

Iron enrichment, DOC and TOC, Pico and Nanoplankton biomass incubation experiment results from RVIB Nathaniel B. Palmer and R/V Roger Revelle cruises in the Southern Ocean, 1997-1998 (U.S. JGOFS AESOPS project)

Website: <https://www.bco-dmo.org/dataset/2749>

Version: 11 April 2002

Version Date: 2002-04-11

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
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Dataset Description

Fe enrichment, DOC and TOC incubation experiments Pico and Nanoplankton biomass incubation experiments; in downloadable Excel file format

Methods & Sampling

PI: Kenneth Coale

of: Moss Landing Marine Laboratory (MLML)

dataset: Fe enrichment, DOC and TOC incubation experiments
Pico and Nanoplankton biomass incubation experiments

project/cruise: US JGOFS Antarctic Environments Southern Ocean Process Study (AESOPS)

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Parameters

Parameters for this dataset have not yet been identified

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Deployments

NBP-97-01

Website	https://www.bco-dmo.org/deployment/57720
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.who.edu/aesops/p2.html
Start Date	1997-01-13
End Date	1997-02-11
Description	<p>Ross Sea Process Study 2</p> <p>Methods & Sampling PI: Kenneth Coale of: Moss Landing Marine Laboratory (MLML) dataset: Fe enrichment, DOC and TOC incubation experiments Pico and Nanoplankton biomass incubation experiments project/cruise: US JGOFS Antarctic Environments Southern Ocean Process Study (AESOPS) Ross Sea Process 2 cruise aboard R/V Nathaniel B. Palmer cruise 97-1 Antarctic Polar Front Zone (APFZ) Survey 1 and 2 cruises aboard R/V Roger Revelle cruises 6 (Survey 1) and 8 (Survey 2)</p>

KIWI6

Website	https://www.bco-dmo.org/deployment/57724
Platform	R/V Roger Revelle
Report	http://usjgofs.who.edu/aesops/RRs1.html
Start Date	1997-10-20
End Date	1997-11-24
Description	<p>Polar Front Survey I</p> <p>Methods & Sampling PI: Kenneth Coale of: Moss Landing Marine Laboratory (MLML) dataset: Fe enrichment, DOC and TOC incubation experiments Pico and Nanoplankton biomass incubation experiments project/cruise: US JGOFS Antarctic Environments Southern Ocean Process Study (AESOPS) Ross Sea Process 2 cruise aboard R/V Nathaniel B. Palmer cruise 97-1 Antarctic Polar Front Zone (APFZ) Survey 1 and 2 cruises aboard R/V Roger Revelle cruises 6 (Survey 1) and 8 (Survey 2)</p>

KIWI8

Website	https://www.bco-dmo.org/deployment/57726
Platform	R/V Roger Revelle
Report	http://usjgofs.who.edu/aesops/RRs2.html
Start Date	1998-01-08
End Date	1998-02-08
Description	<p>Polar Front Survey II</p> <p>Methods & Sampling PI: Kenneth Coale of: Moss Landing Marine Laboratory (MLML) dataset: Fe enrichment, DOC and TOC incubation experiments Pico and Nanoplankton biomass incubation experiments project/cruise: US JGOFS Antarctic Environments Southern Ocean Process Study (AESOPS) Ross Sea Process 2 cruise aboard R/V Nathaniel B. Palmer cruise 97-1 Antarctic Polar Front Zone (APFZ) Survey 1 and 2 cruises aboard R/V Roger Revelle cruises 6 (Survey 1) and 8 (Survey 2)</p>

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.

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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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