

CTD data from the western Gulf of Maine collected on R/V Gulf Challenger (GC2002-4) from repeat visits to four locations from February to December 2002-2004 (REACH project)

Website: <https://www.bco-dmo.org/dataset/707014>

Data Type: Cruise Results

Version: 1

Version Date: 2017-06-28

Project

» [Regional Ecology And Coastal Hydrography](#) (REACH)

| Contributors | Affiliation | Role |
|--------------------------------|---|------------------------|
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Abstract

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Coverage

Spatial Extent: N:43.034 E:-70.416 S:42.991 W:-70.58

Temporal Extent: 2002-04-24 - 2004-06-28

Dataset Description

Salinity, temperature and light data from repeat visits to the western Gulf of Maine.

Methods & Sampling

Samples are taken monthly along a cross-shelf transect in coastal waters offshore of New Hampshire (see locations below). The CTD data served here are part of a full suite of data that were collected at each station.

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Data Files

| File |
|---|
| ctd.csv (Comma Separated Values (.csv), 1.08 MB) MD5:d058583501b4b0bd46d704a1a6dea488 |
| Primary data file for dataset ID 707014 |

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Parameters

| Parameter | Description | Units |
|---------------|--|--------------------------------------|
| date_cruiseid | Date of visit to station; MMDDYY; doubled as cruiseid for a short time; local date | date format |
| station | where the data was collected | text |
| lat | latitude of station; North is positive | decimal degrees |
| lon | longitude of station; West is negative | decimal degrees |
| depth | depth of the observation | meters |
| temp | Temperature | degrees C |
| sal | Salinity | dimensionless(PSU) |
| cond | Conductivity | mSiemens/cm |
| light_tran | light transmission | percent |
| fluor | fluorescence from the CTD | micrograms per cubic meter |
| PAR | Photosynthetically Available Radiation | microEinsteins per square centimeter |
| sigma_t | density | kilograms per meter |

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Instruments

| | |
|---|---|
| Dataset-specific Instrument Name | CTD profiler |
| Generic Instrument Name | CTD - profiler |
| 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. It permits scientists to observe the physical properties in real-time via a conducting cable, which is typically connected to a CTD to a deck unit and computer on a 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 term applies to profiling CTDs. For fixed CTDs, see https://www.bco-dmo.org/instrument/869934 . |

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Deployments

GC2002-4

| | |
|--------------------|---|
| Website | https://www.bco-dmo.org/deployment/58067 |
| Platform | R/V Gulf Challenger |
| Start Date | 2002-05-24 |
| End Date | 2004-06-28 |
| Description | <p>This is one deployment designation for all the individual trips to the four stations of the REACH time series. The first visit was on 24 May 2002 and the last one on 28 June 2004.</p> <p>Methods & Sampling</p> <p>This is an accumulation of all the deployments that went out to visit these four sites during these three years.</p> |

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Project Information

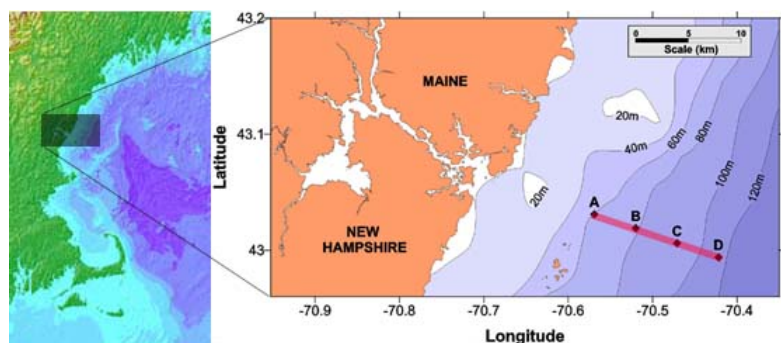
Regional Ecology And Coastal Hydrography (REACH)

Coverage: Western Gulf of Maine

From April 2002 through June 2004, the Regional Ecology and Coastal Hydrography (REACH) project conducted monthly field sampling in the western Gulf of Maine. REACH is one of five seed projects associated with the UNH center of excellence for Coastal Ocean Observing and Analysis (COOA).

The objective of REACH is to document and understand the functional inter-relationships among the major elements of the planktonic assemblage in the waters of western Gulf of Maine. The field program characterized the physical dynamics, nutrient availability, and phytoplankton and zooplankton assemblages. A long-term goal of this effort is to work toward a predictive index of harmful algal bloom (HAB) occurrences in near-shore waters of the western Gulf of Maine based on an integrated assessment of the planktonic community. The comprehensive nature of the study also enables this work to serve as a baseline for the western Gulf of Maine, against which future studies can be compared.

An innovative aspect of this project is the integrated analysis of the entire planktonic assemblage at the species level - including both phytoplankton and zooplankton species abundances in the same samples that are used to determine toxic dinoflagellate counts. In addition, we will ensure detailed examination and characterization of the physical oceanographic and meteorological setting from real-time data derived from satellites, remote sensors on buoys, and commercial fishing boats. (from project website)



The REACH transect runs from 10km to 22km offshore of the coast of Maine and New Hampshire, USA. Sampling stations are marked by letters A, B, C, and D.

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Funding

| Funding Source | Award |
|---|------------------------------------|
| Coastal Ocean Observing and Analysis (COOA) | unknown REACH COOA |

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