

The Focal Point

The Atlanta Astronomy Club
Established 1947
January 2007

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Editor: Kat Sarbell

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January General Meeting

By Keith "Kosmic Kow" Burns, AAC Program Chair

The next general meeting of the Atlanta Astronomy Club will be on January 19th at 8 P.M. at Emory University at the Goodrich Whitehall building. The meeting will take place in room 207. This is the first room on the left after entering into the building through the double doors. We will have refreshments just outside of the room before the meeting. A small donation in the "kitty" box is requested but not required. Directions to White Hall are on page 7.

The meeting starts at 8 PM sharp. We will have our business meeting first. This includes any announcements and other things of astronomical interest. Anyone who wishes to make any announcements, please notify Peter Macumber at president@atlantaastronomy.org and also email me at



Keith_B@Bellsouth.net. That way Peter knows who is speaking ahead of time and he can schedule the time required. I need to know so I can put your information on a power point presentation slide that will run before and during the beginning of the business meeting. Please have the announcement info to me by no later than January 16th, 2006 (Tuesday).

Our featured speaker of the night is Jim Hutchinson, who has worked on the Voyager project. He will give his talk with questions and answers to follow. We will adjourn the meeting and head off to a local eating establishment for supper, dessert, or just a drink.

The Voyager Project: The twin Voyager spacecraft were launched in 1977. Voyager 1

Artist's view of one of the Voyager Spacecraft in interplanetary space. Credit: NASA/JPL

flew by Jupiter in 1979 and Saturn in 1980. Voyager 2 flew by Jupiter in 1979 and Saturn in 1981. Voyager 2 continued on to explore Uranus in 1986 and Neptune in 1989. Following their planet flybys, both Voyagers are heading out of the solar system. Flight controllers believe both spacecraft will continue to operate and send back valuable data until at least the year 2020. On February 17, 1998, Voyager 1 passed the Pioneer 10 spacecraft to become the most distant human-made object in space.

Upcoming Speaker and Program

The February meeting will be held on the **2nd Friday - February 9th**. Our speaker will be Dr. Paul S. Hardersen, Department of Space Studies, University of North Dakota. He will speak on his current research activities, which mainly involves near-IR asteroid spectroscopic work.

A Message from the President

Peter Macumber, President Atlanta Astronomy Club

Happy New Year to all club members and hope you had a pleasant holiday season.

MEMBERSHIP RENEWALS: Last year, we moved the AAC to a "one-date-for-all" membership renewal. ALL CLUB MEMBERS, with some exceptions, should submit their \$30 dues for 2007 by March 20th - The Vernal Equinox. (There will be an R1 in the upper right corner of your Focal Point). New members and those who have not yet paid their prorated dues, will receive a notice in their Focal Point stating the amount you owe to bring you in line with the March date. (There will be either an xxx or an RF on your label). If you have questions or concerns, please let me or the Treasurer know.

The club had a successful year in 2006 and we hope this will continue in 2007. We have hosted many public events, Dark Site Observing sessions, GASP, the Boy Scout summer Camp, and, of course, the Peach State Star Gaze. Many events for the upcoming year are already on the calendar (but, please verify all dates & times as they may change due to unforeseen circumstances).

Perhaps our proudest accomplishment is the acquisition, after 20 years of effort, of a Dark Sky site for the Club. The property at the Deerlick Astronomy Village (DAV) not only provides us with our OWN observing site, but a permanent home for the Peach State Star Gaze, as well as making us a part of the newest astronomy village in the world. The PSSG 2007 will be a week long event at the Deerlick Astronomy Village from October 7 to October 14.

It's time for the budget to be drafted and set for the coming year. If you have a need for funding or think the club should focus more on a particular aspect of club functions, please let the Board know or attend the next Board meeting and present your case. The next meeting will be called in January. A priority item is how we should start to build out the facilities on the DAV site.

Upcoming Telescope & Instrument Workshop Meetings

by Sharon Carruthers

The next meeting of the Telescope and Instrument Workshop will be January 13th at the Bradford Map/Telescope Atlanta store, 300 Hammond Rd, Sandy Springs. We will try to find you help with your equipment related questions or problems. We have a few 6" mirror blanks for those who wish to try their hand at mirror-grinding; and are currently searching for some small mirrors to build some small Club loaner scopes. For more info you can contact me at 404-843-9610. Future meetings will be on February 10th and March 10th at the same location. Details about these meetings will be announced later

Open House at Villa Rica

by Daniel Herron, Observing Chair

Did you get a new telescope, binocular, or accessories for Christmas? Want to show off your new toy? Want to learn how to get the best out of your gift? Want help learning how to get started in astronomy? Do you have questions you would like to get answered before diving into astronomy as a hobby?

Well the Atlanta Astronomy Club is here to help!! We will be will having our second annual Open House & Telescope Help Session at our Villa Rica Observatory on January 27th starting at 3:00PM and lasting until every one leaves. We invite everyone to come out with their new toys, gadgets or questions. We will have members on hand for anyone who may need help learning how to setup and use a new telescope, binocular, etc or just to help answer any questions you may have. The event is FREE and Open to the public and will be held rain or shine!

Directions:

From Atlanta Take I-20 west to exit 24 (Carrollton and Villa Rica). Exit interstate and at end of exit ramp turn right onto GA 61/101. Proceed on GA 61. At the third traffic light, the road shrinks down from 4 lanes to 2 lanes. Continue straight through intersection. Road becomes GA 101. After approximately 1 mile, the road ends at a three-way intersection. (Stop Sign.) Turn left. Proceed for 1/4 mile. Turn right onto Harlan Lane. Travel on Harlan Lane for exactly 2 miles. Turn left onto Tapley Road. Proceed on Tapley Road for 3/4 mile. The entrance to the Observatory field is on the right, just before the Stone Wall with Iron Gate

Anyone that wishes to volunteer to help out please contact me at Observing@atlantaastronomy.org

Charlie Elliott December Minutes

by Clevis Jones, CEC Recording Secretary

Charlie Elliott Chapter (CEC) Meeting Minutes: December 9, 2006

ATTENDANCE: Sixteen guests and members.

BUSINESS: Chapter director Larry Owens, on behalf of the chapter, presented Alesia Rast (Charlie Elliott Liaison, and honorary member) with a gift, a small token of our deep appreciation for her splendid and able support of the chapter over the years.

Two cash donations have been given to the chapter to help with chapter projects: Thank you to Dale Harrison and "Anonymous"!

After the presentations, Jon Wood played a great, short musical movie he created about the recent Mercury transit. Here is the link, click on the "Mercury Transit 2006", or right click and save to disk - 5 meg download: http://www.atlantaastronomy.org/CEWMA/1106_mercury_transit_01.html

Larry Owens updated us on projects and status of the "Telescope Babysitting" program. The January program was set with Steve Bieger

volunteering to do the presentation on basic telescopes. It will be a "show and tell" and "help each other" event, so bring your new (and old) telescopes. We'll try to answer your questions.

2007 schedule for the CEC Meetings is: January 13, February 10, March 10, April 14 (back to 5 p.m. for the summer), May 19 (JAKES DAY - volunteers needed, and ELECTION of Officers), June 9, July 7, Aug 18, September 15, October 6 (note: Peach State on the 13th), November 3 (back to 3 p.m. for the winter), December 15.

FEATURE PRESENTATION: Fred Buls, instructor at Perimeter College in Conyers, GA, gave a delightful and information packed presentation entitled "Two Planets that can tell us a lot about the Planet Population of our Galaxy". He covered the various methods used to discover the approximately 250 (so far) extra-solar planets. A very interesting feature was the discussion of how each method has its bias for detection and thus is best at discovering certain types of planets. He explained the Gravitational Microlensing method and why it is probably the best for discovering Earth-like extra-solar planets. Recent planet discoveries help to predict the probability of, and tell us a lot about, the planet populations of our galaxy.

OBSERVING REPORT: Steve Bieger filled us in on upcoming events, Native Myths and Legends, constellations and objects, science features, and included resources with web links and a target list that will be on the CE website. This month's moon is the Full Cold Moon and the Cherokee called it the Full Snow Moon. He covered information on featured doubles, two very interesting female scientists, and gave an update on his club project to make the 12.5-inch a Dob.

CURRENT EVENTS: Clevis Jones dragged everyone from Mars to the Shuttle to the Sun to a planet alignment. Along the way we heard of two X-class flares, the wrong but common way to refer to the spots on the Sun, and the two correct ways to do so: one is for numbering the Active Regions (nearly 11,000 over the years) as they come round the Sun's eastern limb - the other is for daily tabulation of total spots to figure cycles and magnetic pole flips. He even went so far as to predict the launch of Shuttle Discovery & STS-116 would be visible from the CE observing field, down to the azimuth and altitude - and did he have to eat crow?

OBSERVING SESSION: Dual observing locations were set up for the night - one was the usual observing field, frigid with a light wind. The other was in the cozy CE visitor's center with a nice 6-foot screen showing live NASA TV from the Internet that was covering the launch of Discovery and STS-116. Larry, Angus, Alesia, Junior and Rose manned the cozy center with Larry calling in live reports and play-by-play to Jon on the frigid "prediction test" field. While everyone was enjoying star hopping, Jon yelled the Shuttle updates to the other seven brave folks, six of whom were ready to feed Clevis his crow - but WAIT - the launch was seen by all eight on the field!

Charlie Elliot Future Meetings

by Clevis Jones, CEC Recording Secretary

MEETING DATES AND PROGRAMS: January 13, 2007 at 3:00 PM (winter schedule)

FEATURE PRESENTATION: Steve Bieger presents "Basic Telescopes, their features and how to use them". A show and tell, HELP each other event - bring telescopes.

Place: Charlie Elliott Visitor's Center

Time permitting after the feature presentation: Observing Report "What's Up Tonight" by Steve Bieger and Current Events by Clevis Jones

February 10, 3:00 PM: TBD

For updates & directions, check the CEastronomy website for the most current meeting information! <http://www.CEastronomy.org>

“There Once Was a Sky Full of Stars”

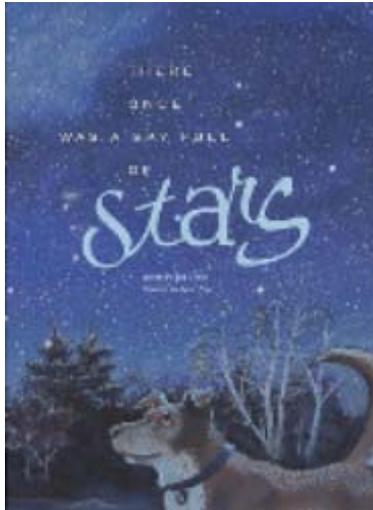
Dear Friends of Dark Skies,

As you may know, I've been very involved in dark sky efforts for the past twelve years. I've dedicated most of my efforts to dreaming up the best tools that help bring light pollution awareness/action into mainstream society.

Here's some news on one of those tools...

After selling out of a short paperback run, my children's book “There Once Was a Sky Full of Stars” (Sky Publ.), has been re-introduced as a beautiful, large format hardcover. This book is the first, lyrical children's book that teaches kids about the stars AND fixing light pollution. The story's environmental message is simple, educational and unforgettable for young readers (listeners and parents, too!)

This hardcover release now has expanded distribution, which means that “There Once Was a Sky Full of Stars” is available to Barnes & Noble, Borders, and any other national book chain or local book store. However, because Sky is a smaller publisher, many stores have not heard of the book. This book can't deliver its important message if it is sitting in boxes in a warehouse.



YOU CAN HELP GREATLY to get this book on the store shelves, into libraries, into schools, etc. Please encourage your club members, friends and family members to ask for it at your local book stores, libraries (the more places that stock it, the more LP awareness gets spread!) Consider it as a gift to children, nieces, nephews, grandchildren, great grandchildren, etc. for the holidays.

We might just change the world!

Sincerely,

Bob Crelin, author

bob@bobcrelin.com

<http://bobcrelin.com/author.html>

“There Once Was a Sky Full of Stars” by Bob Crelin, Sky Publishing Corp. ISBN# 1931559376

“Bob Crelin's enchanting, educational tale explains how light pollution steals the stars and how children can lead the way to restore the nighttime sky for the enrichment of future generations.” - Robert F. Kennedy, Jr., President, Waterkeeper Alliance

“What a beautiful job of communicating the dark sky issue to the next generation. I enjoyed reading it myself, and very much appreciated the tone of voice. It's such a lovely telling that I think it will have a wide appeal.” - Dava Sobel, Award-winning & NY Times Best Selling Author of “Longitude” and “Galileo's Daughter”

Christmas Pot Luck Gallery

Enjoy these photos of our pot luck dinner for the holidays. After eating a delicious selection of homemade dishes, we were treated to a talk by Alex Langoussis and Dave Riddle about their travels in Namibia. Many thanks go to Sharon Carruthers (below left) and Keith Burns (below center) for organizing the event, and to Dr. Rick Willamon of the Emory University Physics department (below right) for being our gracious host. All photos by Tom Faber.



Guests snacked and socialized before dinner...



...and soon the line for the buffet stretched out the door!



There was a huge spread in the buffet area.



These tables will soon be filled with guests and overflowing plates.

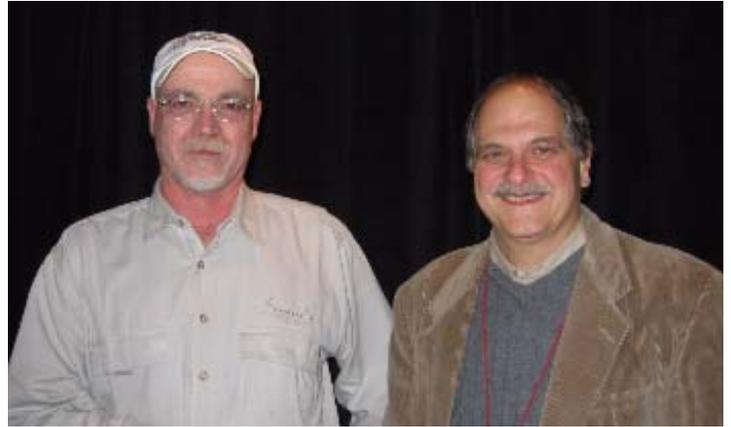


Club members and guests dined in the atrium of the Math & Science Building.

Above right: After dinner, everyone gathered into the Emory Planetarium to hear the lecture and slide show.

Center right: Dave Riddle (left) and Alex Langoussis were the speakers of the evening.

Below right: The presentation “Namibian Nights” begins.



Observing Events for 2007

by Daniel Herron, Observing Chair

Here are some dates in 2007 for Observing events (all dates subject to change). I am sure some will be added or changed during the course of the year but I will try and stick to them if possible. I will update the locations and times later as well as add them to the AAC web site and the Yahoo Astro Atlanta List.

Sidewalk events (known as of today) January 18th - Montgomery Elementary School (Sandy Springs)

DSO Dates (locations noted if known/decided) January 20th - @ DAV, February 17th - @ DAV, March 17th, April 12-15th (zombie party) - @ DAV, May 12th, June 16th, July 14th, August 11th, September 8th, October (PSSG) - @ DAV, November 10th, December 8th

GASP Events (only 2 known as of today more to come) March 24th - Unicoi State Park, November 3rd - Red Top Mtn. State park

New member Orientation/open houses (all at Villa Rica for now) January 27 (open House), March 10th (New member Orientation), May 26th (Open House), July 21 (New member Orientation), September 22nd (Open House), October 20 (New member Orientation), December 15th (Open House - New member Orientation)

So mark your calendars! (once you unwrap them! :))

DSO December Report

by Keith Burns, Program Chair aka the "Kosmic Kow"

The following is a post of Over Productive Imagination Productions who owns Kow Productions. Of course Kow productions actually wrote this stuff. (*sic*)

It was high noon Saturday when the Kow parted the home pasture and headed toward DAV (Deerlick Astronomy Village). DAV is a place of much pasture and very dark skies too. This is important for any serious astro Kow. Around 2PM the quick hoofed Bovine pulled into the parking lot of the Madison Wal-Mart to pick up a few things for grazing on later. Back on the road and heading west by 3PM, I arrived at DAV to find new things on the upper field. Electric plugs and several concrete pads. Of course, there was something there that any Kow greatly hates, a wooden fence. Note the fence is there to support the series of electric plugs run along its length, or so they claim. Having been greeted by Mike Boni, I set up next to him on one of the concrete pads. Note that it is now known as the Kow Pad after my visit there.

Now Ray was not there yet but his friends had already arrived and were setting up their gear for the night observing. These were the folks from the Roper Mtn Club (Greenville, SC). Soon arrived Gil aka Curly Joe, Karen, and their two color-changing white dogs. He setup the "Mighty Stubby" scope with new motorized system. I will say WOW just to say wow. Keith Davidson arrived and set up his 12.5 Star Master nearby. Ray arrived soon after with food to feed the herd or at least that was the rumor we heard. Being the smart one, he set up outside the fence to avoid the impending stampede that would happen when word got out about the "fud" to be served soon. (*Editor's note: Referring to food as "fud" comes from a Far Side cartoon in which a dog tries to write the word "food" but misspells it.*)

The Kow set up his 13-inch Aurora Scope. The air was warm but not hot. The skies were as clear as clear can get. We were soon treated to pizza and lemon pie. It was a great combination to start the night's observing off with. Thanks to Ray for bringing us the "fud".

Darkness fell upon the field; the stars came out and greeted us. Now Dan L. aka Shemp called and said he and Kelly would be there in two hours. After that time, we would set up his 32-inch scope. The Kow was excited by this news.

We awaited the flyover of a low Iridium flare to the south but managed to miss it by a few minutes. Next came an impressive view of the Space Station and the Space Shuttle. It was bright and easy to see. I managed to snap off a few pictures of it with my camera. A few minutes later the Hubble Space Telescope made a pass to our south. The light from it was not very bright but the timing of its fading was dead on as was its location in the sky when it went black.

I moved over to my telescope and began to align the computer. Of course, all this effort was a total waste of time as I forgot to plug the encoders into the computer. It was a classic Stooze action to say the least. Actions like this can only occur if you have enough Stoozes in the area to generate the necessary Stooze Force Field to cause such actions to occur. With Keith (Larry), Gil (Curly Joe), and Dan (Shemp) soon to arrive, we had enough Stooze power generated.

The observing project of the night was objects in Cass and And. NGC 278, NGC 185, NGC 147, M31, M33, so on and so forth. Then I made a visit to the Orion Nebula to count stars visible in the Trapezium area. I did see 6 without too much effort. At this point Shemp drove into the site and headed down to his place in the southern (lower) field. So I abandoned my excellent instrument to head on down to his place. Jumping the fence was a challenge but not too hard of a task for an experienced Bovine that knows how to escape fenced-in areas.

Even in the dark, I noticed the lower field had changed a lot. There were observatories everywhere to be found. Some of them were still under construction while others were already finished and in use. Dan did not have an observatory but a house instead with a garage. A quick tour of the house was followed by the start of assembling the 32-inch "Beast" scope. Note this was the first time this scope was to see starlight by its new owners. It was myself, Rick S., and Dan who tackled the assembly project. After about 1 hour of reading instructions and struggling to assemble it, we finished the project. Now came the task of viewing thru this monster scope. Note we had no Telrad or spotter scope to use to point this thing with. Plus one of the encoder arms was missing so we could not even hook up the Sky Commander computer. We did it the old fashioned way, we sighted down the box. This task was hard to do but not impossible. First object on the list was the Orion Nebula. WOW is the least I can say. Colors, oh yeah, colors everywhere in this nebula were visible. Green, Purple, and Red covered the entire nebula. M43 nearby was nothing but red in color. Plus the detail of the nebula cloud was wonderful. Very picture like. Actually better than a picture. The Bovine rating was four hooves up on this plus I will throw in the tail too. (*sic*)

The hours cruised by as we jumped from object to object. More oooo's and aaaa's and Wow's too! (*Editor's note: Should that be more "moooo's", Keith?*) I finally broke free and wandered down the field to Peter Macumber's site and visited for a while. He showed me his new cord sculpture. His electric cord of many years had earlier in the eve decided to melt into a giant tangled mess of plastic and copper. It was impressive to say the least.

I came back up to visit the mighty 32-inch "Beast" some more. They were looking for the Horse Head Nebula and accidentally found another nebula instead. Not knowing what it was, the Kow was asked to look and see if he could recognize it. It turned out to be M78. I guess a large instrument makes it hard to recognize, but not for me. Finally the night air was getting very cold and damp for the Kow to stay out wandering the field anymore. With cold feet and legs, I beat a hasty retreat back to my pasture and bedded down for the night. Of course, I put the Aurora Scope away first. It was a cold night and I froze for most of it. That's what happens when you don't bring the right sleeping bag for the correct temperature.

Morning came not soon enough for me to wake up and see fog in the sky at 7:30 AM. Then 8:30 AM. Then still around at 9:30 AM. By now I had started breaking down camp. The fog was still there at 10:30 AM. The skies finally cleared as I finished packing at 11AM. I made my way back

down to Dan's place and we broke down the scope. By now it was 3PM or was that 3:30PM? I headed back toward the house. I stopped to graze again in Madison at the Wal-Mart Subway and then drove home. Got home just in time to see it get dark out.

Not to be out done, I unpacked the truck and drove down to Stooges Field and observed with Curly for an hour or two before heading back home. Finally the observing run was finished.

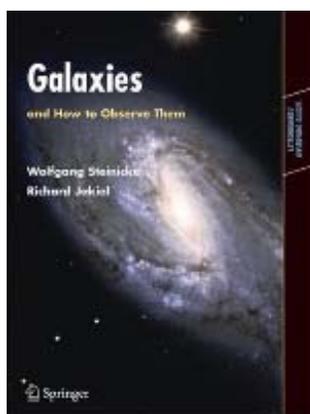
As a side note, I want to update the Kow rating system on the DAV site a bit. Now with the addition of tail to the rating system, I can safely add another ½ mark to the scale without the demise of the Kow happening. DAV as a whole gets 3 ½ hooves up now. But going for broke even though Mike asked me not to I will. Darkness of the site 4 hooves up. Ease of access 4 hooves up. Availability of power, water, and so on 3 ½ hooves up. Koolness of site 4 hooves up. Natural setting of site 4 hooves up. Need I say more guys?

“Galaxies and How to Observe Them”

by Rich Jakiel, Recording Secretary

Greetings. It's time for a little shameless self promotion - but I think it's worth it and I believe most of you can benefit. The book I helped co-author with Wolfgang Steinicke is finally out. Entitled "Galaxies and How to Observe them", it is part of Springer's astronomy observing guide series.

However, its not your typical guide as it numerous lists and detailed information on just about every type of galaxy you can think of. Some of the observing topics include Messier, NGC, IC/UGC, local group, hidden behind the veil (of the Milky Way), interacting galaxies, giant ellipticals and cD, 'flat', active galactic nuclei, doubles, triples, clusters - and so on. Over 600 galaxies with observing notes, detailed info on over 100 of those - plus detailed info on galaxy evolution, catalogs, techniques and so on.



As you are my astro-friends - the best place to buy this book is at Amazon.com. Of course, it's considerably cheaper than at the Springer site (and my cut is smaller), but at 19.95 plus s/h it's a great deal.

Spread the word around - IMHO it's the best amateur book on 'galaxies' out there.

Stardust Findings Override Commonly Held Beliefs

University of Washington News Release - December 18, 2006

Contrary to a popular scientific notion, there was enough mixing in the early solar system to transport material from the sun's sizzling neighborhood and deposit it in icy deep-space comets. It might have been like a gentle eddy in a stream or more like an artillery blast, but evidence from the Stardust mission shows that material from the sun's vicinity traveled to the edge of the solar system, beyond Pluto, as the planets were born.

"Many people imagined that comets formed in total isolation from the rest of the solar system. We have shown that's not true," said Donald Brownlee, the University of Washington astronomer who is principal investigator, or lead scientist, for Stardust.

"As the solar system formed 4.6 billion years ago, material moved from the innermost part to the outermost part. I think of it as the solar system partially turning itself inside out," said Brownlee, the lead author among 183 on the primary paper detailing the first research results from the

Stardust mission, published in the Dec. 15 edition of the journal Science.

NASA's Stardust mission was launched in February 1999 and met comet Wild 2 (pronounced Vilt) beyond the orbit of Mars in January 2004. The comet formed more than 4.5 billion years ago and had remained preserved in the frozen reaches of the outer solar system until 1974 when a close encounter with Jupiter shifted the comet's orbit to a path between Mars and Jupiter. After a 2.88 billion-mile journey, Stardust returned to Earth last January with a payload of thousands of tiny particles from Wild 2.



Image: NASA/JPL

Among the biggest surprises, Brownlee said, was finding material that formed in the hottest part of the solar system. "If those materials had gotten any hotter they would have vaporized," he said. "The most extreme particle was the second one we worked on in my lab. These types of particles are among the oldest things in the solar system."

That particle was a calcium-aluminum inclusion, a rare material seen in some meteorites and the very type of matter that scientists used as an argument for flying Stardust to less than 150 miles from Wild 2. At that close range, the fast-moving particles could have seriously damaged the spacecraft, but Brownlee and others felt it was necessary to take that risk if they were to have a chance to determine an upper limit of material that formed near the sun that ended up at the farthest fringes of the solar system.

"Truthfully, we really didn't expect to find anything from the inner solar system. Instead, it showed up in the second particle we looked at," he said. The scientists also found magnesium olivine, a primary component of the green sand found on some Hawaiian beaches and, like a calcium-aluminum inclusion, one of the first things to form in the cooling solar nebula.

Brownlee estimates that as much as 10 percent of the material in comets came from the inner solar system. "That's a real surprise because the common expectation was that comets would be made of interstellar dust and ice."

But interstellar dust has a glassy characteristic, he said, while the particles that formed around stars and are found in comets are partially crystalline. It was suggested previously that interstellar dust had been mildly heated to transform its glassy substance into the crystalline comet contents. "What we've seen, I believe, is totally incompatible with that interpretation," Brownlee said. "The particles we've seen have been heavily heated. Astronomical interpretations will be affected by that."

Wild 2's characteristics seem to be different from those of comet Tempel 1, which was closely examined in a mission called Deep Impact. In that case, a probe crashed into the comet surface and the properties of the resulting dust were analyzed using the infrared part of the spectrum. But Brownlee notes that while Tempel 1 was examined remotely from a distance, Stardust returned actual samples for scientists to study.

"The comets may be different from each other, or different observations could simply be a result of the different techniques used to examine them.

Continued on next page

It is a challenge for us to understand how they are different and why," he said....Brownlee has noted the irony that the tiny specks of comet dust are being examined by some of the largest investigative tools, such as the 2-mile-long Stanford Linear Accelerator. But with more than 150 scientists studying dust from Wild 2, Stardust also is driving the advance of new technology, including development of the world's highest-resolution microscope at the Lawrence Livermore National Laboratory.

"We're doing things no one ever imagined we could do, even at the time we launched the mission," Brownlee said. "We've taken a pinch of comet dust and are learning incredible things."

Georgia Astronomy in State Parks (GASP) Events

The GASP events for 2007 are being planned. Scheduled so far are:

March 24th - Unicoi State Park

November 3rd - Red Top Mountain State Park

For more information about these events, contact Joanne Cirincione at

Starrynights@AtlantaAstronomy.org

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 third Friday of each month at Emory University's White Hall or occasionally at other locations or times. Membership is open to all. Membership fees are **\$30** for a family or single person membership. College Students membership fee is **\$15**. These fees are for a one year membership.

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.

Atlanta Astronomy Club Hot Line: Timely information on the night sky and astronomy in the Atlanta area. Call **770-621-2661**.

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

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Webmaster Atlanta Astronomy: Peter Macumber 770-941-4640
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Directions to White Hall at Emory

Meeting Location Information:

Turn onto Dowman Drive from North Decatur Road at the five way intersection (across from Everybody's Pizza). White Hall is located on the right across from the new Science & Math building. Parking is available along Dowman Drive on both sides of the road. There is also a gated parking lot on the left behind the Admissions Building. After 6PM there is no fee to park there. For more detailed directions on how to get to Emory University, visit www.atlantaastronomy.org.

Calendar by Tom Faber (All times EST unless noted)

January 3rd, Wednesday: Full Moon. Earth at Perihelion. Quadrantids Meteors.
January 4th, Thursday: Latest Sunrise (~7:42 AM EST at Atlanta).
January 6th, Saturday: Moon near Regulus.
January 7th, Sunday: Mercury Superior Conjunction.
January 11th, Thursday: Moon Last Quarter.
January 13th, Saturday: **CEC Meeting - see pg 2 for details. Telescope & Instrument Workshop at Bradford Map/Telescope Atlanta - see pg 2 for details.**
January 15th, Monday: Moon near Antares and Jupiter.
January 18th, Thursday: New Moon. Venus near Neptune.
January 19th, Friday: **AAC Meeting at White Hall, 8PM, Emory University.** Moon near Mercury.
January 20th, Saturday: **DSO at DAV - Contact Daniel Herron for details.** Moon near Venus.
January 25th, Thursday: Moon First Quarter.
January 27th, Saturday: **VR Open House & Telescope Help Session, 3PM - see pg 2 for details.**
February 2nd, Friday: Full Moon.
February 7th, Wednesday: Mercury Greatest Eastern Elongation.
February 9th, Friday: **AAC Meeting at White Hall, 8PM, Emory University (Special Date).**
February 10th, Saturday: Moon Last Quarter. **Telescope & Instrument Workshop at Bradford Map/Telescope Atlanta**
February 17th, Saturday: New Moon. **DSO at DAV - Contact Daniel Herron for details.**
February 22nd, Thursday: Mercury Inferior Conjunction.
February 23rd, Friday: Moon near M45.
February 24th, Saturday: Moon First Quarter.
February 28th, Wednesday: Moon near M44.
March 10th, Saturday: **Telescope & Instrument Workshop at Bradford Map/Telescope Atlanta**
March 24th, Saturday: **GASP at Unicoi State Park - See pg 7 for details.**

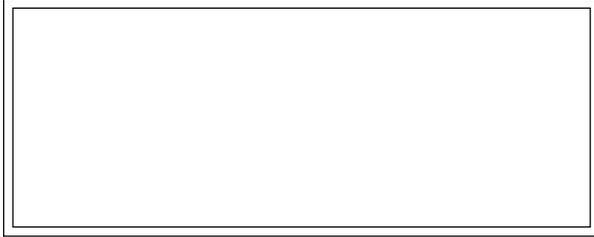
Atlanta Astronomy Club Listserve

Subscribe to the Atlanta Astronomy Club Mailing List: The name of the list is: AstroAtlanta. The address for messages is: AstroAtlanta@yahoogroups.com . To add a subscription, send a message to: AstroAtlanta-subscribe@yahoogroups.com . This list is owned by Lenny Abbey.

Focal Point Deadline and Submission Information

Please send articles, pictures, and drawings in electronic format on anything astronomy related to Kat Sarbell 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 and including the deadline date. **The deadline for February is Thursday, January 25th at 4:00 PM Submissions will no longer be accepted after the deadline.**

FIRST CLASS



Newsletter of The Atlanta Astronomy Club, Inc.



FROM:

Kat Sarbell

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

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