

Phytoplankton carbon content by type (w/ POC new) 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/3438>

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Project

» [Iron Experiment II](#) (IronExII)

Program

» [Iron Synthesis](#) (FeSynth)

| Contributors | Affiliation | Role |
|-----------------------------------|---|---------------------------|
| Coale, Kenneth H. | Moss Landing Marine Laboratories (MLML) | Principal Investigator |
| Johnson, Ken | Moss Landing Marine Laboratories (MLML) | Co-Principal Investigator |
| Armstrong, Evelyn | University of Otago | Contact |
| Gegg, Stephen R. | Woods Hole Oceanographic Institution (WHOI BCO-DMO) | BCO-DMO Data Manager |

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Dataset Description

Phytoplankton carbon content by type (w/ POC_new)

Data Processing Description

BCO-DMO Processing Notes

Prepared by WHOI OCB-DMO from original file:FEX2CARB.XLS, Sheet 2 contributed by Doug Mackie

Changes made to original file:

- Extensive editing to remove blank lines, organize data (stations, etc) into rows/columns
- Parameter names edited to conform to BCO-DMO convention
- date, time, event, cast, lat, lon manually inserted from Cast Log using event in Cast Log

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Data Files

File

Carb_POC_New.csv(Comma Separated Values (.csv), 4.76 KB)
 MD5:eb18d06733f89e1427eb1a3ab5786957

Primary data file for dataset ID 3438

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Parameters

| Parameter | Description | Units |
|-----------------------|--|-----------------|
| STATION | Station id | text |
| event | Unique event number (Generated by BCO-DMO) | YYYYMMDDHHMM |
| date | Station date (GMT) | YYYYMMDD |
| time | Station time (GMT) | HHMM |
| yday | year day | int |
| lon | Station longitude (West is negative) | decimal degrees |
| lat | Station latitude (South is negative) | decimal degrees |
| Patch | Station location relative to the Patch (I; O; I/O) | In/Out |
| depth | Station depth | meters |
| TIME_sta | Station time (GMT) | dec days |
| Del_T | Delta time | hrs |
| SF6 | SF6 | text |
| POC | POC | μM C |
| POC_new | POC new | μM C |
| TOTAL_PPC_plusHEt | TOTAL PPC plusHEt | μM C |
| TOTAL_PPC_plusHEt_new | TOTAL PPC plusHEt new | μM C |
| PHYTO_TOTAL | PHYTO TOTAL | μM C |
| PHYTO_Synoc_new | PHYTO Synoc new | μM C |
| PHYTO_Synoc | PHYTO Synoc | μM C |
| PHYTO_RFP_new | PHYTO RFP new | μM C |
| PHYTO_RFP | PHYTO RFP | μM C |
| PHYTO_Prymn | PHYTO Prymn | μM C |
| PHYTO_Dino | PHYTO Dino | μM C |
| PHYTO_Pen | PHYTO Pen | μM C |
| PHYTO_Cen | PHYTO Cen | μM C |
| PHYTO_Phaeo | PHYTO Phaeo | μM C |
| HETERO_TOTAL | HETERO TOTAL | μM C |
| HETERO_H_Flag | HETERO H Flag | μM C |
| HETERO_H_Dino | HETERO H Dino | μM C |
| HETERO_H_Ciliates | HETERO H Ciliates | μM C |
| HETERO_A_Ciliates | HETERO A Ciliates | μM C |

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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 |
| Office of Naval Research (ONR) | N00014-94-10125 |

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