



# AU AstroNews

## The Newsletter of the Astronomical Unit

September 2007

Sponsored by the Santa Barbara Museum of Natural History

### AU Outreach Report

August was a fairly quiet month for AU outreach, but we still showed the sky to **601** customers since the last newsletter, thanks to AU volunteers Andy Allen, Chad Caprio, Bill Clausen, Jason & Tim Crawford, Joe Doyle, Ed Edwards, Mike Farris, John Gomm, Art Harris, Chris Larson, Pat & Chuck McPartlin, Ron Nixon, Edgar Ocampo, Helen Osenga, Jiri Polivka, Javier Rivera, Nancy Rohrer, Tom Whittemore, and Tim Wittenburg.

### September AU Outreach

September doesn't have many outreach events scheduled so far, but the first one is likely to have a large crowd, so join us if you can! Events are subject to change and cancellation, so contact Chuck at [macpuzl@west.net](mailto:macpuzl@west.net) or 964-8201 for the latest information.

### Saturday, September 1, setup 7:30 PM

Slide show and telescopes for campers at Cachuma Lake Campgrounds. This is Labor Day weekend, so we can really use extra scopes if you can make it! We'll be setting up in the field at Dakota Plains.

### Friday, September 7, 7:30 PM

AU monthly meetings resume in Farrand Hall at SBMNH. Come and hear AU member Paul Winn talk about his amazing adventures in astrophotography!

### Saturday, September 8, 5:30 PM

AU Planning Meeting in the classroom outside Krissie's office at SBMNH. Come help plan your club's activities.

### Saturday, September 8, 7:30 PM

Monthly Public Star Party at SBMNH. Bring a scope and have fun sharing the sky outside Palmer Observatory.

### Friday, Sept. 14 - Sunday Sept. 16

Annual AU Campout! See the following article.

### Friday, September 21, 7:30 PM

Monthly Public Telescope Night at Westmont College, at the Carroll Observatory, next to Van Kampen Dormitory.

### Annual AU Campout and Potluck!

*This year the AU Campout will begin Friday afternoon and run through Sunday noon, September 14 through 16.* As is the tradition, the generous folks at Cachuma Lake will let us use the *Mohawk Shores group campsite*, located on the edge of the camping area away from most lights, for free. *Since there is a 25-car limit at the site, parking will be critical!* You may recall that last year some folks were turned away or charged an entrance fee because of the excessive number of cars trying to enter the campgrounds. In order to avoid the car confusion this year, please consider carpooling with a friend! There will be a signup sheet at the September 7th meeting to estimate the number of AU members who will attend as well as what each member will contribute to the potluck dinner. Don't miss this fabulous event. It is an AU tradition! Here are some of the details:

We will start setting up on Friday afternoon, and we'll have Friday and Saturday night to enjoy the dark skies of Cachuma Lake and, of course, the good company of AU members. During the day we can relax, hike, boat, or fish. If you can't live without music, please bring headphones so you don't disturb your fellow observers. *The park enforces quiet time after 10 PM.*

As mentioned above, on *Saturday evening we'll have our potluck dinner.* Bring your own plates and silverware and some food/drink to share (enough for about 4 people). Plan to start the potluck dinner around 5:30 so that we will have plenty of time to clean up before we begin observing.

One of the most interesting activities at Cachuma is the Nature Cruise. Take a 2-hour tour of the lake, conducted by a park naturalist to view wildlife and hear about the natural history of the area. Cruises are on Friday at 3 PM, Saturday at 10 AM and 3 PM, and Sunday at 10 AM. Be sure to reserve a spot early! The cost is \$15 for adults and \$7 for children 12 and under. For reservations, call (805) 686-5050 weekdays 10 AM to 3 PM, and (805) 686-5055 after 3 PM and weekends. Read all about it at: <http://www.sbparcs.org/DOCS/lakecruise.html>

## **The August 28th Total Lunar Eclipse**

*by T. Whittimore*

Although total lunar eclipses are not all that rare, I hadn't seen one in several years. This year, however, I was determined not to miss late August's early-morning event. Setting my alarm clock for 1:30 AM, I woke up, grabbed my trusty 9x63 binoculars and watched, first with my eyes and next with the binoculars, the soft shadow of our Earth begin to slowly cover the Moon. When you watch one of these wonderful events unfold, you really become acquainted with the fact that there is a 3-dimensional tapered shadow out there looming in space created by Earth. And, if the conditions are right, the Moon slowly waltzes into this shadow, first covered by Earth's soft penumbral shadow and later by the more spectacular, deep umbral shadow which takes a distinctive bite out of the "lunar apple." Later, as the Moon takes on more and more of this shadow, the stars of Aquarius now in the Southwestern sky begin to peer out of the formerly full-Moon drenched background. More stars appear as the Milky Way starts to dust the constellations of Cassiopeia and Perseus well up in the Northeast. The Moon takes on an eerie coppery glow. Surprisingly, the sky looks almost as dark as one during a New Moon phase. But, there's that spooky red ink spot that was a full Moon only moments ago hovering in the Southwest! I did not stay up for the entire event but said good night to my coppery friend, convinced that, in the following couple of hours, the full Moon would in fact reappear as I dreamed.

## **Reaching Out**

*by Tim Crawford*

This September 1st the AU made its way to Cachuma Lake for an outreach. We had around 125 customers that evening. The crowd ranged from young to old and it was comprised it seemed to me of families from LA and surrounding communities. The weather was clear and warm but the temperatures dropped as evening approached. Near twilight the campers stopped the different activities around us, the sounds diminished a bit and curiosity at the sight of some pretty strange looking characters on the lawn at the Dakota Plains increased. Chuck McPartlin went off to do his usual slide show for the campers and we continued to set up for the evening show. People started to make campfires and I really though they were a little crazy because of the heat. Slowly a trickle of people came over to join us and inquire about what

we were going to do. We were all lined up in a row: Art Harris, Edgar Ocampo, Pat and Chuck McPartlin, Joe and Coni Doyle, Chad Caprio, Helen Osenga, and me to show the skies to the guests at Cachuma. Throughout the evening we had young and old ask great questions, and certain questions seemed to repeat. One was, "Were we going to be there tomorrow night?" Others wanted to go get their families to see what they saw through our scopes. They were excited and that was great! I had a young man that showed great enthusiasm for the stars. He told me he wanted to go and ask his Dad to join us and look at the stars. He would "really like it- I know", he said. He didn't want to leave though because he thought if he did we would disappear. I looked over to the rest of the group. All were engaged in the stories that they were telling of the August, September usual list of objects. We had an Iridium flare below Polaris of -1 and Vesta was very close to Jupiter. This all seemed to grip the guests. Especially the young ones. A man came over and looked with me at the Ring Nebula and I showed his two children the same object. Then I showed him the Hercules Globular cluster. He told me it made him think there just must be a Creator. I told him the last time I came to Cachuma I showed M13 to a group and explained it was 25,000 L.Y. away from us and the light we were looking at was 25,000 years old. A lady in the crowd exclaimed that was impossible because her Bible told her it could not be any more than 5000 years old. I apologized to this man and said I had made the mistake of mixing science with religion and it made very bad partners. Then, against all common sense I told him that maybe God's days were 2 billion Earth years. He agreed with me and stated that he thought the older he got the more he didn't understand. Another lady in the crowd had several children with her and wanted to know where she could take them to get an experience like this. I asked where she was from and she said Orange County. I told her to go over and ask the man named Chuck McPartlin. I told her he was our version of the Encyclopedia Britannica and if anyone knew it would be him. She was very pleasant and thanked us all. The young man returned with his father and I readily started to show him the objects I wanted him to see. He was a grateful old guy, and his son was very nice to bring his father over. Chuck heard about him as well and came over and handed him a rare meteorite and told him what he was holding may be between 4.5 to 4.6

billion years old! He was truly beginning to appreciate what was going on- but maybe not as much as his children who had brought him to us. I could see they really wanted to share this all with him. A group of teens showed up and I got a little apprehensive at their demeanor. They appeared a little rambunctious and unruly. I told them immediately not to touch any of the optics and not to push and shove each other into the scope. After a little coaxing they settled in and began to observe with me. I showed them NGC 457, the Owl Cluster (a favorite of young and old alike.) This stopped them and they began asking questions. It seemed to me the campers were not the only ones starting fires that evening. We were starting some ourselves- but these were embers that start bigger fires- fires in the minds of all who ask. And they had many. One kid asked if I could see Global Warming. Immediately another said, "That's a dumb question!" Without hesitation I said, "No, that's not a dumb question. There are no dumb questions." One of them stated if they only taught science like I was doing it, they would all be into it! They even started to tell each other which subjects they liked the most. I really began to feel proud of these young lads. Later, when I was talking to Pat and she told me someone came up to Chuck and asked if he would please be his or her science teacher. Starting to see a pattern here? I guess where I'm going with all this is, if you ever wonder why we do all this- it can be made real clear if you witness some of these events. Wow! I didn't expect to witness all this in one evening under the stars. This Labor Day weekend it will be 10 years since my father passed away. I still miss him very much- which is probably very common. He was quite a guy and worked so hard he never really got to see the days of retirement- not even close. I told many he never had any wealth to speak of - not until I saw the group of people that filled the church at his funeral. They came from all over the world. He had no monetary wealth- that is clear - but we were his wealth. He believed in us all. There was just nothing he thought we could not do once we got it in our minds to do it. He really believed it! I got a little glimpse of this belief this weekend. I'm glad I did- it gives me reason to believe we will be all right- as long as we have just plain old "human nature" on our side. Just look at that young man who went to get his father- to bring him out to us - to share with him a gift. This young man went back to get his father to bring him out and give him the night. What a gift!

### AU Information Box

<b>President:</b>	Tim Wittenburg	969-6945
	<a href="mailto:black10@aol.com">black10@aol.com</a>	
<b>Vice President:</b>	Laurence Harms	962-9855
	<a href="mailto:lauroh@aol.com">lauroh@aol.com</a>	
<b>Secretary:</b>	Bridget & Andy Allen	451-6981
	<a href="mailto:andrewstuartallen@gmail.com">andrewstuartallen@gmail.com</a>	
<b>Treasurer:</b>	Ruben Gutierrez	682-0405
	<a href="mailto:rubenalvag@aol.com">rubenalvag@aol.com</a>	
<b>Outreach:</b>	Chuck McPartlin	964-8201
	<a href="mailto:macpuzl@west.net">macpuzl@west.net</a>	
<b>Webmaster:</b>	Paul Winn	886-2319
	<a href="mailto:strg8zn@cox.net">strg8zn@cox.net</a>	
<b>Refreshments:</b>	Timma Buck	969-0070
	<a href="mailto:NMTBuck@aol.com">NMTBuck@aol.com</a>	
<b>Newsletter:</b>	Tom Whittemore	687-2025
	<a href="mailto:kometes@aol.com">kometes@aol.com</a>	

### AU Astronomy Information Pager

(Leave a short message) 564-9002

### SBMNH Astronomy Program Coordinator

Krissie Cook 682-4711x173  
[kkcook@sbnature2.org](mailto:kkcook@sbnature2.org)

### SBMNH Astronomy Program Tape

Updated monthly 682-4711x405

**AU AstroNews**, the monthly publication of the **Astronomical Unit (AU)**, is mailed to the AU membership. For publishing consideration for the next month, submit astronomical items by the 20<sup>th</sup> of the current month!

### AU annual membership rates:





**Single = \$15                      Family = \$25**

### AU mailing address:

Astronomical Unit  
 c/o Santa Barbara Museum of Natural History  
 2559 Puesta Del Sol Road  
 Santa Barbara, CA 93105-2998

**On the Web:** <http://www.sbau.org>

## September 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Scopes for Cachuma Lake
2	3	4 	5	6	7 AU Meeting 7:30PM	8 Planning Meeting 5:30PM SBMNH Star Party 7:30PM
9	10	11 	12	13	14 AU Campout Cachuma Lake	15 AU Campout Cachuma Lake Potluck Night
16 AU Campout Cachuma Lake	17	18	19 	20	21 Westmont College 7:30PM	22
23	24	25	26 	27	28	29
30						

**The Astronomical Unit**  
 c/o Santa Barbara Museum of Natural History  
 2559 Puesta Del Sol Road  
 Santa Barbara, CA 93105-2998