



SPACE

St. Petersburg Astronomy Club Examiner

June 2022

Editor – Guy Earle

The St. Petersburg Astronomy Club has been the center of family astronomy in the Tampa Bay Area since 1927. Our 388 adult members are dedicated to promoting and sharing the wonders and science of astronomy. We host a dark-sky star party each New Moon at Withlacoochee River Park, along with local star parties, telescope-making workshops, science lectures, astronomy lectures, educational outreach sessions and much more.

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Astronomy Image of the Month

Globular cluster **47 Tucanae** by Joe Reichle



For All Mankind

We're all inundated with streaming services, but if you happen to have Apple TV+, check out ***For All Mankind***. Written and produced by Ronald D. Moore, of Star Trek and Battlestar Galactica (2004-09), it's an alternate history of space exploration, grounded in realism and starting at the Gemini program. It's now on it's 3rd season, and my wife and I are hooked!



June General Meeting

This month's general meeting will take place on Friday, June 24th at **8:00 PM**. The meeting will be ***in person*** at St. Petersburg College, Gibbs Campus, 6405 5th Avenue North, Natural Science Building, Classroom 232, 2nd floor, and also virtual.

To attend virtually with **Zoom**, join from your computer, tablet or smartphone by clicking [here](#).

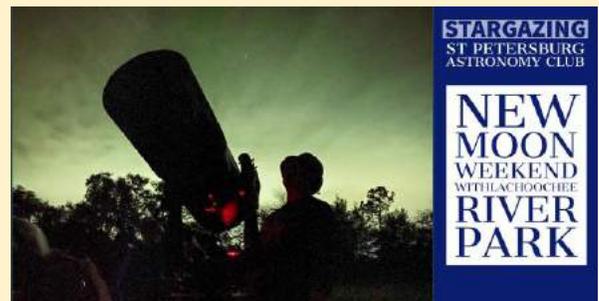
You can also dial in using your phone.

United States: +1 (301) 715-8592

Meeting ID: 993-399-331

Passcode: 999123

The club's **New Moon observing weekend** will be held June 24th – June 25th at [Withlacoochee River Park](#) east of Dade City.



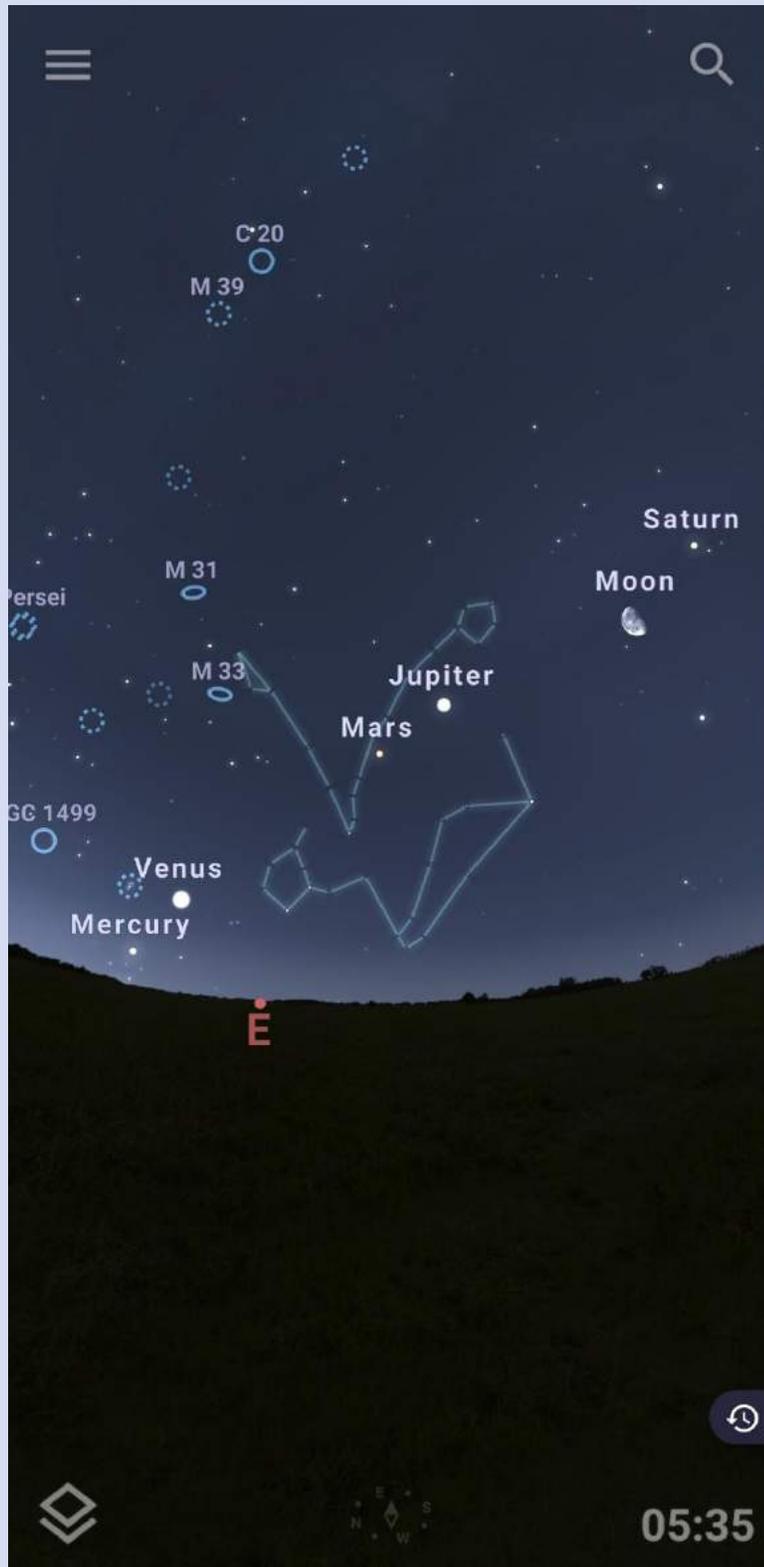
New SPAC Members

We would like to welcome Vladimir Polyakov & Randy Lee, Chris Mitchell, Marcus Mock & Carolyn Smith to our family of members.

Planetary Alignment Reminder:

Just a reminder to all that the morning of **June 20th, this coming Monday**, you'll be able to see the planets in the best alignment positions. Yes, they will be there before and after the 20th, but they will be in their most distinct line. Between Venus and Mars is also Uranus, and between Jupiter and the Moon, Neptune. What is special is the unique alignment of ALL the other planets together in one part of the sky at one time. Saturn will be nearly due south, and Mercury will barely get above the horizon, but they're there (Mercury will disappear soon but reappear in the setting sky in December). I'll be out with my wide-angle lens, trying to get a nice snapshot of this astronomical sight.

Image: from Stellarium app



May 28th New Moon Weekend

Field Report



By Back-up Intrepid Field Reporter

For the New Moon weekend field report that fell on May 27th and 28th, I am standing in for the true Intrepid Field Reporter, Kelly Anderson. It's that time of year where, unless you are lucky enough to enjoy the RV amenity of air conditioning, the Florida heat and humidity has begun to make tenting an incompatible option.

The observing season at our dark sky site in Withlacoochee River Park is typically from October to May, with perhaps September and June being included if the weather is favorable. A few years ago, Mike Partain and I met Doug Sliman for the first time at an empty field on a June WRP and had one of the greatest nights observing ever, so you can never say never. July and August, yeah, those are likely out unless Ron Wayman or Joe Canz are hardcore enough to show up in their campers. Again, air conditioning is the key. I say this because some SPAC members did indeed show up on Friday the 27th for the New Moon weekend, but I was not one of them, so my report is strictly on Saturday's observing.

When I arrived in the late afternoon, Ron Wayman, Joe Canz, Mike Partain, Doug, Terri, and Sidney Sliman, Tim and Mary Ann Harris, were already there, among others. Some new SPAC members also joined us as well, which it is always great to see people getting into this hobby...err...obsession. The skies actually looked really great, with hardly a cloud in the sky, and breezy, even if it was a bit warm. Okay, it was hot. A tip for the newer astronomers, always bring a fan in Florida. Not only can you stick it behind your scope to cool down your mirror, but also it keeps you more comfortable in the shade and stops the mosquitoes from being able to land on you. Sunset is always The Purge for mosquitoes, so having a fan for that hour or two is key to maintaining one's sanity.

I set up next to Mike Partain with our dueling 16's, and as soon as I pulled my CRV into my observing spot and took out my quick setup Crown Canopy (review in the April 2022 issue), Tim was



right there looking to see how it works. Proof positive that you all read the newsletter! Thirty seconds later and the canopy was up, over the car and giving shade. It so hot that if I had set up my scope right then, it would have baked for hours and the mirror wouldn't have equalized until well past midnight. So, I angled the shade down on the western side, turned on the fan, and relaxed. The skies continued to look good as the sun began to set, and I pulled out the scope and gear. As a reminder to all who attend, please find Joe Canz on the field and pay him the nightly park fee for observing. He's usually riding around the field on his powered bicycle like an episode of Sons of Arthritis, so make sure to find him and not to rely on Joe to track you down for the few bucks.



That Saturday night was one of the best in a long time, and in my opinion even better than the clear, four nights we had at the OBS in February. The encroachment of urbanization, even in the Dade City area, have been eroding the dark sky, but that night still pulled out a few stops for everyone. By midnight the Milky Way was distinct, not blazing, but still quite good for being 30 minutes outside of Tampa. Globular clusters were being blown apart left and right, and we were all having a good time. Around 1 or 2 o'clock, I was ready to pack it in and drive home (referring to the no a/c, so sleeping in a tent is not an option). I felt a bit guilty packing it in while the summer Milky Way was just at prime viewing, but my back was telling me something else. As it happened, by the time I had packed the gear I looked up to see the sky had socked in. I left alongside some of our new members, and I believe everyone else was closing it down for the night. However, for the four or five hours that night we had very good viewing. And as great as looking through a telescope can be, getting together with friends who all love this hobby is more important.

Maybe I'll see you in June, but given the temperature right now as I write this article, I'm thinking I won't see you until September.

July Lunar Calendar

July 2022						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

As we head into summer the **planets** begin rising higher into the eastern and southern skies, with Saturn now past the meridian before sunrise. Looking eastward, Jupiter shines brightly with Mars following behind. Mars makes a close approach every two years, so even though it is in the sky it will not increase in any appreciable size until next year. Venus also shines brightly with Mercury only briefly skirting the horizon, and will not make a real appearance in the western sky until just before the end of the year. Just above Venus is Uranus, and higher still is Neptune.

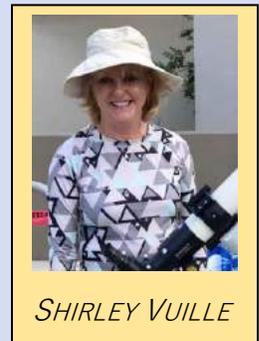
Opposition of the planets:

- Saturn, August 14
- Jupiter, September 26
- Mars, December 8
- Mercury, highest altitude in setting sky, December 24

2022 Weather Balloon Spotting Season

★ For those of us living in the Tampa Bay area, conditions are just right a few weeks before & after the summer solstice to spot weather balloons after sunset. If you have nothing to do at about 8:30pm, grab your binoculars, go outside & see if you can see one drifting in the sky. You can see it eyes only, but with binoculars, you can see a swinging tail that holds the transponder. Every day, it's location and breakage time vary. As the days get longer, they will be visible for longer periods. Locally, weather balloons are released by the National Weather Service in Ruskin. The flight can last about 2 hours & the balloon can rise over 20 miles high (about 100,000 Ft) until it shatters. Data from it & 91 additional balloons released simultaneously across the US & Pacific islands and 10 locations in the Caribbean are used for weather forecasting.

<https://www.weather.gov/tbw/tampabayofficetourupperair>



SPAC Image Gallery



Here are some excellent astrophotography highlights from our fellow SPAC members. Anyone who would like to share his or her work, I encourage you to [email the editor](#) to submit for future newsletters or share them on our [SPAC Facebook page](#).



Left: **Ghost Nebula** William
Optics FLT132 910mm F6.9 on my
EQ6R by **Gregg Williams**

Below: Planetary alignment on June
17th, Nikon D5100 w/Rokinon
14mm f/2.8 by **the editor**





Above: **M81 and M82** by
Allen Force

Right: **Saturn** with
combined RGB and IR in
Winjupos, about 7,000
stacked images, 16" f/4.5 @
only f/8.1, ASI290MC w/1.8X
barlow by **the editor**





Above: **M8 Lagoon Nebula** by **Joe Reichle**

Below: **M13 The Great Hercules Globular Cluster**, Date: 2022-06, Location: Chiefland Astro Ranch, OTA: Rasa 11, Camera: ZWO ASI2600MC, Mount: CEM70, Exposures: 180s x112, Filter: IDAS D1 by **Jamie Kenas**



SPAC Mirror Lab

We members of the Mirror Lab are all about building and improving telescopes. However, if we can't enjoy using them, then what's the point? Whether you are trying to do astrophotography, or just scanning the star fields of the Milky Way with your DOB and MK1 eyeball, stray light from neighbor's security lights, street lights, car headlights, or wind gusts shaking your telescope can all ruin a night under the stars. What to do?

I have found a solution, at my remote Arizona property where I like to do astrophotography. In my case it is wind shaking the scope, and not stray light, that is the problem. But this solution works for both. I built a simple wind and light-proof enclosure and set up my telescope inside it. I have seen several variations on this, but here is what I did.



really good job of blocking the wind. It would also block stray light, if there were any out there. There is plenty of room inside for my telescope, plus a lawn chair and small folding table for my laptop and charts. I made a video the setup when I was there last month. <https://youtu.be/XB-yH7cjPRs>

I bought a 10X10X6 chain link dog kennel at Lowes. It was pretty easy to assemble and set up all by myself, even though the instructions said two people were needed. A second person certainly would have helped. Then I hung 8X10 plastic tarps on the walls of the kennel, and attached them to the chain link fence with bungee cords. The result is a large enclosure that does



a

of

The only real issue I had putting this together was that I needed to cut one of the taps to fit the side with the door. I also needed to add a few clamps to hold the tarp in place on the cut edges because there are no eyelets for bungees on those fresh-cut edges.

This enclosure has worked well for me for some years now. When I am not at the Arizona place, or there but not doing astronomy, I take the tarps down. Without the tarps, the kennel is nearly



invisible from a distance. It took my neighbors years to notice it. Then they wondered if I bring a dog with me, and why I never introduced them to it?

The kennel isn't permanent. I have it staked down so high winds don't shift it, but I can disassemble it if needed. I could move it to another area of the property or even to another location



entirely any time. The cost was not too bad at all. I think the entire setup, including the tarps and bungees was less than \$450 at the time I built it. Your mileage may vary with inflation since.

I have seen variations on this idea that use pipes stuck into the ground and clothes line or wire run between them. Tarps hung on the wires do a good job of blocking stray light, but aren't as good at blocking wind as the kennel. Some people may only need to block stray light in one or two directions, so a very simple and portable solution could be put together easily using pipes, lines and tarps.

That's all for this month. Please feel free to submit your own article ideas. If you know of a mirror making or telescope making story that you think should be showcased here, email me at astronomermike@gmail.com. Put "Mirror Lab Submission" in the title so it will stand out in my email torrent. You can follow everything happening at The Mirror Lab at <http://telescopelab.com/>. You can follow what I am doing on my blog at <http://www.mdpub.com>.

SPAC Business Meeting

Our next business meeting is **Wed., July 13th, at 8:00 PM** via conference call; details upon request. All interested members are invited to attend. All club business decisions are made at the business meeting so as not to encumber the general meeting.

Officers & Directors

President	Brad Perryman	727 420-1957
Vice Pres.	Paul Krahrmer	727 535-5827
Secretary	Shirley Vuille	727 864-2624
Treasurer	Jim Hunter	813 507-8415
Dir.-at-Large	Kyle Brinkman	727 455-6931
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Dir.-at-Large	Jack Fritz	727 692-9831
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Public Relations	John O'Neill	727 637-5945
Membership Chair	Shirley Vuille	727 864-2624
Mirror Lab Chair	Paul McNabb	727-345-5713
Outreach Chair	Jim Hunter	813 507-8415
Star Party Chair	Mike Partain	850 339-0828
Librarian	Ralph Craig	727 384-2086
Club Webmaster	Jack Fritz	813 508-5680
Dark Sky Chair	Leeann Muszynski	813-601-0986

Click on the name to send email

Withlacoochee New Moon Weekends

There's no need for reservations. However, the park closes at sundown, so you will need to arrive before then. The park rangers will give you the gate-code once you're inside the park. Please do not call for the gate code as they are not allowed to give it out over the phone.

Reservations are not necessary. Please print and display our [Friends-Of-The-Park Pass](#) on your dashboard.



Please join us! All astronomy enthusiasts are welcome. You do not need to be a club member to attend. Please refer to our [Club Calendar](#) for details and scheduled dates.

Withlacoochee River Park - Dade City, FL
Detailed directions can be found at:
www.StPeteAstronomyClub.org

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Recognition of Patrons & Benefactors

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Steve & Cindy Fredlund	Patron	Ed Wilson	Patron
Steve Gaber & Karen Sell	Patron		



St. Petersburg Astronomy Club Membership Form

Membership in St. Petersburg Astronomy Club, Inc. (SPAC) is open to anyone, regardless of age, who is interested in astronomy. Benefits of membership include a monthly subscription to the SPAC Examiner newsletter, reduced camping rates and use of the club's bunkhouse at our dark sky site at Withlacoochee River Park, the ability to serve on the SPAC board and voting privileges. Dues are considered donations and are non-refundable. Membership options are available as listed below.

You are now able to choose how you wish to join or renew your membership:

- **Preferred On-line Website Option: New instructions as our website has been updated.**

Go to https://www.stpeteastronomyclub.org/Sign_In.php on the SPAC website where you can join, view and update your membership profile, provide payment, and **print your membership card.**

- **US Mail Option: Takes more time to process manually because we are all volunteers.**

Complete the attached membership form and send it along with your payment to:

Jim Hunter
17316 Oak Ledge Drive
Lutz, FL 33549.
(Checks should be made payable to SPAC, Inc.)

Adult 1: _____ Adult 2: _____

Street: _____

City, State, Zip: _____

Home Phone: _____ Cell Phone: _____

Email Address: _____

Number of Children under 18: _____

Memberships:

Single: \$ 30.00/YR. Includes one adult, minor children, the "SPACE" newsletter, and all the rights and privileges of membership.

Family: \$ 35.00/YR. Includes two adults, minor children and the above rights and privileges.

Patron: \$ 50.00/YR. A Patron member is entitled to the above rights and privileges.

Benefactor: \$100.00/YR. A Benefactor member is entitled to the above rights and privileges.

Student: FREE. SPAC offers free membership to full time high school and college students.

Expected date of graduation: _____

Total Submitted: \$ _____

Your SPAC Membership Card is required for reduced fees at the campground.