

The Focal Point

The Atlanta Astronomy Club
Established 1947
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Editor: Tom Faber

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October General Meeting

by Keith Burns, AAC President

The next general membership meeting of the Atlanta Astronomy Club will be held on Friday, October 2nd, at White Hall on the Emory University Campus in Room 207. The meeting starts at 8PM. Refreshments and snacks will be served starting around 7:30PM. Directions to White Hall are at the bottom of this article.

The Program

The AAC's Paul Tankersley will give a talk titled "Narrow Band Imaging".

Directions to White Hall and Parking

Emory University is in the process of making improvements to the parking and roads. So for the next year, we will have to endure road construction plus the closing of some of our favorite parking spots. For now, the best places to park are the Peavine Parking Deck and the Fishburne Parking Deck. Fishburne Parking Deck is located on Fishburne Drive. When driving on North Decatur Rd, turn onto Dowman Drive (Dowman is now a one-way road into the campus now from North Decatur Road. Exit either by Oxford Road or Fishburne Drive) and then right on Fishburne Drive. You can also access Fishburne Drive from Clifton Road southbound on right before the N. Decatur Rd intersection. Note the Fishburne Parking deck is actually accessible from Fishburne Lane. When driving on Fishburne Drive, watch for the parking lot signs. The parking deck is located behind the Rich Building.

The Peavine parking deck is accessible from North Decatur Road. Take N. Decatur Rd to Oxford Road. Oxford is accessible from N. Decatur Road at two spots. If you are traveling east on North Decatur, then turn right onto Oxford. If traveling west, turn left onto Oxford. Take Oxford Road to the back entrance of Emory and turn onto Eagle Row. Take that to the Peavine parking deck. Note Peavine is across the street from the running track. You can also access Peavine from Clifton Road. Take Clifton south from

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Peach State Star Gaze 2009!

October 11-18, 2009

It's hard to believe that we are in our 3rd year at our new home at DAV, but here we are. The first 2 years were incredible, meeting new folks and seeing good friends. We are hoping that this year is the same, if not more. We have to say that it has been so much fun seeing all of the planning come together when get to the site and start the set up, and we are almost there.



The Deerlick Astronomy Village, located about 100 miles east of Atlanta and 50 miles west of Augusta, has some of the darkest skies in the state.



The AAC field at the DAV during the PSSG'08 - Photo by Tom Faber.

Continued on next page

Briarcliff Road. Turn right onto Asbury Circle. Asbury Circle changes names to Eagle Row. Parking deck will be on right side of road.

Directions to White Hall are on page 7. See the Emory web site for more details and directions: www.emory.edu

Upcoming AAC Meetings

November 6th, Speaker and Topic TBA.

December 5th (Saturday), Christmas Banquet and a talk about meteors by Dave Gheesling.

Peach State Star Gaze (Continued from page 1)

Several of our speakers have been confirmed as of this writing. They include Dr. Guy J. Consolmagno, S.J. Dr. Consolmagno is curator of the Vatican meteorite collection in Castel Gandolfo, one of the largest in the world. He will be speaking at the PSSG on Saturday, October 17th. Also speaking will be Paul Jones of Star Instruments, Michael Covington who has written several astrophotography books, supernova discoverer Tim Puckett, Dan Llewellyn, Chris Hetlage, and AAC Recording Secretary Richard Jakiel who will present a talk entitled "Earth: The First Two Billion Years." A full list of speakers, talks and times will be available at the PSSG.

We also have Jonn Serrie entertaining us with his awesome music under the stars Friday evening, October 16, so plan on being there for that. It is a must see. Micki's Kitchen will be there again this year making sure we are fed, and keeping the coffee hot and our brownie cravings going! OH, those brownies... We will have the door prize drawings on Saturday, and yes you have to be present to win.

Pre-registration for the PSSG ended on September 25 but walk-ins are welcome. For more information and updates please check the website - <http://www.AtlantaAstronomy.Org/PSSG>. If you have any questions, please feel free to email us at pssg@atlantaastronomy.org.

The PSSG Staff - Hope to see you there!

September General Meeting Minutes

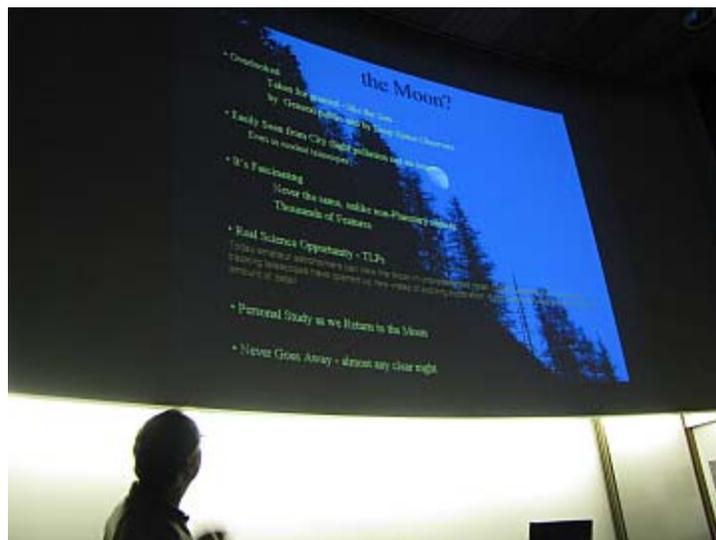
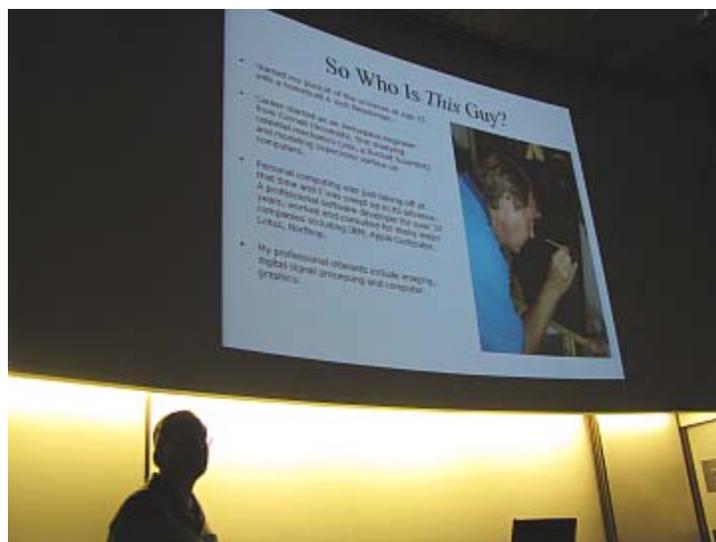
by Richard Jakiel, AAC Recording Secretary - Photos by Tom Faber

The September General Meeting of the AAC was held at White Hall of Emory University. Vice President and Observing Chair Dan Herron conducted the meeting in the absence of President Keith Burns. Over 40 AAC members and guests were in attendance. After a few brief notices, Dan let David Lumpkin (photo below) introduce the evening's speaker -

Robert Duvall of the Chiefland Astronomy Village. Bob (photos below) discussed in-depth the many features of his Lunar Observing software (*Lunar Discoverer and Lunar Pronouncer*). Unlike most computerized lunar atlases, Discoverer relies on a series of high resolution images taken at various phases for charting purposes. Close-up images of over 4000 craters, mare, mountains, rilles and other features are also included in the primary package. The long, often torturous names of many lunar features are properly pronounced with the simple positioning of the mouse. More details on these software packages can be found at: <http://www.astrohawk.com>

After the conclusion of the evening's presentation, Dan discussed the upcoming DSO's (Dark Sky Observing events), the Charlie Elliot Potluck Dinner (9/19) and GASP (Georgia Astronomy in State Parks) events. The AAC's main revenue generator and prime observing event - the 16th Peach State Star Gaze (October 11 - 18) was a major item on the business agenda. Tom Crowley talked about the upcoming Chiefland Fall Star Party held a month after (November 8 - 15) the PSSG. More details on both the PSSG and the Chiefland Party and will be forthcoming.

The meeting adjourned around 9:45 PM and many members and friends headed off to Athens Pizza for socialization, drink and tasty food.



CE Chapter August 22 Meeting Minutes

Article & Photos by Theo Ramakers, CEWMA Chapter Director

The meeting was called to order at 5:00pm by Chapter Director Theo Ramakers. The meeting was attended by 34 members and guests. Theo explained the agenda briefly and introduced Alesia Rast, our coordinator at Charlie Elliott and Paul Tankersley. Paul did donate a beautiful framed picture of the Pelican Nebula that he made in 2008 for display in the presentation room of the Visitors Center (photo below).



Subsequently Theo introduced Fred Bulls (photo below), the Lab Supervisor for Astronomy and Physics at the Georgia Perimeter College for his presentation “Back out of the Harbor”, about NASA’s efforts to get us back to the Moon and on to Mars.

Mr. Bulls took us back to the past in Space Exploration and after talking about the early NASA programs such as the Apollo, quickly went on to explain the third phase in NASA’s programs, the “Constellation” program to get back to the Moon and on to Mars. He then went on explaining the use of the Orion Capsule and the two main vehicles being developed to get us back to the moon and beyond, the Ares I and the Ares V and how they would be used in the different missions. He explained the workings of the solid rocket booster motors and the liquid rocket motors, the plans and dates for the test firings and test launch if the Ares IX. And he explained the differences in the plans for missions to Mars using 4 Ares V launch vehicles and one Ares I, vs. the ideas of some to use only one launch vehicle.

The pictures, posters, and videos shown by Mr. Bulls were fantastic and made you wanting to be part of the program. Young and old did appreciate the presentation that gave a lot of insight to NASA’s plans. One can only hope that in the end sufficient funding will be available for NASA to make this dream come true as currently planned.



After the main presentation Dale Harrison showed how she was inspired by our Solar events and showed a quilt she made (photo below). I believe she called it Solar Expressions.

A brief pause was used by Theo to teach the very young in the audience a little about our Solar System, and used some material provided by Night Sky Network to show them how small our world is in relation to the rest



of the solar system and the Universe. They were very proud to go home after the meeting with some posters and stereo postcards of the Sun.

The last presentation was Theo’s Current Events in Astronomy and Space Exploration. Theo’s presentation in form of a short movie went through the outreach events and the highlights of the month, especially the strike of Jupiter, or “Bird’s Strike” as he called it, after Anthony Wesley (the bird) who discovered the dark spot on July 19th. NASA had its place in his presentations as usual this time showing parts of the Kibo module and pictures of the Ares I vehicle.

After the meeting, most of the members and visitors went to the observation field (photo below), where others joined us for a passionate evening of observing and sharing of the views of the night sky, including a number of kids bussed in by the Methodists Church from Madison.



Charlie Elliott Future Meetings

The Meeting dates for the Charlie Elliott Chapter have now been set for 2009. All meetings are on Saturdays: Oct 17, Nov 14, Dec 19. Please note that the June, September and December Meetings are our Pot Luck Dinner Meetings. For meeting updates and other information please check the CE chapter website: <http://www.CEastronomy.org>

AAC at Dragon*Con

On labor day weekend members of the Atlanta Astronomy Club held a sidewalk astronomy event at the downtown Hilton Hotel for Dragon*Con. During the day Friday Stephen Ramsden set up telescopes for solar viewing. Friday evening several other AAC members, including Keith Burns, Richard Jakiel, Daniel and Misty Herron, and Dave Lumpkin, set up scopes for Dragon*Con attendees to observe Jupiter and a nearly Full Moon from the 3rd Floor pool deck of the Hilton. About 75 people viewed through the AAC member's telescopes Friday night. The AAC volunteers were planning to be back Saturday night but unfortunately the weather didn't cooperate. Below are some photos from the event.



Stephen Ramsden set up several scopes for Dragon*Con attendees to do solar viewing. Photo by Dr. Bill Keel.



Dragon*Con attendees viewed the moon and Jupiter through the member's scopes Friday night. Photo by Richard Jakiel.

The Next AAC Board Meeting

by Keith Burns, AAC President

The next Board Meeting of the Atlanta Astronomy Club is scheduled for Sunday, November 22nd from 4PM to 6PM. Meeting location is TBA. Contact Keith Burns or Board Chair Don Hall for more information about the meeting agenda.

Upcoming AAC Events and Information

by Keith Burns, AAC President

We are planning to have our next board meeting on November 22. The meeting time, date, and location will be announced as soon as the details are worked out. Updated information will be posted on the AAC board listserv and time permitting on the AAC website.

The general meeting dates for the remainder of 2009 are the following: Oct. 2nd, Nov. 6th and Dec. 5th. Our speaker chairman (Dave) is working on speakers for the coming meetings. He is asking for input from members on speakers, so this is your chance to suggest someone you want to see come and speak on an astronomy related topic at one of our meetings. Dave's email is DaveLump@Bellsouth.net. Daniel Herron is working on a new observing schedule for the remainder of 2009 and the first part of 2010. Soon he will post details of upcoming events to the newsletter, the website, and the AAC listserv.

The GASP group is continuing to bring the stars to the campers at various State Parks in Georgia. The currently scheduled events are November 14th at Red Top Mountain State Park and March 20th at Unicoi State Park. For more information, please contact Keith Burns at Keith_B@Bellsouth.net.

The Charlie Elliott Chapter continues to hold meetings and observing events at the Charlie Elliott Wildlife Management Area. The meetings are held on Saturday afternoons with observing in the evening weather permitting. For more information, see the Elliott website at CEAAstronomy.org. The Elliott Group also posts updates on events in their area on the AAC listserv.

Bradley Observatory Open House Series 2009-2010

The Galileo Project: Revealing Hidden Worlds

During the 2009-2010 academic year, the 400th anniversary of Galileo's first astronomical use of his telescope, Agnes Scott College is hosting "Project Galileo: Revealing Hidden Worlds". This year-long series of events will explore Galileo's complex life and innovative work, and it will help us engage the challenges we all face when pushing the boundaries of exploration in the quest for knowledge. Lectures at the Observatory in this anniversary year focus on Galileo's contributions to astronomy and to changing the way we see the universe around us. All programs begin at 8PM and will be followed by a planetarium show and observing with the Beck telescope (weather permitting).



October 9th - "Stars to Stage": Performing Heaven and Earth via Brecht's Galileo

November 13th - "Galileo's Universe"

December 11th - "Hidden Worlds in the Asteroid Belt"

February 12 - Brother Guy Consolmagno, Vatican Observatory

March 19 - Spring Equinox Concert and Open House

April 9 - Tina Pippin, professor of religion, Agnes Scott College: "Galileo and the Church"

May 7 - Jeffrey Young, Georgia State University Honors Program: "Galileo and the Birth of the Modern"

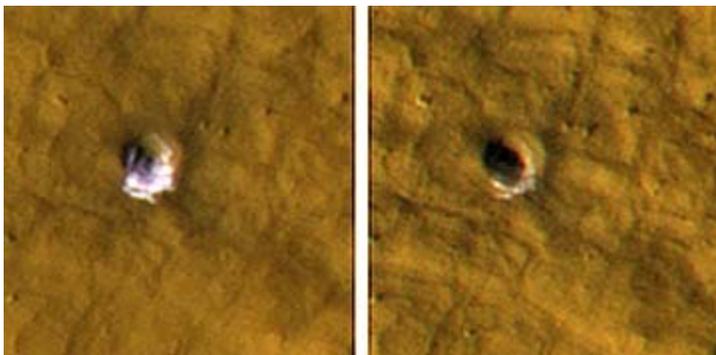
For more info see: <http://www.agnesscott.edu/academics/bradleyobservatory/open-house-series.aspx>

NASA Spacecraft Sees Ice on Mars Exposed by Meteor Impacts

JPL News Release - September 24, 2009

PASADENA, Calif. -- NASA's Mars Reconnaissance Orbiter has revealed frozen water hiding just below the surface of mid-latitude Mars. The spacecraft's observations were obtained from orbit after meteorites excavated fresh craters on the Red Planet.

Scientists controlling instruments on the orbiter found bright ice exposed at five Martian sites with new craters that range in depth from approximately half a meter to 2.5 meters. The craters did not exist in earlier images of the same sites. Some of the craters show a thin layer of bright ice atop darker underlying material. The bright patches darkened in the weeks following initial observations, as the freshly exposed ice vaporized into the thin Martian atmosphere. One of the new craters had a bright patch of material large enough for one of the orbiter's instruments to confirm it is water-ice.



The High Resolution Imaging Science Experiment camera on NASA's Mars Reconnaissance Orbiter took these images of a fresh, 6-meter-wide crater on Mars on Oct. 18, 2008, (left) and on Jan. 14, 2009. Each image is 35 meters across. This crater's depth is estimated to be 1.33 meters.

The impact exposed water ice from below the surface. It is the bright material visible in this pair of images. The change in appearance from the earlier image to the later one resulted from some of the ice sublimating away during the Martian northern-hemisphere summer, leaving behind dust that had been intermixed with the ice. The thickening layer of dust on top obscured the remaining ice. This crater is at 43.28 degrees north latitude, 164.22 degrees east longitude. Image Credit: NASA/JPL-Caltech/University of Arizona

The finds indicate water-ice occurs beneath Mars' surface halfway between the north pole and the equator, a lower latitude than expected in the Martian climate.

"This ice is a relic of a more humid climate from perhaps just several thousand years ago," said Shane Byrne of the University of Arizona, Tucson.

Byrne is a member of the team operating the orbiter's High Resolution Imaging Science Experiment, or HiRISE camera, which captured the unprecedented images. Byrne and 17 co-authors report the findings in the Sept. 25 edition of the journal *Science*.

"We now know we can use new impact sites as probes to look for ice in the shallow subsurface," said Megan Kennedy of Malin Space Science Systems in San Diego, a co-author of the paper and member of the team operating the orbiter's Context Camera.

During a typical week, the Context Camera returns more than 200 images of Mars that cover a total area greater than California. The camera team examines each image, sometimes finding dark spots that fresh, small craters make in terrain covered with dust. Checking earlier photos of the same areas can confirm a feature is new. The team has found more than 100 fresh impact sites, mostly closer to the equator than the ones that revealed ice.



The bright material conspicuous in this image was excavated from below the surface and deposited nearby by a 2008 impact that dug a crater about 8 meters in diameter. The extent of the bright patch was large enough for the Compact Reconnaissance Imaging Spectrometer for Mars, an instrument on NASA's Mars Reconnaissance Orbiter, to obtain information confirming the material to be water ice.

This image, covering an area 50 meters across, was taken on Nov. 1, 2008, by the HiRISE camera on the same orbiter. The time frame for the crater-forming impact to have occurred was bracketed by before-and-after images (not shown) taken by the Thermal Emission Imaging System camera aboard NASA's Mars Odyssey orbiter on Jan. 26, 2008, and by the Context Camera on the Mars Reconnaissance Orbiter on Sept. 18, 2008.

The crater is at 55.57 degrees north latitude, 150.62 degrees east longitude. Image Credit: NASA/JPL-Caltech/University of Arizona

An image from the camera on Aug. 10, 2008, showed apparent cratering that occurred after an image of the same ground was taken 67 days earlier. The opportunity to study such a fresh impact site prompted a look by the orbiter's higher resolution camera on Sept. 12, 2008, confirming a cluster of small craters.

"Something unusual jumped out," Byrne said. "We observed bright material at the bottoms of the craters with a very distinct color. It looked a lot like ice."

The bright material at that site did not cover enough area for a spectrometer instrument on the orbiter to determine its composition. However, a Sept. 18, 2008, image of a different mid-latitude site showed a crater that had not existed eight months earlier. This crater had a larger area of bright material.

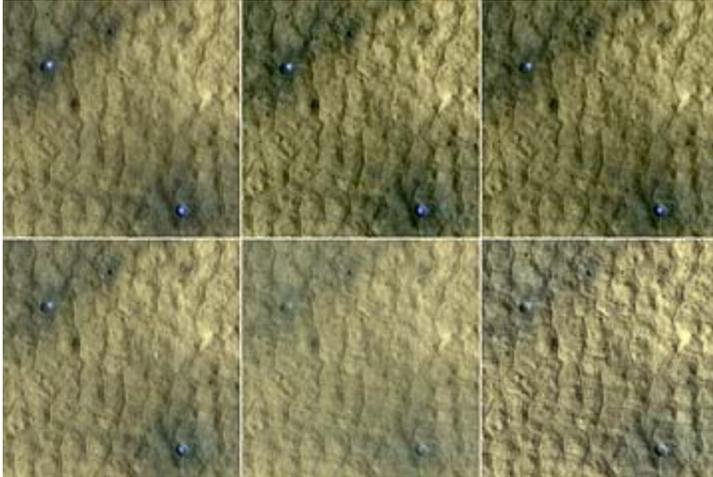
"We were excited about it, so we did a quick-turnaround observation," said co-author Kim Seelos of Johns Hopkins University Applied Physics Laboratory in Laurel, Md. "Everyone thought it was water-ice, but it was important to get the spectrum for confirmation."

Mars Reconnaissance Orbiter Project Scientist Rich Zurek, of NASA's Jet Propulsion Laboratory, Pasadena, Calif., said, "This mission is designed to facilitate coordination and quick response by the science teams. That makes it possible to detect and understand rapidly changing features."

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The ice exposed by fresh impacts suggests that NASA's Viking Lander 2, digging into mid-latitude Mars in 1976, might have struck ice if it had dug 10 centimeters (4 inches) deeper. The Viking 2 mission, which consisted of an orbiter and a lander, launched in September 1975 and became one of the first two space probes to land successfully on the Martian surface. The Viking 1 and 2 landers characterized the structure and composition of the atmosphere and surface. They also conducted on-the-spot biological tests for life on another planet.

To view images of the craters and learn more about the Mars Reconnaissance Orbiter, <http://marsprogram.jpl.nasa.gov/mro/>

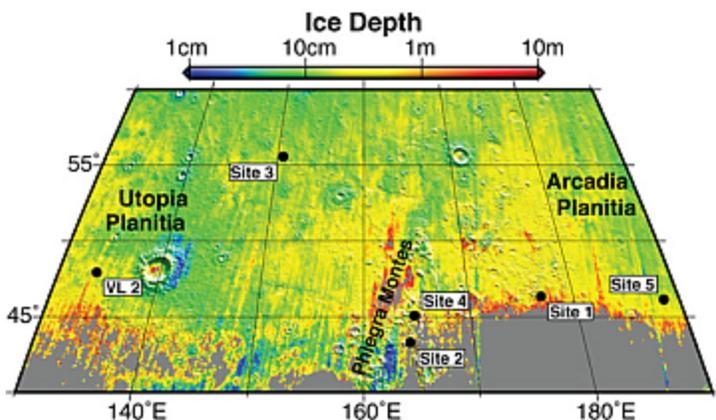


This series of images spanning a period of 15 weeks shows a pair of fresh, middle-latitude craters on Mars in which some bright, bluish material apparent in the earliest images disappears by the later ones. Each panel is 75 meters across. The two craters are each about 4 meters in diameter and half a meter deep.

The bright material is water ice that was uncovered by the meteorite impact that excavated these small craters less than 15 weeks before the initial image of this series. Sublimation of the ice during the Martian summer leaves a dust layer that gradually thickens to the point where it obscures the ice.

The HiRISE camera on NASA's Mars Reconnaissance Orbiter took these images of this site at 46.33 degrees north latitude, 176.90 degrees east longitude. The HiRISE camera's targeting of the site was prompted by two earlier images from the Context Camera on the Mars Reconnaissance Orbiter, which showed that the impact responsible for these craters had not yet occurred by June 4, 2008, but had occurred by Aug. 10, 2008.

The dates when these six HiRISE images were taken were (left to right, top row; then left to right, bottom row): Sept. 12, 2008; Sept. 28, 2008; Oct. 9, 2008; Oct. 14, 2008; Nov. 22, 2008; and Dec. 25, 2008. The span of time corresponded to a period from mid to late summer in Mars' northern hemisphere. The images are subframes of the observations made on those dates. Image Credit: NASA/JPL-Caltech/University of Arizona

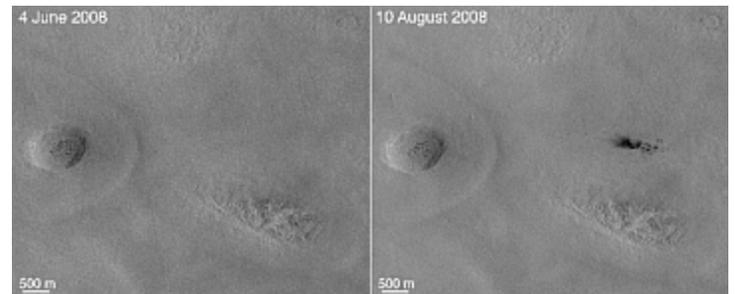


This map (bottom left) shows five locations where fresh impact cratering has excavated water ice from just beneath the surface of Mars (sites 1 through 5) and the Viking Lander 2 landing site (VL2), in the context of color coding to indicate estimated depth to ice.

The map covers an area from 40 to 60 degrees north latitude and from 130 to 190 degrees east longitude. Estimates of the depth to water-ice come from a computer model and observations of the brightness and temperature of the surface. The model matches the ice-exposing crater observations by NASA's Mars Reconnaissance Orbiter and data from the neutron spectrometer on NASA's Mars Odyssey orbiter.

Analysis of the observations of ice-exposing fresh craters at sites 1 through 5, reported by Byrne et al. in a Sept. 25, 2009, paper in the journal Science, leads the paper's authors to calculate that if NASA's Viking Lander 2 had been able to dig slightly deeper than the 10-to-15-centimeter-deep trench that it excavated in 1976, it would have hit water ice.

The color coding indicates depths to the top of a water-ice-containing layer, ranging from 1 centimeter in dark-blue coded locations to 10 meters in red-coded locations. Image Credit: NASA/JPL/University of Arizona



The team operating the Context Camera aboard NASA's Mars Reconnaissance Orbiter frequently discovers new dark spots on Mars that, upon closer examination, turn out to be brand new impact craters. Sometimes only a single crater is present, but often there is a cluster of several craters. Depending on the patterns and size, crater clusters are interpreted as indicating that the incoming meteorite broke apart before it hit the surface. In some cases, clusters could be formed by ejecta from other, larger impact craters.

Shown here are subframes of two Context Camera images of terrain in western Arcadia Planitia (near 46.7 degrees north latitude, 183.2 degrees west longitude). Each covers an area about 6.5 km across. The first (on the left) was taken on June 4, 2008, the second on Aug. 10, 2008. Between the time the two images were acquired, a cluster of dark spots - and dark rays radial to some of the dark spots - formed. The camera team immediately considered this to be a candidate new meteor impact site, but Context Camera images have a resolution of 6 meters per pixel. This means that features, including impact craters, smaller than about 20 to 25 meters across cannot usually be resolved. Thus, most of the dark spots (like these) that the Context Camera team finds and suspects to be new impact craters have to be imaged at higher resolution to find out whether small impact craters are actually present.

To confirm that the features were craters, the Context Camera team created an opportunity for the team operating the HiRISE camera, which is also on the Mars Reconnaissance Orbiter, to take a picture of the site. This camera makes images of Mars' surface with a resolution of about 30 centimeters per pixel. Such images can be used to identify objects as small as about a meter across. The Context Camera team targeted its camera to take a new picture centered on the candidate impact site and made a request to the HiRISE team to take a picture at the same time.

That interest - and the Context Camera team's quick work - paid off. The HiRISE team obtained a picture of the site on Sept. 12, 2008, just a month after the Aug. 10 Context Camera image was received on Earth and evaluated. The Sept. 12 image shows a nice cluster of new impact craters. Some of the craters exposed a light-toned material that appeared somewhat bluish in the HiRISE's color data. Immediately suspecting the material to be an exposure of subsurface ice, the HiRISE team began a campaign to monitor this site to see if the bright material changed. It did, suggesting that

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perhaps the material was going away, just as ice might do at that time of year (summer in Mars' northern hemisphere). The two camera teams worked during the next several months to identify more such craters and, in the end, found a total of five brand new impact crater sites at northern middle latitudes that seemed to have exposed buried water ice.

Details and scientific interpretation of these new impact craters and their use to examine subsurface ice at northern mid-latitudes on Mars are captured in a paper published this week in *Science* by Shane Byrne and 17 colleagues on teams operating the Context Camera, HiRISE, and Compact Reconnaissance Imaging Spectrometer for Mars. All of that effort began with a single pair of Context Camera images, the two shown here. If the Context Camera team had not found these first two images and had not immediately attempted to re-image the suspected crater cluster and provide an opportunity for High Resolution Imaging Science Experiment to "ride along," then the most important aspect of the observations reported in *Science* - the presence of excavated ground ice - would have been lost because the ice began to disappear or darken immediately after the impacts occurred. Image Credit: NASA/JPL-Caltech/Malin Space Science Systems

Georgia Astronomy in State Parks

The following GASP events are currently scheduled:

November 14 - Red Top Mountain State Park.

March 20 - Unicoi State Park.

For more information about these events, contact Keith Burns at 770-427-1475 or Keith_B@bellsouth.net.



The GASP volunteers at FDR State Park on Labor Day weekend 2004 - From left to right: Joanne Cirincione, Keith Burns, Harold and Claudia Champ with Ginger, Peter Macumber, Sharon Carruthers, Tom Faber, Kat Sarbell, and Holly and John Ritger. Photo by Holly Ritger.

Atlanta Astronomy Club Website

While this newsletter is the official information source for the Atlanta Astronomy Club, it is only up to date the day it is printed. So if you want more up to date information, go to our club's website. The website contains pictures, directions, membership applications, events updates (when available) and other information. <http://www.atlantaastronomy.org>

The **Atlanta Astronomy Club, Inc.**, the South's largest and oldest astronomical society, meets at **8:00 P.M.** on the Friday closest to full moon of each month at Emory University's White Hall or occasionally at other locations or times. Membership fees are **\$30 (\$35)** for a family or single person membership. College Students membership fee is **\$15 (\$20)**. These fees are for a one year membership (\$5 per year extra charge to receive the *Focal Point* mailed).

Magazine subscriptions to *Sky & Telescope* or *Astronomy* can be purchased through the club for a reduced rate. The fees are **\$33** for *Sky & Telescope* and **\$34** for *Astronomy*. Renewal forms will be sent to you by the magazines. Send the renewal form along with your check to the Atlanta Astronomy Club treasurer.

The Club address: Atlanta Astronomy Club, Inc., P.O. Box 76155, Atlanta, GA 30358-1155.

AAC Web Page: <http://www.AtlantaAstronomy.Org>. Send suggestions, comments, or ideas about the website to webmaster@AtlantaAstronomy.org. Also send information on upcoming observing events, meetings, and other events to the webmaster.

AAC Officers and Contacts

President: Keith Burns 770-427-1475 Keith_B@bellsouth.net

Program Chair: Dave Lumpkin programs@atlantaastronomy.org

Observing Chair: Daniel Herron observing@atlantaastronomy.org

Corresponding Secretary: Tom Faber focalpoint@atlantaastronomy.org

Treasurer: Sharon Carruthers Treasurer@AtlantaAstronomy.org

Recording Secretary: Rich Jakiel Secretary@atlantaastronomy.org

Board Chair: Don Hall - donrhall@bellsouth.net

Board: Misty Herron - Contact Info TBA

Board: Theo Ramakers 770-464-3777 director@ceastronomy.org

Board: Marie Lott 770-496-5774 mtlott@comcast.net

ALCOR: Art Zorka 404-633-8822 (H) 404-824-7106 (C) star.myth@juno.com

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Elliott Observing Supervisor: Jonathan Wood 404-374-8750 observing@ceastronomy.org

Elliott Recording Secretary: Ken Poshedly 678-516-1366 poshedly@bellsouth.net

Elliott Coordinator: Alesia Rast Alesia_Rast@mail.dnr.state.ga.us

Elliott Webmaster: Larry Owens 678-234-5399 webmaster@CEastronomy.org

Georgia Astronomy in State Parks: Keith Burns 770-427-1475 Keith_B@bellsouth.net

Light Trespass: Open - Contact Keith Burns if you would like to volunteer.

PSSG Chairman: Peter Macumber pmacumber@nightsky.org

PSSG Co-Chair: Joanne Cirincione starrnights@AtlantaAstronomy.org

Sidewalk Astronomy: Brad Isley sidewalkastronomy@atlantaastronomy.com

Woodruff Observ. Coordinator: Sharon Carruthers Treasurer@AtlantaAstronomy.org

Webmaster Atlanta Astronomy: Peter Macumber 770-941-4640 pmacumber@nightsky.org

Directions to White Hall at Emory

Our meetings are generally held in White Hall. To get to White Hall, turn onto Dowman Drive from North Decatur Rd at the five way intersection (across from Everybody's Pizza). White Hall is located across from the new Science & Math building. The best places to park are the Peavine and the Fishburne Parking Decks. The Fishburne deck is located on Fishburne Drive which is accessible from N. Decatur Rd. Turn onto Dowman and then right on Fishburne. You can also access Fishburne Drive from Clifton Road just north of N. Decatur. The Peavine parking deck is accessible from N. Decatur Rd. Turn onto Oxford Rd, go to the back entrance of Emory and turn onto Eagle Row. Take that to the Peavine deck. You can also access the Peavine deck from Clifton Rd. Turn onto Asbury Circle. It's the intersection next to the railroad tracks on Clifton. For maps to the decks see <http://map.emory.edu>. For more detailed directions to Emory University, visit www.atlantaastronomy.org or go to the Emory web site.

Calendar by Tom Faber (Times EDT/EST unless noted)

Upcoming AAC Events are listed in BOLD

- October 2nd, Friday: **AAC Meeting at White Hall, 8PM, Emory University.**
- October 4th, Sunday: Full Moon.
- October 5th, Monday: Mercury Greatest Elongation West.
- October 8th, Thursday: Mercury near Saturn. Draconid Meteors.
- October 9th, Friday: Bradley Observatory Open House, 8PM - see pg 4 for details.
- October 11th, Sunday: Moon Last Quarter. Mars near Moon.

October 11th, Sunday to October 18th, Sunday: Peach State Star Gaze!!!

October 17th, Saturday: **CEC Meeting - see pg 3 for details.**

October 18th, Sunday: New Moon.

October 21st, Wednesday: Orionid Meteors.

October 23rd, Friday: **November Focal Point Deadline.**

October 25th, Sunday: Moon First Quarter.

November 1st, Sunday: Daylight Saving Time Ends 2AM.

November 2nd, Monday: Full Moon.

November 5th, Thursday: Southern Taurids Meteors. Mercury at Superior Conjunction.

November 6th, Friday: **AAC Meeting at White Hall, 8PM, Emory University.**

November 9th, Monday: Moon Last Quarter.

November 13th, Friday: **December Focal Point Deadline.** Bradley Observatory Open House, 8PM - see pg 4 for details.

November 14th, Saturday: **GASP at Red Top SP - see pg7, DSO at DAV, CEC Meeting.**

November 16th, Monday: New Moon.

November 17th, Tuesday: Leonids Meteors.

November 24th, Moon First Quarter.

December 2nd, Wednesday: Full Moon.

December 5th, Saturday: **AAC Meeting & Christmas Potluck Dinner.**

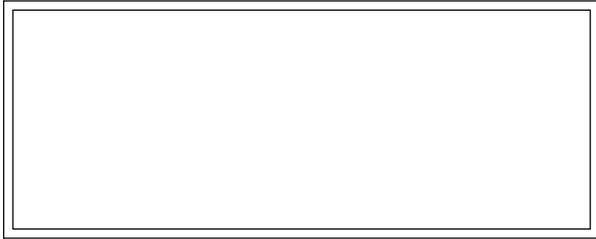
Atlanta Astronomy Club Listserv

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Focal Point Deadline and Submission Information

Please send articles, pictures, and drawings in electronic format on anything astronomy, space, or sky related to Tom Faber at focalpoint@atlantaastronomy.org. Please send images separate from articles, not embedded in them. Articles are preferred as plain text files but Word documents are okay. You can submit articles anytime up to the deadline. **The deadline for November is Friday, October 23rd at 4:00 PM. Submissions will not be accepted after the deadline.**

FIRST CLASS



Newsletter of The Atlanta Astronomy Club, Inc.



The Focal Point

We're here to help! Here's how to reach us:

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