

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

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Dynamic Height and Seawater Transport across the Texas-Louisiana Shelf Break

OCS Study MMS 2000-045

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, *Dynamic Height and Seawater Transport across the Texas-Louisiana Shelf Break*.

This study employs dynamic modal techniques to temperature, salinity, and current data from the Louisiana-Texas (LATEX) continental shelf break collected during the MMS-funded LATEX-A program. The water level over the shelf break varies, with minimum in February-March and maximum in October-November. The amplitude of this cycle is about 6 to 7 cm. Geostrophic water transport also shows a seasonal cycle. Offshore transport is strong in the upper 70 meters during winter east of 95°W longitude. In the summer, onshore transport develops first in deeper waters, penetrating higher in the water column until eventually the direction of transport is onshore from surface to seafloor. This strong offshore flow during November is consistent with the low freshwater volume on the shelf noted by other people. Because this continental shelf continues far beyond the Mexican border, investigators in the future may find it productive to examine the possibility that northward, alongshelf flow from Mexican waters could be important to understanding mass balance on the Louisiana-Texas shelf.

For more information about this study or the Environmental Studies Program in general, contact the Environmental Sciences Section (MS 5430), 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123-2394, telephone (504) 736-2789.

You can obtain copies of the report from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$4.00 by referencing OCS Study MMS 2000-045. 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 that manages the Nation's natural gas, oil and other mineral resources on the OCS, and collects, accounts for and disburses about \$4 billion yearly in revenues from offshore Federal mineral leases and from onshore mineral leases on Federal and Indian lands.

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Homepage Address on the Internet: http://www.mms.gov

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