
The FOCAL POINT

Newsletter of the Atlanta Astronomy Club, Inc.
Volume V, Number VII March 1993

PROGRAM NOTES

This month's meeting will be held at 8:00 p.m., Friday, March 19th, 1993 at Bradley Observatory, Agnes Scott College.

Our speaker, Jim Rouse, will present a talk on astrophotography.

RECENT OBSERVATIONS

Mike Kazmierczak

Cassville, Kelleytown, Bold Springs... these small Georgia towns have little in common except for one thing. They have hosted grazing occultation expeditions.

Barnesville, Ga.

The most recent trip was to the thriving metroplex of Barnesville. After arriving there, the initial sites I had chosen were too wooded. An alternate site was selected and I drove back to the meeting place. There were thin clouds, so I wasn't surprised when no other observers showed up. The new site was next to a railroad track, so I expected the train to drive by during mid-graze!

I timed a 6.0 magnitude total several minutes before the graze, so I would get at least one event this night. I did get eight events during the graze, including five events within two seconds. One of the brief (0.2 seconds) reappearances was not as bright as the star was, so I may have discovered a double star! Confirmation will hopefully be obtained from other observers. I was lucky (again) because I applied an estimated 0.3 miles south shift to the limit, and then drove about .05 miles from a poorly located landmark.

McDonough, Ga.

After having several good grazes clouded out already this year, I waited with bated breath for the evening of February 1. This was a good graze. A 4th magnitude star would be grazing the moon 9 degrees from the cusp on the dark limb. My only cohort in this operation was the collector of much valuable data (misses), Steve Gilbreath. He arrived at my place before graze time to chit chat. He stated that his car had handled poorly. Inspection with a flashlight showed a faulty valve stem. After muttering at an unnamed tire company, we put air in the tire and headed to the outskirts of McDonough.

We set up about 0.1 mile apart and waited for the occultation. The star was easy to find and as I waited for the graze, a man walked up and asked what I was doing. He knew that I had a telescope set up. The reason that he knew was that he is a good buddy of the man who bought Howard Landis' home and observatory. We chatted about that and I showed him the star and the moon. He left before the graze occurred and I waited. I got three quick events and waited. I would probably only get the final reappearance for a total of four events. After the reappearance occurred, I did get two more events for a total of six. I packed up the telescope and headed to meet Steve.

There are still several excellent grazes left in the next few months. There is a faint graze occurring on the evening of March 27th that would be only for large (>20 cm) telescopes. May 15th brings us a sixth magnitude star under very favorable conditions.

So far this year, the weather has cooperated for two out of three grazes. If you are

interested in collecting data that only amateurs can provide, give me a call at 760-8502.

THE OBSERVATORY AND OBSERVATIONS

David Riddle

This month's public observing session is scheduled for Saturday, March 20th.

With "galaxy season" once again upon us, we will be examining these majestic stellar cities in detail with our 20" reflector. A good way to sharpen your observing skills is to try to detect the subtle spiral structure visible in some of the many galaxies strewn across the sky. Of special interest to me is the number of interacting pairs of galaxies visible at this time of year. A good example is NGC 4631 and NGC 4656-57 in Canes Venatici. If you have never seen what tidal distortion can do to a galaxy, you are in for a surprise!

Jupiter reaches opposition at month's end. With its ever changing, detailed face and jewel like moons, Jupiter never fails to deliver a fascinating sight.

Our observatory will shortly have a new eyepiece available for members' use. We have a Meade 8.8mm "Ultra-Wide Angle" (84 degree apparent field) that will make an excellent medium power eyepiece with the 10" and 20" reflectors.

Do you have any unusual observations you have made recently that you could forward to me? I am always interested to know of other members' notes concerning deep-sky objects with a particular emphasis on faint diffuse nebulae and planetary nebulae.

In January I asked for observations of the winter sky supernovae remnants and the response was positive. I would like to again thank members who took the time to write.

Concerning the supernovae remnants, I made an observation of Sharpless 2-276 (Barnard's Loop in Orion) during my stay at the Winter Star Party in the Florida Keys. Under a dark sky with superb "seeing" conditions, I found the loop (to) be a slightly brighter glow against the sky in 11x80 binoculars. Using a borrowed Astroscan with a 25mm eyepiece and a hydrogen beta filter, I was shocked to see a gently curving arc of nebulosity 6 to 8 degrees long and in spots about 3/4 to 1 degree wide. The portion of the loop closest to M-78 appeared very well defined and quite easy to see. Southward the loop became fainter and more diffuse. Over the last year I have come to respect what a small aperture scope can do with a nebula filter and a dark sky!

THE MESSIER CLUB

William Snell

During March all objects in the Messier Catalog, except for M-30 can be found in one night! Even if you don't want to try a "Messier Marathon" you can still get a good start on your Messier Certificate.

To be eligible for a Messier Certificate you must keep a log that contains, for each object observed, the time and date of observation, the magnification, aperture and type of telescope, the "seeing" conditions and notes about your observation of each object.

You must belong to an a club that is affiliated with the Astronomical League or be a League member-at-large. You must find each object without any help. You must find 70 objects for the regular certificate or all 110 objects for the honorary certificate. You cannot use electronic or digital setting circles. There is no time limit.

You must submit your log (or a copy) to an officer of your club, who will verify that your

log is complete and send a letter to the League recommending that you be granted a certificate.

In recent years several Club members have been awarded Messier Certificates. Please contact a Club officer for more information.

HARRY L. JOHNSON **William Close**

Harry L. Johnson passed away last week after a long illness. Probably not many present day members of the Atlanta Astronomy Club will remember him but he was a very active member back in the old days of the 50's and 60's. He served for a long time as Club Treasurer, and was one of the original first group to make a telescope. We are sorry to lose him.

THE BIG BANG THEORY AND THE GOD OF THE BIBLE **John Dickinson Ross**

The Big Bang theory of the origin of the Universe is logically compatible with the existence of the God of the Bible. Truly in the Big Bang theory we see a basic convergence between Science and the Bible.

Most basically the Big Bang theory has a definite beginning in time for our Universe. It begins at a definite point in time. This could be Creation. So there is room in this theory for a Creator God beyond our Universe in space and existing eternally like the God of the Bible.

In addition, according to the Big Bang theory, the violence of the primordial fireball would have eliminated all traces of any previous Universe in which the matter and energy which formed it could have been shaped. In other words, Science is now saying that it can see, even in principle, no farther back than the

point in time which could have been the instant of Creation out of Nothing. This point in time the Church Fathers also looked back to.

True, the Big Bang theory differs considerably in detail from the literal interpretation of Genesis traditional in Christianity and still clung to by the Protestant Fundamentalists. But the Big Bang has room to fit in a Creator God of unimaginable power and grandeur that can be drawn from a non-literal interpretation of Genesis. In such an interpretation not every detail of Genesis needs to be scientifically accurate for the basic thrust of its conception of God and Creation to be fundamentally true. Such an interpretation would be basically compatible with the teachings of Astronomy.

Consequently, belief in the God of the Bible is logically compatible with the evidence of modern astronomy.

Altogether, I find these arguments supportive of a non-literal interpretation of Genesis that still takes it as telling great and glorious truths.

TRIVIA

When the 60" reflector was completed in 1908 the largest telescope that had ever been built was William Parsons' 72" reflector. The largest fully operational telescope in 1908 was very likely the 40" Yerkes refractor. Although several larger telescopes existed (though generally in pieces), including a 47" reflector that was rebuilt in the 1940's, they were not considered usable.

This month's trivia question:

What was the largest refractor ever built and when and where was it used?

The *Focal Point* is published monthly by the Atlanta Astronomy Club, Inc., a non-profit organization dedicated to the advancement of amateur astronomy.

Meetings are held on the third Friday of each month (the second Friday in December) at the Bradley Observatory of Agnes Scott College in Decatur, Georgia.

For up-to-date information on Club programs and activities please call the AAC's telephone hot-line at 621-2661.

Membership: \$20 annually for families and \$10 for students. Membership includes a subscription to the Astronomical League's *Reflector* newsletter and use of the Club's observatory in Villa Rica, Georgia. Optional subscriptions to *Sky & Telescope* and *Astronomy Magazine* are available for \$20 and \$16 per year, respectively.

Article submissions are strongly encouraged; please deliver to the editor for consideration. The submission deadline for the April 1993 issue of the *Focal Point* is April 5th. Permission is granted to duplicate and redistribute in a non-profit manner, in part or whole, provided credit is given to the authors, the Club and this publication.

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