



CINCINNATI ASTRONOMICAL SOCIETY

101 Years!

www.cinastro.org

Sidereal Messenger

A Monthly Publication of the Cincinnati Astronomical Society

Volume 107, No. 12 - December 2012



Image of the Month

As the Full Moon rose on Nov. 28, Jupiter was a nice close companion. This is a pseudo-HDR composite. Moon was shot at 1/500 sec, Jupiter at 1/20 sec. Canon Digital Rebel XTi, Stellarvue SV66, ISO 100. © Eric Africa

Calendar of Events for the Tri-state area

December

- 21 [Young Astronomers' Class](#). Our young astronomer's class is geared towards Elementary school-aged children (and their parents.) If the skies are cloudy we will attempt remote viewing (via the web) or use planetarium-type software. Please dress to be outside for 30 minutes. If planets, stars, telescopes, and lasers (yes, lasers!) sound fun to you, then be sure to join us for this new program! IT'S FREE! December's class will focus on the planets. 5 - 7 p.m. *
- 21 Monthly Board Meeting, 7 - 8:30 p.m.; Members' Holiday Party - [End of the World Potluck](#). Come celebrate the season with CAS! Please bring a dish to share and hope for clear skies. 7:30 - 9:30 p.m. *
- 22 [The World Didn't End Stargaze](#). Come out for some views of the winter skies! If it is clear enough, we will be able to view the Ursid meteor shower. 8 - 11 p.m. *
- 22 [Not The End of the World](#) at the Cincinnati Observatory Center (CoC). After the Mayan calendar "resets" and we wake up to see the world continuing to exist on December 22, the Cincinnati Observatory welcomes you to celebrate a night under the stars.

Learn about the Mayan Astronomy from Astronomer Dean Regas, co-host of PBS' Star Gazers, then view through the 1843 and 1904 telescopes, as well as several portable scopes to see the Moon, Jupiter, and the Orion Nebula (weather permitting). Admission: \$10/adults, \$5/kids. FREE for Observatory Members. 7 - 10 p.m.

- 29 [Late Night @ the Observatory](#) (CoC). Can't sleep? Looking for a unique night out? Come see what the Observatory is like after hours - long after the "early crowd" has gone home. You'll get to use the oldest big telescope in the U.S. to view astronomical objects that are not visible until late at night (weather permitting). Get a sneak preview of the next season's planets and stars a month or two ahead of everyone else. Plus, zoom in on a late-rising moon, or watch the whole sky for a meteor shower or satellite passes. Each night is different and special! These programs are recommended for adults only. If the weather does not permit viewing, we'll have fun with some of the crazy science experiments and "adult" constellation mythology stories that we can't share with family audiences. Admission is \$10 per person. 10 p.m. - 12 a.m.

January

- 13 [Telescope Training \(Members ONLY\)](#). Members' telescope training on any of our 4 main telescopes. Additionally, if you would like assistance with your own telescope, bring it along! 4 - 6:30 p.m. *
- 18 [Young Astronomer's Class](#). Our young astronomer's class is geared towards Elementary school-aged children (and their parents.) We will start off with some pizza, then have a brief presentation to introduce some basic themes in astronomy. Once the sun sets we will head outside to see what stars and planets we can see with the naked eye. Of course everyone will also have the opportunity to look through one of our huge telescopes! * If the skies are cloudy we will attempt remote viewing (via the web) or use planetarium-type software. * Please dress to be outside for 30 minutes. If planets, stars, telescopes, and lasers (yes, lasers!) sound fun to you, then be sure to join us for this new program! IT'S FREE! 5 - 7 p.m. *
- 18 [Board Meeting, 7 - 8:30 p.m. Members' Meeting. 8:30 - 10 p.m.](#) *
- 18 [Beginner's Stargaze at the CoC](#). Want some hands-on practice using a portable telescope? Join us for an outdoor stargaze on the Observatory's grounds. You can bring your own telescope if you have one or rent one of ours for the evening!

A brief presentation will introduce you to the basics of how to use a telescope, and the best targets to look for in the sky that night. Simple star charts will be provided. The rest of the evening will be spent outside viewing (weather permitting). You're in charge of your own telescope or bring a friend and share, but staff and volunteers will be available to help as needed! Costs: Admission - \$7/person. Telescope Rental - \$10 / telescope (Free for members). Binocular Rental - \$5/binoculars. Reservations are required. Please call (513) 321-5186 to sign up. 7 - 9 p.m.

* Event at CAS HQ

Upcoming Stargazes

The clouds are here, like most recent years, and even though it's not even Christmas, we're thinking ahead to warm and clear skies! Once again next year, there are three stargazes planned for 2013 at the West Chester Parks. We'll again be at Keener Park on Barrett Road in West Chester. Please reserve the three dates for public stargazes on your calendars. The dates are:

- **Saturday, April 20, 2013** (rain date April 27)
- **Saturday, May 18, 2013** (rain date May 25)
- **Saturday, Sept. 14, 2013** (rain date September 21)

All of these dates are at first quarter to full moon or pretty close to either. Please make a note of these dates and/or save this message! We've done these stargazes for several years now and they've been very well attended and well-represented by our local clubs and others from the area. Come on out and join the fun!

In addition to the West Chester Parks stargazes, we've also set up several campers' stargazes again next summer at Caesar Creek State Park (hosted by me) and again next year, at Cowan Lake (hosted by Steve Tilford).

Together with the dates below for Caesar Creek and Cowan Lake, we have a full agenda for the summer again in 2013! The Caesar Creek dates are:

- **Saturday, June 15, 2013** (Caesar Creek campground) - Pat Freeman hosting
- **Saturday, July 13, 2013** (Caesar Creek campground) - Pat Freeman hosting
- **Saturday, August 10 2013** (Caesar Creek beach) - Pat Freeman hosting

The Lake Cowan dates are:

- **Friday, June 14 2013** (Cowan Lake Campground) - Steve Tilford hosting
- **Friday, July 12 2013** (Cowan Lake Campground) - Steve Tilford hosting

All campground stargazes are set for around the first-quarter moon. The last one, on August 10 at the Caesar Creek beach, is the annual Perseids Meteor Shower Camp-Out on the beach grounds.

Mark your calendars! See you there!
-- Pat Freeman

CAS NEWS

Meet a Meteorite

On November 17, the Cincinnati Observatory Center hosted a night of meteorite displays. I was invited to bring my collection, which is a cross-section of nearly every type of meteorite - but small samples.



Instead, I showed my collection of impactites - which are native Earth materials that are transformed when a meteorite impacts the surface.

This includes two major subcategories - impact rock and impact glass.

Impact rock is formed from material that is ejected from the crater, or falls back into the crater, or is part of the Earth's crust under the crater. The best known type is *shattercones* - literally cones of rock that usually point back to the impact location. There are other types as well.

The second category is *impact glass*, formed by molten material that is ejected from the crater and falls to the Earth as a glassy material. The most common impact glass is *tektite* - which you can buy very cheaply because there is so much of it in southeast Asia. *Moldavites* are another type and are sold as "spiritual jewelry".



There were several other displays, including collections from Northern Kentucky University and Miami University. Steve and Sue Rismiller were displaying (above), as was John Ventre - and Bob and Jerry Stanton had their meteorite sticks for sale. One professor was even showing "meteor-wrongs" - items that can easily be mistaken for meteorites.



For me, the "best in show" was an oriented metal meteorite owned by a collector from Indiana (above). Oriented meteorites are formed when a rock or metal meteoroid falls to the Earth but doesn't tumble. Instead, the same surface is facing the direction of travel. The intense heat melts the forward surface and material flows away along all sides (cont'd on page 3).

The Indiana example was a beautiful sample of such a meteorite.



The show ran from 7 to 9 p.m., and the crowd was nearly overwhelming at times. We know that more than 300 people came through.

I did learn that what I had to show was very interesting to nearly everyone that attended – and that you don't need large, expensive samples to get the public interested in meteorites. – *Mike Smith*

Young Astronomer's Class

Thank you to everybody who came out to our first "Young Astronomer's Class" (YAC) on November 16th! Parents, kids, and volunteers alike all made the first ever YAC a great one. We ate pizza, talked about the constellations, and made a planisphere. Afterward we headed outside to some amazingly clear skies. The kids had a blast looking through the telescopes and posed some really insightful questions.

A very special thank you to all the volunteers who came out to help with providing food, guidance, and running the telescopes: Terry Endres, Steve Tilford, Mike Smith, Jim Mills, Philip Boes, Ralph Goldsmith, Nathan Mantia, Chris Beiting, and Jeff Wilson. (Please forgive me if I forgot to mention anyone!)

Please join us for the next class on [Friday, December 21 at 5 p.m.](#), where our topic will be "planets". Both members and non-members are encouraged to attend. Contact me if you have any questions or would like to volunteer - catherinegallo@yahoo.com



Also, be sure to check out the new tab on our website specifically for the young ones! We are always adding material, so check back often. <http://www.cinastro.org/cas-kids> – *Catherine Gallo*

Member Reports

Venus-Saturn Conjunction

Nov. 26. With a clear sky and a little bit of travel, I actually got to observe the early morning conjunction of Venus and Saturn, I was hoping I could see it from home before work, but that didn't happen. Just to be on the safe side, I put one of my scopes in the car the night before. Five a.m. came, and they weren't up yet. At 5:30, they were first breaking through the trees, So, I left for work with a scope aboard. I arrived shortly after 6 a.m. (I start work at 7:00 between November and Christmas).



Saturn and Venus together early morning of Nov. 26. - *Jun Lao*

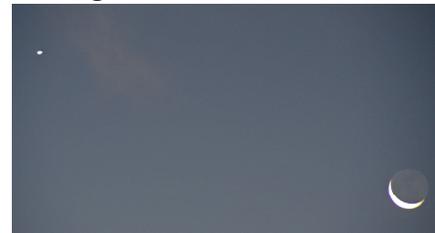
I set up the scopes and as mentioned in *Sky and Telescope*, I was able to see both planets in the same field. I was using my 6" f/8 with a 35 mm eyepiece. Both were centered in the finder scope, but in the eyepiece, each occupied opposite sides and barely got squeezed in at the edges of my eyepiece.

Saturn was barely visible as a pinpoint, against Venus' glaring light, but I could still see Saturn naked eye at a position of about 8 o'clock, and about 1/2 degree away.

I was elated with my attempt. I was very thankful for the clear sky. I hope Christmas night turns out to be clear too, as I'm looking forward to see how mighty Jupiter looks alongside the Full Moon. – *Bill Schultz, Vice Chair, Member Development*

Venus and the Moon

Nov. 11. Venus and the Moon presented a nice pair during the early morning.



While the separation was not as close as Jupiter and the Moon later in the month, or Saturn and Venus would have later as well, the two brightest objects in the night sky made for a nice, bright pair, even through a brightening sky.

Jupiter and the Moon

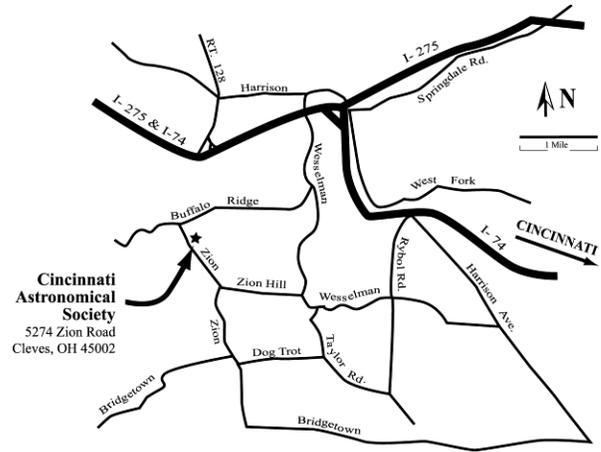
Nov. 28. Two days after the conjunction of Venus and Saturn, the Full Moon rose with a bright spot to its upper left – and no, it was not the cow that jumped over the Moon in the nursery rhyme. It was bright Jupiter, hovering close by.



Above's a composite of the two, taken with a Nikon D7000 and an 800 mm f/8 mirror lens. - *Jun Lao*

CAS Officers, Trustees, & Chairs

President	Terry Endres
1st Vice President	Steven Tilford
2nd Vice President	Mike Smith
Secretary	Don Bockelman
Treasurer	Jim Mills
Trustees (Term Ends)	Philip Boes (2013)
	Ralph Goldsmith (2013)
	Nathan Mantia (2014)
	Valerie Niemi (2015)
	Brad Reck (2015)
	Bill Schultz (2014)
Astronomical League Corr.	Steve Fitzimmons
Audit	John Ventre
Buildings Facilities Maint.	Jim Mills, Chair
	Pat Freeman, Vice Chair
Instruments	Mike Catanzaro, Chair
	Ralph Goldsmith, Vice Chair
Investments	Brian Engel
Library	Valerie Niemi
Membership	Ralph Goldsmith
Member Development	Mike Smith, Chair
	Bill Schultz, Vice Chair
Newsletter	Jun Lao
Photography	Brad Reck
Public Relations	Craig Niemi
Public Outreach	Craig Niemi, Chair
	Steve Tilford, Vice Chair



Directions to CAS Headquarters above

CAS meets on the third Friday of each month at 8:30 p.m. at the CAS Headquarters. The Board meeting is held at 7:00 p.m. prior to the regular meeting.

Headquarters/Scopes phone 941-1981

Web address: <http://www.cinastro.org>

The Sidereal Messenger is all about YOU – we would like to feature your activities, observations, instruments, and proposals. DO drop us a line – e-mail the editor, Jun Lao, appulse2000@yahoo.com.

Sidereal Messenger

Cincinnati Astronomical Society
5274 Zion Road
Cleves, OH 45002