COMMITTEE REPORTS

CHARGE-COUPLED DEVICE (CCD)

Chair: Gary Walker
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The AAVSO CCD Program has completed anouther active year. During the period of October 1, 1998, to September 30, 1999, six observers submitted 885 BVRI measurements, with a typical standard deviation of 0.03 magnitude, on all 8 BVRI program stars. Feedback was provided to all observers showing their measurements in comparison to other observers'. The agreement was well within 0.1 magnitude absolute. The database in Lotus was updated to include these observations and a backup copy was sent to headquarters. The BVRI program star CCD measurements now total 4,707.

The AAVSO Faint CV and LPV program, which was started in 1997 to measure in CCDV the faint portion (at or below the limit of our visual observers) of the light curves of those CV's and LPV's in the AAVSO visual observing program which have observations only of the brighter portion of their light curves in the AAVSO International Database, continues to prosper. In the past year, 550 observations on 20 of the 27 variables in the program were submitted, bringing the CV/LPV CCD(V) database to 1,233 observations.

Combining both the BVRI and CV/LPV program totals gives a Grand Total of 5,940 CCD program star observations.

I would like to recognize our top two observers for this year: Ron Zissell, 1,101 observations, and Tom Michalik, 261 observations. Thank you all very much.

Additional accomplishments for the past six months were:

1. Encouraged participation of CCD observers
2. Updated database and corresponded with members
3. Continued the CCD(V) project
4. Generated feedback on a revised web page

Goals for the next six months are:

1. Continue to expand participation—both observing and contributing
2. Update database and correspond with members
3. Publish the 4th issue of *CCD Views*
4. Finish updating the CCD web page with light curves and other information
5. Review/rewrite the transformation instructions
6. Start a new observing program using brighter stars

CHART DISTRIBUTION

During the period from October 1, 1998, to September 30, 1999, AAVSO Headquarters distributed the following numbers of charts by postal mail (charts downloaded electronically are not included in these totals):

Standard Charts	920
Reversed Charts	101
Finder Charts	80
PEP Charts	189
CCD Charts	48
Total Charts Mailed:	1,338

In addition, 15 copies of *The AAVSO Variable Star Atlas* were sold.

ECLIPSING BINARY

Chair: Marvin E. Baldwin
8655 N. County Road 775E
Butlerville, IN 47223

During this reporting period 67 observers submitted 14,659 visual observations and 6,046 CCD observations of 268 eclipsing binary stars. Five observers, led by Gerry Samolyk, obtained more than a thousand observations. These included Gerry, Peter Guilbault, Gilbert Lubcke, Chris Stephan, and your committee chairman. Substantial numbers of observations were submitted by Sergio Foglia, Avelino Alves, Richard Schmude, David B. Williams, Kari Tikkanen, James Roe, and Richard Hays.

Data by CCD observers are rapidly becoming a major contribution to the eclipsing binary program. Ten CCD observers submitted observations, led by Gerry Samolyk and Gil Lubcke. Gerry submitted more than 3,000 CCD observations and Gil submitted nearly 2,000.

Observed Minima Timings of Eclipsing Binaries, No. 5 has been published. It includes 1,050 minima of 50 stars and the historical O-C curves of these stars based on AAVSO data. David Williams recently published and distributed our newsletter, "Eclipsing Binary Update, No. 8."

NEW CHART

Chair: Charles E. Scovil
Stamford Observatory
39 Scofieldtown Road
Stamford, CT 06903

857 Preliminary charts were mailed during this fiscal year, and about 220 charts were distributed by email. With ready availability of the charts on the Web, few chart orders are received by mail.

Work on converting older charts to the new computer-generated format continues. All Preliminary charts have now been scanned preparatory to putting them on the Web. Charts through 20 hours have been posted so far. Our thanks to Lenny Abbey in Atlanta and Carl Feehrer at Headquarters for helping with this work.

Mark Biesmans in Belgium continues to produce reversed versions of charts for those with telesocpes having an odd number of reflections.

We continue to chart novae and supernovae.

NOVA SEARCH

Chair: Rev. Kenneth C. Beckmann
339 N. Washington
Kahoka, MO 63445

Between September 1, 1998, and August 31, 1999, we received a total of ten inquries regarding information about the AAVSO Nova Search Program. Each observer was sent the *Nova Search Handbook* along with information on participating in the AAVSO program. To date some of those who have inquired have begun their search efforts and we are happy to add them to our nova search community.

Several discoveries of novae have been made by observers who have been searching. On February 25.1945, 1999 UT, the recurrent nova U Scorpii underwent a new outburst and was first observed by Patrick Schmeer, Bischmisheim, Germany, at visual magnitude 9.5. Minoru Yamamoto of Okazaki, Japan, discovered Nova Sagittarii 1999 on April 25, 1999 UT at photovisual magnitude 8.6. On May 22.396, 1999 UT, Peter Williams of Heathcote, New South Wales, Australia, and on May 22.451 UT, Alan C. Gilmore of Mount John University Observatory, New Zealand, independently discovered Nova Velorum 1999 visually at magnitude 3.1. On July 13.558, 1999 UT, Akihiko Tago, of Tsuyama, Japan, photographically discovered Nova Aquilae 1999 at magnitude 8.8. We congratulate all those who discovered a nova in 1999 and wish them continued success in their efforts.

Five observers sent observations during the 1998–1999 observing year. They are: Gary T. Nowak of Essex Junction, Vermont, with 829 observations; Pablo Pecorelli of Capital Federal, Argentina, with 4; Daniel del Valle of Aquiadilla, Puerto Rico, with 765; Manfred Durkefälden of Hannover, Germany, with 7,756; and Ken Beckmann of Kahoka, Missouri, with 735 observations.

We thank each of our observers for their valuable contributions and encourage others to investigate the possibility of participating in the AAVSO nova search program.

PHOTOELECTRIC PHOTOMETRY

Chair: Howard J. Landis
2870 Hwy. 20 West
Hampton, GA 30228

This is the report of photoelectric photometry observations made by 19 observers in the fiscal year 1998–1999. We had a good year, with 2,878 observations.

We appreciate all observers working harder to make the nice total for this fiscal year. This is almost a record year for us—we are a true working group, for which all of you can be proud.

The grand total of observations in the AAVSO photoelectric photometry database is 25,804.

We have an unusual observer, who started observing just over 2 years ago, but he apparently found an activity he loves and to which he is very faithful. This person is 91 years old, formerly lived in the U. S. A., but is now a resident of South Africa. He observes with an 11-inch SCT with an SSP-5 at his home in Capetown. And even though he has failing eyesight, he has found ways to do all of the necessary observing procedures. His care and enthusiasm result in excellent PEP data that he submits to the AAVSO. This person is Mr. Win Jones, and he is third from our top observer this fiscal year with 383 observations.

Photoelectric Photometry Observations, October 1, 1998–September 30, 1999

Observer	*Location*	*No. Obs.*	*Observer*	*Location*	*No. Obs.*
T. Beresky	MO	30	E. Lopata	CA	10
W. Clark	MO	46	K. Luedeke	NM	351
L. Cox	Canada	85	P. Manker	GA	165
R. Crumrine	NY	12	M. Smith	AZ	65
F. Dempsey	Canada	86	H. Sorensen	Denmark	23
S. Dallaporta	Italy	396	N. Stoikidis	Greece	120
F. de Villiers	South Africa	104	R. Thompson	Canada	829
A. Frigo	Italy	10	D. Williams	IN	33
W. Jones	South Africa	383	J. Wood	CA	86
P. Kneipp	LA	14			

Dr. John R. Percy, University of Toronto, published two issues of the *AAVSO Photoelectric Photometry Newsletter*. The Newsletter should be read by any photoelectric photometry observer as it is inspirational and encourages us to continue our efforts on cold dark nights. Thank you very much, John.

RR LYRAE

Chair: Marvin E. Baldwin
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Butlerville, IN 47223

During this reporting period 13 observers have submitted a total of 4,501 observations of 58 RR Lyrae stars. Both Ray Berg and Richard Schmude provided a substantial number of observations. Gerry Samolyk has obtained CCD observations to confirm the new period for RZ Cap and the improved period for VW Cap, both reported at the 1999 Spring Meeting. Gerry Samolyk continues to prepare the ephemerides for short period variables, including both the RR Lyrae stars and the eclipsing binary stars.

SOLAR DIVISION

Chair and SID Analyst: Joseph Lawrence
1808 N. Anthony Blvd.
Fort Wayne, IN 46805

American Relative Sunspot Number Program

In the past nine months, 95 AAVSO sunspot observers have contributed 10,268 daily measures of sunspot counts. Their results have been reduced to daily mean sunspot values and transmitted to Helen Coffey at the National Geophysical Data Center each month in accordance with the Solar Division's obligation to NOAA. Through the financial support of NOAA and the commitment of our worldwide network of observers, the American Relative Sunspot Number program continues to provide the solar research community a consistent and credible index of solar activity. 23 requests for sunspot data have been received and processed since January 1999.

Sudden Ionospheric Disturbance (SID) Group Report

The SID monitoring group has made progress in extending the AAVSO SID event database. To date, 10,322 recorded SID events covering the period from January 1985 to the present have been entered into database files. These files are accessible on line at the AAVSO Solar Division webpage: http://www.aavso.org/committees/solar/. Miss Sarah Parry, a high school student in New York, has recently key-entered SID data files for the period of January 1985 through December 1990. Miss Parry's effort in furthering the SID database is greatly appreciated.

Since January 1999, 15 SID observers have identified a total of 739 events. SID observers continue to provide professional-quality results to the National Geophysical Data Center (NGDC) for publication in the *NOAA Journal of Solar-Terrestrial Activity* and *Solar-Geophysical Data*. Monthly AAVSO SID results have been transmitted consistently to the NGDC before the 20th day of each month succeeding the collection. All SID observers are commended for their diligence in providing SID data plots and e-mail reports in a timely manner, allowing the prompt delivery of results to the scientific community.

Two notable accomplishments highlight recent advances in the solar observing programs:

• The AAVSO Sunspot Database has been extended back to April 1997, due to the much-appreciated data entry efforts of headquarters volunteer and sunspot observer Carl Feehrer. The database archives all sunspot observation submissions and provides a record of each observer's contribution to the program. With the exception of four months during the April 1997 to September 1998 period, all sunspot reports have been entered. A search for the reports from the missing months is in progress. Overall, the sunspot observing program has become more organized, with better record-keeping procedures and more open accountability to the sunspot observers and the scientific community which relies upon the American Relative Sunspot Number program.

• The Solar Observer Award was established by the AAVSO. The award recognizes the contribution of solar observers based on the number of daily sunspot observations or monthly SID reports submitted. Solar observing award milestone levels were designed to be comparable to accomplishments required for variable star observing awards.

SUPERNOVA SEARCH

Chair: Rev. Robert O. Evans
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Australia

In 1998, there were over 156 supernovae discovered, about half of which were fainter than twentieth magnitude.

This year, the total has reached 135 by the beginning of October, and the same magnitude features apply.

Several amateurs who operate fully automatic searches have been successful in making discoveries—congratulations to them! The stars they found were generally too faint to be seen visually with amateur telescopes. I have tried to observe supernovae visually when I could, but the number which were within reach of my telescope, and visible from -33°, could be counted on the fingers of one hand.

As I mentioned in previous reports, the automatic searches, both professional and amateur, are now so numerous that any bright supernovae which might appear will most likely be found before they become bright enough to be seen visually. While this is good for science, it does mean that visual observers have very little chance of making any discoveries. So, although the number of supernovae being found has risen greatly, the number which are brighter than fifteenth magnitude is still not any greater than it was before.

I have found that universities which possess a small telescope, and are looking for some simple project for undergraduates to use it on, are likely to embark on supernova searching. Even a telescope on a light-polluted campus can be used like this, with potentially good results.

TELESCOPE

Chair: Charles E. Scovil
Stamford Observatory
39 Scofieldtown Road
Stamford, CT 06903

The mission of the Committee continues to be the receipt and disposal of any telescopes donated or bequeathed to the AAVSO.

We have on hand for sale the following telesocpe:

> 4-inch Goto refractor with equatorial mount and heavy tripod, formerly owned by David Rosebrugh. Photos of this telescope are available.

During this past year the 3-inch Busch refractor was sold as an antique for $1,100.