

# RSSG

## Newsletter



Remote Sensing Specialty Group  
Association of American Geographers

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### From the Chair

I would like to take this opportunity to thank Dale Quattrochi (NASA/Marshall Space Flight Center) for being my "stunt double" at the meeting in Hawaii this past March. Although I was unable to attend the meeting myself, I was with you "in spirit" as I made my way through another cool and rainy spring here in Michigan.

Believe it or not, it is time to start planning for our next AAG annual meeting. Next year the meeting will be held in Pittsburgh, Pennsylvania, a venue that is sure to attract a large number of RSSG members. If you plan on presenting a paper at this meeting, please consider having it put into one of the many RSSG-sponsored sessions being planned. Historically these sessions are among the best-attended paper sessions at the conference. Submission details appear elsewhere in this issue of the newsletter. The Year 2000 Program Chairs will be Tom Allen (Old Dominion University), Tim Foresman (University of Maryland, Baltimore County) and Scott Loomer (U.S. Military Academy).

Congratulations are in order to our group's Vice Chair, Dale Quattrochi (NASA/Marshall Space Flight Center), for winning the RSSG's Outstanding Contributions Medal for 1999. I had the pleasure of informing Dale of the award via telephone prior to the meeting in Hawaii. He was both very gracious and very much surprised.

Continued on page 2...From the Chair

### AAG 2000 Annual Meeting Pittsburgh, Pennsylvania *Call for RSSG Program Participation*

The Remote Sensing Specialty Group (RSSG) solicits abstracts for papers or sessions on any aspect of remote sensing for the 2000 AAG Annual Meeting. The RSSG program co-chairs for AAG 2000 are Tom Allen (Old Dominion University) and Tim Foresman (University of Maryland-Baltimore County).



In 2000, the AAG/RSSG program will highlight linkages of remote sensing to the digital world under the theme: *Remote Sensing Applications and Integration for the New Millennium*. While topics on any aspect of remote sensing are welcome, papers relating to the theme are encouraged in areas such as: 1) new sensors and algorithm developments, 2) change detection and land use/cover change, 3) scale dependence and scaling, and 4) remote sensing integration in the digital world (simulation, environmental modelling, GIS, socio-demographic and land use models, earth system science, etc.)

Continued on page 3...Call-for-Papers

From the Chair...Continued from page 1.

Duane Nellis (University of West Virginia) and the other members of the RSSG Honors Committee made an outstanding selection.

I would also like to thank Doug Goodin (Kansas State University) for making the medal presentation for me. Getting the medal into Doug's hands for the presentation proved to be another interesting experience, involving express mail services, the message board at the meeting, and personnel from two separate geography departments acting as "couriers."

After four years of service Duane Nellis is stepping down from his position of Chair of the Honors Committee. Duane did a great job during his tenure. Steven J. Walsh (University of North Carolina) has been selected as the new Honors Committee Chairman. Joining Steve on the Committee will be Dan Brown (Michigan State University) and Ling Bian (State University of New York at Buffalo).

I am looking forward to a large RSSG turn out in Pittsburgh next year. I hope to see you there!

Bill Tyler  
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Ypsilanti, MI 48197  
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tylerw@dteenergy.com

## **RSSG 1999 Outstanding Contributions Award**

Congratulations are extended to Dr. Dale A. Quattrochi, recipient of the 1999 RSSG Outstanding Contributions Award and Medal. Dr. Quattrochi is a remote sensing research scientist with the NASA George C. Marshall Space Flight Center ([http://www.ghcc.msfc.nasa.gov/ghcc\\_home.html](http://www.ghcc.msfc.nasa.gov/ghcc_home.html)). He also serves as current Vice-Chair of the AAG Remote Sensing Specialty Group.

His recent research has focused on the analysis of land-atmosphere energy exchanges using thermal remote sensing, on the spatial analysis of remote sensing data using fractals, and on the integration of remote sensing data with geographic information systems. His research on thermal remote sensing has focused on the analysis of the urban thermal landscape as an important component in urban climatology and on the study of hydrometeorological interactions within mountain desert terrain. He is a Co-Principal Investigator for Project ATLANTA (ATLanta Land-use ANalysis: Temperature and Air-quality), research that seeks to observe, measure, model, and analyze how the rapid growth of the Atlanta, Georgia metropolitan area since the early 1970's has impacted the region's climate and air quality.

Dr Quattrochi has also worked with the National Center for Geographic Information and Analysis (NCGIA) to improve the integration of remote sensing and geographic information systems by exploring where impediments to such integration exist, and in developing a research agenda to overcome these impediments.

**If you wish to submit an abstract for a poster or paper to be included in a RSSG organized session, mail your abstract, program participation form, disk, and check by August 27 for papers or September 25 for posters to either:**

Thomas R. Allen  
Department of Political Science & Geography  
Old Dominion University  
Norfolk, VA 23529-0088  
Voice: (757) 683-3846  
Fax: (757) 683-4763  
[Tallen@odu.edu](mailto:Tallen@odu.edu)

Timothy W. Foresman  
University of Maryland Baltimore County  
Department of Geography & Environmental Systems  
Baltimore, MD 21250  
Voice: (410) 455-3149  
Fax: (410) 455-1056  
[foresman@umbc.edu](mailto:foresman@umbc.edu)

If you wish to organize a session (i.e., papers, posters, panel, discussion) to be sponsored by the RSSG, solicit abstracts from participants, organize the session sequentially and fill out the Group Participation Form in the May 1999 AAG newsletter. Please contact Tom Allen ([Tallen@odu.edu](mailto:Tallen@odu.edu)) or Tim Foresman ([foresman@umbc.edu](mailto:foresman@umbc.edu)) and indicate your intention to organize the session and provide a title.

Materials must be received at the AAG office by September 3, 1999 (paper) or October 1, 1999 (poster). Best wishes over the summer and looking forward to another great meeting in 2000!

Tom Allen and Tim Foresman

## **AAG/RSSG 2000 Student Paper/Poster Competitions**

It's not too soon to start planning for the 2000 AAG Annual Meeting (4-8 April 2000) in Pittsburgh! The RSSG will again sponsor a student paper competition and co-sponsor (with the GIS Specialty Group) a student poster competition. As was done at the 1999 AAG Annual Meeting in Honolulu, we will have RSSG-sponsored sessions for both competitions. This means abstracts will be due approximately one week prior to the AAG/RSSG deadlines.

Fellow students, this is a great opportunity to highlight the results of your hard work and meet many of our profession's well-respected scientists as well as other students with similar interests. Cash prizes and certificates will be presented at the AAG awards luncheon. Faculty, please encourage your students to participate the competitions.

As your 1999-2000 RSSG student director, I look forward to assisting you in any way I can. Please contact me if you have questions about the student competitions or any other matter concerning student involvement in the RSSG.

Best Regards,

Michael W. Hernandez  
1999-2000 RSSG Student Director  
University of Utah  
Department of Geography  
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Salt Lake City, UT 84112  
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e-mail: [mhern@geog.utah.edu](mailto:mhern@geog.utah.edu)

# 1999 RSSG Student Paper and Poster Competitions

by  
Brad Rundquist  
Kansas State University

The RSSG Student Paper Competition was held at the annual AAG meeting in Honolulu, HI. Winners were announced at the AAG Awards Luncheon, each receiving a certificate and cash prize. Competition judges were Douglas Goodin (Kansas State University), Douglas Ramsey (Utah State University), and Rolland Fraser, (Western Michigan University). Winners for best papers were:

- First Place (\$150) -- Brian Frizzelle and Aaron Moody, University of North Carolina-Chapel Hill, *Accuracy Assessment of Fuzzy Classification Methods in Southern California*.
- Second Place (\$75) -- Jane M. Read, Louisiana State University, *Dynamic Tropical Landscapes: Understanding Land-Cover and Land-Use Changes Using Remote Sensing and GIS*.
- Third Place (\$50) -- Jay D. Miller, University of Arizona, *Modeling Fire for Prescribed Fire Management Planning, the Spatial Implications*.



The RSSG and GIS Specialty Group Student Poster Competition was held at the annual AAG meeting in Honolulu, HI. Winners were announced at the AAG Awards Luncheon, each receiving a certificate and cash prize. Competition judges were Stephen Yool (University of Arizona), Sunil Narumalani (University of Nebraska-Lincoln), and Joseph Messina (University of North Carolina-Chapel Hill). There was a tie for first place. Winners for the poster competition were:

- First Place (\$125) -- Natalya Antonova and David O. Wallin, Western Washington University, *Mapping Potential Ferruginous Hawk Habitat using Satellite Data*.
- First Place (\$125) -- J.M. Shawn Hutchinson and Bradley C. Rundquist, Kansas State University, *Spatial Modeling of Net Radiation over Heterogenous Terrain*.
- Third Place (\$50) -- Linda F. Prosperie and J. Ronald Eyton, Southwest Texas State University, *Synthetic Principal Components Image Analysis*.

**The AAG Remote Sensing  
Specialty Group  
News and Information**

The RSSG Newsletter is your vehicle for communicating with colleagues interested in remote sensing. You are invited to send news regarding research activities, studies, publications, academic programs, projects, commercial ventures, announcements to the editor, James Merchant (see address below). If possible, please submit contributions on a disk in Wordperfect or ASCII format or by e-mail.



The RSSG WWW site is located at <http://www.earthsensing.com/rssg/index.html>  
The site was developed, and is maintained, by:  
John Althausen  
Department of Geography  
Central Michigan University  
Mt. Pleasant, MI 48859  
Telephone: (517) 774-1305  
Fax: (517) 774-2907  
E-mail: [John.D.Althausen\\_Jr@cmich.edu](mailto:John.D.Althausen_Jr@cmich.edu)

Participate in the on-line RSSG discussion list:  
[rssg@ulysses.unl.edu](mailto:rssg@ulysses.unl.edu)

To subscribe to the neb-gisnews list, please send a message to: [listserv@ulysses.unl.edu](mailto:listserv@ulysses.unl.edu) with the line, *subscribe rssg* in the body of your message.

For additional details, contact:  
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Lincoln, NE 68588-0517  
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E-mail: [jm1000@tan.unl.edu](mailto:jm1000@tan.unl.edu)

**2000 RSSG Outstanding  
Contributions Award  
Nominations Requested**

The RSSG Outstanding Contributions Award is presented to members of the AAG RSSG who have made especially noteworthy contributions to the field of Remote Sensing. Past honorees have included: Dr. David Simonett (posthumously), Dr. Benjamin Richason, Jr. (posthumously), Dr. Alan Strahler, Dr. John Estes, Dr. John Jensen, Dr. Duane Nellis, Dr. Kamlesh Lulla, Dr. James Campbell, Dr. Stephen Walsh, Dr. Robert Holz, Dr. Sam Goward, Dr. James Merchant, and Dr. Dale Quattrochi.

Candidates for the award are evaluated by a selection committee appointed by the RSSG board. The Chair of the RSSG Outstanding Contributions Award Committee is Stephen J. Walsh (University of North Carolina). Other member of the committee are Daniel G. Brown (Michigan State University) and Ling Bian (State University of New York at Buffalo).

**Nominations for the 2000 award must be received by February 15, 2000.** Nominations must include a letter of nomination and a complete vita for each candidate. Send nominations to:

Dr. Stephen J. Walsh  
Department of Geography  
University of North Carolina  
Chapel Hill, NC 27599-3220  
(919) 962-3867 (tel)  
(919) 962-1537 (fax)  
[swalsh@email.unc.edu](mailto:swalsh@email.unc.edu)

# **Minutes of the Annual Meeting of the Remote Sensing Specialty Group, Association of American Geographers Honolulu, Hawaii**

Dale Quattrochi, RSSG Vice-Chair reporting for Chairman Bill Tyler

The 1999 RSSG Business Meeting was held at the Hilton Hawaiian Village in Honolulu, Hawaii, in conjunction with the AAG's 95<sup>th</sup> Annual Meeting. Due to the location of the meeting site on beautiful Waikiki Beach, the business meeting was indeed a very "laid back" affair! Participants were bedecked in an array of casual attire with colorful Hawaiian shirts and associated dress in abundance. In fitting with the casual nature of our Hawaiian ambience, the RSSG business meeting was functionally short. The main highlights from the business meeting are described below:

Report on the 1999 RSSG Program (Rollie Fraser, Western Michigan University 1999 Program Chair):

There was concern expressed about the relatively few paper sessions sponsored by the RSSG at the meeting (no fault of Rollie Fraser's) in comparison to previous meetings. Perhaps the cost of travel to Hawaii impeded the development of more RSSG-sponsored sessions at the meeting, but it was strongly encouraged that for the 2000 meeting in Pittsburgh, that a call for RSSG-sponsored special sessions go out this spring (e.g., May-June) to hopefully help the organization of more remote sensing sessions next year.

Report on the RSSG Newsletter: Although Jim Merchant, our perennial newsletter editor, was not in attendance at the meeting, he did relay that after many years of service in this capacity (and with much grateful thanks from the RSSG membership for his hard work and a job well done), that he would like to relinquish this post to someone else if they were so inclined. Perhaps it was because we were all "reclined" from basking on Waikiki, but no one who attended the business meeting had any predilections for assuming Jim's editorial position. The call still goes out, however, to anyone who has the desire to edit our newsletter, to please come forth and make yourselves be known (especially to Jim...). Jim's done an outstanding job with the newsletter and we all agreed that he's due for a break if anyone else wants to be appointed to this position within the RSSG.

Nominations and Elections for Director and Student Director Positions: A call for nominations for the RSSG Director and Student Director positions was issued by Bill Tyler, RSSG chair, prior to the 1999 AAG Annual Meeting. Unfortunately, as has been the usual case when a call for nominations for RSSG officers goes out --- no one responds. So, we solicited nominations from the floor of the people in attendance at the business meeting. In this case, the mai-tai's on the beach before the meeting must have helped, because we did get two people to place their names in nomination for these positions. Actually, we coerced them to have their names be placed in nomination with a chorus of hula dancers outside the windows who were paid with funds from our treasury to "chant" the names of likely candidates until they acquiesced. As it turned out, Rollie Fraser from Western Michigan University was elected as Director and Mike Hernandez from the University of Utah was elected (or rather "re-elected") as Student Director.

Honors Committee (M. Duane Nellis, West Virginia University): The recipient of the RSSG 1999 Outstanding Contributions Award was Dale Quattrochi from the NASA Marshall Space Flight Center. As I am reporting on the business meeting on behalf of Bill Tyler, I wish to express my gratitude to the RSSG for this award. I am indeed honored that I was chosen to receive it. As I told my boss, not only was I

Continued on page 7...RSSG Business Meeting

selected for this award, of which I am very proud, but I even got to go to Hawaii to receive it!

Student Awards Committee (Brad Rundquist, Kansas State University): The RSSG (in conjunction with the GIS Specialty Group) student poster competition award winners were:

- 1<sup>st</sup> Place (tie) - Natalya V. Antonova (Western Washington University), "Mapping Potential Ferruginous Hawk Habitat Using Satellite Data"
- 1<sup>st</sup> Place (tie) - J.M. Shaun Hutchinson (Kansas State University), "Spatial Modeling of Net Radiation Over Heterogeneous Terrain"
- 3<sup>rd</sup> Place - Linda F. Prosperie (Southwest Texas State University), "Synthetic Principal Component Image Analysis"

The 3 RSSG student paper competition winners were:

- 1<sup>st</sup> Place - Brian Frizzelle (University of North Carolina, Chapel Hill), "Accuracy Assessment of Fuzzy Classification Methods in Southern California"
- 2<sup>nd</sup> Place - Jane M. Read (Louisiana State University), "Dynamic Tropical Landscapes: Understanding Land-Cover and Land Use Changes Using Remote Sensing and GIS"
- 3<sup>rd</sup> Place - Jay D. Miller (University of Arizona), "Modeling Fire for Prescribed Fire Management Planning, the Spatial Implications"

Congratulations to all our student award winners – and let's hope they didn't spend their all their award money on renting surfboards or other "carousing" in Hawaii!

Publications (Dale Quattrochi, NASA/MSFC) and Communications (Doug Goodin, Kansas State University): A special issue of *Geocarto International* with papers from the 1998 AAG meeting in Boston has been published. This is the second issue of *Geocarto* that has been focused on papers by RSSG members. Although there was an expressed desire to continue such a series, it was agreed that we are going to have to be more proactive in soliciting manuscript submittals to make such endeavors "fly" in the future. Kam Lulla, Chief Editor of *Geocarto* who was in attendance at the meeting, commented that the journal would still be open to dedicating an issue to RSSG.

Election of Program Chair and Vice Chair for the 2000 AAG Meeting in Pittsburgh: As opposed to the past, we have three persons providing leadership for the RSSG events at AAG 2000 in Pittsburgh. Tim Foresman (University of Maryland-Baltimore County) and Tom Allen (Old Dominion University) will be the "lead" chairs for organizing RSSG-paper and poster sessions for the Pittsburgh meeting. Scott Loomer (U.S. Military Academy) agreed to be a 3<sup>rd</sup> program committee member as a "warm up" to become the RSSG Program Chair for the 2001 AAG meeting in New York City.

Although there wasn't a social event planned for after the RSSG business meeting, everyone agreed that being in Honolulu was in itself a "big time" social event and the meeting was adjourned.

Yours respectfully,

*Dale Quattrochi*  
NASA, Marshall Space Flight Center  
Global Hydrology and Climate Center  
Huntsville, Alabama

## Announcing MicroMSI for Windows

Many of you have used one of the DOS-based, public-domain multispectral image processing programs that I wrote some years ago (LANDSAT and MicroMSI) for use in the basic instruction of multispectral imagery analysis. For several years now, the question has been if and when there would be a Windows based version. The answer is now.

Several things had to come together to make this the right time to create this program: a powerful new version of Delphi (programming environment), a much higher capability in even "base-level" computers in academia (I think you'll find performance acceptable on Pentium 90 or faster systems with 32MB of RAM), my time (never enough) and some exciting events in the civil remote sensing sector (if they can ever get a satellite up and operating!).

A beta version of MicroMSI for Windows will be available for download from our anonymous ftp site (<ftp.usma.edu/G&ENE/GSL/MICROMSI/WINDOWS>) by the time you read this. I consider it a beta version not so much that I think that there are bugs lurking in the program (but I'd be naïve to deny the possibility), but rather because I consider it to still be evolving. Download the program and the sample data set and play with it. Send me an email after you download it so I can put you on a distribution list to be notified when I post a new version (which will likely be often initially). And, most importantly, provide feedback to me in the following categories:

- 1) Outright bugs (hopefully few): you tried something reasonable (or at least as you understood the explanation of the function) and didn't get the expected results. This is my highest priority to fix.
- 2) "Reasonable" bugs: you tried something you should have known wouldn't work (like accessing non-existent drives) and the program handled it less than gracefully.
- 3) Non-standard (whatever that is!) approach: "This doesn't operate the way I learned remote sensing!" Mostly, I'm trying to be consistent with "Remote Sensing and Image Interpretation" by Lillesand and Kiefer. I'm willing to bend to popular opinion.
- 4) Omissions: something you'd like to see was missing. I'll certainly consider your suggestions and likely reply with one of three responses: good idea and easy to implement...done!, good idea and I'll try to add it at some point, or good idea, but it'll probably never be added.

### Systems requirements:

- Windows 95/98/NT4
- P90 or faster with 32MB or more (may work with less, let me know)
- high color (16-bit) or true color (24-bit) display (better), the higher the resolution, the better
- disk space: 1MB for the program; 3MB for the sample data

### Current Limitations:

- 7 bands per scene, but I'm working on n bands.
- printing other than displayed images not yet implemented

For additional details, contact:

Scott A. Loomer, COL, EN  
Department of Geography and Environmental Engineering  
United States Military Academy  
West Point, NY 10996  
[loomer@usma.edu](mailto:loomer@usma.edu) or [loomer@worldnet.att.net](mailto:loomer@worldnet.att.net).  
(914) 938-2301

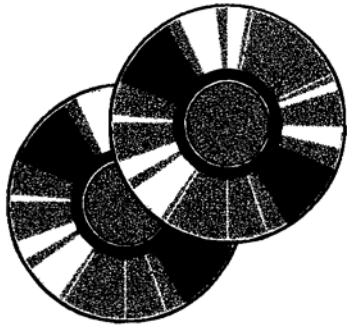


# WHAT'S NEW



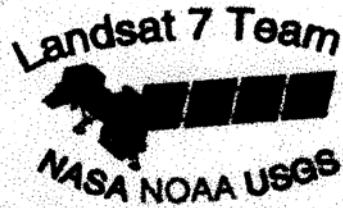
## CD-ROM Provides Background on Spaceborne Imaging Radar

The NASA Jet Propulsion Laboratory (NASA/JPL) has published a new SIR-C Educational CD-ROM (Volume 3): "Seeing the Earth In a New Way." The CD-ROM is designed for use by educators and students in middle schools, high schools, and universities, and contains lesson plans, presentation materials, and a teacher's guide. The SIR-C Educational CD can be used as part of the curriculum for earth science, computing, or geography classes. The CD runs on PCs, Macintosh or Unix workstations.



The CD-ROM can be ordered for \$5.00 from the USGS EROS Data Center. Note: Make checks and money orders payable to: Department of the Interior/USGS. Credit card orders will be billed and checks deposited upon receipt by the Department of Interior/USGS. \*Price includes handling fee and is subject to change.

For additional details, contact: USGS EROS Data Center DAAC User Services EROS Data Center Sioux Falls, SD 57198 Fax: 605-594-6963 or see <http://edcwww.cr.usgs.gov/landdaac/sir-c/educational.html>



## Landsat-7 Web Pages

Landsat-7 was successfully launched on April 15, 1999. Several web pages provide details on the satellite and access to imagery. The NASA Landsat-7 "gateway" is at <http://landsat.gsfc.nasa.gov/> Take special note of the Landsat browse image collections at [http://ftpwww.gsfc.nasa.gov/LANDSAT/CAMPAIGN\\_DOCS/DATA/Browse/Landsat7\\_Gallery.html](http://ftpwww.gsfc.nasa.gov/LANDSAT/CAMPAIGN_DOCS/DATA/Browse/Landsat7_Gallery.html)

There is also an excellent new USGS Landsat-7 web site at <http://landsat7.usgs.gov/> At <http://landsat7.usgs.gov/java/locate7.html> you can check the location of Landsat-7 along its orbit. Although not strictly Landsat-7, check out the USGS/EROS Earthshots page at <http://edcwww.cr.usgs.gov/earthshots/slow/tableofcontents> and the Landsat Gallery at <http://edcwww.cr.usgs.gov/l7dhf/L7MMO/gallery.htm>

Other good Landsat-7 pages are <http://geo.arc.nasa.gov/sge/landsat/landsat.html> and <http://www.nnic.noaa.gov/SOCC/L7Documentation.html>

**RSSG Newsletter**  
c/o James W. Merchant  
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