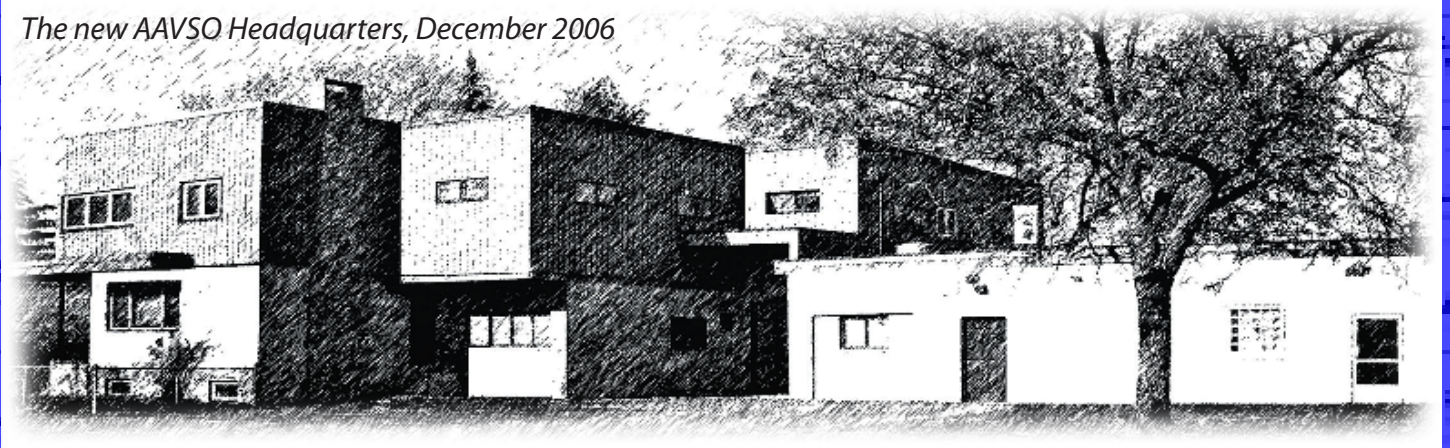
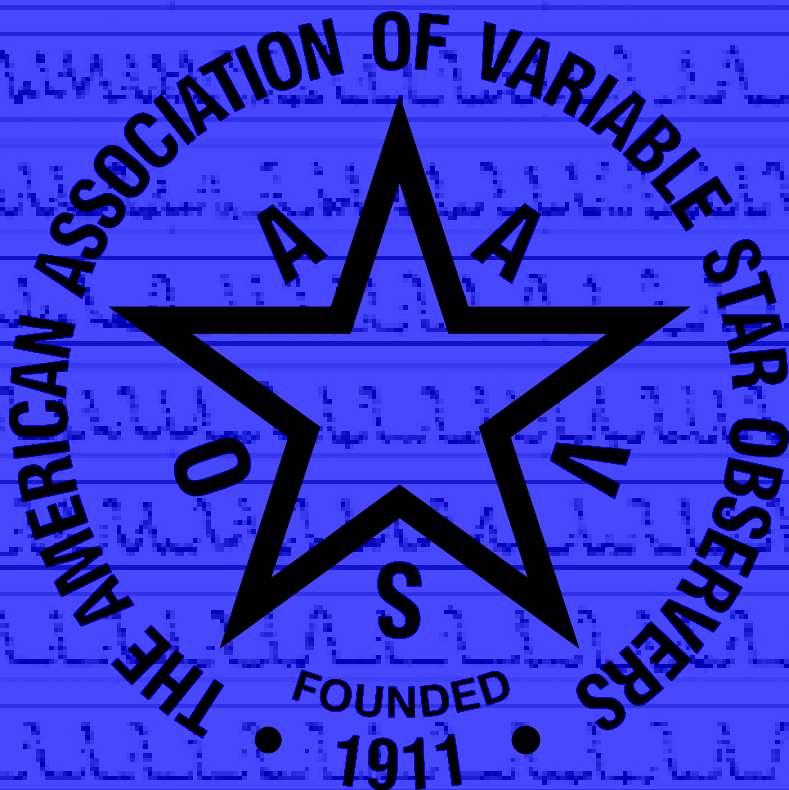


AAVSO

The new AAVSO Headquarters, December 2006



The American Association of Variable Star Observers



Annual Report
2006–2007

The American Association of Variable Star Observers
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Cambridge, MA 02138
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Annual Report Website: <http://www.aavso.org/annual>

On the cover...

The American Association of Variable Star Observers purchased the former headquarters of Sky & Telescope magazine on December 27, 2006. This property, at 49 Bay State Road in Cambridge, Massachusetts, is about one hundred feet from the AAVSO's former Birch Street headquarters. The acquisition doubles the AAVSO's available square footage, providing space for the association to grow. The American Association of Variable Star Observers turns 100 years old in 2011, and this new building forms the foundation of its growth plans for its second century of operation.

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, 2006–September 30, 2007



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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 annual meeting, 2007

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 and mentoring between amateurs and professionals that promote both scientific research and education on variable sources
- to promote international collaboration.

About the AAVSO

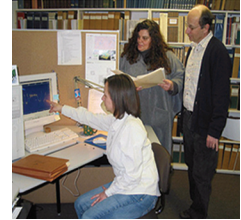
The American Association of Variable Star Observers (AAVSO) is a non-profit worldwide scientific and educational organization of amateur and professional astronomers who are interested in stars that change in brightness—variable stars.

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 in 45 countries, and an archive of over 15 million variable star observations, it is the world's largest association of variable star observers.

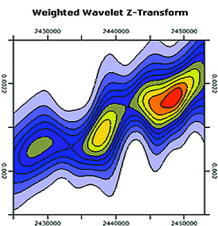
Membership in the AAVSO is open to anyone—professionals, amateurs, and educators alike—interested in variable stars and in contributing to the support of valuable research. Professional astronomers have neither the time nor the telescopes needed to gather data on the brightness changes of thousands of 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.

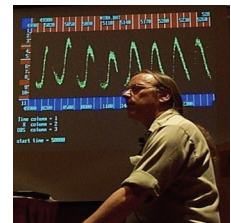


Observers send their data to Headquarters electronically or via postal mail where they are checked, processed, and added to the AAVSO International Database. Once the data have been validated at headquarters, they become available through the AAVSO website. Special requests can also be made to AAVSO 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 global community with valuable observing information. The type of published information is diverse, ranging from Dr. Dorrit Hoffleit's book entitled *Women in the History of Variable Star Astronomy*, to the annual *AAVSO Bulletin: Predicted Dates of Maxima and Minima of Long Period Variables*, to the bi-annual publication of *The Journal of the AAVSO*—a collection of scientific papers that focuses on variable stars.

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

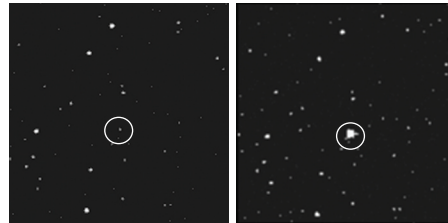


Additionally, the AAVSO is actively involved in education and public outreach to those interested in variable star astronomy. *Hands-On Astrophysics* (HOA) is the AAVSO's flagship educational project developed with the discovery process in mind, for both students and teachers. Using HOA, students can learn about variable stars, how to make their own observations, and how the science of variable star astronomy is done. In recent years, the AAVSO has broadened its outreach efforts, and actively participates in teacher training workshops (like the NASA High-Energy Astrophysics Workshop series), public outreach events, and other activities designed to increase public awareness of the changing universe in which we live.

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 30,000 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 15 million variable star brightness estimates going back over ninety 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

The AAVSO receives observations from members of other variable star observing associations around the world for inclusion in the AAVSO International Database and dissemination to the astronomical community worldwide. These observations are sent regularly by the group leader/representative or directly by the group members themselves. The AAVSO values highly these fruitful, mutually beneficial collaborations, and truly appreciates the ongoing efforts of everyone involved in working together for the benefit of the astronomical community.

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 15 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:

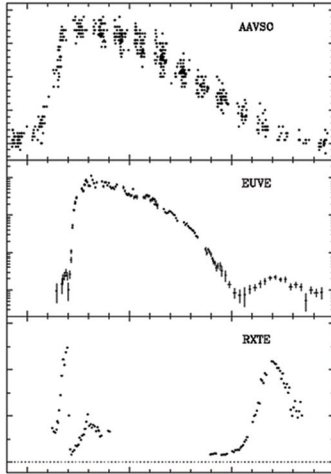
- Hubble Space Telescope
- Chandra X-Ray Observatory
- Spitzer Space Telescope
- XMM-Newton X-Ray Observatory
- Extreme Ultraviolet Explorer
- High Energy Astronomical Observatories 1 and 2
- International Ultraviolet Explorer
- Roentgen Satellite
- European X-Ray Observatory Satellite
- High Precision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

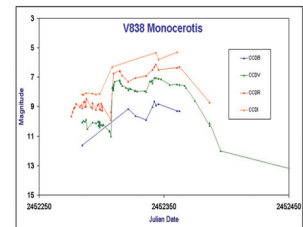


With the outburst detected by AAVSO Observers, simultaneous AAVSO visual, EUVE, and RXTE observations of SS Cygni were triggered, providing astronomers with important information about the behavior of dwarf novae (from Wheatley et al. 2003, MNRAS, 345, 49)

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 public outreach (EPO) 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

One element of the AAVSO's education initiative is *Hands-On Astrophysics* (HOA), which uses variable star observing and analysis to develop and integrate students' science, math, and computing skills. Its success is based on the fun and motivation of doing real science with real data. HOA is presently being converted into a web-based program, and should be available again in early 2008.

A Speakers Bureau has been created, enabling teachers, astronomy clubs, star party organizers, and other interested parties to schedule variable star programs for their classrooms and meetings.

User-friendly variable star presentations in several formats can be downloaded from the education web pages for use in spreading the word about variable stars.

The committee is planning workshops at AAVSO meetings to support interest and activity in EPO.

You are invited to contribute appropriate papers on EPO to AAVSO meetings and to the *Journal of the AAVSO*.

There is also an AAVSO-EPO discussion group online, where interested parties can contribute thoughts on, and experiences with, Education and Public Outreach.



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

We are partnering with other scientific and educational organizations to use variable star activities to support their work, and to enlist their help in promoting our work.

The Education and Public 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, University of Arizona, Institute for Astronomy;
Dr. Christine Anne Royce, Shippensburg University, Department of Teacher Education, Shippensburg, Pennsylvania;
Michael A. Simonsen, Imlay City, Michigan;
Donn R. Starkey, Auburn, Indiana;
David B. Williams, Whitestown, Indiana;
Donna L. Young, Tufts University, Wright Center for Science Education, Medford, Massachusetts.



2. The Year in Review

Minutes of the 96th Spring Meeting of the AAVSO, Held June 26–July 3, 2007, Calgary, Alberta, Canada

David B. Williams (for Secretary Gary Walker)

The 96th Spring Meeting of the AAVSO was held in Calgary, Alberta, Canada, June 26–July 3, 2007, as part of "Astronomy Roundup 2007" with the Royal Astronomical Society of Canada and the Association of Lunar and Planetary Observers. Scientific paper sessions were held on Friday, June 29, and Saturday, June 30. Papers on the accompanying list were presented.

The membership meeting was called to order by President David Williams at 2:37 p.m. MDT on Sunday, July 1. Each of the twenty-four attendees was asked to introduce him- or herself. Members were present from the United States, Canada, Belgium, and Australia.

Minutes of the previous meeting were not available in the absence of the secretary. Treasurer David A. Hurdis reported income of \$717,710 and expenses of \$672,092 for the period October 1, 2006, to June 22, 2007. These figures do not include the purchase of the new headquarters building at 49 Bay State Road and sale of the 25 Birch Street property.

Committee reports were presented for Education and Public Outreach (John Percy) and Eclipsing Binaries and RR Lyrae Stars (Gerry Samolyk).

Director Arne Henden reported that seventy new members had enrolled since October 1, bringing total membership to 1,257. He also reported the deaths of members or friends of the AAVSO: Frank Bateson, Jacques Fontalba, Martha Hazen, Dorrit Hoffleit, Raymond (Win) Jones, Bohdan Paczyński, and Alan Shapley. Members stood for a moment of silence in memory of these significant figures in variable star astronomy.

Future meetings are scheduled for November 1–3, 2007, in Cambridge, Massachusetts; April 2008 with the British Astronomical Association and its Variable Star Section in Cambridge, England; and October 2008 on Nantucket during the 100th anniversary of Maria Mitchell Observatory. AAVSO has been invited to hold its 2009 spring meeting in May in conjunction with the Society for Astronomical Science conference in Big Bear, California. The 2011 spring meeting will be held in Boston with the American Astronomical Society to mark the AAVSO's 100th anniversary.

In his director's report, Arne Henden noted the passing of an era: the move from the headquarters facility at 25 Birch Street to the former *Sky & Telescope* building just around the corner at 49 Bay State Road. Purchase of the new building and sale of the previous headquarters has resulted in a net decrease in the endowment fund, and Secretary Gary Walker has initiated a fund-raising program to help offset this reduction. Many members have pledged contributions at the annual meeting or subsequently.

The staff has reprocessed 36,000 photoelectric observations from the AAVSO Photoelectric Photometry program and created a new, online reporting form for Photoelectric Photometry data. Over the summer the staff is also scanning 75,000 index cards containing photoelectric data collected by the late Olin J. Eggen at Cerro Tololo. The scans are being posted online, and volunteers are needed to digitize these valuable data.

Variable star highlights of the preceding months include several unusually bright maxima of Mira stars; six new novae; an observing campaign on an eclipsing Cepheid, the first discovered in the Milky Way galaxy; successful observations of transiting exoplanets; the outburst of GW Lib and unusual activity by P Cyg; and an eclipse of V838 Mon.

The AAVSO is progressing in establishing robotic telescope services to directly support AAVSO research and as a member benefit. AAVSO currently has one-third observing time with the Sonoita Observatory 35-cm telescope in New Mexico. Members can now schedule CCD observations with this instrument by request to the director. A 24-inch telescope at Mt. John Observatory in New Zealand is being improved and should be online by the end of the year. A 24-inch telescope at Lowell Observatory is expected online in 2008.

A Web interface for requesting robotic telescope time has been delayed by development of the Variable Star Plotter program. The beta release of VSP is now available on the charts link.

Other highlights included the production of Turkish and Japanese editions of the visual observing manual; data validation back on track with new automatic software that performs a preliminary check of reported observations; work on the AAVSO centenary history by Thomas R. Williams and Michael Saladyga; and implementation of an e-mail ticketing system to track electronic correspondence and ensure that each message receives a timely response.

The meeting was adjourned at 3:56 p.m. MDT.

At the joint awards banquet that evening, the AAVSO Director's Award was presented to Vance Petriew of Regina, Saskatchewan, Canada (see p. 16). Observer award certificates were presented to observers present who had surpassed various milestone totals in visual, PEP, and CCD observations (see p. 15).

Papers presented at the Scientific Paper Session on Friday, June 29, 2007

Jayme Matthews	"One Little Telescope, So Many Stars"
David Turner	"Research Breakthrough From Pro-Am Collaborations"
Daniel Majaess	"Trumpeting the Success of the Abbey Ridge Observatory: Stellar Discoveries From Nova Scotia"
Jerry Horne	"An Examination of EV Lyrae"
Gary Billings	"Period Change Behavior of the Algol Type Eclipsing Binary LS Persei"

Papers presented at the Scientific Paper Session on Saturday, June 30, 2007

John R. Percy Cristina O. Nasui	"Long-Term Photometric Variability of 13 Bright Pulsating Red Giants"
Robert J. Dukes, Jr. Laney Mills Melissa Sims	"Slowly Pulsating B Stars: A Challenge for Photometrists"
Gorden E. Sarty Richard Huziak Laszlo Kiss Helen Johnston Michael Ashley Andre Phillips Bogumil Pilecki Paul Roche Kinwah Wu	"High Mass X-Ray Binaries for Small Telescopes"
Michael Koppelman Richard Huziak Walter Cooney Vance Petriew	"A Multicolor Photometric and Fourier Study of New Field RR Lyrae Variables"
Tim Crawford David Boyd Carlo Gualdoni Tomas Gomez Walter MacDonald II Arto Oksanen	"Detection of the First Observed Outburst of DW Cancri"
Eugene F. Milone Andrew T. Young	"Infrared Passbands for Precise Photometry of Variable Stars by Amateur and Professional Astronomers"
Richard Huziak	"Suspected Variables in AAVSO Star Fields"
Vance Petriew	"The AAVSO Standard Star Database (VSD) and the Variable Star Plotter (VSP)"
David Lane	"Automated Variable Star Observing and Photometric Processing At the Abbey Ridge Observatory"

New Members Accepted at the Spring Meeting, June 28, 2007

Bailey, Daniel, IL	Hoot, John E., CA
Baker, Ron, OH	Janky, Denis G., WA
Banfi, Massimo, Italy	Jarvis, Warren, FL
Bokowy, Gerald, IL	Johnson, August, AZ
Bosch, Jean-Gabriel, Switzerland	S Johnston, A. Sidney, MA
Boyce, Grady P., TX	Kahler, Eric, NJ
Briggs, John W., MA	Lamb, Gordon, KY
Brooks, David, MO	McArthur, Robert, GA
Collins, Thomas, DE	Powel, Paul, MD
Davis, Paul, FL	Rivera, Marzio, Italy
De Ponthiere, Pierre, Belgium	Roy, Paul A., MA
Dowhos, David J., Canada	Sabo, Richard Ronald, MT
Freeman, Paul Douglas, England	Schorr, Frank, GA
Furner, John J., VA	Smith, Thomas C., NM
Gragg, Barry, NY	Sonnek, David, Sweden
Grzybowski, Thomas Anthony, NM	Stanaland, Thomas, CA
Harrison, Robert, VA	Stimson, Joel, WA
Hedgepeth, Clifford A., VA	Tomlin, Ray E., IL
Hodge, Tracy, KY	S Warner, Brian D., CO
Holland, Karen, England	Webster, Charlie, PA

S = sustaining membership

Deceased Members, Observers, and Colleagues

Bateson, Frank M., New Zealand	Jones, Raymond W., South Africa
Fontalba, Jacques, France	Paczyński, Bohdan, NJ
Hazen, Martha L., MA	Shapley, Alan, CO
Hoffleit, E. Dorrit, CT	

AAVSO Observer Awards

Presented at the 96th Spring Meeting, Calgary, Alberta, Canada, July 1, 2007

*Over 150,000 Visual Observations**

Gerald P. Dyck	USA	1978–2006	152,754
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*Over 50,000 Visual Observations**

Peter Williams	Australia	1989–2006	53,563
Michael A. Simonsen	USA	1999–2006	52,028

*Over 25,000 Visual Observations**

Csaba Hadhazi	Hungary	1990–2006	25,642
David B. Williams	USA	1962–2006	25,502

*Over 10,000 Visual Observations**

Alan Plummer	Australia	2001–2006	14,373
Jose Rodrigues Ribeiro	Portugal	2000–2006	14,130
Ana Paula da Silva Correia	Portugal	2000–2006	14,099
Pavel A. Dubovsky	Slovakia	1999–2006	11,214
Robert J. Stine	USA	1964–2006	10,553
Michael Linnolt	USA	2000–2006	10,166

*Over 100,000 CCD/PEP Observations**

Christopher T. Middleton	South Africa	2004–2006	140,929	CCD
Vance Petriew	Canada	2001–2006	119,147	CCD
Robert A. James	USA	1953–2006	117,415	CCD
Tonny Vanmunster	Belgium	1976–2006	107,399	CCD

*Over 50,000 CCD/PEP Observations**

Richard J. Huziak	Canada	1980–2006	60,041	CCD
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*Over 25,000 CCD/PEP Observations**

Timothy Crawford	USA	2001–2006	41,095	CCD
William Goff	USA	1981–2006	40,380	CCD
David Boyd	England	2003–2006	34,466	CCD
Thomas J. Richards	Australia	1992–2006	29,882	CCD
Bart Staels	Belgium	1994–2006	28,598	CCD

continued on next page

2. The Year in Review

AAVSO Observer Awards, cont.

*Over 10,000 CCD/PEP Observations**

Thomas Krajci	USA	2002–2006	23,519	CCD
Geir Klingenberg	Norway	2003–2006	16,542	CCD
Giancarlo Gotta	Italy	2003–2006	16,264	CCD
Andy Howell	USA	1964–2006	14,297	CCD
Keith A. Graham	USA	1981–2006	13,135	CCD
Walter MacDonald, II	Canada	1982–2006	12,786	CCD
Gary Walker	USA	1994–2006	11,781	CCD
Pierre de Ponthiere	Belgium	2003–2006	11,059	CCD
Steve Brady	USA	2004–2006	10,776	CCD

*Over 2,500 PEP Observations**

Auckland Photometry

Observing Group

(Stan Walker)

New Zealand 2006–2006 4,380 PEP

* Years include total AAVSO observing interval (not only PEP/CCD observing).
Total includes only visual or PEP/CCD observations, depending on award.

AAVSO Director's Award

The 2007 AAVSO Director's Award was presented at the 96th Spring Meeting, Calgary, Alberta, Canada, to Vance Petriew, Regina, Saskatchewan, Canada, "for his leadership of the Comparison Star Database Team, devoting numerous hours in the documentation of every comparison star currently used by the AAVSO. Vance also utilized his database



Vance Petriew (on right) receives the AAVSO Director's Award from Arne Henden at the Spring Meeting

skills in the creation of the Variable Standards Database, a masterful relational database of the comparison stars that can be updated in perpetuity. All the while, Vance has been a major observational contributor to the AAVSO International Database, showing his enthusiasm for and pursuit of all aspects of variable star astronomy."

Minutes of the 96th Annual Meeting of the AAVSO, Held November 1–3, 2007, Cambridge, Massachusetts

Gary Walker, Secretary

The 96th Annual Meeting of the AAVSO was held in Cambridge, Massachusetts, November 1–3, 2007, at AAVSO Headquarters.

A workshop titled “Variable Stars 101” was held on Friday morning, November 2, at headquarters. Presentations were: Eclipsing Binary Stars by Dirk Terrell, Southwest Research Institute; Pulsating Stars by Doug Welch, McMaster University; and Cataclysmic Variables by Paula Szkody, University of Washington. The workshop was followed by a cookout on the grounds. The First Scientific Paper Session was held in the afternoon, with papers on the accompanying list presented. On Friday evening, *Sky & Telescope* Editor (and former “resident” of 49 Bay State Road) Dennis di Cicco presented a fascinating and entertaining look at the history of the newest AAVSO Headquarters building. Dennis was followed by Michael Saladyga, of the AAVSO staff, who presented the stories behind the AAVSO's headquarters of the past.

The membership meeting was called to order at 9:00 a.m., Saturday, November 3, by President David B. Williams. The imminent arrival of hurricane “Noel” forced us to take the group picture immediately after the meeting was called to order. Everyone convened outside the front door of headquarters, and AAVSO staff member Travis Searle took the group picture from an upstairs window.

Secretary Gary Walker read the minutes of the 2007 Spring Meeting held in Calgary, Alberta, Canada.

AAVSO Treasurer David A. Hurdis presented the Treasurer’s Report. He reported a total income of \$1,103,950 with total expenses of \$979,226. He also reported that the Endowment fund had increased to \$17.4M for the year, after paying for the new Headquarters and realizing the sale of the old Headquarters at 25 Birch Street. This compares favorably with the \$16.8M at the beginning of the year.

The following Committee Reports were read: CCD prepared and read by Gary Walker; Photoelectric Photometry prepared by Jim Fox and read by Bob Crumrine, J and H-Band IR Photometry prepared by Doug West and read by Bob Crumrine; Nova Search prepared by Ken Beckmann and read by Kate Hutton; Eclipsing Binary and RR Lyrae prepared and read by Marv Baldwin, who announced his retirement; GRB/HEN Network prepared and read by Matthew Templeton; Education and Outreach Committee prepared and read by Pamela Gay, who is succeeding John Percy, who is retiring.

Arne Henden asked for any remaining ballots from the floor on the Revised by-laws. None were forwarded. The Revised By-Laws passed by a vote of 212 to 3.

Director Arne Henden announced the results of the election for council. Pamela Gay, Barry Beaman, and Michael Simonsen were re-elected to Council, and Christopher Watson was elected to Council. Paula Szkody was elected President, Jaime Garcia 1st Vice President, and Michael Simonsen 2nd Vice President. David Hurdis was re-elected Treasurer and Gary Walker was re-elected Secretary. Mike's vacated council position was filled by James Bedient.

Director Arne Henden gave his Annual Director's Report. He reported that we currently have 1,277 members from 47 countries. He reported deceased members and friends Ralph Geschwind, Manuel Fojo, Jane Halbach, and Peter Wlasuk. All stood for a moment of silence. Arne reported that the 2008 Spring meeting will be held in England on April 10–13 with the British Astronomical Association. The 2008 Annual meeting will be held in Nantucket, Massachusetts, October 17–18. This meeting will be preceded by a Special Meeting on Peculiar Star MWC349 (V1478 Cyg) on October 13–15, with the 15th being a combined meeting for presentations on the Optical Behavior of this star. Solar observer awards were announced for five SID observers; due to technical issues, sunspot awards were announced after the Annual Meeting (see p. 22). Additional details of the Director's Report are posted on the web site and may be found elsewhere in this Annual Report.

The meeting was adjourned approximately at noon.

After a catered buffet lunch at Headquarters, the Second Scientific Paper Session was held in the afternoon. Papers on the accompanying list were presented, and the session was adjourned at approximately 5 p.m.

The HQ Conference Center was converted to a Banquet Hall for the banquet, awards ceremony, and after-banquet speaker. After a buffet dinner highlighted by new-headquarters-celebratory cakes made by professional pastry chef (and wife of AAVSO's Aaron Price) Erma Cuenca Price, the evening program began. Gerry Samolyk was presented with the 39th AAVSO Merit Award (see p. 20). John R. Percy was presented with the 6th William Tyler Olcott Distinguished Service Award (see p. 21). A Special Award of Appreciation was given to Leonard B. Abbey, Jr. (see p. 21). An AAVSO Supernova Award was announced for the Rev. Robert O. Evans (see p. 21). Following the awards presentations, Justin Raddick of Johns Hopkins University spoke about "how the Internet is transforming science from feudalism to democracy". At the end of the evening and a very memorable meeting, President Williams relinquished his office, handing the gavel to 1st Vice President Jaime Garcia, who was standing in for incoming President Paula Szkody, who had had to return early to the West Coast.

Papers presented at the Scientific Paper Session on Friday, November 2, 2007

Barbara L. Welther	"Maria Mitchell: Portrayed in a New Biography"
Gary Walker	"Extending Maria's Legacy"
Pamela Gay M. Kozubal D. E. R. Bemrose-Fetter	"AH Leo: 2004–2007"
Sumin Tang Silas Laycock Jonathan Grindlay	"Search for Dwarf Novae in DASCH Scans Near M44"
Ronald E. Zissell	"The Orbit of Venus—A Lab Exercise"
Gerald P. Dyck	"Have Scope—Will Travel"
Donald F. Collins	"High Speed Photometry of V455 Andromedae With a Small Telescope (1), (2)"

Papers and posters presented at the Scientific Paper Session on Saturday, November 3, 2007

Karen Meech	"The Challenge of Finding the Comet for the Deep Impact Extended Mission"
George H. Keel Keith A. Graham Donald F. Collins	"Time Series Observations of IP Pegasi Using an Inexpensive Ambient Temperature CCD Camera"
David Sliski	"On the Classification of V3798 Sgr"
Kate Hutton Arne Henden Michael Koppelman	" <i>BVR</i> Photometry of CX Cephei (WR 151)"
Matthew Beaky	"Variable Star Spectroscopy: Tools, Techniques, and Recent Results"
Edward J. Los	"The New DASCH Web Page" (<i>poster</i>)
John R. Percy Elena Favaro Jou Glasheed Bernadette Ho David G. Turner	"Period Changes in Pulsating Red Supergiants: A Science and Education Project"
Mary Ann Kadooka	"Light and Optics Demonstrations for Astronomy"
Donna L. Young	" <i>Hands-On Astrophysics</i> Science Olympiad"
Catherine Garland Mary Ann Kadooka Donn Starkey Michael Nassir	"HI STAR: Building Bridges Between AAVSO Observers and High School Students"

New Members Accepted at the Annual Meeting, November 1, 2007

Aguirre, Salvador, Mexico
Allyn, Michael, ID
Artale, Christopher, CA
Atkinson, Hubert, TX
Biparva, Ebrahim Amini, Italy
Bitters, Warren, CA
Branchett, David, FL
Castle, James, Spain
Collins, Patrick David, Spain
Davis, Victor Edward, AL
Dodge, Darrell, CO
Glogowski, Walter, IL
Graves, Kelly, Canada
Hencheck, Michael, WI
Holland, Scott, Spain

Keep, David John, England
Kirshner, Brian, CA
Lioris, Panagiotis, Greece
Menzies, Kenneth Thomas, MA
O'Driscoll, David, Australia
Orlando, Steve, Spain
Pinizzotto, Russell, MA
Potter, Michael, MD
Ritzel, John, NY
Sacco, Sandoro, Spain
Smeggil, John, CT
S Smojver, Lee, WA
Teyssier, François, France
Tulloch, Gord, Canada
Uyematsu, Roy Shiro, FL

S = sustaining membership

Deceased Members, Observers, and Colleagues

Fojo, Manuel, CA
Geschwind, Ralph, OH

Halbach, Jane, CO
Wlasuk, Peter, FL

AAVSO Merit Award Recipient (presented at the 96th Annual Meeting in Cambridge, MA, November 3, 2007)



Gerard Samolyk was presented the 39th AAVSO Merit Award "in recognition of his over 32 years of devoted service to the AAVSO as variable star observer, particularly of eclipsing binaries and RR Lyrae stars, contributing over 150,000 observations; Council member for four years; member of the Eclipsing Binary and RR Lyrae Committees for nearly 30 years and developer of observing techniques, data collection methods, and analysis processes for these stars; preparer or co-preparer of thirteen AAVSO publications and 30 years' of ephemerides on these stars; and his continual encouragement to other variable star observers."



AAVSO William Tyler Olcott Distinguished Service Award Recipient (presented at the 96th Annual Meeting in Cambridge, MA, November 3, 2007)

John R. Percy of Toronto, Ontario, Canada, was presented the William Tyler Olcott Distinguished Service Award for "his promotion of variable stars and astronomy education through his ongoing research, dedicated student and peer mentoring, consistent demonstration of and advocacy for best practices in teaching, leadership within the AAVSO and the astronomy and science education communities, and his commitment to public education."



John R. Percy receives the William Tyler Olcott Distinguished Service Award from Director Arne Henden at the AAVSO's Annual Meeting

Special Recognition Award Recipient (presented at the 96th Annual Meeting in Cambridge, MA, November 3, 2007)

A Special Award of Appreciation was given to Leonard B. Abbey, Jr., "in appreciation of more than 50 years of service to the AAVSO, not only through his contribution of variable star observations, but also through his devotion of numerous hours as a volunteer and programmer to create and maintain important software packages that have been used by hundreds of observers and researchers worldwide."

AAVSO Supernova Award Recipient (announced at the 96th Annual Meeting in Cambridge, MA, November 3, 2007)

Robert O. Evans, for his visual discovery of SN 2007it in NGC 5530.

AAVSO Solar Observer Awards (presented at the 96th Annual Meeting in Cambridge, MA, November 3, 2007)

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

Franky Dubois

E. C. Richardson, England

Piotr Urbanski

A. Gonzala Vargas

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

Len A. Anderson, Australia

William Michael Hill, Massachusetts

Jim Mandaville, Arizona

Domenic Toldo, South Africa

Jerome L. Winkler, Texas

Annual Report of the Director for Fiscal Year 2006–2007

Arne A. Henden, Director

The Passing of an Era

The biggest single event of this past year was the relocation of the AAVSO Headquarters. We had been in our first purchased “home” at 25 Birch Street in Cambridge, Massachusetts, for two decades. That building served us well over the years, providing the extra room we needed at the time to handle the increased staff during the 1990s, with the archival data and data validation projects, and with the *Hands-On Astrophysics* development project, as well as providing space for the ever-increasing AAVSO archives.

However, by 2005 it became apparent that we were running out of room, and that the headquarters building was in need of renovation. We investigated the cost of repairing the building, along with zoning and code requirements, and decided that it was a huge expense to repair a building that was only marginally large enough to handle the existing staff and records, much less any future growth.

We searched in the immediate Boston area, as well as checking costs of building and relocation to other states. Most places were too expensive, not located near mass transit, in far worse shape than the existing headquarters, or would be a major disruption during a long and extensive move. We desired to keep the existing staff if at all possible, as it takes a long time to learn how the AAVSO works and to be effective. In the end, this meant finding someplace in the vicinity of the existing headquarters.

At the same time, we heard from *Sky & Telescope* magazine (whose offices were right next to the old AAVSO headquarters) that they were planning to relocate, and would be placing their three buildings on the market during the spring of 2006. They attempted to sell the buildings as a single parcel, hoping to find a developer who would be interested. However, it became apparent that the two buildings closest to our headquarters would

be sold separately from their main building at 49 Bay State Road. We then made an offer on the main building, which was accepted in October, 2006. We closed on the building on December 27, 2006; a bright and sunny winter day—perhaps a good omen!



The new AAVSO Headquarters



Sky & Telescope moved about a mile away, on the other side of Danehy Park. They were overcrowded in their buildings, and it took a great deal of effort to get moved by October. When we took over the site, there was considerable trash, as well as damaged walls and additional repairs that had to be made. As usual when moving into a new building, we also needed to paint, add partitions, and in general make the space useful for our needs. For the entire month of January, we worked on cleaning things up, and had several work parties on weekends to get the bulk of the remodeling done. Volunteers such as Keith, Doug, and Sylvia Danskin, Gerry Dyck, Gary Walker, Mike Mattei, and Justin Przyby, joined forces with staff “volunteers” Michael Saladyga, Gamze and Haldun Menali, Elizabeth Waagen, Aaron Price, Matthew Templeton, Sara Beck, Kate Davis, Rebecca Turner, Travis Searle, and the Henders. It is amazing how much can be done with a large work party! Everyone rolled up their sleeves and took on any assigned task. Without these folks, we never would have been ready for the move.

At the same time, throughout the work-week the HQ staff were packing the old headquarters building. There were literally tons of old observations, archives of correspondence, observing logbooks, previous charts, etc. that had to get packed. We went through and selected what furniture was reasonable to move and what should be sold, given away, or trashed. This process took about a month, during which time HQ operations had to continue as usual—the public was (hopefully) unaware of the turmoil!

Finally, on February 2, 2007, the move took place. Three moving vans and a crew of a dozen strapping men moved everything from the old HQ to the new HQ. They earned their fee—we estimated about eight tons of furniture (desks, bookcases, many file cabinets) and twenty-four tons of paper, much of it taken out of the basement at 25 Birch and placed on the second floor of 49 Bay State. Unpacking started immediately as we had 600 flip-lid boxes that had to be returned to the movers within a week. We spent the next month finishing the unpacking, rebuilding bookcases, cleaning up the old HQ in preparation for sale, and at the same time, keeping the AAVSO working.

We sold the 25 Birch Street building on Thursday, March 29, 2007. President David Williams signed all of the necessary paperwork and we handed over the keys. Just this past week, we see that the old HQ has been rented out to an architectural firm, so it will remain a useful building for some time to come.

Internet Presence and the AAVSO Website

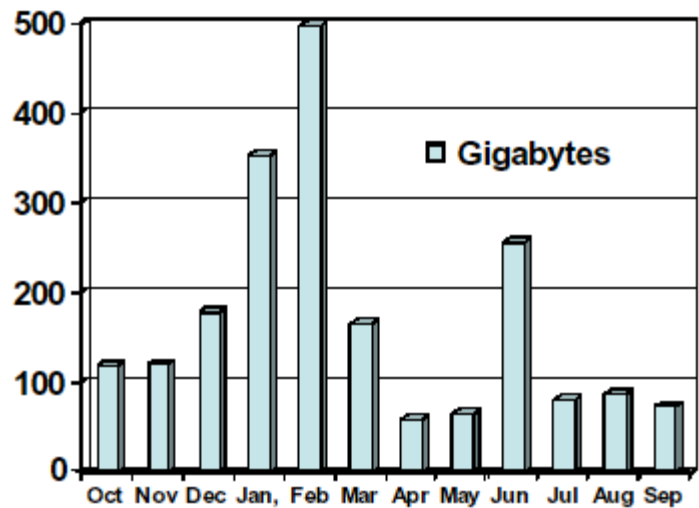
The most visible aspect of the AAVSO is our website. We work diligently to ensure that it is useful to our members and observers, as well as to outside researchers and anyone who happens across it. There is an enormous amount of information on the site, and everyone has their own idea as to how it should be presented. We continue to add and refine towards a better future. Kate Davis is the Webmaster, and has spent a large fraction of the year adding features.

The Blue and Gold section, where members and observers can access their records and submit observations, has had many changes. We've automated the membership renewal process, making it available on-line through PayPal/Verisign. This automatically updates your membership type when a renewal takes place. You can update MyNewsFlash profiles online.

An education/public outreach section was added. PayPal is now also used for online shopping and donations. An RSS feed was made available for rapid updates of page changes. With Matt and Sara's help, Kate implemented an online raw photoelectric photometry (PEP) submission form—software at HQ will process such data and place them automatically into the database. Webobs now gives you the ability to download all of your observations, or just to count them.

Kate Davis created many internal forms too—such as those that staff uses for preparation of Special and Alert Notices. Hidden behind the scenes are the many hours of effort to maintain the home page, reformat feature articles, and freshen links—all performed seamlessly by Kate.

We averaged about 200 gigabytes per month of transferred data this past year, with the largest transfers occurring in January and February, during our move. Most likely those peaks were caused by 'bots updating their records as we moved and changed our IP address. Another big peak occurred in June with the announcement of the VSP variable star plotter. We served about 40,000 distinct hosts per month, and had about 25,000 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.



Data transferred during FY06–07

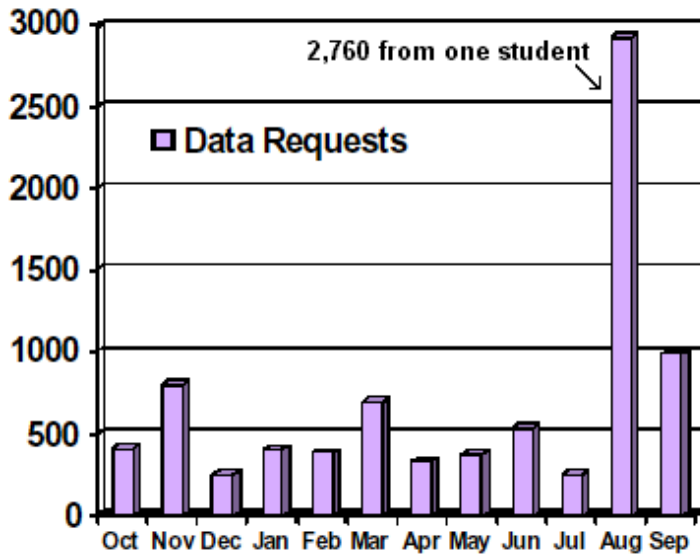
Probably the biggest presence, though, are the main observer tools: VSP, the finding chart plotter; VSX, the variable-star catalog; LCG, the light curve generator; and WebObs, the access portal for data submission. All of these tools were revised this year because of our MySQL relational database for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

Observation Database

In FY2007, we collected 1.7 million observations. 873,411 of these were visual observations (an increase over last year, primarily due to the merged observations

2. The Year in Review

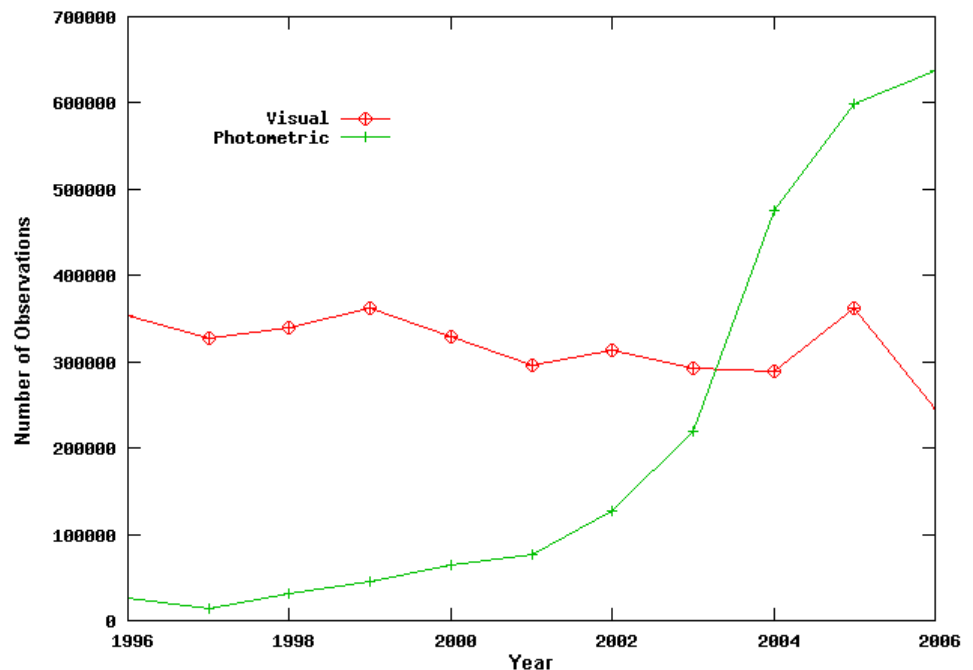
from A. W. Roberts, Albert Jones, and several Royal Astronomical Society of New Zealand members). 1,450 were PEP or photographic observations (replacing some that were already in the database with newer reductions). The remainder (837,310) were CCD observations. The CCD totals remain high, as we get 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 day!



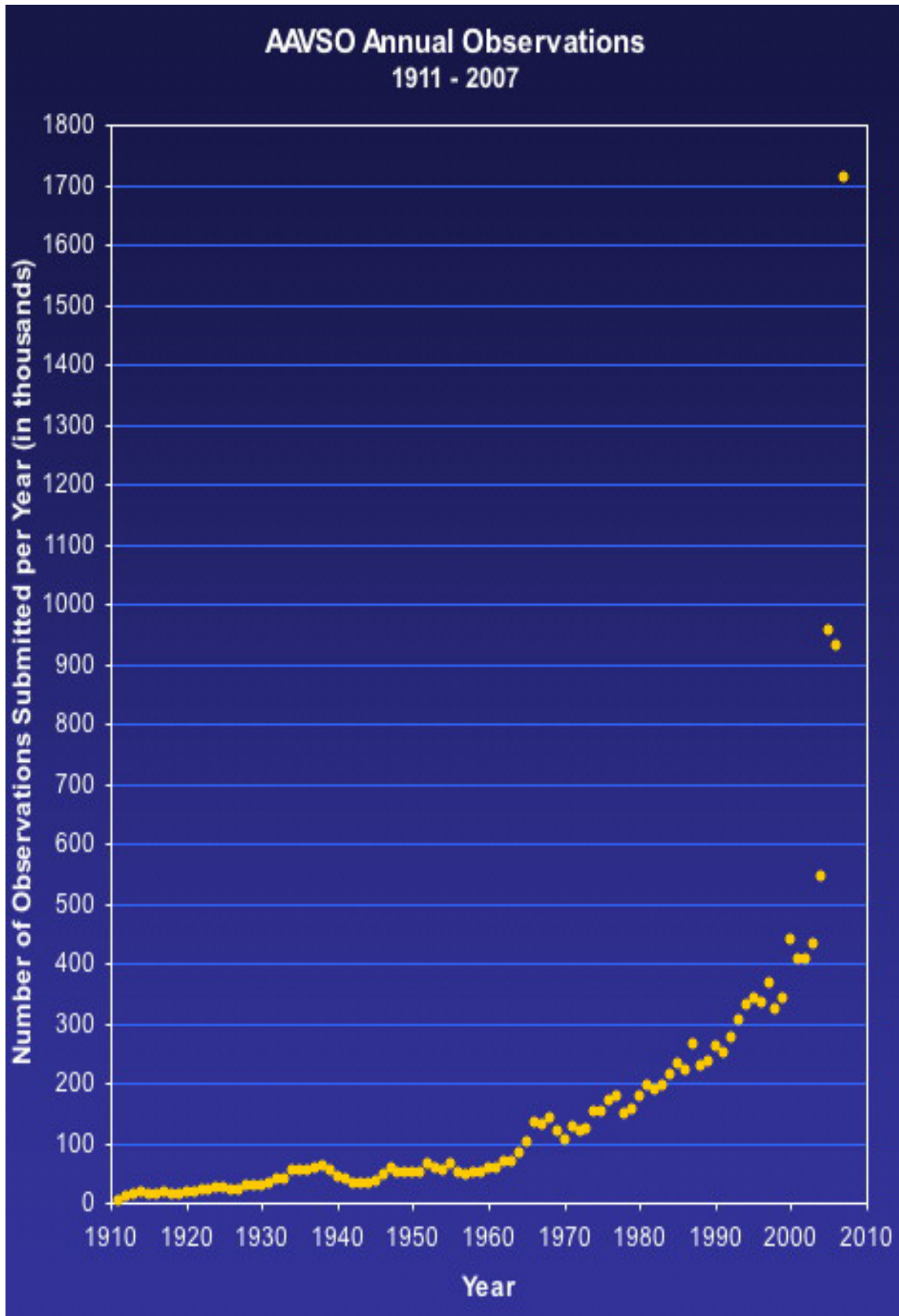
Requests for data from researchers during FY06-07

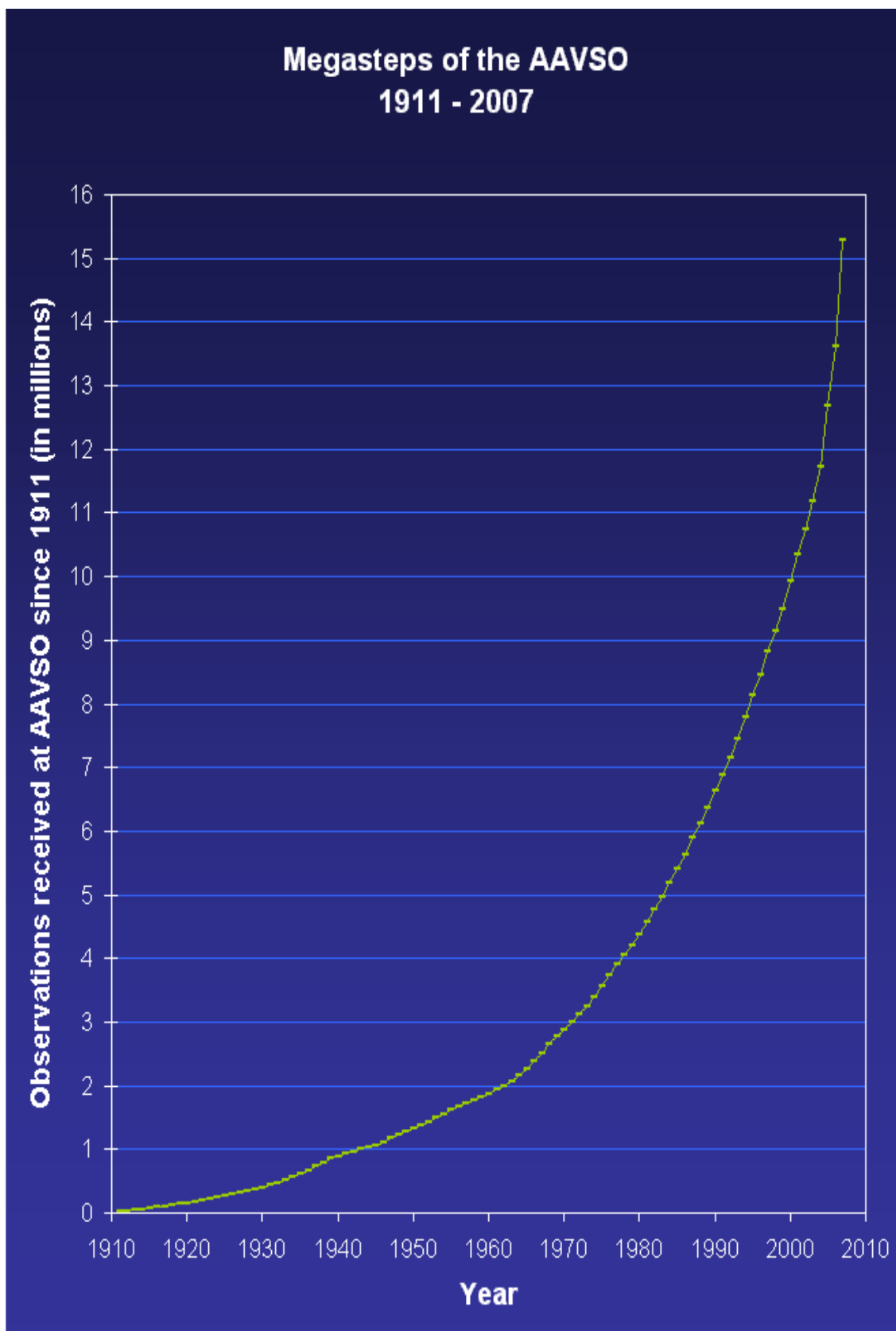
We had 5,700 data requests from a multitude of researchers during the year, along with 2,760 additional requests from a single student in August, who was trying to prove a variable-star theory and needed lots of data (figure at left)! The data request rate is pretty constant throughout the year, but has definitely continued its upward annual trend.

Visual observing continues to be very important. I have given many talks and articles on its usefulness. You can see on the chart of annual totals (below) that the submitted observation total stays pretty constant at about 400,000 observations per year.



Requests for data from researchers during FY06-07





International Cooperation

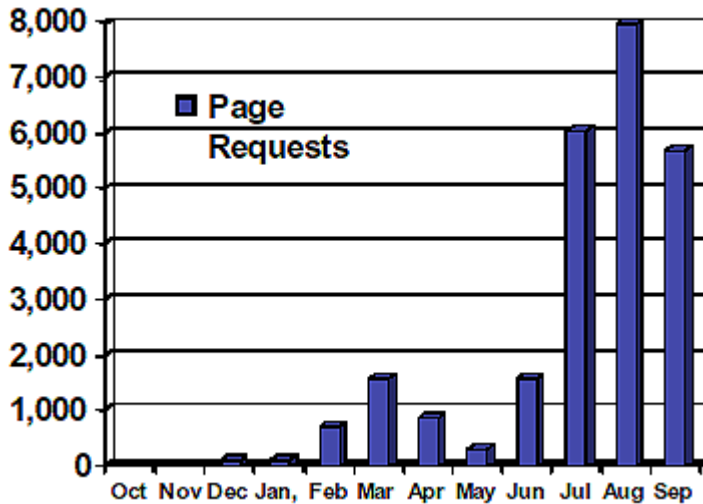
We acknowledge with appreciation the observations sent to the AAVSO by members of the following variable star associations, either individually or as a group, for inclusion in the AAVSO International Database for dissemination to the astronomical community worldwide:

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

Software

Much progress was made on the automated chart program, VSP. There are two aspects to VSP: the plotting package itself, along with the star catalogs used to find stars to display; and the comparison star database (VSD) that is used to identify comparison stars in each displayed field. Michael Koppelman, the main architect of VSP, worked with observers to improve the layout and the sky appearance of each field. We moved from using *NOMAD*, a star catalog that merges many catalogs into one, to the separate use of *Tycho2* and *UCAC*, two catalogs that are better representations of the sky. Vance Petriew, the architect of VSD (along with a large team

2. The Year in Review



Variable Star Plotter page requests during FY06-07

of volunteers), created a MySQL database of the comparison star data to be used by VSP. Two VSP releases were made: the initial release on June 30, which announced the availability of 4,000 AAVSO fields in VSP; and at the end of August, when we improved the sky appearance. We expect to make more releases soon to improve the comparison star photometry. The website requests for VSP showed the increased activity after the formal June release, along with a small peak in March when testing was being performed (see figure at left).

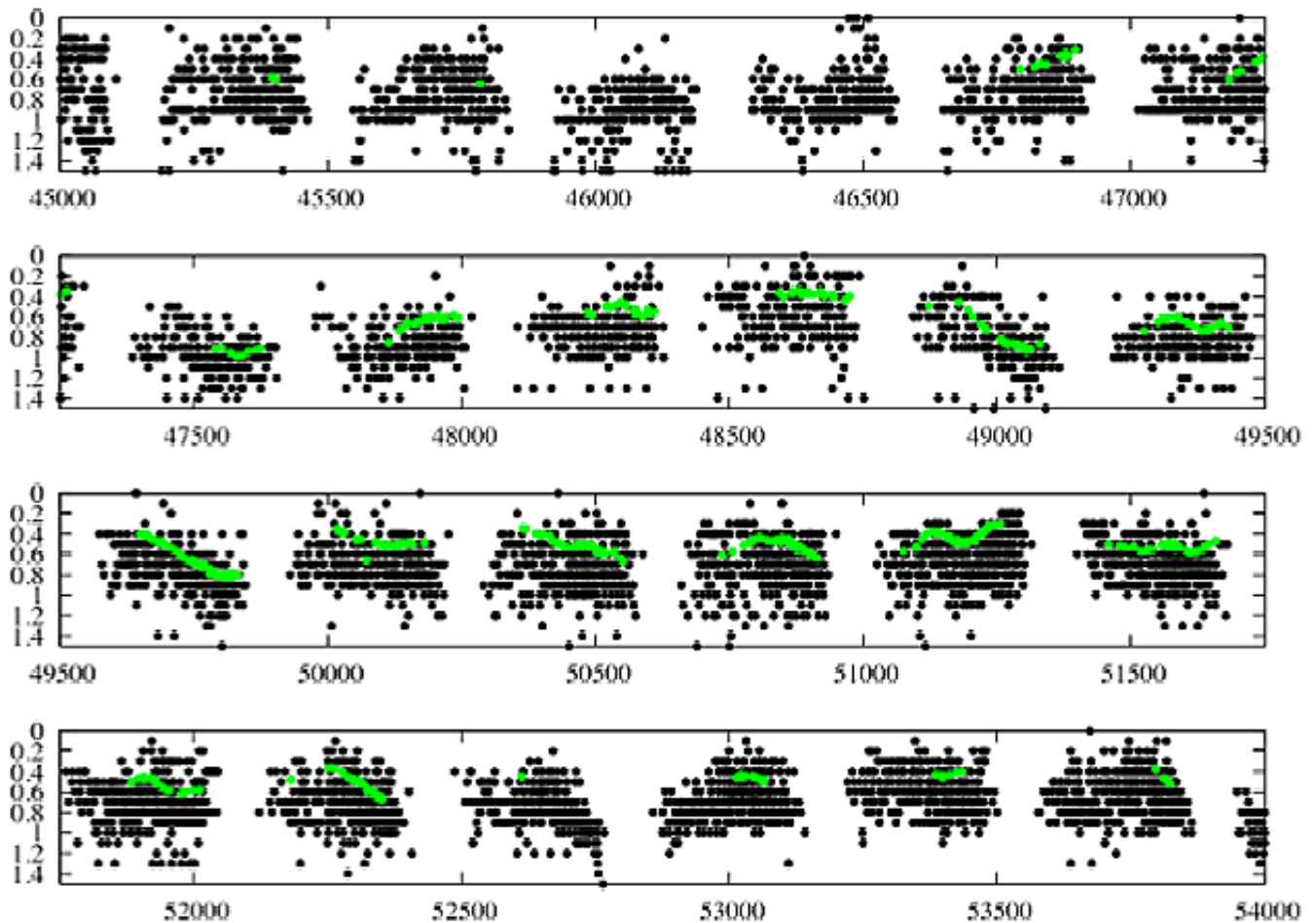
Sara Beck finished her JavaZAP program, an interactive software program to display observations and perform validation. This program is used by staff and was essential for validation with the new relational observation database. Kate Davis also wrote a Java program to help Elizabeth Waagen in her analysis of long period variable data, used for creating the *AAVSO Bulletin* of predicted maxima/minima of long period variables.

Kate Davis and Sara Beck took Java courses this year, improving our programming ability with this important web language. Kate also took a database course to learn about design concepts.

Observing News

The photoelectric photometry (PEP) community has been active for several decades, working on low amplitude red variables for John Percy, monitoring IM Peg for the Gravity Probe-B satellite, and T Tau stars and P Cygni. A few years ago, the AAVSO worked with Jerry Persha of Optec, Inc., and designed a near-infrared version of the popular SSP-3 photometer. The AAVSO purchased five of these new SSP-4 photometers and distributed them around the globe. They are being used primarily for observing long period red variables, continuing the monitoring that has been underway at the South African Astronomical Observatory for decades.

Sara Beck and Matt Templeton have taken Howard Landis' data reduction program, converted it from BASIC to FORTRAN, and added many bells and whistles to improve the quality of the photometry. About 36,000 photoelectric observations that had been submitted to the AAVSO over the years have been reprocessed and made available through the AAVSO International Database (AID). Kate has worked with Sara and Matt to provide an online input form, so that PEP observers can input their raw photometry,



AAVSO observations of α Ori (Betelgeuse) are shown, with PEP observations shown in green

have it processed by HQ, and inserted into the database automatically. An example of the PEP quality is shown in the figure above, where observations of α Ori (Betelgeuse) are shown, with the PEP observations shown in green.

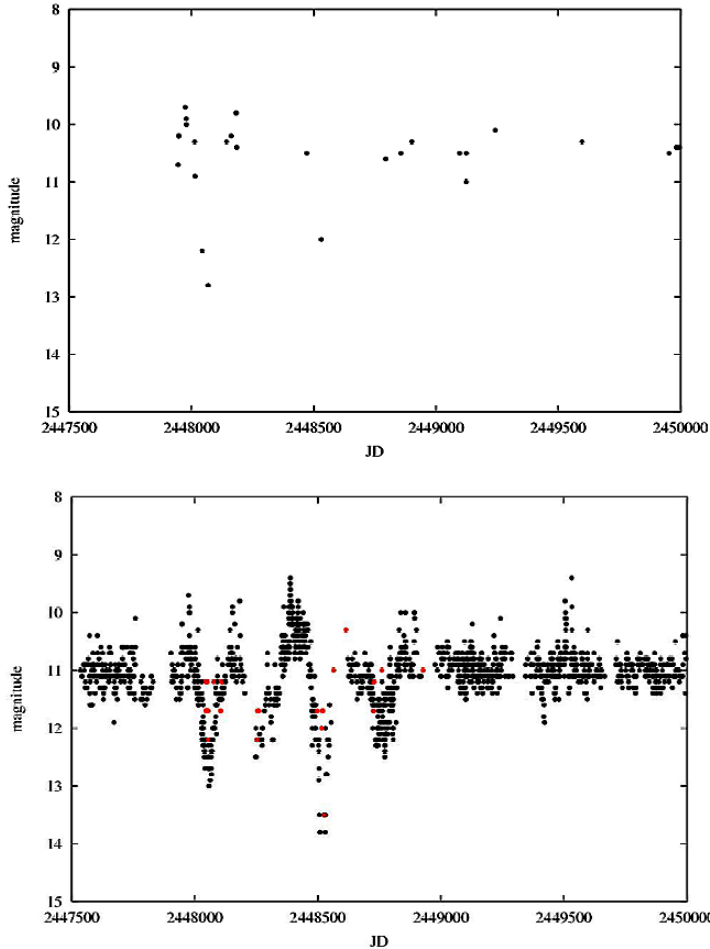
Several new campaigns will be announced for the PEP observers in the coming year, such as for ϵ Aurigae, the “Citizen Science” target for IYA2009.

Gamze Menali continues her editorship of *Eyepiece Views*, the premier newsletter devoted to visual variable star observing. Several issues were released during the year, with interesting stories from several long-time observers and suggestions of targets to observe.

Two large visual observation databases were merged into the AID this year. A. W. Roberts was a South African observer from 1891 to 1922. A team of Astronomical Society of Southern Africa observers, led by Brian Fraser and Tim Cooper (and his father Dennis), has diligently digitized Roberts’ observations over the past several years, and the fruits

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of their labor have resulted in the addition of 70,000 observations, primarily of ninety-nine southern variables, to the AID. Due in part to my visit to New Zealand in 2006, we received the entire RASNZ variable star database from Randal McIntosh. The RASNZ



Light Curves of RU Lup: (top) without Albert Jones' archival observations, and (bottom) with his observations added to the AAVSO International Database

database contains 1,588,806 observations on CD. Michael Saladyga of the AAVSO staff has merged into the AAVSO database about 1,056,174 of these observations, including 359,664 observations by Albert Jones. Some of these are duplicates, so that the total numbers will be lower than this, but we are finding many new observations that fill in the light curves of many southern variables. It is amazing how prolific some observers are! On the left is a comparison between the light curve of RU Lup without the observations of Albert, and the same light curve with Albert's observations. Without his contribution, we would know little about the history of this star!

We've added several new observing tools related to CCD observing: two signal/noise calculators to help you estimate your errors, and spreadsheets from Lew Cook to provide heliocentric Julian Date calculations and subtraction of contaminating stars from photometric apertures.

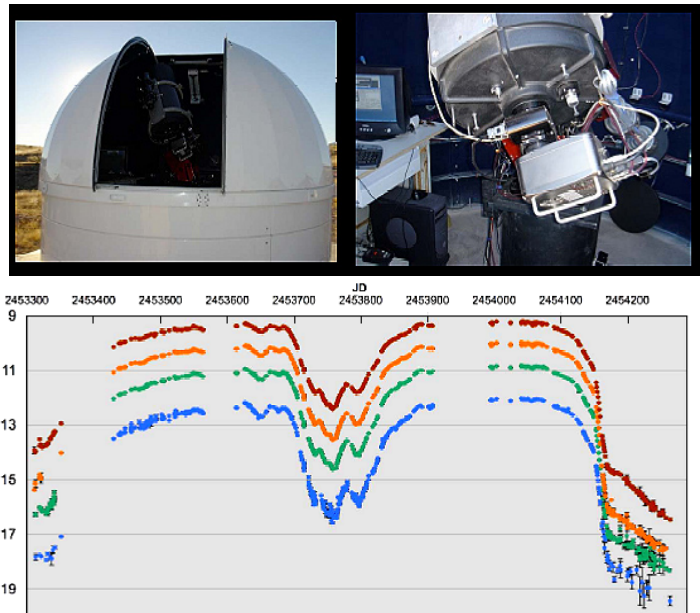
The results for the SS Cyg campaign that was run by Aaron Price last year have been published. Several other campaigns were run throughout the year, including a blazar campaign for Markus Boettcher. He needed early notification of the outbursts of a handful of these variable galactic nuclei so that he could trigger Veritas and XMM observations. Gordon Sarty wanted monitoring observations of several "high mass X-ray binaries" (HMXBs) so that he could correlate photometric changes with radial-velocity spectra being taken at the Dominion Astrophysical Observatory. Gordon is a good friend of the AAVSO, and offered to let members such as Tim Crawford, Michael Koppelman, and Richard Huziak observe at DAO as part of the project. We participated in a campaign to observe the pulsating prototype W Virginis; the first paper from that campaign has been published. In collaboration with Steve Howell, a campaign on the field surrounding NGC 6811 was run last year; analysis of the collected data continued this year, along with a poster paper given at the January 2007 AAS meeting. Christian Knigge requested U Gem and

SS Cyg observations for triggering Very Large Array radio observations of these targets. Steve Howell asked for AR UMa monitoring observations to coincide with Spitzer observations. Greg Laughlin asked us to monitor GJ436 for a possible exoplanet transit.

Robotic Telescope News

The AAVSO has been developing a robotic telescope capability for several years. We felt that access to telescopes in good observing sites or at geographically important spots was important to the core mission of the organization. We needed to be able to calibrate variable star fields in multiple wavelengths; monitor campaign targets and transients requested by researchers and the Central Bureau for Astronomical Telegrams; develop instrumentation and software, or test vendor-supplied instruments; and most importantly, give our membership access to high-quality equipment for their own research.

The first of these facilities was the Sonoita Research Observatory (SRO). John Gross, Walt Cooney, and Dirk Terrell approached me at a Society for Astronomical Sciences (SAS) meeting in 2005 to see if the AAVSO would be interested in working with them on a telescope owned by John in southern Arizona. Since that initial beginning, the AAVSO has used the telescope for 650 nights over nearly three years. We have performed numerous BVRI calibrations for LPV and transient objects; helped identify new novae and cataclysmic variables, and support several campaigns initiated by professional researchers. The system is remarkably efficient, with scheduling software that autonomously selects objects to be observed based on weather conditions. Its strong point is monitoring many objects over the course of many nights or years. The plot at right shows the power of a robotic telescope for long-term monitoring of light curves, showing three years of the variation of Z UMi. Several members are also using SRO, including Bill Dillon (AGNs, T Pyx), Jim Bedient (Miras), Michael Sallman (SRB star), and Michael Koppelman (time series of RR Lyr variables).



The Sonoita Research Observatory robotic telescope (top), and a light curve of Z UMi made up of long-term robotic observations from this station (bottom)

Dirk Terrell, Jerry Foote, and I are headed in early 2008 to New Zealand, where we have a cooperative arrangement with Mount John University Observatory (MJUO) to refurbish

their 24-inch Optical Craftsman telescope. Once finished, this refurbished telescope will have the same software as is running on SRO, and will also be available to the AAVSO and its membership. We are hoping to announce access in mid-2008. Mt. John is not a super site, but it has all of the infrastructure in place and gets about half of the available hours for observing.

Doc Kinne and Kate will be working on a web interface for the robotic telescopes. We hope that access will be easier in the near future than it is today. However, remember that this is a membership benefit—if you have a program that you want to run on any of these telescopes, contact the Director.

Other Projects

Olin J. Eggen (1919–1998) was a professional astronomer whose fifty-year career spanned four continents. He was an extremely careful photoelectric observer, compiling some 500,000 observations during his career. When he passed away in 1998, his card files were placed into storage at Cerro Tololo Inter-American Observatory (CTIO), Chile. While working on the W Vir project, I contacted CTIO to see if it would be possible to look at some of his cards, since only a fraction of his observations were ever published. The director of CTIO, Alistair Walker, has loaned the entire card collection to the AAVSO, and we received a Small Research Grant from the AAS to scan these cards. There are about 75,000 hand-written cards, and the majority of these were scanned during summer 2007 by David Coit. Once scanning is completed, we will place all scans on-line for volunteer digitization.



*Astronomer Olin J. Eggen
Courtesy Olin Eggen Photo Archive, AURA-O*

Staffing

Headquarters Staffing has remained constant for a number of years. We have had ten full-time employees, along with one part-time employee and two contractors. This year, we had a summer student join us, and also hired two new part-time employees. 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 that support the members and observers; it is a really nice and efficient staff at HQ!

The summer student was our Margaret Mayall Assistant—David Coit. He is a junior at Worcester Polytechnic Institute (WPI). Some of his accomplishments for the summer included: uploading 300,000 CCD images from the U.S. Naval Observatory, Flagstaff Station (NOFS) and SRO; scanning 60,000 of Eggen's cards; entering thousands of BVRI

observations from the CCD multicolor program; and creating web pages for all old journal articles. We were extremely pleased to have such a capable young man join us, and hope that he will return and remain a friend of the AAVSO for years to come!

Richard (Doc) Kinne was hired part-time as information technology assistant to help Aaron. Doc works from home in New York and travels to HQ infrequently when his physical presence is necessary.

Linda Henden was hired part-time as a financial assistant to help Travis in paperwork and Quickbooks bookkeeping.

Aaron Price now works part-time as he continues his Ph.D. studies in Astronomy Education at Tufts University.

Publications

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

The Japanese and Turkish translations of the *AAVSO Manual for Visual Observing of Variable Stars* were released. *JAAVSO* volume 34, number 1 was printed. Many *eJAAVSO* articles were posted. We posted seventeen Alert Notices and fifty Special Notices. As mentioned above, Gamze edited six *Eyepiece Views*. Two "Variable Star of the Season" articles were published. We contributed sections for the *RASC Observer's Handbook*. Elizabeth completed long period variable maxima/minima *Bulletin Number 70*. The AAVSO released the annual eclipsing binary/RR Lyrae stars ephemerides as well as the monthly *Solar Bulletin*.

There were eight non-refereed staff publications (such as BAAS abstracts), in addition to the twenty-two refereed staff publications (Henden, Price, Templeton, Waagen; *PASP*, *AJ*, *JAAVSO*, etc.).

We noted that thirty-four papers in journals such as *Astronomy & 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.

Travel

FY2007 was another year of travel by staff to worldwide meetings to spread the word about the AAVSO and variable star observing. Arne went to Rochester in November to give a talk on V838 Mon for the Rochester Astronomy Club. Elizabeth Waagen went to

Texas to receive the 2006 Leslie C. Peltier Award from the Astronomical League. This was given in honor of her dedication to variable star research and her leadership in the AAVSO. January saw Aaron Price, Matt Templeton, Travis Searle, Rebecca Turner, and Arne traveling to the AAS meeting in Seattle to present a series of papers about the AAVSO and its value to the professional community. Kate Hutton volunteered to staff a booth at the Riverside Telescope Makers Conference (RTMC), held immediately after the SAS meeting, to advertise the AAVSO to a diverse crowd of amateurs. Tim Crawford continued this effort later in August by taking the traveling display to the ALCON conference in Oregon.

We also highlighted our new HQ building by participating in the First Annual Cambridge Science Festival, held during two weekends in April. We converted the "Annex" into a meeting hall for the first time, and gave talks on exoplanets and variable stars to the public. The Amateur Telescope Makers of Boston helped out by holding star parties after the lectures. The end of June found Arne and Rebecca traveling to Calgary to the joint AAVSO/AL/RASC meeting, along with many other AAVSO members. Gamze and Haldun Menali, along with Arne, participated in the 2nd Amateur Astronomy Symposium in Istanbul. We had a really great time with a group of very interested amateurs, even if Turkey is awfully hot in July! Finally, Matt Templeton represented the AAVSO at the cool stars conference held at East Tennessee State University in July.

Aaron Price organized the annual AAVSO one-day symposium in September, this one in collaboration with Tufts and devoted to Astronomy Education. He has also represented the AAVSO at LSST meetings and IYA2009 working groups.

Arne, Gary Walker, Elizabeth Waagen, and Michael Saladyga went to New Haven in March to participate in Dorrit Hoffleit's 100th birthday party. Elizabeth Waagen, Sara Beck, and Michael Saladyga were able to travel to New Haven in September for a memorial celebration in honor of Dorrit.

Looking Towards the Future

Coming up over the next fiscal year are a number of improvements in support of the observers. We will be adding precision photometry to the comparison star database. Some fields have had known errors and inconsistencies in their sequences, and this adjustment should make it easier for the observers to obtain reliable estimates. In addition, CCD and PEP photometry needs higher precision magnitudes, and often in several bandpasses, and the new photometry will enable precision measurements for many more fields. The standardized input formats will be released, so that we only have to support fewer software formats and ensure all information that might be important to the researcher is included. Several new campaigns are already in queue, and some fun projects will be announced. We hope to have the Mt. John 24-inch telescope up and running and available to the membership. Meetings in the UK and for the 100th

celebration of Maria Mitchell Observatory will be held. It will be another great year for the AAVSO!

Acknowledgements

This 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”—that 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 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.

2. The Year in Review

Table 1. AAVSO Observer Totals 2006–2007 by Country

Country	No. Observers	No. Obs.	Country	No. Observers	No. Obs.	Country	No. Observers	No. Obs.
ARGENTINA	24	410	GREECE	10	7421	REPUBLIC OF KOREA	1	3
AUSTRALIA	30	213694	HUNGARY	72	22575	ROMANIA	8	7669
AUSTRIA	3	600	INDIA	3	82	RUSSIA	9	3984
BELARUS	2	5	IRAN	2	2	SINGAPORE	1	1
BELGIUM	22	88220	IRELAND	4	140	SLOVAKIA	1	384
BERMUDA	1	30	ISRAEL	2	6	SLOVENIA	1	1553
BRAZIL	13	2784	ITALY	30	13228	SOUTH AFRICA	12	385127
CANADA	34	62967	JAPAN	4	1528	SPAIN	34	11865
CHINA	1	1	MALTA	2	34	SWEDEN	1	637
COSTA RICA	1	14	MEXICO	1	10	SWITZERLAND	6	1068
CROATIA	4	2174	NETHERLANDS	12	10686	TURKEY	6	97
CZECH REPUBLIC	2	70	NEW ZEALAND	5	404612	UKRAINE	4	700
DENMARK	3	63	NORTH CYPRUS	1	93	URUGUAY	2	10
ENGLAND	33	54251	NORWAY	7	1198	USA	275	307310
FINLAND	9	15486	PERU	1	10			
FRANCE	25	36383	PHILIPPINES	2	77	TOTAL	784	1712567
FRENCH POLYNESIA	1	3	POLAND	19	28905			
GERMANY	36	16237	PORTUGAL	2	8160			

Table 2. AAVSO Observer Totals 2006–2007 USA by State or Territory

State	No. Observers	No. Obs.	State	No. Observers	No. Obs.	State	No. Observers	No. Obs.
ALABAMA (AL)	2	12	MICHIGAN (MI)	5	1301	PUERTO RICO (PR)	1	19
ARIZONA (AZ)	9	3817	MINNESOTA (MN)	8	6005	RHODE ISLAND (RI)	4	2244
CALIFORNIA (CA)	29	10286	MISSISSIPPI (MS)	1	46	SOUTH CAROLINA (SC)	4	60
COLORADO (CO)	5	28064	MISSOURI (MO)	3	1226	SOUTH DAKOTA (SD)	1	6
CONNECTICUT (CT)	7	1069	MONTANA (MT)	1	251	TENNESSEE (TN)	5	1384
FLORIDA (FL)	7	53371	NEBRASKA (NE)	2	128	TEXAS (TX)	20	5163
GEORGIA (GA)	3	1833	NEVADA (NV)	3	85	UTAH (UT)	3	15080
HAWAII (HI)	2	2161	NEW HAMPSHIRE (NH)	3	6923	VERMONT (VT)	1	3
ILLINOIS (IL)	14	38378	NEW JERSEY (NJ)	1	7	VIRGINIA (VA)	6	765
INDIANA (IN)	9	10500	NEW MEXICO (NM)	8	56076	WASHINGTON (WA)	9	232
KANSAS (KS)	6	4277	NEW YORK (NY)	12	4872	WEST VIRGINIA (WV)	2	770
KENTUCKY (KY)	4	23	NORTH CAROLINA (NC)	5	469	WISCONSIN (WI)	5	6344
LOUISIANA (LA)	2	2663	OHIO (OH)	14	1090			
MAINE (ME)	2	100	OKLAHOMA (OK)	5	241	TOTAL	275	307310
MARYLAND (MD)	11	2501	OREGON (OR)	3	24153			
MASSACHUSETTS (MA)	19	11504	PENNSYLVANIA (PA)	9	1808			

Table 3. AAVSO Observers, 2006–2007.

Code	Org.	Name	No. Obs.	Code	Org.	Name	No. Obs.
AFO		A. Abascal, Spain	2	ABG		B. Andresen, Norway	30
AAP	27	P. Abbott, Canada	3105	KOC	03	K. Antal, Hungary	820
AAN	02	A. Abe, Germany	167	AKO		K. Apostolidis, Greece	4
AIV	09	I. Abramov, Ukraine	593	AJN		J. Appleyard, Canada	26
ARV		R. Adamson, CA	10	AWX		W. Arango, Argentina	3
ASA		S. Aguirre, Mexico	10	AWY	13	W. Araujo, Brazil	275
AJT	13	J. Agustoni, Brazil	1	AAT	15	A. Ardanuy, Spain	2
AB		W. Albecht, WI	6208	AFQ		F. Armario, Spain	106
AWL		W. Alexander, VA	28	AAM		A. Arminski, Poland	8146
ACO	20	C. Allen, Sweden	637	ADN		D. Arnautovic, Australia	5
AJC		J. Almeida, Brazil	79	ARJ		J. Arnold, TX	38
AJV	15	J. Alonso, Spain	110	AAU		A. Aslanturk, Turkey	7
AMH		M. Amato, CT	32	ATO	08	T. Aslesen, Norway	72
AAQ	03	A. Ambrus, Hungary	51	ATI		T. Asztalos, Hungary	2996
AAX	13	A. Amorim, Brazil	810	ADI	02	D. Augart, Germany	683

Table 3. AAVSO Observers, 2006–2007, 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>
AAV		A. Avtanski, CA	9	BOA	01	A. Bruno, France	826
ARX		R. Axelsen, Australia	92	BHU		R. Buchheim, CA	432
PBC		P. Bacci, Italy	3	BGO		R. Bunge, MD	1
BGL	03	G. Baglyas, Hungary	5	BXD		A. Burda, Romania	6
BIY		D. Bailey, IL	3	BXE		E. Burichel, Brazil	24
BWY		W. Bailey, NJ	7	BIW		N. Butterworth, Australia	4958
BIE	05	A. Baillien, Belgium	191	CCB		C. Calia, CT	408
BPH	02	S. Bakan, Germany	2	CCZ		C. Calis, Turkey	18
BFX		R. Baker, OH	96	CMN		R. Cameron, Australia	121
BWW		W. Bakewell, CA	5	C		L. Campbell, MA	55
BYX	03	L. Balaton, Hungary	8	CPN	27	P. Campbell, Canada	93
BCD		R. Ball, England	15	CMP		R. Campbell, FL	1838
BQH	03	E. Balogh, Hungary	3	CN		A. Cannon, MA	11
BIV	03	I. Balogh, Hungary	183	CEM	15	E. Capella, Spain	64
BVN	18	M. Banfi, Italy	2425	CQP		A. Capetillo Blanco, Spain	25
BGZ		G. Banialis, IL	70	CXN		J. Carlson, MA	1613
BHI		J. Banister, TX	37	CZO		R. Carrizo, Argentina	3
BSR	18	S. Baroni, Italy	189	CVJ		J. Carvajal Martinez, Spain	24
BVT		T. Bartlett, TX	107	CRI	15	R. Casas, Spain	24
BBA		B. Beaman, IL	1559	CLQ		L. Cason, SC	5
BWX	27	A. Beaton, Canada	383	CKN		K. Castle, AZ	22
BDY	09	D. Bechutskiy, Ukraine	2	CWO		W. Castro, OH	45
BSZ		S. Beckwith, MA	129	CNT		D. Chantiles, CA	462
BJS		J. Bedient, HI	317	CGF		G. Chaple Jr., MA	3842
BCP	20	C. Beech, England	37	CKJ		J. Cheng, PA	19
BNY		R. Benge Jr., TX	1	CGU		G. Chew, Singapore	1
BTY		T. Benner, PA	419	CCY		C. Chiselbrook, GA	1625
BQO		L. Bentolila, Argentina	5	CWY		W. Chisik, Argentina	3
BEB	27	R. Berg, IN	9	COQ		Cincinnati Observatory Center, OH	330
RFC		F. Bergali, Spain	1329	CCV		C. Clarasso, Spain	93
BQX		M. Betlej, Poland	7	CMB		M. Clark, New Zealand	28
BPU		A. Bhuptani, England	39	CLK	29	W. Clark, MO	9
BVG	18	G. Bianciardi, Italy	14	CPY		P. Clayton, England	8
BIC	01	L. Bichon, France	2150	CPS	05	P. Cloesen, Belgium	96
BMM	05	M. Biesmans, Belgium	520	CPE	06	P. Cloas, Spain	37
BCO		C. Birza, Romania	41	CKH	05	H. Coeckelberghs, Belgium	10
BXN	01	M. Bisson, France	223	CAY		A. Coelho, Brazil	1
BXT	08	T. Bjerkgard, Norway	67	CCT	13	C. Colesanti, Brazil	1207
BXU		J. Bjoerklund, Denmark	1	CDK		D. Collins, NC	412
BKL		J. Blackwell, NH	559	COL		P. Collins, AZ	4
BLD	10	D. Blane, South Africa	208	CME	18	E. Colombo, Italy	323
BWJ		J. Bohdanowicz, Canada	5	CMG	04	G. Comello, Netherlands	5781
BOI		B. Bois, Canada	19	CKL		A. Cook, OH	138
BQG		G. Bokowy, IL	88	CXA		A. Cook, CA	3
BVS		S. Bolzoni, Italy	7	COO		L. Cook, CA	100
BRJ		J. Bortle, NY	3793	CK		S. Cook, NM	28
BMU	04	R. Bouma, Netherlands	167	CWT		W. Cooney Jr., LA	2520
BDG	20	D. Boyd, England	14858	COM	10	T. Cooper, South Africa	725
BFI		F. Boyer, OH	8	CDV		D. Cornell, WA	5
BMK		M. Bradbury, IN	426	CLZ	01	L. Corp, France	309
BPX		P. Bradley, England	47	CAI		A. Correia, Portugal	4033
BXS		S. Brady, NH	6283	CIO		I. Costache, Romania	10
BDT		D. Branchett, FL	300	COV		V. Coulehan, NY	130
BNW	02	W. Braune, Germany	99	CWD		D. Cowall, MD	11
BQC	01	J. Breard, France	5	CXO		J. Cox, England	28
BXI		D. Breit, CA	8	CR		T. Cragg, Australia	10782
BZG		G. Brellier, France	50	CFY		J. Craig, MA	98
BTB		T. Bretl, MN	349	CTX	27	T. Crawford, OR	15481
BHA	02	H. Bretschneider, Germany	968	CMY		M. Crook, England	25
BQE		E. Briggs, Canada	1	CRR		R. Crumrine, NY	45
BOS	05	E. Broens, Belgium	563	CIZ		I. Cruz, OH	93
BJQ	27	J. Brooks, CA	12	CBZ	03	B. Csak, Hungary	39
BWU		D. Brooks, MO	214	CTI	03	T. Csorgei, Hungary	260
BXV	15	X. Bros Caton, Spain	166	CSM		M. Csukas, Romania	1297
BQS	15	J. Bros, Spain	11	CKB		B. Cudnik, TX	1199

2. The Year in Review

Table 3. AAVSO Observers, 2006–2007, 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>
CUU		J. Curto Amigo, Spain	267	FTH		T. Fox, TX	5
DS		J. Da Silva, Brazil	3	FBN	10	B. Fraser, South Africa	82
DAM	06	A. Darriba Martinez, Spain	16	FML		M. Fridlund, Netherlands	13
DMP		M. Dasgupta, India	7	FAA	18	A. Frosina, Italy	2
DVE		V. Davis, AL	9	FMG		G. Fugman, NE	108
DJS	20	J. Day, England	153	GBZ	21	O. Gabzo, Israel	5
DPP		P. De Ponthiere, Belgium	14978	GHT	27	G. Gaherty, Canada	141
DSP		P. De Santis, NV	1	GMO		M. Gainer, PA	33
SWQ	13	W. De Souza, Brazil	26	GDM	03	M. Galea De Giovanni, Malta	1
DSJ	13	J. De Souza Aguiar, Brazil	11	GTN		T. Gandet, AZ	3
DFR	27	F. Dempsey, Canada	27	GAA		P. Garey, IL	22
DDE		D. Denisenko, Russia	120	GJP		J. Garlitz, OR	229
DAT		A. Derdzikowski, Poland	186	GPG		P. Garossino, TX	10
DAA	03	A. Derekas, Hungary	2	GKI		K. Geary, Ireland	30
DNO		O. Deren, Poland	483	GCP		C. Gerber, Germany	323
DSI		G. Di Scala, Australia	32421	GAO		A. Giambersio, Italy	37
DMQ		M. Diamond, CO	5	GGU	04	G. Gilein, Netherlands	405
DDD		D. Dickinson, AZ	1	GLJ		J. Glasheen, Canada	1
DPA	05	A. Diepvens, Belgium	537	GMV		M. Glennon, Ireland	28
DRG		R. Diethelm, Switzerland	9	GZN	06	A. Glez-Herrera, Spain	75
DJU		J. Dildine, CA	1	GLG		G. Gliba, MD	17
DLA		A. Dill, KS	171	GFT		F. Gobet, France	10463
DIL		W. Dillon, TX	396	GAW		A. Godfrey, England	691
DRL		S. Dirocco, OH	22	GFH		B. Goff, CA	5356
GDB	03	G. Domeny, Hungary	8	GPX	14	W. Goltz, Australia	27324
DLX	03	L. Dorogi, Hungary	4	GOT	06	T. Gomez, Spain	4583
DDB		D. Douglass, PA	5	GAQ		A. Goossen, NY	7
DXA		A. Douvris, Greece	4	GGZ	03	Z. Gorgei, Hungary	566
DDJ		D. Dowhos, Canada	6	GLM		L. Gorski, IL	18
DPV		P. Dubovsky, Slovakia	384	GGC	18	G. Gotta, Italy	1961
DFS	05	S. Dufoer, Belgium	2	GKA		K. Graham, IL	12247
DAB		A. Dukes Jr., SC	8	GPE		Grainger Observatory (J. Blackwell), NH	81
DMO	01	M. Dumont, France	1089	GRL	08	B. Granslo, Norway	234
CLW01		D. Durig, TN	1051	GMZ	18	M. Graziani, Italy	34
DRZ		R. Durkee, MN	101	GTZ		T. Grzybowski, NM	265
DEQ		E. Dutton, CO	3	GCO		C. Gualdoni, Italy	3841
DKS		S. Dvorak, FL	49346	GXB		G. Gualdoni, Argentina	3
DGP		G. Dyck, MA	1827	GUX		L. Guevara, Argentina	3
DDI		D. Dyer, KS	190	GPR		P. Guilbault, RI	3
EJF		J. Edmonds, MA	11	GUN	01	J. Gunther, France	1142
EMA		M. Eichenberger, Switzerland	44	GVA		L. Gyarmati, Hungary	28
EER	25	E. Eker, Turkey	2	HCS	03	C. Hadhazi, Hungary	2182
EJI		J. Elliott, NC	1	HTY		T. Hager, CT	59
EM		G. Emerson, NM	20	HKB		B. Hakes, IL	297
EPE	01	P. Enskonatus, Germany	179	HP		W. Hampton, CT	24
ERB		R. Eramia, WA	61	HDX		D. Hands, NC	42
EJO	03	J. Erdei, Hungary	95	HBB		B. Harris, FL	455
LTE		D. Evans, England	925	HMQ		M. Harris, GA	204
FTB		T. Fabjan, Slovenia	1553	HAV		R. Harvan, MD	1021
FEO	03	E. Farkas, Hungary	212	HZA		A. Hasanzadeh, Iran	1
FBH		B. Fehling, Spain	4	HJK		J. Hauk, SD	6
FAJ	03	A. Fejes, Hungary	56	HHU	05	H. Hautecler, Belgium	781
FBA		B. Ferguson, OK	2	HKY	27	K. Hay, Canada	64
FOM	15	M. Fernandez Ocana, Spain	111	HAB		R. Hays Jr., IL	902
FRF	03	R. Fidrich, Hungary	39	HCA		C. Hedgepeth, VA	1
FWH		W. Finlay, Canada	8	HKN		K. Hedrick, WV	77
FGU	02	G. Flechsig, Germany	28	HRZ		R. Hegenbarth, Germany	1
FLY		J. Flores, Argentina	3	HMC		M. Hencheck, WI	9
FMU	15	M. Flores, Spain	16	HQA		A. Henden, MA	6
FDA	03	A. Fodor, Hungary	59	HGC	14	G. Herdman, New Zealand	52685
FBZ	03	B. Fodor, Hungary	14	HXE		E. Herrera, Argentina	3
FSE	18	S. Foglia, Italy	5	HMV		M. Hessom, CA	2
FFC	03	F. Foldesi, Hungary	112	HDJ		D. Higgins, Australia	124
FMR		M. Fonovich, Croatia	2105	HIM		W. Hill, MA	49
FXJ		J. Fox, MN	102	HEG		E. Hintz, UT	4

Table 3. AAVSO Observers, 2006–2007, cont.

Code	Org.	Name	No. Obs.	Code	Org.	Name	No. Obs.
HZR	02	R. Hinzpeter, Germany	30	KRV		R. Koff, CO	26624
HIR		Y. Hirasawa, Japan	358	KHL		M. Kohl, Switzerland	578
HJS		J. Hissong, OH	4	KHJ	27	H. Koller, Canada	5
HJX	13	J. Hodar Munoz, Brazil	10	KRS		R. Kolman, IL	2307
HWD		W. Hodgson, Australia	15	KMA		M. Komorous, Canada	2778
HEK		E. Hoeg, Denmark	20	KMP		M. Koppelman, MN	2998
HDF		D. Hohman, NY	1	KSG		G. Koronis, Greece	25
HSQ		S. Holland, NC	3	KOS		A. Kosa-Kiss, Romania	4910
HOO	04	G. Hoogeveen, Netherlands	32	KLX		L. Koscianski, MD	97
HJZ		J. Horne, CA	24	KMS		M. Kossa, France	1
HJA		J. Hudson, CA	67	KAF	03	A. Kovacs, Hungary	310
HOX	14	O. Hull, New Zealand	43059	KVS	03	A. Kovacs, Hungary	95
HDU		D. Hurdis, RI	836	KVI	03	I. Kovacs, Hungary	372
HUR	20	G. Hurst, England	2395	KFK		F. Kafka, TX	41
HSU		S. Hutchins, CO	2	KTC		T. Krajci, NM	10064
HTN		K. Hutton, CA	2599	KWO	02	W. Kriebel, Germany	2695
HUZ	27	R. Huziak, Canada	5811	KIS	02	G. Krisch, Germany	581
HHT	17	H. Hyvonen, Finland	9	KTZ		T. Krzyt, Poland	1561
ILE	03	E. Illes, Hungary	838	KUC	01	S. Kuchto, France	1332
IPA	12	P. Ingrassia, Argentina	20	KPB		P. Kuebler, OH	5
IVM	16	V. Ivanov, Russia	3057	KZQ	03	Z. Kuli, Hungary	13
JMA		M. Jacquesson, France	441	KMI		M. Kuzmin, Russia	125
JTP	01	P. Jacquet, France	10	KSQ		S. Kuznetsov, Russia	221
JAT	03	T. Jakabfi, Hungary	31	LCR	15	C. Labordena, Spain	462
JM		R. James, NM	45555	LHS		H. Lacombe, Canada	1
JZO	03	Z. Jankovics, Hungary	19	LSA		S. Lahtinen, Finland	7
JDG		D. Janky, WA	9	LDJ	27	D. Lane, Canada	1479
JSI	20	S. Jenner, England	4	LTO	02	T. Lange, Germany	53
JKK	08	K. Jensen, Norway	91	LMF	13	M. Lara, Brazil	332
JLR		R. Jepeal, CT	536	LTM		T. Laskowski, IN	20
JOG		G. Johnson, MD	110	LED		E. Lawrence, KY	1
JON	05	K. Jonckheere, Belgium	3	LZT		T. Lazuka, IL	1143
JA	14	A. Jones, New Zealand	277100	LEB	01	R. Lebert, France	208
JCN	20	C. Jones, England	730	LFC	01	F. Lecoyer, Belgium	1
JJI		J. Jones, OR	8443	LMT		M. Legutko, Poland	598
JKL		K. Jones, Australia	8	LDA		D. Lehman, MD	12
JRC	15	R. Josa, Spain	35	LDI	02	D. Lehmann, Germany	3
JAX		A. Junkkari, Finland	7	LNZ		G. Lenz, LA	143
KSB		S. Kalkan, Turkey	2	LJL		J. Leonard, IL	10
KB		W. Kaminski, NM	8	LNL		N. Lerner, CA	4
KAM	02	A. Kammerer, Germany	37	LEV		A. Leveque, CA	149
KMO		M. Kardasis, Greece	25	LVY	27	D. Levy, AZ	1
KSF		S. Karge, Germany	434	LMI		M. Lierl, KY	6
KAD	03	A. Karpati, Hungary	52	LAI	27	A. Ling, Canada	934
KLU		L. Karpiesiuk, Poland	72	LMK		M. Linnolt, HI	1844
KKI		K. Kasai, Switzerland	302	LLZ	03	L. Liziczai, Hungary	244
KEI		E. Kato, Australia	6	LOX		S. Logioco, Argentina	3
KPI	17	P. Kehusmaa, Finland	503	LRD		D. Loring, UT	284
KCE		C. Kelly, TN	1	LDS	20	D. Loughney, England	660
KZX	03	Z. Kereszty, Hungary	1	LFZ		F. Lucidi, Italy	275
KSH	14	S. Kerr, Australia	283	LBU	03	D. Lukacs, Hungary	1
KSZ	03	S. Keszthelyi, Hungary	387	LMJ	17	M. Luostarinen, Finland	1827
KRB		R. King, MN	766	MDW		W. MacDonald II, Canada	4471
KQR		R. Kinne, NY	22	MTX		T. MacKenzie, NY	70
KSJ	27	S. Kinsella, Canada	18	MAL		R. MacLaren, WI	8
KIR		P. Kirby, AZ	549	MLI		L. Maisler, NY	81
KBR		B. Kirshner, CA	20	MII	03	L. Majzik, Hungary	47
KKA	03	K. Kis, Hungary	7	MUV	03	A. Makay, Hungary	23
KIL	03	L. Kiss, Australia	1301	MEX		P. Mancini, Argentina	3
KCO	03	S. Kiss, Hungary	1	MBG	03	B. Mandek, Hungary	2
KPC		P. Klages, England	6	MOF		O. Maraev, Russia	432
KGE	08	G. Klingenberg, Norway	172	MXI	18	A. Marchini, Italy	1209
KWL		W. Kloehr, Germany	15	MKW		A. Markiewicz, Poland	1443
KGT		G. Knight, ME	42	MXS	03	S. Marosi, Hungary	78
KSP		S. Knight, ME	58	MMN	18	M. Martignoni, Italy	36

2. The Year in Review

Table 3. AAVSO Observers, 2006–2007, 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>
MYC		C. Martin, NE	20	NMI		M. Nicholas, AZ	949
MMG		M. Martinengo, Italy	6	NDC		D. Nicholls, Australia	1
MRX	02	H. Marx, Germany	1022	NMR		M. Nicholson, England	6421
MN		H. Mason, NV	76	NFD	04	F. Nieuwenhout, Netherlands	1692
MQI		M. Matesic, Croatia	41	NVM		M. Niveyro, Argentina	3
MTH		H. Matsuyama, Australia	9562	NCH		C. Norris, TX	177
MXV		A. Matvienko, Russia	3	NKL		K. Nuber, Germany	243
MPR	23	P. Maurer, Germany	470	NHK	17	H. Nylander, Finland	27
MGE		G. Mavrofridis, Greece	4571	OB		B. O'Bannion, TX	1
MAZ		M. Mazurek, AZ	50	OCN		S. O'Connor, Bermuda	30
MBE		B. McCandless, MD	274	ODI		D. O'Driscoll, Australia	5
MUE		R. McDaniel, TX	647	ONJ		J. O'Neill, Ireland	81
MBT		T. McDonagh, MA	227	OSN		S. Oatney, KS	1285
MDP	27	P. McDonald, Canada	1096	OES		D. Oesper, WI	33
MGH	20	H. McGee, England	44	OYE		Y. Ogmen, North Cyprus	93
MED		K. Medway, England	1492	OAR	17	A. Oksanen, Finland	13082
MIQ	20	I. Megson, England	680	OXV		J. Olivo, Argentina	3
MEH		C. Meinhardt, WA	8	OSC		S. Orlando, NY	1
MHI	01	H. Menali, MA	3	OPR		P. Ossowski, Poland	14
MQZ		M. Mendez Majuelos, Spain	136	OSE	12	S. Otero, Argentina	12
MDJ	12	D. Mendicini, Argentina	58	OJJ		J. Ott, CO	1430
MQG		M. Menegotto, Argentina	235	OJS		J. Ott, KY	6
MBB	14	B. Menzies, New Zealand	31740	OCR	05	C. Otten, Belgium	1024
MZK		K. Menzies, MA	266	OB	10	D. Overbeek, South Africa	6189
MEZ	03	C. Mezosi, Hungary	38	PPK	17	P. Paakkonen, Finland	12
MTK		T. Michalik, VA	378	PUC		C. Panichi, Argentina	5
MXT		C. Middleton, South Africa	172727	PBC		B. Paolo, Italy	3
MOK	08	O. Midtskogen, Norway	532	PCC		R. Papini, Italy	1770
MXM		M. Mifsud, Malta	33	PPS	03	S. Papp, Hungary	5927
MXL		R. Miles, England	472	PDV		D. Parker, England	5
MTU		T. Miller, NV	8	PTQ		T. Parson, MN	1437
MIP		R. Miro, MD	11	PJJ	15	J. Pastor, Spain	39
MZS	03	A. Mizser, Hungary	433	PKV		K. Paxson, TX	2
MCE		E. Mochizuki, Japan	23	PN		A. Pearlmutter, MA	2
MRV		R. Modic, OH	77	PEI	11	E. Pedersen, Denmark	42
MHH		J. Moehlmann, PA	168	PEG	01	C. Peguet, France	1216
MII	03	I. Mohacsi, Hungary	47	PWD		W. Pellerin, TX	49
MPV	03	P. Molnar, Hungary	1056	PIV		I. Peretto, Italy	25
MLF	10	L. Monard, South Africa	153919	PWM	05	W. Pessemier, Belgium	480
MYX		L. Mongabure, Argentina	2	PVA	27	V. Petriew, Canada	32991
MHC	12	C. Montalvo, Peru	10	PGE	02	G. Petter, Germany	29
MXO		C. Montes, Philippines	4	PRP		R. Pickard, Australia	6
MYK		K. Moore, SC	25	PXR		R. Pickard, England	1930
MEV	01	E. Morelle, France	2771	PBN		B. Pickett, Australia	1
MFS		S. Moretti, Italy	6	PKI		O. Piechowski, KY	10
MOI	01	E. Morillon, France	4065	PLQ	01	L. Pinatelle, France	358
MOW		W. Morrison, Canada	5291	PGU	18	G. Pinazzi, Italy	88
MDA		A. Morton, WA	1	PHT		H. Pinkston, VA	21
MXK	03	A. Morvai, Hungary	12	PMZ	15	M. Pinto, Spain	18
MVZ	03	J. Morvai, Hungary	9	PFB		F. Pires, Brazil	5
MPS		P. Mozal, Canada	96	PIJ	03	J. Piriti, Hungary	342
MMH		M. Muciek, Poland	10	PPL		P. Plante, OH	242
MKH		S. Mukherjee, India	5	PPZ		P. Plaszczyk, Poland	16
MDU		D. Mulinski, Poland	309	PDL	03	D. Plesa, Hungary	75
MMU		M. Munkacsy, RI	468	PAW		A. Plummer, Australia	9195
MUY	05	E. Muylaert, Belgium	12311	AST	12	R. Podesta, Argentina	22
NIS	03	I. Nagy, Hungary	7	PMO	10	M. Poll, South Africa	85
NZO	03	Z. Nagy, Hungary	31	PRV		R. Potter, MI	27
NDQ	01	D. Naillon, France	902	PWR		R. Powaski, OH	16
NDA		D. Nance, AL	3	POX		M. Poxon, England	882
NIL		I. Nasiroglu, Turkey	50	PYG		G. Poyner, England	11711
NLX	14	P. Nelson, Australia	5083	PCJ		C. Predom, CT	9
NAL	03	A. Nemes, Hungary	68	PDD		D. Presley, GA	4
NBB		B. Neuman, VT	3	PAH		A. Price, MA	1
NVT		V. Nevski, Belarus	4	POB		R. Price, England	17

Table 3. AAVSO Observers, 2006–2007, 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>
PUJ	06	F. Pujol-Clapes, Spain	689	SJOE		J. Schlimmer, Germany	8
PHG		H. Purucker, Germany	328	SPK	01	P. Schmeer, Germany	52
PSY		S. Pyatih, Belarus	1	SHV	03	A. Schmidt, Hungary	54
QPR		P. Queitsch, IN	3	SQE		R. Schoenstene, IL	26
QW	02	W. Quester, Germany	9	SAND	02	A. Schumann, Germany	3
QNK	20	N. Quinn, England	729	SCZ	01	E. Schweitzer, France	33
RIO	27	I. Radine, Canada	3	SCE		C. Scovil, CT	1
RKE		K. Raetz, Germany	523	SXV		S. Seva, Argentina	5
RBK		B. Ramotowski, NM	5	SDF		D. Shackelford, CA	237
RTM		T. Ranka, India	70	SHS		S. Sharpe, Canada	2833
RWA		W. Rauscher, PA	179	SDP		D. Sharples, NY	11
RUQ		A. Regnier, Argentina	2	SSA		A. Sharpless, WA	30
RZQ		S. Reichel, Argentina	5	SFY		J. Shears, England	8095
RFA		F. Reichenbacher, AZ	2238	SHW		W. Sherman, TX	6
RZS	03	Z. Reiczigel, Hungary	42	SLH		L. Shotter, PA	748
REP	24	P. Reinhard, Austria	393	SIG		D. Siegrist, MA	2
RWG	02	W. Renz, Germany	26	SPAO	18	P. Siliprandi, Italy	259
RMQ		M. Reszelski, Poland	2085	SNE		N. Simmons, WI	86
RNA	03	N. Rezsabek, Hungary	22	SDO		C. Simone, Argentina	3
RJG		J. Ribeiro, Portugal	4127	SXN		M. Simonsen, MI	989
RIX	14	T. Richards, Australia	10089	SANG		A. Sing, Philippines	73
RRZ	03	R. Ricza, Hungary	65	SYI		E. Skrzynecki, Poland	5084
RRJ		R. Rios, CA	11	SAE	10	A. Slotegraaf, South Africa	6
OJR	06	J. Ripero Osorio, Spain	1866	SJX	10	J. Smit, South Africa	58
RIV		M. Rivera, Italy	7	SDEW		D. Smith, OK	94
RAE		A. Roberts, South Africa	51003	SHA		H. Smith, MI	79
RRX		R. Roberts, NY	2	SUI		R. Smith, England	351
RCW		C. Robertson, KS	2477	SPV		P. Sobotka, Czech Republic	1
RSE		S. Robinson, MD	513	SKA	16	K. Sokolovsky, Russia	19
RZD	06	D. Rodriguez, Spain	199	SBX		A. Sonka, Romania	145
RHE	26	H. Rodriguez, Uruguay	4	SYP		P. Soron, Canada	300
RMU	06	M. Rodriguez Marco, Spain	43	SJZ		J. Speil, Poland	2734
ROE		J. Roe, MO	1003	SMUS	27	M. Spicer, Canada	12
RRO		R. Rogge, Germany	16	SSTE		S. Sposetti, Switzerland	30
ROG		G. Ross, MI	204	SXR	03	M. Sragner, Hungary	27
RGN		G. Rossi, Italy	61	SBL	05	B. Staels, Belgium	13995
RR		R. Royer, CA	23	SBH		B. Standifer, TN	159
RJV	07	J. Ruiz Fernandez, Spain	19	STR		R. Stanton, CA	66
RPH		H. Rumball-Petre, CA	9	SDB		D. Starkey, IN	7570
REM		E. Rumbo, Australia	792	SALE	09	A. Staroverov, Ukraine	63
RTH		T. Rutherford, TN	166	SPET		P. Starr, Australia	1039
RSV		S. Ryan, Ireland	1	SJAT		J. Starzowski, Poland	133
RZM		M. Rzepka, Poland	815	SYO		T. Steck, IN	626
SRIC		R. Sabo, MT	251	STF		G. Stefanopoulos, Greece	764
SJQ		A. Sajtz, Romania	1252	SRAN		R. Steffens II, TN	7
SSU		S. Sakuma, Japan	1146	STI		P. Steffey, FL	724
SVP	15	V. Sallares Pujol, Spain	5	SET		C. Stephan, FL	704
SVI		M. Sallman, MN	229	SVAG		V. Stephanou, Greece	1
SQL	26	R. Salvo, Uruguay	6	STIG		M. Stigliano, Argentina	3
SQU		J. Sanchez Lopez, Spain	86	SRB		R. Stine, CA	599
SAR		A. Sandage, OH	10	SOX		C. Stockdale, Australia	1778
SNL		J. Sandel, SC	22	STQ		N. Stoikidis, Greece	170
SXY		A. Sankowski, Poland	29	SDI	20	D. Storey, England	100
SGX	03	G. Santa, Hungary	861	SFU	14	M. Streamer, Australia	25
STC		G. Santacana, PR	19	SOLI		O. Strickson, England	2
SXQ	01	R. Santallo, French Polynesia	3	SRX	14	R. Stubbings, Australia	1961
SSIM		S. Santini, Italy	127	SUK		M. Stuka, CA	20
SKI	03	K. Sarneczky, Hungary	237	SAC	02	A. Sturm, Germany	320
SGE	27	G. Sarty, Canada	10	SUS	02	D. Suessmann, Germany	460
SSQ		R. Sass, NM	131	SUH		M. Suhovecky, IN	1
SVA		A. Saw, Australia	107	SWV		D. Swann, TX	419
SFI	18	T. Scarmato, Italy	89	SSW		S. Swierczynski, Poland	5180
SXK	02	M. Schabacher, Germany	133	SOZ	03	L. Szantho, Hungary	1
SCQ		T. Schell, TX	16	SAO	03	A. Szauer, Hungary	178
SFS		S. Schiff, VA	309	SLY	03	L. Szegedi, Hungary	230

2. The Year in Review

Table 3. AAVSO Observers, 2006–2007, cont.

Code	Org.	Name	No. Obs.	Code	Org.	Name	No. Obs.
SYV	03	P. Szekely, Hungary	310	VII	03	I. Vincze, Hungary	1
TUO		U. Tagliaferri, Italy	31	VJA	17	J. Virtanen, Finland	12
TDB	27	D. Taylor, Canada	844	VGK		G. Vithoulkas, Greece	1856
TNX	14	N. Taylor, Australia	48550	VRM		R. Vivaldi, Italy	30
TBA		A. Tekatch, Canada	57	VPZ	03	P. Vizi, Hungary	369
TJV		J. Temprano, Spain	274	VMH		M. Vlasov, Israel	1
ATE		A. Teofilo, Spain	929	VFK	02	F. Vohla, Germany	5509
TPS	03	I. Tepliczky, Hungary	526	VOL		W. Vollmann, Austria	197
TFM		F. Teyssier, France	43	UBN01		A. Von Der Linden, Germany	2
TTU		T. Tezel, Turkey	18	VVC		V. Voropaev, Russia	3
TJE		J. Thibodeau, OK	108	VVE		V. Vrhovac, Croatia	22
TGG		W. Thomas, CA	28	WGD		G. Waddill, VA	28
THU	01	B. Thouet, France	74	WLY		L. Wade, MS	46
TIA	03	A. Timar, Hungary	88	WJI	27	J. Wagner, Canada	48
TRE		R. Tomlin, IL	19686	WGR		G. Walker, MA	3354
TWP		W. Toomey, MA	6	WBY		B. Walter, TX	123
TOO	20	J. Toone, England	2	WHN		H. Walter, Hungary	47
TMH		M. Torabi, Iran	1	WJX		J. Wan, Australia	4
TJX	03	J. Toth, Hungary	213	WCB		C. Webster, PA	180
TJ	03	J. Toth, Hungary	180	WPT	10	P. Wedepohl, South Africa	114
TMQ	03	M. Toth, Hungary	15	WDZ		D. Wells, TX	1859
TFR		F. Travaglino, Italy	113	WKL		K. Wenzel, Germany	367
TWA		W. Travis, MA	2	WJD		D. West, KS	128
TRF		C. Trefzger, Switzerland	105	WEF		F. West, MD	434
TDW		D. Trowbridge, WA	109	WRP		R. Wheeler, OK	32
TVS		V. Tsamis, Greece	1	WDO		D. Whelan, RI	937
TSJ		S. Tsuji, Japan	1	WAH		A. Whiting, WA	2
TUB	03	V. Tuboly, Hungary	801	WPK		P. Wiggins, UT	14792
TXA		A. Tudorica, Romania	8	WJO		J. Wilder, CA	1
TYS		R. Tyson, NY	709	WEY		E. Wiley, KS	26
URS		R. Uyematsu, FL	4	WSA		S. Wilfrid, Canada	10
VFR	01	F. Vaclik, Czech Republic	69	WI		D. Williams, IN	1618
VST		S. Valentini, Italy	252	WIG		G. Williams, OH	4
BVE	04	E. Van Ballegoij, Netherlands	2179	WPX	14	P. Williams, Australia	48056
VDH	04	H. Van Den Hil, Netherlands	1	WWJ	20	B. Wilson, England	697
VDL	05	J. Van Der Looy, Belgium	3556	WSN		T. Wilson, WV	693
VDE	04	E. Van Dijk, Netherlands	143	WAS		A. Winkler, Germany	419
VHD	05	D. Van Hessche, Belgium	64	WKM		M. Wiskirken, WA	7
VNL	05	F. Van Loo, Belgium	1203	WBT		R. Wolpert, CA	16
VPJ		J. Van Poucker, MI	2	WGO		G. Wood, NC	11
VUG		G. Van Uden, Netherlands	128	WVR		R. Wood, TX	30
VVP	04	P. Van Vliet, Netherlands	106	WPF		P. Wright, MN	23
VWS	05	J. Van Wassenhove, Belgium	68	WUB	04	E. Wubbena, Netherlands	39
VZP		P. Van Zyl, South Africa	11	XWE		W. Xu, China	1
VBH		H. Vandenbruaene, Belgium	81	YDS		D. Yi, Republic of Korea	3
VEF	05	E. Vanderfeesten, Belgium	6	YBA		B. Young, OK	5
VMT	05	T. Vanmunster, Belgium	37750	YKA		K. Young, CA	13
VKN		K. Vardijan, Croatia	6	ZAD		D. Zak, PA	57
VED	01	P. Vedrenne, France	8370	ZPA		P. Zeller, IN	227
VET	01	M. Verdenet, France	5	ZDM		D. Zhdanok, Russia	4
VIA	01	J. Vialle, France	297	ZIG		I. Zinchenko, Ukraine	42
VLL		A. Villalobos, Costa Rica	14	ZTH		T. Zwach, Austria	10

Table 3. AAVSO Observers, 2006–2007, cont.

These codes, which appear in the Table (AAVSO Observers 2006–2007), 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)
- 07 Asociacion de Variabilistas de Espagne (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)
- 25 Variable Star Observers League in Japan
- 26 Red de Observadores (Montevideo, Uruguay)
- 27 Royal Astronomical Society of Canada
- 29 Asociacion Amigos de la Astronomia (Argentina)

Table 4. Observation statistics for fiscal year 2006–2007.

<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	87191	5	652
1000-1999	68750	4	48
2000-2999	47467	3	19
3000-3999	24548	1	7
4000-4999	35718	2	8
5000-5999	49022	3	9
6000-6999	25101	1	4
7000-7999	7570	0.5	1
8000-8999	33054	2	4
9000-9999	18757	1	2
10000+	1315389	77	30

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 2006–2007. Observers continued to perform variable star measurements with their CCD cameras. In addition to our program stars, observers continued 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 837,310 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 LPV’s started in 1993. This may be the most extensive record of these eight long period variable stars.

The Faint CV and LPV program, which was started at the Spring 1997 meeting, completes its tenth 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, and many observers 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 Faint 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.

In addition, Aaron Price, Matthew Templeton, and Elizabeth Waagen, coordinated six special observing campaigns/Special Notices/VSOTS on: Blazars for VERITAS/XMM collaborating with Dr. Markus Boettcher, GJ436 collaborating with Greg Laughlin, XMXB campaign collaborating with Dr. Gordon Sarty, PQ And collaborating with Dr. Paula Szkody, AR UMa collaborating with Dr. Steve Howell, ten Dwarf Nova CV’s collaborating with Dr. Christian Knigge.

The main goal for the coming year is to continue the *BVRI*, Faint CV and LPV, and Standard Stars Programs, to mentor future CCD observers, and to support future campaigns, thereby being a resource to observers embarking on this fascinating segment of AAVSO and to researchers utilizing its products.

Eclipsing Binary

Chair: Marvin E. Baldwin

8665 N. County Road 775 E, Butlerville, IN 47223

The trend toward more eclipsing binary data being obtained with CCD cameras continues. A few visual observers continue to play an active role obtaining data to measure times of minima. Among the most active of these visual observers are Chris Stephan, Robert Hays, Susan Oatney, David Williams, and Glenn Chaple. A considerable amount of photoelectric photometry data was provided by Brian Loader working minima of southern eclipsing binary stars from New Zealand.

The bulk of our CCD data was obtained by the Milwaukee observers, with Jerry Bialozynski, Rudy Poklar, and Gerry Samolyk being very active. *Observed Minima Timings of Eclipsing Binaries, No. 12*, now at the printers, continues our series of publications and will be available soon. All the minima will be listed on the AAVSO website, where researchers may find O–C curves and the data, including all historical AAVSO eclipsing binary data.

I want to take this opportunity to announce my retirement from the chairmanship of both the EB and RR Lyrae Committees. It has been a good run, but age tells! So, I'll leave it to younger and more energetic folks.

I hope the AAVSO continues the tradition of tracking the behavior of EB and RR stars. We have some 45 years of data on some of these stars, with much of the initial work having been done by the likes of David Williams and Leif Robinson. I would hope that anyone working on these stars 100 years from now would find 145 years of continuous AAVSO data to work with.

Education and Public Outreach

Chair: Pamela Gay

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

I'm afraid that this report starts with a bit of melancholy news. This is the last report of the Education and Public Outreach Committee in which we'll be able to list John Percy as a committee member. This year John is retiring from the University of Toronto, and as part of that retirement he is leaving the Education and Public Outreach Committee. The committee wishes to extend its deepest thanks to John for helping us get started and wishes him all the best in all his post-retirement endeavors.

This year the 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 public outreach.

2007 was the first 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. Last winter many of members of the AAVSO were invited to help hundreds of children prepare for local and regional Science Olympiad events. The 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 2008, and Donna has been busy holding numerous Coaches Clinics featuring resources from numerous of the AAVSO's "Variable Star of the Season" web presentations as well as from *Hands-On Astrophysics* (HOA). She has been distributing HOA to teachers, and at this time there are only fifteen copies remaining.

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. In parallel to Pam and Donna's efforts, Jaime Garcia has been creating a Spanish language version of HOA. These projects will continue in 2008 and hopefully we'll be able to announce a complete digital version of HOA in the not too distant future.

Continuing on the theme of formal education, numerous members have all worked hard to get students addicted to variable star astronomy through authentic research experiences. One excellent example that lead to a good benefit to the membership is work done by John Percy's students to complete a manual for his team's publicly available self-correlation software. Both the manual and software are available for free

online (software at <http://www.astro.utoronto.ca/~percy/web/scs.zip> and the manual at <http://www.astro.utoronto.ca/~percy/manual.pdf>. Pebble Richwine also worked with middle-school students provide research experiences using StarDial data. Her students successfully identified and quantified variable stars in this publicly available database.

The committee would like to congratulate Pebble for becoming the newest Ph.D. holder on our committee. Last spring, Pebble successfully earned her doctoral degree from the University of Arizona. We are very proud of her success and wish her the best in her new position as a science coordinator in Georgia.

Also in the area of formal education, Mary Kadooka and Donn Starkey have been teaming up to provide workshops for middle school and high school students, their teachers, and interested amateur astronomers. Using Donn's Dekalb Observatory and digital communications technology, Mary and Donn facilitated workshops on variable stars and photometry that allowed daytime Hawaiian participants to gain experience observing Midwestern night skies. This represents a powerful example of how geographically-separated teachers and amateurs can together bring variable stars to the public.

In the area of amateur-to-amateur education, Barry Beaman has developed an Astronomical League "Astro Note" on Beta Lyra. This is a tremendous piece of work that will hopefully inspire many League members to become interested in variable star observing and reporting.

As we move into a new year, the committee seeks to add projects in public outreach to our list of EPO activities. Specifically, we have set three goals for 2008:

1) We have plans to create an online archive of outstanding variable star presentations that can be used by anyone seeking to educate students, the general public, or fellow amateur astronomers about variable stars. Quite accidentally, this project started with Tim Crawford's talk entitled, "Introduction to Visual and CCD Observing of Variable Stars." When Tim announced this talk's availability on the AAVSO discussion list he was bombarded with requests for the talk and AAVSO Headquarters responded by posting the talk on the AAVSO webpage. We wish to build on his talk with additional member-contributed presentations. We humbly request from the membership copies of educational presentations on Variable Stars in a digital form for archiving on the committee's website for general use (with attribution always being given to the presentation author). We hope to go live with a beta version of a presentations index in the New Year, with a fully functional presentation index online by May 1.

2) Hand in hand with the presentations index, we plan to create a speakers' bureau listing people willing to give public presentations on variable star science and observing. If you are interested in requesting a speaker or being a speaker, contact Pamela Gay or Mike Simonsen.

3) We will also be doing a complete reworking of the AAVSO education webpages, with Donn Starkey at the coding helm. Expect to find great new content with the New Year.

Nova Search

Chair: Reverend Kenneth C. Beckmann

330 North Washington, Kahoka, Missouri 63445

No novae were discovered September 1, 2006, through December 31, 2006. During 2007 several novae were discovered photographically or by CCD in the Milky Way galaxy:

William Liller, Chile, discovered Nova Centauri 2007 (V1065 Cen) on January 23.354 UT at photographic magnitude 8.2.

Y. Nakamura, Japan, and Y. Sakurai, Japan, independently discovered Nova Scorpii No. 1 2007 (V1280 Sco) on February 4.8624 UT at photographic magnitude 9.9 and on February 4.896 UT at unfiltered magnitude 9.4, respectively. This nova later brightened to visual magnitude 3.

Y. Nakamura, Japan, and H. Nishimura, Japan, independently discovered Nova Scorpii No. 2 2007 (V1281 Sco) on February 19.8693 UT at unfiltered magnitude 9.3 and on February 20.8365 UT at photographic magnitude 9.2, respectively.

A. Tago, Japan, discovered Nova Cygni 2007 (V2467 Cyg) on March 15.787 UT at unfiltered magnitude 6.7.

H. Nishimura, Japan, and Y. Nakamura, Japan, independently discovered Nova Ophiuchi 2007 (V2615 Oph) on March 19.812 UT at photographic magnitude 10.2 and on March 20.812 UT at unfiltered magnitude 10.0, respectively.

Y. Sakurai, Japan, discovered Nova Sagittarii 2007 (V5558 Sgr) on April 14.777 UT at photographic magnitude 10.3.

William Liller, Chile, discovered Nova Normae 2007 (V390 Nor) on June 15.086 UT at photographic magnitude 9.4.

H. Abe, Japan, discovered Nova Vulpeculae 2007 (V458 Vul) on August 8.54 UT at unfiltered magnitude 9.4.

Our congratulations to all of these discoverers.

We continue to receive inquiries about the AAVSO visual nova search program. We suggest those interested in the program read the resources on the web pages on the AAVSO internet site devoted to visual nova search.

The following observations were received by our observers through the aforementioned observing period:

<i>Observer</i>	<i>Country</i>	<i>Free or Dome Search</i>	<i>Search Areas</i>
Gary Nowak	USA		1394
Dave Branchet	USA		48
Manfred Durkefalden	Germany	2979	21
Ken Beckmann	USA		514
Totals: 4 Observers		2979	1977

Photoelectric Photometry

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

The AAVSO Photoelectric Photometry program includes two sections: one group observes in the traditional *V*-band and a newer group observes in the near-infrared *J* and *H* bands. Doug West coordinates the IR observers and his report is below.

Our photoelectric photometry-*V* group continued its high level of activity with fifteen observers contributing 1,164 observations to the database. Individual contribution levels will be acknowledged in the published *JAAVSO* report, but it should be noted that three observers contributed more than 220 observations each. One newly qualified observer joined our ranks, Roy Axelsen from Australia, and two more observers, who recently acquired photometers, are training. We thank all of the contributors whose collective observing time totals over 400 hours of effort.

All photoelectric photometry observers have received ample support from Headquarters staff. In the past year, staff has implemented direct, on-line data entry and reduction. The new *PEPOBS* on-line interface accommodates both individual and batch modes of accepting raw data. Special thanks to Matthew Templeton, Sara Beck, and Kate Davis for making *PEPOBS* a reality. A significant number of the submitted observations were uploaded and reduced using this new tool, available through the "Blue & Gold" section of the AAVSO website.

The chairman has updated the photoelectric photometry introductory web page, and written a new instruction packet to guide new observers through the intricacies of making and submitting photoelectric photometry observations to AAVSO. He even managed to make a few observations, himself.

AAVSO Infrared Photometry Group Progress Report

During the last twelve months, the IR photometry group has been busy taking over 100 observations with the SSP-4 photometer in the *J* and *H* bands. The group is still small, with only a half-dozen observers. The AAVSO Infrared Photometry program was established

in 2003 and has been actively pursuing *J* and *H* band photometry of variable stars since the group's inception. Cool M type stars are much brighter in the infrared wavelengths (beyond 1 micron) and therefore become prime candidates for observation with the infrared SSP-4 photometer. During the last year the group has primarily concentrated observations on the Mira variables R Leo, α Cet, and X Oph. Another cool giant observed was W Ori. The eclipsing binary star δ Ori was also observed enough to put together a nearly complete light curve in the *J* and *H* bands.

During the coming twelve months the group is going to change its focus to work on two semiregular variable stars, SW Vir and χ Aqr. There is also talk of a joint photoelectric photometry and IR observing project on δ Sco. Our two new southern sky observers, Anthony Dutton and Greg Bond, plan to continue to monitor L2 Pup, R Cen, and η Car.

RR Lyrae

Chair: Marvin E. Baldwin

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With a few exceptions virtually all of the RR Lyrae star observing has fallen to the CCD camera again this year. The bulk of the results comes from the Milwaukee group of observers, whose totals, including both RR and EB data, come to over 60,000 observations.

Observing has been largely concentrated on a few RR stars with marked Blazhko effect, but I hope that other program stars will continue to be checked occasionally to track any period changes. I encourage all observers to assure that their data are entered into the AAVSO International Database.

As noted in more detail in my Eclipsing Binary Committee report, I am taking this opportunity to announce my retirement from the chairmanship of these two committees. As I also mentioned, I hope the AAVSO continues the tradition of tracking the behavior of these stars. With the AAVSO's long history of observing eclipsing binaries and RR Lyr stars, it would be disappointing for future researchers to find that history interrupted or terminated and their research frustrated.

Solar

Chair: Paul Mortfield

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

The following is a summary of AAVSO Solar Committee activity for the period October 2006 through September 2007 (Committee Chair, Paul Mortfield; Sunspot Observing Group Analyst, Dan Williams; Solar Flare/SID Analyst, Michael Hill).

The dedicated group of AAVSO solar observers continues to monitor the sun both visually and in radio wavelengths. These observers should be given credit for keeping vigil in spite of declining activity as we approach solar minimum. This is all part of living with our nearest star and the solar cycle. We welcome new observers to our ranks and congratulate the observers mentioned below that have achieved observational milestones.

Sunspot Observation Group

During the past year the sunspot observers team submitted a total of 10,922 sunspot observation reports. We averaged 57 observers per month during this period, showing that our dedicated team submitted an average 191 reports each. In the past 12 months, the R_s count averaged 10.6.

New observers to the team include Alan Buck, Dean Chantiles, and Mark Harris. The following sunspot observers are eligible for awards achieving their 1500- or 2000-observation milestones:

Name	Observations
E. C. Richardson	2184
Franky Dubois	1695
A. Gonzala Vargas	1666
Piotr Urbanski	1665

Sudden Ionosphere Disturbance (SID) Group Report

For the last twelve months SID Activity has been mostly slow, with some moderate bursts of activity, as the solar cycle settles into minimum. Even with a slowing of activity our observer ranks have remained steady. Seventeen observers submitted 167 reports. Thanks to all observers for their efforts in monitoring, data analysis, and report generation.

Five 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
Jerry Winkler	A50
Domenic Toldo	A52
Michael Hill	A87
Jim Mandaville	A90
Len Anderson	A91

Supernova Search

Chair: AAVSO Headquarters

Some observers, most notably former committee chair the Rev. Robert O. Evans of Hazelbrook, Australia, continue to search for supernovae visually, with success demonstrated particularly by Bob's ever-increasing tally of discoveries. More and more amateur supernova searching is done by CCD, and discoveries are frequently announced in the *IAU Circulars* and Central Bureau for Astronomical Telegrams *Central Bureau Electronic Telegrams* (CBETs).

For observers interested in visually searching for supernovae, information is available both on line and in the *AAVSO Supernova Search Handbook*. The AAVSO continues to present its Supernova Award for the visual discovery of a supernova.

Treasurer's Report
October 1, 2006–September 30, 2007

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

Income

	Dues	\$ 52,029
	Investments	921,750
	Contributions	38,290
	Grants and royalties	68,673
	Operating income	<u>23,242</u>
Total Income		1,103,984

Expenses

	Staff costs	\$ 736,205
	Building and utilities	73,744
	General operations	53,826
	Publications	17,634
	Technical operations	20,980
	Project operations	955
	Meetings	28,324
	Miscellaneous	<u>47,558</u>
Total Expenses		979,226



3. Officers, Staff, and Volunteers

AAVSO Officers, Council Members, and Committee Chairs for Fiscal Year 2007–2008

You may contact these persons through AAVSO Headquarters.

Officers

Director	Dr. Arne Henden	(term of office: 2005–2009)
President	Dr. Paula Szkody	(2007–2008)
Past President	David B. Williams	(2007–2008)
1st VP	Jaime Ruben García	(2007–2008)
2nd VP	Michael A. Simonsen	(2007–2008)
Secretary	Gary Walker	(2007–2008)
Treasurer	David A. Hurdis	(2007–2008)

Council Members

Barry B. Beaman	(2007–2009)
James Bedient	(2007–2009)
Gary Billings	(2006–2008)
Dr. Pamela L. Gay	(2007–2009)
Dr. Arlo U. Landolt	(2006–2008)
Dr. Karen J. Meech	(2006–2008)
Christopher Watson	(2007–2009)
Dr. Douglas L. Welch	(2006–2008)

Committee Chairs

CCD	Gary Walker
Eclipsing Binary	Gerard Samolyk
Education and Public 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. Charles A. Whitney

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, Part Time
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, <i>JAAVSO</i> Production Editor, Library, Archives
Travis Searle	Administrative Assistant, Publications
Michael A. Simonsen	Development Director
Dr. Matthew Templeton	Staff Astronomer
Rebecca Turner	Astronomical Technical Assistant, Meeting Coordinator, Part Time
Elizabeth O. Waagen	Senior Technical Assistant, <i>JAAVSO</i> 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 stars sequences, as well as serving as officers, councilors, and committee chairs.

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

Barry Beaman	Keith Graham	Steve Robinson
John A. Blackwell	Bill Goff	Guido E. Santacana
Tim Crawford	Michael Linnolt	Mike Simonsen
Bill Dillon	Mike Mattei	Ray Tomlin
Jim Fox	Chuck Pullen	

Variable Star Index (VSX) Moderators

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

Charts and Sequences

Marc Biesmans	Mati Morel	Wolfgang Renz
Tim Crawford	Sebastian Otero	Mike Simonsen
Michael Koppelman	Vance Petriew	

Eyepiece Views Contributing Authors

Eric Broens	Yenal Ogmen	Chris Stephan
Tim Crawford	Alfredo Pereira	David Turner
Gerald P. Dyck	Gary M. Ross	Erwin van Ballegoij
Kate Hutton	Mike Simonsen	David B. Williams

Solar Section

William Michael Hill	Arthur Ritchie
Paul Mortfield	Dan Williams

Programming and Coding

Len Abbey	Rick Merriman
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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*

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

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