High-sensitivity euphotic zone ammonium from R/V Thomas G. Thompson TT043, TT053 cruises in the Arabian Sea in 1995 (U.S. JGOFS Arabian Sea project)

Website: https://www.bco-dmo.org/dataset/2539 Version: final Version Date: 2001-08-23

Project

» U.S. JGOFS Arabian Sea (Arabian Sea)

Program

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

Contributors	Affiliation	Role
<u>McCarthy, James J.</u>	Harvard University	Principal Investigator
<u>Chandler, Cynthia L.</u>	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager

Table of Contents

- Dataset Description
- Methods & Sampling
- <u>Parameters</u>
- Instruments
- Deployments
- Project Information
- Program Information
- <u>Funding</u>

Dataset Description

High Sensitivity Euphotic Zone Ammonium Data

Methods & Sampling

See Platform deployments for cruise specific documentation

[table of contents | back to top]

Parameters

Parameter	Description	Units
event	event number, from event log	
sta	station number, from event log	
sta_std	Arabian Sea standard station identifier	
cast	cast number, from event log, consecutive within station	
TM_num	Trace metal clean rosette cast number	
bot	TM bottle number	
depth	sample depth (corrected wire out)	meters
NH4	ammonium concentration	micromoles/liter
depth_n	nominal sample depth	meters

[table of contents | back to top]

Instruments

Dataset-specific Instrument Name	Trace Metal Bottle	
Generic Instrument Name	Trace Metal Bottle	
Dataset-specific Description	Trace metal (TM) clean rosette bottle.	
Generic Instrument Description	Trace metal (TM) clean rosette bottle used for collecting trace metal clean seawater samples.	

[table of contents | back to top]

Deployments

TT043	T043	
Website	https://www.bco-dmo.org/deployment/57704	
Platform	R/V Thomas G. Thompson	
Report	http://osprey.bcodmo.org/datasetDeployment.cfm?ddid=2580&did=353&flag=view	
Start Date	1995-01-08	
End Date	1995-02-05	
Description	Purpose: Process Cruise #1 (Late NE Monsoon) Methods & Sampling PI: James J. McCarthy of: Harvard University dataset: High Sensitivity Euphotic Zone Ammonium Data dates: January 09, 1995 to January 31, 1995 location: N: 22.4835 S: 9.9986 W: 57.2999 E: 68.7499 project/cruise: Arabian Sea/TTN-043 - Process Cruise 1 (Late NE Monsoon) ship: Thomas Thompson Samples were obtained with the *trace metal-clean* rosette and assayed by the method of Brzezinski (1988),Limnol. & Oceanog. 33: 1176-1182. Detection limit = 0.002 micromoles/liter	

Website	https://www.bco-dmo.org/deployment/57714	
Platform	R/V Thomas G. Thompson	
Start Date	1995-10-29	
End Date	1995-11-26	
Description	Methods & Sampling PI: James J. McCarthy of: Harvard University dataset: High Sensitivity Euphotic Zone Ammonium Data dates: October 30, 1995 to November 19, 1995 location: N: 23.8002 S: 10.0848 W: 56.4971 E: 67.1666 project/cruise: Arabian Sea/TTN-053 - Process Cruise 6 (bio- optics) ship: Thomas Thompson Samples were obtained with the CTD rosette and assayed by the method of Brzezinski (1988) Limnol. & Oceanog. 33: 1176-1182. Detection limit = 0.002 micromoles/liter	

[table of contents | back to top]

Project Information

U.S. JGOFS Arabian Sea (Arabian Sea)

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

Coverage: Arabian Sea

The U.S. Arabian Sea Expedition which began in September 1994 and ended in January 1996, had three major components: a U.S. JGOFS Process Study, supported by the National Science Foundation (NSF); Forced Upper Ocean Dynamics, an Office of Naval Research (ONR) initiative; and shipboard and aircraft measurements supported by the National Aeronautics and Space Administration (NASA). The Expedition consisted of 17 cruises aboard the R/V Thomas Thompson, year-long moored deployments of five instrumented surface buoys and five sediment-trap arrays, aircraft overflights and satellite observations. Of the seventeen ship cruises, six were allocated to repeat process survey cruises, four to SeaSoar mapping cruises, six to mooring and benthic work, and a single calibration cruise which was essentially conducted in transit to the Arabian Sea.

[table of contents | back to top]

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).

[table of contents | back to top]

Funding

Funding Source	Award	
National Science Foundation (NSF)	<u>unknown Arabian Sea NSF</u>	

[table of contents | back to top]