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Atmospheric Aerosol Properties and Climate Impacts

Synthesis and Assessment Product 2.3
Report by the U.S. Climate Change Science Program
and the Subcommittee on Global Change Research

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January 2009,

Members of Congress:

On behalf of the National Science and Technology Council, the U.S. Climate Change Science Program (CCSP) is pleased to transmit to the President and the Congress this Synthesis and Assessment Product (SAP) *Atmospheric Aerosol Properties and Climate Impacts*. This is part of a series of 21 SAPs produced by the CCSP aimed at providing current assessments of climate change science to inform public debate, policy, and operational decisions. These reports are also intended to help the CCSP develop future program research priorities.

The CCSP's guiding vision is to provide the Nation and the global community with the science-based knowledge needed to manage the risks and capture the opportunities associated with climate and related environmental changes. The SAPs are important steps toward achieving that vision and help to translate the CCSP's extensive observational and research database into informational tools that directly address key questions being asked of the research community.

This SAP reviews current knowledge about global distributions and properties of atmospheric aerosols, as they relate to aerosol impacts on climate. It was developed in accordance with the Guidelines for Producing CCSP SAPs, the Information Quality Act (Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554)), and the guidelines issued by the National Aeronautics and Space Administration pursuant to Section 515.

We commend the report's authors for both the thorough nature of their work and their adherence to an inclusive review process.

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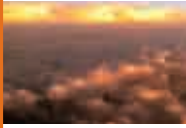
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ACKNOWLEDGMENTS

First, the authors wish to acknowledge the late Yoram J. Kaufman both for his inspiration and contributions to aerosol-climate science throughout his career and for his early leadership of the activity that produced this document. His untimely passing left it to the remaining authors to complete this report. Yoram and his contributions to our community are greatly missed.

This Climate Change Science Program Synthesis and Assessment Product (CCSP SAP) 2.3 has been reviewed by a group of experts, the public, and Federal Agencies. The purpose of these independent reviews was to assure the quality of this product.

We wish to thank the following individuals for their expert review of this report: Sundar Christopher (University of Alabama Huntsville), Daniel Jacob (Harvard University), Steven Ghan (Pacific Northwest National Laboratory), John Ogren (NOAA Earth System Research Laboratory), and Susan Solomon (NOAA Earth System Research Laboratory).

We also wish to thank the following individuals/group for their public/federal agency review of this report: Joel D. Scheraga (EPA), Samuel P. Williamson (NOAA/OFCM), Alan Carlin, David L. Hagen, Douglas Hoyt, Forrest M. Mims III (Geronimo Creek observatory), John Pittman, Nathan Taylor (Texas A&M University), Werner Weber (Technische University Dortmund, Germany), and the NOAA Research Council.

The work by Bates et al. (2006), Penner et al. (2006), Yu et al. (2006), Textor et al. (2006), Kinne et al. (2006), Schulz et al. (2006), and the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (2007) provided important groundwork for the material in Chapter 2 and Chapter 3.

RECOMMENDED CITATIONS

For the Report as a Whole:

CCSP 2009: *Atmospheric Aerosol Properties and Climate Impacts*, A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Mian Chin, Ralph A. Kahn, and Stephen E. Schwartz (eds.)]. National Aeronautics and Space Administration, Washington, D.C., USA, 128 pp.

For the Executive Summary:

Remer, L. A., M. Chin, P. DeCola, G. Feingold, R. Halthore, R. A. Kahn, P. K. Quinn, D. Rind, S. E. Schwartz, D. Streets, and H. Yu, 2009: Executive Summary, in *Atmospheric Aerosol Properties and Climate Impacts*, A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Mian Chin, Ralph A. Kahn, and Stephen E. Schwartz (eds.)]. National Aeronautics and Space Administration, Washington, D.C., USA.

For Chapter 1:

Kahn, R. A., H. Yu, S. E. Schwartz, M. Chin, G. Feingold, L. A. Remer, D. Rind, R. Halthore, and P. DeCola, 2009: Introduction, in *Atmospheric Aerosol Properties and Climate Impacts*, A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Mian Chin, Ralph A. Kahn, and Stephen E. Schwartz (eds.)]. National Aeronautics and Space Administration, Washington, D.C., USA.

For Chapter 2:

Yu, H., P. K. Quinn, G. Feingold, L. A. Remer, R. A. Kahn, M. Chin, and S. E. Schwartz, 2009: Remote Sensing and *In Situ* Measurements of Aerosol Properties, Burdens, and Radiative Forcing, in *Atmospheric Aerosol Properties and Climate Impacts*, A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Mian Chin, Ralph A. Kahn, and Stephen E. Schwartz (eds.)]. National Aeronautics and Space Administration, Washington, D.C., USA.

For Chapter 3:

Rind, D., M. Chin, G. Feingold, D. Streets, R. A. Kahn, S. E. Schwartz, and H. Yu, 2009: Modeling the Effects of Aerosols on Climate, in *Atmospheric Aerosol Properties and Climate Impacts*, A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Mian Chin, Ralph A. Kahn, and Stephen E. Schwartz (eds.)]. National Aeronautics and Space Administration, Washington, D.C., USA.

For Chapter 4:

Rind, D., R. A. Kahn, M. Chin, S. E. Schwartz, L. A. Remer, G. Feingold, H. Yu, P. K. Quinn, and R. Halthore, 2009: The Way Forward, in *Atmospheric Aerosol Properties and Climate Impacts*, A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Mian Chin, Ralph A. Kahn, and Stephen E. Schwartz (eds.)]. National Aeronautics and Space Administration, Washington, D.C., USA.



Earth observed from space. Much of the information contained in this image came from the MODIS instrument on the NASA Terra satellite. This 2002 “Blue Marble” features land surfaces, clouds, topography, and city lights. Credit: NASA (image processed by Robert Simmon and Reto Stöckli).