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 website At www.avac.av.org
The A.V.A.C. is a Sustaining Member of The Astronomical League



Up-Coming Events

August 1: Last Quarter Moon

August 8: New Moon

August 9: Monthly Club Meeting*
August 10: Star Party, Mt. Pinos
August 12-14: Perseid Meteor Shower

August 15: First Quarter Moon

August 22: Full Moon **Anytime:** *Observe*

* Monthly meetings held at the S.A.G.E. Planetarium at the Cactus School in Palmdale on the second Friday of each month. The meeting location is at the northeast corner of Avenue R and 20th Street East. Meeting starts at 7 p.m. <u>Please note that food</u> and drink are not allowed in the planetarium. Monthly A.V.A.C. meetings are open to the public.

President's Report

Terry Pedroza

Well...I think that the AVAC has outdone itself this time! The Annual picnic was a roaring success. We had over a thousand dollars in raffle, silent auction and door prizes. Over 65 people in attendance and the best of times was had by all. The only thing that could have been better was... the moon could have gone down just a tad bit earlier. But hey, nothing's perfect. I would like to thank everyone that donated an item, brought food, drink, or helped in any way. Without all of your help, this would not have been such a great event.

August looks to be a quiet month for the AVAC. The only outside event is August 22nd at the A.V. Amateur Radio Club meeting. We have been asked to give a short talk and star party at their meeting. If you would like to be a part of this event, please let me know.

August 12th thru 14th is the Perseid Meteor shower. Since this is midweek we have nothing planned.

Our Club is still growing by leaps and bounds. We are gaining members every month and I am confident that we will be able to accomplish any task that we wish to do. I would like to see our club with an H alpha filter for solar viewing by year's end and have an Audio/video system for outside presentations. These are just my wishes, though.

Matt is working on finding a sight for our club to call home, with dark skies and good viewing. Tom is working on our first major Star Party/seminar, and the list of things in the works goes on. If you would like to be a part of any of these projects or have an idea of your own, please talk to any of the Club's Board members.

Club elections are coming up in October. If you are interested in running for an office or want to see any changes to our constitution, you had better hurry as the deadline for submitting changes is drawing near. Please remember, our club is run by its members. If you feel a change is needed, get active. Without your voice, nothing will change. Let's all be active and make this the best Astronomy Club ever.

Vice President's Report

Matt Leone

The picnic for the AVAC was really great. I ate and I ate and then I did some viewing, too. I thought that the moon was a little bright- but wonderful at the same time. I hope that you all had just as much fun as my kids and I had.

I want to thank everyone who made the picnic possible. All of the prizes for the raffle and the silent auction were great. I love the books that I won in one of the raffles. I am also proud of my two boys because one of them has finished the Messier list and the other has found 70 objects. I am also proud of all the club members who have finished their Messier list or have made it to 70. This is a great testimony for our club. Thank you.

Our own Doug Drake is going to be giving the talk at our next meeting. Doug has completed his Planet Observation for the Astronomical League and will be talking about his observations. Doug is very knowledgeable about the planets, so this should be a great meeting. If you intend to come, please be sure to arrive a little early so that you can get a good seat in the front, if possible.

This month, Uranus and Neptune will be up. They are relatively close in their orbits, so they should be good for viewing. I hope to see you all at Mt. Pinos (I won't be able to attend the club meeting).

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The Desperados got together at Mt. Pinos on July 4th weekend. (I-r; Sam Prestel, Jerry Prestel, Matt Leone, Michael Leone, and Steve Trotta)

Observing Report

Tom Koonce, July 7, 2002

We held an impromptu star party July 5-6-7 at Mt. Pinos. AVAC attendees included Sam and Jerry Prestel, Matt and Michael Leone, Steve Trotta, Tom Koonce, and Dr. and Mrs. Mahadevan.

Dr. M and his wife hiked all of the way up to the top of Mt. Pinos to the Condor Viewing Area, but said they didn't view a single one. During the afternoon on Saturday we all got to oogle over some very nice astronomy equipment that people had brought up there and look at the ingenious modifications that had been made to various scopes.

Saturday night, the sky was considered "partly clear" with extensive Cirrus and Alto Cirrus clouds bringing the overall contrast of the sky down to a "3" or "4" on a scale of one to ten. There were plenty of "Sucker Holes" all evening, and as everyone would swing their scope over to these, they were quickly filled in by more clouds - thus earning their name. The temperatures weren't too bad on Saturday evening hovering around a low of 50. Michael Leone got to within 8 Messier Objects of getting the 70 needed for his certificate. It looks like all of the Leone guys will have their certificates by the time you read this. Way to go! Matt, you're going to have to start your wife Susan out next!

We called it quits at about 1:30 am and it seems like almost everyone on the mountain had the same idea at the same time. A string of cars filed out- everyone looking forward to dark skies and more fun in August on the Saturday closest to the New Moon.

Astronomy Links on the Web

http://www.astro-tom.com/

(Tom Koonce's website)

http://pages.prodigy.net/sstrott/

(Steve Trotta's website)

http://www.projectsandhobbies.com/howtolearnastronomy.htm

(Getting started in Astronomy...)

http://antwrp.gsfc.nasa.gov/apod/archivepix.html

(Astronomy Picture of the Day)

http://www.jpl.nasa.gov/

(Jet Propulsion Laboratory)

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

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

NEO (Near-Earth Objects) News

(from Sky&Telescope Online)

July 22, 2002 | Next month a newly discovered asteroid will pass close enough to Earth to be easily spotted in small telescopes and even binoculars. According to calculations by Gareth V. Williams, associate director of the Minor Planet Center in Cambridge, Massachusetts, the asteroid's August 18th flyby should bring it to within 530,000 kilometers (330,000 miles) of Earth, just outside the Moon's orbital distance.

Astronomers first detected this object, designated 2002 NY₄₀, on July 14th with the 1-meter <u>LINEAR telescope</u> in New Mexico. Thus it was picked up a full month before brushing by Earth, unlike asteroid <u>2002 MN</u>, whose pass well inside the Moon's orbit was not realized until several days after the fact. The best current estimates suggest that this new interloper is about 500 meters (0.3 mile) across — significantly larger than 2002 MN.

Still quite faint at magnitude 18, 2002 NY₄₀ is making a very tight loop around the star Beta Aquarii. During the next few weeks it will brighten tremendously and yet remain almost motionless in the sky — the eerie signature of an asteroid hurtling right toward Earth! On the night of Saturday, August 17th, 2002 NY₄₀ should reach magnitude 9.3 when well placed for viewing from North America. At that time its angular velocity will exceed 4 arcminutes per minute, a motion easily perceptible in small telescopes. *Sky & Telescope* plans to issue detailed observing instructions, through <u>AstroAlerts</u> and SkyandTelescope.com, in the days leading up to this rare event.

A mere 24 hours after it goes by, the asteroid plunges hopelessly beyond reach of Earth-based telescopes as it heads closer to the Sun. (We will then be viewing its unilluminated side, which explains why it becomes so faint, so fast.)

While there is no danger of 2002 NY₄₀ striking Earth during this flyby, a future impact has not been ruled out. Both <u>NEODyS</u>, operated by the University of Pisa, and NASA's <u>Near-Earth Object Program</u> have identified a number of very close encounters in the years to come. These occur either around August 18th as the asteroid heads in toward the Sun, or near February 14th when on its way out. Both agencies are focusing on a flyby just 20 years from now (on August 18, 2022), when there appears to be a 1-in-500,000 chance of an impact — extremely unlikely, but worrisome just the same.

Did you know? ?

The comet that is believed to have wiped out the dinosaurs 65 million years ago was approximately 10 kilometers (6.2 miles) across.

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Astronomical Events - AUGUST

01 Alpha Capricornids Meteor Shower peak

(http://comets.amsmeteors.org/meteors/showers/alpha_capricornids.html)

06 Southern lota Aquarids Meteor Shower peak

(http://comets.amsmeteors.org/meteors/showers/iota_aquarids.html)

12 Perseids Meteor Shower Peak

(http://comets.amsmeteors.org/meteors/showers/perseids.html)

25 Northern Iota Aquarids Meteor Shower peak

(http://comets.amsmeteors.org/meteors/showers/iota_aquarids.html)

If you want to sell astronomical equipment through the DSO, please contact Brian Peterson with a description of the items.

Got something you want to see in the *Desert Sky Observer*? Whether it's a website, a type of story, or astronomy jokes, send an e-mail to Brian Peterson at cybrpete@sbcglobal.net and he'll be happy to consider your request.

This Month in (pretty recent) History

08 24th Anniversary (1978), launch of <u>Pioneer13</u>, first spacecraft to land on planet Venus (http://spaceprojects.arc.nasa.gov/Space_Projects/pioneer/PNhist.html)

10 36th Anniversary (1966), launch of <u>Lunar Orbiter 1</u>, first U.S. spacecraft to orbit the Moon (http://nssdc.gsfc.nasa.gov/planetary/lunar/lunarorb.html)

14 36th Anniversary (1966), first photos of Earth from the Moon taken by Lunar Orbiter 1

20 25th Anniversary (1977), launch of <u>Voyager 2</u>, the first of two Jupiter/Saturn flyby spacecraft (http://www.jpl.nasa.gov/calendar/voyager2.html)

27 40th Anniversary (1962), launch of Mariner 2, flyby of planet Venus http://www.jpl.nasa.gov/missions/past/mariner1-2.html

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.

A.V.A.C. Board Members

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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.

<u>Darkrooms Plus</u>: 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.

<u>King Photo</u>: 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.

QNET: 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!

September Calendar

September 7: Star Party and BBQ at Steve Trotta's house;

September 13: Club Meeting, Sage Planetarium;

October Calendar

October 5: Super Science Saturday, Joe Walker Middle School;

October 5: Star Party, Red Rock State Park;
October 11: Club Meeting, Sage Planetarium;

October 12-13: Palmdale Fall Festival October 26: Prime Desert Woodlands