ACCESSION NUMBER 78-0311

DDF-13:1:24

DATA DOCUMENTATION FORM

TR2974

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-R20

319143

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

DATA MANAGEMENT
INSTITUTE OF MARINE SCIENCE
UNIVERSITY OF ALASKA
FAIRBANKS, ALASKA 99701

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

OCSEAP

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

AC 248
FGP ID 248IMS

4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)	6. PLATFORM AND OPERATOR NATIONALITY(IES)		7. DATES	
		PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR
ACONA	SHIP	U.S.	U.S.	08/08/77	08/15/77

8. ARE DATA PROPRIETARY?

☒ NO ☐ YES

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

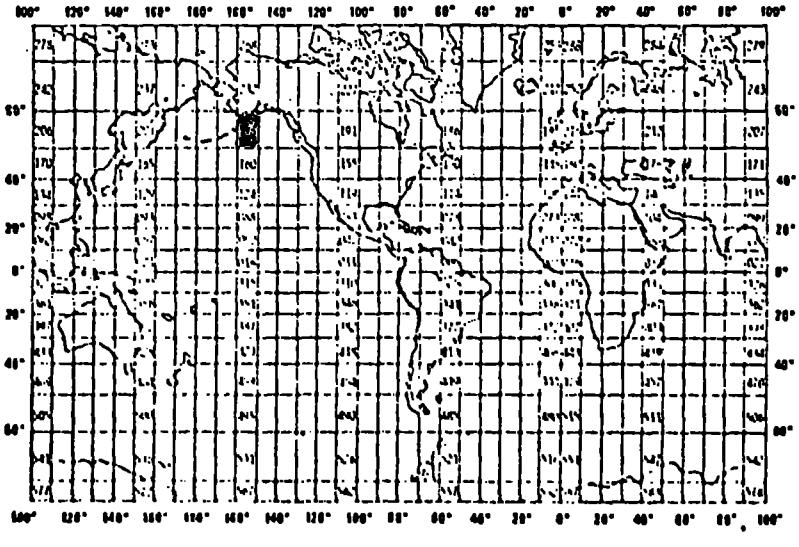
11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.

GENERAL AREA MAR. SQ. 196

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)

DATA PROCESSING
c/o CYDNEY HANSEN
(907) 479-7833
(907) 479-7074

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
SALINITY	0.001‰	NANSEN BOTTLES + PLESSEY STD	SEE ATTACHED DATA PROCESSING PROCEDURE SHEETS	N/A
TEMPERATURE	°C	DSR THERMOMETERS + PLESSEY STD	"	N/A
DEPTH	METERS (1M = 1db)	THERMOMETRIC DEPTH + PLESSEY STD	"	N/A

STDCOPY

Raw, 7-track mag tapes from 8409 or 8314 Plessey Digitizers are input, along with conversion equations specific for each sensor. These equations reflect the latest calibration or factory compliance data. If the FISH contains a conductivity sensor, it is converted to salinity by a relation based on the work of A. S. Bennett. (DSR, Vol. 23, No. 2, February 1976.)

Output of this program is on 9-track tape and includes digitally entered header data and all STD values on the 7-track tape. Output from this program is input for STDAV.

CALVAL

Periods from a frequency counter, taken at the time discrete samples were taken, is input along with raw temperature and conductivity data from the discrete samples. Each set of such data constitute one field correction.

All of the field corrections are listed along with mean values and standard deviations for T and S. Generally, values for T and S are rejected if they fall beyond two standard deviations from the mean.

Subjective judgments as to the quality of the field correction data is made at this time.

Output from this program provides input for STDAV.

STDAV

Data from STDCOPY and CALVAL are input with keypunched header information which includes station position, time and weather.

STDAV checks each parameter to insure it falls within sensor limits. Parameters are grouped into one meter intervals (1m = 1db) and averaged. Field corrections are added to the one meter averages.

STD Scan condition codes are set:

0 - Data processed prior to implementatio code. All values will be labeled 0.

1 - Value obtained from raw data at that depth interval. Processing to obtain this value must be specified in a DDF.

2 - Values are linearly interpolated from adjacent depth intervals.

3 - Values are obtained by "Vertical Extrapolation" from the first depths for which a value is found that falls within sensor limits.

Output includes header information and all corrected data in one meter intervals.

FINAL PRINT-OUT: To include the following, in addition to header and data:

1) Print-out "FISH" serial No. and stations for which it was used if more than one was used.

2) Equations used to convert frequency to parameters for each FISH used.

3) Field corrections used, to include mean and S.D. for each parameter. (If more than one fish was used, this is given for all fish).

4) Indicate how many bottles were used to determine each field correction for each fish used.

5) Other comments pertinent to individual stations or whole cruise.

C. DATA FO[illegible]

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 22

DESIGNATED AS: "1"For Text Record (in 10th Byte position)

"2" for Master Record

"3" for Detail Record

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

FILE 22, STD/CTD: 0 to 99,999 Text Records, followed by

1 Master Record, followed by

0 to 99,999 Detail Records

REPEATS

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, University of Alaska, Fairbanks, AK99701

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE
☐ BCD ☐ BINARY
☐ ASCII ☒ EBCDIC
☐ _____

6. 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
☒ .5 - .6 inch

10. END OF FILE MARK
☐ OCTAL 17
☒ octal 23

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

289 022 248IMS
ACONA 248
STA'S. 1-20 DR. ROYER
08/08/77 - 08/15/77
9 TRK, 800 BPI, EBCDIC, NO LABEL, ODD

12. PHYSICAL BLOCK LENGTH IN BYTES
120 bytes/block

13. LENGTH OF BYTES IN BITS
8 bit bytes

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

USER TAPE

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 D752 - NOAA/EDS/NODC - 2026347505
ADDRESS WASHington, DC 20235

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

5. RECORDING MODE ☐ BCD ☐ BINARY ☐ ASCII ☒ EBCDIC ☐ _____

6. 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)*

001466 (1,5L)

DSN=TR297A

12. PHYSICAL BLOCK LENGTH IN BYTES
4800

13. LENGTH OF BYTES IN BITS
120

RECORD FORMAT DESCRIPTION

RECORD NAME STD RECORD FORMAT DESCRIPTION, FILE TYPE 22

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
FILE TYPE "22" AS DESIGNATED BY GCSEP AND NODC. THERE ARE NO INTENDED DEVIATIONS FROM THIS TYPE.					

RECORD FORMAT DESCRIPTION STD

2.20-16

RECORD NAME TEXT RECORD (OPTIONAL)

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN Bytes (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
File Type	1	3	Bytes	A3	Always '022'
File Identification	4	6	Bytes	A6	
Record Type	10	1	Bytes	I1	Always '1'
Cast Number	11	5	Bytes	A5	Analogous to NODC Station Number
Text	16	100	Bytes	100A1	Additional pertinent information
Sequence Number	116	5	Bytes	I5	Ascending numeric, used for sorting
MASTER RECORD (REQUIRED THRU BYTES 59)					
File Type	1	3	Bytes	A3	Always '022'
File Identification	4	6	Bytes	A6	
Record Type	10	1	Bytes	I1	Always '2'
Cast Number	11	5	Bytes	A5	Analogous to NODC Station Number
Latitude					
Degrees	16	2	Bytes	I2	
Minutes	18	2	Bytes	I2	
Hundredths of Minutes	20	2	Bytes	I2	
[redacted]isphere	22	1	Bytes	A1	'N' or 'S'
L[redacted]ude					
Degrees	23	3	Bytes	I3	
Minutes	26	2	Bytes	I2	
Hundredths of Minutes	28	2	Bytes	I2	
Hemisphere	30	1	Bytes	A1	'E' or 'W'
Cruise Identification	31	10	Bytes	10A1	Originator Cruise Identification
Number of Scans	41	5	Bytes	I5	Number of scans in a 'station' (There are five scans per record type '3')
Year	46	2	Bytes	I2	Last two digits of year } GMT
Month	48	2	Bytes	I2	1-12 } GMT
Day	50	2	Bytes	I2	1-31 } GMT
Hour	52	2	Bytes	I2	0-23 } GMT
Minutes	54	2	Bytes	I2	0-59 } GMT
Depth Interval Indicator	56	1	Bytes	I1	'0' equals unequally spaced depths '1' equals equal spaced depths
Depth Interval	57	3	Bytes	I3	When above equals '1', the depth interval, to tenths of meters reported.
Barometric pressure	60	5	Bytes	I5	Millibars to tenths .

RECORD FORMAT DESCRIPTION STD

RECORD NAME MASTER RECORD CONTINUED

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN Bytes (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
Wet bulb temperature	65	4	Bytes	I4	Degrees C to tenths
Dry bulb temperature	69	4	Bytes	I4	Degrees C to tenths
Wind direction	73	2	Bytes	I2	Tens of degrees WMO Codes 0855 and 0877
Wind speed	75	2	Bytes	I2	Whole knots
Weather Code	77	1	Bytes	I1	WMO 4501
Sea State Code	78	1	Bytes	I1	WMO 3700
Visibility Code	79	1	Bytes	I1	WMO 4300
Cloud Type Code	80	1	Bytes	A1	WMO 0500
Cloud Amount Code	81	1	Bytes	I1	WMO 2700
Instrument Information	82	20	Bytes	20A1	Type and Serial Number
Location Name	102	6	Bytes	A6	OCSEP Internal Location Code
Depth to bottom	108	5	Bytes	I5	To whole meters
Maximum depth of cast	113	4	Bytes	I4	To whole meters
Blank	117	4	Bytes	4X	
	DETAIL RECORD (REQUIRED)				
[illegible]e Type	1	3	Bytes	A3	Always '022'
[illegible]ile Identification	4	6	Bytes	A6	
Record Type	10	1	Bytes	I1	Always '3'
Cast Number	11	5	Bytes	A5	Analogous to NODC Station Number
Depth	16	5	Bytes	I5	Meters to tenths
Temperature	21	5	Bytes	I5	Degrees C to thousandths } SCAN
Salinity	26	5	Bytes	I5	P.P.T. to thousandths } DATA
Sigma-t	31	4	Bytes	I4	To hundredths
Scan Condition Code	35	1	Bytes	A1	Code describing how data arrived at
SCAN DATA	36	4(20)	Bytes	4(3I5,I4,A1)	Repetition of above
Sequence Number	116	5	Bytes	I5	Ascending numeric, used for sorting

Blanks are used when significance of field indicated exceeds what is measured.

RECORD FORMAT DESCRIPTION STD

2-20-70

RECORD NAME MASTER RECORD CONTINUED

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN Bytes (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
Wet bulb temperature	65	4	Bytes	I4	Degrees C to tenths
Dry bulb temperature	69	4	Bytes	I4	Degrees C to tenths
Wind direction	73	2	Bytes	I2	Tens of degrees WMO Codes 0855 and 0877
Wind speed	75	2	Bytes	I2	Whole knots
Weather Code	77	1	Bytes	I1	WMO 4501
Sea State Code	78	1	Bytes	I1	WMO 3700
Visibility Code	79	1	Bytes	I1	WMO 4300
Cloud Type Code	80	1	Bytes	A1	WMO 0500
Cloud Amount Code	81	1	Bytes	I1	WMO 2700
Instrument Information	82	20	Bytes	20A1	Type and Serial Number
Location Name	102	6	Bytes	A6	OCSEP Internal Location Code
Depth to bottom	108	5	Bytes	I5	To whole meters
Maximum depth of cast	113	4	Bytes	I4	To whole meters
Blank	117	4	Bytes	4X	
	DETAIL RECORD (REQUIRED)				
File Type	1	3	Bytes	A3	Always '022'
File Identification	4	6	Bytes	A6	
Record Type	10	1	Bytes	I1	Always '3'
Cast Number	11	5	Bytes	A5	Analogous to NODC Station Number
Depth	16	5	Bytes	I5	Meters to tenths
Temperature	21	5	Bytes	I5	Degrees C to thousandths } SCAN
Salinity	26	5	Bytes	I5	P.P.T. to thousandths } DATA
Sigma-t	31	4	Bytes	I4	To hundredths
Scan Condition Code	35	1	Bytes	A1	Code describing how data arrived at
SCAN DATA	36	4(20)	Bytes	4(3I5,I4,A1)	Repetition of above
Sequence Number	116	5	Bytes	I5	Ascending numeric, used for sorting

Blanks are used when significance of field indicated exceeds what is measured.

022248IMS1 1THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED 1
022248[illegible] 1ABOARD THE DISCOVERER BETWEEN 08/08/77 AND 08/15/[illegible]Y DR ROYER 2
022248[illegible] 1OF THE INSTITUE OF MARINE OF SCIENCE. 3
022248[illegible] 1 4
022248[illegible] 1CTD MODEL 9040. SERIAL NUMBER 5341 WAS USED. EQU[illegible]S USED TO GENERATE. 5
022248IMS1 1PARAMETERS FROM FREQUENCY FOLLOW: 6
022248IMS1 1 D=(C-9711.856D0) * .9502194D0 7
022248IMS1 1 T=(T-2124.918D0) * 1.78901D-2 -2.0D0 8
022248IMS1 1 S=(S-5027.57D0) * 3.4456D-3 + 26.0D0 9
022248IMS1 1FIELD CORRECTION FOR THIS CRUISE WAS TAKEN FROM ACONA CRUISE AC248. 10
022248IMS1 1 11
022248IMS1 1FIELD CORRECTION FOR THE CTD DATA WAS DERIVED BY COMPARING SINGLE BOTTLE SAMPLES 12
022248IMS1 1TO RECORDED PERIODS FROM THE CTD SENSORS. THE FIELD CORRECTION IS BASED ON 10 13
022248IMS1 1SAMPLES FROM A TOTAL OF 20 STATIONS. THE FIELD CORRECTION IS: 14
022248IMS1 1 TEMPERATURE MEAN(NANSEN-STD) IS 0.00517 15
022248IMS1 1 STANDARD DEVIATION OF DIFFS(NANSEN-STD) IS 0.01413 16
022248IMS1 1 SALINITY MEAN(NANSEN-STD) IS 0.32377 17
022248IMS1 1 STANDARD DEVIATION OF DIFFS(NANSEN-STD) IS 0.00656 18
022248IMS2 159547ON1492440W248 24077 810 4251 1010077 128 129 0 0635 CTD MODEL9040 SN5341RES004 264 249

022248IMS3	1	0133872631619661	10133872631619661	20134882673419961	30133082698620191	40131042735620511	1
022248IMS3	1	50125492748920641	60128562777420882	70127622805821122	80126682834321352	90125742862721591	2
022248IMS3	1	100124812878021721	110125182901121901	120125642902621901	130124992908921962	140124342915222022	3
022248IMS3	1	150123682921522082	160123032927822141	170122922932622181	180122722936622221	190122582938422231	4
022248IMS3	1	200122482939322241	210122402941422262	220122322943422282	230122252945522292	240122172947622312	5
022248IMS3	1	250122092949722331	260122002951022341	270121982951522341	280121852953622361	290121772957722401	6
022248IMS3	1	300121602960922421	310121512964222451	320121522966222481	330120552977922572	340119582987622672	7
022248IMS3	1	350115612997322762	360117443007022851	370116533022522991	380115603028823061	390113653027423081	8
022248IMS3	1	400111343025123101	410108783036923242	420106223048623372	430103663060423512	440101103072123641	9
022248IMS3	1	450100093066923621	460 98703071323671	470 97253065723651	480 95383066723691	490 93533072823772	10
022248IMS3	1	500 91683079023842	510 89823085123922	520 87983091224001	530 86783084723961	540 85203082123971	11
022248IMS3	1	550 79513052923621	560 75463076124061	570 72983087724182	580 70513099224302	590 68043110824432	12
022248IMS3	1	600 65563122324551	610 64613128624611	620 63083114524521	630 60873126024631	640 59633137724741	13
022248IMS3	1	650 60993147424802	660 62363157124862	670 63723166824922	680 65093176524981	690 64733165524901	14
022248IMS3	1	700 63613177425001	710 64043175824991	720 63923177025002	730 63813178225012	740 63693179525022	15
022248IMS3	1	750 63503180725032	760 63463181925042	770 63353183125052	780 63233184325062	790 63123185525071	16
022248IMS3	1	800 63523184925071	810 64103186725071	820 64613188225061	830 64613187025072	840 64613187725072	17
022248IMS3	1	850 64613188525082	860 64613189325092	870 64613190025091	880 64683190125091	890 64603192325111	18
022248IMS3	1	900 64653199125161	910 64673201125182	920 64693203025192	930 64723205025211	940 64643204225201	19
022248IMS3	1	950 64323203225201	960 63863208425251	970 63573209325261	980 63443209525261	990 63403209925262	20
022248IMS3	1	1000 63363210325272	1010 63223210725272	1020 63273211125271	1030 63233211025271	1040 63113211925281	21
022248IMS3	1	1050 63093214825311	1060 63173215225311	1070 63173217425322	1080 63163219525342	1090 63163221625362	22
022248IMS3	1	1100 63163223725371	1110 63233222525361	1120 63043221225361	1130 62903224625391	1140 62723222525371	23
022248IMS3	1	1150 62293224125391	1160 62033228225421	1170 61953230625441	1180 62043231225451	1190 62053231525451	24
022248IMS3	1	1200 62043232325461	1210 62003234825481	1220 61783239225511	1230 61513241525541	1240 61353242825551	25
022248IMS3	1	1250 61293243525551	1260 61283243225551	1270 61273243225551	1280 61263243525551	1290 61223243425551	26
022248IMS3	1	1300 61243243825561	1310 61213244025561	1320 61193244125561	1330 61123245125572	1340 61053246025582	27
022248IMS3	1	1350 60993247025592	1360 60923247925591	1370 60823247925591	1380 60743249125601	1390 60633250125611	28
022248IMS3	1	1400 60583250725621	1410 60423252225632	1420 60263253725652	1430 60103255325662	1440 59943256825682	29
022248IMS3	1	1450 59783258325692	1460 59623259925702	1470 59463261425722	1480 59303262925732	1490 59143264525752	30
022248IMS3	1	1500 58983266025762	1510 58823267525771	1520 58733267325771	1530 58713267925781	1540 58653269425791	31
022248IMS3	1	1550 58623269125791	1560 58573269425792	1570 58523269825792	1580 58473270125802	1590 58423270425801	32
022248IMS3	1	1600 58353271025811	1610 58293272325821	1620 58153273025821	1630 58123273725831	1640 57963275125842	33
022248IMS3	1	1650 57813276525862	1660 57663278025872	1670 57513279425882	1680 57363280825902	1690 57213282225912	34
022248IMS3	1	1700 57063283625922	1710 56913285125932	1720 56753286525952	1730 56603287925962	1740 56453289325972	35
022248IMS3	1	1750 56303290725992	1760 56153292226002	1770 56003293626012	1780 55853295026031	1790 55783295226031	36
022248IMS3	1	1800 55653297526051	1810 55523298626061	1820 55483299726071	1830 55413300726082	1840 55333301626082	37
022248IMS3	1	1850 55263302626092	1860 55183303526101	1870 55133304426111	1880 55093304126111	1890 55043305326121	38
022248IMS3	1	1900 54983306626131	1910 54883307426132	1920 54773308226142	1930 54673309026151	1940 54603309426151	39
022248IMS3	1	1950 54573310226161	1960 54513310326161	1970 54483305926161	1980 54383310826171	1990 54313311026171	40
022248IMS3	1	2000 54293311526171	2010 54273311826181	2020 54213312226181	2030 54173312726181	2040 54183313426191	41

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* * ***** **** * ****

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 (√)	BEFORE OR AFTER USE (√)	BEFORE AND AFTER USE (√)	ONLY AFTER REPAIR (√)	ONLY WHEN NEW (√)	(√)
CTD MODEL 9040 PLESSEY	7/76		NRCC	1 YR.					

TR 0311

NANSEN REF. #

319143

MULDARS TRACK #

TR2974

MONITOR: CONTACT

J. Frank

LOCATION OF F022 SOURCE

Archives (TR2974)

RECORD ALL ERRORS FOUND

CONSEC(S)

ERRORS FOUND

None

Parameter quality indicators were applied to 2 stations

```
C22TR29741   12THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29741   13THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29741   14THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29741   15THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29742   1559  30N1512650W248          82777 81510451 1010163 105 11019 714   CTD MODEL9040 SN5341KISS32  137 126
             ??
ILLEGAL BLANK FIELD-LAT MIN
**********************************************************************************************************
C22TR29741   16THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29741   17THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29741   18THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29741   19THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
**********************************************************************************************************
C22TR29741   20THE INSTITUTE OF MARINE SCIENCE IS RESPONSIBLE FOR THIS DATA WHICH WAS COLLECTED                    1
        ?????
STATION NUMBER HAS CHANGED WITHOUT A MASTER
THE FIELDS BELOW WERE CHECKED AS FOLLOWS(S=SIGN/B=BLANK/T=TAXONOMIC CODE/N=NUMERICS/M=MANDATORY NUMERIC
```

TYPE	REC	POS	LENGTH	NAME	RANGE TESTED LOW	RANGE TESTED HIGH	ACTUAL RANGE LOWEST	ACTUAL RANGE HIGHEST	MEAN	S. DEV	COUNT
C	2	30	1	LON HEM	W	W					
M	2	16	2	LAT DEG	40	89	57	59	58.14	1.17	20
M	2	18	2	LAT MIN	00	59	1	54	32.10	18.91	19
N	2	20	2	LAT MIN 1/100	00	99	0	80	26.94	29.02	20
C	2	22	1	LAT HEM	N	N					
M	2	23	3	LON DEG	50	179	149	152	150.34	1.88	20
M	2	26	2	LON MIN	00	59	0	47	28.04	12.91	20
N	2	28	2	LON MIN 1/100	00	99	0	80	25.00	28.72	20
N	2	41	5	NUM. OF SCANS	NO RANGE CHECKING		42	253	129.19	57.17	20
M	2	46	2	OBS YR	74	80	77	77	77.00	00	20
M	2	48	2	OBS MON	01	12	8	8	8.00	00	20
M	2	50	2	OBS DAY	01	31	10	16	13.59	1.87	20
M	2	52	2	OBS HR	00	23	1	23	9.79	7.35	20
N	2	54	2	OBS MIN	00	59	1	50	32.44	14.42	20
N	2	56	1	DEPTH INTERVAL INDIC	0	1	1	1	1.00	00	20
N	2	57	3	DEPTH INTVL.	00	99	10	10	10.00	00	20
N	2	60	4	BAROMETRIC PRESSURE	0944	1050	1007	1022	1017.75	3.56	20

N	2	65	4	WET-BULB TEMPERATURE	-300	0400	101	128	115.59	7.83	20
N	2	69	4	DRY-BULB TEMPERATURE	-300	0400	106	135	118.79	8.47	20
N	2	73	2	WIND DIRECTION	00	36	0	20	12.29	6.97	20
N	2	75	2	WIND SPEED	00	70	0	27	11.59	8.16	20
N	2	77	1	WEATHER	NO RANGE CHECKING		1	6	2.25	1.37	20
N	2	78	1	SEA STATE	NO RANGE CHECKING		3	5	4.00	44	20
N	2	79	1	VISIBILITY	NO RANGE CHECKING		5	7	6.00	35	16
N	2	81	1	CLOUD AMOUNT	NO RANGE CHECKING		4	8	7.00	1.47	12
N	2	108	5	BOTTOM DEPTH	00000	11000	68	265	147.44	51.70	20
N	3	16	4	DEPTH1	0000	6000	5	250	78.29	54.61	304
N	3	20	1	DEPTH1 1/1000	0	9	0	0	00	00	524
N	3	36	4	DEPTH2	0001	6000	1	251	75.92	55.56	520
N	3	40	1	DEPTH2 1/1000	0	9	0	0	00	00	520
N	3	56	4	DEPTH3	0002	6000	2	252	76.73	55.73	514
N	3	60	1	DEPTH3 1/1000	0	9	0	0	00	00	514
N	3	76	4	DEPTH4	0003	6000	3	248	77.39	55.24	513
N	3	80	1	DEPTH4 1/1000	0	9	0	0	00	00	513
N	3	96	4	DEPTH5	0004	6000	4	249	78.39	55.24	513
N	3	100	1	DEPTH5 1/1000	0	9	0	0	00	00	513
N	3	21	4	TEMPER1	-200	2000	527	1938	756.02	214.19	524
N	3	25	1	TEMPER1 1/1000	0	9	0	9	4.52	2.82	524
N	3	41	4	TEMPER2	-200	2000	524	1338	753.73	212.04	520
N	3	45	1	TEMPER2 1/1000	0	9	0	9	4.50	2.88	520
N	3	61	4	TEMPER3	-200	2000	522	1348	750.60	210.84	514
N	3	65	1	TEMPER3 1/1000	0	9	0	9	4.29	2.81	514
N	3	81	4	TEMPER4	-200	2000	521	1330	747.43	208.66	513
N	3	85	1	TEMPER4 1/1000	0	9	0	9	4.44	2.87	513
N	3	101	4	TEMPER5	-200	2000	521	1310	743.28	206.26	513
N	3	105	1	TEMPER5 1/1000	0	9	0	9	4.32	2.94	513
N	3	26	4	SALINITY1	1000	3650	2631	3330	3224.94	84.40	524
N	3	46	4	SALINITY2	1000	3650	2631	3329	3225.54	83.02	520
N	3	66	4	SALINITY3	1000	3650	2673	3330	3226.69	81.22	514
N	3	86	4	SALINITY4	1000	3650	2695	3329	3227.52	79.53	513
N	3	106	4	SALINITY5	1000	3650	2707	3329	3228.68	78.02	513
N	3	31	4	SIGMA-T1	0315	3000	1966	2634	2520.12	92.35	524
N	3	51	4	SIGMA-T2	0315	3000	1966	2633	2520.96	90.80	520
N	3	71	4	SIGMA-T3	0315	3000	1996	2634	2522.28	89.65	514
N	3	91	4	SIGMA-T4	0315	3000	2019	2634	2523.48	88.24	513
N	3	111	4	SIGMA-T5	0315	3000	2036	2634	2524.98	86.49	513
N	3	35	1	SCANCON1	NO RANGE CHECKING		1	3	1.39	53	524
N	3	55	1	SCANCON2	NO RANGE CHECKING		1	3	1.42	52	520
N	3	75	1	SCANCON3	NO RANGE CHECKING		1	3	1.42	52	514
N	3	95	1	SCANCON4	NO RANGE CHECKING		1	3	1.41	51	513
N	3	115	1	SCANCON5	NO RANGE CHECKING		1	2	1.41	49	513
N	4	16	5	DEPTH6	00005	60000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	36	5	DEPTH7	00006	60000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	56	5	DEPTH8	00007	60000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	76	5	DEPTH9	00008	60000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	96	5	DEPTH10	00009	60000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	21	5	DISSOLVOXYGEN1	00000	15000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	41	5	DISSOLVOXYGEN2	00000	15000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	61	5	DISSOLVOXYGEN3	00000	15000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	81	5	DISSOLVOXYGEN4	00000	15000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	101	5	DISSOLVOXYGEN5	00000	15000	NO VALUES FOUND FOR THIS PARAMETER				
N	4	35	1	SCANCON6	NO RANGE CHECKING		NO VALUES FOUND FOR THIS PARAMETER				
N	4	55	1	SCANCON7	NO RANGE CHECKING		NO VALUES FOUND FOR THIS PARAMETER				
N	4	74	1	SCANCON8	NO RANGE CHECKING		NO VALUES FOUND FOR THIS PARAMETER				
N	4	95	1	SCANCON9	NO RANGE CHECKING		NO VALUES FOUND FOR THIS PARAMETER				
N	4	115	1	SCANCON10	NO RANGE CHECKING		NO VALUES FOUND FOR THIS PARAMETER				
N	4	26	5	TRANSMISSIVITY1	00000	99000	NO VALUES FOUND FOR THIS PARAMETER				

N	4	46	5	TRANSMISSIVITY2	00000	99000	NO VALUES FOUND FOR THIS PARAMETER	
N	4	66	5	TRANSMISSIVITY3	00000	99000	NO VALUES FOUND FOR THIS PARAMETER	
N	4	86	5	TRANSMISSIVITY4	00000	99000	NO VALUES FOUND FOR THIS PARAMETER	
N	4	106	5	TRANSMISSIVITY5	00000	99000	NO VALUES FOUND FOR THIS PARAMETER	
B	4	31	4					0
B	4	51	4					0
B	4	71	4					0
B	4	91	4					0
B	4	111	4					0

RECORDS READ : 904

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Password:
 accNo   fleA refNo  proj inst ship    startDate  cruise   catId
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 7800311 F022 TR2974 0081 31C1 31AC    1977/08/10 248IMS       306814
 7800311 C022 319143 0081 31C1 31AC    1977/08/10 TR2974       306815

(2 rows affected)
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Password:
 accNo   fleA refNo  ship staCnt recCnt startDate  endDate
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 7800311 F022 TR2974 31AC 20     904    77/08/10   77/08/16
 7800311 C022 319143 31AC 20     20     77/08/10   77/08/16

(2 rows affected)
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