

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
9100027	TV5891	F029	0104	313F	31TT	TT131	04/10/78	04/29/78	97	1,074
9100027	TV5892	F029	0104	313F	31TT	TT-131	05/07/78	05/21/78	63	846
9100027	TV5893	F029	0104	313F	31TT	TT-131	05/27/78	06/12/78	122	1,495
9100027	TV5894	F029	0104	313F	31TT	TT131	06/17/78	06/29/78	56	699
9100027	TV5895	F029	0104	313F	31TT	TT131	07/03/78	07/13/78	5	66
9100027	TV5896	F029	0104	313F	31TT	TT-138	04/14/79	04/28/79	66	695
9100027	TV5897	F029	0104	313F	31TT	TT138	05/03/79	05/21/79	103	1,243
9100027	TV5898	F029	0104	313F	31TT	TT-138	05/25/79	06/15/79	161	2,090
9100027	TV5899	F029	0104	313F	31TT	TT149	03/17/80	04/03/80	38	492
9100027	TV5900	F029	0104	313F	31TT	TT149	04/07/80	04/24/80	84	1,039
9100027	TV5901	F029	0104	313F	31TT	TT149	04/27/80	05/18/80	141	1,749
9100027	TV5902	F029	0104	313F	31TT	TT149	05/21/80	06/08/80	134	1,717

9100027

FILETYPE

TRACK NO.

	DATE	INIT.	TAPE OR DISK DSN	NO. FIL	NO. SIZE	NO. RECORDS
	02/07/91	CMT	A01359 *** F022	16	150 6000	65,800
TAPE	03/05/91		W14568 *** F022	16	150 6000	65,800
TAPE	02/07/91		A01360 *	16	80 3200	35,410
DISK	03/06/91		W14635 * ←	16	80 3200	35,410
EX	02/07/91	✓	A01361 * *	06	80 8000	37,100
EX	03/06/91	✓	W14748 * *	06	80 8000	37,100
22 DAMOS TAPZ	5-9-91	FJM	W09077 *****	1	80 8000	13,205
INITIALIZED						

NOTED TO PRINCIPAL INVESTIGATOR: Tapes W14568, W14635, and W14748 are 9 TRK, NL, 1600bpi.
* THIS FOLDER ONLY

* * = SEPARATE FOLDER

*** PREVIOUSLY PROCESSED.

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

*** LABEL = PNODE * PROUT.

TRACKS DELETED, FIELDS DELETED, ETC.)

TRANSMITTAL AND RECEIPT RECORD

(Please sign and return carbon copy acknowledging receipt)

TO: NOAA/NESDIS/NODC 2001 Wisconsin Ave. N.W. Washington D.C. 20235	REFER TO
	ATTENTION Dr. Anthony R. Picciolo, E/OC13

THE ITEM(S) LISTED BELOW WERE FORWARDED TO YOU BY

☐ ORDINARY MAIL ☐ REGISTERED MAIL ☐ AIR MAIL ☒ CERTIFIED MAIL ☐ GOVERNMENT TRUCK ☐ BY HAND ☐ OTHER

CERT. # 523113

PROBES - Physical Oceanographic Data Sets

Enclosed, find thirty (30) DDF's and one magnetic data tape containing three (3) types of data; 1) C/STD data, 16 data sets, in NODC FT 022 format, 2) hydrocast data, 9 data sets in Univ. of Alaska format 029, and 3) continuous surface data, 5 data sets in Univ. of Alaska "Underway data format" 099.

A description (layout) of the University's "Hydrographic Data Format" (029) and "Underway Data Format" (099) are enclosed also.

A sheet showing the layout and order of all files on the tape is enclosed (attachment 2).

Attachment 1 shows the total number of records per file (data set) for for all files on the tape.

Tape specs: 9 track, ASCII, 6250 bpi, total number of records are approx. 19,508.

Note: Each file is separated by an end of file marker (EOF).

* Special instructions - this tape was loaned to me by PMEL, it is their backup tape. Please take extra precaution in its handling, make a copy, and return this tape to me as soon as conveniently possible.

PROBES = Processes & Resources of the Bering Sea

FORWARDED BY (Signature) Sidney D. Stillwaugh	TITLE Pacific NW Liaison Office, Seattle	DATE FORWARDED 7-2-84
RECEIVED BY (Signature)	TITLE	DATE RECEIVED

TRANSMITTAL AND RECEIPT RECORD

(Please sign and return carbon copy acknowledging receipt)

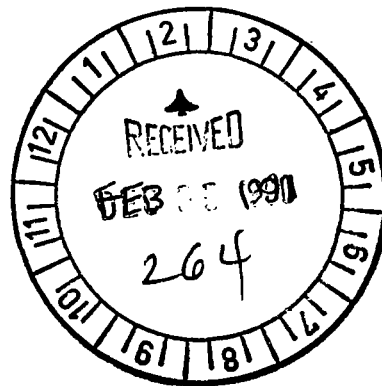
TO: NODC 1825 Connecticut Ave NW Washington, DC 20235	REFER TO Probes Data
	ATTENTION

THE ITEM(S) LISTED BELOW WERE FORWARDED TO YOU BY

☐ ORDINARY MAIL ☐ REGISTERED MAIL ☒ AIR MAIL ☐ CERTIFIED MAIL ☐ GOVERNMENT TRUCK ☐ BY HAND ☐ OTHER

Enclosed are three tapes of PROBES data that the Services Division asked for replacement tapes from IMS. The data are CTD Primary Production and Underway data. The cruises are identified in the documentation forms that Sid Stillwaugh prepared. See the stat sheets with each tape and the other printouts.

AEC # 9100027

A01359
A01360
A01361

FORWARDED BY (Signature) Michael Crane <i>[Signature]</i>	TITLE Liaison Officer	DATE FORWARDED 11/13/90
RECEIVED BY (Signature)	TITLE	DATE RECEIVED

NODC Liaison Office
NOAA/NESDIS
7600 Sand Point Way NE
Seattle, Wa. 98115

August 16, 1990

Mr. Michael Crane
Alaska Liaison Officer
NOAA/NESDIS
707 A Street
Anchorage, AK 99501

Mike,

Per our conversation on Wednesday, Aug. 15th, here is a copy of the documentation (less DDF's) I sent to NODC along with the "PROBES" CTD, hydrocast and continuous surface data tape back in 1984. As I understand the problem, we (NODC) processed the CTD data, but somewhere along the way the tape was misplaced or lost before the hydrocast and continuous surface data were processed. I was requested to try to obtain replacement data but PMEL no longer has their tape or the missing data. If you have a good contact at IMS, perhaps you could locate and recapture a copy of the missing data.

Let me know if you have any luck.

Many Thanks,

Sid

Sid Stillwaugh

enclosures

9100027

User Name <i>Cliff Hattley</i>	Phone # <i>673-5636</i>	Org/Task <i>EG12008N/3/1/91</i>	Submit Date <i>03/05/91</i>	Due Date <i>ASAP</i>
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PART A

Request/Problem Category

- ☐ General Info ☐ Communications ☐ Equipment ☐ Supplies
☐ Software ☐ Tape Library ☒ Computer Operations
☐ Other _____

Request/Problem Description:

Copy Tape AΦ1359 to a 'W' tape
Please scan 'W' tape

PART B

(For Operator Job Requests)

Operator Job Request Type

- ☐ Run BRBUOY procedure Name: _____ ☐ See attached list
☐ Run SELBUOY procedure Name: _____ ☐ See attached list
☐ Run BUOYSUM procedure Name: _____ ☐ See attached list
☐ Run OTHER procedure - see SPECIAL INSTRUCTIONS
☐ Tape Scan
☒ Tape to Tape Copy Scan OUTPUT tape? ☒ yes ☐ no
☐ Disk to Tape Copy Scan OUTPUT tape? ☐ yes ☐ no
☐ Tape to Disk Copy
☐ Print ☐ 80 column ☐ 132 column ☐ HEX ☐ OCTAL ☐ Character
 All files/records? ☐ yes ☐ no, see SPECIAL INSTRUCTIONS
☐ Restore VAX file Name: _____
☐ OTHER - see SPECIAL INSTRUCTIONS

Special Operator Instructions:

Please send 'W' tape to Asheville, N.C.

JOB INPUT

Id#/Filename: AΦ1359(DΦ722)

Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify:
 Code: ☒ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:
 Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☒ NL ☐ SL
 MAX Record Length: 150 MAX Blocksize: 6000

JOB OUTPUT

Id#/Filename: W/4568

Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify:
 Code: ☒ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:
 Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☒ NL ☐ SL
 MAX Record Length: 150 MAX Blocksize: 6000

(OC3 Use Only)

JOB Number:

91030501

Completed By:

*Mhatt*Date/Time Start: *3/05/91 08:45*Date/Time Completed: *3/05/91 09:15 (EGG)*

User Name <i>Cliff Hartley</i>	Phone # <i>673-5636</i>	Org/Task <i>EG12008N3/H9</i>	Submit Date <i>03/05/91</i>	Due Date <i>ASAP</i>
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PART A

Request/Problem Category

- | | | | |
|---|---|---|-----------------------------------|
| <input type="checkbox"/> General Info | <input type="checkbox"/> Communications | <input type="checkbox"/> Equipment | <input type="checkbox"/> Supplies |
| <input type="checkbox"/> Software | <input type="checkbox"/> Tape Library | <input checked="" type="checkbox"/> Computer Operations | |
| <input type="checkbox"/> Other Specify: | | | |

Request/Problem Description:

*copy tape A#1360 to a 'W' tape
Please scan 'W' tape*

PART B (For Operator Job Requests)

Operator Job Request Type

- | | | |
|--|---|--|
| <input type="checkbox"/> Run BRBUOY procedure | Name: _____ | <input type="checkbox"/> See attached list |
| <input type="checkbox"/> Run SELBUOY procedure | Name: _____ | <input type="checkbox"/> See attached list |
| <input type="checkbox"/> Run BUOYSUM procedure | Name: _____ | <input type="checkbox"/> See attached list |
| <input type="checkbox"/> Run OTHER procedure - see SPECIAL INSTRUCTIONS | | |
| <input type="checkbox"/> Tape Scan | | |
| <input checked="" type="checkbox"/> Tape to Tape Copy | Scan OUTPUT tape? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no | |
| <input type="checkbox"/> Disk to Tape Copy | Scan OUTPUT tape? <input type="checkbox"/> yes <input type="checkbox"/> no | |
| <input type="checkbox"/> Tape to Disk Copy | | |
| <input type="checkbox"/> Print <input type="checkbox"/> 80 column <input type="checkbox"/> 132 column <input type="checkbox"/> HEX <input type="checkbox"/> OCTAL <input type="checkbox"/> Character | | |
| All files/records? <input type="checkbox"/> yes <input type="checkbox"/> no, see SPECIAL INSTRUCTIONS | | |
| <input type="checkbox"/> Restore VAX file | Name: _____ | |
| <input type="checkbox"/> OTHER - see SPECIAL INSTRUCTIONS | | |

Special Operator Instructions:

Please send 'W' tape to Asheville, N.C.

JOB INPUT

Id#/Filename: *A#1360 (D#723)*

Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify:

Code: ☒ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:

Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☒ NL ☐ SL

MAX Record Length: 80 MAX Blocksize: 3200

JOB OUTPUT

Id#/Filename: *W14635*

Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify: *16 Files*

Code: ☒ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:

Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☒ NL ☐ SL

MAX Record Length: 80 MAX Blocksize: 3200

(OC3 Use Only)

JOB Number: *91030605*

Completed By:

Date/Time Start: *3/06/91 09:00*

Date/Time Completed: *3/06/91 09:10*

REQUEST FOR ADP SERVICES

User Name <i>Cliff Hadley</i>	Phone # <i>673-5636</i>	Org/Task <i>EG1200543449</i>	Submit Date <i>02/05/91</i>	Due Date <i>ASAP</i>
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PART A

Request/Problem Category

☐ Communication ☒ Equipment ☐ Supplies
☐ Other

Please scan tape AΦ1359

PART B

(For Operator Job Request)

Operator Job Request Type

- ☐ Run BRBUOY procedure Name: _____ ☐ See attached list
☐ Run SELBUOY procedure Name: _____ ☐ See attached list
☐ Run BUOYSUM procedure Name: _____ ☐ See attached list
☐ Run OTHER procedure - see SPECIAL INSTRUCTIONS
☒ Tape Scan
☐ Tape to Tape Copy Scan OUTPUT tape? ☐ yes ☐ no
☐ Disk to Tape Copy Scan OUTPUT tape? ☐ yes ☐ no
☐ Tape to Disk Copy
☐ Print ☐ 80 column ☐ 132 column ☐ HEX ☐ OCTAL ☐ Character
 All files/records? ☐ yes ☐ no, see SPECIAL INSTRUCTIONS
☐ Restore VAX file Name: _____
☐ OTHER - see SPECIAL INSTRUCTIONS

Special Operator Instructions:

Please return tape AΦ1359 to Bin 09

JOB INPUT

Id#/Filename: *AΦ1359*Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify:Code: ☐ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☐ NL ☐ SLMAX Record Length: _____ MAX Blocksize: *6000*

JOB OUTPUT

Id#/Filename: *AΦ1359*Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify:Code: ☐ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☐ NL ☐ SLMAX Record Length: _____ MAX Blocksize: *6000*

(OC3 Use Only)

JOB Number: *91424745*
 Completed By: *G.B.*

Date/Time Start: *2-7-91/14:00*
 Date/Time Completed: *2-7-91/14:10*

REQUEST FOR ADP SERVICES

User Name	Phone #	Org/Task	Submit Date	Due Date
Cliff Hartley	673-5636	EG12008N3449	02/05/91	ASAP

PART A

Request/Problem Category:

X

Please scan tape AΦ136Φ

PART B

(For Operator Job Requests)

Operator Job Request Type:

- ☐ Run BRBUOY procedure Name: _____ ☐ See attached list
☐ Run SELBUOY procedure Name: _____ ☐ See attached list
☐ Run BUOYSUM procedure Name: _____ ☐ See attached list
☐ Run OTHER procedure - see SPECIAL INSTRUCTIONS
☒ Tape Scan
☐ Tape to Tape Copy Scan OUTPUT tape? ☐ yes ☐ no
☐ Disk to Tape Copy Scan OUTPUT tape? ☐ yes ☐ no
☐ Tape to Disk Copy
☐ Print ☐ 80 column ☐ 132 column ☐ HEX ☐ OCTAL ☐ Character _____
 All files/records? ☐ yes ☐ no, see SPECIAL INSTRUCTIONS
☐ Restore VAX file Name: _____
☐ OTHER - see SPECIAL INSTRUCTIONS

Special Operator Instructions:

Please return tape AΦ1360 to Bin 09

JOB INPUT

Id#/Filename: AΦ1360

Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify:Code: ☐ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☐ NL ☐ SL

MAX Record Length: _____ MAX Blocksize: 3200

JOB OUTPUT

Id#/Filename: AΦ1360

Medium: ☒ Tape ☐ Disk ☐ Diskette ☐ Other Specify:Code: ☐ ASCII ☐ EBCDIC ☐ Binary ☐ Other Specify:Tape Specs: ☐ 800 ☒ 1600 ☐ 6250 ☐ NL ☐ SL

MAX Record Length: _____ MAX Blocksize: 3200

(OC3 Use Only)

JOB Number: 91Φ2Φ7Φ6

Completed By: Q.S.

 Date/Time Start: 2-7-91/14:15
 Date/Time Completed: 2-7-91/14:20



University of Alaska, Fairbanks

Fairbanks, Alaska 99701

PROBES

CTD RECORD FORMAT DESCRIPTION

COMMENT RECORD(S) (REQUIRED): (Analogous to NODC TEXT record)

These records should contain all pertinent information concerning data quality as determined during processing. Cruise dates and responsible Principal Investigator(s) should be logged here as well as calibration information.

FIELD	DATA / NO. TYPE / BYTES	USE AND MEANING
FILE TYPE	A/3	Always '022'
FILE IDENTIFICATION	A/6	Unique identifier of cruise
RECORD TYPE	I/1	Always '1'
STATION NUMBER	I/5	
TEXT	A/130	Comments/pertinent information
SEQUENCE (RECORD) NUMBER	I/5	Ascending numeric, 1st comment record=1, 2nd comment record=2, etc.

150

HEADER RECORD: (Analogous to NODC's Master Record)

FIELD	DATA / NO. TYPE / BYTES	USE AND MEANING
FILE TYPE	A/3	Always '022'
FILE IDENTIFICATION	A/6	Unique identifier for this cruise
Record Type	I/1	Always '2'
Station Number	I/5	
Latitude:		
Degrees	I/2	
Minutes	I/2	
Hundreths of Minutes	I/2	
Hemisphere	A/1	'N' or 'S'
Longitude:		
Degrees	I/3	
Minutes	I/2	
Hundreths of Minutes	I/2	
Hemisphere	A/1	'E' or 'W'

CTD RECORD FORMAT DESCRIPTION (CONT'D):

HEADER RECORD (CON'T):

FIELD	DATA/NO. TYPE/ BYTES	USE AND MEANING
Cruise identification	A/10	
Number of Scans	I/5	Number of 'scans' of station data. (Five scans per Data Record - same as number of depths.)
Year	I/2	Last two digits of year (GMT)
Month	I/2	1-12 (GMT)
DAY	I/2	1-31 (GMT)
Hour	I/2	0-23 (GMT)
Minutes	I/2	0-59 (GMT)
Depth Interval Indicator	I/1	Always '1' for equally spaced depths
Depth interval	I/3	Depth interval to tenths (should always be 010)
Barometric Pressure	I/5	To tenths
Wet bulb temperature	I/4	To tenths
Dry bulb temperature	I/4	To tenths
Wind Direction	I/2	Tens of degrees (eg. 145°=15)
Wind speed	I/2	Whole knots
Weather Code	I/1	WMO Code 4501
Sea State Code	I/1	WMO Code 3700
Visibility Code	I/1	WMO Code 4300
Cloud Type Code	I/1	WMO Code 0500
Cloud Amount Code	I/1	WMO Code 2700
Instrument Information	A/20	Type and Serial Number
Station Name	A/6	
Depth to Bottom	I/5	To whole meters
Maximum Depth of Cast	I/4	To whole meters
Wave Direction	I/2	Tens of degrees (eg. 355° 4' = 36)
Wave Height	I/3	To tenths

PROBES

CTD RECORD FORMATION DESCRIPTION (CONT'D):

HEADER RECORD (CONT'D):

FIELD	DATA / NO. TYPE / BYTES	USE AND MEANING
Wave Period	I/2	To nearest second
Blank	X/27	

DATA RECORD: (analogous to NODC Detail Record)

Usually there will be Comment Records followed by one Header Record followed by N number of Data Records where N= number of depths per cast divided by 5. (5= number of 'scans' of data per Data Record.)

FIELD	DATA / NO. TYPE / BYTES	USE AND MEANING
File Type	A/3	Always '022'
File Identification	A/6	
Record Type	I/1	Always '3'
Station Number	I/5	
Depth	I/5	To tenths (but not used] (Scan Data)
Temperature	I/5	To thousandths (Scan Data)
Salinity	I/5	To thousandths (Scan Data)
Sigma-t	I/4	To hundredths (Scan Data)
4th Channel	I/6	To thousandths (Scan Data)
Scan Condition Code	I/1	Code describing how data arrived at. (Scan Data) (See attached)
Scan Data	4*26	Repetition of above
Sequence Number	I/5	Ascending numeric, 1st Data Record =1, 2nd Data Record = 2, etc.

150

METHODS

Temperature and Salinity

The salinities and temperatures for the bottle data were taken from Plessey 9040 Series salinity, temperature vs. depth (STD) instruments. The STD data are averaged over 1 meter intervals. Precision of the complete operation does not justify finer resolution than this. Depth corrections are not computed because it is felt that STD (CTD) depths are much better than thermometric depths. However, thermometric checks are made on each field calibration cast as an operational check. Smoothing is not done on temperature or salinity values because an adequate method has not been found to evaluate thermal response problems. Spikes are chopped at the limits of the STD (CTD) scales. Meter intervals for which no data was recorded (rare at the sample rate of 0.2 sec) are linearly interpolated to provide a value at all depths. A field calibration consisting of one sample bottle per cast on casts over 200 m is taken.

Dissolved Oxygen

Oxygen concentrations were determined using the Chesapeake Bay Institute technique (Carpenter, 1965).

Inorganic Nutrients

Nutrient analyses were performed with a 5-channel Technician Auto Analyzer using methods described by Whitledge *et al.* (1981).

Note

Some stations (e.g. Station 2057) are mixtures of hydrographic and productivity nutrient observations and are not duplicates.

CTD DATA ~~processed~~ AS 8400210

MAG. tape file organization (beginning to end)

I) CTD & fluorometer Data sets

	CRUISE # LEG	CRUISE DATES	File Type	File Type
1)	TT 131 leg 1	4/11/78 to 4/29/78	NODC	FT 022
2)	TT 131 " 2	5/7/78 to 5/21/78	"	" " 2
3)	TT 131 " 3	5/25/78 to 6/12/78	"	" " 2
4)	TT 131 " 4	6/17/78 to 6/21/78	"	" "
5)	TT 131 " 5	7/3/78 to 7/6/78	"	" "
6)	TT 138 leg 1	4/14/78 to 4/26/79	NODC	FT 022
7)	TT 138 " 2	5/3/79 to 5/17/79	"	" "
8)	TT 138 " 3	5/25/79 to 6/15/79	"	" "

CTD data only

9)	TT 149 leg 1	3/24/80 to 4/3/80	NODC	FT 022
10)	TT 149 " 2	4/7/80 to 4/23/80	"	" "
11)	TT 149 " 3	4/27/80 to 5/18/80	"	" "
12)	TT 149 " 4	5/22/80 to 6/8/80	"	" "
13)	TT 159 leg 1	4/11/80 to 4/26/80	NODC	FT 022
14)	TT 159 " 2	4/30/81 to 5/27/81	"	" "
15)	TT 159 " 3	5/3/81 to 5/27/81	"	" "
16)	TT 159 " 4	6/27/81 to 7/21/81	"	" "

II Hydrographic Data

Cruise & leg	Cruise Dates	File Type
17) TT 131 leg 1	4/10/78 to 4/29/78	U of AK FT 029
18) TT 131 " 2	5/7/78 to 5/21/78	" " "
19) TT 131 " 3	5/27/78 to 6/12/78	" " "
20) TT 131 " 4	6/17/78 to 6/29/78	" " "
21) TT 131 " 5	7/3/78 to 7/13/78	" " "
— — — — —	— — — — —	— — — — —
22) TT 138 leg 1	4/14/79 to 4/28/79	U of AK FT 029
23) TT 138 " 2	5/3/79 to 5/21/79	" " "
24) TT 138 " 3	5/25/79 to 6/15/79	" " "
25) TT 149 leg 1-4	3/17/80 to 6/8/80	U of AK FT 029

11
\$Input file number (RETURN for next):
>>

1352 records of length: 752 bytes.

File 1

Total number of records: 1352

\$*
>> 11
\$Input file number (RETURN for next):
>>

464 records of length: 752 bytes.

2

Total number of records: 464

\$*
>> 11
\$Input file number (RETURN for next):
>>

828 records of length: 752 bytes.

3

Total number of records: 828

\$*
>> 11
\$Input file number (RETURN for next):
>>

343 records of length: 752 bytes.

4

Total number of records: 343

\$*
>> 11
\$Input file number (RETURN for next):
>>

49 records of length: 752 bytes.

5

Total number of records: 49

\$*
>> 11
\$Input file number (RETURN for next):
>>

1066 records of length: 752 bytes.

6

Total number of records: 1066

\$*

↑
CTD
data

\$Input file number (RETURN for next):

>>

522 records of length: 752 bytes.

7

Total number of records: 522

**

>> li

\$Input file number (RETURN for next):

>>

1155 records of length: 752 bytes.

8

Total number of records: 1155

**

>> li

\$Input file number (RETURN for next):

>>

499 records of length: 752 bytes.

9

Total number of records: 499

**

>> li

\$Input file number (RETURN for next):

>>

676 records of length: 752 bytes.

10

Total number of records: 676

**

>> li

\$Input file number (RETURN for next):

>>

1092 records of length: 752 bytes.

11

Total number of records: 1092

**

>> li

\$Input file number (RETURN for next):

>>

926 records of length: 752 bytes.

12

Total number of records: 926

**

>> li

CTD
data

939 records of length: 752 bytes.
Total number of records: 939

13

\$\$
>> 11
\$Input file number (RETURN for next):
>>

818 records of length: 752 bytes.
Total number of records: 818

14

\$\$
>> 11
\$Input file number (RETURN for next):
>>

1277 records of length: 752 bytes.
Total number of records: 1277

15

\$\$
>> 11
\$Input file number (RETURN for next):
>>

1156 records of length: 752 bytes.
Total number of records: 1156

16

↑
CTD

\$\$
>> 11
\$Input file number (RETURN for next):
>>

225 records of length: 801 bytes.
Total number of records: 225

17

hydrocast
2 1/2 x 4'
3' 301
6
20
15
2'

\$\$
>> 11
\$Input file number (RETURN for next):
>>

182 records of length: 801 bytes.
Total number of records: 182

18

\$\$
>> 11
\$Input file number (RETURN for next):

297 records of length: 801 bytes.
Total number of records: 297

19

>> li
\$Input file number (RETURN for next):
>>

129 records of length: 801 bytes.
Total number of records: 129

20

>> li
\$Input file number (RETURN for next):
>>

13 records of length: 801 bytes.
Total number of records: 13

21

>> li
\$Input file number (RETURN for next):
>>

137 records of length: 801 bytes.
Total number of records: 137

22

>> li
\$Input file number (RETURN for next):
>>

251 records of length: 801 bytes.
Total number of records: 251

23

>> li
\$Input file number (RETURN for next):
>>

412 records of length: 801 bytes.
Total number of records: 412

24

>> li
\$Input file number (RETURN for next):
>>

Hydro

HYDROGRAPHIC DATA FORMAT

This file will consist of five different record types: One HEADER RECORD followed by a set of one STATION INFORMATION RECORD; followed by one or more COMMENT/WEATHER RECORDS, pertaining to this station; followed by X number of Data 1 and Data 2 records where X equals the number of discrete samples taken. Note: The data records should always be in pairs, ie: Data 1 record should always be followed by a Data 2 record.

HEADER RECORD FORMAT:

FIELD	DATA/NO. TYPE/BYTES	USE AND MEANING
File Type	A/3	Always '029'
File Identifier	A/6	Unique identifier for cruise
Record Type	I/1	Always '0'
Vessel	A/11	
Cruise	A/6	
Cruise Dates (GMT)	A/17	XX/XX/XX-XX/XX/XX Beginning year,month,day; Ending year,month,day.
Senior Scientist	A/19	Left justified
Investigator/Institution	A/17	Left justified

PROBES

STATION INFORMATION RECORD FORMAT:

FIELD	DATA/NO. TYPE/BYTES	USE AND MEANING
File Type	A/3	Always '029'
File Identifier	A/6	
Record Type	I/1	Always '1'
Station Number	I/5	
Latitude:		
Degrees	I/2	
Minutes	I/2	
Seconds	I/2	
Hemisphere	A/1	'N' or 'S'
Longitude:		
Degrees	I/3	
Minutes	I/2	
Seconds	I/2	
Hemisphere	A/1	'E' or 'W'
Year	I/2	Last 2 digits of year (GMT)
Month	I/2	1-12 (GMT)
Day	I/2	1-31 (GMT)
Hour	I/2	0-23 (GMT)
Minutes	I/2	0-59 (GMT)
Time Zone	A/1	'+' or '-'
Time Zone	I/2	1-12
Depth to Bottom	I/5	To whole meters
Chlorophyll a (Integrated)	I/4	To tenths (mg m ⁻²)
Phaeopigments (Integrated)	I/4	To tenths (mg m ⁻²)
Carbon Assimilation	I/5	To tenths (mgC m ⁻² Day ⁻¹)
One Percent Light Depth	I/3	To whole meters
Phosphate PO ₄ -P Reactive Time	I/2	To whole minutes
pH Scale	I/1	1=NBS pH Scale 2=Sorenson pH Scale 3=Hansson pH Scale
In Situ Corrections for pH measurements	I/1	1=Temperature and pressure correction has been made 2=No corrections have been made
SECCHI Depth	I/2	To whole meters
Mixed Layer Depth	I/3	To whole meters
Light Level (Aboard Plat- form)	I/3	Langleys/Day
Blank	X/4	

PROBES

COMMENT/WEATHER RECORD(s) FORMAT:

The first record of this set of Comment/Weather Records should contain the weather information as outlined below. Any additional records should contain pertinent information pertaining to the data quality of this station or any other information deemed important.

FIELD	DATA/NO. TYPE/BYTES	USE AND MEANING
File Type	A/3	Always '029'
File Identifier	A/6	
Record Type	I/1	Always '4'
Station Number	I/5	
Station Name	A/6	
Barometric Pressure	I/5	To Tenths
Wet Bulb Temperature	I/4	To Tenths
Dry Bulb Temperature	I/4	To Tenths
Wind Direction	I/2	Tens of Degrees (eg. 145°=15)
Wind Speed	I/2	Whole Knots
Weather Code	I/1	WMO Code 4501
Sea State	I/1	WMO Code 3700
Visibility	I/1	WMO Code 4300
Cloud Type	I/1	WMO Code 0500
Cloud Amount	I/1	WMO Code 2700
Wave Direction	I/2	Tens of Degrees (eg. 355° 4' = 36)
Wave Height	I/3	To Tenths
Wave Period	I/2	To nearest second
Instrument Information	A/27	Additional comments pertaining to Station/data should be continued on additional Comment/Weather Records using columns 17-77.
Sequence Number	I/3	Ascending numeric for each Comment/Weather Record

PROBES

DATA 1 RECORD FORMAT:

FIELD	DATA/NO. TYPE/BYTES	USE AND MEANING
File Type	A/3	Always '029'
File Identifier	A/6	
Record Type	I/1	Always '3'
Station Number	I/5	
Depth of Sample	I/5	^{IN} To tenths of meters
Chlorophyll a Concentration	I/4	To hundredths (mg m^{-3})
Phaeopigment Concentration	I/4	To hundredths (mg m^{-3})
Carbon Assimilation	I/5	To hundredths ($\text{mgC m}^{-3} \text{ hr}^{-1}$)
Elapsed Time of Incubation	I/4	2 bytes hours, 2 bytes minutes
Oxygen	I/4	To hundredths (ml/l)
Phosphate, $\text{PO}_4\text{-P}$ (Inorganic)	I/4	To hundredths ($\mu\text{g-at/l}$)
Ammonia, $\text{NH}_3\text{-N}$	I/4	To hundredths ($\mu\text{g-at/l}$)
Nitrate, $\text{NO}_3\text{-N}$	I/3	To tenths ($\mu\text{g-at/l}$)
Nitrite, $\text{NO}_2\text{-N}$	I/3	To hundredths ($\mu\text{g-at/l}$)
Silicate $\text{SiO}_3\text{-Si}$	I/5	To hundredths ($\mu\text{g-at/l}$)
pH	I/3	To hundredths
Alkalinity, total	I/4	To thousandths (meg/l)
Temperature	I/4	To hundredths ($^{\circ}\text{C}$)
Salinity	I/4	To hundredths (o/oo)
Blank	X/2	
Sequence Number	I/3	Ascending numeric for each data record.

PROBES

DATA 2 RECORD FORMAT:

FIELD	DATA/NO. TYPE/BYTES	USE AND MEANING
File Type	A/3	Always '029'
File Identifier	A/6	CRUISE #
Record Type	I/1	Always '5'
Station Number	I/5	
Depth of Sample	I/5	^{IN} To tenths of meters
'NO'	I/5	To tenths
Partical Count *100	I/6	
Total CO ₂	I/6	To thousandths
Blank	X/40	
Sequence Number	I/3	Ascending numeric for each data record.

METHODS

Temperature and Salinity

The salinities and temperatures for the bottle data were taken from Plessey 9040 Series salinity, temperature vs. depth (STD) instruments. The STD data are averaged over 1 meter intervals. Precision of the complete operation does not justify finer resolution than this. Depth corrections are not computed because it is felt that STD (CTD) depths are much better than thermometric depths. However, thermometric checks are made on each field calibration cast as an operational check. Smoothing is not done on temperature or salinity values because an adequate method has not been found to evaluate thermal response problems. Spikes are chopped at the limits of the STD (CTD) scales. Meter intervals for which no data was recorded (rare at the sample rate of 0.2 sec) are linearly interpolated to provide a value at all depths. A field calibration consisting of one sample bottle per cast on casts over 200 m is taken.

Dissolved Oxygen

Oxygen concentrations were determined using the Chesapeake Bay Institute technique (Carpenter, 1965).

Inorganic Nutrients

Nutrient analyses were performed with a 5-channel Technician Auto Analyzer using methods described by Whitledge *et al.* (1981).

Note

Some stations (e.g. Station 2057) are mixtures of hydrographic and productivity nutrient observations and are not duplicates.

Password:.

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
9100027	L153	L01200	0104	313F	31TT	1978/05/08	TT-131	194480
9100027	L153	L01201	0104	313F	31TT	1979/05/15	TT-138	194481
9100027	F029	TV5891	0104	313F	31TT	1978/04/10	TT131	194482
9100027	F029	TV5892	0104	313F	31TT	1978/05/07	TT-131	194483
9100027	F029	TV5893	0104	313F	31TT	1978/05/26	TT-131	194484
9100027	F029	TV5894	0104	313F	31TT	1978/06/18	TT131	194485
9100027	F029	TV5895	0104	313F	31TT	1978/07/03	TT131	194486
9100027	F029	TV5896	0104	313F	31TT	1979/04/14	TT-138	194487
9100027	F029	TV5897	0104	313F	31TT	1979/01/04	TT138	194488
9100027	F029	TV5898	0104	313F	31TT	1979/05/23	TT-138	194489
9100027	F029	TV5899	0104	313F	31TT	1980/03/24	TT149	194490
9100027	F029	TV5900	0104	313F	31TT	1980/04/07	TT149	194491
9100027	F029	TV5901	0104	313F	31TT	1980/04/27	TT149	194492
9100027	F029	TV5902	0104	313F	31TT	1980/05/22	TT149	194493

(14 rows affected)

Password: .

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
-----	-----	-----	-----	-----	-----	-----	-----
9100027	L153	L01200	31TT	10	NULL	78/05/08	78/07/03
9100027	L153	L01201	31TT	1	NULL	79/05/15	79/05/18
9100027	F029	TV5891	31TT	97	977	78/04/10	78/04/30
9100027	F029	TV5892	31TT	63	783	78/05/07	78/05/21
9100027	F029	TV5893	31TT	122	1373	78/05/26	78/06/12
9100027	F029	TV5894	31TT	56	643	78/06/18	78/06/29
9100027	F029	TV5895	31TT	5	61	78/07/03	78/07/04
9100027	F029	TV5896	31TT	66	629	79/04/14	79/04/26
9100027	F029	TV5897	31TT	103	1140	79/01/04	79/05/21
9100027	F029	TV5898	31TT	161	1929	79/05/23	79/06/15
9100027	F029	TV5899	31TT	38	454	80/03/24	80/04/03
9100027	F029	TV5900	31TT	84	955	80/04/07	80/04/23
9100027	F029	TV5901	31TT	141	1608	80/04/27	80/08/15
9100027	F029	TV5902	31TT	134	1583	80/05/22	80/06/08

(14 rows affected)