CTD casts from R/V Seward Johnson SJ9508 on Georges Bank from June 1995 (GB project)

Website: https://www.bco-dmo.org/dataset/3411 Version: 2011-01-18

Project

» U.S. GLOBEC Georges Bank (GB)

Program

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

Contributors	Affiliation	Role
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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 salinity 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 salinity 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), 286.23 KB)

 MD5:e11109d8e16f089eba1cb939d2edab8c

Primary data file for dataset ID 3411

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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/m ³
flvolt	fluorescence	volts

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Instruments

Dataset- specific Instrument Name	CTD Sea-Bird 25
Generic Instrument Name	Sea-Bird SBE 25 Sealogger CTD
Generic Instrument Description	The Sea-Bird SBE 25 SEALOGGER CTD is battery powered and is typically used to record data in memory, eliminating the need for a large vessel, electrical sea cable, and on-board computer. All SBE 25s can also operate in real-time, transmitting data via an opto-isolated RS-232 serial port. Temperature and conductivity are measured by the SBE 3F Temperature sensor and SBE 4 Conductivity sensor (same as those used on the premium SBE 9plus CTD). The SBE 25 also includes the SBE 5P (plastic) or 5T (titanium) Submersible Pump and TC Duct. The pump-controlled, TC-ducted flow configuration significantly reduces salinity spiking caused by ship heave, and in calm waters allows slower descent rates for improved resolution of water column features. Pressure is measured by the modular SBE 29 Temperature Compensated Strain-Gauge Pressure sensor (available in eight depth ranges to suit the operating depth requirement). The SBE 25's modular design makes it easy to configure in the field for a wide range of auxiliary sensors, including optional dissolved oxygen (SBE 43), pH (SBE 18 or SBE 27), fluorescence, transmissivity, PAR, and optical backscatter sensors. More information from Sea-Bird Electronics: http://www.seabird.com .

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Deployments

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 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.

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Project Information

U.S. GLOBEC Georges Bank (GB)

Website: <u>http://globec.whoi.edu/globec_program.html</u>

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

The U.S. GLOBEC <u>Georges Bank</u> 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, <u>Haddock</u>, and two species of zooplankton (<u>Calanus finmarchicus</u> and <u>Pseudocalanus</u>) - in terms of their coupling to the physical environment and in terms of their <u>predators and prey</u>. 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 <u>Executive Committee (EXCO)</u> 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)	<u>unknown GB NSF</u>

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