

The Focal Point

The Atlanta Astronomy Club
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Editor: Keith Burns

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January General Meeting

Friday January 18th at Emory University – White Hall – Meeting starts at 8 PM. April Witt from Fernbank will speak on Astronomy & Sri Lanka. You need to show up to find out the details.

February Meeting will feature Dave King of Auburn University. He will speak about the Wetumpka Meteor Crater located in East Central Alabama. Plans are in the works to do a tour of the crater area on another day. Details are being worked out.

Why So Short?

As you read though this newsletter, you will notice that it's awful short this month. Rather slim picking is the proper phrase to use. Anyone who has been a member of the AAC for at least a year has heard various tales of past focal point incidents. This month I have topped myself. Just like the Titanic, the ship went down fast.

Your publication was being created using a rather old computer. Until last week, I was using 166mega hertz computer. Slow by today's standards. The computer actually is seven years old. It has been rebuilt several times. With this bit of information in mind, I purchased a new computer on Christmas Eve.

We move ahead several weeks to the point where the new computer arrives at the house. I spent the next four days at-

tempting to transfer files over to the new system. This would allow me to do the January issue of the Focal Point. After crossing the rather stormy seas of Windows XP, network setup, and the always fun email setup, I thought I was in for smooth sailing. That's when the iceberg showed. The hard drive on the new computer broke. Many attempts made to save it. Now the computer is in the shop for repairs.

Well, the old computer still works. That is how I was able to finish the newsletter at all. In your hands is this short issue. It's better than nothing.

Keith Burns

AAC Corresponding Secretary

From the Prez's Desk.....

Happy New Year to everyone. Did you ever think we would make it to 2002 after the dire predictions we heard about the coming of year 2000?

This promises to be a fun winter for observing, with 3 visual planets up in the early evening. While Mars is fading, it is still the brightest object in Pisces. Saturn was in *opposition* in early December and its ring system is at its most open. Jupiter went into opposition in early January 2002. During the *transit* of Io (?) on Dec 27, it's shadow could only be seen as a thin crescent under the moon.

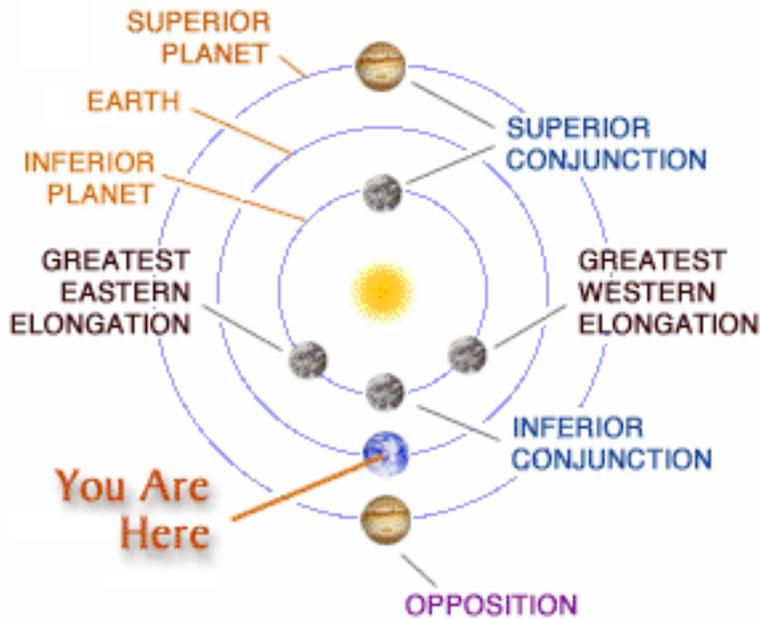
There will be several neat *occultations* of the Moon over these planets in the next couple of months; unfortunately, most of them will NOT be visible from North America. However, on Wednesday Feb 20th at about 6:55 p.m., Atlanta will be in the path of an occultation of Saturn. We are trying to arrange a sidewalk event at Bradley on this night. This next series of Saturn occultations won't occur until 2006, so don't miss this one!

Planetary Terminology

BY SHARON CARRUTHERS

SO, WHAT DO CONJUNCTION, TRANSIT AND OCCULTATION MEAN, ANYWAY???

Continued on next page.



When a planet has the same longitude as the Sun, it is called a *conjunction*. In effect, the Sun, the Earth and the planet are lined up in a row.

The inner (inferior) planets have 2 conjunctions. The Earth-planet-Sun is called an *inferior conjunction*; and the Earth-Sun-planet is a *superior conjunction*. The greatest angle between the planet and the Sun during the planet's orbit, relative to the Earth, is called the *eastern or western elongation*.

The outer (superior) planets can be in *superior conjunction* (Earth-Sun-planet), usually just referred to as *conjunction*; or *opposition* (planet-Earth-Sun). When an outer planet is in opposition, it rises as the Sun sets and is at its brightest. That is why Io was sitting over its shadow on Dec 27th – the Sun, Earth, Io and Jupiter were almost in a straight line. The greatest angle an outer planet appears away from the Sun is called the *eastern or western quadrant*.

When a celestial body crosses another that *appears* to be the same size, it is called an *eclipse*. If the crossing body is significantly smaller (such as Venus crossing the Sun or Io crossing Jupiter), the crossing is called a *transit*. If the cross-

ing body is significantly larger, so that it hides the smaller object (such as the Moon crossing Saturn or Saturn crossing a star), it is called an *occultation*.

Illustration from the JPL website "The Basics of Flight: The Solar System, Chapter 1" <http://www.jpl.nasa.gov/basics/bsf1-2.html>

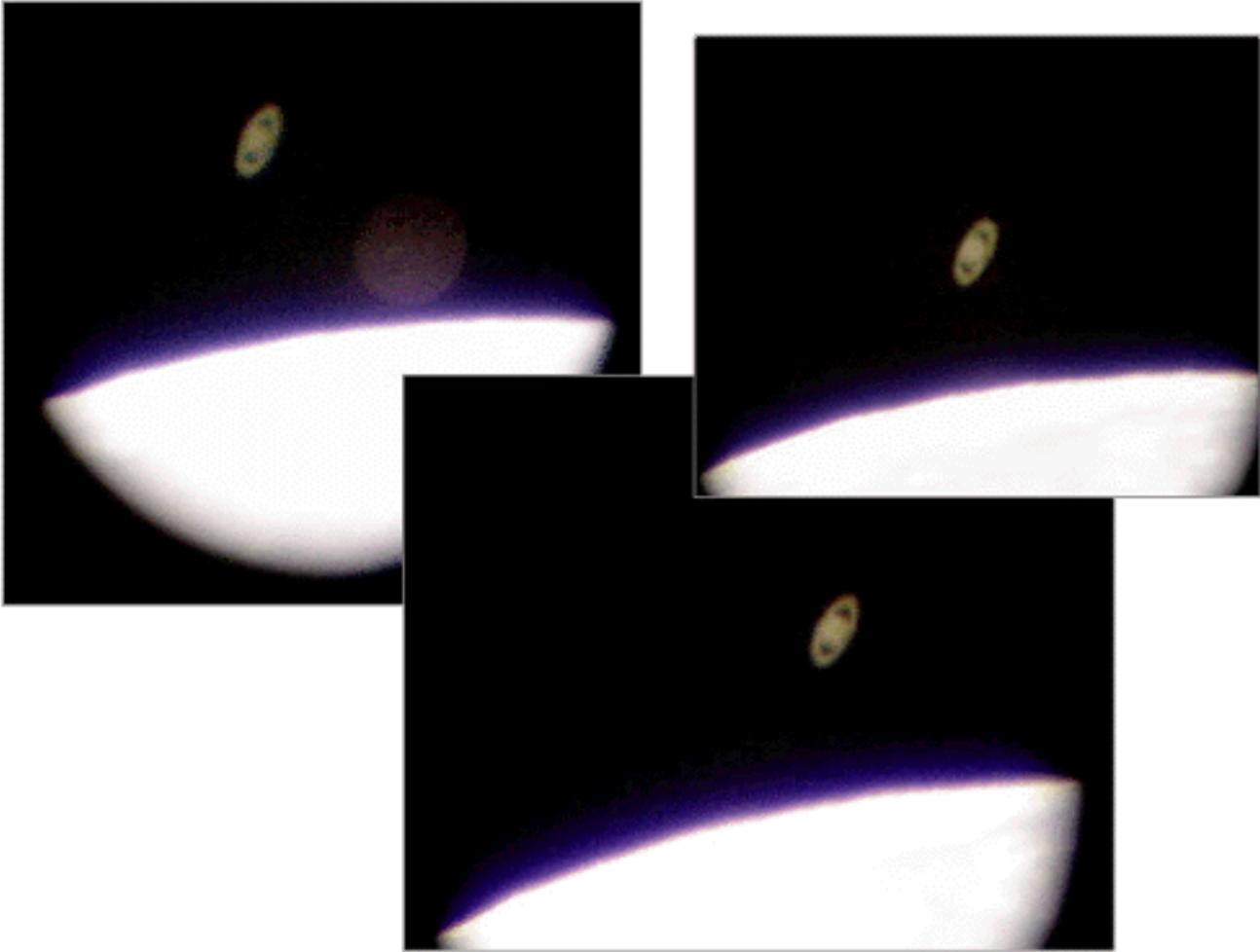


Pictures on the bottom of the previous page are of a Partial Solar Eclipse. Partial Solar Eclipse occurred on December 14th. The eclipse took place about an hour before sunset and ended as the sun was setting. Pictures provided by Steve Saftigan. The following is some information provided by him.

I tried to get a few of the sun eclipsed by both the horizon and the moon, but these show it setting into heavy cloud cover right at the horizon instead. These were taken with a digital camera through a solar filter (and some light cloud cover). Photos taken at Mount Alto near Rome, GA.



Here is an image of M42 taken at Woodruff on 12/14/01. Equipment: Telescope - Takahashi FS-102. Mount - Williams Optics GT-1. Camera - Starlight Xpress MX7-C. Image taken By Dan Ford.



Pictures taken By Roth Ritter of the Saturn Occultation. Occultation took place on November 30th. I caught it on both sides; a very nice sight. I snapped a couple of generic shots by hand through the eyepiece w/ digital camera through an 80mm refractor. They're sub par for sure, but kind of give you an idea of some color contrast.

Amatuer Telescope Makers Group

Interested in building your own telescope? Want to enhance your current scope with some features or fix problems with it? Do you want to grind your own mirror or learn how it is done? This is the group for you. The ATM group meets every couple of weeks at Skip Cook's house. He has generously offer this location for this purpose. Contact him via phone (404-325-4987) or email (scz9@cdc.gov) for more information and directions. Tracy Wilson runs the group and has much expertise to offer. You can contact him via email (tracy@c2optical.com). Announcements of meetings will be posted on the AAC listserv. You can also find out about upcoming meetings from Skip.

They are using Skip's house currently but are interested in moving the group to another location. If you have a place where they can meet and work on those projects, please contact Skip.

I have recently seen the scopes that the regular ATMers have built, and I was impressed with the quality of their scopes. It's amazing what hard work, determination, shared knowledge, and a little money can do to make these wonderful instruments.

Get the Focal Point Online

The Focal Point is available online in PDF format. The PDF version is bigger and better. The free Adobe(R) Reader allows you to view, navigate, and print PDF files across all major computing platforms. Download the free reader at www.adobe.com

Visit NightSky.Org/aac on the web. In a private sub-web, the past year of Focal Points can be found. Check it out. If it works for you, send Peter Macumber an e-mail at pmacumber@nightsky.org . The Focal-Point web can be entered by using the Username of AAC and a password of Ar-

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ies. These names are case sensitive! Type **AAC** and **Aries** exactly as you see it here.

Notes on the Focal Point

Some of you who sent me articles and pictures, may have noticed that they are missing from this month's publication. The missing articles will be included in next month's issue. We recently had a board meeting on Sunday January 5th. The minutes from that meeting will also be included in the February issue. On Sunday December 30th there was a meeting of the planning committee. The purpose of this meeting was to schedule events for the coming year. Dates and events for the next few months are included on the last page of this publication.

Here is the policy for copyrighted material. The policy is that material sent to me is for use in our newsletter only. If anyone wants to use the material elsewhere, please contact the author of the article or photographer who has taken the picture. With rare exceptions, most people will grant you permission.

AAC Member of Astronomical League

For more info on the Astronomical League, visit their website at <http://www.astroleague.org>. The AAC astronomical league contact is Keith Burns. You can reach him via email at Keith_B@Bellsouth.net or 7-427-1475.



As part of the benefits of being a member of the AL, you can do one of the many observing programs available. Upon successful completion of the requirements the AL awards you a pin and certificate for your troubles. Hope you also gain knowledge along the way and an interest in some aspect of astronomy.

Focal Point Submission Deadline

I'm looking for articles, pictures, and drawings on anything astronomy related. All formats are acceptable. Pictures can be sent as either JPEGs, GIFs, or other formats. I can also scan in hard copy pictures. Articles can either be sent via snail mail addressed to Keith Burns 3740 Burnt Hickory Road Marietta, Georgia 30064 or email at Keith_B@bellsouth.net. You can submit articles anytime up and including the deadline date. The **deadline for the February issue is February 2nd and no later.**

Atlanta Area Astronomers Listserv

While the Focal Point is a good source for information among other things, it cannot be undated after it is printed. If you have email access with a computer, then you can subscribe to the Atlanta Astronomers Listserv. This is a great source for up to the minute info on observing events. You can also post questions about astronomy. You can talk to fellow astronomers about the hobby or other things related to it.

Subscribe to the Atlanta Area Astronomers Mailing List: The name of the new list is: AstroAtlanta. The address for messages is: AstroAtlanta@yahoogroups.com. To add a subscription, send a message to: AstroAtlanta-subscribe@yahoogroups.com. To cancel your membership, send a message to AstroAtlanta-unsubscribe@yahoogroups.com. Messages for the list-owner (me) go to: AstroAtlanta-owner@yahoogroups.com or to LAbbey@mindspring.com. The "home page" for the list, from which you can change your account defaults is: <http://www.yahoogroups.com/group/AstroAtlanta>. This list is owned by Lenny Abbey.

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Hotline and Website

Atlanta Astronomy Club Hot Line: Timely information on the night sky and astronomy in the Atlanta area. Call **770-621-2661**.

The website has proven itself in attracting new members and keeping members informed of club events. This can only happen if we are given the information to post on the website. If you have any suggestions, comments or ideas please send them along to the webmaster@AtlantaAstronomy.org. Internet Home Page: <http://www.AtlantaAstronomy.Org>

The **Atlanta Astronomy Club Inc.**, the South's largest and oldest astronomical society, meets at **8:00 p.m.** on the third Friday of each month at Emory University's White Hall or occasionally at other locations. Membership is open to all. Membership fees are **\$25** for a family or single person membership. College Students membership fee is **\$10**. These fees are for a one year membership.

Magazine subscriptions to Sky & Tel or Astronomy can be purchased through the club for a reduced rate. The fees are **\$30** for Sky & Tel and **\$29** for Astronomy. Renewal forms will be sent to you by the magazines. Send the renewal form along with you check to the Atlanta Astronomy Club treasurer.

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Woodruff Observ. Coordinator: John Lentini 7-984-0175 johnlentini@yahoo.com	

Calendar

January 18th- General Membership Meeting. Emory University at White Hall. Speaker is April Witt of Fernbank.. Topic is Astronomy and Sri Lanka. Starts at 8PM.

January 19th- Open House and Orientation. Training to. At our Villa Rica Observatory AKA Walter F. Barber Jr. Starts at 4PM.

February 9th- Deep Sky Observing to be held at the William A. Calder Observatory located at Woodruff BSC. Woodruff located near Blue Ridge, GA. Starts at Dusk.

February 15th- General Membership Meeting. Emory University at White Hall. Speaker is Dave King of Auburn University. Topic: The Watumpka Meteor Impact Crater of Alabama. Starts at 8PM.

February 16th- Open House and Orientation at CEWMA. Starts a 4PM. More info TBA.

March 2nd- GASP goes to Tallulah Gorge State Park. Located south of Clayton, GA. Talk, sidewalk astronomy, and camping.

March 15th- General Membership Meeting. More information TBA.

March 16th- Deep Sky Observing to be held at the William A. Calder Observatory located at Woodruff BCS. Woodruff located near Blue Ridge, GA. Starts at Dusk.

March 23rd- Open House and Orientation at our Villa Rica Observatory AKA Walter F. Barber Jr. Starts at 4:30PM. Training to.

FIRST CLASS



The Focal Point

Newsletter of The Atlanta Astronomy Club, Inc.

FROM:

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We're here to help! Here's how to reach us:

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