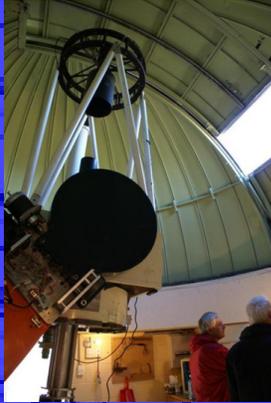
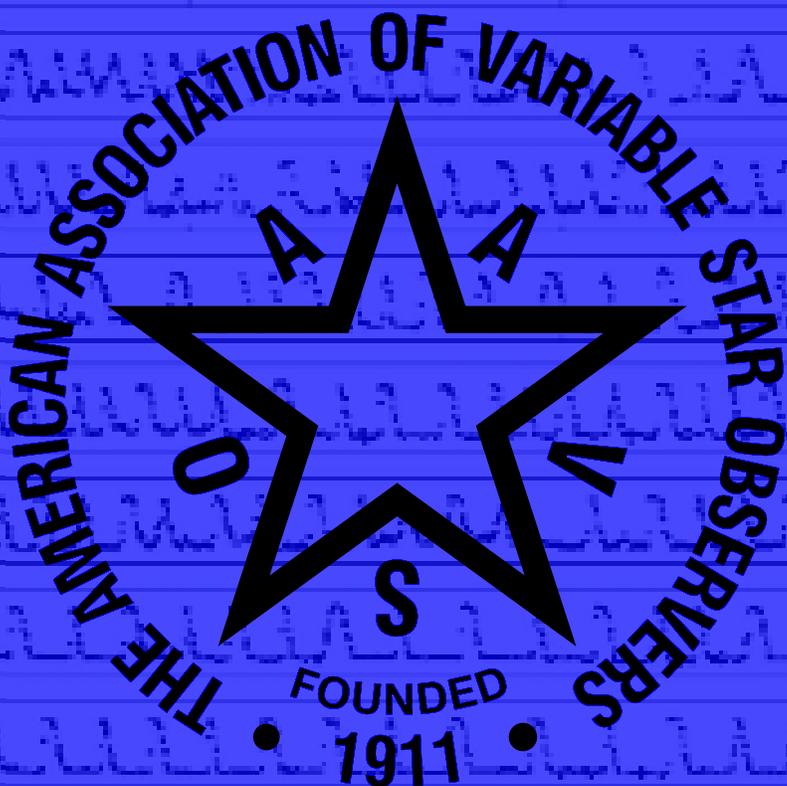


AAVSO



The American Association of Variable Star Observers



Annual Report
2007–2008

The American Association of Variable Star Observers
49 Bay State Road
Cambridge, MA 02138
USA

Telephone: 617-354-0484

Fax: 617-354-0665

email: aavso@aavso.org

website: <http://www.aavso.org>

Annual Report Website:

<http://www.aavso.org/aavso/annualreports.shtml>

On the cover...

The AAVSO Robotic Telescope Network, AAVSONet, continues to grow with the addition of several telescopes over the past year. New additions to AAVSONet are welcome at any time. The common feature of all AAVSONet facilities is queue-scheduled observations of scientific targets. AAVSONet is available free-of-charge to all dues-paying members of the AAVSO. Pictured clockwise from upper left: Sonoita Research Observatory's 35-cm (C14) Schmidt-Cassegrain, Sonoita, Arizona; Mt. John University Observatory's 24-in (OC60) Optical Craftsman, Lake Tekapo, New Zealand; Puckett Observatory's, 5-in wide-field telescope and 7-in Tak astrograph with Apogee U9000 CCD camera, Ellijay, Georgia; Dark Ridge Observatory's 24-in Morgan60 telescope, donated by Lowell Observatory, Weed, New Mexico; and, at Astrokolchoz Observatory, Cloudcroft, New Mexico, is a C11 telescope, donated in memory of Paul Wright by his daughter. Not pictured is the Cohen/Menke Observatory's 12-in LX200 telescope, to be installed at AAVSO Headquarters.

The cover's background shows a portion of the historical light curve of the variable star SS Cygni—the brightest dwarf nova type cataclysmic variable visible in the northern hemisphere. These stars are close binary systems consisting of a red dwarf star and a white dwarf with an accretion disk around it. At approximately fifty-day intervals, SS Cyg brightens from magnitude 12.0 to 8.5 due to material from the accretion disk falling onto the white dwarf. The AAVSO's historical light curve for this star ranges from 1900 to the present.

Picture credits

In addition to images from the AAVSO and its archives, the editors gratefully acknowledge the following for their image contributions: Mary Glennon, Mario Motta, NASA, Gary Poyner, Msgr. Ronald Royer, the Mary Lea Shane Archives of the Lick Observatory, the Olin Eggen Photo Archive of AURA-O, and Wheatley, et al. 2003, MNRAS, 345, 49.

The American Association of Variable Star Observers

Annual Report
October 1, 2007–September 30, 2008



Table of Contents

1. About the AAVSO

Vision and Mission Statement	1
About the AAVSO	1
What We Do	2
What Are Variable Stars?	3
Why Observe Variable Stars?	4
The AAVSO International Database	4
Observing Variable Stars	6
Services to Astronomy	7
Services to Education and the Public	9

2. The Year in Review

Minutes of the 97th Spring Meeting	11
Minutes of the 97th Annual Meeting	19
Annual Report of the Director	25
AAVSO Observer Totals	44
Committee Reports	53
Charge-Coupled Device (CCD)	53
Eclipsing Binary	54
Education and Outreach	55
Nova Search	56
Photoelectric Photometry	57
RR Lyrae	58
Solar	59
Supernova Search	60
Treasurer's Report	61

3. AAVSO Officers, Staff, and Volunteers

Officers, Council, and Committee Chairs	63
Headquarters Staff	64
Volunteers	65

4. Word From the Astronomical Community 67

5. Support for the AAVSO

The Argelander Society	71
Benefactors	72
Planned Giving	76
AAVSO Corporate Affiliate Program	77



1. About the AAVSO

AAVSO Vision

The AAVSO seeks to be the world-recognized leader in information and data on variable stars.



Participants in the AAVSO's 97th Annual Meeting, 2008

The AAVSO's Mission

The AAVSO is an international non-profit organization of variable star observers whose mission is:

- to observe and analyze variable stars
- to collect and archive observations for worldwide access
- to forge strong collaborations between amateur and professional astronomers
- to promote scientific research and education using variable star data.

About the AAVSO

The American Association of Variable Star Observers (AAVSO) is a non-profit worldwide scientific and educational organization of amateur and professional astronomers who are interested in stars that change in brightness—variable stars.

The AAVSO was founded in 1911 to coordinate variable star observations—made largely by amateur astronomers—for Harvard College Observatory. The AAVSO was incorporated in the Commonwealth of Massachusetts in 1918 as a non-profit scientific and educational organization. Today, as an independent, private research organization headquartered in Cambridge, Massachusetts, with members and observers in 67 countries, and an archive of over 16.5 million variable star observations, it is the world's largest association of variable star observers.

1. About the AAVSO

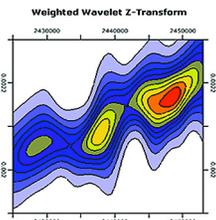
Membership in the AAVSO is open to anyone—professionals, amateurs, and educators alike—interested in variable stars and in contributing to the support of valuable research. Professional astronomers have neither the time nor the telescopes needed to gather data on the brightness changes of thousands of variables, and amateurs make a real and useful contribution to science by observing variable stars and submitting their observations to the AAVSO International Database.

What We Do

The AAVSO coordinates, evaluates, compiles, processes, and publishes variable star observations, and disseminates them to the astronomical community throughout the world.



Observers send their data to Headquarters electronically or via postal mail where they are checked, processed, and added to the AAVSO International Database. Once the data have been validated at Headquarters, they become available through the AAVSO website. Special requests can also be made to AAVSO Headquarters directly. The AAVSO and its observers frequently provide the professional community with archival data, intensive monitoring of interesting variable stars, and even target-of-opportunity event notification for coordinated observing campaigns and satellite observations.



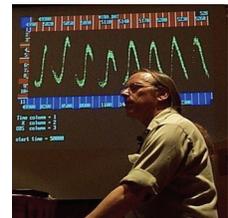
AAVSO publications provide the astronomical community with valuable information. The type of published information is diverse, and includes *The Journal of the AAVSO*, a collection of scientific papers that focuses on variable stars, the *AAVSO Manual for Visual Observing of Variable Stars*, which is now available in eight languages, the quarterly *AAVSO Newsletter*, the *AAVSO Eclipsing Binary and RR Lyrae Ephemerides*, and this *Annual Report*.

Additionally, the AAVSO is actively involved in education and outreach. We have several programs designed to assist disseminating information to educators and the public.

Our Writers Bureau offers variable star and topical astronomy content on a monthly basis to editors of astronomy club and society newsletters.

The Speakers Bureau is a service established for people and groups looking for enthusiastic, knowledgeable speakers.

Our Presentation Library offers free POWERPOINT™ presentations on variable stars, observing techniques, and other astronomical topics.



Variable Star Astronomy (VSA) is a flexible set of hands-on educational materials, activities, and investigations, based on the AAVSO's unique electronic database of variable star measurements.

The AAVSO has an active Mentor Program that is available to any observer requesting personal instruction in observing techniques and methods.

Members and observers have a unique opportunity to present and exchange ideas at the AAVSO meetings. The AAVSO organizes two meetings a year, one in the fall and one in the spring. The fall meeting is the official AAVSO annual meeting that is always held at or near the AAVSO Headquarters in Cambridge, MA. The spring meeting is held outside of the state of Massachusetts with the intention of attracting more members and observers to attend. Everyone interested in the AAVSO and its activities is invited and encouraged to participate in these exciting events.

What Are Variable Stars?

Variable stars are stars that change brightness. The brightness changes of these stars can range from a thousandth of a magnitude to as much as twenty magnitudes over periods of a fraction of a second to years, depending on the type of variable star. Over 100,000 variable stars are known and catalogued, and many thousands more are suspected to be variable.



The variable star U Geminorum in its faint state (left) and its bright state (right)

There are a number of reasons why variable stars change their brightness. Pulsating variables, for example, swell and shrink due to internal forces. An eclipsing binary will dim when it is eclipsed by a faint companion, and then brighten when the occulting star moves out of the way. Some variable stars are actually extremely close pairs of stars, exchanging mass as one star strips the atmosphere from the other.

The different causes of light variation in variable stars provide the impetus for classifying the stars into different categories. Variable stars are classified as either intrinsic, wherein variability is caused by physical changes such as pulsation or eruption in the star or stellar system, or extrinsic, wherein variability is caused by the eclipse of one star by another, the transit of an extrasolar planet, or by the effects of stellar rotation.

Why Observe Variable Stars?

Research on variable stars is important because it provides information about stellar properties, such as mass, radius, luminosity, temperature, internal and external structure, composition, and evolution. Some of this information would be difficult or impossible to obtain any other way. In many cases, it is the nature of the variability that provides the clues to the answers. This information can then be used to understand other stars.

Variable stars need to be systematically observed over decades in order to determine their long-time behavior. Professional astronomers have neither the available time nor the unlimited telescope access needed to gather data on the brightness changes of thousands of variable stars. Thus, it is amateur astronomers utilizing visual, photographic, photoelectric, and CCD techniques who are making a real and highly useful contribution to science by observing variable stars and submitting their observations to the AAVSO International Database. These important data are needed to analyze variable star behavior, to schedule satellite observations of certain stars, to correlate data from satellite and ground-based observations, and to make computerized theoretical models of variable stars possible.

Variable stars continue to play a crucial role in our understanding of the universe. Cepheid variables have played a major part in determining distances to far-away galaxies and determining the age of the Universe. Mira variables give us a glimpse into the future evolution of our own star, the Sun. Accretion disks in cataclysmic variables help us to understand larger scale disk behavior, like the activity inside active galaxies with super-massive black holes. Supernovae have led us to the surprising realization that the expansion of the Universe is accelerating. Even the search for extra-terrestrial life is illuminated by variable stars. Transiting extrasolar planets provide clues into the processes of planetary formation, and the very stuff life as we know it is made of comes from the hearts of stars that explode in the final stages of their evolution.

The AAVSO International Database

The AAVSO International Database has over 16.5 million variable star brightness estimates going back almost one hundred years. It is the largest and most comprehensive digital variable star database in the world. Over 1,000,000 new variable star brightness measurements are added to the database every year by over 700 observers from all over the world.

Quality

The AAVSO International Database is not only the largest but also the highest quality database available to researchers. The AAVSO and its technical staff spend more time and resources on database maintenance and quality control than any other organization.

Quality control begins before the observation is even made. Extensive training materials are sent to new AAVSO observers and a large section of the AAVSO website is designed specifically for observing techniques. The AAVSO holds two meetings per year where members come together to discuss their observing strategies, compare results, and much more. Workshops are routinely held at these meetings, bringing the best professionals in the field in contact with the observers. Since 2000, workshops have been held on CCD imaging, Eclipsing Binary star observing, GRB afterglow hunting, and data analysis. The AAVSO also has an active mentoring program for new observers.

We have data entry error checks at every stage in the process. Whether the observer is using WebObs, PCObs, or sending their data in via e-mail, we have error checking routines running to automatically identify the most common data entry errors. In addition, every month we comb through all the observations using both human scrutiny and automated programs to look for misidentifications, typos, and any other errors. The best check, however, is the observers themselves who check their submitted data by using the Quick Look file, Light Curve Generator, and by comparing their own records with the observer totals we send out via postal mail every year.

Data validation ensures the quality of our permanent archives

This practice is what really separates AAVSO data from others. Every data point that comes from the AAVSO International Database has been validated—that is, put through a rigorous system of data integrity checks. This system involves running automated programs and also requires a human being to actually look at and validate each data point. Not a point gets through the system without being looked at by a real person. This combination of techniques takes advantage of the benefits that both humans and automation can bring to the process, and it is applied not only to new observations, but to every observation in the database, even the ones made a century ago.

Observers

The AAVSO International Database would not exist without the dedication, tireless effort, and enthusiasm of thousands of variable star observers. Our observers come from all over the world. As of 2003, over two-thirds of AAVSO observers contributing data annually come from outside of the United States. Thanks to this broad network of observers we have coverage across most time zones and latitudes regardless of weather or other regional disruptions. To make it easier for the widely-scattered AAVSO members/observers to gather together in person, the AAVSO meeting(s) held every spring or summer take place in different parts of the United States or, as often as possible, in different countries.



Mary Glennon, AAVSO member-observer since 1999

Access

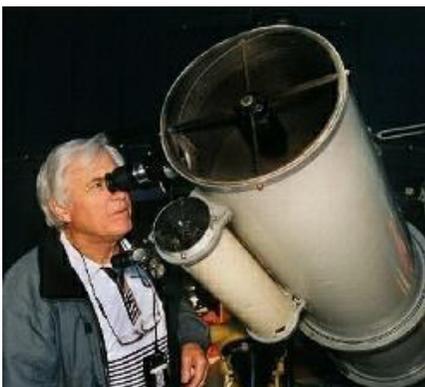
Observations from the database are available to anyone at any time. For raw observations, simply fill out our online request form. For access to light curves, use our Light Curve Generator which works in all browsers (you do not need JAVA or any special plug-ins), and for really quick access to recent data, visit our Quick Look file. Our online systems are updated every ten minutes with the latest data.

Observing Variable Stars

Astronomy is a unique science that cannot be studied in a typical laboratory setting here on earth. Instead, astronomers turn their attention and telescopes to the sky in order to study their subjects. Since professional astronomers often do not have the telescope time needed to follow a particular star or group of stars, the dedication of amateur astronomers is often an invaluable means of collecting information. Nowhere is this more true than in the field of variable star astronomy. Since 1911, thousands of amateur astronomers from all over the world and from all backgrounds have contributed observations, one at a time, to make up the more than 16.5 million data points housed in the AAVSO International Database!

Anyone can be a variable star observer. All you really need to begin observing are:

- your unaided eyes, a pair of binoculars, or a telescope
- some variable star charts to help you navigate your way through the sky
- some basic instructions
- a little patience



*Msgr. Ron Royer, AAVSO member-observer
since 1953*

For those interested in observing activity on our closest star, the sun, or a particular type of variable, such as the Eclipsing Binary and RR Lyrae type stars, or if hunting for novae, supernovae, or optical counterparts to energetic Gamma-Ray Bursts strikes your fancy, we have observing programs designed to help satisfy your appetite.

The AAVSO Mentor Program is available to all observers to assist newcomers in the methods and techniques of visual variable star observation, as well as CCD and PEP observation.

Services to Astronomy

The AAVSO provides a wide range of services to the astronomical community. AAVSO International Database data are disseminated extensively to astronomers around the world, upon request, and are freely available from the AAVSO website. AAVSO data and services have been used, referenced, and acknowledged in hundreds of professional astronomical publications.



Mario Motta, M.D., an AAVSO member-observer since 1985, at his 32-inch telescope

Services to Astronomers

AAVSO services are sought by astronomers for the following purposes:

- real-time, up-to-date information on unusual stellar activity
- scheduling of variable star observing programs coordinating earth-based large telescopes and instruments aboard satellites
- simultaneous optical observations of program stars and immediate notification of their activity during earth-based or satellite observing programs
- correlation of AAVSO optical data with spectroscopic, photometric, and polarimetric multi-wavelength data
- collaborative statistical analysis of stellar behavior using long-term AAVSO data

Collaboration between the AAVSO and professional astronomers for real-time information or simultaneous optical observations has enabled the successful execution of hundreds of observing programs using satellites such as:

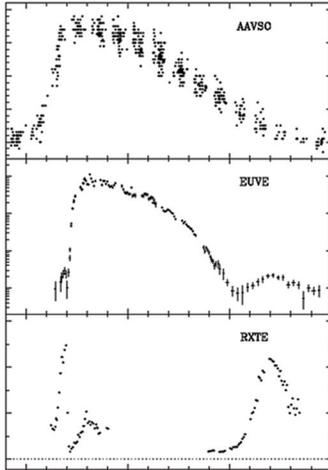
- Hubble Space Telescope
- Chandra X-Ray Observatory
- Spitzer Space Telescope
- XMM-Newton X-Ray Observatory
- Extreme Ultraviolet Explorer
- High Energy Astronomical Observatories 1 and 2
- International Ultraviolet Explorer
- Roentgen Satellite
- European X-Ray Observatory Satellite
- High Precision Parallax Collecting Satellite (HIPPARCOS)



AAVSO services have been used by researchers affiliated with such satellites as Chandra, XMM, RXTE, FUSE, HST, Spitzer, and many more

A significant number of rare events have been observed with these satellites as a result of timely notification by the AAVSO.

1. About the AAVSO

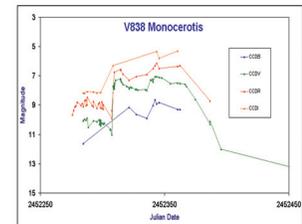


With the outburst detected by AAVSO Observers, simultaneous AAVSO visual, EUVE, and RXTE observations of SS Cygni were triggered, providing astronomers with important information about the behavior of dwarf novae (from Wheatley et al. 2003, MNRAS, 345, 49)

In recent years, the SWIFT satellite has been sending real-time notification to ground-based observers in the AAVSO High-Energy Network to alert them of Gamma-Ray Bursts (GRBs). Several GRB optical afterglows have been detected by AAVSO observers. In this way, AAVSO observers are contributing to cutting-edge, high-energy astrophysics.

Services to Observers and Members

The AAVSO enables variable star observers to contribute vitally to variable star astronomy by accepting their observations, incorporating them into the AAVSO International Database, publishing them, and making them available to the professional astronomer. Incorporating an observer's observations into the AAVSO archives means that future researchers will have access to those observations, so the observer is contributing to the science of the future as well as the present.



The AAVSO coordinates observing campaigns between professional and amateur astronomers, in which observations from amateur astronomers play an important role in correlating observations obtained with special instruments at earth-based observatories or aboard satellites.

On request, the AAVSO will help set up an appropriate observing program for an individual, an astronomy club, an elementary school, a high school, college, and so forth. In this way observers, students, and faculty are able to make the best use of their resources to do valuable science. The AAVSO can also assist in teaching observing techniques and in suggesting stars to be included in a program through the AAVSO Mentor Program.



Gary Poyner, AAVSO member-observer since 1991, with his 14-inch telescope

Services to Education and the Public

Education and outreach is important for the AAVSO

- to attract, train, and retain new variable star observers and members of all ages
- to increase awareness, understanding, and appreciation of variable star astronomy and variable star observing among amateur and professional astronomers, educators, students, and the general public
- to improve science education and literacy through the unique power of variable stars and variable star observing to motivate students, young and old

Projects, Programs, and Activities

The AAVSO Writers Bureau offers variable star and topical astronomy content on a monthly basis to editors of astronomy club and society newsletters. This gives us the chance to inform the public about the fascinating objects we study, as well as the science and research being done, while providing reliable, accurate information to newsletter editors who may lack the time or expertise to write or vet articles for publication.

The Speakers Bureau is a service established for people and groups looking for enthusiastic, knowledgeable speakers to provide informative presentations for astronomy clubs, star parties, banquets, Scout Troops, Astronomy Day activities, and other public and private astronomy functions.

Our Presentation Library contains POWERPOINT™ presentations on variable stars, observing techniques and other astronomical topics. These are available free to the public to use in making your own presentations.

The AAVSO Mentor Program connects experienced observers with new observers to assist them in observing, recording, and reporting observations of variable stars to the AAVSO International Database.



The AAVSO has much experience in hosting successful educational lectures such as the series of High-Energy Astrophysics Workshops for Amateur Astronomers

Variable Star Astronomy (VSA) is an AAVSO educational project, originally developed as Hands-On Astrophysics (HOA) with funds from the National Science Foundation. It is a flexible set of hands-on educational materials, activities, and investigations, based on the AAVSO's unique electronic database of variable star measurements. Its success is based on the fun and motivation of doing real science with real data. By carrying out all aspects of the research process, students can develop and integrate skills in science,

math, computing, and other areas. VSA has been converted to a web-based format and is expected to be available again in 2009.

VSTAR is the software that accompanies the activities for VSA. We are currently seeking funding to convert the original VSTAR programs to a JAVA platform.

The Education and Outreach Committee

The committee consists of amateur and professional astronomers with a wide range of interests in informal and formal education at all levels, and in many contexts. The committee members are:

Dr. Pamela L. Gay (chair), Southern Illinois University, Physics Department, Edwardsville, Illinois;
Barry B. Beaman, Rockford, Illinois;
Jaime R. García, Instituto Copérnico, Mendoza, Argentina;
Mary A. Kadooka, University of Hawaii, Institute for Astronomy;
Dr. Roger S. Kolman, Harper College, Palatine, Illinois;
Douglas Lombardi, Las Vegas, Nevada;
Paul Mortfield, Thornhill, Ontario, Canada;
Mario E. Motta, M.D., Gloucester, Massachusetts;
Dr. John R. Percy, University of Toronto, Department of Astronomy;
Dr. Pebble L. Richwine Johnson, Riverwatch Middle School, Cumming, Georgia;
Dr. Christine Anne Royce, Shippensburg University, Department of Teacher Education, Shippensburg, Pennsylvania;
Michael A. Simonsen, Imlay City, Michigan;
Donn R. Starkey, Auburn, Indiana;
Donna L. Young, Tufts University, Wright Center for Science Education, Medford, Massachusetts.



2. The Year in Review

Minutes of the 97th Spring Meeting of the AAVSO, Held April 10–13, 2008, Cambridge, England

Gary Walker, Secretary

The 97th Spring Meeting of the AAVSO was held in Cambridge, England, April 10–13, 2008, at New Hall College in Cambridge, England, in conjunction with the British Astronomical Association's (BAA) Out of London Meeting.

The AAVSO Council Meeting was held in Cambridge, Massachusetts on April 26, 2007, after the Spring Meeting.

In spite of the weather, Cambridge turned out to be warm and charming in its own right, mostly due to our hosts, the British Astronomical Association. On Thursday night attendees got together for the first time in the dining hall to reunite with old friends, while sharing a meal and catching up on things. After dinner most of the group went on to the Cambridge Institute of Astronomy to take a tour and see the historic telescopes there, while Mike Simonsen and John Toone opted out to observe several cataclysmic variables using the C8 John had conveniently stashed in his trunk (or “boot” as the English call it).

The crowd in the dining hall was much larger Friday morning and the hallway leading to the meeting room was full of displays and people. BAA President Roger Pickard and AAVSO Director Arne Henden welcomed the attendees. The Scientific Paper session began. The authors and titles of the Scientific Session are summarized below.

Pamela Gay also blogged the whole meeting live on Astronomycast, which can be seen at: <http://www.astronomycast.com/LIVE/>



Participants in the AAVSO's 97th Spring Meeting, 2008

2. The Year in Review

After dinner Friday, Professor Michael Bode gave a talk summarizing research results from outbursts of the recurrent nova RS Ophiuchi. One of the pleasant surprises in the results was that they had the system modeled fairly accurately the last time around, and were able to verify that during the most recent outburst.

The Saturday Scientific Session, held April 12, was equally informative and fun. Again, the authors and titles are summarized in tabular form below.

The Saturday banquet was reported to be one of the best meals during the entire meeting. Three special awards were given out after the banquet. The AAVSO presented Roger Pickard with a lifetime membership in the AAVSO, in recognition of a lifetime of contributions to variable star research. Arto Oksanen was awarded an AAVSO Gamma-Ray Burst Award for the discovery of the Gamma-Ray Burst optical afterglow of GRB 071010B, and the BAA's Variable Star Section (BAA-VSS) awarded Gary Poyner the Butterworth Award for his amazing contribution of over 200,000 visual observations.

Mike Simonsen's impromptu talk, "Hobby or Obsession" talk was well received after dinner (Mike agreed to fill in for the planned speaker who was unable to attend).

The following day was spent travelling by bus across the English countryside as we visited Stonehenge and another stone circle formation, Avebury, which is so large it actually has a small town inside of it.

We wish to thank you, all our British hosts, for making this meeting a special memory. We look forward to seeing you all again soon.

The Secretary wishes to thank Mike Simonsen for his assistance in the preparation of these Minutes.



Two of the AAVSO's RR Lyrae observers from Italy who attended the AAVSO Spring Meeting: Ricardo Papini (on left), and Alessandro Marchini (on right), with RR Lyrae Committee Chair, Gerry Samolyk.

Papers Presented at the Scientific Paper Session on Friday, April 11, 2008

Roger Pickard Arne Henden	"BAA President and AAVSO Director--Welcome"
Paula Szkody	"HST Campaigns and the Amateur"
Des Loughney	"Eclipsing Binaries--Observational Challenges"
David Boyd	"New Results on SW Sex Stars and a Proposed Observing Campaign"
Martin Nicholson	"A Week in the Life of a Remote Observer"
Mike Simonsen	"AAVSO Acronyms Demystified in 15 Minutes"
Patrick Wils	"Finding Eclipsing Binaries in NSVS Data"
Pamela Gay	"Peer-to-Peer Astronomy Education"
John Toone	"British Variable Star Associations 1848-1908"
Robin Leadbeater	"Chasing Rainbows--The European Amateur Spectroscopy Scene"
Tom Lloyd-Evans	"Long Term Monitoring and the Carbon Miras"
Boris Gaensicke	"Warwick University, Cataclysmic Variables From Large Surveys--a Silent Revolution"

Papers Presented at the Scientific Paper Session on Saturday, April 12, 2008

Roger Pickard Arne Henden	"BAA President and AAVSO Director--Welcome"
Rene Oudmaijer	"Star Formation"
Arne Henden	"The MJUO/AAVSO Collaboration"
Guy Hurst	"Novae and Supernovae: From Visual to Remote Robotic Observations"
Lee MacDonald	"Observing the Sun with Small Telescopes"
Giulio Del Zanna	"Changes in the Solar Corona During the Last Cycle"
Arto Oksanen	"Observing GRB Optical Afterglows"

New Members Accepted at the Spring Meeting, April 13, 2008

- Bales, Dale, IN
Beech, Clive, England
Bianco, Giuseppe, Italy
Birsianis, George, Greece
Briggs, Eric, Canada
Catalan, Lionel, Canada
Closas, Pere, Spain
Collins, Donald F., NC
Dandrea, Albert, FL
Davis, Jack, NV
H Droege, Thomas, IL
Dwyer, Terry, CO
Eadie, Gwen, Canada
Erdelyi, Emery, CA
Furrow, Charles D., FL
Ghiri, Mauro, Italy
Green, Bill, VA
Hillier, Anna, MA
Hopkins, Jeffry, AZ
Hose Jr., Richard, OR
Howerton, Stan, KS
Julian, William, NM
Kaczmarek, Marcelo, Brazil
Karcher, Dennis, OK
Kirkman, Thomas, MN
Kunzmann, Bjoern, Germany
Lemay, Damien, Canada
Leonard, Larry, IL
Lorenz, Roy, AZ
S Mattingly, Andrew, Australia
McKay, Steve, VA
Meibom, Soren, MA
Menke, John, MD
S Meyers, Gordon, CT
Mogul, Ken, GA
Muller, Fred, OR
Mullin, Benjamin, MN
Ogmen, Yenal, North Cyprus
H Pickard, Roger D., England
Raine, Peter, Canada
Redding, Terrence, FL
Rocha, Jose, Brazil
Rowlands, Stephen, Australia
Sada, Pedro, TX
Salas, Javier, Spain
Silvis, George, MA
Sjoberg, George, MA
Staels, Bart, Belgium
Stein, William, NM
Trybus, Pawel, Poland
van der Meer, Hans, Netherlands
Wahlgren, Glenn, VA
Walker, Mark P., Canada
Wobus, Richard, MD
Wood, Jeremy, KY

H = honorary membership, S = sustaining membership

Deceased Members, Observers, and Colleagues

- Droege, Thomas F., IL
Hodgson, William D., Australia
Moos, Walter S., Switzerland

AAVSO Observer Awards

Presented at the 97th Spring Meeting, Cambridge, England, April 13, 2008

*Over 250,000 Visual Observations**

Albert F. Jones	New Zealand	1960-2007	277,351
-----------------	-------------	-----------	---------

*Over 200,000 Visual Observations**

none

*Over 150,000 Visual Observations**

Paul Vedrenne	France	1978-2007	152,455
---------------	--------	-----------	---------

*Over 100,000 Visual Observations**

Peter Williams	Australia	1989-2007	102,130
Eddy Muyliaert	Belgium	1986-2007	100,073

*Over 50,000 Visual Observations**

Alexander W. Roberts	South Africa	1894-1920	66,374	(historical data)
Gordon C. Herdman	New Zealand	1989-2007	53,116	

*Over 25,000 Visual Observations**

N. W. Taylor	Australia	1989-2007	49,094
O. R. Hull	New Zealand	1989-2007	43,475
Barry Menzies	New Zealand	2007-2007	31,741
Hiroshi Matsuyama	Japan	1978-2007	29,030
W. Goltz	Australia	1989-2007	28,326
George Stefanopoulos	Greece	1970-2007	25,376
Frans R. Van Loo	Belgium	1976-2007	25,298

*Over 10,000 Visual Observations**

Franck Gobet	France	2003-2007	14,840
George Vithoukias	Greece	1999-2007	11,550
Emilian Skrzynecki	Poland	2002-2007	10,969
Tomasz Krzyt	Poland	1997-2007	10,777
Daniel P. Loring	USA	1965-2007	10,338

*Over 250,000 CCD/PEP Observations**

Christopher T. Middleton	South Africa	2004-2007	265,227	CCD
--------------------------	--------------	-----------	---------	-----

*Over 200,000 CCD/PEP Observations**

none

continued on next page

2. The Year in Review

Observer Awards, cont.

*Over 150,000 CCD/PEP Observations**

Libert A. G. Monard	South Africa	1992-2007	167,834	CCD
Gerard Samolyk	USA	1975-2007	175,474	CCD
Robert A. James	USA	1953-2007	163,412	CCD
Vance Petriew	Canada	2001-2007	152,111	CCD

*Over 100,000 CCD/PEP Observations**

Shawn W. Dvorak	USA	1981-2007	109,418	CCD
-----------------	-----	-----------	---------	-----

*Over 50,000 CCD/PEP Observations**

Giorgio Di Scala	Australia	2004-2007	60,764	CCD
Timothy Crawford	USA	2001-2007	56,669	CCD
Neil D. Butterworth	Australia	2002-2007	50,283	CCD

*Over 25,000 CCD/PEP Observations**

Thomas Krajci	USA	2002-2007	38,873	CCD
Arto Oksanen	Finland	2001-2007	36,024	CCD
James L. Jones	USA	2003-2007	34,571	CCD
Robert Koff	USA	2003-2007	27,243	CCD
Keith A. Graham	USA	1981-2007	25,242	CCD
Pierre De Ponthiere	Belgium	2003-2007	25,090	CCD

*Over 10,000 CCD/PEP Observations**

Jerry Bialozynski	USA	2004-2007	22,652	CCD
Ray E. Tomlin	USA	2006-2007	19,685	CCD
Jeremy Shears	England	2004-2007	16,564	CCD
Patrick Wiggins	USA	2000-2007	15,122	CCD
Michael Koppelman	USA	2001-2007	12,194	CCD
Martin Nicholson	England	2004-2007	11,732	CCD

*Over 5,000 CCD/PEP Observations**

none

*Over 2,500 CCD/PEP Observations**

none

*Over 1,000 CCD/PEP Observations**

James H. Fox	USA	1999-2007	1,064	PEP
--------------	-----	-----------	-------	-----

* Years include total AAVSO observing interval (not only PEP/CCD observing).
Total includes PEP and/or CCD observations only (not observer's visual contributions).

The AAVSO Gamma-Ray Burst Award

This award is given to an amateur astronomer for the discovery of a gamma-ray burst optical afterglow.



The AAVSO Gamma-Ray Burst Award was presented at the 97th Spring Meeting of the AAVSO Cambridge, England, to Arto Oksanen, Muurame, Finland, for the discovery of the Gamma-Ray Burst optical afterglow of GRB 071010B, October 10.8768, 2007 UT.

Arto Oksanen (on left) receives the AAVSO Gamma-Ray Burst Award from Arne Henden at the Spring Meeting

Special Recognition Award Recipients

Thomas F. Droege, Batavia, IL, was awarded an Honorary AAVSO membership on December 28, 2007, "in recognition of his promotion of amateur-professional collaboration in astronomy, his mentoring of amateurs, and the vast amount of energy and funds he has contributed in making the TASS MarkIV survey a reality."

Roger D. Pickard, Leominster, England, was awarded an Honorary AAVSO membership, "in recognition of his contributions to and support of international cooperation in the creation and dissemination of standardized comparison star sequences and charts, encouraging and promoting the exchange of information, data, and ideas between the British Astronomical Association, Variable Star Section, and the AAVSO, his lifelong contributions to variable star research as an observer, and his distinguished service as Director of the BAAVSS." The award was presented at the 97th Spring Meeting in Cambridge, England, April 13, 2008.



Roger Pickard (on left) receives an Honorary AAVSO membership presented by Arne Henden

2. The Year in Review



After the meeting, attendees made a field trip to Stonehenge.

Minutes of the 97th Annual Meeting of the AAVSO, Held October 16-19, 2008, Nantucket, Massachusetts

Gary Walker, Secretary

The 97th Annual Meeting of the AAVSO was held October 16-18 on Nantucket Island, Massachusetts, at the Nantucket Inn. The Council Meeting was held all day Thursday, October 16, 2008, while registration was opened during the afternoon.

A Data Mining Workshop was held on Friday morning. After an introduction by AAVSO President, Dr. Paula Szkody, five presentations were given on Data Mining. A special Session on MMO (Maria Mitchell Observatory) History and Research was held Friday afternoon, Opening remarks were made by the Maria Mitchell Association President Toni McKerrow and were followed by five papers. The Special Session on History was followed by three papers relating to recent MMO Research.

The history session was followed by an open house and dinner reception at the Vestal Street Campus to commemorate the 100th anniversary of MMO. Visitors toured the Library, Vestal Street Observatory, Mitchell House, and Hinchman House, where the reception was held. After the reception, everyone toured the Loines Observatory to see the new 24-inch RC Research Telescope, installed last year. A Star Party was hampered by some low, thick cirrus.

The Membership Meeting was called to order on Saturday Morning at 9:00 a.m., by President Paula Szkody. Secretary Gary Walker read the Minutes of the 2007 Annual Meeting held in Cambridge, Massachusetts. Dave Hurdis, presented the Treasurer's Report. He reported a total income of \$1,405,415 with total expenses of \$1,112,716. He also reported that the Endowment fund had decreased from \$17.4 M to \$14.0 M as a result of the financial crisis in the stock market.

The following Committee Reports were read; CCD, prepared and read by Gary Walker; Photoelectric Photometry, read by David B. Williams; Eclipsing Binary and RR Lyrae, prepared and read by Gerry Samolyk; GRB Network, prepared by Matt Templeton and read by Doug Welch; Solar, prepared by Paul Mortfield and read by Haldun Menali. The reports on *J*- and *H*-Band IR Photometry, Nova Search, and the Education Committee were not available at the meeting.

Director Arne Henden announced the results of the election for AAVSO Council. Arlo Landolt, Kate Hutton, Mike Koppleman,



During the Maria Mitchell Observatory open house, AAVSO staff member Sara Beck rediscovers a photographic plate she had made there while one of Dorrit Hoffleit's student researchers in 1978. Present-day MMO Director Vladimir Strel'nitski happily assists in the rediscovery.

and Ed Guinan were elected to Council. The Nominating Committee of Mario Motta, Lee Anne Willson, and Tim Crocker did an excellent job selecting candidates. Rotating off Council were Dave Williams, Karen Meech, Gary Billings, and Doug Welch. Thanks were extended to them for their service.

Director Arne Henden gave his Annual Director's Report. He reported that we have 1,277 members from 47 countries. Arne also reported 95 new members joined during this year. He reported deceased members, colleagues, and friends: Arthur C. Clarke, Ronald A. Parise, Charles L. Ricker, John A. Wheeler, and Tatsuo Yamada, and attendees stood for a moment of silence. Arne reported that the 2009 Spring meeting will be held May 20–21, at the Northwood's Resort in conjunction with the Society for Astronomical Sciences (SAS) in Big Bear, California. The 2009 Annual meeting is scheduled for Headquarters in Cambridge, Massachusetts. The 2010 Spring meeting is planned for April in Mendoza, Argentina. The 2011 Spring meeting will coincide with the American Astronomical Society's (AAS) meeting; although the two meetings will be separate events, the AAVSO plans to have a presence at the AAS meeting. Arne reported that a study of observers was done: during the period from 2000 to 2007, the number of visual observers went from 275 to 225, while the CCD observers increased from 20 to 120. The Photoelectric Photometry observers stayed at a constant 20. We also had 150-200 observers with less than 10 observations during that same period. It seemed as though some mentoring was in order to develop more interest. During this year, 1.9 million observations were submitted, consisting of 1.5 million current observations and 400,000 observations from older sources. Arne reported that we had 27,000 hits on our home page per month. There were also 4,248 online data requests (compared to 246 in 2002). 20,000 charts were downloaded per month using AAVSO's Variable Star Plotter (VSP). Arne reported on the Robotic Telescope Network, which has the Sonoita Research Observatory operating, and the Morgan 24-inch sited at Dark Ridge Observatory in Weed, New Mexico, by Tom Smith, as well as the 22-inch Auto Scope donated to Tom Krajci by Brigham Young University, sited at Tom's facility in Cloudcroft New Mexico. In addition, Paul Wright bequeathed his C11 and Meade 12-inch telescopes to AAVSO--also sited at Tom Krajci's facility. Arne reported that the Variable Star Database (VSD) of comparison stars now numbers over 36,000. Headquarters also reported that 4,338 BVRI CCD measurements from 1993–1997 are now online on the web. This means that all 15 years of data on these 8 LPV's are now online. Additional details of the Director's Report are posted on the web site.

The Scientific Paper Session followed the Director's Report, from late morning until the end of the afternoon. Fifteen papers on various aspects of Variable Star astronomy were presented. The authors and titles are summarized below in tabular form.

The Conference Center was converted to a banquet hall for the dinner and awards ceremony.

Lee Anne Willson was presented with the 40th AAVSO Merit Award (see p. 23). Albert F. Jones received the 41st AAVSO Merit Award, which will be presented to him personally at his home by the Director in 2009 (see p. 22). Vladimir Strel'nitski was presented with the 7th William Tyler Olcott Distinguished Service Award (see p. 23). Sunspot Observation Awards were presented to Mike Boschat, Mieczyslaw Szulc, and the IPS Observatory. Sudden Ionospheric Disturbance (SID) Awards were presented to Michael King and Paul Mortfield.

Papers and posters presented at the Scientific Paper Session on Saturday, October 18, 2008

Donna L. Young	"Variable Star Astronomy Education Outreach Initiative"
Aaron Price	"The International Year of Astronomy and Citizen Science"
David Hogg	"Automated Calibration and an Open-Source Sky Survey"
Joy Nichols	"The Chandra Variable Guide Star Catalog"
D. Huenemoerder	
E. Martin	
J. Lauer	
D. Morgan	
A. Henden	
Geoffrey Clayton	"The Evolution of R Coronae Borealis Stars"
Kristine Larsen	"Reclaiming the Astronomical and Historical Legacy of Antonia Maury"
Katy Sternberger	"Henrietta Swan Leavitt"
Edward J. Los	"Overview of the DASCH Photometry Pipeline" (poster)
James Faustman Breitmeyer	"First Steps Towards a Solar Flare Detector Using the AAVSO Design" (poster)
Lee Anne Willson	"How Do Pulsating Giant Stars Make Dust?"
Doug Welch	"A Microprocessor-based Starfield Simulator"
Anthony Tektach	
Steve Bickerton	
James Bedient	"120 Years of RZ Dor"
Aaron Price	"40 Years of Mystery: Unraveling BZ UMa"
Grant Foster	
Paula Szkody	"Update on HST Campaign on Pulsating White Dwarfs in Cataclysmic Variables"
David A. Hurdis	"Two-Color Photometry of the Double-Mode RR Lyrae Star NSVS-5222076"

New Members Accepted at the Annual Meeting, October 16, 2008

Alexander, James, AZ	Gorodenski, Stanley, AZ
Barrett, Douglas, France	Hautecler, Hubert, Belgium
Bearscove, Jon, WA	Hollander, Allan, CA
Berry, Richard, OR	S Kaz, Ed, CA
Blais, George, MA	Keefer Jr., Andrew, AZ
Brewster, Michael, TX	Lam, Helios, MA
Ceron, Christophe, France	Makinen, Paul, TX
Combs, Kent, CA	Mohrbacher, Dave, OH
Corp, Laurent, France	S Puckett, Tim, GA
Crast, Jack, NY	Richardson, Noel, GA
de Jong, Mark, Canada	Riddle, Andrew, OH
Detterline, Peter, PA	Rinehart, Gary, CA
Dixon, Mary, VA	Roth, Brian, NY
Drumheller, Dean, CA	Scott, Phillip, OK
S Finer, Mitchell, CA	Sepulveda, Mark, TX
A Fischler, Evan, WA	Smith Jr., Noel, AZ
Fraser, Rhona, England	Thompson-Renz, Michael, MA
French, Linda, IL	Tremblay, Robert, Canada
Gagliano, Robert, AZ	Wilson, Matt, NJ

S = sustaining membership, A = associate membership

Deceased Members, Observers, and Colleagues

Clarke, Arthur C., Sri Lanka	Wheeler, John A., NJ
Parise, Ronald A., MD	Yamada, Tatsuo, Japan
Ricker, Charles L., MI	

AAVSO Merit Award Recipients

Lee Anne Willson receives the 40th AAVSO Merit Award from Director Arne Henden at the AAVSO's Annual Meeting

Lee Anne Willson was presented the 40th AAVSO Merit Award "...in recognition of her years of leadership as AAVSO President and Council member; her seminal research into the nature and evolution of Mira and semiregular variable stars, including the use of AAVSO data and encouragement of amateur observers; her service as ambassador between the professional and amateur variable star communities; her inspiring education of students and the public; and her support, counsel, and collaborative research with AAVSO directors and staff." The award was presented at the 97th Annual Meeting in Nantucket, MA, October 19, 2008.

Albert F. Jones received the 41st AAVSO Merit Award "...for his dedicated contributions to variable star astronomy for over 60 years, including over 500,000 visual observations of Southern Hemisphere stars, providing decades of uninterrupted coverage; contributions to Southern comparison star sequences; research collaborations with professional astronomers, providing valuable data and insight into target variable star behavior; sharing his meticulous observations with the Royal Astronomical Society of New Zealand, and with the AAVSO for worldwide distribution; mentoring countless new observers, particularly in New Zealand, with good humor, patience, and grace; and inspiring variable star observers worldwide." The award, announced at the 97th Annual Meeting in Nantucket, MA, October 19, 2008, will be presented to Albert Jones in 2009 at his home in New Zealand, by the Director, Arne Henden.



Veteran observer Albert Jones at his telescope in Stoke, New Zealand

AAVSO William Tyler Olcott Distinguished Service Award Recipient (presented at the 97th Annual Meeting in Nantucket, MA, October 19, 2008)

Vladimir Strelnitski, Director of the Maria Mitchell Observatory in Nantucket, Massachusetts, was presented the William Tyler Olcott Distinguished Service Award “for his tireless promotion of astronomy to the public and his keen mentorship of future astronomers through the Maria Mitchell Observatory REU Program.”



Vladimir Strelnitski receives the William Tyler Olcott Distinguished Service Award from Director Arne Henden at the AAVSO's Annual Meeting

AAVSO Solar Observer Awards (presented at the 97th Annual Meeting in Nantucket, MA, October 19, 2008)

Sunspot Observers (1,500 or more observations; announced after the Annual Meeting)

Mike Boschat, Canada
Mieczyslaw Szulc, Poland

IPS Observatory

Sudden Ionospheric Disturbance Observers (40 or more months of reports)

Michael King, England

Paul Mortfield, Canada

Annual Report of the Director for Fiscal Year 2007-2008

Arne A. Henden, Director

Settling In

We've now been in our new Headquarters building for eighteen months (February 2007 to September 2008). They have been some of the most active and exciting months in our association's history. The building itself has been perfect. It divides nicely into three segments: an old (original) house, an "annex" (the original *Sky & Telescope* warehouse), and a two-story office complex. We found that our staff and the archives actually fit into the office area. While that area had about the same square footage as our entire 25 Birch headquarters, it is laid out in a more logical manner and things just seemed to "fit." The annex has four offices, a storeroom, two bathrooms, a kitchen and a large open area. Michael Saladyga is using two of the offices as temporary space for the archive, containing material that needs to be sorted and logged before moving to the office archive space. One office was reserved for the fund-raiser (originally Gary Walker, since November 2007, Michael Simonsen), and the remaining office is for visitors.

We made use of the open area for our Fall 2007 annual meeting. It holds about 100 people comfortably, both for theater-style seating during the meeting, and round tables for the banquet. Because of its shape, we installed two projectors and screens, both showing the powerpoint presentation of the speaker. We set up a nice audio system with front-mounted speakers. Attendees seemed to think the setup worked well! We were also able to have noontime lunches, including the first annual AAVSO cookout. This space has great potential for a permanent conference and workshop venue, but needs considerable funds for renovation. The suspended ceiling can be removed, giving an additional fifteen inches of ceiling height; the kitchen needs to be remodeled; better projectors need to be purchased, along with chairs; etc. The surrounding neighborhood is undergoing change, and some of our favorite restaurants have closed. New construction is underway, and we



The versatility of the new AAVSO Headquarters : at left, the HQ annex room as set up for the paper sessions; below, the annex becomes a banquet room



2. The Year in Review

are assuming that new restaurants will also be included. The Best Western Tria hotel, the closest lodging to Headquarters, is adding rooms. We've found that the lowest lodging rates are in the spring, so we will be moving the annual meeting to the spring to lower costs to our members.

The original building on the property was a house, constructed in 1949. When Charles Federer purchased the property for *Sky & Telescope* in 1956, he converted the house into office space. It produced interesting offices; Susan Lit's office, for example, was the original dining room and still had a china cabinet in one corner. The motif was basic 1970s when we purchased the office; black wrought iron railings and lots of wood sheet wall paneling. There were doorways between the house and the two-story office complex on both floors, but to get to a specific office meant that you had to walk through other offices since no hallway was present.

As we didn't need the old house space for our offices, we pondered potential uses for the space. It was in dramatic need of refurbishment, with old carpeting, holes in the walls, fluorescent fixtures that had yellowed, etc. David Williams, President of the AAVSO at the time, suggested that it could be made into a Director's Residence. By doing so, we could refurbish the space, improving the value of the property, and provide a "perk" of a house in Cambridge (a very expensive place!) to future Directors. We also realized that a portion of the renovation could be used as a "guest suite" for AAVSO visitors. After review by our architects, Design Associates, and consultation with the City of Cambridge, we settled on a basic plan and selected a contractor (Daniel Construction). In January 2008, construction (well, demolition actually) began, and the contractor was finished with his portion of the work by mid-August 2008. The Hends did all of the sanding, leveling, and painting for the entire house, as well as construction of shelves in the closets and daily cleanup of the construction site. They made a major donation towards building costs as well.



The first guests in the Walter A. Feibelman Guest Suite were Tom and Anna Fay Williams in July 2008. Many more visitors have stayed since, and it is rapidly becoming one of the best features of the new Headquarters. The Hends are enjoying the house and the lack of a commute. We're also finding that it makes the headquarters more secure; we are on top of any false security or fire alarm; we keep the outside cleaner than before.

Two views of the new Walter A. Feibelman Guest Suite at AAVSO Headquarters

Economic Downturn

The stock market peaked in October 2007. We were able to make the original purchase of the *Sky & Telescope* building near the peak, and also to pay for most of the house renovations while it was still high. However, by July 2008 the market had dropped 20% from the October high, and dropped rapidly thereafter. While this report only extends until the end of September, it is painfully obvious to everyone reading that the market continued to decline, reaching a bottom around November, 40% below that high recorded only a year earlier. The economic forecast is pretty dismal, with the banking crisis, subprime loans, automobile industry in decline, and everyone worried for their jobs and financial security. The AAVSO is no different. The major part of our income is from our Endowment, paying basically for all staff salaries. Additional funding comes from donations, membership dues, and external grants from agencies like the National Science Foundation.

Our financial managers saw the steady decline in the market, and made sure that any bonds that matured were kept in cash reserves rather than being reinvested. This has given us about a one-year cushion before the “virtual losses” of our investments become real losses. If the market were to make a turnaround in the next year, we’d be in good shape. Only a fool would close their eyes to the situation, though. We are closely monitoring the economy, are doing some initial belt-tightening, and will most likely make some adjustments this coming spring to keep the AAVSO strong and vibrant. We also made the decision to ask for more donations from our membership, and to make grant applications for the upcoming NSF and NASA review cycles.

No crystal ball is perfect. We are aware of the problems and are developing several future paths, depending on the health of the economy.

Internet Presence and the AAVSO Website

The most visible aspect of the AAVSO is our website. While staff thoroughly enjoys the new headquarters building, what you see as an observer are the homepage and the features that help you in your observing. We work diligently to ensure that the website is useful to our members and observers, as well as to outside researchers and anyone who happens across it. Kate Davis is our Webmaster, and has spent a large fraction of the year adding features and preparing for the impending website update in FY2009.

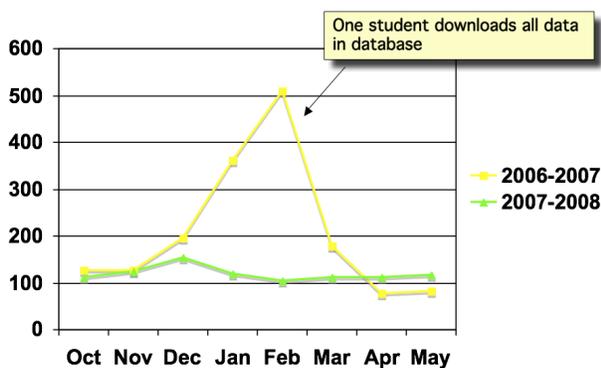
You’ve noticed that all of the education pages have been updated this year? These pages were rewritten by Mike Simonsen, and added to the website by Kate. Lots of these “behind the scenes” administrative tasks are handled by Kate. She tries to make the site work well for users, and works hard to make staff duties easier and more reliable. Many small ancillary programs, like the Special Notice and Alert Notice interfaces, have been written by Kate.

2. The Year in Review

We've implemented a variable star bookstore. While all items in the bookstore show up on our webpage and you order through the page, it actually links to Amazon for purchase. The nice thing about this is that every purchase (while it costs the same to the buyer) results in a donation to the AAVSO. Every few months, we get a gift certificate that we can use to buy things through their site, such as books for our library or office supplies. It is a *really* simple way to donate to the AAVSO. Kate Hutton and Mike Simonsen have spent a considerable amount of their time reviewing many of the books listed in the store. Just reading the reviews will be helpful to you--not all of the books are dry tomes! If you have additional books that you would like to see added to the bookstore, submit your reviews and get them added.

One of the most visible changes to the website this year was the addition of the visual and extended AAVSO standard formats for data submission. We've been handling the output files from many software vendors over the years, and finally decided that it was not an efficient use of staff time to support the changes that each new version brought. In addition, what a software vendor might think is unimportant may be essential for proper use of photometric data. Moving to the MySQL relational database also gave us the opportunity to increase field sizes so that you are less limited in the length of object names or any extra comment that you might want to make about an observation.

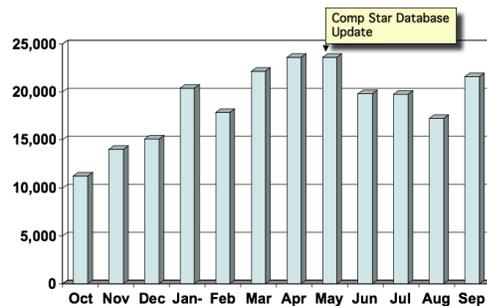
Towards those ends, we published standards for two formats: visual data submission and CCD data submission. For visual observers, the format is very similar to what was previously available, and so should be very straightforward to use. For CCD observers, we wanted to support pure differential photometry as well as ensemble photometry, and wanted additional information such as transformation status, error analysis and airmass to be included. The Extended Format is thus considerably more complex, and designed for computer-generated files. We contacted all of the major software vendors, supplied them with a description of the new standard, and they were unanimously in favor of updating their software to support the new file format. With this new format, Kate only has to support one format in her WebObs submission program. This eliminates a lot of logical tests and improves reliability of the software.



Total data transferred on the AAVSO website. Comparison of 2006-2007 and 2007-2008 in Gigabytes

We averaged about 120 gigabytes per month of transferred data this past year, with the largest transfer occurring in December. We served about 48,000 distinct hosts per month, and had about 30,000 home page hits per month. These home page hits are often the less-frequent visitors, as most observers bookmark the lower-level page that they need and don't hit the home page nearly as frequently. For example, we average about 500,000 page hits per month for everything other than the homepage.

Probably the biggest presence, though, are the main observer tools: VSP, the finding chart plotter; VSX, the variable-star catalog; LCG, the light curve generator; and WebObs, the access portal for data submission. All of these tools were revised this year because of updates to our MySQL relational database for the observations.

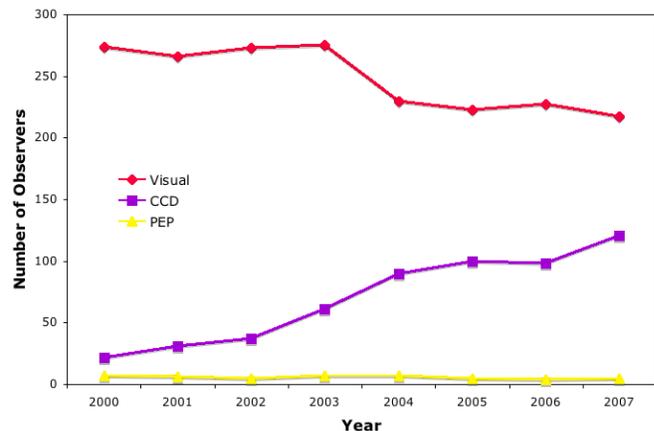


Number of charts plotted by VSP during FY 2007-2008

The computer hardware continues to be improved at Headquarters. We now have two 7-terabyte file servers to handle the AAVSO International Database (AID), as well as providing space for storage of CCD images from our robotic observatories. The daily backups were getting too large for our tape archival system, so we have now switched to an external hard drive backup system.

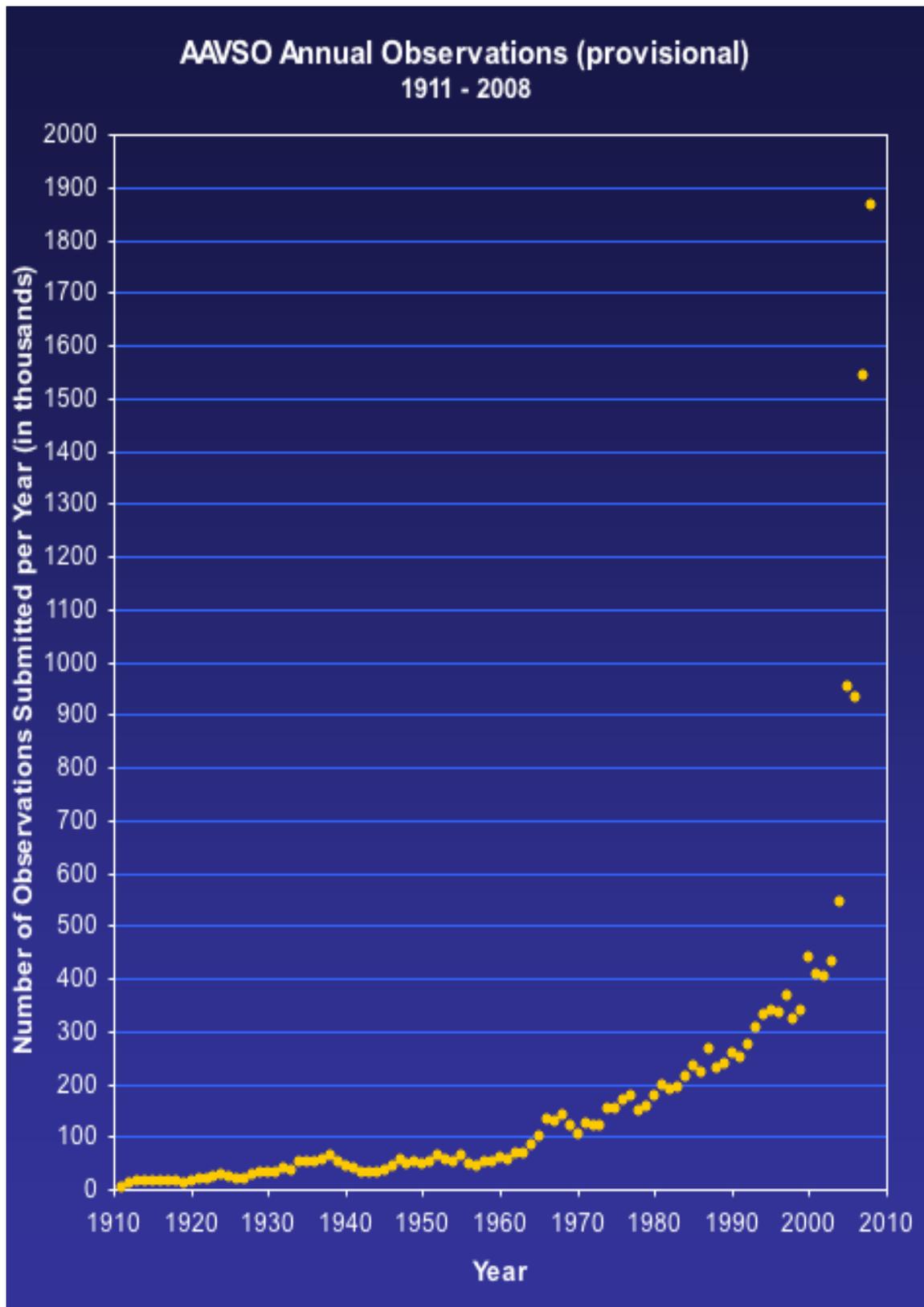
Observation Database

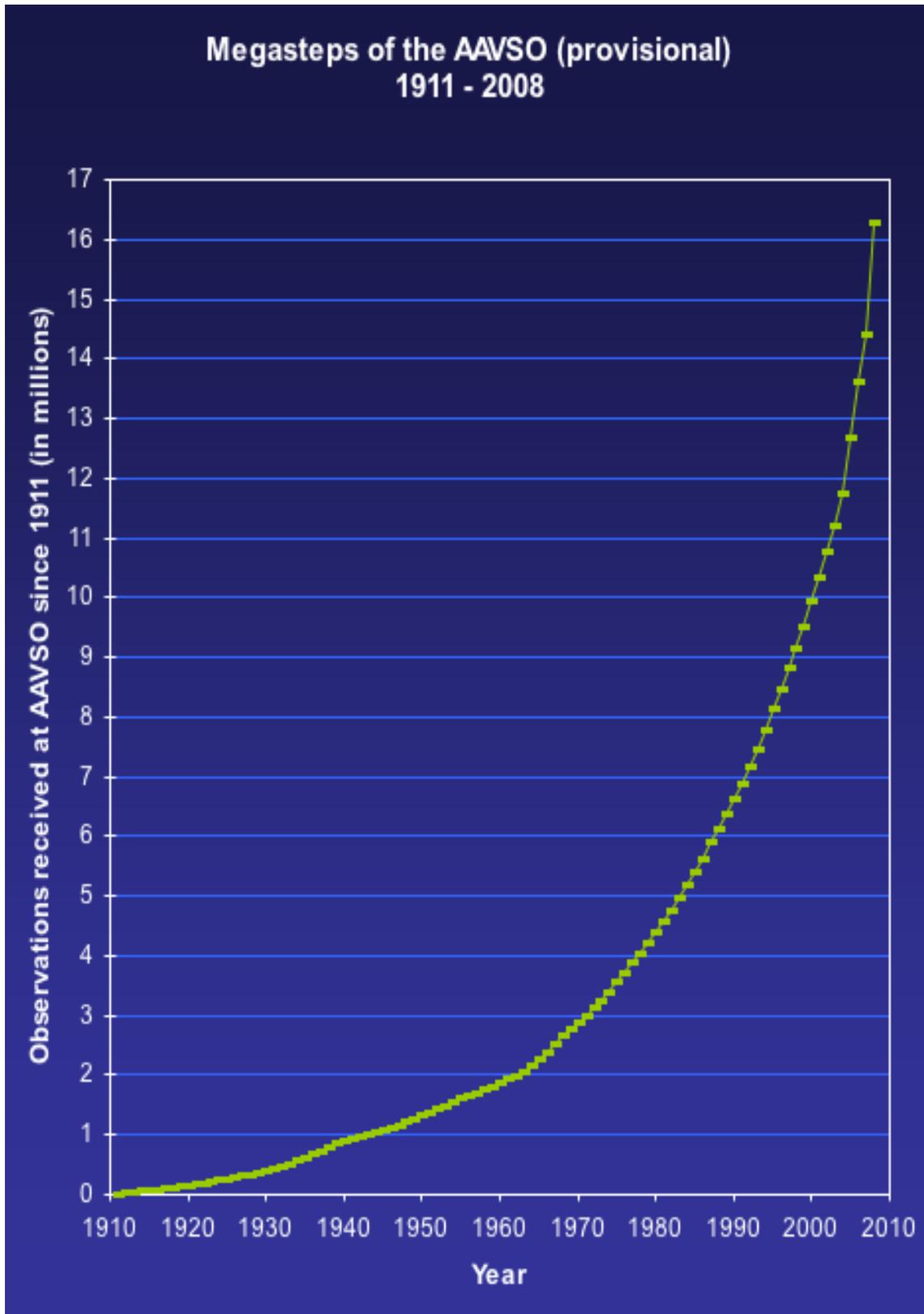
In FY2008, we collected 1,874,893 observations: 792,668 of these were visual observations; 1,546 were PEP or photographic observations. The remainder (1,080,679) were CCD observations. The CCD totals remain high, as we get many thousands of observations for any time-series campaign (SS Cyg is an example). The two charts on the following pages show the annual submission totals since 1911, and the total submitted observations ("Megasteps") since 1911. You can see that the trend is exponential, so that by 2011, we will be collecting 15 million observations per year!



Types of observations received from observers during FY 2007-2008

The AAVSO CCD committee began a program of *BVRI* observations of a number of variable stars back in the early 1990s, just as CCD cameras were becoming available to the amateur community. Eight stars were chosen to monitor, mainly long period variables. While recent data for this program are being entered through the normal WebObs procedures, several years of early observations were only available in paper format. David Coit, our Margaret Mayall Assistant in 2007, entered these observations in computer-readable format. Sara Beck and Elizabeth Waagen proofread this entry and converted the observations into our standardized format for submission. A total of 4,338 observations were added in this manner. An example of the resultant light curves is VX UMa. If you plot the 4000-day light curve, so that decade-old data are visible, you will see the new observations on the left. We are happy that this pioneering CCD work is finally available for public access!

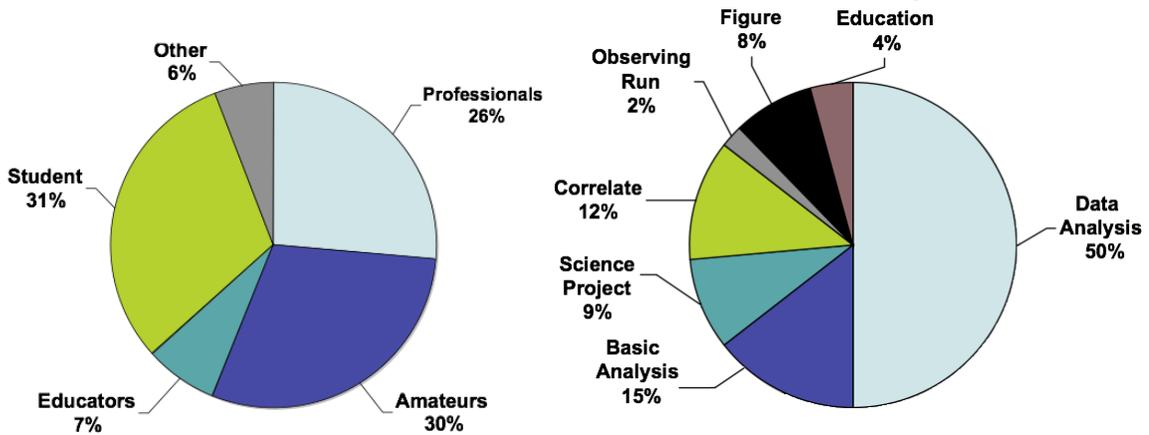




2. The Year in Review

Work continues on importing the RASNZ database. A large fraction of the observational data comes from just a few observers, such as Albert Jones and Danie Overbeek, and so were straight-forward to import. The remaining observations require assigning observer codes to those observers who were not regular AAVSO submitters, as well as determining what charts and comparison stars were used. We hope to finish this project in the near future.

We had 4,248 data requests from a multitude of researchers during the year. The data request rate is pretty constant throughout the year, but has definitely continued its upward trend.



Researchers who used AAVSO data or services during FY 2007–2008

Areas in which AAVSO data or services were used during FY 2007–2008

Sara Beck wrote *zapper*, a stripped-down version of *zap*, the tool that Headquarters staff use to validate (quality check) observations. When validating, we choose a star, pull up all of the data for that star, and then look for discrepant points. When one is found, we do additional checks to see if the observer is always too bright or too faint (by connecting observations from the same observer), an indication that the observation is “ok”, just offset from other observers. *zapper* gives us lots of flexibility in plotting and does many tasks automatically, such as providing an email template to request clarification from the observer.

We have three staff members who validate data on a part-time basis. This gives some flexibility in case one staff member is ill or on vacation, and keeps the amount of effort per staff member at a reasonable level. However, we don't have time to validate every star with data submitted to the AAVSO. The slimmed down *zapper* program gives validation capability to the general membership. You can run this Java program on your local computer, look at your favorite stars, and mark points that appear to be discrepant. The information regarding those discrepant observations is then automatically uploaded to the AAVSO, and can be used in an automated manner to point out possible errors to the staff validators. Using *zapper* helps reduce staff time and results in higher-quality data in the AAVSO International Database. We highly recommend that you give *zapper* a try!

International Cooperation

We acknowledge with appreciation the observations sent to the AAVSO by members of the following variable star associations, either individually or as a group, for inclusion in the AAVSO International Database for dissemination to the astronomical community worldwide:

- a. Agrupacion Astronomica de Sabadell (Spain)
- b. Asociacion Amigos de la Astronomia (Argentina)
- c. Association Française des Observateurs d'Étoiles Variables (AFOEV)
- d. Association of Variable Star Observers "Pleione" (Russia)
- e. Astronomical Society of Southern Africa, Variable Star Section
- f. Astronomischer Jugendclub (Austria)
- g. Astronomisk Selskab (Scandinavia)
- h. Brazilian Observational Network REA
- i. British Astronomical Association, Variable Star Section
- j. Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e.V. (BAV) (Germany)
- k. Grupo Astronomico Silos (Spain)
- l. Israeli Astronomical Association, Variable Star Section
- m. Koninklijke Nederlandse Vereniging Voor Weer-en Sterrenkunde, Werkgroep Veranderlijke Sterren (Netherlands)
- n. Liga Ibero-Americana de Astronomia (South America)
- o. Madrid Astronomical Association M1 (Spain)
- p. Magyar Csillagászati Egyesület, Valtózcillag Szakcsoport (Hungary)
- q. Norwegian Astronomical Society, Variable Star Section
- r. Red de Observadores (Montevideo, Uruguay)
- s. Royal Astronomical Society of Canada
- t. Royal Astronomical Society of New Zealand, Variable Star Section
- u. Ukraine Astronomical Group, Variable Star Section
- v. Unione Astrofili Italiani (Italy)
- w. URSA Astronomical Association, Variable Star Section (Finland)
- x. Vereniging Voor Sterrenkunde, Werkgroep Veranderlijke Sterren (Belgium)

In March 2008, I went to Australia to give talks and workshops at many of their Society meetings. Amateur astronomy is alive and well in Australia, with many thousands of observers belonging to one of the societies. I also visited with Elizabeth Hodgson, as Doug Hodgson passed away in December 2007. She wanted to honor his memory by donating his telescopes to groups that could make use of them. Two telescopes went to the Amateur Society of Western Australia. The larger Meade 12-inch LX200 went to the Deniliquin astronomy club of New South Wales, along with Doug's SSP-3 photometer.

The AAVSO held a joint meeting with the British Astronomical Association (BAA) in April 2008. Minutes of this meeting are given elsewhere. We felt that it had been too long

since we acknowledged the contributions of the BAA towards variable-star astronomy and their collaboration with the AAVSO, and so were very happy that the BAA invited us to join their meeting. Several European observers also attended, making this a true international gathering.

I went to Potsdam, Germany in September to talk with the Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e.V. (BAV). While I gave a review of the AAVSO and its activities, a major part of the visit was to talk to the officers of their association, answer questions that they might have about our joint efforts, and to improve our support of their organization.

Software

As mentioned above, we released two standard observation submission formats this year. These are supported by most of the software vendors, with others promising to add these formats in their next versions. The new formats meant extra coding at HQ as well, to add them to WebObs, emailobs, and pcobs. Len Abby made the changes to PCObs; Aaron updated Emailobs, and Kate made the WebObs enhancements. We also wrote an article for the home page regarding the new formats, and added a detailed description of the formats to our internal staff pages.

Matthew Templeton and Sara Beck have made modifications to the PEP submission program and improved the comparison star photometry. Dan Gray (SciTech) made modifications to the SSP-4 to automate its functions, and wrote control software for the photometer that will be used by the AAVSO near-infrared photometry group.

Kate Davis took a course on Discrete Mathematics with Computer Science Applications. Richard Kinne went to the NVO Summer School, held in Santa Fe.

Sara wrote zapper, a user-friendly version of the zap program that is used by staff to validate (quality check) incoming observations. Sara's program is written in Java and runs on the user's computer. As described above, users review observations and click on discrepant points; these points are then automatically transferred to the staff for inspection.

A new version of the Variable Star Plotter (VSP) was released in December 2007. This version removed NOMAD as the main source for star positions and magnitudes. Instead, VSP now uses Tycho for bright fields, UCAC3 for fainter fields, and only uses NOMAD for the faintest fields. The result is much nicer looking charts with fewer discrepancies from the real sky. Michael Koppelman continues his great service of maintaining this important software tool for the AAVSO.

Kate modified an administrative tool written by Chris Watson for the Variable Star Database (VSD) that enables staff editing and updating of this important database. The program will edit single records as well as accepting batch uploads of new sequences.

Observing News

The AAVSO had a tradition in earlier years of giving honorary membership to those members, observers, and friends who contributed over and beyond the call of duty to the variable star community. The Council has revived that tradition, with the award of honorary membership to Thomas Droege and Roger Pickard in FY2008. Tom was the driving force behind The Amateur Sky Survey (TASS), building many telescope systems to survey the northern sky. He ran three systems from his home in Illinois, gave others freely to members of the group, and offered advice at every turn. He passed away in January 2008. Roger is the current President of the British Astronomical Association, but is the long-time leader of its Variable Star Section. As the VSS leader, he interacted with both Janet and me over the years, working hard to create a strong alliance between our groups.

Gerry Dyck reached an important milestone this year, receiving his award for 150,000 visual observations. If you assume that each observation takes perhaps ten minutes to perform and report, then this total means that Gerry has contributed 25,000 hours to science and the AAVSO just from observing, not counting his many hours of volunteer work and mentoring!

Arto Oksanen (Hankasalmi Observatory) uses a 40-cm R/C telescope and SBIG STL-1001E CCD as part of a group effort in Finland. Arto concentrates on cataclysmic variables, obtaining many light curves of outbursting objects. He also is an active member of the High Energy Network, and observes GRB afterglows whenever the field is visible at his observatory. The HEN effort paid off on October 10, 2007, when he discovered the optical afterglow from GRB 071010B. His time series of the fading of the optical counterpart were the only ones from the first few hours, and have been used in a *JAAVSO* article by Arto and Matt.

Members volunteer their time and effort in promoting the AAVSO. Kate Hutton used the AAVSO traveling display at the Riverside Telescope Makers Convention in May 2007, with many visitors passing by the booth and picking up our brochure. She did the same thing at the new Pacific Astronomy and Telescope Show, held at the Pasadena Convention Center in September 2008. About 1,000 people attended and passed by our booth. These meetings are attended by many of the high-end amateurs who may not have considered doing photometry with their equipment, so we are really happy when someone offers to stand at a booth or poster for hours and answer questions.

One suggestion that is often made to Headquarters is to provide more guidance to the observers in selecting their targets. Towards that end, Mike Simonsen has taken the *AAVSO Bulletin* (predicted dates of maxima and minima of long period variables) and has parsed out the stars that are listed as needing more observations. He reinstated the Needs More Observations Planning Tool in April 2008, which is uploaded to the website every month. While these stars are not to be considered "priority targets," they do offer some guidance towards under-observed stars that could stand some more attention.

The big change this past fiscal year was the photometry improvement for the comparison star database. In October 2007, we uploaded 21,826 photometric values for comparison stars in the Variable Star Database (VSD) that is used by the Variable Star Plotter (VSP) to mark sequence stars on the plot and in providing an optional table of photometry. We updated VSD a few more times during the year, with the final update occurring in early September 2008. At that point, nearly all sequence stars had reliable photometry, coming from multiple catalogs. The new photometry has highlighted many fields where the sequences need revision. The chart error tracking tool, CHET, was updated and now handles all chart errors reported by our observers. A new sequence team was formed, initially led by Mike Simonsen, that will go through the charts, revise sequences and add future sequences for new fields. Many thanks go out to Mike Simonsen, Michael Koppelman, Vance Petriew, Kate Davis, Matt Templeton, and Aaron Price for their work on this phase of AAVSO chart making.

We have had many campaigns this past year. Brad Schaefer is predicting an outburst of U Sco, a dwarf nova that hasn't had an outburst for the past decade. He has requested continued monitoring of the star during 2008 and 2009 in anticipation of the outburst. Gordon Sarty is observing high mass X-ray binaries, obtaining spectra at DAO. While he has requested monitoring of his target list, he also has provided an opportunity for AAVSO observers to assist in the spectrographic observing. If you have ever wanted to use a big telescope, here is your chance! Tim Crawford, Richard Huziak, and others have already taken advantage of the offer.

Paula Szkody and her team continue to use the Hubble Space Telescope (HST) to obtain spectra of SDSS cataclysmic variables. The HST operations team requires that these targets be in quiescence at the time of the HST observations. Therefore, careful monitoring of the targets in the day or two preceding the HST observation is crucial. Many observers have contributed their observations in support of this project. Bill Dillon has been using the GRAS robotic telescope network, obtaining observations in Israel and Australia to extend the longitudinal coverage. These observations were relatively inexpensive but were extremely helpful in pinning down quiescence on some of the targets that were difficult to observe in the hours prior to the HST observation.

GRB 080319B (March 19) was the brightest optical afterglow ever seen. Observations by robotic telescopes indicate that this afterglow might have been visible by eye, if anyone looked in that direction. While visual observations by Finnish observers were made of an earlier burst, I think that seeing a 6th magnitude object suddenly appear and then fade below binocular visibility within an hour would be a once-in-a-lifetime experience!

We've also been asked to observe U Gem and SS Cyg for support of a radio observation campaign by Elmar Koerding (Univ. Southampton), as well as three other dwarf novae for another campaign by Elmar; monitor SS Aurigae for Patrick Godon (Villanova Univ.) in support of an XMM-Newton project; monitor a long list of tremendous outburst amplitude dwarf novae (TOADs) for Steve Howell, so that he could trigger a Spitzer

target-of-opportunity program if any of these objects went into outburst; obtain observations of VY Scl for Steve in support of a VLT spectroscopy program; and participate in a campaign by Greg Laughlin (Univ. Calif. Santa Cruz) to look for a possible transit of a 5-Earth mass planet in the exoplanetary system around GJ 436. We typically get about a dozen requests annually by professional astronomers to support their research, and expect these requests to expand in the coming years as more surveys find interesting objects that need to be followed.

Robotic Telescope News

We have chosen a preliminary name for the AAVSO robotic telescope network: AAVSONet. This network is being slowly expanded at low cost to provide access to scientific-grade systems around the world for our membership and our professional collaborators.

Every July and August, Sonoita Research Observatory (SRO) closes down for the U.S. Southwestern monsoon. This weather pattern results from a stationary high pressure system over the Four Corners in conjunction with a low pressure system that sets up southwest of Arizona. Combined, they cause a change in the prevailing wind pattern, bringing up Gulf of Mexico moisture into the American southwest. Typically, mornings are clear; daytime heating causes the build-up of thunderstorms in the afternoon and early evening; then slow clearing occurs the rest of the evening until dawn. Even when clear, the humidity is often very high. Most professional observatories such as Kitt Peak National Observatory close down during this period to perform maintenance on equipment and to prepare for the good weather that returns in September.

In 2008, the summer shutdown was extended at SRO for two reasons. The weather pattern remained moist throughout most of September, so the number of observing nights was reduced. Also, we are testing a new 50-cm telescope at SRO and needed a few good nights for experiments. This new telescope will be an addition and not a replacement, as the existing C14/Paramount/STL-1001E system is reliable and produces excellent results. The tests highlighted some remaining problems that will be addressed over the next few months. Funding for installation of this telescope will be obtained from private donors.

SRO was used on 226 nights during FY2008 for AAVSO projects, with about half of those being photometric. Many long period variable, Cepheid, and RR Lyr fields were calibrated during this year. Monitoring of many campaign objects and personal research targets was performed. We slowly released the telescope to the public and initiated observing programs for AAVSO members.

Work continues on our collaborative refurbishment of the Mount John University Observatory 24-inch (61-cm) Optical Craftsman (OC) telescope. This telescope was the first professional one at Mt. John and has been updated over the past few decades. Our agreement is to fully automate the telescope, and towards that end, Jerry Foote (Scopecraft), Dirk Terrell (SwRI), and I went to New Zealand in March to install motors,

computers, and software. Nigel Frost, the Mt. John machinist, had installed a new band-drive system for the mount and helped in the motor installation by Jerry. Steve Barlow, their IT person, worked with Dirk to get the computers installed and give access to their internal network. That trip resulted in a telescope that could be manually controlled with the new drive system. We identified remaining issues, such as remote control of the secondary focus and a new dome motor system, and shipped these items down to Mt. John later in the year for installation. Currently, we are waiting for a CCD camera refurbishment to be completed, and then will return to Mt. John for final checkout of that telescope. The OC will give us access to the southern sky to provide comparison star calibration, campaign monitoring, and research projects for our members.

Former Treasurer Lou Cohen has donated his observatory to the AAVSO. This consists of a 12-inch Meade LX200; a 6-foot ProDome; and an ST-8XME CCD camera, filters, and filter wheel. The intent is to place this system on top of Headquarters. It will help in campaign monitoring; it can be used for some scientific research as part of AAVSONet; it will be a test-bed for instrumentation; and it will help in training staff about CCD observing. Clay Sherrod has "supercharged" the system as a donation to the AAVSO, and John Menke has offered his expertise in automating the dome. We hope to complete the project during summer 2009.

The Lowell Morgan 24-inch (60-cm) telescope was officially donated to the AAVSO. Tom Smith (Dark Ridge Observatory) has offered to refurbish the telescope at cost, and transported it from Flagstaff to DRO near Weed, NM. He is busily working on the roll-off building, getting the basic structure weathertight before winter sets in, and hopes to have the refurbishment completed during 2009. This will be the second flagship 60-cm telescope of our network, giving the northern-hemisphere access. We are currently writing grants to fund new instrumentation for both 60-cm telescopes.

Tom Krajci (Astrokolkhoz Observatory) is a long-time member of the AAVSO. After retirement to New Mexico, he has been slowly building up a telescope farm at his site near Apache Point Observatory. He contacted me a while back, asking if I knew of any larger telescope that might be available as a donation to his observatory. I was able to put him in touch with J. Ward Moody (BYU), who had a 22-inch Autoscope telescope in storage. BYU donated this telescope to Tom, and he drove to Provo this summer to pick up the telescope. It tested his pickup's suspension, but he was able to get the parts back home. The optical telescope assembly and mount are of low quality, but the R/C optics are from Paul Jones and are suitable for scientific research. Tom will experiment with the hardware and decide whether it makes sense to refurbish the existing system, cannibalize for parts, or just use the optics in a new configuration. The AAVSO may get some time on this telescope as well, but I guarantee that rebuilding this telescope will keep Tom off of the streets for a while!

Other Projects

In the 1990s, the AAVSO was awarded NSF funding to create *Hands-On Astrophysics*, a curriculum that contained educational materials, activities, and investigations, that taught astrophysical concepts and the scientific research process through the use of variable-star observations. It contained an excellent manual and a teacher's guide. HOA was used by many educators and was given out at several teacher workshops.

However, HOA contained several now "dated" items, such as videotapes, floppy disks, and DOS-based software. We continued to market it until our stock was depleted. Rather than re-issue the same material, we have undertaken a massive rewrite to make the material more relevant in today's Internet society. Donna Young (Tufts University) has entered most of the manual into html format, and once that project is finished, it will be released through the AAVSO website. The curriculum is being renamed *Variable Star Astronomy* (VSA) to eliminate that scary "astrophysics" word, but the content level is not changing. The slides have been digitized and the videotape has been placed in mpeg format. The one remaining item is the software, and we have applied for external funding to pay for the porting of the software to a more modern language. We hope to release the full VSA system during FY2009.

At the January 2008 AAS meeting, Joy Nichols (Chandra) gave a neat poster on new variable stars that they were discovering from photometric data available from the Chandra Aspect Camera--a 12-cm telescope that is used to guide the spacecraft. For each pointing, they choose a handful of stars to keep the telescope pointed accurately. Since X-ray observations often take days to perform, the aspect camera gives high precision light curves for the same duration. Joy invited the AAVSO to help in studying these variables. We will give guidance in classification, improving the photometry, and in initiating campaigns on those variables where insufficient data were available for period determination. We will be involving our members and observers in this neat data-mining project.

As part of the Education Committee, a speaker's bureau and a writer's bureau have been started. The speaker's bureau is a list of those people who are willing to give talks on astronomical topics, especially related to variable stars. The writer's bureau is a compendium of those bloggers who have given permission for use of their material in club newsletters and other publications. Mike Simonsen is the primary contact for these new initiatives, and more details are given elsewhere.

At the IAU General Assembly in 2006, we offered to host the IAU unpublished photometry archive at the AAVSO. Towards that end, we have slowly been accreting copies of the 300+ files and scanning those only available on paper. Our summer assistant, David Coit, did most of the scanning. We are still attempting to get all of the files, but it is a bookkeeping exercise, with several sites having some, but not all, of the files. Once the archive is complete, we will create a simple web form for retrieval of the information.

We are also continuing to scan the Olin Eggen observation card archive. Most of the scanning was completed in summer 2007 by David Coit, but he scanned the “easy” cards! What was left were difficult cases, where special attention was needed to complete the scan. Linda Henden has been working on these scans, along with our 2008 summer student, Sungmun Choi. We hope to finish the scanning process in 2009, and then will create a simple web form for retrieval of the scans.

Staffing

Arthur Ritchie continues volunteering at Headquarters. He comes in whenever we call for assistance, usually to help in stuffing envelopes, mailing the *Solar Bulletin*, and general sorting. We really appreciate his efforts, and they save considerable staff time.

David Coit, our 2007 Margaret Mayall summer assistant, returned for a few days around Christmas to help out. He was hoping to work in summer 2008, but family matters intervened. We were lucky enough to have Sungmun Choi (also known as Orion) volunteer to work at Headquarters this past summer. Orion is a visiting Korean high school student interested in astronomy. We gave him several tasks, though I have to admit that most of them were grunge work and not fun! Orion now has an appreciation for the amount of unexciting work that goes on at Headquarters (and does at any scientific institution), but not the exciting work, so we’ve probably turned him off to science. Next time we will do better!

Richard “Doc” Kinne was hired part-time last year to help Aaron with the computer chores. As Aaron is getting further into his graduate studies, his time is becoming more limited, while our IT requirements keep increasing. Towards that end, we brought Doc on-board as a full-time employee. Along with being a long-time member and observer, Doc also brings enthusiasm and years of administrative experience to the table. We welcome him into the AAVSO family.

Finally, Mike Simonsen was hired as our full-time development director. He can stay in Michigan and still perform the necessary duties. Not only does he perform all of our fund-raising, but he is a whirlwind of activity, calling members (especially new ones!), running the mentor program, developing and running the speaker’s bureau and the writer’s bureau, and starting the Long Period Variable section. After years of extensive volunteer effort, Mike finally gets to be paid for his contributions!

Other than these changes, headquarters staffing has remained constant. With the new additions, we have twelve full-time employees, along with one part-time employee and two contractors. All permanent employees are described on our website at <http://www.aavso.org/aavso/about/staff.shtml>. I encourage you to read about these folk who support the members and observers; it is a really nice and efficient staff at HQ!

We held a series of staff meetings regarding the current status and future of the AAVSO during November and December 2007. These meetings helped me understand the

concerns of the staff, as well as coming up with some good ideas as to how to make our membership support better in the future.

Publications

Thomas R. Williams and Michael Saladyga continue work on the AAVSO centenary book. They hope to publish by 2011.

The Chinese and Polish translations of the *AAVSO Manual for Visual Observing of Variable Stars* were released. *JAAVSO* Volume 34, number 2, and Volume 35, number 1, were printed. This latter issue was a special edition that covered the AAVSO meeting in Sion, Switzerland, several years earlier. We had promised at that time to publish the proceedings, but many delays occurred, and since several of the papers were not available in any other manner, we felt an obligation to complete this project. Many *eJAAVSO* articles were posted. We posted twenty-six *Alert Notices* and fifty-five *Special Notices*. Gamze Menzli edited six *Eyepiece Views*. Three "Variable Star of the Season" articles were published. We contributed sections for the RASC *Observer's Handbook*. Elizabeth Waagen completed *AAVSO Bulletin 71*. The AAVSO released the annual eclipsing binary/RR Lyrae stars ephemerides as well as the monthly *Solar Bulletin*.

There were nineteen non-refereed staff publications (such as *BAAS* abstracts), in addition to the sixteen refereed staff publications (Henden, Price, Templeton, Waagen; *PASP*, *AJ*, *JAAVSO*, etc.). We noted that forty-five papers in journals such as *Astronomy and Astrophysics*, *MNRAS*, *ApJ*, *AJ*, *PASP*, etc. were published using AAVSO data and assistance. The actual number is larger than this, as many posters and papers at AAS meetings use our light curves in their presentations.

Aaron Price received the Chambliss Astronomy Achievement Student Award for a graduate student poster presentation at the 212th meeting of the AAS (2008), for the poster "Polarimetry and the Long Awaited Superoutburst of BZ UMa" (J. Masiero, co-author). Two press releases were also issued.

Charles Whitney has decided to retire as Editor in Chief of the *JAAVSO*. Chuck has been editor for over thirty-eight years, starting in spring 1975 near the beginning of the *Journal*. While we sincerely appreciate the many years of service that he has given the AAVSO, we equally wish Chuck all the best in his "retirement." We have been pursuing several options in his replacement.

As part of our policy of continued improvement, we've upgraded the *AAVSO Newsletter*. It now incorporates *Eyepiece Views*, *CCD Views*, the *PEP Newsletter*, and observing information, as well as the normal articles, and it will be published quarterly.

We also produced the first *AAVSO Annual Report*, for FY2007. The *Annual Report* contains information on the AAVSO and its mission, programs, and activities, Minutes from the

AAVSO meetings, annual Committee and Treasurer's reports, and the Director's Annual Report (including observer totals). These items are no longer published in *JAAVSO*.

Travel

FY2008 was another year of travel by staff to worldwide meetings to spread the word about the AAVSO and variable star observing. Linda accompanies me to most of the foreign meetings, with her part of the travel paid for personally. I would also like to mention that most of my foreign travel is subsidized by the hosts of the attended meetings. Sometimes they can contribute towards the plane fares, and often provide housing, meals, and logistical support. This is gratefully appreciated!

I attended the January 2008 AAS meeting in Austin, TX. There, I talked with several AAVSO members who were helping out at the meeting, and was involved in several other discussions about education and the Large Synoptic Survey Telescope (LSST). In late February, I went South to New Zealand and Australia. The New Zealand portion was in collaboration with Dirk Terrell and Jerry Foote to refurbish the Mt. John 24-inch telescope. After this was finished, I went to Australia, touring several major cities on the east and west coasts, giving talks at various society meetings and a workshop at the national amateur conference meeting in Sydney. Amateur astronomy is alive and thriving in Australia; we just need to introduce more of the observers to variable stars!



*Attendees gather at the joint AAVSO/
BAA meeting in England*

In April, I went to the UK for two meetings. I was invited to speak at the BAA's Winchester Weekend in early April, discussing some new variable stars in an attempt to interest attendees in variable star observing. This was followed by the joint AAVSO/BAA meeting in Cambridge, where Rebecca Turner was the meeting coordinator, and several AAVSO representatives attended (mentioned earlier). Pamela Gay did some live blogging of the meeting--a first for the AAVSO!

In May, I was invited to speak at the Skyscrapers (Rhode Island) monthly meeting. Gerry Dyck and Dave Hurdis were planning on holding a "star party" the following night, getting members to make variable-star estimates, and my role was to get them excited. It was a fun time, and I got to see a Criterion 6-inch reflector again (this model was my first real telescope with a clock drive). I also attended the Society for Amateur Scientists (SAS)/Big Bear conference to talk to the organizers about the upcoming joint AAVSO/SAS meeting in 2009.

June saw the St. Louis AAS meeting, where I was joined by Mike Simonsen. AAVSO members again helped with meeting coordination, and we were invited to Pamela Gay's home for a party during the meeting. She lives on the Illinois side of St. Louis and has a really nice Victorian house. You have to go visit if you get a chance! I also attended a Giant Telescope conference in Chicago, where the professional community was introduced to

some of the planned future big telescope projects like the Thirty Meter Telescope. Later in the month, I attended the STARS conference in San Louis Obispo, where a group is investigating new technology large aperture telescopes that might be affordable by amateurs and small colleges. Dave Hurdis and I attended a single-day conference regarding non-profit organizations offered by the Massachusetts Attorney General's office.

Aaron went to the UK in June to meet with Andrew Wilson, the BAA's database manager. We gave Andy a copy of the AAVSO International Database for safe-keeping, and he will be working with Aaron to port their database into our AID in the near future.

Finally, I went to Germany in September 2008. I gave a talk at Tautenburg Observatory regarding our robotic telescope network. Sylvio Klose of Tautenburg and I have a long relationship concerning gamma-ray burst follow-up observations, so it was good to meet with him and his students regarding future collaborations. As mentioned earlier, I then went to Potsdam for the annual BAV meeting, where I gave an invited talk on the AAVSO. I met with the BAV officers and clarified our position on several questions. I think we have a much better working relationship based on that meeting. It was a lot of fun meeting some of the BAV members I have had email conversations with, and to see some of the historical telescopes in the Potsdam area.



Having lunch with BAV members in Germany

Looking Towards the Future

Coming up over the next fiscal year will be a number of improvements in support of the observers. We will be adding more precision photometry to the comparison star database. The sequence team will start their work in updating the sequences and providing new sequences for newly discovered transients. More campaigns will be announced. The robotic telescope network will be expanded, with both 24-inch telescopes coming on-line. The AAVSO/SAS joint meeting will take place. A new website will be released. 2009 is the International Year of Astronomy, and we will be participating in IYA2009 activities. Hopefully some of our submitted grants will be awarded. All-in-all, I think it will be another great year for the AAVSO!

Acknowledgements

The AAVSO is not a one-person show, or even a dozen-person show. Everyone who has contributed data, made a monetary donation, volunteered their time and energy, has made this organization the success that it is. We "stand on the shoulders of giants" who came before us and built the foundation of the organization. Clint Ford contributed enormously to the organization, which is why his name bears such prominence everywhere. Previous Directors organized the association and had the vision for its future. The Council guides

2. The Year in Review

the AAVSO, volunteering their efforts to make the organization financially solvent and relevant. Our committee chairs handle specific areas of interest, working with enthusiastic observers and making reports to the membership and Council. Others work quietly behind the scene, acting as scientific advisors to programs, writing important software, or participating in important projects such as the Chart Team. Finally, many institutions and government agencies see our research important enough to provide financial support. Without all of these people, the AAVSO would not exist.

Observer Totals

Our special appreciation and thanks go to our enthusiastic and dedicated observers, who are the heart of the AAVSO and whose ongoing efforts make this association vital to variable star research. Listed on the following pages are the observation totals that we have received at Headquarters.

Table 1. AAVSO Observer Totals 2007–2008 by Country

Country	No. Observers	No. Obs.	Country	No. Observers	No. Obs.	Country	No. Observers	No. Obs.
Argentina	5	104	Greece	10	8450	Portugal	2	1180
Australia	28	217496	Hungary	64	20656	Republic of Korea	1	51
Austria	2	439	India	1	2	Romania	9	5597
Belgium	34	153033	Ireland	4	102	Russia	9	5242
Bermuda	1	10	Israel	1	3	Slovakia	1	32851
Bolivia	1	242	Italy	32	12815	Slovenia	1	2465
Brazil	15	2811	Japan	2	1164	South Africa	11	120077
Canada	34	39019	Malta	1	44	Spain	27	19791
Chile	3	79929	Mexico	1	89	Sweden	1	1250
China	1	73	Netherlands	87	92287	Switzerland	5	264
Croatia	4	5387	New Zealand	18	261053	Turkey	4	44
Czech Republic	1	59	North Cyprus	1	2553	Ukraine	4	573
Denmark	3	123	Northern Ireland	1	26	Uruguay	2	261
England	32	69411	Norway	7	1165	U.S.A.	285	615295
Finland	4	16205	Peru	1	6			
France	34	49590	Philippines	2	110			
Germany	35	14387	Poland	17	21109	TOTAL	849	1874893

Table 2. AAVSO Observer Totals 2007–2008 USA by State or Territory

State	No. Observers	No. Obs.	State	No. Observers	No. Obs.	State	No. Observers	No. Obs.
Alabama (AL)	1	6	Massachusetts (MA)	17	19534	Oregon (OR)	2	10923
Arizona (AZ)	14	68587	Michigan (MI)	6	2145	Pennsylvania (PA)	11	2535
Arkansas (AR)	1	14	Minnesota (MN)	10	5776	Puerto Rico (PR)	1	14
California (CA)	37	6441	Mississippi (MS)	1	17	Rhode Island (RI)	2	1346
Colorado (CO)	6	28656	Missouri (MO)	3	15755	South Carolina (SC)	2	75
Connecticut (CT)	8	1340	Montana (MT)	1	2127	Tennessee (TN)	2	55
Florida (FL)	8	43589	Nebraska (NE)	2	165	Texas (TX)	20	10967
Georgia (GA)	5	1997	Nevada (NV)	1	948	Utah (UT)	1	1143
Hawaii (HI)	1	27	New Hampshire (NH)	3	49018	Virginia (VA)	5	1866
Illinois (IL)	13	75939	New Jersey (NJ)	1	45	Washington (WA)	10	975
Indiana (IN)	10	7123	New Mexico (NM)	8	43553	West Virginia (WV)	2	826
Kansas (KS)	7	2777	New York (NY)	10	5883	Wisconsin (WI)	18	199143
Louisiana (LA)	4	212	North Carolina (NC)	4	688			
Maine (ME)	2	136	Ohio (OH)	12	560	TOTAL	285	615295
Maryland (MD)	10	2270	Oklahoma (OK)	3	99			

Table 3. AAVSO Observers, 2007–2008, cont.

Code	Org.	Name	No. Obs.	Code	Org.	Name	No. Obs.
AFO		A. Abascal, Spain	4	BYF	04	H. Betlem, Netherlands	2118
AAP	27	P. Abbott, Canada	2676	BIB	04	R. Betz, Belgium	25
AAN	02	A. Abe, Germany	97	BIZ		J. Bialozynski, AZ	48320
AIV	09	I. Abramov, Ukraine	336	BVG	18	G. Bianciardi, Italy	3
ARV		R. Adamson, CA	28	BVO		V. Bibe, Argentina	17
SBX		S. Adrian, Romania	31	BIC	01	L. Bichon, France	86
ASA		S. Aguirre, Mexico	89	BMM		M. Biesmans, Belgium	260
AIM	04	M. Alberts, Netherlands	38	BQM		M. Bignotti, Italy	1
AB		W. Albrecht, WI	4379	BCO		C. Birza, Romania	1
ARL	13	R. Alencar Caldas, Brazil	2	BXN	01	M. Bisson, France	417
AWL		W. Alexander, VA	28	BXT	08	T. Bjerkgaard, Norway	147
ASAS3		All Sky Automated Survey 3, Chile	79923	BXU		J. Bjoerklund, Denmark	4
ACO	20	C. Allen, Sweden	1250	BKL		J. Blackwell, NH	45
AWH	14	W. Allen, New Zealand	7	BLD	10	D. Blane, South Africa	107
AJC		J. Almeida, Brazil	80	BWZ		E. Blown, New Zealand	29
AJV	15	J. Alonso, Spain	123	BHQ		T. Bohlsen, Australia	742
ARC		R. Altenburg, PA	21	BOI		B. Bois, Canada	2
AAA	13	A. Alves, Brazil	117	BQG		G. Bokowy, IL	40
AME	27	M. Amaral, Canada	8	BVS		S. Bolzoni, Italy	21
AAQ	03	A. Ambrus, Hungary	21	BZU		M. Bonnardeau, France	785
AAX	13	A. Amorim, Brazil	1706	BPQ	04	G. Borst Pauwels, Netherlands	29
AKO		K. Apostolidis, Greece	2	BRJ		J. Bortle, NY	4206
AJN		J. Appleyard, Canada	40	BFO	04	S. Both, Netherlands	378
AWY	13	W. Araujo, Brazil	190	BXQ		A. Botta, Switzerland	6
AAM		A. Arminski, Poland	4649	BMU	04	R. Bouma, Netherlands	1760
ADN		D. Arnautovic, Australia	16	BDG	20	D. Boyd, England	18194
ARJ		J. Arnold, TX	49	BFI		F. Boyer, OH	1
ATE		T. Arranz, Spain	9290	BMK		M. Bradbury, IN	255
AAU		A. Aslanturk, Turkey	2	BXS		S. Brady, NH	48965
ATO	08	T. Aslesen, Norway	21	BDT		D. Branchett, FL	154
ATI		T. Asztalos, Hungary	3291	BNW	02	W. Braune, Germany	55
ADI	02	D. Augart, Germany	449	BQC	01	J. Breard, France	166
AWB		B. Awe, WI	46	BZG		G. Brellier, France	31
ARX		R. Axelsen, Australia	117	BTB		T. Bretl, MN	446
BFH	04	J. Backer, Netherlands	11	BHA	02	H. Bretschneider, Germany	629
BIE	05	A. Baillien, Belgium	341	BMI		M. Brewster, TX	3
BFX		R. Baker, OH	16	BAA	20	British Astronomical Association, England	12750
BWW		W. Bakewell, CA	2	BWU		D. Brooks, MO	25
BBQ	04	C. Bakker, Netherlands	673	BJQ	27	J. Brooks, CA	63
BOZ	03	B. Balazs, Hungary	70	BXV	15	X. Bros, Spain	52
BFU	18	F. Baldanza, Italy	7	BFF	04	J. Brosens, Netherlands	9
BM		M. Baldwin, IN	386	BFP	04	G. Brummelman, Netherlands	98
BCD		R. Ball, England	25	BOA	01	A. Bruno, France	3371
BIV	03	I. Balogh, Hungary	305	BHU		R. Buchheim, CA	39
BGZ		G. Banialis, IL	49	BDH	04	H. Bulder, Netherlands	31
BHI		J. Banister, TX	7	BEP	04	E. Bus, Netherlands	381
BSF		S. Barnhart, OH	13	BIW		N. Butterworth, Australia	19942
BSR	18	S. Baroni, Italy	185	CCB		C. Calia, CT	342
BPO		D. Barrett, France	664	CCZ		C. Calis, Turkey	5
BQ	20	L. Bartha, Hungary	1609	CMN		R. Cameron, Australia	30
BVT		T. Bartlett, TX	312	CMQ	14	P. Camilleri, Australia	6
BT	14	F. Bateson, New Zealand	21154	CPN	27	P. Campbell, Canada	42
BBB	27	B. Battersby, Canada	4	CMP		R. Campbell, FL	1999
BBA		B. Beaman, IL	995	CQP		A. Capetillo Blanco, Spain	5
BVV		J. Bearscove, WA	3	CVJ		J. Carvajal Martinez, Spain	27
BWX	27	A. Beaton, Canada	422	CLQ		L. Cason, SC	59
BJS		J. Bedient, HI	27	CJE	01	J. Castellani, France	393
BCP	20	C. Beech, England	61	CKN		K. Castle, AZ	32
BFW	04	G. Beekman, Netherlands	2450	CWO		W. Castro, OH	72
BFB	04	J. Beerends, Netherlands	376	CTE	27	L. Catalan, Canada	1023
BZX		G. Beltran, Bolivia	242	CEC		C. Ceron, France	3
BTY		T. Benner, PA	474	CBI		B. Chandler, CA	1
BBE	03	B. Berente, Hungary	18	CNT		D. Chantiles, CA	491
BEB	27	R. Berg, IN	63	CGF		G. Chaple Jr., MA	4453
BQX		M. Betlej, Poland	21	CFX		F. Char, Chile	3

2. The Year in Review

Table 3. AAVSO Observers, 2007–2008, cont.

<i>Code</i>	<i>Org.</i>	<i>Name</i>	<i>No. Obs.</i>	<i>Code</i>	<i>Org.</i>	<i>Name</i>	<i>No. Obs.</i>
CKJ		J. Cheng, PA	12	DPA	05	A. Diepvens, Belgium	76
CQS		S. Cheng, China	73	DSV		S. Diesso, WI	578
CCY		C. Chiselbrook, GA	718	DTI	04	T. Dijkhuizen, Netherlands	32
CCV		C. Clarasso, Spain	108	DLA		A. Dill, KS	60
CMB		M. Clark, New Zealand	1	DIL		W. Dillon, TX	331
CRO		R. Clark, CA	11	DRL		S. Dirocco, OH	12
CLK	29	W. Clark, MO	14	GDB	03	G. Domeny, Hungary	14
CPS	05	P. Cloesen, Belgium	195	DSN		S. Donnell, CO	11
CPE	06	P. Closas, Spain	175	DXA		A. Douvris, Greece	29
CKH	05	H. Coeckelberghs, Belgium	3	DKE	04	J. Dronkers, Netherlands	2
CCT	13	C. Colesanti, Brazil	65	DUH	04	M. Drummen, Netherlands	267
CFO		J. Coliac, France	1740	DPV		P. Dubovsky, Slovakia	32851
CDK		D. Collins, NC	669	DMO	01	M. Dumont, France	1786
COL		P. Collins, AZ	54	DIU		I. Durham, NH	8
CME	18	E. Colombo, Italy	361	DKS		S. Dvorak, FL	39344
CMG	04	G. Comello, Netherlands	18975	DGP		G. Dyck, MA	1771
CLV	18	L. Comolli, Italy	4717	DDI		D. Dyer, KS	291
CXA		A. Cook, CA	2	EED		E. Edinho, Brazil	3
CKL		A. Cook, OH	106	EMA		M. Eichenberger, Switzerland	23
CK		S. Cook, TX	2456	EER		E. Eker, Turkey	16
CWT		W. Cooney Jr., MI	2	ELE		L. Elenin, Russia	127
COM	10	T. Cooper, South Africa	1779	EJI		J. Elliott, NC	2
CPI	18	P. Corelli, Italy	1	EM		G. Emerson, NM	7
CDV		D. Cornell, WA	141	EPE	01	P. Enkonatus, Germany	232
CLZ	01	L. Corp, France	576	ERB		R. Eramia, WA	23
CAI		A. Correia, Portugal	590	EJO	03	J. Erdei, Hungary	242
CIO		I. Costache, Romania	1	EEY		E. Erdelyi, CA	46
COV		V. Coulehan, NY	99	EWK		K. Ewing, FL	6
CWD		D. Cowall, MD	1	FTB		T. Fabjan, Slovenia	2465
CR		T. Cragg, Australia	68	FSU		S. Fanutti, Canada	6
CFY		J. Craig, MA	10	FEO	03	E. Farkas, Hungary	164
CGO		G. Crawford, Australia	50	FTI		T. Farris, TN	1
CTX	27	T. Crawford, OR	10287	FBH		B. Fehling, Spain	2
CMY		M. Crook, England	40	FJH	04	H. Feijth, Netherlands	35010
CRR		R. Crumrine, NY	118	FAJ	03	A. Fejes, Hungary	25
CTI	03	T. Csorgei, Hungary	200	FM	04	M. Fernandes, Germany	197
CSM		M. Csukas, Romania	905	FOM	15	M. Fernandez Ocana, Spain	70
CKB		B. Cudnik, TX	1481	FRU		R. Ferraiuolo, Argentina	4
CUU		J. Curto Amigo, Spain	15	FEV		E. Fischler, WA	30
DS		J. Da Silva, Brazil	24	FDA	03	A. Fodor, Hungary	6
DQA		A. Dandrea, FL	88	FBZ	03	B. Fodor, Hungary	3
DAM	06	A. Darriba Martinez, Spain	37	FFC	03	F. Foldesi, Hungary	59
DMP		M. Dasgupta, India	2	FMR		M. Fonovich, Croatia	5355
DIJ	20	I. Davies, England	4	FJQ		J. Foster, CA	254
DVE		V. Davis, AL	6	FXJ		J. Fox, MN	72
DJS	20	J. Day, England	118	FBN	10	B. Fraser, South Africa	11
DGA	04	H. De Groot, Netherlands	341	FML		M. Fridlund, Netherlands	4
DGM		M. De Groot, Northern Ireland	26	FAA	18	A. Frosina, Italy	1
DJX	27	M. De Jong, Canada	119	FMG		G. Fugman, NE	145
DNG	04	S. De Jong, Netherlands	3	GBZ	21	O. Gabzo, Israel	3
DJ	04	N. De Jongh, Netherlands	502	GXR		R. Gagliano, AZ	30
DPP		P. De Ponthiere, Belgium	11942	GHT	27	G. Gaherty, Canada	193
SWQ	13	W. De Souza, Brazil	44	GMO		M. Gainer, PA	10
DEI	04	E. Defesche, Netherlands	9	GTN		T. Gandet, AZ	1
DWG	04	J. Degewey, Netherlands	2	GAA		P. Garey, IL	39
DHQ	04	J. Dehove, Belgium	272	GPG		P. Garossino, TX	1
DHK	04	H. Dekker, Netherlands	66	GKI		K. Geary, Ireland	27
DDN		D. Delaney, PA	70	GCP		C. Gerber, Germany	23
DFR	27	F. Dempsey, Canada	33	GHS		H. Gerner, WI	4600
DDE		D. Denisenko, Russia	24	GNK	04	H. Geuverink, Netherlands	5
DKN	04	J. Der Kinderen, Netherlands	208	GQR		R. Gherase, Romania	1
DNO		O. Deren, Poland	172	GAO		A. Giambersio, Italy	3
DPK		P. Detterline, PA	133	GSA		S. Giambruno, CA	80
DSI		G. Di Scala, Australia	40683	GGU	04	G. Gilein, Netherlands	532
DGI	04	G. Diepeveen, Netherlands	119	GMY		M. Glennon, Ireland	18

Table 3. AAVSO Observers, 2007–2008, cont.

Code	Org.	Name	No. Obs.	Code	Org.	Name	No. Obs.
GZN	06	A. Glez-Herrera, Spain	108	JMA		M. Jacquesson, France	76
GFT		F. Gobet, France	7249	JTP	01	P. Jacquet, France	65
GAW		A. Godfrey, England	234	JAT	03	T. Jakabfi, Hungary	1
GFB		B. Goff, CA	108	JM		R. James, NM	40589
GPX		W. Goltz, Australia	27324	JSC		S. Jamieson, WI	743
GOT	06	T. Gomez, Spain	3568	JZO	03	Z. Jankovics, Hungary	388
GGZ	03	Z. Gorgei, Hungary	382	JDG		D. Janky, WA	32
GKA		K. Graham, IL	9234	JJG	04	J. Jansen, Netherlands	11
GRL	08	B. Granslo, Norway	193	JGN	04	G. Janssens, Belgium	46
GMZ	18	M. Graziani, Italy	48	JKK	08	K. Jensen, Norway	129
GWJ		W. Green, VA	1	JLR		R. Jepeal, CT	144
GBD		B. Griffiths, New Zealand	1	JDU	04	D. Jochmans, Belgium	91
GTZ		T. Grzybowski, NM	615	JOG		G. Johnson, MD	131
GCO		C. Gualdoni, Italy	2746	JON	05	K. Jonckheere, Belgium	2
GUN	01	J. Gunther, France	704	JA	14	A. Jones, New Zealand	10000
GGX	01	G. Guzman, France	59	JCN	20	C. Jones, England	246
GYA		L. Gyarmati, Hungary	11	JJI		J. Jones, OR	636
HKQ	04	J. Haak, Netherlands	420	JMV	14	M. Jones, Australia	25799
HCS	03	C. Hadhazi, Hungary	2650	JRW	10	R. Jones, South Africa	396
HTY		T. Hager, CT	99	JLN	04	L. Jongen, Netherlands	115
HKB		B. Hakes, IL	401	JRC	15	R. Josa, Spain	1
HK		E. Halbach, MN	543	JWM		W. Julian II, NM	2309
HP		W. Hampton, CT	17	KMY		M. Kaczmarech, Brazil	3
HSG		G. Hanson, AZ	1397	KB		W. Kaminski, NM	12
HBB		B. Harris, FL	42	KAM	02	A. Kammerer, Germany	25
HMQ		M. Harris, GA	53	KMO		M. Kardasis, Greece	34
HIX	14	E. Harris-Harries, New Zealand	19969	KAD	03	A. Karpati, Hungary	144
HAV		R. Harvan, MD	1303	KKI		K. Kasai, Switzerland	24
HRA		R. Haugen, NM	3	KEI		E. Kato, Australia	10
HHU	05	H. Hautecler, Belgium	2706	KBJ		R. Kaufman, Australia	26
HKY	27	K. Hay, Canada	33	KTE		T. Kennedy, CA	1
HDK		D. Hayden, Canada	3	KSH	14	S. Kerr, Australia	2255
HAB		R. Hays Jr., IL	885	KSZ	03	S. Keszthelyi, Hungary	220
HBD		B. Heathcote, Australia	1	KRB		R. King, MN	703
HPC		P. Hecht, Germany	21	KQR		R. Kinne, MA	9
HKN		K. Hedrick, WV	5	KSJ	27	S. Kinsella, Canada	1
HRZ		R. Hegenbarth, Germany	1	KIR		P. Kirby, AZ	391
HQA		A. Henden, MA	7	KBR		B. Kirshner, CA	1
HGC	14	G. Herdman, New Zealand	52685	KIL	03	L. Kiss, Australia	528
HHQ	04	G. Hermans, Belgium	9	KMM	09	M. Kititsa, Ukraine	224
HES		C. Hesseltine, WI	14168	KPC		P. Klages, England	1
HMV		M. Hessom, CA	1	KEA	03	R. Klimaj, Hungary	11
HIM		W. Hill, MA	7	KGE	08	G. Klingenberg, Norway	284
HZR	02	R. Hinzpeter, Germany	375	KPL		P. Kneipp, LA	145
HJX	13	J. Hodar Munoz, Brazil	22	KGJ		G. Knight, ME	49
HEK	11	E. Hoeg, Denmark	76	KSP		S. Knight, ME	87
HFO	01	G. Hoffer, Germany	4	KRV		R. Koff, CO	18371
HDF		D. Hohman, NY	223	KHL		M. Kohl, Switzerland	123
HXA		A. Hollander, CA	51	KXO	04	M. Kollenaar, Netherlands	36
HOO	04	G. Hoogeveen, Netherlands	1650	KRS		R. Kolman, IL	2810
HPK	04	S. Horenblas, Netherlands	21	KMA		M. Komorous, Canada	2829
HJZ		J. Horne, CA	9	KMP		M. Koppelman, MN	524
HSW		S. Howerton, KS	497	KSO		S. Korotkiy, Russia	47
HJA		J. Hudson, CA	60	KCY		D. Korycansky, CA	79
HOX	14	O. Hull, New Zealand	43059	KOS	03	A. Kosa-Kiss, Romania	4537
HDU		D. Hurdis, RI	603	KLX		L. Koscianski, MD	76
HUR	20	G. Hurst, England	2736	KMS		M. Kossa, France	3
HTN		K. Hutton, CA	3104	KAF	03	A. Kovacs, Hungary	332
HUZ	27	R. Huziak, Canada	12550	KVS	03	A. Kovacs, Hungary	40
IVI	04	V. Icke, Netherlands	2	KVI	03	I. Kovacs, Hungary	484
ILE	03	E. Illes, Hungary	529	KFK		F. Krafka, TX	114
IPA	12	P. Ingrassia, Argentina	1	KMD		M. Kran, CA	229
IMA		M. Iozzi, Italy	3	KWO	02	W. Kriebel, Germany	1653
IVM	16	V. Ivanov, Russia	4646	KIS	02	G. Krisch, Germany	129
JPM	10	P. Jacobs, South Africa	17	KTV	16	T. Kryachko, Russia	60

2. The Year in Review

Table 3. AAVSO Observers, 2007–2008, cont.

<i>Code</i>	<i>Org.</i>	<i>Name</i>	<i>No. Obs.</i>	<i>Code</i>	<i>Org.</i>	<i>Name</i>	<i>No. Obs.</i>
KTZ		T. Krzyt, Poland	648	MPR	23	P. Maurer, Germany	703
KUC	01	S. Kuchto, France	806	MGE		G. Mavrofridis, Greece	4816
LCR	15	C. Labordena, Spain	472	MAZ		M. Mazurek, AZ	20
LHS		H. Lacombe, Canada	23	MBX		R. McArthur, GA	12
LSA		S. Lahtinen, Finland	1	MBE		B. McCandless, MD	397
LIH	04	J. Lamerichs, Netherlands	20	MYX		J. McClusky, TX	674
LDJ	27	D. Lane, Canada	2284	MUE		R. McDaniel, TX	2676
LTO	02	T. Lange, Germany	57	MBT		T. McDonagh, MA	50
LQT	04	T. Langerwerf, Netherlands	30	MDP	27	P. McDonald, Canada	894
LMF	13	M. Lara, Brazil	283	MGH	20	H. McGee, England	332
LTM		T. Laskowski, IN	57	MEP		D. Medicis, NY	113
LJJ		J. Laurent, France	2	MED		K. Medway, England	1910
LZT		T. Lazuka, IL	1129	MEG	04	J. Meeus, Belgium	57
LEB	01	R. Lebert, France	289	MIQ	20	I. Megson, England	262
LXQ	04	J. Leer, Netherlands	255	MHI	01	H. Menali, MA	106
LMT		M. Legutko, Poland	465	MDJ	12	D. Mendicini, Argentina	54
LDA		D. Lehman, MD	8	MQB		N. Mennekens, Belgium	12
LDI		D. Lehmann, Germany	6	MBB	14	B. Menzies, New Zealand	31443
LPD	01	P. Lemarchand, France	18	MZK		K. Menzies, MA	9040
LNZ		G. Lenz, LA	60	MWM		M. Merrell, MN	24
LJL		J. Leonard, IL	15	MTK		T. Michalik, VA	1479
LEV		A. Leveque, CA	187	MXT		C. Middleton, South Africa	110557
LVY	27	D. Levy, AZ	161	MOK	08	O. Midtskogen, Norway	369
LRX	04	R. Lieveloo, Netherlands	185	MXM		M. Mifsud, Malta	44
LIW		W. Liller, Chile	3	MZF	03	Z. Miklos, Hungary	3
LCI		C. Limbach, WI	328	MXL		R. Miles, England	7
LAI	27	A. Ling, Canada	1275	MLL		J. Miller, MD	3
LMK		M. Linnolt, NV	948	MZS	03	A. Mizser, Hungary	802
LLZ	03	L. Liziczai, Hungary	351	MCE		E. Mochizuki, Japan	11
LTE		T. Lloyd Evans, England	1068	MRV		R. Modic, OH	14
LOB	06	J. Lobo Rodriguez, Spain	539	MHH		J. Moehlmann, PA	453
LBI		B. Logan, AZ	233	MQE		K. Mogul, GA	556
LRD		D. Loring, UT	1143	MOD		D. Mohrbacher, OH	5
LDS	20	D. Loughney, England	25	MPV	03	P. Molnar, Hungary	893
LFZ		F. Lucidi, Italy	1671	MOZ	03	Z. Molnar, Romania	36
LBU	03	D. Lukacs, Hungary	12	MLF	10	L. Monard, South Africa	4149
LMJ	17	M. Luostarinen, Finland	1083	MBL	03	L. Monich, Hungary	3
MFU	04	A. Maas, Netherlands	3	MHC	12	C. Montalvo, Peru	6
MDW		W. MacDonald II, Canada	5611	MXO		C. Montes, Philippines	3
MTX		T. MacKenzie, NY	1	MYK		K. Moore, SC	16
MDD		P. Madden, LA	6	MWN	14	L. Morand, New Zealand	21513
MBU	04	W. Maessen, Netherlands	3	MEV	01	E. Morelle, France	14265
MLI		L. Maisler, NY	55	MOI	01	E. Morillon, France	3859
MYN		A. Majczyna, Poland	178	MOW		W. Morrison, Canada	5506
MII	03	L. Majzik, Hungary	14	MXK	03	A. Morvai, Hungary	3
MVU	04	A. Mak, Netherlands	1172	MPS		P. Mozel, Canada	70
MBK	04	J. Mak, Netherlands	3	MMH		M. Muciek, Poland	9
MKG		A. Manske, WI	2	MUG	04	J. Mulder, Netherlands	54
MKE		B. Manske, WI	554	MDU		D. Mulinski, Poland	32
MOF		O. Maraev, Russia	94	MBQ		B. Mullin, MN	283
MGK		G. Maravelias, Greece	24	MMU		M. Munkacsy, RI	743
MYH	14	A. Marino, New Zealand	297	MJV		J. Murray, OH	11
MBF	14	B. Marino, New Zealand	11441	MUY	05	E. Muylaert, Belgium	7923
MFB	01	F. Mariuzza, Italy	27	MGW		G. Myers, CT	621
MKW		A. Markiewicz, Poland	1291	NIS	03	I. Nagy, Hungary	28
MXS	03	S. Marosi, Hungary	43	NDQ	01	D. Naillon, France	396
MMN	18	M. Martignoni, Italy	2	NDD		D. Nash, CO	5
MYC		C. Martin, NE	20	NLX	14	P. Nelson, Australia	19172
MMG		M. Martinengo, Italy	102	NAL	03	A. Nemes, Hungary	331
MRX	02	H. Marx, Germany	827	NAR		A. Neumann, NC	12
MN		H. Mason, CA	12	NJO	02	J. Neumann, Germany	1257
MQI		M. Matesic, Croatia	3	NMR		M. Nicholson, England	3906
MTH		H. Matsuyama, Australia	9700	NFD	04	F. Nieuwenhout, Netherlands	488
MFE	13	C. Mattos, Brazil	56	NAW	05	A. Nieuwlandt, Belgium	29
MXV		A. Matvienko, Russia	9	NWD	04	J. Niewold, Netherlands	45

Table 3. AAVSO Observers, 2007–2008, cont.

Code	Org.	Name	No. Obs.	Code	Org.	Name	No. Obs.
NCH		C. Norris, TX	128	RLM		M. Raymonde, France	2
NKL		K. Nuber, Germany	32	RRD	14	R. Rea, New Zealand	9
NKB		K. Nugent, NJ	45	RFA		F. Reichenbacher, AZ	483
NZL	04	Z. Nunninga, Netherlands	435	RZS	03	Z. Reiczigel, Hungary	179
NAN		A. Nygaard, England	8	REP	24	P. Reinhard, Austria	341
OCN		S. O'Connor, Bermuda	10	RNN		T. Renner, WI	15
ODI		D. O'Driscoll, Australia	6	RKZ		K. Resende, Brazil	1
ONJ		J. O'Neill, Ireland	54	RNA	03	N. Rezsabek, Hungary	50
OSN		S. Oatney, KS	207	RUZ	04	S. Rezvani, Netherlands	332
OES		D. Oesper, WI	15	RJG		J. Ribeiro, Portugal	590
OYE		Y. Ogmen, North Cyprus	2553	RIX	14	T. Richards, Australia	2655
OAR	17	A. Oksanen, Finland	11738	RRZ	03	R. Ricza, Hungary	188
OAO	04	A. Oosterhuis, Netherlands	28	RGW		G. Rinehart, CO	15
OIP	04	I. Oosterveld, Netherlands	74	RRJ		R. Rios, CA	21
OSC		S. Orlando, NY	290	OJR	06	J. Ripero Osorio, Spain	2764
OAD		A. Ormsby, MI	118	RDP	04	D. Riphagen, Netherlands	414
OPR		P. Ossowski, Poland	19	RIV		M. Rivera, Italy	347
OSV	03	L. Osvald, Hungary	25	RAE		A. Roberts, South Africa	2676
OJJ		J. Ott, CO	964	RCW		C. Robertson, KS	1331
OCR	05	C. Otten, Belgium	74	RKO		K. Robinson, England	7
PQU	04	L. Paanakker, Netherlands	797	RZD	06	D. Rodriguez, Spain	24
PLP		L. Palazzi, Italy	448	RFC		F. Rodriguez Bergali, Spain	504
PKO		K. Panourakis, Greece	89	RHE	26	H. Rodriguez, Uruguay	205
PCC	18	R. Papini, Italy	1008	RMU	06	M. Rodriguez Marco, Spain	177
PPS	03	S. Papp, Hungary	3644	ROE		J. Roe, MO	15716
PSQ	03	S. Papp Jr., Hungary	2	RRO		R. Rogge, Germany	49
PGC		G. Pappa, Italy	3	ROG		G. Ross, MI	218
PTQ		T. Parson, MN	3085	RGN		G. Rossi, Italy	359
PJJ	15	J. Pastor, Spain	12	RR		R. Royer, CA	46
PKV		K. Paxson, TX	3	RPH		H. Rumball-Petre, CA	9
PN		A. Pearlmutter, MA	2	RUO		D. Ruokonen, WI	1570
PEI	11	E. Pedersen, Denmark	43	RTH		T. Rutherford, TN	54
PEG	01	C. Peguet, France	952	RSV		S. Ryan, Ireland	3
PWD		W. Pellerin, TX	61	RZM		M. Rzepka, Poland	1648
PFA		J. Pfannerstill, WI	41	SRIC		R. Sabo, MT	2127
PRP		R. Pickard, Australia	4	SXW		W. Sabo, IL	66
PXR	20	R. Pickard, England	4553	SJQ		A. Sajitz, Romania	84
PLQ	01	L. Pinatelle, France	97	SSU		S. Sakuma, Japan	1153
PGU	18	G. Pinazzi, Italy	39	SIE		A. Salati, Italy	4
PNT	04	R. Pintjes, Belgium	623	SVI		M. Sallman, MN	39
PDX		D. Pitou, CA	876	SQL	26	R. Salvo, Uruguay	56
PPL		P. Plante, OH	269	SAH		G. Samolyk, WI	167843
PDL	03	D. Plesa, Hungary	18	SQU		J. Sanchez Lopez, Spain	34
PAW		A. Plummer, Australia	5759	SNN		J. Sanford, CA	2
AST	12	R. Podesta, Argentina	28	SXY		A. Sankowski, Poland	2
PRX		R. Poklar, AZ	17452	SGX	03	G. Santa, Hungary	487
PMO	10	M. Poll, South Africa	147	STC		G. Santacana, PR	14
PUW	04	W. Pont, Netherlands	233	SSIM		S. Santini, Italy	1
PMI		M. Potter, MD	5	SKI	03	K. Sarneczky, Hungary	94
PWR		R. Powaski, OH	30	SGE	27	G. Sarty, Canada	6
POX		M. Poxon, England	388	SSQ		R. Sass, NM	11
PYG		G. Poyner, England	11084	SVA		A. Saw, Australia	219
PDO		D. Pray, MA	169	SDAV		D. Scanlan, England	233
PCJ		C. Preadom, CT	2	SFI	18	T. Scarmato, Italy	14
PAH		A. Price, MA	3	SXX	02	M. Schabacher, Germany	25
POB		R. Price, England	37	SDY	02	D. Scharnhorst, Germany	47
PDQ	01	D. Proust, France	36	SFS		S. Schiff, VA	348
PUJ	06	F. Pujol-Clapes, Spain	602	SAJC	04	A. Schipper, Netherlands	93
PHG		H. Purucker, Germany	522	SJOE		J. Schlimmer, Germany	1
QW	02	W. Quester, Germany	12	SPK	01	P. Schmeer, Germany	18
QFI	05	F. Questier, Belgium	3	SUF		C. Schneider, CA	27
QJK	03	J. Qvam, Norway	22	SJCH	04	J. Schoemaker, Netherlands	24
RIO	27	I. Radine, Canada	2	SANO		A. Schoenmaker, Netherlands	11
RKE		K. Raetz, Germany	428	SQE		R. Schoenstene, IL	67
RWA		W. Rauscher, PA	114	SFRA		F. Schorr, GA	658

2. The Year in Review

Table 3. AAVSO Observers, 2007–2008, cont.

<i>Code</i>	<i>Org.</i>	<i>Name</i>	<i>No.</i> <i>Obs.</i>	<i>Code</i>	<i>Org.</i>	<i>Name</i>	<i>No.</i> <i>Obs.</i>
SYU	02	M. Schubert, Germany	156	SSW		S. Swierczynski, Poland	4158
SAND	02	A. Schumann, Germany	8	S58		H. Swope, CA	103
SHCH	04	H. Schut, Netherlands	202	SDX		D. Sworin, TX	9
SRIH		R. Schwartz, WA	289	SBT	03	R. Szabo, Hungary	58
SANI		A. Semien, LA	1	SAO	03	A. Szauer, Hungary	164
SWEV	04	W. Sevensma, Netherlands	1	SLY	03	L. Szegegi, Hungary	541
SDF		D. Shackelford, CA	191	SILD	03	I. Szeitz, Hungary	2
SHS		S. Sharpe, Canada	2580	SYV	03	P. Szekely, Hungary	20
SDP		D. Sharples, NY	6	SNO	03	L. Szentasko, Hungary	1
SSA		A. Sharpless, WA	14	SFX	03	T. Szentasko, Hungary	3
SFY		J. Shears, England	10038	TUO		U. Tagliaferri, Italy	91
SHW		W. Sherman, TX	154	TMK		M. Takacs, Hungary	1
SLH		L. Shotter, PA	763	TDB	27	D. Taylor, Canada	647
SPAO	18	P. Siliprandi, Italy	304	TNX	14	N. Taylor, Australia	48549
SBN	13	A. Silva Barros, Brazil	215	TBA		A. Tekatch, Canada	9
SGEO		G. Silvis, MA	201	TPV		P. Temple, NM	7
SNE		N. Simmons, WI	2298	TJV		J. Temprano, Spain	610
SXN		M. Simonsen, MI	1779	TCI	03	C. Tepliczky, Hungary	3
SJAN	20	J. Simpson, England	1	TPS	03	I. Tepliczky, Hungary	878
SANG		A. Sing, Philippines	107	TXJ	04	J. Teule, Netherlands	80
SGOR		G. Sjoberg, MA	346	TFM		F. Teyssier, France	1950
SYI		E. Skrzynicki, Poland	5090	TTU		T. Tezel, Turkey	21
SJX	10	J. Smit, South Africa	150	TJE		J. Thibodeau, OK	21
SMI		A. Smith, England	23	TAH		A. Thornburg, NC	5
SDEW		D. Smith, OK	67	THU	01	B. Thouet, France	66
SGF	14	G. Smith, New Zealand	9752	TIA	03	A. Timar, Hungary	5
SHA		H. Smith, MI	22	TRL		R. Togni, AR	14
SJE		J. Smith, CA	14	TRE		R. Tomlin, IL	60209
SUI		R. Smith, England	229	TVM		V. Torres, Spain	467
SPOT	04	P. Soeters, Netherlands	92	TJX	03	J. Toth, Hungary	140
SKA	16	K. Sokolovsky, Russia	230	TON	03	J. Toth, Hungary	34
SAON	04	A. Son, Netherlands	46	TMQ	03	M. Toth, Hungary	34
SATO	04	A. Son, Netherlands	58	TSC		S. Tracy, CT	113
SGYO	03	G. Soponyai, Hungary	47	TVT		V. Tramazzo, AZ	4
SYP		P. Soron, Canada	71	TFR		F. Travaglio, Italy	118
SJZ		J. Speil, Poland	2252	TWA		W. Travis, MA	5
SMUS	27	M. Spicer, Canada	1	TRF		C. Trefzger, Switzerland	88
SPOE	04	P. Spoek, Netherlands	572	TBX	14	B. Tregaskis, New Zealand	13931
SC	27	C. Spratt, Canada	49	TRH	20	R. Tremblay, Canada	4
SXR	03	M. Sragner, Hungary	16	TDW		D. Trowbridge, WA	397
SRUD	14	R. Stabenow, New Zealand	12461	TRX		R. Truta, Romania	1
SBL	05	B. Staels, Belgium	99008	TVS		V. Tsamis, Greece	5
STY		J. Stafl, WI	23	TOE		O. Tuchin, Russia	5
SMAR		M. Stangalini, Italy	5	TAA		A. Turner, CT	2
STR		R. Stanton, CA	14	TYS		R. Tyson, NY	772
SDB		D. Starkey, IN	4772	VFR	01	F. Vaclic, Czech Republic	59
SALE	09	A. Staroverov, Ukraine	1	VST		S. Valentini, Italy	146
SJAT		J. Starzomski, Poland	309	VBO	04	P. Van Baal, Netherlands	6
SYO		T. Steck, IN	4	BVE	04	E. Van Ballegoij, Netherlands	1982
STF		G. Stefanopoulos, Greece	1321	VDF		F. Van Den Abbeel, Belgium	47
STI		P. Steffey, FL	742	VDX	04	W. Van Den Berg, Netherlands	63
SWTE	04	W. Steffelaar, Netherlands	3	VDV		V. Van Den Bosch, Netherlands	10
SET		C. Stephan, FL	1214	VDL	05	J. Van Der Looy, Belgium	1597
SIF	27	M. Stephens, Canada	3	VME	04	N. Van Der Meij, Netherlands	561
SR		R. Stewart, IN	1	VWL	04	P. Van Der Wal, Netherlands	18
SRB		R. Stine, CA	218	VSW	04	S. Van Der Wal, Belgium	63
STQ		N. Stoikidis, Greece	72	VDE	04	E. Van Dijk, Netherlands	37
SDI	20	D. Storey, England	42	VEP	04	P. Van Everbroeck, Belgium	406
SFU	14	M. Streamer, Australia	41	VHD	05	D. Van Hessche, Belgium	17
SRX	14	R. Stubbings, Australia	9811	VKB	04	B. Van Kerckhove, Belgium	334
SUK		M. Stuka, CA	48	VNL	05	F. Van Loo, Belgium	1099
SAC	02	A. Sturm, Germany	260	VOW	04	A. Van Oyen, Netherlands	223
SUS	02	D. Suessmann, Germany	481	VRW	04	W. Van Rensbergen, Netherlands	2
SUH		M. Suhovecky, IN	6	VSQ	04	J. Van Soldt, Netherlands	8
SWV		D. Swann, TX	469	VSU	04	B. Van Spreng, Netherlands	1266

Table 3. AAVSO Observers, 2007–2008, cont.

Code	Org.	Name	No. Obs.	Code	Org.	Name	No. Obs.
VUG		G. Van Uden, Netherlands	142	WED		G. Wedemayer, WI	1911
VVP	04	P. Van Vliet, Netherlands	67	WPT	10	D. Wedepohl, South Africa	88
VWS	05	J. Van Wassenhove, Belgium	43	WEI		D. Weier, WI	29
VMT	05	T. Vanmunster, Belgium	25373	WDZ		D. Wells, TX	1972
VSD	05	D. Vansteelant, Belgium	5	WKL		K. Wenzel, Germany	414
VKN		K. Vardijan, Croatia	24	WEF		F. West, MD	316
VJO		J. Vazquez, Spain	1	WJD		J. West, KS	49
VED	01	P. Vedrenne, France	8262	WRP		R. Wheeler, OK	11
VPA	04	J. Veerkamp, Netherlands	11047	WAH		A. Whiting, WA	32
VC	14	C. Venimore, New Zealand	13301	WNA	04	R. Wielinga, Netherlands	2
VET	01	M. Verdenet, France	27	WEY		E. Wiley, KS	342
VWY	04	W. Verhaegen, Belgium	234	WUG	04	G. Wilkens, Netherlands	195
VPF		P. Verney, England	1	WI		D. Williams, IN	1302
VCH	04	C. Veth, Netherlands	33	WIG		G. Williams, OH	11
VIA	01	J. Vialle, France	389	WPX	14	P. Williams, Australia	3955
VNA		N. Virnina, Ukraine	12	WRX		R. Williams, MI	6
VJA	17	J. Virtanen, Finland	3383	WLP	05	P. Wils, Belgium	18
VFB	04	F. Visser, Netherlands	6	WWJ	20	B. Wilson, England	848
VGK		G. Vithoukas, Greece	2058	WBH		R. Wilson, AZ	9
VRM		R. Vivaldi, Italy	29	WSN		T. Wilson, WV	821
VPZ	03	P. Vizi, Hungary	306	WAS		A. Winkler, Germany	415
VFK	02	F. Vohla, Germany	4779	WKM		M. Wiskirken, WA	14
VLO	04	L. Volders, Belgium	100	WBS		R. Wobus, MD	30
VOL		W. Vollmann, Austria	98	WJM		J. Wood, CA	5
VKQ	04	J. Vonk, Netherlands	39	WVR		R. Wood, TX	10
VVE		V. Vrhovac, Croatia	5	WPF		P. Wright, MN	57
WGD		G. Waddill, VA	10	WUB	04	E. Wubbena, Netherlands	2638
WLY		L. Wade, MS	17	WCG		C. Wyatt, Australia	28
WGR		G. Walker, MA	25	YDS		D. Yi, Republic of Korea	51
WBY		B. Walter, TX	57	YKA		K. Young, CA	8
WHN		H. Walter, Hungary	14	ZAD		D. Zak, PA	36
WAU		A. Wargin, Poland	166	ZPA		P. Zeller, IN	277
WMJ	04	J. Warmerdam, Netherlands	29	ZRE		R. Zissell, MA	3330
WAB		B. Warner, CO	9290	ZWX	04	W. Zweers, Netherlands	1476
WCB		C. Webster, PA	449				

These codes, which appear in the Table (AAVSO Observers 2007–2008), indicate observers are also affiliated with the groups below:

- 01 Association Française des Observateurs d'Étoiles Variables (AFOEV)
- 02 Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e.V. (BAV) (Germany)
- 03 Magyar Csillagászati Egyesület, Valtózcillag Szakcsoport (Hungary)
- 04 Koninklijke Nederlandse Vereniging voor Weer-en Sterrenkunde, Werkgroep Veranderlijke Sterren (Netherlands)
- 05 Vereniging voor Sterrenkunde, Werkgroep Veranderlijke Sterren (Belgium)
- 06 Madrid Astronomical Association M1 (Spain)
- 08 Norwegian Astronomical Society, Variable Star Section
- 09 Ukraine Astronomical Group, Variable Star Section
- 10 Astronomical Society of Southern Africa, Variable Star Section
- 11 Astronomisk Selskab (Scandinavia)
- 12 Liga Ibero-Americana de Astronomia (South America)
- 13 Brazilian Observational Network REA
- 14 Royal Astronomical Society of New Zealand, Variable Star Section
- 15 Agrupacion Astronomica de Sabadell (Spain)
- 16 Association of Variable Star Observers "Pleione" (Russia)
- 17 URSA Astronomical Association, Variable Star Section (Finland)
- 18 Unione Astrofili Italiani (Italy)
- 20 British Astronomical Association, Variable Star Section
- 21 Israeli Astronomical Association, Variable Star Section
- 23 Grupo Astronomico Silos (Spain)
- 24 Astronomischer Jugendclub (Austria)
- 26 Red de Observadores (Montevideo, Uruguay)
- 27 Royal Astronomical Society of Canada
- 29 Asociacion Amigos de la Astronomia (Argentina)

2. The Year in Review

Table 4. Observation statistics for fiscal year 2007–2008.

<i>Observations (increments of 1000)</i>	<i>No. Observations per increment</i>	<i>% of All Observations</i>	<i>No. Observers per increment</i>
1–999	100385	5	697
1000–1999	63964	3	43
2000–2999	62767	3	25
3000–3999	38496	2	11
4000–4999	63414	3	14
5000–5999	27321	1	5
6000–6999	0	0	0
7000–7999	15172	1	2
8000–8999	8262	0.4	1
9000–9999	66117	4	7
10000+	1428995	76	44

Committee Reports

Charge-Coupled Device (CCD)

Chair: Gary Walker

179 South Main Street, Sherborn, MA 01770

The CCD program had another active and successful year in 2007–2008. Observers continued to perform variable star measurements with their CCD cameras. In addition to our program stars, observers continue to participate in various campaigns and perform significant photometry on many of the AAVSO stars that were not “CCD Program Stars.” This year, we logged over 1 million CCD observations, including both program stars and others.

The original *BVRI* program continues, with many observers logging their observations on the web. These transformed *BVRI* measurements on eight long period variable stars (LPV) started in 1993. The first four years of *BVRI* data, starting in 1993, have been added to the web and are available through the AAVSO’s Light Curve Generator and data requests. This may be the most extensive record of these eight LPVs.

The Faint CV and LPV program, which was started at the Spring 1997 meeting, completes its eleventh year. The purpose of this program is to study these objects at the faint portion of their light curves; observations are made with a *V* filter, but the data are not transformed. The activity on this program increases each year.

The Standard Star observing program continued this year. CCD observations were made on all twelve fields while many observers have posted their results. This is an excellent way to check your results, since the fields have well observed constant stars.

Web-based online chart and sequence generation and distribution has joined online data submission, light curve generation, and data downloading. This has made the tasks of observing, collecting data, and plotting light curves “Internet Friendly.” Personally, I can say that batch uploading hundreds of time series observations over the web, in a matter of seconds, without typing in any data, and then seeing how they compare to each star’s history, and other observers from the night before, returns as the highlight of my day. Many thanks to the HQ staff for this Web presence.

While the *BVRI* and CV/LPV programs continue, I encourage each of you to observe, submit online, view online and data-mine whatever stars are of interest to you.

The main goal for the next six months is to reorganize ourselves into Sections, with Science Leaders to better connect both the observers with targets, and the scientific community, with the data collected. While we suggest that you continue to observe the

BVRI, Faint, CV and LPV, and Standard Stars programs, look for changes in the future. We will no longer have a CCD committee, but will just consider it a technique that may be used when appropriate by the Section and Science Leads.

I have thoroughly enjoyed the past fifteen years as committee chair and could have never imagined that CCD observing would become so popular. Thank you for your support.

Eclipsing Binary

Chair: Gerard Samolyk

9504 W. Barnard Ave., Greenfield, WI 53228

The publication of times of minima has returned to the *JAAVSO*. In spring, a paper containing 261 times of minima of 155 stars was published. A second paper containing 377 times of minima of 184 stars was submitted for publication. The most active observers have been Jerry Bialozynski, Ken Menzies, Rudy Poklar, and your committee chair.

Times of minima published by the AAVSO are being added to the Lichtenknecker Database maintained by the Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e. V. (BAV), in Germany. This database is the most comprehensive source of EB times of minima. An English language interface to this database can be found at: <http://www.bav-astro.de/LkDB/index.php?lang=en>.

A project to upload the visual observations made from 1975 through 2000 to the AAVSO International Database is underway. This requires the observations to be translated from the old Apple computer format to a format compatible with the AAVSO's system. Neil Simmons has written the software to translate these files and has been working through the large number files involved. Many of these observations were made using steps rather than magnitudes. The transformation of these observations will be time consuming.

The rare eclipse of ϵ Aur will start in the fall of 2009 and continue for the following two years. For more information, refer to the recent AAVSO "Star of the Season" at http://www.aavso.org/vstar/vsots/eps_aur.shtml.

Education and Public Outreach

Chair: Pamela Gay

Southern Illinois University Edwardsville, Physics Dept., Box 1654, Edwardsville, IL 62026

Like in last year, in 2008 the education committee was busy on many individual tasks that can be split into four basic areas: Science Olympiad support, formal education support, amateur-to-amateur education efforts, and outreach. It should also be noted that the AAVSO as a whole has worked on its own major educational initiatives.

2008 was the second year the Science Olympiad featured Variable Stars as one of the primary topic areas. This inclusion was in large part due to committee member Donna Young. Many members of the AAVSO assisted school children around the nation prepare for local and regional Science Olympiad events, and many of the exams used by Science Olympiad at local levels were created by AAVSO volunteers. The education committee would like to thank all members who gave up a few clear nights to help teachers teach variable star astronomy. We would love to know how many members participated and what teachers' needs they were asked to fulfill. If anyone can share their experiences, please contact Pamela Gay at pgay@siue.edu.

Variable Stars will again be part of the Science Olympiad in 2009, and Donna has been busy holding numerous Coaches Clinics featuring resources from numerous of the AAVSO's Variable Star of the Seasons as well as from Hands on Astrophysics. To help make the HOA program accessible in the future to a larger population of students and teachers, Donna Young and Pam Perry have been working on creating a web version of the HOA curriculum, complete with updates and digital exercises developed with the support of Chandra Observatory.

Beyond the scope of the Education Committee, it should be noted that the AAVSO as an organization has been a major part of the International Year of Astronomy, with AAVSO staff member Aaron Price working on materials to support international observations of the variable star Epsilon Aurigae. If fully funded, this project will provide workshops to teach people who to observe and teach observing. This project has the potential to leave a lasting legacy of educating people in how to be a part of AAVSO.

Also in conjunction with the International Year of Astronomy, numerous AAVSO members have been giving presentations on Variables Stars, Astronomy, and Citizen Science. Supporting these speakers is a new Education Committee project to provide publicly available presentations online for use by anyone. As of this writing, a dozen presentations were posted online for use.

This presentation library was made available as part of a complete redesign of the Education and Outreach section of the AAVSO website. Other major aspects of this redesign include the implementation of a Speakers' Bureau and a Writers' Bureau.

The AAVSO Speakers' Bureau seeks to provide astronomy clubs a list of people who are available to give talks. The Speakers' Bureau contains people from a variety of backgrounds, including amateurs with both visual and CCD observing expertise and professionals who use amateur data to perform their research. Many of these speakers are willing to travel 100 miles (or more!) without stipend to speak and give workshops. When a club has an empty night on their calendar, the AAVSO Speakers' Bureau provides an easy way to fill that space.

The AAVSO Writers' Bureau actively provides astronomy clubs content that they can use in association new letters. Organized by Mike Simonsen, this program aggregates astronomy content from dozens of astronomy blogs across the globe and provides a means to republish this content with attribution. When a club has an empty space in their publication, the AAVSO Writers' Bureau provides an easy way to fill that gap.

In the coming year the AAVSO Education Committee looks forward to continuing to grow these new programs and finding new ways to provide educational service to astronomy clubs.

Nova Search

Chair: Reverend Kenneth C. Beckmann

330 North Washington, Kahoka, Missouri 63445

During the 2007–2008 observing year, five observers contributed nova search observations:

Ken Beckmann	USA	504	Gary Nowak	USA	1341
Manfred Durkefalden	Germany	25	Richard Wobuse	USA	18
Cristina Montes	USA	3	Total: 5 Observers		1891

Gary Nowak has been a contributor of nova search observations for the past fifteen years, Ken Beckmann for the past thirty years, and Manfred Durkefalden for the past forty years. Mr. Wobus and Ms. Montes are newcomers to the program.

While none of these observers has discovered a nova recently, each of the three long time observers has contributed well in excess of 10,000 negative observations. The chairman wishes to thank each observer for their efforts, recognizing that the visual method for searching for novae is a monumental feat, requiring the memorization of large areas of the summer and winter Milky Way with a pair of binoculars or a small telescope. Unlike photographic searches where the observer compares multiple photographs in order to discover a nova, the visual observer must depend upon a keen eye and highly developed memory skills. We believe that each individual effort has helped to provide the AAVSO with an understanding of the frequency of novae over long periods of time.

Photoelectric Photometry

Chair: James H. Fox, 14601 55th Street S., Afton, MN 55001

The AAVSO Photoelectric Photometry program in 2008 included two sections: one group observed in the traditional *V*-band and a newer group observed in the near-infrared *J* and *H* bands. Doug West coordinated the IR observers, but he has communicated that the group has ceased to function.

Our photoelectric photometry-*V* group remains active with fifteen observers contributing 1,317 observations to the database. While most observers continue traditional reports in the *V*-band, two observers, Ron Zissell and Roy Axelsen, have expanded their programs to provide time series measurements, and one observer, Brian McCandless, has reported observations in multiple filters (*BVRIJH*). We thank all of the contributors whose collective observing time totals close to 450 hours of effort.

While our total number of observers has held steady since 2007, some observer's counts are down this year. I do not know if this reduction is due to a shift to CCD observing, or to poor sky quality. In the case of the chairman, photometric skies were noticeably reduced during 2008 with observable nights being only about two-thirds of those in prior years.

The chairman has received inquiries from three newcomers to PEP during the year, and one former observer has now retired and is "dusting off" the old photometer and hoping to get involved again. Director Henden has suggested some new programs may be forthcoming for 2009, and of course, there is the ϵ Aurigae eclipse in mid-year that is sure to draw additional observations. We are grateful for the continued support of the program by headquarters staff.

Photoelectric Photometry Observations Reported in 2007–2008:

<i>Name</i>	<i>Observations</i>	<i>Name</i>	<i>Observations</i>
Axelsen, Roy	107 (time series)	Hoeg, Erik	5
Calia, Charles L.	165	Kneipp, Paul W.	30
Clark, Wayne E.	14	McCandless, Brian E.	310 (<i>BVRIJH</i>)
Crumrine, Robert E.	20	Stoikidis, Nik	72
Dempsey, Francis S.	8	West, Jerry Doug	2
Fox, James H.	72	Wood, James E.	5
Fraser, Brian	10	Zissell, Ronald E.	492 (time series, archival)
Hecht, Peter	5		

RR Lyrae

Chair: Gerard Samolyk

9504 W. Barnard Ave., Greenfield, WI 53228

In the past year, Jerry Bialozynski, Ken Menzies, Rudy Poklar, Rich Harvan, and your committee chair have contributed significant data to the RR Lyr observing program, with Ricardo Papini and Alesandro Marchini providing observations from Italy. By coordinating observing runs with the Italian and American observers, we have been able to produce some long observing runs on stars of high interest.

One star of particular interest is AC And, an RR Lyr star with multiple periods. We made a special project of observing this star for the past three years. Other stars on the long term AAVSO program that exhibit a Blazhko effect and were observed this year are; RW Cnc, XZ Cyg, RR Gem, AR Her, and SZ Hya. There are additional stars on the AAVSO program that exhibit a Blazhko effect but have not received adequate CCD study.

We have also been observing two δ Scuti stars with multiple periods, VX Hya and AE UMa. AAVSO Staff Astronomer Matt Templeton is working on the analysis of our observing campaigns on VX Hya in 2006 and 2007 and has a draft of a paper in the works. Matt will present a poster on this project at the AAS meeting in January.

A project to upload the visual observations made from 1975 through 2000 to the AAVSO International Database is underway. This requires the observations to be translated from the old Apple computer format to a format compatible with the AAVSO's system. Neil Simmons has written the software to translate these files and has been working through the large number files involved. Many of these observations were made using steps rather than magnitudes. The transformation of these observations will be time consuming.

Solar

Chair: Paul Mortfield

34 Portree Crescent, Thornhill, ON L3T 3G2, Canada

The dedicated group of AAVSO solar observers continue to monitor the sun both visually and in radio wavelengths. These observers should be given credit for keeping vigil in spite of minimal solar activity in what appears as a prolonged solar minimum. We welcome new observers to our ranks and congratulate the observers mentioned below that have achieved awards for observational milestones.

The chair acknowledges with thanks the work of: Michael Hill, AAVSO SID Analyst; Dan Williams, AAVSO Sunspot Analyst; and headquarters volunteer Arthur Ritchie. The committee also wishes to thank AAVSO staff members Kate Davis and Travis Searle for their continued assistance and support of our efforts.

Sunspot Observation Group

During the past year the 69 members of the sunspot observers team submitted a total of 9,748 sunspot observations. In the past twelve months, the Ra count averaged 3.1, versus 10.6 of the previous twelve months. It is now quite common to go a week or longer without a single sunspot.

We welcome Piotr Wirkus of Poland who joined as a new observer, and we are glad to welcome back Timothy Hrutkay after a two-year hiatus.

The following sunspot observers are eligible for awards having achieved their 1,500 observation milestones.

Name	Observations
Mike Boschat	1,605
Myachaslav Szulc	1,569
IPS Observatory	1,507

Sudden Ionosphere Disturbance (SID) Group Report

For the last twelve months SID Activity has been very slow to nonexistent. We are experiencing a very prolonged time with no flare activity on the sun. Our observer ranks have diminished with this slowing but we still have a good number of observers remaining vigilant in their watch for the next solar flare events. There were a total of fifteen observers submitting reports and a total of 153 reports were sent in. Thanks to all observers for their efforts in monitoring, data analysis and report generation.

Two observers are eligible for awards this year. SID Observer awards are given to observers after having submitted 40 reports to the group. The observers are:

Name	Solar Observer Code
Michael King	A99
Paul Mortfield	A108

Supernova Search

Chair: AAVSO Headquarters

Amateur visual discoveries of supernovae continue to be made despite competition from automated search campaigns. The Rev. Robert O. Evans of Hazelbrook, NSW, Australia, visually discovered a bright supernova (visual magnitude 13.5) in NGC 5530 on September 13.44, 2007 UT. His discovery was quickly confirmed, and was announced to the astronomical community in the International Astronomical Union's (IAU) Central Bureau for Astronomical Telegrams' *Central Bureau Electronic Telegram* (CBET) No. 1065. Bob was awarded an AAVSO Supernova Award for his visual discovery—the 35th such award presented to Bob by the AAVSO since 1983 for discoveries going back to 1981! The award was announced at the 96th AAVSO Annual Meeting in Cambridge, MA, in November 2007, and later presented to him in Australia by AAVSO Director Arne Henden.

Our most sincere congratulations to Bob on his amazing record of discoveries and on his latest one!

Amateur supernova search via CCD is popular and several amateurs have made many discoveries. All announcements of supernova discoveries—whether visual, CCD, or photographic—are made to the astronomical community via the IAU Circulars and CBETs.

For observers interested in visually searching for supernovae, information is available both on line at the AAVSO website and in the *AAVSO Supernova Search Handbook*.

Treasurer's Report
October 1, 2007–September 30, 2008

David A. Hurdis, *Treasurer, AAVSO, 49 Bay State Road, Cambridge, MA 02138*

Income

Dues	\$ 76,534
Non-operating income	1,208,814
Operating income	25,457
Temp. restricted income	90,682
Restricted income	3,745
Unidentified income	<u>185</u>
Total Income	\$1,405,415

Expenses

Staff costs	\$ 872,696
Director's Survivor Benefit	12,000
Building and utilities	34,920
General operations	80,722
Publications	36,512
Technical operations	9,206
Project operations	(2,532)
Meetings	24,087
Miscellaneous	<u>45,105</u>
Total Expenses	\$1,112,716



3. Officers, Staff, and Volunteers

AAVSO Officers, Council Members, and Committee Chairs for Fiscal Year 2008–2009

You may contact these persons through AAVSO Headquarters.

Officers

Director	Dr. Arne Henden	(term of office: 2005–2009)
President	Dr. Paula Szkody	(2008–2009)
Past President	David B. Williams	(2008–2009)
1st VP	Jaime Ruben García	(2008–2009)
2nd VP	Michael A. Simonsen	(2008–2009)
Secretary	Gary Walker	(2008–2009)
Treasurer	David A. Hurdis	(2008–2009)

Council Members

Barry B. Beaman	(2007–2009)
James Bedient	(2007–2009)
Dr. Pamela L. Gay	(2007–2009)
Edward F. Guinan	(2008–2010)
Katherine Hutton	(2008–2010)
Michael Koppelman	(2008–2010)
Dr. Arlo U. Landolt	(2008–2010)
Christopher Watson	(2007–2009)

Committee Chairs

CCD	Gary Walker
Eclipsing Binary	Gerard Samolyk
Education and Outreach	Dr. Pamela L. Gay
Nova Search	Rev. Kenneth C. Beckmann
Photoelectric Photometry	James H. Fox
RR Lyrae	Gerard Samolyk
Solar	
Committee Chair	Paul Mortfield
Sunspot Group Leader	Dan Williams
Solar Flare/SID	
Observing Group	William Michael Hill
Supernova Search	AAVSO Headquarters

Journal of the AAVSO Editor Dr. John R. Percy

AAVSO Headquarters Staff

Sara J. Beck	Technical Assistant, Special Projects
Gloria Ortiz Cruz	Data Entry Technician, Part Time
Katherine Davis	Astronomical Technical Assistant, Website
Dr. Arne Henden	Director
Linda Henden	Administrative Assistant, Part Time
Richard Kinne	Astronomical Technical Assistant
Kerriann Malatesta	Astronomical Technical Assistant
Gamze Menali	Astronomical Technical Assistant
Aaron Price	Astronomical Technical Assistant, Technology
Arthur Ritchie	Headquarters Volunteer
Dr. Michael Saladyga	Technical Assistant, JAAVSO Production Editor, Library, Archives
Travis Searle	Administrative Assistant, Publications
Michael A. Simonsen	Development Director
Dr. Matthew Templeton	Staff Astronomer, JAAVSO Assistant Editor
Rebecca Turner	Astronomical Technical Assistant, Meeting Coordinator, Part Time
Elizabeth O. Waagen	Senior Technical Assistant, JAAVSO Associate Editor

AAVSO Volunteers

AAVSO members are very generous with their time and talents. Many of the programs and services we offer would not be possible without the participation of member volunteers. They are regularly involved in teaching new observers, writing articles for our publications, vetting submissions to the *Variable Star Index*, and the creation of charts and comparison star sequences.

We take this opportunity to recognize these special people, and to say *thank you* for another year of valuable contributions of time and expertise.

Mentor Program Volunteers

Patrick Abbott	Bill Goff	Sebastian Otero
John A. Blackwell	Keith Graham	Chuck Pullen
Thom Bretl	Kate Hutton	Steve Robinson
Glenn Chaple Jr.	Michael Koppelman	Guido E. Santacana
Tim Crawford	Tom Krajci	Mike Simonsen
Bill Dillon	Michael Linnolt	Ray Tomlin
Jim Fox	Mike Mattei	
Geoff Gaherty	Peter Nelson	

Variable Star Index (VSX) Moderators

Michael Koppelman	Wolfgang Renz	Christopher Watson
Sebastian Otero	Mike Simonsen	Patrick Wils

Charts and Sequences

Thom Bretl	Mati Morel	Bob Stine
Tim Crawford	Sebastian Otero	Dan Taylor
Kate Hutton	Wolfgang Renz	
Michael Koppelman	Mike Simonsen	

Solar Section

William Michael Hill	Arthur Ritchie
Paul Mortfield	Dan Williams

Programming and Coding

Len Abbey
Michael Koppelman



4. Word From the Astronomical Community

The AAVSO provides invaluable services to astronomy, first in collecting and maintaining very long-term light curves for a huge number of stars, and second in motivating a global network of amateurs to track and report observations of individual objects in support of multi-wavelength observations. Further, the AAVSO has set the standard for the immediate public availability of data which is essential to time-variable astronomy. In my own case, the AAVSO has been critical to several X-ray/radio/infrared campaigns, including the first clear demonstration that cataclysmic variable (CV) outbursts lead to strong radio emission. More generally, the professional community is finally beginning to realize the importance of the time domain, with major instruments like Swift, LSST, and SKA making the exploration of this last astronomical frontier one of their major objectives. The AAVSO will play an ever more critical role, providing consistent, reliable, and global optical coverage for the sources these instruments discover and study.

—Michael Rupen
Scientist, National Radio
Astronomy Observatory,
Socorro, NM

[AAVSO support] was especially critical, as many of the Southwestern U.S. observatories were clouded-out, and it was the AAVSO measurements that saved the day. For cataclysmic variable work on the Hubble Space Telescope, the AAVSO observations are fundamental to the project as HST needs confirmation that the objects are not in an outburst state within twenty-four hours of the start, and if this is not received, the observation is cancelled and it cannot be done later. With the vagaries of weather, multiple sites are a must, and this is where the AAVSO shines. I have been awed by the continued response of AAVSO observers to my requests.... [on AAVSO support for her Hubble Space telescope observing campaign on the cataclysmic variable SDSS133948 (<http://www.aavso.org/news/sdss133948.shtml>)]

—Dr. Paula Szkody
University of Washington,
Seattle

4. Word From the Astronomical Community

I have downloaded AAVSO data for a few [Cataclysmic Variable Stars], most of the times for use in public talks, or in teaching.... I would like to express my sincere acknowledgement of the resources that the AAVSO provides. The online database is extremely good, there is not much that could be improved.

—Boris Gaensicke
Dept. Physics, Univ. Warwick,
Coventry, England

I am pleased to say that my experience with the AAVSO [International Database] was a good one. The web-based system was straightforward to use and the download was fast. I used the AAVSO observations of Betelgeuse in my research concerning the nature of the star's variability. Although these data were a relatively small part of my investigation, being combined with my own spectroscopic data from the Elginfield Observatory here at the University of Western Ontario, it was still very valuable and helped fill out the scientific picture. The long time base was particularly useful.

—David F. Gray

I am a young astronomer from Sri Lanka.... Although [our institute] has the facility to do photometry, our site is very bad for such observation. In such a case, it is very important to have a data archive for variable star observations. As a less-privileged astronomer, I very much appreciate your service in the development of astronomy in my country.

—Janaka Adassuriya

*During this past year we have published two papers in which we used AAVSO data: Gromadzki, M.; Mikolajewska, J.; Whitelock, P. A.; Marang, F., 2007, "On the nature of the cool component of MWC 560", *Astronomy and Astrophysics*, 463, 703; and Gromadzki, M., Mikolajewska, J., Lachowicz, P., 2008, "Post-outburst variations in the optical light curve of RS Oph", in "RS Oph 2006 and the Recurrent Nova Phenomenon", eds. N. Evans, M. Bode, T. O'Brien, *Astron. Soc. of the Pacific Conf. Ser.*, in press. This data helped us very much. Thank you very much for your efforts.*

—Mariusz Gromadzki
N. Copernicus Astronomical
Center, Warsaw, Poland

...I was aiming to look at some data from SS Cyg to see if it would be appropriate for a laboratory exercise. I didn't have any trouble getting the data. I appreciate the service.
—Tom Maccarone

For my dissertation research I studied water masers around evolved stars, like Miras. Masers are the microwave equivalent of lasers, and amplify ambient background microwave emission through stimulated emission of radiation and very long path lengths (~1AU) through velocity coherent water vapor that is in an inverted energy state. By studying the motions of these point-like bright spots of microwave light, I measured the distance to the stars more accurately than was possible before. In order to gain insight into the physical environment around the stars at the time of my observation I used AAVSO observations. The light curves of these stars are important for understanding how much of the gas might be in an excited state and picking the best time to observe the stars (the more light from the star, the more molecules are typically in an inverted state and the brighter the masers are). The work of the AAVSO community in providing these observations added significantly to my ability to understand my target objects and ensure that my observations with the VLBA would be successful.

—Kevin Marvel
Executive Officer, American
Astronomical Society



5. Support for the AAVSO

The Argelander Society

Named for Friedrich Argelander, who is considered to be "the father of variable star astronomy," **The Argelander Society** offers membership benefits to those individuals who have given substantial financial support to the AAVSO over many years. Once a benefactor has donated a cumulative total of \$35,000.00 to the AAVSO, they are eligible for a lifetime membership in the organization, free registration to annual meetings, invitations to special events, special awards, and tokens of the association's appreciation.



Friedrich Wilhelm August Argelander
(1799–1875)

*Photograph courtesy of the Mary Lea Shane Archives
of the Lick Observatory, University of California-Santa Cruz*

The AAVSO gratefully acknowledges the benefactor members of

THE ARGELANDER SOCIETY

WILLIAM B. ALBRECHT

MARVIN E. BALDWIN

CHARLES E. CURRY

MARGARET DOLEMAN

CLINTON B. FORD

MARTHA L. HAZEN

ARNE AND LINDA HENDEN

E. DORRIT HOFFLEIT

THEODORE H. N. WALES

THOMAS R. WILLIAMS

2008 Benefactors (*January 1, 2008–December 31, 2008*)

Supernovae Society (*\$20,000 or more*)

Margaret Doleman (*in honor of Dorrit Hoffleit*)
Arne and Linda Henden

Novae Society (*\$10,000–19,999*)

John and Megan Menke

Directors' Circle (*\$5,000–9,999*)

Thomas R. Williams

Patrons (*\$2,500–4,999*)

Gary Walker



AAVSO Annual Meeting at Harvard College Observatory, 1917

Advocates (*\$1,000–2,499*)

James R. Bedient
John Centala
Gene A. Hanson, II
David A. Hurdis

Arlo U. Landolt
Ira Mogul
(*in memory of
Margaret Mogul*)

Mike Simonsen
David J. Sworin
Doug Welch

Sponsors (*\$500–999*)

Terrill Bartlett
Barry and Carol Beaman
Jaime Ruben Garcia

Pamela Gay
Albert V. Holm
Koji Mukai

Stephen C. Schiff
P. Clay Sherrod
Barbara L. Welther

Contributors (*\$250–499*)

Thomas A. Burrows
Gary Cole
C. V. Malcolm Fridlund
Roy H. Garstang
William Goff

Jerry D. Horne
Kevin B. Marvel
Ken Mogul
Richard J. Smith
Paula Szkody

Joseph F. Van Poucker
George Wallerstein
Lee Anne Willson
Robert F. Wing
Donna L. Young

Friends (\$100–249)

Michael Armstrong
 Stephen F. Barnhart
 Gary Billings
 Bernard Bois
 Charles A. Bordner, Jr.
 James M. Borgwald
 Michael Bozoian
 Thomas C. Bretl
 Charles Calia
 Dean Chandler
 David Eric Cowall
 Tim Crawford
 Charles Hall Daffin
 Robert Darby
 Jack Davis
 Richard D. Dietz
 George H. East, Jr.
 Patrick J. Garey
 John E. Gaustad
 George W. Gliba
 Mary Glennon

Grainger Observatory
 L. Michael Gundy
 Walter R. Hampton
 Robert Hauk
 Robert H. Hays, Jr.
 Christopher W. Hesseltine
 William M. Hill
 John P. Huchra
 Tim Hunter
 Katherine Hutton
 Ruth E. Imperi
 Christopher P. Jones
 Keith L. Jones
 Margarita Karovska
 John D. Koester
 Allister Ling
 Thomas Lloyd Evans
 Des Loughney
 Hugh C. Maddocks
 Christopher W. Mauche
 Kenneth W. McLaughlin

Bradford Mead
 Frank Melagrano
 Haldun I. Menali
 Gordon Myers
 Joseph Pasek
 William D. Pellerin
 Sei-ichi Sakuma
 Gordon Eric Sarty
 Bill Smith
 James C. Smith
 Donn R. Starkey
 Berton L. Stevens, Jr.
 Michael T. Stuka
 Gregory Thomas
 Charles H. Townes
 Elizabeth O. Waagen
 Bradley S. Walter
 Brian Warner
 Jeff Wilkerson
 Winston S. Wilkerson



The AAVSO's 50th Anniversary Meeting at Harvard College Observatory, 1961

Supporters (\$1–99, includes sustaining memberships)

A. Patrick Abbott	Thomas L. Gandet	David H. Levy
William R. Alexander	Peter M. Garnavich	William Liller
Kevin B. Alton	Larry M. Gorski	Edward J. Los
Lesa H. Andree	John W. Griesé, III	Thomas F. Lubbers
Peter Armstrong	Griffith Observatory	Maria Mitchell
Wayne Bailey	Bruce Grim	Association
Steven J. Beckwith	Edward F. Guinan	Laurence A. Marschall
Raymond Doyle Benge, Jr.	Timothy Hager	Andrew Mattingly
Ray Berg	David C. Harper	Matthew Mazurek
Edwin V. Bishop	Richard P. Harvan	Brian McCandless
Judith Braffman-Miller	Peter Hecht	James McCann
David Brooks	Carl Heinrich	Andrew R. McCrae
Robert Lee Brown	Richard E. Hill	Ron McDaniel
Carl Bruhn	Anna Hillier	Thomas McDonagh
Tom Bryant	David H. Hough	Albert Menzl
Spencer L. Buckner	Rodney H. Howe	Daniel Morgan
Paula Bushby	Andy Howell	Gary Morin
Robert R. Cadmus, Jr.	<i>(J. Andreas)</i>	Mario E. Motta
John P. Campbell	Richard Huziak	Charles H. Munoz
Richard J. Campbell	John E. Isles	Peter Nelson
Allan Chertok	Warren Jarvis	Michael A. Nicholas
Tamela Chitea	Gus Johnson	Thomas S. Norton
Wayne E. Clark	Mary Ann Kadooka	Warren Offutt
Don Cline	Peter J. Kandefer	Arto Oksanen
Walt Cooney	Ed Kaz	Adrian Ormsby
Louis B. Cox	Edwin Kellogg	Julian E. Parks
Thomas A. Cragg	<i>(in memory of</i>	Timothy G. Parson
Jeffrey B. Craig	<i>Herbert Gursky)</i>	William Penhallow
Richard J. Decoster, II	Glenn R. Kelly	John R. Percy
Vincent Dovydaitis	Pam Kilmartin	James G. Peters
David W. Dunham	Richard Kinne	Stephen H. Peters
Douglas T. Durig	Michael Kipfer	Hugh T. Pinkston
Anthony J. Dutton	Kenneth E. Kissell	Hugh T. Pinkston
Shawn W. Dvorak	Seiichiro Kiyota	Philip L. Plante
Jeffrey A. Edmonds	Michael Kohl	Tim Puckett
Gary P. Emerson	Michael Koppelman	Diane Pyper-Smith
Giancarlo Favero	Donald G. Korycansky	John C. Raymond
Mitchell Finer	Frank Krafka	Thomas Richards
Richard R. Fink	Kristine M. Larsen	Charles W. Robertson
James T. Foster	George F. Lenz	Jose Rocha

continued on next page

Supporters, cont.

Miguel Rodriguez Marco
 Nancy Grace Roman
 Stephen Rowlands
 Hugh Rumball-Petre
 Eric R. Rumbo
 Richard Sabo
 John Sainsbury
 Gerard Samolyk
 Todd Schell
 Frank Schorr
 Lawrence Shotter
 George A. Silvis
 Neil Alan Simmons

Horace A. Smith
 Lee Smojver
 Andrea Sponcil
 Richard H. Stanton
 William Stein
 Christopher Stephan
 Robert J. Stine
 David E. Stooksbury
 Mark Suhovecky
 Ann Tekatch
 (in honor of Doug
 Welch's 50th Birthday)
 Ray Tomlin

Scott Henry Tracy
 Charles F. Trefzger
 David Trowbridge
 Paul Valleli
 Erwin van Ballegoij
 Romano Vivaldi
 Wayne H. Warren, Jr.
 Amelia Wehlau
 David Whitehead
 Meghan Wilker
 William J. Wilson
 Gary Wood
 Paul Wright

Asampling from the AAVSO Archives. Counterclockwise from upper right: souvenir of the 4th Spring Meeting, May 1917; The Practical Observing of Variable Stars, 1918; General Instructions to Observers pamphlet; catalogue of the AAVSO C. Y. McAteer Library; blueprint and photographic charts; letters and postcard (1919–1921) from Charter Member, Prof. Anne S. Young of Mount Holyoke College.



Planned Giving

Charitable contributions to the American Association of Variable Star Observers can have benefits that last a lifetime—and beyond. A bequest or life-income gift that includes the Association will support variable star research and education for generations to come. Your legacy can be made in a variety of ways that can help you reach your philanthropic goals and provide tax benefits to help you reach your financial objectives. To include the AAVSO in your financial planning, you might consider one or more of these options:

- A Bequest through your Will
- Create a Charitable Remainder Trust
- Establish a Charitable Lead Trust
- Design a Gift Annuity
- Consider a Deferred Gift Annuity
- Use your Life Insurance
- Utilize your Retirement Account

To discuss these and the many other options available to you, please contact the AAVSO, toll free at 888-802-7827 (617-354-0484 outside the USA), or by email at donations@aavso.org.

The AAVSO is recognized by the Internal Revenue Service and the State of Massachusetts as a non-profit scientific and educational organization. Gifts of all denominations are welcomed, and may include cash, securities, and other gifts. Unrestricted contributions may be made in any amount, and are tax-deductible to the extent allowed by the law.



The AAVSO's 75th Anniversary Meeting at Harvard University, 1986

AAVSO Corporate Affiliate Program

Today, corporations are taking an increasingly active role in supporting non-profit organizations. The AAVSO's Corporate Affiliate program is an opportunity for companies and organizations to demonstrate their support for continuing astronomy and science research and education.

Our program is designed to enhance your corporate image and offers the chance for you to be a good corporate citizen by supporting a worthwhile non-profit organization. It has the added benefit of helping you sell more products or services, and to increase positive awareness in astronomy related markets and amongst customers, potential customers, and the professional and amateur astronomy communities.

Your participation in the Corporate Affiliate program will help the AAVSO accomplish its mission, and will clearly demonstrate that you support long-term efforts to improve astronomy and science education and research.

If you would like more information about becoming a Corporate Affiliate of the AAVSO, please contact the Development Director at aavso@aavso.org

	Contributing Affiliate \$2,500–4,999 Annually	Supporting Affiliate \$5,000–9,999 Annually	Sustaining Affiliate \$10,000–24,999 Annually	Partner Affiliate \$25,000 and up Annually
Named service supporting sponsor				×
Three additional high-traffic page listings			×	×
Text and link listing in the footer of AAVSO email			×	×
Free registration to meetings		ONE PERSON	TWO PERSONS	THREE PERSONS
Listing in the AAVSO <i>Annual Report</i>		×	×	×
Listing in the AAVSO <i>Newsletter</i>		×	×	×
Subscription to the <i>AAVSO Journal</i>	×	×	×	×
Static home page and support page listing, logo, and link	×	×	×	×

details on next page

AAVSO Corporate Affiliate Program Description

Static Home Page and Support Page Listing

Your logo, linked to your home page on our Home and Support pages. Our website is visited by nearly 500,000 visitors annually.

Subscription to the Journal of the AAVSO

The *Journal of the AAVSO* is the leading refereed scientific journal on variable star-related topics.

Listing in the AAVSO Newsletter

The *AAVSO Newsletter* is in electronic format so we can offer your logo linked to your home page from our newsletter. It is issued quarterly, reaching approximately 1,500 subscribers.

Free registration at AAVSO Fall and Spring meetings

Spring 2009—Big Bear, Calif.

Spring 2010—Argentina

Fall 2009—Cambridge, Mass.

Fall 2010—Cambridge, Mass.

Spring 2011—Boston, with the American Astronomical Society
(celebrating the AAVSO's 100th anniversary)

Text message and link in the footer of our email deliveries

600–700 *My News Flash* emails are issued daily. These can be several different messages queued up and randomly generated to keep them fresh.

AAVSO Discussion, Photometry, High Energy Network, and Solar Ionic Disturbances, text messages are manually changed monthly or quarterly.

In total, we generate approximately 330,000 emails annually to our list subscribers.

Three additional high traffic pages

Again, your logo, linked to your home page on three more AAVSO web pages.

Named Service Supporting Sponsorship

Our busiest pages are service pages we provide:

- **Light Curve Generator**—generates custom light curves online
- **Quick Look Data**—most recent data submissions
- **Web Obs**—online tool for submitting observations
- **Variable Star Plotter (VSP)**—our automated chart generator

These are limited naming opportunities, such as “The ABC Company Light Curve Generator.”

These will be grandfathered listings. First come, first served basis, continued indefinitely as long as the corporate sponsor participates at this level.

For information please contact us at aavso@aavso.org or call 617-354-0484.