

Longmont Astronomical Society

July 2005



The image depicts the first moments after Deep Impact's probe interfaced with comet Tempel 1

The Home Planet Stellar Views
Calendar
June Meeting Notes
Deep impact at Mount Evans by Gary Garzone
Another weekend away in dark skies by Garry Garzone
Deadman Star gazing report by Gary Garzone
Classified
The LAS Warehouse
August Sky Map

The Home Planet Stellar Views

Hello astronomy lovers,

You just got to love it to do what we do just for some fuzzy view of a comet. Astronomy in the extreme it was with the extreme team visit to the summit of Mount Evans at 14,250 feet. Wobble Meyer twin 28 inch scope with Dr. Bob Stencel from DU. The extreme team for this adventure was Ron, Nancy Crispe, Vern Raben, Ken Otoole, Mark Wiley, Mike Hotka, Jim Crane, Emily Haynes, Ray Warren, Dick Mallot, Mike Luckow and myself. Beautiful place to visit before dark, so high you can see across the vastness of colorful Colorado. It is indeed a privilege to live here.

The night started with finding Temple 1 comet in big dome scope with Dr. Bob, to view before the midnight collision of Deep Impact mission. Then we did Jupiter and several others and back to comet again. Several of us did set up our scopes in viewing area at top. It was windy at first but by 10:30 or so we set up for comet viewing low in the southwest. The comet was low surface brightness and small so large scopes did way better for viewing it. I did find it in 10 inch scope. It did brighten but was so low in west hard to view in scope. Mountain Billy goats hang out on Summit areas. It's a pretty cool building and dome, very nicely done. A must see visit, one of the highlights of living in Colorado. It is a 14 mile road to Summit with stop at Summit lake area, where water still has frozen chunks.

We hiked to the top and took pictures from the summit looking east toward Denver with dome in foreground. Great place for lots of pictures, so I was in hog heaven, pictures I got to share with group.

Air is very thin up there, so Ken Otoole brought some oxygen for test of eye seeing of Milky Way. I think lack of oxygen for several hours on top does get to you some. I breathed it for several minutes then went outside to see if it looked better, and I think it was. Most think, it to be not so dark because of being so close to Denver, but if you look to South, West or North and straight up very dark, as naked eye views 6 to 7 magnitude maybe. You can see the Denver lights but not from viewing area of parking lot, so it did seem very good for viewing. Driving down is a little hairy at 2 am in total darkness of night, black road, no guard rails, you better not miss your hairpin turns. I got home after 3AM for an extreme night that I will remember for sometime. I did not make the Star Stare this year, first one I missed in quite some time. I went to Fox Park for three nights instead, no long lines at my scope. I needed a night without the crowds in true dark skies again. We have not had a very good spring for viewing but this made up for it. Total dark skies all night on Thursday, and Friday again, Saturday night it was cloudy some, was set up to view but it was a sucker hole night. I did manage to see about 20 objects in the holes that would open up than close again.

Dave Dunn, Steve Lynch, Dan Lafaive, Mike Roos, Vern Raben and I who were at Fox Park, drove to the Deadman dark sky site for LAS. Wow! The views from there! Bob Spohn said it was 10,600 feet elevation. I took some pictures that I sent out already. It is a pretty bad road to get there so that is why I have never taken my motor home and big scope there. I would have to use Explorer car to tow trailer. I slice of Heaven up there, very green and snow cap views of peaks to south west are awesome. I will have to try it out one night, September maybe?

WUTS Star Party is coming up, August 5th, 6th, and 7th and most will be there for August dark sky viewing. Large crowds for this one, it is getting tight for space but there is enough sky for all. Parking with all the motor homes anymore has had its impact. There is room and we will try to get everybody in two fields. I plan to be there for social event it has become and some star gazing late at night after crowds go to sleep.

Home planet stellar views have been very good to us this past month. Mars is back, polar cap and all, and will be a highlight for WUTS views if seeing is good. Thanks Dr. Bob for an excellent night of viewing from summit, and thanks to all the extreme team die hards who braved the cold and did the extreme once again, it was well worth the trip. The star gazing adventures continue. See you all next month at WUTS. See you in the dark, bye, Gary

Calendar

August	New Moon:	4th – 6th: Weekend Under the Stars – Fox Park	
1st qtr:	13th – Flanders Park	– Hispanic group Barbeque at Flanders shelter –	4 pm to 9 pm
	Meeting:	18th – Solar System Ambassador Update	
September	New Moon:	3rd	
	1st qtr:	10th – Flanders Park	
	Meeting:	15th	
October	New Moon:	1st	
	1st qtr:	8th – Flanders Park	
	Meeting:	20th	
November	New Moon:	October 29th	
	1st qtr:	5th – Flanders Park	
	Meeting:	17th – Swap Meet	
December	New Moon:	3rd	
	1st qtr:	10th – Flanders Park	
	Meeting:	15th – Ray Warren – Stardust Return	

June meeting notes

Visitors:

- An active member of Anaheim astronomy club
- Jim Gotti? High School Chemistry teacher. Friend of Dick Mallot.
- Rick Chatwell, FAA engineer, astronomy newbie
- Lyle Rupert, had visited out Flanders parties a couple of times, and decided to catch a meeting
- Phil visiting from North Carolina

Officer Reports:

Secretary Report by Mark Propp: New issue of the Reflector is out, any members not get their copy?

Newsletter editor report by Philippe Bridenne (just off the airplane-- thanks to Bob Spohn for printing!). Good content this month, including story by Don Cerow and report by Julie Carmen.

Treasurer report by Julie Carmen. We have money in the bank! Balances reported. Telescope fund is doing well. No money from our star party but we had money to give CU Mountain Research Station (to buy propane). We had the place all to ourselves, observatory site, and dorm, plenty of parking! It was a really good thing! I have a box of coffee, creamers, with LAS on them. Not as many coffee drinkers as expected! We can probably go up there again.

Telescope report by Lee Pierson. We are in a holding pattern right now, getting garage organized. Need boxes drilled out for rotating base. He has 14 of those in the garage. Weather has not cooperated enough to do polyurethane on the weekends.

Publicity/ Fundraising report by Ray Warren (a.k.a Monte Hall). I went to these last two outings at Calwood and CU Research Station, they were great! Star party for Twin Peaks Charter Academy 3rd grade classes at Flanders Park last month, was much fun, sold \$35 of planispheres! Need to make more planispheres!

ALCOR report by Bob Spohn. A Tour of the Messier Catalog, Episode Five: Great Balls of Fire. You can download the whole presentation and slides from our web site.

Just returned from Arizona, saw Vatican observatory with adaptive optics, infrared and fm bands, and nearing completion the large binocular telescope with two 8.4m mirrors! Great tour started in Safford AZ, Science center and 20" scope. All day tour, best \$40 I've spent in a long time!

No more galaxies. We are moving on to clusters and nebula. 12 globulars and 2 opens tonight. Start with Hercules, Serpens, down to the center of the galaxy.

Start with Hercules, M92. Globular cluster. Cataloged by Messier the same night he cataloged the Realm galaxies M84-M91 in 1781 (busy night!). 2 years later, William Herschel was the first to resolve it into stars. During Earth's precession, the North Celestial Pole passes closer than 1 degree to this cluster, so about 15,000 AD we will have a "North Cluster" instead of a North Star. Can be seen naked eye in dark skies.

M13 - Globular in Hercules. The most popular globular in the northern hemisphere. It may contain as many as 1 million stars. Selected in 1974 as target for one of the 1st radio messages addressed to possible ET intelligent races sent by the Arecibo radio telescope Observatory.

M5, a really nice one! Globular Cluster in Serpens. One of the largest and oldest globulars: 165 light years diameter and 13 billion years old! 1 of the 3 finest globulars in northern skies, along with M13 and M3. Often overlooked at star parties.

Who is Ophiuchus? Healer, with snakes in his hands (Serpens Cauda and Serpens Caput).

M12, Globular Cluster in Ophiuchus. Slightly larger and dimmer than its neighbor, M10. Relatively loose structure, not very concentrated.

M10, globular neighbor to M12. 3.5 degrees SE of M12. Rich cluster with a compressed center.

M14 - Remote and fairly faint. Even magnitude of member stars. Homogenous magnitudes.

M107, about 80 ly across. Contains some dark obscured regions. Not as big and bright as some others. Down in the southern skies, not right overhead.

M9, this is a cool one! One of the nearest globulars to the Galactic Center: about 5500 ly. Can be fully resolved in scopes in 12" and up. Ophiuchus is the constellation that contains the most globular clusters, due to its proximity to the galactic center. 2 smaller and fainter NGC globulars lie about 1.2 degrees to the SE and NE. Take a detour, like you do on your family vacation to see the world's largest mud house!

Scorpius the Scorpion. M80, one of the densest globular clusters. Easy to find.

M4, probably the nearest globular to us: about 7200 ly away. Displays a peculiar "bar" structure bisecting it. Slightly reddened in color due to absorption from intervening dark material.

M19, the most oblong or elliptical of all the globulars - E3 to E4 in shape. Cosmic egg in shape!

M62, globular on the scorpius ophiuchus border. One of the most irregularly shaped globulars, probably due to its proximity to the Galactic center.

M6, open cluster in scorpius. The "butterfly" cluster, due to the outline of its brighter members. The brightest star in the cluster is a yellow-orange super giant. Contains about 80 stars. Naked-eye object.

M7, open cluster in scorpius. Large and bright, easily naked-eye. Also known as Ptolemy's cluster, he described it around 130 AD. The southern-most Messier object. 80 of the stars are brighter than 10th magnitude. Brightest star is a yellow giant.

Announcements:

Julie Carmen: Name badges are in, with magnets! Pick yours up!

Saturday June 25th is the Tri-town star party in Frederick, Michelle Lavers is organizing that.

Ordered 15 calendars for next year, let me know if I should order more, we get 50% off now!

We had a great star part this past weekend at CU Mountain Research Station. Very successful! The closest dark sky spot we have, and great facilities! Observing area is a big lumpy, so we want to work with the station to volunteer time to enhance the observing area, doing some cosmetic leveling-out of the observing area. We liked the dormitories and kitchen, we found out Labor Day weekend is available!

We can do fishing or hikes in the afternoon. There is an option for members to camp at Rainbow lakes, and come over for observing. Horseshoes, all kinds of goodies. Let me know if you want to participate, and how you can help. Do we want to continue doing this? Southern view was good later at night, earlier in the night Sagittarius was in light pollution. Late at night it was almost "Fox Park" dark.

Gary, let's talk about Mt. Evans. Temple1 and Deep Impact is coming up. Send me email if you are interested, so far only have about 10 people signed up. Midnight July 3rd 14,000 foot adventure, the "extreme team". Sunday night. Probably won't see any impact, but we can see the comet before impact. Easy to find, Jupiter is in Virgo, down and to left is Spica, deep impact day will be to the right of Spica.

You should be able to see it in 8 or 10" scope.

Andrew Planck, report on weekend above Jamestown. I had organized starting with my students at Platte Middle School. I was a teacher there, but as of Friday I am now retired! We had 21 kids and parents signed up. Event was at Calwood Center, absolutely beautiful 1000 acres. At start it rained hard (showers!) I was afraid everyone was going to go home! We had classes on Saturday, cleared up a bit for some solar viewing, with white light filters and HA filters. Then, at midnight, a magical thing, it totally cleared up! Not a cloud in the sky! We had to wake up all of the students and parents, but they were an enthusiastic crew! We had two solid hours of clear, dark sky viewing, then at 2:15 not a piece of sky to be seen anywhere! Got a lot of good reports back from parents and kids, they had a great time, it blew them away! Happy even while it was raining, as they found the classes very worthwhile. Good friend of mine, Linda, she and her husband and their two kids signed up and came, quite an investment, said she learned "so much stuff, and I'm not even a geek like you guys!"

Dick Mallot: August 13 Hispanic BBQ star party at Flanders Park.

September 2nd through 4th, LAS and BASS joint star party at CU mountain research party.

BREAK -----

Suzanne Traub-Metlay: Venus Express: Europe's first probe of Venus

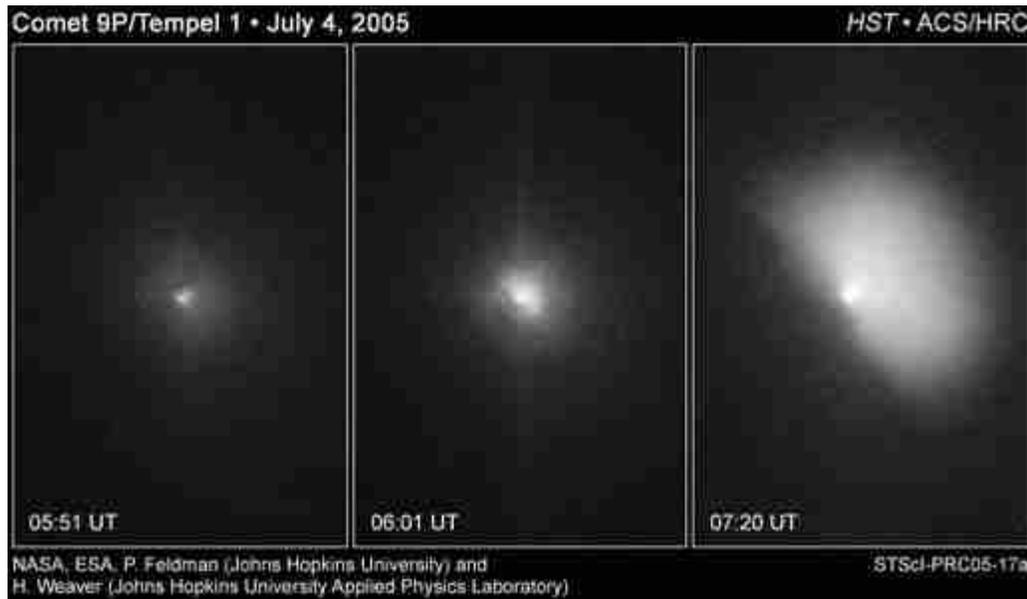
Suzanne Traub-Metlay, Ph.D. Fiske Planetarium, University of Colorado at Boulder. She taught astronomy at FRCC for 5 years. My job is to "Make People Happy!".
Excellent and interactive presentation!

Deep impact at Mount Evans by Gary Garzone

I guess by now most have seen the great images of Deep Impact mission. The Extreme team from LAS members and some Bass members too were at Mt Evans observatory with Dr. Bob Stencel from Denver University 14, 250 foot summit for some very Extreme astronomy trying to view Deep Impact collision. Dr. Stencel did get some very noticeable brightening of comet in pictures from CCD camera through the 28 inch twin scope in dome. Most of us with smaller scopes set up on summit viewing area by parking lot did not notice any change but was pretty faint to start with, so I thought any improvement in brightness would show up, but none was detected naked eye in scopes. Now if I had my 30 instead of 16, I am sure we would have seen some change going on.



Thanks too many for a great night on summit. Extreme it was! Cold and windy at first then clearing with awesome views of Milky Way that were had naked eye. I stood in awe under such a great views of the heavens above. Here are a few more pictures of the few and proud who made the long trek to summit for views, then to have the nerve to drive down that hairy road from top in total darkness. No guard rails, several thousand foot drop offs. Cliff hanger it was indeed, do we get hazard pay for this one? I enjoyed it and would do it again sometime. bye, Gary



Deep Impact

Another weekend away in dark skies by Garry Garzone

Hi All, Steve Lynch, Dave Dunn., Dan LaFaive., Jim Sapp, Mike Roos, Ken O toole, Vern Raben, Norm Vojta, Carol my wife, and myself Gary, had another fun weekend away in dark skies again. I love summer time viewing from the high country. We beat the heat, but not the mosquitoes, lots of feeding going on, brought lots of bug spray and extra coats to ward them off.

Thursday night was awesome good, very steady skies, will send you a Jupiter single shot, not stacked to show you just how good, almost a 9, I would say out of 10. Total clear skies all night, stayed up till 3 am. Friday more people showed up, for another good night, some clouds but viewed till 2 am. Saturday was cloudy mostly with several very clear nice looking sucker holes that quickly filled in before you could do several objects. Despite clouds I did manage to view about 20 objects thru the night.

We built a fire, first time ever at a Star party to ward of the mosquitoes. The fire was out before we began true dark sky viewing. Baby Moose was seen in woods behind Jim's campsite and lots of butterflies, wildlife there is plenty to see if you are watching for them. Old dark sky marine type Jim Sapp showed up, good to see him again. Jim cleaned up the woods around his camp place. What a guy, we could use a few million more like him. Lots of dead tree branches and such still just laying around, fire danger and lots of breeding grounds for mosquitoes, worst I have ever seen them up there. It was also the warmest ever on record for me, just mid 30's cold, mid 40's one night.

Solar in H alpha was good too, I tried for some pictures but just came out so so. Here are a few shots from the dark, bye, Gary

Deadman Star gazing report by Gary Garzone

Hi All, We, Steve L, Dave D, Mike R, Dan L, Vern R and myself, did do the drive to Deadman star gazing site from Fox Park on Saturday. Wow !! Beautiful place, high country, over 10,000 feet. Mountain views of snow caps, slice of Heaven for sure. Long winding road, 18 miles from Red Feathers area, 8 miles up hill from Wyoming side, makes it almost impossible with my motor home. I would have to take the Explorer instead, so probably will not attempt with my old motor home. WUTS will be where I will be for star party once again next month. This is a social event with some star gazing going on, I will be testing crowds with tracking scope, less running up and down ladder if working right.

You guys that want to be alone can if you go down one of the roads to fields near Fox Park itself, about two or three blocks away even would be without crowds for those who think it is getting to be too much and too big a event. We could use a new bigger area but where?? I will endorse WUTS once again and see some old friends that always show up. I get the rest of the year for myself, at our new moon dark Sky viewing, this is a time to

share views of stars and minds with all, so much to still learn. I enjoy talking with the crowds at these events, usually get my own time after midnight, when most are too cold to endure, crowds thin to real dark sky marines.

We had solar views with H alpha, filter scope, way cool, but pictures did not come out good. Focus again was the problem with first try with digital camera, 3 Meg only. Will let you know when they get better.

Moose on the loose in Fox Park, so big a animal, makes it a special place to visit just to see one once in awhile. Butterflies were amazing, so many this year, got some great close ups of flowers and butterflies too ,was cruising on 4 wheeler in backwoods, so many trails, goes on for miles, deep woods experience, bugs in my teeth, you know I was having fun. Fox Park, my favorite place, is still the easiest drive and darkest skies, will put up with the crowds, see you in the dark, bye, Gary

Classified

To buy:

Wanted: Large dob, say 14-15 inches, in good working order, preferably with digital settings circles. Thanks!
Bill Travis, 303-530-5010, wtravis@colorado.edu

To sell:

I am trying to sell a Celestron Ultima 9.25. If the deal were local I would expect closer to \$1,600 or so and accept credit cards.

<http://www.astromart.com/viewad.asp?cid=233874>

Jared Workman

I got a new (800mHz) computer & wish to sell my 3rd computer. It's a 433mHz, 64meg RAM, 9 Gig HD space, 33.6K modem, and SoundBlaster sound card, with a 15" monitor, programmable keyboard & MS mouse, with Windows 98 SE for sale. \$180. No problems with it what-so-ever. Will deliver & setup within 30 miles of Ft. Collins. It would be great for a stand-alone application or a kid's computer.

Contact Tom Teters tomt@starmon.com

For Sale: Orion EQ 120 Refractor; F/8. Items included: EQ mount, tripod, JMI Refractor hard case, telrad & telrad dew shield, 1 1/4" Diag mirror, 6X30 Finders Scope, Collimation eye piece, 25 mm & 4mm eye pieces, Astrosystems new waterproof cover. All for \$1,000 firm. Contact Marc and Julie at 303-682-5428 or email if interested; marcwiley@wildmail.com or julie.carmen@colorado.edu

Couch Potato Binocular chair. It all collapses down for transportation. I built this and it works great. \$120.00. Contact Mike Hotka (mhotka@yahoo.com) with questions or comments.

Binocular parallelogram I built. Works great. Tripod not included. \$70.00. Contact Mike Hotka (mhotka@yahoo.com) with questions or comments.

To give:

FREE: Monitor, HP D1195A 15" CRT, will display 1024x768.

Clean, like new, works. Contact: Bob Noble nobler@att.net

If you have astronomy stuff to buy or to sell, send an email to your newsletter editor
philippe_bridenne@yahoo.com

The LAS warehouse

LAS logo T-Shirts:

Crewneck, navy blue, 8" white LAS logon on front

\$10 - S, M, L, XL

\$12 - 2XL

\$13 - 3XL

\$14 - 4XL

\$2 - 5" LAS vinyl sticker, black or white

\$5 - 4" LAS embroidered patch

\$5 - VHS tape, "An Evening With David H. Levy", 3 January 2004

\$1 - LAS Planisphere

2/\$1 - LAS un-bumper sticker



Mount Evans Telescope

August Sky Map

