

**Regional Visualization and Analytics Centers  
Developing the Next Generation of Science and  
Scientists in Visual Analytics**

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Abstract

The Department of Homeland Security has established five Regional Visualization and Analytics Centers (RVACs) led by universities across the United States to develop visual analytics tools that can help analysts and emergency responders detect, prevent, and reduce the threat of terrorist attacks; identify and assess threats and vulnerabilities to our homeland; and recover from and minimize damage from national disasters. Visual analytics software tools leverage people's inherent ability to process visual information to help them interpret and analyze vast volumes of data. Visual analytics helps facilitate analytical reasoning about complex information to identify important trends, test hypotheses, and determine how best to take action.

The RVACs are affiliated with the National Visualization and Analytics Center (NVAC), which was established by DHS in 2004 and is led by Pacific Northwest National Laboratory. PNNL coordinates the efforts of the RVACs. NVAC Director Jim Thomas will present an overview of the RVACs' research and accomplishments in their mission to create the next generation of visual analytics technologies and educate the next generation of visual analytics researchers.