### MAY 2007

# **CMAS Quarterly**

The Quarterly Newsletter of the Community Modeling and Analysis System

#### Registration Is Open!

The 6<sup>th</sup> Annual CMAS Conference will be held October 1-3, 2007, at **UNC.** Please see the CMAS web site to obtain information and register for the conference.

#### **Upcoming Training Events**

(All are at UNC unless otherwise indicated)

#### **SMOKE Training:**

- July 23-25, 2007
- September 26-28, 2007

#### **CMAQ Training:**

- July 26-27, 2007
- October 4-5, 2007

Can't come to us for training? Have the same courses taught onsite at your location by the same experienced trainers. Visit http://www. cmascenter.org/training/ classes.cfm or e-mail cmas@unc.edu.



**Credits** 

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Please come visit us on the Web!

www.cmascenter.org

## **CMAS Establishes Visiting Scientist Program**

In response to numerous requests from U.S. and international scientists in the CMAS community, the CMAS Center has established a new visiting scientist program. The program is flexible regarding the timing of the visits and their durations (we recommend 2 to 4 weeks). Visiting scientists can receive a thorough, hands-on introduction to the air quality modeling system, including emissions, meteorology, and chemistry-transport models. They can also bring their own specific modeling application issues for consultation with CMAS scientists, and test modeling runs on CMAS computers. This visiting

scientist program complements the very popular CMAS classroom training program by focusing on the specific needs and applications of individuals. While it is designed primarily to address the community's needs, the program also benefits CMAS by enabling close interactions with a variety of the community's scientists; we gain valuable knowledge on the utilization of the modeling tools for specific applications and on their uses to support environmental decision making.

At this time, the CMAS visiting scientist program highlights the following topics:

- Meteorology modeling with MM5 or WRF
- Emissions processing with SMOKE
- · Air quality modeling with **CMAQ**
- Data analysis and model performance evaluation
- Atmospheric chemistry research

During April, two scientists from Mexico visited CMAS for two weeks at the campus of UNC at Chapel Hill. CMAS has also received requests and signed memoranda of agreement with universities in Brazil. South Korea, and Bulgaria to host scientists from those countries.

## 6<sup>th</sup> Annual CMAS Conference: October 1-3, 2007

Preparations are underway for the 6<sup>th</sup> Annual CMAS Conference, which will be hosted at the Friday Center of the University of North Carolina at Chapel Hill. This year, conference participants giving presentations in the "Sensitivity of Air Quality Models to Meteorological Inputs" session will be given the opportunity to submit a paper for a peer-reviewed journal issue on that topic. The publishing journal will be announced after CMAS completes ongoing negotiations with a number of

journals. This will be the third special issue sponsored by CMAS; previous issues were published by Atmospheric Environment (CMAS 2004) and Journal of Applied Meteorology (CMAS 2005). Also this year, we will have a special session on "Urban Database Development and Applications." Other conference sessions include:

- · Air Quality Model **Developments**
- Emissions Inventories, Modeling and Analyses
- Air Quality Forecasting

- · Model Evaluation and Analysis
- Integrated Modeling Systems for Environmental Decision Support
- Climate Variability/Air Quality

Please visit the CMAS web site (cmascenter.org) for information on conference registration and submission of papers. Note that presenter registrations must be received by June 2 to be considered for inclusion, and that early bird registration is available through September 4.

## Third CMAQ Peer Review Report and EPA Response Complete

CMAQ peer reviews provide important information used to guide priorities for model development in terms of improving the science and also supporting various application needs. CMAS and the U.S. EPA Office of Research and Development (ORD) have conducted and completed the third CMAQ peer review. The review panel consisted of seven scientists from the CMAS community. Convening for a three-day meeting in December 2006 at EPA in Research Triangle Park, NC, they discussed recent

developments in the CMAQ modeling system. CMAS worked with EPA and the reviewers to communicate and clarify issues during the review process.

The full peer review report and EPA's response to it are now posted on the CMAS Center web site (cmascenter.org). Overall the analysis of the reviewers was positive, and in EPA's response to the report there was general agreement with issues and suggestions raised by panel members.

### We Value Your Input

Through the CMAS web site, annual CMAS conferences, CMAS Quarterly newsletters, and trainings and workshops, CMAS provides opportunities for you as a member of the CMAS user community to interact with us and comment on your needs. One option is to fill in the survey form on the CMAS web site, which we use to collect information about the modeling community. The survey asks web site users to provide details about how they use the models, the types of educational opportunities that interest them, and any comments they may have regarding the models and/or services supported by CMAS. Another web site feature is the suggestion box, which acts as a catch-all for all types of comments submitted. In addition, we provide information about how to contact the CMAS Center through our quarterly newsletters. We also encourage you to submit articles to the quarterly newsletter that describe your research topics and findings (the articles will be reviewed by CMAS before publication). Please submit your articles to cmas@unc.edu.

## **Future CMAS Conference Locations: Do You Have a Preference? Please Let Us Know**

From 2002 through this vear, the annual CMAS conferences have been held in the Research Triangle area of North Carolina. This location has the benefit of being close to the CMAS Center at the University of North Carolina in Chapel Hill (the conference host), and also near the large number of EPA offices located in Research Triangle Park. Using this location has helped control the cost of the conference, and therefore the registration fee charged, thus allowing a larger number of people to attend. It also facilitates the logistics of conducting the SMOKE and CMAQ trainings held before and after the conferences.

CMAS is studying requests to hold some of the future annual conferences in locations other than North Carolina, as a way of reaching out to air quality communities in other states. We at CMAS would like your input to help us make this decision. In thinking about other possible locations, please consider issues such as

- How far are you willing to travel?
- Will the new location be advantageous for networking with a large number of air quality community members (as North Carolina is)?
- Will the benefits of the new location more than offset the increased

registration and training fees that would result from moving the conference away from the Research Triangle?

Please mail any suggested locations (including the advantages of your choice) to cmas@unc.edu. Also, please mail us if your organization would be willing to provide some resources toward hosting the conference (e.g., meeting rooms). The conference is three days long and has about 250 attendees: additional davs and facilities are required for (1) SMOKE and CMAQ training sessions and (2) the CMAS External Advisory Committee meeting held the day after the conference ends.

## CMAQ & SMOKE in Europe

The CMAQ and SMOKE modeling systems continue to be actively applied and developed in the United Kingdom and Europe. A workshop, organized by two U.K. consulting firms. was held last month in the U.K. to give the European science and user communities an opportunity to exchange information and discuss recent developments and applications of CMAQ, SMOKE, and associated meteorological and emissions processing models. The workshop also covered a number of topics in addition to development and application, including model evaluation, model-to-model intercomparison, and policy implications.