

NOAA'S NATIONAL WEATHER SERVICE TRANSITIONS SMOKE FORECAST TOOL INTO OPERATIONS

Expanding its suite of air quality forecast guidance, NOAA's National Weather Service has deployed its Smoke Forecast Tool into operations, following successful experimental testing over the last ten months. The Smoke Forecast Tool leverages capabilities both within and outside NOAA to forecast smoke concentrations in the air we breathe.

"Emissions from large fires are a significant source of fine particle pollution. This type of pollution is responsible for an estimated 50,000 premature deaths each year," said retired Air Force Brig. Gen. David L. Johnson, director of NOAA's National Weather Service. "Smoke forecast guidance will help air quality forecasters and the public to take steps to limit their exposure to airborne particulate matter."

The Smoke Forecast Tool integrates NOAA's Satellite, Data, and Information Service's satellite information on the location of wildfires with NOAA/NWS weather inputs from the North American Mesoscale model and smoke dispersion simulations from NOAA's Office of Oceanic and Atmospheric Research HYSPLIT model to produce a 48-hour prediction of smoke transport and concentration, updated daily. The model also incorporates U.S. Forest Service estimates for wildfire smoke emissions based on vegetation cover.

"The implementation of the Smoke Forecast Tool as an operational product expands the National Weather Service vision for an end-to-end national air quality forecast capability," said Paula Davidson, National Weather Service manager for air quality forecasting. "Our goal is to provide the United States with ozone, particulate matter and other pollutant forecasts with enough accuracy and advance notice to allow people to take action to prevent or reduce adverse effects. The introduction of the Smoke Forecast Tool is the first step toward achieving this goal for particulates."

NOAA's National Weather Service currently provides next-day forecast guidance for ozone throughout the eastern United States, with experimental predictions covering the lower forty-eight states.

The Smoke Forecast Tool was built and tested by a NOAA team that included efforts from NOAA's Office of Oceanic and Atmospheric Research, NOAA's Satellite, Data and Information Service, and NOAA's National Weather Service. NOAA partners at the U.S. Forest Service provide wildfire emissions information and the Environmental Protection Agency coordinates with state and local air quality forecasters.

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On the Web:

National Oceanic and Atmospheric Administration: <http://www.noaa.gov> NOAA Air Quality Guidance: <http://www.weather.gov/aq/>