

01/16/91

TO: E/OC12 - Douglas Hamilton

E/OC11 - P. Hadsell

FROM: E/OC13 - A. Picciolo

SUBJECT: Data Transfer

The following listed data sets have been transferred as indicated:

Current Meters (F015)

Acc: 9000294 Ref: TV5725 - TV5743 19 sta. 170,622 rec.

Battelle Pacific NW Division

cc: Division Director

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
9000294	TV5725	F015		31BD	317F	S1070	04/27/88	06/07/88	1	4,009
9000294	TV5726	F015		31BD	317F	S1070	06/09/88	09/13/88	1	9,215
9000294	TV5727	F015		31BD	317F	S1070	09/15/88	01/20/89	1	12,198
9000294	TV5728	F015		31BD	317F	S1072	01/30/89	06/02/89	1	11,817
9000294	TV5729	F015		31BD	317F	S1072	04/27/88	06/07/88	1	4,010
9000294	TV5730	F015		31BD	317F	S1072	06/09/88	09/13/88	1	9,206
9000294	TV5731	F015		31BD	317F	S1072	09/15/88	01/20/89	1	12,198
9000294	TV5732	F015		31BD	317F	S1075	01/30/89	06/02/89	1	11,812
9000294	TV5733	F015		31BD	317F	S1075	04/27/88	06/07/88	1	4,012
9000294	TV5734	F015		31BD	317F	S1075	06/09/88	09/13/88	1	9,216
9000294	TV5735	F015		31BD	317F	S1075	09/15/88	01/20/89	1	12,198
9000294	TV5736	F015		31BD	317F	S1059	05/08/88	06/07/88	1	2,954
9000294	TV5737	F015		31BD	317F	S1059	06/09/88	09/01/88	1	8,052
9000294	TV5738	F015		31BD	317F	S1059	09/03/88	01/17/89	1	12,998
9000294	TV5739	F015		31BD	317F	S1059	01/30/89	05/28/89	1	11,253
9000294	TV5740	F015		31BD	317F	S1079	05/08/88	06/03/88	1	2,510
9000294	TV5741	F015		31BD	317F	S1079	06/09/88	09/01/88	1	8,053
9000294	TV5742	F015		31BD	317F	S1079	09/02/88	01/17/89	1	13,095
9000294	TV5743	F015		31BD	317F	S1070	01/30/89	06/02/89	1	11,816

19 170,622

ACCESSION NO. 90 00294 FILETYPE F015

TRACK NO. _____ PROJECT IDENTIFICATION _____
TV5725-5743

STEP	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
ORIG. TAPE <u>ORIG Diskettes</u>	<u>12-10-90</u>	<u>FJM</u>	<u>NINE(9) 3.5" DISK</u>	<u>19</u>	<u>60</u>	<u>—</u>	<u>—</u>
DUPLICATE TAPE	<u>1-15-91</u>	<u>R.P.S.</u>	<u>W17785 *</u>	<u>1</u>	<u>60</u>	<u>6000</u>	<u>170,622</u>
REFORMATTED TAPE							
REFORMATTED DISK							
FIRST MULCHEK							
FINAL MULCHEK							
MPD75 OR F022							
DATA SET FINALIZED							

* LABEL: DNOPC *BATOUT.

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:

ADDITIONAL ERRORS/CORRECTIONS (NOT REPORTED TO P.I.)

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)

THE FOLLOWING CURRENT METER DATA FILES WERE RECEIVED ON NINE (9) 3.5 INCH DISKETTES; THESE FILES WERE COPIED TO THE VAX 780 AND THENCE TO DAMUS.

	VAX FILENAME	DAMUS FILE NAME
	-----	-----
1.	BB1TON.	DNODC*BLLE1. 5225
2.	BB2TON.	DNODC*BLLE2. 6
3.	BB3TON.	DNODC*BLLE3. 7
4.	BM1TON.	DNODC*BLLE4. 8
5.	BM2TON.	DNODC*BLLE5.
6.	BM3TON.	DNODC*BLLE6.
7.	BM4TON.	DNODC*BLLE7.
8.	BT1TON.	DNODC*BLLE8.
9.	BT2TON.	DNODC*BLLE9.
10.	BT3TON.	DNODC*BLLE10.
11.	BT4TON.	DNODC*BLLE11.
12.	MB1TON.	DNODC*BLLE12.
13.	MB2TON.	DNODC*BLLE13.
14.	MB3TON.	DNODC*BLLE14.
15.	MB4TON.	DNODC*BLLE15.
16.	MT1TON.	DNODC*BLLE16.
17.	MT2TON.	DNODC*BLLE17.
18.	MT3TON.	DNODC*BLLE18.
19.	MT4TON.	DNODC*BLLE19.

= F. MITCHELL, E/OC13, 1-8-91 =

TRANSMITTAL AND RECEIPT RECORD
(Please sign and return carbon copy acknowledging receipt)

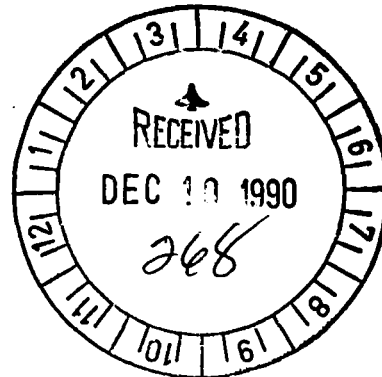
TO: NOAA/NESDIS/NODC 1825 Connecticut Ave NW Washington DC 20235	REFER TO
	ATTENTION E/OC13, Dr. Anthony R. Picciolo

THE ITEM(S) LISTED BELOW WERE FORWARDED TO YOU BY

ORDINARY MAIL
 REGISTERED MAIL
 AIR MAIL
 CERTIFIED MAIL
 GOVERNMENT TRUCK
 BY HAND
 OTHER

Enclosed, find documentation and nine (9) 3.5" HD diskettes containing current meter data as received from Mr. Chris Sherwood, Battelle Northwest Div. The diskettes should contain a total of 19 files of current meter data in NODC File Type 015 as processed from four deployments from two locations (see attached documentation).

Deployment dates - 4/27/88 through 6/2/89



cc: Mr. Chris Sherwood, Battelle, Pacific Northwest Div.

acc # 9000294

#268



FORWARDED BY (Signature) Sid Stillwaugh	TITLE NODC Liaison Officer, Seattle	DATE FORWARDED 12/6/90
RECEIVED BY (Signature) Francis Mitchell	TITLE	DATE RECEIVED 10 DEC 90



Pacific Northwest Division
Marine Sciences Laboratory
439 West Sequim Bay Road
Sequim, Washington 98382
(206) 683-4151

November 29, 1990

Mr. Sid Stillwaugh
Pacific Northwest Liaison Office
NOAA/NESDIS/NODC
7600 Sand Point Way N.E.
Seattle, WA 98115

Dear Mr. Stillwaugh:

SUBJECT: Submission of Current Meter Data from Sites B1B and 1M to NODC Database

Enclosed please find disks containing current meter data recorded at two sites in the Gulf of the Farallones during 1988 and 1989. These data were collected by Pacific Northwest Laboratory for the U. S. Army Corps of Engineers, San Francisco District. A complete description of the program and results are contained in the enclosed two-volume report. The disk and data formats are described in Volume 2, Appendix D, of our report. I have also enclosed a completed Data Documentation Form.

I would appreciate a brief note acknowledging your receipt of the data. Please contact me at Battelle (206-683-4151) or at the University of Washington (543-5099) if you have any problems reading the disks or any questions regarding the data.

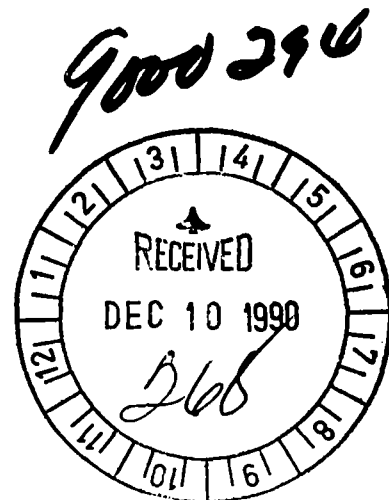
Sincerely,

Christopher R. Sherwood
Research Scientist

Enclosures: 9-3.5" disks
Report PNL-7553 (2 volumes)
Data Documentation Form

cc: Duke Roberts, USACE, S.F. District

CRS:lm



DATA DOCUMENTATION FORM

NOAA FORM 24-13
(2-85)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
WASHINGTON, DC 20235

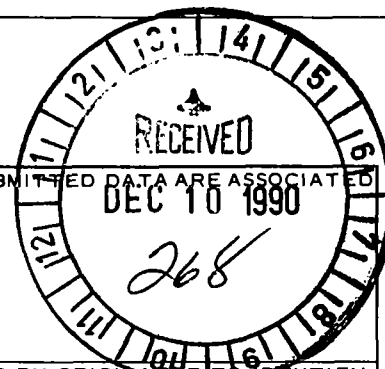
FORM APPROVED
O.M.B. No. 0648-0024
EXPIRES 2/29/87

(While you are not required to use this form, it is the most desirable mechanism for providing the required ancillary information enabling the NODC and users to obtain the greatest benefit from your data.)

This form should accompany all data submissions to NODC. Section A, Originator Identification, must be completed when the data are submitted. It is highly desirable for NODC to also receive the remaining pertinent information at that time. This may be most easily accomplished by attaching reports, publications, or manuscripts which are readily available describing data collection, analysis, and format specifics. Readable, handwritten submissions are acceptable in all cases. All data shipments should be sent to the above address.

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS



1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED

Battelle Pacific Northwest Laboratory
Marine Sciences Laboratory
439 West Sequim Bay Road
Sequim, WA 98382

2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED

Oakland Inner Harbor
Dredged Material Disposal
Monitoring Project

3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT

(see attached sheets)

4. PLATFORM NAME(S)

B1B & M1

5. PLATFORM TYPE(S)
(E.G., SHIP, BUOY, ETC.)

Subsurface moorings

6. PLATFORM AND OPERATOR NATIONALITY(IES)

PLATFORM	OPERATOR
USA	USA

7. DATES

FROM: MO, DAY, YR	TO: MO, DAY, YR
4/27/88	6/2/89

8. ARE DATA PROPRIETARY?

NO YES

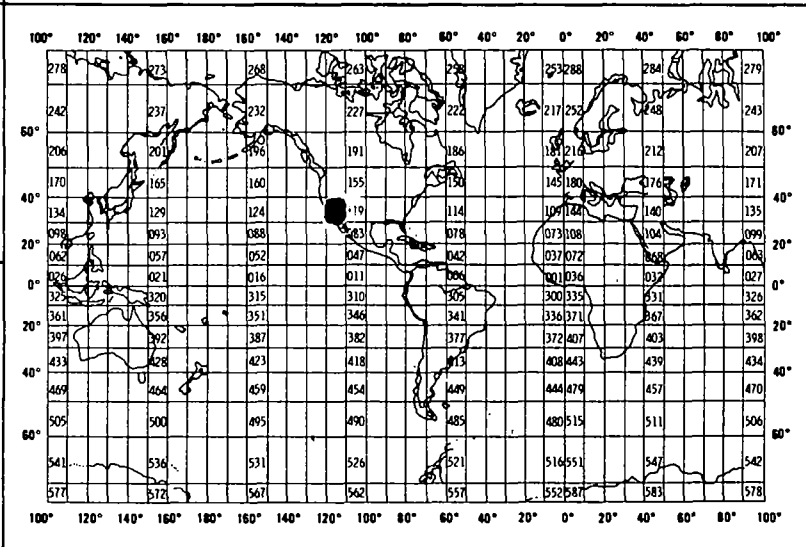
IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR ___ MONTH ___

11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.

GENERAL AREA

9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)?
(I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)

NO YES PART (SPECIFY BELOW)



10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)

Chris Sherwood
(206)683-4151

B. SCIENTIFIC CONTENT

Include enough information concerning manner of observation, instrumentation, analysis, and data reduction routines to make them understandable to future users. Furnish the minimum documentation considered relevant to each data type. Documentation will be retained as a permanent part of the data and will be available to future users. Equivalent information already available may be substituted for this section of the form (i.e., publications, reports, and manuscripts describing observational and analytical methods). If you do not provide equivalent information by attachment, please complete the scientific content section in a manner similar to the one shown in the following example.

EXAMPLE (HYPOTHETICAL INFORMATION)

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
Salinity	‰	Nansen bottles	Inductive salinometer (Hytech model S510)	N/A (Not applicable)
		STD Bissett-Berman Model 9006	N/A	Values averaged over 5-meter intervals
Water color	Forel scale	Visual comparison with Forel bottles	N/A	N/A
Sediment size	φ units and percent by weight	Ewing corer	Standard sieves. Carbonate fraction removed by acid treatment	Same as "Sedimentary Rock Manual," Folk '65

(SPACE IS PROVIDED ON THE FOLLOWING
TWO PAGES FOR THIS INFORMATION)

B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
Current U & V	M/S (x 100)	Neil Brown Smart Accoustic Current Meter with Temperature Sensor	N/A.	None
Temperature	°C (x 100)	Neil Brown Smart Accoustic Current Meter with Temperature Sensor	N/A.	despiking, surrounding values, replace spikes

B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING

C. DATA FORMAT

This information is requested only for data transmitted on punched cards or magnetic tape. Have one of your data processing specialists furnish answers either on the form or by attaching equivalent readily available documentation. Identify the nature and meaning of all entries and explain any codes used.

1. List the record types contained in your file transmittal (e.g., tape label record, master, detail, standard depth, etc.).
2. Describe briefly how your file is organized.
- 3-13. Self-explanatory.
14. Enter the field name as appropriate (e.g., header information, temperature, depth, salinity).
15. Enter starting position of the field.
16. Enter field length in number columns and unit of measurement (e.g., bit, byte, character, word) in unit column.
17. Enter attributes as expressed in the programming language specified in item 3 (e.g., "F 4.1," "BINARY FIXED (5.1)").
18. Describe field. If sort field, enter "SORT 1" for first, "SORT 2" for second, etc. If field is repeated, state number of times it is repeated.

C. DATA FORMAT

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS.

1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE
GIVE METHOD OF IDENTIFYING EACH RECORD TYPE

NODC 015 format on DSHD 3 1/2" MS-DOS diskettes

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

(see attached sheets)

3. ATTRIBUTES AS EXPRESSED IN
- | | | |
|----------------------------------|--------------------------------|--------------------------------|
| <input type="checkbox"/> PL-1 | <input type="checkbox"/> ALGOL | <input type="checkbox"/> COBOL |
| <input type="checkbox"/> FORTRAN | <input type="checkbox"/> _____ | LANGUAGE |

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Mr. Chris Sherwood
 ADDRESS Battelle NW, 439 West Sequim Bay Rd., Sequim, Wa. 98382

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> BCD</td> <td><input type="checkbox"/> BINARY</td> </tr> <tr> <td><input type="checkbox"/> ASCII</td> <td><input type="checkbox"/> EBCDIC</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY	<input type="checkbox"/> ASCII	<input type="checkbox"/> EBCDIC	<input type="checkbox"/> _____		<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____</p>	
<input type="checkbox"/> BCD	<input type="checkbox"/> BINARY							
<input type="checkbox"/> ASCII	<input type="checkbox"/> EBCDIC							
<input type="checkbox"/> _____								
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> SEVEN</td> </tr> <tr> <td><input type="checkbox"/> NINE</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> SEVEN	<input type="checkbox"/> NINE	<input type="checkbox"/> _____	<p>10. END OF FILE MARK</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> OCTAL 17</td> </tr> <tr> <td><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> OCTAL 17	<input type="checkbox"/> _____		
<input type="checkbox"/> SEVEN								
<input type="checkbox"/> NINE								
<input type="checkbox"/> _____								
<input type="checkbox"/> OCTAL 17								
<input type="checkbox"/> _____								
<p>7. PARITY</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> ODD</td> </tr> <tr> <td><input type="checkbox"/> EVEN</td> </tr> </table>	<input type="checkbox"/> ODD	<input type="checkbox"/> EVEN	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p>					
<input type="checkbox"/> ODD								
<input type="checkbox"/> EVEN								
<p>8. DENSITY</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> 200 BPI</td> <td><input type="checkbox"/> 1600 BPI</td> </tr> <tr> <td><input type="checkbox"/> 556 BPI</td> <td></td> </tr> <tr> <td><input type="checkbox"/> 800 BPI</td> <td></td> </tr> <tr> <td colspan="2"><input type="checkbox"/> _____</td> </tr> </table>	<input type="checkbox"/> 200 BPI	<input type="checkbox"/> 1600 BPI	<input type="checkbox"/> 556 BPI		<input type="checkbox"/> 800 BPI		<input type="checkbox"/> _____	
<input type="checkbox"/> 200 BPI	<input type="checkbox"/> 1600 BPI							
<input type="checkbox"/> 556 BPI								
<input type="checkbox"/> 800 BPI								
<input type="checkbox"/> _____								
<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p>	<p>13. LENGTH OF BYTES IN BITS</p>							

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
<i>(see attached sheets)</i>					

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ <i>(e.g., bits, bytes)</i>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		

D. INSTRUMENT CALIBRATION

This calibration information will be utilized by NOAA's National Oceanographic Instrumentation Center in their efforts to develop calibration standards for voluntary acceptance by the oceanographic community. Identify the instruments used by your organization to obtain the scientific content of the DDF (i.e., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("✓") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	

APPENDIX D

CURRENT-METER DATA FILE FORMAT

This appendix describes the contents of data disks prepared for submission to the National Oceanographic Data Center (NODC). The disks contain data recorded by current meters moored in the Gulf of the Farallones as part of an oceanographic study conducted by the Pacific Northwest Laboratory (PNL) for the U.S. Army Corps of Engineers (USACE), San Francisco District. A complete description of the study and an analysis of the results is presented elsewhere in this report.

The current-meter moorings were maintained by Kinnetics Laboratories, Inc. (KLI), and resulted in 19 data files from four deployments from two locations, Sites B1B and 1M. At Site B1B, data were collected at the top, middle, and bottom of the water column (11 files; no data were obtained from the near-bottom meter during the fourth deployment). At Site 1M, data were collected at the top and bottom (8 files). Temperature, cross-shelf, and alongshore components of current velocity were collected at all sites during all deployments.

The original 19 data files were received from KLI and subsequently edited at PNL. The final data files differ from the original data in five ways: 1) the header information has been standardized in all files, 2) the location (latitude and longitude) have been corrected in all files, 3) temperature data were despiked (outliers were replaced by averaging the adjacent four points) in all but two files (1385 records were changed in total), 4) missing velocity components were replaced by interpolation in one file (10 records were changed), and 5) the first data record was deleted in two files.

These data are publicly available through NODC:

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Oceanographic Data Center Records Section
Washington, D.C. 20235

D.1 FORMAT

D.1.1 Disk Format

The distribution disks are 3.5-in. double-sided, high-density floppy disks formatted for 1.44 Mb using IBM DOS 3.30. Data are contained in 19 American Standard Code for Information Interchange (ASCII) files on 9 disks. File names and contents are summarized in Table D.1.

D.1.2 File Format

File format conforms to NODC Format F015 (NODC 1984, Table D.2). The NODC file structure uses four types of 60-character records: 1) Text Record containing descriptive header information, 2) Master Record containing specific header information, and either 3) Detail Record 1 containing current-meter data, or 4) Detail Record 2 containing current-meter data. All of the files contained on these distribution disks use the following structure: 1) the first record in the file is a Text Record, 2) the second record is a Master Record, and 3) remaining records are data records of type Detail Record 2. The number of Detail Records varies with the length of the data file and can be determined by subtracting two from the number of records listed in Table D.1. Record format for each record type is specified in Table D.2. Note that the current meters used did not have pressure or conductivity sensors; thus, no data appear in those columns. A listing of the first 30 records in file BT1TON (Table D.3) provides an example of the file and record formats.

D.2 REFERENCE

NODC (National Oceanographic Data Center). 1984. National Oceanographic Data Center Users Guide Key to Oceanographic Records Documentation No. 14. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Environmental Satellite, Data, and Information Service, Washington, D.C.

TABLE D.1. Summary of Current-Meter Data Files in NODC Format

Disk Number	File Name	Station Name	Number Rec	Water Depth, m	Instr. Depth, m	Location		Start Date	Stop Date
						Latitude	Longitude		
1	bt1t0n.	B1BTA8	8 4008	86	21	37°28'06"N	122°47'09"W	4/27/88	6/ 7/88
1	bt2t0n.	B1886T	9 9214	86	21	37°28'13"N	122°47'03"W	6/ 9/88	9/13/88
2	bt3t0n.	B1889T	10 12197	86	21	37°28'15"N	122°46'43"W	9/15/88	1/20/89
3	bt4t0n.	B1891T	7 11815 ✓	86	21	37°28'13"N	122°47'03"W	1/30/89	6/ 2/89
3	bmlt0n.	B1BMA8	4 4009 ✓	86	46	37°28'06"N	122°47'09"W	4/27/88	6/ 7/88
1	bm2t0n.	B1886M	5 9205	86	46	37°28'13"N	122°47'03"W	6/ 9/88	9/13/88
4	bm3t0n.	B1889M	6 12197 ✓	86	46	37°28'15"N	122°46'43"W	9/15/88	1/20/89
5	bm4t0n.	B1891M	15 11816 ✓	86	46	37°28'13"N	122°47'03"W	1/30/89	6/ 2/89
3	bb1t0n.	B1BBA8	1 4011 ✓	86	85	37°28'06"N	122°47'09"W	4/27/88	6/ 7/88
5	bb2t0n.	B1886B	2 9215 ✓	86	85	37°28'13"N	122°47'03"W	6/ 9/88	9/13/88
6	bb3t0n.	B1889B	3 12197 ✓	86	85	37°28'15"N	122°46'43"W	9/15/88	1/20/89
6	mt1t0n.	1MTA8	16 2953 ✓	42	21	37°38'50"N	122°42'01"W	5/ 8/88	6/ 7/88
6	mt2t0n.	1M886T	17 8051 ✓	42	21	37°38'43"N	122°42'16"W	6/ 9/88	9/ 1/88
7	mt3t0n.	1M889T	18 12997 ✓	42	21	37°38'39"N	122°42'19"W	9/ 3/88	1/17/89
2	mt4t0n.	1M891T	19 11252 ✓	42	21	37°38'43"N	122°42'16"W	1/30/89	5/28/89
3	mb1t0n.	1MBA8	12 2509 ✓	42	40	37°38'50"N	122°42'01"W	5/ 8/88	6/ 3/88
4	mb2t0n.	1M886B	13 8052 ✓	42	40	37°38'43"N	122°42'16"W	6/ 9/88	9/ 1/88
8	mb3t0n.	1M889B	14 13094 ✓	42	40	37°38'39"N	122°42'19"W	9/ 2/88	1/17/89
9	mb4t0n.	1M891B	11 11811 ✓	42	40	37°38'43"N	122°42'16"W	1/30/89	6/ 2/89

D.3

TABLE D.2. NODC File Format (after NODC 1984)

Current Meter Data (Components) (FO15)

<u>Parameter</u>	<u>Description</u>	<u>Column</u>
Text Record	Always '1'	10
Meter Number	Five-Character Field Assigned by the originator - also included on record types 2 and 3	11
Text	Thirty-eight character field for comments or pertinent information	16
Blank		54
Sequence Number	xxxxxx - used for sorting text information	55
Master Record	Always '2'	10
Meter Number	See Record '1'	11
Latitude	DDMMXX plus hemisphere 'N' or 'S' minutes in hundredths	16
Longitude	DDMMXX plus hemisphere 'E' or 'W' minutes in hundredths	23
Depth of Bottom	XXXXX (Whole Meters)	31
Depth of Current Meter	XXXXX (Meters in Tenths)	36
Meter Usage Sequence Number	XXX - Used for indicating number of times meter has been used	41
(NODC Use)	Two characters for NODC internal use	44
Axis Rotation	XXX - Degrees clockwise from true north of V axis - values should be 0 when final processed to provide true direction information	46
Location Name	Six-character name determined by originator	49
Number of Detail	XXXXXX - used to indicate number of detail records (3) to follow the master record (2)	55
Detail Record 1	Always '3'	10
Meter Number	See Record '1'	11
Date (GMT)	YYMMDD	16
Time (GMT)	XXXXXX (Hours, Minutes in hundredths)	22
East-West Current Component (U)	XXXXXX - CM/SEC in hundredths with positive directions (east and north) indicated without plus sign - negative directions (west and south) preceded by minus sign - direction toward	28
North-South Current Component (V)	XXXXXX - CM/SEC in hundredths with positive directions (east and north) indicated without plus sign - negative directions (west and south) preceded by minus sign - direction toward	34

TABLE D.2. (contd)

Current Meter Data (Components) (F015)

<u>Parameter</u>	<u>Description</u>	<u>Column</u>
Temperature	XXXXX with negative temperatures preceded by minus sign (deg C to thousandths)	40
Pressure	XXXXX (decibars in tenths)	45
Conductivity	XXXX - MMHOS/CM in hundredths	50
Blank		54
Sequence Number	XXXXXX - Used for sorting data records originator	55
Detail Record 2	Always '4'	10
Meter Number	See Record '1'	11
Date (GMT)	YYMMDD	16
Time (GMT)	XXXXXX (hours, minutes in hundredths)	22
East-West Current Component (U)	XXXXXX - CM/SEC in hundredths with positive directions (east and north) indicated without plus sign - negative directions (west and south) preceded by minus sign - direction toward	28
North-South Current Component (V)	XXXXXX - CM/SEC in hundredths with positive directions (east and north) indicated without plus sign - negative directions (west and south) preceded by minus sign	34
Temperature	XXXXX with negative temperatures preceded by minus sign (deg C thousandths)	40
Pressure	XXXXX (decibars in tenths)	45
Salinity	XXXXX parts per thousand in thousandths	50
Sequence Number	XXXXXX - used for sorting data records	55

TABLE D.3. NODC File Sample (First 30 records from File BT1TON)

015B1BTA81S1070USACE/PNL B1B TOP	DEPL 1 OF 4	1
015B1BTA82S1070372809N1224715W	86 210 0B1B	4006
015B1BTA84S107088 427040000	889 143011210	1
015B1BTA84S107088 427041500	641 143811230	2
015B1BTA84S107088 427043000	866 91711200	3
015B1BTA84S107088 427044500	728 43611010	4
015B1BTA84S107088 427050000	810 28810700	5
015B1BTA84S107088 427051500	393 -910960	6
015B1BTA84S107088 427053000	286 -16510920	7
015B1BTA84S107088 427054500	489 -32710710	8
015B1BTA84S107088 427060000	766 -59410590	9
015B1BTA84S107088 427061500	557 -59610690	10
015B1BTA84S107088 427063000	357 -49710980	11
015B1BTA84S107088 427064500	602 -29711540	12
015B1BTA84S107088 427070000	117 -97010540	13
015B1BTA84S107088 427071500	782 -126511130	14
015B1BTA84S107088 427073000	-12 -105811100	15
015B1BTA84S107088 427074500	-29 -126110870	16
015B1BTA84S107088 427080000	24 -129711330	17
015B1BTA84S107088 427081500	-276 -154410770	18
015B1BTA84S107088 427083000	-164 -180510580	19
015B1BTA84S107088 427084500	-548 -154911470	20
015B1BTA84S107088 427090000	-109 -175811630	21
015B1BTA84S107088 427091500	-505 -183211170	22
015B1BTA84S107088 427093000	-771 -181811630	23
015B1BTA84S107088 427094500	-837 -175710880	24
015B1BTA84S107088 427100000	-864 -185311430	25
015B1BTA84S107088 427101500	-820 -126311750	26
015B1BTA84S107088 427103000	-770 -152710900	27
015B1BTA84S107088 427104500	-430 -120810460	28
015B1BTA84S107088 427110000	-361 -133210530	29
015B1BTA84S107088 427111500	-921 -140011160	30

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
9000294	F015	TV5725	9999	31BD	317F	1988/04/27	S1070	194178
9000294	F015	TV5726	9999	31BD	317F	1988/06/09	S1070	194179
9000294	F015	TV5727	9999	31BD	317F	1988/09/15	S1070	194180
9000294	F015	TV5728	9999	31BD	317F	1989/01/30	S1072	194181
9000294	F015	TV5729	9999	31BD	317F	1988/04/27	S1072	194182
9000294	F015	TV5730	9999	31BD	317F	1988/06/09	S1072	194183
9000294	F015	TV5731	9999	31BD	317F	1988/09/15	S1072	194184
9000294	F015	TV5732	9999	31BD	317F	1989/01/30	S1075	194185
9000294	F015	TV5733	9999	31BD	317F	1988/04/27	S1075	194186
9000294	F015	TV5734	9999	31BD	317F	1988/06/09	S1075	194187
9000294	F015	TV5735	9999	31BD	317F	1988/09/15	S1075	194188
9000294	F015	TV5736	9999	31BD	317F	1988/05/08	S1059	194189
9000294	F015	TV5737	9999	31BD	317F	1988/06/09	S1059	194190
9000294	F015	TV5738	9999	31BD	317F	1988/09/03	S1059	194191
9000294	F015	TV5739	9999	31BD	317F	1989/01/30	S1059	194192
9000294	F015	TV5740	9999	31BD	317F	1988/05/08	S1079	194193
9000294	F015	TV5741	9999	31BD	317F	1988/06/09	S1079	194194
9000294	F015	TV5742	9999	31BD	317F	1988/09/02	S1079	194195
9000294	F015	TV5743	9999	31BD	317F	1989/01/30	S1070	194196

(19 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
9000294	F015	TV5725	317F	3	4009	88/04/27	88/06/01
9000294	F015	TV5726	317F	4	9215	88/06/09	88/09/01
9000294	F015	TV5727	317F	5	12198	88/09/15	89/01/01
9000294	F015	TV5728	317F	6	11817	89/01/30	89/06/01
9000294	F015	TV5729	317F	3	4010	88/04/27	88/06/01
9000294	F015	TV5730	317F	4	9206	88/06/09	88/09/01
9000294	F015	TV5731	317F	5	12198	88/09/15	89/01/01
9000294	F015	TV5732	317F	6	11812	89/01/30	89/06/01
9000294	F015	TV5733	317F	3	4012	88/04/27	88/06/01
9000294	F015	TV5734	317F	4	9216	88/06/09	88/09/01
9000294	F015	TV5735	317F	5	12198	88/09/15	89/01/01
9000294	F015	TV5736	317F	2	2954	88/05/08	88/06/01
9000294	F015	TV5737	317F	4	8052	88/06/09	88/09/01
9000294	F015	TV5738	317F	5	12998	88/09/03	89/01/01
9000294	F015	TV5739	317F	5	11253	89/01/30	89/05/01
9000294	F015	TV5740	317F	2	2510	88/05/08	88/06/01
9000294	F015	TV5741	317F	4	8053	88/06/09	88/09/01
9000294	F015	TV5742	317F	5	13095	88/09/02	89/01/01
9000294	F015	TV5743	317F	6	11816	89/01/30	89/06/01

(19 rows affected)