



Climate Models

An Assessment of Strengths and Limitations

U.S. Climate Change Science Program
Synthesis and Assessment Product 3.1

July 2008

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Report by the U.S. Climate Change Science Program
and the Subcommittee on Global Change Research

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Eight members of the Climate Change Science Program Product Development Advisory Committee (CPDAC) wrote this Climate Change Science Program Synthesis and Assessment Product at the request of the Department of Energy.

The entire CPDAC has accepted the contents of the product. Recommendations made in this report regarding programmatic and organizational changes, and the adequacy of current budgets, reflect the judgment of the report's authors and the CPDAC and are not necessarily the views of the U.S. Government.

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July 2008

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), *Climate Models: An Assessment of Strengths and Limitations*. 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 assesses the strengths and limitations of climate models. It was developed with broad scientific input and in accordance with the Guidelines for Producing CCSP SAPs, the Federal Advisory Committee Act, 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 Department of Energy 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.

Sincerely,

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This report has been peer reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The expert review and selection of reviewers followed the OMB’s Information Quality Bulletin for Peer Review. The purpose of this independent review is to provide candid and critical comments that will assist the Climate Change Science Program in making this published report as sound as possible and to ensure that the report meets institutional standards. The peer-review comments, draft manuscript, and response to the peer-review comments are publicly available at: www.climatescience.gov/Library/sap/sap3-1/default.php.

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- NSF: Marta Cehelsky

The public review comments, draft manuscript, and response to the public comments are publicly available at: www.climatescience.gov/Library/sap/sap3-1/default.php

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