Deep sea sediment trap POC and carbohydrate flux from RVIB Nathaniel B. Palmer cruises and JGOFS AESOPS Sediment Traps in the Southern Ocean in 1997 (U.S. JGOFS AESOPS project)

Website: https://www.bco-dmo.org/dataset/2765
Version: 1 October 2002
Version Date: 2002-10-01

Project
» U.S. JGOFS Antarctic Environment and Southern Ocean Process Study (AESOPS)

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

Contributors	Affiliation	Role
Hedges, John	University of Washington (UW)	Principal Investigator
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Table of Contents

Dataset Description

Deep sea sediment trap POC and carbohydrate flux dataset named sedtrap_carbos in the US JGOFS database. The PI opted not to submit these data because they were contaminated with paint chips.

Methods & Sampling

PI: John Hedges
of: University of Washington
dataset: Deep sea sediment trap POC and carbohydrate flux
dates: nd
location: N: 56.895 S: 56.895 W: 170.1652 E: 170.1652
project/cruise: AESOPS/Southern Ocean 1996-1997 Mooring Deployment
Deployment: NBP 96-5
Recovery: NBP 98-2 Benthic Cruise
ship: R/V Nathaniel B. Palmer

DMO note: The PI opted not to submit these data because they were contaminated with paint chips.

These data were part of a larger study by:
Lee, Cindy (State University of New York, Stony Brook),
Stuart Wakeham (Skidaway Institute of Oceanography),
and John Hedges (University of Washington)

"Organic geochemical studies in the Southern Ocean"

The amino acid, pigment and lipid data from moored IRS sediment traps are listed on the Southern Ocean data directory page.

[table of contents | back to top]

Parameters

Parameters for this dataset have not yet been identified

[table of contents | back to top]

Deployments

NBP-98-2

Website	https://www.bco-dmo.org/deployment/57723
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.whoi.edu/aesops/nbp-bp_mr.html
Start Date	1998-02-25
End Date	1998-04-03
Description	Benthic Process and Moorings Recovery **Methods & Sampling** PI: John Hedges of: University of Washington dataset: Deep sea sediment trap POC and carbohydrate flux dates: nd location: N: 56.895 S: 56.895 W: 170.1652 E: 170.1652 project/cruise: AESOPS/Southern Ocean 1996-1997 Mooring Deployment Deployment: NBP 96-5 Recovery: NBP 98-2 Benthic Cruise ship: R/V Nathaniel B. Palmer DMO note: The PI opted not to submit these data because they were contaminated with paint chips. These data were part of a larger study by: Lee, Cindy (State University of New York, Stony Brook), Stuart Wakeham (Skidaway Institute of Oceanography), and John Hedges (University of Washington) "Organic geochemical studies in the Southern Ocean" The amino acid, pigment and lipid data from moored IRS sediment traps are listed on the Southern Ocean data directory page.

AESOPS_Array

Website	https://www.bco-dmo.org/deployment/57753
Platform	JGOFS Sediment Trap
Start Date	1996-11-28
End Date	1998-01-27
Description	AESOPS sediment trap and current meter moorings Mooring M1 was set at 53.031°S 174.730°W in 5441 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. Mooring M2 was set at 56.895°S 170.165°W in 4924 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. Mooring M3 was set at 60.283°S 170.056°W in 3958 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. Mooring M4 was set at 63.149°S 169.897°W in 2886 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. Mooring M5 was set at 66.161°S 168.672°W in 3016 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. Mooring M6 was set at 73.543°S 176.886°E in 566 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. Mooring M7a was set at 76.491°S 177.872°W in 567 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. Mooring M7b was set at 76.495°S 178.022°W in 582 meters of water during cruise NBP 96-5 and recovered during cruise NBP 98-2. View a graphic showing the location of AESOPS mooring arrays, courtesy of Suzanne O'Hara of Lamont-Doherty Earth Observatory, Columbia University. **Methods & Sampling** PI: John Hedges of: University of Washington dataset: Deep sea sediment trap POC and carbohydrate flux dates: nd location: N: 56.895 S: 56.895 W: 170.1652 E: 170.1652 project/cruise: AESOPS/Southern Ocean 1996-1997 Mooring Deployment Deployment: NBP 96-5 Recovery: NBP 98-2 Benthic Cruise ship: R/V Nathaniel B. Palmer DMO note: The PI opted not to submit this data because it was contaminated with paint chips. Some portion of the data may be available in the future. This data was part of a larger study by: Lee, Cindy (State University of New York, Stony Brook), Stuart Wakeham (Skidaway Institute of Oceanography), and John Hedges (University of Washington) "Organic geochemical studies in the Southern Ocean" The amino acid, pigment and lipid data from moored IRS sediment traps is listed on the Southern Ocean data directory page.

NBP-96-5

Website	https://www.bco-dmo.org/deployment/57719
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.whoi.edu/aesops/m1.html
Start Date	1996-11-11
End Date	1996-12-01
Description	Moorings Deployment

[table of contents | back to top]

Project Information

U.S. JGOFS Antarctic Environment and Southern Ocean Process Study (AESOPS)

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

Coverage: Southern Ocean, Ross Sea

The U.S. Southern Ocean JGOFS program, called Antarctic Environment and Southern Ocean Process Study (AESOPS), began in August 1996 and continued through March 1998. The U.S. JGOFS AESOPS program

focused on two regions in the Southern Ocean: an east/west section of the Ross-Sea continental shelf along 76.5°S, and a second north/south section of the Southern Ocean spanning the Antarctic Circumpolar Current (ACC) at ~170°W (identified as the Polar Front). The science program, coordinated by Antarctic Support Associates (ASA), comprised eleven cruises using the R.V.I.B Nathaniel B. Palmer and R/V Roger Revelle as observational platforms and for deployment and recovery of instrumented moorings and sediment-trap arrays. The Ross-Sea region was occupied on six occasions and the Polar Front five times. Mapping data were obtained from SeaSoar, ADCP, and bathymetric systems. Satellite coverage was provided by the NASA SeaWiFS and the NOAA/NASA Pathfinder programs.

[table of contents | back to top]

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).

[table of contents | back to top]