

DECEMBER
2009

CMAS Quarterly

The Quarterly Newsletter of the Community Modeling and Analysis System

Upcoming Events

(All are at UNC unless otherwise indicated)

SMOKE Training:

- January 25-27, 2010
- April 26-28, 2010

CMAQ Training:

- January 28-29, 2010
- April 29-30, 2010

BenMAP Training:

- April 21-23, 2010

Please note that the Satellite/AQ Training that was tentatively planned for February has been postponed until sometime in the fall of 2010.

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



Credits

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Around the 8th Annual CMAS Conference

On October 19-21, 2009, CMAS hosted its 8th annual conference in the Friday Center of the University of North Carolina at Chapel Hill. About 250 participants attended the conference, with 133 papers being presented (poster and oral presentations). Attendees included 50 participants from 18 foreign countries.

Following the close of the first day, CMAS Application and Training Coordinator Zac Adelman organized a model developers working evening. Participants discussed their views on many topics, including the performance of various models and analysis tools, communication, training, and future developments. Minutes from this meeting are posted on the CMAS Wiki site. The main page of www.cmascenter.org has an announcement with a link to the Wiki, which is located at <http://cmas.wikidot.com>. From the Wiki's main page, you can link to an article about the ad hoc developers group, which contains a link to minutes from the 2009 meeting. We encourage all community members to register at the Wiki site and use it as a way to communicate with CMAS and to follow the activities of community members.

Following the conference, CMAS Director Adel Hanna met with the CMAS Exter-

nal Advisory Committee (EAC) members. They discussed the status of the Center as well as possible ways to enhance communication with EPA. Dr. Rohit Mathur of EPA was invited to attend part of the meeting and to answer questions from EAC members. A good part of the meeting was devoted to discussing ways to improve communication between the CMAS community and the EPA model development team, especially on issues related to modularity and to the prioritization process for model development efforts. The CMAS Center will continue to explore potential avenues to improve communication.

As an extension of this year's CMAS conference, CMAS hosted a two-day U.S.-U.K. workshop on air quality (October 22-23). The objective of the workshop was to exchange information and ideas on

potential areas of collaboration. Topics included overviews of research activities, model evaluation, exposure assessment, fine-scale modeling, source apportionment, atmospheric chemical mechanisms, climate change, and ecosystem impacts. The workshop was attended by five U.K. and about twenty EPA/CMAS personnel.

As CMAS does each year, various training sessions were conducted immediately before and after the conference. Having the conference and trainings back to back especially benefits conference attendees who travel from remote places and may not be able to travel to North Carolina at a different time to receive training. Training sessions on four topics were conducted in October: SMOKE, CMAQ, BenMAP, and (new this year) the use of satellite data in air quality modeling.

Nominations for CMAS Visiting Scientist Program

CMAS is planning to host two Visiting Scientists at the CMAS Center in Chapel Hill, NC, during the summer of 2010. If your organization would like to nominate someone for one or both of these appointments, please contact Adel Hanna, Director of CMAS (ahanna@unc.edu). Fine-scale modeling and human exposure are the two intended topics for the 2010 summer program, although other topics are possible.

Please come visit
us on the Web!

www.cmascenter.org

CMAS Conference Publications

CMAS and EPA have negotiated the publication of a special issue of the international journal *Atmospheric Pollution Research* to present peer-reviewed articles based on the 8th Annual CMAS Conference that was held in October. *Atmospheric Pollution Research (APR)* is a new, open-access, online journal that will be published quarterly beginning in January 2010.

This journal focuses on air pollution and atmospheric processes. The topic of the special issue is "Air Quality Modeling and Analysis." The tentative deadline for manuscript submission to *APR* is March 31, 2010. We expect the publication of the special issue, following peer reviews, by the end of 2010. You can visit the *APR* web site at <http://www.atmospolres.com>

to learn more about the journal and to get information on preparing and submitting papers. If you have questions, please contact Adel Hanna (ahanna@unc.edu).

This special issue continues the CMAS tradition of encouraging peer-reviewed publication of its conference papers, to enable wider distribution of important concepts and scientific methodologies to the air quality modeling and analysis community at large. In 2006, the journal *Atmospheric Environment* published a special issue titled "Model Evaluation: Evaluation of Urban and Regional Eulerian Air Quality Models" that was based on the 2004 CMAS annual conference. Papers from the 2005 conference's session on meteorological modeling for air quality

Training of Scientists from China

Seven scientists from Jinan Environmental Protection Bureau and Jinan Environmental Protection Monitoring Station are visiting CMAS for three weeks of training on WRF, SMOKE, and CMAQ. The standard training sessions of two to three days were expanded to a full week to cover more air quality modeling theory as well as examples of applications in areas outside the U.S. Our Chinese peers also visited the U.S. EPA.



modeling were published in *Journal of Applied Meteorology* (2007). Early this year, the journal *Environmental Fluid Mechanics* published a special issue

on "Physics-Chemistry Interactions in the Atmosphere" that included articles based on presentations during the 2007 conference.

CMAS Web Functions and Connections: Easy Information Access

In addition to being the main web portal to the CMAS Center, <http://www.cmascenter.org> contains links to other sites (see table) that provide access to various components of

the supported modeling systems, data acquisition and analysis tools, and user support.

We regularly update these web sites with new infor-

mation, including model releases, documentation, training schedules, and conference announcements. While each product-specific site contains information only on that prod-

uct, the main CMAS web site posts information about all of the supported products. During the past six months, for example, <http://www.cmascenter.org> was updated with releases of VERDI 1.1 (June 2009), SMOKE 2.6 (October '09), and VERDI 1.2 (December '09). The CMAS web site also provides useful statistics on the number of model and analysis tool downloads. Further, the web site provides links to other modeling systems of interest to community members, such as CAMx, AERMOD, and CALPUFF.

Web sites hosted by the CMAS Center

URL	Description/Purpose
http://www.cmascenter.org	Central web portal to the CMAS Center
http://www.cmaq-model.org	Air quality modeling
http://www.smoke-model.org	Emissions processing
http://www.benmap-model.org	Economic and health impact modeling
http://www.verdi-tool.org	Visualization and graphics
http://bugz.unc.edu	Email-based technical support
http://www.cmascenter.org/irods	Model output data distribution
http://cmas.wikidot.com	CMAS Wiki site