

CAPE FEAR



Skies



*The
Monthly
Newsletter of the
Cape Fear Astronomical Society*

Volume 5 No. 4

Wilmington, NC

April 1990

April Meeting Announcement

Sunday
April 1, 1990
7:00 PM
Bryan Auditorium
Morton Hall
UNCW Campus

The next meeting of the Cape Fear Astronomical Society will be held on Sunday April 1, 1990 in the Bryan Auditorium of Morton Hall on the UNCW Campus. The Business meeting will begin at 7:00 PM EST.

The general meeting will begin at 7:30 PM. Please note this change in the starting time for the program. The program for this month's general meeting will be a slide show titled: *Jupiter: The Star that Failed*. Presented by society member Tom Jacobs.

the observatory fund. Alan said that John Marshall has accepted the office of Associate Vice President.

Alan mentioned that the society could shorten the business meetings by at least a half an hour. There was some discussion on the subject and most members liked the idea. We will try it for a few months and see how it goes. The meetings will start at 7:00pm and the program will now start at 7:30pm.

Tom Jacobs and Alan informed the society about the latest on Comet Austin. It may be a 2nd or 3rd magnitude comet this spring, but time will tell. Conrad Pope said when he saw it, it was about 5th magnitude.

Paul Walker had one of his photographs of the Space Shuttle launch on the front page of the *Wilmington Star News* newspaper last month (Feb.). He was recognized by the membership for his efforts. Good work Paul. Alan shared with the society a clipping from a newspaper from Boone, North Carolina on the observatory near Boone. We were informed that our Astronomy Day exhibit at the mall will be sometime in late May or early June due to some indoor remodeling.

Martin Best talked about the upcoming eclipses of the Sun in July of 1991. So far Alan and Martin are planning to go to Baja California. Conrad is going with

Meeting Minutes from March

Sunday March 4, 1990

The March meeting of the Cape Fear Astronomical Society was called to order by Alan Hilburn at 7:03pm.

Wayne Teachy reported to the society that we have \$244.51 in the checking account and \$90.79 in

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Comet Austin Update

Comet Austin (1989c₁) continues to maintain a close following from the Amateur Astronomer Community. While it now seem unlikely that Austin will ever reach "first magnitude or brighter" as was initially indicated it will most probably brighten to a naked eye levels. The current predictions call for Comet Austin to reach about 3rd magnitude.

It does look like there will be a good comet this spring. Even if it is not a once in a life time "great" comet.

The Society will have regular scheduled viewing sessions on Saturday the 14th and 21st of April. Both of our regular group viewing sessions are being scheduled for good coverage of Comet Austin. Rather than the "normal" evening sky sessions, both April view-

ings will be morning sky oriented. Instead of starting these session at dark and going until late at night we will be starting late at night and going to dawn.

This appearance of Comet Austin seems to be it's first journey into the inner solar system. It is impossible to accurately predict the activity of a first time comet. For this reason we are making only tentative plans for public viewing sessions of Comet Austin. We do not want to arouse the public for another Kohoutek.

If we have a public session on Austin, we now plan to have this event at Fort Fisher on the morning of May 5th. However, to avoid a false alarm we will not announce this session to the public until after we have observed Austin for ourself to determine if there will be anything for the public to see.

Current EPHEMERIS FOR Comet Austin (1989c₁) J2000.0

Date	R.A.	DEC.	DELTA	R
March 30	1:48.26	+11° 39.8'	1.25	.47
April 4	1:49.04	+18° 32.8'	1.16	.39
April 9	1:43.26	+25° 21.1'	1.05	.35
April 14	1:28.94	+30° 51.6'	.93	.37
April 19	1:08.19	+34° 17.3'	.81	.43
April 24	0:44.31	+35° 52.0'	.70	.53
April 29	0:18.40	+36° 03.7'	.60	.63
May 4	23:49.40	+35° 04.9'	.51	.73
May 9	23:14.66	+32° 44.2'	.42	.83

(March Meeting Minutes from page 1)

a tour group to see "day turn into night".

Alan said that if anyone has anything to give to the yard sale to contact him.

Some of you may be wondering where is Doug Rhodes. Alan has found out that Doug is attending a school for the handicaped in Greensboro. Doug's mogher said Dough likes it there, but he sure does miss our meetings. We wish Doug the best of luch and hope to see him back with us soon.

James Picklsesimer talked about the Astronomy Book Club of which he is a member.

Martin gave the main program for the evening. Using slides and a model, his topic was the Sun. It was, I thought, an enjoyable program.

The next program will be on the planet Jupiter, given by Tom Jacobs on April 1st, no foolin'.

— Ronnie Hawes

(Sky Calendar from page 3)

19:51 Sunset.

21:22 Astronomical twilight ends.

Friday: Apr 27

4:54 Astronomical twilight begins.

6:25 Sunrise.

19:51 Sunset.

21:23 Astronomical twilight ends.

Saturday: Apr 28

4:53 Astronomical twilight begins.

6:24 Sunrise.

19:52 Sunset.

21:24 Astronomical twilight ends.

— Alpha Bootids meteor radiant 14:30; declination +19°; ZHR = 1; velocity 20 km/sec

Sunday: Apr 29

±4:00 Jupiter passes 3° south of the Moon.

4:51 Astronomical twilight begins.

6:23 Sunrise.

19:53 Sunset.

21:25 Astronomical twilight ends.

Monday: Apr 30

4:50 Astronomical twilight begins.

6:22 Sunrise.

19:54 Sunset.

20:00 Current Julian date is 244 8011.5

21:26 Astronomical twilight ends.

Sky Calendar for April 1990

(All times are given in Eastern Time. Times preceded with the "±" symbol are ±30 minutes of the time listed.)

Sunday: Apr 01

- 2:00 Daylight Savings Time begins. Set your clock forward one hour.
- 5:33 Astronomical twilight begins.
- 6:58 Sunrise.
- ±14:00 Jupiter passes 3° south of the Moon.
- 19:31 Sunset.
- 20:56 Astronomical twilight ends.
- Comet P/Sanguin at perihelion. Distance from the Sun is 1.81 au.
- Tiros 1 launched on this date in 1960. It becomes the first Earth orbiting weather satellite.

Monday: Apr 02

- 5:31 Astronomical twilight begins.
- 6:24 Moon at first quarter.
- 6:57 Sunrise.
- 19:32 Sunset.
- 20:57 Astronomical twilight ends.

Tuesday: Apr 03

- 5:30 Astronomical twilight begins.
- 6:55 Sunrise.
- 19:33 Sunset.
- 20:58 Astronomical twilight ends.
- The Soviet Luna 10 becomes the first space probe in Lunar orbit on this date in 1966.

Wednesday: Apr 04

- 5:28 Astronomical twilight begins.
- 6:54 Sunrise.
- 19:34 Sunset.
- 20:59 Astronomical twilight ends.
- Kappa Serpentid Meteors. Radiant is right ascension 15:20; declination +18°; ZHR = 1; velocity 45 km/sec.

Thursday: Apr 05

- 5:27 Astronomical twilight begins.
- 6:53 Sunrise.
- 19:34 Sunset.
- 21:00 Astronomical twilight ends.

Friday: Apr 06

- 5:25 Astronomical twilight begins.
- 6:51 Sunrise.
- 19:35 Sunset.
- 21:01 Astronomical twilight ends.
- The first commercial communications satellite Intelsat 1 is placed in geosynchronous orbit on this day in 1965.

Saturday: Apr 07

- 5:24 Astronomical twilight begins.
- 6:50 Sunrise.
- 19:36 Sunset.
- 21:02 Astronomical twilight ends.
- Delta Draconid Meteors. Radiant is right ascension 18:45; declination +68°; ZHR = 1; velocity 27 km/sec.

Sunday: Apr 08

- 5:22 Astronomical twilight begins.
- 6:48 Sunrise.
- 19:37 Sunset.
- 21:03 Astronomical twilight ends.
- Palm Sunday

Monday: Apr 09

- 5:21 Astronomical twilight begins.
- 6:47 Sunrise.
- 19:38 Sunset.
- 21:04 Astronomical twilight ends.
- 23:18 Full Moon called the "grass" or "egg" Moon.

Tuesday: Apr 10

- 5:19 Astronomical twilight begins.
- 6:46 Sunrise.
- 19:38 Sunset.
- 21:05 Astronomical twilight ends.
- First Day of Passover

Wednesday: Apr 11

- 5:18 Astronomical twilight begins.
- 6:45 Sunrise.
- 19:39 Sunset.
- 21:06 Astronomical twilight ends.

Thursday: Apr 12

- 5:16 Astronomical twilight begins.
- 6:43 Sunrise.
- ±16:00 Moon at apogee. Distance from the Earth is 63.6 Earth-radii.
- 19:40 Sunset.
- 21:07 Astronomical twilight ends.
- Cosmonaut Yuri Gagarin becomes the first man to orbit the Earth on this date in 1961.
- Virginid Meteors.

Friday: Apr 13

- 5:15 Astronomical twilight begins.
- 6:42 Sunrise.
- ±11:00 Mercury at it's greatest eastern elongation 20°.
- ±19:00 Uranus is stationary in right ascension; begins retrograde motion.
- 19:41 Sunset.
- 21:08 Astronomical twilight ends.
- Good Friday
- A tank onboard Apollo 13 ruptures en route to the Moon on this date in 1970.

Saturday: Apr 14

- ±3:00 Antares passes 0.1° south of the Moon Occultation.
- 5:13 Astronomical twilight begins.
- 6:41 Sunrise.
- 19:41 Sunset.
- 21:09 Astronomical twilight ends.
- Shuttle Columbia lands safely after a 2 day orbital test flight. This completed the first space shuttle mission in 1981.

Sunday: Apr 15

- 5:11 Astronomical twilight begins.
- 6:39 Sunrise.
- 19:42 Sunset.
- 21:10 Astronomical twilight ends.
- Easter Sunday

Monday: Apr 16

- 5:10 Astronomical twilight begins.
- 6:38 Sunrise.
- ±7:00 Neptune is stationary in right ascension; begins retrograde motion.
- ±15:00 Uranus passes 3° north of the Moon.
- 19:43 Sunset.
- 21:11 Astronomical twilight ends.

Tuesday: Apr 17

- 0:00 Neptune passes 3° north of the Moon.
- 5:08 Astronomical twilight begins.
- 6:37 Sunrise.
- 19:44 Sunset.
- ±21:00 Saturn passes 1.8° north of the Moon.
- 21:12 Astronomical twilight ends.
- Sigma Leonids Meteor radiant is right ascension 13:00; declination -5°; Zhr = 1; velocity 20 km/sec.

Wednesday: Apr 18

- 3:02 Moon at last quarter.
- 5:07 Astronomical twilight begins.
- 6:36 Sunrise.
- 19:44 Sunset.
- 21:13 Astronomical twilight ends.

Thursday: Apr 19

- 5:05 Astronomical twilight begins.
- 6:34 Sunrise.
- 19:45 Sunset.
- 21:14 Astronomical twilight ends.

Friday: Apr 20

- 5:04 Astronomical twilight begins.
- 6:33 Sunrise.
- ±16:00 Mars passes 3° south of the Moon.
- 19:46 Sunset.
- 21:15 Astronomical twilight ends.

Saturday: Apr 21

- 5:03 Astronomical twilight begins.
- 6:32 Sunrise.
- 19:47 Sunset.
- ±21:00 Venus passes 4° south of the Moon.
- 21:16 Astronomical twilight ends.
- Lyrids Meteors radiant is right ascension 18:08; declination +32°; ZHR 10 to 15; velocity 47 km/sec. Parent body is beleaved to be Comet Thatcher last seen in 1861 with a 415 year period. Currently the earliest recorded of all major showers by the Chinese

Sunday: Apr 22

- 5:01 Astronomical twilight begins.
- 6:31 Sunrise.
- 19:48 Sunset.
- 21:17 Astronomical twilight ends.

Monday: Apr 23

- 5:00 Astronomical twilight begins.
- 6:30 Sunrise.
- ±11:00 Mercury is stationary in right ascension; resumes direct motion.
- 19:48 Sunset.
- 21:18 Astronomical twilight ends.
- Pi Puppids meteor radiant is right ascension 7:48; declination -45°; ZHR = 23. Parent body is comet Grigg-Skjellerup which passed perihelion last year. This maybe a good shower this year but you will have to observe from a location with a low and dark sou

Tuesday: Apr 24

- 4:58 Astronomical twilight begins.
- 6:29 Sunrise.
- 19:49 Sunset.
- 21:19 Astronomical twilight ends.

Wednesday: Apr 25

- 0:27 New Moon. Lunation number 833
- 4:57 Astronomical twilight begins.
- 6:27 Sunrise.
- ±13:00 Moon at perigee. Distance from the Earth is 56.1 Earth-radii.
- 19:50 Sunset.
- 21:20 Astronomical twilight ends.
- Mu Virginids meteor radiant is right ascension 14:44; declination -5°; ZHR = 1; velocity 29 km/sec.

Thursday: Apr 26

- 4:55 Astronomical twilight begins.
- 6:26 Sunrise.

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Upcoming Events for April 1990

Monthly Meeting of the Cape Fear Astronomical Society
Sunday April 1, 1990; 7:00 PM - Bryan Auditorium; Morton Hall

Club Viewing Session
Saturday April 14, 1990; 2:00 am until Dawn - Hampstead Site

Club Viewing Session
Saturday April 21, 1990; 2:00 am until Dawn - Hampstead Site

Deadline for the May issue of *Cape Fear Skies*.
Sunday April 15, 1990

Cape Fear Skies
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