

U.S. DEPARTMENT OF COMMERCE/ National Oceanic and Atmospheric Administration

OFCM



OFFICE OF THE FEDERAL COORDINATOR FOR  
METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

**PROCEEDINGS  
OF THE  
WORKSHOP  
ON MULTISCALE  
ATMOSPHERIC DISPERSION  
MODELING WITHIN THE  
FEDERAL COMMUNITY**

**June 6-8, 2000  
Town Center Hotel  
Silver Spring, Maryland**

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PROCEEDINGS  
OF THE  
WORKSHOP ON MULTISCALE ATMOSPHERIC DISPERSION MODELING  
WITHIN THE FEDERAL COMMUNITY

JUNE 6-8, 2000

TOWN CENTER HOTEL  
SILVER SPRING, MARYLAND

Washington, DC  
August 2000

## FOREWORD

The Workshop on Multiscale Atmospheric Dispersion Modeling within the Federal Community, sponsored by the Office of the Federal Coordinator for Meteorology, was held on June 6-8, 2000, at the Town Center Hotel, Silver Spring, Maryland. The workshop was attended by over fifty participants who represented nine federal agencies involved in dispersion modeling. The requirements for dispersion modeling within the federal government are derived from various agency missions including emergency response, national security, public health, and transportation safety that respond to events with both natural and human causes. Such events as volcanic ash, chemical, biological and nuclear releases, pollution, and smoke from forest fires, to name a few, represent potential threats to the health and well being of the population and are of concern to both emergency managers and government officials. These concerns were exemplified by the recent train derailment near Eunice, Louisiana, that involved a variety of chemicals and caused the evacuation of residents surrounding the accident scene.

The goal of the workshop was to bring users and developers of dispersion models together to improve the coordination in the development and operational use of dispersion models. The objectives of the workshop were to state requirements and capabilities; describe methods for the validation, verification, and approval of models; address technical barriers to model development; begin a process to establish subsets of models for specific applications; and to identify opportunities for leveraging model development. This workshop provided an opportunity to assess the current state of dispersion modeling and to identify barriers that need to be overcome in order to meet the wide range of requirements.

This document summarizes the requirements and capabilities for dispersion modeling, presents the results of the sessions on technical barriers, model subsets, model verification and presents the next steps needed to maintain the momentum toward improved dispersion modeling.

In conclusion, I would like to express my appreciation to the agency participants whose presentations and involvement contributed to a successful workshop. I would also like to thank the OFCM staff and the members of the Joint Action Group for Atmospheric Transport and Diffusion (JAG/ATD) for their support and active involvement in the workshop.

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Federal Coordinator for Meteorological Services  
and Supporting Research

PROCEEDINGS

of the

Workshop on Multiscale Atmospheric Dispersion Modeling  
Within the Federal Community

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