



Mingo Creek Park
Observatory

The Guide Star

Newsletter of the Amateur Astronomers Association of Pittsburgh, Inc.

Founded June 9, 1929 by Chester B. Roe and Leo J. Scanlon

Website: 3ap.org



Nicholas E. Wagman
Observatory

February 2008

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PLANETARIUM SHOW AT FEBRUARY AAAP MEETING

By Ann Norman

Friday, February 15th, at the Carnegie Science Center, we will have our annual planetarium show. This is your second chance to see the new Buhl Digital Dome. From the Carnegie Science Center website: "NEW! A Traveler's Guide to Mars. Get ready for the most immersive space journey yet! Soar through a high-definition digital Martian landscape on a guided tour of the once-mysterious surface of Mars. Traverse ancient lake beds and channels in search of the history of Mar's watery past."

I've been assured that this will be exciting (it's newly released) and that they MIGHT throw in a little something extra for the amateur astronomers. The meeting starts at 7:30. Please COME FIRST TO THE MAIN AUDITORIUM, not the planetarium. We'll have a quick business meeting before heading upstairs to the Buhl Digital Dome. Hope to see you there!



TREASURER'S REPORT

By Michael Meteney

The following is a budget summary for 2007. As you will notice, there was a \$17,655.19 deficit in last year's budget. This is primarily due to the fact that we spent about \$17,000 on installing the restroom at Mingo from a grant we received in 2006.

This is only a summary of our budget. The detailed budget is too large to include in the Guide Star. If anyone wants information on the budget, you may contact me.

If anyone still owes 2008 dues, please send them to Mark Schomer ASAP (continued on Page 2).

AAAP Budget Summary: 1/1/07-12/31/07

Category	
Inflows	
50-50	516.00
Donation	1,891.83
Donations:	
Alum Recycle	90.25
Fish Bowl	1,050.00
Government	300.00
keyfee	735.00
Mingo	20,000.00
NEWO Star Party	40.00
SSP	1,000.00
Wagman Fund	566.00
<hr/>	
Total Donations	23,781.25
Interest	1,399.86
Membership:	
Astronomy mag	2,137.34
Junior:	
new	137.00
renew	143.25
<hr/>	
Total Junior	280.25
New	1,740.00
Renew	8,145.50
NightSky mag	-17.50
S&T mag	1,885.50
<hr/>	
Total Membership	14,171.09
Stock:	
3M	5,476.55
<hr/>	
Total Stock	5,476.55



From S.H.O.Mingo	3,686.03
From VV2	20,459.25

Total Inflows 71,381.86

Outflows

Award:	
Brunell Photo Contest	150.00
Award - Other	171.30

<hr/>	
Total Award	321.30
Bank Charge	78.46
Bank Fee	35.23
Equipment	8,873.44
Gift:	
Raffle prizes	409.68

Total Gift 409.68

Guide Star:	
Printing	2,635.21

Total Guide Star 2,635.21

Insurance	
Mail:	
bulk mail depos	450.00
certified	13.53
PO Box	66.00
Mail - Other	63.14

Total Mail 592.67

Meeting:	
Food	19.95
honorarium	250.00
Meeting - Other	615.00

Total Meeting 884.95

Memorial	118.72
Merchandise	35.00

Mingo:	
DCED Grant	17,975.88
Equipment (fund)	24,294.47
supplies (AAAP)	259.45

Total Mingo 42,529.80

Misc	38.31
Officers:	
Memb Sec	509.66
Treasurer	155.11

Total Officers 664.77

Planetarium Service	600.00
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Promotion:	
Brochures	35.20

Total Promotion 35.20	
Software	1,635.95
Sponsor:	
IDA	250.00

Total Sponsor 250.00

Stamps:	
Treasurer	119.00
Stamps - Other	42.41

Total Stamps 161.41

Star Party:	
Mingo:	
star finders	489.53

Total Mingo 489.53

NEWO:	
star finders	489.54

Total NEWO 489.54

Total Star Party 979.07

Subscr:	
Astronomy	2,037.17
S&T	2,810.30

Total Subscr 4,847.47

Tax 4,137.23

Utility:	
Mingo:	
Electric	534.48
lawn care	650.00
phone	523.70
porta john	379.50

Total Mingo 2,087.68

NEWO:

Electric	209.80
lawn care	750.00
phone	590.78
porta john	1,210.17

Total NEWO 2,744.55

Total Utility 4,832.23

Valley View Restore 10,459.25

Wagman:	
security sys	253.50

Total Wagman 253.50

Outflows - Other 0.00

Total Outflows 89,037.05

Net Inflows/Outflows -17,655.19

DONATIONS AND TAX DEDUCTIONS: AMATEUR ASTRONOMERS ASSOCIATION OF PITTSBURGH

By Kathy DeSantis

Donations and Tax Deductions: Amateur Astronomers Association of Pittsburgh (www.3ap.org) is registered with the IRS as a 501(c)(3) organization and has received tax-exempt status.

Disclaimer: Amateur Astronomers Association of Pittsburgh does not warrant or guarantee the accuracy, quality, completeness, or validity of any information it provides. All information has been obtained from sources believed by Amateur Astronomers Association of Pittsburgh to be accurate and reliable. Please consult your tax advisor for specific tax advice.

1. What does it mean to be a 501(c)(3) organization? For charities, this means that they can accept contributions and offer donors a tax deduction for their gifts. For donors, this means your contributions are fully tax deductible to the amount allowed by law.

2. What is my tax benefit for charitable contributions? Your personal tax bracket and how you file your taxes (individually, jointly, as a corporation, etc.) determines the deduction for your charitable contribution. The instructions for the 1040 Form will help determine the exact amount of your deduction, which will vary depending on your tax bracket and whether you file as a single person or jointly. You should consult with your accountant for more details.

3. What counts as a charitable organization? A charitable organization is generally defined as any non-profit organization that is incorporated and identified by the IRS as a 501(c)(3) organization. These organizations have been given tax-exempt status and can accept contributions. For a charitable event, only a portion of the ticket value is deductible. The portion that is NOT deductible is the value of the goods or services that you receive (e.g. dinner, entertainment, etc.). The rest is deductible.

4. How can I take a deduction for my donation? To claim a deduction, you will need to fill out a 1040 Form, which is available through the IRS website, and itemize your deductions on Schedule A. If you fill out the short form or take standard deductions, you cannot claim your contributions.

5. Do I need a receipt for donations I make? The IRS does not require receipts for cash donations under \$250, but you should keep donation information on file. Cash contributions of \$250 and more require an acknowledgement that must be sent to the IRS with your tax returns.

6. Do I need any acknowledgement for donations under \$250? Though the IRS does not require receipts for donations under \$250, it is a good idea to keep this information on file. Be sure to keep the canceled check, credit card statement, or e-mail receipt from the organization to which you donate. Always note the donation amount and the date of the contribution.

7. For donations over \$250, what information does the receipt need? The receipt needs to record the donation amount, the date the donation was made, and the name

of the charity (Amateur Astronomers Association of Pittsburgh), as well as a written acknowledgement from the organization of any property or services that you may have received in return for your donation and an estimate of value. The IRS should acknowledge an e-mail receipt as an acceptable record of donation, but to be certain, always consult your tax advisor.

CONGRATULATIONS FROM NIGHT SKY NETWORK

by Marni Berendsen and Vivian White
Night Sky Network Administrators

Congratulations to the Amateur Astronomers Association of Pittsburgh for your outstanding work in 2007! You have won the NSN Top Ten Outreach Clubs Award, an additional Exploring the Solar System and Our Star, the Sun Banner along with the rulers, stickers, and Jupiter strip that go along with the banner.

We want to thank you for all that you do for your community and for keeping us updated on your successes. A club's Event Logs are our proof to supporters that the Night Sky Network is a vibrant community of dedicated outreachers. Because of these, NSN has become one of the most effective ways that NASA and other space programs extend resources and communicate with the public, through you, the amateur astronomy community. We want to thank you for helping the program thrive. Your outreach is making a huge impact nationwide, and we thank you.

Keep up the excellent outreach.
Astronomical Society of the Pacific
Night Sky Network: <http://nightsky.jpl.nasa.gov/>

CONGRATULATIONS TO JOHN HOLTZ

His web page is on Wikipedia. See this site:
<http://en.wikipedia.org/wiki/Analemma>

John's Analemma page: <http://members.aol.com/jwholtz/analemma/analemma.htm>

OBSERVATIONS



Mercury photo courtesy of NASA's Messenger 01/14/08

Tom Reiland Posted to the listserver January 19, 2008: I observed Mercury for the first time this year. It was just above the tree line in my WSW and I spotted it with my 10 X 50's "shortly" after 6 PM just as the clouds started to cover it. It was -0.7 magnitude. Mars and the Moon are still nice sights.

Mike Colski posted to listserver January 10, 2008: Actually, the wind was minimal at Wagman last night and the temperature was moderate as well. We even had an hour or so of pretty good seeing in between various light cloud formations that moved in from the west. I packed up around 9:30 PM, as the clouds got far more extensive and lingering. I got the usual suspects: M42, M36, M37, M38, M39, and M31. Love M37 and 39! Even got 3 double stars as well in Auriga and Gemini. But my Celestron go-to (very handy for double star observing) doesn't work in the cold and I hate star hopping with a GEM so I didn't get to all the doubles on my list. But overall, it was a pleasant night.

John Pane posted to listserver December 18, 2007: I took advantage of this morning's clearing to photograph Comet Holmes again, starting around 1:20 AM. It was a beautiful night, if a bit nippy at 19 degrees. Because conditions were better, I was able to capture slightly more detail of the outer coma than in my photo last week. The comet appears to be at least 1.5 degrees long and 1 degree wide. The website contains the new photo and the updated composite image, which now covers twelve nights: <http://holmes.johnpane.com>. Posted January 13, 2008: I've updated my website with Comet Holmes photos taken January 9 and 12. I also photographed the comet on the 7th, but did not add those to the website because the quality was poor due to conditions. Transparency was not particularly good on any of these nights. The comet continues its trend of growth, with decreasing surface brightness, and it is now approaching Algol. I added the January 12 image to the composite, now spanning 15 nights over a 79- day period.

Sherry O'Neill posted to listserver January 08, 2008: Wow! What a night! I've had my best observing in about four months. I was so discouraged over the weekend when they said that even though it was going to be warm, it was going to be rainy all week. I was so happy to see the sun come out this afternoon. Imagine observing from Pittsburgh on January 7th with no coat on! Loved it. I started off with Mars. I got my first really good look at it. I also tried observing it with a couple of different filters. The blue one seemed to work the best. I looked for M74, but it was slightly hazy over that way. I also wasn't able to see Tuttle in that direction. I tried to find Holmes, but it seems to be a lost cause from my light-polluted driveway. I got to see Mira for the first time in ages. It started to cloud up a little by then, so I came inside for an hour or so. When I went back later on, I checked out one of my old favorites, M42. The seeing on it was incredibly good. I could easily see the trapezium with my 25 mm eyepiece. I got a couple more Messier objects knocked off my list; firstly, M78. I then used the sword of Orion to star hop down to M79. Both were easily visible (once I found them). Thank goodness for Uranometria 2000. Checked out a few more things like M35 and the double cluster. I spent about a half hour looking for M74 but at this time of the night, it is located in the direction of the majority of the lights in my neighborhood. I'm hoping the awesome skies holds out until dawn. I didn't get to do the Monoceros objects the other night when it was so cold. I'd also like to knock the Leo objects off my list. But in both cases, I have to wait until they rise above the house.

James Schultheis posted to listserver January 4, 2008: I got up at 4:00 AM and looked out at a very clear sky so before I left for work, I set up the Orion ST-80 3.1 "Acromat and as I was fiddling with it, I caught a few bright meteors out of the corner of my eye. I pulled back for a moment to observe the whole sky naked eye and what a show I saw! In about five minutes, I observed about ten bright, white, "healthy" meteors one of which had a nice tail. The origin radiant seemed to be Coma Berenices or maybe Canes Venatici. Would these be Quadrantids? I could see all 7 of the bright stars in Ursa Minor so it was much better transparency than last night. It was about 12 degrees and I also observed the Sombrero M104 with M82 and Hercules's M13. The crescent moon with Venus was just what I needed to start a Friday

Fred Klein posted to listserver January 13, 2008: I actually got out with a scope last night and the sky was better than I had expected. I took out my 4" APO mostly to do some testing, but I looked around a little too. I had my first views this year of the Orion Nebula and Mars. The trapezium was very well defined at 100x and the nebula was wonderful, as always. It lost its punch at lower power due to light pollution in Monroeville. Mars just showed a little nonuniformity even at 150x. The crescent moon with earthshine looked nice. I tried for comet 9P Temple and may have convinced myself I saw a smudge, but I wouldn't bet on it. For some reason, my scope didn't want to point at Holmes and I was getting too cold to figure it out. I was testing some stuff intended to make my imaging easier, but it didn't work very well so back to the workbench. I would gladly spend 4 hours inside on a cloudy day to make the time under the stars easier.

On dark matter, I came across a web site of an astrophysicist named Sean Carroll at <http://preposterousuniverse.com/talks/> where he has links to a lot of talks. One I especially liked is at <http://online.kitp.ucsb.edu/online/lens06/carroll/> Titled "Can Dark Matter Replace Modified Gravity?". He also has some DVD's that I sent off for.

HELP CHERRY SPRINGS STATE PARK

By Sam Terry

The PA Parks and Forests Foundation (which administers our Cherry Springs Dark Sky Fund) can add a penny for every time you search the internet. Here's how: GoodSearch.com is a new search engine that donates half its revenue (about a penny a search) to the charity of your choice. You use it as you would any search engine, and it's powered by Yahoo! so you get great results. Just go to GoodSearch.com, register Pennsylvania Parks and Forests Foundation as the charity of your choice, and search the Internet using the GoodSearch.com search engine. This looks like a simple and easy way to help out our parent organization that has greatly supported CSSP in the past. Please consider making the switch to GoodSearch.com today.

METZGAR ELEMENTARY SCHOOL STAR PARTY

January 18, 2008

By Jim Klueber

I just got back after being out with the Astronomy Club students at Metzgar Elementary in the Greensburg-Salem School District. We formed a club there a couple of years ago so that the kids could have a chance to learn more about astronomy as an after-hours program. Once a month, I give an hour long after school classroom program and introduce them to some aspect of astronomy. We then follow that up with an evening of viewing (weather permitting). This month's program was about observing the Moon. We have about 30 kids in the club this year and six of them and their parents braved the chilly temperatures this evening to spend about two hours in the moonlight.

With the help from a little hot chocolate and an occasional trip into the school, everyone survived the cold, saw some great views of the Moon, Mars, the Orion Nebula, the Pleiades, and the Perseus Double Cluster in addition to learning a few stars and constellations, although we will be learning more about those next month. I had the kids make sketches of what they could see of the Moon with their unaided eyes, a view through a pair of binoculars, and the view through a telescope. I had my six-inch reflector and one of the other parents brought their 8-inch Cassegrain. Not only did they get to see the Moon through a wide range of instruments and magnifications, but they also got to see how different instruments present their view to your eye with the binoculars, reflector, and Cassegrain all giving different orientations of the Moon. They then took their sketches inside to compare to a Moon map to see if they could identify any of the features they sketched.

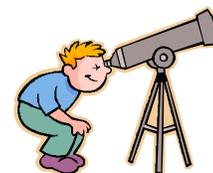
Everyone was surprised at how bright the Moon was through the telescopes. I remarked to them that I often wear my sunglasses to view the Moon. They laughed at the idea at first, but after taking a look, they understood why. We put some filters on the lens to help cut down the brightness at lower magnifications. In addition to the full view of the Moon at low power for making sketches, we looked at several different craters, plains, and mountains on the Moon. Probably the area that attracted the most interest was the crater complex around Gassendi, which was right along the terminator. Everyone was surprised at the incredible detail they could see and the three-dimensional aspect of the view with the way the shadow from the central peak stretched across the crater's floor to the western rim. Several other "mountain" peaks (or crater rims) could be seen poking up through the darkness beyond the terminator, which they thought was really cool. Another crater which really stood out for them was Proclus near Mare Crisium. It was very bright compared to the surrounding terrain with three prominent rays stretching out from the crater.

One of the most encouraging things was how engaged the parents of the students were in our activities. They enjoyed it as much as their kids and at the end of the evening, we watched a video clip of the Apollo landings, which brought back fond memories when they were kids of being caught up in the excitement of the first men on the Moon. Hopefully they'll turn this into a frequent family activity.

Our club will have two star parties next month—one on the 8th on a Moonless night to learn the winter constellations and take in a few star clusters, and then again on the 20th for the lunar eclipse. Later in the spring when it gets warmer, I'm hoping I can entice a few of our club members to join me to give the kids an opportunity to look through a greater variety of telescopes. I'm also hoping to take them to Wagman for a "fieldtrip", but since I'm a relatively new AAAP member, I need to first get there myself to see what I've been missing! If anyone from the club lives in the Greensburg area and would be willing to come to one of our club star parties in the future, please let me know.

After our Metzgar Astronomy Club class on Wednesday, one of the parents showed up to pick up their son and brought along a telescope they had purchased for Christmas and asked me for some guidance on how to use it. It was a 70 mm beginner's grade Meade Refractor. Our class had just been on observing the Moon and fortunately, it was clear after class so we set up their scope just outside the school so they could look at the first-quarter Moon in the coming twilight. The tripod is a bit flimsy, but the optics gave us a reasonable view of the Moon. I had just given each of the students a Moon map at class. As I centered the Moon in his low-power eyepiece, I remarked that he may be confused a bit when he looks through it because the 90-degree diagonal flips the Moon left to right, which might be confusing for him to find anything on the straight projection map I had given him.

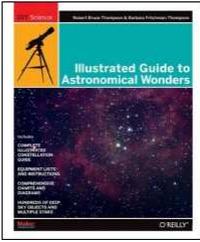
When I got home, I tried to find a map on line for him that would show the Moon as he would see it through his telescope. In the process, I found a really great Virtual Moon Atlas that you can download for free. It is really well presented and contains a wealth of information. It also allows you to quick flip the atlas to give you the view through any type of instrument you may use for viewing the Moon. I thought the other AAAP members might be interested in checking it out. For the Moon map viewer, go to http://www.astrosurf.com/avl/UK_download.html and download VMA Expert Version 3.5. The download is about a 14.5 MB zip file, which once installed requires around 120 MB of disk space.



BOOK REVIEWS

Illustrated Guide to Astronomical Wonders

John Cheng posted to listserver



It's always a pleasure to come across something really done well.

The team of Robert and Barbara Thompson, who produced the excellent "*Astronomy Hacks*" in 2005, have come up with a superlative book for beginning to intermediate deep sky observers entitled, "*Illustrated Guide to Astronomical Wonders*".

Taking the objects from six well-known observing lists: the Messier objects; the RASC (Royal Astronomical Society of Canada) Finest NGC objects; the AL (Astronomical League) Binocular Messier List; the AL Deep-Sky Binocular List; the AL Urban Observing List; the AL Doubles Star List the authors present 400 outstanding objects, all well within the range of moderate apertures (the largest scope referenced in their book is a 10" reflector). So, while challenging, the number isn't overwhelming and the objects aren't too difficult.

The objects are sorted into fifty constellations available to northern observers, each given a chapter and presented alphabetically. Each chapter contains a discussion of the constellation; a full constellation chart showing object locations; tables giving object type, size, magnitude, coordinates, etc., for each object the originating observing list (Messier, RASC, AL) from which the object was taken; finder charts for each object with uniform 5-degree or 1-degree circles superimposed making them adequate for field use; individual discussions of each object. Each discussion also contains a description on how to find the object, as an example,

"...The easiest way we found to locate NGC 7129 was to place mag 4.4 xi on the SE edge of our finder field and look for mag 5.4 7-Cep which appears near the NW edge. NGC 7129 lies on a line between those two stars, about two-thirds of the way from xi to 7-Cep..."

and also uniform 1 square degree black and white photographs of almost all of the deep-sky objects. These small images better approximate what a visual observer will actually see.

Each object also bears a four-level visual rating, ranging from unimpressive to showpiece and a four-level finding difficulty rating, going from very difficult to easy to find.

To those acquainted with the larger, more expensive two-volume *Night Sky Observer's Guide*, this chapter format will look familiar, the significant difference being that the NSOG chapters list a selection of variables in each constellation.

Of course, the 400 objects of the Thompson book are

dwarfed by the 5,541 of the NSOG, but that smaller number allows the Illustrated Guide to include more practical finder charts and to better address amateurs equipped with moderate apertures under less than ideal skies. Some of the NSOG descriptions describe what will be seen in 16- to 18-inch scopes.

The first sixty or so pages of the Illustrated Guide contain an intro to DSO observing and a discussion of observing equipment. Both sections are very informative and actually enjoyable because they address the concerns of a practicing amateur observer.

For example, you'll find pointers on how to plan observing sessions but you'll also find things that will move you off the level of a beginner right away; for example, a description of the Trumpler scale for open clusters and a discussion of perceiving color in blue-green O-III light.

Equipment wise, the Thompsons aren't shy about noting their preferences; for example, their favored planetarium software is Megastar. But they try to objectively discuss the pros and cons of telescope types, individual eyepiece lines and the performance of different nebular filters.

Physically, the Illustrated Guide is an attractive paperback that opens flat and has generous margins on each page for jotting notes. It lists at \$29.95 but can be had much less expensively at Amazon.

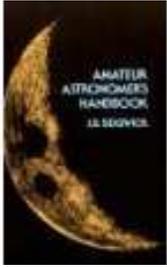
So general strengths of the book? The Illustrated Guide is a reasonably priced, one-volume guide to deep sky observing written by a knowledgeable observing team that can become a mainstay of any amateur library. Using just this observing guide, a beginning observer could become a relatively advanced amateur in a relatively short period—yes, I think it is that well designed. For some observers, it might actually make up their entire observing "career".

Also, with some qualifications, viewing all the objects in this book will fulfill the requirements for a number of observing certificates, if that's one of your aims.

Okay, weaknesses? Well, none really except something said by the authors in their introduction bears repeating. Amateur astronomy has become almost synonymous with deep sky observing and that is unfortunate.

Planetary and variable star observing each require different types of observing skills and often different types of equipment. Until excellent guides like the Thompson's new book are devoted to these branches of amateur astronomy, many people will continue to ignore them.

Amateur Astronomer's Handbook
John Cheng posted to listserver



The "bible" on these and other somewhat technical matters is probably J. B. Sidgwick's "*Amateur Astronomer's Handbook*". I think some older members may agree. It is a book first published in Britain in 1955, but the good people at Dover Publishing have kept it in print and it is available from Amazon for about \$16.00. Some sections are

outdated and if the book is any indication, Sidgwick never heard of computerization, Dobs or Al Nagler. You will find things here you won't find elsewhere and every topic is treated in a way that defines the term "rigorous".

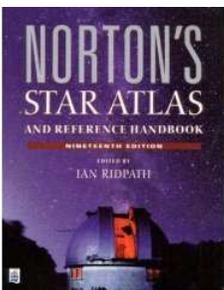
There are no mentions of name brands, constellations, open clusters, etc. Some of the chapter headings are: Telescopic Function: Light Grasp, Telescopic Function: Resolution, Aberrationsm, Newtonian and Cassegrain Adjustments, Setting an Equatorial Head, Vision, The Atmosphere and Seeing Times and Clocks, Dewing and Tube Currents.

Yes, there are formulae, diagrams, graphs and a bit of math. Frankly, the great majority of amateur astronomers probably aren't going to care about what's inside or the dry way in which it's presented but it is a cornerstone reference for anyone into digging.

Observational Astronomy for Amateurs
Jim Klueber posted to listserver

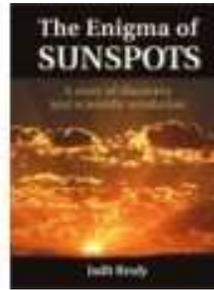
I just started reading another one of Sidgwick's books: *Observational Astronomy for Amateurs*, which is the companion book to the *Amateur Astronomer's Handbook*. I would agree with the others in that Sidgwick takes a "rigorous" approach to observational astronomy. If you want to understand the math behind what and how to observe, these are the best books I've seen on it. They may be a bit old in terms of publication date, but don't let that undermine their usefulness. I had previously read the third edition to this book, but stumbled on a hard-cover fourth edition at a used book sale this fall and picked it up for \$1.00. What a steal! It was revised by James Murden and published in 1982. Comparing the two editions, this latest one contains some significant updates from what I've read so far.

Norton's Star Atlas and Reference Handbook
Dan Fundo posted to listserver



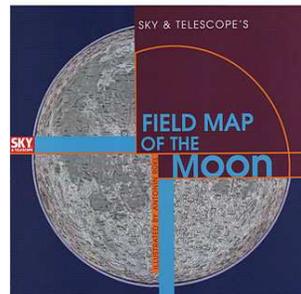
Another must have is "*Norton's Star Atlas*" (currently called "*Norton's 2000.0*"). This is probably the best first star atlas to cut your teeth on. You can go to (pun intended) a computer atlas after you learn your way around.

*The Enigma of Sunspots—
A story of Discovery and Scientific Revolution*
Dan Peden posted to listserver



I would like to recommend a book to anyone interested in solar observing: "*The Enigma of Sunspots - A story of Discovery and Scientific Revolution*" by Judit Brody (2002). Though it is marked US \$24.95, I found a copy at Half Price Books for \$2.00. Recounting the history of solar observation, the book is filled with beautifully reproduced diagrams, drawings and photographs.

Sky and Telescope's Field Map of the Moon
Kathy DeSantis posted to listserver



I wanted to thank the List and John, for recommending the Sky and Telescope's lunar map.

From your earlier suggestion, I ordered it in both the real and mirror image versions, and am pleased.

As you described, it comes laminated, and is quite sturdy. Since I have used mine in sidewalk astronomy where it can get rougher handling, I picked up some thin Plexiglas squares. To hold the "sandwich" together, and still allow access to flip it around, I used binder clips on the one and made clips for the other by slicing open lengths of clear vinyl tubing, to fit around the edges. Both claspings methods work. At any time, half of one side can be seen without rearranging and since it is rigid, it can lean and be displayed.

**GLOBE AT NIGHT AND TELECONFERENCE
FEBRUARY 5**
By Kathy DeSantis

GLOBE at Night and Teleconference, February 5. Can You See the Stars? Here is some info about a worldwide weekly survey, you can participate in, as well as an NSN teleconference on the same.

Remember when we hosted an Act 48 class for teachers at Mingo, on the GLOBE Atmosphere Protocol? Or perhaps, you remember invitations in recent years on the listserver to participate in GLOBE at Night? This year the Night Sky Network is planning a special teleconference on February 5, 2008, on GLOBE at Night.

GLOBE is an educational project, involving Landsat, and gets school students to collect data which can be used to calibrate Landsat's instruments. In doing so, students

earn science, math and language skills by participating in data gathering and analysis.

GLOBE at Night 2008, running February 25 through March 8, 2008, surveys the visibility of stars in the region of the sky around the constellation Orion. Because of ambient lighting, many urban dwellers never see a sky full of stars. GLOBE at night involves participants in research into light pollution. Participation in GLOBE at Night is open to anyone who lives, or works in one of the 110 GLOBE countries (<http://www.globe.gov/fsl/INTL/table.pl>). Last year, 8,491 observations were reported from 60 GLOBE countries, almost doubling the observations from 2006. Reporting involves finding Orion, and matching to one of seven magnitude charts. Let's see if we can get members of the AAAP to participate in the sky survey and to spread the word. The five easy steps follow, and more information can be found at the GLOBE at Night website: <http://www.globe.gov/GaN/index.html>.

Five Easy Star-Hunting Steps:

1. Find your latitude and longitude (http://www.globe.gov/GaN/observe_latlong.html).
2. Find Orion (http://www.globe.gov/GaN/observe_finder.html) by going outside an hour after sunset (about 7-10 PM local time).
3. Match your nighttime sky to one of our magnitude charts (http://www.globe.gov/GaN/observe_magnitude.html).
4. Report (<http://www.globe.gov/GaN/report.html>) your observation.
5. Compare (<http://www.globe.gov/GaN/analyze.html>) your observation to thousands around the world.

The Night Sky Network's February 5 teleconference will be with one of the biggest advocates for dark skies, Constance Walker, of the GLOBE at Night project and the National Optical Astronomy Observatory (NOAO). She will talk with us about how to participate in this worldwide citizen science project and what AAAP can do to increase awareness about light pollution. As a special gift to Night Sky Network clubs, GLOBE at Night is giving away 20 Sky Brightness Meters with a full outreach kit to use at star parties, even cloudy ones! To receive a Sky-Brightness Meter with activities and resources, AAAP club must commit to the following:

- At least one club member will attend the Telecon on February 5th to learn about the project and how to use the instrument.
- Hold a public event during the GLOBE at Night Campaign Event from February 25th - March 8th, 2008.

You also agree to log your observations from that week on the easy-to-use website (takes less than 2 minutes): <http://www.globe.gov/GaN/>. Most of this information appears in the 3ap.org calendar, along with active hyperlinks.

MINGO 2008 PUBLIC STAR PARTIES

By Kathy DeSantis

April 11-12
 May 9-10
 June 6-7, 28
 July 25-26
 August 22-23
 September 5-6, 27
 October 4, 25
 November 1

WAGMAN 2008 PUBLIC STAR PARTIES

By Tom Reiland

February 16 Winterfest 4 PM start time
 April 11-12 Sunset start time for all regular events
 May 9-10
 June 6-7
 July 11-12
 August 8-9
 September 5-6, 20 Dark Sky
 October 4, 18 Dark Sky/Moonrise

IMPORTANT DATES

February 2—Ryerson Station Winterfest
February 5—Night Sky Network GLOBE at Night
February 8—Metzgar Elementary Star Party
February 15—**Membership Meeting**
February 16—Wagman Winterfest
February 20—Metzgar Elementary Star Party
 Lunar Eclipse
February 21—Total Lunar Eclipse
February 29—PAEE Antiochian Village Star Party

WELCOME NEW MEMBERS

Bruce Tepke
 J. Scott Ashwood
 Frederick Lanni
 David J. Vaglia
 Erick N Fox

FOR SALE

I am selling a Meade f/10 LX90 LNT with UHTC telescope. We joined the astronomers club in July with the intent of learning more about astronomy and the use of our telescope; however, we moved into a new home and our priorities have changed. We are beginners and will most likely purchase something more portable. We are asking \$1,500. If anyone has an interest or questions, I can be reached during the day at 412-263-4185. Charles Krznaric.

FOR SALE (CONTINUED)

I have 2 really nice scopes for sale. The first is a virtually brand new Astronomy Technologies 66ED black tube refractor with case. I'd sell for \$200. The second is an Orion 8-inch Dob/Intelliscope with computer controller in excellent condition. This I would sell for \$350 or best offer. John Hudec at hudecjohn@yahoo.com.



I have been thinking about selling my motorized camera tracker that I purchased in the mid 80s. I have no desire to get back into astrophotography and I think that it is time to part with it. It helped me produce many great long exposure photos with my Olympus Om-1 with lens from 28 mm to 135 mm. It is in excellent condition and it has an AcuTrack control system with rates for Lunar, Solar and Sidereal and a fast/slow motion control box. There is a finder for polar alignment and several different power cords for regular outlets, lighter/car power sources and even for car batteries. I think I paid close to \$300 for all of it. I'm looking for at least \$250. I'll take the best bid at that price or higher because it's still in excellent condition. Tom Reiland. Contact me at TRcassiopeia@aol.com.

COOL WEBSITES

<http://www.space.com/business/technology/071112-technolog-asteroid-mistake.html>

<http://neo.jpl.nasa.gov>

<http://www.astronomy2009.org/>

<http://www.astronomy.com/asy/default.aspx?c=a&id=6292>.

<http://www.texasjim.com/NASApix/NASA%20pix.htm>
<<https://mail.dental.pitt.edu/exchweb/bin/redir.asp?URL=http://www.texasjim.com/NASApix/NASA%2520pix.htm>

<http://hubblesite.org/newscenter/archive/releases/2008/05/full/>

<http://hubblesite.org/newscenter/archive/releases/2008/05/full/>

<http://www.astronexus.com/index.php?q=node/17/>

<http://www.phrenopolis.com/perspective/atom/>

<http://www.thinkastronomy.com/M13/common/mw-rising.html>

http://pasc.met.psu.edu/PA_Climatologist/state/pameans.html

http://www.galaxyimages.com/UNP_IFNebula.html

<http://www.pittsburghlive.com/x/pittsburghtrib/news/>

cityregion/s_546515.html

<http://home.isoc.net/~ejones/A%2010%20Inch%20Window%20Scope3.htm>

http://ciclops.org/view_media.php?id=14617

http://science.nasa.gov/headlines/y2007/14dec_excitement.htm

<http://www.twanight.org/newTWAN/news.asp?newsID=6002>

<http://www.fredkleinastro.com/images/Sunset12-26-07.JPG>

http://www.cfa.harvard.edu/iau/unconf/cbat_unconf.html

http://www.planetary.org/image/h3909_0000.jpg

<http://antwrp.gsfc.nasa.gov/apod/ap071225.html>

<http://www.cnn.com/2007/TECH/space/12/21/mars.asteroid.ap/index.html>

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

<http://www.skyandtelescope.com/equipment/basics/12511616.html>

<http://www.gillesvidal.com/picdumidi%5B1%5D.htm>

<http://www.fredkleinastro.com>

IT COMMITTEE ANNOUNCEMENT**By Michael Skowvron**

Announcing the general availability of 3ap.org email addresses for club members. Having trouble getting the listserver emails? Need more email space (6 GB)? Need yet another email account to track? Get a 3ap.org email account! Any club member may request an @3ap.org mail account. Just send a request to accounts@3ap.org and indicate what you would like your name@3ap.org to be. We will create the account and send you instructions to log in. Questions contact: it@3ap.org.



<http://www.fredkleinastro.com/images/Moon1-20-08.jpg>

