

OHIOVIEW 2023 - 2024 ACTIVITIES

OhioView Presents: Workshop Series

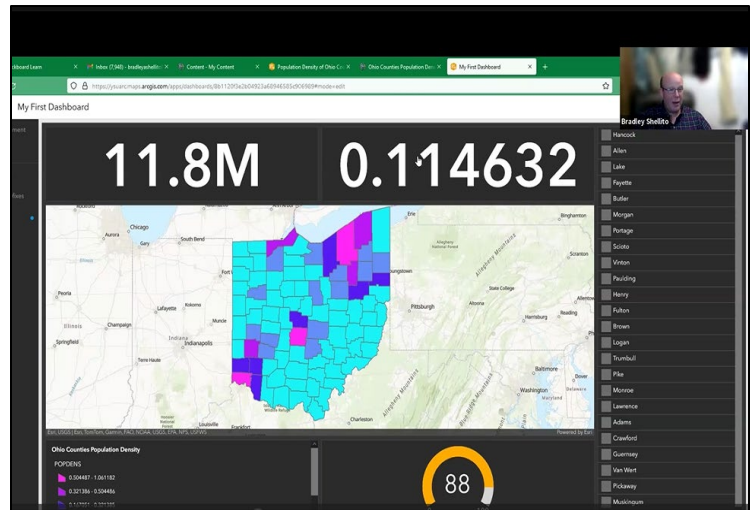
OhioView member universities Youngstown State University, University of Toledo, Bowling Green State University, Kent State University, Miami University, and University of Dayton presented three workshops on February 9, 16, and 23, 2024. There were six sessions held across the three days with between 25 to 45 participants per session. Pls from each university presented sessions that covered a variety of remote sensing and geospatial topics that used freely available software and data. These workshops are the latest in an ongoing series and were held online to be open to participants from across the country throughout AmericaView.

OhioView Teacher Training

Ohio teachers participated in professional development to learn how to incorporate GLOBE observations and satellite imagery through Google Earth Engine into student projects. Teacher professional development focused on the solar eclipse in April 2024 and connecting GLOBE observations to the Toledo Zoo Prairie Project.

Crop Status Monitoring and SPLIT Workshop

Bowling Green State University (Dr. Anita Simic Milas) led the SPLIT Spatial Remote Sensing Program, involving undergraduate and graduate students in fieldwork. Students utilized radiative transfer models and various machine learning regression algorithms applied to multispectral and hyperspectral data to map chlorophyll, nitrogen, and phosphorus content in crop fields with different chemical practices and soil treatments. SPLIT Geoscience workshop was organized at Idaho State University to bridge the gap between education and workforce.



Attendees of the 2024 OhioView Presents workshops participated online via Zoom to receive instruction on multiple types of remote sensing and GIS applications using freely available software and data, including designing ArcGIS Dashboards.



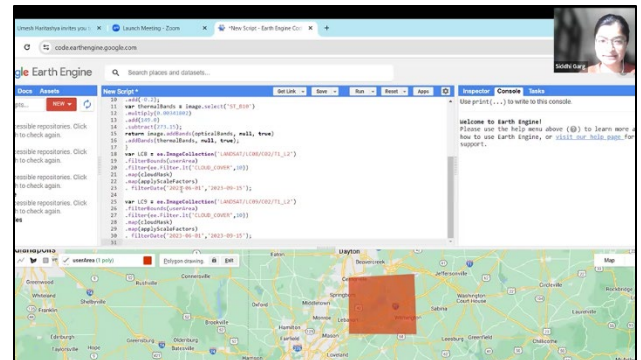
SPLIT Geoscience students participated in a workshop organized in collaboration with Idaho State University. The workshop featured a series of hands-on lectures led by NASA and USGS researchers, as well as university professors. A field trip to Craters of the Moon National Monument was also included.

BENEFITS TO OHIO

- Initiated in 1997, OhioView is a consortium of Ohio universities dedicated to furthering education, research, and workforce training in Earth Observation Science. OhioView is overseen by a Board of Directors made up of PIs from several of the universities in the consortium. Many OhioView schools participate in the OhioView Software Pool, by which the member schools contribute to a central fund dedicated to purchasing specialized remote sensing software at a significant cost savings to each school. This software enables the classwork, educational efforts, and research conducted by OhioView universities.
- The OhioView “Online and Open-source GIS and Remote Sensing: This Is The Way” workshops served numerous faculty, students, and workforce members in Ohio and across the US over three days. Instruction included using building ArcGIS Dashboards (Dr. Bradley Shellito), analysis using ArcGIS Survey 123 (Ms. Robbyn Abbitt), LIDAR analysis using QGIS (Dr. Joseph Ortiz), crop type classification in Google Colab (Dr. Anita Simic Milas and Mr. Henry Osei), vegetation mapping in Google Earth Engine (Dr. Umesh Haritashya and Dr. Siddhi Garg), and processing high resolution imagery in R (Dr. Kevin Czajkowski and Ms. Kim Panozzo).
- One of the longest running OhioView initiatives is the SATELLITES (Students and Teachers Exploring Local Landscapes to Interpret the Earth From Space) Program. This is offered yearly to K-12 teachers (particularly middle and high school level) in Ohio and Michigan. and provides teachers and students with hands-on, inquiry-based science and STEM education using geospatial technologies. The annual SATELLITES Conference was held on May 6, 2024 this year at the Toledo Zoo and 384 students presented their authentic research projects.
- The SPLIT Remote Sensing program established a network of institutions, researchers, and students, both nationally and internationally, who applied existing algorithms and developed new ones for monitoring crop status.
- The SPLIT Geoscience program enhanced students’ understanding of geoscience through the use of geospatial information, incorporating fieldwork and hands-on training. This program was also funded by the NSF. Regional and national partners include AmericaView, Bowling Green State University, Idaho State University, University of Louisiana at Lafayette, University of Wyoming, NASA and USGS.



Students at the University of Toledo participated in GLOBE observations to study the April 8, 2024 solar eclipse and urban heat island effect



Participants at the 2024 online OhioView Presents remote sensing workshops receive instruction on using Google Earth Engine for image processing and vegetation analysis.



K-12 students presenting their research projects at the SATELLITES Conference at the Toledo Zoo, May 6, 2024.

OhioView Principal Investigator:

Anita Simic Milas

Bowling Green State University

1.419.372.4035

asimic@bgsu.edu



<https://www.ohioview.org>



@OHViewGeo