

# The Objective View

Newsletter of the Northern Colorado Astronomical Society

January 2012

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**Next Meeting: January 5 7:30 pm**

**Space Rockets -- Men and Machines**

**By Jon Caldwell**

**Club Business, Elections at 7:15 pm**

**Coors Room, McKee Conference Center**

**2000 N Boise Ave, Loveland CO**

Enter campus at 19<sup>th</sup> and Boise. Drive to Wellness Center Parking to the North of the buildings. Enter Wellness Center on the NW corner of the building and proceed straight to the Coors Room.

<http://www.bannerhealth.com/Locations/Colorado/McKee+Medical+Center/About+Us/Map/Driving+Directions.htm>

## NCAS Programs

Feb 2 Dr. Suzanne Metlay "What Time is It?"

FRCC

Harmony Library, Fort Collins

March 1 TBA

## City of Fort Collins Natural Area Program

Fossil Cr Reservoir 7 pm Jan 28

<http://www.fcgov.com/naturalareas/finder/bobcat>

<http://www.fcgov.com/naturalareas/finder/fcopenspace>

## Dark Site Observing Dates

Jan 20, 21: Keota or other site, ask FRAC newsgroup

## Other Events

Greeley History Museum First Friday 6 pm Jan 6  
Dr. Paul Lightsey, History of Space Telescopes

Chamberlin Observatory Open House, 7 to 10 pm

Jan 28, Mar 3

303 871 5172 <http://www.du.edu/~rstencil/Chamberlin/>

Cheyenne Astronomical Society 7 pm Jan 20 Deep Sky  
Objects Cheyenne Botanic Gardens.

<http://home.bresnan.net/~curranm/>

CSU Madison Macdonald Observatory Public Nights

On East Drive, north of Pitkin Street

Tuesdays after dusk if clear, when class is in session

Estes Park Memorial Observatory EVAS meeting,

7 pm Jan 26 TBA <http://www.angelsabove.org/>

Little Thompson Observatory, Berthoud 7 pm Jan 20.

Nitescapes 3D Aurora and landscapes, by Bryan White.

<http://www.starkids.org>

Longmont Astronomical Society 530 pm Jan 21 Annual

Members Banquet TBA. Pinocchio's, 2010 Ken Pratt Blvd

<http://www.longmontastro.org/>

## December 2 Program: Little Thompson Observatory, by Meinte Veldhuis

As LTO approaches their milestone of 50,000 visitors, their new dome with a 24 inch Cassegrain from Mount Wilson is nearing operation. Observing is possible day and night. Solar telescopes piggyback on the original 18 inch Cassegrain. The warm room has added a new perspective on the Star Wall with dedication this fall of the sky knowledge of the Lakota Sioux. The calendar continues to fill, in demand for area educators and nights are available to local groups. The monthly public program typically features an expert speaker active in space research or the industry. This month aurora photographer Bryan White will return with his 3D program. Volunteers are appreciated and contributions are also welcomed.

Rob Grover completed his 2010 total lunar eclipse movie. It was gratifying to see an eclipse to completion after 2011's short event. Dan Laszlo brought a variety of planispheres. Commonly available units have sky plots with highly distorted southern constellations. David Chandler's Night Sky is double sided and works well. Another approach is the double-sided disk design promoted by Toshimi Taki. The disk can be easily removed to use as an all sky map. Different latitude masks are provided.

[http://www.geocities.jp/toshimi\\_taki/planisphere/planisphere.htm](http://www.geocities.jp/toshimi_taki/planisphere/planisphere.htm)

Another version is at the Krieger Science site:

<http://kriegerscience.wordpress.com/2010/09/19/all-the-stars-in-the-sky/>

### December 2011 NCAS Business

Nominated for for 2012 NCAS officers are: President: Robert Grover, Treasurer David Auter; Secretary David Chamness. We need a VP nominee for 2012 as Tom Teters is stepping down. A big thanks to Tom for tracking down programs last year!

### From Michael Hotka: Hubble Legacy Archive

Today I listened to a telecon about merging galaxies. One wonderful resources that was talked about is the Hubble Legacy Archive. You can find ANY object that Hubble has taken a picture of in their archive. The instructions on how to use it are below. You already paid for this resource, so you might as well use it. I was very impressed with the brief intro we had how powerful this resource can be for amateur astronomers.

If you have any questions, I might be able to help. The instructions are pretty clear.

Enjoy...

#### How to find color images of galaxies in the Hubble Legacy Archive in less than 60 seconds

1. Type: hla.stsci.edu in the box at the top of your web browser and hit return.
2. Click on "Enter Site here".
3. Type Arp 256 in the box and hit "Search" (i.e., start with a famous object).
4. Scroll over and notice that this is from proposal ID = 10592 (for HST/WFC).
5. Go to the top and click on "Reset", then "advanced search".
6. Enter 10592 in the Proposal ID box, and "Level 4" in the box under "Data Product" to just get color images.
7. Click on "Search".
8. Click on the "Images" tab. Pick an object and click on

"Interactive Display".

9. Practice moving the image around, zooming in, using the Lighter/Darker, etc.

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Mike Hotka

Amateur Astronomer  
Deep Sky Marine  
JPL Solar System Ambassador  
Dark Sky Ranger  
My Homepage: <http://skinny.jeans.tripod.com/astronomy/>

### From Mike Prochoda: Total Lunar Eclipse from EPMO

Astronomers:

We had over a dozen people meet at the Estes Park Memorial Observatory parking lot to observe the lunar eclipse from about 5:30 AM until the moon set just before 7:00 AM on Saturday morning. Both Steve Little and I brought our small portable APO refractors with which to observe the eclipse. The latter stages were gorgeous with the progressive orange umbral shadow eating away at the moon while the dawn sky was brightening and illuminating the foreground mountains. Included is a picture series of the progress of the umbral shadow across the moon's face, with the moon sinking further to the west, and finally setting behind snow-covered Mount Chiquita. The photos were taken with my little Panasonic Lumix point-and-shoot camera mounted on a tripod (I used manual settings). I included a GIF animation of what I would like to call "5th contact", namely, the moon's limb touching the flank of Mount Chiquita and finally setting behind the mountain. The last photo was taken inside the observatory lecture room where most of the observers were warming up with hot chocolate after the moon had already set (a couple of folks had left before the photo was taken). Enjoy!







Total Lunar Eclipse by Rob Grover, Charlie Davis at NCAS, Fossil Cr Reservoir, at 6 degrees F



Total Lunar Eclipse by Phil McCallum, Estes Park Memorial Observatory



International Space Station Passes for Loveland – Fort Collins

January 2012

Date	<a href="#">Mag</a>	Starts			Max. <a href="#">Altitude</a>			Ends		
		Time	<a href="#">Alt.</a>	<a href="#">Az.</a>	Time	<a href="#">Alt.</a>	<a href="#">Az.</a>	Time	<a href="#">Alt.</a>	<a href="#">Az.</a>
<a href="#">3 Jan</a>	-1.5	18:22:03	10	WNW	18:24:57	31	SW	18:27:48	10	SSE
<a href="#">4 Jan</a>	-3.1	17:25:09	10	WNW	17:28:23	71	SW	17:31:34	10	SE
<a href="#">5 Jan</a>	-0.1	18:05:32	10	W	18:07:34	16	SW	18:09:34	10	S
<a href="#">6 Jan</a>	-1.3	17:08:05	10	WNW	17:11:03	33	SW	17:13:58	10	SSE
<a href="#">12 Jan</a>	0.2	06:37:21	10	S	06:39:22	16	SE	06:41:24	10	E
<a href="#">14 Jan</a>	-1.3	06:18:36	10	SSW	06:21:29	30	SE	06:24:23	10	ENE
<a href="#">15 Jan</a>	-0.2	05:22:55	10	SSE	05:24:44	14	SE	05:26:34	10	E



<a href="#">15 Jan</a>	-3.3	06:57:22	10	WSW	07:00:32	59	NW	07:03:46	10	NE
<a href="#">16 Jan</a>	-3.0	06:00:41	12	SW	06:03:33	63	SE	06:06:46	10	ENE
<a href="#">17 Jan</a>	-1.3	05:06:59	27	ESE	05:06:59	27	ESE	05:09:27	10	ENE
<a href="#">17 Jan</a>	-2.6	06:39:46	10	W	06:42:44	33	NNW	06:45:44	10	NE
<a href="#">18 Jan</a>	-3.4	05:45:21	61	WNW	05:45:36	65	NW	05:48:49	10	NE
<a href="#">19 Jan</a>	-0.4	04:51:03	15	ENE	04:51:03	15	ENE	04:51:42	10	ENE
<a href="#">19 Jan</a>	-1.9	06:23:25	17	WNW	06:24:54	22	NNW	06:27:32	10	NNE
<a href="#">20 Jan</a>	-1.6	05:28:54	25	NNE	05:28:54	25	NNE	05:30:38	10	NE
<a href="#">21 Jan</a>	-1.4	06:06:36	16	NNW	06:07:00	17	NNW	06:09:11	10	NNE
<a href="#">22 Jan</a>	-0.5	05:11:49	12	NNE	05:11:49	12	NNE	05:12:15	10	NNE
<a href="#">22 Jan</a>	-0.9	06:45:19	10	NNW	06:46:37	12	N	06:47:56	10	NNE
<a href="#">23 Jan</a>	-1.0	05:49:17	13	N	05:49:17	13	N	05:50:45	10	NNE
<a href="#">24 Jan</a>	-0.8	06:27:24	10	NNW	06:28:40	12	N	06:29:55	10	NNE
<a href="#">25 Jan</a>	-0.7	05:31:39	11	N	05:31:39	11	N	05:32:18	10	NNE
<a href="#">26 Jan</a>	-0.8	06:09:02	10	NNW	06:10:34	13	N	06:12:06	10	NE
<a href="#">27 Jan</a>	-0.4	05:13:50	10	NNE	05:13:50	10	NNE	05:14:02	10	NNE
<a href="#">27 Jan</a>	-1.4	06:47:24	10	NNW	06:49:57	21	NNE	06:52:29	10	ENE
<a href="#">28 Jan</a>	-1.0	05:51:04	13	NNW	05:52:19	15	NNE	05:54:18	10	NE
<a href="#">29 Jan</a>	-0.2	04:55:57	10	NNE	04:55:57	10	NNE	04:56:02	10	NE
<a href="#">29 Jan</a>	-1.9	06:28:36	10	NW	06:31:31	30	NNE	06:34:25	10	E
<a href="#">30 Jan</a>	-1.2	05:33:10	18	N	05:33:54	20	NNE	05:36:21	10	ENE
<a href="#">31 Jan</a>	-2.7	06:10:24	15	NW	06:12:53	50	NNE	06:16:02	10	ESE

ISS predictions can be obtained from:

<http://www.heavens-above.com/main.aspx?lat=40.4997&lng=-105.05736&loc=Fort+Collins+CO+USA&alt=0&tz=MST>