

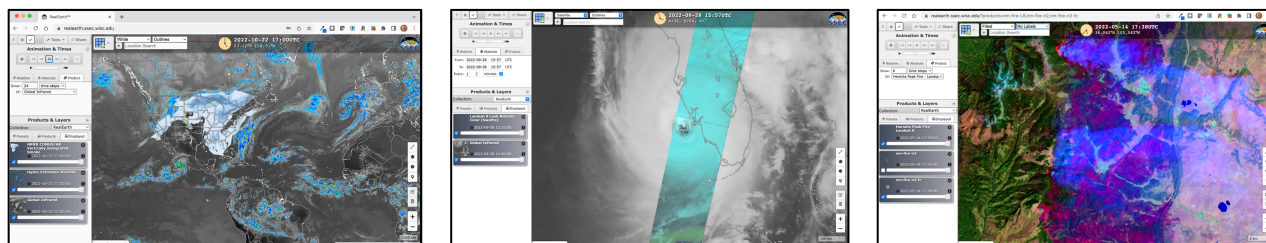


WISCONSINVIEW 2021 - 2022

AmericaViewSM
Empowering Earth Observation Education
americaview.org

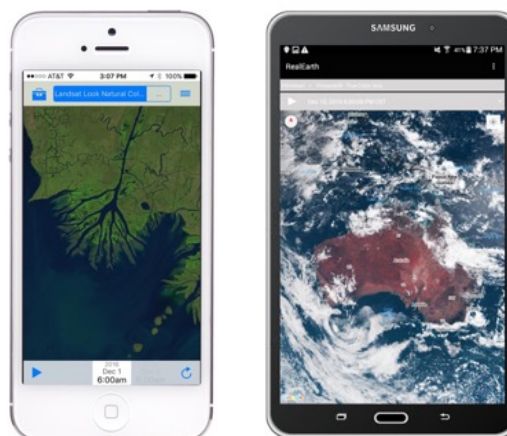
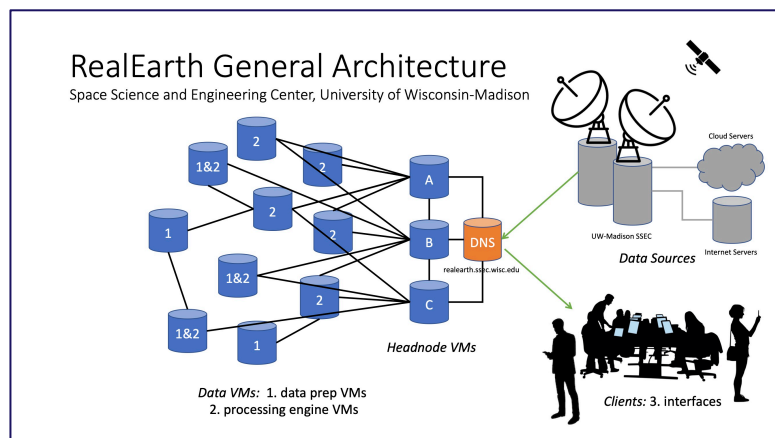
WISCONSINVIEW 2021 - 2022 ACTIVITIES

WisconsinView’s “High Impact Activity” leverages its *RealEarth* mapping platform and visualization tool to empower Earth observation education and outreach. The goal is to assist StateView members of AmericaView in sharing educational materials and research results by utilizing *RealEarth* as an Earth science communication tool. The platform is flexible and works in both web browsers and mobile devices. Mobile devices with locational services give educators an opportunity to put their students “into the data” as an immersive experience. This year WisconsinView developed video tutorials and conducted an in-person workshop at the AmericaView annual meeting in Fort Collins, Colorado.



Examples of satellite-derived rain rate with wildland fire smoke (left), Landsat-8 over the eye of Hurricane Ian (center), a New Mexico wildland fire.

RealEarth is a flexible tool that allows visualization of nearly any spatial data. At the PECORA22 conference in Denver, Colorado, WisconsinView’s Sam Batzli showed how the *RealEarth* platform facilitates data visualization across the atmospheric science and Earth science domains. He showed examples of how Landsat imagery can be overlaid with GOES (Geostationary Operational Environmental Satellites) weather imagery to give higher spatial resolution to meteorological features of interest. *RealEarth* is structured around time and location, making it possible to synchronize visualization and animation of data of different types. Because much of the imagery in *RealEarth* is acquired and displayed in near real-time, it is useful for event-based monitoring of severe weather events and natural hazards like wildland fires and flooding. This HIA advances education, training, technology transfer, and outreach.



The architecture of the RealEarth visualization platform (left) with examples of the iOS mobile app showing a Landsat 8 image of a river delta (center) and the Android mobile app showing geostationary imagery of Australia (right).

WisconsinView 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 G18AP00077.

AmericaViewSM
Empowering Earth Observation Education
americaview.org

AmericaView Website:
www.AmericaView.org
Christopher McGinty, Executive Director:
chris.mcginty@americaview.org
Lisa Wirth, Program Director:
lisa.wirth@americaview.org
John McGee, Board Chair:
jmcg@vt.edu

BENEFITS TO WISCONSIN

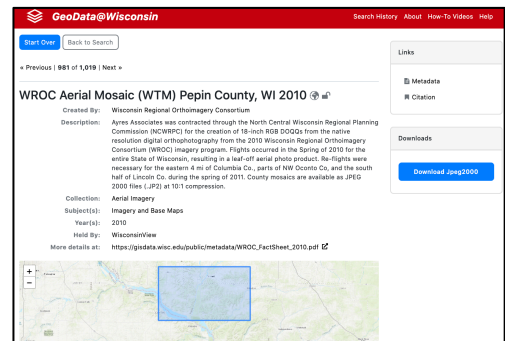
Since its establishment in 2004, WisconsinView has supported Earth observation education and outreach across Wisconsin in the following ways:

- **Presenting** Earth observation data and information at public science events across the State and in local classrooms.
- **Enriching** access to high-value data sets such as LiDAR and aerial photography through a 100TB ftp server.
- **Demonstrating** how to utilize emerging web mapping technologies such as OGC WMTS in workflows by professionals as well as in the classroom.
- **Partnering** with organizations and agencies to leverage expertise and synergies.

WisconsinView collaborates with other StateViews with similar goals and regional concerns, sharing research and education ideas and leveraging the power of the AmericaView network.



Students enjoy a 3D experience of a terrain model at a museum outreach event in Milwaukee, WI.



WisconsinView partners with the State Cartographer's Office and UW-Madison Department of Geography to catalog data sets for improved discovery.

CURRENT WISCONSINVIEW CONSORTIUM PARTNERS



Federal consortium members identified above do not receive funding from AmericaView.

WisconsinView Principal Investigator:

Sam Batzli, PhD

Space Science & Engineering Center

University of Wisconsin-Madison

608-263-3126 :: sabatzi@wisc.edu



<https://wisconsinview.org>



<https://ssec.wisc.edu/realearth>



@WisconsinView



@SSERealEarth