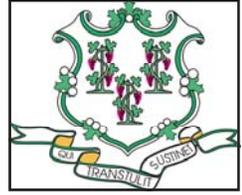


CONNECTICUT Geo-Focus



From the GeoDESK

Spring Edition 2010

Volume 3, Issue 1



South Windsor Canine Officer Issued A BlackBerry

The Town of South Windsor Police Services and Information Technology are testing the use of a BlackBerry phone enabled with GPS to aid in performing suspect, missing persons and evidence recovery tracking. Our initial tests have left everyone extremely optimistic about the results and potential future uses. Before the BlackBerry, the K9 Officer would take a paper map and draw tracking lines based on her/his recall of the track, notes and landmarks passed. This is time consuming and at times it is very difficult to determine the exact locations for the police report. Using the BlackBerry to send it's location back to a server in real-time, we are able to see the location of the K9 team as they track. In addition, we can produce a map showing the tracking route superimposed on other mapping layers such as an aerial photograph, roads, parks, buildings, lakes and streams. *Continued on page 2.*



Geo Highlights

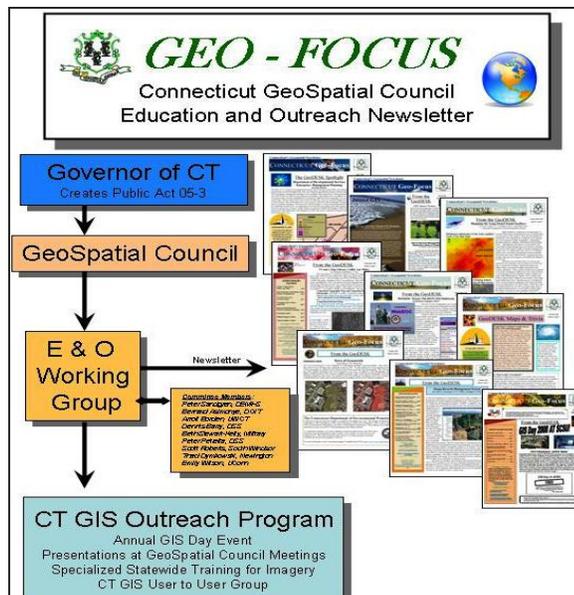
- South Windsor Canine Officer
- GPS: LORAN Changes
- GeoTidbits
- Municipal Highlight: Bridgeport GIS
- Programs: Human Geography Summer Institute
- Geo-Person Spotlight
- CT Geography Bee
- We Hear You!
- U.S.G.S. Virtual Museum
- The EOC Geo Lab is Activated
- TGIF: GIS Legislation
- Census 2010
- Outer Continental Shelf
- Wide-field Infrared Survey Explorer
- New England GIS Pages

Upcoming Conferences -
Association of American Geographers
Annual Meeting
 Washington D.C., April 14-18, 2010

Newsletter Contacts

Submit letters, feedback and articles to:
beth.kelly2@us.army.mil or
peter.sandgren@ct.gov

These articles are published for the education and enjoyment of the GIS community, and may be edited to fit space available. The CT Geospatial Council does not endorse or recommend any software programs.



Connecticut Geo-Focus

The CT Geo-Focus Newsletter can now be viewed in a new way. When you navigate to the CT.gov/gis portal, the CT Geospatial Newsletter is listed by published edition, year and issue. We've made it easier for you to search for past articles by including the index under each edition.

beth.kelly2@us.army.mil



From the GeoDESK

Spring Edition 2010

Volume 3, Issue 1

South Windsor Canine Officer Issued A BlackBerry *Continued from page 1.* The software allows for each

"The technology allows for extremely accurate records of the actual paths and locations the team visited during tracks for suspects, missing persons and evidence recovery. The GIS interface allows the points to be displayed on an aerial view map, showing landscape features and buildings. When accessed via a webpage and viewed in real-time, the public safety dispatches and incident commanders will be able to watch the team's location and deploy resources as needed."

Sergeant Scott P. Custer
Public Information Officer

event to have a customized form. For the K9 team we have designed a specific form for tracking events. This allows the officer to select the tracking event such as a subject search. From there the officer can enter a case number or additional notes if desired. The forms allow for continuous tracking at specific time intervals, for example, every 15 seconds, or by submitting a GPS point when the officer initiates one. This last option might be beneficial for marking evidence for future collection or by another officer monitoring the track. The tracking forms are completely customizable and can adapt based on requests from the

officers. The flexibility of the system allows us to make changes to the master form and then download the forms to the BlackBerry phone out in the field, without requiring the officer to return to the office. In addition, if a situation arises requiring interoperability between multiple K9



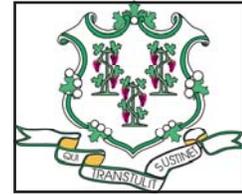
teams, we have additional phones that can be redeployed to other agency's K9s. This ability provides the

police department with one system that will provide the incident commander with a common operating picture. Later this spring we will be upgrading the system with a new feature called, "follow my team." This will give the users of the system the ability to see the location of the other team members. In the case of the K9 team, other patrol officers can monitor the teams location thru a webpage using the car computer. By monitoring the K9 team, the other officers and command staff can provide support and ensure officer safety. For more information please contact Scott Roberts at 860-644-2511 x 288 or by email at scott.roberts@southwindsor.org.



*****Maritime GPS Users: Special Notice Regarding LORAN Closures.***** In accordance with the 2010 DHS Appropriations Act, the U.S. Coast Guard terminated the transmission of all U.S. LORAN-C signals on 08 Feb 2010. This termination does not affect U.S. participation in the Russian American or Canadian LORAN-C chains. U.S. participation in these chains will continue temporarily in accordance with international agreements. You may read more and download the pertinent maps and documents [via the LORAN-C page](#). U.S. Department of Homeland Security, United States Coast Guard Navigation Center.

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The Beginning of GEO

Eratosthenes was born around 276 B.C.E. at a Greek colony in Cyrene, Libya. He was educated at the

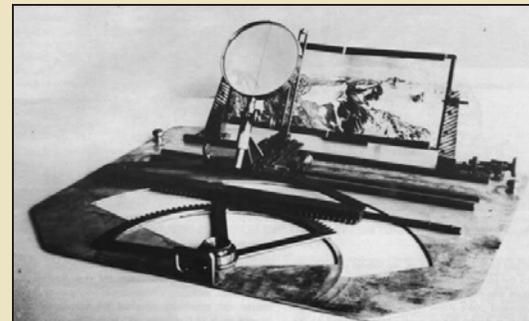


academies of Athens and was appointed to run the Great Library at Alexandria in 240. While serving as head librarian and scholar, Eratosthenes wrote a comprehensive treatise about the world, called *Geography*. This was the first use of the word, which literally means "writing about the earth" in Greek. *Geography* also introduced the climatic concepts of torrid, temperate, and frigid zones.

Geo Tidbits

History Corner

The panoramic camera, used in early 1900s in Alaska, marked the beginning of photogrammetric methods of mapping by the USGS. *U.S.G.S.*



Civil Global Positioning System Service Interface Committee (CGSIC)

is the recognized worldwide forum for effective interaction between all civil GPS users and the U.S. GPS authorities. It was established and chartered to identify civil GPS user needs (e.g. navigation, timing, and positioning) in support of the Department of Transportation's (DOT) program to exchange information concerning GPS with the civil user community as part of the GPS "outreach" program. In fulfilling this responsibility, the CGSIC reports its activities to the National Space-Based Positioning, Navigation, and Timing (PNT) Executive Committee and the Office of the Assistant Secretary for Transportation.



Imagery Working Group — Update

The Capitol Region Council of Government's (CRCOG) digital ortho photography project is moving closer to final delivery to its member towns. The vendor has submitted the digital photography for evaluation by CRCOG's review team comprised of town & state GIS staff within the region. For more information please email esnowden@crcog.org or richg@ci.manchester.ct.us.

Dr. Roger F. Tomlinson, born November 17, 1933, is the originator of computerized mapping. His system, GIS, was the first of it's kind, not only in Canada but in the world. He was awarded the Order of Canada for "changing the face of geography" as a discipline.

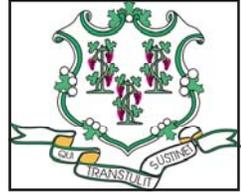
GEO-FYI

Save the date!

Spring NEARC, the Northeast Arc Users Group Conference, will be held

Tuesday May 11, 2010 at Smith College Campus, MA

www.northeastarc.org



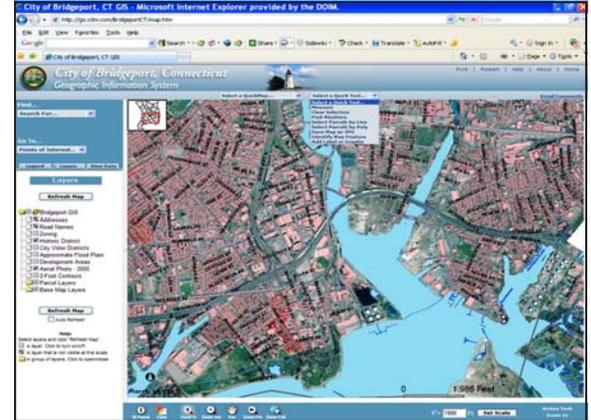
Municipal Highlights

Spring Edition 2010

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BRIDGEPORT: The City of Bridgeport embarked on its ambitious Enterprise GIS System in the year 2004 with a goal of providing instant access to information for all its users. In the spring of 2005 aerial photography was flown.

One of the components of the Enterprise GIS is the online AR-CIMS GIS application. The online GIS application provides the users with access to the City of Bridgeport's GIS database. This includes instant access to information layers such as parcels, zoning, state flood data, 2005 aerial images, school districts, voter districts, historic districts and base map layers. This system provides an integrated information repository to various city departments including tax assessor, city engineer, tax collector, building inspectors, police, health, fire, emergency management, public facilities and is also linked to the city tax assessor's system.



There are countless examples of our GIS use. The recent Nor'easter that hit our area saw the power of GIS use by providing instant access to locations hard hit by the Storm. It also helped in recovery, disaster analysis and assessment of damage city-wide. The GIS is providing tremendous help in the ongoing Census 2010 by providing instant accurate address location. The Police Department routinely uses GIS for its crime analysis and the Fire Department in dispatching. The Office of the City Attorney also uses GIS as a tool in illustrating their cases in courts for the City. As the technology grows so does its uses. GIS at the City of Bridgeport is also being poised to be used with Green Technology, Sustainability, CitiSTAT and Climate Change. *By Aijaz Syed, GISP, City of Bridgeport*

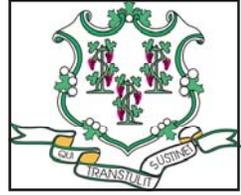
MEETING NOTICE : Come join the GIS User to User Group Meeting will be held on April 30, 2010 at Connecticut Central State University from 9 a.m. to 12 p.m. in Vance Academic Building, Room 105. Contact Alan Sylvestre at (860) 978 - 9150 or email Alan.Sylvestre@ct.gov for more information or directions. See next page for Bio on Alan.



Taft Education Center
110 Woodbury Road Watertown, CT 06795

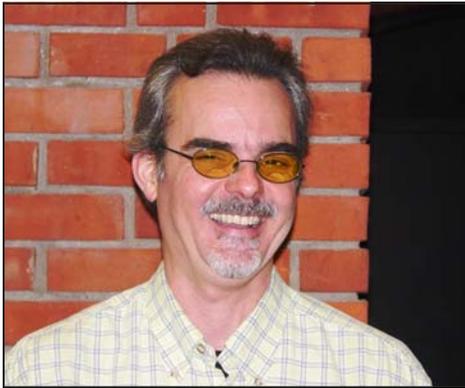
Programs: Advanced Placement Human Geography Summer Institute

Teachers who wish to explore the possibility of teaching the Advanced Placement Human Geography course are encouraged to attend a College Board-sponsored workshop this summer. Ken Keller, Danbury High School APHG teacher, will lead this workshop at the Taft Educational Center in Watertown from July 5 through July 9. The registration deadline is June 1. The workshop will cover the key topics of the course. Participants will evaluate teaching materials and engage in discussions and activities related to the key topics. Those attending will also participate in a local cultural landscape field study as part of their training. Additional information regarding the workshop, tuition, and registration is available online at <http://www.taftschool.org/tec/default.aspx>.



CT Geo-Person Spotlight

Newly Elected User to User Network President



Welcome Alan Sylvestre, AICP research analyst for the CT State Labor Department!

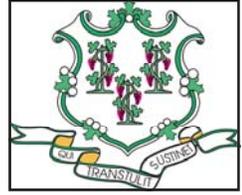
Now a word from the new president: Since early 1998 I have worked as an economic geographer specializing in GIS for the state labor department's performance measurement unit. I designed and built GIS using the MapInfo desktop suite of GIS products as a platform. I provide business mapping services centered around employment and training opportunities and support services such as child day care and public transportation. I also provide demographic and statistical maps for internal and external clients including the UCONN Health Care Center, the Capitol Region Council of Governments and several State agencies.

I have been affiliated with the User to User group since its inception and I played a major role in drafting the governor's executive order establishing the State GIS Council. In addition to my GIS experience, I earned the certified "Land Use Planner" designation from the American Institute of Certified Planners.

22nd ANNUAL CONNECTICUT GEOGRAPHIC BEE

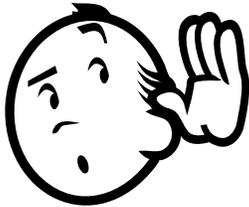
- WHO: 100 of the brightest young minds in Connecticut today (grades 4-8), moderated by Brad Drazen, news anchor NBC Television
- WHAT: The 22nd Annual Connecticut Geographic Bee, a program of the National Geographic Society, sponsored by Google and Plum Creek Timber Company
- WHERE: Herbert D. Welte Auditorium on the campus of Central Connecticut State University- New Britain, CT
- WHEN: Friday April 9, 2010
Preliminary Rounds 9:45-10:45 A.M. Final Competition 11:15 A.M.
- WHY: State Champion wins \$100, geography books, and a trip to Washington, DC to compete in the National Geographic Bee, May 25-26, and a chance to win a \$25,000 college scholarship
- HOW: Each state contestant won their school Bee and finished in the top 100 out of over 225 school winners (100+ if there are ties) competing across Connecticut in a written exam of geographic knowledge
- Contact: William DeGrazia, State Coordinator, Connecticut Geographic Bee
Home # 203-375-8882, Cell # 203-260-1392 (media please use day of event)
bdgeotc@aol.com

Each year thousands of schools in the United States participate in the National Geographic Bee using materials prepared by the National Geographic Society. The contest is designed to encourage teachers to include geography in their classrooms, spark student interest in the subject, and increase public awareness about geography. State level Geographic Bees are starting on April 9, 2010 and the National Geographic Bee is in Washington D.C. on May 25th and 26th 2010. Good Luck Connecticut! [National Geographic Bee](#)



From the GeoDESK

GIS Day 2009 Survey – We Hear You!



In the last GeoFocus we asked you, the readers and members of Connecticut's GIS community, to give us your feedback on GIS Day 2009 with a Survey Monkey survey. Forty-eight brave, anonymous souls undertook the rigorous task of answering nine questions. The answers provided to us were insightful and will be very useful as we plan this year's GIS Day event. The first insight told us that a majority of you would be willing to drive, on average, 50 miles if the event were moved to a new location each year. The 2010 GIS Day event will be held on the campus of Central Connecticut State University in New Britain. You also told us that the map gallery, the presentations, and the ability to network with your peers were the biggest draws to GIS Day. Those aspects will continue to be mainstays of GIS Day events in the future! Start thinking up ideas for your own map for display or a topic of presentation you may be interested in offering.

There were multiple requests for hands-on training opportunities, and we plan to discuss and research this. In addition, you asked for increased network participation, more displays, and more speakers. We agree with you, and we encourage everyone to contact us about presenting or displaying your map projects.

This year's GIS Day will be November 17. Our goal is to continue to make it the best that we can, but we depend on you! GIS Day is all about giving you the opportunity to demonstrate real-world applications that are making a difference in our society! GIS Day is the perfect opportunity for you to showcase your work. It provides a forum for teaching others about the significant contribution this important technology is making in their lives and communities each day. We look forward to seeing all of your map projects and another successful Connecticut GIS Day.

Thad Dymkowski, Town Of Newington GIS

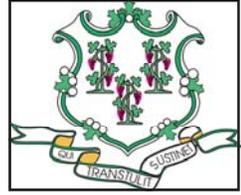
U.S.G. S. Virtual Museum

The United States Geological Survey (USGS) has a virtual museum: http://www.usgs.gov/aboutusgs/who_we_are/museum/collections.asp. They have small displays in the National Center, including the Model A Ford in the lobby that was used to survey the great west. The cultural resources portion of the USGS museum collection consists of primarily historic objects from various offices and laboratories across the nation; subject areas include surveying, drafting, water instruments, chemical, photography and geology. There is a small fine arts collection and objects associated with some of the past USGS directors. Also, a collection of field equipment used by western geologist John D. Love. There is a natural history component which is housed at the Museum of Southwestern Biology in Albuquerque, New Mexico. The USGS collection is rapidly expanding and is always on the look out for appropriate additions.

CT State Geo Lab is Activated



The Department of Emergency Management and Homeland Security activated the Emergency Operations Center (EOC) in the Hartford Armory on March 29th to monitor the state on the recent rain event which caused statewide flooding. Dan Czaja, from Department of Public Safety, and Howard Sternberg, from Department of Environmental Protection, were called by DEHMS to maintain the Geo-Lab as a GIS resource to the team of state and federal representatives in the EOC. The Geo-Lab is used in conjunction with the EOC during training operations and during a statewide emergencies and events.



GIS Legislative Feature : TGIF

Teaching Geography is Fundamental Legislation

Submitted by Bill DeGrazia 3/19/10

Background:

Geography is recognized as a “core academic subject” in No Child Left Behind, but there is no dedicated federal funding stream to advance the discipline. The other eight core subjects all have received dedicated federal funding since the original No Child Left Behind legislation was signed into law in 2002.

The National Geographic Society and the State Geography Alliances around the country support the Teaching Geography is Fundamental Act (TGIF). By building upon education programs funded by the National Geographic Society Education Foundation and implemented by the State Geography Alliances, TGIF would authorize grants to universities, nonprofit organizations, and state and local education agencies to support innovative programs to expand geographic/geospatial literacy among U.S. students and improve the teaching of geography at the K-12 level.

Current Status:

TGIF was introduced during the 111th Congress as S. 749 by Senator Thad Cochran (R-MS) and Senator Chris Dodd (D-CT) and as H.R. 1240 by Congressman Chris Van Hollen (D-MD) and Congressman (now Senator) Roger Wicker (R-MS). To date Congressmen Joe Courtney (D-2), John Larson (D-1), and Christopher Murphy (D-5) have signed on as co-sponsors and Senator Dodd continues his leadership in the Senate. Congressmen Jim Himes (D-4) and Rosa DeLauro (D-3) have expressed their support, but we would like you to encourage them to join the 103 co-sponsors in the House and 23 co-sponsors in the Senate. We would also encourage you to write Senator Joe Lieberman (I) to become a co-sponsor of the legislation.

Our goal is for the TGIF legislation to be passed during the 111th Congress, whether via NCLB or another legislative vehicle.

Major Features of the TGIF Bill:

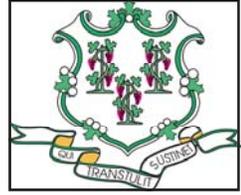
- The Department of Education would make a grant to a national nonprofit geographic education organization or consortium of organizations. The bulk of the funding then would be directed to sub grants for universities, nonprofit organizations, and state and local agencies to support innovative geography education programs at the state and local levels.
- In addition, the national nonprofit organizations would undertake geography education research and programs of national significance. The sub grants to the state and local level would specifically support:
 - o Teacher training programs
 - o Application of Internet and other distance learning technology to the teaching of geography
 - o Advancement of viable academic standards and assessment techniques to guide and measure student performance in geography
 - o Development and dissemination of effective classroom materials.

Funding Level:

The bill authorizes \$15 million per year for five years. At the same time, we will be working through the appropriations process to get start-up funding to pilot the program.

How Can I Help?

Please write your Congressman and Senator Lieberman encouraging them to co-sponsor the bill. If your member of Congress is a co-sponsor please write/email them and thank them for their support on this vital issue for the children of Connecticut.



From the GeoDESK

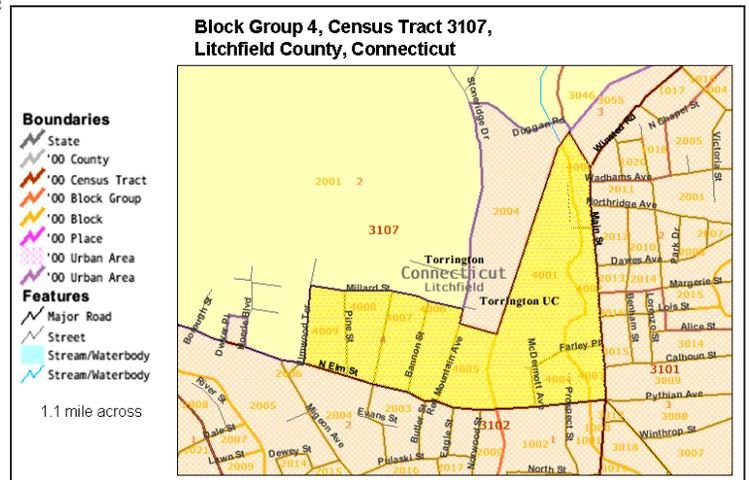
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Watch the Portrait of America Unveil in Real Time

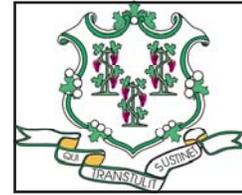
Census Bureau Launches Online Mapping Tool Showing 2000 Census Participation Rates to Help Communities Prepare for 2010 Census

With mail-out of the 2010 Census forms, the Census Bureau unveiled a [new online mapping tool](#) that allows communities nationwide to prepare for the 2010 Census by seeing how well they did mailing back their 2000 Census forms. Visitors to the new Google-based map will be able to find the 2000 Census mail participation rates for states, counties and cities, as well as smaller areas called “census tracts.” After the 2010 Census forms are mailed out in mid-March, the online map will be updated to include a tracking tool with daily updates of the 2010 Census mail participation rates for local areas across the nation. Users will be able to compare their 2010 Census progress using their 2000 Census rates as a benchmark. “The future of your community starts with a look at its past,” said Census Bureau Director Robert M. Groves. “The 2000 Census map allows communities to see which areas need extra attention and reminders to improve mail participation. The emphasis on encouraging mail participation in the census is a practical one. For every 1 percent increase in mail response, taxpayers will save an estimated \$85 million in federal funds. Those funds would otherwise be required to send census takers to collect census responses in person from households that don't mail back the form. After the 2000 Census, the Census Bureau was able to return \$305 million in savings to the federal Treasury because mail rates exceeded expectations — a move the Census Bureau would like to repeat in 2010. In 2000, 72 percent of households that received a form mailed it back. The mail participation rate is a new measure designed to give a better picture of actual participation by factoring out census forms that the U.S. Postal Service was unable to deliver as addressed. It should be particularly useful in areas with seasonal populations or a large number of vacancies or foreclosures.



Census Data Update: The first publicly visible activity of the 2010 Census is ahead of schedule. Address canvassing kicks off a week earlier than originally planned and should conclude by mid-July. The operation will use new hand-held computers equipped with GPS to increase geographic accuracy. The ability to capture GPS coordinates for most of the nation's housing units will greatly reduce the number of geographic coding errors caused by using paper maps in previous counts. Over the last several years, the Census Bureau has been actively working on updating its geographic databases and master address files. From implementing the Local Update of Census Address program where more than 11,500 tribal, state and local governments participated in a review of the Census Bureau's address list for their area, to increasing the precision of the GPS mapping, many advances have been made to compile the most comprehensive listing of addresses in the nation. This is the first census to include group quarters (such as dormitories, group homes, prisons and homeless shelters) in the address canvassing operation, which should improve both the accuracy and coverage of the final count. There will also be one final opportunity to add new home construction in early 2010 prior to the mailing of the census questionnaires. www.census.gov

CONNECTICUT Geo-Focus



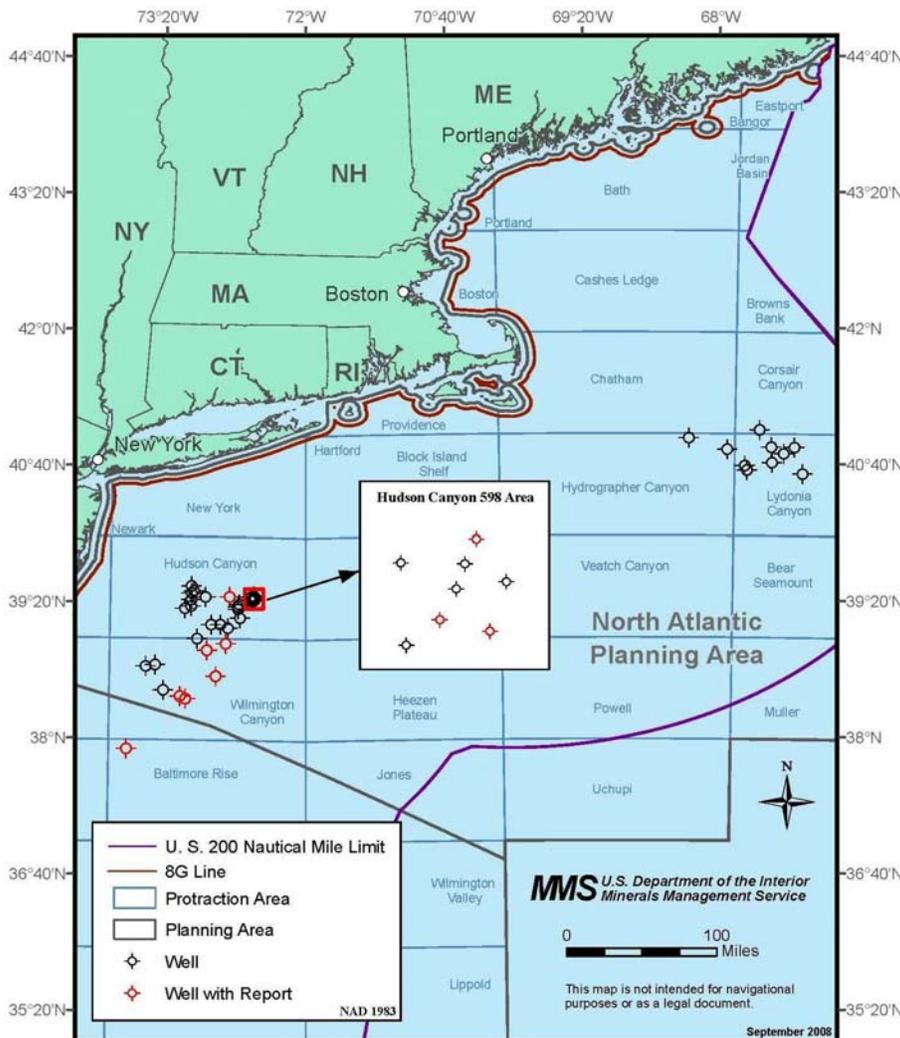
From the GeoDESK

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Activity on the Outer Continental Shelf

The Mineral Management Service (MMS), a bureau in the U.S. Department of the Interior, is the federal agency that manages the nation's natural gas, oil and other mineral resources on the outer continental shelf (OCS). The agency is announcing its intent to prepare a Programmatic Environmental Impact Statement (PEIS) to evaluate potential environmental effects of multiple geological and geophysical (G&G) activities on the Atlantic OCS. The proposed PEIS will evaluate the environmental impacts of multiple geological and geophysical activities in Outer Continental Shelf waters of the Atlantic. This is proposed for the Atlantic in light of multiple applications for permits received and industry's expressed interest in expanding activities into the Atlantic offshore waters. Geological and geophysical (G&G) surveys provide information used by industry and government to evaluate the potential for offshore oil, gas, and methane hydrate resources and geologic hazards. The oil and gas industry needs accurate data on the location, extent, and properties of hydrocarbon resources, as well as information on shallow geologic hazards and seafloor geotechnical properties, in

order to explore, develop, produce, and transport hydrocarbons safely and economically. The Minerals Management Service (MMS) also needs this information to ensure safe operations, support environmental impact analyses, protect benthic and archaeological resources, ensure fair market value for leases, make royalty relief determinations and conserve oil and gas resources. The MMS regulatory staff specifically uses G&G data to ensure that the proposed site of bottom founded structures is safe (i.e., via geohazards review). The MMS environmental staff uses these G&G data in complying with various environmental laws, such as the Endangered Species Act, the Marine Mammal Protection Act, the Coastal Zone Management Act, and the Magnuson-Stevens Fishery Conservation and Management Act, and to support mitigation measures and decisions to protect benthic, historic archaeological, and other natural resources. The MMS production and development staff uses 2D, 3D and 4D seismic data to map reserves and to develop evaluations for conservation of resources. For additional information, refer to Section I.B. of *Geological and Geophysical Exploration for Mineral Resources* (OCS EIS/EA MMS 2004-054), at <http://www.gomr.mms.gov/PDFs/2004/2004-054.pdf>.

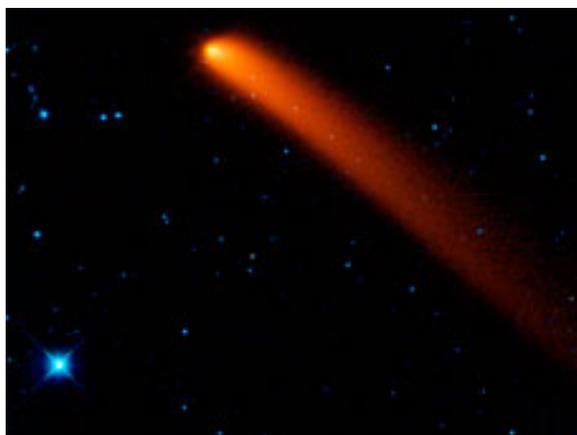




From the GeoDESK



The Andromeda galaxy, also known as Messier 31 or M31, is captured in full in this new image from NASA's Wide-field Infrared Survey Explorer.



Comet Siding Spring streaks across the sky in this new image from NASA's WISE. The comet, also known as C/2007 Q3, was discovered in 2007 by observers in Australia.

Wide-field Infrared Survey Explorer: First Images

In A Galaxy Far, Far Away... A diverse cast of cosmic characters is showcased in the first survey images NASA released on February 17th from its Wide-field Infrared Survey Explorer, or WISE. Since WISE began its scan of the entire sky in infrared light on Jan. 14, the space telescope has beamed back more than a quarter of a million raw infrared images. Four new, processed pictures illustrate a sampling of the mission's targets. The images are online at : http://www.nasa.gov/mission_pages/WISE/multimedia/images20100216.html

"WISE has worked superbly," said Ed Weiler, associate administrator of the Science emission Directorate at NASA Headquarters in Washington. "These first images are proving the spacecraft's secondary mission of helping track asteroids, comets and other stellar objects will be just as critically important as its primary mission of surveying the entire sky in infrared."

One image shows the beauty of the comet known as Siding Spring. As the comet parades toward the sun, it sheds dust that glows in infrared light visible to WISE. The comet's tail which stretches about 10 million miles, looks like a streak of red paint.

"All these pictures tell a story about our dusty origins and destiny," said Peter Eisehardt, the WISE project scientist at NASA's Jet Propulsion Laboratory in Pasadena, CA. "WISE sees dusty comets and rocky asteroids tracing the information and evolution of our solar system. We can map thousands of forming and dying solar systems across our entire galaxy. We can see patterns of star formation across other galaxies, and waves of star-bursting galaxies in clusters millions of light years away." The mission will scan the sky one-and-a-half times by October. At that point, the frozen coolant needed to chill its instruments will be depleted.

New England — GIS Pages

- [Connecticut GIS](#) — Connecticut's Maps Online: MAGIC at UCONN
- [Mass GIS](#) — Massachusetts Geographic Information System
- [NEARC](#) — Northeast ARC Users Group
- [New England URISA](#) — New England Chapter of Urban and Regional Information Systems Association
- [New Hampshire GRANIT](#) — The New Hampshire Geographically Referenced Analysis and Information Transfer System
- [Rhode Island GIS](#) — Rhode Island Geographic Information System
- [Vermont GIS](#) — Vermont Center for Geographic Information