Shipboard Meteorology from R/V Atlantis II cruises All-119-4, All-119-5 in the North Atlantic in 1989 (U.S. JGOFS NABE project)

Website: https://www.bco-dmo.org/dataset/2599 Version: July 7, 1995 Version Date: 1995-07-07

Project

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

Program

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

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Dataset Description

Atlantis II Shipboard Meteorology assembled by U.S. JGOFS DMO

Methods & Sampling

 PI:
 No specific PI - Data assembled by U.S. JGOFS DMO

 dataset:
 Atlantis II shipboard meteorology

 project/cruise:
 North Atlantic Bloom Experiment/Atlantis II 119, leg 4

 project/cruise:
 North Atlantic Bloom Experiment/Atlantis II 119, leg 5

 ship:
 Atlantis II

This data set should be used with caution.

The U.S JGOFS Data Management Office assembled this data set from an undocumented source. Due to the lack of supporting documentation, we have concerns about instrument calibrations and other routine data processing steps. Units for all variables are assumed.

Parameters

Parameter	Description	Units
seconds	number of seconds beyond a starting January 1, 1970, 0000 hours.	seconds
lat	latitude (negative for south)	decimal degrees
lon	longitude (negative for west)	decimal degrees
date	date reported as YYYYMMDD	
time	time reported as HHMMSS	
wind_dir	wind direction reported as compass degrees	degrees
wind_speed	wind speed	meters/second ?
temp_air	air temperature	degrees Centigrade
humidity	humidity	per cent
radiation	solar radiation	watts/m^2 ?

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Instruments

Dataset- specific Instrument Name	Meteorological Station
Generic Instrument Name	Meteorological Station
Dataset- specific Description	shipboard MET station
	MET station systems are designed to record meteorological information on board ships or mounted on moorings. These are commonly referred to as EMET (Electronic Meteorological Packages) or IMET (Improved Meteorological Packages) systems. These sensor packages record measurements of sea surface temperature and salinity, air temperature, wind speed and direction, barometric pressure, solar and long-wave radiation, humidity and precipitation.

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Deployments

All-119-4		
Website	https://www.bco-dmo.org/deployment/57737	
Platform	R/V Atlantis II	
Start Date	1989-04-17	
End Date	1989-05-11	
	early bloom cruise; 17 locations; 60N 21W to 46N 18W	
Description	Methods & Sampling dates: April 16, 1989 to May 13, 1989 location: N: 64.2748 S: 37.65942 W: -25.66898 E: - 18.96942 project/cruise: North Atlantic Bloom Experiment/Atlantis II 119, leg 4 ship: Atlantis II	

All-119-5		
Website	https://www.bco-dmo.org/deployment/57738	
Platform	R/V Atlantis II	
Start Date	1989-05-15	
End Date	1989-06-06	
Description	late bloom cruise; 31 locations; 61N 22W to 41N 17W Methods & Sampling dates: May 14, 1989 to June 08, 1989 location: N: 73.95642 S: 37.65124 W: -70.07076 E: - 16.85442 project/cruise: North Atlantic Bloom Experiment/Atlantis II 119, leg 5 ship: Atlantis II	

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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)	<u>unknown NABE NSF</u>

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