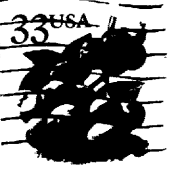
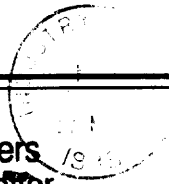




Newsletter of the Pomona Valley Amateur Astronomers

Amateur
astronomers
just get better
looking...



Janis Seaton

If you haven't payed your \$27 dues then you are overdue.

Volume 19 Number 12

nightwatch

December 1999

President's ADDRESS

The final days of the year are coming. In this most festive time we should gather together to regard warmly our fellow members and amateur astronomy. Whether your interests are in listening to professional and amateur astronomers talking about their projects and expertise in the general meetings or to observing the heavens first hand with your telescope, we all share a binding interest in the heavens above. We are going to share our company and friendship in a holiday dinner. The cost is reasonable and the occasion could not be better. Please look further in the newsletter to get details. Several members have contacted me to get a place on the Mt. Wilson 60" telescope. Do not be afraid of missing this event. I am still working on the details with hopes that we can get in somewhere in the spring. As details become available I will let everyone of you know the price and date. I am currently looking into a possible tour of the solar observatory that is run by Cal State Northridge. No date or time is known presently.

The star party for December 4 th will be in Death Valley. Please call the hot line for further details. The alternate star party site (for those of us who cannot or will not travel such distances) will be at Yesterday Ranch. Your president will try to make the latter site his last star party of the Millennium.

A final note for those of you who perhaps know less than you want about certain systems of measurement. Bob Branch mentioned in his review of a new solar filter material that the optical density of the before mentioned material was ND 5. ND, or the neutral density factor is a logarithm. Thus, the attenuation power of an ND 5 filter is 100,000 . The ND 3.5 filter that is for photography has an attenuation power of

about 3162. The reason that Bob cautioned against using the photography ND filter for visual use is that 32 times more eenergy will pass through that filter (and into your poor over burdened eye). We can now easily see why you should use the proper filter. ALWAYS EXERCISE CAUTION WHEN VIEWING THE SUN THROUGH YOUR TELESCOPE. For those of you who are inclined to solving problems of this sort, the apparent magnitude of the Sun as viewed through the filter can be calculated directly.

Roy Schmidt

PVAA General Meeting 22 October 1999

Announcements

An Evening on Mt. Wilson. We are still working on setting a date for a visit early next year.

Tour of 40 inch Reflector. San Diego State has tours available of its facilities on Mt. Laguna – about 150 miles south of here. There is a campground nearby that we may

PVAA Events Calendar

Month	Star Party	General Meeting	Board Meeting
December	4	17	10
January	8	21	28
February	5	18	25
March	4	17	24

reserve for our stay overnight.

Cal State Northridge Solar Observatory. In response to the participation of our tour of the Big Bear Solar Observatory, we are now attempting to arrange a tour of the facilities run by Cal State Northridge. More details to come.

November Star Party. The next Star Party will be on Nov 6 at Yesterday Ranch.

On the Internet. Check out the Internet for websites relating to changes of a Foucault Pendulum during a solar eclipse.

November General Meeting Speaker. Randy Fear will discuss the goals of the Big Bear Solar Observatory.

Member Participation

John Brock described his stay at Observers Inn outside Julian (northeast of San Diego).

It is a cozy Bed & Breakfast complete with telescopes – 12, 14 & 16 inch Cassegrain.

Roy Schmidt shared his Journal of San Diego History that included pictures and history of the construction of the 200" Hale telescope.

Dave Gardner reminds us that he has items for sale – patches, pins and planispheres. A price list is available. There are also things to loan – a 10" and two 8" telescopes.

Dave Gardner also asked for help from any members with the Valley Vista School Star Party on November 12. Please call him for info.

Jack Gardner supplied information about the Halloween Star Party.

What's Up?

Bob Branch detailed the upcoming events of November 15. Mercury will transit the Sun, making first contact at 1:11 p.m. Similar to observing sunspots but they will appear much darker. The event will occur in the upper left quadrant for 59 minutes and was last visible from North America 26 years ago. Viewing is best with a good refractor telescope – use your regular solar observation setup.

Solar flares in the year 2000 were also discussed because they will become more common as we approach solar max. These can create problems with increased particle bombardment and magnetic disturbances. These may cause outages in power grids and electrolysis in pipelines. Astronauts in orbit may experience increased radiation. On a positive note, the Aurora Borealis will be of greater intensity.

Ron Hoekwater related information about the Leonids from David Asher in Sky and Telescope. His estimation for peak sightings begins at 6:08 pm on Nov 17 until the morning of Nov 18. He estimates this year's quantity to be similar to those of 1833 or 1966. Last years estimate was approximately 100 / hour. Best viewing of faint meteors will be after midnight because the moon sets about 1am. Go somewhere dark and don't forget your chaise lounge.

Presentation of the Evening.

Todd Hansen of the Riverside Astronomical Society gave a talk about the scale of our solar system. His demonstration was based on Guy Ottwell's 1000-Yard Model. The most memorable data shared was that the Earth's density is the equivalent to two Chevy Suburbans crushed to the size of a kitchen stove while the mass of Jupiter is 2 ½ times the mass of all the other planets put together and has the density approximately equal to that of a large bag of water. With a soccer ball as a model of the Sun, Mercury was the head of a pin 10 yards away. Venus and Earth were but peppercorns

..PVAA 24 HR. Hotline.

Get the latest news on the star party, club meetings, special events and astronomy happenings.call 909/985-1684

Visit or website at:

<http://www.cyberg8t.com/patrick/PVAA.htm>

PVAA Officers and Board

Officers

President.....Roy Schmidt.....909/980-1867
 Vice President..Joe Hillberg.....909/985-5617
 Secretary.....Claire Stove.....909/988-9747
 Treasurer.....Jack Gardner....909/626-2665
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Directors

Nightwatch.....Ray Magdziarz....909/626-8303
 Membership..Jack Gardner.....909/626-2665
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 Programs.....Bob Branch.....909/982-8015

with the Earth 26 yards from the soccer ball/Sun. Mars was another pin-head at 40 yards radius and the rest of the planets were various beans and nuts extending outside the confines of our hall and very hard to see at night. The nearest star would still be 4000 miles away.

Todd also entered the debate concerning Pluto's standing as a planet. Various moons and asteroids were compared, and Pluto was 3 times bigger than the largest asteroid.

On January 15, John Dobson will be the key speaker at Riverside City College, room 134. Contact the Riverside Astronomical Society for more details.

John Stover

November Star Party

The seeing was exceptionally steady at Yesterday ranch for the November Star Party. However, the transparency could have been better. This combined with the fact both Jupiter and Saturn were near opposition, made it a night for planetary observing.

When I arrived, about 5:00 PM, Ludd Trozpek and Bob Akers were already set up and eating their supper. Joe Hillberg drove in a little after dark and set up his 25X100 binoculars, on the custom tripod and mount, which he made himself. I set up my 22 inch Starsplitter.

Ludd and Bob spent some time hunting down and observing NGC 1931, west of M36, but most of the night was spent looking at the Solar System's two largest planets. The seeing allowed using power up to 525X. I have never seen Jupiter and Saturn better. Everyone agreed these planets were the highlights of the evening. Much detail was visible on Jupiter, including the great spot. AT 525X the four Galilean satellites clearly showed discs. We could see the shadow of Saturn on it's rings. It was great!

We spent some time looking at the stars in the trapezium at high power. The four brightest stars in the trapezium range from magnitude 5.4 to 7.7. There are two 11th magnitude stars, then three 16th magnitude stars. We only saw six stars for sure.

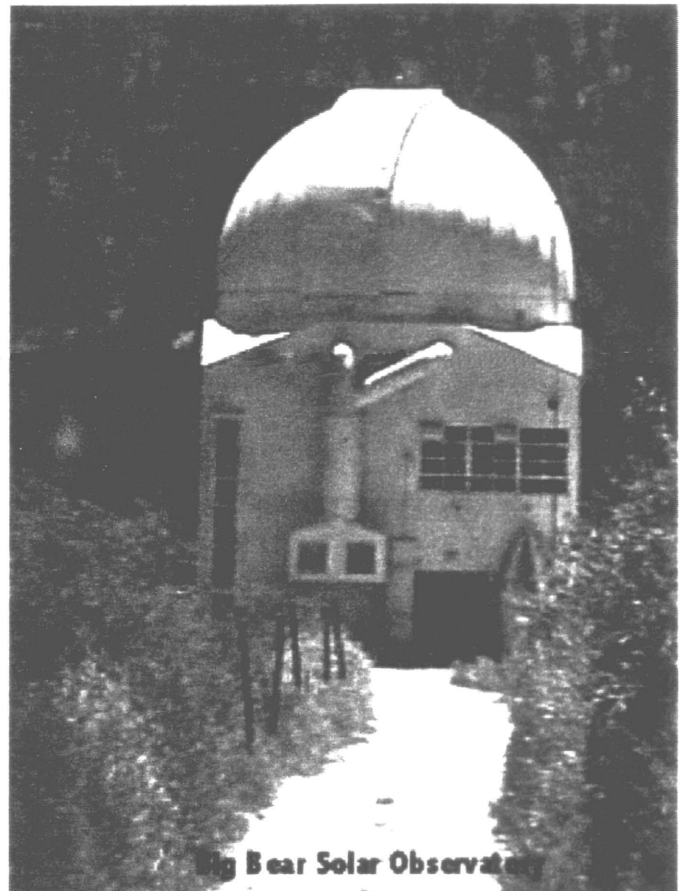
After the rest of us had gone to bed, Bob saw a brief flurry of meteors at 2:00 AM, including one bright one that traversed more than 90 degrees of the sky, was emitting secondary particles, and left a trail which persisted for 30 seconds.

In the morning we packed up and made the traditional visit to Quigley's, at the outlet center in Barstow before heading home.

In December PVAA members have a choice of star parties.

On the 4th there will be a star party at Yesterday Ranch or for those with more time, Joe Hillberg is organizing a trip to Mesquite Springs, Death Valley, on December 3rd and 4th. The Mesquite Springs site is the darkest that the PVAA visits. I hope many of you will be able to attend.

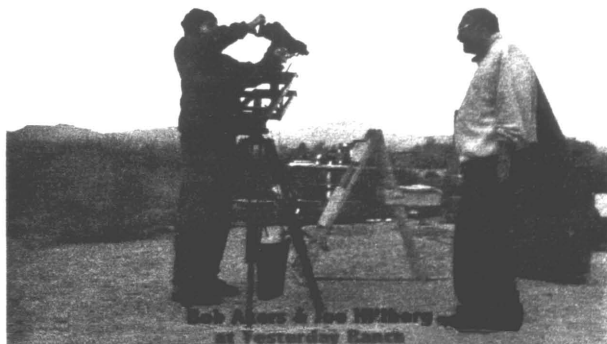
Ron Hoekwater



Joe Hillberg at Ron Hoekwater's 22 inch Star Splitter, at Yesterday Ranch



Bob Akers at Ron Hoekwater's 22 inch StarSplitter, at Yesterday Ranch



Bob Akers and Joe Hillberg at Joe's binocular mount, at Yesterday Ranch

ANNUAL PVAA CHRISTMAS DINNER PARTY

The third annual Christmas Party will be held on December 17, 1999 at JOUNI'S restaurant, located at 922 N Central Ave in Upland. The club will subsidize part of the dinner cost for each member and one guest. You may bring more guests but you will need to pay to pay the full price. The unsubsidized part of the dinner will be \$8.00 per person. Full price is \$15.00. We need to have you sign up by December 1, 1999. Jack Gardner is in charge of the list. This is by reservation only, there will be no unexpected guests admitted at the door. There will be no refunds since the restaurant will prepare the scheduled meals.

Dinner begins at 7:00 PM. Mark your choice of the menu shown below, and mail to P.V.A.A., Attention Treasurer, P.O. Box 162, Upland, Ca 91785, or give it to Jack Gardner at the general meeting.

Member name _____

	Member	Guest
1) Chicken Cordon Bleu. Chicken breast stuffed with ham and cheese. _____	_____	_____
2) Top sirloin _____	_____	_____
3) Vegetarian dinner _____	_____	_____

The price includes tax, desert and tip.