Mooring data from the Crest mooring on Georges Bank from 1994-1995 as part of the U.S. GLOBEC Georges Bank project (GB project)

Website: https://www.bco-dmo.org/dataset/2402
Data Type: Cruise Results
Version: 1
Version Date: 2005-06-14

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
Mooring data from the Crest mooring on Georges Bank from 1994-1995 as part of the U.S. GLOBEC Georges Bank project

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Coverage

Spatial Extent: **Lat**:41.4077 **Lon**:-67.5423
Temporal Extent: 1994-10-28 - 1995-09-30

Dataset Description

GLOBEC Georges Bank Long-term Moored Array Component

CREST Mooring Site
41 24.461 N, 67 32.538 W

Two deployments were made at this site. The first deployment was between Oct 28, 1994 and Jan 21, 1995. The second deployment was between Apr 2, 1995 and Sep 30, 1995.

During the second deployment the transmissometer record appears to decline at a steady rate during mid-record. This maybe due to biofouling, but this trend does not appear in the fluorometer.

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updated 06/14/05; gfh

Methods & Sampling

Two deployments were made at this site. The first deployment was between Oct 28, 1994 and Jan 21, 1995. The second deployment was between Apr 2, 1995 and Sep 30, 1995.

Data Processing Description

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Data Files

File
crest.csv (Comma Separated Values (.csv), 1.97 MB) MD5:e586f7d8164c3fa76b349992a6001554 Primary data file for dataset ID 2402

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Parameters

Parameter	Description	Units
year_start	starting year of mooring deployment	
brief_desc	data type description	
lat	latitude, negative = South	decimal degrees
lon	longitude, negative = West	decimal degrees
depth	depth of instrument, negative = height above sea surf.	meters
hour_gmt	time GMT in hours (0-23)	whole hours

minute_gmt	time GMT in minutes (0-59)	whole minutes
seconds_gmt	time GMT in seconds	decimal seconds
day_gmt	day of month GMT (1-31)	
month_gmt	month of year GMT (1-12)	
year	year	
julian_day	Julian day. In this convention, Julian day 2440000 begins at 0000 hours, May 23, 1968	decimal day
flvolt	fluorescense	volts
trans	light transmission	percent
par_scalar	scalar PAR	microEinstein/meter^2/second
cond	conductivity	seimens/meter
sigma_0	potential density	(kg/m^3)
sal	salinity PSU	
temp	water temperature	decimal deg. C
temp_air	air temperature	decimal deg. C

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Instruments

Dataset-specific Instrument Name	Rotronics
Generic Instrument Name	Rotronics Temperature and Humidity Probe
Dataset-specific Description	Air Temperature
Generic Instrument Description	Rotronics device used to measure air temperature

Dataset-specific Instrument Name	SeaTech Fluorometer
Generic Instrument Name	Sea Tech Fluorometer
Dataset-specific Description	Sea Tech chlorophyll-a fluorometer
Generic Instrument Description	The Sea Tech chlorophyll-a fluorometer has internally selectable settings to adjust for different ranges of chlorophyll concentration, and is designed to measure chlorophyll-a fluorescence in situ. The instrument is stable with time and temperature and uses specially selected optical filters enabling accurate measurements of chlorophyll a. It can be deployed in moored or profiling mode. This instrument designation is used when specific make and model are not known. The Sea Tech Fluorometer was manufactured by Sea Tech, Inc. (Corvalis, OR, USA).

Dataset-specific Instrument Name	SeaTech Transmissometer
Generic Instrument Name	Sea Tech Transmissometer
Dataset-specific Description	Sea Tech 25-cm path-length transmissometer
Generic Instrument Description	The Sea Tech Transmissometer can be deployed in either moored or profiling mode to estimate the concentration of suspended or particulate matter in seawater. The transmissometer measures the beam attenuation coefficient in the red spectral band (660 nm) of the laser lightsource over the instrument's path-length (e.g. 20 or 25 cm). This instrument designation is used when specific make and model are not known. The Sea Tech Transmissometer was manufactured by Sea Tech, Inc. (Corvalis, OR, USA).

Dataset-specific Instrument Name	SBE-3
Generic Instrument Name	Sea-Bird SBE-3 Temperature Sensor
Dataset-specific Description	SBE-3 Temperature
Generic Instrument Description	The SBE-3 is a slow response, frequency output temperature sensor manufactured by Sea-Bird Electronics, Inc. (Bellevue, Washington, USA). It has an initial accuracy of +/- 0.001 degrees Celsius with a stability of +/- 0.002 degrees Celsius per year and measures seawater temperature in the range of -5.0 to +35 degrees Celsius. More information from Sea-Bird Electronics: https://www.seabird.com/products/sbe-3-oceanographic-temperature-sensor

Dataset-specific Instrument Name	SBE-4
Generic Instrument Name	Sea-Bird SBE-4 Conductivity Sensor
Dataset-specific Description	SBE-4 Conductivity
Generic Instrument Description	The Sea-Bird SBE-4 conductivity sensor is a modular, self-contained instrument that measures conductivity from 0 to 7 Siemens/meter. The sensors (Version 2; S/N 2000 and higher) have electrically isolated power circuits and optically coupled outputs to eliminate any possibility of noise and corrosion caused by ground loops. The sensing element is a cylindrical, flow-through, borosilicate glass cell with three internal platinum electrodes. Because the outer electrodes are connected together, electric fields are confined inside the cell, making the measured resistance (and instrument calibration) independent of calibration bath size or proximity to protective cages or other objects.

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Deployments

Crest

Website	https://www.bco-dmo.org/deployment/57357
Platform	GB Crest Mooring
Report	http://globec.whoi.edu/globec-dir/data_doc/WHOI-2005-11.pdf
Start Date	1994-10-28
End Date	1995-09-30
Description	U.S. GLOBEC Georges Bank Long-Term Moored Program **Methods & Sampling** Two deployments were made at this site. The first deployment was between Oct 28, 1994 and Jan 21, 1995. The second deployment was between Apr 2, 1995 and Sep 30, 1995. **Processing Description** During the second deployment the transmissometer record appears to decline at a steady rate during mid-record. This maybe due to biofouling, but this trend does not appear in the fluorometer.

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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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