# **ANNUAL REPORT OF THE DIRECTOR FOR FISCAL YEAR 2000–2001**

Janet Akyüz Mattei AAVSO Headquarters 25 Birch Street Cambridge, MA 02138

It is a privilege and a distinct pleasure for me to present to you my Annual Report for Fiscal Year 2000–2001.

This has been another very active and productive year. I am pleased to report another milestone reached: the 10 millionth observation in the AAVSO International Database was received at AAVSO Headquarters. In other highlights of the year, we have: further worked towards streamlining and automating the submission of incoming observations; updated our data entry software and released a new program for Macintosh and Microsoft Windows users; developed Windows versions of our plotting and editing software ZAP and our HOAFUN program for Hands-On Astrophysics; upgraded our web and FTP sites-first to DSL and later to a T1 line; upgraded our file server and database to a Linux file server; expanded our Internet presence through hardware and software upgrades, improvements, and enhancements; secured the web server to accept credit card transaction information; provided a new ability to batch upload large numbers of CCD observations; published and distributed a revised Manual for Visual Observing of Variable Stars and a CD-ROM of all AAVSO charts; placed on our web site an on-line chart search engine; automated the chart-making process; brought up-to-date the publication of the Journal of the AAVSO; placed 15 years of JAAVSO articles on NASA/ Astrophysics Data Systems (ADS); responded to a record high number of requests for AAVSO data; and started two electronic publications for observers-CCD Views and Eyepiece Views.

In my Annual Report I will summarize these and other activities, and share with you some highlights of our operations.

## 1. Data management and data processing

1.1. Computerization and processing of current data

The computerization of monthly data that we receive by postal mail, fax, and email is up to date, thanks to Gloria Gonzalez and Barbara Silva, who enter and verify, respectively, the data that come by postal mail, and to Elizabeth Waagen and Michael Saladyga, who process and archive all of the monthly data in the AAVSO International Database.

Currently 75% of the incoming data are being submitted electronically through our web site or through automated email using the PCObs or KSOLO programs. More time is saved each month in data processing, as more and more observers use the new system of data submission and follow AAVSO format requirements exactly. The improvements have been slow because 30% of the observers using the new system of submission still send data in a non-standard format that need to be reformatted individually by the technical staff.

## 1.2. Electronic observations and software

This past year we have made major revisions to the formats, procedures, and software associated with submitting observations electronically to the AAVSO, and with processing these data and making them available to the astronomical community. Our goal in making these revisions was to simplify electronic submission of data for the observers, make these observations available to the astronomical community nearly in real-time, make the submitted electronic data homogeneous in AAVSO format to facilitate processing by Headquarters, and make more efficient use of staff time that was being used to reformat non-standard data.

No changes were made to the format and procedure for reporting observations on paper.

Before we made the changes, we notified current and potential observers through the AAVSO web site, articles in the AAVSO Newsletter, letters accompanying the AAVSO Bulletin to active observers, and through personal letters to international variable star observing group leaders who submit their observers' data to the AAVSO.

### 1.2.1. Simplified procedures for electronic data submission

Beginning February 1, 2001, we implemented greatly simplified procedures for submitting observations electronically to the AAVSO. In the past, observers submitted a monthly report in two differently-formatted files, and if they also wanted to submit observations on a daily basis for the *News Flash* or Quick-Look File, they used a third format. Now there is only one format for incoming observations, and monthly reports are no longer required—an observer submits an observation one time only, and whenever he or she wants. We refer to this new procedure as "one time, one file, one format." We realize these changes asked a lot of some of our observers and members. Thanks to their patience, suggestions, and support, and hard work by the staff, we were able to overcome the difficulties of these new initiatives, and the new procedures have been a real success.

# 1.2.2. Automated receipt of incoming electronic observations

The receipt of electronic observations by our staff has now been almost completely automated. The observations are automatically pipelined into the online Quick-Look/Light Curve Generator Files every half hour (around the clock, 7 days a week) and stockpiled for monthly processing. Instead of technical staff spending a few (sometimes several) hours every day, it now takes only a few minutes to process a night's observations. The only time the technical staff spends time with the incoming daily observations is when the observer does not wish to use the new system of data submission and sends data in a non-standard way. In comparison to the old system, the new method is a huge improvement and has freed up staff time to spend on other projects.

# 1.2.3. Software

Over the past year we worked to provide more software and new data entry tools to members and observers. We updated our MS-DOS (KSOLO) and WWW-based (WebObs) data entry tools, and released a Windows-based data entry program called PCObs that allows observers to quickly and easily enter and submit observations in the official AAVSO format. PCObs is our most popular program and has been downloaded over 680 times since it was released in January. We would like to thank Lenny Abbey for his tireless work on PCObs, along with all the PCObs beta testers.

At any time an observer or astronomer can check to see the latest activity of a star. The AAVSO is the only variable star organization that offers data so close to real time.

In addition, we have released data entry software for Macintosh OS9, and OSX, and for Linux users.

We have continued our collaboration with Elwood Downey of the Clear Sky Institute by interfacing his popular Xephem astronomical software package with our on-line Light Curve Generator. This has resulted in over 4,100 light curves being plotted by users of his software since the collaboration began in March. Xephem is an award-winning free astronomical software package available for Linux and Unix operating systems. Its support for AAVSO light curves was displayed in the August 2001 issue of *Sky & Telescope* (page 72).

### 1.3. Hardware

### 1.3.1. File server

At Headquarters we have implemented many new technologies to improve our service to members, and to make our internal operations more efficient. The most important of these changes was the replacement of our file server with a more modern system. The new hardware runs on Linux, which completed our switchover from Microsoft Windows NT to an all-Linux server environment. In addition, it has many data redundancy features such as a RAID 5 hard drive array, multiple tape backup drives, and an isolation power supply that protects the system in the event of a power disruption.

## 1.3.2. Staff workstations

Along with the new file server, we have upgraded other equipment at Headquarters. We purchased a new computer to help with the publication of the *Journal of the AAVSO*. We upgraded various staff workstations with hard drives, RAM, and video cards where appropriate. In addition, all full-time staff members now have 17-inch monitors. We also purchased a new internal networking switch, along with a laser printer for office tasks and a dot matrix printer for the archiving of data and printing of mailing labels. All of this has increased staff efficiency by making network access more reliable, printing quicker, and hardware downtime less.

### 1.3.3. Internet access

We upgraded our Internet access from 56K to 512K per second of bandwidth. Originally we had upgraded to 128Kbps DSL in January, but it became apparent rather quickly that 128Kbps of throughput was still not enough to satisfy demand for our web and FTP sites. In July we upgraded further to a partial T1 (512Kbps) with an option to expand to a full T1 (1.54Mbps) should demand warrant. This upgrade has greatly decreased the download time of files from the AAVSO web and FTP sites along with opening up many possibilities for the future.

We would like to thank the NASA Astrophysics Division for providing us with the 56K connection for six years. This generous grant was an important factor in the exciting growth of the AAVSO Internet presence during that time.

### 1.3.4. Internet security

The last year has seen a dramatic increase in the number of high profile security problems with the Internet, mainly due to malicious code that takes advantage of vulnerabilities in the popular Microsoft products, some of which are in use at the AAVSO. In response we have implemented a program to tighten computer security at AAVSO Headquarters. First, personal membership data are always kept on a computer that is never hooked up to the network so it is impossible for anyone to gain remote access to it. Secondly, the archives are both mirrored and backed up every night. We have also restricted the kind of attachments that can be received at Headquarters via e-mail and upgraded our anti-virus software, and we have set up a firewall on each server.

## 2. Internet presence: the AAVSO web site

The AAVSO Internet presence—the AAVSO web site—continued to expand thanks to the efforts of Kate Davis, our Webmaster, and Aaron Price, our System Administrator and Technology Technical Assistant.

## 2.1. Internet achievements—October 1, 2000–September 30, 2001

We have added educational tools such as an html version of the newly revised *AAVSO Manual for Visual Observing of Variable Stars*; a Gamma-Ray Burst (GRB) PowerPoint presentation by Chuck Pullen; an on-line "Getting Started with CCD Observing" web page; and 12 entries to the "Variable Star of the Month" pages (Z And, GK Per, Betelgeuse, BL Lac, TTau, SN 1987A, R Leo, Novae, AM Her, EU Del, RY Sgr, WZ Sge).

We have added materials for members, such as an "AAVSO Awards and Honors" section; an "AAVSO in print" section listing publications using AAVSO data and collaboration; historical (long-term) light curves; "Photographic History of AAVSO Meetings"; more complete coverage of Meetings and Meeting Announcements, including a photo gallery and written reports; and a "Solar Photo Gallery" and SID equipment pages to the Solar section.

We have added most of the AAVSO publications: the AAVSO Newsletter; Monographs; Alert Notice; News Flash; Circular; Bulletin 64 (Predicted maxima and minima of long period variables for 2001); Minima Timings of Eclipsing Binaries (Numbers 1–6); Eclipsing Binary and RR Lyrae Ephemerides for 2001; Solar Bulletin; CCD Views; Eyepiece Views; 2001 Julian Day Calendar; and Nova Hunter's Handbook by Kenneth Beckmann.

In addition we have re-designed the web's chart section, tailored to the new chart search-engine feature; compiled user feedback to the on-line web survey; and revised the navigability of the *Hands-On Astrophysics* site.

We set up a secure web server that encrypts data coming to and from it over the Internet. This has allowed us to begin taking payment information on-line along with membership dues, meeting registrations, and orders for publications and stellar gifts. We have seen a 40% increase in completed new member applications since we began accepting payment on-line.

Plotting software for the Light Curve Generator was re-written to optimize the database, thus lowering the average plot time from 30 seconds to 5 seconds. We added the ability to plot evaluated data in a different color, and an option to change the height (magnitude limit) and width (date) of the plot and the limiting magnitude. The Light Curve Generator usage has doubled in the last year. On average it creates 115 light curves a day, and has produced a total of 41,902 light curves in the last year. It is accessed extensively by both professional and amateur astronomers.

The Quick-Look File was enhanced to update itself automatically every half hour, seven days a week, instead of once per weekday, as in the past. The daily accessing of the files has doubled.

All the AAVSO charts—over 3,000 standard and preliminary—are on-line and are updated as additional charts are made. A new chart search engine has recently been developed to search and index our chart catalogues for charts on a specific star (by name or designation), by constellation, right ascension, declination, chart scale, star type, or even by any combination of the above. The new search engine for AAVSO charts makes the planning of an observing program much easier.

Here are some web site statistics for October 2000–September 2001: Total web pages downloaded—2,246,780; average pages downloaded—6,155 per day (1 every 15 seconds); number of individual visitors—117,762; number of light curves plotted—41,902; about 2,990 charts downloaded per day (tripled in the last half of the year); the most popular stars were SS Cyg, Mira, and U Gem.

Top destinations: Standard Chart Index—16%; Quick-Look—14%; Light Curve Generator—11%; Variable Star Section—10%; Alert Notices—9%; Variable Star of the Month—9%; Finder Charts Index—8%; Committees Index—8%; Easy to Observe Stars—7%; Chart Update—7%.

Some comments on our web site and new services:

• I have just submitted my completed report...Thanks so much! I love this new way of sending observations. —David Levy

• I am very pleased finding your new web page which only needs me to enter the star's designation or name to get to the charts. So a lot of clicks to search in the preliminary and the standard chart branch and their levels are not any longer necessary. Ido like that new feature. —Hans G. Diederich

166

• I wanted to congratulate and thank you both for the new T1 Internet Connection. The web site loads blindingly fast now, and I can use the full speed of my DSL connection on it. ...Seriously, I think this is a wonderful augmentation of the most visible (to the outside world) portion of AAVSO.... —Chuck Pullen

• I really like to report to AAVSO with a new electronic system "Submit Observations Online" (I never thought to say this after a few unsuccessful attempts with KSOLO). Finally I would like to say it is far more satisfying to me to observe long period variables than CVs, in which respect AAVSO "Light Curve Generator" works great. To see my observations in dark red against light green of other observers is probably best selection of colors. —Miroslav Komorous

• I happen to browse the AAVSO website last night and was very pleased to find the archives of the past meetings. The photographs are great! —Paul Norris

• I just submitted via the web, my first observation that way. It was really neat to do that Sunday nite, and then look at the quick look file a short time later and see my observations there. I then came into work the next morning and looked at the light curve generator before work, and there was my observations plotted. Wow. —Gary Walker

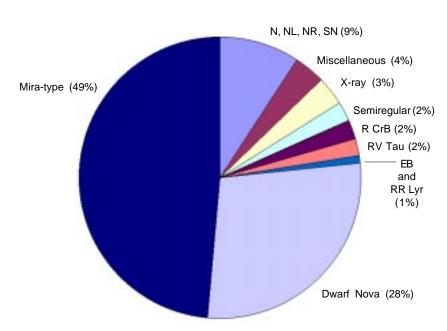
## 3. Requests for AAVSO data

AAVSO data are continuing to play a vital role in variable star astronomy. This year we responded to 431 electronic, postal, or telephone requests from astronomers, observers, educators, and students. Of these, 257 were filled by providing the requested information by telephone, email, fax, or postal mail, and 174 by the requester downloading evaluated data (1963–2000) on long period variables from our web site. While the requests for downloaded data were on individual stars, some of those that came to Headquarters contained requests for data on a long list of stars. These requests are in addition to a significant number of people who obtain data and information they need from materials on our web site, such as the Quick-Look File, *News Flash*, and Light Curve Generator.

We have provided data support for observations with ground-based telescopes (such as KPNO, VLBA, INT, SAAO, CAO-SAI, ETSU) and satellites (such as FUSE, Chandra, Hubble Space Telescope, XMM, RXTE, ISO, GP-B, ASCA).

Those requesting data from AAVSO Headquarters are: professional astronomers (68%), amateur astronomers (13%), teachers (2%), students (16%), and newspaper and magazine reporters (1%).

A list of individuals requesting data, as well as each person's affiliation and location, is given in Table 5 at the end of my report.



Director's Report, JAAVSO Volume 30, 2002

Figure 1. Types of stars for which AAVSO data were requested during fiscal year 2000–2001.

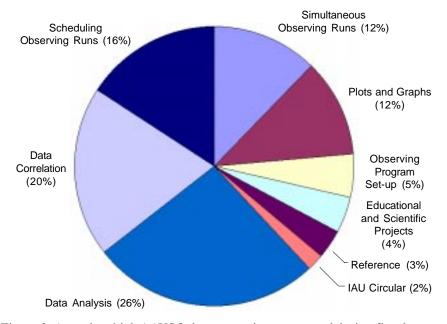


Figure 2. Areas in which AAVSO data or services were used during fiscal year 2000–2001.

The types of stars for which AAVSO data and services have been requested this year are given in the list below and in Figure 1:

- a. Cataclysmic variables—37% (Dwarf novae 28%; Novae, nova-like, recurrent novae, supernovae 9%)
- b. Long period variables—51% (Mira 49%; Semiregular 2%)
- c. X-Ray sources—3%
- d. R Coronae Borealis stars—2%
- e. RV Tauri stars—2%
- f. Eclipsing binaries and RR Lyrae stars—1%
- g. Miscellaneous (Cepheids, BL Lac objects, Symbiotic, Nebular, gamma Cas variables)—4%

The areas in which AAVSO data have been used this year are given in the list below and in Figure 2:

- a. Multiwavelength data correlation from optical to radio wavelength data 20%
- b. Reference material 3%
- c. Scheduling of satellite and ground-based observing runs 16%
- d. Simultaneous observations of targeted objects with satellites 12%
- e. Data analysis 26%
- f. Figure/illustration 12%
- g. Become familiar with star 5%
- h. Education 4%
- i. IAU Circular 2%

## 4. Awards and recognition

## 4.1. Awards given

a. AAVSO Nova Awards: At the 90th Annual Meeting, AAVSO Nova Awards were presented to the following observers for their visual discoveries of novae or supernovae: Brett White (Australia) for Supernova 2000do in NGC 6754; Alfredo Pereira (Portugal) for Nova Sagittarii 2001 No. 2 (V4739 Sgr) and his independent discovery of Nova Sagittarii 2001 No. 3 (V4740 Sgr); Robert O. Evans (Australia) for Supernova 2001du in NGC 1365; Libert A. G. Monard (South Africa) for Supernova 2001el in NGC 1448.

b. AAVSO Observer Awards: We have continued recognition of our observers through the Observer Award program. This year, at the AAVSO 90th Spring Meeting in Madison, Wisconsin, we presented the following AAVSO Observer Awards: to Paul Vedrenne of France, who has made over 100,000 observations; three awards to those observers who have made 50,000 or more observations; six awards to those observers who have made 25,000 or more observations; four awards to those observers who have made 10,000 or more observations; one award to that observer who has made 10,000 or more CCD observations; two awards to those observers who have made 5,000 or more CCD observations; two awards to those observers who

have made 2,500 or more CCD/PEP observations; six awards to those observers who have made 1,000 or more CCD/PEP observations. A complete list of Observer Award recipients was published in the *Journal of the AAVSO*, Volume 30, Number 1, pages 102–103.

c. AAVSO Director's Award: This year the recipient of the AAVSO Director's Award was Stephen D. O'Connor of Montreal, Quebec, Canada, for his unique and dedicated contributions to special observing programs, particularly with FUSE and Chandra satellites, and for his untiring voluntary work in checking AAVSO charts. At Steve's request, this award was presented at the 90th Annual Meeting, rather than at the Spring Meeting, as is the custom.

d. AAVSO William Tyler Olcott Award: The second AAVSO William Tyler Olcott Distinguished Service Award was presented at the Annual meeting in November to Leif J. Robinson for his untiring promotion of variable star astronomy in the pages of *Sky & Telescope* magazine during his many years as Editor and Editorin-Chief, and for his enthusiastic fostering of the Amateur-Professional Partnership.

e. A special award of thanks and appreciation was presented at the Annual meeting to Howard J. Landis, who is retiring after 26 years as Chair of the AAVSO Photoelectric Photometry Committee.

f. A special award of thanks and appreciation was presented at the 89th Annual Meeting (October 2000) to John E. Bortle for his thirty years of dedication and service as Editor of the *AAVSO Circular*, which ceased publication as of January, 2001.

## 4.2. Awards received

Minor planets have been named in honor of the following AAVSO members:

Danie Overbeek—No. 5038;	Sergio Foglia—No. 13147;
Janet Akyüz Mattei—No. 11695;	Mauro Zanotta—No. 14568;
Martha Hazen—No. 10024;	Sandro Baroni—No. 7196;
Michel Verdenet—No. 25625;	Reinder Bouma—No. 9706.

## 5. Special projects

The AAVSO Gamma-Ray Burst (GRB) Network was formed by the AAVSO and NASA/Marshall Space Flight Center in 2000 at the First High-Energy Astrophysics Workshop for Amateur Astronomers. The network provides three main services for would-be observers of elusive, transient gamma-ray burst optical afterglows: training, alert support, and discovery notification. Network members participate in the AAVSO GRB Discussion Group—an e-mail forum, archived on the web—in which participants ask questions of mentors and each other, receive feedback, and post observation results. Through the Discussion Group and GRB web site, participants receive training and answers to their questions from a team of professionals on searching for GRB afterglows, locating the field rapidly, filters, observing procedures, etc. In addition, we have on the web site many discussions of GRB theory and on-line tutorials about the GRB Network, including an 89-page presentation developed by network member and HEA Workshop attendee Chuck Pullen.

The GRB Network is geographically diverse, consisting of 98 members located in 17 countries. All network members have CCDs that reach limiting magnitude 17 or fainter. One third of the members receive immediate notification of GRB detection via pagers, some funded by the AAVSO through a grant from a private foundation (the Curry Foundation). Four of the network members so far have imaged and detected three GRB afterglows, including a multi-color light curve of GRB 010222.

The network has developed a fully comprehensive set of procedures to follow when attempting to image a GRB afterglow. Upon detection of a GRB and subsequent electronic notification via the Global Coordinates Network (GCN), finder charts, photometry, minor planet searches, and other data are automatically compiled and placed on the AAVSO web site within minutes. The web site is hosted at AAVSO headquarters, and is served by a T1 line installed in direct response to the traffic generated by the activity of the GRB Network.

To support worldwide coverage of GRB afterglows and to help make the amateur observations uniform and up to professional standards, five AAVSO observers, in Finland, Hungary, Australia, New Zealand, and Brazil, were selected in 2001 to be upgraded with similar CCD cameras (on loan from the AAVSO), funded through a grant from the Curry Foundation. The observers were chosen on the basis of their geographic location to ensure wide latitude/longitude coverage of bursts, the quality and aperture of their telescope, and their proven reliability and observing ability.

My sincere thanks go to G. J. Fishman and C. Kouveliotou at NASA/MSFC and to the Curry Foundation for their support of the GRB program, to Arne Henden for his professional mentoring of the GRB observers, and to Aaron Price for his technical support of the GRB network.

## 6. AAVSO educational project

The dissemination of *Hands-On Astrophysics* (HOA) continues with sales through the AAVSO and catalogues of the Astronomical Society of the Pacific and Sky Publishing Corporation. This fiscal year we have sold 95 HOA sets and given out 4 complimentary copies. We had three workshops:

a. Two-week workshop with 22 hours of HOA activities, as part of the University of Hawaii's TOPS (Towards Other Planetary Systems) education workshop for Hawaiian and Pacific Islands teachers and students;

b. Teachers' workshop in Florida organized by our member Chris Stephan;

c. Workshop for the public at the Davis Star Show (California) by our members Chuck Pullen and Ray Berg.

## 7. Summary of observations

We had a milestone in the AAVSO International Database: the 10 millionth observation was made by Miroslav Komorous (London, Ontario, Canada) with his observation of 0152+54 U Per at magnitude 10.2 on JD 2451840.6222 (October

23.1222, 2000 UT). Figure 3 shows the AAVSO Megasteps—the years in which each half-millionth observation was contributed to the AAVSO International Database and the name of the observer making each megastep observation.

## 7.1. Annual observations

This year we received 407,540 visual, photoelectric, and CCD observations from 656 observers worldwide (Figure 4). These totals include 123,221 observations, of which 17,691 are inner sanctum observations, from 250 observers in 43 states and territories of the United States, and 284,319 observations, of which 54,986 are inner sanctum observations, from 406 observers in 46 countries.

We continued to receive increasing numbers of observations from observers in the southern hemisphere and from observers with CCDs.

The total number of observations since 1911 in the AAVSO International Database is 10,364,626.

Our top three observers for this fiscal year were Lewis Cook (USA) with 10,526 (all CCD) observations, Rod Stubbings (Australia) with 11,384, and Maciej Reszelski (Poland) with 29,569 observations (6 years' data).

Table 1 lists the number of observers and the total observational contribution from each country during this fiscal year. Table 2 gives the same information for each state or territory in the United States. Table 3 is an alphabetical list of observers, giving each person's AAVSO observer initials, location, and annual totals of observations and inner sanctum observations (magnitude 13.8 or fainter, or "fainter than" 14.0 and fainter).

Table 4 lists the numbers of observers, each of whom made 1 to 999 observations; 1,000 to 9,999 observations (in increments of 1,000); and 10,000 or more observations this year. Table 4 also lists for each category the total number of observations and the percentage of all observations the category represents. Figures 5, 6, and 7 show schematic representations of the information in Table 4.

We received 2,460 observations from 20 photoelectric observers. Howard Landis, chair of the AAVSO Photoelectric Photometry Committee, digitizes these observations, reduces them to standard format, archives them, and sends them to Headquarters to be included in the AAVSO Photoelectric Photometry Database.

We received 57,046 CCD observations from 60 observers. These include *B*, *V*, *R*, *I* observations of CCD program stars and the CCD observations of other types of stars, particularly faint cataclysmic and long period variables. Gary Walker, chair of the AAVSO CCD Committee, makes sure that the CCD-program star observations are reduced in the standard format, archived, and submitted to Headquarters for inclusion in the AAVSO CCD Database.

We received 33,539 eclipsing binary and RR Lyrae star observations from 104 observers. Marvin Baldwin, chair of the AAVSO Eclipsing Binary and RR Lyrae Committees, together with committees member Gerry Samolyk, reduces and archives the observations for the determination of times of minima and maxima, respectively.

We received 2,389 supernova search observations from four observers. These observations, which are not included in the annual totals, are archived at AAVSO

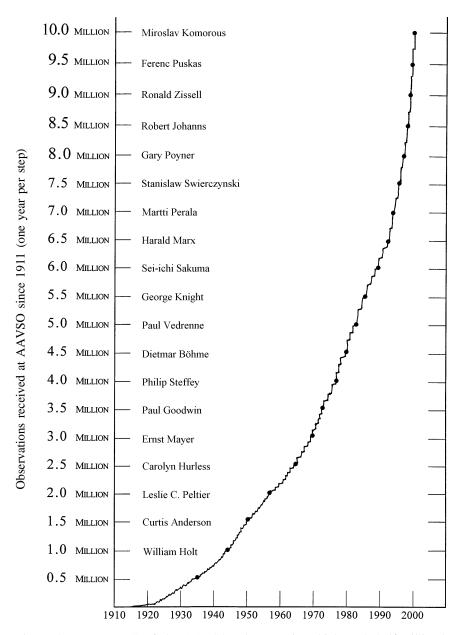


Figure 3. "Megasteps" of the AAVSO—the year in which each half-millionth observation was contribued to the AAVSO International Database, and the name of the observer credited with making the observation.

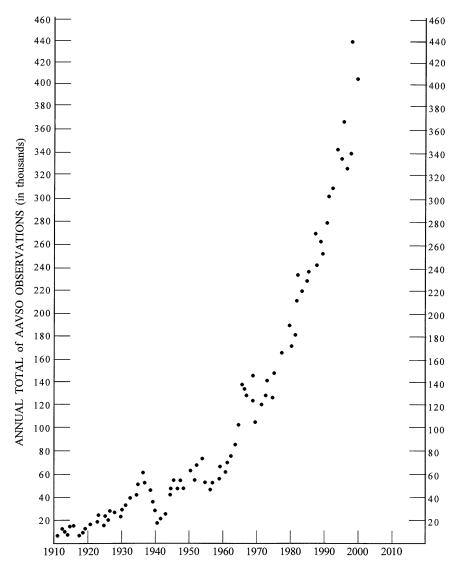
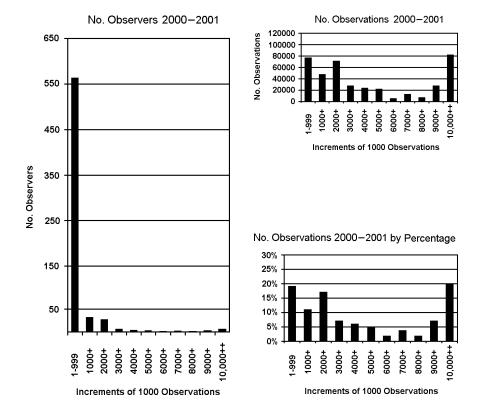


Figure 4. Number of observations submitted each year to the AAVSO International Database since its founding in 1911.



Figures 5, 6, and 7. These figures represent the information given in Table 4. Figure 5(left) shows the number of observers, each of whom contributed 1–999; 1,000–9,999 (in increments of 1000), and 10,000 or more observations in fiscal 2000–2001. Figure 6 (top right) shows, for each increment of 1,000 observations, the total number of observations contributed by the corresponding number of observers shown in Figure 5. Figure 7 (bottom right) shows, for each increment of 1,000 observations, the number of observations given in Figure 6, represented as a percentage of the total number of observations contributed to the AAVSO in fiscal 2000–2001.

Headquarters. Rev. Robert Evans, chair of the AAVSO Supernova Search Committee, continues to provide vital guidance to the observers.

We received 4,154 nova search observations from five observers. These observations are not included in the annual totals. Rev. Kenneth Beckmann, chair of the AAVSO Nova Search Committee, compiles these observations and provides valuable guidance to observers.

My most sincere thanks go to all our observers for their tireless efforts, dedication, and vital astronomical contributions to the AAVSO International Database.

My sincere thanks also go to our data processing and archiving staff—Elizabeth Waagen, Michael Saladyga, Gamze Menali, Barbara Silva, and Gloria Gonzalez—who very carefully digitize, process, and archive our hundreds of thousands of observations received each year.

## 7.2. 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 de Variabilistas de Espagne (Spain)
- c. Association of Variable Star Observers "Pleione" (Russia)
- d. Association Française des Observateurs d'Étoiles Variables (France)
- e. Astronomical Society of Southern Africa, Variable Star Section
- f. Astronomisk Selskab (Scandinavia)
- g. Brazilian Observational Network REA
- h. Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e.V. (BAV) (Germany)
- i. Liga Ibero-Americana de Astronomia (South America)
- j. Madrid Astronomical Association M1 (Spain)
- k. Magyar Csillagàszati Egyesület, Valtozócsillag Szakcsoport (Hungary)
- 1. Nederlandse Vereniging Voor Weer-en Sterrenkunde, Werkgroep Veranderlijke Sterren (Netherlands)
- m Norwegian Astronomical Society, Variable Star Section
- n. Royal Astronomical Society of New Zealand, Variable Star Section
- o. Sociedad Astronomica "Syrma" (Valladolid, Spain)
- p. Svensk Amator Astronomisk Förening, variabelsektionen (Sweden)
- q. Ukraine Astronomical Group, Variable Star Section
- r. Unione Astrofili Italiani (Italy)
- s. URSA Astronomical Association, Variable Star Section (Finland)
- t. Vereniging Voor Sterrenkunde, Werkgroep Veranderlijke Sterren (Belgium)

# 8. Membership

At the 90th Spring Meeting, held in Madison, WI, May 3–6, 2001, we elected 73 new members, one of whom joined as a Sustaining member. A list of these new members appears on pages 101–102 of Volume 30, Number 1, of the *Journal of the AAVSO*.

At the 90th Annual Meeting, held in Somerville, MA, November 1–4, 2001, we elected 87 new members, three of whom joined as Sustaining members. A list of these new members appears in this issue of the *Journal* following the Minutes.

## 9. AAVSO publications

This year the following were published by the AAVSO:

a. *Journal of the AAVSO*, Vol. 28, No. 2, and Vol. 29, Nos. 1 and 2, edited by Charles A. Whitney, with assistance from Elizabeth O. Waagen and Michael Saladyga (*JAAVSO* Vols. 13–28 are now accessible on-line through the NASA Astrophysics Data System (ADS)).

b. AAVSO Bulletin 64: 2001 Predicted Dates of Maxima and Minima of 561 Long Period Variables, prepared by Janet A. Mattei, with assistance from Elizabeth O. Waagen.

c. *AAVSOAlert Notice*, Nos. 278–290, prepared by Janet A. Mattei and Elizabeth O. Waagen.

d. *AAVSO News Flash*, Nos. 678–851, prepared by Janet A. Mattei and Rebecca T. Pellock, with assistance from Kerriann Malatesta and Gamze Menali.

e. *AAVSO Newsletter*, Nos. 24–26, edited by Travis Searle and Dan Brannen. f. *AAVSO Circular*, Nos. 357–362 (publication ceased with No. 362), prepared

by John E. Bortle, with assistance from Leonard Abbey and Charles E. Scovil. Since the AAVSO web site—particularly the Quick-Look File and the *News* 

*Flash*—serves the goals set forth for the *Circular*—*i.e.*, to inform the observers and the astronomical community of the activity of some of the interesting variables at the wish of its editor, publication of the *AAVSO Circular* was terminated January 2001, after 30 years of service.

g. AAVSO 2001 Ephemeris for Eclipsing Binaries, prepared by Gerard Samolyk and Marvin E. Baldwin.

h. AAVSO 2001 Ephemeris for RR Lyrae Stars, prepared by Gerard Samolyk and Marvin E. Baldwin.

i. *AAVSO Solar Bulletin*, Vol. 56, Nos. 9–12, and Vol. 57, Nos. 1–9, prepared by Carl Feehrer.

j. AAVSO Photoelectric Photometry Newsletter, Vol. 20, Nos. 1–2, edited by John. R. Percy.

k. AAVSO Eclipsing Binary Update, Nos. 10-11, edited by David. B. Williams.

1. AAVSO Manual for Visual Observing of Variable Stars, material compiled and edited by Sara Beck, with contributions by several active observers (Gene Hanson,

Peter Guilbault, Carl Feehrer, Haldun Menali, Paul Norris, Ron Royer, Doug Welch), and AAVSO Headquarters staff (Janet Mattei, Michael Saladyga, Elizabeth Waagen).

The *Manual* was published through a generous contribution from Gene Hanson. It is being distributed free of charge to all AAVSO members and observers. Complimentary copies of the *Manual* have been sent to astronomy clubs and societies around the world.

m. AAVSO Chart Compact Disk (CD).

All AAVSO charts—over 3000, standard, preliminary, and CCD charts—were published on a CD. The CD was published through a Small Research Grant from the American Astronomical Society. It is being distributed free of charge, except for a small postage and handling fee, to all members and observers.

Complimentary copies of the CD have been sent to astronomy clubs and societies around the world.

## 10. Other publications with AAVSO participation

a. "A Workshop on High Energy Astrophysics for Amateur Astronomers" by G. J. Fishman and J. A. Mattei was published in *Proceedings of the American Astronomical Society*, HEAD meeting #32, #16.09; 2000.

b. "The history and source of mass-transfer variations in AM Herculis" by F. V. Hessman, B. T. Gaensicke, and J. A. Mattei was published in *Astronomy and Astrophysics*, **361**, 952–958; 2000.

c. "The Variability of R, N, and C Stars from HIPPARCOS and AAVSO Data" by Michel Grenon, Janet A. Mattei, Laurent Eyer, and Grant Foster was published in *The Carbon Star Phenomenon*, Proceedings of the 177th Symposium of the International Astronomical Union, held in Antalya, Turkey, May 27–31, 1996. Edited by Robert F. Wing. *International Astronomical Union Symposia, Volume 177*, Kluwer Academic Publishers, Dordrecht, p.171; 2000.

d. "Comparison of Mean Light Curve Parameters of M, S and C Mira and Semi-Regular Variable Stars Using 75 Years of AAVSO Data" by Marie-Odile Mennessier, Hichame Boughaleb, and Janet A. Mattei was published in *The Carbon Star Phenomenon*, Proceedings of the 177th Symposium of the International Astronomical Union, held in Antalya, Turkey, May 27–31, 1996. Edited by Robert F. Wing. *International Astronomical Union Symposia, Volume 177*, Kluwer Academic Publishers, Dordrecht, p.165; 2000.

e. "Trend Analysis on 51 Carbon Long Period Variables" by Janet A. Mattei and Grant Foster was published in *The Carbon Star Phenomenon*, Proceedings of the 177th Symposium of the International Astronomical Union, held in Antalya, Turkey, May 27–31, 1996. Edited by Robert F. Wing. *International Astronomical Union Symposia, Vol. 177*, Kluwer Academic Publishers, Dordrecht, p. 165; 2000.

f. "R Centauri: An Unusual Mira Variable in a He-Shell Flash" by G. Hawkins, J. A. Mattei, and G. Foster was published in the *Publications of the Astronomical Society of the Pacific*, **113**, 501–506; 2001.

g. "Solar-type cycles of the secondary stars in cataclysmic variables" by T. Ak, M. Ozkan, and J. A. Mattei was published in *Astronomy and Astrophysics*, **369**, 882–888;2001.

h. "Gamma-Ray Bursts and Amateur Astronomers" by Gerald J. Fishman, Arne A. Henden and Janet A. Mattei was published in *Sky & Telescope*, **101**, 1, 92; 2001.

i. "Professional-Amateur Collaboration: The AAVSO Experience" was published by Janet A. Mattei in *Amateur-Professional Partnerships in Astronomy*, Proceedings of a Meeting held at University of Toronto, Toronto, Canada, July 1–7, 1999. Edited by John R. Percy and Joseph B. Wilson, *Astronomical Society of the Pacific Conference Series, Vol. 220*, 35, San Francisco; 2000.

j. "Hands-On Astrophysics: Variable Stars in Math, Science, and Computer Education" by Janet A. Mattei and John R. Percy was published in *Amateur*-*Professional Partnerships in Astronomy*, Proceedings of a Meeting held at University of Toronto, Meeting held in Toronto, Canada, July 1–7, 1999. Edited by John R. Percy and Joseph B. Wilson, *Astronomical Society of the Pacific Conference Series, Vol.* 220, 296, San Francisco; 2000.

k. "Data Handling in the AAVSO" by Janet A. Mattei and Elizabeth O. Waagen was published in *Information Handling in Astronomy*, edited by Andre Heck, Kluwer Academic Publishers, Dordrecht, p. 165; 2000.

l. "Long-Term VRI Photometry of PCygni" by J. R. Percy, T. D. K. Evans, G. W. Henry, and J. A. Mattei was published in *P Cygni 2000: 400 Years of Progress*, edited by M. de Groot and C. Sterken, *Astronomical Society of the Pacific Conference Series*, Vol. 233, 31, San Francisco; 2001.

m. *IAU Circulars* (edited by D. Green): in 2000—SW Ursae Majoris, J. A. Mattei, *IAU Circular* No. 7365; Z Andromedae, J. A. Mattei, *IAU Circular* No. 7489; RZ Leonis, J. A. Mattei, *IAU Circular* No. 7547; R Coronae Borealis, J. A. Mattei, *IAU Circular* No. 7543; Possible Nova in Sagittarius, J. Mattei and K. Malatesta, *IAU Circular* No. 7362; in 2001—Nova Sagittarii 2001 No. 2, J. A. Mattei, *IAU Circular* No. 7692; WZ Sagittae, J. A. Mattei, *IAU Circular* No. 7669; BL Lacertae, J. A. Mattei, *IAU Circular* No. 7665; Nova Aquilae 2001, J. A. Mattei, *IAU Circular* No. 7632; Nova Aquilae 2001, J. A. Mattei, *IAU Circular* No. 7632; AL Comae Berenices, J. A. Mattei, *IAU Circular* No. 7629.

## 11. Meetings attended and talks given

#### 11.1 Meetings attended

I attended the following scientific meetings during fiscal year 2001-2002:

a. 2001 American Association for the Advancement of Science Annnual Meeting and Science Innovation Exposition, San Francisco, CA, February 15–20, 2001.

b. TOPS (Towards Other Planetary Systems) Teacher Enhancement Program, June 16-29, 2001.

c. Statistical Challenges in Modern Astronomy III, July 18–21, 2001, Pennsylvania State University, State College, PA.

11.2 Talks and presentations

I have given the following talks and presentations this year:

a. "Wonders of the Universe," popular talk to a youth group in Lowell, MA, December 8, 2000.

b. "Networking and Internationalization in the Amateur Variable Star Community," American Association for the Advancement of Science, San Francisco, CA, February 18, 2001.

c. "Trend Analysis of Oxygen-Rich Long-Period Variable Stars," poster paper (Mattei and Foster), presented at Statistical Challenges in Modern Astronomy III, July 18–21, 2001, Pennsylvania State University, State College, PA.

d. "Wavelet Analysis of a Large Period Change in the Mira Variable R Cen," poster paper (Hawkins, Mattei, and Foster), presented at Statistical Challenges in Modern Astronomy III, July 18–21, 2001, Pennsylvania State University, State College, PA.

Presentations on AAVSO and/or HOA were also given by Chuck Pullen, Ray Berg, Scott Wolfe, Brian Rogan, Chris Stephan, Elizabeth Waagen, and Aaron Price.

## 12. Personnel at Headquarters

I am happy to report that the Headquarters staffing continues to remain stable and staff morale and productivity high. We have a dedicated, hardworking, and team-spirited technical and administrative staff whose goal is to provide the best service to the membership and the astronomical community. I would like to express my sincere appreciation and thanks to our Headquarters staff who assist me in running the Association: Staff Astronomer George Hawkins; Senior Technical Assistant and Associate Editor of the *Journal of the AAVSO* Elizabeth Waagen; Technical Assistant and *Journal* Production Editor Michael Saladyga; Technical Assistant and Meeting Coordinator Rebecca Pellock; Technical Assistants Kerriann Malatesta and Gamze Menali; Technical Assistant/Website Katherine Davis; Technical Assistant (technology) and Unix Systems Administrator Aaron Price; Membership Services/Administrative Assistant Victor Gonzalez; Administrative Assistant Travis Searle; Office Assistant Sarah Turner Sechelski; 7-month full-time Technical Assistant Sara Beck; part-time Data Technicians Barbara Silva and Gloria Gonzalez; and volunteers Carl Feehrer and Arthur Ritchie.

In addition to our full and part-time staff, I also acknowledge and thank our contract help: Charles Scovil and Mark Biesmans (chart preparation); Ayo Ijidakinro and Lenny Abbey (Visual Basic programming); Ann Saladyga (Accounting).

We were fortunate to have a student assisting us this summer, Alissa Rothschild, who was hired under the AAVSO's Margaret Mayall Assistantship Program. I thank

180

Alissa for her careful work and cheerful attitude towards working on a variety of projects.

## 13. Acknowledgements

I want to thank with deep feelings of appreciation and gratitude all those who have contributed so much to the Association this year.

We remember Clint Ford with fond memories and are grateful to him for providing us with our own Headquarters and with a legacy—the Clinton B. Ford Fund—that assure a sound future for the AAVSO.

We remember Margaret Mayall for her dedicated service to the AAVSO, for making it survive during very hard times, and for the bequest that she and Newton made to assure the sound future of the AAVSO.

Our appreciation and thanks go to our dedicated, devoted, and untiring observers—656 of them around the world this year—the unsung heroes of the AAVSO who make this Association vital to variable star research. Special thanks go to all those who have contributed to the *AAVSO News Flash* and to our special observing programs.

Our thanks go to members who support the AAVSO with their dues; special thanks to those who are sponsoring the membership of an active observer, and to those who have generously contributed above their dues so that we can serve you, our members, and the astronomical community, well.

My sincere thanks and appreciation go to our Committee Chairpersons who give so generously of their time and wisdom to the Committee(s) for which they are responsible. Thanks to Gary Walker, Marv Baldwin, Rev. Ken Beckmann, Howard Landis, Joseph Lawrence, Carl Feehrer, Charles Scovil, and Rev. Bob Evans.

I am grateful for, and appreciate, the support of our Vice Presidents Dan Kaiser and Bill Dillon, and our Council members Ray Berg, Lew Cook, Jaime Garcia, Arne Henden, Margarita Karovska, Kristine Larsen, Kevin Marvel, and David B. Williams.

I especially thank Lee Ann Willson, our President, and Martha Hazen, our Secretary.

A special thanks to our treasurer, Wayne Lowder, and our assistant treasurer, Louis Cohen, for their wisdom and time; to our accountant, Ann Saladyga, for her careful work and dedication; and to our past Treasurer, Ted Wales, for his help and expertise.

Additional thanks to Dan Kaiser for his being in charge of our Mentorship program, Arne Henden for his leadership in our GRB program, and Doug Welch for his administration of our on-line Discussion Group and GRB Discussion Group.

Our sincere thanks go to Charles Whitney for his continuing editorship of the *Journal of the AAVSO*.

Our thanks go to Dr. John Percy for his excellent editorship of the AAVSO Photoelectric Photometry Newsletter.

Our thanks and appreciation to Lenny Abbey for his valuable contribution in programming so many much-needed software packages for our technical operations.

Thanks go to Stamford Observatory for allowing Charles Scovil and John Griese to use the 22" telescope for making variable star observations, and for allowing Charles Scovil to use the facilities of the observatory to prepare charts and the *AAVSO Circular*.

We have been fortunate to receive financial support from institutions, private foundations, and government agencies this year. We gratefully acknowledge the following:

The Curry Foundation, to purchase and disseminate, on loan, professionalquality CCDs throughout the world for the observations of GRB afterglows and other variable star activities;

The National Aeronautics and Space Administration (NASA), for two grants in support of our collaboration with Dr. Christopher Mauche for Chandra observations;

NASA Headquarters and NASA Goddard Space Flight Center, in support of the first HEA Workshop;

The Fund for Astrophysical Research, for the Theodore Dunham grant to produce an updated CD of AAVSO charts;

The American Astronomical Society, for an International Travel Grant for J. A. Mattei and L. A. Willson to attend the LIADA meeting in Asuncion, Paraguay (due to September 11, 2001, events this trip was cancelled and the travel grant will be used for a future international astronomical meeting).

We are grateful to have the support of so many individuals and organizations!

Finally, my personal thanks to my husband Mike for his continuous understanding and support.

Table 1. AAVSO Observer Totals 2000–2001 by Country.

Country	No. Observers	No. Obs.	<i>Country</i> (	No. Dbservers	No. Obs.
	003011013	003.	country	103011013	005.
ARGENTINA	6	871	MALTA	1	47
ARUBA	1	1994	NETHERLANDS	6	9634
AUSTRALIA	9	28076	NEW ZEALAND	1	10200
AUSTRIA	3	750	NORTHERN IRELAN	ID 1	12
BELGIUM	22	20154	NORWAY	8	1522
BRAZIL	10	1422	PARAGUAY	1	18
CANADA	18	18043	POHNPEI	2	43
CHILE	1	34	POLAND	18	41495
CHINA	1	104	PORTUGAL	1	4
CROATIA	3	85	ROMANIA	6	10328
CZECH REPUBLIC		2623	RUSSIA	5	668
DENMARK	5	465	SCOTLAND	1	39
ENGLAND	14	20816	SLOVAKIA	1	3879
FINLAND	10	9026	SLOVENIA	2	41
FRANCE	28	14010	SOUTH AFRICA	12	9748
GERMANY	32	29963	SPAIN	37	6947
GREECE	6	2142	SWEDEN	2	302
HUNGARY	55	11178	SWITZERLAND	5	3101
INDIA	6	502	TURKEY	4	11476
IRELAND	3	430	UKRAINE	22	6028
ISLE OF MAN	1	91	URUGUAY	3	111
ITALY	24	3820	USA	250	123221
JAPAN	3	1891	ZIMBABWE	2	22
LITHUANIA	1	164			
			TOTAL	656	407,540

Table 2. AAVSO Observer Totals 2000–2001 USA by State or Territory.
---

				2		-	
State/Territory	Obse	No. rvers	No. Obs.	State/Territory	Obse	No. ervers	No. Obs.
ALABAMA	(AL)	2	107	MISSOURI	(MO)	2	66
ARIZONA	(AZ)	13	2549	MONTANA	(MT)	1	115
ARKANSAS	(AR)	3	453	NEBRASKA	(NE)	1	86
CALIFORNIA	(CA)	30	16571	NEVADA	(NV)	1	7
COLORADO	(CO)	5	1634	NEW HAMPSHIRE	(NH)	2	22
CONNECTICUT	(CT)	9	3128	NEW JERSEY	(NJ)	1	167
DELAWARE	(DE)	1	1	NEW MEXICO	(NM)	4	3724
FLORIDA	(FL)	6	9743	NEW YORK	(NY)	13	8200
GEORGIA	(GA)	1	5962	NORTHCAROLINA	(NC)	2	4
HAWAII	(HI)	20	1190	OHIO	(OH)	10	2281
ILLINOIS	(IL)	12	7208	OREGON	(OR)	1	26
INDIANA	(IN)	6	8882	PENNSYLVANIA	(PA)	6	2750
IOWA	(IA)	3	58	PUERTO RICO	(PR)	3	180
KANSAS	(KS)	3	599	RHODEISLAND	(RI)	3	929
KENTUCKY	(KY)	3	124	SOUTHCAROLINA	(SC)	2	18
LOUISIANA	(LA)	2	130	TEXAS	(TX)	6	902
MAINE	(ME)	3	2647	UTAH	(UT)	2	1307
MARYLAND	(MD)	7	1103	VIRGINIA	(VA)	9	2409
MASSACHUSETTS	(MA)	16	10733	WASHINGTON	(WA)	6	257
MICHIGAN	(MI)	10	8928	WEST VIRGINIA	(WV)	1	413
MINNESOTA	(MN)	8	2107	WISCONSIN	(WI)	10	15497
MISSISSIPPI	(MS)	1	4		. ,		
				TOTAL		250	123,221

Table 3. AAVSO Observers, 2000–2001.

Code	Nar		No. Obs.		Code	Na	<b>m</b> a	No. Obs.	
Coue	nui	ne	Obs.	1.5.	Coue	nu	me	Obs.	1.5.
AAP	Ρ.	Abbott, Canada	3554	225	BHT	Τ.	Brennan, WA	13	
AAN ¶	Α.	Abe, Germany	85	3	BTB	Τ.	Bretl, MN	159	17
ACH *	C.	Accary, France	69		BHA ¶	H.	Bretschneider, Germany		
AAK #	A.	Ackermann, Hungary	2	52	BOV	О. С	Brettman, IL	4	
ABB ARL £	B. R.	Adams, CA	477 39	53	BSM BOS ‡	S. E.	Brincat, Malta	47 32	
ETOAS	ĸ. S.	Alencar Caldas, Brazil	39 2		BOS ‡ BRK	Е. J.	Broens, Belgium	52 1	
ALN	з. R.	Alis, Turkey Allison, IA	49 49	8	BXV ^	J. Х.	Brooks, VA Bros, Spain	144	8
ARF √	R.	Alvarez Franco, Spain	21	0	BOA *	А. А.	Bruno, France	58	21
AAA £	A.	Alves, Brazil	27		BTH	Τ.	Burrows, CA	1010	320
AAX £	Α.	Amorim, Brazil	1143		CMQ %		Camilleri, Australia	10	020
AJ	J.	Anderer, AR	4		CCG	С.	Campo, NY	4	
AEJ	E.	Anderson, NY	20		CNP	N.	Campos, Spain	1	
ADO	D.	Andreic, Croatia	32		CFN ^	F.	Campos Cucarella, Spai	n 187	4
AZE	Z.	Andreic, Croatia	30		CEM ^	E.	Capella, Spain	21	1
ABG \$	В.	Andresen, Norway	38		CAF	Α.	Carlini, Italy	5	
AWI	Ψ.	Anthony, MA	327	37	CAX √	Α.	Carrillo Alba, Spain	21	
ADP	D.	Apollonio, Italy	3		CVJ λ	J.	Carvajal Martinez, Spa		4
AWJ	W.	1 /	253		CRI ^	R.	Casas, Spain	3	
AAT ^	A.	Ardanuy, Spain	5		CLQ	L.	Cason, VA	58	
ARB	В.	Arnold, NC	1		CKN	K.	Castle, AZ	266	66
AKT	Τ.	Atkin, FL	39		CWO	W.		50	
BIE ‡ BAH	А. А.	Baillien, Belgium	23 139		$CGN \otimes CNB \otimes$		Cerrutti, Uruguay	15 51	
ban BM	A. M.	Balcerek, Poland Baldwin, IN	2185		CNB ©	B.	Cerrutti, Uruguay Chandler, CA	71	25
BIV #	I.	Balogh, Hungary	576	7	CNT	Б. D.	Chantiles, CA	407	2.
BZO #	Z.	Balogh, Hungary	255	'	CGF	G.	Chaple, Jr., MA	1766	616
BGZ	G.	Banialis, IL	27		CJL	J.	Charles, MI	8	010
BDI ¶	D.	Bannuscher, Germany	362		CPT	Ρ.	Chevalley, Switzerland		
BXA ¢	A.	Baransky, Ukraine	571		X01	D.	Ching, HI	5	
BKQ ¢	Α.	Barkanov, Ukraine	123		X02	S.	Ching, HI	17	
BSR @	S.	Baroni, Italy	452		CRO	R.	Clark, CA	60	
BSK	S.	Basso, Italy	6		CLK	W.	Clark, MO	56	
BBB	В.	Battersby, Canada	8		CSP	S.	Clegg, Northern Irelan	d 12	
BBA	В.	Beaman, IL	688	2	CPS ‡	Ρ.	Cloesen, Belgium	137	
BKV	Κ.	Beamer, VA	17		CRX	R.	Cnota, Poland	1367	
BJS	J.	Bedient, HI	106	1	COL	Ρ.	Collins, AZ	37	
BGY +	M.	Begbie, Zimbabwe	1		CME @		Colombo, Italy	500	
BHS §	H.	Bengtsson, Sweden	31	1	CMG &		Comello, Netherlands		834
BTY	Τ.	Benner, PA	105	21	CAU	Α.	Conu, Romania	226	
BTU BEB	T. R.	Beresky, MO	10 829		CXA COO	A.	Cook, CA	4 10526	379
BMM ‡	к. М.	Berg, IN Biesmans, Belgium	262	136	CK	L. S.	Cook, CA Cook, AR	448	57
BBP	B.	Bishop, CA	202	150	CTM	З. Т.	Cook, NY	14	
BXN *	ы. М.	Bisson, France	178		COM +	Т. Т.	Cooper, South Africa	533	:
BXC √	C.	Blanco Arca, Spain	29		CLZ *	L.	Corp, France	22	
BEU	Е.	Blankenship, VA	31		CTO ‡	Т.	Corstjens, Belgium	70	
BOQ #	А.	Borsos, Hungary	2		COV	V.	Coulehan, NY	573	
BRJ	J.	Bortle, NY	4971	1855	CWD	D.	Cowall, MD	49	
BBW	В.	Bose, India	106		CLX	L.	Cox, Canada	270	
BMU &		Bouma, Netherlands	1442	70	CR %		Cragg, Australia	2315	70
BPI *	Ρ.	Bourret, France	21		CCU	C.	Cremaschini, Italy	10	
BMK	Μ.		47		CRR	R.	Crumrine, NY	61	
BQD	D.	Brannen, Jr., PA	3		CGB #	G.	Cseri, Hungary	8	
BNW ¶	W.		19		CTI #	Τ.	Csorgei, Hungary	173	1

Table 3. AAVSO Observers, 2000–2001, cont.

Code	Na			No. I.S.	Code		Nar	ne	No. Obs.	
	Μ.	Csukas, Romania 89		2	FFC	#	F.	Foldesi, Hungary	8	1
CKB	В.	Cudnik, TX 40		7	FJD		J.	Foley, WI	1	
	S.	Dallaporta, Italy 10			FJT	*	J.	Fontalba, France	2	
DAM λ		······································	0	36	FT		G.	Fortier, Canada	76	-
DSA	S.		6		FXJ		J.	Fox, MN	382	,
DMP	Μ.	01	29		FMC		M.	Frangeul, France	6	
DRB	R.	,	7		FML			Fridlund, Netherlands	27	
DJS	J.	., .	4		FAA	æ	A.	Frosina, Italy	50	
DBQ ‡	В.	1, 5	2		FMG		G.	Fugman, NE	86	4
DJT ‡	S.	0, 0	23		GMB		М.	Gable, OH	143	
DRC √	F.	/ <b>1</b>	21	1	GEC		Е. Т.	Gale, IA	5	
DVA	D.	Del Valle, PR 11		1	GTN			Gandet, AZ	51	
DRO	R.	,	4	2	GME		М.	Gardner, CA	8	
DME √	S. F.	De Miguel San Juan, Spain 12		2	GJY	0	J.	Garzon, NY	1	
DFR		· · · · · · · · · · · · · · · · · · ·	6	5	GMD			Geldorp, Netherlands	41	
DAY ¢ DNO	А. О.	1 ,	52		GAX		А. J.	Gellrich, Germany	17 15	
DNU DSJ £	U. J.	,	1		GJN GSR	¶	J. R.	Gensler, Germany	528	
	J. F.	0, ,	25		GAO		к. А.	Geschwind, OH		
DVI + DHN ¶	г. Н.	,	.3	5	GGU	P.,		Giambersio, Italy	65 438	
	п. А.	, ,		197	X04	α	О. R.	Gilein, Netherlands	438	
DPA ‡ DSH *	A. S.	1	50	197	GVN		к. V.	Gillespie, HI Giovannone, NY	40	
DRG	З. R.	Diethelm, Switzerland 218		1662	GMY		м.	Glennon, Ireland	275	
DLA	к. А.	Dill, KS 20		1002	GOH		м. О.	Golbasi, Turkey	1019	
DIL	W.		21	1	GHA	¶	Н.	Goldhahn, Germany	995	
DMF	F.	. ,	2		GSH	∥ ¢	S.	Golovin, Ukraine	193	
DPL	Р.	Dombrowski, CT 70		162	GFN	λ	Б. F.	Gomez, Spain	53	
GDB #	G.		28	102	GIN	V	I.	Gomez, Spain	21	
	S.		2		GOT	*	Т.	Gomez, India	5	
DEH	Ĕ.		58		GMX		M.	Goncharov, Ukraine	36	
DIV	I.		6		GZN	V	Α.	Gonzales Herrera, Spair		1
DSN	S.	Donnell, CO	1		GCJ	Ń	J.	Gonzalez Carballo, Spa		•
DPV	Р.	,	-	2009	GLU	· ·	L.	Gordillo Rodriguez, Sp		
DFS ‡	S.		1		GKA		K.	Graham, IL	499	14
DMO *	M.	Dumont, France 28			GRL	\$	Β.	Granslo, Norway	549	
DKS	S.	Dvorak, FL 729		167	GSM	+	S.	Greene, MI	43	1
DGP	G.			3637	GRI		J.	Griese, III, CT	113	8
X03	В.		9		GVD	Δ	V.	Grigorenko, Russia	34	
EEZ	E.		2		GBI		В.	Grim, UT	7	
EER	E.	Eker, Turkey 1045	53		GPI		Ρ.	Grudniewski, Poland	45	
EPE ¶	Ρ.	Enskonatus, Germany 43	33		GCT	∉	C.	Grunnet, Denmark	49	
EJO #	J.	Erdei, Hungary 40	)4		GCO		C.	Gualdoni, Italy	53	
EMI	Μ.		5		GPR		Ρ.	Guilbault, RI	375	
FMA @	Μ.	Fadda, Italy 33	39		GUN	*	J.	Gunther, France	3429	87
FBO	Β.	Fain, MT 11	5		GGX	*	G.	Guzman, France	290	6
FSV	S.	Falvo, CA	1		HCS	#	С.	Hadhazi, Hungary	2552	
FCA	С.	Fausel, KY 6	53	1	HTY		Τ.	Hager, CT	1152	
FGI	G.	Favero, Italy 1	5		HK		E.	Halbach, CO	1588	1
FDI *	D.	Favre, France 1	0		HME		М.	Haliniak, Poland	8	
FNI ¢	N.		8		HAL		R.	Hall, SC	7	
FMQ	Μ.	Fiaschi, Italy 2	23	17	HMG	#	G.	Halmi, Hungary	99	
FMP	Μ.	Fikes, VA	5		HP		<b>W</b> .	Hampton, CT	80	
FSJ *	J.	Fis, France 12	21	2	HDX		D.	Hands, NC	3	
FDA #	Α.	Fodor, Hungary 2	21		HAN		J.	Hannon, CT	240	13
FSE @	S.	Foglia, Italy 124	1		HSG		G.	Hanson, II, AZ	1023	67

Table 3. AAVSO Observers, 2000–2001, cont.

			No.	No.				No.	No.
Code	Nar	ne	Obs.		Code	Na	me	Obs.	
HAV	R.	Harvan, MD	295		KSH	S.	Kerr, Australia	9	5
HAI	A.	Hastings, MA	15		KSZ #	S.	Keszthelyi, Hungary	369	5
HSB ¶	W.	Hasubick, Germany	46	21	KRB	R.	King, MN	641	160
HRK "	R.	Hauk, OR	26		ΚΤΟ ∇	Τ.	Kinnunen, Finland	3591	3007
HHU ‡	H.	Hautecler, Belgium	2803	76	KAQ #	Α.	Kiss, Hungary	219	
HAB	R.	Hays, Jr., IL	1757		KIL #	L.	Kiss, Hungary	611	1
HLS \$	L.	Heen, Norway	82		KMM ¢	Μ.	Kititsa, Ukraine	1	
HEN	C.	Henshaw, England	360		KON ∉		Klinting, Denmark	4	
HJN +	J.	Hers, South Africa	297	17	KPL	Р.	Kneipp, LA	117	
HES	C.	Hesseltine, WI	1885		KGT	G.	Knight, ME	38	
HEV # X05	Z. B.	Hevesi, Hungary	89 9		KSP KS	S. J.	Knight, ME	46 479	
HIM	ь. М.	Hieki, HI Hill, MA	9		KOC #	J. А.	Knowles, RI Kocsis, Hungary	479	2
HRI	R.	Hill, AZ	828		KOC # KHL	M.	Kohl, Switzerland	228	2
HED	D.	Himes, OH	80	5	KVD	V.	Kolbas, Croatia	228	
HZR ¶	R.	Hinzpeter, Germany	634	5	KHJ	H.	Koller, Canada	23	
HIR	Y.	Hirasawa, Japan	1026	54	KRS	R.	Kolman, IL	2017	79
HJS	J.	Hissong, OH	1020	5.	KAO ¢	A.	Koloskova, Ukraine	60	.,
HTA	Τ.	Hoare, England	169		KMA	М.	Komorous, Canada	2516	99
HFL £	F.	Hodar Luengo, Brazil	14		KGG	G.	Koralewski, Poland	1016	
HJX £	J.	Hodar Munoz, Brazil	6		KSG	G.	Koronis, Greece	4	
HWD	W.	Hodgson, Australia	59		KOS #	Α.	Kosa Kiss, Romania	4393	
HSY \$	S.	Hoeydalsvik, Norway	39		KVS #	Α.	Kovacs, Hungary	177	
HBA ¶	A.	Holbe, Germany	2163		KVI #	I.	Kovacs, Hungary	218	15
HZJ	J.	Holtz, PA	431	2	KSR #	S.	Kovacs, Hungary	9	
HTB #	Τ.	Horvath, Hungary	1		KFK	F.	Krafka, TX	2	
HDU	D.	Hurdis, RI	75	39	KGA ⊗		Krasnopolsky, Argent		
HUR	G.	Hurst, England	1646	255	KKE	K.	Kreutzer, KY	59	240
HUZ IRM √	R. R.	Huziak, Canada	3748 658	190	KWO ¶ KIS ¶	W. G.	, ,	758 2848	249 107
	к. Р.	Iglesias Marzoa, Spain Ingrassia, Argentina	40		KIS ¶ KRK	б. К.	Krisch, Germany Krisciunas, AZ	2040	107
ION $\Delta$	0.	Ivanov, Russia	38		KMK	M.	Krolik, Poland	26	5
JTP *	Р.	Jacquet, France	173	12	KTZ	Τ.	Krzyt, Poland	655	8
JM	R.	James, NM	2803		KBP	Ρ.	Kubicek, Czech Repu		
JSC	S.	Jamieson, WI	30		KSA	Α.	Kucinskas, Lithuania	164	
JMY #	Μ.	Jardi, Hungary	2		KBO	R.	Kuplin, AZ	7	
JEA	A.	Jenkins, SC	11	8	KMI $\Delta$	Μ.	Kuzmin, Russia	207	
JSI	S.	Jenner, England	19		LCR ^	С.	Labordena, Spain	42	
JKK \$	Κ.	Jensen, Norway	129		LAL	Α.	Landolt, LA	13	
JFA √	F.	Jiminez Alvarado, Spa			LTO ¶	Τ.	Lange, Germany	2671	
JIS √	I.	Jiminez Sanchez, Spain			LZT	Τ.	Lazuka, IL	1080	
JOG	G.	Johnson, MD	172	1	LEB *	R.	Lebert, France	268	
JRA	R.	Johnson, MN	157		LMT	M.	Legutko, Poland	284	
JON ‡ JA %	K.	Jonckheere, Belgium	34		LJY V LNZ	J. G.	Lehtinen, Finland	131	
JA % JCN	А. С.	Jones, New Zealand Jones, England	10200 3981	2526	LINZ LJL	G. J.	Lenz, CT Leonard, IL	161 31	
JRW +	R.	Jones, South Africa	526	2550	LJL LSI	л. S.	Leonini, Italy	102	
KHG	H.	Kaing, MA	1		LGE *	З. G.	Letellier, France	27	
KDA	D.	Kaiser, IN	373		LEV	А.	Leveque, CA	124	
KB	W.		215	34	LVY	D.	Leveque, err Levy, AZ	69	56
KYG ¢	Υ.	Karoatsky, Ukraine	42		LIW	W.		34	
KKI	K.	Kasai, Switzerland	354		LAI	Α.	Ling, Canada	1	
KTI #	Τ.	Katonka, Hungary	161		LMK	M.	0.	882	191
KIV #	I.	Kelley, Hungary	57		LLZ #	L.	Liziczai, Hungary	329	

Table 3. AAVSO Observers, 2000–2001, cont.

Code	Nar	ne	No. Obs.		Code	Na	me	No. Obs.	No. I.S.
	T.	Late Data a Gast	- 20			M	Mallana Fisteri	1507	
LOB λ LMG	J. М.	Lobo-Rodriguez, Spai	n 20 5		MMF $\nabla$ MPQ #	М. Р.	Moilanen, Finland	1507 1	
LEQ	E.	Looby, IL Lopata, CA	2		MFQ # MSG $$	г. А.	Mojzes, Hungary	42	
LEQ LRD	ь. D.	1 /	1300		MBG V MPP ‡	А. Р.	Molina Saorin, Spain	42	
LEJ	D. E.	Loring, UT Los, NH	1300		MPF 4 MOL	г. J.	Mollet, Belgium Molnar, VA	1880	
LEJ LRG √	E. R.	Losada Menendez, Spa				J. I.	Molod, Ukraine	30	
	к. Т.	Lubbers, MN	503		MIX ¢ MLF +	г. В.	Monard, South Africa	4620	2004
LBG	G.	Lubcke, WI	2382		X07	ь. К.	Monis, HI	4020	299.
	б. F.	,	2382 7			к. Е.	,	987	
LFZ LKA	г. К.	Lucidi, Italy Luedeke, NM	312		MOI * MXA ¢	Е. А.	Morillon, France	1004	(
	к. М.	· · · · · · · · · · · · · · · · · · ·			,		Mormyl, Ukraine		
LMJ ∇ MDW	W.	Luostarinen, Finland	253 a 195		MVR ¢	V. E.	Mormyl, Ukraine	3026 9	
		MacDonald, II, Canad			MRE		Morris, AL		201
MZA ¢	A.	Maidyk, Ukraine	5		MOW	W.	· · · · · · · · · · · · · · · · · · ·	5093	300
MFA ¢		. Maidyk, Ukraine	56		MDA	А. т	Morton, WA	18	4
MQA ¢		. Maidyk, Ukraine	256		MMP +	J.	Mostert, South Africa	20	
MQN ¢	N.	Maidyk, Ukraine	70		MHR £	R.	Mota das Chacas, Brazi		
MVL ¢	V.	Maidyk, Ukraine	43		MMH	M.	Muciek, Poland	160	
MZG ¶	G.	Maintz, Germany	314	10	MKH	S.	Mukherjee, India	328	
MLI	L.	Maisler, NY	206	12	X08	J.	Mullen, HI	6	
MVO V	V.	Makela, Finland	141		MUY ‡	E.	Muyllaert, Belgium	9851	414.
MNV ¢	N.	Maksimenko, Ukraine			NZO #	Z.	Nagy, Hungary	24	
MKG	Α.	Manske, WI	6		NAT	Α.	Naik, India	28	
MKE	R.	Manske, WI	590		NDA	D.	Nance, AL	98	
MMV ¢	Μ.	Marichev, Ukraine	58		X09	J.	Nelson, HI	12	
MKW	Α.	Markiewicz, Poland	2186		NLX %		Nelson, Australia	1748	97.
MMN	Μ.	Martignoni, Italy	686		NJO ¶	J.	Neumann, Germany	2562	
MQJ	J.	Martins, Portugal	4		NMI	М.	Nicholas, AZ	62	
MRX ¶	Н.	Marx, Germany	1032	99	X10	R.	Nicholson, HI	10	
MN	Н.	Mason, CA	142		X11	С.	Nishimura, HI	4	
MAQ #	А.	Matis, Hungary	11		X12	Τ.	Nomura, HI	6	
MVK #	V.	Matis, Hungary	11		NPM	Ρ.	Norris, MA	21	
MAV $\Delta$		Matsnev, Russia	232		NHK $\nabla$		Nylander, Finland	628	68
MTT	J.	Mattei, MA	1		OCN	S.	O'Connor, Canada	761	405
МТМ	М.	Mattei, MA	1		OFA	А.	O'Fearghail, Ireland	62	33
MPR ¶	Ρ.	Maurer, Germany	750	20	ONJ	J.	O'Neill, Ireland	93	
MGE	G.	Mavrofridis, Greece	190	2	OFR λ		Ocana, Spain	1	
MJW	J.	Mayer, PA	937	50	OAR $\nabla$		Oksanen, Finland	2504	
MGU	Τ.	McCague, IL	88		OJO ∉		Olesen, Denmark	220	
MCX	A.	McCrae, Scotland	39		X13	С.	Oliva, HI	14	
MDP	Ρ.	McDonald, Canada	443	32	OHJ #	H.	Olle, Hungary	4	
MGH	H.	McGee, England	2569	840	OV	E.	Oravec, NY	1808	
MCI	В.	McInnerny, England	18		OSW	W.	Osborn, MI	3	3
MKJ	J.	McKenna, NJ	167	18	OPR	Ρ.	Ossowski, Poland	10	
MED	Κ.	Medway, England	1520		OSV #	L.	Osvald, Hungary	13	
MGQ	G.	Menali, MA	1		OSE ⊗	S.	Otero, Argentina	669	
MHI	Н.	Menali, MA	178		OJJ	J.	Ott, CO	2	
MTK	Τ.	Michalik, VA	215	54	OCR ‡	С.	Otten, Belgium	430	
LMS	L.	Michalis, Greece	453		ORE	R.	Otto, NH	4	
MKL	R.	Mickle, CO	39	11	OB +	D.	Overbeek, South Africa	1629	
MOK \$	О.	Midtskogen, Norway	674	68	PPC #	Ρ.	Papics, Hungary	12	
X06	R.	Miralles, Pohnpei	22		PPS #	S.	Papp, Hungary	1694	11
MZS #	Α.	Mizser, Hungary	175		PSQ #	S.	Papp, Jr., Hungary	5	
MZE #	C.	Mizser, Hungary	6		PTO	T.	Parson, MN	132	64
MCE	Ĕ.	Mochizuki, Japan	28			A.	Pearce, Australia	5599	
	R.	Modic, OH	809	387	PN	A.	Pearlmutter, MA	6	

Table 3. AAVSO Observers, 2000–2001, cont.

Code	Nar	<i></i>	No. Obs.	No.	Code		Nai		No. Obs.	
Coue	nai	ne	Obs.	1.5.	Coue		nai	ne	Obs.	1.5.
PTI	N.	Peattie, CA	136		SSU		S.	Sakuma, Japan	837	90
PPB ⊗		Pecorelli, Argentina	30		SIE		А.	Salati, Italy	3	
	E.	Pedersen, Denmark	183	3		۸	V.	Sallares Pujol, Spain	175	4
PWD	W.	,	18		SFV	~	F.	Salvaggio, Italy	8	
PKI	0. C	Piechowski, KY	2			$\otimes$	R.	Salvo, Uruguay	45	
PGU @ PHT	G.	Pinazzi, Italy	82		SAH		G.	Samolyk, WI	10160	
PHI PLU	Н. L.	Pinkston, VA Pirozzi, Italy	13 32		SNN STC		J. G.	Sanford, CA Santacana, PR	8	
PPL	L. P.	Plante, OH	200			*	С. R.	Santallo, France	0	
PJP +	J.	Plomp, South Africa	30			#	C.	Santano, France Sapi, Hungary	9	
	R.	Podesta, Paraguay	18		X16		J.	Saratena, HI	10	
PMO +	M.	Poll, South Africa	32			#	K.	Sarneczky, Hungary	122	$\epsilon$
PGG #	G.	Posztpisl, Hungary	36		SGE		G.	Sarty, Canada	64	
PWR	R.	Powaski, OH	28		SSQ		R.	Sass, NM	394	
POX	Μ.	Poxon, England	534	158	SXŇ	¶	Μ.	Schabacher, Germany	514	2
PYG	G.	Poyner, England	9336	5961	X17		С.	Schaefer, HI	25	
PCJ	С.	Predom, CT	6			¶	D.	Scharnhorst, Germany		24
PAH	А.	Price, MA	529	377	SFK		F.	Scheder, MD	570	209
	E.	Prosperi, Italy	5	5	SXT		Τ.	Schieding, MA	70	
	F.	Pujol, Spain	373	144	SFS		S.	Schiff, VA	189	3
PCH	C.	Pullen, CA	2228	10	SPK	ш	Ρ.	Schmeer, Germany	51	4
PFR #	F. M.	Puskas, Hungary	613 35		SHV	Ŧ	A.	Schmidt, Hungary	292 5962	9
PMK QFI ‡	м. F.	Pust, Slovenia Questier, Belgium	33 8		SQR SQE		R. R.	Schmude, Jr., GA Schoenstene, IL	5962 652	
QPF 4	г. Р.	Questier, Bergrunn Quinn, WI	27			¶	к. Н.	Schubert, Germany	54	
RKE ¶	K.	Raetz, Germany	491			 *	E.	Schweitzer, France	342	
RBU ‡	В.	Raeymaekers, Belgiur			SBQ		В.	Scott, MI	63	
RCH *	C.	Ramillon, France	549		SCE		C.	Scovil, CT	5	1
REA	E.	Redmond, FL	5		SDF		D.	Shackleford, CA	248	
RZS #	Z.	Reiczigel, Hungary	161		SHS		S.	Sharpe, ME	2563	75
X14	М.	Reid, HI	9		SDP		D.	Sharples, NY	12	
REP	Ρ.	Reinhard, Austria	492		SSA		А.	Sharpless, WA	142	
RFP £	Ρ.	Reis-Fernandes, Brazi			SSV		S.	Shervais, Jr., WA	32	
RMQ	М.	Reszelski, Poland	29569	9649	SQH		R.	Shida, Brazil	29	
RNA #	N.	Rezsabek, Hungary	6		SBN	£	A.	Silva Barros, Brazil	48	_
RMP	M.	Ricard, Canada	17		SNE		N.	Simmons, WI	97	7
RWI	W.	,	1		SLI	ш	R.	Simmons, II, CA	15	
RQ RRZ #	C. R.	Ricker, MI	61 1122		SII SXN	#	А. М.	Simon, Hungary	2 8106	1620
RVM $$	M.	Ricza, Hungary Rigo Vidal, Spain	7			#	B.	Simonsen, MI Sipocz, Hungary	3100	4025
$OJR \lambda$	J.	Ripero Osorio, Spain		1219	SIX	π	Ы. М.	Siwak, Poland	26	1
RSE	S.	Robinson, MD	11	8	SDN		D.	Slauson, IA	4	1
RGE √	E.	Rocamora Galceran, S		0	SLQ		L.	Smelcer, Czech Reput		
RZD λ	D.	Rodriguez, Spain	33	17		+	J.	Smit, South Africa	1626	1
RMU υ	Μ.	Rodriguez Marco, Spa	in 11	1	SMI		Α.	Smith, England	34	15
RSO √	О.	Rodriguez Santana, S	pain 2		SDZ		D.	Smith, AZ	40	
RJA *	J.	Rohart, France	25		SHA		Н.	Smith, MI	71	
RJH	J.	Romano, de	1		SJE		J.	Smith, CA	214	
RCX	C.	Rose, IV, MS	4		SKA			Sokolovsky, Russia	157	
ROG	G.	Ross, MI	91	59	SDA	*	A.	Sonka, Romania	2475	
RR	R.	Royer, CA	149	40	X18		C.	Soram, Pohnpei	21	
RJV √	J.	Ruiz Fernandez, Spain			SOH			Sorensen, Denmark	9	
RPH	Н.	Rumball Petre, CA	26		SOW	V		Sorvari, Finland	135	
SJQ	A.	Sajtz, Romania	2324		SJZ	¢	J.	Speil, Poland	2093	
X15	С.	Sakuma, HI	18		SPO	\$	J.	Spongsveen, Norway	41	

Table 3. AAVSO Observers, 2000–2001, cont.

Code	Nai	me	NO. Obs.	No. I.S.	Code	Nai	ne	No. Obs.	
CDD		G: 1 DI	1756	20	VDI	<b>.</b>		4.40	
SDB SVD	D. V.	Starkey, IN	4756 48	20	VPJ	J. D	Van Poucker, MI	449	5
SVD STF	v. G.	Steblina, WA	324	1	VSD ‡	D. J.	Vansteelant, Belgium	19 m 2	
STE		Stefanopoulos, Greece	324 892	31	VWS ‡		VanWassenhove, Belgiu	m 2 6	
SAA	Ρ.	Steffey, FL	892 9	51	VSB * VFO √		Vasselle, France		
SAA SET	А. С.	Stephan, FL Stephan, FL	1506	26	VFO V VED *		VazquezRodriguez,Spa	ain 5 4649	
SRB	R.	Stine, CA	342	20 25			Vedrenne, France	4049 54	
	ĸ. N.	,		25	,		Velikazova, Ukraine		100
STQ		Stoikidis, Greece	261		121	171.	Verdenet, France	2081	123
SDI	D. H.	Storey, Isle of Man	91		VAN ¶		Viertel, Germany	55 1	
SHZ ¶		Struever, Germany	160	7644	VII #		Vincze, Hungary		1
	R.	Stubbings, Australia		/644	VJA V		Virtanen, Finland	83	1
SUK	Μ.	Stuka, CA	18		VGK	G.	Vithoulkas, Greece	910	
SAC ¶	Α.	Sturm, Germany	85		VFK ¶		Vohla, Germany	9249	
SUX √	Μ.	Suarez Tejera, Spain	80	26	VOL	W.	Vollmann, Austria	198	
SUS ¶	D.	Suessmann, Germany	2047		VOX ¢		Voloshun, Ukraine	193	
SUH	Μ.	Suhovecky, OH	41		WGR	G.	Walker, MA	234	14
SQC	С.	Suslavage, CA	13		WSM +		Walsh, Zimbabwe	21	
SWV	D.	Swann, TX	457		WFR ¶		Walter, Germany	230	
SSW	S.	Swierczynski, Poland			WJK	J.	Warpinski, MD	1	
SDX	D.	Sworin, CA	24	1	WER	R.	Weber, KS	21	
SSI #	S.	Szabo, Hungary	3		WPT +		Wedepohl, South Afric		
SOZ #	L.	Szantho, Hungary	31	7	WMG	М.	Weichinger, Austria	60	
SIK	Κ.	Szaruga, Poland	4	1	WEI	D.	Weier, WI	319	ŝ
SAO #	Α.	Szauer, Hungary	163		WC	R.	Wend, IL	360	
X19	S.	Takeba, HI	10		WWO¶	W.	Wenzel, Germany	66	
X20	Κ.	Tanaka, HI	8		WJD	D.	West, KS	375	
ГDВ	D.	Taylor, Canada	558	42	WEF	F.	West, PA	1272	
ΓTU	Τ.	Tezel, Turkey	2		WDM §	Μ.	Westlund, Sweden	271	
ГЕМ ‡	E.	Thienpont, Belgium	2		WAH	Α.	Whiting, AZ	112	
rgg .	G.	Thomas, CA	181	50	WDQ %	5 D.	Williams, Australia	2	
ГHR	R.	Thompson, Canada	609		WI	D.B	.Williams, IN	692	
гни *	Β.	Thouet, France	93		WDD	D.L	. Williams, MN	7	
ΓΚΚ ∇	K.	Tikkanen, Finland	53		WJL	J.	Williams, CA	4	
ΓIA #	A.	Timar, Hungary	13		WPX %	5 P.	Williams, Australia	6950	14
FAE \$	Α.	Tjolsen, Norway	1		WRX	R.	Williams, MI	33	
ΓVG ⊗		Tombotto, Argentina	126		WLP ‡		Wils, Belgium	314	
riv *	I.	Torreadrado, France	18		WSN	Τ.	Wilson, WV	413	12
ГТЕ #	E.	Toth, Hungary	9		WWJ	W.	Wilson, England	585	-
TOZ #	Z.	Toth, Hungary	123	12	WKM	Μ.	Wiskirken, WA	4	
rsc "	<u>S</u> .	Tracy, CT	671	258	WUL ¶		Witt, Germany	75	
ΓRF	С.	Trefzger, Switzerland	228	82	WRZ	R.	Wlodarczyk, Poland	319	
FRO \$	0.	Trondal, Norway	220	3	WSV	S.	Wolfe, OH	401	
TRX	R.	Truta, Romania	18	5	WJM	J.	Wood, CA	118	
TUB #	V.	Tuboly, Hungary	11		WBK	В.	Worraker, England	110	
UC +		Turk, South Africa	92		WPF	Р.	Wright, MN	126	
TYS	R.	Tyson, NY	237		YHE	н.	Yong, China	104	
VFR *	F.	Vaclic, Czech Republic			YED	E.	Young, AZ	104	
VLN *	г. L.	Vadrot, France	228		YKA	Е. К.	Young, CA	19	
	E.			25	YJW	к. J.		19	
		Van Ballegoij, Aruba		23			Young, CA		
VBR	Н.	Van Bemmel, Canada	57		ZAM @		Zanotta, Italy Zhalah, Uluzina	26	
VDL ‡	J.	Vander Looy, Belgium		10	ZOX ¢		Zholob, Ukraine	31	
	E.	Van Dijk, Netherlands		12	ZXI	X.	Zhu, PA	2100	
VNL ‡	F.	Van Loo, Belgium	548	13	ZRE	R.	Zissell, MA	2199	63

Table 3. AAVSO Observers, 2000–2001, cont.

These symbols, which appear in Table 3 (AAVSO Observers 2000-2001), indicate observers are also affiliated with the groups below:

^	Agrupacion Astronomica de Sabadell (Spain)
	Asociacion de Variabilistas de Espagne (Spain)
$\Delta$	Association of Variable Star Observers "Pleione" (Russia)
*	Association Française des Observateurs d'Étoiles Variables (France)
+	Astronomical Society of Southern Africa, Variable Star Section
∉	Astronomisk Selskab (Scandinavia)
£	Brazilian Observational Network REA
¶	Bundesdeutsche Arbeitsgemeinschaft für Veränderliche Sterne e.V. (BAV) (Germany)
$\otimes$	Liga Ibero-Americana de Astronomia (South America)
λ	Madrid Astronomical Association M1 (Spain)
#	Magyar Csillagàszati Egyesület, Valtozócsillag Szakcsoport (Hungary)
&	Nederlandse Vereniging Voor Weer-en Sterrenkunde, Werkgroep Veranderlijke Sterren (Netherlands)
\$	Norwegian Astronomical Society, Variable Star Section
%	Royal Astronomical Society of New Zealand, Variable Star Section
υ	Sociedad Astronomica 'Syrma' (Valladolid, Spain)
§	Svensk Amator Astronomisk Förening, variabelsektionen (Sweden)
¢	Ukraine Astronomical Group, Variable Star Section
@	Unione Astrofili Italiani (Italy)
$\nabla$	URSA Astronomical Association, Variable Star Section (Finland)
‡	Vereniging Voor Sterrenkunde, Werkgroep Veranderlijke Sterren (Belgium)

Observations (increments of 1000)	No. Observations per increment	% of All Observations	No. Observers per increment
1–999	78201	19%	565
1000-1999	46743	11%	33
2000-2999	68087	17%	28
3000-3999	28436	7%	8
4000-4999	23389	6%	5
5000-5999	22032	5%	4
60006999	6950	2%	1
7000–7999	14868	4%	2
8000-8999	8106	2%	1
9000-99999	28436	7%	3
10,000+	82292	20%	6

190

Table 5. Individuals requesting AAVSO data during fiscal year 2000–2001.\*

Name Affiliation/Location		
A. Abatemarco (2)	San Rufo, Italy	
L. Abbey	Atlanta, GA	
J. Alcolea	Alacal de Henares, Spain	
N. Allen	Essex, England	
H. Anderson	Joplin, MT	
T. Arny (2)	Amherst College, MA	
R. Baptista (2)	Florianopolis, SC	
R. Barth	Ames, IA	
D. Baskill(6)	University of Leicester, England	
E. Beaudoin	Pau, France	
T. Bedding (9)	University of Sydney, Australia	
J. Bedient	Honolulu, HI	
A. Bonaca (3)	Visnjan, Croatia	
M. Bradbury	Indianapolis, IN	
J. Brand (11)	Ist. di Radioastronomia, Bologna, Italy	
R. Brawley	Piqua, OH	
L. Bretthorst	Washington University in St. Louis, MO	
O. Brettman	Huntley, IL	
J. Bricken	Stanford University, CA	
J. Buchler	University of Florida, Gainesville, FL	
S. Butz	Whitehall, PA	
W. Carragan	Troy, NY	
N. Carvajal	Brighton, MA	
T. Castellano	NASA Ames Research Center, CA	
G. Chaple	Townsend, MA	
G. Clayton	Louisiana State University, Baton Rouge, LA	
R. Coccioli (2)	Rome, Italy	
M. Cohen (2)	University of California, Berkeley, CA	
A. Conu	Alexandria, Romania	
G. Cook	Terre Haute, IN	
H. Danner	Mainz, Germany	
P. Diamond	University of Manchester, England	
Don	email only	
P. Doward	Chester, PA	
J. Drake (18)	Ames, IA	
L. Early	Gladstone, MO	
Y. Efimov(2)	Crimean Astrophysical Observatory, Ukraine	
E. Erhan (20)		
M. Feast (4)	Istanbul, Turkey South African Astron Observatory, South Africa	
	South African Astron. Observatory, South Africa	
M. Friedjung	Institute d'Astrophysique, Paris, France	

\*List does not include individuals obtaining data or information directly from the AAVSO website. A number in parenthesis after the name indicates multiple requests.

Table 5. Individuals requesting AAVSO data, 2000–2001, cont.

Name	me Affiliation/Location	
C. Froning	Space Telescope Science Institute, Baltimore, MD	
B. Gaensicke	Universitäts-Sternwarte, Göttingen, Germany	
T. Gandet	Tucson, AZ	
D. Gokce	Izmir, Turkey	
H. Goldhahn (4)	Lohmen, Germany	
P. Gonthier	Hope College, MI	
J. Gonzalez	Badajoz, Spain	
J. Good	IPAC, Caltech, Pasadena, CA	
J. Greaves (2)	Northampton, England	
D. Green (11)	Smithsonian Astrophysical Observatory, MA	
M. Greenbaum	Tower Hill School, DE	
J. Griffin	Zundy Junior High, Wichita Falls, TX	
P. Groot (4)	Harvard-Smithsonian Center for Astrophysics, MA	
P. Guilbault	Chepachet, RI	
A. Guller	Izmir, Turkey	
R. Hamper	Iowa State University, Ames, IA	
M. Handren	email only	
S. Havriliak(2)	Huntingdon Valley, PA	
J. Hearnshaw (18)	New Zealand	
T. Hill(2)	Surbiton, Canada	
M. Hollis	email only	
M. Houchins	USA	
S. Howell(4)	University of Wyoming, Laramie, WY	
Ido	email only	
N. Jevtic	University of Connecticut, Storrs, CT	
J. Kaler	University of Illinois, Urbana, IL	
A. Kammerer	Ettlingen, Germany	
R. Kastrukoff	University of Toronto, Canada	
R. Khan	West Bengal, India	
Kimberly	email only	
T. Kipper	Tartu Observatory, Estonia	
A. Kilpio	Moscow, Russia	
S. Komonjinda (2)	Bangkok, Thailand	
M. Kuecker	Spring, TX	
C. Kunesh	Bethlehem, PA	
E. Kuulkers (3)	Utrecht, The Netherlands	
R. Lazauskaite	Vilnius, Lithuania	
T. Lebzelter (8)	University of Vienna, Austria	
N. Leigh	University of Toronto, Canada	
R. Lilgenber	FL	
I. Livadiotis (3)	University of Athens, Greece	
K. Long (19)	Space Telescope Science Institute, MD	
<b>K.</b> Long $(1)$	space relescope science institute, with	

Table 5. Individuals requesting AAVSO data, 2000–2001, cont.

Name	Affiliation/Location	
M. Lopez	Guadalajara, Spain	
D. Lore	Dispatch Magazine, Columbus, OH	
D. Loughney	Edingurgh, Scotland	
Z. Luciano	La Spezia, Italy	
J. Lyke	University of Minnesota, Minneapolis, MN	
E. Lynch	Maynard, MA	
Lyndsey	email only	
A. Magalhaes (2)	University of São Paulo, Brazil	
D. Mais (2)	email only	
K. Marasinghe (2)	Iowa State University, Ames, IA	
A. Marie	Palos Hills, IL	
T. Marsh (2)	University of Southampton, England	
M. Matsuura (4)	Manchester, England	
C. Mauche (24)	Lawrence Livermore National Laboratory, CA	
J. McSaveney	New Zealand	
K. Meech	Institute for Astronomy, Honolulu, HI	
P. Merchan (15)	Spain	
R. Michta	Nesconset, NY	
M. Mikako	Manchester, England	
S. Mondal	Physical Research Laboratory, Gujarat, India	
J. Mood	USA	
L. Morales-Reda (10)	University of Southampton, England	
K. Oh	Korea	
K. Ohnaka	Max-Planck Institute, Germany	
D. Osterbrock	Lick Observatory, CA	
J. Pasachoff	Harvard College Observatory, MA	
Patrizia	email only	
N. Peattie	Winters, CA	
O. Pejcha	Brno, Czech Republic	
L. Pirozzi	Ischia, Italy	
M. Pointon	Manchester, England	
M. Prabhune	Maharashtra, India	
W. Priedhorsky	Los Alamos National Laboratory, NM	
C. Pullen	Wilton, CA	
Quiara	Ridgewood, NY	
K. Quinn	South Florida Museum, Bradenton, FL	
S. Rabe (2)	Sonneberg, Germany	
S. Radabah	Mountlake Terrace, WA	
M. Ratner	Harvard-Smithsonian Center for Astrophysics, MA	
M. Reid (2)	Harvard-Smithsonian Center for Astrophysics, MA	
	Arkansas School for Mathematics, Hot Springs, AF	
W.Richter		

Table 5. Individuals requesting AAVSO data, 2000–2001, cont.

Name Affiliation/Location		
E. Rubenstein	Yale University, CT	
R. Rushenberg (4)	Ames, IA	
A. Sebrell	Mills E. Godwin High School, Richmond, VA	
R. Shirey (2)	University of California, Santa Barbara, CA	
W. Shuster	Penticton, Canada	
C. Sigismondi (4)	Yale University Astronomy Dept., New Haven, CT	
E. Silva Villa	Colombia	
E. Sion (15)	Villanova University, PA	
F. Siver	Lancaster, MA	
B. Smith (20)	East Tennessee State University, Johnson City, TN	
D. Steeghs (6)	University of Southampton, England	
A. Stegeman	Heidelberg, Germany	
S. Stoganoff	email only	
H. Sung (7)	Seoul National University, Korea	
D. Swann	Carrollton, TX	
J. Tapia	email only	
J. Terraciano	San Francisco, CA	
X. Theoret	Sherbrooke, Canada	
C. Townes (2)	University of California, Berkeley, CA	
J. Tracey	Villanova University, PA	
H. Tuan	email only	
R. Tubbs	Institute of Astronomy, Cambridge, England	
D. Turner	St.Mary's University, Halifax, Canada	
Unknown (2)	email only	
R. Valdettaro	Arcetri Observatory, Firenze, Italy	
N. Vasile(7)	Bucharest, Romania	
S. Vaughn	Aiken, SC	
C. Venturini (10)	Los Angeles, CA	
R. Viotti	Inst. di Astrofisica, Rome, Italy	
F. Violat	Spain	
R. Walker	Scotts Valley, CA	
G. Wallerstein (4)	University of Washington, Seattle, WA	
J. Wan (3)	Melbourne, Australia	
W. Watson	Nevada City, CA	
T. Weber	Sonneberg, Germany	
D. West (4)	Mulvane, KS	
P. Wheatley (3)	University of Leicester, England	
E. Wightman	W. Easton, PA	
L. Willson (3)	Iowa State University, Ames, IA	
P. Wright	Rosemount, MN	
B. Yudin	Sternberg Astronomical Institute, Moscow, Russia	