RCVD: 13 JAN 77

ACCESSION NUMBER: 77-0054

DDF A:4:09

43 STATIONS
BL2560 - BL2562

DATA DOCUMENTATION FORM

FORM 24-13

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
ROCKVILLE, MARYLAND 20852

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

BL2560 L508
BL2561 L133
BL2562 L129

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.

L01372 L505

NODC TAPE # 10188

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

COASTAL UPWELLING ECOSYSTEMS ANALYSIS
UNIVERSITY OF WASHINGTON
DEPARTMENT OF OCEANOGRAPHY WB-10
SEATTLE, WASHINGTON 98195

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

IDOE/CUEA

JOINT - I

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

CRUISE 082

4. PLATFORM NAME(S)	5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)	6. PLATFORM AND OPERATOR NATIONALITY(IES)		7. DATES	
		PLATFORM	OPERATOR	FROM: MO/DAY/YR	TO: MO/DAY/YR
ATLANTIS II	SHIP	U.S.	U.S.	8 MAR 74	25 MAY 74

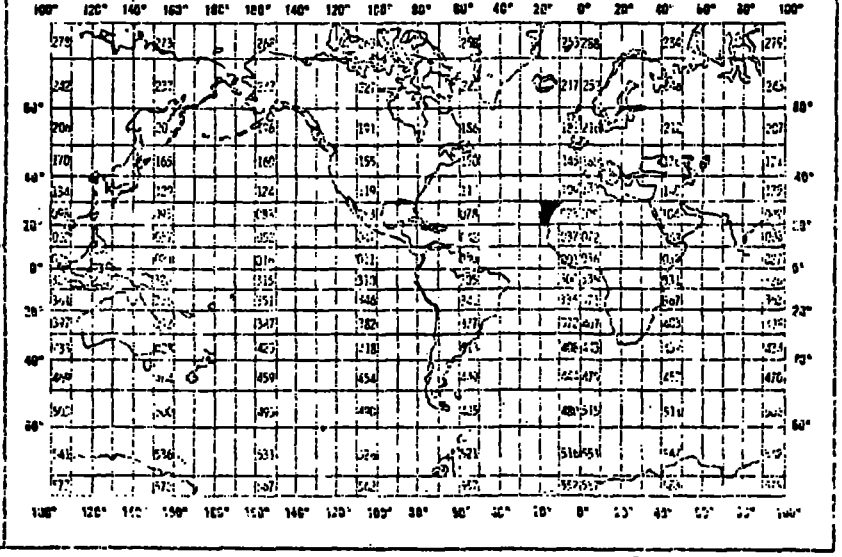
8. ARE DATA PROPRIETARY?

[XX] 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)

R. C. DUGDALE
BIGELOW LAB FOR OCEAN SCIENCE
MCCOWN POINT
WEST BARHARBOR, MAINE 04575
(207)633-5572

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
STATION NUMBER	N/A	N/A	N/A	N/A
LATITUDE	DEGREES, MINUTES, AND TENTHS	SATTELITE NAVIGATION, RADAR, AND LORAN	N/A	N/A
LONGITUDE	DEGREES, MINUTES, AND TENTHS	SATTELITE NAVIGATION, RADAR, AND LORAN	N/A	N/A
DATE	DAY, MONTH, YEAR LOCAL	CALENDAR	N/A	N/A
TIME	HOURS, MINUTES, AND SECONDS LOCAL	SHIP'S CHRONOMETER	N/A	N/A
SONIC DEPTH -212	METERS	DEPTH RECORDER SUBMARINE	N/A	N/A
INCIDENT PERCENT/LIGHT PENETRATION 199 0055	PERCENT OF SURFACE LIGHT	QUANTUM METER MODEL LI185 LAMBDA INSTRUMENT CORP.	N/A	N/A
SAMPLE DEPTH Nucleic	METERS	METER WHEEL	N/A	N/A
FLUOROMETRIC CHLOROPHYLL 5000	UG/L	NISKIN BOTTLE, TURNER MODEL-FLUOROMETER	MODIFICATION OF LORENZEN? METHOD(HARMON, BREITNER, 1976)	N/A
UNESCO CHLOROPHYLL	UG/L	NISKIN BOTTLE, BECKMAN ACTA II	UNESCO METHOD	N/A
PHAEOPHYTIN -8802	UG/L	NISKIN BOTTLE, BECKMAN ACTA II	MODIFICATION OF UNESCO METHOD(HARMON, BREITNER, 1976)	N/A
2nd. 199 PHOSPHATE -0010	UGAT/L	NISKIN BOTTLE, AUTOANALYZER	PAVLOU, 1972	N/A
SILICATE -0030	UGAT/L	NISKIN BOTTLE, AUTOANALYZER	PAVLOU, 1972	N/A

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
NITRATE - 0021	UGAT/L	NISKIN BOTTLE AUTOANALYZER	PAVLOU 1972	CORRECTED FOR THE NITRITE CONTRIBUTION WHENEVER NITRITE DATA WERE AVAILABLE
NITRITE - 0020	UGAT/L	NISKIN BOTTLE AUTOANALYZER	PAVLOU 1972	N/A
AMMONIA - 0041	UGAT/L	NISKIN BOTTLE AUTOANALYZER	PAVLOU 1972	N/A
ELECTRON TRANSPORT SYSTEM - 5007	MICRO LITERS OF O^2 per LITER HOUR	NISKIN BOTTLE BECKMAN ACTA II	PACKARD, T., 1971	N/A
TOTAL PARTICLES - 8600	COUNTS PER LITER	NISKIN BOTTLE	BIOPHYSICS LASER PARTICLE COUNTER	N/A
PARTICLE AREA - 8600	SQUARE MICRONS	NISKIN BOTTLE	BIOPHYSICS LASER PARTICLE COUNTER	N/A
PARTICLE VOLUME - 5011	CUBIC MICRONS	NISKIN BOTTLE	BIOPHYSICS LASER PARTICLE COUNTER	N/A
NITRATE REDUCTASE - 5008	NANOGRAM ATOMS PER LITER PER HOUR	NISKIN BOTTLE BECKMAN ACTA II	EPPLEY, R., J. COATSWORTH AND L. SOLORZANO, 1969.	
ATP CARBON - 8805	MICROGRAMS PER LITER			

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
PARTICULATE CARBON - 8610				
501 5003 CARBON 14 UPTAKE	REFER TO:			
CARBON EXCRETION 506 - 8201	COASTAL UPWELLING ECOSYSTEMS ANALYSIS DATA REPORT 14 JOINT I CARBON, CHLOROPHYLL, AND LIGHT EXTINCTION R/V ATLANTIS II CRUISE 82 RICHARD T. BARBER AND SUSAN A. HUNTSMAN, MARCH 1975.			76-0744
PARTICULATE NITROGEN - 0022	UGAT/L			
NITRATE UPTAKE VELOCITY - 5012	PER HOUR	ROSETTE WITH 30 LITER NISKIN BOTTLES	GUNTER, FLOSS, SIMON 1966.	
AMMONIA UPTAKE VELOCITY - 5013	PER HOUR	AEI MS10-MASS SPECTROMETER	MACISAAC AND DUGDALE 1972.	
RHO NITRATE No code	UGAT/L/HR	N/A	DUGDALE AND GOERING 1967	PARTICULATE NITROGEN NITRATE UPTAKE VELOCITY
RHO AMMONIA no code	UGAT/L/HR	N/A	DUGDALE AND GOERING 1967.	PARTICULATE NITROGEN NITRATE UPTAKE VELOCITY

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

THERE ARE TWO (2) TYPES OF RECORDS, HEADER RECORDS, AND DATA RECORDS.

AN 'H' IN COLUMN ONE (1) DENOTES THE HEADER RECORD. THERE ARE TWO (2) HEADER RECORDS PER STATION.

A 'D' IN COLUMN ONE (1) DENOTES A DATA RECORD. THERE ARE SIX (6) DATA RECORDS PER SAMPLE DEPTH.

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

THERE ARE TWO(2) HEADER RECORDS PER STATION WITH SIX (6) DATA RECORDS PER SAMPLE DEPTH.

LOGICAL RECORDS ARE 80 ASCII CHARACTERS LONG WITH A PHYSICAL BLOCK LENGTH OF 256 BYTES.

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

4. RESPONSIBLE COMPUTER SPECIALIST:
NAME AND PHONE NUMBER DON BISHOP (206) 543-7242
ADDRESS UNIVERSITY OF WASHINGTON DEPARTMENT OF OCEANOGRAPHY WB-10
SEATTLE, WASHINGTON 98195

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

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

6. NUMBER OF TRACKS (CHANNELS) ☐ SEVEN ☒ NINE ☐ _____

7. PARITY ☐ ODD ☒ EVEN

8. DENSITY ☐ 200 BPI ☐ 1600 BPI ☐ 556 BPI ☒ 800 BPI ☐ _____

9. LENGTH OF INTER-RECORD GAP (IF KNOWN) ☒ 3/4 INCH ☐ _____

10. END OF FILE MARK ☐ OCTAL 17 ☒ OCTAL 777

11. PASTE-ON-PAPER LABEL DESCRIPTION *(INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER)*
JOINT-I PRODUCTIVITY
8 MAR-25 MAY 1974
9-TRACK, ASC-II, 800 BPI
EVEN PARITY
ATLANTIS-II DATA

12. PHYSICAL BLOCK LENGTH IN BYTES
256 bytes

13. LENGTH OF BYTES IN BITS
8 bits/byte

RECORD FORMAT DESCRIPTION

RECORD NAME HEADER RECORD 1

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
RECORD CODE	1	1	CHAR	A1	AN 'H' INDICATES A HEADER RECORD
STATION NUMBER	2	6	CHAR	I6	STATION DESIGNATION
DATE	17	9	CHAR	9A1	GMT DATE(DD_MMM_YY) (NOTE: '_' DENOTES A BLANK SPACE)
TIME	31	8	CHAR	8A1	GMT TIME (HH:MM:SS)
LATITUDE	44	9	CHAR	9A1	XX_XX.X_N (NOTE: '_' DENOTES A BLANK SPACE)
LONGITUDE	56	10	CHAR	10A1	XXX_XX.X_W (NOTE: '_' DENOTES A BLANK SPACE)

RECORD FORMAT DESCRIPTION

RECORD NAME HEADER RECORD 2

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
RECORD CODE	1	1	CHAR	A1	AN 'H' INDICATES HEADER RECORD
STATION NUMBER	2	6	CHAR	I6	STATION DESIGNATION
SURFACE TEMPERATURE	13	10	CHAR	F10.0	DEGREES C
SONIC DEPTH	27	10	CHAR	F10.0	DEPTH TO BOTTOM

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD 1

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES DATA RECORD
LIGHT DEPTH	2	9	CHAR	F9.0	PERCENT INCIDENT LIGHT PENETRATION
DEPTH	11	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
NITRATE REDUCTASE (enzyme)	24	14	CHAR	F14.0	NG-AT/L/HR
NITRATE	38	12	CHAR	F12.0	IN MICROGRAM ATOMS PER LITER CORRECTED FOR THE NITRITE CONTRIBUTION WHENEVER NO_2 DATA WERE AVAILABLE.
NITRITE	50	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER
AMMONIA	63	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD 2

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES A DATA RECORD
LIGHT DEPTH	2	9	CHAR	F9.0	PERCENT INCIDENT LIGHT PENETRATION
DEPTH	11	12	CHAR	F12.0	SAMPLE DEPTH IN METERS
SILICATE	24	13	CHAR	F13.0	DISSOLVED SILICON IN MICROGRAM ATOMS PER LITER
PHOSPHATE	37	13	CHAR	F13.0	REACTIVE PHOSPHOROUS IN MICROGRAM ATOMS PER LITER
CHLOROPHYLL A UNESCO	50	13	CHAR	F13.0	IN MICROGRAMS PER LITER
CHLOROPHYLL FLUOROMETRIC	63	13	CHAR	F13.0	IN MICROGRAMS PER LITER

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD 3

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES A DATA RECORD
LIGHT DEPTH	2	9	CHAR	F9.0	PERCENT INCIDENT LIGHT PENETRATION
DEPTH	11	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
PHAEOPHYTIN	24	13	CHAR	F13.0	IN MICROGRAMS PER LITER
PARTICULATE CARBON	37	13	CHAR	F13.0	MILLIGRAMS PER CUBIC METER
ATP CARBON	50	13	CHAR	F13.0	MICROGRAMS PER LITER
CARBON 14 UPTAKE	63	13	CHAR	F13.0	MILLIGRAMS PER CUBIC METER PER HOUR

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD 4

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES A DATA RECORD
LIGHT DEPTH	2	9	CHAR	F9 .0	PERCENT INCIDENT LIGHT PENETRATION
DEPTH	11	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
CARBON EXCRETION	24	13	CHAR	F13.0	MILLIGRAMS PER CUBIC METER PER HOUR
PARTICULATE NITROGEN	37	13	CHAR	F13.0	MICROGRAM ATOMS PER LITER
NITRATE UPTAKE VELOCITY	50	14	CHAR	F14.0	PER HOUR
RHO NITRATE	64	13	CHAR	F13.0	MICROGRAM ATOMS PER LITER PER HOUR

NITRATE UPTAKE VELOCITY

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD 5

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES A DATA RECORD
LIGHT DEPTH	2	9	CHAR	F9.0	PERCENT INCIDENT LIGHT PENETRATION
DEPTH	11	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
AMMONIA UPTAKE VELOCITY	24	13	CHAR	F13.0	PER HOUR
RHO AMMONIA	37	13	CHAR	F13.0	MICROGRAM ATOMS PER LITER PER HOUR
ELECTRON TRANSPORT SYSTEM	50	13	CHAR	F13.0	MICRO LITERS OF OXYGEN PER LITER PER HOUR

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD 6

14. FIELD NAME	15. POSITION FROM-1 MEASURED IN CHAR (e.g., bits, bytes)	16. LENGTH NUMBER	16. LENGTH UNITS	17. ATTRIBUTES	18. USE AND MEANING
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES A DATA RECORD
LIGHT DEPTH	2	9	CHAR	F9.0	PERCENT INCIDENT LIGHT PENETRATION
DEPTH	11	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
PARTICLE COUNTS	28	13	CHAR	F13.0	TOTAL PARTICLES PER LITER
PARTICLE AREA	41	13	CHAR	F13.0	TOTAL PARTICLE SURFACE AREA IN SQUARE MICRONS PER LITER
PARTICLE VOLUME	54	13	CHAR	F13.0	TOTAL PARTICLE VOLUME IN CUBIC MICRONS PER LITER
SIGMA-T*COUNTS	67	13	CHAR	F13.0	SIGMA-T times PARTICLE COUNTS

```
Password:
 accNo   fleA refNo  proj inst ship    startDate  cruise   catId
 ------- ---- ------ ---- ---- ------- ---------- -------- ----------
 7700054 L501 BL2560 0071 3109 31AN    1974/03/08 082           302462
 7700054 L133 BL2561 0071 3109 31AN    1974/03/08 082           302463
 7700054 L129 BL2562 0071 3109 31AN    1974/03/08 082           302464
 7700054 L505 L01372 0071 3109 31AN    1974/03/08 NULL          302465

(4 rows affected)
```

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
7700054	L501	BL2560	31AN	43	0	74/03/08	74/05/25
7700054	L133	BL2561	31AN	43	0	74/03/08	74/05/25
7700054	L129	BL2562	31AN	43	0	74/03/08	74/05/25
7700054	L505	L01372	31AN	43	0	74/03/08	74/05/25

(4 rows affected)