

DDF B: 3

13

## DATA DOCUMENTATION FORM

TR1431

NOAA FORM 24-13  
(4-72)

NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION  
RECORDS SECTION  
KIVILLE, MAR

ION

FORM APPROVED  
O.M.B. No. 41-R265

F004

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

## 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

Hopkins Marine Station of Stanford University  
Pacific Grove, Calif. 93950

2. EXPEDITION, PROJECT, OR PROGRAM  
DATA WERE COLLECT

CRUISE NUM

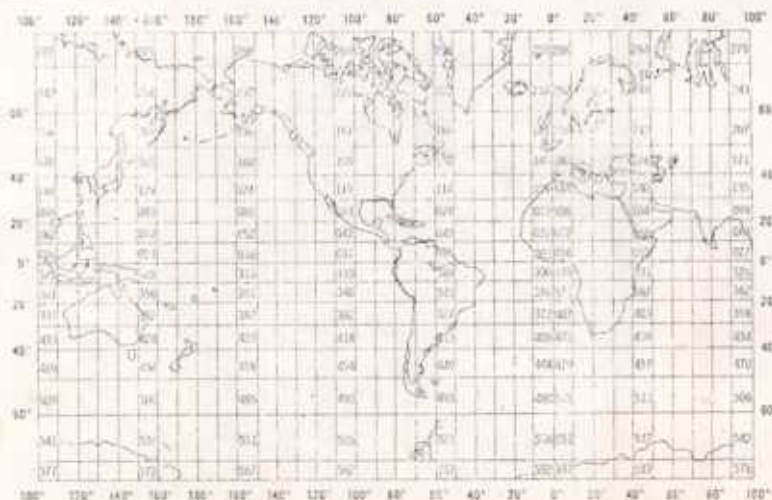
ER(S) USED BY ORIGINATOR TO IDENTIFY  
SHIPMENTCalCOFI  
Annual Report 1969

4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)	6. PLATFORM AND OPERATOR NATIONALITY(IES)		7. DATES	
TAGE	Ship	PLATFORM	OPERATOR	FROM: MO, DAY, YR	TO: MO, DAY, YR
		U.S.	U.S.	05/08/69	12/10/69

8. ARE DATA PROPRIETARY?

XX NO ☐ YESIF YES, WHEN CAN THEY BE RELEASED  
FOR GENERAL USE? YEAR MONTH9. ARE DATA DECLARED NATIONAL  
PROGRAM (DNPI)?(I.E., SHOULD THEY BE INCLUDED IN WORLD  
DATA CENTERS HOLDINGS FOR INTERNATIONAL  
EXCHANGE?)XX 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)11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA  
CONTAINED IN YOUR SUBMISSION WERE COLLECTED.

GENERAL AREA



# B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
Temperature	° Centigrade	Reversing Thermometers		
Salinity	°/oo	Nansen Bottles		
Sigma - t		Computed		
Oxygen	ml/l	Nansen Bottles		

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

FILE HEADER RECORD - "1" in col. 10  
FIRST STATION HEADER RECORD - "2" in col. 10  
SECOND STATION HEADER RECORD - "3" in col. 10  
DATA RECORDS - "4" in col. 10

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>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input checked="" type="checkbox"/> 3/4 INCH</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17</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>Data on tape is in card image</p> <p>dcb = (recfm+fb,lrecl*80,blksize=3200)</p> <p>DSN = AC710605,vol=ser=005571</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>9 Track tape;Standard Label.</p> <p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>3200</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

# RECORD FORMAT DESCRIPTION

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004") 1/5

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH in bytes NUMBER	17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
<u>File Header Record</u>				
File Type	1	3	A3	"004" (constant)
Track Number	4	6	6A1	NODC (in-house) Identifier
Record Type	10	1	A1	"1" (File Header Record)
Vessel	11	11	11A1	(left aligned)
Cruise	22	6	6A1	Originator's Cruise Identifier
Cruise Dates	28	17	5(I2,A1) I2	XX/XX/XX-XX/XX/XX Beginning Month, Day, Year; Ending Month, Day, Year
Senior Scientist	45	19	19A1	(left aligned)
Investigator	64	17	17A1	Responsible Institution (left aligned)



# RECORD FORMAT DESCRIPTION

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004")

2 / 5

14. FIELD NAME	15. POSITION FROM +1 MEASURED IN (e.g., bits, bytes)	16. LENGTH in bytes		17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
		NUMBER			
<u>First Station Header Record</u>					
File Type	1	3	A3		"004" (constant)
Track Number	4	6	6A1		NODC (in-house) Identifier
Record Type	10	1	A1		"2" (First Station Header Record)
Sequence	11	3	I2		Sequence of this record type within station. (Leading zeros or leading blanks.)
Station	14	5	5A1		Station Identifier
Latitude	19	6	3I2		Degrees, Minutes, Seconds
Lat hem	25	1	A1		Hemisphere "N" or "S"
Longitude	26	7	I3, 2I2		Degrees, Minutes, Seconds
Lon hem	33	1	A1		Hemisphere "W" or "E"
Time	34	3	I3		GMT in hour to tenths
Date	37	8	2(I2,A1), I2		XX/XX/XX Station Date; Month, Day, Year
Bottom	45	5	I5		Water Depth, meters to tenths
Navigation	50	2	I2		(See attached codes)
Method	52	1	I1		(See attached codes)
Blank	53	28	28X		Blank

# RECORD FORMAT DESCRIPTION

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004")

3 / 5

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH in bytes NUMBER	17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
<u>Second Station Header Record</u>				
File Type	1	3	A3	"004" (constant)
Track Number	4	6	6A1	NODC (in-house) Identifier
Record Type	10	1	A1	"3" (Second Station Header Record)
Sequence	11	3	I3	Sequence of this record type within station. (Leading zeros or leading blanks.)
Station	14	5	5A1	Station Identifier
Barometer	19	3	I3	Pressure in millibars to tenths
Dry Bulb	22	4	I4	Air temperature; degrees Celsius to tenths
Wet Bulb	26	4	I4	Air temperature; degrees Celsius to tenths
Wind Direction	30	2	I2	WMO code 0877; tens of degrees
Wind Speed	32	2	I2	Knots
Sea Direction	34	2	I2	WMO code 0885; tens of degrees
Sea Height	36	1	A1	WMO code 1555
Swell Direction	37	2	I2	WMO code 0885
Swell Height	39	1	A1	WMO code 1555
Weather	40	1	I1	WMO code 4501
Cloud Type	41	1	A1	WMO code 0500
Cloud Cover	42	1	I1	WMO code 2700
Visibility	43	1	I1	WMO code 4300
Transparency	44	4	I4	Secchi Disk Depth; meters to tenths
Turbidity Code	48	1	I1	(See attached codes)
Blank	49	37	37X	Blank

# RECORD FORMAT DESCRIPTION

FILE NAME: WATER PHYSICS and CHEMISTRY

file type "004"

4 / 5

14. FIELD NAME	15. POSITION FROM -1 MEASURED IN (e.g., bits, bytes)	16. LENGTH in bytes		17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
		NUMBER			
<u>Data Record</u>					
File Type	1	3	A3		"004" (constant)
Track Number	4	6	6A1		NODC (in-house) Identifier
Record Type	10		A1		"4" (Data Record)
Sequence	11	3	I3		Sequence of this record type within station. (Leading zeros or leading blanks.)
Station	14		5A1		Station Identifier
Depth	19	4	I4		Sample Depth; to tenths
Temperature	23	5	I5		Water Temp.; degrees Celsius to thousandths
Salinity	28		I5		Salinity; parts per thousand to thousandths
Sigma-T	33	4	I4		Sigma-t to hundredths
Transmissivity	37		I		Transmissivity; percent to tenths
pH	40		I3		pH to hundredths
eH	43	4	I4		eH to hundredths
Oxygen	47	4	I4		Dissolved; hundredths to ml./liter
Ammonia	51	3	I3		Tenths of microgram (ug)-atoms/liter
Nitrite	54	3	I3		Hundredths of ug-atoms/liter
Nitrate	57	4	I4		Hundredths of ug-atoms/liter
Silicate	61	4	I4		Hundredths of ug-atoms/liter
Phosphate	65		I3		Inorganic; hundredths of ug-atoms/liter
Solids	68	4	I4		Suspended solids in hundredths of mg./liter

# RECORD FORMAT DESCRIPTION

FILE NAME: WATER PHYSICS and CHEMISTRY (File Type "004")

5 / 5

14. FIELD NAME	15. POSITION FROM +1 MEASURED IN (e.g., bits, bytes)	16. LENGTH in bytes NUMBER	17. ATTRIBUTES (FORTRAN)	18. USE AND MEANING
<u>Data Record (cont'd)</u>				
Turbidity	72	4	I4	Turbidity; in hundredths of mg./liter
Chlorophyll	76	5	I5	Chlorophyll; in hundredths of mg./meter <sup>3</sup>



# Water Physics and Chemistry

## NAVIGATION

- 01 = Loran (mixed or unspecified)
- 02 = Radar and/or fixes
- 03 = Raydist without complication
- 04 = Raydist with errors, driftin , etc.
- 05 = Satellite
- 06 = Omega
- 07 = Loran A only
- 08 = Loran C only

## TURBIDITY CODE

- 1 = Turbidometer; in JTU
- 2 = Transmissometer; in percent of light transmission over a 10 cm. path.
- 3 = Fluorometer; suspended solid calibration

## METHOD CODE

- 1 = STD (Salinity, Temperature, and Depth recorder
- 2 = XBT (Expendable Bathythermograph)
- 3 = Nansen Cast
- 4 = MBT (Mechanical Bathythermograph)

TR 1431

# CODING INSTRUCTIONS

NODC COUNTRY-CRUISE REFERENCE NO. 710605, WRITER LWA DATE

CHECKED BY DATE; APPROVED BY DATE

SOURCE MATERIAL (AUTHOR, TITLE, VOLUME, PART, PAGE, ETC.

CalCOFI Hydrographic Data Annual Report of 1969 from Hopkins Marine  
Station of Stanford University. The entire data batch - 710605 - consists  
of one (1) sub-data set (1 cruise) containing 72 observations. The data  
is a series of observations taken at six (6) specific locations. The  
positions for these locations are recorded on an attached supplemental  
sheet. The vessel remains the same throughout the cruise as the TAGE.  
The data to be coded is found on pages 7 through 18.

NODC PUB. M-2 IS TO BE USED IN CONJUNCTION WITH THESE INSTRUCTIONS  
(General instructions begin on Page 2)

INSTR. NO.	SPECIAL INSTRUCTIONS
#1	If any entry is made in any field on the Data Record, and that entry does not fill the entire field, zeros (0) should be prefixed to fill that particular field. If no entry is made, leave field blank.
#2	Do not code decimal points, they are understood.
#3	Do not suffix zeros (0).

Supplemental Sheet for 710605

<u>Acces. No.</u>	<u>Vessel</u>	<u>Dates of Operation</u>	<u># Obs.</u>	<u>Institution</u>
710605	TAGE	05/08/69-12/30/69	69	Stanford Univ.

Positional Information for Observations

<u>Station No.</u>	<u>Latitude</u>	<u>Longitude</u>
1	36°37'36"N	121°53'36"W
2	36°41'42"N	121°57'12"W
3	36°46'18"N	122°01'00"W
4	36°51'42"N	122°00'00"W
5	36°56'48"N	121°59'12"W
6	36°52'12"N	121°55'12"W

# SAMPLE STATION

30 December 1969

Station #					4			Me
Weather and Surface Conditions								
Time S	Oc up	1440	0850	0939	1120	1213	1257	
Wind D	ti n	2	2	2	2	2	2	
Weather (H.O.)		02	02	02	02	02	02	
ome		0.8	30.30	30.28	30.26	30.22	30.20	
Wind			4	4	4	2	1	
ud Type								
C ud C			0	0	0	0	0	
Vi ibi y			25	20	20	20	20	
Hydrographic Observations:								
T	0m	64	13.43	---	13.35	13.29	13.28	13.34
	15m	13.57	13.42	13.48	13.27	13.15	13.13	13.34
BT	0m	13.7	13.4	13.5	13.4	13.3	13.4	13.5
	10m	13.6	13.4	13.5	13.3	13.2	13.2	13.4
	20m	13.5	13.4	13.6	13.2	---	13.1	13.4
	30m	12.0	13.4	13.6	13.0	---	13.1	13.0
	40m	---	12.0	13.5	12.5	---	11.4	12.3
	50m	---	11.5	13.5	11.6	---	10.5	11.8
Salin	0m	33.218	33.130	33.304	33.075	33.276	33.301	33.217
	15m	33.263	33.267	33.286	33.221	33.338	33.365	33.290
Sigma-t	0m	24.90	24.87	---	24.85	25.01	25.03	24.95
	15m	24.96	24.98	24.99	24.96	25.09	25.12	25.10
Secchi Disc (m)		4	8.5	10.5	6	4.5	6.5	6.7
O <sub>2</sub>	0m	6.82	6.93	6.39	6.70	6.25	6.38	6.58
		---	6.19	6.26	6.05	6.10	6.27	6.17





CODING INSTRUCTIONS FOR CRUISE NO. 710605

First - Station  
Header Record

ITEM	CARD COL. NO.	M-2 TABLE NO.	INSTRUCTIONS
File Type	1-3	-----	Constant entry of "004"
Access. Number	4-9	-----	Enter "710605" on each Station Header Record
Record Type	10	-----	Constant entry of "2"
Record Seq.	11-13	-----	Constant entry of "001"
Orig. Sta. No.	14-18		Enter as given for each respective station. Prefix necessary zeros (right justified)
Latitude	19-24		Enter as given for each respective station as supplied on supplemental sheet
Hemisphere	25		Enter "N" throughout entire data set
Longitude	26-32	-----	Enter as given for each respective station as supplied on supplemental sheet
Hemisphere	33		Enter "W" throughout entire data set
Time (GMT)	34-36	Tables #2 & 4	Hours are given in (PST) Pacific Standard Time and must be converted to (GMT) Greenwich Mean Time using Table #4. In addition, Table #2 should be used to convert minutes to tenths of minutes. Time is given next to "Time Sta. Occup."
Station Date	37-44	-----	Enter as given, except where conversion to GMT changes the day. Convert month to numeric code (e.g., Jan=01, Feb=02, etc.)
Water Depth	45-49		Leave blank
	50-51		Leave blank
Method	52		Enter "3"
	53-80		Leave blank

## CODING INSTRUCTIONS FOR CRUISE NO. 710605

Second - Station  
Header Record

ITEM	CARD COL. NO.	M-2 TABLE NO.	INSTRUCTIONS
File Type	1-3	-----	Constant entry of "004"
Access. Number	4-9	-----	Enter "710605" on each Station Header Record
Record Type	10	-----	Constant entry of "3"
Record Seq.	11-13	-----	Constant entry of "001"
Orig. Sta. No.	14-18	-----	Enter as given for each respective station. Prefix necessary zeros (right justified)
Bar. Press.	19-21	Table #18	Use Table #18 to convert Bar. Pressure from inches to millibars. Bar. Pressure values are recorded adjacent to "Barometer"
Air Temp.	22-29	-----	Leave blank
Wind Dir.	30-31	-----	Wind Direction is recorded adjacent to "Wind Direction" in a single numeric code. Use the following conversion:
			Wind # given as                      then code
			0                      =                      00
			1                      =                      36
			2                      =                      04
			3                      =                      09
			4                      =                      14
			5                      =                      18
			6                      =                      22
			7                      =                      27
			8                      =
Wind Force	32-33	-----	Wind Speed is recorded adjacent to "Wind Force" in a single digit numeric code ranging from 0-5. Use the following conversion:
			Wind F given as                      then code
			0                      =                      10
			4                      =                      16
			5                      =                      21
Sea Dir.	34-35	-----	Leave blank





CODING INSTRUCTIONS FOR CRUISE NO. 710605

## Data Records

[illegible]