# CTD - Stations from R/V Hugh R. Sharp HRS070714AB in the Chesapeake Bay from July 2007 (Assessing Roseobacter activities project)

**Website**: https://www.bco-dmo.org/dataset/3488
**Version**: 14 June 2011
**Version Date**: 2011-06-14

**Project**
» Determining growth rates of specific bacterioplankton (Assessing Roseobacter activities)

| Contributors | Affiliation | Role |
|---|---|---|
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## Dataset Description

CTD Stations - station ids, dates, times, lats, lons

### Methods & Sampling

Generated by BCO-DMO staff from CTD .HDR files

### Data Processing Description

Generated by BCO-DMO staff from CTD .HDR files

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## Data Files

| File |
|---|
| **CTD_Stations.csv** (Comma Separated Values (.csv), 975 bytes) MD5:11e89a81cfa80c4f726f6e133728b9f7 Primary data file for dataset ID 3488 |

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## Parameters

| Parameter | Description | Units |
|---|---|---|
| CTD_DataSet_Id | CTD Dataset Id | text |
| station | station id | text |
| date | Station date | YYYYMMDD |
| time | Station time | HHMMSS |
| lat | Station latitude from header record (South is negative) | decimal degrees |
| lon | Station longitude from header record (West is negative) | decimal degrees |

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## Instruments

| | |
|---|---|
| **Dataset-specific Instrument Name** | CTD Sea-Bird SBE 911plus |
| **Generic Instrument Name** | CTD Sea-Bird SBE 911plus |
| **Generic Instrument Description** | The Sea-Bird SBE 911 plus is a type of CTD instrument package for continuous measurement of conductivity, temperature and pressure. The SBE 911 plus includes the SBE 9plus Underwater Unit and the SBE 11plus Deck Unit (for real-time readout using conductive wire) for deployment from a vessel. The combination of the SBE 9 plus and SBE 11 plus is called a SBE 911 plus. The SBE 9 plus uses Sea-Bird's standard modular temperature and conductivity sensors (SBE 3 plus and SBE 4). The SBE 9 plus CTD can be configured with up to eight auxiliary sensors to measure other parameters including dissolved oxygen, pH, turbidity, fluorescence, light (PAR), light transmission, etc.). more information from Sea-Bird Electronics |

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## Deployments

**HRS070714AB**

| | |
|---|---|
| **Website** | https://www.bco-dmo.org/deployment/58668 |
| **Platform** | R/V Hugh R. Sharp |
| **Start Date** | 2007-07-14 |
| **End Date** | 2007-07-19 |
| **Description** | Funded by: NSF OCE-0550485 Original cruise data are available from the NSF R2R data catalog (http://www.rvdata.us/catalog/HRS070714AB) |

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## Project Information

**Determining growth rates of specific bacterioplankton (Assessing Roseobacter activities)**

**Coverage**: Chesapeake Bay, 38N 76W

While an improved picture of the diversity and metabolic capabilities of environmentally significant microorganisms now exists, direct links between phylogenetic diversity and activity of heterotrophic marine bacterioplankton remain elusive. We propose to address this gap with a series of laboratory and field experiments designed with the ultimate goal of measuring in situ growth rates of specific members of the bacterioplankton by direct measurement of the expression of genes involved in fundamental cellular processes (e.g. cellular division, DNA replication, etc.). An advantage of this approach is that instantaneous population parameters are measured directly without labile DOC amendment or incubation. Also, the activity of specific bacterial populations, rather than entire communities, will be monitored and thus provide an improved understanding of the significance of community structure to ecosystem function. Efforts will focus on the Roseobacter lineage of marine bacteria. Members of this clade are ubiquitous and often abundant in marine plankton, have been linked to specific and significant biogeochemical roles and are a main focus of recent whole genome sequencing efforts.

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## Funding


| Funding Source | Award |
|---|---|
| NSF Division of Ocean Sciences (NSF OCE) | OCE-0550485 |


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