

Issue 3

Fall 2016

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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, Our goal is to advance knowledge of the mapping sciences and promote the responsible application of geospatial sciences and technologies in the Rocky Mountain Region of ASPRS, which encompasses the states of Montana, Wyoming, Colorado, and New Mexico. We try to meet this goal by providing informative quarterly newsletters such as this one and by organizing an annual dinner, planning a special track at the GIS in the Rockies Conference, offering student scholarships, announcing events on our website and Facebook page, and more. However, our level of success varies greatly across the region. The majority of conference and annual dinner participants is from Colorado, for example, while the most active student chapters are in New Mexico. With this brief message, I would like to reach out to you—all of our members—for feedback and ideas. Independent of whether you are a student, a faculty member, an employee or employer in the public and private sectors, what can we do to serve you better? We'd like to hear from you. Please email us (asprs.rmr@gmail.com) your thoughts!

With best wishes,

Dr. Michaela Buenemann
ASPRS Rocky Mountain Region President

ASPRS-RMR Board Nominations

ASPRS Rocky Mountain Region is currently accepting nominations for the upcoming election of the Region Board of Directors for the 2017 calendar year term. 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 collaborations. A Board position also looks great on your resume, LinkedIn profile or Curriculum Vitae!

If you are interested in running for a position, or would like to nominate one of your peers, or if you have questions about being a Board Member, please contact me or any of the current Region Officers at www.asprs-rmr.org > Officers page

Note: You must be a current ASPRS member to run for office (Student members are not eligible).

We will publish the nominations and announce the election in the Winter issue of the Rocky Mountain Region Compiler newsletter.

Isn't it time YOU got involved???

Inside this Issue:

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One Student's Experience at the "GIS in the Rockies" Conference

Note: The ASPRS-RMR provided a complimentary registration to the recent GIS in the Rockies Conference. The winner was a student, Zhiwei Liu of Colorado State University. Zhiwei was asked to write about his experience at the conference, also what changes he might suggest for future events. Following is Zhiwei's write-up:

The 29th Annual GIS in the Rockies Conference was held in Denver on September 21 and 22. It was an honor for me to attend this conference in person. At the very beginning I would like to thank everyone who offered me the opportunity to take part in this conference.

The two-day conference included activities such as vendor exhibition, poster booth and presentation sessions. The major GIS technical support suppliers and the conference sponsors, such as CompassTools and Esri, took over the primary exhibition area with their latest products. The rest of the exhibitors were mostly GIS solution designers and suppliers. Their products mainly serve local governments and enterprises.

The poster exhibit included both professional posters and students' work. All the posters were designed concisely, neatly, and were well organized. Some of the posters even showed a high level of spatial awareness coupled with advanced GIS mapping techniques.

The presentation sessions were the main activities of this conference. More than five presentation sessions were ongoing simultaneously. The topics covered multiple fields such as remote sensing, mobile terminals, storage media and GIS education in college. Most of the presentations were related to the cutting edge research in their own field.

From the perspective of an undergraduate student, I acquired many useful resources at this conference -- for example, the information about internship opportunities and occupational training from the exhibitors. Networking with other professionals will benefit me a great deal in my future professional career. However, I still found some things that I think need to be improved. First, even though there were some interactive activities, such as the map explore and the scavenger hunt with mobile phone

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application, the number of activities that the audience could take part in was still limited.

Since remote sensing with UAS field mapping took an important role in the conference, I think it would be better if the audience could experience how the drone works and take turns controlling it. Second, all the speakers had their speeches well prepared, but the time allotted to each presentation was too short for them to completely demonstrate their studies and achievements. I think the time for each presentation session should be extended.

Above all, I think the GIS in the Rockies Conference was quite successful. I hope I can get the opportunity to attend this conference in the future, especially as one of the exhibitors instead of merely as an audience member.

Zhiwei Liu
Undergraduate Student
Natural Resources Management
Colorado State University



Zhiwei Liu with Sheila Pelczarski, Communications Coordinator, and Mike Tuffly, Vice-President, Rocky Mountain Region

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!***

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

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!

Welcome New Members!

Nick Broyles
 Daniel Carter
 James Covington
 Sonja Jamilla
 Lilly Jones
 Jenna Kendall
 Ethan Lacher
 Manuel K. Lopez
 Wil McKenzie
 Hanes Motzinger
 Stephanie Mundis
 Dianne Osborne
 Muthukumaran Sampath
 Daniel N. Shorb
 Hugo Luis Rojas Villalobos
 Steven Daniel Rospopo

2017 IGTF Registration

ASPRS's Annual Imaging and Geospatial Technology Forum (IGTF) will be held in Baltimore in March of 2017. Registration is open and early bird pricing will be available through January 15, 2017. Additional details relating to registration, speakers, workshops, and the technical program [can be found here](#).

PE&RS Digital Submissions

You asked and we listened!

ASPRS is pleased to announce that paper submission to *PE&RS* just got easier. Authors can submit papers to *PE&RS* via the Allen Press site. The new all-digital submission method for *PE&RS* is hosted by Allen Press Peer-Track system. [Click here to submit a paper to PE&RS \(requires free login\)](#). Anyone interested in submitting a paper to *PE&RS* can go to our website to learn more, and from there simply access our digital submission page.

GeoBytes

In addition to the ASPRS Webinars, our organization also offers free online seminars presented by ASPRS and sponsored by the ASPRS GIS Division, in cooperation with AAGS and CaGIS.

Attention those seeking ASPRS Certification: ASPRS Online Seminars are a great way to gain Professional Development Hours!

[Click here to learn more](#)



"GIS in the Rockies" Report

The 29th annual "GIS in the Rockies" Conference, *the Premier Geospatial Conference of the Rocky Mountain West*, was held September 21-23 at the University of Denver, aka "DU." The conference appeared to have record turnout, with over 600 registered from various western states, mostly from

Colorado. The Cable Center at DU is an excellent venue for this conference, with numerous presentation rooms and a spacious, bi-level exhibition hall. RMR VP **Mike Tuffly** and others helped out with the ASPRS table during conference breaks. Visit the conference website at www.GISintheRockies.org for more information.

Keynote

Day 1: [Matt Sheehan](#) is the founder of [WebMapSolutions](#), focused on helping organizations big and small understand and use GIS to solve business problems. Born in England, Matt holds a BSc and MSc in Geography. Matt works on both the technical and business sides of the GIS fence. He is a prolific blogger, writing topical, often humorous articles on the new exciting world of GIS. Matt's low-key but interesting presentation was entitled, "*Is this the dawn of a new era for GIS?*"

Day 2: [Brian Timoney](#), owner of [The Timoney Group](#) and a 15-year Colorado geospatial veteran, has wide experience in GIS and web mapping in sectors such as defense, oil & gas, and local government. An ongoing promoter of the local technology scene, he has founded and organized conferences, co-hosts the [Denver Geospatial Amateurs' monthly gatherings](#), and opines on a broad range of industry issues at the [Mapbrief.com blog](#) as well as on Twitter. He is a long-time promoter of open-source software.

Brian's talk was aptly called "*Mapping Ourselves into Oblivion.*" His talk was simultaneously hilarious and poignant as he took us on a journey through time, describing various advances in geotechnology, punctuated by noteworthy examples. He was intrigued as a young Marine Corps soldier by the new GPS receiver that he was not allowed to use because it was too expensive; yet he was given a tank, a rocket launcher, and an AK-47 assault rifle! He cited some recent examples of humans who relied too much on their new devices, including three tourists who drove their rental car straight into the ocean, following instructions from the onboard GPS; and the woman who walked across a 4-lane highway, then sued Google over faulty pedestrian information.

Brian Timoney recommended key books and research studies that influenced him, including:

- [Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time](#), by Dava Sobel, describes 18th-

Speakers

century clockmaker John Harrison's chronometer which allowed sailors to navigate longitude at sea;

- [The Songlines](#), by Bruce Chatwin, based on Aboriginal Australian mythology, describes how a person is able to navigate across the land by repeating the words of traditional songs, which describe the location of landmarks, waterholes, and other natural phenomena.
- [Making Space: How Our Brains Know Where Things Are](#) by Jennifer M. Groh, describes how our brains devote tremendous computational power to figuring out the simplest details about spatial relationships, how the brain creates our sense of location, then goes further, to make the case that spatial processing permeates all our cognitive abilities, and that the brain's systems for thinking about space may be the systems of thought itself.
- Research by Neuroscientist Eleanor Maguire of University College London found that London taxi drivers' brains grew from training to memorize the city's tangled web of 25,000 streets for their license exam. <https://www.wired.com/2011/12/london-taxi-driver-memory/>

Poster Session (27 entries in Student and Professional categories) and contest (several excellent entries).

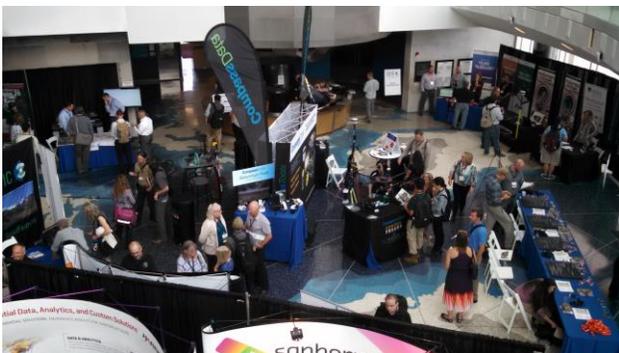


Conference Presentation Tracks:

- Development and Programming in GIS
- FOSS4G [Open-source Software] in the USA and Around the World
- GIS: A Medium for Local and Regional Development (RM-URISA)
- GIS in Conservation
- GIS in Education
- Lessons from the Intersection, the GIS Practitioner, and the Land Surveyor (PLSC)
- Planes, Drones, and Features (ASPRS-RMR)
- Using GIS to Support Collaboration, Coordination, and Cooperation Across Various Levels of Government (GISCO)
- Vendor Showcase
- Web Mapping

Additional Goings-on during the conference:

- Career Development Academy
- Exhibit Hall (private companies, non-profit educational and professional organizations, and government agencies)
- Field Demo of Data Collection Tools by CompassTools
- GNSS Scavenger Hunt
- National Geographic's Giant Map: Explore Colorado
- National Map Corps Map-a-thon (USGS)
- OpenStreetMap Workshop (Advanced)
- Social Event and Geography Quiz
- Web Gallery



Following the Plenary Session, six simultaneous sessions were held on Wednesday and Thursday. The **ASPRS** track called **Planes, Drones, and Features**, was organized and moderated by our own **Harold Schuch**. This track included several excellent presentations on wildfire burn severity mapping, evaluating landscape change on a national scale, high-precision surveying with UAVs, an overview of USGS 3DEP LiDAR, spatial analysis at the continental scale, remote sensing analytics for driving enterprise solutions, using remote sensing to characterize road pavement condition, remote sensing in archeology, what you need to know in order to fly a UAV, the practical physics of geomatics and photogrammetry, and comparing five methods for extracting building outlines from different aerial sensor types. There was certainly an abundance of high quality presentations at this year's conference.

**Post-Conference Technical Tours on Friday, September 23**

- Boulder Emergency Operations Center
- OneCompass: CompassCom, CompassData, CompassTools, and CompassDrone
- DigitalGlobe Headquarters
- Denver International Airport's Enterprise GIS

Last year I attended the tour of the Boulder Emergency Operations Center (EOC) to help me better understand how EOCs work, and it was excellent. This year I toured DigitalGlobe and DIA; both were very interesting experiences. Surprisingly, DIA only has two dedicated GIS staff in their IT department.

-Sheila Pelczarski, RMR Communications Coordinator