



LAS Member Vern Raben peeks thru the 92 incher at JELM

Longmont Astronomy Society Newsletter

October 2007

From the President:

Hello Astronomers:

The Home Planet Stellar views this past month have been good to us again, worth talking about. We finally got a good night for Marcia Aden, the School Teacher for Overland Middle school. The star party was held at a church site out of town, she was trying to find a dark place to show the kids the best dark skies views possible for urban area.

Marcia was not kidding when she told me there would be over 75 kids plus the parents, what a huge turn out of people. Marcia was so kind, she and her husband cooked dinner and cherry pie for the 11 volunteers who showed. I got there before dark to set up near Andrew Planck, Vern Raben, Damon Alcorn, Mike Hotka, Scott Leasia, John Warren, Steve Hartung, Wes Walleys and a few others. I noticed two wall pack lights in back of building plus one pole light that was in view of our church yard sky views. Well with me being a master electrician, I asked where is the breaker boxes. We turned off pole light and backyard wall lights, now we are talking dark. The church site was almost to town of Hudson, off Highway 52, on WCR 41 road, then north a few miles, so pretty far from town lights. I could even see the Milky Way naked eye along with M 31 not quite the level of M13 dark. Great success because of the great volunteers. Thanks Volunteers, we could never do it without you guys. Your time and efforts are well appreciated by me, Marcia and all the kids too.

We started the night with a very bright -2 mag ISS pass straight over us, then a -4 mag Iridium flare, thanks to green lasers, it was easy for all to see and find it.

The weather man said cloudy night and windy but clouds held off long enough for viewing and winds did die down some right after dark. I got the most spectacular sunset shot. Clear skies with sun just going down behind mountains then you can see shadow of mountains outlined onto sunset with sharp clear spikes of light rays.

I figure you never know about weather until last minute. Marcia's kids had no views at all last year because of bad weather. Whole group had showed up at YMCA in Estes Park. Brian White did his Aurora show inside because of bad weather. We made up for the lack of views last year this time. Thanks Marcia for being so good to your students and volunteers and knowing star parties need to get done outside of light domes of town if possible. You did good, earn a passing grade.

The diehards, Vern Raben, Mike Hotka, John Figoski, Dan Lafaive and Carol and myself showed up for the new moon viewing at Fox park. We did the Jelm open house Friday night. They had an eyepiece in the scope but no views were had because it clouded up after dark. Darn clouds hard to see thru. First clouded out Jelm scope open house in 6 years. Well Mike H, John F., Carol and myself did get a great night at Fox park on Thursday night. We got there Thursday because of weather reports of clouds for weekend. I took off a few days off work - it has slowed down some for me. We got total clear skies with best contrast and views since last time we were at Fox park in August for WUTS weekend. The Veil nebula is still so good, Crescent nebula, a favorite was awesome too. M 31 galaxy is so huge in 30 inch scope. Blue planetary nebula was so blue looking in black velvet dark skies. When Mike went to bed at 4 am it was 18 degrees outside, cold it was, but luckily no winds at all.

Mars was so good, the best since the last closest approach about 2 years ago.. I could easily see details, so bright in 30 scope you need filters. I saw polar cap and surface features and colors, dark area and tan areas. Very good about 2 am or so. I can not wait now, Mars will continue to get better next few months until Christmas when it will be at its' best. Sorry never will be as big as full moon as those idiots on Internet say, too bad they are still getting old news that was a lie then and still is now. I plan to do some web camera tries,

will be sending off pictures. I hope some of you astro photographers will get some awesome shots once again. This will be best year for it , higher in sky than summer visit two years ago, winter you know, so angles will be different, higher up, so good for us taking the pictures.

The LAS club is going strong these days with some great views going on. We do so many outreach star parties, we are in demand . We need some more volunteers for Crow Valley Star party. It's on Oct. 20th Saturday night. We have two bus loads of people coming out to the dark skies for actual astronomy views in dark skies?? Somebody finally is aware of dark skies for a star party. We must be getting thru to them hey? I have done this one for 5 years now? Let's keep a good thing going, thanks.

LTO friends need volunteers for some of their outreach programs. Andrew and myself and a few more will be needed for 4th grade classes on Oct.17th Wednesday night viewing. This is local event and easy to do, fun social night for us. I will report how it went at next meeting. Will be over by then.

I need volunteers for Altona Middle School in Longmont for Nov 14th at 7:30 PM . I will send off e mails before then, local school, Airport and Nelson roads area. We will do this one again for them. Ken Otoole is the guy for this event, contact me or Ken. Thanks.

The annual Banquet is coming up again. It will be at Izak Walton park on sunset in Longmont ,January 19th 5 PM. Guest speaker to be announced yet. I am trying to get somebody from LASP William Possel old friend knows some people there. I will keep you all posted as soon as I get a firm response.

Vern Raben, Mike Hotka, Dan Lafaive and myself were booked for special night at Jelm on Oct 13th but got bumped because of snow storm and cloudy windy weather, Darn again. We did not take it too well ,so will try again maybe Monday. Last chance for viewing till next year. We are paying to rent the place. Serious astronomers only for a long die hard night of awesome views of all my favorites. Eyepiece views thru 92 inch scope, am I dreaming or what?? Dreams sometimes do come true, I will give full report to LAS club members if it happens. Aperture fever , maybe no cure is what they told me when I built the 30 scope, I hope it does not spoil me too bad, might be looking for my next scope.

Well us amateur astronomers sure have it hard compared to professional astronomers. We drag all the equipment around to dark sky places while they get all the great scopes and stuff in warm rooms , but what I figured out is, we get all the great views, not them. They talk about it but we do it. It's darn well worth it if you ask me about how much trouble it is to haul 30 inch scope to dark sky sites, quality viewing is not free, you must earn it with some effort and costs. Thank God we live in America, where there is still some dark sky places left, we are keeping the dark sky viewing dreams alive.

See you at next dark sky star party which is Crow Valley Oct. 20th Saturday, lets make it a good turn out . Try to show up for some great views of the heavens before light pollution steals our views away. We will tell our kids in future about it, probably think we are old slowski folks from the past, my new motto is, "Milky Way before it fades away". See you in the dark, bye, Gary

Late news from Jelm:

Hey astronomers, Vern Raben Dan Lafaive and myself got to rent Jelm Mtn, WIRO 92 inch scope for a night. We had eyepiece on it with a 2 minute field of view only, so we did mostly Planetary nebula . We looked at NGC 891 galaxy, which is edge on and dust lane was 1/2 inch wide in eyepiece it seemed. We had to scan to see whole galaxy. Blinking planetary nebula did not even come close to blinking off, it filled almost entire eyepiece with star in center of blue halo. Wow!!! Best ever view of that, even in 30 scope it is a blue ball only with center star. We stayed up till 5 am. Few pictures of scope, observatory and us. It snowed up there Saturday and Sunday nights. We had Saturday booked but waited till Monday for clearing skies.



In the sky this month:

Meteor Showers:

Meteor rates start and end with a trickle, but they achieve a substantial peak October 21. In 1993 and 1998, the Orionids displayed enhanced rates 3 to 4 days before the usual peak, so it's worth watching the shower over a week's time centered on the date of maximum. Rates can reach 20 meteors per hour, and occasionally more.

The Moon's absence makes this a good year to watch the Leonids on November 18. The radiant rises about midnight as the First Quarter Moon is setting. Meteor rates should be 20-40 per hour at 3 A.M. In the hour or two before dawn, the shower strikes headon, and you can expect fireballs into twilight.

Planets

New map of Mercury: See the details at

<http://www.skyandtelescope.com/community/skyblog/newsblog/10317557.html> - this method is straight out of Vern's driveway, except they used a "little bit" better equipment.

Speaking of Mercury, the sun planet puts on its best show of 2007 the morning of November 7th, when it is at an elongation of 19 degrees. Catch it starting an hour before dawn in the east.

Venus is still high in the east during the morning hours, and Saturn is just above it, although the rings are closing. With the Moon passing through the group of planets on November 5th, it should be a sight!

Jupiter is still in the evening sky, but low in the western mountains. I was checking out the moons last week with the 20x spotting scope as a test (it worked just fine, but it's still a cheap one). I've been eyeing one of those Svarkovski gems for bird watching, but I'm kinda put off by the idea of it costing as much as my first new car! And then you have to get a real good tripod to hold it....

Mars is rising just after sunset, as it prepares for opposition in December. Rises 3 hours after sunset on November 1 and doubles in magnitude from -0.6 to -1.3 during the month as it grows from 12 to 15 seconds of arc. Look in the constellation Gemini for the warrior planet. While you're at it, compare the color with nearby Betelgeuse. Goes into retrograde on November 15th, for the real sky watchers.

Moonwatchers: libration brings Mare Australe into view around Nov 23/24 on the southeastern limb. Watch starting a week in advance for the movement into view.

Interesting Stars/Galaxies

Moon occults Regulus on Sunday morning November 3rd. 11:00 to 11:35 GMT

Club Calendar:

Nov: New Moon: 10th - Pawnee
Meeting: 15th – Swap Meet/Nominations

Winter Banquet is at the Isaac Walton clubhouse on Sunset St, January 19, starting at 5:00 PM. Speaker is good old TBD (Hey, we're working on it, ok?)

Fiske Planetarium:

+ Colorado Skies: Dark Matter (October 25, 2007, 7:30 pm)

<http://fiske.colorado.edu/calendar/moreinfo.php?id=122>

Enjoy this guide to the night sky under the Fiske Planetarium dome, presented by Matt Benjamin. Come for a current look at Colorado's skies with a special focus on dark matter.

+ Moon Mineralogy Mapper (November 1, 2007, 7:30 pm)

<http://fiske.colorado.edu/calendar/moreinfo.php?id=146>

Aboard India's first lunar orbiter will be an instrument designed here in Boulder—the Moon Mineralogy Mapper.

+ Moon Mineralogy Mapper (November 2, 2007, 7:30 pm)

<http://fiske.colorado.edu/calendar/moreinfo.php?id=146>

Aboard India's first lunar orbiter will be an instrument designed here in Boulder—the Moon Mineralogy Mapper.

+ Colorado Skies: Nature of Science (November 8, 2007, 7:30 pm)

<http://fiske.colorado.edu/calendar/moreinfo.php?id=138>

Enjoy this guide to the night sky under the Fiske Planetarium dome, presented by Matt Benjamin.

+ Deep Impact Mission Update (November 9, 2007, 7:30 pm)

<http://fiske.colorado.edu/calendar/moreinfo.php?id=58>

On July 4, it will be one year since the Deep Impact mission peered inside a comet for the very first time. What have we learned about comets and the structure of the solar system since then? Where will the surviving Deep Impact spacecraft go next?

+ Colorado Skies: Leonid Meteor Shower (November 15, 2007, 7:30 pm)

<http://fiske.colorado.edu/calendar/moreinfo.php?id=124>

Enjoy this guide to the night sky under the Fiske Planetarium dome,

presented by Elin Deeb. Come for a current look at Colorado's skies with a special focus on this year's Leonid meteor shower, which peaks on November 17.

+ Colorado Skies: Extraterrestrial Life (November 29, 2007, 7:30 pm)

<http://fiske.colorado.edu/calendar/moreinfo.php?id=108>

Enjoy this guide to the night sky under the Fiske Planetarium dome, presented by Matt Benjamin. Come for a current look at Colorado's skies with a special focus on the possibility of life elsewhere in the solar system.

Internet Resources:

Remote telescopes (ideas brought about in the September meeting):

One of the oldest is SLOOH, housed on an island off the coast of Africa. \$20 gets you 200 minutes, \$100 gets you unlimited time. Nice thing about SLOOH is that it's about 5 hours east of us, so you can use your telescope time starting about 5PM mountain time.

<http://www.slooh.com> for the details.

There are many remote telescopes in the world, including

<http://www.elkcreekobservatory.org/projects.html> in Holton, KS

<http://www.telescope.org/> in Bradford, England

<http://www.csu.edu.au/telescope/> in Australia (that CSU bit got me for a minute)

<http://www.remote-astronomical-society.org/> in New Mexico, with a lot of stuff on "how to use" materials on their website

<http://www.madison.k12.wi.us/sturgeon/remotemmsd.htm> an educational project for middle school kids in

Wisconsin using remote telescopes

All these references should give you a good start.

Must see movie:

On April 20, 2007, the comet had just dipped inside the orbit of Mercury, perilously close to the sun, when a solar eruption struck and literally tore the comet's tail off. This surely has happened to comets before, but for the first time in history a spacecraft was watching. NASA's STEREO-A probe recorded a fantastic movie of the collision. Watch the movie at: http://science.nasa.gov/headlines/y2007/01oct_encke.htm?list937934

Remote viewing for laughs:

A websearch for 'remote viewing' in the search for the remote telescopes turned up the following site: <http://www.manyuniverses.com/remotewiewing.htm> Apparently there's a big group out there that saves money on telescopes and doesn't have to stay up late to see other universes, including the parallel ones not accessible to amateur astronomers. Maybe Brian K. is using this to make his pictures? Tell the truth, now.... I enjoyed the preview of Courtney Brown's book on the internet, which includes the directions for "Shifting the Awareness of the Physical/Subspace Interface". Editor's note: this is **NOT** a serious reference, just illustrates the diversity of pseudo-science out there.

Close by viewing: The New York Times on October 4th had a nice article on the "newest thing" to hit the home front – houses with an observatory. Read the article "Adding an Extra Room for the Sky" at http://www.nytimes.com/2007/10/04/garden/04observatories.html?_r=1&oref=slogin When Gary starts on the BIG scope, this might give him some ideas. The article mentions that one guy did spend 200 thou on the equipment.... Look for Gary to increase his hourly rate to cover the big glass.

New Department: Member Notes and accolades:

Vern Raben and Mike Hotka have been recognized by the AstroLeague for their help in editing/ writing/ revising the AL webpage. Good job, youse guys!

This month's field trip:

The Pima Air and Space Museum, outside of Tucson, contains the largest collection of planes in the United States. You can read the list at <http://www.aero.com/museums/pima/pimaexhb.htm> and visit the main museum site at <http://www.pimaair.org/> One of the cooler things to do: The Pima Air & Space Museum offers exclusive bus tours of the Aerospace Maintenance and Regeneration Group (AMARG), also known as the "Boneyard." The facility is located adjacent to the Museum at Davis-Monthan Air Force Base. You can pass about a hundred B-52s at the boneyard – impressive. They also have the Eisenhower presidential plane, and that's unique. And the 'guppy' with a swelled nose, first used to transfer rocket parts to Cape Canaveral. Associated with the museum is a Titan missile silo if you'd like to visit that. Allow a day here.

Upcoming Space Missions:

Details on the Dawn mission (launch date of Sept 27, on its way) can be found at http://science.nasa.gov/headlines/y2007/27sep_dawn2.htm?list937934 Gonna go look at a couple of asteroids is the short version.

The New Horizons mission, on its merry way to visit the dwarf planet Pluto, used the gravity of Jupiter to speed it on its way. As it passed by, it took a few pictures and discovered a few things. (Amazing how the photo ability has improved since Voyager first flew by, isn't it) Brief summary from Astronomy Magazine is at <http://www.astronomy.com/asy/default.aspx?c=a&id=6075> and the mission home page has all the details at <http://pluto.jhuapl.edu/> or http://www.nasa.gov/mission_pages/newhorizons/main/ Image analysis by our very own

Southwest Research Institute in Boulder. We have to get one of those folks in to give a talk, I guess.

ISS News:

Expedition 16 in Orbit, Heads to Station

Expedition 16 Commander Peggy Whitson, Flight Engineer Yuri Malenchenko and spaceflight participant Sheikh Muszaphar Shukor are in orbit and on their way to the International Space Station. Their Soyuz TMA-11 spacecraft launched from the Baikonur Cosmodrome October 10, 2007, at 9:22 a.m. EDT and entered orbit less than 10 minutes later. They will dock to the Earth-facing port of the station's Zarya module on October 12, 2007, at about 10:52 a.m.

The Expedition 15 crew has been busy readying the station as they prepare to greet their replacements and Malaysian guest. Commander Fyodor Yurchikhin and Flight Engineer Oleg Kotov set up a work space in the Zvezda service module that will allow the visiting Shukor to perform several experiments over nine days. Flight Engineer Clay Anderson also resized U.S. spacesuits for Whitson and Malenchenko for an upcoming spacewalk. The current station crew also held space-to-ground teleconferences with their Expedition 16 counterparts to assist with handover activities.

Yurchikhin and Kotov are scheduled to leave the station on October 21 officially ending the Expedition 15 increment. Shukor will go home with the two cosmonauts. Anderson will remain onboard with Expedition 16 and return to Earth next month aboard Discovery on its STS-120 mission.

New Software:

If you've liked to play with Google Earth (earth.google.com) has updated the imagery to include the view of the Earth's surface at night. **USE:** locate the best patches of dark sky nearest your house! Go for the "Earth City Lights" layer on Google Earth.