



American Society for Photogrammetry and Remote Sensing

Potomac Region

THE IMAGING AND GEOSPATIAL INFORMATION SOCIETY

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Upcoming Events in and around the Region

Geo Week | March 23-25, 2020 | Washington, DC

More information: <https://conferences.asprs.org/geoweek-2020/>

Geospatial Research Symposium 2020 | April 3, 2020 | Williamsburg, VA

More information: <https://events.wm.edu/event/view/wm/116378>

ASPRS GeoByte | April 12, 2020, Noon ET | Webinar

More information: https://my.asprs.org/ASPRSMember/Events/GeoByte_Webinars.aspx

GEOINT Symposium 2020 | 26-29 April, 2020 | Tampa, Florida

More information: <http://geoint2020.com/>

2020 Spring Simulation Conference (SpringSim '20) | 19-21 Mary 2020 | Fairfax, VA

More information: <https://scs.org/springsim/>

TUgis: Maryland's Geospatial Conference | 11-12 August, 2020 | Towson, MD

More information: <https://tugisconference.com/>

Highlights and Features

Potomac Region Annual Meeting and Dinner

The Potomac Region Annual Meeting and Dinner was held Sunday, February 9 2020 at Maggiano's Little Italy in Tysons Corner, VA. In addition to the installation of newly elected officers to the Potomac Region Board of Directors and the Annual Report of the State of the Region, the event included time for colleagues to catch up with one another, good food, and a feature presentation by Lauren Vatie of Team Rubicon on how the organization utilizes imagery and geospatial data to plan and execute their disaster responses efforts as well as coordinate with other volunteer organizations and keep their team members safe during the process. Again this year,

we succeeded to share the meeting presentations via web conferencing with a gathering of the North Carolina Chapter members making the annual meeting an official multi-state event. It was wonderful greeting old friends and making new acquaintances and we're already looking forward to next year's events. For those of you who could not attend, you were missed, and we hope to see you next year.



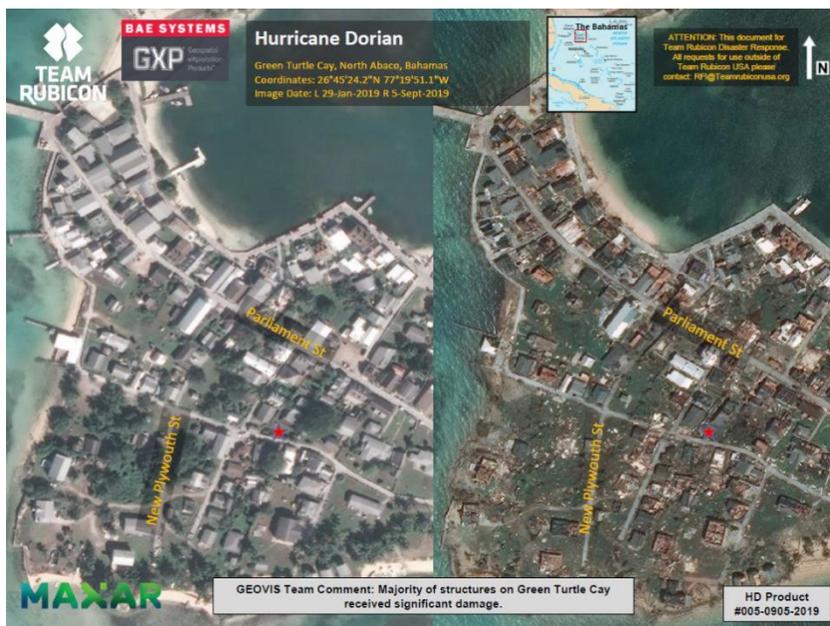
Members and guests enjoying the evening's feature presentation after an abundant multi-course dinner.

Annual Meeting Feature Presenter: Team Rubicon

Team Rubicon (TR) is a nonprofit organization that serves communities by mobilizing veterans to continue their service, leveraging their skills and experiences to help people prepare, respond, and recover from disasters and humanitarian crises. Since the organization's inception in 2010, TR has conducted 429 operations globally, and created a roster of over 110,000 volunteers. While thousands of volunteers deploy to Team Rubicon operations each year, opportunities exist for volunteers to support remotely, including those with a background in geospatial intelligence. For more information on Team Rubicon, visit www.teamrubiconusa.org.



Utilizing partnerships with BAE Systems and Maxar, TR has leveraged high-resolution satellite imagery for planning and executing disaster response operations globally. Volunteers part of the specially trained "GeoVis" team create geospatial situational awareness products that are used by the planning and operations team to make informed decisions after a disaster.



The visual above shows an imagery product produced by a Team Rubicon GeoVis analyst over Green Turtle Cay on Abaco Island, The Bahamas.

Following Hurricane Dorian, the GeoVis team created more than 50 products. These products looked at the concentration of damaged vs. destroyed properties to help determine areas to target, confirmed roads blocked with debris, identified potential locations where teams could stay, and identified high-ground evacuation locations for volunteers. TR leveraged these products and was able to stand-up a response to Abaco and Grand Bahama Island, The Bahamas, within a few days of the hurricane making landfall. After 77 days in The Bahamas, 563 Team Rubicon volunteers

were able to work on 337 homes and community-focused facilities, assist 1108 people, and treat 93 patients.

Volunteering with Team Rubicon does not always require travel or a lengthy time commitment. If you are interested in using your geospatial intelligence skills to help TR become more efficient in helping communities affected by disaster, email nationalplanning@teamrubiconusa.org.

Student Chapter Highlights

The Potomac Region is honored to support Student Chapters at a number of academic institutions throughout the region. This newsletter gives us the opportunity to highlight activities at West Virginia University. Michelle Bester, Remote Sensing Club President, provides the following report on the chapter event, SENSOR EXPO.

West Virginia University Remote Sensing Club – Student Chapter

The WVU Remote Sensing Club hosted a SENSOR EXPO on the 28th of October in Brooks Hall, Geography and Geology Department. The purpose of the expo was to give students the opportunity gain exposure to various remote sensing technologies used in both research and industry. We invited graduate students, industry professionals and faculty to exhibit at the SENSOR EXPO and had great participation. Some of our exhibits included: about four different drones on display each with informational placards, an Aeropod and kite from the AEROKATS program, a pinhole camera, UV light box with various florescent minerals, light refracting glasses, spectrometer demonstration, field cameras as well as informational posters such as “why the sky is blue?”.

Virtual reality system



Drones, Aeropod and Kite



Surveying instrumentation (NEW and OLD)



PIZZA AND SNACKS!!!!



Highlights from the West Virginia University Remote Sensing Club SENSOR EXPO event.

Some highlights included Dr. Aaron Maxwell’s virtual reality system, where students could visit and navigate through iconic places such as Vatican City through Google Earth. Surveying industry experts also gave students insight into how their work has changed over time with technology innovations. They demonstrated to students how surveying equipment evolved from Land Surveyor’s Chains (Gunter’s Chain), to metal measuring tapes, to the satellite based digital equipment used in modern surveying. This afforded students’ insight into how improvements in technology and the field of remote sensing has greatly increased the accuracy and ease of surveying.

The expo also featured model representations built by the remote sensing club of well-known satellites such as the Hubble Space Telescope and Landsat 8. The models were accompanied by short paragraphs describing their design, intended use, remarkable results and other interesting factoids about them. Student were able to closely examine the models and in so doing gain a better understanding of how these satellites, that are so pivotal for scientific research and commercial processes, work.



More SENSOR EXPO exhibits.

In general, the expo was a success based on the attendance, as more than 30 undergraduate students, graduate students, faculty and public participated in the event. The pizza, snacks, soda and “goodies” were enjoyed by all. The club would like to thank the committee members of the remote sensing club, Dr. Warner, Dr. Maxwell, and Dr. Andrew and all other faculty that participated.

Potomac Region ASPRS Scholarship Winners

The Potomac Region is proud to share that three students from within the Potomac Region will be awarded ASPRS Scholarships at the national level. Congratulations on behalf of the region to each of these recipients. Please keep your eyes peeled for these outstanding students at GeoWeek in March and be sure to extend your congratulations on their achievements.

John O. Behrens Institute for Land Information (ILI) Memorial Scholarship

The 2020 John O. Behrens Institute for Land Information (ILI) Memorial Scholarship is award to **Ms. Elizabeth Hanwell**. Ms. Hanwell is a senior at **West Virginia University** pursuing a bachelor’s degree in environmental geoscience. She has demonstrated academic excellence in geospatial engineering technology and related math and science courses. Ms. Hanwell has pursued four professional work internships that focused on generating, curating, and analyzing geospatial data and plans to explore graduate programs focused on Earth observation applied to hazard mapping and disaster response.

Ta Liang Memorial Award

The Ta Liang Memorial Award for 2020 is presented to **Mohammad Abdul Qadir Khan**. The selection was based on his academic achievements and awards, participation in a diversity of geospatial research projects, technical publications, planned program of research-related travel, and volunteer activities for youth and continuing education programs. Mr. Khan is pursuing a Master of Science degree in Geospatial Data Science at the **University of Delaware**. He received his Bachelor of Technology degree in Physical Sciences at the Indian Institute of Space Science and Technology (IIST). His research focus is to advance the technology of Machine Learning coupled with satellite imagery and geospatial tools for addressing the

global food security crisis and to provide current information of cropping practices and patterns at farm scale. He is conducting his research in northeastern India, and will be travelling there during Spring/Fall 2020 to conduct field work to obtain information for crops grown in his study area. The field data will be used for image classification and accuracy assessment purposes. His research will advance our understanding of shifting cultivation patterns and cycles in the region based on biophysical factors and population dynamics in the region. Mohammed Abdul Qadir Khan is a truly deserving recipient of the 2020 Ta Liang Memorial Award.

Paul R. Wolf Memorial Scholarship

The 2020 Paul R. Wolf Memorial Scholarship is awarded to **Lee Ann Nolan**. Ms. Nolan is receiving this award in recognition of her outstanding academic credentials and her plans and enthusiasm to become an education professional in Surveying, Mapping, and Photogrammetry and related fields. Lee Ann is currently a Doctoral candidate (planned graduation August 2020) in Geography at the **University of West Virginia-Morgantown**. Lee Ann Nolan has demonstrated a continued interest, dedication, enthusiasm, passion, and aptitude to become an education professional and has been recognized at all levels. Lee Ann's career goal is to become a tenured teaching/research faculty member at a university, wishing to grow her skill set and continually learn with special interest in the area of UAV's and drones.

Awards for Outstanding Papers, Professional Achievement, and Service activities are determined by committee selection; scholarships and academic awards are also determined by committee selection but are chosen from among current applications. For details on the application process, see: <https://www.asprs.org/education/asprs-awards-and-scholarships>

Region Business Update

North Carolina A&T State University submits Student Chapter application

The Potomac Region welcomes the opportunity to champion for development of a new student chapter organized at North Carolina Agriculture and Technology State University. North Carolina A&T State University, led by faculty member advisor Dr. Leila Hashemi-Beni, has submitted a student chapter petition to ASPRS for formal recognition of their chapter status and bylaws. The Potomac Region looks forward to their energy and participation in the region.

Coming soon: new Potomac Region website

As some of you may have noticed, there have been a few lags in the information updates on the Potomac Region website, <http://asprspotomac.org/>. This past year Martin Wills, our website manager for many years, retired from his position at University of Missouri and has also selected to retire from his service to the Potomac Region so that he can enjoy his new freedom to travel and visit family. We wish Martin all the best in retirement, will miss his support, and are grateful for the services he provided over the year.

During the last few months, the board has explored options for continued website support and recently contracted with a small business website design and management company to help us modernize the Potomac Region website look, feel and conveyance of region information. We're excited about what the next few months will bring and look forward to bringing news of the updates to the region. Stay tuned!

Highlights from Social Media

In 2020, the Potomac Region continues on its 2019 goal to make and renew connections in the region and build on our methods of communication through use of social media starting with Facebook at <https://www.facebook.com/asprspotomac/>. In addition to reminders about national and regional events, you'll also find shared articles on all topics geospatial. Here is a sampling of our posts since the October newsletter:

Brilliant Maps: An Atlas for Curious Minds. Which nations have North Korean embassies? Which region has the highest number of death metal bands per capita? Where can you find lions in the wild? All this and more in a publication available from granta.com, <https://granta.com/products/brilliant-maps/>

Mapping Potholes by Phone (the West Bank's Roads were Smoother) Students in Cambridge, Mass., and Ramallah have created an app to track road quality. An article by Mark Gardiner published in the New York Times.

The final selfie frontier: app takes pictures from 36,000 km up in space. Cameras mounted on a satellite allow users to take 'selfies from space' An article in The Guardian.

To catch up on these posts and others, visit and follow the Potomac Region Facebook page.