

Observatory e-News

December 2009
513-321-5186

Published by the Friends of the Observatory
www.cincinnatiobservatory.org Bill Cartwright, editor

Volume 20 No. 12
wcartw@aol.com



Coming Up At The Observatory....

Dec. 3, 6 pm, FOTO Volunteer Appreciation Supper. See page 2 for more information
Dec. 4, 7 pm, FOTOKids
Dec. 10, 7 pm, Astro Thursday
Dec. 11, 7 pm, Astro Friday
Dec. 13, 1-4 pm, Sunday History Tours
12/13, 6:30 pm, Luminaria Night
12/14 7:30 pm *Historic Homes & Sites* meeting
12/16 7 pm 3rd Wednesday Lecture
12/17 7 pm Astro Thursday
12/18 7 pm Astro Friday
12/21 7 pm, The 2012 Hoax
12/22 7 pm The 2012 Hoax
12/26 7:30 pm Astro Saturday
12/27 1-4 pm Sunday History Tours
01/2/2010 7 pm Astro Saturday
01/05/10 7 pm Intro to Astronomy (3 classes)
01/07/10 7:30 pm FOTO Monthly Meeting
01/08/10 7 pm FOTOKids
01/21-1/24 8 pm Marsapalooza (4 nights)
Call 513-321-5186 or visit www.cincinnatiobservatory.org for more information

The Word from FOTO's President Zoller

A "Friday the 13th" supposedly portends ominous events, and this time it has lived up to its reputation with the premier of the ultimate doomsday movie, *2012*. In case you haven't heard, the world as we know it is due to end on December 21, 2012 based on the premise that the Mayan calendar predicts the end of time when the current Long Count time cycle (Baktun 13) runs out. Polar shifts, asteroid collisions, earthquakes and tsunamis, Oh my!

Of course, this is just one in a long line of "end time" predictions. The 1910 appearance of Halley's Comet brought widespread panic when it was discovered that the Earth might pass through the tail of the comet, flooding the atmosphere of the Earth with poison. There was the recent Y2K computer glitch that was supposed to cause civilization to collapse. This was followed by an alignment with Jupiter in May 2000 that was supposed to cause the

New Madrid fault to slip and wipe out the Midwest. And who can forget the spaceship hiding behind Comet Hale-Bopp?

It would be one thing if the movie and the "theories" it is based on were understood by the public to be the fantasy it is. Unfortunately, a large number of people actually believe this stuff is based on facts. Instead of worrying about over-hyped imaginary time cycles and planetary alignments, our efforts would be better spent addressing real issues that face our world.

NASA is currently being swamped with calls from people wanting information about the 2012 predictions. The Observatory staff has received numerous calls from the public. Our outreach astronomer, Dean Regas, recently appeared on WNKU to debunk the myths surrounding the 2012 "predictions." The Observatory is planning a series of programs about 2012 based on actual *scientific* information. If you are asked by friends or relatives about 2012, encourage them to contact the Observatory or attend one of our programs. Better yet, plan to visit the Observatory on December 22, 2012.

FOTO's Meeting

By Dale Zoller

There will not be a regular FOTO membership meeting for December. Instead, the FOTO Volunteer Appreciation Dinner will be held Thursday, December 3, 2009 at the Observatory. Members plus one guest are covered at no cost. Additional guests are \$7 each. You can make reservations by contacting **Rebecca Shundich** at 513.533.3449 or rebecca.shundich@cchmc.org. The building opens at 6 pm with *dinner starting at 6:30 pm* (note difference from normal meeting time).

November FOTO Meeting Highlights

Rebecca Shundich announced the Volunteer Appreciation Dinner, Thursday Dec. 3 at 6 PM, Herget Building. Each member can bring one guest free of charge.

Jim Groen and Steve Rismiller discussed the idea of putting a web cam in the telescope in the Cone Room, and transmitting the images to a screen outside on the grounds. This would allow viewing by many people at one time, and allow viewing by people who cannot climb the steps to the domes. There was general approval of this idea, and Steve was put in charge of implementing it.

The evening's presentation, "Dehoaxing the Moon Hoax" was given by Terry Endres. The program refuted the various claims made by the skeptics who claim the landings didn't happen.

COC Representative report: Scott Gainey reported that the COC Board quarterly meeting was held on Nov. 4. The budget for the next year is balanced. The grant that

Dean Regas and Lynn Marsteller wrote for NASA funding to extend the Galileo Telescopes program has been approved. The program will award 20 telescopes per year, and train the participants to use them and to do astronomy outreach.

John Ventre announced that Dr. Alan Schanzle made a substantial donation to the COC. Dr. Schanzle was a graduate student here under Paul Herget, and gave the FOTO meeting lecture last month. He was favorably impressed by the renovation of the Observatory and by the positive energy of the volunteers and Observatory staff.

Library Committee: Frank Huss projects that the cataloguing will be done by the Spring Equinox.

Scott Gainey announced that the new CCD camera, being custom built for the 16" Alvan Clark telescope by SBIG, is almost finished. This camera will be used for the FOTO Research Group's variable star and exo-solar planet work.

Michelle Gainey asked for volunteers to head up and/or participate on the new FOTO committees, which are required by the new bylaws.

FOTO Volunteer Appreciation Dinner

The FOTO Volunteer Appreciation Dinner will be held Thursday, December 3, 2009 at the Observatory. Members plus one guest are covered at no cost. Additional guests are \$7 each.

You can make reservations by contacting **Rebecca Shundich** at 513-533-3449 or rebecca.shundich@cchmc.org. The building opens at 6 pm with *dinner starting at 6:30 pm* (note difference from normal meeting time).

It Was John Ventre's Day in Cincinnati



There was a Proclamation from the Mayor of Cincinnati and an all around good time at the Observatory.



John's family members

See details and photos of this event see pages 5 and 6.

FOTOkids Meeting

By Dean Regas

The next FOTOkids meeting will be at the Observatory on Friday, December 4, at 7 pm (note the earlier time).

It is time for the annual FOTOkids Astro-Trivia Quiz Night. Dean Regas has compiled a list of astronomy trivia questions from members and the internet and is ready to challenge your knowledge of the heavens. Valuable (not really) prizes will be awarded to the winners. Also be sure to bring your completed Galileo Pages for more valuable (not really) prizes.

If you would like to submit questions (and answers) for the Quiz or have any questions, please email them to Dean at fotokids@fuse.net

Craig's Corner

By Craig Niemi, Observatory
Executive Director

I guess you could consider it a "Good Housekeeping Seal of Approval" or maybe an early Christmas present. Lyn had no sooner started in her position as the Observatory's Development Coordinator when a grant opportunity came across her desk. Faced with a tremendously tight deadline she and Dean wrote and submitted an application to NASA to fund the continuation of our very successful "40 Galileos Project". Writing grants can be stressful enough but remember NASA is a government agency so this meant also working with the dreaded IRS and various procurement offices.

We just recently received word from NASA that the proposal was accepted! "Future Galileos" provides partial funding to extend the current *Galileos Project* for another 3 years. Each year we'll train and mentor 20 additional astronomy ambassadors who will spread an appreciation and understanding of the universe to schools, libraries, civic groups and the general public. At the end of the 3 years we'll have 100 Galileos easily serving tens of thousands throughout the community. Already in its first year "40 Galileos" has served over 6,500!

While this is great news for the Observatory, this type of funding carries considerable restrictions. The Development Committee recognized from the start the potential trap that many non-profits fall into of creating new and often times unsustainable programs just to bring in grant money. Based on the success and response from the community "Future Galileos" was the perfect fit for a grant. The funds can only be used for specific program needs and does not cover

ongoing support and the general operations of the Observatory. Which is why your memberships and unrestricted gifts are so important to the continued success of the Observatory! While we will continue to look for appropriate grants you are the greatest stakeholders of the Observatory and make possible the day-to-day operations and you will ultimately secure the future of this landmark. Our thanks to Dean and Lyn, and all of you, for your hard work, generous contributions and selfless volunteerism.

Speaking of our volunteers, Sunday November 22nd was officially declared "**John E. Ventre Day**" by Cincinnati Mayor Mark Mallory. John has given so much to the Observatory, to the Cincinnati Astronomical Society and to the astronomy community overall that we hope that this tribute in some small way repays him for all his great deeds. John personifies the volunteer spirit that really allows the Observatory to serve the community the way we do. Thanks John!

We hope you'll join us at the Observatory on the 13th for the annual **Mt. Lookout Luminaria Night and Observatory Open House**. There will be free shuttles to and from the Square, carolers and refreshments at the Observatory, tours and hopefully stargazing. The gift shop will be open for all your holiday shopping needs. The fantastic COC Calendar is the perfect gift for everyone on your list!

With the NASA grant in place and the momentum from the International Year of Astronomy we'll be looking ahead to more successes in 2010. (*Hard to believe it was almost a year ago when we all crammed into the Mitchel dome to kick off IYA for all of the US.*) We still face challenges but we're confident that with your help the Observatory will continue to serve

the Greater Cincinnati community as one of its finest educational and historic institutions.

Our best wishes to you and yours this holiday season.

Recycle Your Old Telescope

By Scott Gainey

We are starting a new program in which we will acquire used telescopes, correct any problems they may have and then place them with prequalified candidates.

If you or someone you know would like to donate a telescope to this recycling program please contact Scott Gainey at 513-289-7022 or e-mail at scottgainey@msn.com.

The Planning Meeting

By Dale Zoller

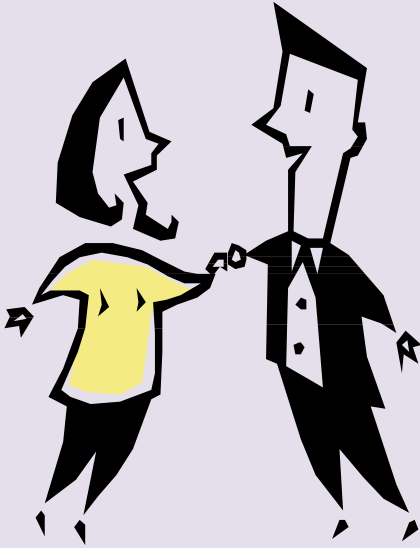
There will not be a FOTO Planning Meeting in December. The next FOTO Planning meeting is scheduled for **Thursday, January 21, 2010** at 6 pm at the **Observatory**. The meeting generally lasts a couple hours. The Planning meetings are open to all FOTO members. We encourage your participation in planning future FOTO activities.

Did You Know....

Astronomers say NASA's Fermi telescope has recorded the most powerful radiation blast from deep space ever detected.

This image provided by the space agency shows the orange and yellow afterglow from the burst. Astronomers determined that the explosion had taken place 12.2 billion years ago.

Welcome
Renewing & New FOTO
and COC Members!



Dobbs Ackermann
John Blanton
Donald Campbell
Gene Chung
Bala Corattiyil
Adam Crosby
Raymond & Mary Dasenbrock
Linda & John Deatruck
Donald & Katherine Durack
Ralph Goldsmith
Dan Haehnichen
Robert Hale
Michael Heflin
Ben Hemingway
Greg Huber
Robin Legg
Dominic Lovaglio
Timothy Mathile
John McHugh
Minnie Mehuron
William & Kathleen Moorman
John & Karen Noble
Jay & Therese Paul
Terry Powell
Pamela Reising
Melody Richardson
Greg Ries
Charles Seibert
John Shepherd
Barbara Stough
Thomas & Mary Syzek

Rita Thomas
Naomi Tucker Gerwin
Kenneth Wellington
Dean Wochner

Wednesday Lecture Series

By *Craig Niemi*

Wednesday, December 16th
7 pm

Dr. Scott Nutter, from Northern
Kentucky University "**CREAM;**
The Art of Scientific Ballooning"

Free to members and open to the
general public for just \$5.

Reservations are suggested.
Call 513-321-5186 to RSVP.

In 2010 the Wednesday Lectures
will take a hiatus and in its place,
FOTO member and UC Instructor
Dave Bosse will be offering a
continuing astronomy course for
members. Dave's class will meet on
the 2nd Monday of the month
beginning in February.

Star Parties

By *Scott Naylor*

The next scheduled Stonelick Star
Parties will be **Saturday,**
December 12 and December 19.

For directions or for more
information phone Scott Naylor at
513-575-5556.

Word of the Month

By *Greg Huber*

"Residuals"

The Word for November
"Scatter ellipse"

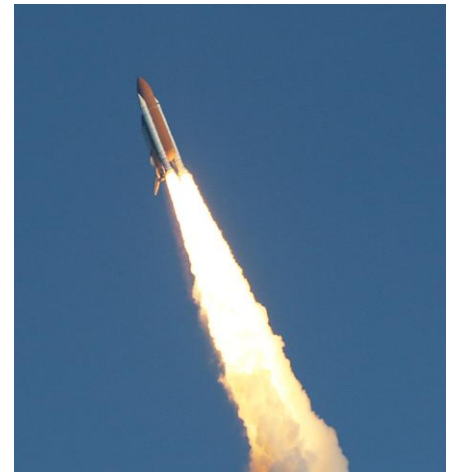
The Answer

The scatter ellipse is the elongated
area on the ground where fragments
of a meteorite fall.

"3...2...1...Lift Off"

By *Steve Rismiller*

You probably are wondering why
there is a picture of the space shuttle
racing into orbit. The only link to
the Sun is that it was a sunny day on
November 16th at the Kennedy
Space Center. Sue and I were there
to watch the shuttle rise from the
launch pad and rumble through the
sky.



We observed the launch from
Parrish Park on the causeway just
east of Titusville. We and hundreds
of people from around the world
were about 11.3 miles from the
action at the launch pad. Using my
102ED telescope, I got the image
above around 20 seconds after lift-
off. A few seconds later, the rumble
of the rocket reached us. That was
impressive! The loud, thundering,
waffling sound could be felt in our
 chests, giving us the sensation of the
power we were seeing. A few
seconds later, we saw the spacecraft
shed its two solid rocket boosters.
In the telescope it looked like two
white, long handled, paint brushes
dipped in orange paint being
discarded from a single white point
source of light. Seconds later the
show was over as the shuttle raced
above the clouds.

You should plan to see a shuttle
launch since there are only five left.

Trivia Question

By Greg Huber

What was the top speed for the Lunar Rover?

November's Question

Who were the first astronauts to carry out a space walk from the space shuttle?

The Answer

The First Shuttle astronauts to do a spacewalk were Story Musgrave and Don Peterson.

Dean and Mike at WLW



By Marsie Newbold

Here's a photo of Cincinnati Observatory Outreach Astronomer **Dean Regas** with 700WLW's Mike McConnell with the "Official Cincinnati Observatory/700WLW Telescope." Dean, who is 700WLW's "Staff Astronomer", presented it to Mike live on the "Midday with Mike" program on Friday, November 13, 2009 while promoting our "Shooting Stars" events.

The telescope is now a permanent fixture in the 700WLW studios. This is just one more example of Dean's commitment to educating the public about the science and wonders of astronomy! It is through these appearances that many people who have never visited (or heard about) the Cincinnati

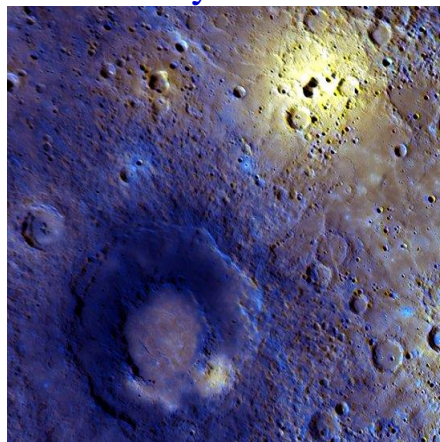
Observatory find out about our wonderful facility and programs.

That week he also appeared on "The Dean & Randi" show on WARM 98, WXIX-TV 19's "19 in the Morning" program, WNKU, WVXU, WKRC-TV 12's "Good Morning Cincinnati" program and published his monthly column in the Cincinnati Enquirer.

Yes, Virginia, There IS Water on the Moon!

The argument that the Moon is a dry, desolate place no longer holds water. Scientists revealed data from NASA's LCROSS mission indicating that water exists in a permanently shadowed lunar crater. http://science.nasa.gov/headlines/y2009/13nov_lcrossresults.htm?list739819

Hidden Territory on Mercury Revealed



Nov. 3, 2009: The MESSENGER spacecraft's third flyby of the planet Mercury has given scientists, for the first time, an almost complete view of the planet's surface and revealed some dramatic changes in Mercury's comet-like tail.

The new images remind us that Mercury continues to hold surprises. http://science.nasa.gov/headlines/y2009/03nov_hiddenterritory.htm?list739819

It Was John Ventre's Day in Cincinnati



By Dean Regas & Craig Niemi

The Cincinnati Observatory presented, former director and full-time volunteer John Ventre with the "Diffusion of Useful Knowledge Award" on November 22, 2009.



John has been instrumental in inspiring a generation of visitors to the Cincinnati Observatory and led the effort to save the Observatory from the wrecking ball.



John's family members

His tireless dedication has preserved the history of this grand institution and helped expand the education programs offered around the city.

John has also acted as a mentor to the educators at both the Cincinnati Observatory and Cincinnati Astronomical Society.

The award pays homage to John's forerunner and the founder of the Cincinnati Observatory, Ormsby MacKnight Mitchel. Mitchel was America's first popularizer of astronomy. The founding of the Cincinnati Observatory in 1842 arose from Mitchel's lectures for the Cincinnati Society for the Diffusion of Useful Knowledge. The award seemed most appropriate and well deserved to Ventre - the long-time popularizer of astronomy in this century who also has tremendous reverence for American astronomical history.



Craig Niemi reading the Mayor's Proclamation

Even Mark Mallory, the Mayor of the City of Cincinnati got into the act and issued this official proclamation:



John holds the Proclamation

Whereas, John E. Ventre first visited the "Birthplace of American Astronomy," the Cincinnati Observatory Center in the late 1940's while on a Boy Scout field trip, awakening a love of astronomy that continues to this day.

Whereas, John E. Ventre served as the Cincinnati Observatory Center's first Administrator and Director, becoming a driving force in the efforts that saved the facility from being closed.

Whereas, today John E. Ventre continues as Staff Historian of the Cincinnati Observatory, working tirelessly to restore the Cincinnati Observatory Center to a working 19th Century astronomical observatory.

Whereas, John E. Ventre is a self-taught astronomer with an unparalleled knowledge of the moon which he has shared with thousands of students by teaching at the University of Cincinnati and lecturing at the Cincinnati Observatory Center.

Whereas, it is due to John E. Ventre's passion, vision and love of astronomy that the Cincinnati Observatory Center is the world-renowned institution that it is today offering public programming and providing educational opportunities through astronomical viewing, classes and workshops as well as tours, displays and presentations to the citizens of the City of Cincinnati.

Whereas, John E. Ventre has earned the love, respect and admiration of his friends, family, colleagues and students.

Whereas, John E. Ventre has made it his mission to share the wonders of the Universe with the Citizens of the City of Cincinnati.

Therefore, I, Mayor Mark Mallory hereby proclaim, Sunday, November 22, 2009, John E. Ventre Day in the City of Cincinnati.

And from **Craig Niemi**, the Director of the Observatory came these words: "As a small token of appreciation for all Mr. Ventre has done for the Observatory, the Astronomical Society, as well as for astronomy education throughout the region, Mayor Mark Mallory proclaimed Sunday, November 22nd, as *John E. Ventre Day in Cincinnati.*"



Craig and Valerie Niemi

"Those who know John are well aware of his tireless energy and limitless passion for astronomy. The Observatory would not be the amazing place it has become without his years of selfless volunteer service. He inspires others every day to make the community a better place."

The Observatory Online

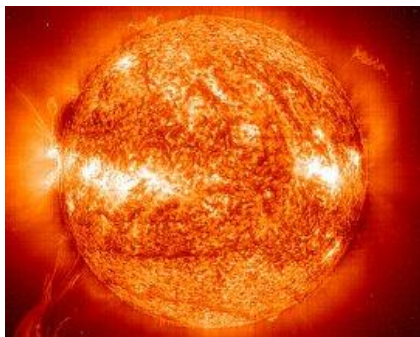
By Craig Niemi

You can now quickly, easily and securely renew your membership via the Observatory's website. www.cincinnatiobservatory.org/becomeamember.html

Be sure to bookmark the Calendar and *What's Coming Up* pages to stay current with Observatory events.

www.cincinnatiobservatory.org

The Sun's Sneaky Variability



Every 11 years, the sun undergoes a furious upheaval. Dark sunspots burst forth from beneath the sun's surface. Explosions as powerful as a billion atomic bombs spark intense flares of high-energy radiation. Clouds of gas big enough to swallow planets break away from the sun and billow into space. It's a flamboyant display of stellar power.

So why can't we see any of it?

Almost none of the drama of Solar Maximum is visible to the human eye. Look at the sun in the noontime sky and—ho-hum—it's the same old bland ball of bright light.

"The problem is, human eyes are tuned to the wrong wavelength," explains Tom Woods, a solar physicist at the University of Colorado in Boulder. "If you want to get a good look at solar activity, you need to look in the EUV. http://science.nasa.gov/headlines/y2009/27oct_eve.htm?list739819

Asteroid Skims by Earth

Asteroid 2009 VA barely missed Earth on November 6th when it flew just 14,000 km above the planet's surface. That's well inside the "Clarke Belt" of geosynchronous satellites. If it had hit, the ~6-meter wide space rock would have disintegrated in the atmosphere as a spectacular fireball, causing no significant damage to the ground.

2009 VA was discovered just 15 hours before closest approach by astronomers working at the Catalina Sky Survey.

It went pole-to-pole in about 6 hours and was bright enough to be seen in a small telescope or large binoculars.

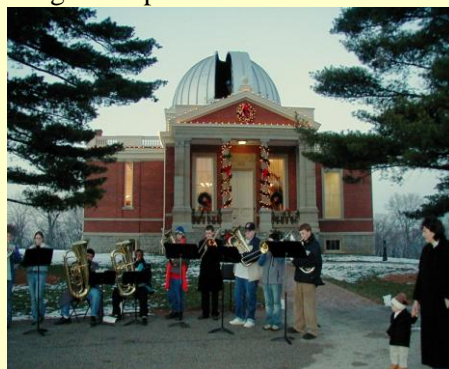
Luminaria

Night Lights at the Observatory

December 13, 6:30-8:30 pm

By Dean Regas

Join us for the 34th year of this Mount Lookout tradition. As the neighborhood lights up the streets, the Cincinnati Observatory will open its buildings and telescopes for the general public.



Cruise from Mount Lookout Square to the Observatory for carolers, stargazing, a gift shop, and hot drinks. Perfect for all ages.

Cost: Free

No reservations required. For more information visit: www.cincinnatiobservatory.org or call 513-321-5186.

Did You Know....

Recent flybys of the Messenger Spacecraft have discovered an abundance of iron on the surface of Mercury.

Observatory Receives Award from NASA

By Dean Regas

We are proud to announce that the Cincinnati Observatory Center program *Future Galileos* has been selected by NASA for funding over three years.

Lyn Marsteller and **Dean Regas** submitted a proposal to continue the wildly successful 40 Galileos program – to award 20 more telescopes per year to deserving schools and communities for astronomy outreach over the next 3 years.



Bob Schroeder is a teacher at St. Antoninus Elementary and one of 40 winners of the 40 Galileos program in 2009

NASA wrote of the proposal's scientific and intrinsic merit and labeled this project, "a gem." This is a tremendous boost for the Observatory from NASA to continue this notable and exciting program. The Observatory had always hoped that this project would expand with time and we are thrilled by this national support.

Cleaning the Merz and Mahler Lens

By John Ventre

The 11-inch, 1845 Merz and Mahler telescope lens required cleaning. A recent attempt to clean the front surface of the lens resulted in the cleaning fluid being deposited between the two lens; this deposit had to be removed since it produced an objectionable halo around all celestial objects. The last time that the lens in its brass cell was removed from the telescope, disassembled and cleaned was in 2001, when **Paul Nohr** accomplished the task.



Dick Wessling examining the newly cleaned Merz & Mahler lens in his optical shop.

Fortunately **Chuck Strubbe** video recorded the 2001 cleaning process; therefore we had an excellent idea on how to remove the lens from its wooden tube, disassemble and clean it. **Dean Regas** and **Scott Gainey** were present when the lens was removed from the tube. **John Ventre** took the lens in its brass cell to **Dick Wessling's** Pines Optical Shop where he performed the

delicate task of removing the two glass lenses from the brass cell, clean and inspected them, and then reassembled the assembly.

Scott Gainey, Dean Regas and Kirk Schrotel assisted in the installation of the cleaned lens on the telescope tube. While the lens was off the wooden tube the inside of the tube was inspected. This was the first time since 2001 that we had access to the inside of the tube.



Kirk Schrotel feigning despair since he cannot use a soda straw to measure the inside diameter of the wooden tube to within 0.001 inch.

We hope that you soon will have the opportunity to use the newly cleaned lens, since it now produces nice and sharp images. Many thanks to the crew who accomplished the project!

Did You Know....

Glycine, an amino acid used by living organisms to make proteins, has been found in a comet. This supports the idea that the fundamental building blocks of life are prevalent in space, and strengthens the argument that life in the universe may be common rather than rare.

'Vampire Star': Ticking Stellar Time Bomb Identified

Using ESO's Very Large Telescope and its ability to obtain images as sharp as if taken from space, astronomers have made the first time-lapse movie of a rather unusual shell ejected by a "vampire." <http://www.sciencedaily.com/releases/2009/11/091117094927.htm>

A Tale of Planetary Woe



Once upon a time — roughly four billion years ago — Mars was warm and wet, much like Earth. Liquid water flowed on the Martian surface in long rivers that emptied into shallow seas. A thick atmosphere blanketed the planet and kept it warm. Living microbes might have even arisen, some scientists believe, starting Mars down the path toward becoming a second life-filled planet next door to our own. But that's not how things turned out. http://science.nasa.gov/headlines/y2009/06nov_maven.htm?list739819

The 2012 Hoax.... Now, the **Real Story**

A Class at the Observatory

December 21 and 22 at 7 pm

By Dean Regas

The world will not end on December 21, 2012!

Forget what you read on websites. Don't believe the Hollywood blockbuster movie.

The Ancient Mayans knew great things about astronomy, could predict eclipses and cycles of Venus. But their calendars predict neither gloom nor doom to come.

Led by the Outreach Astronomer, **Dean Regas**, this program will delve into the Mayan calendar and help you sort the facts from the fiction. He will demonstrate that there are no unique astronomical events happening that fateful day. We will also view the stars through our historic telescopes (weather permitting). Cost: \$10 per person

Advance reservations are required – space is limited. For further information or to make reservations, please call 321-5186

Two Earth-Sized Bodies With Oxygen-Rich Atmospheres Found, but They're Stars Not Planets

Astrophysicists have discovered two earth sized bodies with oxygen rich atmospheres; however, there is a bit of a disappointing snag for anyone looking for a potential home for alien or even a future home for ourselves, as they are not planets but are actually two unusual white dwarf stars.life.

<http://www.sciencedaily.com/releases/2009/11/091112141309.htm>

Watching a Cannibal Galaxy Dine



A new technique using near-infrared images, obtained with ESO's 3.58-metre New Technology Telescope (NTT), allows astronomers to see through the opaque dust lanes of the giant cannibal galaxy Centaurus A, unveiling its "last meal" in unprecedented detail -- a smaller spiral galaxy, currently twisted and warped. This amazing image also shows thousands of star clusters, strewn like glittering gems, churning inside Centaurus A..
<http://www.sciencedaily.com/releases/2009/11/091120084619.htm>

Stonelick State Park Stargazes

By Craig Niemi

The crisp, clear skies of winter are fast approaching and are jam-packed with celestial treasures. Stonelick stargazes are a great chance for members, teachers, scouts, and the general public to learn the night sky, learn how to use their telescopes while enjoying the company of Observatory members. Our thanks to Scott Naylor for all his work in making the Stonelick stargazes and big part of our member and public programming.

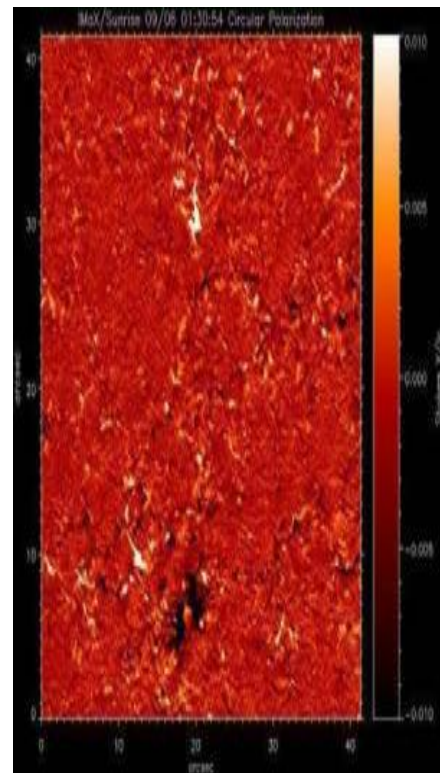
www.cincinnatiobservatory.org/stonelickblog.html

Close-Up Movie Shows Hidden Details in the Birth of Super-Suns

A new high-resolution time-lapse movie reveals the process of massive star formation with radio images a thousand times sharper and more detailed than any previously obtained.

<http://www.sciencedaily.com/releases/2009/11/091116131826.htm>

Bubbling Ball of Gas: SUNRISE Telescope Delivers Spectacular Pictures of Sun's Surface



The Sun is a bubbling mass. Packages of gas rise and sink, lending the Sun its grainy surface structure, its granulation. Dark spots appear and disappear, clouds of matter dart up -- and behind the are the magnetic fields, the engines of it all.

<http://www.sciencedaily.com/releases/2009/11/091111123608.htm>