

### **3D Image Transforms**

by John Kirchhoff

As I grew up in the 1960's I was constantly amazed by the latest images of the moon and planets taken by the latest NASA unmanned probe or Apollo mission. In addition to the wealth of detail that was impossible to see from our humble vantage point on earth many images showed familiar features from a totally new perspective. I will never forget the the remarkable panorama taken by Lunar Orbiter of Copernicus or the picture looking back at Earth from Apollo 8.

This January's Sky and Telescope stopped me in my tracks with an article that reminded me of that sense of newness of seeing a familiar feature from a new point of view. The author J.-P. Metsavainio shows how to take an image of the moon and by pasting it to a virtual globe in Adobe Photoshop, transform the image so we can view it from an entirely different position. The process as described by the author is very straight forward and since I just happened to have a lunar image or two I decided to give 3D transform a try. For those of you that missed the article you can order it on line at www.skyandtelescope.com. Just plug in 3d transform in the article archive search engine. Cost is \$2.95.

... continued on page 2

### **DID YOU FORGET TO RENEW YOUR MEMBERSHIP IN FAAC?**

If you did, it's not too late to renew. We don't want you to miss future issues of Star Stuff. Send your check in today to:

FAAC P.O. Box 7527 Dearborn, Michigan 48121-7527

Late renewals for 2005 are \$30 (or you can convert to a Life Membership for \$150 and never be late again!)

Please include any updates to your address (snail mail or email), phone number, etc.



### **President's Corner**

by Don Klaser, President, FAAC

#### Searching for Spring !!

Gray, menacing clouds above and a blanket of white below -it sure looks like winter in Michigan. Is it possible that warmth and clear skies will ever return ?

Yes !! And the signs are all around us. Seed catalogs have been arriving for weeks, and orders have been placed ( homegrown tomatoes -- uummmm ). The crocus bulbs that Jan planted last fall are poking their heads up thru the snow, and spring training is under way ( could this be the year of the Tigers ?). While encouraging as these events are, what clinches it for me are the astronomical happenings.

First - The Messier Marathon. There is no better messenger of Spring than this event. Amateur astronomers around the world welcome it's arrival, with the opportunity to view this wonderful collection of objects.

Second - The FAAC Dinner Party. The best night out that isn't under the stars! It's a chance to mingle with our fellow club members and enjoy the evening's festivities. It is again being held at Station 885 in Plymouth. Reservations are filling up fast, so be sure to make yours soon.

Third - Astronomy Day. On Saturday, April 16, we will have a full schedule of activities available. Again this year we will be

working with the Detroit Science Center to support their Astronomy Day program. As partners with the DSC, we will have our club logo, along with the DSC logo on literature being provided by Astronomy Magazine for this event ! We will host an indoor display as well as observing out on the sidewalk. There will be crafts for the children, an astronomy show and door prize give-aways by the Science Center. In the evening, it's out to Island Lake for the first Beginner's Night of the year. John Kirchhoff will lead this event again this year. Please see the ad in Star Stuff for the other dates for this years program. Other venues being attended by FAAC members include Kensington Metro Park, Cranbrook and possibly HFCC. As always, Harold Thomason will be at the Dearborn Civic Center on Michigan Ave.

Wow !!! What a way to let us know that Spring has finally arrived. Let's all go out and support these events !!!!

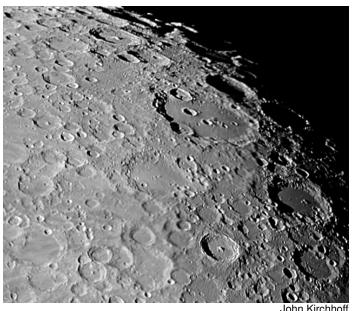
-- Don Klaser

### 3D Image Transforms...

#### ... continued from Page 1

The crater Clavius is one of the largest craters (actually classified as a walled basin) on the moon. It along with the crater Tyco dominate the southern lunar highlands shortly after the moon reaches first quarter. Clavius from our vantage point is a distinctive oval shaped crater with smaller "twin" craters that oppose each other on the north and south walls of the primary crater. In addition there is a wonderful chain of craters running east and west along it's floor. Both of the "twins" as well as the individual members of the crater chain exhibit the same oval shape as Clavius with the major axis running east and west.

At least that's how it appears from our vantage point.....



The transformed image is as we would view Clavius flying over the top of it rather than peering at it from a severe sideways slant. We can make a couple of interesting observations from this view. Clavius is just as round as almost all of the other large craters on the moon. The oval shape is entirely due to foreshortening caused by our viewing





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#### FORD AMATEUR ASTRONOMY CLUB P.O. Box 7527 Dearborn MI 48121-7527

PRESIDENT: VICE PRESIDENT: SECRETARY: TREASURER: Don Klaser Ed Halash Dale Ochalek Gordon Hansen

NEWSLETTER EDITOR: Greg Burnett

#### CLUB INFORMATION

The Ford Amateur Astronomy Club holds regular general meetings on the fourth Thursday of each month, except for the combined November/December meeting held on the first Thursday of December. Meetings are held in the Administrative Services and Conference Center building at Henry Ford Community College in Dearborn. Refer to our website for a map and directions.

The Ford Amateur Astronomy Club observes at Spring Mill Pond within the Island Lake State Recreation Area near Brighton, Michigan. The club maintains an after-hours permit, and observes on Friday and Saturday nights, and nights before holidays, weather permitting.

Observing schedules and additional information are available by calling the FAAC Observing Hotline at 313-390-5456, on the Ford Intranet at <u>www.be.ford.com/astro/faac.html</u>, and on the public internet at <u>www.boonhil.net/faac</u>

Membership in the Ford Amateur Astronomy Club is open to anyone with an interest in amateur astronomy. The Ford Amateur Astronomy Club is an affiliate of the Ford Employees Recreation Association (F.E.R.A.).

Membership fees are as follows:

Annual – New Member: Annual – Renewal: Life Membership:	\$30 \$25 \$150	(\$15 after July 1) (\$30 after January 31)
Life Membership.	ψ150	

Membership includes the STAR STUFF newsletter, discounts on ASTRONOMY and SKY & TELESCOPE magazines, discounts at selected area equipment retailers, and after-hours access to the Island Lake observing site.

#### MAGAZINE DISCOUNTS

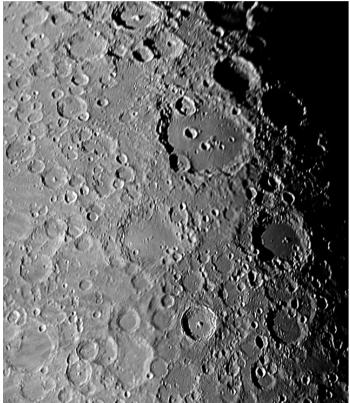
Do not send money to the FAAC for ASTRONOMY or SKY & TELESCOPE magazine subscriptions. Obtain a discount form from the club secretary and send the form directly to the publisher with your subscription to receive a \$10 discount.

#### STAR STUFF NEWSLETTER SUBMISSIONS

Your submissions to *STAR STUFF* are more than welcome! Send all items to the editor at <u>skyfog@comcast.net</u> preferably in MS-Word format, but in-line email text is fine too. *STAR STUFF* will usually go to press the weekend prior to the week of each general meeting. Submissions received prior to that weekend will be included in that issue.

#### STAR STUFF

perspective. In addition the upper twin crater Rutherford is really oval but in a north/south rather than an east/west direction! I also think that the transformed image shows that the chain of craters running down the center of Clavius is from at least two separate events (pure conjecture on my part... I am not certified selenographer).



John Kirchhoff

I am looking forward to using the program to examine other features on the moon, especially those that that are close to the lunar limb. I hope to image the lunar basin Bailly, located to the southeast of Clavius and twice it's size. The technique might also be used for a different look at Jupiter's cloud belts or the polar region of Mars. I hope you get a chance to try the 3D transform program and look forward to seeing your images. If you don't have Photoshop there is a free program you can download at www.astrospider.com/planetwarp that is designed to transform lunar images too. Clear skies and happy picture taking!

### Letters to the Editor

#### Dear STAR STUFF:

I would like to publicly extend my thanks to **Professor Gerald Dunifer** of Wayne State University (Physics Department) for the suggestion and coordination of the presentation of John Rather's lecture on "Asteroid and Comet Impact Hazards and Potential Mitigation Method," at the February FAAC meeting. We appreciate your effort on behalf of the club and everyone thoroughly enjoyed the presentation.

-- Vicki Burnett, FAAC

On behalf of the FAAC, our thanks goes out to Vicki for getting this event going in the first place. –Ed.

#### FAAC 2005 BANQUET by Jim Frisbie

Tickets and reservations are going fast. **Only 9 tickets left!** Be sure and mail or bring your checkbook to the FAAC General Meeting on Thursday, March 24<sup>th</sup>. Our guest speaker at the Banquet will be Dr. Jacobs from Henry Ford Community Collage. His talk will be on "Polynesian Star Navigation". It should be interesting! See you there on Saturday, April 2, 2005.

### Mini- Winter Star Party

by Ed Halash

During the third week of February, my wife Jeanne, my 15 year-old daughter Laura, and I drove to Sebring, Florida to visit my in-laws and spend a week in the sun. First stop was near Tampa, where my daughter stayed two nights with a friend that had just moved to the Tampa area when her father, who works for Ford, was relocated. This gave Jeanne and I a chance to hang out near Sarasota before picking our daughter up and completing our trip to Sebring.

I would have liked to bring my 10" dob but room in the car dictated that I bring binoculars and my 35 year old 60mm Unitron refractor. By the time we got to Sebring, on Valentines Day, the moon was beginning to reclaim its control over the night sky. Nevertheless, I snuck out at night to view the stars after everyone else tired of playing cards and visiting. Most of my vacations revolve around visiting with family, stargazing, and sleeping very little. For example, my in-laws spend their summers in northern Wisconsin, where it is very dark, and I plan the one-week we go there each summer near the new moon. This requires me to visit and play all day and star gaze all night if the skies are clear. Many times, I actually hope for a few cloudy nights.

While in Florida, it did not rain once, the sun shone everyday, and the temperature reached into the seventies each afternoon. My in-laws live in a mobile home park which likes to keep its streetlights going big and bright, but I was able to find a few spots out of the glare. I also kept a close eye out for alligators, which were all around the lake near by.

Before leaving for Florida, I checked the clear-sky clock to find out if there were any dark observing spots that amateur astronomers could use near by. One spot, near Venus, Florida, was only 20 miles away to the south. I checked it out one day but never actually made it there at night. The web site for this site is http://www.palmbeachastro.org/calendar/starfarm.htm if you need directions. It will take you about 20 hours from Detroit, so this would not be an alternative viewing site for FAAC, but it would be significantly darker than Lake Hudson! The web site says all are welcome anytime.

Well what did I see while in Florida? A few things were Jupiter and Saturn, Macholtz, M-42, M81, M82, the moon, and M22, which is one of my favorite objects. Of course I looked at Omega Centauri and saw the bright star Canopus, which I do not remember ever seeing before. When viewing M22, the bright globular in Sagittarius, I spotted a bright reddish star just above it and to the left. Was it a plane approaching in the distance? No, it didn't move. A variable star? Maybe I was seeing a new supernova! When I went inside, to check my star chart, this only verified my observation that I was seeing something in the sky that didn't belong. The "teapot" asterism had sprung a new star near its top. Did the fact that this new "star" was right on the ecliptic clue me in to what it really was, did the ruddy reddish color help me out? No, not at all. However, while eating breakfast later that morning a smile came to my face as I thought "Mars, you dummy!" Hey, I told you I'm sleep deprived during my vacations.

Mars is coming back. Let's all hope it is a great return this fall. Since, I "discovered" Mars this time, I'll make a prediction. This time it will be just as red, almost as big, almost as bright, but higher in the sky for us to observe, which should make it even better to observe than its closest approach in over 50,000 years last time. What a great hobby.

### FAAC ASTRO IMAGING SIG

by Jim Frisbie

O.K. Lets try it again! After a miss in March, the April meeting of the Astro Imaging S.I.G. will be held Thursday, April 14, 5:30pm at Henry Ford Community College in Dearborn.

George Korody has agreed to tell us about his recent trip to the Florida Star Party. Tony Licata will also speak on his experiences with IRIS and other Image Processing Software. All Club members and their guests are invited.

We will meet in the Roseneau Conference Rooms at the Administrative Services and Conference Center. (Same room as the FAAC General Meeting). If you approach the Faculty parking lot gate with your car, it should open allowing you to park close to the building.

### FOR SALE...

12.5" f/6 Meade Research Grade OTA. Rotating Rings. 2" focuser. Circa 1984. \$1100.00

**Machined GE mount**, circa 1973. 2" stainless steel shafts (both axes). Teflon bushings (bearings). 6" Byers RA gear. 5.75" DEC gear. 3" aluminum casing. Aluminum cradle for above 12"5 inch Newt. NGC-max with encoders. \$1900.00

**10" f/10 Meade SCT OTA**. \$600.00. Or with the **LX200 Mount** \$1600.00. I'll have to decommission the Frankenscope, if you want the entire lx200 10"... but that's ok... it has a dob mount idling in the garage.

All items: You pick up. These aren't spring chickens, and have had a lot of hours logged on them. Contact Doug Bock dbock1@chartermi.net

### Welcome New Members!

The Ford Amateur Astronomy Club welcomes the following new members:

#### David Senf

We hope your membership will be rewarding and enjoyable. Let us know how we can help you enjoy amateur astronomy.

#### Caught

Oh comet sailing thru the sky We know from where your glow does shine Blown away we see you are Helpless you so close your star And even if you'd think to try No other way your tail could fly So race away into deep space Laughable your doomed escape Her hold on you reaches far Evermore caught by your star

-- David Senf, FAAC

#### Stars and Moon

Sparkling diamonds in the heavens,

Sovereign white globe of reflected light, In silence......You shine on ALL mankind.

Looking "UP", exploring the night-skies, We find PEACE in viewing your gentle lights,

With deep gratitude, we give Thanks! For without your distant glow, Our nights would be total darkness.

-- Anna Scott, FAAC

#### NIGHT SKY by Nancy Rohrer

Walking up the hill at night Looking down on city lights See them reflect way up high In the dark and rounded sky.

Looking up, I see many friends They seem to go without end There's Orion doing good deeds Warrior, hunter, keep us free.

Many more friends there to see Far they go into eternity Glad to see Leo, Twins and Bull Looking up will never be dull.

Enjoyed the walk and friendly chat Time to-return and feed the cat Keep star gazing on the menu I will be back to continue.

Nancy Rohrer

## Minutes of the FAAC General Meeting by Dale Ochalek

#### February 24, 2005

The general meeting was called to order a bit prior to 5:30 pm by FAAC V-P Ed Halash, subbing for President Don Klaser. The agenda was altered to accommodate the guest speaker presentation time requirements.

The members introduced themselves and reported observational experiences, per usual.

Ed then introduced Prof. John Rather, of Wayne State University, and related some of the professor's impressive background. Prof Rather, began his hour-long talk, on the Asteroid Impact Hazard - what is out there, and what can we do about it? He then took some questions before wrapping up.

The business portion of the meeting then resumed. Jim Frisbie presented information on several agenda topics, beginning with the FAAC Annual Dinner Party, to be held at Station 885 in Plymouth, on April 2. Tickets are \$29, and there is a 50 ticket maximum. There will be the usual hijinks and mayhem, including a Jeopardy rematch, prizes, and slide show. Commitments are preferred by next meeting at the latest. Send money to the FAAC PO Box address, see Gordon Hansen, or contact Jim Frisbie.

Mr. Frisbie reported the Astrophotography SIG continues to meet the 2nd Thursday of each month at HFCC, at 5:30 pm. George Korody agreed to talk about his Key West excursion at the March meeting, among other topics to be determined.

Also, regarding the Swap Meet he coordinated, Mr. Frisbie reported attendance down a bit this year, but there was a profit of just under \$400 from admissions and table rentals. The question as to whether holding the event on Saturday vs. Sunday had an effect on attendance was considered for future reference.

Next, Mike Bruno noted the planetarium training team would be getting busy starting in March, perhaps on Tuesdays, with HFCC's Steve Murrell. Contact Mike for information. Also, according to Mike Bruno, Mike Lopresto offered that training throughout the summer might be useful for some fall shows. There are no training materials available, per se, and effort may be necessary to work on this for training sessions.

Gary Stahl reported on a cabinet purchase to support the FAAC Library. A cabinet that can handle 180. lbs per shelf can be had for \$180, with free delivery to HFCC. The cabinet will be housed in the HFCC Science building.

Ed Halash talked about the committee efforts to find an alternative dark sky observing site, and reported the sites considered, including Hudson Mills Metro Park, a farm museum site, Waterloo Parks site, Lyndon Park in Washtenaw County, White Oaks park, and finally an airport near Gregory, Michigan. The rental fees were discussed, along with the high expense of trying to own a private site.

The meeting adjourned at 7:30 pm.

#### Up-Coming Events by Bob MacFarland

The following organizations have identified dates for their 2005 Michigan area astronomy events. In all cases, event specific details are still under development. Check the for the latest news releases on the boonhill.net website links for each of these organizations over the upcoming weeks and months.

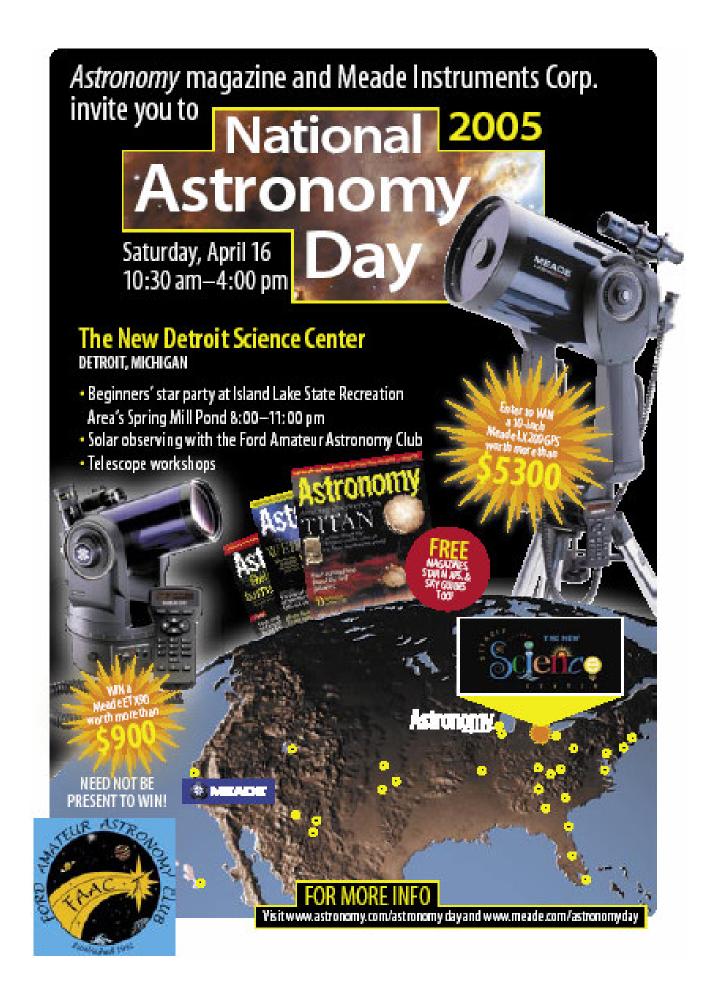
- The Great Lakes Area Astronomy Clubs have set the dates of September 9th & 10th for the Huron Clinton Metroparks Kensington Astronomy on the Beach event at Martindale Beach within the park.
- The Warren Astronomical Society cooperating with the City of Clarkston to put on a public awareness star party with live concert music on June 11th.
- The Sunset Astronomical Society is hosting their third annual Great Lakes Star Gaze on September 30th/October 1st near Gladwin, Michigan.

### **Treasurer's Report**

by Gordon Hansen

February 23, 2005

Bank Accounts		
Checking	\$ 768.06	
Savings	\$ 2,399.54	
TOTAL Bank Accounts	\$ 3,167.60	
Cash Accounts		
Cash Account	\$ 100.07	
TOTAL Cash Accounts	\$ 100.07	
Asset Accounts		
FERA Ticket Sales	\$ -	
GLAAC	\$ 795.00	
Projector	\$ 840.75	
Scholarship	\$ 166.60	
Swap Meet	\$ -	
TOTAL Asset Accounts	\$ 1,802.35	
OVERALL TOTAL	\$ 5,070.02	





# FAAC DINNER BANQUET 2005

## SATURDAY, APRIL 2, 2005 6:00 pm until ?

### **ASTRO SLIDE SHOW – PRIZES – ASTRO QUIZ**

LOCATION: This years Dinner Banquet will be held at Station 885, located at 885 Starkweather, Plymouth, Michigan 48170, telephone 734-459-0885.

### **DINNER SELECTIONS:**

\*

10oz. Prime Rib of Beef au Jus

or

### Pan Seared Salmon

or

Chicken Marsala

•

All dinner entrees will include fresh vegetable medley, Chef's roasted herb potatoes, and a mixed green salad.

\*

Dessert Delectable of White Chocolate Mousse filled Eclairs.

\*

Coffee, tea, iced tea, and soft drinks will be available throughout the evening. A Cash Bar will be available. Please ask your server for a selection of beer, wine, and mixed drinks.

ADMISSION: \$29.00 per person.

COCKTAILS AT 6:00 PM, Cash Bar, Dinner at 7 pm.

MAKE CHECKS PAYABLE: Please pay Gordon Hansen at the General Meeting, call Diane Worth or Send payment to Ford Amateur Astronomy Club, P.O. Box 7527, Dearborn, MI 48121-7527. "Thank you for another great year. We hope to see you there. Please let us know if you are coming!" FAAC Board.

LOCATION: The restaurant, Station 885 is located 3 blocks north of Plymouth Road, just east of downtown Plymouth. \* See STAR on map\*



**For More Information:** Contact Diane Worth via email: <u>dianesails@sbcglobal.net</u> or call (248) 737-5131 or Jim via email: <u>w8tu@comcast.net</u> or call (734) 453-1422

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on all telescopes and accessories