Summary of March & April 2008 Key Activities

During March and April 2008, RENCI@NCSU focused on a global climate change visualization project, produced an audio recording for an Electrical and Computer Engineering Department video production, continued its development of the RENCI 3D Slicer tool, and supported many NC State University groups as well as RENCI units in outreach activities. Both our Partners I Suite 1500 and Engineering Building II Room 1235 facilities are currently under heavy usage.

Atmospheric Model Visualization: supporting global climate change exploration

We continued our work with Dr. Gary Lackmann, Associate Professor in NCSU’s Department of Marine Earth and Atmospheric Sciences, (College of Physical and Mathematical Sciences) and his team to visualize large atmospheric model data sets that are executed on the RENCI IBM Blue Gene computer. From March 13 through April 8, this work was featured in a RENCI news story with the visualization work displayed on the front page of the renCI.org web site, see: (http://www.renci.org/news/perfect_storm.php). The NCSU Department of Computer Science also featured the story and included a Flash animation of the path of the hurricane, see: (http://www.csc.ncsu.edu/news/661).

Audio Recording Production for Electrical & Computer Engineering Researchers:

RENCI@NCSU provided audio recording and production support to Dr. Mo-Yen Chow and his students in their efforts to develop a new video production about their Advanced Diagnosis, Automation and Control Laboratory efforts. This video was shown as part of the April 12th NCSU College of Engineering Open House. Dr. Chow is a professor in the Department of Electrical and Computer Engineering (College of Engineering).
RENCI 3D Slicer: supporting a geotechnical visualization need

Our continued work with Dr. Matt Evans and his research team in the Department of Civil Engineering, (College of Engineering), resulted in enhancements to RENCI 3D Slicer so that the visualization tool now supports multiple types of numerically generated soil sample data sets and detailed image processing.

RENCI@NCSU Outreach Activities: Supporting NCSU & RENCI Activities

The RENCI@NCSU Partners I Suite 1500 facility hosted several high profile outreach activities in March and April 2008. These include:

(1) March 28, 2008 meeting of the NCSU College of Textiles Fashion and Textile Management Industry Advisory Board. This was requested by Dr. Nancy Cassill, Professor and Acting Dept. Head in the Department of Textile & Apparel Technology & Management, NCSU College of Textiles.

(2) March 18, 2008 RENCI Bistro session on the University of Southern California Shoah Foundation Institute Visual History Archive (VHA) that NC State University, Duke University and University of North Carolina at Chapel Hill faculty, staff and students can access via RENCI resources.

(3) April 18, 2008 tour for members of McKim & Creed P.A., a engineering, surveying, mapping and planning company located on NCSU Centennial Campus (http://www.mckimcreed.com), requested by Janet Jackson, Geographic Information Systems Manager at McKim & Creed.

(4) April 25, 2008 meeting of the Department of Textile & Apparel Technology & Management, NCSU College of Textiles with Dr. Carol Strohecker, Director of the Center for Design Innovation – (UNC inter-institutional research center). This was requested by Dr. Nancy Cassill, Professor and Acting Dept. Head in the Department of Textile & Apparel Technology & Management, NCSU College of Textiles.

(5) March 13, 2008 meeting of meteorologists involved with RENCI’s NC-First Project hosted by Jessica Proud of RENCI at the RENCI@NCSU Partners I Suite 1500 facility.

The RENCI@NCSU Engineering Building II Room 1235 facility hosted several outreach activities in conjunction with specific faculty and staff in the NCSU Department of Computer Science and Department of Electrical and Computer Engineering. These include:

(1) April 12, 2008 participation by RENCI@NCSU in the Department of Computer Science’s contribution to the NCSU College of Engineering Open House, (http://www.engr.ncsu.edu/openhouse/)
(2) March 28 and April 4, 2008 demonstrations of RENCI@NCSU visualization and access grid capabilities for parents of prospective students done in collaboration with Dr. Barbara Jasmine Adams, Director of Advising (Undergraduate) for NCSU Department of Computer Science.

(3) March 14, 2008 tour for Dr. Carol Strohecker, Director of the Center for Design Innovation – (UNC inter-institutional research center). This was requested by Dr. James Lester, Associate Professor of Computer Science, NCSU College of Engineering.

(3) March 29, 2008 tour for attendees of the NCSU Department of Computer Science hosted Symposium for Graduate Research (an event for graduate students in computer science to present their research). This was requested by Sarah Heckmann, General Chair of the Symposium and graduate student in the Department of Computer Science, NCSU College of Engineering, (http://www.csc.ncsu.edu/news/669).

(4) April 23, 2008 demonstration of RENCI@NCSU visualization and access grid capabilities for thirty-nine visiting high school students (3 separate tours) done in collaboration with Dr. Barbara Jasmine Adams, Director of Advising (Undergraduate) for NCSU Department of Computer Science.

Invited University of Virginia Presentation:

On April 9, 2008, as part of the University of Virginia’s Research Computing Lab / Scholar’s Lab Speaker Series, Theresa-Marie Rhyn gave a presentation on “Developing a Visualization Viewpoint” that described her personal journey in the field of visualization.

The RENCI@NCSU Team:

The RENCI@NCSU team is currently composed of Steve Chall, Senior Research Visualization Software Developer, and Theresa-Marie Rhyn, Director. On May 1, 2008, Sidharth Thakur will join the RENCI@NCSU team as a Senior Research Visualization Software Developer.