



U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

Technical Announcement

August 2002

Contact: Barney Congdon
(504) 736-2595

Caryl Fagot
(504) 736-2590

Debra Winbush
(504) 736-2597

**Observation of the Atmospheric Boundary Layer Study
in the Western and Central Gulf of Mexico**

OCS Study MMS 2002-028

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, *Observation of the Atmospheric Boundary Layer Study in the Western and Central Gulf of Mexico*. This report presents the field observations of upper air wind and temperature, surface wind, surface temperature, surface relative humidity, surface pressure, and sea surface temperature, which were collected at two offshore platform sites at Vermillion and South Marsh Island for a continuous 40-month period from 1998 to 2002. The purpose of this study was to obtain field data describing the vertical structure of the marine boundary layer over the Western and Central Gulf of Mexico for meteorological and air pollution applications.

Two sites at Vermillion and South Marsh Island were selected for this study. One is located at a shallow-water location to collect data that will help measure how the marine boundary layer is affected by the land/sea breeze mechanism, and the other is at a deepwater location to collect data that will help measure how the marine boundary layer is affected by interaction between advecting air masses and colder waters in the Gulf of Mexico. The collected database provides the type of direct atmospheric measurements needed to define better the vertical structure of the marine boundary layer in order to reduce uncertainties in environmental assessments.

Meteorological measurement equipment includes a 915-MHz pulsed-Doppler radar profiler at each site to collect upper air wind and virtual temperature data, and a suite of standard in-situ sensors to collect surface (platform level) wind, temperature, relative humidity, pressure, and sea surface temperature data.

You can obtain copies of the report from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$10.00 by referencing OCS Study MMS 2002-028. 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.

Minerals Management Service
Gulf of Mexico OCS Region
Public Information Office (MS 5034)
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394
Telephone requests may be placed at
(504) 736-2519 or 1-800-200-GULF
or FAX: (504) 736-2620

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161
(703) 487-4650 or FAX: (703) 321-8547
Rush Orders: 1-800-336-4700

MMS is the federal agency in the U.S. Department of the Interior that manages the nation's oil, natural gas and other mineral resources on the outer continental shelf in federal offshore waters. The agency also collects, accounts for and disburses mineral revenues from federal and Indian leases. These revenues totaled nearly \$10 billion in 2001 and more than \$120 billion since the agency was created in 1982. Annually, nearly \$1 billion from those revenues go into the Land and Water Conservation Fund for the acquisition and development of state and federal park and recreation lands.

-MMS-GOM-

MMS's Website Address: <http://www.mms.gov>

[Return to Technical Announcements](#)