

Technical Announcement

U. S. Department of the Interior
Bureau of Ocean Energy Management
Gulf of Mexico OCS Region

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Evaluation of NASA Aura's Data Products for Use in Air Quality Studies over the Gulf of Mexico

OCS Study BOEMRE 2010-051

The Bureau of Ocean Energy Management (BOEM), Gulf of Mexico OCS Region, announces the availability of a new study report, *Evaluation of NASA Aura's Data Products for Use in Air Quality Studies over the Gulf of Mexico*.

The focus of the study was to assess the viability of using satellite data to reduce significant sources of uncertainty in both transport and transformation in air quality model predictions and to evaluate the effects on air quality model performance. Reducing these uncertainties is of special interest to the BOEM mission in the Gulf of Mexico (GOM) region as they impact the accuracy of analyses for OCS air quality impacts to onshore areas. The main uncertainty addressed was the inaccurate specification of ozone background concentrations over Gulf waters. The NASA Aura satellite OMI ozone profiles, together with MODIS aerosol products were used to improve the representation of the chemical atmosphere in the MM5/CMAQ air quality modeling system. Retrospective CMAQ air quality model simulations were performed for August 2006 and the results were evaluated against observed surface ozonesonde and satellite data.

This report is available only in compact disc format from the Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, at a charge of \$15.00, by referencing OCS Study BOEMRE 2010-051. The report may be downloaded from the BOEM website through the [Environmental Studies Program Information System \(ESPIS\)](#). You will be able to obtain this report also from the National Technical Information Service in the near future. Here are the addresses. You may also inspect copies at selected Federal Depository Libraries.

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