



# ArkansasView

## Remote Sensing Activities

### 2012 - 2013



Improving Utilization of Remote Sensing Resources

#### Expansion of Remote Sensing Curriculum and Delivery of an Image Analysis Workshop



ArkansasView-supported graduate students demonstrate several remote sensing-assisted silviculture workflows using the NSF-funded RazorVue collaborative display at the Center for Advanced Spatial Technologies (CAST), University of Arkansas, Fayetteville, AR (Mar 2013). Associated Landsat 7 ETM+ and Landsat 5 TM imagery from USGS were critical in the development of the resulting study:

Jones, J.S., J.A. Tullis, L.J. Haavik, J.M. Guldin and F.M. Stephen, 2013, "Monitoring Oak-hickory Forest Change During an Unprecedented Red Oak Borer Outbreak in the Ozark Mountains: 1990-2006", *Journal of Applied Remote Sensing*, in press.

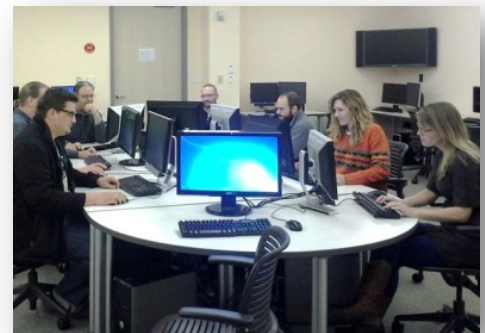
With Arkansas' first PhD program in Geosciences approved by the Arkansas Department of Higher Education (ADHE), new doctoral graduate students can now specifically emphasize remote sensing and other areas of geoinformatics in their research. To prepare for the new curriculum demand, ArkansasView:

- created new and updated laboratory exercises for *Principles of Remote Sensing* and *Remote Sensing of Natural Resources*,
- designed a "shared provenance store" to help students collaboratively design, compare, and replicate remote sensing workflows with the ArcGIS 10 platform, and
- prepared and delivered a workshop in object-based image analysis (OBIA)

University of Arkansas students now have the opportunity to study remote sensing with a uniquely stronger appreciation for collaborative remote sensing-assisted problem solving, and the state's pool of OBIA-trained students and professionals has been expanded.

#### Benefits of Remote Sensing Education to Arkansans

While the Department of Labor has cited remote sensing and other geospatial developments as key emerging technologies, county and local governments in Arkansas are challenged to find qualified employees. By focusing on undergraduate and especially graduate education at the state's flagship university, ArkansasView is addressing this need. As graduates contribute to Arkansas' rural and urban remote sensing workforce, and even educate students at other centers of learning, such investment has a clear economic benefit. Further, ArkansasView's land stewardship focus in laboratory and classroom materials helps inspire future remote sensing scientists to be problem solvers in a state with crucial natural and agricultural resources.



ArkansasView delivered an "Introduction to Object-based Image Analysis with eCognition" workshop with nine government and academic participants (Feb 2013).

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