

## Issue 2

Summer 2015

Issued Quarterly

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

### President's Message

Dear Rocky Mountain Region members of ASPRS,

As the "Dog Days of Summer" are in full swing, I write this message to you. Many of us in the Region take time off during this time period to visit family, friends, or go to new and exciting places. While others may look for intellectual or spiritual enrichment during the long, hot summer days. It is the former that I would like to discuss.

In late July, I attended the 2015 ESRI User Conference (UC) in San Diego, California. I have been attending the UC since 1993, when it was still being held in Palm Springs, California. Hence, I have a long history with the UC and have seen it go through a temporal metamorphosis. Some of the changes have been for the better; others not so much. Nevertheless, the ESRI UC will continue to grow and change over time.

Now getting back to the main topic. While I was at the UC I attended a LIDAR session for my own intellectual enrichment. I am, by no means, a LIDAR expert. In fact, I would say I am somewhat of a beginner when it comes to LIDAR, so please pardon my ignorance. In the LIDAR session at the UC, it was mentioned that ASPRS has written the standards for the "LAS" file format. I was happy and proud to hear this bit of information, since I am an ASPRS member and a Certified Mapping Scientist (Remote Sensing).

This got me thinking. The Geospatial community looks to ASPRS for standards and ASPRS has stepped up to the plate and filled that role. In fact, as many of the RMR members know, ASPRS has published new (2015) positional accuracy standards for Digital Geospatial data. ASPRS continues to play a critical role in setting the guidelines for the development of Geospatial data.

Geospatial data are among the key elements at the ESRI UC.

I was disappointed not to see an ASPRS booth in the vendor's exhibit at the ESRI UC. While I do not know the reasons ASPRS was not represented at the UC (and there are perhaps many good ones), it seems apparent to me that an organization that sets the mapping accuracy standards should have some presence at the largest geospatial conference in North America.

To finish with a more positive note: I know that many ASPRS members attended the 2015 ESRI UC. I am confident that those members got a great deal of professional enrichment from the conference. In addition, I believe that ASPRS members will continue to attend the UC long into the future. Furthermore, ASPRS will continue to be the primary professional organization setting mapping standards well into the future.

Thank you,

**Dr. Michael Tuffly, CMS**  
**Rocky Mountain Region President**

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## National Director's Report

### ASPRS Elects Rebecca Morton as Vice President

As many of you may be aware, ASPRS recently posted the Vice Presidential election results. Becky Morton was elected and her selection by our membership is a big win for the Society. Becky is creative, courageous, and resourceful and under her future leadership we can anticipate great strides forward for the Society. Below is a summary of her background, excerpted from the ASPRS press release 17 June 2015.



Rebecca Morton is President and CEO of GeoWing Mapping, Inc. (GeoWing), based in San Francisco, California. She founded the company in January of 2015 with the goal of offering both traditional photogrammetric mapping services as well as services related to unmanned aircraft systems (UAS). Her interest in UAS photogrammetry began several years before she started her company. She was impressed by the accessibility of the new technology and for the first time, she could consider integrating and flying her own mapping cameras!

Morton is certified by ASPRS as a Mapping Scientist GIS/LIS and also as a Photogrammetrist. She holds a Bachelor's degree in psychology and has taken post-graduate studies in computer science. Prior to the start of GeoWing, Morton practiced photogrammetry with Horizons, Inc., Fugro EarthData, Inc., and Towill, Inc. Over these years she has served in a variety of positions, beginning in the role of Programmer/Analyst responsible for systems integration and the translation of mapping data, followed by positions as Orthophoto Systems Manager, Director of Business Development, Regional Manager, and Senior Program Director. In addition, Morton established and ran a small GIS

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company, RAMCad, for 8+ years to provide historical georeferenced imagery to the U.S. Army Corps of Engineers and GIS application development services for numerous clients.

Morton has been an active member of ASPRS since 1995, providing service to the Society at the Regional and National levels. She served as a regional officer from 2006-2013 and began her national leadership by serving first as Assistant Director and then Director of the Photogrammetric Applications Division from 2006-2010, where she worked with others in the development of standards and guidelines for Lidar data and mapping accuracy. Morton has served as Assistant Director and Director of the Professional Practice Division, as Chair of the Division Directors Committee, worked on the Corporate Sponsors Committee for the ASPRS 2012 Annual Conference, the ASPRS Restructuring Task Force, Licensure Exam Writing Committee, Evaluation for Certification Committee, the Kenneth J. Osborn Memorial Scholarship Committee and in 2013 she served on the Selection Committee for the ASPRS Executive Director. Also in 2014, Morton served as the Conference Chair for the UAS MAPPING 2014 RENO symposium and technical demonstration; which she will continue for the 2015 symposium. Also in 2014, she was appointed by the ASPRS Board of Directors to head a UAS Task Force whose work resulted in the formation of the Unmanned Autonomous Systems Division.

She has received two ASPRS Presidential Citations (2009 and 2011) and one ASPRS Outstanding Service Award (2013). Morton is active in other geospatial organizations and served from 2008-2011 on the Board of Directors for a regional URISA chapter.

Please join me in a complete vote of confidence for Becky in her new role.

**Jeffrey M. Young, RMR National Director**

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***Stay tuned for upcoming Technical Tours and Social Events! Check out new professional opportunities and upcoming events on the Rocky Mountain Region [Website](#) ...***

## 2015 GIS in the Rockies

[Join us](#) September 23 & 24 in Denver for the 28th annual GIS IN THE ROCKIES Conference.

GIS in the Rockies returns to The Cable Center in Denver in 2015, offering outstanding presentations, networking, exhibitors, job fair, social events, UAV content, and an outstanding array of [pre-conference professional workshops](#) (details below).

GIS in the Rockies 2015 highlights include:

### - [FULL PROGRAM OF OUTSTANDING SESSIONS](#)

#### - 2 GREAT KEYNOTES:

- **Steve Coast**, founder of [OpenStreetMap](#) - a user created map of the world emphasizing local knowledge.
- **Dr. Melinda Laituri**, Professor of Geography, Colorado State University Department of Ecosystem Science and Sustainability.

### - [GREAT SLATE OF EXHIBITORS](#)

- [ONSITE JOB FAIR](#) – including resume review, mock interviews, etc.

- UAV TRACK (hosted by ASPRS-RMR) & [2 day Pre-Conference UAV-GIS Workshop](#)

- OUTSTANDING CONFERENCE SOCIAL EVENT - World Renowned GISitR Geo Quiz, networking, etc.

- [PRE-CONFERENCE PROFESSIONAL WORKSHOPS](#)  
Stay on top of ever-changing technology with a full slate of pre-conference workshops September 21 & 22:

- [Working with Lidar Data in ArcGIS Desktop](#): Hands-on workshop introducing users to the tools and workflows available in ArcGIS for visualizing, analyzing, and sharing Lidar data. ArcGIS Desktop experience required.
- [Migrating CAD into GIS - Best Practices](#): Integrating CAD drawings into GIS data.
- [Incorporating No-Cost Landsat Data and Products for Natural Resources - Monitoring and Mapping Applications](#): Remote sensing concepts introduction & characteristics of Landsat data and products.
- [UAS and GIS Ground School and Hands-On UAV Flying and Data Collection](#): Introduction for GIS professionals to the fundamentals of legal and safe UAV operation. (2 day workshop. 9/21 & 22. Off-site.)

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- [Creating Timescapes - Using GIS to Visualize and Analyze Time-Series Data as Raster Maps](#): Innovative techniques to create raster maps of time-based datasets using non-geographic data and existing software.

Join us September 23 & 24 for the 28th Annual GIS in the Rockies Conference - the Intermountain West's premier geospatial information and technology conference. (Pre-Conference Workshops will be held on September 22.)

Questions about GIS in the Rockies? Email <mailto:chair@gisintherockies.org>



### **Pre-Conference Workshop: UAS and GIS Ground School plus Hands-On UAV Flying and Data Collection**

Date: September 21-22, 2015

Time: September 21: 10:00AM-1:00PM,

September 22: 9:00AM-2:00PM

Location: Offsite (11001 West 120th Ave, Suite 400, Broomfield, CO, 80021)

Primary Instructor: Joe Falconer, CEO, Aerial Data Systems (<mailto:joe@aerialdatasystems.com>)

Co-Instructor: Steve Hick, GIS Director, University of Denver (<mailto:steven.hick@du.edu>)

Ground school and hands-on UAV flying and data collection. UAS has been prolific in the news and is extremely relevant to the GIS professional. Big industry is lining up to do business in this market space, to name a few: Esri, Leica, Trimble, USGS, USDA, BLM, CU, DU more. To be ready for the future and to take advantage of these technological breakthroughs, it is paramount that we all operate legally, safely and respect the national airspace system (NAS).

Some of the Topics to be Covered:

1. Regulations applicable to small UAS operations
2. Airspace and Flight restrictions
3. Camera settings
4. Planning a mission

**Primary Instructor Biography:** Joe Falconer is the CEO of Aerial Data Systems and a FAA certified commercial flight instructor with over 20 years' experience flying and training pilots, and now brings his expertise to the UAS industry. He has over 20 years' experience building, designing and flying UAVs. He is a subject matter expert in this market as an Adjunct Professor at the University of Denver, teaching the first UAVs and GIS course in the country, and as a free-lance writer, for industry magazines such as Robot and MultiRotor magazines. Along with being a pilot and having a love for all things that fly, Joe started his career as a computer programmer and established himself in the IT Industry working for Fortune 500 companies. He received his BS degree from Colorado State University and an MBA from the University of Denver.

Format: Lecture, Hands-On  
 Cost: \$199.99  
 Prerequisite: None

This workshop accommodates 6-25 attendees.  
 Lunch is not included with this workshop.

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## Free Webinar

### *GeoBytes*

### ***USGS Science Data Catalog – Data Visualization, Discovery and Use***

**Friday, August 28, 2015**

**12 noon to 1 pm EDT**

**To register, click [here](#)**

The session will focus on the USGS SDC current approaches to data visualization, discovery of USGS data resources, and aiding in the use of USGS data services by multiple stakeholder organizations.

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### Geospatial Career Fair

On April 27th, the Geospatial Information Sciences Department at Pikes Peak Community College launched a Geospatial Career Fair at their Rampart Range Campus in Colorado Springs. This was a free public event that was geared toward showcasing modern day geospatial technology and its utilization within numerous professional career fields.



Devin Johnson, its organizer and GIS Department Chair, orchestrated exhibitors and introduced various speakers on interesting topics such as earthquake potential tracking in California, bicycle theft tracking in Colorado Springs, and the spatial distribution of Twitter flare-ups after racial tensions erupted in Ferguson, Missouri. Representing ASPRS-RMR were Mike Tuffly, who manned the ASPRS booth, and Harold Schuch, who (mostly) manned the booth for his own company GeoCounsel, Inc.




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### Upcoming ASPRS Webinars

Registration and Additional Information can be found on the [ASPRS website](#). For those seeking ASPRS Certification: ASPRS Training Webinars are a great way to gain Professional Development Hours!

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## Welcome New Members!

Steve Cabiedes  
 Reza Goljani Amirkhiz, GST  
 Todd Lebov  
 Shane Poteet  
 Adrian Sanchez  
 Scott Simmons

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## Scholarship Announcement

In its continuing efforts to support and build awareness for the Remote Sensing and GIS / Geospatial sciences, the Rocky Mountain Region of ASPRS is proud to announce its academic scholarships for 2015-2016. The ASPRS-RMR offers scholarships to deserving undergraduate and graduate students every year. There will be at least one scholarship awarded (assuming sufficient applications are received) in the range of at least \$500 to \$1,000 each, depending on level of study (Bachelor's, Master's or Ph.D.). The scholarships are intended for students throughout the Rocky Mountain Region (Montana, Wyoming, Colorado and New Mexico) 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.

Get information and the application from the "Newsletters" page at <http://www.asprs-rmr.org>

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Student membership in ASPRS is not required to apply, but if selected, membership is required at time of scholarship award. Awards will be presented at the ASPRS-RMR Annual Dinner Meeting in January or February 2016. The Rocky Mountain Region has consistently offered thousands of dollars in annual scholarships every year. Preference will be given to those studies that apply sound scientific principles to practical applications in the geospatial sciences (photogrammetry, remote sensing, Geographic Information Systems, etc.). 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 or if you have questions, please contact Dr. Michaela Buenemann, ASPRS-RMR Vice-President, at [elabuen@nmsu.edu](mailto:elabuen@nmsu.edu) or 575-646-350.

## Applications should be submitted by the December 4, 2015 deadline.

*Be sure to follow submittal instructions on the bottom of the application.*

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## Student Rebate Offer

ASPRS Rocky Mountain Region will reimburse \$25 of the \$50 cost of student membership, so your net cost is only \$25 for all the benefits of membership in the Society!

Download the Student Membership Rebate Form at <http://www.asprs-rmr.org> (on the News & Events page). Here's the best part: ***This offer from the Region is good for every year you are a full-time student!***

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## ILMF 2016 – Call for Papers

The 16th Annual International LiDAR Mapping Forum (ILMF), taking place in Denver, Colorado, USA, February 22-24, 2016, has announced a Call for Papers and invites any interested parties to submit their abstracts by September 1, 2015 online [here](#).

### ILMF 2016

Whether supporting highly detailed 3D urban mapping projects, forestry management, or railroad and power transmission line maintenance programs, LiDAR technology delivers the results needed by today's demanding geospatial and mapping professionals.

We invite abstracts addressing the following topics:

- Data acquisition -- Airborne, Terrestrial and Bathymetric LiDAR
- Applications / Integration of LiDAR, photogrammetry, survey data and dense image matching
- UAV/UAS developments & applications with a particular focus on precision measurement collection
- LiDAR point clouds & large data sets
- Data fusion and processing technologies
- Engineering collaboration systems and cloud-hosted data management
- Developments in point data classification and GIS modeling
- Trends and new technology development
- Mobile mapping and survey
- Industry issues
- Recent project examples



The ILMF Advisory Board will review each abstract and the final program will be announced in November. Abstracts are encouraged by users of hardware and software, e.g., professionals from government entities, process & power companies and the like. Vendors are welcome to nominate end user customers. Please: no abstracts promoting products for marketing purposes.

The success of ILMF 2015, which saw more than 800 professional attendees from 27 countries, proved once again that LiDAR, in its increasing variety of

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operational formats either alone or when complementing other technologies, is becoming a critically important technology for fast, accurate and quality geospatial data acquisition. Whether supporting highly detailed 3D urban mapping projects, forestry management, or railroad and power transmission line maintenance programs, LiDAR technology delivers the results needed by today's demanding geospatial and mapping professionals. Please submit abstract by Sept. 1 [here](#).

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## "Change is in the Air:" UAS Mapping 2015 Reno

**[ASPRS](#) UAS Technical Demonstration and Symposium  
September 29 - 30, 2015**

**Reno Ballroom Event Center  
401 N. Center Street  
Reno, Nevada**

**[Symposium Web Site](#)  
[Registration](#) - [Exhibitor and Attendee](#)  
[Hotel Reservations](#)**

### Call for Posters

**Poster sessions** will be held concurrently with blocks of time allocated for networking and exhibition. A committee will review the applications and select poster session presenters from the pool of applicants.

***Poster presenters will receive discounted registration!***

Posters are to follow guidelines for standard technical/research format.

**The poster space is 48" height x 96" width with a recommended poster size of 42" x 90".**

Please email poster applications to [asprs.norcal@gmail.com](mailto:asprs.norcal@gmail.com). This is an excellent opportunity to highlight your UAS technologies, applications, research and development, and real-life project experiences!

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