

DDF-A: 4:16

DATA DOCUMENTATION FORM

313518-313520

NATIONAL OCEANOGRAPHIC DATA CENTER
RECORDS SECTION
WASHINGTON, D. C. 20390

C100

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

A. ORIGINATOR IDENTIFICATION

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

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

*National Ocean Survey
6001 Executive Blvd.
Rockville, MD 20853*

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

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

4. PLATFORM NAME(S)

*NOAA SHIP
FERREL*

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

Ship

6. PLATFORM AND OPERATOR NATIONALITY(IES)

| PLATFORM | OPERATOR |
|------------|------------|
| <i>USA</i> | <i>USA</i> |

7. DATES

| FROM: MO, DAY, YR | TO: MO, DAY, YR |
|-------------------|-----------------|
| <i>4/20/70</i> | <i>10/5/70</i> |

8. ARE DATA PROPRIETARY ?

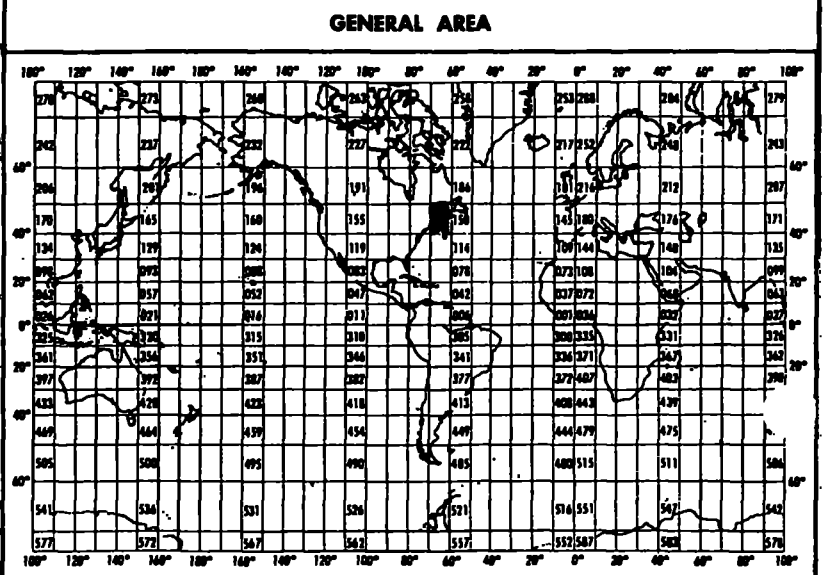
NO YES

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.

9. ARE DATA DECLARED NATIONAL PROGRAM (DNP) ?
(i.e., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE ?)

NO YES PART (SPECIFY BELOW)



10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)

*Charles R. Muirhead
8255
IDS 14-68060*

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 | ‰ | Nansen bottles | Inductive salinometer (Hytech model S 510) | 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 cores | 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 |
|--------------------|-------------------------|--|--|---|
| Salinity | ‰ | STD Bissett-Berman | NA | NA |
| Temperature | °C | 9060 | | |
| Conductivity | mmho/cm | in situ Salinometer | | |

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.

TAPE # 2419

~~5437 TAPES (NOOC) WRITTEN BY [unclear]~~

5437 CARDS WRITTEN ON TAPE in
CARD IMAGE FORMAT, BLOCKED 10, 1600 B.P.L.
9-TRACK, USING PLI V5, NO LABEL.

1ST CARD IS GEOGRAPHIC POSITION
2ND SERIES OF CARDS ARE SALINITY
3RD SERIES OF CARDS ARE TEMPERATURE

SEE ASSOCIATED MATERIAL FOR CARD
IDENTITIES & FORMAT

C. DATA FORMAT

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

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

2. GIVE BRIEF DESCRIPTION OF FILE ORGANIZATION

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

4. RESPONSIBLE COMPUTER SPECIALIST:

NAME AND PHONE NUMBER _____

ADDRESS _____

COMPLETE THIS SECTION IF DATA ARE ON MAGNETIC TAPE

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

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

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

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

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 | | |
| | | | | | |

IN SITU PROGRAM I

J0400'CM60000'T75'TP0. WARTHA OCEANOGRAPHY

COMMENT.DPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP

COMMENT.MAIL THIS DECK AND ANY PUNCHES

COMMENT.CARDS TO THE FOLLOWING ADDRESS--

COMMENT.-----WSC BLDG-2-----ROCKVILLE

RUN(S''''''20000''')

RFL'10000.

XPAUSE. OPERATOR' PLEASE RUN ON UNLINED PAPER ONLY.

XPAUSE. OPERATOR IF THIS CANNOT BE DONE' DO NOT RUN AT ALL.

RFL'60000.

LOAD(LGO)

EXECUTE.

EXIT.

DMP(0'60000)

#

PROGRAM SALINE (INPUT'OUTPUT'TAPE2'PUNCH)

DIMENSION QS(40)'QT(40)'A(2000)'IDEP(40)'LOC(4)'QX(7)

DATA (IXs1HX)'(ISS1HS)'(ICs1HC)'(INS1HN)'(IES1HE)'(IWS1HW)

DATA (DCODs2HFT)'(TMEWS1HW)

~~JOBS=205~~ JOBS=25

READ 11' (IDEP(LUM)'LUMs1'40)

DO 500 IJK s1*JOBS

JCT s 0

MP s 1

LLs 1

LU s LL + 9

READ 4'AAL'IABL'IACL'ICD'IDAYL'MOL'IYRL'MAX'LAD'LAM'LAS'HNS'LOD'LO

1M'LOS'HEW'IWEATH'INSCD'WS'WD

INSCDs2

100 READ 5'AA'IAB'IAC'AD'IE'ISD'IDAY'MO'IYR'IHR'ITM'AUN'ATP'(QS(L)'LsL
1L'LU)

101 READ 5' AAT'IABT'IACT'ADT'IET'ISDT'IDAYT'MOT'IYRT'IHRT'ITMT'AUNT'A
1TPT'(QT(L)'LsLL'LU)

115 READ 5' AAX'IABX'IACX'ADX'IEX'ISDX'IDAYX'MOX'IYRX'IHRX'ITMX'AUNX'A
1TPX'(QX(L)'LsLL'LU)

IF(AAL.EQ.AA) GO TO 102

PRINT 1011

STOP

102 IF(AAL.EQ.AAT) GO TO 103

PRINT 1021

STOP

103 IF(IABL.EQ.IAB) GO TO 104

PRINT 1031

STOP

104 IF(IABL.EQ.IABT) GO TO 105

PRINT 1041

STOP

105 IF(IACL.EQ.IAC) GO TO 106

PRINT 1051

STOP

106 IF(IACL.EQ.IACT) GO TO 107

PRINT 1061

STOP

107 IF(IDAYL.EQ.IDAY) GO TO 108

PRINT 1071

```

STOP
108 IF(IDAYL.EQ.IDAYT) GO TO 109
PRINT 1081
STOP
109 IF(MOL.EQ.MO) GO TO 110
PRINT 1091
STOP
110 IF(MOL.EQ.MOT) GO TO 111
PRINT 1101
STOP
111 IF(AAL.EQ.AAX)GO TO 119
PRINT 1311
STOP
119 IF(IABL.EQ.IABX) GO TO 120
PRINT 1321
STOP
120 IF(IACL.EQ.IACX) GO TO 121
PRINT 1331
STOP
121 IF(IDAYL.EQ.IDAYX) GO TO 122
PRINT 1341
STOP
122 IF(MOL.EQ.MOX) GO TO 113
PRINT 1351
STOP
113 IF(ISD.NE.0) GO TO 1131
ISD s ICD
AUNs1HF
SYM s1HC
GO TO 1132
1131 SYMs1HS
1132 PRINT7
ALASsFLOAT(LAS)/60.
ALAMsFLOAT(LAM)+ALAS
ALOSsFLOAT(LOS)/60.
ALOMsFLOAT(LOM)+ALOS
PRINT8
PRINT 9'AA'IAB'IAC'MO'IDAY'IYR'ISD'AUN'SYM'IHR'ITM'TMEW'LAD'ALAM'H
INS'LOD'ALOM'HFW'IWEATH'WS'WD'INSCD
PRINT 10' DCOD
CATsFLOAT(LAD)+ALAM/60.
CONsFLOAT(LOD)+ALOM/60.
IF(HNS.EQ.IN) GO TO 1133
CATs-CAT
1133 IF(HEW.EQ.IW) GO TO 1134
CONs-CON
1134 A(MP) s AA
A(MP+1)sIAB
A(MP+2)sIAC
A(MP+3)sIDAY
A(MP+4)sMO
A(MP+5)sIYR
A(MP+6)sIHR

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A(MP+7)S CAT
A(MP+8)S CON
A(MP+9)S MAX
A(MP+10)S INSCD
A(MP+11)S IWEATH
A(MP+12)S WS
A(MP+13)S WD
A(MP+14)S ISD
A(MP+15)S ITM
A(MP+16)S AUN
MPPS MP+20
MPXS MP+60
DO 114 Ls1'MAX
PRINT 6' IDEP(L)'QS(L)'QT(L)'QX(L)
A(MPP+L)S QS(L)
A(MPX+L)S QT(L)
114 CONTINUE
500 CONTINUE
STOP
4 FORMAT(1X'A2'2(I2'1X)'I3'1X'2I2'I4'1X'I3'3(1X'I2)'A1'10'I3'2(1X'I2
1)'A1'3(1X'I2)'1X'I3)
5 FORMAT(1X'A2'I2'1X'I2'A1'I1'I3'I2'I4'I3'2X'2A1'10F5.3)
6 FORMAT(12X'I4'4X'F5.1'3X'F5.1'3X'F5.1)
7 FORMAT(1H1)
8 FORMAT(23X'8HNOAA-NOS)
9 FORMAT(11X'4HSTA 'A2'I2'1H-'I2'7H DATE 'I2'1H-'I2'1H-'I2/11X'3HSD
1 'I3'1X'A2'1X'A1'2X'5HHOUR 'I4'1X'3HTM 'I3'A1/11X'4HLAT 'I2'1H-'F6
2.3'A1'5H LON 'I3'1H-'F6.3'A1/11X'8HWEATHER 'I2'2X'5HWIND 'I2'7H KT
3 AT 'I3/11X'5HINST 'I2//)
10 FORMAT(11X'3IHDEPTH SALIN TEMP COND//11X'3H ('A2'29H)
1 (PPT) (DEG C) (MMH/CM)///)
11 FORMAT(30X'10I5)
1011 FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON SAL CARD*)
1021 FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON TEMP CARD*)
1031 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1041 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1051 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1061 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1071 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1081 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1091 FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1101 FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1311 FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON COND CARD*)
1321 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
1331 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
1341 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
1351 FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
END

```

J0031'CM60000'T75'TP0. WARTHA OCEANOGRAPHY

COMMENT.PPP

COMMENT.MAIL THIS DECK AND ANY PINCHED

COMMENT.CARDS TO THE FOLLOWING ADDRESS--

COMMENT.-----WSC BLDG-2-----ROCKVILLE

RUN(S'-----'200000'--)

LOAD(LG0)

EXECUTE.

EXIT.

DMP(0'60000)

h

PROGRAM SALINE (INPUT'OUTPI'T'TAPE2'PUNCH)

PRINT 9999

9999 FORMAT(2HPM'*OPERATOR PLEASE RUN ON UNLINED PAPER ONLY*')

DIMENSION QS(40)'QT(40)'A(2000)'IDEP(40)'LOC(4)

DIMENSION AJ(3)'IABJ(3)'IACJ(3)'MOJ(3)'IDJ(3)'IYRJ(3)'ISDJ(3)

DIMENSION AUNJ(3)'SYMJ(3)'IHRJ(3)'ITMJ(3)'TMEWJ(3)'LADJ(3)'ALJM(3)

DIMENSION HNSJ(3)'LODJ(3)'ALOMJ(3)'HEWJ(3)'IWEJ(3)'WSJ(3)'WDJ(3)

DIMENSION INSJ(3)

DATA (IXs1HX)'(ISS1HS)'(ICS1HC)'(INS1HN)'(IES1HE)'(IWS1HW)

DATA (DCODs2H M)'(TMEWs1HW)

~~JOBSs1~~ JOBS=738

READ 11' (IDEP(LUM)'LUMs1'40)

Is0

DO 500 IJK s1*JOBS

IsI+1

JCT s 0

MP s 1

LLs 1

LU s LL + 9

READ 4'AAL'IABL'IACL'ICD'IDAYL'MOL'IYRL'MAX'LAD'LAM'LAS'HNS'LOD'LO

1M'LOS'HEW'IWEATH'INSCD'WS'WD

INSCDs1

100 READ 5'AA'IAB'IAC'AD'IE'ISD'IDAY'MO'IYR'IHR'ITM'AUN'ATP'(QS(L)'LsL

1L'LU)

LL s LL+10

LU s LL+9

IF (LL.LE.MAX) GO TO 100

LL s 1

LU s LL+9

101 READ 5' AAT'IABT'IACT'ADT'IET'ISDT'IDAYT'MOT'IYRT'IHRT'ITMT'AUNT'A

1TPT'(QT(L)'LsLL'LU)

LLs LL+10

LUsLL+9

IF(LL.LE.MAX) GO TO 101

LLs1

LUsLL+9

IF(AAL.EQ.AA) GO TO 102

PRINT 1011

STOP

102 IF(AAL.EQ.AAT) GO TO 103

PRINT 1021

STOP

```

103 IF(IABL.EQ.IAB) GO TO 104
    PRINT 1031
    STOP
104 IF(IABL.EQ.IABT) GO TO 105
    PRINT 1041
    STOP
105 IF( IACL.EQ.IAC) GO TO 106
    PRINT 1051
    STOP
106. IF(IACL.EQ.IACT) GO TO 107
    PRINT 1061
    STOP
107 IF(IDAYL.EQ.IDAY) GO TO 108
    PRINT 1071
    STOP
108' IF(IDAYL.EQ. IDAYT) GO TO 109
    PRINT 1081
    STOP
109 IF(MOL.EQ.MO) GO TO 110
    PRINT 1091
    STOP
110 IF(MOL.EQ.MOT) GO TO 111
    PRINT 1101
    STOP
111 IF(ISD.NE.0) GO TO 1131
    ISD s ICD
    AUNs1HF
    SYMs1HC
    GO TO 1132
1131 SYMs1HS
1132 PRINT7
    ALASsLAS
    ALOSsLOS
    ALAMsFLOAT(LAM)+ALAS/60.
    ALOMsFLOAT(LOM)+ALOS/60.
1188 PRINT 8
    PRINT 9'AA'IAB'IAC'MO'IDAY'IYR'ISD'AUN'SYM'IHR'ITM'TMEW'LAD'ALAM'H
    INS'LOD'ALOM'HEW'IWEATH'WS'WD'INSCD
    PRINT 10'DCOD
    Is0
    CATsFLOAT(LAD)+ALAM/60.
    CONsFLOAT(LOD)+ALOM/60.
    IF(HNS.EQ.IN) GO TO 1133
    CATs-CAT
1133 IF(HEW.EQ.IW) GO TO 1134
    CONs-CON
1134 A(MP) s AA
    A(MP+1) s IAB
    A(MP+2) s IAC
    A(MP+3) s IDAY
    A(MP+4) s MO
    A(MP+5) s IYR
    A(MP+6) s IHR
    A(MP+7) s CAT
    A(MP+8) s CON

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A(MP+9)sMAX
A(MP+10)sINSCD
A(MP+11)sIWEATH
A(MP+12)sWS
A(MP+13)sWD
A(MP+14)sISD
A(MP+15)sITM
A(MP+16)sAUN

MPPsMP+20

MPXsMP+60

DO 114 Ls1'MAX

PRINT 6' IDEP(L)'QT(L)'QS(L)

A(MPP+L)sQS(L)

A(MPX+L)sQT(L)

114 CONTINUE

500 CONTINUE

STOP

4 FORMAT(1X'A2'I2'1X'I2'1X'I2'1X'I2'1X'I2'I4'1X'I3'3(1X'I2)'A1'1X'I3'2(1X'
1'I2)'A1'3(1X'I2)'1X'I3)

5 FORMAT(1X'A2'I2'1X'I2'A1'I1'I3'2I2'I4'I3'2X'2A1'10F5.3)

6 FORMAT(13X'I4'4X'F5.1'3X'F5.1)

7 FORMAT(1HI)

8 FORMAT(23X'8HNOAA-NOS)

9 FORMAT(11X'4HSTA 'A2'I2'1H-'I2'7H DATE 'I2'1H-'I2'1H-'I2/11X'3HSD

1 'I3'1X'A2'1X'A1'2X'5HHOUR 'I4'1X'3HTM 'I3'A1/11X'4HLAT 'I2'1H-'F6

2.3'A1'5H LON 'I3'1H-'F6.3'A1/11X'8HWEATHER 'I2'2X'5HWIND 'I2'7H KT

3 AT 'I3/11X'5HINST 'I2//)

10 FORMAT(11X'25H DEPTH TEMP SALINITY//11X'3H. (*A2'20H) (DEG
1C) (PPT)///)

11 FORMAT(30X'I0I5)

1011 FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON SAL CARD*)

1021. FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON TEMP CARD*)

1031 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)

1041 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)

1051 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)

1061 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)

1071 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)

1081 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)

1091. FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)

1101. FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)

END

IN SITU PROGRAM

J0400'CM60000'T75'TP0. WARTHA OCEANOGRAPHY

COMMENT.PPP

COMMENT.MAIL THIS DECK AND ANY PINCHED

COMMENT.CARDS TO THE FOLLOWING ADDRESS--

COMMENT.-----WSC BLDG-2-----ROCKVILLE

RUN(S'00000000')

RFL'10000.

XPAUSE. OPERATOR' PLEASE RUN ON UNLINED PAPER ONLY.

XPAUSE. OPERATOR IF THIS CANNOT BE DONE' DO NOT RUN AT ALL.

RFL'60000.

LOAD(LGO)

EXECUTE.

EXIT.

DMP(0'60000)

h

PROGRAM SALINE (INPUT'OUTP'IT'TAPE2'PUNCH)

DIMENSION QS(40)'QT(40)'A(2000)'IDEP(40)'LOC(4)'QX(7)

DATA (IXs1HX)'(ISS1HS)'(ICS1HC)'(INS1HN)'(IES1HE)'(IWS1HW)

DATA (DCODs2HFT)'(TMEws1HW)

~~JOBS=205~~ JOBS=180

READ 11' (IDEP(LUM)'LUMs1'40)

DO 500 IJK s1'JOBS

JCT s 0

MP s 1.

LLs 1

LU s LL + 9

READ 4'AAL'IABL'IACL'ICD'IDAYL'MOL'IYRL'MAX'LAD'LAM'LAS'HNS'LOD'LO

IM'LOS'HEW'IWEATH'INSCD'WS'WD

INSCDs2

100 READ 5'AA'IAB'IAC'AD'IE'ISD'IDAY'MO'IYR'IHR'ITM'AUN'ATP'(QS(L)'LsL

1L'LU)

101 READ 5' AAT'IABT'IACT'ADT'IET'ISDT'IDAYT'MOT'IYRT'IHRT'ITMT'AUNT'A

1TPT'(QT(L)'LsLL'LU)

115 READ 5' AAX'IABX'IACX'ADX'IE'ISDX'IDAYX'MOX'IYRX'IHRX'ITMX'AUNX'A

1TPX'(QX(L)'LsLL'LU)

IF(AAL.EQ.AA) GO TO 102

PRINT 1011

STOP

102 IF(AAL.EQ.AAT) GO TO 103

PRINT 1021

STOP

103 IF(IABL.EQ.IAB) GO TO 104

PRINT 1031

STOP

104 IF(IABL.EQ.IABT) GO TO 105

PRINT 1041

STOP

105 IF(IACL.EQ.IAC) GO TO 106

PRINT 1051

STOP

106 IF(IACL.EQ.IACT) GO TO 107

PRINT 1061

STOP

```

107 IF(IDAYL.EQ.IDAY) GO TO 108
    PRINT 1071
    STOP
108 IF(IDAYL.EQ.IDAYT) GO TO 109
    PRINT 1081
    STOP
109 IF(MOL.EQ.MO) GO TO 110
    PRINT 1091
    STOP
110 IF(MOL.EQ.MOT) GO TO 111
    PRINT 1101
    STOP
111 IF(AAL.EQ.AAX)GO TO 119
    PRINT 1311
    STOP
119 IF(IABL.EQ.IABX) GO TO 120
    PRINT 1321
    STOP
120 IF(IACL.EQ.IACX) GO TO 121
    PRINT 1331
    STOP
121 IF(IDAYL.EQ.IDAYX) GO TO 122
    PRINT 1341
    STOP
122 IF(MOL.EQ.MOX) GO TO 113
    PRINT 1351
    STOP
113 IF(ISD.NE.0) GO TO 1131
    ISD s ICD
    AUNs1HF
    SYMs1HC
    GO TO 1132
1131 SYMs1HS
1132 PRINT7
    ALASsFLOAT(LAS)/60.
    ALAMsFLOAT(LAM)+ALAS
    ALOSsFLOAT(LOS)/60.
    ALOMsFLOAT(LOM)+ALOS
    PRINT8
    PRINT 9'AA'IAB'IAC'MO'IDAY'IYR'ISD'AUN'SYM'IHR'ITM'TMEW'LAD'ALAM'H
    1NS'LOD'ALOM'HEW'IWEATH'WS'WD'INSCD
    PRINT 10' DCOD
    CATsFLOAT(LAD)+ALAM/60.
    CONsFLOAT(LOD)+ALOM/60.
    IF(HNS.EQ.IN) GO TO 1133
    CATs-CAT
1133 IF(HEW.EQ.IW) GO TO 1134
    CONs-CON
1134 A(MP) s AA
    A(MP+1)sIAB
    A(MP+2)sIAC
    A(MP+3)sIDAY
    A(MP+4)sMO
    A(MP+5)sIYR
    A(MP+6)sIHR

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A(MP+7) sCAT
A(MP+8) sCON
A(MP+9) sMAX
A(MP+10) sINSCD
A(MP+11) sIWEATH
A(MP+12) sWS
A(MP+13) sWD
A(MP+14) sISD
A(MP+15) sITM
A(MP+16) sAUN
MPP sMP+20
MPX sMP+60
DO 114 Ls1'MAX
PRINT 6' IDEP(L)'QS(L)'QT(L)'QX(L)
A(MPP+L) sQS(L)
A(MPX+L) sQT(L)
114 CONTINUE
500 CONTINUE
STOP
4 FORMAT(1X'A2'I2(I2'1X)'I3'1X'2I2'I4'1X'I3'3(1X'I2)'A1'1X'I3'2(1X'I2
1)'A1'3(1X'I2)'1X'I3)
5 FORMAT(1X'A2'I2'1X'I2'A1'I1'I3'I2'I4'I3'2X'2A1'10F5.3)
6 FORMAT(12X'I4'4X'F5.1'3X'F5.1'3X'F5.1)
7 FORMAT(1H1)
8 FORMAT(23X'8HNOAA-NOS)
9 FORMAT(11X'4HSTA 'A2'I2'1H-'I2'7H DATE 'I2'1H-'I2'1H-'I2/11X'3HSD
1 'I3'1X'A2'1X'A1'2X'5HHOUR 'I4'1X'3HTM 'I3'A1/11X'4HLAT 'I2'1H-'F6
2.3'A1'5H LON 'I3'1H-'F6.3'A1/11X'8HWEATHER 'I2'2X'5HWIND 'I2'7H KT
3 AT 'I3/11X'5HINST 'I2//)
10 FORMAT(11X'31HDEPTH SALIN TEMP COND//11X'3H ('A2'29H)
1 (PPT) (DEG C) (MMH/CM)///)
11 FORMAT(30X'10I5)
1011 FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON SAL CARD*)
1021 FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON TEMP CARD*)
1031 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1041 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1051 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1061 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1071 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1081 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1091 FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON SAL CARD*)
1101 FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON TEMP CARD*)
1311 FORMAT(1X*SECTION TYPE ON GP CARD NOT SAME AS ON COND CARD*)
1321 FORMAT(1X*SECTION NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
1331 FORMAT(1X*STATION NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
1341 FORMAT(1X* DAY NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
1351 FORMAT(1X* MONTH NUMBER ON GP CARD NOT SAME AS ON COND CARD*)
END

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72-0218
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

Date: January 24, 1972

Reply to
Attn of: C3332-5-GTO

Subject: STD data-Perobscot Bay

To: Mr. Anthony R. Picciolo
Chief, Search and Acquisition Branch
National Oceanographic Data Center

In response to your memo of December 9, 1971 and previous phone conversations, I am forwarding STD data obtained in the Penobscot Bay in 1970. As I mentioned, there were 943 casts made with the data being digitized onto cards. Enclosed are 3 program listings, program explanation, a copy of NOS Operational Data Report (NOS DR-13) which lists the data, and under separate cover, the magnetic tape you sent, 4 boxes of data, and program cards.

As I mentioned in a previous conversation, we do not now have people on time to record the data on your tape. However, if you find that this is a must, return the tape and we will make the transfer if and when we can get to it.

Charles R. Muirhead

Charles R. Muirhead
Acting Chief, Descriptive
Oceanographic Section
Oceanographic Surveys Branch
Oceanographic Division

Enclosures
Separate Cover:
Magnetic tape
Four boxes of data
Program cards

72.0218

TO: NODC

Three programs, each run on the CDC 6600 computer in Fortran IV, comprise PROGRAM SALINE: one for STD and, for In Situ, two programs due to differing depths of observations.

In addition to the identifying cast information (date, latitude, longitude, sounded or chart depth, etc.) for 943 locations, PROGRAM SALINE is designed to print:

1. For the STD, Temperature ($^{\circ}\text{C}$) and Salinity (parts per thousand) at meter depths. The meter depths are in one meter increments from the surface to 19 meters and in 5 meter increments for 20 meters to the bottom.

2. For the In Situ, depth (feet) and corresponding temperature ($^{\circ}\text{C}$), Salinity (PPT), and Electrical Conductivity (mmh/cm). The depths generally are 0, 10, 20, 30, 40, 60, and 80 feet, or 0 through 25 feet in 5 feet increments.

Any depths that differed from those above were eradicated and corrected after being printed. Using this program only one station per page is printed.

A copy of our publication, Operational Data Report NOS DR-13, is enclosed to facilitate your comprehension of the data.

The order of control cards and an example follow on the next page.

6. Documentation of Processed STD Velocimeter Data
 National Oceanographic Data Center

August 1969

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 Package

- a. Manufacturer *Busek-Berman*
- b. Model *9060*
- 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

3. Temperature

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

4. Pressure

- a. Model
- b. Serial
- c. Date of last calibration
- 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
- d. Place of last calibration
- e. Is raw calibration data available? Yes ___ No ___

7. Other (Attach a list for other parameters such as ambient light, transmissivity, etc.)

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
- b. Enter lowering rate in regions of low parameter gradients

3. Time Response

- a. Unit measu
- b. Unit measures ___ samples per ___
- c. Samples are averages of measurements over ___ time or ___ 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

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.

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
 - (1) Digital
 - (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, rounding of depth, temperature, salinity, etc.)

3. Corrections

- a. Were corrections applied to final data? *No*
- b. Corrections based on (by parameter)
 - (1) Surface sample
 - (2) On-line samplers (give depth relation to 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)?
 - (1) Depth-pressure + _____
 - (2) Temperature + _____
 - (3) Salinity + _____
 - (4) Sound Velocity + _____

· Password:

| accNo | fleA | refNo | proj | inst | ship | startDate | cruise | catId |
|---------|------|--------|------|------|------|------------|-----------|-------|
| 7200218 | C100 | 313518 | 9999 | 31J4 | 318L | 1970/04/20 | PENOBSCOT | 17080 |
| 7200218 | C100 | 313519 | 9999 | 31J4 | 318L | 1970/07/09 | PENOBSCOT | 17081 |
| 7200218 | C100 | 313520 | 9999 | 31J4 | 318L | 1970/08/18 | PENOBSCOT | 17082 |

(3 rows affected)

Password:

| accNo | fleA | refNo | ship | staCnt | recCnt | startDate | endDate |
|---------|------|--------|------|--------|--------|-----------------|-------------|
| 7200218 | C100 | 313518 | 318L | | 396 | 396 Apr 20 1970 | Jun 22 1970 |
| 7200218 | C100 | 313519 | 318L | | 466 | 0 Jul 9 1970 | Jul 9 1970 |
| 7200218 | C100 | 313520 | 318L | | 516 | 0 Aug 18 1970 | Oct 13 1970 |

(3 rows affected)