

Night Visions

April 2023



Newsletter of the Baton Rouge Astronomical Society

Mars will "kiss the crescent moon" on April 25th, see [Page 10](#) for details. Photo credit: Bossco via Flickr.

Monthly Meeting April 10th at 7:00 PM, in person

You may also join this meeting via meet.jit.si/BRASMeet

(Monthly meetings are held on 2nd Mondays of the month, at Highland Road Park Observatory)

PRESENTATION: Eric Borowski: An introduction to the AAVSO
(American Association of Variable Star Observers), what it does and how to contribute.

What's In This Issue?



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Globe At Night
ALCON 2023



[Article: April Celestial Events](#)

HRPO EVENTS

OBSERVING NOTES: Sextans – The Sextant

Like this newsletter? See **PAST ISSUES** online back to 2009
Baton Rouge Astronomical Society Facebook Page
BRAS YouTube Channel – Monthly Speakers via Jitsi

President's Message

It's April and only four more months until ALCon 2023! The registration form(s) are now online. We need members to volunteers for the registration and information desk. If you can help any of the days below, please let us know. We are scheduling volunteers now.

Here is a brief description of the main events:

Wednesday, July 26th, there will be a "Meet and Greet" held at LSU's Nicholson Hall. There will be a tour of the Landolt Observatory (on the hall's roof) including the 11.5-inch Clarke refractor. There will be some "finger food" and drink available, and a few short talks by Physics and Astronomy Professors. There will also be a brief walk to the LSU "Indian" mounds – the oldest human artifact in the Americas (dated at 11,33 years old) – and a brief talk by one of the co-authors of the research paper on the mounds.

Thursday, July 27th, in the afternoon, will be a tour of LIGO – only 54 participants (one bus full) will be allowed due to LIGO being in a scientific run at that time. We ask that locals, including those living in Louisiana, not register for the tour so that the international and out-of-state people can have a chance to see LIGO. In the evening, at LASM there will be a talk by Fred Espenak on Eclipses, followed by a planetarium show.

Friday, July 28th, there will be the traditional BBQ dinner – with our touch in accordance with the ALCon 2023 theme "Astronomical Gumbo" – at HRPO.

Saturday, July 29th, the AL Awards Dinner with Keynote Speaker David Eicher, Editor of Astronomy Magazine, will talk about Galaxies.

Each day, there will be panels and talks by various people including: **David Levi** – Comet Hunter and Author, **Brother Guy Consolmagno, SJ**, the official Vatican Astronomer, **Pranvera Hyseni** – founder of Astronomy Outreach of Kosovo (AOK), and many other presenters will be there.

We are looking into having all the BRAS Newsletters (42 years worth) archived at the Goodwood Library, and . . . no word yet on a new Webmaster.

The library telescope is being repaired and will be returned after repair and collimation.

It has been determined that MOON nights will be held immediately following the HRPO Edge-of-Night events. As there is no Edge-of-Night in the Spring, our Spring MOON night is yet to be decided.

Clear skies, and Happy Easter

John R. Nagle

Calendar of Upcoming Meetings

Light Pollution Committee: 6 p.m. before the Monthly meeting.

Monthly Member Meeting – 7 pm Monday, April 10th at the Observatory, in person and via Jitsi

Monthly Business Meeting: 7 pm Wednesday, April 26th (Members Only), in person and via Jitsi

MOON (Members Only Observing Night) TBA

ALCon 2023 ("Astronomical Gumbo") Committee Meeting
Two meetings: TBA, online.



Monthly Meeting Minutes – March 13

- Welcome by the president, John Nagle.
- The speaker for the evening was Dr. Param Singh from LSU; his specialty is quantum gravity. The title for his lecture was The Story of Big Bang and Beyond. This was an overview of the history of the Big Bang theory and related issues.
- LASM has a future exhibit of stargazing coming up called the Art of Looking Up. We've been invited to complement this program as they are soliciting ideas for this from the history of people looking at space.
- Outreach was discussed; see Ben's notes for details.
- The LSU Science Saturday talks at the Main Library were mentioned.
- John is still waiting to hear back from the library about record keeping there. This would be a possible repository for our newsletters if that works out.
- The donation of the 8-inch astrograph was mentioned. Don was asking about the possibility of donating another scope to the Ascension Parish Library; also, Mary at Westdale (WHAM) was mentioned as a possible recipient of a telescope.
- We now have 3 pairs of BRAS magnetic signs for cars; Chris K. is going to use a pair for his survey.
- Merrill was mentioned as the contact for Saturday Science; he has them set up on a Facebook page.
- The air table finally found a home at Glen Oaks High School. They have already picked it up. When they get it set up over there, they'll invite us over for a ceremony.
- Trey has agreed to be ALCor for our club which means he'll be the coordinator between the Astronomical League and BRAS.
- We are still looking to purchase a laptop to use at ALCON 2023 and future outreaches. Since the outlay will probably be over \$500, the club went ahead and had a vote on it; this passed.
- John mentioned the AAVSO paper by Brad Schaefer. This was in reference to a star, T Coronae Borealis, that is subject to recurrent nova.
- The next ALCON planning meeting is scheduled for this Thursday, March 16th. Steven hopes to have the registration up and running by this weekend (March 18th & 19th). We need a certain percentage of the membership to register for this event which will be held from July 26th – 29th at the Downtown Hilton here in town. David Eicher is the keynote speaker. Fred Espinak and Guy



2022 USA Forever Stamp

2023 Officers:

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president@brastro.org

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vice-president@brastro.org

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Open

Consolmagno are also scheduled to speak along with a young lady from Kosovo. The Friday night dinner will be held out at HRPO with barbeque brisket and gumbo on the menu. Check the .org website for details.

- A raffle was held with coffee and cookies available for onsite attendees.

Submitted by Roz Readinger, Secretary



Business Meeting Minutes – March 29

(meeting is the last Wednesday of the month, in person, at HRPO.)

1. Archives at EBRPL – Goodwood. – John still has not received an answer about this. He will go see if he can meet with this employee in person to get the information he needs. We will probably only be storing the newsletters here. It was suggested that any agreement we have with the library should be saved on paper.
2. Laptop? – Ben found a laptop for \$549 that has the specifications we need to use for ALCON and outreaches. John is going to take these specs and go talk to Tim at Tim's Computers and see what he can do for us.
3. LASM Astronomy Day. – This is scheduled for Saturday, April 22nd, from 10 am – 2 pm. Ben is looking for 4 or more people to help with outreach on that day. This will involve solar viewing and demos. The LASM people are wanting to know if we have any contributions for this event. Discussion ensued; history was talked about.
4. Telescope donation – Larry Miele. – This was the potential 8-inch astrograph donation that's been mentioned before as a candidate for being fostered. John will go through Ben to talk to Larry to see if he's still interested in donating. Chris K. suggested a rotating process being set up to cycle donated scopes through to interested parties with deadlines so that we can prevent traffic jams in the BRAS closet.
5. BRAS E-mails – will receive from a different email address. – There's been a problem with the BRAS officers' emails. There was discussion about this with the solution having to do with taking over the domain name from Mike Carambat so that we can make the necessary adjustments to the mailboxes.
6. Goodwood Library telescope repairs. – Scott C. has been working on this; no update for this meeting.
7. Coffin. – The air track and optical bench did get donated to Glen Oaks High School. John will check with the person who picked this up as there is supposed to be a ceremony at the school when this gets set up. Craig's name got mentioned as someone who could help if they have any questions about assembly and operation.
8. State of HRPO for ALCON 2023. – What needs to be done to fix things up for July? There was discussion about the incomplete paint job on the pipes in the parking lot as well as the cylinders for the drop out on the main dome. Chris K. will talk with Darryl tomorrow morning. He will also be asking about the generator and about the construction that was supposed to go up behind the pavilion.

New Items

- HRPO Programming – Chris K. is going to get with BRAS and LSU to reaffirm that HRPO is an extension of LSU. He will post this notice in a public place at the observatory. BRAS opinions should not be tied to the suppression of inquiry. This will be discussed at the May Observatory Committee meeting.
- There was an announcement that the observatory was going to be closed for Good Friday. This and the day before Astronomy Day (April 7th and April 28th) can be used as MOON Nights for BRAS should we want to come out and the weather cooperates.

Members attending this evening were John N., Chris K., Steven T., Trey A., and Roz R.

Submitted by Roz Readinger, Secretary

BRAS subreddit and a Discord server.

Our subreddit has been set up for us to reach out to the public. Please join us on there. <https://www.reddit.com/r/BRAstro/>

Our Discord server is for Members only, and requires the download of a free app. It's a fun place for us to hang out. To join the discord, email **safey2007@gmail.com** with the subject **BRAS Discord**.

To add a Flair next to your username, PM Amy Northrop.

.For Discord help, access **techsupport-faq**,

or message Amy or Justin: <https://discord.gg/6N8r8DDj>

It also has voice channels so that you can speak to people through Discord.

The best part about both of these is that you can access them on your phone with the free apps. Hope to see you there. ~ Amy Northrop





Outreach Report for March 2023

Hi Everyone,

Wow! March was a busy month, for sure!! First, here's a quick summary of our events:

We had a very successful outing to the Spring Gala for the State Archives. We made a few connections there, too, and we can expect to be invited to some events in the future.

Next, we had our annual outreach for Rockin' At The Swamp at the Bluebonnet Swamp and Nature Center. It was a beautiful day and we saw a ton of people. We always enjoy being a part of their event.

Our busiest week just finished up. Unfortunately (but maybe fortunately?), the weather predictions caused us to cancel Sidewalk Astronomy at Perkins Rowe for March, but we more than made up for it on the following two days.

We trooped out to Glasgow Middle School for their Math/ELA night and it was a great time! They even asked us about coming to do some more in depth science/astronomy talks with some of the teaching staff to help them out with their lesson plans. It was another nice, clear night with a gorgeous 1st quarter Moon. Everyone had a great time!

The next night, we made our way to Port Allen for the Holy Family School Open House. It was another great event over there. We've always been received and treated so well whenever we make the trek across the bridge. The event was well organized and we were able to interact with lots of kids and parents throughout the night.

Thanks again to our steadfast volunteers. We couldn't do this without you! And for those of you on the fence, come on over!! I've said it before and I'll keep saying it, participating in these outreach events is a great way to share and learn more about the hobby you love.

Of course, we still have plenty of opportunities coming up as you'll see below. I'm especially happy that we've been called again by the Louisiana Art and Science Museum. They are excited to have us help out with their own Astronomy Day



Our crew is all set up for the Spring Gala at the State Archives!



Ben's setup at the Archives. Scope points to Orion Nebula then people can view same object via astrovideo camera attached to a side mounted telescope. Best of both worlds!

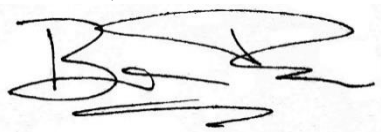


John doing some planetary instructing while Chris R. shows off the Sun at Rockin At The Swamp

celebrations which, fortunately, take place a week before our own out at the Observatory.

As always, please let me know ASAP if you'd like to help out with any of these events. They're great fun!

Clear Skies,



Ben Toman

Upcoming Events:

Tuesday, April 4th

5:30-7pm

Westdale Heights Academic Middle School

Demos, exhibits, telescope(?)

Saturday, April 15th

Time TBD (Evening)

Baton Rouge Zoo Girl Scout Camp Event

Telescope viewing

Saturday, April 22nd

10am-2pm

LASM Astronomy Day Event

Demos, exhibits, solar scope

Tuesday, April 25th

6pm(?) - 9Pm (May change time to 7pm start.)

Sidewalk Astronomy at Perkins Rowe

Tuesday, May 30th

6pm(?) - 9Pm (May change time to 7pm start.)

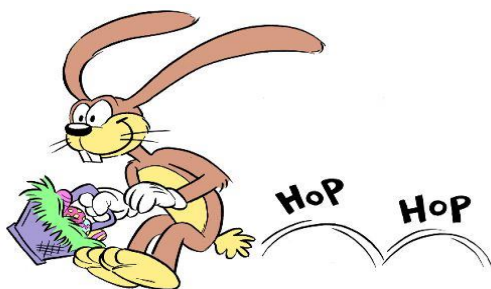
Sidewalk Astronomy at Perkins Rowe (Last one for the Summer)

Thursday, June 1st

10am-1pm

Main Library (Goodwood) Summer Reading Program Kickoff

Demo/exhibit table, solar observing



Scott with our setup indoors at the Holy Family Open House



Chris K., Scott, Roz and Annette taking a quick breather at Rockin' At The Swamp



Scott, Roz and Chris trying to keep up with all the kids and parents at Oak Grove Primary on their STEAM night!



LPC (Light Pollution Committee) Report (March)

This committee meets at 6:00, same day as the 7:00 BRAS Member Meeting

Everyone is welcome to join in.

1. The “form” letter for new development/construction, to be tailored for specifics of the project, has had the basic composition outlined by Chris K and John N.
2. Clarification on a few sections of the UDC on light pollution measurements are being reviewed.
3. Discussed complaints to DOTD – meeting to be arranged.
4. BRAS You-Tube channel – scripts being developed for light pollution. Live action (a person reading the scripts) with animation and/or Power Point, etc, to be determined. Pictures of Sky Glow, Glare, etc. in the HRPO service area (75 km around HRPO) are needed.
5. Outreach events in the BREC parks in North Baton Rouge arrangements are being worked on.

John Nagle, LPC Chair Pro-Tem

Globe At Night

The target for the Globe at Night program is Leo from April 12th through April 21st.

If you would like to participate in this citizen science program, you can find instructions

[ahttps://www.globeatnight.org](https://www.globeatnight.org)

P.S. The “Loss of the Night” app can be used for information and for reporting your observations.

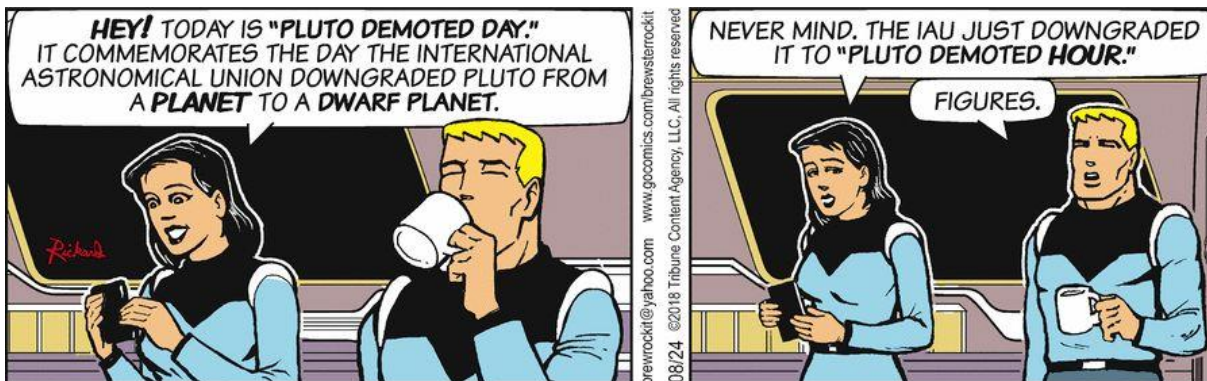
SPACE WEATHER ALERTS

Instant solar flare alerts: The sun is starting to flare again.

Sign up for [Space Weather Alerts](#) to receive text messages when explosions are underway.

Basic plan \$49.95/year

Alerts include: Coronal Mass Ejections (CME), Geomagnetic Storms Predicted (class G1-G4), Planetary K-index (K5-K9, K4 for Pro Plan), Solar Flare alerts (X-Ray Flux levels and Scales), Solar wind speed alerts (500, 600, 700 and over 800 km/s), B Sub Z South-pointing episodes, Cracks in Earth's magnetic field.



2023 Astronomical League Convention Update!

We now have our own ALCON Web Page. Check it out. Bookmark and watch it grow.

<https://alcon2023.org/>

HELP! We Need More Sponsors!!!

From now on, we will be doing planning and work by way of subcommittees, making use of small group meetings, e-mail, phone, etc, without the need to have the full committee meeting. We have a lot to get done. If you like to help, please EMAIL Steven M. Tilley smtilley@alcon2023.org

We are looking for Sponsors, please check with the ALCon 2023 committee before, so we do not re-ask anyone.

The 2023 ALCON Sponsorship Levels

Level	Price	Benefits
Galaxy	Above \$5000	Same as "Solar System" plus a 10-minute presentation[time slots are limited] during the conference.
Solar System	\$2000 to \$5000	Same as "Star" plus a large logo displayed on all conference signs and all slides used in the conference room between speakers. One full page for sponsor information in the Convention Program.
Star	\$1000 to \$1999	Same as "Planet" plus small Logo displayed on all conference signs and on schedule display. 1/4 page in Conference Program for logo and sponsor information
Planet	\$500 to \$999	Same as "Moon" plus Name displayed on Conference Hall display during breaks. 1/8 page in Conference Program for logo and sponsor
Moon	\$100 to \$499	Name listed in Conference program and can provide items for inclusion in attendee bags.

After you sign someone up, let us know and have them send a check made out to "Astronomical League" with **ALCon 2023** in the memo line, to the attention of

Carroll Iorg (AL President)
Astronomical League
9201 Ward Parkway, Suite #100
Kansas City, MO 64114

Watch Mars Kiss Our Crescent Moon – the Highlight of April Stargazing, on the 25th



Article from Good News Network at:

<https://www.goodnewsnetwork.org/april-stargazing-paschal-moon-close-approaches-of-saturn-and-mars-and-the-lyrid-meteor-shower/>

"As we are only a week of waxing away from the full moon of April, it's worth taking a look at other celestial sightseeing opportunities in the springing month.

Around midnight of **Wednesday, April 5th, the Pink Moon** will fully illuminate the sky. Also known as the Paschal Moon, it sets the date for Easter on the Sunday after the first full moon in April.

Despite cherry blossoms and other flowers heralding spring, the Pink Moon is not actually pink. The name corresponds with the early springtime blooms of *Phlox subulata*—commonly called creeping phlox or moss phlox, native to North America [where Old Farmer's Almanac keeps track](#) of all the names given by a mix of settlers and native tribes.

For example, you have Moon When the Ducks Come Back (Lakota), Moon When the Geese Lay Eggs (Dakota), Frog Moon (Cree), Breaking Ice Moon (Algonquin), and Budding Moon (Tlingit).

Further out into space, the second half of April will present some excellent viewing opportunities for those with a telescope or binoculars.

On **April 15th, overnight into the 16th, the planet Saturn will come within very close proximity to the Moon**. They will appear just 3° apart, and while the ringed planet can be seen by the naked eye, a decent pair of binos will allow you to see the rings.

April 23rd will be the peak time of the Lyrid Meteor Shower, where in the pre-dawn hours one will be able to see around 20 shooting stars per hour. (read more)

<https://www.goodnewsnetwork.org/april-stargazing-paschal-moon-close-approaches-of-saturn-and-mars-and-the-lyrid-meteor-shower/>

BIENVENUE EN LOUISIANE! (WELCOME TO LOUISIANA!)

Join us for this unique and exciting amateur astronomy gathering!



ALCON 2023

July 26-29, 2023

Hilton Baton Rouge
Capitol Center Hotel

201 Lafayette Street,
Baton Rouge, LA 70801

KEYNOTE SPEAKERS

- ★ David Eicher—writer, editor-in-chief of *Astronomy Magazine*
- ★ Fred Espenak—co-author of *Totality: The Great American Eclipses of 2017 and 2024*

FIELD TRIPS

- ★ Irene W. Pennington Planetarium
- ★ LIGO (Laser Interferometer Gravitational-Wave Observatory) Livingston*
- ★ Louisiana State University Physics & Astronomy
- ★ Highland Road Park Observatory

*Spaces
are limited
for this trip!

SPEAKERS ★ Pranvera Hyseni ★ Guy Consolmagno ★ Dan Davis ★ And many more

Brought to Baton Rouge by the **Baton Rouge Astronomical Society**

Registration info coming soon! Check alcon2023.org

***Get ready for ALCON 2023 BATON ROUGE
Hosted by your own Astronomy Club.
Get on board. PARTICIPATE.***





Messages from HRPO

Highland Road Park Observatory



FRIDAY NIGHT LECTURE SERIES

7:30pm / For ages fourteen and older. / No admission fee.

3 March = “Recent Unidentified Objects” This timely talk will disseminate what we know of the ongoing news stories regarding balloons in the atmosphere above North America.

24 March = “Solar System Protection” As part of an initiative to present updated versions of classic lectures, BREC Center Supervisor James DeOliveira will outline NASA’s in-place guidelines to keep other bodies of the Solar System from ‘contamination’ by Earth microbes.

31 March = “Starliner” Now is the time for it to prove itself. The vital space capsule in the Commercial Crew agreement between NASA and its private partners will be tested in April!



SCIENCE ACADEMY

Saturdays from 10am to 12pm.

*for Cadets aged eight to twelve *\$5 per Cadet per week (\$6 if out-of-parish)
walk-ins welcome, but advanced registration via WebTrac strongly recommended
[activity #531990] * parents may stay with or leave Cadet
Four Cadet minimum and sixteen Cadets maximum per session.*

1 April = “Radical Radioactivity”

8 April = “Calendars and Timekeepers”

15 April = “Expedition 2”



EVENING SKY VIEWING

No admission fee. For all ages.

Saturdays (1, 8, 15 and 22 April) from 7:30pm to 10pm

Fridays (14 and 21 April) from 8:30pm to 10pm

HRPO houses a 50-cm reflector, a 40-cm reflector and several smaller telescopes to bring the majesty of the night sky to the public. Trained operators, sharing duties via a rotating roster, work throughout the year in shifts. Each operator has a pre-planned list of objects to highlight. However, requests will be taken if there is time and if all present have viewed the previous target.



SPRING SPACE EXPLORATION CAMP

Tuesday 11 April and Wednesday 12 April (8am to 5pm daily)

Mission Theme: Future of Spaceflight Rockets: Gnome and Crossfire

Activity: Interstellar Spacecraft Design

All materials are supplied; Explorers will need a sack lunch and drink that does not require refrigeration. Explorers will also need to bring a hat and sunscreen. Parents may register in person at the HRPO or online at [Webtrac](#) (the activity number is 531180).

**for Explorers ages 9 to 13 / Limit twelve campers.*

**\$55 per in-parish child / *\$66 per out-of-parish child (cost covers both days)*



FRIDAY NIGHT LECTURE SERIES

7:30pm / For ages fourteen and older. / No admission fee.

14 April = “Wonders of the Spring Sky” The temperature is mild as April’s constellations settle high overhead early in the night. For her second consecutive talk, Amy Northrop takes the audience on a fascinating tour of Baton Rouge’s spring season. She highlights [the celestial gems](#) that will sparkle throughout the next three months—gems that visitors will be able to see live if they continue to visit HRPO!



SKYGAZING: A PURSUER’S GUIDE

Friday 21 April from 7pm to 8:30pm / No admission fee. For ages eleven and older.

The Baton Rouge Astronomical Society gives a special presentation toward middle and high school students and families to introduce the how this timeless science hobby can support a lifetime of intellectual and aesthetic fulfillment.



STEM EXPANSION: “Failure is Not an Option”

Saturday 22 April from 3:30pm to 7:30pm

For ages twelve to sixteen. / \$15 each per in-parish registrant; \$18 each per out-of-parish registrant. Advanced registration via WebTrac required [activity #531993].

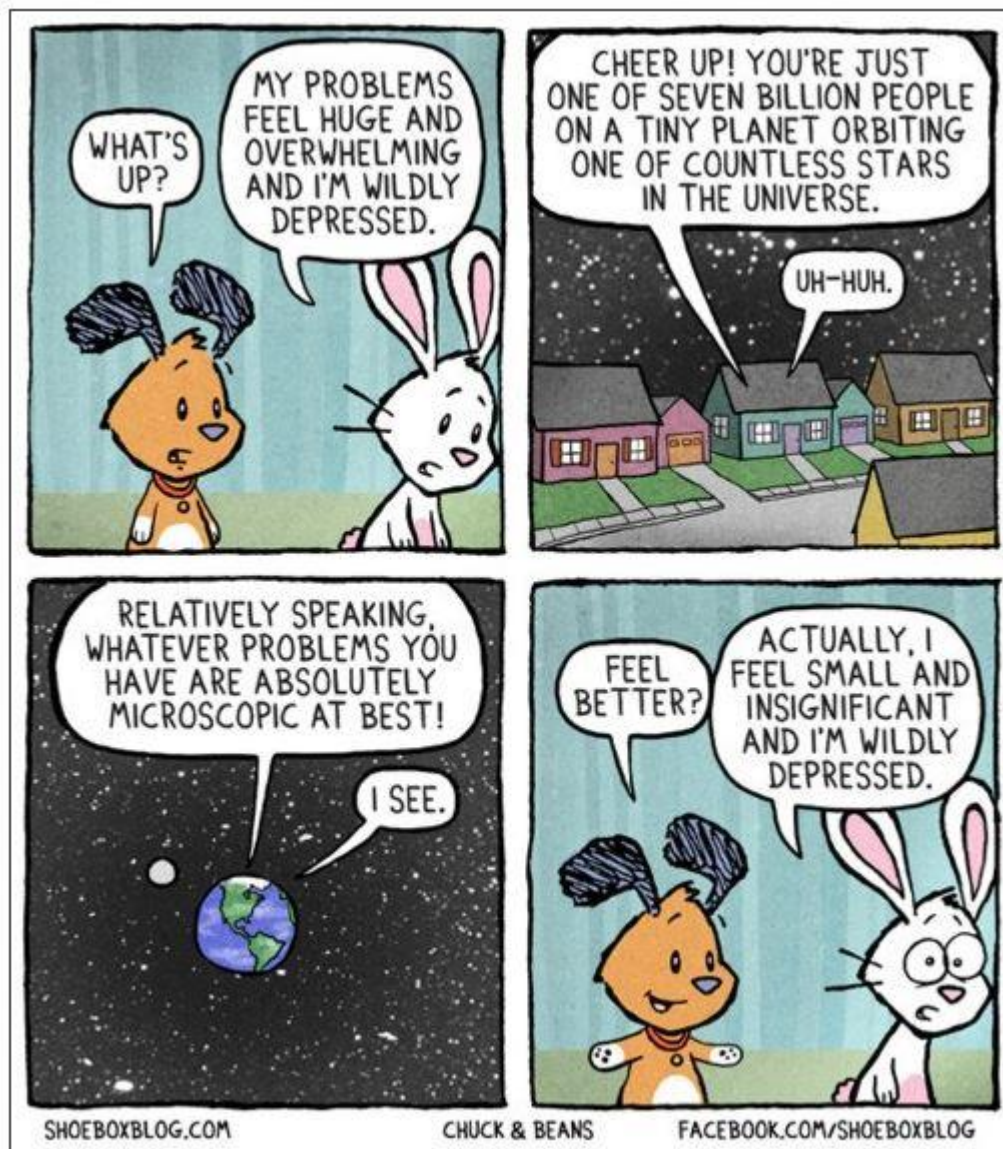
This program offers advanced topics, topic extensions and all-new games and activities to an older crowd. Certificates will be earned, and a section of archived experiments, some not seen in over fifteen years (and some *never* performed on site) take place. There are also giveaways and door prizes.



INTERNATIONAL ASTRONOMY DAY

Saturday 29 April from 3pm to 11pm / No admission fee. For all ages.

It's back—the greatest IAD event in the region returns. The hugely popular Adventure Quest game, delicious food and drink, and a passport to the stars. Visits from the Baton Rouge Amateur Radio Club, the Baton Rouge Zoo, the Baton Rouge Gem and Mineral Society and more. Mark your calendar and don't miss it!





OBSERVING NOTES **APRIL - 2023**

Sextans – The Sextant

Position: RA 10, Dec.+0°

Note: For six years I wrote these Observing Notes, featuring the 60 constellations we can see before midnight from Baton Rouge, containing objects above magnitude 10. For the next three years I expanded that information and put all my research in the same format, ending last April, 2022. Beginning with last May, Named Stars, Deep Sky and Other Stars are repeated here, for convenience. Monthly updates will be made to Sky Happenings and all that appears below that title.

Named Stars

Equator Star (Alpha Sex), mag. 4.48, 10 07 56.3 -00 22 17.9, is a white giant star that is informally called the “equator star” because it is almost (less than 0.25° south) on the celestial equator. Also known as **HD 87887**, **HIP 49641**, and **15 Sextantis**.

Bibha (HD 86081), mag. 8.74, 09 56 05.92 -03 48 30.3, is a yellow-white main sequence dwarf star with one planet, 1.5 Jupiter mass, in a 2.1325 day orbit. Also known as **HIP 48711**.

Deep Sky:

[A084] 1, mag. 2.13, 10 36 00 -01 00 00, 10,000' in size, 17 stars. It is a very large moving cluster hypothesized in 1984.

NGC 3169, mag. 6.49, 10 14 15.05 +03 27 57.87, 4.4'x2.8' in size. Also known as **UGC 5525**, **H4-01**, **C36-066**, **C1011.7+0343**, **IRAS 10116+0342**, **M+01-26-026**, **KPG 228B**, **HOLM 173B**, and **PGC 29855**.

NGC 3115, “The Spindle Galaxy”, mag. 8.03, 10 05 13.98 -07 43 06.9, 8.3'x3.2' in size, is a very bright, large, and elongated galaxy; very bright nucleus; almost spherical nuclear bulge with an extremely thin disk. Several times the size of the **Milky Way**. Contains a super-massive black hole of over two billion solar masses. Also known as **Caldwell 53**, **H1-163**, **UGCA 199**, **M-01-26-018**, **Ben 42**, **LEDA 0298265**, and **PGC 029265**.

NGC 2974, mag. M9.3, 09 42 33.28 -03 41 56.9, 3.5'x2.0' in size. Also known as **UGCA 172**, **C07-022**, **C0940.0-0328**, **M+00-25-008**, **IRAS 09400-0328**, **GSC 4998 00518**, and **PGC 027162**.

NGC 3166, mag. 9.5, 10 13 45.77 +03 25 29.89. Also known as **UGC 5516**, **C36-064**, **C01011.1+0340**, **M+01-26-024**, **IRAS 10111+0340**, **KPG 228A**, **H3-01**, **HOLM 173A**, and **PGC 029814**.

NGC 3044, mag. 9.9, 09 53 40.88 +01 34 46.7, 5.7'x0.63' in size. Also known as **UGC 5311**, **C07-056**, **C0951.1+0148**, **M+00-25-031**, **FGC 0965**, **IRAS 09511+0148**, **H3-254**, and **PGC 028517**.

Sextans Dwarf Galaxy (Sextans DSG), mag. 10.04, 10 13 03 -01 36 54, 3'x3' in size. Also known as Sextans 1, and **LEDA 088608**.

The following objects are beyond magnitude 10 but are of interest.

Sextans A, mag. 11.36, 10 11 00.8 -04 41 34.0, 5.7'x5.1' in size, is a dwarf irregular galaxy with an unusual square shape. Also known as **UGCA 205**, **DDO 75**, **M+01-26-030**, **AGC 500034**, and **PGC 029653**.

Sextans B, mag. 11.9, 10 00 00.1 +05 19 56.0, 5.1'x3.5' in size, is a fairly bright dwarf irregular galaxy containing five planetary nebulae. Also known as **UGC 5373**, **DDO 70**, **C36-012**, **C0957.4+0534**, **M+01-26-005**, **KIG 0388**, and **PGC 028913**.

NOTE: Sextans A and B might be gravitationally associated with NGC 3109 in Hydra and the Antlia Dwarf Galaxy in Antlia.

Sextans C, 10 05 31.85 +00 04 20.9, is a globular cluster. Also known as **UGC 5439**, **A 1003**, **Pal 3**, **C08-035**, **C01003.0+0019**, and **M+00-26-017**.

CR7 (Cosmos Redshift 7), was discovered in 2015. It is a Lyman-alpha emitter and one of the oldest, most distant galaxies known at 12.9 billion light-years distant. It contains **Population III** (first generation) stars formed during the re-ionization epoch when the universe was only 800 million years old. **CR7** has a red shift of $Z=6.60$.

CL J1001+0220, is the most distant known galaxy cluster at 11.1 billion light-years from **Earth**. It contains 17 galaxies at a red shift of $Z=2.506$.

CID-42 (CXOC 1 100043.1+020637), is a galactic quasar or a super-massive black hole that was created when two small galaxies collided, leaving an extended trail of stars.

Objects in Sextans: 62 NGC; 38 IC; 63 UGC; 3 UGCA; 271 MGC; 8 A; 5 Arp; 2 Radio Galaxies; 4 Quasars; 1 HCG, 1 Caldwell; 1 Mrk; 1 Pal; Sextans A, B, and C; Sextans Dwarf Galaxy; 1 CR; 1 CL; 1 CID; 1 [AO84]; 1 Ben; 14 Herschel; 7 VV; 69 NPM1G; 95 GSC; 47 IRAS; 126 CGCG; 71 CGCG+; 305 PGC; 4 Ring Galaxies; 2 Galaxy Trios; 5 Flat Galaxies; and 3 Small Galaxy Groups for a total of 1217 objects in Sextans.

Other Stars:

Gamma Sextantis, mag. 5.07, 09 52 30.47 -08 06 17.7, is a triple star system consisting of a double star with a companion. The primary is a blue-white main sequence dwarf star at a magnitude of 5.7, with its binary member at magnitude 6.2 and a separation of 0.38" in an orbital period of 77.6 years. The companion is at 12th magnitude at a separation from the binary star of 36". Also known as **HD 85558**, **HIP 48437**, and **8 Sextantis**.

Beta Sextantis, mag. 5.08, 10 30 17.5 -00 38 13.1, is a blue-white main sequence dwarf star. Also known as **HD 90994**, **HIP 51437**, and **30 Sextantis**.

Delta Sextantis, mag. 5.19, 10 29 28.73 -02 44 20.6, is a blue-white main sequence dwarf star. Also known as **HD 90882**, **HIP 51362**, and **29 Sextantis**.

Epsilon Sextantis, mag. 5.25, 10 17 37.9 -08 04 08.1, is a yellow-white giant star. Also known as **HD 89254**, **HIP 50414**, and **22 Sextantis**.

24 Sextantis, mag. 6.45, 10 23 28.33 -00 54 07.8, is a yellow sub-giant star with two planets in orbit (in a 2:1 resonance). The b planet is two Jupiter masses with an orbital period of 453 days, The c planet is only 5/6 Jupiter mass with an orbital period of 883 days. Also known as **HD 90043** and **HIP 50887**.

HD 92788, mag. 7.31, 10 42 48.0 -02 11 01.0, has two planets in orbit. The b planet is 3.67 Jupiter masses with an orbital period of 325.81 days. Also known as **HIP 52409**.

KELT-11, mag. 8.04, 10 46 49.74 -09 23 56.49, is a yellow sub-giant star with a high proper motion. There is one planet in orbit, 0.171 Jupiter mass, in a 4.73-day orbit, at a separation of 0.06229 au from the star. Also known as **HD 93396** and **HIP 52733**.

BD-08°2823, mag. 9.86, 10 00 47.72 -09 31 00.0, is an orange main sequence dwarf star with two planets in orbit. The b planet has an orbital period of 5.6 days, while the c planet has an orbital period of 237.6 days. Also known as **HIP 49067**.

Stars of interest beyond magnitude 10:

WASP-127, mag. 10.15, 10 42 14.1 -03 50 06.0, has one transiting planet in orbit.

RW Sextantis, mag. 10.7, 10 19 56.62 -0841 56.1, is a nova-like star.

WASP-43, mag. 12.4, 10 19 38.0 -09 48 23.0, is an orange dwarf star with a transiting hot Jupiter planet.

PG 1026+002, mag. 13.83, 10 28 34.86 -00 00 24.5, is a re-radiating binary star with an excess of ultra-violet. It is a short period (0.597 day) binary star with the primary a white dwarf star. Also known as **UZ Sextantis**.

LHS 292, mag. 15.6, 10 48 12.58 -11 20 08.3, is a red dwarf flare star.

SW Sextantis, 10 15 09.39 -03 08 32.8, is an eclipsing binary star consisting of a red and a white dwarf star. It is a nova-like star with a mass transfer from the red dwarf star to the white dwarf star which has a stable accretion disk.

Stars found in Sextans:

5 Greek; 41 Numbered; 18 Lettered; 13 Σ ; 6 β ; 6 A; 1 S; and 1 AC for a total of 91 stars.

Sky Happenings: April 2023 (what follows pertains ONLY to the current month. Material above is good year after year.)

- Apr. 4th - Morning: In the west the waxing gibbous **Moon** sinks toward the horizon in tandem with **Regulus** with less than 4° separating them.
- Apr. 5th - **Full Moon** occurs at 11:35 PM CDT.
- Apr. 10th - **Antares** is 1.5° south of the waning gibbous **Moon** at about 1 AM CDT,
Evening: **Venus** is 2.5° to the left of the **Pleiades**, above the west-northwest horizon.
- Apr. 11th - **Jupiter** is in conjunction with the **Sun** at 5 PM CDT,
Mercury is at greatest eastern elongation (19°) at 5 PM CDT.
- Apr. 13th - **Last Quarter Moon** occurs at 4:11 AM CDT.
- Apr. 14th - Evening: High in the west **Mars** is less than 0.25° to the left of **Epsilon Geminorum**.
- Apr. 15th - The **Moon** is at perigee (226,645 miles or 367,968 km from **Earth**) at 9:24 PM CDT,
The **Moon** passes 3° south of **Saturn** at 11 PM CDT.
- Apr. 17th - The **Moon** passes 2° south of **Neptune** at 12 noon CDT.
- Apr. 19th - **New Moon** occurs at 11:13 PM CDT (lunation 1241).
- Apr. 20th - **Venus** passes 8° north of **Aldebaran** at 4 PM CDT.
- Apr. 21st - **Mercury** is 1.9° north of the **Moon** at 2 AM CDT,
The **Moon** passes 1.7° north of **Uranus** at 8 AM CDT,
Mercury is stationary at 11 AM CDT.
- Apr. 22nd - The **Moon** is 1.8° south of the **Pleiades** at 5 AM CDT,
Dusk: The waxing crescent **Moon** is between **Venus** (6° to the upper left) and the **Pleiades** (about 7° to the lower right) in the west-northwest,
The **Lyrid Meteor Shower** peaks with the waxing crescent **Moon** setting before midnight.
- Apr. 23rd - The **Moon**, in **Taurus**, passes 1.3° north of **Venus** at 8 AM CDT,
Dusk: The **Moon**, still in **Taurus**, is now about 5° to the upper left of **Venus**.
- Apr. 24th - Asteroid **Vesta** is in conjunction with the **Sun** at 4 AM CDT.
- Apr. 25th - The **Moon** passes 3° north of **Mars** at 9 PM CDT.
- Apr. 26th - The **Moon** is 1.5° south of **Pollux** at 3 PM CDT.
- Apr. 27th - **First Quarter Moon** occurs at 4:20 PM CDT,
Evening: High in the southwest the first quarter **Moon** is about 4° above the **Beehive Cluster** (**M44**) in **Cancer**.
- Apr. 28th - The **Moon** is at apogee (251,220 miles or 404,299 km from **Earth**) at 1:43 AM CDT.
- Apr. 29th - Evening: The waxing gibbous **Moon**, high in the south in Leo, sits 5° to the upper left of **Regulus**.
- Apr. 30th - Asteroid **Iris** is at opposition at 11 AM CDT.

Planets:

Mercury – **Mercury** reaches its best evening appearance for the year during April and is visible almost all month. On April 1st, the planet is 5° above the western horizon 45 minutes after local sunset. Setting more than an hour after the **Sun**, the planet shines at magnitude -1.1, an easy twilight target. On the 6th, the planet passes 8° due south of **Hamal** (**Alpha Arietis**) and will then climb to its greatest eastern elongation (19°) from the **Sun** on the 11th. The planet will dim to magnitude -0.1 with its phase declining from 76% to 39%

during this period. On the 21st, the crescent **Moon** will join the planet low in the western sky – the planet will be difficult to spot because it has now faded to magnitude 1.9 and will stand nearly 9° due east of the **Moon** at a low altitude – the **Moon** is 12° high, and the planet is just 5° above the horizon. **Uranus**, at magnitude 5.5, is within 4° of **Mercury** and will be most challenging to spot.

Venus -Venus dominates the evening sky, starting April at magnitude -4. During the month the planet will travel between the **Pleiades (M45)** and the **Hyades** star clusters. The planet starts the month in **Aries**, 2.8° northeast of **Uranus** on the 1st. By the 10th, it is 3° south of **M45**, 2.5° from **Alcyone – Eta Tauri**, and will remain visible after 10 PM local time, with a 74% illuminated disk spanning 15". On the 20th, the planet will pass 8° due north of **Aldebaran**, and the next night (the 21st) a crescent **Moon** will join the scene just below the **Pleiades**. By the 22nd, the **Moon** and the planet are less than 7° apart in a scene with the **Hyades** and the **Pleiades**. On the 23rd, a nearly 4-day-old **Moon** is less than 6° above the planet. By now the planet has a 69% lit disk and has grown to span 16" at magnitude -4.1. The planet ends the month located almost midway between the two horns of the **Bull - Zeta and Beta Tauri**.

Mars – Mars, at the start of April, shines at magnitude 0.9 and stands 2° northeast of **M35 in Gemini**. **Mu and Eta Geminorum** are about 3° south of the planet. On the 13th the planet will pass very close to the double star **Mebsuta (Epsilon Geminorum)**, and on the 14th the planet will be within a half **Moon's** width of the star. On the 25th, a waxing crescent **Moon** will be at only 3° separation from the planet, with **Caster and Pollux** about 8° above them. By the end of the month the planet is 2° north of **Wasat (Delta Geminorum - at magnitude 1.3)**. The planet's disk will span only 5" by month's end. The planet remains visible above the horizon until well after midnight all month.

Jupiter – Jupiter is in conjunction with the **Sun** on April 11th and is not visible this month.

Saturn – Saturn rises in **Aquarius** shortly after 5 AM local time on April 1st, just as twilight begins. By the 30th, the planet is rising two hours earlier, reaching 8° high at first onset of twilight. The planet will glow at magnitude 0.9. On the 16th, a waxing crescent **Moon** will be 5° below the planet. A telescope will show a 16" wide disk with a thin set of rings – now inclined by only 9° to our line of sight. **Titan** will be easy to spot late in the month shining at 8th magnitude due west of the planet on the 30th.

Uranus – Uranus is quickly fading into the evening twilight. On April 21st, the planet (at magnitude 5.9) will be within 4° of **Mercury**, just 5 above the horizon and will be most challenging to spot.

Neptune – Neptune is just now re-appearing from behind the **Sun** in the morning twilight. The planet's disk, at magnitude 7.8, is poorly placed for observing in **Pisces**. By April 30th, the planet is only 7° high an hour before sunrise.

Moon – Favorable Librations: Pettit Crater on April 6th; **Glushko Crater** on April 8th; **Abel Crater** on the 23rd; and **Helmholtz Crater** on April 26th.

Greatest North Declination on the 25th (+27.9°)

Greatest South Declination on the 12th (-27.9°)

Libration In Longitude: East Limb Most Exposed on the 22nd (+5.1°)

West Limb Most Exposed on the 8th (-5.3°)

Libration In Latitude: North Limb Most Exposed on the 14th (+6.8°)

South Limb Most Exposed on the 28th (-6.8°)

Asteroids / Minor Planets – The following positions of the asteroids are according to the

RASC Observers Handbook, USA 2023 Edition, unless otherwise designated:

Asteroid **1 Ceres**: On April 6th – 12 14.57 +16 17.9, in **Coma Berenices** at magnitude 7.1; on the 16th – 12 07.22 +16 21.0, in **Coma Berenices** at magnitude 7.3; and on the 26th – 12 01.78 +16 00.5, in **Coma Berenices** at magnitude 7.5. **Ceres** positions, by my estimates, are as follows: On April 1st – about 1.3° north and a little east of **6 Comae Berenices**; on the 5th – about 1.4° north and a little west of **6 Comae Berenices**; on the 10th – about 1.8° north-northwest of **6 Comae Berenices**; on the 15th – about 2.4° northwest of **6 Comae Berenices**, or about 2.9° east and a little north of **95 Leonis**; on the 20th – about 2° east and a little north of **95 Leonis**; on the 25th – about 1.8° east-northeast of **95 Leonis**; and on the 30th – about 1° due east of **95 Leonis**.

Asteroid **2 Pallas** – On April 6th – 07 11.37 -02 31.2, in **Monoceros** at magnitude 8.4; on the 16th –

07 26.08 +00 14.7, in **Canis Minor** at magnitude 8.5; and on the 26th – 07 42.17 +02 35.7, in **Canis Minor** at magnitude 8.6.

Asteroid **7 Iris** – On April 16th – 14 35.96 -21 06.6, in **Libra** at magnitude 9.8; and on the 26th – 14 26.62, in **Libra** at magnitude 9.6.

Comets – The following positions of comets is in accordance with *ALPO*, unless otherwise designated.

Comet **C/2017 K2 (PANSTARRS)** – **K2's** positions: On April 1st – 03 43 42 -39 19 48, at magnitude 8.5 in **Eridanus**; on the 11th – 04 05 00 -34 07 06, at magnitude 8.7 in **Eridanus**; and on the 21st – 04 23 48 -29 30 42, at magnitude 8.9 in **Eridanus**.

Asteroid **C/2020 V2 (ZTF)**, an evening comet – **V2's** positions: On April 1st – 02 10 24 +32 13 48, at magnitude 9.5 in **Triangulum**; and on the 11th – 02 18 24 +30 01 06, at magnitude 9.6 in **Triangulum**. **V2's** positions, *by my estimates*, are as follows: On April 1st – about 1.8° southwest of **Gamma Trianguli**, or about 1.6° north and a touch west of **6 Trianguli**; on the 5th – about 0.9° northeast of **6 Trianguli**; on the 10th – about 1.2° east-southeast of **6 Trianguli**, or about 1.3° due north **10 Trianguli**; on the 15th – about 0.9° east-northeast of **10 Trianguli**; on the 20th – about 0.4° northeast of **14 Arietis**; on the 25th – about .3° southeast of **14 Arietis**; and on the 30th – about 1.8° southwest of **33 Arietis**.

Meteor Showers – There are two **Major (Class I)** meteor showers active in April. The **Lyrids**, active from April 15 through April 25, peaks on April 22nd with a maximum zenith hourly rate (mzhr) of 18; and the **Eta Aquarids**, active from April 15 through May 27, peaks on May 5th with a mzhr of 60.

There are no **Minor (Class II)** meteor showers active in April.

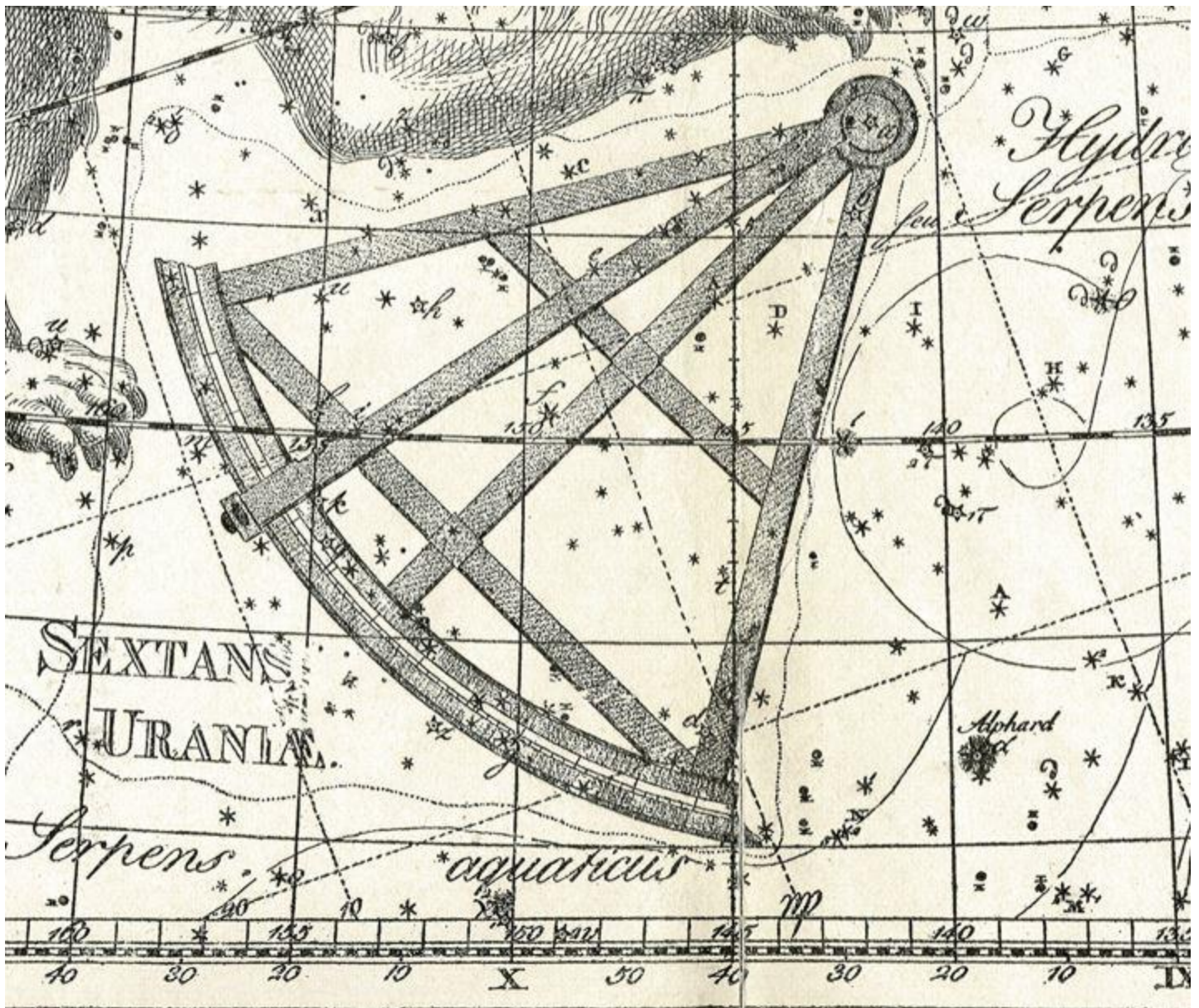
There is 1 **Variable (Class III)** meteor shower active in April – the **Pi Puppids**, active from April 16 through April 30, peaks on April 24th.

There are 5 **Weak (Class IV)** meteor showers – a mzhr of <2 – active in April: the **Delta Pavonids**, active from March 11 through April 16, peaked on March 31st; the **April Epsilon Delphinids**, active from March 31 through April 20, peaks on April 9th; the **Kappa Serpentids**, active from April 11 through April 22, peaks on April 16th; the **Alpha Virginids**, active from April 6 through May 1, peaks on April 18th; and the **h Virginids**, active from April 24 through May 4, peaks on May 1st.

Mythology:

Sextans – The Sextant

A faint constellation south of Leo, introduced by the Polish astronomer Johannes Hevelius in 1687 under the name *Sextans Uraniae* to commemorate the instrument with which he measured star positions. Hevelius continued to make naked eye sightings with his sextant throughout his life, even though telescopes were available; it was perhaps to demonstrate the keenness of his eyes that he formed Sextans out of such faint stars, as he did with another of his inventions, Lynx. The brightest star in Sextans is of magnitude 4.5, and none of the stars are named.



From Bode's 1801 "Uranographia" courtesy of Henk Bril

The End