

Observatory News

May 2007
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May Events at The Observatory

(unless otherwise noted)

FOTO's May meeting Thurs., May 3rd,
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History of Computing at UC, Tuesday,
May 8th at 7:30 pm. (page 3)

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Stonelick Lake. (page 2)

FOTO planning meeting May 15th 6:00
pm at Max & Ermas. (page 2)

Venus Days, Wednesday and Thursday,
May 18th-19th, 8:30-10:30 pm (page 4)

Kenton County Star Gaze, May 19th in
Banklick Woods Park. (page 4)

UC Communiversity class about Venus,
Tuesday, May 22nd, 8-10 pm. (page 4)

The Word from FOTO's President Bosse

I know I've been on a rail about the weather all winter long, but now I find myself singing a different tune. April has more than made up for winter's stingy scattering of stellar opportunities. Other parts of the country may have suffered late winter's worst recently, but we have been blessed with some very clear skies. I hope May will follow suit.

This spring brings with it not just warm(er) nights instead of cold nights, it brings the planets back in a most pleasant parade that marches across the

sky all night long. One after another, Venus is chased by Saturn who is chased by Jupiter who is chased by Mars. As spring melts into summer the planetary procession will continue to unfold. With telescope or naked-eye we can approach the planets on many levels. What fun awaits us!

I have always found the naked-eye aspect of the planets exciting. I suppose that that feeling comes from the days when I only dreamt about having a telescope. Over the years I have come to realize that utilizing less technology can be very rewarding. Only the naked-eye can drink in the giant panorama of the heavenly vault adequately. Seeing the wanderers of the heavens without optical enhancement, just the same as seen by the Greeks, seems somehow fulfilling, light-pollution notwithstanding. With the planets nicely distributed as they are now, playing a game of connect the dots makes seeing the Ecliptic not just some ethereal virtual line against the stars but as a real tangible object. The sky becomes that much more real.

This wonderful world of astronomy allows us to examine the universe at any level we wish with whatever tools we might have with us. That could include no tools at all. You can know a lot or you can know a little. The mission is always to learn more and there is always more to learn.

FOTOKids Meeting

By Dean Regas

The next FOTO Kids meeting will be on Friday, May 4 at 8:30 - notice the later time. Since we have been focusing mainly on the planets and the solar system lately, Dean Regas will change things up and lead the group out into Deep Space. We will explore the Messier catalog and zoom in and around some of the night's stellar gems. If it is clear, we'll also get some practice with the telescopes and try to find a few things in Deep Space. Remember to bring your observation notebooks.

Mark Your Calendars!

Here Are Two Events You
Will Want To Attend

By John Ventre

Tuesday, May 8th, 7:30 p.m. Russell McMahon, a UC professor, will present "The History of Computing at UC: The Astronomy Twist". It is an historical perspective of the role of the Observatory with the development of computers at UC.

Wednesday, July 11th, evening time, the American Institute of Aeronautics and Astronautics (AIAA) will present the Cincinnati Observatory with a bronze plaque that designates the Observatory as a significant historic site. There will be a formal presentation, social period, tours, and viewing through the telescopes that night.

FOTO Planning Meeting

By Dave Bosse

All members of FOTO are invited to the next planning meeting for the *Friends of the Observatory*, which will be held at *Max & Erma's* in Rookwood Commons on **May 15th at 6:00 P.M.** This is the usual date (3rd Tuesday) and the usual place (*M & E's*). We had been planning on making a location change in May, but have decided that we would defer that move for the time being. We would like to find a better location than *Max & Erma's* for our meeting. Not that *Max & Erma's* is lacking in their efforts or in the quality of their victuals, but issues with parking and noise-level leave us wanting. We would also like to continue to meet near the Observatory, and need your ideas.

There will definitely be a date change for the Summer month planning meetings. Wherever they might be held, schedule conflicts force us to move the meetings to the **3rd Thursday** of the month for the months of June, July and August. So the dates for the summer planning meetings are **Thursday** June 21st, July 19th, and August 16th.

So for now, we are at *Max & Erma's* on Tuesday, May 15th at 6:00 P.M. See you there!.

Did You Know...

Sand dunes were recently discovered on Titan.

Director's Report May 2007

By Craig Niemi
COC Executive Director

I hope everyone was pleasantly surprised by last month's combination newsletter and annual report. Much thanks to FOTO newsletter editor **Bill Cartwright** and designer **Stacy Stith** of Stith Graphics. There was much good news to report in 2006. With the successes we've had so far into this year, the 2007 report will be full of great news too.

April finally signaled a change in the weather for the good. Stonelick Park stargazers are finally getting warm, clear skies. April's *Sunday Sun Day Sundaes* brought out over 125 for lectures, glimpses of the Sun and of course ice cream. We had many calls from folks wondering if we were going to do that every Sunday. I think *Sun Day*, like the expanding newsletter is best served once a year. Thanks to all the volunteers for making Sun Day Sunday, like our other events, a success.

You'll notice some changes at the O soon. One of the 3 white pines in front of the Herget building will be coming down. It took too much of a beating from the ice storm. While we're losing a tree, we are gaining an improved view of the grand old Hannaford building which will be framed nicely by the two remaining pines. And we're close to a final design for a handrail system for the Herget building. UC architect **Len Thomas** is working with the fabricator for an elegant design that will echo some of the architectural elements of the building while being subordinate to it.

On the education front, follow up discussions with faculty from UC's teachers' education division continue. The O has also partnering with the *Southwest Ohio Center for Excellence in Science and Mathematics Education*. "SWOC" provides broad community support in STEM (Science, Technology, Engineering and Mathematics) disciplines. Our interdisciplinary programs are a perfect match for this state-wide initiative.

Our thanks to **Dr. Michael Flick** of Xavier's EXCEED program for presenting an insightful program at our first COC Presenter's meeting. Our presenters served nearly half our visitors last year and we'll be holding regular meetings with the presenters, telescope operators and assistants to give them the support, skills and tools they need to build on the already great job they are doing. And members of all astronomy knowledge levels are always welcome to join our volunteer corps. We hope members will also take advantage of the classes and programs being offered by John, Richard and Dean.

FOTO's Monthly Meeting

The next *Friends of the Observatory* meeting will be held at the Observatory, in the Herget Building on **Thursday, May 3rd** starting at 7:30 pm.

At the last FOTO general meeting, the amateur astronomer's astronomer **Ron Ravneberg** treated us to a most enjoyable discourse on his latest adventures in astronomy. His emphasis is now on simplicity and "Grab and Go" astronomy in the face of ever more complicated lifestyles and jumbled schedules that limit observing opportunities. Of course Ron included some very innovative (and simple) samples of telescope construction that left us all inspired. We're going to have Ron back in the fall to inspire us once again.

The May meeting will prove to be just as interesting. Our very own outreach teacher, Dean Regas, has prepared a talk for us on archeoastronomy. I'm not sure I could even hazard a guess as to what archeoastronomy is, so I, for one, am looking forward to finding out.

Another very important piece of FOTO business will take place at the May gathering as we will conclude nominations and hold an election for the position of FOTO representative to the Cincinnati Observatory Center Board. This is a very important three-year term position that provides FOTO's main voice and ears on the C. O. C. Board. Come out and make your voice heard at the May meeting.

Stonelick Lake Star Parties

By Scott Naylor

Our next Star Party will be Saturday, May 12th with a cloud date of Saturday, May 19th.

For updates, directions, or information, phone Scott Naylor at 513-575-5556.

The Schiff Report

By Charlie Schiff, President, Cincinnati Observatory Center Board

Dear Friends,

Every once in a while someone will walk through the front doors of the Observatory and gasp "I never knew this existed!" To this, we like to add a few other tidbits of popular history:

-Mt. Adams changed its name from Mt. Ida after Pres. John Quincy Adams' visit to Cincinnati to lay the Observatory's cornerstone in 1843.

-Architect Samuel Hannaford designed and built the Observatory before he built Music Hall and City Hall.

-Ft. Mitchell, KY is named after the Observatory's founder, Ormsby MacNight Mitchel. However, they got the spelling of his name wrong (only one "l").

-The shape of the Pringle's potato chip was suggested by Paul Herget, director from 1947 - 1978.

Consider that the names of these folks, so vital to Cincinnati's development, are somewhat lost to the average person and you realize how much of history is bound for obscurity. Imagine all the characters, their genius and effort, who have quietly faded into anonymity.

For the last four years now, **Joanne Coors** has been transcribing old Observatory journals and records. She reads the fading, beautifully elicited cursive handwriting from thick, crumbling leather volumes and types it into the computer for safe keeping.

Imagine one hundred or so years ago, the gentleman patiently committing his thoughts and data to paper. Would the author have imagined his legacy any more than we might have that someone, someday may be poring over our notes and wondering about our lives?

Every time I see the 1843 11" Merz und Mahler telescope I am reminded of my Great-Great-Great-Great-Great-Grandfather, John Schiff. He came to America and Cincinnati in 1836. He lived a successful life, served his state as a member of Congress and

enjoyed some business success.

Did he ever put his eye against the telescope's eyepiece and wonder aloud at the rings of Saturn? Very likely.

Could he imagine that roughly 150 years later, in 2007, his great-great...grandson named John Schiff would be looking through that same telescope at the Rings of Saturn?

I often hear from volunteers what an honor it is to serve an institution with such a valued and important history. I agree wholeheartedly.

The Observatory is a direct link to the past. A place where the philanthropists and volunteers responsible for its vitality are still remembered by more than just their fading script in a leather volume or their signature on a framed document. They are a part of the magnificence of the institution itself.

Today, we are thankful for the many volunteers that commit so much to the Observatory. Your efforts directly shape the Observatory's future. You are its magnificence and vitality. You are the history that will be remembered 135 years from now when our great city of Cincinnati celebrates the Observatory's 300th anniversary. We thank you, and so will your future generations.

May's Trivia Question

By Greg Huber

What was the name of the secret project that bought Dr. Werner Von Braun and his rocket team to the United States after WWII?

Last Month's Question

What was the original name for the Johnson Space Center in Houston where the astronauts are based?

The Answer

The name of the Johnson Space Center before it was called Johnson Space Center, was the Manned Spacecraft Center, or MSC for short.

Did You Know....

In the past decade astronomers found 200 new planets orbiting distant stars, and not one of them looks like Earth.

Humanities @ The Observatory

By Craig Niemi

The Cincinnati Observatory Center complements its astronomy programs with an annual lecture series: "*Humanities @ The Observatory*." The lectures are a natural extension of the Observatory's efforts to highlight its historic setting and broaden its audience. The lectures will focus on subjects that may be historic or philosophic in nature, but are somehow linked to the history of Cincinnati and/or science. The next lecture will be:

The History of Computing at UC: the Astronomy Twist

The talk will be given by **Russell McMahon** of the University of Cincinnati, College of Applied Sciences, Information & Technology,

Come to the Observatory for the talk at 7:30 pm on Tuesday, May 8th.

Cost: \$10 (\$5.00 students & Observatory Members)



Russell McMahon is an assistant professor and assistant department head of information technology in the [College of Applied Sciences](#). He received his BS (Physics) from the University of Cincinnati in 1976 and his MEd (2nd Science Education) from the University of Cincinnati in 1981. Ten members of the McMahon family have graduated from the University of Cincinnati, one will graduate in June and two more are to begin at UC in the Fall. And two are UC professors.

For information and reservations, call: (513) 321 - 5186.

Stargaze in Kenton County

By John Ventre

Come and enjoy a summer star gaze in Banklick Woods Park in Kenton County on Saturday, May 19. Jeff Hutton will present a program "(Our) Stories in the Skies" Explore how our hopes and fears are projected onto the night sky (and everywhere else). We'll see faces everywhere! Appearances can be deceiving, and often are. Come and see the Big Dipper in 3-D.

The program will be presented in the Public Works Building at 8:30 p.m. and the star gaze (weather permitting) will start about 9:30 p.m. The Midwestern Astronomers will be supporting this star gaze by bringing their telescopes. Additional telescopes are needed!

Directions to Banklick Woods Park: From the I-275 and Turkeyfoot Road intersection, go south on Turkeyfoot Road for approximately 4 miles. You will come to a 5-way intersection. Caution--this intersection is under construction. Turn left (east) on Independence-Station Road, immediately south of the Sunoco station at the intersection. Go approximately two miles to Banklick Wood Park on your left, after passing the Kenton County Golf Course.

Venus Days at the Observatory

May 18-19, from 8:30-10:30 pm

Is it a plane? Is it a UFO? No, that bright thing in the west is Venus!

Venus Days include programs about our closest planetary neighbor and tours of the Observatory. Then, see the clouded, shrouded goddess of beauty for yourself through our historic telescopes along with the Moon and Saturn (weather permitting).

\$5 for adults, \$3 for children.

Reservations are recommended. For further information or to make reservations, please call 513-321-5186.

UC Communiversity Class at the Observatory

By John Ventre

The University of Cincinnati Communiversity will offer a class on Venus on Tuesday, May 22nd, 8-10 pm at the Observatory. Check out the hottest of the terrestrial planets! Find out how remarkably different Venus is from Earth, despite the fact that it has been known as the earth's "twin." From our vantage point, Venus is brighter than any other planet or even any star. If weather permits, you'll see our fascinating nearest neighbor through the telescope. \$15 fee.

Call the UC Communiversity 513-556-6932 to enroll in course #1204-01.

Dying Star Bursts in Near-Perfect Symmetry



The Red Square is created by a dying star spewing its innards from opposite poles into space. It ranks among the most symmetrical objects ever observed.

Seen in the infrared, the nebula resembles a giant, glowing red box in the sky, with a bright white inner core. A dying star called MWC 922 is located at the system's center and spewing its innards from opposite poles into space. (A nebula is an interstellar cloud of gas, dust and plasma where stars can both emerge and die.)

"This spectacular event is the death of a star," said study team member James Lloyd of Cornell University.

Star Burps Then Explodes

Tens of millions of years ago, in a galaxy far, far away, a massive star suffered a nasty double whammy. Signs of the first shock reached Earth in 2004, when the star was observed letting loose an outburst enormous and bright. The star survived for nearly two years, however, until it blew itself to smithereens as a supernova. <http://spaceflightnow.com/news/n0704/04burp/>

Did You Know....

Neptune was once nearly a billion miles closer to the Sun, then was gravitationally nudged outward by the Kuiper Belt

GPS Significantly Impacted By Powerful Solar Radio Burst

During an unprecedented solar eruption last December, researchers at Cornell University confirmed solar radio bursts can have a serious impact on the Global Positioning System and other communication technologies using radio waves.

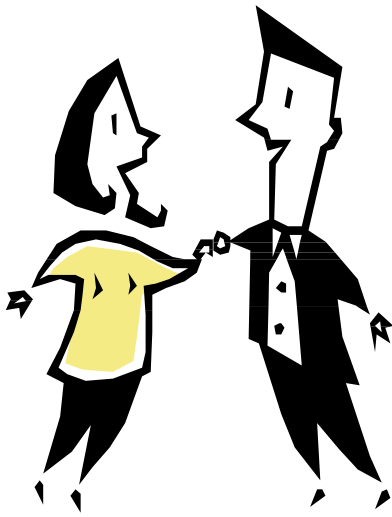
<http://spaceflightnow.com/news/n0704/04gpsun/>

Binary Asteroid Revealed As Twin Rubble Piles

Roping together observations from the world's largest telescopes as well as the small instrument of a local backyard amateur, astronomers have assembled the most complete picture yet of a pair of asteroids whirling around one another in a perpetual pas de deux.

<http://spaceflightnow.com/news/n0704/04doubleasteroid/>

Welcome New and
Renewing FOTO and
COC Members!

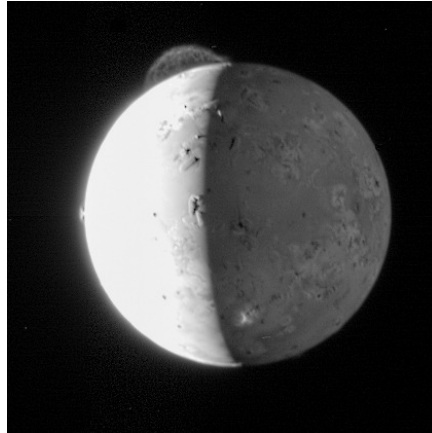


Dave & Peggy Bosse
Tim Decker
Jean Durbin
Robert & Ann Flanagan
William Hopple III
Juliet Jones
Nick Lloyd
Perrin March III
Denise Mustain
Scott Naylor
Frederick Sanborn
Charles Schiff
Jeffry Spain
Mike Strobel
Kara Uhl
John Ventre
Nathan Whitsett
Everett & Margie Yowell

Did You Know....

Some Kuiper Belt objects are called "scattered-disk" objects as they have been tossed into highly elliptical orbits, often at a sharp angle to the rest of the solar system. Surprisingly, these include some of the larger Kuiper Belt objects including Xena, which is larger than Pluto

Alien Volcano



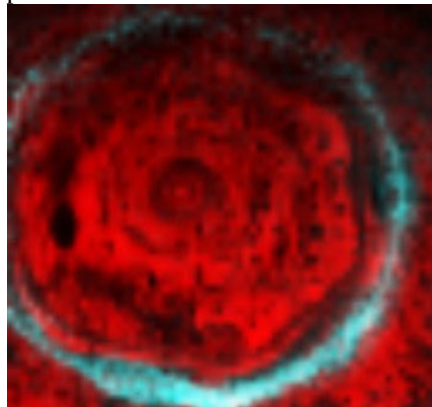
Andy Cheng has seen it all. The scientist from Johns Hopkins' Applied Physics Lab has worked on the Galileo mission to Jupiter, the Cassini mission to Saturn, the NEAR mission to asteroid 433 Eros and many others during his decades-long career. Alien vistas are old hat to him.

But even he was amazed when he laid eyes on this photo of Io's Tvashtar volcano, taken Feb. 28th by the New Horizons spacecraft:

Omigod! I can't believe it. "That was my first reaction," says Cheng. "The LORRI image of the Tvashtar plume is the best and most detailed plume image that any of us -- including longtime Jupiter experts -- have ever seen." http://science.nasa.gov/headlines/y2007/09mar_alienvolcano.htm?list739819

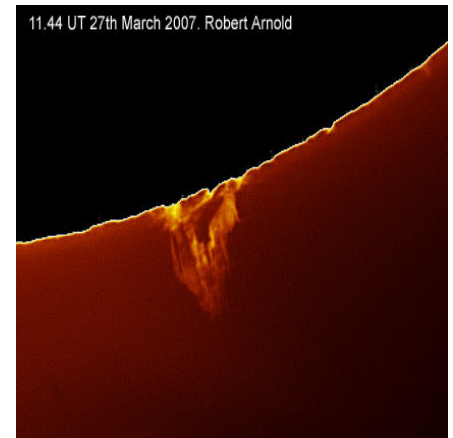
A Hexagon on Saturn

The Cassini spacecraft has photographed a bizarre geometrical figure encircling Saturn's north pole: a hexagon. NASA scientists say they've never seen anything like it on any other planet.



The formation of the giant hexagon is a mystery you can ponder tonight under the stars. After sunset on March 28th, Saturn rises in the east beautifully close to the Moon. This makes Saturn easy to find and enjoy. Even a small telescope will reveal the planet's broad rings and largest moons. Take a look! <http://spaceweather.com>

Prominence Alert



11.44 UT 27th March 2007. Robert Arnold
A large prominence was caught dancing over the Sun's southwestern limb.

Word of the Month

By Greg Huber

"Sulcus"

March Word of the Month: "Equinoctial colure"

The Answer

The Equinoctial Colure is the hour circle that passes through both celestial poles, the vernal and autumnal equinoxes.

Mira Variable

400 light years from Earth, a red giant named Mira has swelled larger than the orbit of Mars. The pulsating star is now at maximum brightness and can be seen with the naked eye after sunset. Brightness: 2nd magnitude, similar to the stars of the Big Dipper. Take a look, you may be seeing the future. Our own Sun could become a Mira-variable when it evolves to red gianthood five billion years from now. Visit <http://spaceweather.com> for sky maps and more information

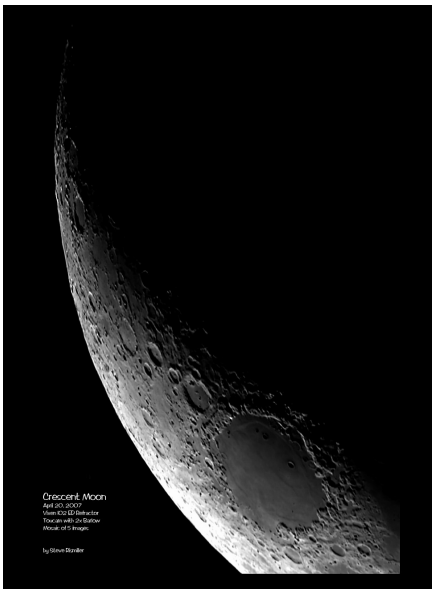
April's Thin Crescent Moon

By Steve Rismiller

On April 17, I tried for the young moon but was unsuccessful. The following night, I did see the moon through broken clouds but did not have the scope or camera. So on the evening of April 20, I set up my Vixen 102 ED refractor to observe the thin crescent moon. Seeing was quite good, so I did some imaging.



All images were taken with the 102 ED refractor, f/6.5. I used the toucam with an IR filter for the prime focus as well as the barlow projections. The images were collected as 10 second avi files using K3CCD Tools. In 10 seconds I usually get 145 images. I then open Registax and select the best of these images to stack. I usually end up with 20 to 40 images that look good to me. These stacked images are saved in tiff format and opened up in Photoshop. I drag the images into place and flatten the image and save as the jpg you see here.



Looking at some of the lunar charts I have, I can easily see 3 to 4 mile wide craters in the close up mosaic. One of the telescope image calculators I have indicate that with 4 inches of aperture,

the smallest crater should be 2.7 miles in diameter. I guess I should find a more detail lunar chart and start looking!



Crescent Moon
April 20, 2007
Vixen 102 ED Refractor
Toucam with IR Filter
Stack of 40 Images
By Steve Rismiller

For Sale

Orion AstroView 90mm EQ Refractor. Includes Sirius Plossl 10mm & 25mm eyepieces; equatorial mount; 1.25" rack-and-pinion focuser; 90-degree mirror star diagonal; 6x30 finder scope; and padded carrying case. \$299. Celestron ExploraScope 80mm Newtonian Reflector. Includes 6mm, 12.5mm, & 25mm eyepieces; stand; and carrying belt. Nice first scope for kids. \$69. Selling separately or get both for \$350. Call Steve at 859-331-3151. stevehegge@excite.com.

Did You Know....

Even though Kuiper Belt objects have very weak gravity, they are able to pair up with other objects due to the gravitational drag generated by many other much smaller Kuiper objects.



One of the largest images ever taken by the Hubble of the Crab Nebula shows six-light-year-wide expanding remnants of a star's supernova explosion.

COC Donates Computer Equipment

By Tom Kloecker

Recently, the COC donated obsolete and unused PC equipment to the Cincinnati Computer Cooperative in Woodlawn. Cincinnati Computer Cooperative, a 501C3 non-profit organization, refurbishes and recycles computers to benefit area schools, non-profits and those in need. Their refurbished computers and recycling program provides for the technology needs of schools and public charities while solving the problem of equipment disposal for businesses and individuals upgrading their office systems.

They will accept any PC or Mac system or components. They do not accept items such as Unix workstations, copiers, or VHS/TV items. More information is available at <http://www.cincinnati.computercooperative.org>.

If you have dust gathering PCs and do not get to Woodlawn, let me know and perhaps I can get it from you when we are both at the Observatory.

Springtime in Cincinnati



This is THE END