

DATA DOCUMENTATION FORM

NOAA FORM 24-13  
(2-85)

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEANOGRAPHIC DATA CENTER  
RECORDS SECTION  
WASHINGTON, DC 20235

FORM APPROVED  
O.M.B. No. 0648-0024  
EXPIRES 2/29/87

(While you are not required to use this form, it is the most desirable mechanism for providing the required ancillary information enabling the NODC and users to obtain the greatest benefit from your data.)

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.

F615

A. ORIGINATOR IDENTIFICATION

TT8330 - TT8346

THIS SECTION MUST BE COMPLETED BY DONOR FOR ALL DATA TRANSMITTALS

<p>1. NAME AND ADDRESS OF INSTITUTION, LABORATORY, OR ACTIVITY WITH WHICH SUBMITTED DATA ARE ASSOCIATED</p> <p>MARINE SCIENCES PROGRAM 12-5 VENABLE HALL, 045-A UNIVERSITY OF NORTH CAROLINA CHAPEL HILL, NC 27514</p>											
<p>2. EXPEDITION, PROJECT, OR PROGRAM DURING WHICH DATA WERE COLLECTED</p> <p>GULF STREAM MEANDERS EXPERIMENT; GULF STREAM DEFLECTION AND MEANDER ENERGETICS EXPERIMENT (DAMEX); DEEP STREAM EXPR.</p>		<p>3. CRUISE NUMBER(S) USED BY ORIGINATOR TO IDENTIFY DATA IN THIS SHIPMENT</p>									
<p>4. PLATFORM NAME(S)</p>	<p>5. PLATFORM TYPE(S) (E.G., SHIP, BUOY, ETC.)</p> <p>AIRPLANE (ABAT)</p>	<p>6. PLATFORM AND OPERATOR NATIONALITY(IES)</p> <table border="1"> <thead> <tr> <th>PLATFORM</th> <th>OPERATOR</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	PLATFORM	OPERATOR			<p>7. DATES</p> <table border="1"> <thead> <tr> <th>FROM: MO, DAY, YR</th> <th>TO: MO, DAY, YR</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	FROM: MO, DAY, YR	TO: MO, DAY, YR		
PLATFORM	OPERATOR										
FROM: MO, DAY, YR	TO: MO, DAY, YR										
<p>8. ARE DATA PROPRIETARY?</p> <p><input checked="" type="checkbox"/> NO <input type="checkbox"/> YES</p> <p>IF YES, WHEN CAN THEY BE RELEASED FOR GENERAL USE? YEAR _____ MONTH _____</p>		<p>11. PLEASE DARKEN ALL MARSDEN SQUARES IN WHICH ANY DATA CONTAINED IN YOUR SUBMISSION WERE COLLECTED.</p> <p>GENERAL AREA</p>									
<p>9. ARE DATA DECLARED NATIONAL PROGRAM (DNP)? (I.E., SHOULD THEY BE INCLUDED IN WORLD DATA CENTERS HOLDINGS FOR INTERNATIONAL EXCHANGE?)</p> <p><input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> PART (SPECIFY BELOW)</p>											
<p>10. PERSON TO WHOM INQUIRIES CONCERNING DATA SHOULD BE ADDRESSED WITH TELEPHONE NUMBER (AND ADDRESS IF OTHER THAN IN ITEM-1)</p> <p>RUSSELL AULT 919-962-1252</p>											

177/6-1-87

**Contents of tapes U00585 & U01268  
f/ Dr. John Bane's research group @ UNC-CH**

Common format of both tapes:

Density= 1600bpi  
Code= EBCDIC  
NONLABELED

These 2 tapes contain data for 3 major projects. The data for each project comes from 2 sources: current meters (moored in the ocean for several months) & AXBT drops (which map a portion of the ocean in a single day). The following information tells the format of the tape for each group of datasets.

- 1st listed are the files on the tape in the group, along with the logical record length & blocksize.
- Next is an explanation of how the meters were deployed.
- Following is the explanation of the variables in the group, with their type given & units of measure.
- After this is the format of the variables within the group.
  - 1st the format of the header lines is given. These appear only once at the top of each file.
  - The format of the data lines is then given. Each observation is in a separate record. There are usually a variable number of records depending on how many observations are in the dataset.
  - Next comes any special notes about the data format within the files.
- Finally listed is an explanation of how to determine the number of records in each dataset.

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For any questions regarding the enclosed research projects, contact:

**Dr. John Bane, principal Investigator  
12-5 Venable Hall, 045-A  
Marine Sciences Program  
University of North Carolina at Chapel Hill  
Chapel Hill, NC 27514  
(919) 962-1252**

For any questions regarding the enclosed 2 tapes or the data format on the tapes, contact **Russell Ault, Jr.**, research programmer, at the same address & phone number as above.

Table 1. Instrument identification, start and stop times, depths, and mooring locations.

Instr. name	(Serial #) Instrument no.	Instrument type	Reference no.	Coordinates	Water depth (m)	Instr. depth (m)	Sample interval (min)	Anchor deployment Start date (1979) Day-Mo.-Hr. (GMT)	Anchor release End date (1979) Day-Mo.-Hr. (GMT)	On time (GMT) (16 Jan 79)	Off time (GMT) (1979)
A TOP	3425	AA	655	Lat 33°27.96' Long 76°52.3'	198	98	20	16 Jan 0831	15 May 1030	0600	15 May 1118
A BOT	3343	AA	41		198	178	20			0600	15 May 1119
B TOP	3426	AA	622	Lat 33°21.46' Long 76°41.71'	390	250	20	16 Jan 1040	15 May 1258	0600	15 May 1342
B BOT	3423	AA	286		390	370	20			0600	15 May 1337
C TOP	3332	AA	500	Lat 33°50.75' Long 76°15.50	385	245	20	16 Jan 1532	15 May 1800	0600	16 May 2209
C MID	3345	AA	30		385	305	20			0600	16 May 2216
C BOT	3344	AA	624		385	365	20			0600	16 May 2217
D TOP	3337	AA	67	Lat 33°55.44' Long 76°11.57'	376	236	20	16 Jan 1718	15 May 2021	0600	16 May 2217
D MID	3427	AA	733		376	296	20			0600	16 May 2219
D BOT	3424	AA	840		376	356	20			0600	16 May 2220

GSFC winter deployment

**Gull Stream Meanders Experiment  
Current meters (Winter deployment)**

File numbers in group w/ associated names of current meter locations (on tape U00686)

- 1 B-TOP
- 2 B-BOT
- 3 C-MID
- 4 A-TOP
- 5 A-BOT
- 6 D-BOT
- 7 C-BOT
- 8 D-MID
- 9 D-TOP
- 10 C-TOP
- 11 corrected PRESSURE values for B-TOP, A-TOP, & D-TOP

File format

record format: fixed block; logical record length: 80; blocksize: 6400

Deployment information

{See separate sheet entitled *GSME winter deployment*.}

The time of the 1st record each meter recorded is given in column *On time* of the separate sheet. The meter continued making recordings while out of the ocean until the time listed in column *Anchor deployment*. The meter then collected data until the time listed in the column *Anchor release*. The final records were again recorded while the meter was out of the ocean, with the final record made at the time listed in column *Off time*. These initial & final records must not be used in any data analysis.

The interval between records is 20 minutes.

Variables in dataset (for files 1-10)

REF [integer] reference # of instrument  
SER [integer] serial # of instrument  
LOC [character\*5] location of instrument in deployment  
INDEX [integer] data record # in file {count begins @ 1}  
TEMP [real] temperature reading (units of °C)  
COND [real] conductivity reading (units of mmho/cm)  
SALT [real] salinity value {calculated f/ TEMP & COND} (units of ppt)  
PRESS [real] pressure reading (units of kg/cm<sup>2</sup>)  
U [real] U {offshore} velocity-component (units of cm/sec, oriented 124°T)  
V [real] V {downstream} velocity component (units of cm/sec, oriented 34°T)

Header lines (for files 1-10)

REF (/T21,I3)  
SER,LOC (/T12,I4,6X,A5////)

Data lines (for files 1-10)

INDEX,TEMP,COND,SALT,PRESS,U,V (I5,3(4X,F5.2),9X,3(2X,F7.2))

Notes about data (for files 1-10)

- The column labelled  $\sigma_t$  has all zeroes under it, since these values were never calculated.
- Several notes about the PRESSURE column:
  - Only the TOP meters have pressure sensors. The MID & BOT meters have "1023" as a dummy value to fill up this column.
  - These current meters have a built-in counter. This count value is placed in alternate

records in the PRESSURE column. The counter ranges from 0-1023, then cycles back to 0 again. Since only alternate records are numbered, only even counts are listed. The counts are in records that have odd INDEX numbers.

- The PRESSURE values listed in files A-TOP, B-TOP, & D-TOP are WRONG! Instead use the values in file 11.
- At the end of the record are error flags that were used in processing the raw data. They count the number of bits that may have been misread. Any errors that may have occurred has since been cleaned up.

#### Variables in dataset (for file 11)

INDEX [integer] data record # in file {count begins @ 1}  
PR3426 [real] pressure reading for serial #3426, file B-TOP (units of kg/cm<sup>2</sup>)  
PR3425 [real] pressure reading for serial #3425, file A-TOP (units of kg/cm<sup>2</sup>)  
PR3337 [real] pressure reading for serial #3337, file D-TOP (units of kg/cm<sup>2</sup>)

#### How to skip Header lines (for file 11)

(///)

#### Data lines (for file 11)

INDEX,PR3426,PR3425,PR3337 (I5,3(2X,F7.2))

#### Notes about data (for file 11)

- Several notes about the columns entitled PR3426, PR3425, & PR3337:
  - Since all of these are TOP meters they all have a pressure sensor.
  - These current meters have a built-in counter. This count value is placed in alternate records in the 3 PR... columns. The counter ranges from 0-1023, then cycles back to 0 again. Since only alternate records are numbered, only even counts are listed. The counts are in records that have odd INDEX numbers.
  - These PRESSURE values for files A-TOP, B-TOP, & D-TOP are the corrections for those listed in file #4, 1, & 9, respectively. Use these instead of the ones in those files.
- At the end of the record are error flags that were used in processing the raw data. They count the number of bits that may have been misread. Any errors that may have occurred have since been cleaned up.

#### Determination of end of each dataset

There are different number of records in each dataset. Use the END=Iline number parameter, of the READ statement, if using Fortran (or the equivalent in other languages) to stop processing new records when the end of file has been reached.

Table 1. Instrument identification, start and stop times, depths, and mooring locations.

Mooring no.	(Serial #) Instrument no.	Instrument type	Reference no.	Coordinates	Water depth (m)	Instr. depth (m)	Sample interval (min)	Anchor deployment (1979) Day-Mo.-Hr. (GMT)	Anchor release (1979) Day-Mo.-Hr. (GMT)	Initial cycle (GMT) (1979)	Final cycle (GMT) (1979)
A TOP	3425	AA	655	Lat 33°28.2' Long 76°52.1'	200	100	20	06 AUG 1732	18 NOV 1345	31 JUL 1740	18 NOV 1439
A BOT	3343	AA	41			180	20			31 JUL 1740	18 NOV 1419
B TOP	342E	AA	622	Lat 33°21.9' Long 76°41.3'	410	270	20	03 AUG 0647	18 NOV 1150	31 JUL 1740	18 NOV 1242
B BOT	3423	AA	266			390	20			01 AUG 1620	18 NOV 1239
C TOP	3332	AA	500	Lat 33°51.1' Long 76°14.7'	400	260	20	03 AUG 1036	18 NOV 1657	31 JUL 1740	18 NOV 1811
C MID	3427	AA	733			320	20			31 JUL 1740	18 NOV 1800
C BOT	3344	AA	624			380	20			31 JUL 1740	18 NOV 1758
D TOP	3337	AA	67	Lat 33°55.1' Long 76°11.1'	390	250	20	03 AUG 1556	17 NOV 2130	31 JUL 1710	17 NOV 2315
D MID*	3345	AA	30			310	20			31 JUL 1740	•
D BOT*	3424	AA	840			370	20			31 JUL 1740	•

\* Failed; no data.

GSVE Fall CS210WMS11

**Gulf Stream Meanders Experiment  
Current meters (Fall deployment)**

File numbers in group w/ associated names of current meter locations (on tape U00686)

12	A-TOP
13	A-BOT
14	B-TOP
15	B-BOT
16	C-TOP
17	C-MID
18	C-BOT
19	D-TOP

File format

record format: fixed block; logical record length: 80; blocksize: 6400

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Deployment information

{See separate sheet entitled *GSME fall deployment.*}

The time of the 1st record each meter recorded is given in column *Initial cycle* of the separate sheet. The meter continued making recordings while out of the ocean until the time listed in column *Anchor deployment*. The meter then collected data until the time listed in the column *Anchor release*. The final records were again recorded while the meter was out of the ocean, with the final record made at the time listed in column *Final cycle*. These initial & final records must not be used in any data analysis.

The interval between records is 20 minutes.

Variables in dataset

SER [integer] serial # of instrument

REFLOC [character\*13] 1 variable field that contains both the reference # & the location of the instrument in the deployment. Either value may appear 1st in this field.

INDEX [integer] data record # in file {count begins @ 1}

TEMP [real] temperature reading (units of °C)

COND [real] conductivity reading (units of mmho/cm)

SALT [real] salinity value {calculated f/ TEMP & COND} (units of ppt)

PRESS [real] pressure reading (units of kg/cm<sup>2</sup>)

U [real] U {offshore} velocity component (units of cm/sec, oriented 124°T)

V [real] V {downstream} velocity component (units of cm/sec, oriented 34°T)

Header lines

SER,REFLOC (////T6,I4,1X,A13////)

Data lines

INDEX,TEMP,COND,SALT,PRESS,U,V (I5,3(4X,F5.2),9X,3(2X,F7.2))

Notes about data

- The column labelled  $\sigma_t$  has all zeroes under it, since these values were never calculated.
- Several notes about the PRESSURE column:
  - Only the TOP meters have pressure sensors. The MID & BOT meters have "1023" as a dummy value to fill up this column.
  - These current meters have a built-in counter. This count value is placed in alternate records in the PRESSURE column. The counter ranges from 0-1023, then cycles back to 0 again. Since only alternate records are numbered, only even counts are listed. The counts are in records that have odd INDEX numbers.
- At the end of the record are error flags that were used in processing the raw data. They count

the number of bits that may have been misread. Any errors that may have occurred has since been cleaned up.

Determination of end of each dataset

There are a different number of records in each dataset. Use the **END=line** number parameter, of the **READ** statement, if using Fortran (or the equivalent in other languages) to stop processing new records when the end of file has been reached.



DAVEX Deployment

Table I. Mooring and Buoy Data

	Lat	Long	Deployed*	Recovered*	Inst#
Mooring E1	31°14.7	79°40.7	9-19-81 1745	4-25-82 1620	T 5705 B 3424
Mooring E2	31°13.8	79°38.5	9-19-81 1855	4-25-82 1910	T 5707 B 5708
Mooring E3	31°24.0	79°33.7	9-19-81 1250	4-25-82 2205	T 5706 B 3427
Mooring F1	32°25.5	78°15.3	9-18-81 1920	4-22-82 1900	T 3337 B 3423
Mooring F2	32°16.9	78°10.4	9-18-81 1800	4-22-82 2100	T 3425 B 3344
Mooring F3	32°22.3	77°55.7	9-18-81 1600	4-22-82 1745	T 3426 B 3345
Mooring G	33°23.7	76°41.3	9-17-81 0130	4-22-82 0200	T 3332 B 3343

\*All times referenced to universal (Zulu) time.

4 5 1 1 7 9 5

**Gull Stream Meanders Experiment  
AXBT drops (Winter & Fall deployments)**

File numbers in group w/ associated flight numbers & dates of flights (on tape U00686)

20-50	Winter Flight #1	9FEB79
51-87	Winter Flight #2	10FEB79
88-139	Winter Flight #3	11FEB79
140-233	Winter Flight #4	14FEB79
234-278	Winter Flight #5	15FEB79
279-335	Winter Flight #6	16FEB79
336-402	Winter Flight #7	17FEB79
403-446	Winter Flight #8	18FEB79
447-517	Fall Flight #1	21NOV79
518-602	Fall Flight #2	23NOV79
603-686	Fall Flight #3	25NOV79
687-745	Fall Flight #4	27NOV79
746-823	Fall Flight #5	29NOV79

Notes: Each file contains 1 AXBT drop. Some AXBT numbers are missing. These are the "duds".

File format

record format: fixed block; logical record length: 80; blocksize: 8000

Deployment information

all information is contained within the datasets - no other information is needed

Variables in dataset

MONTH [integer] month of flight  
DAY [integer] day of flight  
BT [integer] AXBT drop number  
BT2 [integer] 2nd BT drop number {Duplicate of BT. Duplication required in our program.}  
LATD [real] ° of latitude of AXBT drop  
LATM [real] ' of latitude of AXBT drop  
LOND [real] ° of longitude of AXBT drop  
LONM [real] ' of longitude of AXBT drop  
OCEDEP [real] calculated depth of ocean @ AXBT drop site (units of meters)  
DEPTH [real] depth of temperature reading from AXBT probe (units of meters)  
TEMP [real] temperature reading from AXBT probe measured @ DEPTH (units of °C)

Header lines

MONTH,DAY,BT (2I2,I3)  
BT2,LATD,LATM,LOND,LONM (1X,I3,1X,F2.0,F3.1,2X,F2.0,F3.1)  
OCEDEP (T19,F3.0)

Data lines

DEPTH;TEMP (T13,F4.0,1X,F5.2)

Notes about data

- OCEDEP is listed as 400m if the ocean depth is calculated to be  $\geq 400$ m.
- There is a TEMP value listed for every 4 meters from the surface to 200m. Then from 200 to 400m, a TEMP value is listed for every 10 meters.
- There are an equal number of records in every file; therefore, short casts are padded with zeroes in the TEMP column. A cast ends when either DEPTH exceeds OCEDEP or when the usable data from the cast ends; whichever comes first.

Determination of the end of each dataset

There are exactly 71 data records in each file. This number excludes the 3 header lines.

# Gulf Stream Deflection & Meander Energetics Experiment (DAMEX)

## Current meters

### File numbers in group w/ associated names of current meter locations (on tape U00686)

824	E1-TOP	no variable in the 7th column
825	E1-BOT	no variable in the 7th column
826	E2-TOP	no variable in the 7th column
827	E2-BOT	no variable in the 7th column
828	E3-TOP	no variable in the 7th column
829	E3-BOT	DIR is in the 7th column
830	F1-TOP	no variable in the 7th column
831	F1-BOT	DIR is in the 7th column
832	F2-TOP	DIR is in the 7th column
833	F2-BOT	no variable in the 7th column
834	F3-TOP	no variable in the 7th column
835	F3-BOT	no variable in the 7th column
836	G-TOP	SPEED is in the 7th column
837	G-BOT	DIR is in the 7th column

### File format

record format: fixed block; logical record length: 80; blocksize: 8000

### Deployment information

{See separate sheet entitled *DAMEX deployment*.}

The #1 moorings (e.g. E1) were deployed on the 300m isobath. Moorings #2 & #3 were on the 400m isobath, with #3 being downstream of #2. The "G" mooring was also placed on the 400m isobath.

Each mooring has 2 meters: a TOP one at a depth of 210m & a BOT one at 270m below the ocean's surface.

The time of the 1st record each meter recorded is given in column *Initial cycle* listed below. The meter continued making recordings while out of the ocean until the time listed in column *Deployed* of the separate sheet. The meter then collected data until the time listed in the column *Recovered* of the separate sheet. The remaining records were again recorded while the meter was out of the ocean. These initial & final records must not be used in any data analysis.

The interval between records is 30 minutes.

<u>Mooring</u>	<u>Initial Cycle (Zulu time, year=1982)</u>
E1	9/19:11:30
E2	9/19:11:30
E3	9/19:11:30
F1	9/18:12:30
F2	9/18:12:30
F3	9/18:12:30
G	9/16:22:30

### Variables in dataset

SER [integer] serial # of instrument  
LOC [character\*6] location of instrument in deployment  
REF [integer] reference # of instrument  
INDEX [integer] data record # in file {count begins @ 1}  
TEMP [real] temperature reading (units of °C)  
COND [real] conductivity reading (units of mmho/cm)  
SALT [real] salinity value {calculated from TEMP & COND} (units of ppt)  
SIGMAT [real]  $\sigma_t$  value {calculated f/ TEMP & SALT}  
PRESS [real] pressure reading (units of kg/cm<sup>2</sup> for E1, E2, & E3; units of psig for F1, F2, &

G; meter did not work for F3)  
 U [real] U {offshore} velocity component (units of cm/sec, table below gives orientation)  
 V [real] V {downstr.} velocity component (units of cm/sec, table below gives orientation)  
 DIR [real] direction reading (units of degrees Magnetic)  
 SPEED [real] speed reading (units of cm/sec)

TABLE OF U & V ORIENTATIONS

Array	U direction	V direction
E	110°T	20°T
F	155°T	65°T
G	127°T	37°T

Header lines

SER,LOC (//T17,I4,2X,A6)  
 REF (//T22,I3////)

Data lines

INDEX,TEMP,COND,SALT,SIGMAT,PRESS,U,V,nothing\DIR|SPEED (I5,3X,F5.2,6\7(2X,F7.2))

Note: The "\ & "|" symbols indicate different possibilities. See §Notes about the data below for more information.

Notes about the data

- When either SPEED or DIR failed during part of the mooring period, U & V cannot be calculated; therefore, some of the meters have an extra variable listed-- SPEED or DIR, whichever one did not fail. The §File number above has a column indicating if there is an extra variable and, if so, which one it is. If there is no extra variable, there are only 6 repetitions of the format (2X,F7.2). There are 7 repetitions if there is a SPEED or DIR column.
- If there is an extra variable, the heading line giving the units of measurement of each column, may not be correct. Use the information in §Variables in dataset instead.
- Several notes about the PRESSURE column:
  - All of the PRESSURE columns (if label is not shifted) is labelled as kg/cm<sup>2</sup>; however, this is incorrect for files F1-TOP, F2-TOP, & G-TOP which are in psig units.
  - Only the TOP meters have pressure sensors. The BOT meters have "1023" as a dummy value to fill up this column.
  - Current meters with a serial # < 5000 have a built-in counter. This count value is placed in alternate records in the PRESSURE column. The counter ranges from 0-1023, then cycles back to 0 again. Since only alternate records are numbered, only even counts are listed. The counts are in records that have odd INDEX numbers.

Determination of end of each dataset

There are different number of records in each dataset. Use the END=line number parameter, of the READ statement, if using Fortran (or the equivalent in other languages) to stop processing new records when the end of file has been reached.

## Gull Stream Deflection & Meander Energetics Experiment (DAMEX)

### AXBT drops

#### File numbers in group (on tape U00686)

838 all AXBT drops

839 calculated ocean depths beneath AXBT drops

Note: The AXBT drop numbers range from 1 to 326.

#### File formats

(for file 838) record format: fixed block; logical record length: 34; blocksize: 8024

(for file 839) record format: fixed block; logical record length: 80; blocksize: 8000

#### Deployment Information

all information is contained within the datasets - no other information is needed

#### Variables in dataset (for file 838)

BT [integer] AXBT drop #

MONTH [integer] month of flight

DAY [integer] day of flight

YEAR [integer] year of flight

AIRCFT [character\*4] research group owning aircraft

GRID [character] letter of line in grid containing AXBT drop (w/ ascending letters headed southward)

FLT [integer] sequence # of flight containing AXBT drop (each day has a different flight #)

LATD [real] ° of latitude of AXBT drop

LATM [real] ' of latitude of AXBT drop

LOND [real] ° of longitude of AXBT drop

LONM [real] ' of longitude of AXBT drop

TIMH [real] hour of AXBT drop (Zulu time)

TIMM [real] minute of AXBT drop

DUDIND[character] an indicator that the AXBT was a dud. {"D" if is, "-" if not}

INTDEP [real] depth listed at integral meters (units of meters)

INTTMP [real] temperature interpolated @ TEMP at DEPTH to INTDEP (units of °C)

DEPTH [real] depth AXBT actually made a recording (units of meters)

TEMP [real] temperature recorded by AXBT (units of °C)

#### Header lines (for file 838)

BT,MONTH,DAY,YEAR,AIRCFT,GRID,FLT (/1X,I3,1X,I1,2(1X,I2),1X,A4,1X,A1,I1)

LATD,LATM,LOND,LONM,TIMH,TIMM (1X,3(F2.0,1X,F4.1,1X))

DUDIND (T4,A1/)

#### Data lines (for file 838)

INTDEP,INTTMP,DEPTH,TEMP (1X,F3.0,1X,F5.2,1X,F6.2,1X,F5.2)

#### Notes about data (for file 838)

- The data actually measured from the AXBT is stored in DEPTH & TEMP. For our purposes, we wanted interpolated temperatures at each integral meter. INTDEP & INTTMP contain these interpolations. Since the AXBT measured temperature ~ every 1.6m, the DEPTH & TEMP columns are shorter than the INTDEP & INTTMP columns. To make all columns have the same number of records, "-1" values have been padded below the last DEPTH & TEMP reading.
- Quite often the calculated ocean depths is shallower than the deepest data value stored in the AXBT file. The ocean depth file (file 839) needs to be inputted along with the AXBT file (file 838) to know when to start tossing out readings while the AXBT probe was sitting on the bottom of the ocean.

- All of the AXBT numbers listed in the range under §File numbers in group are present; although, they are not stored in sequential order.
- If a line is a dud, the 5 header lines are present, but there are no data lines.
- If GRID="Z9" then the drop is not part of the contour grid layout. The drop was made for a different reason, such as to compare the repeatability of measurements in the same part of the ocean between different AXBT probes.
- The "V" in the 1st column of every record is an artifact of the package that was used to copy this dataset. They are to be ignored.
- The other numbers & letters on the header line that contains DUDIND were used to keep track of which raw data file was generating this AXBT file. These other numbers & letters are no longer used.

#### Determination of end of each dataset (for file 838)

There is a different number of records in each subdataset (1 AXBT drop), with all AXBT drops concatenated together to make a huge dataset. This method of copying the data is much easier than the method of having each AXBT drop in a separate file.

This is the method of determining the end of each AXBT drop, & thus the beginning of the next AXBT drop:

First read the 5 header lines. Then while reading each line of data, retain the previous DEPTH value. When the 1st "-1" appears in the DEPTH column, the retained previous DEPTH value is the maximum depth of the AXBT drop. Truncate the decimal part of the maximum DEPTH value. This will give the last INTDEP value. The next record will be the 1st header for the next AXBT drop, unless the last record was the end of the entire file. Problems that could arise from this latter case will be solved by using the END=Iline number parameter, of the READ statement, if using Fortran (or the equivalent in other languages). If the former is true then repeat the entire process for the next AXBT drop.

#### Variables in dataset (for file 839)

AXBT [integer] AXBT drop #

OCEDEP[real] calculated depth of the ocean at AXBT drop site (units of meters)

#### Header lines (for file 839)

none

#### Data lines (for file 839)

AXBT,OCEDEP (I3,I1X,I3)

#### Notes about data (for file 839)

- This dataset contains the calculated-ocean depths beneath each AXBT drop. This dataset is to be used to truncate the AXBT drops when the drops appear to contain all good data even though part of the dataset contains data while the AXBT probe is just resting on the ocean bottom.
- OCEDEP is listed as 800m if the ocean depth is calculated to be  $\geq 800$ m.
- The symbols to the right of some OCEDEP values are not important. Also the column of numbers to the far right of each record are line numbers, used as the data was inputted into the computer. They have no other use in the dataset.

#### Determination of end of dataset (for file 839)

There are 326 records of data in this file, 1 record per AXBT drop.

**Deep Stream Experiment**  
**Current Meter Deployment Times and Locations**  
**Line C**

**C1 Mooring:**

<u>Latitude</u>	<u>Longitude</u>	<u>Bottom Depth</u>	<u>Deployment</u>	<u>Recovery</u>
36°16.4N	73°06.8W	3490m	00Z <sup>1</sup> 1-16-84	12Z 1-14-85
<u>Position</u>	<u>Instrument</u>	<u>Estimated Mean Z (m)</u>	<u># Data Cycles</u>	<u>End of Data</u>
#1	5705	393	6521 <sup>2</sup>	10Z 10-15-84 <sup>3</sup>
#2	3427	893	8706	Recovery
#3	7357	1893	8702	Recovery
#4	7362	2990	8706	Recovery

3.75

**C2 Mooring:**

<u>Latitude</u>	<u>Longitude</u>	<u>Bottom Depth</u>	<u>Deployment</u>	<u>Recovery</u>
36°06.0N	72°57.4W	3650m	07Z 1-16-84	20Z 1-14-85
<u>Position</u>	<u>Instrument</u>	<u>Estimated Mean Z (m)</u>	<u># Data Cycles</u>	<u>End of Data</u>
#1	5706	378	8714	Recovery
#2	5708	878	8640	17Z 1-11-85
#3	7358	1878	497	11Z 2-7-84
#4	7363	3150	8721	Recovery

3.2

**C3 Mooring:**

<u>Latitude</u>	<u>Longitude</u>	<u>Bottom Depth</u>	<u>Deployment</u>	<u>Recovery</u>
35°46.0N	72°43.7W	3900m	20Z 1-14-84	12Z 1-17-85
<u>Position</u>	<u>Instrument</u>	<u>Estimated Mean Z (m)</u>	<u># Data Cycles</u>	<u>End of Data</u>
#1	5707	361	8779	Recovery <sup>4</sup>
#2	7077	861	8756	Recovery
#3	7359	1861	8759	Recovery
#4	7593	3400	8779	Recovery

<sup>1</sup>All times given are Greenwich Mean Time (Zulu).

<sup>2</sup>The number of data cycles should be the same for each current meter on a given mooring, starting with the first cycle at depth and ending with the last cycle at depth. This may not be the case, however, as in the case of the B<sub>2</sub> mooring, if one or more current meters fails early. Even if all current meters function until recovery, tape or digitizer errors may add or delete cycles.

<sup>3</sup>Note that the speed sensor failed earlier, at 05Z 8-11-84.

<sup>4</sup>Note that the speed sensor failed very shortly after deployment.

## Deep Stream Experiment

### Current Meter Deployment Times and Locations

#### Line B

B2 Mooring:	<u>Latitude</u>	<u>Longitude</u>	<u>Bottom Depth</u>	<u>Deployment</u>	<u>Recovery</u>
	35°48.8N	73°25.0W	3560m	01Z <sup>1</sup> 1-17-84	22Z 1-16-85
	<u>Position</u>	<u>Instrument</u>	<u>Estimated Mean Z (m)</u>	<u># Data Cycles</u>	<u>End of Data</u>
	#1	3425	396	8764	Recovery
	#2	3423	896	8764	Recovery
	#3	7355	1896	8764	Recovery
	#4	7360	3060	8764	Recovery

B3 Mooring:	<u>Latitude</u>	<u>Longitude</u>	<u>Bottom Depth</u>	<u>Deployment</u>	<u>Recovery</u>
	35°31.1N	73°07.9W	3930m	04Z 1-15-84	15Z 1-16-85
	<u>Position</u>	<u>Instrument</u>	<u>Estimated Mean Z (m)</u>	<u># Data Cycles</u>	<u>End of Data</u>
	#1	3426	306	8757	Recovery
	#2	3424	806	8757	Recovery
	#3	7356	1806	2366 <sup>2</sup>	10Z 4-25-84
	#4	7361	3430	8757	Recovery

<sup>1</sup>All times given are Greenwich Mean Time (Zulu).

<sup>2</sup>The number of data cycles should be the same for each current meter on a given mooring, starting with the first cycle at depth and ending with the last cycle at depth. This may not be the case, however, as in the case of the B<sub>3</sub> mooring, when one or more current meters fails early. Even if all current meters function until recovery, tape or digitizer errors may add or delete cycles.



**Deep Stream Experiment  
Current meters**

File numbers in group w/ names of current meters locations (on tapes U00686 → U01268)

840	B2-1
841	B2-2
842	B2-3
1	B2-4
2	B3-1
3	B3-2
4	B3-3
5	B3-4
6	C1-1
7	C1-2
8	C1-3
9	C1-4
10	C2-1
11	C2-2
12	C2-3
13	C2-4
14	C3-1
15	C3-2
16	C3-3
17	C3-4

File formats

record format: fixed block; logical record length: 95; blocksize: 6080

Deployment information

{see the 2 separate sheets entitled *Deep Stream Experiment: Line B & C*}

Variables in dataset

SER [integer] serial # of instrument  
LOC [character\*4] location of instrument in deployment  
REF [integer] reference # of instrument  
JPRIME [integer] data record # in file. {count begins @ 0} The records recorded before the current meter was deployed & after its recovery have been deleted.  
J [integer] data record # that the current meter recorded {count began @ 0}  
MONTH [integer] month of reading (1=JAN84 → 13=JAN85)  
DAY [integer] day of reading  
HOUR [integer] hour of reading (Zulu time)  
MINUTE [integer] "minute" of reading {actually the whole column is "00"}  
REFREC [integer] reference # of instrument recorded by the instrument on the data records  
TEMP [real] temperature reading (units of °C)  
PRESS [real] pressure reading (units of kg/cm<sup>2</sup>)  
DEPTH [real] calculated value f/ PRESS to a depth below the ocean surface (units of meters)  
DIR [real] direction reading (°mag)  
SPEED [real] speed reading (units of cm/sec)  
U [real] U {offshore} velocity component (units of cm/sec, oriented 40°T)  
V [real] V {downstream} velocity component (units of cm/sec, oriented 310°T)

Header lines

SER,LOC (//T18,I4,3X,A4)  
REF (//T21,I3////)

### Data lines

JPRIME,J,MONTH,DAY,HOUR,MINUTE,REFREC,TEMP,PRESS,DEPTH,DIR,SPEED,U,V  
(2I5,4(1X,I2),3X,I3,7(2X,F7.2))

### Notes about data

•Several notes about the PRESSURE & DEPTH columns:

- Only the TOP meters have pressure sensors. The MID & BOT meters have "1023" as a dummy value to fill up this column.
- Current meters with a serial # < 5000 have a built-in counter. This count value is placed in alternate records in the PRESSURE & DEPTH columns. The counter ranges from 0-1023, then cycles back to 0 again. Since only alternate records are numbered, only even counts are listed. The counts are in records that have even numbers.

### Determination of end of each dataset

There are different number of records in each dataset. Use the END=line number parameter, of the READ statement, if using Fortran (or the equivalent in other languages) to stop processing new records when the end of file has been reached.

**Deep System Experiment  
AXBT drops**

File numbers w/ associated months of flights (on tape U01268)

18 JUN84  
19 OCT84  
20 NOV84  
21 calculated ocean depths beneath the JUN84 AXBT drops  
22 calculated ocean depths beneath the OCT84 AXBT drops  
23 calculated ocean depths beneath the NOV84 AXBT drops

Notes: The AXBT numbers for files 18 & 21 range from 1 to 503.  
The AXBT numbers for files 19 & 22 range from 1 to 108.  
The AXBT numbers for files 20 & 23 range from 1 to 323.

File format

(for files 18-20) record format: fixed block; logical record length: 26; blocksize: 8008  
(for files 21-23) record format: fixed block; logical record length: 80; blocksize: 8000

Deployment information

all information is contained within the datasets - no other information is needed

Variables in datasets

BT [integer] AXBT drop #  
DAY [character\*2] day of flight  
MONTH [character\*2] month of flight {*character\*2* for files 837 & 839; *character* for 838}  
YEAR [integer] year of flight  
AIRCFT [character\*4] research group owning aircraft  
GRID [character\*3] letter of row & number of column in grid containing AXBT drop (w/ ascending letters heading northward; greater numbers heading shoreward «westward»)  
LATD [real] ° of latitude of AXBT drop  
LATM [real] ' of latitude of AXBT drop  
LOND [real] ° of longitude of AXBT drop  
LONM [real] ' of longitude of AXBT drop  
TIMH [real] hour of AXBT drop (Zulu time)  
TIMM [real] minute of AXBT drop  
CODE [character] a code giving information about the AXBT cast. The important code is «D», which means the AXBT is a dud. Any other letter means the AXBT is OK.  
FLT [integer] sequence # of flight containing AXBT drop {each day has a different flight #}  
FREQ [integer] the frequency channel the AXBT used to radio its data to the airplane  
INTDEP [real] depth listed @ integral meters (units of meters)  
INTTMP [real] temperature interpolated f/ TEMP @ DEPTH to INTDEP (units of °C)  
DEPTH [real] depth AXBT actually made a recording (units of meters)  
TEMP [real] temperature recorded by AXBT (units of °C)

Header lines (for files 18 & 20)

BT, DAY, MONTH, YEAR, AIRCFT, GRID (/1X,I3,3(1X,A2),1X,A4,1X,A3)  
LATD, LATM, LOND, LONM, TIMH, TIMM (1X,2(F2.0,1X,F4.1,1X),F2.0,1X,F5.2)  
CODE, FLT, FREQ (1X,A1,1X,I1,1X,I2)

Header lines (for file 19)

BT, DAY, MONTH, YEAR, AIRCFT, GRID (/1X,I3,2X,A2,1X,A1,1X,A2,1X,A4,1X,A3)  
LATD, LATM, LOND, LONM, TIMH, TIMM (1X,2(F2.0,1X,F4.1,1X),F2.0,1X,F5.2)  
CODE, FLT, FREQ (1X,A1,1X,I1,1X,I2)

#### Data lines (for files 18-20)

INTDEP,INTTMP,DEPTH,TEMP- (1X,F3.0,1X,F5.2,1X,F6.2,1X,F5.2)

#### Notes about data (for files 18-20)

- The data actually measured from the AXBT is stored in DEPTH & TEMP. For our purposes, we wanted interpolated temperature at each integral meter. INTDEP & INTTMP contain these interpolations. Since the AXBT measured temperature = every 1.6m, the DEPTH & TEMP columns are shorter than the INTDEP & INTTMP columns. To make all columns have the same number of records, "-1" values have been padded below the last DEPTH & TEMP reading.
- Quite often the calculated ocean depth is shallower than the deepest data value stored in the AXBT file. The ocean depth files (files 21-23) need to be inputted along with their corresponding AXBT files (files 18-20) to know when to start tossing out readings while the AXBT probe was sitting on the bottom of the ocean.
- All of the AXBT numbers listed in the range under *\$File numbers in group* are present; although, they may not be stored in sequential order.
- If a line is a dud, the 4 header lines are present, but no data lines.
- If GRID="Z9" then the drop is not part of the contour grid layout. The drop was made for a different reason, such as to compare the repeatability of measurements in the same part of the ocean between different AXBT probes.
- The "V" in the 1st column of every record is an artifact of the package that was used to copy this dataset. They are to be ignored.
- The other number that appears on the header line that contains CODE but was not referenced by the format statement in *\$Header lines* had some use during the initial data processing, but it is no longer used.

#### Determination of end of each dataset (for files 18-20)

There are different number of records in each subdataset (1 AXBT drop), with all AXBT drops concatenated together to make a huge dataset. This method of copying the data is much easier than the method of having each AXBT drop in a separate file.

This is the method of determining the end of each AXBT drop, & thus the beginning of the next AXBT drop:

First read the 4 header lines. Then while reading each line of data, retain the previous DEPTH value. When the 1st "-1" appears in the DEPTH column, the retained previous DEPTH value is the maximum depth of the AXBT drop. Truncate the decimal part of the maximum DEPTH value. This will give the last INTDEP value. The next record will be the 1st header for the next AXBT drop, unless the last record was the end of the entire file. Problems that could arise from this latter case will be solved by using the END=line number parameter, of the READ statement, if using Fortran (or the equivalent in other languages). If the former is true then repeat the entire process for the next AXBT drop.

#### Variables in dataset (for files 21-23)

AXBT [integer] AXBT drop #

OCDEP[real] calculated depth of the ocean @ AXBT drop site (units of meters)

#### Header lines (for files 21-23)

none

#### Data lines (for files 21-23)

AXBT,OCDEP (13,1X,13)

#### Notes about data (for files 21-23)

- This dataset contains the calculated ocean depths beneath each AXBT drop. This dataset is to be used to truncate the AXBT drops when the drops appear to contain all good data even though part of the dataset contains data while the AXBT probe is just resting on the ocean bottom.

- OCEDEP is listed as 999m if the ocean depth is calculated to be  $\geq 999$ m; although, the true depth any AXBT can reach is 800m.
- Depths were not calculated for dud AXBTs or for drops where GRID="Z9". In the case of duds, OCEDEP=-1. In the case of GRID="Z9", OCEDEP=-9; since we do not need to know these depths for our purposes.
- The column of numbers to the far right of each record are line numbers, used as the data was inputted into the computer. They have no other use in the dataset.

Determination of end of dataset (for file 21-23)

There is one record of data per AXBT drop in these files. The total number of records in each file is equal to the total number of AXBT drops (including duds & "Z9" drops). See *File Numbers* for the number of AXBT drops per file.

8700213

TO: E/OC12 - C. Noe ↙  
E/OC11 - P. Hadsell  
FROM: E/OC13 - A. Picciolo  
DATE: November 9, 1987  
SUBJECT: Data Transfer

The following listed data sets have been transferred as indicated:

---

---

DATA ARCHIVE AND INVENTORIES BRANCH (E/OC11)

CURRENT METERS (F015)

Acc: 8700213 Ref: TT8295 - 8329 35 stations 298,869 records

Acc: 8700213 Ref: TT8330 - 8346 17 stations 132,534 records

University of North Carolina, Chapel Hill  
DAMEX - Gulf Stream

---

---

cc: Division Director

TO: E/OC12 - C. Noe  
E/OC11 - P. Hadsell  
FROM: E/OC13 - A. Picciolo  
DATE: November 9, 1987  
SUBJECT: Data Transfer

The following listed data sets have been transferred as indicated:

---

---

DATA ARCHIVE AND INVENTORIES BRANCH (E/OC11)

CURRENT METERS (F015)

Acc: 8700213 Ref: TT8295 - 8329 35 stations 298,869 records

Acc: 8700213 Ref: TT8330 - 8346 17 stations 132,534 records ✓

University of North Carolina, Chapel Hill  
DAMEX - Gulf Stream

431,403

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cc: Division Director

MARY,

Files DAMEX1 OUT. THRU DAMEX18 OUT. match up with the first nineteen files on the tape. File 11 is garbage and was skipped. These 18 files have header records that define which mooring they belong with (on input files only) I started the conversion with the on time. Note that the documentation states that the first umpteen and last umpteen records are garbage. You should eliminate all records that don't fall between START DATE + END DATES/TIMES.

Additionally, you should monitor for consecutive records having <sup>delete zeroes</sup> zeroes in the <sup>current direction</sup> U and V fields.

Files T10 OUT through T14 OUT, are files 403 thru 416  
Files T15 OUT, through T17 OUT are files 419 thru 421  
The last three do not conductivity reported. I noticed a lot of bad values in the data. Am not sure as to whether these are part of the beginning, ending records that need deleting. Any problems, feel free to see me.

Bob Stein

P.S. I kept them in separate file to assist your editing efforts



Francis,

These are beginning ending dates before Mary does here editing. Many records need deleting. Each track is 1 sta

File Name	TRACK #	START	END	# RECS
DAREX1OUT.	PT8295	✓ 790116	790515	8592
" 2out.	96	✓ 790116	790515	8593
" 3out.	97	✓ 790116	790516	8691
" 4"	98	✓ 790116	790515	8586
" 5"	99	✓ 790116	790515	8586
" 6"	8300	✓ 790116	790516	8691
" 7"	01	✓ 790116	790516	8691
" 8"	02	✓ 790116	790516	8691
" 9"	3	✓ 790116	790516	8691
" 10"	4	✓ 790116	790516	8686
" 11"	5	✓ 790731	791118	7913
" 12"	6	✓ 790731	791118	7912
" 13"	7	✓ 790731	791118	7907
" 14"	8	✓ 790801	791118	7839
" 15"	9	✓ 790731	791118	7924
" 16"	10	✓ 790731	791118	7923
" 17"	11	✓ 790731	791118	7923
" 18"	12	✓ 790731	791117	7867
T1 OUT	8313	✓ 810919	820415	9995
" 2 "	14	✓ 810919	820413	9873
" 3	15	✓ 810919	820416	10043
" 4	16	✓ 810919	820422	10309
" 5	17	✓ 810919	820412	9853

continued on next page

File Name	Track#	START	END	#RECS
T6 OUT	TT 8318	✓ 810919	820416	10043
7	19	✓ 810918	820414	9980
8	20	✓ 810918	820415	10012
9	21	✓ 810918	811106	2336
10	22	✓ 810918	820419	10243
11	23	✓ 810918	810925	322
12	24	✓ 810918	820411	9842
13	25	✓ 810916	820412	9966
14	26	✓ 810916	820413	10000
15	27	✓ 840117	850116	8782
16	28	✓ 840117	850116	8782
17	29	✓ 840117	850116	8782

Also BT data included with this submission.

Output on tape W01484

2 cruises 68801 → 68802 details on BT1INV

# CURRENTS

FILE NAME

TRACK

C1 OUT.	TT8330
C2 OUT.	TT8331
C3 OUT.	TT8332
C4 OUT.	TT8333
C5 OUT.	TT8334
C6 OUT.	TT8335
C7 OUT.	TT8336
C8 OUT.	TT8337
C9 OUT.	TT8338
C10 OUT.	TT8339
C11 OUT.	TT8340
C12 OUT.	TT8341
C13 OUT.	TT8342
C14 OUT.	TT8343
C15 OUT.	TT8344
C16 OUT.	TT8345
C17 OUT.	TT8346

ACCESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8700213	TT8330	F015		31V9	317F		01/17/84	01/16/85	1	8,782
8700213	TT8331	F015		31V9	317F		01/15/84	01/16/85	1	8,820
8700213	TT8332	F015		31V9	317F		01/15/84	01/16/85	1	8,820
8700213	TT8333	F015		31V9	317F		01/15/84	04/25/84	1	2,430
8700213	TT8334	F015		31V9	317F		01/15/84	01/16/85	1	8,820
8700213	TT8335	F015		31V9	317F		01/16/84	10/15/84	1	6,565
8700213	TT8336	F015		31V9	317F		01/16/84	01/14/85	1	8,749
8700213	TT8337	F015		31V9	317F		01/16/84	01/14/85	1	8,745
8700213	TT8338	F015		31V9	317F		01/16/84	01/14/85	1	8,749
8700213	TT8339	F015		31V9	317F		01/16/84	01/14/85	1	8,750
8700213	TT8340	F015		31V9	317F		01/16/84	01/11/85	1	8,674
8700213	TT8341	F015		31V9	317F		01/16/84	02/07/84	1	533
8700213	TT8342	F015		31V9	317F		01/16/84	01/14/85	1	8,748
8700213	TT8343	F015		31V9	317F		01/14/84	01/17/85	1	8,850
8700213	TT8344	F015		31V9	317F		01/14/84	01/16/85	1	8,826
8700213	TT8345	F015		31V9	317F		01/14/84	01/16/85	1	8,830
8700213	TT8346	F015		31V9	317F		01/14/84	01/17/85	1	8,849

17 132,534

File NAME	TRACK#	START	END	# RECS
C10UT	TT8330 ✓	840117	850116	8782
C20UT	31 ✓	840115	850116	8820
C30UT	32 ✓	840115	850116	8820
C40UT	33 ✓	840115	840425	2430
C50UT	34 ✓	840115	850116	8820
C60UT	35 ✓	840116	841015	6564
C70UT	36 ✓	840116	850114	8749
C80UT	37 ✓	840116	850114	8745
C90UT	38 ✓	840116	850114	8749
C100UT	39 ✓	840116	850114	8750
C110UT	40 ✓	840116	850114	8674
C120UT	41 ✓	840116	840207	533
C130UT	42 ✓	840116	850114	8748
C140UT	43 ✓	840114	850117	8850
C150UT	44 ✓	840114	850116	8826
C160UT	✓ 45 ✓	840114	850116	8830
C170UT	TT8346 ✓	840114	850117	8849

ACCESSION NO. 8700213

~~Current 7/11/87~~  
~~W09987~~  
 FILETYPE Fo15

TRACK NO. \_\_\_\_\_

PROJECT IDENTIFICATION \_\_\_\_\_

TT8330 - TT8346

CURRENTS

GULF STREAM

STEP	DATE	INIT.	TAPE OR DISK DSN	GULF STREAM NO. PAMEX		
				FILES	LRCL	BLK SIZE
ORIG. TAPE	07/06/87	CWH	ACC:521	23	VAR	VAR
DUPLICATE TAPE	07/20/87	CWH	W09987	23	VAR	VAR
REFORMATTED TAPE			See tape scan			
REFORMATTED DISK						
FIRST MULCHEK	11/13/87	CBA	SEIDATA.FO15TT8330	1	60	132539
FINAL MULCHEK						
MPD75 OR F022						
DATA SET FINALIZED	11/13/87	CBA	MPD75.TT8330/F015	1	60	132539

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:  
 NONE

Tape W09987 is NL.

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

NONE

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)

11/6 1 2  
Curriculum in Marine Sciences  
UNC-CH  
12-5 Venable Hall 045-A  
Chapel Hill NC 27514  
May 1, 1987

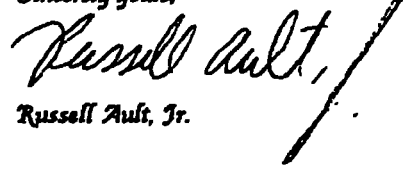
8700213

NOAA  
NODC - Liaison Office  
4301 Rickenbacker Causeway  
Miami FL 33149

Dear John Sylvester:

Enclosed you will find 2 data tapes and a report discussing the contents of the tapes as well as salient factors of the experiments. Although the tapes have been ready for the last couple of months, the documentation was not complete. After completing another project, I carefully explained the subtle aspects of the data products so you would have complete and accurate information.

If you have any questions, feel free to contact me or Dr. John Bane. The phone number is: 919/962-1252.

Sincerely yours,  
  
Russell Ault, Jr.

TRANSMITTAL AND RECEIPT RECORD  
(Please sign and return carbon copy acknowledging receipt)

TO: Data Acq. & Mgmt. Div. E/OC 13  
 Domestic Bldg  
 Wash., DC 20235

REFER TO

ATTENTION

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

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

2 Magnetic tapes containing current meter data and AXBT data from the NSF funded Gulf Stream Meanders Experiment; the Gulf Stream Deflection and Meanders Experiment (DAMEX); and the Deep Stream Experiment.

1DDF

1 set of documentation from programmer Russell Cull at UNC.

Ref # \_\_\_\_\_  
 Acct # 8700213

FORWARDED BY (Signature) <i>John C. ...</i>	TITLE S.E.L.O.	DATE FORWARDED 5-22-87
RECEIVED BY (Signature) FRANCIS J. MITCHELL	TITLE	DATE RECEIVED JUNE 1, 87



Copy to 'W' tape  
Scan 'W' tape

300  
09

MEDIUM R CARD DISK <b>TAPE</b> TTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK <b>PRINT</b> <b>TAPE</b> PLOT DISKETTE OTHER(SPECIFY)
---	---

DISKETTE INFORMATION									
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FIL
A00521		9	1600	ODD	NL	VB	VAR	VAR	23 files
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII <b>EBCDIC</b> BCD SDF OTHER(SPECIFY)			DATA SET NAME				PUR DAT
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FIL
SECTOR SIZE	EXCHANGE TYPE	CODE: <del>ASCII</del> <b>EBCDIC</b> BCD SDF OTHER(SPECIFY)			DATA SET NAME				PUR DAT
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FIL
W49987		9	1600	ODD	NL	VB	VAR	VAR	23 files
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII <b>EBCDIC</b> BCD SDF OTHER(SPECIFY)			DATA SET NAME				PUR DAT

INSTRUCTIONS Please send 'W' tape to Ashville, N.C.	ESTIMATED EXECUTION TIME
---	--------------------------

ONLY	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINT DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
	12/18/87	0845	0915	C	COMPLETED BY FL

PRINT TO BE USED AND FUNCTION TO BE PERFORMED

J. ... Scan Tapes

5000

INPUT MEDIUM PER CARD DISK <b>TAPE</b> KETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK <b>PRINT</b> TAPE PLOT DISKETTE OTHER(SPECIFY)
---	--

DISKETTE INFORMATION

TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	#
A00521		9	1600		NZ				
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII <b>EBCDIC</b> BCD SDF OTHER(SPECIFY)				DATA SET NAME			
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	#
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY TYPE	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# FI
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			

AL INSTRUCTIONS

Please return tapes A00521  
to Sin 09

ESTIMATED  
EXECUTION  
TIME

USE ONLY

DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRI DISKETTES-USED, CARDS PUNCHED, CARDS KEYVERIF
07/06/87	0800	0805	✓	COMPLETED by FL

ACCESSION NO. 8700213

*Current Master*  
**AXBT**  
 FILETYPE \_\_\_\_\_  
**AXBT C118**

TRACK NO. \_\_\_\_\_  
**068801-068802**  
 PROJECT IDENTIFICATION \_\_\_\_\_

STEP	DATE	INIT.	TAPE OR DISK DSN	NO. FILES	LRECL	BLK SIZE
ORIG. TAPE	07/06/57	CUMH	A00520	842	VAR	VAR
DUPLICATE TAPE			* See part II			
REFORMATTED TAPE	W01484		for Wtape specifications			
REFORMATTED DISK		DISK FILE NAME	DN0DC * BT1OUTB. SL		VB	VB
FIRST MULCHEK						
FINAL MULCHEK						
MPD75 OR F022						
DATA SET FINALIZED						

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:

*~ 189,000 records*

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

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)

INVENTORY  
Record 2291 on screen:  
169919

Record 2291 updated

DATA ENTRY INFORMATION SYSTEM  
(DATASET INVENTORY)

SJH

DATE OF ENTRY: 11/05/87

REFERENCE NUMBER: 068801                      ACCESSION NUMBER: 8700213  
FORMER REFERENCE NUMBER:                      FORMER ACCESSION NUMBER:                      (RESUB ONLY)

-----  
INVENTORY

MEDIA-IN: 01 - Digital Magnetic Tape                      DINDB CODE 03  
EXCHANGE (FORMAT): E125 - Aircraft Expendible Bathythermograph  
PROCESSING (FORMAT): C118 - Universal Bathythermograph (UBT) Aircr.

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

INSTITUTE (COUNTRY AND INSTITUTE CODES): 31V9  
PLATFORM (COUNTRY AND PLATFORM CODES): 3191  
PLATFORM TYPE: 1 - Aircraft                      DINDB CODE 01

ORIGINATORS FILE ID:                      ORIGINATORS CRUISE ID:  
CRUISE START DATE: 02/09/79   CRUISE END DATE: 02/18/79   Press PgDn  
PROJECT CODE:                      DATA USE CODE (DUC): 3                      to continue  
F2ENTER F3VIEW F4EXIT F5FORM CLR F6FLD CLR F7DELETE F8MODIFY F9REPORT F10MULTI

INVENTORY

VOLUME - NUMBER OF STATIONS:                      427   NUMBER OF RECORDS:                      427

If STA/REC counts are not appropriate then enter -

NUMBER:                      UNITS:  
AVERAGE REC SIZE:                      305   MBYTES:                      0.130235

-----  
OCEAN AREA

CODE 1:                      MEANING:  
CODE 2:                      MEANING:  
CODE 3:                      MEANING:  
-----

DINDB TRACK TRANSACTION GENERATED:   /   /

F2ENTER F3VIEW F4EXIT F5FORM CLR F6FLD CLR F7DELETE F8MODIFY F9REPORT F10MULTI

INVENTORY  
Record 2292 on screen  
169920

Record found

DATA ENTRY INFORMATION SYSTEM  
(DATASET INVENTORY)

SJH

DATE OF ENTRY: 11/05/87

REFERENCE NUMBER: 068802                      ACCESSION NUMBER: 8700213  
FORMER REFERENCE NUMBER:                      FORMER ACCESSION NUMBER:                      (RESUB ONLY)

-----  
INVENTORY

MEDIA-IN: 01 - Digital Magnetic Tape                      DINDB CODE 09  
EXCHANGE (FORMAT): E125 - Aircraft Expendible Bathythermograph  
PROCESSING (FORMAT): C118 - Universal Bathythermograph (UBT) Aircr.

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

INSTITUTE (COUNTRY AND INSTITUTE CODES): 31V9  
PLATFORM (COUNTRY AND PLATFORM CODES): 3191  
PLATFORM TYPE: 1 - Aircraft                      DINDB CODE 01

ORIGINATORS FILE ID:                      ORIGINATORS CRUISE ID:  
CRUISE START DATE: 11/21/79                      CRUISE END DATE: 11/29/79                      Press PgDn  
PROJECT CODE:                      DATA USE CODE (DUC): 3                      to continue

F2ENTER F3VIEW F4EXIT F5FORM CLR F6FLD CLR F7DELETE F8MODIFY F9REPORT F10MULTI

INVENTORY

VOLUME - NUMBER OF STATIONS:                      377                      NUMBER OF RECORDS:                      377

If STA/REC counts are not appropriate then enter -

NUMBER:                      UNITS:  
AVERAGE REC SIZE:                      305                      MBYTES:                      0.114985

-----  
OCEAN AREA

CODE 1:                      MEANING:  
CODE 2:                      MEANING:  
CODE 3:                      MEANING:

-----  
DINDB TRACK TRANSACTION GENERATED:                      /                      /

F2ENTER F3VIEW F4EXIT F5FORM CLR F6FLD CLR F7DELETE F8MODIFY F9REPORT F10MULTI

ITEM TO BE USED AND FUNCTION TO BE PERFORMED

Please return tape

Bin C

MEDIUM PER CARD DISK <b>TAPE</b> KETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK <b>PRINT</b> TAPE PLOT DISKETTE OTHER(SPECIFY)
---	--

DISKETTE INFORMATION

TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# FI
A00520		9	1602		NL				
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII <b>EBCDIC</b> BCD SDF OTHER(SPECIFY)			DATA SET NAME				
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# FI
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				
TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# FI
SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)			DATA SET NAME				

ADDITIONAL INSTRUCTIONS

Please return tape A00520  
to Bin C9

ESTIMATED  
EXECUTION  
TIME

USE ONLY

DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRI DISKETTES-USED, CARDS PUNCHED, CARDS KEYVERIF
07/06/87	0807	0915	C	COMPLETED by PLI

## FILES

CURRENT METERS (WINTER DEPLOYMENT)

		<u>METER</u>	<u>DATES</u>	<u>LOCATION</u>
1	B-TOP	3426	1/16/79 - 5/15/79	33° 21.46' N 76° 41.71' W
2	B-BOT	3423	" "	" "
3	C-MID	3345	SEE C-TOP	
4	A-TOP	3425	4/16/79 - 5/15/79	33° 27.96' N 76° 52.3' W
5	A-BOT	3343	" "	" "
6	D-BOT	3424	SEE D-TOP	
7	C-BOT	3344	SEE C-TOP	
8	D-MID	3427	SEE D-TOP	
9	D-TOP	3337	4/16/79 - 5/16/79	33° 55.49' N 76° 11.57' W
10	C-TOP	3332	4/16/79 - 5/16/79	33° 50.75' N 76° 15.50' W
11	CORRECTED "PRESSURE" VALUES FOR B-TOP, A-TOP, & D-TOP			

CURRENT METERS (FALL DEPLOYMENT)

12	A-TOP	3425	8/6/79 - 11/18/79	33° 28.2' N 76° 52.1' W
13	A-BOT	3343	" "	" "
14	B-TOP	3428	8/3/79 - 11/18/79	33° 21.9' N 76° 41.3' W
15	B-BOT	3423	" "	" "
16	C-TOP	3332	8/3/79 - 11/18/79	33° 51.1' N 76° 14.7' W
17	C-MID	3427	" "	" "
18	C-BOT	3344	" "	" "
19	D-TOP	3337	8/3/79 - 11/17/79	33° 55.1' N 76° 11.1' W

AXBT DROPS (WINTER & FALL DEPLOYMENTS)

20-50	WINTER FLIGHT #1	2/9/79
51-87	WINTER FLIGHT #2	2/10/79
88-139	WINTER FLIGHT #3	2/11/79
140-233	WINTER FLIGHT #4	2/14/79
234-278	WINTER FLIGHT #5	2/15/79
279-335	WINTER FLIGHT #6	2/16/79
336-402	WINTER FLIGHT #7	2/17/79
403-446	WINTER FLIGHT #8	2/18/79

## FILES

AXBT DROPS (WINTER & FALL DEPLOYMENTS)

447-517	FALL FLIGHT #1	11/21/79
518-602	FALL FLIGHT #2	11/23/79
603-686	FALL FLIGHT #3	11/25/79
687-745	FALL FLIGHT #4	11/27/79
746-823	FALL FLIGHT #5	11/29/79

GULF STREAM DEFLECTION & MEANDER ENERGETICS EXP (DAMEX)CURRENT METERS

				METER
824	E1 - TOP	9/19/81 - 4/25/82	31° 14.7' N 79° 40.7' W	T 5705
825	E1 - BOT	"	"	B 3424
826	E2 - TOP	9/19/81 - 4/25/82	31° 13.8' N 79° 38.5' W	T 5707
827	E2 - BOT	"	"	B 5708
828	E3 - TOP	9/19/81 - 4/25/82	31° 24.0' N 79° 33.7' W	T 5706
829	E3 - BOT	"	"	B 3427
830	F1 - TOP	9/18/81 - 4/22/82	32° 25.5' N 78° 15.3' W	T 3337
831	F1 - BOT	"	"	B 3423
832	F2 - TOP	9/18/81 - 4/22/82	32° 16.9' N 78° 10.4' W	T 3425
833	F2 - BOT	"	"	B 3344
834	F3 - TOP	9/18/81 - 4/22/82	32° 22.3' N 77° 55.7' W	T 3426
835	F3 - BOT	"	"	B 3345
836	G - TOP	9/17/81 - 4/22/82	33° 29.7' N 76° 41.3' W	T 3332
837	G - BOT	"	"	B 3343

GULF STREAM DEFLECTION & MEANDER ENERGETICS EXP (DAMEX)AXBT DROPS

838	ALL AXBT DROPS
839	CALCULATED OCEAN DEPTHS BENEATH AXBT DROPS

DEEP STREAM EXPERIMENT - CURRENT METERS

840	B2-1
841	B2-2
842	B2-3



177/6-1-87

Curriculum in Marine Sciences  
UNC-CH  
12-5 Venable Hall 045-2  
Chapel Hill NC 21514  
May 1, 1987

8700213

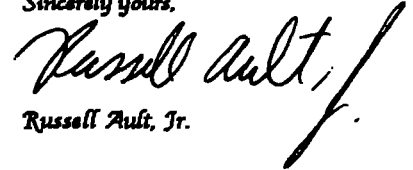
NOAA  
NODC - Liaison Office  
4301 Rickenbacker Causeway  
Miami FL 33149

Dear John Sylvester:

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Sincerely yours,

  
Russell Ault, Jr.

**TRANSMITTAL AND RECEIPT RECORD**  
(Please sign and return carbon copy acknowledging receipt)

TO: Data Acq. & Mgmt. Div. E/OC 13  
University of Maryland  
Wash., DC 20725

REFER TO  
ATTENTION

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

- ORDINARY MAIL   
  REGISTERED MAIL   
  AIR MAIL   
  CERTIFIED MAIL   
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  BY HAND   
  OTHER

2 Magnetic tapes containing Current meter data and AXBT data from the NSF funded Gulf Stream Meanders Experiment; the Gulf Stream Deflection and Meanders experiment (DAMEX); and the Deep Stream Experiment.

1DDF

1 set of documentation from programmer Russell Cuet at UNIC.

Ref # \_\_\_\_\_  
Acct # 8700213

FORWARDED BY (Signature)  
*John C. ...*  
RECEIVED BY (Signature)  
FRANCIS J. MITCHELL

TITLE  
S.E.L.O.  
TITLE

DATE FORWARDED  
5-22-87  
DATE RECEIVED  
JUNE 1, 87

Password:

accNo	flea	refNo	proj	inst	ship	startDate	cruise	catId
8700213	L105	L00151	0132	31NC	317F	1983/03/06	TT9425	496556
8700213	L105	L00152	0132	31NC	317F	1983/03/06	TT9426	496557
8700213	F015	TT8295	0132	31V9	317F	1979/01/16	DAMEX	171146
8700213	F015	TT8296	0132	31V9	317F	1979/01/16	DAMEX	171147
8700213	F015	TT8297	0132	31V9	317F	1979/01/16	DAMEX	171148
8700213	F015	TT8298	0132	31V9	317F	1979/01/16	DAMEX	171149
8700213	F015	TT8299	0132	31V9	317F	1979/01/16	DAMEX	171150
8700213	F015	TT8300	0132	31V9	317F	1979/01/16	DAMEX	171151
8700213	F015	TT8301	0132	31V9	317F	1979/01/16	DAMEX	171152
8700213	F015	TT8302	0132	31V9	317F	1979/01/16	DAMEX	171153
8700213	F015	TT8303	0132	31V9	317F	1979/01/16	DAMEX	171154
8700213	F015	TT8304	0132	31V9	317F	1979/01/16	DAMEX	171155
8700213	F015	TT8305	0132	31V9	317F	1979/07/31	DAMEX	171156
8700213	F015	TT8306	0132	31V9	317F	1979/07/31	DAMEX	171157
8700213	F015	TT8307	0132	31V9	317F	1979/07/31	DAMEX	171158
8700213	F015	TT8308	0132	31V9	317F	1979/08/01	DAMEX	171159
8700213	F015	TT8309	0132	31V9	317F	1979/07/31	DAMEX	171160
8700213	F015	TT8310	0132	31V9	317F	1979/07/31	DAMEX	171161
8700213	F015	TT8311	0132	31V9	317F	1979/07/31	DAMEX	171162
8700213	F015	TT8312	0132	31V9	317F	1979/07/31	DAMEX	171163
8700213	F015	TT8313	0132	31V9	317F	1981/09/19	NULL	171164
8700213	F015	TT8314	0132	31V9	317F	1981/09/19	NULL	171165
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8700213	F015	TT8316	0132	31V9	317F	1981/09/19	NULL	171167
8700213	F015	TT8317	0132	31V9	317F	1981/09/19	NULL	171168
8700213	F015	TT8318	0132	31V9	317F	1981/09/19	NULL	171169
8700213	F015	TT8319	0132	31V9	317F	1981/09/18	NULL	171170
8700213	F015	TT8320	0132	31V9	317F	1981/09/18	NULL	171171
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8700213	F015	TT8322	0132	31V9	317F	1981/09/18	NULL	171173
8700213	F015	TT8323	0132	31V9	317F	1981/09/18	NULL	171174
8700213	F015	TT8324	0132	31V9	317F	1981/09/18	NULL	171175
8700213	F015	TT8325	0132	31V9	317F	1981/09/16	NULL	171176
8700213	F015	TT8326	0132	31V9	317F	1981/09/16	NULL	171177
8700213	F015	TT8327	0132	31V9	317F	1984/01/17	NULL	171178
8700213	F015	TT8328	0132	31V9	317F	1984/01/17	NULL	171179
8700213	F015	TT8329	0132	31V9	317F	1984/01/17	NULL	171180
8700213	F015	TT8330	0132	31V9	317F	1984/01/17	NULL	171181
8700213	F015	TT8331	0132	31V9	317F	1984/01/15	NULL	171182
8700213	F015	TT8332	0132	31V9	317F	1984/01/15	NULL	171183
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8700213	F015	TT8334	0132	31V9	317F	1984/01/15	NULL	171185
8700213	F015	TT8335	0132	31V9	317F	1984/01/16	NULL	171186
8700213	F015	TT8336	0132	31V9	317F	1984/01/16	NULL	171187
8700213	F015	TT8337	0132	31V9	317F	1984/01/16	NULL	171188
8700213	F015	TT8338	0132	31V9	317F	1984/01/16	NULL	171189
8700213	F015	TT8339	0132	31V9	317F	1984/01/16	NULL	171190
8700213	F015	TT8340	0132	31V9	317F	1984/01/16	NULL	171191
8700213	F015	TT8341	0132	31V9	317F	1984/01/16	NULL	171192
8700213	F015	TT8342	0132	31V9	317F	1984/01/16	NULL	171193
8700213	F015	TT8343	0132	31V9	317F	1984/01/14	NULL	171194
8700213	F015	TT8344	0132	31V9	317F	1984/01/14	NULL	171195
8700213	F015	TT8345	0132	31V9	317F	1984/01/14	NULL	171196
8700213	F015	TT8346	0132	31V9	317F	1984/01/14	NULL	171197
8700213	C118	068801	0132	31V9	3191	1979/02/09	NULL	171144
8700213	C118	068802	0132	31V9	3191	1979/11/21	NULL	171145

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
8700213	L105	L00151	317F	1	4820	83/03/06	83/09/23
8700213	L105	L00152	317F	1	4820	83/03/06	83/09/23
8700213	F015	TT8295	317F	5	8592	79/01/16	79/05/01
8700213	F015	TT8296	317F	5	8593	79/01/16	79/05/01
8700213	F015	TT8297	317F	5	8691	79/01/16	79/05/01
8700213	F015	TT8298	317F	5	8586	79/01/16	79/05/01
8700213	F015	TT8299	317F	5	8586	79/01/16	79/05/01
8700213	F015	TT8300	317F	5	8691	79/01/16	79/05/01
8700213	F015	TT8301	317F	5	8691	79/01/16	79/05/01
8700213	F015	TT8302	317F	5	8691	79/01/16	79/05/01
8700213	F015	TT8303	317F	5	8691	79/01/16	79/05/01
8700213	F015	TT8304	317F	5	8686	79/01/16	79/05/01
8700213	F015	TT8305	317F	5	7913	79/07/31	79/11/01
8700213	F015	TT8306	317F	5	7912	79/07/31	79/11/01
8700213	F015	TT8307	317F	5	7907	79/07/31	79/11/01
8700213	F015	TT8308	317F	4	7839	79/08/01	79/11/01
8700213	F015	TT8309	317F	5	7924	79/07/31	79/11/01
8700213	F015	TT8310	317F	5	7923	79/07/31	79/11/01
8700213	F015	TT8311	317F	5	7923	79/07/31	79/11/01
8700213	F015	TT8312	317F	5	7867	79/07/31	79/11/01
8700213	F015	TT8313	317F	8	9995	81/09/19	82/04/01
8700213	F015	TT8314	317F	8	9873	81/09/19	82/04/01
8700213	F015	TT8315	317F	8	10043	81/09/19	82/04/01
8700213	F015	TT8316	317F	8	10309	81/09/19	82/04/01
8700213	F015	TT8317	317F	8	9853	81/09/19	82/04/01
8700213	F015	TT8318	317F	8	10043	81/09/19	82/04/01
8700213	F015	TT8319	317F	8	9980	81/09/18	82/04/01
8700213	F015	TT8320	317F	8	10012	81/09/18	82/04/01
8700213	F015	TT8321	317F	3	2336	81/09/18	81/11/01
8700213	F015	TT8322	317F	8	10243	81/09/18	82/04/01
8700213	F015	TT8323	317F	1	322	81/09/18	81/09/18
8700213	F015	TT8324	317F	8	9842	81/09/18	82/04/01
8700213	F015	TT8325	317F	8	9966	81/09/16	82/04/01
8700213	F015	TT8326	317F	8	10000	81/09/16	82/04/01
8700213	F015	TT8327	317F	13	8782	84/01/17	85/01/01
8700213	F015	TT8328	317F	13	8782	84/01/17	85/01/01
8700213	F015	TT8329	317F	13	8782	84/01/17	85/01/01
8700213	F015	TT8330	317F	13	8782	84/01/17	85/01/01
8700213	F015	TT8331	317F	13	8820	84/01/15	85/01/01
8700213	F015	TT8332	317F	13	8820	84/01/15	85/01/01
8700213	F015	TT8333	317F	4	2430	84/01/15	84/04/01
8700213	F015	TT8334	317F	13	8820	84/01/15	85/01/01
8700213	F015	TT8335	317F	10	6564	84/01/16	84/10/01
8700213	F015	TT8336	317F	13	8749	84/01/16	85/01/01
8700213	F015	TT8337	317F	13	8745	84/01/16	85/01/01
8700213	F015	TT8338	317F	13	8749	84/01/16	85/01/01
8700213	F015	TT8339	317F	13	8750	84/01/16	85/01/01
8700213	F015	TT8340	317F	13	8674	84/01/16	85/01/01
8700213	F015	TT8341	317F	2	533	84/01/16	84/02/01
8700213	F015	TT8342	317F	13	8748	84/01/16	85/01/01
8700213	F015	TT8343	317F	13	8850	84/01/14	85/01/01
8700213	F015	TT8344	317F	13	8826	84/01/14	85/01/01
8700213	F015	TT8345	317F	13	8830	84/01/14	85/01/01
8700213	F015	TT8346	317F	13	8849	84/01/14	85/01/01
8700213	C118	068801	3191	427	421	79/02/09	79/02/18
8700213	C118	068802	3191	377	371	79/11/21	79/11/29