COMMITTEE REPORTS

CHARGE-COUPLED DEVICE (CCD)

Chair: Gary Walker
179 South Main Street
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The AAVSO CCD observing program has completed its most active 6-month period and has undergone the largest change since its inception: CCD program star observations may now be submitted to the AAVSO directly via the web site/email utilities for CCD observations, and they will be available for viewing/access within half an hour of their receipt at AAVSO. Three things have happened which facilitated this change:

- First, The AAVSO changed its online data collection procedures so that an observer may submit observations in AAVSO format directly via the web or email and these AAVSO-formatted observations are automatically incorporated every half hour into the online Quick-Look files, where they may be viewed, or plotted via the online Light Curve Generator. Also, observations submitted this way do not need to be submitted again as a "monthly" report.

- Second, observers are more and more willing to and interested in performing variable star measurements with their CCD cameras. Observers have been obtaining significant photometry on many of the AAVSO visual program stars that are not "CCD Program Stars."

- Third, the work of Dick Stanton (1999, *JAAVSO*, **27**, 97) verified that visual and CCD *V* measurements can be mixed properly.

After a very brief discussion of these developments, the AAVSO Director and I agreed that future AAVSO CCD program star observations should be reported and made available via the same web/email resources as the visual observations, and that CCD program star observations already archived should also be made available in these ways.

Personally, I can say that going to work each morning and logging in my 2–10 observations over the web, and then seeing how they compare to each star's history and the other observers from the night before has been the highlight of my day. Many thanks to the HQ staff for this web presence. I encourage each of you to observe, submit data online, view online, and data-mine whatever stars are of interest to you.

The *BVRI* and Faint CV/LPV observing programs continue. As of 27 April 2001, the total of *BVRI* CCD measurements now exceeds 6000, going back 9 years. The total of Faint CV/LPV measurements now exceeds 2000, going back 4 years. Thus, the grand total of AAVSO CCD Program observations is now over 8000. Soon, they will all be available on the web.

Aaron Price and George Hawkins of AAVSO Headquarters and your chair agreed to write articles for the summer 2001 issue of *CCD Views*.

We are planning a CCD campaign on SU UMa, with a call for observations via the AAVSO online Discussion Group and dissemination of information via the Light Curve Generator and Quick-Look File.

The main goal for the next 6 months is to initiate the SU UMa campaign. We expect that the fast turnaround available through electronic communication will greatly expand participation and interest.

ECLIPSING BINARY

Chair: Marvin E. Baldwin
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Twenty-four observers submitted nearly 7000 visual observations and about 6500 CCD observations of eclipsing binary stars during this reporting period. Chris Stephan, Peter Guilbault, Richard Hays, Rik Hill, Gerry Samolyk, and Sergio Foglia each submitted a large number of visual observations. More than half of the CCD observations were provided by Shawn Dvorak.

The variable stars discovered by the Hipparcos satellite and believed to be eclipsing binaries remain very elusive. The periods are not known for most of these stars, so frequent visual monitoring would seem to be a means for finding eclipses and eventually determining their periods. Ray Berg obtained visual data indicating that he found DS Cet faint twice during the past observing season, but the remaining stars on our list gave no hint about their variability.

Suspected eclipsing binaries discovered by the Robotic Optical Transient Search Experment (ROTSE) continue to be targets of the AAVSO eclipsing binary team. Accurate periods have been determined for several of these stars with follow-up color photometry being done at all phases of these stars' cycles. The results have been published in the *Information Bulletin on Variable Stars* (IBVS) for a few of these variables, and more publications are anticipated in the near future.

Observers are reminded that an ephemeris for AAVSO program stars, prepared by Gerry Samolyk, is now available on the AAVSO web site, as well as in its usual paper form from Headquarters.

Our newsletter, *Eclipsing Binary Update #11*, has recently been issued by editor David B. Williams.

NEW CHART

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

We continue converting old charts to computer format and making more finder charts. We have sold about 348 preliminary charts by mail. The bulk of preliminary charts continue to be disseminated via the AAVSO web site.

NOVA SEARCH

Chair: Rev. Kenneth C. Beckmann
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Kahoka, MO 63445

The AAVSO Nova Search committee continues to receive emails and surface correspondence as a result of the AAVSO Internet website and other publications about the AAVSO. Since our last report, the *AAVSO Nova Search Handbook* has been placed on the AAVSO's web site along with the Search Area Location Charts and Reporting Forms. If you do have access to the web, you may find a wealth of information on visual nova searching at www.aavso.org. If you do not have access to the Internet, you are welcome to write the committee chairman at the above address for the handbook, charts, and reporting forms.

We will submit a full report of our observers' activities at the 2001 Annual meeting of the AAVSO. Good hunting!

PHOTOELECTRIC PHOTOMETRY

Chair: Howard J. Landis
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This is the committee report for the first half of the fiscal year 2000/2001. The total number of photoelectric photometry observations received October 1, 2000–March 31, 2001, is 1,371 from 17 observers.

During this period I have carried out communications with 9 new prospects to be PEP observers. Some have amounted to just one exchange, others many more. Some require extensive careful writing concerning the relative advantages for the beginner to join the ranks of PEP or CCD observing.

Photoelectric Photometry Observations, October 1, 2000–March 31, 2001

Observer	*Location*	*No. Obs.*	*Observer*	*Location*	*No. Obs.*
Beresky, T.	MO	10	Kneipp, P.	LA	63
Clark,W.	MO	26	Luedeke, K.	NM	282
Cox, L.	Canada	50	Pinkston, H.	VA	8
Dallaporta, S.	Italy	35	Sorensen, H.	Denmark	9
Dempsey, F.	Canada	17	Stoikidis, N.	Greece	121
de Villiers, F.	South Africa	25	Thompson, R.	Canada	322
Fox, J.	MN	32	VanBemmel, H.	Canada	30
Grim, B.	UT	7	Wood, J.	Canada	38
Jones, W.	South Africa	296			

RR LYRAE

Chair: Marvin E. Baldwin
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A total of seven observers have submitted 550 visual observations of 27 RR Lyrae type stars. Glen Chaple, Ray Berg, and Rik Hill each submitted data defining the light curve maxima that will be useful for determining those times of maxima.

Additional CCD data by Gerry Samolyk provide light curve maxima for three stars.

We currently have data in hand that define period behavior of many of these stars over an extended period of time—some for more than 35 years. Careful observations of the AAVSO program stars taken at about 10-minute intervals, beginning while the star is still at minimum and continuing for about an hour past maximum, are needed to prevent large gaps in our long-term data.

The AAVSO RR Lyrae program stars are listed in an ephemeris now available at the AAVSO web site, as well as in its usual paper form from Headquarters. The ephemeris lists the predicted times of maxima. In order to obtain data while a star is still at minimum observations should begin more than an hour (and preferably two hours) before predicted maximum.

SOLAR DIVISION

Chair: Carl E. Feehrer
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The occurrence of solar maximum has generated great interest among observers. It, along with the now-routine publication of the monthly *Solar Bulletin* on

AAVSO's web site, has resulted in a net increase of approximately 10% in the number of people reporting to the sunspot and SID sections of the Solar Division. The large amount of email received from non-members during the last few months requesting information on recommended equipment and requirements for reporting results to AAVSO suggests that this percentage will continue to grow.

Highlights of activities conducted by the Division during the period are presented below.

American Relative Sunspot Number Program

The computation of revised constants for observers who filed reports during the year 2000 has been completed. The reports of all observers, including new observers who completed their initial learning periods by November 2000 and who continue to contribute, are now included in the monthly processing with up-to-date k-coefficients.

The content of the sunspot section of the *Solar Bulletin* continues to evolve. Since the accurate reporting of sunspot groupings can be a difficult task, particularly when the sun is very active, we now routinely report estimates of the mean numbers of groups reported. To provide further guidance, we have also begun to report the ratios of spots to groups for each day of the month.

New sunspot reporting software with a much-improved user interface now exists. Written by Len Abbey, the software is being reviewed by several volunteer observers and is expected to become available for downloading from the AAVSO web site in late May or early June.

Sudden Ionospheric Disturbance (SID) Program

Beginning with the March issue of the *Solar Bulletin*, Mike Hill now presents a detailed plot of data obtained by the GOES-8 satellite. These plots, which provide useful supplements to the flare events reported by our SID observers, extend back to July 2000 and are available on the web site.

In response to requests from prospective SID observers for information on the construction of SID antennas, Mike has prepared a document that contains design tips contributed by several current observers. This document is now available on the web site.

The roster of SID observers and the file containing frequencies of VLF transmitters around the world have been updated and placed on the web site.

The recent detection of a possible gamma-ray burst by SID observers Danie Overbeek and Domenic Toldo in South Africa and its identification and analysis by Casper Hossfield has been discussed at some length in the *SID Supplement to the Bulletin*. It is hoped that this event will encourage other observers to continue their efforts to identify GRB signatures in their records.

Summary of Observer and Report Statistics

From September 2000 through March 2001, a monthly average of 67 sunspot observers submitted 7808 observations for analysis. During that time, five new observers contributed reports, bringing the total number of active observers to 80.

Over the same period, a monthly average of 9 SID observers contributed 2553 observations. Three new observers joined the group and one former observer rejoined, bringing the total active pool to 15.

SUPERNOVA SEARCH

Chair: Rev. Robert O. Evans
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Australia

During the six months since the last report, several bright supernovae have been found through different automatic search efforts, and a long list of faint and very distant supernvoae have been found by the groups involved in that work.

No visual discoveries have been made in this period.

Several months ago I had a visit from Michael Schwartz, of Cottage Grove, Oregon. He has found over 15 supernovae with his fully automatic search equipment, and has now become involved with the professional search people at Berkeley. They are also trying to monitor the light curves of newly found supernovae automatically.

Michael said that he is happy to answer any queries which AAVSO members might have about any aspect of automatic supernova searching, or in the area of automatic monitoring of light curves. He has retired at a relatively early age from a successful computer industry of his own creation, and is putting in much time and expertise on supernova work. He spends a lot of time answering email correspondence (mbs@tenagraobservatories.com, www.tenagraobservatories.com), and so is well able to handle queries which our members might have on these topics.

Good observing to one and all.

TELESCOPE

Chair: Charles E. Scovil
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We currently have for sale one telescope, a 4-inch Goto refractor, complete with equatorial mounting and heavy tripod. Asking price is $1,000.