

Longmont Astronomical Society

April 2005



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The Home Planet Stellar Views

Hello dark sky marines!

The LAS club has been working overtime this past month, probably one of our busiest in awhile. We did Heritage elementary school but got clouded out.

Then we all ventured out to North Sterling Reservoir State Park for our LAS annual Star party.

Thursday, I left for Sterling but broke down with Motor Home on I76 by Wiggins and did not make it to Sterling until Friday morning. I heard from gang it was a great night. Friday the winds blew so hard that most left for home figuring on clouds and wind, but by midnight it all cleared and was beautiful, calm, clear and real dark. Saturday morning the park Ranger Bob Loomis stopped by my motor home to warn us about huge snow storm moving in. We all hit the road before then and good thing with 12 to 30 inches of snow, most major highways were closed down by Sunday morning. Great blizzard and blow out of 2005, will remember this one for awhile.

We had LAS planning meeting here at my place for FRCC college viewing night. Great turn out by LAS executives, and members to help with FRCC students, but last minute cloud cover changed all that and at 8 PM Adam J. , teacher at FRCC astronomy class called and said they were not coming over. Darn I had cookies, cake, drinks, cheese, sausage and more for crowds that never made it there.

Friday night at Lyons Elementary school star party was huge success. Despite the clouds and poor chance for viewing lots of people showed up anyway and before it was over the clouds broke and we had great clear sky views. Saturn and Jupiter were excellent for showing off to kids and parents that were there.

Astronomy day at Mall was probably the best yet. We had three solar scopes set up by west entrance to Mall. Andrew Planck and Vern Raben had H alpha filters, with very cool views of sun, super treat indeed for most of us. We also had my 8 inch telescope with solar Baader film for sun spots. Crowds were constant all day long. Thanks to many of the LAS members who helped out and it was needed and is much appreciated by me and rest who usually carry the load. Michelle Lavers brought her big Meade scope, which was impressive. Thanks go out to many. Mike Hotka for JPL set up again, Jeff Laux, Mark Propp, Mike Fellows, Ken Tryon, Ray Warren, Nancy Muth, Brian Kimball, Philippe Bridenne, Dick Mallot, Dick Latt, Bob Spohn, Ron Crispe, Michelle, Neal Stangis and his wife Shannon, also Terry Frazier wheeled in to help with crowds and giving away the posters. Vern Raben had his great H alpha scope. Andrew Planck's H alpha scope too was going strong and had constant lines at scopes. Wow! Just like at big star party.

The Home Planet Stellar views of planets were great at Flanders Park for public viewing on Astronomy day. Planets were tack sharp but haze and China dust storm particles in air along with moon light made for some horrible views on most stuff. We all had fun anyway and lots of people showed up. LAS is definitively the most active bunch that I know of and I am proud to be a part of it all.

Hope to see you guys in the dark next new moon? We will send out e mails. Keeping it Cosmic, right Tom T, bye, Gary

Picture on the front page courtesy of Brian Kimball.

Hello, this is my attempt at M63. Things are starting to come together finally. Three hours of luminance was taken Thursday night and one hour through each colored filter was taken last night before the clouds came in. 12.5" Ritchey at f9 and a SBIG ST2000XM camera.

Calendar

Apr: New Moon: 8th & 9th – Sterling Star Party
1st qtr 16th – Astronomy Day at Twin Peaks Mall & Flanders
Meeting: 21st – George Hypes – star slide show
Lyons Elementary – April 15th

May: New Moon: 7th - Pawnee
1st qtr: 14th – Flanders Park
Meeting: 19th – Deep Impact – Jim Crane? Gary’s friend?

Jun: New Moon: 4th – Members’ choice!
1st qtr: 11th – Flanders Park
3rd qtr: 25th – Tri-Town Party
Meeting: 16th – Gary Garzone – Lunar presentation
Andrew Planck Star Party – 3rd & 4th
LAS/BASS/URSA private party at CU Mountain Research Station - 10th – 11th

Jul: New Moon: 7th – 10th: Rocky Mountain Star Stare
1st qtr: 9th – Flanders Park
Meeting: 21st – Shuttle return review/Perseid review – Ross/Johnston
Deep Impact on Mt. Evans - 4th

Aug: New Moon: 4th – 6th: Weekend Under the Stars – Fox Park
1st qtr: 13th – Flanders Park
Meeting: 18th – Fiske or NOAA – Steve Albers sphere mapping project

Sep: New Moon: 3rd
1st qtr: 10th – Flanders Park
Meeting: 15th

Oct: New Moon: 1st
1st qtr: 8th – Flanders Park
Meeting: 20th

Nov: New Moon: October 29th
1st qtr: 5th – Flanders Park
Meeting: 17th

Dec: New Moon: 3rd
1st qtr: 10th – Flanders Park
Meeting: 15th – Ray Warren – Stardust Return

March meeting notes

Meeting called to order by President Gary Garzone.

Visitors:

Ron from Niwot, makes eyepieces.

Mark Hannah, friend of Brian G., works at Ball Aerospace, has lots of hardware in orbit. Hope to be a speaker sometime.

VP report: Dick Mallot, we have been invited by Mead Elementary 2nd graders, about 60, Monday April 18th. Rented out Little Thompson Observatory, would like to see half a dozen telescopes.

Secretary report by Mark Propp: web server crashed Monday, back up on new hardware Tuesday. Mail server is back today. Much improved software in the process, fixed some problems. We now have redundant hardware.

Treasurer report by Julie Carmen : Julie reported on account balances, all is well. Closing raffle fund, motion put forward that remainder goes to telescope fund. Motion approved by the meeting participants. Come to Julie to renew your magazine subscriptions.

Newsletter Editor by Philippe Bridenne: Philippe distributed newsletter. This month's newsletter is pretty short. This is your newsletter, so please contribute stories, observing reports. Another event, non-astro: I have pictures of my new grand son, 1 day old!

Astronomy Day report by Michelle Lavers: passing up signup sheet for Astronomy day volunteers, also for Flanders Park that night. Last month we got \$350 from Mike's camera and discount coupons. Walmart donated \$50 worth of merchandise, sometime after April 1st, several little plans for that. Border's fell through, but may have 15% of one day sales contributed to LAS. Fiske contributed posters and other goodies. Working on the T-shirts, narrowed down to 5 colors and 5 slogans, we vote tonight on the preferences. Lighter colors preferred for summer, and ink on dark shirts also costs more.

Publicity and Fund Raising report by Ray Warren: Planetariums, more than 100. We need 10 more for Crestview Middle school. Need your help building planetariums. Only cost us \$0.25 apiece. Made like \$300 from these things. Ray demonstrated how to build the planetariums.

Astronomical League Correspondent report by Bob Spohn: Bill Possell could not be here, but he has submitted documents for 3 certificates : Messier, Herschel 400, Peculiar Galaxies. They have redesigned the logo for the Herschel, that's why I've waited 5 years to turn mine in :) How many had a chance to look at the objects we talked about last week. (About 3 hands went up). Now we do presentation 2 of 8. Look PowerPoint, all by myself!

Northern part of sky. Two opens in Cancer, then M81 and M82, 108,109, M40, 51, 94, 106 and more. That time of the year, we are talking Galaxies!

Cancer, M44, Beehive cluster, one of the nearest largest and brightest clusters, naked eye cluster, best in low power, Galileo was the first to observe it in a telescope, big cluster.

M67 below it, open cluster, bright one too. Nearly the oldest cluster in the galaxy, about 10 billion years. It is located 1500 light years above the plane of the galaxy.

Ursa Major: M81 and M82, take the bowl of the dipper, up in a square. M81 is a Spiral Galaxy, M82 is irregular galaxy. You can get in same view with low power. You can see in all but very bad skies. Not going to see it like you see in these pictures. Take your time, look for details.

Can you see the spiral structure? M82 is an irregular galaxy, not spiral, some interaction between the two galaxies in the distant past. Look for 2 or 3 smaller companion galaxies in the area. Look for a lot of dust lane structures, can see in good dark skies. It is some of the easiest galaxies to find.

Next we go to the owl, M97 and M108. M108 is a spiral galaxy, nearly edge on, dirty dusty galaxy, a lot of detail to see. The owl nebula, M97, planetary nebula, one of the largest planetary nebulae, diameter is about 3 LY. Look for the distinctive dark 'eyes'.

Now to next galaxy, M109 in Ursa Major, is easy to find from bottom corner. M109 is spiral galaxy, barred spiral, easy to find. How much detail can you resolve? How about the bar? Probably won't be able to see detail of arms. M40 Double star, questionable Messier. Hevelius recorded a nebula in 1660, Messier could not find it at this wrong location, so he assumed these two stars were mistaken for nebulosity, and made entry in his catalog.

Jump to Draco, M102 Lenticular Galaxy, the other controversial Messier object. It is basically a spiral-type without the spiral structure. Confusion, thought to be a duplication of M101. Nice edge-on with fine dust lane and central bulge.

Handle of dipper, M101, nice fun one to look at, the "Pinwheel galaxy". Large face-on spiral, note the wide spaced arms and relatively small, bright nucleus. How far can you trace the arms?

Now to Canis Venatici, also called the Hunting Dogs. Cor Corrolli. Two hunting dogs. M51, the "Whirlpool Galaxy", Spiral Galaxy. The first galaxy where spiral structure was detected, 1845 by Lord Rosse, who made an accurate and detailed painting. The small companion is physically interacting with M51. Spiral structure is easily detected.

M63, "the sunflower galaxy", is a spiral galaxy, part of a small group of galaxies that includes M51, the closest group outside of our "local group". Very large, bright nucleus, surrounded by tightly coiled arms.

Our last two, M94, spiral galaxy. It is very bright and compact, nearly circular. It is easily found- makes an isosceles triangle with Alpha and Beta Canum. A tight series of arms radiates from the core, and the whole galaxy is surrounded by a ring.

M105, Spiral galaxy, is located half way between face-on and edge-on (kind of like M31 andromeda galaxy). There is a bright central region fading out to the spiral arms.

Thanks to Brian Simpson for Night Vision program used to prepare the charts. Bob also used Burnham's Celestial Handbook for info. Thanks to Brian Kimball for images, and National Optical Astronomy Observatory.

Charts set for Saturday, April 8th.

Old Business:

Any observing reports? People were out at Pawnee the last two weekends, a couple of marathoners, whole family out in a tent. Wind blowing. The week before, dedicated observers out on Friday night. Discussion of telescopes and mods. Jupiter rising. Saturn is straight up at zenith at first dark, awesome. Best view of Saturn since before opposition, even in urban sky.

New Business:

Upcoming Star Parties:

Crestview Elementary Star Party: 31st March. North Boulder, 5:30 PM. Patty Fawcett.

Sterling Star Party: New Moon, Apr 8th and 9th. Great place to do the Messier objects, jumping out of the dark sky! Hope it's not windy, it can be windy there. Gary plans to be there Thursday, Friday, and Saturday, with 16" and 30" scopes with tracking platform.

March 23rd, Heritage Elementary in Longmont, Hispanic/English mixed group. It is located on Mountain View and Lashley, by Roller Hockey Rink. 6 to 8pm. Two scopes would work great.

Lyons Elementary, with Dr. Erika Ellington: April 15th.

Collaboration with BASS and CU to use CU Mountain Research Station about Nederland. There is a 12.5" scope up there, new dormitory, June 10th and 11th. It is 4 days after New Moon. We have to pay for the dorm rooms.

Julie Carmen: We will be one of the first groups to use the full facilities, BASS would like to host Friday night and pay for Kitchen that night, and we would host Saturday night. It is a two night event. Perhaps we could have a presentation for Saturday. When snow is down we can map out where to place our scopes. Bedrooms: 8 dorm rooms with 4 bunks each, warm, hot showers and bathrooms. It averages out to \$11 per night per bunk bed. There is a new modern kitchen. All the AV equipment we need, laptop. Julie sent around an envelope. Fairly dark site, some trees.

Julie Carmen: Laser Name tags \$6.00, optional, we still have the old \$3.00 clip on ones.

Western Colorado Astronomy Party in June, Grand Junction. Gary heard it is great. It is located at 10,000 feet on top of a mesa. Rave reviews. Same weekend as the CU Mountain Research party, only 30 miles away.

Andrew's party is the weekend prior.

Astronomy Day coming is up before next meeting, April 16th, at the Longmont Twin Peaks Mall, and Flanders party following. Our biggest outreach, been doing it for years, people come to look forward to it.. Bring H-alpha scope, 11" !

April 18th, Little Thompson.

----- Break -----

Patty Fawcett, plug for the Crestview Elementary star party. Should be a good group of kids.

Andrew Plank, project to turn the moon from an enemy to the friend. Created a guide, "The Moon: A night by night exploration of features", includes place for notes and drawings. Passing around, if anyone finds it useful, I will give it to you at cost of production. Kinko's charges me \$15 to make it. If it would be interesting, let me know.

Steve Albers, showed off some new links from our web site. Cool stuff, Titan, Mars, Cassini, amusing and entertaining. There is a link to a blog on Cassini, college age guy working as part of imaging team at Univ. of Arizona. Leaks some stuff before it is available on the JPL web site: "Titan Today". There are some raw images, commentary.

Presentation by Dick Mallott: Upon Whose Shoulders We Stand: A History of Astronomy Up to 200 A.D. A great presentation!

FRCC College Night report by Gary Garzone

Sorry, but the FRCC college night was cancelled because of clouds. It sounds like a rain dance when I try to plan something like this.. They could have at least come over and ate up all this food and stuff. Carol made Cookies, Banana bread cake , vegetable tray and cheese and sausage , coffee, drinks etc. Darn cloudy weather. As soon as you guys left, you knew it would clear for us. I always joke about it but darn! It did clear again, and before midnight. Work gets in the way, but we all got to pay for our hobbies and support our families, so no late nighter tonight, work does come first sometimes.

We had a great planning meeting, too bad it did not clear until most of you guys left . Brian K and Ken T got to do Jupiter, Saturn and Fuzzy moon views. By the time I put everything away it was totally clear almost. You can never out guest mother Nature in Colorado, that's why I do not always listen to what the report is and just hope for the best.

Great group shot! Thanks to all of you guys for showing up, the die-hards, still LAS is the Best. And late night bird gets the star view or something like that?? Enjoy sending pictures, Bye, Gary



First light on new scope by Perkins

Finally finished building my 12" dob. A few pictures are at http://home.earthlink.net/~nateperkins1/misc/astro/12dob/12dob_pics.htm

Saw first light last night at Discovery Center, along with Dan Laszlo and Greg Halac. We had some good views of Jupiter, Saturn, and the Moon. The views using Dan's binoviewer with 19mm Panoptics was really something; we saw lots of detail in the belts.

There were very few visitors because of the late clearing clouds. The one family of five that came by was very excited by the views.



Sterling Reservoir report by Vern Raben

I arrived at Sterling Reservoir last Thursday afternoon around 5 and was immediately impressed by the facilities. There were actually picnic tables, shelters, tent pads, bathrooms, and showers -- all very nice. It was fairly windy, around 5-10 mph most of the time and occasionally 20 or so. Setting up my tent was difficult and took a lot longer than usual. I was tired by the time I had everything unpacked, and my scope setup on the wedge. I recovered after grabbing snacks and chatting with Dick now and then who was setup south of me. Fortunately, the sky was mostly clear and very transparent. I was quite impressed with how dark it was, nearly as good as Fox Park.

Normally, I just surf around using the Nexstar's goto, but I decided it was time to practice locating the faint fuzzies manually. I started off taking a look at M42/43 Orion. I was able to trace nebulosity with the Nexstar11 for about a 3/4 degree to the northeast and about the same to the Southwest. Next I found M37, M36, and M38 clusters in Auriga. The Pleiades were not impressive in binoculars; thin clouds in the area masked most of the nebulosity. The Praespe however, was gorgeous. By then, Jupiter was pretty high up, so I couldn't resist taking a look. Not much detail was apparent, other than the main bands as atmospheric turbulence was a problem.

I next went to Leo, star hopping to locate M95, then on to M96 and M105. I decided wasn't going to win the Messier marathon, as I was only averaging about an object every half hour or so! I took a break and looked at M51 in Bob's scope -- very impressive. It was then past midnight and clouding up in Leo so I decided to locate the Whirlpool on my own. To my surprise, it was visible even with 7x50 binoculars.

It had cleared up in Leo around 2 am, and I located M65, M66 and nearby NGC 3628.

A little after three I started in Virgo, locating M60 and then galaxy hopping west to M59, M58 and then north to M89, M90, and west to M86 and M84.

By 4 am Sagittarius was fairly far up, so we couldn't resist taking a look at the Lagoon. Back in Virgo, I got lost multiple times somewhere between M87 and M49. I finally gave up, and punched in M13 on the control. I had to take a quick look at that fabulous globular to end the evening just before 5.

By the next afternoon, the winds were getting stronger. My tent was suffering from a couple bent poles and the weatherman was predicting rain later in the evening with snow coming in Saturday afternoon. I decided to wimp out and head home.

Messier Marathon report by Mike Luckow

In case anyone is interested in hearing it, here's a report on the Messier Marathon I attempted Friday night with some friends at Cactus Flats.

I'm pretty new to astronomy, so I used a Meade LX200 SCT "go to" scope for it. I know that it's considered "cheating" by some people to use a go to scope for a Messier Marathon, and I know that Messier Marathons aren't even "real" astronomy. I just thought that it would be fun to see all those objects in one night anyway, and it was! The friends who participated in the marathon with me were Jim Adams, who's also a BASS member, and Shane Rea. Also, Bill Travis was kind enough to hang out with us off and on until almost midnight, too, and he helped us identify a few of the objects. Thanks, Bill!!

Altogether, we managed to see 105 or 106 of the 109 Messier Objects. (Apparently, M102 is the same as M101, according to a recent article in Sky and Telescope, so the total number of Messier Objects is 109.)

We started as soon as it was dark enough to see anything, and there were some clouds to the west, but we eventually picked up all the Messier Objects in the western sky through holes in the clouds except M74, unfortunately.

Working our way from the west to the east horizon, we were able to see about 70 objects by the time we went to bed at 1:30 a.m. Vern Raben was just leaving about that time, too. We dragged ourselves out of bed at 3:30 to start looking for the rest of the objects. We knew ahead of time that we wouldn't be able to see M30 because it was rising just before sunrise, but we weren't able to see M73, either, because it was too light when we were trying to find it near the eastern horizon, unfortunately. Jim was able to see M72, which was near M73, so he saw a total of 106 objects, but Shane and I weren't able to see M72, so we saw 105 altogether.

Anyway, it was a lot of fun even though there was some wind and blowing dust at times. I'd definitely like to try it again, and hopefully I can see all 109 of them in one night. We learned a few tricks that will help us be a little more efficient next time.

Observing report on Steens Mountain by Dan Lafaive

Earlier in the month, I had the opportunity to visit the ultra-dark skies in the area of Steens Mountain in South Eastern Oregon on my way to see my sister in Seattle. Steens Mountain is the former site of the Oregon Star party and is said to have the least light polluted and most transparent skies in the lower 48 states. I couldn't actually go up the road to the former star party site because it is closed in the winter, so I spent a night (March 6-7) about 30 miles west of Steens off of a gravel road.

While the Western side of Oregon gets a lot of cloudiness and moisture, the eastern side tends to be much drier. In fact, there's a desert in the rain shadow of Steens Mountain. The area around the mountain gets about 300 days of sunshine a year (similar to the Front Range here).

Anyhow, I setup scope a bit after sunset (I've got a 9 1/4" Celestron Advanced GT) and I started out by attempting to do a personal Messier Marathon (I know we're not supposed use GoTo scopes, but it's the only thing I have :), but I later abandoned that effort because I was enjoying the views to much. Skies were perfectly clear.

I did manage to look at 46 Messier objects. I didn't have a list to start with. So I just started looking at objects closest to the western horizon and worked my way east. I managed to hit M39 first, then M77 and M74. Then I got hung up on M31, 32, and 110 because the view was so good. I swung to the north-west and caught M52 and then swung to the south-west and peeked and M79. I continued my sweep until I got closer to Zenith and then took a look at Saturn. At 450X it was awesome! Seeing was pretty close to perfect. I also enjoyed a great view of Jupiter.

My attempt at a marathon came to a screeching halt when I hit Virgo :) I've only been observing through a telescope for less than a year, so the view of 7 galaxies in my eyepiece at one time was just too enjoyable and it slowed me WAY down. Never mind trying to figure out which galaxy corresponded to which Messier object!

I would do about 1 1/2 to 2 hour sessions with the scope and then take a break and just look around at the sky and horizon and try to identify objects and features with the unaided eye.

Where I was at, there were only 4 artificial lights visible on the horizon. They were all 10 to 30 miles away and they were the yard-lights of ranch houses, so they just looked like stars. There was no evidence of a light dome of any kind.

One of the features I looked for was the Zodiacal light and band. I could see it clearly after twilight until well into the night towards the western horizon.

To give you an idea of how clear and dark the skies were, I had an interesting experience when the Milky Way in Cygnus started coming up at around 2 AM. The Milky Way was so bright that at first glance I thought I was looking at a light dome in the distance that my eyes were adjusting to. But then I realized what it was and after my next observing session, I found it to be so bright that a few clouds that appeared on the North-Eastern horizon stood out vividly, it was spectacular!

I had to pack it in at about 4AM because I had a long day of driving ahead of me the next day. I do fully intend to go back to the area in the summer or fall of 2006, during the dry season and go up to some of the observing areas on Steens Mountain itself. If anyone gets a chance to go there, I would strongly recommend it. With good weather, you won't be disappointed. If you're looking for more information about this area, check out these web-sites.

<http://www.patch.com/astro/starsites/#steens>
http://www.or.blm.gov/steens/background/background_page.htm

Anyhow, look forward to seeing everyone at CFN this weekend

Clear, Dark, and Calm skies (CDCF),

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

Wil Tirion's Sky Atlas 2000.0, Deluxe Edition. Stars are black while deep sky objects are colored by type. Spiral bound. Pages unfold to 21 by 16 inches. \$40.00. Contact Mike Hotka.

A complete set of the 1st Edition Uranometria star chart books plus the field guide. A \$160 value if you purchased them today through Willman-Bell, plus their shipping and handling. I will sell all 3 for \$100. I will only sell them as a set. Contact Mike Hotka.

JMI NGF-DX1 focuser. Has 2 inch to 1 ½ inch adapter. \$150.00. Contact Mike Hotka at mhotka@yahoo.com
All...

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, 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

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

May Sky Map

