February 2008

Sponsored by the Santa Barbara Museum of Natural History

Outreach Report

Since the last newsletter, AU volunteers Andy Allen, Chad Caprio, Bill Clausen, Krissie Cook and her Quasars, Tim & Jason Crawford, Joe Doyle, Mike Farris, Ruben Gutierrez, Art Harris, Jürgen Hilmer, Terry Kowing, Chris Larson, Pat & Chuck McPartlin, Ron Nixon, Dennis Nord, Edgar Ocampo, Helen Osenga, Nancy Rohrer, Tom Whittemore, Tim Wittenburg, and a bunch of friendly folks from the Vandenberg Amateur Astronomical Society showed cool stuff to 405 happy customers.

January also saw the debut of the club's new Mallincam color video eyepiece and HD display. The Orion Nebula shows up in shocking pink, shows lots of turbulent cloud structure, and gets transited by geosynchronous satellites that show up as small dashed lines. The Eskimo Nebula is brilliant emerald green, and shows its fur-lined parka hood. Catch the next show at an outreach near you!

February Events

Winter and the rainy season are here, but that doesn't stop outreach. Here's the schedule so far for February. Remember, the schedule is subject to change, so for the latest updates, contact Chuck at 964-8201 or macpuzl@west.net.

Friday, February 1, 7 PM

Catch a quick planetarium show by Krissie, followed by our monthly meeting in Farrand Hall. This month, AU member Bob Piatek of Fishcamp Engineering will tell us about his Starfish camera and his adventures installing cameras at Cerro Tololo Observatory in the Andes.

Wednesday, February 6, 7 to 8 PM

Telescopes for kids and parents at St. Andrews preschool, on Arroyo Road near Auhay Drive in Goleta. The official address is 4575 Auhay Drive, but the entrance is off Arroyo.

Saturday, February 9, 5 PM

Monthly AU planning meeting in the classroom outside Krissie's office. Come help your club plan our activities for the coming year.

Saturday, February 9, 7 PM

Monthly Public Star Party at the Museum. Saturn should be high enough to become a good target this month.

Friday, February 15, 7 PM

Monthly Westmont Public Telescope Night at Van Kampen Observatory. The big 24-inch scope should be open for viewing.

Wednesday, February 20, setup 5:30 PM

Set up scopes at the east end of Shoreline Park for the total lunar eclipse. The Moon rises a little before 6, already partially eclipsed, and totality lasts from about 7 to 8 PM.

Thursday, February 28, 5:30 to 7:30 PM

Telescopes for Ellwood Elementary School's Science Night.

To the AU membership:

The new year has begun. And that means a rapidly approaching Astronomy Day show. Those who attend this event try to expose the public to things of interest both at the museum and at the AU's demonstration tables. *One* (make that *two*) of the tables are used to hold offerings of donated items which the club will not be using for its own ends. I am fixed with the task of selling off these items to club members and to those of the public who may be interested enough to take these things away. These sales provide the club with funds which are used to purchase things like the recently acquired camera and monitor (just wait until you see how wonderfully these show the heavens), and many other items. Without funds, we do not get to enjoy items like these

I am not asking for money - what I am asking for is your old and no longer valuable (to you) astronomy equipment. Telescopes, tripods, lenses, mirrors, anything which can be of use to an astronomer - the sort of stuff you have been tripping over in your garage or work room, and just don't need anymore. Just call me and let me know that its being donated - I'll take care of the rest.

Thanks, Arthur Harris, AU Equipment Manager (805) 968-4017

Outreach Observations

(one in a time-to-time series about any of the prior month's outreaches) by Pat McPartlin

At the SB Museum of Natural History's 1/12/08 Star Party, I had the pleasure of asking various of our 62 customers, which doesn't include the 49 AU members (with guests) and SBMNH Quasars who were there, too, what they liked best as they walked toward the parking lot away from the 13 telescopes and 1 set of binoculars (an exit poll, as it were).

Overall, the consensus was the friendliness of the equipment operators and the feeling of making the stars a personal quest for each customer. Thus, in general, each volunteer made each customer feel welcomed and involved in what's above us

Below, in specific, are the items and percentages of what folks liked. Please note that this is a very non-scientific poll-taking, and exceeds 100% since folks gave multiple opinions. These just give an idea of what folks remembered, liked, and took home in their memories, and show a fairly diverse distribution, too.

So, good job to everyone who assisted and gave a friendly touch to the universe!

SBMNH Star Party Exit Poll results, Saturday, January 12, 2008:

Galaxies (Andromeda, M81, M82) ... 18%

Individual stars and open clusters (M37, Beehive, Owl, Winter Albireo, Double Cluster) ... 31%

Orion Nebula (on television through the AU's new

Mallincam video eyepiece and/or black/white through a regular eyepiece) ... 32%

Equipment (various types: from refractors to Schmidt-Cassegrains to Dobsonians to reflectors to binoculars to laser pointers) ... 21%

Crab Nebula (M1) ... 11%

Moon ("La Luna") ... 16%

Mars ... 13%

Globular clusters ... 8%

Quasars and the make 'n' take tables ... 13%

All of the Above (yes, this really is a category!) ... 35%



Pat McPartlin, Nancy Rohrer, and Edgar Ocampo at one of the SBMNH Saturday evening public outreaches.



After making a brief appearance in the western sky in January, *Mercury* now climbs up into the morning sky only to greet *Venus* in late February. For seven days (from February 25 – March 2) the two "morning stars" are within 2⁰ of one another.

Not to be outdone by Mercury, however, Venus passes a mere 0.6° north of Jupiter on the morning of February 1. This will be the closest conjunction of these, the two brightest planets, since 2004 and until 2014. Please don't miss this one: Venus and Jupiter can be observed in the same field-of-view in telescopes using medium magnification! After coming into opposition near the end of last year, Mars now begins to dim this month from magnitude -0.6 to +0.2, and is thus no brighter than *Saturn*. Those of you who have been watching Mars in its retrograde motion for the last couple months will notice how far it has moved west from the star, Mebsuta, in Gemini. The "god of war" now creeps east against the background stars as it returns to prograde motion. As it does so, the apparent diameter of Mars shrinks from 12" to 9" during February. Some features on Mars' surface will still be discernable, but they are going fast! Saturn reaches opposition on the 24th of February and therefore becomes visible all night long – only three nights after the planet and Regulus flank the totally eclipsed *Moon*. Saturn is highest during the middle of the night – even small telescopes can show its now 20"-wide globe and its modestly tilted but still lovely rings! Speaking of our Moon, on the night of February 20, the Moon crosses most of the gap between Regulus and Saturn and undergoes a total eclipse during the journey.



Art Harris and Edgar Ocampo set up and relax at a recent Refugio State Beach outreach.

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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 20th of the current month!

AU annual membership rates:

Single = \$15 Family = \$25

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February 2008						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					AU Meeting 7PM	2
3	4	5	6 St. Andrew's Preschool 7 – 8PM	7	8	Planning Meeting 5PM SBMNH Star Party 7PM
10	11	12	13	14	15 Westmont College 7PM	16
17	18	19	Total Lunar Eclipse! 5:30PM setup at Shoreline Park	21	22	23
24	25	26	27	28 Ellwood Elementary Science Night: 5:30 - 7:30PM	Leap Day!	

The Astronomical Unit

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