Mesozooplankton weight-specific carbon ingestion rates from R/V Atlantis II cruises AII-119-4, AII-119-5 in the North Atlantic in 1989 (U.S. JGOFS NABE project)

Website: https://www.bco-dmo.org/dataset/2582
Version: December 05, 1994
Version Date: 1994-12-05

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

Mesozooplankton weight-specific carbon ingestion rates

Methods & Sampling

PI: Hans Dam
of: University of Connecticut
dataset: Mesozooplankton weight-specific carbon ingestion rates
dates: April 25, 1989 to May 31, 1989
location: N: 47.0553 S: 46.265 W: -20.251 E: -17.6567
project/cruise: North Atlantic Bloom Experiment/Atlantis II 119, leg 4 and 5
ship: R/V Atlantis II

Methodology

See: Dam, Hans G., Carolyn Miller and Sigrun Jonasdottir, 1993. The trophic role of mesozooplankton at 47N and 20W during the North Atlantic Bloom Experiment. Deep-Sea Research II, Vol. 40, N0. 12 pp 197-212.

DMO Note:

The reporting of plankton tow events was inconsistent, event numbers may reference a single tow or a series of tows. Use caution in a merging of data from different sources.

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Data Files

File
grazing.csv (Comma Separated Values (.csv), 3.04 KB) MD5:eb5d3ba2619608d44571bbd041fd49ce Primary data file for dataset ID 2582

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Parameters

Parameter	Description	Units
year	year (as YYYY)	dimensionless
event	event number, from event log	dimensionless
sta	station number from event log	dimensionless
cast	cast number, numbered consecutively within station	dimensionless
sizefrac	size fraction/interval of organisms analyzed	millimeters
C_ingest	carbon ingestion rate	mgr C ingested/(mgr body C)/hr

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Instruments

Dataset-specific Instrument Name	Mechanical Flowmeter
Generic Instrument Name	Mechanical Flowmeter
Dataset-specific Description	A General Oceanics flowmeter mounted at the mouth of the net and a filtering cod end (mesh size 0.2 mm).
Generic Instrument Description	Manufactured by General Oceanics, a mechanical flow meter is used with plankton tows to determine the volume of water which flows through the net. Flow meters are also used in rivers, estuaries, canals, sewer outfalls, pipes, and harbor entrances to determine water velocity and flow distance information.

Dataset-specific Instrument Name	RingNet
Generic Instrument Name	Ring Net
Dataset-specific Description	a 1 meter ring net fitted with a 0.2 mm mesh
Generic Instrument Description	A Ring Net is a generic plankton net, made by attaching a net of any mesh size to a metal ring of any diameter. There are 1 meter, .75 meter, .25 meter and .5 meter nets that are used regularly. The most common zooplankton ring net is 1 meter in diameter and of mesh size .333mm, also known as a 'meter net' (see Meter Net).

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Deployments

AII-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
Description	early bloom cruise; 17 locations; 60N 21W to 46N 18W **Methods & Sampling** PI: Hans Dam of: University of Connecticut dataset: Mesozooplankton weight-specific carbon ingestion rates dates: April 25, 1989 to May 31, 1989 location: N: 47.0553 S: 46.265 W: -20.251 E: -17.6567 project/cruise: North Atlantic Bloom Experiment/Atlantis II 119, leg 4 ship: R/V Atlantis II Methodology See: Dam, Hans G., Carolyn Miller and Sigrun Jonasdottir, 1993. The trophic role of mesozooplankton at 47N and 20W during the North Atlantic Bloom Experiment. Deep-Sea Research II, Vol. 40, N0. 12 pp 197-212. DMO Note: The reporting of plankton tow events was inconsistent, event numbers may reference a single tow or a series of tows. Use caution in a merging of data from different sources.

AII-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** PI: Hans Dam of: University of Connecticut dataset: Mesozooplankton weight-specific carbon ingestion rates dates: April 25, 1989 to May 31, 1989 location: N: 47.0553 S: 46.265 W: -20.251 E: -17.6567 project/cruise: North Atlantic Bloom Experiment/Atlantis II 119, leg 5 ship: R/V Atlantis II Methodology See: Dam, Hans G., Carolyn Miller and Sigrun Jonasdottir, 1993. The trophic role of mesozooplankton at 47N and 20W during the North Atlantic Bloom Experiment. Deep-Sea Research II, Vol. 40, N0. 12 pp 197-212. DMO Note: The reporting of plankton tow events was inconsistent, event numbers may reference a single tow or a series of tows. Use caution in a merging of data from different sources.

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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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