Aircraft deployed XBT section from NASA P3 aircraft in the North Atlantic in 1989 (U.S. JGOFS NABE project)

Website: https://www.bco-dmo.org/dataset/2596
Version: August 4, 1995
Version Date: 1995-08-04

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

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

Contributors	Affiliation	Role
Hoge, Frank E.	National Aeronautics and Space Administration (NASA)	Principal Investigator
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Methods & Sampling

PI: Frank Hoge
of: NASA
dataset: Aircraft deployed XBT section
dates: April 26, 1989 to June 3, 1989
location: N: 63.472 S: 45.803 W: -22.38 E: -10.181
project/cruise: North Atlantic Bloom Experiment
platform: NASA P3 aircraft

The following note was prepared by the U.S. JGOFS Data Management Office (DMO) and applies to all of the NASA P3 AXBT sections released by Dr. Frank Hoge, NASA.

These data have undergone a rigorous reprocessing and quality control review and the resulting data set, in the opinion of the DMO, is of poor quality.

The AXBT data were collected using two different recording rates (high and low resolution). The high resolution observations, (flights 10, 13, 18 and 21 May) have been reprocessed and averaged at one meter binned intervals. The low resolution data were recorded at approximately 1.4 meter intervals and reported as recorded. Spiking was a problem in both data sets.

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Data Files

File
P3axbt.csv (Comma Separated Values (.csv), 1.59 MB) MD5:c769e5e69703d5fde5a85d7f9ca6a3a5 Primary data file for dataset ID 2596

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Parameters

Parameter	Description	Units
date	date of sample, as YYYYMMDD	
year	year in which sample collected, as YYYY	
month	month of year, as MM	
day	day of month in year, as DD	
time	time reported as hhmmss	
lat	latitude (minus = south)	decimal degrees
lon	longitude (minus = west)	decimal degrees
depth	depth of observation	meters
temp	temperature	degrees centigrade

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Instruments

Dataset-specific Instrument Name	Expendable Bathythermograph - aircraft
Generic Instrument Name	Expendable Bathythermograph - aircraft
Generic Instrument Description	An aXBT is an Expendable Bathythermograph (XBT) designed to be launched from an aircraft (often a P3 type aircraft) as opposed to a ship. The aXBT collects data in a similar fashion to an XBT, and once the probe hit the sea surface, it free falls through the water column.

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Deployments

Aircraft_P3_NABE

Website	https://www.bco-dmo.org/deployment/57744
Platform	NASA P3 aircraft
Start Date	1989-04-26
End Date	1989-06-03

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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 Aeronautics & Space Administration (NASA)	unknown NABE NASA

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