



The Observer

Newsletter of the Denver Astronomical Society

“One Mile Nearer The Stars”



Friday, April 1st, 2005

Newsletter News

Get published! Mail your articles, reports, and images to newsletter@thedas.org
Publication deadline is the 20th of each month.

President's Corner



Well, let's see – the birds are singing, the grass is greening, the trees are

budding – must be time for the rainy season. Ah, yes, there's an optimistic outlook, eh? Not to worry – the thunderstorms and precipitation should be another couple of months off. In the meantime, there are galaxy clusters, planets and target comets to be had, so load up those objectives, mirrors and imaging equipment and head out.

As we move into warmer weather, the star party season gets into full swing – Texas, Rocky Mountain Star Stare, Fox Park – all are wonderful opportunities to plot treachery with your fellow observers and imagers. Don't forget our wonder Edmund G. Kline Dark Site, or “Ed's Place.” It can be a bit breezy at times, but jet-black, nonetheless, and you'll find folks there almost every weekend. Coming up at the May 14th Open House is the first of two planned “Solar Saturdays”, when we'll feature our own blazing star in white

light and H-alpha. We're putting together several displays for Chamberlin and the venerable 20-inch Clark has a new Baader Astro-Film solar filter. I know that many of you own H-alpha systems, so be ready to let the sun shine in from 1-4 p.m. on the 14th. We'll take a dinner break and be back at the observatory to get ready for the regular Open House from 7-11 p.m.

On the subject of time, remember that as of April 1st, Public Nights begin at 8:30 p.m. Also, a quick reminder for those who bring scopes to Open House: Please be sure that after you off-load your equipment, move cars, trucks and vans back onto the street for the evening. Parking on the grass is not permitted and the single-lane drive to the observatory must remain clear. Our thanks. Take care, all, and enjoy the skies.

... Steve

Important Notice

Urgent Warning to Astronomy magazine subscribers:

Unauthorized companies have been contacting Astronomy subscribers and asking for renewals.

These companies are not affiliated with Kalmbach Publishing Co. - authentic renewals will come only from a P.O. Box in Milwaukee or Waukesha, WI. Astronomy magazine warns DO NOT RENEW with any phone solicitor and DO NOT GIVE THEM CREDIT CARD INFORMATION OR PAYMENT.

Monthly Meetings

The April General Meeting will be April 22, back at Olin Hall. The speaker will be DAS member Dr Roger N Clark. His topic will be the Cassini-Huygens Mission to Saturn. The meeting starts at 7:30 pm.

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1st Quarter Participation Prize

Todd Hitch, one of our most active volunteers, was the winner of the 1st quarter 2005 Participation Prize, a pair of Celestron binoculars and a

year's DAS membership.
 Congratulations, Todd!

You can become eligible for the participation prize when you volunteer at any Public Night, Open House, school star party, clean up day at Chamberlin, or work day at the Edmund G Kline Dark Sky Site. Just ask an E-board member for a participation slip and their signature, and you could be the next winner at the June General Meeting.

Upcoming Events

Apr 9-10	Dark Sky Weekend
Apr 15	E-board meeting, Chamberlin Observatory, 8:00 pm
Apr 16	Open House, Chamberlin Observatory, 7:00 pm
Apr 22	General Meeting, Olin Hall, Rm 105, DU, 7:30 pm
May 7	Dark Sky Weekend
May 14	Solar Saturday, Chamberlin Observatory, 1:00-4:00 pm
May 14	Open House, Chamberlin Observatory, 7:00 pm
May 20	E-board meeting, Chamberlin Observatory, 8:00 pm
May 27	General Meeting, Olin Hall, Rm 105, DU, 7:30 pm

Public Outreach News

This is the time of year when local public schools, especially the 5th and 9th grades reach the Astronomy chapters in their science text books. The regular Tuesday and Thursday Public Night crews are facing larger than normal crowds.

If you are interested in joining the Public Night Operators, this is a great opportunity to come down and see how an evening with lots of kids goes "under the stars".

April 15th is National Astronomy Day. Longmont will be having an all-day affair with observing afterwards. BASS (Boulder Astronomy and Space Society) will be having their festivities at Sommers-Bausch Observatory and Fiske Planetarium.

Annual DAS Banquet

The annual Spring Banquet was a great success. Al Herzel from Lockheed Martin spoke to us about the success of the Mars Global Explorer. We found out that it gets millions of miles to the gallon! The



pictures of Mars were accompanied with a great introduction to the team of people who helped to make the mission a great success. They are entering into their third extension to the science mission. This is a fantastic achievement. Thanks to Bill Ormsby for the Banquet pictures.

Dark Sky Corner

Aaron Reid has joined the DAS from the Western Slope and brings his enthusiasm for the International Dark Sky Association with him. Light pollution is becoming more and more of an issue on the Front Range. One member reports upgrading his porch light with an excellent fixture obtained from Lowe's Home Improvement Center. The other big boxes did not carry what he was looking for. Watch this space for additional ways to reduce light pollution.

There have also been reports of severe dust made worse by the wind at the Dark Sky Site. This area often does not see the snow and rain that we get here along the Front Range. Please take efforts to protect your gear at the Dark Sky Site when the wind is kicking up dust.

April/May Skies

April and May offer a great opportunity commune with the Great Gas Giants of the system – Saturn which is prominent in the early evening sky and Jupiter rising earlier and earlier (until we set the clocks forward!) in the east. It has been said that the Solar System consists of Jupiter, Saturn and other debris.

Apr 3	Jupiter at Opposition
Apr 11	Moon 0.9 Deg. South of Pleiades
Apr 22	Lyrids Peak.

-- Prepared by Public Night Team 5: John Doran, Darrell Dodge, Wayne Green, Bill Ormsby, and David Shouldice

Public Night Corner

Aaron Reid is currently working with Dr. Stencel and the Meyer-Wombel Observatory on Mt. Evans. Aaron will be working with us for

some upgrades and improvements at Chamberlin. He is very close to taking his test drive with the Clark. Welcome aboard, Aaron!

The DAS Public Night teams operate the Clark Telescope and present programs about popular or requested celestial objects every Tuesday and Thursday night, rain or dark. The only exceptions are extreme weather events and major holidays. Check the Reservation System for details!

Public Night teams are open to any DAS member. Training and certification to use the Clark Telescope is available. Contact Ron Mickle or any Public Night team member for details about joining the Public Night Operators.

Messier Marathon

March weather roared this year and we missed the traditional time to attempt the Messier Marathon – observing all the Messier Objects in one evening. This is still one of the best seasons to start and finish that Astronomical League (AL) Messier Observing Certificate.

The Dark Sky Weekend in April will see another push for objects at the Edmund G. Klein Dark Sky Site. Hope to see you there on April 9-10, but it may be difficult to capture the early evening objects (especially M-74) on that date.

Remember, go-to telescopes cannot be used if you're seeking an official AL Messier certificate or a Marathon award. Complete descriptions of objects are required for the AL Messier certificate. Example forms will be available.

Internet Options for DAS Members

DAS offers an email subscription service. This service allows you to

receive messages posted to the list by other members and to compose and post messages that will be seen by all subscribers. You must be a member of DAS, as verified by the mailing list. Messages on the list include notices of members getting together for observing and news about celestial happenings. To subscribe go to the website, choose the listserver option and follow the instructions. We are looking to move the listserver from Yahoo! to our own server soon. We may add lists for the Amateur Telescope Makers group, etc. If there is a special list that you would like to see created please contact Wayne Green at wayne@infosavvy.com with the details.

Observer's Corner

Master Observer

Michael Hotka received his Master Observer certificate from the AL, in recognition for the Messier and Messier Binocular, Double Star, Lunar, Deep Sky Binocular, SunSpotter, Venus Transit, Herschel 400, Planetary, Caldwell Silver, Globular Cluster and Urban Certificates. This represents quite a logbook full of reports. Great job, Michael.!

Observation reports

Wednesday night, March 16, Brad Gilman, Bill Ormsby and Wayne Green tackled astrophotography with Brad's SBIG 7e and the Clark. The target was a transit of Io across Jupiter's face. Early in the evening pictures of the lunar surface and of Saturn through increasing layers of clouds were obtained. The skies closed up before the transit even started. Another attempt will be

made later in the April. Photo's below.

Send a report of your observing to newsletter@thedas.org for inclusion in the newsletter.

Amateur Telescope Making

There are approximately 10 mirrors in various stages of grinding and polishing in the group. The cost of the course is \$10.00 for members for Mirror Grinding and the soon to start section on "Telescope Making" where mirror supports, the tube and mounts are going to be tackled. These courses are workshops, where people of all levels of experience can get into the fun.

Barrels and a safe workspace for grinding and polishing mirrors are supplied by the DAS. You can come and use these facilities under the watchful eye of an experienced mirror maker, test with good test equipment and achieve better than commercial levels of performance with your mirrors.

The success of the ATM group has started discussions about the scopes that will show up at the annual Picnic this year. We might even have to start a trophy! Give us your thoughts.

A wealth of information about mirror grinding and telescope making is available on the internet. Each month we will present some of the better links in this column.

The ATM List is an email mailing list for amateur telescope makers, who are a very generous and supportive lot. For a wealth of information go to the site:

<http://www.starastronomy.org/TelescopeMaking/faq>

A similar list is the atm_free group at Yahoo! Groups, that is a free, easy-

to-use email group service. To learn more about the atm_free group, please visit http://groups.yahoo.com/group/atm_free.

Additional internet resources will be presented in following issues. Watch this space. Stuart Hutchins is the contact for the ATM group.

DAS Science and Space News

The Deep Impact Mission is still seeking observations, position and development of the comet's coma, etc. Brad Gilman took the image shown in the photo section below. Note the extent of the coma in the negative image. A full discussion of the Deep Impact Mission and your ability to make contributions may be obtained from:

<http://deepimpact.jpl.nasa.gov/science/observations.html>

Results already coming from the Small Telescope Science Program may be viewed at the website.

Call for Photos

The DAS is beginning a project to acquire some amateur quality images of the Moon, planets and deep space objects for use in our programs and to offer for sale to interested parties.

As currently envisioned, the rights to the photographs will be transferred to the DAS, but the image's author will receive full credit for their images. These images may be used by third parties with the royalties going to DAS projects.

This 'Call for Pictures' is a way for DAS to make some money and to enhance the aspects of amateur astronomers during our public night presentations. If you are interested, please contact, Steve Solon, Wayne Green or Frank Mancini for details.

Film photos may be submitted in paper or scanned form, digital photos in their original format (i.e. FITS for SBIG and other astro-cameras, jpeg from consumer cameras).

You can always get your photos published in the Observer.

Edmund G. Kline Dark Sky Site

The EGK Dark Site is open to all members. Special permission is required for guests. The combinations to the locks at the main gate and the warming hut should be obtained from the President or Vice President.

Please remember that white light disrupts the eye's dark adaptation and can ruin Astrophotography. The rules for the EGK Dark Sky Site can be found at the website. A few of them are reprinted here:

- Upon arrival at the site, check to see if sign-in has been instituted at the warming hut. We hope this will help alleviate problems members may be experiencing in trying to find a place to set up. (Updated 9/5/04)
- DAS MEMBERS have priority usage at the concrete pads. Holding a pad for friends is NOT allowed.
- Drive carefully on the road, there are blind spots in the low area and you will find cattle on the road at times.
- Try to arrive before dark.
- If you have to arrive after dark, turn off headlights when turning into site.
- Turn off all dome and trunk lights. If a light can't be turned off, pull the fuse, use layered red brake light tape or just duct tape over it.
- When you drive in, position your car so you can drive out directly instead of using your back up lights.
- Use only dim red flashlights. Never shine a flashlight in someone's face or on their scope.
- Serious astrophotographers may wish to use the South field since it is somewhat isolated from the rest of the area.
- If you are the last person to leave the site, turn off the lights and the heaters in the warming hut. Then, lock the warming hut and close the gate to the site.

DAS Officers and E-Board

This list includes some new names, and some old members changed positions within the DAS. Business of the Denver Astronomical Society is conducted at a separate Executive Board Meeting usually held at 8PM at Chamberlin Observatory, 2930 East Warren Street, Denver, CO 80210. All members are welcome. Regular meetings are held at Olin Hall, University of Denver's Main Campus.

Please see the schedule of events for meeting dates and times.

OFFICERS:

President Emeritus: Larry Brooks
President: Steve Solon (303) 932-7613 galaxyshots@att.net
Vice President: Wayne Green, (303) 530-1023 Wayne@Infosavvy.com
Secretary: Stuart Hutchins, (303) 697-4353 stuart452@earthlink.net
Treasurer: Sandy Shaw (303) 234-0264 m6m7@earthlink.net
Past President: Carla Swartz; orion42@comcast.net

DAS EXECUTIVE BOARD

Jack Eastman, Frank Mancini, Joe Gafford, Dan Wray, David Shouldice, Bill Ormsby, Ron Mickle, Darrell Dodge.

ALCor: (Astronomical League Correspondent) Sandy Shaw; m6m7@earthlink.net

Contact Info: DAS

INFORMATION LINE: 303-871-5172

DAS CORRESPONDENCE:

Denver Astronomical Society
Chamberlin Observatory C/O Steve Solon
2930 East Warren Avenue
Denver, Colorado 80210

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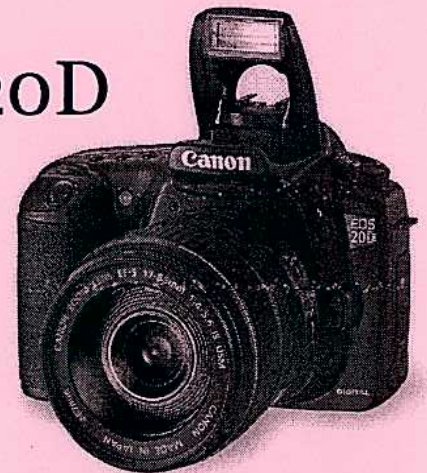
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**WATCH FOR the May flyer about our
upcoming special event:**

"Orion Day"

May 14th - 10 am until 4 pm

**This one day event will feature
Dave Thomas from Orion Telescope**

Join us for the Fun & the Specials !

S & S OPTIKA

5174 South Broadway - Englewood, Co. 80113
303 789-1089

Election Results

The elections are over and the results are in. Below is a photo of your newly elected Officers and Board of Directors. From right to left: Stuart Hutchins, Secretary; Wayne Green, Vice President; Joe Gafford, Eboard; Bill Ormsby, Eboard; Dan Wray, Eboard; Darrell Dodge, Eboard; Sandy Shaw, Treasurer (standing behind Frank and Ron); Ron Mickle, Eboard and Public Night Leader; Frank Mancini, Eboard; Jack Eastman, Eboard and Chief Observer; and Steve Solon, the President with the nifty neck tie.

Picture from Bill Ormsby.



Photography Section

Brad Gilman captured an image of 9P/Tempel-1 Comet. The image below was captured with an 11" Celestron SCT, on a Williams GTO mount with an SBIG 7E Camera with no filters. You can see a slight coma developing around a tight nucleus. The SBIG FITS image was doctored for publication using Linux and the xv program – enhancing the contrast and is presented here in the negative image. Brad is quite active in his backyard without an observatory.

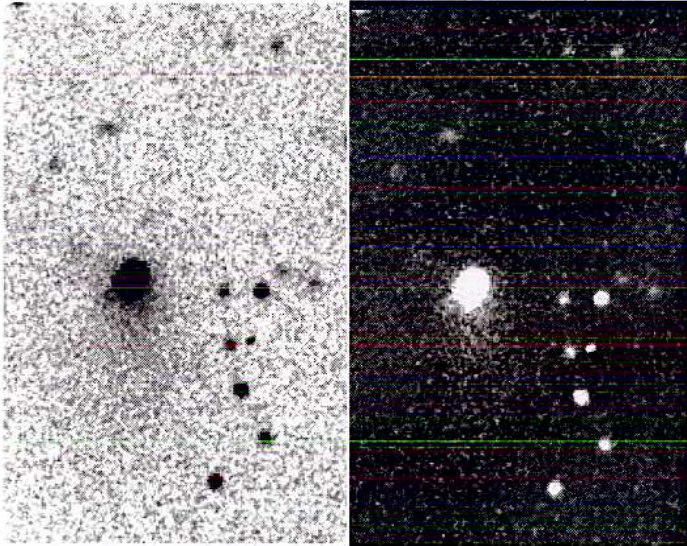


Figure 1 Comet 9P/Tempel1, Brad Gilman

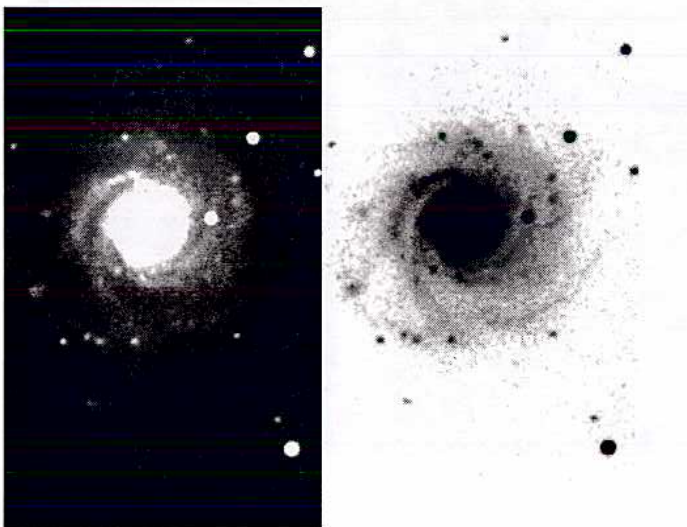


Figure 2 NGC 3938, Brad Gilman, SBIB 7e camera and a Celestron 11" SCT on a Williams Optics GTO mount

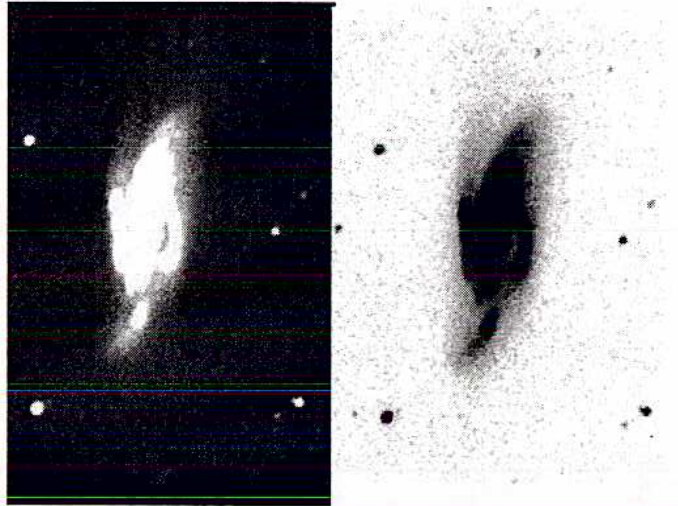


Figure 3 NGC 4088, Brad Gilman, SBIB 7e camera and a Celestron 11" SCT on a Williams Optics GTO mount

The photos of the Moon were taken by Brad Gillman, Bill Ormsby, and Wayne Green using Brad's SBIG 7e and the Alvan Clark telescope at Chamberlin.

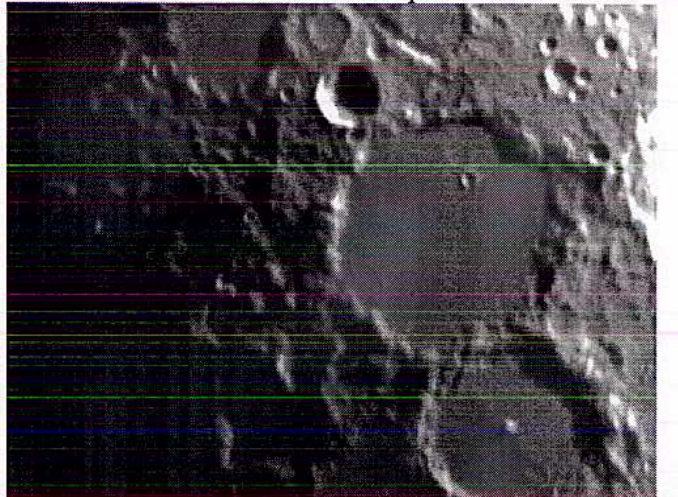


Figure 4 Ptolemaeus Crater (big crater in center), Alphonsus Crater (lower right), Crater Ammonius (little crater in Ptolemaus), Crater Herschel A (small, dark crater at top center) Brad Gilman, Bill Ormsby, Wayne Green

The use of the SBIG 7e on the Clark caused no amount of difficulty focusing, as the Clark is a refractor and has a pronounced blue fringe around images. No filter wheel was available to use an ultra-high contrast filter to narrow the spectrum down for a sharp focus.

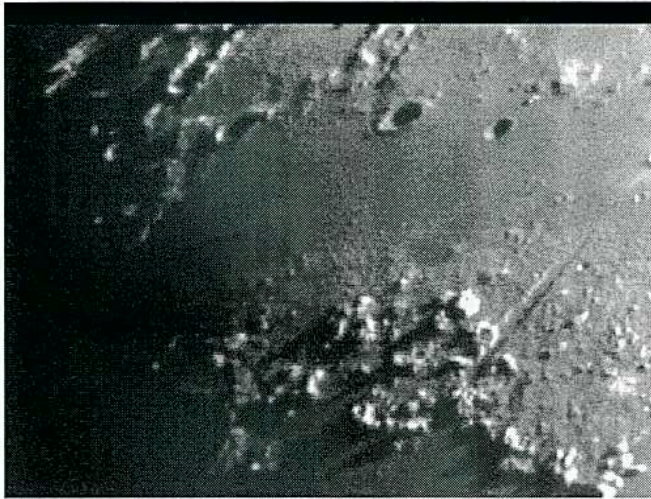


Figure 5 Vallis Alpes cutting through mountainous region called Montes Alpes (scratch lower right), northern edge of Mare Imbrium and Mare Frigoris (flat area north of Montes Alpes) Brad Gilman, Bill Ormsby, Wayne Green

Finally, Steve Solon supplied us with a color image of Saturn.



Figure 6 Saturn, Steve Solon

Miscellaneous News

DAS Jackets

The last Eboard decided to look into having DAS Jackets made again – perhaps a light-weight and heavy-weight version, with the logo printed. We are acquiring the options and anticipate making a decision at the next Eboard meeting.

Solar System Info

Recently, the question arose of where to find objects in the solar system. JPL, those guys that drive the spacecraft around, keep their crib sheets at:

<http://ssd.jpl.nasa.gov/cgi-bin/eph>

Follow their checklist; item 1 lets you select the target body. Ramble around in that area and you can find all sorts of hard data useful to predict the location of objects in the solar system. This is a handy place to get comet ephemeris.

NASA Night Sky Network

NASA has allowed us to participate in their Night Sky Network. You can download slides and dial in (using provided passwords) and hear speakers discuss various topics while following along with the downloaded materials. Details about this service are usually posted to the DAS Yahoo! Listserv group.

About the Denver Astronomical Society

Membership in The Denver Astronomical Society is open to anyone wishing to join. The DAS provides trained volunteers who operate the University of Denver's historic Chamberlin Observatory, which the DAS helped place on the National Register of Historic Places. First light at Chamberlin in 1894 was a public night of viewing, a tradition the DAS has helped to maintain since its founding in 1952.

The DAS is a long-standing member of the Astronomical League and participates in NASA's Project Astro program.

The DAS' credo is to provide its members a forum for increasing and sharing their knowledge of astronomy, to promote astronomical education to the public, and to preserve the historic telescope and observatory in cooperation with the University of Denver.

The DAS is a 501(c)(3) tax-exempt corporation and has established three tax-deductible funds: the Van Nattan-Hansen Scholarship Fund, the Chamberlin Restoration Fund, and the EGK Dark Site Fund. To contribute, please see the bottom of the membership form for details.

More information about the DAS, its activities, and the special tax-deductible funds is available on the DAS web site at www.thedas.org.

Membership Application Form

New Member _____ Renewing Member _____

Name _____

Address _____

City _____

State/ZIP _____

Phone Number _____

Email _____

PDF Form of Newsletter Only (YES / NO) _____

Regular Member (\$35) _____

Student Member (under age 23) (\$12) _____

Sky and Telescope Subscription (\$32.95) _____

Astronomy Magazine (\$29) _____

Donations:

Van Nattan-Hansen Scholarship Fund _____

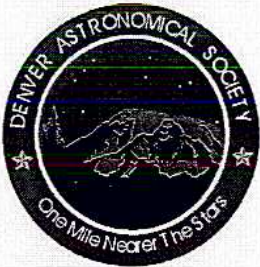
Chamberlin Restoration Fund _____

DAS General Fund _____

TOTAL*: _____

EGKDS (Dark Sky) Fund* _____

*Please make Dark Sky Site donations payable to DAS EGKDS Fund and mail to Steve Solon, 9774 W. Elmhurst Place, Littleton, CO 80128. Please make other checks payable to Denver Astronomical Society and mail together with this form to Sandy Shaw, DAS Treasurer, 1095 Yank Street, Golden CO 80401.



The Denver Astronomical Society
C/O Chamberlin Observatory
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Denver, CO 80210