Data Received: May 26, 1976

Orrela M. messure

ACCESSION NUMBER

77-0261

TR1656

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NOAA FORM 24-13 (4-72) DATA DOCUMENTATION FORM

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

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

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 COMP	LETED BY DONOR	OR ALL I	DATA TRANSMIT	TALS		
1. NAME AND ADDRESS OF IN University of Ca Scripps Institut La Jolla, CA 92	alifornia-San D tion of Oceanog	iego	R ACTIVITY WIT	H WHICH SUBM	ITTED DATA AF	RE ASSOCIATED
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BER(S) USED E IS SHIPMENT	Y ORIGINATOR	TO IDENTIFY
IDOE/MODE-1			·	·		
4. PLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SHIP, BUO		6. PLATFORM A		7. DA	TES
	(2.0., 31117, 200	1, 210.,	PLATFORM	OPERATOR	EROM MODAY,YR	TO: MO/DAY/YR
	Bottom-mounte instrument	d	USA	USA		7/8/73
8. ARE DATA PROPRIETARY  X NO YES  IF YES, WHEN CAN THE FOR GENERAL USE?	EY BE RELEASED	11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.  GENERAL AREA				
9. ARE DATA DECLARED NAPROGRAM (DNP)?  (I.E., SHOULD THEY BE IN DATA CENTERS HOLDINGS TIONAL EXCHANGE?)  NO XX YES PARTON TO WHOM INQUIRE	190° 120° 278	148" 160" 188" 198" 149  272 26  273 26  273 272  274 275  275 275	120° 100° 80° 80° 22′ 22′ 22′ 22′ 22′ 22′ 22′ 22′ 22′ 22	107 148 OT 3 108	284 (1) (25) 279  284 (1) (25) 279  284 (1) (25) 279  212 207  214 207  215 40 171  309 28°  334 327 227  309 28°	
DATA SHOULD BE ADDRES PHONE NUMBER (AND ADD THAN IN ITEM-1)  Dr. Charles S. ( U. Cal-San Diego La Jolla, CA1920 (714)452-3235 or	20° 331 40° 409 40° 505 541 577 100° 120°	320 315 354 331 362 347 423 423 464 450 500 495 572 567 140° 180° 180° 140° 140°	310   300   341   341   342   347	372 407 408 443	631   326     667   362     403   398     439   434     457   470     511   506     547   578     583   578     40° 80° 100°	

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	Tor	Nansen bottles	Inductive Salinometer (Hytech model S 510)	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	d units and percent by weight	Ewing corer	Standard sieves. Carbonate fraction removed by acid treatment	Same as "Sedimentary Rock Manual," Folk 165

(SPACE IS PROVIDED ON THE FOLLOWING TWO PAGES FOR THIS 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
East and North horizontal components of electric field	-8 10 volts per meter	Scripps bottom-mounted recorders. Electrode reversal switching to remove electrode noise and residual voltage.		Data are averaged over 16 sec, reported at 64 sec intervals.
Repor Execu This barot Cox,	t of the MODE-1 In tive Office, 54-14 reference contains ropic velocity."  C. S., J. Filloux, tean Dynamics Expe	Electric Fields in the MODE tercomparison Group, December 17, M.I.T., Cambridge, MA 02 the statement "1.0 µV/m volument "1.0 µV/m volument (MODE-1)" 1977, 274p.	r, 1974, 173p.,(unpublished 139.) tage is equivalent to approx "Electromagnetic Observation	rimately 0.3 cm/s

		D. SCIENTIFIC CO		
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
·				
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NO. 4 FORM 24 (9-72)				

#### 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.

NOAA FORM 24-13 USCOMM-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							
Data Record only (see attached list for	dates and geographic positions).						
Logical record length: undefined. Block size: 3168.							
Seven files total.							
2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION							
electric field component values,	No header record.  Data record: 256 East electric field component values followed by 256 North electric field component values, then a record (block) number, then 15 zero padding, all in (I6) format.						
3. ATTRIBUTES AS EXPRESSED IN TRAN FORTRAN	ALGOL COBOL LANGUAGE						
4. RESPONSIBLE COMPUTER SPECIALIST:							
NAME AND PHONE NUMBER							
ADDRESS Standard Label Tape	DSN= ELECTRIC.FIELD						
COMPLETE THIS SECTION IF DATA ARE ON MAGNET							
5. RECORDING MODE BCD BINARY	9. LENGTH OF INTER- RECORD GAP (IF KNOWN) X 3/4 INCH						
ASCII X EBCDIC							
	10. END OF FILE MARK OCTAL 17						
6. NUMBER OF TRACKS							
(CHANNELS) SEVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE						
X NINE	ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)						
	   77-0 <b>26</b> 1						
7. PARITY	77-0201 IX 1030						
EVEN	IDOE/MODE-1						
8. DENSITY 200 BPI X 1600 BPI	BOTTOM MOUNTED						
556 BPI	12. PHYSICAL BLOCK LENGTH IN BYTES						
800 BPI	3168						
	13. LENGTH OF BYTES IN BITS						
	1						

USCOMM-DC 44289-P72

NOAA FORM 24-13

14. FIELD NAME	15. POSITION FROM - 1 MEASURED		GТH	17. ATT	RIBUTES	18. USE AND MEANING
	IN <u>bytes</u> (e.g., bits, bytes)	NUMBER	UNITS			
East Horizontal Electric Field Component (in	1		6			
-8 10 Volts/meter)	7		6			
	13		6			
	Repeated	to pos	ition	1536	(Total	of 256 values.)
North Horizontal Electric Field Component (in -8	1537		6			
10 Volts/meter)	Repeated	to pos	ition	3072	(Total	of 256 values.)
Record Number (Block Number)	3073		6			
Zero Padding	3079		6	·		
	Repeated	to pos	ition	3168	(15 zer	os)
		  -				
	!	!		:		
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			,			

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

# MODE-I ELECTRIC FIELD OBSERVATIONS BOTTOM MOUNTED RECORDERS

# PART I - MARCH - MAY 1973

	NODC/EDS netic Tape		Loca	tion	Tangent of	f Tilt		t which		d start	ts
File #	*Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute	2
1	272	1-A	27°57.2'	69 <sup>0</sup> 39.9'	+.027	+.007	March	26	11	56 ±	30
2	206	18	27°58.7°	69 <sup>0</sup> 33.7'	113	+.013	March	26	11	52 ±	30
<b>3</b> ·	256	5	27 <sup>0</sup> 50.8'	70 <sup>0</sup> 40.1'	+.007	+.007	March	26	14	46 <u>+</u>	30
4	272	20	27°08.7'	69°32.1'	. 0	0	March	20	18	45 ±·	30
			PAF	RT II - MAY -	JULY 1973						
5	<b>2</b> 51	1	27 <sup>0</sup> 57.8'	69 <sup>0</sup> 38.3'	0	+.026	May	22	07	29 <u>+</u> :	30
6	288	5	27 <sup>0</sup> 51.2'	70 <sup>0</sup> 40.0'	+.013	0	May	16	14	00 ±	30
7	288	20	27 <sup>0</sup> 08.5'	69°32.7'	013	+.033	May	16	14	00 ±	30

Note: Relative starting times between stations are less uncertain than the stated  $\pm$  30 min.

<sup>\*</sup>A "record" here is the same as a block of data.

**RECORD FORMAT DESCRIPTION** RECORD NAME\_ 15. POSITION 16. LENGTH FROM - 1 MEASURED 14. FIELD NAME 17. ATTRIBUTES 18. USE AND MEANING NUMBER UNITS (e.g., bits, bytes)

RECORD FORMAT DESCRIPTION RECORD NAME \_\_ 15. POSITION 16. LENGTH 17. ATTRIBUTES 18. USE AND MEANING FROM - 1 MEASURED 14. FIELD NAME IN NUMBER UNITS (e.g., bita, bytea)

#### 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 ("\( \subseteq \cdot \)") 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		CHECK ONE: INSTRUMENT IS CALIBRATED					
(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	IS NOT CALI- BRATED (√:)	
special purpose:		"Calibratio	n only involve	s verifica	tion of vo	Ltage to fr	equency 1	ateş	
for the MODE-1 Project.		clock rate	and good insul ground and wit	ation of t	he two chai	hhels with	respect (	0	
		"Expected properties of the second properties	erformance: 1. velocity. Act	OpV/m equi ual perfor	valent to mance: same	approx. 0.3 e as expect	cm/sec ed."		
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#### DATA DOCUMENTATION FORM

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

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#### A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS								
U. California - : Scripps Instit	1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED  U. California - San Dizzo  Scripps Justitution of Oceanography							
La Jolla, CA 92093								
2. E'PEDITION, PROJECT, O DATA WERE COLLECTED	R PROGRAM DURING	WHICH		BER(S) USED E IS SHIPMENT	ORIGINATOR	TO IDENTIFY		
IDOE/MODE	-1							
4. PLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SHIP, BUO		6. PLATFORM A	ND OPERATOR	7. DA	TES		
	Bottom- mou	1	PLATFORM	OPERATOR	FROM: MO,DAY,YR	TO: MO/DAY/YR		
	Instrumen	+	USA	usA	3/21/73	7/8/73		
8. ARE DATA PROPRIETARY	?	11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.						
NO TES								
•			GENERAL AREA					
1					40° 20° 0° 28°	40" 80" 80" 1900"  244		

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.

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Salinity	Tor	Nansen bottles	Inductive Salinometer (Hytech model S 510)	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	dunits and percent by weight	Ewing corer	Standard sieves. Carbonate fraction removed by acid treatment	Same as "Sedimentary Rock Manual," Folk 165

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

		b. SCIENTIFIC CO		
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
EAST and NORTH Horizontal Components of Electric Field	10 <sup>-8</sup> volts per meter	Scripps bottom- mounted Recorders electrode reversal switching to revove electrode noise and residual voltage		date are averaged over 16 sec, reported at 64 second intervals.
Descript 1974,173 Combridge	p., (un sublish e, MA 02/39,	rizontal Electric Fields orn panison Report of the ed manuscript). (The Media reference, it is a 0.3 cm/s barotropic ux, J. C. forsen and D. Ca ynamics Experiment (Mo ge, MA 02139).	10DE Executive Office, tated "/OHV/m voltage is ay velocity." you, "Electromagnetic Or	son thoup, December 54-1417, M.LT., wivalent to approximately servationa." IN:

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		
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#### C. DATA FORMAT

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- 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.
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- 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 TRANSMITT GIVE METHOD OF IDENTIFYING EACH RECORD TYPE										
Data record only (see attached list for dates and geographic positions).  256 East field component values followed by 256  North field component values, then a record (block) number  and 15 zero padding, all in format I6.										
2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION										
Dota records: LRECL=528 6 indefined BLKSIZE=3168  Seven files total.										
4. RESPONSIBLE COMPUTER SPECIALIST:  NAME AND PHONE NUMBER  ADDRESS  TAMO DRAIS ELECTRIC	L. FIELD									
5. RECORDING MODE BCD BINARY  ASCII EBCDIC	9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH  10. END OF FILE MARK									
6. NUMBER OF TRACKS SEVEN    SEVEN   SEVEN     NINE   SEVEN     ODD   EVEN   SEVEN     SEVEN   SEVEN   SEVEN     SEVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)  17-0261 TRIGS6  TDOE/MODE-I									
B. DENSITY    200 BPI   1600 BPI   556 BPI   800 BPI	BOTTOM MOUNTED  12. PHYSICAL BLOCK LENGTH IN BYTES  3168  13. LENGTH OF BYTES IN BITS  USCOMM-DC 44289-P72									

# RECORD FORMAT DESCRIPTION

RECORD	NAME
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14. FIELD NAME	15. POSITION FROM - 1	16. LENC	ЭТН	17. ATTRIBUTES	18. USE AND MEANING
	MEASURED	NUMBER	UNITS		
East Horizontal Electric Field	(e.g., bits, bytes)		4		
Component (in 10° Volts/m)					
	7		6	.1.	
	Repeat	ted	40 b	osition ;	1536 (Total of 256 measurements)
North-Horizontal Electric Field	1537		6		
(in 10 <sup>8</sup> Volts/m)					
	Repeate	ed to	Po	sition - 30	(256 measurements)
Record Number (Block Number)	3073		6		
Zeno Padding	3079		6		(15 zeros)
	Repeate	l to	P	paition 3168	
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RECORD FORMAT DESCRIPTION RECORD NAME 15. POSITION 16. LENGTH FROM-1 MEASURED 17. ATTRIBUTES 18. USE AND MEANING 14. FIELD NAME IN\_ NUMBER UNITS (e.g., bits, bytes)

# RECORD FORMAT DESCRIPTION

14. FIELD NAME	15. POSITION FROM - 1 MEASURED	16. LEN	GTH	17. ATTRIBUTES	18. USE AND MEANING	
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## RECORD FORMAT DESCRIPTION

RECORD NAME

14. FIELD NAME	ILE BOSTTION	116 1 51	CTU	IT ATTRIBUTES	18. USE AND MEANING
17. FIELD NAME	15. POSITION FROM - 1	I P. LEN	GIH	17. AT TRIBUTES	10. USE AND MEANING
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	I -	NUMBER	UNITS	1	
	(e.g., bits, bytes)				
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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 ("\sum'") 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.)		INSTRUMENT WAS	S CALIBRATED BY		INSTRU- MENT IS				
	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
special surpose,	"Calibrat		olous verifi						·
four built for	clock ra	te and go	od insula	find of	the twith	respert	els wit	Loto	Ken."
	" Experted	Puforma	uce: 1.0 p		ł	} ′	sprox.	0.3	cu/ser
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NUMBER

77-0261

DDF 4:1:01

### DATA DOCUMENTATION FORM

NOAA FORM 24-13

IMPORTANT

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

This form should must be complete remaining pertine reports, publicate sis, and formates

data shipments:

THIS MATERIAL IS A FART OF THE DATA/
DUCUMENTATION OF THE MODE-T DATA SET.
DO NOT REMOVE, DISPOSE OF, CH CIME
THIS MATERIAL AWAY WITHOUT THE PRIOR
APPROVAL OF THE NODE DATA SERVICES
DIVISION, OCEANCORAPPIC SERVICES
BRANCH, D7C1. THANK YOU.

r Identification, to also receive the ed by attaching collection, analyill cases. All

#### 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

University of Ca Scripps Institut La Jolla, CA 92	ion of Oceanogr	_					
2. EXPEDITION, PROJECT, O DATA WERE COLLECTED		BER(S) USED E	Y ORIGINATOR	TO IDENTIFY			
IDOE/MODE-1		1					
. PLATFORM NAME(S)	5. PLATFORM TYPE( (E.G., SHIP, BUOY		6. PLATFORM A		7. DA	TES	
	Bottom-mounted	Ī	PLATFORM	OPERATOR	FROM: MO,DAY,YF	TO: MO/DAY/YR	
	instrument	•	USA	USA	3/21/73	7/8/73	
8. ARE DATA PROPRIETARY	?		SE DARKEN ALI				
X NO YES		CONT	AINED IN YOUR	SUBMISSION W	ERE COLLECT	ED.	
IF YES, WHEN CAN TH FOR GENERAL USE?		GENERAL AREA					
9. ARE DATA DECLARED NA PROGRAM (DNP)?	TIONAL	100" 120" 140" 160" 180" 160" 140" 120" 100" 80" 60" 40" 20" 8" 20" 40" 60" 80" 100"					
(I.E., SHOULD THEY BE IN DATA CENTERS HOLDING TIONAL EXCHANGE?)		278 20 20 20 20 20 20 20 20 20 20 20 20 20	773 200 711 773 773 773 773 773 773 773 773 773		5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	712	
10. PERSON TO WHOM INQUIRE DATA SHOULD BE ADDRES PHONE NUMBER (AND ADDRES) THAN IN ITEM-1) Dr. Charles S. ( U. Cal-San Diego La Jolla, CAl920 (714)452-3235 of	Cox SIO	28° 0.6 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1	057   052   1016   1027   1049   160"   16	047   100   10   10   10   10   10   10	02/072   02/072   02/0333   03/03333   03/03/03/03/03/03/03/03/03/03/03/03/03/0	20	
NOAA FORM 24-13					USC	OMM-DC 44289-P72	

# B. STATIFIC CONTENT

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
-8 10 volts per meter	Scripps bottom-mounted recorders. Electrode reversal switching to remove electrode noise and residual voltage.		Data are averaged over 16 sec, reported at 64 sec intervals.
t of the MODE-1 In tive Office, 54-14 reference contains ropic velocity."	tercomparison Group, December 17, M.I.T., Cambridge, MA 02 the statement "1.0 pV/m vol	r, 1974, 173p.,(unpublished 139.) tage is equivalent to appro	manuscript). (The MODE ximately 0.3 cm/s
·			•
	-8 10 volts per meter  1x, J., "Horizontal tof the MODE-1 Incive Office, 54-14 reference contains ropic velocity."  2. S., J. Filloux, tean Dynamics Expe	INSTRUMENTS USED (SPECIFY TYPE AND MODEL)  -8  10 volts per meter  Scripps bottom-mounted recorders. Electrode reversal switching to remove electrode noise and residual voltage.  1x, J., "Horizontal Electric Fields in the MODE and residual voltage.  1x of the MODE-1 Intercomparison Group, Decemberive Office, 54-1417, M.I.T., Cambridge, MA Office contains ropic velocity."  2. S., J. Filloux, J. C. Larsen and D. Cayan, rean Dynamics Experiment (MODE-1)" 1977, 274p.	OR CODE  INSTRUMENTS USED (SPECIFY TYPE AND MODEL)  OR CODE  OR CODE  (SPECIFY TYPE AND MODEL)  OR CODE  (SPECIFY TYPE AND MODEL)  OR CODE  (SPECIFY TYPE AND MODEL)  OR CODE  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES  (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES

C. DATA FURMAT

1. EIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE

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

GIVE METHOD OF IDEN	ITIFYING EACH RECORD TYPE	
Data Record only	. (and attached list for	datas and secondaria maritima.
Data Record only	y (see attached list for	dates and geographic positions).
Logical record 1 Block size: 316	length: undefined. 68.	·
Seven files tota	al.	
		·
GIVE BRIEF DESCRIPT	TION OF FILE ORGANIZATION	
No booder recer		
electric	6 East electric field cor	nponent values followed by 256 North then a record (block) number, then mat.
. ATTRIBUTES AS EXPF	RESSED IN TOTAL	ALGOL COBOL LANGUAGE
. RESPONSIBLE COMPU	TER SPECIALIST:	
	PHONE NUMBER	
ADDRESS	Standard Label Tape	DON- ELECTRIC PIETR
COMBI ETE THIS S	Standard Laber Tape : ECTION IF DATA ARE ON MAGNET	
5. RECORDING MODE	ECTION IF DATA ARE ON MAGNET	IC TAPE NODC Tape Copy= 013644
	BCD BINARY	RECORD GAP (IF KNOWN) X 3/4 INCH
	ASCII EBCDIC	
		10. END OF FILE MARK
6. NUMBER OF TRACKS	SEVEN	
(0117111220)	X HINE	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS
		OF DATA TYPE, VOLUME NUMBER)
7. PARITY		77-0261 TR 1656
	X ODD	
a privated	EVEN	IDOE/MODE-1
8. DENSITŸ	200 BPI X 1600 BPI	BOTTOM MOUNTED
	556 BPI	12. PHYSICAL BLOCK LENGTH IN BYTES
-	800 BPI	3168 13. LENGTH OF BYTES IN BITS
		8
AA FORM 24-13		USCOMM-DC 44289-P7

C. DATA TORMA

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

1. LIST RECORD TYPES GIVE METHOD OF IDE			L OF YOUR FILE	Ē	
				•	-
2. GIVE BRIEF DESCRIP	TION OF FIL	E ORGANIZATION			
	·				
,					
3. ATTRIBUTES AS EXPI	RESSED IN	PL-1	ALGOL	COBOL	-
		FORTRAN		LANGUAGE	
4. RESPONSIBLE COMPU	ITED SDECIA	I ICT·			
		BER			
ADDRESS			<del></del>		
	ECTION IF	ATA ARE ON MAGNE		GINATOR TAPE, NODC N	o.003671
5. RECORDING MODE	ХХ вср	BINARY	9. LENGTH OF RECORD GAR	INTER- P (IF KNOWN) 3/4 INCH	
	ASCII	EBCDIC	<u> </u>		
			10. END OF FILE	MARK OCTAL 17	
6. NUMBER OF TRACKS (CHANNELS)	XX SEVEN				
	NINE			APER LABEL DESCRIPTION	
				PE, VOLUME NUMBER)	
7. PARITY					
	ODD XX EVEN				
8. DENSITY		<del></del>			
	200 BPI	1600 BP1			
	556 BP1			LOCK LENGTH IN BYTES	
	XX 800 BPI		13. LENGTH OF		
				8	
NOAA FORM 24-13			<u></u>		MM-DC 44289-P72

RECORD NAME \_\_

14. FIELD NAME	FROM-1		17. ATTRIBUTES	S 18. USE AND MEANING	
	IN hytes	NUMBER	UNITS		
East Horizontal Electric Field Component (in	1		6		
-8 10 Volts/meter)	7		6		
	13		6		·
	Repeated	to pos	ition	1536 (Tota	of 256 values.)
North Horizontal Electric Field Component (in -8	1537		6	·	
10 Volts/meter)	Repeated	to po	ition	3072 (Tota	al of 256 values.)
Record Number (Block Number)	3073		6		
Zero Padding	3079		6		
	Repeated	to po	sition	3168 (15 z	zeros)
				•	
					·
					·
·			,		

# MODE-I ELECTRIC FIELD OBSERVATIONS BOTTOM MOUNTED RECORDERS

# PART I - MARCH - MAY 1973

	NCDC/EDS Magnetic Tape		Location		Tangent o		record starts time*				
File #	*Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Min	ute
1	272	ĿΑ	27°57.2'	69 <sup>0</sup> 39.9'	+.027	+.007	March	26	11	56	± 30
2	206	13	27 <sup>0</sup> 58.7 <sup>1</sup>	69°33.7'	113	+.013	March	26	11	52	± 30
3	256	5	27 <sup>0</sup> 50.81	70 <sup>0</sup> 40.1'	+.007	+.007	March	26	14	46	± 30
4	272	20	27 <sup>0</sup> 08.7'	69°32.1'	. 0	0	March	20	18	45	±· 30
			PA	RT II - MAY -	JULY 1973						
5	251	1	27 <sup>0</sup> 57.8'	69 <sup>0</sup> 38.3'	0	+.026	May	22	<b>C</b> 7	29	<u>+</u> 30
6	288	5	27 <sup>0</sup> 51.2'	70 <sup>0</sup> 40.0'	+.013	0	May	16	14	00	± 30
7	288	20	27 <sup>0</sup> 08.5'	69°32.7'	013	+.033	May	16	14	00	± 30

Note: Relative starting times between stations are less uncertain than the stated  $\pm$  30 min.

<sup>\*</sup>A "record" here is the same as a block of data.

#### 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 ("\sum'") 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	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	BEFORE OR AFTER USE	BEFORE AND AFTER USE	ONLY AFTER REPAIR	ONLY WHEN NEW	NOT CALI- BRATED
	<u>i</u>	(√)		. (√)	(√)	(√)	( <b>/</b> )	(V)	(√)
special purpose: four were built	•	"Calibration	on only involve	s verifica	tion of vo	ltage to fr	equency r	ateş	
for the MODE-1 Project.		clock rate instrument	and good insul ground and wit	ation of t h respect	he two char to each ot	mels with ner."	respect t	O	
		"Expected p barotropic	erformance: 1. velocity. Act	0μV/m equi ual perfor	valent to mance: same	approx. 0.3 e as expect	cm/sec ed."		
	· · · · · · · · · · · · · · · · · · ·								
	,	1	1		ĺ			[ [	
			<del> </del>						<u> </u>
		1							

### DATA DOCUMENTATION FORM

AA 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

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 IN	1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED								
University of California-San Diego									
Scripps Institut	ion of Oceanog	raphy							
La Jolla, CA 92									
2. EXPEDITION, PROJECT, O	R PROGRAM DURING	WHICH	3. CRUISE NUM		Y ORIGINATOR	TO IDENTIFY			
DATA WERE COLLECTED			DATA IN TH	IS SHIPMENT					
IDOE/MODE-1									
•			j						
4. PLATFORM NAME(S)	5. PLATFORM TYPE (E.G., SHIP, BUO		6. PLATFORM AND OPERATOR 7. DATES NATIONALITY(IES)						
			PLATFORM	OPERATOR	FROM: MODAY,YF	TO: MO,DAY,YR			
<del></del>	Bottom-mounte	d	-						
	instrument					7/8/73			
[			USA	USA	3/21/73				
8. ARE DATA PROPRIETARY	<u> </u> ?	11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA							
		CONTAINED IN YOUR SUBMISSION WERE COLLECTED.							
X NO YES									
IF YES, WHEN CAN TH	EY BE RELEASED	GENERAL AREA							
FOR GENERAL USE?									
9. ARE DATA DECLARED NA PROGRAM (DNP)?	TIONAL	100" 120" 140" 160" 180" 180" 140" 120" 100" 80" 60" 40" 20" 8" 28" 48" 66" 80" 180"							
(I.E., SHOULD THEY BE IN	CLUDED IN WORLD	778	JA 223 1 294	1200 190	x 3 34m	(1) Next :			
DATA CENTERS HOLDING									
TIONAL EXCHANGE!	•	M. [-]- -	14,0						
NO XX YES PAR	T (SPECIFY BELOW)	70.0	5) 12/1-1-19	150	191710	712 707			
ì		40- 170	165 160	130	14514	7114)			
		20.	093 088	No.	073006	<b>(</b>			
10. PERSON TO WHOM INQUIR	IES CONCERNING		057 (52 171 01s	[D1]		700			
DATA SHOULD BE ADDRE	SSED WITH TELE-	2	× 200 133	310	20,015				
PHONE NUMBER (AND ADI	20. 30	7V bx4 4 1331	)346 D		/ m / m / m				
Dr. Charles S.	4. 03	K28 pg 423	P15 / P15		430 434				
U. Cal-San Diego			944 69 69	1 1004 1 18/2 2	<del></del>	(470 L			
La Jolla, CAL920	•	80- 505	500 495	1000 100 100	<del></del>	51E 500 ea.			
(714)452-3235 or			bx6.	20 20	21 516551				
1		577	1 577 1 1 1 1 1 1 1	1	57 . 552 457	343 571			
		199* 128*	140" 160" 180" 160" 14	0° 126° 100° 60° 60	- 40. 20. 0. 20.	45. 80. 88. 100.			



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
East and North horizontal components of electric field	-8 10 volts per meter	Scripps bottom-mounted recorders. Electrode reversal switching to remove electrode noise and residual voltage.		Data are averaged over 16 sec, reported at 64 sec intervals.
Repor Execu This barot	t of the MODE-1 In ive Office, 54-14 reference contains ropic velocity."  C. S., J. Filloux, ean Dynamics Expe	Electric Fields in the MODE tercomparison Group, December 17, M.I.T., Cambridge, MA 02 the statement "1.0 pV/m volum vol	r, 1974, 173p.,(unpublished 139.) tage is equivalent to approx "Electromagnetic Observation	manuscript). (The MODE ximately 0.3 cm/s as." IN: "Atlas of the

COMPLETE THIS SECTION FOR PUNCHED CARDS OR TAPE, MAGNETIC TAPE, OR DISC SUBMISSIONS. 1. LIST RECORD TYPES CONTAINED IN THE TRANSMITTAL OF YOUR FILE IVE METHOD OF IDENTIFYING EACH RECORD TYPE Data Record only (see attached list for dates and geographic positions). Logical record length: undefined. ' Block size: 3168. Seven files total. 2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION No header record. Data record: 256 East electric field component values followed by 256 North electric field component values, then a record (block) number, then 15 zero padding, all in (I6) format. COBOL XXPL-1 ALGOL 3. ATTRIBUTES AS EXPRESSED IN FORTRAN LANGUAGE 4. RESPONSIBLE COMPUTER SPECIALIST: NAME AND PHONE NUMBER Standard Label Tape DSN= ELECTRIC.FIELD COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE NODC Tape Copy= 013644 5. RECORDING MODE 9. LENGTH OF INTER-RECORD GAP (IF KNOWN) X 3/4 INCH BCD BINARY ASCII \* EBCDIC 10. END OF FILE MARK OCTAL 17 6. NUMBER OF TRACKS SEVEN (CHANNELS) 11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) X NINE 77-0261 TR 1656 7. PARITY X 000 EVEN IDOE/MODE-1 8. DENSITY 200 BPI X 1600 BPI BOTTOM MOUNTED 12. PHYSICAL BLOCK LENGTH IN BYTES 556 BPI 3168 800 BPI 13. LENGTH OF BYTES IN BITS

NO A A FORM 24-13 USCOMM-DC 44289-P72

L. DAIA PURMAT

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

1. LIST RECORD TYPES GIVE METHOD OF IDE			L OF YOUR FILE
			<u> </u>
2. GIVE BRIEF DESCRIP	TION OF FIL	E ORGANIZATION	<u></u>
			•
3. ATTRIBUTES AS EXPI	RESSED IN		ALGOL COBOL
		FORTRAN	LANGUAGE
4. RESPONSIBLE COMPU	TER SPECIA	ALIST:	
NAME AND I ADDRESS		BER	
COMPLETE THIS S	ECTION IF D	ATA ARE ON MAGNET	TIC TAPE ORIGINATOR TAPE, NODC No.003671
5. RECORDING MODE	ХХ вср	BINARY	9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH
	ASCII	EBCDIC	10. END OF FILE MARK
6. NUMBER OF TRACKS	ᆜ		OCTAL 17
(CHANNELS)	XX SEVEN		11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE
	NINE		ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)
7. PARITY			
	XX EVEN		·
8. DENSITY	200 BPI	1600 BPI	
	556 BPI		12. PHYSICAL BLOCK LENGTH IN BYTES 3168
	XX 800 BPI		13. LENGTH OF BYTES IN BITS
	<u> </u>		

NOAA FORM 24-13

U5COMM-DC 44289-P72

14. FIELD NAME	15. POSITION FROM - 1 MEASURED			17. ATTRIBUTES		18. USE AND MEANING
	(e.g., bitu, bytes)	NUMBER	UNITS			
East Horizontal Electric Field Component (in	1		6			
-8 10 Volts/meter)	7		6			
	13		6			
	Repeated	to pos	ition	1536	(Total	of 256 values.)
North Horizontal Electric Field Component (in -8	1537		6			
10 Volts/meter)	Repeated	to pos	ition	3072	(Total o	f 256 values.)
Record Number (Block Number)	3073		6			·
ero Padding	.3079		6			
Zero Padding	Repeated	to po	 sition	3168	(15 zer	os)
						·
			}			
						·
				•		
					•	
			<u> </u>			

# MODE-I ELECTRIC FIELD OBSERVATIONS BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

	NODC/EDS gnetic Tape		Loca	tion	Tangent o	f Tilt	Time a Un	t which iversal			tarts
File #	*Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Mir	nute
1	272	ŀΑ	27 <sup>0</sup> 57.21	69 <sup>0</sup> 39.9'	+.027	+.007	March	26	11	56	± 30
2	206	13	27 <sup>0</sup> 58.7'	69 <sup>0</sup> 33.7'	113	+.013	March	26	11	52	± 30
3	256	5	27 <sup>0</sup> 50.81	70 <sup>0</sup> 40.1'	+.007	+.007	March	26	14	46	<u>+</u> 30
4	272	20	27 <sup>0</sup> 08.7'	69°32.1'	0	0	March	20	18	45	±· 30
			PAF	RT II - MAY -	JULY 1973						
5	251	1	27 <sup>0</sup> 57.8'	69°38.3'	0	+.026	May	22	07	29	± 30
6	288	5	27 <sup>0</sup> 51.2'	70 <sup>0</sup> 40.0'	+.013	0	May	16	14	00	± 30
7	288	20	27 <sup>0</sup> 08.5'	69 <sup>0</sup> 32.7'	013	+.033	May	16	14	00	± 30

Note: Relative starting times between stations are less uncertain than the stated  $\pm$  30 min.

<sup>\*</sup>A "record" here is the same as a block of data.

#### 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 ("\(\superature\)") the appropriate spaces. Add the interval time (i.e., 3 months, 6 months, 9 months, etc.) if the fixed interval calibration cycle is checked.

INSTRUMENT TYPE	5.75.05.1467	INSTRUMENT WAS	S CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED				
(MFR., MODEL NO.)	DATE OF LAST CALIBRATION	YOUR ORGANIZATION (√)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS	BEFORE OR AFTER USE (√)	BEFORE AND AFTER USE ( \( \frac{1}{2} \))	ONLY AFTER REPAIR (√)	ONLY WHEN NEW	IS NOT CALI- BRATED
special purpose: four were built	•	"Calibratio	on only involve	s verifica	ation of vol	ltage to fr	requency r	rate;	
for the MODE-1 Project.		clock rate instrument	and good insul ground and wit	n respect	the two char to each ot	hhels with her."	respect t	0	
		"Expected p barotropic	performance: 1. velocity. Act	0μV/m equi ual perfor	mance: sam	e as expect	cm/sec ed."		
							<u> </u>		
A FORM 24-13	·	1	L	J	L		<u> </u>	112604	M-DC 44289

### UNIVERSITY OF CALIFORNIA, SAN DIEGO

BERKELEY · DAVIS · IRVINE · LOS ANCELES · RIVERSIDE · SAN DIECO · SAN FRANCISCO



SANTA BARBARA - SANTA CRUZ

SCRIPPS INSTITUTION OF OCEANOGRAPHY

May 21, 1976

Mr. Sid Marcus EDS/NODC D 781 Washington, D. C. 20235

Dear Mr. Marcus:

This letter is attached to a magnetic tape which contains all presently available electric field observations from our part of the MODE-I experiment, March - July 1973.

The electric instruments were placed on the sea bottom and for two intervals separated by a short gap for servicing in May. The installations and their locations are summarized in the attached table. Each instrument recorded two components of the electric field by means of recording voltmeters. These were intended to be horizontal components of the field, but because of the unevenness of the sea floor, the instruments were slightly tilted as listed in the table.

The electric fields components were recorded over a span of 6 meters. The recorded results have been adjusted for the azimuth of the instruments. Thus the data are reported in terms of electric components <u>eastward</u> (geographic) and <u>northward</u> (geographic) respectively. No allowance has been made for tilt.

The data are in BCD code. They are in integers, each unit of which represents  $10^{-8}$  volts/meter. The data are reported at 64 second intervals. The magnetic tape has seven files, one for each of the data listed in the table. Each file consists of records of 528 integers in format (16) as follows:

(9 track 800 bpi)
256 East field component
256 North field component
1 Record number
15 Zero padding

I hope these data will be readily usable.

Yours sincerely,

Charles S. Cox

cc: J. Filloux

R. Heinmiller

D. Cayan

#### PART I - MARCH - MAY 1973

3700 c /-					•					
NODC/E Magneti			Location		Tangent of Tilt		Time at which record starts Universal time			arts
le number	Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute
1	272	1A	27°57.2°	69°39.91	+.027	+.007	March	27	03	07 ± 3C
2	206 .	1B	27°58.71	69°33,71	0.113	+.013	March	<b>27</b> .	03	07 ± 30
3	256	5.	27°50.8°	70°40.1'	+.007	<u>+</u> .007	March	26	06	02 ± 30
4	272	20	27°08.7°	69°32.1'	0	0	March	21	. 07	07 ± 9
		·								
				·		•	•	•		
·		7	·	PART II	- MAY - JULY 197	3				
5	251	1	27°57.8°	69°38.31	0	+.026	May	22	07	35 ± 12
6	288	5	27°51.2°	70 <sup>6</sup> 40.01	+.013	0	May	. 16	13	56 ± 2
7	288	20	27.08.51	69°32.71	013	+.033	May	. 16	14	00 ± 2

NOT VALID
Lee letter & 8/9/76

PART I - MARCH - MAY 1973

NODC/EDS Magnetic Tape			Location		Tangent of Tilt		Time at which record starts Universal time*				arts
File #	*Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Min	ute
1	272	1.A	27°57.2'	69 <sup>0</sup> 39.9'	+.027	+.007	March	26	11	56	± 30
2	206	18	27 <sup>0</sup> 58.7'	69 <sup>0</sup> 33.7'	113	+.013	March	26	11	52	± 30
3	256	• 5	27 <sup>0</sup> 50.8'	70 <sup>0</sup> 40.1'	+.007	+.007	March	26	14	46	± 30
4	272	20	27 <sup>0</sup> 08.7'	69°32.1'	0	0	March	20	18	45	±· 30
			PAI	RT II - MAY -	JULY 1973						
5	<b>2</b> 51	1	27 <sup>0</sup> 57.8¹	69 <sup>0</sup> 38.3'	0	+.026	May	22	07	29	± 30
6	288	5	27°51.2'	70 <sup>0</sup> 40.0'	+.013	0	May	16	14	00	<u>+</u> 30
7	288	20	27 <sup>0</sup> 08.5'	69 <sup>0</sup> 32.7'	013	+.033	May	16	14	00	± 30

Note: Relative starting times between stations are less uncertain than the stated  $\pm$  30 min. \*A "record" here is the same as a block of data.

valid info by lox letter of 8/9/76

#### UNIVERSITY OF CALIFORNIA, SAN DIEGO

BERKELEY · DAVIS · IRVINE · LOS ANGELES · RIVERSIDE · SAN DIECO · SAN FRANCISCO



SANTA BARBARA - SANTA CRUZ

SCRIPPS INSTITUTION OF OCEANOGRAPHY

LA JOLLA, CALIFORNIA 92093 August 9, 1976

Mr. Sid Marcus
EDS/NODC
D781
Washington, D. C. 20235

Dear Mr. Marcus:

We have found a serious timing error describing the starting times of the electric field data I sent you dated July 29, 1976 (reference Data Documentation Form).

The corrected starting times are enclosed. Please alter the form to agree with these new values.

I am indebted to Dr. Ken Poehls for pointing out this error.

Sincerely,

Charles S. Cox

#### enclosure

cc: K. Poehls

- . R. Heinmiller
  - D. Cayan

PART I - MARCH - MAY 1973

NODC/EDS Magnetic Tape		Location		Tangent of Tilt		Time at which record sta Universal time*				arts	
File #	Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Min	ute
. 1	272	1A	27°57.21	69 <sup>0</sup> 39.91	+.027	+.007	March	26	11	56	± 30
2	206	1B	27 <sup>0</sup> 58.7'	69 <sup>0</sup> 33.7'	113	+.013	March	26	11	52	± 30
<b>3</b> ·	256	5	27°50.81	70 <sup>0</sup> 40.1'	+.007	+.007	March	26	14	46	± 30
4	272	20	27 <sup>0</sup> 08.7'	69°32.1'	0	. 0	March	20	18	45	±· 30
	•		PAF	RT II - MAY -	JULY 1973						
5	251	1	27 <sup>0</sup> 57.8 <sup>1</sup>	69 <sup>0</sup> 38.3'	0	+.026	May	22	07	29	± 30
6	288	5	27 <sup>0</sup> 51.2 <sup>1</sup>	70 <sup>0</sup> 40.0'	+.013	0	May	16	14	00	± 30
7	288	20	27 <sup>0</sup> 08.5'	69 <sup>0</sup> 32.71	013	+.033	May	16	14	00	± 30

Note: Relative starting times between stations are less uncertain than the stated ± 30 min.

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

	S CONTAINED IN THE TRANSMITT ENTIFYING EACH RECORD TYPE	
	• .	
		•
. GIVE BRIEF DESCRI	PTION OF FILE ORGANIZATION	, gray, 1991
	·	
. ATTRIBUTES AS EX	= = =	ALGOLCOBOL
	☐ FORTRAN [	LANGUAGE
. RESPONSIBLE COMP		
	PHONE NUMBER	
ADDRESS,	<del></del>	
COMPLETE THIS	SECTION IF DATA ARE ON MAGN	ETIC TAPE ORIGINATOR TAPE, NODC No.003671
5. RECORDING MODE	XX BCD BINARY	9. LENGTH OF INTER- RECORD GAP (IF KNOWN) 3/4 INCH
	<u> </u>	RECORD GAP (IF KNOWN) 3/4 INCH
	ASCII EBCDIC	to END OF EU CHARK
		10. END OF FILE MARK
5. NUMBER OF TRACK	s	
(CHANNELS)	XX SEVEN	M. DACTE ON DADED LAREL DESCRIPTION (INC.) UDD
	NINE	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS
		OF DATA TYPE, VOLUME NUMBER)
7 BARITY		=
7. PARITY	ООО	
	XX EVEN	
8. DENSITY		
	200 BPI 1600 BPI	
	556 BPI	12. PHYSICAL BLOCK LENGTH IN BYTES
		3168
	VV:	3100
	XX 800 BPI	13. LENGTH OF BYTES IN BITS
	XX 800 BPI	

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.

NOAA FORM 24-19 USCOMM-DC 44289-P72

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

MITTAL OF YOUR FILE
TYPE
ION
Apre, described below, as a nexu is SEARCH program Levelopsed to Chings and their locations. During
5 EARCH reporter Levelaged to
cologo and their locations.
ALGOL COBOL LANGUAGE
AACHETIG TABE
9. LENGTH OF INTER-
RECORD GAP (IF KNOWN) 3/4 INCH
10. END OF FILE MARK
<del> </del>
11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE
ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)
Originator Take NOD number 00367/
Originator Tape, NODE number 00367/
12. PHYSICAL BLOCK I ENGTH IN SYTES
12. PHYSICAL BLOCK LENGTH IN BYTES 3168
r

NOAA FORM 24-13

USCOMM-DC 44289-P72

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.
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NOAA FORM 24-19 USCOMM-DC 44289-P72

### RECORD FORMAT DESCRIPTION

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

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

#### PART I - MARCH - MAY 1973

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NODC/EDS Magnetic Tape			Location			Tangent of Tilt		Time at which record starts Universal time			
le number	Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute	
1	272	1A	27°57.2°	69°39.91	+.027	+.007	March	27	03	07 ± 30	
· 2	206	1B	27°58.71	69°33.7'	0.113	+.013	March	27	03	07 ± 30	
3	256	<b>5</b> ;	27°50.8°	70°40.1	+.007	<u>+</u> .007	March	27	06.	02 ± 31	
4	272	20 .	27°08.7°	69°32.1°	0	0	March	21	07	07 ± 9	
·			·								
				•				•			
		<b>7</b>		PART II	- MAY - JULY 197	3	٠				
5	251	1	27°57.81	69°38.3	0	+.026	May	22	07	35 ± 1:	
6	288	. 5	27°51.2°	70°40.01	+.013	0	May	16	. 13	56 ± 2	
7	288	20	27.08.51	69°32.71	013	+.033	May	. 16	14	00 <u>+</u> 2	

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Somm
See letter of 8/9/76

#### UNIVERSITY OF CALIFORNIA

Attachment Memo- PC 0070

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			Marcus with co				
			ure 🗆 approval 🗆 c				
Please	□ file	□ return	draft reply 🛚 .	route to			
Messa	geI	enclose	a corrected co	py of the	e attachme	ent: n	ote
	cha	ange in	date from Marc	h 26 to 1	March 27		
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## UNIVERSITY OF CALIFORNIA

Attachment Memo- PC 0070

	Date
TOS. Marcus	FROM A. Pickens, Secretary
Subject Letter	of 5/21 with attachment from C. S. Cox
For 🗆 initial	$\Box$ signature $\Box$ approval $\Box$ comments $\Box$ discussion $\Box$ information
Please 🗆 file	□ return □ draft reply □ route to
Message Not	e date change on attachment from March 26 to/27)
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. PART I - MARCH - MAY 1973

NODC/EDS Magnetic Tape			Location			Tangent of Tilt		Time at which record starts Universal time			
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2	206	1B	27°58.7°	69°33.71	0.113	+.013	March	27	03	07 ± 3	
3	256	5	27°50.8°	70°40.1°	+.007	+.007	March	27	06	02 ± 3	
4	272	20	27°08.7'	69°32.1'	0	. 0	March	21	07	07 ± 9	
			. •							•	
								•			
		•		PART II	- MAY - JULY 197	3					
5	251	1	27°57.8°	69°38.31	0	+.026	May	22	07	35 ± 1	
6	288	· 5	27°51.2'	70°40.0°	+.013	0	May	16	. 13	56 ± 2	
. 7	288	20	27°08.5°	69°32.7'	013	+.033	May .	16	14	00 ± 2	
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Sa letter of 8/9/76



#### THE U.S. POLYMODE ORGANIZING COMMITTEE

BUILDING 54 ROOM 1417 MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MA. 02139

March 1, 1979

Mr. Don Maguire
World Data Center-A, Oceanography
NOAA/EDS
2001 Wisconsin Ave., N.W.
Washington, D.C. 20235

Dear Don,

I talked to Chip Cox about the electric field data from MODE. He said he had sent in all the documentation on it.

I checked through my files and found that I had copies of the correspondance between Marcus and Cox (attached). Apparently Cox sent a letter to Marcus, who responded by asking for more info. According to Cox's August 9, 1976 letter, he had sent the DDF's on July 29.

Hope this helps in tracking the stuff down.

Sincerely,

Robert Heinmiller

US POLYMODE Executive Manager

RH/pf Encls. cc: C. Cox



### U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEANOGRAPHIC DATA CENTER Washington, D.C. 20235

June 8, 1976

D781/SOM

Dr. Charles S. Cox 0-030 Scripps Institution of Oceanography La Jolla, Ca 92093

Dear Dr. Cox:

Receipt of one magnetic tape containing all of your presently available electric field observations from your part of the MODE-I experiment is acknowledged.

Much of the required documentation for your tape was included in your covering letter. However, in order to satisfy anticipated users' needs we require more detailed documentation. I have enclosed two Data Documentation Forms (DDF), one with entries and question marks to guide you in filling in the other (blank). If you have any publication or other literature further describing these unique data, I would appreciate your sending it back with the DDF.

I am pleased to receive your data tape and would appreciate receiving the DDF as soon as possible, so we can finalize the archival process.

Sincerely.

Sidney Ø. Marcus, Jr.

NODC Manager, IDOE Project

Enclosure (DDF Form)

cc: R. Heinmiller

N. Ross

C. Collins

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7700261	L105	TR1656	0061	3101	317F	1973/03/21	NULL	303203

(1 row affected)

#### Password:

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