

RSSG Newsletter

Association of American Geographers
Remote Sensing Specialty Group

March 1993



FROM THE CHAIR

I hope you are all looking forward to the Atlanta meeting April 6-11, 1993. The Remote Sensing Specialty Group is scheduled to meet at 7:00 pm on Wednesday, April 7. A preliminary agenda is provided below. If there are other topics you know we need to discuss, please call.

Preliminary Agenda - AAG 1993 Business Meeting

1. Welcome and Introductions
2. Secretary/Treasurer Report - Doug Ramsey
3. Report on Atlanta RSSG Program - C.P. Lo
4. RSSG Newsletter Editor's Report - Jim Merchant
5. Election Results - Tina Cary
6. Committee Reports - Chairs
7. Regional Councillors' Reports - Councillors
8. Identification of Program Chair for 1994 Meeting
9. NCGIA Remote Sensing Core Curriculum - Tina Cary
10. Other Business

P.S. Please vote!! BALLOT on page 2.

Tina Cary, RSSG Chair
Earth Observation Satellite Company
4300 Forbes Boulevard
Lanham, MD 20706
Telephone (301) 552-0542
FAX: (301) 552-5476

RSSG REGIONAL COUNCILORS

by
M. Duane Nellis
Kansas State University

The idea of having RSSG Regional Councilors was approved at the 1991 RSSG business meeting and implemented shortly thereafter. Regional Councilors are appointed by the RSSG Chair in consultation with other RSSG officers. The Regional Councilors act as liaisons between the RSSG Officers, the Newsletter Editor and their respective AAG divisions. Regional Councilors also serve to facilitate RSSG interests at regional meetings (e.g., by organizing paper sessions). Regional Councilors serve three year terms and may be re-appointed to a second three year term.

Continued on page 2...Councilors

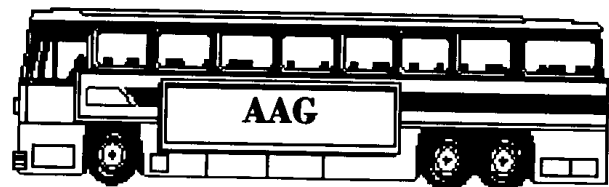
AAG ATLANTA

April 6-11, 1993

RSSG BUSINESS MEETING

Wednesday, April 7, 1993

7:00 pm



HONORS, AWARDS AND ANNOUNCEMENTS

John R. Jensen (University of South Carolina) was elected Vice President of the American Society for Photogrammetry and Remote Sensing.

M. Duane Nellis (Kansas State University), immediate past RSSG Chair, and **Kamlesh Lulla** (NASA/Johnson Space Center) coauthored an overview of the AAG Remote Sensing Specialty Group in the August 1992 issue of Photogrammetric Engineering and Remote Sensing. The article, entitled "Remote Sensing and the Association of American Geographers," provided a synopsis of RSSG committees, programs and publications.

Councilors... Continued from page 1.

The following are the current Regional Councilors (including the date on which their term expires). Ending dates on terms are staggered so that a few new Regional Councilors are appointed each year.

Middle States	Ray Lougeay (June 1995) SUNY-Geneseo
NESTVAL 1993)	William Hamilton (June Salem State College
Southwest	Kamlesh Lulla (June 1994) NASA/Johnson Space Center
Pacific Coast	Doug Stow (June 1994) San Diego State University
West Lakes	Shamim Naim (June 1994) University of Wisconsin -Waukesha
East Lakes	David Lusch (June 1995) Michigan State University
Great Plains/ 1993) Rocky Mts.	Michael Hodgson (June University of Colorado
Middle Atlantic	Samuel Goward (June 1995) University of Maryland

RSSG BALLOT

The AAG Remote Sensing Specialty Group (RSSG) has received the following nominations for the positions of Director (1993-1995) and Student Director (1993-1994). All persons who cast ballots must be current members of the AAG and RSSG. Send ballots by **April 1, 1993** to:

Tina K. Cary
EOSAT
4300 Forbes Boulevard
Lanham, MD 20706
Telephone: (301) 552-0542
FAX: (301) 552-5476

Vote for one. Circle or write-in name:

Director:

Daniel G. Brown (Michigan State
University)

Kevin P. Price (University of Kansas)

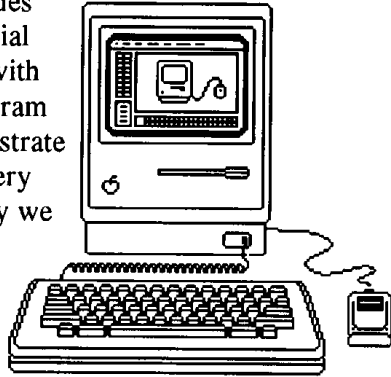
Student Director:

Thomas R. Allen, Jr. (University of North
Carolina)

TEACHING GEOGRAPHY THROUGH LANDSAT

by
M. Duane Nellis
Kansas State University

The National Council for Geographic Education (NCGE) has joined with Eidetic Digital Imaging and EOSAT to develop an exciting, hands-on program to teach high school students about the applications of satellite-based remote sensing. The program, Geography for Student Applications and Training (Geo/SAT), provides geography and social sciences students with an interactive program designed to demonstrate how satellite imagery can change the way we see the earth.



Four Landsat data sets provided by EOSAT are used in the project. Spectacular images of the 1988 fires in Yellowstone National Park, the nuclear accident at Chernobyl, the effects of Hurricane Hugo on Charleston, SC, and the 1991 oil disaster in the Persian Gulf will help teachers focus on problems associated with rapid environmental change. Each image has is a 512 x 512 pixel scene containing all seven Landsat Thematic Mapper (TM) bands.

The data sets are used with software designed for the application by Fred Peet of Eidetic. Called PEDAGeog (Pictures of Earth for Display and Analysis of Geography), the software runs on IBM PCs and compatibles.

Duane Nellis (Kansas State University) chaired the initial NCGE task force that designed the test stages for the project. The first stage involved the selection of 24 educators, 12 from universities and 12 from middle and high schools. The educators were paired, one from each group, and provided with the software and one of the four Landsat scenes. Each team prepared a lesson module, with the initial testing done by the school participant. After the teachers used and evaluated the software, they made recommendations to Eidetic.

Refinement and secondary testing is being carried out in Maryland and Alabama under the coordination of Paul Baumann (State University of New York - Oneonta), NCGE Remote Sensing Task Force Chair. For additional details contact:

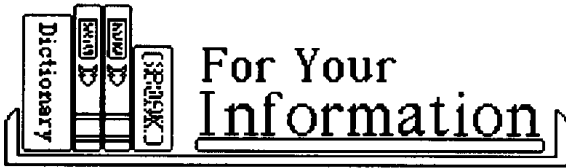
Dr. M. Duane Nellis
Department of Geography
Kansas State University
Dickens Hall
Manhattan, KS 66506-0801
Telephone: (913) 532-6727
FAX: (913) 532-7310



REMOTE SENSING EDUCATION OPPORTUNITY FOR SCHOOL TEACHERS

Geographers at Indiana State University have recently learned that their NSF Science Education proposal, "In-service Program in Physical Geography: Introductory, Advanced and Outreach Models," has been funded. The two-year, \$300,203 project will provide school teachers with an opportunity to increase their knowledge in the areas on meteorology/climatology, environmental remote sensing, and natural hazards. Bill Dando is the principal investigator and John Harrington has primary responsibility for teaching the environmental remote sensing materials. The first educational opportunities will occur during June 1993. Interested teachers from around the country, or others wishing additional details on the project, should contact:

Dr. William Dando
Department of Geography and Geology
Indiana State University
Terre Haute, IN 47809
Telephone: (812) 237-2261



EARTHVIEW SOFTWARE FOR LOW-COST IMAGE ANALYSIS

NORTH AMERICA AVHRR COMPOSITE

EROS Data Center has announced the release of a CD-ROM containing AVHRR composited coverage for all of North America. The North America composite is a 1-km resolution dataset obtained by the NOAA-11 satellite during a 10-day period in August 1990. The image was developed cooperatively by the U.S. Geological Survey/EROS Data Center and the Canada Centre for Remote Sensing. Image display software, that can be run on any IBM PC AT/386/486 or compatible, is provided with the dataset. To order or obtain additional details contact:

Customer Services
USGS/EROS Data Center
Sioux Falls, SD 57198
Telephone: (605) 594-6151
FAX: (605) 594-6589

Atlantis Scientific Systems Group has announced the EarthView software for PC-based image analysis. The package is designed to maximize the performance of standard 80386 and 80486 PC hardware. Image size is restricted only by the amount of installed RAM. The software adapts to any VESA standard graphics adapter, supporting up to 1024 x 768 x 256 colors. EarthView is a menu driven package supporting floating point, 16 and 8 bit image data types, both real and complex. A full suite of image analysis algorithms for enhancement, classification, data conversion from other software and so forth are contained in the package. The software sells for \$550 (US). For additional details contact:

Atlantis Scientific Systems Group, Inc.
1827 Woodward Drive
Ottawa, Ontario CANADA K2C 0P9
Telephone: (613) 727-1087
FAX: (613) 727-5853

AIRBORNE GEOSCIENCE NEWSLETTER

The Airborne Geoscience Newsletter is published by the National Aeronautics and Space Administration as a digest of interdisciplinary airborne activities in the earth sciences. RSSG members may wish to obtain the most recent copy, and consider being placed on the mailing list for future issues. Subscriptions are free. Those wishing to be placed on the newsletter mailing list should contact:

David Dokken
Earth Science Support Office
National Aeronautics and Space Administration
600 Maryland Avenue, SW
Suite 440
Washington, D.C. 20024
Telephone: (202) 479-0360
FAX: (202) 479-2743

JOINT EDUCATION INITIATIVE NEWS

In 1992, the National Science Foundation awarded a grant to the University of Maryland to improve teacher competence in the classroom use of scientific data sets. The Joint Education Initiative (JEI) provides a number of important services including:

1. Technical support to teachers using scientific data sets in the classroom;
2. Teacher training courses and workshops;
3. Continued development of scientific data sets and lab activities for classroom use; and,
4. Information on sources of scientific data.

RSSG members will be especially interested in the variety of datasets that relate to remote sensing. The JEI Newsletter frequently includes information on CD-ROMs containing image data, teachers guides, publications, electronic bulletin boards and much

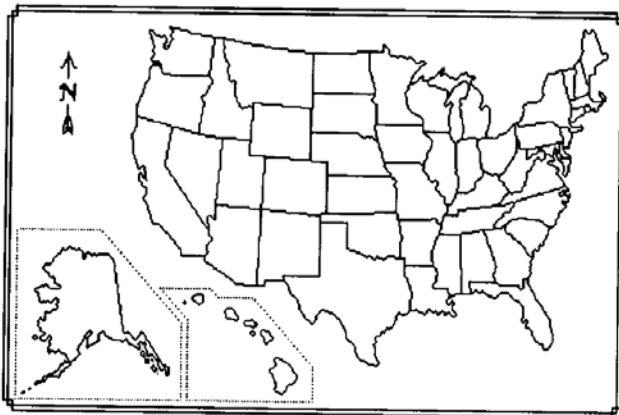
else of interest. For a free subscription to JEI News, or to obtain additional details on the JEI project, contact:

Joint Education Initiative Office
3433 A.V. Williams
University of Maryland
College Park, MD 20742-3281
Telephone: (301) 405-2324

MANUAL OF FEDERAL GEOGRAPHIC DATA PRODUCTS

The Manual of Federal Geographic Data Products will be of great interest to many RSSG members. Published by the Federal Geographic Data Committee (FGDC), the manual describes over 150 data products distributed by 21 federal agencies. These include maps, digital data, aerial photography, multispectral imagery, and other geographically-referenced data. The manual is produced in full color in a looseleaf format. Single copies are available free, while supplies last, from:

Federal Geographic Data Committee Secretariat
U.S. Geological Survey
ATTN: Manual Requests
590 National Center
Reston, VA 22092
FAX: (703) 648-5755
Internet: gdc@usgs.gov



USED ERDAS SOFTWARE/HARDWARE FOR SALE

New Mexico State University's Center for International Programs is offering "like new" PC hardware and ERDAS software for sale. The equipment was purchased in 1989, but has been used very little and is in good operating condition. Asking price is \$6000 for the hardware and \$9000 for the software or best offer. This does not include shipping costs. The hardware and software may also be purchased separately. The ERDAS software license is upgradeable to the latest revision. The hardware and software available include the following:

- 512 x 512x32 bit image processor (Number Nine card)
- 13" RGB color monitor
- Serial mouse
- ERDAS Core and Image Processing modules (Version 7.3)
- ERDAS GIS module
- ERDAS Polygon Digitizing module
- ERDAS Tapes module
- ERDAS Hardcopy module
- Color ink-jet printer (HC96)

- 1 Star NX1000 Multifunction Font II Printer
- 1 Tripplite Omni Power 1200 surge protector
- 2 Everex 80386sx 16 Mhz computers
- 1 Intel 80387sx math coprocessor
- 2 40MB ST 251 hard drives
- 1 VGA STB video adapter card
- 1 GLD 1430 Goldstar 14" analog VGA color monitor
- 1 LS 1800 line stabilizer
- 1 Goldstar 12" monochrome monitor
- 1 Bernouli 5.5 dual external 20MB drive
- 1 Magellan GPS NAV 1000 Pro

For additional details contact:
Ida Baca, Assistant Director
Center for International Programs
New Mexico State University
Box 30001/Dept. 3567
Las Cruces, NM 88003-0001
Telephone: (505) 646-3199
FAX: (505) 646-1517

GLOBAL CHANGE DATABASES ON DISK AND CD-ROM

The National Oceanics and Atmospheric Administration (NOAA) National Geophysical Data Center (NGDC) has announced several new datasets of interest to RSSG members. The Global Ecosystems CD-ROM provides raster data on world ecosystems, land use, wetlands, vegetation, (including satellite-derived vegetation index data), climate topography and soils. Vector data for coastlines and other features are also provided. The CD-ROM format can be used by a variety of computers ranging from PCs to UNIX workstations. Browse and visualization software is also contained on the disc. The Global Ecosystems dataset is available for \$100 (product number 1016-A27-001) NOTE: Academic researchers should contact NGDC for information about obtaining data by "special arrangement."

The Global Change Educational Diskette Project has produced a raster database for Africa that includes extensive data on climate, terrain, vegetation, ecosystems, soils and other phenomena. The data are provided on IBM-compatible floppy diskettes. Included are software for viewing the data, documentation, and a 150-page manual of exercises for instructors. The Africa database and materials costs \$150 (product number 1085-A25-001).

The NGDC has also prepared a CD-ROM containing experimental calibrated Global Vegetation Index (GVI) data. The data are processed on a biweekly basis from NOAA/AVHRR imagery, and cover the period April 1985-December 1991. The database, including browse and visualization software, can be purchased for \$70 (product number 1084-A27-001).

For additional information on these, or other NGDC products contact:

NOAA/National Geophysical Data Center
E/GC1, Department 891
325 Broadway
Boulder, CO 80303
Telephone: (303) 497-6125
FAX: (303) 497-6513
Internet: info@mail.ngdc.noaa.gov

GLOBAL LAND INFORMATION SYSTEM (GLIS) UPGRADED

The USGS/EROS Data Center has announced the availability of PC-GLIS Version 1.2. GLIS, the Global Land Information System, is an interactive computer system designed for scientists seeking sources of information about the Earth's land surface. Through GLIS, scientists can evaluate data sets, determine their availability, and place on-line requests for products such as digital maps, remote sensing imagery, and terrain data. There is no charge for the service.

Among the enhancements in Version 1.2 are:

1. Browse images are compressed to speed up modem transmission by as much as 10 times;
2. Zmodem is the new communications software;
3. The graphics coverage plot base map has been tiled to make zooming faster;
4. Users can now monitor progress when downloading guide figures and inventory browse images; and,
5. PC communications ports 3 and 4 are now supported.

A GLIS User's Manual will be available within a few months.

To obtain a free copy of the new PC-GLIS and additional information about GLIS, contact EROS by mail, telephone, FAX or EMAIL. Specify the size and density of floppy disk desired (note that 5.25" low density diskettes are not supported).

Workstation/Internet users should note that a new version of GLIS, X-GLIS, is now undergoing Beta testing. For information on either PC-GLIS or X-GLIS contact:

USGS/EROS Data Center
GLIS User Assistance
Sioux Falls, SD 57198
Telephone: 1-800-252-GLIS
FAX: 605-594-6589
Internet: glis@glis.cr.usgs.gov

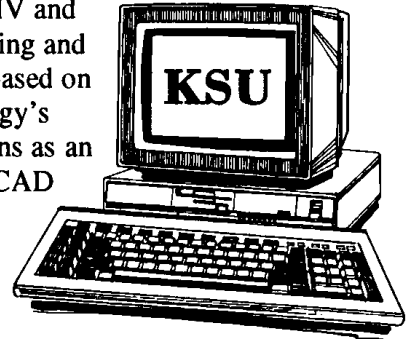
KANSAS STATE UNIVERSITY'S GEOGRAPHIC INFORMATION SYSTEMS/SPATIAL ANALYSIS LABORATORY (GISSAL)

by
M. Duane Nellis

GISSAL at Kansas State University was created in August 1990 as an outgrowth of the Department of Geography's continued expansion of hardware and software capabilities in support of remote sensing, GIS and computer mapping. Current or recent GISSAL projects are funded by the U.S. Agency for International Development, USDA/Soil Conservation Service, National Science Foundation, Kansas GIS Policy Board/Kansas Water Office, Kansas Wildlife and Parks, National Aeronautics and Space Administration, and the Kansas State University Agricultural Experiment Station. GISSAL also cooperates closely with the Konza Prairie Long-Term Ecological Research Site's remote sensing/GIS laboratory on various projects.

Research and instructional software used at GISSAL and KSU is largely interchangeable. ERDAS, RSVGA and IDRISI are PC packages used for analysis of SPOT and Landsat imagery, as well as for some GIS functions. Both ARC/INFO and PC ARC/INFO workstations are used at KSU for GIS applications, supplemented by IDRISI on a PC. Coverages developed with ERDAS can be imported as layers in ARC/INFO and IDRISI. The speed and flexibility of CAD packages on a 386 or 486 PC make them preferable for editing of information layers to be imported into ARC/INFO. In particular, Evolution Computing's EASYCAD and FASTCAD, both written in Assembly language, are heavily used at KSU for the editing of DXF files which are easily imported into ARC/INFO. Maps for internal review and final project papers at KSU are produced by a variety of packages on a PC. Choropleth maps are generated from ATLAS-PRO, MAP-INFO (in both DOS and Windows versions), and MAP-VIEWER, a Windows package which also outputs graduated symbol and 3D prism maps. SURFER is used to

produce contour and 3D fishnet plots. CAD packages are utilized when it is necessary to produce qualitative symbol maps. Database work centers on the use of dBASE IV and FOX-PRO. Scanning and editing at KSU is based on Scorpion Technology's SRV-386 which runs as an addition to AUTOCAD (version 11) and controls an E-size scanner. Recently added ARCVIEW and ARCSCENE provide user-friendly software for education and training at GISSAL.



For additional details on GISSAL contact:

Dr. M. Duane Nellis
Department of Geography
Kansas State University
Dickens Hall
Manhattan, KS 66506-0801
Telephone: (913) 532-6727
FAX: (913) 532-7310

CONTRIBUTORS

Contributors to this issue of the RSSG Newsletter include:

Tina Cary (EOSAT)

John Harrington (Indiana State University)

Dennis Jelinski (SUNY-Buffalo)

Duane Nellis (Kansas State University)

Bill Tyler (Environmental Research Institute of Michigan)

GLOBAL RESOURCE INFORMATION DATABASE (GRID) ESTABLISHES NORTH AMERICAN SITE AT EROS DATA CENTER

The United Nations Environment Programme (UNEP) is responsible for initiating and stimulating environmental action and awareness at all levels of society worldwide, and for coordinating the environmental work of all United Nations organizations and agencies. Within this framework, UNEP has established the Global Resource Information Database (GRID) to provide reliable, timely information to help address environmental issues at global, national and regional levels. UNEP/GRID has recently established its North American center at the U.S. Geological Survey's EROS Data Center in Sioux Falls, SD.



GRID maintains a distributed global archive of environmental data acquired from researchers and sectoral specialists in computer-accessible form, and makes the data readily available to international and national decision-makers and environmental analysts. Data are available in consistent, geo-referenced formats, and are distributed free of charge. Regional training and technology transfer programs for developing countries are also supported by GRID.

GRID is coordinated through a Program Activity Center at UNEP headquarters in Nairobi, Kenya. GRID cooperative centers have been established in institutions around the world. Each GRID center is responsible for acquisition, management and distribution of data in either a regional or thematic realm. There are currently centres in Kenya, Switzerland, Norway, the United States, Japan, Poland, Nepal, Thailand and Brazil. Other centers are to be located in other regions of the globe.

RSSG members wishing to stay abreast of GRID activities should subscribe to GRID NEWS, P.O. Box 30552, Nairobi, Kenya
FAX: 254-2-226491. Subscriptions are free upon request.

UNEP/GRID-Sioux Falls is supported by the U.S. Geological Survey and the National Aeronautics and Space Administration and also includes the University of New Hampshire and the University of California-Santa Barbara as active partners.

For additional information on GRID-Sioux Falls, GRID publications and databases, contact: Dr. Ashbindu Singh, UNEP/GRID, EROS Data Center, Sioux Falls, SD 57198. Telephone: (605) 594-6107, FAX: (605) 594-6589.

Adapted, in part, from Delta, the newsletter of the Canadian Global Change Program (Fall 1992 issue). Delta is available free from the Royal Society of Canada, P.O. Box 9734, Ottawa, Ontario K1G 5J4.



EOSAT TO SPONSOR GRANTS PROGRAM

EOSAT has announced that it will be soliciting proposals for grants of up to \$25,000 to fund market development projects. The application deadline will be May 1, 1993. To receive the Announcement of Opportunity, send a written request to:

Grants Office
EOSAT
4300 Forbes Boulevard
Lanham, MD 20706

LANDSAT DATA USERS NOTES FOCUSSES ON LANDSAT 6

The Summer 1992 issue of Landsat Data Users Notes was a special issue on Landsat 6. RSSG members will find this to be a particularly well-illustrated and useful publication. Details on launch plans, sensor (Enhanced Thematic Mapper) characteristics, and the ground system configuration are provided. Free copies are available from EOSAT Customer Services.

EOSAT REDUCES PRICE OF ARCHIVED LANDSAT DATA

EOSAT has announced a 65% price reduction on archived Landsat data. The pricing impacts more than 8000 previously processed Thematic Mapper scenes currently in the U.S. Government archive at EROS Data Center, Sioux Falls, SD. The archived TM data will sell for \$1500 per scene, a significant reduction from the current \$4400 per scene. PERSONS AFFILIATED WITH ACADEMIC INSTITUTIONS CAN PURCHASE DATA FOR \$750 PER SCENE. Only full scenes are available in system corrected, LTWG-quad format on 6250 BPI nine-track tapes. Most of the imagery was acquired by Landsats 4 and 5 between 1985 and 1989. A

catalog of available scenes is available upon request.

Prices are effective until September 1, 1993

EOSAT Customer Services
4300 Forbes Boulevard
Lanham, MD 20706-9954
Telephone: (800) 344-9933 or (301) 552-0537
FAX: (301) 552-5476

EOSAT TO SPONSOR SEMINAR ON ENERGY AND THE ENVIRONMENT



EOSAT has announced a seminar on Energy and the Environment: Remote Sensing and GIS Applications. The conference will be held May 17-18, 1993 at the Adam's Mark Hotel in Houston, TX. In addition to paper presentations, the meeting will feature a variety of vendor displays, and several

vendors will present workshops on May 18, 1993. For additional details on the seminar contact:

June E. Glover
Earth Observation Satellite Company
9430 Research Boulevard
Echelon IV, Suite 400
Austin, TX 78759
Telephone: (512) 343-4513
FAX: (512) 345-2924

**POSTDOCTORAL AND
GRADUATE RESEARCH
ASSISTANTSHIP
OPPORTUNITIES FOR BOREAS
PROJECT**

Candidates for postdoctoral and research assistant positions are currently being sought to work on the BOREAS (Boreal Ecosystem Atmosphere Study) study. BOREAS is a NASA-led project involving elements of terrestrial ecology, surface climatology, and remote sensing in the boreal forest region of Canada. The overall program seeks to understand the interactions between the boreal forest biome and the atmosphere to clarify their roles in global change. The study is centered on two locations near the northern and southern limits of the biome, respectively. One science team, led by Dr. Dennis Jelinski, is examining vegetation-environment interactions in: 1) a northern fen, and 2) a young jack pine forest, but there exists opportunity to broaden the scope of the investigation to include adjacent landscape elements and ecotones.

Requirements: Applicants should have an interest in GIS-based integration of data from physiological, plant, ecosystem, and landscape scales and the response of boreal forest landscapes to changes in climatic and atmospheric conditions. A background in ecology, GIS and remote sensing is highly desirable. The successful candidates would be expected to participate in field work in northern Manitoba. Positions available beginning spring 1993. Screening begins 1 April 1993.

Support: Salary for postdoctoral position commensurate with experience. Tuition and stipend are available for graduate students. Full funding for research expenses.

Location: University of Nebraska, Lincoln.

Application: Send letter of application including statement of research interests, vitae, transcripts, and three letters of recommendation to:

Dr. Dennis E. Jelinski
National Center for Geographic
Information and Analysis
State University of New York at Buffalo
Buffalo, NY 14261

Telephone: 716-645-2545
FAX: 716-645-5957
EMAIL: geodej@ubvms.cc.buffalo.edu



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@CALMIT.UNL.EDU

If possible, please submit contributions on a disk in Wordperfect or ASCII format.

ERDAS INTRODUCES RADAR IMAGE ANALYSIS SOFTWARE

ERDAS, Inc. has developed a new Radar Module as an option to the ERDAS IMAGINE software. Designed to be easily upgraded as new radar image analysis tools are developed, the package currently contains a suite of data handling, and image enhancement functions. These include:

- Range line radiometric correction
- Slant to ground and ground to slant range conversion
- Complex to integer data compression
- Bad line/stripping removal
- Floating point complex data handling
- Speckle noise removal (five different filters)
- Image enhancement tools including local luminance modification, texture and spatial gray-level dependence, and edge detection.

Many of the algorithms can have user-specified operating matrices. A variety of display options are also available. These include data value histograms, range azimuth single line intensity profiles, and local mean calculation. For additional information contact:

ERDAS, Inc.
2801 Buford Highway
Suite 300
Atlanta, GA 30329
Telephone: (404) 248-9000
FAX: (404) 248-9400

SAR-DM/2: PC-BASED RADAR IMAGE PROCESSING AND MORE

SAR-DM/2 was developed to provide an affordable solution for the display, analysis and processing of radar image data sets. The software has been used for two years by Canadian scientists to analyze SAR imagery and is now being used in ERS-1 data evaluation and processing. The package can be used either as a stand-alone analysis system or as a supplement to third party facilities.

SAR-DM/2 was designed for scientific image analysis and provides support for 8 bit, 16 bit,

floating point, and complex data sets. The package is ideal for manipulating image data sets having high dynamic range (e.g., radar, laser spectrometry, infrared, seismic and sonar data). Radar image analysis is facilitated by the software's handling of the standard CEOS format files in which ERS-1, JERS-1, Radarsat and other SAR satellite data sets will be distributed. Processing capabilities include signal processing, speckle reduction filters, slant to ground range correction and texture classification. Extensive input and output options are provided. The programmability of the software allows users to construct unique data processing modules using an internal macro language or a "C" language programmers development kit.

The SAR-DM/2 software will run only on an 80386 or 80486 type PC. An Intel 80387 numeric coprocessor (for 80386 computers), a VGA or SVGA display card (such as the ATI VGA Wonder TM), and at least 8 MB of RAM are strongly recommended. For ordering or to obtain additional information contact:

Philip Carr or Pat McConnell
Atlantis Scientific
1827 Woodward Drive
Ottawa, Ontario
Canada K2C 0P9
Telephone: (613) 727-1087
FAX: (613) 727-5853

REFLECTIONS: A NEWSLETTER FOCUSSING ON RADARSAT

Radarsat International, Inc. has issued Volume 1, Number 1 of an excellent new newsletter entitled Reflections. The newsletter's focus is radar remote sensing, and RADARSAT. The first issue describes the satellite, sensor and image products, and radar applications of data in ice monitoring. It is illustrated with some sample images.

RSSG members may also be interested in two other products from Radarsat International: Radar Remote Sensing - A Training Manual and the SAR Applications Catalogue for Canada's RADARSAT. The Manual provides resource materials for instructors involved in teaching radar remote

sensing, and includes slides and hard-copy imagery.

The Catalogue summarizes research articles on SAR applications. For a free subscription to Reflections, or to obtain additional information on other products, contact:

Radarsat International, Inc.
275 Slater Street, Suite 1203
Ottawa, Ontario
CANADA K1P 5H9
FAX: (613) 238-5425

RADARSAT TUTOR SOFTWARE

The Radarsat Tutor is a new computerized tutorial designed to address the need for low-cost, accessible educational media on topics relevant to radar remote sensing. The Tutor includes an easy-to-use point-and-click interface, and actual radar image samples with interpretations. Among

other things the tutor:

1. explains the purpose and structure of the Radarsat program;
2. decodes buzzwords and jargon;
3. illustrates fundamental radar concepts;
4. discusses current radar applications; and,
5. provides a roadmap to understanding Radarsat and other radar remote sensing platforms.

The software requires an IBM or compatible personal computer, a VGA compatible display, DOS 3.3 or higher, and a hard disk having 5 MB free space. The Radarsat Tutor (Version 1.0) may be purchased for \$169 (U.S.) plus \$10 shipping and handling. To place an order or to obtain additional details, contact:

Horler Information, Inc.
130 Albert Street, Suite 1006
Ottawa, Ontario
CANADA K1P 5G4
Telephone: (613) 594-5155
FAX: (613) 594-86792

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