METEOR


METEOR is the official publication of the Greenbelt Astronomy Club and is distributed monthly as a privilege of membership. Articles and other contributions are welcome. Membership in the Greenbelt Astronomy Club is open to anyone interested in astronomy. The club meets on the last non-holiday Thursday of the month at 7:30 pm EST at the Owens Science Center. The address of the Editor is: G.W. Gliba, 58-D Crescent Road, Greenbelt, Maryland 20770.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * *

Greenbelt Astronomy Club

The January meeting will be held at the Owens Science Center on the 28th. Dr. Wayne Warren Jr. will talk on the October 1995 Total Solar Eclipse in India, and will show some pictures he took and give some of the results obtained thus far.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * *

Nova Cassiopeiae 1995 - A peculiar nova

Continued to brighten slowly, and was estimated to be 8.4 magnitude in early December, but brightened to 8.0 magn. by the 7th. It stayed at 8.0 magn. until around the 11th, and then brightened rather rapidly to 7.3 magnitude on the 14th and to 7.1 magnitude three nights later. Then by Christmas night, it again faded to 8.7 magnitude. When last seen near the end of December it was 8.6 magnitude.

It seems that Nova Cassiopeiae 1995 is a type of peculiar slow nova, and some astronomers say the light curve resembles a somewhat slower version of Nova Delphini 1967 (HR Del), which slowly reached a maximum brightness of 3.5 magnitude, and was easily visible to the naked-eye in northern Delphinus in March of 1968, but the amplitude for Nova Cassiopeiae 1995 is about two magnitudes greater.

Also, some novae experts, like Dr. Steven Shore and Dr. Sumner Starfield, think that this is a strange new class of novae. It shows a strong "Fe curtain" absorption similar to the most optically thick stages of a nova ejection and resembles the UV minimum and earliest recovery stages of OS And 1986 and V1974 Cyg 1992. Two IUE spectra they took recently were very different than one taken on Sep. 21.5 UT, when the UV of this object was considerably less opaque, displaying flux throughout the 1200-2000 Å region and showing moderately strong line absorption in the 2500-2700 Å region. This first observation resembles the V1974 Cygni "fireball" spectrum shown in Shore et al. (1994, ApJ, 421, 344).

Because this object is behaving so peculiarly, to put it mildly, Shore and Starrfield urge that observations at all wavelengths be continued. An AAVSO (b) chart from AAVSO Alert Notice #214 of this strange new type of nova appears on the facing page.

The constellation of Cassiopeia is well placed for observation in the early
evening in January. High power binoculars, or a small telescope is all that is needed to see this strange star system, that until recently had been a boring 18th magnitude star, lost among the many stars of the Milky Way in Cassiopeia.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

On the Horizon - Happy New Year 1996

This may be the year of the 'comet of the century', comet Hale-Bopp. It is estimated that it will be a binocular object by early Summer, and a naked-eye object by September 1996! We'll just have to wait and see.

For all stargazers that didn't see the great conjunction of Venus and the Moon on Christmas Eve 1995, you'll have another chance on February 21st, when Venus and the Moon will be close after sunset.

Also, next year will have two Total Lunar Eclipses, one will be on April 3rd when the totally eclipsed Moon rises at sunset; the other, on September 26/27, during the Harvest Moon.

For meteor observers, this will be an excellent year for the maximum of the Perseid Meteor Shower, and the newly discovered Aries-Triangulids, with the New Moons occurring on August 14th and September 12th respectively.

So whatever your observing passion is, make a New Year's resolution to go out and observe more next year. The beauty of the starry night sky is calling you.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

Nova Cassiopeiae 1995 Light Curve
by G.W. Glica, Greenbelt, Md

![Nova Cassiopeiae 1995 Light Curve](image-url)