

Scientific sampling event logs 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/2718>

Version: final

Version Date: 2002-12-05

Project

» [U.S. JGOFS Antarctic Environment and Southern Ocean Process Study](#) (AESOPS)

Program

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

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Dataset Description

Scientific sampling event logs from research cruises

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Parameters

Parameter	Description	Units
year	year cruise took place.	
event	A unique number assigned to each over the side sampling activity. This number is a composite of date and time UTC(GMT) in the form MMDDHHmm that indicates the starting time of the sampling activity. Generally, one event began as the preceding event ended.	
sta	Station. A unique number designating a general geographic location at which a suite of sampling activities may occur; occupied sequentially during the cruise	
cast_type	a sampling activity identifier, where: CTD = CTD rosette bottle cast TM = trace metal free rosette bottle cast	
lat	starting latitude for each event (negative = south)	decimal degrees
lon	starting longitude for each event (negative = west)	decimal degrees
activity_and_comments	Identifies the sampling method, generally followed by a sampling sequence number for that method. CTD or Trace Metal(TM) casts were also designated by an 8 digit unique number consisting of: (3 digits for cruise, 3 digits for station, and 2 digits for sequence).	
seq	is a sequential (within each station) entry in the bridge log of all over the side activities for which gear was deployed.	
person	Name of the scientist(s) involved in the particular sampling event or responsible for the resulting data.	

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Deployments

NBP-96-4

Website	https://www.bco-dmo.org/deployment/57717
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.whoi.edu/aesops/ss.html
Start Date	1996-08-30
End Date	1996-09-24
Description	<p>Site Survey Cruise</p> <p>Methods & Sampling</p> <p>PI: Bob Anderson of: Lamont-Doherty Earth Observatory dataset: Cruise event log dates: August 30, 1996 to September 24, 1996 location: N: -46.4002 S: -64.1155 W: -178.357 E: -169.2333 project: NBP-9604 Site Survey cruise ship: R/V Nathaniel B. Palmer Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

NBP-96-04A

Website	https://www.bco-dmo.org/deployment/57718
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.whoi.edu/aesops/p1.html
Start Date	1996-10-02
End Date	1996-11-08
Description	<p>Ross Sea Process Study 1</p> <p>Methods & Sampling PI: Walker Smith of: University of Tennessee dataset: Cruise event log dates: October 2, 1996 to November 24, 1996 location: N: -63.4455 S: -78.0348 W: 168.9742 E: -170.5797 project: NBP-9604a Process cruise 1 ship: R/V Nathaniel B. Palmer Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

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	<p>Moorings Deployment</p> <p>Methods & Sampling PI: Jack Dymond of: Oregon State University dataset: Cruise event log dates: November 11, 1996 to December 1, 1996 location: N: -53.0085 S: -76.538 W: 176.8862 E: -169.6195 project: NBP-96-5 Mooring Deployment ship: R/V Nathaniel B. Palmer Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

NBP-97-01

Website	https://www.bco-dmo.org/deployment/57720
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.whoi.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: John Marra of: Lamont-Doherty Earth Observatory dataset: Cruise event log dates: January 13, 1997 to February 11, 1997 location: N: -73.9972 S: -78.0498 W: 163.3383 E: -173.9992 project: NBP-97-1, Process cruise 2 ship: R/V Nathaniel B. Palmer Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

NBP-97-03

Website	https://www.bco-dmo.org/deployment/57721
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.whoi.edu/aesops/p3.html
Start Date	1997-04-04
End Date	1997-05-11
Description	<p>Ross Sea Process Study 3</p> <p>Methods & Sampling PI: Hugh Ducklow of: Virginia Institute of Marine Science dataset: Cruise event log dates: April 4, 1997 to May 12, 1997 location: N: -63.5023 S: -77.9962 W: 168.8260 E: -176.0121 project: NBP-97-3, Process cruise 3 ship: R/V Nathaniel B. Palmer Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

NBP-97-08

Website	https://www.bco-dmo.org/deployment/57722
Platform	RVIB Nathaniel B. Palmer
Report	http://usjgofs.whoi.edu/aesops/p4.html
Start Date	1997-11-05
End Date	1997-12-13
Description	<p>Ross Sea Process Study 4 SeaWiFS transmits images to U.S. JGOFS scientists aboard the Palmer, for first time on November 23, 1997.</p> <p>Methods & Sampling PI: Walker Smith of: University of Tennessee dataset: Cruise event log dates: November 5, 1997 to December 13, 1997 location: N: -60.1542 S: -77.888 W: 168.7308 E: -169.8877 project: NBP-97-8, Process cruise 8 ship: R/V Nathaniel B. Palmer Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

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	<p>Benthic Process and Moorings Recovery</p> <p>Methods & Sampling PI: Susumu Honjo of: Woods Hole Oceanographic Institution dataset: Cruise event log dates: February 25, 1998 to April 8, 1998 location: N: -49.9148 S: -76.512 W: 176.8413 E: -168.9518 project: NBP-98-2, Mooring recovery and Benthic cruise ship: R/V Nathaniel B. Palmer Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

Website	https://www.bco-dmo.org/deployment/57724
Platform	R/V Roger Revelle
Report	http://usjgofs.whoi.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: Timothy Cowles of: Oregon State University dataset: Cruise event log dates: October 20, 1997 to November 24, 1997 location: N: -56.9998 S: -62.3787 W: -171.9677 E: -167.6087 project: RR_KIWI6, APFZ Survey 1 cruise ship: R/V Roger A. Revelle Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

KIWI7

Website	https://www.bco-dmo.org/deployment/57725
Platform	R/V Roger Revelle
Report	http://usjgofs.whoi.edu/aesops/RRp1.html
Start Date	1997-12-02
End Date	1998-01-03
Description	<p>Polar Front Process I</p> <p>Methods & Sampling PI: Richard Barber of: Duke University dataset: Cruise event log dates: December 2, 1997 to January 3, 1998 location: N: -52.9143 S: -64.7418 W: -174.7303 E: -168.8212 project: RR_KIWI7, APFZ Process 1 cruise ship: R/V Roger A. Revelle Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

KIWI8

Website	https://www.bco-dmo.org/deployment/57726
Platform	R/V Roger Revelle
Report	http://usjgofs.whoi.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: Oregon State University dataset: Cruise event log dates: January 8, 1998 to February 8, 1998 location: N: -53 S: -67.7952 W: -175.5483 E: -169.4433 project: RR_KIWI8, APFZ Survey 2 cruise ship: R/V Roger A. Revelle Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

KIWI9

Website	https://www.bco-dmo.org/deployment/57727
Platform	R/V Roger Revelle
Report	http://usjgofs.whoi.edu/aesops/RRp2.html
Start Date	1998-02-13
End Date	1998-03-19
Description	<p>Polar Front Process II</p> <p>Methods & Sampling PI: Wilford Gardner of: Texas A&M University dataset: Cruise event log dates: February 13, 1998 to March 19, 1998 location: N: -49.9033 S: -71.3158 W: -178.826 E: -165.9127 project: RR_KIW19, APFZ Process 2 cruise ship: R/V Roger A. Revelle Cruise track Some activities, such as aerosal sampling, sampling from the ship's seawater system, and continuous underway sampling (weather, solar radiation, Sea Beam) are not reported in the log.</p>

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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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