

E Y E P I E C E V I E W S #323

-----  
January, 2008

**Table of Contents**  
-----

1. [Introduction](#)
  2. [My First 100 Days](#) - Ben Mullin
  3. [U might B](#) - Kate Hutton
  4. [New AAVSO Data Submission Formats](#)
  5. [Catch Them While They Are Young](#) - Chris Stephan
- 

**1. INTRODUCTION**

It is hard to believe that we are through the first month of 2008 already! As we always say, "time flies".

This year our spring meeting, April 10-13, 2008, will be a joint meeting of The American Association of Variable Star Observers (AAVSO) and The British Astronomical Association (BAA). And we will be traveling from Cambridge, MA to Cambridge, England!

By visiting the link below you can find more information on the agenda and the fees, lodging, directions, and other information, and you can register on-line too:

<https://www.regonline.com/builder/site/Default.aspx?eventid=180912>

For the ones who are getting ready to meet us in Cambridge (!), it will be lovely seeing you there. Those who will not have the opportunity to make it to Cambridge, we hope to see you in the fall.

In this issue, we have a very nice article from the grandson of one of our long-term members. Ben started making variable star observations after inheriting his grandfather's equipment and in this lovely tale, he takes us with him on a wonderful journey through his first 100 days of observing.

A very neat piece will follow from our contributor Kate Hutton, which will put a nice smile on our faces.

We have a brief description of the new submission formats, and a very nice piece from our contributor Chris Stephan following that.

Thanks and good observing!

Gamze Menali, AAVSO Technical Assistant

---

## 2. MY FIRST 100 DAYS - Ben Mullin (MBQ)

While sitting in a hotel room in cloudy Cleveland recently I passed a minor milestone in my variable star observing career. That evening marked 100 days since my first variable star observation. I am afraid to say, but I think I might be infected with the variable star observing bug. A brief review of the last 100 days will probably show that it is incurable.

A genetic background check would probably show that my entry into variable star observing was inevitable. My grandfather was an AAVSO member for many years and an amateur astronomer for longer than I have been alive. Though I only observed with him a few times, and never variable stars, I always enjoyed talking astronomy with him when we got together. I have since inherited all of his equipment and have been making sporadic use of it for the last few years. That is, until about 100 days ago.

But to make a slightly smaller step back again, for the last several years I have been interested in variable star observing. There are two variable star observers in my local astronomy club who have given presentations on the CCD observations that they have been making. This piqued my interest and I made several attempts to put together a single CCD observation. A lack of concerted effort and a setup that needed to be put up and taken down each night resulted in a high frustration level and a low interest level in continuing to pursue variable star observing until such a time that I could make a more concerted effort with less setup and take down.

So my interest lay dormant for a year or two. At some point in there I got the silly idea in my head that visual observations would be too difficult. After that year or two of dormancy I realized the time until I would be able to give CCD observing the level of effort it would need to be successful might be considerable (work, kids, wife, etc, etc). So I finally decided I should give the visual observing a try. I read the AAVSO Manual for Visual Observing of Variable Stars "cover to cover". I decided that Algol would make a good first target where I could see some real action in a single few hours of effort. I looked up the predictions, printed an AAVSO chart and was all set.

On a Friday evening with a nearly full moon, I set out to make my first visual variable star observations. So in-between bathing the kids, reading bed-time stories, etc, I was running in and out of the house making observations of Algol. Over the course of three and a half hours I managed 8 observations. When I plotted them in Excel I was elated to see that my estimates formed a nice increasing slope. Unfortunately I missed the minimum. But a day or two later checking the recent observations on the AAVSO website, another observer from Poland made two observations of the descending portion of the eclipse for which I observed the ascending portion. My first inter-continental collaboration! I also quickly learned how to create a phase-plot in Excel so I could see my observations layered on top of all of the AAVSO data. I was extremely happy to see that it matched up pretty well.

At this point, it should be pretty clear I was hooked. Over the course of the next 100 days I made more efforts to go outside and look up than at any time previously. A little time spent crunching the numbers shows that in 100 days I made observations of 21 different objects on 30 different nights. I was surprised that I even had that many clear, or at least partially clear nights in a 100-day period. I am not a prolific observer (yet?), averaging only 2.5 observations on any given night. I can guarantee that I would not have been out 30 nights to look at M31 night after night though.

Not only have my nights under the stars become more productive, so have my cloudy nights. I have done some reading in the JAAVSO. Learned how to calculate the period using the ANOVA method including writing my own C program and using it to determine the period of X Cyg from my observations. Using that period I was then able to calculate the distance to X Cyg using a bunch of math that the regulars on the AAVSO chat room were kind enough to coach me through. I also gave a "Visual Variable Star Observing is Fun" talk to my local astronomy club trying to share my newfound enthusiasm. Actually that was a clear night... why did I agree to do that without a clear sky contingency?

One of the best things is that I know I have only just started scratching the surface of what variable star observing has to offer. My first 100 days have been pretty exciting. I am certain that my condition will worsen over the next 100 days. I think I am all right with that though.

---

### 3. U MIGHT B - Kate Hutton (HTN)

You might be a variable star observer if ...

- ... dirt on the walls or floor reminds you of your favorite star fields.
- ... you have ever tried to mentally reorient or "blink" acoustic ceiling tiles.
- ... you have ever "estimated" the chocolate chips in your cookie (contributed by Thom Gandet, GTN).
- ... you have ever looked at the weather forecast before scheduling a date.
- ... you have ever found a missing eyepiece or red flashlight when cleaning out your jacket pockets.
- ... you routinely use ":" to indicate uncertainty in notes to yourself or (oops) others.
- ... you type dates & times all in one string separated by "/".
- ... you have ever wrapped a present for someone in old charts.
- ... you think 15. is <13.
- ... you know exactly where your screen icons will appear because of the star field you are using for wallpaper (contributed by Albert Dill, DLA).
- ... the weather forecast's "mostly clear" looks more like "partly cloudy" to you (contributed by Richard Harvan, HAV).
- ... you have concluded that cirrus clouds "don't count" in weather forecasts.
- ... you have ever used distant outdoor lighting as a brightness standard (contributed by Thom Gandet, GTN).
- ... you find yourself daydreaming about a huge blackout, on a clear, moonless night.

## 4. NEW AAVSO DATA SUBMISSION FORMATS

We are happy to announce that two new AAVSO observing formats are now available! By visiting the link below, you can read more about the new format specifications and discover what has changed and how this may affect the way you submit observations to the AAVSO:

<http://www.aavso.org/news/newformats.shtml>

The old format (now referred to as our legacy format) will still be supported until July 1, 2008. Observations in this format may be submitted by sending them in an e-mail to [observations@aavso.org](mailto:observations@aavso.org) or by using the upload tool in BlueGold's WebObs function. We strongly encourage you to move to the new format! By using the old format you will not be taking advantage of many of the new fields, comment codes and other new features in the new formats. This makes your data less valuable in the database compared to the same data in the new formats.

In Summary...

- The new format specifications describe how you should upload a file of multiple observations. If you enter observations individually, we provide the forms for you.
- PCObs (for visual observers) and many photometry software packages (for CCD observers) will export the data according to the new specifications automatically
- The entire GCVS catalog has been added to the stars in our program (except the NSV stars, which we'll get loaded soon)
- The harvard designation and lots of comment codes have been retired from service
- After July 1, 2008, if you try to submit data in a \*new\* format that is not one of the two AAVSO official formats, it will not be supported.

---

## 5. CATCH THEM WHILE THEY ARE YOUNG - Chris Stephan (SET)

The year 2009 has been declared the International Year of Astronomy by the United Nations and the International Astronomical Union. I am sure the AAVSO will participate in some fashion. This provides a good opportunity for me to share a burden that is on my heart.

As many of you know, I have been a science teacher for 21 years in Highlands County, Florida. Almost all of that has been at the middle school level, teaching at 7th and 8th grade. Over these 21 years I see less and less astronomy emphasized in the science curriculum. I have also seen the interest and enthusiasm for our science of astronomy wane in the students' interests. It is hard for me to comprehend that students this age range have almost no interest in meeting for an evening with telescopes and having their science teacher show them the constellations and lovely celestial objects. Even an event like a total lunar eclipse barely catches their interest.

Back in the late 1980's to the late 1990's a group of fellow amateur astronomers and myself would have a star party for the students each year out in the country of southern Highlands County. I would send letters home with the students inviting the entire family for this event. I would even offer extra credit points for grades to those students who would attend. We would have 50-200 people at these events, viewing events such as a total lunar eclipse, Comet Hale-Bopp, and Comet Hyakutake. We even watched the Mir Space Station go over one year. The parents were as thrilled as the students. I would even have a few students bring their own telescopes.

I always used to take the students out behind the school on a clear day and show them sunspots through the telescopes with safe solar filters. They used to draw the sun and the spots. The last time I tried this, they showed no interest, all I had was behavior problems.

Why do our young people show so little interest in the night sky. Is it because the parents show little interest? Is it because our public schools are failing at this? Is it from so much competition from cell phones, video games, television, and all our new technologies? We have become a very entertainment oriented society. If teaching science doesn't entertain, the students show no interest. Is it because amateur astronomy gives the preconceived notion that to have a telescope, it must be expensive, have all the latest technological gadgets? I can tell you that the majority of people of Highlands County are not rich. In fact, where I teach in Avon Park, we are at 71% poverty level.

How can AAVSO help? I don't have many answers. I do hope we can mentor more young people in variable star observing, or even just amateur astronomy in general. Perhaps we can take them back to the old days where simple telescopes with pipe mounts that are very inexpensive, can give great views of the heavens. Two of my 3 telescopes are pipe mounted, I wouldn't have it any other way!

I would love to see the AAVSO members and staff put our heads together and see if we can come up with a way to jump start some interest in our young people. The International Year of Astronomy would be great for this. In the mean time, I will strive to inspire my students. I am passionate about astronomy, and my prayer is that my passion would rub off on some students. I often meet former students from years ago, and one of the things they tell me that they remember most is the star party we had out in the country, and all the neat things I showed them in the telescopes. Oh, how I wish for it to be like those days. I'm sorry I don't have many ideas myself. I have tried very hard teaching this, and even hosting a Hands On Astrophysics workshop here in 2001. We've got to keep trying, yes, we must keep trying.

---

EYEPIECE Views is published bimonthly and when circumstances warrant via e-mail. An [Eyepiece Views archive](#) is available online.

Please send comments and suggestions to [gamze @ aavso.org](mailto:gamze@aavso.org).

You may [subscribe or unsubscribe from Eyepiece Views](#) on our website.

Good observing!  
Gamze Menali, AAVSO Technical Assistant (MGQ)

Copyright 2008, American Association of Variable Star Observers

---

**THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS**  
49 Bay State Road, Cambridge, MA 02138 USA  
Tel. 617-354-0484                      Fax 617-354-0665  
<http://www.aavso.org>

---