

IDOE/CUEA

ACCESSION
NUMBER

78-0803

1812
RCUD: 11 May 78
DOF A: 4:12

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 20852FORM APPROVED
O.M.B. No. 41-R2651

ORIGINATOR'S TAPE = JASON6

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.

116 CTD STATIONS

25 OCEAN SERIAL STATIONS

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

NODC TAPE = 5992

1600 b.p.l., 9 TRACK

NON-LABELLED

ASCII, 12 FILES

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

School of Oceanography
Oregon State University
Corvallis, OR 97331

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

JASON (1976)

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

JASON (1976)

4. PLATFORM NAME(S)

R/V EASTWARD

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

Ship

6. PLATFORM AND OPERATOR
NATIONALITY(IES)R/V EAST-
WARDDuke Univ.
Marine
Lab.

7. DATES

FROM: MO, DAY, YR TO: MO, DAY, YR

7/23/76

8/16/76

8. ARE DATA PROPRIETARY?

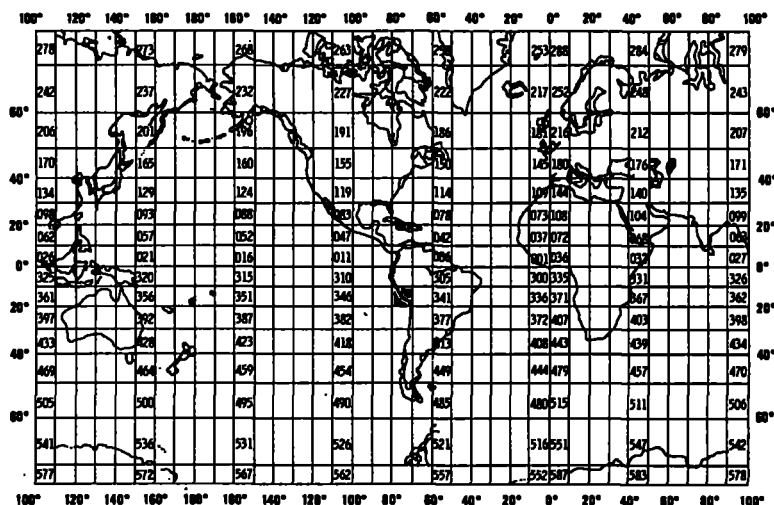
☒ NO ☐ YESIF YES, WHEN CAN THEY BE RELEASED
FOR GENERAL USE? YEAR MONTH11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA
CONTAINED IN YOUR SUBMISSION WERE COLLECTED.

GENERAL AREA

9. ARE DATA DECLARED NATIONAL
PROGRAM (DNP)?(I.E., SHOULD THEY BE INCLUDED IN WORLD
DATA CENTERS HOLDINGS FOR INTERNA-
TIONAL EXCHANGE?)☐ NO ☒ YES ☐ PART (SPECIFY BELOW)10. PERSON TO WHOM INQUIRIES CONCERNING
DATA SHOULD BE ADDRESSED WITH TELE-
PHONE NUMBER (AND ADDRESS IF OTHER
THAN IN ITEM-1)

Dr. Jane Huyer
(503) 754-2206

OCE 76-00594
SMITH/HUYER



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
Salinity	700	Nansen bottles	Inductive salinometer (Hytech model S510)	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	ϕ units and percent by weight	Ewing corer	Standard sieves. Carbonate fraction removed by acid treatment	Same as "Sedimentary Rock Manual," Folk '65

(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
Temperature Conductivity	°C mhos/cm ²	Geodyne CTD	(see attached sheet)	values averaged over one meter intervals

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

Header Block - list is enclosed with mag. tape (there are 5 cruises).
Data Blocks - each cast is composed of 2 header cards and numerous
lines of data. See p. 27-28 of enclosed data report
for header card information. P. 28-29 gives data layout.

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

Header block followed by as many data blocks as needed.

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER William Gilbert (503) 754-2206

ADDRESS School of Oceanography, Oregon State Univ., Corvallis, OR 97331

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE.

5. RECORDING MODE <input checked="" type="checkbox"/> BCD <input type="checkbox"/> BINARY <input type="checkbox"/> ASCII <input type="checkbox"/> EBCDIC <input type="checkbox"/> _____	9. LENGTH OF INTER-RECORD GAP (IF KNOWN) <input checked="" type="checkbox"/> 3/4 INCH <input type="checkbox"/> _____
6. NUMBER OF TRACKS (CHANNELS) <input checked="" type="checkbox"/> SEVEN <input type="checkbox"/> NINE <input type="checkbox"/> _____	10. END OF FILE MARK <input checked="" type="checkbox"/> OCTAL 17 <input type="checkbox"/> _____
7. PARITY <input type="checkbox"/> ODD <input checked="" type="checkbox"/> EVEN	11. PASTE-ON-PAPER LABEL DESCRIPTION (INCLUDE ORIGINATOR NAME AND SOME LAY SPECIFICATIONS OF DATA TYPE, VOLUME NUMBER) Oregon State University School of Oceanography BCD Even Parity <u>JASON (1976)</u> 7 Track 800 BPI
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"/> _____	
	12. PHYSICAL BLOCK LENGTH IN BYTES 4000
	13. LENGTH OF BYTES IN BITS 6

NODC TAPE # 5992

9 TRACK, 1600 b.p.i.

ASCII, NON-LABELLED

12 FILES

FILES 1 THRU 9 CONTAIN 116 CTD STATIONS

FILES 10-12 CONTAIN 25 OCEAN SERIAL (BOTTLE) STATIONS IN CTD FORMAT

NOTE: On the originator's tape there are 24 files - files 1 THRU 9 and

22 THRU 24 are to be disregarded: Authority - Dr. Jane Huyer, P.I. 10/24/78

F. J. Mitchell, NODC

RECORD FORMAT DESCRIPTION

ORIGINATOR
FILES 10 - 18

NO. 1000
FILE 1-9

RECORD NAME

CTD FORMAT (DATA RECORD)

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Depth (m.)	1 - 6	6			whole meters
blank	7	1			blank
Temperature(°C)	8 - 11	4			xx.xx decimal implied
blank	12	1			blank
Salinity(‰)	13 - 18	6			xx.xxx
blank	19	1			blank
Sigma-T	20 - 24	5			
***** REPEAT OF ABOVE *****					
Depth (m.)	25 - 30	6			whole meters
blank	31	1			blank
Temperature(°C)	32-35	4			xx.xx decimal implied
blank	36	1			blank
Salinity(‰)	37 - 42	6			xx.xxx
blank	43	1			blank
Sigma-T	44 - 48	5			
***** REPEAT OF ABOVE *****					
Depth (m.)	49 - 54	6			whole meters
blank	55	1			blank
Temperature(°C)	56 - 59	4			xx.xx decimal implied
blank	60	1			blank
Salinity(‰)	61 - 66	6			xx.xxx
blank	67	1			blank
Sigma-T	68 - 72	5			

RECORD FORMAT DESCRIPTION

RECORD NAME _____

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

RECORD FORMAT DESCRIPTION ORIGINATOR

NO. TAPE
FILES

RECORD NAME BOTTLE DATA IN CTD FORMAT (DATA RECORD) FILES 19 - 21

10-12

14. FIELD NAME	15. POSITION FROM: 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Depth (m.)	1 - 4	4			XXXX
blank	5	1			blank
Temperature(°C)	6 - 9	4			xx.xx decimal implied
blank & zero	10 - 15	6			blank and zero
Salinity (‰)	16 - 19	4			xx.xx decimal implied
blank	20	1			blank
Sigma-T	21 - 24	4			
blank	25 - 26	2			blank
***** REPEAT OF ABOVE *****					
Depth (m.)	27 - 30	4			xxxx
blank	31	1			blank
Temperature(°C)	32 - 35	4			xx.xx decimal implied
blank & zero	36 - 41	6			blank and zero
Salinity(‰)	42 - 45	4			xx.xx decimal implied
blank	46	1			blank
Sigma-T	47 - 50	4			
blank	51 - 52	2			blank
*****REPEAT OF ABOVE *****					
Depth (m.)	53 - 56	4			xxxx
blank	57	1			blank
Temperature(°C)	58 - 61	4			xx.xx decimal implied
blank & zero	62 - 67	6			blank and zero
Salinity(‰)	68 - 71	4			xx.xx decimal implied
blank	72	1			blank
Sigma-T	73 - 76	4			

RECORD FORMAT DESCRIPTION

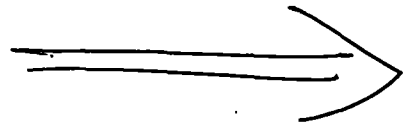
RECORD NAME

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
				FIRST HEADER CARD	
Sta. No.			col. 1-3 col. 4		Station number U = up cast; D = down
Sta. Designator (if used)			col. 5-7		
Month			8-9		
Day			10-11		
time (z)			12-15		
Latitude (N)			16-21		
Longitude (W)			22-28		
Swell direction			29-31		
Swell height (ft)			32-33		
Swell period (sec)			34-35		
Wind direction			36-38		
Wind speed (knots)			39-40		
Barometric pressure (mb)			41-44		14.6 = 1014.6 mb
Dry bulb temperature			45-48		°C
Wet bulb temperature			49-52		°C
WMO weather code			53-54		
Cloud Type			55-56		
Second Cloud Type			57-58		
Cloud amount			59		
Visibility code			60		

RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN _____ (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
<div> <div>SECOND HEADER CARD</div> <div>Columns .</div> <div> Bottom depth (m) 1-4 Surface temperature ~ 1 m 5-8 Surface salinity ~ 1 m 9-14 depth of following salinity (m) 15-18 Salinity (o/oo) 19-24 CTD number 25-28 year (1974) 29-32 </div> </div>					
<div> <div>Data</div> <div> Depth (m) Temperature (°C) Conductivity (mmhos/cm²) Salinity (o/oo) Sigma-T (Repeats) </div> </div>					



RECORD FORMAT DESCRIPTION

RECORD NAME _____

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
SECOND HEADER CARD					
COLUMNS					
Bottom depth (m)				1-4	
Sample depth (m)				5-10	
Sample temperature (C)				11-16	
Sample salinity (o/oo)				17-23	
Second sample depth (if used)				24-29	
Second sample temp. (C)				30-35	
Second sample sal. (o/oo)				36-42	
CTD number				43-47	
Year				49-52	
Data					
Depth (m)					
Temperature (°C)					
Conductivity (mmhos/cm ²)					
Salinity (o/oo)					
Sigma-T					
(repeats)					

RECORD FORMAT DESCRIPTION

RECORD_NAME[illegible]

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 (✓)	
CTD		X				X			

200
F
5

1	ML0	JASON (1976) PROCESSED CTD FILE STA. 1-9
2	ML11	JASON (1976) PROCESSED CTD FILE STA. 10-18
3	ML12	JASON (1976) PROCESSED CTD FILE STA. 29-43
4	ML13	JASON (1976) PROCESSED CTD FILE STA. 44-61
5	M21	JASON (1976) PROCESSED CTD FILE STA. 62-83
6	M22	JASON (1976) PROCESSED CTD FILE STA. 84-102
7	M23	JASON (1976) PROCESSED CTD FILE STA. 104-120
8	M3	JASON (1976) PROCESSED CTD FILE STA. 121-131
9	M24	JASON (1976) PROCESSED CTD FILE STA. 132-144
10	ML0 S3H	SMOOTHED 3 HANNINGS ML0 1-7, 9
11	ML11 S3H	SMOOTHED 3 HANNINGS ML11 10-17
12	ML12 S3H	SMOOTHED 3 HANNINGS ML12 29-43
13	ML13 S3H	SMOOTHED 3 HANNINGS ML13 44-61
14	M21 S3H	SMOOTHED 3 HANNINGS M21 - 62-69, 71, 73, 75-76, 78, 80, 81, 83
15	M22 S3H	SMOOTHED 3 HANNINGS M22 - 84, 86, 88-98, 100-102
16	M23 S3H	SMOOTHED 3 HANNINGS M23 - 104-105, 107-108, 112, 113, 115, 116, 118, 120
17	M3 S3H	SMOOTHED 3 HANNINGS M3 - 121-131
18	M24 S3H	SMOOTHED 3 HANNINGS M24 - 132-144
19	B2028	JASON BOTTLE DATA IN CTD FORMAT STA. 20-28
20	B7087	JASON BOTTLE DATA IN CTD FORMAT STA. 70-87
21	B99119	JASON BOTTLE DATA IN CTD FORMAT STA. 99-119
22	C7087	JASON BOTTLE DATA INCLUDING CHEMICAL MEASUREMENTS STA. 70-87
23	C99119	JASON BOTTLE DATA INCLUDING CHEMICAL MEASUREMENTS STA. 99-119
24	C74917	LP 156M WISTERIA 28 JAN-26 APR 75. HOURLY U, V, SUMU, SUMV, T, SAL

For
OSU's WISP & UP-75 mag tape sent to you about 15 Sept 1977.

You couldn't get this file to come off.

William J. Willard

JASON 1976

R/V EASTWARD

Documentation of Processed STD Velocimeter Data

National Oceanographic Data Center

September 1971

Please use this form as a supplement to the NODC "Data Definition Form, General Information."

All items on this form are considered of importance to the archive processing and future use of STD-velocimeter data. In submitting computer processed data, it is especially important to complete the section titled "Reduction-Processing."

A. Instrument - Sensors

1. Instrument - Sensors

- a. Manufactuerer Geodyne CTD
- b. Model
- c. Serial
- d. Sensors (The questions asked about each sensor listed may serve as a guide for information to be submitted about other sensors.)

2. Salinity (Compensated Conductivity)

- a. Model
- b. Serial
- c. Date of last calibration Data was calibrated using samples collected during casts.

3. Temperature

- a. Model
- b. Serial
- c. Date of last calibration Data was calibrated using samples collected during casts.

4. Pressure

- a. Model
- b. Serial
- c. Date of last calibration August 1974
- d. If pressure is recorded as depth, what relationship was used to arrive at depth?

5. Sound Velocity

- a. Model
- b. Serial number
- c. Date of last calibration

- d. Is raw calibration data available? Yes _____ No _____
 - e. Person to be contacted for calibration information.
 - f. Reference equation used for sound velocity (i.e., Wilson, Greenspan, etc., or variations thereon).
6. Conductivity (if used)
- a. Model
 - b. Serial
 - c. Date of last calibration Collected samples used to calibrate data during cruise.
7. Other (Attach a list for other parameters such as ambient light, transmissivity, etc.)
8. Is calibration data for the above sensors available? Yes X No _____
9. Have you modified your instrument and/or sensors? yes
10. Which parameters are affected by the modifications? conductivity, T
11. What is the result of the modification with respect to the accuracy, resolution, and precision of the data? improved data quality

B. Operational Methods

1. Mode of use

- (a) Platform is affected by pitch and roll which is not decoupled from the package.
- b. Platform is stable or platform motion is decoupled from package.
- c. Unit is freefalling.
- d. Other (describe).

2. Lowering rate (meters/min)

- a. Enter lowering rate in regions of high parameter gradients 15 m/minute
- b. Enter lowering rate in regions of low parameter gradients 30 m/minute

3. Time Response

- a. Unit measures continuously
- b. Unit measures 1 samples per second (CTD 3-4)
- c. Samples are averages of measurements over _____ time or 1 m depth.

4. Power Supply

- a. Power supply is unstabilized _____ Maximum fluctuations + _____ Volts about _____ volts nom
- b. Power supply to the following portions of the system is stabilized. The instrument package which is lowered into the water use a self contained battery power supply.
- 5. Field Checks (Indicate any operational "Deck" tests routinely made on the system (e.g., ice point tests on temperature sensors, electrical tests, etc.). (Describe) Collected sample T - S were compared to profile listings.
- 6. Thermal Environment
 - a. Instrument stored in water bath at _____ °C to _____ °C

C. Reduction-Processing

1. Primary Data Output

- a. Strip chart (state scale setting(s))
- b. Paper tape
- ☒ c. Magnetic tape (CTD's)
 - (1) Digital (CTD's)
 - (2) Analog

2. Initial Reduction

- ☒ a. Down trace only
 - b. Down trace and up trace processed
 - (1) Separate
 - (2) Averaged
 - c. Multiple lowerings _____ through depth interval _____
 - d. Values smoothed against depth. Describe (e.g., running average, etc.)
 - ☒ e. Special routines to compensate for "spiking" (describe)
 - f. Compression applied to final data record (i.e., vertical spacing, accuracy of depth, temperature, salinity, etc.)
- Spikes removed by removing those values that looked bad on T, S, σ_t plots.

3. Corrections

- a. Were corrections applied to final data? yes
- b. Corrections based on (by parameter)

- (1) Surface sample
- (2) On-line samplers (give depth relation to probe) T, C (2 m above probe)
- (3) Separate lowerings (Nansen casts, other probes)
- (4) Other _____

c. For corrected data, what is the estimated average accuracy of the final data? For uncorrected data, what is the average bias (if known)?

CTD 3, 4

(1) Depth-pressure	+ _____	±0.2
(2) Temperature	+ _____	±0.02
(3) Salinity	+ _____	±0.02
(4) Sound Velocity	+ _____	

Reference :

Huyer, A.; W.E. Gilbert; R. Schramm and D. Barstow. March 1978.

"Temperature and Salinity Observations off the Coast of Peru,
R/V EASTWARD, 23 July - 16 August 1976."

Oregon State University, School of Oceanography, Data Report 69,
Ref 78-3 , 183 p. (Coastal Upwelling Ecosystems Analysis Data Report 47)

14 August. We switched back to the first probe for the Callao line which was completed on 16 August. We arrived in Callao on 16 August 1976.

During Leg 2, we did not observe any pelagic crabs, exceptionally clear water, or high surface temperatures. This may have been due to the increase in the wind speed which occurred between Legs 1 and 2 (Figure 4).

PROCEDURES

Bottle Casts.

When the CTD system was inoperable (stations 19-29) or when we needed water samples for chemical analysis, we made Niskin bottle casts equipped with protected and unprotected thermometers. Some of the thermometers were supplied by Oregon State University, but most were supplied by L. Codispoti of the University of Washington. Both sets of thermometers are regularly calibrated. Protected thermometers were used in pairs, and unprotected thermometers were used on all but the three shallowest bottles of each cast. After each cast was lowered, we allowed ten minutes of soak-time for equilibrating the thermometers before dropping the messenger. As the calibration factor of the winch readout was unknown, we relied heavily on the thermometric depths for determining the depth of each sample. After allowing time for all bottles to trip, the cast was brought aboard, and salinity samples were drawn. The thermometers were read twice by different observers. Differences between paired protected thermometers are summarized in Table 1.

The salinity samples were run on the University of Washington's AUTOSAL salinometer which measures the conductivity of water by means of electrodes, or on one of two inductive salinometers, a HYTECH belonging to Duke University

Table 1. Means and standard deviations between pairs of protected thermometers from Oregon State University and University of Washington.

	Both OSU	Both UW	One OSU, One UW
No. of comparisons	150	220	18
No. of different thermometers	6	35	10
Mean difference (°C)	0.001	0.002	0.022*
Standard deviation (°C)	0.019	0.016	0.028

*UW readings were higher.

Table 2. Means and standard deviations of differences between salinity determinations of duplicate samples, using different salinometers.

	Australian #73, and Hytech	Autosal and Hytech	Autosal and Australian #73
No. of comparisons	18	17	16
Mean difference (o/oo)	0.0068	0.0005	0.0003
Standard deviation	0.0051	0.0034	0.0076

Marine Lab and an AUTOLAB belonging to Oregon State University. On some occasions, duplicate salinity samples were drawn, and the duplicates were analyzed on different salinometers. Results of this comparison are shown in Table 2.

CTD Stations

Each CTD station consisted of a single cast of a Geodyne conductivity-temperature-depth probe, with one sampling bottle equipped with reversing thermometers mounted about 3 m above the CTD sensors. The CTD normally records while it is being lowered, at a rate of 15 - 30 m min⁻¹. The sample bottle is usually tripped at the bottom of the cast, or in regions of relatively weak vertical gradients of temperature and salinity, after a 5 - 10 minute wait to allow the thermometers to reach equilibrium. At the end of the cast, the thermometers are read and a salinity sample is drawn, to provide in-situ calibration data. During particularly rough weather, we were unable to use the sample bottle; on these occasions we took a bucket salinity sample.

Two different CTD probes were used. Each measures pressure, temperature and conductivity sequentially, and begins a new sampling cycle about once per second. Each probe must be calibrated separately; whenever a sensor is replaced or repaired, it must be recalibrated.

CTD TEMPERATURE AND CONDUCTIVITY CALIBRATION

Bath Calibration

Laboratory calibrations of the CTD temperature and conductivity are carried out simultaneously in a bath of sea water, whose temperature is measured by a quartz probe (which is itself calibrated at least once per

Profiles of T , S , σ_t are plotted for error detection. The data are edited by hand to remove obviously erroneous values, and replotted. Temperature-salinity diagrams are plotted as a final check on the conductivity calibration (conceivably it can change from station to station because it depends on cell geometry).

For a few stations, data had to be entered from the teletype listing obtained at sea, because there was neither a complete paper tape record, or a magnetic tape record. These stations (6, 44, 55, and 128) do not have as high a data density as usual, because the teletype does not keep pace with the CTD sampling rate. For one other station (42), data were recorded while the CTD was being raised rather than during its descent; this is indicated in the listings by a U (for up) rather than a D (for down) immediately after the station number.

At only one station (132) did the T-S diagram show that the processed salinity data were in error. At this station, the difference between the sample and processed CTD salinity was also unusually large (0.08 o/oo). Although we could not account for this error, we were reluctant to discard it entirely, since the temperature data appeared to be correct. We reprocessed the data from this station, using $C_{\text{new}} = C_{\text{old}} + 0.08$. The reprocessed data results are in good agreement between the CTD and sample data, and also results in a reasonable T-S curve, but the salinity data from this station (132) should be used only with extreme caution.

Since the resolution of the salinity data (± 0.03) was only about an order of magnitude smaller than the total salinity range during JASON, we decided to smooth the salinity data, and also the sigma-t data. The technique we used was to interpolate linearly the data to 1 m intervals,

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This data file, of unsmoothed temperature, smoothed salinity, and smoothed sigma-t, is regarded as the final data, and was used to generate the plots and listings in the body of this data report. The first section includes profiles of temperature, salinity and sigma-t to the maximum depth observed at each station, and listings at standard depths of computed as well as observed parameters. The second section shows profiles to 200 m, using the same depth scale for all stations.

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ACKNOWLEDGMENTS

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Laina Hardenburger did the beautiful typing.

For each station, profiles of temperature, salinity and sigma-t are shown. The header data for each station give location and weather information coded as follows:

CAST NO	Consecutive cast number. For CTD casts, the number is followed by "U" if the profile was obtained during ascent of the probe or "D" if it was obtained during descent.
STATION	Not used in this data file.
LAT	Latitude in degrees and minutes south of the equator.
LONG	Longitude in degrees and minutes west of Greenwich.
DATE	Month/day/year.
TIME	Hours and minutes, Universal time.
DPTH	Bottom depth in meters.
PROBE	OSU3, OSU4 - CTD units 3 or 4.
SWELL DIR	Direction in degrees True from which the swell propagates.
HT	Swell height in feet.
PER	Swell period in seconds.
BAR	Atmospheric pressure in excess of 1000 mb.
WEATHER	Not used in this data file.
WIND DIR	Direction in degrees True from which the wind blows.
SPD	Wind speed in knots.
CLOUD TYPE	The two predominant cloud types (see WMO Cloud Type code below).
AMOUNT	Coded cloud amount (see WMO Cloud Amount code below).
AIR TEMP	Air temperature in degrees Celsius.
WET BULB	Wet bulb temperature in degrees Celsius.
SAMPLE DEPTH	Depth of the sample bottle used for <u>in situ</u> calibration.

RECORD FORMAT DESCRIPTION

RECORD NAME _____ CTD FORMAT (DATA RECORD) FILES 10 - 18

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Depth (m.)	1 - 6	6			whole meters
blank	7	1			blank
Temperature(°C)	8 - 11	4			xx.xx decimal implied
blank	12	1			blank
Salinity(‰)	13 - 18	6			xx.xxx
blank	19	1			blank
Sigma-T	20 - 24	5			
***** REPEAT OF ABOVE *****					
Depth (m.)	25 - 30	6			whole meters
blank	31	1			blank
Temperature(°C)	32-35	4			xx.xx decimal implied
blank	36	1			blank
Salinity(‰)	37 - 42	6			xx.xxx
blank	43	1			blank
Sigma-T	44 - 48	5			
*****REPEAT OF ABOVE *****					
Depth (m.)	49 -54	6			whole meters
blank	55	1			blank
Temperature(°C)	56 - 59	4			xx.xx decimal implied
blank	60	1			blank
Salinity(‰)	61 - 66	6			xx.xxx
blank	67	1			blank
Sigma-T	68 - 72	5			

RECORD FORMAT DESCRIPTION

RECORD NAME() BOTTLE DATA IN CTD FORMAT (DATA RECORD) FILES 19 - 21

14. FIELD NAME	15. POSITION FROM - 1 MEASURED IN (e.g., bits, bytes)	16. LENGTH		17. ATTRIBUTES	18. USE AND MEANING
		NUMBER	UNITS		
Depth (m.)	1 - 4	4			XXXX
blank	5	1			blank
Temperature(°C)	6 - 9	4			xx.xx decimal implied
blank & zero	10 - 15	6			blank and zero
Salinity (‰)	16 - 19	4			xx.xx decimal implied
blank	20	1			blank
Sigma-T	21 - 24	4			
blank	25 - 26	2			blank
***** REPEAT OF ABOVE *****					
Depth (m.)	27 - 30	4			xxxx
blank	31	1			blank
Temperature(°C)	32 - 35	4			xx.xx decimal implied
blank & zero	36 - 41	6			blank and zero
Salinity(‰)	42 - 45	4			xx.xx decimal implied
blank	46	1			blank
Sigma-T	47 - 50	4			
blank	51 - 52	2			blank

***** REPEAT OF ABOVE *****

Depth (m.)	53 - 56	4			xxxx
blank	57	1			blank
Temperature(°C)	58 - 61	4			xx.xx decimal implied
blank & zero	62 - 67	6			blank and zero
Salinity(‰)	68 - 71	4			xx.xx decimal implied
blank	72	1			blank
Sigma-T	73 - 76	4			

RECORD FORMAT DESCRIPTION

RECORD NAME

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

Reference:

Huyer, A.; W.E. Gilbert; R. Schramm and D. Barstow. March 1978.

"Temperature and Salinity Observations off the Coast of Peru, R/V EASTWARD, 23 July - 16 August 1976."

Oregon State University, School of Oceanography, Data Report 69,
Ref 78-3, 183 p. (Coastal Upwelling Ecosystems Analysis Data Report 47)

NODC TAPE # 5992

9 TRACK, 1600 b.p.i.

ASCII, NON-LABELLED

12 FILES

FILES 1 THRU 9 CONTAIN 116 CTD STATIONS

FILES 10-12 CONTAIN 25 OCEAN SERIAL (BOTTLE) STATIONS IN CTD FORMAT

NOTE: On the originator's tape there are 24 files - files 1 THRU 9 and

22 THRU 24 are to be disregarded: Authority - Dr. Jane Hoyer, P.I. 10/24/78

F. J. Mitchell, NODC

14 August. We switched back to the first probe for the Callao line which was completed on 16 August. We arrived in Callao on 16 August 1976.

During Leg 2, we did not observe any pelagic crabs, exceptionally clear water, or high surface temperatures. This may have been due to the increase in the wind speed which occurred between Legs 1 and 2 (Figure 4).

PROCEDURES

Bottle Casts.

When the CTD system was inoperable (stations 19-29) or when we needed water samples for chemical analysis, we made Niskin bottle casts equipped with protected and unprotected thermometers. Some of the thermometers were supplied by Oregon State University, but most were supplied by L. Codispoti of the University of Washington. Both sets of thermometers are regularly calibrated. Protected thermometers were used in pairs, and unprotected thermometers were used on all but the three shallowest bottles of each cast. After each cast was lowered, we allowed ten minutes of soak-time for equilibrating the thermometers before dropping the messenger. As the calibration factor of the winch readout was unknown, we relied heavily on the thermometric depths for determining the depth of each sample. After allowing time for all bottles to trip, the cast was brought aboard, and salinity samples were drawn. The thermometers were read twice by different observers. Differences between paired protected thermometers are summarized in Table 1.

The salinity samples were run on the University of Washington's AUTOSAL salinometer which measures the conductivity of water by means of electrodes, or on one of two inductive salinometers, a HYTECH belonging to Duke University

Table 1. Means and standard deviations between pairs of protected thermometers from Oregon State University and University of Washington.

	Both OSU	Both UW	One OSU, One UW
No. of comparisons	150	220	18
No. of different thermometers	6	35	10
Mean difference (°C)	0.001	0.002	0.022*
Standard deviation (°C)	0.019	0.016	0.028

*UW readings were higher

Table 2. Means and standard deviations of differences between salinity determinations of duplicate samples, using different salinometers.

	Australian #73, and Hytech	Autosal and Hytech	Autosal and Australian #73
No. of comparisons	18	17	16
Mean difference (o/oo)	0.0068	0.0005	0.0003
Standard deviation	0.0051	0.0034	0.0076

Marine Lab and an AUTOLAB belonging to Oregon State University. On some occasions, duplicate salinity samples were drawn, and the duplicates were analyzed on different salinometers. Results of this comparison are shown in Table 2.

CTD Stations

Each CTD station consisted of a single cast of a Geodyne conductivity-temperature-depth probe, with one sampling bottle equipped with reversing thermometers mounted about 3 m above the CTD sensors. The CTD normally records while it is being lowered, at a rate of 15 - 30 m min⁻¹. The sample bottle is usually tripped at the bottom of the cast, or in regions of relatively weak vertical gradients of temperature and salinity, after a 5 - 10 minute wait to allow the thermometers to reach equilibrium. At the end of the cast, the thermometers are read and a salinity sample is drawn, to provide in-situ calibration data. During particularly rough weather, we were unable to use the sample bottle; on these occasions we took a bucket salinity sample.

Two different CTD probes were used. Each measures pressure, temperature and conductivity sequentially, and begins a new sampling cycle about once per second. Each probe must be calibrated separately; whenever a sensor is replaced or repaired, it must be recalibrated.

CTD TEMPERATURE AND CONDUCTIVITY CALIBRATION

Bath Calibration

Laboratory calibrations of the CTD temperature and conductivity are carried out simultaneously in a bath of sea water, whose temperature is measured by a quartz probe (which is itself calibrated at least once per

Profiles of T , S , σ_t are plotted for error detection. The data are edited by hand to remove obviously erroneous values, and replotted. Temperature-salinity diagrams are plotted as a final check on the conductivity calibration (conceivably it can change from station to station because it depends on cell geometry).

For a few stations, data had to be entered from the teletype listing obtained at sea, because there was neither a complete paper tape record, or a magnetic tape record. These stations (6, 44, 55, and 128) do not have as high a data density as usual, because the teletype does not keep pace with the CTD sampling rate. For one other station (42), data were recorded while the CTD was being raised rather than during its descent; this is indicated in the listings by a U (for up) rather than a D (for down) immediately after the station number.

At only one station (132) did the T-S diagram show that the processed salinity data were in error. At this station, the difference between the sample and processed CTD salinity was also unusually large (0.08 o/oo). Although we could not account for this error, we were reluctant to discard it entirely, since the temperature data appeared to be correct. We reprocessed the data from this station, using $C_{\text{new}} = C_{\text{old}} + 0.08$. The reprocessed data results are in good agreement between the CTD and sample data, and also results in a reasonable T-S curve, but the salinity data from this station (132) should be used only with extreme caution.

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SAMPLE DEPTH	Depth of the sample bottle used for <u>in situ</u> calibration.

SAMPLE TEMP Temperature at sample depth, measured by two protected reversing thermometers.

SAL Sample salinity, determined by a bench salinometer. If sample depth is zero, the salinity sample was obtained by bucket.

The data listing includes observed and calculated parameters at the shallowest and deepest observation levels. If there was no observation at 0 m, sea surface values are assumed to be the same as those of the shallowest observation. For each depth, the temperature (TEMP) and salinity (SAL) values are as observed or interpolated linearly from the nearest neighboring values. Sigma-t (SIGMA), specific volume anomaly $\times 10^5$ (SVA), dynamic height (DELD) in dynamic meters, and potential energy in 10^8 ergs cm^{-2} (POTE) are given for each depth. Computed parameters are calculated from the complete data array for each station.

CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, dustorm, sandstorm or other analogous phenomena.		

CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = 1/8 of the sky covered.

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4	4 oktas		
5	5 oktas		

Note: 1 okta = 1/8 of the sky covered.

HANSEN REF. #

319969

7800803

MULDARS TRACK #

TV 5257

MONITOR: CONTACT

J. FRANK

LOCATION OF F022 SOURCE

Archives (TV 5257)

RECORD ALL ERRORS FOUND

CONSEC(S)

39

ERRORS FOUND

Change Day from 1 to 2

~~7/23/91~~
7/23/91

Unique No.: 196165

Date of Entry: 01/15/91

DATA ENTRY INFORMATION SYSTEM
(DATASET INVENTORY - DINDB)

Accession No.: 7800803 Reference No.: 319969
Former Accession No.: Former Reference No.: (Resub ONLY)

Media-In (DINDB): 09 - Digital Magnetic Tape

Exchange Format: E001 - Low Resolution STD

Processing Format: C022 - Low Resolution STD (SD2 Format)

* Note * If data is F022, create an additional record for C022.

Country/Institute Code: 3103

Country/Platform Code: 31EZ

Platform Type (DINDB): 09 - Ship

Orig. Cruise ID: ~~JASON 76~~ TV5257

Cruise Start Date: 07/23/76

Project Code: 0071

Cruise End Date: 08/16/76

Data Use Code (DUC): 1

Number of Stations: 116

Number of Records: 11,389

If stations/records not appropriate then:

Number: Units:

Ocean Area:

Code 1: 61B Meaning: SE Pacific (limit-140 W)

Code 2: Meaning:

Code 3: Meaning:

DINDB Transaction Date:

ACCESSION NO. 7800803 FILETYPE C022

TRACK NO. _____

PROJECT IDENTIFICATION DOE/CUEA

STEP	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	RECL	BLK SIZE	NO. RECORDS
ORIG. TAPE	8-9-90	M.E.C.	A01231 *	24	80	4000	TOTAL 37,298
DUPLICATE TAPE 9-25-90	8-9-90	M.E.C.	W02164 *	24	80	4000	✓
REFORMATTED TAPE	11-26-90	R.P.S	W06153 **	1	120	12000	11,398
REFORMATTED DISK							
FIRST MULCHEK							
FINAL MULCHEK							
MPD75 OR F022							
DATA SET FINALIZED							

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:

* = NO LABEL

** LABEL: DNODC * JASON CTDOUT.

ADDITIONAL ERRORS/CORRECTIONS (NOT REPORTED TO P.I.)

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)

FILES 1-9; 13-19 = CTD

FILES 10-12; 20-24 = BOTTLE

Living Resources Program

The goal of this program was to provide scientific knowledge for improved management and use of the ocean's living resources. Emphasis was on interdisciplinary studies of the mechanisms that produce and sustain marine life. The program included the Coastal Upwelling Ecosystems Analysis (CUEA) and Seagrass Ecosystem Study (SES) projects.

Coastal Upwelling Ecosystems Analysis (CUEA)

The long-term goal of the CUEA program was to understand coastal upwelling ecosystems well enough to predict their response to changes far enough in advance to be useful to mankind. This goal, when achieved, provides the basis for protecting the long-term productivity of fisheries in these ecosystems.

CUEA Data

CUEA data received during the period of this report are available from NODC as follows:

NODC Accession No: 78-00803

Organization: Oregon State University

Investigator: J. Huyer and R. L. Smith (OSU)

Grant No: OCE 76-00594

Project: CUEA (JASON - 1976)

Data: 144 CTDs taken aboard the *Eastward*, 7/23 - 8, 16/76. Data submitted on NODC compatible magnetic tape.

NODC Accession No: 79-00205

Organization: University of Delaware

Investigator: C. N. K. Mooers (U of D)

Grant No: OCE 77-28354

Project: CUEA - JOINT II

Data: 194 CTDs taken aboard the *Columbus Iselin*, 3/15 - 3/31/77. Data submitted on NODC compatible magnetic tape.

NODC Accession No: 79-00209

Organization: Oregon State University

Investigator: Jane Huyer (OSU)

Grant No: OCE 76-00594

Project: CUEA - JOINT II (MAM 77)

Data: 453 CTDs taken aboard the *Melville* (3/4 - 5, 22/77) and *Columbus Iselin* (4/5 - 5, 19/77). Data submitted on NODC compatible magnetic tape.

CUEA Bibliography

Adamec, D., and J. O'Brien.

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EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED

SCAN

INPUT MEDIUM

PAPER CARD DISK TAPE
DISKETTE OTHER(SPECIFY)

OUTPUT MEDIUM

CARD DISK PRINT TAPE PLOT
DISKETTE OTHER(SPECIFY)

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
INPUT	W10448									
	116448		9	1641				120	400	14
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
OUTPUT										
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES

SPECIAL INSTRUCTIONS

ESTIMATED
EXECUTION
TIME

D731 USE ONLY

JOB #	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
44061709	7/17/51	14:4	11:50 15:44	C	COMPLETED BY J.S

COMMENTS

Unique No.: 196162

Date of Entry: 01/15/91

DATA ENTRY INFORMATION SYSTEM
(DATASET INVENTORY - DINDB)

Accession No.: 7800803 Reference No.: 313499
Former Accession No.: Former Reference No.: (Resub ONLY)

Media-In (DINDB): 09 - Digital Magnetic Tape

Exchange Format: E003 - Ocean Station Data (SD2-112 Byte)

Processing Format: C100 - Ocean Station Data (SD2 Format)

* Note * If data is F022, create an additional record for C022.

Country/Institute Code: 3103 Country/Platform Code: 31EZ

Platform Type (DINDB): 09 - Ship Orig. Cruise ID: JASON 76

Cruise Start Date: 07/29/76 Project Code: 0071

Cruise End Date: 07/29/76 Data Use Code (DUC): 1

Number of Stations: 9 Number of Records: 117

 If stations/records not appropriate then:

 Number: Units:

Ocean Area:

 Code 1: 61B Meaning: SE Pacific (limit-140 W)
 Code 2: Meaning:
 Code 3: Meaning:

DINDB Transaction Date:

Unique No.: 196163

Date of Entry: 01/15/91

DATA ENTRY INFORMATION SYSTEM
(DATASET INVENTORY - DINDB)

Accession No.: 7800803 Reference No.: 313500
Former Accession No.: Former Reference No.: (Resub ONLY)

Media-In (DINDB): 09 - Digital Magnetic Tape
Exchange Format: E003 - Ocean Station Data (SD2-112 Byte)
Processing Format: C100 - Ocean Station Data (SD2 Format)

* Note * If data is F022, create an additional record for C022.

Country/Institute Code: 3103 Country/Platform Code: 31EZ
Platform Type (DINDB): 09 - Ship Orig. Cruise ID: JASON 76
Cruise Start Date: 08/10/76 Project Code: 0071
Cruise End Date: 08/14/76 Data Use Code (DUC): 1

Number of Stations: 16 Number of Records: 182

 If stations/records not appropriate then:

 Number: Units:

Ocean Area:

 Code 1: 61B Meaning: SE Pacific (limit-140 W)
 Code 2: Meaning:
 Code 3: Meaning:

DINDB Transaction Date:

ACCESSION NO. 7800803FILETYPE C100TRACK NO. 313499-3500PROJECT IDENTIFICATION IDOE/CUEA

STEP	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE	NO. RECORDS
ORIG. TAPE	8-8-90	M.E.C.	A01231 *	24	80	4000	37,298
DUPLICATE TAPE	9-25-90	M.E.C.	W02164 *	24	80	4000	37,298
REFORMATTED TAPE	12-7-90	R.P.S.	W14893 **	1	112	11200	299
REFORMATTED DISK							
FIRST MULCHEK							
FINAL MULCHEK							
MPD75 OR F022							
DATA SET FINALIZED							

~~ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:~~

* = NO LABEL

** LABEL: DNODE * JASON STAOUT.

FILES 1-9; 13-19 = CTD
 FILES 10-12; 20-24 = BOTTLE

ADDITIONAL ERRORS/CORRECTIONS (NOT REPORTED TO P.I.)

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)

Living Resources Program

The goal of this program was to provide scientific knowledge for improved management and use of the ocean's living resources. Emphasis was on interdisciplinary studies of the mechanisms that produce and sustain marine life. The program included the Coastal Upwelling Ecosystems Analysis (CUEA) and Seagrass Ecosystem Study (SES) projects.

Coastal Upwelling Ecosystems Analysis (CUEA)

The long-term goal of the CUEA program was to understand coastal upwelling ecosystems well enough to predict their response to changes far enough in advance to be useful to mankind. This goal, when achieved, provides the basis for protecting the long-term productivity of fisheries in these ecosystems.

CUEA Data

CUEA data received during the period of this report are available from NODC as follows:

NODC Accession No: 78-00803

Organization: Oregon State University

Investigator: J. Huyer and R. E. Smith (OSU)

Grant No: OCE 76-00594 JUL, AUG, SEP, OCT, NOV

Project: CUEA (JASON - 1976)

Data: 144 CTDs taken aboard the *Eastward*, 7/23 - 8/16/76.

Data submitted on NODC compatible magnetic tape.

NODC Accession No: 79-00205

Organization: University of Delaware

Investigator: C. N. K. Mooers (U of D)

Grant No: OCE 77-28354

Project: CUEA - JOINT II

Data: 194 CTDs taken aboard the *Columbus Iselin*, 3/15 - 3/31/77. Data submitted on NODC compatible magnetic tape.

NODC Accession No: 79-00209

Organization: Oregon State University

Investigator: Jane Huyer (OSU)

Grant No: OCE 76-00594

Project: CUEA - JOINT II (MAM 77)

Data: 453 CTDs taken aboard the *Melville* (3/4 - 5/22/77) and *Columbus Iselin* (4/5 - 5/19/77). Data submitted on NODC compatible magnetic tape.

CUEA Bibliography

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RUN #:

RUN T-DRIVES

UNID	PRI	DATE	TIME	TOT/S	BATCH ECL	FILE NAME	RST	ACCOUNT #
D3KAL	A	8806151150	0	0/ 0				NO EG32008N3AV5

RUN TYPE	SLOT #	PULL TAPE	FILE NAME	MAIL	TAPE	LIST
	0096*			W10448		NEW
				W14984		NEW

RUN #:

(COPIES 1 & 2)

*mailed
6/15/88
TP*

EQUIPMENT TO BE USED AND FUNCTION TO BE PERFORMED

SCAN

INPUT MEDIUM

PAPER CARD DISK TAPE
DISKETTE OTHER(SPECIFY)

OUTPUT MEDIUM

CARD DISK PRINT TAPE PLOT
DISKETTE OTHER(SPECIFY)

TAPE/DISKETTE INFORMATION

W10448		TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
INPUT		W10448		9	1641				120	4000	14
		SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
		TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
		SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
OUTPUT		TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
		SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
		TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
		SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE

SPECIAL INSTRUCTIONS

ESTIMATED
EXECUTION
TIME

D731 USE ONLY

JOB #	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEY VERIFIED
44061709	7/17/88	14:45	11:50 10:45	C	COMPLETED BY J.S

COMMENTS

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
7800803	C100	313499	0071	3103	31EZ	1976/07/29	JASON 76	308131
7800803	C100	313500	0071	3103	31EZ	1976/08/10	JASON 76	308132
7800803	C022	319969	0071	3103	31EZ	1976/07/23	TV5257	308133
7800803	F022	TV5257	0071	3103	31EZ	1976/07/23	JASON 76	308134

(4 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
-----	-----	-----	-----	-----	-----	-----	-----
7800803	C100	313499	31EZ	9	9	76/07/29	76/07/29
7800803	C100	313500	31EZ	16	16	76/08/10	76/08/14
7800803	C022	319969	31EZ	116	181	76/07/23	76/08/16
7800803	F022	TV5257	31EZ	116	11398	76/07/23	76/08/16

(4 rows affected)