

## NODC Electronic Data Documentation Form 39429

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 Richard A Iannuzzi	5. Telephone 845/365-8839
2. Organization/Institution name Lamont-Doherty Earth Observatory of Columbia University	6. Email iannuzzi@ldeo.columbia.edu
3. Mailing address 61 Route 9W Palisades, NY, 10964	7. FAX 845/365-8736
4. City Palisades State/Province New York Zip/Postal Code 10964 Country United States	8. Other contact methods/information

### SECTION 2. DATA COLLECTOR IDENTIFICATION

(PLEASE COMPLETE INFORMATION ABOUT WHO COLLECTED THESE DATA.)

1. Name of data collector Douglas G. Martinson and Palmer Long Term Ecological Research Group with Raytheon Polar Services Company	5. Telephone 845/365-8830
2. Organization/Institution name Lamont-Doherty Earth Observatory of Columbia University	6. Email dgm@ldeo.columbia.edu
3. Mailing address 61 Route 9W Palisades, NY, 10964	7. FAX 845/365-8736
4. City Palisades State/Province NY Zip/Postal Code 10964 Country U.S.A.	8. Other contact methods/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)

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)

Palmer Long Term Ecological Research (PAL-LTER) Temperature and Salinity profile data collected west of the Antarctic Peninsula. These data from January/February 2003 are part of the ongoing collection of ecological data generally on an equal area grid 400 km long (roughly parallel to the coast) and extending offshore about 200 km to include the continental slope.

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)

These data were collected to support the Palmer Long Term Ecological Research (PAL-LTER) project for the purpose of ecosystem and physical oceanography research. In particular, information regarding the transport of heat and nutrients in the region is of particular importance. Additionally the data is used to understand the vertical ocean structure and its relationship to sea ice, chemical and biological systems. See <http://pal.lternet.edu/>

4. Dataset collection dates

January 6, 2003

First day of data collection

February 1, 2003

Last day of data collection

5 Dataset location

Northernmost Latitude -63.5

Southernmost Latitude -68.2

Easternmost Longitude -64.0

Westernmost Longitude -73.1

Ocean/sea area names

Southern Ocean

6. Platform(s) used to collect these data

Platform name(s) and type(s)

Laurence M. Gould - United States R/V

7. Instruments used to collect these data

Instrument(s)

Seabird Electronics 911plus CTD System with pumped  
Dual Seabird Electronics SBE3 Temperature Sensors and  
Dual Seabird Electronics SBE4 Conductivity Sensors

8. Parameters measured

Parameters

Temperature, Salinity, Pressure

9. Project name(s)

PAL-LTER (Palmer Long Term Ecological Research)

10. Original cruise name(s)

LMG0301

11. Volume of data transferred (in bytes)

~1,500,000

12. Filenames in data submission

2003jan.list

**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)
Pressure	decibars	SeaBird Electronics SBE9plus Pressure Sensor	<ul style="list-style-type: none"> <li>Removed ship roll effects using Seabirds Seasoft Loopedit function</li> </ul>	<ul style="list-style-type: none"> <li>Lowpass filtered</li> </ul>
Temperature	Degrees C	SeaBird Electronics SBE3 Temperature Sensors	<ul style="list-style-type: none"> <li>Corrected for sensor drift using pre and post cruise calibrations and applying slope and offset correction to pre cruise calibrations</li> </ul>	<ul style="list-style-type: none"> <li>Data averaged into 1 db bins</li> <li>Dual sensors compared, primary sensor used, secondary sensor data supplements where primary is bad</li> </ul>
Salinity	unitless	SeaBird Electronics SBE4 Conductivity Sensors	<ul style="list-style-type: none"> <li>Corrected for sensor drift using pre and post cruise calibrations and applying slope correction to pre cruise calibrations</li> <li>Removed Conductivity cell thermal mass effects using</li> </ul>	<ul style="list-style-type: none"> <li>Lowpass filtered</li> <li>Data averaged into 1 db bins</li> <li>Dual sensors compared, primary sensor used, secondary sensor data supplements where primary is bad</li> </ul>

**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

ctd2003janS87.txt

3. Brief description of file organization

92 ascii files named as c2003jjjz.s87 where jjj = julian day, z = character representing cast number of that day  
each file is an individual cast (a list of files names is in file 2003jan.list) with a header (the Lamont-Doherty Earth Observatory s87 format) as defined in ctd2003janS87.txt

4. Record type(s)

see ctd2003janS87.txt

5. Data format information contact person

Name Richard A Iannuzzi

Email iannuzzi@ldeo.columbia.edu

Telephone 845/365-8839

Address Lamont-Doherty Earth Observatory  
61 Route 9W  
Palisades, NY, 10964

**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

ctd2003janS87.txt