ISSUE NO.49 | JULY 2011 WWW.AAVSO.ORG

AAVSO Newsletter

IN THIS ISSUE:

Celebrating 100 years
1911–2011

SINCE 1911...

The AAVSO is an international non-profit organization of variable star observers whose mission is: to observe and analyze variable stars; to collect and archive observations for worldwide access; and to forge strong collaborations and mentoring between amateurs and professionals that promote both scientific research and education on variable sources.

FROM THE DIRECTOR'S DESK

ARNE A. HENDEN (HQA)

We had a really excellent joint meeting with the American Astronomical Society (AAS) in May. They treated us well; we had sessions over the weekend on the history of variable star astronomy (organized by Tom Williams), sessions on Monday (organized by Matt Templeton) during the meeting, and a very popular AAS/AAVSO booth near the poster session that was staffed in shifts by the entire HQ staff. As mentioned in the staff blogs, Sara Beck and Mike Saladyga handed out lots of copies of Dorrit Hoffleit's book, *Misfortunes as Blessings in Disguise*, and the new centennial history book by Mike and Tom (*Advancing Variable Star Astronomy: The Centennial History of the American Association of Variable Star Observers*) was out on display. I can't imagine a better joint meeting for the AAVSO, and I think we got quite a bit of attention from the professional community.

Speaking of the centennial, we're continuing our plans for the celebration. Aaron Price ordered a huge banner that we've hung on the building, announcing the 100 years that we've been in the Cambridge area and inviting people in for a tour. Mike Simonsen gave some rousing talks at the Texas Star Party, and we've actually had people join the AAVSO as a result. I'm heading to ALCON in a couple of days to give another centennial talk as well as giving some training on how to observe. We'll be hitting several other star parties in the near future. The plans for the Annual meeting are now finalized and on the web. Such a fun time!

We had a great visit from Bas Bergmans, a Dutch high-school student. He spent a couple of weeks at HQ in May learning about variable star astronomy. Bas was a student with Erwin van Ballegoij, and Erwin recommended the AAVSO to Bas as a good example of a scientific organization. Also, we hired Ben Briggs as our Margaret Mayall Assistant for the summer. Ben is a student in computer science at Tufts University, and is helping Will McMain this summer with web-site improvements.

Another addition to our staff is Lauren Rosenbaum, our new Administrative Assistant. Lauren will start at the AAVSO on July 5. Lauren has a degree from NYU, background in working at non-profits, and most recently has been teaching in the Somerville, Massachusetts, community schools.

This summer will be a busy one for the AAVSO, with many changes to the web site, APASS, and AAVSOnet. Make your plans for the centennial bash this fall—the 100th Annual meeting on October 4–8, 2011—and I'll give details of the summer efforts at the membership meeting. See you there! ★

PRESIDENT'S MESSAGE

JAIME R. GARCÍA (GAJ)

We enjoyed a terrific 100th Spring Meeting together with the American Astronomical Society in downtown Boston last May. A lot of people, mainly professional astronomers and students, became knowledgeable about the AAVSO. We spent a whole week of interesting talks, amazing poster papers, and marvelous interactions. Our usual program was slightly modified, having the banquet earlier than usual and including an invitation to the council of the AAS, and we enjoyed a very interesting talk from Dr. Nancy Morrison about P Cygni. We had also a couple of scientific paper sessions, and one special session devoted to the history of astronomy. Dr. Matthew Templeton, our Science Director, spent nine months working with Dr. Lee Anne Willson (Iowa State) and Dr. Christine Jones (CfA), both Vice Presidents of the AAS, on schedules and special sessions of interest to AAVSO members and the variable star community for this very special meeting, one of the best-attended Summer AAS meetings in recent history. I would like to acknowledge Matt for his impressive work.

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PRESIDENT'S MESSAGE
CONTINUED...

I was very impressed by the huge contribution to science by the Kepler mission. There were a number of presentations during this meeting involving new science coming from Kepler, not only about extrasolar planets but the whole field of stellar astrophysics. Kepler data are publicly available, and we can mine and analyze them ourselves using our own tools like VStar!

Regarding our Council, the process of Director's review was finished previous to our last Council meeting and we have received the results of the process. This was the very first time that a process like this was taking place in the AAVSO and we are very grateful for the impressive work of the committee, involving people from inside and outside our organization. After the final evaluation, the Council decided to offer a renewal of the contract to our current Director, Dr. Arne Henden. Arne has accepted, and I am pleased to announce that we will have him as Director for another five years.

Our Citizen Sky project is facing a new time. We are reaching the end of the eclipse of epsilon Aurigae, and our citizen scientists continue contributing in several other ways through our special website, citizensky.org. One of the new ways involves the Spanish translation of the 10-Star Visual Observing Tutorial for observers in the southern hemisphere. The translation was possible thanks to several collaborators but with substantial new input from Sebastian Otero. We are very grateful!

The elections for Council are very soon, and our Nominating Committee chairman Barry Beaman is hoping you will offer yourself as a candidate. The AAVSO needs you.

I am close to finishing my term as President. I am enjoying a wonderful time with the AAVSO completing its first centennial anniversary and facing new challenges. The amateur astronomers now have fantastic equipment (telescopes, cameras, and even spectrographs) and impressive tools for data mining and analysis. The AAVSO already has a network of telescopes localized in several parts of the world—AAVSONet—and a photometric survey that makes easy any variable star study, using your eyes, your telescope, or any of the AAVSONet telescopes. You are able to enjoy everything from your backyard or from your favorite armchair comfortably at home through your computer, smartphone, or tablet. It comes to my mind that I enjoyed the chilly nights during my adolescence, when I started to contribute to our AAVSO International Database, making lots of visual estimations. Now, I can make my professional photometric studies from my desk in my warm office....

Finally, I would like to continue hearing about your ideas of how the AAVSO can contribute to the future of variable stars. And, I am looking forward to see you in Woburn and Cambridge for our Centennial Celebration in October. Have a nice season! ★

Ed. note: the Spanish language text of Jaime's message can be found on page 14.

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The *AAVSO Newsletter* is published in January, April, July, and October. Items of general interest to be considered for the *Newsletter* should be sent to eowaagen@aavso.org. Photos in this issue courtesy of Barry and Carol Beaman, Rebecca Turner, and the Space Science Telescope Institute.

Membership in the AAVSO is open to anyone who is interested in variable stars and in contributing to the support of valuable research. Members include professional astronomers, amateur astronomers, researchers, educators, students, and those who love variable star astronomy.

AAVSO
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AAVSOers TO SPEAK AT STELLAFANE

ELIZABETH O. WAAGEN (WEO)
AAVSO SENIOR TECHNICAL ASSISTANT

The 76th Stellafane Convention—the annual Convention of Amateur Telescope Makers on Breezy Hill in Springfield, Vermont—will be held Thursday-Sunday, July 28–31, 2011. The schedule is packed with workshops and talks (tailored to different levels of experience), optical and mechanical telescope competitions, children's/young adult events, and the swap tables. The full schedule may be found at http://stellafane.org/convention/2011/

There will be an AAVSO Workshop, and several AAVSO members and observers will be giving presentations:

AAVSO Workshop: Monitoring Bright Stars for Fun and Profit, by Arne Henden—Professional astronomers keep building bigger and better telescopes, trying to image fainter objects to understand the beginning of the Universe. At the same time, thousands of important, nearby stars are being neglected. Naked eye stars like epsilon Aurigae have unknown companions; hundreds of small-telescope stars have transiting exoplanets; a dozen novae occur every year in our galaxy. You don't always need to take the one-millionth color image of M51 to enjoy the sky! During this workshop, Arne will show you a few simple hardware setups that can be used from your backyard to monitor these stars, and give some scientifically valuable projects to which you can contribute valuable observations.

What we Learned about Epsilon Aurigae during its Recent Eclipse, by Arne Henden—Every 27.1 years, epsilon Aurigae is eclipsed by a mysterious dark cloud. The most recent eclipse started in 2009, and ended in late Spring of 2010. Thousands of amateur astronomers contributed observations of the eclipse, and professional astronomers worldwide trained their telescopes on this unique event. During this presentation, Arne will talk about the competing models of the system and what we think happens every three decades!

An Introduction to Telescopes for All Ages, by Alan French and Glenn Chaple—Adults and youngsters often become interested in astronomy and acquiring a telescope for exploring the heavens. With the plethora of telescopes on the market, buying your first telescope, or a telescope for a child can be intimidating. In this program, Alan and Glenn will cover telescope basics (types, mounts, and eyepieces), telescopes suitable for children, and introduce you to observing and finding sights in the night sky.

Discover and Enjoy the Sky, by John Briggs—The beauty of the night sky is a driving motivation for telescope making, the Stellafane convention, and astronomy in general. John W. Briggs, a physics and astronomy instructor at Clay Science Center, will show how to become oriented in the sky using popular references, recent new software and other tools of astronomy. The presentation will be appropriate for all ages. Weather permitting, after the program the group will use the historic 5-inch Alvan Clark refractor, originally installed at Abbot Academy in 1875.

Medical Effects of Light Pollution, by Dr. Mario Motta—Amateur astronomers are very much aware of the deleterious effects of excessive night lighting. Beyond sky glow, energy waste, and environmental degradation, however, there are other less well known adverse effects on human health. Excess night lighting can cause disability glare and sleep disturbances, and affect mood, memory, and, by circadian rhythm disturbance, even leads to a rise in the level of certain cancers. Mario will use published data on increased breast cancer risk to demonstrate this effect.

Learning and Enjoying the Night Sky, by Dave Siegrist—Dave will introduce beginners to observing the sky, including identifying the constellations, the Milky Way, and so on. ★

THANKS TO OUR SPONSORS!

THE 100TH ANNUAL MEETING OF THE AAVSO

WHEN: October 4–8, 2011
WHERE: Cambridge and Woburn, Massachusetts

The AAVSO's Centennial Meeting will be held at AAVSO Headquarters in Cambridge, Massachusetts, and the Hilton Hotel in Woburn, Mass. We have many exciting events and sessions planned for this very special anniversary celebration. A preliminary meeting schedule is included below. Detailed event descriptions and registration/abstract submission forms will go online the week of July 18, 2011 at: http://www.aavso.org/aavso-100th-annual-meeting

Spouse/Guest Networking: We encourage attendees to bring spouses, family members and other guests to the meeting, but we know that some guests may not wish to attend all of the sessions. This year we will set up a mailing list so that spouses/guests can share sightseeing ideas and make plans to "hit the town" together. Sign-up for this mailing list will be available via the meeting registration form.

Accommodations: Sleeping rooms have been reserved at the Woburn Hilton for AAVSO meeting attendees at a special group rate of $99 plus tax per night. Please make your reservations by calling the hotel at 781-932-0999 before September 10th, 2011. Please be sure to mention that you will be participating in the AAVSO meeting when making room reservations. The hotel address is: 2 Forbes Road, Woburn, MA 01801 USA. Roommate matching assistance will be available for those who would like to cut costs by sharing a room.

Transportation: The hotel has free shuttle service within a five-mile radius of the property. A shopping mall, many restaurants, and bus service to/from the airport are all located well within five miles. A subway stop, which provides service into downtown Boston for sightseeing, is also located within the five-mile radius.

For those driving or renting cars, there is plenty of free onsite parking!

Transportation will be provided between the Woburn Hilton and AAVSO HQ for events being held at HQ on Wednesday evening and Thursday. All other meeting events will be held at the Hilton Hotel.

From the airport—Taxi: Travel from Logan Airport to the Woburn Hilton will be about $60.

Recommended! Logan Express Bus: Runs every hour to half hour depending on the day of week. Direct to airport, no other stops. No reservations required. Fare is $12 one-way and $22 round trip. This bus picks up at all airport terminals and drops off less than ten minutes from the Hilton at the Anderson Regional Transportation Center. You can take the free hotel shuttle (call the hotel front desk upon arrival at 781-932-0999) or a taxi from there.

This is sure to be a once-in-a-lifetime meeting with unprecedented attendance and a very special anniversary program. If you've been waiting to find just the right AAVSO meeting to attend, this is it!!

Please consider joining us in October to help celebrate this once-in-a-lifetime event! Please feel free to contact Rebecca with any questions about the meeting.

Preliminary Meeting Schedule

October 4–8, 2011, AAVSO Headquarters, Cambridge, Mass., and Hilton Hotel, Woburn, Mass.

Events take place at the Woburn Hilton unless otherwise indicated.

Tuesday, October 4, 2011
All day: Council Meeting—current Council Members only (at AAVSO HQ)

Wednesday, October 5
All day: Historical Paper Sessions
Evening: Leadership Banquet—by invitation only (former Council and staff members; at AAVSO HQ)

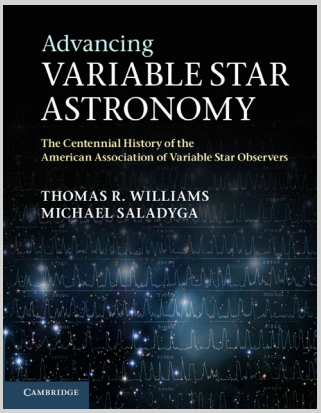
Thursday, October 6
Morning: Building Dedications/Invited Talks (at AAVSO HQ)
Afternoon: Lunch/Birthday Party/Time Capsule Dedication (at AAVSO HQ)
Evening: Amphibious Duck Boat Tour of Boston Sights and Clambake (buses depart from Woburn Hilton)

Friday, October 7
Morning: Membership Meeting
Centennial History Book reading by Tom Williams and Mike Saladyga
Afternoon: Scientific Paper Session
Evening: Historical Session (event, not paper session)

Saturday, October 8
Morning: Scientific Paper Session
Afternoon: Scientific Paper Session; Poster Session and Picture Session
Evening: Centennial Banquet with Guest Speaker Owen Gingerich

AAVSO CENTENNIAL HISTORY NOW AVAILABLE!

Advancing Variable Star Astronomy: The Centennial History of The American Association of Variable Star Observers by Thomas R. Williams and Michael Saladyga, published by Cambridge University Press, is now available through the AAVSO at a special reduced price.



Part of your purchase made through the online store will go to the AAVSO!

To order,
visit the AAVSO online store:
http://www.aavso.org/aavso-online-store

or contact the AAVSO, 49 Bay State Road, Cambridge, MA 02138, USA
phone: 617-354-0484

AAVSO DIRECTOR ARNE A. HENDEN RECEIVES 2011 PELTIER AWARD

ELIZABETH O. WAAGEN (WEO) AAVSO HQ

Arne with Peltier Award committee member and AAVSO Past President Barry Beaman (Photo courtesy of Barry and Carol Beaman).

We are pleased to report that AAVSO Director Arne A. Henden (HQA) is the 2011 recipient of the Astronomical League's Leslie C. Peltier Award.

The Awards Banquet of ALCON Expo 2011 was held July 2, 2011, in Bryce Canyon National Park, Utah, the site for the meeting. Awards Committee member and AAVSO Past President Barry Beaman introduced Arne and Scott Roberts of Explore Scientific presented the award to Arne.

Barry introduced Arne to the Banquet attendees with the following remarks:

"Arne Henden was born in Huron, South Dakota, but that would not be the only place he called home as a child. The son of a U.S. Army Corp of Engineers Civil Engineer, Arne received the chance as a child to travel the United States and world with his father, mother, and two sisters. Arne's father, Ward, built missile silos and roads in South Dakota, dams on Lake Powell in Arizona and Lake Monroe in Indiana, as well as hospitals and schools in Iran prior to retiring as a Public Works Engineer at White Sands Missile Range in New Mexico. Along the way, Arne's interest in astronomy would first be piqued by a chance to view Saturn through the historic 24-inch Clark refractor at Lowell Observatory in Flagstaff, Arizona. His mother, Esther, encouraged his interest in astronomy, giving him his first telescope as a Christmas present. Later, his older sister's boyfriend brought Arne copies of *Sky & Telescope* nurturing his interest even further. He was particularly intrigued by comets, taking many 35mm pictures and writing software for IBM 360 computers to predict their motion. In addition, he had an interest in Pluto, doubtlessly because he had met Clyde Tombaugh several times while living in Las Cruces, New Mexico.

"This early interest in astronomy transformed itself into an astronomical education and career. Arne received a Bachelor of Science in Astrophysics from the University of New Mexico in Albuquerque in 1972, and Masters in Physics from UNM in 1975. He later went on to receive a Master of Science in Astronomy in 1978 and a Ph.D. in Astronomy in 1985 from the University of Indiana in Bloomington. One of his early research experiences included a summer studying Cepheid pulsations with Art Cox at Los Alamos National Laboratory in New Mexico.

"Between the phases in his higher education, Arne worked for Dikewood Industries in Albuquerque, New Mexico, and Systems and Applied Sciences Corporation in Seabrook, Maryland. These jobs included working on software and systems development for Federal Government contracts. After obtaining his Ph.D., Arne moved to The Ohio State University in Columbus to participate in the Columbus Project (later the Large Binocular Telescope) and to build astronomical instruments for the astronomy department. His instruments included CCD imagers, a spectrograph, a Fabry-Perot imager, and an NIR imager/spectrograph for the 1.8-m Perkins telescope in Flagstaff, Arizona.

"The variable star astronomy community came to know Arne through his regular contributions to AAVSO email groups, such as AAVSO-Discussion, AAVSO-Photometry, The Minor Planet Mailing List (MPML), AAVSO-Eclipsing Binary Group, and the CCD Astrometry/Photometry Group. These contributions are in addition to his membership in a number of professional consortiums involving cataclysmic variable stars and GRB afterglows. He is a member of the AAS, RAS and IAU. Arne is a fixture at amateur-professional astronomy development conferences and workshops including the Society for Astronomical Science, AAVSO High Energy Astrophysics Workshops for Amateur Astronomers, and Amateur-Professional Minor Planet Workshops. He also has been invited to speak at numerous professional conferences, including the Second European Union Research Training Network Meeting on Gamma Ray Bursts: an Enigma and a Tool (Santorini, Greece 2003) and the Monte Rosa conference on "GAIA Spectroscopy, Science and Technology" (Gressoney St. Jean, Italy 2002).

"Through the years, Arne emerged as one of the premier mentors of amateur astronomers, especially those interested in variable stars and minor planet astrometry. He has both helped nurture existing programs and worked to bring new programs into existence as astronomy has evolved. Two shining examples of Arne's leadership and nurturing are the AAVSO High Energy Network (HEN) and AAVSO Chart Team. Arne was involved at the inception of both these very important and visible groups within AAVSO. The HEN orchestrated successful amateur searches for faint optical afterglows associated with gamma-ray bursts. The detections and photometry performed by this group could not have been possible without his expertise and willingness to make himself and his skills available to AAVSO and its members. Arne is also an integral member of the AAVSO Sequence Team, a group that is updating the calibrated photometry of large numbers of comparison stars.

"Arne has over 100 peer-reviewed publications as a primary or co-author, and over 350 citations in the NASA Astronomical Data System (see ADS: Henden for details). Arne's book (with Ron Kaitchuck) Astronomical Photometry (1978, revised in 1990: Willman-Bell publishers) is one of the classic texts in photometry. He is in the process of updating this text to include information on amateur and professional CCD based systems.

"Arne has been a member of AAVSO since 1998, contributing many thousands of observations to the International database. These data points are only the tip of the iceberg. Arne brings with him to AAVSO over a hundred thousand CCD images of AAVSO Program stars. The addition of this data, once extracted, will add immeasurably to our most important asset: The AAVSO International Database.

"In addition to observing for AAVSO, Arne served the members of AAVSO for six years as a member of AAVSO's Council (its Board of Directors). He worked closely with his predecessor, Janet Mattei, on a number of programs

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PELTIER AWARD
CONTINUED...

and issues. This experience provides Arne with a firm understanding of AAVSO's past that will help in defining AAVSO's future.

"When not working, Arne and his wife of thirty-nine years, Linda, like to travel, hike, cross country ski, and go for long road trips though the Northeast. Linda is trained as a landscape architect and loves gardening and Spider Solitare. For relaxation, Arne runs cross-country, does cabinetry woodwork, and takes landscape photography. They have two cats, Pixie (short for Pixel), and Snowy (short for Snowflake; a stray cat Arne and Linda adopted during a snow storm).

"We are pleased that he is the 2011 recipient of the Leslie C. Peltier Award!

"Leslie C. Peltier Award Committee: Roger S. Kolman, Ph.D., Chairman, Barry Beaman, Member, Russ Maxwell, Member"

The Leslie C. Peltier Award is presented to an individual, usually an amateur astronomer, who has contributed to astronomy observations of lasting significance. The award is sponsored by Explore Scientific. A list of Peltier Award recipients – many of them AAVSO members/observers – may be found on the AAVSO website at http://www.aavso.org/astronomical-leagues-leslie-c-peltier-award.

Arne with Scott Roberts of Explore Scientific (Photo courtesy of Barry and Carol Beaman).

Congratulations, Arne!! ★

ANOTHER AAVSO NAME IN THE SKY

AAVSO member/observer Dr. Salvador Aguirre (ASA) informs us that minor planet (12789) has been named Salvadoraguirre in his honor. The 17th-magnitude asteroid was discovered on 1995 October 14 by Carl W. Hergenrother at Kitt Peak National Observatory.

The citation reads: "Salvador Aguirre (b. 1952) is an avid amateur astronomer from Hermosillo, Mexico. He has conducted many observations of variable stars, asteroid occultations, meteors, and comets. He has also helped popularize and coordinate amateur astronomical research within Mexico."

An ephemeris of (12789) Salvadoraguirre may be generated at http://ssd.jpl.nasa.gov/horizons.cgi?find_body=1&body_group=sb&sstr=12789

A list of minor planets and comets named in honor of AAVSOers may be found at http://www.aavso.org/minor-planet-names-honor-aavso-members-and-observers

Congratulations to Salvador on this honor!

NEW OBSERVING SECTION CREATED TO STUDY YOUNG STELLAR OBJECTS (YSOs)

ARNE A. HENDEN (HQA)

Michael Poxon has taken it upon himself to head a new AAVSO section on his favorite class of variable star: Pre-Main Sequence Stars (YSO/PMS). The AAVSO has had a long history of working with such objects, especially the "Orion variables" that were monitored by many visual observers for years. We've started to cover some of these objects again, such as with the new program centered at BM Ori and monitored by the MOST satellite for Matt Templeton. However, there are *lots* of these stars; they vary at all temporal scales, usually chaotic, and study of the variation can help us understand these stars as they head towards the Main Sequence.

Mike has created a website for the section: http://www.starman.co.uk/ysosection/ and we have an on-line forum for the section (on the AAVSO home page, go to community>forums>Young Stellar Objects). Dr. William (Bill) Herbst has agreed to be the science advisor.

Check out the Section and give Mike some feedback—it will keep him active, and you may get hooked on this different type of variable object! ★

TALKING ABOUT THE AAVSO

ELIZABETH O. WAAGEN (WEO) AAVSO HQ

We are inaugurating a new feature in the *AAVSO Newsletter* that we hope you will enjoy and that we plan to have appear regularly. It is called "Talking about the AAVSO," and its purpose is to let our readers know who among the AAVSO membership/observership is speaking/presenting about the AAVSO.

Are you an AAVSOer giving a talk or paper or poster at a club meeting, star party, scientific symposium, camp, workshop, or as part of a classroom curriculum? Let us know in advance so we can spread the word through the *Newsletter* and thank you for your efforts on behalf of the AAVSO and variable star astronomy. You can also let us know after the fact how things went—perhaps you had an adventure we would love to hear about (see Mike Simonsen's article in this issue on his participation in the Texas Star Party).

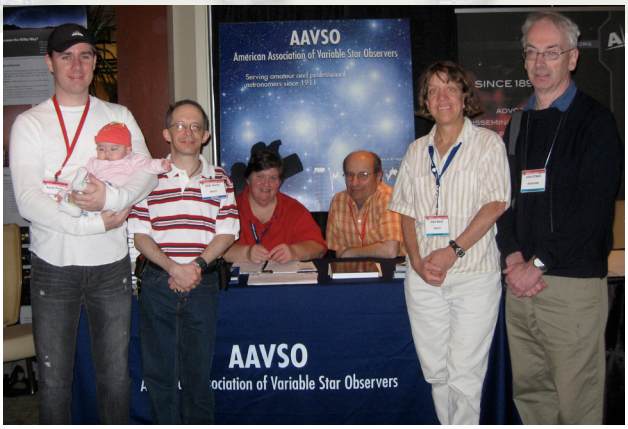
The *AAVSO Newsletter* appears quarterly on the first of January, April, July, and October. (Occasionally we may be a little late, but we try hard to stick to this schedule.) Please submit any items to aavso@aavso.org by the 15th of the preceding month, that is, December, March, June, and September. Your item may be one line or many paragraphs (if space is short, we may have to consolidate your item to make it fit).

A lot of AAVSOers are out there spreading the good word about the AAVSO and variable stars—we would like to hear about it! ★

RASC'S TOPHAM AWARD GOES TO PATRICK MCDONALD

We are pleased to report that AAVSO member/observer Patrick McDonald (MDP) was awarded the 2010 Bert Topham Award for Observing by the Royal Astronomical Society of Canada's Toronto Centre. The award namesake himself was on the AAVSO Council in the 1940s. Congratulations, Patrick!

AAVSO 100TH SPRING MEETING IN BOSTON



Part of the "AAVSO Family" at the 100th Spring Meeting

The AAVSO 100th Spring Meeting was held jointly with the American Astronomical Society in Boston, MA, May 22–26, 2011. As a meeting wrap-up this time, instead of having member/observer attendees share their meeting memories, we decided to share the AAVSO website blog entries of some of the HQ staff members who wrote about their experiences and impressions.

Spring meeting whirlwind
—by Matthew Templeton

Last month the AAVSO co-hosted its Spring Meeting with the American Astronomical Society in downtown Boston. I hope those of you who attended found it as much fun as I did. I also hope you've had a chance to rest up as well—there was a lot happening at this meeting! We had our own activities from Saturday through Monday, and had a full slate of fun and interesting AAS sessions to attend throughout the rest of the week as well. There was plenty of great science throughout the week, and with this being one of the best-attended Summer AAS meetings in recent history there were plenty of things to see and people to talk to.

I was fortunate to have an inside perspective on this AAS meeting. Over the past nine months I worked with Lee Anne Willson (Iowa State) and Christine Jones (CfA), both Vice Presidents of the AAS, on schedules and special sessions of interest to the variable star community, in particular to the AAVSO members who would be joining the AAS meeting. On Saturday and Sunday morning we had two full sessions of AAVSO talks featuring many long-time members and friends of the AAVSO, and on Sunday afternoon we had a fascinating special session with the AAS Historical Astronomy Division on topics related to the AAVSO and variable star astronomy. Then, as part of the AAS meeting itself, we arranged two special sessions on Monday—Astrophysics with Small Telescopes, and Variable Stars in the Imaging Era—as well as a plenary talk by Jeremy Drake of the CfA. We also had a full slate of posters from AAVSO staff, as well as a formal press conference where the Hubble Heritage images of M31_V1 were finally released. I was pleased to see the turnout for all of these sessions, and hope all meeting attendees found them as enjoyable and informative as I did.

After Monday, I was able to occasionally take off my AAVSO hat and put on my AAS hat to take in some of the rest of the meeting. I've been attending AAS meetings since January 1995 as a first-year graduate student, and have always found them to be a great way to catch up on current science as well as with old friends. There's always something new and interesting to attend and this meeting—with so much participation from the Boston-area astronomical community—was no exception. Of particular interest to me was a special session on Data Archiving and knowledge propagation in the era of large databases and large surveys. The half-dozen or so speakers all came from different areas of the science, from large scale data-producing facilities and satellites to groups like the Astronomical Data System, to the Virtual Observatory. There's a wealth of data available now, both as data itself and as publications and other materials, and a large part of research now will depend upon making sense of these resources. You can see one example of the work being done in this area at the Seamless Astronomy.

The other big item for me was all the wonderful science coming from Kepler. There were a number of presentations at this meeting about new science coming from Kepler—the great volume of data being produced is now yielding new information, new insights, and new understanding on everything from extrasolar planets to fundamental stellar astrophysics. Kepler is a unique mission in astronomy right now, and it's unlikely that we'll see a similar mission again for many years. But while we have it, it's a remarkable resource, and one that you can take advantage of yourself! A great deal of the Kepler data is now publicly available, and you can access and analyze it yourself with any number of tools (including the AAVSO's own VStar). There's a lot of science waiting to be done with Kepler data, and I encourage you to explore this wonderful archive.

It was a pleasure to help organize the AAVSO's joint meeting with the AAS, and I hope all attendees—both AAVSO and AAS—found it a productive and enjoyable gathering. However, our biggest meeting of the year is still to come—our Centennial Meeting in October! We hope to see even more members of the AAVSO community join us in October for what will be a very memorable meeting to come.

The AAS Meeting: A First-Timer's Perspective
—by Doc Kinne

This last month was my first American Astronomical Society meeting. While the attendance at the Boston AAS Summer Meeting was listed as rather large, the AAS Summer meetings are the smaller of the two annual AAS Meetings (Winter, Summer).

I've not been to many professional conferences in my time, certainly nothing large. My career has largely taken me to small, budget-locked schools or small cities. So it was with a great amount of good luck that the 2011 Summer AAS meeting was right here in my own back yard (nearly literally!) and that the AAVSO was partnering with the AAS in order to celebrate its 100th Anniversary.

The meeting's entire prospects were exciting. I was giving my first professional poster, I was giving a presentation, and I was now a professional part of the organization sponsoring the meeting. The presentation—Variable Star Observing Using the Bradford Robotic Telescope—was to be my second for the AAVSO. My goal was to make it better than my first, which occurred during our Nantucket Meeting a couple of years ago. We'd filmed that meeting, and I was in charge of editing the distributing the video. Let me tell you that seeing my presentation at Nantucket was painful. I looked like a squirrel hopped up on speed! So, for this presentation I vowed to not leave the lectern and slow everything down. That seemed to work. I thought the presentation went well.

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SPRING MEETING
CONTINUED...

The AAVSO portion of the meeting started on Saturday with the AAS portion of the meeting effectively starting on Monday, with some significant exceptions. The neat part of this meeting was that I really didn't need to do much in terms of infrastructure. Usually, with AAVSO meetings, I'm in charge of the technical infrastructure—computers, networking, audio/visual, etc. This time I wasn't. But, old habits die hard and I found myself helping out just because. The nice thing here was that there was a small army of people in red AAS VOLUNTEER shirts running around all during the meeting. I made the argument that I had been AAS A/V person through the weekend so I should get a shirt. They agreed! So, now I have a new favorite shirt.

Sunday saw a special Historical Astronomical Division Meeting concentrating, to a point, on variable stars and the people behind them. I was surprised to find my poster all over the HAD website. It made sense since my poster was a history poster, but I'd not thought to tell anyone in HAD about it so this was a nice surprise. I can only think that our own Tom Williams had something to do with it. Thanks Tom!

And then there were the posters! Oh my gods, the posters! There was one huge room with them, and then, just moving to someplace else upstairs, I found a whole additional space filled with them! I couldn't believe the number! Monday's posters scared me. They were so heavily chemically based I could hardly make heads or tails out of them. Tuesday's posters (there are so many there are a different set each day) were better in that they were more geared toward photometry, something I had a chance of understanding!

While the technical and science aspects of the AAS meeting were first rate, what really made things for me was the socio-political aspect. "Networking," Aaron would say. I had found myself attached to a group of folks trying to get an LGBT Working Group (Lesbian/Gay/Bisexual/Transgendered) to become part of the AAS. This would complement the already existing Committees for the Status of Women & Minorities in Astronomy. What was interesting was that the only member of this then unofficial task force attending the Boston meeting was its newest member—me. I was set up to just introduce myself to AAS Councilor Pat Knezek just to get a couple of minutes "face time." Those couple of minutes ballooned into five hours of discussion with two AAS Councilors and a Vice President. Apparently, also, the names of the now official Task Force were flashed up by Kevin Marvel during the AAS Membership Meeting. Guess who was taking a phone call during his 15 seconds of fame and missed it?

So, in the end, for me, it was a great AAS meeting. It was, in its own way a bit like our own AAVSO meetings, just a bit larger and more varied. Because of the size, certainly, I didn't feel the same feeling of family at the AAS meeting, but there certainly was some of that because the AAVSO certainly had a large presence at this meeting. Also, oddly enough, such meetings are vacations to me. Indeed, before I became staff at the AAVSO our annual meetings were my vacations. But meetings like this energize me far more than vacations do, and this meeting was no exception.

I look forward to the next time. Due to my work with the LGBT Task Force I may be going to Austin. If so, I can't wait!

"Blessings" and the AAS Meeting
—bySara Beck

I'm sure you will hear more about it from others, but from my point of view, the 100th Spring meeting of the AAVSO held jointly with the AAS was an excellent opportunity to distribute copies of Dorrit Hoffleit's wonderful autobiography, *Misfortunes as Blessings in Disguise*.

When this book was published in 2002, thanks to Dorrit's generosity, we printed many more copies than we could sell. Keeping boxes of books squirreled away in our storeroom at HQ just didn't make any sense—we wanted to get the books out to people who might enjoy them (Donna Young has distributed many to teachers at her workshops), but mailing it out to libraries around the country was prohibitively expensive.

So what to do?

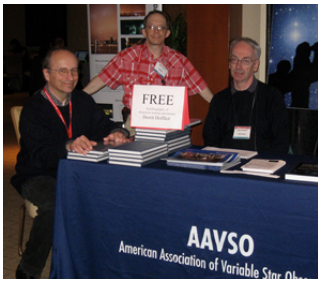
I came up with the idea of giving them away to AAS meeting attendees. What better opportunity than a hotel filled with astronomers who could carry the book in their luggage to the far reaches of the country—not to mention the world!

The hardest part was getting the heavy boxes of books to our table at the Westin Copley Hotel. This process involved loading my poor little Prius to the gills, unloading the boxes amongst the dirty laundry and beer kegs filling the loading area of the hotel, and transporting them to the third floor via the freight elevator.

Then it was just a case of getting them into the hands of as many people as possible. Each of us had our own style. Some preferred the passive approach and others (like me!) were a bit more aggressive about it. Our volunteer, John O'Neill (ONJ), expertly distributed books to other exhibitors and to graduate students tending their posters in another room.

John O'Neill in action.

What was remarkable to me was how many people either knew Dorrit or had heard of her. Those who hadn't (including many students and young astronomers) seemed intrigued and promised to read her book and/or donate it to their university libraries afterward. Not only did the book give-away help to ensure that Dorrit's legacy lives on, but it also gave the staff the opportunity to interact with more people than we might have otherwise and spread information about the AAVSO. All-in-all it was a great success. Thank you Dorrit!



Mike, Doc, and John ask, "Would you like a book?"

By the way, we gave away about 270 books. if anyone has any great ideas for the remaining 400, please let us know! ★

PAPERS AND POSTERS PRESENTED AT THE AAS-AAVSO JOINT MEETING

Listed below are the papers presented at the 100th Spring Meeting of the AAVSO, held in conjunction with the 218th meeting of the American Astronomical Society, held in Boston, Massachusetts, May 21–26, 2011. Complete abstracts will be published in the December issue of *The Journal of the AAVSO*.

AAVSO Paper Session I, Saturday, May 21, 2011

"Recent Changes in the Orbital Periods of Some Eclipsing SW Sextantis Stars" by David Boyd, British Astronomical Association, London

"Secular Variation of the Mode Amplitude-Ratio of the Double-Mode RR Lyrae Star NSVS 5222076, Part 2" by David A. Hurdis, Narragansett, Rhode Island; Tom Krajci, Cloudcroft, New Mexico

"The Pulsational Behaviour of the High Amplitude Delta Scuti Star RS Gruis" by Jaime Garc°a, Mendoza, Argentina

"Ha Emission extraction using Narrowband Photometric Filters" by Gary E. Walker, Maria Mitchell Association Observatory, Nantucket, Massachusetts

"Preliminary Analysis of MOST Observations of the Trapezium" by Matthew R. Templeton, AAVSO Headquarters, Cambridge, Massachusetts; Joyce Ann Guzik, Los Alamos National Laboratory, Los Alamos, New Mexico; Arne A. Henden, AAVSO Headquarters, Cambridge, Massachusetts; William Herbst, Wesleyan University, Department of Astronomy, Middletown, Connecticut

"AAVSO Estimates and the Nature of Type C Semiregulars: Progenitors of Type II Supernovae" by David G. Turner, K. Moncrieff, C. Short, St. Mary's University, Department of Astronomy and Physics, Halifax, Nova Scotia, Canada; Robert F. Wing, Ohio State University, Department of Astronomy, Columbus, Ohio; Arne A. Henden, AAVSO Headquarters, Cambridge, Massachusetts

"The Hunt for the Quark-Nova: A Call for Observers" by David Lane, St. Mary's University, Department of Astronomy and Physics, 923 Robie Street, Halifax, Nova Scotia, Canada; R. Ouyed, D. Leahy, Doug Welch, McMaster University, Department of Physics and Astronomy, Hamilton, Ontario, Canada

AAVSO Paper Session II, Sunday, May 22, 2011

"New Life for Old Data: Digitization of Data Published in the Harvard Annals" by Matthew R. Templeton, Michael Saladyga, AAVSO Headquarters, Cambridge, Massachusetts; Kevin B. Paxson, Pring, Texas; Robert J. Stine, Newbury Park, California; C. Froschlin, Andrew Rupp, East Aurora, New York

"The Effect of Online Sunspot Data on Visual Solar Observers" by Kristine Larsen, Central Connecticut State University, Department of Physics and Earth Sciences, New Britain, Connecticut

"The World Science Festival" by John Pazmino, Brooklyn, New York

"Variable Star Observing with the Bradford Robotic Telescope" by Richard C. S. Kinne, AAVSO Headquarters, Cambridge, Massachusetts

"Cosmology with Type Ia Supernovae" by Kevin Krisciunas, Texas A & M University, Department of Physics, College Station, Texas

"Edwin Hubble's Famous Plate of 1923, and a Hubble-Hubble Connection" by David R. Soderblom, Space Telescope Science Institute, Baltimore, Maryland

Session HAD I: Women in the History of Variable Star Astronomy, Sunday, May 22, 2011

"The Legacy of Annie Jump Cannon: Discoveries and Catalogs of Variable Stars" by Barbara L. Welther, Smithsonian Astrophysical Observatory, Cambridge, Massachusetts

"Anne S. Young: Professor and Variable Star Observer Extraordinaire" by Katherine Bracher, Austin, Texas

"The Stars Belong to Everyone: Astronomer and Science Writer Dr. Helen Sawyer Hogg (1905-1993)" by Maria J. Cahill, Edison State College, Department of Arts and Sciences, Fort Myers, Florida

"Variable Stars and Constant Commitments: The Stellar Career of Dorrit Hoffleit" by Kristine Larsen, Central Connecticut State University, Department of Physics and Earth Sciences, New Britain, Connecticut

Session HAD II: Variable Star Astronomy in Theory and Practice, Sunday, May 22, 2011

"King Charles' Star: A Multidisciplinary Approach to Dating the Supernova Known as Cassiopeia A" by Martin Lunn, Yorkshire Museum, York, England

"John Goodricke, Edward Pigott, and Their Study of Variable Stars" by Linda M. French, Illinois Wesleyan University, Department of Physics, Bloomington, Illinois

"The development of early pulsation theory, or, how Cepheids are like steam engines" by Matthew Stanley, New York University, Gallatin School of Individualized Study, New York, New York

"Frank Elmore Ross and his Variable Star Discoveries" by Wayne Osborn, Central Michigan University, Delevan, Wisconsin

"Stellar Pulsation Theory from Arthur Stanley Eddington to Today" by Steven D. Kawaler, Iowa State University, Department of Physics and Astronomy, Ames, Iowa; Candice J. Hansen, Tucson, Arizona

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AAS-AAVSO
CONTINUED...

"The AAVSO Photoelectric Photometry Program in its Scientific and Socio-Historic Context" by John R. Percy, University of Toronto, Department of Astronomy and Astrophysics, Toronto, Ontario, Canada

AAVSO Poster Session, Monday, May 23, 2011

"Data Release 3 of the AAVSO All-Sky Photometric Survey (APASS)" by Arne A. Henden, AAVSO Headquarters, Cambridge, Massachusetts; Stephen E. Levine, Lowell Observatory, Flagstaff, Arizona; Dirk Terrell, Southwest Research Institute, Space Studies, Boulder, Colorado; T. C. Smith, Dark Ridge Observatory, Weed, New Mexico; Doug Welch, McMaster University, Department of Physics and Astronomy, Hamilton, Ontario, Canada

"AAVSOnet: The Robotic Telescope Network" by Mike Simonsen, AAVSO Headquarters, Cambridge, Massachusetts

"High Speed UBV Photometry Of Epsilon Aurigae's 2009-2011 Eclipse" by Aaron Price, AAVSO Headquarters, Cambridge, Massachusetts; Gary Billings, B. Gary, Brian K. Kloppenborg, Denver, Colorado; Arne A. Henden, AAVSO Headquarters, Cambridge, Massachusetts

"20 Million Observations: the AAVSO International Database and its First Century" by Elizabeth O. Waagen, AAVSO Headquarters, Cambridge, Massachusetts

"Professional Astronomers in Service to the AAVSO" by Michael Saladyga, Elizabeth O. Waagen, AAVSO Headquarters, Cambridge, Massachusetts

"The Citizen Sky Planetarium Trailer" by Rebecca Turner, Aaron Price, AAVSO Headquarters, Cambridge, Massachusetts; Ryan Wyatt, American Museum of Natural History, California Academy of Sciences, San Francisco, California

"Status of the USNO Infrared Astrometry Program" by Frederick John Vrba, J. A. Munn, C. B. Luginbuhl, T. M. Tilleman, H. H. Guetter, U.S. Naval Observatory, Flagstaff Station, Flagstaff, Arizona; Arne A. Henden, AAVSO Headquarters, Cambridge, Massachusetts

"Membership of the Planetary Nebula Abell 8 in the Open Cluster Bica 6 and Implications for the PN Distance Scale" by David G. Turner, St. Mary's University, Department of Astronomy and Physics, Halifax, Nova Scotia, Canada; J. M. Rosvick, Thompson Rivers University, Canada; D. D. Balam, Dominion Astrophysical Observatory, Canada; A. A. Henden, AAVSO Headquarters, Cambridge, Massachusetts; D. J. Majaess, D. J. Lane, St. Mary's University, Department of Astronomy and Physics, Halifax, Nova Scotia, Canada

"Amateur Observing Patterns and Their Potential Impact on Variable Star Science" by Matthew R. Templeton, AAVSO Headquarters, Cambridge, Massachusetts

"An Overview of the Evolution of the AAVSO's Information Technology Infrastructure Between 1965-1997" by Richard C. S. Kinne, Michael Saladyga, Elizabeth O. Waagen, AAVSO Headquarters, Cambridge, Massachusetts

"Rasch Analysis of Scientific Literacy in an Astronomical Citizen Science Project" by Aaron Price, AAVSO Headquarters, Cambridge, Massachusetts

"Collaborative Research Efforts For Citizen Scientists" by Brian K. Kloppenborg, Denver, Colorado; Aaron Price, Rebecca Turner, Arne A. Henden, AAVSO Headquarters, Cambridge, Massachusetts; Robert E. Stencel, University of Denver, Department of Physics and Astronomy, Denver, Colorado

AAVSO: Astrophysics with Small Telescopes, Monday, May 23, 2011

"Contributions by Citizen Scientists to Astronomy" by Arne A. Henden, AAVSO Headquarters, Cambridge, Massachusetts

"The Z CamPaign Early Results" by Mike Simonsen, AAVSO Headquarters, Cambridge, Massachusetts

"Cataclysmic Variables in the Backyard" by Joseph Patterson, Columbia University, Department of Astronomy, New York, New York

"Planet Hunting with HATNet and HATSouth" by Gaspar Bakos, Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts

"Lessons Learned During the Recent Epsilon Aurigae Eclipse Observing Campaign" by Robert E. Stencel, University of Denver, Department of Physics and Astronomy, 2112 E. Wesley Avenue, Denver, Colorado

"Long-Term Visual Light Curves and Modern Visual Observing in Astrophysics" by John R. Percy, University of Toronto, Department of Astronomy and Astrophysics, Toronto, Ontario

AAVSO: Variable Stars in the Imaging Era, Monday, May 23, 2011

"Imaging Variable Stars with HST" by Margarita Karovska, Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts

"Interferometry and the Cepheid Distance Scale" by Thomas G. Barnes, McDonald Observatory, McDonald Observatory, Texas

"Spots, Eclipses, and Pulsation: The Interplay of Photometry and Optical Interferometric Imaging" by Brian K. Kloppenborg, Denver, Colorado

Invited Session: Stars, Planets and The Weather: If You Don't Like It Wait 5 Billion Years, Monday, May 23, 2011

"Stars, Planets and The Weather: If You Don't Like It Wait 5 Billion Years" by Jeremy J. Drake, Harvard-Smithsonian Center for Astrophysics, Cambridge Massachusetts

★

CENTEMENTAL VALUE

MIKE SIMONSEN (SXN), AAVSO HEADQUARTERS

It's not often that History comes knocking on your door, or in this case, phoning home....

By 1917, the tireless efforts of AAVSO founder William Tyler Olcott had resulted in an association that was now considering formal organization and incorporation. In a meeting held in the home of David B. Pickering in May that year, the AAVSO presented Olcott with a sterling silver loving cup in recognition of his leadership and efforts in promoting variable star observing and establishing the AAVSO.

According to AAVSO historians Thomas R. Williams and Michael Saladyga, during this period the First World War had begun to take a toll on Olcott, who was Secretary of the Draft Board in Norwich, Connecticut. This responsibility weighed heavily on him and limited the time and enthusiasm he could muster to run the AAVSO. Presenting him with this cup was probably an effort to bolster his spirits as much as to recognize the Herculean effort he had expended in founding and running the organization.

No one can say for sure how Olcott felt about this honor, but it is safe to assume it meant an awful lot to him, and the cup was a cherished possession. There is a picture of Olcott holding the cup, surrounded by his fellow AAVSO members and admirers (shown here and on page 45 of the AAVSO centennial history book by Williams and Saladyga, *Advancing Variable Star Astronomy: The Centennial History of the American Association of Variable Star Observers*).

Like most historical artifacts and personal possessions from the early 20th century, the ultimate fate of this cup was impossible to trace. The cup was lost. It could have been buried in the ground, tucked away in a chest in an attic, adorning the mantle of a private collector, or melted down for its 46 ounces of sterling silver.

In March 2011, Ed, an antiques dealer from El Cajon, California, was attending the Hillsboro Antiques Show in Hillsboro, California, when he came upon the booth of George, a dealer from Fullerton, California. Among the items offered was a sterling silver loving cup engraved with the words:

To
William Tyler Olcott
From the Members
of
The American Association of Variable Star Observers

— May 5th 1917 —

In Recognition and Appreciation
of
His Loyal Leadership of the Association
His unfailing Courtesy and Cordial Assistance
and
His untiring Efforts to Foster and Promote
Among the Amateurs of America
The Observation and Study of
Variable Stars

The 1917 Spring Meeting of the AAVSO where an appreciative membership presented a cup to their organization's founder, William Tyler Olcott.

Ed decided to take a risk and purchased the silver cup, figuring at the least it was worth a couple of thousand dollars as scrap metal alone. After doing some research on the Internet, Ed contacted Mike Saladyga at the AAVSO via email in May and offered to sell us the cup for $4,500.00. Using information and pictures supplied by Ed, Elizabeth Waagen did some research on the web and contacted a local antiques auctioneer/silver expert to learn what she could about the manufacturer and ascertain the value of the cup. Serendipity had offered us a chance to recover a historical artifact with tremendous sentimental value to the organization, but we weren't about to overpay for it.

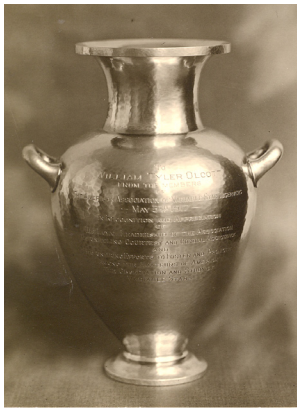
In June, Arne asked me if I would negotiate a price to purchase the Olcott Cup. Ed proved to be a tough cookie, but I was able to talk him down from his "$4,000 firm" counter-offer to a final price of $3,625.00. That left just enough room to squeeze in shipping and insurance for $75.00 to bring the total to $3,700.00.

This fine silver cup now resides in the archives of the AAVSO in Cambridge, Massachusetts, where it belongs.

Tom Williams and Mike Saladyga have agreed to pay half of the $3,700.00 purchase price of this cup, and we are asking the membership to match those funds to pay the remaining half by October 1, before the annual meeting.

If you would like to contribute some or all of the needed $1,850 you can send a check to AAVSO, 49 Bay State Rd., Cambridge, MA 02138 USA, make a donation online at http://www.aavso.org/donate, or contact Mike Simonsen at mikesimonsen@aavso.org to make other arrangements.

Thank you! ★



The 1917 Spring Meeting souvenir featured this photograph of the cup.

TEXAS IN MY REAR VIEW MIRROR

MIKE SIMONSEN (SXN), AAVSO HEADQUARTERS

TSP OR BUST As part of our program to introduce the AAVSO and our 100-year tradition to as many people as possible in 2011, we determined to send a speaker from the AAVSO to as many major star parties this year as we could. One of my assigned destinations in this mission was the Texas Star Party in Fort Davis, Texas. A couple days after returning from the joint AAVSO/AAS meeting in Boston, I was busy loading my 12-inch LX200 and all the necessary gear into my four-door sedan to drive the 1,700 miles from my home in Michigan to the Davis Mountains in west Texas.

I left home Sunday morning, May 29. I ran into a ferocious storm just south of Chicago that forced me off the road and under cover to escape the wind, rain, and golf-ball size hail pouring down from a black sky. The same storm hammered Battle Creek, MI, later that day, and places east the day after, as it tore a path across the upper Midwest and Northeast. Other than that, the trip was largely uneventful, and I made good time.

The first night I stopped in Springfield, Missouri, for the night. My original plan had been to push on to Joplin, Missouri, but with the destruction from the tornado still dominating the headlines, I wasn't sure there would be hotel rooms available for non-residents or non-relief workers. Monday night I stayed in Midland, Texas, only a few hours away from Fort Davis. I just love Oklahoma and Texas, where the speed limit on the highway is often 80 mph. I could drive 94 mph without fear of getting a reckless driving ticket, and I did!

I arrived in Fort Davis around 2pm on Tuesday. From there, it was a short drive up Highway 118 through some very pretty mountain terrain to the Prude Guest Ranch, where the TSP is held.

MY BIG TEXAS WELCOME TSP is very well organized. I was greeted at the gate by organizers and shown where to check in at the office, where I picked up the key to a cabin I would be sharing with the other speakers. After unpacking, I claimed a spot on the middle observing field, right across the street from my cabin, and began to set up my telescope. On the advice of friends who had been to TSP before, I had purchased a tarp to cover the dusty ground around my scope and 10-inch spikes to nail it down with. They were not exaggerating at all when they told me I would need a three-pound sledge hammer to drive the spikes into the rock-hard, red Texas dirt.

When it came time to heft the 12-inch LX200 onto the tripod, several guys who had been watching me set up in the mid-day Sun from their shade canopy under a large tree ran over and offered to help. I soon learned they were veterans of many TSPs and claimed the same spot under this tree each year. In fact, they were now unofficially known as "The Shade Tree Gang." I met a lot of warm, friendly, intelligent people at TSP, but the Shade Tree Gang were a lot of fun, and we spent a lot of time together.

DON'T CALL ME LATE FOR DINNER I was pretty hungry by the time dinner was being prepared in the mess hall at Prude Ranch. I decided to beat the rush and get in line early because I was feeling a little weak and light-headed. Not knowing exactly where to go, I headed inside the office, which led to the buffet line and salad bar attached to the dining hall. I sat down in the foyer with a few other early birds and waited for the dinner bell. I think I might have drooled a little as they began bringing food out and stocking the salad bar.

After a while a back door to the building I did not know was there suddenly opened and a line of people began streaming in. "This must be it!" I said to myself hungrily and walked over to the line, which led out the door, along the building, around a corner, up some steps and all the way to the door I had come in to wait for dinner in the wrong place.

I was one of the first people to show up for dinner, and now I was at the very end of a long line. I didn't have enough energy, and I was too dehydrated, to cry.

WEATHERVANES At dinner that evening, I ran into my first fellow AAVSOer, Brad Walter. Brad and I had met before in Big Bear a couple years ago, but I didn't recognize him right away with his safari gear and hat on. As it turned out, Brad was also camped on the middle field just yards from where my telescope was set up. After dinner I was finishing setting up for the night and began packing the tools and cases back into my car when Brad came over and told me I wasn't done setting up yet. "What do you mean?" I asked him.

"Do you have any more of those spikes?"

"Yeah."

"You need to use them and some of that rope you have to tie down your telescope."

Brad explained that even though my telescope was pretty darn heavy, the winds here in the Davis Mountains could be pretty fierce at times, and he advised me to tie down the three legs of the tripod to guard against the telescope blowing over!

He wasn't kidding.

Clouds socked us in Tuesday night, and I decided to call it and get some sleep around midnight. Overnight, the star party was hit by what could best be described as a hurricane without the rain. Lightning flashed, thunder boomed, and heavy winds, with violent gusts, shook the cabin until just before dawn.

When I walked out into the bright Texas sunlight Wednesday morning there were signs of destruction and chaos everywhere. Some of the smaller tents from the night before just weren't there any more. Many shade canopies were dangling from ropes or wrapped around cars, and tent poles stood or lay on the ground with no canvas attached to them. You could tell which way the wind had come from because every Dobsonian telescope at the star party was facing in the opposite direction, having been turned in the night like a hundred weathervanes. And sadly, there were a few telescopes that had toppled in the storm.

Mine was not one of them. It stood there unscathed, securely nailed to the ground. Brad had saved my telescope and my trip from disaster. I sent him a heart-felt thank you card the day after I got back from TSP.

I did some exploring around the star party that morning, took some pictures, found the free coffee at the vendors' display, and eventually made my way over to the meeting hall where I met with Bill Flanagan, the MC for the afternoon paper session, to load the PowerPoints for my two talks into the TSP computer. This is also where I met Steve and Amelia Goldberg, two of the organizers of TSP. They were great. Talk about your power couple. If I needed

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TEXAS STAR PARTY
CONTINUED...

anything, or something with my room wasn't just right, Steve would bark orders into a walkie-talkie and it would be handled, bam, now, no questions.

Spreading the Word The talks after lunch were well attended. There were probably a hundred or more people in the hall. I gave condensed versions of two talks I have done before: Stand Back!, about citizen science projects in astronomy for amateurs, which of course features variable star projects, and Variable Stars and the Stories They Tell, which describes how variable stars fit into the larger landscape of astronomy and astrophysics, using stellar evolution, the cosmic distance scale, and the search for life in the Universe as examples.

Both talks were well received and followed by good Q&A sessions. TSP also awarded me a certificate of merit for each talk, which was yet another example of how they think of everything at this star party. If they could just control the weather…

After the talks, Tim Parson from Minnesota came up and introduced himself. I knew Tim from online, but we had never met, so it was another chance to put a face to a fellow AAVSO observer who until now was just an email address. We talked about telescopes, cold weather observing, cataclysmic variables, star parties, and got to know each other. I like Tim a lot.

Dinner Wednesday night was simply awesome. BBQ chicken, brisket and sausages, pinto beans, potato salad, coleslaw, corn bread, cherry and apple cobblers - it was a feast. I sat with Tut Campbell of the CBA and learned all about his telescope farm and the observing he does. Tut is about as affable and friendly a guy as you will ever meet. He is a passionate observer and I totally enjoyed listening to him talk while I gorged myself on barbecue. I also met Bill Pellerin, another active AAVSOer, who would be giving a talk on CCD observing Thursday afternoon.

Wednesday night the weather just teased us for a few hours. It looked like it might clear up, so I had my scope powered up, aligned, and on standby, but the clear, dark Texas sky I drove 1,700 miles to see never materialized. I finally forfeited at midnight. Texas Clouds 2, Visitors 0.

Thursday was my big day. I was the scheduled speaker for the evening program, so I took it easy and treated myself to a light day. I slept in, went in to town for breakfast at a little diner that had wifi and to catch up on email and check the weather reports, then drove around the countryside and did some sightseeing. I also took a trip up the mountain to McDonald Observatory to gawk at the big telescopes under the silver domes. After lunch, I checked out the vendors' displays to kill time before the afternoon paper sessions. Bill Pellerin gave a very good introduction to CCD observing talk, which featured variable stars, AAVSO, and VPHOT.

Thursday, at dinner, I finally got to meet up with Walt Cooney, another AAVSO member. We had been playing phone tag, and missing each other since Tuesday when I arrived. After dinner I got called over to spend some time with Barbara Wilson, who would be hosting the evening program and introducing me. Barbara, a veteran of TSP going back to the 1980s, is a legendary visual observer. She and her 20-inch telescope were featured in the Timothy Ferris movie "Seeing In the Dark."

When the time came and Barbara handed the microphone to me, I found myself standing in front of 400 or so amateur astronomers who had made the pilgrimage to TSP from all around the country to share the dark skies and camaraderie of the Texas Star Party. Now they were sitting there expecting me to entertain and inform them for a while as we all waited for darkness to fall.

When we had first discussed my coming to TSP, I explained to Barbara that I wanted to give a talk about the first 100 years of the AAVSO, since this was our centennial year. She was quite honest and said she didn't think that would be very appealing to the TSP crowd, who were by and large deep sky hunters and aficionados like her. So I created a whole new program specifically for TSP. My talk was called The Unpredictable Deep Sky. It featured deep sky objects that changed their appearance on human time scales. As I am sure you have guessed already, many of these changes are because they are associated with variable stars of one type or another.

The talk went well, it was just about the right length, the applause was enthusiastic, the Q&A was interesting but brief, and I felt a deep sense of relief as the crowd headed for the doors to go uncover their telescopes for what we all hoped would be a great night under the stars. I was on the down-slope now, my obligations having been met. I planned to coast through the next couple days and just enjoy the sky I had dragged my telescope 1700 miles to see.

Observing The overcast sky did not offer much hope, and the glow from the wildfires burning just a few miles to the west of us extended up 30 degrees into the sky. These were the worst kind of clouds. They would thunder and lightning and spoil the night sky but they didn't give up a drop of rain. This part of the country was parched - it hadn't rained there since September.

I refused to give up and hung out and talked and laughed with the Shade Tree Gang until well past midnight, hoping for a miracle. What we got was about half a miracle. The sky above us and to the south and east did clear up around 1:30am so we were actually able to observe for about three hours until just before dawn began to break. It wasn't the incredible life changing experience I had hoped for. In fact, it is that dark at my house on a good moonless night. But I was able to look through some other telescopes, try some new eyepieces, and share the views of a few galaxies, nebulae, and clusters in my 12-inch proudly.

I was very impressed with Keith Venables' portable 10-inch telescope, which breaks down to fit inside a gun case. He had it hooked up to an application running on an iPad that showed its location very accurately - so accurately, in fact, that he was able to locate several parts of the Veil Nebula he had never seen before using it to guide him.

The optics of his compact Dob were first rate, and I got my first look through a couple of Ethos eyepieces. I couldn't get over how flat the field looked and how positively comfortable the eye relief and general feel of the Ethos was. I tried them in my LX200 and felt the same way, although it wasn't as noticeable an improvement over the Naglers I normally use as I thought it would be. Still, I can see one or two of these fine eyepieces ending up in my kit eventually.

At last, it finally felt like a star party. Tim Parson observed with me and we had fun comparing notes and just being around telescopes under the stars. Some people wandered by and we showed them what ever we were looking at. It wasn't a big score, but it wasn't a defeat. I would call it a scoreless tie.

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TEXAS STAR PARTY
CONTINUED...

The Texas Clouds had not swept me. But I was still losing the series 2.5 to 0.5. The best I could do was tie, and it would have to be clear Friday and Saturday, which would mean I would have to stay Saturday, instead of driving home, which had been Plan A.

Let's Make A Deal Friday morning I hurried into town to get breakfast and log on to the free wifi. TSP had wifi, but it wasn't working very well, so this was the best way to get Internet access, check email, and most important of all, check the weather. It was also the only time I could get phone reception, so checking in back home became part of the morning routine. But I had to rush through all that today, because at 9 a.m. was the swap meet outside the vendors' building, and I had brought a box full of gear I never use any more to sell or trade.

I arrived back at the ranch just as the swap meet was getting underway. I pulled my box of goods out of the trunk and set up shop in amongst the other hopefuls who had brought merchandise to sell or trade. I was in the mood to deal. I didn't want to bring any of this stuff back home with me, and I had already purchased a new observing chair I had seen at one of the vendor displays. I needed to recoup my investment. I was a motivated seller and did very well. I sold everything, even the box!

The Lost Weekend Friday lunch was actually brunch. They served eggs, biscuits and gravy, French toast, corned beef hash, bacon, sausage, hash browns, fruit, and cereal. The weather may have been lousy to this point, but the food was outstanding! After lunch they herded us all out on to the sun-burnt lawn outside the dining hall for the traditional TSP group picture. They arranged us and handed out letters that spelled Texas Star Party 2011. I took a long nap that afternoon and wrote some notes about the trip to use in any blogs or articles I was planning to write. The weather report was not looking very good again and I started mentally packing.

After dinner Friday, Brad Walter and I sat down together for a while and he showed me some interesting projects he was working on in his spare time. One was a graph of the ASAS V magnitudes versus Landolt standards, which seemed to indicate ASAS V mags are pretty robust from 7th to 14th magnitude. I encouraged him to finish this work and have it published before the AAVSO Photometric All Sky Survey (APASS) makes it obsolete! He also had a great idea for a variable star science website which I won't describe here. Hanging out with brilliant people is one of the side benefits of going to astronomy conferences, meetings, and star parties.

Friday night was cloudy, so after the evening program, a talk given by C. Renee James about her new book, Seven Wonders of the Universe You Probably Took for Granted, we socialized and partied. I read some of the funny stories from my blog to the guys and we shared our own stories of observing, traveling, star parties, and other misadventures. Sometime during the night I began thinking I had come too far to give up and I was going to stay Saturday if the weather forecast looked at all promising.

Saturday morning over breakfast I decided I was going to stay for the last day, just in case the weather broke. I had concluded that even though the weather forecast was questionable at best, I would be sick if I packed up and drove away from TSP just as the skies cleared over the Davis Mountains. I called home and told Irene I was going for "Plan B."

I also told her I would be taking a different route home. One of the guys I had become friends with was Art Smoot, an airline pilot from Dallas. He suggested I take a route through Texas west and then north instead of the way I came, to avoid the two-lane blacktop roads I had taken through northern Texas on the way down. I figured if there was anyone to listen to when it comes to getting from point A to point B it is an airline pilot.

Saturday afternoon featured another paper session. Keith Venables, one of the Shade Tree Gang, was giving a couple of talks and I looked forward to hearing them. The first was an overview of all the telescopes he had ever owned and what was right or wrong with them, called Equipment: How Much Is Enough? It was very clever and explained the evolution of his lightweight Dob that fits in a gun case. He is from the UK, and when airline restrictions on luggage and carry-ons were tightened after 9/11, he had to adjust his travel scope accordingly. He also gave an interesting talk about his attempts at finishing an entire Messier Marathon from different locations around the world.

Dinner that evening was rib-eye steak, baked potatoes, veggies, rolls, and salad bar. I know I have mentioned the food a lot in this piece, but the food at the Prude Guest Ranch is really quite good. With cloudy skies at night and hot dusty days, the food was one of the highlights of the trip.

William Keel, from the University of Alabama, was the featured guest speaker Saturday night. He gave an excellent, if lengthy, talk on Citizen Science, featuring Galaxy Zoo, Hubble Zoo, Moon Zoo, and other parts of the Zooniverse.

The weather had not improved at all. In fact, it started raining suddenly after dinner so I had to run back to my site to get things out of the rain. I got soaked doing it and had to change, so I missed the first part of Bill's talk that night.

I finally had to admit defeat and began packing things away that night as best I could in the dark. Texas Clouds 4.5, Visitors 0.5.

Sunday morning I was ready to pack up and hit the road. Observing had been a bust, but I had had a good time anyway. I met people I only knew through email and made some new friends. I vowed not to let Texas clouds beat me, so I will be back one day, maybe next year.

No Place Like Home It took all day Sunday to drive across Texas from west to east. I stopped in Little Rock, Arkansas, overnight then drove like a man possessed Monday to get home in one long push. I think the police in Indiana are still looking for me. I pulled into my driveway around 1:30am Tuesday morning where, ironically, the Milky Way shone down on me from a clear, moonless sky. ★

MEET THE STAFF: REBECCA TURNER

LINDA HENDEN, AAVSO HEADQUARTERS

To continue our introductions of Headquarters staff members, this month's interview is with Rebecca Turner, our Project Manager and Sponsored Research Officer. She is also our Meetings Coordinator—Rebecca has performed various duties for the AAVSO over many years. Throughout this time, she has been an entertaining storyteller, sure to cheer us up with her incredible tales of adventure, woe, or what-have-you, presented with a flare that only Rebecca could supply. She's also an energetic hard-worker who manages to put on one successful event after another, and this says nothing of her accomplishments outside of the office!

Rebecca Turner

Q: What brought you to the AAVSO and when?
A: I came to the AAVSO over fifteen years ago right after graduating from the University of Georgia with a Bachelor's Degree in Physics and Astronomy. My advisor at UGA knew Janet Mattei, then AAVSO Director. He knew I was looking for work and thought that the AAVSO and I might be a good match. He sent Janet a letter of introduction and even though she did not officially have an opening she asked me to come interview. Being from Atlanta, I was not all that familiar with driving in a rotary (traffic circle) and I had to make it through two of them on the short drive to AAVSO HQ from my hotel. I remember Janet on the phone giving me directions that made me feel like I needed to mount a protractor on the dashboard to have any chance of making it—this, of course, was before we all had cell phones and GPS systems. I had read a lot about the AAVSO before the interview. After reading about everything that the organization was doing I expected to show up at a huge office building with many, many employees. When I arrived I was shocked that all of this wonderful work was being done by less than a dozen staff members. Janet and I clicked right away and she offered me a job the next day. I've been with the AAVSO ever since.

Q: Your duties at AAVSO have evolved over the years. What are some of the duties you've performed and projects you've work on, and which did you enjoy most?
A: I started as a technical assistant dealing mostly with data requests. I also handled the nightly reports of activity that came in. Back then these arrived mostly by phone. I started working at the AAVSO right before the 84th Annual Meeting. During that meeting a bunch of observers were talking about how they would like some sort of quick electronic newsletter letting them know about current CV activity. Most of the staff were skeptical that something like this could work. Being the bright-eyed new kid, I spoke up about how I thought it could be done. Janet raised an eyebrow and gave me a look that I would get to know very well in the years to come.... That's how I was tasked with creating the AAVSO News Flash! The News Flash has since been automated but for a number of years I put out issues by hand almost daily. Another thing happened at that first Annual Meeting that would impact my future job description. I found myself helping out quite a bit—I even took charge in a couple of situations when our Meeting Coordinator wasn't around. Janet noticed this and the next year when our Meeting Coordinator took a job at another organization Janet told me that she thought I would be a great replacement. I had never considered doing conference management but it seemed like a nice challenge. Over thirty meetings later, I am still enjoying it! I have project-managed a couple of grant projects over the years, including the current, NSF-funded project, Citizen Sky. I worked on the Information Architecture for the current AAVSO website and continue to be active in the organization and content management of the site. I don't really have a favorite task. I love the fact that there is SO much variety. I really enjoy getting to meet the membership at AAVSO meetings. It is nice to put a face with a name, email address, or observer code. My favorite part of the last fifteen years has been the people: the staff, the members and observers, the astronomers, the students. All of you reading this article—you are my favorite part of this job!

Q: You're also a trained performer. Could you please tell us how you got into "show business" and what types of shows you do?
A: I come from a musical family. My parents were in a folk band when I was very young. Some of my earliest memories are of my parents performing. I started taking dance classes when I was four and acting classes when I was seven or eight. For most of my life I have been a musical theater performer. I was in a children's theater company, then I went to a high school with an award winning theater department. I minored in musical theater in college and did lots of community theater once I moved to Boston right after college. From there I started doing professional theater in the Boston area and even moved to the New York City area for a couple of years to test those waters. I telecommuted while I was away so I never left the AAVSO and I have been back in Boston for about five years now. A little over a year ago I joined a band for the first time in my life and am very much enjoying making music in a very different setting from the musical theater stage. I still do a musical from time to time.

Q: Do you have a favorite vacation place, or a type of vacation that you especially enjoy?
A: I enjoy all kinds of vacations. I grew up going to the beach in Florida every summer but we also went backpacking in the Appalachians quite a bit. One of my favorite vacations was spending ten days on a dude ranch in Wyoming. I went alone so it really forced me to interact with and get to know the other guests and staff. I have always loved horses and took lessons as a child, so it was nice to brush up on those skills. We even helped out with a cattle drive.

Q: What do you do for relaxation?
A: Cooking, yoga, taking a dance class, singing, trying to play my guitar, going to see live music in the Boston area.

Q: Do you have any pets? Please tell us about them.
A: Yes, I have a number of pets. I have a pair of black cats, Ben and Jerry, who

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MEET THE STAFF
CONTINUED...

I got way back in college. They are almost seventeen years old now. About seven years ago I rescued a pair of tiny gray kittens—Daisy and Violet—from a pretty bad situation with the idea that I would find them good homes. They were just too cute. I couldn't give them away, so now I have two pairs of cats. Daisy even has an account on the Citizen Sky website! (We ask her to test things from time to time.)

Q: Where have you most enjoyed living and why?
A: Hmmmm. I seem to be the master of non-answers today. I am very close to my family so I have really enjoyed the time I have spent in Atlanta. I loved living in the NYC area because of all of the music and art and things to do and crazy energy. All of my friends, my performing network, and my job are all in the Boston area. I think my ideal would be to shove New Hampshire up a little bit and stick northern Georgia in that space. Then I could have both Boston and my family. In terms of my favorite apartment, it would definitely be the one I had in New Jersey right on the Hudson River with a twenty-foot balcony that had a panoramic view of the NYC skyline from the George Washington Bridge to the Empire State Building. Why pay Manhattan rents and look at New Jersey when you can pay New Jersey rents and look at Manhattan?!?

Rebecca appearing in a production of The Wild Party

Q: Is there anything else you would like to tell us about yourself?
A: Just that I very much appreciate all that the AAVSO has given me over the years—not the least of which are all of the great friendships with staff, members/observers, and colleagues. ★

Ed. note: following is the Spanish language text of Jaime's President's message.

MENSAJE DEL PRESIDENTE

JAIME R. GARCIA (GAJ)

Hemos disfrutado de una excelente centenaria reunión de primavera junto con la Sociedad Astronómica Americana (AAS) en el centro de Boston, en mayo pasado. Un montón de gente, principalmente astrónomos profesionales y estudiantes tomaron conocimiento sobre la AAVSO. Pasamos una semana de interesantes charlas, impresionantes trabajos científicos presentados como posters y maravillosas interacciones. Nuestro programa habitual fue ligeramente alterado y así el banquete tuvo lugar antes de lo habitual y a él fueron invitados los miembros del Consejo de la AAS y disfrutamos de una charla muy interesante de la Dra. Nancy Morrison acerca de P Cygni. Hemos tenido también un par de sesiones de trabajo científico, y una sesión especial dedicada a la historia de la astronomía. El Dr. Mathew Tampleton, nuestro Director de Ciencia, pasó nueve meses de trabajo con la Dra. Lee Anne Willson (Universidad del Estado de Iowa) y la Dra. Christine Jones (CfA), ambas Vicepresidentes de la AAS, planificando los horarios de las sesiones especiales de interés para los miembros de AAVSO y la comunidad de estrellas variables de esta reunión muy especial, una de las reuniones de verano de la AAS más concurridas, en la historia reciente. Deseo agradecer a Matt por su impresionante trabajo.

La contribución enorme a la ciencia por parte de la misión Kepler muy me impresioné. Hubo una serie de presentaciones durante esta reunión incluyendo la nueva ciencia procedentes de Kepler, no sólo sobre los planetas extrasolares, sino también sobre todos los campos de la astrofísica estelar. Los datos de Kepler están disponibles al público, y podemos hacer minería sobre ellos y analizarlos con nuestras propias herramientas, ¡como VStar!

En cuanto a nuestro Consejo, el proceso de revisión del desempeño de nuestro Director se terminó antes de nuestra última reunión del Consejo y hemos recibido los resultados de ese proceso. Esta fue la primera vez que un proceso como este se llevaba a cabo en la AAVSO y estamos muy agradecidos por el impresionante trabajo de la comisión, incluyendo a personas de dentro y fuera de nuestra organización. Después de la evaluación final, el Consejo ha decidido ofrecer una renovación del contrato a nuestro actual director, el Dr. Arne Henden. Arne ha aceptado y me complace anunciar que vamos a contar con él como director durante cinco años más.

Nuestro proyecto Citizen Sky enfrenta a un nuevo tiempo. Estamos llegando al final del eclipse de epsilon Aurigae, y nuestros científicos ciudadanos siguen contribuyendo de varias maneras a través de nuestra página web especial, citizensky.org. Una de las novedades consiste en la traducción al español del tutorial 10-estrellas para la observación visual por parte de observadores en el hemisferio sur. La traducción fue posible gracias a varios colaboradores, pero con un nuevo aporte sustancial de Sebastián Otero. ¡Le estamos muy agradecidos!

Las elecciones para el Consejo están muy pronto, y nuestro líder del Comité de Nominaciones Barry Beaman está esperando que usted se ofrecerá como candidato. La AAVSO te necesita.

Estoy cerca de terminar mi mandato como Presidente. Estoy disfrutando de un maravilloso tiempo con la AAVSO completando su primer centenario y enfrentando nuevos desafíos. Los aficionados a la astronomía ya disponen de material fantástico (telescopios, cámaras, e incluso espectrógrafos) y herramientas impresionantes para la minería y el análisis de datos. La AAVSO ya cuenta con una red de telescopios localizados en varios lugares del mundo, AAVSONet, y un relevamiento fotométrico (APASS) que facilitan cualquier estudio de estrellas variables, ya sea con sus ojos, su telescopio, o de cualquiera de los telescopios AAVSONet. Puedes disfrutar de todo esto desde tu patio trasero o desde tu sillón favorito cómodamente desde tu casa a través de tu computadora, smartphone o tableta. Me viene a la mente que he disfrutado durante las noches frías, de mi adolescencia, cuando comencé a contribuir a nuestra base de datos internacional AAVSO, realizando muchas estimas visuales. Ahora, puedo hacer mis estudios fotométricos profesionales desde mi escritorio en mi oficina templada....

Por último, me gustaría seguir conociendo sus ideas de cómo la AAVSO puede contribuir al futuro de las estrellas variables. Y me encantaría verlos en Woburn y Cambridge para la Celebración del Centenario, a comienzos de octubre. ¡Que tengan una buena temporada! ★

IN MEMORIAM

MEMBERS, OBSERVERS, COLLEAGUES, AND FRIENDS OF THE AAVSO

THOMAS A. CRAGG (CR), AAVSO member and observer since 1945, died May 6, 2011, at the age of 82 after a series of strokes over the past year. Tom joined the AAVSO in 1945 at the age of 17, already excited about astronomy and eager to participate in the AAVSO observing programs. He was an avid and prolific variable star observer, amassing a lifetime total of 157,056 observations, of which all but five were visual (the five were CCD). He was also a dedicated solar observer. Tom observed all kinds of variable stars, and took advantage of his location after relocating to Australia to monitor many unstudied or neglected southern variables. When Tom lived in his native California, he often observed at Ford Observatory with Clinton Ford, Charles Scovil, Monsignor Ron Royer, and other AAVSO'ers involved in chart and sequence work and in expanding the AAVSO observing program. His longevity with the AAVSO meant that Tom "served" under the leadership, successively, of Leon Campbell, Margaret Mayall, Janet Mattei, and Arne Henden.

Tom served three terms on the AAVSO Council: 1951–1953, 1962–1964, and 1964–1966. He had a strong interest for many years in Cepheid variables, and served as chair of the AAVSO Cepheid Committee from the years when Cepheids were of great interest to the professional community until the committee's dissolution in the late 1980s, its goals achieved.

Tom was the recipient of numerous AAVSO awards, including the 25th Merit Award, the Director's Award, a Solar Honor Award, Observer Awards for visual observations through the 150,000 observations level, and a Supernova Award (for assisting Robert O. Evans in his discovery of SN 1995V in NGC 1087).

Among Tom's other honors is the Astronomical League's Leslie C. Peltier Award for his work in variable stars and lunar and planetary astronomy. Minor planet (5068) Cragg is named in Tom's honor.

In his professional career, Tom's astronomical work included being an observer at Mount Wilson Observatory near Los Angeles, California, for many years, then serving for many more years as an observer at Siding Spring Observatory near Coonabarabran, New South Wales, Australia.

Thomas A. Cragg

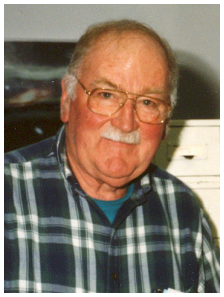
Those of us fortunate to know Tom personally will remember his twinkling blue eyes, ready smile, and hearty laugh, his willingness to help with projects large and small, his excitement over and persistence in trying to observe anything asked of him (no matter how difficult the target or how sleep-deprived it might make him), his dedication and loyalty and professionalism. His old friends called him Tommy, and this boyish nickname suited him. Tom's other interests included music; attendees at the AAVSO's 75th Anniversary meeting in 1986 will remember his skilled and charming performance on several different flutes he had brought with him from Australia. Tom is survived by his beloved wife, Mary.

DOUGLAS BRUCE MCHENRY, husband of late, longtime AAVSO member and former Secretary Martha Hazen, and friend of the AAVSO, died May 10, 2011, of congestive heart failure at the age of 79. Bruce was a frequent attendee with Martha at AAVSO meetings, where he usually orchestrated and led or co-led expeditions for spouses. Whether the expeditions were birding or other nature walks or historical tours, Bruce's lifetime of experience in the National Park Service made him the perfect leader for these adventures. Stories told by participants over dinner or the next day would frequently make the AAVSO meeting attendees envious of the spouses!

Bruce's father was a ranger naturalist in the National Park Service, so Bruce grew up in that environment in the West, and chose to study wildlife management and ecology. The first 15 years of Bruce's own career in the National Park Service as a ranger, law enforcement ranger, and ranger naturalist took him all around the United States. In 1974 he was asked to join in the formation of the NPS North Atlantic Region—headquartered in Boston, Massachusetts—so he was deeply involved in many of the diverse projects related to the Bicentennial. Bruce also developed the NPS Interpretive Training Institute, designed to train state and federal agency employees in the art of Interpretation (the communication process that creates emotional and intellectual connections between the audience and the resource being viewed or explored, be it a natural or historical site, an animal, person, event, or idea). It is little wonder Bruce was such a superb story-teller! In addition, he was also a founder of the Massachusetts Environmental Education Association.

A U.S. Army veteran, Bruce served for three years as an aviator in Germany in the 1950s.

When Martha introduced us to Bruce, and when they married in 1991 (a second marriage for both of them), their happiness was obvious to all. We could not have guessed, however, what a role Bruce was to play in the AAVSO and what a warm corner of our hearts he would occupy.



Bruce McHenry

Bruce is survived by his daughters from his first marriage (to Martha Phelan), Martha (Hazen's) son and daughter, and his grandchildren, as well as by many friends around the world.

We were saddened to learn that **MARGARET WEST**, wife of AAVSO member/observer Frederick West, and **MARTHA WARREN**, wife of member and colleague Wayne Warren, had died in 2010. Our condolences to their spouses and families.

MY VERY BEST TOOL

SUSAN OATNEY (OSN/OATS/A125), PARTRIDGE, KANSAS

Today I have way too many things to do: Willy Wonka's "so much time, so little to do" never seems to apply to my life. It is 4:15 a.m. and my husband has been doing the milking for at least thirty minutes. I am bustling around in the house trying to get my work underway for the day and I am impatiently waiting for my bread to come out of the oven. The timer was set, but looking at it, I can see it is not quite finished. When we got up, a quick peek through the curtains told me that the stars were sparkling brightly and the wind has finally calmed down from thirty mph to a slow ten and I think I can do some observing. This time of day is my favorite to observe. Most people are not interested in observing these predawn hours because they will be going to work or they don't want to get up. I figure these observations are most valuable for those reasons.

I need to get a few things done first and so before I head out the door with my eyes now totally unadapted, I check the radar. No clouds over Kansas. I don't mind sitting there in the dark for twenty minutes doing nothing but looking around before I can observe. It would be a guilty pleasure even if there will not be much time left for observing before sunrise. My bread is done, so I grab my things and head out to the deck and as I open the door I look up—maybe a minute here and I will see a bright star. No. Low reflective clouds that the radar did not pick up are everywhere: they are literally under the radar. The air is humid. My observing window is now closed. I sit and wait, but I know they will not go away. I look up and I know what I should be seeing on this June morning. I strain to get a glimpse of Fomalhaut, but there is nothing there.

During the last several years this moment has repeated itself many times. The weather is just a little different. Many days and nights the sky is clear, but the wind is ferocious. I sit and ponder what I can not see. Corona Borealis would be in the west. I often have thought of Leslie Peltier's relationship with T CrB and how he looked on it with suspicion after its outburst. It has been quite a while since I observed R CrB with my binoculars. It used to be a star that I observed every time I stepped out the door and the sky was clear. I can remember after observing it for a long period of time, one evening thinking that it just looked "funny." I am not sure how to explain that, but it seemed like it was different than it had been: not just brightness, but something I could not explain. A couple of tenths variation was not a big deal. I wondered if it could be going into a fade; and sure enough, within a few days quick look observations began to confirm that.

Many pleasant hours have been spent gazing at these bright stars and I love to sit and study a cluster of stars and sketch what I see. Pushing my vision to the edge is a challenge when I am concentrating on getting the orientation of a cluster right, but I can really get to know an object by studying it this way.

My observing for this day (if there is any that I am able to do) will have to consist of the star that is closest to us: the Sun. I have to admit it is my favorite star. Many people probably think of the Sun as being steady and true. I don't ever look at it that way. I know what a variable star it is. These past several years when the Sun has been moving into and out of minimum have been a challenge to use my eyes to see what is on the disk. SOHO, SDO, and STEREO produce many awesome closer-than-I-am images, but personally observing this star from day to day is also rather awe-inspiring. Looking all around the edges of the image helps me to see if there is an active region coming around the disk. The appearance of faculae tells me there may be more to follow. Being able to watch a sunspot develop while I am observing is particularly thrilling. There have been spots that appeared and disappeared while I was observing that were not there long enough to be assigned a number. Seeing an area with a light bridge is exciting because I know the chances of seeing flare activity increase with this development.

I have also witnessed many times a "greenish-gray" color that occurs within a sunspot and extends to the area around the sunspot during times of flaring. People have asked me: are you sure there is not something wrong with your filter? I am able to corroborate these incidences with the GOES and also with my Sudden Ionospheric Disturbance monitoring set-up. The intensity of the flare also has a unique signature that I can see in my graphs. During some of the last several years, the most memorable thing I have witnessed on the Sun is the blank disk. Day after day of no spots: no spots, but something was there. The grayish dimpling that is gone now. It was so strange. I could not see this in the online images, but it was there. Many, many days of this phenomenon. I found that my sketches of it look like a smudge. The image of it is in my brain; I don't know if a camera would have picked it up, but it only appeared during the time of the deepest solar minimum. I wonder if I will ever see it again? Normally, the hardest place to observe an active area on the Sun is at the center—and no matter how I offset my focus, that grayish dimpling was there. Putting a camera on my telescope to observe the Sun is an option, but my life is so full, I would have to give up something somewhere else, and you know, we kind of like fresh bread.

Visual observing may be the way most of us begin our life-long love affair with the heavens, but it seems that it is quickly discarded as an inferior form of data collection. It is possible to collect a data point with every visual observing session, but the study of the object may suffer if this is the only reason to observe. One of the most important aspects of visual observing is that it is never routine and it never becomes just "work." The brain-eye connection is so very important. I am processing my data at the exact moment I am collecting them. Looking at R CrB my eye could somehow see something was different. Seeing the blank Sun through my eyepiece I could detect an intensity that I could not see in online images. Studying my SID graphs I can discover what effect a flare is having on the ionosphere. Baking my bread over and over again, I know exactly when it is done. ★

COYOTES AND VARIABLE STARS

MARK BRADBURY (BMK), GREENWOOD, INDIANA

Probably one of the most unusual experiences I have had as an amateur astronomer is dealing with wildlife under the stars at night. I have heard extremely loud and tumultuous commotions by owls, footsteps of deer nearby, the "jumping" of opossums on my car at an observing site, and even an occasional visit by snakes at my feet while my eyes were peering through the scope. All these and other wildlife experiences were out in the country or at specifically, designated dark observing sites. Although they startled me, I was not afraid of them. After all, these were pretty tame. However, one would think that it is safer to observe the night sky from home in a well-developed urban area: perhaps not. There is a "continuing" issue of remaining safe outdoors at night on one's back porch in the city. The problem lies with urban coyotes.

Here in Greenwood and for the most part, the metro-area of Indianapolis, as with other urban areas, coyotes seem to take up residence. On one Saturday evening in the first week of October 2007, I was on the back deck of my home observing variable stars with my 80mm, f/5 refractor scope. The time was about 7:30pm, not long after sunset but already dark. With my eye at the eyepiece, I heard "footsteps" in the grass close by. At first I thought it was deer, but then I heard another "set" of footsteps and then yet again a third "set" of footsteps. Startled as to what in the world these sounds could be, I jumped from the chair I was in, stepped only two feet inside the back door and turned on the porch light. After stepping out the door to look, there in front of me about 20 yards away were three coyotes, standing and glaring at me. They didn't leave. They just stood there with their eyes frozen on me. With my heart wildly pacing, I quickly gathered up my materials—telescope and everything else---and went indoors for safety.

Now, one event like this was surely just a "once in a lifetime" event, or so one would think. Not true. An exact duplicate event of this event happened again three weeks later on the last Saturday of October 2007. The second "visit" by these wild canines took place two hours before dawn. Again, I was observing variable stars with my scope on the back deck, just two feet away from the back door, when I heard "footsteps" very close nearby. My memory of the incident three weeks ago was fresh in my mind and sure enough I heard two more "sets" of footsteps from the same area as the last time. Startled again, I jumped up from my chair, ran into the house and turned on the porch light. What did I see? Three coyotes staring at me---and I was inside the house! This time the animals were a little bit closer than the last time: about 10-15 yards away. Man, after these experiences I seriously thought about giving up observing the night sky for good. When coyotes do not run away from humans, that means they are not afraid and can be dangerous. I decided to take a "rest" from observing the night sky for some time.

I realize that this story sounds fictional. It is not. It is all true. Consider the following: One evening in early May 2008, I was again out on the back deck on my home enjoying the night air. I wasn't observing the stars at all. It was about 10:30. All of a sudden I heard a sound which to me sounded like deer running and the sound was coming towards me. I stepped inside the house, turned on the porch light, stepped back out the door and saw two coyotes streaking through the empty field at a very fast pace towards me! Almost freaked out of my mind, I ran back inside the house, and closed and locked the door! From inside the house I heard the coyotes bark, howl, yip, and yelp so loudly it sounded like they were having a party! They were nearly at my doorstep. Again, this was all true!

The next day I called the Greenwood police and they told me I was not the only resident having problems with coyotes. Others had the same problem. During the rest of that year local police trapped some coyotes and released them somewhere in rural areas. However, either the coyotes have returned or others taken their place because I still have "visiting" coyotes outside my home from time to time. And this is the reason I no longer use a telescope to observe the night sky, at least not from home! Instead, I now use only binoculars. At the beginning of every observing session I always scan the empty field next to our home for any "wild" canine and even when I am looking through the binocs I keep my ears wide open to pick up any unusual sounds nearby.

Very recently a coyote was barking and howling outside my home - very close - and had awakened not only me but also other residents in our neighborhood. If I return to using a telescope I may have to drive to a safer rural area! ★

NORTHERN R COR BORS: THE GOOD, THE BORING, AND THE UNKNOWN

MIKE SIMONSEN (SXN), IMLAY CITY, MICHIGAN

Introduction R Coronae Borealis stars (RCBs) are a small group of hydrogen-poor, carbon-rich supergiants that decline in brightness unpredictably and rapidly by up to nine magnitudes, and remain at or near minimum light for several weeks or months, even years in some cases. It is generally accepted that the declines are the result of the formation of a cloud of carbon soot that obscures the stellar photosphere, and that this condensation takes place in matter that has been ejected from the stellar surface toward the observer.

Some RCBs exhibit more or less regular variations that may be interpreted as pulsations. The amplitudes of these changes are small, on the order of a few tenths of a magnitude, and have periods of approximately 30 days to 150 days. This pulsation appears to have no relationship to the obscuring events, and has been seen to continue through fading episodes in several cases.

Possible evolutionary tracks RCBs are intriguing because they challenge our models for stellar structure and evolution. At first, they were believed to be highly evolved post-AGB stars, but most scenarios fail to explain the hydrogen abundance or trace their evolution back to the AGB (Asymptotic Giant Branch on the Herzsprung-Russell diagram).

Two more recent ideas suggest that: 1) these may be "born again" planetary nebulae, created when the last thermal pulse is delayed to the point such that it occurs as the star reaches the white dwarf phase. If the pulse is intense enough it may re-ignite a helium burning shell and expand the star to giant dimensions, moving it to the AGB for a second time, or that 2) RCBs may be the result of the merger of helium and CO white dwarfs. The merger theory goes a long way to explaining the exotic chemical composition of these stars.

The Family Whatever their origin, this is a small group of unique, unpredictable stars, just my cup of tea! I've come to know many of them well through a decade of observations and I have subdivided the class into my own categories based on their relative activity and interest as targets for the visual

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R COR BORS
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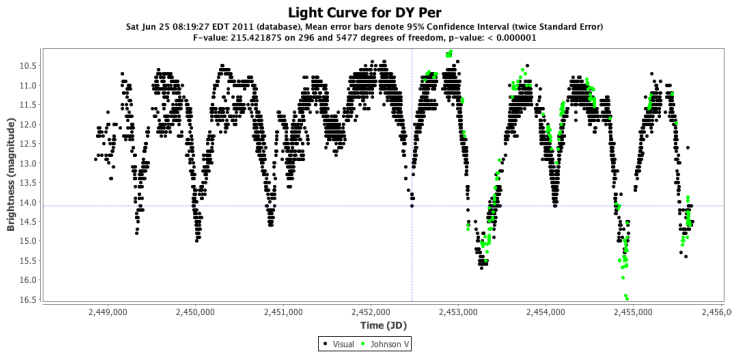
or CCD amateur astronomer or hobbyist. I call them simply the Good, the Boring, and the Unknown. Let me introduce you to the "family."

The Good These are stars that provide a lot of entertainment value for the time invested in observing them. They are quirky and unpredictable, but most importantly, they are active. You don't need to wait five years to see a fading event or some small blip in a light curve. These stars are crazy and not afraid to show it.

DY Per R.A. 02h 35m 17.07s Dec. +56° 08' 44.7" (J2000.0)
Spectral type: C4,5(R8)
Magnitude range: 10.6–<13.2 V (16.5V AAVSO)

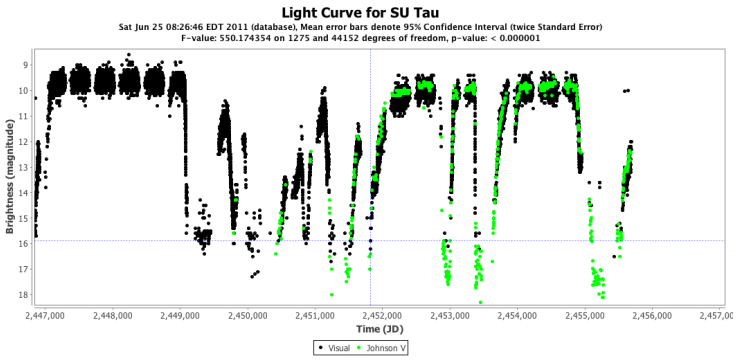


AAVSO light curve of DY Per 1992–2011

While this is certainly the light curve of an unpredictable star, the fading episodes to don't follow the typical RCB pattern. Is DY Per a special case in a class of special cases? Instead of occasional fades every few years or so, lasting months at a time, these episodes are more or less regular and spend almost no time lingering at minimum or maximum light.

For the visual observer with a 10" or 12" telescope this star is visible during all but the very faintest excursions into 15th to 16th magnitude range, and as you can see, it should soon be back up if you just wait a couple weeks. DY Per is a solid performer and always a surprise from night to night.

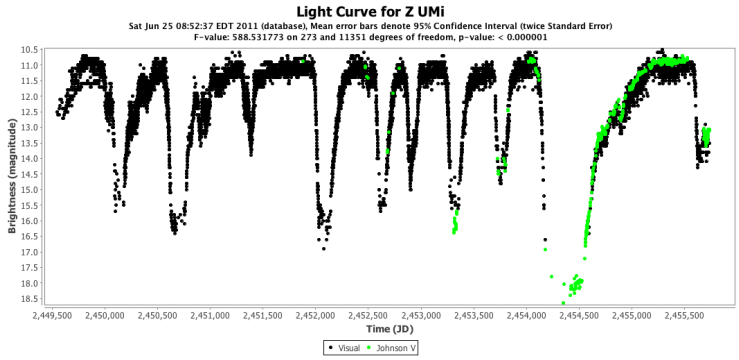
SU Tau R.A. 05h 49m 03.73s Dec. +19° 04' 21.8" (J2000.0)
Spectral type: G0-1Iep(C1,0 HD)
Magnitude range: 9.1–16.86 V (18.2V AAVSO)



AAVSO light curve of SU Tau 1987–2011

Discovered by Annie Jump Cannon, SU Tau is another entertaining star to follow. The very interesting AAVSO light curve for this one goes back to 1909. As you can see from the above light curve, SU Tau has been very active since 1994, with an extended period after an initial fade where it tried to climb back to maximum light in fitful starts but sputtered again and again. It is now recovering from the third fading episode in the last decade. As with DY Per, visual observers can follow all but the very faintest periods of this star's unpredictable cycles.

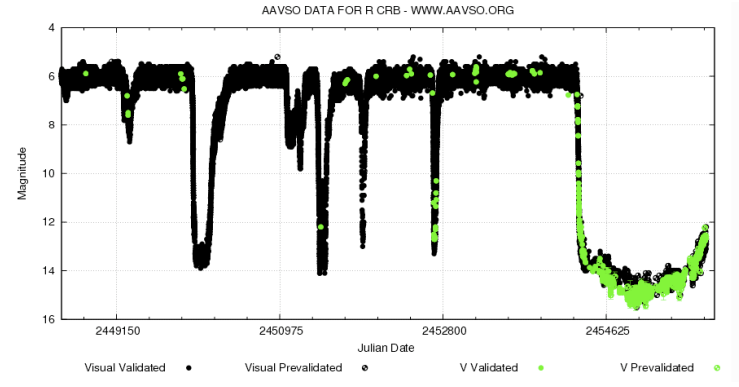
Z UMi R.A. 15h 02m 01.48s Dec. +83° 03' 48.7" (J2000.0)
Spectral type: C
Magnitude range: 10.8–17.5: V (18.5V AAVSO)



AAVSO light curve of Z UMi 1999–2011

Z UMi is another RCB that delivers a lot of action. Because it is circumpolar, the light curve is nearly continuous. As shown in this light curve, the fading episode prior to the current one was a record breaking affair, reaching an unprecedented minimum level and an extremely long, slow climb back to maximum light. After a typical interval at maximum light, Z UMi precipitously faded again and is currently recovering towards maximum. There is no guarantee it will make it to the top before sputtering or fading again, and that is what makes observing these stars on a regular basis so much fun.

R CrB *R.A.* 15h 48m 34.41s Dec. +28° 09' 24.3" (J2000.0)
Spectral type: C0,0(F8pep)
Magnitude range: 5.71–14.8 V (15.4V AAVSO)



Thirty years of AAVSO data on R CrB 1981–2011

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R COR BORS
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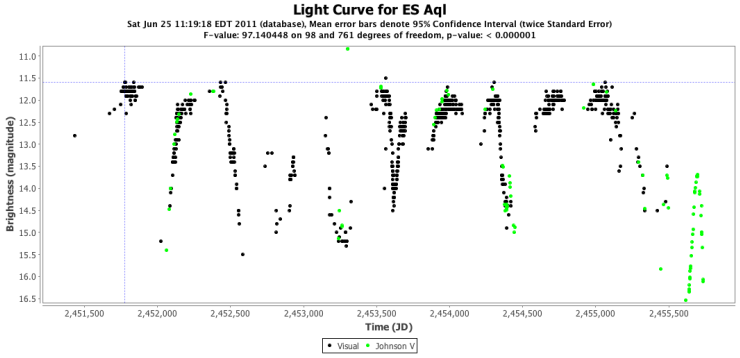
The prototype of the class, R CrB is a binocular star hovering around 6th magnitude most of the time. Then, unpredictably it fades rapidly, diving for cover in the inner sanctum at or near 14th magnitude. However, we live in interesting times, because the last fade of R CrB was one for the record books. In July of 2007, R CrB began to drop. By October it was 14th magnitude, but R CrB was only beginning to put on the show of the ages. In February 2009 observations of 15th magnitude began to come in, with no sign of a recovery. In fact, R CrB did not even get back to 14th magnitude until November of 2010. This fade was not only the deepest in recorded history, it was now the longest, and it isn't over yet!

Observations in June put R CrB around 12.2 V as it slowly makes its way towards recovery. Will R CrB make a full recovery, or have a relapse and fade again before reaching maximum light? Only time and AAVSO data will tell. No wonder this is one of the most well observed stars in the AAVSO program. You can't buy this kind of reality entertainment.

ES Aql 19h 32m 21.62s Dec. –00° 11' 30.9" (J2000.0)
Spectral type: C
Magnitude range: 11.5–<17.7 V

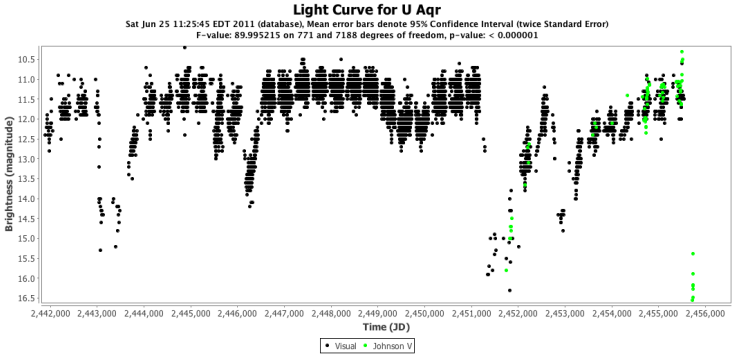


All the AAVSO ES Aql data, 1999–2011

Located on the celestial equator, this under-observed star is somewhat difficult for northern observers to monitor, including me, which is a shame because ES Aql is a great star to follow if you can. That's why I added it to my AAVSOnet queue to acquire CCD photometry of it on a regular basis. As luck would have it, just about the time I began obtaining CCD measures it went into the deepest death spiral in AAVSO recorded history, hitting 16.5V in February 2011. I watched ES Aql steadily recover to 13.7V in May only to witness another fast decline, again reaching 16.5V as I write this piece, on June 27, 2011. During this entire period I was the only one collecting data on this fascinating star.

ES Aql is another fun-to-observe, unpredictable star worth putting on your program if you can observe near the celestial equator in Aquila from your observing site. I have it on both my visual and CCD programs.

U Aqr 22h 03m 19.70s Dec. –16° 37' 35.3" (J2000.0)
Spectral type: pec
Magnitude range: 10.6–15.9 V



U Aqr AAVSO data 1976–2011

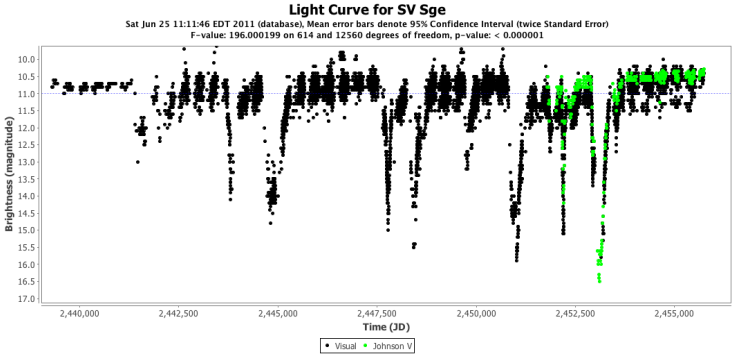
The AAVSO data for this star stretch all the way back to 1905. Not surprisingly, at minus 16 degrees declination in Aquarius, it is not a well-observed star by northern observers. The long-term nature of U Aqr's behavior seems to change each decade. From 1976 to 1986 it had 4 or five fadings, then from 1986 to 1998, it remained more or less at maximum except for a couple seasons where it averaged one magnitude fainter than maximum light. Then, in 1999, it faded to fainter levels than ever seen before and has had a decade of fitful recovery to maximum light, which is where it was when I added it to my robotic telescope queue.

Again, my beginner's luck has struck gold. As soon as we picked it up coming out of conjunction I could see it was fading to a deep minimum again, and as of right now the Krajci 35cm telescope holds the record for the faintest recorded magnitude of U Aqr in the AAVSO database, 17.2V on June 26.

Obviously a CCD target when this faint, when it creeps back into the 14th magnitude range its liable to provide an interesting subject for visual observers who can pierce the haze from mid-northern latitudes. This chapter of U Aqr is far from over and no one knows how the story will develop from here.

The Boring These are RCBs that for whatever reason just aren't very exciting to follow. They exhibit little, if any, activity and it has been years or decades since they showed any real sign of life at all.

SV Sge R.A. 19h 08m 11.78s Dec. +17° 37' 41.2" (J2000.0)
Spectral type: C0-3,2-3(R2)
Magnitude Range: 11.5–16.2 p



AAVSO data on SV Sge 1966–2011

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R COR BORS
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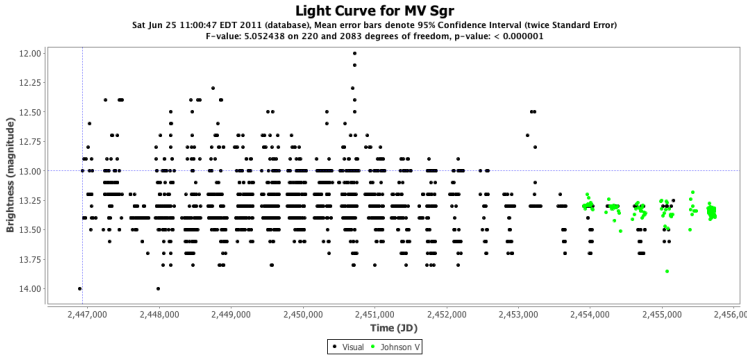
It wasn't too long ago that SV Sge was a lot of fun to monitor. It seemed to be fading and recovering fairly often, bit the last time it did anything was 2004. I've grown tired of observing it at 10.5V for years on end, but I know better than to drop it, because that is the day it will go into a tailspin and fade to record depths.

This is probably normal behavior for this star as the light curve above shows. I'm just impatient. It looks long overdue for a fade, but for now it's a yawner. When it finally does cough up a dust cloud I'll take it off the Bad list and put it back in the Good category.

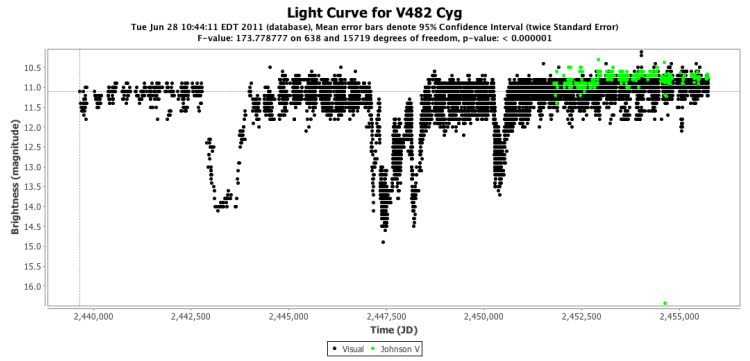
MV Sgr *R.A.* 18H 44M 31.97S DEC. –20˚ 57' 12.9" (J2000.0)
Spectral type: B2p(HDCe)
Magnitude range: 12–16.05 B



AAVSO data on MV Sgr 1987–2011

With an amplitude of 1.5 magnitudes, this light curve of MV Sgr looks a lot more like a semiregular variable than an RCB. The spectrum is of a hydrogen-deficient carbon star so it has the requisite color and composition, it just hasn't done anything since we've been monitoring it. Twenty-five years isn't long in the history of an RCB, so maybe we just need to keep an eye out for activity. So far, it hasn't been much fun.

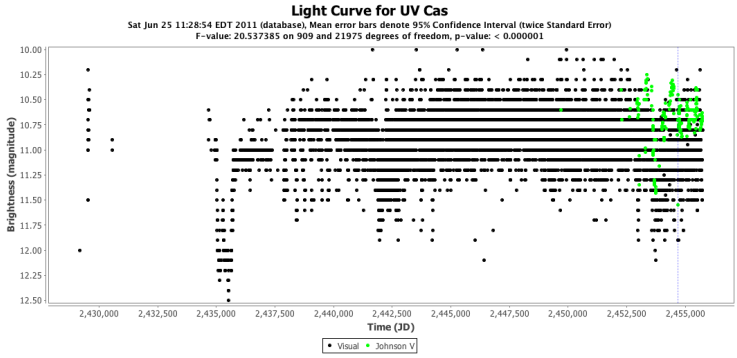
*V482 Cyg*R.A. 19h 59m 42.57s Dec. +33˚ 59' 27.9" (J2000.0)
Spectral type: —
Magnitude range: 11.8–<15.5 p



AAVSO data on V482 Cyg 1967–2011

The last fade of V482 Cyg was in 1996, three years before I started observing variables regularly. So in the time I've accumulated nearly 70,000 observations, V482 Cyg has kept me waiting, based on the promise of a fade from 11th magnitude to 13.5 in the last century. If I weren't already observing dozens of stars in Cygnus I probably would have dropped it a long time ago. All I can say is I hope the next fading event is worth waiting for, or my relationship with this bad star will suffer.

UV Cas R.A. 23h 02m 14.67s Dec. +59˚ 36' 36.6" (J2000.0)
Spectral type: F0Ib-G5Ib
Magnitude range: 11.8–6.5 p

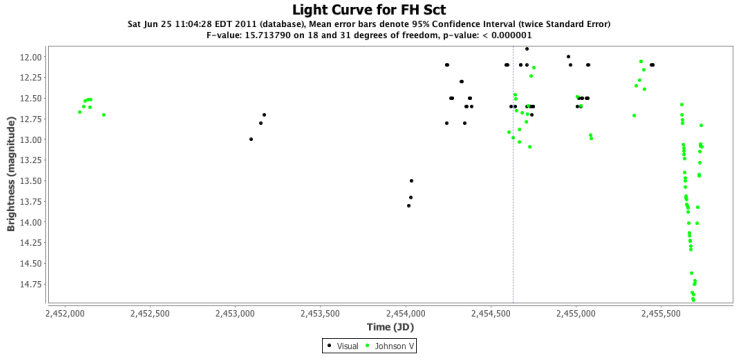


AAVSO data on UV Cas 1959–2011

I remember a couple years ago some people got all excited because UV Cas had a half-magnitude dip in its light curve, confirming what I already thought about this star. It is one of the most R Cor Boring stars in the sky. Apparently, a "deep fade" of two magnitudes 40 years ago is enough to keep some observers monitoring this RCB. Not me, I dropped it long ago.

The Unknown This category is made up of stars for which there are little or no data in the AAVSO database. These stars are ripe for the picking. No one else is watching - you never know what you might find.

FH Sct *R.A.* 18h 45m 14.84s Dec. –09˚ 25' 36.1" (J2000.0)
Spectral type: —
Magnitude range: 13.4–16.8 p



AAVSO data on FH Sct 2001–2011

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R COR BORS
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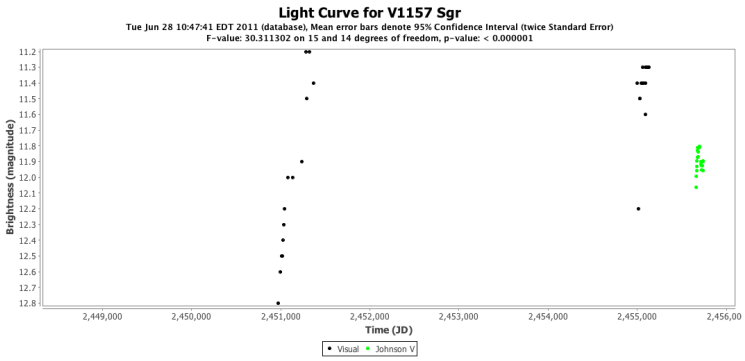
I knew next to nothing about the RCB FH Sct when I added it to my CCD program in 2009. I soon discovered it resides in the open cluster M26 in Scutum. There was no sequence for it when I began taking data, but now there are BVRI data available from the AAVSOnet telescopes and a color magnitude sequence of comparison suitable stars has been created. In 2011 I caught the first fading episode recorded in BVRI in the AAVSO database. Normally around 12th magnitude at maximum, it faded abruptly to 15V and has been steadily recovering since. There is no excuse not to observe FH Sct now. It simply suffers from neglect due to its southerly declination.

V1157 Sgr *R.A.* 19h 10m 11.83s Dec. –20° 29' 42.1" (J2000.0)
Spectral type: C(R)
Magnitude range: 11.5–<14.5 V



AAVSO data on V1157 Sgr 1998 to present

The epitome of an ugly light curve, the data for V1157 Sgr are sparse and pretty much uninterpretable, even with the addition of a few fainter-than observations not plotted here. At -20 degrees declination, this one stretches the definition of a northern RCB to the limit, but any reliable data starting right now can only improve the situation here. Amplitude, maximum and minimum magnitudes, and pretty much everything else are uncertain for V1157 Sgr. My own recent observations only range from about 12 – 11.8V, not enough to say anything for sure, except it is variable.

LT Dra is another "northern RCB" you may happen upon in the literature, but it is a constant star, not a variable, so don't waste your precious telescope time following this one.

There are not that many observers following these interesting stars regularly, so the chance to hit upon something new or unexpected is always there. That coupled with their irregular and unpredictable nature makes them fun and challenging at the same time. Add a few of these stars to your observing program and be prepared to be surprised. ★

PHOTOELECTRIC PHOTOMETRY PROGRAM UPDATE

MATTHEW TEMPLETON (TMT), AAVSO SCIENCE DIRECTOR

AAVSO PEP observers have been busy with several targets this spring, with two targets—P Cygni and epsilon Aurigae—garnering the most observations. P Cyg is the focus of an ongoing amateur spectroscopic study during 2011 (see *AAVSO Alert Notice 440*, 2011 May 17, http://www.aavso.org/aavso-alert-notice-440). Two AAVSO PEP observers, Adrian Ormsby and Erik Hoeg, made a total of ten BV-paired observations of P Cyg, providing both light and color curves for this important star. High precision photometry of this star is requested, and PEP observers are encouraged to devote some observing to P Cyg during 2011. Epsilon Aurigae is now ending its two-year eclipse, and observers Thomas Rutherford (17 J and H observations), and Erik Hoeg (two V observations) observed this star right up to the every end of the observing season. Epsilon Aurigae will be hard to observe for the next few months, but there were indications that the eclipse didn't end as predicted, and continued observations—PEP or otherwise—are encouraged!

Overall, seven PEP observers made eighty-seven observations of twenty-one different stars this past quarter. The observers were: Jim Fox, 31; Thomas Rutherford, 17; Erik Hoeg, 12; Gianni Galli, 11; Adrian Ormsby, 10; Brian Fraser, 4; and Hans Nielsen, 3. The stars were: P Cyg, 20; eps Aur, 19; FS Com, GK Com, RS Cnc, and TV UMa, 5; del Sco and W Boo, 4; FH Vir, FP Vir, and SW Vir, 3; AC Her, VW UMa, and VY UMa, 2; and IN Hya, ST Her, tau 4 Ser, V433 Oph, V441 Her, and Z UMa, 1.

In addition to bringing P Cyg into better view, the coming season also brings delta Scorpii back into our skies. This star was discovered as a new gamma Cas-type eruptive variable by Sebastian Otero in 2000. Delta Sco is not currently in the AAVSO PEP program, but we'll establish formal comparison and check stars in the coming weeks.

Clear skies! ★

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THE AAVSO WALTER A. FEIBELMAN SUITE

The Feibelman Suite is available to guests who are in the Boston/Cambridge area to perform an AAVSO-related task, that is, the purpose of their visit is to do something for or related to the AAVSO. For details about the suite or making a reservation, please visit http://www.aavso.org/news/feibelman.shtml.

AAVSO OBSERVING CAMPAIGNS UPDATE

**ELIZABETH O. WAAGEN (WEO),
AAVSO SENIOR TECHNICAL ASSISTANT**

CAMPAIGNS INITIATED SINCE APRIL 2011

Since the last Newsletter appeared, several campaigns have been initiated. These include:

Monitoring the recurrent nova T Pyx throughout 2011 eruption The campaign to observe the ongoing eruption of the recurrent nova T Pyx through this observing season (around the end of August), organized by Dr. Bradley Schaefer (Louisiana State University) and begun April 15, 2011, continues. 82 observers have contributed 73,132 visual and electronic observations—thank you all very, very much! The campaign is in support of multiwavelength photometry and is designed to gather fundamental knowledge about T Pyx both as a recurrent nova and as a possible Type Ia supernova progenitor. T Pyx reached its peak brightness of m(visual) = 6.4/m(V) = 6.378 on May 12, 2011, and is declining, reaching m(V) = 9.559 on July 17, 2011. Please follow T Pyx for as long as possible for the remainder of its observing season. Related information may be found in *Alert Notice 436* (http://www.aavso.org/aavso-alert-notice-436), *Alert Notice 437* (http://www.aavso.org/aavso-alert-notice-437), and an updated AAVSO Information Page (http://www.aavso.org/campaign-observe-t-pyx-throughout-2011-eruption).

Although the campaign itself will finish when the observing season is over, please resume observing T Pyx when it becomes observable again. The outburst will not have concluded by then, so observations will continue to be very valuable.

PEP Observing Campaign on P Cygni Ernst Pollmann of the Active Spectroscopy in Astronomy group in Germany has requested photoelectric photometry monitoring of the S Dor variable P Cyg throughout the 2011 observing season for correlation with spectra to be obtained by Ernst and his colleagues. Information regarding comparison and check stars, as well as special instructions for CCD and DSLR observers, may be found in *Alert Notice 440*, issued 17 May 2011 (http://www.aavso.org/aavso-alert-notice-440). Thank you, Eric Hoeg (HEK) and Adrian Ormsby (OAD), for your 32 observations contributed since May 17!

Request for observations of Bright Giant Variables in support of ground-based spectroscopy Dr. Steve Howell of NASA and NOAO and Dr. Travis Rector of the University of Alaska, Anchorage, requested both short-term and long-term monitoring, beginning in late May 2011, of a number of bright giant variables of diverse types for correlation with spectra. The goal of the project is to determine if the surface temperatures and radii of these stars change in a recognizable pattern over long timescales. The short-term, intensive monitoring phase of the campaign is over, but the long-term monitoring is underway and is just as important because of the long timescales the astronomers are investigating. The two lists of 22 target stars, many of which are suitable for observing with binoculars or small telescopes, and other details are given in *Alert Notice 441*, issued 27 May 2011 (http://www.aavso.org/aavso-alert-notice-441). Keep those observations coming!

Long-term monitoring of four AGN in support of ground-based spectroscopy Dr. Misty Bentz of Georgia State University requested long-term monitoring of four active galactic nuclei (AGN) July—November in support of spectroscopic monitoring she and her colleagues will be doing as part of a variability study of these galaxies. Since July 8, 2011, Teofilo Arranz (ATE) and George Sjoburg (SGOR) have contributed nine observations of NGC 6814, and George (SGOR) and Klaus Wenzel (WKL) have contributed four observations of NGC 7469. The other two AGN, NGC 1566 and NGC 7213, are far southern and NGC 1566 is not well placed currently for observing (details in *Alert Notice 443*, 8 July 2011; http://www.aavso.org/aavso-alert-notice-443). Thank you, Teofilo, George, and Klaus!

RESULTS FROM CONCLUDED CAMPAIGNS

Observing Campaign on Hubble's First Variable in M31: M31_V1 This very challenging observing campaign was announced July 16, 2010—almost exactly one year ago (*Alert Notice 422* (http://www.aavso.org/aavso-alert-notice-422). The Hubble Heritage Team, with Dr. Keith Noll, Space Telescope Science Institute (STScI), as Principal Investigator, planned to observe M31_V1—the first variable star discovered in M31 by Edwin Hubble —with the Hubble Space Telescope (HST), and needed to know the phase of this Cepheid variable. Although basic parameters were known for this 19th magnitude star, no recent photometry existed, so observations were required to generate current phase information.

Eleven AAVSO observers stepped up to the plate and obtained 214 observations of M31_V1, no mean feat with such a faint star in a very crowded field! Thanks to their efforts, HST observations were successfully carried out. What follows is a condensed version of a press release issued by NASA, ESA, and the Hubble Heritage Team at the recent meeting of the American Astronomical Society and AAVSO in Boston (full text and all images at http://hubblesite.org/newscenter/archive/releases/2011/15/image/a/).

M31_V1 HST images

Though the universe is filled with billions upon billions of stars, NASA's Hubble Space Telescope has been trained on a single variable star that in 1923 altered the course of modern astronomy.... The star goes by the inauspicious name of Hubble variable number one, or V1, and resides two million light-years away in the outer regions of the neighboring Andromeda galaxy, or M31. V1 is a special class of pulsating star called a Cepheid variable that can be used to make reliable measurements of large cosmic distances. The star helped Edwin Hubble show that Andromeda lies beyond our galaxy....

In commemoration of this landmark observation, astronomers with the Space Telescope Science Institute's Hubble Heritage Project partnered with the American Association of Variable Star Observers (AAVSO) to study the star. AAVSO observers followed V1 for six months, producing a plot, or light curve, of the rhythmic rise and fall of the star's light. Based on this data, the Hubble Heritage team scheduled Hubble telescope time to capture Wide Field Camera 3 images of the star at its dimmest and brightest light levels.

The observations are being presented on May 23 at the meeting of the American Astronomical Society in Boston, Mass.

"This observation is a reminder that Cepheid variables are still relevant today," explains Max Mutchler of the Heritage team. "Astronomers are using them to measure distances to galaxies much farther away than Andromeda. They are the first rung on what astronomers call the cosmic distance ladder."

CONTINUED ON NEXT PAGE

OBSERVING CAMPAIGNS UPDATE
CONTINUED...

> ...Edwin Hubble's observations of V1 became the critical first step in uncovering a larger, grander universe....
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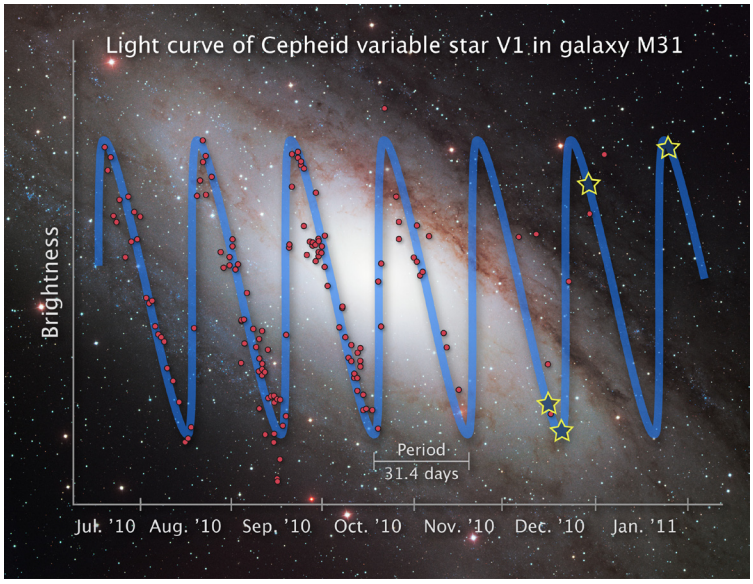
> "V1 is the most important star in the history of cosmology," says astronomer Dave Soderblom of the Space Telescope Science Institute in Baltimore, Md., who proposed the V1 observations....

(Courtesy NASA, ESA, and the Hubble Heritage Team (STScI/AURA); Acknowledgement: R. Gendler)



This illustration shows the rhythmic rise and fall of starlight from the Cepheid variable star V1 over a seven-month period. Cepheid variables are pulsating stars that brighten and fade in a predictable pattern. The illustrated graph shows that V1 completes a pulsation cycle every 31.4 days. The red dots on the graph represent observations by the American Association of Variable Star Observers (AAVSO), who partnered with the Space Telescope Science Institute's Hubble Heritage Project to study the star. The four stars on the graph denote observations made by the Hubble Space Telescope's Wide Field Camera 3.

Ten [sic] amateur astronomers from around the world made 214 observations of M31_V1 between July 2010 and December 2010, obtaining four pulsation cycles. The AAVSO study allowed the Hubble Heritage team to target Hubble observations that would capture the star at its brightest and dimmest phases.

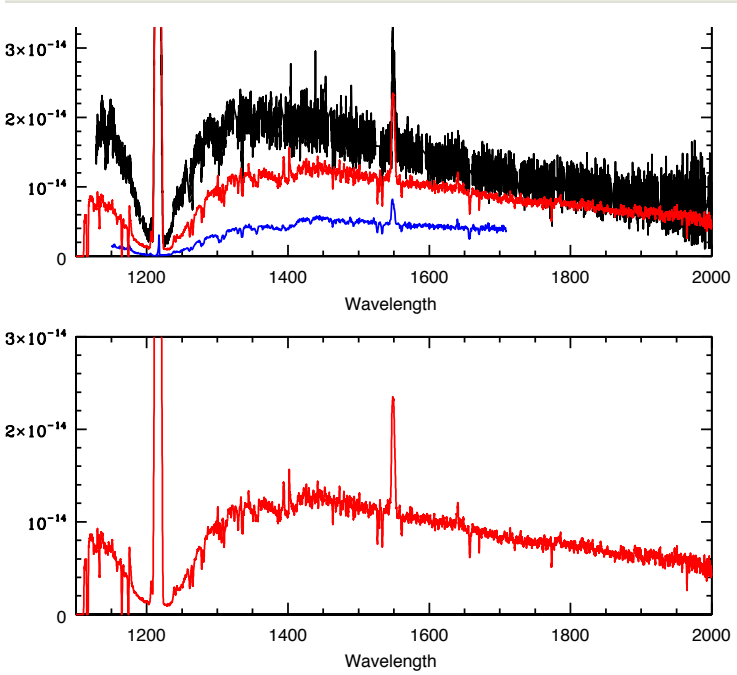
(Illustration credit: NASA, ESA, and Z. Levay (STScI); Science Credit: NASA, ESA, the Hubble Heritage Team (STScI/AURA), and the American Association of Variable Star Observers; Acknowledgement: T. Rector, University of Alaska, Anchorage)

Thank you, Gergana Belcheva (BGU), Robert Buchheim (BHU), Michael Cook (CMJA), Timothy Crawford (CTX), Shawn Dvorak (DKS), Bill Goff (GFB), Barbara Harris (HBB), Arne Henden (HQA), Richard Sabo (SRIC), Steve Smith (SSTB), and Gary Walker (WGR)!

Observations of GW Lib in support of HST observations This campaign for March and April 2011, organized at the request of Dr. Paula Szkody, University of Washington, was a real success. Nightly AAVSO observations of the dwarf nova GW Lib were requested in order to make a go/no go decision when the HST observing window opened for this object; the observations were also desired for use in the analysis of the resulting HST data (details in *Alert Notice 433,* http://www.aavso.org/aavso-alert-notice-443*; Special Notice #238.* http://www.aavso.org/aavso-special-notice-238).

Based on observations from AAVSO observers, the HST team responsible for deciding whether to permit a satellite observation to be made was able to approve Dr. Szkody's observations, and excellent data were obtained. It took a while for Dr. Szkody to have access to the data, however, as she was in Christchurch, New Zealand, at the time of their severe earthquake. Her laptop was in the science building she and colleagues evacuated when the earthquake occurred, and it was many days before she was allowed back into the building to retrieve it!

Later, Dr. Szkody wrote, "Just wanted to thank all you great observers for your observations that enabled our HST program to get the go-ahead and produce results! I've attached a pdf file of a plot of the recent (April 2011) data (the red on the bottom and in the top plot) along with our 2 past observations (the black is Mar 2010 and the blue is from quiescence in 2002). As you can see, GW Lib has still not returned to its quiescent flux in the UV i.e. the white dwarf is still hot (after 4 years!). Not sure why it's taking so long to cool but as you know, all CVs are odd in some way.... Thanks for all your help. Cheers, Paula"



Read more about these and other AAVSO Observing Campaigns on our Observing Campaigns page at http://www.aavso.org/observing-campaigns. Our sincere thanks go to all of you, our AAVSO observers, for your astronomical efforts and valuable contributions! Keep up the excellent work!! ★

JULIAN DATE / MOON PHASE CALENDARS

2,450,000 plus the value given for each date

JUNE 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 5714	2 5715	3 5716	4 5717
5 5718	6 5719	7 5720	8 5721	9 5722	10 5723	11 5724
12 5725	13 5726	14 5727	15 5728	16 5729	17 5730	18 5731
19 5732	20 5733	21 5734	22 5735	23 5736	24 5737	25 5738
26 5739	27 5740	28 5741	29 5742	30 5743		

JULY 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 5744	2 5745
3 5746	4 5747	5 5748	6 5749	7 5750	8 5751	9 5752
10 5753	11 5754	12 5755	13 5756	14 5757	15 5758	16 5759
17 5760	18 5761	19 5762	20 5763	21 5764	22 5765	23 5766
24 5767	25 5768	26 5769	27 5770	28 5771	29 5772	30 5773
31 5774						

AUGUST 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 5775	2 5776	3 5777	4 5778	5 5779	6 5780
7 5781	8 5782	9 5783	10 5784	11 5785	12 5786	13 5787
14 5788	15 5789	16 5790	17 5791	18 5792	19 5793	20 5794
21 5795	22 5796	23 5797	24 5798	25 5799	26 5800	27 5801
28 5802	29 5803	30 5804	31 5805			

Moon calendars courtesy StarDate online
http://stardate.org/nightsky/moon/

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