

01/05/90

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:

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Temperature (L129)

Acc: 8900259 Ref: L00432 - L00432 1 sta. 17,431 rec.

Science Applications

(MMS-Gulf Mex. Phys. Oceanog.)

Current Meter (F015)

Acc: 8900259 Ref: TV4620 - TV4628 9 sta. 83,865 rec. ✓

Science Applications

(MMS-Gulf Mex. Phys. Oceanog.)

cc: Division Director

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT		CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900259	TV4620	F015	0125	312H	317F	GG	1/2-3	11/09/87	10/30/88	1	8,537
8900259	TV4621	F015	0125	312H	317F	GG	2/1	04/06/87	04/13/87	1	333
8900259	TV4622	F015	0125	312H	317F	GG	2/3	04/09/88	10/30/88	1	9,807
8900259	TV4623	F015	0125	312H	317F	GG	3/1	04/06/87	04/10/87	1	185
8900259	TV4624	F015	0125	312H	317F	GG	3/2-3	11/09/87	10/30/88	1	17,071
8900259	TV4625	F015	0125	312H	317F	GG	4/1-3	04/06/87	10/30/88	1	27,499
8900259	TV4626	F015	0125	312H	317F	GG	5/2	11/09/87	04/03/88	1	7,008
8900259	TV4627	F015	0125	312H	317F	GG	5/3	04/09/88	10/30/88	1	9,805
8900259	TV4628	F015	0125	312H	317F	GG	9/2	11/10/87	04/08/88	1	3,620

ACCESSION NO. 8900259

FILETYPE F015

TRACK NO. TV4620-8

PROJECT IDENTIFICATION 0125  
MMS/GULF OF MEX.

STEP	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	RECL	BLK SIZE	NO. RECORDS
ORIG. TAPE	11-23-89	C MIT	A00990 *	10	60	3600	101287
DUPLICATE TAPE	12-03-89	↓	W07472 *	10	↓	3600	↓
REFORMATTED TAPE	12-20-89	R.P.S.	W07032 **	9	↓	6000	83,865
REFORMATTED DISK							
FIRST MULCHEK							
FINAL MULCHEK							
MPD75 OR F022							
DATA SET FINALIZED							

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:

\* = No Label  
9 TRK, 1600 bpi

\*\* Label = DNODE \* SMI CURROUT.

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

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)



Science Applications International Corporation

8900259

October 12, 1989

Mr. Francis Mitchell  
NOAA/NODC  
1825 Connecticut Avenue, NW  
Room 416  
Washington, DC 20235

A00989  
A00990  
A00991  
A00992

Dear Francis:

Enclosed please find four (4) nine-track magnetic data tapes containing all data collected as part of Year 5 of the Gulf of Mexico Physical Oceanography Program. This work was funded under Minerals Management Service Contract Number 14-12-0001-29158, which was awarded to Science Applications International Corporation. The following items have been enclosed:

(1) Four (4) data tapes:

- 1 - 2400 foot tape containing Hydrographic and AXBT data in NODC Formats 022 and 004,
- 1 - 2400 foot tape containing Inverted Echo Sounder (IES) data in modified NODC Format 015,
- 2 - 2400 foot tapes containing Current Meter data in NODC Format 015.

CTD & XBT

(2) Five (5) printed volumes detailing the information stored on each tape:

- Volume I - Current Meter Data
- Volume II - XBT and CTD Cruise Data
- Volume III - Oxygen Data
- Volume IV - AXBT Survey Data
- Volume V - Inverted Echo Sounder (IES) 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,

*Rebecca J. Weber*  
Rebecca J. Weber  
Data Analyst

Enclosures

ACCESSION  
NUMBER

8900259

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

SPI217

(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.

A00990

CURRENT METER

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 Cooperation  
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

Gulf of Mexico Physical Oceanography Program  
Year 5 (GOMP05)  
(MMS Contract No: 14-12-0001-29150)

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

MOORING IU'S  
MGG1 | MGG5  
MGG2 | MGG9  
MGG3  
MGG4  
\*\* SEE ATTACHED SHEETS \*\*

4. PLATFORM NAME(S)

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

6. PLATFORM AND OPERATOR

7. DATES

MOORING

USA

USA

4/87

11/88

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

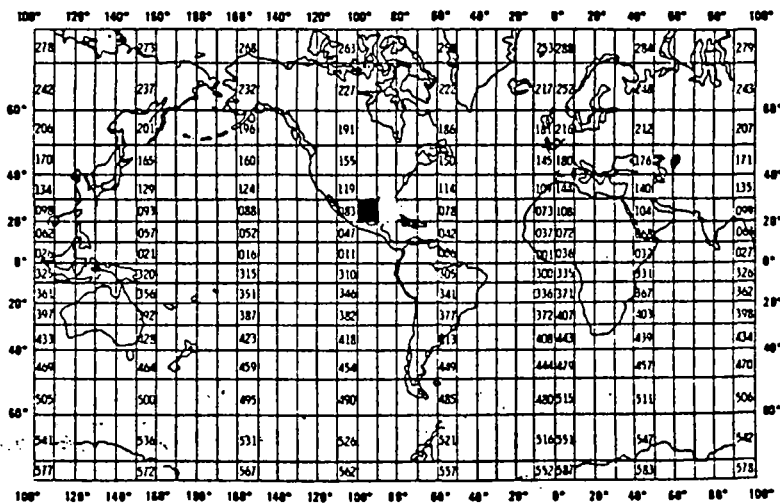
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)?

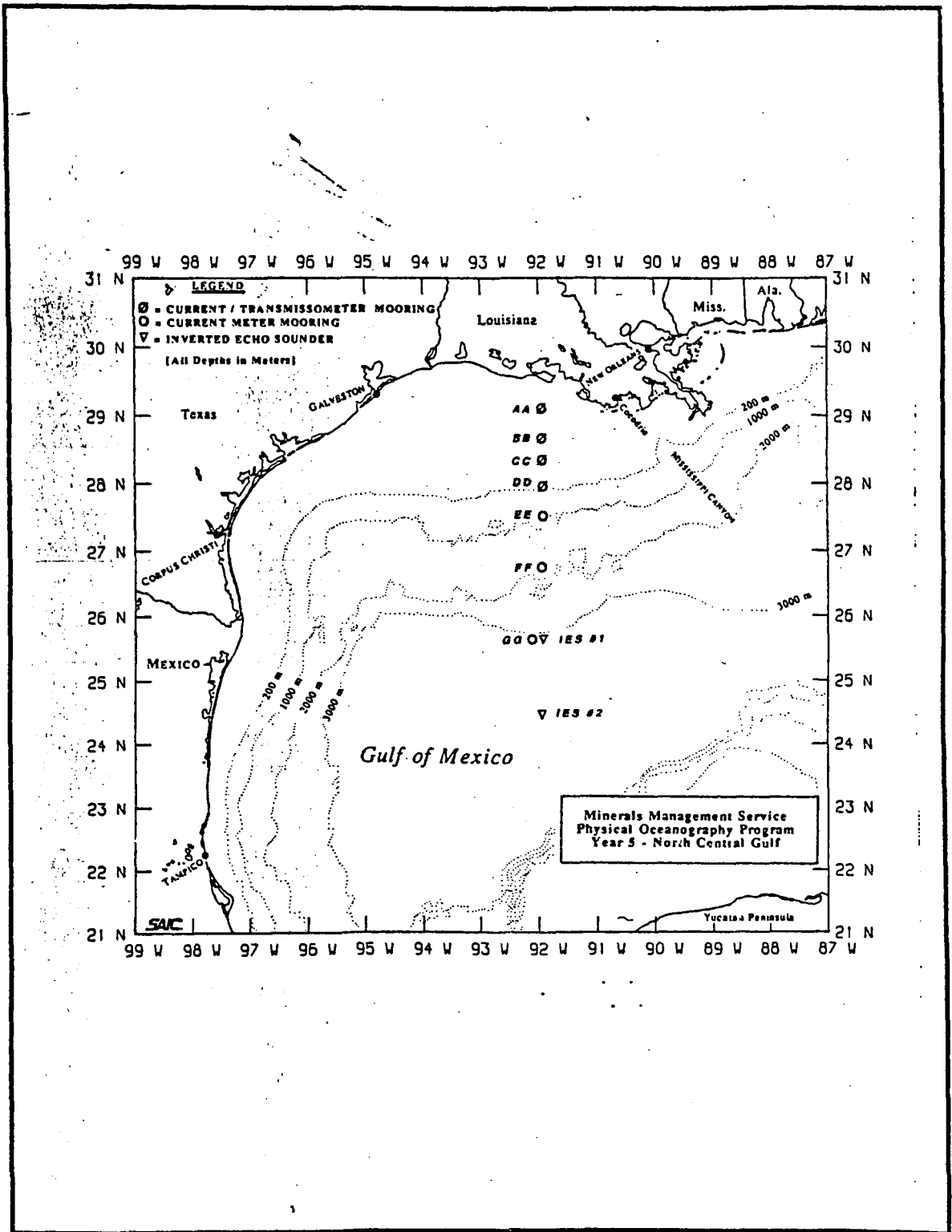
(I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)

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. Evans Waddell, Div. Mgr.  
SAIC  
4900 Water's Edge Drive  
Suite 255  
Raleigh, NC 27606  
(919) 851-8356

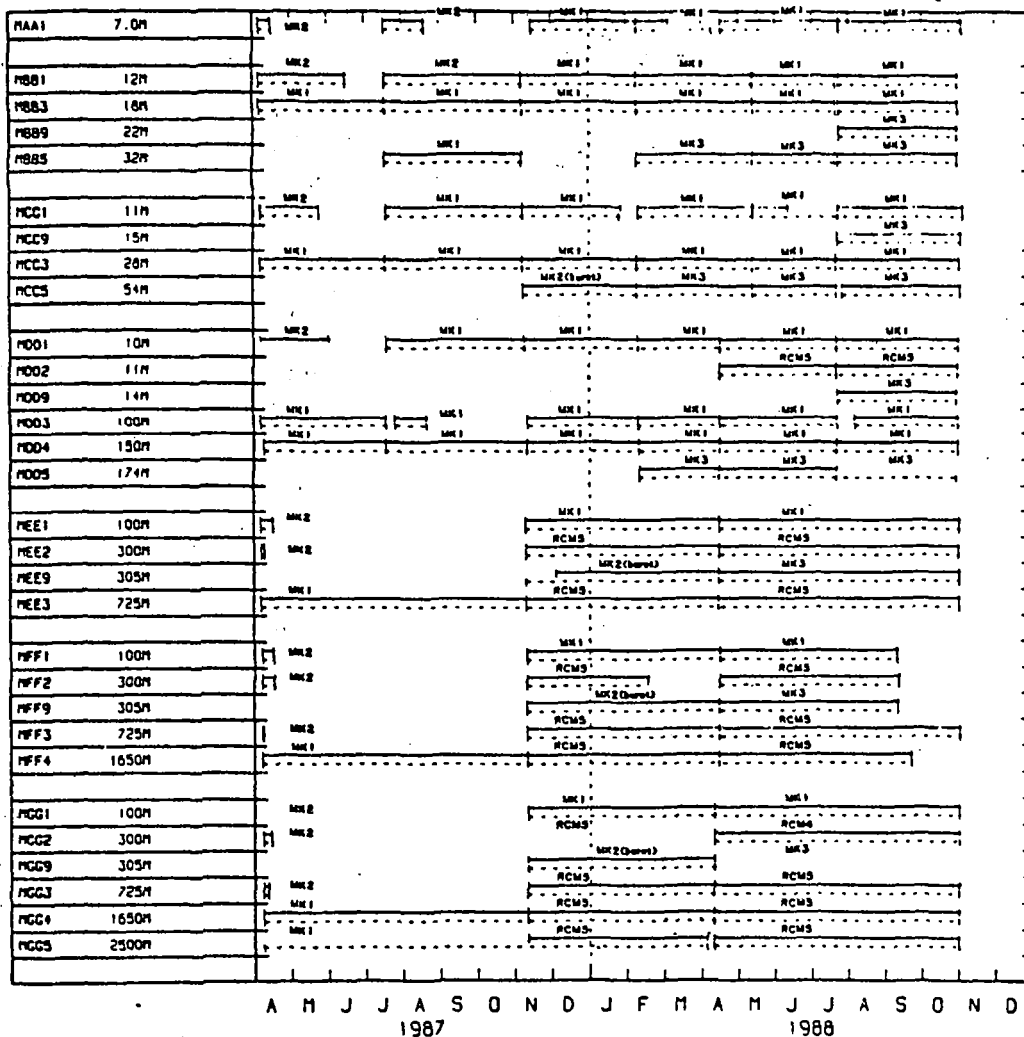




Mooring locations during Year 5 of the MMS-sponsored Gulf of Mexico Physical Oceanography Program.

Mooring locations and corresponding depths for Year 5 of the MMS-sponsored Gulf of Mexico Physical Oceanography Program.

Mooring	Loran C Time		Location		Water Depth (m)
	Delays (TDs)	Latitude	Longitude		
AA	11189.4 27194.6 46870.9 64046.3	29°07.031'N	92°08.658'W		14
BB	11277.2 27099.1 46792.2 64071.6	29°40.52'N	92°05.87'W		40
CC	11343.9 26999.2 46725.5 64080.6	28°18.57'N	92°05.76'W		64
DD	11434.7 26945.7 46641.6	27°53.0'N	91°59.7'W		181
EE	11501.7 26835.2 46561.4	27°28.1'N	92°00.0'W		825
FF	11609.1 26662.4 46419.5 64081.9	26°44.4'N	91°59.7'W		1750
GG	11736.0 26417.2 46213.6 64061.1	25°39.2'N	92°01.9'W		3000
IES1	11734.1 26412.7 46215.1 64061.1	25°39.4'N	92°02.4'W		3000
IES2	11853.6 26241.0 46000.7 64024.9	24°29.57'N	92°00.95'W		3743



Time line of deployment periods and data return for each current meter level during Year 5 of the Gulf of Mexico Physical Oceanography Program. The solid lines are for currents and the dashed lines are for temperature.



### 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	cm/s	General Oceanics Mark I General Oceanics Mark II General Oceanics Mark III Aanderaa Instruments RCM-5 Aanderaa Instruments RCM-4	- NONE -	Raw data has been included in this submittal.
Temperature	°C	General Oceanics Mark I General Oceanics Mark II General Oceanics Mark III Aanderaa Instruments RCM-5 Aanderaa Instruments RCM-4	- NONE -	Raw data has been included in this submittal.
Pressure	db	General Oceanics Mark II General Oceanics Mark III Aanderaa Instruments RCM-5 (NOTE: Pressure is only on selected instruments - see attached sheets for details)	- NONE -	Raw data has been included in this submittal.
<p>THE FOLLOWING NOTES REGARDING PRESSURE DATA ARE OFFERED:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>① TAPE FILE 1: Data is bad-unusable</p> <p>② TAPE FILE 2: Data is bad-unusable</p> <p>③ TAPE FILE 14: Data is bad-unusable</p> <p>④ TAPE FILE 15: Data is bad-unusable</p> <p>⑤ TAPE FILE 41: Data is bad-unusable</p> <p>⑥ TAPE FILE 50: Data is bad-unusable</p> <p>⑦ TAPE FILE 51: Data is bad-unusable</p> </div> <div style="width: 5%; text-align: center; font-size: 2em;">}</div> <div style="width: 45%;"> <p>SP1216</p> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>① TAPE FILE 3: Data is bad-unusable</p> <p>② TAPE FILE 5: Data is bad-unusable</p> <p>③ TAPE FILE 6: Data is bad-unusable</p> </div> <div style="width: 5%; text-align: center; font-size: 2em;">}</div> <div style="width: 45%;"> <p>SP1217</p> </div> </div>				

### 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 #15  
 "Current Meter Data (Components)"  
 April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

10 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) 851-8756  
 ADDRESS Science Applications International Corporation/4900 Water's Edge Drive, Suite 255  
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY  <input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC  <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) <input type="checkbox"/> SEVEN  <input checked="" type="checkbox"/> NINE  <input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17  <input checked="" type="checkbox"/> IBM</p>
<p>7. PARITY <input type="checkbox"/> ODD  <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>SASC/Raleigh Tape ID No:   <span style="font-size: 1.5em; font-family: cursive;">SP 1217</span></p>
<p>8. DENSITY <input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI  <input type="checkbox"/> 556 BPI  <input type="checkbox"/> 800 BPI  <input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES  <span style="font-size: 1.2em;">3600</span></p> <p>13. LENGTH OF BYTES IN BITS   <span style="font-size: 1.2em;">60</span></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		

DATE April 1985	<b>NODC Users Guide</b>	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	DDDMMXX 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

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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		64
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

### 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 CALIBRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	<u>BEFORE OR</u> AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
GENERAL OCEANICS INCORPORATED (I, II, III)	4/87		GENERAL OCEANICS INCORPORATED		✓				
Handeraa Instruments RCM4, 5	4/87		Handeraa Instruments		✓				

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT		CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900259	TV4635	F022	0125	312H	32PE	PE	87-13	04/07/87	04/10/87	24	3,891
8900259	TV4636	F022	0125	312H	32PE	PE	87-15	04/25/87	04/26/87	16	223
8900259	TV4637	F022	0125	312H	32PE	PE	88-03	07/17/87	07/17/87	11	170
8900259	TV4638	F022	0125	312H	32PE	PE	88-14	11/09/87	11/16/87	12	1,643
8900259	TV4639	F022	0125	312H	32PE	PE	88-20	02/09/88	02/10/88	17	232
8900259	TV4640	F022	0125	312H	32PE	PE	89-03	07/21/88	07/22/88	17	221

ACCESSION NO. 8900259

FILETYPE F022

TRACK NO. TV4635-  
4640

PROJECT IDENTIFICATION 0125

STEP	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
ORIG. TAPE	11-23-89	CMH.	ADD 991	22	120	3600	106,536
DUPLICATE TAPE	12-3-89	CMH	W07634 *	↓	↓	↓	↓
REFORMATTED TAPE	1-3-90	R.P.S.	W16387 **	1	↓	12000	6,380
REFORMATTED DISK							
FIRST MULCHEK							
FINAL MULCHEK							
MPD75 OR F022							
DATA SET FINALIZED							

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:

\* = NO LABEL

\*\* : LABEL D NODC \* S A I C T D O U T .

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

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)



01/08/90

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:

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Low Resolution STD (C022)

Acc: 8900259 Ref: 329608 - 329613 sta. rec.

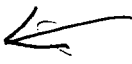
C/STD (F022)

Acc: 8900259 Ref: TV4635 - TV4640 97 sta. 6,380 rec. ✓

Science Applications  
(MMS-Gulf Mex. Phys. Oceanog.)

cc: Division Director

01/08/90

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:

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Current Meters

(F015)

Acc: 8900259 Ref: TV4574 - TV4619 46 sta. 394,724 rec.

Science Applications

(MMS-Gulf Mex. Phys. Oceanog.)

89-006

cc: Division Director

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900259	TV4574	F015	0125	312H	317F	AA 1/1	04/04/87	04/14/87	1	458
8900259	TV4575	F015	0125	312H	317F	AA 1/2	07/15/87	08/18/87	1	1,604
8900259	TV4576	F015	0125	312H	317F	AA 1/3-4	11/13/87	03/03/88	1	5,354
8900259	TV4577	F015	0125	312H	317F	AA 1/5-6	04/15/88	11/01/88	1	9,643
8900259	TV4578	F015	0125	312H	317F	BB 1/1	04/04/87	06/14/87	1	3,376
8900259	TV4579	F015	0125	312H	317F	BB 1/2-5	07/16/87	07/19/88	1	17,727
8900259	TV4580	F015	0125	312H	317F	BB 1/6	07/22/88	10/29/88	1	4,775
8900259	TV4581	F015	0125	312H	317F	BB 3/1-5	04/04/87	07/19/88	1	22,649
8900259	TV4582	F015	0125	312H	317F	BB 3/6	07/22/88	10/29/88	1	4,774
8900259	TV4583	F015	0125	312H	317F	BB 5/2	07/16/87	11/05/87	1	5,406
8900259	TV4584	F015	0125	312H	317F	BB 5/4-5	02/08/88	07/19/88	1	7,798
8900259	TV4585	F015	0125	312H	317F	BB 5/6	07/22/88	10/29/88	1	4,773
8900259	TV4586	F015	0125	312H	317F	BB 9/6	07/22/88	10/28/88	1	4,725
8900259	TV4587	F015	0125	312H	317F	CC 1/1	04/04/87	05/23/87	1	2,316
8900259	TV4588	F015	0125	312H	317F	CC 1/2-3	07/16/87	01/26/88	1	9,281
8900259	TV4589	F015	0125	312H	317F	CC 1/4-5	02/08/88	06/09/88	1	5,860
8900259	TV4590	F015	0125	312H	317F	CC 1/6	07/20/88	11/02/88	1	5,023
8900259	TV4591	F015	0125	312H	317F	CC 3/1	04/04/87	10/31/88	1	27,624
8900259	TV4592	F015	0125	312H	317F	CC 5/3-5	11/07/87	07/20/88	1	12,317
8900259	TV4593	F015	0125	312H	317F	CC 5/6	07/25/88	11/07/88	1	4,771
8900259	TV4594	F015	0125	312H	317F	CC 9/6	07/20/88	11/01/88	1	4,976
8900259	TV4595	F015	0125	312H	317F	DD 1/1	04/05/87	05/31/87	1	2,710
8900259	TV4596	F015	0125	312H	317F	DD 1/2-6	07/17/87	10/29/88	1	22,585
8900259	TV4597	F015	0125	312H	317F	DD 2/5-6	04/14/88	10/29/88	1	9,513
8900259	TV4598	F015	0125	312H	317F	DD 3/1	04/05/87	07/16/87	1	4,915
8900259	TV4599	F015	0125	312H	317F	DD 3/2	07/24/87	08/19/88	1	1,237
8900259	TV4600	F015	0125	312H	317F	DD 3/3-5	11/10/87	07/20/87	1	12,157
8900259	TV4601	F015	0125	312H	317F	DD 3/6	08/04/88	10/29/88	1	4,140
8900259	TV4602	F015	0125	312H	317F	DD 4/1-6	04/07/87	10/29/88	1	27,405
8900259	TV4603	F015	0125	312H	317F	DD 5/4-5	02/09/88	07/20/88	1	7,791
8900259	TV4604	F015	0125	312H	317F	DD 9/6	07/21/88	10/28/88	1	4,791
8900259	TV4605	F015	0125	312H	317F	EE 1/1	04/05/87	04/14/87	1	445
8900259	TV4606	F015	0125	312H	317F	EE 1/2-3	11/08/87	10/31/88	1	8,609
8900259	TV4607	F015	0125	312H	317F	EE 2/1	04/05/87	04/07/87	1	105
8900259	TV4608	F015	0125	312H	317F	EE 2/2-3	11/08/87	10/30/88	1	17,146
8900259	TV4609	F015	0125	312H	317F	EE 3/1-3	04/05/87	10/31/88	1	27,610
8900259	TV4610	F015	0125	312H	317F	EE 9/2-3	12/02/87	10/31/88	1	8,015
8900259	TV4611	F015	0125	312H	317F	FF 1/1	04/06/87	04/15/87	1	434
8900259	TV4612	F015	0125	312H	317F	FF 1/2-3	11/08/87	09/09/88	1	7,336
8900259	TV4613	F015	0125	312H	317F	FF 2/1	04/06/87	04/16/77	1	482
8900259	TV4614	F015	0125	312H	317F	FF 2/2	11/09/87	02/15/88	1	4,710
8900259	TV4615	F015	0125	312H	317F	FF 2/3	04/14/88	09/10/88	1	7,181
8900259	TV4616	F015	0125	312H	317F	FF 3/1	04/06/87	04/06/87	1	30
8900259	TV4617	F015	0125	312H	317F	FF 3/2-3	11/08/87	10/31/88	1	17,167
8900259	TV4618	F015	0125	312H	317F	FF 4/1-3	04/06/87	09/20/88	1	25,620
8900259	TV4619	F015	0125	312H	317F	FF 9/2-3	11/08/87	09/10/88	1	7,360

O. 8900-89  
8900259

FILETYPE FOIS

TRACK NO. \_\_\_\_\_

PROJECT IDENTIFICATION \_\_\_\_\_

Gulf of Mexico Current Meter Data

	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS	
	11/23/89	CMH	A00989	NL	52	60	3600	467597
	12/03/89		W07458	W16165**	NL	52	60	3600
TAPE	11/23/89		A00990	NL	10	60	3600	101787
	12/03/89		W07472	NL	10	60	3600	
TAPE	11/23/89		A00991	NL	22			106556
	12/03/89		W07634	NL	22			
DISK TAPE	11/23/89		A00992	NL	04	60	<del>3600</del>	38717
	12/03/89	✓	W07768	NL	04	60	<del>3600</del>	39472
EX							3600	
EX								
2								
FINALIZED								

REPORTED TO PRINCIPAL INVESTIGATOR: Tapes ~~W07458~~ W07458, W07472, W07634 and W07768 are 9 TRK, NL, 1600 bpi.

\*\* DNODE \* SAICURRENT

W07458  
W07472  
W07634  
W07768  
FOIS + L Data  
CTD, SDZ, XBT  
Inventory

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

TRACKS DELETED, FIELDS DELETED, ETC.)

USER NAME <i>Cliff Hartley</i>	PHONE # <i>673-5636</i>	ORG/TASK # <i>EG1200 8N3AH9</i>	DATE SUBMITTED <i>10/17/89</i>	DATE DUE <i>ASAP</i>	BIN # <i>09</i>
-----------------------------------	----------------------------	------------------------------------	-----------------------------------	-------------------------	--------------------

EQUIPMENT 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	<i>A00989</i> <del>A00993</del>		<i>9</i>	<i>1600</i>					<i>3600</i>	<i>52</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
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

*Please return tape A00989 to Bin 09*

ESTIMATED EXECUTION TIME

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>89114-2341</i>	<i>10/23/89</i>	<i>09:30</i>	<i>09:40</i>	<i>C</i>	<i>COMPLETED BY J.S.</i>

COMMENTS

DEPT NAME <i>Cliff Hartley</i>	PHONE # <i>673-5436</i>	ORG/TASK # <i>EG12008N31A19</i>	DATE SUBMITTED <i>11/02/89</i>	DATE DUE <i>ASAP</i>	EOIN # <i>09</i>
-----------------------------------	----------------------------	------------------------------------	-----------------------------------	-------------------------	---------------------

copy to 'W' tape  
Please scan tape (use abbreviated Scan (MTSUM))

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

TAPE/DISKETTE INFORMATION										
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES	
<u>A00989</u>		9	1600	ODD	NL	FB	60	3600	52	
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	
<u>W07458</u>		9	1600	ODD	NL	FB	60	3600	52	
SECTOR SIZE	EXCHANGE TYPE	CODE: <u>ASCII</u> EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE	

SPECIAL INSTRUCTIONS <i>Please send 'W' tape to Asheville, N.C.</i>	ESTIMATED EXECUTION TIME
--	--------------------------------

DATE ONLY					
#	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
	<i>11/03/89</i>	<i>09:30</i>	<i>09:40</i>	<i>C</i>	<i>COMPLETED BY [initials]</i>

ACCESSION  
NUMBER

8900259

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-R265  
EXPIRES 1-81

A00989

(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.

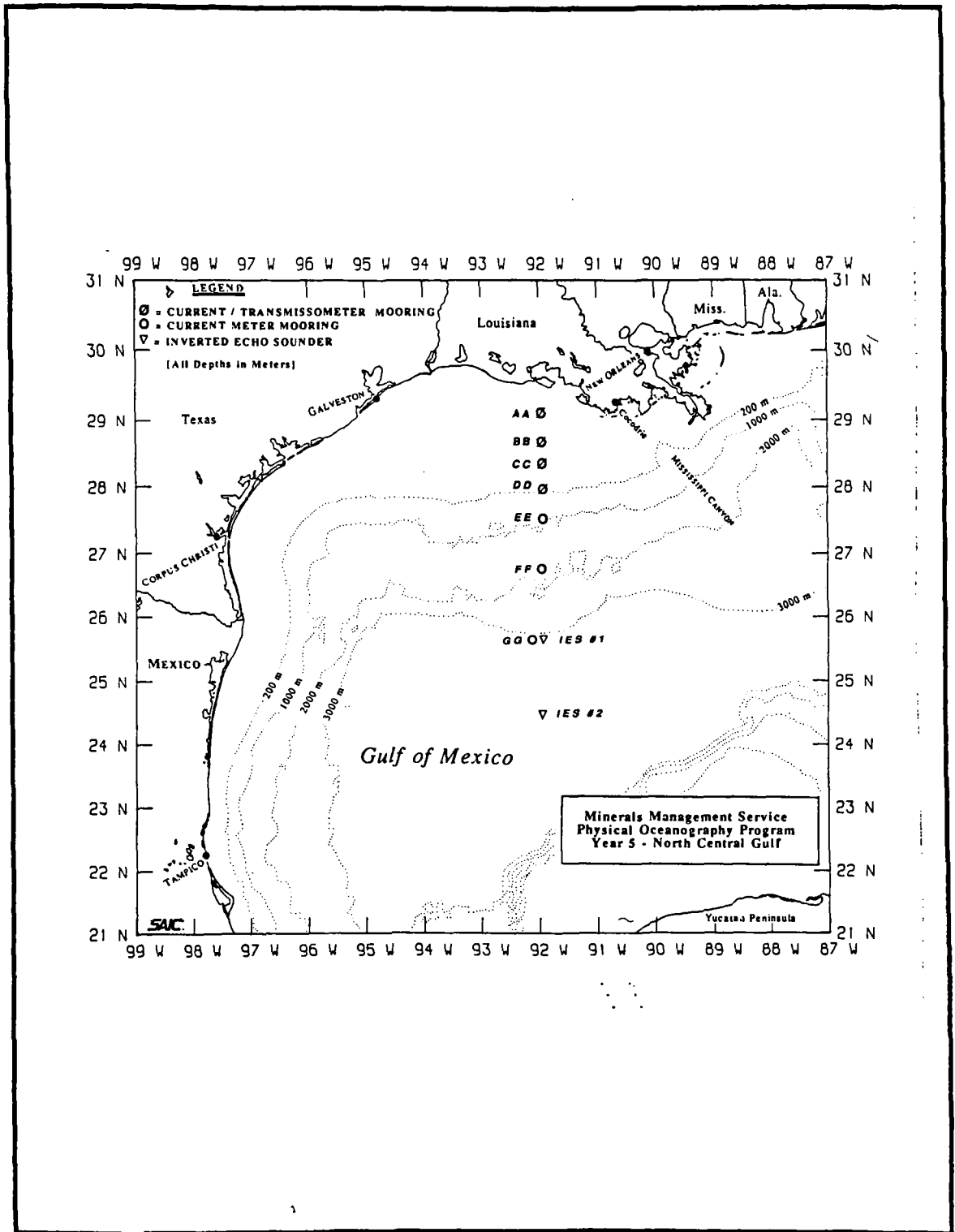
SPI216

CURRENT METER

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 Cooperation Maritime Technology Group/Physical Oceanography Division 4900 Water's Edge Drive Suite 255 Raleigh, NC 27606</p>																											
<p>2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED</p> <p>Gulf of Mexico Physical Oceanography Program Year 5 (GOMPPOP) (MMS Contract No. 14-12-0001-2915B)</p>		<p>3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT - MOORING ID'S</p> <table border="1"> <tr> <td>MAA1</td> <td>MBO9</td> <td>MCC9</td> <td>MDD4</td> <td>MEE2</td> <td>MFF2</td> </tr> <tr> <td>MBB1</td> <td>MCC1</td> <td>MDD1</td> <td>MDD5</td> <td>MEE3</td> <td>MFF3</td> </tr> <tr> <td>MBB3</td> <td>MCC3</td> <td>MDD2</td> <td>MDD9</td> <td>MEE9</td> <td>MFF4</td> </tr> <tr> <td>MBB5</td> <td>MCC5</td> <td>MDD3</td> <td>MEE1</td> <td>MFF1</td> <td>MFF9</td> </tr> </table> <p>NOTE: SEE ATTACHED SHEETS</p>		MAA1	MBO9	MCC9	MDD4	MEE2	MFF2	MBB1	MCC1	MDD1	MDD5	MEE3	MFF3	MBB3	MCC3	MDD2	MDD9	MEE9	MFF4	MBB5	MCC5	MDD3	MEE1	MFF1	MFF9
MAA1	MBO9	MCC9	MDD4	MEE2	MFF2																						
MBB1	MCC1	MDD1	MDD5	MEE3	MFF3																						
MBB3	MCC3	MDD2	MDD9	MEE9	MFF4																						
MBB5	MCC5	MDD3	MEE1	MFF1	MFF9																						
<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> <th>PLATFORM</th> <th>OPERATOR</th> <th>FROM: MO, DAY, YR</th> <th>TO: MO, DAY, YR</th> </tr> <tr> <td>USA</td> <td>USA</td> <td>04/87</td> <td>11/88</td> </tr> </table>	PLATFORM	OPERATOR	FROM: MO, DAY, YR	TO: MO, DAY, YR	USA	USA	04/87	11/88	<p>7. DATES</p>																
PLATFORM	OPERATOR	FROM: MO, DAY, YR	TO: MO, DAY, YR																								
USA	USA	04/87	11/88																								
<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)? (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. Evans Waddell, Div. Mgr. SAIC 4900 Water's Edge Drive Suite 255 Raleigh, NC 27606 (919) 857-8352</p>																											

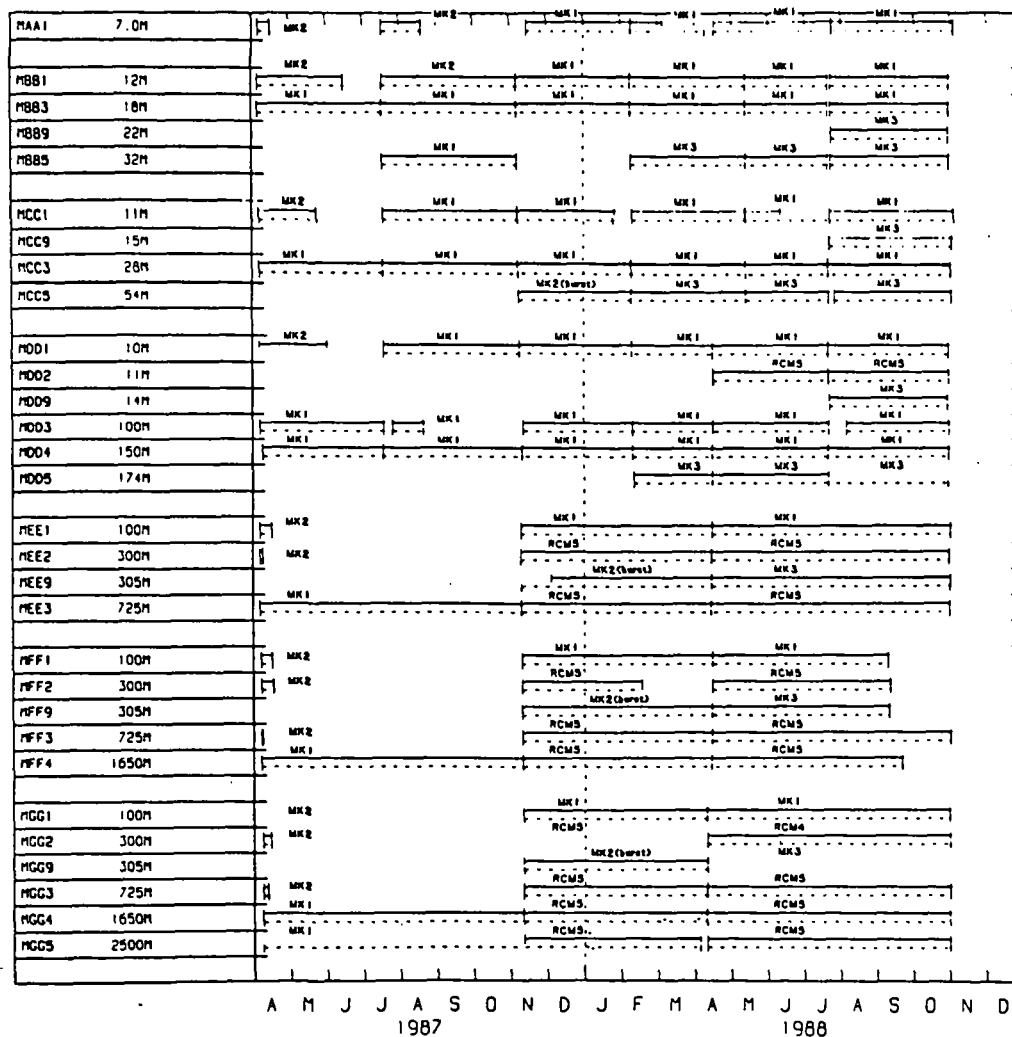


Mooring locations during Year 5 of the MMS-sponsored Gulf of Mexico Physical Oceanography Program.



Mooring locations and corresponding depths for Year 5  
of the MMS-sponsored Gulf of Mexico Physical Ocean-  
ography Program.

Moorings	Loran C Time	Location		Water Depth (m)
	Delays (TDs)	Latitude	Longitude	
AA	11189.4 27194.6 46870.9 64046.3	29°07.031'N	92°08.658'W	14
BB	11277.2 27099.1 46792.2 64071.6	29°40.52'N	92°05.87'W	40
CC	11343.9 26999.2 46725.5 64080.6	28°18.57'N	92°05.76'W	64
DD	11434.7 26945.7 46641.6	27°53.0'N	91°59.7'W	181
EE	11501.7 26835.2 46561.4	27°28.1'N	92°00.0'W	825
FF	11609.1 26662.4 46419.5 64081.9	26°44.4'N	91°59.7'W	1750
GG	11736.0 26417.2 46213.6 64061.1	25°39.2'N	92°01.9'W	3000
IES1	11734.1 26412.7 46215.1 64061.1	25°39.4'N	92°02.4'W	3000
IES2	11853.6 26241.0 46000.7 64024.9	24°29.57'N	92°00.95'W	3743



Time line of deployment periods and data return for each current meter level during Year 5 of the Gulf of Mexico Physical Oceanography Program. The solid lines are for currents and the dashed lines are for temperature.

### 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	cm/s	General Oceanics Mark I General Oceanics Mark II General Oceanics Mark III Aanderaa Instruments RCM-5 Aanderaa Instruments RCM-4	- NONE -	Raw data has been included in this submittal.						
Temperature	°C	General Oceanics Mark I General Oceanics Mark II General Oceanics Mark III Aanderaa Instruments RCM-5 Aanderaa Instruments RCM-4	- NONE -	Raw data has been included in this submittal.						
Pressure	db	General Oceanics Mark II General Oceanics Mark III Aanderaa Instruments RCM-5 (NOTE: Pressure is only on selected instruments - see attached sheets for details)	- NONE -	Raw data has been included in this submittal.						
<div style="border: 1px solid black; padding: 5px;"> <p style="margin: 0;">THE FOLLOWING NOTES REGARDING PRESSURE DATA ARE OFFERED:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>① TAPE FILE 1: Data is bad - unusable</li> <li>② TAPE FILE 2: Data is bad - unusable</li> <li>③ TAPE FILE 14: Data is bad - unusable</li> <li>④ TAPE FILE 15: Data is bad - unusable</li> <li>⑤ TAPE FILE 41: Data is bad - unusable</li> <li>⑥ TAPE FILE 50: Data is bad - unusable</li> <li>⑦ TAPE FILE 51: Data is bad - unusable</li> </ul> </td> <td style="width: 5%; text-align: center; vertical-align: middle;">}</td> <td style="width: 45%; vertical-align: middle; font-size: 2em;">SP1216</td> </tr> <tr> <td style="vertical-align: top; margin-top: 10px;"> <ul style="list-style-type: none"> <li>① TAPE FILE 3: Data is bad - unusable</li> <li>② TAPE FILE 5: Data is bad - unusable</li> <li>③ TAPE FILE 6: Data is bad - unusable</li> </ul> </td> <td style="text-align: center; vertical-align: middle; margin-top: 10px;">}</td> <td style="vertical-align: middle; font-size: 2em; margin-top: 10px;">SP1217</td> </tr> </table> </div>					<ul style="list-style-type: none"> <li>① TAPE FILE 1: Data is bad - unusable</li> <li>② TAPE FILE 2: Data is bad - unusable</li> <li>③ TAPE FILE 14: Data is bad - unusable</li> <li>④ TAPE FILE 15: Data is bad - unusable</li> <li>⑤ TAPE FILE 41: Data is bad - unusable</li> <li>⑥ TAPE FILE 50: Data is bad - unusable</li> <li>⑦ TAPE FILE 51: Data is bad - unusable</li> </ul>	}	SP1216	<ul style="list-style-type: none"> <li>① TAPE FILE 3: Data is bad - unusable</li> <li>② TAPE FILE 5: Data is bad - unusable</li> <li>③ TAPE FILE 6: Data is bad - unusable</li> </ul>	}	SP1217
<ul style="list-style-type: none"> <li>① TAPE FILE 1: Data is bad - unusable</li> <li>② TAPE FILE 2: Data is bad - unusable</li> <li>③ TAPE FILE 14: Data is bad - unusable</li> <li>④ TAPE FILE 15: Data is bad - unusable</li> <li>⑤ TAPE FILE 41: Data is bad - unusable</li> <li>⑥ TAPE FILE 50: Data is bad - unusable</li> <li>⑦ TAPE FILE 51: Data is bad - unusable</li> </ul>	}	SP1216								
<ul style="list-style-type: none"> <li>① TAPE FILE 3: Data is bad - unusable</li> <li>② TAPE FILE 5: Data is bad - unusable</li> <li>③ TAPE FILE 6: Data is bad - unusable</li> </ul>	}	SP1217								

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 #15  
"Current Meter Data (Components)"  
April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

52 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, Suite 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 <input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> <u>IBM</u></p>
<p>7. PARITY</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>SAC/Raleigh Tape ID No:</p> <p><u>SP 1216</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		

DATE April 1985	NODC Users Guide	SECTION 4.1.8	PAGE 1
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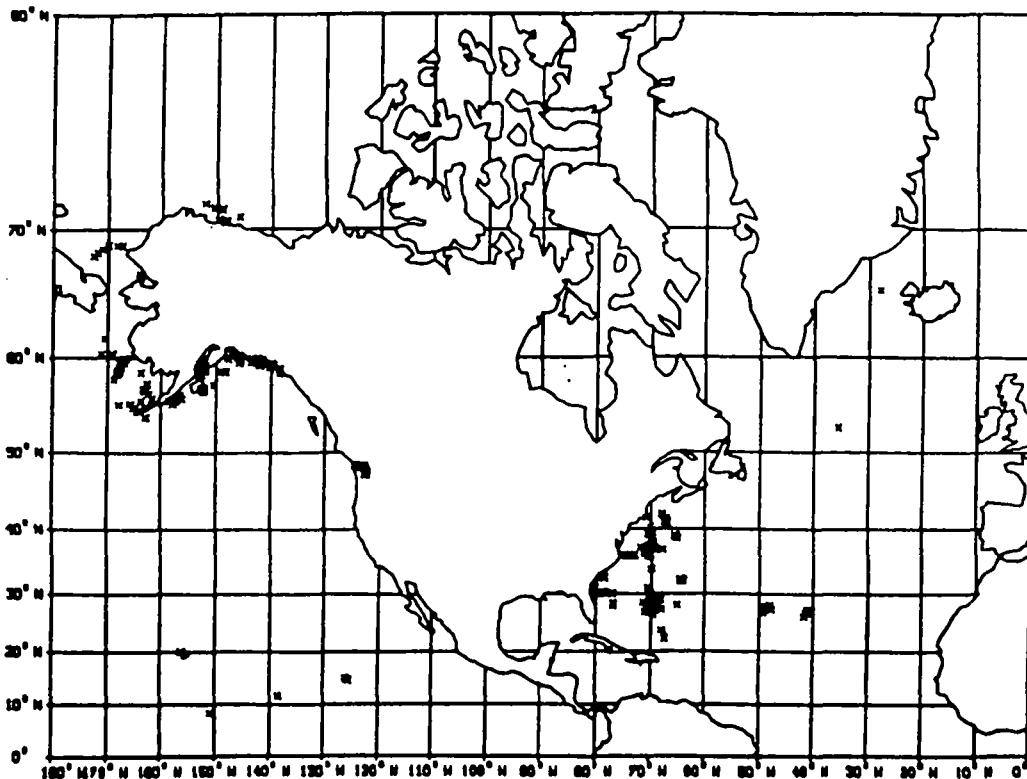
4.1.8 Current Meter Data (Components) (File 015)

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.



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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 HUNDREDTHS	16
LONGITUDE	DDMMXX PLUS HEMISPHERE 'E' OR 'W' - MINUTES TO HUNDREDTHS	23
DEPTH OF BOTTOM	XXXXX (WHOLE METERS)	31
DEPTH OF CURRENT	XXXXX (METERS TO TENTHS)	36
METER		
METER USAGE SEQUENCE NUMBER	XXX - USED FOR INDICATING NUMBER OF TIMES METER HAS BEEN USED	41
(NODC USE)	TWO CHARACTERS FOR NODC INTERNAL USE	44
AXIS ROTATION	XXX - DEGREES CLOCKWISE FROM TRUE NORTH OF V AXIS - VALUES SHOULD BE 0 WHEN FINAL PROCESSED TO PROVIDE TRUE DIRECTION INFORMATION	46
LOCATION NAME	SIX-CHARACTER NAME DETERMINED BY ORIGINATOR	49
NUMBER OF DETAIL 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 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

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



### 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 (✓)	
GENERAL OCEANICS INCORPORATED (I, II, III)	4/87		GENERAL OCEANICS INCORPORATED		✓				
Aanderaa Instruments RCM4, 5	4/87		Aanderaa Instruments		✓				

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900259	323085	C100	0125	312H	32PE	PN8713	04/07/87	04/09/87	17	182
8900259	323086	C100	0125	312H	32PE	PN8715	04/25/87	04/26/87	12	67
8900259	323087	C100	0125	312H	32PE	PN8803	07/17/87	07/17/87	5	33
8900259	323088	C100	0125	312H	32PE	PN8814	11/15/87	11/15/87	7	26
8900259	323089	C100	0125	312H	32PE	PN8820	02/09/88	02/10/88	13	64
8900259	323090	C100	0125	312H	32PE	PN8903	07/21/88	07/21/88	12	67

NO. 8900-09  
8900259

FILETYPE C100

TRACK NO. \_\_\_\_\_

PROJECT IDENTIFICATION 0125

Gulf of Mexico Station Data

	DATE	INIT.	TAPE OR DISK DSN		NO. FILES	LRECL	BLK SIZE	NO. RECORDS
	11/23/89	CMK	A00989	NL	52	60	3600	467594
	11/03/89		W09458	NL	52	60	3600	↓
TAPE	11/23/89		A00990	NL	10	60	3600	101287
	11/03/89		W07472	NL	10	60	3600	↓
TAPE	11/23/89		A00991	NL	22	80		106556
	11/03/89		W07634	NL	22			↓
DISK TAPE	11/23/89		A00992	NL	04	60	<del>3600</del>	58777
	11/03/89	✓	W07768	NL	04	60	<del>3600</del>	↓
MEM							3600	439
MEM								RECORDS
CP2								
FINALIZED								

REPORTED TO PRINCIPAL INVESTIGATOR: Tapes ~~W07458~~ W07458, W07472, W07634 and W07768 are 9 TRK, NL, 1600 bpi.

\*\* LABEL = DNODC\*SAIOUT.  
112 X 11200.

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

DERIVED FROM F004 FORMAT.

(TRACKS DELETED, FIELDS DELETED, ETC.)



Science Applications International Corporation

8900259

October 12, 1989

Mr. Francis Mitchell  
NOAA/NODC  
1825 Connecticut Avenue, NW  
Room 416  
Washington, DC 20235

A00989  
A00990  
A00991  
A00992

Dear Francis:

Enclosed please find four (4) nine-track magnetic data tapes containing all data collected as part of Year 5 of the Gulf of Mexico Physical Oceanography Program. This work was funded under Minerals Management Service Contract Number 14-12-0001-29158, which was awarded to Science Applications International Corporation. The following items have been enclosed:

- (1) Four (4) data tapes: CTD & XBT
- 1 - 2400 foot tape containing Hydrographic and AXBT data in NODC Formats 022 and 004,
  - 1 - 2400 foot tape containing Inverted Echo Sounder (IES) data in modified NODC Format 015,
  - 2 - 2400 foot tapes containing Current Meter data in NODC Format 015.
- (2) Five (5) printed volumes detailing the information stored on each tape:
- Volume I - Current Meter Data
  - Volume II - XBT and CTD Cruise Data
  - Volume III - Oxygen Data
  - Volume IV - AXBT Survey Data
  - Volume V - Inverted Echo Sounder (IES) 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,

*Rebecca J. Weber*  
Rebecca J. Weber  
Data Analyst

Enclosures

8900259

10/25/87  
CUNT

Tape A00989 52 files  
Current Meteor data in FOIS format - 52 files total

Tape A00990 10 files  
Current Meteor data in FOIS format - 10 files total

Tape A00991	<u>22 files</u> 1-1-1
XBT	08 files
CTD	06 files
AXBT	02 files
Oxygen in FOD4 format	<u>06 files</u>
	<u>22 files</u>

Tape A00992 04 files  
Inverted Echo Sounder data in FOIS format 04 files total

CLIFF

THE TAPE WITH 22 Files

A0099/

has:

2,4,6,8,10,11,12,13,14,15,16,17

10 - Files

F022

10 - Files

F004

2 - Files

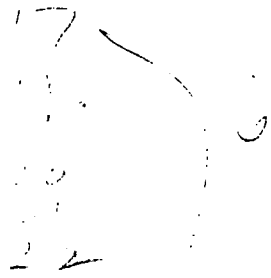
~~A00~~ BT, W

1,3,5,7,9,11,13,15,17

12-16

F022

FORMAT



Mitch

USER NAME <i>Cliff Hartley</i>	PHONE # <i>673-5636</i>	ORG/TASK # <i>EG1200 8N3AH9</i>	DATE SUBMITTED <i>10/19/89</i>	DATE DUE <i>ASAP</i>	BIN # <i>09</i>
-----------------------------------	----------------------------	------------------------------------	-----------------------------------	-------------------------	--------------------

EQUIPMENT 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	<del>A00991</del>		<i>9</i>	<i>1600</i>					<i>4000</i>	<i>33</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
OUTPUT	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY TYPE	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 A00991 to Bin 09.*

ESTIMATED  
EXECUTION  
TIME

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>007/023403</i>	<i>10/23/89</i>	<i>09:10</i>	<i>09:15</i>	<i>C</i>	<i>COMPLETED BY J.S.</i>

COMMENTS

PERSONNEL: Cliff Hartley PHONE #: 673-5636 ORG/TASK #: EG12008N37H9 DATE SUBMITTED: 11/03/89 DATE DUE: ASAP BIN #: 09

DEPARTMENT TO BE USED AND FUNCTION TO BE PERFORMED:  
 • a straight copy (files have different maximum block size)  
 to a 'w' tape  
 Please scan 'w' tape - Use abbreviated scan (MTSUM).

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
<u>A00991</u>		<u>9</u>	<u>1600</u>	<u>ODD</u>	<u>NL</u>	<u>FB</u>		<u>3600</u>	<u>20</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
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
<u>W07634</u>		<u>9</u>	<u>1600</u>	<u>ODD</u>	<u>NL</u>	<u>FB</u>			<u>22</u>
SECTOR SIZE	EXCHANGE TYPE	CODE: <u>ASCII</u> EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE

SPECIAL INSTRUCTIONS: Please send 'w' tape to Asheville, N.C. ESTIMATED EXECUTION TIME:

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>11/06/89</u>	<u>08:45</u>	<u>09:10</u>	<u>C</u>	<u>COMPLETED BY JS</u>



ACCESSION NUMBER

8500259

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

SP 1227

TAPE SAYS SP 1226

(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, 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.

MIX OF CTD AND AXBT

A00991

FILES 1-16 = F022

A. ORIGINATOR IDENTIFICATION FILES 17-22 = F004

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>Gulf of Mexico Physical Oceanography Program Year 5 (GOMPOP) (MMS Contract No. 14-12-0001-39158)</p>		<p>3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT (CRUISE ID'S)</p> <table border="1"> <tr> <td>PN8713</td> <td>PN8826</td> <td>PN8911</td> </tr> <tr> <td>PN8715</td> <td>PN8823</td> <td>SE8729</td> </tr> <tr> <td>PN8803</td> <td>PN8903</td> <td>GOMYRSAXBT1</td> </tr> <tr> <td>PN8814</td> <td>PN8913</td> <td>GOMYRSAXBT2</td> </tr> </table>		PN8713	PN8826	PN8911	PN8715	PN8823	SE8729	PN8803	PN8903	GOMYRSAXBT1	PN8814	PN8913	GOMYRSAXBT2
PN8713	PN8826	PN8911													
PN8715	PN8823	SE8729													
PN8803	PN8903	GOMYRSAXBT1													
PN8814	PN8913	GOMYRSAXBT2													
<p>4. PLATFORM NAME(S)</p>	<p>5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)</p> <p>AIRCRAFT, SHIP</p>	<p>6. PLATFORM AND OPERATOR NATIONALITY(IES)</p> <table border="1"> <tr> <th>PLATFORM</th> <th>OPERATOR</th> <th>FROM: MO/DAY/YR</th> <th>TO: MO/DAY/YR</th> </tr> <tr> <td>USA</td> <td>USA</td> <td>04/05/87</td> <td>11/02/88</td> </tr> </table>		PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR	USA	USA	04/05/87	11/02/88				
PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR												
USA	USA	04/05/87	11/02/88												
<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. Evans Waddell, Div. Mgr. SAIC 4900 Waters Edge Drive Suite 255 Raleigh, NC 27606 (919) 851-8356</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
Temperature	°C	Sippican T-5 XBT Probes Sippican T-7 XBT Probes Sippican T-14 XBT Probes Sippican AXBT Probes SeaBird SBE-9 CTD System Neil Brown Mark III-B CTD System	- NONE -	All data interpolated to 1m depth increment per Contract specifications.
Salinity	PPT	SeaBird SBE-9 CTD System Neil Brown Mark III-B CTD System	CTD SALINITIES WERE VERIFIED/ CALIBRATED WITH BOTTLE DATA	All data interpolated to 1m depth increment per Contract specifications.
		<p><b>NOTE:</b> Due to a failure in the fast response thermistor on the SeaBird CTD during PM89-03, the salinity data is of poor quality and <u>SHOULD NOT BE USED</u>! You will find this data especially bad in the thermocline region.</p>		
Oxygen (O <sub>2</sub> )	ml/l	Bottle Samples	- 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

Files 1-16: NODC File Type 022  
                   "High Resolution CTD/STU Data"  
                   April 1985 Format Version

Files 17-22: NODC File Type 004  
                   "Water Physics and Chemistry"  
                   April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

22 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 4900 Water's Edge Drive, Suite 255/ Science Applications International Corporation  
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE    <input type="checkbox"/> BCD    <input type="checkbox"/> BINARY                                     <input checked="" type="checkbox"/> ASCII    <input type="checkbox"/> EBCDIC                                     <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)    <input type="checkbox"/> SEVEN           <input checked="" type="checkbox"/> NINE           <input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK    <input type="checkbox"/> OCTAL 17           <input checked="" type="checkbox"/> IBM</p>
<p>7. PARITY    <input type="checkbox"/> ODD                         <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 style="text-align: center;">SAIC/Raleigh Tape ID No:   <span style="font-size: 2em; font-family: cursive;">SP1227</span></p>
<p>8. DENSITY    <input type="checkbox"/> 200 BPI    <input checked="" type="checkbox"/> 1600 BPI           <input type="checkbox"/> 556 BPI           <input type="checkbox"/> 800 BPI           <input type="checkbox"/> _____</p>	
<p>12. PHYSICAL BLOCK LENGTH IN BYTES              1-16: 3600                                17-22: 4000</p> <p>13. LENGTH OF BYTES IN BITS              1-16: 120                                 17-22: 100</p>	

### RECORD FORMAT DESCRIPTION

RECORD NAME NODC FORMAT TYPES 022 and 004      **\*\* 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		

DATE April 1985	<b>NODC Users Guide</b>	SECTION 4.1.6	PAGE 2
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File structure -

Five 100-character records: (1) File Header Record, (2) First Station Header Record, (3) Second Station Header Record, (4) Data Record 1, and (5) Data Record 2.

File format -

Water Physics and Chemistry (F004)

PARAMETER	DESCRIPTION	SC
<b>FILE HEADER RECORD</b>	<b>ALWAYS '1'</b>	<b>10</b>
VESSEL	11-CHARACTER VESSEL NAME	11
CRUISE	SIX-CHARACTER ORIGINATOR'S CRUISE ID	22
CRUISE DATES	MM/DD/YY-MM/DD/YY - BEGIN-END DATES	28
SENIOR SCIENTIST	19-CHARACTER FIELD FOR SCIENTIST NAME	45
INVESTIGATOR	17-CHARACTER FIELD FOR RESPONSIBLE INSTITUTION	64
<b>FIRST STATION HEADER RECORD</b>	<b>ALWAYS '2'</b>	<b>10</b>
SEQUENCE	XXX - THREE-CHARACTER SEQUENCE NUMBER	11
STATION	FIVE-CHARACTER STATION IDENTIFIER	14
LATITUDE	CCMMSS PLUS HEMISPHERE 'N' OR 'S'	19
LONGITUDE	CCDMSS PLUS HEMISPHERE 'E' OR 'W'	26
TIME (GMT)	XXX - HOURS TO TENTHS	34
DATE	MM/DD/YY	37
BOTTOM	XXXXX - WATER DEPTH (METERS TO TENTHS)	45
NAVIGATION	TWO-CHARACTER CODE - USE CODE 0080	50
METHOD	ONE-CHARACTER CODE - USE CODE 0300	52
CABIN TEMPERATURE	XXX - DEG C TO TENTHS	53
BOX TEMPERATURE	XX - DEG C (WHOLE DEGREES)	56
SALINITY FLAG	ONE-CHARACTER CODE - USE CODE 0502	58
STATION IDENTIFIER	10-CHARACTER ORIGINATOR STATION IDENTIFIER	59
MAXIMUM DEPTH	XXXXX-DEPTH OF DEEPEST OBSERVATION (METERS)	69
BOTTOM TYPE	ONE-CHARACTER CODE - USE CODE 0103	74
BLANKS		75
<b>SECOND STATION HEADER RECORD</b>	<b>ALWAYS '3'</b>	<b>10</b>
SEQUENCE	SEE RECCRC '2'	11
STATION	SEE RECCRC '2'	14
BAROMETER	XXX - MILLIBARS TO TENTHS	19
DRY BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	22
WET BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	26
WIND DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	30
WIND SPEED	XX - KNOTS	32
SEA DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	34
SEA HEIGHT	ONE-CHARACTER CODE - USE CODE 0104	36
SWELL DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	37
SWELL HEIGHT	ONE-CHARACTER CODE - USE CODE 0104	39

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WEATHER	CNE-CHARACTER CODE - USE CODE 0102	40
CLOUD TYPE	CNE-CHARACTER CODE - USE CODE 0053	41
CLOUD COVER	CNE-CHARACTER CODE - USE CODE 0102	42
VISIBILITY	CNE-CHARACTER CODE - USE CODE 0157	43
TRANSPARENCY	XXXX - SECCHI DISC DEPTH (METERS TO TENTHS)	44
TURBIDITY	CNE-CHARACTER CODE - USE CODE 0094	48
WATER COLOR	TWO-CHARACTER CODE - USE CODE 0051	49
BLANKS		51
DATA RECORD 1	ALWAYS '4'	10
SEQUENCE	SEE RECORD '2'	11
STATION	SEE RECORD '2'	14
DEPTH	XXXX - SAMPLE DEPTH (METERS TO TENTHS)	19
TEMPERATURE	XXXXX - WATER TEMPERATURE (DEG C TO THOUSANDTHS)	23
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	28
SIGMA-T	XXXX - TO HUNDREDTHS	33
TRANSMISSIVITY	XXX - PERCENT TO TENTHS	37
PH	XXX - TO HUNDREDTHS	40
EH	XXXX - TO HUNDREDTHS	43
OXYGEN	XXXX - DISSOLVED OXYGEN (ML/L TO HUNDREDTHS)	47
AMMONIA	XXX - UG-ATOMS/L TO TENTHS	51
NITRITE	XXX - UG-ATOMS/L TO HUNDREDTHS	54
NITRATE	XXXX - UG-ATOMS/L TO HUNDREDTHS	57
SILICATE	XXXX - UG-ATOMS/L TO HUNDREDTHS	61
PHOSPHATE	XXX - INORGANIC UG-ATOMS/L TO HUNDREDTHS	65
SOLIDS	XXXX - SUSPENDED SOLIDS (MG/L TO HUNDREDTHS)	68
TURBIDITY	XXXX - MG/L TO HUNDREDTHS	72
CHLOROPHYLL	XXXXX - MG/CUBIC METER TO HUNDREDTHS	76
LIGHT PENETRATION	XXX - PERCENT OF SURFACE LIGHT AT DEPTH (TO TENTHS)	81
PRODUCTIVITY	XXX - PRODUCTION RATE OF CARBON (G/M <sup>3</sup> /HR)	84
TOTAL NITROGEN	XXX - (UG-AT/L)	87
TOTAL PHOSPHATE	XXXX - PHOSPHATE FROM TOTAL SAMPLE, INCLUDING SEDIMENT (UG-AT/L) TO HUNDREDTHS	90
TOTAL FILTER PASSING PHOSPHATE	XXXX - (UG-AT/L) TO HUNDREDTHS	94
TITRATION ALKALINITY	XXX - (MEG/L) TO HUNDREDTHS THE NUMBER OF MILLIEQUIVALENTS OF HYDROGEN IONS NEUTRALIZED BY ONE LITER OF SAMPLE WATER	98
DATA RECORD 2	ALWAYS '5'	10
SEQUENCE	SEE RECORD '2'	11
STATION	SEE RECORD '2'	14
DEPTH	XXXX - SEE RECORD '4'	19
TEMPERATURE	XXXXX - SEE RECORD '4'	23
SALINITY	XXXXX - SEE RECORD '4'	28
SIGMA-T	XXXX - SEE RECORD '4'	33
EAST-WEST CURRENT	XXXXX - CM/SEC TO TENTHS	37
COMPONENT (U)		
NORTH-SOUTH CURRENT	XXXXX - CM/SEC TO TENTHS	42
COMPONENT (V)		
TRANSMISSIVITY	XXX - PERCENT TO TENTHS	47

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PH	XXX - TO HUNDRETHS	50
OXYGEN	XXXX - SEE RECORD '4'	53
AMMONIA	XXX - UG-ATOMS/L TO TENTHS	57
NITRITE	XXX - UG-ATOMS/L TO HUNDRETHS	60
NITRATE	XXXX - UG-ATOMS/L TO HUNDRETHS	63
SILICATE	XXXX - UG-ATOMS/L TO HUNDRETHS	68
PHOSPHATE	XXX - SEE RECORD '4'	72
CHLOROPHYLL	XXXXX - SEE RECORD '4'	75
BLANK		80

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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	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	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



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	35
	SCANNING DATA - USE CODE 0080	
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	55
	SCANNING DATA - USE CODE 0080	
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	75
	SCANNING DATA - USE CODE 0080	
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	95
	SCANNING DATA - USE CODE 0080	
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	115
	SCANNING DATA - USE CODE 0080	
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	35
	SCANNING DATA - USE CODE 0080	
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	55
	SCANNING DATA - USE CODE 0080	
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	75
	SCANNING DATA - USE CODE 0080	
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

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 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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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	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)	78
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)	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 O080	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	118

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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 (✓)	<u>BEFORE</u> OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
ippican/Bathy Systems XBT System	UNKNOWN		MANUFACTURER				✓	✓	
ippican AXBT System	7/88 10/88		HORIZON MARINE, INC.		✓				
SeaBird SBE-9 CTD System	4/87		SeaBird, Inc.		✓				
Leil Brown Mark III-B CTD system	4/87		Texas A & M University		✓				

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900259	076340	C116	0125	312H	32PE	PN8713	04/05/87	04/10/87	39	39
8900259	076341	C116	0125	312H	32PE	PN8715	04/25/87	04/25/87	2	2
8900259	076342	C116	0125	312H	32PE	PN8803	07/17/87	07/17/87	4	4
8900259	076343	C116	0125	312H	32PE	PN8814	11/10/87	11/12/87	42	42
8900259	076344	C116	0125	312H	32PE	PN8823	04/07/88	04/10/88	56	56
8900259	076345	C116	0125	312H	32PE	PN8911	10/19/88	11/02/88	74	74
8900259	076346	C116	0125	312H	320V	SE8729	11/03/87	11/08/87	53	53
8900259	076347	C118	0125	312H	3191	GOMYR5AX	07/31/88	08/03/88	89	89
8900259	076348	C118	0125	312H	3191	GOMYR5AX	10/19/88	10/22/88	82	82

NO. 8900259  
8900259

FILETYPE C116

TRACK NO. \_\_\_\_\_

PROJECT IDENTIFICATION 0125

Gulf of Mexico BT Data

	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS	
	11/23/89	CMH	A00989	NL	52	60	3600	467597
	11/03/89		W07458	NL	52	60	3600	
TAPE	11/23/89		A00990	NL	10	60	3600	101287
	11/03/89		W07472	NL	10	60	3600	
TAPE	11/23/89		A00991	NL	22			106556
	11/03/89		W07634	W16504 **	22			
DISK TAPE	11/23/89		A00992	NL	04	60	<del>3600</del>	5841
	11/03/89		W07768	NL	04	60	<del>3600</del>	
MEM						3600		441 obs
MEM								
OP2								
FINALIZED								

REPORTED TO PRINCIPAL INVESTIGATOR: Tapes ~~W07458~~ W07458, W07472, W07634 and W07768 are 9 TRK, NL, 1600 bpi.

\*\* DNODE \* SAIBTOUT.

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

(TRACKS DELETED, FIELDS DELETED, ETC.)



8900259

10125187  
Cunt

Tape A00989

52 files

Current Meter data in FOIS format - 52 files total

Tape A00990

10 files

Current Meter data in FOIS format - 10 files total

Tape A00991

22 files 11.1

XBT

08 files

CTD

06 files

AXBT

02 files

Oxygen in F004 format

06 files

22 files

Tape A00992

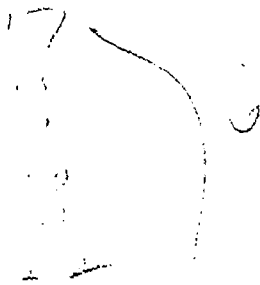
04 files

Inverted EchoSounder data in FOIS format 04 files total

CLIFF

THE TAPE WITH 22 Files  
A0099/

HAS :  
2,4,6,8,10,12,14,16,18,20,22  
10 - Files FO22  
10 - Files FO04  
1,3,5,7,9,11,13,15,17,19,21  
2 - Files ~~AD~~ BT, W  
12-16  
FO22  
FORMAT



Mitch



Science Applications International Corporation

8900259

October 12, 1989

Mr. Francis Mitchell  
NOAA/NODC  
1825 Connecticut Avenue, NW  
Room 416  
Washington, DC 20235

A00989  
A00990  
A00991  
A00992

Dear Francis:

Enclosed please find four (4) nine-track magnetic data tapes containing all data collected as part of Year 5 of the Gulf of Mexico Physical Oceanography Program. This work was funded under Minerals Management Service Contract Number 14-12-0001-29158, which was awarded to Science Applications International Corporation. The following items have been enclosed:

- CTD & XBT
- (1) Four (4) data tapes:
    - 1 - 2400 foot tape containing Hydrographic and AXBT data in NODC Formats 022 and 004,
    - 1 - 2400 foot tape containing Inverted Echo Sounder (IES) data in modified NODC Format 015,
    - 2 - 2400 foot tapes containing Current Meter data in NODC Format 015.
  - (2) Five (5) printed volumes detailing the information stored on each tape:
    - Volume I - Current Meter Data
    - Volume II - XBT and CTD Cruise Data
    - Volume III - Oxygen Data
    - Volume IV - AXBT Survey Data
    - Volume V - Inverted Echo Sounder (IES) 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,  
*Rebecca J. Weber*  
Rebecca J. Weber  
Data Analyst

Enclosures

USER NAME <i>Cliff Hartley</i>	PHONE # <i>673-5636</i>	ORG/TASK # <i>EG1200 8N3AH9</i>	DATE SUBMITTED <i>10/17/89</i>	DATE DUE <i>ASAP</i>	BIN # <i>09</i>
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EQUIPMENT 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

	<u>TAPE #/</u> DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
<i>ADD991</i>	<del><i>ADD993</i></del>		<i>9</i>	<i>1600</i>					<i>4000</i>	<i>22</i>
INPUT	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
	<u>TAPE #/</u> DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
OUTPUT	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				PURGE DATE
	<u>TAPE #/</u> DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES

SPECIAL INSTRUCTIONS

*Please return tape ADD991 to Bin 09.*

ESTIMATED  
EXECUTION  
TIME

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>09/10/89 0303</i>	<i>10/23/89</i>	<i>09:10</i>	<i>09:15</i>	<i>C</i>	<i>COMPLETED BY J.S.</i>

COMMENTS

USER NAME: Cliff Hartley | PHONE #: 673-5636 | ORG/TASK #: EG12008N37A9 | DATE SUBMITTED: 11/03/89 | DATE DUE: ASAP | E.J.N. #: 09

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED:  
 • Do a straight copy (files have different maximum block size) to a 'w' tape  
 • Please scan 'w' tape - Use abbreviated Scan (MTSUM).

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>A00991</u>		<u>9</u>	<u>1600</u>	<u>ODD</u>	<u>NL</u>	<u>FB</u>		<u>3600</u>	<u>20</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
INPUT	<u>W07634</u>		<u>9</u>	<u>1600</u>	<u>ODD</u>	<u>NL</u>	<u>FB</u>			<u>22</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:

FINISH ONLY

#	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
<u>5</u>	<u>11/06/89</u>	<u>08:45</u>	<u>09:10</u>	<u>C</u>	<u>COMPLETED BY JS</u>

ACCESSION  
NUMBER

8500259

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

SP 1227

TAPE SAYS SP 1226

(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, 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.

MIX OF CTD  
AND  
AXBT

A0099/

FILES 1-16 = F022

A. ORIGINATOR IDENTIFICATION FILES 17-22 = F004

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 Gulf of Mexico Physical Oceanography Program Year 5 (GOMPOP) (MMS Contract No. 14-12-0001-29158)		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT (CRUISE ID'S) PN8713 PN8826 PN8911 PN8715 PN8823 SE8729 PN8803 PN8903 GOMYRSAXBT1 PN8814 PN8913 GOMYRSAXBT2	
4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) AIRCRAFT, SHIP	6. PLATFORM AND OPERATOR NATIONALITY(IES) PLATFORM OPERATOR FROM: MO/DAY/YR TO: MO/DAY/YR USA USA 04/05/87 11/02/88	
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> 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?) <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> 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. Evans Waddell, Div. Mgr. SAIC 4900 Waters Edge Drive Suite 255 Raleigh, NC 27606 (919) 851-2356			

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 T-5 XBT Probes Sippican T-7 XBT Probes Sippican T-10 XBT Probes Sippican AXBT Probes SeaBird SBE-9 CTD System Neil Brown Mark III-B CTD System	- NONE -	All data interpolated to 1m depth increment per Contract specifications.
Salinity	PPT	SeaBird SBE-9 CTD System Neil Brown Mark III-B CTD System	CTD SALINITIES WERE VERIFIED / CALIBRATED WITH BOTTLE DATA	All data interpolated to 1m depth increment per Contract specifications.
		NOTE: Due to a failure in the fast response thermistor on the SeaBird CTD during PM89-03, the salinity data is of poor quality and <u>SHOULD NOT BE USED</u> ! You will find this data especially bad in the thermocline region.		
Oxygen (O <sub>2</sub> )	ml/l	Bottle Samples	- 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

Files 1-16: NOOC File Type  $\phi 22$   
 "High Resolution CTD/STD Data"  
 April 1985 Format Version

Files 17-22: NOOC File Type  $\phi 04$   
 "Water Physics and Chemistry"  
 April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

22 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 4900 Water's Edge Drive, Suite 255/Science Applications International Corporation  
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY  <input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC  <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) <input type="checkbox"/> SEVEN  <input checked="" type="checkbox"/> NINE  <input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17  <input checked="" type="checkbox"/> IBM</p>
<p>7. PARITY <input type="checkbox"/> ODD  <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 style="text-align: center;">SAIC/Raleigh Tape ID No:   <span style="font-size: 2em;">SP1227</span></p>
<p>8. DENSITY <input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI  <input type="checkbox"/> 556 BPI  <input type="checkbox"/> 800 BPI  <input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES                  1-16: 36<math>\phi\phi</math>      17-22: 40<math>\phi\phi</math></p> <p>13. LENGTH OF BYTES IN BITS                  1-16: 12<math>\phi</math>      17-22: 1<math>\phi\phi</math></p>



### RECORD FORMAT DESCRIPTION

RECORD NAME NODC FORMAT TYPES 022 and 004      **\*\* 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 100-character records: (1) File Header Record, (2) First Station Header Record, (3) Second Station Header Record, (4) Data Record 1, and (5) Data Record 2.

File format -

Water Physics and Chemistry (F004)

PARAMETER	DESCRIPTION	SC
<b>FILE HEADER RECORD</b>	<b>ALWAYS '1'</b>	<b>10</b>
VESSEL	11-CHARACTER VESSEL NAME	11
CRUISE	SIX-CHARACTER ORIGINATOR'S CRUISE ID	22
CRUISE DATES	MM/DD/YY-MM/DD/YY - BEGIN-END DATES	28
SENIOR SCIENTIST	19-CHARACTER FIELD FOR SCIENTIST NAME	45
INVESTIGATOR	17-CHARACTER FIELD FOR RESPONSIBLE INSTITUTION	64
<b>FIRST STATION HEADER RECORD</b>	<b>ALWAYS '2'</b>	<b>10</b>
SEQUENCE	XXX - THREE-CHARACTER SEQUENCE NUMBER	11
STATION	FIVE-CHARACTER STATION IDENTIFIER	14
LATITUDE	CCMMSS PLUS HEMISPHERE 'N' OR 'S'	19
LONGITUDE	CCDMSS PLUS HEMISPHERE 'E' OR 'W'	26
TIME (GMT)	XXX - HOURS TO TENTHS	34
DATE	MM/DD/YY	37
BOTTOM	XXXXX - WATER DEPTH (METERS TO TENTHS)	45
NAVIGATION	TWO-CHARACTER CODE - USE CODE 0088	50
METHOD	ONE-CHARACTER CODE - USE CODE 0300	52
CABIN TEMPERATURE	XXX - DEG C TO TENTHS	53
BOX TEMPERATURE	XX - DEG C (WHOLE DEGREES)	56
SALINITY FLAG	ONE-CHARACTER CODE - USE CODE 0502	58
STATION IDENTIFIER	10-CHARACTER ORIGINATOR STATION IDENTIFIER	59
MAXIMUM DEPTH	XXXXX-DEPTH OF DEEPEST OBSERVATION (METERS)	69
BOTTOM TYPE	ONE-CHARACTER CODE - USE CODE 0103	74
BLANKS		75
<b>SECOND STATION HEADER RECORD</b>	<b>ALWAYS '3'</b>	<b>10</b>
SEQUENCE	SEE RECCR '2'	11
STATION	SEE RECCR '2'	14
BAROMETER	XXX - MILLIBARS TO TENTHS	19
DRY BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	22
WET BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	26
WIND DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	30
WIND SPEED	XX - KNOTS	32
SEA DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	34
SEA HEIGHT	ONE-CHARACTER CODE - USE CODE 0104	36
SWELL DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	37
SWELL HEIGHT	ONE-CHARACTER CODE - USE CODE 0104	39

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WEATHER	ONE-CHARACTER CODE - USE CODE 0108	40
CLOUD TYPE	ONE-CHARACTER CODE - USE CODE 0053	41
CLOUD COVER	ONE-CHARACTER CODE - USE CODE 0105	42
VISIBILITY	ONE-CHARACTER CODE - USE CODE 0157	43
TRANSPARENCY	XXXX - SECCHI DISC DEPTH (METERS TO TENTHS)	44
TURBIDITY	ONE-CHARACTER CODE - USE CODE 0094	48
WATER COLOR	TWO-CHARACTER CODE - USE CODE 0051	49
BLANKS		51
DATA RECORD 1	ALWAYS '4'	10
SEQUENCE	SEE RECORD '2'	11
STATION	SEE RECORD '2'	14
DEPTH	XXXX - SAMPLE DEPTH (METERS TO TENTHS)	19
TEMPERATURE	XXXXX - WATER TEMPERATURE (DEG C TO THOUSANCTHS)	23
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANCTHS	28
SIGMA-T	XXXX - TO HUNDREDTHS	33
TRANSMISSIVITY	XXX - PERCENT TO TENTHS	37
PH	XXX - TO HUNDREDTHS	40
EH	XXXX - TO HUNDREDTHS	43
OXYGEN	XXXX - DISSOLVED OXYGEN (ML/L TO HUNDREDTHS)	47
AMMONIA	XXX - UG-ATOMS/L TO TENTHS	51
NITRITE	XXX - UG-ATOMS/L TO HUNDREDTHS	54
NITRATE	XXXX - UG-ATOMS/L TO HUNDREDTHS	57
SILICATE	XXXX - UG-ATOMS/L TO HUNDREDTHS	61
PHOSPHATE	XXX - INORGANIC UG-ATOMS/L TO HUNDREDTHS	65
SOLIDS	XXXX - SUSPENDED SOLIDS (MG/L TO HUNDREDTHS)	68
TURBIDITY	XXXX - MG/L TO HUNDREDTHS	72
CHLOROPHYLL	XXXXX - MG/CUBIC METER TO HUNDREDTHS	76
LIGHT PENETRATION	XXX - PERCENT OF SURFACE LIGHT AT DEPTH (TO TENTHS)	81
PRODUCTIVITY	XXX - PRODUCTION RATE OF CARBON (G/M3/HR)	84
TOTAL NITROGEN	XXX - (UG-AT/L)	87
TOTAL PHOSPHATE	XXXX - PHOSPHATE FROM TOTAL SAMPLE, INCLUDING SEDIMENT (UG-AT/L) TO HUNDREDTHS	90
TOTAL FILTER PASSING PHOSPHATE	XXXX - (UG-AT/L) TO HUNDREDTHS	94
TITRATION ALKALINITY	XXX - (MEG/L) TO HUNDREDTHS THE NUMBER OF MILLIEQUIVALENTS OF HYDROGEN IONS NEUTRALIZED BY ONE LITER OF SAMPLE WATER	98
DATA RECORD 2	ALWAYS '5'	10
SEQUENCE	SEE RECORD '2'	11
STATION	SEE RECORD '2'	14
DEPTH	XXXX - SEE RECORD '4'	19
TEMPERATURE	XXXXX - SEE RECORD '4'	23
SALINITY	XXXXX - SEE RECORD '4'	28
SIGMA-T	XXXX - SEE RECORD '4'	33
EAST-WEST CURRENT COMPONENT (U)	XXXXX - CM/SEC TO TENTHS	37
NORTH-SOUTH CURRENT COMPONENT (V)	XXXXX - CM/SEC TO TENTHS	42
TRANSMISSIVITY	XXX - PERCENT TO TENTHS	47

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PH OXYGEN AMMONIA NITRITE NITRATE SILICATE PHOSPHATE CHLOROPHYLL BLANK	XXX - TO HUNDRETHS XXXX - SEE RECORD '4' XXX - UG-ATOMS/L TO TENTHS XXX - UG-ATOMS/L TO HUNDRETHS XXXX - UG-ATOMS/L TO HUNDRETHS XXXX - UG-ATOMS/L TO HUNDRETHS XXX - SEE RECORD '4' XXXXX - SEE RECORD '4'	50 53 57 60 63 68 72 75 80
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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	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

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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	35
	SCANNING DATA - USE CODE 0080	
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	55
	SCANNING DATA - USE CODE 0080	
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	75
	SCANNING DATA - USE CODE 0080	
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	95
	SCANNING DATA - USE CODE 0080	
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	115
	SCANNING DATA - USE CODE 0080	
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	35
	SCANNING DATA - USE CODE 0080	
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	55
	SCANNING DATA - USE CODE 0080	
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	75
	SCANNING DATA - USE CODE 0080	
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

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 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	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

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 OOB0	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 OOB0	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 OOB0	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 OOB0	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	78
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 OOB0	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 OOB0	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	118



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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

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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



ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8900259	329608	C022	0125	312H	32PE	TV4635	04/07/87	04/10/87	24	3,891
8900259	329609	C022	0125	312H	32PE	TV4636	04/25/87	04/26/87	16	223
8900259	329610	C022	0125	312H	32PE	TV4637	07/17/87	07/17/87	11	170
8900259	329611	C022	0125	312H	32PE	TV4638	11/09/87	11/16/87	12	1,643
8900259	329612	C022	0125	312H	32PE	TV4639	02/09/88	02/10/88	17	232
8900259	329613	C022	0125	312H	32PE	TV4640	07/21/88	07/22/88	17	221

ACCESSION NO. 8900259

FILETYPE C022

TRACK NO. TV 4635-4640 ] PROJECT IDENTIFICATION 0125

329608 - 329613

STEP	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	RECL	BLK SIZE	NO. RECORDS
ORIG. TAPE	11-23-89	CMH	A00991	27	120	3600	106,556
DUPLICATE TAPE	12-3-89	CMH	W07634	↓	↓	↓	↓
REFORMATTED TAPE	1-3-90	RPS	W16387 **	1	↓	12000	6,380
REFORMATTED DISK							
FIRST MULCHEK							
FINAL MULCHEK							
MPD75 OR F022							
DATA SET FINALIZED							

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:

\*\* DNODC\* SAICTDOUT.

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

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)

329608

TU4635

MONITOR: CONTACT

SULLIVAN

LOCATION OF F022 SOURCE

ARCHIVER

RECORD ALL ERRORS FOUND

CONSEC(S).

NONE

ERRORS FOUND

NANSEN REF. #

329609

MILDARS TRACK #

TV4636

MONITOR: CONTACT

J. Frank

LOCATION OF F022 SOURCE

Archives (TV4636)

RECORD ALL ERRORS FOUND

CONSEC(S)

ERRORS FOUND

*None*

NANSEN REF. #

329610

MULDARS TRACK #

TV 4637

MONITOR: CONTACT

J. Frank

LOCATION OF F022 SOURCE

Archives (TV4637)

RECORD ALL ERRORS FOUND

CONSEC(S)

5

ERRORS FOUND

Delete Station  
(Data values identical to  
previous station)

MRL  
4/6/90



329611

TV4638

MONITOR: CONTACT

SEZKIRK

LOCATION OF F022 SOURCE

ARCHIVES

RECORD ALL ERRORS FOUND

CONSEC(S).

NONE

ERRORS FOUND

329612

TU4639

MONITOR: CONTACT

SEUKIRK

LOCATION OF T022 SOURCE

ARCHIVES

RECORD ALL ERRORS FOUND

CONSEC(S).

NONE

ERRORS FOUND

USER NAME <i>Cliff Hartley</i>	PHONE # <i>673-5636</i>	ORG/TASK # <i>EG1200 8N3AH9</i>	DATE SUBMITTED <i>10/19/89</i>	DATE DUE <i>ASAP</i>	BIN # <i>09</i>
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EQUIPMENT 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

	<u>TAPE #/</u> DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
INPUT	<del>A00993</del>		<i>9</i>	<i>1600</i>					<i>4000</i>	<i>32</i>
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	<u>TAPE #/</u> 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>TAPE #/</u> 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 A00991 to Bin 09.*

ESTIMATED  
EXECUTION  
TIME

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>897/10/23/89</i>	<i>10/23/89</i>	<i>09:10</i>	<i>09:15</i>	<i>C</i>	<i>COMPLETED BY J.S.</i>

COMMENTS

USER NAME: Cliff Hartley | PHONE #: 673-5436 | ORG/TASK #: EG12008N31A#9 | DATE SUBMITTED: 11/03/89 | DATE DUE: ASAP | BIN #: 09

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED:  
 • a straight copy (files have different maximum block size)  
~~to~~ to a 'w' tape  
 Please scan 'w' tape - use abbreviated scan (MTSUM)

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
<u>A00991</u>		<u>9</u>	<u>1600</u>	<u>ODD</u>	<u>NL</u>	<u>FB</u>		<u>3600</u>	<u>20</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	
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
<u>W07634</u>		<u>9</u>	<u>1600</u>	<u>ODD</u>	<u>NL</u>	<u>FB</u>			<u>22</u>
SECTOR SIZE	EXCHANGE TYPE	CODE: <u>ASCII</u> EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME			PURGE DATE	

SPECIAL INSTRUCTIONS: Please send 'w' tape to Asheville, N.C.

ESTIMATED EXECUTION TIME:

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>11/06/89</u>	<u>08:45</u>	<u>09:10</u>	<u>C</u>	<u>COMPLETED BY JS</u>

ACCESSION  
NUMBER

8500259

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

SP 1227

TAPE SAYS SP 1226

(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, 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.

MIX OF CTD  
AND  
AXBT

A0099/

FILES 1-16 = F022

A. ORIGINATOR IDENTIFICATION FILES 17-22 = F004

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 Gulf of Mexico Physical Oceanography Program Year 5 (GOMPOP) (MMS Contract No. 14-12-0001-2915B)		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT (CRUISE ID'S) PNB713 PNB826 PNB911 PNB715 PNB823 SEB729 PNB803 PNB903 GOMYR5AXBT1 PNB814 PNB913 GOMYR5AXBT2	
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 04/05/87 11/02/88
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> 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?) <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> 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. Evans Waddell, Div. Mgr. SASC 4900 Water's Edge Drive Suite 255 Raleigh, NC 27606 (919) 851-8356			

### 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 T-5 XBT Probes Sippican T-7 XBT Probes Sippican T-10 XBT Probes Sippican AXBT Probes SeaBird SBE-9 CTD System Neil Brown Mark III-B CTD System	— NONE —	All data interpolated to 1m depth increment per Contract specifications.
Salinity	PPT	SeaBird SBE-9 CTD System Neil Brown Mark III-B CTD System	CTD SALINITIES WERE VERIFIED/ CALIBRATED WITH BOTTLE DATA	All data interpolated to 1m depth increment per Contract specifications.
		NOTE: Due to a failure in the fast response thermistor on the SeaBird CTD during PM89-03, the salinity data is of poor quality and <u>SHOULD NOT BE USED</u> ! You will find this data especially bad in the thermocline region.		
Oxygen (O <sub>2</sub> )	ml/l	Bottle Samples	— 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

Files 1-16: NODC File Type  $\Phi 22$   
 "High Resolution CTD/STD Data"  
 April 1985 Format Version

Files 17-22: NODC File Type  $\Phi 4$   
 "Water Physics and Chemistry"  
 April 1985 Version

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

22 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 4900 Water's Edge Drive, Suite 255/ Science Applications International Cooperation  
Raleigh, NC 27606

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE <input type="checkbox"/> BCD <input type="checkbox"/> BINARY  <input checked="" type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC  <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) <input type="checkbox"/> SEVEN  <input checked="" type="checkbox"/> NINE  <input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17  <input checked="" type="checkbox"/> IBM</p>
<p>7. PARITY <input type="checkbox"/> ODD  <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 style="text-align: center;">SAIC/Raleigh Tape ID No:   <span style="font-size: 1.5em;">SP1227</span></p>
<p>8. DENSITY <input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI  <input type="checkbox"/> 556 BPI  <input type="checkbox"/> 800 BPI  <input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES                  1-16: 36<math>\Phi\Phi</math>      17-22: 4<math>\Phi\Phi\Phi</math></p> <p>13. LENGTH OF BYTES IN BITS                  1-16: 12<math>\Phi</math>      17-22: 1<math>\Phi\Phi</math></p>

### RECORD FORMAT DESCRIPTION

RECORD NAME NODC FORMAT TYPES 022 and 004      **\*\* 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 100-character records: (1) File Header Record, (2) First Station Header Record, (3) Second Station Header Record, (4) Data Record 1, and (5) Data Record 2.

File format -

Water Physics and Chemistry (F004)

PARAMETER	DESCRIPTION	SC
<b>FILE HEADER RECORD</b>	<b>ALWAYS '1'</b>	<b>10</b>
VESSEL	11-CHARACTER VESSEL NAME	11
CRUISE	SIX-CHARACTER ORIGINATOR'S CRUISE ID	22
CRUISE DATES	MM/DD/YY-MM/DD/YY - BEGIN-END DATES	28
SENIOR SCIENTIST	19-CHARACTER FIELD FOR SCIENTIST NAME	45
INVESTIGATOR	17-CHARACTER FIELD FOR RESPONSIBLE INSTITUTION	64
<b>FIRST STATION HEADER RECORD</b>	<b>ALWAYS '2'</b>	<b>10</b>
SEQUENCE	XXX - THREE-CHARACTER SEQUENCE NUMBER	11
STATION	FIVE-CHARACTER STATION IDENTIFIER	14
LATITUDE	CCMMSS PLUS HEMISPHERE 'N' OR 'S'	19
LONGITUDE	CCOMSS PLUS HEMISPHERE 'E' OR 'W'	26
TIME (GMT)	XXX - HOURS TO TENTHS	34
DATE	MM/DD/YY	37
BOTTOM	XXXXX - WATER DEPTH (METERS TO TENTHS)	45
NAVIGATION	TWO-CHARACTER CODE - USE CODE 0005	50
METHOD	ONE-CHARACTER CODE - USE CODE 0300	52
CABIN TEMPERATURE	XXX - DEG C TO TENTHS	53
BOX TEMPERATURE	XX - DEG C (WHOLE DEGREES)	56
SALINITY FLAG	ONE-CHARACTER CODE - USE CODE 0502	58
STATION IDENTIFIER	10-CHARACTER ORIGINATOR STATION IDENTIFIER	59
MAXIMUM DEPTH	XXXXX-DEPTH OF DEEPEST OBSERVATION (METERS)	69
BOTTOM TYPE	ONE-CHARACTER CODE - USE CODE 0103	74
BLANKS		75
<b>SECOND STATION HEADER RECORD</b>	<b>ALWAYS '3'</b>	<b>10</b>
SEQUENCE	SEE RECCR '2'	11
STATION	SEE RECCR '2'	14
BAROMETER	XXX - MILLIBARS TO TENTHS	19
DRY BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	22
WET BULB TEMPERATURE	XXXX NEGATIVE TEMPERATURES ARE PRECEDED BY A MINUS SIGN ADJACENT TO TEMPERATURE VALUE - DEG C TO TENTHS	26
WIND DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	30
WIND SPEED	XX - KNOTS	32
SEA DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	34
SEA HEIGHT	ONE-CHARACTER CODE - USE CODE 0104	36
SWELL DIRECTION	TWO-CHARACTER CODE - USE CODE 0110	37
SWELL HEIGHT	ONE-CHARACTER CODE - USE CODE 0104	39

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WEATHER	ONE-CHARACTER CODE - USE CODE 0100	40
CLOUD TYPE	ONE-CHARACTER CODE - USE CODE 0053	41
CLOUD COVER	CNE-CHARACTER CODE - USE CODE 0100	42
VISIBILITY	CNE-CHARACTER CODE - USE CODE 0157	43
TRANSPARENCY	XXXX - SECCHI DISC DEPTH (METERS TO TENTHS)	44
TURBIDITY	ONE-CHARACTER CODE - USE CODE 0094	48
WATER COLOR	TWO-CHARACTER CODE - USE CODE 0051	49
BLANKS		51
DATA RECORD 1	ALWAYS '4'	10
SEQUENCE	SEE RECORD '2'	11
STATION	SEE RECORD '2'	14
DEPTH	XXXX - SAMPLE DEPTH (METERS TO TENTHS)	19
TEMPERATURE	XXXXX - WATER TEMPERATURE (DEG C TO THOUSANDTHS)	23
SALINITY	XXXXX - PARTS PER THOUSAND TO THOUSANDTHS	28
SIGMA-T	XXXX - TO HUNDREDTHS	33
TRANSMISSIVITY	XXX - PERCENT TO TENTHS	37
PH	XXX - TO HUNDREDTHS	40
EH	XXXX - TO HUNDREDTHS	43
OXYGEN	XXXX - DISSOLVED OXYGEN (ML/L TO HUNDREDTHS)	47
AMMONIA	XXX - UG-ATOMS/L TO TENTHS	51
NITRITE	XXX - UG-ATOMS/L TO HUNDREDTHS	54
NITRATE	XXXX - UG-ATOMS/L TO HUNDREDTHS	57
SILICATE	XXXX - UG-ATOMS/L TO HUNDREDTHS	61
PHOSPHATE	XXX - INORGANIC UG-ATOMS/L TO HUNDREDTHS	65
SOLIDS	XXXX - SUSPENDED SOLIDS (MG/L TO HUNDREDTHS)	68
TURBIDITY	XXXX - MG/L TO HUNDREDTHS	72
CHLOROPHYLL	XXXXX - MG/CUBIC METER TO HUNDREDTHS	76
LIGHT PENETRATION	XXX - PERCENT OF SURFACE LIGHT AT DEPTH (TO TENTHS)	81
PRODUCTIVITY	XXX - PRODUCTION RATE OF CARBON (G/M3/HR)	84
TOTAL NITROGEN	XXX - (UG-AT/L)	87
TOTAL PHOSPHATE	XXXX - PHOSPHATE FROM TOTAL SAMPLE, INCLUDING SEDIMENT (UG-AT/L) TO HUNDREDTHS	90
TOTAL FILTER PASSING PHOSPHATE	XXXX - (UG-AT/L) TO HUNDREDTHS	94
TITRATION ALKALINITY	XXX - (MEG/L) TO HUNDREDTHS THE NUMBER OF MILLIEQUIVALENTS OF HYDROGEN IONS NEUTRALIZED BY ONE LITER OF SAMPLE WATER	98
DATA RECORD 2	ALWAYS '5'	10
SEQUENCE	SEE RECORD '2'	11
STATION	SEE RECORD '2'	14
DEPTH	XXXX - SEE RECORD '4'	19
TEMPERATURE	XXXXX - SEE RECORD '4'	23
SALINITY	XXXXX - SEE RECORD '4'	28
SIGMA-T	XXXX - SEE RECORD '4'	33
EAST-WEST CURRENT	XXXXX - CM/SEC TO TENTHS	37
COMPONENT (U)		
NORTH-SOUTH CURRENT	XXXXX - CM/SEC TO TENTHS	42
COMPONENT (V)		
TRANSMISSIVITY	XXX - PERCENT TO TENTHS	47

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PH	XXX - TO HUNDRETHS	50
OXYGEN	XXXX - SEE RECORD '4'	53
AMMONIA	XXX - UG-ATOMS/L TO TENTHS	57
NITRITE	XXX - UG-ATOMS/L TO HUNDRETHS	60
NITRATE	XXXX - UG-ATOMS/L TO HUNDRETHS	63
SILICATE	XXXX - UG-ATOMS/L TO HUNDRETHS	68
PHOSPHATE	XXX - SEE RECORD '4'	72
CHLOROPHYLL	XXXXX - SEE RECORD '4'	75
BLANK		80

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	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

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	35
	SCANNING DATA - USE CODE O080	
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	55
	SCANNING DATA - USE CODE O080	
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	75
	SCANNING DATA - USE CODE O080	
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	95
	SCANNING DATA - USE CODE O080	
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	115
	SCANNING DATA - USE CODE O080	
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	35
	SCANNING DATA - USE CODE O080	
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	55
	SCANNING DATA - USE CODE O080	
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	75
	SCANNING DATA - USE CODE O080	
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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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 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 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
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 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
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 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
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 0080	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	106
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

SCAN CONDITION	ONE-CHARACTER CODE INDICATING METHOD OF SCANNING DATA - USE CODE 00R0	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 00B0	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 00B0	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 00B0	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 00B0	75
PRESSURE	XXXXX (DECIBARS TO TENTHS)	78
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 00B0	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 00B0	115
SEQUENCE NUMBER	XXXXX - USED FOR SORTING DATA RECORDS	116

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



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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 (✓)	
ippican/Bathy Systems XBT System	UNKNOWN		MANUFACTURER				✓	✓	
ippican AXBT System	7/88 10/88		HORIZON MARINE, INC.		✓				
SeaBird SBE-9 CTD System	4/87		SeaBird, Inc.		✓				
Neil Brown Mark III-B CTD System	4/87		Texas A & M University		✓				

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
8900259	F015	TV4574	0125	312H	317F	1987/04/04	AA 1/1	188988
8900259	F015	TV4575	0125	312H	317F	1987/07/15	AA 1/2	188990
8900259	F015	TV4576	0125	312H	317F	1987/11/13	AA 1/3-4	188995
8900259	F015	TV4577	0125	312H	317F	1988/04/15	AA 1/5-6	188996
8900259	L129	L00426	0125	312H	317F	1987/11/13	AA 1/3-4	188997
8900259	L129	L00427	0125	312H	317F	1987/07/16	CC 1/2-3	188998
8900259	L129	L00428	0125	312H	317F	1988/02/08	CC 1/4-6	188999
8900259	L129	L00429	0125	312H	317F	1987/07/17	DD 1/2-6	189000
8900259	L129	L00430	0125	312H	317F	1988/02/09	DD 5/4-6	189001
8900259	L129	L00431	0125	312H	317F	1987/11/08	EE 9/2-3	189002
8900259	L129	L00432	0125	312H	317F	1987/04/06	GG 5/1-2	189003
8900259	L151	L00433	0125	312H	317F	1987/04/06	NULL	189004
8900259	F015	TV4578	0125	312H	317F	1987/04/04	BB 1/1	189005
8900259	F015	TV4579	0125	312H	317F	1987/07/16	BB 1/2-5	189006
8900259	F015	TV4580	0125	312H	317F	1988/07/22	BB 1/6	189007
8900259	F015	TV4581	0125	312H	317F	1987/04/04	BB 3/1-5	189008
8900259	F015	TV4582	0125	312H	317F	1988/07/22	BB 3/6	189009
8900259	F015	TV4583	0125	312H	317F	1987/07/16	BB 5/2	189010
8900259	F015	TV4584	0125	312H	317F	1988/02/08	BB 5/4-5	189011
8900259	F015	TV4585	0125	312H	317F	1988/07/22	BB 5/6	189012
8900259	F015	TV4586	0125	312H	317F	1988/07/22	BB 9/6	189013
8900259	F015	TV4587	0125	312H	317F	1987/04/04	CC 1/1	189014
8900259	F015	TV4588	0125	312H	317F	1987/07/16	CC 1/2-3	189015
8900259	F015	TV4589	0125	312H	317F	1988/02/08	CC 1/4-5	189016
8900259	F015	TV4590	0125	312H	317F	1988/07/20	CC 1/6	189017
8900259	F015	TV4591	0125	312H	317F	1987/04/04	CC 3/1	189018
8900259	F015	TV4592	0125	312H	317F	1987/11/07	CC 5/3-5	189019
8900259	F015	TV4593	0125	312H	317F	1988/07/25	CC 5/6	189020
8900259	F015	TV4594	0125	312H	317F	1988/07/20	CC 9/6	189021
8900259	F015	TV4595	0125	312H	317F	1987/04/05	DD 1/1	189022
8900259	F015	TV4596	0125	312H	317F	1987/07/17	DD 1/2-6	189023
8900259	F015	TV4597	0125	312H	317F	1988/04/14	DD 2/5-6	189024
8900259	F015	TV4598	0125	312H	317F	1987/04/05	DD 3/1	189025
8900259	F015	TV4599	0125	312H	317F	1987/07/24	DD 3/2	189026
8900259	F015	TV4601	0125	312H	317F	1988/08/04	DD 3/6	189027
8900259	F015	TV4602	0125	312H	317F	1987/04/07	DD 4/1-6	189028
8900259	F015	TV4603	0125	312H	317F	1988/02/09	DD 5/4-5	189029
8900259	F015	TV4604	0125	312H	317F	1988/07/21	DD 9/6	189030
8900259	F015	TV4605	0125	312H	317F	1987/04/05	EE 1/1	189031
8900259	F015	TV4606	0125	312H	317F	1987/11/08	EE 1/2-3	189032
8900259	F015	TV4607	0125	312H	317F	1987/04/05	EE 2/1	189033
8900259	F015	TV4608	0125	312H	317F	1987/11/08	EE 2/2-3	189034
8900259	F015	TV4609	0125	312H	317F	1987/04/05	EE 3/1-3	189035
8900259	F015	TV4610	0125	312H	317F	1987/12/02	EE 9/2-3	189036
8900259	F015	TV4611	0125	312H	317F	1987/04/06	FF 1/1	189037
8900259	F015	TV4612	0125	312H	317F	1987/11/08	FF 1/2-3	189038
8900259	F015	TV4614	0125	312H	317F	1987/11/09	FF 2/2	189039
8900259	F015	TV4615	0125	312H	317F	1988/04/14	FF 2/3	189040
8900259	F015	TV4616	0125	312H	317F	1987/04/06	FF 3/1	189041
8900259	F015	TV4617	0125	312H	317F	1987/11/08	FF 3/2-3	189042
8900259	F015	TV4618	0125	312H	317F	1987/04/06	FF 4/1-3	189043
8900259	F015	TV4619	0125	312H	317F	1987/11/08	FF 9/2-3	189044
8900259	F015	TV4620	0125	312H	317F	1987/11/09	GG 1/2-3	189045
8900259	F015	TV4621	0125	312H	317F	1987/04/06	GG 2/1	189046
8900259	F015	TV4622	0125	312H	317F	1988/04/09	GG 2/3	189047
8900259	F015	TV4623	0125	312H	317F	1987/04/06	GG 3/1	189048

8900259	F015	TV4624	0125	312H	317F	1987/11/09	GG 3/2-3	189049
8900259	F015	TV4625	0125	312H	317F	1987/04/06	GG 4/1-3	189050
8900259	F015	TV4626	0125	312H	317F	1987/11/09	GG 5/2	189051
8900259	F015	TV4627	0125	312H	317F	1988/04/09	GG 5/3	189052
8900259	F015	TV4628	0125	312H	317F	1987/11/10	GG 9/2	189053
8900259	F015	TV4600	0125	312H	317F	1987/11/10	DD 3/3-5	189054
8900259	F015	TV4613	0125	312H	317F	1987/04/06	FF 2/1	189055
8900259	C118	076347	0125	312H	3191	1988/07/31	GOMYR5AX	188973
8900259	C118	076348	0125	312H	3191	1988/10/19	GOMYR5AX	188974
8900259	C116	076346	0125	312H	320V	1987/11/03	SE8729	188972
8900259	C116	076340	0125	312H	32PE	1987/04/05	PN8713	188966
8900259	C116	076341	0125	312H	32PE	1987/04/25	PN8715	188967
8900259	C116	076342	0125	312H	32PE	1987/07/17	PN8803	188968
8900259	C116	076343	0125	312H	32PE	1987/11/10	PN8814	188969
8900259	C116	076344	0125	312H	32PE	1988/04/07	PN8823	188970
8900259	C116	076345	0125	312H	32PE	1988/10/19	PN8911	188971
8900259	C100	323085	0125	312H	32PE	1987/04/07	PN8713	188975
8900259	C100	323086	0125	312H	32PE	1987/04/25	PN8715	188976
8900259	C100	323087	0125	312H	32PE	1987/07/17	PN8803	188977
8900259	C100	323088	0125	312H	32PE	1987/11/15	PN8814	188978
8900259	C100	323089	0125	312H	32PE	1988/02/09	PN8820	188979
8900259	C100	323090	0125	312H	32PE	1988/07/21	PN8903	188980
8900259	C022	329608	0125	312H	32PE	1987/04/07	TV4574	188981
8900259	C022	329609	0125	312H	32PE	1987/04/25	TV4575	188982
8900259	C022	329610	0125	312H	32PE	1987/07/17	TV4576	188983
8900259	C022	329611	0125	312H	32PE	1987/11/09	TV4577	188984
8900259	C022	329612	0125	312H	32PE	1988/02/09	TV4578	188985
8900259	C022	329613	0125	312H	32PE	1988/07/21	TV4579	188986
8900259	F022	TV4635	0125	312H	32PE	1987/04/07	PE 87-13	188987
8900259	F022	TV4636	0125	312H	32PE	1987/04/25	PE 87-15	188989
8900259	F022	TV4637	0125	312H	32PE	1987/07/17	PE 88-03	188991
8900259	F022	TV4638	0125	312H	32PE	1987/11/09	PE 88-14	188992
8900259	F022	TV4639	0125	312H	32PE	1988/02/09	PE 88-20	188993
8900259	F022	TV4640	0125	312H	32PE	1988/07/21	PE 89-03	188994

(90 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
8900259	F015	TV4574	317F	1	458	87/04/04	87/04/04
8900259	F015	TV4575	317F	2	1604	87/07/15	87/08/01
8900259	F015	TV4576	317F	5	5354	87/11/13	88/03/01
8900259	F015	TV4577	317F	8	9643	88/04/15	88/11/01
8900259	L129	L00426	317F	1	7047	87/11/13	88/04/07
8900259	L129	L00427	317F	1	9232	87/07/16	88/01/25
8900259	L129	L00428	317F	1	12845	88/02/08	88/11/02
8900259	L129	L00429	317F	1	22582	87/07/17	88/10/29
8900259	L129	L00430	317F	1	12606	88/02/09	88/10/28
8900259	L129	L00431	317F	1	8606	87/11/08	88/10/31
8900259	L129	L00432	317F	1	17431	87/04/06	88/04/03
8900259	L151	L00433	317F	2	58423	87/04/06	88/10/30
8900259	F015	TV4578	317F	3	3376	87/04/04	87/06/01
8900259	F015	TV4579	317F	13	17727	87/07/16	88/07/01
8900259	F015	TV4580	317F	4	4775	88/07/22	88/10/01
8900259	F015	TV4581	317F	16	22649	87/04/04	88/07/01
8900259	F015	TV4582	317F	4	4774	88/07/22	88/10/01
8900259	F015	TV4583	317F	5	5406	87/07/16	87/11/01
8900259	F015	TV4584	317F	6	7798	88/02/08	88/07/01
8900259	F015	TV4585	317F	4	4773	88/07/22	88/10/01
8900259	F015	TV4586	317F	4	4725	88/07/22	88/10/01
8900259	F015	TV4587	317F	2	2316	87/04/04	87/05/01
8900259	F015	TV4588	317F	7	9281	87/07/16	88/01/01
8900259	F015	TV4589	317F	5	5860	88/02/08	88/06/01
8900259	F015	TV4590	317F	5	5023	88/07/20	88/11/01
8900259	F015	TV4591	317F	19	27624	87/04/04	88/10/01
8900259	F015	TV4592	317F	9	12317	87/11/07	88/07/01
8900259	F015	TV4593	317F	5	4771	88/07/25	88/11/01
8900259	F015	TV4594	317F	5	4976	88/07/20	88/11/01
8900259	F015	TV4595	317F	2	2710	87/04/05	87/05/01
8900259	F015	TV4596	317F	16	22585	87/07/17	88/10/01
8900259	F015	TV4597	317F	7	9513	88/04/14	88/10/01
8900259	F015	TV4598	317F	4	4915	87/04/05	87/07/01
8900259	F015	TV4599	317F	2	1237	87/07/24	87/08/01
8900259	F015	TV4601	317F	3	4140	88/08/04	88/10/01
8900259	F015	TV4602	317F	19	27405	87/04/07	88/10/01
8900259	F015	TV4603	317F	6	7791	88/02/09	88/07/01
8900259	F015	TV4604	317F	4	4791	88/07/21	88/10/01
8900259	F015	TV4605	317F	1	445	87/04/05	87/04/05
8900259	F015	TV4606	317F	12	8609	87/11/08	88/10/01
8900259	F015	TV4607	317F	1	105	87/04/05	87/04/05
8900259	F015	TV4608	317F	12	17146	87/11/08	88/10/01
8900259	F015	TV4609	317F	19	27610	87/04/05	88/10/01
8900259	F015	TV4610	317F	11	8015	87/12/02	88/10/01
8900259	F015	TV4611	317F	1	434	87/04/06	87/04/06
8900259	F015	TV4612	317F	11	7336	87/11/08	88/09/01
8900259	F015	TV4614	317F	4	4710	87/11/09	88/02/01
8900259	F015	TV4615	317F	6	7181	88/04/14	88/09/01
8900259	F015	TV4616	317F	1	30	87/04/06	87/04/06
8900259	F015	TV4617	317F	12	17167	87/11/08	88/10/01
8900259	F015	TV4618	317F	18	25620	87/04/06	88/09/01
8900259	F015	TV4619	317F	11	7360	87/11/08	88/09/01
8900259	F015	TV4620	317F	12	8537	87/11/09	88/10/01
8900259	F015	TV4621	317F	1	333	87/04/06	87/04/06
8900259	F015	TV4622	317F	7	9807	88/04/09	88/10/01
8900259	F015	TV4623	317F	1	185	87/04/06	87/04/06

8900259	F015	TV4624	317F	12	17071	87/11/09	88/10/01
8900259	F015	TV4625	317F	19	27499	87/04/06	88/10/01
8900259	F015	TV4626	317F	6	7008	87/11/09	88/04/01
8900259	F015	TV4627	317F	7	9805	88/04/09	88/10/01
8900259	F015	TV4628	317F	6	3620	87/11/10	88/04/01
8900259	F015	TV4600	317F	9	12157	87/11/10	88/07/01
8900259	F015	TV4613	317F	1	482	87/04/06	87/04/06
8900259	C118	076347	3191	89	89	88/07/31	88/08/03
8900259	C118	076348	3191	82	82	88/10/19	88/10/22
8900259	C116	076346	320V	53	52	87/11/03	87/11/08
8900259	C116	076340	32PE	39	34	87/04/05	87/04/10
8900259	C116	076341	32PE	2	NULL	87/04/25	87/04/25
8900259	C116	076342	32PE	4	4	87/07/17	87/07/17
8900259	C116	076343	32PE	42	40	87/11/10	87/11/12
8900259	C116	076344	32PE	56	56	88/04/07	88/04/10
8900259	C116	076345	32PE	74	74	88/10/19	88/11/02
8900259	C100	323085	32PE	17	17	87/04/07	87/04/09
8900259	C100	323086	32PE	12	12	87/04/25	87/04/26
8900259	C100	323087	32PE	5	5	87/07/17	87/07/17
8900259	C100	323088	32PE	7	7	87/11/15	87/11/15
8900259	C100	323089	32PE	13	13	88/02/09	88/02/10
8900259	C100	323090	32PE	12	12	88/07/21	88/07/21
8900259	C022	329608	32PE	24	38	87/04/07	87/04/10
8900259	C022	329609	32PE	16	16	87/04/25	87/04/26
8900259	C022	329610	32PE	11	10	87/07/17	87/07/17
8900259	C022	329611	32PE	12	15	87/11/09	87/11/16
8900259	C022	329612	32PE	17	17	88/02/09	88/02/10
8900259	C022	329613	32PE	17	17	88/07/21	88/07/22
8900259	F022	TV4635	32PE	24	3891	87/04/07	87/04/10
8900259	F022	TV4636	32PE	16	223	87/04/25	87/04/26
8900259	F022	TV4637	32PE	11	154	87/07/17	87/07/17
8900259	F022	TV4638	32PE	12	1643	87/11/09	87/11/16
8900259	F022	TV4639	32PE	17	232	88/02/09	88/02/10
8900259	F022	TV4640	32PE	17	221	88/07/21	88/07/22

(90 rows affected)