

Mesozooplankton from bongo tows, abundance and dry weight from R/V Roger Revelle KIWI7, KIWI9 cruises in the Southern Ocean, 1998 (U.S. JGOFS AESOPS project)

Website: <https://www.bco-dmo.org/dataset/2777>

Version: September 6, 2001

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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

Mesozooplankton from bongo tows, abundance and dry weight

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Parameters

Parameter	Description	Units
event	a unique number assigned to each sampling operation consisting of month MM, day DD hour HH and minute mm	
sta	bongo station number from event log	
Rhincal_g	Rhincalanus gigas abundance	per m3
Cal_p	Calanus propinquus abundance	per m3
Cal_a	Calanoides acutus abundance	per m3
Neocal_t	Neocalanus tonsus abundance	per m3
Cal_s	Calanus simillimus abundance	per m3
Pleur_r	Pleuromamma robusta abundance	per m3
Met_spp	Metridia spp abundance	per m3
Oith	Oithona spp abundance	per m3
Cten	Ctenocalanus spp abundance	per m3
Krill	Krill abundance	per m3
Other	Other abundance	per m3
Copepod	Total copepods (including nauplii) abundance	per m3
Total	Total mesozooplankton	per m3
Rhincal_g_DW	Rhincalanus gigas dry weight	mg per m3
Cal_p_DW	Calanus propinquus dry weight	mg per m3
Cal_a_DW	Calanoides acutus dry weight	mg per m3
Neocal_t_DW	Neocalanus tonsus dry weight	mg per m3
Cal_s_DW	Calanus simillimus dry weight	mg per m3
Pleur_r_DW	Pleuromamma robusta dry weight	mg per m3
Met_spp_DW	Metridia spp dry weight	mg per m3
Oith_DW	Oithona spp dry weight	mg per m3
Cten_DW	Ctenocalanus spp dry weight	mg per m3
Krill_DW	Krill dry weight	mg per m3
Other_DW	Other dry weight	mg per m3
Copepod_DW	Total copepods (including nauplii) dry weight	mg per m3
Total_DW	Total mesozooplankton dry weight	mg per m3

Instruments

Dataset-specific Instrument Name	Bongo Nets
Generic Instrument Name	Bongo Net
Dataset-specific Description	Vertical bongo nets were taken in through the upper 200 m.
Generic Instrument Description	A Bongo Net consists of paired plankton nets, typically with a 60 cm diameter mouth opening and varying mesh sizes, 10 to 1000 micron. The Bongo Frame was designed by the National Marine Fisheries Service for use in the MARMAP program. It consists of two cylindrical collars connected with a yoke so that replicate samples are collected at the same time. Variations in models are designed for either vertical hauls (OI-2500 = NMFS Pairovet-Style, MARMAP Bongo, CalVET) or both oblique and vertical hauls (Aquatic Research). The OI-1200 has an opening and closing mechanism that allows discrete "known-depth" sampling. This model is large enough to filter water at the rate of 47.5 m ³ /minute when towing at a speed of two knots. More information: Ocean Instruments, Aquatic Research, Sea-Gear

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Deployments

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: Michael Dagg of LUMCON Juanita Urban-Rich of Univ. of Massachusetts dataset: Mesozooplankton from bongo tows, abundance and dry weight dates: December 05, 1997 to December 28, 1997 location: N: -53.0263 S: -64.695 W: -174.6923 E: -168.8333 project/cruise: AESOPS/KIWI07; APFZ Polar Front Process 1 ship: R/V Roger A. Revelle Methodology PI Notes on Methodology: 1. For Ctenocalanus spp, station 1 samples are actually Clausocalanus spp. 2. "Other" catagory includes nauplii, small stage 1-2 calanus spp, oncaea, harpacticoids, pteropods, larvaceans, chaetognaths and polychaetes</p>

KIWI9

Website	https://www.bco-dmo.org/deployment/57727
Platform	R/V Roger Revelle
Report	http://usjgofs.who.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: Michael Dagg of LUMCON Juanita Urban-Rich of Univ. of Massachusetts dataset: Mesozooplankton from bongo tows, abundance and dry weight dates: February 15, 1998 to March 14, 1998 location: N: -52.9872 S: -71.3158 W: -174.75 E: -165.914 project/cruise: AESOPS/KIWI09; APFZ Polar Front Process 2 ship: R/V Roger A. Revelle Methodology PI Notes on Methodology: 1. For Ctenocalanus spp, station 1 samples are actually Clausocalanus spp. 2. "Other" category includes nauplii, small stage 1-2 calanus spp, oncaea, harpacticoids, pteropods, larvaceans, chaetognaths and polychaetes</p>

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Project Information

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

Website: <http://usjgofs.who.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.who.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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