Foram species abundances from MOCNESS tows from R/V Thomas G. Thompson cruises TT007, TT011 in the Equatorial Pacific in 1992 during the U.S. JGOFS Equatorial Pacific (EqPac) project

Website: https://www.bco-dmo.org/dataset/2669
Version: 27 July 1998
Version Date: 1998-07-27

Project
» U.S. JGOFS Equatorial Pacific (EqPac)

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

Contributors	Affiliation	Role
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Dataset Description

Foram species abundances from MOCNESS tows

Methods & Sampling

See Platform deployments for cruise specific documentation

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Data Files

File
forams_TT007.csv (Comma Separated Values (.csv), 7.11 KB) MD5:1e254ab82a09961ce9e7190a1284ebcb version July 27, 1998 James Watkins Foram species abundances from MOCNESS tows Equatorial Pacific Process study - R/V Thomas Thompson TT007
forams_TT011.csv (Comma Separated Values (.csv), 8.81 KB) MD5:cc2aa4f1bd27ce5798cfc2999c79decd version July 27, 1998 James Watkins Foram species abundances from MOCNESS tows Equatorial Pacific Process study - R/V Thomas Thompson TT011

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Parameters

Parameter	Description	Units
event	event number	
sta	station number	
tow	MOCNESS tow #	
depth_begin	beginning depth of depth interval	meters
depth_end	ending depth of depth interval	meters
vol_filt	volume of water filtered	m^3
raw_live	total # alive (protoplasm full) counted	
raw_dead	total # dead (lack protoplasm) counted	
ss_live	live standing stock	live individuals per m^3
ss_dead	dead standing stock	dead individuals per m^3
o_univ	Orbulina universa	live individuals per m^3
g_cnglb	Globigerinoides conglobatus	live individuals per m^3

g_ruber	Globigerinoides ruber	live individuals per m^3
g_ten	Globoturborotalita tenellus	live individuals per m^3
g_sacc	Globigerinoides sacculifer	live individuals per m^3
g_saccw	Globigerinoides sacculifer w/ terminal chamber	live individuals per m^3
s_dehis	Sphaeroidinella dehiscens	live individuals per m^3
g_adam	Globigerinella adamsi	live individuals per m^3
g_aequi	Globigerinella aequilateralis	live individuals per m^3
g_cal	Globigerinella calida	live individuals per m^3
g_bull	Globigerina bulloides	live individuals per m^3
g_falc	Globigerina falconensis	live individuals per m^3
g_dig	Globigerinella digitata	live individuals per m^3
g_rubes	Globoturborotalita rubescens	live individuals per m^3
t_hum	Turborotalita humilis	live individuals per m^3
n_pac	Neogloboquadrina pachyderma	live individuals per m^3
n_dut	Neogloboquadrina dutertrei	live individuals per m^3
g_cnglm	Globoquadrina conglomerata	live individuals per m^3
g_hex	Globorotalioides hexagona	live individuals per m^3
p_obliq	Pulleniatina obliquiloculata	live individuals per m^3
g_scit	Globorotalia scitula	live individuals per m^3

g_men	Globorotalia menardii	live individuals per m^3
g_tum	Globorotalia tumida	live individuals per m^3
c_nitid	Candeina nitida	live individuals per m^3
g_glut	Globigerinita glutinata	live individuals per m^3
t_pum	Turborotalita pumilio	live individuals per m^3
h_pelag	Hastigerina pelagica	live individuals per m^3
forams_other	unidentified individuals	live individuals per m^3

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Instruments

Dataset-specific Instrument Name	MOCNESS
Generic Instrument Name	MOCNESS
Generic Instrument Description	The Multiple Opening/Closing Net and Environmental Sensing System or MOCNESS is a family of net systems based on the Tucker Trawl principle. There are currently 8 different sizes of MOCNESS in existence which are designed for capture of different size ranges of zooplankton and micro-nekton Each system is designated according to the size of the net mouth opening and in two cases, the number of nets it carries. The original MOCNESS (Wiebe et al, 1976) was a redesigned and improved version of a system described by Frost and McCrone (1974). (from MOCNESS manual)

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Deployments

TT007

Website	https://www.bco-dmo.org/deployment/57728
Platform	R/V Thomas G. Thompson
Start Date	1992-01-30
End Date	1992-03-13
Description	Purpose: Spring Survey Cruise; 12°N-12°S at 140°W TT007 was one of five cruises conducted in 1992 in support of the U.S. Equatorial Pacific (EqPac) Process Study. The five EqPac cruises aboard R/V Thomas G. Thompson included two repeat meridional sections (12°N - 12°S), 2 equatorial surveys, and a benthic survey (all at 140° W). The scientific objectives of this study were to observe the processes in the Equatorial Pacific controlling the fluxes of carbon and related elements between the atmosphere, euphotic zone, and deep ocean. As luck would have it, the survey window coincided with an El Nino event. A bonus for the research team.

TT011

Website	https://www.bco-dmo.org/deployment/57730
Platform	R/V Thomas G. Thompson
Start Date	1992-08-05
End Date	1992-09-18
Description	Purpose: Fall Survey; 12°N-12°S at 140°W TT011 was one of five cruises conducted in 1992 in support of the U.S. Equatorial Pacific (EqPac) Process Study. The five EqPac cruises aboard R/V Thomas G. Thompson included two repeat meridional sections (12°N - 12°S), 2 equatorial surveys, and a benthic survey (all at 140° W). The scientific objectives of this study were to observe the processes in the Equatorial Pacific controlling the fluxes of carbon and related elements between the atmosphere, euphotic zone, and deep ocean. As luck would have it, the survey window coincided with an El Nino event. A bonus for the research team.

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Project Information

U.S. JGOFS Equatorial Pacific (EqPac)

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

Coverage: Equatorial Pacific

The U.S. EqPac process study consisted of repeat meridional sections (12°N -12°S) across the equator in the central and eastern equatorial Pacific from 95°W to 170°W during 1992. The major scientific program was focused at 140° W consisting of two meridional surveys, two equatorial surveys, and a benthic survey aboard the R/V Thomas Thompson. Long-term deployments of current meter and sediment trap arrays augmented the survey cruises. NOAA conducted boreal spring and fall sections east and west of 140°W from the R/V Baldridge and R/V Discoverer. Meteorological and sea surface observations were obtained from NOAA's in place TOGA-TAO buoy network.

The scientific objectives of this study were to determine the fluxes of carbon and related elements, and the processes controlling these fluxes between the Equatorial Pacific euphotic zone and the atmosphere and deep ocean. A broad overview of the program at the 140°W site is given by Murray et al. (Oceanography, 5: 134-142, 1992). A full description of the Equatorial Pacific Process Study, including the international context and the scientific results, appears in a series of Deep-Sea Research Part II special volumes:

Topical Studies in Oceanography, A U.S. JGOFS Process Study in the Equatorial Pacific (1995), Deep-Sea Research Part II, Volume 42, No. 2/3.

Topical Studies in Oceanography, A U.S. JGOFS Process Study in the Equatorial Pacific. Part 2 (1996), Deep-Sea Research Part II, Volume 43, No. 4/6.

Topical Studies in Oceanography, A U.S. JGOFS Process Study in the Equatorial Pacific (1997), Deep-Sea Research Part II, Volume 44, No. 9/10.

Topical Studies in Oceanography, The Equatorial Pacific JGOFS Synthesis (2002), Deep-Sea Research Part II, Volume 49, Nos. 13/14.

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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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