

Welcome to the fourth issue of ESRI Archaeology and GIS News, a newsletter for and about the ESRI Archaeology and GIS User Community.

You are receiving ESRI Archaeology and GIS News because you are involved in archaeological GIS activities, or related fields and interests.

This newsletter is used only to distribute information about the group.

Please use the ONLINE DISCUSSION FORUM on the site for GIS/Archaeology discussions.

To subscribe, unsubscribe, or change your e-mail address, respond to:

bbooth@esri.com

### Top News

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### (1) Public Release of Arc-SDM

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Arc-SDM, an ArcView extension for Spatial Data Modeling, was developed at the Geological Survey of Canada in collaboration with the US Geological Survey, with support from a consortium of mining companies and one state geological survey. It was coded in Avenue language by Lara Kemp, except for a separate Fortran routine for logistic regression, and DataXplore, an executable code in Visual C++ by Carl Looney, which does the NN calculations.

The original package was distributed January 2000, and was used exclusively by the original participants for one year. It is now being released for public access.

The package is similar in design to an earlier Arcview extension, Arc-WofE (Weights of evidence modelling for use with Arcview and Spatial Analyst), <http://ntserv.gis.nrcan.gc.ca/wofe/project.htm>. Arc-SDM includes Arc-WofE (slightly modified and improved), and in addition includes logistic regression, fuzzy logic and two neural network approaches. There are also several utilities embedded in the code for various GIS operations such as selecting particular map contacts, multiple buffering, labelling lines by orientation (useful for lineament analysis) and several reclassification tools.

The package is documented with online help, and various report files. There are several publications in pdf format to provide background information about the methods.

The URL for Arc-SDM is <http://ntserv.gis.nrcan.gc.ca/sdm/>.

If you have questions about Arc-SDM please contact Graeme Bonham-Carter at or Gary Raines at

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Mathematical Geology  
IAMG Home Page: <http://www.iamg.org>

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### (2) ESRI Archaeology User Interest Group meeting scheduled

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The second annual meeting of the ESRI Archaeology User Interest Group has been tentatively scheduled for Tuesday, July 10, 2001 at the Twenty-first Annual ESRI International User Conference. The meeting will be held at lunch, between scheduled sessions on GIS and Archaeology.

Scheduled archaeology-related sessions include:  
Tuesday am: GIS at the Archaeological Site  
Tuesday am: GIS in Historic Preservation  
Tuesday pm: Analyzing & Predicting Archaeological Sites  
Tuesday pm: Historical Landscape Change Analysis

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### (3) Digital Atlas of Central America

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Subject: DDS-62A

The following CD-ROM is now available: (from USGS)

DDS-62A "Global GIS Database: Digital Atlas of Central and South America"  
by P. Hearn, Jr., T. Hare, P. Schruben,  
D. Sherrill, C. LaMar, and P. Tsushima.

DDS-62A contains a digital atlas of the countries of Central and South

America. It is part of a global database compiled from USGS and other data sources at a nominal scale of 1:1 million and is intended to be used as a regional-scale reference and analytical tool by government officials, researchers, the private sector, and the general public. The atlas includes free GIS software; it may also be used with ArcView software. Customized ArcView tools, specifically designed to make the atlas easier to use, are also included.

The atlas contains the following datasets: country political boundaries, digital shaded relief map, elevation, slope, hydrology, locations of cities and towns, airfields, roads, railroads, utility lines, population density, geology, ecological regions, historical seismicity, volcanoes, ore deposits, oil and gas fields, climate data, land cover, vegetation index, and lights at night.

Stock Number: 01-DDS-0062A

ISBN: 0-607-95953-3

Price: \$32.00 plus \$5.00 handling per order

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USGS: Science for a Changing World

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(4) ESRI Archaeology publication: call for papers

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ESRI is soliciting paper submittals for the second issue of a magazine dealing with the use of GIS in archaeological research and cultural resource management (CRM). The target audience for this publication includes not only archaeologists engaged in research, but also managers and professionals with responsibilities for the stewardship of public lands and historic and archaeological sites, planners and architects involved with the restoration of historic sites and districts, and persons with strong interests in archaeology or preservation. Articles should address what was found or accomplished by the use of GIS technology in archaeological research or CRM.

Papers should be approximately 2000 words in length and should include three to four figures, of which at two or three should be maps produced using GIS. Photos of landscape should include a human being to provide scale. Images should be very high resolution, more than 2000 pixels on a side, ideally saved as TIF or JPEG files. Text should be written adhering to Chicago Manual of Style guidelines and should be submitted as a Microsoft Word document (make sure that your document is not set on autoformat). In matters of citation, capitalization, and other rules pertaining to format, the magazine will generally follow the Society for American Archaeology Style Guide (available at the SAA website: [www.saa.org/Publications/Styleguide/styframe.html](http://www.saa.org/Publications/Styleguide/styframe.html)). Please use the Times New Roman font, 12 point, single-spaced, without indenting paragraphs.

Papers can be submitted or queries directed by e-mail to Dr. Douglas Comer, Editor at [dcomer@culturalsite.org](mailto:dcomer@culturalsite.org), or mailed to his attention at 4303 North Charles Street, Baltimore, Maryland 21218-1054.

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(5) More Links of Interest

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\*\* Note on fonts: you can use any symbol from any TrueType font that you have installed on your system as a point marker symbol in ArcView 3.2 and in ArcMap (ArcView 8.1). In ArcMap you can also use font symbols in marker lines and fills.\*\*

Maya fonts download:

[http://copan.bioz.unibas.ch/meso.html\\_mayafontsttw.zip](http://copan.bioz.unibas.ch/meso.html_mayafontsttw.zip): Free Maya Calendrics Fonts in Truetype for Windows, Copyright Ecological Linguistics. Zipped, transfer in binary. Note: 500k download

Crime analysts are making greater use of GIS to analyze and display geographic concentrations or hot spots of crime events...

<http://www.esri.com/news/arcuser/0199/crimedata.html>

SpaceImaging /archaeology:

<http://www.imagingnotes.com/novdec00/feat1.htm>

U.S. Census TIGER/Line 2000 Data Information

<http://www.geographynetwork.com/data/tiger2000/>

Arizona AZSITE consortium:

<http://azsite.asu.edu>

California Historical Resources Information System:

<http://www.chris.ca.gov/>

Colorado SHPO GIS program:

<http://coloradohistory-oahp.org/gis/gis.htm>

New Mexico Office of Cultural Affairs, Historic Preservation Division:

<http://museums.state.nm.us/hpd/programs/arms/about.html>

Geography Network - Find GIS Data Online

<http://www.geographynetwork.com/>

GIS.com - Introductory GIS Information

<http://www.gis.com/>

GIS News and Information Sites

<http://www.gisafe.com/>

<http://www.tenlinks.com/mapgis/>  
<http://www.geocomm.com/>

ESRI-L and ARCVIEW-L - Searchable!  
<http://support.esri.com/community/list.asp>

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## (6) Notices of conferences

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- a) International Seminar on Sites and Monuments Records
- b) Annual Archaeometry Conference at SUNY Buffalo
- c) Archaeologie und Computer
- d) Call for Papers: Chacmool 2001 - An Odyssey of Space
- e) GIS and Archaeological Predictive Modeling: Large-scale Approaches to Establish a Baseline for Site Location Models

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a) An International Seminar on Sites and Monuments Records is being organised in May in Chelmsford, as part of the Planarch project. Planarch brings together five regions (in England, France, Belgium and Netherlands) around the Southern North Sea with a common heritage but different archaeological frameworks to:

- develop archaeological decision-making in spatial planning;
- share experience and academic knowledge;
- improve best practice in reducing the impact of development on archaeology;
- investigate ways of presenting archaeology to the public.

Part of the programme has involved a review of Sites and Monuments Records, how they have developed in the partner regions and the possibilities for European standards, including GIS. The seminar is being arranged for 9th-10th May this year, to present progress to date and to discuss and if possible agree standards and/or good practice for SMRs in a European context.

Planarch is being funded by the European Regional Development Fund through the Interreg IIC North West Metropolitan Area programme.

Speakers will be international, from the project area, and will also include people from related European projects.

The seminar is open to other interested professionals who are welcome to attend but, as we need to know numbers for refreshments, prior booking is essential, by March 30th. There is no fee for the seminar but a charge will be made to cover food and drink. Overnight accommodation can be arranged, if wished, but please contact us as soon as possible.

Further information can be obtained from Paul Gilman, Heritage Conservation, ESD, Essex County Council,

County Hall, Chelmsford, Essex, tel: 01245 437636, fax: 01245 258353, email: [paul.gilman@essexcc.gov.uk](mailto:paul.gilman@essexcc.gov.uk)

b) The Annual Archaeometry Conference at SUNY Buffalo will be held on April 7 & 8, 2001. If you would like to attend, please contact Eva Hulse at [evahulse@acsu.buffalo.edu](mailto:evahulse@acsu.buffalo.edu).

Those interested in presenting a paper relating science to archaeology should contact Holley Moyes at [hmoyes@acsu.buffalo.edu](mailto:hmoyes@acsu.buffalo.edu) by February 15th.

Registration for the conference is free and housing is provided for presenters. Hope to see you in Buffalo.

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c) Dear colleagues,

It is time to plan our next workshop "Archaeologie und Computer. The fifth workshop was great, 140 people from 17 countries. The publications of Workshop 1-4 are now available (3, 4 only on CD-Rom). You can order it:

<mailto:phoibos@webmail.at>

The 6th Workshop "Archaeologie und Computer" will take place  
——November 5th and 6th, 2001 in the Town-hall of Vienna, Austria——

Since now you have the possibility for registration under the email on the bottom of this mail

Submission of abstracts until April 27th 2001

Information about acceptance of your paper until May 18th 2001

Deadline of registration until October 20th 2001

The lesson should be 25 min long and show the output of your work or the development of applications.

Many greetings from Austria  
Wolfgang Börner

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d) Call for Papers: Chacmool 2001 - An Odyssey of Space  
November 14th - 18th 2001

Rosza Centre, University of Calgary, Calgary, Alberta, Canada

This is a theme we can have a lot of fun with and which will bring out endless interesting topics. A few potential sessions we have thought of are as follows:

How space is defined - boundaries, enclosures

How space is used - traditional ways in which space is divided into households and communities, as well as working and living space

Public space - plazas, courtyards, domestic vs public, gender utilization

Landscapes - systems such as fields, irrigation etc.

Archaeoastronomy - Nazca, medicine wheels, Stonehenge etc.

The Cosmos - space as defined for ideological purposes - how did ancient peoples map out space

Mapping space - remote sensing, GIS and GPS

Sacred space - perceptions of space, creation myths, use of space for

Ceremonials Ancient maritime utilization of space - underwater archaeology, marine archaeology

The temporalization of space - the relationship between space and time

Geoarchaeology

Spatial analysis - history and theory, trends, future

Ethnographic studies of space

Spatial data management within CRM

More ideas, session proposals etc. are welcomed! Or if you want to run with one of the above suggestions, please contact us!

#### Deadlines

Submission of session topics January 15, 2001

Submission of paper abstracts February 15, 2001

Send Abstracts to: 2001 Conference Committee, Department of Archaeology, University of Calgary, Calgary AB T2N 1N4, Canada; or FAX us at 403-282-9567, or email us at [cjcluney@ucalgary.ca](mailto:cjcluney@ucalgary.ca)

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e) GIS and Archaeological Predictive Modeling: Large-scale Approaches to Establish a Baseline for Site Location Models

<[http://www.niu.edu/depts/ext\\_prog/GIS/site.html](http://www.niu.edu/depts/ext_prog/GIS/site.html)>

A conference of concerned professionals to begin formulating a widely-applicable foundation of method and theory for developing useful predictive models of archaeological site location using GIS technology

Supported by Northern Illinois University, Argonne National Laboratory, and other sponsors

Organized by Northern Illinois University and Argonne National Laboratory

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(7) 2001 ESRI User Conference Dates to Remember

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2001 ESRI User Conference Dates to Remember

<http://www.esri.com/events/uc/index.html>

Software Applications Fair Submissions

Due April 1, 2001

Student Assistantship Applications

Due April 13, 2001

Conference and Preconference Seminar Registration

Due May 12, 2001

Map Gallery Registration

Due May 16, 2001

Activities Registration

Due June 1, 2001

Geography Network Challenge Submissions

Due June 1, 2001

Preconference Seminars

July 7-8, 2001

User Conference 2001

July 9-13, 2001

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