

NCCS Snapshot

The Week of February 4, 2008

NATIONAL CENTER
FOR COMPUTATIONAL SCIENCES



Oak Ridge National Laboratory
U.S. Department of Energy

Congressman Zach Wamp Visits Oak Ridge

Congratulates researchers for IPCC, Nobel effort

- **Congressman Zach Wamp recognized five ORNL researchers for their contributions to climate science in a speech at the NCCS**
- **Their work, performed on an NCCS supercomputer, was responsible for roughly one-third of the data submitted by the U.N.'s IPCC panel, which shared the Nobel Prize with former Vice President Al Gore**

“With one fell swoop you have advanced the cause of Oak Ridge National Laboratory well into the future.”

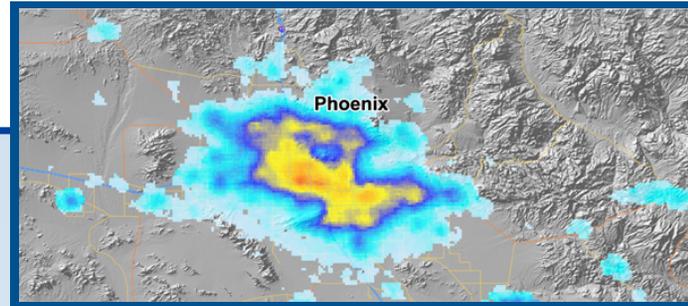
Congressman Zach Wamp

U.S. Rep. Zach Wamp, right, recognizes from left, Tom Wilbanks, David Greene, Virginia Dale, David Erickson, and Paul Hanson.



ORNL Assists NFL

- National Football League Environmental Program Coordinator Jack Groh recently contacted ORNL's David Greene to calculate the carbon footprint of the Super Bowl
- The scientists concluded Super Bowl XLII would be responsible for the emission of about a million pounds of carbon
- NBC Nightly News came to ORNL on Jan. 28 to cover the story
- Carbon's role in the world's climate is a key research focus of the NCCS, which hosts one of the nation's most powerful computers for open science research



Carbon footprint (left) from the Univ. of Phoenix Stadium (below).



Laboratory helps quantify carbon footprint of Super Bowl

NCCS to Replace Visualization Cluster



- The Hawk system has been responsible both for data analysis and for powering the center's 240-square-foot EVEREST Powerwall, but it is nearing 5 years old
- It will be replaced by three separate clusters: Lens, dedicated to data analysis; Everest, to operate the Powerwall; and Orb, a state-of-the-art Lustre file system

"With Everest and Orb, it will be possible to show movies across the entire wall at 30 frames per second, compared to two frames per second possible with the current setup."

Sean Ahern, Visualization Task Lead at NCCS

New hardware for EVEREST will dramatically increase data analysis capabilities.