# Scientific sampling event log from R/V Oceanus OC467 in the Cape Cod to Georges Bank and Bay of Fundy from July to August 2010 (ALEX-GoME project)

Website: https://www.bco-dmo.org/dataset/3501 Version: 8 July 2011 Version Date: 2011-07-08

#### Project

» Investigations of Alexandrium fundyense dynamics in the Gulf of Maine (ALEX-GoME)

Contributors	Affiliation	Role
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# **Dataset Description**

This scientific sampling event log was created using a very early implementation of the Rolling Deck to Repository (R2R) event log application (ELOG with cruise-specific custom configuration files). The log includes a record of all scientific sampling events from the cruise. OC467 was the first field test deployment of the R2R ELOG system.

Supporting documentation: <u>Cruise track showing event locations</u>

#### **Data Processing Description**

Post-cruise processing of the cruise event log was done by Cyndy Chandler (R2R and BCO-DMO). Event numbers were checked to ensure that all event numbers are unique. Text was modified in the event-type field to remove the colon character and simplify the entries. The R2R event number and original date and time in UTC have been removed from the data set.

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### **Data Files**

<b>EventLog.csv</b> (Comma Separated Values (.csv), 11.38 KB) MD5:ed5e093fb3c342d215cc9b62947d7db7
Primary data file for dataset ID 3501

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## Parameters

Parameter	Description	Units
Cruise_ID	Cruise_ID	dimensionless
event	unique sampling event number derived from local YYYYMMDD.HHMM	dimensionless
date	date (UTC) as YYYYMMDD	dimensionless
time	time (UTC) using 24 hour clock HHMM format	dimensionless
Latitude	latitude (North is positive; South is negative)	decimal degrees
Longitude	longitude (East is positive; West is negative)	decimal degrees
Device_Type	name of sampling device or activity	dimensionless
Event_Type	activity performed with the instrument; e.g. deploy, maxDepth, recover	dimensionless
station	station number	dimensionless
cast	cast number	dimensionless
seafloor	depth of water; seafloor depth from the shipboard 12 kHz Knudsen echosounder	meters
Author	name of person entering the event	dimensionless
Comment	free text comment	dimensionless
year	year that sampling was done	dimensionless

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# Deployments

#### OC467

Website	https://www.bco-dmo.org/deployment/58685
Platform	R/V Oceanus
Start Date	2010-07-29
End Date	2010-08-06
Description	Synoptic mapping of Alexandrium fundyense, hydrography, and velocity in the coastal current from Cape Cod to Georges Bank, Cape Cod to Bay of Fundy. OC467 is one of the GOMTOX project cruises to study the dynamics of Alexandrium fundyense distributions in the Gulf of Maine. GOMTOX is an observational and modeling study of nearshore and offshore shellfish toxicity, vertical toxin flux, and bloom dynamics in the Gulf of Maine, a complex shelf sea region. WHOI cruise planning synopsis Cruise information and original data are available from the NSF R2R data catalog

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### **Project Information**

### Investigations of Alexandrium fundyense dynamics in the Gulf of Maine (ALEX-GoME)

**Coverage**: Gulf of Maine

#### **Project Summary**

Harmful algal blooms, commonly called "red tides" or HABs, are a serious economic and public health problem throughout the world. In the U.S., the most serious HAB problem is <u>paralytic shellfish poisoning (PSP)</u>, a potentially fatal neurological disorder caused by human ingestion of shellfish that accumulate toxins as they feed on dinoflagellates of the genus *Alexandrium*. These organisms cause human illness and death due to PSP, repeated shellfish harvest quarantines, and the mortality of fish and marine mammals. This phenomenon, which affects thousands of miles of U.S. coastline and numerous fisheries resources, has expanded dramatically in the last two decades, especially in the Gulf of Maine. ECOHAB-GOM is a project that addresses several fundamental issues regarding *Alexandrium* blooms in the Gulf of Maine: 1) the source of the *Alexandrium* cells that appear in the fresh water plumes in the western Maine coastal current (WMCC); 2) *Alexandrium* cell distribution and dynamics in the eastern Maine coastal current (EMCC); and 3) linkages among blooms in the WMCC, the EMCC and on Georges Bank. Utilizing a combination of numerical modeling, hydrographic, chemical, and biological measurements, moored and drifting current measurements, and satellite imagery, we are working to characterize the structure, variability and autecology of the major *Alexandrium* habitats in the Gulf of Maine.

#### Summary of Data Sources by Year

2003 – MERHAB (McGillicuddy) 2004 – MERHAB 2005 – WHCOHH (Stegeman) 2006 – NOAA Rapid Response (Anderson) / WHCOHH 2007 – GOMTOX (Anderson) / WHCOHH 2008 – GOMTOX / WHCOHH 2009 – GOMTOX / WHCOHH 2010 – GOMTOX / WHCOHH

#### Summary of Funding Sources by Years

The cruises from 2003-2004 were supported by NOAA grant NA160P2785 (MERHAB).

The cruises from 2005-2010 were jointly funded:

NSF grant OCE-0430724 and NIEHS grant 1P50-ES01274201 (Woods Hole Center for Oceans and Human Health)

NOAA grant NA06NOS4780245 (GOMTOX)

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### Funding

Funding Source	Award
NOAA Center for Sponsored Coastal Ocean Research Coastal Ocean Program (NOAA/CSCOR/COP)	NA06NOS4780245
National Institute of Environmental Health Sciences (NIEHS)	<u>1P50-ES01274201</u>
NSF Division of Ocean Sciences (NSF OCE)	<u>OCE-0430724</u>

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