



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

Technical Announcement

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Analysis of Ocean Current Data from Gulf of Mexico Oil and Gas Platforms

[OCS Study BOEM 2014-040](#)

The Bureau of Ocean Energy Management (BOEM), Gulf of Mexico OCS, announces the availability of a new study report, *Analysis of Ocean Current Data from Gulf of Mexico Oil and Gas Platforms*.

On April 21, 2005, the U.S. Department of the Interior's Minerals Management Service, now the Bureau of Ocean Energy Management, issued Notice to Lessees and Operators No. 2005-G05 requiring oil companies operating on the Gulf of Mexico Outer Continental Shelf to monitor and report real time velocity profiles using acoustic Doppler current profilers (ADCP). The data were disseminated through the Internet by the National Data Buoy Center starting April–June 2005. These measurements, required when total depth exceeds 400 meters (m), are reported at 10- to 20-minute intervals from near surface (~ 30 m) to ~ 500-1,000 m. At sites where depth exceeds 1,100 m, two ADCPs were required. This dataset provides an unprecedented amount of vertical velocity profile time series in the deep northern Gulf of Mexico. The data come from 20 fixed platforms. The mean and standard deviation of the records at different depths, in different regions, and different times, their vertical and horizontal variations were computed and discussed. The currents' directions were analyzed using wind rose techniques from meteorology, and the spectra of the flow speed as functions of time, depth, and location were discussed.

Between 2005 and 2008, Hurricanes Katrina and Rita, and Hurricanes Gustav and Ike, affected the platforms, allowing the analyses of near inertial oscillations induced by hurricanes and non-hurricane events.

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. The addresses are listed below.

To order a CD, use the Gulf of Mexico OCS Region contact information below and reference OCS Study BOEM 2014-040. To download a pdf copy, use the Environmental Studies Program

Information System and search using the study report number:

http://www.data.boem.gov/homepg/data_center/other/espis/espismaster.asp?appid=1

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