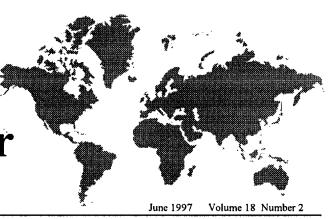
RSSG

Newsletter

Remote Sensing Specialty Group Association of American Geographers



From the Chair

Unfortunately, due to a nasty cold that left me without a voice for over a week, I was unable to attend the AAG Meetings this year. I appreciated Bill Tyler's (RSSG Vice President) willingness to conduct the RSSG Business Meeting in Fort Worth. I also appreciate the many hours spent by other RSSG officers and members who assisted in organizing sessions, planning activities, publishing newsletters, developing a world wide web homepage, and serving on committees. I congratulate those who were elected to RSSG leadership positions, and thank them for their willingness to serve. In this issue of the RSSG Newsletter, Jim Merchant has listed last year's officers and the new incoming officers.

This year the Awards Committee decided to do something different. They honored both Stephen Walsh (University of North Carolina) and James Campbell (Virginia Polytechnic Institute) with the RSSG Outstand-

ing Contributions Award. I am very pleased with the committee's decision to honor both of these very deserving members of our group. Their contributions to the field of remote sensing and geography are certainly worthy of our recognition and respect. Congratulations Jim and Steve and thank you for your outstanding efforts.

Continued on page 8...From the Chair

Call for RSSG Program Participation

AAG 1998 Annual Meeting See also Other Announcements - pp. 3-5

The 1998 annual meeting of the Association of American Geographers will be held March 25



-29 in Boston, Massachusetts. Planning for the Remote Sensing **Specialty Group** (RSSG) program must begin now. Participants are invited to send completed abstracts, program participation form, and payment (\$120 for AAG members, \$60 student) to Dan Brown, the

FANEUIL HALL, BOSTON

Program Vice Chair, for inclusion in Remote Sensing Specialty Group-sponsored sessions. Deadline for submitting abstracts to the RSSG Program Chair is Wednesday, August 27, 1997. All individual papers and Specialty Group-sponsored sessions are due at the AAG Central Office by September 3, 1997.

Continued on page 3...1998 AAG

Minutes

Remote Sensing Specialty Group 1997 Business Meeting Fort Worth, TX

Bill Tyler (ERIM) opened the 1997 RSSG business meeting by welcoming those in attendance.

Financial Report: Doug Ramsey (Utah State University) presented a financial report for the 1996 calendar year noting that there was a \$2,626.34 carryover from 1996 and a total income of \$1,786.88 in 1996 from dues and interest. Expenses for 1996 included payment for publication and mailing of three newsletters, support for the Radar Workshop, the RSSG social, and student paper competition, for a total of \$1,634.75, leaving a balance of \$2,776.97 in the RSSG account as of December 30th, 1996. A motion was made to accept the financial report, it was seconded and the entire group accepted the motion.

Conference Report: Mark Jakubauskas (University Of Oklahoma) provided a report of this years RSSG-sponsored sessions. There were a total of 8 sponsored sessions and 6 other non-sponsored remote sensing oriented sessions. There were two panel sessions. The first was titled *Perspectives on Commercialization of Remote Sensing* organized by Kevin Price (University of Kansas) and Mark Jakubauskas (University of Oklahoma). The second panel discussion was titled *International Space Station: Opportunities for Earth Science Research* organized by Kamlesh P. Lulla (NASA).

Newsletter Report: Jim Merchant (University of Nebraska-Lincoln) was not in attendance this year, but discussion centered around converting the newsletter to a WWW version for those who have Internet capability and notifying recipients through e-mail when newsletters are published. Those who do not have Internet capability can still be sent paper copies. The general thought was to reduce the cost of providing a newsletter and apply the sav-

ings toward other activities such as the student paper competition.

Nominations and Elections: Mark Jakubauskas (University of Oklahoma) was elected a director to replace Dale Quattrochi (NASA) whose term had expired. Mike Hernandez (University of Utah) was elected Student Director. Responsibilities of the student director include organizing the student paper competitions and participating in the executive committee of the RSSG.

Honors Committee: Duane Nellis (University of West Virginia), chairman of the Honors Committee, presented Steve Walsh (University of North Carolina) and James B. Campbell (Virginia Polytechnic Institute) with the 1997 award for outstanding contribution to the field of remote sensing.

Student Awards: At the time of the business meeting, Tim Warner (West Virginia University) was not able to report on the student paper competition since not all papers had been presented yet. However, discussion in the meeting centered on ways to increase the level of the award.

Collaboration with the GIS Specialty group was presented as an option and using the Internet to publish the newsletter in order to reduce reproduction and mailing costs was also discussed. In addition to the paper competition, the poster competition held in collaboration with the GIS specialty group was organized for this years meeting.

Publications Committee: Dale Quattrochi (NASA/Marshall Space Flight Center) presented the published special issue of Geocarto International titled Geographical Applications of Satellite Remote Sensing. This issue contained selected papers presented by the membership of the RSSG at the 1996 meetings and other papers

Continued on page 6...Business Meeting Minutes

1998 AAG...Continued from page 1.

Abstracts are invited in the following areas:

Remote Sensing Applications
Environmental Remote Sensing
Airborne Remote Sensing
Hyperspectral Remote Sensing
Multitemporal Data Analysis
Remote Sensing and Landscape Ecology
Radar Remote Sensing
Advanced Data Analysis Techniques
Environmental Modeling
Data Integration

Other paper topics and alternate session sugges-

tions are welcome. If you are willing to offer a workshop, chair a session, or organize a field trip for the Remote Sensing Specialty Group, please let us know of your intention by Wednesday, August 27, 1997.

Jeff Olsenholler, 1998 Program
Chair:
CIESIN
2250 Pierce Road
Saginaw, Michigan 48710
jeff.olsenholler@ciesin.org
(517) 797-2657 (voice)
(517) 797-2622 (fax)
http://www.ciesin.org/~jolsenho/jeffo.html
alternate e-mail address: jsolsenh@cris.com

Dan Brown, 1998 Program Vice Chair Department of Geography Michigan State University East Lansing, MI 48824-1115 brownda@pilot.msu.edu (517) 353-9811 (voice) (517) 432-1671 (fax) http://pilot.msu.edu/~brownda/

Geostatistical and Geospatial Techniques for Remote Sensing of Land Surface Processes Parallel Paper Sessions 1998 Royal Geographical Society-Institute of British Geographers Meeting and the 1998 AAG Meeting Call for Papers

I've been working with Dr. Pete Atkinson, Department of Geography at the University of

Southampton in England, on setting up sessions on Geostatistical and Geospatial Techniques for Remote Sensing of Land Surface Processes at next year's AAG meeting in Boston. This stems from my participation at the Royal Geographical Society-Institute of British Geographers (RGS-IBG)

meeting this past January in Exeter, England, and my subsequent discussions with the Quantitative Methods Research Group of the RGS-IBG. I intend to organize some special sessions, sponsored by the RSSG at the Boston meeting, while Pete is organizing similar special sessions, sponsored by the British Remote Sensing Society (RSS), at the 1998 RGS-IBG meeting, to create a series of parallel sessions on the topics of geostatistics, geospatial techniques and remote sensing and GIS for analysis of land surface processes. The intent here is to foster scholarly dialog and interaction between British and American remote sensing/GIS researchers in exploring joint research on remote sensing/GIS and geostatistics or spatial analytical techniques for observation and analysis of land surface processes. This includes, amongst others, such techniques as fractal and variogram analysis, kriging, spatial pattern, texture, arrangement and distribution algorithms, along with techniques and ap-

Continued on page 4...Parallel Sessions

Parallel Sessions...Continued from Page 3.

plications for integrating remote sensing data with GIS.

Additionlly, one important component that is emerging in both remote sensing and GIS research is the whole set of issues related to spatial and temporal scale, and the analysis of how land surface properties are manifested or imparted at different spatio-temporal scales. The use of geostatistics and geospatial techniques for analysis of remote sensing data within a GIS context is particularly timely, given the launch in the next 1-2 years of a number of multispatial resolution and hyperspectral satellite systems, such as the Lewis satellite and NASA's EOS AM-1 platform with its suite of sensors.

In addition to sponsoring parallel sessions at the 1998 RGS-IBG and AAG meetings, Pete and myself are working to have selected papers from these meetings published in one British and one American geography or remote sensing journal. It appears that the Transactions of the

Institute of British Geographers is very interested in publishing such an issue from the U.K. side, while Stan Morain, editor of Photogrammetric Engineering and Remote Sensing, has agreed to publish a special "focus" issue dedicated to papers from the U.S. side (i.e., from the special sessions at the 1998 Boston AAG meeting). We anticipate that these special issues will be published in late 1998 or early 1999. Thus, these parallel sessions will have good sponsorship in the publication of selected papers in well-respected, scholarly, British and American journals.

I trust this joint initiative will be of significant interest to members of the RSSG and that the special sessions I am organizing for the Boston meeting will be well populated with papers. As organizer, I ask that this announcement be used as an official call-for-papers for the special RSSG-sponsored sessions on Geostatistical and Geospatial Techniques for Remote Sensing of Land Surface Pro-

cesses at the 1998 AAG meeting in Boston. Please send me a prospective title and the names of authors for papers as soon as possible, via e-mail. Due date is August 1, 1997. This will permit Pete Atkinson and myself to coordinate activities in these special parallel sessions on both sides of the Atlantic. I look forward to your participation in this unique, joint endeavor with the RGS-IBG. Thanks.

Dale A. Quattrochi NASA Global Hydrology and Climate Center 977 Explorer Blvd. Huntsville, AL 35806 dale.quattrochi@msfc.nasa.gov (205) 922-5887 (voice) (205) 922-5723 (fax)

Remote Sensing and Geomorphometry in Mountain Environments Call-for-Papers

Michael P. Bishop (University of Nebraska-Omaha) is organizing a special session on *Re*-

mote Sensing and Geomorphometry in Mountain Environments for the 1998 AAG meetings in Boston. Per-



sons having papers dealing with remote sensing of mountain environments are invited to contact:

Michael P. Bishop
Department of Geography and Geology
University of Nebraska-Omaha
Omaha, NE 68182
bishop@data.unomaha.edu
(402) 554-4808 (voice)
(402) 554-3518 (fax)

RSSG Student Competitions - 1998 AAG Annual Meeting

Would you like to be recognized by your peers and the professional geographic community for your accomplishments in Remote Sensing and related research? How about an opportunity to be awarded a cash prize for having one of the top student posters or papers? Then, the 1998 AAG Annual Meeting Remote Sensing/GIS/Cartography Specialty Groups Student Poster Competition and the RSSG Student Paper Competition are for you! Last year's RSSG/GIS-SG Poster Competition was a great success! First place received \$125.00 and second place received \$75.00. This year's expanded student competition at the 1998 AAG Annual Meeting in Boston, MA (25-29 March) will provide greater opportunity to win cash prizes. You will also have the opportunity to meet with many of today's most-respected scientists in geography and specifically, remote sensing, as well as share ideas with other students from around the country.

For the Remote Sensing/GIS/Cartography Specialty Groups Poster Competition, the main theme must deal with some topic of remote sensing, GIS, and/or cartography. You must be a student and a current member of the AAG. You should be the sole or first author of the poster and have performed the majority of research on your topic. You should also be the primary person responsible for designing and constructing the poster. The cash amount of the awards are still being worked out by the specialty groups. For the RSSG Student Paper Competition, the main theme must deal with some topic of remote sensing. The paper topic is not limited to the initial listing of RSSG-sponsored sessions found in this newsletter. In addition to being an AAG member, you must also be a current member of RSSG. You should be the sole or first author of the paper and have performed the majority of research. The cash amount of the awards are still being worked out by the RSSG.

Deadlines: (Poster) All abstracts are due at the AAG Central Office by October 1, 1997. Contact me (Michael Hernandez) and send me a copy of your poster abstract by October 2, 1997. (Paper) You must submit an abstract to the 1998 RSSG Program Chair (Jeff Olsenholler) by Wednesday, August 27, 1997. On a separate sheet of paper, indicate you are entering the RSSG Student Paper Competition. Also, send me an e-mail stating your intent to enter the paper competition.

Michael Hernandez
University of Utah
Department of Geography
270 OSH
Salt Lake City, UT 84112
801-581-8218 (voice)
801-581-8219 (fax)
mhern@geog.utah.edu

Jeff Olsenholler
CIESIN
2250 Pierce Road
Saginaw, MI 48710
517-797-2657 (voice)
517-797-2622 (fax)
http://www.ciesin.org/~jolsenho/jeffo.html

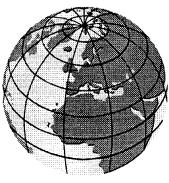
I will post more information about the awards and the judging criteria for both competitions on the RSSG home page (http://www.ksu.edu/rssg/rssg.htm) and in the next RSSG newsletter. I'll also send out e-mail to the current list of RSSG students. I've already sent a message out on June 1. If you didn't receive it, contact me so I can update the e-mail list and include you in the next mailing.

Michael Hernandez, RSSG Student Director

Call for Papers Special RSSG Issue of Geocarto International

Abstracts are solicited for a special issue of Geocarto International sponsored by the AAG Remote Sensing Specialty Group (RSSG). Guest editors for the special issue will be Doug Goodin (Kansas State University) and Mark Jakubauskas (University of Oklahoma). The issue will focus on Geographical Applications of Satellite Remote Sensing. Our highest priority is for including papers that were presented at the 1997 AAG Annual Meeting in Ft. Worth. Other papers will also be considered.

The special issue will contain 8 to 10 papers solicited from members of the Remote Sensing Specialty Group. The papers will be selected on the basis of (1) quality and innovation of the research and (2) fit of the research within the



theme described here. Each paper will include at least one author who is a member of the Remote Sensing Specialty Group of the AAG. Special attention will be given to include papers authored by students. Although all papers will be expected to fit within the broad theme of *Geographical Applications of Satellite Remote Sensing* the specific projects may fall into the following categories:

- * Agricultural inventory and monitoring
- * Water resource inventory and monitoring
- * Climatological analysis
- * Geomorphology mapping and analysis
- * Urban geography mapping and analysis
- * Snow and Ice monitoring
- * Soil quality/moisture analysis
- * Landscape characterization
- Spatial analysis techniques and analysis of remote sensing data
- * Scaling of remote sensing data

Continued on page 8...GeoCarto

Student Poster Competition Winners 1997 AAG Annual Meeting - Ft. Worth, TX

The RSSG is pleased to announce the winners of the student poster competition, held in conjunction with the GIS Specialty Group at the AAG annual meeting in Fort Worth. The first place winner was Alecia M. Kaczmarek of Southwest Texas State University for her presentation, Understanding Spectral Signatures in Color Composites. Along with a first place certificate, Alecia was awarded a \$125 cash prize. Second place was awarded to Shawn Hutchinson of Kansas State University for his presentation, Estimating Soil Moisture Over Tallgrass Prairie Using ERS-2 SAR. Shawn received a cash prize of \$75 along with the second place certificate.

Thanks go to the RSSG Board for providing the funding for the competition and to all the students who participated. Thanks also go to Steve Walsh (University of North Carolina) and Jack Estes (University of California-Santa Barbara) who, along with the student directors (Aileen Buckley, Oregon State University representing the GIS-SG), judged the competition.

Plans are to continue the poster competition, with the possibility of more specialty groups, such as the Cartography and MicroComputer SG's, being involved and the possibility of greater funding for awards. Inquiries should be directed to the new student director, Michael Hernandez (University of Utah) at mhern@geog.utah.edu.

Jerry A. Griffith
Department of Geography and
Kansas Applied Remote Sensing Program
University of Kansas
Lawrence, KS 66044
jag@falcon.cc.ukans.edu
913-864-5543 (voice)
913-864-5378 (fax)

From the Chair...Continued from page 1.

Believe it or not, it is time to remind you that abstracts for RSSG sponsored sessions will be due inAugust for the 1998 AAG Annual Meetings in Boston. If you plan on presenting a remote sensing related paper or poster, we would encourage you to submit your abstract with the accompanying forms to the RSSG Program Vice Chair, rather than directly to the AAG office. This way, your paper will be sponsored by RSSG, and placed in a session with other RSSG papers of similar topics.

As you review the minutes of our business meeting (page 2.), notice that RSSG sponsored a special issue of **Geocarto International** titled, *Geographic Applications of Satellite Remote Sensing*. This special issue included selected papers presented during the 1996 AAG meetings. In 1997 we will repeat this endeavor (see p. 7). I hope this represents the beginning of a tradition that continues and that RSSG members take advantage of this opportunity to remind the remote sensing community at large that we are doing valuable remote sensing research in geography.

I want to draw your attention to page 3 of this newsletter and the discussion of cooperative efforts between RSSG and Great Britain's Remote Sensing Society (RSS). I would encourage any of you who are interested in this to contact Dale Quattrochi at (205) 922-5887 or dale.quattrochi@msfc.nasa.gov.

Some discussion has developed at the RSSG meeting concerning means for raising additional funds to support student paper and poster competitions. One suggestion was to save postage by transmitting the newsletter via e-mail and/or placing it on the RSSG Homepage. These suggestions are being considered. There are those who have suggested that this may actually reduce funding available to RSSG because having the newsletter freely available may be an incentive to some to discontinue their membership. Another idea was to ask members to voluntarily contribute to support student awards. After the meeting, one individual volunteered to match the funds that RSSG provided

for student awards. If you have any suggestions regarding this matter, please contact me (913) 864-7723 or send them via e-mail at k-price@ukans.edu.

Notice also that this issue has a call for nominations for one of the Director positions, the Vice Chair position and the Student Director position. Please send your nominations to me before the deadline indicated in the announcement so that we can include election forms in the next newsletter.

Thank you for your support. Please feel free to contact me if you have any suggestions or comments. I hope to see you in Boston next spring.

Kevin Price
Department of Geography
213 Lindley Hall
University of Kansas
Lawrence, KS 66045
k-price@ukans.edu.
(913) 864-7723 (voice)

GeoCarto...Continued from page 7.

Although we expect a number of submissions to be applications based on multispectral sensors, applications of radar or other remotely sensed data are welcome. Papers will be due September 1, 1997. Send papers to:

Doug Goodin
Department of Geography
Kansas State University
Manhattan, KS 66506-0801
dgoodin@ksu.ksu.edu
(913) 532-6727 (voice)
(913) 532-7310 (fax)

Mark Jakubauskas
Department of Geography
University of Oklahoma
Norman, OK 73019
jakubaus@uoknor.edu
(405) 325-4319 (voice)
(405) 325-6090 (fax)

Association of American Geographers Remote Sensing Specialty Group Officers 1997-1998

Officers 1997 1996

Chair: Kevin Price, University of Kansas

Vice Chair: Bill Tyler, Environmental Research

Institute of Michigan

1995-97 Director: Dale Quattrochi, NASA/Marshall

Space Flight Center

1997-99 Director: Mark Jakubauskas, University of

Oklahoma

1996-98 Director: Doug Goodin, Kansas State Uni-

versity

Secretary/Treasurer: Doug Ramsey, Utah State

University

1996-97 Student Director: Jerry Griffith, University

of Kansas

1997-98 Student Director: Michael Hernandez, Uni-

versity of Utah

Newsletter Editor: Jim Merchant, University of

Nebraska-Lincoln

Regional Councillors

Middle States: Ling Bian, SUNY-Buffalo

NESTVAL: Tom Allen, University of Vermont

Southwest: Mark Jakubauskas, University of Okla

homa

Pacific Coast: Janet Franklin, San Diego State

University

West Lakes: Sue Berta, Indiana State University

East Lakes: Dave Lusch, Michigan State University

Great Plains/Rocky Mtns: Danny Vaughn, Weber

State University

Middle Atlantic: Doug Wheeler, USGS

Southeast: Aaron Moody, University of North Car

olina



Committees

Executive Committee

Kevin Price, Chair Bill Tyler, Vice-Chair

Doug Ramsey, Secretary/Treasurer

Doug Goodin, Director

Mark Jakubauskas, Director

Michael Hernandez, Student Director

Steve Walsh, Past-Chair

Jim Merchant, Newsletter Editor

1997 RSSG Program Chair (Ft. Worth)

Mark Jakubauskas

1998 RSSG Program Co-Chairs (Boston)

Jeff Olsenholler, CIESIN

Dan Brown, Michigan State University

Honors Committee

M. Duane Nellis, Chair

Tim Warner

Sue Berta

Publications Committee

Dale Quattrochi, Chair

Doug Ramsey

Sunil Narumalani

Student Awards Committee

John Harrington Jr., Chair

Bill Tyler

John Brockhouse

Communications Committee

Doug Goodin, Chair

Tom Allen

Sunil Narumalani

John Althausen

Call for Nominations Remote Sensing Specialty Group

Nominations for three RSSG offices are solicited. Offices to be filled in 1998 include:

- Vice-Chair (2 year term)
- Director (2 year term)
- Student Director (1 year term)

All nominees must be current members of RSSG and AAG, and must have agreed to serve. If you are interested in serving as an RSSG officer, you are encouraged to nominate yourself! However, no anonymous nominations will be accepted. The name of the person placing the nomination must be provided.

Office (Circle one):	Vice Chair	Director	Student Director	
Name of nominee:				
Address:				
City:	State/Province:			
Telephone:		Fax: _		
E-mail:				
Name of person placing	g the nomination:			

Please send nominations by September 19, 1997 to:

Kevin Price
Department of Geography
University of Kansas
213 Lindley Hall
Lawrence, KS 66045-2121
kprice@falcon.cc.ukans.edu
(913) 864-7723 (voice)
(913) 864-7789 (fax)

RSSG WWW Site To Move Home Page Relocated to the University of South Florida-St. Petersburg

The RSSG WWW HomePage, currently located at http://www.ksu.edu/rssg/rssg.htm will soon move. In July the Geographic Information Analysis & Remote Sensing Research Lab of the Department of Geography at the University of South Florida-St. Petersburg will assume responsibility for an expanded RSSG WWW site. Information on the home page will include:

- 1. hypertext links to organizational information on RSSG and regional groups; mailing addresses, phone numbers, fax numbers, e-mail addresses, WWW URLs;
- 2. hypertext links to short biographies and photos of RSSG officers;
- 3. hypertext links to schedule of RSSG-sponsored events;
- 4. hypertext links to city hosting the RSSG events, the hotels, restaurants, and attractions in the area surrounding the conference;
- 5. hypertext links to charity and public service work carried out by RSSG and its members;
- 6. hypertext link to a section on the "WWW Member-of-the-Month" highlight one member a month for significant achievements or major contributions in the field, picture and a short biography on the member;
- 7. hypertext link to a question and answer section on RSSG; live chat sessions on the Internet (the experts and their fans!); network forum between RSSG members;
- 8. hypertext links to all RSSG regional sites on the World Wide Web;
- 9. hypertext link to a search engine that will enable members, students, and site visitors to find information on topics including cartography, GIS, photogrammetry, and remote sensing; and 10. a form for comments and suggestions on the site and RSSG.

We envision the site as a focal point for all members within the specialty group. The new site, at http://big.stpt.usf.edu/~rssg/index.html, will become operational about 1 July 1997.

For additional information contact:

John D. Althausen, Jr., Ph.D. University of South Florida Department of Geography 140 Seventh Avenue South St. Petersburg, FL 33701-5016 john@big.stpt.usf.edu (e-mail) (813) 553-1560 (voice) (813) 553-1526 (fax)

Use Your Newsletter

The RSSG Newsletter is your vehicle for communicating with colleagues interested in remote sensing. You are invited to send news regarding publications, awards, honors, academic programs, research activities, commercial ventures, students, jobs and other announcements to:

James W. Merchant Conservation and Survey Division University of Nebraska-Lincoln 113 Nebraska Hall Lincoln, NE 68588-0517 Telephone: (402) 472-7531 FAX: (402) 472-2410 Internet: jm1000@tan.unl.edu

If possible, please submit contributions on a disk or via e-mail in Wordperfect or ASCII format.

WHAT'S NEW

UNEP/GRID Publishes Guide to Data

The United Nations Environment Programme/Global Resources Information Database (UNEP/GRID) North American Node has published a new report entitled: Spatial Data Sets for Environmental Assessment: Towards Bridging the Data Gap. The 66 page, full-color booklet contains dozens of descriptions and illustrations of data available through the North American node of UNEP/GRID located at the USGS/EROS Data Center. Included are examples of AVHRR data, Landsat images of Cambodia, Kenya, Brazil, Saudi Arabia, Greenland, the U.S., Mexico and other areas, land cover maps, NDVI images, global digital elevation data, global drainage basin boundaries, and global population data. To request a copy, contact:

Dr. Ashbindu Singh
Regional Coordinator-North America
UNEP Environmental Assessment and Information Programme
EROS Data Center
Sioux Falls, SD 57198
grid@grid1.cr.usgs.gov
http://grid2.cr.usgs.gov
(605) 594-6117 (voice)
(605 594-6119(fax)

New Magazine Focusses on Precision Farming

Modern Agriculture: The Journal for Site-Specific Crop Management is a new periodical published 6 times per year. The inaugural issue contains articles on remote sensing in agriculture,

use of satellite imagery to monitor farmland subsidies in Europe, and applications of GIS, GPS and aerial imagery in California wine growing. For information on subscriptions, contact:

Modern Agriculture, Inc. 13741 East Rice, Suite 200 Aurora, CO 80015 gt@modernag.com (303) 690-2242 (voice) (303) 690-2522 (fax)

On-Line ArcView Tutorial

A good on-line introduction to ArcView 3.0 (including sample data that can be downloaded) can be found at:

http://humboldt.geog.csulb.edu/arcview/aag-intro.htm

The site was developed by Bryan Baker (Sonoma State University) and Frank Gossette (California State University-Long Beach) to support their workshop on Desktop GIS with ArcView offered at the 1997 AAG meetings in Ft. Worth, TX. The tutorial provides basic instruction on producing thematic maps; creating, editing, and linking data tables to map objects; and performing map and database queries. ArcView's GIS/Spatial Modeling and analysis tools are also introduced.

NAPP Photos on GLIS

Aerial Photographs from the National Aerial Photography Program (NAPP) can now be searched and ordered through the Global Land Information System (GLIS). Now one can do on-line queries, identify photographs covering specific areas of interest, look at maps outlining the area covered by each photograph, and create orders for the photographs selected. NAPP photography, flown at 20,000 feet, is available for the 48 conterminous States, with photographs starting in 1987. Each image covers an area of about 33 square miles. Most of the photographs are in black and white, with some areas available in color infrared.

GLIS searches for NAPP photography can be made by identifying a geographic area on a map, by typing in latitude and longitude coordinates, or by entering a US Place Names feature name. Acquisition date and film type may also be specified. The inventory search results will list all photographs meeting the entered criteria. If a date is not specified, the results will include all of the photography flown over that area with the most recent listed first. Detailed information, which can be viewed for each photograph listed, includes an outline of the area covered shown on a map background, film type, acquisition date, and roll and frame number. EROS Data Center(EDC) plans for enhanced map background graphics in the near future include the 1:1000,000-scale transportation, hydrography, and boundary layers.

Customers placing orders for NAPP photographs through GLIS will be contacted for credit card information. Customer assistance in ordering is available from EDC Customer Services at 605/594-6151. E-mail can be sent to custerv@edcmail.cr.usgs.gov. The Internet address for NAPP on GLIS is http://edcwww.cr.usgs.gov/webglis

Source: ESIC Information Bulletin 368 (6/17/97)

Geographer Available

Eleven years experience in GIS and Remote Sensing. Trained in ARC/INFO, Avenue, ERDAS, EASI/PACE, and other software packages. Master's from Indiana State University, Diploma from ITC. Contact:

Jeff Olsenholler 2216 Mershon Saginaw, MI, 48602-5232 jsolsenh@cris.com.

Opportunities for Students Michigan State University

We are seeking highly qualified applicants for our MA, MS and Ph.D. programs in Geography. Some degree of expertise in the areas of remote sensing, GIS, land use and cover change, especially deforestation, is required. Our Department is expanding, in terms of faculty and facilities, in the areas of remote sensing and GIS, as part of our Basic Science Remote Sensing Initiative, and is thereby providing opportunities for advanced study in these systematic areas. Graduate assistantships and fellowships for fall or spring are still available to exceptional applicants. Please contact Ms. Sharon Ruggles to obtain an application packet, and consult our web site for more information about the graduate program (http:// www.ssc.msu.edu:80/~geo/). For additional information, feel free to contact Associate Chairperson Dr. Richard Groop (groop@pilot.msu.edu) or Graduate Supervisor Dr. Randall Schaetzl (schaetzl@pilot.msu.edu).

Dan Brown brownda@pilot.msu.edu Department of Geography Michigan State University East Lansing, MI 48824-1115 http://pilot.msu.edu/~brownda/ 517/353-9811 (voice)

Faculty Position University of Kansas

GIS POSITION ANNOUNCEMENT Kansas, Lawrence 66045-2121 University of Kansas. Assistant Professor.

Full-time, tenure track appointment beginning January, 1998.

Required qualifications: PhD in Geography or closely related field with demonstrated skills in Geographic Information Systems, and research and teaching interests in aspects of geography that are complementary to those of the department and related programs on campus. Teaching responsibilities include basic and advanced courses in GIS as well as topical or systematic courses in the successful candidate's area(s) of expertise.

Desired qualifications: Commensurate with level of appointment, the applicant is expected to have an established publication and grant record, a commitment to teaching and to supervising graduate research, evidence of collaborative research and/or involvement in cooperative program development.

Salary commensurate with qualifications.

Please send letter of application detailing research and teaching interests, vitae, and the names of three references. Initial review of

applications will begin on 1 September 1997 and will continue until the position is filled.

EO/AA employer. JUN 97-87.

Apply: Curt Sorenson, Search Committee Chair, Department of Geography, 213 Lindley Hall,. Voice 913-864-5144. Fax 913-864-5378.

I would like to strongly encourage those individuals who meet the GIS required qualifications for this position, but are also highly skilled in remote sensing to apply for this position. Notice that in the announcement it says we are looking for someone with a "Ph.D. in Geography or closely related field

with demonstrated skills in Geographic Information Systems, and research and teaching interests in aspects of geography that are complementary to those of the department and related programs on campus." We desperately need help in the field of GIS and remote sensing.

The successful candidate will have an open invitation to work in the KARS program which is an interdisciplinary research program specializing in remote sensing and GIS applications and theoretical research (see http://www.kars.ukans.edu). The KARS program has 27 employees (7 faculty and 20 graduate research assistants, most of them are geography graduate students. We have over 20 research projects underway at this time including work in China, Africa, and Mexico. Last year, the KARS program brought in over \$3,000,000 in research grants and contracts. We anticipate the funding to be much higher in the next few years. This year, the University of Kansas told our congressional delegation that remote sensing and rural health are the two highest priorities for support at KU. To show their support, they have offered to make an \$800,000 match towards a project that is currently in review.

Although this position is advertised at the Assistant Professor level, the salary will be very competitive. My personal opinion is that there are also many opportunities for specialnegotiations associated with this position. If you have additional questions, please call me at (913) 964-7723 or e-mail me at k-price@ukans.edu.

Kevin Price Associate Professor, Geography Associate Director, Kansas Applied Remote Sensing (KARS) Program

Faculty Position University of Kansas

GIS POSITION ANNOUNCEMENT Kansas, Lawrence 66045-2121 University of Kansas. Assistant Professor.

Full-time, tenure track appointment beginning January, 1998.

Required qualifications: PhD in Geography or closely related field with demonstrated skills in Geographic Information Systems, and research and teaching interests in aspects of geography that are complementary to those of the department and related programs on campus. Teaching responsibilities include basic and advanced courses in GIS as well as topical or systematic courses in the successful candidate's area(s) of expertise.

Desired qualifications: Commensurate with level of appointment, the applicant is expected to have an established publication and grant record, a commitment to teaching and to supervising graduate research, evidence of collaborative research and/or involvement in cooperative program development.

Salary commensurate with qualifications.

Please send letter of application detailing research and teaching interests, vitae, and the names of three references. Initial review of

applications will begin on 1 September 1997 and will continue until the position is filled.

EO/AA employer. JUN 97-87.

Apply: Curt Sorenson, Search Committee Chair, Department of Geography, 213 Lindley Hall,. Voice 913-864-5144. Fax 913-864-5378.

I would like to strongly encourage those individuals who meet the GIS required qualifications for this position, but are also highly skilled in remote sensing to apply for this position. Notice that in the announcement it says we are looking for someone with a "Ph.D. in Geography or closely related field

with demonstrated skills in Geographic Information Systems, and research and teaching interests in aspects of geography that are complementary to those of the department and related programs on campus." We desperately need help in the field of GIS and remote sensing.

The successful candidate will have an open invitation to work in the KARS program which is an interdisciplinary research program specializing in remote sensing and GIS applications and theoretical research (see http://www.kars.ukans.edu). The KARS program has 27 employees (7 faculty and 20 graduate research assistants, most of them are geography graduate students. We have over 20 research projects underway at this time including work in China, Africa, and Mexico. Last year, the KARS program brought in over \$3,000,000 in research grants and contracts. We anticipate the funding to be much higher in the next few years. This year, the University of Kansas told our congressional delegation that remote sensing and rural health are the two highest priorities for support at KU. To show their support, they have offered to make an \$800,000 match towards a project that is currently in review.

Although this position is advertised at the Assistant Professor level, the salary will be very competitive. My personal opinion is that there are also many opportunities for specialnegotiations associated with this position. If you have additional questions, please call me at (913) 964-7723 or e-mail me at k-price@ukans.edu.

Kevin Price Associate Professor, Geography Associate Director, Kansas Applied Remote Sensing (KARS) Program

Aerial Photographs of Select United States Metropolitan Areas

The aerial photographs of the United States metropolitan areas listed below were selected on the basis of quality and minimum cloud cover. They are not necessarily the most recent aerial photography coverage available.

These photographs are of central business districts only. The majority of the photographs are color infrared; others are natural color.

The photographs are generally at a scale of 1:58,000 (1" = .9 miles); however, otherscales range from 1:60,000 to 1:132,000 (1'' = 1 mile to 1'' = 2 miles).

If your area of interest is not listed or if you want portions of cities other than the central business district, contact any Earth Science Information Center (ESIC) or call 1-800-USA-MAPS.

Akron, OH Albany, NY Albuquerque, NM Anaheim, CA Anchorage, AK Annapolis, MD

Arlington and Grand Prairie, TX

Atlanta, GA Augusta, ME Aurora, CO Austin, TX Baltimore, MD Baton Rouge, LA Birmingham, AL Bismarck, ND Boise, ID Boston, MA Buffalo, NY Butte, MT Carson City, NV Charleston, SC

Charlotte, NC Chattanooga, TN Cheyenne, WY Chicago, IL Cincinnati, OH Cleveland, OH Colorado Springs, CO

Columbia, SC

Charleston, WV

Columbus, GA Columbus, OH Concord, NH Corpus Christi, TX

Dallas, TX Dayton, OH Denver, CO Des Moines, IA Detroit, MI Dover, DE El Paso, TX

Flint, MI Frankfort, KY Fresno, CA Ft. Wayne, IN Ft. Worth, TX Grand Rapids, MI Greensboro, NC Harrisburg, PA

Hartford, CT Helena, MT Honolulu, HI Houston, TX (east) Houston, TX (west)

Huntington Beach, CA Indianapolis, IN Jackson, MS Jacksonville, FL Jefferson City, MO Jersey City, NJ Juneau, AK Kansas City, KS

Kansas City, MO Knoxville, TN Lansing, MI Las Vegas, NV Lexington, KY (east) Lexington, KY (west)

Lincoln, NE Little Rock, AR Long Beach, CA Los Angeles, CA Louisville, KY Lubbock, TX Madison, WI Memphis, TN Miami, FL Milwaukee, WI Minneapolis, MN Mobile, AL Montgomery, AL

Montpelier, VT

Nashville, TN

New Orleans, LA

New York, NY (Central Park)

Newark, NJ Norfolk, VA Oakland, CA

Oklahoma City, OK (east) Oklahoma City, OK (west)

Olympia, WA Omaha, NE Philadelphia, PA Phoenix, AZ Pierre, SD Pittsburgh, PA Portland, ME Portland, OR Providence, RI Raleigh, NC Richmond, VA Riverside, CA (east) Riverside, CA (west) Rochester, NY Sacramento, CA Salem, OR Salt Lake City, UT

San Antonio, TX San Diego, CA San Francisco, CA San Jose, CA Santa Ana, CA Santa Fe, NM Savannah, GA Seattle, WA Shreveport, LA Spokane, WA Springfield, IL St. Louis, MO St. Paul, MN St. Petersburg, FL Syracuse, NY Tacoma, WA Tallahassee, FL Tampa, FL

Toledo, OH Topeka, KS Trenton, NJ Tucson, AZ Tulsa, OK Virginia Beach, VA Washington, DC Wichita, KS Wilmington, DE Worcester, MA

Yonkers, NY

RSSG Newsletter c/o James W. Merchant Conservation and Survey Division University of Nebraska-Lincoln 113 Nebraska Hall Lincoln, NE 68588-0517