
Desert Sky Observer

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NEWSLETTER OF THE ANTELOPE VALLEY ASTRONOMY CLUB, INC
P.O. BOX 4595, LANCASTER, CALIFORNIA 93539-4595

*The Antelope Valley Astronomy Club Is A California Non Profit Corporation
Visit The Antelope Valley Astronomy Club Web Site At www.avac.av.org
The A.V.A.C. Is A Sustaining Member Of The Astronomical League*



Up-Coming Events

December 7: Last Quarter Moon

December 14: Partial Solar Eclipse

December 14: New Moon

December 15: Christmas Party

December 21: First Day of Winter

December 22: First Quarter Moon

December 25: Christmas

December 30: Full Moon

Anytime: *Observe.*

President's Report

Doug Drake, Sr.

Here we are in a great time of the year with Christmas coming up and the hope of a new telescope or eyepiece from Santa. Or, maybe Santa will bring a pair of binoculars or just a nice book on astronomy. Yes, we amateur astronomers can dream of nice things for Christmas, too.

But you know what? I also look back on this year and think of all the great things this club has done for the community and all the great people we have met. I have enjoyed meeting and talking with all of you very much; at the club meetings, at the star parties, and the special community events we have done throughout this year. I think our Antelope Valley Astronomy Club is special because of people like you. I want to say, as I finish this year as your President, that I find all of you to be most remarkable people. Each one of you has a special part that can enhance our club

even more. Please get involved with the club- it is yours- and talk to one of the Board members and provide them with the great ideas that you have, or ask what you can do to help. Even one idea can make the difference and that's you.

Flash - We will have an partial eclipse of the Sun on the 14th of December, Friday, between noon and 2:00 pm. The Sun will only be a little less than 20% eclipsed, but it will be eclipsed by the Moon none the less. Be sure to look for it, but only if you have a solar filter for you telescope or your eyes. Your eyes will literally burn through from the Sun if you don't protect your eyes with a filter. Be safe, use a filter, and have fun looking for this special event.

Remember this December we are having our Christmas Party at the Greenhouse Cafe' in Lancaster on the 15th (Saturday) at 7:00 pm. Don't forget, this is a time to remember the Christmas together. I hope to see you all and get to say hello. We will all have fun together. Your President, Doug Drake.

Vice President's Report

Terry Pedroza

Those words, "If you weren't there you really missed out" are spoken again! The Leonid Meteor shower as observed from the Poppy Reserve was a roaring success! This was a once in a lifetime event. I don't expect that in my lifetime I will see anything like this again. I have never seen anything so beautiful or exciting like

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the Leonid Meteor “Storm” in my life! If you missed it you truly missed out!

I just can't believe it's Christmastime already. The Holiday Party is in a couple of weeks and we're all busy making our holiday arrangements. Don't forget to put the AVAC Holiday Party on your calendar! This should be a fun event with raffles and silent auctions. Please plan to attend! I don't want to say next month, “If you weren't there you really missed out.” Hope to see you all there.

Happy Holidays all.

Minutes of the Antelope Valley Astronomy Club, Inc. 2001 Annual Business Meeting

Call To Order:

Doug Drake, President, called the meeting to order at 7:03 pm;
Doug welcomed visitors;

Vice President's Report:

Terry Pedroza announced that the next Star Party is at the Poppy Reserve, November 17th for the Leonid Meteor Shower. A “Plan B” is welcome in case of cloud cover. Terry also announced the “Terry & Debora Pedroza's 2nd Annual New Year's Eve Star Party at Saddleback Butte State Park” (TDPSANYESPSBSP for short);

Treasurer's Report:

Steve Trotta, Club Treasurer, announced that the Club treasury balance now stands at approx. \$700.00 (he forgot the exact amount); Astronomy Magazine calendars are on sale now for \$6.00 (normally \$12.00);

Secretary's Report:

Tom Koonce was unable to attend; Brian Peterson took the minutes in his stead;

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New Business:

Mary Andrus will collect money for the Christmas Party, which is December 15, 2001, 7pm., at the Greenhouse Café (1169 Commerce Center Dr., Lancaster); price is \$14.00 per person and the food options look good; dress is business casual (i.e. ties not necessary); buffet style;

Presentations were made for support of the club and “the spirit of scientific education of youth” to Debora Pedroza, Errol Van Horne, Jeremy Amarant, Gary Grigg, Wes Thomas, Bob Redman, Nagin Cox, Delbert Highlands, and Charles Lesiecki.

Member at Large:

Errol Van Horne summarized the year: success with raffles; expanded membership; purchase of new astronomical equipment; ½ dozen public programs; greater number of programs expected next year due to city of Lancaster's interest in our activities;

Speaker/Presentation:

Jeremy Amarant, S.A.G.E. Planetarium Director, gave a presentation entitled “The Explorers of Mauna Kea,” about the Hawaiian mountain that houses numerous telescopes owned by various countries; his presentation touched on the Hawaiian pagan mythology that provides the background for Mauna Kea and neighboring Mauna Loa; presentation also referenced Mt. Palomar, the Big Bang theory, and favorable viewing conditions in Hawaii;

Following his presentation, Jeremy gave a 10-minute “Star Talk”

Close of Meeting:

The meeting was adjourned at 8:47 pm.

Minutes written and respectively submitted to the Executive Board, November 12, 2001.

Sincerely,
Brian Peterson
Acting Secretary

COMMUNITY DEVELOPMENT

By Errol Van Horne, Member At Large,
Community Development Liaison

As you all know, the Leonid star shower/storm event at the Poppy Reserve was a terrific event not only for club members but those community members who attended as well. It is interesting to note that many of them learned of the event by accidentally "hitting" our website then calling for additional information. It's nice to know that the effort put into the site by Steve Trotta and all the contributors is paying off by rapidly becoming an important astronomical site and public resource.

Our last public event will be held at the S.A.G.E. Planetarium on November 30, 2001, where over one hundred medical doctors will receive a planetarium presentation and view the night sky from a dozen of our telescopes.

This will be my last column as I turn the Community Development Committee and duties of the Member at Large over to Debora Pedroza, our new elected representative. I want to thank all of you who participated this year in the many public events that were provided as a benefit for our communities and especially for the thousands of children who had an opportunity to look through a "real telescope" in 2001. Any attempt to quantify the opportunity this provides our young people and their parents diminishes its importance to their futures and to the future of our society. Someplace in the past of every great scientist there was an event that "flipped" a mental switch, resulting in a passion for scientific study and exploration. Who knows how many young people we may have "turned on" to astronomy or any of the related sciences through our efforts this past year? Our community assistance activities culminated in the "Youth Exploring Astronomy" program that made a great difference for those children involved, reinforcing and applauding their efforts to excel academically, in a world that all too seldom rewards individual achievement in educational

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pursuits. Debora has been an integral part of all these efforts and is committed to our young people, the club, and the community. Please welcome her with your support and continued assistance through the coming year.

AlCor (Astronomical League Coordinator)

by Tom Koonce

It is with regret that we say goodbye to four very active members this month as they head on back home to England after working on the successful Joint Strike Fighter Program with Lockheed Martin. Dave and Marie Allen and Bill and Klaske Ellison have been active members in the AVAC since first coming across 'the pond' to work on the demonstration program. Dave and Bill teamed up to be two of the first three members of this club to get their Messier Pins for observing all 110 Messier Objects. Both Dave and Bill were awarded their Messier Pins outside of the regular club meeting because they had so much to do getting ready for their moves. Dave was very active as an astrophotographer, and treated us several times with his photos- recently with an entire astrophotography talk as our meeting's featured speaker. The Ellisons and the Allens will be missed here in the 'Colonies.' (I hear that Dave may be accepting a position in Texas?! Our loss is their gain. Get a hold of Bob Newman at the FWAS, Dave. He'll fix you up with some dark sky viewing around Big Bend!)

I'm sure that the other officers will be writing this month about the incredible experience of seeing the Leonid Meteor Shower at the Poppy Reserve early on the morning of the 18th. I thought Terry and I had stuck it out to the end when I left at 4:00 am, but he ended up the only one out there who saw the third peak at 4:30 am! I was to the point of, "Just how many fabulous meteors could there possibly be?" We'll be talking about that night for years. My peak hourly rate calculations (based on a ten minute spread at 3:30 - 3:40 am) were as follows:
8 meteors per 5 seconds (ave.) X 12 = 96

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meteors per minute
96/min X 60 min/hr = 5760 meteors/hour!

Again, this is based only on a ten minute spread, but I could only see the north and part of the western horizon because of some clouds and the way my recliner was facing. I figure a factor of four needs to be multiplied assuming the meteors were evenly distributed across the sky. (+20K/hr?!) At any rate, it was the most meteors ANY of us had ever seen, and certainly the two nearly horizon to horizon fireballs will never be forgotten by our club members! Wow.

In The News

In the past six years, astronomers have found nearly 80 gas-giant planets orbiting stars beyond our solar system. Although the discoveries keep piling up, researchers could only theorize about exactly what these worlds are made of, or what they look like. But that has started to change.

On November 27th, a team of astronomers using the [Hubble Space Telescope](#) announced that they have detected the atmosphere of the one known extrasolar planet that crosses directly in front of the face of its star. They even suggested — very tentatively — that it has a high layer of clouds. The team was led by David Charbonneau (Caltech) and Timothy Brown (National Center for Atmospheric Research); their report will be published in the *Astrophysical Journal*.

“We have entered into a new phase in the era of extrasolar planet discovery and characterization,” says Alan Boss (Carnegie Institution of Washington). Charbonneau hopes to detect and analyze light reflected by other extrasolar planets that don't transit their stars. Eventually astronomers hope to measure methane, water, and possibly oxygen and ozone in exoplanetary atmospheres.
(reprinted from Sky&Telescope online)

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Viewing the Planets...

Mars is due south and one third of the way up the sky as the sky is growing dark, and then it moves to the southwest as the earth rotates, not setting until after 10 p.m. Mars is presently 120 million miles from earth and too distant to see its surface

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features, now that the long dust storm is beginning to clear. Mars is in eastern Capricornus.

Saturn is low in the east as the sky is growing dark, and at 7 p.m. it is already 25 degrees high. Saturn is only 4 degrees to the left of the bright star Aldebaran, the eye of Taurus; Aldebaran is about half as bright as Saturn. Notice the Pleiades star cluster 13 degrees straight above Saturn then. On December 28th, the moon eclipses Saturn as seen from Los Angeles – mark your calendar now.

Jupiter rises a short distance north of due east at 7 p.m., and by 8 p.m. it is high enough to see it well. Jupiter is in the middle of Gemini the Twins.
(from the Griffith Observatory website)



Did you know?

The planet Uranus appears blue-green because the methane in its upper atmosphere absorbs red light.

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Astronomy Links on the Web

<http://opposite.stsci.edu/pubinfo/>

(Awesome Hubble Telescope Photos)

<http://pds.jpl.nasa.gov/>

(A cool JPL and NASA site)

<http://science.nasa.gov/>

(More NASA)

http://encke.jpl.nasa.gov/whats_visible.html

(visible comets)

<http://www.spaceweather.com/>

(weather you don't get on television)

<http://www.avac.av.org/>

(Hey, that's us! So go there!)

Got something you want to see in the *Desert Sky Observer*? Whether it's a website, a type of story (ie. stories about the Mars *Odyssey* mission), or astronomy jokes (please, no Uranus jokes), then e-mail Brian Peterson at cybrpete@sbcglobal.net and he'll be happy to consider your request.

A.V.A.C. Membership Information

Membership in the Antelope Valley Astronomy Club is open to any individual.

The Club has three categories of membership.

- Family membership at \$30.00 per year.
- Individual membership at \$25.00 per year.
- Junior membership at \$15.00 per year.

Membership entitles you to...

- Desert Sky Observer—monthly newsletter.
- The Reflector—the quarterly publication of the Astronomical League.
- The A.V.A.C. Membership Manual.
- To borrow club telescopes, binoculars, camera, books, videos and other items.

The Desert Sky Observer is available as a separate publication to individuals at a cost of \$10.00 per year. Subscription to the Desert Sky Observer does not entitle the subscriber to membership in the Antelope Valley Astronomy Club and its associated privileges.

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Our Sponsors

Al's Vacuum and Sewing: 904 West Lancaster Blvd. (661) 948-1521. Stop by and say "hey" to Matthew and Suzanne.

Darkrooms Plus: 20th St. W. near Pep Boys in Lancaster. (661) 945-1444. They offer all club members a 10% discount on all purchases. Stop by and say "hey" to Dean or Hank.

King Photo: 749 W. Lancaster Blvd. (661) 948-8441. As a telescope dealer, they always support the AVAC. Stop by and say "hey" to Stokely or Paul.

ONET: 1529 E. Palmdale Blvd., Suite 200. (661) 538-2028. As an Internet provider, they are kind enough to provide us with a free website.

Vista Golf: 43517 N. 13th Street West, Lancaster. (661) 945-7003.

Thanks for your generous support!