The RSSG Newsletter

Volume 25, Issue I

Inside this issue:

The Chair Speaks	I
Early Career Award	2
Meet Mark Chopping	3
Earth System Science and Policy Graduate Program	3
What is CESAR?	4
How's the Weather?	5
TAs Available!	5
RSSG Sponsored AAG Sessions	6
RSSG Student AAG Sessions	11
Grants-R-Us UMd Geography	12
Nellis to Speak at AAG	13
RS Imagery in AAG Cryosphere Session	14
RS 2004 Conference	14
CELEBRATE Our Past RSSG Award Winners	15
RA Available West Virginia Univ.	15
GIS Coordinator Position Miami Univ. Ohio	15
AAG 2004 Annual Meeting	

Philadelphia, PA

March 14 to 19, 2004

"Ruminations" from the Chair: Update on RSSG Activities...

The RSSG has been busy since the last AAG in New Orleans. The material below gives you a partial summary of our group's latest activities.

The Newsletter

Special thanks to John Althausen, of Salem State College for helping to reinvigorate the RSSG through these periodic newsletters. The newsletter provides the one formal medium of communication for our group.

The Web Site

The RSSG web site, at http://www.aagrssg.org, provides a central identity for our group, and a method for communication of important announcements, such as related to the annual meeting. John Althausen manages to maintain the web site, in addition to his work as newsletter editor. The web site will soon be enhanced with a complete archive of RSSG newsletters, starting with the group's first newsletter from 1980. This archive of newsletters was preserved by Jim Merchant (University of Nebraska), who kindly scanned them for inclusion on our web site.

The List Serve

The RSSG list serve is maintained by Jim Merchant. In the last newsletter I mentioned that the list was being updated, and also asked those who were not getting occasional emails from the list serve to let Jim know. I understand that Jim only received a few responses, so I assume that our members are now all in the email database. You can subscribe/unsubscribe to the list at our home page.

Special issue of Geocarto International

An excellent response was received to the call for papers for the special issue of Geocarto International, to be published in celebration of the centennial of the AAG. The editors of this special issue are M. Duane Nellis & Tim Warner (West Virginia University), Doug Stow (San Diego State University) and Kam Lulla (NASA). Kam is also leading the writing of a short introductory article, discussing American geographers, remote sensing, and the RSSG.

Early Career Award

The RSSG Honors Committee, led by Steve Walsh (University of North Carolina), had a busy fall/winter. In addition to reviewing nominations for the 2004 RSSG Outstanding Contributions in Remote Sensing *Award*, the committee has developed a new RSSG award – the *RSSG Early* Career Award in Remote Sensing. The rationale for this new award is that RSSG currently recognizes both students and senior members, but not new professionals, who are some of the most productive members in our group. Furthermore, our outstanding early career RSSG members, who face many challenges such as in promotion and tenure and grant applications, would potentially gain a great deal from the recognition of the RSSG. The first Early Career Award in Remote Sensing will be announced at the Centennial meeting of the AAG in Philadelphia. The award consists of a cash prize, and the publication of the winner paper in Photogrammetric Engineering and Remote Sensing.

Centennial Meeting of the AAG

The Centennial meeting of the AAG in Philadelphia is promising to be a

(Continued on page 2)

February 2004

"Ruminations" from the Chair: Update on RSSG Activities...

(Continued from page 1)

particularly noteworthy event. Jerry Griffith (University of Southern Mississippi), on behalf of the RSSG, has organized a particularly wide array of remote sensing paper and poster sessions. Members of the RSSG have also organized a large number of sessions.

A highlight of the conference should be the student paper and poster competitions, organized by RSSG Student Director, Theresa Burcsu (University of Florida). Theresa reports that a total of 26 students are competing this year, which must be a record number! Please be sure to attend the student competition sessions. In addition to encouraging the next generation of RSSG members, you will hear cuttingedge research results!

Another highlight of the meeting will

be the special reception, organized by Kelley Crews-Meyer (University of Texas at Austin) to honor past winners of the RSSG Outstanding Contributions Award – all RSSG members are invited to attend.

RSSG members are particularly encouraged to attend the RSSG business meeting (7 pm, Thursday, 18 March). We'll announce the winners of the various RSSG awards, and plan the events for the 2005 AAG meeting in Denver. We'll also be holding officer elections, including for the positions of RSSG director and a student director.

While at the centennial meeting, be sure to look out for remote sensing events listed in the Geography in America timeline (thanks to Joe Messina, Michigan State University), as well as the RSSG poster in the AAG Centennial Hall of History.

Concluding thoughts

As always, I invite your participation in these and other RSSG events– don't be shy! The RSSG is only what we all individually make of it. Because we are so spread out geographically, it takes a conscious effort to be included as an active RSSG member. That is a barrier for many, but does mean that if you do decide to participate, you are appreciated a lot more. I look forward to seeing you in Philadelphia.

Regards,

Tim Warner RSSG Chair West Virginia University tim.warner@mail.wvu.edu

New RSSG Award: Early Career Award in Remote Sensing

In recognition of the 100th Anniversary of the Association of American Geographers (AAG), the AAG Remote Sensing Specialty Group announces an inaugural competition & award to recognize "exemplary research scholarship in remote sensing" by post-doctoral students and faculty in Geography and allied fields.

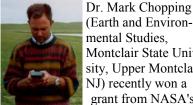
To qualify for this "Early Career Award in Remote Sensing," applicants must have earned their Ph.D. degrees within the previous 5 years, and be a member of the Association of American Geographers Remote Sensing Specialty Group.

The competition will be held in conjunction with the March 2004 AAG Meeting in Philadelphia, and annually thereafter. In addition to a \$250 cash prize, the best paper will be published in *Photogrammetric Engineering and Remote Sensing* (awards made in even years) or *Geocarto International* (awards made in odd years). Thus, for this particular competition year, the award winning paper will be published in *Photogrammetric Engineering and Remote Sensing*.

An "award to recognize exemplary research scholarship in remote sensing by post-doctoral students and faculty in Geography and allied fields." 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 that year's journal. Papers will be reviewed by the RSSG Honors Committee, and also selected external reviewers. Please note that the RSSG reserves the right to make no award, should no submissions of sufficient quality be received.

The deadline for the 2004 award was February 1, 2004. The deadline for the 2005 award will be January 15, 2005. Please contact Tim Warner (Tim. Warner@mail.wvu.edu) for more details.

Member in the Spotlight: Dr. Mark Chopping



(Earth and Environmental Studies. Montclair State University, Upper Montclair, NJ) recently won a grant from NASA's Earth Science Enter-Dr. Mark Chopping Assistant Professor prise program, with a Montclair St. Univ. proposal to use data from NASA's Earth

Observation System satellites to map carbon pools in the southwestern United States. The three-year project involves moderate resolution, multiangle remote sensing driving a biogeochemical process model, CENTURY, which is to be modified for arid

environments by researchers at the USDA, ARS Jornada Experimental Range, Las Cruces, NM.

The proposal was one of 192 selected from a field of 566. The \$540K project is supported by the NASA grant with a \$60K contribution from the Jornada Experimental Range. Dr. Chopping has also been appointed to the MISR Science Team.

The data to be used are from the MISR and MODIS sensors on the Terra and Aqua satellites. Co-investigators include scientists Dr. Albert Rango and Dr. Debra P.C. Peters at the USDA, ARS Jornada Experimental Range;

Dr. John Martonchik at NASA's Jet Propulsion Laboratory in Pasadena, CA; and Dr. William J. Parton at the Natural Resource Ecology Laboratory/ Colorado State University in Fort Collins, CO.

The research proposal was inspired by the need to better exploit new multiangle sensing techniques: looking at the Earth's surface from a range of different vantage points provides unique information not available to sensors which look straight down. The research is driven in part by the observation that desert grasslands throughout the southwestern U.S. have

(Continued on page 4)

Program in the Spotlight: M.E.M., M.S., Ph.D. in Earth System Science and Policy Program

There is a new graduate program in Earth System Science and Policy at the University of North Dakota. The program will be a student-centered, problem-based interdisciplinary curriculum bridging the worlds of science and humanity. It will begin in Fall 2004.

The mission of the Earth System Science and Policy program is to provide an integrated and creative learning environment that fosters intellectual growth, critical thinking, and practical engagement in research and management of the Earth system and resources. The need for the program exists because humans during the 20th century modified the global environment faster than they understood the consequences of their changes. The major theme of the program is therefore sustainability, defined as meeting human needs and values while preserving the planet's life-support systems.

Five major concentrations support this

central theme:

- Biodiversity and Ecosystem Func-1 tioning.
- 2. Climate and Environmental Change,
- 3. Land and Resource Management,
- 4 Environmental Management, Policy, and Communication, and
- 5. Human Health and the Environment.

The objectives of the program in Earth System Science and Policy include:

- Student-structured curriculum •
- Research driven by societal needs and values
- Multidisciplinary education •
- Learning within teams •
- Experiential learning
- Leadership to create a future proactively
- Unification of economic security, ecological integrity, and social equity
- Bridging the "digital divide"

global conceptually but acting regionally

The ESSP Program builds on an established research and applications team, centered at UND, but networking with 7 other universities in 4 other states: the Universities of Idaho, Montana, and Wyoming; South Dakota and Montana State Universities; South Dakota School of Mines and Technology; and Sinte Gleska University, SD. External funding for this team during 1994-2003 exceeds \$14 million. Personnel resources include: 10 core faculty, affiliated faculty from various UND departments, and approximately 30 collaborating faculty from the network of universities above; a technical and administrative support staff



Center for Earth Systems Analysis Research San Diego State University

The Stephen and Mary Birch Foundation's Center for Earth Systems Analysis Research (CESAR) is a computer-based research and instruction facility administered by the Department of Geography at San Diego State University. The purpose of the Center is to apply state-of-the-art technology in image processing, remote sensing, geographic information systems, automated cartography and numerical modeling to problems with a spatial dimension. As such, a number of SDSU Geography Department faculty are affiliated with the center.

Research conducted by the CESAR is directed at both applied and fundamental problems in fields ranging from biophysical remote sensing to urban planning. This research includes computer-based map and image data processing and spatial simulation modeling as well as field experimentation. Current, and in progress, grants and contracts are in excess of 2.0 million dollars.

CESAR facilities include three computer workrooms, a server room and offices for the technical staff. The workrooms are a mixed environment of Sun Workstations, Intel Pentium PCs, Silicon Graphics Workstations and Macintosh computers linked to numerous processing and data servers through a Department of Geography administered LAN.

CESAR has extensive GIS, Remote Sensing, statistical and modeling software resources including ESRI's Arc/Info and related products, GRASS, ERDAS Imagine, ENVI, SPlus, SPSS, and RHESSys. Graphics software includes Adobe and Macromedia products along with various software utilities.

For more information about on-going research projects or services provided by CESAR, or for a demonstration of its capabilities, contact Mr. David McKinsey, Manager of CESAR.

Stephen Mary Birch Foundation Center for Earth Systems Analysis Research Department of Geography San Diego State University San Diego, CA 92182-4493 Phone: (619) 594-8042 or (619) 594-5437 E-mail: dave@typhoon.sdsu.edu.





CESAR has extensive GIS, Remote Sensing, and cartography software resources including Arc/Info and related products, IDRISI, and ERDAS. The Center research equipment is augmented by facilities in the Department of Geography including three field vehicles, a wide array of field measuring devices, a class "A" weather station and a physical geography laboratory.

Member in the Spotlight: Dr. Mark Chopping

(Continued from page 3)

experienced a dramatic increase in shrub abundance since the end of the 19th century, altering distributions of below-ground carbon pools. The arid southwest provides an excellent subject for the development of remote sensing and modeling methods which will be useful in other arid regions and at global scales. The approach is to exploit the information content of the Bidirectional Reflectance Distribution Function (BRDF), in addition to spectral measures.

Prior to his Montclair State appointment (in September 2002), Dr. Chopping worked for the USDA Agricultural Research Service (ARS) in both Maryland and New Mexico, and has been working on remote sensing of arid and semi-arid environments in the U.S. and in Inner Mongolia, People's Republic China, for over ten years. He is also an investigator in the European Space Agency's CHRIS-PROBA Mission, exploiting data from the Compact High Resolution Imaging Spectrometer (CHRIS), sensor developed by the British company Sira Electro-Optics Ltd. flown on the agile PROBA mini-satellite which also has multi-angle capabilities.

Geostationary Operational Environmental Satellites Mapping U.S. Weather Continuously

GOES satellites fly 22,300 miles above Earth from where they peer down continuously on their assigned areas of North America. These "stationary satellites" actually are moving in equatorial orbits so far above the planet's surface they seem to us to be standing still. Two GOES (GOES-East & GOES-West) satellites send a continuous stream of weather data (in visible and infrared) to the National Weather Service.

Data from GOES-E can be registered to a Lambert Conformal Conic projection,

and mapped in most GIS packages using the following information:

 Download the current GOES IR satellite imagery. First you need to obtain a fresh jpeg graphic from the National Environmental Satellite Data and Information Service. The current IR image can always be found at http://www.goes.noaa. gov/GIFS/ECIR.JPG. With the right button of your mouse, click on the satellite image and select Save Picture As... and save the graphic. This image is not rectified to a map projection but can be by creating a registration file for it.

2. Create the header file. Since the GOES satellite is always found "stationary" over the same part of the United States, its image will always be the same so you can generate a registration file for it without too much difficulty. The coordinates have been calculated already for the Lambert Conformal Conic projection. You will just need to create a text file that

Teaching Assistantships Available Miami University in Oxford, Ohio

The Geography Department at Miami University (Ohio) has several teaching assistantships available, and seeks applicants interested in pursuing a Master's degree in Geography.

We offer an M.A. in Geography at Miami with specializations in three areas: urban economic; physical; and human-environment. In addition, we offer courses in a range of techniques such as remote sensing and geographic information systems. Particular areas of emphasis in the program include Sustainable Development, Landscape Analysis & Environmental Change, Geographic Information Science, Regional Studies, Urban Worlds, and Critical Geographies. Our program is a small one that offers excellent student access to faculty, with a near one-toone ratio of students to faculty.

Assistantships in the Geography Department this year carry a 9-month stipend of \$10,350 (the number will be higher next year), plus a \$1600 summer fellowship. This amount goes farther in Oxford, Ohio with its relatively low cost of living, than it does in many other locations. In addition, the department offers significant financial assistance in support of thesis research.

For more information, please visit our web site at:

http://www.muohio.edu/geography

or contact Dr. Ian Yeboah at yeboahie@muohio.edu



Program in the Spotlight: M.E.M., M.S., Ph.D. in Earth System Science and Policy Program

(Continued from page 3)

of thirteen; and funding for several graduate student assistantships. An array of major research equipment is also in place.

Students having backgrounds in

natural, physical, and social sciences or humanities, as well as in applied sciences, engineering, law, education and many other fields will generally be well qualified for graduate work in ESSP. Help make a Sustainable World by applying for admission now! ESSP, University of North Dakota, Box 9007, Grand Forks, ND 58202-9007

URL: http://www.umac.org/essp E-mail: essp@umac.org Tel.: 701-777-2482 Fax: 701-777-2940

Are Parks Working? Exploring Tradeoffs in Protected Area Conservation I is scheduled on Friday, 3/19/2004 from 8:00 a.m. - 9:40 a.m.

Harini Nagendra - Indiana University (Presenter) Abstract Title: *Disentangling a*

Complex Web: Nepal's People and Parks Program

Darla Munroe - University Of North Carolina, Charlotte (Presenter) Abstract Title: Protection, topography and market accessibility: examining forest fragmentation in Celaque National Park, Western Honduras

Juergen Clemens - University Of Heidelberg (Presenter) Abstract Title: Is the Khunjerab National Park in Northern Pakistan Working for the Local Agropastoralists?

Lisa Naughton - University of Wisconsin (Presenter)

Abstract Title: Mapping visible and invisible threats to biodiversity: Deforestation and hunting in 15 parks in the Tropical Andes

Robert J. Mason - Temple University (Presenter) Abstract Title: What is Working Where? Evaluating Protected Area Management in two "Greenline Parks"

Are Parks Working? Exploring Tradeoffs in Protected Area Conservation II is scheduled on Friday, 3/19/2004 from 10:00 a.m. - 11:40 a.m.

Jennifer Lipton - University Of Texas, Austin (Presenter) Abstract Title: Managing Mountains: Institutions and Landscape Change in Huascarán National Park, Peru

Karl Zimmerer - University of Wisconsin, Madison (Presenter) Abstract Title: Globalization and Multispatial Trends in the Coverage of Protected Areas (1980-2000)

Catherine Tucker - (Presenter) Abstract Title: Conservation, Contradiction and Community Experiences in Mexico's Monarch Butterfly Reserve

Glen Martin Green - Indiana University (Presenter) Abstract Title: Are Protected Areas Distributed to Best Protect Biodiver-

sity?

Marcus Nuesser - University of Bonn, Germany (Presenter) Abstract Title: Conflicts of resource

utilization and environmental protection in the high mountains of Lesotho, southern Africa

Are Parks Working? Exploring Tradeoffs in Protected Area Conservation III is scheduled on Friday, 3/19/2004 from 2:00 p.m. - 3:40 p.m.

Ned Horning - Center for Biodiversity and Conservation (Presenter) Abstract Title: When Rules Help Conservation and When They Do Not

Rinku Roy Chowdhury - University Of Miami (Presenter) Abstract Title: Regional and local landscape change in the southern Yucatán, Mexico: forests, smallholders and institutions

Stephen M. Oppermann - Stephen M. Oppermann & Associates (Presenter) Abstract Title: *Protecting National Parks Via Partnership Between National Park Service and United States Air Force*

Jagdish Krishnaswamy - Ashoka Trust for Research in Ecology and the Environment (Presenter) **Abstract Title:** *Effectivess of Protected Areas in protecting forest bio-* mass: a case study from Southern India

Are Parks Working? Exploring Tradeoffs in Protected Area Conservation IV is scheduled on Friday, 3/19/2004 from 4:00 p.m. - 5:40 p.m.

Dianne E. Rocheleau - Clark University (Presenter)

Abstract Title: Parks, Power and (un) Protected Areas: Complex Ecologies and Patchwork Biodiversity in the Adirondacks and Santiago R.D.

Glenn G. Hyman - CIAT (Presenter) Abstract Title: *Population change* and protected areas in Central America since 1950

Rahul Shrivastava - Florida International University (Presenter) Abstract Title: Kaziranga National Park in Transition: Predicting parkpeople relations when park size increases

Gary Geller - (Presenter) Abstract Title: Increasing Access and Usability of Remote Sensing Data: ASTER Protected Area Archive

Coalescing Frontiers? Landscape Ecology and GIScience, Part I is scheduled on Monday, 3/15/2004 from 10:00 a.m. - 11:40 a.m.

Richard J. Aspinall - Montana State University (Presenter)

Abstract Title: Geography, landscape ecology, and GIScience – some opportunities for interdisciplinary development.

Joseph P. Messina - Michigan State University (Presenter) Abstract Title: Deviation from Neutral: Comparing Social and Physical Landscapes in the Northwestern Amazon

(Continued on page 7)

(Continued from page 6)

F.N. Scatena - University of Pennsylvania (Presenter)

Abstract Title: GIScience and the management of tropical ecosystems; Challenges for the future

Joy Nystrom Mast - Carthage College (Presenter)

Abstract Title: Landscape Ecology and GIScience approaches to examining snag dynamics and wildlife use of burned versus unburned landscapes in Arizona

Kenneth R. Young - University of Texas - (Presenter) Abstract Title: Landscape Ecology of Protected Areas

Coalescing Frontiers? Landscape Ecology and GIScience, Part II is scheduled on Monday, 3/15/2004 from 1:00 p.m. - 2:40 p.m.

Daniel G. Brown - University of Michigan (Presenter) Abstract Title: *Uncertainty in Spatial Landscape Metrics*

Jane Southworth - University of Florida (Presenter)

Abstract Title: Spatial versus temporal analysis of landscape change in North Central Florida

George Malanson - University of Iowa (Presenter) Abstract Title: *Frontiers as frontiers*

Kelley A. Crews-Meyer - University of Texas (Presenter)

Abstract Title: Landscape Dynamics or Landscape Dynamism? Implications of Linking Pattern and Process

Kenneth R. Young - Univ of Texas - (Discussant)

Developing Remote Sensing and GIS Applications for Coastal Research is scheduled on Wednesday, 3/17/2004 from 10:00 a.m. - 11:40 a.m.

Thomas Allen - Old Dominion University (Presenter)

Abstract Title: Remote Sensing of Coastal Habitats for Mosquito Surveillance and Control

John Althausen - Salem State College (Presenter)

Abstract Title: Comparison of Landsat-7 ETM+ high gain and low gain settings for coastal research in arid climates.

L. Jean Palmer-Moloney - SUNY Oneonta (Presenter)

Abstract Title: Linking In-Situ & Remote Sensing to Determine Critical Parameters of the Estuarine Wetlands

Michael S. Kearney - University of Maryland (Presenter) Abstract Title: Using Spectral Indices in Spectral Mixture Modeling of Marsh Condition with Landsat Data

Keqi Zhang - (Presenter) Abstract Title: *Three-Dimensional* Visualization and Animation of Storm Surge Flooding

Ecoregionalization: Establishing the State of the Practice and Setting a Future Science Agenda is scheduled on Tuesday, 3/16/2004 from 8:00 a.m. -9:40 a.m.

James M. Omernik - U.S. Geological Survey (Presenter) Abstract Title: Perspectives on the Nature and Definition of Ecological Regions

Thomas R. Loveland - USGS/EROS (Presenter) Abstract Title: Using Ecoregions to Analyze Land Cover Change

Robert Thompson - U.S. Geological Survey (Presenter) Abstract Title: *Comparison of Envi*- ronmental Characteristics of the Küchler, Bailey, and World Wildlife Fund Ecoregions in North America

Gerard McMahon - USGS (Presenter) Abstract Title: *Toward a scientifically rigorous basis for developing mapped ecological regions*

Environmental Applications of High Resolution Remote Sensing I is scheduled on Thursday, 3/18/2004 from 1:00 p.m. - 2:40 p.m.

Timothy Warner - West Virginia University (Presenter)

Abstract Title: Identifying individual Haleakala Silverswords in high resolution digital imagery

Maggi Kelly - University of California (Presenter)

Abstract Title: Classification of 1-m ADAR imagery for mapping hardwood mortality

Bradley C. Rundquist - University of North Dakota (Presenter) Abstract Title: *Remote Sensing of Invasive Saltcedar in North Dakota using Airborne Hyperspectral Imagery*

Le Wang - University Of California, Berkeley (Presenter) Abstract Title: A multiscale-based method to identify individual trees from high spatial resolution imagery

Jane M. Read - Syracuse University (Presenter) Abstract Title: Characterizing Tropical Land Cover Using High Resolution Satellite Remote Sensing

Environmental Applications of High Resolution Remote Sensing II is scheduled on Thursday, 3/18/2004 from 3:00 p.m. - 4:40 p.m.

Stephen Vincent Mather - University of Toledo (Presenter)

(Continued on page 8)

(Continued from page 7)

Abstract Title: Field Scale Remote Sensing: Scaling Leaf Properties To The Landscape Scale

Geoffrey Jacquez - Biomedware (Presenter) Abstract Title: Detection of local anomalies in high resolution hyperspectral imagery using geostatistical filtering and local spatial statistics

Francisco Artigas - Rutgers University (Presenter)

Abstract Title: Vigor Gradients of Phragmites Australis in the Meadowlands District

L. Monika Moskal - Southwest Missouri State University (Presenter) Abstract Title: Oak savanna habitat remnants mapping using feature extraction from IKONOS imagery

Wanxiao Sun - Southern Illinois University at Carbondale (Presenter) Abstract Title: Automated Separation of Dead Tree Crowns from the Oak Woodland Forest Mosaic by Integrating Spatial Information

Geovisualization Applications in Remote Sensing is scheduled on Wednesday, 3/17/2004 from 1:00 p.m. - 2:40 p. m.

Matt D. Dunbar - University of Kansas - Kansas Applied Remote Sensing Program (Presenter)

Abstract Title: Geovisualization Applications at the Kansas Applied Remote Sensing (KARS) Program and the University of Kansas Geography Department

Nathaniel Huggins - Southwest Missouri State University (Presenter) Abstract Title: Implementing Geovisualizations of Forest Cover Change in the James River Basin of Missouri for Public Education and Resource Decision Making Ikuko Fujisaki - Department of Forestry, Mississippi State University (Presenter) Abstract Title: *Realistic Forest Visualization in a Virtual Environment Based on LiDAR*

Kevin Dobbs - (Presenter) Abstract Title: Visualizing Recent and Future Urban Growth with Thematic Mapper and QuickBird Imagery

Bo Song - (Presenter) Abstract Title: 3-D Visualization of Golf Courses of the Coastal Plain of South Carolina

Hazards, GIS and Remote Sensing is scheduled on Tuesday, 3/16/2004 from 8:00 a.m. - 9:40 a.m.

Mara Chen - Salisbury University (Presenter)

Abstract Title: Using GIS for Coastal Hazard Mapping and Emergency Management

Michael E. Hodgson - University of South Carolina (Presenter) Abstract Title: A Survey of GIS and Remote Sensing in State-Level Hazard Offices

May Yuan - Univ of Oklahoma (Presenter)

Abstract Title: Evaluating Remote Sensing and GIS Techniques on Assessment of Tornado Damage Tracks from the Oklahoma City Tornado Outbreak on May 3rd 1999

David Lanter - CDM - Camp Dresser & Mckee (Presenter) Abstract Title: An Early Warning System for River Water Suppliers

Tom Cova - University of Utah (Presenter)

Abstract Title: Light my fire proneness: residential change detection in the urban-wildland interface with

nighttime satellite imagery

Quantitative techniques in optical remote sensing (I) is scheduled on Wednesday, 3/17/2004 from 8:00 a. m. - 9:40 a.m.

Doug Rickman - NASA (Presenter) Abstract Title: Atmospheric correction of imagery, 0.35 - 12 micrometers, based on first principles

Matthew E. Ramspott - Kansas Applied Remote Sensing Program (Presenter) Abstract Title: Characterization of Biophysical Factors in an Experimental Cool-season Grassland using Multidate, Multiscale VNIR Remote Sensing

Jeffrey D. Colby - Appalachian State University (Presenter)

Abstract Title: Anisotropic Reflectance Correction in Mountain Environments: A Review

Alan H. Strahler - Boston University (Presenter)

Abstract Title: *Retrieval of Global Albedo Fields from Multiangle and Multitemporal MODIS Data*

Shunlin Liang - University Of Maryland (Presenter) Abstract Title: *Mapping incident photosynthetically active radiation* (PAR) from MODIS data

Quantitative techniques in optical remote sensing (II) is scheduled on Wednesday, 3/17/2004 from 10:00 a. m. - 11:40 a.m.

Hongliang Fang - (Presenter) Abstract Title: *Estimating Leaf Area Index from satellite observations: new algorithm and results*

Charles W. Emerson - Western Michigan University (Presenter) Abstract Title: *An analysis of texturebased urban land cover classification*

(Continued from page 8)

Ivan Csiszar - University Of Maryland - College Park (Presenter) Abstract Title: Active fire detection and property retrieval from ASTER for the evaluation of MODIS fire products

Michael P. Bishop - University of Nebraska-Omaha (Presenter) Abstract Title: Integration of Remote Sensing and Glacier Modeling for Assessing Glacier Mass Balance and Erosion

Remote Sensing: Agriculture and Fractals is scheduled on Monday, 3/15/2004 from 3:00 p.m. - 4:40 p.m.

Shira Amir - (Presenter) Abstract Title: Monitoring Spatial and Temporal Plant cover by Remote Sensing Tools in the Visible, Infra-Red and Microwave Regions

Brian Wardlow - University of Kansas (Presenter)

Abstract Title: *Regional Scale Crop Mapping Using a Decision Tree Classifier*

Anthony Filippi - Texas A&M University (Presenter) Abstract Title: *Fractal Geometry Application to Agricultural Land Use*

Information Acquisition Using Multiscale Remote Sensing

Guiyun Zhou - Louisiana State University (Presenter)

Abstract Title: Comparison of Methods for Fractal Dimension Computation Based on Multiple Surface Generation Algorithms

Remote Sensing and GIS For Estuarine Ecosystem Analysis is scheduled on Wednesday, 3/17/2004 from 11:40 a.m. - 1:00 p.m.

Fugui Wang - (Presenter)

Abstract Title: Assessing Water Quality of Reelfoot Lake, TN by Analyzing Hyperspectral Reflectance and Satellite Images

Zhi Liu - Florida State University (Presenter)

Abstract Title: Use of Remote Sensing and Landsacpe Metrics to Analyze Estuarine Landscape Changing Dynamics

Xiaojun Yang - Florida State University (Presenter) Abstract Title: *Predicting Estuarine Water Quality with Landscape and Socio-Economic Metrics*

Remote Sensing and GIS For Urban Analysis I is scheduled on Friday, 3/19/2004 from 8:00 a.m. - 9:40 a.m.

Changshan Wu - University of Wisconsin, Milwaukee (Presenter) Abstract Title: *Monitoring and modeling urban growth*

Fei Yuan - University of Minnesota (Presenter)

Abstract Title: Land Cover Classification and Change Monitoring in the Twin Cities (Minnesota) Metropolitan Area with Landsat Remote Sensing

Jean Parcher - U.S. Geological Survey (Presenter)

Abstract Title: Remote Sensing Methods for Estimating Impervious Cover for Hydrologic Modeling Applications. A Case Study of the Brownsville/ Matamoros Urban Area.

Douglas A. Stow - San Diego State University (Presenter) Abstract Title: Validation of Satellite Derived End-Member Fraction Maps

Remote Sensing and GIS For Urban Analysis II is scheduled on Friday, 3/19/2004 from 10:00 a.m. - 11:40 a.m.

Jeremy Mennis - University of Colo-

rado (Presenter)

Abstract Title: Urban Socioeconomic and Vegetation Change in the Front Range of Colorado

David Viertel - (Presenter) Abstract Title: *The Relationships Between LIDAR Data and Socioeconomic Variables for Austin, Texas*

Michael Reibel - California State Univ (Presenter)

Abstract Title: *Street Weighted Areal Interpolation for Incompatible Zone Counts*

Dale A. Quattrochi - NASA MSFC (Presenter) Abstract Title: Using High Resolution Multispectral Remote Sensing Data for Urban Land Cover Characterization and Assessment of Its Impact on the Urban Heat Island Effect and Air Ouality

Remote Sensing and GIS For Urban Analysis III is scheduled on Friday, 3/19/2004 from 2:00 p.m. - 3:40 p.m.

Limin Yang - SAIC, USGS EROS Data Center (Presenter) Abstract Title: Urban land cover change detection through sub-pixel imperviousness mapping

Tenley Conway - University of Toronto (Presenter)

Abstract Title: Moving beyond inhospitable oceans: representing urban/ suburban landscapes for environmental monitoring.

Victor Mesev - University of Ulster (Presenter)

Abstract Title: Identification and characterization of urban neighborhood features: fusion of IKONOS imagery and point-based property information.

C P. Lo - University of Georgia

(Continued on page 10)

RSSG Sponsored Sessions

@ AAG-Philadelphia, 2004

(Continued from page 9) (Presenter) Abstract Title: *Remote Sensing and Urban Theory*

Remote Sensing: From LIDAR to Aerial Photography is scheduled on Monday, 3/15/2004 from 1:00 p.m. -2:40 p.m.

Jason Alan Tullis - University Of South Carolina (Presenter) Abstract Title: LIDAR Digital Elevation Model Accuracy as a Function of Posting Density and Land Cover Category

Desheng Liu - UC Berkeley (Presenter) Abstract Title: Urban development detection using SPOT-Panchromatic imagery in the developing world

Christine Garrard - Utah State University (Presenter)

Abstract Title: An Online Archive of Satellite Imagery the Intermountain Region of the United States

Noel Ring - Private Consultant (Presenter) Abstract Title: New England's Stone Star Charts: the Atlantic Trace Settlement Updated

Remote Sensing: Mountain, Intermountain, and Semi-arid Regions is scheduled on Tuesday, 3/16/2004 from 10:00 a.m. - 11:40 a.m.

Dan G. Blumberg - Ben-Gurion University of the Negev (Presenter) Abstract Title: Mapping exposed and buried drainage morphologies using remote sensing techniques in a semi arid region: The Negev Desert case, Israel

Barry N. Haack - George Mason University (Presenter)

Abstract Title: *History and Analysis of Mapping Urban Expansion in the Kathmandu Valley, Nepal*

John Lowry - RSGIS Lab, Utah State University (Presenter) Abstract Title: Land Cover Mapping for the Southwest Regional Gap Analysis Project

Leonhard Blesius - UNIVERSITY OF IOWA (Presenter) Abstract Title: Comparison of satellite and air-photo derived landslide susceptibility maps

Remote Sensing of Land Cover: Mapping, Change Detection, and Evaluation Techniques is scheduled on Tuesday, 3/16/2004 from 3:00 p.m. -4:40 p.m.

Jinmu Choi - University Of Georgia (Presenter) Abstract Title: *Rule-Based Expert GIS for Urban Mapping*

George Thomas Raber - University of Southern Mississippi (Presenter) Abstract Title: LIDAR Statistical Image Fusion with IKONOS Data for Land Cover Classification

Jerry A. Griffith - University Of Southern Mississippi (Presenter) Abstract Title: Land Cover Change in the Mississippi River Loess Plains Ecoregion, 1972-2000.

Tingting Zhao - University of Michigan (Presenter)

Abstract Title: *Regional-Scale Land-Cover Mapping in the East Siberian Boreal Forest Using Multi-Scale Remote Sensing Data*

Amy Burnicki - (Presenter) Abstract Title: *Geostatistical Analysis* of Uncertainty in a Remote Sensing Based Change Analysis

Remote Sensing: Water and Wetlands is scheduled on Monday, 3/15/2004 from 8:00 a.m. - 9:40 a.m.

Douglas R. Oetter - Georgia College & State University (Presenter) Abstract Title: Enhancing Digital Orthophotographs for Spectral Classification of Wetlands

Teresa Howard - U of TX Center for Space Research (Presenter) Abstract Title: *Playa Basin Characterization on the Southern High Plains of Texas*

Gregory Carter - The University of Southern Mississippi (Presenter) Abstract Title: Hyperspectral remote sensing of invasive wetland plants in northern Mobile Bay

David F. Vaughan - University Of South Carolina (Presenter) Abstract Title: Extraction of Spartina alterniflora biophysical parameters using narrow-band vegetation indices and high spatial resolution hyperspectral imagery

Amir Natan - (Presenter) Abstract Title: *Monitoring Phytoplankton in Lake Kinneret by Satellite Remote Sensing*

RSSG Student Sessions

@ AAG-Philadelphia, 2004

Cartography/GIS/RSSG Student Illustrated Paper Competition I is scheduled on Monday, 3/15/2004 from 1:00 p.m. - 2:40 p.m.

Matthew Holden - (Presenter) Abstract Title: Creating historical land use maps for long-term change analysis in Massachusetts

Erik Strandhagen - University of Oregon (Presenter)

Abstract Title: Views of the Rivers; Representing Hydrological data of the Greater Yellowstone Ecosystem

Susan Myrhl Taunton - University of Arizona (Presenter)

Abstract Title: *Producing a Fuels Hazard Index in the Santa Catalina-Rincon mountains from 1989 to 2003*

Kelley J. O'Neal - University of Arizona (Presenter)

Abstract Title: Monitoring post-fire vegetation regeneration using Thematic Mapper imagery and multitemporal spectral mixture analysis

Christopher Gross - West Chester University of PA (Presenter)

Abstract Title: validating the MODIS snow product using student collected and National Weather Service ground observations

Carl J. Legleiter - Geography Department, University of California Santa Barbara (Presenter)

Abstract Title: *Remote mapping and geostatistical analysis of river channel morphology and change in Yellowstone National Park*

Ryan Perroy - UC Santa Barbara (Presenter) Abstract Title: Quantifying Soil Erosion on Santa Cruz Island, CA using Remote Sensing

Cartography/GIS/RSSG Student Illustrated Paper Competition II is scheduled on Monday, 3/15/2004 from 3:00 p.m. - 4:40 p.m.

Andrew Clark - (Presenter) **Abstract Title:** On a journey to anywhere, you can draw your own map: Hybrid Teaching and Geographic Information Systems

Christopher Zanger - Oregon State University (Presenter) Abstract Title: Ecoregion delineation: Using a GIS to identify and model the dominant ecoregion variables in Southern Oregon / Northern California

Jamie Conley - (Presenter) Abstract Title: The effects of redevelopment on crime in the Jeffrey-Lynn neighborhood

Genong Yu - Indiana State University (Presenter) Abstract Title: A Distributed Spatial Information System: Web Service and its Implementation

Eric Sproles - Student (Presenter) Abstract Title: Developing an Interactive Geo-referenced Interface for Static GIS Data Through the Internet

Xuan Shi - WVU (Presenter) Abstract Title: *Web Service Development* and Deployment in GIS Applications

RSSG Student Paper Competition I: Mapping and Modeling Landscapes is scheduled on Tuesday, 3/16/2004 from 8:00 a.m. - 9:40 a.m.

Cynthia A. Moudy - Salem State College (Presenter) Abstract Title: *Mapping the tidal prism of*

a marsh wetlands using historic Landsat imagery

Claudia M. Stickler - (Presenter) Abstract Title: Predicting the Complexity of Primate Habitat Selection in Kibale National Park, Western Uganda, Using Multiscale Spatial Analysis and Remote Sensing

Ranjeet John - Michigan State University (Presenter)

Abstract Title: *Deriving Rangeland Information Products from Multi-scale Imagery in Afghanistan*

Qinghua Guo - (Presenter) Abstract Title: An object-based classification method in detecting Sudden Oak Death

Kristy M. Capobianco - University of Florida (Presenter)

Abstract Title: Christopher Columbus to Quickbird: High Spatial Resolution Satellite Imagery in the First New World Historical Archeology **RSSG Student Paper Competition II: Ad**vances in Classification is scheduled on Tuesday, 3/16/2004 from 10:00 a.m. - 11:40 a.m.

Qian Yu - (Presenter) Abstract Title: Object-based Vegetation Classification with Airborne High Resolution Image

Elena Tarnavsky - San Diego State University (Presenter)

Abstract Title: *Fidelity of Scanned and Direct Digital Imagery in a Land-cover Change Context*

Xin Miao - (Presenter) Abstract Title: Local Feature Reduction Algorithms for Hyperspectral Image Classification

Qi Chen - (Presenter) Abstract Title: Using Automatically Extracted Variogram Model Parameters for the Textural Classification of Panchromatic IKONOS Imagery

RSSG Student Paper Competition III: Experiments and Error is scheduled on Tuesday, 3/16/2004 from 1:00 p.m. - 2:40 p.m.

Mario Cardozo - University of Texas (Presenter)

Abstract Title: Vegetation and Flooding Seasonality: Multitemporal Classification of the Pantanal Wetlands

Christopher Lippitt - Clark University (Presenter)

Abstract Title: A method to distinguish real landscape change from map error during map comparison

Linda Cacopardo - (Presenter) Abstract Title: *Relationship Between Scanning Density and Feature Resolution*

Zhe Li - CLARK UNIVERSITY (Presenter) Abstract Title: An Experimental study on remotely sensed imagery classification using an improved Self-Organizing Map

Rebecca Powell - Univesity Of California -Santa Barbara (Presenter) Abstract Title: Factors Influencing Accuracy Assessment of Sub-pixel Estimates of Urban Land-cover Components

Geostationary Operational Environmental Satellites Mapping U.S. Weather Continuously

(Continued from page 5)

contains the information. You can use Notepad as the text editor. A blank page will come up. Add to it the following:

> 8078 0.0 0.0 -8043 -2580000 1930336

When done save the file (File > Save) as "ECIR.JGW". Make sure that it is in the same naming convention and location as the image you downloaded.

- Projection Information. In your GIS software, set the projection to Lambert Conformal Conic and the Spheroid to WGS 84. Set the Central Meridian to -88, the Reference Latitude to 37, the Standard Parallels to 37 (1) and 45 (2).
- 4. Create your East Coast weather map!

Historic data sets can also be utilized and online archives go back three weeks. This is a great way to get Introductory Geography students to learn about satellites and weather. With the registered image you can also demonstrate theme overlay. And, if you toss in a discussion on map projections and reference systems, you have a lab assignment that covers a broad spectrum of geography and the mapping sciences.



Grant "Go-Getters" Department of Geography, University of Maryland-College Park

The Department of Geography at the University of Maryland, College Park has been very successful in obtaining new award funding from NASA and other sponsors. The Department has recently received notification that 16 new awards totaling over \$13 million dollars have been made to the Department's faculty.

- Dr. Ruth DeFries has been awarded a \$528,624 project "Nature Reserves as Coupled Natural and Human Systems" by Montana State University with NASA funding.
- Dr. Ralph Dubayah has received funding from NASA in the amount of \$1.1 M for a project entitled "VCL Science and Technology Support." This funding will allow for the final 3 years of project activity.
- Dr. Dubayah and Dr. Michelle Hofton, have received a \$1.8M

award from NASA entitled "Characterizing Forest Structure for Assessments of Carbon Cycling and Biodiversity: An Integrated Approach Using Lidar Remote Sensing."

- Dr. Christopher Justice has received three awards. One is a \$1.5M for a project from NASA entitled "Refinement and Maintenance of the MODIS Fire Product Suite and MODIS Land Discipline Leader." Co-investigators are Dr. David Roy and Dr. Ivan Csiszar. Louis Giglio of SSAI is also contributing to the work of the project.
- The second for Dr. Justice is \$480,315 for a NASA project entitled "Assessing the NPOESS Preparatory Project (NPP) VIIRS Fire Product as a Climate Data Record." Co-investigators on this project are Dr. David Roy and Dr. Ivan Csiszar. Louis Giglio of SSAI is also contributing to the project.

- Dr. Justice's third award is for a project from Michigan State University with \$1.1M NASA funding entitled "SAXTA: Implementing a Peer-to-peer Technology Solution to Improve Satellite Data Access and Distribution."
- NASA has awarded Dr. Shunlin Liang \$894,435 for a project entitled "Improving Land Surface Products from Multiple EOS Sensors by Developing a Prototype Data Assimilation System." Dr. John R. Townshend and Dr. Robert Dickinson (Georgia Institute of Technology) are Co-Investigators.
- Dr. Shunlin Liang has received a subaward of \$198,001 from Boston University as a member of the NASA NPP science team. The project "Assessment of Aerosol and Albedo EDRs from VIIRS."
 - Dr. David Roy is Co-Investigator

(Continued on page 13)

Grant "Go-Getters" Department of Geography, University of Maryland-College Park

(Continued from page 12)

on a project awarded by NASA for which Dr. Robert Swap (University of Virginia) is the Principal Investigator and includes researchers Jeffrey Privette (NASA GSFC), Steve Platnick (NASA GSFC), Saulo Freitas (CPTEC-INPE, Brazil), Robert Chatfield (NASA Ames Research Center), Karla Longo (CPTEC-INPE, Brazil), and Kelly Caylor (Princeton University). The project is entitled "Sources, Transports and Impacts of Southern African Aerosols: Synthetic Case Studies Using Terra and Aqua Satellite Products." The total budget for this project is \$765, 441 and is funded by NASA Earth System Science Research using data and products from the TERRA, AQUA, and ACRIM satellites. Dr. Roy's portion of the award is \$42,263.

- Dr. John R. Townshend has received three awards. One is for over \$1.3M from NASA to continue the work of the *"The Global Land Cover Facility."* Dr. Joseph Jaja of the University of Maryland's Institute for Advanced Computer Studies (UMIACS) is Co-Investigator.
- Dr. Townshend's second project is titled "Enhanced Land Cover & Land Cover Change Production from MODIS." Co-Investigators are Dr. Ruth DeFries, Mr. Robert

Sohlberg and Dr. Matthew Hansen. NASA's support of more than \$1.1 million provides for the continuation of this highly effective project.

- Dr. Townshend also received a \$114,101 grant from NASA titled "Assessment of the VIIRS Surface Type EDR as a Climate Data Record Using Global MODIS Data"
- Dr. Eric Vermote has received four awards.

1. The first is a NASA award for \$854,157 entitled *"Interdisciplinary Long-term Data Set from AVHRR."* Co-Investigators are Dr. David Roy and Dr. Stephen Prince. The project will contribute to one entitled "A 0.05 Degree Global Climate/ Interdisciplinary Longer Term Data Set from AVHRR, MODIS and VIIRS Instruments" with Dr. Edward Masuoka of Goddard Space Flight Center as Principal Investigator.

2. The second award for Dr. Vermote is the "Evaluation of NPP/ VIIRS Land Surface Data Record with Respect to Climate Change Objectives" has been awarded by NASA in the amount of \$545,482. Nazmi Saleous of Raytheon is Co-Investigator of this project. 3. Dr. Vermote's third award is a new NASA award for \$294,547 "Fire as a Disturbance in the Earth-Atmosphere System, a Pilot Study using MODIS Data and Ex*perimental Algorithms.*" Co-Investigators are Oleg Dubovik (GEST, University of Maryland, Baltimore County), Nazmi Saleous (Raytheon), Francois Petitcolin (ACRI-US).

4. The fourth award to Dr. Vermote from NASA is for a \$1.3 million dollar project, "*Refinement of the MODIS land surface reflectance in the visible to middle infrared and associated products*" for the refinement and enhancement of the surface reflectance products suite.

Our colleagues at the University of Maryland-College Park should be applauded for their fine work.





Duane Nellis to Speak at AAG-Philadelphia Providing Past President Address

Dr. M. Duane Nellis (currently, Dean of the Eberly College of Arts and Sciences at West Virginia University) will provide the **AAG Past President's Address** on Wednesday evening, March 17th at the AAG meeting in Philadelphia. It will be part of the AAG Banquet. His presentation topic deals with geospatial information, rural resource systems, and future geographies, and will include some dimensions of his work in the field of remote sensing. For further information, contact Duane at (304) 293-4611.

Also, kudos to Duane on his recent appointment to become Provost at Kansas State University.

RS Paper in AAG Cryosphere Session Todd Albert to Present Imagery of the Quelccaya Ice Cap, Peru

At AAG-Philadelphia, Todd Albert (University of Colorado-Boulder) will present "Late 20th century fluctuations in ice area of the tropical Quelccaya Ice Cap" in the Cryosphere 1 Session. The theme of the session is "regional and global snow cover variations." Todd's co-authors are Christian Georges, Tropical Glaciology Group, University of Innsbruck, Austria and Anton Seimon, International Research Institute for Climate Prediction, Columbia University, New York.

Their abstract follows:

Analyses of remotely sensed imagery of the Quelccaya Ice Cap, in southern

Peru, since 1962, yield the first look at the changing morphology of the ice cap in the modern climate regime. These analyses of satellite imagery and aerial photography show that the ice cap has exhibited an overall retreat since 1962, most of which occurred between 1975 and 1998. Between 1962 and 1975, and between 1998 and 2001, the ice cap did not retreat, and may have advanced. The recent history of advance and retreat found on the Quelccaya Ice Cap reflects a larger regional pattern of ice retreat which are closely related to decadal-scale fluctuations in the El Nino-Southern Oscillation. No evidence is found of an accelerating retreat due to anthropogenic warming that was described in previous literature. A description of the techniques used, and ideal satellite imagery to determine ice-area extent is also given.

Todd and his colleagues welcome all AAG-RSSG members to attend. For more information contact Todd at: todd.albert@colorado.edu



RS 2004 "Remote Sensing for Field Users"



Tenth Biennial USDA Forest Service Remote Sensing Applications Conference

Overview:

The USDA Forest Service is pleased to announce RS 2004, the Tenth Biennial Remote Sensing Applications Conference, taking place from April 5th to 9th in Salt Lake City, Utah. The theme for RS 2004 is "Remote Sensing for Field Users", thus the conference will emphasize remote sensing and geospatial projects that have benefited the field user. RS 2004 will be held in the Marriott Hotel Downtown in Salt Lake City, Utah, the week of April 5, 2004. Papers and posters for all phases of remote sensing used in land management activities will be presented. As in the past, the conference is national in scope, and all projects are welcome as abstract submittals.

Objectives:

The objectives of the conference are to:

- Provide a forum for people interested in remote sensing and natural resource applications to share experiences and ideas and learn more about the latest remote sensing technologies.
- Review the latest remote sensing, image processing, and geospatial technologies and their application for natural resource management.
- Publish conference proceedings that document technical presentations and poster displays.

Co-sponsors:



Conference Web Site:

http://www.fs.fed.us/eng/rsac/RS2004/

Celebrating Our Leaders "Reception To Honor our Past Outstanding Contributions Award Winners"

Dr. Kelley Crews-Meyer, University of Texas-Austin, is organizing an RSSG reception for the Philadelphia convention, recognizing our past RSSG Outstanding Contributions Award winners. All RSSG members are invited to attend. The reception will be on Tuesday, March 16th from 6:30 PM to 7:45 PM in Room 303 of Philadelphia Marriott.



Position Announcement

Graduate Research Assistant

WEST VIRGINIA UNIVERSITY

West Virginia University Geography is currently searching for a remote sensing Graduate Research Assistant starting Fall 2004. The student will assist Tim Warner with the West Virginia View consortium (www.wvview.org), a state-wide consortium of institutions that have a focus on remote sensing. Excellent communication skills are very important for this position. Although a PhD student would be preferred, MA students will also be considered. The position includes a competitive stipend and a tuition waiver. Current remote sensing research at WVU includes remote sensing of invasive species using high resolution imagery and LIDAR, and also investigations of the spatial properties of images.

Please contact Dr. Tim Warner at tim.warner@mail.wvu.edu or 304-293-5603 x4328 for further information.

Position Announcement

GIS Coordinator

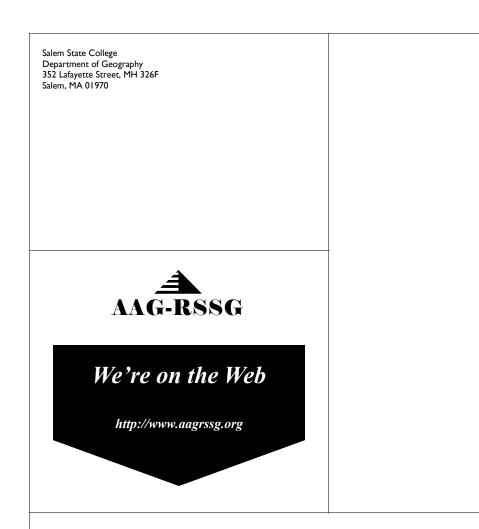
MIAMI UNIVERSITY, OXFORD, OHIO 45056

Begin August 2004. Position has service, teaching and research responsibilities. Service responsibilities include assisting faculty with GIS-related teaching and scholarship, supervising production of GIS- and cartographic-related materials for faculty and external contractors, and working with university technical support personnel on GIS-related issues. Expected teaching includes advanced level courses on GIS principles and applications and advising students specializing in GIS. Coordinator is expected to obtain external funding through summer workshops, grants and contracts. Nine-month appointment allows salary augmentation through these activities. Master's degree required; PhD preferred. Remuneration includes salary and benefits, including health insurance.

Send letter of application including curriculum vitae, names of three referees, copies of publications or papers presented, and record of teaching (including GIS-related courses taught and evidence of teaching quality). Screening begins March 22, 2004 and continues until the position is filled. Women and minorities are strongly encouraged to apply; Miami University offers equal opportunity in employment and education.

Apply:

William Renwick, Interim Chair
Department of Geography, Miami University, Oxford, OH 45056
E-mail: renwicwh@muohio.edu / Telephone: 513-529-5010 / FAX: 513-529-1948
For more information on Miami University and the Department of Geography, consult http://www.muohio.edu/geography



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.

John D. Althausen, Jr. Newsletter Editor Phone: (978) 542-6487 Fax: (978) 542-6269 Email: John.Althausen@salemstate.edu

