

Central Region Newsletter

American Society for Photogrammetry & Remote Sensing

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Michaela Buenemann, Shannon Lear, and Christopher Wood Awarded the Francis E. "Gene" Lortz Scholarships



Presentation Ceremony from the University of Arkansas on 11 February 2005. From left to right: Dr. Monika Moskal, Scott Perkins, Chris Wood, Shannon Lear, and Michaela Buenemann

The Central Region Officers and Board of Directors congratulates the winners of this year's scholarships. As in previous years, the scholarship committee was tasked with analyzing the applications and awarding one undergraduate and one graduate scholarship.

'Why, then, are there three names listed?'

Good question! The reason there are three names is that the top two graduate applicants were so close that the scholarship committee declared the competition to be a tie. So, let us congratulate our undergraduate winner and our two graduate co-winners!

Michaela Buenemann

Graduate Co-Winner

Michaela Buenemann was born and raised in Westerkappeln, Germany. Following the completion of her B.A. in geography, media sciences, and modern languages at the University of Paderborn, Germany in 1999, she completed one year as an exchange student at the University of Oklahoma in Norman, OK. There, she matriculated to pursue a masters degree in Geography in Fall 2000; and later, in Fall 2002, applied to directly pursue her Ph.D. degree, which she will be completing in 2005. Ms. Buenemann's general research interests revolve around exploring, explaining, and predicting the spatio-temporal dynamics of human-environment relationships in drylands through integrated and interdisciplinary approaches that merge field work, remote sensing, GIS, and spatially explicit modeling. Her dissertation project focuses on the characterization of the spatio-temporal, regional-scale dynamics of a subtle form of land cover modification in grasslands and savannas — woody plant encroachment — using an integrative remote sensing, GIS, and spatial modeling approach. Ms. Buenemann is currently applying for post-docs and jobs at universities and international organizations around the world. When she's not teaching or doing research, she enjoys camping as shown below in the San Juan Valley in southern Colorado.



Chris Wood

Graduate Co-Winner

Chris Wood is an International Graduate Student from Australia. He is a Masters of Natural and Applied Science (MNAS) Candidate at Southwest Missouri State University (SMSU) with a major in Computer Science and a minor in Geospatial Technologies. His thesis work focuses on removing redundant rules from a neuro-fuzzy network classification system for remotely sensed imagery, combining his major and minor fields of study. Chris works as a Graduate Assistant for the James River Basin Partnership and presented part of his work at the ASPRS 2004 Fall Conference in Kansas City, and has been invited to present further work in this area at the forthcoming ASPRS 2005 Annual Conference in Baltimore. Chris has been involved with the SMSU CNAS Centennial Project and has been invited to present his work at the forthcoming Association of American Geographers (AAG) 2005 Annual Conference in Denver. Chris obtained a Bachelor of Engineering (Computer Systems) Degree at Curtin University of Technology in Perth, Australia. Prior to completing the degree he participated in an International Student Exchange Program in Aachen, Germany. Chris is a member and active participant of many professional organizations including ASPRS, AAG and the Institute of Electrical and Electronics Engineers.



Shannon Lear

Undergraduate Winner

The undergraduate recipient of the 2004 Central Region ASPRS Francis E "Gene" Lortz Memorial Scholarship is Shannon Lear. She is a senior in the Department of Geography, Geology and Planning at Southwest Missouri State University (SMSU). In May of 2005, she expects to earn a Bachelor of Science degree in Geography with a minor in Cartography and a focus on GIS.

Shannon is an enthusiastic individual, who sincerely enjoys learning and being exposed to new things. She is active in the student chapter of ASPRS at SMSU, as well as volunteering at regional and national ASPRS conferences. Currently, she is a project assistant for the Remote Sensing Research and Geospatial Analysis Laboratory at SMSU where her duties are divided between providing GIS services to other university departments, organizing satellite imagery for accessibility and publishing a satellite imagery database to the internet through ArcIMS. Upon graduation, her immediate goal is to work for the CIA or National Geospatial Intelligence Agency (NGA). After obtaining some work experience she is committed to narrowing her field of interest to enable her to focus on a certification through ASPRS, as well as to go on to complete a Master's of Science degree.



New Members!

The Central Region welcomes two new student members for this issue.

- Ms. Melissa Cox, Springfield, Missouri
- Mr. Christopher Wood, Springfield, Missouri

National News

Election Results

We are pleased to inform you of the ASPRS-wide ballot results for 2005. Please join us in congratulating Marguerite Madden, the next Vice President of ASPRS; Paula Smit, the incoming GISD Asst. Director; and Robert Eadie, incoming PDAD Asst. Director.

Dave Greenlee will now move to the Board as Director of the GISD and Brian Huberty will be the new Director of PDAD. Mike Hutt is the new Chair of the Sustaining Member Council, and we will be welcoming new National Directors from the Columbia River Region (Chris Aldridge) and the Potomac Region (Jim Hipple) in Baltimore. Re-elected Board members include Ed Freeborn (CNY) and Chuck Olson (EGL). All new Board members will be receiving further information from Jesse Winch concerning administrative processes and the New Board Member Orientation session in Baltimore.

Awards

The following message is from Central Region President Scott Perkins:

The following awards will be presented to the Central Region on Thursday, March 10th at the Memorial Address:

- 1st place award for the Region Website of the Year
- 1st honorable mention for Region of the Year
- 2nd place for Region Newsletter of the Year

Job well done!

Election of Officers: Call for Nominations

The Officers and Board of Directors for the Central Region would like to invite members to nominate fellow members (or themselves) for office. This year the Region is due to elect a National Director, Vice-President, Secretary/Treasurer, and two Directors for three-year terms. The current Board strongly encourages people to self-nominate. Physical location does not preclude someone from serving. Teleconferencing, e-mail, and collaborative software can allow any member to participate. Brief descriptions of the duties of each office are included below. Individuals interested in being considered for nomination for any of these positions should send their names and bio-sketch to the Central Region Nominating Committee. The society will also accept nominations from the region membership at large. Nominations close 31 March 2005. Ballots will be mailed in April and the votes will be counted on 31 May. Any and all regular members of the Region are eligible to serve. If you would like to nominate someone or nominate yourself, please contact the nominating committee chairperson, Monika Moskal, by written, voice, or electronic correspondence.

Dr. Monika Moskal

Assistant Professor

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Southwest Missouri State University

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Contact Email: moskal@alumni.uwaterloo.ca

National Director

This year the Central Region will be holding elections for the position of Regional National Director - a position with a three year term running from April 2005 through Annual Meeting in 2008. The national director represents the Central Region and serves on the ASPRS Board of Directors.

The National Director works closely with the Board, the Executive Committee, and the staff of the society to provide leadership and oversight for the national organization. Board meetings are held in the spring and fall of each year, with periodic email or telecom communications between each board meeting. The only qualifications are ASPRS non-student membership and an interest in working to further the objectives of the society.

Vice President

The Vice President office is a three-year commitment. The incumbent spends one year as Vice President, another as President, and a third year as Past President. Other duties of the Vice-President include:

- Function as the President if the situation requires
- Chair the Membership Committee
- Assist the Secretary/Treasurer in compiling the Annual Report
- Drafting the Past-President's certificate for presentation to the outgoing Past-President

Secretary/Treasurer

The Secretary/Treasurer serves a one-year term as the Region's chief financial officer. Principal duties include maintaining accounting records of region funds and writing checks to cover Region expenses.

Directors

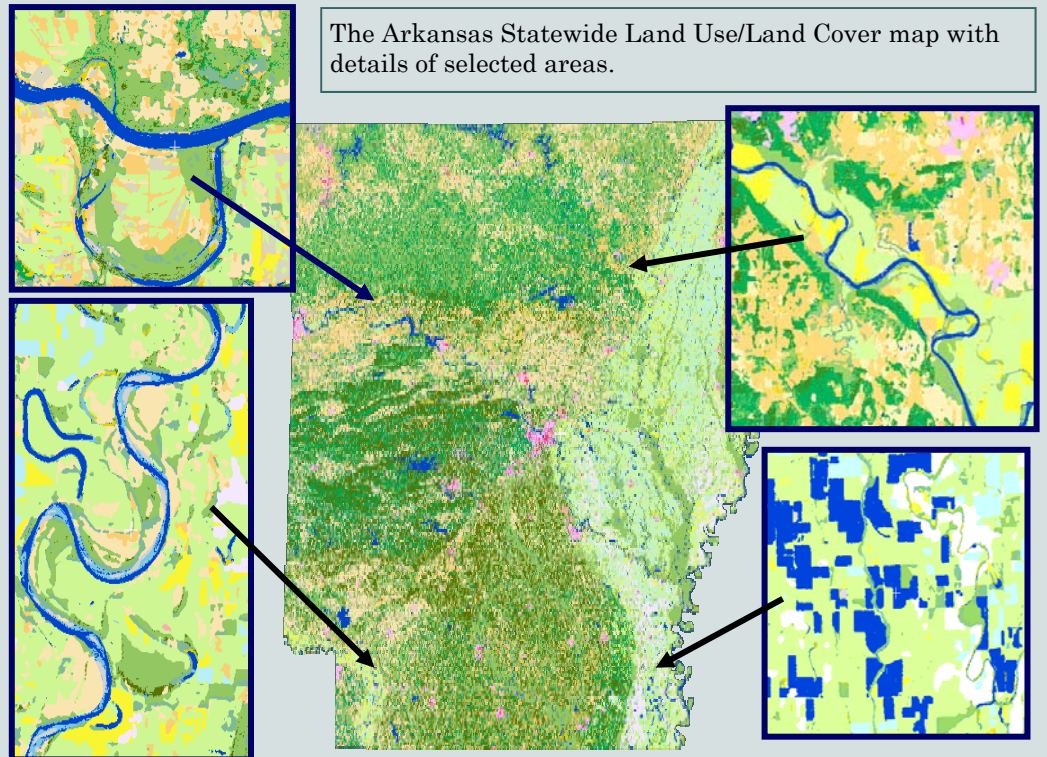
Directors normally serve a three-year term as a voting member of the board as well as some committee responsibilities. Committee work focuses on activities such as special programs, newsletter, outreach, etc. This year we are electing two Directors.

Technical Sessions at the University of Arkansas

11 February 2005

The Central Region of the American Society of Photogrammetry and Remote Sensing (ASPRS) gathered at the University of Arkansas, Feb 11, 2005, for an afternoon of technical presentations and discussion. The Center for Advanced Spatial Technologies at the U of A hosted the event which was attended by over 30 people from various universities, organizations, and businesses from every state in the region. Dr. John Hehr,

Associate Dean of the William J. Fulbright College of Arts and Sciences and Professor of Geography, opened the event by noting his involvement as a student member of ASPRS and the opportunities ASPRS membership holds for all members – student members in particular.



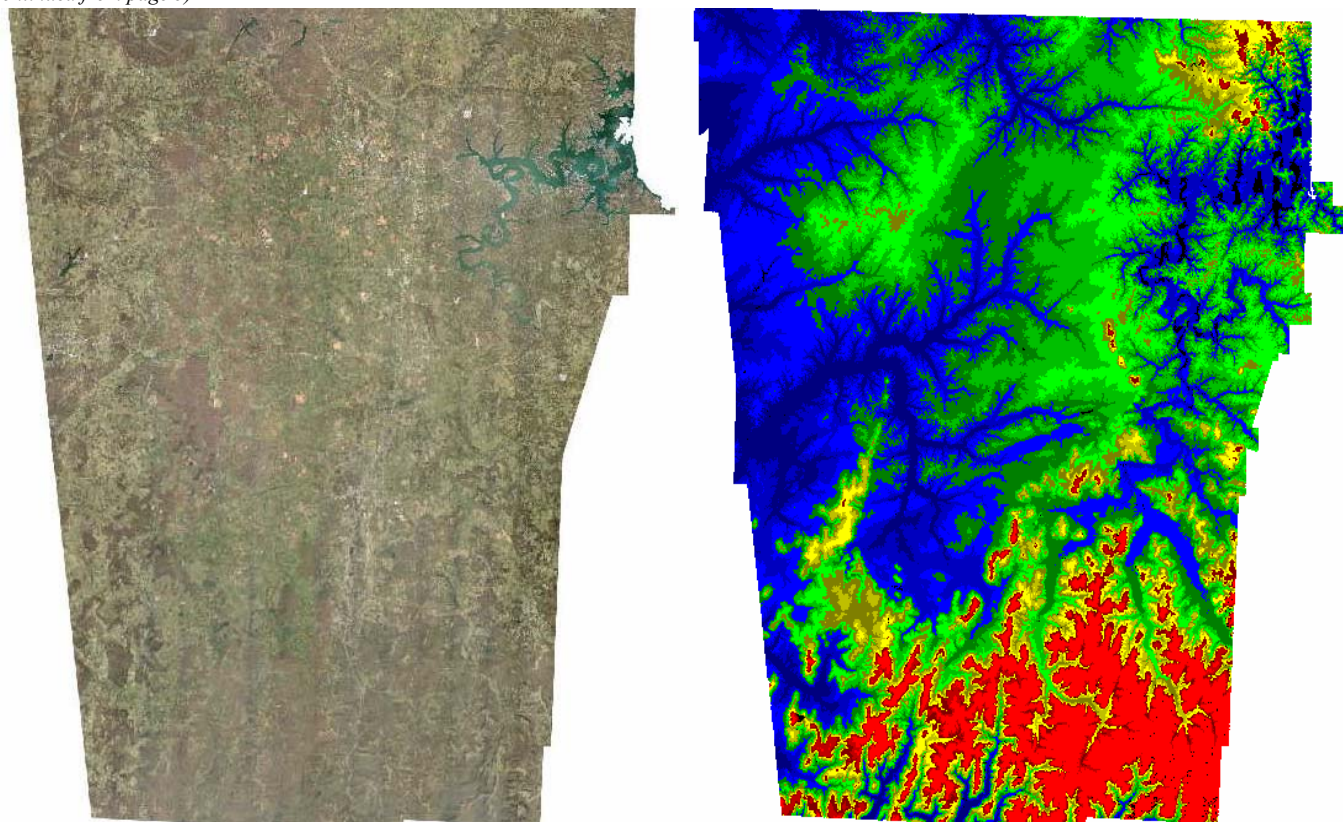
The technical presentations focused on four distinct geospatial activities in Arkansas. First, Bruce Gorham and Jason Tullis spoke about the soon to be released 2003 Land Use / Land Cover (LULC) map of Arkansas. The LULC map is the second such project to be funded by the state of Arkansas (the first was for the year 1999) and is widely anticipated by scientists and policy makers across Arkansas. The map is based on Landsat 7 (pre Scan Line Corrector error) imagery spanning three seasons in order to capture the all-important crop-rotation cycles throughout the state. The 1999 map was generated using supervised maximum likelihood methods while the 2003 map will be based on more flexible decision tree methods.

See the following for additional information on this project:

- Email: bruce@cast.uark.edu
- Project Web Pages: www.cast.uark.edu
- Download Data from GeoStor at: www.cast.uark.edu/cast/geostor/

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Benton and Washington Counties: Scanned orthoimage mosaic (l) and LiDAR image (r).

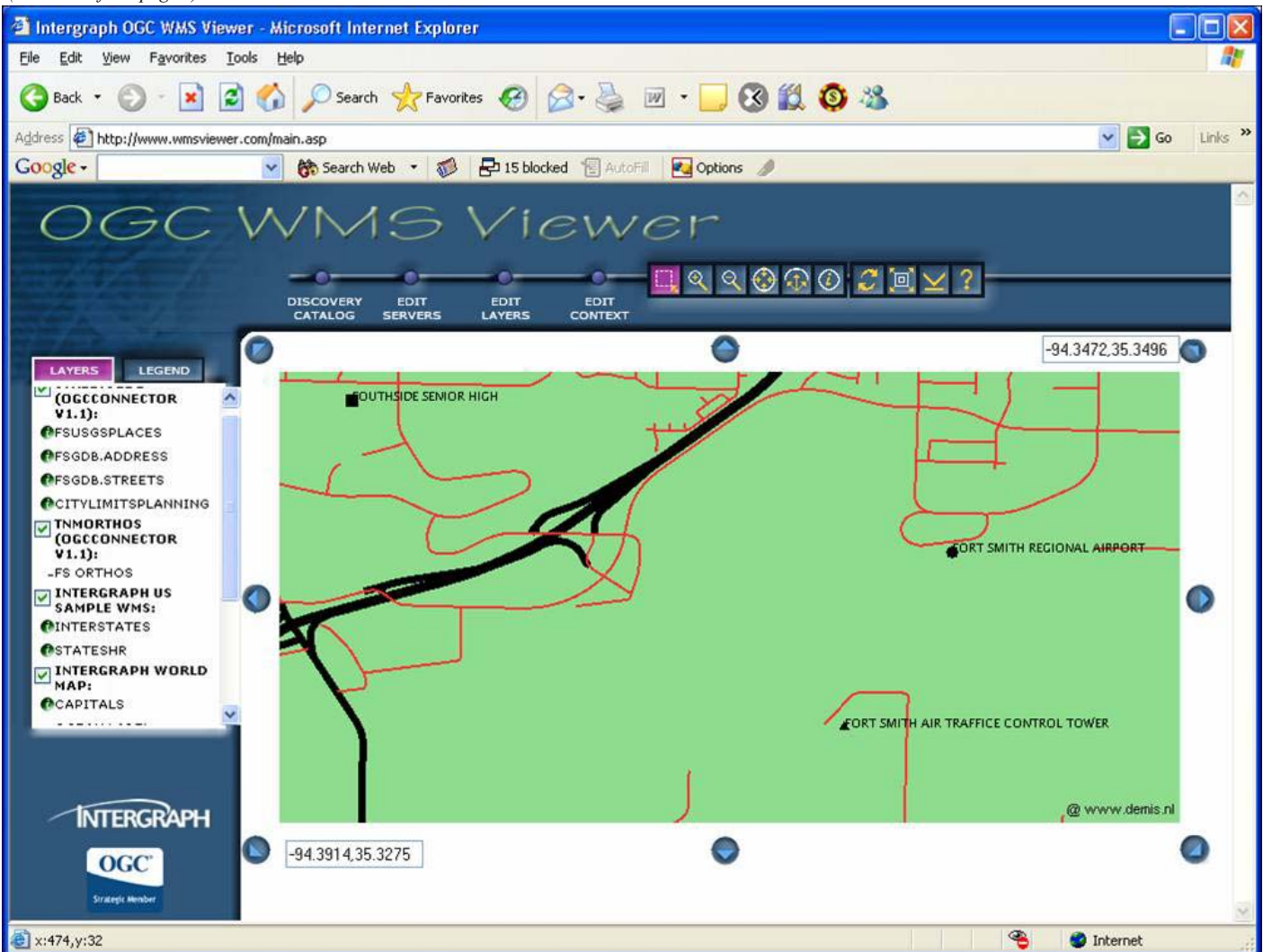
The second presentation was by Salah Ezzaoudi of Land Air Mapping, Inc of Atlanta, GA. Land Air Mapping was recently contracted by the Northwest Arkansas Regional Planning Commission to triangulate and orthorectify 1,100 frames of imagery collected over Benton and Washington counties by the Arkansas Highway and Transportation Department. In order to meet the project's horizontal accuracy standards (1" = 200' NMAS) and time constraints, Land Air decided to provide a LiDAR derived elevation model rather than compile the model from the 10,000 ft photography. This approach not only saved time but produced a superior elevation model with 25 foot postings that tested to an accuracy of about 1.3 feet using NSSDA standards. Mr. Ezzaoudi discussed some of the challenges of the project including the need for extensive ground control and quality assurance.



The USGS Mid-Centinent Mapping Center has been working with the City of Fort Smith Arkansas and CAST for the past year to enable viewing of the cities extensive GIS layers through *The National Map*. Mr. Russell Gibson, city of Fort Smith GIS Coordinator and Arkansas State Land Information Board Chairman, discussed the challenges involved in making the data in his care part of the *The National Map* with a currency of 24 hours. James Sullins discussed some the technological details involved in enabling an Open Geospatial Consortium-compliant Web Mapping Service while Bill Sneed of the United States Geological Survey (USGS) commented on the partnership between the city government, USGS, and the University of Arkansas and its implications for future *The National Map* related projects.

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Fort Smith street data as seen through the OGC Viewer.

Finally, Malcolm Williamson (CAST) discussed a nation-wide education initiative with Arkansas roots. The Environmental And Spatial Technologies (EAST) Initiative (www.eastproject.org) began as an Arkansas Department of Education funded initiative to promote student-driven learning in a high school laboratory environment. Now, in over 250 schools across Arkansas, California, Hawaii, Illinois (Chicago areas), Mississippi, and Louisiana, EAST promotes learning using commercial software from ESRI, Intergraph, Bentley Systems, Macromedia, Trimble, Softimage and others. Although the program is not necessarily concerned with teaching geospatial technology, it has become clear these technologies are not only interesting to the students but enable truly useful student-led community projects. Students are not taught in a standard classroom environment, in fact the adult “facilitators” are not trained in the use of the software but instead offer guidance in communication, organization, and problem solving to the students who are leading the efforts.

(Continued on page 8)



Dr. Hehr makes his opening remarks for the afternoon's events

After the technical presentations, Central Region President Scott Perkins and Vice-President Monika Moskal presented scholarships to this year's three winners.

Slides presentations are available at:

<ftp://ftp.cast.uark.edu/outgoing/asprs/>

Classifieds

The Region Board of Directors has created a Classifieds section in the newsletter. Region members seeking to hire or to be hired should send information to the Newsletter editor.

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Donors Wanted for a Central Region Corporate Scholarship.

The Board awarded two scholarships in 2003 and would like to continue this practice in future years. However, the principal in the Gene Lortz Scholarship Fund is sufficient to sustain one scholarship only. We would like to ask corporate members to consider donating to fund a new Central Region Corporate Scholarship to support students and future professionals in our region. Please contact our treasurer if you are interested in making a donation.

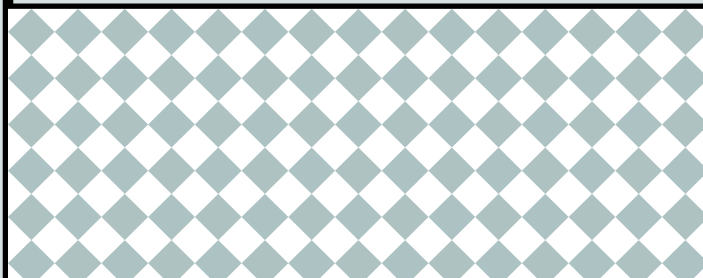
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Donors Wanted for the Francis E. 'Gene' Lortz Scholarship:

The Board awarded two scholarships this year and would like to continue this practice in future years. However, the principal in the scholarship fund is insufficient to sustain the current level and number of awards. We would like to ask our members to consider donating to this fund to support students and future professionals in our region. Please contact our treasurer if you are interested in making a donation.

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Events Calendar

March 6-9, 2005. **GITA's Annual Conference 28, Crossing Boundaries**, Colorado Convention Center, Denver, Colorado (www.gita.org/events/annual/28/index.html)

March 7-11, 2005. **ASPRS 2005 Annual conference: Geospatial Goes Global: From Your Neighborhood to the Whole Planet**, Baltimore, Maryland, (<http://www.asprs.org/baltimore2005>)

March 14-16, 2005. **3rd International Symposium Remote Sensing and Data Fusion Over Urban Areas (URBAN 2005) and the 5th International Symposium Remote Sensing of Urban Areas (URS 2005)**. The first joint conferences of URBAN and URS represent a landmark event for the international urban remote-sensing community. Both conferences will highlight the most recent advances in urban remote-sensing technology, methodology, and application since 1997. The conference will be held at Arizona State University-Main Campus in Tempe, Arizona, USA (in the Phoenix metropolitan area) (<http://www.urban-remote-sensing.org>)

March 14-16, 2005. **Management Association for Private Photogrammetric Surveyors Federal Programs Conference**, Hyatt Regency Capitol Hill, Washington, D.C. (www.mapps.org)

April 5-9, 2005. **International Workshop on Geographic Hypermedia "Concepts and Systems" in parallel with the Annual Meeting of the Association of American Geographers**. Denver, Colorado. (www.dbnet.ece.ntua.gr/~stefanak/GeoHypermedia/)(www.aag.org/annualmeetings/index.cfm)

May 16-18, 2005. **Multi Temp 2005: The 3rd International Workshop on the Analysis of Multi-temporal Remote Sensing Images**, Beau Rivage Resort and Casino, Biloxi, Mississippi, USA. (www.multitemp05.org)

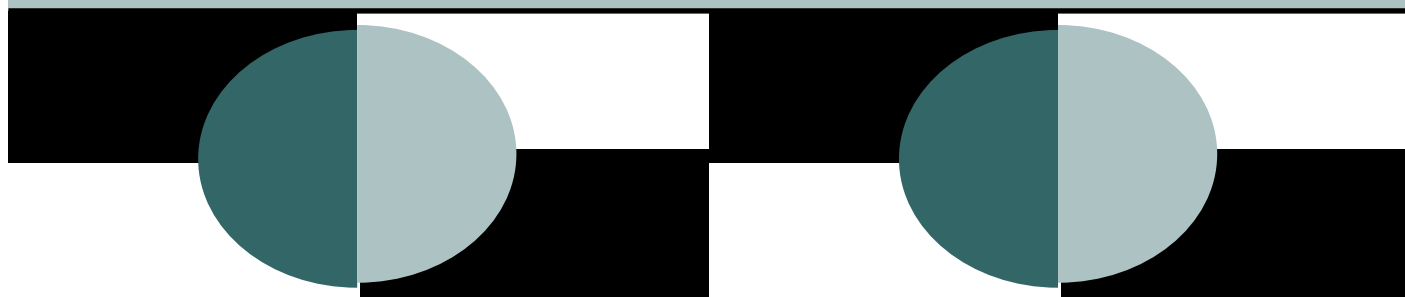
June 14-16, 2005. **Shuttle Radar Topography Mission Workshop to Summarize the Results of the SRTM Mission**. Reston, Virginia, USA. (www2.jpl.nasa.gov/srtm/)

June 16-18, 2005. **Open Source Geospatial '05 - MUM3/EOGEO**. Radisson Hotel Metrodome, Minneapolis, Minnesota, USA. (mapserver.gis.umn.edu/mum/mtg2005.html)

July 16-21, 2005. **Management Association for Private Photogrammetric Surveyors Annual Summer Conference**, Grove Park Inn, Asheville, North Carolina. (www.mapps.org)

October 9-12, 2005. **URISA's 43rd Annual Conference**, Kansas City, Missouri. (www.urisa.org)

October 23-27, 2005. **The Sixteenth William T. Pecora Memorial Remote Sensing Symposium**, Organized by ASPRS, Sheraton Hotel and Sioux Falls Convention Center Sioux Falls, South Dakota. (<http://www.asprs.org/pecora16/index.html>)



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