CTD data from R/V Endeavor cruises EN321 and EN325 to Georges Bank, 1999

Website: https://www.bco-dmo.org/dataset/2301

Data Type: Cruise Results

Version: 1

Version Date: 2004-10-04

Project

» U.S. GLOBEC Georges Bank (GB)

Program

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

Contributors	Affiliation	Role
Gifford, Dian J.	University of Rhode Island (URI-GSO)	Principal Investigator
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Abstract

CTD data from R/V Endeavor cruises EN321 and EN325 to Georges Bank, 1999

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Coverage

Spatial Extent: **N**:42.2998 **E**:-66.1997 **S**:40.7873 **W**:-70.7237

Temporal Extent: 1999-03-29 - 1999-06-28

Dataset Description

CTD Hydrography, Endeavor 321 and 325

Click here for additional sampling information (SeaBird system output).

Questions regarding these data should be directed to the US GLOBEC Data Management Office.

DMO Note:
The data reported here are from the primary CTD sensors. However, this data set also contains conductivity, temperature and related computed parameters from secondary sensors. If these data are of interest, please contact the Data Management Office at the above link.

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prepared by:  Dicky Allison, March 2003
updated:  gfh, 4 October 2004
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Acquisition Description

The data reported here are from the primary CTD sensors. However, this data set also contains conductivity, temperature and related computed parameters from secondary sensors.

Processing Description

Header Details:
```
# nquan = 14
# nvalues = 75
# units = metric
# pr = pressure [db]
# c0S/m = conductivity, primary [S/m]
# c1S/m = conductivity, secondary [S/m]
# t090 = temperature, pri, ITS-90 [deg C]
# t190 = temperature, sec, ITS-90 [deg C]
# xmiss = transmissometer
# flS = fluorometer, sea tech
# oxML/L = oxygen [ml/l]
# par = irradiance (PAR)
# nbf = number of bottles fired
# sal00 = salinity, PSS-78 [PSU], T0, C0
# sal11 = salinity, PSS-78 [PSU], T1, C1
# sigma-t00 = density, sigma-t [kg/m^3], T0, C0
# nbin = number of scans per bin
# interval = decibars = 1
# start_time = Mar 31 1999 13:48:50
# bad_flag = -9.990e-29
# sensor 0 = Frequency  0  temperature, primary, 2107, 03 FEB-99
# sensor 1 = Frequency  1  conductivity, primary, 1745, 05-FEB-99s, cpcor = -9.5700e-08
# sensor 2 = Frequency  2  pressure, 64853, 08-21-96
# sensor 3 = Frequency  3  temperature, secondary, 2034, 03-FEB-99s
# sensor 4 = Frequency  4  conductivity, secondary, 1749, 03-FEB-99s, cpcor = -9.5700e-08
# sensor 5 = Extrnl Volt  0  transmissometer, 243D, 16 FEB 1999
# sensor 6 = Extrnl Volt  1  fluorometer, sea tech, 30s, july 1987
# sensor 7 = Extrnl Volt  2  oxygen, current, 130454, 18 AUG 1999
# sensor 8 = Extrnl Volt  3  oxygen, temperature, 130454, 18 AUG 1999
# sensor 9 = Extrnl Volt  4  irradiance (PAR), 4479, AUG 15, 1996
# sensor 10 = Extrnl Volt  9  surface irradiance (SPAR), degrees = 0.0
```

Parameters

Parameter	Description	Units
cruiseid	Originator's cruise identification	
year	4-digit year (i.e. 1995)	
cast	CTD cast number	
lat	latitude, negative = south	decimal degrees
lon	longitude, negative = west	decimal degrees
month_gmt	month of year	GMT
day_gmt	day of month	GMT
time_gmt	time in gmt, reported as hhmm.mm	GMT
press	depth of s ample, reported as pressure	decibars
cond	conductivity	seimens/meter
temp	temperature	deg. C, ITS90
trans	light transmission	percent
par_v	photosynthetically available radiation	volts
flvolt	fluorescence	volts
sal	salinity	PSS-78
sigma_t	sigma-t	kg/m3-1000
o2	dissolved oxygen	milliliters/liter
nbin	number of data cycles per press/bin average	

Instruments

Dataset-specific Instrument Name	Conductivity, Temperature, Depth
Generic Instrument Name	CTD profiler
Dataset-specific Description	CTD measurements taken, CTD unit unidentified.
Generic Instrument Description	The Conductivity, Temperature, Depth (CTD) unit is an integrated instrument package designed to measure the conductivity, temperature, and pressure (depth) of the water column. The instrument is lowered via cable through the water column and permits scientists observe the physical properties in real time via a conducting cable connecting the CTD to a deck unit and computer on the ship. The CTD is often configured with additional optional sensors including fluorometers, transmissometers and/or radiometers. It is often combined with a Rosette of water sampling bottles (e.g. Niskin, GO-FLO) for collecting discrete water samples during the cast. This instrument designation is used when specific make and model are not known.

Dataset-specific Instrument Name	SeabirdCTD
Generic Instrument Name	CTD Sea-Bird
Dataset-specific Description	Sea Bird CTD, no specific unit identified. See also other SeaBird instruments listed under CTD.
Generic Instrument Description	Conductivity, Temperature, Depth (CTD) sensor package from SeaBird Electronics, no specific unit identified. This instrument designation is used when specific make and model are not known. See also other SeaBird instruments listed under CTD. More information from Sea-Bird Electronics.

Deployments

EN321

Website	https://www.bco-dmo.org/deployment/57428
Platform	R/V Endeavor
Start Date	1999-03-28
End Date	1999-04-11
Description	process **Acquisition Description** The data reported here are from the primary CTD sensors. However, this data set also contains conductivity, temperature and related computed parameters from secondary sensors. **Processing Description** Header Details: # nquan = 14 # nvalues = 75 # units = metric # pr = pressure [db] # c0S/m = conductivity, primary [S/m] # c1S/m = conductivity, secondary [S/m] # t090 = temperature, pri, ITS-90 [deg C] # t190 = temperature, sec, ITS-90 [deg C] # xmiss = transmissometer # flS = fluorometer, sea tech # oxML/L = oxygen [ml/l] # par = irradiance (PAR) # nbf = number of bottles fired # sal00 = salinity, PSS-78 [PSU], T0, C0 # sal11 = salinity, PSS-78 [PSU], T1, C1 # sigma-t00 = density, sigma-t [kg/m^3], T0, C0 # nbin = number of scans per bin # interval = decibars = 1 # start_time = Mar 31 1999 13:48:50 # bad_flag = -9.990e-29 # sensor 0 = Frequency 0 temperature, primary, 2107, 03 FEB-99 # sensor 1 = Frequency 1 conductivity, primary, 1745, 05-FEB-99s, cpcor = -9.5700e-08 # sensor 2 = Frequency 2 pressure, 64853, 08-21-96 # sensor 3 = Frequency 3 temperature, secondary, 2034, 03-FEB-99s # sensor 4 = Frequency 4 conductivity, secondary, 1749, 03-FEB-99s, cpcor = -9.5700e-08 # sensor 5 = Extrnl Volt 0 transmissometer, 243D, 16 FEB 1999 # sensor 6 = Extrnl Volt 1 fluorometer, sea tech, 30s, july 1987 # sensor 7 = Extrnl Volt 2 oxygen, current, 130454, 18 AUG 1999 # sensor 8 = Extrnl Volt 3 oxygen, temperature, 130454, 18 AUG 1999 # sensor 9 = Extrnl Volt 4 irradiance (PAR), 4479, AUG 15, 1996 # sensor 10 = Extrnl Volt 9 surface irradiance (SPAR), degrees = 0.0

EN325

Website	https://www.bco-dmo.org/deployment/57432
Platform	R/V Endeavor
Start Date	1999-06-13
End Date	1999-06-30
Description	process **Acquisition Description** The data reported here are from the primary CTD sensors. However, this data set also contains conductivity, temperature and related computed parameters from secondary sensors. **Processing Description** Header Details: # nquan = 9 # nvalues = 61 # units = metric # pr: pressure [db] # c0S/m = conductivity, primary [S/m] # c1S/m = conductivity, secondary [S/m] # t090 = temperature, pri, ITS-90 [deg C] # t190 = temperature, sec, ITS-90 [deg C] # flS = fluorometer, sea tech # par = irradiance (PAR) # sal00 = salinity, PSS-78 [PSU], T0, C0 # sal11 = salinity, PSS-78 [PSU], T1, C1 # bad_flag = -9.990e-29 # sensor 0 = Frequency 0 temperature, primary, 2107, 03 FEB-99 # sensor 1 = Frequency 1 conductivity, primary, 1745, 05-FEB-99s, cpcor = -9.5700e-08 # sensor 2 = Frequency 2 pressure, 64853, 08-21-96 # sensor 3 = Frequency 3 temperature, secondary, 2034, 03-FEB-99s # sensor 4 = Frequency 4 conductivity, secondary, 1749, 03-FEB-99s, cpcor = -9.5700e-08 # sensor 5 = Extrnl Volt 0 transmissometer, 243D, 16 FEB 1999 # sensor 6 = Extrnl Volt 1 fluorometer, sea tech, 30s, july 1987 # sensor 7 = Extrnl Volt 2 oxygen, current, 130454, 18 AUG 1999 # sensor 8 = Extrnl Volt 3 oxygen, temperature, 130454, 18 AUG 1999 # sensor 9 = Extrnl Volt 4 irradiance (PAR), 4479, AUG 15, 1996 # sensor 10 = Extrnl Volt 9 surface irradiance (SPAR), degrees = 0.0

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.

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).

Funding

Funding Source	Award
National Oceanic and Atmospheric Administration (NOAA)	unknown GB NOAA
NSF Division of Ocean Sciences (NSF OCE)	OCE-9806375