

Monthly Notices
of the
Everglades
Astronomical Society
Naples, FL
November 3, 2024



Officers: President: Paul Leopold Treasurer: Kathy James Home Page: https://evergladesastronomicalsociety.org/Home.php

President's Message

Greetings EAS Members,

Clear weather is finally moving into southwest Florida. With the end of daylight savings time, we can look forward to getting out earlier in the evening and enjoying the fall skies at Big Cy-press preserve. Many of us have been busy imaging comet Tsuchinshan-Atlas over the last few weeks. The comet is moving higher in the western sky and even though it's now at 6th magnitude; it makes for a splendid view through the telescope. This fall also brings Saturn and Nep-tune into view crossing the meridian at around 9 PM. Jupiter rises in the East at around 10 PM and with our Florida steady skies, shows great views later in the evening. Our "snowbird" members will be returning to their Florida roosts and they can enjoy the winter skies of Florida in shirt sleeves instead of parkas.

Our November meeting will continue our discussion of club officer and BOD structure. For those of you who are interested in serving on the board, please submit a brief Bio. We had an article in the Naples Press on Friday October 25th. Thanks go out to Mike Usher, Kathy James and Denise Sabatini in assisting in this great publicity effort. There is a daytime program at Big Cypress Preserve on November 7th. We will be sharing a table with Collier Seminole staff with solar viewing being one of the activities.

Best regards, Paul Leopold

President: The Everglades Astronomical Society

A Note on the Monthly Newsletter

Remember, this is your newsletter! Please submit your notes, articles and images for inclusion each month. The submission deadline is the 25th day of the preceding month. For the December newsletter, please share your articles and images (outreach, club photos & astrophotography) by November 25.

UPCOMING EAS MEETINGS

Our monthly meetings are the 2^{nd} Tuesday of each month and usually start at 7pm.

November 12, 2024: Time 7:00 – 8:00 pm

Agenda:

- 1. We will discuss the size and responsibilities of the new Board of Director, PLEASE BRING A BIO IF YOU WOULD LIKE TO JOIN THE BOARD (more info later in this newsletter)
- 2. We will have an open forum to share member photos of Comet Tsuchinshan-Atlas, so BRING YOUR COMET PHOTOS TO THE MEETING.

<u>Location</u>: North Collier Government Center 2335 Orange Blossom Dr., Naples, FL

December 10, 2024: Time 7:00 – 8:00 pm

Location: North Collier Government Center

2335 Orange Blossom Dr., Naples, FL

January 14, 2025: NOTE THE EARLY START **TIME 6:30 – 7:30 pm**

Guest Speaker: Dan Mints from the Amateur Astronomers Association of Princeton speaking on remote imaging in Texas.

Location: North Collier Government Center 2335 Orange Blossom Dr., Naples, FL

February 11, 2025 NOTE THE EARLY START TIME AND CHANGE OF LOCATION 6:30 – 7:30 pm

Guest Speaker (tentative): Dr. Mario Motta, retired Cardiologist, amateur astrophotographer, telescope maker, and renowned expert on Light Pollution will discuss Light Pollution and its impact on health.

NOTE CHANGE OF LOCATION:

Bradford Square Retirement Community 3255 Vanderbilt Beach Rd, Naples, FL 34109

****All meetings are accessible via ZOOM:

Meeting ID: 349 568 7507

Passcode: telescope

Please do NOT share this info with non-club members.

CLUB NEWS

The process to elect a new Board for the EAS is ongoing

For those interested in becoming a Board member, please submit your bio to Paul Leopold, Club President at Paul@theleopolds.net or bring your bio to the November meeting.

EAS featured in article in the Naples Press

The Everglades Astronomical Society was featured in The Naples Press on October 25, 2024. We have been granted permission by The Naples Press to share the article in our newsletter. Special thanks to

Jim Schwartzel at The Naples Press for this link to the article, click here to read it: All eyes to the starry skies - The Naples Press

EAS 2024-2025 Dues

The fourth quarter is membership renewal season. Before year end, please bring \$20 to a club meeting or mail your check to:

Kathy James 270 Naples Cove Dr #3206 Naples, FL 34110

Did you know...Starlink By Rich Sherman

I received two magazines recently, both with lengthy articles on Starlink. I learned a few things and thought I would share them here:

- Starlink presently has around 6,400 very low orbiting satellites, accounting for about 75% of all the active satellites in space.
- The very low orbits—around 500km above the Earth—mean each satellite has a lifetime of only around five years "before the tenuous atmosphere at that altitude drags it below orbital velocity" (source:Economist.com). To maintain a constellation of approximately 40,000 satellites (SpaceX has applied to have 42,000 satellites), SpaceX would have to replace 8,000 satellites each year. No information was provided about the risk of space debris when these satellites de-orbit.

Big Cypress and Other Viewing



We have the following sungazing/stargazing outreach dates with the public at Collier Seminole. Please bring your telescope and enjoy sharing the skies with our community. Sungazing is typically 2pm-4pm:

November 30, 2024 December 28, 2024 January 25, 2025 February 22, 2025 March 29, 2025

For Big Cypress stargazing dates, remember to keep an eye on the GroupMe app where members coordinate their trips down to "BC."

A word about Jupiter! Of particular interest, *Sky & Telescope's* December edition reminds us that Jupiter will be at opposition on December 7, 2024. The article also reveals:

- Double shadow transits by Jupiter's moons Io & Ganymede will occur twice in December. For East Coasters, the opportunity to see the double shadows occurs on 12/23 between 2:47am and 3:51am EST. For our members out west, the second double shadow transit occurs on 12/30 at 2:37am to 3:54am PST.
- Callisto, the outermost of the four bright Jovian moons passes just above and just below the red planet in December. The first occurs on 12/4 at roughly 2am EST, and

then on 12/12 at 4am Pacific Standard Time, and finally on 12/28 at 830pm EST.

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ASTRO NEWS & NOTES

"Star Parties"

- Don't forget now is the best time to register for the Winter Star Party that takes place at the Girl/Boy Scout camps on Scout Key, FL from January 27, 2025 to February 2, 2025. For more information talk to Mike Usher. To register, visit: https://www.scas.org/winter-star-party/?y=2025
- Joshua Tree Night Sky Festival (29 Palms, CA) 10/4/2024-10/5/2024, more info at https://www.skysthelimit29.org/night-sky-festival.html
- Texas Star Party (90 mins. SW of Dallas):
 4/24/2025 to 4/27/2025, more info at https://texasstarparty.org/
- Grand Canyon Star Party (Grand Canyon N.P.): 6/21-6/28/2025, more info at https://www.nps.gov/grca/planyourvisit/grandcanyon-star-party.htm
- Green Bank Star Quest (West VA): 6/25/2025-6/28/2025, more info at https://greenbankstarquest.org/
- Stellafane (Vermont): first week in August, more info at https://stellafane.org/convention/

Articles of Interest

Could Life Exist Below Mars Ice? NASA Study Proposes Possibilities:

https://www.jpl.nasa.gov/news/could-life-exist-below-mars-ice-nasa-study-proposes-possibilities/

Snippet of Euclid Mission's Cosmic Atlas Released by ESA

https://www.jpl.nasa.gov/news/snippet-of-euclid-missions-cosmic-atlas-released-by-esa/



Source: NASA

Liftoff! NASA's Europa Clipper Sails Toward Ocean Moon of Jupiter

https://www.jpl.nasa.gov/news/liftoff-nasas-europaclipper-sails-toward-ocean-moon-of-jupiter/

Can Life Exist on an Icy Moon? NASA's Europa Clipper Aims to Find Out

https://www.jpl.nasa.gov/news/can-life-exist-on-an-icy-moon-nasas-europa-clipper-aims-to-find-out/

NASA: New Insights Into How Mars Became Uninhabitable

https://www.jpl.nasa.gov/news/nasa-new-insights-into-how-mars-became-uninhabitable/

NASA Turns Off Science Instrument to Save Voyager 2 Power

https://www.jpl.nasa.gov/news/nasa-turns-off-science-instrument-to-save-voyager-2-power/

8 Things to Know About NASA's Mission to an Ocean Moon of Jupiter

https://www.jpl.nasa.gov/news/8-things-to-know-about-nasas-mission-to-an-ocean-moon-of-jupiter/

ASTRO IMAGES FROM EAS MEMBERS:

For inclusion in future newsletters, please send your images to Rich at <u>RJSherman@hotmail.com</u>. Please include at a minimum:

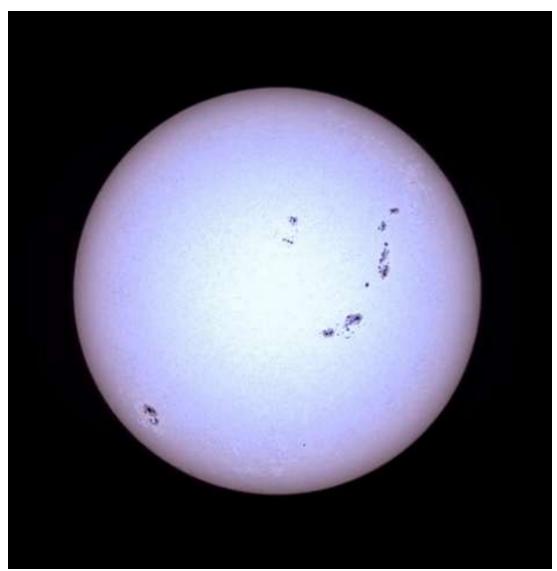
- the name and/or catalog number of the object (e.g., "M33" or "Triangulum Galaxy")
- the date of the image
- the location where you took the image
- the telescope you used to take the image

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Additional information such as the camera, the number of frames, the filter you used, the number of exposures, and the length of each exposure are also very welcome.



Comet Tsuchinshan-Atlas by Paul Leopold
Olympus EM5 Mark II on IOptron Star tracker mount
Lens: 75-300 Telephoto @ 75mm / F6.3
Exposure: 61 seconds
ISO:1600
Taken on 10/21/24 at 8.00 PM



The Sun, by Robyn Pritchard
Naples, FL
October 3, 2024



Fireworks galaxy NGC 6946 and open cluster NGC 6939 by Chuck Pavlick
Constellation: Cepheus
Takahashi FSQ 106 and ASI 533mc camera
60-120sec subs Bortle 4



Elephant trunk Nebula in Hubble palette (SHO) by Chuck Pavlick Takahashi FSQ 106 ASI 1600mm Camera 2 hours each filter 360 sec subs for Ha and SII, 300 sec subs for 0III Bortle 7



Comet Tsuchinshan-Atlas by Chuck Pavlick Tualatin National Wildlife Refuge, Oregon



Comet Tsuchinshan-Atlas by Paul Scott Naples, FL 10/18/2024



M51, The Whirlpool Galaxy by Lou Tancredi Starry Night Ranch in Okeechobee, FL Takahashi TSA 120 Telescope Takahashi EM200 Mount ZWO 2600MC Camera Pixinsight Processing



Two interacting galaxies 0.5 billion light years away
11-hour exposure
Atacama Desert, Chile
NGC7733, the smaller one is 161,000 light years across and NGC7734
is 283,000 light years across - almost 3 times the size of the Milky Way



Comet C/2023 Tsuchinshan-Atlas by Carmela Nobili Chokoloskee, FL Canon D6 and Canon 16mm wide lens 10 sec. exposure



CTB1 a supernova remnant by Eric Uthus
9/26-27/2024 in Glenwood MN
6-inch Newtonian
14 hours Ha/OIII, 2 hours Optolong L-Pro filter
Poseidon-C Pro camera
Software: Pixinsight



M33 by Eric Uthus
9/24-25/2024 in Glenwood MN
6-inch Newtonian
5.5 hours Ha/OIII, 1 hour Optolong L-Pro filter.
Poseidon-C Pro camera
Software: Pixinsight



LBN437 (the Gecko nebula) by Eric Uthus 10/4, 10/5, 10/6, and 10/7/2024 in Glenwood MN 6-inch Newtonian 7.75 hours Ha/OIII, 15.4 hours Optolong L-Pro filter Poseidon-C Pro camera Software: Pixinsight



Comet Tsuchinshan-Atlas by Chuck Dryer Sigma 24mm, fl.4 lens at ISO 800, 2 second exposure Software: Photoshop



Comet Tsuchinshan-Atlas by Chuck Dryer
Location: Michigan
Tamron 70-200mm, f2.8 lens at 200mm,
ISO 800, 40 images at 2 second exposure
Software: Deep Sky Stacker using the Comet registration feature