

ACCESSION NO. 8600146 FILETYPE AXBT TRACK NO. _____ PROJECT IDENTIFICATION _____
 LEVEL 1 SEQUAL

STEP	DATE	INIT.	TAPE OR DISK DSN.	NO. FILES	RECL	BLK SIZE	NO. RECORDS
ORIG. TAPE	5/5/86	H	XBT#1 - A00218	25	XBT AXBT	8000 4600	
DUPLICATE TAPE	5/20/86	H	W08861	25			
REFORMATTED TAPE	6/4/86	RPS	*				
REFORMATTED DISK							
FIRST MULCHEK							
FINAL MULCHEK							
MPD75 OR F022							
DATA SET FINALIZED							

ERRORS REPORTED TO PRINCIPAL INVESTIGATOR:

* DNODC * SEQUAL OUT. W01047 [67664-67669]
 DNODC * SEQUAL OUT A. W13216 [67670-67688]

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

COMMENTS (TRACKS DELETED, FIELDS DELETED, ETC.)

ESS NUMBER	REF NUMBER	FILE TYPE	PROJ CODE	INST	PLAT	CRUISE NO	CRUISE START	CRUISE END	NUM STA	NUM REC
8600146	067664	FC116	0132	3112	31RD	24-1	02/03/83	02/16/83	47	47
8600146	067665	FC116	0132	3112	31RD	24-2	02/21/83	03/11/83	68	68
8600146	067666	FC116	0132	3112	316N	04-3	09/03/83	09/30/83	98	98
8600146	067667	FC116	0132	3112	316N	04-8	03/18/84	04/05/84	79	79
8600146	067668	FC116	0132	3212	32GY	4G10	09/17/84	10/02/84	53	53
8600146	067669	FC116	0132	3212	32GY	4G11	10/11/84	10/22/84	47	47
8600146	067670	FC118	0132	3112	3191	1	05/06/83	05/06/83	5	5
8600146	067671	FC118	0132	3112	3191	2	05/07/83	05/07/83	23	23
8600146	067672	FC118	0132	3112	3191	3	05/09/83	05/09/83	24	24
8600146	067673	FC118	0132	3112	3191	4	05/11/83	05/11/83	23	23
8600146	067674	FC118	0132	3112	3191	5	05/26/83	05/26/83	24	24
8600146	067675	FC118	0132	3112	3191	6	06/18/83	06/18/83	25	25
8600146	067676	FC118	0132	3112	3191	7	09/14/83	09/14/83	21	21
8600146	067677	FC118	0132	3112	3191	8	05/23/84	05/23/84	23	23
8600146	067678	FC118	0132	3112	3191	9	06/04/84	06/04/84	22	22
8600146	067679	FC118	0132	3112	3191	10	06/18/84	06/18/84	19	19
8600146	067680	FC118	0132	3112	3191	11	06/26/84	06/26/84	22	22
8600146	067681	FC118	0132	3112	3191	12	07/03/84	07/03/84	25	25
8600146	067682	FC118	0132	3112	3191	14	07/10/84	07/10/84	24	24
8600146	067683	FC118	0132	3112	3191	15	07/16/84	07/16/84	23	23
8600146	067684	FC118	0132	3112	3191	16	07/23/84	07/23/84	24	24
8600146	067685	FC118	0132	3112	3191	17	08/06/84	08/06/84	22	22
8600146	067686	FC118	0132	3112	3191	18	08/20/84	08/20/84	22	22
8600146	067687	FC118	0132	3112	3191	19	09/03/84	09/03/84	24	24
8600146	067688	FC118	0132	3112	3191	20	10/04/84	10/04/84	25	25

TRANSMITTAL AND RECEIPT RECORD

(Please sign and return carbon copy acknowledging receipt)

TO: National Oceanographic Data Ctr.
3300 Whitehaven St., NW
Washington, D.C. 20235

REFER TO

ATTENTION Dr. Tony Picciolo

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

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

The enclosed magnetic tape (XBT001) contains XBT data from the SEQUAL program. These data were received from Dr. Eli Katz and Dr. Robert Houghton, Lamont-Doherty Geological Observatory. These data have been formatted to a format approved by NODC and are reported at one meter intervals. It is requested that these data be processed to inflection point intervals on a priority bases (converted to UBT format). Files 1-6 contain data collected from ships where as files 7-25 contain aircraft deployed XBTs (see attached list of ship names and cruise dates).

Note: These data are considered proprietary until March 1987!

- a..One magnetic tape (XBT001), 9tk, 1600bpi, ASCII, recsize=controlled by XBT type,
- b..Format description
- c..NAPIS records
- d..Sample dump of first and seventh files
- e..Originators letter of transmittal.

149

A60218

8600146

FORWARDED BY (Signature)
George HeimerdingerTITLE
NODC N.E. Service Center Rep.DATE FORWARDED
Apr. 28, 86

RECEIVED BY (Signature)

TITLE

DATE RECEIVED

5/2/86

FILE#	SHIP NAME	C.R. #	DATES	DATES	# OBS.
1	R. CONRAD	24-1	830203	830216	47
2	" "	24-2	830221	830311	68
3	KNORR	104-3	830903	830930	98
4	" "	104-8	840319	840406	79
5	GYRE	84G10	840917	841003	53
6	" "	84G11	841008	841023	<u>47</u>
7	AIRCRAFT	1	830506	830506	5
8	" "	2	830507	-	23
9	" "	3	830509	-	24
10	" "	4	830511	-	23
11	" "	5	830526	-	24
12	" "	6	830618	-	25
13	" "	7	830914	-	21
14	" "	8	840523	-	23
15	" "	9	840604	-	22
16	" "	10	840618	-	19
17	" "	11	840626	-	22
18	" "	12	840703	-	25
19	" "	14	840710	-	24
20	" "	15	840716	-	23
21	" "	16	840723	-	24
22	" "	17	840806	-	22
23	" "	18	840820	-	22
24	" "	19	840903	-	24
25	" "	20	841004	-	25
					<u>420</u>

April 7, 1986

Dear George,

Enclosed is the tape with all the SEQUAL XBT and AXBT data. The tape is 1600 BPI, odd parity and ASCII data format. Each file has one record per station. There is no blocking. The data format follows the instructions received from your office.

The data are the same as published in the two 1985 reports, "Report of XBT Data From Four SEQUAL Cruises" and "SEQUAL AXBT Report". There are 25 files on the tape, six for XBT data and 19 for AXBT data. The first and last SEQUAL cruises had two legs, and therefore I wrote them to tape in two separate files. The file order and number of XBTs is as follows:

file	cruise	# of XBTs	
1	Conrad 24-1	47	SEQUAL I
2	Conrad 24-2	68	"
3	Knorr 104-3	98	SEQUAL II
4	Knorr 104-8	79	SEQUAL III
5	Gyre 84G10	53	SEQUAL IV
6	Gyre 84G11	47	"

As per our phone conversation, I increased the record size from 7300 bytes to 8000 bytes, in order to hold an entire T-7 probe cast. Please note that there is no data and no records within the file for XBT numbers; 40, 72 and 90.

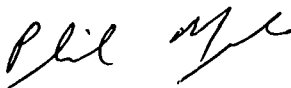
The AXBT data of 20 flights are in 19 files, flight 13 was aborted. The file number, flight number and number of AXBTs is as follows:

file	flight	# of XBTs
7	1	5
8	2	23
9	3	24
10	4	23
11	5	24
12	6	25
13	7	21
14	8	23
15	9	22
16	10	19
17	11	22
18	12	25
	13 - aborted	
19	14	24
20	15	23
21	16	24
22	17	22
23	18	22
24	19	24
25	10	25

Since the number of aborted AXBTs is sporadic, I will not list them here, and as with the XBT data there are no records within the file for missing AXBTs. The above AXBT files have record lengths of 4600

bytes as recommended for T-4 type probes. In order to differentiate these XBTs, I used an '8' as the one character XBT probe type code in column 3 as per our phone conversation.

Good Luck,

A handwritten signature in black ink, appearing to read "Phil Mele". The signature is fluid and cursive, with the first name "Phil" being more legible than the last name "Mele".

Phil Mele

XBT FORMAT

This format was designed as a means of submitting high resolution digital XBT data to the U.S. National Oceanographic Data Center (NODC). For XBT purposes, high resolution is defined as temperature values averaged or recorded at depth levels equal to or less than one meter. XBT data received by NODC at this resolution can be readily processed to a compressed form which is consistent with NODC's existing data base and output capabilities. It must be emphasized that this format is for input purposes only as NODC cannot produce this format on output!

This tape record layout is a simplistic fixed field configuration consisting of a number of header information fields followed by "n" number of depth-temperature pairs and blank padded to the specified unit record length. To compensate for the different data string lengths associated with the three standard XBT probe types, a range of unit record lengths is available to the submitter to reduce the amount of padding necessary.

<u>PROBE TYPE</u>	<u>DATA RESOLUTION</u>	<u>UNIT RECORD SIZE</u>
T-10 (200m)	<1 meter	3,700
" "	1 meter	2,100
T-4 (460m)	<1 meter	9,100
" "	1 meter	4,600
T-7 (760m)	<1 meter	13,200
" "	1 meter	7,300

For submission of XBT data in this format, the submitter must adhere to the format as defined and to the following requirements:

1. The XBT data must be cleaned of all spikes and truncated to remove erroneous data resulting from instrument failure or on impacting the ocean floor.
2. There should be no blank temperature or depth values within the record. Occasional missing or bad values may be replaced with interpolated values or the entire data cycle deleted.
3. The first depth-temperature pair must be a surface or zero depth value. If missing, the one meter value can be duplicated as the surface value.
4. The tape specifications are 9 track, 800 or 1600 bpi densities, ASCII code, one cruise per file.
5. All fields marked mandatory must be completed or the data set cannot be processed.

Field Name	Description	Field Position/ Length	Comments
Record ID	(XX) Two character code always "Ø".	1 - 2/2	Mandatory - Ø = blank.
XBT Probe Type	(X) one character code: 2 = 760 meter 4 = 460 meter 6 = 200 meter	3/1	
Platform Name	(XXXXXXXXXXXXXXXX) Alpha/numeric representation of platform name.	4 - 18/15	If not provided here. The platform name must be provided with the supporting documentation.
Cruise Number	(XXXXXXX) Alpha/numeric representation of the originators cruise number.	19 - 26/8	Mandatory
Station Number	(XXXX) Alpha/numeric representation of the originators station/consecutive number within cruise.	27 - 30/4	Mandatory - May be used as a sort or search field right justify and zero fill to left.
Date (GMT)	(YYYYMMDD) Year, month, day.	31 - 37/7	Mandatory - Report as GMT - zero fill to left month and day.
Time (GMT)	HHMM) Hours and minutes.	38 - 41/4	Mandatory - Report as GMT - zero fill to left hour and minute.
Latitude	(DDMMX) degrees and minutes to tenths.	42 - 46/5	Mandatory - Zero fill to left degree and minutes - Do not zero fill tenths position.
Latitude hemisphere	(X) "N" or "S".	47/1	Mandatory
Longitude	(DDDMMX) degrees and minutes to tenths.	48 - 53/6	Mandatory - Zero fill to left degree and minute - Do not zero fill tenths position.

Field Name	Description	Field Position/ Length	Comments
Longitude Hemisphere	(X) "E" or "W".	54/1	Mandatory.
Bottom Depth	(XXXX) Water depth to whole meters	55 - 58/4	Right justify and zero fill to left - Useful in shallow water areas for determining near bottom water temperatures.
Bottom Flag	(X) one character code to indicate that the XBT probe hit the bottom (B = yes, Blank = No or unknown).	59/1	Useful for obtaining bottom water temperature.
Count	(XXXX) Number of depth - temperature pairs for this XBT Drop.	60 - 63/4	Useful if available - right justify.
Depth *	(XXXXX) Meters to tenths.	64 - 68/5	If reporting to whole meters, zero fill tenths position - decimal point is assumed.
Temperature *	(XXXX) degrees centigrade to hundredths.	69 - 72/4	Decimal point is assumed.
PAD Character	PAD with blank characterers to fill to unit record length selected.		

* Depth-Temperature Pairs (9 characters) repeated as many times as necessary. If the "Count" field is used the number of depth-temperatures pairs must equal this value.

R NAME HALMINEKI	PHONE # 634 - 7441	ORG/TASK #	DATE SUBMITTED 5/5/86	DATE DUE	BIN # 33
----------------------------	------------------------------	------------	------------------------------------	----------	--------------------

INSTRUMENT TO BE USED AND FUNCTION TO BE PERFORMED

XBT

SCAN. PRINT 2 PAGES OF RECORDS

PRIORITY

SEQUAL

INPUT MEDIUM PAPER CARD DISK TAPE DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK PRINT TAPE PLOT DISKETTE OTHER(SPECIFY)
--	---

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
PUT	XBT 401		9	1600	ODD	NL		80	8000	25
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
INPUT	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE

SPECIAL INSTRUCTIONS

ESTIMATED
EXECUTION
TIME

31 USE ONLY

#	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
555	05/06/86	14:31	14:37	B	Completed by Andy

TIME

PR NAME HALMINSKI	PHONE # 634 - 7441	ORG/TASK #	DATE SUBMITTED 5/7/86	DATE DUE	BIN # 33
-----------------------------	------------------------------	------------	---------------------------------	----------	--------------------

INSTRUMENT TO BE USED AND FUNCTION TO BE PERFORMED

XBT/AXBT

MAKE COPY. SCAN OUTPUT

INPUT MEDIUM PAPER CARD DISK (TAPE) DISKETTE OTHER(SPECIFY)	OUTPUT MEDIUM CARD DISK PRINT (TAPE) PLOT DISKETTE OTHER(SPECIFY)
--	--

TAPE/DISKETTE INFORMATION

	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
INPUT	XBT001		9	1600		NL		VAR		25
	SECTOR SIZE	EXCHANGE TYPE	CODE: (ASCII) EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
INPUT	W08861		9	1600		NL		VAR		25
	SECTOR SIZE	EXCHANGE TYPE	CODE: (ASCII) EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE
	TAPE #/ DISKETTE	SLOT #	TRK	DENSITY	PARITY	LABEL TYPE	RECORD TYPE	RECORD LENGTH	MAX. BLOCK SIZE	# OF FILES
	SECTOR SIZE	EXCHANGE TYPE	CODE: ASCII EBCDIC BCD SDF OTHER(SPECIFY)				DATA SET NAME			PURGE DATE

SPECIAL INSTRUCTIONS

NEED 'W' TAPE

ESTIMATED
EXECUTION
TIME

31 USE ONLY

#	DATE JOB COMPLETED	START TIME	END TIME	PRIORITY	DEVICES USED, NUMBER OF TAPE MOUNTS, LINES PRINTED DISKETTES USED, CARDS PUNCHED, CARDS KEYVERIFIED
050701	05/12/86	14:57	15:10	C	Completed by Andy

REMARKS

Password:

accNo	fleA	refNo	proj	inst	ship	startDate	cruise	catId
8600146	C116	067666	0132	3112	316N	1983/09/03	04-3	162660
8600146	C116	067667	0132	3112	316N	1984/03/18	04-8	162661
8600146	C118	067670	0132	3112	3191	1983/05/06	1	162664
8600146	C118	067671	0132	3112	3191	1983/05/07	2	162665
8600146	C118	067672	0132	3112	3191	1983/05/09	3	162666
8600146	C118	067673	0132	3112	3191	1983/05/11	4	162667
8600146	C118	067674	0132	3112	3191	1983/05/26	5	162668
8600146	C118	067675	0132	3112	3191	1983/06/18	6	162669
8600146	C118	067676	0132	3112	3191	1983/09/14	7	162670
8600146	C118	067677	0132	3112	3191	1984/05/23	8	162671
8600146	C118	067678	0132	3112	3191	1984/06/04	9	162672
8600146	C118	067679	0132	3112	3191	1984/06/18	10	162673
8600146	C118	067680	0132	3112	3191	1984/06/26	11	162674
8600146	C118	067681	0132	3112	3191	1984/07/03	12	162675
8600146	C118	067682	0132	3112	3191	1984/07/10	14	162676
8600146	C118	067683	0132	3112	3191	1984/07/16	15	162677
8600146	C118	067684	0132	3112	3191	1984/07/23	16	162678
8600146	C118	067685	0132	3112	3191	1984/08/06	17	162679
8600146	C118	067686	0132	3112	3191	1984/08/20	18	162680
8600146	C118	067687	0132	3112	3191	1984/09/03	19	162681
8600146	C118	067688	0132	3112	3191	1984/10/04	20	162682
8600146	C116	067664	0132	3112	31RD	1983/02/03	24-1	162658
8600146	C116	067665	0132	3112	31RD	1983/02/21	24-2	162659
8600146	C116	067668	0132	3112	32GY	1984/09/17	4G10	162662
8600146	C116	067669	0132	3112	32GY	1984/10/11	4G11	162663

(25 rows affected)

Password:

accNo	fleA	refNo	ship	staCnt	recCnt	startDate	endDate
8600146	C116	067666	316N	98	98	83/09/03	83/09/30
8600146	C116	067667	316N	79	79	84/03/18	84/04/05
8600146	C118	067670	3191	5	5	83/05/06	83/05/06
8600146	C118	067671	3191	23	23	83/05/07	83/05/07
8600146	C118	067672	3191	24	24	83/05/09	83/05/09
8600146	C118	067673	3191	23	23	83/05/11	83/05/11
8600146	C118	067674	3191	24	24	83/05/26	83/05/26
8600146	C118	067675	3191	25	25	83/06/18	83/06/18
8600146	C118	067676	3191	21	21	83/09/14	83/09/14
8600146	C118	067677	3191	23	23	84/05/23	84/05/23
8600146	C118	067678	3191	22	22	84/06/04	84/06/04
8600146	C118	067679	3191	19	17	84/06/18	84/06/18
8600146	C118	067680	3191	22	21	84/06/26	84/06/26
8600146	C118	067681	3191	25	25	84/07/03	84/07/03
8600146	C118	067682	3191	24	24	84/07/10	84/07/10
8600146	C118	067683	3191	23	23	84/07/16	84/07/16
8600146	C118	067684	3191	24	24	84/07/23	84/07/23
8600146	C118	067685	3191	22	20	84/08/06	84/08/06
8600146	C118	067686	3191	22	22	84/08/20	84/08/20
8600146	C118	067687	3191	24	24	84/09/03	84/09/03
8600146	C118	067688	3191	25	25	84/10/04	84/10/04
8600146	C116	067664	31RD	47	45	83/02/03	83/02/16
8600146	C116	067665	31RD	68	68	83/02/21	83/03/11
8600146	C116	067668	32GY	53	53	84/09/17	84/10/02
8600146	C116	067669	32GY	47	47	84/10/11	84/10/22

(25 rows affected)

TRANSMITTAL AND RECEIPT RECORD

(Please sign and return carbon copy acknowledging receipt)

TO: National Oceanographic Data Ctr.
3300 Whitehaven St., NW
Washington, D.C. 20235

REFER TO

ATTENTION Dr. Tony Picciolo

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

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

The enclosed magnetic tape (XBT001) contains XBT data from the SEQUAL program. These data were received from Dr. Eli Katz and Dr. Robert Houghton, Lamont-Doherty Geological Observatory. These data have been formatted to a format approved by NODC and are reported at one meter intervals. It is requested that these data be processed to inflection point intervals on a priority bases (converted to XBT format). Files 1-6 contain data collected from ships where as files 7-25 contain aircraft deployed XBTs (see attached list of ship names and cruise dates).

Note: These data are considered proprietary until March 1987!

- a..One magnetic tape (XBT001), 9tk, 1600bpi, ASCII, recsize=controlled by XBT type,
- b..Format description
- c..NAPIS records
- d..Sample dump of first and seventh files
- e..Originators letter of transmittal.

67664
5
688

8600146

FORWARDED BY (Signature)
George HeimerdingerTITLE
NODC N.E. Service Center Rep.DATE FORWARDED
Apr. 28, 86

RECEIVED BY (Signature)

TITLE

DATE RECEIVED
5/2/86

FILE#	SHIP NAME	CR. #	DATES	DATES	# OBS.
1	R. CONRAD	24-1 67664	830203	830216	47
2	" "	24-2 5	830221	830311	68
3	KNORR	104-3 6	830903	830930	98
4	" "	104-8 7	840319	840406	79
5	GYRE	84G10 8	840917	841003	53
6	" "	84G11 67669	841008	841023	47
7	AIRCRAFT	1 67670	830506	830506	5
8	" "	2	830507	-	23
9	" "	3	830509	-	24
10	" "	4	830511	-	23
11	" "	5	830526	-	24
12	" "	6	830618	-	25
13	" "	7	830914	-	21
14	" "	8	840523	-	23
15	" "	9	840604	-	22
16	" "	10	840618	-	19
17	" "	11	840626	-	22
18	" "	12	840703	-	25
19	" "	14	840710	-	24
20	" "	15	840716	-	23
21	" "	16	840723	-	24
22	" "	17	840806	-	22
23	" "	18	840820	-	22
24	" "	19	840903	-	24
25	" "	20 67688	841004	-	25

April 7, 1986

Dear George,

Enclosed is the tape with all the SEQUAL XBT and AXBT data. The tape is 1600 BPI, odd parity and ASCII data format. Each file has one record per station. There is no blocking. The data format follows the instructions received from your office.

The data are the same as published in the two 1985 reports, "Report of XBT Data From Four SEQUAL Cruises" and "SEQUAL AXBT Report". There are 25 files on the tape, six for XBT data and 19 for AXBT data. The first and last SEQUAL cruises had two legs, and therefor I wrote them to tape in two separate files. The file order and number of XBTs is as follows:

file	cruise	# of XBTs	
1	Conrad 24-1	47	SEQUAL I
2	Conrad 24-2	68	"
3	Knorr 104-3	98	SEQUAL II
4	Knorr 104-8	79	SEQUAL III
5	Gyre 84G10	53	SEQUAL IV
6	Gyre 84G11	47	"

As per our phone conversation, I increased the record size from 7300 bytes to 8000 bytes, in order to hold an entire T-7 probe cast. Please note that there is no data and no records within the file for XBT numbers; 40, 72 and 90.

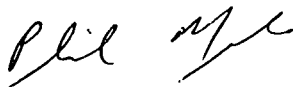
The AXBT data of 20 flights are in 19 files, flight 13 was aborted. The file number, flight number and number of AXBTs is as follows:

file	flight	# of XBTs
7	1	5
8	2	23
9	3	24
10	4	23
11	5	24
12	6	25
13	7	21
14	8	23
15	9	22
16	10	19
17	11	22
18	12	25
	13 - aborted	
19	14	24
20	15	23
21	16	24
22	17	22
23	18	22
24	19	24
25	10	25

Since the number of aborted AXBTs is sporadic, I will not list them here, and as with the XBT data there are no records within the file for missing AXBTs. The above AXBT files have record lengths of 4600

bytes as recommended for T-4 type probes. In order to differentiate these XBTs, I used an '8' as the one character XBT probe type code in column 3 as per our phone conversation.

Good Luck,

A handwritten signature in cursive script, appearing to read "Phil Mele".

Phil Mele

NATIONAL OCEANOGRAPHIC DATA CENTER
2001 WISCONSIN AVE. N.W.
WASHINGTON, D.C. 20235

05/06/86

DR. ELI KATZ
LAMONT-DOHERTY GEOLOGICAL OBSERV.
PALISADES, NY 10964

We would like to acknowledge with thanks receipt of your recent submission to the National Oceanographic Data Center (NODC). On 05/02/86, we received the following:

ONE TAPE OF SEQUAL XBT AND AXBT DATA (25 CRUISES; 1983 - 84).

Your shipment has been given the following unique NODC identification number: 8600146. Please use this number in future correspondence regarding this submission.

During the next years, we will continue to archive and distribute our regular data accessions. In addition to our normal processing, I would like to call your attention to NODC's participation in the Tropical Ocean and Global Atmosphere (TOGA) program. TOGA, a major study of the interannual variability of the oceans and atmosphere, is being conducted by the United States in cooperation with many countries of the world. The goal of TOGA is to increase our understanding of climate, and ultimately of climate prediction.

The NODC is aiding this important long-term experiment (1985-1995) by a concentrated effort to collect and archive subsurface temperature data from the tropics (20 degrees N to 20 degrees S). In turn, the NODC will make these data available to the TOGA scientific community.

Since you are a contributor to NODC, I would like to take this opportunity to solicit your support for this project. If you hold tropical subsurface temperature data, please send them to NODC in a timely manner. We hope to receive as much data as possible within a few months after observation. We will be pleased to help you with data processing, if appropriate.

Thank you again for your continued support.

Sincerely,

Gregory W. Withee
Director