



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

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Tom Reiland giving his annual Holiday talk

Tom gave a very enjoyable speech on comets for the December holiday party. He showed slides of comets from Hale-Bopp to the most recent Comet Holmes. Tom stated, "I've been fortunate to observe since my first comet observation 34 years ago this month. Kohoutek was the first of the 139 comets that I've observed. Hale-Bopp was the one I viewed most often and over the longest period of time.

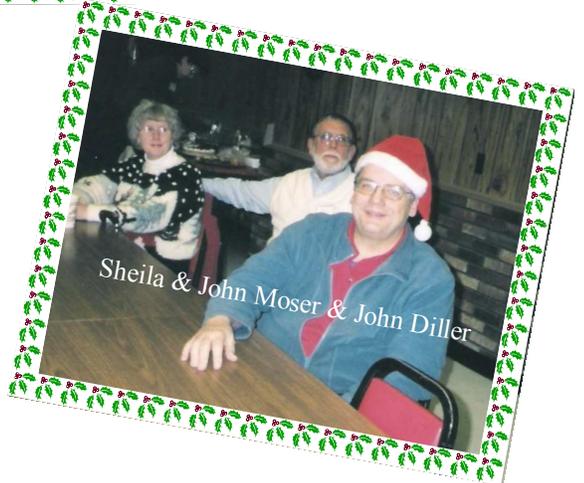
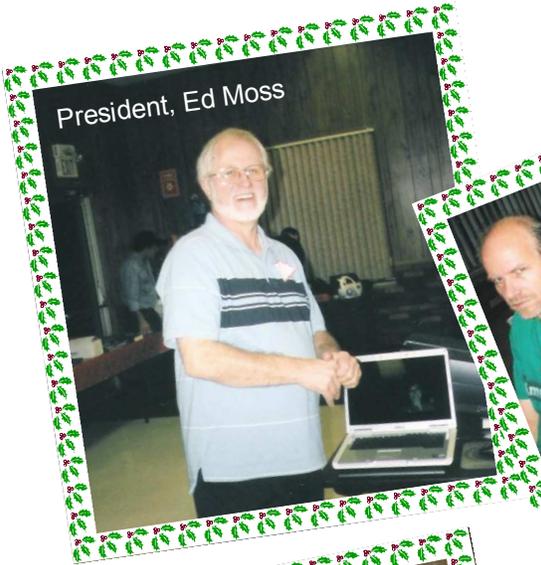
TOPIC OF JANUARY MEETING: "INTERNATIONAL SPACE STATION: THE BACKSTORY"

Our own Eric Fischer is the guest speaker at the next AAAP General Meeting, January 11 at 7:30 pm at the Carnegie Science Center. His talk, "ISS Backstory" examines the convoluted history of the ISS and the many bizarre events that led to its current design. The ISS may become the third brightest celestial object (after the Sun and Moon) within the next few years, and has already dazzled observers on many occasions. However, observers can consider themselves lucky because the station has barely survived a series of political stresses such as the fall of the USSR and a U.S. President who ignored his closest advisors. In addition to the ISS's upbringing, Eric will also present some seldom-published facts about the station, its likely fate and possible successors. He will also give some tips for seeing the ISS at the best possible times.

THANK YOU FROM TOM REILAND

I want to thank John Pane for the use of his Comet Holmes photos for my talk. It was interesting going through my thousands of slides to find the ones I needed, but to also locate some others of historical value. Many years ago, some of the veteran members passed on their photos and slides to me. Unfortunately, many of them are not labeled. The ones I used are from the AAAP/Allegheny Observatory Moonwatch Program from the late 50's and 60's.

HOLIDAY PARTY PICTURES 2007 By Ann Norman



NOTES OF INTEREST

From U\$X Federal Credit Union®

All members of the Amateur Astronomers Assoc. of Pittsburgh and members of their families are eligible for membership in U\$X FCU. Here's a look at another great benefit of credit union membership exclusively from **YOUR** Credit Union.

Look Out for Identity Theft



It is important to always be on guard against identity theft (when someone uses your personal or financial information without your consent). Why be so vigilant? Because thieves are constantly looking for ways to steal data, and it's easiest for them when you are not paying attention to the early warning signs. To know if you've been a crime victim, be on the look out for:

- Credit card and checking account statements that don't arrive when they should.
- Being denied credit for no reason.
- Bills for purchases you never made.
- Collection agencies trying to collect on debts that you didn't incur.
- Bills from credit accounts you did not open.
- Unauthorized charges on your telephone or checking account statements.
- Credit reports showing new, unauthorized accounts.

If you have been a victim of identity theft, take swift action:

- Place a fraud alert on your credit file by contacting a major credit reporting bureau (Trans Union, Experian, or Equifax). The other bureaus will be notified and will place alerts on their files. Free reports will be sent to you.
- Alert affected businesses over the phone and in writing.
- Close tampered accounts or those opened without your consent.
- File a police report. Ask for a copy of the report too – you may need it for businesses requiring proof of the crime.
- Report the crime to the Federal Trade Commission.

For help with identity theft issues, contact BALANCE at 888-456-2227 or log onto www.balancepro.net. An expert in the field can access and review your credit report, and provide the direction and support you need. As a benefit of credit union membership, the service is low cost to you.

AUTOGUIDER IMAGE OF M16 FROM MINGO

By Fred Klein

This is an image from this summer while I was setting up to take the M16 image. I asked the ST-4 autoguider to calibrate while I had left the shutter open on the camera. This was the result. You can see that the autoguider moved the mount first in the RA axis to the lower right, then moved it back, then moved it in the declination axis and then back again; thus, the angle shaped stars. If you look closely, you can see that the last motion to the lower left did not return all the way to the start point. This is due to the declination axis backlash. There is no RA backlash because the adjustment is made by changing the speed of the RA motor, but not stopping or reversing it.



LUNAR ECLIPSE AND LUNAR OCCULTATION OF VENUS

By Kathy DeSantis

Wednesday, February 20, starting around 7:30 PM to past midnight is a total lunar eclipse. Wednesday, March 9 mid-afternoon is the lunar occultation of Venus.

From the AAAP calendar:

Total Lunar Eclipse Description: Total Lunar Eclipse of February 20-21, 2008. The AAAP will likely host an eclipse viewing event for this total lunar since it will be seen in its entirety from about 7:30 PM EST February 20 to about 1:15 AM the next morning.

Total Lunar Eclipse of February 21: The first lunar eclipse of 2008 is perfectly placed for observers throughout most of the Americas as well as western Europe. The eclipse occurs at the Moon's descending node, midway between perigee and apogee. During the eclipse, Saturn lies about 3° north-east of the Moon and shines brightly ($m_v = +0.2$) because it is near opposition.

The Moon's orbital trajectory takes it through the southern half of Earth's umbral shadow. Although the eclipse is not central, the total phase still lasts nearly 25 minutes. The Moon's path through Earth's shadow as well as a map

illustrating worldwide visibility of the event are shown in Figure 2.

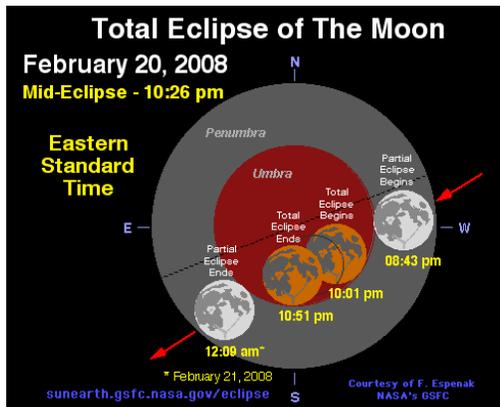


Figure 2 from NASA website

The timings of the major phases of the eclipse are listed below.

Penumbral Eclipse Begins: 00:36:35 UT
 Partial Eclipse Begins: 01:43:19 UT
 Total Eclipse Begins: 03:01:10 UT
 Greatest Eclipse: 03:26:05 UT
 Total Eclipse Ends: 03:50:57 UT
 Partial Eclipse Ends: 05:08:47 UT
 Penumbral Eclipse Ends: 06:15:39 UT

At the instant of greatest eclipse (03:26 UT), the Moon lies near the zenith for observers in French Guiana. At this time, the umbral magnitude peaks at 1.1062 as the Moon's northern limb passes 7.2 arc-minutes south of the shadow's central axis. In contrast, the Moon's southern limb lies 3.3 arc-minutes from the southern edge of the umbra and 38.4 arc-minutes from the shadow center. Thus, the northern half of the Moon will appear much darker than the southern half because it lies deeper in the shadow. Since the Moon samples a large range of umbral depths during totality, its appearance will change dramatically with time. It is not possible to predict the exact brightness distribution in the umbra, so observers are encouraged to estimate the Danjon value at different times during totality (see Danjon Scale of Lunar Eclipse Brightness). Note that it may also be necessary to assign different Danjon values to different portions of the Moon (i.e., north vs. south).

During totality, the spring constellations are well placed for viewing so a number of bright stars can be used for magnitude comparisons. Regulus ($m_v = +1.40$) is 3° northwest of the eclipsed Moon, while Procyon ($m_v = -0.05$) is 40° to the west, Spica ($m_v = +0.98$) is 51° to the southeast, and Arcturus ($m_v = -0.05$) is 58° to the northeast. Alaphard or Alpha Hya ($m_v = +1.99$) is 23° to the southwest and Saturn ($m_v = +0.2$) is just 3° to the northeast of the Moon.

The entire event is visible from South America and most of North America. Observers along North America's west coast miss the early stages of the partial eclipse because it begins before moonrise. Alaskans in Anchorage and Fairbanks experience moonrise during totality but bright evening

twilight will make it difficult for sourdoughs to view the event. Western Europe and northwest Africa also see the entire eclipse. Further to the east (east Africa and central Asia), the Moon sets before the eclipse ends. None of the eclipse is visible from eastern Asia or Australia.

Table 3 (<http://sunearth.gsfc.nasa.gov/eclipse/OH/OHtables/OH2008-Tab03.pdf>) lists predicted umbral immersion and emersion times for 20 well-defined lunar craters. The timing of craters is useful in determining the atmospheric enlargement of Earth's shadow (see Crater Timings During Lunar Eclipses). From: <http://sunearth.gsfc.nasa.gov/eclipse/OH/OH2008.html#2008Feb21T>

Lunar Occultation of Venus Description: March 5, late afternoon: An occultation of Venus will occur, when the moon passes directly between Earth and Venus, blocking our view. Binoculars or, better yet, a low-power telescope, will be required for viewing this daytime event, and it may not be easy to see. The occultation by the extremely thin crescent moon will occur at 3:18 p.m. when Venus is only about 21° above the horizon. The Moon and Venus may be visible together in low-power telescopes for as much as an hour before that. The very abrupt reappearance of Venus will happen at 4:28 p.m. when Venus is only about 8° above the horizon. The very low altitude combined with the common appearance of haze and horizon clouds this time of year mean that the disappearance of Venus will be better seen than the reappearance. If conditions are good enough for the reappearance to be seen, a clear southwestern horizon and a telescope that can track Venus even when it is invisible behind the moon will be required. Date: Wednesday, March 5, 2008.

VIRTUAL PLANETARIUM

By Craig Lang

If one wants a quick sanity check type of online "planisphere-ish" tool, the "Interactive Sky Chart" on Sky and Telescope's webpage is handy. Since I have not had a lot of time over the last few years to keep up with where the planets are positioned at all times, I use the ISC when someone, usually a coworker, asks something like: "I saw this really bright star between a white and a red looking one, what was that?" Typically that being a planet with their wandering patterns, I consult the ISC after asking them which direction they were looking in and about what time of night it was. (This usually makes me seem like some type of Gandalf/Merlin-like wizard to them since I can tell them just minutes after they ask. Little do they know that I often cheat and head to the ISC). I actually do share this link with people who show me a bit more interest than the average. It is just the right magnitude depth for a casual observer with or without binoculars. S & T has recently changed the ISC to require one to register, but registration is free.

So add this to your astro software toolboxes for the next time you need a quick check of what's above your head. Of course, if you want neat/advanced features, load up all these other programs that everyone is talking about.

WESTMORELAND COUNTY COMMUNITY COLLEGE STAR PARTY

By Kathy DeSantis

December 5, 2007, AAAPer Glenn Smith's WCCC astronomy class staged a public star party for their community college and environs. Wednesday's weather happened to be the worst winter, snowy weather yet of the season! That decreased the crowd, but to the delight of those in attendance, the sky opened up for some fine viewing.

Besides the student scopes, Fred Klein and I represented the AAAP. Fred presented his scope and astrophotography prints. I gave a brief presentation on extrasolar planets, referring to the December Distant Worlds star map's list of stars known to have planets and to Kepler Mission prints, informing on the search for earthlike planets.

Glenn's students went on to give various presentations. Dr. Carol Rush, WCCC Director, was in attendance and the college provided hot drinks. Dr. Rush extended an invitation to return for a spring star party planned for April.

WAGMAN OBSERVATORY 2007 VOLUNTEER LIST

By Tom Reiland, Director

Here's the Final Wagman Observatory Volunteer List for 2007:

| | |
|---------------------|------|
| Nemis Barrett | 3 |
| Phil Breidenbach | 4 |
| Shirley Ann Cassman | 3 |
| John Cheng | 3 |
| Mike Ciechalski | 1 |
| Rick Clare | 1 |
| Ken Coles | 3 |
| Tim Cobert | 5* |
| Kathy DeSantis | 1 |
| Mary DeVaughn | 10** |
| John Diller | 2 |
| Joanne Diller | 1 |
| Derek Findlay | 1 |
| Kelly Findlay | 1 |
| Eric Fischer | 10** |
| Kelly Fletcher | 1 |
| Chris Genovese | 1 |
| Jon Grimme | 3 |
| Peter Guercio | 2 |
| Martina Guercio | 2 |
| George Guzik | 6* |
| Bill Hayeslip | 18** |
| Don Hoecker | 11** |
| John Holtz | 2 |
| Dave Houggy | 1 |
| Brent Hudock | 4 |
| Les Johnson | 1 |
| Bob Kalan | 1 |
| Jeff Kearns | 3 |

| | |
|-----------------------|-------|
| Fred Klein | 5* |
| Gene Kulakowski | 1 |
| Ed Kuzemchak | 1 |
| Jack Landman | 2 |
| Tim Manka | 4 |
| Dennis Molten | 2 |
| Ed Moss | 2 |
| Bill Moutz | 4 |
| Maureen Moutz | 1 |
| John Mozer | 1 |
| Mike Nizinski | 5* |
| Ann Norman | 4 |
| Bob Novack | 1 |
| Joyce Osborne-Fischer | 12** |
| Sherry O'Neill | 5* |
| Mark Orsatti | 1 |
| Frank Pastin | 8* |
| Ron Pollack | 1 |
| Cindy Pollack | 1 |
| Rowen Poole | 5* |
| Tom Reiland | 20*** |
| Glen Rockhill | 3 |
| Bill Roemer | 8* |
| Brent Samay | 1 |
| Judy Schomer | 1 |
| Mark Schomer | 1 |
| Bob Saut | 1 |
| Lori Seitz | 3 |
| Allen E. Sluder | 1 |
| Michael Skowron | 3 |
| Dave Smith | 3 |
| Larry Sneider | 14** |
| Bill Snyder | 1 |
| Flac Stifel | 17** |
| Terry Trees | 1 |
| Allen Tracht | 2 |
| Charlotte Tunney | 2 |
| Jim Tunney | 2 |
| Frank Wielgus | 1 |
| John Wilson | 4 |
| Bill Yorkshire | 14** |
| Diane Yorkshire | 10** |
| Pete Zapadka | 6* |

Total members = 72 Times = 290

There were 2,255 visitors, 16 star parties and 5 private groups (1 canceled, 4 attended); 13 out of 16 public star parties observable, 3 private nights observable; 6 clear nights, 7 partly clear, 3 partly to moderately cloudy and 5 cloudy 10/28/07.

10 hats/or patches**

| | | |
|-----------------------|------|------------------------|
| Tom Reiland | 20** | Passed on hat or patch |
| Bill Hayeslip | 18** | Received hat |
| Flac Stifel | 17** | Passed |
| Larry Sneider | 14** | Received patch |
| Bill Yorkshire | 14** | Passed |
| Joyce Osborne-Fischer | 12** | Passed |
| Don Hoecker | 11** | Received hat |

| | |
|-----------------|-------------------|
| Mary DeVaughn | 10** Received hat |
| Eric Fischer | 10** Passed |
| Diane Yorkshire | 10** Received hat |

9 Patches*

| | |
|----------------|----------------------|
| Frank Pastin | 8* Received Patch |
| Bill Roemer | 8* Not in attendance |
| George Guzik | 6* Not in attendance |
| Pete Zapadka | 6* Passed |
| Tim Cobert | 5* Not in attendance |
| Fred Klein | 5* Received patch |
| Mike Nizinski | 5* Not in attendance |
| Sherry O'Neill | 5* Received patch |
| Rowen Poole | 5* Not in attendance |

Two members from 2006 have not received their patches yet, Rick Clare and Brent Samay.

My thanks go out to all who gave their time to make 2007 one of our best years ever.

2007 AWARD WINNERS

By Ed Moss

NOVA Award Winners:

Rosaline Lombardo
Mike Nizinsky
Todd Kelly
Sherry O'Neill

Photo Contest winners:

Fred Klein Atmospheric Phenomenon, Under 150 mm
Mark Arelt over 150mm

George G. Lindbloom Memorial Award

For outstanding achievements and contributions as amateur astronomer of the year: Bill Moutz

Lois J. Harrison Memorial Award

As outstanding woman member: Maureen Moutz

DONATION REQUEST FROM CHERRY SPRINGS, PA

By Gary Shannon

This from the Cherry Springs listserv regarding the placement of wind farms in the area near CSSP.

This is a straightforward request for donations. As you know, A.E.S. has received a conditional approval for their permit to construct their 124 turbines on Armenia Mountain. This is merely phase 1 and if given their way (and they will most certainly be given their way on a silver platter by what we have been observing from Jim Weaver and his Planning Commission), within 3 years we will have well over 500 turbines in Tioga County. There will hardly be a place you could be without seeing them. This will be very harmful to

the tourist industry and our lives in general. This will also open the door wide for wind development in our neighboring Potter County. Our comrades in Potter County have been fighting as hard as we have and I promised them we would hold up our end and fight hard. Once one county permits turbines, the neighboring counties will not be able to keep them out.

We have literally spent tens of thousands of man hours and thousands of our dollars so far keeping them out of Lycoming, Tioga and Potter Counties. With A.E.S. this close to getting their permit, we CANNOT quit now or all our efforts will be wasted. We have been in touch with one of the BEST land use lawyers in Pennsylvania. Her name is Susan Smith from Camp Hill, Pennsylvania. She has agreed to work for us to file an appeal against the conditional approval and feels we have a good chance at winning this appeal. The conditional approval needs to be challenged and overturned thus denying A.E.S. the ability to construct.

So the bottom line is this. The appeal process will cost us about \$5,000 dollars. If we split this up among all of us, it is very affordable. If it is left up to a couple of us, it isn't going to happen and we will all be looking at and listening to 500 turbines for the next 20 years. So dig deep, please.

We already have a few donations of \$100 dollars each from some VERY generous friends of which we are very grateful. This is the type of donation we need--\$10 or \$20 will help but it takes a lot of small donations to come up with \$5,000. So please dig deep and we will win this .

Any questions, please call Frank at 570-724-0626.

Please send donations to: Tioga Preservation Group; 111 East Avenue; Wellsboro ,PA 16901. Thank you.

BOOK REVIEWS

John Cheng: Even though this book is two years old and a few words were posted about it on this list, "*Astronomy Hacks: Tips and Tools for Observing the Night Sky*" is probably just the book some AAAP members may now be looking for.

It's by a husband/wife observing team, Robert and Barbara Thompson. It definitely would help any beginner but there are many things in it that could be new to astronomers of any level.

It covers things that might take months or years to get wise to. Some examples are cleaning your optics, selecting eye-pieces or binoculars, determining the actual power of your Barlow, choosing scopes, suggestions for logging your observations, what to wear to keep warm, filters, finders, software to aid a visual observer, center spotting a mirror, collimating a Newtonian, star catalogues, the celestial coordinate system, how to star hop, how to determine your entrance pupil size, why it's better to sit than stand while ob-

serving (the common wisdom is that it's like adding 2 inches of aperture)...and the list goes on.

Check out the recommendations on Amazon. This is a good book. Small warning: it is geared to visual astronomy so there is no "how do I take a picture" topics and it doesn't cover electronic scopes.

The 65 separate topics in the book are all relatively short, all easily understandable, and each is the answer to a question that everyone of us has asked at one time or another.

John O'Hara: I second John's opinion of this book. Although I've been observing for 30 years, I've still found this book very useful. I've used this book's tip to center spot my mirror on my 7-inch reflector. Besides, it's just a whole lot of fun to page through! I have a great deal of respect for Robert Bruce Thompson. He is a member of Talking Telescopes Yahoo group and is of those people (along with Phil Harrington, Geoff Gaherty, Jack Kramer and others) that always has, IMO, solid advice.

Trevor Lewis: I recently finished reading an interesting book: "*The Chilling Stars - A New Theory of Climate Change*" by Henrik Svensmark and Nigel Calder. Ordinarily, I consider global warming a bit off topic for this list, although I'm confident there is a lot of interest among the members. However, this book is interesting not just because it relates to climate change, but also because it explicitly intertwines astronomy with nearly every other scientific discipline. They use the term cosmoclimatology for this line of research. I found the book an easy, informative, and thought-provoking read.

The chief premise is that the flux of cosmic rays on the earth's atmosphere is a primary driver of global cloud formation. The more clouds, the less sunlight is absorbed, and the colder the earth. This seems a bit farfetched on the surface, but they back up the premise with an impressive collection of basic research and historical climate data, going back billions of years in some cases. This includes the presumed history of solar activity. The first line of defense of the earth against interstellar cosmic radiation is the solar wind. When the sun is active with a strong solar wind, fewer cosmic rays reach the earth and our planet cools off.

Another fascinating thread is the correlation between earth's climate and the path of the earth around the galaxy. When the earth passes through a region with high cosmic ray flux (from supernova remnants), the climate responds.

The authors do not deny that atmospheric CO₂ affects global warming, but argue that the effect is overestimated. They also note their belief that research proposals and papers relating to CO₂ are readily accepted in the present scientific and governmental "climate", whereas alternative proposals receive scant attention and sometimes scorn.

Whatever the merits of their premise (and I have some

doubts), *The Chilling Stars* is an interesting read, both for astronomers and those with an interest in global climate change.

OBSERVATIONS

Larry McHenry (Posted to listserver 12/02/07): I got out Saturday morning before the front moved in, for a little solar observing. The Sun currently has a very small sunspot group (AR10977) that has just rotated into view on the Eastern limb. Visually, it was barely observable with the 8" SCT & Baader filter, and then only during a few moments of steady seeing (it was a little easier seeing it once I switched to video, but not by much). At first, I was just going to consider it being what is called a "pore" and not log it as a true sunspot (a "pore" is a tiny, dark, granule spot, often having fairly short lifetimes. Pores occasionally form where several granulation channels meet and can sometimes precede the development of sunspots) but after checking Space-weather.com, they are now calling it an official group.

Over the course of the observing session, the seeing became increasingly turbulent, so other than a sketch of the group, I wasn't able to capture a good video AVI of the group. (It generally takes me about an hour and one-half for a full session, starting with visual observations and sketching, then switching over to video. It also includes swapping the C8's baader film white-light filter with either the Lumicon 1.5A or Daystar .6A H-alpha filters).

In the Solar-ALPO group, there has been some discussion by newer members as to whether this extended dearth of spots is normal for solar minimums or are we witnessing a particularly sparse solar minimum? The answer is "all is normal". We are just at the end of Cycle-23, with the start of Cycle-24 predicted for sometime late spring 2008. Here's a website with all kinds of interesting stats on solar minimum spotless days: <http://users.telenet.be/j.janssens/spotless/Spotless.html>

There are three views of the Sun from Saturday 12/01/2007: White-Light (PST detuned) <http://home.comcast.net/~lemsolar/images/pstviews/pst-wl-120107.jpg>

Calcium II (PST CaK) <http://home.comcast.net/~lemsolar/images/pstviews/pst-cak-120107.jpg>

H-alpha (PST Ha on band) <http://home.comcast.net/~lemsolar/images/pstviews/pst-ha-120107.jpg>

Hi Res image of AR10977 made with the Daystar .6A H-alpha filter on the 8" SCT: <http://home.comcast.net/~lemsolar/images/daystar/haspot1-120107.jpg>

Sketch: <http://home.comcast.net/~lemsolar/images/sketches/s120107.gif>

To view the three PST images side-by-side, and for a complete observing report visit: "Big Woodchuck Solar Observatory" (BWSO) <http://home.comcast.net/~lemsolar/Bwwso1.htm>

Shirley Ann Caseman (posted to listserver 11/05/07): I got up early and went up the hill where a communication tower is near my house. A cloud band was just starting to roll in. Right on time the ISS brightened as a single point of white light, dimmed slightly, then brightened again as it headed near the Moon & Venus, then disappeared into thicker clouds. Thick clouds obscured Saturn for me, but still a nice way to start a Monday!

Phil Breidenbach (posted to listserver 11/05/07): WOW...did I say WOW? I had no Internet connection here at work when I got in, so I had to rely on my memory for the details. Not a good thing to rely on! I went out at 5:54 and there it was, the ISS heading straight towards the Moon and Venus. I was thinking they might meet, but the Space Station passed less than a degree below the pair. It was a very impressive sight! I watched the ISS get dimmer and turn a reddish color as it headed into the east and then I went back inside and back to work again.

Jim Klueber (posted to listserver 11/24/07): I hope other members were able to catch the beautiful lunar show this morning. I woke up around 5:30 to a bright full moon shining in through the blinds of our bedroom. Taking a look outside was a gorgeous site of the full moon with bands of clouds rolling slowly by it. Because of the favorable orientation of our house, I was able to sit in the comfort of my living room and watch the show through my 15x70 binoculars mounted on my camera tripod through our bay window. I really wanted to capture the scene so my kids could see it when they got up, so I mounted our Sony camcorder on the tripod to take some video. Unfortunately, it kept wanting to focus on the window rather than on the moon.

Not to be defeated, I slipped on a pair of boots, coat and hat and headed out to the yard. I took about a 4-minute video clip of the clouds rolling by, but it is not nearly as impressive as what you could see with the eye or through the binoculars. Unfortunately, I have very limited focus or exposure control on the camcorder. I then swapped out the camcorder with my SLR and snapped a few shots with both my 50 mm lens and 150 mm zoom. There was a strong lunar pillar affect this morning so I hope my pictures capture it adequately. After watching the show in the 17-degree temperatures, I turned to head back in and there was Venus shining behind me to end a wonderful morning show.

My 12-year-old son, Zachary, was up when I went back in, so we set up the binoculars on the tripod in the living room so he could watch it for a while before the Moon slowly sank down into the trees. What a great way to start a new day.

John Cheng (posted to listserver 12/24/07: Mars and our Moon amidst scudding clouds was a pretty picture this morning, but there are a couple of other reasons to view the planet at this time.

First, Mars is at opposition today, Christmas Eve, and from this point on it will diminish in size. In fact, today's 16 or so arc seconds is the largest apparent diameter for the planet until the opposition of 2016.

During the oppositions of 2010, 2012 and 2014, Mars will show a smaller disk than the current one. So, now would be the time to view Mars...in fact today.

Second, Syrtis Major, probably the most prominent Martian feature in small to moderate telescopes, is facing us in prime time. This morning, in good seeing, it was clearly seen in an 85mm (3.3") refractor.

The seeing also allowed me to run up the magnification on Saturn, still the prettiest sight in the Solar System, despite its rings having closed to below 7 degrees. Something new to watch is the broad shadow being cast to the north of the ring system. Magic night.

Tom Reiland (posted to listserver 12/23/07)) I just came in from observing in my backyard with my 10 X 50's. It's exceptionally clear because of the front moving through, but the full Moon and the wind cut out any attempt at serious observing. The Moon is about a degree above Mars. It's a fine sight in binoculars with the bright pock-marked orb near the small yellow-orange disc of Mars. I was able to locate Comet Holmes as a very large, very diffuse patch above Kappa Persei. M31 was easy and I had no trouble finding Uranus and M15.

CONGRATULATIONS NEW MEMBERS

Lauren M Grim
Amy Pastnovich
Jody Villella
Sarah W. Hoge
Dean Agliori
Debra Meteney

COOL WEBSITES

<http://al-paslow.smugmug.com/gallery/2875491#190810867-L-LB>

<http://www.npr.org/templates/story/story.php?storyId=14142355>

<http://www.nytimes.com/2007/09/05/opinion/05ferris.html>

<http://www.astronomyratings.com/index.php>

<http://www.msnbc.msn.com/id/20667442/>

COOL WEBSITES (CONTINUED)

http://pittsburghlive.com/x/pittsburghtrib/search/s_533900.html

<http://www.fredkleinastro.com/AllImages.htm>

<http://tinyurl.com/2ownos>

http://imgsrc.hubblesite.org/hu/db/2007/40/images/a/formats/web_print.jpg

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

<http://www.ifa.hawaii.edu/faculty/jewitt/holmes.html>

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IMPORTANT DATES

January 1—New Year's Day
1801 Giuseppe Piazzi discovers asteroid Ceres

January 2—Earth at perihelion

January 3—Moon at apogee
Quadrantid meteor shower

January 4—Quadrantid meteor shower

January 5—Venus 7° north of Moon
Antares 0.5° north of Moon

January 6—Venus 6° north of Antares

January 7—1610 Galileo discovers Callisto, Europa, and Io

January 8—New Moon 6:37 a.m.

January 9—1967 Surveyor 7 lands on Moon

January 10—Neptune 0.4° north of Moon

January 11—**Carnegie Science Center Meeting**
1998 Lunar Prospector arrives at Moon

January 12—Uranus 3° south of Moon

January 13—1610 Galileo discovers Ganymede
1978 NASA selects first women astronauts

January 14—2005 Huygens probe lands on Titan

January 15—First quarter Moon 2:46 p.m.

January 16—1969 First docking of 2-manned spacecraft (Soyuz 5 and Soyuz 4)

January 19—Moon at Perigee
Mars 1.1° south of Moon

January 22—Mercury at greatest elongation (19° east)
Full Moon at 8:35 a.m.

January 24—Regulus 0.7° north of Moon

January 25—Saturn 3° north of Moon

January 28—1611 Johannes Hevelius born

January 29—1989 Phobos 2 enters orbit around Mars

January 30—Last quarter moon 12:03 a.m.
1964 Ranger 6 launched
Meteor may crash into Mars

January 31—Moon at apogee

AAAP Membership Renewal Form – 2008

(1)

Completely fill in the following information: Check here if these are changes: _____

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Check if you want your e-mail on the AAAP List Server (____)

How do you want your "Guide Star" Delivered? Online (____) Snail Mail (____)

Which of the following AAAP positions would you volunteer for?

- I would like to help at star parties at: Mingo (____) Wagman (____)
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- I would like to run for an association office (____)
 Specify Offices:

What areas of astronomy interest you?

What type of Astronomical equipment do you want listed under your name in the membership directory?

(over)

AAAP Membership Renewal Form – 2008

(2)

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| “Astronomy” Subscription (12 issues per year) Both new and renewals are processed through the AAAP. Do not renew your subscription directly with Kalmbach Publishing, you won’t get your discount. | \$34.00 | |
| Key Fee: check appropriate observatory Only current key holders! Mingo_____ Wagman_____ | \$15.00 | |
| Tax Deductible Donation | ---- | |
| TOTAL PAYMENT (make checks to AAAP, Inc.) | ---- | |

Prices are subject to change without notice. Payments must accompany this application.
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Mark G. Schomer, Membership Secretary
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Connellsville, PA 15425-9708

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E-mail: MembershipSecretary@3ap.org
Phone: 724-628-3499

Billing questions?
E-mail: Treasurer@3ap.org
Phone: 724-348-9087

Amateur Astronomers Association of Pittsburgh, Inc.

Founded June 9, 1929 by

Chester B. Roe and Leo J. Scanlon

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