



STAR STUFF

The Newsletter of the Ford Amateur Astronomy Club

Volume 15, Number 3

March 2006

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NOTE: Dues Due!

Renew now - we don't want to see you go! Send your check (\$30) in today - with updates to your address (or email), phone numbers, etc., to: **FAAC, P.O. Box 7527, Dearborn, Michigan 48121-7527**

Making the Trip to the WSP

Gordon Hansen



Photo by Gordon Hansen

The Winter Star Party (WSP) is one of those events you hear so much about (a star party, in February, in the Florida Keys), you vow, that one day - if you ever get the chance...

After transitioning to my new profession of RETIRED, the time had come; any excuses, were gone. So I hurriedly returned the completed application, the same day it arrived last fall, to the hosting Southern Cross Astronomical Society (they sell out every year!). I was soon after delighted with a reward - a pair of tickets for the WSP, February 20-25, 2006 (I had convinced my wife, Susan, she also needed a getaway from this *terrible* Michigan winter).

On Thursday, February 16, time had finally come, and, after endless packing, and loading up the Ranger, WSP tickets in hand, we began a long drive in a southerly direction. George and Pat Korody, the FAAC resident WSP veterans, had a 24-hour head start and, we heard, were already in Corbin, Kentucky (home of the original KFC!). Taking a cue from the experts, that would be our first day's destination as well. Bob MacFarland would leave later the same day, and Dennis Salliotte, the next morning.

...continued on page 4

STAR STUFF

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STAR STUFF is published eleven times each year by the

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

PRESIDENT:	Don Klaser
VICE PRESIDENT:	Ed Halash
SECRETARY:	Ken Anderson
TREASURER:	Gordon Hansen
NEWSLETTER EDITOR:	Dale Ochalek

CLUB INFORMATION

The Ford Amateur Astronomy Club (FAAC) meets on the fourth Thursday each month, except for the combined November/December meeting on the first Thursday of December – at Henry Ford Community College, Administrative Services and Conference Center in Dearborn. Refer to our website for a map and directions (www.boonhill.net/faac).

The FAAC 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. The FAAC also has use of the dark skies at Richmond Airport, Unadilla, given prior permission. See the FAAC Yahoo Group* for more information.

Observing schedules and additional information are available by calling the FAAC Observing Hotline at 313-390-5456, on our website, or via the FAAC Yahoo Group.*

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

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

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

ASTRONOMY or SKY & TELESCOPE MAGAZINE DISCOUNTS

Obtain the required form from the FAAC club treasurer for a \$10 discount. Send the completed form directly to the respective publisher with your subscription request and payment. Do not send any money directly to the FAAC for this.

STAR STUFF NEWSLETTER SUBMISSIONS

Your submissions to *STAR STUFF* are more than welcome! Send your story and/or images to the editor at dake00k@yahoo.com. Email text or MS Word is fine. *STAR STUFF* will usually go to press the weekend prior to each general meeting. Submissions received prior to that weekend can be included in that issue.

* FAAC Members are welcome to join our **FordAstronomyClub** Yahoo! Group. Messages, photos, files, online discussions, and more! URL: groups.yahoo.com/group/FordAstronomyClub

Here's Lookin' at You, Kid!

President's Corner

Don Klaser, President, FAAC

Last year I wrote a column about observing - the heart and soul of our hobby. It's what we want to do most, but probably do less than we'd like. Ever since I purchased my 8" Schmidt-Newtonian, I've looked at a variety of objects at several locations with different eyepieces. Knowing that the light I'm seeing has traveled from a few seconds to millions of light years is truly amazing. But, with so many objects to see, figuring how to best assimilate and organize the information can be overwhelming.

One method, which has been discussed at club meetings, is to use an observing log to plan and record sessions. I've done this from time to time, though not really in an organized manner. But two recent purchases might help me gain a more structured observing program. First, I ordered "Explore the Universe 2006," a special issue from Astronomy Magazine that highlights a wide range of interesting events throughout the year. These include: A total solar eclipse (unfortunately, not visible around here), planetary oppositions transits (Mercury in November), occultations (moon and Pleiades on April 1st) and conjunctions (Jupiter, Mars and Mercury in December). In addition, there's a deep sky guide and double star list as well as a big scope challenge.

Next, I got Ken Graun's book, "What's out Tonight." It's a well-organized collection of star charts and tables of deep sky, planetary, lunar and comet observing, eclipse information and sunrise/sunset times of over 200 cities in North America. And best of all, the information is correct until 2050 (a pleasant change from the planned obsolescence of Microsoft)!

So, with scope in one hand (figuratively speaking), my observing aids in the other, and the Explorer heading out to Island Lake or Richmond Airport, the question still remains... where to look? So many objects, so little time...

It seems focusing on one type of object might be the way to go (pardon the pun). But which type? With 44 years to go on Ken Graun's book, I guess I'll take my time and check them all out.

One thing Ken didn't have any advice for: What to do with the Michigan Nebula!



Artist's rendering - size of a hypothetical hypergiant star and its surrounding dusty disk-- compared to that of our solar system.

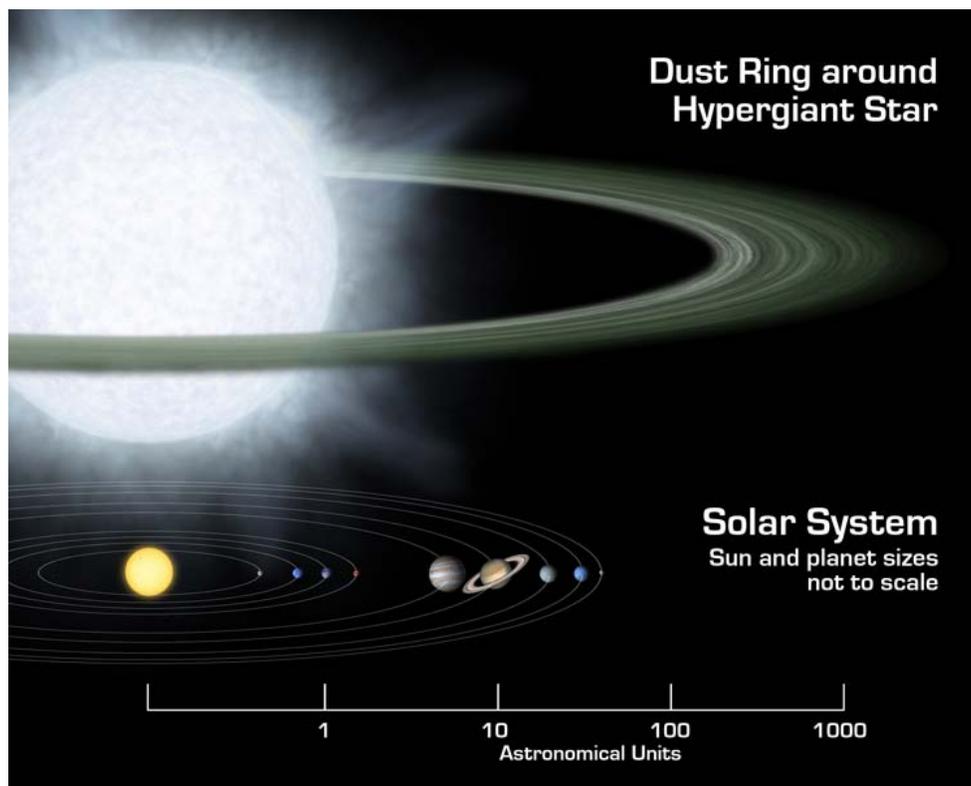
Red star, blue star, big star, small star—planets may form around virtually any type or size of star throughout the universe, not just around mid-sized middle-aged stars like the Sun. That's the surprising implication of two recent discoveries from the 0.85-meter-diameter Spitzer Space Telescope, which is exploring the universe from orbit at infrared (heat) wavelengths blocked by the Earth's atmosphere.

At one extreme are two blazing, blue "hypergiant" stars 180,000 light-years away in the Large Magellanic Cloud, one of the two companion galaxies to our Milky Way. The stars, called R 66 and R 126, are respectively 30 and 70 times the mass of the Sun, "about as massive as stars can get," said Joel Kastner, professor of imaging science at the Rochester Institute of Technology in New York. R 126 is so luminous that if it were placed 10 parsecs (32.6 light-years) away—a distance at which the Sun would be one of the dimmest stars visible in the sky—the hypergiant would be as bright as the full moon, "definitely a daytime object," Kastner remarked. Such hot stars have fierce solar winds, so Kastner and his team are mystified why any dust in the neighborhood hasn't long since been blown away.

But there it is: an unmistakable spectral signature that both hypergiants are surrounded by mammoth disks of what might be planet-forming dust and even sand. At the other extreme is a tiny brown dwarf star called Cha 110913-773444, relatively nearby (500 light-years) in the Milky Way. One of the smallest brown dwarfs known, it has less than 1 percent the mass of the Sun. It's not even massive enough to kindle thermonuclear

Planets in Strange Places

Trudy E. Bell



reactions for fusing hydrogen into helium. Yet this miniature "failed star," as brown dwarfs are often called, is also surrounded by a flat disk of dust that may eventually clump into planets (Note: This brown dwarf discovery was made by a group led by Kevin Luhman of Pennsylvania State University).

Although actual planets have not been detected (in part because of the stars' great distances), the spectra of the hypergiants show that their dust is composed of forsterite, olivine, aromatic hydrocarbons, and other geological substances found on Earth. These newfound disks represent "extremes of the environments in which planets might form," Kastner said. "Not what you'd expect if you think our solar system is the rule."

Hypergiants and dwarfs? The Milky Way could be crowded with worlds circling every kind of star imaginable—very strange, indeed. For more, see Spitzer - www.spitzer.caltech.edu, or, for kids, spaceplace.nasa.gov/en/kids/sirtf1/sirtf_action.shtml

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Star Party... *(continued from page 1)*

Conditions when we left were low 40's and rain (not so bad for February!). By the time we got to Corbin temps were in the low 60's and sunny - had we found spring?

Nope. The next morning it was 40's and rain. Things continued this way all the way through Georgia -- we would race to find the warmth and sun, but when we stopped, the cold would catch up again. Would winter ever let us go?

Finally we crossed the Florida border into warm sunshine - no threat of any of that winter stuff! We arrived at Big Pine Key by mid-afternoon on Sunday - blue skies and 70s. We made it - to where winter rarely treads!

Waking up Monday morning, we were excited to get going to Camp Wesumkee, the Girl Scout camp where the WSP is held. The gates open at noon, but everyone else is just as anxious to get in to stake out a good spot. By the time Bob, Dennis, Susan, and I arrived at 8:30 am we were about a 1/2 mile back in line, and were forced to sit in WARM SUNSHINE (missing Michigan already - NOT!!!!) If you're wondering what happened to George and Pat, they stopped to visit friends and arrived later in the day. Bob's wife Holly joined us on Wednesday.

Photos by Gordon Hansen



The camp is located on West Summerland Key, just over the Seven Mile Bridge from the city of Marathon - mile-marker 32.5 (mile-marker 0 is Key West). The beach essentially faces south, with 90 miles of ocean to Cuba. North of the key is open water to the Florida Everglades. This translates into nice dark skies, hampered only by a modest light bubble from the city of Marathon to

the east, and a smaller one from Big Pine Key to the northwest. The weather cooperated to the fullest! I don't remember seeing a cloud day or night until Friday evening. Humidity was fairly low, allowing us to see almost all the way to the southern horizon. One could get spoiled by a place like this!

The sky here takes on a strange appearance. Polaris is only 23 degrees above the horizon. You can't see all of the handle of the Big Dipper at dusk, and there ARE lots of things to see below Sirius (who would have thought!). I've been chasing down the Messier objects and cleaned up all those below Orion quickly. It's amazingly easy to find things, when you can actually see the surrounding guide stars.



The real thrill, though, was viewing objects not visible from Michigan, regardless of how dark the sky. Omega Centauri was awesome. This globular clocks in at 36 arc-minutes in diameter with a magnitude of 3.7 (M13 is magnitude 5.8, 16.6 arc-minutes). Once you know where to look, it's a naked eye object.

We also wanted to see the Southern Cross. Each morning the top three stars would rise, but, the bottom one was lost in the horizon haze. Finally early Thursday morning we could see right to the horizon and the entire Southern Cross was visible. Nifty! The Southern Cross Astronomical Society set up there club Dob called the "Yard Scope." Yard as in 36 inches! Bob, Dennis, and George spent some time at this scope, but, because of equipment issues I managed to get there but once to view " η Carinae." Aperture rules! The central star took on the appearance of a traffic light - red and green. All who looked saw the distinct colors. Through Bob's 12.5" Dob and my 9.25" SCT, the star had a singular blue-green color.

Star Party... *(continued from page 4)*

Besides the night time viewing, the WSP also had a full slate of presentations during the daytime hours. The daily decisions became 1) how much do I sleep? 2) do I go to the presentations? or 3) sight-seeing? or, in my case 4) figure out what's wrong with the equipment. There were also a good number of vendors there who would be glad to sell you that new eyepiece...

I opted to attend only one of the presentations: Scott Ireland's "Advance Photoshop - Masking and Compositing," which only proved how much I don't know about Photoshop. George Korody got presentation handouts, for the next SIG meeting.

The last event was door prizes. You have to be there to win, so attendance was very good. A Binoviewer, a Nagler 31 mm, and lots more were awarded. Unfortunately, none of us in the FAAC contingent were lucky. Maybe next year.

For those who were wondering, "where are the astrophotos?" Unfortunately, Murphy and his Laws also made the trip down to Florida. I did spend several hours each evening, trying to get the auto-guider to calibrate with no success.

To make a long, FRUSTRATING story short, the RA motor attaching studs were bent, almost to the point of disconnecting the motor from the worm gear (too bad it didn't - I would have discovered the problem sooner). Tracking was OK for visual, but, totally unacceptable for photos. Oh well, I still rate the week a total success.

After attending WSP 2006, my original thought, that this is a "must attend" event, was confirmed. If you are thinking of attending next year, you're well-advised to do so, and - we need a bigger FAAC contingent. You would need to send an email to Fred & Lucille Heinrich, WSP Registrars heinrich1@alltel.net to get on their distribution list for an application. They send them out in September, and they do sell out. If you miss out, there is still an opportunity to buy tickets from someone who can't make it, on AstroMart.

February 23 Meeting Minutes

Ken Anderson

Don Klaser, President, called the meeting to order at 5:30 pm, and led the introductions. Discussions and observations included Ed Halash,

who observed the Monoceros cluster. Mike Bruno stated the Detroit Science Center has a nice Space Exhibit where you can actually touch meteorites from both Mars and the Moon. Gordon Hansen, Bob MacFarland, and Pat and George Korody called from the Florida Star Party to inform us that the skies were clear and they could see Omega Centauri, the Jewel Box, the Southern Cross, and down to -70 deg latitude.

Tony Licata reported replicating Damien's Saturn Opposition imaging, where the ring is much brighter than the planet, due to the ring particle shadows being masked within a week of opposition. Harold Thomason acquired a new C14 telescope and is awaiting first view. Ken Anderson led a HFCC planetarium Winter Sky presentation, and afterwards let guests look through binoculars at Saturn in M44 Beehive, and Mars in M45 Pleiades, and Orion (including M42). Milt French and John Schroer saw Mercury around 7PM at greatest elongation.

Jim Frisbie gave the Tech Talk with a presentation on "Splitting Double Stars." Approximately 50% of all stars are binaries. Polaris, the North Star, for example, is a Mag 9 primary and Mag 2 secondary binary and is split 25%. Visual double stars can either be optical doubles (visually aligned but really far apart from each other) or true binaries (gravitationally attracted and rotating around each other's Barry center).

Dawes Limit for separation distance is $S = 4.56 / D$ (where S = separation in minutes and D is aperture in inches). For example an 8" SCT provides 0.57 arc minutes of separation resolution. Jim's 8" SCT prefers 285x providing 0.7mm exit pupil. The minimum preferred exit pupil size is 0.8mm. References include the Sky Atlas, Select Double Stars, Burnham's Celestial Handbook (Strew objects), and a planisphere. In practice seeing conditions must be taken into consideration. Poor conditions require more power. Differing magnitudes require more power. 2x Visual acuity is preferred. Power required = $240 / S$ (where S is separation in minutes).

However, lower magnification yields smaller pinpoint stars and deter color.

Possible awards for the effort include Astronomy League Double Star Club (for 100, 200 & 300), and Spirit of 33 (starting with Orion, and then moving on to different constellations). Jim's favorite double stars include Sigma Orion, 52 Pi

Meeting Minutes . . . *(continued from page 5)*

Aquila (to test scope optics and seeing conditions in the summer ≥ 1 arc sec typical), and the double double (20 arc sec between both pairs, and 2.3 and 2.7 arc sec between individual stars).

Next, Alan Rothenberg, Warren Astronomical Society, gave the main presentation entitled, "Long Night of Selenography." Havellious is the study on the Moon, and Greek/Roman gods of the moon were named Diana, Luna, or Selen. The original ancient theory of the moon was that we were observing cloud reflections.

Although Lipochette invented the telescope, Galileo started observing the moon in 1610AD with his 2-3" homemade refractor telescope, and first drew Moon, starting selenography era.

Schroder's Valley is visible about 2-3 days before a full moon. Aristratus is the brightest spot on the moon. People speculated if these were signs of life, with civilizations building ant like circular cities to stay in the shadows. John Hershel, the discoverer of Uranus and descendent of William Hershel, stated he saw "Ice and Forest" on the moon, while observing in S. Africa. The newspapers added flying demons to his story in this 19th century hoax. Alan challenged FAAC club members with looking for the straight wall!

Don Klaser next continued to the club business portion of the meeting. The February newsletter was posted in Yahoo the Tuesday before the club meeting. Bob MacFarland's January minutes were approved/accepted. Don Klaser gave the treasurer's report, since Gordon Hansen was in Florida. Report provided in this newsletter.

Don and John Schroer gave updates from Forest Elementary school where they used the portable indoor planetarium. John said they had a new projector with fiber arc lenses for 20 of the brightest stars. They gave 12 shows for a total of 300 kids! Afterward they went outside and looked at the Moon, Saturn, stars/deep sky objects.

Don is submitting entry for a \$2500 award for Astronomy Magazine Outreach Program. March 9th at 5:30PM is the next Astro Imaging meeting, with "Ask the Photographer."

Diane Worth announced the FAAC Dinner Party for April 8th at 6PM at Station 885, Plymouth, for 58 people maximum. Norbert Vance is the guest speaker. Details provided in this newsletter.

The Swap Meet was a success adding \$700 to the FAAC treasury, and selling 27 tables and 110-120 participant tickets. As a lessons learned next time they will have a luncheon for people at the tables.

Astronomy Day, Saturday May 6, 2006. Detroit Science Center – Solar Observing and "Journey through Space." Island Lake Beginner Night later.

Astro Imaging Contest sponsored by Detroit Science Center (John Schroer, contact) open to anybody with Beginner or Advanced categories, and all photos must be received before Saturday April 29, 2006. Best of the Best will win a Nagler eyepiece as top prize.

The West Virginia Star Gaze, Calhoun County Park is March 30-31, 2006. Ed Halash says this is the darkest area south of Michigan, approximately 7 hours, or 380 miles, away. Calhoun County Park allows tents or a Barn could be rented for \$60.

The HFCC Science Building Planetarium Presentations have resumed for "Winter Sky" on Tuesdays, with doors opening at 7:15 pm, and presentations starting either when all seats are full or NLT 7:30 pm when doors are locked. Ken Anderson, Mike Bruno, and Don Sommers are FAAC club volunteers giving the presentations. Only four "Winter Sky" shows are officially scheduled, before they switch to "Spring Sky."

Next meeting will feature just one main presentation. April 8 is Lyon Oaks 7-11 pm astronomy event in Wixom off of Pontiac Trail. Contact Tom Blaszak, if interested. Meeting adjourned at 7:45 pm.

WELCOME, new members: Charles Frayer, Michael Maurer, Thomas Voydanoff.

Astro Imaging SIG

Jim Frisbie

The next meeting of the Astro Imaging S.I.G. is Thursday, April 13, 5:30pm, Roseneau Rooms A-B at Henry Ford Community College in Dearborn, in the Administrative Services & Conference Bldg. (same as the FAAC General Meeting). All Club members and their guests are invited. The topic for the meeting will be "Ask the Astrophotographer." Please bring your questions, problems, and troubling issues. If you drive up to the Faculty parking lot gate, it should open, allowing you to park close to the building.

Meeting Agenda - March 23

(5:30 pm)

Opening/Introductions/Member Observing

New Members & Guests – Diane Worth

Presentation – Measuring Distance to Sun – the Ancient Way - Dale Partin (WAS)

Club Business / Secretary/ Treasurer Report

Club Projects / Committees / Member support

- Astronomy Day – Don Klaser
- Astro-Imaging Contest DFC – Don Klaser
- Astronomy Mag. Outreach Award – Don Klaser
- Astro-Imaging SIG – Jim Frisbie
- Club Dinner Party – Diane Worth
- GLAAC Update – Bob MacFarland
- Bad Astronomy Talk – Discussion
- Walk-ins

Treasurer's Report

Gordon Hansen

Bank Accounts

Checking	\$	801.23
Savings	\$	4666.29

TOTAL Bank Accounts	\$	5467.52

Cash Accounts

Cash Account	\$	40.30

TOTAL Cash Accounts	\$	40.30

Asset Accounts

GLAAC	\$	526.45
Projector	\$	543.97
Scholarship	\$	354.60

TOTAL Asset Accounts	\$	1425.02

OVERALL TOTAL	\$	6932.84

FAAC Calendar of Events 2006

Bob MacFarland

April	8- Lyon Oaks Twp. Park Star Gaze 8 - FAAC Annual Dinner Party
May	6 - Astronomy Day - The New Detroit Science Center and Kensington Park / Beginner's Night - Island Lake Rec. Area
June	2 & 3 - Astronomy on the Beach - GLAAC (Observing Only)
July	1 - Beginner's Night - Island Lake Recreational Area
TBD	Summer FAAC / Sand Hill Soaring Club Combined Picnic
August	5 - Beginner's Night - Island Lake Recreational Area
September	22-24 - Great Lakes Star Gaze – Gladwin 29-30 - Astronomy on the Beach - GLAAC (w/Presentations)
October	28 - Beginner's Night - Island Lake (proposed)

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Items for Sale

Coulter 10" Dobsonian telescope. \$400.
Bob Stonik, 313-361-4954.

Meade 10" LXD55 Schmidt Newtonian
Autostar, GEM mount, "T"- adapter, Super Plossl
26mm, 1.25" 2" ep holders, battery pack, 25ft.
110v. cord. New in 2002 for \$1200, sell for
\$1000, or trade. eddyelectro@talkamerica.net

Crestwood/Ensign Planetarium

Spring Planetarium programs include "Our Very Own Star" April 12, "Sky Tellers" May 10, and "My Favorite Things" June 7.

Location - 1501 Beech Daly, Dearborn Heights.
Call 313-274-3703 for more information. Or visit:
www.csdm.k12.mi.us

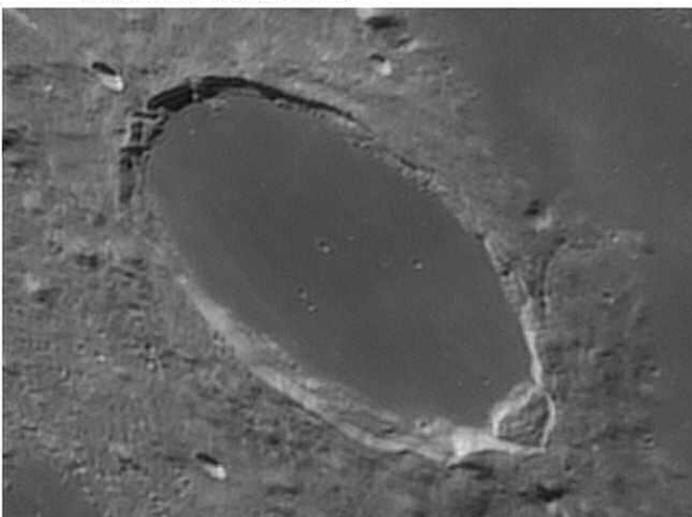
Some Recent Imaging

John Kirchoff



The Great Walled Plain Clavius
Celestron 9.25 f/39 Atik 1HS 180sec avi@10fps
350 frames 640X480 Baader IR Pass filter

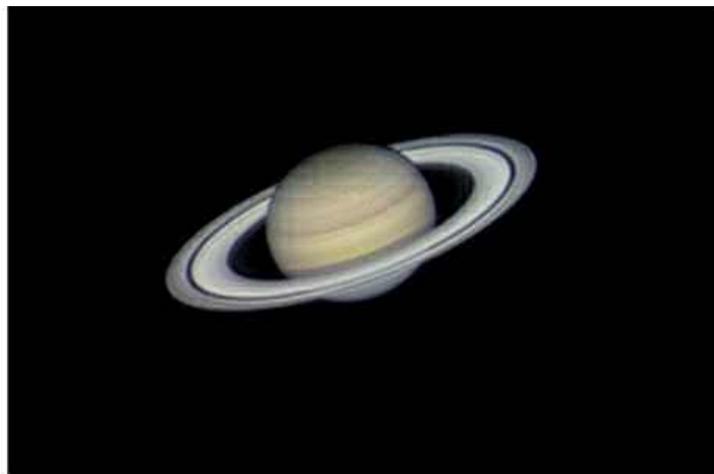
John Kirchoff
Hudson, Michigan USA



Plato and Craterlets

Celestron 9.25 f/39 Atik 1HS 180 sec avi@10fps
498 frames 640X480 Baader IR Pass filter

John Kirchoff
Hudson, Michigan USA



Saturn February 1, 2006 04:45UT Trans 6/10 Seeing 7/10
Celestron 9.25SCT f/25 640X480 Atik 1HS LRGB L= 180 sec @10fps
I=309.5 II=036.0 III=168.7 John Kirchoff Hudson, MI USA



Saturn February 9, 2006 02:53UT Trans 7/10 Seeing 6/10
Celestron 9.25SCT f/39 640X480 Atik 1HS LRGB L= 360sec@10fps
I=158.8 II=349.4 III=112.7 John Kirchoff Hudson, MI USA



FAAC Annual Dinner Banquet 2006

**Saturday, April 8, 2006
6:00 pm until ...?**

ASTRO SLIDE SHOW – PRIZES – ASTRO QUIZ

Station 885, 885 Starkweather, Plymouth, Michigan 48170 (see map). 734-459-0885.

Dinner Selections:



10oz. Prime Rib of Beef au Jus

or

Broiled Whitefish with Michigan Sun Dried Cherry Cream Sauce

or

Chicken Picata with Mushrooms and Artichokes Sautéed in White Wine Beurreblanc



Dinner entrees include fresh vegetable medley, Chef's roasted herb potatoes, and a mixed green salad

Dessert: Delectable Chocolate Sunday



Coffee, tea, iced tea, and soft drinks will be available throughout the evening.
A Cash Bar is available. Ask your server for beer, wine, and mixed drinks.

ADMISSION: \$29.95 per person.

Cocktails 6:00 pm (cash bar), Dinner 7 pm.

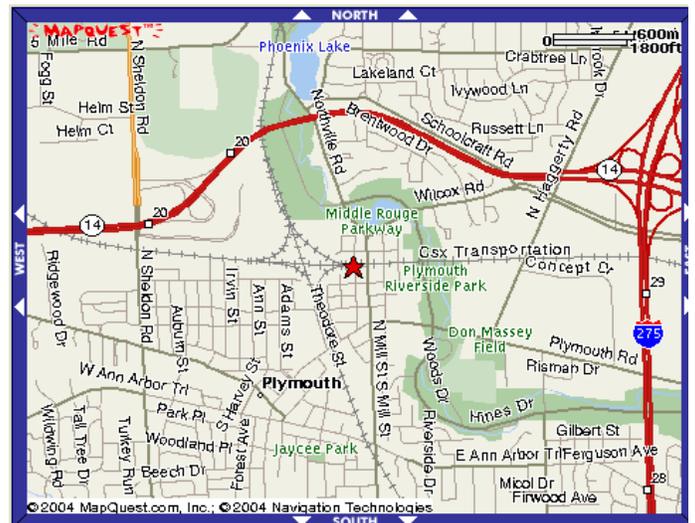
Make Checks Payable: Please pay Gordon Hansen at the General Meeting, call Diane Worth or Send payment to Ford Amateur Astronomy Club, P.O. Box 7527, Dearborn, MI 48121-7527.

"Thank you for another great year. We hope to see you there. Please let us know if you are coming!"

- - FAAC Board.

Location: Station 885 is 3 blocks north of Plymouth Road, just east of downtown Plymouth.

* See STAR on map*



For More Information, contact : Diane Worth: dianasails@sbcglobal.net (248) 737-5131 - or -
Jim Frisbie: w8tu@comcast.net (734) 453-1422

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March 2006

Ford Amateur Astronomy Club
Star Stuff Newsletter
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Eighth Annual Spring Open House!!

Saturday, April 1 – 10am - 6pm

Don't miss this Annual Special Event!

See the sun the "Ha way" with a Coronado solar scope.

Demos all day long... Meteorite hunters will want to attend our metal detector seminar, from 10am-noon