



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

Technical Announcement

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Deep Circulation in the Gulf of Mexico: A Lagrangian Study

[OCS Study BOEM 2016-081](#)

To increase the knowledge and understanding of the deep circulations in the Gulf of Mexico, BOEM conducted a study using underwater and autonomous profiling (APEX) floats. A total of 186 floats were deployed over 2 years at depths of 1,500 and 2,500 m. This study obtained, for the first time, observations of deep circulation throughout the basin in a single four-year interval. The most important results were: there was little evidence of deep mass exchange from the eastern to the western basin given rise to two distinct basins; an anticlockwise current following the escarpment from south of the Mississippi delta, along the Mexican slope, and around the Bay of Campeche to the northeastern point of the Campeche-Yucatan shelf; finally a large anticlockwise gyre over the deepest part of the western basin was observed.

This report is available on CD from the Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, for \$15.00, and free of charge as a pdf file downloaded from the BOEM Website. Copies can also be viewed at selected Federal Depository Libraries.

To order a CD, use the Gulf of Mexico OCS Region contact information below and reference OCS Study BOEM 2016-081. To download a pdf copy, use the [Environmental Studies Program Information System](#) (ESPIS) and search on the study report number. This report can also be obtained from the National Technical Information Service; the contact information is below.

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