

VIRGINIAVIEW REMOTE SENSING ACTIVITIES 2015 - 2016



BLACKSBURG CHILDREN'S MUSEUM

During 2015-16, VirginiaView designed and installed a geospatial exhibit and interactive display at the Blacksburg Children's Museum. At the Children's Museum's invitation, VirginiaView created the exhibit to interest children of all ages in their local landscapes, and engage them in current technologies to view and examine images of the earth's surface.

Activities are based upon VirginiaView's experience in preparing geospatial exhibits and activities for the public, such as Virginia Tech's Kid's Tech one-day programs for middle school students from our region, and the Virginia Science Festival. Both events are effective in engaging K-12 students, and their parents.

The VirginiaView Children's Museum display includes a 10×15 ft. fabric mural displaying a Landsat 8 false-color image of Southwest Virginia, and a carpet map of the Chesapeake Bay watershed, extending from Southwest Virginia at its southern extremity to southern New York State at its northern-most extent.

The Landsat mural shows principal terrain features of the region with cities, transportation, and water bodies. The mural was designed to introduce students to their region, interpretation of maps and images, use of the stereoscope, matching place names to maps, and identifying basic land use regions and political boundaries. The mural includes a brief guide to assist students to interpret the Landsat image for basic geographic features.



VirginaView PI John McGee introduces two visitors to the Blacksburg Children's Museum to use the stereoscope, and to use image magnification to examine aerial photographs of their region. Visible in the background is a portion of the 15 ft. x 10 ft. Landsat mural depicting Southwestern Virginia. Blacksburg VA, January 2016. Image credit: Virginia Tech



Visitors to the Children's Museum examine a paper version of the larger Landsat mural prepared so visitors can mark and annotate features of interest. Blacksburg VA, January 2015, photo credit: JBC

- Comments from Our Partners -

 Children's Museum volunteer and board member Treesha Baird saw the VirginiaView geospatial exhibit at the 2014 Virginia Science Festival and noted its effectiveness in engaging children and their parents. She asked if the VirginiaView team could create a permanent display for the museum –

"I realized there was a unique opportunity to involve the university with the community, to offer a resource not only for museum members but for teachers."

• Julene Rice, Director of the Children's' Museum, remarked "This is our first exhibit that directly addresses our region with geography and weather. It's amazing."

Exhibit contributors include:

- The Virginia Association of Mapping and Land Information Systems,
- Draper Aden Associates,
- VirginiaView, and others

VirginiaView 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.



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BENEFITS TO VIRGINIA

As a focal point for our nation's geospatial industries, Virginia has been actively supporting development of a geospatially literate workforce. VirginiaView contributes to this workforce development effort by providing educational materials, and by sponsoring, co-sponsoring, and delivering hands-on workshops to:

- K-12 educators,
- Community college educators,
- Private sector employees,
- Local government staff, and
- State government employees.

VirginiaView's website (<u>http://virginiaview.net</u>) provides on-line teaching resources suitable to support instruction and learning for all of these groups, including:

- K-12 instructional resources,
- On-line Digital Atlas of Virginia
- "Loaner" kits for geospatial instruction
- Sample remote sensing imagery of Virginia

VIRGINIAVIEW VIEW CONSORTIUM MEMBERSHIP



In-service high school and middle school teachers display their certificates upon completion of the *Earth Observation for K-12 Education,* workshop. Virginia Tech, April, 2016. Photo credit: JBC

VirginiaView partners develop, leverage, and disseminate remote sensing resources and applications to stakeholders across the Commonwealth. Partners also collaborate with the development of proposals, workshops, and research efforts to maintain statewide coverage. Through its affiliation with other AmericaView consortium members and other partners and affiliates, including the National Geospatial Technology Extension Network (NGTEN), and the Geospatial Technology Education (GeoTEd) project, VirginiaView has also developed the capacity to efficiently extend resources and programming efforts nationally.



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

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