Pennate growth rate from the R/V Melville IronEx II cruise in the Equatorial Pacific Ocean in 1995 (IronEx II project)

Website: https://www.bco-dmo.org/dataset/3447
Version: 10 March 2011
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Project
» Iron Experiment II (IronExII)

Program
» Iron Synthesis (FeSynth)

Contributors	Affiliation	Role
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Dataset Description

Pennate growth rate - pinnate diatoms

Data Processing Description

BCO-DMO Processing Notes
Prepared by WHOI OCB-DMO from original multi sheet file :FeEx2_summary01-(c).xls contributed by Doug Mackie
Sheet pennate growth rate used to prepare this dataset.

Changes made to original file:
- Parameter names modified to conform to BCO-DMO convention

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Data Files

File
Growth_pennate.csv (Comma Separated Values (.csv), 131 bytes) MD5:663d74fcdf563ed126116542bb7f1565 Primary data file for dataset ID 3447

File

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Parameters

Parameter	Description	Units
day	day	integer
conc_in	Conc in	(tbd)
conc_out	Conc out	(tbd)
k_in	K in	(tbd)
k_out	K out	(tbd)

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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

IronExII_MV

Website	https://www.bco-dmo.org/deployment/57830
Platform	R/V Melville
Start Date	1995-05-13
End Date	1995-06-21
Description	Cruise Summary: 5/14/95 Depart Papeete, Tahiti 5/14/95 to 5/23/95 Transit & Test stations 5/23/95 to 5/29/95 Survey for Fe release 5/29/95 to 5/30/95 Fe release #1 5/30/95 to 6/1/95 In & out sampling 6/1/95 to 6/1/95 Fe release #2 6/1/95 to 6/5/95 In & out sampling 6/5/95 to 6/5/95 Fe release #3 6/6/95 to 6/8/95 In & out sampling 6/8/95 to 6/9/95 Control patch (SF6 only), 2nd Fe patch release (0.4 nM Fe) 6/9/95 to 6/15/95 In & out sampling of all 3 patches 6/15/95 to 6/21/95 Transit to Acapulco, Mexico

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Project Information

Iron Experiment II (IronExII)

Coverage: Equatorial Pacific Ocean

One of two (see IronEx I Oct/Nov 1993) small scale iron fertilization experiments conducted in the Equatorial Pacific Ocean.

Summary:

5/14/95 Depart Papeete, Tahiti

5/14/95 to 5/23/95 Transit & Test stations

5/23/95 to 5/29/95 Survey for Fe release

5/29/95 to 5/30/95 Fe release #1

5/30/95 to 6/1/95 In & out sampling

6/1/95 to 6/1/95 Fe release #2

6/1/95 to 6/5/95 In & out sampling

6/5/95 to 6/5/95 Fe release #3

6/6/95 to 6/8/95 In & out sampling

6/8/95 to 6/9/95 Control patch (SF6 only), 2nd Fe patch release (0.4 nM Fe)

6/9/95 to 6/15/95 In & out sampling of all 3 patches

6/15/95 to 6/21/95 Transit to Acapulco, Mexico

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Program Information

Iron Synthesis (FeSynth)

Coverage: Global

The two main objectives of the Iron Synthesis program (SCOR Working Group proposal, 2005), are:
1. Data compilation: assembling a common open-access database of the *in situ* iron experiments, beginning with the first period (1993-2002; Ironex-1, Ironex-2, SOIREE, EisenEx, SEEDS-1; SOFeX, SERIES) where primary articles have already been published, to be followed by the 2004 experiments where primary articles are now in progress (EIFEX, SEEDS-2; SAGE, FeeP); similarly for the natural fertilizations S.O.JGOFS (1992), CROZEX (2004/2005) and KEOPS (2005).

2. Modeling and data synthesis of specific aspects of two or more such experiments for various topics such as physical mixing, phytoplankton productivity, overall ecosystem functioning, iron chemistry, CO2 budgeting, nutrient uptake ratios, DMS(P) processes, and combinations of these variables and processes.

SCOR Working Group proposal, 2005. "The Legacy of *in situ* Iron Enrichments: Data Compilation and Modeling".
http://www.scor-int.org/Working_Groups/wg131.htm

See also: SCOR Proceedings Vol. 42 Concepcion, Chile October 2006, pgs: 13-16 2.3.3 Working Group on The Legacy of *in situ* Iron Enrichments: Data Compilation and Modeling.

The first objective of the Iron Synthesis program involves a data recovery effort aimed at assembling a common, open-access database of data and metadata from a series of *in-situ* ocean iron fertilization experiments conducted between 1993 and 2005. Initially, funding for this effort is being provided by the Scientific Committee on Oceanic Research (SCOR) and the U.S. National Science Foundation (NSF).

Through the combined efforts of the principal investigators of the individual projects and the staff of Biological and Chemical Oceanography Data Management Office (BCO-DMO), data currently available primarily through individuals, disparate reports and data agencies, and in multiple formats, are being collected and prepared for addition to the BCO-DMO database from which they will be freely available to the community.

As data are contributed to the BCO-DMO office, they are organized into four overlapping categories:
1. Level 1, basic metadata
(e.g., description of project/study, general location, PI(s), participants);
2. Level 2, detailed metadata and basic shipboard data and routine ship's operations
(e.g., CTDs, underway measurements, sampling event logs);
3. Level 3, detailed metadata and data from specialized observations
(e.g., discrete observations, experimental results, rate measurements) and
4. Level 4, remaining datasets
(e.g., highest level of detailed data available from each study).

Collaboration with BCO-DMO staff began in March of 2008 and initial efforts have been directed toward basic project descriptions, levels 1 and 2 metadata and basic data, with detailed and more detailed data files being incorporated as they become available and are processed.

Related file

Program Documentation

The Iron Synthesis Program is funded jointly by the Scientific Committee on Oceanic Research (SCOR) and the U.S. National Science Foundation (NSF).

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Funding

Funding Source	Award
NSF Division of Ocean Sciences (NSF OCE)	OCE-9217518
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