



## THE IMAGING & GEOSPATIAL INFORMATION SOCIETY

### ~The Rocky Mountain Compiler~

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*Newsletter of the Rocky Mountain Region of ASPRS, serving Montana, Wyoming, Colorado, and New Mexico*

### **National Director's Report**

#### ***NSGIC-Both Spatial and Special***

This September, I had the opportunity to attend the National States Geographic Information Council (NSGIC) Conference in Minneapolis. The NSGIC (see <http://www.nsgic.org/>), founded 20 years ago, "... is an organization committed to efficient and effective government through the prudent adoption of geospatial information technologies." As a consequence, ASPRS members are under NSGIC's sphere of influence. NSGIC's membership is diverse, has political influence, is committed to geo-collaboration, advocates for the advancement of geospatial technologies, and sits at the intersection of geospatial policy and technology. This year's conference was very engaging, covering the topics of data access, emergency management, broadband mapping, public/private partnerships, and federal, state and local information flow. The National Agriculture Imagery Program (NAIP) of USDA Farm Services Agency was a conspicuous discussion topic during the week. The ASPRS Rocky Mountain states are well represented at NSGIC (source: <http://gisinventory.net/summaries/>). As opportunity presents itself, I suggest you introduce yourself to your state NSGIC representative. ASPRS and your professional interests would be well served:

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On the National ASPRS front, a few items are of note: I serve on the Audit Committee and am pleased to report we are solvent and our fiscal matters are well served by ASPRS leadership and Headquarters staff. This summer, information and surveys were compiled for the ASPRS 10-Year Industry forecast. Also, National ASPRS is regularly sponsoring webinars which serve the needs of the membership for continuing education. Finally, Episode One of the *Geospatial Revolution* film has been released. ASPRS is a major contributor to this effort of Penn State University with both funding and participation by key elders of our Society. Please spend 20 minutes to review Episode One at <http://geospatialrevolution.psu.edu/>. If you react as I did, you will feel part of something that is making a difference and is sustainable, spatial, and special.

I hope to see many of you in Orlando next month. Please contact me if you have any questions regarding NSGIC or National ASPRS matters.

Thanks,

**Jeffrey M. Young**

National Director, ASPRS RMR  
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## University of Wyoming: the Value of Public Domain Landsat Data

Availability of free Landsat data since January 2009 has opened numerous opportunities for University of Wyoming (UW) students interested in using these images in their research projects. Prior to this, each Landsat scene would cost a few hundred US dollars, depending on the type of sensor (MSS, TM5 and ETM+), which was beyond what students or their class teaching budget could afford. Students relied on sources such as AmericaView ([www.americaview.org](http://www.americaview.org)) or Global Land Cover facility ([glcf.umd.edu](http://glcf.umd.edu)) for obtaining no-cost Landsat images.

UW Students have downloaded numerous Landsat images from USGS for mapping and monitoring changes in rangelands, croplands, water bodies and forests. **Mr. William Grey** monitored changes in Ocean Lake's surface area using Landsat images acquired since 1986. Ocean Lake is located in west

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central Wyoming and serves as a habitat for numerous fish and birds. **Mr. Grey** downloaded two images for each year and mapped annual changes in the Lake's water surface area. **Mr. Paul Arendt** assessed the impact of bark beetle infestation in the Medicine Bow National Forest, WY, using Landsat images acquired prior to and after the insect pest outbreak. He measured changes in vegetation condition using Normalized Difference Vegetation Index, a commonly used index. Having access to the entire Landsat archive enabled these students to obtain images for specific times (date and year) to be able to make useful analyses or comparisons and successfully complete their projects. Both students presented their findings at the 2010 GIS in the Rockies Conference. Free Landsat images provided by the USGS will continue to be a valuable resource for students and researchers at UW and elsewhere who are interested in the application of remotely sensed data for natural resource management.

**Ramesh Sivanpillai**

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## Geospatial Data and Geovisualization: Environment, Security, and Society

**November 15-19, 2010 Orlando, Florida**

The ASPRS/CaGIS 2010 Fall Specialty Conference is co-located with ACSM Fall Business Meetings and the MAPPS Fall Policy Conference. Check the [Preliminary Program](#) and [register](#) by 2 November or register on site.

In conjunction with the Fall Meeting, you are also invited to attend a special Symposium of AutoCarto 2010 and the International Society for Photogrammetry and Remote Sensing (ISPRS) Technical Commission IV, "Geodatabases and Digital Mapping." This Symposium will include special participation from ISPRS, the International Cartographic Association (ICA), and the International Geographical Union (IGU). Cartographers, geographers, and other scientists conducting research on the cutting edge of cartography and geospatial science and technology are invited to submit abstracts for papers and posters. This special international research symposium will be held at the Doubletree Hotel in Orlando, Florida, USA on November 15-19, 2010.

## 2011 Annual Meeting: Milwaukee

The 2011 ASPRS Annual Meeting will be 1-5 May 2011, in Milwaukee, Wisconsin. The conference

theme is “Ride on the Geospatial Revolution,” reminding us that Milwaukee is the home of Harley-Davidson. Visit the [conference home page](#) for additional information.

If you will be speaking at the 2011 Annual Meeting in Milwaukee in May, you must register by 1 December.

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### Welcome New Members

Raven I. McDavid, III	Lin Barnes	Michael Tuffly
Robert J. Romero	Kari Richards	Robert Sours
Vanessa Prileson	Silvio Aguilar	Carmen Lozano
Jorge R. Aguayo	Matt Staten	Merinda Lobato
Daniel Gwartney	Tammy Cook	Andrew D. Gay
Aldo Pinon-Villarreal	Lee Wilson	Abram Johnson
Sarah Robinson		

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### Region 2011 Scholarship Announcement

In its continuing efforts to support and build awareness for the Remote Sensing and GIS sciences, the Rocky Mountain Region of ASPRS is proud to announce its academic scholarships for 2011. The ASPRS-RMR offers scholarships to deserving undergraduate and graduate students every year. There will be at least two scholarships awarded (assuming sufficient applications are received) in the amount of \$1000 each. The scholarships are intended for students throughout the Rocky Mountain Region (Colorado, Montana, New Mexico, and Wyoming) who demonstrate excellence while pursuing careers in the fields of Photogrammetry, Remote Sensing, and Geographic Information Systems (GIS) or related disciplines. Both undergraduate and graduate students of any third-level educational institution within the four-state region who are pursuing careers in these disciplines are encouraged to apply.

#### Application deadline is December 3, 2010.

(must be *received* at the PO Box by this date)

Download the application from

<http://www.asprs-rmr.org/news.html>.

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Awards will be presented at the ASPRS-RMR Annual Dinner Meeting in January 2011. We've consistently offered thousands of dollars in annual scholarships and this year will be no different! Preference will be given to those studies that apply sound scientific principles to practical applications and/or to those presenting their work at an ASPRS sponsored conference. Awards at both the undergraduate and the graduate levels are based on academic merit; that is, the application form does not request any personal financial data. For more information, please contact **Ramesh Sivanpillai**, ASPRS-RMR Vice-President, at 307.766.2721 or at [sivan@uwyo.edu](mailto:sivan@uwyo.edu) (preferred).

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### Nominations for Board Elections

ASPRS-RMR is currently accepting nominations for the upcoming Board Member Elections. The following positions will be open for the 2011 – 2012 term: President (one year); Vice President (one year); Secretary (one year); Treasurer (one year); Regional Director (GIS in the Rockies) (2 years); Regional Director (At Large) (2 years).

Being a Board Member is an excellent way to contribute to the expansion of the geospatial community throughout the Rockies. Board membership allows individuals to lead the convergence of ideas and technologies, connect with our peers, communicate with our membership, and contribute to these kinds of collaborations. If you are interested in running for a position, would like to nominate one of your peers, or if you have questions about being a Board Member, please contact any of the [Regional Officers](#). We will publish the nominations and announce the election in the Winter issue of the Rocky Mountain Region *Compiler*.

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### Two Newsletters to Check Out

The first newsletter is for those interested in lidar: the organizers of the International Lidar Mapping Forum and the European Lidar Mapping Forum now publish a weekly e-newsletter, LiDARbuzz. Subscriptions are free. If you want to be added to the mailing list, send your request with contact details to [info@lidarmap.org](mailto:info@lidarmap.org).

The second newsletter is for people interested in market reports and marketing communications in the geospatial technologies. *News and Notes* from Cary and Associates is published once a month and subscriptions are free. Recent topics have included the US Federal Homeland Security market, unmanned aerial systems, lidar, an online library of geospatial presentations, business benefits of open geospatial standards, one-page marketing plans, social media use in state government, To sign up, visit [www.caryandassociates.com](http://www.caryandassociates.com).

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### News from Headquarters

#### ***Episode 1 of “The Geospatial Revolution Project” is now Online***

Episode 1 of the Penn State Public Broadcasting's (PSPB) four-part online video series, “The Geospatial Revolution Project,” is now available in its entirety or in shorter chapters at Penn State Public Broadcasting's [website](#). The 13-minute episode, which is divided into four chapters, begins with an overview and moves into how GPS works. Following a brief history of the evolution of mapping, the

episode wraps with the practical and human application of crisis mapping and “crowd sourcing,” and uses the earthquake in Haiti as the case study.

According to PSPB, “The mission of “The Geospatial Revolution Project” is to expand public knowledge about the history, applications, related privacy and legal issues, and the potential future of location-based technologies.” The remaining three episodes, to be released over the next five months, will cover timely topics on geospatial applications, privacy and legal issues, civic engagement, and more. It is expected that K-12 teachers and post-secondary educators will use these films in the classroom to help explain the location-based technologies and applications that influence our lives.

ASPRS, the ASPRS Foundation, and individual ASPRS members have been heavily involved in the evolution of “The Geospatial Revolution Project,” working with Penn State Public Broadcasting to help identify topics to cover, people to interview, and potential funding sources. “ASPRS, working through the ASPRS Foundation, is very proud to be associated with this important effort, which grew out of an earlier proposal to document the history of photogrammetry and remote sensing in the U.S.” said **James Plasker**, ASPRS Executive Director. “The original proposal, developed by ASPRS Fellow Member **Dr. Alan Voss**, was extremely powerful in concept, but needed the professional oversight of an experienced film production team; the group assembled by Penn State is outstanding, and the project concept has since evolved under their leadership to a landmark outreach opportunity for all of the geospatial science community.”

Sponsors of “The Geospatial Revolution Project” include the ASPRS Foundation, Booz, Allen, Hamilton, DigitalGlobe, ESRI, GeoEye, Harris, National Geospatial-Intelligence Agency, Navteq, and Northrop Grumman.

### ***Call for Nominations: 2011 NOAA David Johnson Award***

The NOAA David Johnson Award was established in 1999 to honor the first Administrator of what was to become the NOAA National Environmental Satellite, Data, and Information Service. Presented by the National Space Club, the award is given to young professionals who have developed an innovative application of Earth observation satellite data (alone or in combination with non-satellite data) that is, or could be, used for operational purposes to assess and/or predict atmospheric, oceanic or terrestrial conditions.

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Nominations may be submitted for individuals or groups. Nominees must be a US citizen, national or permanent resident and not more than 40 years old on 31 December 2010.

**Deadline for nominations is December 15, 2010.**

The non-profit National Space Club is devoted to fostering excellence in space activity through interaction between industry and government, and through a continuing program of educational support. Awards are offered to recognize significant achievements in space science and enterprise.

Find more information on the award, the Call for Nominations, and instructions for submission at <http://www.nesdis.noaa.gov/pdf/10DJaward-web.pdf>.

Past award recipients include:

- 2010 **Dr. Molly E. Brown** – University of Maryland, College Park
- 2009 **William J. Blackwell** – MIT Lincoln Laboratory
- 2008 **Peter J. Etnoyer** – Texas A&M University-Corpus Christi
- 2007 **Dr. Steven D. Miller** – Naval Research Laboratory
- 2006 **Dr. Jeffrey T. Morissette** – NASA Goddard Space Flight Center
- 2005 **Dr. Jason Dunion** – University of Miami
- 2004 **Dr. John A. Knaff** - Colorado State University
- 2003 **James Cantore** - Weather Channel
- 2002 **Jun Li** – University of Wisconsin-Madison
- 2001 **Gregg Jacobs** - Naval Research Laboratory, **Brian Sodin** – NOAA
- 2000 **Kevin J. Schrab, Fuzhang Weng** – NOAA

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## **Manual of Geographic Information Systems**

This manual, edited by ASPRS Fellow and past president **Marguerite Madden, PhD**, has 62 chapters organized in 8 major sections:

1. Introduction Background & Overview
2. Data Models, Metadata and Ontology
3. GIS Data Quality, Uncertainty and Standards
4. Spatio-Temporal Aspects of GIS
5. Analysis and Modeling
6. Blending Technologies: Remote Sensing, GPS and Visualization
7. GIS and the World Wide Web
8. GIS Reaches Out: Applications

The list price is \$135; ASPRS Member price is \$110, and ASPRS Student price is \$80. Instructors may request an [examination copy](#). Read the [description](#) and [order online](#).