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Celebrating 100 years 52 1911–2011

FROM THE DIRECTOR'S DESK

ARNE A. HENDEN (HQA)

One hundred years. How many organizations do you know that have lasted this long? The Boy Scouts of America celebrated their 100th anniversary last year; the Girl Scouts will do the same next year. IBM (lesser known as the International Business Machine Corporation) celebrates their 100th in 2011. Many, many more organizations have fallen by the wayside. The AAVSO has had a long run, and is reinventing itself to meet the needs of each new generation of astronomers. Pretty cool, huh?

As mentioned elsewhere in this newsletter, we will have celebrated our 100th Annual meeting by the time that you read this. We're in a pretty solid financial state, with several active grants and generous donations from members and friends. Word is getting out about the great observations made by AAVSO observers, and we have had several recent new campaigns from professional researchers. I see this process continuing for the future, with the professional community leaning more and more on the small-telescope operator for valuable ground-based observations for their projects.

The sky has also been generous to us. T Pyx goes into outburst for the first time in forty-five years. SN 2011fe explodes in a really pretty spiral galaxy. Lots of new cataclysmic variables and weird transients are being discovered by the surveys like CRTS. If you feel that you are running out of objects to observe, you are not looking very hard! One of the neat things about surveys is that they keep finding larger numbers of those rare objects like R CrB stars or WZ Sge variables. You can set up a program now, following just one class of rare object, with a high probability that one or more of the stars will do something special within a year's time. You don't need to wait decades to see an outburst! At the same time, continuing observations of old favorites, like the centurylong light curves of many Mira variables, yields new science as theories change and predictions of behavior are made. Your observations are required for confirming these changes.

Changes are in the wind; there are always changes, and I think the ones for the AAVSO are positive and exciting. Enjoy your long nights with the upcoming winter in the northern hemisphere, or the long days to watch the new sunspot cycle for the southern hemisphere observers! Everyone can data-mine, no matter how short the nights or how poor the weather may be at home. American farmers used to use their winters to sharpen their tools and prepare for the planting season. A good idea for everyone is to take some time to look back on the past and plan for the future, whether it be a century of memories or just last year. Keep up the good work, and clear skies! **★**

Newsletter

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.

PRESIDENT'S MESSAGE

JAIME R. GARCÍA (GAJ)

S o finally the moment arrives—we are celebrating our Centenary. And this is in coincidence with the end of my term as President.

At the end of this term we will complete two years of intense work. I want to make a brief overview of what happened and tell you my wishes and dreams for the future.

One of my most fervent desires was to organize the first meeting of the AAVSO in South America and the southern hemisphere. We accomplished that in April 2010, in the Valle Grande, in western Argentina, with an attendance of over 100 people. It was also the first AAVSO meeting with simultaneous translation into another language, Spanish.

The contract of our Director, who is responsible for the scientific and administrative management of the institution, had ended and an assessment of his management was needed to offer to renew or start looking for a replacement. In the past this had been a decision made based on internal evaluations only. This time, for being more transparent and to allow us to a further evaluation, including external aspects of the image projected by the AAVSO, we

PRESIDENT'S MESSAGE CONTINUED...

decided to form a committee of professionals and amateurs from inside and outside the institution. As a result, we had an interesting report, useful not only for the Director, but also for the Council itself. Then, we offered to renew the contract with Dr. Arne Henden because their assessment was highly positive.

For the first time in the ninety-eight years of history the AAVSO had when I took office, our newsletter featured a column—this column, the President's Message—written in both English and Spanish. This was the next step, after the ongoing translation of the *Manual for Visual Observation* of Variable Stars into several languages, to the AAVSO's becoming more multilingual.

Also for the first time, we have a forum for reaching the President, with whom you can communicate directly and raise ideas and suggestions, criticism, and support to be transmitted to the Council, which is the political head of the institution. This forum also proved to be bilingual.

Now we also have a forum for variable stars in Spanish. Although it is not used too much yet, it will be improved and, certainly, will be growing strongly in the coming years.

During these two years, we added new telescopes to our network of robotic telescopes which also increased their geographic coverage. We added two Bright Star Monitors (BSM) in the southern hemisphere, one in Australia and another in Argentina, and a 61-cm telescope in New Zealand.

Another big improvement in support of our observers has been APASS (AAVSO Photometric All-Sky Survey), a survey for determining photometric standards very deeply over the entire sky. This survey and the abilities of our chart and sequence team allow

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us to have excellent comparison sequences for almost every star in our program.

The CitizenSky project has been another achievement of the last two years. Developed to study the mysterious star epsilon Aurigae, it exceeded this framework, generating a wealth of remarkable tools, such as using DSLR cameras for photometry, or the VSTAR software, which is used for the analysis of observations – and not just from the AAVSO International Database (AID) but also from other surveys such as MACHO, Kepler, and SuperWASP.

VSX and VSP, two great tools, deserve a special chapter. VSX is the Variable Star Index, a huge catalog on variable objects with direct participation of observers who can update information moderated by volunteers and by AAVSO staff. Almost everything that varies is in VSX. VSP – the AAVSO Variable Star Plotter – is the program for the automatic generation of charts and comparison sequences. VSP is good not only for variable star observing but for other astronomical observations like occultations by asteroids or even photometry of Solar System bodies.

The renewal of our website, after many years, was a demand from our members and observers, as they constantly expressed difficulty finding the information they needed for their activities. The website now looks very nice and it is very useful, too.

During these two years, my work as President has included taking part in various amateur and professional meetings, trying to show what the AAVSO is and encouraging people to join us, in different countries in Latin America. Among them, in addition to various parts of Argentina, I would like to mention Bolivia, Brazil, Mexico, and Nicaragua. I gave also some virtual conferences to other places like Nicaragua (before visiting there in person) and Colombia.

Speaking about the future of the AAVSO, our main concern in Council will be economic sustainability in a world whose complexity, in this aspect, is extremely difficult. The AAVSO, like any nonprofit, is sustained by the generosity of its members, by grants, and by the revenue from endowment funds, which are very sensitive to the global economy in general and the United States' economy in particular.

My dreams for the future, in the welfare of the Association, are to have a complete multilingual website, another international AAVSO meeting in South America, a wider network of robotic telescopes with global coverage, more tools for observers and data miners, and pretty dark skies for everyone! I would like to express my gratitude to all who helped me during this challenging but wonderful time! Special thanks to the AAVSO staff, and to fellow officers and councilors. Also, my infinite gratitude to my wife Maria Jose, my son Federico, and my daughter Dolores for their incredible support.

Ed. note: the Spanish language text of Jaime's message can be found on page 8.

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS

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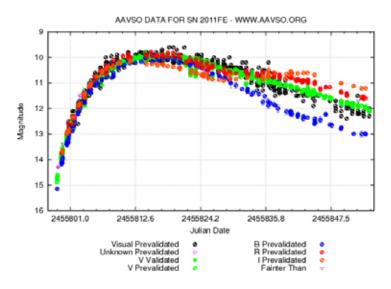
The AAVSO Newsletter is published in January, April, July, and October. Items of general interest to be considered for the Newsletter should be sent to eowaagen@aavso.org. Photos in this issue courtesy of Carol Beaman and Sara Beck.

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.

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SUPERNOVA 2011FE IN M101-A RARE TREAT! MATTHEW TEMPLETON (TMT)

On August 24, 2011, astronomers from the Palomar Transient Factory project announced the detection of a supernova in the nearby galaxy M101 (NGC 5457). The transient, initially dubbed "PTF11kly," was initially observed around magnitude 17.2, but has since risen to V = 10.0. The supernova has now been formally named "SN 2011fe." It's one of the brightest supernovae to be observed from Earth in the last twenty-five years, and promises to be a treat for both visual and instrumental observers for several weeks to come. I hope everyone able to see M101 from their locations can join in and contribute observations for the duration of this event!



SN 2011fe is known to be a Type Ia supernova, formed from the collapse of a white dwarf star in a binary system. When the white dwarf collects enough matter to reach the Chandrasekhar Limit of 1.4 solar masses, it collapses and then explodes as a supernova. Type Ia supernovae are cosmologically important because they can be used to calibrate the distances to galaxies where they occur. All Type Ia supernovae are believed to reach similar peak brightnesses, and the measurement of this peak is an important way to calibrate distances to galaxies measured by other means (such as redshift).

The last comparably bright supernova of any type was SN 1993J, a Type II supernova which reached magnitude 10.0, while the last comparably bright Type Ia was SN 1972E which reached magnitude 8.5 nearly forty years ago. All of these were overshadowed by the stupendous SN 1987A in the Large Magellanic Cloud, but supernovae this bright are rare, and I hope you get to enjoy it while you can! As of mid-October 2011, SN 2011fe is visual magnitude 12.

SN 2011fe is located at the following J2000 coordinates: R.A. 14h 03m 05.81s, Dec. +54° 16' 25.4".

The AAVSO has a comparison star sequence suitable for both visual observers and CCD and DSLR imagers. You can create your own customized charts of the field using the AAVSO's chart plotting tool, VSP.

You can also submit observations to the AAVSO using our WebObs tool, just as you would any other variable star. Please use the name "SN 2011fe" to submit data or prepare your own charts.

And be sure to enjoy the view! These don't come around very often.

Clear skies! ★







www.sbig.com



http://astronomy.swin.edu.au/sao



www.skyandtelescope.com



THE AAVSO CELEBRATES ITS 100TH BIRTHDAY!

During October 5–8, the AAVSO held its 100th Annual Meeting in Cambridge, and Woburn, Massachusetts. The AAVSO staff would like to share with you some pictures from that great meeting. The next issue of the Newsletter will include the group photo, many more pictures, and descriptions of the events.





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Top row: two of four AAVSO birthday cakes. **Second row:** historical paper session; crowd gathering for HQ dedication; member-observer-piper Ron Zissell piping "Happy Birthday" at HQ. **Third Row:** unveiling of HQ sign; guests inside HQ; Linda and Arne Henden. **Fourth row:** HQ sign unveiled by past president David Williams and director Arne Henden; cutting of cake by longtime member Owen Gingerich and past president Martha Stahr Carpenter. **Bottom row:** Mario Motta, M.D., discusses cardiovascular variable types; Owen Gingerich gives his talk on astronomical highlights of 100 years; outgoing president Jaime Garcia (on right) passes gavel to incoming president Mario Motta.





Photos courtesy of Carol Beaman and Sara Beck

TALKING ABOUT THE AAVSO

ELIZABETH O. WAAGEN (WEO) AAVSO HQ

Events—AAVSO members, observers, and friends have given or are giving presentations about the AAVSO at the following venues:

May 13, 2011—**Mike Simonsen** (SXN, Imlay City, Michigan) gave a talk called "Stand Back, We're Going to Try Science!" via Skype for the Orange County Astronomers in CA.

June 2, 2011—**Mike Simonsen** (SXN, Imlay City, Michigan) gave the feature evening talk at The Texas Star Party, "The Variable Deep Sky," about deep sky objects that vary, contain variable stars, or reside next to variable stars.

July 19, 2011—Al Holm (Columbia, Maryland) gave a presentation titled "Variable Stars: Stepping Stones To The Universe" to an audience of the general public at the Iron County Historical Museum in Caspian, Michigan. About 1/3 of his slides concerned AAVSO and amateur contributions to variable star astronomy.

August 3, 2011—**Mike Simonsen** (SXN, Imlay City, Michigan) gave a talk for the Nebraska Star Party called "Advancing Variable Star Astronomy" about 100 years of AAVSO.

September 10, 2011—John Percy (University of Toronto, Ontario, Canada) writes: "The University of Toronto's David Dunlap Observatory in Richmond Hill, Ontario, opened in 1935, at which time its 74-inch telescope was the second-largest in the world! It has had a long and rich history of research, graduate education, and public outreach, including the co-discovery of the first black hole, by Tom Bolton in 1971. By the turn of the millennium, however, its use had declined. In 2008, the university sold the property to a developer, and invested the proceeds in a new Dunlap Institute (http://www.di.utoronto.ca) to bring the Dunlap bequest into the 21st century.

"The Toronto Centre of the Royal Astronomical Society of Canada offered to continue the DDO's public education program voluntarily, with two public programs/tours each Saturday night in the summer; see <u>http://www.theddo.</u> ca). These programs include a non-technical presentation, usually by an enthusiastic professional (such as me), followed by viewing of and through the 74-inch and smaller telescopes operated by members of the RASC.

"Last summer, my presentation was on 'Action in the Sky: Variable Stars and Pro-Am Collaboration.' This year (September 10) it was, by special request of the RASC, 'A Century of Citizen Astronomy.' As you might guess, it was about the illustrious 100-year history of the AAVSO—both scientific and human aspects.

"As Aaron Price pointed out in an invited talk that he gave in Toronto in the spring, there has been a long and productive partnership between the AAVSO and the RASC (and the University of Toronto), much of which is mentioned in the centennial histories of the AAVSO and of the RASC (available on-line at http://www.rasc.ca/publications/lookingup/)."

October 21, 2011—**Mike Simonsen** (SXN, Imlay City, Michigan) will be giving a revised version of his Nebraska Star Party talk to the St. Louis Astronomical Society at McDonnell Hall, Washington University, St. Louis, Missouri.

General—Alan Plummer (PAW, Linden, New South Wales, Australia) writes: "I publicize the AAVSO, to some extent or other, in every issue of *Australian Sky & Telescope*. I have a monthly column, and do the odd (meaning 'occasional, not 'strange') feature." Alan also gives astronomy-related talks.

A Success Story—David Majors (MDAV, Morro Bay, California) writes: "The Central Coast Astronomical Society located in San Luis Obispo County, California, holds a monthly public star party at the KOA campground outside Santa Margarita Lake. As one of the Club's regulars I like to show Polaris and its companion through my 12-inch Dob. Polaris is my cue to use its Cepheid status to introduce visitors to the concept of variable stars and the existence of the AAVSO.

"At our 2010 July 30th event Hitesh Dholakia from Santa Clara was staying at the campground with his twin sons to practice astro-imaging. The result has been one of the most rewarding experiences of my 30+ years as an amateur. After a couple of hours just the hardcore bunch of us were left. While discussing the type of observing I do with one of his 12-year old sons we decided to give R CrB a try. Using my AAVSO 'D' chart the young amateur astronomer clearly and cleanly identified R CrB and we both independently estimated the star at mag 12.5—not bad for the youngster's first try with a dim star.

"A few days later after exchanging a couple of e-mails Hitesh indicated that he and his sons would be interested trying their hand at estimating variables. I contacted Dr. Aaron Price, who sent Hitesh a packet on variable stars. Next thing I know Hitesh and his sons are thinking about doing a Science Fair project on photometry. Knowing they had experience with DSLR imaging I sent them the link to the DSLR tutorial on the Citizen Sky website. After studying the tutorial they sent Dr. Price a basic procedural and having received a positive response they decided to proceed using beta Lyrae as a test case. Their first light curve shows they have expended a great deal of effort and are well on their way up the learning curve. The light curve sent to Dr. Price and I clearly shows both primary and secondary eclipses.

"Sometimes we may think we are hitting a brick wall when we give our little talks. Every so often we succeed and these experiences make all the effort worthwhile."

Let us help you spread the word! Send us information about your event (upcoming or past) for inclusion in the December AAVSO Newsletter (submission deadline November 15). Many thanks for your education and outreach efforts on behalf of the AAVSO and variable star observing! **★**

MINOR PLANET WUBBENA (10976)

We are happy to add an individual to the list of AAVSO members, observers, and friends who have been honored by the naming of a minor planet after them.

Erwin van Ballegoij of the Koninklijke Nederlandse Vereniging voor Weer-en Sterrenkunde, Werkgroep Veranderlijke Sterren reports that recently minor planet (10976) was named after Eltjo K.Wubbena, a Dutch variable star observer who started observing in 1970 and is still active. Eltjo has contributed more than 3600 observations to the AAVSO International Database (AAVSO Observer Initials WUB). He is in good company with other Dutch variable star observers similarly honored, including Georg Comello (5791 Comello,

CMG), Hendrik Feijth (7147 Feijth, FJH), and Reinder Bouma (9706 Bouma, BMU), and J. Degewey (5274 Degewij, DWG), Arie Mak (9701 Mak, MVU), Jean Meeus (2013 Meeus, MEG), H. Munsterman (12169 Munsterman, MHN), Anton Schoenmaker (5071 Schoenmaker, SANO), and Bert van Sprang (3098 van Sprang, VSU). The citation reads: "10976 Wubbena discovered 1973 Sept. 29 by C. J. van Houten and I. van Houten-Groeneveld on Palomar Schmidt plates taken by T. Gehrels. Eltjo Wubbena (b. 1947) was president of the NVWS, the Dutch popular-astronomy society, from 1975 to 1985. He observed variable stars for many years and promoted international contacts between amateur astronomers. Name suggested by H. van Woerden and A. van de Brugge."

Congratulations to Eltjo! *

A NEW TRADITION MIKE SIMONSEN (SXN)

Traditions are great. Fireworks on the Fourth of July, Easter egg hunts, turkey and dressing for Thanksgiving, and decorating the house for Christmas all help us mark the passage of time and add a sense of order and familiarity. The AAVSO has had traditions for decades also. Traditionally, the annual meeting is held in Massachusetts and the spring meeting is held somewhere else in the U.S. or abroad. Even the structure of the meetings has become familiar to those of us who have been to many.

I would like to start another tradition, the Annual AAVSO Star Party. The idea is simple. Every year we choose a major star party held somewhere in the USA and get as many AAVSO observers from around the world to show up together as possible. By choosing a different star party each year we can include more people from different regions and provide a new destination for the hard core campers who will want to go to all of them.

It shouldn't require a lot of work by the AAVSO staff or volunteers. These star parties are all well organized by the local organizing committees. All we have to do is agree which one the AAVSO will "invade" that year and use the star party's website to register.

We can observe together at night under dark skies, share tips, stories, and laughter, and during the day we can go exploring the sights around the star party. For example, the Nebraska Star Party is located close enough to the South Dakota border that you can make a day trip to Mt. Rushmore, Custer National Park, and the Badlands. NSP also organizes a rafting trip down the scenic Niobrara River each year.

To capitalize on the momentum we have from all the 2011 Centenary excitement, we've decided to kick start this new tradition by holding the First Annual AAVSO Star Party at the Winter Star Party on West Summerland Key in the Florida Keys February 20–26, 2012.

Astrophotographers and amateur astronomers come from across the U.S. and around the globe to make it a truly international event. This six-day star party includes vendors promoting their latest astronomy products, nationally recognized guest speakers, a popular "Kids Kamp," mirror-grinding lessons, and a door prize giveaway on Friday afternoon.

There are plenty of interesting sights and destinations within driving distance of the WSP. Key West and all its restaurants, bars, and charms, pre-Civil War forts, diving, snorkeling, boating, and fishing trips, an aquarium, and even a chance to swim with dolphins makes quite a list of entertaining side trips.

Be sure to register early to avoid the late registration fee assessed after November 15, 2011. You can download the registration forms and rules and regulations from the WSP website at http://www.scas.org/2012register.html.

What better way to start a new AAVSO tradition than a star party in sunny Florida in the dead of winter? In the U.S., the leaves are just beginning to turn. Soon they will be gone and the low riding Sun will throw the bare trees' long gray shadows on the snow. Wouldn't a trip to the Florida Keys to observe the southern skies do you good?

Register now, before it's too late! Then pack up your telescopes, star charts, and red flashlights. I'll see you there. \star

TAX DEDUCTIBLE DONATIONS

MIKE SIMONSEN (SXN)

Here are a few thoughts about ways to support the AAVSO:

Dues—Once dues renewal notices went out, September became a very busy time for me, sending out thank you letters for donations and sustaining memberships. I haven't had a chance to look at the final numbers, but it seems to me we had a very high percentage of people paying at the sustaining level and making additional contributions along with their dues renewals this year.

For the record, your annual dues are not generally tax deductible, unless you claim them as a professional fee. The amount you pay over the regular annual dues amount, either as a contribution or a sustaining membership, is tax deductible.

We are now saving money and trees by sending out thank you letters for contributions less than \$2,500.00 as pdf documents in email messages. If you prefer to have us mail you a hard copy we can, but unless you specifically ask we assume this will meet your needs.

TAX DEDUCTIBLE CONTINUED...

Keeping your membership up to date and performing paperless transactions over the web saves money and trees also.

Funds—We were able to fund the costs of the Olcott Cup and its new display case out of contributions from Thomas R. Williams and Michael Saladyga and matching funds from several of the AAVSO Council members.

We also created two new funds, one for travel expenses for visiting astronomers and another to cover the cost of running the Solar Section. These are now available as items in the drop down menu on the "make a donation" web page. We were already able to sponsor an astronomer to come give a talk at the Centennial Meeting in October, and there is seed money in the fund to build on to assist the next astronomer.

For the last two years we have been able to fully fund the observers in the sponsored member fund. If you are looking for a worthwhile cause to make a tax-deductible donation to, please consider this fund. Funds donated to this program pay the membership dues for those active variable star observers who want to become members of the Association but cannot afford the dues. You can also sponsor a specific observer if you know someone on the list.

Year End Giving—The last quarter of the year is also the time people tend to wrap up their philanthropic goals for the year. If you plan to donate and claim it on your next tax return, it has to be done before December 31, 2011.

Last Chance!—This year is the last year charitable IRA rollover legislation allows donors, aged seventy-and-a-half and over, to transfer lifetime gifts up to \$100,000 using funds from their individual retirement account (IRA) without undesirable tax effects.

By making a gift this year of up to \$100,000 from your IRA, you can see your philanthropic dollars at work. You are jump-starting the legacy you would like to leave and give yourself the joy of watching your philanthropy take shape.

You may contribute funds this way if :

You are age seventy-and-a-half or older at the time of the gift.

The gifts total any amount up to \$100,000 in 2011.

You transfer funds directly from an IRA.

You transfer the gifts outright to one or more qualified charities, but not to supporting organizations, or for gift annuities, charitable trusts or donor advised funds.

Pension, profit sharing, 401(k), 403(b), and other forms of retirement funds do not fall under this tax legislation.

If you have not yet taken your required minimum distribution, the charitable IRA rollover gift can satisfy all or part of that requirement. Contact your IRA custodian to complete the gift.

You should consult with your tax professional first if you are contemplating a charitable gift under the extended law. \star

WE'VE ALL BEEN THERE

BOB STINE (SRB) NEWBURY PARK, CALIFORNIA

Dear Variable Star Observing Colleagues,

By way of background, I visually observe these days using a Dob, pushing it around the sky without benefit of setting circles or other high-tech gadgetry. (OBTW, gadgetry that I love and upon which I had become somewhat dependent in the past.)

Early this morning, I observed variables in Cetus. As you probably know, this is a rather sparsely populated part of the sky with faint star patterns with which I am unfamiliar. I became puzzled early on trying to get my bearings and make the stick figure in my all-sky chart match what my eyeballs were seeing. After all, I had to know where to point the Telrad and begin zooming in. Tracing from Deneb Kaitos to Menkar, I just couldn't make sense out of what I was seeing. There was a bright star where the chart showed none. (Have you guessed where I'm going with this?) Though I had all the planets accounted for, I zoomed in anyway to make sure. Nope, not a planet.

Then suddenly one of my few remaining functional synapses connected and I realized I was looking at a very bright Mira (omicron Ceti), the flagship of variable stars. I felt silly and had a good laugh at myself. So much so in fact, that it was just too good not to share with you all, even though the joke is at my own expense! (It was also quite perplexing, I'm sure, to the coyotes, packrats, and any other desert denizens lurking nearby at 1:30 a.m.)

My apologies to Fabricius and Argelander, Olcott and Peltier, and all variable star observers, past and present, whom I consider to be my colleagues. I will try and do better!

Clear skies! ★



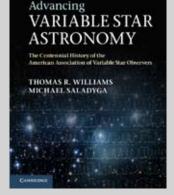
Advancing Variable Star Astronomy: The Centennial History of The American Association of Variable Star Observers by Thomas R. Williams and Michael Saladyga, published by Cambridge University Press, is now available through the AAVSO at a special reduced price.

All proceeds from your purchase made through the AAVSO 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



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

MENSAJE DEL PRESIDENTE JAIME R. GARCIA (GAJ)

 \mathbf{Y} , finalmente, llegó el momento. Estamos celebrando nuestro Centenario. Y esto es en coincidencia con el final de mi mandato como Presidente.

Al final de este mandato completaremos dos años de intenso trabajo y quiero hacer un breve resumen de lo que ocurrió en este tiempo y contarles mis deseos y sueños para el futuro.

Uno de mis deseos más fervientes era organizar la primera reunión de la AAVSO en América del Sur y el hemisferio sur. Eso lo hicimos en abril de 2010, realizándola en Valle Grande, al oeste de Argentina, con una asistencia de más de 100 personas. También fue la primera reunión de AAVSO con traducción simultánea a otro idioma, el castellano.

El contrato de nuestro Director, quien es responsable de la gestión científica y administrativa de la institución, había terminado v era necesario hacer una evaluación de su gestión para ofrecerle la renovación o buscar un reemplazante. En el pasado había sido una decisión tomada en base únicamente a evaluaciones internas. Esta vez, para mayor transparencia y que nos permita una evaluación más amplia, incluidos aspectos externos, como la imagen proyectada por la AAVSO, decidimos formar un comité de profesionales y aficionados de dentro y fuera de la institución. Como resultado, tuvimos un interesante informe, útil no sólo para el director, sino también para el propio Consejo. Luego de esto, ofrecimos renovar el contrato al Dr. Arne Henden, debido a que su evaluación fue muy positiva.

Por primera vez, en los 98 años de historia conque contaba AAVSO cuando asumí el cargo, en nuestro boletín aparece una columna, esta columna, el Mensaje del Presidente, escrito en inglés y en castellano. Éste era el paso siguiente, después de la traducción en curso del *Manual para la Observación Visual de Estrellas Variables* en varias idiomas, a los AAVSO que llegaban a ser más multilingües.

También por primera vez, tenemos un foro del Presidente, a través del cual es posible comunicarse directamente y plantear ideas y sugerencias, críticas y apoyo, que se transmitirán al Consejo, que es el órgano político de la institución. Y además, este foro también es bilingüe.

Ahora también contamos con un foro sobre estrellas variables en español, que aunque aún no es demasiado utilizado, se puede mejorar y, sin duda, tendrá un fuerte crecimiento en los próximos años.

Durante estos dos años, hemos añadido nuevos telescopios a nuestra red de telescopios robóticos también aumentando su cobertura geográfica. Agregamos dos monitores de estrella brillantes (BSM) en el hemisferio sur, uno en Australia y otra en Argentina, y un telescopio de 61 cm en Nueva Zelanda.

Otra mejora importante para apoyar a nuestros observadores es APASS (AAVSO Photometric All-Sky Survey), un survey para determinar estándares fotométricas hasta bajas magnitudes. Este survey y la capacidad de nuestro equipo de cartas y secuencias permite contar con excelentes secuencias comparación de casi todas las estrellas en nuestro programa.

El proyecto CitizenSky ha sido otro de los grandes logros de los últimos dos años. Desarrollado para estudiar la misteriosa estrella epsilon Aurigae, superó este marco, generando una gran cantidad de herramientas notables, como el uso de las cámaras DSLR para hacer fotometría o el software Vstar para el análisis de las observaciones, y no sólo de la base de datos internacional de AAVSO (AID), sino de otros surveys como MACHO, Kepler o SuperWASP.

VSX y VSP dos grandes herramientas, merecen un capítulo aparte. VSX es el indice de estrellas variables de AAVSO, un amplio catálogo con la participación directa de los observadores que se puede actualizar la información moderado por voluntarios y personal de AAVSO. Casi todo lo que varía está en VSX. VSP es el programa para la generación automática de gráficos y secuencias de comparación. VSP es bueno no sólo para la observación de estrellas variables, sino también para otras observaciones astronómicas como las ocultaciones por asteroides o incluso la fotometría de los cuerpos del Sistema Solar. La renovación de nuestra página web, después de muchos años de no hacerlo, era una demanda de nuestros miembros y observadores, que continuamente expresaban problemas para encontrar la información que necesitan para su actividad. El sitio hoy luce muy moderno y resulta realmente muy útil.

Durante estos dos años, mi trabajo como Presidente ha incluido participar en varias reuniones de aficionados y profesionales, tratando de mostrar qué es AAVSO, animando a la gente a unirse a nosotros, en diferentes países de América Latina. Entre ellos, me gustaría mencionar, además de varias partes de Argentina, a Bolivia, Brasil, México y Nicaragua. He proferido también algunas conferencias virtuales a otros lugares como Colombia y Nicaragua, antes de visitarla en persona.

Hablando sobre el futuro de AAVSO, nuestra principal preocupación en el Consejo, será la sustentabilidad económica en un mundo cuya complejidad, en este aspecto, es muy difícil. La AAVSO, como cualquier otra organización sin fines de lucro, se sostiene gracias a la generosidad de sus miembros, por subvenciones y por los ingresos provenientes de sus fondos de inversión, que son muy sensibles a la economía mundial en general y la economía de los Estados Unidos, en particular.

Mis sueños para el futuro, más allá del bienestar de la Asociación, son: tener un sitio web multilingüe, otra reunión internacional AAVSO en América del Sur, una amplia red de telescopios robóticos con una cobertura global, más herramientas para los observadores y para minería de datos, y obviamente, cielos limpios y oscuros para todos!

Quiero expresar mi gratitud a todos aquellos que me ayudaron en estos tiempos desafiantes, aunque maravillosos. Un agradecimiento especial al equipo de AAVSO y a mis colegas directivos y consejeros. Y mi infinita gratitud a mi esposa María José, mi hijo Federico, y mi hija Dolores su incondicional apoyo. *

IN MEMORIAM

MEMBERS, OBSERVERS, COLLEAGUES, AND FRIENDS OF THE AAVSO

ALLEN E. HASTINGS (HAI), AAVSO member and observer since 1973, died March 14, 2009, at the age of 99. Allen contributed 521 mostly photographic observations, in keeping with his lifelong interest in photography. After a government career working on the development of early radar, he became a cabinetmaker and organ builder and repairer. He was a church organist and Boy Scout leader, and a licensed radio operator (call sign N1AUU).



Allen E. Hastings

RICHARD D. SCHWARTZ (SRIH), AAVSO observer since 2007, died July 28, 2011, at the age of 71 of pancreatic cancer. Dick contributed 22,111 CCD observations. After obtaining his Master's degree in Divinity, he switched to astrophysics for his Ph.D. work. He developed the astronomy program at the University of Missouri at St. Louis and initiated its Bachelor of Science degree in physics with an astrophysics option. He designed and oversaw construction

of the campus observatory in 1981 that serves as both a teaching and research facility and hosts monthly public open houses; it was named in his honor upon his retirement. As well as being a successful and popular educator who introduced hundreds of students to scientific research, he had a distinguished research career as an astrophysicist, pioneering a new research area studying energetic mass-loss in young stars. He was a past member of IAU Division VI (Interstellar Matter) and Commission 34 (Interstellar Matter). Dick is survived by his wife, Eleanor McIntyre, and family.



Richard D. Schwartz

We are saddened to report that AAVSO staff member Richard (Doc) Kinne lost his mother, **BARBARA KINNE**, and his eldest foster sister, **ELIZABETH MESSICK**, in the past few months. Doc's mother was 71, and Elizabeth was 37. According to Doc, "Neither of them understood astronomy much, although my mother said, during the phone call where I told them I was moving to Boston to take the job [at the AAVSO] and tried to explain what we did here, 'I have no idea what you are saying at all, but you haven't sounded happier since college, so it has to be good!'" Our sincere condolences go to Doc, his family, and Elizabeth's family.



Barbara Kinne



Elizabeth Messick

FRANKLIN E. KAMENY (KFE) died October 11, 2011, at the age of 86 of cardiac arrest. Beginning a career in astronomy and physics, Frank observed RV Tau stars and yellow semiregular variables 1952-1954, using his photoelectric observations as the basis of his Harvard Ph.D. thesis in 1956. A US Army veteran during World War II, his science career was cut short in 1957 when he was fired from his federal job and barred from future federal service because of his sexual orientation. He became a pioneer in the struggle for gay rights and was involved in many issues leading to just and equitable treatment of all people, regardless of sexual orientation, most notably the removal of homosexuality from the American Psychiatric Association's manual of mental disorders. Frank was reconnected with his astronomy past by the AAVSO's Matthew Templeton and Richard (Doc) Kinne. Matt found Frank's thesis in the AAVSO library, had the 547 observations digitized and included in the AAVSO International Database, learned that Frank had published nothing further - which was puzzling - and on investigation learned his story. He shared Frank's story with Doc, who is active in gay rights issues, and Doc was able to arrange a meeting with Frank in Washington and talk with him about his astronomy past. Doc writes: "In taking his Ph.D. at Harvard in the 1950s Frank [had] strong memories working with the giants of the field - Harlow Shapley and Bart Bok specifically, as well as Dr. Cecilia Payne-Gaposchkin, his thesis advisor. He also [remembered] Margaret Mayall working in the Harvard Observatory at the time along with Dr. Dorrit Hoffleit, and in his thesis he thanked Margaret for providing assistance. During our dinner I brought with me his thesis to sign for our Library, and modern light curves of his thesis stars. He was visibly moved, saying to me that he'd not looked at the thesis in decades, and a door that he thought had been closed forever I'd just reopened for him." Frank was honored by federal and local leaders and institutions in many ways over the years for his fundamental contributions to human rights.

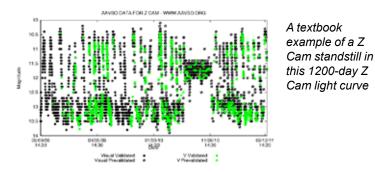


Frank Kameny (on left) with AAVSO staff member Richard Kinne in 2009

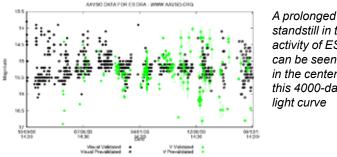
Z CAMPAIGN UPDATE—SEPTEMBER 2011 MIKE SIMONSEN (SXN)

T's been two full years since the start of the Z CamPaign. The response to this campaign and the feedback from observers has been more than I could ever have hoped for. I would like to extend my personal thanks to all of you who have been supplying the essential data to realize the goals of this project. I will summarize what we have found so far, point out some interesting stellar behavior, and present the revised list of Z Cam stars to follow for the next year.

Bona Fide Z Cams-Stars that we have determined to be bona fide Z Cams with obvious examples of standstills in the long term light curves are Z Cam (the prototype system), WW Cet, RX And, TZ Per, HL CMa, AT Cnc, SY Cnc, Leo 5, AH Her, UZ Ser, EM Cyg, VW Vul, and HX Peg.



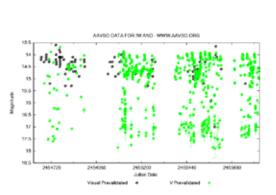
Since the last update F. A. Ringwald and Kenia Velasco, from California State University, Fresno, published a paper, The Orbital Period and Variability of the Dwarf Nova ES Draconis, which reveals ES Dra as another Z Cam star whose most recent standstill was hiding there in the AAVSO data from the last ten years. So we've added this star to the list of bona fide Z Cams.



standstill in the activity of ES Dra can be seen here in the center of this 4000-day

All these stars will remain on the campaign list indefinitely. Please continue to cover them on a nightly basis. After all, one of the aims of the Z CamPaign is to study the long term behaviors of these quirky dwarf novae.

The IW And stars-IW And, V513 Cas, and V849 Her look like cousins or sisters. They all exhibit some sort of quasi-periodic, quasi-eclipse-like curves. The vastly improved coverage they have received helped to reveal this unusual behavior and remains one of the Z CamPaign's most noteworthy serendipitous discoveries. In the spring, Steve Howell and Paula Szkody from NASA Ames Research Center and the University of Washington, respectively, were able to obtain several nights of spectroscopy and the preliminary results are pretty exciting. Interesting enough that I can't let the cat out of the bag. Please continue your excellent, extensive coverage of these stars for the next year.

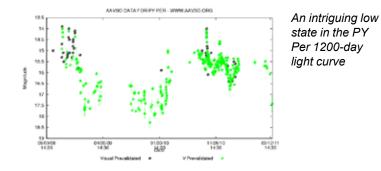


The peculiar behavior of IW And in the last 1200 days. This light curve also shows the effect the Z CamPaign has had on the amount and quality of data being acquired for this star since its inception.

The Imposters—Stars that have been dropped from the campaign because there is no evidence of standstills in their decades-long light curves are KT Per, AM Cas, FO Per, BI Ori, CN Ori, SV CMi, AB Dra, V391 Lyr, V344 Ori and V1363 Cyg.

Although no longer campaign targets, most of these are still excellent CVs for visual observers to continue long term monitoring. V344 Ori is a little studied UG with rare outbursts and V1363 Cyg is an unusual CV worthy of a lot more attention. But they are not UGZs.

Needs More Observations-PY Per has been somewhat neglected and has one of my favorite light curves in the whole bunch. It looks rather like the VY Scl curve, but not quite. The middle of this 1200-day curve seems to show an extended low state. Perhaps there is something to the relationship between NL, VY, and UGZ type stars. I would like to see more emphasis put on acquiring data for this star.



New Targets-I've added a few new stars to the program for 2012. Besides the aforementioned ES Dra, these include a couple Hamburg Survey CVs that show some promise of being UGZ, HS 0139+0559 and HS 0642+5049, as well as a couple under-observed CVs in Perseus, V368 Per and V392 Per. UY Pup is so close to BX Pup in the sky and north of it at -12 degrees declination that I added it to the list also. Two intriguing stars in Aquila have been added, V991 Aql and V1101 Aql. I began observing them last year with the AAVSOnet telescopes and they show some promise. They are also relatively bright targets.

Z CAMPAIGN UPDATE CONTINUED...

The Z CamPaign List for 2012—Now the campaign target list is 37 stars from 0 hours to 23 hours, with an unfortunate gap in the 11–14 hour spring sky.

	-		01		•	0 1
	Name	RA (2000)	Dec (2000)	Max	Min	Туре
1	WW Cet *	00 11 24.77	-11 28 43.2	9.3V	15.7V	UGZ
2	V513 Cas	00 18 14.9	66 18 14	15.5p	<17.2p	IW And?
3	IW And	01 01 08.91	43 23 25.8	14.2p	17.4p	IW And?
4	RX And*	01 04 35.54	41 17 57.8	10.2V	15.1V	UGZ
5	TW Tri	01 36 37.0	32 00 40	13.3p	17.0p	UGZ:
6	AY Psc*	01 36 55.46	07 16 29.3	15.3V	17.0V	UGZ+E
7	HS 0139+0559	01 41 39.8	06 13 48.0	15.2	_	UGZ:/NL:
8	TZ Per*	02 13 50.91	58 22 51.9	12.3v	15.6v	UGZ
9	HS 0229+8016	02 35 58.0	80 29 46	13.7	15	UGZ:/NL:
10	V368 Per	02 47 32.6	34 58 28	15.2p	<17.5p	UGZ:
11	PY Per	02 50 00.1	37 39 23	13.8p	16.5p	VY:/UGZ:
12	V392 Per	04 43 21.37	47 21 25.8	15.2p	<17.5p	UGZ:
13	HL CMa*	06 45 17.2	-16 51 35	11.0v	14.5v	UGZ
14	HS 0642+5049	06 46 19.6	50 45 48	15.6		UGZ
15	WZ CMa	07 18 49.19	$-27\ 07\ 43.2$	14.5p	18.3p	UGZ:
16	UY Pup	07 46 31.24	$-12\ 57\ 09.0$	13.5V	15.8V	UG
17	BX Pup*	07 54 15.58	-24 19 36.5	13.8V	18.0V	UGZ
18	Z Cam*	08 25 13.18	73 06 39.2	10.5v	14.8v	UGZ
19	AT Cnc*	08 28 36.92	25 20 03.0	12.7B	16.2B	UGZ
20	SY Cnc*	09 01 03.34	17 53 56.1	11.1V	14.5V	UGZ
21	Leo5*	10 28 00.11	22 03 33.4	15.2CV	17.7CV	UGZ+E
22	ES Dra*	15 24 36.54	62 11 27.1	13.9p	16.3p	UGZ
23	V849 Her	16 35 45.7	11 24 58.0	15.0p	16.0p	IW And?
24	AH Her*	16 44 10.01	25 15 02.0	11.3v	14.7V	UGZ
25	V426 Oph	18 07 51.69	05 51 47.8	11.5V	19.4V	UGZ:/DQ:
26	UZ Ser*	18 11 24.8	-14 55 34	12.4V	17.2V	UGZ
27	HS 1857+7127	18 57 20.4	71 31 19	13.9v	17.2V	UGZ:+E
28	V868 Cyg	19 29 04.4	28 54 26	14.3p	<17.8p	UGZ:
29	V1505 Cyg	19 29 49.0	28 32 54	15.2p	<17.5p	UGZ:
30	V991 Aql	19 35 34.84	06 33 45.8	14p	16p	UGZ:
31	EM Cyg*	19 38 40.11	30 30 28.3	12.5v	14.4v	UGZ+E
32	FY Vul	19 41 29.95	21 45 59.0	13.4B	15.3B	UGZ:
33	V1101 Aql	20 13 04.07	15 35 46.8	14.3V	14.7V	UGZ:/CV:
34	VW Vul*	20 57 45.1	25 30 26	13.1B	16.27B	UGZ
35	HS 2133+0513	21 35 59.3	05 27 00.0		16.9V	UGZ:/NL:
36	V1404 Cyg	21 57 16.4	52 12 00	15.7p	<17.7p	UGZ:
37	HX Peg*	23 40 23.70	12 37 41.7	12.9V	16.6V	UGZ

* Bonafide Z Cam type

PHOTOELECTRIC PHOTOMETRY PROGRAM UPDATE MATTHEW TEMPLETON (TMT), AAVSO SCIENCE DIRECTOR

As I type this report (2011 September 15), our webmaster Will McMain just demonstrated the test version of PEPObs, and PEPObs will be online again and available to observers by the time you read this. We thank all of the PEP observers for their patience and look forward to seeing more submissions in the upcoming months!

During the past quarter, PEP observers continued making regular observations of several stars. Since 2011 July 1, seven observers made a total of 118 PEP observations of twenty-two different stars. The most popular target of the past three months by far has been P Cygni (39 observations), with observer OAD (A. Ormsby) contributing a number of B and V pairs. P Cygni is the subject of an ongoing campaign announced in *AAVSO Alert Notice 440* (2011 May 17), and we encourage PEP observers to contribute if possible. Other stars with more than one observation include: V441 Her (12), epsilon Aur (10), W Boo (9), ST Her (9), V832 Cyg (6), AC Her (5), V395 Vul (5), V2048 Oph (5), V395 Vul (5), V Boo (3), V533 Oph (2), zeta Aur (2), and tau4 Ser (2). The tally of PEP observations since July 1 is: CCB (39), OAD (36), FXJ (22), UIS01 (9), RTH (8), HEK (3), and PEI (1). Observers UIS01 (J. Martin) and RTH (T. Rutherford) also made multicolor observations, with T. Rutherford continuing his long-term J and H band monitoring of epsilon Aurigae.

Although the epsilon Aurigae eclipse has ended, observations of this star are always worthwhile since it varies outside of eclipse due to pulsations of the primary star. There are also a number of other very deserving targets, particularly Betelgeuse, which is too bright for Bright Star Monitor. Betelgeuse has been neglected by photometrists for several years but remains a worthwhile target, and I encourage its renewed observation.

Clear skies! ★

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Subscribe online to receive AAVSO *Alert Notices* and *Special Notices* directly to your email's inbox. Stay on top of stellar activity and get detailed information on current and upcoming observing campaigns by visiting <u>http://www.aavso.org/observation-notification</u> to subscribe today!

AAVSO OBSERVING CAMPAIGNS UPDATE ELIZABETH O. WAAGEN (WEO) AAVSO SENIOR TECHNICAL ASSISTANT

It has been a very busy few months for observing campaigns! Through September 2011, several new campaigns have been initiated, and numerous ones previously announced are continuing. Please see the AAVSO Observing Campaigns page (<u>http://www.aavso.org/observing-campaigns</u>), *AAVSO Alert Notices* (<u>http://www.aavso.org/alert-notice-archives</u>), and *AAVSO Special Notices* (<u>http://www.aavso.org/special-notice-archives</u>) for full details. Highlights of some of these campaigns include:

The bright star epsilon Aur has emerged from its most recent eclipse that began in August 2009. A BVRIJH light curve for August 2010–August 2011 can be viewed at <u>http://tinyurl.com/epsaur</u>. Even though the main eclipse is over and eps Aur has returned to visual magitude 3.0, observations for at least the rest of 2011 are needed in order to more precisely define 4th contact, and to characterize the magnitude of out-of-eclipse variations (~0.1 mag in V). Information on the latter will be helpful in comparison with planned post-eclipse observations with both the CHARA Array MIRC imager and the IRTF SpeX infrared instrument. Over 15,500 observations have been contributed by more than 615 observers – many via the Citizen Sky project (<u>http://www.citizensky.org</u>) - through September 2011! (*AAVSO Special Notice #246*)

In July, Dr. Misty Bentz (Georgia State University) requested observations of four active galactic nuclei (AGN) for a study of variability in these sources by the Southern Telescope AGN Reverberation Experiment (STARE) Collaboration. Their primary goal was the measurement of the mass of the central black hole in each of these objects. She requested BVRcIc filtered photometry through October of NGC 6814, NGC 7213, NGC 7469, and NGC 1566 in support of a spectroscopic monitoring campaign to run concurrently using the SMARTS 1.5-meter telescope at CTIO in Chile. Coverage on these AGNs has been as follows: NGC 6814 (729 observations from 8 observers), NCC 7213 (97/2), and NGC 7469 (843/13), and NGC 1566 (8/2) through September 30, 2011. (AAVSO Alert Notice 443)

In August, following their very successful multiwavelength observing campaign on the dwarf nova SS Cygni in 2010 April, Dr. James Miller-Jones (International Centre for Radio Astronomy Research, Curtin University, Perth, Western Australia) and colleagues organized a follow-up multiwavelength campaign on SS Cyg searching for more evidence of a radio jet following outburst. For their observations to be successful, AAVSO observers had to catch SS Cyg when its outburst was just beginning and report that information to the AAVSO immediately so it could be relayed without delay to the astronomers, who could in turn trigger radio observations at multiple sites. Their first possible observation date was August 25–26, 2011. SS Cyg cooperated beautifully by going into outburst on August 23. The rise to maximum and the entire outburst were very well covered by AAVSO observers—1,673 observations by 85 observers—and Dr. Miller-Jones and colleagues were able to obtain data which they are now analyzing. (*AAVSO Alert Notice 445*)

In September, as part of her ongoing research on the white dwarf in WZ Sgetype cataclysmic variables, Dr. Paula Szkody (University of Washington) requested the help of AAVSO observers in monitoring V455 And in support of Hubble Space Telescope ultraviolet spectroscopic observations. AAVSO observers provided excellent and timely data that allowed the HST observations to go ahead and will be used in analyzing the HST data obtained. (*AAVSO Alert Notice 448*)

In September, the campaign organized by Dr. Bradley Schaefer (Louisiana State University) to observe the recurrent nova T Pyx throughout its outburst resumed in earnest as T Pyx emerged from solar conjunction and became more widely observable again. Since its outburst on 2011 April 14, T Pyx has been very well monitored by visual and instrumental observers who can reach –32 degrees—over 75,000 observations have been submitted to the AAVSO International Database by more than 90 observers! Arto Oksansen (OAR) was able to monitor it throughout July and August despite its proximity to the Sun. As of October 1, T Pyx was CCD (V) magnitude 11.3. (*AAVSO Alert Notice 437, AAVSO Special Notice #244*)

In September, Dr. Gregory Sivakoff (University of Alberta) requested observations of the X-ray binary star MAXI J1836-194 as part of the Jet Acceleration and Collimation Probe of Transient X-ray Binaries (JACPOT) Collaboration study of stellar radio jets from compact binaries. Continuing AAVSO observations were requested for correlation with ongoing X-ray and radio observations of this object, which is probably a stellar black hole binary system. (*AAVSO Special Notice #253*)

In September, Dr. Bradley Schaefer (LSU) requested fast time series of SN 2011fe, the very bright Type Ia supernova discovered in M101 in August, over a period of several weeks to attempt the detection of fast optical variations in supernova light. (*AAVSO Special Notice #256*) For more on this important supernova, please see the article by Dr. Matthew Templeton in this newsletter.

Sincere thanks go to each observer who has made observations of these campaign targets. Whether you have made one observation or thousands, you have helped make these professional research projects possible and successful. The astronomers are grateful to you and so is the AAVSO. Keep up the excellent work! **★**

THE AAVSO WALTER A. FEIBELMAN SUITE

The Feibelman Suite is available to guests who are in the Boston/ Cambridge area to perform an AAVSOrelated 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 <u>http://www.aavso.org/</u>walter-feibelman-guest-suite.

JULIAN DATE / MOON PHASE CALENDARS 2,450,000 plus the value given for each date

SEPTEMBER 2011

Sun Mon Tue Wed Thu Fri Sat 1 2 3 5806 5806 5808 5818 5812 5814 5815 5815 5817 5818 5819 5821 5821 5822 5821 5822 5821 5822 5821 5822 5821 5822 5821 5822 5821 5822 5821 5822 5821 5822 5822 5821 5822 5821 5822 5821 5822 5821 5822 5824 5829 5829 5829 5834 5834 5834 5834 5834 5834 5834 5834 5834 5834

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

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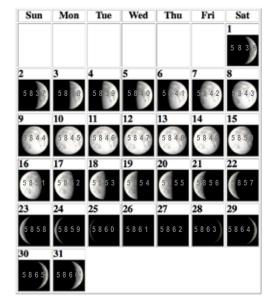
Annual:	Adul	t				US \$75.00
	Asso	ciate (Un	der 21)/	Pension-Incor	ne Limited	US \$37.50
Sustaining:		-				US \$150.00
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All applicants please add a one-time application processing fee of US \$10.00.

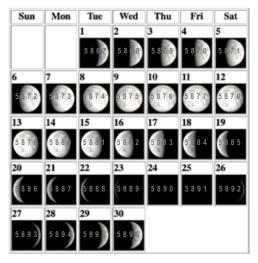
Full Name:						
Full Address:						
City	State/Province					
Zip/Postal Code	Country					
Telephone	Fax	Email				
Age Birth Date	Vocation					
Telescopic Equipment						
Astronomical Experience(if any)						
How did you learn about the AAVSO?						
·						

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OCTOBER 2011



NOVEMBER 2011



See the next page for important information about membership renewals and contributions.

MEMBERSHIP RENEWAL

On this page is a copy of the AAVSO membership renewal form for 2012. You may also renew your membership online. Safe and secure online payments are possible by visiting http://www.aavso.org/membership-renew. If your postal or email address has changed, please also take a minute to update your personal profile online. Simply click "User login" at the upper right of the home page, then go to "My account." Please note: We are transitioning from charging membership dues from the fiscal year (October 2010–September 2011) to the calendar year. If you paid dues for 2010–2011, you will be charged for the rest of 2011 (October–December) plus all of 2012. The prices listed for 2012 have been updated to reflect this. This is a one-time update and does not reflect a change in the price of our membership dues. In addition to your dues, your contributions to the AAVSO further support the organization's activities and are very much appreciated. Also, on the next page you will find descriptions of the various funds to which you may contribute.

AAVSO Membership and Subscriptions 49 Bay State Rd Cambridge, MA 02138-1203 Address Service Requested Name Address City State/Province Zip/Postal Code	2012 Membership Dues Renewal Form Membership Type (please check one):										
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						Name on card:Signature:					
						*If the billing address for this credit card is different from your address above, please provide it here:					
						Billing Address	City				
State/Province Zip/Postal Code	Country										
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AAVSO Building Fund: Contributions to this fund will be used to replenish the Endowment, to refurbish the building, and to cover other costs associated with the purchase of 49 Bay State Road, Cambridge, Massachusetts. We expect the new Headquarters to meet the needs of the AAVSO for decades to come, with sufficient space for growth, for safeguarding our century-long archives, and for giving us the opportunity to hold meetings and workshops at Headquarters.

Janet A. Mattei Research Fellowship Fund: Contributions to this fund help to bring a visiting scientist, postdoctoral researcher, or student to AAVSO Headquarters to perform research using the AAVSO International Database with the goal of disseminating the results throughout the astronomical community.

Margaret W. Mayall Assistantship Fund: Established in honor of the former Director of the AAVSO on the occasion of her retirement in 1974, this fund is used to hire summer research assistants to carry out various important technical projects of the organization.

Member Sponsorship Program: Contributions to this fund go toward paying for the membership dues of an active observer who otherwise would not be able to become a member of the AAVSO. The recipients are chosen by the Director based on the quality and number of observations submitted to Headquarters and the perceived benefit of membership to the observer.

AAVSO General Fund: Contributions to this fund help in the operation of the AAVSO, enabling us better to serve the needs of our members and the astronomical community.

If you wish to contribute to one or more of these funds please fill in the amount on the appropriate line on your renewal form and include it in the total. *All contributions are tax-deductible in the USA*.

You may also donate online at: <u>http://www.aavso.org/support-aavso</u>

Thank you for your support of the AAVSO!