The Objective View
Newsletter of the Northern Colorado Astronomical Society
Dan Laszlo, Editor. Phone 498-9226
Meetings first Tuesday of each Month
Next Meeting: March 7 1995, chat 6:30 pm, the Pillmore's, 2631 Shadow Court, Fort Collins
7pm program: "Astronomy at the South Pole," by Gary Emerson

****Star Party March 4****
Jerry Reynolds will guide an overnight Messier marathon at the NW end of the Crow Valley Campground. From I25, 39 mi E on Colo Hwy 14 to Road 77 (1 mi west of Briggsdale CO). Go N about 1/4 mi and turn W. He can give a checklist with a recommended sequence, and offers an LED flashlight bulb to the star-hopper who logs the most Messier objects (without digital setting circles, in other words!). March provides our best chance to see 110 Messier objects in a single night. No scope? Come anyway, for as long as you like! RSVP 226-0705.

Upcoming Events:
NCAS Meetings
April: Offsite Control of Telescopes, Tom Bisque
May: Basic Assumptions in Astronomy, Brad Jarvis
FRASC Events:
Apr 22 Tim Ferris "Is the Big Bang Dead?" Univ Denver
Jun 27-28 Denver Astro Society at Canyonlands, Utah
Jul 27 Star Stare at Badger Flats, Colo Spgs Astro Society
Aug 25-26 StarParty, FoxPark, Cheyenne Astr Soc+NCAS

Longmont Astronomical Society Star Parties:
March 4, April 29: Woodrow
May 27: Caribou
June 24: Deadman

Longmont Astronomical Society Programs:
3rd Thu of Month, New Creation Church, 550 Coffman St
Mar 16 Rich Keen Astrophotos with a 13" Refractor
Apr 20 Gary Emerson CCD Photo Imaging
May 18 Keith Gleason Sommerboshch Observatory
June 15 Tom Johnston NGC Max Computer System
July 20 John AstelosEclipses? Denver Astro Society
Aug 21 Tom Melsheimer Drives for 1-2 meter scopes
Sep 21 ARC Software Dance of the Planets

February's Meeting:
Introduction to RedShift
Multimedia Astronomy
Harold Porter demonstrated the capabilities of this desktop planetarium software. It is the product of team of Russian authors. The introductory screen provides a command for Guided Tours. Onscreen buttons make navigation in time and place easy. Harold began with a tour of the immediate vicinity of the Earth. The Earth's rotation and changing illumination at the poles with the seasons was readily apparent. The appropriate star background was simultaneously displayed. A map function allowed a site on the globe to be represented as a physical features map, with labels on cities or even observatories. From there it was possible to sample satellite photo images of Earth. A horizon view showed the sky with stars, planets and deep sky objects plotted for a selected date and time from 4712 BC to 11000 AD. It is possible to simulate a planet, asteroid, or periodic comet's motion as seen from anywhere in the solar system, and plot the path. For certain objects such as the planets or Moon, a zoom function allowed magnification up to 9999x. Closeup views of
Jupiter and Saturn were shown from perspectives over the poles, leading or trailing along the orbital path, or towards/away from the Sun. A photo gallery contains some of the best 700 full screen photographs of planets, moons, nebulae, and galaxies. There are movie clips of the lunar rover and selected topics such as eclipses, optics and telescope mountings. Harold showed an intriguing view of the Earth from the Moon's North Pole over a month. The Earth dipped below the horizon as seen from the pole, due to the Moon's libration. He concluded by stepping through the Movie option, creating a time lapse view of the Moon's libration and changing angular diameter through a month. The price for the breadth and depth of this astronomy resource is also remarkable, often discounted to about $50. For IBM-PC's and Macintoshes. Redshift Multimedia Astronomy. Copyright 1993, Maris Multimedia, Ltd.

Business
NCAS formally adopted a constitution. Tom Teters is taking orders for T-shirts and jackets with the NCAS logo. Brad Jarvis invites members to bring to the March meeting 1) list of your interests, 2) topics you would like to present to the club. He showed "A Teacher's Guide to a Simulated Space Shuttle Mission" from a recent teachers' conference. Dan Doner is creating a home page on FortNet for NCAS. Mark Young volunteered to be Publicity coordinator for NCAS. Burnham's Celestial Handbook is offered for $2.95+shipping and handling to new members of the Astronomy Book Club, 3000 Cindel Drive, Delran, NJ 08370-0001. There is an obligation to purchase one additional book (+s+h) within 12 months, in a promotion in the March 95 Astronomy magazine. Dan Laszlo would be happy to FAX the NCAS newsletter to members within the local calling area.

Club Telescope: F/6 Newtonian
A work site has been selected and supplies are in hand. With any luck, coarse grinding will begin on a 10 inch mirror blank this month. In addition, Thom Peck has secured an offer of machining expertise for metal parts.

New Media
Comet Collision with Jupiter is a new CDROM from Gepetto and Sons, of Longmont. It features data, still images and animations which give a variety of perspectives on the impact of Comet SL9 with Jupiter. The producers have solicited our input, with a gift their disk to the club. Contact Dan Laszlo if you want to give it a spin, and give your opinions. IBM+Mac format, on a single $19.95 disk. Tom Teters has the ROSAT X-ray images CDROM.

New Astro Computer BBS:
303-635-1846
Northern Colorado astronomers have a new way to keep up with fast-breaking astronomy news. Loveland software developer, amateur astronomer and ham radio enthusiast Jeff Brower has launched the CAP-SAR BBS. Jeff daily combs the Internet for news, information, and images of interest to amateur astronomers. He routinely posts information on transient phenomena such as the aurora, comets, novae supernovae, and unusual meteors. Telescope users will find opinions on equipment questions. Telescope makers will enjoy tips and Val Germann's series on star testing. Satellite orbital elements are updated weekly, and astronomical software/shareware for Macs and PC's may be downloaded. NASA and shuttle news, schedules, and the weekly Sky and Telescope news are posted. You can even find the NCAS Newsletter. There is much more than can be listed here, so log on and explore! A single line is operating now, so users are encouraged to download large files for browsing offline, please. The service can be accessed with your modem software, up to 19,200-8N1, or download from the Client Software directory, Ripterm for PC's, Novaterm for Mac's. These client software packages each provide an easily navigated point-and-click icon environment. Expect no charge for local calls; your normal toll charges will apply if you're outside Loveland's local calling area. CAP-SAR BBS is in beta testing and is generally available 5-10pm MST; daytime weekends.
Observing Notes
Dan Doner has begun exploring the skies with a 10" Newtonian reflector. Jerry Reynolds dissected the faint stars within Orion's Trapezium from the Pawnee Grasslands. Dan Laszlo followed the STS-63 mission, and was able to see Mir and Discovery on 4 of 5 possible observing days, including a fantastic pass on Feb 6 in which Discovery trailed Mir by about 200 nautical miles and both were above the horizon simultaneously.

Imaging notes
Thom Peck brought his low budget but extremely precise camera drive. The double hinge design avoids the tangent error of a simple hinge, and addition of an inexpensive 1 rpm motor markedly improves convenience over a hand-driven platform. He has successfully used it for hour-long unguided exposures with a 135mm lens. Dan Laszlo brought a VHS tape of NASA TV highlights of STS-63 mission day 4, in which Discovery approached within 40 feet of the Russian Space Station Mir.

Overhead in March: The Zodiacal Light Nighttime travelers far from streetlights in the mountains and plains may be startled by a slender cone of light reaching toward the Pleiades in the West. It can approach portions of the Milky Way in brightness. March gives early evening observers their best chance to see the Zodiacal Light. The subtle glow is easily lost in the slightest haze or moonlight, but distinct if the sky is dark. Dust near the plane of Earth's orbit scatters sunlight back to Earth's night side, and creates a very faint band along the Ecliptic, through the Zodiac constellations. The region of the band opposite the Sun is marginally brighter and is dubbed the Geigenschein, or Counterglow. The Zodiacal Band and the Geigenschein require extraordinary conditions to show, but Colorado observers with a dark western sky should fairly easily find the Zodiacal Light.

Shuttle Launch
STS-67 is scheduled for a late night launch on March 2. Cable channel 10, Fort Collins has NASA TV. Best passes will be about 8 degrees elevation for our area, a challenge to see; call Dan Laszlo for predictions.

Best Looks
Mercury: Low in SE, dawn, max W elongation 3/1
Venus: Brilliant all month before dawn
Mars: Bright in East near the Sickle of Leo, eves
Jupiter: Bright near Antares. 90 deg to Sun 3/5
Saturn: Conjunction with Mercury in dawn, 3/26
Uranus: Will need binoculars!
Neptune: Mag 8 in Sagittarius
Pluto: Magnitude 13.7 in Ophiuchus

Mir
Date MST Azimuth Elev
Mir Event
3/4 pm 19:25 308 00
Illuminated
Rise
19:30 40 68
Into Shadow
3/6pm 19:10 303 00
Illuminated Rise
19:15 220 54
Illuminated Max
19:17 152 23
Into Shadow
Nova Aquilae, Mag 9, fading,
RA19:05:27 Dec -01:42