

Total organic nitrogen data from CTD casts from R/V Thomas G. Thompson TT043, TT045, TT049, TT050, TT053, TT054 cruises in the Arabian Sea in 1995 (U.S. JGOFS Arabian Sea project)

Website: <https://www.bco-dmo.org/dataset/2537>

Version: final

Version Date: 2001-05-08

Project

» [U.S. JGOFS Arabian Sea](#) (Arabian Sea)

Program

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

Contributors	Affiliation	Role
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Dataset Description

Total organic nitrogen data from CTD casts

Methods & Sampling

See Platform deployments for cruise specific documentation

Data Processing Description

Dennis A. Hansell
Bermuda Biological Station for Research
Total organic nitrogen data

Shore based analysts: Paula Hansell and Catherine Adams

Methods reported in:
Hansell, D.A. and T.Y. Waterhouse. 1997. Controls on the distribution of organic carbon and nitrogen in the eastern Pacific Ocean, Deep Sea Research, 44: 843-857.

Notes:

1. Samples were taken in 60 ml. polyethylene bottles and stored frozen until analysis at BBSR.

2. Samples were oxidized by UV light for at least 24 hours to ensure full oxidation of refractory organics such as urea.

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Parameters

Parameter	Description	Units
event	event number from event log	
sta_std	Arabian Sea standard station identifier	
sta	station number from event log	
cast	CTD rosette cast number from event log	
bot	CTD rosette bottle number	
press	sample depth reported as pressure	decibars
TON	total organic nitrogen	micromoles/liter

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Instruments

Dataset-specific Instrument Name	Niskin Bottle
Generic Instrument Name	Niskin bottle
Dataset-specific Description	CTD/Niskin Rosette bottles.
Generic Instrument Description	A Niskin bottle (a next generation water sampler based on the Nansen bottle) is a cylindrical, non-metallic water collection device with stoppers at both ends. The bottles can be attached individually on a hydrowire or deployed in 12, 24, or 36 bottle Rosette systems mounted on a frame and combined with a CTD. Niskin bottles are used to collect discrete water samples for a range of measurements including pigments, nutrients, plankton, etc.

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Deployments

TT043

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	<p>Purpose: Process Cruise #1 (Late NE Monsoon)</p> <p>Methods & Sampling PI: Dennis A. Hansell of: Bermuda Biological Station for Research dataset: Total organic nitrogen data from CTD casts dates: January 08, 1995 to January 31, 1995 location: N: 22.483 S: 10 W: 57.2999 E: 68.75 project/cruise: Arabian Sea/TTN-043 - Process Cruise 1 (Late NE Monsoon) ship: Thomas Thompson</p> <p>Processing Description Dennis A. Hansell Bermuda Biological Station for Research Total organic nitrogen data Shore based analysts: Paula Hansell and Catherine Adams Methods reported in: Hansell, D.A. and T.Y. Waterhouse. 1997. Controls on the distribution of organic carbon and nitogen in the eastern Pacific Ocean, Deep Sea Research, 44: 843-857. Notes: 1. Samples were taken in 60 ml. polyethylene bottles and stored frozen until analysis at BBSR. 2. Samples were oxidized by UV light for at least 24 hours to ensure full oxidation of refractory organics such as urea.</p>

TT045

Website	https://www.bco-dmo.org/deployment/57706
Platform	R/V Thomas G. Thompson
Start Date	1995-03-14
End Date	1995-04-10
Description	<p>Methods & Sampling PI: Dennis A. Hansell of: Bermuda Biological Station for Research dataset: Total organic nitrogen data from CTD casts dates: March 14, 1995 to April 07, 1995 location: N: 22.4858 S: 9.9993 W: 57.3007 E: 68.7532 project/cruise: Arabian Sea/TTN-045 - Process Cruise 2 (Spring Intermonsoon) ship: Thomas Thompson</p> <p>Processing Description Dennis A. Hansell Bermuda Biological Station for Research Total organic nitrogen data Shore based analysts: Paula Hansell and Catherine Adams Methods reported in: Hansell, D.A. and T.Y. Waterhouse. 1997. Controls on the distribution of organic carbon and nitogen in the eastern Pacific Ocean, Deep Sea Research, 44: 843-857. Notes: 1. Samples were taken in 60 ml. polyethylene bottles and stored frozen until analysis at BBSR. 2. Samples were oxidized by UV light for at least 24 hours to ensure full oxidation of refractory organics such as urea.</p>

TT049

Website	https://www.bco-dmo.org/deployment/57710
Platform	R/V Thomas G. Thompson
Start Date	1995-07-17
End Date	1995-08-15
Description	<p>Methods & Sampling PI: Dennis A. Hansell of: Bermuda Biological Station for Research dataset: Total organic nitrogen data from CTD casts dates: July 18, 1995 to August 12, 1995 location: N: 22.5268 S: 9.9313 W: 57.2997 E: 68.7507 project/cruise: Arabian Sea/TTN-049 - Process Cruise 4 (Middle SW Monsoon) ship: Thomas Thompson</p> <p>Processing Description Dennis A. Hansell Bermuda Biological Station for Research Total organic nitrogen data Shore based analysts: Paula Hansell and Catherine Adams Methods reported in: Hansell, D.A. and T.Y. Waterhouse. 1997. Controls on the distribution of organic carbon and nitrogen in the eastern Pacific Ocean, Deep Sea Research, 44: 843-857. Notes: 1. Samples were taken in 60 ml. polyethylene bottles and stored frozen until analysis at BBSR. 2. Samples were oxidized by UV light for at least 24 hours to ensure full oxidation of refractory organics such as urea.</p>

TT050

Website	https://www.bco-dmo.org/deployment/57711
Platform	R/V Thomas G. Thompson
Start Date	1995-08-18
End Date	1995-09-15
Description	<p>Methods & Sampling PI: Dennis A. Hansell of: Bermuda Biological Station for Research dataset: Total organic nitrogen data from CTD casts dates: August 18, 1995 to September 12, 1995 location: N: 22.487 S: 9.9959 W: 57.3004 E: 68.7492 project/cruise: Arabian Sea/TTN-050 - Process Cruise 5 (Late SW Monsoon) ship: Thomas Thompson</p> <p>Processing Description Dennis A. Hansell Bermuda Biological Station for Research Total organic nitrogen data Shore based analysts: Paula Hansell and Catherine Adams Methods reported in: Hansell, D.A. and T.Y. Waterhouse. 1997. Controls on the distribution of organic carbon and nitrogen in the eastern Pacific Ocean, Deep Sea Research, 44: 843-857. Notes: 1. Samples were taken in 60 ml. polyethylene bottles and stored frozen until analysis at BBSR. 2. Samples were oxidized by UV light for at least 24 hours to ensure full oxidation of refractory organics such as urea.</p>

TT053

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	<p>Methods & Sampling PI: Dennis A. Hansell of: Bermuda Biological Station for Research dataset: Total organic nitrogen data from CTD casts dates: October 29, 1995 to November 23, 1995 location: N: 24.3274 S: 10.0866 W: 56.5005 E: 67.1668 project/cruise: Arabian Sea/TTN-053 - Process Cruise 6 (bio-optics) ship: Thomas Thompson</p> <p>Processing Description Dennis A. Hansell Bermuda Biological Station for Research Total organic nitrogen data Shore based analysts: Paula Hansell and Catherine Adams Methods reported in: Hansell, D.A. and T.Y. Waterhouse. 1997. Controls on the distribution of organic carbon and nitogen in the eastern Pacific Ocean, Deep Sea Research, 44: 843-857. Notes: 1. Samples were taken in 60 ml. polyethylene bottles and stored frozen until analysis at BBSR. 2. Samples were oxidized by UV light for at least 24 hours to ensure full oxidation of refractory organics such as urea.</p>

TT054

Website	https://www.bco-dmo.org/deployment/57715
Platform	R/V Thomas G. Thompson
Start Date	1995-11-30
End Date	1995-12-28
Description	<p>Methods & Sampling PI: Dennis A. Hansell of: Bermuda Biological Station for Research dataset: Total organic nitrogen data from CTD casts dates: November 30, 1995 to December 26, 1995 location: N: 22.5171 S: 9.9789 W: 57.2992 E: 68.7849 project/cruise: Arabian Sea/TTN-054 - Process Cruise 7 (Early NE Monsoon) ship: Thomas Thompson</p> <p>Processing Description Dennis A. Hansell Bermuda Biological Station for Research Total organic nitrogen data Shore based analysts: Paula Hansell and Catherine Adams Methods reported in: Hansell, D.A. and T.Y. Waterhouse. 1997. Controls on the distribution of organic carbon and nitogen in the eastern Pacific Ocean, Deep Sea Research, 44: 843-857. Notes: 1. Samples were taken in 60 ml. polyethylene bottles and stored frozen until analysis at BBSR. 2. Samples were oxidized by UV light for at least 24 hours to ensure full oxidation of refractory organics such as urea.</p>

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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.

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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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Funding

Funding Source	Award
National Science Foundation (NSF)	unknown Arabian Sea NSF

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