Maryland meeting advances AQAST mission

By Sarah Witman and Tracey Holloway
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NASA Air Quality Applied Sciences Team (AQAST) celebrates the completion of its fifth biannual meeting, AQAST5, which took place last week, June 4-6, at the University of Maryland.

AQAST’s mission is to promote the use of Earth Science data and tools for serving the needs of U.S. air quality management. Each meeting is aimed at bringing together team members, air quality managers, and research and applications partners. AQAST5 attracted over 100 attendees, including representatives from a number of air quality agencies from local to national. AQAST Leader Daniel Jacob from Harvard University said about the meeting, “It was a great success – air quality managers are increasingly looking to AQAST as a resource to address the complex and rapidly evolving issues that they face, and we are responding to this need.”

The first day of the meeting, June 4, consisted of presentations by AQAST members covering the range of activities done by the team. Highlights included Brad Pierce from NOAA explaining how he worked with the Wyoming Department of Environmental Quality to use satellite and aircraft ozone data for an exceptional event demonstration in June 2012, Yang Liu from Emory University reporting on satellite detection of human-caused fires in the southeast U.S., and Bryan Duncan from NASA showing reductions in power plant NOx emissions as observed by satellite from 2005-2011.

On the second day of the meeting, the focus shifted to presentations by air quality managers, helping to inform AQAST members and other participants about pressing policy issues where advanced data sources could contribute. Terry Keating from the EPA’s Office of Air and Radiation gave a presentation on the use of satellite observations in air quality management, and regulatory modeling issues. NOAA National Weather Service’s Ivanka Stajner spoke on national air quality forecast capability, which air quality managers noted was high-value to their organizations. From the Maryland Department of the Environment (MDE), Tad Aburn and Jennifer Haines discussed issues facing the state of Maryland, and highlighted the high value of collaborations between the University of Maryland AQAST members and MDE in tackling the science behind air pollution control. Other regional speakers included Susan Wierman from Mid-Atlantic Regional Air Management Association...
(MARAMA), Ellen Burkhard from the New York State Energy Research and Development Authority (NYSERDA) and Paul Miller from the Northeast States for Coordinated Air Use Management (NESCAUM). All speakers addressed the role science could play in better constraining emissions and transport processes contributing to air quality exceedances.

Deputy AQAST Leader Tracey Holloway presented results from a survey sent out to the air quality community. The survey, distributed via the AQAST newsletter mailing list, Twitter, and professional networks, garnered 72 responses, 62 of which were from air quality management agencies at the national, regional, state and local scale.

Holloway described this high response rate as “remarkable.” The survey brought new voices into the decision-making process for AQAST research design and project funding. The data and comments gleaned from the survey will be fundamental in shaping the next steps for the 2013 “Tiger Team” funding process.

AQAST is a NASA-funded team of atmospheric scientists focused on serving air quality management needs through the use of Earth Science data and tools. AQAST conducts a wide range of projects in partnership with air quality agencies at the local, state, regional, and national levels. It has the flexibility to continually take on new projects based on input from the air quality management community.

The next AQAST meeting, AQAST6, will be held at the University of Texas-Austin in January 2014.

All presentations from the meeting in Maryland may be found at http://acmg.seas.harvard.edu/aqast/meetings/2013_jun/program.html.