

## **Results from the ROSE Seismic Oceanography Experiment**

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In the summer of 2007, multichannel seismic (MCS) observations were collected by the GSI Pacific over the Sohm Abyssal Plain (in the region of the Gulf Stream) with the primary intent to define Canadian jurisdiction of the seabed and its natural resources under Article 76 of the United Nations Convention on the Law of the Sea (UNCLOS). The Reflection Ocean Seismic Experiment (ROSE) was granted access to the MCS water column data collected during this program, which has been processed to image thermohaline fine-structure features in the ocean. During the MCS acquisition, approximately 350 km of high spatial density oceanographic data (~1000 m) were collected by the R/V Endeavor using shipboard XBTs and CTDs. The oceanographic data have been used to produce synthetic seismic images of the water column which will be compared to the multichannel seismic imagery. This analysis will provide important ground-truthing for the observed MCS structures and improve our understanding of the linkages between the physical structures and the seismic reflections.