

DDF A:1:01

DATA DOCUMENTATION FORM

TR1656
L105

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

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

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED University of California-San Diego Scripps Institution of Oceanography La Jolla, CA 92093			
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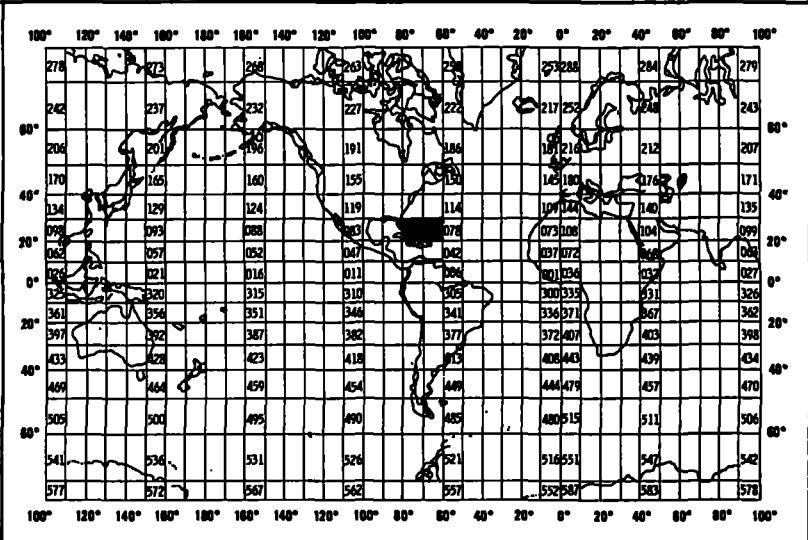
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED IDOE/MODE-1		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT _____	
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4. PLATFORM NAME(S) _____	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Bottom-mounted instrument	6. PLATFORM AND OPERATOR NATIONALITY(IES)		7. DATES	
		PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR
		USA	USA	3/21/73	7/8/73

8. ARE DATA PROPRIETARY?
 NO YES
 IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____

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

9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)?
 (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)
 NO YES PART (SPECIFY BELOW)



10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)
 Dr. Charles S. Cox
 U. Cal-San Diego, SIO
 La Jolla, CA 92093
 (714)452-3235 or -3232

B. SCIENTIFIC CONTENT

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

EXAMPLE (HYPOTHETICAL INFORMATION)

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
<i>Salinity</i>	<i>‰</i>	<i>Nansen bottles</i>	<i>Inductive salinometer (Hytech model 5510)</i>	<i>N/A (Not applicable)</i>
		<i>STD Bissett-Berman Model 9006</i>	<i>N/A</i>	<i>Values averaged over 5-meter intervals</i>
<i>Water color</i>	<i>Forel scale</i>	<i>Visual comparison with Forel bottles</i>	<i>N/A</i>	<i>N/A</i>
<i>Sediment size</i>	<i>φ units and percent by weight</i>	<i>Ewing corer</i>	<i>Standard sieves. Carbonate fraction removed by acid treatment</i>	<i>Same as "Sedimentary Rock Manual," Folk '65</i>

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

B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
<p>East and North horizontal components of electric field</p>	<p>-8 10 volts per meter</p>	<p>Scripps bottom-mounted recorders. Electrode reversal switching to remove electrode noise and residual voltage.</p>		<p>Data are averaged over 16 sec, reported at 64 sec intervals.</p>
<p><u>References:</u> Filloux, J., "Horizontal Electric Fields in the MODE-1 Area." IN: <u>Instrument Description and Intercomparison Report of the MODE-1 Intercomparison Group</u>, December, 1974, 173p., (unpublished manuscript). (The MODE Executive Office, 54-1417, M.I.T., Cambridge, MA 02139.) This reference contains the statement "1.0 μV/m voltage is equivalent to approximately 0.3 cm/s barotropic velocity."</p> <p>Cox, C. S., J. Filloux, J. C. Larsen and D. Cayan, "Electromagnetic Observations." IN: "Atlas of the Mid-Ocean Dynamics Experiment (MODE-1)" 1977, 274p. (The POLYMODE Office, 54-1417, M.I.T., Cambridge, MA 02139)</p>				

B. SCIENTIFIC CONTENT

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

C. DATA FORMAT

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

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

C. DATA FORMAT

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

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

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.

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____
ADDRESS _____

Standard Label Tape DSN= ELECTRIC.FIELD

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE NODC Tape Copy= 013644

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input checked="" type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>77-0261 TR 1656</p> <p>IDOE/MODE-1</p> <p>BOTTOM MOUNTED</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p align="center">3168</p> <p>13. LENGTH OF BYTES IN BITS</p> <p align="center">8</p>

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <u>bytes</u> <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
East Horizontal Electric Field Component (in -8 10 Volts/meter)	1		6		
	7		6		
	13		6		
	Repeated to position 1536				(Total of 256 values.)
North Horizontal Electric Field Component (in -8 10 Volts/meter)	1537		6		
	Repeated to position 3072				(Total of 256 values.)
Record Number (Block Number)	3073		6		
Zero Padding	3079		6		
	Repeated to position 3168				(15 zeros)

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

MODE-I ELECTRIC FIELD OBSERVATIONS

BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

File #	NODC/EDS Magnetic Tape *Records/file	Station	Location		Tangent of Tilt		Time at which record starts Universal time*				
			Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute	
1	272	1A	27°57.2'	69°39.9'	+0.027	+0.007	March	26	11	56	± 30
2	206	1B	27°58.7'	69°33.7'	-.113	+0.013	March	26	11	52	± 30
3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	26	14	46	± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	20	18	45	± 30

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	29	± 30
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	14	00	± 30
7	288	20	27°08.5'	69°32.7'	-.013	+0.033	May	16	14	00	± 30

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

*A "record" here is the same as a block of data.

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

D. INSTRUMENT CALIBRATION

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

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
special purpose: four were built for the MODE-1 Project.			"Calibration only involves verification of voltage to frequency rates, clock rate and good insulation of the two channels with respect to instrument ground and with respect to each other."						
			"Expected performance: 1.0µV/m equivalent to approx. 0.3 cm/sec barotropic velocity. Actual performance: same as expected."						

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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1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED
U. California - San Diego
Scripps Institution of Oceanography
La Jolla, CA 92093

2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED
IDOE / MODE - 1

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

4. PLATFORM NAME(S)
—

5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)
Bottom-mounted instrument

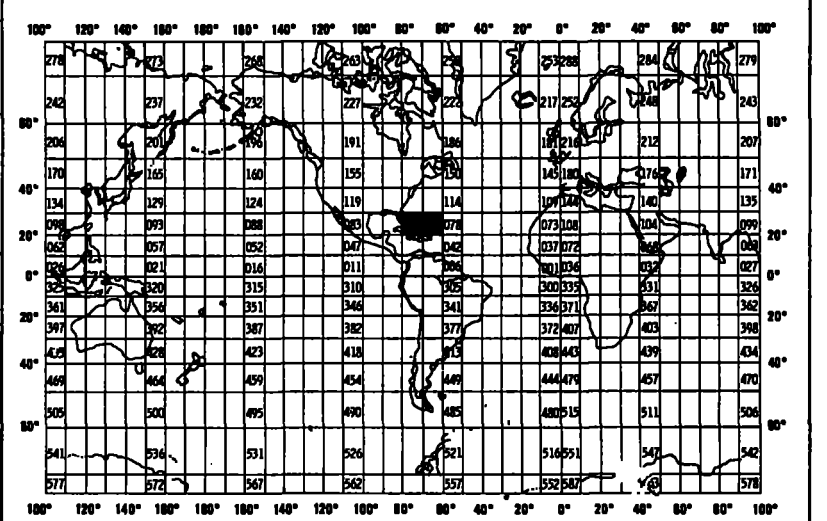
6. PLATFORM AND OPERATOR NATIONALITY(IES)
USA USA

7. DATES
FROM: 3/21/73 TO: 7/8/73

8. ARE DATA PROPRIETARY?
[X] NO [] YES
IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR MONTH

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

9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)
[] NO [X] YES [] PART (SPECIFY BELOW)



10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)
Dr. Charles S. Cox
U. Cal. - S.D., SIO
La Jolla, CA 92093
(714) 452-3235 or 3232

B. SCIENTIFIC CONTENT

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

EXAMPLE (HYPOTHETICAL INFORMATION)

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

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

B. SCIENTIFIC CONTENT

NAME OF DATA FIELD	REPORTING UNITS OR CODE	METHODS OF OBSERVATION AND INSTRUMENTS USED (SPECIFY TYPE AND MODEL)	ANALYTICAL METHODS (INCLUDING MODIFICATIONS) AND LABORATORY PROCEDURES	DATA PROCESSING TECHNIQUES WITH FILTERING AND AVERAGING
<p>EAST and NORTH Horizontal Components of Electric Field</p>	<p>10^{-8} volts per meter</p>	<p>Scripps bottom-mounted Recorders electrode reversal switching to remove electrode noise and residual voltage</p>		<p>Data are averaged over 16 sec, reported at 64 second intervals.</p>
<p>References: Filloux, J., "Horizontal Electric Fields in the MODE-1 Area." IN: <u>Instrument Description and Intercomparison Report of the MODE-1 Intercomparison Group</u>, December 1974, 173 p., (unpublished manuscript). (The MODE Executive Office, 54-1417, M.I.T., Cambridge, MA 02139). *In this reference, it is stated "1.0 μV/m voltage is equivalent to approximately 0.3 cm/s barotropic velocity." Cox, C.S., J. Filloux, J.C. Jansen and D. Cayan, "Electromagnetic Observations." IN: "Atlas of the Mid-Ocean Dynamics Experiment (MODE-1)" 1977, 274 p. (The POLYMODE Office, 54-1417, M.I.T., Cambridge, MA 02139).</p>				

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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.
17. Enter attributes as expressed in the programming language specified in item 3 (e.g., "F 4.1," "BINARY FIXED (5.1)").
18. Describe field. If sort field, enter "SORT 1" for first, "SORT 2" for second, etc. If field is repeated, state number of times it is repeated.

C. DATA FORMAT

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

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

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

No header records.
Data records: ~~LRECL=528~~ 6 undefined
BLKSIZE=3168
seven files total.

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____
ADDRESS _____

Standard Label Tape DSN = ELECTRIC. FIELD

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE NODC Tape Copy: 013644

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input checked="" type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>77-0261 TR1656 IDOE / MODE -1 BOTTOM MOUNTED</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>3168</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <u>bytes</u> (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
East Horizontal Electric Field Component (in 10^{-8} Volts/m)	1		6		
	7		6		
	13		6		
Repeated to position 7536 (Total of 256 measurements)					
North Horizontal Electric Field Component (in 10^{-8} Volts/m)	1537		6		
Repeated to position - 3072 (256 measurements)					
Record Number (Block Number)	3073		6		
Zero Padding	3079		6		(15 zeros)
Repeated to position 3168					

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD NAME _____

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

RECORD NAME _____

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

D. INSTRUMENT CALIBRATION

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

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
<i>special purpose, four built for MODE-7 Project</i>	<i>"Calibration only involves verification of voltage to frequency ratio, clock rate and good insulation of the two channels with respect to instrument ground and with respect to each other." "Expected Performance: 1.0 μV/m equivalent to approx. 0.3 cm/sec barotropic velocity. Actual performance: same as expected."</i>								

DDF A:1:01

DATA DOCUMENTATION FORM

NOAA FORM 24-13 (4-72)

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

IMPORTANT

This form should be completed by donor for all data transmittals. This form should be completed by donor for all data transmittals. This form should be completed by donor for all data transmittals.

THIS MATERIAL IS A PART OF THE DATA/ DOCUMENTATION OF THE MODE-1 DATA SET. DO NOT REMOVE, DISPOSE OF, OR GIVE THIS MATERIAL AWAY WITHOUT THE PRIOR APPROVAL OF THE NODC DATA SERVICES DIVISION, OCEANOGRAPHIC SERVICES BRANCH, 0701. THANK YOU.

Identification, to also receive the ed by attaching collection, analy- ill cases. All

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED University of California-San Diego Scripps Institution of Oceanography La Jolla, CA 92093				
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED IDOE/MODE-1		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT _____		
4. PLATFORM NAME(S) _____	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Bottom-mounted instrument	6. PLATFORM AND OPERATOR NATIONALITY(IES)		
		PLATFORM	OPERATOR	7. DATES
		USA	USA	FROM: MO/DAY/YR TO: MO/DAY/YR 3/21/73 7/8/73
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA		
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)				
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Charles S. Cox U. Cal-San Diego, SIO La Jolla, CA 92093 (714)452-3235 or -3232				

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
<p>East and North horizontal components of electric field</p> <p><u>References:</u> Filloux, J., "Horizontal Electric Fields in the MODE-1 Area." IN: <u>Instrument Description and Intercomparison Report of the MODE-1 Intercomparison Group</u>, December, 1974, 173p., (unpublished manuscript). (The MODE Executive Office, 54-1417, M.I.T., Cambridge, MA 02139.) This reference contains the statement "1.0 $\mu\text{V}/\text{m}$ voltage is equivalent to approximately 0.3 cm/s barotropic velocity."</p> <p>Cox, C. S., J. Filloux, J. C. Larsen and D. Cayan, "Electromagnetic Observations." IN: "Atlas of the Mid-Ocean Dynamics Experiment (MODE-1)" 1977, 274p. (The POLYMODE Office, 54-1417, M.I.T., Cambridge, MA 02139)</p>	<p align="center">-8 10 volts per meter</p>	<p>Scripps bottom-mounted recorders. Electrode reversal switching to remove electrode noise and residual voltage.</p>		<p>Data are averaged over 16 sec, reported at 64 sec intervals.</p>

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

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 PL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____

ADDRESS _____

Standard Label Tape DSN= ELECTRIC.FIELD

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

NODC Tape Copy= 013644

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input checked="" type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>77-0261 TR 1656</p> <p>IDOE/MODE-1</p> <p>BOTTOM MOUNTED</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>3168</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

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

[Empty box for listing record types and identifying methods]

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

[Empty box for describing file organization]

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

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

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE ORIGINATOR TAPE, NODC No.003671

<p>5. RECORDING MODE</p> <p><input checked="" type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input checked="" type="checkbox"/> SEVEN</p> <p><input type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input checked="" type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>3168</p>
	<p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN bytes (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
East Horizontal Electric Field Component (in -8 10 Volts/meter)	1		6		
	7		6		
	13		6		
	Repeated to position 1536				(Total of 256 values.)
North Horizontal Electric Field Component (in -8 10 Volts/meter)	1537		6		
	Repeated to position 3072				(Total of 256 values.)
Record Number (Block Number)	3073		6		
Zero Padding	3079		6		
	Repeated to position 3168				(15 zeros)

MODE-I ELECTRIC FIELD OBSERVATIONS

BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

File #	*Records/file	Station	Location		Tangent of Tilt		Time at which record starts Universal time*				
			Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute	
1	272	1A	27°57.2'	69°39.9'	+0.027	+0.007	March	26	11	56	± 30
2	206	1B	27°58.7'	69°33.7'	-.113	+0.013	March	26	11	52	± 30
3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	26	14	46	± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	20	18	45	± 30

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	29	± 30
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	14	00	± 30
7	285	20	27°08.5'	69°32.7'	-0.013	+0.033	May	16	14	00	± 30

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

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

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
special purpose: four were built for the MODE-1 Project.									
		"Calibration only involves verification of voltage to frequency rate; clock rate and good insulation of the two channels with respect to instrument ground and with respect to each other."							
		"Expected performance: 1.0µV/m equivalent to approx. 0.3 cm/sec barotropic velocity. Actual performance: same as expected."							

DATA DOCUMENTATION FORM

NOAA FORM 24-13 (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

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

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED University of California-San Diego Scripps Institution of Oceanography La Jolla, CA 92093				
2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED IDOE/MODE-1		3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT _____		
4. PLATFORM NAME(S) _____	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.) Bottom-mounted instrument	6. PLATFORM AND OPERATOR NATIONALITY(IES)		
		PLATFORM	OPERATOR	7. DATES
		USA	USA	FROM: MO/DAY/YR TO: MO/DAY/YR 3/21/73 7/8/73
8. ARE DATA PROPRIETARY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____		11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED. GENERAL AREA		
9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?) <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)				
10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1) Dr. Charles S. Cox U. Cal-San Diego, SIO La Jolla, CA 92093 (714)452-3235 or -3232				

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
<p>East and North horizontal components of electric field</p>	<p>-8 10 volts per meter</p>	<p>Scripps bottom-mounted recorders. Electrode reversal switching to remove electrode noise and residual voltage.</p>		<p>Data are averaged over 16 sec, reported at 64 sec intervals.</p>
<p><u>References:</u> Filloux, J., "Horizontal Electric Fields in the MODE-1 Area." IN: <u>Instrument Description and Intercomparison Report of the MODE-1 Intercomparison Group</u>, December, 1974, 173p., (unpublished manuscript). (The MODE Executive Office, 54-1417, M.I.T., Cambridge, MA 02139.) This reference contains the statement "1.0 μV/m voltage is equivalent to approximately 0.3 cm/s barotropic velocity."</p> <p>Cox, C. S., J. Filloux, J. C. Larsen and D. Cayan, "Electromagnetic Observations." IN: "Atlas of the Mid-Ocean Dynamics Experiment (MODE-1)" 1977, 274p. (The POLYMODE Office, 54-1417, M.I.T., Cambridge, MA 02139)</p>				

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

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

XPL-1 ALGOL COBOL
 FORTRAN _____ LANGUAGE

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____

ADDRESS _____

Standard Label Tape DSN= ELECTRIC.FIELD

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

NODC Tape Copy= 013644

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input checked="" type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input checked="" type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input type="checkbox"/> SEVEN</p> <p><input checked="" type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input checked="" type="checkbox"/> ODD</p> <p><input type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p>77-0261 TR 1656</p> <p>IDOE/MODE-1</p> <p>BOTTOM MOUNTED</p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input checked="" type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p>3168</p> <p>13. LENGTH OF BYTES IN BITS</p> <p>8</p>

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

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

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____
ADDRESS _____

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE ORIGINATOR TAPE, NODC No.003671

<p>5. RECORDING MODE</p> <p><input checked="" type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input checked="" type="checkbox"/> SEVEN</p> <p><input type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p> </p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input checked="" type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p style="text-align: center;">3168</p>
	<p>13. LENGTH OF BYTES IN BITS</p> <p style="text-align: center;">8</p>

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN <u>bytes</u> (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
East Horizontal Electric Field Component (in -8 10 Volts/meter)	1		6		
	7		6		
	13		6		
	Repeated to position		1536	(Total of 256 values.)	
North Horizontal Electric Field Component (in -8 10 Volts/meter)	1537		6		
	Repeated to position		3072	(Total of 256 values.)	
Record Number (Block Number)	3073		6		
Zero Padding	3079		6		
Zero Padding	Repeated to position		3168	(15 zeros)	

MODE-I ELECTRIC FIELD OBSERVATIONS
 BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

File #	*Records/file	Station	Location		Tangent of Tilt		Time at which record starts Universal time*				
			Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute	
1	272	1A	27°57.2'	69°39.9'	+0.027	+0.007	March	26	11	56	± 30
2	206	1B	27°58.7'	69°33.7'	-.113	+0.013	March	26	11	52	± 30
3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	26	14	46	± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	20	18	45	± 30

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	29	± 30
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	14	00	± 30
7	288	20	27°08.5'	69°32.7'	-.013	+0.033	May	16	14	00	± 30

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

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

INSTRUMENT TYPE (MFR., MODEL NO.)	DATE OF LAST CALIBRATION	INSTRUMENT WAS CALIBRATED BY		CHECK ONE: INSTRUMENT IS CALIBRATED					INSTRUMENT IS NOT CALI- BRATED (✓)
		YOUR ORGANIZATION (✓)	OTHER ORGANIZATION (GIVE NAME)	AT FIXED INTERVALS (✓)	BEFORE OR AFTER USE (✓)	BEFORE AND AFTER USE (✓)	ONLY AFTER REPAIR (✓)	ONLY WHEN NEW (✓)	
special purpose: four were built for the MODE-1 Project.									
		"Calibration only involves verification of voltage to frequency rate; clock rate and good insulation of the two channels with respect to instrument ground and with respect to each other."							
		"Expected performance: 1.0µV/m equivalent to approx. 0.3 cm/sec barotropic velocity. Actual performance: same as expected."							

REC'D 5-26-76

UNIVERSITY OF CALIFORNIA, SAN DIEGO

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SANTA BARBARA · SANTA CRUZ

SCRIPPS INSTITUTION OF OCEANOGRAPHY

~~XXXXXXXXXXXX~~
LA JOLLA, CALIFORNIA ~~XXXX~~ 92093

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 eastward (geographic) and northward (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 (I6) 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

MODE-I ELECTRIC FIELD OBSERVATIONS

BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

File number	NODC/EDS Magnetic Tape Records/file	Station	Location		Tangent of Tilt		Time at which record starts Universal time			
			Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute
1	272	1A	27°57.2'	69°39.9'	+0.027	+0.007	March	27	03	07 ± 30
2	206	1B	27°58.7'	69°33.7'	0.113	+0.013	March	27	03	07 ± 30
3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	26	06	02 ± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	21	07	07 ± 9

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	35 ± 12
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	13	56 ± 2
7	288	20	27°08.5'	69°32.7'	-0.013	+0.033	May	16	14	00 ± 2

INFO HERE

NOT
VALID

Drum

see letter of 8/9/76

MODE-I ELECTRIC FIELD OBSERVATIONS
 BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

File #	NODC/EDS Magnetic Tape *Records/file	Station	Location		Tangent of Tilt		Time at which record starts Universal time*				
			Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute	
1	272	LA	27°57.2'	69°39.9'	+0.027	+0.007	March	26	11	56	± 30
2	206	1B	27°58.7'	69°33.7'	-.113	+0.013	March	26	11	52	± 30
3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	26	14	46	± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	20	18	45	± 30

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	29	± 30
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	14	00	± 30
7	288	20	27°08.5'	69°32.7'	-.013	+0.033	May	16	14	00	± 30

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

*A "record" here is the same as a block of data.

valid info by Cox letter of 8/9/76

r2c 8/13/76

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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

MODE-I ELECTRIC FIELD OBSERVATIONS

BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

NODC/EDS Magnetic Tape		Station	Location		Tangent of Tilt		Time at which record starts Universal time*			
File #	Records/file		Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute
1	272	1A	27°57.2'	69°39.9'	+0.027	+0.007	March	26	11	56 ± 30
2	206	1B	27°58.7'	69°33.7'	-.113	+0.013	March	26	11	52 ± 30
3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	26	14	46 ± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	20	18	45 ± 30

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	29 ± 30
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	14	00 ± 30
7	288	20	27°08.5'	69°32.7'	-.013	+0.033	May	16	14	00 ± 30

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

C. DATA FORMAT

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

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

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____

ADDRESS _____

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE ORIGINATOR TAPE, NODC No.003671

<p>5. RECORDING MODE <input checked="" type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC <input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS) <input checked="" type="checkbox"/> SEVEN <input type="checkbox"/> NINE <input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK <input type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____</p>
<p>7. PARITY <input type="checkbox"/> ODD <input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p>
<p>8. DENSITY <input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI <input type="checkbox"/> 556 BPI <input checked="" type="checkbox"/> 800 BPI <input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES 3168</p> <p>13. LENGTH OF BYTES IN BITS 8</p>

C. DATA FORMAT

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

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

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

[Empty box for listing record types]

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

found this type, described below, as a result of work with the archives SEARCH program developed to document all archives holdings and their locations. Drum

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____
ADDRESS _____

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input checked="" type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC</p> <p><input type="checkbox"/> _____</p>	<p>9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input type="checkbox"/> 3/4 INCH</p> <p><input type="checkbox"/> _____</p>
<p>6. NUMBER OF TRACKS (CHANNELS)</p> <p><input checked="" type="checkbox"/> SEVEN</p> <p><input type="checkbox"/> NINE</p> <p><input type="checkbox"/> _____</p>	<p>10. END OF FILE MARK</p> <p><input type="checkbox"/> OCTAL 17</p> <p><input type="checkbox"/> _____</p>
<p>7. PARITY</p> <p><input type="checkbox"/> ODD</p> <p><input checked="" type="checkbox"/> EVEN</p>	<p>11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)</p> <p><i>Originator Tape, NODE number 003671</i></p>
<p>8. DENSITY</p> <p><input type="checkbox"/> 200 BPI <input type="checkbox"/> 1600 BPI</p> <p><input type="checkbox"/> 556 BPI</p> <p><input checked="" type="checkbox"/> 800 BPI</p> <p><input type="checkbox"/> _____</p>	<p>12. PHYSICAL BLOCK LENGTH IN BYTES</p> <p><i>3168</i></p> <p>13. LENGTH OF BYTES IN BITS</p> <p><i>8</i></p>

C. DATA FORMAT

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

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

MODE-I ELECTRIC FIELD OBSERVATIONS

BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

NODC/EDS Magnetic Tape	Records/file	Station	Location		Tangent of Tilt		Time at which record starts			
			Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute
1	272	1A	27°57.2'	69°39.9'	+0.027	+0.007	March	27	03	07 ± 30
2	206	1B	27°58.7'	69°33.7'	0.113	+0.013	March	27	03	07 ± 30
3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	27	06	02 ± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	21	07	07 ± 9

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	35 ± 1
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	13	56 ± 2
7	288	20	27°08.5'	69°32.7'	-0.013	+0.033	May	16	14	00 ± 2

INFO HERE

NOT VALID

Drum

see letter of 8/9/76

UNIVERSITY OF CALIFORNIA

Date..... June 7

TO..... R. Heinmiller..... FROM..... Annette Pickens Secy

Subject..... Letter to S. Marcus with copy to you 5/21/76 & attach-
ment

For initial signature approval comments discussion information

Please file return draft reply route to.....

Message..... I enclose a corrected copy of the attachment: note
change in date from March 26 to March 27

UNIVERSITY OF CALIFORNIA

Date June 7

TO S. Marcus FROM A. Pickens, Secretary

Subject Letter of 5/21 with attachment from G. S. Cox

For initial signature approval comments discussion information

Please file return draft reply route to

Message Note date change on attachment from March 26 to (27)

MODE-I ELECTRIC FIELD OBSERVATIONS

BOTTOM MOUNTED RECORDERS

PART I - MARCH - MAY 1973

MODE

NODC/EDS Magnetic Tape		Location		Tangent of Tilt		Time at which record starts Universal time				
File number	Records/file	Station	Latitude	Longitude	up to north	up to east	Month	Day	Hour	Minute
1	272	1A	27°57.2'	69°39.9'	+0.027	+0.007	March	27	03	07 ± 30
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3	256	5	27°50.8'	70°40.1'	+0.007	+0.007	March	27	06	02 ± 30
4	272	20	27°08.7'	69°32.1'	0	0	March	21	07	07 ± 9

PART II - MAY - JULY 1973

5	251	1	27°57.8'	69°38.3'	0	+0.026	May	22	07	35 ± 1
6	288	5	27°51.2'	70°40.0'	+0.013	0	May	16	13	56 ± 2
7	288	20	27°08.5'	69°32.7'	-0.013	+0.033	May	16	14	00 ± 2

16 33

INFO HERE
NOT VALID

Down

See 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 correspondence 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
ENVIRONMENTAL DATA SERVICE
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.

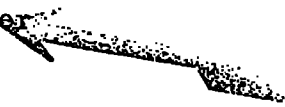
I am pleased to receive your data tape and would appreciate receiving the DDF as soon as possible, so we can finalize the archival process.

Sincerely,


Sidney P. 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:

accNo	fileA	refNo	ship	staCnt	recCnt	startDate	endDate
7700261	L105	TR1656	317F	1833	0	73/03/21	73/07/08

(1 row affected)