AU AstroNews
The Newsletter of the Astronomical Unit

August 2001 Sponsored by the Santa Barbara Museum of Natural History

August Means Meteors

The Perseid Meteor Shower is always worth watching, even in years like this when the predicted peaks fall in daylight hours for Santa Barbara, and the Last Quarter Moon brightens the early morning sky. The nights of August 11, 12, 13, and 14 are your best bets. Find a dark spot with a view of a lot of sky, sit back in a lawn chair, point your feet northeast, and watch the show. The radiant point in the constellation Perseus doesn't rise until after 10 PM, but there will still be an increased rate of meteor activity as soon as it's dark.

Jupiter Occulted by the Moon

On Wednesday, August 15, you can watch the bright limb of the 16% illuminated waning crescent Moon occult Jupiter and its Galilean moons. Io will disappear at around 1:26 PM, followed by Jupiter, Europa, Callisto, and Ganymede over the next 9 minutes. They will pop out from behind the dark limb starting at 2:31 PM. Those of you who watched the Venus occultation last month will not be surprised to spot it as a bright dot nearby (about 10° to the east of the Moon) with just your unaided eye.

Thanks, Volunteers!!

July was a **huge** outreach month, with volunteers Jim Billig, Liliana and Warren Bitters, Gretchen and Greg Brinser, Chey Hahn, Art Harris, June Kelley, Kathryn MacCurry, Pat McPartlin, Edgar Ocampo, Helen Osenga, Craig Prater, Wayne Rothermich, and Jim Williams showing the sky to **1242** customers. Whew!

The outreach schedules are subject to change, so check the web page, the bulletin board (under the "observing" topic), or contact Edgar or Chuck to find out the latest. Try to let one of us know ahead of time if you are planning to show up at an outreach event.

AU Observations for August

Saturday, August 11, 8:30 PM – SBMNH Star Party. Enjoy the Perseids while stargazing.

Tuesday, August 14, setup 7:30 PM – Outreach observation for disadvantaged children at Sage Hill Campground.

Friday, August 17, 8:00 PM – Westmont Public Observation at Van Kampen Observatory.

Saturday, August 18, setup 8:00 PM – Campground outreach at Refugio State Beach.

Saturday, August 18, dusk – Dark Sky at Figueroa Mountain and/or West Camino Cielo. Remember to check where people are going.

Wednesday, August 22, setup 8:00 PM – Outreach observation for AquaCamp kids at El Capitan State Beach.

Thursday, August 23, setup 7:30 PM – Outreach observation Senior Summer School (like Elderhostel) group at Francisco Torres in Isla Vista.

Saturday, August 25, setup 8:00 PM – Campground outreach at Cachuma Lake. Meet at Dakota Plains.

Meeting Next Month

Remember that our regular monthly meetings will resume on Friday, September 7. Joan and Tony Galván will show us some slides from the **55 rolls** of

film they shot while in Africa for June's total solar eclipse. You've seen Jim Williams' views of Asian elephants; now get a look at the African variety.

Calstar in September

There will be an AU contingent at the 2001 California Star Party at Lake San Antonio from September 13 – 15. You can register for this event on the San Jose Astronomical Association web page at http://www.sjaa.net/calstar2001.html. Or, send snail mail to: Jim Van Nuland, 3509 Calico Avenue, San Jose, CA 95124. Include the following information: Name, Address, City, State, ZIP, Email Address (could be a friend's), Phone Number, Number in your party. Choose from: Tent Camping at Dark Enforced Observing area, Tent Camping at Casual Observing area, RV Camping at Casual Observing area (no hookups), RV Camping at RV Campground in park, Cabin in park (limited availability), Outside park. Mention at the gate when you arrive that you are registered for the star party, and the cost per vehicle for three nights of camping will be $32.

Calstar is meant to be a basic star party, and as such will have no vendors, no food concessions, no speakers, and no prizes for Liliana to win. There will be a small swap meet, potable water, campfire rings, and toilets. Free showers are available nearby.

Stolen Scope Alert

If anyone spots a 6 inch Orion Argonaut Mak-Cass scope (short black tube, Astro-Physics dovetail mounting plate, black carry bag) at a local swap meet or pawn shop, please notify Chuck. It's Pat's telescope, and some swine stole it from the group campsite at Refugio State Beach while we weren't looking.

Telescope Deal

Speaking of a steal - If you're a Costco shopper, you may have noticed a coupon good during the month of August for the purchase of a Meade ETX-60 computerized GoTo telescope for just $99. It's only a 60mm aperture scope, but at that price it's cheaper than most finderscopes. If you've been looking for an excuse to finally get a telescope (and come to some outreaches), here's your chance!

Mars Disappoints

Despite its most favorable apparition in 13 years, Mars has been a real disappointment to telescope viewers these last two months. In June, when Mars came as close as 42 million miles, we got some hints of surface detail, but then a huge dust storm kicked up from its southern hemisphere and engulfed the whole planet. Since then, it's just been a fuzzy orange tennis ball. Even the vaunted Ocular Industries Dust Filter could not pierce the haze. We're pulling away from Mars in our orbit, so unless the storm clears soon, we'll have to wait for two years, when Mars will be even closer at only 35 million miles away.

Put That Star on a Diet!

Recent observations with an optical interferometer, combined with spectroscopic data, have shown that Altair, the lucida (that's for you, Warren) of the constellation Aquila (the Eagle), rotates so rapidly that it has a noticeable bulge around its equator. Material there is moving at 470,000 miles per hour, leading to a radius at the equator 14% larger than the polar radius. Altair is the southernmost star of the Summer Triangle. Take a peek and see whether it looks fat to you.

Griffith Observatory to Close

The Griffith Observatory is about to undergo a major renovation and expansion, its first significant physical improvement in 66 years of continuous operation (since May 14, 1935).

The facilities will be doubled in size without changing their external appearance by expanding underground, under the front lawn. In addition to cosmetic restoration of the existing buildings, the project will rebuild the planetarium and dome, restore the interior murals, repair earthquake

damage, add major exhibit and office space, expand the bookstore and gift shop, and add food service and restrooms.

What this means for us in the near term is that Griffith Observatory will close in January of 2002, not to reopen until late in 2004 (assuming everything happens on schedule, and funding can be found). If enough club members are interested, we should arrange to take a trip down to the observatory before the end of the year, while we still have the chance. Otherwise, our next opportunity will not come around again for at least three years. If you want to get together for a visit, make your wishes known at the September meeting.

To find out more about the restoration and expansion plans, visit the Griffith Observatory web pages at www.griffithobservatory.org. Throughout the construction, they will have a live webcam where you will be able to follow the action.

Mars Moon Trivia

Since looking at Mars in its present dusty condition is a little bit boring, here's a bit of Martian trivia to ponder while you're waiting for those elusive surface features to reappear. Phobos, the larger of the two moons of Mars, looking like a pockmarked potato, is about 16 miles across its long dimension (both Phobos and Deimos are irregular in shape, and appear to be captured asteroids). The orbital period of Phobos is about 7 hours and 39 minutes. It orbits around Mars in the same direction that Mars rotates, which is known as a prograde orbit. The rotational period of Mars is about 24 hours and 37 minutes, which means that you could see Phobos rise and set multiple times in the course of a Martian day. As a result of this, tidal gravitational forces between Mars and Phobos are causing the moon to spiral inward in its orbit. If it stayed intact, Phobos would hit the surface of Mars in about 50 million years. The tidal effects will become more severe as Phobos nears Mars, however, tearing the moon apart, so we'll get lots of new craters instead of just one big one.

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Current annual membership rates are:

Single $15 Family $25

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August 2001

			1	2	3	4
5	6	7	8	9	10 Perseids	11 Perseids SBMNH Star Party
12 Perseids	13 Perseids	14 Sage Hill Obs	15 Moon Occults Jupiter	16	17 West-mont Obs	18 Refugio Obs, Dark Sky
19	20	21	22 Aqua Camp Obs	23 FT Obs	24	25 Cachuma Obs
26	27	28	29	30	31	

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