NCCS Snapshot
The Week of March 5, 2007

NATIONAL CENTER
FOR COMPUTATIONAL SCIENCES

Oak Ridge National Laboratory
U.S. Department of Energy

Scientists Shed Light on Climate Change

- Team headed by Warren Washington of the National Center for Atmospheric Research
- Contributed simulations for the Fourth Assessment Report of the Intergovernmental Panel on Climate Change
- Responsible for Community Climate System Model
  - Simulates effect of carbon dioxide on temperatures across the planet
  - Future version will simulate the entire carbon cycle
- 2007 allocation
  - 4 million processor hours on Jaguar
  - 1.5 million processor hours on Phoenix

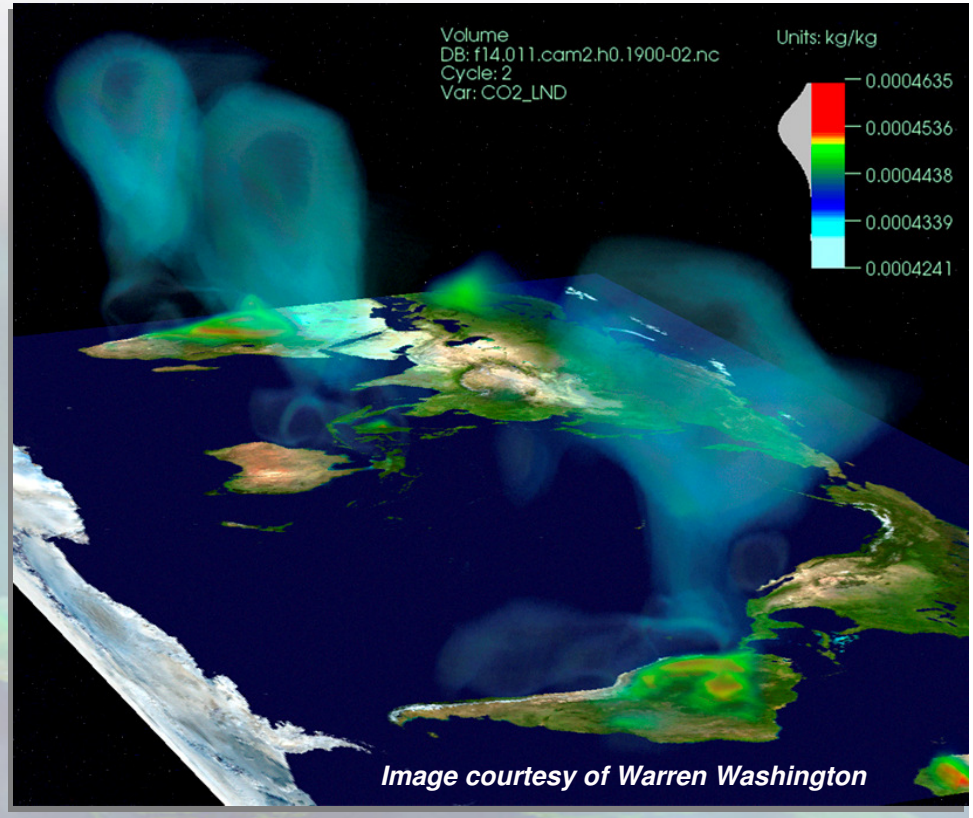
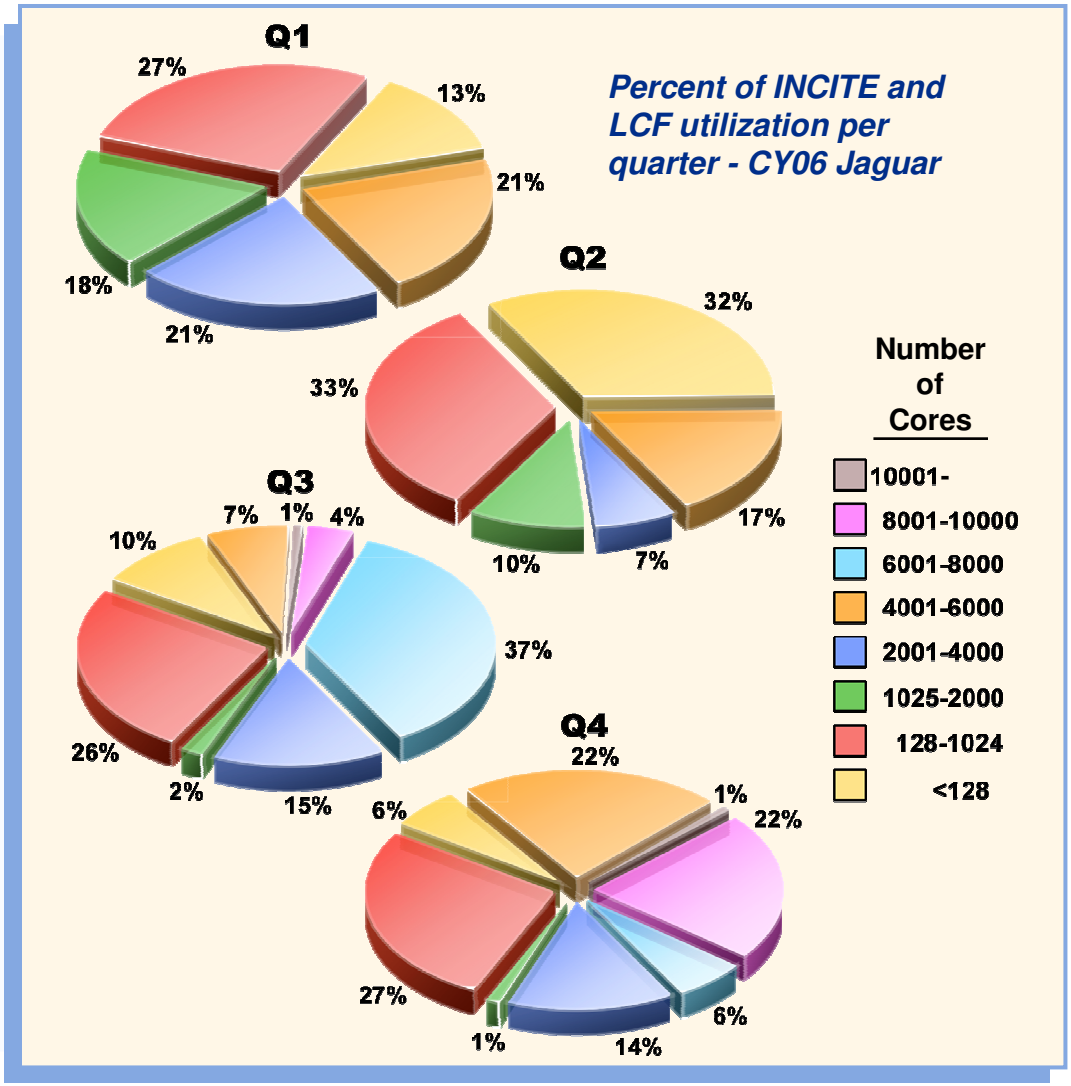


Image courtesy of Warren Washington

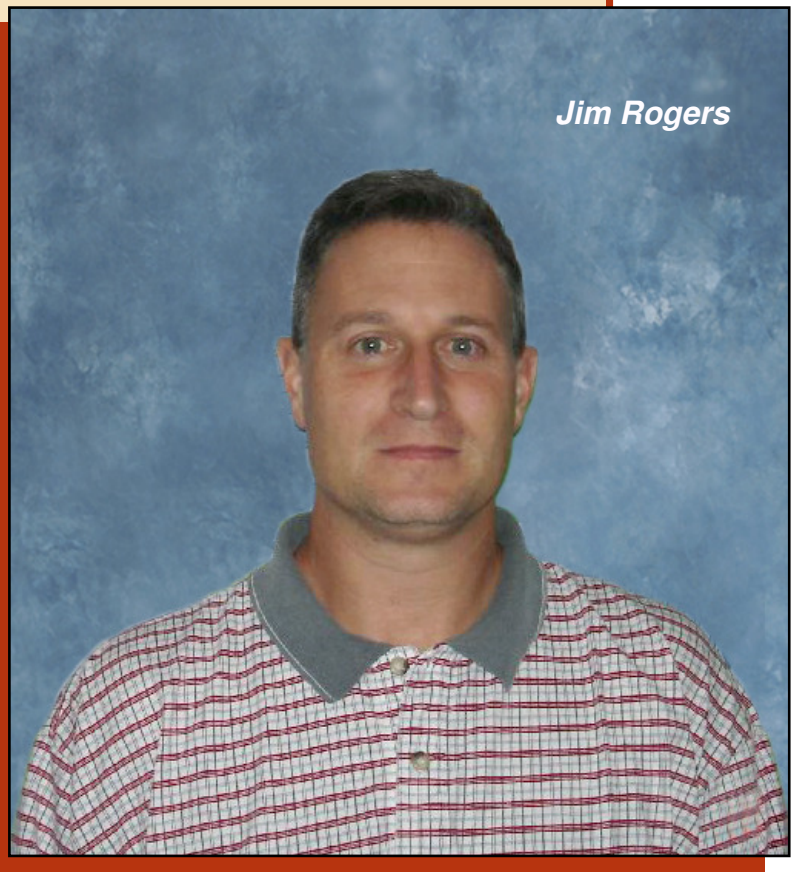
Researchers Take Advantage of Increasing Number of Processor Cores

- Users successfully scaling applications to take advantage of system upgrades
- Nearly a quarter of the system's run time saw usage of more than 8,000 cores in quarter 4
- Even more upgrades are on the way for Jaguar
  - 119 teraflops by the end of March
  - Eventual upgrade to 250 teraflops



Cray Users Pool Experience at Workshop

- First Cray Technical Workshop–USA held in Nashville, Tennessee
- Sponsored by NCCS and Cray User Group
- Attendees from United States and Europe
- Topics included
  - Upcoming Cray products
  - Upcoming AMD products
  - Cray performance tools
  - Benchmarking and performance analysis
  - Application performance analysis
  - I/O strategies
- Video and slides will be available at http://nccs.gov/news/workshops/cray/index.html

NCCS Names Director of Operations

- Jim Rogers joins NCCS
- Has broad experience in HPC and has worked with a variety of supercomputing centers
- Will be responsible for day-to-day operation of NCCS systems
- Will take over duties from Doug Kothe, who will focus on his role as director of science