



CAPE FEAR Skies

Monthly Newsletter
Cape Fear Astronomical Society
Serving Wilmington, NC and Surrounding Areas



Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

April 2022

President's Report *by Jon Stewart-Taylor*

It's State Wide Star Party season. We're signed up to participate in two this year: April 8th in Beulaville, and April 23rd in Carolina Beach State Park. The Beulaville session has something unusual for star parties: a cloud date on the 9th. The weekend of the 8th is first quarter moon, so even if the weather isn't the best we'll have something to show. The weekend of the CBSP session is last quarter moon, so we'll need to choose bright deep sky objects to feature.

Friday, the 26th of March we had 6 people at the Starfields Observatory. Even though the forecast wasn't for the best weather, we got some observing in before the clouds started to thicken. The Double Cluster in Perseus is always a treat in practically any instrument, and even after the clouds started moving in we were able to see some objects through the sucker holes, including Mizar and Cor Caroli. The forecast was for clearing at about 11 pm, but nobody wanted to wait two hours to see if that would be true.

Our next scheduled observing session is the first and second of April: hope to see you there. If you find a weekday night where you want to observe, post a message to GroupMe or the email list, and we can probably open the observatory.

April and May are some of the best observing months of the year. Weather permitting, let's get together and see some stuff.



Speaking of the Double Cluster, here's a stack of 5 shots I took in 2011 at the Eastern Iowa Star Party in Dixon, Iowa and just now stacked them. Talk about procrastinating!

If you look closely, you can see a number of red stars. When I see them at a public event, I point them out – telling them to look at the star in the middle of the 2 clusters. Not everyone can see the color, but when they do they have to tell me about the others.

Next time, have a look yourself.

- Karl Adlon

Calendar

The February Meeting will be via ZOOM.
 Observing events, being outside, shall continue at this time.
 Please watch your email for the most up to date information.

April 2022

Date – Event – Time

- 01 New Moon - 06:26 UTC
- 01 Club Observing @ the Club Observatory; Shiloh Road Ivanhoe NC; 7:00 PM**
- 02 Club Observing @ the Club Observatory; Shiloh Road Ivanhoe NC; 7:00 PM**
- 02 Moon and Uranus; 19:00 UTC: Moon ½ degree from Uranus; 29 degrees from Sun; evening
- 05 Mars and Saturn; 02:00 UTC: Mars 1/3 degree from Saturn; 53 degrees from Sun; morning
- 08 State Wide Star Party @ Beulaville Elementary School with #Science Alliance 7 PM – 10 PM**
- 09 First Quarter Moon; 06:47 UTC
- 09 State Wide Star Party @ Beulaville Elementary School with #Science Alliance 7 – 10 PM – Rain Date**
- 09 Public Observing, 7:30 PM, starts at sunset; Carolina Beach State Park**
- 10 ★ Cape Fear Astro Monthly Meeting ★
 CFAS Monthly Meeting - 7:00pm – 9:30pm
 212 DeLoach Hall; UNCW
 And will be via Zoom**
- 16 Full Moon; 18:56 UTC
- 22 Club Observing (Last Quarter Moon) @ the Club Observatory; Shiloh Road Ivanhoe NC; 7:00 PM**
- 23 Last Quarter Moon; 11:57 UTC
- 23 Club Observing (Last Quarter Moon) @ the Club Observatory; Shiloh Road Ivanhoe NC; 7:00 PM**
- 27 Mercury at easternmost elongation; 08:00 UTC; 20 deg from Sun; evening
- 27 Moon-Venus-Jupiter within circle of 4 degrees; 09:00 UTC; 41 degrees from sun; morning
- 29 Club Observing (Last Quarter Moon) @ the Club Observatory; Shiloh Road Ivanhoe NC; 7:00 PM**
- 30 Club Observing (Last Quarter Moon) @ the Club Observatory; Shiloh Road Ivanhoe NC; 7:00 PM**
- 30 New Moon; 20:30 UTC
- 30 Venus < ¼ degree from Jupiter; 22:00 UTC

2022 Public Events

Date	Time	Event	Where
Apr 8	7 PM – 10 PM	State Wide Star Party	BES
Apr 9	30 min before Sunset	Public Observing	CBSP
Apr 22	7-10 pm	State Wide Star Party	CBSP
May 7	30 min before Sunset	Public Observing	CBSP
Jun 4	30 min before Sunset	Public Observing	CBSP
Jul 2	30 min before Sunset	Public Observing	CBSP
Aug 6	30 min before Sunset	Public Observing	CBSP
Sep 3	30 min before Sunset	Public Observing	CBSP
Oct 1	30 min before Sunset	Public Observing	CBSP
Oct 1	TBA	International Observe the Moon Night	CFM
Oct 29	30 min before Sunset	Public Observing	CBSP

Where (Locations):

- ★ CBSP: Carolina Beach State Park
- ★ CFM: Cape Fear Museum
- ★ BES: Beulaville Elementary School

Special Interest Groups (SIGs)

Usual meeting dates – watch emails for exceptions

- Phenomena: First Wednesday
 Both Eyes: Second Tuesday
 Astrophotography: As Requested
 Telescope Usage: Third Tuesday
 New Astronomer: Third Wednesday
 Outreach: Fourth Tuesday

Astro phenomena from:

<https://www.universalworkshop.com/astronomical-calendar-any-year/>

Sunday Night Observing: March 6th

by Jon Stewart-Taylor

Sunday nights aren't our usual observing nights, but the forecast for March 6th was too good to stay at home. After checking all three of the Clear Sky Chart, MeteoBlue, and NWS ILM i had to go out to the Observatory under a waxing crescent moon.

The actual weather was far better than even the most optimistic of the forecasts. From sunset 'til i left around 11 pm it was pretty much cloudless. The temperature was warm enough that a long-sleeved T-shirt was enough until 10 pm. There was no dew to speak of until nearly 10:30. As proof of that, the Telrad never fogged over.

Speaking of Telrads, the one i was using was donated by Bill Cooper. The first thing i did when arriving was pull the club 8" dob out of the shed to let it start cooling. While it cooled, i removed the old red-dot finder and attached the new Telrad. Bill donated a deluxe Telrad, with the blinking circuit and a dew shield: Thanks Bill. By the time i was done attaching it, i could use first the moon and then Sirius to align the Telrad with the main scope.

The darkness was limited both by the moon and by a bit of humidity in the air, but towards the end of the evening i was using 5.5th magnitude stars visible unaided-eye to help me find stuff. And, what a lot of stuff there was to find. The remnants of late Fall were in Cassiopeia and Perseus, with a bit of the eastern half of Andromeda. The moon made finding anything in Aries or Pisces pretty tough, but there were lots of deep-sky things from Taurus all the way into Early Spring in Leo and Ursa Major.

I collected a lot of Messiers, and NGCs, and a few objects from other catalogs pretty much all over the sky. The tourist traps were beautiful. Even with the moon, the Orion Nebula was simply gorgeous. The Trapezium were nicely separated. That "other Orion Nebula", NGC 1980:

https://en.wikipedia.org/wiki/NGC_1980

was a nice sight as well. Some other highlights included M35 and it's NGC companion, M46 with it's included planetary nebula (hard to pick out from the cluster without a bit more magnification), galaxies M81/82 in Ursa Major, a double star and some clusters in Monoceros, both Leo galaxy triples (95/96/105 and 65/66/3628).

Perhaps my favorite of the night was my first visit to M93 since a trip to the Winter Star Party. That far south, M93 was much higher and clearer than i'd seen it before, with a shape like a Thunderbird (actual bird, not car). From Starfields on Sunday, the view rivaled the view from the Keys, again showing the distinctive bird shape. Most photos don't show the bird as clearly. This one is pretty close to what i saw, but flipped top for bottom.

<http://www.kopernik.org/images/archive/m93.htm>

In the image the bird's head points towards bottom left and its tail towards upper right. If

you haven't tracked this down in your scope, give it a try and see what you think it looks like.

The Observatory is doing what it's supposed to do. Taking a scope out of the shed and getting ready for observing took about 10 minutes (not counting attaching the Telrad) and putting it away was possibly even quicker. I'm looking forward to when we get the C8 on a permanent mount, so we can have a driven scope ready to observe almost instantly.

The scheduled observing weekends are on the club calendar. When the sky is good on a non-scheduled day, i'll try to post an e-mail. Or, post one when you'd like to go, and we'll see if we can't meet under the night skies.



Pictures from Saturday, March 26



Jon send these pictures from the observing event.

Besides Jon, attendees included Hank Lyon, Thomas and Nancy Tucker and Alan and Eileen Kayman.



The pictures give a good idea of the size of Starfields and the sky conditions before the clouds left and darkness fell.



And the Next Night

I used a Revolution Imager R2 with a Celestron 80mm f5 refractor to display the image at left and took a picture of it with my DSLR. I'm quite pleased with the R2 (no D2).

With the brightness as low as possible, the screen is still very bright at night. Something I need to address.

I set it to take 2.56 sec exposures and stack the last 6 frames – all internally in the R2. I watched for a while as Orion passed a geostationary satellite! Fun!



Get to Know YOUR Astronomical League

www.astroleague.org



The Astronomical League (Astroleague or AL) is one of the largest amateur astronomical organizations in the world. The organization serves to encourage an interest in astronomy (especially amateur astronomy) and promote the science of astronomy by:

- ✓ fostering astronomical education;
- ✓ providing incentives for astronomical observation and research;
- ✓ assisting communication among amateur astronomical societies.

CFAS is one of over 300 member societies affiliated with the Astroleague. Your membership in CFAS allows you take full advantage of this relationship so periodically review the information below to see how the Astroleague can support your astronomical interests and endeavors.

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ALCon 2022 is ON!	https://alcon2022.org/
Current issue of <i>Reflector Magazine</i>	https://www.astroleague.org/reflector/december-2021-reflector-magazine
Searching for a book? See the AL Book Service	https://www.astroleague.org/al/bookserv/bookserv.html
AL Store Guides, Books, Apparel +	https://www.astroleague.org/store/index.php
CFAS ALCor	Hank Lyon, hlyon8448@gmail.com
Reminders and AL News Bites!	ACT NOW! – It’s time to let your ALCor know of any address, email or <i>Reflector</i> delivery (mail or digital) preference changes. Interested in going to Albuquerque, New Mexico July 27-30 for the <i>IN PERSON</i> (finally) Astroleague annual conference? Check out the Alcon 2022 link above.

The Astroleague Correspondent (or ALCor) is your link between CFAS and the Astroleague. Don't hesitate to contact your ALCor if you need assistance with anything Astroleague related whether it's general information or detailed coordination of observing program completions for certification. Check back here each month to see any new postings or reminders.

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CFAS Correspondence:

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Members are welcome and encouraged to submit articles or other input for "CAPE FEAR SKIES". Submit any and all interesting items for publication to Karl Adlon, Editor (email kmja79@yahoo.com).

Cape Fear Astronomical Society is a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code.

CFAS Officers:

President:	Jon Stewart-Taylor
Vice-Pres:	Skip Hagers
Associate VP	Karl Adlon
Secretary:	George Pappayliou
Treasurer:	Ben Steelman
ALCor	Hank Lyon

Dues: Dues for 2022 are \$25 for Individual and \$32 for Family Membership. Students dues are \$5 per year.

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