

## Calendar/Meetings

### October 2005

3-6, [GridWorld](#), Boston, Massachusetts

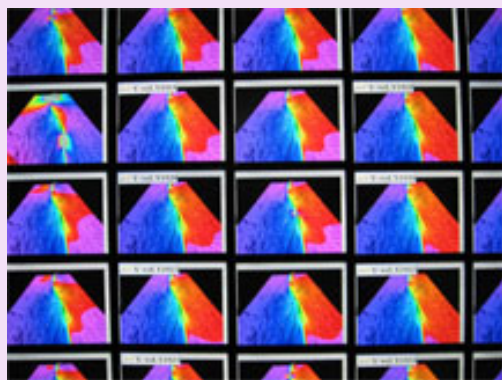
3-6, [GGF15](#), Boston, Massachusetts

6-7, [GridNets 2005](#), Boston, MA

12-14, [Second ESnet Collaboration Workshop](#), Lawrence Berkeley National Laboratory, Berkeley, California

[Full Calendar](#)

## Image of the Week



**Earth science visualization using OptIPuter technology. (Click on image for larger version.)**

A history of earthquake activity in California for the last 50 years was presented at [iGrid 2005](#) using a display of 55 tiled monitors and dedicated light paths. [OptIPuter](#) protocols were used to transfer the multi-gigabit data sets over optical networks between Amsterdam, Chicago and California, and [OptIPuter](#) middleware allowed the visualization environment to be shared between researchers at several institutions.

## Statistic of the Week

## Feature Story

### Science, Art, Advanced Networks Meet at iGrid 2005



Participants in the world's highest-resolution videoconference.  
*Image Courtesy Osamu Ishida, NTT*

Advanced optical networks and light path technology were on display at iGrid 2005, held September 26–30 at the new Calit2 building on the campus of the University of California, San Diego. The workshop showcased more than four dozen demonstrations of applications using high-speed optical networks, and also included a symposium with lectures, panel discussions and master classes on applications, middleware and underlying cyberinfrastructure for 10 gigabit optical networks.

"We only organize an iGrid when there's a new level of technology available," said Tom DeFanti, iGrid 2005 co-chair. "This workshop was organized because of the global availability of light paths. The goal of iGrid 2005 was to build a team that knows and trusts each other, and that knows how to control and request light paths for applications and users."

Light paths are direct connections between the source of data and the recipient over an optical network. While the technology has been available for several years, only recently has the technology advanced—although still in an experimental stage—to support on-demand requests by application users.

## Cyberinfrastructure's Long and Winding Road

Sangtae Kim has returned to Purdue University, where he is a distinguished professor of both mechanical and chemical engineering. He has been on



leave since 2003, serving as director of the National Science Foundation's Shared Cyberinfrastructure Division. Recently, Kim reflected on 20 years of working with NCSA as a university professor, an industry researcher with Eli Lilly and Company, and an NSF administrator. He also shared his thoughts with NCSA's Karen Green on cyberinfrastructure and what it means to science, engineering, and the world.

**Q:** Before you came to NSF, you were a partner for several years. Can you tell us about that experience and why it was important to bring such a variety of disciplines together under the centers program?

**A:** I consider the opportunities I had to partner with the national partnership at NCSA as one of the highlights of my career. One of the especially memorable activities happened during the period from 1995 through 97 when I was partnered with Shankar Subramaniam [then at NCSA] in the computational biology team, and one of the things that we did—and at that time this was a revolutionary new idea—was use the power of the newly emerging cyberinfrastructure of the time, namely the World Wide Web and the Mosaic Web browser, to show that access to supercomputers didn't mean that you had to write a proposal for supercomputer time.

[Read the full article](#)

# 550


Number of projects that used the TeraGrid between January 2004 and June 2005, representing 800 users and 280 principal investigators.

**Source: Jose Munoz, NSF**

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 Office of Science/  
U.S. DOE

A 9,000 mile light path from Keio University in Japan to the Calit2 building in San Diego enabled one of the first demonstrations of the workshop, the world's highest-resolution videoconference using 4K digital video. The president of Keio University and Chancellor of UCSD took part in the videoconference, which was shown on a theater screen with four times the resolution of high-definition television. Along with the videoconference, 4K real-time streaming was used to display digital motion pictures, still camera images and computer animations from Keio University in the auditorium in San Diego.

[Read the full article](#)

*This article originally appeared in Access Online, published by the National Center for Supercomputing Applications.*

## **Grids in the News**

### **Grid Project Lends A Hand To Katrina Victims**

Grid Computing Planet, September 27, 2005

W2COG, the World Wide Consortium for the Grid, has been using its portable networking technology to aid victims of Hurricane Katrina.

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### **MERIS monitoring tracks planetary photosynthesis levels**

PhysOrg.com, September 26, 2005

Daily multispectral observations from Envisat's MERIS sensor are being combined with a sophisticated processing algorithm and powerful Grid computing to reveal global photosynthesis activity on land.

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