

PRELIMINARY CRUISE REPORT

U.S. Dept. of State CRUISE No.:	2008-011
SHIP NAME:	R/V Knorr
OPERATING INSTITUTE OR AGENCY:	Woods Hole Oceanographic Institution
PROJECT TITLE:	Shelf-basin exchange south of Denmark Strait
CRUISE DATES (INCLUSIVE):	3-31 Oct 2008

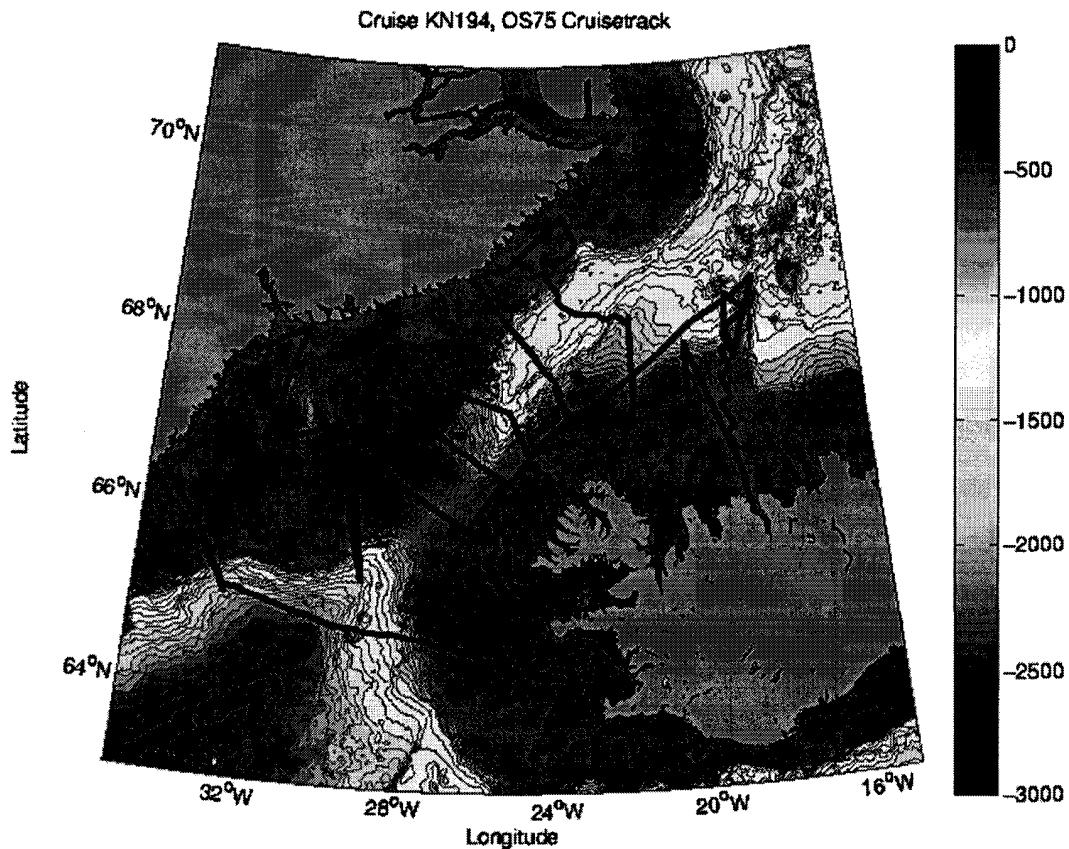
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CLEARANCE COUNTRIES:	Iceland, Denmark
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DESCRIPTION OF SCIENTIFIC PROGRAM(include page-sized chartlet showing cruise track):
Cruise KN194 Leg IV on the research vessel Knorr took place from 3-31 October, 2008 in the northern Irminger Sea and southern Iceland Sea. The main goals of the cruise were to recover a mooring array that was deployed the previous September on the Greenland shelf/slope south of Denmark Strait, and to carry out a hydrographic/velocity survey to shed light on the origin and fate of the dense water flowing through the strait. An additional goal of the cruise was to investigate the source of the recently established East Greenland Coastal Current. This is a buoyancy-driven current located on the inner Greenland shelf. Another goal was to determine the amount and types of zooplankton advected southward from the Arctic domain via the East

Greenland Current using a video plankton recorder. The final goal of the cruise was to learn more about the nature of the storms that pass through this region, via radiosonde measurements. The area of operations was along the North Atlantic storm track, and these storms are believed to influence the currents measured by the moorings.

Despite significant weather delays during the course of the month-long cruise, the various goals were accomplished. We recovered 7 out of the 8 moorings (the final mooring remains in the water), and occupied 263 conductivity/temperature/depth (CTD) stations. A total of 58 radiosonde casts were done, and 15 video plankton recorder (VPR) casts. Vessel-mounted acoustic Doppler current profiler (VMADCP) data and seabeam bathymetry data were collected throughout the cruise, as were underway meteorological (IMET) data.



SCHEDULE OF DATA DELIVERY:	
Data Description	Date of Expected Delivery to Dept. of State
Mooring hydrographic data	12/31/2010
Mooring velocity data	12/31/2010
CTD data	12/31/2010
Radiosonde data	12/31/2009
VPR data	12/31/2010
VMADCP data	12/31/2010
Seabeam data	12/31/2010
IMET data	12/31/2010