ANNUAL REPORT OF THE DIRECTOR FOR FISCAL YEAR 1977 - 78

It is with a sense of honor and pride that I present to you my fifth annual report as your director. This year I will again report our accomplishments in the different areas of our operation, and I will state our goals for the coming year.

In general, due to financial difficulties this year, we had a very hard time in operating. But as Clint Ford put it at one time: AAVSO always has a way of coming out smelling like a rose, and at the end of the year we have.

DATA PROCESSING

Accomplishments: 1) Processing, editing and partially plotting the data for Report 38/39; 2) processing the data between 1966 and 1971, the so-called "gap," and processing the incoming observations.

1) Report 38/39: Five months were spent in completing the processing -- validating, sorting and merging -- of 500,000 observations for this report. The printout of the listings of observations made a 36-inch thick pile, and if pages were put side by side they would stretch from Headquarters to Harvard Square, about one mile. Data on Mira variables have been initially edited by my assistants, Robert Hill and David Drucker, and computer plots have been obtained on those stars whose data had final editing by me. These plots were sent to the printer and blueprints obtained.

2) Data between 1966-1971: I am happy to report that the so-called "gap" data from 1966 to mid 1974 are now processed, i.e., validated, sorted, partially merged and listed up to mid 1971. It is interesting to note that although it took us almost eight months to reach that state with Report 38/39 data, once our computer programs were perfected, it took us only three weeks to process that much data for 1966-71. The data between mid 1971 and mid 1974 are keypunched and on magnetic tapes. However, since they are not yet verified, they have not been processed.

Processing of Current Data: Due to extreme financial difficulties, we were unable to hire adequate student help, and we fell continuously behind in the processing of our current data. This is detrimental to our operation. We are grateful for the grant from Clinton Ford and the contribution from Cy and Emily Fernald that alleviated this situation. We are now successfully processing incoming observations without delay.

Goals: Publication of Report 38/39 and successful conversion of our computer programs to the new computer system at the Center For Astrophysics.

SPECIAL REQUESTS

Accomplishments: Wider distribution of our data in the astronomical community, and significant contributions by our observers to sophisticated astronomical experiments.

This year we have received 85 special requests, which represents about one every 2 to 3 working days. Requests came from all corners of the USA -- in particular, from California (California Institute of Technology and U. of California) -- and the world: Canada, Ireland, England, France, Italy, West Germany, Poland, Israel and India.

This year, more than before, both our published and as yet unpublished observations have been used extensively by astronomers. As data poured in from satellites that are scanning the sky in the ultraviolet and x-ray regions of the spectrum, our observers made genuine contributions to astronomy. As detectors on satellites, such as the High Energy Astronomical Observatory-1 (HEAO-1), and International Ultraviolet Explorer (IUE) were scheduled to monitor our favorite variables, such as U Gem and SS Cyg, our observers stood alongside the professionals to provide them with data crucial for the success of their experiments. It has been an exciting year!

Instead of citing the 85 requests, individually, I will categorize them, and share with you our contributions in general. A complete listing of the requests appears at the end of this report.

The special requests for our data covered the following types of variables:

1. Long period and semiregular variables.
2. Dwarf novae: U Gem and Z Cam stars.
3. Symbiotic stars, i.e., Z And stars.
4. Novae, recurrent novae, and novalike objects.
5. R Coronae Borealis stars.
6. Nebular variables.
7. Irregular variables.

The majority of the requests were, once again, for our uninterrupted data on long period and semiregular variables. Our data were used in research by astronomers and graduate students for the following purposes:

1. Determination of phases and brightnesses of stars for correlation to ground-based and jet flight data in the infrared, radio and visual regions of the spectrum.
2. Estimation of projected brightnesses and phases of stars for future ground-based and jet flight observations. This, coupled with our predictions of dates of maxima and minima of long period variables, is indispensable in planning efficient observing programs.
3. Correlation of our long term uninterrupted light curves with theoretical models of stars. Dr. Lee Anne Willson (Iowa State U.) spent one week at HQ copying ~1200 pages of data.

Our optical data are essential to both theoretical astronomers who are working to understand the mechanism of the variations in these stars - and to observational astronomers who are working in the infrared and radio regions of the spectrum to find out more about the kinematics, chemistry, and evolution of the extended atmospheres of these stars. In short, without our data, research on these stars is not complete. Therefore, our data on these stars must continue to be uninterrupted.

As Dr. K. Bechis from U. of Mass. put it so well: "Up-to-date information on visual light variations from these stars . . . as obtained essentially uniquely by the members of the AAVSO . . . is an invaluable complement to radio and infrared data allowing the development of complete models of the stars, their mass-loss processes and evolution."

In the area of dwarf novae, our contribution can be divided into two parts:

1. Correlation of x-ray and infrared data with our optical observations.
2. Pre- and simultaneous optical coverage of dwarf novae during HEAO-1, IUE and Ariel-V Sky Survey observations as well as ground-based infrared and high-speed photometric observations. It is here that our observers made major contributions which led to successful execution of observing programs and important discoveries. SS Cygni was observed at maximum with the IUE satellite in May. Correlating x-ray data obtained by Ariel V with the optical indicated that SS Cygni emits hard x-rays (2-10 keV) at all phases.

Our major contributions have been to HEAO-1 x-ray experiments. Throughout the year, our observers have been notified with our Alert Notices and the Director's Requests in our Circular of the observing schedule of HEAO-1. It was through the efforts of our observers that I was able to alert the HEAO-1 x-ray team of the outbursts of U Gem and SS Cyg and the behavior of cataclysmic variables throughout the year. The x-ray observations of these stars during outbursts by HEAO-1 led to major discoveries (see F. Cordova's article, elsewhere in this issue).

I would like to thank all of you who followed these stars so closely throughout the year. Our contributions have been referenced

in many recent astronomical publications and praised by many astronomers.

"I want to thank the AAVSO for an outstanding contribution to our efforts. Simultaneous monitoring of AAVSO is the only way we will know what state these stars are, if they are observed to emit x-rays." - F. Cordova (California Inst. of Tech.)

"Our survey was meaningful only with the simultaneous optical coverage of these stars provided by many AAVSO members. For example, we were promptly informed as to which dwarf novae in the HEAO-1 scan path were erupting, making it possible to alter our operating mode during these times to increase our sensitivity to these sources. The AAVSO has also generously provided us with light curves of all dwarf novae in our survey." - Dr. G. Garmire, F. Cordova (Cal. Inst. of Tech.)

"As you know, I have been searching for soft x-ray emission from dwarf novae using the low energy x-ray detectors onboard the HEAO-1 spacecraft. Of particular interest has been the star U Gem which we detected as a soft x-ray source during optical outburst in October 1977. The important point in this context is that the x-ray emission was only seen during optical outburst; and it is only through the efforts of organizations such as the AAVSO that we have any record of this event, since there is clearly not enough telescope time, money or personnel in the professional astronomical community to continuously monitor these unpredictable stars. Here we have one of the many instances when the data collected by dedicated amateur astronomers is not only useful, but vital in interpreting the physical processes going on in this star, and even in identifying it as the source of the x-ray outburst." - K. Mason (U. of California)

"We would like to commend the valuable service offered to the astronomical community by the AAVSO. This is a unique and irreplaceable source. We would like to be a loud voice in commending the quality and importance of their work." - R. E. Nather, E. L. Robinson, J. Patterson (U. of Texas).

In the field of novae and recurrent novae, our optical data were used in correlating the infrared emission with visual observations of Nova Ser 1978 for the detection of a dust shell, etc. (As IR emission increases, a dust shell forms; dust grains get bigger and optical brightness is attenuated.) Dr. E. Ney, who has used our data for NQ Vul and Nova Ser, states "I have been very impressed (and scientifically helped) by the work of the AAVSO... In my work on NQ Vul with Brian Hatfield I relied very heavily on the many excellent observations you supplied...AAVSO performs real service to the astronomical community."

Recently our optical data during the small flare of GK Per in July was used to correlate the x-rays detected from it at that time.

As with the other types of variables, our optical data were used to correlate spectroscopic and infrared observations of symbiotic stars; polarimetric changes of T Tauri stars; the study of the quasi-periodic oscillations of R CrB variables, as well as for the spectroscopic data used in the refinement of their classification.

The six Alert Notices issued to alert observers on the discoveries of two novae, Nova Ser 1978 discovered photographically on March 1 by M. Honda and Nova Cyg 1978 discovered visually by W. Morrison, an AAVSOer, on September 10, and to communicate requests for notification of outburst or simultaneous coverage have contributed significantly to our success. Also, on several occasions this year, astronomers, such as Dr. M. Cohen from U. of California and Dr. Hildebrand from U. of Chicago called to learn about stars they were about to observe. We were able to make intelligent guesses as to whether these stars would have outbursts by telephoning our observers who concentrate on observing these stars and by carefully analyzing our data.

Dr. Martin Cohen of U. California later wrote: "As you know I was prepared to monitor in the infrared about 75 U Gem stars.

However, having the immediate notification via the AAVSO of which stars had attained their maxima certainly enabled me to make the fullest use of the rather limited time that the weather permitted. Essentially due to your members, I now have observed about eight U Gem stars at maximum light. The data that you have sent me in the past seem to be quite internally consistent and reliable in delineating both the time of maximum light and its duration.

What I am hoping to do with a combination of your data and my own is to make some statement as to the quantity of hot gas that is present in a typical U Gem system."

Our success is solely due to our devoted and enthusiastic observers. Whenever our assistance was requested by an astronomer, our observers did everything they could to help. Throughout the year I am continuously informed of the behavior or unusual activity of stars, so that astronomers may be alerted. I wish to thank all of you who contributed so significantly to astronomy. I wish to thank those observers who called or wrote me on the behavior of the stars and, in particular, Jim Morgan, R. Annal, Ernst Mayer, Paul Goodwin, John Bortle, Charles Scovil, C. Hurless, George Kelly, Lancaster Hiett, Danie Costanzo, Tom Bretl, Jim DeYoung, Tom Fetterman, Bob Ariail, Dave Rosebrugh, Peter Collins, Jack Davis, Rich Hill, Gus Johnston, Steve O'Meara, Jim Sandel, and Chris Spratt for their phone calls and postcards.

Goal: To continue contributing valuable data for research in variable stars.

INTERNATIONAL COLLABORATION WITH OTHER VARIABLE STAR OBSERVERS

Accomplishment: Collaboration with variable star observer groups abroad.

Observers of the Astronomical Society of Southern Africa, under the direction of Jan Hers, have contributed valuable observations on stars in the HEAO-1 observing schedule. Their contribution to our regular observing program has also been significant.

French variable star observers also joined us in providing good visual coverage for HEAO-1 x-ray experiments. The exchange of publications between the two groups is very beneficial. The observation of Mr. Duruy, the Honorary Secretary, continues to be a valuable addition to our data file.

The Albireo Amateur Astronomy Club of Hungary continues to contribute data to AAVSO with increasing enthusiasm. To date, five Hungarians have been sponsored for membership by our members in the USA.

Valuable contributions have also been received from the following groups: Japanese Astronomical Study Group; Belgium Variable Star Observers; Astronomisk Selskab; New South Wales division of the British Astronomical Association of Australia.

There is an exchange of publications and observing literature between AAVSO and other variable star observer groups in Argentina, Brazil, Chile, England, Italy, Netherlands, Scandinavia, and the U.S.S.R.

Last, but not least, copies of observations of southern long period variables by members of Variable Star Section of the Royal Astronomical Society of New Zealand are compiled by Gordon Smith and kindly sent to us by their director, Frank Bateson. This fruitful collaboration continues to be valuable in refining dates of maxima and minima of these stars, for the annual predictions.

Goal: To continue our collaboration with other groups, abroad.

REQUEST FOR INFORMATION AND NEW MEMBERSHIP

We sent out about 500 AAVSO Information Kits to individuals interested in the AAVSO. This, coupled with talks on AAVSO and recruiting done by many of our members, enabled us to elect 125 new annual members and 5 sustaining members: Scott Birney, William Olsen, Betsey Purinton, Ralph Rieth, Ronald Spencer. Eight annual members changed to sustaining: Russell Chipman, Herbert Koller,

Robert Mitchell, John Percy, Edward Tyrolf, Richard Tyson, George Wallerstein and Walter Wheeler. Three members were sponsored from iron countries: Csaba Molnar by Damien Lemay; Istvan Karaszi and Pal Brlas both by Roger Dufur.

I invite more of you to change from annual to sustaining membership, to recruit more members and to sponsor more members from the iron countries. All of these help the operation of the association.

We were saddened by the deaths of our members: Sterling Anderson, L. E. Armfield, Timothy Brown, Robert Johnston and Mrs. Walter Reeves.

PUBLICATIONS

Journal of the AAVSO: Volume 6, Nos. 1 and 2 were published. The typing and the preparation were done at Headquarters, due to the increased workload of Charles Scovil. This caused delays in the publications, since it added more responsibility to the already overloaded Headquarters' staff. The operation of the Journal is improving. I thank Dr. Charles Whiteny for his editorship, the editorial board for their suggestions, and Charles Scovil for the time he contributed in the preparation of this publication since 1972.

AAVSO Bulletin: The 1978 Annual Predictions of Maxima and Minima Dates of Long Period Variables was published in AAVSO Bulletin 41, and distributed to observers and astronomers. This publication enables astronomers to schedule observing programs with maximum efficiency. Some remarks received about the Bulletin are:

"For many years I have made regular use of the AAVSO predictions for long period variables in order to request major telescope time at the most auspicious moments...I am grateful for the efforts of the thousands of amateur astronomers." T. Barnes (U. of Texas).

"Predicted times of maxima and minima for long period variables are indispensable for preparing my observing programs." G. Wallerstein (U. of Washington).

The data on Bulletin 41 is schematically represented in Bulletin 41 A&B. I thank Peter and MaryJane Taylor for their excellent work in compiling the maxima and typing this Bulletin. Thanks are extended to Clinton Ford for compiling the minima.

AAVSO Circular: Published monthly by John Bortle and Charles Scovil, this publication gives preliminary information on the behavior of cataclysmic variables and interesting stars, and it alerts active observers for more data on neglected stars. This year observing schedule of catalcysmic variables with HEAO-1 was published in it monthly, which secured good coverage by observers. I thank John and Charles for preparing this helpful publication. The Circular can be received through individual subscription.

Solar Bulletin: It is prepared by Casper Hossfield, the Chairman of the Solar Division; Bruce and Dr. Robert Ammons, who analyze the data on solar flares; and it is published monthly by Carolyn Hurless. Thanks are extended to Casper, Bruce, Robert and Carolyn for their valuable service.

Ephemerides of Eclipsing Binaries and RR Lyrae Stars: Computerized ephemerides for 1978 of eclipsing binaries and RR Lyrae stars prepared by Donald Livingston and Marvin Baldwin were published and distributed to observers and astronomers.

A compilation of predicted dates of maxima of bright stars was prepared for monthly publication in Sky and Telescope and annually in the Observers Handbook of the R.A.S.C., Astronomical Calendar, with descriptions of variables and light curves of o Cet and R And, respectively. "Variable Star Notes," published in the Journal of the R.A.S.C., contained articles on Z Andromedae, NQ Vulpecular, and the behavior of SS Cygni and U Geminorum in 1977 and sample light curves from Report 38/39.

SUMMARY OF OBSERVATIONS

This year we have three milestones in our observing records. Chronologically, these are:

1. Philip Steffey made AAVSO's 4,000,000 observation with his estimate of YZ Cnc at ($12^m.7$ on March 26. Our heartfelt congratulations to our very enthusiastic observer, Dr. Steffey. Welcome to AAVSO's "millionaire's club!"

2. Edward Oravec is our fourth member who has made over 100,000 variable star observations in the AAVSO. The other three are: Reginald DeKock, Cyrus Fernald, and Leslie Peltier.

3. The recent nova, 213843b Nova Cygni 1978, was visually discovered by two AAVSOers. Peter Collins from Tucson, Arizona, was the first to alert the astronomical community of this discovery with his observation on Sept. 10.24 UT at $6^m.9$. However, an earlier observation of Warren Morrison from Ontario, Canada, on Sept. 10.032 UT at $6^m.8$ made Warren the official discoverer - and the candidate to receive the AAVSO Nova Award (this award is given for the earliest visual discovery). We congratulate both Peter and Warren for their discovery!

The total number of observations received this year was 148,491. For the decrease in the annual totals, I blame partly the weather. Throughout the year, report forms from observers contained notes, such as:

"This is the worst summer that I can ever remember."
"This has been the worst year."
"Only 6 observations! That is all the skies would permit."
"I did not open the observatory for two months."
"It rained so hard all month that my pier shifted."

We received observations from 373 observers. 92565 observations were made by 245 observers in U.S.A., and 55926 by observers in 27 countries. The grand total of the observations since our founding in 1911 is 4,069,830.

Table I lists the number of observers from each country and their astronomical contributions; Table II from each state in the U.S.A.; and Table III is an alphabetical list of observers, giving observers initials, name, location, annual total of their observations, and the inner sanctum observations (observations with magnitude estimate $13^m.8$ or fainter, and/or "fainter than" observations of $14^m.0$ and fainter). This year 25 observers made between 1000 and 2000 observations. J. Bortle, T. Cragg, C. Hurless, A. Kosa-Kiss, D. Levy, A. Mizser, E. Oravec, G. Samolyk between 2000 and 3000; P. Goodwin, W. Morrison, S. B. Sharpe, M. B. Smith between 3000 and 4000; L. Hiett, 4051; W. Lowder, 4155; E. Mayer, 4271; U. Surawski, 4421; R. Annal, 4,490; and M. Baldwin 5799.

E. Mayer leads the inner sanctum observations with 1698, then R. Annal with 1530, and J. Bortle with 514 observations. R. Binzel, P. Garnavich, P. Hartigan, L. Kalish, H. Louth, R. Minton, R. Mitchell contributed photoelectric data, and R. Royer photovisual and B. Schaeffer photographic data.

PERSONNEL

During the fiscal year, my assistant, Robert S. Hill, very capably handled the data processing. He refined our plotting programs to handle large volumes of data most efficiently and he was in charge of the preparation of the data for Reports 38 and 39. He also assisted me in writing grant proposals. My other assistant, David Drucker from Brown University, is a Venture program participant. He was responsible for plotting, compilation of data for special requests, and for initial editing of data on Mira Variables for Report 38 and 39. At the end of the fiscal year both Bob Hill and David left Headquarters. We now have two other capable assistants, Christopher Walton and Douglas Edwards, from Bates College and Brown University, respectively. Both are participants of Venture program which provides challenging jobs to those who take time off from their college education.

Mary Thompson continues to assist conscientously in the general operation of the office, distribution of charts and books.

We have several part-time assistants. Dorothy Haviland care-

fully and capably handles the incoming mail and assists with the operation of the office. Part of the academic year Harvard University students, Jill Gustafson and Sean Dawling, keypunched and verified incoming observations on computer cards, Celia Colbert assisted me with my correspondence. During the summer, through the generous grant of Clinton Ford, and contribution of Cyrus Fernald, we were able to hire William Segal and Jill Gustafson to bring the backlogged keypunching up to date.

We had two CETA trainees: Terry Pacherno for clerical assistance, and Wayne Wilkerson for data processing. CETA (Comprehensive Employment and Training Act) Federal Program provides job training and employment opportunities to economically disadvantaged.

Our member, Richard Strazdas, is our indispensable consultant in data processing. Our member, Ann Piening from Harvard University, has recently joined our part-time staff as a participant of Work Study Program. She is responsible for the compilation of data for special requests, and assists me with the analysis of our data.

Through the Grant of Clinton Ford, I now have an excellent part-time corresponding secretary, Agnes Meaney, to assist me with my enormous correspondence.

ACKNOWLEDGEMENTS

We are grateful to the Harvard-Smithsonian Center For Astrophysics for their support of our computer activities, and to Dr. Owen Gingerich for his help in making that support possible. Special thanks are extended to Barbara Welther for her valuable recommendations in data processing, and particularly computer funding. It was through her efforts that we got additional funding in computer time that enabled the work on Reports 38/39 and to process the gap data.

We also acknowledge the help that the staff, particularly Robert Fitzpatrick and Joseph Finn, and computer operators of the Computer Center of the Center For Astrophysics have given us in processing our voluminous data.

We are grateful to the National Oceanic and Atmospheric Administration for supporting the activities of our Solar Division.

Thanks also are due to Stamford Museum for making the facility available to Charles Scovil and his assistant, John Griese, for the preparation of new AAVSO charts and the AAVSO Circulars.

Our thanks to Unitron Instruments for printing the Julian Day Calendar.

Throughout the year we are most fortunate and very grateful to have several members and friends of the AAVSO who volunteer their services and time at HQ. Margaret Mayall gives generously of her time and knowledge. This year she prepared light curves of the prominent U Gem variables using all the published and yet unpublished AAVSO data, and continues to work on the Extension of the Studies of Long Period Variables. Keith Danskin, John Coolbaugh and Robin Foster volunteered to analyze the data on AY Lyrae (see JAAVSO, Vol. 7, p. 1), UV Per and SS Aur, respectively. Theodore Wales revised our "Validation File," Jeremy Knowles and Richard Lynch prepared the observers list for Reports 38 and 39. Hillary Liller (our 12-year-old friend) helped with keypunching of our data.

I thank my husband for his support and encouragement and for putting up with me particularly near meeting times.

My heartfelt thanks and appreciation is extended to you, our officers, committee chairmen, members, and above all our observers. The success of this association is due to the dedicated observers and members and to the team effort of everyone.

Let us continue our contribution to astronomy.

Respectfully submitted,

Janet Akyüz Mattei

LIST OF SPECIAL REQUESTS
DURING FISCAL YEAR 1977-78

Arnold, S., University of Rochester. AAVSO light curves of RX And, TZ Per, CN Ori, CW Mon, Z Cam, SY Cnc and AH Her for the interval between 1974 and 1977 for correlation with high speed photometric data. Part of Doctoral thesis.

Augason, G., NASA Ames Research Center. AAVSO light curves of α Ori between 1960 and 1978,

Bappu, K. V., Indian Inst. of Astrophysics. AAVSO predictions of maxima and minima of long period variables for 1978, to be used in programming spectroscopic observations.

Bastien, P., U. of Western Ontario, Canada. AAVSO light curves of T Tau, RY Tau, SU Aur, RW Aur, DI Cep for correlation of optical and polarization variations.

Bechis, K., U. of Massachusetts. Dates and brightness of observed maxima and minima of R Mon, X Cyg, o Cet in 1976 and 1977 for correlation with radio observations. AAVSO predictions of maxima and minima of long period variables for scheduling radio observations.

Bopp, B. W., U. of Toledo. Long term AAVSO light curves of AX Per, BF Cyg, CI Cyg, Z And, AG Peg, TX CVn, AG Dra, CH Cyg for correlation with spectroscopic data.

Bowers, P. S., National Radio Ast. Observatory. AAVSO light curves of RX Tau between 1974 and 1977 for correlation with radio observations.

Campbell, M., U. of Arizona. AAVSO optical data on BU Gem for correlation with infrared observations.

Ciatti, F., Osservatorio Astrofisico di Asiago, Italy. AAVSO light curves of HM Sge and Vl016 Cyg.

Cimerman, M., California Inst. of Tech. AAVSO light curves of U Ori, R Aql and W Hya for 1977 and 1978 for correlation with radio observations.

Cohen, M., U. of California. Assisting the infrared observations of outbursts of U Gem and Z Cam stars, with pre and simultaneous AAVSO optical coverage.

Cordova, F., California Inst. of Tech. Simultaneous optical coverage of cataclysmic variables in the observing schedule of High Energy Astronomical Observatory-1 (HEAO-1) by AAVSO observers for 8 months.

_____, Alerting x-ray team of Cal. Inst. Tech. on the eruption of dwarf novae in the scan path of the satellite, in order to increase the sensitivity of the instruments for special observing, particularly for U Gem, SS Cyg and the long, bright outburst of YZ Cnc.

_____, AAVSO light curves of cataclysmic variables for correlation with x-ray data from HEAO-1.

_____, Alerting the optical state of R CrB variables for effective spectroscopic observations in refining the classification of some of these stars.

Davis, R., Harvard-Smithsonian Center For Astrophysics. Alerting the onset of outburst of SS Cygni, in May, to enable monitoring with the International Ultraviolet Explorer (IUE).

_____, Optical coverage of V818 Sco = (Sco x-1) during its monitoring by IUE, in May.

De Groot, M., Armagh Observatory, Ireland. AAVSO light curve of NQ Vul.

Dettmann, T., U. of Washington. Long term AAVSO light curve of RU Cam.

Elvis, M., Harvard-Smithsonian Center For Astrophysics. AAVSO data on GK Per during June and July for correlation with x-ray data from Ariel V.

Evans, A., U. of Keele, England. AAVSO light curve of RS Oph from 1965 to 1978.

Fabiano, G., Harvard-Smithsonian Center For Astrophysics. AAVSO data on SS Cyg and EX Hya for correlation with HEAO-1 x-ray observations.

Fernie, J. D., U. of Toronto. Long term AAVSO light curve of S Vul.

Garrigue. J. P., U. de Sciences et Tech. du Languedoc, France. AAVSO light curves of U Ori, R Aql between 1966-1977 for correlation with radio observations.

Gehrz, R., U. of Wyoming. AAVSO light curves of Nova Ser 1978.

Hall, D., Kitt Peak Nat. Observatory. AAVSO light curves of T Cas, R And, o Cet, IK Tau, R Aur, U Ori, R Hya, X Oph, R Aql, χ Cyg, V Cyg, T Cep, R Cas for correlation with infrared spectral data. AAVSO predictions of maxima and minima of long period variables for planning observing programs.

Hildebrand, R., U. of Chicago. Immediate notification of outbursts of cataclysmic variables during observing runs at Yerkes Obs.

_____, AAVSO light curve of AH Her for correlation with high speed photometric data.

Hinkle, K., Kitt Peak Nat. Observatory. Dates of observed maxima and minima of R Leo in 1976 and 1977, and the predicted dates for 1978.

Jacchia, L., Harvard-Smithsonian Center For Astrophysics. Extensive use of AAVSO observations on variables of all types, for the preparation of a book on variable stars.

Jewell, P., U. of Illinois. AAVSO light curves of U Ori, S CrB, U Her, R Aql, R Cas.

Johnston, K., Naval Research Laboratory. AAVSO light curves of U Ori, U Her, W Hya, and RT Vir for correlation with radio observations.

Keenan, P. C., Perkins Obs. AAVSO data on WZ Cas in August 1974 for correlation with spectroscopic data.

Kleinmann, S., Mass. Inst. of Tech. AAVSO light curves of R Leo, and R Aql for correlation with radio observations.

Lichten, S., Harvard-Smithsonian Center For Astrophysics. AAVSO light curve of S Per from 1967 to 1977 for correlation with radio observations.

_____, AAVSO data on VX Sgr from 1967 to 1977 to analyze its behavior.

Maran, S., NASA Goddard Space Flight Center. AAVSO light curve on VY Leo to correlate its behavior in the infrared.

Maron, N., Coll. of Engineering, Poland. AAVSO light curve of R CrB from 1966 to 1977.

Marraco, H., U. Nacional de la Plata, Argentina. AAVSO light curves and observations on RY Sgr from 1961 to mid 1977 for studying the quasi-periodic oscillations.

Mason, K., U. of California. Notification of U Gem and SS Cyg outbursts for correlation with soft x-ray data from HEAO-1.

McCarthy, D., U. of Arizona. AAVSO light curves of o Cet and χ Cyg for correlation of data obtained with the infrared spectral interferometer at 10 μm.

Meyer, A., NASA Ames Research Center. Projected magnitudes and phase of R Cas, IK Tau and TX Cam during scheduled jet-flight infrared observations.

_____, Projected magnitudes and phase of U Her, T Dra, V CrB, S CrB, and R Cyg during another jet-flight observation.

_____ Information given on the Nova Sgr 1978 = V3876 Sgr.

Nevo, I., Wise Observatory, Israel. AAVSO light curves of SY Cnc, KT Per, YZ Cnc for January 1977 for correlation with spectroscopic data.

Ney, E., U. of Minnesota. AAVSO light curves of Nova Ser 1978 to correlate infrared data in the detection of dust shell formation.

Patterson, J., U. of Texas. AAVSO light curves of AY Lyr and YZ Cnc during their recent supermaxima.

Pilcher, F., Illinois College. Identification of an object on a photograph as XX Gem.

Puetter, R., U. of California. Long term AAVSO light curves on Y CVn, V CVn, R And, V CrB and RX Boo.

Pye, J., Harvard-Smithsonian Center For Astrophysics. AAVSO data for SS Cyg for correlation with Ariel V Sky Survey data.

_____, Projected probability of an outburst of SS Cygni in May for scheduling monitoring with Ariel V.

_____, Immediate notification of an outburst of SS Cyg starting May 10.

_____, AAVSO observations of SS Cygni for May 1978 for correlation with satellite data.

Rinsland, C., Ohio State U. AAVSO light curves of R And, o Cet, IK Tau, R Aur, U Ori, R Cnc, W Aql, R Cyg, χ Cyg, R Cas to correlate the infrared data near 4μ.

Russell, R., U. of California. AAVSO light curves of R And, R Aql, R Aqr, V CrB, RX Boo, and SS Vir for correlation with satellite observations.

_____, AAVSO light curves of R Lyn and Y CVn and simultaneous optical coverage by AAVSO members during February and March observing runs.

Sanner, R., U. of Texas. AAVSO data on τ^4 Ser for correlation with spectroscopic data.

Slovak, M., U. of Texas. Long term AAVSO light curves on CH Cyg.

Smith, L., Grumman Aerospace Corp. Simultaneous optical coverage by AAVSO members of o Cet, R Aql, U Her, R Leo and U Ori during jet flight observations.

_____, Projected brightness of o Cet needed in the planning of another jet flight observation.

_____, Projected brightness and phase of o Cet, R Cas, R Aql and U Ori needed for the planning of still another infrared observation by Kuiper Astronomical Observatory jet flight.

Stiening, R. F., Fermi Nat. Accelerator Lab. AAVSO light curves of Z Cam from August 1977 to February 1978. Request made through J. Bortle.

Stockbauer, D., Texas. Information on the optical state of V Tau for April 12, 1978 needed for the grazing occultation observation.

Swank, J., NASA Goddard Space Flight Center. AAVSO light curves of U Gem, SS Cyg, AM Her, SS Aur, and RU Peg for correlation with the hard (2-60 keV) x-ray data from HEAO-1 and OSO-8.

_____, Notification of the outbursts of U Gem and SS Cyg in June 1978 for inclusion in HEAO-1 observing schedule.

_____, AAVSO light curve of SX Cyg.

_____, AAVSO light curve of SS Cygni for 1978.

Szkody, P., U. of Hawaii. AAVSO light curves of Nova Ser 1978, CI Cyg and V Sge for correlation with infrared observation.

Targan, D., Brown U. Information and field chart on S Cep for setting up an observing program.

Troland, T., U. of California. AAVSO light curves on 17 long period and semiregular variables to aid in the interpretation of SiO data.

Tyson, J. A., Bell Lab. AAVSO data on the eclipses of DQ Her between 1958-1968.

Varshni, Y. P., U. of Ottawa, Canada. AAVSO light curves of P Cyg, γ Cas, χ Oph.

Viotti, R., Consiglio Nazional Ricerche, Italy. AAVSO light curves of Z And to correlate data obtained with ultraviolet spectrum.

Wallerstein, G., U. of Washington. AAVSO data on VY CMa between 1968 and 1977.

_____, AAVSO light curve of R Aql for correlation with spectroscopic observations.

Wargan, W., Dr. Remeis Obs., W. Germany. Long term AAVSO light curve of AH HER. Request through U. Hopp.

Warner, B., U. of Capetown, S. Africa. Notification of U Gem outbursts.
White, J., Aerospace Corp. AAVSO light curves on 18 long period and semiregular variables for correlation with radio observations.
_____, Follow-up data on 7 of the above stars.
Willner, S., U. of California. AAVSO light curves on V CrB, T Dra, S CrB, T Lyr, Y CVn, V CVn and R Cyg for correlating infrared data obtained with Kuiper Airborne Observatory.
Willson, L. A., Iowa State U. Long term AAVSO light curves on RT Cyg, and Z Oph.
_____, Spent one week at HQ, copied extensive number of AAVSO light curves and data to aid her in the theoretical and observational studies of long period variables.
Wu, C. C., NASA Goddard Space Flight Center. AAVSO light curves of Nova Ser 1978.
Wyckoff, S., Ohio State U. AAVSO data and light curves of R Cyg, R Gem, and S UMa for correlation with spectroscopic data.

TABLE I

Country	No. of Obs.	Total Obs.	Country	No. of Obs.	Total Obs.
Argentina	1	66	Mexico	1	22
Australia	6	2757	Netherland	1	331
Austria	5	1721	Norway	1	147
Belgium	7	4510	Poland	1	704
Brazil	2	65	Rhodesia	1	189
Canada	22	14141	Romania	1	2032
Czechoslovakia	1	481	South Africa	11	2182
Denmark	7	288	Spain	2	208
France	6	67	Sweden	1	150
German Dem. Rep.	3	1506	Switzerland	1	32
Greece	3	738	United Kingdom	3	281
Hungary	17	5864	U.S.A.	245	92565
Italy	2	31	Uruguay	1	50
Japan	7	2675	West Germany	14	14688
			TOTAL	373	148491

TABLE II

		No. of Obs.	Total Obs.			No. of Obs.	Total Obs.
Alabama	(AL)	2	113	Nebraska	(NE)	1	5
Arizona	(AZ)	6	2769	Nevada	(NV)	1	386
Arkansas	(AK)	1	593	New Jersey	(NJ)	11	3563
California	(CA)	23	10589	New Mexico	(NM)	7	4124
Colorado	(CO)	6	3489	New York	(NY)	14	12045
Connecticut	(CT)	12	3381	North Carolina	(NC)	2	114
Delaware	(DE)	1	3	North Dakota	(ND)	4	448
Florida	(FL)	5	799	Ohio	(OH)	21	8876
Georgia	(GA)	2	335	Oklahoma	(OK)	1	76
Illinois	(IL)	10	630	Oregon	(OR)	1	201
Indiana	(IN)	3	5998	Pennsylvania	(PA)	11	1483
Iowa	(IA)	3	24	Rhode Island	(RI)	2	292
Kansas	(KS)	3	499	South Carolina	(SC)	4	1520
Louisiana	(LA)	5	3568	Tennessee	(TN)	4	374
Maine	(ME)	2	52	Texas	(TX)	9	1246
Maryland	(MD)	6	1077	Virginia	(VA)	4	6445
Massachusetts	(MA)	10	2770	Vermont	(VT)	2	71
Michigan	(MI)	5	4286	Washington	(WA)	5	1129
Minnesota	(MN)	5	78	West Virginia	(WV)	3	2506
Mississippi	(MS)	1	28	Wisconsin	(WI)	22	4877
Missouri	(MO)	5	1703				
				TOTAL		245	92565

TABLE III - AAVSO OBSERVERS 1977-78

AD	R. M. Adams, MA	1152-	42	DEB	B. Deane, TN	20	
AB	W. Albrecht, WI	14-	1	DCS	L. Deicsics, Hungary	62	
ALG	G. S. Aldering, MI	1018-	49	DEF	F. T. DeStefano, MA	5	
AMD	M. D. Anderson, Canada	59		DEY	J. A. DeYoung, WV	1490-	3
AJR	J. R. Andress, OH	119-	1	DMN	D. Dierick, Belgium	229	
ANN	R. J. Annal, CA	4490-1530		DRG	R. Diethelm, Switzerland	32	
ARI	R. B. Ariail, SC	829-	125	DCH	C. Doerr, OH	14	
BTR	T. R. Baker, WI	246		DMR	R. E. Domen, OH	37	
BBN	W. Barbin, PA	10		DUR	M. V. Duruy, France	49-	10
BSF	S. F. Barnhart, IL	280		DGP	G. Dyck, MA	9	
BM	M. E. Baldwin, IN	5799		ECJ	J. H. Eckendorf, AZ	592-	18
BKM	M. Bartonek, Austria	52		ECK	C. Eckert, W. Germany	111-	3
BB	R. S. Bates, MA	112		EMS	M. S. Edelstein, WI	17	
BAU	J. Bauer, West Germany	788-	12	EHR	E. Ehrhart, CA	188	
BBA	B. B. Beaman, IL	32		ELW	S. J. Elwin, Australia	230	
BKK	K. Beckman, MO	659		EKP	K. Engelbrecht, So. Africa	11	
BIL	G. Bilodeau, CA	121-	77	FRW	W. B. Farrar, Jr., NM	196	7
BIR	R. Binzel, MN	2-	PEP	FEN	A. Fenyvesi, Hungary	444	
BKN	A. Birkner, IL	7		FEA	A. M. Ference, PA	3	
BLD	D. L. Blane, So. Africa	22		FER	Y. A. Fernandez, Uruquay	50-	3
BOH	D. Böhme, Ger. Dem. Rep.	1290		FET	T. I. Fetterman, NJ	1036-	92
BOD	D. Bohn, WI	30-	2	FEM	E. M. Flynn, PA	53	
BOI	B. Bois, Canada	427-	13	FD	C. B. Ford, CT	1297-	424
BON	R. Boninsegna, Belgium	110		*SAS	T. Fors, Denmark	20	
BRJ	J. E. Bortle, NY	2034-	514	FT	G. Fortier, Canada	42	
BOW	J. Bowman, PA	1		FRB	B. M. Frank, NY	7	
BPW	P. W. Bradshaw, CT	16		FPK	P. K. Frank, OK	76	
BDC	C. E. Breidster, MN	5		FN	D. Friedman, CA	410	
BTB	T. C. Bretl, KS	218-	2	FR	E. E. Friton, MO	28	
BLP	P. Brlás, Hungary	26-	6	FMG	G. C. Fugman, WI	5	
BYB	B. Brodsky, NJ	1		GAP	P. Garnavich, MD	39-PEP	
BMB	M. B. Brown, PA	9		GHO	L. H. Ghio, Argentina	66	
BNK	N. Brown, W. Australia	103		GIC	C. Gibbons, Canada	34	
BRY	J. T. Bryan, Jr., TX	168-	72	GCH	R. S. Gilchrist, CT	69	
BUS	R. Buss, ND	37		GLF	F. Glenn, NY	673	
BUL	T. Butler, MO	337		GLW	W. Glenn, NY	647	
CWA	W. Campney, Canada	1644-	15	GOP	P. N. Goodwin, LA	3338-	377
CJA	J. A. S. Campos, So.Africa	96		GOR	R. A. Gorkin, MN	49	
CAN	E. R. Canada, AL	112		GAS	E. Ray Grasshoff, TX	6	
*AFOEV	Candela, France	1		GRW	D. W. E. Green, IL	12-	3
CE	C. B. Carpenter, CA	36-	32	GRI	J. W. Griese, CT	452-	235
CTJ	T. J. Carr, LA	4		GA	A. S. Grossman, CA	32	
CIT	M. Cavagna, Italy	23		*SAS	C. Grunnet, Denmark	44	
CRK	R. K. Childress, TN	318-	3	GRZ	H. Grzelczyk, W. Germany	942	
CST	G. J. Christensen, OR	201		HK	E. A. Halbach, WI	665-	105
CHF	R. H. Chase, ME	38		HMR	R. Ham, CO	1711-	6
CLL	S. P. Clancy, NM	214-	36	HAN	J. Hannon, CT	3	
CLK	W. Clark, MO	103		HLP	P. Harles, ND	157	
CEW	E. W. Clement, FL	105		HAT	P. M. Hartigan, MN	12-	PEP
CLB	R. Clyde, OH	11		HRJ	J. A. Harvin, FL	349	
COG	G. Collenberg, AZ	1		HAY	E. R. Hayden, CT	90-	30
COL	P. L. Collins, AZ	363-	2	HZL	L. Hazel, NY	525-	130
COS	S. Coltrain, IA	2		HY	A. S. Heasley, OH	20	
CMG	G. Comello, The Netherlands	331-	3	HEF	M. A. Heifner, CO	845-	1
CBJ	B. J. Coolbaugh, NJ	6		HTZ	M. Heitz, NJ	58	
CRN	D. Cortner, TN	30		HJN	J. Hers, So. Africa	497	
CSD	D. Costanzo, VA	156		HES	C. Hesseltine, WI	70	
COA	A. Coulombe, Canada	166		HEV	Z. Hevesi, Hungary	270	
CR	T. A. Cragg, Australia	2101-	394	HEY	B. Heyndrickx, Belgium	1001-	22
CUD	D. R. Culver, AL	1		HE	L. Hiett, VA	4051	
CUN	D. Cunningham, Canada	310		HID	D. H. Hill, MI	532	
CRY	J. D. Currie, OH	3		HRI	R. E. Hill, MI	1292	
DAK	K. H. Danskin, NJ	35		HIR	Y. Hirasawa, Japan	713-	2
DS	J. M. L. da Silva, Brazil	58		HLC	C. H. Holton, ME	14	
DV	G. Davidson, KS	2		HOH	H. Honda, Japan	1024	
DAJ	J. Davis, MD	499-	38	HOP	U. Hopp, W. Germany	1289	
DMS	M. S. Davis, CT	13		HOU	D. Hough, NJ	125	

TABLE III - AAVSO OBSERVERS 1977-78

HDA	D. M. Hudak, OH	156		MHL	E. J. Michaels,Sr., TX	3	
HDB	B. Hudgens, MI	28-	1	*SAS	O. Midtshogen, Denmark	91	
HUO	D. J. Hughes, NV	386		MLL	J. Miller, MD	3	
HR	C. J. Hurless, OH	2167-	353	MRB	R. B. Minton, AZ	20-	PEP
IDG	D. G. Iadevaia, RI	83		MIM	M. Mitchell, CT	11	
ISH	T. Ishihara, Japan	98		MTC	R. C. Mitchell, WA	9-	PEP
ITO	M. Ito, Japan	439		MZS	A. Mizser, Hungary	2117-	4
JCK	A. Jackson, OH	1		MCE	E. Mochizuki, Japan	45	
JKM	M. G. Jackson, S. Africa	1065-	2	MGJ	J. Mogelinski, NJ	146	
JEA	A. C. Jenkins, SC	7		MOC	C. Molnar, Hungary	415	
*SAS	K. K. Jensen, Denmark	4		MOL	J. Molnar, VA	1499	
JWR	W. R. John, CA	10		MHK	H. K. Moncure, DE	3	
JDJ	D. J. Johnson, NM	30		MOR	R. L. Monski, PA	344-	2
JOG	G. E. Johnson, MD	320-	14	MJ	A. C. Montague, MI	1420	
JBN	B. Johnston, MN	10		MJA	J. A. Morgan, WI	48	
JRV	R. V. Jones, NC	78		MOJ	J. E. Morgan, AZ	1771-	139
KL	L. Kalish, CA	87-	PEP	MRR	C. S. Morris, MA	289-	13
KAI	I. Karaszi, Hungary	556		MOW	W. C. Morrison, Canada	3048	
KLY	G. W. Kelley, Jr., VA	739-	239	MUC	R. Mulac, OH	103	
KSZ	S. Keszthelyi, Hungary	254		MUA	R. A. Mulford, IL	17	
KRM	M. A. Kirby, OH	2		MUN	C. R. Munford, England	141-	3
KIR	P. E. Kirby, OH	474		MUR	P. Murn, WI	45-	9
KLK	K. Klebert, W. Germany	235-	2	MYE	K. J. Myers, IN	7	
KLE	A. R. Klekociuk, Australia	2		NAM	M. Naslund, Sweden	150	
KS	J. Knowles, NY	199		NIM	M. Nicola, Italy	8	
KOC	A. Kocsis, Hungary	45		*SAS	V. G. Nielsen, Denmark	26	
KHJ	H. J. Koller, Canada	14		NIK	K. Nishimura, Japan	8	
KMA	M. A. Komorous, So. Africa	355		NBY	J. Nordby, ND	243-	12
KOP	M. Kopinsky, So. Africa	8		OCN	S. D. O'Connor, Canada	222	
KCY	D. Korycansky, MD	212		*SAS	J. O. Olesen, Denmark	95	
KOS	A. Kosa-Kiss, Romania	2032		*AFOEV	Olivi, France	1	
KRA	R. Kratochwill, Austria	41		OME	S. O'Meara, MA	641-	180
KIS	G. Krisch, W. Germany	572		OV	E. G. Oravec, NY	2556	
KRK	K. L. Krisciunas, CA	606-	2	OGJ	J. C. G. Ortega, Spain	83	
KGK	K. Krueger, WI	22		OJR	J. R. Osorio, Spain	125	
KRU	J. Kruta, Czechoslovakia	481		OSA	A. Ostermann, Austria	785	
KUH	J. L. Kuhns, GA	328-	9	OTB	B. D. Ottum, WI	63-	4
LAM	D. Lam, Canada	15		PCK	E. L. Patrick, OH	5	
LAR	R. Lambert, TX	110		PAR	R. H. Patterson, NY	40-	3
LGH	H. A. Lange, Canada	43		PCE	E. C. Pearce, NM	91	
LWS	M. Lawson, TX	1		PN	A. E. Pearlmutter, MA	348	
LEV	A. J. LeVeque, CA	34		*SAS	E. Pedersen, Denmark	8	
LVY	D. H. Levy, Canada	2315-	13	PEM	M. Peel, England	6	
LNB	G. C. Lindbloom, PA	802		P	L. C. Peltier, OH	573-	38
LOT	H. Louth, WA	355		PEN	A. Penikis, WI	1	
LX	W. M. Lowder, NY	4155		PYR	R. Petruy, Brazil	7	
LZR	R. C. Lozar, IL	4		PFF	G. Pfeiffer, W. Germany	1879	
LKS	R. Lukas, W. Germany	298-	6	PIJ	J. Piriti, Hungary	102	
LYR	R. F. Lynch, RI	209		PLG	G. Plummer, IA	12	
MBN	A. MacRobert, MA	181		PFJ	F. J. Price, NY	120	
MDD	P. Madden, LA	209-	151	PRI	L. H. Price, SC	664-	2
MAN	C. P. Mahnkey, Mexico	22		PRG	G. Prosser, So. Africa	50	
MLT	T. Mallama, MD	4		PUE	E. Purdy, WN	4	
MAK	K. Mallion, OH	4		REH	D. Rehner, OH	29	
MCO	M. Marcario, CA	89-	17	RNN	T. Renner, WI	2	
MAF	G. R. Marshall, So. Africa	18		RMR	M. R. Richardson, NY	52	
MRX	H. Marx, W. Germany	1683-	1	RIR	R. Rieth, West Germany	1571	
MTH	H. Matsuyama, Japan	348		RIP	M. Rippel, NM	12	
MTT	J. Mattei, MA	2		ROR	D. A. Rodger, Canada	43	
MTM	M. Mattei, MA	31-	2	ROL	M. Rollin, CA	3	
MTZ	O. Matzek, Austria	87		RB	D. W. Rosebrugh, FL	327	
MYR	E. H. Mayer, OH	4271-	1698	ROG	G. M. Ross, MI	24-	1
MGE	G. Mayrofridis, Greece	210		RTL	L. Rottner, CA	2	
MKK	K. M. McKeown, CO	200		RR	R. E. Royer, CA	38-	12PV
MED	K. J. Medway, England	134		RPH	H. Rumball-Petre, CA	29	
MEN	P. T. Menober, CT	179		RML	F. Rummler, Ger.Dem.Rep.	154	
MEZ	C. Mežosi, Hungary	340		RUO	D. Ruokonen, WI	162-	1

TABLE III - AAVSO OBSERVERS 1977-78

SJD	J. D. Sabia, PA	24		SZC	B. Szentmartoni, Hungary	156	
SAB	K. M. Sabine, CA	1884-	26	SKB	B. Szőke, Hungary	62	
SKJ	J. Saksek, AZ	22		TNV	V. Tangney, WI	18	
SAH	G. Samolyk, WI	2602-	20	TBD	D. Thibeault, Canada	79	
SNL	J. G. Sandel, SC	20		THG	G. Thibault, Canada	207-	2
SRN	T. M. Sarna, IL	183-	10	TM	H. D. Thomas, WA	169	
SAV	D. R. Savat, LA	6		TMR	R. Thomas, CA	59-	29
SCC	J. D. Scarl, NJ	2		TME	M. E. Thompson, CO	605	
SCK	B. Schaefer, CO	99-78PT		THR	R. Thompson, Canada	173	
SMJ	J. F. Scholl, NY	824		*AFOEV	Thouet, France	3	
SCE	C. E. Scovil, CT	697-	360	TMV	M. V. Thurrell, WI	11	
SBP	P. Sebastiano, VT	31		TAN	A. Tőlgyesi, Hungary	436	
SEE	E. H. Seifert, NE	5		TWN	A. W. Townsend, TN	6	
SHS	S. B. Sharpe, Canada	3686-	136	TFN	F. N. Traynor, Australia	41	
SWY	T. L. Shaw, WI	10		TRR	D. Trommer, W. Germany	634	
SNB	B. Sherman, Canada	233		TUB	V. Tuboly, Hungary	65	
SHB	C. Sherrod, AR	593		TUC	C. Turk, So. Africa	28	
SRC	R. Shrinkfield, S.Australia	280		TYS	R. L. Tyson, NY	237	
SSK	M. Sills, OH	3		UND	E. Underhay, CA	366	
SKL	K. Simmons, FL	13		VAQ	V. Vacquier, CA	97	
SKW	W. Simmons, FL	5		VCP	P. VanCauteren, Belgium	197	
SDD	D. G. Simpson, WV	6		VNL	F. R. Van Loo, Belgium	1164	
SOT	T. W. Sinor, LA	11		VMT	T. Vanmunster, Belgium	884-	1
SKN	C. R. Skinner, NJ	313		*AFOEV	Vedrenne, France	7	
SMN	A. Smith, NY	12		*AFOEV	Verdenet, France	6	
SHA	H. A. Smith, CT	37		VIN	J. V. Vincent, Rhodesia	189	
SJ	J. Russell Smith, TX	275-	46	VIR	P. Virag, Hungary	85	
SHK	K. Smith, TX	15		VLJ	J. Volhard, WI	137-	2
SLD	L. D. Smith, NM	19		VOK	K. Volkmer, CA	51	
SWL	L. Smith, NY	4		VÖL	W. Vollmann, Austria	756-	3
STL	M. B. Smith, NM	3562		WGM	M. S. Wagner, IL	45	
SOD	J. Soder, OH	28		WLL	H. J. Walls, TX	100	
SOK	M. Somodi, Hungary	429		WRN	R. Warden, PA	121-	8
SOU	R. G. Southwick, WA	592		WAB	B. D. Warner, CO	29	
SJZ	J. Speil, Poland	704		WRG	Watson, R. G., III, IN	192-	8
SPC	C. S. Spell, GA	7		WBB	W. V. Webb, OH	512	
SLF	L. F. Spieth, CA	38		WER	R. J. Weber, KS	279-	12
SPZ	R. C. Spizzirri, IL	3		WED	G. Wedemayer, WI	264-	4
SOJ	J. Spoelstra, IA	10		WEI	D. D. Weier, WI	84-	2
SPO	J. Spongsveen, Norway	147		WEL	D. L. Welch, Canada	84	
SC	C. E. Spratt, Canada	1275-	83	WEF	F. West, CT	517	
STR	R. H. Stanton, Canada	71-	48	WTC	J. Wetsch, ND	11	
STI	P. C. Steffey, CA	1848-	5	WJT	J. T. Wilcox, PA	51	
SHY	H. M. Steinbach, W.Germany	159-	1	WIJ	D. J. Williams, NC	36	
SET	C. Stephan, OH	344-	8	WLM	T. R. Williams, TX	568-	6
STF	G. Stephanopoulos, Greece	299		WLP	P. Wils, Belgium	925	
SWT	R. J. Stewart, JN	2-	1	WJA	J. A. Wilson, MO	576	
STQ	N. Stoikidis, Greece	229		WSN	T. W. Wilson, WV	1010-	74
SDT	D. B. Strydom, So. Africa	32		WNB	B. Wingate, NJ	1839	
SUR	U. Surawski, W. Germany	4421		YON	R. R. Young, PA	65	
SUS	D. Sussman, W. Germany	106		ZT	R. Zit, MI	361-	40
SVN	P. Sventek, IL	47		ZW	W. Zukauskas, Canada	22	
SZG	B. Szegedi, Ger.Dem.Rep.	62					

*AFOEV - Association Francaise des Observateurs d'Etoiles Variables
*SAS - Scandinavian Astronomisk Selskab
PEP - Photoelectric
PV - Photovisual
PT - Photographic