AAG Remote Sensing Specialty Group

The RSSG Newsletter

Volume 25, Issue 2 October 2004

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AAG 2005 Annual Meeting
Denver, CO
April 5 to 9, 2005

"Ruminations" from the Chair:
Fall 2004...

Welcome to all the new members of the RSSG! We apparently have grown by 50% over the last two years, to 748 members. As the graph below shows, our membership has been steady at about 500 over the previous 15 years, making this increase all the more remarkable. The AAG headquarters notes that the society as a whole has seen much growth, perhaps coinciding with the centennial, so perhaps we are riding a larger wave. Personally, I ascribe at least part of this growth to the recent hard work of many of our members in revitalizing the RSSG. I would like to summarize some of those successes below, and then discuss some future activities.

RSSG web site and newsletter editor John Althausen (Leica Geosystems) has done a wonderful job in putting out newsletters in August 2003 and again in February 2004. These have been in paper and PDF format, but in the future will be entirely electronic. I believe that the newsletter has been crucial for building our RSSG community. Please do consider sending material to John, and not necessarily waiting on a request from him. Updates on remote sensing activities at your institution are always interesting to readers.

The other major area that John Althausen has contributed to is in developing a new version of our web site: http://www.aagrssg.org. The web site has been reconceived to have a broader role for our group, including that of an archive and "virtual office." Thanks to Jim Merchant, we now have scanned copies of all newsletters available on the website. These old newsletters make quite fascinating reading. I encourage you to visit the web site, and see all the changes. There are many resources available through the web site, including a very extensive listing of remote sensing course tutorials and

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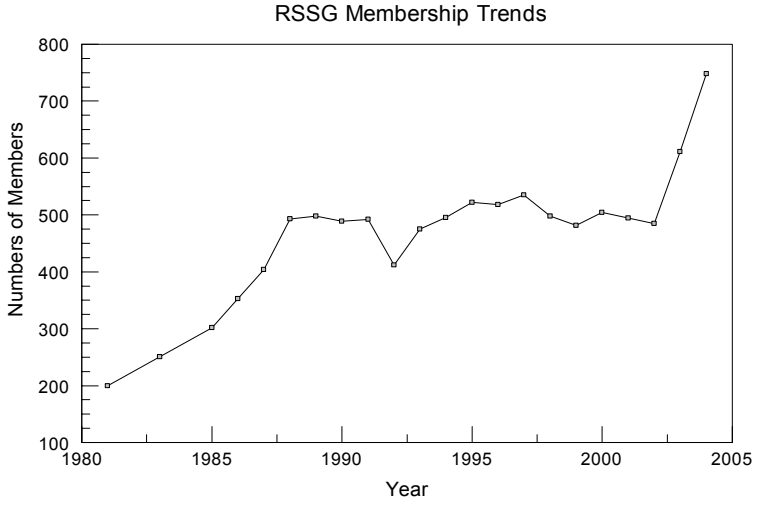

"Ruminations" from the Chair:
Fall 2004...

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syllabuses (http://www.aagrssg.org/exercise.html).

Jim Merchant (University of Nebraska, Lincoln) kindly maintains the RSSG's list server. If you are not on the list server, or you have changed your e-mail address, please be sure to register with the list server through the RSSG web site: http://www.aagrssg.org.

Awards

Congratulations to our latest RSSG Outstanding Contributions Award winners: Doug Stow (San Diego State University) and Nina Lam (Louisiana State University). Thanks go to Steve Walsh (University of North Carolina, Chapel Hill) for chairing the Awards Committee.

Additional congratulations go to our first Early Career Award winners: Bing Xu (Texas State University, now at University of Utah), and runner up Soe Myint (University of Oklahoma). Look for Bing's winning paper, which will be published in Photogrammetric Engineering & Remote Sensing later this year. A second Early Career Award will be made in 2005; see elsewhere in this issue for details for eligibility and for paper submission details.

Winners of the 2004 Student Honors Paper Competition were: First Place: Elena Tarnavsky (San Diego State University), Second Place: Qinghua Guo (University of California, Berkeley), and Third Place: Claudia M. Stickler (University of Florida). The Undergraduate Award went to Christopher Lippitt (Clark University).

The winners of the joint RSSG/Cartography/GIS Student Illustrated paper competition were: First Place: Erik Strandhagen (University of Oregon), Second Place: Carl J. Legleiter (University of California, Santa Barbara), and Third Place: Christopher Zanger (Oregon State University). Theresa Burcsu (Indiana University) deserves special thanks for her tireless efforts in organizing the student competitions.

See elsewhere in this newsletter for additional information about other awards won by RSSG members.

AAG 2004

The centennial meeting was particularly successful for the group. In one of the highlights of the convention, Kelley Crews-Meyer (University of Texas, Austin) organized a reception for past RSSG medal winners. The reception was attended by 10 of the 15 surviving medal winners. The reception was partly underwritten by the University of Texas, Michigan State University, and the Eberly College of Arts and Sciences at West Virginia University.

A total of 28 paper and poster sessions at the conference were sponsored by the RSSG through the RSSG Program Chair, Jerry Griffith (University of Southern Mississippi), and the RSSG members. Many people commented on the high standard of the RSSG presentations.

We also had an excellent turn out at the business meeting of the RSSG, with approximately 40 members attending. The business meetings of the RSSG at the annual AAG conferences provide the focus of our activities, and I strongly encourage all members to attend.

Special Issue of Geocarto International Honors AAG 2004

As a lasting tribute to the centennial of the AAG, the specialty group edited a special issue of the journal, Geocarto International (Volume 19, issue 2, June 2004). The editors were Tim Warner, Duane Nellis (West Virginia University), Doug Stow (San Diego State University), and Kam Lulla (NASA). The special issue consists of 8 research articles, and a broad review article discussing the history of the RSSG in the context of the contributions of geographers to remote sensing.

Future Activities

It is not too late to plan activities for the next annual meeting of the **AAG, in Denver**. Members are encouraged to pass on to George Raber (University of Southern Mississippi), Program Chair for 2005, abstract and session information (see elsewhere in this newsletter for more details). It would be wonderful to have some RSSG-sponsored field trips, as Denver is a major commercial remote sensing area. Please let me know if you have any ideas for field trips. Also, please attend the RSSG business meeting in Denver, as we will be electing new officers, including Vice-Chair, Director, 2006 Program Director, and Student Director.

The bylaws of the RSSG were drafted by John Jensen in 1981. I recently obtained a copy of the bylaws, and I'm not sure that they have been changed in the 23 years since John drew them up. Nevertheless, we have changed our practices during that time, so I believe we should update the bylaws. The bylaws are available as a PDF document on the RSSG web site. I would be very grateful for any thoughts on amending the bylaws; please email me at tim.warner@mail.wvu.edu or phone 304-293-5603 x4328. I would like to hear from you on this matter, or any other issue you think the RSSG should address.

Tim Warner
RSSG Chairperson

A Message From the Editor

John Althausen

As many of you know, I recently joined Leica Geosystems' Defense Solutions Office in Alexandria, Virginia. It's an exciting opportunity that allows me to use my knowledge of photogrammetry and remote sensing plus my expertise in image processing to assist US defense and homeland security initiatives that are supported by Leica Geosystems. I will continue to remain active in the RSSG and, as I informed Tim Warner, will gladly remain on as the Newsletter Editor.

With George Mason Univ., Old Dominion Univ., and the Univ. of Maryland nearby, I expect to remain active in academia. My new contact information will be:

Dr. John D. Althausen, Jr.
LGGM Defense Solutions
5400 Shawnee Road, Suite 206
Alexandria, VA 22312

703-354-7415, Ext. 134
John.Althausen@lggm.com

Call for Participation:

2005 Early Career Award in Remote Sensing

In recognition of the 100th Anniversary of the Association of American Geographers (AAG) in 2004, the AAG Remote Sensing Specialty Group (RSSG) established an inaugural competition and award to recognize "exemplary research scholarship in remote sensing" by post-doctoral students and faculty in Geography and allied fields. Qualified persons are invited to submit a brief application letter and a journal manuscript for the 2nd Annual (2005) Early Career Award in Remote Sensing. Applicants must have earned their Ph.D. degrees within the last five (5) years and be a member of the AAG RSSG. The competition will be held in conjunction with the April 2005 AAG Meeting in Denver.

In addition to a $250 cash prize, the recipient's paper will be published in Photogrammetric Engineering & Remote Sensing (PE&RS).

The competition will be solely based on the quality and scientific merit of a submitted manuscript that must be prepared in accordance with the format and paper length limitations of the PE&RS journal. Multi-authored manuscripts are fine; but the applicant should be the first author, and should also submit a statement indicating that she/he is responsible for over 50% of the research and writing of the paper. Manuscripts will be reviewed by the RSSG Awards Committee and selected external reviewers. Please note that the RSSG reserves the right to make no award, should none of the submissions be deemed to be of sufficient quality.

To apply, send a PDF digital copy of your manuscript to the Chair of the AAG RSSG Awards Committee (Dr. Doug Stow, Department of Geography, San Diego State University, 5500 Campanile Drive, San Diego, CA 92182-4493; stow@mail.sdsu.edu) by January 15, 2005. Please send digital copy on CD by postal mail if greater than 6 megabytes. The award will be announced at the AAG Business Meeting of the RSSG and recognized at the AAG Honors Luncheon.

Member in the Spotlight:

Dr. Joseph Messina

Dr. Joseph Messina, an Assistant Professor at Michigan State University is currently working on a research project entitled "Simulating the Effects of "Plan Colombia" on Land Use and Land Cover in the Ecuadorian Amazon: A Complex Systems Approach". This exciting project, currently funded under the NASA New Investigator Program, explores the unintended consequences of the drug war on both the biophysical and social systems present in the Ecuadorian Amazon. It exploits a rich existing collection of interlinked regional data sets including Landsat imagery dating back to 1973, assorted incomplete coverages of IKONOS, JERS, and aerial photographs, community and household level surveys for 1990 & 1999, and other digital coverages showing roads, rivers, elevation, and other spatial-thematic data. Fieldwork to date has focused on the collection of ground truth data.

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Member in the Spotlight:
Dr. Joseph Messina

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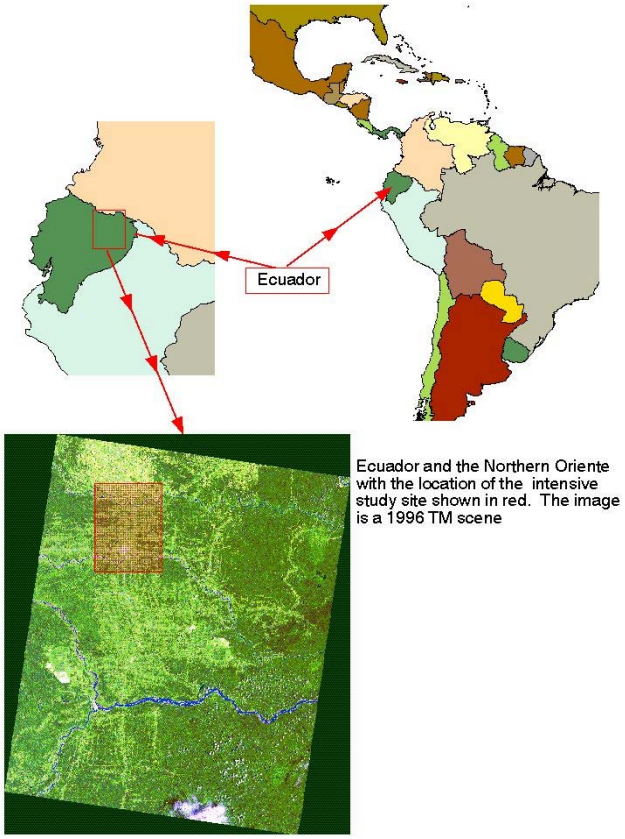
Plan Colombia was created during the Clinton administration to reduce the impact of drugs in the United States. The specific goals of the plan focused on reducing production or supply side management by providing a $1.3 billion package of assistance to Colombia. While most of the money and its impacts are felt within Colombia, some of the unintended consequences of Plan Colombia have significantly and negatively affected the Northern Oriente region of North-eastern Ecuador (Figure 1). From Joe's personal experience in the region (1999, 2000, and 2003), large numbers of Colombian farmers have migrated into Ecuador displacing the Ecuadorians or setting up squatter camps near the towns. Even more problematic, the drug trade production and infrastructure has moved from Colombia into Ecuador bordering the San Miguel and Putumayo Rivers.



Ecuador and the Northern Oriente with the location of the intensive study site shown in red. The image is a 1996 TM scene

Figure 1. The red box covers the primary Sucumbios study region and includes portions of Putumayo and Orellana. Classification map from 1996 TM.

Locally, settlers are generally poor, small scale farmers, who settle on 50 hectare plots called fincas, clearing primary forest to grow subsistence crops (e.g., yucca), as well as commercial crops (e.g., coffee), and to create small pastures for cattle. Particularly high fertility and mortality rates characterize this rural population. The Ecuadorian Amazon is also significant for environmental reasons. Bordering the Andes and lying at the headwaters of the Amazon River basin, the region possesses several major centers of endemism. One site, the Napo center, overlaps the study area. Further, among the Amazon-basin countries, Ecuadorian forests are most rapidly disappearing.

With MSU graduate students Paul Delamater and Chris Barber and colleagues at UNC-Chapel Hill, in particular Dr. Steve Walsh, Joe's group has produced a suite of new research methods, applications, and papers. A Cellular Automata (Potential Energy) Software package (CAPE) is under development and intended for public release, pattern metric software focusing on deviation from neutral landscapes is also well under way, and a suite of papers have been produced covering such diverse themes as complex systems modeling, landscape ecology, direct parameterization of remotely sensed data, and population environment interactions.

Dr. Messina's ultimate goal with this project is to integrate the social and physical, public policy and technology, and computer simulations with theory by building predictive spatial simulation models that combine all of the various datasets within a complex systems framework to build and test Land Use and Cover Change (LUCC) scenarios including the hypothesized impacts of Plan Colombia. There exist few opportunities to use satellite imagery and complex systems based modeling in a LUCC context that spans the time and space of events and conditions as covered in this project. However, beyond the interesting

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NASA's Aura Satellite

Mapping The Atmosphere

At 6:01:59.344 a.m. EDT on July 15, 2004, the Delta II launch vehicle carrying the Earth Observing System (EOS) Aura spacecraft successfully lifted off from Vandenberg Air Force Base, CA. Currently, all systems are functioning normally. The Malindi Tracking Station, in Kenya, confirmed the successful separation of the spacecraft at 7:06 a.m. EDT.

Aura is a NASA mission to study the Earth's ozone, air quality, and climate. This mission is designed exclusively to conduct research on the composition, chemistry, and dynamics of the Earth's upper and lower atmosphere employing multiple instruments on a single satellite. EOS Aura is the third in a series of major Earth observing satellites to study the environment and climate change and is part of NASA's Earth Science Enterprise. The first and second missions, Terra and Aqua, are designed to study the land, oceans, and the Earth's radiation budget. Aura's chemistry measurements will also follow up on measurements which began with NASA'S Upper Atmospheric Research Satellite (UARS) and continue the record of satellite ozone data collected from the TOMS missions.

The Aura spacecraft provides the essential services for operating four scientific instruments over the life of the mission. The spacecraft, based on the EOS Common Spacecraft design, was built by Northrop Grumman Space Technology and adapted for the Aura instrument payload.

EOS Aura's Instruments, the High

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Member in the Spotlight:

Dr. Joseph Messina

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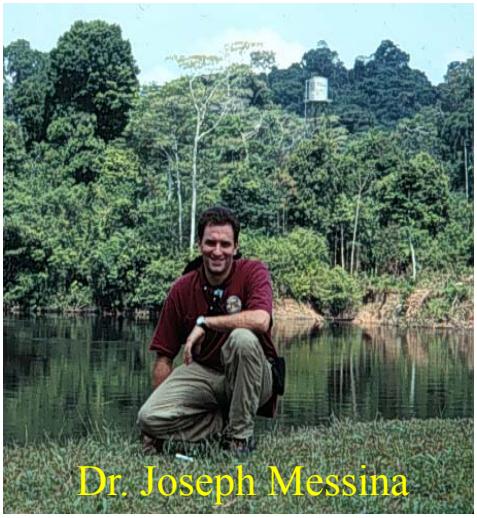
science, Plan Colombia is having an immediate, direct, and measurable impact on the land and lives of colonists within the region. It is an unintended consequence of a government policy and certainly worthy of exploration.

For comments and suggestions, Dr. Messina can be reached at:

Joseph P. Messina Ph.D.
Department of Geography


Dr. Joseph Messina


Paul Delamater

A Call for Help:

Input Needed from Virginia Undergraduate Professors

Dear RSSG Members,

I am working with the Virginia Space Grant Consortium to identify how remote sensing (RS) data are used in undergraduate classes in Virginia. If you use RS data in your teaching at a VA institution, would you kindly reply to me? Thanks very much.

Sincerely,

Elizabeth Smith
Research Assistant Professor

Department of Ocean, Earth and Atmospheric Sciences
Old Dominion University
Norfolk, VA 23529

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exsmith@odu.edu

NASA's Aura Satellite

Mapping The Atmosphere

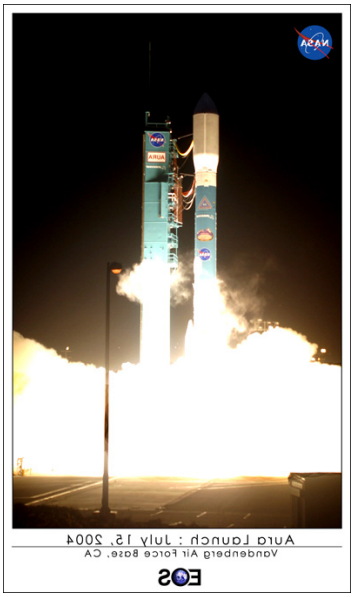
(Continued from page 5)
Resolution Dynamics Limb Sounder (HIRDLS), Microwave Limb Sounder (MLS), Ozone Monitoring Instrument (OMI), and Tropospheric Emission Spectrometer (TES), contain advanced technologies that have been developed for use on environmental satellites. Each instrument provides unique and complementary capabilities that will enable daily global observations of Earth's atmospheric ozone layer, air quality, and key climate parameters.

The Aura observatory is in a near polar, sun-synchronous orbit of 438 miles (705 kilometers), with a period of approximately 100 minutes and a 1:45 PM equator crossing time. The spacecraft repeats its ground track every sixteen days.

More information on Aura can be found at:

http://aura.gsfc.nasa.gov

Adapted from NASA web sites hosted by the Goddard Space Flight Center.



Kudos to Our Members

RSSG Members Score Big in ASPRS Awards

Congratulations to RSSG Members who have recently won awards from the American Society for Photogrammetry and Remote Sensing:

SAIC/Estes Memorial Teaching Award

Dr. John Jensen (University of South Carolina)

Leica Geosystems Award for Best Scientific Paper in Remote Sensing

1st Place to **John Rogan**, Jennifer Miller, Doug Stow, Janet Franklin, Lisa Levien, and Chris Fischer, for their paper, "Land cover change monitoring with classification trees using Landsat TM ancillary data." Photogrammetric Engineering & Remote Sensing 69(7): 793-804.

2nd Place to **Annemarie Schneider**, Mark Friedl, Douglas McIver, and Curtis Woodcock, for their paper, "Mapping urban areas by fusing multiple sources of coarse resolution remotely sensed data." Photogrammetric Engineering & Remote Sensing 96(12): 1377-1386.

3rd Place to **Ling Bian**, for the paper, "Retrieving urban objects using a wavelet transform approach." Photogrammetric Engineering & Remote Sensing 69(2):133-141.

The John I. Davidson President's Award for Practical Papers

3rd Place to **Dong Mei Chen** and Douglas Stow, for their paper, "Strategies for integrating information from multiple spatial resolutions into landuse/ladn cover classification routines." Photogrammetric Engineering & Remote Sensing 69(11): 1279-1287.

William A. Fischer Memorial Scholarship

Carl J. Legleiter (University of California, Santa Barbara)

Space Imaging Award for the Application of High Resolution Digital Satellite Imagery

Jason Janke (University of Colorado, Boulder) and Qian Yu (University of California, Berkeley)

Apologies to any other RSSG members who may have won awards from ASPRS, but whose names are not listed.

End of an Era

USGS to Stop Photographic Production

The USGS EROS Data Center (EDC) has announced that it has decided to transition from providing traditional photographic products from its historical film archive, to providing only digital products.

The USGS has archived thousands of rolls of film containing over eight million frames of historical aerial photographs gathered from various federal agencies and dating back to the 1930s. The largest portion of this archive consists of original film taken during the 1940s through the 1970s to produce 1:24,000-scale USGS topographic quadrangle maps.

Since the early 1970s, the USGS has offered a variety of photographic products from that archive, ranging from 9" to 40" prints along with 9" film copies. For the last few years there has been a decline in customer demand for paper prints and film products. Also, several major suppliers of traditional photo-processing chemicals, paper, etc. are converting to digital product lines and discontinuing traditional raw materials. Therefore, with production expenses becoming increasingly higher than can be recovered through product sales, and with a fundamental transition in the photographic materials industry, the USGS will discontinue offering photographic products.

No orders for photographic products will be accepted after September 3rd, 2004; however, all photographic orders received prior to that cut-off date will be filled.

The USGS/EDC will, however, begin offering two new digital products. One of the new digital products is a high-resolution, digitally scanned product, which will be made available upon request starting in July 2004. This digital product is created at approximately 1200 dpi with an output file size of approximately 120 megabytes from a black and white photograph and 360 megabytes from a color photograph and provided in a TIFF format. The cost for this product will be $24 for cleaning and scanning each frame plus the standard media generation costs of $45/CD, $60/DVD or $30/file if FTP is used.

A second digital product is a medium-resolution digitized product and will be available online as the rolls of film are digitized beginning in October 2004. This medium-resolution digital product is created at approximately 600 dpi with an output file size of approximately 15 megabytes from a black and white photograph and 45 megabytes from a color photograph and will also be provided in a TIFF format. The cost for this product will be $1 per file access fee along with the media generation costs of $30/file if FTP is used, $45/CD, or $60/DVD.

Samples of both the high-resolution and medium-resolution digital products for two frames of photography over an area of New York City acquired in 1966 at a scale of 1:24,000 are available to FTP from the following location: http://edc.usgs.gov/phoenix_iv/new_york

As a result of this transition, USGS digital image products can be delivered faster than traditional photographic products. Unless otherwise restricted, all digital products are public domain and can be modified to suit your needs or combined with other digital data.

For further information please contact: custserv@usgs.gov

Adapted from USGS News Release.

Cloud-Prone & Rainy Areas RS Symposium

Hong Kong

The First International Symposium on Cloud-prone and Rainy Areas Remote Sensing (CARRS) will be held in Hong Kong, May 25-27, 2005. The Symposium is organized by the Joint Laboratory for GeoInformation Science, Chinese Academy of Sciences and The Chinese University of Hong Kong. The theme of the symposium is "Exploring New Frontier in Cloudy and Rainy Areas." Topics of the Symposium cover a wide range of research and applications using microwave and optical remote sensing. Keynote speeches will be delivered at the symposium by Dr. Charles Elachi from the NASA Jet Propulsion Laboratory, USA and Professor Huadong Guo, the Chinese Academy of Sciences.

Technical sessions and a marine environment boat tour will be arranged. We welcome and look forward to your participation of the symposium.

http://www.jlgis.cuhk.edu.hk/events/events/CARRS2005/

Meet Dr. Nina Lam

Recipient of the 2004 RSSG Outstanding Contributions Award

Professor Nina Lam obtained her bachelor degree in Geography from the Chinese University of Hong Kong in 1975, and her master and doctoral degrees in Geography from the University of Western Ontario in Canada in 1977 and 1980 respectively.

She was an assistant professor at The Ohio State University from 1980-1985. In 1985, Professor Lam joined Louisiana State University and is currently a Full Professor as well as the R. J. Russell Distinguished Professor of Geography. During 1994-97, Professor Lam was also Adjunct Professor of LSU's Department of Epidemiology and Community Health. From 1999-2001, Professor Lam was selected as the Program Director of the Geography and Regional Science Program at the National Science Foundation.

Professor Lam's research interests are in remote sensing, geographic information science, cartography, spatial analysis, and medical geography. She has published in various journals and received research funding for topics such as spatial interpolation, cancer mortality studies in China, fractals and scale, AIDS in America, land cover change detection via remote sensing, and uncertainties in environmental health studies.

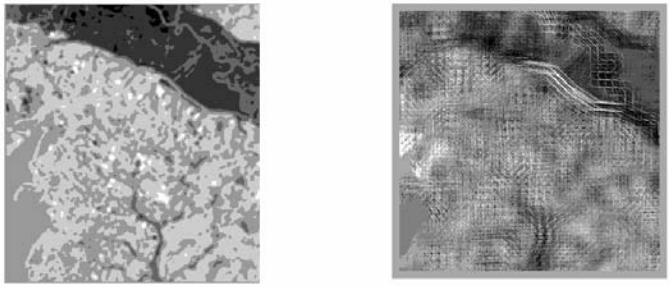
Professor Lam's research has centered on the methodological aspect of geographic information science and on the spatial analysis of medical phenomena. Her research goal has been on advancing spatial analytical methods while applying them to analyze significant societal problems. In 1983, she received the best paper award (the Andrew McNally Award) for her article titled "Spatial interpolation methods: a review", which was published in the journal The American Cartographer. Her edited book "Fractals in Geography", published in 1993 by Prentice-Hall, has recently been reprinted by the Blackburn Press (2003), a time lapse of 10 years.

Dr. Lam's research on the AIDS epidemic has been featured in various newspapers and magazines in the mid-1990s. Her recent research interests are in change detection using textural and spatial methods and data mining of medical, social, and economic phenomena. With support from NASA, Professor Lam and her collaborators developed the software called ICAMS (Image Characterization And Modeling System) in early 1990s.

Among other publications, Professor Lam is currently completing a co-authored book titled "Geospatial Methods for Remote Sensing and GIS" to be published by John Wiley & Sons.

Professor Lam teaches Environmental Remote Sensing, GIS, Advanced GIS Seminar, and Quantitative Methods for Geographical Analysis Seminar at LSU. She has been the major professor of 9 Ph.D.s and 16 MS graduates. She is currently major professor of 8 Ph.D. and 3 Master students.

Impact of Hurricane Hugo on the land cover of the Francis Marion National Forest, South Carolina. Left Landsat-TM image was taken on 10/14/1987 and right image on 10/11/1989 (displayed using Bands 4,3,2). Hugo struck South Carolina on 09/25/1989. (Lam, Kulkani, and Zhou, 2004)



Change detection using the wavelet and the fractal methods from ICAMS. Left is a difference image between the wavelet transform (approximate image) of the 1989 and the 1987 images using band 4. Right is a difference image from the fractal transform images. The darkest and the brightest pixels signal greatest changes in negative and positive directions, respectively. The wavelet difference image captures the flooded area in the NE corner the best, but misses the changes in sediment load at the mouth of the river in the west side of the image. (Nina Lam, 2004)

Meet Dr. Douglas Stow

Recipient of the 2004 RSSG Outstanding Contributions Award

Dr. Douglas Stow is a Professor of Geography at San Diego State University (SDSU) and a specialist in remote sensing. He received bachelors, master's, and doctoral degrees in Geography from the University of California, Santa Barbara.

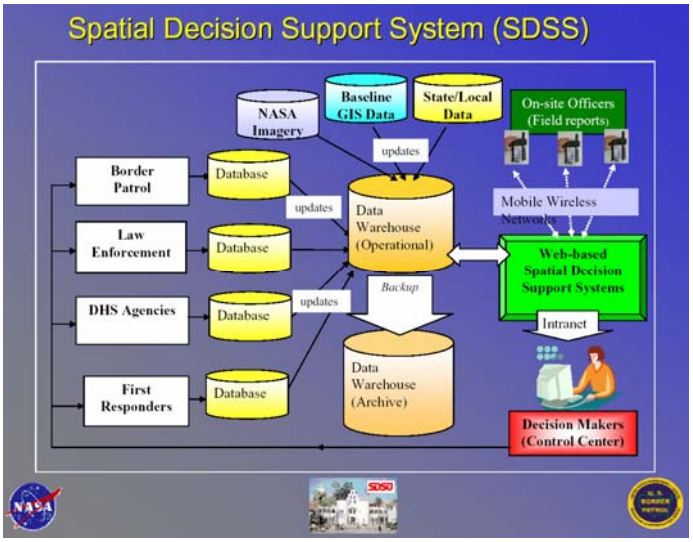
His remote sensing studies focus on land cover change analyses with emphases on Mediterranean-type, Arctic tundra, and salt marsh ecosystems, as well as on urbanization. His current research is on monitoring vegetation fuel moisture and invasive plants in Mediterranean type ecosystems, and on integration of geo-spatial technologies in support of homeland security operations along the US borders.

He is the primary instructor of remote sensing courses at SDSU, is the Co-Director of the Center for Earth Systems Analysis Research, and serves as the chair for the California State University system's Remote Sensing Committee. Stow served for almost five years as department chair and is currently the doctoral program coordinator. He also serves as chair for the Intercollegiate Athletic Authority at SDSU. In 1997, he received the SDSU Alumni Associates Outstanding Faculty Award.

Stow is currently the P.I. for a NASA Research, Education, and Applications Solutions Network (REASoN) project on integration of remote sensing and decision support systems for international border security, and the NASA Affiliated Research Center, which has operated at SDSU for eight years. He has also served as P.I. for numerous state and local agency contracts, and is currently a co-investigator on National Science Foundation and National Institute of Child Health grants.

Stow is the author or co-author of 90 refereed publications and 38 conference proceedings papers, mostly on remote sensing topics. He and his students have received several best paper awards, including a first and a third place award at the recent ASPRS 2004 conference, and first place in the 2004 AAG RSSG student paper competition. Dr. Stow has served as primary advisor to four doctoral and 38 master's degree students at SDSU. The three students that have completed their doctoral degrees now have university-level academic positions in remote sensing.

Outside of his professional life, Professor Stow enjoys "family life," along with sports and outdoor activities. He is an occasional tennis partner with his wife Chris and soccer coach for his sons Dylan (13) and Parker (9). Beach volleyball, running, golf, and traveling are his favorite activities.



Position Announcement

Postdoctoral Researchers in RS/GIS & Alpine Glacier Assessment

UNIVERSITY OF NEBRASKA-OMAHA, OMAHA, NEBRASKA, 68182

The Department of Geography and Geology at the University of Nebraska-Omaha invites applications for two researchers to participate in remote sensing/GIS studies involving assessment of alpine glaciers in Afghanistan and Pakistan. This work is part of the International Global Land Ice Measurements from Space (GLIMS) project. The successful candidate should have a Ph.D. in geography, geology, or related fields (ABD will be considered). Experience in remote sensing, GIS, & Earth science required. Preference will be given to candidates with numerical, computer, and communication skills. Work duties include contributing to research involving glacier mapping, change detection, surface energy budget, glacier flow modeling, and population of the GLIMS database. **Applications will be reviewed immediately and the positions will remain open until filled.** Positions are available for three years pending annual review and availability of funds. For additional information contact:

Dr. Michael P. Bishop
Department of Geography and Geology
University of Nebraska-Omaha
Omaha, Nebraska, 68182
bishop@data.unomaha.edu

Electronic application is required at http://careers.unomaha.edu. Applicants must fill out application form and upload cover letter, vitae, and three references with full contact information. The university has a strong commitment to achieving diversity among faculty and staff. Applications from members of underrepresented groups are encouraged to apply.

Position Announcement

Geography Faculty @ SDSU

SAN DIEGO STATE UNIVERSITY, SAN DIEGO, CALIFORNIA 92182-4493

San Diego State University seeks applicants for a tenure track Assistant Professor position, contingent on funding, to begin in August, 2005. Ph.D. required at time of appointment. Expertise required in some combination of the following areas: Landscape Ecology, ecosystem modeling, spatial/environmental analysis. Demonstrated excellence in teaching and scholarship and commitment to funded research required. SDSU's Geography Department has many faculty with expertise in the application of GIScience and geospatial techniques, and houses the Center for Earth Systems Analysis Research (CESAR), a laboratory facility designed to support state-of-the-art technology in geographic information systems, image processing, remote sensing, automated cartography, spatial statistics, and spatial modeling. Departmental information can be found at http://typhoon.sdsu.edu. Send letter of application describing research agenda and teaching interests, curriculum vitae, and names and addresses of three references to:

Dr. Stuart Aitken
Chair, Hiring Committee
Department of Geography
San Diego State University
San Diego, CA 92182-4493
saitken@mail.sdsu.edu

SDSU is a Title IX, equal opportunity employer and does not discriminate against individuals on the basis of race, religion, national origin, sexual orientation, gender, marital status, age, disability or veteran status, including veterans of the Vietnam era. **Applications must be received by October 15, 2004.**

Proposed AAG Sessions

Get Your Abstracts In!

RSSG Papers

Potential authors of any geographic background who use remote sensing technology in their research or professional work are encouraged to submit papers for the 2005 Annual Meeting in Denver Colorado and have their papers sponsored by the Remote Sensing Specialty Group. After an author submits an abstract at the AAG website, http://www.aag.org, the author should email the paper title, author names and AAG paper number to the program chair (contact information below). The deadline for submitting a paper to be sponsored by the specialty group is October 18, 2004.

Participants are also encouraged to organize special sessions with colleagues according to their own particular areas of focus in remote sensing.

For further information, contact:

Dr. George Raber
2005 RSSG Program Chair
University of Southern Mississippi
george.raber@usm.edu

Remote Sensing and GIS For Estuarine and Coastal Ecosystem Analysis

Organizers: Drs. Xiaojun Yang (Florida State University) and Luoheng Han (University of Alabama)

This special paper session will serve as a forum for researchers to communicate their current developments regarding the use and applications of remote sensing and GIS to develop environmental indicators for assessment of estuarine and coastal ecosystems, particularly at the landscape level. Topics considered will include (but not limited to):

- Characterization, analysis, and modeling of changing estuarine landscape structure and patterns;
- Coastal wetland mapping and change detection;
- Pollutant load modeling and prediction at coastal watershed level;
- Remote sensing of coastal water bio-optical properties (chlorophyll, turbidity, salinity, temperature, dissolved oxygen...);
- Mapping of seagrass, littoral aquatic vegetation, and benthic habitats; and
- Linking conditions in upstream watersheds to downstream estuaries for integrated assessment of the estuarine ecosystems

Our deadline for receiving all application materials from presenters is 20 October 2004. Please contact us with questions or for further details.

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Remote Sensing and GIS for Urban Analysis

Organizers: Drs. Xiaojun Yang and Vector Mesev (Florida State University)

This special paper session will serve as a forum for researchers to communicate their current developments regarding the use of remote sensing and GIS for urban analyses. Topics considered will include (but not limited to):

- Remotely sensed data requirements for urban landscape characterization;
- Digital image processing procedures for deriving accurate and consistent information on urban attributes from remotely sensed data;
- Analytical techniques and methodologies for deriving indicators of social and economic conditions that prevail within urban landscape;
- Urban landscape change monitoring and mapping case studies;
- Impacts of urbanization upon ecological and social environment;
- Urban landscape simulation and predictive modeling based on remotely sensed data; and
- Interface between remote sensing/ GIS and urban geography.

Our deadline for receiving all application materials from presenters is 20 October 2004. Please contact us with questions or for further details.

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Hazards, GIS, and Remote Sensing

Organizers: Tom Cova (U. Utah) & Tarek Rashed (U. Oklahoma)

If you are interested in presenting in this session, match a keyword from list

Proposed AAG Sessions

Get Your Abstracts In!

(Continued from page 11)
A with one from list B and let us know (or suggest something else in this theme).

List A
Avalanche, wildfire, flood, tsunami, vulnerability, terrorism, biohazard, evacuation, tsunami, landslide, nuclear power plant, debris flow, disaster, dam break, earthquake, HazMat, extreme weather, homeland security, warning, tornadoes, radioactive, catastrophic, outbreak, hurricane, critical infrastructure, emergency management, terrorism, risk, rock fall, war, drought, toxic release, inundation or hazard.

List B
GIS, remote sensing, GPS, geocomputation, simulation, agent-based, HAZUS, cellular automata, mathematical modeling, computational, neural network, geovisualization, geospatial, the internet or digital.

Our deadline for receiving all application materials from presenters is 15 October 2004. Please contact us with questions or for further details.

Regards,

Tom Cova
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Tarek Rashed
Department of Geography
University of Oklahoma
rashed@ou.edu

Coastal Remote Sensing

Organizers: Diane Horn (University of London) and John Althausen (Leica Geosystems)

The RSSG and the Coastal and Marine SG would like to collaborate again on some joint sessions for AAG 2005. If you are planning to present a paper on coastal remote sensing contact the organizers and they will place you in a co-sponsored session. If you have organized a session already and want to coordinate with the RSSG and CMSG then contact the organizers as well.

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Draft Strategic Plan for the U.S. Integrated EOS

Get Your Comments In!

On September 8, 2004, the U.S. released a draft 10-year "Strategic Plan for the U.S. Integrated Earth Observation System," a system that will improve our ability to monitor, understand and predict changes to the Earth.

The release of this draft marks a significant milestone in the ongoing development of a Global Earth Observation System of Systems, involving 48 other countries, the European Commission and 29 international organizations. The U.S. draft plan is now open for public and further scientific review and comment prior to being finalized by the end of the year.

The Plan incorporates Earth observations from a broad range of remotely sensed and in situ platforms, so it should be of interest to many RSSG members.

The full text of the draft Strategic Plan is available at:

http://iwgeo.ssc.nasa.gov/draftstrategicplan/

Comments on the draft are due by November 8, 2004. Individual comments may be sent to:

IWGEOcomments@noaa.gov

For more information on the Earth Observation System, see the U.S. Interagency Working Group on Earth Observations website at:

http://IWGEO.ssc.nasa.gov/

and the Global Earth Observation System of Systems (GEOSS) website at:

http://earthobservations.org/

Adapted from an ASPRS Broad Announcement


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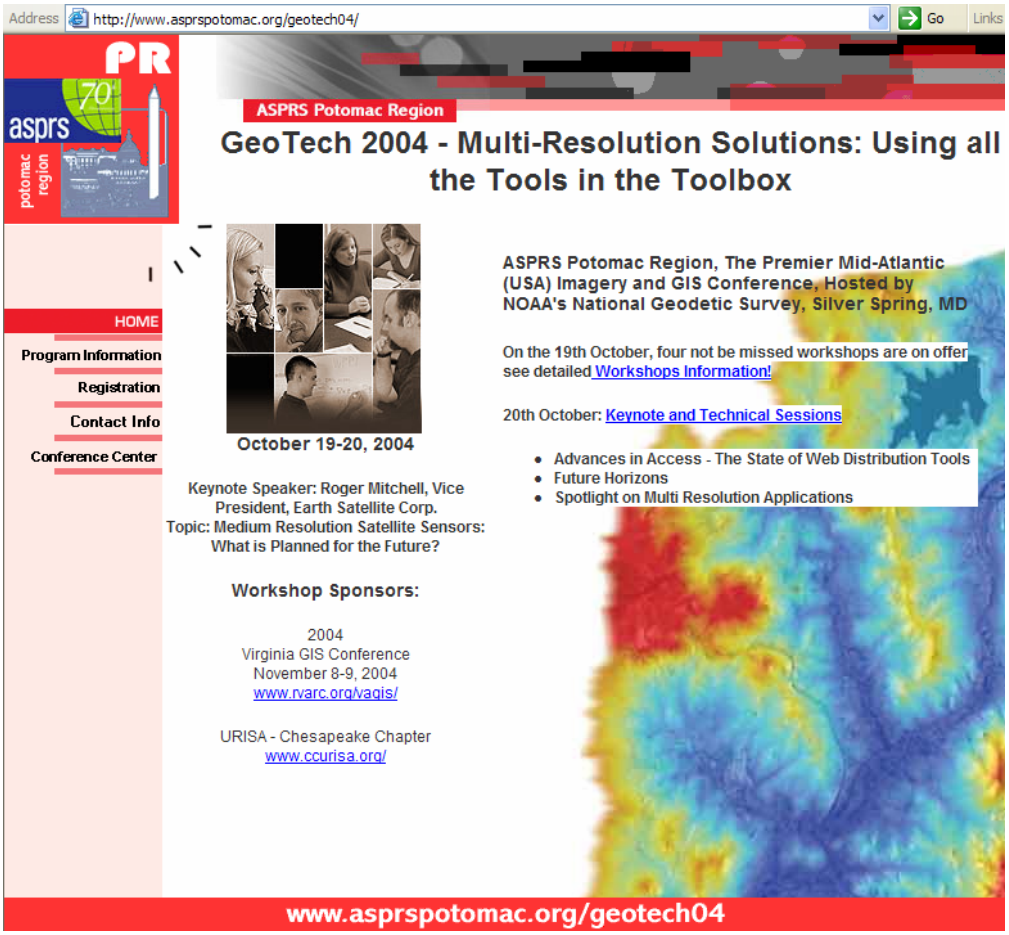
3rd International Symposium Remote Sensing and Data Fusion Over Urban Areas (URBAN 2005)
5th International Symposium Remote Sensing of Urban Areas (URS 2005)
march 14,15,16 2005
CALL FOR PAPERS November 15, 2004
The first joint conferences of URBAN and URS represent a landmark event for the international 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)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On the 19th October, four not be missed workshops are on offer see detailed Workshops Information!
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AAG-RSSG

We're on the Web

http://www.aagrssg.org

It's Your Newsletter!

The RSSG Newsletter is your vehicle for communicating with colleagues interested in remote sensing. You are invited to send news regarding research activities, students, publications, awards, honors, academic programs, projects, commercial ventures, jobs, and other announcements to the editor, John Althausen. If possible please submit contributions by e-mail in MS Word or RTF format.

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