AU AstroNews

The Newsletter of the Astronomical Unit

January 2007 **Sponsored by the Santa Barbara Museum of Natural History**

OUTREACH SUMMARY

Since the last newsletter, AU volunteers Andy Allen, Krissie Cook, Art Harris, Marv Johnson, Edgar Ocampo, Barb O'Grady, and Pat & Chuck McPartlin showed cool astronomical sights to 269 customers, despite the fact that our main event at the Museum was clouded out.

JANUARY EVENTS

It looks like January will be a quiet month for outreach. Come on out and peek at the wonderful sights of winter. To get the latest information on schedules, or directions, please contact Chuck at 964-8201 or macpuzl@west.net.

Wednesday, January 3, about noon PST

The Earth is at perihelion, its closest approach to the Sun. Does it look any bigger to you?

Friday, January 5, 7 PM

First AU meeting of 2007. Catch a quick planetarium show by Krissie Cook, watch a video of Huell Howser's visit to the newly reopened Griffith Observatory with Dr. Ed Krup, and then munch on our world-famous refreshments.

Saturday, January 13, 5 PM

AU planning meeting in the classroom next to Krissie's office. Anyone is welcome to attend and help plan your club's activities.

Saturday, January 13, 7 PM

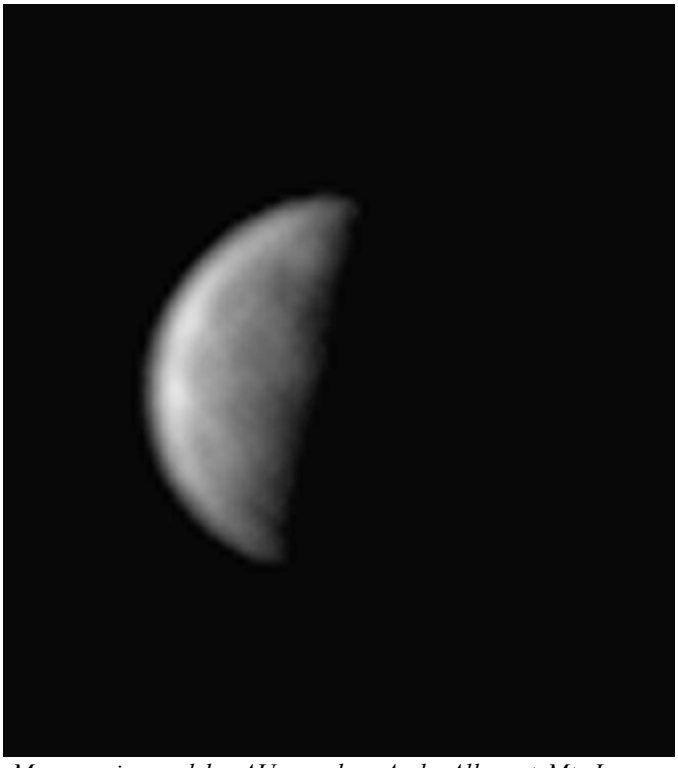
Monthly Public Star Party, next to Palmer Observatory at SBMNH. Saturn might just make it over the rooftop by the end of the party, so come celebrate its return to our evening skies! It is Saturn's day, after all.

Friday, January 19, 7 PM

Monthly Public Telescope Night at Westmont College, just outside Carroll Observatory, or inside, if the new scope has been installed.

OUTREACH SUMMARY FOR 2006

This was a big year for outreach! Here are the stats for the year: For 2006, we had ***114*** outreach events, with ***50 volunteers*** participating to bring astronomy to ***8,316 customers***. This compares to 99 events, 52 volunteers, and 7,473 customers in 2005; 87 events, 37 volunteers, and 5,645 customers in 2004; and our big Mars year in 2003, with 94 events, 44 volunteers, and 10,770 customers, with 3,500 at the Mars event alone. Seventeen membership extensions were awarded to volunteers who helped out a 6 or more events this year. That compares to thirteen in 2005, and fifteen in 2003 and 2004. Also, since the summer of this year, the Astronomical Unit has consistently been in the top three clubs in the nation in the Night Sky Network for the number of events in a running six-month period in which we have used Night Sky Network materials. ***A big THANK YOU to all of our dedicated outreach volunteers for your efforts!***



Mercury imaged by AU member Andy Allen at Mt. Laguna (near San Diego) on November 22, 2006.

WHAT'S UP WITH THE PLANETS?

The best events for January are first Venus and then Mercury coming into view after sundown, Saturn visible most of the night, and Jupiter climbing through Scorpius as it passes the heart of the scorpion, Antares, just before sunrise.

Venus starts the New Year very low in the southwest at dusk, but by the end of the month finds itself setting nearly two hours after the Sun. Late in the month, leaping up to greet Venus is ***Mercury***. Although this apparition is not nearly as good as the morning apparition we enjoyed in December, Mercury will still delight us as it passes within 7^0 of Venus. For Santa Barbara observers Mercury will still be about 10^0 above the horizon and shine at a magnitude of -1 one half hour after sunset. ***Neptune*** will probably be too dim in the evening twilight when Venus and Mercury pass near it on January 18 and 26, respectively. ***Saturn***, rising with Leo, moves higher and higher this month in the northeast. Saturn is about 6^0 to the lower right of Regulus as January begins, but the ringed giant is in retrograde motion (moving westward relative to the stars) until mid-April. Although this motion is subtle, see if you notice Saturn's westward journey for the next few months. ***Jupiter*** rises around 5 a.m. on New Year's Day, and 3:30 a.m. by month's end. And, unlike its smaller brother, Saturn, Jupiter is engaged in prograde motion (moving eastward with respect to the stars). Watch it pass slightly more than 5^0 north of Antares on the 9th. Compare the colors and the magnitudes of these wonderful objects. Does the red heart of the scorpion make Jupiter look all the more yellow? And, shining at a magnitude of about -1.8, does Jupiter look more than "Ten Antares?" ***Mars*** rises shortly before dawn this month, and shining at magnitude +1.5, does little to dazzle the eyes in the early morning twilight. But, if you point your telescope at Mars on the morning of the 28th, see if you can also detect the globular cluster, M22, in your eyepiece!

ASTRONOMICAL ARTS CORNER

"How many stars are in the sky?" "As many as the hairs on this sheep's back – count them if you like." Birbal (1528-1583) was an able minister to Akbar, Mogul emperor of India. Many stories of Birbal's cleverness, such as his answers to the questions posed by the rival sages, have passed into Indian folklore. Another:

Akbar tested his astrologer by ordering him: "Predict the date of your own death." Trembling (since the king had the power of life and death over him) the astrologer asked for time to consult his charts, but instead hurried to ask Birbal's advice, after which he returned and said: "Your Majesty, the stars declare that I shall die only three days before yourself."

THE WINTER SKY

by Helen Osenga

Sometimes it is hard to tell when winter arrives in Southern California, however one look at the evening sky will announce its arrival. Winter is the time of year when all the brilliant stars are on display. Of course the most prominent display is put on by Orion, the hunter, and the accompanying constellations of Canis Major, Orion's big hunting dog; Canis Minor, Orion's little hunting dog; Gemini, the twins; Auriga, the chariot driver; Taurus, the bull; and the Pleiades, the Seven Sisters, a small cluster of stars in the body of the bull.

Face the east to find these constellations in the evening sky. The very bright blue-white star, Sirius, in the big dog and bright star Procyon in the little dog are just above the eastern horizon. Sirius, also known as the Dog Star, is to the right of Procyon. Sirius is the brightest star in our sky. It is bright for two reasons: it is fairly close to us at a distance of 9 light years and it is very hot. Following a big circle of bright stars we go to the left and higher to Pollux and Castor the heads of Gemini, the twins. Continue on around the circle up to Capella in Auriga, the chariot driver. Then you come on around to the right to Aldebaran, a bright reddish star (the eye of the bull), in the V shaped cluster marking the face of Taurus, the bull. Just above this you will notice a small cluster of

stars known as the Pleiades or the Seven Sisters. From Aldebaran continue the circle down to the bright star Rigel, the left knee of Orion, the hunter. Orion's belt is shown as three bright stars in a line oriented vertically to the eastern horizon. From Rigel come down to the left to Sirius to complete the circle.

During the end of December two bright planets will begin to appear in the evening sky. Venus will be hard to see at first low in the southwest shortly after sunset. Every week Venus will become more prominent as it climbs higher in the sky. Saturn will be rising in the eastern sky as early as 9 pm and by midnight it will be high in the southeastern sky. Jupiter will be visible in the early morning sky starting in mid December and on into January.

A HAIRNET WITH STARS

by Ted Kooser, Poet Laureate

I ate at the counter.
The waitress was wearing
a hairnet with stars,
pale blue stars
over the white clouds
of her hair, a woman
still lovely at sixty
or older, full breasted
and proud, her hands
strong and sensual,
smoothing the apron
over her belly.
I sighed and she turned
to me smiling.
"Mustard?" she asked.

ELECTRONIC NEWSLETTER

Want to save your club some money and save trees too? Each copy of the paper newsletter you receive costs the AU about $1.80 to print and mail, but to email you the electronic version (same great text and pictures) is free! To switch to the electronic newsletter, please send an email to AU Secretary Andy Allen: andrewstuartallen@gmail.com

And take another peek at Andy's cool image on the front page – albedo features on Mercury!

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AU annual membership rates:
Single = $15 **Family = $25**

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January 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3 ○	4	5 Monthly Meeting 7PM	6
7	8	9	10	11 ◑	12	13 Planning Meeting 5PM SBMNH Star Party 7PM
14	15	16	17	18	19 ● Westmont 7 PM	20
21	22	23	24	25 ◐	26	27
28	29	30	31			

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