CTD casts from R/V Seward Johnson cruises SJ9506 and SJ9508 in the Gulf of Maine and Georges Bank in 1995 as part of the U.S. GLOBEC program (GB project)

Website: https://www.bco-dmo.org/dataset/2418
Data Type: Cruise Results
Version: 1
Version Date: 2004-12-01

Project
» U.S. GLOBEC Georges Bank (GB)

Program
» U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Contributors	Affiliation	Role
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Abstract
CTD casts from R/V Seward Johnson cruises SJ9506 and SJ9508 in the Gulf of Maine and Georges Bank in 1995 as part of the U.S. GLOBEC program.

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Coverage

Spatial Extent: **N**:41.52 **E**:-67.13 **S**:40.52 **W**:-67.78
Temporal Extent: 1995 - 1995

Dataset Description

CTD Observations, 1995 Seward Johnson Process Cruises

CTD Processing Notes and Comments:

Re: SJ9506

Seward Johnson cruise **SJ9506** 25 Apr - 3 May 1995; using the (NBIS Mark III) CTD system.

Calibrated CTD files provided by R. Limeburner, WHOI.

Re: SJ9508

Seward Johnson cruise **SJ9508** 6 - 16 June 1995; using the (NBIS Mark III) CTD system.

Calibrated CTD files were prepared by R. Limeburner except for stations 1, 37, 51 and 61 which were processed by Russ Burgett, URI.

There was no station 95 for this cruise.

Examination of the files showed the salinity (and sigma_t) to be suspect. The salinty and sigma_t fields have been manually edited and obvious problems marked as no data (nd), however care should be taken when using the salinity and sigma_t from these files. Pressure, temperature, salinity and sigma_t from a SeaBird CTD added to the Seward Johnson CTD package are available for casts 112-114, 116, 124-128, 130-136, 138-140, 142-151, 153-160, 162, 164-172, and 174-185. It is recommended to use these files when possible. They are available as a separate object.

Examination of the unprocessed CTD files showed a 4 dbar pressure offset in the CTD calibration. This offset was added to the pressure in the calibrated files.

Re: SJ9508sb

Seward Johnson cruise **SJ9508** 6 - 16 June 1995; using the (Seabird SBE-25) CTD system.

The Seabird CTD was added to the Seward Johnson CTD package after cast 111 due to poor quality conductivity data. Seabird casts 112-114, 116, 124-128, 130-136, 138-140, 142-151, 153-160, 162, 164-172, and 174-185 are available in this data set.

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Updated December 1, 2004; gfh

Methods & Sampling

SJ9508 Seabird CTD Stations. Using the (Seabird SBE-25) CTD system.

Data Processing Description

Calibrated CTD files were prepared by R. Limeburner except for stations 1, 37, 51 and 61 which were processed by Russ Burgett, URI.

There was no station 95 for this cruise.

Examination of the files showed the salinity (and sigma_t) to be suspect. The salinty and sigma_t fields have

been manually edited and obvious problems marked as no data (nd), however care should be taken when using the salinity and sigma_t from these files. Pressure, temperature, salinity and sigma_t from a SeaBird CTD added to the Seward Johnson CTD package are available for casts 112-114, 116, 124-128, 130-136, 138-140, 142-151, 153-160, 162, 164-172, and 174-185. It is recommended to use these files when possible. They are available as a separate object.

Examination of the unprocessed CTD files showed a 4 dbar pressure offset in the CTD calibration. This offset was added to the pressure in the calibrated files.

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Data Files

File
ctd_dh.csv (Comma Separated Values (.csv), 1.50 MB) MD5:e08551ad4d857588e0e4485fefc67fa0 Primary data file for dataset ID 2418

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Parameters

Parameter	Description	Units
cruiseid	cruise identification	
year	year	
brief_desc	brief cruise description, i.e.: broad-scale, process, mooring	
station	station number	
lat	latitude, negative = South	decimal degrees
lon	longitude, negative = West	decimal degrees
yrday_gmt	day of year based on Julian calender, GMT	decimal day
press	depth of sample reported as pressure	decibars
temp	temperature	degrees C.
sal	salinity, psu	
sigma_t	sigma_t	kg/m³
flvolt	fluorescence	volts

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Instruments

Dataset-specific Instrument Name	MkIIICTD
Generic Instrument Name	CTD Neil Brown Mark III
Dataset-specific Description	NBIS Mark III CTD system.
Generic Instrument Description	The Neil Brown Instrument Systems Mark III Conductivity, Temperature, Depth (CTD) instrument is an integral unit containing pressure, temperature and conductivity sensors with an optional dissolved oxygen sensor in a pressure-hardened casing. Developed in the 1970s, the Neil Brown CTD unit was able to digitize conductivity, temperature and pressure measurements at sufficient speeds to permit oceanographers to study 10 cm features at winch lowering speeds of 30 meters per minute. The most widely used variant in the 1980s and 1990s was the MK3B. The MK3C fitted with an improved pressure sensor to reduce hysteresis was developed to meet the requirements of the WOCE project. The instrument is no longer in production, but is supported (repair and calibration) by General Oceanics.

Dataset-specific Instrument Name	SeabirdCTD
Generic Instrument Name	CTD Sea-Bird
Dataset-specific Description	Seabird SBE-25 CTD system. Pressure, temperature, salinity and sigma_t from a SeaBird CTD added to the Seward Johnson MkIIICTD package.
Generic Instrument Description	A Conductivity, Temperature, Depth (CTD) sensor package from SeaBird Electronics. This instrument designation is used when specific make and model are not known or when a more specific term is not available in the BCO-DMO vocabulary. Refer to the dataset-specific metadata for more information about the specific CTD used. More information from: http://www.seabird.com/

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Deployments

SJ9506

Website	https://www.bco-dmo.org/deployment/57485
Platform	R/V Seward Johnson
Report	http://globec.whoi.edu/globec-dir/reports/sj9506.html
Start Date	1995-04-25
End Date	1995-05-03
Description	this was a process cruise. Process turbulence. **Methods & Sampling** SJ9506 CTD Stations 1- 108. Using the (NBIS Mark III) CTD system.

SJ9508

Website	https://www.bco-dmo.org/deployment/57487
Platform	R/V Seward Johnson
Start Date	1995-06-06
End Date	1995-06-16
Description	This was a process type cruise. Process turbulence. Note: Twenty one navigation records in the evenlog were corrected on February 3, 2011 to fix errors in the latitude, from 41 to 40, for the inclusive dates of 6/11/1995: 0218 - 1536 (GMT). [MDA and RCG] **Methods & Sampling** SJ9508 CTD Stations 1- 185. Using the (NBIS Mark III) CTD system. **Processing Description** Calibrated CTD files were prepared by R. Limeburner except for stations 1, 37, 51 and 61 which were processed by Russ Burgett, URI. There was no station 95 for this cruise. Examination of the files showed the salinity (and sigma_t) to be suspect. The salinty and sigma_t fields have been manually edited and obvious problems marked as no data (nd), however care should be taken when using the salinity and sigma_t from these files. Pressure, temperature, salinity and sigma_t from a SeaBird CTD added to the Seward Johnson CTD package are available for casts 112-114, 116, 124-128, 130-136, 138-140, 142-151, 153-160, 162, 164-172, and 174-185. It is recommended to use these files when possible. They are available as a separate object. Examination of the unprocessed CTD files showed a 4 dbar pressure offset in the CTD calibration. This offset was added to the pressure in the calibrated files.

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Project Information

U.S. GLOBEC Georges Bank (GB)

Website: http://globec.whoi.edu/globec_program.html

Coverage: Georges Bank, Gulf of Maine, Northwest Atlantic Ocean

The U.S. GLOBEC Georges Bank Program is a large multi- disciplinary multi-year oceanographic effort. The proximate goal is to understand the population dynamics of key species on the Bank - Cod, Haddock, and two species of zooplankton (*Calanus finmarchicus* and *Pseudocalanus*) - in terms of their coupling to the physical environment and in terms of their predators and prey. The ultimate goal is to be able to predict changes in the distribution and abundance of these species as a result of changes in their physical and biotic environment as well as to anticipate how their populations might respond to climate change.

The effort is substantial, requiring broad-scale surveys of the entire Bank, and process studies which focus both on the links between the target species and their physical environment, and the determination of fundamental aspects of these species' life history (birth rates, growth rates, death rates, etc).

Equally important are the modelling efforts that are ongoing which seek to provide realistic predictions of the flow field and which utilize the life history information to produce an integrated view of the dynamics of the populations.

The U.S. GLOBEC Georges Bank Executive Committee (EXCO) provides program leadership and effective communication with the funding agencies.

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Program Information

U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Website: http://www.usglobec.org/

Coverage: Global

U.S. GLOBEC (GLOBal ocean ECosystems dynamics) is a research program organized by oceanographers and fisheries scientists to address the question of how global climate change may affect the abundance and production of animals in the sea.

The U.S. GLOBEC Program currently had major research efforts underway in the Georges Bank / Northwest Atlantic Region, and the Northeast Pacific (with components in the California Current and in the Coastal Gulf of Alaska). U.S. GLOBEC was a major contributor to International GLOBEC efforts in the Southern Ocean and Western Antarctic Peninsula (WAP).

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Funding

Funding Source	Award
National Science Foundation (NSF)	unknown GB NSF
National Oceanic and Atmospheric Administration (NOAA)	unknown GB NOAA

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