

Polycystine Radiolarian from 64 ?m 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/2673>

Version: final

Version Date: 1997-05-01

Project

» [U.S. JGOFS Equatorial Pacific](#) (EqPac)

Program

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

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Dataset Description

Polycystine Radiolarian from 64 µm MOCNESS tows

Methods & Sampling

See Platform deployments for cruise specific documentation

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Data Files

File
<p>rad_TT007.csv (Comma Separated Values (.csv), 100.20 KB) MD5:c6824b23e7d7be3d556751c434fde3a2</p> <p>version May 1, 1997 Leigh Welling Thomas G. Thompson cruise TT007; Winter/Spring Survey Polycystine Radiolarian Data collected with 64 micron MOCNESS All tows to 200 meters depth were collected during the day except moc6 and moc10 which were collected at night. All tows to 1000 meters were collected at night. nd = no data</p>
<p>rad_TT011.csv (Comma Separated Values (.csv), 51.72 KB) MD5:b2a2a3655322b79afbc37b7cfe7cb2f5</p> <p>version October 20, 1994 Leigh Welling Thomas G. Thompson cruise TT011; Summer/Fall Survey Polycystine Radiolarian Data collected with 64 micron MOCNESS All tows were collected during the day</p>

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Parameters

Parameter	Description	Units
event	event number from event log	
date	yyyymmdd	
olat	originator's starting latitude (minus=South)	decimal degrees
olon	originator's starting longitude (minus=West)	decimal degrees
moc	MOCNESS tow number from event log	
net	MOCNESS net number	
top	shallowest depth of collection interval	meters
botm	deepest depth of collection interval	meters
flow	volume of water filtered	cubic meters
count	number of radiolarian tests counted for analysis	

total	total radiolarians	count/cubic meter
s1	Spongurus (?) sp.	count/cubic meter
s1a	Spongurus cf. elliptica	count/cubic meter
s3	Actinomma arcadophorum/medianum	count/cubic meter
s4	category not used	
s6	Collosphaera huxleyi	count/cubic meter
s7	Actinomma leptodermum	count/cubic meter
s8	Prunopyle antarctica	count/cubic meter
s9	Amphirhopalum ypsilon	count/cubic meter
s10	Actinomma cf. hystrix	count/cubic meter
s12	Euchitonia elegans/furcata	count/cubic meter
s13	Acrosphaera spinosa	count/cubic meter
s13a	Collosphaera tuberosa	count/cubic meter
s14	Heliodiscus asteriscus	count/cubic meter
s17	Hexacontium laevigatum/enthacanthum	count/cubic meter
s18	Hymeniastrum euclidis	count/cubic meter
s19	Larcospira quadrangula	count/cubic meter
s23	Ommatartus tetrathalamus tetrathalamus	count/cubic meter
s24	Lithelius minor	count/cubic meter

s29	Larcopyle butschlii	count/cubic meter
s30	Stylochlamyidium asteriscus	count/cubic meter
s34	Acrosphaera murrayana	count/cubic meter
s36	Dictyocoryne truncatum	count/cubic meter
s36a	Dictyocoryne profunda	count/cubic meter
s36c	Euchitonia triangulum	count/cubic meter
s37	Siphonosphaera polysiphonia	count/cubic meter
s39	Disolenia quadrata/zanguebarica	count/cubic meter
s40	Spongaster tetras	count/cubic meter
s41	Sponguru pylomaticu	count/cubic meter
s42	Spongocore puella	count/cubic meter
s43	Spongopyle osculosa	count/cubic meter
s44	Spongotrochus glacialis group	count/cubic meter
s47	Stylodictya aculeata/validispina	count/cubic meter
s48	Porodiscus sp. B	count/cubic meter
s50	Axoprunum stauraxonium	count/cubic meter
s51	Stylatractus spp	count/cubic meter
s53	Hexapyle spp.	count/cubic meter
s54	Octopyle stenzona	count/cubic meter

s54a	Tetrapyle octacantha	count/cubic meter
s54b	Phortidium pylonium	count/cubic meter
gs1	Drupptractus pyriformis/irregularis	count/cubic meter
n1	Liriospyris reticulata	count/cubic meter
n1c	Zygocircus sp.	count/cubic meter
n2	Anthocyrtdium ophirensense	count/cubic meter
n3	Anthocyrtdium zanguebaricum	count/cubic meter
n4	Carpocanistrum spp.	count/cubic meter
n5	Lamprocyrtis nigrinae	count/cubic meter
n6	Pterocanium grandiporus	count/cubic meter
n7	Pterocorys minithorax	count/cubic meter
n8	Carpocanarium papillosum group	count/cubic meter
n9	Giraffospyris angulata	count/cubic meter
n10	Eucyrtidium acuminatum	count/cubic meter
n11	Eucyrtidium hexagonatum	count/cubic meter
n14	Phormopyris stabilis scaphipes	count/cubic meter
n15	Lamprocyrtis hannai	count/cubic meter
n16	Lamprocyclas maritalis group	count/cubic meter
n18	Botryostrobos auritus/australis	count/cubic meter

n18a	category not used	
n19	Botryocytis scutum	count/cubic meter
n20	Rhodospyris sp.	count/cubic meter
n23	Peripyramis circumtexta & Plectopyramis dodecomma	count/cubic meter
n24	Pterocanium sp.	count/cubic meter
n25	Pterocanium praetextum group	count/cubic meter
n26	Pterocanium korotnevi	count/cubic meter
n28	Pterocanium trilobum	count/cubic meter
n29	Dictyophimus crisiae/hirundo group	count/cubic meter
n32	Phormostrichoartus corbula	count/cubic meter
n33	Botryostrobus aquilonaris	count/cubic meter
n34	Stichopilium bicorne	count/cubic meter
n35	Cycladophora davisiana davisiana	count/cubic meter
n35a	Cycladophora davisiana cornutoides	count/cubic meter
n36	Theocalyptra bicornis	count/cubic meter
n38	Theocalyptra bicornis var.	count/cubic meter
n39	Pterocorys hertwigii	count/cubic meter
n40	Pterocorys clausus	count/cubic meter
n41	Pterocorys sabae	count/cubic meter

n42	Theocorythium trachelium group	count/cubic meter
n44	Dictyophimus clevei	count/cubic meter
n43	Dendrospyris borealis	count/cubic meter
n45	Helotholus histicosa	count/cubic meter
n45a	Lampromitra quadricuspis	count/cubic meter
n46	Antarctissa strelkovi/denticulata	count/cubic meter
gn1	Dictyophimus infabricatus	count/cubic meter
gn2	Dictyophimus gracilipes	count/cubic meter
gn2a	Dictyophimus platycephalus	count/cubic meter
gn3	Lithomelissa hystrix	count/cubic meter
gn3a	Lithomelissa laticeps	count/cubic meter
gn4	Lithomelissa thoracites	count/cubic meter
gn5	Lithomelissa cf. galeata	count/cubic meter
gn8	Lophospyris pentagona pentagona	count/cubic meter
gn9	Litharachnium tentorium	count/cubic meter
gn10	Acanthocorys variabilis	count/cubic meter
gn11	Arachnocorys umbellifera	count/cubic meter
gn11a	Dictyophimus cf. tripus	count/cubic meter
gn12	Lophophaena cf. capito	count/cubic meter

gn13	Cornutella profunda	count/cubic meter
gn14	Desmospyris anthocyrtoides/stabilis	count/cubic meter
gn15	Lophocoorys polycantha	count/cubic meter
gn16	Eucecryphalus sp.	count/cubic meter
gn17	Coracalyptra cervus	count/cubic meter
gn18	Peridium sp. & P. longispinum	count/cubic meter
gn19	Lithostrobus cf. hexagonalis	count/cubic meter
gn20	Theopilium tricostatum	count/cubic meter
gn21	Lampromitra cf. coronata	count/cubic meter
gn23	Cladoscenum cf. tricolpum	count/cubic meter
gn22	Plectacantha sp. & P. oikiskos	count/cubic meter
gn27	Dictyoceras acanthicum	count/cubic meter
gn28	Dictyophimus bicornis/columba	count/cubic meter
gn29	Amphisplecta cf. acrostoma	count/cubic meter
l1	Lithomelissa setosa	count/cubic meter
l2	Lithomelissa borealis	count/cubic meter
cm	Callimitra emmae	count/cubic meter
lat_n	originator's starting latitude (minus=South)	decimal degrees
lon_n	originator's starting longitude (minus=West)	decimal degrees

tow	MOCNESS tow number from event log	
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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) This designation is used when the specific type of MOCNESS (number and size of nets) was not specified by the contributing investigator.

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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	<p>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.</p> <p>Methods & Sampling</p> <p>PI: Leigh Welling of: Oregon State University dataset: Counts of polycystine radiolarian from 64 um MOCNESS tows dates: February 07, 1992 to March 08, 1992 location: N: 9.0412 S: -12.0767 W: -140.2108 E: -135.0373 project/cruise: EqPac/TT007 - Spring Survey ship: Thomas Thompson Polycystine Radiolarian Data collected with 64 micron MOCNESS All tows to 200 meters depth were collected during the day except moc6 and moc10 which were collected at night. All tows to 1000 meters were collected at night. nd = no data</p>

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	<p>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.</p> <p>Methods & Sampling PI: Leigh Welling of: Oregon State University dataset: Counts of polycystine radiolarian from 64 um MOCNESS tows dates: August 11, 1992 to September 09, 1992 location: N: 12.0233 S: -5.245 W: -141.49 E: -139.8167 project/cruise: EqPac/TT011 - Fall Survey ship: Thomas Thompson Polycystine Radiolarian Data collected with 64 micron MOCNESS All tows were collected during the day</p>

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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 Baldrige 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.

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).