CMAS Quarterly

The Quarterly Newsletter of the Community Modeling and Analysis System

CMAS Moves to UNC-Chapel Hill

A part of the Environmental Modeling Center, formerly at MCNC in Research Triangle Park, NC, has joined the Carolina Environmental Program at The University of North Carolina at Chapel Hill. The group, now known as the Environmental Modeling for Policy Development group, will continue to oversee the CMAS.

"As host of the CMAS, The University of North Carolina at Chapel Hill will expedite the ability of CMAS to reach its goals toward building scientifi-cally sound environmental modeling and analysis tools that benefit the community at large," notes CMAS Outreach Coordinator Dr. Adel Hanna. "The university's extensive environmental research, education, and training programs will be a major asset to CMAS functions and users."

Models-3 User's Workshop Approaching

The second annual Models-3 User's Work-shop will take place October 27-29, 2003, at the Holiday Inn – RDU Airport in Research Triangle Park, NC. It will provide a forum for users to view the latest research results and to learn about the latest Models-3 applications and develop-ments.

The workshop's theme is "One Atmosphere, One Community, One Model-ing System: Models-3." Sessions will include discussions devoted to MIMS, MM5, CMAQ, and the SMOKE and EMS emissions models. Special emphasis will be on bridg-ing the gaps between Models-3 and other mod-els (e.g., CAMx, climate models), and between the regulatory and research communities.

Submissions for 15-20–minute presentations, posters, and booths are now being accepted. Early-bird registration for the workshop is $200. After September 9, the cost increases to $250.

Before and after the work-shop, attendees can take advantage of five training opportunities for using SMOKE, CMAQ, and MIMS (see sidebar).

For more information or to register for the conference and training classes, please visit the CMAS Workshop web site at www.cmascenter.org/ 2003_workshop/ announcement.htm.

How would you like to see your model data?

Would you like to...
- overlay interesting maps on your model data?
- plot other variables such as population density or emission sources in conjunction with your model data?
- analyze your data on a PC without using X-Windows?
- visualize your data over the Web interactively?
- animate over layers instead of time?

PAVE has served our community well for many years, but it is aging and there are some things it just can't do. The CMAS plans to gather a set of community requirements for a visualization tool that meets the needs of today's modelers. Please bring your thoughts on (and examples of) improved ways to view your data to this year's conference for discussion. You can also enter your ideas in the new CMAS bug tracking system at http://www.cmascenter.org/bugtrack.shtml (choose "enhancement" for the severity).

Model Applications: Intercontinental Transport

UNC's Carolina Environmental Program has extended CMAQ modeling applications to support EPA's efforts to assess the long-range transport of pollutants and impacts on regional climate.

The goal is to identify the role of anthropogenic emissions originating from main continents on remote locations across the oceans, and the contributions of important source categories (such as biomass burning, the utility sector, the transportation sector) and their pollutant emissions (for example, ozone and particulate matter precursors, black carbon, methane) to regional air quality and climate.

The intercontinental transport CMAQ modeling applications are conducted for trans-Pacific and trans-Atlantic domains. These applications include extensive modeling and sensitivity analyses using the year 2001 as the base year to identify potential impacts of intercontinental transport on regional air quality, particularly on ambient concentrations of ozone and particulate matter. These modeling applications also include linking CMAQ to global chemistry models to provide CMAQ with initial and boundary conditions for the intercontinental simulations.

Send your CMAQ application experiences to the CMAS Quarterly at cmas@unc.edu.

From the Help Desk

SMOKE Tip:

Standard SMOKE QA should involve checking SMOKE reports at each step in the modeling process. Compare Smkreport inventory import totals against unprocessed inventory summaries. Smkreport totals following spatial, temporal, and chemical allocation can then be compared back to the inventory import totals. Also check the vertical allocation step by creating SMOKE reports by layer, summing across the layers, and comparing back to the inventory import totals.

We're on the Web!

www.cmascenter.org

Conference information, user support, model downloads, and more!

CMAS Provides User Support via On-line Help Desk

The CMAS Help Desk services are free to the modeling community. Many of the help desk services benefit from increased usage, such as the Bulletin Board and listserv discussion groups. Email-based Models-3 technical consultation is available to registered CMAS participants only. In cases where an issue is impossible to resolve through email support, telephone support is available. To become a registered CMAS user, log on to either the CMAS email support site or the CMAS bug tracking system. To report problems with this site or to suggest additional features, please use the bug tracking system.

Software Supported by the CMAS

- CMAQ
- SMOKE
- I/O API
- PAVE
- MIMS
- MCIP

COMMUNITY MODELING AND ANALYSIS SYSTEM
Carolina Environmental Program
CB # 1105
The University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-1105