



MISSOURIVIEW 2023 - 2024

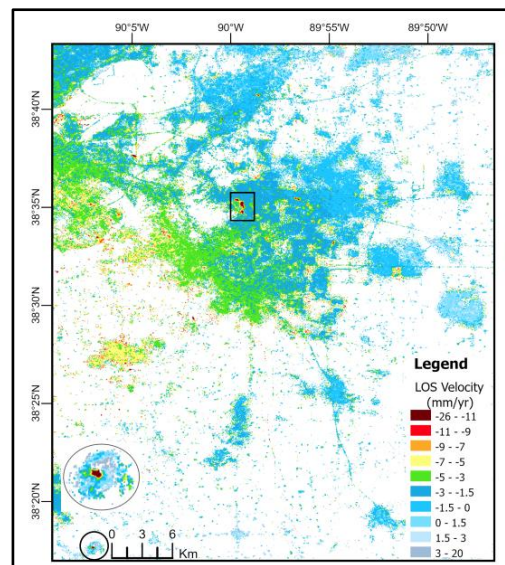
AmericaViewSM
Empowering Earth Observation Education
americaview.org

MISSOURIVIEW 2023 - 2024 ACTIVITIES

The increasing availability of geospatial data, combined with recent advancements in AI/ML, and cloud infrastructure, presents significant opportunities for breakthroughs in science, policy, and national security. To expand the use of Earth Observation data and simplify the application of AI in remote sensing, the development of user-friendly libraries and teaching materials is essential.

During the 2023–2024 reporting period, we published 10 peer-reviewed papers, organized two workshops (GEOINT and Digital Twin), and developed two comprehensive 40-hour UAV training courses. These courses covered UAV operations, photogrammetry, GPS/GNSS, surveying, and mapping. These initiatives aim to promote the use of geospatial data and align with the mission of AmericaView by advancing K-12 and college education.

MissouriView Consortium students and faculty showcased 40 posters at the Geo-Resolution national conference held at Saint Louis University.



*Ground Surface Displacement in Belleville
Measured Using InSAR Technology*



GEOINT workshop



GNSS survey training course

- Geospatial Data Science Academy
 - The TGI Geospatial Data Science Academy is designed to inspire students to pursue GEO-STEM-related subjects in both high school and college. By providing a dynamic and engaging learning environment, the academy encourages students to challenge themselves through research projects centered around geospatial data science principles. This hands-on approach not only makes learning fun but also fosters a deeper understanding of the subject matter. [LINK](#)
- GEOINT Summer Immersive Program
 - We hosted a half-day workshop for 20 students from 13 HBCUs across the country at TGI/SLU. Organized in collaboration with HSSU and NGA, the workshop provided students with an introduction to GEOINT. They participated in hands-on exercises in remote sensing, drone imaging, and GEOINT, including mapping power plants and conducting change detection using satellite data. A newsletter highlighting the program is available at [LINK](#)
- TGI Academy UAV Training
 - 15 students were trained in hands-on AV operation, GNSS, geodesy, Surveying and Photogrammetry technologies.

MissouriView is a member of the AmericaView Consortium, a nationally coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state. AmericaView is funded by USGS grant agreement G23AP00683.

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BENEFITS TO MISSOURI

- Introduced the geospatial ecosystem in St. Louis to students and provided opportunities for them to 'immerse' in GEOINT, advance their skill sets in geospatial technologies and applications.
- Geospatial Data Science Summer camps introduced geospatial science as potential career field to about 50 K-12 students. The goal of the camps was to bring students to campus and talk about mentoring opportunities, and opportunities for college, and to provide two sessions that introduced students to themes in geospatial research. The first theme was devoted to remote sensing and drones and the second theme was devoted to spatial statistics. Students were able to get hands-on experience. They were able to see the power of remote sensing and spatial statistics research.
- The 2024 Geo-resolution conference provide a venue for collaboration among geospatial experts and students in government, academia, and industry. Over 1,000 people, with a combination of in-person and online attendees and over 150 students participated in-person in the conference, the poster session, the mentoring lunch, and the career fair. [LINK](#)
- TGI Academy UAV Training produced 15 experts in UAV operations, digital mapping, geodesy, and GNSS surveying, addressing critical needs in Missouri workforce.



Student operating heavy lift drone in UAV training courses



Geo-resolution 2024, Modeling the Future to Address Today's Geospatial Challenges

MISSOURIVIEW CONSORTIUM MEMBERSHIP



HARRIS-STOWE
STATE UNIVERSITY



SOUTHERN ILLINOIS UNIVERSITY
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T-REX



USGIF



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