

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.*

**October 2021**

## **President's Report**

*by Jon Stewart-Taylor*

A lot has happened over the last month. The COVID-19 pandemic resurged, forcing us back to Zoom-only meetings. Today, I heard the good news that the rate of increase is decreasing. Unfortunately, the number of cases, and of hospitalized cases, is still increasing. Although the current surge shows signs of waning, it isn't over yet, and our October meeting will also be Zoom-only. I'm hoping that as more people are vaccinated and other measures are enacted, the number of cases will drop and we'll be able to hold our November meeting in-person at UNCW. We'll try to figure it out and make the call well before November first.

A more positive thing this month: we have adopted the proposal to transfer the observatory at Starfields into the care of Cape Fear Astro. I believe this will be a very good thing for the club, both for the use of current members and as a draw for future members. There are still quite a few tasks required to implement the proposal, some of which are big steps for a small club. I believe the most important task is to create the Observatory Committee. The Committee will be entrusted with implementing the proposal, and then with maintaining and improving the Observatory. If you'd like to be on the committee, please send an e-mail to the list. The Executive Board will select 4 people to serve from among all those who submit their names.

The coming month will be quite busy as well. October is the first of two months for nominations for club offices. Please do think about whether you'd like to serve the club (in either an elected or appointed office). We could definitely use a more capable web master. If you want one of the elected offices, I suspect the current office holder might be willing to have you step up. If you'd like to nominate someone for an office, first check with them to see if they're willing, then post the nomination to the e-mailing list, or make the nomination at our next Zoom meeting.

On October 9th, we have another scheduled public observing session. We had good public attendance at our last one, and the moon will be slimmer than during previous sessions: only 3 days old. This might be a good opportunity to show off some deep-sky objects, weather permitting. The only drawback is that it's the same night as the second of that weekend's club sessions at Starfields. I plan to try to make the club session on Friday, then the public session on Saturday.

Also coming in October is International Observe the Moon Night. Cape Fear Astro will be partnering with the Cape Fear Museum on Saturday October 16, from 6-8pm. No one has proposed any activities other than telescopic observing of the moon, so we'll need to be there at about 5:30 to set up. We will be in the garden right next to the Museum building, with room for up to 5 scopes of varying sizes. I plan to bring the SkyScanner 100 as an example of a good beginner's scope.

Looking further ahead, we need to think about the possibility of a Holiday Celebration, which we traditionally hold instead of a December general meeting. Under normal circumstances, we'd have a member volunteer to host it. This year, with the uncertainty caused by COVID, we could cancel (as we had to last year), hold it outside (provided the weather permits), or have a member host it. I suspect we're not yet at the point where we have the information we need to make the decision, but keep it in mind as December draws nearer.

## Calendar

**Due to the COVID-19 pandemic upsurge Meetings will be via ZOOM.  
Observing events, being outside, shall continue at this time.  
Please watch your email for the most up to date information.**

### October 2021

Date – Event – Time

06 New Moon

08 Draconid meteor shower; ZHR 20; peak Oct 8; 2 days after New Moon

**08 Club Observing at Starfields; Shiloh Road Ivanhoe NC; 06:30 PM**

**09 Club Observing at Starfields; Shiloh Road Ivanhoe NC; 06:30 PM**

**09 Public Observing; 06:30-09:30 PM; Carolina Beach State Park**

**★ 10 Cape Fear Astro Monthly Meeting ★ ★**

**7:00pm VIA ZOOM**

12 First Quarter Moon

16 Venus 1.5 degrees from Antares; 47 deg from sun in evening sky

20 Full Moon

20 Orionid meteor shower; ZHR 25; peak Oct 20; 1 day after full moon

25 Mercury at westernmost elongation; 18 deg from sun in morning sky

28 Last Quarter Moon

29 Venus at easternmost elongation; 47 deg from sun in evening sky

**29 Club Observing – Location TBD; 07:00 PM**

**30 Club Observing – Location TBD; 07:00 PM**

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

## New Astronomer Packet: Flash Drive

*by Jon Stewart-Taylor*

The New Astronomer Packet has been slowly progressing for almost two years. We've done (overdone?) research on planispheres and books to choose good but inexpensive ones to include in the packet. The final item to go in the packet is a flash drive full of files and links. Bill Cooper was kind enough to donate a batch of drives. Now we're working on the content.

The flash drive is to contain files and links which members of Cape Fear Astro recommend as likely to help a new astronomer gain knowledge and experience to help them grow in the hobby and enjoy it more. There will be a "readme" file, and an HTML index to help people find the files and links, and figure out what they are.

The files included are to be of various experience levels, and the index will sort them by type and level. People will be able to look at them in whichever order they think will suit their needs and interests.

The links to include will be recommended as useful for new astronomers. Again, they'll be organized by type and level. If you have a file or site which you believe will help new astronomers, please let Jon know and it can be added.

The files will be sorted into the following folders on the flash drive. Although some files could easily be in more than one folder, we'll try to put them into just the most appropriate folder. The index may reflect this organization, or it may not, as we decide is most appropriate.

- Beginnings: information for people just starting out
- Binoculars: Using binoculars for astronomy, finding and observing deep sky objects
- Light Pollution: Information about the causes of, problems caused by, and the solutions for unwanted light in the sky
- Moon: observing the Earth's Moon, and its surface features.
- Observing Lists: It's a big universe out there. These lists will help you find some of the best objects to observe.
- Telescopes: information about buying, using, and possibly fixing telescopes.
- Accessories: The stuff which isn't a telescope but which is important to use them. This will include things like observing chairs, flashlights, atlases, etc. which are not in one of the other folders.

Again, if you have any files you think would help a New Astronomer, or think of an additional category, please feel free to e-mail them to Jon.

## Weather to Observe or Not

*by Karl Adlon*

Weather is a primary factor in a decision whether to observe or spend time on other activities. We, hopefully, make an informed decision (guess) based on weather forecasts (which often differ) and weather information. Here are the websites I use:

**National Weather Service (NWS)** at [weather.gov](http://weather.gov) -

<https://forecast.weather.gov/MapClick.php?lon=-78.14604377641807&lat=34.606593235512165> is for Starfields.

Most useful is the Hourly Weather Forecast giving Temperature, Dew Point, Wind, Sky Cover and Relative Humidity.

**GOES-East** - Sector view: Southeast - <https://www.star.nesdis.noaa.gov/GOES/sector.php?sat=G16&sector=se>

This site does not provide forecasts; it does give animation of satellite views of the last ~1.5 hours in various wavelengths. GeoColor is most useful. When conditions don't match expectations, Nighttime Microphysics and its commentary can help identify the reason, such as fog or low haze which is often the culprit.

**Clear Sky Chart** - <https://www.cleardarksky.com/c/CFAS1NCkey.html?1> is close to Starfields. I check all of the parameters here and compare them to NWS.

**Meteoblue** - <https://www.meteoblue.com/en/weather/outdoorsports/seeing/34.606N-78.149E> is for Starfields.

This site gives forecast clouds at low, mid and high elevations and seeing in arc-sec.

**Windy** - <https://www.windy.com/-Clouds-clouds?clouds,34.264,-78.059,5> This site provides lots of past and forecast weather in graphical, animated form. For astronomy clouds is the most useful.

**Weather Underground** - <https://www.wunderground.com/weather/us/nc/ivanhoe/KNCIVANH3> is close to Starfields. For later observing I check the 10 day forecast and for coming soon I check the hourly forecast.

These services provide lots of data and forecasts and, NO, THEY DO NOT AGREE. So you/I become our own forecaster. Which forecasts don't agree with the weather right now? Throw them out. Do the remaining forecasts say GO or NO GO?

I have found that as the night of observing gets closer and even between the night before and morning of, the forecast can change enough to make you want to change your mind from GO to NO GO or vice versa.

Sometimes I'm not optimistic about the skies but go any way, hoping others will be there and we can exchange ideas and experiences and have an enjoyable evening whether we observe or not.

## The Birds and The Byrds

*by Karl Adlon*

Now is the time of the year that if you are observing the Moon you can see migrating birds zip across the bright, lit portion of the Moon. When I saw this many, many years ago I realized what it was and wished I could go with them. Northern winters are not my cup of tea!

Becky sends this link <https://nc.audubon.org/news/wake-audubon-helps-raleigh-go-dark-birds> about Raleigh municipal buildings assisting birds by turning out unneeded lights during migrating times. I wonder; if they can turn them out for period of times of the year, couldn't they turn them out all of the time?

Right now, in the night sky, you can see Cygnus the Swan, Aquila the Eagle and, with a telescope, the Eagle Nebula. The latest Sky & Telescope magazine has an article about objects to observe in Cygnus and an article about observing and sketching the various components of the Veil Nebula located on the eastern wing of the bird.

I posted this picture on Facebook with the caption "To everything turn, terns, turn". Yes, I know it comes from the Bible, but I was thinking of the Byrds song (and yes, I know others did the song before them). I did a search of "turn turn" and this is the first thing that came up, from 1965, which may be before your time:

[https://www.youtube.com/watch?v=W4ga\\_M5Zdn4](https://www.youtube.com/watch?v=W4ga_M5Zdn4) I hope you see the humor in my post!



Occasionally, while observing, I've heard birds calling in the night. Owls, Whippoorwills and Bobwhites I could identify and others I couldn't.

It's enjoyable to see, and hear, our connection with nature.

Clear Skies!!

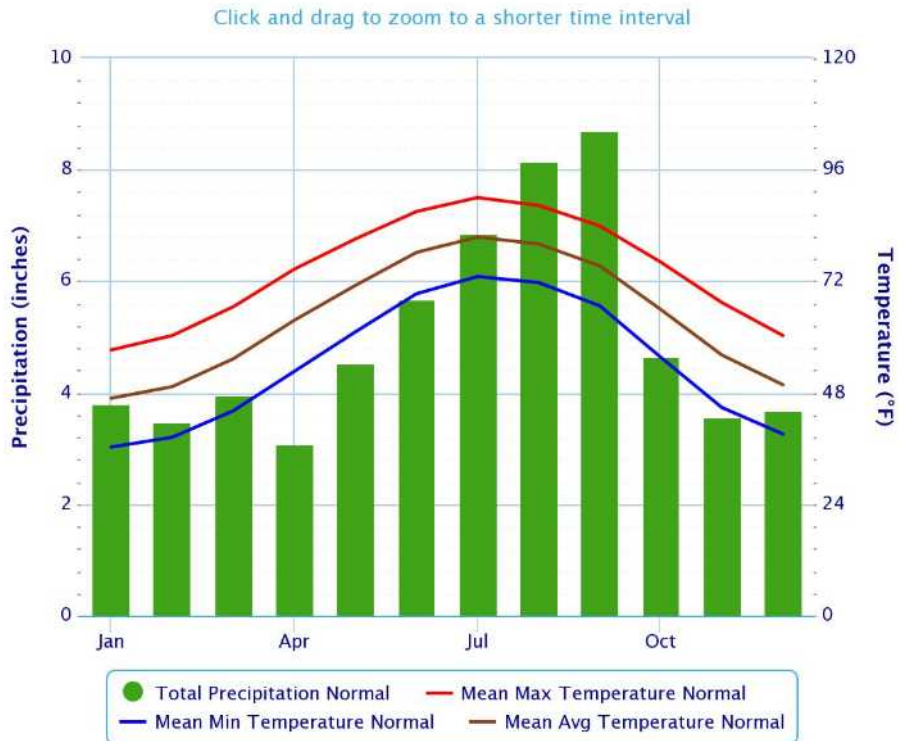


# Our Local Climatology

by Karl Adlon

I sometimes poke around to see what is on the National Weather Service website. At this location: <https://www.weather.gov/wrh/Climate?wfo=ilm> I found this graph:

Monthly Climate Normals (1991–2020) – Wilmington Area, NC (ThreadEx)

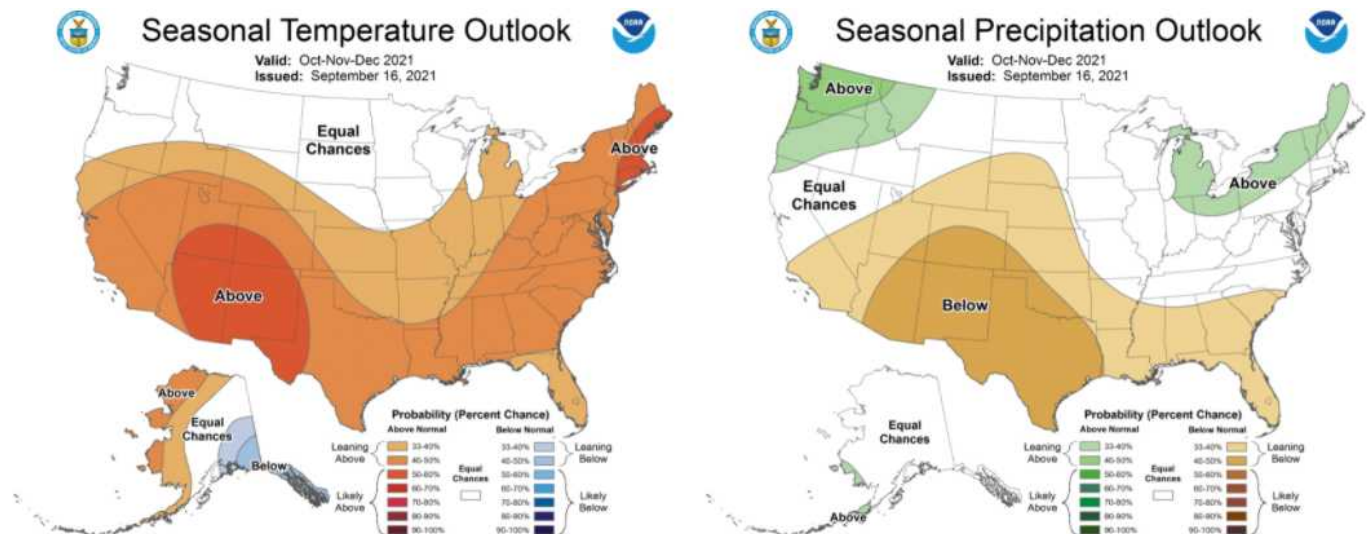


Powered by ACIS

Some surprises for me:

- Not much “April showers” here but plenty of May flowers.
- September is the rainiest month with August a close second. But I wonder how much rain is associated with hurricanes. Last week we got 8” of rain in two days. On the other hand, I see that between the high and the low it is a 3 times difference, which I don’t think is a huge deal.

And from the Climate Prediction Center <https://www.cpc.ncep.noaa.gov/> :



So, warmer than normal and about average precipitation for the remainder of the year.



## Astronomical League Update

by Hank Lyon

Astronomical League Correspondent (ALCor)

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[www.astroleague.org](http://www.astroleague.org)

It's hard to believe we're beginning the last quarter of 2021, quite a year in many respects but certainly not a slow one. With the last quarter upon us, you should have received your September quarterly issue of the Reflector magazine. As updates to our roster with the AL are due by mid-October, please let me know at your earliest convenience if your Reflector preferences have changed (paper vs. electronic copy) or if you're not receiving issues. Recall that a link to the current electronic issue can also be found on the AL's home page, link provided above. On a different note and while we're talking about the AL home page, also note that you can look there for several postings regarding observing program updates and announcements.

Last month I provided information about the successful completion of ALCON 2021 Virtual. If you missed the update or are not aware, the conference remains posted on YouTube in its entirety. Simply review the schedule of events posted on the ALCON 2021 Virtual website <https://www.alconvirtual.org> 6 and determine which session is of interest; you should be able to locate the various sessions by searching "2021 Astronomical League Convention" via Google or YouTube.

Finally, I wanted to remind everyone not to forget the AL Store, especially since we're approaching holiday season. The address is <https://store.astroleague.org/>. The store is a great location to browse for books, AL clothing, charts, astronomy aids and most importantly, observing manuals for those programs not providing one free of charge. Why mention this in October? COVID continues to plague the speed in which orders can be processed and shipped. Delays of a few weeks can happen so factor this into any orders, especially if you plan to surprise someone with a gift this holiday season.

As always, if you have any questions about the AL, its programs or any other aspect, please reach out to me at the email address above.

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Editor's Note: Used in this Newsletter, "Cape Fear Astronomical Society" may be abbreviated "CFAS" or "CFAstro".

### CFAS Correspondence:

Please contact the society at: CFAS, P.O. Box 7685, Wilmington, NC 28406

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](mailto:kmja79@yahoo.com)).

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### CFAS Officers:

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

**Dues:** Dues for 2021 are \$25 for Individual and \$32 for Family Membership. Students dues are \$5 per year.

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### Contact Us:

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