

# NODC Electronic Data Documentation Form

NOAA FORM 24-13  
(Revised 9/2001)

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE  
NATIONAL OCEANOGRAPHIC DATA CENTER  
SSMC-3 FOURTH FLOOR, 1315 EAST WEST HWY  
SILVER SPRING MD 20910-3282

FORM APPROVAL PENDING

This form should accompany all data submissions to the National Oceanographic Data Center. Section 1, Contributor Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent descriptive information about the submitted data at that time. Please include any relevant reports, publications, or other supporting documentation that assist in describing data collection, analysis, and format specifics.

## SECTION 1. CONTRIBUTOR IDENTIFICATION

(PLEASE COMPLETE INFORMATION ABOUT WHO IS SENDING THE DATA TO NODC.)

1. Name of contributor Andreas Schmittner	5. Telephone 541 737 9952
2. Organization/Institution name Oregon State University	6. Email aschmitt@coas.oregonstate.edu
3. Mailing address College of Earth, Ocean, and Atmospheric Sciences 104 CEOAS Admin Bldg	7. FAX
4. City Corvallis State/Province OR Zip/Postal Code 97333 Country USA	8. Other contact methods/information

## SECTION 2. DATA COLLECTOR IDENTIFICATION

(PLEASE COMPLETE INFORMATION ABOUT WHO COLLECTED THESE DATA.)

1. Name of data collector (same as Section 1)	5. Telephone enter one or more phone numbers
2. Organization/Institution name enter organization name(s)	6. Email enter one or more email address
3. Mailing address enter up to 3 address lines	7. FAX enter one or more fax number
4. City enter city State/Province enter state/province Zip/Postal Code enter zip/postal code Country enter country	8. Other contact methods/information enter other relevant contact information

**SECTION 3. GENERAL DATASET DESCRIPTION**  
**(PLEASE COMPLETE GENERAL INFORMATION ABOUT THESE DATA.)**

1. Dataset Title (if applicable) (may be sent in an included ASCII text file named "abcTITLE.TXT" where abc are your initials)

Global Ocean Synthesis of Carbon Isotope (d13C) Measurements in Dissolved Inorganic Carbon, 1990-2005

2. Dataset Abstract (please provide a brief description of the contents of the dataset) (may be sent in an included ASCII text file named "abcABSTRACT.TXT" where abc are your initials)

Measurements of d13C in DIC were compiled mainly from WOCE and CLIVAR cruises. The dataset also contains other physical and biogeochemical variables. A detailed description is available in

Schmittner, A., Gruber, N., Mix, A. C., Key, R. M., Tagliabue, A., and Westberry, T. K.: Biology and air-sea gas exchange controls on the distribution of carbon isotope ratios ( $\delta^{13}\text{C}$ ) in the ocean, Biogeosciences Discuss., 10, 8415-8466, doi:10.5194/bgd-10-8415-2013, 2013.

3. Dataset Purpose (please provide a brief statement about the purpose for collecting these data) (may be sent in an included ASCII text file named "abcPURPOSE.TXT" where abc are your initials)

Analysis and comparison with model results.

4. Dataset collection dates

01/01/1990

First day of data collection

12/31/2005

Last day of data collection

5 Dataset location

Northernmost Latitude 90

Southernmost Latitude -90

Easternmost Longitude -180

Westernmost Longitude 180

Ocean/sea area names

enter one or more ocean area name

6. Platform(s) used to collect these data

Platform name(s) and type(s)

7. Instruments used to collect these data

Instrument(s)

8. Parameters measured

Parameters

d13C in DIC plus various others

9. Project name(s)

NSF 1131834-OCE: Reconstructing Glacial Nitrogen and Carbon Cycling Using Isotopes

10. Original cruise name(s)

various, see file c13\_CDIAc.xlsx

11. Volume of data transferred (in bytes)

12. Filenames in data submission

d13c.tar.gz

**SECTION 4. SCIENTIFIC CONTENT OF DATASET**  
**(PLEASE COMPLETE SPECIFIC INFORMATION ABOUT THESE DATA.)**

Include enough information concerning the manner of observation, instrumentation, analysis, and data reduction techniques to make them understandable to future users. Furnish the minimum documentation considered relevant to each data type. Documentation will be retained 'as is' as a permanent part of the data and will be available for future users. Equivalent information already available may be substituted for this section of this form (i.e., publications, reports, and README files containing descriptions of observational and analytical methods).

NAME OF MEASURED PARAMETER	UNIT OF MEASURE USED FOR PARAMETER	OBSERVATION METHOD AND INSTRUMENT USED (TYPE & MODEL	ANALYTICAL METHOD AND LABORATORY PROCEDURES USED (INCLUDING MODIFICATIONS)	DATA PROCESSING TECHNIQUES (WITH FILTERING AND AVERAGING)
d13C_DIC is in units of permil others see CDIAC web site <a href="http://cdiac3.ornl.gov/waves/discrete/">http://cdiac3.ornl.gov/waves/ discrete/</a>	enter corresponding units of measure for each parameter	enter corresponding instrument or observation method for each parameter	enter corresponding analytical method for each parameter	enter corresponding processing technique for each paramater

**SECTION 5. DATA FORMAT OF DATASET****(PLEASE COMPLETE SPECIFIC INFORMATION ABOUT THE FORMAT OF THESE DATA.)**

Include enough information concerning the format of these data to make them understandable to future users. Furnish at least the minimum documentation considered relevant for your data. Documentation will be retained 'as is' as a permanent part of the data and will be available for future users. Equivalent information already available may be substituted for this section of this form (i.e., publications, reports, and README files containing descriptions of the data format). At a minimum, please include the following information:

1. Media type on which data were submitted (e.g., FTP, exabyte tape, etc.)

ftp

2. Name of included file that contains specific record layout, if applicable, including:

FIELD NAME, POSITION FROM 0 MEASURED IN (BITS, BYTES, ETC.), LENGTH (NUMBER, UNITS), ATTRIBUTES, USE AND MEANING

README

3. Brief description of file organization

The dataset includes three files:

1. c13\_CDIAC.xlsx  
excel file including all data from CDIAC
2. d13c.dat  
ascii file including 1 plus data from Keeling as described in Gruber et al. (1999) and Mix as described in Ortiz et al. (2000)

4. Record type(s)

5. Data format information contact person

Name enter name of data format contact person

Email enter email of data format contact person

Telephone enter phone number of data format contact person

Address enter up to four address lines for data format contact person

**SECTION 6. INSTRUMENT CALIBRATION****(PLEASE COMPLETE SPECIFIC CALIBRATION INFORMATION ABOUT INSTRUMENTS USED TO COLLECT THESE DATA.)**

Include enough information about instrument calibration to make it understandable to future users. Furnish the minimum documentation considered relevant for each instrument. Documentation will be retained 'as is' as a permanent part of the data and will be available for future users. Equivalent information already available may be substituted for this section of this form (i.e., publications, reports, and README files containing descriptions of observational and analytical methods).

1. Name of included file that contains specific calibration details, if applicable, including:

INSTRUMENT TYPE (MFR., MODEL#), DATE OF LAST CALIBRATION, LAST CALIBRATED BY (NAME, ORGANIZATION), INSTRUMENT CALIBRATED AT (FIXED INTERVALS/BEFORE USE/AFTER USE/BEFORE AND AFTER USE/ONLY AFTER REPAIR/ONLY WHEN NEW/OTHER (SPECIFY)/INSTRUMENT NOT CALIBRATED

enter name of file submitted to NODC containing calibration detail information