

# **Oceanographic and Bathymetric Observations at the Ilulissat Ice Fjord**

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The Ilulissat Ice Fjord (a.k.a. Jakobshavn) may play an important role in connecting the waters of the North Atlantic to the Greenland Ice Sheet. At the eastern end of the fjord, the Jakobshavn Isbrae terminates abruptly at a deep ice front. At the western end, a shallow submarine sill partially separates the waters of Disko Bay from those of the fjord. To date there has been little knowledge gained of the bathymetry or oceanographic conditions in the fjord, and thus little ability to draw inferences about the possible influence of ocean waters on the observed retreating behavior of the Jakobshavn Isbrae. During June of 2007, we measured the depth of the fjord and sampled hydrographic conditions within the fjord and in neighboring Disko Bay. We report on these measurements and describe future plans for using them in a computer modeling study in an effort to understand a possible coupling between oceanography and glaciology in this environment.