DATA DOCUMENTATION FORM

TR3489

NOAA FORM 24-13

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

FO21

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

18-018

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

THIS SECTION MOST BE COMP	LETED BY DONOR	FOR ALL I	ZATA IKANSMI	ITALS			
1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED Pacific Marine Environmental Laboratory							
3711 15th Ave. N.E.							
Seattle, WA 98105				·			
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED	PROGRAM DURING	WHICH	DATA IN TH	IS SHIPMENT	Y ORIGINATOR		
Deep Ocean Mining E Studies (DOMES)	Environmental		-4	750 F&3 (File ID		
4. PLATFORM NAME(S)	5. PLATFORM TYPI (E.G., SHIP, BUO		6. PLATFORM A	AND OPERATOR			
1			PLATFORM	OPERATOR	FROM: MODAY,YR	TO: MO/DAY/YR	
OCEANOGRAPHER	SHIP						
			US	US	8/22/75	10/14/75	
8. ARE DATA PROPRIETARY	,				UARES IN WHICH		
X NO YES			Faste	rn Tronical	Pacific	·	
IF YES, WHEN CAN TH FOR GENERAL USE?		Eastern Tropical Pacific GENERAL AREA					
9. ARE DATA DECLARED NA PROGRAM (DNP)?		180° 120° 140° 180° 180° 180° 180° 180° 180° 80° 80° 40° 20° 8° 20° 44° 80° 80° 180°					
(I.E., SHOULD THEY BE IN DATA CENTERS HOLDINGS TIONAL EXCHANGE?)		278	237 232		\$ 532M	24 (1) APS 279	
XNO YES PAR	T (SPECIFY BELOW)	206		191	une 14 de	212 207	
		49* 170	166 166 166 124 124 1093 1088	119 114 119 114	100 100 100 100 100 100 100 100 100 100	ine inee	
10. PERSON TO WHOM INQUIRE	ES CONCERNING	20.	057 052	047 Dag	037/072 201/034	20°	
DATA SHOULD BE ADDRES PHONE NUMBER (AND ADD THAN IN ITEM-1)	20 3dl 30 391	320 315 1954 951 1952 387	340 341 - 348 377	336371 37260	531 326 567 342 403 346		
Dr. Edward T. Baker	4 CO 1	1 (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		444 479	434 43° 43° 43°		
442-5436 (Commercial 399-5436 (FTS)	a ()	M 505	500 493	000 To 000		511 506	
333 3133 (113)	•	M4	536 . 531	529 521	514951	320	
		190° 120° 1	144° 100° 100° 140° 140°	L 150. 100. 90. 60.	40. 50. 0. 50. (NP* 00* 100*	
NOAA FORM 24-13			····		USCO	MM-DC 44289-P72	

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	
RECORD TYPE 1 - 1 IN COL. 10	
RECORD TYPE 2 - 2 IN COL. 10	
RECORD TYPE 5 - 5 IN COL. 10	
RECORD TYPE 4 - 4 IN COL- 10	
RECORD TYPE A - A IN COL. 10	
RECORD TYPE B - B IN COL. 10	
RECORD TYPE C - C IN COL. 10	
. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION	
	0 % = ===
FILE IS COMPOSED REOF DATA FROM I CRUISE. REC	•
I IS A CRUISE AND STATION NUMBER HEADER CARD; RE	· .
2 IS A STATION NUMBER AND CAST IDENTIFIER CARD;	RECORD
TYPE 5 IS A DATA LISTING CARD, RECORD TYPE 4 IS A	
CONTINUATION OF RECORD TYPE 5 . RECORD TYPEA IS A	DATA
LISTING CARD; RECORD TYPES B ANDM C ARE A CONTIN	
OF RECORD TYPE A.	
FORTRANLANGUAGE . RESPONSIBLE COMPUTER SPECIALIST:	
NAME AND PHONE NUMBER MR. KENNETH MUTH DOMES PROT	ECT,
ADDRESS BLDG 264, 7600 SAND POINT WAY NE SEATTLE,	WA.
COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE	1964)
5. RECORDING MODE 9. LENGTH OF INTER-	
ASCII BINARY RECORD GAP (IF KNOWN) 3/4 INCH	
10,7 END OF FILE MARK	
S. NUMBER OF TRACKS	
(CHANNELS) SEVEN 11. PASTE-ON-PAPER LABEL DESCRIPTION	
ORIGINATOR NAME AND SOME LAY SPE	
E.T. BAKER, SPA DATA C	DONES)
□ ODD 8/22/75 TO 10/14/75	1
B. DENSITY 7 TRACK, BCD, 800 BFI, E	
200 BPI 1600 BPI 80 CHAR /REC., 50 REC./B	
100 BF1 1000 BF1 1000 BF1	
556 BPI 12. PHYSICAL BLOCK LENGTH IN BYTES	

Vol. Ser. = DOME 3 (orig.); VOL. SER. = 14621 (7

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
Nephels	kHz to hundredths	See attached sheet	N/A	N/A
Total Suspended Matter (TSM)	μg/l (micrograms per liter)	See attached sheet	See attached sheet	N/A
Particulate Major and Minor ele- ments Al ₂ O , SiO ₂ , K ₂ O, TiO ₂ , Mn, and Fe	$A1_20_3$ - Wt% $Si0_2$ - Wt% K_20 - Wt% $Ti0_2$ - Wt% Mn - ppm Fe - Wt%	See attached sheet	See attached sheet	See attached sheet
Particle Size	Microns (cumulative percent to tenths)	See attached	See attached sheet	
	·			
	·			·
			·	
	·			

RÉCORD NAME Trace Metals (Station/Sample Header)

14. FIELD NAME	FROM - 1 MEASURED IN BYTES	16. LEN	G TH	17. ATTRIBUTES	18. USE AND MEANING
	(e.g., bits, bytes)	NUMBER	UNITS		
File Type	1	3	Bytes	А3	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	Al	Always '1'
Sequence Number	- 11	3	Bytes	13	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Latitude,		·			
Degrees	19	2	Bytes	12	
Minutes	. 21	2	Bytes	12	
Seconds	23	2	Bytes	12 I2	
Hemisphere	25	1	Bytes	A1	'N' or 'S'
Longitude,					
Degrees	26	3	Bytes	13	
Minutes	29	l	Bytes	. 12	
Seconds	31	ļ	Bytes	12	
Hemisphere	33	ļ	Bytes	Al	'E' or 'W'
Sample Collection	n,				
Date-Time			}	ļ	
Year	34	2	Bytes	12	00 to 99 G.M.T.
Month	36	Į.	Bytes	12	01 to 12 "
Day	38	ł	Bytes	12	01 to 31 "
Hour	40		Bytes	12	00 to 23 "
Minutes	42	i	Bytes	12	00 to 59 "
Depth to Bottom	44	5	Bytes	15	Whole meters
Sphere Code	49	1	Bytes	Al	
Blank	50	31	Bytes	31X	
		:			
	•	!. .:			
			1		

RECORD NAME Trace Metals (Data II)

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN BYTES	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING		
	(e.g., bits, bytes)	NUMBER	UNITS				
File Type	1	3	Bytes	А3	Always '021'		
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number		
Record Type	10	ו	Bytes	A1 _	Always '4'		
Sequence Number	11	3	Bytes	13	Ascending order for sorting		
Station Number	14	5	Bytes	A5			
Sample Depth	19	4 ·	Bytes	14	Whole meters		
Replicate Number	23	1	Bytes	11			
Lab Sample Number	24	4	Bytes	14	, in the second		
Titanium Dioxide (TiO ₂)	28	5	Bytes	I5 .	% by weight to thousandths		
Trace Code	33	1	Bytes	ΑΊ	*		
Total Manganese	41	5	Bytes	15	Parts per million by weight to tenths		
Trace Code	46	1	Bytes	Α٦	*		
Total Iron	47	5	Bytes	15	% by weight to thousandths		
Trace Code	52	1	Bytes	Al	*		
Blank	77	4	Bytes	4X			
		•			* Trace code - to be used when no concentrations recorded ' ' = no information 'l' = trace found but too small to measure '2' = measurement beyond limits of instrumenta- tion		

RECORD NAME Trace Metals (Data III)

14. FIELD NAME	FROM-1	POSITION 16. LENGTH FROM-1 MEASURED		17. ATTRIBUTES	18. USE AND MEANING			
	(e.g., bite, bytes)	NUMBER	UNITS		·			
File Type	1	3	Bytes	Al	Always '021'			
File Identifier	4	6	Bytes	A6 .	'YYMMDD' = date of file creation or unique cruise number			
Record Type	10	1	Bytes	A1	Always '5'			
Sequence Number	וו	3	Bytes	13	Ascending order for sorting			
Station Number	14	5	Bytes	A 5				
Sample Depth	19	4	Bytes	14	Whole meters			
Replicate Number	23	1	Bytes	11				
Lab Sample Number	24	4	Bytes	14	,			
Nephels	28	5	Bytes	· 15	kHz to hundredths			
Total Suspended Matter (TSM)	33	6	Bytes	16	Micrograms per liter			
Aluminum Trioxide (Al ₂ O ₃)	57	5	Bytes	15	% by weight to thousandths			
Trace Code	62	1	Bytes	Al	*			
Silcone Dioxide (SiO ₂)	63	5	Bytes	15	% by weight to thousandths			
Trace Code	68	1	Bytes	AT	*			
Potassium Oxide (K ₂ O)	69	. 5	Bytes	15	% by weight to thousandths			
Trace Code	74	1	Bytes	A1	*			
				_				
·								
			·					

REGORD NAME Trace Metals (Particle Size Record 1)

NAME 15. POSITION FROM - 1 MEASURED		GTH	17. ATTRIBUTES	18. USE AND MEANING
INBytes	NUMBER	UNITS		
1	3	Bytes	A3	Always '021'
4	- 6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
10	1	Bytes	· -A1 -	Always 'A'
11	3	Bytes	I3	Ascending order for sorting
14	5	Bytes	A 5	
19	4	Bytes	14	Whole meters
23	1	Bytes	11	€.
24	4	Bytes	A4	Originator's internal number
28	3	Bytes	13	Percent to tenths
31	3	Bytes	13	Percent to tenths
34	3	Bytes	13	Percent to tenths
37	3	Bytes	13	Percent to tenths
:		 		All particle size units are cumulative percent to tent's
40 43 46 49 52 55 58 61 64 67 70 73 76	3 3 3 3 3 3	Bytes Bytes Bytes Bytes Bytes Bytes Bytes	13 13 13 13 13 13 13 13	Cumulative percent to tenths
79	2	Bytes	2x	
	MEASURED IN Bytes (*** bytes) 1 4 10 11 14 19 23 24 28 31 34 37 40 43 46 49 52 55 58 61 64 67 70 73 76	MEASURED IN BYTES (c.d., bits, bytes) NUMBER 1	NUMBER UNITS	MEASURED NUMBER UNITS

RECORD NAME Trace Metals (Particle Size Record 2)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED	16. LEN	GTH	17. ATTRIBUTES	18. USE AND MEANING
	MEASURED IN BYTES (o.g., bite, bytes)	NUMBER	UŅITS	.,	
File Type	:1	3	Bytes	A3	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD! = date of file creation or unique cruise number
Record Type	10	1	Bytes	AT	Always 'B'
Sequence Number	111	3	Bytes	13	Ascending order for sorting
Station Number	14	5	Bytes	A5	·
Sample Depth	19	4	Bytes	14	Whole meters
Replicate Number	23	1	Bytes	11	
Lab Sample Number	24	4	Bytes	A4	Originator's internal number
Particle Sizes	,				Cumulative percent to tenths
,			•		
3.02 μ 3.22 μ 3.44 μ 3.67 μ 3.92 μ 4.18 μ 4.77 μ 4.77 μ 5.09 μ 5.43 μ 5.80 μ 7.05 μ 7.05 μ 8.03 μ 8.57 μ	28 31 34 37 40 43 46 49 52 55 61 64 67 70 73	თ ო ო ო ო ო ო ო ო ო ო ო ო ო ო	Bytes Bytes Bytes Bytes Bytes Bytes Bytes Bytes Bytes Bytes Bytes Bytes Bytes Bytes	13 13 13 13 13 13 13 13 13 13 13	Cumulative percent to tenths
Blank	79	2	Bytes	2х	
		_			

RECORD NAME Trace Metals (Particle Size Record 3)

4. FIELD NAME 15. POSITION FROM-1 MEASURED IN BYTES		16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
	(e.g., bita, bytes)	NUMBER	UNITS		
File Type	1	3	Bytes	А3	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creatio or unique cruise number
Record Type	10	1	Bytes	Al	Always 'C'
Sequence Number	11	3	Bytes	13	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Sample Depth	19	4	Bytes	14	Whole meters
Replicate Number	23	1	Bytes	,II	·
Lab Sample Number	24	4	Bytes	A4	Originator's internal number
Particle Sizes					Cumulative percent to tenths
<pre>< 9.15 μ < 9.76 μ < 10.42 μ 11.12 μ 11.87 μ 12.67 μ 13.53 μ 14.44 μ 15.41 μ 16.45 μ 17.56 μ 20.00 μ 21.35 μ 22.79 μ 24.32 μ 25.96 μ</pre>	28 31 37 40 43 46 49 52 55 58 61 64 67 70 73 76	3 33333333333333333	Bytes	I3 I3 I3 I3 I3 I3 I3 I3 I3 I3 I3 I3	Cumulative percent to tenths
Blank	79	2	Bytes	2x	

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 ("V") 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 WAS	CALIBRATED BY			INSTRU- MENT			
INSTRUMENT TYPE DATE OF LAST CALIBRATION	YOUR ORGANIZATION (√)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS	BEFORE OR AFTER USE	BEFORE AND AFTER USE ($\sqrt{.}$)	ONLY AFTER REPAIR (V.)	(√) WHEN NEW	IS NOT CALI- BRATED	
PMEL Analog Nephelometer	See attached sheet								
								·	
							. .		
				,					
3			·						
									-

SAMPLING METHODS

Water samples were collected in 30 liter Niskin bottles and filtered under vacuum, through preweighed 0.4 μm Nuclepore filters. The filters were removed from the filtration apparatus, placed into individually marked petri dishes, dried in a desiccator for 24 hours and stored for shipment to the laboratory.

The vertical distribution of suspended matter was determined with a continuously recording integrating nephelometer. The instrument was interfaced with Plessey CTD system using the sound velocity channel (14-16 kHz) such that real time measurements of forward light scattering were obtained at each station.

ANALYTICAL METHODS

The major and trace inorganic elements in the suspended matter are determined by secondary emission x-ray fluorescence spectrometry. Radiation from a silver x-ray tube is used to obtain a monochromatic source of x-rays from a secondary target. USGS standard rocks and NBS glass standards are used for calibration of the individual elements.

The total suspended matter is determined by reweighing the preweighed Nuclepore filters on a Cahn 4700 electrobalance.

Particle size is determined by taking Polaroid photographs of particles on 47 mm Nuclepore filters using an I.S.I. Super Mini - SEM. Using a Carl Zeiss TGZ 3 particle size counter, particles on the photographs were sized and counted manually.

DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING

The concentration of each element was calculated from the corrected peak areas and compared to peak areas from standards prepared in the same manner as the samples.

Accuracy

The accuracy of the NBS standards are quoted to be in the range from 0.5-20.0%.

Precision

The total precision for each element, based on replicate sample analysis, is estimated to be:

Element	Coefficient of Variation
Aluminum	9.8
Silicon	9.6
Potassium	10.3
Titanium	9.3
Manganese	9.4
Iron	9.9

DATA DOCUMENTATION FORM

TR3490

DDF 8:2:1 NOÃA FORM 24-13

(4-77)

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

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

FO21

(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

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

Pacific Marine Envi 3711 15th Ave. N.E. Seattle, WA 98105	ronmental Labor	atory						
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED Deep Ocean Mining Environmental Studies (DOMES)			3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT 7602/1 (File ID) 750823					
4. PLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SHIP, BUOY		6. PLATFORM A	ND OPERATOR	7. DA	TES		
			PLATFORM	OPERATOR	FROM: MO,DAY,YR	TO: MO/DAY/YR		
OCEANOGRAPHER '	SHIP		,			·		
			US	US	2/11/76	4/16/76		
8. ARE DATA PROPRIETARY	?		SE DARKEN ALI					
FOR GENERAL USE!	IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE! YEARMONTH		Eastern Tropical Pacific GENERAL AREA					
9. ARE DATA DECLARED NAPROGRAM (DNP)? (I.E., SHOULD THEY BE IN DATA CENTERS HOLDINGS TIONAL EXCHANGE?) XNO YES PARTO DATA SHOULD BE ADDRES PHONE NUMBER (AND ADD THAN IN ITEM-1) Dr. Edward T. Baker 442-5436 (Commercial 399-5436 (FTS)	CLUDED IN WORLD FOR INTERNA- (SPECIFY BELOW) ES CONCERNING SED WITH TELE- RESS IF OTHER	100° 120° 278 278 278 278 278 278 278 278 278 278	160° 180° 180° 180° 180° 160° 160° 160° 160° 160° 160° 160° 16	120° 180° 80° 85° 227 227 191 193 110 114 114 114 114 114 114 11	48" 28" 0" 20" 20" 217 253 228	244		

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
Nephels	kHz to hundredths	See attached sheet	N/A	N/A
Total Suspended Matter (TSM)	ug/l (micrograms per liter)	See attached sheet	See attached sheet	N/A
Particulate Major and minor elements Al ₂ O ₃ , SiO ₂ , K ₂ O, TiO ₂ , Mn, and Fe	Al_2O_3 - Wt% SiO_2 - Wt% K_2O - Wt% TiO_2 - Wt% Mn - ppm Fe - Wt%	See attached sheet	See attached sheet	See attached sheet

C. DATA FORMAT

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

LIST RECORD TYPES CONTAINED IN THE TRANSMIT GIVE METHOD OF IDENTIFYING EACH RECORD TYPE	•
RECORD TYPE 1 - 1 IN CO	oL. 10
	oL. 10
RECORD TYPE 5 - 5 IN C	oh. 10
RECORD TYPE Y - 4 IN C	oL. 10
GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION	
	E AND STATION DESCRIPTION
•	2 ISA STRTION NUMBER AND
	CORD TYPE 5 IS A DATA LISTING
CARD; RECORD TYPE 4 15 A C	ONTINUATION OF RECORD TYPE 5.
ATTRIBUTES AS EXPRESSED IN PL-1 FORTRAN	ALGOL COBOL LANGUAGE
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER	LANGUAGE ENNETH MUTH DOMES PROJECT ND POINT WAY W.E., SEATTLE WA. 9811 (206-442-1964)
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER ADDRESS BLDG 264, 7600 SAL COMPLETE THIS SECTION IF DATA ARE ON MAGN	LANGUAGE ENNETH MUTH DOMES PROJECT OD POINT WAY N.E., SEATTLE WA. 98 11 (206-442-1964)
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER	LANGUAGE ENNETH MUTH DOMES PROJECT ND POINT WAY N.E., SEATTLE WA. 9811 (206-442-1964)
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER ADDRESS BLDG 264, 7600 SAL COMPLETE THIS SECTION IF DATA ARE ON MAGN	LANGUAGE ENNETH MUTH DOMES PROJECT OD POINT WAY N.E., SEATTLE WA. 98 11 (206-442-1964)
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER	LANGUAGE ENNETH MUTH DOMES PROJECT ND POINT WAY N.E., SEATTLE WA. 98 II NETIC TAPE 9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER ADDRESS BLD6 264, 7600 SAL COMPLETE THIS SECTION IF DATA ARE ON MAGN RECORDING MODE BCD BINARY ASCII BECDIC	LANGUAGE ENNETH MUTH DOMES PROJECT DD POINT WAY N.E., SEATTLE WA. 98 II (206-442-1964) 9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH 10. END OF FILE MARK 11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS)
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER	LANGUAGE ENNETH MUTH DOMES PROJECT ND POINT WAY W.E. SEATTLE WA. 98 II (206-442-1964) 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)
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER ADDRESS BLDG 264, 7600 SAI COMPLETE THIS SECTION IF DATA ARE ON MAGN RECORDING MODE ASCII BENCHIC NUMBER OF TRACKS (CHANNELS) SEVEN NINE	LANGUAGE ENPETH MUTH DOMES PROJECT DD POINT WAY N.E. SEATTLE WA. 98 II (206-442-1964) 9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH 10. END OF FILE MARK 11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) E.T. BAKER SPM DATA (DOMES) 2/11/76 TO 4/16/76
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER	INPETH MUTH DOMES PROJECT DD POINT WAY N.E. SEATTLE WA. 9811 NETIC TAPE 9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH 10. END OF FILE MARK 11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) E.T. BAKER SPM DATA (DOMES) 2/11/76 TO 4/16/76 7 TRACK BCD, 800 BPI, EVEN PARITY
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER	LANGUAGE ENPETH MUTH DOMES PROJECT DD POINT WAY N.E. SEATTLE WA. 98 II (206-442-1964) 9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH 10. END OF FILE MARK 11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) E.T. BAKER SPM DATA (DOMES) 2/11/76 TO 4/16/76
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER	INPETH MUTH DOMES PROJECT DD POINT WAY N.E. SEATTLE WA. 9811 (206-442-1964) 9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH 10. END OF FILE MARK 11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) E.T. BAKER SPM DATA (DOMES) 2/11/76 TO 4/16/76 7 TRACK BCD, 800 BPI, EVEN PARITY 80CHAR/REC, 50 REC/BLOCK 12. PHYSICAL BLOCK LENGTH IN BYTES 4000
RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER ADDRESS BLDG 264, 7600 SAI COMPLETE THIS SECTION IF DATA ARE ON MAGN RECORDING MODE ASCII BINARY ASCII BECDIC NUMBER OF TRACKS (CHANNELS) SEVEN NINE PARITY 200 BPI 1600 BPI 556 BPI	INNETH MUTH DOMES PROJECT DD POINT WAY N.E., SEATTLE WA. 9811 (206-442-1964) 10. END OF FILE MARK 11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) E.T. BAKER SPM DATA (DOMES) 2/11/76 TO 4/16/76 7 TRACK BCD, SOO BPI, EVEN PARITY 80CHAR/REC, SO REC/BLOCK 12. PHYSICAL BLOCK LENGTH IN BYTES

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.

RECORD NAME Trace Metals (Station/Sample Header)

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN BYTES		GTH	17. ATTRIBUTES	18. USE AND MEANING
	(e.g., bite, bytes)	NUMBER	UNITS		
File Type	1	3	Bytes	А3	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	Al	Always '1'
Sequence Number	11	3	Bytes		Ascending order for sorting
Station Number	14	5	Bytes	A5	
Latitude,	:			,	
Degrees	19	2	Bytes	12	
Minutes	21	2	Bytes.		
Seconds	23	2	Bytes	' I2	
Hemisphere	25	1	Bytes	ΑΊ	'N' or 'S'
Longitude,	!		Į.		
Degrees	26	3	Bytes	13	
Minutes	29	2	Bytes	12	
Seconds	31		Bytes	12	
Hemisphere	33		Bytes	A1.	'E' or 'W'
Sample Collection					
Date-Time					
Year	34	2	Bytes	12	00 to 99 G.M.T.
Month	36		Bytes	12	01 to 12 "
Day	38		Bytes	I2	01 to 31 "
Hour	40		Bytes	12	00 to 23 "
Minutes	42		Bytes	12	00 to 59 "
Depth to Bottom	44	. 5	Bytes	15	Whole meters
Sphere Code	49	1.	Bytes	A7	
Blank	50	· 31	Bytes	31X	·
		; .			·
		•			·
		:			
.,					

RECORD NAME Trace Metals (Data II)

14. FIELD NAME	15. POSITION FROM - 1		GTH	17. ATTRIBUTES	18. USE AND MEANING
	MEASURED IN BYTES (0.4., bits, bytes)	NUMBER	UNITS		
File Type	1	3	Bytes	A3	Always '021'
File Identifier	4	6 .	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	1	Bytes	A1	Always '4'
Sequence Number	וו	3	Bytes	13	Ascending order for sorting
Station Number	14	5	Bytes	A5	
Sample Depth	19	4 .	Bytes	14	Whole meters
Replicate Number	23	1	Bytes	11	
Lab Sample Number	24	4	Bytes	14	
Titanium Dioxide (TiO ₂)	28	5	Bytes	15	% by weight to thousandths
Trace Code	33	1	Bytes	Al	*
Total Manganese	41	5	Bytes	<u>1</u> 5	Parts per million by weight to tenths
Trace Code	46	1	Bytes	. A1	*
Total Iron	47	5	Bytes	15	% by weight to thousandths
Trace Code	52	1	Bytes	Al	*
Blank	77	4	Bytes	4X	
					* Trace code - to be used when no concentrations recorded ' ' = no information '1' = trace found but too small to measure '2' = measurement beyond limits of instrumentation

RECORD NAME Trace Metals (Data III)

14. FIELD NAME	15. POSITION FROM - 1	Į	GТН	17. ATTRIBUTES	18. USE AND MEANING
	MEBYEES (o.4. bits, bytes)	NUMBER	UNITS		
File Type	1	3	Bytes	Al	Always '021'
File Identifier	4	6	Bytes	A6	'YYMMDD' = date of file creation or unique cruise number
Record Type	10	ו	Bytes	A1 ,	Always '5'
Sequence Number	11	3	Bytes	13	Ascending order for sorting
Station Number	14	5	Bytes	A 5	
Sample Depth	19	4	Bytes	14	Whole meters
Replicate Number	23	1	Bytes	I 1 .	'
Lab Sample Number	24	4	Bytes	14	·
Nephe1s	28	5	Bytes	15	kHz to hundredths
Total Suspended Matter (TSM)	33	6	Bytes	16	Micrograms per liter
Aluminum Trioxide (Al ₂ O ₃)	57	5	Bytes	15	% by weight to thousandths
Trace Code	62	1	Bytes	A1	*
Silcone Dioxide (SiO ₂)	63	5	Bytes	15	% by weight to thousandths
Trace Code	68	1	Bytes	ΑΊ	*
Potassium Oxide (K ₂ O)	69	5	Bytes	15	% by weight to thousandths
Trace Code	74	1	Bytes	Al	*
					,
	·				
NOAA FORM 24-13					

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 WAS	S CALIBRATED BY		CH	IECK ONE: NT IS CALIBRAT	red		INSTRU- MENT IS
INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	YOUR ORGANIZATION (√.)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS	BEFORE OR AFTER USE	BEFORE AND AFTER USE	ONLY AFTER REPAIR (√.)	ONLY WHEN NEW	NOT CALI- BRATED
PMEL Analog Nephelometer	See attached sheet			·					
	-								
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NOAA FORM 24-13	L		<u> </u>	<u> </u>	<u></u>	<u> </u>	L	USCOMI	M-DC 44289-P72

ANALYTICAL METHODS

The major and trace inorganic elements in the suspended matter are determined by secondary emission x-ray fluorescence spectrometry. Radiation from a silver x-ray tube is used to obtain a monochromatic source of x-rays from a secondary target. USGS standard rocks and NBS glass standards are used for calibration of the individual elements.

The total suspended matter is determined by reweighing the preweighed Nuclepore filters on a Cahn 4700 electrobalance.

SAMPLING METHODS

Water samples were collected in 30 liter Niskin bottles and filtered under vacuum, through preweighed 0.4 μ m Nuclepore filters. The filters were removed from the filtration apparatus, placed into individually marked petri dishes, dried in a desiccator for 24 hours and stored for shipment to the laboratory.

The vertical distribution of suspended matter was determined with a continuously recording integrating nephelometer. The instrument was interfaced with Plessey CTD system using the sound velocity channel (14-16 kHz) such that real time measurements of forward light scattering were obtained at each station.

DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING

The concentration of each element was calculated from the corrected peak areas and compared to peak areas from standards prepared in the same manner as the samples.

Accuracy

The accuracy of the NBS standards are quoted to be in the range from 0.5-20.0%.

Precision

The total precision for each element, based on replicate sample analysis, is estimated to be:

Element	Coefficient of Variation
Aluminum	9.8
Silicon	9.6
Potassium	10.3
Titanium	9.3
Manganese	9.4
Iron	9.9

DDF- B:2:11

DATA DOCUMENTATION FORM

TR3491

DUF- 13: 2

NOAA FORM 24-13

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

USCOMM-DC 44289-P72

F015

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 DO	NOR FOR ALL D	ATA TRANSMIT	TALS		
1. NAME AND ADDRESS OF INSTITUTION, L. Dr. Stanley Hayes	-	• .			E ASSOCIATED
Pacific Marine Environme 3711 - 15th Avenue N.E.	ntal Labora Telephone 2		•.	AA)	
2. EXPEDITION, PROJECT, OR PROGRAM D	· . •	3. CRUISE NUM	BER(S) USED B	Y ORIGINATOR	TO IDENTIFY
DATA WERE COLLECTED			IS SHIPMENT		
EBW-3		1) ∃T METEK	C DATA
4. PLATFORM NAME(S) 5. PLATFORM (E.G., SHIP	TYPE(S) BUOY, ETC.)	6. PLATFORM A NATIONALIT	ND OPERATOR Y(IES)		TES
EBW-3 NOAA Sh	ip	U.S.	U.S.	7/4/77	
8. ARE DATA PROPRIETARY? XNO YES IF YES, WHEN CAN THEY BE RELEASE FOR GENERAL USE? YEARMONT	CONT	SE DARKEN ALI AINED IN YOUR		ERE COLLECT	
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WO DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) X NO YES PART (SPECIFY BELL DATA SHOULD BE ADDRESSED WITH TELL PHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Stanley Hayes (206) 442-4598	ORLD 274 20 AOW) 40° 110° 120° 120° 120° 120° 120° 120° 12	140° 150° 120° 150° 140° 140° 140° 150° 120° 150° 150° 160° 160° 160° 160° 160° 160° 160° 16	120° 100° 80° 80° 80° 80° 80° 80° 80° 80° 80°	29724 21125 18124 123125 29725 20125 2	\$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20 \$20

Note:

all records not accepted

by QUADI program appear

to be record type # 3

B. 3	SCI		fic	CONT	ENT
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NAME OF DÂTA 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 .
TIME/DATE	GMT	CRYSTAL CLOCK	N/A	N/A
CURRENT VELOCITY	CM/SEC		PROCESSED AT PMEL. TRANSFERRED TO 7- TRACK TAPE. CALIBRA- TIONS APPLIED. DATA EDITED AND BAD VALUES REPLACED BY LINEAR INTERPOLATION.	REPORTED VALUES REPRESENT AVERAGES
TEMPERATURE	Degrees, C	THERM ISTORS ON AMF CURRENT METERS	SAME AS CURRENT VELOCITY	AUGRAGE VALUES

	CONTAINED IN THE TRAISME SITTEYING EACH RECORD TY	
	DOMES Program CURR	ENT METER FORMAT
There are	(1) Data Header I (optional) 2) Data Header II (required) 3) Data Record (required)
There is no	o File Header record t	ype for this format.
2. GIVII BUBER DESCRIP	TION OF FILE ORGANIZATIO	·
		· ·
B. ATTRUMENTS AS EXP		LALGOL . COSOL
	XX FORTRAR	LARGUAGE
Abdress E	PMEL/NOAA 3711 - 15	19. VENOTH OF BITTER-
	Meen Descrip	RECORD CVL (IE EHOMH) X 3/4 DECA
		16. FIID OF FILE MASK
6. NUMBER OF TRACES	[x] seven	
	RHET	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE GRIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME KUMBER)
		EBW - 3 CURRENT METER DATA
V. Pare y	[] out	TAPE FILE ID NS0698
 6. 08656 y	EVEN	7-TRACK, BOD, EVEN PARITY, 800 BPI ORIGINATOR - DR. S. HAYES
	[] 200 FP1 [] 1600 BP1	DOMES Progra
	Sas en	12. PHYSICAL BLOCK LENGTH IN BYTHS CHOPER'S Mete 3600 Forest
	x soc an	13. LENGTH OF BYTES IN SITS "015"
	[]	Pag.: 1
A.K. S. O. S.M. P.A. VO		Vol. Ser = DOME (OVE)
		Vol. Ser = DOME (oug.) Vol. Ser. = 14228 (o/c

C. DATA FORMAT

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

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	PUTER SPECIALIS	751-	ALGOL	COBOL LANGU		202-634
RESPONSIBLE COM	PUTER SPECIALIS	FORTRAN C	NOAA /	LANGU		202-634
RESPONSIBLE COM NAME AN ADDRESS	PUTER SPECIALIS D PHONE NUMBER	FORTRAN ST: 752- V970N	NOAA /	LANGU		202-634
RESPONSIBLE COM- NAME AN ADDRESS COMPLETE THIS	PUTER SPECIALIS D PHONE NUMBER A A A A A A A A A A A A A A A A A A A	FORTRAN ST: 752- V970N	NOAA /	EDIS / NU 3.5/		202-634
RESPONSIBLE COM- NAME AN ADDRESS COMPLETE THIS	PUTER SPECIALIS D PHONE NUMBER A A A A A A A A A A A A A A A A A A A	FORTRAN ST: 752- V970N	NORA DE LEIC TAPE	EDIS / NU 3.5/	DDC-	
RESPONSIBLE COM- NAME AN ADDRESS COMPLETE THIS	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT	FORTRAN ST: 752- V970N A ARE ON MAGN	NORA DE LEIC TAPE	LANGU	DDC-	
RESPONSIBLE COMP NAME AN ADDRESS COMPLETE THIS	PUTER SPECIALIS D PHONE NUMBER A HAS S SECTION IF DAT	FORTRAN TA ARE ON MAGN	NORA DE LEIC TAPE	LANGU	2DC - 0	
RESPONSIBLE COMP NAME AN ADDRESS COMPLETE THIS RECORDING MODE	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA	LANGU	DDC-	
RESPONSIBLE COM NAME AN ADDRESS	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA	LANGU	2DC - 0	
RESPONSIBLE COMMINAME AND ADDRESS COMPLETE THIS RECORDING MODE OF TRACE	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SCOTT	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL	INTER- P (IF KNOWN) E MARK	3/4 INCH	7 ON (INCLUDE
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RESPONSIBLE COMMINAME AND ADDRESS COMPLETE THIS RECORDING MODE OF TRACE	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SCOTT	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME	OCTAL 1 DESCRIPTION OUTHER	7 ON (INCLUDE ECIFICATION
RESPONSIBLE COMPLETE THIS RECORDING MODE NUMBER OF TRACE (CHANNELS)	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SEVEN NINE	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME	OCTAL 1 DESCRIPTION OUTHER	7 ON (INCLUDE ECIFICATION
RESPONSIBLE COMPLETE THIS RECORDING MODE NUMBER OF TRACE (CHANNELS)	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SEVEN NINE	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME	OCTAL 1 DESCRIPTION OUTHER	7 ON (INCLUDE ECIFICATION
RESPONSIBLE COMMANDE AND ADDRESS COMPLETE THIS RECORDING MODE (CHANNELS)	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SEVEN NINE	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME	ODC - COME LAY SP. NUMBER)	7 ON (INCLUDE ECIFICATION
RESPONSIBLE COMMINAME AND ADDRESS COMPLETE THIS RECORDING MODE OF TRACE	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SEVEN NINE ODD EVEN	FORTRAN ST: J52 V9TAN A ARE ON MAGN BINARY EBCDIC	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME	ODC - COME LAY SP. NUMBER)	7 ON (INCLUDE ECIFICATION
RESPONSIBLE COMMANDE AND ADDRESS COMPLETE THIS RECORDING MODE (CHANNELS)	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SEVEN NINE	FORTRAN TA ARE ON MAGN	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME	ODC - O	7 ON (INCLUDE ECIFICATION
RESPONSIBLE COMMANDE AND ADDRESS COMPLETE THIS RECORDING MODE (CHANNELS)	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SEVEN NINE ODD EVEN	FORTRAN ST: J52- V9TAN A ARE ON MAGN BINARY EBCDIC	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME	ODC - COME LAY SP. NUMBER)	7 ON (INCLUDE ECIFICATION
RESPONSIBLE COMMANDE AND ADDRESS COMPLETE THIS RECORDING MODE (CHANNELS)	PUTER SPECIALIS D PHONE NUMBER S SECTION IF DAT BCD ASCII SEVEN NINE 200 BPI	FORTRAN ST: J52- V9TAN A ARE ON MAGN BINARY EBCDIC	ETIC TAPE 9. LENGTH OF RECORD GA 10. END OF FIL 11. PASTE-ON-F ORIGINATOR OF DATA TY	INTER- P (IF KNOWN) E MARK PAPER LABEL R NAME AND S YPE, VOLUME 3 3 7 3 1 3 4 SLOCK LENGT	ODC - 3/4 INCH OCTAL 1 DESCRIPTION OME LAY SP. NUMBER) SCANO OFFICE OF THE STREET OF THE STRE	7 ON (INCLUDE ECIFICATION

RECORD NAME Data Header II (required)

A. FIELD NAME	NAME IS. POSITION FROM - 1 MEASURED INDYTES		- 	17. ATTRIBUTES	IB. USE AND MEANING		
<u> </u>	(o.g., bits, bytes)	NUMBER	UNITS				
File Type	1	3	bytes	V3	Always "015"		
File Identifica- tion	4	6	11	A6			
Record Type	10).]	11	Il	Always "2"		
Meter number	11	5	Н.	A 5			
Latitude Degrees Minutes Hundredths Hemisphere	16 18 20 22	2 2 2 1	11 11 11	12 12 12 A1	Hundredths of minutes		
Longitude Degrees Minutes Hundredths Hemisphere	23 26 28 30	3 2 2 1	11 . 11 11	13 12 12 A1	"E" or "W"		
th to bottom	31	5	u.	15	To whole meters		
Depth of meter	36·	. 5	ıı ıı	15	To tenths of meter		
Meter Usage Sequence Number	41	3	11	13	Number of times meter has been deployed (by investigator)		
Institution code	44	2	"	. A2	NODC Institution Code		
Axis Rotation	46	3	IJ	13	In whole degrees clockwise from true north of positive V a		
Location Name	49	6	"	A6 .	Not used by DOMES		
Number of data records	55	6	11	16	Number of record type "3" recor		
	·						
·							
	·	·			DOMES Program Current Meter Form "015" page 3		

14. FIELD NAME	15. POSITION	16. LEN	G.LH.	17. ATTRIBUTES	18. USE AND MEANING
	FROM-1 MEASURED IN <u>bytes</u>	1			
	IN <u>bytes</u> (e.g., bits, bytes)	NUMBER	บหารร		
F 13	1 Git carel tol (1991)	<u> </u>			A7 HO75h
File Type	t	3	bytes	А3	Always "015"
File Idendifica- tion	4	6	11	Λ6	
Record Type	10	7	" .	II	Always "l"
Meter Number	11	5	п	A5	
Text	16	38	11	3 8A1	Descriptive information
Blank	54	ן	lī .	· 1X	
Sequence number ·	55	6	н .	16	ascending numeric used for ordering data header recordupon retrieval
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This calibration information will be utilized by NOAA's National Cceanographic 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.c., STD, temperature and pressure sensors, salinometers, oxygen meters, velocimeters, etc.) and furnish the calibration data requested by completing and/or checking ("\(\superature\)") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

	0.75 05 1.4	INSTRUMENT WAS	S CALIBRÁTED BY	CHECK ONE: INSTRUMENT IS CALIBRATED				INSTRU- MENT IS	
INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	YOUR ORGANIZATION (√!)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS	BEFORE OR AFTER USE (√)	BEFORE AND AFTER USE (√:)	ONLY AFTER REPAIR (√)	ONLY WHEN NEW (\(\frac{1}{\chi}\)	NOT CALI- BRATED (√)
THERMISTOR YSI44032 OU V238	MAY 76		NWROC		V				•
V240	JUN 76	·	11		. ~				
V242	MAR 76		lt						·
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TRANSMITTAL AND RECEIPT RECORD

(Please sign and return carbon copy acknowledging receipt)

TO: MESA Data Coordinator NOAA/EDIS/NODC	REFER TO				
Washington, D.C. 20235	Dr. James B. Ridlon				
THE ITEM(S) LISTED BELOW WERE FORWARDED TO YOU BY					
ORDINARY REGISTERED AIR CERTI	FIED GOVERNMENT BY HAND OTHER				
(cert.	no. 523053)				
Enclosed, find magnetic tapes (2) and a	ssociated documentation for:				
	for DOMES cruises RP - 8 - 0C - 75, 76 (legs 1 & 2), file I.D.'s respectively. 1 tape.				
b) <u>S. Hayes/PMEL</u> - FT 015, DOMES EBW - 7/4/77, to 12/8/77.	3, file I.D. NSO698, field period 1 tape.				

RECEIVED

0 2 OCT 1978

20 2200		
Sid Stillwaugh	Seattle L.O.	9/26/78
RECEIVED BY (Signature)	TITLE	 DATE RECEIVED

US REPROPERSON COMPANY OF A A A A A A A A A A A A A A A A A A	/	•		// \	/	Di	OME4	/	
2 CHPY (DITTE) 16 EACKS: 1475 - P. QUA	ior /	,	!	/		14	228	• / !	
3 REFCEMATTED TAPE (TF REQUIRED)	/	,	.	/	₹			/	
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5 CKECK RUN (ERRORS)	1/6 /24	EA	1/0	124	EA	1/4	288	BIK	Ksize 4800, LRECL 1966
5 CHECK FUN (OK)									BIK5:20 4849 LRECL 664
6 CRUMCH TAPE FROM "USEF"	/	1	 	/		1		/ /	
7 EVALUATION OF ORIGINATOR CCP	/	, (- 	,′	1	[]	. — — — — — — — — — — — — — — — — — — —		_
B NAPIS ČĐUNT Program Run	11/21	G	1	/2/	GAR				
DIP:INVENTORY NUR MARGORA	1 //		1/2	178	· m£	<u> </u>			
· VEL INCERTO	·		·	-		- - !			

×		San Company	49
		015-4	
#	2 013842		NSI 013377
	2.740	6774	(c.4045)
. 6	0/4800, FOIS		#1 U Ø2Ø656
- (3263-3267,333 3491,3595-3603,3	-	,461~ 54 f 5 ,
-		: 	359,930 328,319

MESA DONES

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NSDCHEK *** NON-STANDARD DATA FIELD CHECKING PROGRAM
THIS IS 03/15278 VERSION WITH LUMERIC RANGE CHECKING
USERIS INPUT REQUESTS FOLLOW:
LRECT HAS BEEN SPECIFIED AS 69
STATION HEADER RECORD SPECIFIER AS 2
RECORD TYPES FLAGGED FOR RETRIEVAL ARE - 1234
STATION STARTS IN PUSITION 11 FOR 5 BYTES
STATIUN WILL APPEAR ON RECORD TYPES : 1234
RECORD TYPE WILL BE TAKEN FROM COLUMN 10 OF THE INPUT RECORDS
FILETYPE IS 015
NO DEVIOUS ERBORS ROUND IN TABLE GENERATION PHASE & SUCCESSFUL EXECUTION EXPECTED
015TR34912V 23814383 N125293 W 45064456
                                           3F 0
                                                        3768
   333533
FIRST FILE ID
               33
DATA BELOW RANGE IN LATDEC
ILLEGAL BLANKS IN LATMIN 1/100
ILLEGAL BLANKS IN LONMIN 1/100
                                   33555
ILLEGAL BLANKS IN DEPTH OF METER
015TR34912V 24014383 NI25293 W 45064476
DATA BELOW RANGE IN LATDEG
ILLEGAL BLANKS IN LATMIN 1/100
ILLEGAL BLANKS IN CONMIN 1/100
                                   .33333
ILLEGAL BLANKS: IN DEPTH OF METER
***********************
015TR34912V 24214383 NI25293 W 45064500
               ??
DATA BELOW RANGE IN LATDEG
ILLEGAL BLANKS IN LATMIN 1/100
ILLEGAL BLANKS IN LONMIN 1/100
                                   33333
ILLEGAL BLANKS IN DEPTH OF METER
015TR34912V216T14383 N125293 W 45064306
                                                        3768
                                           3F 0
DATA BELOW RANGE IN LATDEG
ILLEGAL BLANKS IN LATMIN 1/100
ILLEGAL BLANKS IN LONMIN 1/100
                                   33555
ILLEGAL BLANKS IN DEPTH OF METER
THE FIELDS BELOW WERE CHECKED OS FOLLOWS/SESIGN/BEBLANK/TETAXONOMIC CODE/NENUMERICS/MEMANDATORY NUMERIC
                                                                   ACTUAL RANGE
TYPE REC
              LENGTH NAME
         POS
                                                RANGE TESTED
                                                                                                               COUNT
                                                         HIGH
                                                                            FIGHEST
                                                                                       MEAN
                                                                  LOWEST
                                                LOW
                      CATDEG
                                                                              14
                                            30
                                                      80
                                                                                        14.00
```

M N	2	18 20	2	CATMIN CATMIN 1/100 .	00	59 99	38. NO	38 VALUES FOUND	38.00 FOR THIS	OC PARAMETER	.4
C٠	2	22	1	ĽATHEH	N	N	_			•	. •
М	2	23	3	LONGPEG	065	179	125	125	125.00		-4
M	2	26	2,	CONMIN	ΩQ	59	29 .	29	29.00		.4
N	2.	28	2	LONMIN 1/100	00 .	99	No	VALUES FOUND	FOR THIS	PARAMETER	
Ç.	2	.30	ļ	CONHEM	W	W			_		
N.	2	31	5	DEPTH TO BOTTOM	00001	60000	4506	4506	4506.00	-0.0	.4
N	2:	36	5	DEPTH DE METER	00000	60000	No	VALUES FOUND	FOR THIS	PARAMETER	
11	3.	16	2	DBS DATE YR	74	80	77	77	77.00	00	15072
М	3	18	2	OBS DATE MO	01	12	7	12	9.17	1,53	15072
M	3,	20	2	OBS DATE DAY	01	31	1	31	15,55		15072
11	3	22	2	MBS DATE HR	00	23	Ö	23	11.50		15072
М	3.	24	2	OBS DATE MIN	οÕ	59	Ö	0	00	.0C	15072
N	3.	26	2	dBS DATE 1/100 MIN	00	99	NO	VALUES FOUND	FOR THIS	PARAMETER	
M.	3	28	6	E-W (U) COMPONENT	-20000	20000	·=912	964	49.48		15072
M.	3	34	6	N-S (X) COMPONENT	. = 20000	20000	-1037	1536	145.01		15072
N	3:	40	4	TEMPERATURE TO 1/100	-200	2200	143.	152	145.94		.11304
M.	3:	45	5	PRESSURE DB TO 1/10	00010	60000	ŃΒ	VALUES FOUND	FOR THIS	PARAMETER	
M.	3:	50	4	CONDUCTIVITY	1500	5500	No	VALUES FOUND	FOR THIS	PARAMETER	
М	4.	16	2	DBS DATE YR	74	80	No	VALUES FOUND	FOR THIS	PARAMETER	
М	4,	. 18	2	OBS DATE MO	01	12	NO	VALUES FOUND			
M.	4.	20	2	OBS DATE DAY	01	31	No	VALUES FOUND	FOR THIS	PARAMETER	
Ai	4.	22	2	OBS DATE HR	ÖÖ	23	NO	VALUES FOUND	FOR THIS	PARAMETER	
M	4.	24	2	OBS DATE MIN	00	59	NO	VALUES FOUND			
M	4.	26	2	OBS DATE 1/100 MIN	00	99	, NO	VALUES FOUND	FOR THIS	PARAMETER	
М	4.	28	6	E-W (U) COMPONENT	=20000	20000	NO	VALUES FOUND			
M.	4	34	6	N-S (V) COMPONENT	-20000	20000	No	VALUES FOUND			
N	4	40	4	TEMPERATURE TO 1/100	-200	2200	NO	VALUES FOUND			
M'	4.	45	5	PRESSURE DB TO 1/10	00010	60000	No				
M	4.	ร่ก	4	SALINITY	2000	3600	NO				

RECORDS READ

15076

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
								,
7800741	F144	TR3489	0800	313F	310C	1975/08/29		308015
7800741	F144	TR3490	0080	313F	310C	1976/02/18	760211	308016
7800741	F015	TT1530	0800	313F	317F	1977/07/04	EBW-3	308017
7800741	F015	TT1531	0800	313F	317F	1977/07/04	EBW-3	308018
7800741	F015	TT1532	0800	313F	317F	1977/07/04	EBW-3	308019
7800741	F015	TT1533	0800	313F	317F	1977/07/04	EBW-3	308020

(6 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
7800741	F144	TR3489	310C	21	668	75/08/29	75/10/13
7800741	F144	TR3490	310C	18	651		76/04/14
7800741	F015	TT1530	317F	24	3769		77/12/01
7800741	F015	TT1531	317F	24	3769	77/07/04	77/12/01
7800741	F015	TT1532	317F	24	3769	77/07/04	77/12/01
7800741	F015	TT1533	317F	24	3769	77/07/04	77/12/01

(6 rows affected)