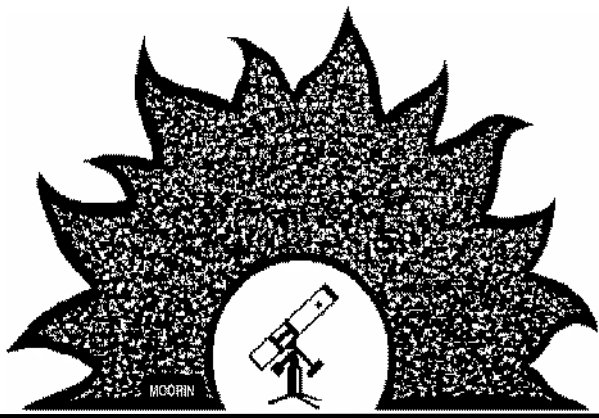




PAStimes

Phoenix Astronomical Society
www.pasaz.org

May 2007
Volume 59 Issue 9

PHOENIX ASTRONOMICAL SOCIETY — ESTABLISHED 1948

Steve Dodder to Speak at May 3 Meeting

By Don

This is the last meeting of the year. For those of you who do not know this P.A.S. takes the summer off. This does not mean we do nothing for the summer, it just means that we have no general meeting.

We are very pleased that Steve Dodder has agreed to be our speaker again this year. His talk this

month is entitled "Cataclysmic Variable Stars."

Since this is the last newsletter before September, we have compiled a list of all the activities that are scheduled at the time of printing. It is on page 4 and can easily be printed out by itself or separated from the rest of the newsletter if you get a hard copy of PAStimes.



Adults Night Out at the Arizona Science Center

By Sam Insana member of PAS

On Friday night, April 6, 2007, I brought my 8 inch meade newtonian reflector telescope to the Arizona Science Center as a PAS representative. Although I set up at 6 pm, it didn't get dark enough until 7 pm. For the next 2 1/2 hours I showed over 100 people Venus, the Orion Nebula, and Saturn. The Adults Night Out program brought

about one half of the people, however, there were many others who showed up for the Bodyworks 3 show. Also, there were a lot of people in the Heritage Square area on Friday night, enjoying the nice weather and restaurants nearby. Many observers refused to believe they were really seeing Saturn because it looked so beautiful at 200 power. They thought it was some kind

of a picture. Although he didn't bring a scope, James DeSantis of PAS showed up for about an hour. He helped answer questions about the night sky and I appreciated his help and company. There were a few clouds in the North but the objects we viewed were in a clear part of the sky for the entire evening.

Officer Position Badges

By the Current President

If you are a current officer and you have one of the Position Badges (example: President, Vice President, etc), please bring it to the May meeting. We are having our Elections and some of the positions may be changing. Thus, the new Officer's will then need their new

position badges. Please wear your badge until elections and then as the new officer is given the position, please pass along the tag to them. For instance, I am currently President. I'm thinking of running as Vice if Rod will take Presidency. So, I will need my current Vice, Matt, to turn over his position badge at that meeting, once I have been elected, and my position

badge of President will then go to Rod, once he is elected. This is an example, or maybe it is the plan. You won't know unless you come to the May PAS meeting and help us vote in the new officers, directors, and anyone else who wants a position within PAS. Your help and input is needed and appreciated. ***

April PAS Meeting Review

By Terri, Prez

We had a great turnout for this meeting. I was very impressed with all who attended. And I was extremely impressed with our Guest Speaker. Larry Wasserman was the prize for the night. He incorporated comedy and humor into his presentation and the compliments came pouring in! In fact, I'd have to say that there were so many compliments and thanks from the attendees, I've lost track of how many. Larry was fantastic! I never heard so many attendees say to me "Larry was the best speaker you've had at PAS in a very long time!" That really makes my day and now I hope to pass that great news on to Larry! I wish to thank Larry and Adrienne Wasserman for making the trip down to Phoenix to join us for that awesome night!

I also wish to thank John Pulis for helping sign everyone in. And Don, wow, he helped Larry set up his A/V. Many thanks goes to Ed and Dave for providing snacks and drinks, and Sam for bringing the popcorn. It is really nice to have these snacks at the meeting and if anyone else feels compelled to bring a snack to share, we might have a great collection of snacks on that future tables.

We started the meeting with Mike talking about Summer Observing sessions/astronomy classes up at his house. We will investigate this more but it looks



Dillon asking for help with his film

like it may be a good idea. Then I asked Dillon to talk about his film he is doing on light pollution. That turned out to be a great thing because we hooked him up with the right folks for information. Steve Palmer had found another book for sale through Sky & Telescope, to add to the collection of books that we are getting along with the Sky



Jerry P.A.S. Rocketry liaison

Atlas orders. Steve Snyder was asking if anyone knew how to or where to get a mirror re silvered. If you know, contact Steve, or me for Steve's contact info. Dave wanted me to announce that they are 2 weeks away from the initial production of the Solar System Model. And we talked about and I collected the money for the Sky Atlas order.

Then Larry took over. I must really thank everyone who made the meeting run

smoothly. I had just had oral surgery that morning, and I was drugged up, not with it at all, and really thankful that even though I ran the meeting, I had a good team to help out.

We also had a surprise guest at our meeting. Bobby McGee is our December speaker and I asked him to give a brief idea of what his talk will be about and thanked him for coming.

After the meeting, we met over in G-147 so that we could discuss the April 12th plans. I thank everyone who stuck around long enough to find out what tables they should be at, to make the event go smoothly.

When I look at my notes from that night in my notebook, I can't believe how drugged up I was. My notes show it. I was that way for 2 days after the surgery. No wonder they told me I wasn't supposed to drive or go to work for 2 days. Even the weekend ended up sluggish and drugged feeling.

Thanks goes to my TEAM as we couldn't have done it without them. ***



Larry Wasserman our April speaker

April Meeting of the Minds Review

By Terri, Prez

At the MOM, Terri wasn't feeling well so the meeting flowed rather fast, I thought. We had 4 topics, and 2 of those topics were scheduled to take some time. I wish to thank everyone who attended and I'd like to mention that Rod and Sue were missed. The four topics we discussed went in this order.

We first gave Don the floor to discuss the constitutional changes. We got a lot of really good input and ideas on wording for these changes. Everyone there appeared to be in agreement, so there wasn't any one who didn't think the changes were a good idea. The constitutional changes were announced in the April NL and the official vote date will be decided.

The next topic we discussed was the purchase of a Canopy for PAS. I told the group of my purchase of a 10X20 canopy the other day. Kevin, William and I could not open the thing by ourselves, plus 2 pieces were broken on it even before we got it all the way out of the box, so I returned it. We weren't happy with it. So, what came of this discussion is that the President was given permission to find 2 10x10 canopies for the club to own and the PAS Members to use with a limit of \$200. So, we will be searching for a good price, and it MUST BE AN EASY UP brand. Barbara was saying that we should get the exact brand that Rod owns because of how easy it was to set it up.

So, we will be doing research. If you see a sale on a 10x10 or even a 12x12 someplace, let Terri know right away so she can snag a good deal for the club. (We have since bought 2 canopies...so do not send Terri this info)

The third topic was that we turned it over to Kevin. Kevin told us of his idea to make bookmarks. 2 kinds of bookmarks. A very glossy, nice one with an astronomy photo, possibly laminated in some way for long wear, that we hand out with some reoccurring events listed, like Every 1st Thu is the PAS meeting and every 1st Fri is Adult Night out, those kind of things. And then hand them out at the events. The other bookmark was a cheaper version that has some data on it, 2 sided, low cost, card stock, that can be used to blanket colleges, given to the students so they know when and where to find us. WE will be discussing the details of each of these at the next MOM. We ask that everyone think up a way to do this, as a form of cheap advertising and a useful item to give out. College students like bookmarks.

The other thing Kevin did was talk about what he does. He is an artist. He brought 5 paintings he did that were space related to share with the attendees of the meeting. HE brought them to sell. He puts his art up for sale in a local art studio down town, and these paintings would go for

\$150 there, but he was offering them at \$50 at the meeting. I don't recall if he sold any of them but they were very nice.

And the last topic of the night was to look at the NEW NIGHT SKY NETWORK Kit having to do with positions of the planets. We watched the video, and discussed some of it, and that is the kit we will be seeing the April 12th event, that Barbara, Sue and I will be doing. But everyone watched the video to get an idea of what to expect and how to do it and how to explain it.

The night was very productive. I believe we were done and I closed the meeting by 8:45ish. Some of us hung around to talk about the kit some more, and we departed by 9:30. That's a first for the MOM's. An early dismissal. Ed handed out his Astronomy 101 tests to anyone who wished to work on them. Those of us who took one will turn it in at the PAS meeting for grading. It is interesting to see how well you do on the test, even though you aren't in the class, you can still see if you know the info that the class would have talked about and then tested on. I enjoy working on them.

Thanks to Barbara, Don, and Kevin for their topics and the time they took to present them. Thank you to everyone else who attended. PAS needs your ideas and thanks you for sharing them. See you at the next MOM on Apr 26. ***

Telescope Accessory Workshop May 13th 2:30-4:30

RSVP today! I've sent out the request for hard copies of the catalogs of your favorite telescope accessories stores, like Orion, Meade, Celestron, etc. I'm covering all aspects of astronomy. If you are attending the workshop on May 13th at Bookman's, you must RSVP so I can bring the correct number of catalogs for each person attending. I'm not going to bring a box of 100 catalogs from every company I have contacted about this event. I only wish to come with the needed few and a few extras for anyone stopping by. So, RSVP today if you plan to attend this event. I'm looking for ideas on places to contact for brochures and catalogs. Get your ideas to me Today so we can have their catalogs in time for our workshop.***

#Oceanside Telescopes
#Telescopes 4 Kids
#Rivers Camera (No Printed Catalog)
#Meade (Catalogs Arriving)
#Orion
#Celestron
#Coronado
#Questar Corp

#Woodland Hills (5% Discount to PAS members, No Printed Catalogs)
#Edmund Scientific
#Anacortes Telescopes (Brochures Arriving)
#High point Scientific
#Scopetronix
#Efston Science
#Skies Unlimited
#Scope City
#Starizona
#The Observatory
#Augen Optics
#Woden Optics
#AstroHaven
#Universal Astronomics
#Scope Stuff
#Earthshine Technologies
#Moonlite Telescopes
#Big Binoculars
#Meridian Telescopes
#Astronomics
#Agenda Astro
#ClearVue Optics
#University Optics

#Optics Planet (No Printed Catalog)
#B& H Photo Video
#Apogee Inc
#Stellar International
#Hands on Optics
#Technical Innovations
#Adorama
#Adirondack Astronomy
#William Optics (Catalogs Arriving)
#Von Slyke Engineering
#Observa-Dome Labs
#Sky & Telescope
#Laser Glow (Pamphlet Arriving)
#Lumicon
#Super Laser Shop
#Sky Pointer
#Wicked Lasers
#Telrad
#Atomic Time
#Denkmeier Optical (Catalogs Arriving)
#DFM Engineering (No Amateur Telescope Accessories)
#SBIG (No Printed Catalog)
#Cyanogen
#Takahashi

Summer Events Calendar 2007

June 1 Friday 6 pm to 9 pm	Arizona Science Center Heritage Square 600 E. Washington St. Phoenix, AZ 85004	PAS Adult Night Out Public Star Party *** Volunteers Needed *** View the Moon, Galaxies and more.RSVP with Terri Finch to attend or to help out.* Weather Permitting *
June 9 Saturday Sundown to Moon- rise	High Desert Park Jacie Lane Black Canyon City, AZ 85324	PAS 3rd Quarter Moon Star Party All are Welcome! \$2 per car donation request. RSVP with Barbara Hartman to attend. * Weather Permitting *
June 10 Sunday 4:30 pm To 6:30	Bookman's Back room 8034 North 19th Avenue Phoenix, AZ 85021-5101	PAS Bookman's Free Indoor Telescope Workshop I-17 & Northern - Bookman's back room Come on by with your telescope, sky charts, questions and learn anything you wish to know about astronomy and telescopes at our FREE Telescope Workshop. R.S.V.P. is required by email to Terri Finch or by phone at 602-561-5398 to attend or help out. Dinner after Bookman's Telescope Class - Location will be decided at class. Or if you wish to attend dinner but missed the class, call Terri's cell around 6:30 to get that info.
June 16 Saturday Sundown till ?	Two Trees Observing Site See Sirius Lookers web site for more info, directions and map.	PAS Deep Sky Star Party All are Welcome! RSVP with Barbara Hartman to attend. We are guests at this site so no white light of any kind. If you arrive after dark drive by parking lights only (but please get there before dark) and turn off your vehicles dome light. If you plan to leave early, park so that you will not disturb other participants. You are responsible for all persons in your party, be sure they know the rules too. You need a Red Rock Pass to use the site (\$5.00 per day, remember midnight becomes the next day, so you will need one for Saturday and Sunday, or \$20.00 for the whole year) see Sirius Lookers web site! Some of us are camping out. Bring some snacks and drinks, warm clothes and let's have fun! * Weather Permitting *
June 28 Thursday 7 pm to 10 pm	Paradise Valley Comm. College 18401 N. 32nd St Phoenix, AZ 85032 Room G-147	PAS Meeting of the Minds No children please (business meeting)
June 30 Saturday	Times and location to be determined	PAS Full Moon Public Star Party*** Volunteers Needed *** Moon Treasure Hunt (see craters, mountains and valleys on Earth's only natural satellite - the Moon). RSVP with Terri Finch to attend or to help out. * Weather Permitting *
July 6 Friday 6 pm to 9 pm	Arizona Science Center Heritage Square 600 E. Washington St. Phoenix, AZ 85004	PAS Adult Night Out Public Star Party*** Volunteers Needed *** View the Moon, Galaxies and more.RSVP with Terri Finch to attend or to help out. * Weather Permitting *
July 7 Saturday Sundown to Moon- rise	High Desert Park Jacie Lane Black Canyon City, AZ 85324	PAS 3rd Quarter Moon Star Party All are Welcome! \$2 per car donation request. RSVP with Barbara Hartman to attend. * Weather Permitting *
July 8 Sunday 4:30 pm to 6:30 pm	Bookman's Back room 8034 North 19th Avenue Phoenix, AZ 85021-510	PAS Bookman's Free Indoor Telescope Workshop
July 14 Saturday Sundown till ?	Two Trees Observing Site See Sirius Lookers web site for more info, directions and map.	PAS Deep Sky Star Party All are Welcome! RSVP with Barbara Hartman to attend. We are guests at this site so no white light of any kind.
July 26 Thursday 7 pm to 10 pm	Paradise Valley Comm. College 18401 N. 32nd St Phoenix, AZ 85032 Room G147	PAS Meeting of the Minds No children please (business meeting)
August 3 Friday 6 pm to 9 pm	Arizona Science Center Heritage Square 600 E. Washington St. Phoenix, AZ 85004	PAS Adult Night Out Public Star Party*** Volunteers Needed *** View the Moon, Galaxies and more.RSVP with Terri Finch to attend or to help out.* Weather Permitting *
August 4 Saturday Sundown to Moonrise	High Desert Park Jacie Lane Black Canyon City, AZ 85324	PAS 3rd Quarter Moon Star Party All are Welcome! \$2 per car donation request. RSVP with Barbara Hartman to attend. * Weather Permitting *
August 11 Saturday Sundown till ?	Two Trees Observing Site See Sirius Lookers web site for more info, directions and map.	PAS Deep Sky Star Party All are Welcome! RSVP with Barbara Hartman to attend. We are guests at this site so no white light of any kind.
August 12 Sunday 4:30 pm to 6:30 pm	Bookman's Back room 8034 North 19th Avenue Phoenix, AZ 85021-5101	PAS Bookman's Free Indoor Telescope Workshop Come on by with your telescope, sky charts, questions and learn anything you wish to know about astronomy and telescopes at our FREE Telescope Workshop. R.S.V.P. is required by email to Terri Finch or by phone at 602-561-5398 .
August 30 Thursday 7 pm to 10 pm	Paradise Valley Comm. College 18401 N. 32nd St Phoenix, AZ 85032 Room G-147	PAS Meeting of the Minds No children please (business meeting)



Clouds From Top to Bottom

By Patrick L. Barry

During the summer and fall of 2006, U.S. Coast Guard planes flew over the North Pacific in search of illegal, unlicensed, and unregulated fishing boats. It was a tricky operation—in part because low clouds often block the pilots' view of anything floating on the ocean surface below.

To assist in these efforts, they got a little help from the stars.

Actually, it was a satellite—CloudSat, an experimental NASA mission to study Earth's clouds in an entirely new way. While ordinary weather satellites see only the tops of clouds, CloudSat's radar penetrates clouds from top to bottom, measuring their vertical structure and extent. By tapping into CloudSat data processed at the Naval Research Laboratory (NRL) in Monterey, CA, Coast Guard pilots were better able to contend with low-lying clouds that might have otherwise hindered their search for illegal fishing activity.

In the past, Coast Guard pilots would fly out over the ocean not knowing what visibility to expect. Now they can find out quickly. Data from research satellites usually takes days to weeks to process into a usable form, but NASA makes CloudSat's data publicly available on its QuickLook website and to users such as NRL in only a matter of hours—making the data useful for practical applications.

"Before CloudSat, there was no way to measure cloud base from space worldwide," says Deborah Vane, project manager for CloudSat at NASA's Jet Propulsion Laboratory.

CloudSat's primary purpose is to better understand the critical role that clouds play in Earth's climate. But knowledge about the structure of clouds is useful not only for scientific research, but also to operational users such as Coast Guard patrol aircraft and Navy and commercial ships at sea.

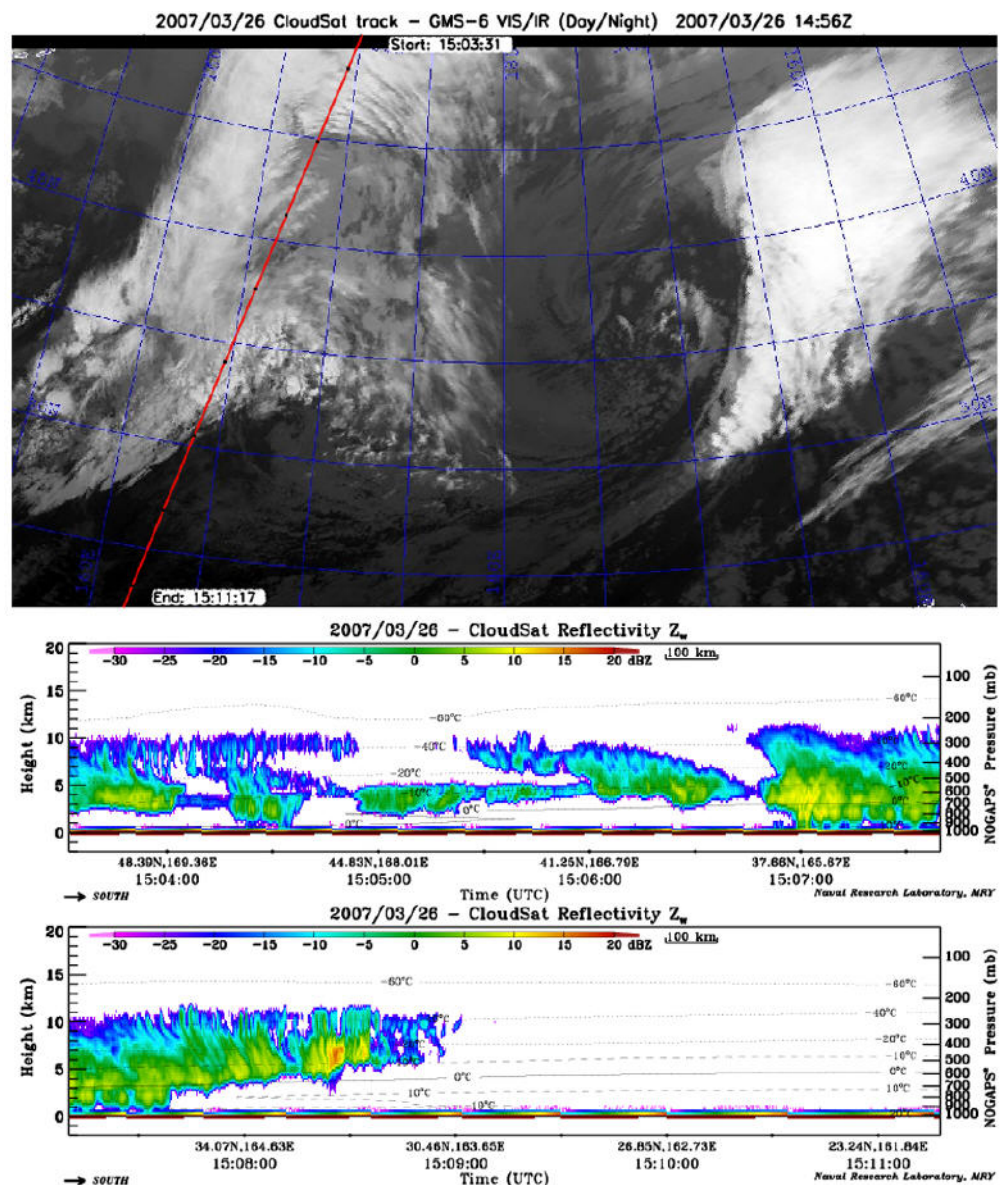
"Especially when it's dark, there's limited information about storms at sea," says Vane. "With CloudSat, we can sort out towering thunderclouds from blankets of calmer clouds. And we have the ability to distinguish between light rain and rain that is falling from severe storms." CloudSat's radar is much more sensitive to cloud structure than are radar systems operating at airports, and from its vantage point in

space, Cloudsat builds up a view of almost the entire planet, not just one local area. "That gives you weather information that you don't have in any other way."

There is an archive of all data collected since the start of the mission in May 2006 on the CloudSat QuickLook website at cloudsat.atmos.colostate.edu. And to introduce kids to the fun of observing the clouds, go to

spaceplace.nasa.gov/en/kids/cloudsat_puz.shtml.

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



A CloudSat ground track appears as a red line overlaid upon a GMS-6 (a Japanese weather satellite) infrared image. CloudSat is crossing the north-central Pacific Ocean on a descending orbit (from upper-right to lower-left) near a storm front. The radar data corresponding to this ground track (beginning in the center panel and continuing into the lower panel) shows a vertical cloud profile far more complex than the two-dimensional GMS-6 imagery would suggest. Thicker clouds and larger droplets are shown in yellow/red tones, while thinner clouds are shown in blue.

Phoenix Parks and Recreations WOW Program

Text and photos by Rod Sutter

The Phoenix Parks and Recreations held one of their WOW campout on Friday April 13.

This turned out to be a decent night, even if we did have a lot of light reflection from the dust in the air due to the wind during the day. We had about 35 teenagers and 6 adults.

When we first arrived Joshua was there to say hi. My son Kyle and his girl-friend Sara were there to help me set-up. We first started viewing the sun thru the PST. Most of the kids kept asking what is

that in the scope, they did not really think it was the sun.

Chet showed up within the hour and started his set-up. Venus was the first object that we looked at; the kids could not believe that they were actually looking at another planet.

When the sun went down past twilight we finally got a few good



looks at M-42 Orion Nebula, Saturn's view was excellent for the evening. It's funny how many children do not even know what planet they are looking at even when they can see that it has a ring around it. This just goes to show all of us amateur astronomers that

what we do when we go to the schools and the campouts and even to our Star Party's and science events that what we are showing is teaching people things that others may not ever know.

We help the Science Teacher, or Astronaut, or Geologist of tomorrow get started with the little boost of letting someone look thru our telescope and wonder if they might someday be our future of knowledge of what is happening in our worlds today. So to all of our members that do Star Party, School Events, and Science Center Events, keep up the good work so that we may someday learn if we live in this universe, alone. Or is there really life somewhere out there.



Viewing Tips By the Prez

VENUS GRACES OUR SKIES

Venus will be a sight to see this month. The planet is an awesome evening object in the early part of May. That bright light in the evening sky, is mostly likely the planet Venus. ***

METEOR SHOWER IN MAY

Eta Aquarid Meteor Shower is known to have 20+ meteors per hour. The waning gibbous Moon will be bright in the sky that night. Only the brightest meteors will be visible. The radiant will be the star Eta Aquarii. The meteor shower peak will be May 6th. ***

Indoor Astronomy Event Review

By Terri, Prez

Wow, what an event. We still didn't have the turnout I had hoped for, with all the advertising we had done, but it was still successful. I enjoyed the company of several folks who stopped by to check out what we were doing. However, the night was windy, and rainy, and we, the participants of this event, figure that is why we didn't have as many people as we expected.

I'd like to thank everyone who set up and were involved in this event. Steve S. did a demo on "How to Collimate a Telescope". Chet did a display/demo on "Telescope Clock Drives." William took over the display of PAS handouts while John P. helped get everyone to leave their email address and fill in a survey for a free magazine. We had quite a few turn in their survey. Mike had his posters and meteorites and was the

talk of the room. Kevin brought his Space Art and had a very nice display at the back of the room. Steve P. brought books and interesting items to show. And Barbara had the biggest display. She was doing the distances to planets, and their location in the night sky. While she was doing that I was doing the Pocket Solar System. She also had a few computers with project / activities for people to have fun doing. Rod and Sue assisted where needed. Don and John P took photos of the event, which you see in this issue.

Because of the not so great weather, we didn't get to have the outdoor viewing. Yes, this is called an IN-DOOR Astronomy Event because we planned all events indoors, however, one of the events that Barbara wanted to do was to show the planets that she, Sue and I were talking about indoors by having the public go outdoor to see, through the telescope, Venus and Saturn while they were available during the night time hours. But, the weather wasn't cooperative and so none of the outdoor activities occurred.

I have scheduled 2 more indoor events for the next school session. One in the Fall semester and one in the Spring semester. I hope to have the same number of activities for the public, and 100 times more people than this time. Start spreading the word.

These activities are fun for all ages. It is well worth your time to attend and / or be a part of this event.



Barbara is holding a model of a spacecraft and standing next to a display of the Solar System.

The idea behind this event is to allow folks to come experience different astronomy related activities that show more than just looking at Saturn. We might show how the rings were made, or how far away Saturn is, or the size of Saturn compared to the other planets. To do this, we have to have public to show, and we have to create these activities over several months of time, and practice what we will be doing while there. There is a lot of planning and preparing needed for this event. Pass the word around. We want the public to come have fun with us.

Thanks goes to my TEAM. I have the best TEAM in the world and hope to have their assistance in all Astronomy activities.



Mike is talking meteorites, again



Terri is showing how to make a model of the Solar system to illustrate how far apart the outer planets are, and how close together the inner planets are.





Rod and Sue explain the Solar System, planet sizes.



Mike talking about meteorites with Steve S. and John looking on



Chet explains how a clock Drive works to one of our guests



Kevin, Terri, Mike and a teacher looking at Mike's toys and meteorites



Steve P. Shows one of the many books he bought at a clearance sale at a local bookstore

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May 3 Thursday	7 pm to 9:30 pm	Paradise Valley Comm. College 18401 N. 32nd St Phoenix, AZ 85032 Library	PAS General Meeting Steve Dodder, Saguro Astronomy Club "Cataclysmic Variable Stars "
May 4 Friday	6 pm to 9 pm	Arizona Science Center Heritage Square 600 E. Washington St. Phoenix, AZ 85004	PAS Adult Night Out Public Star Party "Forensic Anthropology in the Real World: Case Studies", Dr. Laura Fulginiti, Forensic Science Center Planetarium Presentation: Mysterious Moon*** Volunteers Needed ***View the Moon, Galaxies and more. RSVP with Don Boyd
May 9 Wednesday	5:30 pm to 9:30 pm Set-up at 5pm	William T. Machan School 2140 E. Virginia Ave Phoenix, AZ 85006	William T. Machan School Star Party *** Volunteers Needed ***School contact is Hope Phillips. RSVP with Terri to help out.*Weather Permitting *
May 12 Saturday	Sundown to Moonrise	High Desert Park Jacie Lane Black Canyon City, AZ 85324	PAS 3rd Quarter Moon Star PartyAll are Welcome! \$2 per car donation request. RSVP with Barbara Hartman to attend. * Weather Permitting *
May 13 Sunday	2:30 pm to 4:30 pm	Bookman's Back room 8034 North 19th Avenue Phoenix, AZ 85021-5101	PAS Astronomy Accessories & Advertising SIGS For PAS business - Not for the General Public. R.S.V.P. is required by email to Terri Finch or by phone at 602-561-5398 to attend. See page 6
May 13 Sunday	4:30 pm to 6:30 pm	Bookman's Back room	PAS Bookman's Free Indoor Telescope Workshop R.S.V.P. is required by email to Terri Finch or by phone at 602-561-5398 to attend or help out. Everyone is welcome! Dinner after Bookman's Telescope Class - Location will be decided at class. Or if you wish to attend dinner but missed the class, call Terri's cell around 6:30 to get that info.
May 18 Friday	6Pm to 10pm, set up 5:30pm.	Sunset Ridge Elementary School 35707 N 33rd Ln, Phoenix, AZ	Starparty 7th Grade class, possibly whole school. 6Pm – 10pm, set up 5:30pm. Solar Viewing, Space Safari Treasure Hunt, VOLUNTEERS ARE NEEDED, RSVP with Terri by May 15th
May 19 Saturday	Sundown to ?	Two Trees Observing Site See Sirius Lookers web site for more info, directions and map.	PAS Deep Sky Star Party All are Welcome! RSVP with Barbara Hartman to attend. We are guests at this site so no white light of any kind.
May 31 Thursday	7 pmt 10 pm	Paradise Valley Comm. College 18401 N. 32nd St Phoenix, AZ 85032Room G-147	PAS Meeting of the Minds No children please (business meeting)

For more details and the latest information please visit the events page of our website

www.pasaz.org

Ads in PAStimes

Ads in PAStimes run for a month and may be renewed on a month by month basis, if submitted by deadline, space permitting.
Ads in PAStimes are FREE to members all others are asked to make a small donation. Donations are to be sent to the Editor who will forward them to the Treasurer.

Don Boyd PASTimes Editor
701 W. Del Rio St.
Chandler AZ 85225

To:

{MM:Notes 1}

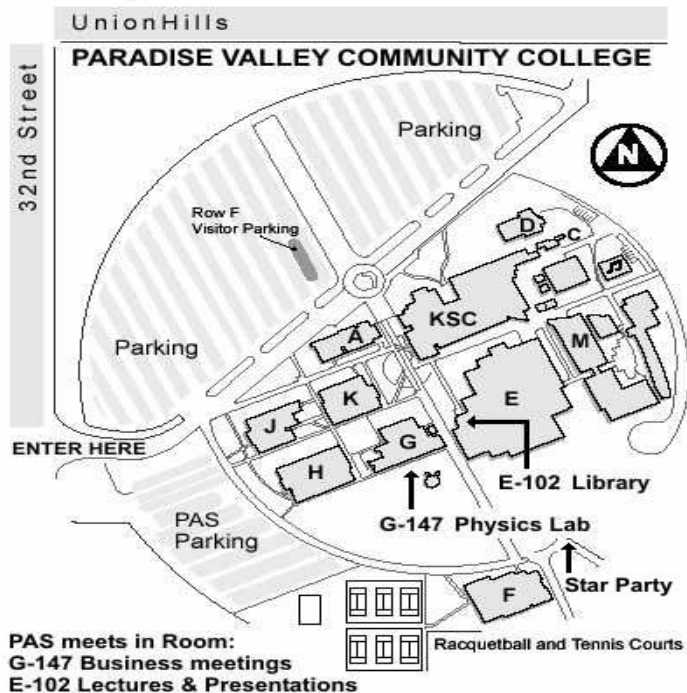
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PAS is incorporated in the state of Arizona as a non-profit, scientific and educational 501(c)(3) organization. Our newsletter PASTimes is published monthly from September to May and distributed by US PS and the Internet. All Issues are available for download on our website www.pasaz.org Ads for astronomy equipment are provided as a courtesy to sellers and buyers, and do not constitute any endorsement by PAS. All Photos by Don Boyd unless otherwise credited.

Map To PAS Meeting Location



Upcoming PAS Meetings

- September 6: Tony La Conte, Star Gazing for Everyone
"Treasures of Summer Triangle"
- October 4: Melissa Morris, Arizona State University
"Indirect Detection of Water in Forming Planetary Systems"
- November 1: Ross Tucker, NASA Solar System Ambassador
"Current Space Mission Updates"

May 15 2007

Sunrise: 5:29

Sunset: 7:20



Full: May 2



Q3: May 10



New: May 16



Q1: May 23

Phoenix Astronomical Society Contact Info

President	Terri Finch	602-561-5398	President@pasaz.org
Vice President	Matt Kohl	623-221-2261	VicePresident@pasaz.org
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PAS Hostess	Amanda Sallas	602-547-2420	PAHostess@pasaz.org
PAS Host	John Pulis	623-582-9235	
Webmaster / Dark Sky Advocate	Barbara Hartman	623-374-5364	Webmaster@pasaz.org
P. R. Director	Steve Snyder	602-686-3334	PRDirector@pasaz.org
WOW Contact	Schuler Schuler	480-551-7066	Chetsch@cox.com
Rocketry Liaison	Jerry Belcher	623-328-9290	http://ahpra.org/launches.html

Astro Events

May 5: Jupiter 6° north of the Moon

May 6: Eta Aquarid meteor shower

May 12: Mars 3° south of the Moon

May 17: Mercury 3° south of the Moon

May 19: Venus 1° south of the Moon

May 22: Saturn .8° south of the Moon