

Calendar/Meetings

August

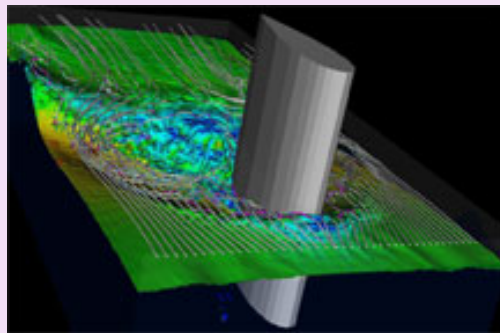
14-18, [Cyberinfrastructure Summer Institute for Geoscientists](#), San Diego, California

21-23, [Open Science Grid Consortium Meeting](#), Seattle, Washington

29-September 1, [Euro-Par 2006](#), Dresden, Germany

[Full Calendar](#)

Image of the Week



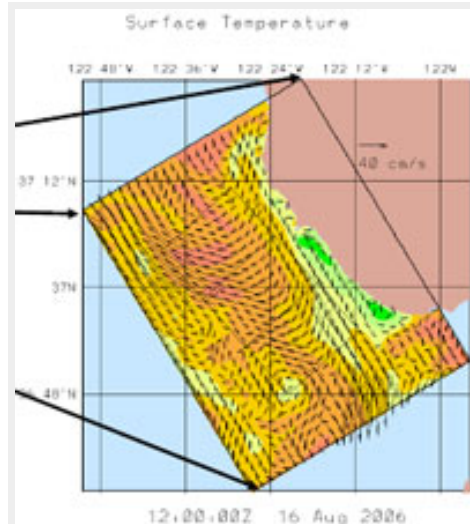
Flow of water past an airfoil that approximates a ship's hull. (Click on image for larger version.)

Image Credit TACC

This image was created using Maverick, a terascale visualization system at the Texas Advanced Computing Center and an NSF TeraGrid resource. Using software jointly developed by TACC and Sun Microsystems, researchers can run applications remotely on Maverick and display results on their desktop machines. Paraview, a scientific visualization application developed for large datasets, was run remotely on Maverick to visualize this 130 GB data set provided by Douglas Dommermuth from the Naval Hydrodynamics Division at Science Applications International Corporation.

Feature Story

Crimson Grid Aids Campus Computing and Collaboration



Ocean surface temperature overlaid with surface current vectors as forecast for 16 August 2006.

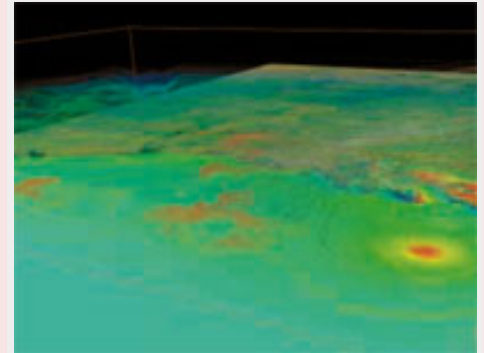
Image Courtesy Pierre Lermusiaux

Harvard University's campus grid is only two years old, but it's already supporting the research projects of 21 different faculty members in 21 different scientific disciplines. These researchers use the Crimson Grid to investigate voting patterns and earthquakes, simulate cancerous tumors and subatomic particles, and model ocean dynamics and acoustics.

"We were running in a distributed fashion before, but with fewer, older computers," says Pierre Lermusiaux, an oceanography researcher at Harvard. "We moved some of our ocean modeling to the Crimson Grid recently. We are not using the whole grid yet but we have already increased our performance by a factor of ten."

Lermusiaux and collaborators are using the Crimson Grid to aid their participation in two experiments studying ocean dynamics and acoustic propagation in the Monterey Bay region off the coast of California. The Adaptive Sampling and Prediction project explores the use of

SDSC to the Data Storage Rescue



Simulations predicting the approach of Katrina to New Orleans.

Image Credit W. Bengert and S. Venkataraman, CCT/LSU

When Hurricane Katrina struck the Gulf Coast it produced widespread devastation. At the same time it presented an unprecedented opportunity for researchers at Louisiana State University and regional partner institutions in an innovative coastal ocean program to better understand and predict future hurricanes by collecting observational data and running sophisticated simulations of storm surge and wave models for the crisis, building the project's collective knowledge base.

As they worked around the clock the Katrina data poured in. So much data, in fact, that eventually it threatened to overwhelm the team's onsite storage capacity at LSU. Even with backup tapes at LSU and online copies at Texas A&M University, the major practical difficulties of recovering the data meant that the researchers faced hard choices in creating space at LSU for new data—including the dismaying prospect of having to delete important data collected in the period leading up to the hurricane.

"We didn't want to throw away data we'd produced, but we were fast running out of onsite storage space," said Jon MacLaren, project manager for the SURA Coastal Ocean Observing and Prediction Program, known as "SCOOP."

[Read more...](#)

Link of the Week

EGEE'06 Call for Abstracts

The abstract submission deadline for the EGEE'06 conference is August 31. EGEE'06 will be held September 25-29 in Geneva, Switzerland. The conference will provide an opportunity for all applications to establish contacts with EGEE and with other user communities, to plan for the future usage of the EGEE grid infrastructure, to learn about the latest advances, and to discuss the future evolution of grid middleware.

[PDF Version for Printing](#)

[XML](#) [RSS Headlines](#)



Office of Science/
U.S. DOE

autonomous vehicles to optimally and adaptively sample ocean conditions, and uses the collected data to more accurately predict future conditions. As part of ASAP, the Harvard group, led by Allan Robinson, models and predicts ocean conditions such as temperature, salinity and currents. These predictions help direct where the autonomous vehicles should sample ocean conditions. Similar predictions are also carried out for the second project, the Persistent Littoral Undersea Surveillance Network, or PLUSNet, which is studying underwater acoustic surveillance.

[Full article](#)

Grids in the News

Computer grid aims to predict storm surge

Computerworld, August 11, 2006
By Patrick Thibodeau

Universities in the southeastern U.S. are building a computer grid designed to help scientists predict storm surges well in advance of an approaching hurricane to give government officials a better idea of when to order evacuations.

[Read More...](#)

Global Grid Exchange gets boost

Times West Virginian, August 10, 2006
By Katie Wilson

The West Virginia High Technology Consortium Foundation's Global Grid Exchange is getting a boost of power from Fairmont State University.

[Read More...](#)

PC users come to aid of scientists

Baltimore Sun, August 10, 2006
By Michael Stroh

By day, Martin Courtney pounds out reports for a government contractor. But at night, in his South Baltimore rowhouse, his job title is far more exotic: cosmic dust hunter.

[Read More...](#)

[Full article \(pdf\)](#)

This article, written by Lynne Friedmann, originally appeared in the Spring 2006 issue of SDSC's EnVision magazine.

Fighting Cancer using Grid Technologies



The [August issue](#) of the Globus Consortium Journal includes an interview with Robin Wilner, vice president of global community initiatives at IBM.

GCJ: Can you give our readers a brief history of the grid since its inception, and maybe what it's doing now?

Wilner: Sure. World Community Grid was launched in November 2004. IBM has a long history of investing in the communities where IBMers and our customers live and work. And one thing that we are always eager to bring to those communities is the special application of technology that really can make a difference to improve their lives. So while we do a lot to make businesses more productive and more efficient, we also want to make sure that people have an opportunity to see how our technology can improve our global communities.

World Community Grid is a wonderful opportunity to address a lot of the issues that concern people in terms of biomedical advances, environmental issues, basic bench research, and particularly the fields that, for whatever reason, are not attracting dollars in the market environment. For example, is there research that's not being funded by big pharmaceutical companies, that's not getting dollars from the standard sources? Or are there basic research issues that could potentially have a huge impact on humanity, but are too fundamental, too far away from immediate application to win funding from the marketplace? Are there environmental issues that just are not getting the attention they need?

[Full article](#)

