

WisconsinView REMOTE SENSING ACTIVITIES 2014 - 2015



DEVELOPING ENHANCED ACCESS TO LANDSAT 8 IMAGERY

In an effort to improve and expand use of satellite imagery, WisconsinView is working with researchers and computer scientists to enhance access to Landsat 8 imagery. The goals of this effort are to:

- Introduce Landsat 8 imagery to atmospheric scientists and meteorologists within their work flows.
- Reduce the delays that exist between Landsat 8 acquiring an image and the image being available to researchers and the public – essential for atmospheric science meteorology.
- Provide mobile-ready access to near real-time imagery.

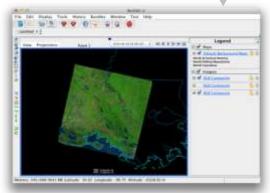
To accomplish these goals, WisconsinView and collaborators at TexasView, MichiganView, and Indiana University have arranged for direct access to Landsat 8 imagery from the Department of the Interior's US Geological Survey as soon as it has been processed. The imagery flows over the high-speed Earth Observation Depot Network (EODN) to programmers and computer scientists at the Space Science and Engineering Center (SSEC) at the University of Wisconsin-Madison who then transform the imagery and data into formats that will work in the systems and software used by weather scientists. The imagery is also immediately viewable in desktop browsers and mobile devices through Wisconsin's RealEarth™ system. See: http://re.ssec.wisc.edu/s/L8Cf8 to view the past seven days of Landsat 8 in the RealEarth™ browser.



This browser interface for "RealEarth™" was developed in part with support from WisconsinView. See: http://re.ssec.wisc.edu/s/L8Cf8 to view the past seven days of Landsat 8 over the United States.



Left: Landsat imagery viewed on an iPhone5s in the prototype "RealEarth™ App." Right: Landsat 8 flowchart from satellite to App.

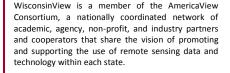


Landsat 8 color composite image viewed in McIDAS-V meteorology software. McIDAS-V is a free, open source, visualization and data analysis software package that is the fifth generation in SSEC's 40 year history of sophisticated McIDAS (Man computer Interactive Data Access System) software packages. McIDAS-V displays weather satellite (including hyperspectral) and other geophysical data in 2- and 3-dimensions, and can be used to analyze and manipulate the data with its powerful mathematical functions.

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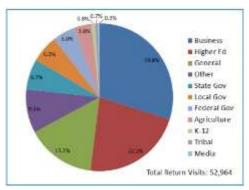
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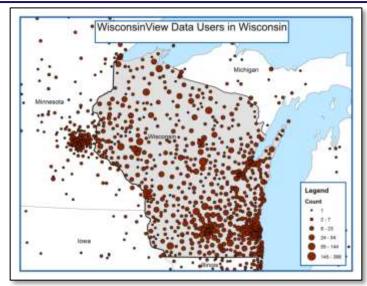


BENEFITS TO WISCONSIN

Landsat 8 imagery is important to Wisconsin for agricultural, forestry, and land cover mapping. Enhancing access to Landsat 8 imagery benefits all of these activities. WisconsinView also makes aerial photography and digital elevation models available online. Along with satellite imagery, these data products are used for business, education, and government. WisconsinView provides the only online source of certain statewide imagery



Many kinds of users benefit from access to WisconsinView data.



Since 2004 WisconsinView has made a variety of land remote sensing imagery available online for free public download. This map shows the location of registered WisconsinView data users.

WISCONSINVIEW CONSORTIUM MEMBERSHIP

WisconsinView is comprised of the following 13 partner organizations:













Wisconsin State Cartographer's Office











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

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