

RSSG Newsletter

Association of American Geographers
Remote Sensing Specialty Group

May 1995

Volume 16 Number 2



From the Chair

The Chicago Meeting of the AAG was marked by sunny and mild weather, a St. Patrick's Day Parade and festival through the streets of Chicago, a well developed and managed RSSG program, election of officers, creation of new RSSG initiatives, and the honoring of one of our own through the RSSG Outstanding Contributions Award.

The meeting had another interesting and successfully orchestrated program this year. Doug Goodin (Kansas State University) and Bill Tyler (ERIM) are commended for their efforts in the formulation and organization of the RSSG program. Six sessions and 24 papers were sponsored by the specialty group. Next year for the Charlotte meeting, Bill Tyler will chair the Program Committee and Mark Jakubauskas (University of Oklahoma) will serve as Associate Chair. Mark will then serve as the Chair of the 1997 Program Committee, so that the Associate Chair will always serve as the Chair of the Program Committee for the following year.

New RSSG Officers were nominated and elected at the specialty group Business Meeting. Doug Ramsey (Utah State University) was elected for a second term as Secretary-Treasurer (1995-97); Dale Quattrochi (NASA/Marshall Space Flight Center) was elected Director (1995-97); and John Dunham (University of Kansas) was elected Student Director (1995-96). Other current Officers include Steve Walsh (University of North Carolina), Chair (1994-96); Kevin Price (University of Kansas), Vice-Chair (1994-96, ascends to Chair following

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CALL FOR PROGRAM PARTICIPATION ANNUAL AAG MEETING - CHARLOTTE, NC

The 1996 annual meeting of the Association of American Geographers will be held April 9-13, 1996 in Charlotte, NC. Planning for the RSSG program must begin now. All individual papers and RSSG-sponsored session materials are due at the AAG central office by mid-September 1995.

If you are willing to present a paper, offer a workshop, or chair a paper session or field trip, please let us know your intention by **September 1, 1995**. Your completed abstract, program, participation form, and payment (\$105 for AAG participant, \$55 student) are **due September 11, 1995**. Participants are invited to submit

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1995 RSSG OUTSTANDING CONTRIBUTIONS AWARD TO DUANE NELLIS

The Remote Sensing Specialty Group (RSSG) of the Association of American Geographers (AAG) presented the Outstanding Contributions Award and Medal to M. Duane Nellis, Kansas State University, as part of the AAG Awards Luncheon at its Annual Meeting in Chicago. Nellis was cited for his outstanding research contributions in geographical remote sensing and his distinguished service to

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RSSG 1995 Business Meeting
Wednesday, March 15, 1995
6:20 pm
AAG Annual Meeting
Chicago, IL

Minutes

Submitted by Doug Ramsey, RSSG Secretary-Treasurer

Steve Walsh (University of North Carolina) opened this year's business meeting by welcoming those in attendance. Steve asked for a motion to accept the minutes of the 1994 Business Meeting as published in the RSSG newsletter. There was a motion and the motion was seconded, the minutes were accepted by the entire group.

Report on the Chicago RSSG Program:

According to RSSG Program Chair Doug Goodin (Kansas State University) and Associate Chair Bill Tyler (ERIM), there were six sessions, for a total of 24 papers sponsored by the RSSG. There were four other sessions dealing with remote sensing issues that were not sponsored by the RSSG. Doug Goodin thanked all those who participated and helped with moderating sessions. Steve Walsh thanked Doug and Bill for their efforts on behalf of the Specialty Group.

Secretary-Treasurer Report:

Doug Ramsey (Utah State University) distributed and discussed the RSSG calendar year budget for 1994. A detailed budget is attached to these minutes. According to the AAG, as of December 31, 1994 there were 495 members of the RSSG.

RSSG Newsletter Editor's Report:

Jim Merchant (University of Nebraska-Lincoln) reported on the newsletter and solicited contributions from the membership. There is a current mailing list for the newsletter of about 700 individuals including current members of the RSSG, editors of other AAG publications and officers of AAG. Jim said that the current mailing list has to be culled to remove individuals who are no longer members of the group.

Steve Walsh suggested that the current membership of the RSSG be requested from the AAG Central Office and that it be requested annually to correct the mailing list. Jim has been working with the newsletter for several years and asked if anyone else would like to try it. He has enjoyed working on the newsletter and would be happy to continue. Duane Nellis congratulated Jim for his efforts with the newsletter, others agreed with Duane that Jim has done an excellent job.

Nominations and Elections:

Steve Walsh asked for nominations for the offices that were up for renewal within the Executive Committee of the RSSG. Election results: Doug Ramsey (Utah State University) was re-elected as Secretary/Treasurer; John Dunham (University of Kansas) was elected as Student Director replacing Brad Rundquist (University of Nebraska-Lincoln); and Dale Quattrochi (NASA/Marshall Space Flight Center) was elected Director replacing Michael Hodgson (Oak Ridge National Lab).

Committee Reports:

John Harrington (Kansas State University), Chair, Student Paper Competition reported that three students entered the student paper competition. Book awards for the student paper competition are being supplied by John-Wiley and Sons. John will attend all papers and select a winner. Steve Walsh asked John to continue as Chair of the Committee and asked for other Committee Members for the 1996 meeting. Bill Tyler (ERIM) and John Brockhaus (US Military Academy) volunteered to serve on the student paper awards committee. John Dunham, Student Director was appointed to the Committee by the Chair of the RSSG.

Honors Committee:

The honors committee chaired by Kamlesh Lulla (NASA/JSC) and members John Jensen (University of South Carolina) and Dan Brown (Michigan State University) nominated four individuals to the RSSG Executive Committee to be considered for the RSSG Outstanding Contribution to Remote Sensing Award. The RSSG Executive Committee considered the nominations and chose Duane Nellis (Kansas State University) as the 1995 recipient. Duane has done much to benefit remote sensing and geography

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the RSSG Business Meeting in Charlotte, 1996-98); and Dan Brown (Michigan State University), Director (1994-96). Jim Merchant (University of Nebraska-Lincoln) continues to serve as Editor of the **RSSG Newsletter**, and is commended for his outstanding service to the Specialty Group. The RSSG thanks outgoing Director, Mike Hodgson, Oak Ridge National Lab, for his contributions and efforts on behalf of the RSSG. Outgoing Regional Directors of the RSSG are also thanked for their support: Ray Lougeay, Bill Hamilton, Kam Lulla, Doug Stow, Shamim Naim, David Lusch, Mike Hodgson, Sam Goward, and Dale Quattrochi.

RSSG Regional Councillors were appointed for the period 1995-1997. Their responsibilities include the coordination and/or reporting of activities, programs, and related matters that deal with and impact on remote sensing research, instruction, and outreach within their AAG-defined regions. Please contact the Councillor in your region with news and notes about information that relates to remote sensing research, instruction, and outreach. Each Councillor will report to the RSSG at the annual Business Meeting held in conjunction with the AAG Meeting. Issues to be reported could include remote sensing papers and/or programs conducted at the regional AAG meetings, course curricula changes and Lab development at universities within ones region, industry-relate remote sensing programs, etc. In short, Councillors represent the RSSG within their region, report on activities and issues that relate to the mission and interests of the RSSG, and provide liaison between regional events and activities and the Executive Committee of the RSSG. The 1995-1997 RSSG Regional Councillors by region are:

Middle States -- Ling Bian, SUNY-Buffalo
(bian@geogsun.geo.ukans.edu (temporary))
NESTVAL -- Tom Allen, University of Vermont
(allen@geog.unc.edu (temporary))
Southwest -- Mark Jakubauskas, University of Oklahoma
(jakubaus@uoknor.edu)
Pacific Coast -- Janet Franklin, San Diego State
University (janet@typhoon.sdsu.edu)
West Lakes -- Sue Berta, Indiana State University
(geberta@scifac.indstate.edu)
East Lakes -- Dave Lusch, Michigan State University
(178721sc@ibm.msu.edu)

Great Plains/Rocky Mtns -- Danny Vaughn, Weber State
University (dvaughn@scinet.weber.edu)
Middle Atlantic -- Doug Wheeler, USGS
(dwwheeler@usgs.gov)
Southeast -- Aaron Moody, University of North Carolina
(moody@geog.unc.edu)

Some new initiatives and procedures were approved by the RSSG during the Business Meeting (see the Minutes of the Business Meeting in this issue of the Newsletter). In brief, two new committees were established : a Publications Committee (Chaired by Dale Quattrochi, NASA/Marshall Space Flight Center) and a Communications Committee (Chaired by Doug Goodin, Kansas State University). The Student Awards Committee (Chair, John Harrington, Kansas State University) has been expanded to more fully emphasize the RSSG commitment to the award and to the efforts in organizing the program. Also, a Social Event is being planned to immediately follow the 1996 RSSG Business Meeting in Charlotte to further recognize and honor recipients of the RSSG Outstanding Contributions Award. The Chair of the Honors Committee will be the most recent recipient of the Outstanding Contributions Award. Professor M. Duane Nellis, Department of Geography, Kansas State University is the 1995 Awardee.

Duties and responsibilities of the RSSG Officers and Committees were briefly discussed at the RSSG Business Meeting. Summarized below are the primary assignments for the 1995-96 period:

Steve Walsh, Chair (1994-96), University of North Carolina: overall leadership, representation, and administration of the RSSG; preparation of columns for the **RSSG newsletter**; representation of the RSSG at the AAG Specialty Group Luncheon; preparation of the RSSG report and its submission to the AAG Central Office within 30 days of the National Meeting; administration of the RSSG Business Meeting; convening the RSSG Executive Committee to set the Business Meeting agenda and to solicit comment and information as necessary.

Kevin Price, Vice-Chair (1994-96: ascends to Chair (1996-98) following the 1996 RSSG Business Meeting), University of Kansas: Coordination of awards for the RSSG Outstanding Contributions

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Award (Duane Nellis, Chair, medals housed at Kansas State University) and the Student Award (John Harrington, Chair, Kansas State University, \$100.00 and assorted remote sensing books secured from publishing companies); preparation of a brief (1-2 paragraphs) award statement on the recipient of the Outstanding Contributions Award for reading at the AAG Honors Luncheon; attend the AAG Honors Luncheon with RSSG Honorees.

Doug Ramsey, Secretary/Treasurer (1995-97), Utah State University: Accounting and management of RSSG funds; taking Business Meeting minutes; preparation of the Minutes for publication in the **RSSG Newsletter**; coordinating with the editor of the **Newsletter** the current membership of the specialty group for newsletter distribution and related matters.

Dan Brown, Director (1994-96), Michigan State University: Coordination of the RSSG Committees through the Chairs of Honors, Student Awards, Communications, Publications, and Program Committees (consolidation of reports for the RSSG Secretary); coordination of the social function to be held immediately following the RSSG Business Meeting to honor the current and prior recipients of the Outstanding Contributions Award.

Dale Quattrochi, Director (1995-97), NASA/Marshall Space Flight Center: Coordination of the RSSG Regional Councillors and the consolidation of reports for the RSSG Secretary; coordination of the social function to be held immediately following the RSSG Business Meeting to honor the current and prior recipients of the Outstanding Contributions Award.

John Dunham, Student Director (1995-97), Kansas State University: Serve as a member of the Student Awards Committee, and represent the interests and concerns of the student members of the specialty group.

1995-96 Executive Committee: Serve as the strategic planning and management council of the RSSG, contribute to the setting of the agenda of the RSSG Business Meeting, and advise the Chair and specialty

group as necessary:

Steve Walsh, Chair
Kevin Price, Vice-Chair
Doug Ramsey, Secretary/Treasurer
Dan Brown, Director
Dale Quattrochi, Director
John Dunham, Student Director
Tina Cary, Past-Chair
Jim Merchant, Editor of the Newsletter.

1995-96 Program Committee: Prepare the RSSG sponsored program for the current year of the AAG Meeting: Bill Tyler, ERIM, 1996 Program Chair; Mark Jakubauskas, University of Oklahoma, 1996 Associate Chair and Chair of the 1997 Program Committee.

1995-96 Honors Committee: Nominate to the Executive Committee, candidates for the Outstanding Contributions Award and facilitate the preparation of biographic information on the awardee for reading at the AAG Honors Luncheon and for presentation in the RSSG Newsletter -- Duane Nellis, Kansas State University, Chair.

1995-96 Publications Committee: Prepare a strategic plan to develop publication outlets of research conducted by members of the RSSG by exploring the creation of a RSSG Monograph Series and/or Special Issues dedicated to the science of remote sensing -- Dale Quattrochi, NASA/Marshall Space Flight Center, Chair.

1995-97 Communications Committee: Examine the procedure and mechanics of establishing an electronic file of RSSG members for contact through the Internet, and to examine the development of a RSSG Home Page on the World Wide Web -- Doug Goodin, Kansas State University, Chair.

1995-97 Student Awards Committee: To expand the solicitation (timing is critical to the solicitation process) of student participation in the RSSG sponsored Students Awards Committee, and to secure donations of books and other suitable materials to serve as the award prize (in addition the RSSG will contribute \$100.00 to the awardee) -- John Harrington, Kansas State University, Chair.

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contributions to the following proposed RSSG sessions:

- Remote Sensing Applications
- Advanced Remote Sensing Techniques
- Airborne Remote Sensing
- Remote Sensing Applications using Radar Sensors
- Future Trends in Remote Sensing
- Remote Sensing/GIS Integration
- Hyperspectral Remote Sensing (AVRIS, etc.)
- Remote Sensing of Coastal Wetlands
- Multitemporal Data Analysis
- Close-Range Remote Sensing
- Environmental Modeling and Remote Sensing
- Remote Sensing in Biodiversity Studies

Other paper topics and alternate session suggestions are welcome.

By all accounts the panel discussion sponsored by the specialty group in Chicago was a great success. It has been suggested that the RSSG sponsor a second panel discussion at Charlotte. Some possible topics include:

- Academic Research and Commercial Remote Sensing
- The Role of Remote Sensing in Global Change Research
- Remote Sensing Education Issues

If you have a suggestion for either an alternate panel discussion topic or a possible panelist, please let us know. For additional details contact:

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remote sensing and the specialty group, one of the AAG's largest in membership. Nellis serves as a member of the AAG Commission on College Geography II, and is Past President of the National Council for Geographic Education. He received the AAG's John Fraser Hart Award for Research Excellence in 1991.

Nellis is currently Associate Dean of the College of Arts and Sciences and Professor Geography at Kansas State University. He has been a member of the K-State faculty since 1980, and served as Head of K-State's geography program for approximately 7 years. Nellis is currently working collaboratively with Kevin Price, University of Kansas, on a NASA funded research project using satellite information to map rural land use change in southwest Kansas. He is also one of the research scientists using satellite information to more fully understand the landscape ecology of the Konza Prairie Research Natural area just south of Manhattan.

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Finally, the RSSG congratulates John Jensen (University of South Carolina), member of the RSSG and 1994 recipient of the Outstanding Contributions Award, for being elected President of the American Society for Photogrammetry and Remote Sensing.

For information and comment on this Newsletter or associated material, please feel free to contact me or the other Officers. Also, material suitable for the Newsletter should be directed to the Editor of the Newsletter, Jim Merchant.

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through his research, instruction, and outreach efforts. The assembled membership of the RSSG congratulated Duane and thanked him for his outstanding contributions. Duane Nellis was asked to serve as Chair of the Honors Committee and to nominate individuals for next year's award. Tim Warner (West Virginia University) and Sue Berta (Indiana State University) will serve with Duane as members of the Committee.

AAG Committee on Standards for Geographic Data: Tina Cary (EOSAT and past RSSG Chair) is the representative from the RSSG to this Standards Committee. Tina was not able to attend this meeting. Steve Walsh will contact her to determine it's progress.

Regional Councillors Report:

There was some discussion about keeping the present structure of the Regional Councillors to the RSSG. Many of the present councillors were up for renewal and Steve Walsh asked if we should appoint another set of councillors or remove the office altogether. It was felt that the councillors could help expand the role of the RSSG by encouraging remote sensing papers and presentations within their region through the AAG regional meetings and through increased participation at the AAG National Meeting through RSSG sponsored programs. New RSSG Regional Councillors will be appointed by the Chair of the Specialty Group.

Program Chair for 1996 Charlotte Meeting:

To add consistency to session organizations, Bill Tyler (ERIM), Associate Chair of the 1995 Program Committee, accepted the invitation to serve as the Chair of the 1996 RSSG Program Committee for the Charlotte AAG meeting. Mark Jakubauskas (University of Oklahoma) volunteered to be Associate Chair and Chair of the RSSG program for the 1997 AAG meeting.

Specialty Group Chair's Luncheon:

The Specialty Group Chair's luncheon occurred after the RSSG business meeting. However, Ron Abler (AAG Executive Director) previewed the session to Specialty Group Chairs. Ron reported that this year,

they expect slightly over 3,700 individuals will attend the 1995 meetings. Ron also reported that there are only a few locations nationwide that can support this type of attendance and the current meeting format. The number of concurrent sessions that need to be scheduled within the period of the meetings is straining most convention facilities. Suggestions are being solicited for alternative presentation formats to help reduce the number of concurrent sessions. The Specialty Group discussed a two-tiered approach where shorter presentations describing progress on broad geographic questions and/or themes could be complemented by longer, possibly, reviewed presentations of a more scholarly nature.

Review of Committees:

Discussion centered on organizing a Communications Committee and a Publication Committee. We decided to solicit papers from the RSSG members for a peer-reviewed and published monograph series. These papers will be written versions of the papers delivered at the annual AAG meeting. The peer-review process will identify the best papers submitted and these would form the monograph for that year. A committee consisting of Dale Quattrochi (NASA/Marshall Space Flight Center), Doug Ramsey (Utah State University), and Sunil Narumalani (University of Nebraska-Lincoln) will take the responsibility of organizing the monograph series and for soliciting possible sponsors from industry and professional organizations. They will report to the RSSG at the Charlotte meeting.

A Communication Committee was appointed to explore ways to connect the members of the RSSG electronically and promote the RSSG. Electronic mailings to members and the development of a world-wide-web (WWW) home page were discussed to present the newsletter electronically and offer other services such as data transfer, remote sensing education, and links to other pertinent data and information sources. A suggestion was made to approach the AAG Central Office to provide a data server that would act as a home page location for the WWW. Doug Goodin (Kansas State University) will act as the Chair of the Communications Committee

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assisted by Tom Allen (University of North Carolina) and Sunil Narumalani (University of Nebraska-Lincoln).

Other Business:

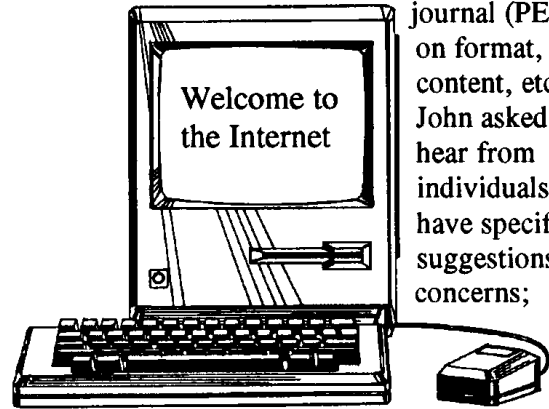
We discussed the response of Bill French (Executive Director of ASPRS) to the letter that Steve Walsh wrote to ASPRS on behalf of the RSSG concerning the difficulties of publishing in PE&RS and the extended review process. To assist PE&RS with the review process, Steve Walsh has asked the membership to send an E-mail note to him indicating a willingness to act as a reviewer for manuscripts submitted to PE&RS as requested by PE&RS associate editors Jim Merchant, Stuart Marsh, and Mike Hodgson. Please provide information on the areas that you would be willing to review as well as all pertinent address and communications information.

Steve Walsh proposed that at the conclusion of the 1996 business meeting, the RSSG should have a social event to recognize the recipient(s) of the Outstanding Contribution to Remote Sensing Award. This event would be paid by current membership dues to the RSSG. The proposal had a positive reception by those attending the meeting. A social event will be held immediately following the RSSG Business Meeting at the 1996 AAG meeting in Charlotte.

Duane Nellis (Kansas State University) reported on the outcome of the survey he made of remote sensing professionals to identify those journals that we publish and respect the most. The following are the results of this survey: **Photogrammetric Engineering and Remote Sensing** ranked number one, followed by **Remote Sensing of Environment** and **The International Journal of Remote Sensing**. Survey respondents were also asked to note which journals they had published in. The most frequently mentioned were **Photogrammetric Engineering and Remote Sensing** and **Geocarto International**. A more complete discussion of the survey results is being developed into a manuscript for publication in one of the geography journals. Prior to completion of the manuscript, the results will be linked with a study completed by John Jensen on scientific citations

associated with geography and remote sensing journals. John Jensen and Kevin Price will serve as co-authors.

John Jensen (University of South Carolina) reported that as the current president of the ASPRS he has three issues to address: (1) a complete review of the



(2) develop a WWW home page for the ASPRS (a prototype is being developed with the National Biological Service and Utah State University, Department of Geography and Earth Resources). This WWW home page will be available by early summer of 1995 and offer "one-stop-shopping" for digital geographic information; and (3) sponsor a high spatial resolution remote sensing conference. Every vendor that offers high resolution imagery will be invited to participate. This conference will be held in Virginia in late September 1995.

Steve Walsh (University of North Carolina) discussed the University Consortium for Geographic Information Science whose mission is to serve as a unified and effective voice for the geographic information science research community; to foster multidisciplinary research and education in this field; and to promote the informed and responsible use of geographic information and analysis for the benefit of society. The goals are to provide ongoing research priorities to advance the theory and methods in geographic information science; to assess the current and potential contributions of GIS to national scientific and public policy issues; to expand and strengthen geographic information science education at all levels; to promote the access to geographic information; to provide the organizational infrastructure for collaborative interdisciplinary

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research in geographic information science; and to foster geographic information and analysis in support of national needs.

The consortium will be open to all U.S. academic and research organizations that meet the membership criteria established at the meeting: critical mass of faculty engaged in research and instruction in geographic information science; significant student enrollment in courses and programs in the spatial sciences; existence of Centers and Labs on campus devoted to geographic information sciences; demonstration of significant research productivity; support from senior administrators; and demonstration of how the institution will fulfill and/or contribute to the mission statement of UCGIS. The UCGIS is open to input from scientists and scholars in all disciplines involved in geographic information science in member institutions. Member institutions will have the opportunity to participate in reviewing and setting national research priorities in GIA (geographic information analysis), GIS (geographic information systems), and related specialties, and they will speak with a single voice in helping to formulate national science policy at the highest levels.

UCGIS will be housed on an interim basis within the Washington, D.C. offices, until a permanent location is chosen. John Bossler, Director of the Center for Mapping at The Ohio State University, was elected to serve as interim President, and Ron Abler, Executive Director of the AAG, was elected to serve as interim Treasurer. Additional information can be obtained by contacting John Bossler, Center for Mapping, The Ohio State University, 1216 Kinnear Road, Columbus, Ohio 43212; Fax 614-292-8062; Phone 614-292-1612.

Dale Quattrochi (NASA/Marshall Space Flight Center) reported on the Landsat 7 Program. Dale was a participant in a Landsat 7 Independent Annual Review (IAR), an internal review within NASA to assess progress and cost requirements for the Landsat 7 program, conducted at Goddard Space Flight Center (GSFC) in February 1995. The Landsat 7 program as a follow-up to Landsat 6 which failed to achieve orbit after launch in 1993, is laboring under

rigid cost containment constraints. One result is that although Landsat 7 program development is on schedule for a launch in the spring-summer of 1998, there is virtually no room for on-ground component failure during production and testing because there are no back-up components being built. The Landsat 7 satellite will carry the Enhanced Thematic Mapper+ (ETM+) sensor (designated as such because of improved spatial resolution in thermal IR portion of the EMS in channel 6). Image spatial coverage will remain the same as Landsats 4-5 at 185km to ensure full compatibility with the Landsat Worldwide Reference System (WRS). Spectral configuration of the ETM+ is as follows:

Band	Bandpass (um)	GSD (m)
Pan	0.52-0.90	15
1	0.45-0.515	30
2	0.525-0.605	30
3	0.63-0.690	30
4	0.775-0.90	30
5	1.55-1.75	30
6	10.40-12.50	60
7	2.09-2.35	30

As opposed to the structure of the existing Landsat Ground Data Processing Network, raw data will be telemetered to GSFC for metadata and browse generation and initial pre-processing. Data will then be transmitted to the EROS Data Center in Sioux Falls, SD for inclusion as part of the Landsat Processing Distributed Active Archive Center (LP DAAC) for distribution to the user community.

John Jensen delivered a request from Jack Estes (University of California, Santa Barbara) who requested that Steve Walsh ask the current administration of the AAG to realign councillors based on membership demographics within Specialty Groups and not on geographic area. Jack feels that the nation is becoming more accessible and that geographic distance between regions of the US is not a major concern. He would like to realign the councillors to better represent the professional interest of the membership. Steve said that he would try to bring that point up at the specialty group's chair's luncheon.

To better organize the RSSG, Steve Walsh will bring together a document that details the responsibilities of

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the executive committee, directors, and councillors.

Those Attending the Business Meeting:

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**Treasurer's Report
AAG Remote Sensing Specialty Group
March 1995**

As of December 31, 1994 the RSSG had a balance of \$2,020.27. All income was generated from membership dues with an additional interest income of \$63.79. The only expenses paid for 1994 were for the publication and mailing of two newsletters. According to the AAG office 495 individuals chose membership in the RSSG generating \$1,477.00 in dues. We do not have member figures for 1993. However, there has been a net decrease of \$88.00 from 1993 dues.

Calendar Year 1994:

Carryover (1993):		\$1,347.58
Income:		
Dues:	2/02/94	\$ 5.00
	3/15/94	\$1,223.00
	5/23/94	\$ 249.00
Interest:		\$ 63.79
Total:		\$1,540.79
Expenses:		
	Nov. 1993 Newsletter	\$ 440.80
	Feb. 1994 Newsletter	\$ 427.30
Balance:		\$2,020.27

RSSG WWW Homepage

Plans are currently underway for development of a World Wide Web Homepage for the Remote Sensing Specialty Group. We intend to make this a clearinghouse for news and information, such as location and dates of conferences, submission locations and deadlines, and relevant happenings in other related fields. We also hope to include links to major remote sensing centers and departments, as well as locations of data, software, and information of importance to the remote sensing community. If you have suggestions for the Homepage, or know of items or links that should be included, please contact:

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email: dgoodin@ksu.ksu.edu

LULLA TO HEAD NASA/JSC EARTH SCIENCE BRANCH

Dr. Kamlesh Lulla has been appointed Chief of the newly organized NASA Earth Science Branch within the Earth Science and Solar Systems Exploration Division of the Space and Life Sciences Directorate at Johnson Space Center (JSC), Houston, Texas. Dr. Lulla has served as the Lead Mission Scientist and Astronaut training specialist for Earth Observations at JSC for the past eight years. Dr. Lulla holds two Ph.D. degrees in Earth and Space sciences and has authored a large number of research papers, book chapters and reports. He also serves as a chief editor of an international remote sensing and earth science journal. He also serves as Honorary Professor of Space and Earth Sciences at the University of Houston-Clear Lake, Kansas State University, The University of Delaware and The Free University of Brussels, Belgium. Dr. Lulla also has been elected this year as the Vice President of American Institute of Aeronautics and Astronautics' Houston Region. He has received several NASA awards and commendations.

RSSG PRESENTS AWARDS FOR STUDENT PAPERS

John Wiley and Sons, Inc. provided book awards for the three winners of the 1995 Student Paper Presentation Competition at the Association of American Geographers Annual Meetings in Chicago, IL. The three student winners are:

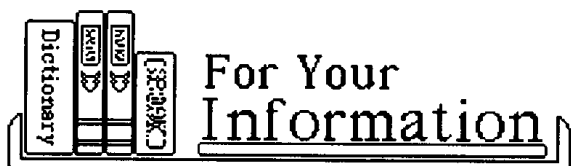
First Place: Cynthia Berlin (Indiana State); Cynthia chose **Terra 2: Understanding our Terrestrial Environment** (P. Mather, Ed.) as her book award.

Second Place Tie: Ivan Cheung (UCLA) and Merland Halisky (Utah State); both Ivan and Merland chose **Remote Sensing and Image Interpretation**, 3rd Ed. (Lillesand and Kiefer) as their book awards.

The RSSG Student Awards Committee, comprised of Bill Tyler, John Brockhouse, and John Harrington, Jr. (Chair), plans on holding another student paper presentation competition at the April 1996 AAG Meetings in Charlotte, North Carolina. Students interested in participating in the 1996 competition should be sure to follow all AAG requirements for presenting a paper or a poster in Charlotte. Students (or faculty advisors), who would like more information, should contact:

John Harrington
Department of Geography
Kansas State University
Manhattan, KS 66506
Tel.: (913) 532-6727
email: jharrin@ksu.ksu.edu

Congratulations



SPOT CD-ROM PRODUCT SAMPLER

SPOT Image Corporation is offering a free CD-ROM with 21 SPOTView sample images in the GIS-GeoSPOT Version 4.0 format. The U.S. scenes include a variety of environments, frame sizes and map projections, in both panchromatic and multispectral data modes. GIS-GeoSPOT Version 4.0 is compatible with most GIS, image processing and desktop mapping systems. To request your CD-ROM, contact:

SPOT Image Corporation
1897 Preston White Drive
Reston, VA 22091-4368
Tel.: 1-800/ASK-SPOT or (703) 715-3100
FAX: (703) 648-1813

PEDAGeOG SOFTWARE AND EOSAT SCHOLAR DATA

The PEDAGeOG image processing software, used with EOSAT's inexpensive Scholar Series data and associated teaching manuals, now is available with a convenient point-and-click interface. The new version is mouse-driven with graphical user interface features that resemble Microsoft Windows. However, Windows is not required; the software runs under DOS on all personal computers. The new version of PEDAGeOG provides an interface so that schools can use image data and teach remote sensing without having to buy expensive computer upgrades. This will be of particular interest to the many schools that have older and less powerful 286 and 386 systems. Fees include \$150 for a site license for PEDAGeOG, \$50 for each Scholar Series data set, and \$20 for each manual. The Mississippi "Flood Study" data set is a two image change detection package for \$95.00). For more information on the PedaGEOG software contact:

Eidetic Digital Imaging Ltd.
1210 Marin Park Drive
Brentwood Bay, B.C. CANADA V8M 1G7
Tel.: 604/652-9326
FAX: 604/652-5269

For details on EOSAT's Scholar series of imagery covering Yellowstone National Park, Hurricane Hugo's effects on Charleston, SC, the 1993 Midwest flooding and oil spill effects in the Persian Gulf, contact:

EOSAT Customer Services
4300 Forbes Blvd.
Lanham, MD 20706-9954
Tel: (800) 344-9933
FAX: (301) 552-3762

RADAR-FORESTRY CD-ROM

The Forestland Group at the Canada Centre for Remote Sensing (CCRS) announces the availability of a CD-ROM dataset for forest research in radar remote sensing. This data covers the CCRS boreal forest test site near Whitecourt, Alberta (northwest of Edmonton) and consists of: C-band Radar images, forest field parameters for 95 stands, optical data, weather data, explanatory notes and a list of references. The CD-ROM has both Macintosh and IBM-PC compatible file formats. The radar images are in PCI file format. Six PCI files of 15 channels each cover the following study areas: conifers, burn scar, man-made features, clearcuts, old burn scar and mixed deciduous/conifer. For more information on this CD-ROM, please contact:

Frank Ahern
Application Division, CCRS
588 Booth Street
Ottawa, Ontario
K1A 0Y7
Tel: (613) 947-1295

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CALMIT WWW Home Page

DIGITAL QUICKLOOK IMAGES ON THE INTERNET

As part of the cataloguing process, CCRS has routinely produced reduced-resolution quicklook images of all data received from Visible Infrared imaging satellites. Initially, the images were stored on microfilm, more recently they have been stored in NTSC format on analog videodisc. Since 1992, a project has been under way to demonstrate the feasibility of a digital quicklook system whereby images are stored in computer compatible format. Digital quicklook images are framed according to the standard framing system of a particular sensor platform, decimated to approximately 400 lines, and then corrected for detector variations - sun angle, sensor angle and earth rotation. Industry standard JPEG compression is used to store one image per file in the JPEG File Interchange Format (JFIF) format. A directory structure based on satellite, track or path, and frame or row facilitates searches. The directory and file-naming convention uniquely identify each image. Text annotation describing the data source, acquisition date and location is included within the file and can be displayed by the CCRS customized viewer. Generic viewers can also display the images, but typically do not display annotation. Digital quicklook files of a demonstration data set (consisting of approximately 8,000 Landsat and SPOT images) and supporting online documentation can now be accessed on the Internet using a World Wide Web browser. The Uniform Resource Locator (URL) for this site is:

<http://www.ccrs.emr.ca/cdql/cdql.html> (English)

<http://www.ccrs.emr.ca/cdql/cdqlf.html> (French)

or, from the Natural Resources Canada URL:

<http://www.emr.ca>

select the 'GCNET (CCRS)' and the "Digital Browse" links.

Digitization of the complete videodisc archive of some 400,000 images (acquired from 1991-1994) is now underway. More images will be added as CCRS receives and archives new satellite data. For more information please contact: Ken Barkman, Systems and Methodology Division, CCRS
Tel: (613)947-1369, email: barkman@ccrs.emr.ca

The Center for Advanced Land Management Information Technologies (CALMIT), Conservation and Survey Division, University of Nebraska-Lincoln, has recently established a Home Page on the World Wide Web (WWW). The URL is:

<http://ianrwww.unl.edu/ianr/calmit/calmit.html>

The Page provides Internet access to information on CALMIT staff, current projects, training programs and data availability. In addition, there are links to dozens of other WWW GIS and remote sensing sites and sites having environmental and natural resources information. Many of these sites have spatial data that can be directly accessed and downloaded to your local computer. There are, for example, links to terrain data, digital line graphs, land cover information, soils data, National Wetlands Inventory data, TIGER data and so forth. For additional information, contact any of the following people: Jim Merchant (jm1000@tan.unl.edu), Jim Lacy (jlacy@tan.unl.edu) or Don Rundquist (dr1000@spot.unl.edu).

USGS DIGITAL RASTER GRAPHICS CD-ROMs

A Digital Raster Graphic (DRG) is a raster image of a published U.S. Geological Survey (USGS) map. DRG's are made by high-resolution color scanning of published paper maps. A sample Product Development Report CD-ROM was released to the public in late 1994. This CD solicited comments from the users on the proposed product. The CD-ROM contained several dozen DRG's of standard USGS quadrangles as well as documentation, metadata, and examples of derivative products. More recently, USGS has produced a CD-ROM of Capital Cities of the U.S. Both CD-ROM's are available free upon request from:

U.S. Geological Survey
1400 Independence Road
Rolla, MO 65401
Tel.: 314-341-0856
FAX: 314-341-9375
email: esic@mcdgs01.cr.usgs.gov

A Guide to GIS, Remote Sensing and Other Useful Internet Resources

Compiled by
James W. Merchant
Center for Advanced Land Management Information Technologies (CALMIT)
University of Nebraska-Lincoln
Lincoln, NE 68588-0517

This guide is intended to provide starting points for acquiring information on remote sensing and GIS through the Internet. Note that most of the sites listed below are accessible through links on the **CALMIT Home Page** at

<http://ianrwww.unl.edu/ianr/calmit/calmit.html>

Federal Agencies

Federal Government WWW Servers

<http://unlvm.unl.edu/fedlgovt.htm>

Library of Congress Home Page

<http://lcweb.loc.gov/homepage/lchp.html>

U.S. Bureau of the Census Home Page

<http://www.census.gov/>

U.S. Department of Interior Home Page

<http://info.er.usgs.gov/doi/doi.html>

U.S. Fish and Wildlife Service Home Page

<http://www.fws.gov/>

U.S. Bureau of Land Management Home Page

<http://www.blm.gov/>

USDA/Natural Resources Conservation Service Home Page

<http://www.ncg.scs.ag.gov/>

U.S. Environmental Protection Agency Home Page

<http://www.epa.gov/>

U.S. Geological Survey Home Page

<http://www.usgs.gov/>

NASA HQ Home Page

<http://www.hq.nasa.gov/>

NASA WWW Information Services

http://www.gsfc.nasa.gov/NASA_homepage.html

NOAA Home Page
<http://www.noaa.gov/>

GIS and Remote Sensing Indexes/Starting Points/Links

GIS MetaData Sites
<http://www.blm.gov/gis/nsdi.html>

GIS/Remote Sensing/GPS/Geoscience hotlist
[http://www.zilker.net/"hal/geoscience/](http://www.zilker.net/)

Satellite Data on the Net
<http://www.edv.agrar.tu-muenchen.de/dvs/rs/satdat.html>

Bill Thoen's Internet Guide for Earth Scientists (includes GIS)
<gopher://una.hh.lib.umich.edu/00/inetdirsstacks/earthsci%3athoen>

Dave Harris' GIS Page
[http://nyx10.cs.du.edu:8001/"deharris/gis.html](http://nyx10.cs.du.edu:8001/)

Harvey's Cyberspace Jump Station: Geography
http://ice.ucdavis.edu/cyberspace_geography.html

GIS Sites (see also Federal Agencies)

GIS Frequently Asked Questions
<http://www.census.gov/geo/gis/faq-index.html>

USGS GIS Resources Page
<ftp://h2o.er.usgs.gov/wais/html/gis.html>

USGS GIS Links
<http://info.er.usgs.gov/network/science/earth/gis.html>

Federal Geographic Data Committee Home Page
<http://fgdc.er.usgs.gov/>

FGDC Geospatial Information Links
<file://fgdc.er.usgs.gov/gdc/linkbyorgt.html>

USGS Node/National Geospatial Data Clearinghouse
<http://nsdi.usgs.gov/nsdi/>

NOAA Data Set Catalog
<http://www.esdim.noaa.gov/NOAA-Catalog/NOAA-Catalog.html>

USDI Bureau of Land Management GIS Home Page
<http://www.blm.gov/gis/gishome.html>

National Center for Geographic Information and Analysis
<http://www.ncgia.ucsb.edu/ncgia.html>

University Consortium for Geographic Information Science
<http://www.eng.rpi.edu/ucgis/>

Environmental Systems Research Institute
<http://redlands.esri.com/>

ARC/INFO Tutorial
<http://boris.qub.ac.uk/shane/arc/ARChome.html>

Geographic Resources Analysis Support System (GRASS)
<http://www.cecer.army.mil/grass/GRASS.main.html>

GIS World, Inc.
<http://www.gisworld.com/>

Geographic Designs, Inc.
<http://www.geodesigns.com/>

USGS MidContinent Mapping Center
<http://mcmcweb.cr.usgs.gov/>

Center for Advanced Spatial Technologies, University of Arkansas
<http://www.cast.uark.edu/>

University of Minnesota Remote Sensing Laboratory (includes GIS jobs clearinghouse)
<http://www.rsl.forestry.umn.edu:10000/>

Arizona Geographic Information Council Home Page
<http://www.state.az.us/gis3/agic/agichome.html>

Montana Natural Resources Information System
<http://nris.msl.mt.gov/>

Texas GIS Planning Council
<http://www.texas.gov/DIR/gis.html>

GIS Data (note - other sites may also have data)

GIS Spatial Data Sites
<http://www.epa.gov/docs/oppe/spatial.html>

Geodata Information Sources
http://www.cgrer.uiowa.edu/servers/servers_geodata.html

U.S. Geographic Data
<http://wings.buffalo.edu/geoweb/sources.html>

TIGER Home Page

<http://www.census.gov/tiger/tiger.html>

SAST Data Bases (U.S.)

<http://edcwww.cr.usgs.gov/sast-home.html>

National Wetlands Inventory

<http://www.nwi.fws.gov/>

GIS Data

<ftp://spectrum.xerox.com/pub/map>

Australian Environmental Data

http://kaos.erin.gov.au/general/spatial_data/query/sp_query_cont.html

U.S. Map Browser

<http://wings.buffalo.edu/cgi-bin/mapbrowse>

Remote Sensing Sites (may also include GIS data)

USGS/EROS Data Center Home Page

<http://sun1.cr.usgs.gov/eros-home.html>

USGS/EROS/Global Land Information System (GLIS)

<http://sun1.cr.usgs.gov/glis/glis.html>

USGS/EROS Land Processes DAAC

<http://sun1.cr.usgs.gov/landdaac/landdaac.html>

USGS/EROS Ames Research Group

<http://geo.arc.nasa.gov/usgs/erosames.html>

NASA Mission to Planet Earth Home Page

<http://www.hq.nasa.gov/office/mtpe/>

NASA Internet Connection

<http://www.jsc.nasa.gov/nasa/NASAIInternet.html>

NASA Earth Observing System Home Page

<http://eos.nasa.gov/>

MODIS Page

<http://ltpwww.gsfc.nasa.gov/MODIS/MODIS.html>

NOAA Office of Satellite Data Processing/Satellite Active Archive

<http://pegasus.nesdis.noaa.gov/osdpd.html>

Public Use of Remote Sensing Data Home Page

<http://rsd.gsfc.nasa.gov/rsd/>

Global Land Cover Test Sites Project

<http://dia.maxey.dri.edu/glcts/>

NASA Pathfinder Program

<http://xtreme.gsfc.nasa.gov/pathfinder/>

Pathfinder Data Sets

<http://pathfinder.arc.nasa.gov/>

AVHRR Pathfinder Home Page

<http://xtreme.gsfc.nasa.gov/>

AVHRR 10-day Composite

<http://edcwww.cr.usgs.gov/landdaac/comp10d.html>

NASA/NOAA Oceans AVHRR Pathfinder

<http://sst-www.jpl.nasa.gov/>

NASA Jet Propulsion Laboratory Home Page

<http://www.jpl.nasa.gov/>

NASA/JPL Imaging Radar Page

<http://southport.jpl.nasa.gov/>

ImageNet (Search for Images)

<http://www.coresw.com/>

ERDAS, Inc.

<http://www.erdas.com/>

RadarSat

<http://adro.radar1.sp-agency.ca/adrohomepage.html>

Airborne Visible IR Spectrometer (AVIRIS)

<http://ophelia.jpl.nasa.gov/pub/docs/html/aboutAV.htm>

Defense Meteorological Satellite Program (DMSP) Data Archive

<http://web.ngdc.noaa.gov/dmsp/dmsp.html>

Space Remote Sensing Center

<http://ma.itd.com:8000/welcome.html>

Environmental Research Institute of Michigan Home Page

<http://www.erim.org/>

European Space Agency Earth Observation Guide and Directory Service

<http://gds.esrin.esa.it/>

IONIA AVHRR Browser

<http://shark1.esrin.esa.it/>

Russian Satellite Data

<http://cen.cenet.com/htmls/Services.html>

IEEE Geoscience and Remote Sensing Society
<http://www.ieee.org/grs/index.html>

Environmental and Natural Resources Data and Information

Environmental Information WWW Index
http://www.cgrer.uiowa.edu/servers/servers_environment.html

Planet Earth Home Page
<http://teal.nosc.mil/info.html>

Weather Information Superhighway
<http://thunder.met.fsu.edu/~nws/wxhwy.html>

National Water Conditions
<http://nwcwww.er.usgs.gov:8080/>

National Climatic Data Center
<http://www.ncdc.noaa.gov/>

Long Term Ecological Research (LTER) Home Page
<http://lternet.edu/>

Man and the Biosphere Home Page
http://ice.ucdavis.edu/MAB/MAB_main_page.html

GAP Analysis Home Page
<http://www.nr.usu.edu/gap/gaphome.htm>

CIESIN Information
<http://www.ciesin.org/>

CIESIN Thematic Guides on Global Change
<http://www.ciesin.org/TG/thematic-home.html>

Joint Education Initiative
<http://jei.umd.edu/jei/jei.html>

1993 Midwest Floods Page
<http://155.76.33.35/philip/fl93hom2.htm>

UNEP/GRID
<http://grid2.cr.usgs.gov/grid/grid.htm>

Australian Environmental Resources Information Network
<http://kaos.erin.gov.au/erin.html>

Canada National Atlas Home Page
<http://www-nais.ccm.emr.ca/Home.html>

Miscellaneous

WWW Map-based Links (world)

<http://wings.buffalo.edu/world/>

North America Virtual Tourist

<http://wings.buffalo.edu/world/na.html>

Colleges and Universities (international links)

<http://www.shu.edu/html/internet/schools/univ.html>

American Universities (links)

<http://www.shu.edu/html/internet/schools/american.html>

University of South Carolina Department of Geography (links to other Geography Departments, AAG/GIS Specialty Group and GIS info)

<http://lorax.geog.scarolina.edu/>

USA City Link

<http://www.neosoft.com/citylink/>

City Net

<http://www.city.net/>

CIA World FactBook

<gopher://umslvma.umsl.edu/11/LIBRARY/GOVDOCS/WF93/WFLATEST>

Chronicle of Higher Education

<http://chronicle.merit.edu/>

Declassified Intelligence Satellite Photographs

An Executive Order, signed by President Clinton on February 23, 1995, has authorized the declassification of satellite photographs collected by the U.S. Intelligence Community during the 1960's.

Duplicate film negatives will be created for these photographs and used to provide film negatives, positives, and paper prints to the public at the cost of reproduction. Photographs will be available from the National Archives and Records Administration and from the U.S. Geological Survey's Earth Resources Observation Systems (EROS) Data Center. The images will become declassified and available for purchase by the public within 18 months after the declassification order was signed. This will allow the two agencies to create the working negatives and integrate the photo collection with their existing product ordering and distribution systems.

When the declassified images become available, an Internet catalog and image browse capability for the entire collection will be accessible, at no charge, on the U.S. Geological Survey's Global Land Information System (GLIS). To try the GLIS online catalog and browse capability for Landsat multispectral scanner (MSS), Landsat thematic mapper (TM), and NOAA advanced very high resolution radiometer (AVHRR) satellite image data, use the text-only Internet GLIS interface:

telnet glis.cr.usgs.gov

or the X windows GLIS interface:

telnet xglis.cr.usgs.gov

Available Products

The USGS plan is to offer these photographs as duplicate negatives, positive transparencies, or black and white photographic prints.

World Wide Web access

An online description of this photographic collection and sample GIF and raster images is available on a USGS World Wide Web server using public domain browse tools such as Mosaic or Netscape. The Universal Resource Locator (URL) address for the USGS Declassified Intelligence Satellite Photographs home page is:

<http://edcwww.cr.usgs.gov/dclass/dclass.html>

Internet FTP access

Only four images were selected for declassification at this time. Sample digital images were created of these four photographs. These sample digitally scanned images demonstrate potential digital products that could be created from the film.

To access this anonymous FTP server:

1. *ftp edcftp.cr.usgs.gov*
2. Enter *anonymous* at the logon prompt.
3. Enter your e-mail address at the password prompt.
4. Change to the directory containing the image files by entering:
cd pub/data/DCLASS

5. Enter *ls* to view an alphabetical listing of the files. Once you have located your desired GIF file (.gif) or raster image file (.img), set the file transfer mode to binary by typing *binary* at the prompt. Then enter *get* followed by the filename. You should also download and read the README file for information concerning the source photography, image size, and information about the images' geographic locations and collection dates.

Further information

An information packet for the Declassified Intelligence Satellite Photographs is available for \$25. It contains the four black and white declassified sample photographic prints, and a color Landsat MSS image over the Aral Sea (included for comparison purposes). To purchase the packet, contact:

U.S. Geological Survey
EROS Data Center Customer Services
Sioux Falls, SD 57198
Phone: 605-594-6151
Fax: 605-594-6589
E-mail:
custserv@edcserver1.cr.usgs.gov

Declassified Intelligence Satellite Photographs: Sample Photographic Products

The photographs in this packet were selected for immediate declassification to illustrate the collection's usefulness in applications from reconnaissance to environmental monitoring. The packet contains four samples of declassified photography and one Landsat satellite image of the same area as one of the declassified photos for comparison.

Soviet Airfield (first image), 18 August 1960

This photograph is the first intelligence target imaged from the first CORONA Mission. It shows a military airfield near Mys Schmidta on the Chukchi Sea in far-northeastern Russia. This image is a 30X enlargement of the original film negative.

Aral Sea, 29 August 1962

The Aral Sea, on the border between Kazakhstan and Uzbekistan, is Asia's second largest body of landlocked water. It has been estimated that over the last three decades, this lake has lost a volume of water equivalent to one and a half times that of Lake Erie in the United States. This photograph shows the full extent of the Aral Sea on August 29, 1962. The comparison of this image with modern satellite digital images gives scientists the opportunity to assess changes in water levels during the past 33 years. A mosaic of 17 original images was created, then reduced by 30 percent to create this sample image. The area covered is approximately 210 x 230 nautical miles (389 x 426 kilometers). A Landsat Multispectral Scanner image of the same area, acquired on August 19, 1987, is also provided for comparison with the declassified photo.

Klyuchevskaya Volcano, 24 November 1962

Klyuchevskaya Volcano is in far eastern Russia's Kamchatka Peninsula, one of the most active seismic and volcanic areas in the world. The photograph shows a cluster of volcanos in the Klyuchevskaya Group. Klyuchevskaya, one of the world's tallest volcanos, erupted as recently as November 1994. Comparing this photograph with more recent images provides insight into the evolution of volcanic activity on the Kamchatka Peninsula. A mosaic of two original images was magnified by 2X to create this photograph.

Soviet Long-Range Aviation Airfield, 20 August 1966

This photograph showing a major Soviet strategic bomber base near Dolon, Kazakhstan, was taken on August 20, 1966. It demonstrates the ability of the early imagery systems to distinguish between heavy bombers and transport aircraft seen on the airfield's main parking apron. This photograph is a 30X enlargement of the original image.

Customer Services
U.S. Geological Survey
EROS Data Center
Sioux Falls, SD 57198
(605)594-6151

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 in Wordperfect or ASCII format or by email.

RSSG Newsletter

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