

11/22/89

TO: E/OC12 - Branch Chief

E/OC11 - P. Hadsell

FROM: E/OC13 - A. Picciolo

SUBJECT: Data Transfer

The following listed data sets have been transferred as indicated:

Temperature

(L129)

Acc: 8900181 Ref: L00419 - L00419 1 sta. 1,487 rec.

Science Applications

(MMS/Frontal Eddy Dynamics)

Current Meters

(F015)

Acc: 8900181 Ref: TV4172 - TV4193 23 sta. 219,100 rec.

Science Applications

(MMS/Frontal Eddy Dynamics) ✓

cc: Division Director

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900181	TV4172	F015	0193	312H	317F	FR11-1&2	05/08/87	11/04/87	1	12,943
8900181	TV4173	F015	0193	312H	317F	FR12-1&2	05/08/87	11/12/87	1	13,555
8900181	TV4174	F015	0193	312H	317F	FR21-1	05/08/87	11/12/87	1	13,567
8900181	TV4175	F015	0193	312H	317F	FR22-1	05/08/87	06/22/87	1	3,243
8900181	TV4176	F015	0193	312H	317F	FR23-1	05/08/87	11/12/87	1	13,556
8900181	TV4177	F015	0193	312H	317F	FR31-1	05/10/87	09/08/87	1	8,732
8900181	TV4178	F015	0193	312H	317F	FR32-1	05/10/87	11/12/87	1	13,420
8900181	TV4179	F015	0193	312H	317F	FR41-1	05/08/87	05/30/87	1	1,607
8900181	TV4180	F015	0193	312H	317F	FR42-1	05/08/87	10/28/87	1	12,523
8900181	TV4181	F015	0193	312H	317F	FR43-1	05/08/87	11/13/87	1	13,615
8900181	TV4182	F015	0193	312H	317F	FR51-1	05/07/87	05/27/87	1	1,458
8900181	TV4183	F015	0193	312H	317F	FR51-2	08/19/87	11/11/87	1	6,049
8900181	TV4184	F015	0193	312H	317F	FR52-1	08/19/87	10/12/87	1	5,125
8900181	TV4185	F015	0193	312H	317F	FR53-1&2	05/07/87	11/11/87	1	13,574
8900181	TV4186	F015	0193	312H	317F	FR61-1	05/07/87	07/09/87	1	4,509
8900181	TV4187	F015	0193	312H	317F	FR62-1	05/07/87	11/13/87	1	13,660
8900181	TV4188	F015	0193	312H	317F	FR63-1	05/08/87	11/13/87	1	13,648
8900181	TV4189	F015	0193	312H	317F	FR71-1	05/09/87	10/23/87	1	12,030
8900181	TV4190	F015	0193	312H	317F	FR72-1	05/09/87	11/13/87	1	13,517
8900181	TV4191	F015	0193	312H	317F	FR81-1	05/09/87	05/27/87	1	1,301
8900181	TV4192	F015	0193	312H	317F	FR82-1	05/07/87	11/13/87	1	13,709
8900181	TV4193	F015	0193	312H	317F	FR83-1	05/07/87	11/13/87	1	13,707

NO. _____

FILETYPE _____

TAPK NO. _____

PROJECT IDENTIFICATION _____

	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
PE ORIGIN	7/10/89	RK	A00931	73	60	3600	220990
E TAPE 'W'	8/8/89	RK	W00251	73	60	3600	220490
ED TAPE	10/23/89	R.P.S.	W16272 **	1	60	6000	219,100
ED DISK							
ELCHK	12/1/89	PBJ	TV4172	1	60	6000	219026
ELCHK							
F022							
FINALIZED	12/2/89	PBJ	L25994	1	60	6000	219026

REPORTED TO PRINCIPAL INVESTIGATOR:

W1 tape is 9 tracks, 1600 bpi, EVEN parity, Fixed block; ~~7~~ NL

W00251

** LABEL: DNODC * FREDCURROUT.

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

NO CORRECTIONS

(TRACKS DELETED, FIELDS DELETED, ETC.)

USER NAME: [Blank] PHONE #: [Blank] ORG/TASK #: [Blank] DATE SUBMITTED: [Blank] DATE DUE: [Blank] BIN #: [Blank]

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED
Please copy to W tape
Scan W tape Thanks

INPUT MEDIUM: PAPER, CARD, DISK, TAPE, DISKETTE, OTHER(SPECIFY)
 OUTPUT MEDIUM: CARD, DISK, PRINT, TAPE, PLOT, DISKETTE, OTHER(SPECIFY)

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
INPUT	<u>A00251</u>		9	11.00	EVEN	NL	FB	1.0	3000	23	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
OUTPUT	<u>W00251</u>		9	1600	EVEN	NL	FB	1.0	3000	23	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS: *Please send W tape to Asheville, NC Thanks*

ESTIMATED EXECUTION TIME: [Blank]

D731 USE ONLY

JOB #	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
<i>905000</i>	<i>08/09/89</i>	<i>13:45</i>	<i>14:30</i>	<i>C</i>	<i>COMPLETED BY J.S.</i>

COMMENTS: [Blank]

USER NAME <i>Cliff Hartley</i>	PHONE # <i>673-9236</i>	CRG/TASK # <i>EG12008N3AH9</i>	DATE SUBMITTED <i>07/10/89</i>	DATE DUE <i>ASAP</i>	BIN # <i>09</i>
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COMPONENT TO BE USED AND FUNCTION TO BE PERFORMED

Please scan tape

INPUT MEDIUM PAPER CARD DISK <u>TAPE</u> DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK <u>PRINT</u> TAPE PLOT DISKETTE OTHER(SPECIFY)
--	--

TAPE/DISKETTE INFORMATION

TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
<i>A00931</i>		<i>9</i>	<i>1600</i>	<i>EVEN</i>				<i>3600</i>	<i>23</i>
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS

*Please return tape A00931
to Bin 09*

ESTIMATED EXECUTION TIME

USER USE ONLY

JOB #	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
<i>47/1/89</i>	<i>7/11/89</i>	<i>10:45</i>	<i>10:55</i>	<i>C</i>	<i>COMPLETED BY J.S.</i>

REMARKS

FOIS

DATA DOCUMENTATION FORM

NOAA FORM 24-13 (4-77)

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

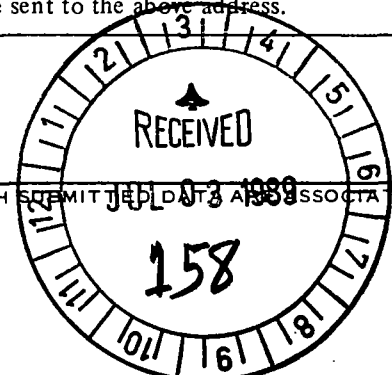
FORM APPROVED
O.M.B. No. 41-R2651
EXPIRES 1-81

(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



<p>1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED</p> <p>Science Applications International Corporation Maritime Technology Group/Physical Oceanography Division 4900 Waters Edge Drive Suite 255 Raleigh, NC 27606</p>																											
<p>2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED</p> <p>North Carolina Frontal Eddy Dynamics Experiment (FRED) (MMS Contract No. 14-12-0001-30349)</p>		<p>3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT</p> <p>MOORING ID'S:</p> <table border="1"> <tr> <td>FR11</td> <td>FR23</td> <td>FR42</td> <td>FR53</td> <td>FR71</td> <td>FR83</td> </tr> <tr> <td>FR12</td> <td>FR31</td> <td>FR43</td> <td>FR61</td> <td>FR72</td> <td></td> </tr> <tr> <td>FR21</td> <td>FR32</td> <td>FR51</td> <td>FR62</td> <td>FR81</td> <td></td> </tr> <tr> <td>FR22</td> <td>FR41</td> <td>FR52</td> <td>FR63</td> <td>FR82</td> <td></td> </tr> </table>		FR11	FR23	FR42	FR53	FR71	FR83	FR12	FR31	FR43	FR61	FR72		FR21	FR32	FR51	FR62	FR81		FR22	FR41	FR52	FR63	FR82	
FR11	FR23	FR42	FR53	FR71	FR83																						
FR12	FR31	FR43	FR61	FR72																							
FR21	FR32	FR51	FR62	FR81																							
FR22	FR41	FR52	FR63	FR82																							
<p>4. PLATFORM NAME(S)</p>	<p>5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)</p> <p>MOORING</p>	<p>6. PLATFORM AND OPERATOR NATIONALITY(IES)</p> <table border="1"> <tr> <td>PLATFORM</td> <td>OPERATOR</td> <td>FROM: MO/DAY/YR</td> <td>TO: MO/DAY/YR</td> </tr> <tr> <td>USA</td> <td>USA</td> <td>05/07/87</td> <td>11/13/87</td> </tr> </table>		PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR	USA	USA	05/07/87	11/13/87																
PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR																								
USA	USA	05/07/87	11/13/87																								
<p>8. ARE DATA PROPRIETARY?</p> <p><input checked="" type="checkbox"/> NO <input type="checkbox"/> YES</p> <p>IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR ___ MONTH ___</p>		<p>11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.</p> <p>GENERAL AREA</p>																									
<p>9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)?</p> <p>(I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)</p> <p><input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)</p>		<p>10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)</p> <p>Dr. C.C. Ebbesmeyer (Prog. Manager) Evans-Hamilton, Inc. 731 N. Northlake Way, Ste. 201 Seattle, Washington 98103 (206) 545-8155</p>																									

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
Currents, Temperature, Pressure	cm/s °C dB	General Oceanics, Inc. Model 6011 Mark II Current Meters (NOTE: FR52 was a Model 6011 Mark I for the period 8/87-11/87)	- NONE -	- NONE - Submittal contains Raw, non-filtered data sets

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 File Type $\Phi 15$
"Current Meter Data (Components)"
April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

23 individual files separated by 1 EOF. 2 EOF's define EOM (End-of-Medium)

3. ATTRIBUTES AS EXPRESSED IN PL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert J. Wayland (919) 851-8356
ADDRESS Science Applications International Corporation / 4900 Water's Edge Drive, Ste. 255
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> <u>IBM</u></p>
<p>7. PARITY (RS-232)</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>SAIC/Raleigh Tape ID No.:</p> <p><u>SP1186</u></p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p><u>3600</u></p> <p>13. LENGTH OF BYTES IN BITS</p> <p><u>60</u></p>

RECORD FORMAT DESCRIPTION

RECORD NAME NODC File Type 015 ** SEE ATTACHED **

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		

8900181

A00931
A00932
A00933

A00934



Science Applications International Corporation

June 21, 1989

Mr. Francis Mitchell
NOAA/NODC
3300 Whitehaven Street, NW
Washington, DC 20235

Dear Mitch:

Enclosed please find four (4) nine-track magnetic data tapes containing data collected during the North Carolina Frontal Eddy Dynamics Experiment (FRED). This work was funded under Minerals Management Service (MMS) Contract Number 14-12-0001-303449, which was awarded to Evans-Hamilton, Incorporated. The following items have been attached:

- (1) Four (4) data tapes:
 - A00931 1 - 2400 foot tape containing current meter data in NODC Format 015, ✓
 - A00932 1 - 2400 foot tape containing AXBT and XBT data in NODC Format 022,
 - A00933 1 - 1200 foot tape containing ADCP data in NODC Format 004,
 - A00934 1 - 600 foot tape containing Lagrangian drifter data in NODC Format 156.

- (2) Five (5) printed volumes detailing the information stored on each tape:
 - Volume I - Current Meter Data
 - Volume II - XBT Data
 - Volume III - AXBT Data
 - Volume IV - Lagrangian Drifter Data
 - Volume V - Acoustic Doppler Current Profiler (ADCP) Data

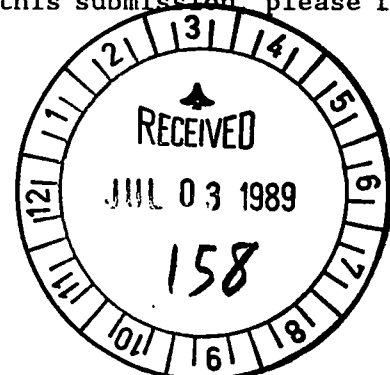
- (3) Appropriate NODC documentation forms for each data type submitted.

If you should have any questions/comments regarding this submission, please feel free to contact me.

Sincerely,

Bob

Robert J. Wayland
Senior Meteorologist



Enclosures

DATE April 1985	NODC Users Guide	SECTION 4.1.8	PAGE 2
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File structure -

Four 60-character records: (1) Text Record, (2) Master Record, (3) Detail Record 1, and (4) Detail Record 2.

File format -

Current Meter Data (Components) (F015)

PARAMETER	DESCRIPTION	SC
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 TO HUNDRETHS	16
LONGITUDE	DDMMXX PLUS HEMISPHERE 'E' OR 'W' - MINUTES TO HUNDRETHS	23
DEPTH OF BOTTOM	XXXXX (WHOLE METERS)	31
DEPTH OF CURRENT METER	XXXXX (METERS TO TENTHS)	36
METER USAGE SEQUENCE NUMBER (NODC USE)	XXX - USED FOR INDICATING NUMBER OF TIMES METER HAS BEEN USED TWO CHARACTERS FOR NODC INTERNAL USE	41 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 RECORDS	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 TO HUNDRETHS)	22
EAST-WEST CURRENT COMPONENT (U)	XXXXXX - CM/SEC TO HUNDRETHS WITH POSITIVE DIRECTIONS (EAST AND NORTH) INDICATED WITHOUT PLUS SIGN - NEGATIVE DIRECTIONS (WEST AND SOUTH) PRECEDED BY MINUS SIGN - DIRECTION TOWARD	28

DATE	NODC Users Guide	SECTION	PAGE
March 1984		4.1.8	3

NORTH-SOUTH CURRENT COMPONENT (V)	XXXXXX - CM/SEC TO HUNDREDTHS WITH POSITIVE DIRECTIONS (EAST AND NORTH) INDICATED WITHOUT PLUS SIGN - NEGATIVE DIRECTIONS (WEST AND SOUTH) PRECEDED BY MINUS SIGN - DIRECTION TOWARD	34
TEMPERATURE	XXXXX WITH NEGATIVE TEMPERATURES PRECEDED BY MINUS SIGN (DEG C TO THOUSANDTHS)	40
PRESSURE	XXXXX (DECIBARS TO TENTHS)	45
CONDUCTIVITY	XXXX - MMHOS/CM TO 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	15
TIME (GMT)	XXXXXX (HOURS, MINUTES TO HUNDREDTHS)	22
EAST-WEST CURRENT COMPONENT (U)	XXXXXX - CM/SEC TO 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 TO 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 TO THOUSANDTHS)	40
PRESSURE	XXXXX (DECIBARS TO TENTHS)	45
SALINITY	XXXXX PARTS PER THOUSAND TO THOUSANDTHS	50
SEQUENCE NUMBER	XXXXXX - USED FOR SORTING DATA RECORDS	55

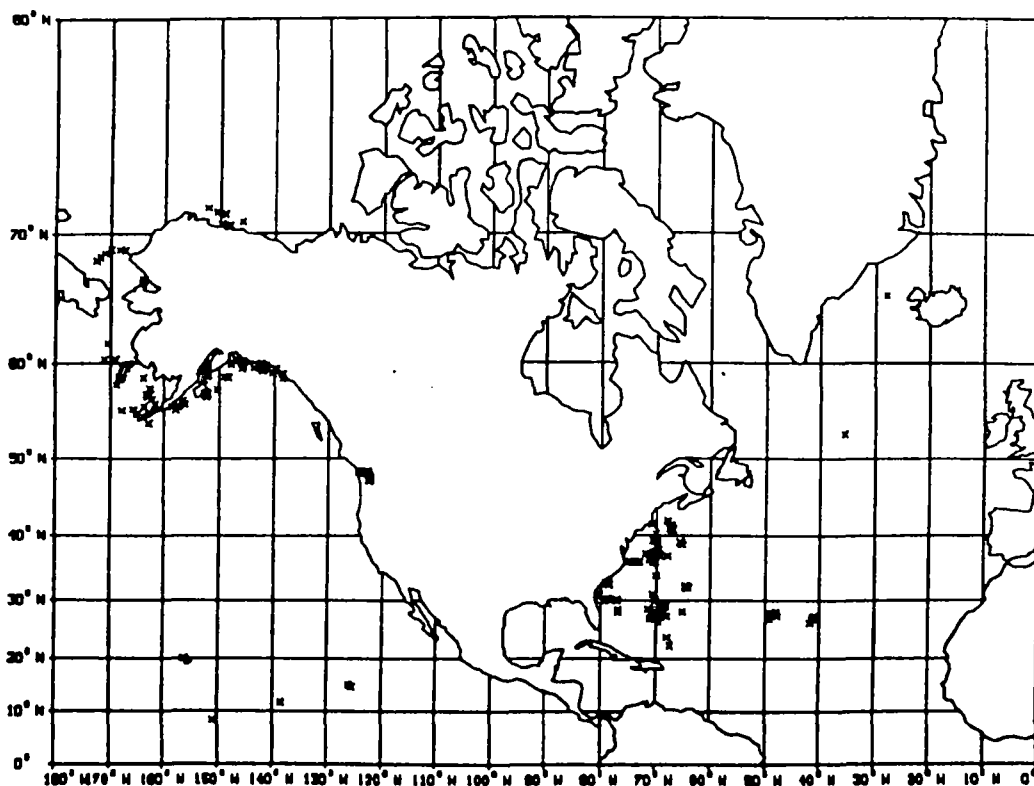
4.1.8 Current Meter Data (Components) (File 015)

Geographic coverage - U.S. East Coast, Coastal Alaska, Puget Sound, Atlantic and Pacific Oceans

Time period - 1962 - present

Description -

This file contains time series measurements of ocean currents. These data are obtained from current meter moorings and represent the Eulerian method of current measurement, i.e., the meters are deployed at a fixed point and measure flow past a sensor. Position, bottom depth, sensor depth, and meter characteristics are reported for each station. The data record comprises values of east-west (u) and north-south (v) current vector components at specified date and time. Current direction is defined as the direction toward which the water is flowing with positive directions east and north and negative directions west and south. Data values may be subject to averaging or filtering and are typically reported at 10-15 minute time intervals. Water temperature, pressure, and conductivity or salinity may also be reported. A text record is available for optional comments.



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 (✓)	<u>BEFORE</u> OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
GENERAL OCEANICS, INC. MODEL 6011 MK I	4/87		GENERAL OCEANICS, INC.		✓				
GENERAL OCEANICS, INC. MODEL 6011 MK II	4/87		GENERAL OCEANICS, INC.		✓				

Unique No.: 188607

Date of Entry: 10/31/89

DATA ENTRY INFORMATION SYSTEM
(DATASET INVENTORY - DINDB)

Accession No.: 8900181 Reference No.: 044873
Former Accession No.: Former Reference No.: (Resub ONLY)

Media-In (DINDB): 09 - Digital Magnetic Tape
Exchange Format: E126 - Standard level Expend. Bathythermograph
Processing Format: C125 - Fixed Level Expendable Bathythermograph

* Note * If data is F022, create an additional record for C022.

Country/Institute Code: 312H Country/Platform Code: 3191
Platform Type (DINDB): 01 - Aircraft Orig. Cruise ID: FRED1
Cruise Start Date: 05/12/87 Project Code: 0193
Cruise End Date: 05/12/87 Data Use Code (DUC): 3

Number of Stations: 25 Number of Records: 25

If stations/records not appropriate then:

Number: Units:

Ocean Area:

Code 1: 23B Meaning: NW Atlantic (limit-40 W)
Code 2: Meaning:
Code 3: Meaning:

DINDB Transaction Date:

NO. _____

FILETYPE C/AS

PROJECT IDENTIFICATION FRSD

8900181

044873

	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
PE C/AS	7/10/89	FA	A00932	5	120	3600	17952
TAPE W	8/8/89	FA	W07785	5	120	3600	17952
ED TAPE	10-25-89	R.P.S.	W15545 **	1	✓	✓	25
ED DISK							
CHEK							
CHEK							
FO22							
FINALIZED							

REPORTED TO PRINCIPAL INVESTIGATOR:

2. 13y... 7K, 1600 bps. Fixed block
DSN = DNODC * 8900181 - 01

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

** LABEL: DNODC * SLOUT.

(TRACKS DELETED, FIELDS DELETED, ETC.)

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED

Copy to []

Can 'W' tape []

INPUT MEDIUM PAPER CARD DISK TAPE DISKETTE OTHER(SPECIFY)				OUTPUT MEDIUM CARD DISK PRINT TAPE PLOT DISKETTE OTHER(SPECIFY)			
---	--	--	--	--	--	--	--

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
INPUT	A20937		9	1600	EVEN	SL	FB	120	3600	5
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
OUTPUT	W07185		9	1600	EVEN	SL	FB	120	3600	15
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS Please Send 'W' tape to Asheville, NC Thanks								ESTIMATED EXECUTION TIME	
---	--	--	--	--	--	--	--	--------------------------------	--

OPERATOR USE ONLY

DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
08/09/89	13:05 13:05	13:20 13:20	C	COMPLETED BY J.S.

Please scan tape

INPUT MEDIUM PAPER CARD DISK <u>TAPE</u> DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK <u>PRINT</u> TAPE PLOT DISKETTE OTHER(SPECIFY)
---	---

TAPE/DISKETTE INFORMATION

TAPES/DISKETTES	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
<u>A00932</u>		<u>9</u>	<u>1600</u>	<u>EVEN</u>				<u>3600</u>	<u>5</u>
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
TAPE #/DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
TAPE #/DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS: Please return tape A00932 to Bin 09

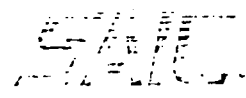
ESTIMATED EXECUTION TIME: _____

31 USE ONLY

JOB #	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED, DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
<u>07471143</u>	<u>07/11/89</u>	<u>11:00</u>	<u>11:45</u>	<u>C</u>	<u>COMPLETED BY JS</u>

8-100181

A00931
A00932
A00933
A00934



Science Applications International Corporation

June 21, 1989

Mr. Francis Mitchell
NOAA/NODC
3300 Whitehaven Street, NW
Washington, DC 20235

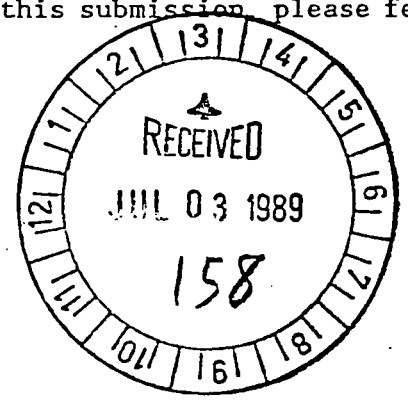
Dear Mitch:

Enclosed please find four (4) nine-track magnetic data tapes containing data collected during the North Carolina Frontal Eddy Dynamics Experiment (FRED). This work was funded under Minerals Management Service (MMS) Contract Number 14-12-0001-303449, which was awarded to Evans-Hamilton, Incorporated. The following items have been attached:

- (1) Four (4) data tapes:
 - A00931 1 - 2400 foot tape containing current meter data in NODC Format 015,
 - A00932 1 - 2400 foot tape containing AXBT and XBT data in NODC Format 022,
 - A00933 1 - 1200 foot tape containing ADCP data in NODC Format 004,
 - A00934 1 - 600 foot tape containing Lagrangian drifter data in NODC Format 156.
- (2) Five (5) printed volumes detailing the information stored on each tape:
 - Volume I - Current Meter Data
 - Volume II - XBT Data
 - Volume III - AXBT Data
 - Volume IV - Lagrangian Drifter Data
 - Volume V - Acoustic Doppler Current Profiler (ADCP) Data
- (3) Appropriate NODC documentation forms for each data type submitted.

If you should have any questions/comments regarding this submission, please feel free to contact me.

Sincerely,
Bde
Robert J. Wayland
Senior Meteorologist



Enclosures

XBT & AXBT DATA DOCUMENTATION FORM

NOAA FORM 24-13
(4-77)

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

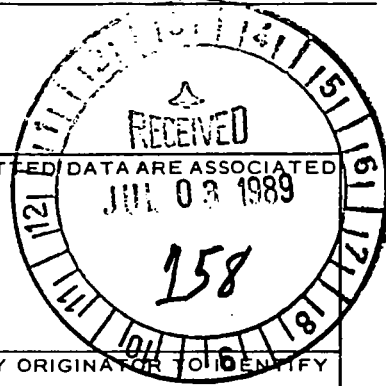
FORM APPROVED
O.M.B. No. 41-R2651
EXPIRES 1-81

(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
 Science Applications International Corporation
 Maritime Technology Group / Physical Oceanography Division
 4900 Water's Edge Drive
 Suite 255
 Raleigh, NC 27606

2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED
 North Carolina Frontal Eddy Dynamics Experiment (FRED)
 (MMS Contract No. 14-12-0001-30349)

3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT
 Four (4) AXBT Flights:
 FRED1, FRED2, FRED3 and FRED5
 One (1) Hydrographic Cruise:
 PI8701

4. PLATFORM NAME(S)

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

 AIRCRAFT,

 SHIP

6. PLATFORM AND OPERATOR NATIONALITY(IES)

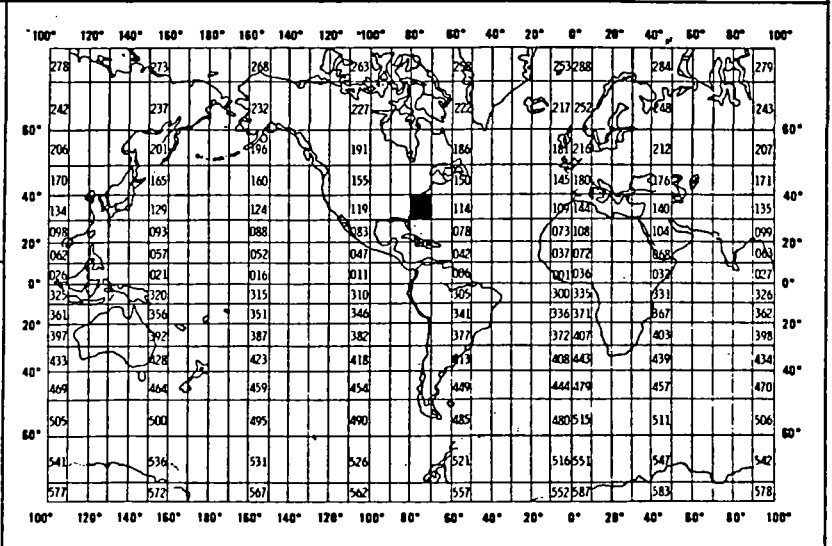
 USA USA

7. DATES
 FROM: MO, DAY, YR TO: MO, DAY, YR
 5/11/87 5/24/87

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)
 Dr. C.C. Ebbsmeyer (Prog. Manager)
 Evans-Hamilton, Inc.
 731 N. Northlake Way, Ste. 201
 Seattle, Washington 98103
 (206) 545-8155

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
Temperature	°C.	Sippican 2500 foot (depth) AXBT	- NONE -	FRED1, Stations 101-127 interpolated to 3 m depth increments. <u>ALL OTHER</u> data interpolated to 1 m depth increments.
Temperature	°C	Sippican T-4 XBT	- NONE -	All data interpolated to 1 m depth increments.

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 File Type $\phi 22$
"High-Resolution CTD/STD Data"
April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

5 individual files separated by 1 EOF. 2 EOF's define EOM (End-of-Medium)

3. ATTRIBUTES AS EXPRESSED IN PL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert J. Wayland (919) 851-8356
ADDRESS Science Applications International Corporation / 4900 Water's Edge Drive, Ste. 255
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input checked="" type="checkbox"/> <u>IBM</u></p>
<p>7. PARITY (RS-232)</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p><u>SAIC/Raleigh Tape ID No.:</u></p> <p><u>SP 1187</u></p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES <u>3600</u></p> <p>13. LENGTH OF BYTES IN BITS <u>120</u></p>

RECORD FORMAT DESCRIPTION

RECORD NAME NODC File Type 022

**** SEE ATTACHED ****

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		

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File structure -

Eight 120-character records: (1) Text Record, (2) Master Record, (3) Detail Record 1, (4) Detail Record 2, (5) Detail Record 3, (6) Detail Record 4, (7) Detail Record 5, and (8) Detail Record 6.

File format -

High-resolution CTD/STD Data (F022)

PARAMETER	DESCRIPTION	SC
TEXT RECORD	ALWAYS '1'	10
CAST NUMBER	FIVE-CHARACTER FIELD ASSIGNED BY THE ORIGINATOR - ALSO INCLUDED ON RECORD TYPES 2,3 AND 4	11
TEXT	100-CHARACTER FIELD - USED FOR COMMENTS OR PERTINENT INFORMATION	16
SEQUENCE NUMBER	XXXX - USED FOR SORTING TEXT RECORDS	116
MASTER RECORD	ALWAYS '2'	10
CAST NUMBER	SEE RECORD '1'	11
LATITUDE	DDMMXX PLUS HEMISPHERE 'N' OR 'S' - MINUTES TO HUNDREDTHS	16
LONGITUDE	DDMMXX PLUS HEMISPHERE 'E' OR 'W' - MINUTES TO HUNDREDTHS	23
CRUISE IDENTIFICATION	TEN-CHARACTER FIELD ASSIGNED BY THE ORIGINATOR	31
NUMBER OF SCANS	XXXX - USED TO INDICATE NUMBER OF SCANS PER STATION (FIVE/RECORD)	41
DATE (GMT)	YYMMDD	46
TIME (GMT)	XXXX (HOURS AND MINUTES)	52
SAMPLE INTERVAL INDICATOR	ONE-DIGIT CODE - USE CODE 0216	56
SAMPLE INTERVAL	XXX - WHEN INDICATOR CODE=1 (EQUAL SPACED DEPTHS) - (METERS TO TENTHS)	57
BAROMETRIC PRESSURE	XXXX (MILLIBARS TO TENTHS)	60
WET BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	68
DRY BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	69
WIND DIRECTION	XX - TWO-DIGIT CODE - WMO 885/887 - DIRECTION FROM - USE CODE 0110	73
WIND SPEED	XX (WHOLE KNOTS)	75
WEATHER	ONE-DIGIT CODE - WMO 4501 - USE CODE 0108	77
SEA STATE	ONE-DIGIT CODE - WMO 3700 - USE CODE 0109	78
VISIBILITY	ONE-DIGIT CODE - WMO 4300 - USE CODE 0157	79
CLOUD TYPE	ONE-DIGIT CODE - WMO 0500 - USE CODE 0053	80
CLOUD AMOUNT	ONE-DIGIT CODE - WMO 2700 - USE CODE 0105	81
INSTRUMENT INFORMATION	TWENTY-CHARACTER FIELD FOR TYPE OF INSTRUMENT, SERIAL NUMBER, ETC	82
LOCATION NAME	SIX-CHARACTER NAME DETERMINED BY THE ORIGINATOR	102

DEPTH TO BOTTOM	XXXXX (WHOLE METERS)	108
MAXIMUM DEPTH OF CAST BLANKS	XXXX (WHOLE METERS)	113 117
DETAIL RECORD 1	ALWAYS '3'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	26
SIGMA-T	XXXX - TO HUNDREDTHS	31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	46
SIGMA-T	XXXX - TO HUNDREDTHS	51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	68
SIGMA-T	XXXX - TO HUNDREDTHS	71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	86
SIGMA-T	XXXX - TO HUNDREDTHS	91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	95
DEPTH	XXXXX (METERS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	108
SIGMA-T	XXXX - TO HUNDREDTHS	111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

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DETAIL RECORD 2	ALWAYS '4'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	21
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	41
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	61
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	81
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	86
BLANKS		91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	95
DEPTH	XXXXX (METERS TO TENTHS)	96
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	101
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	106
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116
DETAIL RECORD 3	ALWAYS '5'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	86
BLANKS		91

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SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	95
DEPTH	XXXXX (METERS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	108
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	116
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116
DETAIL RECORD 4	ALWAYS '6'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	26
SIGMA-T	XXXX - TO HUNDREDTHS	31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	35
PRESSURE	XXXXX (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	46
SIGMA-T	XXXX - TO HUNDREDTHS	51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	55
PRESSURE	XXXXX (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	66
SIGMA-T	XXXX - TO HUNDREDTHS	71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	86
SIGMA-T	XXXX - TO HUNDREDTHS	91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	95
PRESSURE	XXXXX (DECIBARS TO TENTHS)	98
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	106
SIGMA-T	XXXX - TO HUNDREDTHS	111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	116
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

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DETAIL RECORD 5	ALWAYS '7'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
PRESSURE	XXXXX (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
PRESSURE	XXXXX (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	86
BLANKS		91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	95
PRESSURE	XXXXX (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	106
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

DETAIL RECORD G	ALWAYS '8'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PPT TO THOUSANDTHS	26
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	31
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	35
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PPT TO THOUSANDTHS	46
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	51
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	55
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PPT TO THOUSANDTHS	66
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	71
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	75
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PPT TO THOUSANDTHS	86
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	91
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	95
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PPT TO THOUSANDTHS	106
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	111
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

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 (✓)	
Sippican/Bathy-Systems XBT System	UNKNOWN		UNKNOWN				✓		
Sippican AXBT System	4/87		HORIZON MARINE, INC.		✓				

Unique No.: 188606

Date of Entry: 10/31/89

DATA ENTRY INFORMATION SYSTEM
(DATASET INVENTORY - DINDB)

Accession No.: 8900181 Reference No.: 075284
Former Accession No.: Former Reference No.: (Resub ONLY)

Media-In (DINDB): 09 - Digital Magnetic Tape
Exchange Format: E005 - Universal Bathythermograph (Expendable)
Processing Format: C116 - Universal Bathythermograph (UBT) for XBT

* Note * If data is F022, create an additional record for C022.

Country/Institute Code: 312H Country/Platform Code: 31PP
Platform Type (DINDB): 09 - Ship Orig. Cruise ID: PI8701
Cruise Start Date: 05/11/87 Project Code: 0193
Cruise End Date: 05/25/87 Data Use Code (DUC): 3

Number of Stations: 277 Number of Records: 277

 If stations/records not appropriate then:

 Number: Units:

Ocean Area:

 Code 1: 23B Meaning: NW Atlantic (limit-40 W)
 Code 2: Meaning:
 Code 3: Meaning:

DINDB Transaction Date:

NO. _____

FILETYPE C116

075284

8900181

	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
E C116/W	7/10/89	RJK	A00932	5	120	3600	17982
TAPE W	8/8/89	RJK	W07785	5 5	120	3600	17982
ED TAPE	10-24-89	R.P.S.	W14973 **	1	V	V	277
ED DISK							
CHECK							
CHECK							
F022							
FINALIZED							

REPORTED TO PRINCIPAL INVESTIGATOR:

5L, 1050 bpi, Fixed block

DSN=DNODC*8900181-01

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

** LABEL: DNODC*FREDXOUT.

(TRACKS DELETED, FIELDS DELETED, ETC.)

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED

Copy to ...
 ... tapes ...

INPUT MEDIUM PAPER CARD DISK TAPE DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK PRINT TAPE PLOT DISKETTE OTHER(SPECIFY)
--	---

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
INPUT	020937		9	1600	EVEN	1.L	FB	120	3600	5	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
OUTPUT	W07185		9	1600	EVEN	SL	FB	120	3600	15	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME DNOTE 8900181-01				PURGE DATE

SPECIAL INSTRUCTIONS Please send 'W' tape to Asheville, NC Thanks	ESTIMATED EXECUTION TIME
---	--------------------------------

TELETYPE USE ONLY

JOB #	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
4	08/09/89	13:05 13:05	13:20 13:20	C	COMPLETED BY J.S.

REMARKS

Please scan tape

INPUT MEDIUM PAPER CARD DISK <u>TAPE</u> DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK <u>PRINT</u> TAPE PLOT DISKETTE OTHER(SPECIFY)
--	--

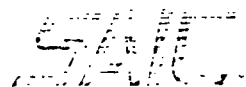
TAPE/DISKETTE INFORMATION										
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
<i>A00932</i>		<i>9</i>	<i>1600</i>	<i>EVEN</i>				<i>3600</i>	<i>5</i>	
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME			PURGE DATE		
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME			PURGE DATE		
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME			PURGE DATE		

SPECIAL INSTRUCTIONS <i>Please return tape A00932 to Bin 09</i>	ESTIMATED EXECUTION TIME
--	--------------------------------

OPERATOR USE ONLY					
DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED	
<i>07/11/89</i>	<i>11:00</i>	<i>11:05</i>	<i>C</i>	<i>COMPLETED By JS</i>	

8-100181

A00931
A00932
A00933
A00934



Science Applications International Corporation

June 21, 1989

Mr. Francis Mitchell
NOAA/NODC
3300 Whitehaven Street, NW
Washington, DC 20235

Dear Mitch:

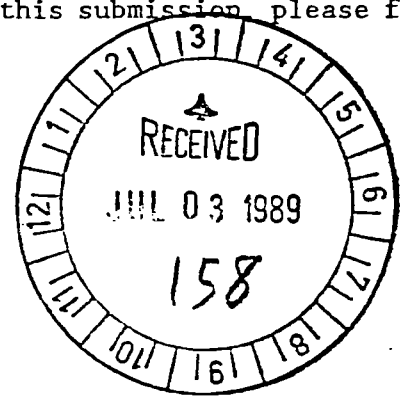
Enclosed please find four (4) nine-track magnetic data tapes containing data collected during the North Carolina Frontal Eddy Dynamics Experiment (FRED). This work was funded under Minerals Management Service (MMS) Contract Number 14-12-0001-303449, which was awarded to Evans-Hamilton, Incorporated. The following items have been attached:

- (1) Four (4) data tapes:
 - A00931 1 - 2400 foot tape containing current meter data in NODC Format 015,
 - A00932 1 - 2400 foot tape containing AXBT and XBT data in NODC Format 022,
 - A00933 1 - 1200 foot tape containing ADCP data in NODC Format 004,
 - A00934 1 - 600 foot tape containing Lagrangian drifter data in NODC Format 156.
- (2) Five (5) printed volumes detailing the information stored on each tape:
 - Volume I - Current Meter Data
 - Volume II - XBT Data
 - Volume III - AXBT Data
 - Volume IV - Lagrangian Drifter Data
 - Volume V - Acoustic Doppler Current Profiler (ADCP) Data
- (3) Appropriate NODC documentation forms for each data type submitted.

If you should have any questions/comments regarding this submission, please feel free to contact me.

Sincerely,

Bob
Robert J. Wayland
Senior Meteorologist



Enclosures

XBT & AXBT DATA DOCUMENTATION FORM

NOAA FORM 24-13
(4-77)

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

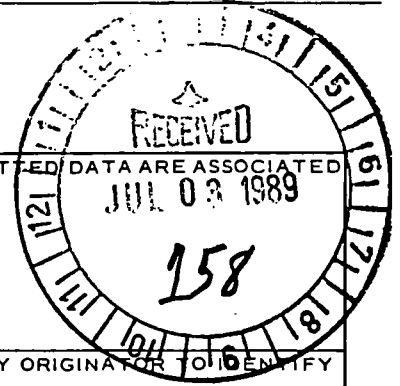
FORM APPROVED
O.M.B. No. 41-R2651
EXPIRES 1-81

(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
 Science Applications International Corporation
 Maritime Technology Group / Physical Oceanography Division
 4900 Water's Edge Drive
 Suite 255
 Raleigh, NC 27606

2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED
 North Carolina Frontal Eddy Dynamics Experiment (FRED)
 (MMS Contract No. 14-12-0001-30349)

3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT
 Four (4) AXBT Flights:
 FRED 1, FRED 2, FRED 3 and FRED 5
 One (1) Hydrographic Cruise:
 PI8701

4. PLATFORM NAME(S)

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

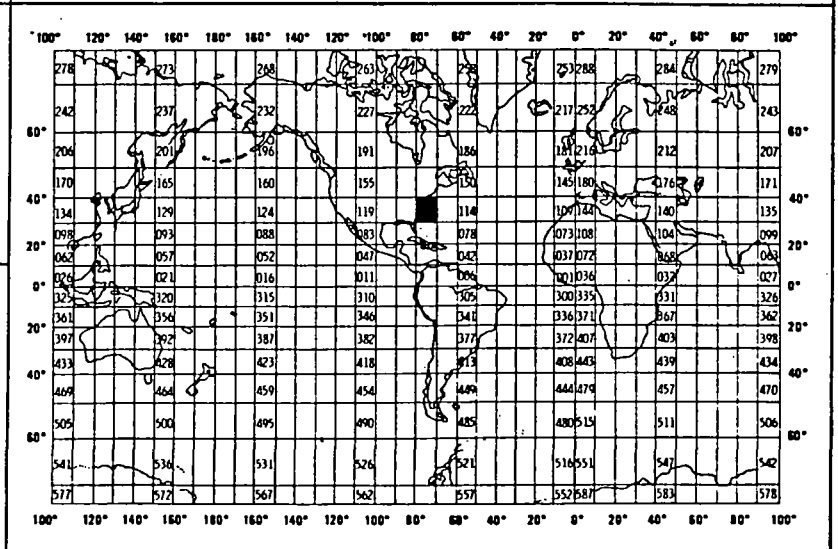
6. PLATFORM AND OPERATOR NATIONALITY(IES)
 PLATFORM OPERATOR
 USA USA

7. DATES
 FROM: MO/DAY/YR TO: MO/DAY/YR
 5/11/87 5/24/87

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)
 Dr. C.C. Ebbesmeyer (Prog. Manager)
 Evans-Hamilton, Inc.
 731 N. Northlake Way, Ste. 201
 Seattle, Washington 98103
 (206) 545-8155

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
Temperature	°C.	Sippican 2500 foot (depth) AXBT	- NONE -	FRED1, Stations 101-127 interpolated to 3 m depth increments. <u>ALL OTHER</u> data interpolated to 1 m depth increments.
Temperature	°C	Sippican T-4 XBT	- NONE -	All data interpolated to 1 m depth increments.

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 File Type $\phi 22$
"High-Resolution CTD/STD Data"
April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

5 individual files separated by 1 EOF. 2 EOF's define EOM (End-of-Medium)

3. ATTRIBUTES AS EXPRESSED IN PL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert J. Wayland (919) 851-8356
ADDRESS Science Applications International Corporation / 4900 Water's Edge Drive, Ste. 2:
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> IBM</p>
<p>7. PARITY</p> <p>(RS-232)</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>SAIC/Raleigh Tape ID No.:</p> <p>SP 1187</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>3600</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>120</p>

RECORD FORMAT DESCRIPTION

RECORD NAME NODC File Type 072 ** SEE ATTACHED **

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		

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File structure -

Eight 120-character records: (1) Text Record, (2) Master Record, (3) Detail Record 1, (4) Detail Record 2, (5) Detail Record 3, (6) Detail Record 4, (7) Detail Record 5, and (8) Detail Record 6.

File format -

High-resolution CTD/STD Data (F022)

PARAMETER	DESCRIPTION	SC
TEXT RECORD	ALWAYS '1'	10
CAST NUMBER	FIVE-CHARACTER FIELD ASSIGNED BY THE ORIGINATOR - ALSO INCLUDED ON RECORD TYPES 2,3 AND 4	11
TEXT	100-CHARACTER FIELD - USED FOR COMMENTS OR PERTINENT INFORMATION	16
SEQUENCE NUMBER	XXXXX - USED FOR SORTING TEXT RECORDS	116
MASTER RECORD	ALWAYS '2'	10
CAST NUMBER	SEE RECORD '1'	11
LATITUDE	DDMMXX PLUS HEMISPHERE 'N' OR 'S' - MINUTES TO HUNDREDTHS	16
LONGITUDE	DDDMMXX PLUS HEMISPHERE 'E' OR 'W' - MINUTES TO HUNDREDTHS	23
CRUISE IDENTIFICATION	TEN-CHARACTER FIELD ASSIGNED BY THE ORIGINATOR	31
NUMBER OF SCANS	XXXXX - USED TO INDICATE NUMBER OF SCANS PER STATION (FIVE/RECORD)	41
DATE (GMT)	YYMMDD	46
TIME (GMT)	XXXX (HOURS AND MINUTES)	52
SAMPLE INTERVAL INDICATOR	ONE-DIGIT CODE - USE CODE 0216	56
SAMPLE INTERVAL	XXX - WHEN INDICATOR CODE=1 (EQUAL SPACED DEPTHS) - (METERS TO TENTHS)	57
BAROMETRIC PRESSURE	XXXXX (MILLIBARS TO TENTHS)	60
WET BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	69
DRY BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	69
WIND DIRECTION	XX - TWO-DIGIT CODE - WMO 885/887 - DIRECTION FROM - USE CODE 0110	73
WIND SPEED	XX (WHOLE KNOTS)	75
WEATHER	ONE-DIGIT CODE - WMO 4501 - USE CODE 0108	77
SEA STATE	ONE-DIGIT CODE - WMO 3700 - USE CODE 0109	78
VISIBILITY	ONE-DIGIT CODE - WMO 4300 - USE CODE 0157	79
CLOUD TYPE	ONE-DIGIT CODE - WMO 0500 - USE CODE 0053	80
CLOUD AMOUNT	ONE-DIGIT CODE - WMO 2700 - USE CODE 0105	81
INSTRUMENT INFORMATION	TWENTY-CHARACTER FIELD FOR TYPE OF INSTRUMENT, SERIAL NUMBER, ETC	82
LOCATION NAME	SIX-CHARACTER NAME DETERMINED BY THE ORIGINATOR	102

DEPTH TO BOTTOM	XXXXX (WHOLE METERS)	108
MAXIMUM DEPTH OF CAST BLANKS	XXXX (WHOLE METERS)	113 117
DETAIL RECORD 1	ALWAYS '3'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	26
SIGMA-T	XXXX - TO HUNDREDTHS	31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O0B0	35
DEPTH	XXXXX (METERS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	46
SIGMA-T	XXXX - TO HUNDREDTHS	51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O0B0	55
DEPTH	XXXXX (METERS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	66
SIGMA-T	XXXX - TO HUNDREDTHS	71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O0B0	75
DEPTH	XXXXX (METERS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	86
SIGMA-T	XXXX - TO HUNDREDTHS	91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O0B0	95
DEPTH	XXXXX (METERS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	108
SIGMA-T	XXXX - TO HUNDREDTHS	111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O0B0	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

DETAIL RECORD 2	ALWAYS '4'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	21
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	41
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	61
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	81
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	86
BLANKS		91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	95
DEPTH	XXXXX (METERS TO TENTHS)	96
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	101
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	106
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116
DETAIL RECORD 3	ALWAYS '5'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	86
BLANKS		91

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SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	95
DEPTH	XXXXX (METERS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	108
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	118
DETAIL RECORD 4	ALWAYS '6'	10
CAST NUMRER	SEE RECORD '1'	11
PRESSURE	XXXXX (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	26
SIGMA-T	XXXX - TO HUNDREDTHS	31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	35
PRESSURE	XXXXX (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	46
SIGMA-T	XXXX - TO HUNDREDTHS	51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	55
PRESSURE	XXXXX (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	66
SIGMA-T	XXXX - TO HUNDREDTHS	71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	86
SIGMA-T	XXXX - TO HUNDREDTHS	91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	95
PRESSURE	XXXXX (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	106
SIGMA-T	XXXX - TO HUNDREDTHS	111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

DATE April 1985	NODC Users Guide	SECTION 4.1.10	PAGE 8
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DETAIL RECORD 5	ALWAYS '7'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
PRESSURE	XXXXX (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
PRESSURE	XXXXX (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	86
BLANKS		91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	95
PRESSURE	XXXXX (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	106
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

DATE April 1985	NODC Users Guide	SECTION 4.1.10	PAGE 9
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DETAIL RECORD G	ALWAYS '8'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PPT TO THOUSANDTHS	26
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	31
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	35
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PPT TO THOUSANDTHS	46
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	51
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	55
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PPT TO THOUSANDTHS	66
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	71
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	75
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PPT TO THOUSANDTHS	86
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	91
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	95
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PPT TO THOUSANDTHS	106
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	111
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

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 (✓)	<u>BEFORE</u> OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
Sippican/Bathy-Systems XBT System	UNKNOWN		UNKNOWN				✓		
Sippican AXBT System	4/87		HORIZON MARINE, INC.		✓				

Unique No.: 188608

Date of Entry: 10/31/89

DATA ENTRY INFORMATION SYSTEM
(DATASET INVENTORY - DINDB)

Accession No.: 8900181 Reference No.: 075294
Former Accession No.: Former Reference No.: (Resub ONLY)

Media-In (DINDB): 09 - Digital Magnetic Tape
Exchange Format: E125 - Aircraft Expendable Bathythermograph
Processing Format: C118 - Universal Bathythermograph (UBT) Aircr.

* Note * If data is F022, create an additional record for C022.

Country/Institute Code: 312H Country/Platform Code: 3191
Platform Type (DINDB): 01 - Aircraft Orig. Cruise ID: FRED1
Cruise Start Date: 05/12/87 Project Code: 0193
Cruise End Date: 05/23/87 Data Use Code (DUC): 3

Number of Stations: 134 Number of Records: 134

If stations/records not appropriate then:

Number: Units:

Ocean Area:

Code 1: 23B Meaning: NW Atlantic (limit-40 W)
Code 2: Meaning:
Code 3: Meaning:

DINDB Transaction Date:

NO. _____

FILETYPE C/10

PROJECT IDENTIFICATION FRED

8900181

075294

	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
E CR 1617	7/10/89	1/1	A00932	5	120	3600	17982
TAPE 16	8/8/89	1/1	W0T785	5	120	3600	17982
ED TAPE			W03402 **	1	V	V	134
ED DISK							
CHECK							
CHECK							
F022							
FINALIZED							

REPORTED TO PRINCIPAL INVESTIGATOR:

type is DL, 9K, 1500 bps, Fixed block

DSN = DNODC * 8900181-01

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

** LABEL: DNODC * FREDAXOUT.

(TRACKS DELETED, FIELDS DELETED, ETC.)

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED

Copy to W. H. H.

Can 'W' tape Thanks

INPUT MEDIUM PAPER CARD DISK TAPE DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK PRINT TAPE PLOT DISKETTE OTHER(SPECIFY)
--	---

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
	INPUT	A00937		9	1600	EVEN	N.L	FB	120	3600	5
SECTOR SIZE		EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
TAPE #/ DISKETTE		SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
SECTOR SIZE		EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
OUTPUT	W07185		9	1600	EVEN	SL	FB	120	3600	15	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS Please Send 'W' tape to Asheville, NC Thanks	ESTIMATED EXECUTION TIME
---	--------------------------------

FOR USE ONLY

#	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
4	08/09/89	13:05 13:05	13:20 13:20	C	COMPLETED BY J.S.

Cliff Hartley

PHONE #

JOB/TASK #

DATE

DATE DUE

UNIT #

473-8636

EG12005N 3/1/89

SUBMITTED

07/10/89

ASAP

09

TO BE USED AND FUNCTION TO BE PERFORMED

Please scan tape

INPUT MEDIUM

PAPER CARD DISK TAPE
DISKETTE OTHER(SPECIFY)

OUTPUT MEDIUM

CARD DISK PRINT TAPE PLOT
DISKETTE OTHER(SPECIFY)

TAPE/DISKETTE INFORMATION

TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
A00932		9	1600	EVEN				3600	5	
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS

Please return tape A00932
to Bin 09

ESTIMATED
EXECUTION
TIME

31 USE ONLY

#	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
1471143	07/11/89	11:00	11:45	C	COMPLETED BY JS

8-100181

ACC931
ACC932
ACC933

ACC934

SAC

Science Applications International Corporation

June 21, 1989

Mr. Francis Mitchell
NOAA/NODC
3300 Whitehaven Street, NW
Washington, DC 20235

Dear Mitch:

Enclosed please find four (4) nine-track magnetic data tapes containing data collected during the North Carolina Frontal Eddy Dynamics Experiment (FRED). This work was funded under Minerals Management Service (MMS) Contract Number 14-12-0001-303449, which was awarded to Evans-Hamilton, Incorporated. The following items have been attached:

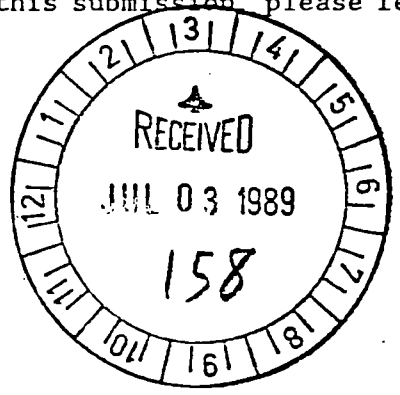
- (1) Four (4) data tapes:
 - ACC931 1 - 2400 foot tape containing current meter data in NODC Format 015,
 - ACC932 1 - 2400 foot tape containing AXBT and XBT data in NODC Format 022,
 - ACC933 1 - 1200 foot tape containing ADCP data in NODC Format 004,
 - ACC934 1 - 600 foot tape containing Lagrangian drifter data in NODC Format 156.

- (2) Five (5) printed volumes detailing the information stored on each tape:
 - Volume I - Current Meter Data
 - Volume II - XBT Data
 - Volume III - AXBT Data
 - Volume IV - Lagrangian Drifter Data
 - Volume V - Acoustic Doppler Current Profiler (ADCP) Data

- (3) Appropriate NODC documentation forms for each data type submitted.

If you should have any questions/comments regarding this submission, please feel free to contact me.

Sincerely,
Bob
Robert J. Wayland
Senior Meteorologist



Enclosures

XBT & AXBT DATA DOCUMENTATION FORM

NOAA FORM 24-13
(4-77)

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. 41-R2651
EXPIRES 1-81

(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
 Science Applications International Corporation
 Maritime Technology Group / Physical Oceanography Division
 4900 Water's Edge Drive
 Suite 255
 Raleigh, NC 27606

2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED
 North Carolina Frontal Eddy Dynamics Experiment (FRED)
 (MMS Contract No. 14-12-0001-30349)

3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT
 Four (4) AXBT Flights:
 FRED1, FRED2, FRED3 and FRED5
 One (1) Hydrographic Cruise:
 PI8701

4. PLATFORM NAME(S)

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

6. PLATFORM AND OPERATOR NATIONALITY(IES)

PLATFORM	OPERATOR
USA	USA

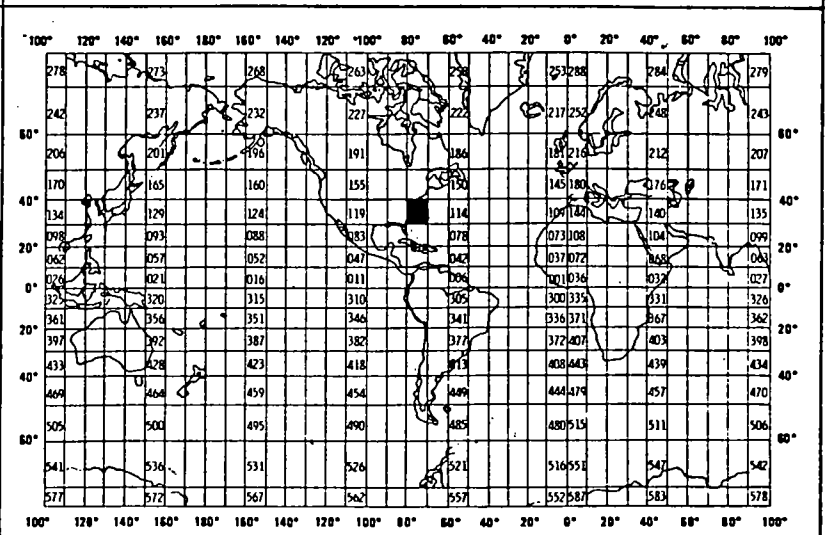
7. DATES

FROM: MO/DAY/YR	TO: MO/DAY/YR
5/11/87	5/24/87

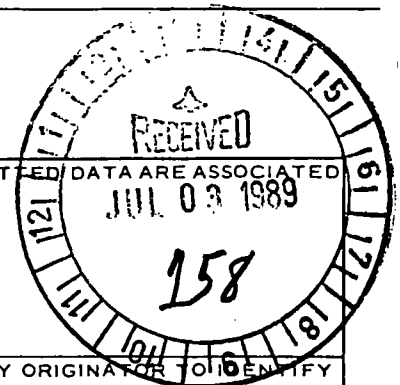
8. ARE DATA PROPRIETARY?
 NO YES
 IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR ___ MONTH ___

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)
 Dr. C.C. Ebbesmeyer (Prog. Manager)
 Evans-Hamilton, Inc.
 731 N. Northlake Way, Ste. 201
 Seattle, Washington 98103
 (206) 545-8155



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
Temperature	°C.	Sippican 2500 foot (depth) AXBT	- NONE -	FRED1, Stations 101-127 interpolated to 3 m depth increments. <u>ALL OTHER</u> data interpolated to 1 m depth increments.
Temperature	°C	Sippican T-4 XBT	- NONE -	All data interpolated to 1 m depth increments.

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 File Type $\phi 22$
"High-Resolution, CTD/STD Data"
April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

5 individual files separated by 1 EOF. 2 EOF's define EOM (End-of-Medium)

3. ATTRIBUTES AS EXPRESSED IN PL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert J. Wayland (919) 851-8356
ADDRESS Science Applications International Corporation / 4900 Water's Edge Drive, Ste. 255
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> <u>IBM</u></p>
<p>7. PARITY</p> <p>(RS-232)</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>SAIC/Raleigh Tape ID No.:</p> <p>SP 1187</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>3600</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>120</p>

RECORD FORMAT DESCRIPTION

RECORD NAME NoDC File Type 022

**** SEE ATTACHED ****

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		

File structure -

Eight 120-character records: (1) Text Record, (2) Master Record, (3) Detail Record 1, (4) Detail Record 2, (5) Detail Record 3, (6) Detail Record 4, (7) Detail Record 5, and (8) Detail Record 6.

File format -

High-resolution CTD/STD Data (F022)

PARAMETER	DESCRIPTION	SC
TEXT RECORD	ALWAYS '1'	10
CAST NUMBER	FIVE-CHARACTER FIELD ASSIGNED BY THE ORIGINATOR - ALSO INCLUDED ON RECORD TYPES 2,3 AND 4	11
TEXT	100-CHARACTER FIELD - USED FOR COMMENTS OR PERTINENT INFORMATION	16
SEQUENCE NUMBER	XXXXX - USED FOR SORTING TEXT RECORDS	116
MASTER RECORD	ALWAYS '2'	10
CAST NUMBER	SEE RECORD '1'	11
LATITUDE	DDMMXX PLUS HEMISPHERE 'N' OR 'S' - MINUTES TO HUNDREDTHS	16
LONGITUDE	DDMMXX PLUS HEMISPHERE 'E' OR 'W' - MINUTES TO HUNDREDTHS	23
CRUISE IDENTIFICATION	TEN-CHARACTER FIELD ASSIGNED BY THE ORIGINATOR	31
NUMBER OF SCANS	XXXXX - USED TO INDICATE NUMBER OF SCANS PER STATION (FIVE/RECORD)	41
DATE (GMT)	YYMMDD	46
TIME (GMT)	XXXX (HOURS AND MINUTES)	52
SAMPLE INTERVAL INDICATOR	ONE-DIGIT CODE - USE CODE 0216	56
SAMPLE INTERVAL	XXX - WHEN INDICATOR CODE=1 (EQUAL SPACED DEPTHS) - (METERS TO TENTHS)	57
BAROMETRIC PRESSURE	XXXXX (MILLIBARS TO TENTHS)	60
WET BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	69
DRY BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	69
WIND DIRECTION	XX - TWO-DIGIT CODE - WMO 885/887 - DIRECTION FROM - USE CODE 0110	73
WIND SPEED	XX (WHOLE KNOTS)	75
WEATHER	ONE-DIGIT CODE - WMO 4501 - USE CODE 0108	77
SEA STATE	ONE-DIGIT CODE - WMO 3700 - USE CODE 0109	78
VISIBILITY	ONE-DIGIT CODE - WMO 4300 - USE CODE 0157	79
CLOUD TYPE	ONE-DIGIT CODE - WMO 0500 - USE CODE 0053	80
CLOUD AMOUNT	ONE-DIGIT CODE - WMO 2700 - USE CODE 0105	81
INSTRUMENT INFORMATION	TWENTY-CHARACTER FIELD FOR TYPE OF INSTRUMENT, SERIAL NUMBER, ETC	82
LOCATION NAME	SIX-CHARACTER NAME DETERMINED BY THE ORIGINATOR	102

DEPTH TO BOTTOM	XXXXX (WHOLE METERS)	108
MAXIMUM DEPTH OF CAST	XXXX (WHOLE METERS)	113
BLANKS		117
DETAIL RECORD 1	ALWAYS '3'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO	21
SALINITY	TEMPERATURE VALUE - DEG C TO THOUSANDTHS XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	26
SIGMA-T	XXXX - TO HUNDREDTHS	31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO	41
SALINITY	TEMPERATURE VALUE - DEG C TO THOUSANDTHS XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	46
SIGMA-T	XXXX - TO HUNDREDTHS	51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO	61
SALINITY	TEMPERATURE VALUE - DEG C TO THOUSANDTHS XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	68
SIGMA-T	XXXX - TO HUNDREDTHS	71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO	81
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SIGMA-T	XXXX - TO HUNDREDTHS	91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	95
DEPTH	XXXXX (METERS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO	101
SALINITY	TEMPERATURE VALUE - DEG C TO THOUSANDTHS XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	108
SIGMA-T	XXXX - TO HUNDREDTHS	111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

DATE April 1985	NODC Users Guide	SECTION 4.1.10	PAGE 6
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DETAIL RECORD 2	ALWAYS '4'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	21
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	41
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	61
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	81
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	86
BLANKS		91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	95
DEPTH	XXXXX (METERS TO TENTHS)	96
DISSOLVED OXYGEN	XXXXX - ML/L TO THOUSANDTHS	101
TRANSMISSIVITY	XXXXX (PERCENT TO THOUSANDTHS)	106
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116
DETAIL RECORD 3	ALWAYS '5'	10
CAST NUMBER	SEE RECORD '1'	11
DEPTH	XXXXX (METERS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
DEPTH	XXXXX (METERS TO TENTHS)	36
TEMPERATURE	XXYXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
DEPTH	XXXXX (METERS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
DEPTH	XXXXX (METERS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	86
BLANKS		91

DATE April 1985	NODC Users Guide	SECTION 4.1.10	PAGE 7
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SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE OORO	95
DEPTH	XXXXX (METERS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	108
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	118
DETAIL RECORD 4	ALWAYS '6'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	26
SIGMA-T	XXXX - TO HUNDREDTHS	31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	35
PRESSURE	XXXXX (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	48
SIGMA-T	XXXX - TO HUNDREDTHS	51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	55
PRESSURE	XXXXX (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	66
SIGMA-T	XXXX - TO HUNDREDTHS	71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	86
SIGMA-T	XXXX - TO HUNDREDTHS	91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	95
PRESSURE	XXXXX (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	106
SIGMA-T	XXXX - TO HUNDREDTHS	111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE O080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

DATE April 1985	NODC Users Guide	SECTION 4.1.10	PAGE 8
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DETAIL RECORD 5	ALWAYS '7'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	21
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	26
BLANKS		31
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	35
PRESSURE	XXXXX (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	41
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	46
BLANKS		51
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	55
PRESSURE	XXXXX (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	61
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	66
BLANKS		71
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	81
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	86
BLANKS		91
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	95
PRESSURE	XXXXX (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO THOUSANDTHS	101
CONDUCTIVITY	XXXXX (MMHO/CM TO THOUSANDTHS)	106
BLANKS		111
SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

DATE April 1985	NODC Users Guide	SECTION 4.1.10	PAGE 9
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DETAIL RECORD G	ALWAYS '8'	10
CAST NUMBER	SEE RECORD '1'	11
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	16
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	21
SALINITY	XXXXX - PPT TO THOUSANDTHS	26
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	31
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	35
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	36
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	41
SALINITY	XXXXX - PPT TO THOUSANDTHS	46
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	51
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	55
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	56
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	61
SALINITY	XXXXX - PPT TO THOUSANDTHS	66
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	71
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	75
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	76
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	81
SALINITY	XXXXX - PPT TO THOUSANDTHS	86
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	91
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	95
PRESSURE	XXXXX - (DECIBARS TO TENTHS)	96
TEMPERATURE	XXXXX - DEG C TO THOUSANDTHS	101
SALINITY	XXXXX - PPT TO THOUSANDTHS	106
DISSOLVED OXYGEN	XXXX - MILLILITERS/LITER	111
SCAN CONDITION CODE	ONE-CHARACTER CODE - USE 0080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

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 (✓)	<u>BEFORE</u> OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
Sippican/Bathy-Systems XBT System	UNKNOWN		UNKNOWN				✓		
Sippican AXBT System	4/87		HORIZON MARINE, INC.		✓				

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900181	TV4673	F156	0193	312H	32DB	8770	05/23/87	05/26/87	1	25
8900181	TV4674	F156	0193	312H	32DB	8771	05/23/87	06/21/87	1	65
8900181	TV4675	F156	0193	312H	32DB	8772	05/23/87	06/30/87	1	42
8900181	TV4676	F156	0193	312H	32DB	8773	05/22/87	06/16/87	1	178
8900181	TV4677	F156	0193	312H	32DB	8774	05/13/87	06/30/87	1	388
8900181	TV4678	F156	0193	312H	32DB	8775	05/13/87	06/30/87	1	394
8900181	TV4679	F156	0193	312H	32DB	8776	05/13/87	06/30/87	1	389
8900181	TV4680	F156	0193	312H	32DB	8777	05/13/87	06/30/87	1	366

WORK NO. 8900181 FILETYPE F156

TRK NO. TV 4673 - 4680 PROJECT IDENTIFICATION 0193

8900181

	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
TAPE	07/16/89 07/11/89	CMAH	A00934	8	80	4000	1847
TAPE	07/11/89	CMAH	W02308	8	80	4000	1847
TAPE	08/16						
DISK	10-31-89	FJM	D NODCX FREDOU:	1	80	224	1,847
CHECK	12/4/89	CBF	SELDATA.F156TV4673	1	80		1847
CHECK							
FORM 022							
FINALIZED	12/2/89	CBF	MPD75.TV4673/F156	1	80		1847

REPORTED TO PRINCIPAL INVESTIGATOR:

Tape W02308 is 9 TRK, NL, 1600 bpi

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

NONE

DELETIONS (TRACKS DELETED, FIELDS DELETED, ETC.)

SER. NAME: Cliff Hartley PHONE #: 673-5636 ORG/DESK #: EC1200SN3AH9 DATE SUBMITTED: 08/15/89 DATE USE: ASAP WTR #: 09

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED

copy to a 'w' tape
~~Please send 'w' tape to Asheville, N.C.~~
 Please scan 'w' tape

INPUT MEDIUM: PAPER CARD DISK TAPE DISKETTE OTHER(SPECIFY)
 OUTPUT MEDIUM: CARD DISK PRINT TAPE PLOT DISKETTE OTHER(SPECIFY)

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
INPUT	<u>A00934</u>		<u>9</u>	<u>1600</u>	<u>EVEN</u>	<u>NL</u>	<u>FB</u>	<u>80</u>	<u>4000</u>	<u>8</u>
	SECTOR SIZE	EXCHANGE TYPE	CODE: <u>ASCII</u> EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
OUTPUT	<u>W02308</u>		<u>9</u>	<u>1600</u>	<u>ODD</u>	<u>NL</u>	<u>FB</u>	<u>80</u>	<u>4000</u>	<u>8</u>
	SECTOR SIZE	EXCHANGE TYPE	CODE: <u>ASCII</u> EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE

SPECIAL INSTRUCTIONS

Please send 'w' tape to Asheville, N.C.

ESTIMATED EXECUTION TIME

USER USE ONLY

DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
<u>08/16/89</u>	<u>07:40</u>	<u>07:45</u>	<u>C</u>	<u>COMPLETED BY J.S.</u>

USER NAME: Cliff Hartley | PHONE #: 673-5636 | JOB/TASK #: EG1200EN3A119 | DATE SUBMITTED: 07/10/89 | DATE DUE: ASAP | BIN #: 09

DEPARTMENT TO BE USED AND FUNCTION TO BE PERFORMED

Please scan tape

INPUT MEDIUM PAPER CARD DISK <u>TAPE</u> DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK <u>PRINT</u> TAPE PLOT DISKETTE OTHER(SPECIFY)
---	---

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
INPUT	<u>A00934</u>		<u>9</u>	<u>1600</u>	<u>EVEN</u>				<u>4000</u>	<u>8</u>	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE
OUTPUT	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS <p style="font-size: 1.2em;"><i>Please return tape A00934 to Bin 09</i></p>	ESTIMATED EXECUTION TIME
---	--------------------------

731 USE ONLY					
JOB #	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED, DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
<u>07/11/89</u>	<u>11:25</u>	<u>11:30</u>	<u>C</u>		<u>COMPLETED BY J.S.</u>

REMARKS

89100181

A00931
A00932
A00933
A00934



Science Applications International Corporation

June 21, 1989

Mr. Francis Mitchell
NOAA/NODC
3300 Whitehaven Street, NW
Washington, DC 20235

Dear Mitch:

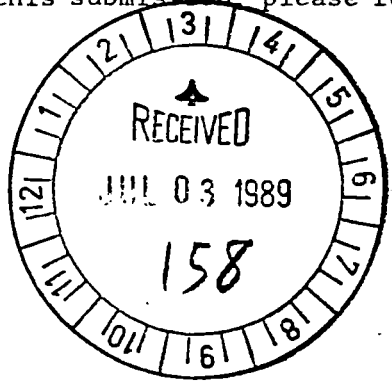
Enclosed please find four (4) nine-track magnetic data tapes containing data collected during the North Carolina Frontal Eddy Dynamics Experiment (FRED). This work was funded under Minerals Management Service (MMS) Contract Number 14-12-0001-303449, which was awarded to Evans-Hamilton, Incorporated. The following items have been attached:

- (1) Four (4) data tapes:
 - A00931 1 - 2400 foot tape containing current meter data in NODC Format 015,
 - A00932 1 - 2400 foot tape containing AXBT and XBT data in NODC Format 022,
 - A00933 1 - 1200 foot tape containing ADCP data in NODC Format 004,
 - A00934 1 - 600 foot tape containing Lagrangian drifter data in NODC Format 156.
- (2) Five (5) printed volumes detailing the information stored on each tape:
 - Volume I - Current Meter Data
 - Volume II - XBT Data
 - Volume III - AXBT Data
 - Volume IV - Lagrangian Drifter Data
 - Volume V - Acoustic Doppler Current Profiler (ADCP) Data
- (3) Appropriate NODC documentation forms for each data type submitted.

If you should have any questions/comments regarding this submission, please feel free to contact me.

Sincerely,

Bob
Robert J. Wayland
Senior Meteorologist



Enclosures

8900181

A00931
A00932
A00933

A00934



Science Applications International Corporation

June 21, 1989

Mr. Francis Mitchell
NOAA/NODC
3300 Whitehaven Street, NW
Washington, DC 20235

Dear Mitch:

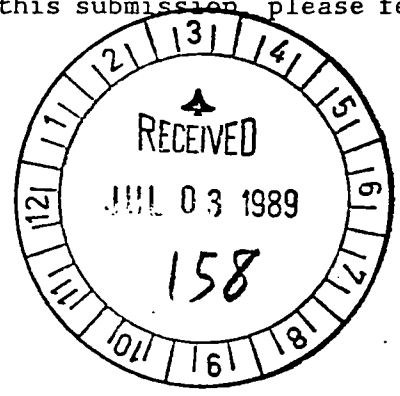
Enclosed please find four (4) nine-track magnetic data tapes containing data collected during the North Carolina Frontal Eddy Dynamics Experiment (FRED). This work was funded under Minerals Management Service (MMS) Contract Number 14-12-0001-303449, which was awarded to Evans-Hamilton, Incorporated. The following items have been attached:

- (1) Four (4) data tapes:
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 - A00932 1 - 2400 foot tape containing AXBT and XBT data in NODC Format 022,
 - A00933 1 - 1200 foot tape containing ADCP data in NODC Format 004,
 - A00934 1 - 600 foot tape containing Lagrangian drifter data in NODC Format 156. ✓
- (2) Five (5) printed volumes detailing the information stored on each tape:
 - Volume I - Current Meter Data
 - Volume II - XBT Data
 - Volume III - AXBT Data
 - Volume IV - Lagrangian Drifter Data
 - Volume V - Acoustic Doppler Current Profiler (ADCP) Data
- (3) Appropriate NODC documentation forms for each data type submitted.

If you should have any questions/comments regarding this submission, please feel free to contact me.

Sincerely,

Bob
Robert J. Wayland
Senior Meteorologist



Enclosures

DATA DOCUMENTATION FORM

NOAA FORM 24-13 (4-77)

F156

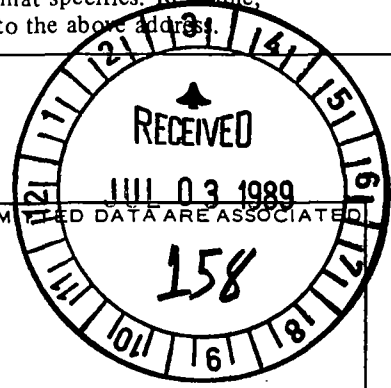
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
WASHINGTON, DC 20235

FORM APPROVED
O.M.B. No. 41-R2651
EXPIRES 1-81

(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
 Science Applications International Corporation
 Maritime Technology Group / Physical Oceanography Division
 4900 Waters Edge Drive
 Suite 255
 Raleigh, NC 27606

2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED
 North Carolina Frontal Eddy Dynamics Experiment (FRED)
 (UMS Contract No. 14-12-0001-30349)

3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT
 Eight (8) ARGOS tracked drifters:
 8770 | 773 | 8776
 8771 | 8774 | 8777
 8772 | 8775

4. PLATFORM NAME(S)
 DRIFTING BUOY

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

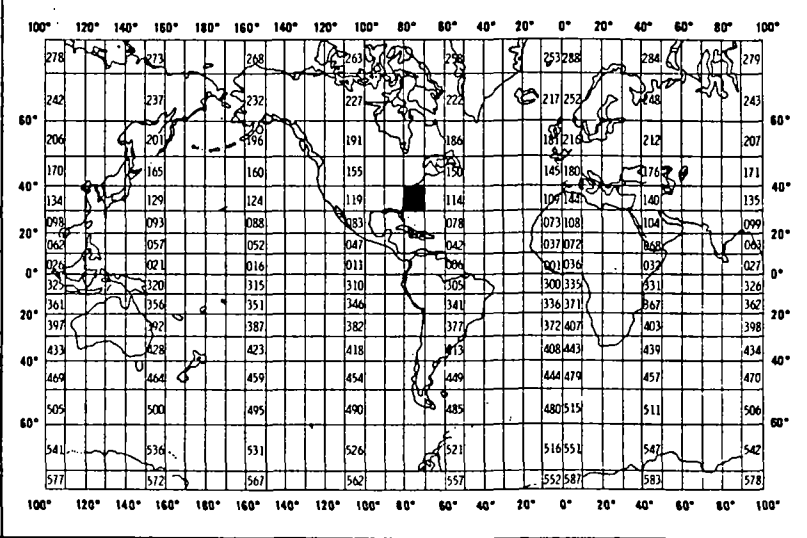
6. PLATFORM AND OPERATOR NATIONALITY(IES)
 PLATFORM OPERATOR
 USA USA

7. DATES
 FROM: MO/DAY/YR TO: MO/DAY/YR
 05/13/87 06/30/87

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)
 Dr. C.C. Ebbesmeyer (Prog. Manager)
 Evans-Hamilton, Inc.
 731 N. Northlake Way, Ste. 201
 Seattle, Washington 98103
 (206) 545-8155

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
GEOGRAPHIC LOCATION	Latitude and Longitude	Polar Research Labs Drifter	- NONE -	- NONE -
GEOGRAPHIC LOCATION	Latitude and Longitude	Met-Ocean, Inc. Drifter	- NONE -	- NONE -

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 File Type 156
"Lagrangian Current Measurements"
March 1984 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

8 individual files separated by 1 EOF. 2 EOF's define EDM (End-of-Medium).

3. ATTRIBUTES AS EXPRESSED IN PL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Robert J. Wayland (919) 851-8356
ADDRESS Science Applications International Corporation / 4900 Water's Edge Drive, Ste. 255
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> <u>IBM</u></p>
<p>7. PARITY</p> <p>(RS-232)</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>SAIC/Raleigh Tape ID No.:</p> <p>SP1188</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>4000</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>80</p>

RECORD FORMAT DESCRIPTION

RECORD NAME NODC File Type 156

**** SEE ATTACHED ****

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		

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File structure -

Five 80-character records: (1) Header Record, (2) Launch Summary Record, (3) Data Record, (4) Subsurface Record, and (5) Text Record. Note: This file format supersedes File Format 056; investigators should report new data in this format.

File format -

Lagrangian Current Measurements (F156)

PARAMETER	DESCRIPTION	SC
HEADER RECORD	ALWAYS 'A'	10
DROGUE NUMBER	FIVE-CHARACTER FIELD ASSIGNED BY INVESTIGATOR - ANALOGOUS TO STATION NUMBER	11
DROGUE TYPE	FIVE CHARACTER FIELD FOR INDICATING TYPE OF DROGUE - DETERMINED BY INVESTIGATOR	16
PRINCIPAL INVESTIGATOR	15-CHARACTER FIELD FOR NAME OF PRINCIPAL INVESTIGATOR	21
INSTITUTION OR AGENCY	15-CHARACTER FIELD FOR NAME OF INSTITUTION OR AGENCY	35
PLATFORM NAME	12-CHARACTER FIELD FOR NAME OF PLATFORM ACQUIRING DATA OR DEPLOYING BUOY	51
BUOY NUMBER	4-CHARACTER FIELD FOR IDENTIFYING THE BUOY ASSOCIATED WITH DROGUE	63
BLANKS		67
LAUNCH SUMMARY RECORD	ALWAYS 'B' - ONLY ONE OF THESE RECORDS SHOULD BE SUBMITTED WITH EACH DROGUE DEPLOYMENT	10
DROGUE NUMBER	SEE RECORD 'A'	11
LAUNCH POSITION:	POSITION AT DEPLOYMENT	
LATITUDE	DDMMSS PLUS HEMISPHERE 'N' OR 'S'	16
LONGITUDE	DDMMSS PLUS HEMISPHERE 'E' OR 'W'	23
END POSITION:	POSITION AT PICKUP OR TERMINATION OF OBSERVATIONS	
LATITUDE	DDMMSS PLUS HEMISPHERE 'N' OR 'S'	31
LONGITUDE	DDMMSS PLUS HEMISPHERE 'E' OR 'W'	38
LAUNCH DATE(GMT)	YYMMDD	45
LAUNCH TIME(GMT)	XXXX-HOURS AND MINUTES	52
END DATE (GMT)	YYMMDD	56
END TIME (GMT)	XXXX-HOURS AND MINUTES	62
DROGUE DEPTH	XXX-DEPTH IN METERS	66
OBSERVATION FREQUENCY	XXXX-HOURS AND MINUTES - USE WHEN BUOY POSITIONS ARE REPORTED AT SPECIFIC TIME INTERVALS	70
BLANKS		74

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DATA RECORD	ALWAYS 'C' - EACH RECORD CONTAINS INDIVIDUAL DROGUE POSITION AND ASSOCIATED SEA SURFACE CONDITIONS	10
DROGUE NUMBER	SEE RECORD 'A'	11
OBSERVED POSITION		
LATITUDE	DDMMSS PLUS HEMISPHERE 'N' OR 'S'	16
LONGITUDE	DDMMSS PLUS HEMISPHERE 'E' OR 'W'	23
OBSERVED DATE (GMT)	YYMMDD	31
OBSERVED TIME (GMT)	XXXX-HOURS AND MINUTES	37
SURFACE TEMPERATURE	XXX-DEG C (TO TENTHS)	41
SURFACE SALINITY	XXXX-PARTS PER THOUSAND (TO HUNDREDTHS)	44
ATMOSPHERIC PRESSURE	XXXXXX-MILLIBARS (TO HUNDREDTHS)	48
WIND SPEED	XX-METERS PER SECOND	54
WIND DIRECTION	XX-TENS OF DEGREES	56
WIND FORCE	ONE-CHARACTER CODE- USE CODE 0052	58
WAVE HEIGHT	ONE-CHARACTER CODE - USE CODE 0104	59
WAVE PERIOD	ONE-CHARACTER CODE - USE CODE 0378	60
SEA STATE	ONE-CHARACTER CODE - USE CODE 0109	61
BOTTOM DEPTH	XXXX-BOTTOM DEPTH AT REPORTED BUOY POSITION (DEPTH IN METERS)	62
AIR TEMPERATURE	XXXX - DEG C TO TENTHS. NEGATIVE VALUES PRECEDED BY MINUS SIGN	66
BLANKS		70
SEQUENCE NUMBER	XXXX-USE TO SORT RECORDS FOR EACH DROGUE/BUOY - SEQUENCE NUMBERS SHOULD BE IN ASCENDING ORDER	77
SUBSURFACE RECORD	ALWAYS 'D' - EACH RECORD CONTAINS SUBSURFACE DATA ASSOCIATED WITH THE DROGUES.	10
DROGUE NUMBER	SEE RECORD 'A'	11
DEPTH	XXXXX - METERS TO HUNDREDTHS	13
PRESSURE	XXXXX - DECIBARS TO HUNDREDTHS	21
TEMPERATURE	XXX - DEG C TO TENTHS. NEGATIVE VALUES PRECEDED BY MINUS SIGN	26
DEPTH	XXXXX - METERS TO HUNDREDTHS	29
PRESSURE	XXXXX - DECIBARS TO HUNDREDTHS	34
TEMPERATURE	XXX - DEG C TO TENTHS	39
DEPTH	XXXXX - METERS TO HUNDREDTHS	42
PRESSURE	XXXXX - DECIBARS TO HUNDREDTHS	47
TEMPERATURE	XXX - DEG C TO TENTHS	52
DEPTH	XXXXX - METERS TO HUNDREDTHS	55
PRESSURE	XXXXX - DECIBARS TO HUNDREDTHS	60
TEMPERATURE	XXX - DEG C TO TENTHS	65
BLANKS		68
SEQUENCE NUMBER	XXXX - SEE ABOVE	77
TEXT RECORD	ALWAYS 'T' - USE FOR COMMENTS AND OTHER INFORMATION	10
DROGUE NUMBER	SEE RECORD 'A'	11
TEXT	61-CHARACTER FIELD FOR COMMENTS- MULTIPLE TEXT RECORDS MAY BE USED TO DESCRIBE INDIVIDUAL DROGUE OBSERVATIONS OR FOR GENERAL COMMENTS	16
SEQUENCE NUMBER	TEXT RECORDS MAY BE INSERTED BETWEEN OR FOLLOW DATA RECORDS DEPENDING ON THE NATURE OF THE COMMENTS. THE ORDER OF SEQUENCE NUMBERS SHOULD REFLECT THE PROPER SORTING OF COMBINED DATA AND TRACK RECORDS FOR EACH DROGUE/BUOY.	77

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 (✓)	
Polar Research Labs	4/87		Polar Research Labs					✓	
Met-Ocean, Inc.	4/87		Met-Ocean, Inc.					✓	

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
8900181	L129	L00419	0193	312H	317F	1987/05/07	FR81	187212
8900181	F015	TV4172	0193	312H	317F	1987/05/08	FR11-1&2	187213
8900181	F015	TV4173	0193	312H	317F	1987/05/08	FR12-1&2	187214
8900181	F015	TV4174	0193	312H	317F	1987/05/08	FR21-1	187215
8900181	F015	TV4175	0193	312H	317F	1987/05/08	FR22-1	187216
8900181	F015	TV4176	0193	312H	317F	1987/05/08	FR23-1	187217
8900181	F015	TV4177	0193	312H	317F	1987/05/10	FR31-1	187218
8900181	F015	TV4178	0193	312H	317F	1987/05/10	FR32-1	187219
8900181	F015	TV4179	0193	312H	317F	1987/05/08	FR41-1	187220
8900181	F015	TV4180	0193	312H	317F	1987/05/08	FR42-1	187221
8900181	F015	TV4181	0193	312H	317F	1987/05/08	FR43-1	187222
8900181	F015	TV4182	0193	312H	317F	1987/05/07	FR51-1	187223
8900181	F015	TV4183	0193	312H	317F	1987/08/19	FR51-2	187224
8900181	F015	TV4184	0193	312H	317F	1987/08/19	FR52-1	187225
8900181	F015	TV4185	0193	312H	317F	1987/05/07	FR53-1&2	187226
8900181	F015	TV4186	0193	312H	317F	1987/05/07	FR61-1	187227
8900181	F015	TV4187	0193	312H	317F	1987/05/07	FR62-1	187228
8900181	F015	TV4188	0193	312H	317F	1987/05/08	FR63-1	187229
8900181	F015	TV4189	0193	312H	317F	1987/05/09	FR71-1	187230
8900181	F015	TV4190	0193	312H	317F	1987/05/09	FR72-1	187231
8900181	F015	TV4191	0193	312H	317F	1987/05/09	FR81-1	187232
8900181	F015	TV4192	0193	312H	317F	1987/05/07	FR82-1	187233
8900181	F015	TV4193	0193	312H	317F	1987/05/07	FR83-1	187234
8900181	C125	044873	0193	312H	3191	1987/05/12	FRED1	187201
8900181	C118	075294	0193	312H	3191	1987/05/12	FRED1	187203
8900181	C116	075284	0193	312H	31PP	1987/05/11	PI8701	187202
8900181	L142	L00420	0193	312H	31PP	1987/05/11	ADCP1	187235
8900181	L142	L00421	0193	312H	31PP	1987/05/21	ADCP2	187236
8900181	F156	TV4673	0193	312H	32DB	1987/05/23	8770	187204
8900181	F156	TV4674	0193	312H	32DB	1987/05/23	8771	187205
8900181	F156	TV4675	0193	312H	32DB	1987/05/23	8772	187206
8900181	F156	TV4676	0193	312H	32DB	1987/05/22	8773	187207
8900181	F156	TV4677	0193	312H	32DB	1987/05/13	8774	187208
8900181	F156	TV4678	0193	312H	32DB	1987/05/13	8775	187209
8900181	F156	TV4679	0193	312H	32DB	1987/05/13	8776	187210
8900181	F156	TV4680	0193	312H	32DB	1987/05/13	8777	187211

(36 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
8900181	L129	L00419	317F	1	1487	87/05/07	87/05/28
8900181	F015	TV4172	317F	7	12942	87/05/08	87/11/01
8900181	F015	TV4173	317F	7	13554	87/05/08	87/11/01
8900181	F015	TV4174	317F	7	13566	87/05/08	87/11/01
8900181	F015	TV4175	317F	2	3242	87/05/08	87/06/01
8900181	F015	TV4176	317F	7	13555	87/05/08	87/11/01
8900181	F015	TV4177	317F	5	8731	87/05/10	87/09/01
8900181	F015	TV4178	317F	7	13419	87/05/10	87/11/01
8900181	F015	TV4179	317F	1	1606	87/05/08	87/05/08
8900181	F015	TV4180	317F	6	12522	87/05/08	87/10/01
8900181	F015	TV4181	317F	7	13614	87/05/08	87/11/01
8900181	F015	TV4182	317F	1	1457	87/05/07	87/05/07
8900181	F015	TV4183	317F	4	6048	87/08/19	87/11/01
8900181	F015	TV4184	317F	3	5124	87/08/19	87/10/01
8900181	F015	TV4185	317F	7	13573	87/05/07	87/11/01
8900181	F015	TV4186	317F	3	4508	87/05/07	87/07/01
8900181	F015	TV4187	317F	7	13659	87/05/07	87/11/01
8900181	F015	TV4188	317F	7	13647	87/05/08	87/11/01
8900181	F015	TV4189	317F	6	12029	87/05/09	87/10/01
8900181	F015	TV4190	317F	7	13516	87/05/09	87/11/01
8900181	F015	TV4191	317F	1	1300	87/05/09	87/05/09
8900181	F015	TV4192	317F	7	13708	87/05/07	87/11/01
8900181	F015	TV4193	317F	7	13706	87/05/07	87/11/01
8900181	C125	044873	3191	25	25	87/05/12	87/05/12
8900181	C118	075294	3191	134	134	87/05/12	87/05/23
8900181	C116	075284	31PP	277	5	87/05/11	87/05/11
8900181	L142	L00420	31PP	924	25105	87/05/11	87/05/15
8900181	L142	L00421	31PP	602	18978	87/05/21	87/05/25
8900181	F156	TV4673	32DB	1	25	87/05/23	87/05/23
8900181	F156	TV4674	32DB	2	65	87/05/23	87/06/01
8900181	F156	TV4675	32DB	2	42	87/05/23	87/06/03
8900181	F156	TV4676	32DB	2	178	87/05/22	87/06/01
8900181	F156	TV4677	32DB	2	388	87/05/13	87/06/01
8900181	F156	TV4678	32DB	2	394	87/05/13	87/06/01
8900181	F156	TV4679	32DB	2	389	87/05/13	87/06/01
8900181	F156	TV4680	32DB	2	366	87/05/13	87/06/01

(36 rows affected)