



**The Fires in Big Sur
(Satellite Photo)**

**Longmont Astronomy Society Newsletter
July 2008**

From the President:

Our next meeting is on this Thursday, July 17th at 7 pm in the Community Room at the Front Range Community College. The speaker will be Dr. Suzanne Traub-Metlay from the Fiske Planetarium. She will give a presentation about the Herschel and Planck telescopes which will be launched by the European Space Agency in early 2009. The Planck telescope is the first European mission to study relic radiation from the 'Big Bang'. The 3.5 meter Herschel telescope will study the spectral range from far infrared to sub millimeter wavelengths. Gary will host the meeting. I'll be visiting family in Iowa and attending the annual Astronomy League conference.

The 17th annual "Weekend Under the Stars" (WUTS) hosted by the Cheyenne and Laramie astronomy clubs is only a couple weeks away on July 31 to Aug. 2nd. Fox Park is 9100 ft in elevation so temperatures can dip to the 30s and occasionally colder. If this will be your first trip to Fox Park bring lots of winter clothing. The skies at Fox Park are about as dark as it can get and the transparency is often excellent as well. Needless to say the telescope views are fantastic. And yes, you really can see subtle shadows cast by the Milky Way -- Don't miss it!

A week after WUTS on Saturday August 9th we will have a "hands-on" imaging clinic for those who want to learn more about planetary imaging or just want to see how it is done. We've reserved the Jack Hamm Nature Area for that Saturday evening (6 pm to 1:30 am) and for Aug 23rd in case of bad weather. More information will be available shortly.

Imaging Clinic:

The Longmont Astronomy Society will be conducting an imaging clinic on August 9 at Jim Hamm City Park (County Line Rd, just north of 17th Ave on the east side of Longmont). If you are planning on attending, please let one of the officers know. If you're at the July meeting, that will do for a notice. Arrive at 6 PM for setup, imaging will last until the wee hours... Rainout / cloudout date will be Aug 23rd.

Club Picnic:

We're planning a club picnic on Sept 6th at Jim Hamm Picnic Shelter (County Line Rd, just north of 17th Ave on the east side of Longmont). Rainout date is the 20th. Eat (no alcohol allowed in city parks), then we have a chance to show the kids and spouses the sights in the sky for dessert. More details and some planning coming up later.

In the sky this month:

A large batch of ISS passes this week and next, as Colorado is favorably placed. Get the times from Vern's weekly news or at www.heavens-above.com If you've never seen an Iridium flash, why not download those times and give it a try. Think of a large flashbulb going off in the sky, and you're there. WARNING: you need a very accurate time.

Meteor Showers: The Delta Aquarids are halfway decent the end of July (peak the 27th, but the 3rd quarter Moon rises after midnight) But the Perseids on the morning of Aug 12 are predicted to be pretty good, with moonset at 2 A.M.

Planets:

Mercury: starting to make it into the evening skies in August

Venus: Setting 50 minutes after the Sun, Venus is starting to put on a visual show at close to magnitude 4 in the west. Mars, Saturn and Mercury are in the area, so it's a "planetary lineup" this month.

Mars: low in the west all month, magnitude 1.7

Saturn: above and to the left of Venus in the constellation Leo. It is magnitude +0.8 in brightness.

Jupiter: spends August to the upper left of the Teapot. Magnitude -2.6. Highest at 11 PM at the beginning of August and 9 PM by the end of August for best viewing.

Comet Boattini: Serious comet chasers — people who track faint comets with telescopes and binoculars — have been aware of Comet C/2007 W1 (Boattini) for quite a while. It was forecast to become quite bright for a telescopic comet, 6th or perhaps even 5th magnitude, making it visible without optical aid to skilled observers at dark sites. [Comet C/2007 W1 Boattini](#) can be seen in constellation Aries in the early morning with binoculars, and hasn't really gotten any brighter – so much for the "hopes". I got the 10x50s out this morning and searched pretty good with no success. It was a little late to look, but I did spot the Pleiades without any problem in the morning glare.

Interesting Stars/Galaxies

The binocular column in Astronomy goes ape about the Messier objects visible in August, so you might want to try M24, Barnard 92 & 93, M23, M25, M18, M17, and M16 in the handhelds. Maybe we'll give them a try for the picnic?

Club Calendar:

July 18 – Full Moon

July 20: [Apollo 11](#) landed on Moon. Neil Armstrong & Buzz Aldrin were 1st humans to walk on Moon; Mike Collins orbited (1969)

July 25 – 3rd Quarter

July 31 – Aug 2 -WUTS in Fox Park (separate notice)

Aug 1 – New Moon

Aug 5 – double shadow transit of Jupiter moons starts at 3:05 AM

Aug 8 – 1st Quarter

Aug 9 - imaging clinic at Jim Hamm park (17th and County Line)

Rainout date is Aug 23

Aug 12 – Perseid Meteor Shower, Moonset at 2 AM. Peak should be around 1/minute, so bundle up, find some dark skies to the east. www.namnmeteors.org (North American Meteor Network) for better directions.

Aug 13-16 – Mercury, Venus, and Saturn all nice and close low in the west after sunset. Use your binoculars for the best view.

Aug 16 – Full Moon

Aug 19-21 - Mercury and Venus 1 degree apart low in the west after sunset. Use your binoculars again.

Aug 21 - Meeting at Front Range CC at 7 PM, topic is image processing, hopefully using some of the pictures from Aug 9.

Aug 23 – 3rd Quarter, Rainout date for imaging clinic

Aug 29/30 – Mountain Research Star Party (separate notice)

Aug 30 – New Moon

Fiske Planetarium:

8:00 P.M. July 18:

Messier Marathon: 110 Deep Sky Objects in One Night by Steve Hartung (BASS)

In the 1700's, French astronomer Charles Messier created one of the first catalogs of deep sky objects, including star clusters and some of the most beautiful nebulae and galaxies visible from the northern hemisphere. On a few evenings each spring, it is possible for a dedicated amateur astronomer to see all of them in one night with a modest telescope. Here you will see them all in one hour in an accelerated sunset to sunrise program.

July 22:

Nuestro Sistema Solar by Tito Salas (Fiske Planetarium)

Ven y descubre lo nuevo que nuestro sistema solar nos ofrece. ¿Porqué Plutón no es considerado un planeta? Ahora con nuevas imágenes de los planetas y sus lunas.

8:00pm August 1 -- "Birth of Stars and Planets": live talk with **Ben Brown**. Peer back through space and time to learn how our solar system may have formed as you go on a virtual tour of star formation in our galaxy.

8:00pm August 8 – “Deep Impact with Live Update”

Ask for an "Adult Free" coupon at Fiske's ticket window! Anyone under age 18 with paid admission qualifies to bring an adult to Fiske at no cost! You are welcome to photocopy and use these coupons until August 8, 2008

Other Clubs and Star Parties:

THE NEBRASKA STAR PARTY INVITES YOU TO NSP 15 July 27th THROUGH August 1st, 2008 at SNAKE CAMPGROUND, MERRITT RESERVOIR, 27 MILES SOUTH OF VALENTINE, NEBRASKA

Details and directions at <http://www.nebraskastarparty.org/>

Valentine is just inside the Nebraska state line, south of the Badlands.

Weekend Under the Stars (WUTS)

The Cheyenne Astronomy Club is the host at Fox Park in Wyoming (about 2 tanks and 100 gallons of gas away for Gary and the big square box). July 31, Aug 1, Aug 2.

Details and directions at <http://home.bresnan.net/~curranm/wuts.html> Take \$10 for the registration along and your camping gear, including food. PortaPotties supplied. 150+ attendees last year. Great place to watch satellites from.

Club Pictures:

Gary has been playing with his new camera. He says these are his, but who knows?



Internet Resources:

Sky & Telescope for August has a good writeup for the Northeast Astronomy Forum and all the technology shown. If you're still under budget for the year and your LAS dues are paid, you might want to check out all those websites!

Also in the S&T was a nice coverage of "how clear is it?" You might want to check out <http://idea.ssec.wisc.edu> for the details and the links at <http://SkyandTelescope.com/haze>

Mountain Research Star Party:

The fourth almost annual Mountain Research Station (MRS) Star Party and Mini-Conference will be held August 29-30. After a one year hiatus due to problems at the facility last year, the MRS Star Party is back for 2008. This is two night event is scheduled for August 29-30 at the CU Mountain Research Station near the continental divide at 9500ft. The facility is west of Boulder between Nederland and Ward. Accommodations are provided in the modern and comfortable lodge (<http://www.colorado.edu/mrs/images/lodge2.jpg>). You can come for one night or two. Friday night will be dedicated to observing adjacent to the MRS observatory which is a short walk from the lodge. A concrete pad and AC power are available for telescopes. Saturday will be a packed program of speakers and presentations in the afternoon and early evening, followed by more observing. We will be hosting talks by area researchers and our famous gAstronomical pot-luck dinner. Guest speakers include Dr. John Spencer of the Southwest Research Institute, a researcher on the moons of Jupiter and Saturn, and CU Prof. John Stocke of the Center for Astrophysics and Space Astronomy. Attendees must be members of BASS, LAS, or another Astronomical League club (not a member yet, not a problem, second half of the year membership in BASS is prorated to only \$10 for a family/\$5 for a student). BASS and LAS members

will get first crack at reservations, then the event will be opened to registration by all AL members in the Front Range. Each room can sleep up to 4 people. There is a common kitchen and a meeting area. There are 8 rooms available. Whole rooms may be booked for \$60/night. Individual bunks may be booked in a shared room for \$22/night (the bunk rate is higher than ¼ the room rate because we have to pay by the room and historically we have not ended up with even fours, we can help try get groups of 4 together as much as possible and give you the room rate). There is no camping allowed, overnight guests must stay in the lodge. Reservations must be made in advance and payment must be received by August 15th. Payment can be made at a BASS meeting, or by check made out Boulder Astronomy & Space Society or BASS and sent to the BASS mailing address:

BASS
PO Box 17203
Boulder, CO 80308

Please let us know by email as soon as possible to get your rooms or bunks reserved. There will be no other BASS meeting in August. You are welcome to come up and attend the programs for free, but spending the night requires booked accommodations by MRS policy.

Current Space Missions:

The Phoenix Mission is digging holes on Mars <http://phoenix.jpl.arizona.edu/> and getting some results. A glitch in one of the 8 sample ovens has shorted the element, so the mission has been speeded up to do a full baking job with the next sample, including some of the ice at the bottom of the trench. That way, if anything additional goes wrong, they'll have the one hopefully completely done.

Cassini is still plugging along, working fine, and has reached the end of its primary mission of 4 years duration. NASA has extended the mission for another 2 years, with the aim of getting closer to Titan and Enceladus.

Cassini crossed the plane of Saturn's rings, and took a time lapse movie of the event. Make some popcorn and watch the flick at http://saturn.jpl.nasa.gov/multimedia/videos/movies/PIA08356_full_movie.mpg The moons going by are very cool....

The smallest satellite has made it to orbit! A 200 gram, 4 inch cube was launched on April 28 to detect gamma ray bursts. Search out "AAUSat" for details.

Upcoming Space Missions:

NASA's Interstellar Boundary Explorer (IBEX) is going up in August to start mapping the boundaries of the heliosphere. It measures this with two SINGLE pixel cameras, which compares somewhat with your spiffy new 10 megapixel digital camera, eh?

Humor Dept:

Navajo Wisdom

About 1966 or so, a NASA team doing work for the Apollo moon mission took the astronauts near Tuba City where the terrain of the Navajo Reservation looks very much like the Lunar surface. Along with all the trucks and large vehicles, there were two large figures dressed in full Lunar spacesuits.

Nearby a Navajo sheep herder and his son were watching the strange creatures walk about, occasionally being tended by personnel. The two Navajo people were noticed and approached by the NASA personnel. Since the man did not know English, his son asked for him what the strange creatures were and the NASA people told them that they are just men that are getting ready to go to the moon.

The man became very excited and asked if he could send a message to the moon with the astronauts. The NASA personnel thought this was a great idea so they rustled up a tape recorder. After the man gave them his message, they asked his son to translate. His son would not.

Later, they tried a few more people on the reservation to translate and every person they asked would chuckle and then refuse to translate.

Finally, with cash in hand, someone translated the message, "Watch out for these guys, they come to take your land." (Sent by Joseph Kleinman.)