2013 Special Office of the Federal Coordinator for Meteorology Session
George Mason University 17th Atmospheric Transport and Dispersion Conference
Progress in Governmental Atmospheric Transport and Dispersion Modeling and Response

AGENDA

DAY 1 - Tuesday, June 25, 2013

1:30 PM *(1:30 PM - 4:30 PM)*

Session Chair: Mr. Mark W. Miller (NOAA/NOS)

Session: Progress in Governmental Atmospheric Transport and Dispersion Modeling and Response

1:30 PM	Introduction	*Mark W. Miller* (NOAA/NOS)
1:40 PM	Operational Predictions of Atmospheric Dispersion at National Oceanic and Atmospheric Administration (NOAA)	*I. Stajner* (NOAA/NWS)
2:00 PM	CAMEO-ALOHA	*Mark W. Miller* (NOAA/NOS)
2:20 PM	NOAA Meteorological Models	*G. DiMego* (NOAA/NWS/NCEP)
2:40 PM	National Atmospheric Release Advisory Center ATD Modeling and Response	*G.Sugiyama* (DOE/LLNL)
3:00 PM	Interagency Modeling & Atmospheric Assessment Center	*B. Chacko* (DHS/IMAAC)
3:20 PM	Defense Threat Reduction Agency (DTRA)	*A. Grose* (DoD/DTRA)
3:40 PM	Coffee Break	

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Abstracts

Operational Predictions of Atmospheric Dispersion at National Oceanic and Atmospheric Administration (NOAA)

Ivanka Stajner[1]
(ivanka.stajner@noaa.gov)

[1]NOAA/National Weather Service

NOAA's National Weather Service produces routine operational dispersion predictions of smoke from wildfires and dust from dust storms, which are available at http://airquality.weather.gov/. In addition, predictions of dispersion of volcanic ash, radiologic contamination and chemical releases are generated for incident support. An overview of progress and status of operational predictions of atmospheric dispersion at NOAA will be provided.

CAMEO-ALOHA Dispersion Model

Mark W. Miller[1]
(mark.w.miller@noaa.gov)

[1]NOAA/NOS

Provide an overview of NOAA's Areal Locations of Hazardous Atmospheres (ALOHA) dispersion model project. Describe the latest version of the program, new development underway, challenges and future goals.

Advances in NOAA Mesoscale Meteorological Models

Geoff DiMego[1]
(Geoff.dimego@noaa.gov)

[1]NOAA/National Weather Service/NCEP

The mesoscale modeling components of the NCEP Production Suite will be described. These include the North American Mesoscale (NAM), Rapid Refresh (RAP), High Resolution Window, Short Range Ensemble Forecasting (SREF) and Real-Time Mesoscale Analysis (RTMA). Future plans (to ~2018) will be discussed for these systems and the future systems they evolve into as enabled by the new computing capabilities afforded by the Weather and Climate Operational Supercomputing System (WCOSS).

National Atmospheric Release Advisory Center ATD Modeling and Response

Gayle Sugiyama[1]
(Sugiyama1@llnl.gov)

[1]DOE/LLNL

As part of the "Progress in Governmental Atmospheric Transport and Dispersion Modeling and Response Panel", the speaker will provide an overview of the Department of Energy's National Atmospheric Release Advisory Center (NARAC) focused on status, recent and on-going developments, challenges, and goals.

Interagency Modeling & Atmospheric Assessment Center (IMAAC)

Betsie Chacko[1]
(betsie.chacko@hq.dhs.gov)

[1]DHS/ Science and Technology Directorate

In 2004, the Interagency Modeling and Atmospheric Assessment Center (IMAAC) was created by the Homeland Security Council is to provide a single point for the coordination and dissemination of Federal dispersion modeling and hazard prediction products that represent the Federal position during an actual or potential incident. Led by Department of Homeland Security (DHS), the IMAAC is a partnership of eight Federal agencies, each with supporting capabilities and/or responsibilities for plume modeling. These agencies include: DHS, Department of Energy, Department of Defense, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, Environmental Protection Agency, Nuclear Regulatory Commission, and the Department of Health and Human Services. This briefing will focus on how the IMAAC coordinates atmospheric modeling between these eight federal agencies to provide the one federal voice.

Defense Threat Reduction Agency Modeling Capabilities

Andy Grose
(Andy.Grose@dtra.mil)

DOD/ Defense Threat Reduction Agency

Dr. Grose earned a Bachelor's Degree in meteorology from the University of North Dakota in 1996, and earned his Masters and Ph.D. in meteorology from Florida State University concluding in 2004. Andy began working as a contractor for DTRA's newly formed Technical Reachback team in 2003, serving as the meteorologist on an 8-person team consisting of numerous scientific specialties. The Technical Reachback team went 24/7 in 2004, and has since grown to a team of more than 30 scientists supporting an ever-growing number of DoD and Interagency customers. Andy joined DTRA as a civilian in 2007 and now serves as the Contracting Officer's Representative for the Technical Reachback contract. He has served as a DTRA representative to the IMAAC Working Group since 2007.

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Biographies

Mark W. Miller

NOAA National Ocean Survey

Mark is part of NOAA's Emergency Response Division which provides science support to the US Coast Guard during oil and chemical spills. He began his NOAA career in 1988, the year prior to the Exxon Valdez oil spill, which until recently had been the largest oil spill in United States history. That was eclipsed by BP's Deep Water Horizon spill in the Gulf of Mexico. Mark spent most of the spill at Coast Guard Headquarters in Washington, DC supporting the National Incident Commander, ADM Allen. Prior to NOAA Mark spent nine year in nuclear power working for General Electric as a Start-up Engineer and the US Navy on a nuclear powered aircraft carrier. He has a degree in Environmental Engineering from Northwestern University.

Ivanka Stajner

NOAA National Weather Service

Dr. Ivanka Stajner is the Manager for the National Air Quality Forecast Capability at NOAA's National Weather Service in Silver Spring, Maryland. Prior to her work on air quality prediction at NOAA and at Noblis, Dr. Stajner was a lead scientist at Sciences Applications International Corporation (SAIC) in Beltsville, Maryland. While at SAIC, Dr. Stajner led the efforts to combine satellite observations of ozone with global atmospheric models at NASA's Goddard Space Flight Center in Greenbelt, Maryland. Using data assimilation techniques she studied atmospheric composition, with a focus on stratospheric and tropospheric ozone. Dr. Stajner earned her Ph.D. and M.S. degrees in mathematics from University of Illinois in Urbana-Champaign, and her B.S. degree in mathematics from the University of Zagreb in Croatia. She is an Associate Editor for the Journal of Geophysical Research-Atmospheres.

Geoff DiMego

NOAA National Weather Service/NCEP

Geoff got his PhD from SUNY-Albany in 1978 and signed on with NMC (now known as NCEP) as a post-doc. He soon became a civil servant and has never left. His early work was with observations for FGGE and data assimilation for the NGM. Since 1993, he has been the chief of the Mesoscale Modeling Branch and in that role he has had a hand in every major implementation since, including Eta model, 3D-Var, North American Regional Reanalysis, WRF, HiResWindow, Short Range Ensemble Forecasting system, Real-Time Mesoscale Analysis, Fire Weather, and Air Quality. He is a fellow of the AMS, received the NOAA Administrators Award, and 5 Dept. of Commerce medals: 3 bronze, a silver & a gold.

Andy Grose

DoD/Defense Threat Reduction Agency

Dr. Grose earned a Bachelor's Degree in meteorology from the University of North Dakota in 1996, and earned his Masters and Ph.D. in meteorology from Florida State University concluding in 2004. Andy began working as a contractor for DTRA's newly formed Technical Reachback team in 2003, serving as the meteorologist on an 8-person team consisting of numerous scientific specialties. The Technical Reachback team went 24/7 in 2004, and has since grown to a team of more than 30 scientists supporting an ever-growing number of DoD and Interagency customers. Andy joined DTRA as a civilian in 2007 and now serves as the Contracting Officer's Representative for the Technical Reachback contract. He has served as a DTRA representative to the IMAAC Working Group since 2007.