Longtrack profile data using SAIL-loop system and SeaBird sensors from R/V Endeavor cruise EN198 in the North Atlantic in 1989 (U.S. JGOFS NABE project)

Website: https://www.bco-dmo.org/dataset/2570
Version: July 25, 1995
Version Date: 1995-07-25

Project
» U.S. JGOFS North Atlantic Bloom Experiment (NABE)

Program
» U.S. Joint Global Ocean Flux Study (U.S. JGOFS)

Contributors	Affiliation	Role
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Dataset Description

longtrack profile using SAIL-loop system and SeaBird

Methods & Sampling

PI: William Broenkow
of: Moss Landing Marine Laboratories
dataset: longtrack profile using SAIL-loop system and SeaBird
dates: June 28, 1989 to July 7, 1989
location: N: 63.826 S: 59.29 W: -24.206 E: -14.901
project/cruise: North Atlantic Bloom Experiment/Endeavor 198
ship: Endeavor

Note:
Sample interval: 60 sec averaged to 5 minutes in this file
Salinity and temperature calibration by comparison with MLML CTD stations

Reference:
JGOFS North Atlantic Bloom long track and vertical profiling results.
W.W. Broeknow, R.E. Reaves and M.A. Yarbrough MLML Tech Pub 90-1
Recorded: 14:50:41 16-FEB-90

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Data Files

File
sail.csv (Comma Separated Values (.csv), 157.35 KB) MD5:841c1dbc8cc6ad1d6271072b52f13495 Primary data file for dataset ID 2570

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Parameters

Parameter	Description	Units
lat	Latitude by LORAN	decimal degrees
lon	Longitude by LORAN	decimal degrees
date	Date	YYYYMMDD
time	Time of day	decimal hrs
yrday	Day of 1989	decimal days
temp_surf	Surface Temperature SeaBird sensor: about 0.3 C > surface CTD values	degrees C
sal	Salinity precision vs CTD +/- 0.01	applied offset = 0.0497,
temp_air	Air Temperature	degrees C
press_bar	Barometric Pressure	mbar
wind_speed	Wind Speed corrected for ship motion	knots
wind_dir	Wind Direction corrected for ship motion	degrees T

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Instruments

Dataset-specific Instrument Name	SeabirdCTD
Generic Instrument Name	CTD Sea-Bird
Dataset-specific Description	Used to measure conductivity and temperature data.
Generic Instrument Description	A Conductivity, Temperature, Depth (CTD) sensor package from SeaBird Electronics. This instrument designation is used when specific make and model are not known or when a more specific term is not available in the BCO-DMO vocabulary. Refer to the dataset-specific metadata for more information about the specific CTD used. More information from: http://www.seabird.com/

Dataset-specific Instrument Name	LongTrack Profiler
Generic Instrument Name	LongTrack Profiler
Dataset-specific Description	LongTrack Profiler that used the ship's SAIL-loop acquisition system with SeaBird conductivity and temperature sesnsors; The LongTrack Profiler used the R/V Endeavor's IEEE standard serial ASCII instrumentation loop (SAIL) shipboard data communication system to record data from SeaBird conductivity and temperature sesnsors; The serial ASCII Instrumentation Loop (SAIL) was a hardware and software protocol that was used for collecting data from a variety of instruments aboard the research vessel.
Generic Instrument Description	The LongTrack Profiler was a custom data acquisition system that used the ship's SAIL-loop acquisition system with SeaBird conductivity and temperature sensors. The LongTrack Profiler used the R/V Endeavor's IEEE standard serial ASCII instrumentation loop (SAIL) shipboard data communication system to record data from SeaBird conductivity and temperature sensors. The serial ASCII Instrumentation Loop (SAIL) was a hardware and software protocol that was used for collecting data from a variety of instruments aboard the research vessel.

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Deployments

EN198

Website	https://www.bco-dmo.org/deployment/57739
Platform	R/V Endeavor
Start Date	1989-06-28
End Date	1989-07-07
Description	post bloom cruise; 7 locations; 63°N 25°W to 59°N 14°W

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Project Information

U.S. JGOFS North Atlantic Bloom Experiment (NABE)

Website: http://usjgofs.whoi.edu/research/nabe.html

Coverage: North Atlantic

One of the first major activities of JGOFS was a multinational pilot project, North Atlantic Bloom Experiment (NABE), carried out along longitude 20° West in 1989 through 1991. The United States participated in 1989 only, with the April deployment of two sediment trap arrays at 48° and 34° North. Three process-oriented cruises where conducted, April through July 1989, from R/V *Atlantis II* and R/V *Endeavor* focusing on sites at 46° and 59° North. Coordination of the NABE process-study cruises was supported by NSF-OCE award # 8814229. Ancillary sea surface mapping and AXBT profiling data were collected from NASA's P3 aircraft for a series of one day flights, April through June 1989.

A detailed description of NABE and the initial synthesis of the complete program data collection efforts appear in: Topical Studies in Oceanography, JGOFS: The North Atlantic Bloom Experiment (1993), Deep-Sea Research II, Volume 40 No. 1/2.

The U.S. JGOFS Data management office compiled a preliminary NABE data report of U.S. activities: Slagle, R. and G. Heimerdinger, 1991. U.S. Joint Global Ocean Flux Study, North Atlantic Bloom Experiment, Process Study Data Report P-1, April-July 1989. NODC/U.S. JGOFS Data Management Office, Woods Hole Oceanographic Institution, 315 pp. (out of print).

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Program Information

U.S. Joint Global Ocean Flux Study (U.S. JGOFS)

Website: http://usjgofs.whoi.edu/

Coverage: Global

The United States Joint Global Ocean Flux Study was a national component of international JGOFS and an integral part of global climate change research.

The U.S. launched the Joint Global Ocean Flux Study (JGOFS) in the late 1980s to study the ocean carbon cycle. An ambitious goal was set to understand the controls on the concentrations and fluxes of carbon and associated nutrients in the ocean. A new field of ocean biogeochemistry emerged with an emphasis on quality measurements of carbon system parameters and interdisciplinary field studies of the biological, chemical and physical process which control the ocean carbon cycle. As we studied ocean biogeochemistry, we learned that our simple views of carbon uptake and transport were severely limited, and a new "wave" of ocean science was born. U.S. JGOFS has been supported primarily by the U.S. National Science Foundation in collaboration with the National Oceanic and Atmospheric Administration, the National Aeronautics and Space Administration, the Department of Energy and the Office of Naval Research. U.S. JGOFS, ended in 2005 with the conclusion of the Synthesis and Modeling Project (SMP).

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Funding

Funding Source	Award
National Science Foundation (NSF)	unknown NABE NSF

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