

NAP.S: 29 MARCH 76

DATA DOCUMENTATION FORM

ACC # 76-0744

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.

TAPE = 2894 LABEL = (NL) 9TRK RECD: 26 JAN 76
LRECL = 80, BLKSIZE = 800 1600 b.p.c.

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
SEATTLE, WASHINGTON 98195

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

3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT
CRUISE 082

4. PLATFORM NAME(S)
ATLANTIS II

5. PLATFORM TYPE(S)
(E.G., SHIP, BUOY, ETC.)
SHIP

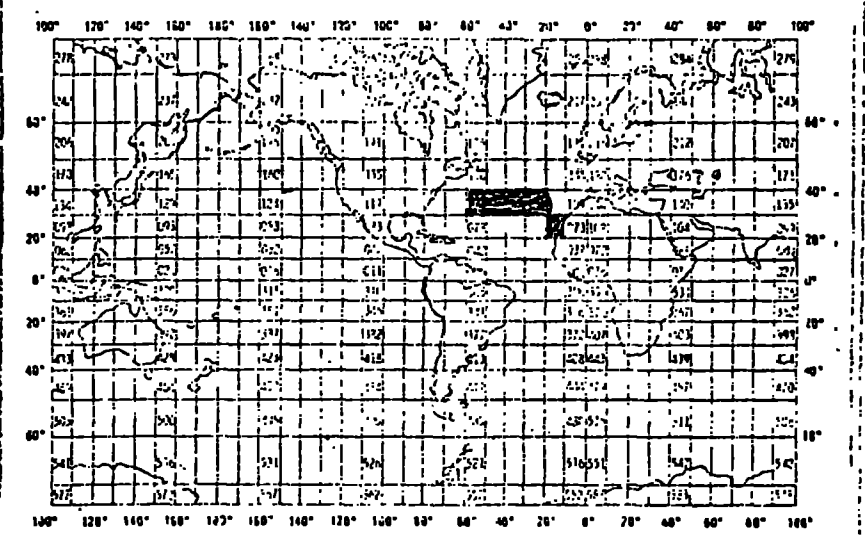
6. PLATFORM AND OPERATOR NATIONALITY(IES)
U.S. U.S.

7. DATES
8 MAR 74 25 APR 74

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 ACCESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM 1)

DON BISHOP
(206) 543-7242

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
CAST	N/A	N/A	N/A	N/A
LATITUDE	DEGREES, MINUTES AND TENTHS	SATELITE NAVIGATION, RADAR LORAN	N/A	N/A
LONGITUDE	DEGREES, MINUTES AND TENTHS	SATELITE NAVIGATION, RADAR LORAN	N/A	N/A
DATE	(GMT) DAY, MONTH, YEAR	CALENDER	N/A	N/A
TIME	HOURS (GMT) MINUTES AND SECONDS	SHIP'S CHRONOMETER	N/A	N/A
SONIC DEPTH	METERS	PRECISION DEPTH RECORDER	N/A	N/A
SECCHI DISK DEPTH	METERS	SECCHI DISK	N/A	N/A
SAMPLE DEPTH	METERS	METER WHEEL	N/A	N/A
TEMPERATURE	CENTIGRADE	REVERSING THERMOMETERS	N/A	H.O. 614
SALINITY	o/oo	NISKIN BOTTLES	GULF LINE SALINOMETER AND WHOI SALINOMETER	N/A
SIGMA - T	N/A	N/A	N/A	H.O. 615
OXYGEN	ML/L	NISKIN BOTTLE	CHESAPEAKE BAY WINKLER METHOD	N/A
OXYGEN	MGAT/L	NISKIN BOTTLE	N/A	
APPARENT OXYGEN UTILIZATION	MGAT/L	N/A	N/A	WEISS' FORMULA(1970)
PERCENT OXYGEN SATURATION	N/A	N/A	N/A	WEISS' FORMULA (1970)
FLUOROMETRIC CHLOROPHYLL	UG/L	NISKIN BOTTLE	TURNER FLUOROMETER	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
PHOSPHATE	UGAT/L	NISKIN BOTTLE	AUOTANALYZER	N/A
SILICATE	UGAT/L	NISKIN BOTTLE	AUTOANALYZER	N/A
NITRATE	UGAT/L	NISKIN BOTTLE	AUTOANALYZER	CORRECTED FOR THE NITRITE CONTRIBUTION WHENEVER NITRITE DATA WERE AVAILABLE.
NITRITE	UGAT/L	NISKIN BOTTLE	AUTOANALYZER	N/A
AMMONIA	UGAT/L	NISKIN BOTTLE	AUTOANALYZER	N/A
NITRATE/SILICATE RATIO	N/A	N/A	N/A	NITRATE/SILICATE
ETS	MICRO LITERS OF O2 PER LITER PER HOUR.	NISKIN BOTTLE	BECKMAN ACTA-II	N/A
CARBON - 14 UPTAKE	MG/M ³ /HR	NISKIN BOTTLE	SCINTILLATION BECKMAN ASPIRATION COUNTER	N/A
UREA	MICROMOLES/LITER	NISKIN BOTTLE	AUTOANALYZER	N/A
DISSOLVED ORGANIC NITROGEN	UG/L	NISKIN BOTTLE	AUTOANALYZER	N/A
TOTAL PARTICLES	COUNTS/LITER	NISKIN BOTTLE	BIOPHYSICS LASER PARTICLE COUNTER	N/A
PARTICLE AREA	TOTAL AREA IN SQUARE MICRONS	NISKIN BOTTLE	"	N/A
PARTICLE VOLUME	TOTAL AREA IN CUBIC MICRONS	NISKIN BOTTLE	"	N/A

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**

HEADER RECORD - AN 'H' IN COLUMN 1. TWO HEADER RECORDS PER STATION CONTAINING ONE CAST. (i.e. FOUR(4) HEADER RECORDS FOR A STATION WITH A DOUBLE CAST.)

DATA RECORD - A 'D' IN COLUMN 1. THERE ARE FOUR (4) DATA RECORDS PER SAMPLE DEPTH.

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

EACH STATIONS DATA HAS TWO (2) (FOUR (4) DEPENDING ON NUMBER OF CASTS) HEADER RECORDS FOLLOWED BY FOUR (4) DATA RECORDS PER SAMPLE DEPTH. DATA RECORDS ARE ALWAYS SEQUENCED BY INCREASING DEPTH IN GROUPS OF FOUR (4) DATA RECORDS PER SAMPLE DEPTH.

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 WB -10 SEATTLE, WASHINGTON 98195

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

<p>5. RECORDING MODE</p> <p><input type="checkbox"/> BCD <input type="checkbox"/> BINARY</p> <p><input checked="" type="checkbox"/> ASCII <input 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</p> <p><input type="checkbox"/> <u>777</u></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>BB UNIVERSITY OF WASHINGTON ANSI STANDARD 9-TRACK TAPE DON BISHOP JOINT - I HYDRO (206) 543-7242</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>256</p> <p>13. LENGTH OF BYTES IN BITS</p>

RECORD FORMAT DESCRIPTION

HEADER RECORD #1 (& 3)

RECORD NAME

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	AN 'H' INDICATES HEADER RECORD
STATION NUMBER	2	5	CHAR	I5	STATION DESIGNATION
CAST	18	5	CHAR	I5	DESIGNATES THE NUMBER OF THE WIRE CAST FOR A STATION.
LATITUDE	30	9	CHAR	9A1	XX_XX.X_N (NOTE: ' ' DENOTES A BLANK SPACE)
LONGITUDE	42	10	CHAR	10A1	XXX_XX.X_W (NOTE: ' ' DENOTES A BLANK SPACE)
DATE	55	9	CHAR	9A1	GMT DATE (dd mm yy) (NOTE: ' ' DENOTES A BLANK SPACE)
TIME	69	8	CHAR	8A1	GMT TIME (hh:mm:ss)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN CHAR <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
RECORD CODE	1	1	CHAR	A1	AN 'H' INDICATES HEADER RECORD
STATION NUMBER	2	5	CHAR	I5	STATION DESIGNATION
CAST	18	5	CHAR	I5	CAST DESIGNATION
SONIC DEPTH	29	7	CHAR	F7.0	DEPTH TO BOTTOM
SECCHI DEPTH	43	5	CHAR	I5	SECCHI DISK DEPTH FOR EACH STATION.

RECORD NAME

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 A DATA RECORD
CAST	2	8	CHAR	I8	INDICATES CAST TO WHICH THIS DATA RECORD BELONGS
DEPTH	10	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
TEMPERATURE	23	13	CHAR	F13.0	TEMPERATURE AT SAMPLE DEPTH DEGREES CELSIUS.
SALINITY	36	13	CHAR	F13.0	SALINITY AT SAMPLE DEPTH, PARTS PER THOUSAND.
SIGMA-T	49	13	CHAR	F13.0	AN EXPRESSION FOR THE DENSITY OF THE SAMPLE AT ATMOSPHERIC PRESSURE.
OXYGEN	62	13	CHAR	F13.0	ML/L

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD #2

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 A DATA RECORD
CAST	2	8	CHAR	I8	INDICATES CAST TO WHICH THIS DATA RECORD BELONGS
DEPTH	10	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
OXYGEN	23	13	CHAR	F13.0	MILLIGRAM-ATOMS/LITER
APPARENT OXYGEN UTILIZATION	36	13	CHAR	F13.0	DIFFERENCE BETWEEN THE SURFACE EQUILIBRIUM SOLUBILITY OF THE SAMPLE WATER AS DETERMINED BY WEISS' (1970) FORMULA AND THE OBSERVED OXYGEN CONCENTRATION IN MG-ATOMS/LITER.
PERCENT OXYGEN SATURATION	49	13	CHAR	F13.0	OBSERVED OXYGEN CONCENTRATION DIVIDED BY THE SURFACE EQUILIBRIUM SOLUBILITY VALUE (FROM WEISS' FORMULA).
FLUOROMETRIC CHLOROPHYLL	62	13	CHAR	F13.0	IN MICROGRAMS PER LITER

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 A DATA RECORD
CAST	2	8	CHAR	I8	INDICATES CAS. TO WHICH THIS DATA RECORD BELONGS
DEPTH	10	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
PHOSPHATE	23	13	CHAR	F13.0	REACTIVE PHOSPHOROUS IN MICROGRAM ATOMS PER LITER.
SILICATE	36	13	CHAR	F13.0	DISSOLVED SILICON IN MICROGRAM ATOMS PER LITER.
NITRATE	49	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER CORRECTED FOR THE NITRITE CONTRIBUTION WHENEVER NITRITE DATA WERE AVAILABLE.
NITRITE	62	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER

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 A DATA RECORD
CAST	2	8	CHAR	I8	INDICATES CAST TO WHICH THIS DATA RECORD BELONGS
DEPTH	10	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
PHOSPHATE	23	13	CHAR	F13.0	REACTIVE PHOSPHOROUS IN MICROGRAM ATOMS PER LITER.
SILICATE	36	13	CHAR	F13.0	DISSOLVED SILICON IN MICROGRAM ATOMS PER LITER.
NITRATE	49	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER CORRECTED FOR THE NITRITE CONTRIBUTION WHENEVER NITRITE DATA WERE AVAILABLE.
NITRITE	62	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER

RECORD FORMAT DESCRIPTION

RECORD NAME DATA RECORD #4

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 A DATA RECORD
CAST	2	8	CHAR	I8	INDICATES CAST TO WHICH THIS DATA RECORD BELONGS
DEPTH	10	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
AMMONIA	23	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER
NITRATE/SILICATE RATIO	36	13	CHAR	F13.0	NITRATE CONCENTRATION DIVIDED BY THE SILICATE CONCENTRATION.
ETS	49	13	CHAR	F13.0	ELECTRON TRANSPORT SYSTEM
CARBON - 14	62	13	CHAR	F13.0	CARBON UPTAKE

RECORD FORMAT DESCRIPTION

DATA RECORD # 5

RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN CHAR <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES A DATA RECORD
CAST	2	8	CHAR	I8	INDICATES CAST TO WHICH THIS DATA RECORD BELONGS
DEPTH	10	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
UREA	23	13	CHAR	F13.0	IN MICROGRAM ATOMS PER LITER
DON (DISSOLVED ORGANIC NITROGEN)	36	13	CHAR	F13.0	IN MICROGRAMS PER LITER
TOTAL PARTICLES	49	13	CHAR	F13.0	COUNTS PER LITER
PARTICLE AREA	62	13	CHAR	F13.0	TOTAL PARTICLE AREA

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN CHAR <small>(e.g., bits, bytes)</small>	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
RECORD CODE	1	1	CHAR	A1	A 'D' INDICATES A DATA RECORD
CAST	2	8	CHAR	I8	INDICATES CAST TO WHICH THIS DATA RECORD BELONGS
DEPTH	10	13	CHAR	F13.0	SAMPLE DEPTH IN METERS
PARTICLE VOLUME	23	13	CHAR	F13.0	TOTAL PARTICLE VOLUME