

JUN 12 1979

ACCESSION NUMBER

79-0207

DDF-B:1:16

DATA DOCUMENTATION FORM

TR4174

NOAA FORM 24-13 (4-72)

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEANOGRAPHIC DATA CENTER RECORDS SECTION ROCKVILLE, MARYLAND 20852

FORM APPROVED O.M.B. No. 41-R2651

TR4175

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

A. ORIGINATOR IDENTIFICATION

79-10

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 INSTITUTE OF MARINE SCIENCE UNIVERSITY OF ALASKA FAIRBANKS, AK. 99701			
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED OCS/OCSEAP R.U. 289		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT CM0042, 43 MONTAGUE STRAIT	
4. PLATFORM NAME(S) N/A	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) CURRENT METER MOORING	6. PLATFORM AND OPERATOR NATIONALITY(IES) PLATFORM OPERATOR U.S.A. U.S.A.	7. DATES FROM: MO/DAY/YR TO: MO/DAY/YR 04/24/78 09/21/78
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 checked="" type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)		<p>The map shows a grid of latitude and longitude from 100°W to 100°W and 80°N to 80°N. Hand-drawn lines and shaded squares indicate data collection locations. The shaded area is roughly between 140°W and 160°W, and 50°N and 60°N, corresponding to the Montague Strait area mentioned in the cruise number.</p>	
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) INSTITUTE OF MARINE SCIENCE UNIVERSITY OF ALASKA FAIRBANKS, ALASKA 99701			

B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
CURRENT SPEED	CM/SEC	RCM-4 AANDERAA CURRENT MERERS	N/A	Conductivity to salinity conversion equations attached to DDF
DIRECTION	degrees T (includes declination of degrees)			-----
TEMPERATURE	Degrees C			Data are wild point edited only. No attempt has been made to correct S,T or D to STD casts.
SALINITY	0/00			-----
DEPTH	Meters			Expect good precision. Accuracy not checked in field.

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

THREE RECORD TYPES WITHIN FILE TYPE-15

Designated by byte 10:

"1" for Text Record
"2" for Master Record
"3" for Detail Record

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

015CM0042 (6953 RECORDS)

015CM0043 (6954 RECORDS)

015CM0044 (6954 RECORDS)

015CM0045 (6954 RECORDS)

015CM0046 (6954 RECORDS)

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER Cydney Hansen (907) 479-7836
 ADDRESS Institute of Marine Science, Univ. of Alaska, Fairbanks, Ak. 99701

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 type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input checked="" type="checkbox"/> .5 inch</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input checked="" type="checkbox"/> octal 23</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. F (((VS</p> <p style="text-align: center;">MONTAGUE STRAIT 289 015CM0042, CM0043 04/24/78 - 09/21/78 Dr. ROYER 3135/1 & 3131/1 TAPE 1 of 3 9trk, 1600BPI, EBCDIC, NOLABEL, ODD PARITY</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 style="text-align: center;">60 bytes/block</p> <p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">8 bits/byte</p>

MONTAGUE STRAIT
289 015CM0044,CM0045
04/24/78 - 09/21/78 Dr. ROYER
3132/1 & 3133/1
TAPE 2 of 3
9trk,1600BPI,EBCDIC,NOLABEL,ODD
PARITY

MONTAGUE STRAIT
289 015CM0046
04/24/78 - 09/21/78
3134/1
TAPE 3 of 3
9trk,1600BPI,EBCDIC,NOLABEL,ODD
PARITY

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

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

USER TAPE

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:
NAME AND PHONE NUMBER D752-NOAA/EDIS/NODC - 202-6347505
ADDRESS WASHINGTON, DC. 202135

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <input type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC <input type="checkbox"/> _____	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <input type="checkbox"/> SEVEN <input checked="" type="checkbox"/> NINE <input type="checkbox"/> _____	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____</p>
<p>7. PARITY</p> <input checked="" type="checkbox"/> ODD <input type="checkbox"/> EVEN	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p><u>014386 (1,SL)</u></p>
<p>8. DENSITY</p> <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>12. PHYSICAL BLOCK LENGTH IN BYTES <u>4800</u></p> <p>13. LENGTH OF BYTES IN BITS <u>60</u></p>

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 METER	XXXXX (METERS TO TENTHS)	36
METER USAGE SEQUENCE NUMBER	XXX - USED FOR INDICATING NUMBER OF TIMES METER HAS BEEN USED	41
INSTITUTION	TWO-CHARACTER NODC INSTITUTION CODE - USE CODE 0218	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	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
CONDUCTIVITY	XXXX - MMHOS 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	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	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 HUNDREDTHS	50
SEQUENCE NUMBER	XXXXXX - USED FOR SORTING DATA RECORDS	55

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1      SUBROUTINE CONSAL(R,B,T,D,S)
2      C
3      C WRITTEN JAN 7,1976 BY J DRYDEN AND R SEITZ
4      C
5      C PURPOSE OF THIS ROUTINE IS TO PROVIDE CONVERSION CAPABILITY FOR IN
6      C SITU CONDUCTIVITY RATIOS TO SALINITY
7      C
8      C ALGORITHM AND EQUATIONS TAKEN FROM 'CONVERSION OF IN SITU MEASUREMENTS
9      C OF CONDUCTIVITY TO SALINITY' BY A.S. BENNETT (PREPUBLICATION COPY
10     C RECEIVED JAN 75 BY PRIVATE COMMUNICATION BETWEEN AUTHOR AND D NEBERT)
11     C
12     C USAGE CALL CONSAL(R,B,T,D,S)
13     C WHERE R IS RATIO C(S,T,P)/C(35,B,0)
14     C B IS BATH TEMPERATURE IN DEG C OR REFERENCE TEMP EMPLOYED
15     C IN THE DESIGN OF SOME IN SITU SAMPLING INSTRUMENTS
16     C T IS IN SITU TEMPERATURE IN DEG C
17     C ***** NOT THAT BOTH B AND T ARE BOTH 1968 IPTS MEASUREMENTS * **
18     C D IS IN SITU DEPTH IN METERS (PRESUMED EQUIVALENT TO
19     C PRESSURE IN DECIBARS
20     C S IS CALCULATED SALINITY WHICH IS RETURNED TO CALLER IN PPT
21     C
22     C
23     C
24     P=D
25     C
26     C CONVERT IN SITU RATIO TO 15 DEG C REFERENCE
27     R2=B*B
28     RB= 0.676518 + 2.00402E-2*B + 1.227E-4*B2 - 2.18091E-6*B*B2
29     X + 6.63405E-8*B2*B2 - 9.5646E-10*B2*B2*B
30     RO= RB*R
31     C
32     C CALCULATE AND APPLY GROSS PRESSURE CORRECTION
33     T2=T*T
34     F= 1.0 + 3.0786E-2*T + 3.169E-4*T2
35     F=(1.80836E-5*P - 5.4845E-10*P*P + 6.166E-15*P*P*P)/F
36     RO= RO/(1.0 + F)
37     C
38     C CALCULATE AND APPLY GROSS TEMPERATURE CORRECTION
39     RT= 0.676518 + 2.00402E-2*T + 1.227E-4*T2 - 2.18091E-6*T*T2
40     X + 6.63405E-8*T2*T2 - 9.5646E-10*T2*T2*T
41     RO= RO/RT
42     C
43     C CALCULATE SALINITY APPLY SECONDARY PRESS/TEMP CORRECTIONS
44     R2 = RO*RO
45     S = -0.08996 + 28.8567*RO + 12.18882*R2 - 10.61869*RO*R2
46     X + 5.98624*R2*R2 - 1.32311*R2*R2*RO
47     S = S + RO*(RO-1.0) * ( 0.0442*T - 4.6E-4*T2 - 0.004*RO*T
48     X + ( 1.25E-4 - 2.9E-6*T)*P )
49     C
50     C RETURN TO CALLER
51     RETURN
52     END

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THERE WERE NO DIAGNOSTICS IN ABOVE COMPILATION
25K WORDS WERE USED FOR THIS COMPILATION

1. ACCESSION NUMBER 79-0207 CM0042	NOAA FORM 44-9 (10-72) TR4174	U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NODC INDEX FORM FOR INSTRUMENT-MEASURED SUBSURFACE CURRENT OBSERVATIONS (NIMSCO)	FORM APPROVED O.M.B. NO. 41-R2689 EXPIRES - AUGUST 1977
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PART I

2. NAME OF INSTITUTION HOLDING DATA INSTITUTE OF MARINE SCIENCE, UNIV OF AK	CODE	3. ARCHIVE REF. NO.	4. PLATFORM NAME OR DESIGNATOR	CODE	5. CRUISE OR SURVEY PERIOD
6. COUNTRY OF INSTITUTION HOLDING DATA USA	CODE	*7. PLATFORM TYPE (Check one)		OTHER (Specify)	
8. NAME OF PERSON TO CONTACT FOR FULL DATA PROCESSING INFO. Cydney Hansen, Inst. of Marine Science		SHIP		YEAR MO. DAY	
8A. ADDRESS - STREET OR POST OFFICE BOX NUMBER University of Alaska		<input type="checkbox"/> DRIFTING <input checked="" type="checkbox"/> MOORED <input type="checkbox"/> WINGED <input type="checkbox"/> ANCHORED <input type="checkbox"/> DRIFTING <input type="checkbox"/> HELICOPTER <input type="checkbox"/> UNDERWAY <input type="checkbox"/> ICE ISLAND <input type="checkbox"/> FIXED STRUCTURES		5A. BE-GINNING 1978 4 24	
CITY Fairbanks	STATE Alaska	ZIP CODE/COUNTRY 99701/USA	9. PROJECT OR EXPEDITION DESIGNATOR		GASS (OCSEAP)
8B. TELEPHONE	AREA CODE	NUMBER	When applicable, record the international cooperative project or expedition designator of which survey was a part. Examples: IGOSS, CICAR, CIM, CINECA, etc. If survey was primarily a national or local cooperative endeavor, enter project or expedition designator assigned.		
				5B. ENDING 19 78 9 21	

PART II

10. INSTRUMENT USED TO COLLECT DATA Aanderaa Meters	10A. MODEL NO. RCM4	CODE	*12. OBSERVATION TYPE (Check one)	OTHER (Specify)	14. USABLE RECORDS				
*11. INSTRUMENT TYPE (Check one)		OTHER (Specify)		CODE		14A. BEGINNING DATE	YEAR	MONTH	DAY
<input checked="" type="checkbox"/> CURRENT METER <input type="checkbox"/> NEUT. BUOY. FLOAT <input type="checkbox"/> DROGUE <input type="checkbox"/> FREE-FALL DEVICE						19 78	4	29	
15. TEN-DEGREE SQUARE, SUBSQUARES			13. ARE DATA PROCESSED?	13A. IF NO, WHEN PLANNED?	14B. ENDING DATE	YEAR	MONTH	DAY	
15A. 10°	15B. 5°	15C. 1°	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	MONTH YEAR	19 78	9	20		
18. OBSERVATION DEPTH (Meters) - Record depth at which observations were taken in "From" space. If the observation series represents a depth range (such as obtained with free-fall devices or neutral buoyancy floats) enter shallower depth in "From" space and deeper depth in "To" space.			16. ARE DATA EDITED? (Check one)		17. LOCATION OF CURRENT MET. OBSERV.				
18A. FROM			<input type="checkbox"/> YES <input type="checkbox"/> NO		DEGREES	MIN.	SEC.	HEM. (Circle approx.)	
18B. AT 30M					17A. BE-GINNING LATITUDE	59	58	4	NORTHERN
			*19. DATA STORAGE MEDIUM (Check one)		17B. BE-GINNING LONGITUDE	147	48	8	WESTERN
			<input type="checkbox"/> PUNCHED CARDS <input checked="" type="checkbox"/> MAG. TAPE <input type="checkbox"/> ANALOG RECORD <input type="checkbox"/> PAP. TAPE						

20. ANALYSIS PRODUCTS GENERATED (e.g., speed vs direction, speed vs time, progressive vector plots, etc.)	21. ANALYSIS PRODUCTS PLANNED
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PART III (Fill out this section only if no other documentation is forwarded with form)

22. PERTINENT PUBLICATIONS (List publications containing any documentation on instrumentation data reduction and processing, data editing, and analysis relative to the data inventoried.)	24. DATA REDUCTION AND PROCESSING REMARKS (Describe briefly the time interval of individual observations of processed data, storage codes of processed data (BCD, EBCDIC, binary, etc.) and other pertinent processing factors)
23. INSTRUMENTATION REMARKS (Specify any major modifications to manufacturer's original product, major routine manufacturing features, operation failures during data collection, or other comments helpful in data interpretation.) NO MODIFICATIONS	25. DATA EDIT CRITERIA REMARKS (List criteria applied in editing data to the point of their use for analysis; e.g. constant errors (time or other) applied, depth corrections, interpolations, purging of undesirable frequencies, etc.)
25. DATA EDIT CRITERIA REMARKS (List criteria applied in editing data to the point of their use for analysis; e.g. constant errors (time or other) applied, depth corrections, interpolations, purging of undesirable frequencies, etc.)	26. GENERAL REMARKS (Enter any other comments useful in interpretation and use of data reported)

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
FILE TYPE	"15" AS DESIGNATED BY	1. col 45-49	depth in	OSCEAP AND NODC.	THERE ARE NO DEVIATIONS
	FROM THIS TYPE, EXCEPT:	2. col 59-53	salinity	in 0/00 (I4 to	1/100ths)
			meters (I5 to	1/10ths)	

FIRST 50 RECORDS OF METER

015CM00421	3135	METER 3135	1
015CM00421	3135		2
015CM00421	3135		3
015CM00421	3135		4
015CM00421	3135		5
015CM00421	3135	THIS DATA CONTAINS A SECTION OF	6
015CM00421	3135	BAD DATA FOR ALL CHANNELS.	7
015CM00421	3135	THESE ARE RECORD NO. 1247-1251.	8
015CM00421	3135	THE DATA HAS BEEN INTERPOLATED.	9
015CM00421	3135		10
015CM00421	3135	THIS DATA CONTAINS A SECTION WH	11
015CM00421	3135	ICH NUMEROUS VALUES MUST BE	12
015CM00421	3135	INTERPOLATED. THIS SECTION IS	13
015CM00421	3135	ABOUT 35 RECORDS LONG. THE	14
015CM00421	3135	INTERPOLATED VALUES ARE SOMEWA	15
015CM00421	3135	Y RANDOM AND SHOULD NOT BIAS.	16
015CM00421	3135	SPECTRAL ANALYSIS. (SEE REC.#2	17
015CM00421	3135	41-278)	18
015CM00421	3135		19
015CM00421	3135		20
015CM00421	3135	CONVERSION EQUATIONS OBTAINED FROM NRC	21
015CM00421	3135	CALIBRATION	22
015CM00421	3135	INFORMATION DATED JANUARY 1978.	23
015CM00421	3135		24
015CM00421	3135		25
015CM00421	3135		26
015CM00421	3135	TEMP=-2.522 + 2.2847F-2*R2 - 1.5	27
015CM00421	3135	58F-6*R2**2 +	28
015CM00421	3135	2.100F-9*R2**3	29
015CM00421	3135		30
015CM00421	3135	COND=(7.426F-2*R3 + 0.07)	31
015CM00421	3135		32
015CM00421	3135	DEPTH=(0.2230*R4 - 27.2)/1.458	33
015CM00421	3135		34
015CM00421	3135	DIP= 0.3482*P5 + 1.7 + DECLINATI	35
015CM00421	3135	ON	36
015CM00421	3135	SDFE=(2.8*R6)/SAMPLING INTERVAL	37
015CM00421	3135	+ 1.5	38
015CM00421	3135		39
015CM00421	3135		40
015CM00421	3135	NOTE--	41
015CM00421	3135		42
015CM00421	3135	CONDUCTIVITY FIELD IN DETAIL R	43
015CM00421	3135	CORD CONTAINS	44
015CM00421	3135	SALINITY IN PARTS/THOUSAND.	45
015CM00421	3135	THE CONVERSION	46
015CM00421	3135	EQUATIONS USED WERE INCLUDED	47
015CM00421	3135	AS PART OF THE DDF.	48
015CM00421	3135		49
015CM00421	3135		50

1. ACCESSION NUMBER 79-0207 CM0043	NOAA FORM 44-9 (10-72) TR4175	U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NODC INDEX FORM FOR INSTRUMENT-MEASURED SUBSURFACE CURRENT OBSERVATIONS (NIMSCO)	FORM APPROVED O.M.B. NO. 41-R2689 EXPIRES - AUGUST 1977
FILE NAME: IMCURFIL			

PART I

2. NAME OF INSTITUTION HOLDING DATA INSTITUTE OF MARINE SCIENCE, UNIV OF AK	CODE	3. ARCHIVE REF. NO.	4. PLATFORM NAME OR DESIGNATOR	CODE	5. CRUISE OR SURVEY PERIOD
6. COUNTRY OF INSTITUTION HOLDING DATA USA		7. PLATFORM TYPE (Check one)		OTHER (Specify)	
		SHIP BUOY AIRCRAFT			
		<input type="checkbox"/> DRIFTING <input checked="" type="checkbox"/> MOORED <input type="checkbox"/> WINGED			
		<input type="checkbox"/> ANCHORED <input type="checkbox"/> DRIFTING <input type="checkbox"/> HELICOPTER			
		<input type="checkbox"/> UNDERWAY			
		<input type="checkbox"/> ICE ISLAND <input type="checkbox"/> FIXED STRUCTURES			
8. NAME OF PERSON TO CONTACT FOR FULL DATA PROCESSING INFO. Cydney Hansen, Inst. of Marine Science				5A. BE-GINNING 1978 4 24	
8A. ADDRESS - STREET OR POST OFFICE BOX NUMBER University of Alaska				5B. ENDING 1978 9 21	
CITY Fairbanks	STATE Alaska	ZIP CODE/COUNTRY 99701/USA		GASS (OCSEAP)	
8B. TELEPHONE 907	NUMBER 479-7836	9. PROJECT OR EXPEDITION DESIGNATOR When applicable, record the international cooperative project or expedition designator of which survey was a part. Examples: IGOSS, CICAR, CIM, CINECA, etc. If survey was primarily a national or local cooperative endeavor, enter project or expedition designator assigned.			

PART II

10. INSTRUMENT USED TO COLLECT DATA Aanderaa Meters	10A. MODEL NO. RCM4	CODE	*12. OBSERVATION TYPE (Check one)	OTHER (Specify)	14. USABLE RECORDS		
			<input type="checkbox"/> ONE INSTANTANEOUS RECORD	CODE			
			<input type="checkbox"/> AVERAGE OF SEVERAL INSTANTANEOUS RECORDS				
			<input type="checkbox"/> ANALOG RECORD				
*11. INSTRUMENT TYPE (Check one)		OTHER (Specify)					
<input checked="" type="checkbox"/> CURRENT METER <input type="checkbox"/> NEUT. BUOY. FLOAT							
<input type="checkbox"/> DROGUE <input type="checkbox"/> FREE-FALL DEVICE							
13. ARE DATA PROCESSED?			13A. IF NO, WHEN PLANNED?				
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			MONTH YEAR				
15. TEN-DEGREE SQUARE, SUBSQUARES			16. ARE DATA EDITED? (Check one)				
15A. 10°	15B. 5°	15C. 1°	<input type="checkbox"/> YES <input type="checkbox"/> NO				
18. OBSERVATION DEPTH (Meters) - Record depth at which observations were taken in "From" space. If the observation series represents a depth range (such as obtained with free-fall devices or neutral buoyancy floats) enter shallower depth in "From" space and deeper depth in "To" space.			*19. DATA STORAGE MEDIUM (Check one)		OTHER (Specify)		
			<input type="checkbox"/> PUNCHED CARDS <input checked="" type="checkbox"/> MAG. TAPE				
			<input type="checkbox"/> ANALOG RECORD <input type="checkbox"/> PAP. TAPE				
17A. BE-GINNING LATITUDE 59 58 4			17. LOCATION OF CURRENT MET. OBSERVS.				
17B. BE-GINNING LONGITUDE 147 48 8			DEGREES MIN. SEC.		HEM. (Circle approp.) NORTHERN SOUTHERN EASTERN WESTERN		
20. ANALYSIS PRODUCTS GENERATED (e.g., speed vs direction, speed vs time, progressive vector plots, etc.)				21. ANALYSIS PRODUCTS PLANNED			

PART III (Fill out this section only if no other documentation is forwarded with form)

22. PERTINENT PUBLICATIONS (List publications containing any documentation on instrumentation data reduction and processing, data editing, and analysis relative to the data inventoried.)	24. DATA REDUCTION AND PROCESSING REMARKS (Describe briefly the time interval of individual observations of processed data, storage codes of processed data (BCD, EBCDIC, binary, etc.) and other pertinent processing factors)
23. INSTRUMENTATION REMARKS (Specify any major modifications to manufacturer's original product, major routine manufacturing features, operation failures during data collection, or other comments helpful in data interpretation.) <p style="text-align: center;">NO MODIFICATIONS</p>	25. DATA EDIT CRITERIA REMARKS (List criteria applied in editing data to the point of their use for analysis; e.g. constant errors (time or other) applied, depth corrections, interpolations, purging of undesirable frequencies, etc.)
25. DATA EDIT CRITERIA REMARKS (List criteria applied in editing data to the point of their use for analysis; e.g. constant errors (time or other) applied, depth corrections, interpolations, purging of undesirable frequencies, etc.)	26. GENERAL REMARKS (Enter any other comments useful in interpretation and use of data reported)

FIRST 50 RECORDS OF METER

015CM00431	3131	METER 3131	1
015CM00431	3131		2
015CM00431	3131		3
015CM00431	3131		4
015CM00431	3131	1. ALL SENSORS APPEAR TO BE GOOD.	5
015CM00431	3131		6
015CM00431	3131	2. TEMPERATURE AND CONDUCTIVITY ARE Q	7
015CM00431	3131	UITE VARIABLE AND THEREFORE	8
015CM00431	3131	DIFFICULT TO EDIT, BUT THE VARIABI	9
015CM00431	3131	LITY APPEARS TO BE DUE TO	10
015CM00431	3131	STRONG GRADIENTS.	11
015CM00431	3131		12
015CM00431	3131		13
015CM00431	3131		14
015CM00431	3131	CONVERSION FACTORS OBTAINED FROM NRC	15
015CM00431	3131	FOR CALIBRATION.	16
015CM00431	3131	INFORMATION DATED Jan. 1975.	17
015CM00431	3131		18
015CM00431	3131		19
015CM00431	3131		20
015CM00431	3131	TEMPERATURE = -2.518 + 2.2826E-2*R2	21
015CM00431	3131	- 1.565E-6*R**2 +	22
015CM00431	3131	2.070E-9 * R2**	23
015CM00431	3131		24
015CM00431	3131	CONDUCTIVITY = (7.491E-2*R3 + 0.0	25
015CM00431	3131	R)	26
015CM00431	3131	DEPTH = (0.5452*R4 - 27.1)/1.458	27
015CM00431	3131		28
015CM00431	3131	DIRECTION = 0.3470*R5 + 0.7 + DFCL	29
015CM00431	3131	INATION	30
015CM00431	3131	SPEED = (2.8*R6)/SAMPLING INTERVAL	31
015CM00431	3131	+ 1.5	32
015CM00431	3131		33
015CM00431	3131		34
015CM00431	3131	NOTE--	35
015CM00431	3131		36
015CM00431	3131	CONDUCTIVITY FIELD IN DETAIL	37
015CM00431	3131	RECORD CONTAINS	38
015CM00431	3131	SALINITY IN PARTS/THOUSAND.	39
015CM00431	3131	THE CONVERSION	40
015CM00431	3131	EQUATION USED WERE INCLUDED	41
015CM00431	3131	AS PART OF THE DDF.	42
015CM00431	3131		43
015CM00431	3131		44
015CM00432	3131	595819M1474859W 240 50 101 25MS-R 6954	45
015CM00433	3131	78 4282357 0 1510 2706 4469 5203190	1
015CM00433	3131	78 429 027 0 1091 1849 4446 5203184	2
015CM00433	3131	78 429 057 0 706 2017 4446 5243192	3
015CM00433	3131	78 429 127 0 722 1912 4446 5243184	4
015CM00433	3131	78 429 157 0 1005 1216 4491 5243188	5

FIRST 50 RECORDS OF METER

FOE

Data Set Title Sheet

Accession # 79-0207

Step	Completion Date/Init.	Tape #, # of Files	BLKSIZE	LRECL
Originator Tape #	6-25-79 JPS	ANDY54 2	4800	60
QUADI Duplicate Tape #	7-10-79 JPS	011955 2	4800	60
DDF Evaluation				
Quality Review	7-16-79 MRL			
Preliminary Data Sort	7-17-79 MRL	011955		
Preliminary Check	7-26-79 CES	011955 1	4800	60
First User Tape #	10-02-79 CES	014386 1	4800	60
Final User Tape #				
Final Check	10-02-79 CES	014386 1	4800	60
1. NAFIS Inventory	10-11-79 CES	014386 1	4800	60
DIP Inventory	10-02-79 CES	014386 1	4800	60
2. Data Set 'Finalized'				

DATA DOCUMENTATION FORM

TR 4176
TR 4177

NOAA FORM 24-13
(4-77)

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

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

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

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

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED IMS						
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED RU 289			3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT CM0044 CM0045			
4. PLATFORM NAME(S)		5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)		6. PLATFORM AND OPERATOR NATIONALITY(IES)		7. DATES
		Current Meter		PLATFORM OPERATOR		FROM: MO/DAY/YR TO: MO/DAY/YR
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. 195 GENERAL AREA			
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input 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) ROYER						

B. SCIENTIFIC CONTENT

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

EXAMPLE (HYPOTHETICAL INFORMATION)

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

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

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

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:
NAME AND PHONE NUMBER _____
ADDRESS _____

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 type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN,</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input 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>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>13. LENGTH OF BYTES IN BITS</p> <p style="font-size: 1.5em; text-align: center;">120 / 4800 / NL</p>

C. DATA FORMAT

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

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

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

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

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

USER TAPE

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:
 NAME AND PHONE NUMBER **D 752-NOAA/EDIS/NODC - 202-6347505**
 ADDRESS **WASHINGTON, DC 20235**

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 type="checkbox"/> ASCII <input checked="" 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 type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME KEY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>00 9414 (1, 5L)</p> <p>DSN = TR 4176</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>4800</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>60</p>

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

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
INSTITUTION	TWO-CHARACTER NODC INSTITUTION CODE - USE CODE 0218	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	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
CONDUCTIVITY	XXXX - MMHOS 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	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	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 HUNDREDTHS	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 (✓)	

1. ACCESSION NUMBER 79-0207 CM0044	NOAA FORM 44-9 (10-72) TR 4176	U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NODC INDEX FORM FOR INSTRUMENT-MEASURED SUBSURFACE CURRENT OBSERVATIONS (NIMSCO)	FORM APPROVED O.M.B. NO. 41-R2689 EXPIRES - AUGUST 1977
FILE NAME: IMCURFIL			

PART I

2. NAME OF INSTITUTION HOLDING DATA INSTITUTE OF MARINE SCIENCE, UNIV OF AK	CODE	3. ARCHIVE REF. NO.	4. PLATFORM NAME OR DESIGNATOR	CODE	5. CRUISE OR SURVEY PERIOD
6. COUNTRY OF INSTITUTION HOLDING DATA USA	CODE	*7. PLATFORM TYPE (Check one)		OTHER (Specify)	
8. NAME OF PERSON TO CONTACT FOR FULL DATA PROCESSING INFO. Cydney Hansen, Inst. of Marine Science		SHIP BUOY AIRCRAFT		YEAR MO. DAY	
8A. ADDRESS - STREET OR POST OFFICE BOX NUMBER University of Alaska		<input type="checkbox"/> DRIFTING <input checked="" type="checkbox"/> MOORED <input type="checkbox"/> WINGED		5A. BE-GINNING	
CITY Fairbanks		<input type="checkbox"/> ANCHORED <input type="checkbox"/> DRIFTING <input type="checkbox"/> HELICOPTER		1978 4 24	
STATE Alaska		<input type="checkbox"/> UNDERWAY		5B. ENDING	
ZIP CODE/COUNTRY 99701/USA		<input type="checkbox"/> ICE ISLAND <input type="checkbox"/> FIXED STRUCTURES		1978 9 21	
8B. TELEPHONE: AREA CODE NUMBER 907 479-7836		9. PROJECT OR EXPEDITION DESIGNATOR When applicable, record the international cooperative project or expedition designator of which survey was a part. Examples: IGOSS, CICAR, CIM, CINECA, etc. If survey was primarily a national or local cooperative endeavor, enter project or expedition designator assigned.			
GASS (OCSEAP)					

PART II

10. INSTRUMENT USED TO COLLECT DATA Aanderaa Meters	10A. MODEL NO RCM4	CODE	*12. OBSERVATION TYPE (Check one)	OTHER (Specify)	14. USABLE RECORDS		
*11. INSTRUMENT TYPE (Check one)		OTHER (Specify)		YEAR MONTH DAY			
<input checked="" type="checkbox"/> CURRENT METER <input type="checkbox"/> NEUT. BUOY. FLOAT		<input type="checkbox"/> AVERAGE OF SEVERAL INSTANTANEOUS RECORDS		14A. BEGINNING DATE			
<input type="checkbox"/> DROGUE <input type="checkbox"/> FREE-FALL DEVICE		<input type="checkbox"/> ANALOG RECORD		19 78 4 28			
15. TEN-DEGREE SQUARE, SUBSQUARES		13. ARE DATA PROCESSED?		13A. IF NO, WHEN PLANNED?		14B. ENDING DATE	
15A. 10° 15B. 5° 15C. 1°		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		MONTH YEAR		19 78 9 20	
18. OBSERVATION DEPTH (Meters) - Record depth at which observations were taken in "From" space. If the observation series represents a depth range (such as obtained with free-fall devices or neutral buoyancy floats) enter shallower depth in "From" space and deeper depth in "To" space.		16. ARE DATA EDITED? (Check one)		17. LOCATION OF CURRENT MET. OBSERV.			
18A. FROM 18B. AT 100M		<input type="checkbox"/> YES <input type="checkbox"/> NO		DEGREES MIN. SEC. HEM. (Circle approp.)			
20. ANALYSIS PRODUCTS GENERATED (e.g., speed vs direction, speed vs time, progressive vector plots, etc.)		*19. DATA STORAGE MEDIUM (Check one)		17A. BE-GINNING LATITUDE			
		<input type="checkbox"/> PUNCHED CARDS <input checked="" type="checkbox"/> MAG. TAPE		59 58 4			
		<input type="checkbox"/> ANALOG RECORD <input type="checkbox"/> PAP. TAPE		17B. BE-GINNING LONGITUDE			
				147 48 8			
				EASTERN WESTERN			
				21. ANALYSIS PRODUCTS PLANNED			

PART III (Fill out this section only if no other documentation is forwarded with form)

22. PERTINENT PUBLICATIONS (List publications containing any documentation on instrumentation data reduction and processing, data editing, and analysis relative to the data inventoried.)	24. DATA REDUCTION AND PROCESSING REMARKS (Describe briefly the time interval of individual observations of processed data, storage codes of processed data (BCD, EBCDIC, binary, etc.) and other pertinent processing factors)
23. INSTRUMENTATION REMARKS (Specify any major modifications to manufacturer's original product, major routine manufacturing features, operation failures during data collection, or other comments helpful in data interpretation.) NO MODIFICATIONS	26. GENERAL REMARKS (Enter any other comments useful in interpretation and use of data reported)
25. DATA EDIT CRITERIA REMARKS (List criteria applied in editing data to the point of their use for analysis; e.g. constant errors (time or other) applied, depth corrections, interpolations, purging of undesirable frequencies, etc.)	26. GENERAL REMARKS (Enter any other comments useful in interpretation and use of data reported)

FIRST 50 RECORDS OF METEP

015CM00441	3132	METER 3132	1
015CM00441	3132		2
015CM00441	3132		3
015CM00441	3132		4
015CM00441	3132	1. DATA QUALITY IS EXCELLENT. #4584	5
015CM00441	3132	INTERPOLATED VALUES NEEDED.	6
015CM00441	3132		7
015CM00441	3132		8
015CM00441	3132	CONVERSION EQUATIONS OBTAINED FROM NRC	9
015CM00441	3132	CALIBRATION	10
015CM00441	3132	INFORMATION DATED JANUARY 1978.	11
015CM00441	3132		12
015CM00441	3132		13
015CM00441	3132		14
015CM00441	3132	TEMP = -2.468 + 2.2736F - 2*R2 - 1.2	15
015CM00441	3132	48F - 6*R2**2 +	16
015CM00441	3132	1.866F - 9*R2**3	17
015CM00441	3132		18
015CM00441	3132	COND = (7.540F - 2*R3 + 0.02)	19
015CM00441	3132		20
015CM00441	3132	DEPTH = (0.5624*4 - 28.5) / 1.458	21
015CM00441	3132		22
015CM00441	3132	DIR = 0.3478*R5 + 0.3 + DECLINATI	23
015CM00441	3132	ON	24
015CM00441	3132	SPEED = (2.8*R6) / SAMPLING INTERVAL	25
015CM00441	3132	+ 1.5	26
015CM00441	3132		27
015CM00441	3132		28
015CM00441	3132	NOTE--	29
015CM00441	3132		30
015CM00441	3132	CONDUCTIVITY FIELD IN DETAIL R	31
015CM00441	3132	CORD CONTAINS	32
015CM00441	3132	SALINITY IN PARTS/THOUSAND.	33
015CM00441	3132	THE CONVERSION	34
015CM00441	3132	EQUATIONS USED WERE INCLUDED	35
015CM00441	3132	AS PART OF THE DDF.	36
015CM00441	3132		37
015CM00441	3132		38
015CM00442	3132	595819N1474859W 240 100 1C1 25MS-B 6954	39
015CM00443	3132	78 4282359 0 1422 2552 4898 10233223	1
015CM00443	3132	78 429 029 0 1399 1554 4875 10273217	2
015CM00443	3132	78 429 059 0 1013 1257 4875 10353217	3
015CM00443	3132	78 429 129 0 796 976 4830 10353221	4
015CM00443	3132	78 429 159 0 208 920 4853 10353219	5
015CM00443	3132	78 429 229 0 125 689 4853 10353219	6
015CM00443	3132	78 429 259 0 -433 258 4740 10353212	7
015CM00443	3132	78 429 329 0 -477 276 4898 10383223	8
015CM00443	3132	78 429 359 0 -505 -443 4763 10383210	9
015CM00443	3132	78 429 429 0 -671 -282 4808 10383214	10
015CM00443	3132	78 429 459 0 -547 -650 4808 10383214	11

PART I														
2. NAME OF INSTITUTION HOLDING DATA INSTITUTE OF MARINE SCIENCE, UNIV OF AK			CODE	3. ARCHIVE REF. NO.			4. PLATFORM NAME OR DESIGNATOR			CODE	5. CRUISE OR SURVEY PERIOD			
6. COUNTRY OF INSTITUTION HOLDING DATA USA			CODE	*7. PLATFORM TYPE (Check one)			OTHER (Specify)				YEAR	MO.	DAY	
8. NAME OF PERSON TO CONTACT FOR FULL DATA PROCESSING INFO. Cydney Hansen, Inst. of Marine Science				<input type="checkbox"/> SHIP <input checked="" type="checkbox"/> BUOY <input type="checkbox"/> AIRCRAFT <input type="checkbox"/> DRIFTING <input checked="" type="checkbox"/> MOORED <input type="checkbox"/> WINGED <input type="checkbox"/> ANCHORED <input type="checkbox"/> DRIFTING <input type="checkbox"/> HELICOPTER <input type="checkbox"/> UNDERWAY <input type="checkbox"/> ICE ISLAND <input type="checkbox"/> FIXED STRUCTURES			CODE				5A. BE-GINNING	1978	4	24
8A. ADDRESS - STREET OR POST OFFICE BOX NUMBER University of Alaska											5B. ENDING	1978	9	21
CITY Fairbanks		STATE Alaska	ZIP CODE/COUNTRY 99701/USA		9. PROJECT OR EXPEDITION DESIGNATOR						GASS (OCSEAP)			
8B. TELEPHONE		AREA CODE 907	NUMBER 479-7836		When applicable, record the international cooperative project or expedition designator of which survey was a part. Examples: IGOSS, CICAR, CIM, CINECA, etc. If survey was primarily a national or local cooperative endeavor, enter project or expedition designator assigned.									

PART II															
10. INSTRUMENT USED TO COLLECT DATA Aanderaa Meters			10A. MODEL NO. RCM4	CODE	*12. OBSERVATION TYPE (Check one)			OTHER (Specify)		14. USABLE RECORDS					
*11. INSTRUMENT TYPE (Check one)			OTHER (Specify)		<input type="checkbox"/> ONE INSTANTANEOUS RECORD <input type="checkbox"/> AVERAGE OF SEVERAL INSTANTANEOUS RECORDS <input type="checkbox"/> ANALOG RECORD			CODE		14A. BEGINNING DATE	19 78	4	29		
<input checked="" type="checkbox"/> CURRENT METER <input type="checkbox"/> NEUT. BUOY. FLOAT <input type="checkbox"/> DROGUE <input type="checkbox"/> FREE-FALL DEVICE					13. ARE DATA PROCESSED?			13A. IF NO, WHEN PLANNED?		14B. ENDING DATE	19 78	9	20		
15. TEN-DEGREE SQUARE, SUBSQUARES					16. ARE DATA EDITED? (Check one)					17. LOCATION OF CURRENT MET. OBSERVS.					
15A. 10°	15B. 5°	15C. 1°			<input type="checkbox"/> YES <input type="checkbox"/> NO					DEGREES	MIN.	SEC.	HEM. (Circle approp.)		
18. OBSERVATION DEPTH (Meters) - Record depth at which observations were taken in "From" space. If the observation series represents a depth range (such as obtained with free-fall devices or neutral buoyancy floats) enter shallower depth in "From" space and deeper depth in "To" space.			18A. FROM		18B. AT 200M		*19. DATA STORAGE MEDIUM (Check one)			17A. BE-GINNING LATITUDE		59	58	4	NORTHERN SOUTHERN
							<input type="checkbox"/> PUNCHED CARDS <input checked="" type="checkbox"/> MAG. TAPE <input type="checkbox"/> ANALOG RECORD <input type="checkbox"/> PAP. TAPE			17B. BE-GINNING LONGITUDE		147	48	8	EASTERN WESTERN
20. ANALYSIS PRODUCTS GENERATED (e.g., speed vs direction, speed vs time, progressive vector plots, etc.)					21. ANALYSIS PRODUCTS PLANNED										

PART III (Fill out this section only if no other documentation is forwarded with form)									
22. PERTINENT PUBLICATIONS (List publications containing any documentation on instrumentation data reduction and processing, data editing, and analysis relative to the data inventoried.)									
23. INSTRUMENTATION REMARKS (Specify any major modifications to manufacturer's original product, major routine manufacturing features, operation failures during data collection, or other comments helpful in data interpretation.) NO MODIFICATIONS					24. DATA REDUCTION AND PROCESSING REMARKS (Describe briefly the time interval of individual observations of processed data, storage codes of processed data (BCD, EBCDIC, binary, etc.) and other pertinent processing factors)				
25. DATA EDIT CRITERIA REMARKS (List criteria applied in editing data to the point of their use for analysis; e.g. constant errors (time or other) applied, depth corrections, interpolations, purging of undesirable frequencies, etc.)					26. GENERAL REMARKS (Enter any other comments useful in interpretation and use of data reported)				

FIRST 50 RECORDS OF METER

015CM00451	3133	METER 3133	1
015CM00451	3133		2
015CM00451	3133		3
015CM00451	3133		4
015CM00451	3133	1. DATA QUALITY IS EXCELLENT. NO IN	5
015CM00451	3133	TERPOLATED VALUES.	6
015CM00451	3133		7
015CM00451	3133		8
015CM00451	3133	CONVERSION EQUATIONS OBTAINED FROM NPC	9
015CM00451	3133	C CALIBRATION	10
015CM00451	3133	INFORMATION DATED JANUARY 1978.	11
015CM00451	3133		12
015CM00451	3133		13
015CM00451	3133		14
015CM00451	3133	TEMP=-2.54R + 2.3158F-2*R2 - 2.2	15
015CM00451	3133	26F-6*R2**2 +	16
015CM00451	3133	2.487F-9 * R2**3	17
015CM00451	3133		18
015CM00451	3133	COND=(7.542F-2 * R3 + 0.17)	19
015CM00451	3133		20
015CM00451	3133	DEPTH=(0.5439*R4 - 2R.4)/1.458	21
015CM00451	3133		22
015CM00451	3133	DIR=0.2467 * R5 + 0.3 + DECLINAT	23
015CM00451	3133	TON	24
015CM00451	3133	SPEED=(2.8*R6)/SAMPLING INTERVAL	25
015CM00451	3133	+ 1.5	26
015CM00451	3133		27
015CM00451	3133		28
015CM00451	3133	NOTE--	29
015CM00451	3133		30
015CM00451	3133	CONDUCTIVITY FIELD IN DETAIL R	31
015CM00451	3133	CORD CONTAINS	32
015CM00451	3133	SALINITY IN PARTS/THOUSAND.	33
015CM00451	3133	THE CONVERSION	34
015CM00451	3133	EQUATIONS USED WERE INCLUDED	35
015CM00451	3133	AS PART OF THE DDF.	36
015CM00451	3133		37
015CM00451	3133		38
015CM00452	3133	595819N1474859W 240 200 101 25MS-B 6954	39
015CM00453	3133	78 429 010 0 1682 2778 5256 20063271	1
015CM00453	3133	78 429 040 0 1401 2553 5256 20093271	2
015CM00453	3133	78 429 110 0 1493 2246 5232 20093273	3
015CM00453	3133	78 429 140 0 990 2061 5232 20093273	4
015CM00453	3133	78 429 210 0 657 1807 5232 20133273	5
015CM00453	3133	78 429 240 0 416 1376 5232 20133264	6
015CM00453	3133	78 429 310 0 33 839 5232 20133264	7
015CM00453	3133	78 429 340 0 -192 374 5211 20133267	8
015CM00453	3133	78 429 410 0 -286 -177 5188 20133269	9
015CM00453	3133	78 429 440 0 -443 -566 5211 20133267	10
015CM00453	3133	78 429 510 0 -748 -943 5211 20133267	11

FIRST 50 RECORDS OF METER

END

DATA DOCUMENTATION FORM

TR 4178

NOAA FORM 24-13
(4-77)

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

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

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

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

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

IMS			
RU289		015	
CM0046			
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. <div style="text-align: center; font-size: 2em;">195</div> GENERAL AREA	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input checked="" type="checkbox"/> NO <input 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) <div style="text-align: center; font-size: 2em;">ROYER</div>			

B. SCIENTIFIC CONTENT

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

EXAMPLE (HYPOTHETICAL INFORMATION)

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

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

B. SCIENTIFIC CONTENT

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

B. SCIENTIFIC CONTENT

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

C. DATA FORMAT

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

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

C. DATA FORMAT

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

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

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____
ADDRESS _____

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 type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input 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>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>13. LENGTH OF BYTES IN BITS</p> <p style="font-size: 2em; text-align: center;">120/4800/NL</p>

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
METHOD OF IDENTIFYING EACH RECORD TYPE

USER TAPE

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER

ADDRESS

D 752. NOAA/EDIS/NODC - 202-634 7505
WASHINGTON, DC. 20235

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

4. RECORDING MODE

BCD BINARY

ASCII EBCDIC

5. NUMBER OF TRACKS (CHANNELS)

SEVEN

NINE

7. PARITY

ODD

EVEN

8. DENSITY

200 BPI 1600 BPI

556 BPI

800 BPI

9. LENGTH OF INTER-RECORD GAP (IF KNOWN) 3/4 INCH

10. END OF FILE MARK

OCTAL 17

11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)

011139 (1, 5L)

DSN = TR 4178

12. PHYSICAL BLOCK LENGTH IN BYTES

4800

13. LENGTH OF BYTES IN BITS

60

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
INSTITUTION	TWO-CHARACTER NODC INSTITUTION CODE - USE CODE 0218	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	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
CONDUCTIVITY	XXXX - MMHOS 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	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	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 HUNDREDTHS	50
SEQUENCE NUMBER	XXXXXX - USED FOR SORTING DATA RECORDS	55

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

D. INSTRUMENT CALIBRATION

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

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

1. ACCESSION NUMBER 79-0207	NOAA FORM 44-9 (10-72) TR4178	U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NODC INDEX FORM FOR INSTRUMENT-MEASURED SUBSURFACE CURRENT OBSERVATIONS (NIMSCO)	FORM APPROVED O.M.B. NO. 41-R2689 EXPIRES - AUGUST 1977
C40046	FILE NAME: IMCURFIL		

PART I

2. NAME OF INSTITUTION HOLDING DATA INSTITUTE OF MARINE SCIENCE, UNIV OF AK	CODE	3. ARCHIVE REF. NO.	4. PLATFORM NAME OR DESIGNATOR	CODE	5. CRUISE OR SURVEY PERIOD
6. COUNTRY OF INSTITUTION HOLDING DATA USA	CODE	*7. PLATFORM TYPE (Check one)		OTHER (Specify)	
8. NAME OF PERSON TO CONTACT FOR FULL DATA PROCESSING INFO. Cydney Hansen, Inst. of Marine Science		SHIP BUOY AIRCRAFT		YEAR MO. DAY	
8A. ADDRESS - STREET OR POST OFFICE BOX NUMBER University of Alaska		<input type="checkbox"/> DRIFTING <input checked="" type="checkbox"/> MOORED <input type="checkbox"/> WINGED <input type="checkbox"/> ANCHORED <input type="checkbox"/> DRIFTING <input type="checkbox"/> HELICOPTER <input type="checkbox"/> UNDERWAY <input type="checkbox"/> ICE ISLAND <input type="checkbox"/> FIXED STRUCTURES		5A. BE-GINNING 19 78 4 24	
CITY Fairbanks		STATE Alaska		ZIP CODE/COUNTRY 99701/USA	
8B. TELEPHONE		9. PROJECT OR EXPEDITION DESIGNATOR		5B. ENDING 19 78 9 21	
AREA CODE 907		NUMBER 479-7836		GASS (OCSEAP)	
When applicable, record the international cooperative project or expedition designator of which survey was a part. Examples: IGOSS, CICAR, CIM, CINECA, etc. If survey was primarily a national or local cooperative endeavor, enter project or expedition designator assigned.					

PART II

10. INSTRUMENT USED TO COLLECT DATA Aanderaa Meters	10A. MODEL NO. RCM4	CODE	*12. OBSERVATION TYPE (Check one)	OTHER (Specify)	14. USABLE RECORDS			
*11. INSTRUMENT TYPE (Check one)		OTHER (Specify)		CODE		YEAR MONTH DAY		
<input checked="" type="checkbox"/> CURRENT METER <input type="checkbox"/> NEUT. BUOY. FLOAT <input type="checkbox"/> DROGUE <input type="checkbox"/> FREE-FALL DEVICE		<input type="checkbox"/> ONE INSTANTANEOUS RECORD <input type="checkbox"/> AVERAGE OF SEVERAL INSTANTANEOUS RECORDS <input type="checkbox"/> ANALOG RECORD				14A. BEGINNING DATE 19 78 4 29		
15. TEN-DEGREE SQUARE, SUBSQUARES			13. ARE DATA PROCESSED?		13A. IF NO, WHEN PLANNED?		14B. ENDING DATE 19 78 9 20	
15A. 10° 15B. 5° 15C. 1"			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		MONTH YEAR		17. LOCATION OF CURRENT MET. OBSERVS.	
18. OBSERVATION DEPTH (Meters) - Record depth at which observations were taken in "From" space. If the observation series represents a depth range (such as obtained with free-fall devices or neutral buoyancy floats) enter shallower depth in "From" space and deeper depth in "To" space.			16. ARE DATA EDITED? (Check one)		17A. BE-GINNING LATITUDE		DEGREES MIN. SEC. HEM. (Circle approp.)	
18A. FROM			<input type="checkbox"/> YES <input type="checkbox"/> NO		59 58 4		NORTHERN SOUTHERN	
18B. AT 225M			*19. DATA STORAGE MEDIUM (Check one)		17B. BE-GINNING LONGITUDE		147 48 8	
19A. FROM			<input type="checkbox"/> PUNCHED CARDS <input checked="" type="checkbox"/> MAG. TAPE <input type="checkbox"/> ANALOG RECORD <input type="checkbox"/> PAP. TAPE		147 48 8		EASTERN WESTERN	
20. ANALYSIS PRODUCTS GENERATED (e.g., speed vs direction, speed vs time, progressive vector plots, etc.)					21. ANALYSIS PRODUCTS PLANNED			

PART III (Fill out this section only if no other documentation is forwarded with form)

22. PERTINENT PUBLICATIONS (List publications containing any documentation on instrumentation data reduction and processing, data editing, and analysis relative to the data inventoried.)	24. DATA REDUCTION AND PROCESSING REMARKS (Describe briefly the time interval of individual observations of processed data, storage codes of processed data (BCD, EBCDIC, binary, etc.) and other pertinent processing factors)
23. INSTRUMENTATION REMARKS (Specify any major modifications to manufacturer's original product, major routine manufacturing features, operation failures during data collection, or other comments helpful in data interpretation.) <p style="text-align: center;">NO MODIFICATIONS</p>	26. GENERAL REMARKS (Enter any other comments useful in interpretation and use of data reported)
25. DATA EDIT CRITERIA REMARKS (List criteria applied in editing data to the point of their use for analysis; e.g. constant errors (time or other) applied, depth corrections, interpolations, purging of undesirable frequencies, etc.)	24. DATA REDUCTION AND PROCESSING REMARKS (Describe briefly the time interval of individual observations of processed data, storage codes of processed data (BCD, EBCDIC, binary, etc.) and other pertinent processing factors)

FIRST 50 RECORDS OF METER

015CM00461	3134	METER 3134	1
015CM00461	3134		2
015CM00461	3134		3
015CM00461	3134		4
015CM00461	3134	DATA QUALITY IS EXCELLENT. NO INT	5
015CM00461	3134	ERPOLATED VALUES.	6
015CM00461	3134		7
015CM00461	3134		8
015CM00461	3134	CONVERSION EQUATIONS OBTAINED FROM NRC	9
015CM00461	3134	CALIBRATION	10
015CM00461	3134	INFORMATION DATED JANUARY 1978.	11
015CM00461	3134		12
015CM00461	3134		13
015CM00461	3134		14
015CM00461	3134	TEMP = -2.512 + 2.2983F - 2*R2 - 1.8	15
015CM00461	3134	76F - 6*R2**2 +	16
015CM00461	3134	2.270F - 9*R2**3	17
015CM00461	3134		18
015CM00461	3134	COND = (7.460F - 2*R3 - 0.01)	19
015CM00461	3134		20
015CM00461	3134	DEPTH = (0.5455*R4 - 33.6) / 1.458	21
015CM00461	3134		22
015CM00461	3134	DIR = 0.3468 * R5 + 1.3 + DECLINA	23
015CM00461	3134	TION	24
015CM00461	3134	SPEED = (2.8*R6) / SAMPLING INTERVAL	25
015CM00461	3134	+ 1.5	26
015CM00461	3134		27
015CM00461	3134		28
015CM00461	3134	NOTE--	29
015CM00461	3134		30
015CM00461	3134	CONDUCTIVITY FIELD IN DETAIL R	31
015CM00461	3134	CORD CONTAINS	32
015CM00461	3134	SALINITY IN PARTS/THOUSAND.	33
015CM00461	3134	THE CONVERSION	34
015CM00461	3134	EQUATIONS USED WERE INCLUDED	35
015CM00461	3134	AS PART OF THE DDF.	36
015CM00461	3134		37
015CM00461	3134		38
015CM00462	3134	5819N1474859W 240 225 101 25MS-B 6954	39
015CM00463	3134	478 429 030 0 1617 2676 5264 22273243	1
015CM00463	3134	478 429 1 0 0 1292 2357 5242 22313245	2
015CM00463	3134	478 429 130 0 1072 2104 5242 22353245	3
015CM00463	3134	478 429 2 0 0 436 1930 5242 22383245	4
015CM00463	3134	478 429 230 0 -317 1773 5242 22423245	5
015CM00463	3134	478 429 3 0 0 -357 1479 5242 22423245	6
015CM00463	3134	478 429 330 0 -279 1219 5210 22423239	7
015CM00463	3134	478 429 4 0 0 -592 277 5210 22463239	8
015CM00463	3134	478 429 430 0 -806 99 5210 22463239	9
015CM00463	3134	478 429 5 0 0 -762 -539 5210 22463239	10
015CM00463	3134	478 429 530 0 -669 -1035 5210 22463239	11

FIRST 50 RECORDS OF METER

FOF

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 (✓)	
AANDERAA RCM-4 3135	JANUARY 1978		NRCC	✓					
AANDERAA RCM-4 3131	JANUARY 1978		NRCC	✓					
AANDERAA RCM-4 3132	JANUARY 1978		NRCC	✓					
AANDERAA RCM-4 3133	JANUARY 1978		NRCC	✓					
AANDERAA RCM-4 3134	JANUARY 1978		NRCC	✓					

Data Set "ite Sheet

Accession # 79-0207

Step	Completion Date/Init.	Tape #, # of Files	BLKSIZE,	LRECL
Originator Tape #	6-25-79 <i>JS</i>	ANDY56 1	4800	60
<u>QUADI</u> Duplicate Tape #	7-10-79 <i>JS</i>	012974 1	4800	60
DDF Evaluation				
Quality Review				
Preliminary Data Sort				
Preliminary Check	7-20-79 <i>LES</i>	012974 1	4800	60
First User Tape #	10-02-79 <i>LES</i>	11139 1	4800	60
Final User Tape #				
Final Check	10-02-79 <i>LES</i>	11139 1	4800	60
NAPIS Inventory	10-11-79 <i>LES</i>	11139 1	4800	60
DIP Inventory	10-22-79 <i>LES</i>	11139 1	4800	60
Data Set 'Finalized'				

Data Set Write Sheet

Accession # 79-0207

Step	Completion Date/Init.	Tape #,	# of Files	BLKSIZE,	LRECL
Originator Tape #	6-25-79 JMS	ANDY55	2	4800	60
QUADI Duplicate Tape #	7-10-79 JMS	013117	2	4800	60
DDF Evaluation					
Quality Review	7-16-79 MRL				
Preliminary Data Sort					
Preliminary Check	7-17-79 MRL	013117			
First User Tape #	10-08-79 C88	09414	1	4800	60
Final User Tape #					
Final Check	10-02-79 C98	09414	1	4800	60
NAPIS Inventory	10-11-79 C98	09414	1	4800	60
DIP Inventory	10-02-79 C98	09414	1	4800	60
Data Set 'Finalized'					

*

015-5

8
13
31

#2 043350

ANSI 013397

8730

6491 (C4208)

60/4800, F015

~~11029657~~

4049-4052,

#1 UQ20622

TR 4072-4075, 4174-4178, 4445, 4516-4529, 4814-4816

193,029

~~80,685~~

59,034

series no. 79-0207

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7900207	F015	TR4174	0081	31I7	317F	1978/04/24	CM0042	309505
7900207	F015	TR4175	0081	31I7	317F	1978/04/24	CM0043	309506
7900207	F015	TR4176	0081	31I7	317F	1978/04/24	CM0044	309507
7900207	F015	TR4177	0081	31I7	317F	1978/04/24	CM0045	309508
7900207	F015	TR4178	0081	31I7	317F	1978/04/24	CM0046	309509

(5 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
7900207	F015	TR4174	317F	6	7004	78/04/24	78/09/21
7900207	F015	TR4175	317F	6	6999	78/04/24	78/09/21
7900207	F015	TR4176	317F	6	6993	78/04/24	78/09/21
7900207	F015	TR4177	317F	6	6993	78/04/24	78/09/21
7900207	F015	TR4178	317F	6	6993	78/04/24	78/09/21

(5 rows affected)