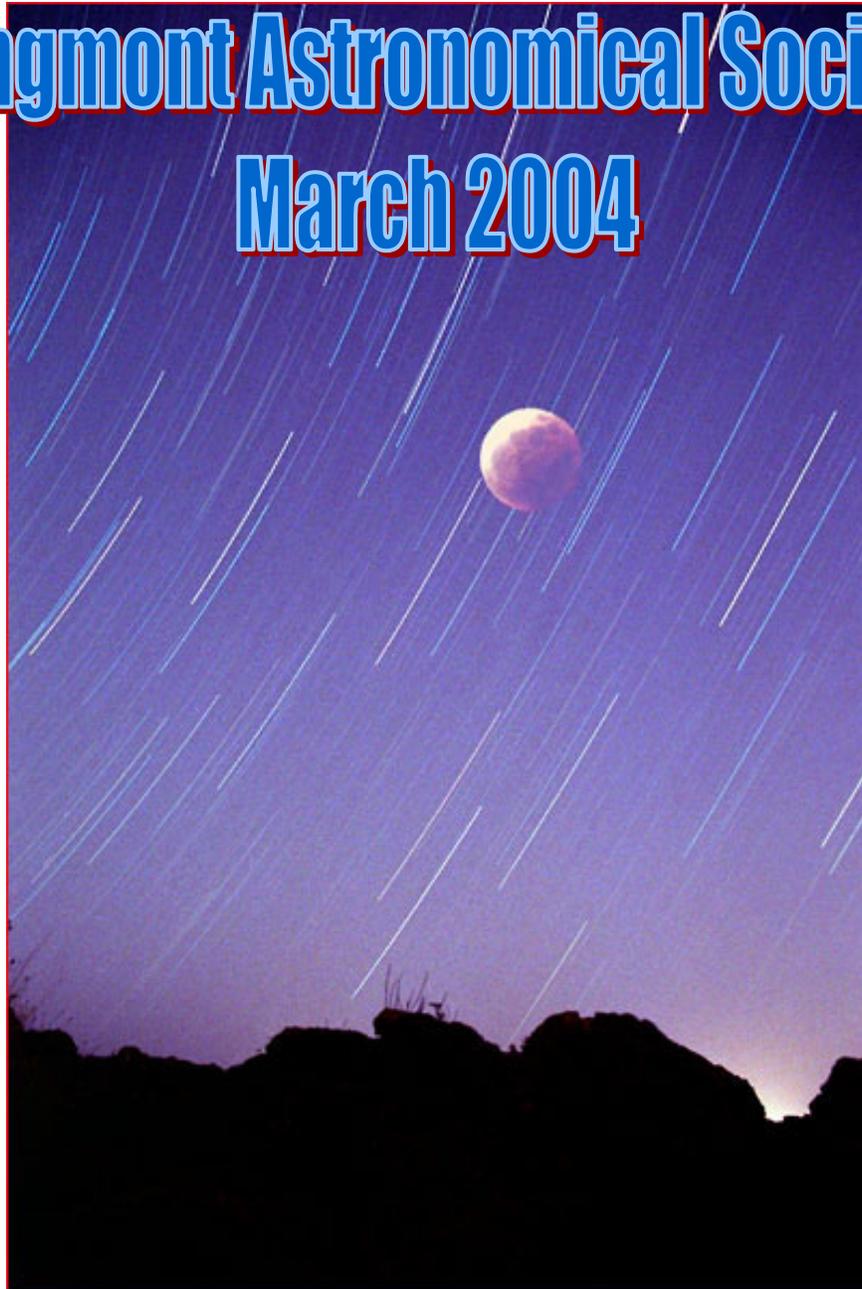


Longmont Astronomical Society

March 2004



*The View From Up Here
Calendar*

February Meeting Notes

Survey synthesis by Ray Warren

Pawnee first light report by Gary Garzone

Record observing by Michael Hotka

Announcements

Classified

April Sky Map

Sterling star party by Gary Garzone

The View From Up Here

Dear members and friends,

Springtime is upon us, that glorious time when the nights are still long, the weather warms up, and telescopes (and their users) come out of hibernation! This is the time to pound out those Messier objects!

We have some events of interest coming up soon:

Friday and Saturday, April 16 & 17, is the Sterling Reservoir State Park Star Party, hosted by the State Park and the LAS. This is a nice dark site, and is turning into a great star party with lots of input and visitors from Sterling and beyond. This is the 1st big Front Range star party of the year, so come out and enjoy. See our website for more information.

For those of you unable to attend, or wish to stay a little more local, there will also be a star party at Lyons Elementary on Friday, April 16 – stay tuned for details.

The following Saturday, April 24, is Astronomy Day, and it is our largest public outreach and education function of the year. This year, due to the large art show, we will be set up outside of the Sears entrance to Twin Peaks Mall, and it should be good with all of the theater traffic. We have a wonderful multi-media display planned, followed that evening with a public star party at Flanders Park. Please try to sign up for display setups, manning the booth during the day, take down, or the star party. With all of the members we have now, that should be no problem. Plus, it's a lot of fun!

Finally, we are making progress on our search for a new meeting place. Stay tuned for some exciting news next month!

Clear skies,

Bob Spohn
President

Calendar

March	New Moon Party 1st Quarter Party	20th – New Moon Party at Pawnee 27th – Public Observing at Flanders Park at dusk
April	Meeting New Moon Party 1st Quarter Party	15th 16-17th – Sterling Reservoir Star Party 24th – Flanders and Astronomy Day at Twin Peaks Mall
May	Meeting New Moon Party 1st Quarter Party	20th 15th – New Moon Party at Pawnee 22nd – Public Observing at Flanders Park at dusk
June	Meeting New Moon Party 1st Quarter Party	17th 12th – Rocky Mountain Star Stare 26th – Public Observing at Flanders Park at dusk
July	Meeting New Moon Party 1st Quarter Party	15th 17th – (Grand Junction Star Party), Fox Park 24th – Public Observing at Flanders Park at dusk
August	Meeting New Moon Party 1st Quarter Party	19th 14th – Weekend Under the Stars 21st – Public Observing at Flanders Park at dusk
September	Meeting New Moon Party 1st Quarter Party	16th 11th – Caribou? 18th – Public Observing at Flanders Park at dusk
October	Meeting New Moon Party 1st Quarter Party	21st 9th – New Moon Party at Pawnee 16th – Public Observing at Flanders Park at dusk
November	Meeting New Moon Party 1st Quarter Party	18th 13th – New Moon Party at Pawnee 20th – Public Observing at Flanders Park at dusk
December	Meeting New Moon Party 1st Quarter Party	16th 11th – New Moon Party at Pawnee 18th – Public Observing at Flanders Park at dusk
Jan 2005	Banquet	15th – Wayside Inn

February 19th meeting notes

Meeting called to order by Bob Spohn our President
Secretary Mark Propp recorded minutes

Visitors were introduced:

- Ralph, found us on the internet
- Bill, friend of Ralph
- David and David Spahn, past members
- Jay Gebrewski, moved here from Sarasota Fl, member of astro club there

Officers Reports:

Vice President report by Melinda Diehl:

- Back on the net!
- Astronomy day coming April 24th.
- Working with Rocky Mountain Christian Academy. Kindergarten children drew pics of "what they thought space looks like" for a contest.

Secretary Report by Mark Propp:

- Announced again new LAS internet domain:
longmontastro.org
 - Steve Albers has moved our web site to our new web server
 - We now have our own email server and list server, making it easier to communicate with club members.
- Any members not receiving LAS email, please inform Mark.

Newsletter editor, Bob Spohn filling in for Philippe today.

- Newsletters distributed

Astronomical League Rep report by Bill Possel

- Lots of information coming
- Club looking at buying book on observing program
- Planning Pawnee viewing Friday night 02/20/2004, in addition to or in place of Saturday 02/21/2004, due to forecast for overcast skies Saturday.

Webmaster report: none

Equipment report: none

Publicity and fundraising report by Ray Warren

- Showed pictures of Ray and Philippe with "Abe Lincoln beards", in honor of President's day.
- Showed slides of new viewing site, and discussed arrangements for using "Kim's Place" (home of Kim and Lenny Jones and Diane Roberts). Several members have checked out the site on a few occasions, and agree it looks good for a close-in spot. Members who want to use the site should simply call Kim before hand, leaving a message if she is not available, and then come on out.

For directions, speak to one of the members who know the way, including Ray, Mark Propp, Gary Garzone, Bill Possel. Best and darkest viewing is on the South side of property, on the access road bordering the property and the irrigation ditch.

Treasurer's report by Monica Martens

- Distributed one of two remaining calendars
- Reported account balances:

Old business

- We continue to search for a better (more accessible) meeting room. We are having discussions with Front Range Community College (FRCC). It sounds promising. They have a nominal room charge, the lowest rate because we are non-profit, and the science club is offering to sponsor us, paying our fee. It offers good access, and potential storage space in the library.

11. New business

- 3 school sponsored parties upcoming:

+ Friday night 02/20/2004, Kerry Martin elementary in North Berthoud as part of science fair.

+ Wednesday night 02/25/2004, Pioneer elementary, starting at 7, arranged by Emily Haynes and Judy Wolf. Last year both the main date and alternate date were cloudy. This year Emily is doing a Mars rovers presentation regardless of weather, followed by viewing if weather permits. It will start at 7:00PM at Pioneer Elementary Baseline and S. Public, behind school. More scopes, the better.

+ FRCC Star Party, Friday 02/27/2004, at Westminster campus 112th Sheridan and Federal, North side, lower parking lot West end, by library, arranged by Terry Frazier. Several members have committed to bring scopes. It will start at sunset. Plan to distribute LAS flyers.

- Fiske planetarium representative Julie Carmen:

+ Fiske had grand reopening, with new carpets and seats. Last Friday was "Deep Impact" talk by Dr. Doug Duncan, sponsored by Ball Aerospace and NASA. Talk is going to be released national.

+ Schedule change for star talks, now held on Thursday and Friday nights instead of Tuesday and Friday.

+ March 4th and 5th (Thu and Fri) is last talk by Dr. John Stake on "Navaho Skies"

+ July 2005 Comet Temple 1, short window for launch.

+ New Boulder Astronomy club, members include Archer and Gary. The new web page will be coming soon. Next meeting is Saturday March 13th at 7pm at Sommers Bausch observatory. Club intends to complement, not compete with LAS. They are using LAS as a model of good, active club.

- Upcoming star parties: New moon this Saturday at Pawnee, and Friday night (better weather predicted). 1st Quarter Moon party at Flanders Park Saturday is scheduled for 02/28.

- Auctioned another club patch autographed by David Levy.

- Brian Kimball made announcement for Lee, regarding availability of Astro Physics telescope mount. Normally long waiting list, Lee's number is up but he is offering it to others that want his spot. Cost is \$8,800 with 50% deposit. Contact Lee for info.

BREAK

Karen Mendenhall made a nice presentation about the November 2003 eclipse expedition and viewing in Antarctica, by. The expedition left from South Africa.

The party included David Levy, Karen, and others. Karen presented her photos and video, photos and DVD from David Levy. Karen said expedition was "expensive, but I had to do it!" Storms in Antarctica delayed departure. Weather cleared just in time for eclipse, and storms gathered day following, giving perfect good weather window for eclipse -- "meant to be!". They flew to Antarctica in chartered Russian cargo plane. Karen showed video of riding snow cat to mountain range, Japanese Antarctic research station. Eclipse images, very cool!

Survey synthesis by Ray Warren

Here is a short summary of the survey results.

People have joined the club to do observing, followed by interesting meeting topics and socializing (or friendship).

Our club members do a lot of observing (weekly) right from their own yards. If they go any place, they will not typically spend the night. A convenient local site would be welcome.

People are willing to do raffles to raise funds but are overwhelmingly opposed to gambling.

The majority are not interested in "doing" fundraising (an equal number of "if I have to" and "I'd rather not").

But, no one said they would "absolutely not" do fund raising.

People are OK with spending money on an observing site followed by club equipment.

Astro-photography equipment tops the list.

There are a significant number of people who knew nothing about club equipment.

The answers for LAS Logo items were mixed and inconclusive.

We'll give the details during our next club meeting.

Pawnee first light report by Gary Garzone

New moon star party at Pawnee with new astro systems 30 scope was great. Wow!! is how good Saturn was for a time, then Jupiter, we could see the festoons in belts very clearly. Huge turnout of people! The old Dark Sky Marines, Dave Dunn, Steve Lynch, Dan Laszlo, Bill Travis and his Daughter Katie, William Possel, Mike Hotka, Ray and Max Moe, and another Dave and several others I do not know your names.

I got to Pawnee after dark so first light and first scope set up in the dark. Randy the focal length needs to be shortened only about 1/2 inch. I will fix Sunday or tonight yet. I could not reach focus after set up then kept trying different eyepieces. The 50 mm possel and 32 erfle and 16 Nagler did focus, rest needed to get racked in more so no views thru most of my eyepieces.

My very first look and view thru new scope with new mirror coatings was tuff choice but with Orion nebula being old Favorite and in good position got several votes from friends. You have not seen Orion nebula till you seen it with 30 inches of aperture...very good! Galaxies are us with big mirror so NGC, 891, 4565, 5709, old edge on favorites, whirlpool M51, M101, and M81, M82 and so many more were just great. Globular clusters are always awesome in large aperture, so we did several, M13, M92, M3, and more. Temperature was very cold with low of 17 degrees and when Dave Dunn left about 1:30 am it was 19 on his thermometer. I took several pictures, no surprise hey, so here are a few. Between Steve Lynch's command post and mine kept us from freezing. I stayed the night along with Bill Travis and Steve L. I will have another first light, or should I say second light star party here in my yard soon for rest of gang that could not make Pawnee. I will send out an email. bye, gary



Record observing by Michael Hotka

To record or not to record, that is NOT the question. The question is what should I record?

Whether you are working on an Astronomical League certificate program, where you must record your observations or you are observing for fun, recording your observations allows you to go back and ‘re-view’ these objects.

I have personal observations dating back to the early 1980s. I record almost everything I look at in the eyepiece, whether it is in my scope or someone else’s scope. I must admit that I have been working on certificates lately, but I have always recorded what I see in the field of view. It has become a habit.

I use an astronomical database program to “log” my observations, which I use mostly as an index to date and time of when I observed an object. I use a notebook to keep the details of an observation, which I use at my computer to transpose my observations from the field into a much nicer typed format. I then print out these observations and keep them in a 3-ring notebook.

I used to use a tape recorder in the field to record my observations. Ask most anyone...they heard me talking to myself in the dark. But I lost many observations because I often had the record/pause button toggled in the wrong mode. I would pause when I thought I was recording, then when I paused, I was recording. Later, at home, when I was transposing my observations, I would hear the conversations of people I met in the dark, but not the details of the objects I had observed.

So now I use a notebook to write down what I see. I use a shorthand notation so it goes real quick. FS for field star. BW for a blue-white colored star. AV for adverted vision used. FOV for field of view. You can make shorthand that has meaning to you. These are suggestions of what I use.

So, what do you write down? The following is what I do. I am currently working on the first Herschel 400 list. I have found that about 200x is needed to even find these faint guys. So I start with my 19mm EP (shorthand for eyepiece). I find the object, then reference the star charts and the Telrad again to ensure I am in the correct

part of the sky. I let my eye become accustomed to the object I am seeing. I watch it for about a minute. I then try higher and lower magnifications to see what it looks like under these powers. Then I get my filters out and see what the object looks like using an UHC or an OIII filter. Once I have satisfied myself that I have teased out as much detail and contrast that I can from the object, only then do I record my observation of what I saw using each combination of EP and filter.

After I have recorded the object in my notebook, I take one last look at the object, using the combination of EP and filter that gave the best view.

There are plenty of write-ups about the objects you are observing. I never read these BEFORE first trying to find the object. After searching for some time and not finding the object, will I then read what it is I am trying to find. Often, I will remember seeing something during the search that resembled the description.

What am I looking for when I view an object?

For a galaxy, I look to see if the object is uniformly lit, or is there any contrast between the nucleus and the halo of the galaxy. If there is contrast, to what extent. Is the nucleus stellar in nature (presents a pin point) or diffused (more of a brighter smudge). By the way, “a faint smudge of light” is a perfect way to describe an object that is at the limit of what your telescope can see. Is there any halo seen? How much of the halo can you see? Is it compact around the nucleus or is it extended? Is the halo easy to see or very faint? Measure it with respect to the diameter of the FOV. For instance, I looked at NGC 55 one night and it extended almost 2 and a half FOVs. You can later calculate the angular size of the object, for you know the angular size of the FOV for each of your EPs. Is it linear in shape, cigar shaped or oval? If linear or cigar shaped, what direction is the major axis in the FOV? You can write “Upper Left to Lower Right”, for example.

For gaseous nebula, I observe them very similarly to galaxies, looking for contrast in the nebula. Is the object uniformly lit, or is it blotchy (like the Rosette nebula in my scope was). How far does it extend? What is the general shape? Are there field stars in the nebulosity? Does the nebulosity “surround” these stars with a glow? For planetary nebula, is the nebula large or small? Is it uniformly lit or is there some differences, like in M57? Can you see the central star? Did you see the central star with direct vision or with adverted vision? What did the OIII filter do for this object? Can you see it better or worse with the filter?

Galaxies and nebula are often bounded by field stars. Where are these bounding stars in relation to the object? Top, bottom, left? On a line from 10 o'clock to 4 o'clock. How many stars are there in this area, bounding the object?

For globular star clusters, what is the overall brightness? Is the central part of the cluster brighter than the halo part of the cluster? Or is it uniformly lit? Can you “see” member stars? Is there a subtle characteristic to the cluster? For instance, one globular I recently looked at had a bright line of stars that extended out from the center of the cluster at about the 8 o'clock side of the cluster. How far across the FOV does this cluster extend? Is it large, small or stellar in size?

For open star clusters, what is the overall shape of the cluster? Are the stars roughly in a circular shape, is it boxy shaped or are the stars all over the place? Some clusters, like Kemble 1, are all in a line. What are the magnitudes of the stars as compared to other stars in the FOV? What are their colors? Are there any off-color stars in the cluster? How many stars can you count? Are there field stars present in the cluster? Field stars often stand out because of a significant difference in magnitude from the rest of the stars in the FOV? Also, field stars may reveal themselves by being different in color, but this is not always the case.

The above questions are just a guideline for helping to gather good observing notes. You can never write down too much while at the eyepiece. You can always edit your notes when you transpose them, but I have never done this. I have always saved my initial impressions of the object in my permanent log.

I am now adding simple sketches to my notes. I find this very helpful in my squeezing the most detail out of an object that my eye can detect.

Whatever you record, record something. It will be a lasting impression of your time under the stars.
Michael.

Announcements

Public Star Night at the Little Thompson Observatory in Berthoud

Friday, March 19, 2004 7:00 to 11:00 PM
Public Star Night at the Little Thompson Observatory
850 Spartan Ave in Berthoud (just east of the high school)
Directions are posted on our website: www.starkids.org

Information about the presentation:

Our speaker for the evening will be Andrea Schweitzer, Ph.D., a local professional astronomer. She will be speaking on: "Going to a NASA Launch (or, How I spent my summer vacation?)"

Andrea will talk about her experiences visiting Kennedy Space Center in Florida for the launch of the Spitzer Space Telescope last August, and what new things this space telescope has already discovered.

About the speaker:

Andrea Schweitzer is an astronomer with the Little Thompson Observatory in Berthoud. Andrea grew up in Longmont and received her Ph.D. in Astronomy from the University of Wisconsin. She has authored/co-authored a dozen astronomy articles, helped test one of the cameras for the Hubble Space Telescope, and her research has been written up in publications ranging from the Longmont Times-Call to the New York Times, and Sky & Telescope Magazine. Andrea works from Fort Collins as a consultant for NASA business and for astronomy education. Her clients include NASA Headquarters, Boeing, the Southwest Research Institute and the Space Science Institute.

Dear Mark-

"Astronomy Night" at Lyons Elementary.

This evening for students and parents is on Friday, April 16th, probably about 7:30pm-9:30pm. The school is quite excited about giving students a first look at the astronomical sky.

My idea would be to bring a handful of telescopes and people to the school playground (not very dark skies, but seeing a few planets would be sufficient for most!) I'd work to have a couple of activities to do in the school gym as well.

I'm a Lyons Elementary parent as well as a professor in the astronomy department at CU. I'll be working to marshal some volunteers from the department and Fiske planetarium, but was also thinking that LAS is a great community contact for people who would like to continue in their interests.

Unfort. I'm going to be out town for a few weeks starting tomorrow, but am hoping to be in some email contact for another week or so. elling@colorado.edu

Do please let me know whether you think LAS might be interested in helping. My contact phone number (work) is: 303-492-6610 for when I get back. Erica



Thursday March 25th
NASA Mars Exploration Rover Press Briefing
11:00 A.M., Space Odyssey, Denver Museum of Nature & Science
Admission is Free with Museum Admission

NASA has scheduled a press briefing about new results from the Mars Exploration Rover Opportunity for Tuesday at noon MST. View the live briefing in Space Odyssey starting at noon. Call Jennifer at 303-370-6073 for more information.

Friday, March 26th

60 Minutes in Space: Beyond the Headlines

Curator from the Department of Space Sciences

7:00 P.M., VIP Room, Denver Museum of Nature & Science

Admission is Free

Dr. Steve Lee, and/or Dr. Dimitri Klebe will take you behind the headlines and give you details of breaking news in space science. Find out what's happening in the cosmos with up-to-the-minute reports of breakthroughs and events in astronomy and space exploration. Call 303-322-7009 for reservations.

Upcoming Events

Wednesday, April 14th

Telescopes of the World

Dr. Dimitri Klebe, curator of space sciences

12:15 P.M., Ricketson Auditorium, Denver Museum of Nature & Science

Admission is Free

Dr. Dimitri Klebe will discuss the fundamentals of how telescopes work and how they are used to collect valuable astronomical data. Dr. Klebe will highlight some of the largest ground-based telescopes like the Gemini telescopes, the Keck, and the VLT (Very Large Telescope) in South America as well as NASA's great observatories in space. Call 303-322-7009 for reservations.

Monday, April 19th

What's New on Mars?

Mission Update on the Mars Exploration Rovers

Dr. Steve Lee, curator of planetary science, DMNS

7:00 P.M., Phipps IMAX Theater, Denver Museum of Nature & Science

Cost is \$10 member, \$13 nonmember, \$8 student

The twin Mars Exploration Rovers, Spirit and Opportunity, successfully landed on Mars in January 2004 and have been roaming across Gusev Crater and Meridiani Planum looking for signs of ancient water. Steve Lee will give an update on the mission's progress, using the latest images and high-definition video received from NASA. He will describe the scientific results, and discuss how our understanding of the history of the Red Planet is being rewritten by these remarkable "robotic field geologists". Call 303-322-7009 for reservations.

Friday, April 30th

60 Minutes in Space: Beyond the Headlines

Curators from the Department of Space Sciences

7:00 P.M., VIP Room, Denver Museum of Nature & Science

Admission is Free

Dr. Steve Lee, and/or Dr. Dimitri Klebe will take you behind the headlines and give you the spicy details of breaking news in space science. Find out what's happening in the cosmos with up-to-the-minute reports of breakthroughs and events in astronomy and space exploration. Call 303-322-7009 for reservations.

Desert Sunset Star Party - May 13-16, 2004

The 2004 Desert Sunset Star Party will be held at the Caballo Loco Ranch, about 11.5 miles south of Three Points, AZ, on Rt. 286, and then east for 8 miles. This RV ranch is in a secluded area of Arizona with dark skies. The telescopes of Kitt Peak are in clear view to the west. The DSSP begins on Thursday night and runs through Saturday night. We will have a speaker on both Friday and Saturday evenings along with door prize

giveaways. Registration information will be posted on the DSSP website -
<http://chartmarker.tripod.com/sunset.htm>

Pat and Arleen Heimann
<http://chartmarker.tripod.com>

Sun, Skies and Girl Scouts Red Feathers Lake, June 12th and 13th

I am putting on a weekend event at Magic Sky Ranch, near Red Feathers Lake, June 12 and 13. It's called "Sun, Skies and Girl Scouts".

The girls (ages 11-16) will be learning about the Sun-Earth Connection.

They will be doing all sorts of hands on activities during the day, including the Herschel experiment. At night, they will be making a star chart and observing the skies.

I was hoping that members of the Longmont Astronomy Society would be interested in coming out to help at night (and perhaps even bring a few telescopes).

Of course, if anyone is interested in participating for the daytime activities, they would be welcome.

Please let me know if anyone would be interested in helping. My home number is 303-691-3757.

Ms. Jill Pommrehn
Operations Manager
University of Denver, English Language Center
Phone: 303-871-3069; fax: 303-777-7380
jipommre@du.edu
www.du.edu/intl/elc/

Classified

To sell:

10" Sears Craftsman table saw

Price: \$200 sends email to Brian bnimball@msn.com or calls him at 303-678-0525

Complete set (3 books) of 1st edition of Uranometria 2000.0 Observing Guides. Excellent condition. Contains Volume 1 and 2 and Deep Sky Guide. Sells as a set only. \$80.00 for set which is 50% of price for a new set of these guides. Contact Mike Hotka deepskymike@earthlink.net

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

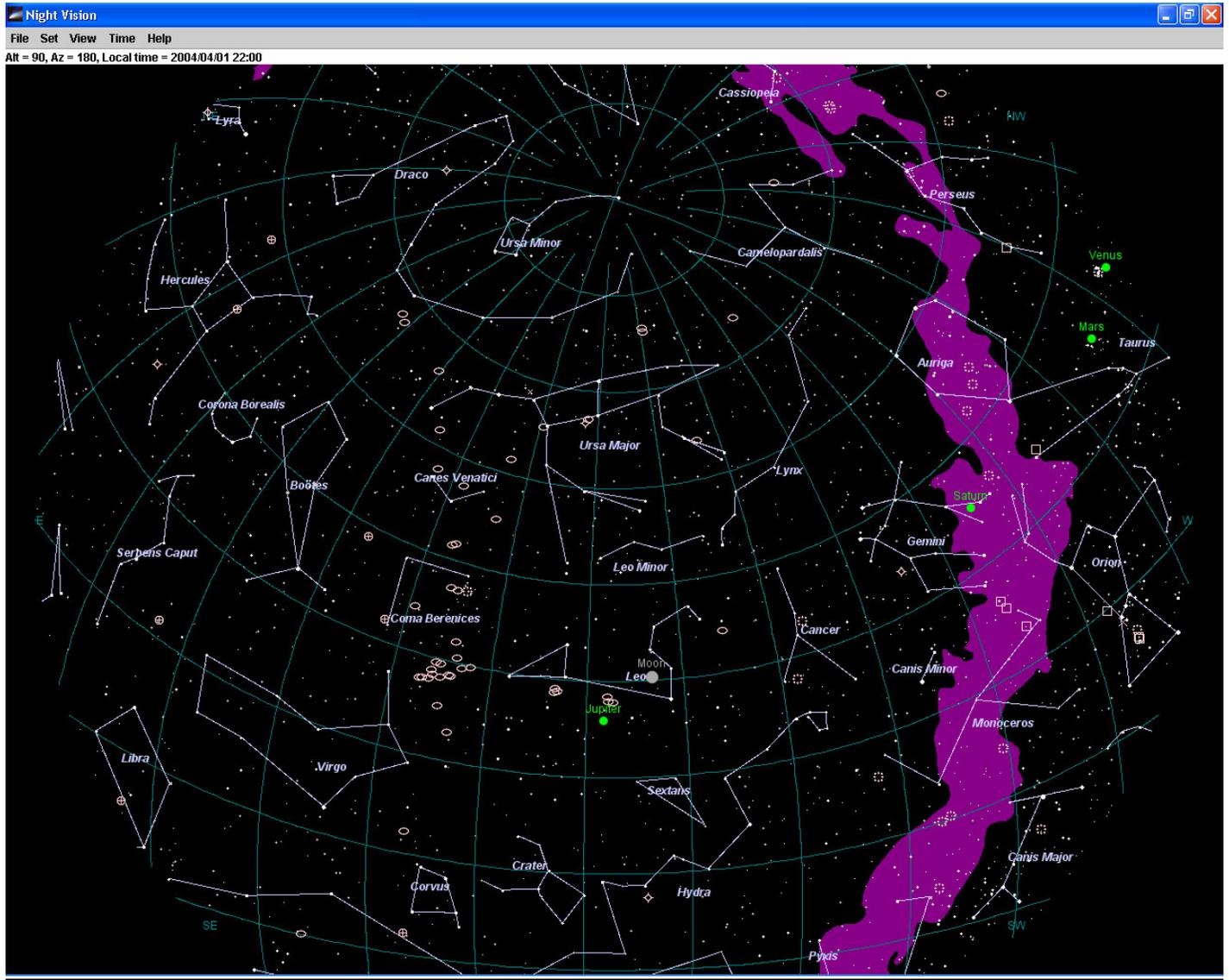
To buy:

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

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

April Sky Map



Sterling star party is coming up on April 16th and 17th for a weekend of star gazing, LAS puts on the first of the summer star gazing events. This is a great place for a star party and if you have never been there it is almost as dark as Fox Park, better than Pawnee. Heated bathrooms with hot showers and nice big camp sites make it a very user friendly place for us astronomers. Bob Loomis, North Sterling State park ranger waives camping fees but still need State park pass, 5 dollars per day only. This will be a two night event but Saturday is the advertised day for locals to come out and share the views with us, they mostly leave early and us dark sky people have Friday night and rest of Saturday night after crowds leave for ourselves. Maps and directions downloaded from <http://www.reserveamerica.com/jsp/commonpage.jsp?goto=/usa/co/nost/newindex.html>. If you love dark sky observing this is it, one of the best of the year, slightly behind our favorite, Fox Park, weekend under the Stars, which is still the best for us each year.

Dan Laszlo, Marty Curran, Tom Teters and Robert Roten and Tom Edgar, maybe pass this onto your dark sky people who might want to come out for Star party. My new Astro System 30 scope will be there for views. I moved mirrors, finders, Telrad and sky commander to new scope, new mirror coatings. The darker the skies the better my scope works, bye, gary