NOAA Data Report ERL AOML-18

CURRENT VELOCITY AND HYDROGRAPHIC OBSERVATIONS IN THE SOUTHWESTERN NORTH ATLANTIC OCEAN: SUBTROPICAL ATLANTIC CLIMATE STUDIES (STACS), 1989

Anne Marie Wilburn
Elizabeth Johns
Mark Bushnell

Atlantic Oceanographic and Meteorological Laboratory
Miami, Florida
October 1990

UNITED STATES DEPARTMENT OF COMMERCE

Robert A. Mosbacher
Secretary

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

John A. Knauss
Under Secretary for Oceans and Atmosphere/Administrator

Environmental Research Laboratories

Joseph O. Fletcher
Director

NOTICE

Mention of a commercial company or product does not constitute an endorsement by the the NOAA Environmental Research Laboratories. Use for publicity or advertising purposes of information from this publication concerning proprietary products or the tests of such products is not authorized.

For sale by the National Technical Information Service, 5285 Port Royal Road
Springfield, VA 22161

TABLE OF CONTENTS

		Page
I.	INTRODUCTION	1
II.	DATA COLLECTION AND ANALYSIS	1
	A. Pegasus Current Profiler	1
	1. Editing	6
	2. Calibration	6
	3. Velocity Computation	8
	B. CTD Data	8
	1. System Description	8
	2. Calibration	8
	C. XBT Data	12
III.	REFERENCES	15
IV.	ACKNOWLEDGMENTS	16
	Appendix A: Pegasus Data	17
	Appendix B: CTD Data	23
	Appendix C: XBT Data	91

I. INTRODUCTION

The primary objectives of the STACS program are to increase our understanding of the dynamics of the North Atlantic circulation and the role of ocean circulation in global climate, to develop the capability to monitor the climatically important processes, and to provide data needed in the development of the coupled ocean-atmosphere general circulation models to be used for global climate prediction. In particular, the mechanisms by which the ocean transports heat to balance the net radiation deficit at northerly latitudes are being studied.

The initial objectives of STACS (Molinari et al., 1985) were directed at the Florida Current, a flow which makes significant contribution to heat flux. After an intensive two-year observing program, we have the capability to monitor Florida Current transport without extensive ship-board observations. Data collected during this period are listed in Williams et al. (1983), Leaman and Vertes (1983), Vertes and Leaman (1984), and Ratnaswamy et al. (1985). STACS efforts during 1984-1986 were directed toward studying the relationship of western boundary currents along the Antillean Archipelago and in the Caribbean Sea to the dynamics of the North Atlantic subtropical gyre and on meridional heat flux, while continuing the monitoring effort in the Florida Current at 27°N. STACS efforts during 1987-1988 continued the observational studies of western boundary currents, extending the study area southward to northern Brazil (4°N) in order to examine North Atlantic cross-equatorial fluxes of mass and heat. Data collected during these cruises are given in Wilburn et al. (1987a,b, 1988, and 1989).

During 1989 STACS observational efforts extended even farther east and south. During the February 1989 cruise the western half of a cross-Atlantic transect along 14.5°N was done (in cooperation with a German cruise which occupied the eastern half) in addition to observations of the western boundary currents between Barbados (13°N) and northern Brazil (4°N). This cruise was done in cooperation with Dr. Rana Fine's group from the University of Miami, and included freon measurements at the CTD-O_2 stations. STACS monitoring of the Abaco, Bahamas transect at 26.5°N continued. The August 1989 cruise extended south to the equator in the course of deploying a joint RSMAS/KIEL moored current meter array. Figures 1 and 2 show station locations for the February and August 1989 cruises, respectively. XBT data were generally collected along the entire cruise track, with CTD-O_2 and Pegasus stations taken where indicated.

II. DATA COLLECTION AND ANALYSIS

Data from STACS cruises conducted on the NOAA Ships ALBATROSS IV and MALCOLM BALDRIGE during two cruises--February and August 1989--are contained in this report. Table 1 shows the type of data collected on each cruise. Techniques used to reduce the Pegasus, CTD, and XBT data to final form are described below.

A. Pegasus Current Profiler

The Pegasus instrument is an acoustically-tracked, free-falling profiler of horizontal current components (Spain et al., 1981). A schematic of the Pegasus system is shown in Figure 3. The Pegasus instrument used by AOML consists of a hollow cylindrical metal tube with the electronics package

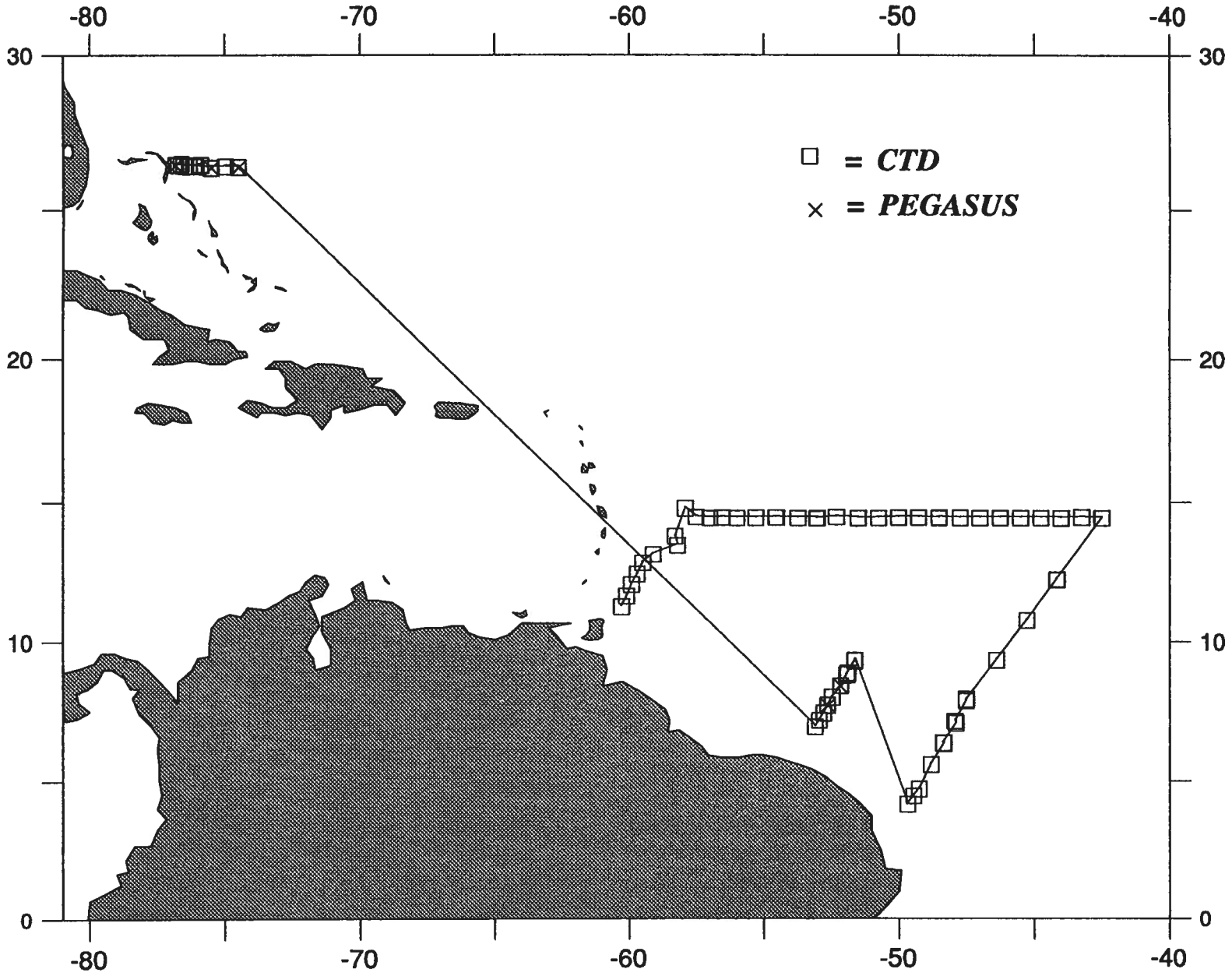


Figure 1. STACS cruise track for February 1989 showing CTD and Pegasus sampling stations.

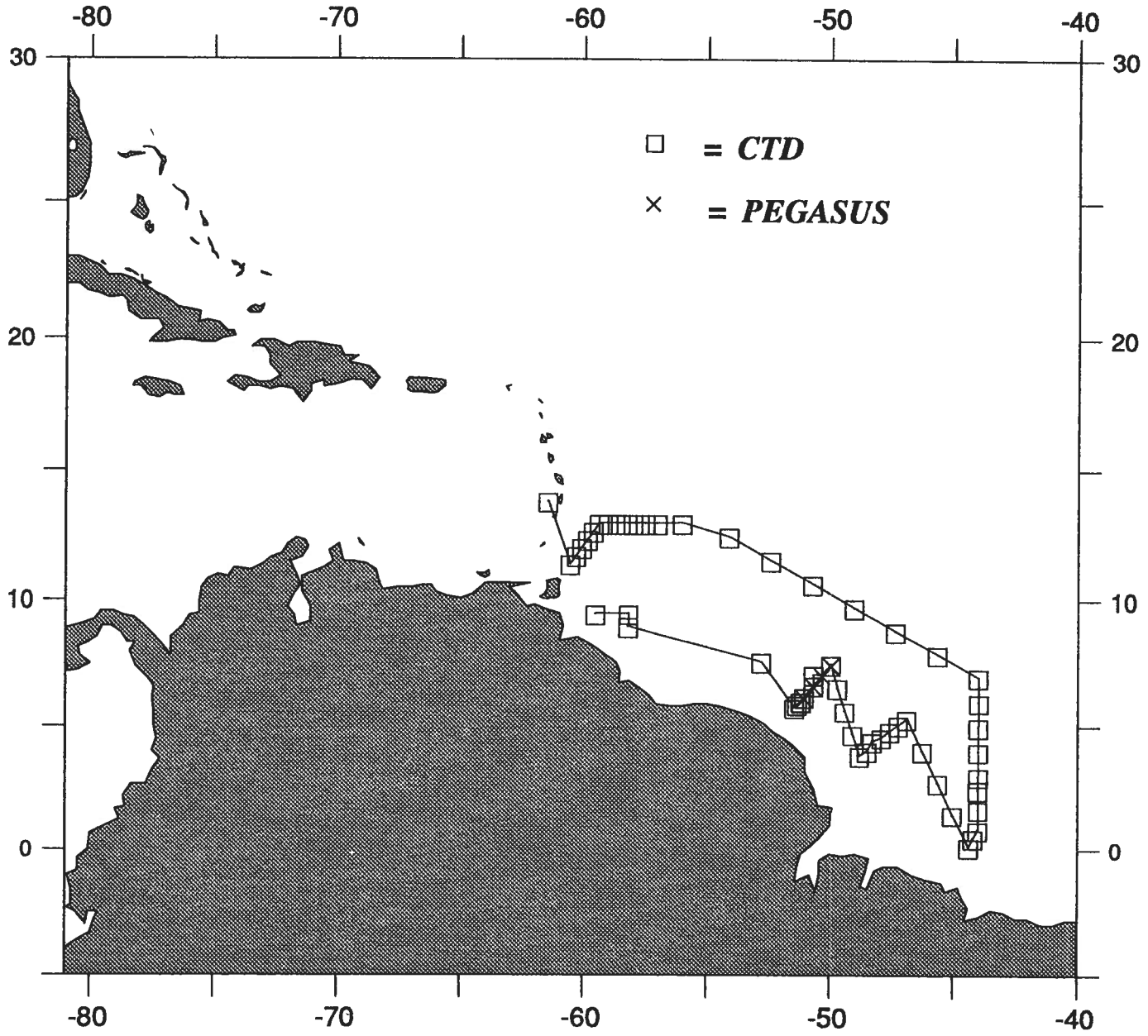


Figure 2. STACS cruise track for August 1989 showing CTD and Pegasus sampling stations.

Table 1. Types of Data Collected by Cruise.

Cruise	Vessel	Dates	Pegasus	CTD	XBT
February 1989 (AL-89-03-STACS)	ALBATROSS IV	1/24-3/16/89	5	80	64
August 1989 (MB-89-04-STACS)	MALCOLM BALDRIGE	8/22-9/22/89	4	54	110

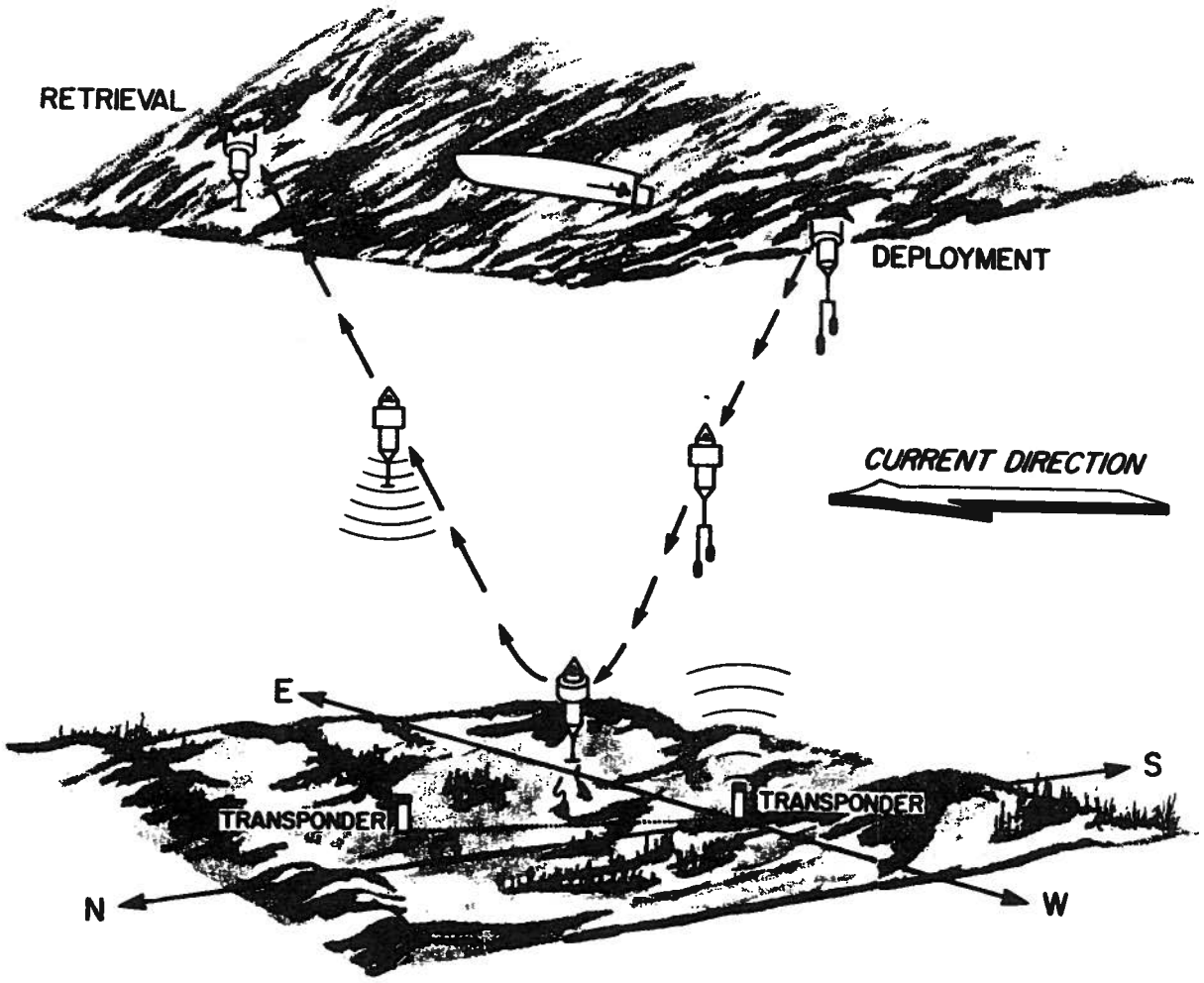


Figure 3. Schematic of the Pegasus current profiler.

sealed within. A flotation collar attached to the exterior of the cylinder provides the instrument buoyancy. Pegasus houses a transducer/receiver, a thermistor and a pressure sensor. When the Pegasus is in the water, its transducer interrogates two fixed transponders on the ocean bottom at a frequency of 10 KHz at an interval of eight or sixteen seconds. Each transponder responds at a different frequency. The Pegasus internally records the acoustic travel times from the transponders, along with temperature and pressure. Transponder frequency pairs are alternated between stations in order to avoid interference from adjacent stations.

The instrument is weighted at the beginning of the drop and falls at a rate between 20-50 cm/sec. This rate may be adjusted by adding or removing weights. External weights are released by a bottom trip mechanism when the weights touch the ocean floor or by a pressure release when the Pegasus reaches a predetermined depth. The instrument ascends at approximately the same rate as it descends.

Each Pegasus station is defined by a unique geometry (see Table 2). A mean sound velocity profile for each station is used to convert the acoustic travel times from the transponders to the instrument into ranges in meters. The baseline becomes the base of a triangle which is projected onto the bottom. The X and Y coordinates of the instrument at each pressure can then be determined.

Following a Pegasus cast the contents of the instrument's solid state memory are transferred to a Hewlett Packard 85 computer for conversion to decimal values and storage on flexible diskettes. The conversion of raw data to a velocity profile is done on an HP-86 in three steps: editing, calibration and velocity computations. Following is a brief description of each step.

1. Editing

Two files are created for each Pegasus cast: an ASCII character header file on magnetic tape containing cast information and a multi-record data file on magnetic disk. Each record contains decimal values of the original Pegasus memory address, corresponding pressure and temperature sensor output counts and two travel times significant to 10^{-4} second. HP-86 BASIC programs allow graphic display and printed listings of the data for preliminary evaluation of data quality.

Errors can be introduced into the raw data due to instrument hardware errors and into the travel times by acoustic propagation irregularities such as the detection of reflected instead of direct path signals. Erroneous points are hand edited from the record and replaced by points estimated by a low order polynomial fit.

2. Calibration

Prior to each research cruise the Pegasus pressure sensor is calibrated to produce second order polynomial fits of pressure counts versus pressure in decibars (db). Standard deviations from the fits over the working range of the sensors are generally on the order of 1 db. After the raw data has been edited the pressure counts are converted to decibars. Pressure is further smoothed with a five point running mean. Cast limits (surface/bottom/surface)

Table 2. Summary of Pegasus Station Geometry off Abaco Island.

Station	Transponder Parameters				Baseline Length (m)
	Latitude (N)	Longitude (W)	Frequency (KHz)	Depth (m)	
15	26°30.83′	76°19.01′	12.0		
	26°31.74′	76°21.55′	13.0	4810	4296
16	26°32.28′	76°30.10′	11.5	4855	
	26°32.20′	76°33.15′	13.0		4892
17	26°35.48′	76°39.30′	12.5		
	26°33.72′	76°39.31	12.0	4050	3937
18	26°32.67′	76°45.23′	13.0	3600	
	26°30.53′	76°44.88′	12.5		3755
19	26°33.11′	76°50.85′	12.0	800	1465
	26°32.22′	76°50.92′	11.5		
34	26°29.90′	76°07.22′	12.5	4810	4197
	26°29.71′	76°09.61′	12.0		
35	26°29.31′	75°32.34′	12.0	4610	4038
	26°29.44′	75°29.94′	12.5		
36	26°30.20′	74°32.97′	12.0	4460	1665
	26°30.12′	74°30.31′	12.5		

are recorded in the header file and the data are split into downcast and upcast files containing two travel times and pressure (db).

3. Velocity Calculation

Given the transponder depths, baseline length, pressure and the travel times, the Pegasus position can be determined. Each station has an associated sound velocity profile used to calculate harmonic mean velocity and thus convert acoustic travel times to distance for input into the position equations. The resulting profiles of X and Y position (in unrotated baseline coordinates) versus depth are smoothed with a seven point convolution. The resulting U and V velocity components are then rotated into a true geographic coordinate system. Each cast produces two profiles: one represents the downcast portion and the other the upcast. Only one profile from each cast is chosen based on a subjective comparison of the up and down profiles and these data for each cruise are presented by increasing cast numbers in Appendix A. The positions represent deployment locations rather than the transponder positions listed in Table 1.

B. CTD Data

1. System Description

The Neil Brown Instrument Mark III CTD system used in STACS includes pressure, temperature, conductivity and oxygen sensors.

The instrument scans at a rate of 30 scans per second. The descent rate is approximately 30 meters per minute to a depth of 200 meters then increases to 60 meters per minute for the remainder of the cast. CTD values are averaged in one decibar increments. Appendix B contains graphic representations of CTD profiles arranged by cruise and cast number. CTD values are listed at selected depths.

2. Calibration

Laboratory calibrations are used for the CTD pressure and temperature sensors. CTD pressures are assumed to be accurate to within $\pm$ 6.5 db and CTD temperatures to within $\pm$ .005°C. Bottle salinities are collected using a rosette sampler lowered with the CTD, with the final values determined using a Guildline Autosal unit. The bottle salinities are used for calibration of the raw CTD data using the methodology described below.

a. The bottle salinities are edited for obvious bad values by examination of the residual differences between bottle and CTD salinities over the entire water column and by means of graphical comparisons with previous regional STACS and TTO (Williams, 1986a,b) temperature/salinity relationships in the deep water.

b. The uncalibrated CTD salinity vs. pressure profiles are examined for conductivity sensor changes by examination of the time history of the residual differences between the edited bottle values and the CTD salinities, and divided into calibration subgroups if necessary. An iterative least squares regression is run on the residual (bottle minus

CTD) salinity vs. pressure data sets for each subgroup, and linear or polynomial fits are obtained over appropriate portions of the water column.

c. The uncalibrated CTD salinity profiles are corrected using the results of the regressions, and the TS correlation is again compared with the bottle salinity values and the historical data set as a final quality check. The calibrated CTD salinity and temperature data are despiked, and a final data set subsampled to 2 db spacing is produced.

Discussions of the bottle salinity quality and CTD performance for the individual cruises, and tabulations of the respective calibration corrections, follow.

February-March 1989:

During the February-March 1989 cruise the bottle salinity data quality was high, and little editing was necessary. However, the CTD performance was atypical in terms of the size of the correction needed. The first CTD, used for casts 1-24, required a correction of .071 ppt. This is an order of magnitude larger than previous STACS CTD salinity calibrations, even though the CTD sensors had been recently calibrated. However, the standard deviation around the .071 ppt was only ± .002 using 95% of the bottle values, indicating high precision.

Between casts 24 and 25 the CTD was changed, and the second CTD also showed a larger than normal offset in the other direction, -.011 ± .002 ppt. During cast 40 rough weather caused the instrument to hit the side of the ship, which caused a small depth dependence in the required correction to develop. The Autosal malfunctioned during the running of the bottle salinity samples for the last 12 casts. These casts were taken off Abaco, the Bahamas, where the TS correlation is highly predictable, confirming that the CTD sensor calibration had remained steady to at least .003 ppt.

A plot of the time history of the CTD correction is given in Figure 4, and the statistics of the regression analysis for the three calibration subgroups are tabulated below. Plots of the delta (bottle-CTD) vs. pressure values are shown in Figure 5.

Casts	Calibration Correction
1-24	dS = .071 ± .002 ppt using 95% of the bottles
25-40	dS = -.011 ± .002 ppt using 90% of the bottles
41-80	dS = $-.010 - 1.62e^{-6}$ * pressure ± .002 ppt using 95% of the bottles

August-September 1989

During the August-September 1989 cruise the bottle salinity data were also of high quality. However, the CTD which was used for casts 3-18 showed a pronounced drift within the range of .040 to .020 ppt, and needed to be calibrated on a cast-by-cast basis. Casts 19-54 were done using another CTD unit, and showed agreement with the bottles of .000 ± .002 ppt, in other words requiring no post-cruise calibration correction. Casts 1 and 2 did not have

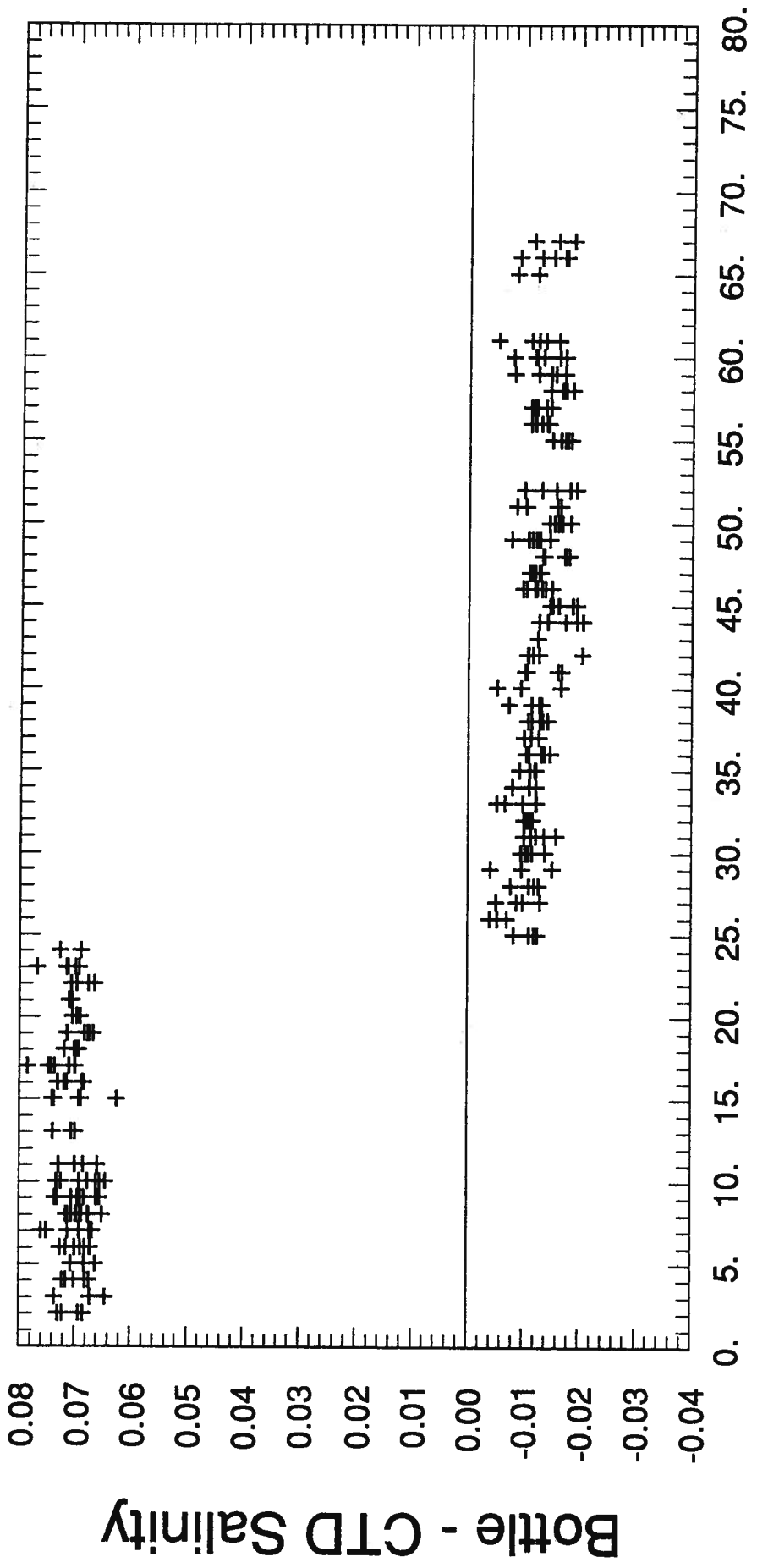


Figure 4. Time history plot of bottle minus CTD salinity vs. cast number for the February 1989 cruise.

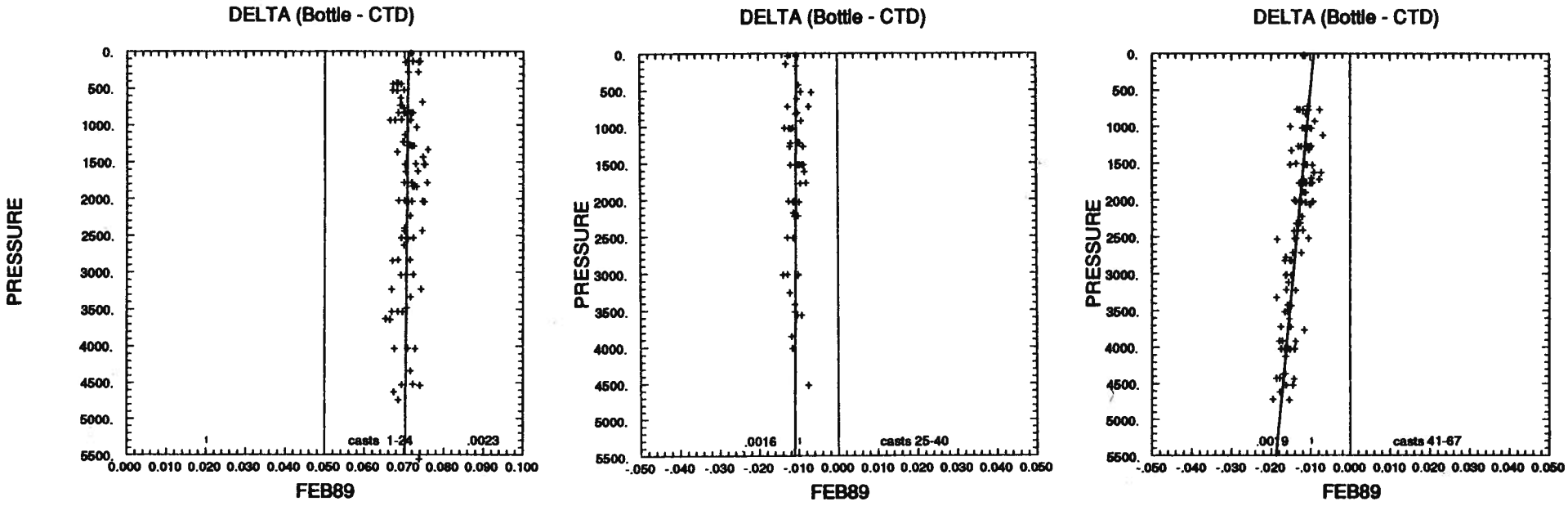


Figure 5. Calibration regression analyses for the February 1989 cruise. Bottle salinity minus uncalibrated CTD salinity values in ppt are shown as +'s vs. pressure in db, and the various linear fits which were used for the calibration are shown as the solid curves. Standard deviation values are indicated at the bottom of each panel.

usable bottle salinity data, but as the same CTD was used as casts 19-54, the same correction was assumed to be valid.

The calibration values used for the three subgroups are tabulated below. A plot of the time history of the CTD correction is shown in Figure 6, and a plot of the delta (bottle-CTD) vs. pressure values is shown in Figure 7.

Casts	Calibration Correction
1,2	.000 (no bottles; same CTD as casts 19-54)
3	.037
4	.038
5	.0385
6	.039
7	.039
8	.0385
9	.038
10	.038
11	.0375
12	.035
13	.033
14	.029
15	.025
16	.023
17	.015 (no bottles; corrected using local TS relationship)
18	.020
19-54	.000 ± .002 ppt using 96% of the bottles

C. XBT Data

Appendix C presents XBT data by cruise and cast number.

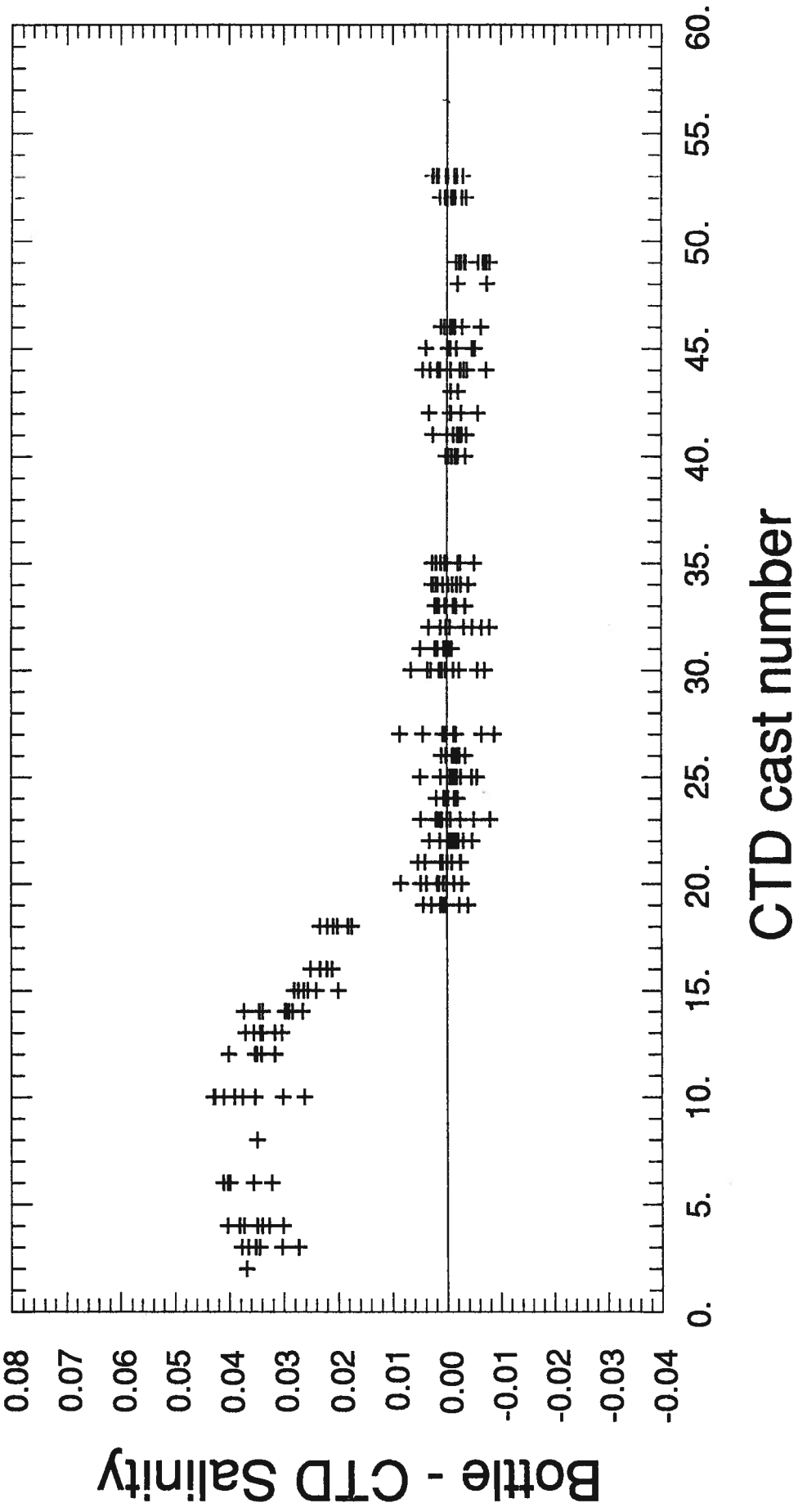


Figure 6. Time history plot of bottle minus CTD salinity vs. cast number for the August 1989 cruise.

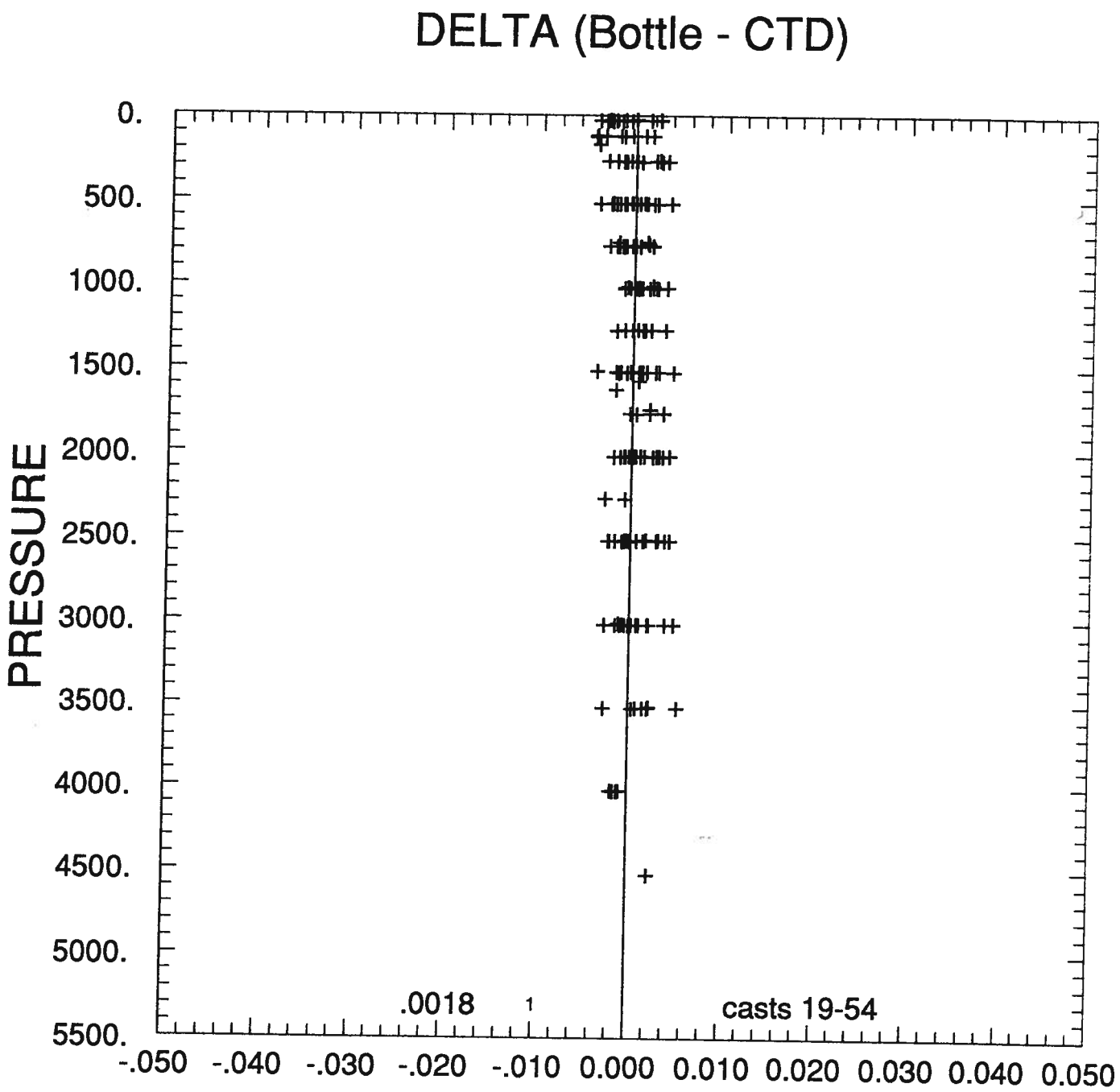


Figure 7. Calibration regression analyses for the August 1989 cruises. Bottle salinity minus uncalibrated CTD salinity values in ppt are shown as +'s vs. pressure in db. The standard deviation value is indicated at the lower left of the panel.

III. REFERENCES

Leaman, K. D. and P. S. Vertes, 1983. The Subtropical Atlantic Climate Study (STACS), 1982. Summary of RSMAS Pegasus observations in the Florida Straits. Technical Report UM RSMAS No. 83012, 154 pp.

Molinari, R. L., W. D. Wilson and K. D. Leaman, 1985. Volume and heat transports of the Florida Current: April 1982 through August 1983. Science, 227, 295-297.

Ratnaswamy, M. J., D. Wilson and R. L. Molinari, 1985: Current velocity and hydrographic observations in the Straits of Florida: Subtropical Atlantic Climate Study (STACS), 1983 and 1984. NOAA Data Report ERL AOML-5.

Spain, P. F., D. L. Dorson and H. T. Rossby, 1981. Pegasus: A simple acoustically-tracked velocity profiler. Deep-Sea Res., 28A, 1553-1567.

Vertes, P. S. and K. D. Leaman, 1984. The Subtropical Atlantic Climate Study (STACS), 1983. Summary of RSMAS Pegasus observations in the Florida Straits. Technical Report UM RSMAS No. 84002, 172 pp.

Wilburn, A. M., E. Johns, and M. Bushnell, 1987a. Current velocity and hydrographic observations in the Straits of Florida, the Caribbean Sea and offshore of the Antillean Archipelago: Subtropical Atlantic Climate Studies (STACS), 1984 and 1985. NOAA Data Report ERL AOML-8, 194 pp.

Wilburn, A. M., E. Johns, and M. Bushnell, 1987b. Current velocity and hydrographic observations in the Straits of Florida, the Caribbean Sea and offshore of the Antillean Archipelago: Subtropical Atlantic Climate Studies (STACS), 1986. NOAA Data Report ERL AOML-10, 247 pp.

Wilburn, A. M., E. Johns, and M. Bushnell, 1988. Current velocity and hydrographic observations in the southwestern North Atlantic Ocean: Subtropical Atlantic Climate Studies (STACS), 1987. NOAA Data Report ERL AOML-12, 86 pp.

Wilburn, A. M., E. Johns, and M. Bushnell, 1989. Current velocity and hydrographic observations in the southwestern North Atlantic Ocean: Subtropical Atlantic Climate Studies (STACS), 1988. NOAA Data Report ERL AOML-13, 83 pp.

Williams, E. J., E. Marmolejo, D. Wilson and R. L. Molinari, 1983. Current velocity profiles in the Straits of Florida from the Pegasus current profiler: Subtropical Atlantic Climate Study (STACS), 1982. NOAA Technical Memorandum ERL AOML-55, 181 pp.

Williams, R. T., 1986. Transient Tracers in the Ocean, North Atlantic Study. Shipboard Physical and Chemical Data Report. Physical and Chemical Oceanographic Data Facility, Scripps Institution of Oceanography. Univ. of California, San Diego. SIO Reference No. 86-15, 714 pp.

Williams, R. T., 1986. Transient Tracers in the Ocean, Tropical Atlantic Study. Shipboard Physical and Chemical Data Report. Physical and Chemical Oceanographic Data Facility, Scripps Institution of Oceanography. Univ. of California, San Diego. SIO Reference No. 86-16, 300 pp.

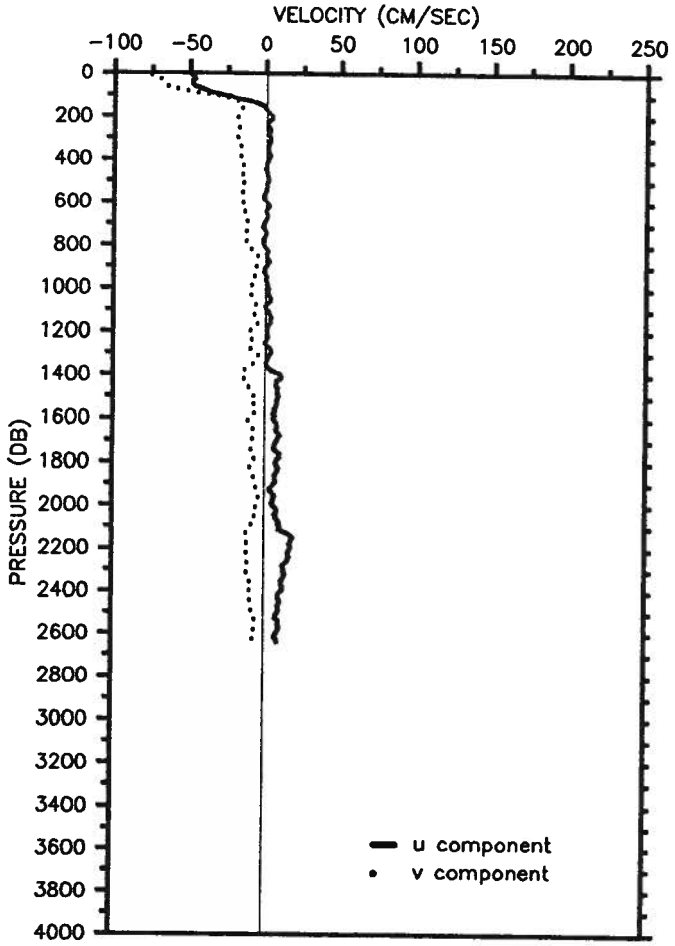
IV. ACKNOWLEDGMENTS

The extensive efforts of the officers and crew of the NOAA Ships ALBATROSS IV and MALCOLM BALDRIGE are gratefully acknowledged. Contributions by scientific and technical personnel Bob Molinari, Doug Anderson, Bob Roddy, Warren Krug, Mike Minton and Dave Bitterman of NOAA/AOML are greatly appreciated.

APPENDIX A: PEGASUS DATA

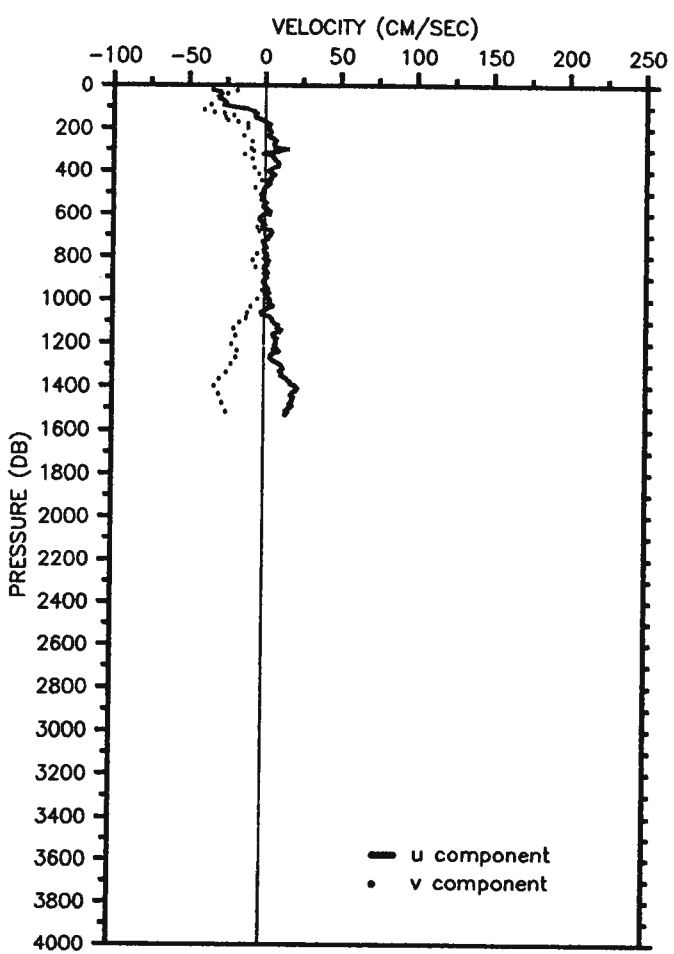
Casts are presented by cruise and increasing cast number. The cruise number and vessel, Pegasus cast and station number, Julian day and time, and position are shown at the top of each plot. "U" represents the east component of velocity. "V" represents the north component. Casts where there are no data values given for the U and V components indicate that the transponders signals were not being received by the Pegasus instrument at the given depth.

ALB-STACS33-89 PEGASUS 2 STN 37
R/V ALBATROSS IV JDAY 60 TIME 1638 Z
Latitude 08.495 N Longitude 052.171 W



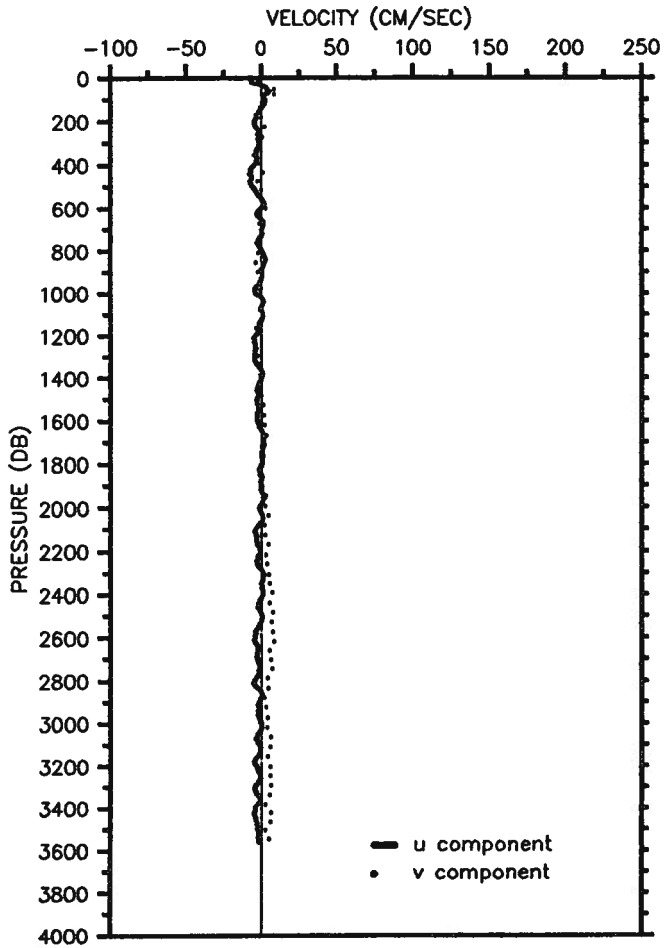
Prs	U	V
10	-49.6	-76.2
20	-47.8	-72.1
30	-47.7	-69.3
40	-48.8	-68.3
50	-48.9	-67.3
60	-47.6	-65.5
70	-44.8	-61.8
80	-40.8	-55.5
90	-36.6	-46.0
100	-30.8	-36.4
110	-24.6	-27.5
120	-17.9	-21.6
130	-11.5	-18.4
140	-6.8	-16.3
150	-2.8	-16.0
160	-1.0	-16.2
170	-0.2	-16.7
180	1.4	-17.7
190	2.4	-18.6
200	4.0	-19.3
250	1.6	-18.5
300	2.4	-19.0
350	1.7	-17.5
400	1.7	-17.6
450	-0.2	-15.1
500	1.7	-13.9
550	0.0	-15.9
600	0.5	-15.5
650	0.3	-14.6
700	-1.0	-12.1
750	0.2	-13.0
800	-1.2	-12.2
850	1.0	-5.5
900	0.9	-6.3
950	0.9	-7.0
1000	2.2	-9.9
1500	9.2	-6.8
2000	6.1	-5.8
2500	9.7	-7.6
2640	9.1	-6.0

ALB-STACS33-89 PEGASUS 3 STN 38
R/V ALBATROSS IV JDAY 61 TIME 0251 Z
Latitude 07.789 N Longitude 052.642 W



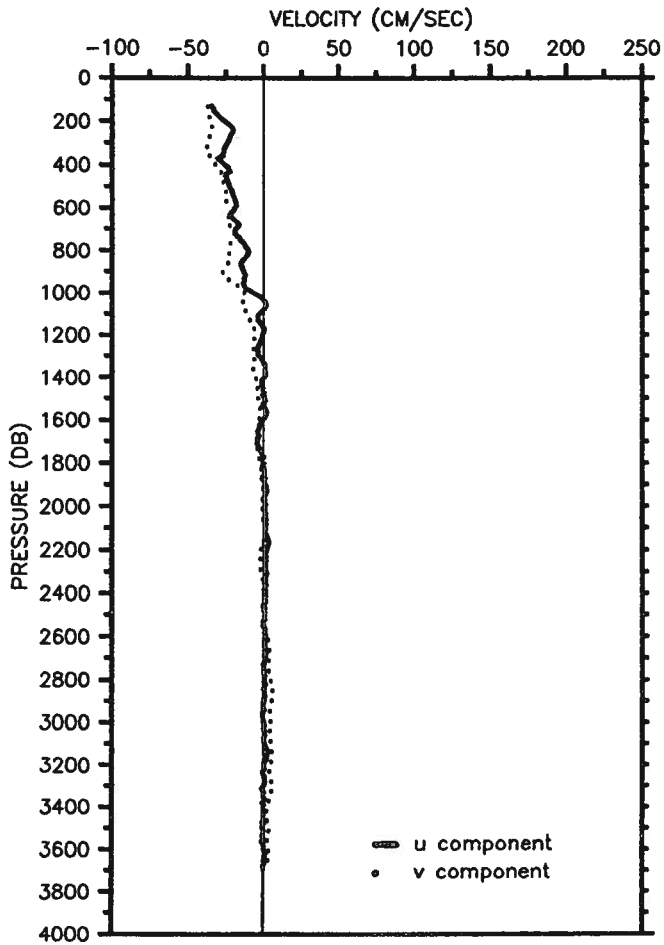
Prs	U	V
20	-34.8	-18.9
30	-30.2	-23.6
40	-29.3	-26.3
50	-30.3	-28.0
60	-29.9	-31.4
70	-27.6	-34.0
80	-26.2	-34.9
90	-27.2	-36.4
100	-21.2	-39.3
110	-12.6	-41.1
120	-6.9	-36.9
130	-5.6	-21.1
140	-6.7	-20.6
150	-5.8	-28.6
160	-2.5	-26.0
170	0.1	-14.7
180	2.9	-8.8
190	2.2	-9.8
200	1.0	-13.3
250	5.9	-10.0
300	14.6	-5.0
350	6.7	-7.2
400	2.4	-7.5
450	1.7	-3.2
500	-0.7	-2.1
550	1.0	1.0
600	2.5	2.8
650	0.1	-2.3
700	3.7	0.7
750	0.0	-0.5
800	1.3	-8.4
850	-0.1	-5.2
900	1.3	0.0
950	2.1	-0.5
1000	3.4	-5.0
1500	17.0	-24.2
1530	14.7	-27.0

ALB–STACS33–89 PEGASUS 4 STN 36
R/V ALBATROSS IV JDAY 72 TIME 0454 Z
Latitude 26.454 N Longitude 074.503 W



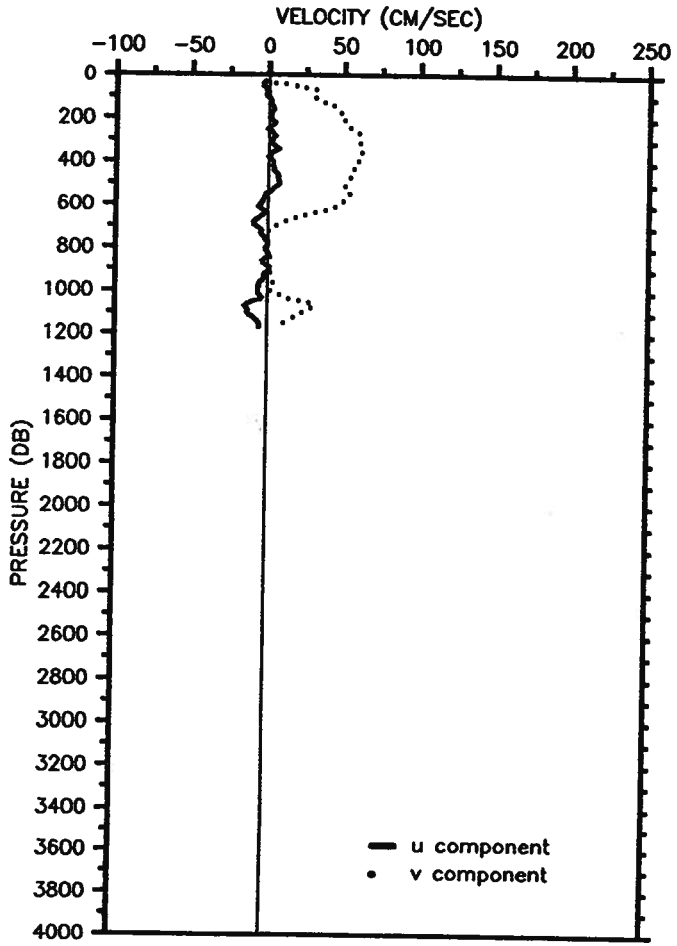
Prs	U	V
10	-6.5	-2.2
20	-6.1	-6.2
30	-0.8	-1.2
40	3.2	5.4
50	4.3	9.8
60	5.5	11.9
70	4.6	10.2
80	1.9	6.4
90	1.6	4.3
100	2.1	2.6
110	2.4	1.0
120	2.2	-0.5
130	1.0	-0.8
140	-0.1	-0.9
150	-1.3	-0.9
160	-2.2	-0.3
170	-3.1	0.5
180	-2.8	0.0
190	-4.2	0.9
200	-4.7	1.7
250	-1.8	1.9
300	-1.7	0.3
350	-3.5	-5.1
400	-4.9	-0.9
450	-6.8	0.3
500	-5.7	-1.2
550	-0.5	-0.6
600	-0.3	3.4
650	-0.4	-2.8
700	0.6	0.3
750	-1.9	-0.2
800	0.6	-2.6
850	2.7	-3.7
900	0.4	-2.5
950	-1.2	0.2
1000	-3.5	0.7
1500	-2.8	0.8
2000	-1.3	3.7
2500	0.4	8.5
3000	-0.1	3.8
3500	-2.3	3.2
3560	-1.8	6.5

ALB–STACS33–89 PEGASUS 5 STN 35
R/V ALBATROSS IV JDAY 72 TIME 1642 Z
Latitude 26.467 N Longitude 075.531 W



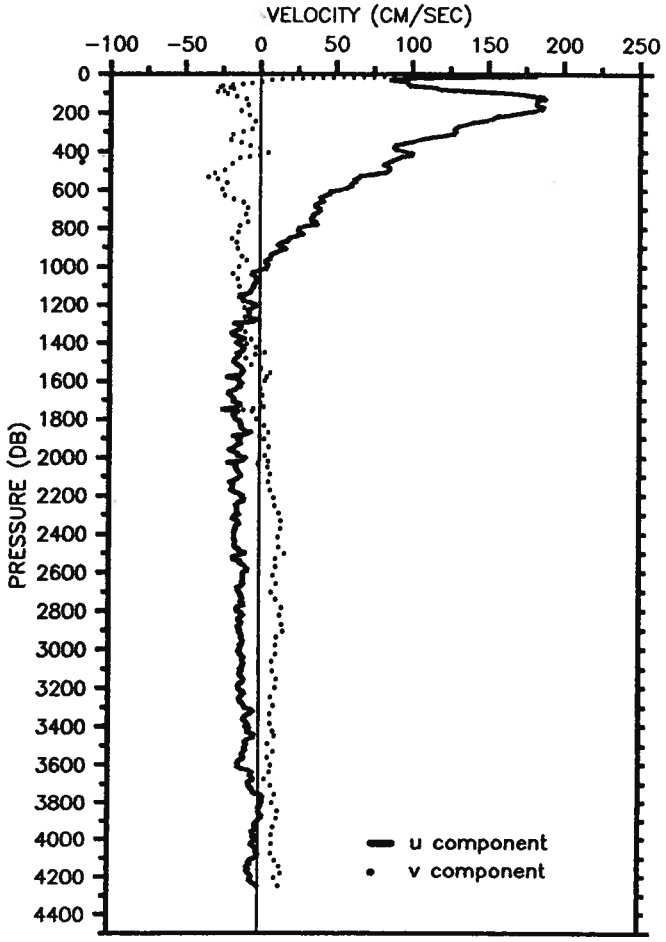
Prs	U	V
130	-34.5	-37.2
140	-33.5	-36.9
150	-32.9	-36.8
160	-31.8	-36.8
170	-30.5	-36.4
180	-29.1	-35.8
190	-27.6	-35.3
200	-26.0	-35.0
250	-20.9	-34.5
300	-24.1	-36.7
350	-27.2	-38.6
400	-25.3	-31.4
450	-25.1	-28.4
500	-23.0	-25.6
550	-19.8	-25.7
600	-19.0	-21.0
650	-20.4	-24.1
700	-18.7	-19.5
750	-15.2	-21.4
800	-10.2	-22.9
850	-14.6	-23.2
900	-13.2	-26.9
950	-13.2	-19.7
1000	-6.3	-12.3
1500	0.6	-3.9
2000	1.0	-1.0
2500	0.8	0.7
3000	0.2	4.7
3500	-0.2	3.8
3690	0.0	5.1

ALB–STACS33–89 PEGASUS 7 STN 19
R/V ALBATROSS IV JDAY 73 TIME 1126 Z
Latitude 26.531 N Longitude 076.821 W



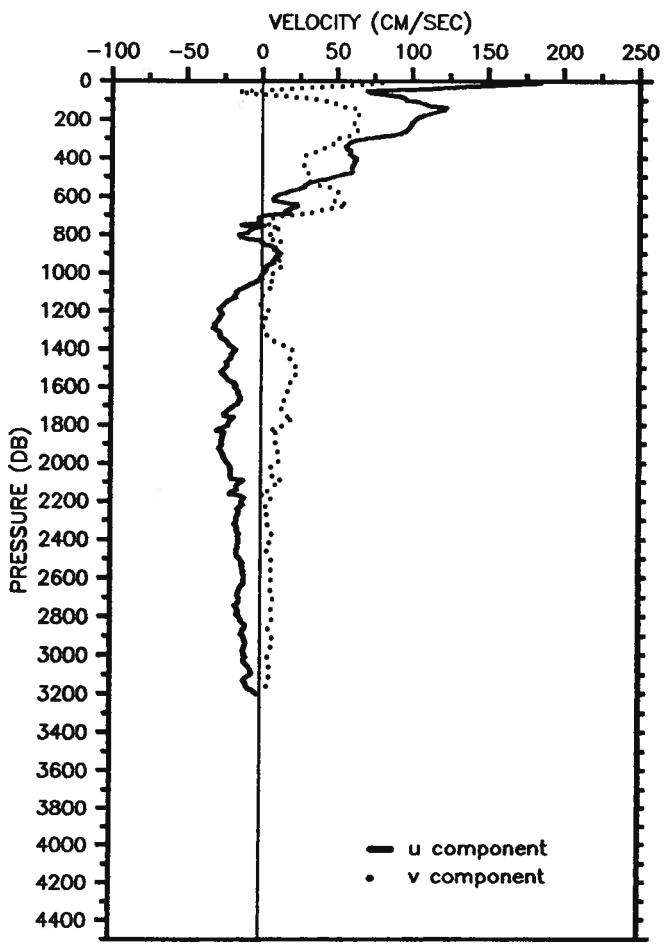
Prs	U	V
30	−2.5	−2.1
40	−3.6	10.9
50	−3.3	19.6
60	−2.1	27.1
70	−1.5	31.7
80	−1.2	32.6
90	−1.8	30.6
100	−1.0	30.8
110	0.7	31.8
120	1.2	34.6
130	0.9	39.2
140	1.1	43.9
150	3.0	45.2
160	3.3	46.0
170	2.3	47.5
180	1.3	50.1
190	1.5	50.9
200	1.1	50.2
250	−0.4	56.8
300	2.7	60.1
350	5.6	61.8
400	2.8	60.0
450	5.2	53.9
500	7.7	51.7
550	−1.1	54.1
600	−5.2	46.6
650	−4.1	21.6
700	−7.4	4.1
750	−2.2	−2.1
800	−1.1	−1.4
850	−1.8	0.7
900	1.0	1.6
950	−3.3	3.2
1000	−6.1	2.1
1170	−5.5	6.9

MB–STACS34–89 PEGASUS 1 STN 39
R/V BALDRIGE JDAY 253 TIME 0315
Latitude 07.518 N Longitude 049.958 W



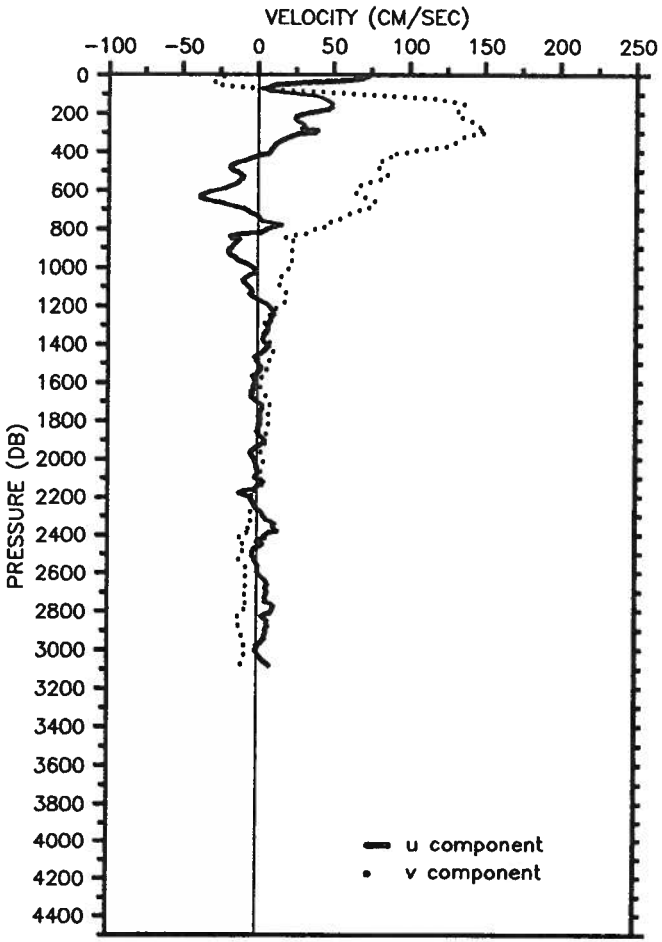
Prs	U	V
10	180.5	87.7
20	102.2	16.6
30	85.9	5.2
40	96.2	-3.0
50	97.0	-13.7
60	98.9	-29.8
70	115.5	-15.6
80	119.2	-21.9
90	137.5	-29.9
100	164.8	-21.3
110	175.6	-16.9
120	186.2	-11.4
130	187.2	-8.2
140	181.7	-6.7
150	182.0	-8.8
160	181.7	-8.2
170	186.2	-8.4
180	185.2	-12.4
190	180.4	-12.8
200	172.5	-10.7
250	139.9	-5.0
300	128.4	-13.8
350	100.7	-12.8
400	94.6	5.2
450	86.5	-18.2
500	85.1	-25.0
550	61.9	-25.6
600	52.6	-25.8
650	40.7	-14.3
700	39.3	-6.3
750	33.8	-9.9
800	25.9	-14.9
850	19.7	-18.8
900	14.9	-15.3
950	7.2	-8.8
1000	4.5	-14.5
1500	-17.2	-7.9
2000	-9.3	6.2
2500	-9.5	17.4
3000	-13.0	10.9
3500	-8.7	7.5
4000	-1.4	8.2
4250	-0.5	14.4

MB–STACS34–89 PEGASUS 2 STN 40
R/V BALDRIGE JDAY 253 TIME 1610
Latitude 07.102 N Longitude 050.327 W



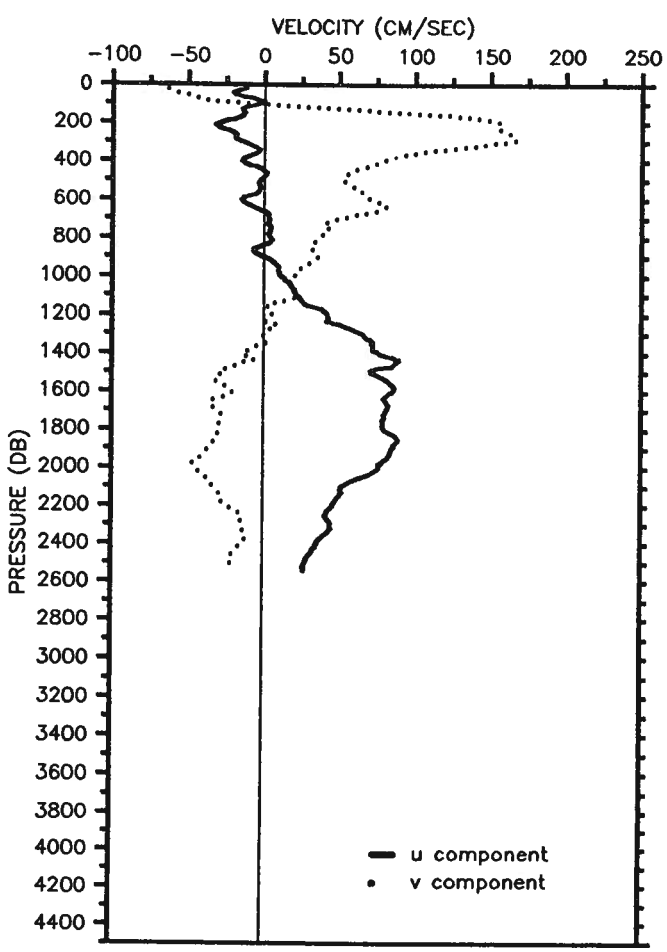
Prs	U	V
10	184.1	79.5
20	158.8	57.9
30	131.6	33.9
40	110.3	15.0
50	69.7	-16.0
60	73.0	-7.8
70	82.8	7.1
80	92.5	24.9
90	94.7	33.9
100	96.2	38.1
110	104.3	47.6
120	108.3	50.8
130	111.7	53.2
140	122.1	62.9
150	121.1	62.5
160	117.0	62.1
170	112.6	64.0
180	107.4	63.0
190	104.6	63.4
200	102.6	63.0
250	96.6	63.0
300	69.2	48.3
350	56.4	40.8
400	62.3	28.3
450	60.0	28.8
500	48.5	29.4
550	28.1	44.4
600	8.8	49.5
650	23.4	52.0
700	3.3	12.5
750	-13.3	0.0
800	-14.9	4.0
850	1.9	11.4
900	12.3	12.3
950	7.6	14.9
1000	1.1	7.6
1500	-24.0	23.5
2000	-21.6	9.9
2500	-13.8	7.0
3000	-10.6	5.3
3200	-2.0	6.5

MB-STACS34-89 PEGASUS 3 STN 41
R/V BALDRIGE JDAY 254 TIME 0053
Latitude 06.675 N Longitude 050.669 W



Prs	U	V
10	72.7	-22.8
20	68.7	-25.3
30	57.5	-27.2
40	31.0	-29.5
50	12.4	-24.1
60	8.6	-10.9
70	5.2	12.4
80	7.2	37.6
90	15.2	58.0
100	26.5	77.1
110	37.5	99.0
120	42.5	116.7
130	44.9	126.4
140	46.7	132.3
150	48.5	135.9
160	48.6	135.2
170	48.4	133.4
180	46.6	132.4
190	40.6	131.2
200	33.7	130.7
250	28.4	144.7
300	37.7	149.0
350	14.4	129.9
400	7.9	96.4
450	-9.1	80.2
500	-16.5	83.1
550	-12.0	75.6
600	-26.1	64.5
650	-34.4	76.3
700	-9.0	68.2
750	1.2	51.5
800	6.9	35.7
850	-17.1	19.2
900	-17.0	22.9
950	-15.0	23.4
1000	-3.2	21.0
1500	0.3	7.1
2000	-2.1	4.2
2500	-2.9	-11.2
3000	-0.2	-7.0
3080	8.6	-10.9

MB-STACS34-89 PEGASUS 4 STN 42
R/V BALDRIGE JDAY 254 TIME 1038
Latitude 06.222 N Longitude 051.048 W

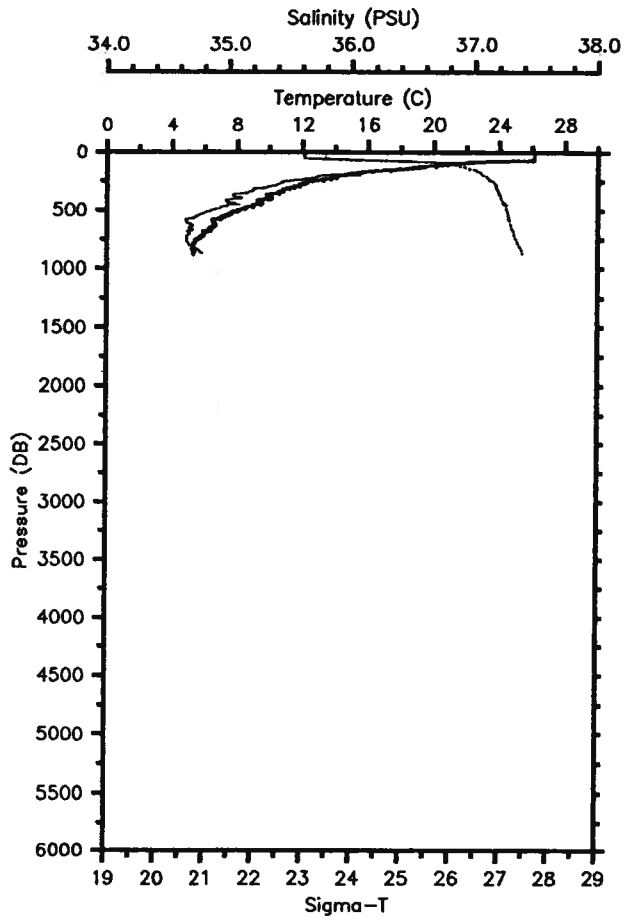


Prs	U	V
20	-12.3	-63.6
30	-16.6	-60.4
40	-20.4	-56.6
50	-19.3	-51.1
60	-14.5	-46.6
70	-7.6	-43.2
80	-3.7	-36.4
90	-0.2	-22.0
100	-1.0	-6.1
110	-6.6	13.6
120	-12.1	39.5
130	-14.5	62.2
140	-14.1	83.6
150	-13.4	104.8
160	-14.2	126.2
170	-15.8	140.7
180	-19.3	148.8
190	-25.1	154.3
200	-28.8	156.7
250	-20.5	162.7
300	-14.2	156.9
350	-3.5	104.7
400	-14.4	77.3
450	0.1	57.3
500	-2.5	53.1
550	-3.1	63.2
600	-14.7	72.6
650	-3.2	77.2
700	3.4	49.1
750	4.3	43.1
800	4.3	35.7
850	-4.3	31.7
900	0.1	35.5
950	9.7	25.3
1000	11.8	19.8
1500	71.6	-29.2
2000	76.0	-45.4
2500	28.0	-21.6
2540	27.1	-25.1

APPENDIX B: CTD DATA

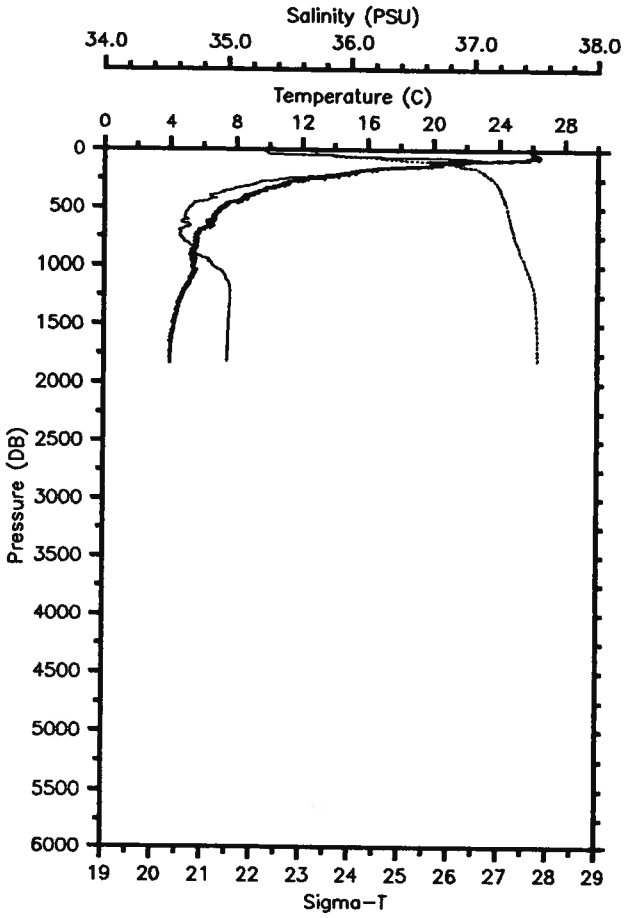
Casts are presented by cruise and increasing cast number. Julian day and time, cruise number and vessel, and position are given at the top of each plot. Temperature, salinity and sigma-t profiles are shown for each cast.

ALB–STACS33–89 CTD 1 ALBATROSS IV
Date 02 14 89 Latitude 11.322 N
Time 1243 Z Longitude 60.298 W



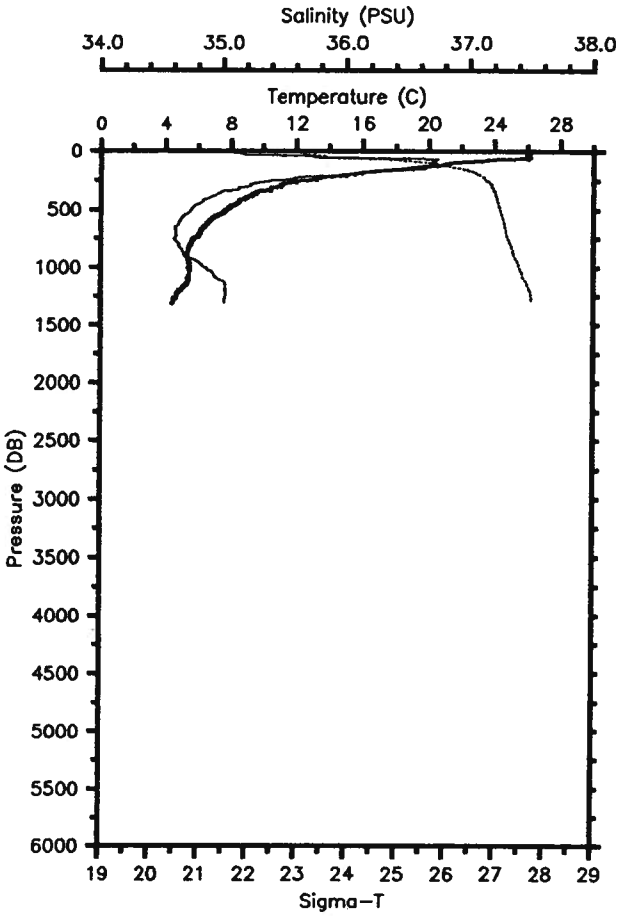
Prs	Tem	Sal	SigT
0	26.12	35.616	23.46
10	26.12	35.611	23.46
20	26.12	35.612	23.46
30	26.12	35.612	23.46
40	26.13	35.612	23.46
50	26.13	35.612	23.46
60	26.08	35.973	23.75
70	25.82	36.176	23.98
80	22.86	36.415	25.05
90	22.09	36.849	25.60
100	21.23	36.855	25.84
110	20.18	36.796	26.09
120	19.56	36.689	26.17
130	18.82	36.605	26.30
140	18.39	36.565	26.37
150	17.55	36.418	26.47
160	16.71	36.212	26.51
170	15.86	36.052	26.59
180	15.56	35.994	26.61
190	15.26	35.932	26.63
200	14.56	35.796	26.68
250	12.52	35.443	26.83
300	11.50	35.319	26.93
350	10.55	35.155	26.98
400	9.92	35.070	27.02
450	9.11	35.084	27.17
500	8.04	34.855	27.15
550	7.24	34.739	27.18
600	6.55	34.651	27.21
650	6.35	34.670	27.25
700	5.98	34.676	27.30
750	5.48	34.653	27.34
800	5.31	34.673	27.38
850	5.29	34.762	27.45
870	5.33	34.781	27.46

ALB–STACS33–89 CTD 2 ALBATROSS IV
Date 02 14 89 Latitude 11.705 N
Time 1745 Z Longitude 60.102 W



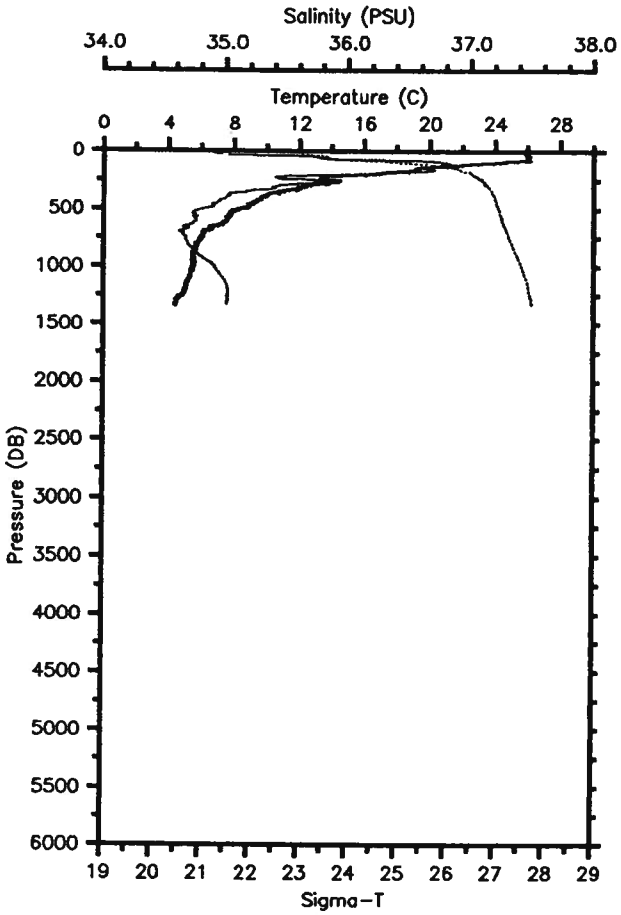
Prs	Tem	Sal	SigT
0	26.10	35.327	23.25
10	26.12	35.311	23.23
20	26.02	35.310	23.26
30	25.98	35.321	23.28
40	26.03	35.415	23.34
50	26.30	35.931	23.64
60	26.34	36.044	23.72
70	25.82	36.852	24.49
80	25.45	37.065	24.76
90	23.86	36.805	25.05
100	21.92	36.739	25.56
110	21.40	36.817	25.77
120	20.16	36.646	25.98
130	19.88	36.730	26.11
140	19.28	36.658	26.22
150	17.87	36.408	26.38
160	16.84	36.236	26.55
170	16.28	36.164	26.58
180	15.58	36.049	26.65
190	15.28	35.991	26.68
200	14.85	35.909	26.71
250	12.22	35.415	26.87
300	10.88	35.210	26.96
350	9.66	35.014	27.02
400	8.58	34.852	27.07
450	8.06	34.800	27.11
500	7.15	34.689	27.15
550	6.74	34.652	27.18
600	6.61	34.662	27.21
650	6.51	34.690	27.24
700	5.77	34.610	27.27
750	5.58	34.618	27.30
800	5.51	34.660	27.35
850	5.52	34.722	27.39
900	5.31	34.738	27.43
950	5.46	34.845	27.50
1000	5.36	34.871	27.53
1500	4.24	35.005	27.77
1818	3.99	34.995	27.78

ALB-STACS33-89 CTD 3 ALBATROSS IV
Date 02 14 89 Latitude 12.118 N
Time 2218 Z Longitude 59.922 W



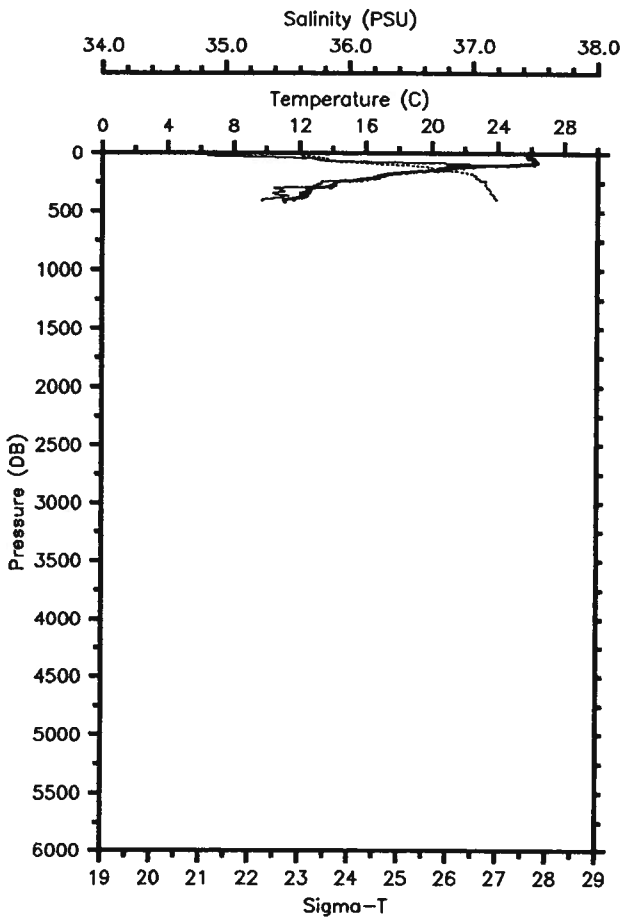
Prs	Tem	Sal	SigT
0	26.06	35.077	23.07
10	26.06	35.076	23.07
20	26.04	35.144	23.13
30	25.94	35.188	23.19
40	26.06	35.701	23.54
50	26.04	35.756	23.59
60	25.91	36.347	24.08
70	24.00	36.689	24.92
80	23.31	36.688	25.13
90	22.21	36.709	25.46
100	21.35	36.710	25.70
110	21.03	36.699	25.78
120	20.58	36.741	25.94
130	19.65	36.626	26.10
140	19.01	36.556	26.21
150	18.69	36.637	26.35
160	17.72	36.450	26.45
170	16.80	36.264	26.53
180	16.05	36.127	26.60
190	15.63	36.050	26.64
200	15.09	35.953	26.69
250	12.60	35.462	26.83
300	11.08	35.231	26.94
350	9.57	34.987	27.01
400	8.91	34.888	27.04
450	8.32	34.810	27.08
500	7.73	34.748	27.12
550	7.17	34.690	27.15
600	6.68	34.653	27.19
650	6.30	34.607	27.20
700	6.11	34.617	27.24
750	5.73	34.603	27.27
800	5.55	34.649	27.33
850	5.39	34.670	27.37
900	5.31	34.687	27.39
950	5.45	34.798	27.46
1000	5.46	34.862	27.51
1308	4.44	35.013	27.75

ALB-STACS33-89 CTD 4 ALBATROSS IV
Date 02 15 89 Latitude 12.570 N
Time 0200 Z Longitude 59.755 W



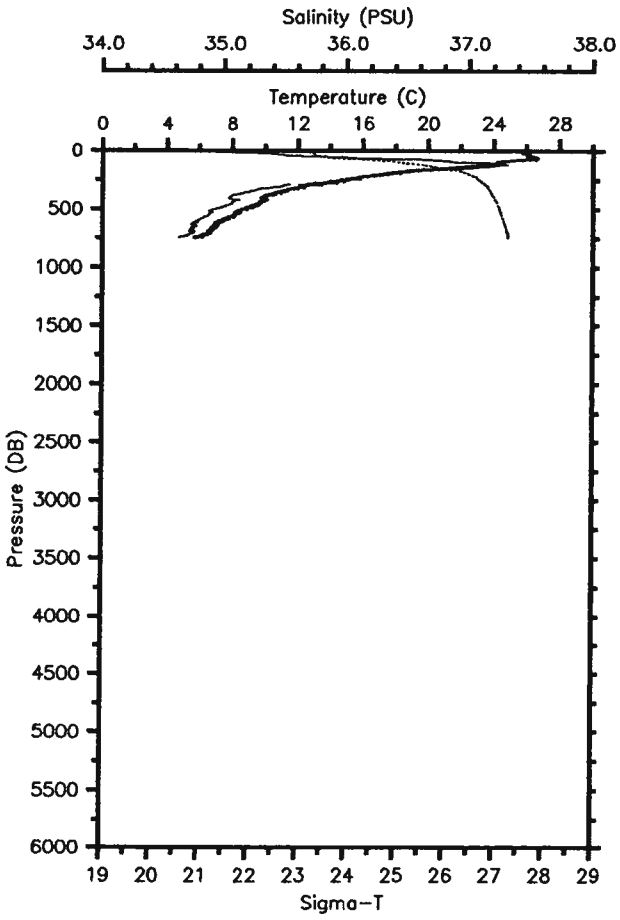
Prs	Tem	Sal	SigT
0	25.92	34.898	22.98
10	25.92	34.897	22.98
20	25.94	34.910	22.99
30	25.92	35.015	23.07
40	26.03	35.578	23.46
50	26.08	35.752	23.58
60	26.06	35.790	23.61
70	26.09	35.961	23.73
80	25.42	36.666	24.47
90	24.50	36.743	24.81
100	23.88	36.819	25.11
110	22.15	36.781	25.53
120	21.77	36.869	25.70
130	20.42	36.688	25.94
140	19.45	36.612	26.14
150	19.25	36.671	26.24
160	19.13	36.709	26.30
170	18.76	36.647	26.34
180	17.41	36.400	26.49
190	16.84	36.252	26.51
200	15.99	36.021	26.54
250	14.44	35.851	26.75
300	12.36	35.433	26.86
350	10.74	35.161	26.95
400	9.67	34.999	27.01
450	9.15	34.923	27.03
500	8.27	34.809	27.08
550	7.74	34.740	27.11
600	7.55	34.757	27.15
650	6.68	34.667	27.20
700	6.07	34.628	27.25
750	6.00	34.672	27.29
800	5.70	34.684	27.34
850	5.64	34.736	27.39
900	5.50	34.777	27.44
950	5.45	34.843	27.50
1000	5.50	34.907	27.54
1332	4.42	35.010	27.75

ALB–STACS33–89 CTD 5 ALBATROSS IV
Date 02 15 89 Latitude 12.898 N
Time 0534 Z Longitude 59.495 W



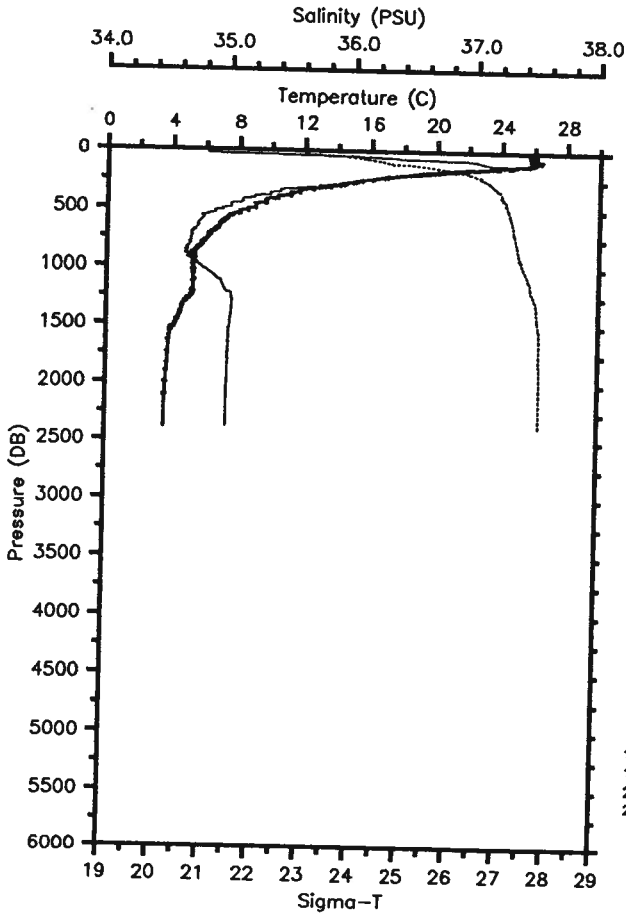
Prs	Tem	Sal	SigT
0	25.75	34.857	23.01
10	25.76	34.852	23.00
20	25.76	34.852	23.00
30	25.88	35.215	23.23
40	26.00	35.533	23.44
50	26.09	35.726	23.55
60	26.15	35.781	23.58
70	26.26	35.907	23.64
80	26.08	36.533	24.17
90	26.14	36.970	24.48
100	25.19	36.974	24.78
110	22.84	36.776	25.33
120	21.94	36.787	25.60
130	21.00	36.723	25.81
140	20.90	36.708	25.82
150	20.33	36.746	26.01
160	19.06	36.573	26.21
170	18.13	36.489	26.38
180	17.39	36.388	26.49
190	17.00	36.317	26.53
200	16.77	36.288	26.56
250	14.17	35.770	26.75
300	12.80	35.471	26.80
350	12.08	35.396	26.88
400	11.22	35.307	26.97
412	11.09	35.295	26.99

ALB–STACS33–89 CTD 6 ALBATROSS IV
Date 02 15 89 Latitude 13.203 N
Time 0919 Z Longitude 59.115 W



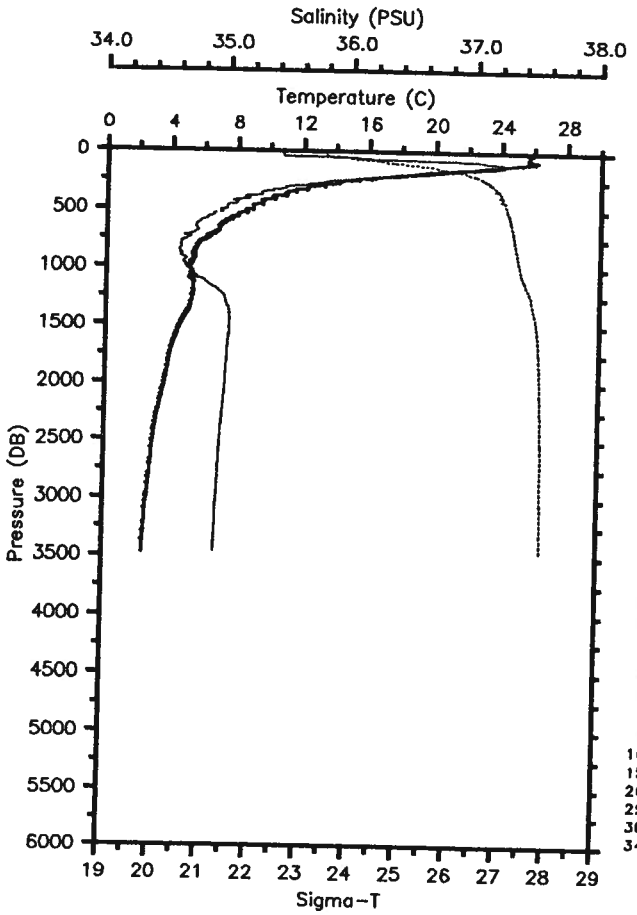
Prs	Tem	Sal	SigT
0	25.74	35.036	23.14
10	25.76	35.056	23.15
20	25.98	35.344	23.30
30	26.07	35.457	23.36
40	26.11	35.500	23.38
50	26.27	35.768	23.53
60	26.59	36.061	23.65
70	26.28	36.400	24.00
80	25.26	36.721	24.56
90	24.53	36.852	24.89
100	24.47	37.150	25.13
110	24.21	37.291	25.32
120	23.41	37.298	25.56
130	22.79	37.237	25.69
140	21.73	37.079	25.88
150	20.91	36.986	26.03
160	20.24	36.776	26.05
170	18.85	36.564	26.26
180	18.28	36.522	26.37
190	17.62	36.419	26.46
200	17.25	36.360	26.50
250	14.84	35.935	26.73
300	12.42	35.484	26.88
350	11.01	35.211	26.94
400	9.90	35.046	27.00
450	9.64	35.067	27.07
500	8.69	34.924	27.11
550	8.14	34.874	27.15
600	7.35	34.786	27.20
650	6.87	34.736	27.23
700	6.61	34.755	27.28
744	5.71	34.629	27.30

ALB–STACS33–89 CTD 7 ALBATROSS IV
Date 02 15 89 Latitude 13.533 N
Time 1320 Z Longitude 58.702 W



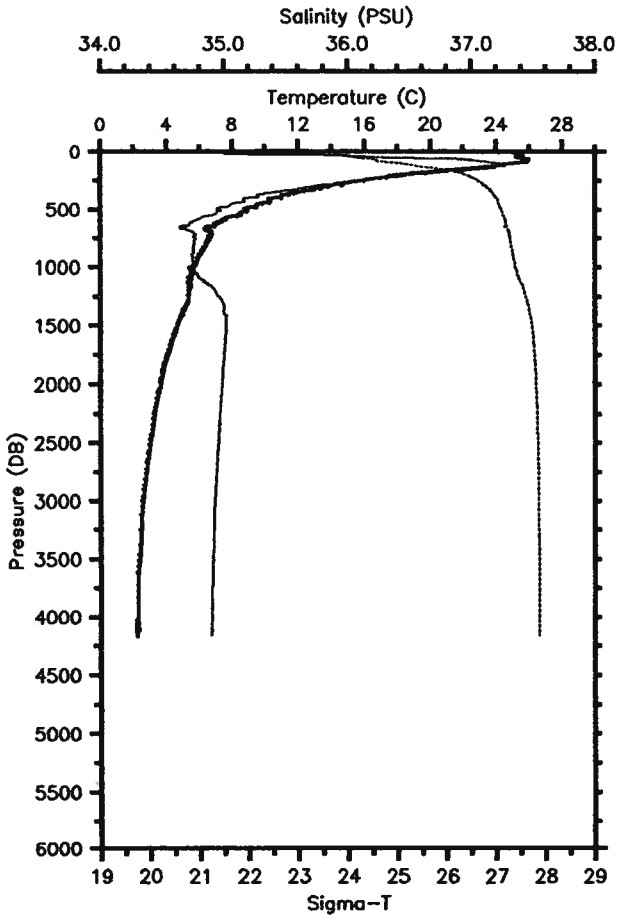
Prs	Tem	Sal	SigT
0	25.67	34.796	22.98
10	25.67	34.809	22.99
20	25.66	34.810	23.00
30	25.75	34.987	23.10
40	26.06	35.669	23.52
50	25.97	36.132	23.90
60	25.76	36.331	24.11
70	26.19	36.705	24.26
80	26.28	36.994	24.45
90	25.95	37.020	24.58
100	25.81	37.072	24.66
110	25.33	37.169	24.88
120	24.18	37.299	25.33
130	23.71	37.300	25.47
140	22.59	37.174	25.70
150	21.37	37.057	25.96
160	20.48	36.920	26.10
170	19.91	36.830	26.18
180	19.13	36.712	26.30
190	18.58	36.614	26.37
200	17.95	36.507	26.44
250	15.40	36.041	26.69
300	13.53	35.713	26.84
350	11.69	35.401	26.96
400	10.39	35.194	27.04
450	9.65	35.071	27.07
500	8.55	34.934	27.14
550	7.72	34.820	27.17
600	7.14	34.758	27.21
650	6.82	34.739	27.24
700	6.37	34.686	27.26
750	6.11	34.683	27.29
800	5.83	34.683	27.32
850	5.46	34.646	27.34
900	5.27	34.665	27.38
950	5.35	34.721	27.41
1000	5.27	34.769	27.46
1500	4.19	35.001	27.77
2000	3.68	34.984	27.81
2374	3.60	34.980	27.81

ALB–STACS33–89 CTD 8 ALBATROSS IV
Date 02 15 89 Latitude 13.850 N
Time 1756 Z Longitude 58.298 W



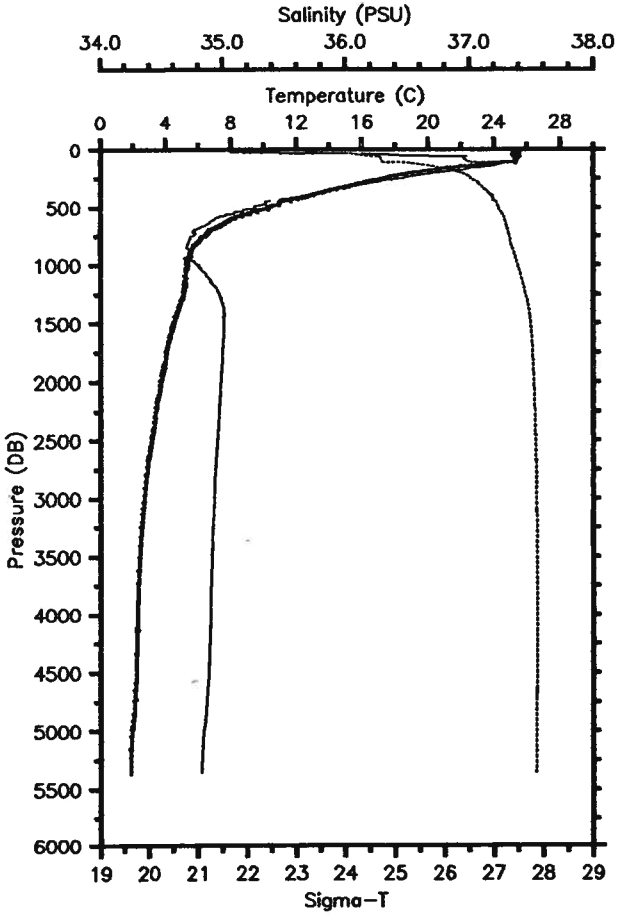
Prs	Tem	Sal	SigT
0	25.85	35.459	23.43
10	25.83	35.428	23.41
20	25.68	35.429	23.46
30	25.67	35.432	23.46
40	25.67	35.435	23.47
50	25.61	36.024	23.93
60	25.59	36.102	24.00
70	25.98	36.606	24.25
80	26.06	37.012	24.54
90	25.76	37.075	24.68
100	25.17	37.183	24.94
110	24.38	37.228	25.22
120	23.80	37.191	25.36
130	23.01	37.214	25.61
140	22.42	37.166	25.75
150	21.42	37.021	25.92
160	20.74	36.887	26.00
170	19.97	36.804	26.15
180	19.37	36.737	26.26
190	18.76	36.624	26.33
200	18.15	36.540	26.42
250	14.82	35.869	26.68
300	12.74	35.512	26.84
350	11.18	35.285	26.96
400	10.24	35.157	27.03
450	9.56	35.062	27.08
500	8.94	34.975	27.11
550	8.10	34.872	27.16
600	7.35	34.766	27.18
650	6.92	34.725	27.21
700	6.70	34.721	27.24
750	6.16	34.661	27.27
800	5.80	34.604	27.29
850	5.38	34.594	27.31
900	5.28	34.608	27.33
950	5.22	34.630	27.36
1000	5.10	34.652	27.39
1500	4.54	35.010	27.74
2000	3.62	34.981	27.81
2500	2.98	34.949	27.85
3000	2.65	34.928	27.86
3458	2.43	34.914	27.87

ALB-STACS33-89 CTD 9 ALBATROSS IV
Date 02 15 89 Latitude 14.232 N
Time 2309 Z Longitude 57.925 W



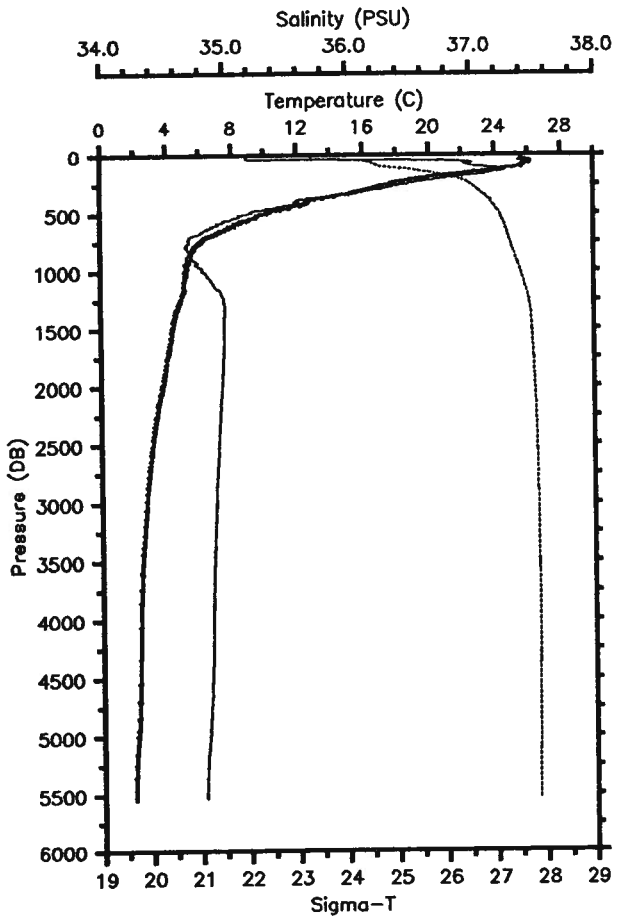
Prs	Tem	Sal	SigT
0	25.29	34.999	23.25
10	25.30	34.996	23.25
20	25.28	35.014	23.27
30	25.43	35.873	23.87
40	25.29	36.008	24.02
50	25.57	36.292	24.14
60	25.89	36.768	24.40
70	25.93	36.982	24.55
80	25.90	37.059	24.62
90	25.62	37.123	24.76
100	24.94	37.235	25.05
110	24.42	37.232	25.21
120	23.97	37.246	25.35
130	23.43	37.199	25.48
140	22.57	37.136	25.68
150	21.78	37.103	25.88
160	20.98	36.999	26.02
170	20.16	36.869	26.15
180	19.53	36.768	26.24
190	18.89	36.665	26.32
200	18.19	36.499	26.37
250	15.86	36.105	26.63
300	13.81	35.733	26.79
350	11.94	35.431	26.94
400	10.48	35.176	27.01
450	9.67	35.064	27.06
500	8.83	34.947	27.10
550	8.37	34.906	27.14
600	7.32	34.750	27.18
650	6.47	34.651	27.22
700	6.72	34.760	27.27
750	6.65	34.770	27.29
800	6.45	34.757	27.30
850	6.26	34.758	27.33
900	6.00	34.745	27.35
950	5.83	34.749	27.38
1000	5.51	34.719	27.39
1500	4.67	35.017	27.73
2000	3.66	34.985	27.81
2500	3.04	34.954	27.85
3000	2.59	34.923	27.86
3500	2.38	34.909	27.87
4000	2.26	34.900	27.87
4156	2.25	34.895	27.87

ALB-STACS33-89 CTD 10 ALBATROSS IV
Date 02 16 89 Latitude 14.523 N
Time 0432 Z Longitude 57.510 W



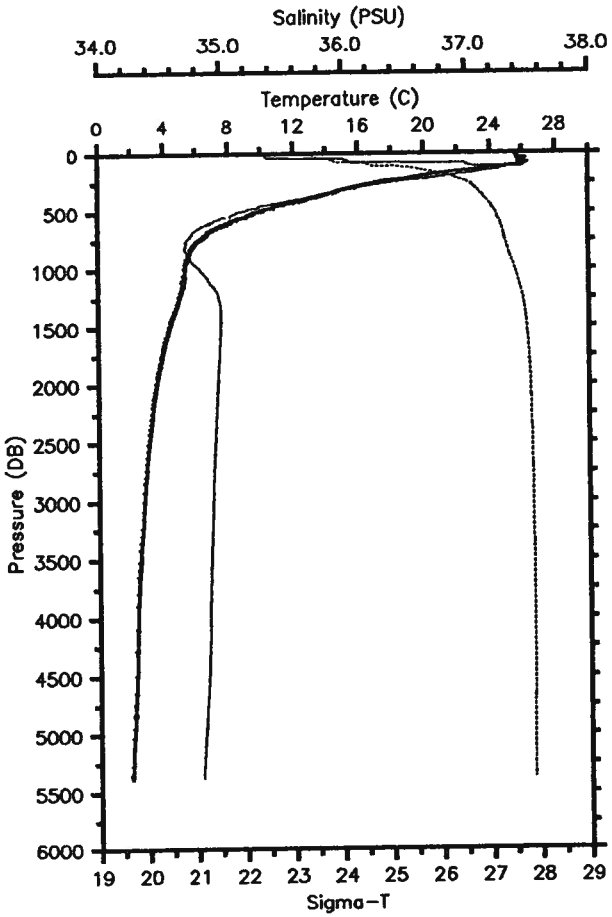
Prs	Tem	Sal	SigT
0	25.53	35.053	23.22
10	25.54	35.056	23.22
20	25.56	35.072	23.23
30	25.46	35.600	23.66
40	25.17	36.211	24.21
50	25.17	36.411	24.36
60	25.54	36.970	24.67
70	25.37	36.958	24.71
80	25.35	36.962	24.72
90	25.36	36.976	24.73
100	25.34	36.980	24.74
110	24.92	37.127	24.98
120	24.01	37.272	25.36
130	23.40	37.246	25.52
140	22.70	37.185	25.68
150	21.90	37.132	25.87
160	21.09	37.017	26.01
170	20.61	36.978	26.11
180	20.24	36.917	26.16
190	19.60	36.807	26.25
200	19.02	36.721	26.33
250	17.33	36.431	26.53
300	15.69	36.157	26.71
350	14.10	35.873	26.84
400	12.68	35.647	26.96
450	11.02	35.359	27.05
500	10.33	35.265	27.10
550	9.20	35.096	27.16
600	8.01	34.934	27.22
650	7.44	34.864	27.25
700	6.66	34.772	27.29
750	6.29	34.742	27.31
800	5.97	34.723	27.34
850	5.67	34.719	27.37
900	5.55	34.746	27.41
950	5.29	34.743	27.44
1000	5.36	34.804	27.48
1500	4.53	35.010	27.74
2000	3.72	34.988	27.81
2500	3.17	34.960	27.84
3000	2.72	34.934	27.86
3500	2.42	34.914	27.87
4000	2.30	34.902	27.87
4500	2.22	34.888	27.86
5000	1.95	34.847	27.85
5354	1.86	34.832	27.85

ALB-STACS33-89 CTD 11 ALBATROSS IV
Date 02 16 89 Latitude 14.507 N
Time 1205 Z Longitude 57.010 W



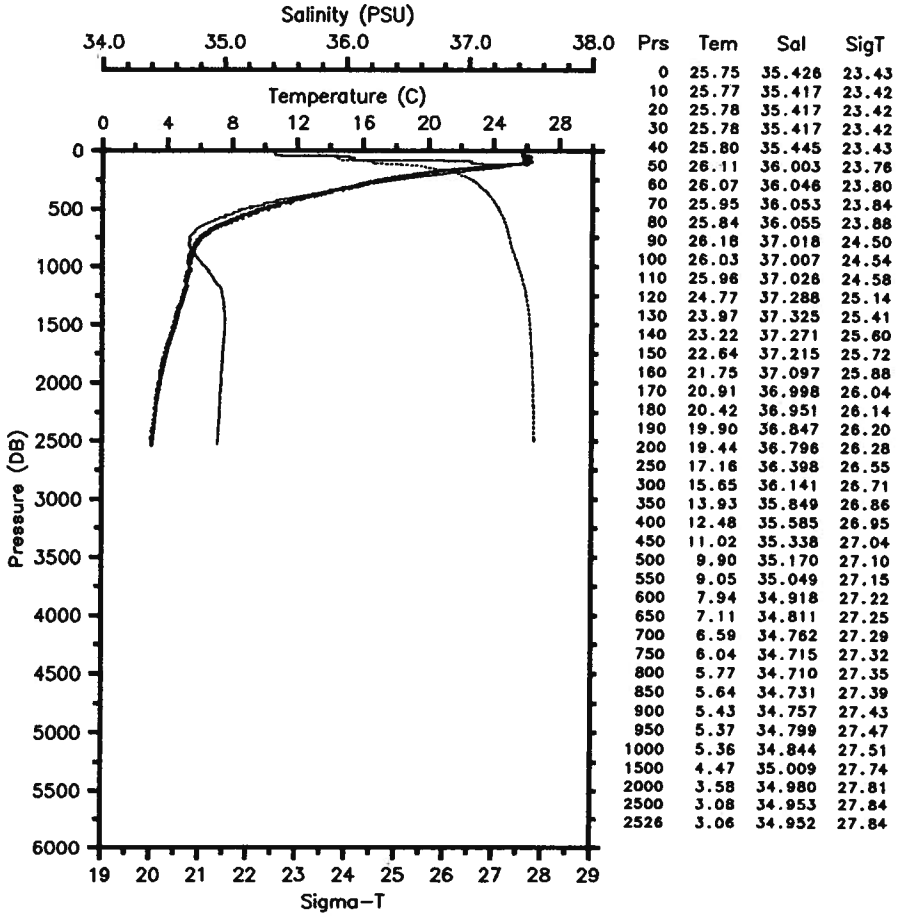
Prs	Tem	Sal	SigT
0	25.60	35.191	23.30
10	25.60	35.190	23.30
20	25.61	35.191	23.30
30	25.61	35.194	23.30
40	25.69	35.768	23.71
50	25.96	36.662	24.30
60	26.16	37.013	24.51
70	25.90	36.952	24.54
80	25.77	36.981	24.60
90	25.69	37.011	24.65
100	25.63	37.051	24.70
110	24.96	37.227	25.04
120	24.50	37.267	25.21
130	23.93	37.266	25.38
140	23.36	37.257	25.54
150	22.61	37.194	25.71
160	22.06	37.120	25.82
170	21.22	37.056	26.00
180	20.64	36.957	26.09
190	20.01	36.881	26.20
200	19.45	36.785	26.27
250	17.53	36.475	26.52
300	16.08	36.224	26.67
350	14.32	35.924	26.83
400	12.65	35.598	26.93
450	11.58	35.440	27.01
500	10.10	35.215	27.10
550	9.10	35.069	27.16
600	8.25	34.959	27.20
650	7.33	34.842	27.25
700	6.50	34.739	27.28
750	6.08	34.719	27.32
800	5.71	34.708	27.36
850	5.53	34.737	27.40
900	5.36	34.758	27.44
950	5.26	34.792	27.48
1000	5.18	34.828	27.52
1500	4.39	35.006	27.75
2000	3.78	34.989	27.80
2500	3.14	34.958	27.84
3000	2.74	34.933	27.85
3500	2.45	34.914	27.87
4000	2.31	34.901	27.87
4500	2.22	34.888	27.86
5000	2.06	34.860	27.86
5500	1.87	34.829	27.84
5532	1.87	34.830	27.85

ALB-STACS33-89 CTD 12 ALBATROSS IV
Date 02 16 89 Latitude 14.520 N
Time 1924 Z Longitude 56.552 W



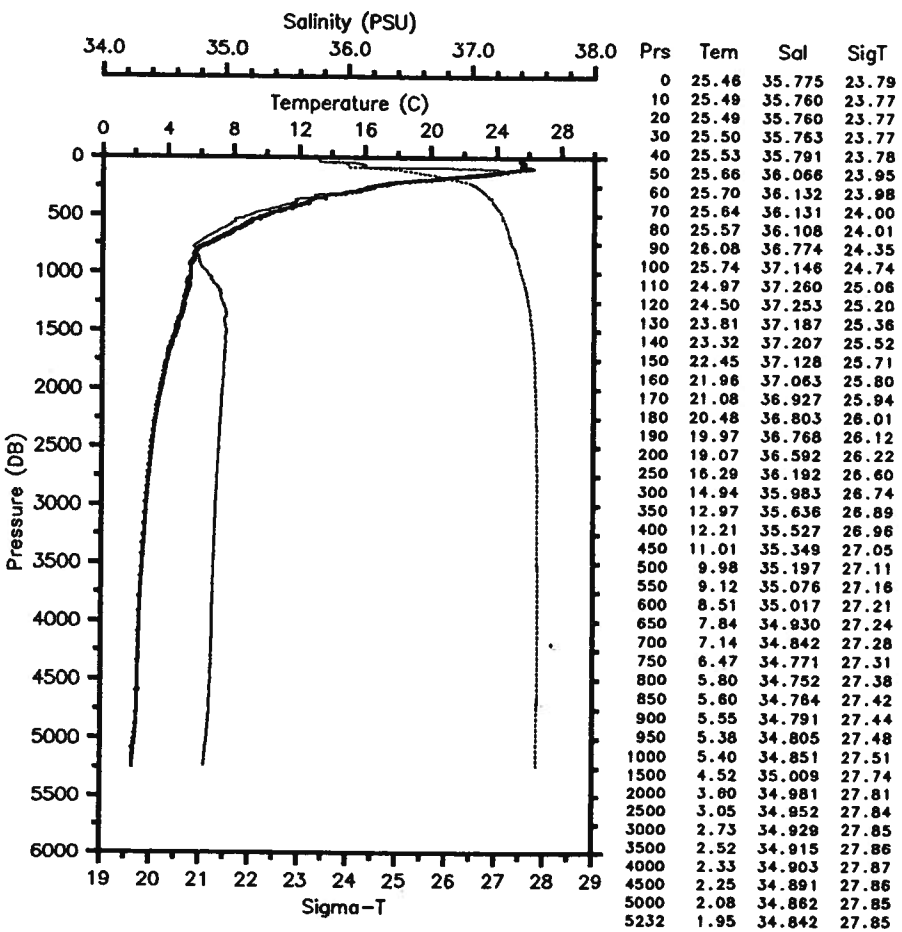
Prs	Tem	Sal	SigT
0	25.69	35.382	23.42
10	25.70	35.376	23.41
20	25.70	35.376	23.41
30	25.69	35.381	23.42
40	25.73	35.445	23.45
50	26.09	36.017	23.78
60	26.00	36.054	23.83
70	25.85	36.036	23.86
80	26.22	36.946	24.44
90	26.08	37.009	24.53
100	25.98	37.019	24.57
110	25.66	37.123	24.75
120	24.35	37.311	25.29
130	23.74	37.312	25.47
140	23.19	37.280	25.61
150	22.57	37.212	25.74
160	21.79	37.113	25.88
170	21.28	37.059	25.99
180	20.74	36.953	26.05
190	20.26	36.921	26.16
200	19.84	36.823	26.25
250	17.09	36.398	26.57
300	15.43	36.099	26.72
350	13.97	35.835	26.84
400	12.58	35.598	26.94
450	10.87	35.318	27.05
500	9.68	35.140	27.12
550	8.83	35.013	27.16
600	7.95	34.922	27.22
650	7.06	34.808	27.26
700	6.62	34.764	27.28
750	6.13	34.721	27.32
800	5.84	34.716	27.35
850	5.67	34.732	27.38
900	5.48	34.756	27.43
950	5.37	34.790	27.46
1000	5.35	34.835	27.50
1500	4.38	35.005	27.75
2000	3.56	34.981	27.82
2500	3.09	34.956	27.84
3000	2.77	34.935	27.85
3500	2.51	34.917	27.86
4000	2.33	34.902	27.87
4500	2.23	34.889	27.86
5000	2.06	34.860	27.85
5374	1.92	34.839	27.85

ALB-STACS33-89 CTD 13 ALBATROSS IV
Date 02 16 89 Latitude 14.535 N
Time 2327 Z Longitude 56.560 W



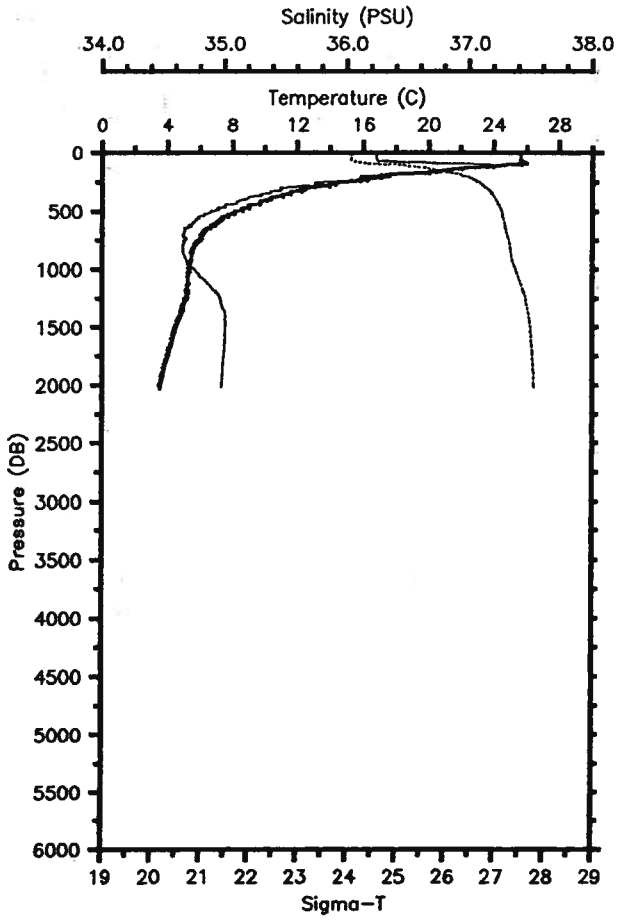
Prs	Tem	Sal	SigT
0	25.75	35.426	23.43
10	25.77	35.417	23.42
20	25.78	35.417	23.42
30	25.78	35.417	23.42
40	25.80	35.445	23.43
50	26.11	36.003	23.76
60	26.07	36.046	23.80
70	25.95	36.053	23.84
80	25.84	36.055	23.88
90	26.18	37.018	24.50
100	26.03	37.007	24.54
110	25.96	37.028	24.58
120	24.77	37.288	25.14
130	23.97	37.325	25.41
140	23.22	37.271	25.60
150	22.64	37.215	25.72
160	21.75	37.097	25.88
170	20.91	36.998	26.04
180	20.42	36.951	26.14
190	19.90	36.847	26.20
200	19.44	36.796	26.28
250	17.16	36.398	26.55
300	15.65	36.141	26.71
350	13.93	35.849	26.86
400	12.48	35.585	26.95
450	11.02	35.338	27.04
500	9.90	35.170	27.10
550	9.05	35.049	27.15
600	7.94	34.918	27.22
650	7.11	34.811	27.25
700	6.59	34.762	27.29
750	6.04	34.715	27.32
800	5.77	34.710	27.35
850	5.64	34.731	27.39
900	5.43	34.757	27.43
950	5.37	34.799	27.47
1000	5.36	34.844	27.51
1500	4.47	35.009	27.74
2000	3.58	34.980	27.81
2500	3.08	34.953	27.84
2526	3.06	34.952	27.84

ALB-STACS33-89 CTD 14 ALBATROSS IV
Date 02 17 89 Latitude 14.510 N
Time 0506 Z Longitude 56.025 W



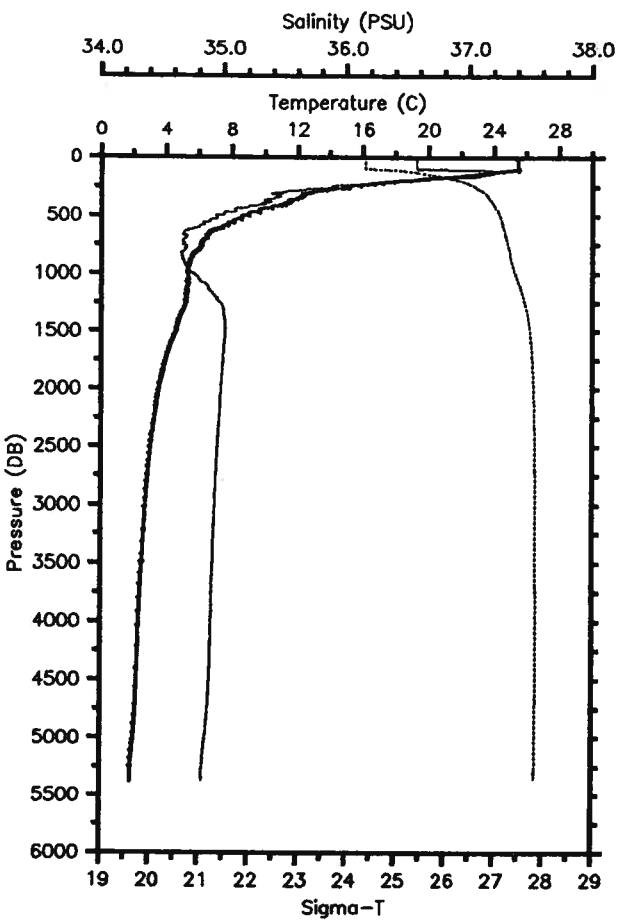
Prs	Tem	Sal	SigT
0	25.46	35.775	23.79
10	25.49	35.760	23.77
20	25.49	35.760	23.77
30	25.50	35.763	23.77
40	25.53	35.791	23.78
50	25.66	36.066	23.95
60	25.70	36.132	23.98
70	25.64	36.131	24.00
80	25.57	36.108	24.01
90	26.08	36.774	24.35
100	25.74	37.146	24.74
110	24.97	37.260	25.06
120	24.50	37.253	25.20
130	23.81	37.187	25.36
140	23.32	37.207	25.52
150	22.45	37.128	25.71
160	21.96	37.063	25.80
170	21.08	36.927	25.94
180	20.48	36.803	26.01
190	19.97	36.768	26.12
200	19.07	36.592	26.22
250	16.29	36.192	26.60
300	14.94	35.983	26.74
350	12.97	35.636	26.89
400	12.21	35.527	26.96
450	11.01	35.349	27.05
500	9.98	35.197	27.11
550	9.12	35.076	27.16
600	8.51	35.017	27.21
650	7.84	34.930	27.24
700	7.14	34.842	27.28
750	6.47	34.771	27.31
800	5.80	34.752	27.38
850	5.60	34.764	27.42
900	5.55	34.791	27.44
950	5.38	34.805	27.48
1000	5.40	34.851	27.51
1500	4.52	35.009	27.74
2000	3.60	34.981	27.81
2500	3.05	34.952	27.84
3000	2.73	34.929	27.85
3500	2.52	34.915	27.86
4000	2.33	34.903	27.87
4500	2.25	34.891	27.86
5000	2.08	34.862	27.85
5232	1.95	34.842	27.85

ALB–STACS33–89 CTD 15 ALBATROSS IV
Date 02 17 89 Latitude 14.512 N
Time 1607 Z Longitude 55.303 W



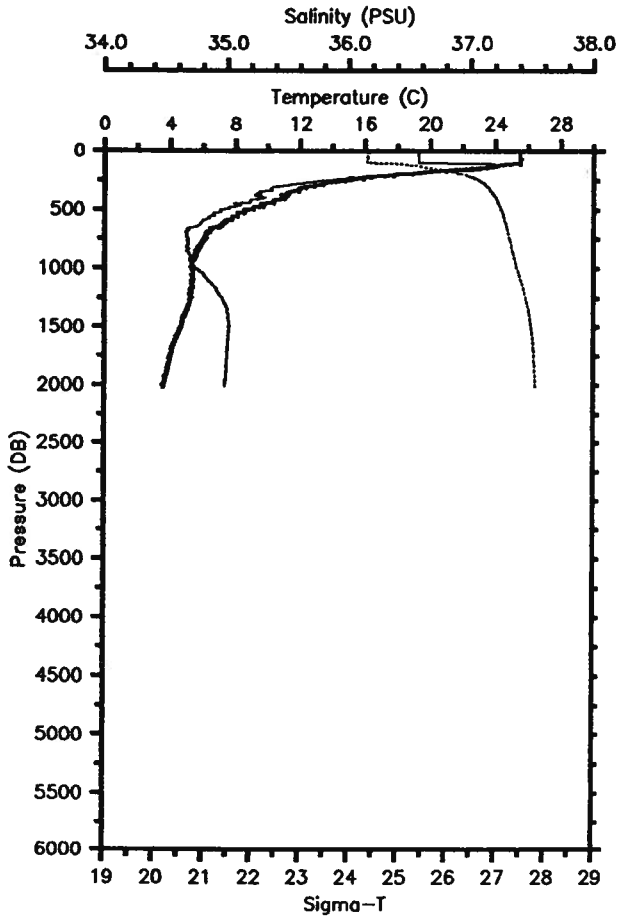
Prs	Tem	Sal	SigT
0	25.61	36.242	24.09
10	25.62	36.242	24.09
20	25.62	36.242	24.09
30	25.62	36.243	24.09
40	25.62	36.243	24.09
50	25.62	36.244	24.09
60	25.62	36.247	24.09
70	25.63	36.268	24.11
80	25.62	36.432	24.23
90	25.77	36.704	24.39
100	25.09	37.036	24.85
110	24.32	37.224	25.23
120	23.73	37.213	25.40
130	22.40	36.971	25.60
140	21.50	36.846	25.76
150	21.14	36.816	25.84
160	20.33	36.737	26.00
170	19.87	36.752	26.14
180	18.22	36.378	26.27
190	17.61	36.270	26.34
200	17.14	36.188	26.39
250	14.38	35.757	26.69
300	12.47	35.459	26.85
350	11.31	35.319	26.97
400	10.21	35.165	27.05
450	9.05	35.004	27.11
500	8.14	34.882	27.16
550	7.38	34.782	27.19
600	6.99	34.741	27.22
650	6.40	34.673	27.24
700	6.09	34.657	27.27
750	5.93	34.670	27.30
800	5.62	34.658	27.33
850	5.50	34.662	27.35
900	5.46	34.680	27.37
950	5.36	34.703	27.40
1000	5.33	34.755	27.44
1500	4.50	35.010	27.74
2000	3.57	34.979	27.81
2020	3.54	34.978	27.82

ALB–STACS33–89 CTD 16 ALBATROSS IV
Date 02 17 89 Latitude 14.525 N
Time 2258 Z Longitude 54.538 W



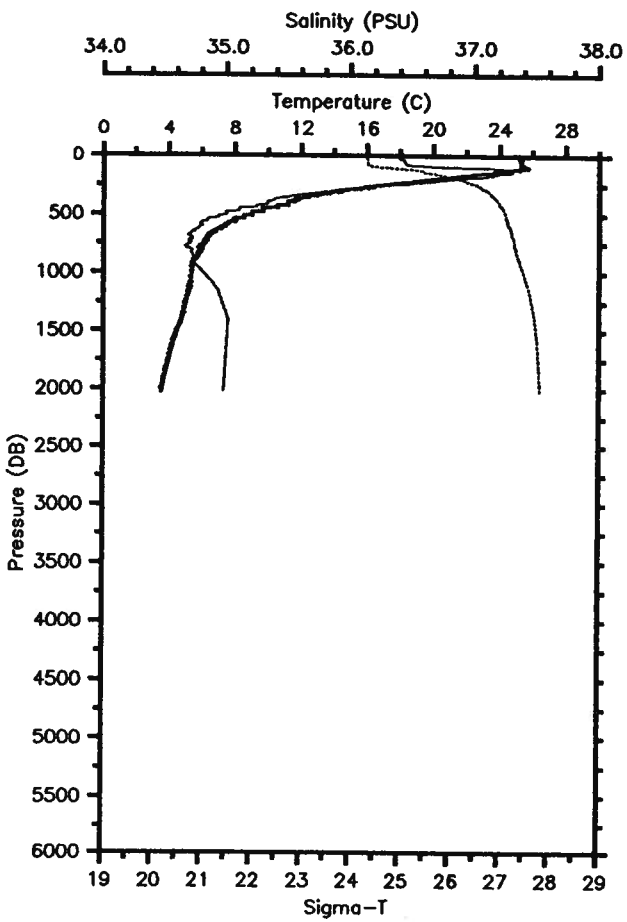
Prs	Tem	Sal	SigT
0	25.46	36.569	24.39
10	25.47	36.569	24.38
20	25.47	36.569	24.38
30	25.47	36.569	24.38
40	25.48	36.569	24.38
50	25.48	36.569	24.38
60	25.48	36.569	24.38
70	25.49	36.569	24.38
80	25.49	36.570	24.38
90	25.50	36.573	24.38
100	25.50	36.588	24.39
110	24.87	37.192	25.04
120	24.22	37.205	25.25
130	23.49	37.205	25.47
140	22.88	37.181	25.63
150	22.12	37.119	25.80
160	21.54	37.084	25.93
170	20.60	36.885	26.04
180	19.68	36.680	26.13
190	19.10	36.656	26.26
200	17.90	36.396	26.37
250	15.15	35.885	26.62
300	12.79	35.468	26.80
350	11.98	35.404	26.91
400	11.25	35.335	26.99
450	9.69	35.096	27.08
500	8.62	34.946	27.14
550	8.16	34.888	27.16
600	7.45	34.798	27.20
650	6.56	34.676	27.22
700	6.35	34.674	27.25
750	6.07	34.668	27.28
800	5.92	34.687	27.32
850	5.54	34.660	27.34
900	5.40	34.674	27.37
950	5.35	34.704	27.40
1000	5.34	34.752	27.44
1500	4.57	35.011	27.73
2000	3.57	34.981	27.81
2500	3.05	34.952	27.84
3000	2.75	34.931	27.85
3500	2.54	34.914	27.86
4000	2.37	34.904	27.86
4500	2.25	34.891	27.86
5000	2.05	34.857	27.85
5368	1.85	34.829	27.85

ALB–STACS33–89 CTD 17 ALBATROSS IV
Date 02 18 89 Latitude 14.517 N
Time 0219 Z Longitude 54.565 W



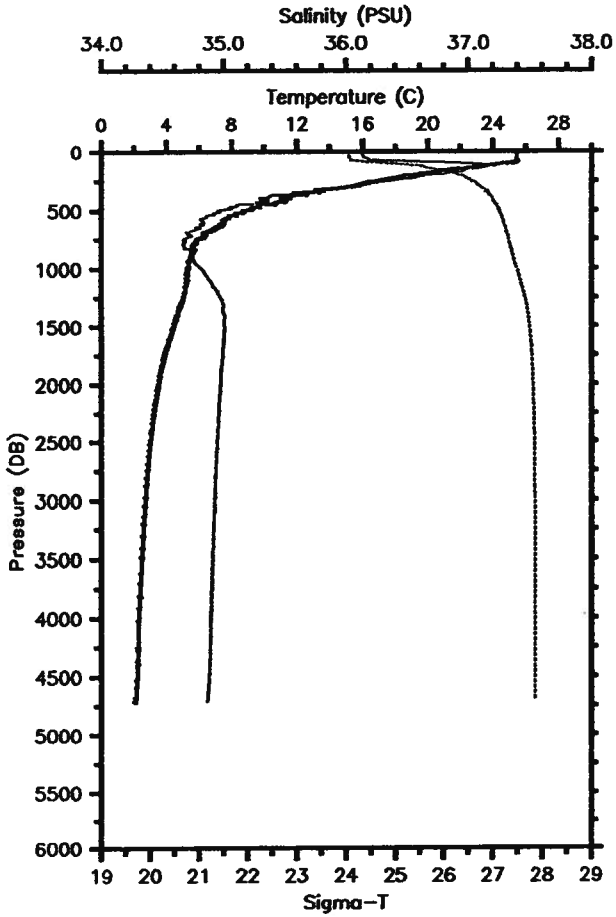
Prs	Tem	Sal	SigT
0	25.47	36.570	24.39
10	25.47	36.570	24.39
20	25.46	36.570	24.39
30	25.47	36.568	24.38
40	25.47	36.570	24.39
50	25.47	36.569	24.38
60	25.48	36.570	24.38
70	25.48	36.569	24.38
80	25.48	36.569	24.38
90	25.49	36.569	24.38
100	25.49	36.583	24.39
110	24.77	37.193	25.07
120	24.12	37.175	25.26
130	23.63	37.216	25.43
140	23.08	37.174	25.56
150	22.32	37.135	25.75
160	21.44	37.048	25.93
170	20.52	36.814	26.01
180	19.62	36.701	26.16
190	19.07	36.613	26.24
200	17.80	36.396	26.39
250	14.72	35.816	26.66
300	12.66	35.417	26.78
350	11.31	35.272	26.93
400	11.04	35.304	27.01
450	9.59	35.065	27.07
500	8.60	34.944	27.14
550	8.15	34.887	27.16
600	7.39	34.791	27.20
650	6.82	34.725	27.23
700	6.19	34.656	27.26
750	6.08	34.678	27.29
800	5.86	34.677	27.32
850	5.56	34.664	27.34
900	5.51	34.697	27.37
950	5.31	34.698	27.40
1000	5.31	34.738	27.43
1500	4.65	35.016	27.73
2000	3.60	34.981	27.81
2014	3.58	34.981	27.81

ALB–STACS33–89 CTD 18 ALBATROSS IV
Date 02 18 89 Latitude 14.505 N
Time 0948 Z Longitude 53.742 W



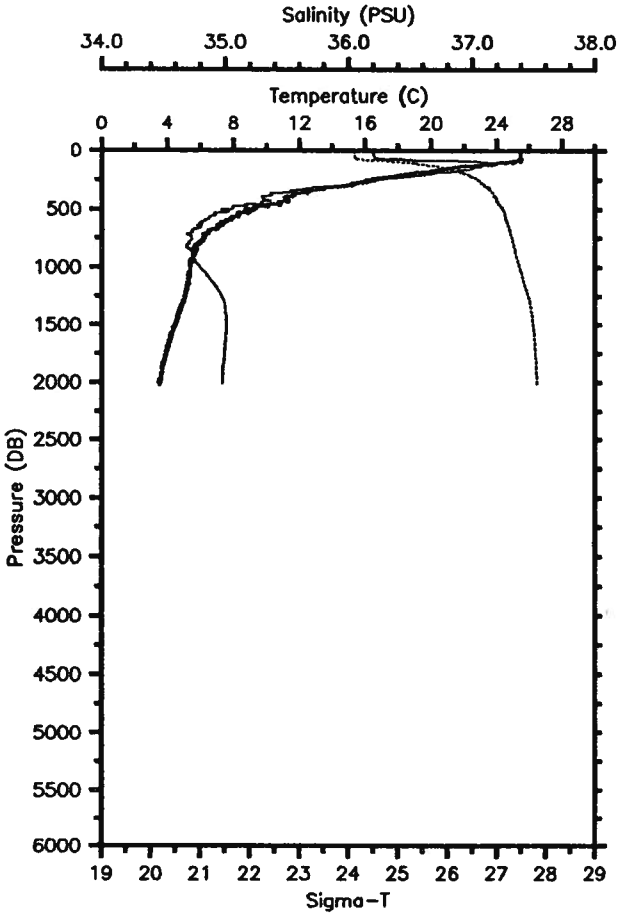
Prs	Tem	Sal	SigT
0	25.19	36.364	24.32
10	25.23	36.398	24.33
20	25.24	36.396	24.33
30	25.24	36.403	24.33
40	25.29	36.434	24.34
50	25.29	36.436	24.34
60	25.29	36.439	24.34
70	25.31	36.446	24.34
80	25.38	36.527	24.38
90	25.53	36.654	24.43
100	25.61	37.123	24.76
110	25.08	37.236	25.01
120	24.35	37.282	25.27
130	23.79	37.302	25.45
140	23.67	37.296	25.48
150	22.68	37.169	25.67
160	22.27	37.150	25.78
170	21.64	37.103	25.92
180	21.15	37.017	25.99
190	20.41	36.936	26.13
200	19.87	36.797	26.22
250	16.76	36.274	26.55
300	14.44	35.860	26.76
350	12.43	35.513	26.90
400	11.20	35.325	26.99
450	9.72	35.100	27.08
500	9.03	35.000	27.11
550	7.99	34.845	27.15
600	7.46	34.808	27.20
650	6.80	34.744	27.24
700	6.36	34.711	27.28
750	6.09	34.693	27.30
800	5.94	34.705	27.33
850	5.80	34.729	27.36
900	5.48	34.727	27.40
950	5.40	34.763	27.44
1000	5.39	34.811	27.48
1500	4.50	35.011	27.74
2000	3.58	34.982	27.82
2016	3.56	34.980	27.82

ALB–STACS33–89 CTD 19 ALBATROSS IV
Date 02 18 89 Latitude 14.505 N
Time 1642 Z Longitude 53.015 W



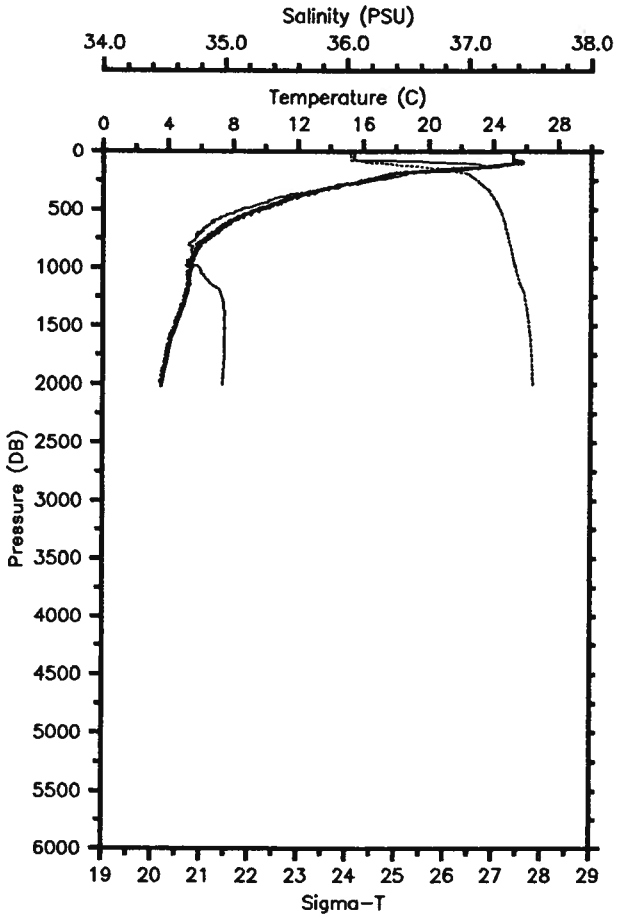
Prs	Tem	Sal	SigT
0	25.41	36.154	24.09
10	25.45	36.136	24.06
20	25.45	36.136	24.06
30	25.45	36.137	24.06
40	25.45	36.138	24.06
50	25.45	36.154	24.08
60	25.46	36.178	24.09
70	25.46	36.191	24.10
80	25.48	36.507	24.34
90	25.24	36.806	24.64
100	24.73	37.013	24.95
110	24.11	37.149	25.24
120	23.22	37.175	25.52
130	22.89	37.153	25.60
140	22.41	37.104	25.70
150	21.59	37.028	25.88
160	20.96	36.970	26.01
170	20.67	36.953	26.07
180	20.01	36.862	26.18
190	19.57	36.810	26.26
200	18.78	36.628	26.32
250	16.91	36.360	26.58
300	15.17	36.049	26.74
350	12.64	35.573	26.91
400	11.11	35.302	26.99
450	9.76	35.111	27.08
500	8.73	34.976	27.14
550	7.85	34.860	27.19
600	7.57	34.839	27.21
650	6.97	34.778	27.25
700	6.29	34.710	27.29
750	5.85	34.674	27.31
800	5.64	34.684	27.35
850	5.68	34.731	27.38
900	5.52	34.753	27.42
950	5.39	34.774	27.45
1000	5.37	34.828	27.49
1500	4.46	35.013	27.75
2000	3.55	34.980	27.82
2500	3.03	34.951	27.84
3000	2.74	34.931	27.85
3500	2.51	34.913	27.86
4000	2.34	34.899	27.86
4500	2.22	34.885	27.86
4714	2.10	34.867	27.86

ALB–STACS33–89 CTD 20 ALBATROSS IV
Date 02 18 89 Latitude 14.480 N
Time 1945 Z Longitude 53.047 W



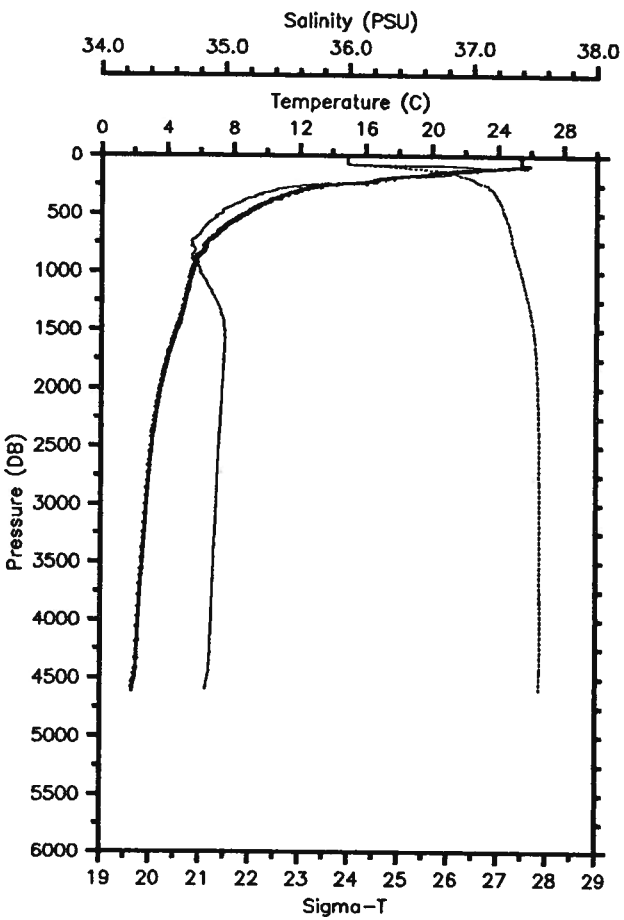
Prs	Tem	Sal	SigT
0	25.45	36.200	24.11
10	25.46	36.199	24.11
20	25.45	36.200	24.11
30	25.44	36.203	24.12
40	25.44	36.206	24.12
50	25.43	36.208	24.12
60	25.43	36.214	24.13
70	25.42	36.256	24.16
80	25.47	36.535	24.36
90	25.06	37.021	24.85
100	24.57	37.131	25.09
110	23.72	37.206	25.40
120	23.01	37.177	25.58
130	21.87	37.010	25.78
140	21.47	37.016	25.90
150	21.02	37.000	26.01
160	20.65	36.977	26.10
170	20.20	36.883	26.15
180	19.66	36.824	26.25
190	18.96	36.695	26.33
200	18.55	36.650	26.40
250	16.21	36.216	26.64
300	14.85	35.981	26.76
350	12.50	35.530	26.90
400	11.14	35.306	26.99
450	10.79	35.296	27.05
500	9.28	35.053	27.11
550	8.29	34.923	27.17
600	7.58	34.833	27.21
650	7.14	34.809	27.25
700	6.49	34.734	27.28
750	6.20	34.729	27.31
800	5.89	34.710	27.34
850	5.70	34.718	27.37
900	5.59	34.738	27.40
950	5.44	34.760	27.43
1000	5.38	34.799	27.47
1500	4.48	35.010	27.74
2000	3.55	34.979	27.82
2010	3.54	34.978	27.82

ALB-STACS33-89 CTD 21 ALBATROSS IV
Date 02 19 89 Latitude 14.560 N
Time 0222 Z Longitude 52.303 W



Prs	Tem	Sal	SigT
0	25.16	36.071	24.10
10	25.18	36.058	24.09
20	25.20	36.061	24.08
30	25.20	36.060	24.08
40	25.20	36.061	24.08
50	25.20	36.055	24.08
60	25.20	36.057	24.08
70	25.21	36.063	24.08
80	25.61	36.547	24.32
90	25.66	36.653	24.39
100	25.44	36.917	24.66
110	24.75	37.083	24.99
120	24.41	37.137	25.14
130	23.63	37.232	25.44
140	22.49	37.097	25.68
150	21.27	37.027	25.97
160	20.68	36.952	26.07
170	19.92	36.821	26.17
180	18.61	36.548	26.31
190	17.80	36.501	26.47
200	17.60	36.473	26.50
250	16.11	36.223	26.66
300	14.43	35.902	26.79
350	12.98	35.672	26.92
400	11.53	35.422	27.01
450	10.63	35.298	27.07
500	9.59	35.143	27.13
550	8.65	35.010	27.18
600	7.81	34.891	27.22
650	7.34	34.846	27.25
700	6.79	34.773	27.27
750	6.40	34.758	27.31
800	5.84	34.703	27.34
850	5.71	34.726	27.37
900	5.56	34.732	27.40
950	5.28	34.729	27.43
1000	5.43	34.790	27.46
1500	4.46	34.999	27.74
2000	3.57	34.980	27.81
2008	3.56	34.980	27.82

ALB-STACS33-89 CTD 22 ALBATROSS IV
Date 02 19 89 Latitude 14.495 N
Time 1000 Z Longitude 51.517 W

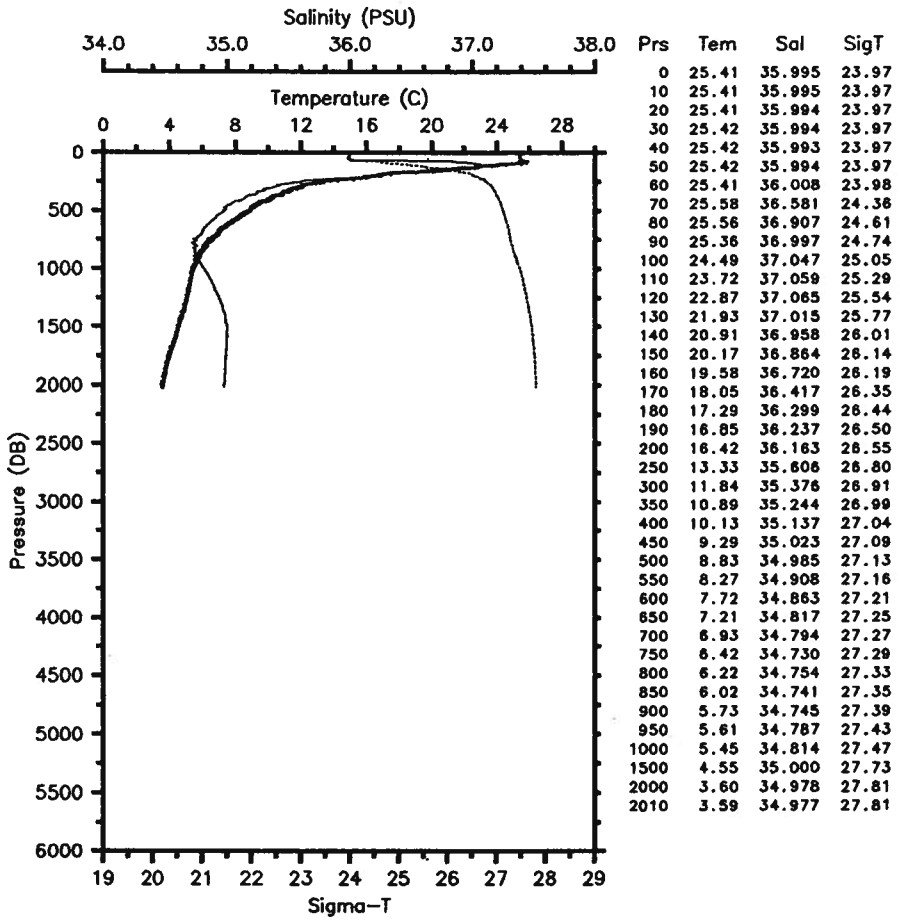


Prs	Tem	Sal	SigT
0	25.34	36.012	24.00
10	25.39	35.984	23.97
20	25.39	35.985	23.97
30	25.40	35.985	23.97
40	25.40	35.984	23.97
50	25.40	35.985	23.97
60	25.40	35.984	23.96
70	25.40	35.984	23.96
80	25.47	36.284	24.17
90	25.56	36.950	24.64
100	24.64	37.054	25.00
110	23.55	37.039	25.32
120	22.74	37.065	25.58
130	21.29	37.001	25.94
140	20.58	36.858	26.03
150	20.10	36.835	26.14
160	19.89	36.810	26.17
170	19.28	36.678	26.23
180	18.33	36.472	26.32
190	17.49	36.328	26.42
200	17.01	36.251	26.47
250	14.14	35.718	26.71
300	12.06	35.411	26.90
350	10.93	35.250	26.98
400	10.13	35.133	27.03
450	9.32	35.030	27.09
500	8.81	34.979	27.13
550	8.20	34.909	27.17
600	7.58	34.849	27.22
650	7.15	34.809	27.25
700	6.78	34.773	27.27
750	6.39	34.733	27.29
800	6.25	34.754	27.33
850	5.99	34.738	27.35
900	5.69	34.738	27.38
950	5.58	34.774	27.43
1000	5.51	34.802	27.46
1500	4.55	34.995	27.72
2000	3.59	34.976	27.81
2500	3.07	34.951	27.84
3000	2.77	34.932	27.85
3500	2.53	34.912	27.86
4000	2.31	34.894	27.86
4500	2.08	34.867	27.86
4602	1.93	34.849	27.86

ALB-STACS33-89 CTD 23 ALBATROSS IV

Date 02 19 89 Latitude 14.493 N

Time 1231 Z Longitude 51.508 W

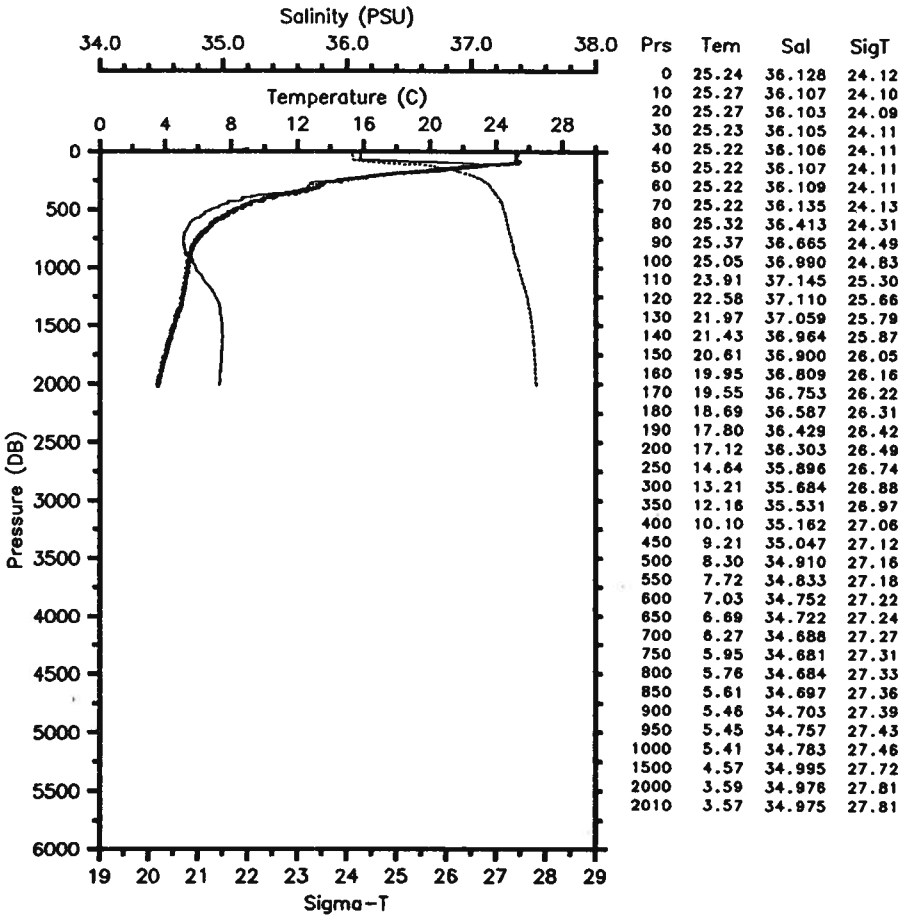


Prs	Tem	Sal	SigT
0	25.41	35.995	23.97
10	25.41	35.995	23.97
20	25.41	35.994	23.97
30	25.42	35.994	23.97
40	25.42	35.993	23.97
50	25.42	35.994	23.97
60	25.41	36.008	23.98
70	25.58	36.581	24.36
80	25.56	36.907	24.61
90	25.36	36.997	24.74
100	24.49	37.047	25.05
110	23.72	37.059	25.29
120	22.87	37.065	25.54
130	21.93	37.015	25.77
140	20.91	36.958	26.01
150	20.17	36.864	26.14
160	19.58	36.720	26.19
170	18.05	36.417	26.35
180	17.29	36.299	26.44
190	16.85	36.237	26.50
200	16.42	36.163	26.55
250	13.33	35.606	26.80
300	11.84	35.376	26.91
350	10.89	35.244	26.99
400	10.13	35.137	27.04
450	9.29	35.023	27.09
500	8.83	34.985	27.13
550	8.27	34.908	27.16
600	7.72	34.863	27.21
650	7.21	34.817	27.25
700	6.93	34.794	27.27
750	6.42	34.730	27.29
800	6.22	34.754	27.33
850	6.02	34.741	27.35
900	5.73	34.745	27.39
950	5.61	34.787	27.43
1000	5.45	34.814	27.47
1500	4.55	35.000	27.73
2000	3.60	34.978	27.81
2010	3.59	34.977	27.81

ALB-STACS33-89 CTD 24 ALBATROSS IV

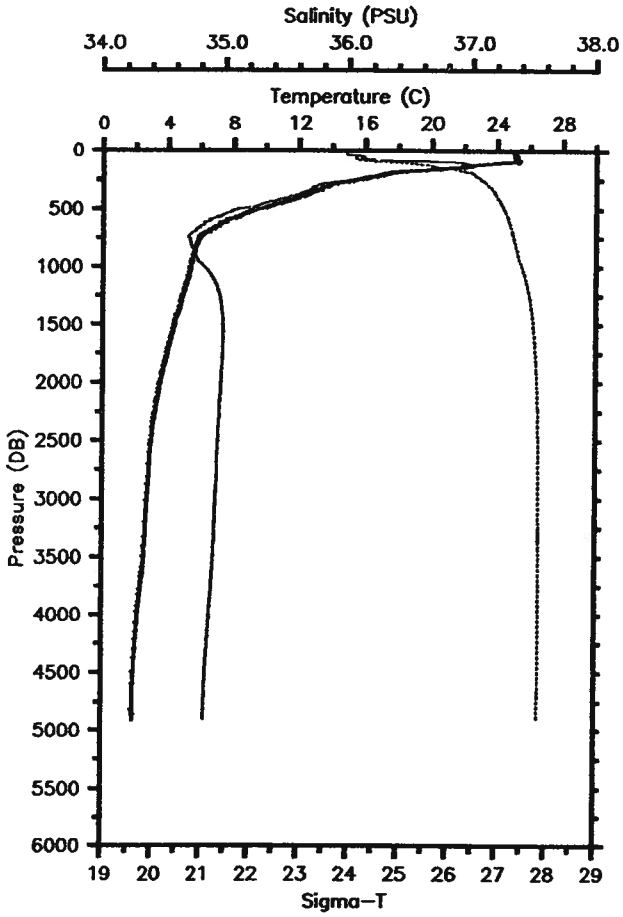
Date 02 19 89 Latitude 14.500 N

Time 1847 Z Longitude 50.770 W



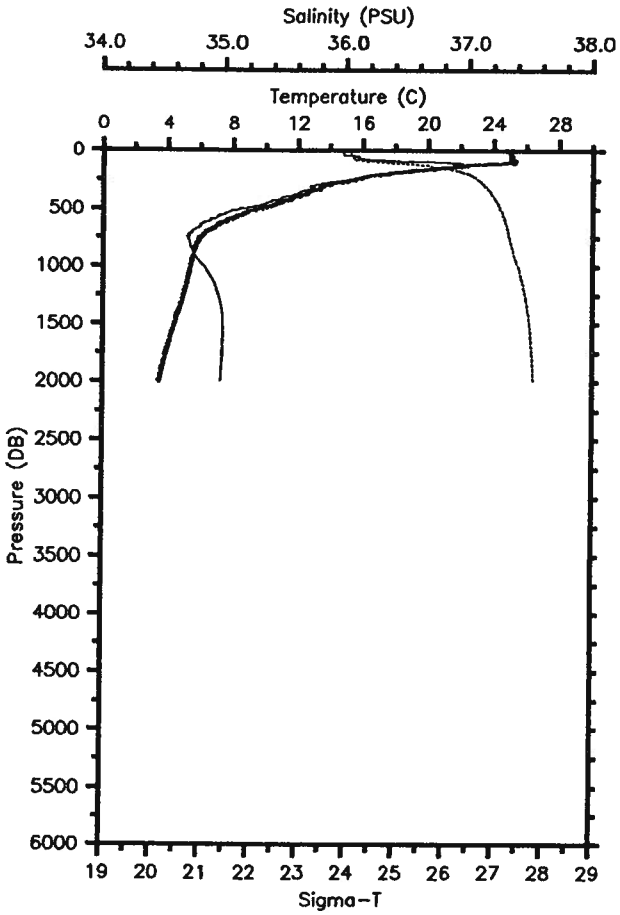
Prs	Tem	Sal	SigT
0	25.24	36.128	24.12
10	25.27	36.107	24.10
20	25.27	36.103	24.09
30	25.23	36.105	24.11
40	25.22	36.106	24.11
50	25.22	36.107	24.11
60	25.22	36.109	24.11
70	25.22	36.135	24.13
80	25.32	36.413	24.31
90	25.37	36.665	24.49
100	25.05	36.990	24.83
110	23.91	37.145	25.30
120	22.58	37.110	25.66
130	21.97	37.059	25.79
140	21.43	36.964	25.87
150	20.61	36.900	26.05
160	19.95	36.809	26.16
170	19.55	36.753	26.22
180	18.69	36.587	26.31
190	17.80	36.429	26.42
200	17.12	36.303	26.49
250	14.64	35.896	26.74
300	13.21	35.684	26.88
350	12.16	35.531	26.97
400	10.10	35.162	27.06
450	9.21	35.047	27.12
500	8.30	34.910	27.16
550	7.72	34.833	27.18
600	7.03	34.752	27.22
650	6.69	34.722	27.24
700	6.27	34.688	27.27
750	5.95	34.681	27.31
800	5.76	34.684	27.33
850	5.61	34.697	27.36
900	5.46	34.703	27.39
950	5.45	34.757	27.43
1000	5.41	34.783	27.46
1500	4.57	34.995	27.72
2000	3.59	34.976	27.81
2010	3.57	34.975	27.81

ALB-STACS33-89 CTD 25 ALBATROSS IV
Date 02 20 89 Latitude 14.533 N
Time 0200 Z Longitude 50.003 W



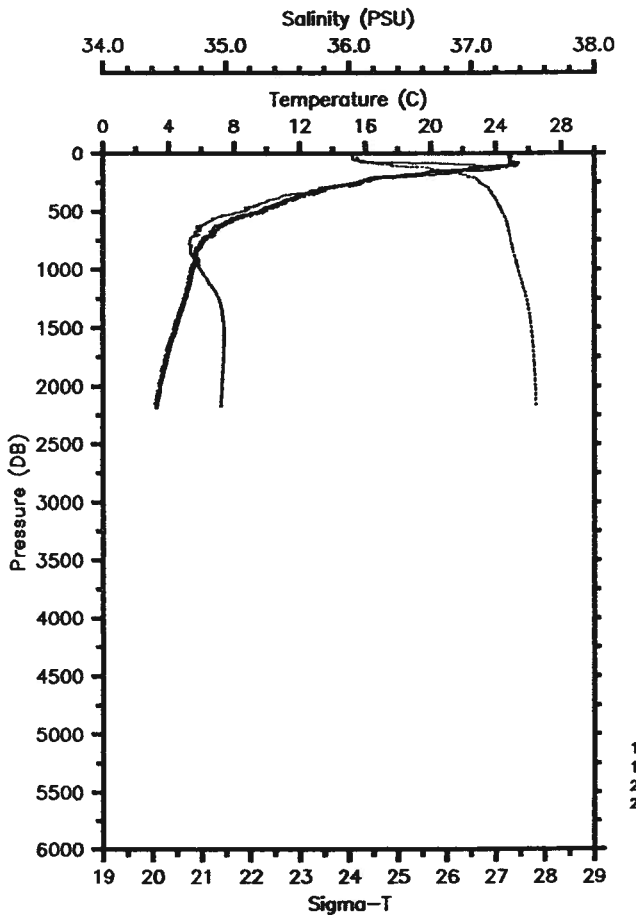
Prs	Tem	Sal	SigT
0	25.01	35.953	24.06
10	25.01	35.972	24.07
20	25.01	35.978	24.08
30	25.02	35.981	24.08
40	25.08	36.064	24.12
50	25.16	36.124	24.14
60	25.14	36.112	24.14
70	25.10	36.113	24.15
80	25.23	36.254	24.22
90	25.32	36.565	24.43
100	24.56	36.908	24.92
110	23.47	36.944	25.27
120	22.63	36.962	25.53
130	22.10	36.994	25.71
140	21.76	36.995	25.80
150	20.82	36.876	25.97
160	19.91	36.747	26.12
170	18.93	36.609	26.27
180	18.23	36.426	26.31
190	17.43	36.364	26.46
200	17.12	36.334	26.51
250	15.38	36.043	26.69
300	13.74	35.742	26.82
350	12.80	35.646	26.93
400	11.93	35.513	27.00
450	10.74	35.304	27.06
500	9.40	35.108	27.14
550	8.49	34.983	27.19
600	7.60	34.872	27.23
650	6.92	34.789	27.26
700	6.33	34.735	27.30
750	5.90	34.698	27.33
800	5.76	34.713	27.36
850	5.65	34.736	27.39
900	5.55	34.752	27.41
950	5.47	34.778	27.44
1000	5.39	34.825	27.49
1500	4.40	34.984	27.73
2000	3.53	34.969	27.81
2500	2.98	34.943	27.84
3000	2.72	34.926	27.85
3500	2.51	34.908	27.85
4000	2.17	34.877	27.86
4500	1.94	34.849	27.86
4900	1.87	34.836	27.85

ALB-STACS33-89 CTD 26 ALBATROSS IV
Date 02 20 89 Latitude 14.523 N
Time 0457 Z Longitude 50.013 W



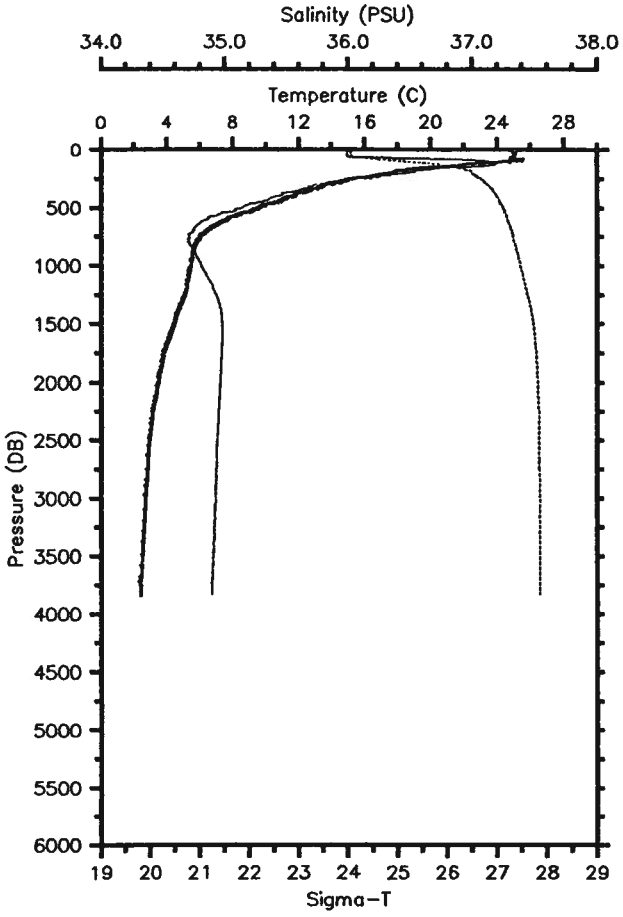
Prs	Tem	Sal	SigT
0	24.99	35.979	24.09
10	25.00	35.975	24.08
20	25.00	35.975	24.08
30	25.00	35.975	24.08
40	25.01	35.979	24.08
50	25.10	36.093	24.14
60	25.11	36.102	24.14
70	25.08	36.100	24.15
80	25.20	36.220	24.20
90	25.30	36.422	24.33
100	25.21	36.787	24.63
110	23.91	36.948	25.15
120	22.67	36.875	25.45
130	22.11	36.976	25.69
140	21.66	36.947	25.79
150	20.50	36.826	26.02
160	19.97	36.760	26.11
170	18.92	36.586	26.26
180	18.52	36.559	26.34
190	17.68	36.443	26.46
200	17.20	36.348	26.50
250	15.38	36.026	26.68
300	13.68	35.735	26.82
350	12.70	35.626	26.94
400	11.73	35.466	27.00
450	10.71	35.333	27.09
500	9.50	35.123	27.13
550	8.49	34.982	27.18
600	7.62	34.879	27.24
650	6.93	34.793	27.27
700	6.32	34.721	27.29
750	5.93	34.684	27.32
800	5.77	34.712	27.35
850	5.65	34.732	27.39
900	5.56	34.747	27.41
950	5.47	34.783	27.45
1000	5.37	34.829	27.50
1500	4.40	34.980	27.73
1994	3.50	34.966	27.81

ALB–STACS33–89 CTD 27 ALBATROSS IV
Date 02 20 89 Latitude 14.522 N
Time 1203 Z Longitude 49.273 W



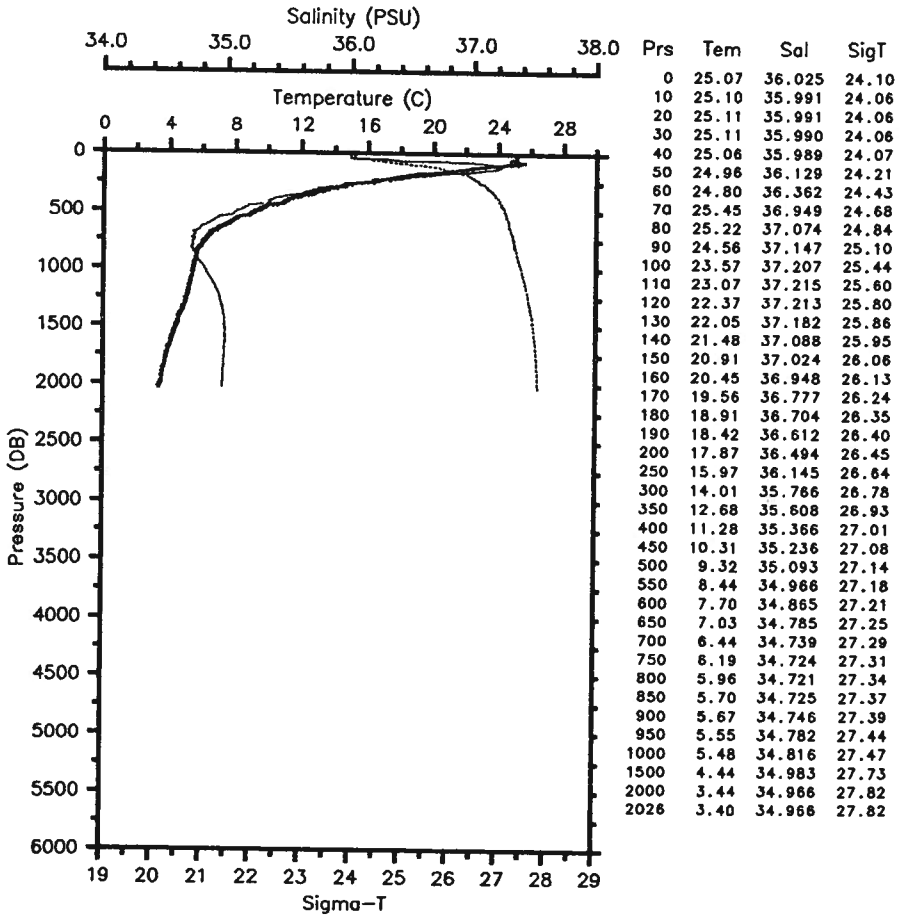
Prs	Tem	Sal	SigT
0	24.87	36.098	24.21
10	24.86	36.031	24.17
20	24.86	36.030	24.17
30	24.86	36.031	24.16
40	24.86	36.031	24.16
50	24.87	36.033	24.16
60	24.89	36.101	24.21
70	24.90	36.126	24.23
80	25.21	36.606	24.49
90	25.30	36.854	24.65
100	25.18	37.037	24.83
110	24.63	37.086	25.03
120	22.90	37.131	25.58
130	22.84	37.212	25.66
140	22.11	37.193	25.85
150	20.97	37.023	26.04
160	19.91	36.880	26.22
170	19.64	36.834	26.26
180	19.20	36.738	26.30
190	18.24	36.561	26.41
200	17.61	36.439	26.47
250	15.55	36.070	26.67
300	13.55	35.757	26.87
350	12.31	35.531	26.94
400	11.23	35.353	27.01
450	10.34	35.226	27.07
500	9.58	35.126	27.12
550	8.24	34.932	27.18
600	7.45	34.840	27.23
650	6.83	34.777	27.27
700	6.63	34.779	27.30
750	6.12	34.710	27.31
800	5.88	34.713	27.34
850	5.70	34.714	27.36
900	5.65	34.768	27.41
950	5.61	34.778	27.43
1000	5.45	34.794	27.46
1500	4.42	34.984	27.73
2000	3.46	34.967	27.81
2172	3.26	34.960	27.83

ALB–STACS33–89 CTD 28 ALBATROSS IV
Date 02 20 89 Latitude 14.520 N
Time 1836 Z Longitude 48.512 W



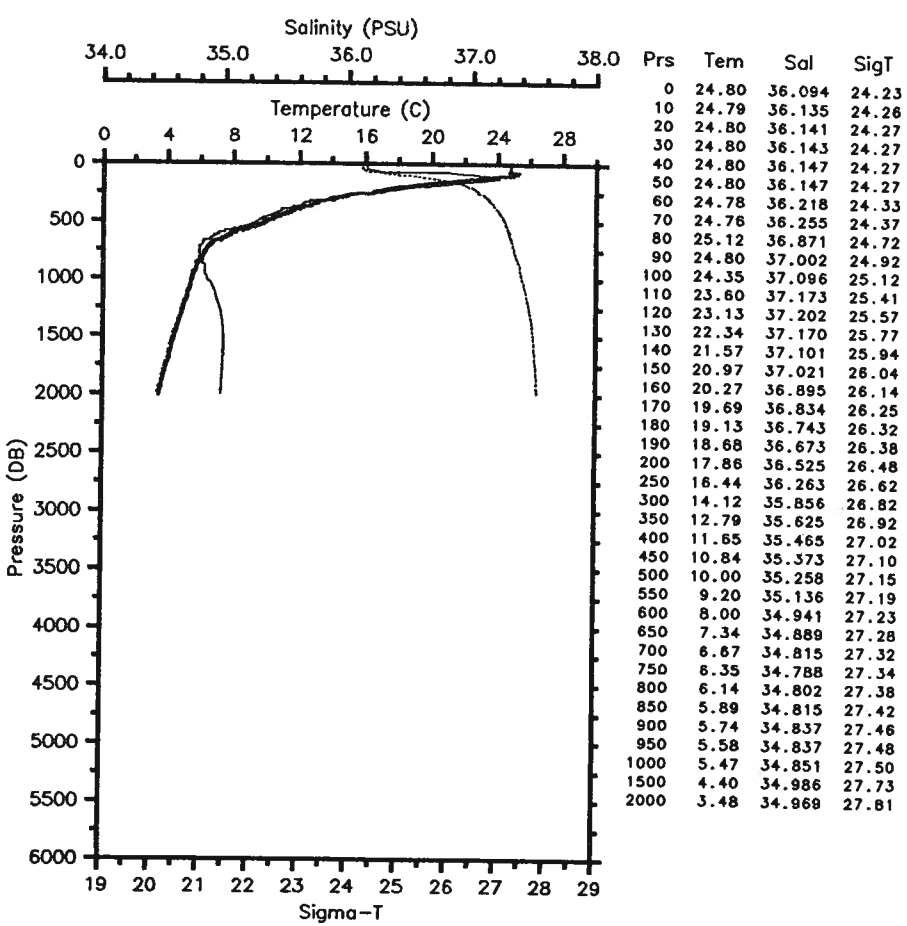
Prs	Tem	Sal	SigT
0	24.94	36.093	24.19
10	25.13	35.993	24.05
20	25.13	35.994	24.05
30	25.11	35.991	24.06
40	25.08	35.991	24.07
50	25.06	35.993	24.08
60	25.05	35.998	24.08
70	24.87	36.322	24.38
80	25.24	36.773	24.61
90	25.43	37.024	24.74
100	24.78	37.133	25.02
110	23.61	37.192	25.42
120	22.60	37.171	25.70
130	22.00	37.180	25.88
140	21.31	37.061	25.98
150	20.26	36.874	26.12
160	19.24	36.681	26.25
170	18.61	36.665	26.40
180	18.00	36.559	26.47
190	17.87	36.542	26.49
200	17.61	36.475	26.50
250	15.25	35.986	26.69
300	13.72	35.742	26.82
350	12.72	35.611	26.92
400	11.68	35.440	26.99
450	10.72	35.298	27.06
500	9.62	35.141	27.13
550	8.49	34.974	27.18
600	7.69	34.864	27.21
650	6.94	34.778	27.25
700	6.38	34.741	27.30
750	6.04	34.717	27.32
800	5.80	34.714	27.35
850	5.68	34.743	27.39
900	5.57	34.769	27.42
950	5.52	34.791	27.45
1000	5.48	34.814	27.47
1500	4.45	34.984	27.73
2000	3.50	34.968	27.81
2500	2.96	34.943	27.84
3000	2.73	34.927	27.85
3500	2.53	34.908	27.85
3830	2.40	34.897	27.86

ALB-STACS33-89 CTD 29 ALBATROSS IV
Date 02 20 89 Latitude 14.522 N
Time 2044 Z Longitude 48.527 W



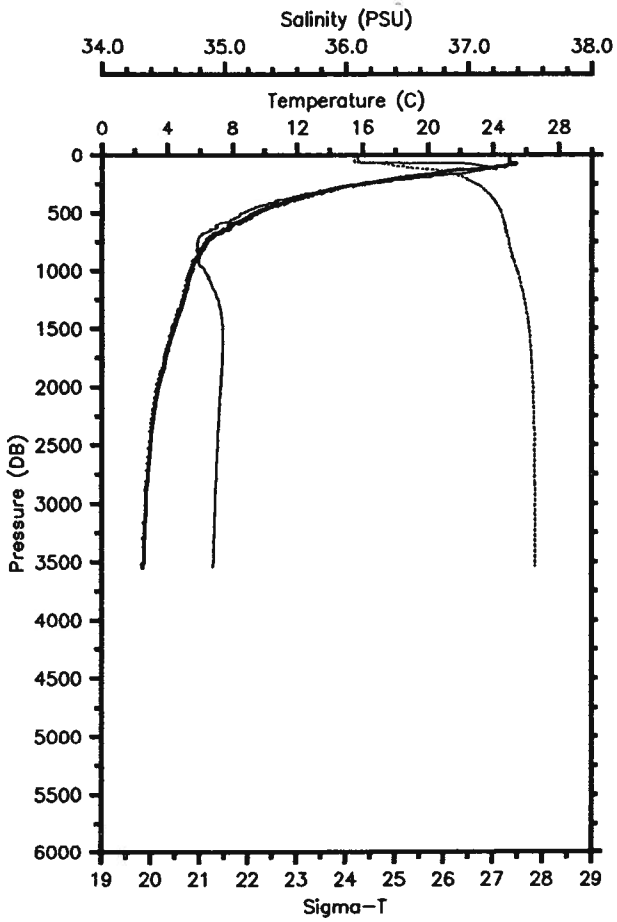
Prs	Tem	Sal	SigT
0	25.07	36.025	24.10
10	25.10	35.991	24.06
20	25.11	35.991	24.06
30	25.11	35.990	24.06
40	25.06	35.989	24.07
50	24.96	36.129	24.21
60	24.80	36.362	24.43
70	25.45	36.949	24.68
80	25.22	37.074	24.84
90	24.56	37.147	25.10
100	23.57	37.207	25.44
110	23.07	37.215	25.60
120	22.37	37.213	25.80
130	22.05	37.182	25.86
140	21.48	37.088	25.95
150	20.91	37.024	26.06
160	20.45	36.948	26.13
170	19.56	36.777	26.24
180	18.91	36.704	26.35
190	18.42	36.612	26.40
200	17.87	36.494	26.45
250	15.97	36.145	26.64
300	14.01	35.786	26.78
350	12.68	35.608	26.93
400	11.28	35.366	27.01
450	10.31	35.236	27.08
500	9.32	35.093	27.14
550	8.44	34.966	27.18
600	7.70	34.865	27.21
650	7.03	34.785	27.25
700	6.44	34.739	27.29
750	6.19	34.724	27.31
800	5.96	34.721	27.34
850	5.70	34.725	27.37
900	5.67	34.746	27.39
950	5.55	34.782	27.44
1000	5.48	34.816	27.47
1500	4.44	34.983	27.73
2000	3.44	34.966	27.82
2026	3.40	34.966	27.82

ALB-STACS33-89 CTD 30 ALBATROSS IV
Date 02 21 89 Latitude 14.502 N
Time 0313 Z Longitude 47.750 W



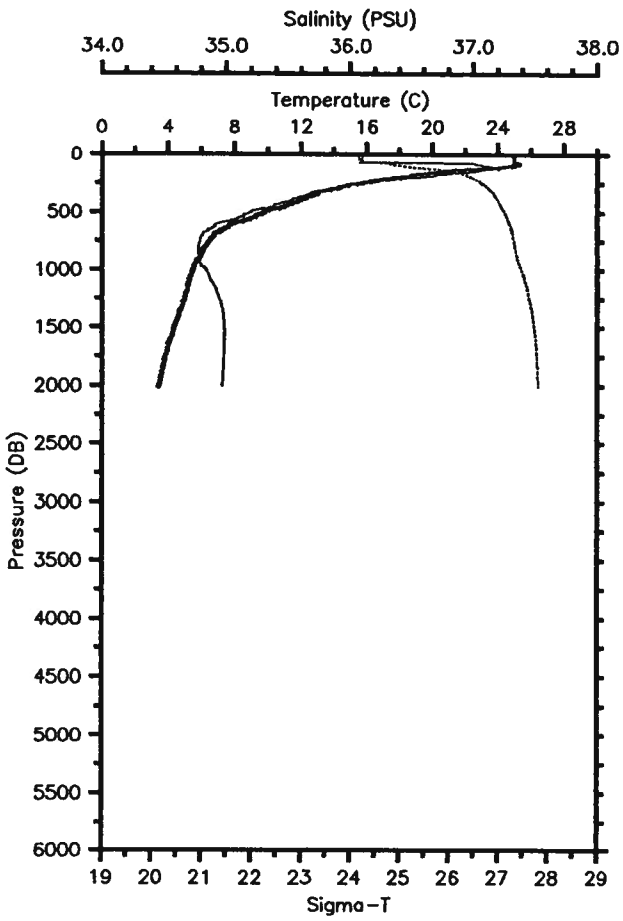
Prs	Tem	Sal	SigT
0	24.80	36.094	24.23
10	24.79	36.135	24.26
20	24.80	36.141	24.27
30	24.80	36.143	24.27
40	24.80	36.147	24.27
50	24.80	36.147	24.27
60	24.78	36.218	24.33
70	24.76	36.255	24.37
80	25.12	36.871	24.72
90	24.80	37.002	24.92
100	24.35	37.096	25.12
110	23.60	37.173	25.41
120	23.13	37.202	25.57
130	22.34	37.170	25.77
140	21.57	37.101	25.94
150	20.97	37.021	26.04
160	20.27	36.895	26.14
170	19.69	36.834	26.25
180	19.13	36.743	26.32
190	18.68	36.673	26.38
200	17.86	36.525	26.48
250	16.44	36.263	26.62
300	14.12	35.856	26.82
350	12.79	35.625	26.92
400	11.65	35.465	27.02
450	10.84	35.373	27.10
500	10.00	35.258	27.15
550	9.20	35.136	27.19
600	8.00	34.941	27.23
650	7.34	34.889	27.28
700	6.67	34.815	27.32
750	6.35	34.788	27.34
800	6.14	34.802	27.38
850	5.89	34.815	27.42
900	5.74	34.837	27.46
950	5.58	34.837	27.48
1000	5.47	34.851	27.50
1500	4.40	34.986	27.73
2000	3.48	34.969	27.81

ALB-STACS33-89 CTD 31 ALBATROSS IV
Date 02 21 89 Latitude 14.505 N
Time 0931 Z Longitude 46.992 W



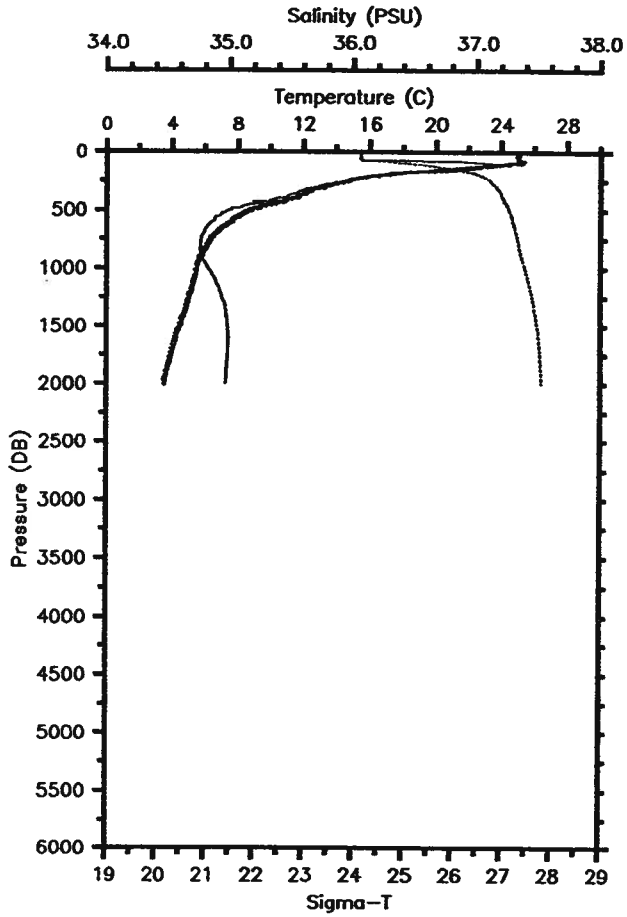
Prs	Tem	Sal	SigT
0	25.00	36.066	24.15
10	25.00	36.072	24.15
20	25.00	36.091	24.17
30	25.00	36.095	24.17
40	25.00	36.096	24.17
50	25.00	36.096	24.17
60	25.00	36.097	24.17
70	25.15	36.609	24.51
80	25.22	37.039	24.82
90	24.90	37.091	24.98
100	24.55	37.124	25.09
110	24.15	37.195	25.26
120	23.30	37.200	25.52
130	22.01	37.084	25.80
140	21.26	37.073	26.00
150	20.79	37.002	26.08
160	20.54	36.971	26.12
170	19.73	36.809	26.21
180	19.23	36.741	26.29
190	18.75	36.689	26.38
200	18.22	36.593	26.44
250	16.02	36.194	26.66
300	14.07	35.838	26.82
350	12.67	35.628	26.95
400	11.37	35.434	27.05
450	10.27	35.250	27.10
500	9.46	35.150	27.16
550	8.84	35.082	27.21
600	7.88	34.936	27.24
650	7.42	34.886	27.27
700	6.76	34.797	27.29
750	6.42	34.781	27.33
800	6.22	34.779	27.35
850	5.98	34.783	27.38
900	5.77	34.794	27.42
950	5.57	34.801	27.45
1000	5.50	34.844	27.49
1500	4.41	34.987	27.73
2000	3.45	34.967	27.82
2500	2.96	34.945	27.84
3000	2.69	34.926	27.85
3500	2.55	34.911	27.85
3538	2.50	34.908	27.86

ALB-STACS33-89 CTD 32 ALBATROSS IV
Date 02 21 89 Latitude 14.505 N
Time 1134 Z Longitude 47.012 W



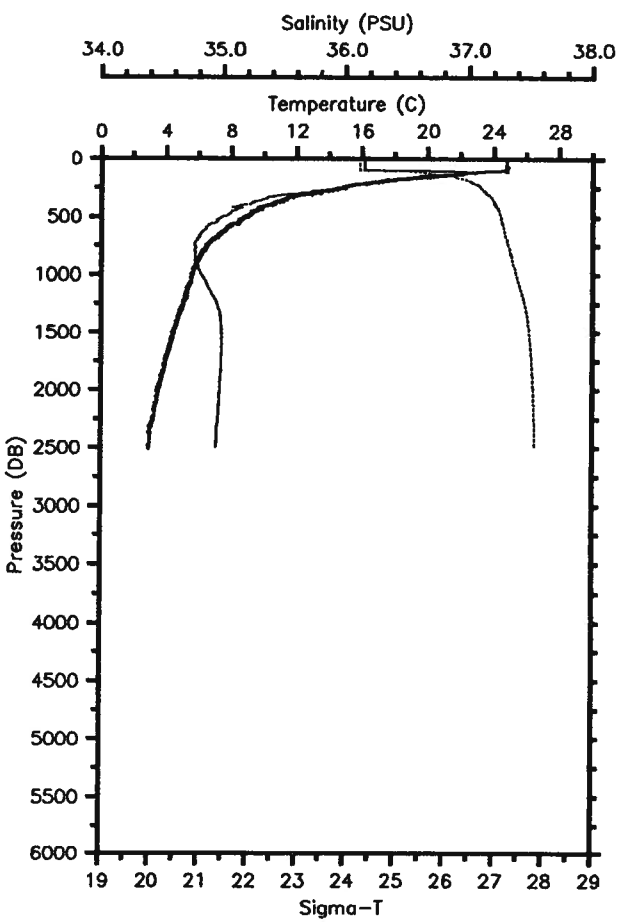
Prs	Tem	Sal	SigT
0	24.94	36.125	24.21
10	24.98	36.095	24.18
20	24.98	36.096	24.18
30	24.99	36.095	24.17
40	24.99	36.095	24.17
50	24.99	36.095	24.17
60	25.00	36.095	24.17
70	25.00	36.095	24.17
80	25.28	37.012	24.78
90	25.05	37.063	24.89
100	24.77	37.108	25.01
110	24.18	37.183	25.24
120	23.41	37.202	25.49
130	22.27	37.148	25.78
140	21.08	37.063	26.04
150	20.69	36.983	26.09
160	20.05	36.854	26.17
170	19.37	36.794	26.30
180	18.78	36.695	26.38
190	18.62	36.657	26.39
200	17.95	36.510	26.44
250	15.62	36.111	26.69
300	14.00	35.831	26.83
350	12.86	35.646	26.92
400	11.96	35.513	27.00
450	11.02	35.382	27.07
500	9.81	35.205	27.15
550	9.08	35.100	27.18
600	7.90	34.931	27.24
650	7.32	34.857	27.26
700	6.81	34.815	27.30
750	6.49	34.788	27.32
800	6.26	34.778	27.34
850	6.08	34.778	27.37
900	5.91	34.786	27.40
950	5.64	34.789	27.43
1000	5.54	34.841	27.48
1500	4.38	34.985	27.73
2000	3.46	34.968	27.82
2008	3.43	34.968	27.82

ALB-STACS33-89 CTD 33 ALBATROSS IV
Date 02 21 89 Latitude 14.518 N
Time 1805 Z Longitude 46.262 W



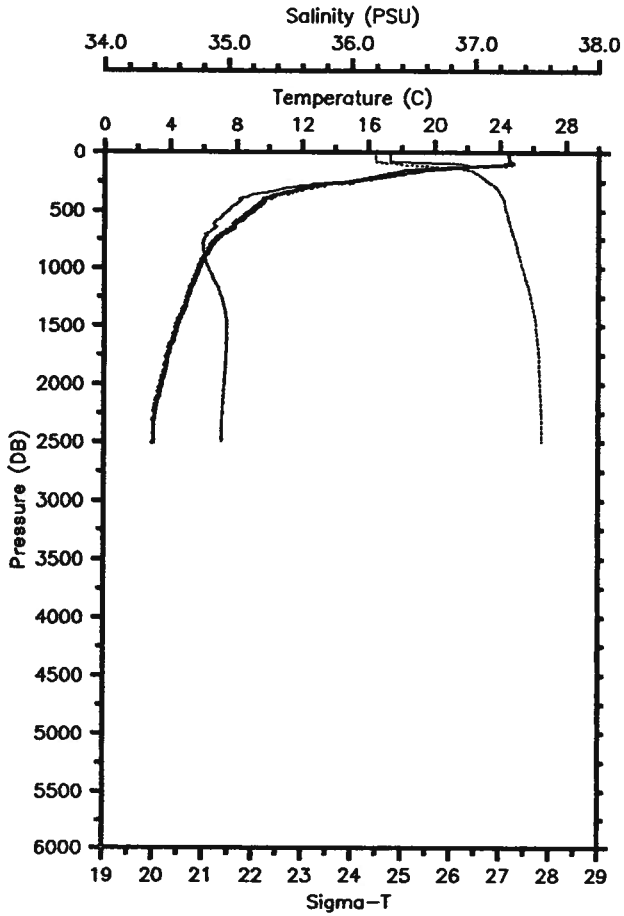
Prs	Tem	Sal	SigT
0	25.01	36.089	24.15
10	25.01	36.063	24.14
20	25.02	36.061	24.14
30	25.01	36.060	24.14
40	25.01	36.060	24.14
50	24.99	36.060	24.15
60	24.99	36.062	24.15
70	25.00	36.071	24.15
80	25.31	36.907	24.69
90	25.15	37.056	24.85
100	24.45	37.159	25.14
110	23.63	37.194	25.41
120	22.79	37.152	25.63
130	21.91	37.072	25.82
140	21.23	37.001	25.96
150	20.49	36.899	26.08
160	19.82	36.824	26.20
170	18.75	36.585	26.30
180	17.66	36.413	26.44
190	17.21	36.340	26.49
200	16.66	36.266	26.57
250	14.66	35.945	26.78
300	13.32	35.729	26.89
350	12.20	35.558	26.98
400	11.34	35.407	27.03
450	10.12	35.213	27.10
500	8.81	35.013	27.16
550	8.08	34.918	27.20
600	7.59	34.862	27.23
650	7.06	34.816	27.27
700	6.67	34.786	27.30
750	6.38	34.771	27.32
800	6.17	34.764	27.34
850	5.94	34.763	27.37
900	5.72	34.774	27.41
950	5.60	34.798	27.44
1000	5.51	34.826	27.48
1500	4.50	34.984	27.72
2000	3.53	34.972	27.81

ALB-STACS33-89 CTD 34 ALBATROSS IV
Date 02 22 89 Latitude 14.505 N
Time 0032 Z Longitude 45.507 W



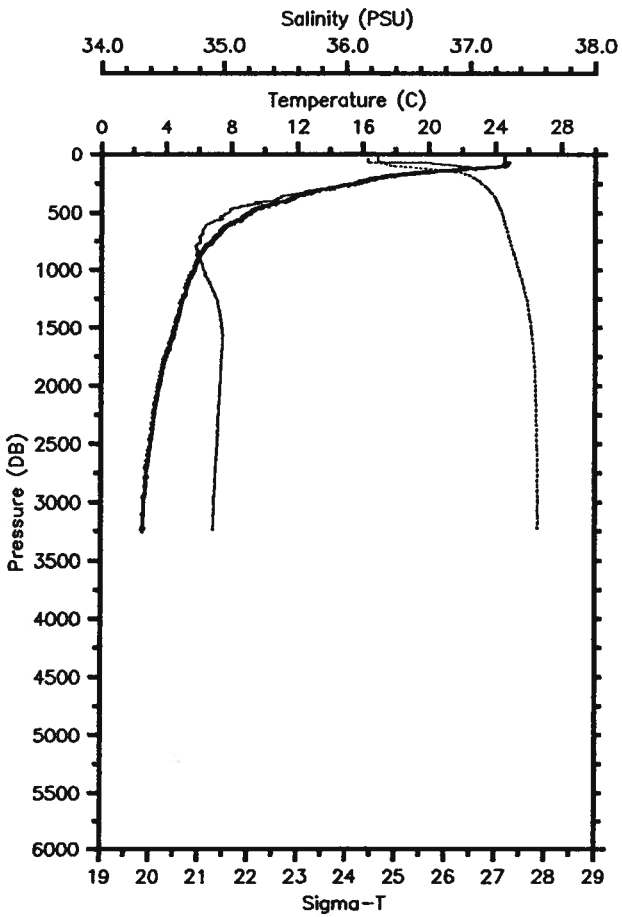
Prs	Tem	Sal	SigT
0	24.79	36.174	24.29
10	24.79	36.153	24.28
20	24.80	36.154	24.28
30	24.80	36.154	24.28
40	24.80	36.155	24.28
50	24.80	36.155	24.28
60	24.81	36.154	24.27
70	24.81	36.153	24.27
80	24.81	36.154	24.27
90	24.81	36.154	24.27
100	24.81	36.227	24.33
110	23.12	36.982	25.40
120	22.37	36.965	25.61
130	21.72	36.972	25.80
140	20.90	36.912	25.98
150	19.82	36.748	26.15
160	19.45	36.728	26.23
170	18.59	36.594	26.35
180	18.03	36.529	26.44
190	17.31	36.401	26.52
200	16.93	36.324	26.55
250	14.94	35.967	26.73
300	13.14	35.617	26.84
350	11.29	35.326	26.98
400	10.35	35.149	27.01
450	9.46	35.085	27.11
500	8.88	34.997	27.14
550	8.42	34.946	27.17
600	7.70	34.858	27.21
650	7.26	34.809	27.23
700	6.83	34.785	27.27
750	6.50	34.766	27.30
800	6.23	34.769	27.34
850	6.05	34.771	27.37
900	5.84	34.773	27.39
950	5.66	34.793	27.43
1000	5.57	34.824	27.47
1500	4.44	34.988	27.73
2000	3.53	34.972	27.81
2498	2.95	34.946	27.85

ALB-STACS33-89 CTD 35 ALBATROSS IV
Date 02 22 89 Latitude 14.503 N
Time 0655 Z Longitude 44.755 W



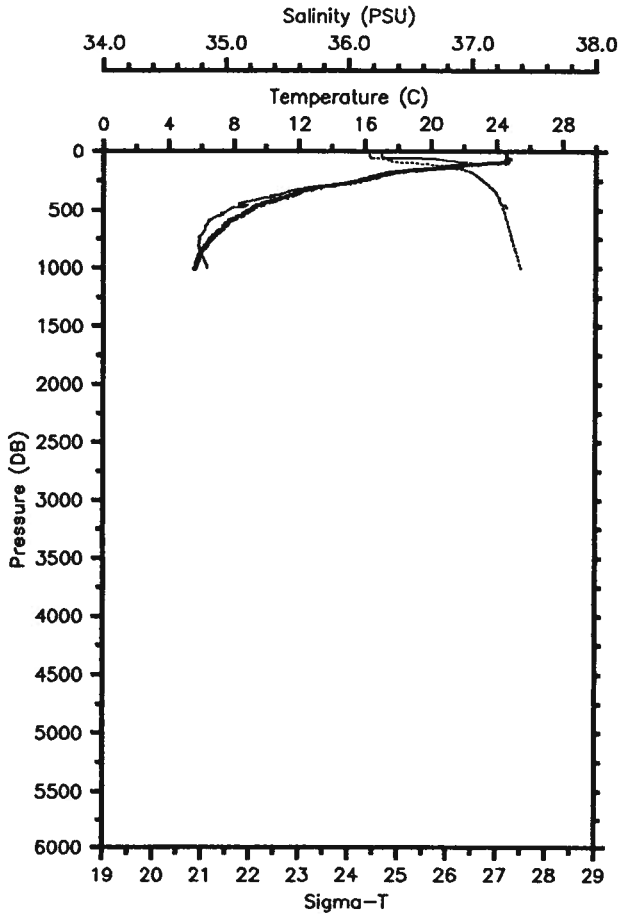
Prs	Tem	Sal	SigT
0	24.49	36.339	24.51
10	24.53	36.306	24.47
20	24.53	36.307	24.47
30	24.53	36.309	24.47
40	24.54	36.308	24.47
50	24.54	36.308	24.47
60	24.54	36.309	24.47
70	24.54	36.309	24.47
80	24.57	36.336	24.49
90	24.64	36.625	24.68
100	24.44	36.875	24.93
110	23.91	36.941	25.14
120	22.50	37.003	25.60
130	20.97	36.947	25.99
140	19.90	36.788	26.15
150	19.15	36.726	26.30
160	18.19	36.589	26.44
170	17.93	36.547	26.47
180	17.57	36.471	26.51
190	17.21	36.430	26.56
200	16.78	36.353	26.61
250	15.04	36.041	26.77
300	12.35	35.508	26.92
350	10.89	35.261	27.00
400	9.69	35.087	27.07
450	9.44	35.063	27.10
500	8.99	35.000	27.12
550	8.50	34.953	27.16
600	7.98	34.887	27.19
650	7.76	34.897	27.23
700	7.18	34.835	27.26
750	6.75	34.809	27.30
800	6.46	34.796	27.33
850	6.32	34.804	27.36
900	6.10	34.811	27.39
950	5.91	34.823	27.42
1000	5.76	34.841	27.46
1500	4.43	34.987	27.73
2000	3.50	34.971	27.81
2496	2.98	34.947	27.85

ALB-STACS33-89 CTD 36 ALBATROSS IV
Date 02 22 89 Latitude 14.500 N
Time 1339 Z Longitude 44.012 W



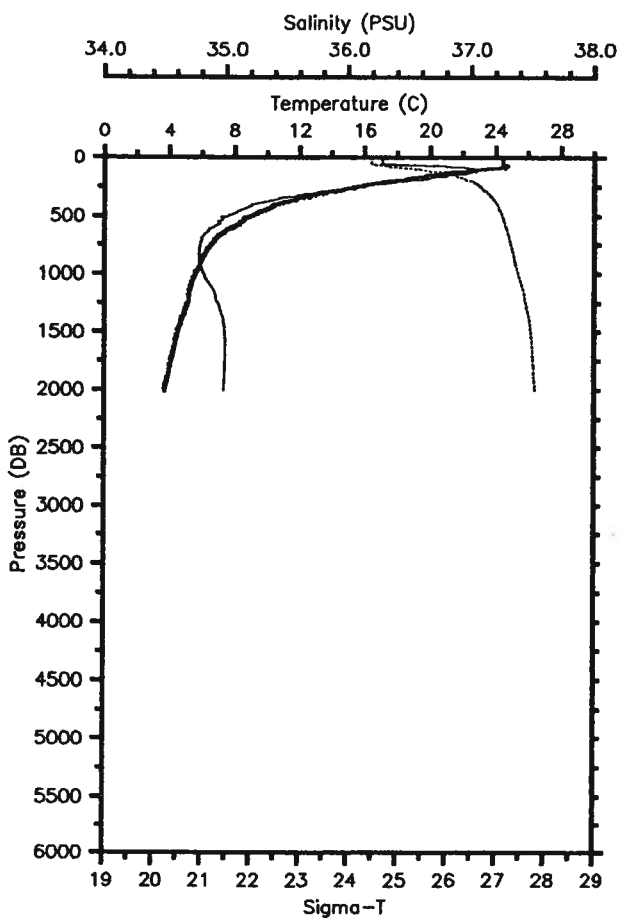
Prs	Tem	Sal	SigT
0	24.56	36.238	24.41
10	24.55	36.253	24.43
20	24.55	36.254	24.43
30	24.55	36.254	24.43
40	24.55	36.255	24.43
50	24.55	36.257	24.43
60	24.56	36.259	24.43
70	24.59	36.330	24.47
80	24.65	36.700	24.74
90	24.62	36.830	24.84
100	24.56	36.908	24.92
110	23.97	37.007	25.17
120	22.86	37.026	25.51
130	21.83	36.998	25.79
140	20.94	36.921	25.97
150	19.98	36.798	26.14
160	19.08	36.710	26.31
170	18.40	36.601	26.40
180	17.69	36.451	26.46
190	17.27	36.392	26.52
200	16.87	36.323	26.56
250	15.53	36.125	26.72
300	13.43	35.740	26.88
350	12.11	35.503	26.96
400	11.30	35.416	27.05
450	9.83	35.137	27.09
500	9.15	35.037	27.12
550	8.59	34.988	27.17
600	7.87	34.873	27.19
650	7.41	34.834	27.23
700	7.09	34.814	27.26
750	6.82	34.811	27.29
800	6.42	34.780	27.32
850	6.12	34.779	27.36
900	5.95	34.802	27.40
950	5.83	34.825	27.44
1000	5.72	34.838	27.46
1500	4.56	34.988	27.72
2000	3.59	34.976	27.81
2500	3.02	34.953	27.85
3000	2.63	34.928	27.86
3242	2.58	34.920	27.86

ALB-STACS33-89 CTD 37 ALBATROSS IV
Date 02 22 89 Latitude 14.483 N
Time 1522 Z Longitude 44.020 W



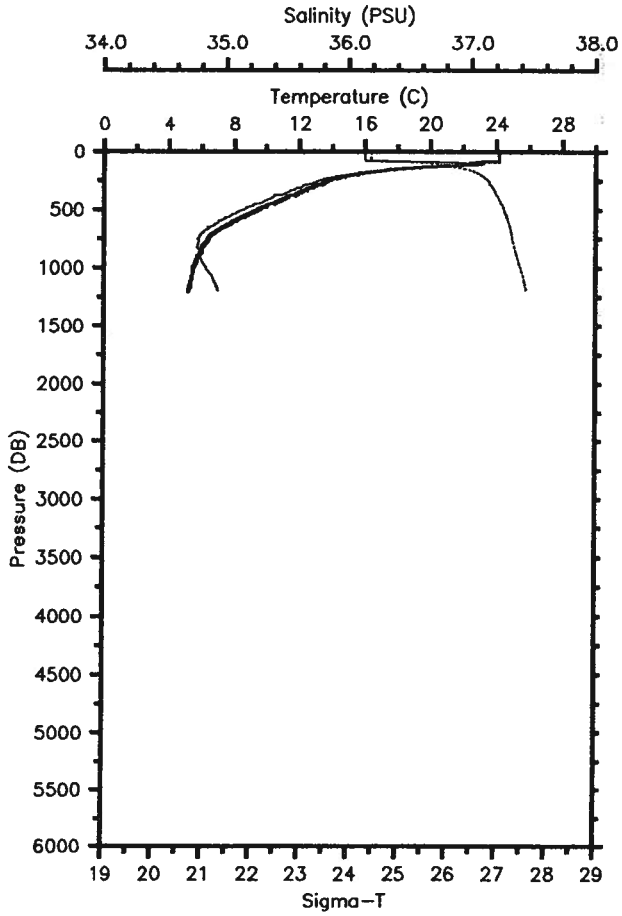
Prs	Tem	Sal	SigT
0	24.54	36.293	24.46
10	24.58	36.266	24.43
20	24.58	36.266	24.43
30	24.58	36.266	24.43
40	24.58	36.266	24.43
50	24.57	36.269	24.43
60	24.60	36.381	24.51
70	24.65	36.711	24.74
80	24.62	36.802	24.82
90	24.59	36.877	24.89
100	23.80	37.012	25.23
110	22.79	37.007	25.52
120	21.64	37.004	25.84
130	20.88	36.947	26.01
140	20.53	36.911	26.08
150	19.85	36.797	26.17
160	19.03	36.701	26.31
170	18.34	36.598	26.41
180	17.58	36.471	26.50
190	17.26	36.391	26.52
200	16.94	36.347	26.56
250	15.71	36.159	26.71
300	13.51	35.713	26.84
350	11.98	35.494	26.98
400	10.88	35.311	27.04
450	9.83	35.137	27.09
500	9.03	35.026	27.13
550	8.51	34.962	27.17
600	7.68	34.864	27.21
650	7.37	34.835	27.24
700	6.94	34.810	27.28
750	6.61	34.789	27.31
800	6.37	34.779	27.33
850	6.08	34.790	27.38
900	5.91	34.812	27.42
950	5.77	34.832	27.45
1000	5.63	34.849	27.48
1006	5.60	34.849	27.48

ALB-STACS33-89 CTD 38 ALBATROSS IV
Date 02 22 89 Latitude 14.533 N
Time 2148 Z Longitude 43.243 W



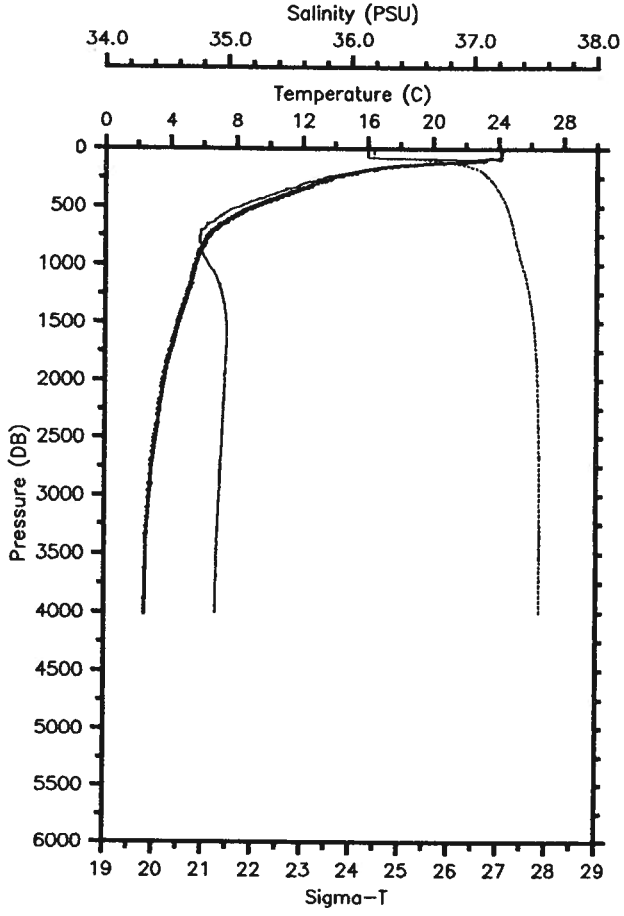
Prs	Tem	Sal	SigT
0	24.44	36.270	24.47
10	24.43	36.274	24.48
20	24.44	36.274	24.48
30	24.44	36.275	24.48
40	24.44	36.277	24.48
50	24.44	36.274	24.48
60	24.48	36.333	24.51
70	24.65	36.632	24.68
80	24.61	36.857	24.87
90	24.25	36.985	25.07
100	23.27	37.033	25.40
110	22.77	37.035	25.54
120	22.10	36.999	25.71
130	21.02	36.986	26.00
140	20.85	36.966	26.03
150	19.93	36.796	26.15
160	19.76	36.804	26.20
170	19.17	36.700	26.28
180	18.75	36.638	26.34
190	18.53	36.610	26.37
200	17.60	36.440	26.48
250	15.44	36.035	26.67
300	13.64	35.740	26.84
350	11.82	35.423	26.95
400	10.46	35.215	27.04
450	9.76	35.111	27.08
500	8.95	35.012	27.14
550	8.33	34.934	27.17
600	7.84	34.889	27.21
650	7.24	34.831	27.25
700	6.81	34.798	27.29
750	6.57	34.782	27.31
800	6.28	34.777	27.34
850	6.08	34.779	27.37
900	5.93	34.779	27.39
950	5.77	34.799	27.42
1000	5.60	34.816	27.46
1500	4.53	34.987	27.72
2000	3.72	34.980	27.80
2004	3.71	34.979	27.80

ALB-STACS33-89 CTD 39 ALBATROSS IV
Date 02 23 89 Latitude 14.502 N
Time 0510 Z Longitude 42.502 W



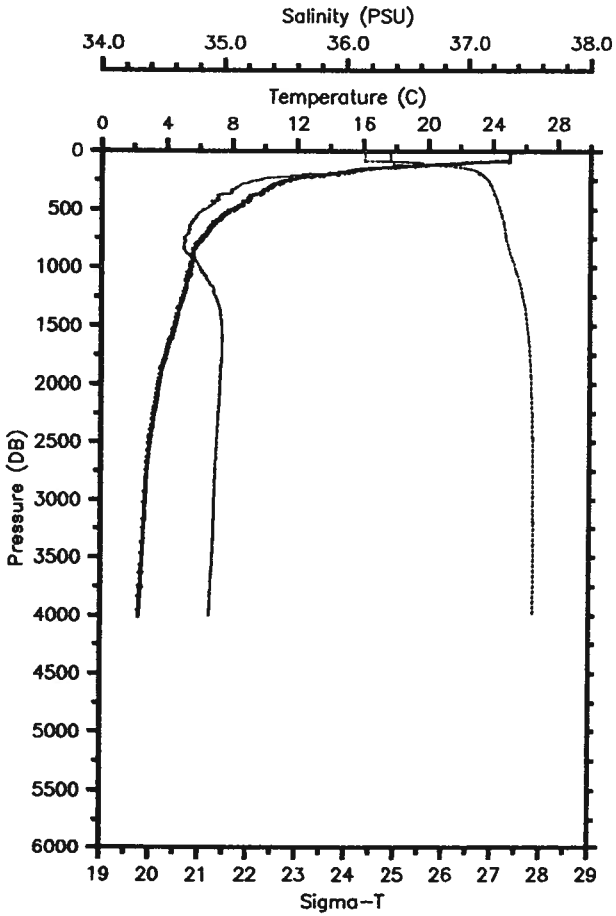
Prs	Tem	Sal	SigT
0	24.14	36.139	24.47
10	24.14	36.137	24.46
20	24.15	36.136	24.46
30	24.15	36.136	24.46
40	24.15	36.135	24.46
50	24.15	36.135	24.46
60	24.15	36.136	24.46
70	24.15	36.138	24.46
80	23.92	36.500	24.80
90	22.85	36.886	25.41
100	22.09	37.015	25.72
110	21.71	37.081	25.88
120	20.72	36.927	26.04
130	19.60	36.651	26.13
140	18.61	36.502	26.27
150	17.78	36.409	26.41
160	17.12	36.288	26.48
170	16.62	36.243	26.56
180	16.10	36.143	26.61
190	15.60	36.073	26.66
200	15.23	36.003	26.70
250	13.71	35.750	26.83
300	12.86	35.627	26.91
350	12.05	35.509	26.98
400	11.12	35.373	27.05
450	10.25	35.247	27.10
500	9.46	35.144	27.16
550	8.66	35.028	27.19
600	7.86	34.943	27.25
650	7.19	34.844	27.27
700	6.68	34.798	27.30
750	6.39	34.768	27.32
800	6.14	34.767	27.35
850	6.01	34.781	27.38
900	5.78	34.786	27.41
950	5.67	34.804	27.44
1000	5.48	34.832	27.48
1198	5.15	34.933	27.60

ALB-STACS33-89 CTD 40 ALBATROSS IV
Date 02 23 89 Latitude 14.513 N
Time 0612 Z Longitude 42.512 W



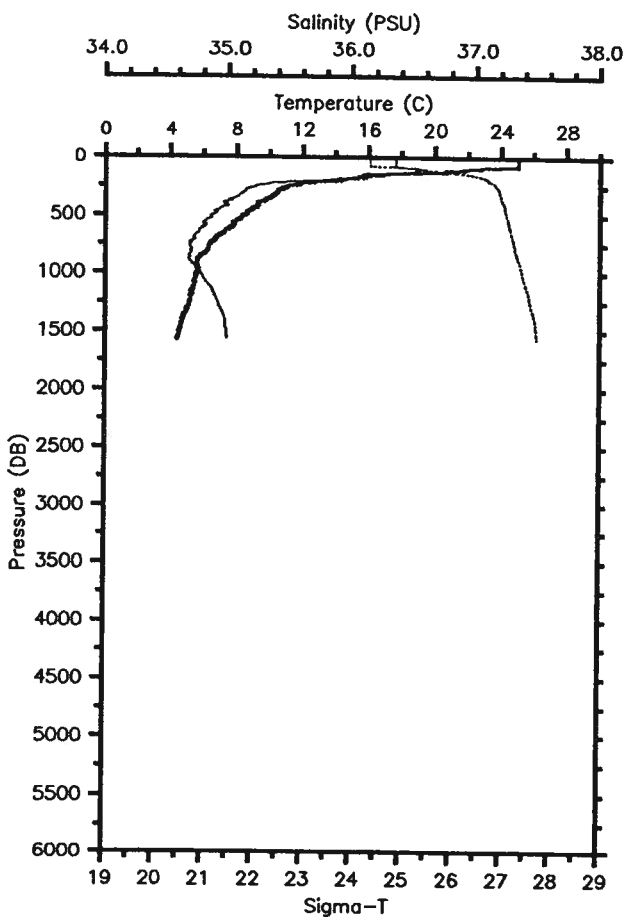
Prs	Tem	Sal	SigT
0	24.12	36.144	24.47
10	24.14	36.133	24.46
20	24.15	36.132	24.45
30	24.16	36.132	24.45
40	24.16	36.133	24.45
50	24.16	36.133	24.45
60	24.16	36.133	24.45
70	24.16	36.134	24.45
80	24.08	36.233	24.55
90	22.92	36.834	25.35
100	22.26	36.986	25.66
110	21.81	37.086	25.86
120	20.73	36.913	26.03
130	19.48	36.620	26.14
140	18.57	36.528	26.30
150	17.75	36.404	26.41
160	17.08	36.248	26.45
170	16.60	36.236	26.56
180	16.16	36.165	26.61
190	15.73	36.074	26.64
200	15.34	36.020	26.68
250	13.81	35.777	26.83
300	12.75	35.607	26.91
350	11.84	35.481	26.99
400	10.97	35.347	27.05
450	10.00	35.212	27.12
500	9.09	35.096	27.18
550	8.33	34.987	27.21
600	7.72	34.917	27.25
650	7.07	34.827	27.27
700	6.73	34.799	27.30
750	6.36	34.777	27.33
800	6.11	34.769	27.36
850	5.95	34.781	27.39
900	5.71	34.786	27.42
950	5.65	34.810	27.45
1000	5.50	34.837	27.49
1500	4.47	34.988	27.73
2000	3.58	34.974	27.81
2500	3.10	34.955	27.84
3000	2.71	34.933	27.86
3500	2.51	34.915	27.86
4000	2.46	34.905	27.86
4004	2.46	34.906	27.86

ALB-STACS33-89 CTD 41 ALBATROSS IV
Date 02 24 89 Latitude 12.298 N
Time 0124 Z Longitude 44.167 W



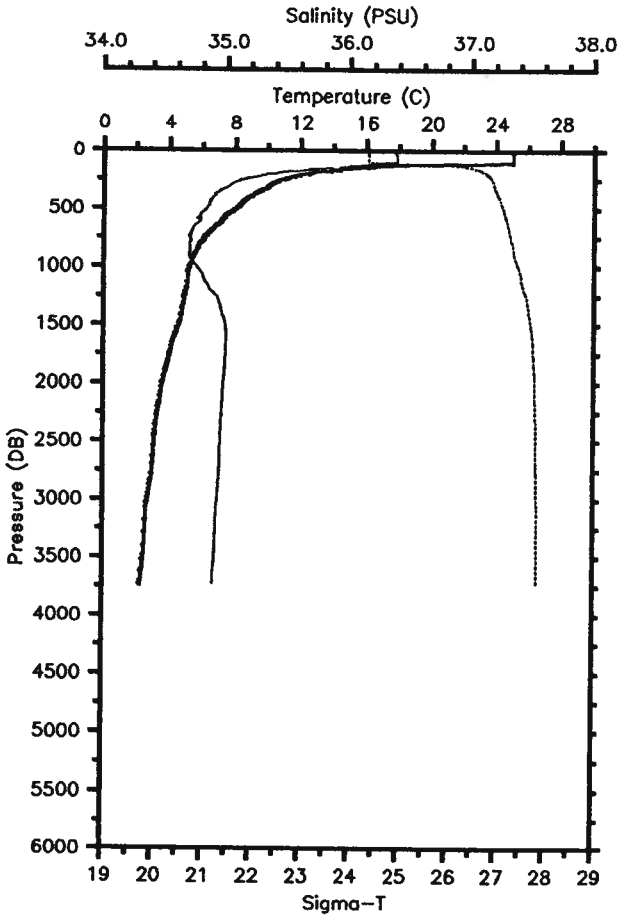
Prs	Tem	Sal	SigT
0	25.01	36.359	24.37
10	25.03	36.353	24.36
20	25.03	36.352	24.36
30	25.04	36.353	24.35
40	25.04	36.353	24.35
50	25.04	36.353	24.35
60	25.04	36.352	24.35
70	25.05	36.352	24.35
80	24.96	36.349	24.37
90	23.14	36.438	24.99
100	22.20	36.607	25.39
110	21.17	36.571	25.65
120	19.92	36.431	25.88
130	18.90	36.395	26.12
140	17.20	36.174	26.37
150	16.32	36.100	26.52
160	15.70	36.020	26.60
170	15.40	36.002	26.66
180	14.98	35.939	26.70
190	14.48	35.861	26.75
200	13.67	35.677	26.78
250	11.49	35.285	26.91
300	10.45	35.126	26.97
350	9.90	35.066	27.02
400	9.09	34.949	27.06
450	8.69	34.919	27.10
500	8.09	34.849	27.14
550	7.44	34.780	27.18
600	7.02	34.745	27.22
650	6.67	34.717	27.24
700	6.48	34.709	27.26
750	6.17	34.676	27.27
800	5.82	34.675	27.32
850	5.63	34.680	27.35
900	5.56	34.720	27.39
950	5.56	34.772	27.43
1000	5.49	34.804	27.46
1500	4.51	34.985	27.72
2000	3.57	34.973	27.81
2500	2.99	34.946	27.84
3000	2.72	34.926	27.85
3500	2.55	34.911	27.85
4000	2.36	34.891	27.85
4002	2.36	34.890	27.85

ALB-STACS33-89 CTD 42 ALBATROSS IV
Date 02 24 89 Latitude 12.332 N
Time 0400 Z Longitude 44.165 W



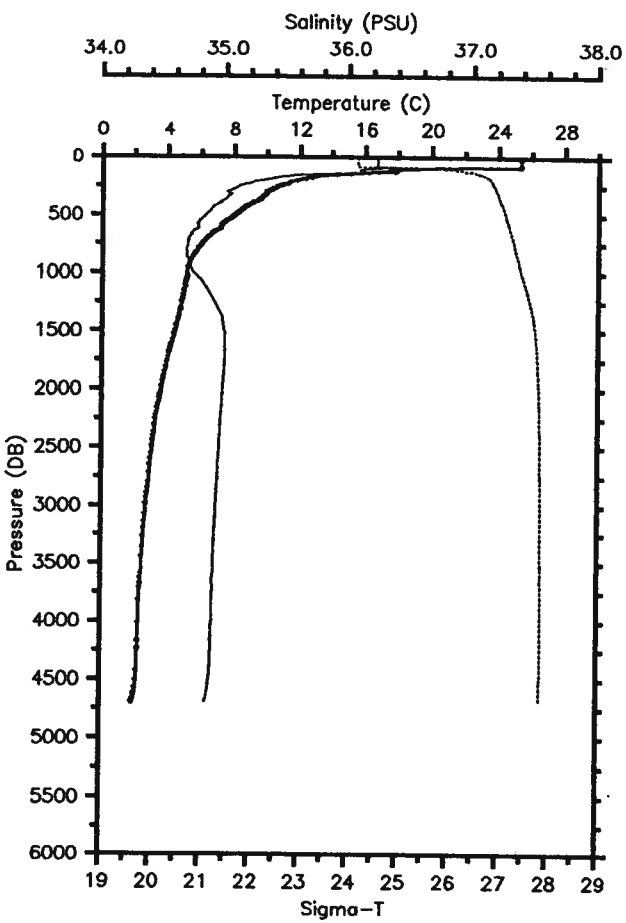
Prs	Tem	Sal	SigT
0	25.01	36.352	24.36
10	25.01	36.353	24.36
20	25.01	36.352	24.36
30	25.02	36.353	24.36
40	25.02	36.353	24.36
50	25.02	36.353	24.36
60	25.02	36.353	24.36
70	25.02	36.353	24.36
80	23.94	36.373	24.70
90	22.73	36.530	25.18
100	21.81	36.556	25.46
110	21.00	36.505	25.64
120	20.67	36.519	25.74
130	19.62	36.410	25.94
140	17.51	36.130	26.26
150	16.86	36.174	26.45
160	16.10	36.060	26.54
170	15.72	36.026	26.60
180	15.29	35.991	26.67
190	14.80	35.875	26.73
200	14.24	35.791	26.75
250	11.14	35.225	26.93
300	10.51	35.133	26.97
350	10.03	35.063	27.00
400	9.23	34.963	27.05
450	8.92	34.930	27.08
500	8.41	34.866	27.11
550	7.93	34.815	27.14
600	7.73	34.810	27.16
650	7.25	34.763	27.20
700	6.79	34.720	27.23
750	6.38	34.686	27.26
800	6.28	34.696	27.28
850	5.86	34.681	27.32
900	5.64	34.686	27.35
950	5.59	34.729	27.39
1000	5.58	34.772	27.43
1500	4.56	34.983	27.71
1564	4.43	34.989	27.73

ALB–STACS33–89 CTD 43 ALBATROSS IV
Date 02 24 89 Latitude 10.833 N
Time 1549 Z Longitude 45.265 W



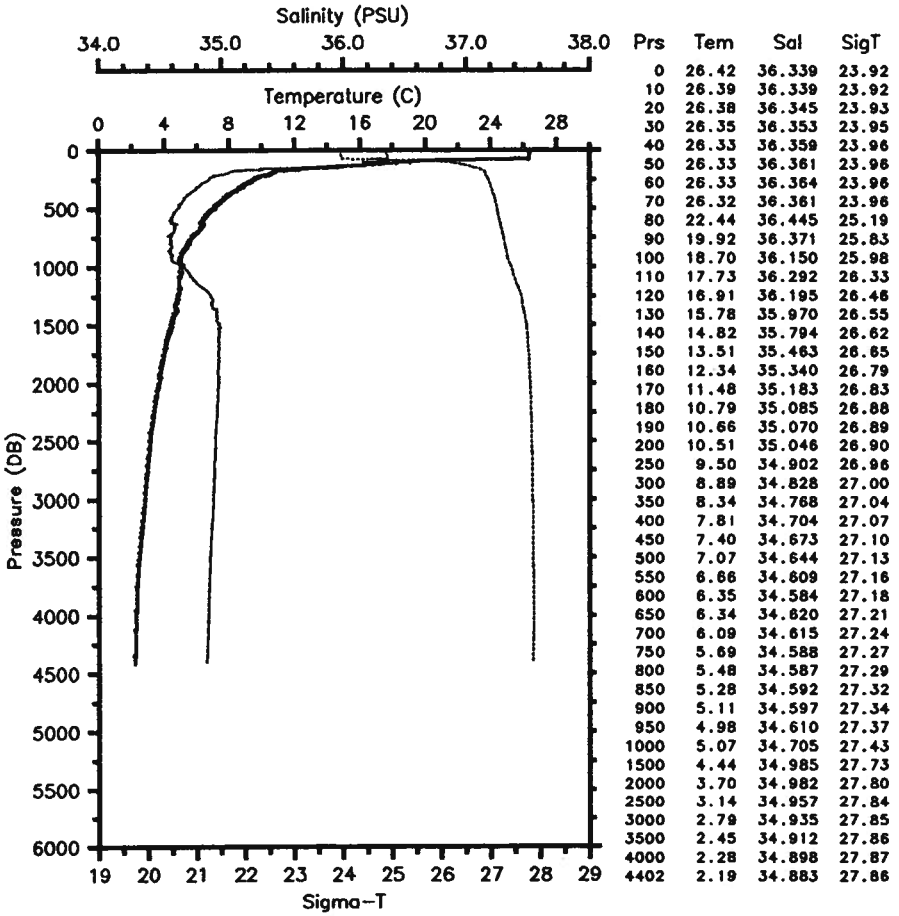
Prs	Tem	Sal	SigT
0	25.08	36.328	24.32
10	25.05	36.356	24.35
20	25.05	36.371	24.36
30	25.05	36.377	24.37
40	25.04	36.379	24.37
50	25.04	36.381	24.38
60	25.04	36.382	24.38
70	25.04	36.383	24.38
80	25.04	36.382	24.38
90	25.03	36.382	24.38
100	24.96	36.360	24.38
110	22.31	36.265	25.09
120	18.49	36.140	26.02
130	17.01	36.004	26.28
140	16.37	35.964	26.41
150	15.32	35.858	26.56
160	14.38	35.707	26.65
170	13.86	35.619	26.69
180	13.34	35.519	26.73
190	12.70	35.430	26.79
200	12.46	35.386	26.80
250	10.79	35.114	26.90
300	10.10	35.019	26.95
350	9.48	34.944	27.00
400	8.84	34.883	27.05
450	8.41	34.851	27.09
500	8.02	34.830	27.14
550	7.47	34.785	27.18
600	7.21	34.775	27.21
650	6.75	34.733	27.24
700	6.44	34.712	27.27
750	6.12	34.706	27.30
800	5.86	34.694	27.33
850	5.68	34.696	27.35
900	5.49	34.693	27.37
950	5.37	34.715	27.41
1000	5.23	34.750	27.45
1500	4.58	34.988	27.71
2000	3.60	34.972	27.81
2500	3.12	34.950	27.83
3000	2.73	34.926	27.85
3500	2.46	34.906	27.86
3736	2.28	34.892	27.86

ALB–STACS33–89 CTD 44 ALBATROSS IV
Date 02 25 89 Latitude 9.402 N
Time 0414 Z Longitude 46.378 W



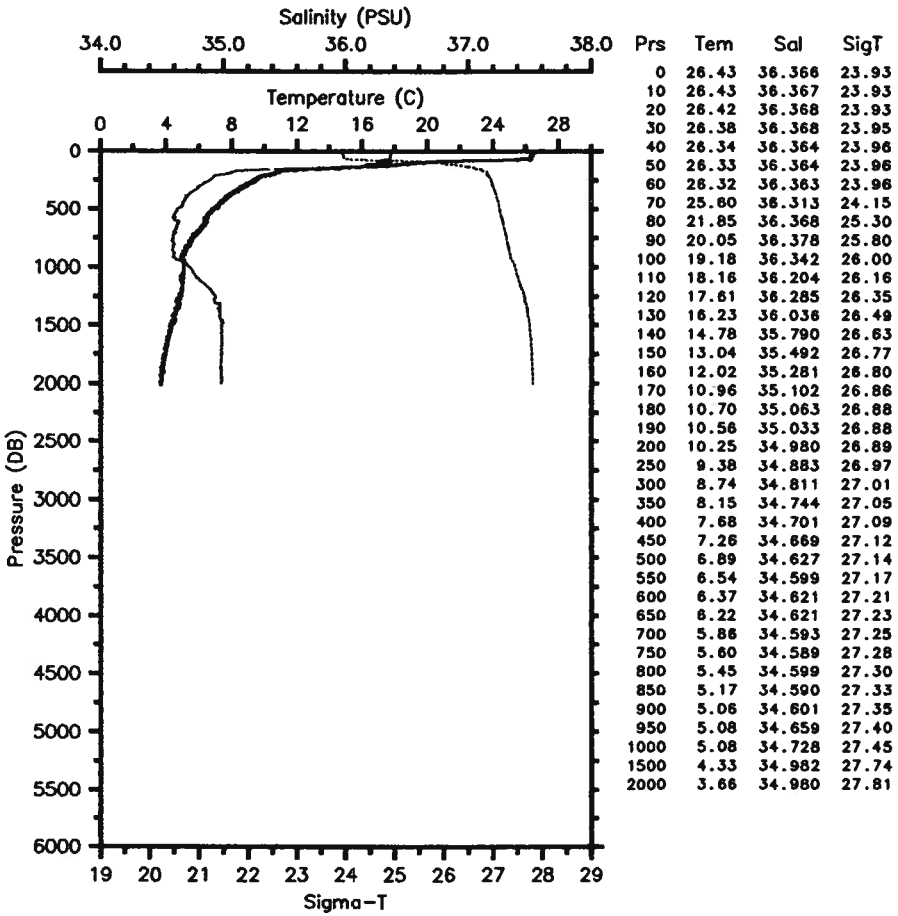
Prs	Tem	Sal	SigT
0	25.32	36.231	24.17
10	25.31	36.225	24.17
20	25.32	36.229	24.17
30	25.32	36.229	24.17
40	25.32	36.232	24.18
50	25.32	36.233	24.18
60	25.33	36.231	24.17
70	25.31	36.221	24.17
80	25.26	36.196	24.17
90	20.41	36.274	25.63
100	18.66	36.164	26.00
110	17.56	36.083	26.21
120	17.80	36.363	26.37
130	16.40	36.150	26.54
140	15.27	35.893	26.60
150	14.13	35.684	26.69
160	13.23	35.531	26.76
170	12.75	35.448	26.79
180	12.40	35.400	26.82
190	12.11	35.336	26.83
200	11.81	35.281	26.84
250	10.85	35.110	26.92
300	9.98	35.006	26.96
350	9.69	35.010	27.01
400	9.09	34.948	27.06
450	8.50	34.881	27.10
500	8.05	34.830	27.13
550	7.54	34.789	27.18
600	7.23	34.773	27.21
650	6.73	34.730	27.24
700	6.35	34.703	27.27
750	6.04	34.692	27.30
800	5.80	34.683	27.33
850	5.53	34.681	27.36
900	5.35	34.698	27.40
950	5.18	34.713	27.43
1000	5.13	34.738	27.45
1500	4.44	34.991	27.73
2000	3.60	34.980	27.81
2500	3.08	34.953	27.84
3000	2.72	34.929	27.85
3500	2.49	34.911	27.86
4000	2.32	34.901	27.87
4500	2.20	34.882	27.86
4696	1.96	34.849	27.85

ALB-STACS33-89 CTD 45 ALBATROSS IV
Date 02 25 89 Latitude 7.952 N
Time 1733 Z Longitude 47.515 W



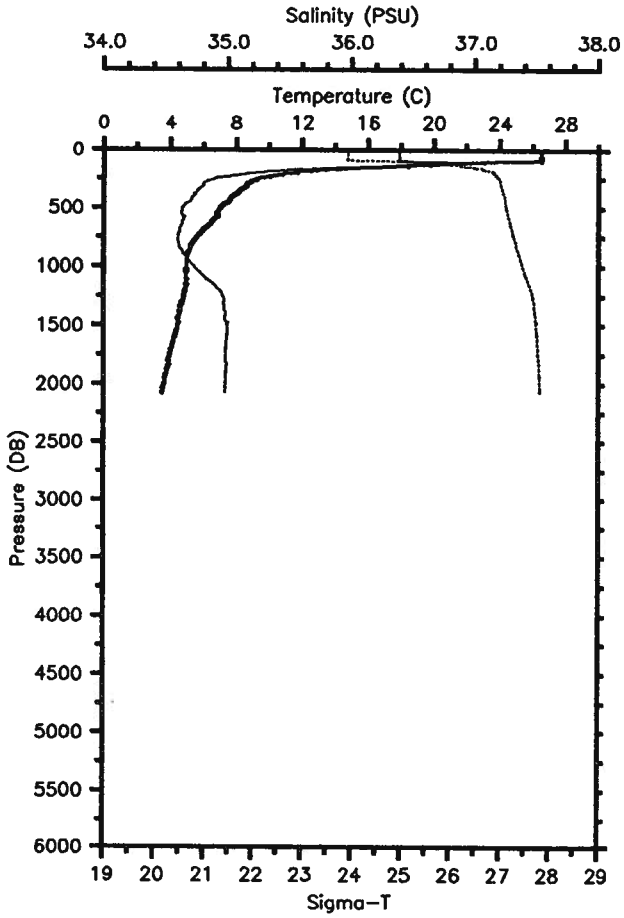
Prs	Tem	Sal	SigT
0	26.42	36.339	23.92
10	26.39	36.339	23.92
20	26.38	36.345	23.93
30	26.35	36.353	23.95
40	26.33	36.359	23.96
50	26.33	36.361	23.96
60	26.33	36.364	23.96
70	26.32	36.361	23.96
80	22.44	36.445	25.19
90	19.92	36.371	25.83
100	18.70	36.150	25.98
110	17.73	36.292	26.33
120	16.91	36.195	26.46
130	15.78	35.970	26.55
140	14.82	35.794	26.62
150	13.51	35.463	26.65
160	12.34	35.340	26.79
170	11.48	35.183	26.83
180	10.79	35.085	26.88
190	10.66	35.070	26.89
200	10.51	35.046	26.90
250	9.50	34.902	26.96
300	8.89	34.828	27.00
350	8.34	34.768	27.04
400	7.81	34.704	27.07
450	7.40	34.673	27.10
500	7.07	34.644	27.13
550	6.66	34.609	27.16
600	6.35	34.584	27.18
650	6.34	34.620	27.21
700	6.09	34.615	27.24
750	5.69	34.588	27.27
800	5.48	34.587	27.29
850	5.28	34.592	27.32
900	5.11	34.597	27.34
950	4.98	34.610	27.37
1000	5.07	34.705	27.43
1500	4.44	34.985	27.73
2000	3.70	34.982	27.80
2500	3.14	34.957	27.84
3000	2.79	34.935	27.85
3500	2.45	34.912	27.86
4000	2.28	34.898	27.87
4402	2.19	34.883	27.86

ALB-STACS33-89 CTD 46 ALBATROSS IV
Date 02 25 89 Latitude 7.943 N
Time 2018 Z Longitude 47.682 W



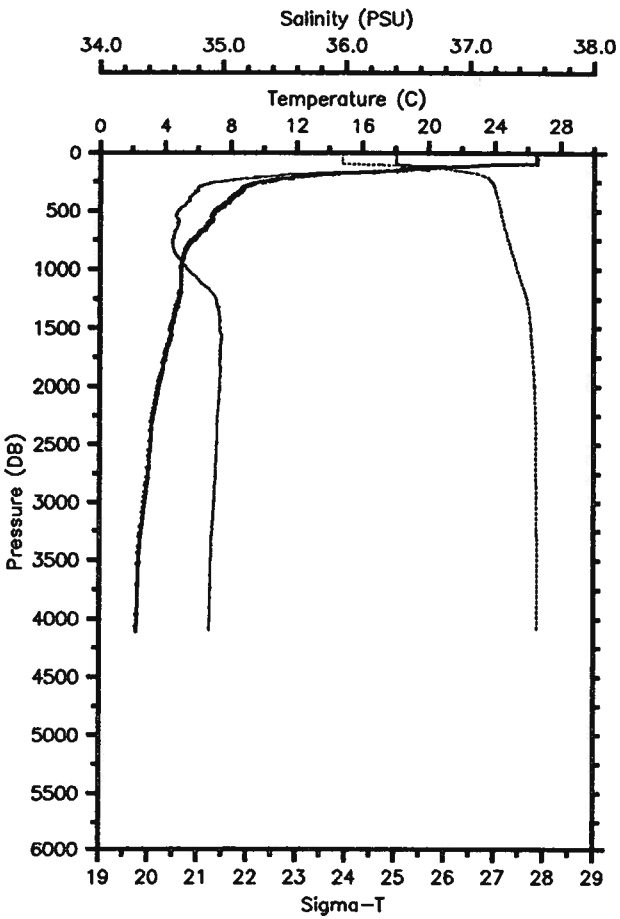
Prs	Tem	Sal	SigT
0	26.43	36.366	23.93
10	26.43	36.367	23.93
20	26.42	36.368	23.93
30	26.38	36.368	23.95
40	26.34	36.364	23.96
50	26.33	36.364	23.96
60	26.32	36.363	23.96
70	25.80	36.313	24.15
80	21.85	36.368	25.30
90	20.05	36.378	25.80
100	19.18	36.342	26.00
110	18.16	36.204	26.16
120	17.61	36.285	26.35
130	16.23	36.036	26.49
140	14.78	35.790	26.63
150	13.04	35.492	26.77
160	12.02	35.281	26.80
170	10.96	35.102	26.86
180	10.70	35.063	26.88
190	10.56	35.033	26.88
200	10.25	34.980	26.89
250	9.38	34.883	26.97
300	8.74	34.811	27.01
350	8.15	34.744	27.05
400	7.68	34.701	27.09
450	7.26	34.669	27.12
500	6.89	34.627	27.14
550	6.54	34.599	27.17
600	6.37	34.621	27.21
650	6.22	34.621	27.23
700	5.86	34.593	27.25
750	5.60	34.589	27.28
800	5.45	34.599	27.30
850	5.17	34.590	27.33
900	5.06	34.601	27.35
950	5.08	34.659	27.40
1000	5.08	34.728	27.45
1500	4.33	34.982	27.74
2000	3.66	34.980	27.81

ALB–STACS33–89 CTD 47 ALBATROSS IV
Date 02 26 89 Latitude 7.205 N
Time 0233 Z Longitude 47.925 W



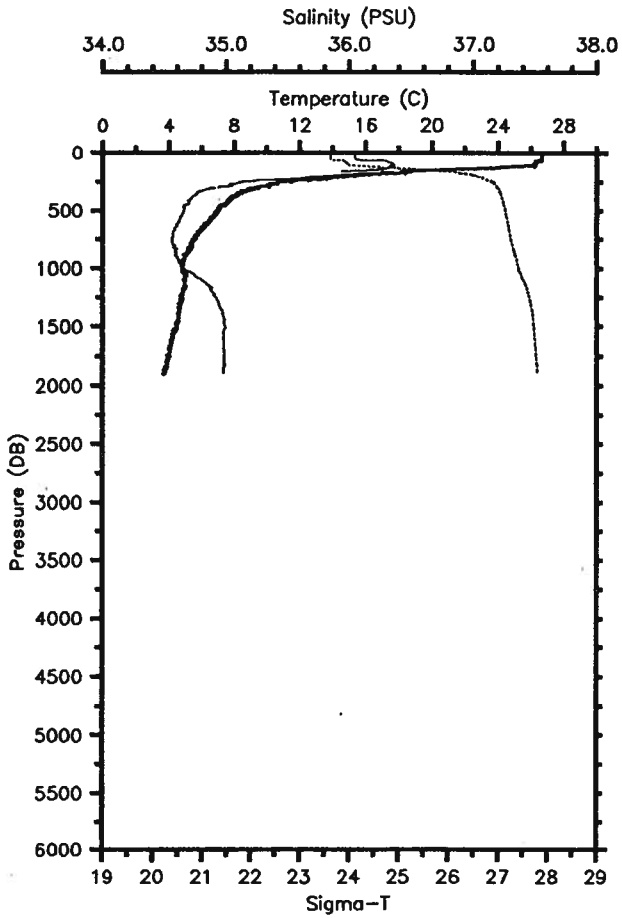
Prs	Tem	Sal	SigT
0	26.55	36.362	23.89
10	26.51	36.382	23.92
20	26.51	36.385	23.92
30	26.51	36.385	23.92
40	26.51	36.387	23.92
50	26.52	36.388	23.92
60	26.52	36.387	23.92
70	26.52	36.387	23.92
80	26.53	36.390	23.92
90	26.31	36.366	23.97
100	23.07	36.362	24.95
110	21.70	36.699	25.60
120	20.29	36.487	25.82
130	19.04	36.464	26.13
140	17.97	36.278	26.26
150	16.34	36.035	26.47
160	14.69	35.745	26.62
170	13.48	35.542	26.72
180	12.74	35.432	26.76
190	11.72	35.298	26.87
200	11.26	35.199	26.88
250	9.33	34.893	26.98
300	8.66	34.797	27.01
350	8.22	34.755	27.05
400	7.79	34.720	27.08
450	7.50	34.689	27.10
500	6.99	34.629	27.13
550	6.61	34.624	27.15
600	6.63	34.640	27.19
650	6.32	34.617	27.21
700	5.95	34.603	27.25
750	5.57	34.594	27.29
800	5.29	34.597	27.32
850	5.17	34.611	27.35
900	5.04	34.643	27.39
950	4.99	34.678	27.42
1000	4.97	34.722	27.46
1500	4.44	34.994	27.73
2000	3.62	34.979	27.81
2076	3.50	34.975	27.82

ALB–STACS33–89 CTD 48 ALBATROSS IV
Date 02 26 89 Latitude 7.138 N
Time 0416 Z Longitude 47.883 W



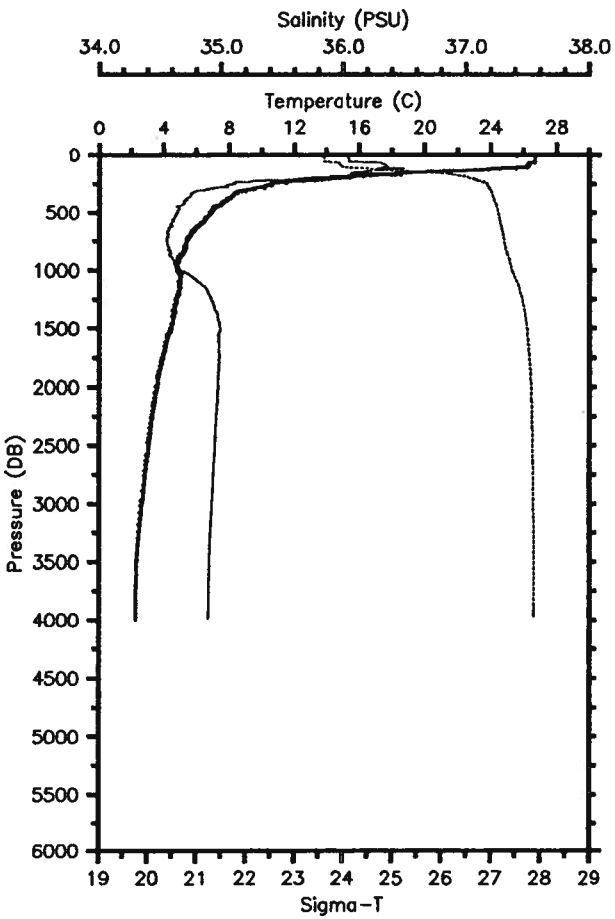
Prs	Tem	Sal	SigT
0	26.53	36.405	23.93
10	26.53	36.404	23.93
20	26.53	36.405	23.93
30	26.53	36.405	23.93
40	26.54	36.405	23.93
50	26.54	36.405	23.92
60	26.55	36.404	23.92
70	26.55	36.405	23.92
80	26.55	36.404	23.92
90	26.55	36.405	23.92
100	25.05	36.514	24.47
110	22.89	36.795	25.33
120	21.32	36.612	25.63
130	20.17	36.447	25.82
140	19.31	36.428	26.03
150	18.50	36.392	26.21
160	17.18	36.193	26.39
170	15.63	35.841	26.48
180	14.40	35.719	26.66
190	13.34	35.502	26.71
200	12.67	35.429	26.79
250	10.04	35.004	26.95
300	8.78	34.813	27.01
350	8.45	34.773	27.03
400	7.96	34.727	27.07
450	7.59	34.697	27.10
500	7.06	34.636	27.12
550	6.85	34.621	27.14
600	6.70	34.643	27.18
650	6.46	34.630	27.20
700	6.02	34.608	27.24
750	5.69	34.589	27.27
800	5.39	34.595	27.31
850	5.21	34.606	27.34
900	5.08	34.836	27.38
950	5.00	34.673	27.42
1000	4.96	34.714	27.45
1500	4.39	34.982	27.73
2000	3.61	34.979	27.81
2500	3.11	34.956	27.84
3000	2.77	34.934	27.85
3500	2.40	34.908	27.87
4000	2.30	34.899	27.87
4096	2.27	34.896	27.87

ALB-STACS33-89 CTD 49 ALBATROSS IV
Date 02 26 89 Latitude 6.427 N
Time 1158 Z Longitude 48.340 W



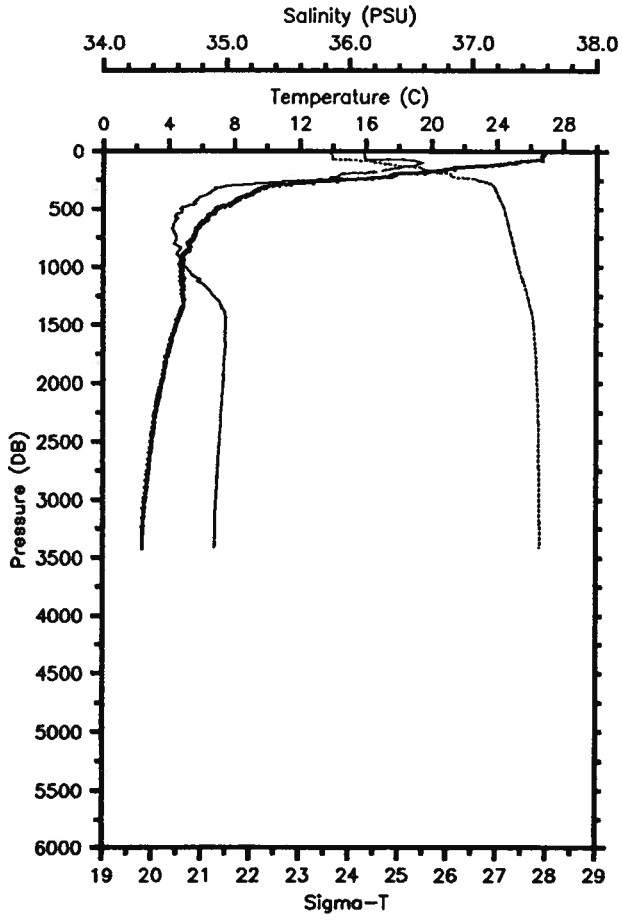
Prs	Tem	Sal	SigT
0	26.68	36.046	23.61
10	26.65	36.043	23.62
20	26.65	36.047	23.62
30	26.65	36.048	23.62
40	26.65	36.049	23.62
50	26.65	36.050	23.62
60	26.65	36.066	23.64
70	26.37	36.303	23.90
80	26.31	36.321	23.94
90	26.30	36.340	23.95
100	26.24	36.359	23.99
110	26.15	36.325	23.99
120	24.68	36.324	24.44
130	24.04	36.368	24.67
140	21.69	36.289	25.29
150	20.12	36.179	25.63
160	18.64	35.939	25.83
170	18.43	36.340	26.19
180	17.12	36.075	26.31
190	16.20	35.998	26.47
200	15.27	35.835	26.58
250	10.89	35.111	26.88
300	9.49	34.936	26.99
350	8.28	34.764	27.05
400	7.76	34.713	27.08
450	7.38	34.665	27.10
500	7.00	34.654	27.15
550	6.74	34.636	27.17
600	6.43	34.606	27.19
650	6.02	34.581	27.22
700	5.76	34.565	27.24
750	5.51	34.557	27.26
800	5.40	34.572	27.29
850	5.19	34.581	27.32
900	4.97	34.599	27.36
950	4.86	34.617	27.39
1000	4.82	34.649	27.42
1500	4.48	34.994	27.73
1896	3.70	34.979	27.80

ALB-STACS33-89 CTD 50 ALBATROSS IV
Date 02 26 89 Latitude 6.410 N
Time 1324 Z Longitude 48.333 W



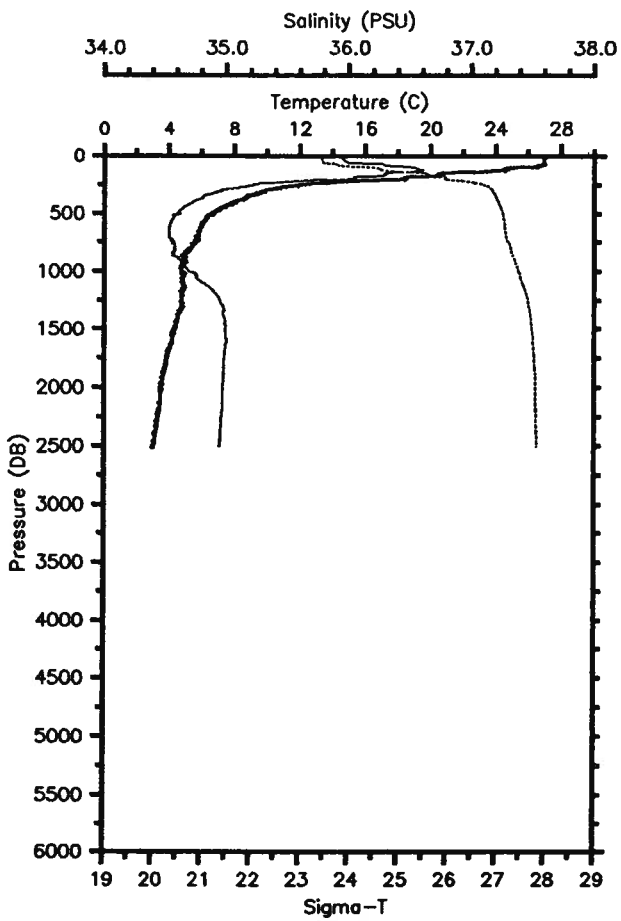
Prs	Tem	Sal	SigT
0	25.58	3.127	-0.75
10	26.67	36.047	23.61
20	26.67	36.047	23.61
30	26.66	36.048	23.62
40	26.66	36.048	23.62
50	26.66	36.048	23.62
60	26.66	36.069	23.63
70	26.35	36.314	23.92
80	26.32	36.335	23.94
90	26.29	36.352	23.96
100	26.24	36.362	23.99
110	25.89	36.325	24.07
120	24.65	36.496	24.58
130	23.80	36.342	24.72
140	21.35	36.232	25.34
150	19.66	36.113	25.70
160	18.24	36.074	26.04
170	18.28	36.330	26.22
180	16.41	36.040	26.45
190	15.57	35.909	26.55
200	14.64	35.740	26.62
250	10.63	35.103	26.92
300	9.10	34.873	27.00
350	8.21	34.754	27.05
400	7.70	34.708	27.09
450	7.11	34.648	27.13
500	6.86	34.643	27.16
550	6.56	34.617	27.18
600	6.21	34.584	27.20
650	5.86	34.574	27.23
700	5.62	34.566	27.26
750	5.42	34.561	27.28
800	5.32	34.570	27.30
850	5.20	34.589	27.33
900	4.91	34.609	27.38
950	4.85	34.628	27.40
1000	4.85	34.667	27.43
1500	4.47	34.995	27.73
2000	3.58	34.979	27.81
2500	3.06	34.955	27.84
3000	2.67	34.930	27.86
3500	2.34	34.907	27.87
3984	2.27	34.898	27.87

ALB-STACS33-89 CTD 51 ALBATROSS IV
Date 02 26 89 Latitude 5.648 N
Time 2002 Z Longitude 48.803 W



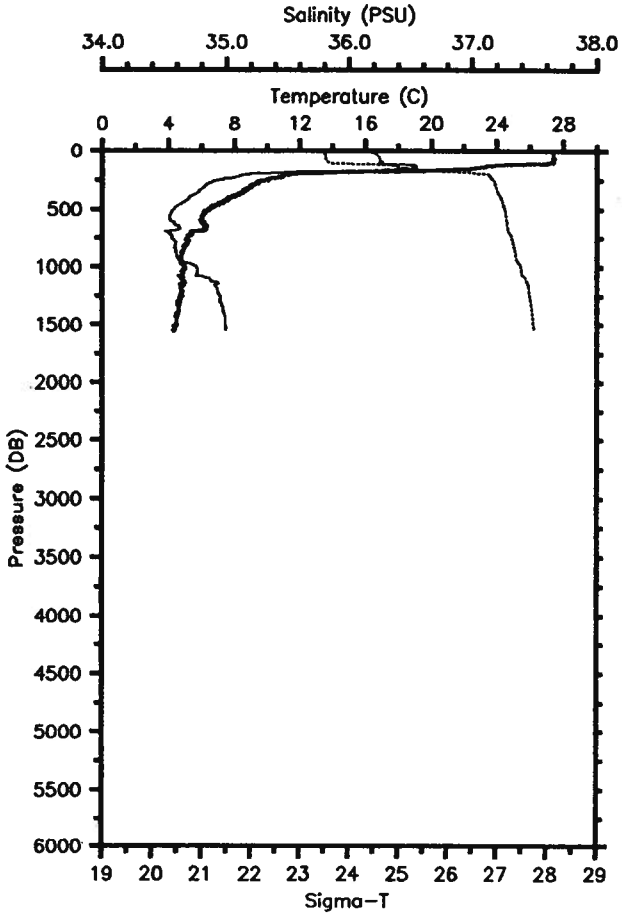
Prs	Tem	Sal	SigT
0	26.87	36.225	23.68
10	26.85	36.117	23.61
20	26.84	36.121	23.62
30	26.75	36.123	23.65
40	26.74	36.124	23.65
50	26.74	36.125	23.65
60	26.73	36.126	23.65
70	26.72	36.155	23.68
80	25.90	36.531	24.22
90	25.18	36.566	24.47
100	24.86	36.592	24.59
110	24.32	36.548	24.72
120	23.77	36.538	24.88
130	22.82	36.501	25.13
140	21.41	36.399	25.45
150	21.33	36.384	25.46
160	20.85	36.324	25.54
170	20.35	36.269	25.64
180	19.59	36.165	25.76
190	18.53	36.044	25.94
200	17.74	35.935	26.05
250	14.35	35.714	26.67
300	10.44	35.032	26.90
350	9.24	34.873	26.98
400	8.45	34.786	27.04
450	7.83	34.733	27.09
500	6.92	34.631	27.14
550	6.48	34.596	27.17
600	6.20	34.579	27.19
650	5.87	34.569	27.23
700	5.67	34.576	27.26
750	5.53	34.595	27.29
800	5.15	34.574	27.32
850	5.28	34.628	27.35
900	4.87	34.612	27.38
950	4.78	34.636	27.41
1000	4.73	34.662	27.44
1500	4.45	34.999	27.74
2000	3.56	34.978	27.81
2500	2.98	34.949	27.85
3000	2.58	34.922	27.86
3408	2.43	34.911	27.87

ALB-STACS33-89 CTD 52 ALBATROSS IV
Date 02 27 89 Latitude 4.937 N
Time 0259 Z Longitude 49.248 W



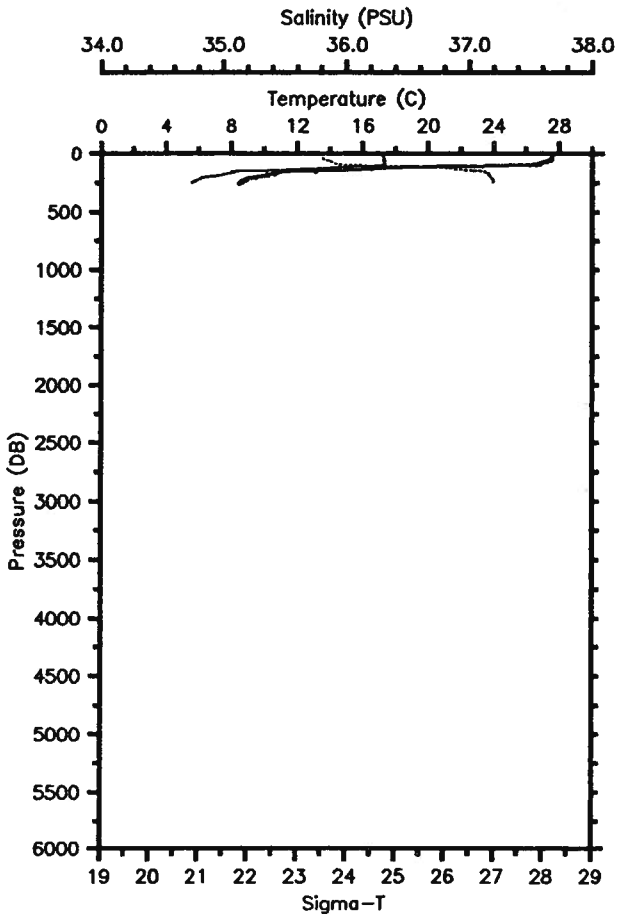
Prs	Tem	Sal	SigT
0	26.96	35.863	23.38
10	26.93	35.927	23.44
20	26.94	35.948	23.45
30	26.94	35.956	23.46
40	26.95	35.966	23.46
50	26.95	35.976	23.47
60	26.96	36.021	23.50
70	26.85	36.262	23.73
80	26.67	36.303	23.81
90	26.48	36.443	23.97
100	25.04	36.522	24.48
110	24.63	36.563	24.64
120	24.59	36.581	24.66
130	24.00	36.595	24.85
140	21.77	36.371	25.33
150	20.68	36.303	25.58
160	20.56	36.301	25.61
170	20.35	36.281	25.65
180	18.94	36.085	25.87
190	18.44	36.044	25.96
200	18.39	36.032	25.97
250	12.03	35.237	26.77
300	9.89	34.970	26.95
350	8.82	34.815	27.00
400	8.02	34.736	27.06
450	7.22	34.655	27.12
500	6.66	34.603	27.15
550	6.26	34.568	27.18
600	6.02	34.541	27.19
650	5.88	34.533	27.20
700	5.73	34.530	27.21
750	5.65	34.577	27.26
800	5.33	34.585	27.31
850	4.99	34.573	27.34
900	4.94	34.629	27.39
950	4.78	34.661	27.43
1000	4.76	34.693	27.46
1500	4.37	34.994	27.74
2000	3.51	34.975	27.82
2500	3.05	34.952	27.84
2504	3.04	34.950	27.84

ALB-STACS33-89 CTD 53 ALBATROSS IV
Date 02 27 89 Latitude 4.522 N
Time 0853 Z Longitude 49.447 W



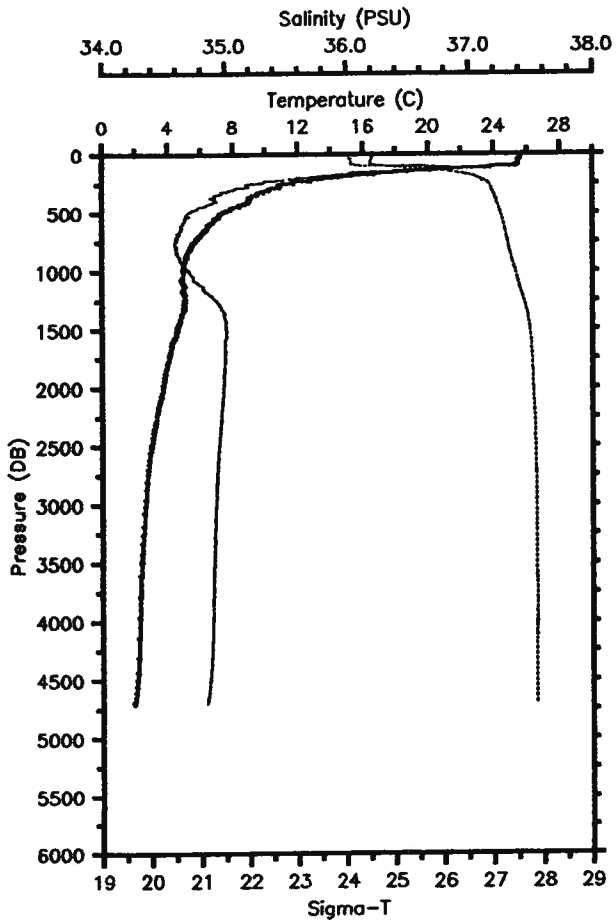
Prs	Tem	Sal	SigT
0	27.40	36.145	23.45
10	27.40	36.166	23.47
20	27.40	36.208	23.50
30	27.40	36.230	23.52
40	27.40	36.239	23.52
50	27.40	36.246	23.53
60	27.40	36.248	23.53
70	27.41	36.252	23.53
80	27.41	36.254	23.53
90	27.41	36.266	23.54
100	27.23	36.269	23.60
110	26.55	36.247	23.80
120	24.26	36.501	24.70
130	23.48	36.542	24.97
140	23.23	36.547	25.04
150	22.61	36.520	25.20
160	21.10	36.364	25.51
170	19.64	36.209	25.78
180	18.27	35.622	26.17
190	13.73	35.421	26.57
200	11.55	35.163	26.80
250	9.78	34.935	26.94
300	9.03	34.832	26.98
350	8.50	34.780	27.02
400	7.70	34.702	27.08
450	7.07	34.641	27.13
500	6.45	34.575	27.16
550	6.09	34.548	27.18
600	5.99	34.552	27.20
650	6.28	34.622	27.22
700	5.43	34.534	27.26
750	5.16	34.564	27.31
800	5.14	34.592	27.34
850	4.91	34.590	27.36
900	4.82	34.601	27.38
950	4.72	34.632	27.42
1000	4.96	34.758	27.49
1500	4.48	34.993	27.73
1550	4.34	34.999	27.75

ALB-STACS33-89 CTD 54 ALBATROSS IV
Date 02 27 89 Latitude 4.235 N
Time 1223 Z Longitude 49.668 W



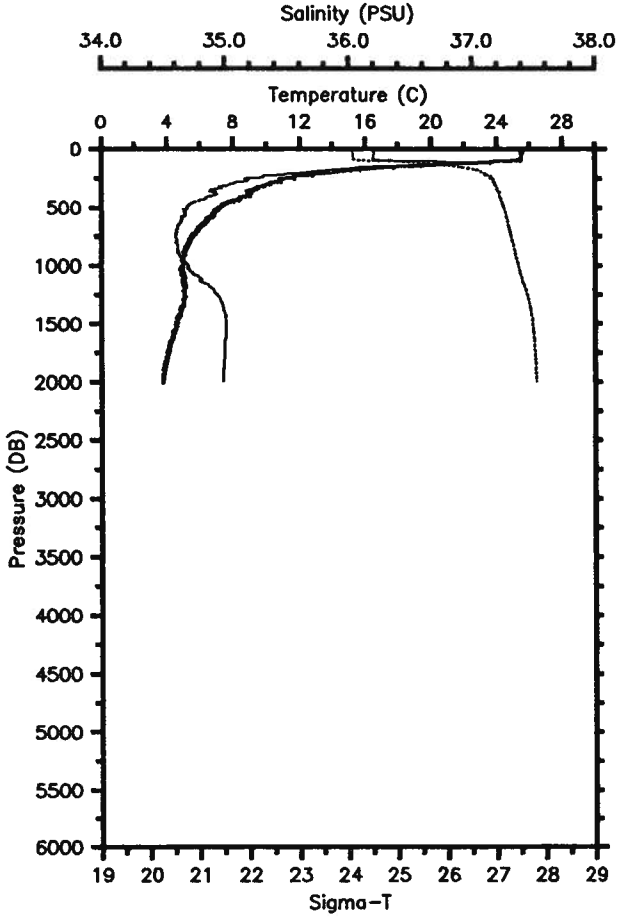
Prs	Tem	Sal	SigT
0	27.55	36.280	23.51
10	27.55	36.285	23.51
20	27.55	36.299	23.52
30	27.56	36.305	23.52
40	27.56	36.308	23.53
50	27.53	36.308	23.53
60	27.26	36.303	23.62
70	27.06	36.310	23.69
80	26.86	36.312	23.75
90	26.68	36.312	23.81
100	26.10	36.307	23.99
110	22.16	36.318	25.18
120	18.24	35.898	25.90
130	16.68	35.774	26.18
140	15.68	35.670	26.34
150	12.65	35.101	26.54
160	10.97	35.095	26.86
170	10.62	35.061	26.89
180	10.25	35.000	26.91
190	10.06	34.955	26.91
200	9.49	34.870	26.94
250	8.51	34.750	27.00

ALB-STACS33-89 CTD 55 ALBATROSS IV
Date 02 28 89 Latitude 9.400 N
Time 2120 Z Longitude 51.630 W



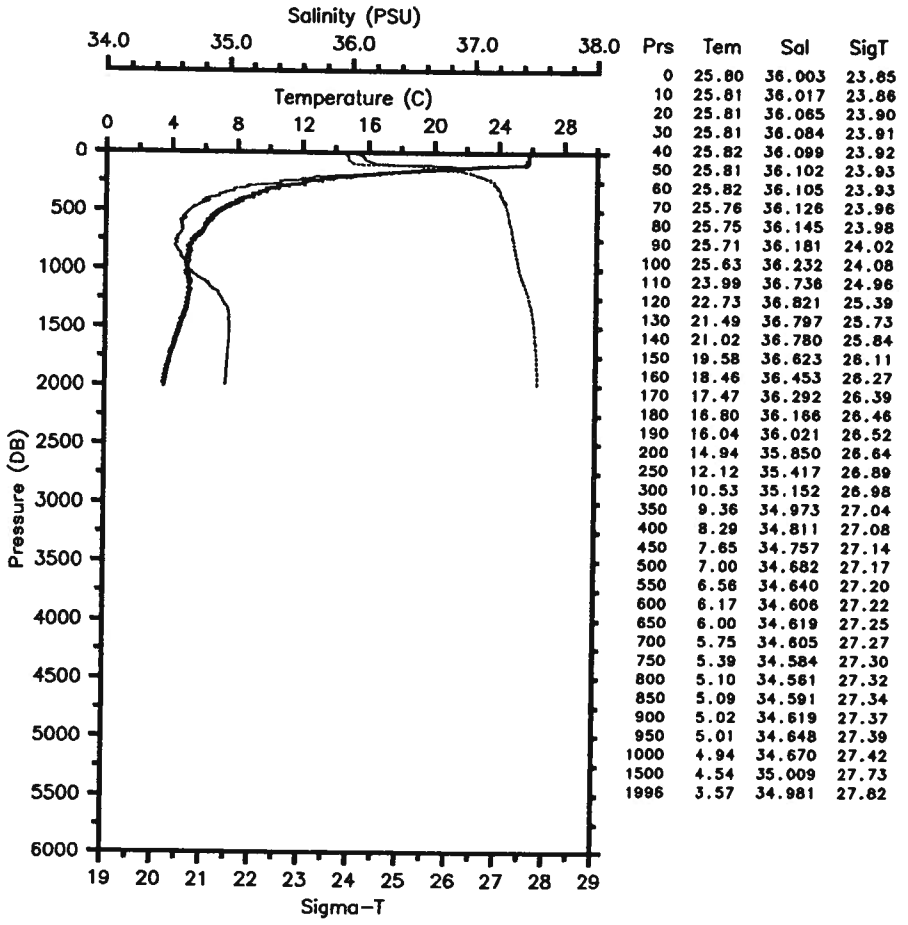
Prs	Tem	Sal	SigT
0	25.66	36.182	24.03
10	25.66	36.194	24.04
20	25.65	36.208	24.06
30	25.62	36.212	24.07
40	25.56	36.207	24.08
50	25.51	36.200	24.09
60	25.50	36.202	24.10
70	25.50	36.203	24.10
80	25.48	36.201	24.10
90	25.36	36.237	24.17
100	24.78	36.463	24.52
110	23.82	36.768	25.03
120	21.72	36.649	25.55
130	20.85	36.744	25.86
140	19.37	36.403	26.00
150	18.64	36.343	26.14
160	17.04	36.085	26.34
170	16.48	36.054	26.45
180	15.53	35.895	26.54
190	14.72	35.766	26.63
200	14.10	35.669	26.68
250	11.14	35.211	26.92
300	10.27	35.081	26.97
350	9.22	34.923	27.02
400	9.02	34.933	27.06
450	8.03	34.780	27.10
500	7.32	34.698	27.14
550	6.91	34.679	27.18
600	6.60	34.658	27.20
650	6.29	34.637	27.23
700	5.94	34.610	27.25
750	5.62	34.599	27.28
800	5.42	34.602	27.31
850	5.19	34.616	27.35
900	5.11	34.637	27.37
950	5.05	34.671	27.41
1000	5.01	34.713	27.45
1500	4.60	35.013	27.73
2000	3.77	34.989	27.80
2500	3.04	34.953	27.84
3000	2.64	34.923	27.86
3500	2.40	34.908	27.86
4000	2.28	34.897	27.87
4500	2.13	34.874	27.86
4702	1.93	34.846	27.85

ALB-STACS33-89 CTD 56 ALBATROSS IV
Date 03 01 89 Latitude 9.365 N
Time 0005 Z Longitude 51.650 W



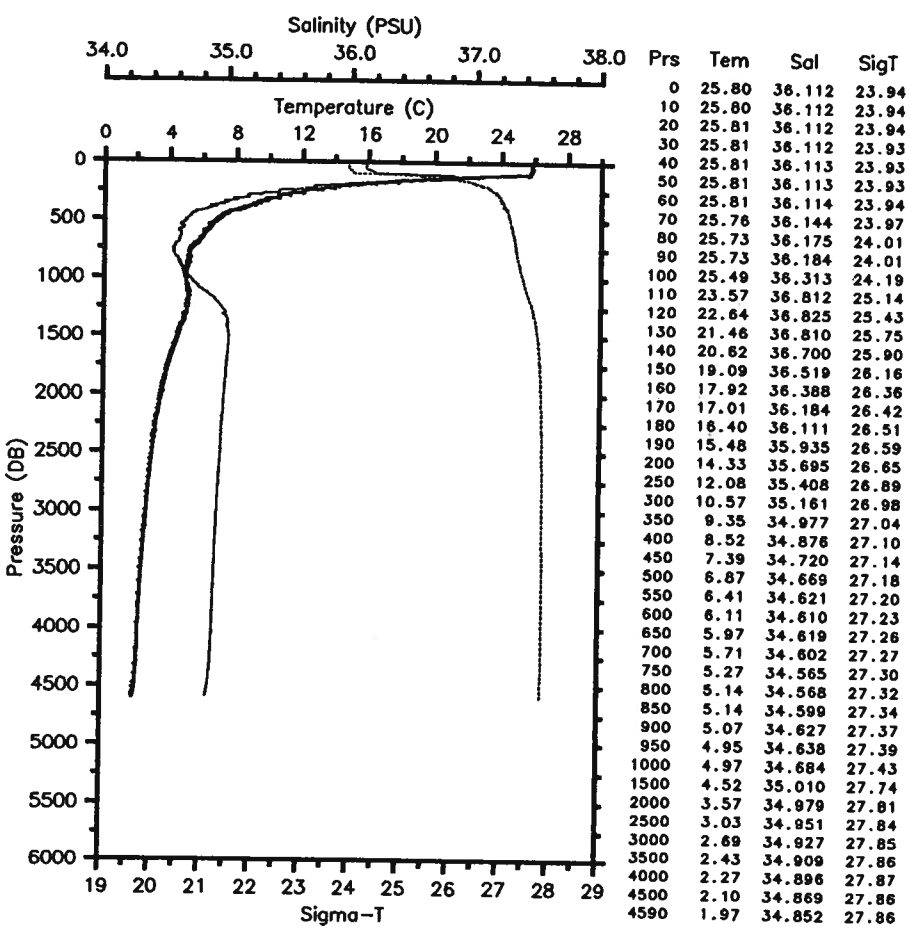
Prs	Tem	Sal	SigT
0	25.60	36.207	24.07
10	25.60	36.206	24.07
20	25.60	36.206	24.07
30	25.57	36.204	24.08
40	25.53	36.203	24.09
50	25.53	36.203	24.09
60	25.53	36.202	24.09
70	25.51	36.201	24.09
80	25.50	36.198	24.10
90	25.42	36.207	24.13
100	24.20	36.648	24.83
110	23.38	36.912	25.27
120	21.46	36.741	25.69
130	20.50	36.600	25.85
140	19.07	36.406	26.08
150	17.77	36.247	26.28
160	16.70	36.128	26.45
170	15.74	35.938	26.53
180	14.96	35.825	26.62
190	14.30	35.701	26.67
200	13.94	35.666	26.72
250	10.88	35.160	26.92
300	10.09	35.046	26.97
350	9.04	34.893	27.03
400	8.81	34.895	27.07
450	7.79	34.756	27.11
500	7.19	34.697	27.15
550	6.84	34.671	27.18
600	6.48	34.656	27.22
650	6.17	34.634	27.24
700	5.81	34.610	27.27
750	5.51	34.605	27.30
800	5.37	34.612	27.32
850	5.16	34.622	27.36
900	5.05	34.635	27.38
950	4.96	34.665	27.41
1000	5.00	34.708	27.44
1500	4.61	35.012	27.73
1996	3.74	34.987	27.80

ALB-STACS33-89 CTD 57 ALBATROSS IV
Date 03 01 89 Latitude 8.943 N
Time 0407 Z Longitude 51.888 W



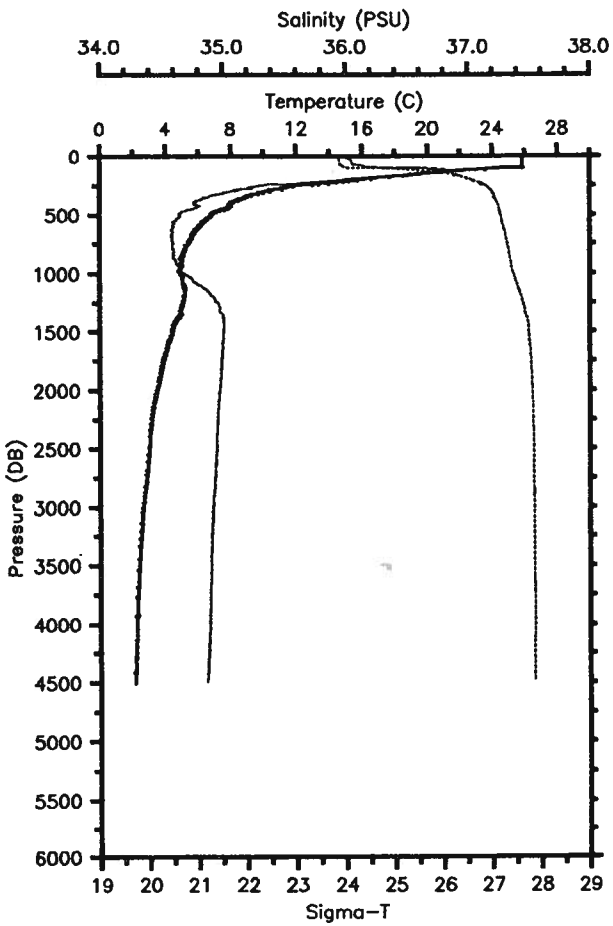
Prs	Tem	Sal	SigT
0	25.80	36.003	23.85
10	25.81	36.017	23.86
20	25.81	36.065	23.90
30	25.81	36.084	23.91
40	25.82	36.099	23.92
50	25.81	36.102	23.93
60	25.82	36.105	23.93
70	25.76	36.126	23.96
80	25.75	36.145	23.98
90	25.71	36.181	24.02
100	25.63	36.232	24.08
110	23.99	36.736	24.96
120	22.73	36.821	25.39
130	21.49	36.797	25.73
140	21.02	36.780	25.84
150	19.58	36.623	26.11
160	18.46	36.453	26.27
170	17.47	36.292	26.39
180	16.80	36.166	26.46
190	16.04	36.021	26.52
200	14.94	35.850	26.64
250	12.12	35.417	26.89
300	10.53	35.152	26.98
350	9.36	34.973	27.04
400	8.29	34.811	27.08
450	7.65	34.757	27.14
500	7.00	34.682	27.17
550	6.56	34.640	27.20
600	6.17	34.606	27.22
650	6.00	34.619	27.25
700	5.75	34.605	27.27
750	5.39	34.584	27.30
800	5.10	34.561	27.32
850	5.09	34.591	27.34
900	5.02	34.619	27.37
950	5.01	34.648	27.39
1000	4.94	34.670	27.42
1500	4.54	35.009	27.73
1996	3.57	34.981	27.82

ALB-STACS33-89 CTD 58 ALBATROSS IV
Date 03 01 89 Latitude 8.877 N
Time 0547 Z Longitude 51.932 W



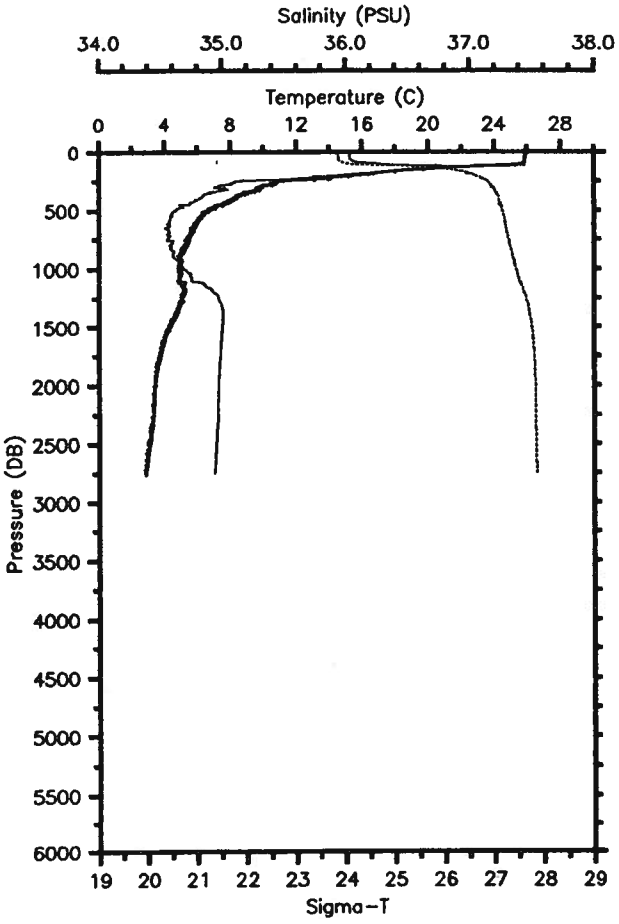
Prs	Tem	Sal	SigT
0	25.80	36.112	23.94
10	25.80	36.112	23.94
20	25.81	36.112	23.94
30	25.81	36.112	23.93
40	25.81	36.113	23.93
50	25.81	36.113	23.93
60	25.81	36.114	23.94
70	25.76	36.144	23.97
80	25.73	36.175	24.01
90	25.73	36.184	24.01
100	25.49	36.313	24.19
110	23.57	36.812	25.14
120	22.64	36.825	25.43
130	21.46	36.810	25.75
140	20.62	36.700	25.90
150	19.09	36.519	26.16
160	17.92	36.388	26.36
170	17.01	36.184	26.42
180	16.40	36.111	26.51
190	15.48	35.935	26.59
200	14.33	35.695	26.65
250	12.08	35.408	26.89
300	10.57	35.161	26.98
350	9.35	34.977	27.04
400	8.52	34.876	27.10
450	7.39	34.720	27.14
500	6.87	34.669	27.18
550	6.41	34.621	27.20
600	6.11	34.610	27.23
650	5.97	34.619	27.26
700	5.71	34.602	27.27
750	5.27	34.565	27.30
800	5.14	34.568	27.32
850	5.14	34.599	27.34
900	5.07	34.627	27.37
950	4.95	34.638	27.39
1000	4.97	34.684	27.43
1500	4.52	35.010	27.74
2000	3.57	34.979	27.81
2500	3.03	34.951	27.84
3000	2.69	34.927	27.85
3500	2.43	34.909	27.86
4000	2.27	34.896	27.87
4500	2.10	34.869	27.86
4590	1.97	34.852	27.86

ALB-STACS33-89 CTD 59 ALBATROSS IV
Date 03 01 89 Latitude 8.463 N
Time 1224 Z Longitude 52.170 W



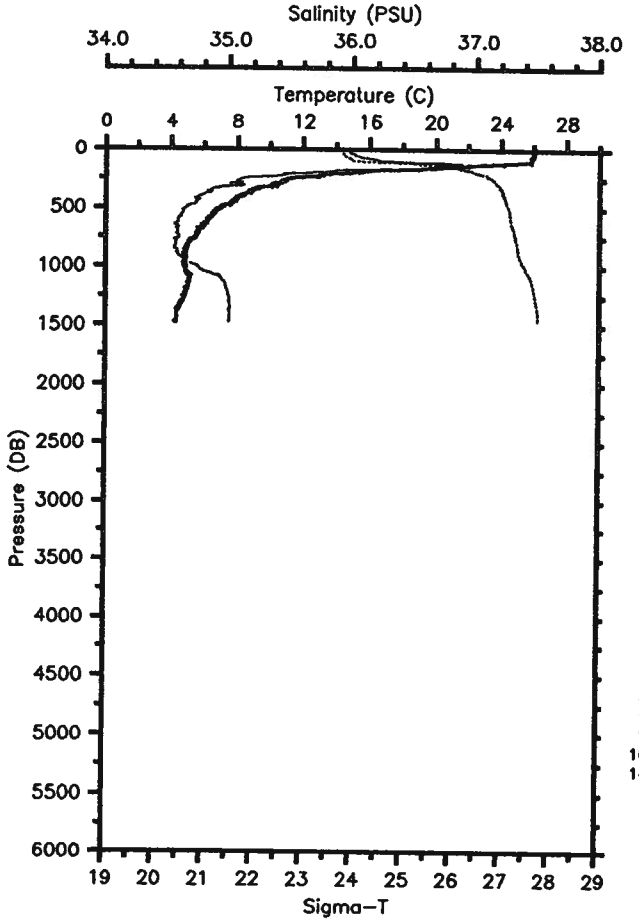
Prs	Tem	Sal	SigT
0	25.84	35.957	23.81
10	25.83	35.999	23.84
20	25.83	36.028	23.86
30	25.83	36.043	23.88
40	25.83	36.050	23.88
50	25.83	36.053	23.88
60	25.83	36.056	23.88
70	25.83	36.059	23.89
80	25.85	36.147	23.95
90	25.85	36.187	23.98
100	25.58	36.359	24.19
110	23.62	36.814	25.13
120	22.19	36.787	25.53
130	21.44	36.779	25.73
140	20.40	36.692	25.95
150	19.52	36.637	26.14
160	18.93	36.607	26.27
170	17.88	36.374	26.36
180	17.04	36.214	26.44
190	16.41	36.048	26.46
200	15.76	35.994	26.57
250	11.87	35.340	26.88
300	10.03	35.059	26.99
350	8.88	34.888	27.05
400	7.98	34.773	27.10
450	7.64	34.765	27.14
500	6.79	34.651	27.17
550	6.43	34.615	27.19
600	6.10	34.600	27.22
650	5.79	34.594	27.26
700	5.57	34.584	27.28
750	5.38	34.594	27.31
800	5.19	34.602	27.34
850	5.01	34.597	27.36
900	4.97	34.623	27.38
950	4.94	34.647	27.40
1000	4.98	34.698	27.44
1500	4.44	35.010	27.75
2000	3.52	34.978	27.82
2500	3.01	34.949	27.84
3000	2.64	34.923	27.86
3500	2.38	34.905	27.86
4000	2.24	34.894	27.87
4496	2.10	34.868	27.86

ALB-STACS33-89 CTD 60 ALBATROSS IV
Date 03 01 89 Latitude 8.077 N
Time 2302 Z Longitude 52.470 W



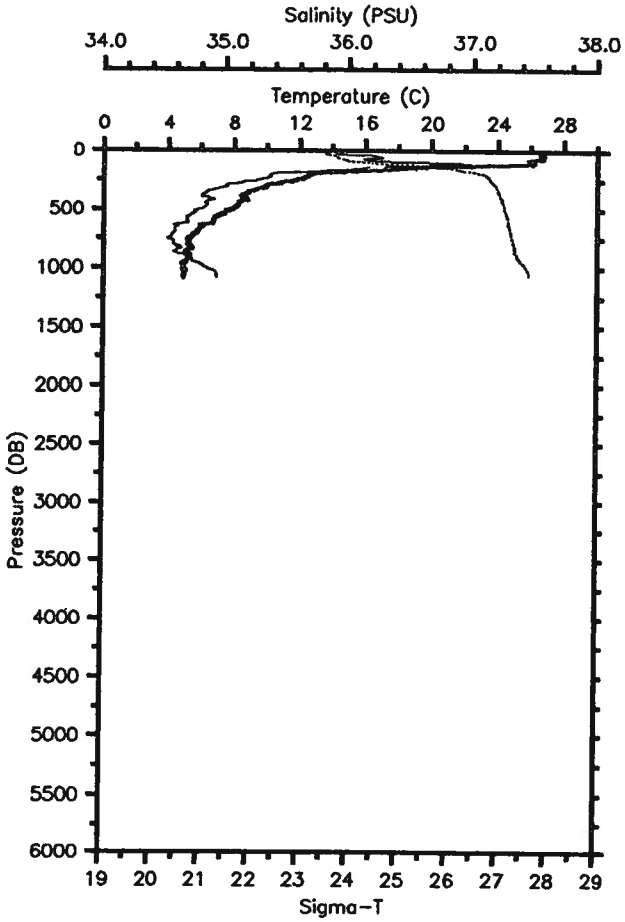
Prs	Tem	Sal	SigT
0	25.93	36.030	23.83
10	25.92	36.031	23.84
20	25.92	36.032	23.84
30	25.91	36.033	23.84
40	25.86	36.033	23.86
50	25.85	36.032	23.86
60	25.85	36.035	23.86
70	25.86	36.048	23.87
80	25.85	36.083	23.90
90	25.84	36.145	23.95
100	25.81	36.277	24.06
110	25.30	36.449	24.35
120	23.37	36.794	25.19
130	21.63	36.754	25.66
140	20.63	36.718	25.91
150	19.58	36.538	26.05
160	18.32	36.423	26.28
170	17.53	36.327	26.41
180	16.91	36.233	26.48
190	16.09	36.096	26.57
200	15.35	35.949	26.63
250	11.13	35.151	26.87
300	9.85	34.958	26.95
350	8.91	34.911	27.06
400	8.21	34.817	27.10
450	7.52	34.734	27.14
500	6.68	34.629	27.17
550	6.28	34.597	27.20
600	5.98	34.580	27.22
650	5.76	34.557	27.23
700	5.61	34.567	27.26
750	5.40	34.559	27.28
800	5.23	34.578	27.31
850	5.13	34.812	27.35
900	4.92	34.613	27.38
950	5.00	34.665	27.41
1000	4.93	34.692	27.44
1500	4.33	35.006	27.76
2000	3.43	34.975	27.82
2500	3.08	34.956	27.84
2748	2.86	34.941	27.85

ALB–STACS33–89 CTD 61 ALBATROSS IV
Date 03 02 89 Latitude 7.788 N
Time 0254 Z Longitude 52.643 W



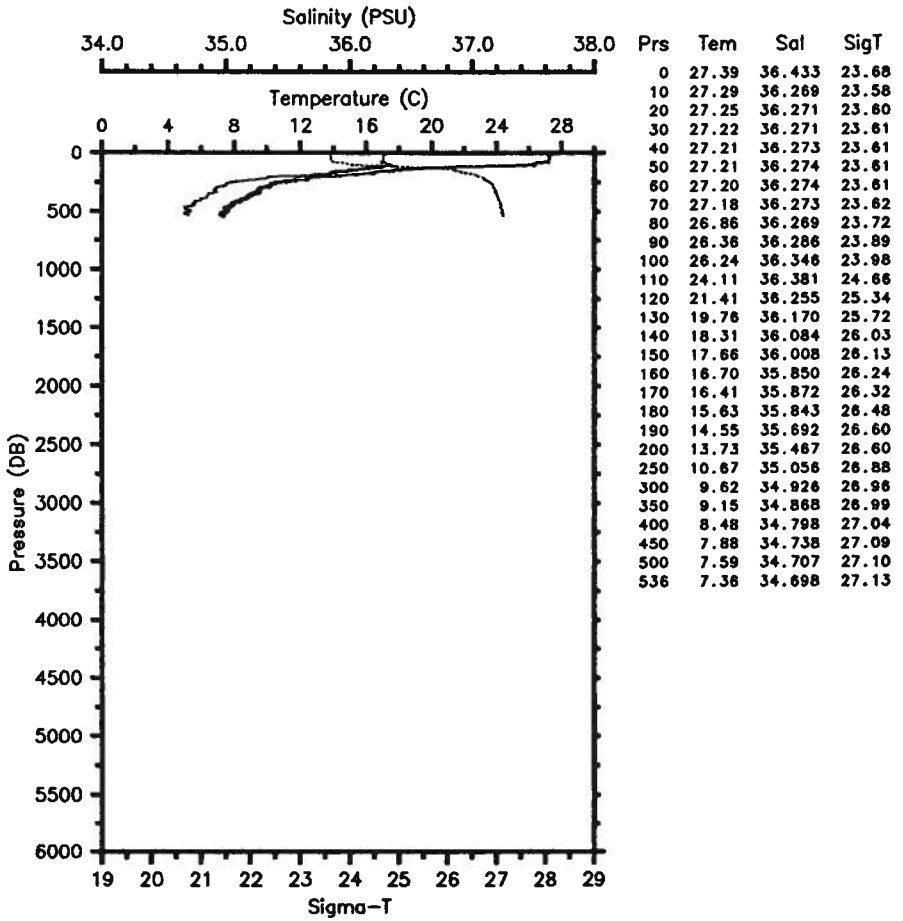
Prs	Tem	Sal	SigT
0	26.02	36.008	23.79
10	25.97	35.973	23.78
20	25.98	35.976	23.78
30	25.97	35.977	23.78
40	25.95	36.015	23.82
50	25.94	36.017	23.82
60	25.90	36.062	23.87
70	25.85	36.079	23.90
80	25.84	36.167	23.96
90	25.86	36.203	23.99
100	25.82	36.246	24.03
110	24.57	36.606	24.69
120	23.31	36.816	25.22
130	22.00	36.760	25.56
140	21.52	36.852	25.76
150	20.21	36.747	26.04
160	19.36	36.568	26.13
170	17.50	36.190	26.31
180	16.05	35.867	26.40
190	15.64	35.810	26.45
200	14.71	35.639	26.53
250	11.21	35.128	26.84
300	10.26	35.066	26.96
350	8.94	34.861	27.02
400	8.23	34.783	27.07
450	7.74	34.729	27.10
500	7.01	34.659	27.15
550	6.60	34.624	27.18
600	6.23	34.593	27.20
650	5.90	34.562	27.22
700	5.68	34.584	27.26
750	5.51	34.600	27.30
800	5.05	34.572	27.33
850	4.88	34.559	27.34
900	4.82	34.592	27.37
950	4.86	34.651	27.41
1000	4.85	34.749	27.49
1470	4.28	35.006	27.76

ALB–STACS33–89 CTD 62 ALBATROSS IV
Date 03 02 89 Latitude 7.508 N
Time 1314 Z Longitude 52.790 W



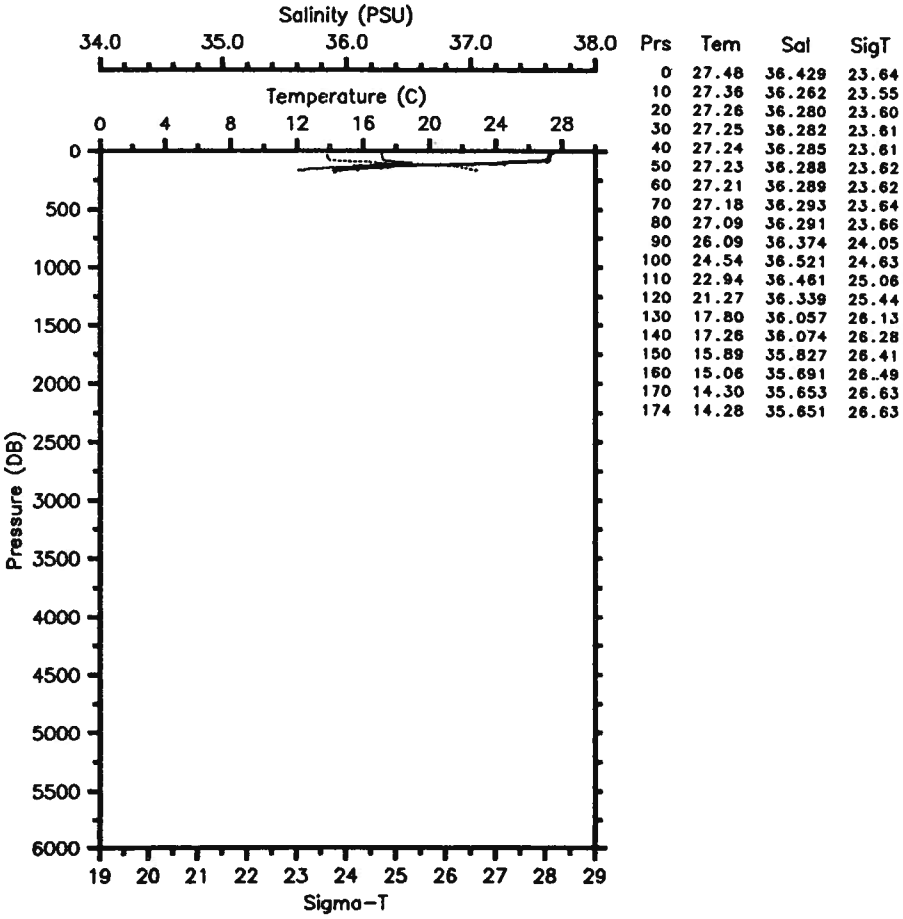
Prs	Tem	Sal	SigT
0	26.69	35.819	23.44
10	26.60	35.895	23.52
20	26.59	35.896	23.52
30	26.59	35.911	23.54
40	26.76	36.182	23.69
50	26.75	36.235	23.73
60	26.69	36.275	23.78
70	26.15	36.126	23.84
80	25.87	36.166	23.96
90	25.92	36.282	24.03
100	26.17	36.855	24.38
110	25.51	36.981	24.69
120	23.00	36.918	25.39
130	21.87	36.839	25.65
140	19.13	36.153	25.87
150	18.18	36.100	26.07
160	17.48	35.998	26.18
170	16.09	35.768	26.32
180	14.88	35.668	26.51
190	13.63	35.446	26.61
200	12.72	35.374	26.74
250	11.82	35.269	26.83
300	9.99	35.015	26.97
350	8.92	34.849	27.01
400	8.61	34.853	27.07
450	8.33	34.853	27.11
500	7.81	34.786	27.13
550	7.11	34.712	27.18
600	6.76	34.687	27.21
650	6.07	34.589	27.22
700	5.71	34.580	27.26
750	5.19	34.520	27.27
800	5.21	34.571	27.31
850	5.16	34.593	27.33
900	5.30	34.675	27.38
950	5.00	34.735	27.46
1000	4.93	34.854	27.57
1078	4.93	34.932	27.63

ALB-STACS33-89 CTD 63 ALBATROSS IV
Date 03 02 89 Latitude 7.247 N
Time 1543 Z Longitude 52.945 W



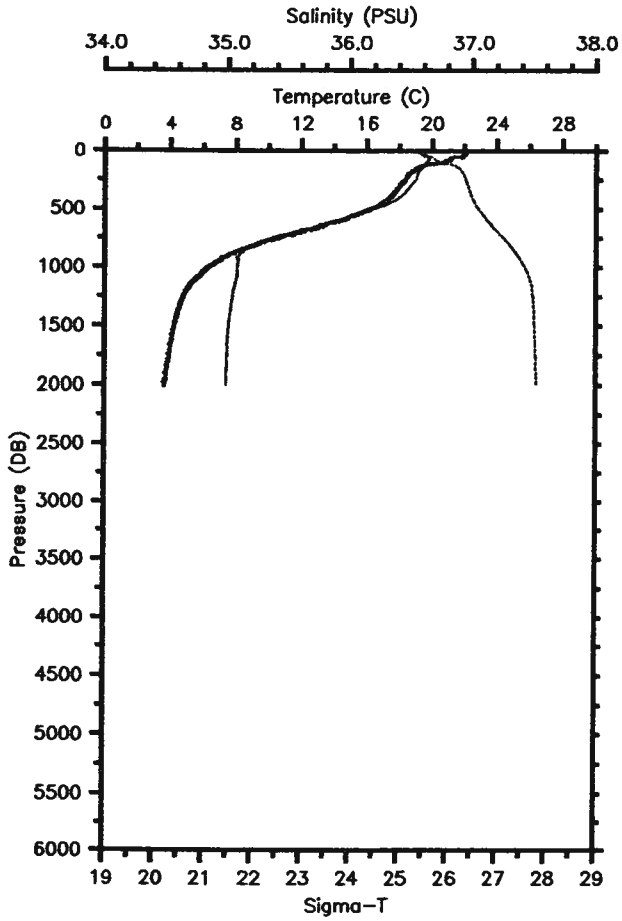
Prs	Tem	Sal	SigT
0	27.39	36.433	23.68
10	27.29	36.269	23.58
20	27.25	36.271	23.60
30	27.22	36.271	23.61
40	27.21	36.273	23.61
50	27.21	36.274	23.61
60	27.20	36.274	23.61
70	27.18	36.273	23.62
80	26.86	36.269	23.72
90	26.36	36.286	23.89
100	26.24	36.346	23.98
110	24.11	36.381	24.66
120	21.41	36.255	25.34
130	19.76	36.170	25.72
140	18.31	36.084	26.03
150	17.66	36.008	26.13
160	16.70	35.850	26.24
170	16.41	35.872	26.32
180	15.63	35.843	26.48
190	14.55	35.692	26.60
200	13.73	35.467	26.60
250	10.67	35.056	26.88
300	9.62	34.926	26.96
350	9.15	34.868	26.99
400	8.48	34.798	27.04
450	7.88	34.738	27.09
500	7.59	34.707	27.10
536	7.36	34.698	27.13

ALB-STACS33-89 CTD 64 ALBATROSS IV
Date 03 02 89 Latitude 7.003 N
Time 1807 Z Longitude 53.105 W



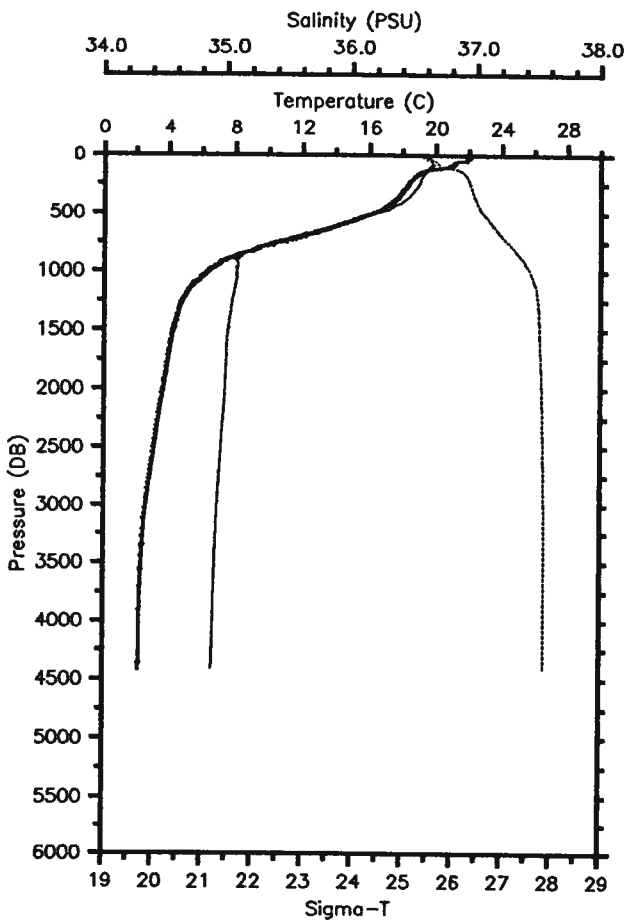
Prs	Tem	Sal	SigT
0	27.48	36.429	23.64
10	27.36	36.262	23.55
20	27.26	36.280	23.60
30	27.25	36.282	23.61
40	27.24	36.285	23.61
50	27.23	36.288	23.62
60	27.21	36.289	23.62
70	27.18	36.293	23.64
80	27.09	36.291	23.66
90	26.09	36.374	24.05
100	24.54	36.521	24.63
110	22.94	36.461	25.06
120	21.27	36.339	25.44
130	17.80	36.057	26.13
140	17.26	36.074	26.28
150	15.89	35.827	26.41
160	15.06	35.691	26.49
170	14.30	35.653	26.63
174	14.28	35.651	26.63

ALB-STACS33-89 CTD 65 ALBATROSS IV
Date 03 05 89 Latitude 26.478 N
Time 0322 Z Longitude 74.520 W



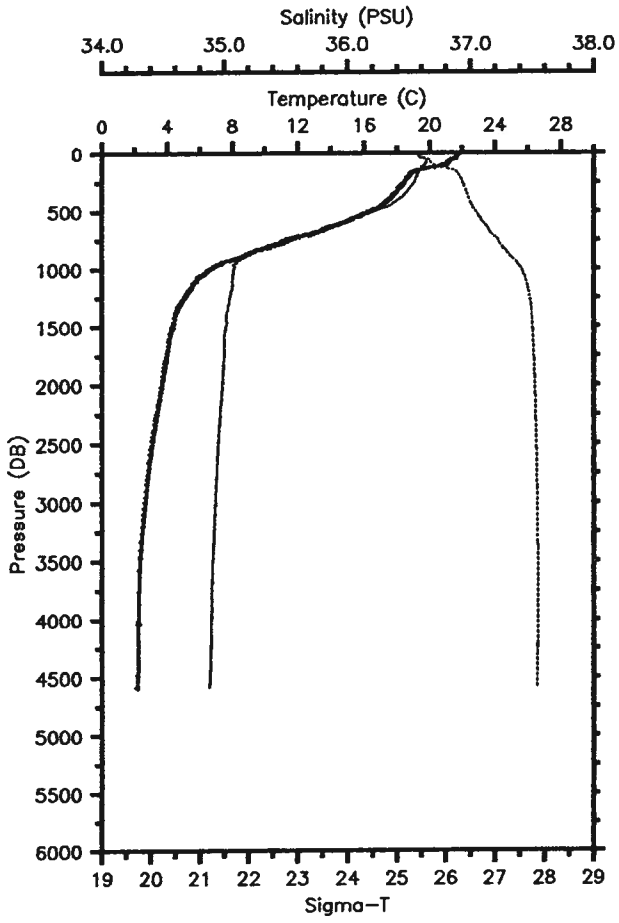
Prs	Tem	Sal	SigT
0	22.11	36.596	25.40
10	22.11	36.600	25.40
20	22.10	36.601	25.41
30	21.94	36.605	25.45
40	21.90	36.625	25.48
50	21.61	36.631	25.57
60	21.19	36.635	25.69
70	21.12	36.643	25.71
80	20.98	36.637	25.75
90	20.81	36.629	25.79
100	20.73	36.625	25.81
110	20.06	36.624	25.99
120	19.68	36.613	26.08
130	19.40	36.602	26.14
140	19.17	36.590	26.20
150	19.05	36.582	26.22
160	18.95	36.578	26.24
170	18.85	36.571	26.26
180	18.75	36.561	26.28
190	18.66	36.552	26.30
200	18.59	36.548	26.31
250	18.36	36.534	26.36
300	18.04	36.493	26.41
350	17.75	36.453	26.45
400	17.41	36.402	26.49
450	16.92	36.321	26.55
500	16.17	36.187	26.62
550	15.33	36.050	26.71
600	14.35	35.890	26.80
650	13.19	35.700	26.90
700	11.90	35.531	27.02
750	10.49	35.348	27.14
800	9.33	35.228	27.24
850	8.26	35.142	27.35
900	7.47	35.091	27.42
950	6.91	35.084	27.50
1000	6.35	35.072	27.56
1500	4.26	35.007	27.76
2000	3.65	34.986	27.81
2002	3.65	34.986	27.81

ALB-STACS33-89 CTD 66 ALBATROSS IV
Date 03 05 89 Latitude 26.472 N
Time 0507 Z Longitude 74.527 W



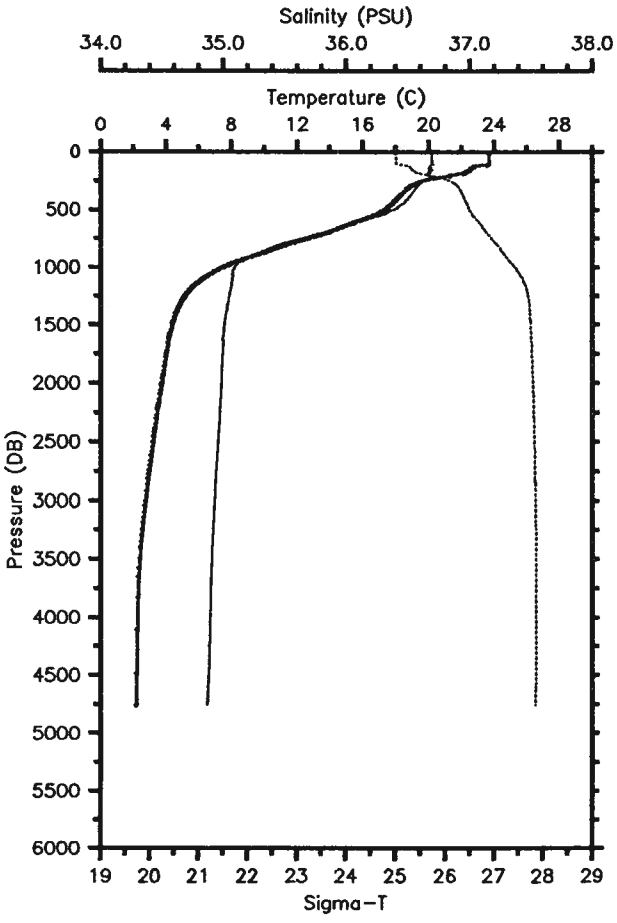
Prs	Tem	Sal	SigT
0	22.09	36.596	25.41
10	22.08	36.601	25.41
20	22.05	36.598	25.42
30	21.90	36.625	25.48
40	21.91	36.640	25.49
50	21.63	36.626	25.56
60	21.22	36.636	25.68
70	21.15	36.637	25.70
80	21.04	36.653	25.74
90	20.85	36.624	25.77
100	20.82	36.629	25.79
110	20.25	36.625	25.94
120	19.83	36.626	26.05
130	19.43	36.605	26.14
140	19.18	36.591	26.19
150	19.08	36.587	26.21
160	18.95	36.575	26.24
170	18.82	36.565	26.27
180	18.76	36.562	26.28
190	18.67	36.556	26.30
200	18.61	36.551	26.31
250	18.38	36.535	26.35
300	18.06	36.493	26.40
350	17.81	36.462	26.44
400	17.42	36.402	26.49
450	16.92	36.320	26.55
500	16.18	36.188	26.62
550	15.20	36.026	26.72
600	14.19	35.866	26.82
650	13.12	35.697	26.91
700	12.02	35.539	27.01
750	10.63	35.358	27.12
800	9.42	35.235	27.23
850	8.33	35.125	27.32
900	7.47	35.091	27.42
950	6.91	35.082	27.50
1000	6.36	35.077	27.57
1500	4.26	35.006	27.76
2000	3.64	34.983	27.81
2500	3.08	34.954	27.84
3000	2.60	34.925	27.86
3500	2.33	34.907	27.87
4000	2.23	34.894	27.87
4412	2.18	34.882	27.86

ALB–STACS33–89 CTD 67 ALBATROSS IV
Date 03 05 89 Latitude 26.490 N
Time 1132 Z Longitude 75.005 W



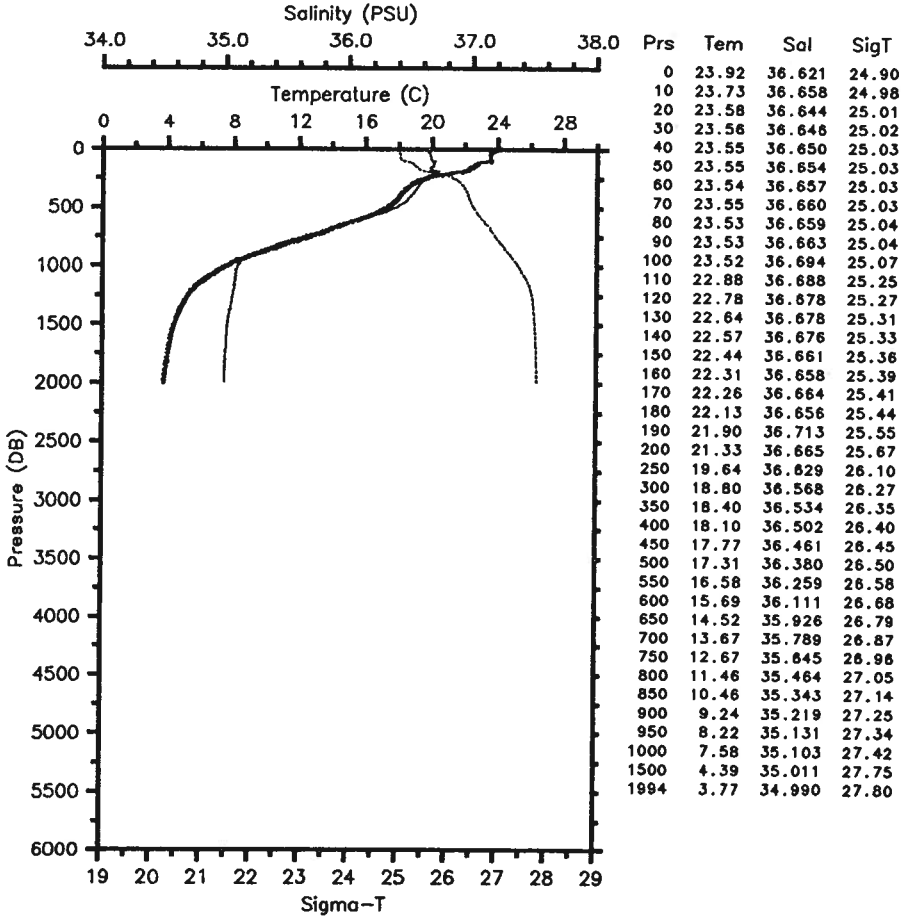
Prs	Tem	Sal	SigT
0	21.82	36.480	25.39
10	21.71	36.562	25.49
20	21.70	36.573	25.50
30	21.69	36.584	25.51
40	21.66	36.589	25.52
50	21.43	36.626	25.61
60	21.27	36.639	25.67
70	21.22	36.643	25.69
80	21.15	36.634	25.70
90	21.11	36.636	25.71
100	20.98	36.623	25.74
110	20.70	36.615	25.81
120	20.37	36.626	25.91
130	19.99	36.630	26.01
140	19.61	36.597	26.09
150	19.20	36.589	26.19
160	19.06	36.582	26.22
170	18.93	36.576	26.24
180	18.88	36.574	26.26
190	18.81	36.568	26.27
200	18.74	36.563	26.28
250	18.47	36.544	26.34
300	18.16	36.507	26.39
350	17.84	36.464	26.43
400	17.52	36.416	26.48
450	17.09	36.350	26.53
500	16.33	36.219	26.61
550	15.56	36.078	26.68
600	14.70	35.951	26.77
650	13.70	35.796	26.87
700	12.70	35.644	26.95
750	11.41	35.468	27.06
800	10.46	35.345	27.14
850	9.16	35.206	27.25
900	8.32	35.142	27.34
950	7.30	35.081	27.44
1000	6.63	35.075	27.53
1500	4.34	35.014	27.76
2000	3.70	34.989	27.81
2500	3.11	34.953	27.84
3000	2.67	34.928	27.86
3500	2.35	34.906	27.87
4000	2.25	34.896	27.87
4500	2.20	34.884	27.86
4586	2.17	34.877	27.86

ALB–STACS33–89 CTD 68 ALBATROSS IV
Date 03 05 89 Latitude 26.440 N
Time 1646 Z Longitude 75.540 W



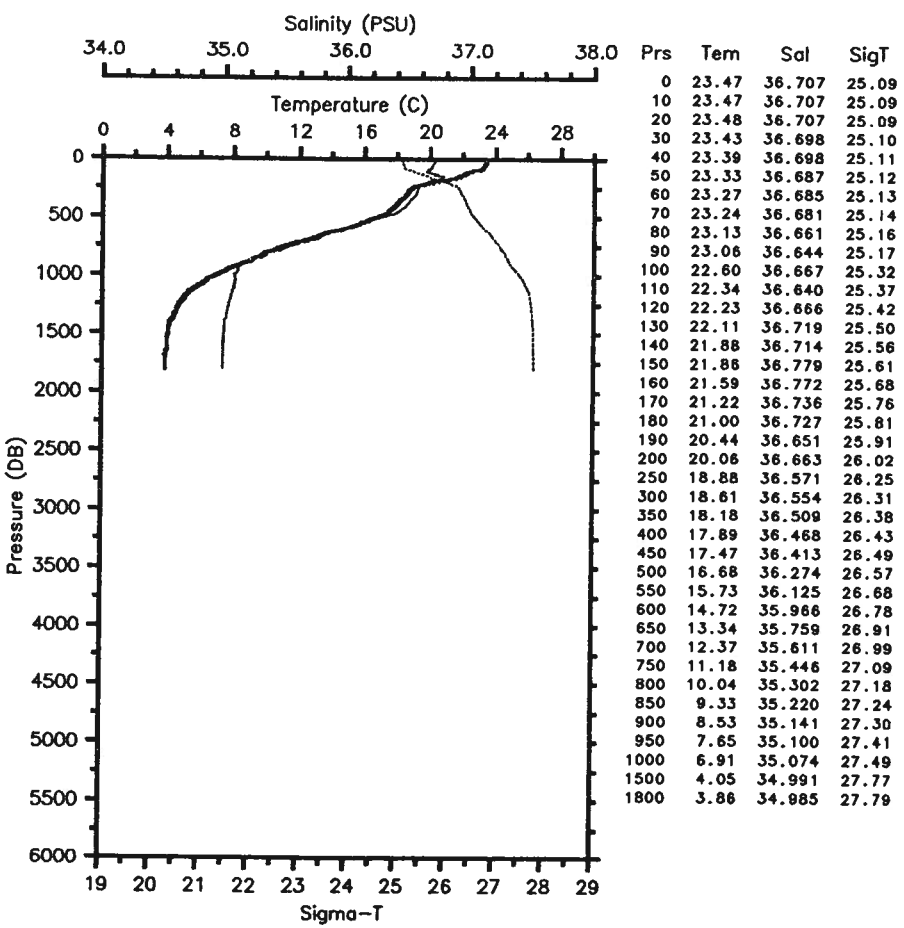
Prs	Tem	Sal	SigT
0	23.74	36.681	24.99
10	23.74	36.681	24.99
20	23.73	36.693	25.01
30	23.72	36.694	25.01
40	23.71	36.695	25.01
50	23.71	36.694	25.01
60	23.72	36.694	25.01
70	23.72	36.694	25.01
80	23.72	36.694	25.01
90	23.71	36.695	25.01
100	23.71	36.695	25.01
110	23.61	36.704	25.05
120	22.84	36.680	25.26
130	22.73	36.682	25.29
140	22.58	36.665	25.32
150	22.56	36.675	25.33
160	22.40	36.674	25.38
170	22.29	36.664	25.40
180	22.22	36.679	25.43
190	21.76	36.667	25.55
200	21.32	36.660	25.67
250	19.55	36.608	26.11
300	18.83	36.575	26.27
350	18.43	36.539	26.34
400	18.11	36.501	26.40
450	17.76	36.453	26.45
500	17.34	36.392	26.50
550	16.65	36.282	26.58
600	15.65	36.109	26.68
650	14.72	35.957	26.77
700	13.75	35.805	26.86
750	12.60	35.625	26.96
800	11.39	35.461	27.06
850	10.42	35.344	27.15
900	9.34	35.219	27.23
950	8.28	35.137	27.34
1000	7.47	35.097	27.43
1500	4.41	35.014	27.75
2000	3.78	34.990	27.80
2500	3.23	34.961	27.83
3000	2.78	34.935	27.85
3500	2.41	34.912	27.87
4000	2.29	34.899	27.87
4500	2.23	34.888	27.86
4756	2.19	34.878	27.86

ALB–STACS33–89 CTD 69 ALBATROSS IV
Date 03 05 89 Latitude 26.438 N
Time 2025 Z Longitude 75.540 W



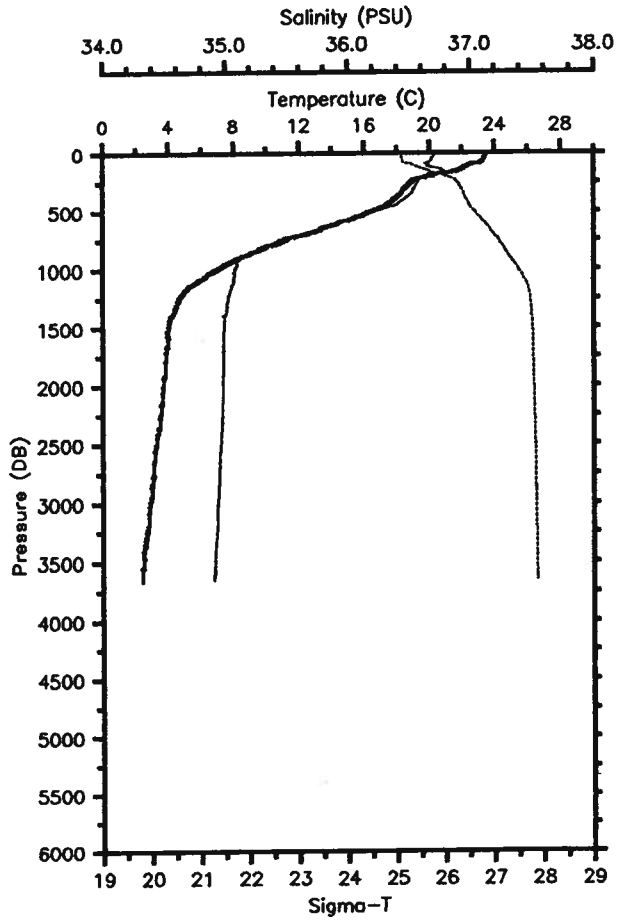
Prs	Tem	Sal	SigT
0	23.92	36.621	24.90
10	23.73	36.658	24.98
20	23.58	36.644	25.01
30	23.56	36.648	25.02
40	23.55	36.650	25.03
50	23.55	36.654	25.03
60	23.54	36.657	25.03
70	23.55	36.660	25.03
80	23.53	36.659	25.04
90	23.53	36.663	25.04
100	23.52	36.694	25.07
110	22.88	36.688	25.25
120	22.78	36.678	25.27
130	22.64	36.678	25.31
140	22.57	36.676	25.33
150	22.44	36.661	25.36
160	22.31	36.658	25.39
170	22.26	36.664	25.41
180	22.13	36.656	25.44
190	21.90	36.713	25.55
200	21.33	36.665	25.67
250	19.64	36.629	26.10
300	18.80	36.568	26.27
350	18.40	36.534	26.35
400	18.10	36.502	26.40
450	17.77	36.461	26.45
500	17.31	36.380	26.50
550	16.58	36.259	26.58
600	15.69	36.111	26.68
650	14.52	35.926	26.79
700	13.67	35.789	26.87
750	12.67	35.645	26.96
800	11.46	35.464	27.05
850	10.46	35.343	27.14
900	9.24	35.219	27.25
950	8.22	35.131	27.34
1000	7.58	35.103	27.42
1500	4.39	35.011	27.75
1994	3.77	34.990	27.80

ALB–STACS33–89 CTD 70 ALBATROSS IV
Date 03 06 89 Latitude 26.535 N
Time 0601 Z Longitude 76.740 W



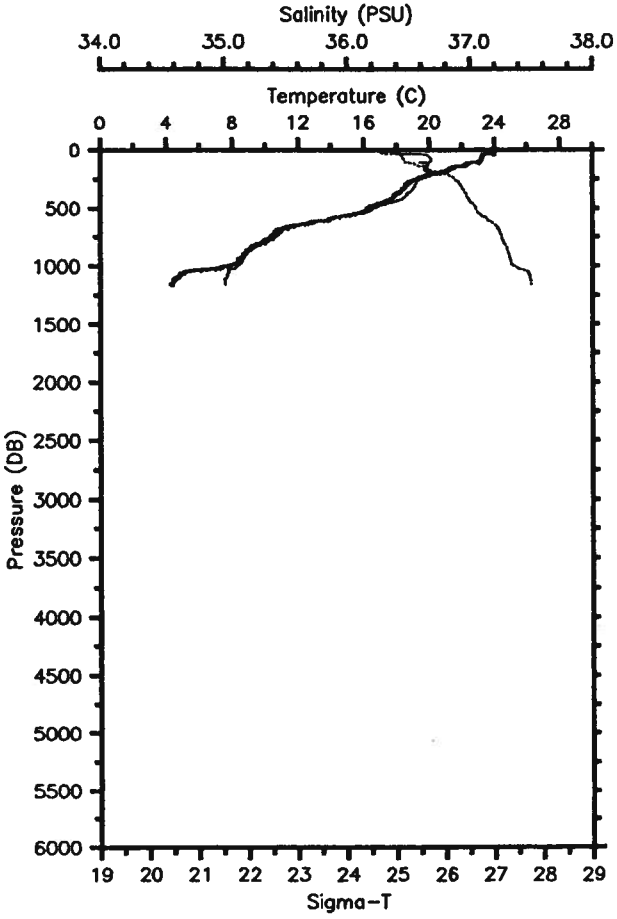
Prs	Tem	Sal	SigT
0	23.47	36.707	25.09
10	23.47	36.707	25.09
20	23.48	36.707	25.09
30	23.43	36.698	25.10
40	23.39	36.698	25.11
50	23.33	36.687	25.12
60	23.27	36.685	25.13
70	23.24	36.681	25.14
80	23.13	36.661	25.16
90	23.06	36.644	25.17
100	22.60	36.667	25.32
110	22.34	36.640	25.37
120	22.23	36.666	25.42
130	22.11	36.719	25.50
140	21.88	36.714	25.56
150	21.86	36.779	25.61
160	21.59	36.772	25.68
170	21.22	36.736	25.76
180	21.00	36.727	25.81
190	20.44	36.651	25.91
200	20.06	36.663	26.02
250	18.88	36.571	26.25
300	18.61	36.554	26.31
350	18.18	36.509	26.38
400	17.89	36.468	26.43
450	17.47	36.413	26.49
500	16.68	36.274	26.57
550	15.73	36.125	26.68
600	14.72	35.986	26.78
650	13.34	35.759	26.91
700	12.37	35.611	26.99
750	11.18	35.446	27.09
800	10.04	35.302	27.18
850	9.33	35.220	27.24
900	8.53	35.141	27.30
950	7.65	35.100	27.41
1000	6.91	35.074	27.49
1500	4.05	34.991	27.77
1800	3.86	34.985	27.79

ALB–STACS33–89 CTD 71 ALBATROSS IV
Date 03 06 89 Latitude 26.547 N
Time 0739 Z Longitude 76.745 W



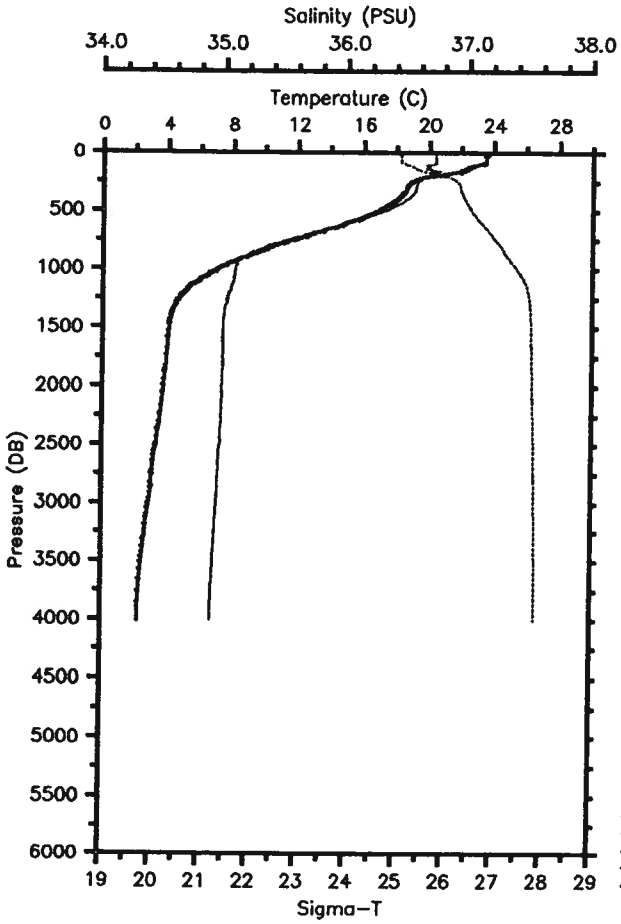
Prs	Tem	Sal	SigT
0	23.45	36.703	25.09
10	23.44	36.707	25.10
20	23.44	36.706	25.10
30	23.43	36.699	25.10
40	23.34	36.689	25.12
50	23.32	36.688	25.12
60	23.32	36.688	25.12
70	23.25	36.680	25.14
80	23.14	36.666	25.16
90	22.65	36.635	25.28
100	22.47	36.658	25.35
110	22.33	36.659	25.39
120	22.13	36.674	25.45
130	22.09	36.729	25.51
140	21.89	36.763	25.59
150	21.72	36.771	25.65
160	21.48	36.773	25.71
170	21.13	36.736	25.78
180	20.60	36.661	25.87
190	20.29	36.688	25.97
200	19.93	36.626	26.02
250	18.90	36.568	26.25
300	18.56	36.550	26.32
350	18.26	36.518	26.37
400	17.84	36.464	26.44
450	17.35	36.391	26.50
500	16.42	36.216	26.59
550	15.51	36.086	26.70
600	14.43	35.925	26.81
650	13.38	35.765	26.91
700	12.38	35.616	27.00
750	11.11	35.440	27.10
800	10.06	35.300	27.18
850	9.18	35.202	27.25
900	8.28	35.116	27.32
950	7.58	35.088	27.41
1000	6.95	35.069	27.48
1500	4.05	34.992	27.77
2000	3.74	34.983	27.80
2500	3.30	34.962	27.83
3000	2.89	34.939	27.85
3500	2.48	34.916	27.86
3652	2.41	34.911	27.87

ALB–STACS33–89 CTD 72 ALBATROSS IV
Date 03 06 89 Latitude 26.540 N
Time 1130 Z Longitude 76.840 W



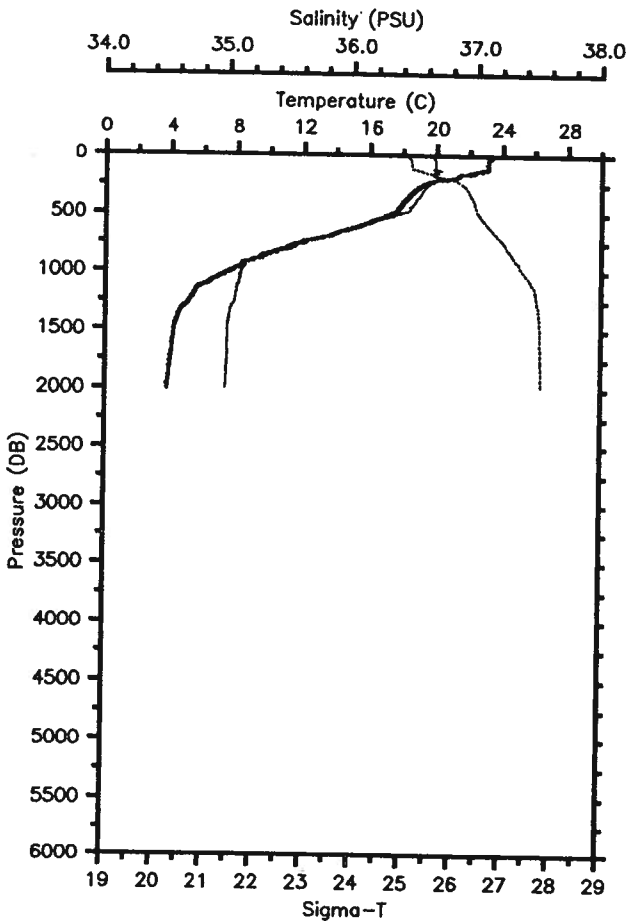
Prs	Tem	Sal	SigT
0	24.06	36.382	24.67
10	24.07	36.365	24.66
20	24.07	36.366	24.66
30	23.96	36.438	24.74
40	23.34	36.651	25.09
50	23.30	36.658	25.11
60	23.28	36.668	25.12
70	23.24	36.683	25.14
80	23.22	36.687	25.15
90	23.17	36.684	25.16
100	23.13	36.677	25.17
110	22.46	36.640	25.34
120	22.33	36.650	25.38
130	22.21	36.657	25.42
140	21.86	36.653	25.57
150	21.46	36.638	25.62
160	21.26	36.628	25.66
170	21.17	36.626	25.69
180	21.02	36.646	25.74
190	20.72	36.690	25.86
200	20.48	36.696	25.93
250	19.28	36.810	26.18
300	18.59	36.553	26.32
350	18.25	36.522	26.38
400	17.82	36.468	26.44
450	17.13	36.362	26.53
500	16.19	36.207	26.63
550	15.36	36.073	26.72
600	13.87	35.834	26.86
650	11.80	35.533	27.04
700	10.87	35.404	27.11
750	10.52	35.365	27.15
800	9.81	35.271	27.20
850	9.10	35.210	27.27
900	8.71	35.174	27.30
950	8.36	35.147	27.33
1000	7.62	35.088	27.40
1158	4.35	35.004	27.75

ALB-STACS33-89 CTD 73 ALBATROSS IV
Date 03 07 89 Latitude 26.600 N
Time 0210 Z Longitude 76.637 W



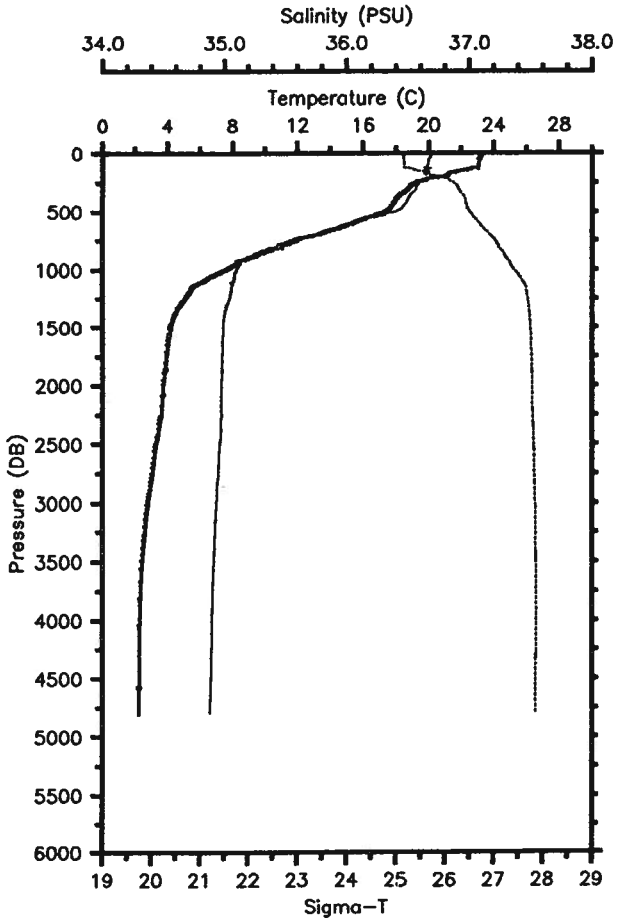
Prs	Tem	Sal	SigT
0	23.69	36.727	25.04
10	23.68	36.732	25.05
20	23.53	36.722	25.09
30	23.51	36.721	25.09
40	23.51	36.723	25.09
50	23.50	36.722	25.09
60	23.50	36.722	25.10
70	23.50	36.721	25.10
80	23.50	36.722	25.10
90	23.39	36.725	25.13
100	23.14	36.705	25.19
110	22.77	36.653	25.26
120	22.59	36.668	25.32
130	22.45	36.658	25.35
140	22.24	36.645	25.40
150	22.13	36.697	25.47
160	21.97	36.737	25.55
170	21.65	36.741	25.64
180	21.08	36.686	25.76
190	20.88	36.716	25.84
200	20.17	36.646	25.97
250	18.94	36.575	26.24
300	18.65	36.559	26.31
350	18.40	36.534	26.35
400	18.07	36.495	26.40
450	17.49	36.409	26.48
500	16.93	36.319	26.54
550	16.01	36.164	26.64
600	14.94	35.993	26.75
650	13.89	35.836	26.86
700	12.74	35.659	26.96
750	11.69	35.511	27.05
800	10.47	35.352	27.15
850	9.63	35.231	27.20
900	8.56	35.141	27.30
950	7.67	35.089	27.39
1000	7.03	35.089	27.48
1500	4.07	34.986	27.77
2000	3.74	34.977	27.79
2500	3.31	34.966	27.83
3000	2.88	34.941	27.85
3500	2.45	34.915	27.87
4000	2.26	34.898	27.87
4002	2.26	34.899	27.87

ALB-STACS33-89 CTD 74 ALBATROSS IV
Date 03 07 89 Latitude 26.537 N
Time 0722 Z Longitude 76.537 W



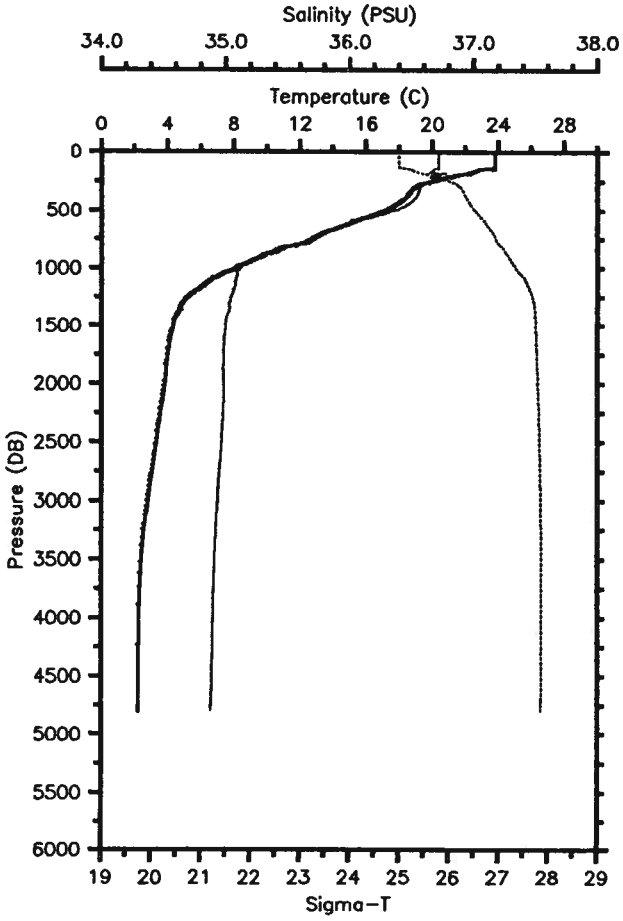
Prs	Tem	Sal	SigT
0	23.29	36.489	24.98
10	23.26	36.623	25.09
20	23.26	36.648	25.11
30	23.16	36.651	25.14
40	23.14	36.656	25.15
50	23.14	36.658	25.15
60	23.13	36.659	25.16
70	23.11	36.657	25.16
80	23.11	36.657	25.16
90	23.10	36.658	25.17
100	23.08	36.656	25.17
110	23.07	36.656	25.17
120	22.77	36.650	25.25
130	22.49	36.678	25.36
140	22.25	36.653	25.41
150	22.01	36.681	25.49
160	21.41	36.646	25.64
170	21.32	36.646	25.66
180	21.27	36.676	25.70
190	21.01	36.705	25.79
200	20.50	36.681	25.91
250	19.22	36.608	26.20
300	18.88	36.560	26.30
350	18.36	36.530	26.36
400	18.01	36.497	26.42
450	17.73	36.455	26.45
500	17.25	36.381	26.52
550	16.29	36.202	26.61
600	15.41	36.070	26.71
650	14.31	35.884	26.81
700	13.21	35.732	26.92
750	11.96	35.552	27.03
800	11.02	35.419	27.10
850	9.87	35.263	27.18
900	8.97	35.184	27.27
950	8.26	35.130	27.34
1000	7.53	35.099	27.42
1500	4.15	34.987	27.76
1998	3.74	34.976	27.79

ALB-STACS33-89 CTD 75 ALBATROSS IV
Date 03 07 89 Latitude 26.540 N
Time 0900 Z Longitude 76.545 W



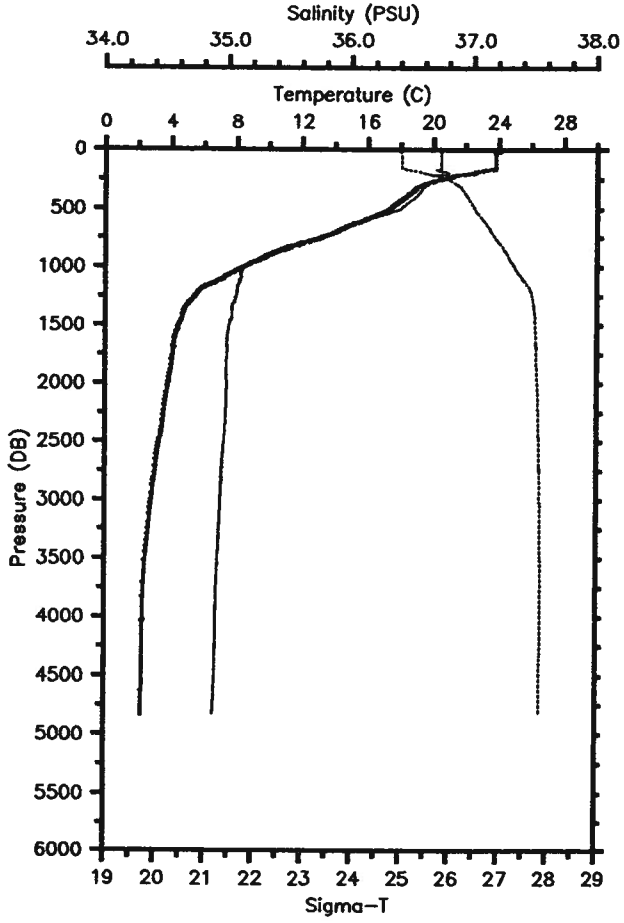
Prs	Tem	Sal	SigT
0	23.21	36.677	25.15
10	23.19	36.682	25.16
20	23.20	36.683	25.15
30	23.20	36.683	25.15
40	23.17	36.671	25.15
50	23.13	36.668	25.16
60	23.11	36.664	25.16
70	23.11	36.664	25.17
80	23.11	36.664	25.17
90	23.10	36.662	25.17
100	23.08	36.657	25.17
110	23.07	36.657	25.17
120	23.05	36.647	25.17
130	22.61	36.683	25.33
140	22.27	36.651	25.40
150	21.83	36.627	25.50
160	21.43	36.639	25.63
170	21.24	36.633	25.67
180	21.19	36.650	25.70
190	21.15	36.735	25.78
200	20.49	36.674	25.91
250	19.20	36.593	26.19
300	18.77	36.566	26.28
350	18.26	36.517	26.37
400	17.98	36.491	26.42
450	17.73	36.460	26.46
500	17.33	36.394	26.51
550	16.22	36.188	26.61
600	15.29	36.037	26.71
650	14.18	35.857	26.81
700	12.99	35.694	26.93
750	11.81	35.531	27.04
800	11.07	35.434	27.10
850	9.80	35.271	27.20
900	8.94	35.177	27.27
950	8.20	35.130	27.35
1000	7.52	35.101	27.42
1500	4.18	34.990	27.76
2000	3.75	34.975	27.79
2500	3.32	34.962	27.82
3000	2.80	34.937	27.85
3500	2.44	34.913	27.87
4000	2.29	34.901	27.87
4500	2.26	34.892	27.86
4796	2.22	34.882	27.86

ALB-STACS33-89 CTD 76 ALBATROSS IV
Date 03 07 89 Latitude 26.520 N
Time 1355 Z Longitude 76.355 W



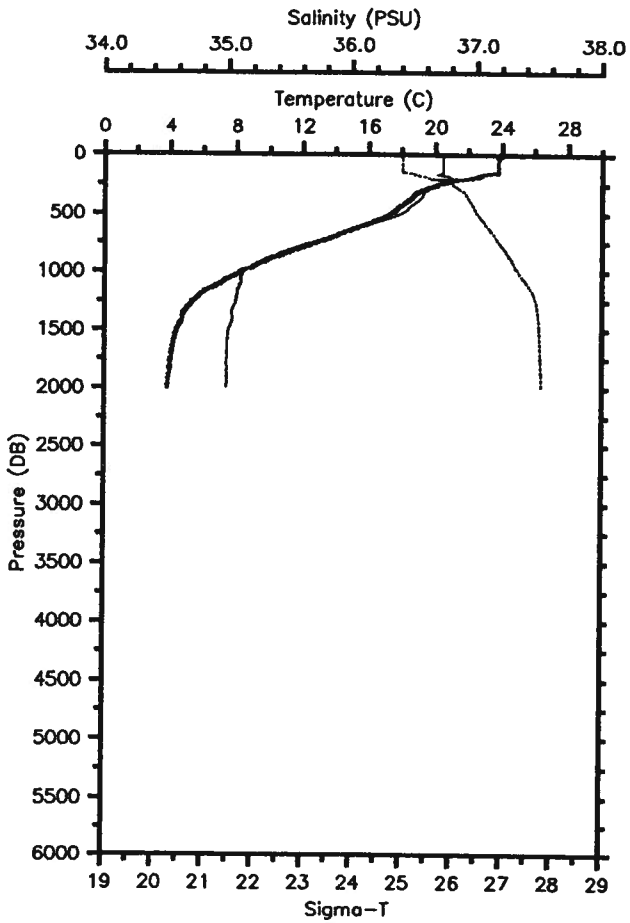
Prs	Tem	Sal	SigT
0	23.83	36.781	25.04
10	23.82	36.717	25.00
20	23.82	36.718	25.00
30	23.82	36.718	25.00
40	23.82	36.718	25.00
50	23.82	36.719	25.00
60	23.82	36.719	25.00
70	23.82	36.718	25.00
80	23.82	36.718	25.00
90	23.82	36.718	25.00
100	23.83	36.719	25.00
110	23.83	36.718	25.00
120	23.82	36.717	25.00
130	23.82	36.716	25.00
140	23.39	36.704	25.12
150	22.80	36.679	25.27
160	22.61	36.670	25.31
170	22.44	36.683	25.37
180	22.39	36.780	25.46
190	21.68	36.719	25.62
200	21.32	36.713	25.71
250	19.90	36.644	26.05
300	18.94	36.574	26.24
350	18.61	36.554	26.31
400	18.26	36.523	26.37
450	17.77	36.467	26.46
500	17.12	36.367	26.54
550	16.27	36.225	26.63
600	15.14	36.042	26.75
650	14.31	35.908	26.82
700	13.35	35.761	26.91
750	12.78	35.669	26.96
800	11.82	35.528	27.03
850	10.72	35.381	27.12
900	9.74	35.267	27.21
950	8.85	35.169	27.28
1000	8.13	35.125	27.35
1500	4.33	35.001	27.75
2000	3.83	34.986	27.79
2500	3.32	34.966	27.83
3000	2.81	34.936	27.85
3500	2.43	34.913	27.87
4000	2.29	34.900	27.87
4500	2.26	34.892	27.86
4798	2.24	34.883	27.86

ALB–STACS33–89 CTD 78 ALBATROSS IV
Date 03 07 89 Latitude 26.497 N
Time 1943 Z Longitude 76.153 W



Prs	Tem	Sal	SigT
0	24.08	36.756	24.95
10	24.09	36.739	24.93
20	23.83	36.731	25.01
30	23.81	36.731	25.01
40	23.80	36.732	25.01
50	23.80	36.732	25.01
60	23.80	36.731	25.02
70	23.80	36.731	25.02
80	23.80	36.732	25.02
90	23.80	36.732	25.01
100	23.80	36.731	25.01
110	23.80	36.731	25.01
120	23.80	36.731	25.01
130	23.80	36.731	25.01
140	23.80	36.730	25.01
150	23.79	36.730	25.02
160	23.69	36.726	25.04
170	23.10	36.706	25.20
180	22.69	36.718	25.33
190	22.52	36.773	25.42
200	22.18	36.794	25.53
250	20.39	36.699	25.95
300	19.32	36.611	26.17
350	18.70	36.583	26.29
400	18.29	36.518	26.36
450	17.76	36.455	26.45
500	17.34	36.401	26.51
550	16.47	36.257	26.61
600	15.66	36.122	26.69
650	14.71	35.968	26.78
700	14.01	35.855	26.85
750	13.09	35.715	26.93
800	11.90	35.540	27.03
850	10.90	35.401	27.11
900	9.91	35.285	27.19
950	9.14	35.198	27.25
1000	8.36	35.129	27.32
1500	4.43	35.004	27.74
2000	3.82	34.985	27.79
2500	3.27	34.984	27.83
3000	2.82	34.937	27.85
3500	2.45	34.915	27.87
4000	2.30	34.901	27.87
4500	2.26	34.892	27.86
4830	2.22	34.880	27.86

ALB–STACS33–89 CTD 79 ALBATROSS IV
Date 03 07 89 Latitude 26.495 N
Time 2229 Z Longitude 76.148 W

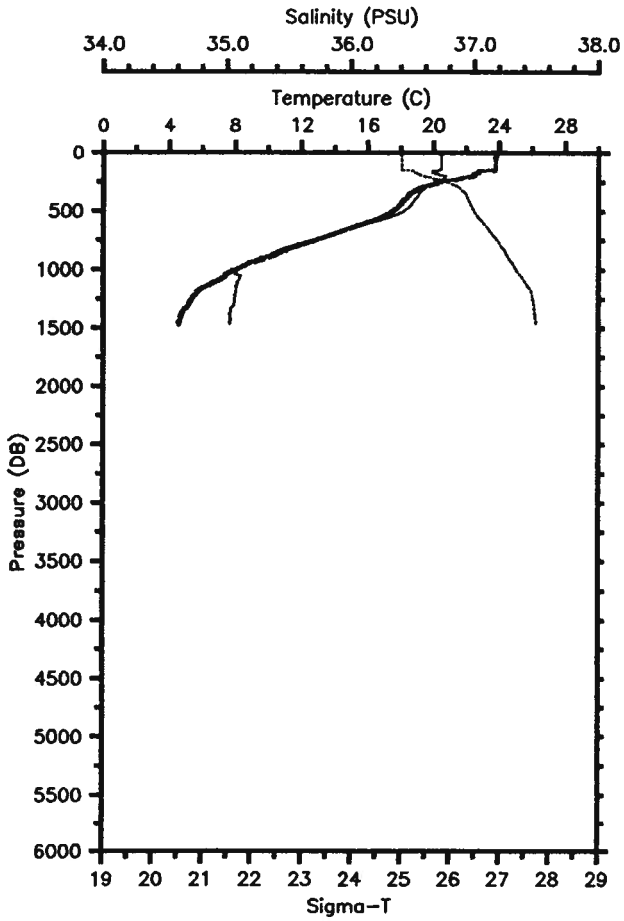


Prs	Tem	Sal	SigT
0	24.00	36.733	24.96
10	24.00	36.736	24.96
20	23.82	36.728	25.01
30	23.80	36.730	25.01
40	23.79	36.729	25.01
50	23.79	36.730	25.02
60	23.79	36.729	25.02
70	23.79	36.730	25.02
80	23.79	36.729	25.02
90	23.79	36.729	25.02
100	23.78	36.728	25.02
110	23.79	36.728	25.02
120	23.79	36.728	25.02
130	23.79	36.728	25.02
140	23.79	36.728	25.02
150	23.71	36.724	25.03
160	23.12	36.727	25.21
170	22.72	36.721	25.32
180	22.55	36.768	25.41
190	22.27	36.795	25.51
200	21.90	36.779	25.60
250	20.16	36.685	26.01
300	19.25	36.603	26.18
350	18.67	36.560	26.30
400	18.22	36.516	26.38
450	17.74	36.452	26.45
500	17.28	36.391	26.51
550	16.46	36.260	26.61
600	15.66	36.117	26.69
650	14.79	35.968	26.76
700	13.87	35.835	26.86
750	12.80	35.673	26.96
800	11.76	35.514	27.03
850	10.78	35.393	27.12
900	9.85	35.281	27.20
950	9.08	35.189	27.25
1000	8.24	35.118	27.33
1500	4.39	35.000	27.74
1996	3.82	34.986	27.79

ALB-STACS33-89 CTD 80 ALBATROSS IV

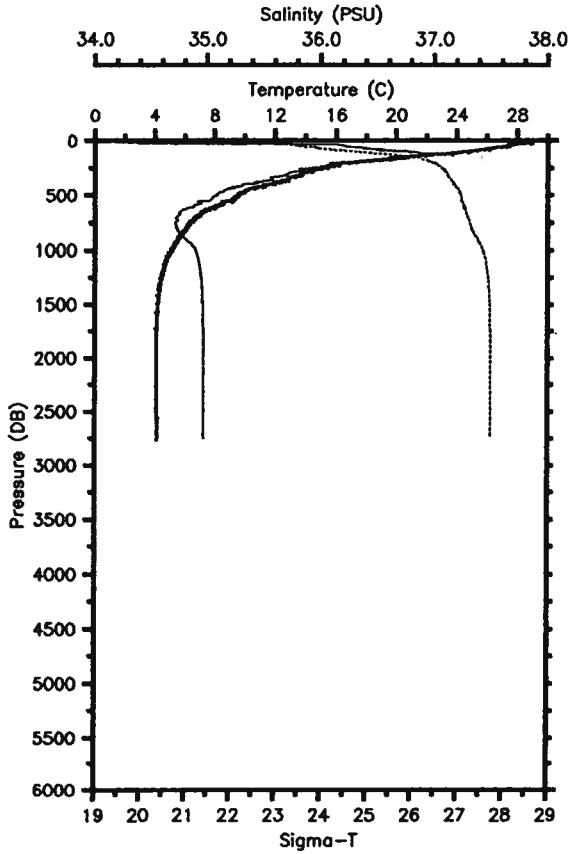
Date 03 08 89 Latitude 26.545 N

Time 0129 Z Longitude 75.907 W



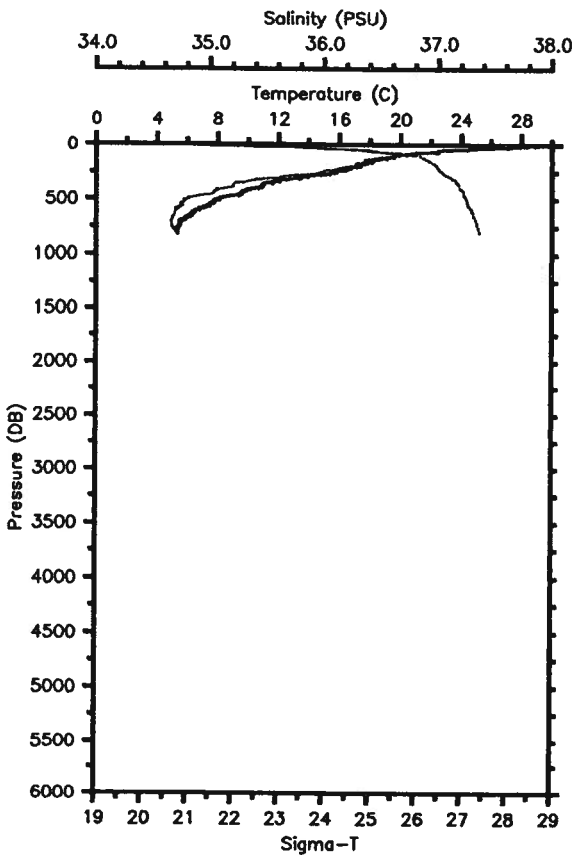
Prs	Tem	Sal	SigT
0	23.86	36.841	25.08
10	23.85	36.736	25.00
20	23.85	36.735	25.00
30	23.80	36.730	25.01
40	23.79	36.731	25.02
50	23.78	36.731	25.02
60	23.77	36.731	25.02
70	23.77	36.731	25.02
80	23.77	36.731	25.02
90	23.77	36.731	25.02
100	23.77	36.730	25.02
110	23.77	36.730	25.02
120	23.77	36.730	25.02
130	23.77	36.729	25.02
140	23.77	36.729	25.02
150	23.53	36.701	25.07
160	22.74	36.657	25.27
170	22.66	36.656	25.29
180	22.49	36.676	25.35
190	22.48	36.721	25.39
200	22.33	36.760	25.46
250	20.39	36.679	25.94
300	19.22	36.604	26.19
350	18.59	36.554	26.32
400	18.22	36.517	26.38
450	17.92	36.484	26.43
500	17.50	36.424	26.49
550	16.85	36.324	26.57
600	15.90	36.169	26.67
650	14.87	36.002	26.77
700	13.84	35.835	26.87
750	12.80	35.674	26.96
800	11.75	35.514	27.04
850	10.79	35.397	27.12
900	9.81	35.270	27.19
950	8.75	35.154	27.28
1000	7.98	35.084	27.34
1464	4.59	35.024	27.74

MB-STACS34-89 CTD 1 BALDRIGE
Date 08 28 89 Latitude 13.840 N
Time 1734 Z Longitude 61.440 W



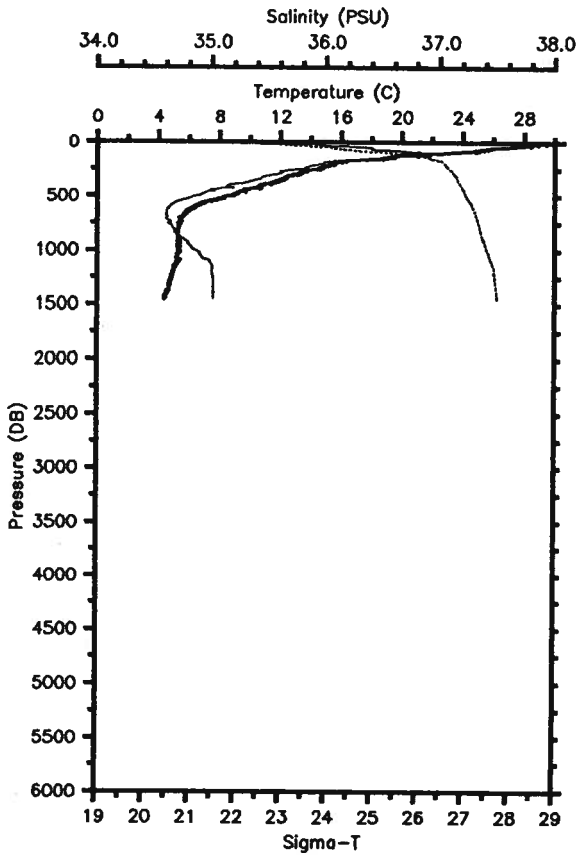
Prs	Tem	Sal	SigT
0	29.05	32.235	19.98
10	28.97	33.862	21.22
20	28.92	34.392	21.64
30	28.02	35.627	22.86
40	27.48	36.178	23.45
50	27.35	36.213	23.52
60	26.71	36.322	23.81
70	26.33	36.405	23.99
80	25.92	36.536	24.22
90	25.25	36.592	24.47
100	24.78	36.797	24.77
110	24.05	36.869	25.04
120	23.55	36.987	25.28
130	22.19	36.907	25.62
140	21.28	36.833	25.82
150	20.20	36.665	25.98
160	19.68	36.752	26.19
170	19.22	36.640	26.22
180	18.55	36.568	26.34
190	17.75	36.390	26.40
200	16.95	36.220	26.46
250	15.07	35.929	26.67
300	13.78	35.715	26.79
350	12.86	35.569	26.86
400	11.38	35.316	26.95
450	10.11	35.159	27.06
500	9.56	35.084	27.09
550	9.14	35.013	27.11
600	8.04	34.874	27.17
650	7.16	34.759	27.21
700	6.75	34.732	27.24
750	6.33	34.721	27.29
800	6.11	34.740	27.33
850	5.81	34.761	27.39
900	5.55	34.810	27.46
950	5.34	34.862	27.53
1000	5.13	34.897	27.58
1500	4.23	34.962	27.73
2000	4.13	34.969	27.75
2500	4.15	34.970	27.75
2752	4.18	34.972	27.75

MB-STACS34-89 CTD 2 BALDRIGE
Date 08 29 89 Latitude 11.420 N
Time 1222 Z Longitude 60.535 W



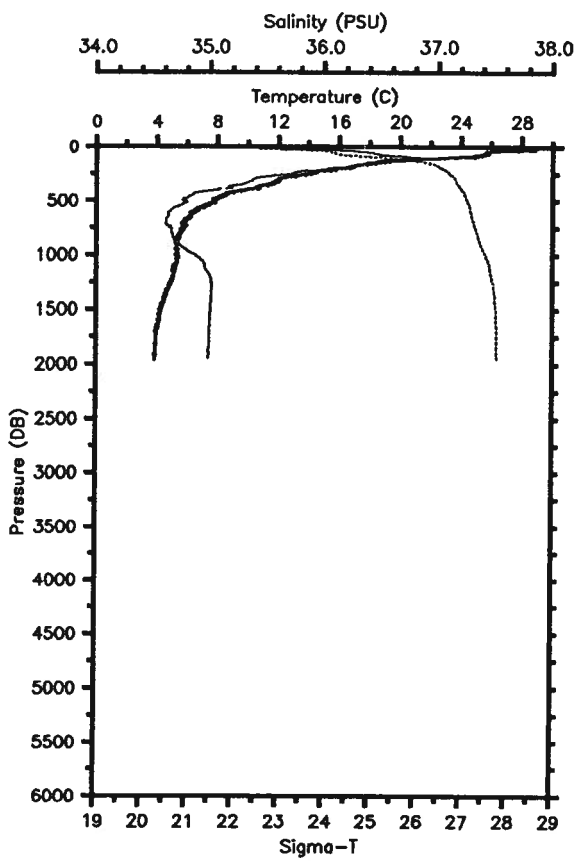
Prs	Tem	Sal	SigT
0	28.88	34.554	21.77
10	28.33	34.878	22.20
20	27.19	35.439	22.99
30	25.29	35.929	23.96
40	24.13	36.073	24.42
50	22.57	36.338	25.07
60	22.42	36.389	25.15
70	21.50	36.549	25.54
80	20.81	36.700	25.84
90	20.07	36.619	25.98
100	19.62	36.592	26.08
110	19.36	36.537	26.10
120	18.81	36.447	26.18
130	18.64	36.416	26.20
140	18.15	36.354	26.27
150	18.09	36.362	26.30
160	17.82	36.338	26.34
170	17.50	36.273	26.37
180	17.38	36.305	26.43
190	17.21	36.288	26.45
200	16.92	36.210	26.46
250	15.68	35.967	26.57
300	13.45	35.615	26.78
350	11.10	35.214	26.92
400	10.35	35.107	26.97
450	9.47	35.017	27.06
500	8.04	34.805	27.11
550	7.47	34.744	27.15
600	6.62	34.691	27.23
650	6.20	34.677	27.27
700	5.51	34.656	27.34
750	5.39	34.662	27.36
800	5.32	34.695	27.40
802	5.33	34.695	27.40

MB-STACS34-89 CTD 3 BALDRIGE
Date 08 29 89 Latitude 11.740 N
Time 1456 Z Longitude 60.297 W



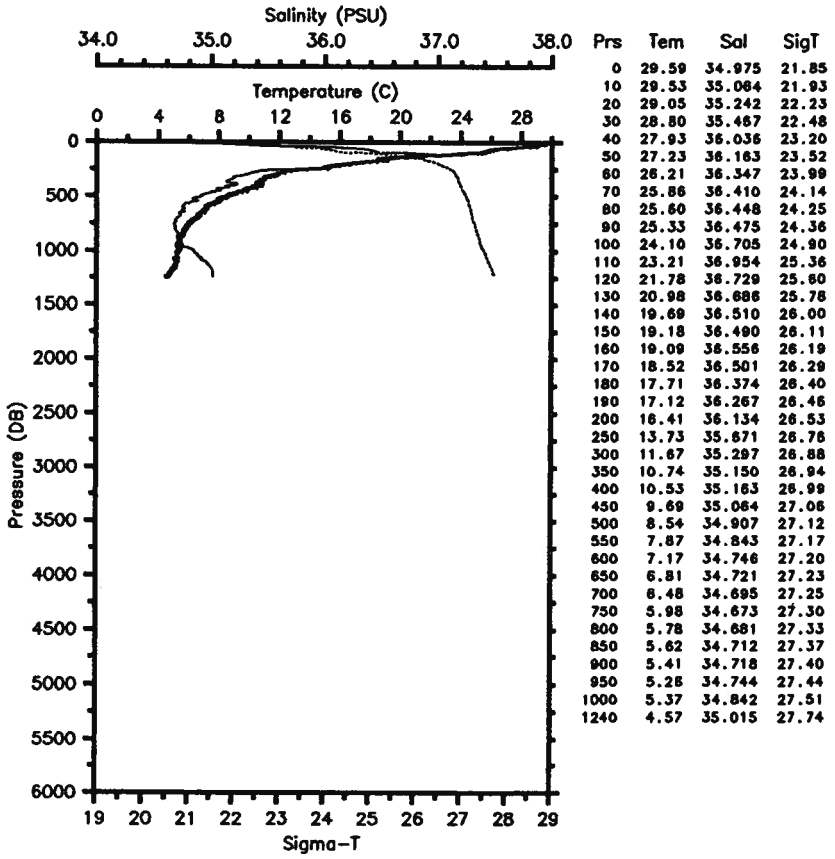
Prs	Tem	Sal	SigT
0	29.48	34.365	21.43
10	28.91	35.314	22.33
20	28.41	35.946	22.97
30	27.77	35.939	23.18
40	26.86	36.239	23.70
50	25.93	36.409	24.12
60	25.45	36.395	24.26
70	25.02	36.475	24.45
80	24.49	36.736	24.81
90	23.44	36.820	25.19
100	22.01	36.782	25.57
110	20.77	36.600	25.78
120	20.05	36.722	26.08
130	19.25	36.607	26.19
140	18.91	36.589	26.26
150	18.59	36.556	26.32
160	17.57	36.367	26.43
170	16.37	36.118	26.52
180	15.93	36.031	26.56
190	15.59	35.980	26.60
200	15.51	35.968	26.60
250	14.40	35.794	26.72
300	12.91	35.538	26.83
350	11.98	35.374	26.88
400	10.69	35.143	26.94
450	9.70	35.022	27.02
500	8.58	34.860	27.08
550	7.28	34.711	27.15
600	6.37	34.632	27.21
650	5.85	34.607	27.26
700	5.48	34.604	27.31
750	5.34	34.622	27.34
800	5.33	34.660	27.37
850	5.25	34.685	27.40
900	5.36	34.757	27.44
950	5.34	34.803	27.48
1000	5.35	34.866	27.53
1446	4.40	35.010	27.75

MB-STACS34-89 CTD 4 BALDRIGE
Date 08 29 89 Latitude 12.049 N
Time 1737 Z Longitude 60.072 W



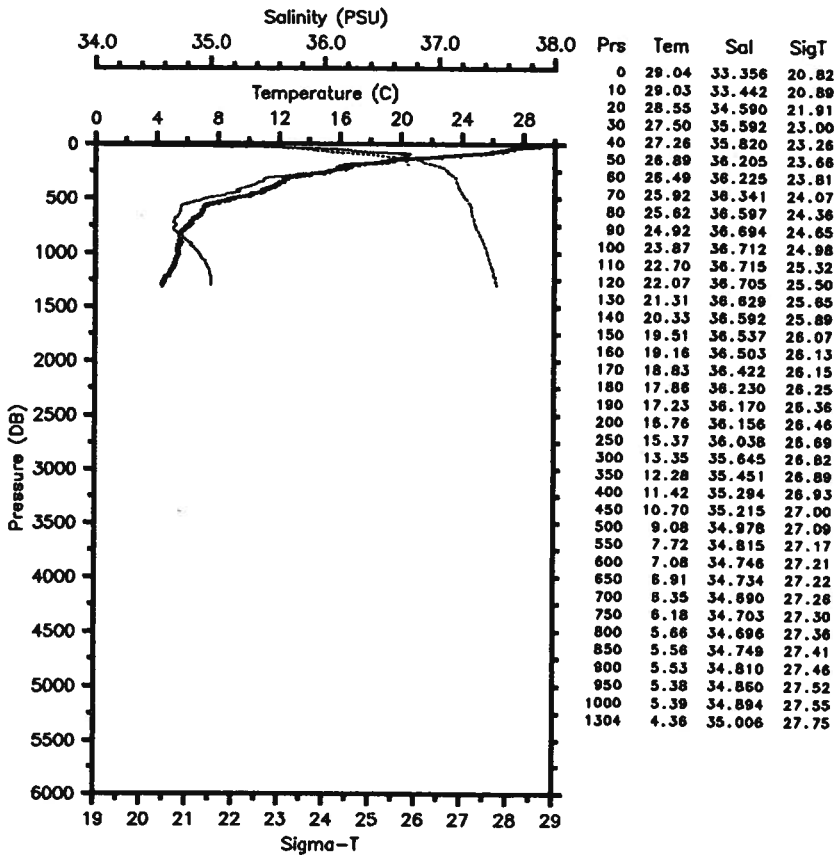
Prs	Tem	Sal	SigT
0	28.99	35.409	22.38
10	28.84	35.554	22.54
20	28.74	35.641	22.64
30	26.80	36.110	23.62
40	25.83	36.272	24.05
50	25.76	36.388	24.16
60	25.61	36.438	24.24
70	25.26	36.500	24.40
80	24.93	36.625	24.59
90	23.97	36.694	24.93
100	23.07	36.820	25.30
110	21.05	36.863	25.75
120	20.69	36.879	25.86
130	19.20	36.479	26.10
140	18.76	36.442	26.19
150	18.26	36.441	26.31
160	17.77	36.390	26.39
170	17.17	36.282	26.46
180	16.91	36.250	26.50
190	16.61	36.195	26.52
200	15.71	36.024	26.60
250	13.90	35.704	26.75
300	12.07	35.384	26.87
350	11.30	35.275	26.93
400	9.82	35.059	27.03
450	8.40	34.837	27.09
500	7.76	34.774	27.13
550	7.11	34.721	27.18
600	6.43	34.639	27.21
650	6.18	34.626	27.23
700	5.77	34.609	27.27
750	5.74	34.648	27.31
800	5.53	34.669	27.35
850	5.34	34.687	27.39
900	5.28	34.729	27.43
950	5.30	34.793	27.48
1000	5.32	34.870	27.53
1500	4.25	35.005	27.76
1946	3.87	34.992	27.79

MB-STACS34-89 CTD 5 BALDRIGE
Date 08 29 89 Latitude 12.365 N
Time 2035 Z Longitude 59.837 W



Prs	Tem	Sal	SigT
0	29.59	34.975	21.85
10	29.53	35.064	21.93
20	29.05	35.242	22.23
30	28.80	35.467	22.48
40	27.93	36.036	23.20
50	27.23	36.163	23.52
60	26.21	36.347	23.99
70	25.86	36.410	24.14
80	25.60	36.448	24.25
90	25.33	36.475	24.36
100	24.10	36.705	24.90
110	23.21	36.954	25.36
120	21.78	36.729	25.60
130	20.98	36.686	25.78
140	19.69	36.510	26.00
150	19.18	36.490	26.11
160	19.09	36.556	26.19
170	18.52	36.501	26.29
180	17.71	36.374	26.40
190	17.12	36.267	26.46
200	16.41	36.134	26.53
250	13.73	35.671	26.76
300	11.67	35.297	26.88
350	10.74	35.150	26.94
400	10.53	35.163	26.99
450	9.69	35.064	27.06
500	8.54	34.907	27.12
550	7.87	34.843	27.17
600	7.17	34.746	27.20
650	6.81	34.721	27.23
700	6.48	34.695	27.25
750	5.98	34.673	27.30
800	5.78	34.681	27.33
850	5.62	34.712	27.37
900	5.41	34.718	27.40
950	5.28	34.744	27.44
1000	5.37	34.842	27.51
1240	4.57	35.015	27.74

MB-STACS34-89 CTD 6 BALDRIGE
Date 08 29 89 Latitude 12.684 N
Time 2311 Z Longitude 59.600 W

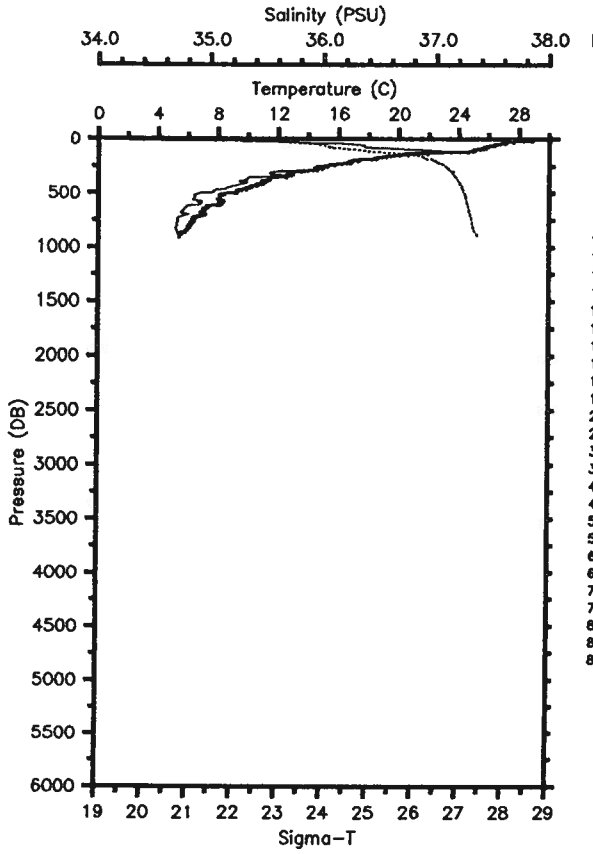


Prs	Tem	Sal	SigT
0	29.04	33.356	20.82
10	29.03	33.442	20.89
20	28.55	34.590	21.91
30	27.50	35.592	23.00
40	27.26	35.820	23.26
50	26.89	36.205	23.66
60	26.49	36.225	23.81
70	25.92	36.341	24.07
80	25.62	36.597	24.36
90	24.92	36.694	24.65
100	23.87	36.712	24.98
110	22.70	36.715	25.32
120	22.07	36.705	25.50
130	21.31	36.629	25.65
140	20.33	36.592	25.89
150	19.51	36.537	26.07
160	19.16	36.503	26.13
170	18.83	36.422	26.15
180	17.86	36.230	26.25
190	17.23	36.170	26.36
200	16.76	36.156	26.46
250	15.37	36.038	26.69
300	13.35	35.645	26.82
350	12.28	35.451	26.89
400	11.42	35.294	26.93
450	10.70	35.215	27.00
500	9.08	34.978	27.09
550	7.72	34.815	27.17
600	7.08	34.746	27.21
650	6.91	34.734	27.22
700	6.35	34.690	27.26
750	6.18	34.703	27.30
800	5.66	34.696	27.36
850	5.56	34.749	27.41
900	5.53	34.810	27.46
950	5.38	34.860	27.52
1000	5.39	34.894	27.55
1304	4.36	35.006	27.75

MB-STACS34-89 CTD 7 BALDRIGE

Date 08 30 89 Latitude 12.998 N

Time 0153 Z Longitude 59.367 W

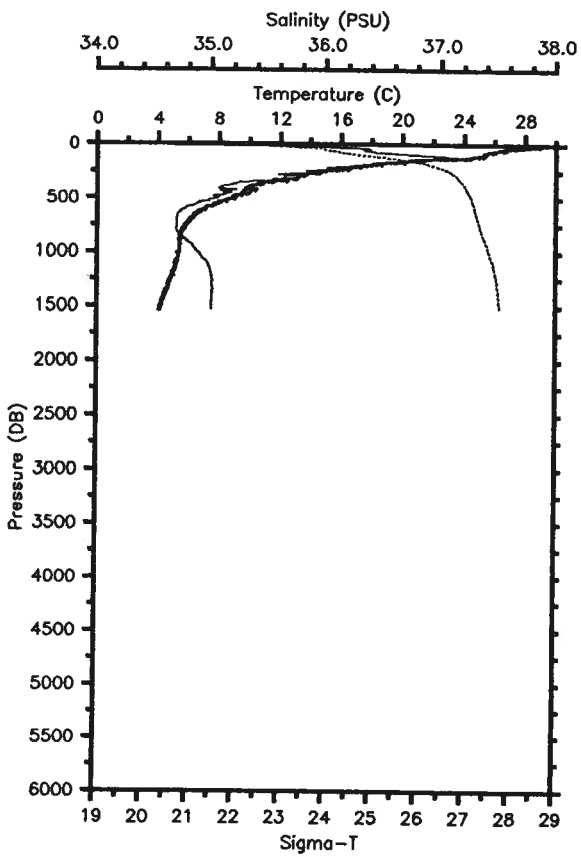


Prs	Tem	Sal	SigT
0	28.84	32.943	20.58
10	28.90	33.031	20.62
20	27.61	35.301	22.75
30	27.16	35.734	23.22
40	26.93	36.039	23.53
50	26.34	36.266	23.88
60	26.10	36.363	24.03
70	25.81	36.356	24.12
80	25.67	36.440	24.22
90	25.34	36.686	24.51
100	25.01	36.921	24.79
110	24.80	37.052	24.96
120	23.46	36.875	25.22
130	21.54	36.715	25.65
140	20.59	36.699	25.90
150	19.77	36.604	26.05
160	19.12	36.528	26.16
170	18.65	36.448	26.22
180	18.43	36.422	26.25
190	17.40	36.285	26.41
200	16.90	36.228	26.48
250	14.96	35.930	26.70
300	12.92	35.639	26.91
350	11.97	35.427	26.93
400	11.06	35.324	27.02
450	9.91	35.144	27.08
500	8.68	34.929	27.11
550	8.08	34.854	27.15
600	8.14	34.918	27.19
650	7.09	34.765	27.22
700	7.05	34.795	27.25
750	6.33	34.706	27.28
800	6.11	34.700	27.30
850	5.82	34.698	27.34
898	5.42	34.727	27.41

MB-STACS34-89 CTD 8 BALDRIGE

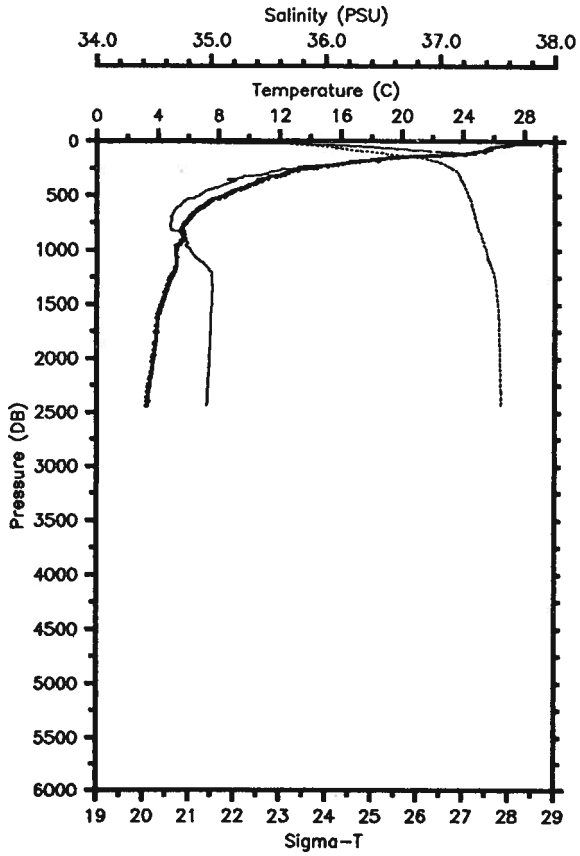
Date 08 30 89 Latitude 13.000 N

Time 0410 Z Longitude 59.008 W



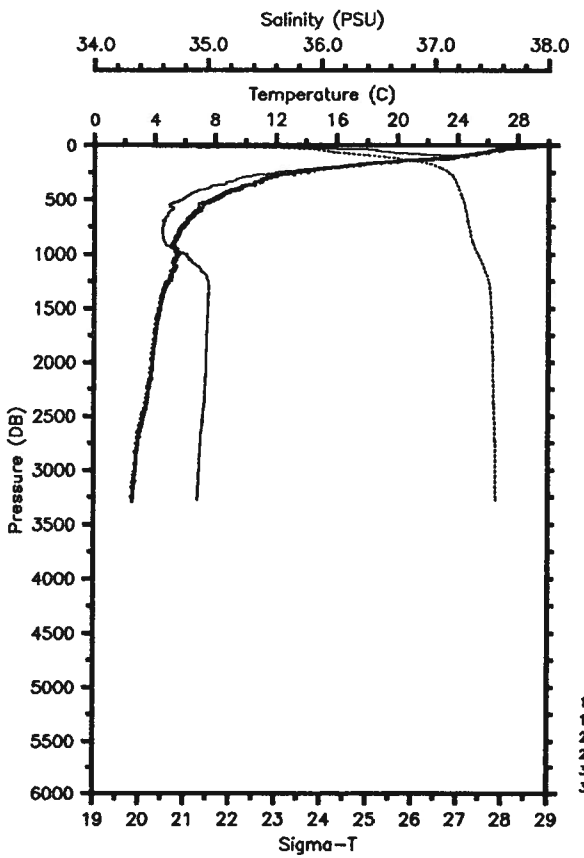
Prs	Tem	Sal	SigT
0	28.97	32.909	20.51
10	28.92	34.556	21.76
20	28.28	35.685	22.82
30	27.54	36.105	23.38
40	26.75	36.368	23.83
50	26.21	36.326	23.97
60	25.88	36.346	24.09
70	25.47	36.423	24.27
80	25.34	36.530	24.39
90	25.31	36.700	24.53
100	25.09	36.921	24.77
110	24.60	37.089	25.04
120	24.14	37.217	25.28
130	22.58	36.880	25.48
140	21.38	36.710	25.69
150	20.86	36.697	25.88
160	20.12	36.628	25.97
170	18.79	36.426	26.17
180	18.45	36.392	26.23
190	17.95	36.310	26.29
200	17.32	36.228	26.38
250	14.89	35.930	26.72
300	13.15	35.636	26.85
350	11.37	35.317	26.98
400	9.97	35.090	27.03
450	9.98	35.178	27.09
500	9.02	35.054	27.16
550	7.84	34.874	27.20
600	7.06	34.765	27.23
650	6.42	34.700	27.26
700	8.12	34.693	27.30
750	5.80	34.692	27.33
800	5.57	34.690	27.36
850	5.44	34.730	27.41
900	5.37	34.788	27.46
950	5.39	34.838	27.50
1000	5.33	34.882	27.54
1500	4.16	35.001	27.77
1530	4.10	34.999	27.78

MB-STACS34-89 CTD 9 BALDRIGE
Date 08 30 89 Latitude 12.998 N
Time 0716 Z Longitude 58.503 W



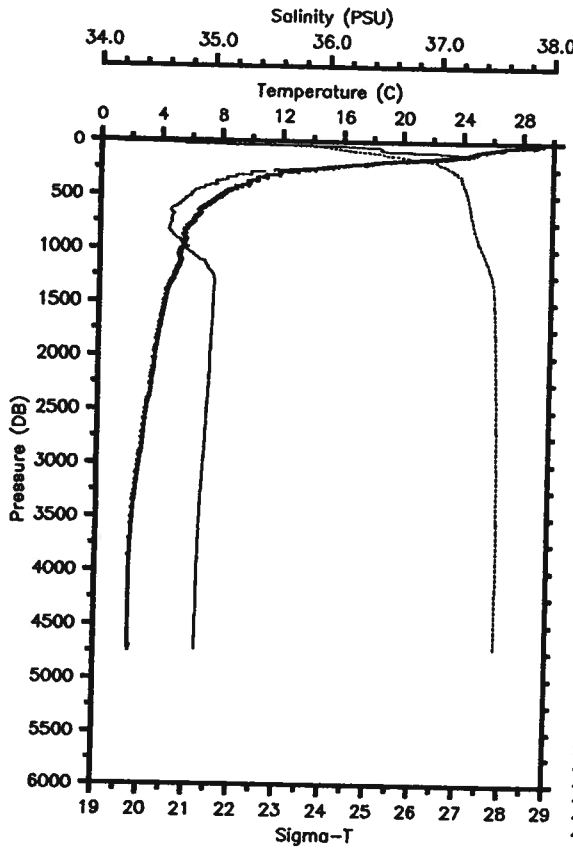
Prs	Tem	Sal	SigT
0	29.05	33.064	20.60
10	29.06	33.063	20.59
20	28.32	35.430	22.61
30	27.12	35.859	23.33
40	26.69	36.139	23.68
50	26.05	36.325	24.02
60	25.81	36.475	24.21
70	25.61	36.693	24.44
80	25.43	36.740	24.53
90	25.07	36.893	24.75
100	24.70	37.098	25.02
110	24.16	37.230	25.28
120	23.60	37.217	25.44
130	22.17	37.035	25.72
140	20.35	36.626	25.91
150	19.63	36.552	26.05
160	18.52	36.393	26.21
170	18.49	36.469	26.28
180	17.31	36.210	26.37
190	16.93	36.224	26.47
200	16.33	36.127	26.54
250	14.23	35.792	26.75
300	12.33	35.483	26.90
350	10.82	35.187	26.95
400	10.09	35.117	27.03
450	9.14	34.979	27.08
500	8.49	34.906	27.13
550	7.43	34.787	27.17
600	7.02	34.725	27.20
650	6.47	34.672	27.23
700	6.16	34.645	27.25
750	5.84	34.650	27.30
800	5.60	34.645	27.32
850	5.68	34.732	27.38
900	5.72	34.785	27.42
950	5.37	34.788	27.46
1000	5.20	34.820	27.51
1500	4.28	35.007	27.76
2000	3.69	34.986	27.81
2438	3.28	34.966	27.83

MB-STACS34-89 CTD 10 BALDRIGE
Date 08 30 89 Latitude 13.000 N
Time 1108 Z Longitude 58.000 W



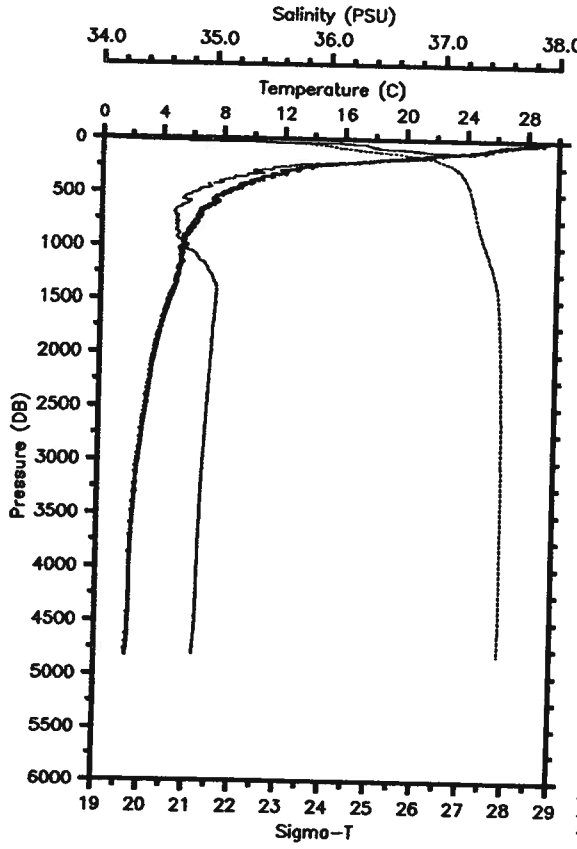
Prs	Tem	Sal	SigT
0	29.04	33.809	21.16
10	29.05	33.818	21.16
20	28.38	34.990	22.27
30	27.40	36.056	23.39
40	26.78	36.475	23.90
50	26.29	36.472	24.06
60	26.00	36.594	24.24
70	25.40	36.722	24.52
80	25.10	36.871	24.73
90	24.64	37.018	24.98
100	24.00	37.148	25.27
110	23.36	37.209	25.51
120	22.48	37.156	25.72
130	21.94	37.074	25.81
140	20.26	36.745	26.02
150	19.76	36.707	26.13
160	18.81	36.562	26.27
170	17.85	36.393	26.38
180	17.37	36.328	26.44
190	16.58	36.187	26.53
200	16.10	36.093	26.57
250	13.20	35.596	26.82
300	11.42	35.284	26.93
350	10.59	35.163	26.98
400	9.55	34.993	27.02
450	8.53	34.853	27.08
500	7.93	34.780	27.11
550	7.01	34.681	27.15
600	6.94	34.683	27.18
650	6.49	34.643	27.21
700	6.20	34.597	27.21
750	5.86	34.606	27.26
800	5.62	34.600	27.28
850	5.45	34.605	27.31
900	5.24	34.626	27.35
950	5.34	34.692	27.39
1000	5.55	34.800	27.45
1500	4.35	35.006	27.75
2000	3.83	34.989	27.80
2500	3.26	34.984	27.83
3000	2.72	34.932	27.86
3278	2.53	34.920	27.86

MB-STACS34-89 CTD 11 BALDRIGE
Date 08 30 89 Latitude 13.000 N
Time 1524 Z Longitude 57.505 W



Prs	Tem	Sal	SigT
0	28.58	22.307	12.70
10	29.02	32.455	20.15
20	28.94	34.707	21.87
30	28.43	34.949	22.22
40	27.06	36.060	23.50
50	26.58	36.330	23.86
60	26.15	36.461	24.09
70	25.71	36.469	24.23
80	25.14	36.492	24.43
90	24.81	36.672	24.67
100	24.70	37.053	24.99
110	24.42	37.170	25.16
120	24.19	37.230	25.27
130	23.28	37.149	25.49
140	22.44	37.137	25.72
150	21.80	37.074	25.85
160	20.60	36.918	26.06
170	19.86	36.787	26.22
180	18.75	36.632	26.33
190	17.89	36.472	26.43
200	17.59	36.413	26.46
250	14.13	35.758	26.75
300	11.82	35.329	26.88
350	10.40	35.111	26.97
400	9.77	35.028	27.01
450	8.65	34.866	27.07
500	8.07	34.805	27.11
550	7.56	34.741	27.14
600	7.05	34.684	27.16
650	6.51	34.620	27.19
700	6.39	34.635	27.21
750	6.16	34.630	27.24
800	5.80	34.612	27.27
850	5.60	34.622	27.30
900	5.57	34.667	27.34
950	5.57	34.721	27.39
1000	5.43	34.766	27.44
1500	4.36	35.006	27.75
2000	3.76	34.989	27.80
2500	3.21	34.962	27.84
3000	2.81	34.939	27.85
3500	2.41	34.913	27.87
4000	2.28	34.899	27.87
4500	2.28	34.893	27.86
4730	2.28	34.892	27.86

MB-STACS34-89 CTD 12 BALDRIGE
Date 08 30 89 Latitude 13.000 N
Time 2010 Z Longitude 57.003 W

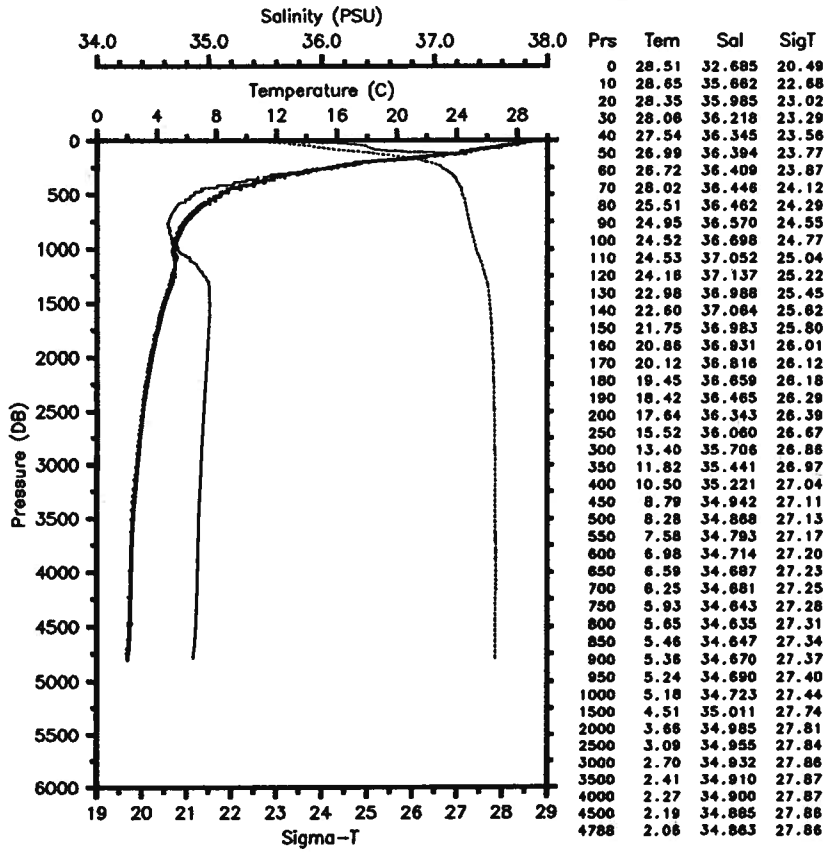


Prs	Tem	Sal	SigT
0	29.06	32.845	20.43
10	29.12	33.549	20.94
20	28.95	34.396	21.63
30	27.87	35.355	22.71
40	27.79	36.210	23.38
50	27.03	36.334	23.72
60	26.27	36.356	23.97
70	25.99	36.424	24.11
80	25.60	36.446	24.25
90	25.37	36.657	24.48
100	25.19	36.806	24.65
110	24.39	36.926	24.99
120	23.74	37.004	25.24
130	22.52	36.930	25.54
140	21.78	36.937	25.75
150	21.23	36.905	25.88
160	20.39	36.878	26.09
170	19.83	36.822	26.20
180	18.96	36.660	26.30
190	18.18	36.491	26.37
200	17.61	36.377	26.42
250	13.84	35.648	26.72
300	11.85	35.329	26.87
350	11.24	35.268	26.94
400	9.79	35.034	27.02
450	9.17	34.962	27.06
500	8.31	34.832	27.10
550	7.56	34.731	27.13
600	7.47	34.761	27.16
650	6.83	34.678	27.19
700	6.53	34.651	27.21
750	6.35	34.681	27.24
800	6.11	34.662	27.27
850	5.83	34.657	27.30
900	5.68	34.680	27.34
950	5.51	34.703	27.38
1000	5.49	34.765	27.43
1500	4.57	35.016	27.74
2000	3.65	34.987	27.81
2500	3.10	34.959	27.84
3000	2.67	34.931	27.86
3500	2.38	34.910	27.87
4000	2.24	34.897	27.87
4500	2.21	34.887	27.86
4808	2.07	34.864	27.86

MB-STACS34-89 CTD 13 BALDRIGE

Date 08 31 89 Latitude 13.005 N

Time 0314 Z Longitude 56.005 W

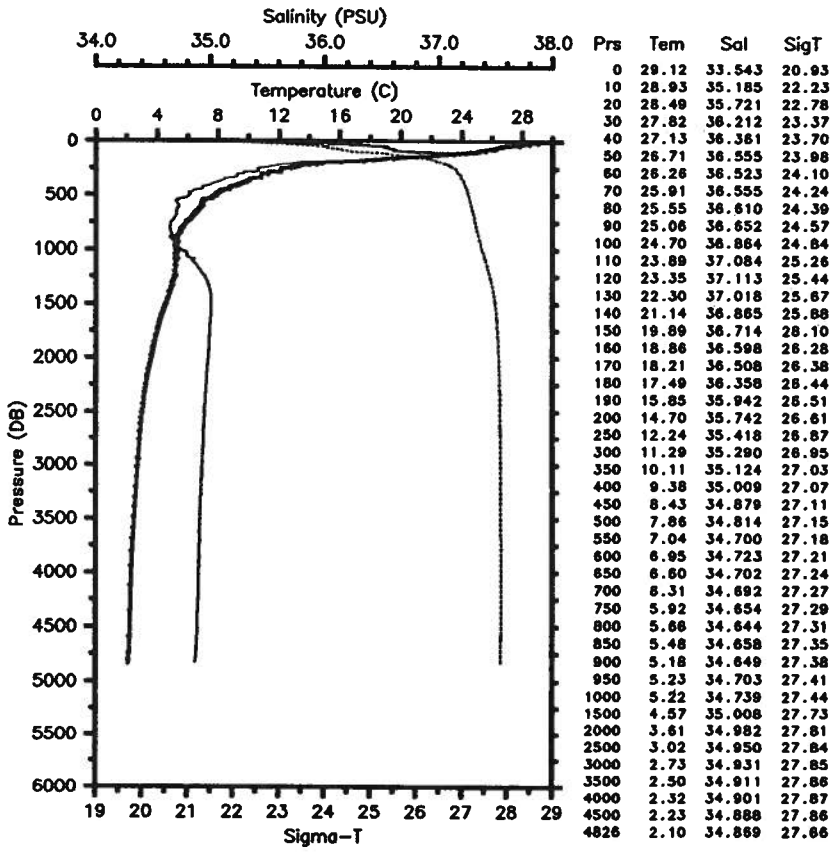


Prs	Tem	Sal	SigT
0	28.51	32.685	20.49
10	28.65	35.662	22.68
20	28.35	35.985	23.02
30	28.06	36.218	23.29
40	27.54	36.345	23.56
50	26.99	36.394	23.77
60	26.72	36.409	23.87
70	26.02	36.446	24.12
80	25.51	36.462	24.29
90	24.95	36.570	24.55
100	24.52	36.698	24.77
110	24.53	37.052	25.04
120	24.18	37.137	25.22
130	22.98	36.988	25.45
140	22.60	37.064	25.62
150	21.75	36.983	25.80
160	20.86	36.931	26.01
170	20.12	36.816	26.12
180	19.45	36.659	26.18
190	18.42	36.465	26.29
200	17.64	36.343	26.39
250	15.52	36.060	26.67
300	13.40	35.706	26.86
350	11.82	35.441	26.97
400	10.50	35.221	27.04
450	8.79	34.942	27.11
500	8.28	34.868	27.13
550	7.58	34.793	27.17
600	6.98	34.714	27.20
650	6.59	34.687	27.23
700	6.25	34.681	27.25
750	5.93	34.643	27.28
800	5.65	34.635	27.31
850	5.46	34.647	27.34
900	5.36	34.670	27.37
950	5.24	34.690	27.40
1000	5.18	34.723	27.44
1500	4.51	35.011	27.74
2000	3.66	34.985	27.81
2500	3.09	34.955	27.84
3000	2.70	34.932	27.86
3500	2.41	34.910	27.87
4000	2.27	34.900	27.87
4500	2.19	34.885	27.88
4788	2.06	34.883	27.88

MB-STACS34-89 CTD 14 BALDRIGE

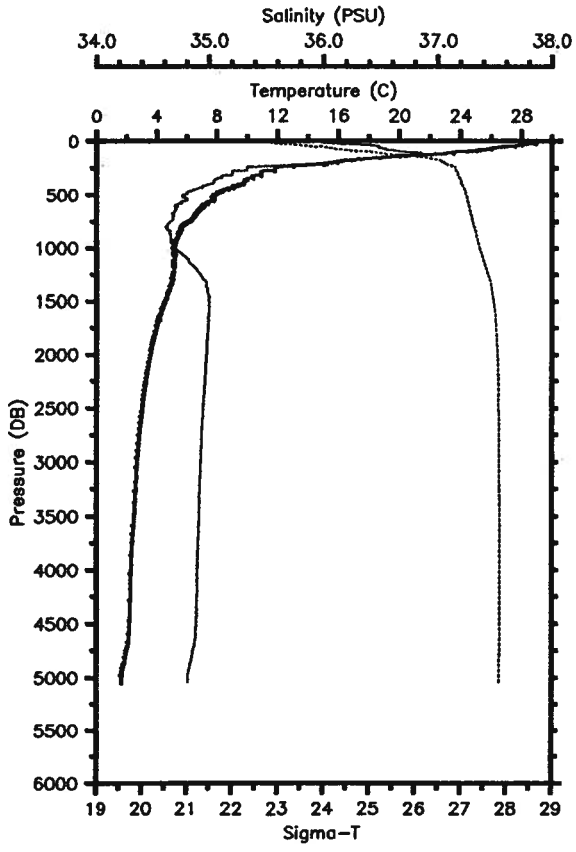
Date 08 31 89 Latitude 12.488 N

Time 1443 Z Longitude 54.088 W



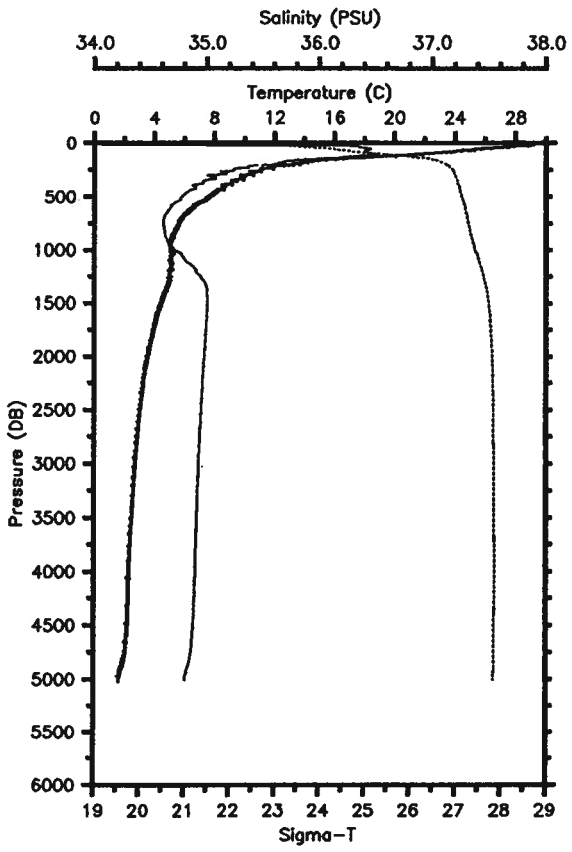
Prs	Tem	Sal	SigT
0	29.12	33.543	20.93
10	28.93	35.185	22.23
20	28.49	35.721	22.78
30	27.82	36.212	23.37
40	27.13	36.361	23.70
50	26.71	36.555	23.98
60	26.26	36.523	24.10
70	25.91	36.555	24.24
80	25.55	36.610	24.39
90	25.06	36.652	24.57
100	24.70	36.864	24.84
110	23.89	37.084	25.26
120	23.35	37.113	25.44
130	22.30	37.018	25.67
140	21.14	36.865	25.88
150	19.89	36.714	26.10
160	18.86	36.598	26.28
170	18.21	36.508	26.38
180	17.49	36.358	26.44
190	15.85	35.942	26.51
200	14.70	35.742	26.61
250	12.24	35.418	26.87
300	11.29	35.290	26.95
350	10.11	35.124	27.03
400	9.38	35.009	27.07
450	8.43	34.879	27.11
500	7.86	34.814	27.15
550	7.04	34.700	27.18
600	6.95	34.723	27.21
650	6.60	34.702	27.24
700	6.31	34.692	27.27
750	5.92	34.654	27.29
800	5.66	34.644	27.31
850	5.48	34.658	27.35
900	5.18	34.649	27.38
950	5.23	34.703	27.41
1000	5.22	34.739	27.44
1500	4.57	35.008	27.73
2000	3.61	34.982	27.81
2500	3.02	34.950	27.84
3000	2.73	34.931	27.85
3500	2.50	34.911	27.86
4000	2.32	34.901	27.87
4500	2.23	34.888	27.86
4826	2.10	34.869	27.86

MB-STACS34-89 CTD 15 BALDRIGE
Date 09 01 89 Latitude 11.565 N
Time 0140 Z Longitude 52.404 W



Prs	Tem	Sal	SigT
0	28.84	34.350	21.63
10	28.86	35.392	22.41
20	28.93	36.083	22.90
30	28.13	36.316	23.34
40	27.72	36.458	23.58
50	27.02	36.491	23.84
60	26.20	36.483	24.09
70	25.87	36.551	24.25
80	25.23	36.562	24.45
90	24.66	36.662	24.70
100	23.56	36.784	25.12
110	23.07	36.800	25.28
120	22.38	36.794	25.48
130	21.09	36.696	25.78
140	19.96	36.672	26.05
150	18.92	36.550	26.23
160	17.88	36.412	26.38
170	17.19	36.309	26.47
180	16.49	36.209	26.57
190	15.97	36.112	26.61
200	15.65	36.060	26.64
250	11.82	35.331	26.88
300	10.96	35.201	26.94
350	10.04	35.063	26.99
400	9.42	34.983	27.04
450	8.48	34.857	27.09
500	7.77	34.767	27.13
550	7.80	34.806	27.15
600	7.03	34.697	27.18
650	6.79	34.694	27.21
700	6.49	34.682	27.24
750	6.11	34.655	27.27
800	5.65	34.623	27.30
850	5.53	34.648	27.33
900	5.40	34.659	27.36
950	5.20	34.665	27.39
1000	5.14	34.694	27.42
1500	4.57	34.997	27.72
2000	3.61	34.978	27.81
2500	3.05	34.949	27.84
3000	2.72	34.928	27.85
3500	2.53	34.913	27.86
4000	2.32	34.900	27.86
4500	2.23	34.885	27.86
5000	1.68	34.813	27.85
5046	1.68	34.812	27.85

MB-STACS34-89 CTD 16 BALDRIGE
Date 09 01 89 Latitude 10.658 N
Time 1259 Z Longitude 50.707 W

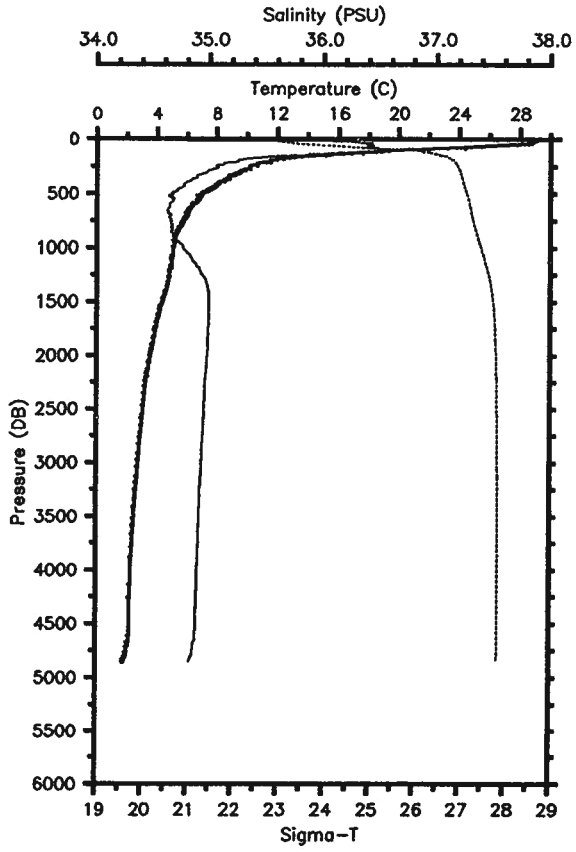


Prs	Tem	Sal	SigT
0	28.83	33.785	21.21
10	28.86	33.793	21.21
20	28.92	35.198	22.24
30	27.74	36.333	23.49
40	26.96	36.387	23.76
50	25.80	36.445	24.19
60	25.18	36.450	24.38
70	24.45	36.401	24.57
80	23.85	36.416	24.76
90	22.93	36.436	25.04
100	21.67	36.505	25.46
110	20.74	36.436	25.66
120	19.48	36.314	25.90
130	18.43	36.233	26.11
140	16.70	36.028	26.38
150	15.63	35.870	26.50
160	14.81	35.789	26.62
170	14.19	35.694	26.68
180	13.76	35.637	26.73
190	13.65	35.668	26.78
200	13.04	35.561	26.82
250	11.11	35.241	26.94
300	9.76	35.009	27.00
350	9.18	34.964	27.06
400	8.62	34.898	27.10
450	8.11	34.829	27.12
500	7.63	34.775	27.15
550	7.02	34.719	27.20
600	6.54	34.673	27.22
650	6.14	34.637	27.25
700	5.83	34.617	27.27
750	5.61	34.613	27.30
800	5.44	34.617	27.32
850	5.28	34.625	27.35
900	5.14	34.643	27.38
950	5.06	34.672	27.41
1000	5.05	34.711	27.44
1500	4.48	35.006	27.74
2000	3.56	34.978	27.81
2500	3.04	34.949	27.84
3000	2.74	34.928	27.85
3500	2.50	34.913	27.86
4000	2.31	34.899	27.87
4500	2.22	34.883	27.86
5000	1.66	34.810	27.85
5008	1.66	34.810	27.85

MB-STACS34-89 CTD 17 BALDRIGE

Date 09 01 89 Latitude 9.741 N

Time 2332 Z Longitude 49.022 W

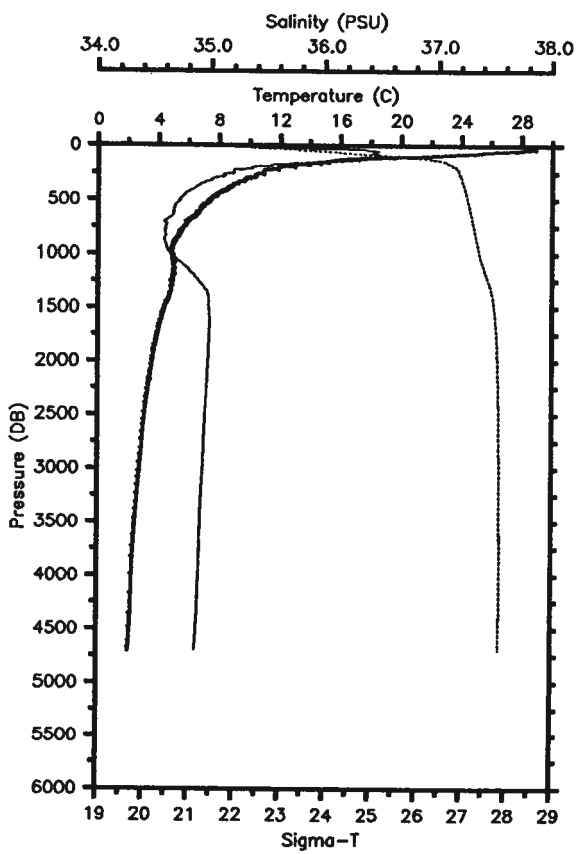


Prs	Tem	Sal	SigT
0	29.05	32.682	20.31
10	28.86	34.032	21.39
20	28.83	36.130	22.97
30	28.66	36.299	23.15
40	28.11	36.373	23.39
50	27.21	36.387	23.70
60	25.75	36.432	24.19
70	24.43	36.394	24.57
80	23.11	36.398	24.96
90	21.56	36.550	25.52
100	19.91	36.542	25.96
110	18.95	36.429	26.13
120	17.61	36.229	26.31
130	16.67	36.098	26.39
140	15.52	35.863	26.52
150	14.64	35.727	26.61
160	13.50	35.550	26.72
170	12.87	35.447	26.77
180	12.28	35.344	26.80
190	11.66	35.257	26.85
200	11.55	35.255	26.87
250	10.20	35.068	26.97
300	9.53	34.981	27.02
350	8.83	34.885	27.06
400	8.13	34.786	27.09
450	7.61	34.736	27.13
500	7.01	34.676	27.16
550	6.79	34.679	27.19
600	6.39	34.648	27.22
650	6.07	34.627	27.25
700	5.98	34.650	27.28
750	5.75	34.655	27.31
800	5.57	34.665	27.34
850	5.28	34.658	27.37
900	5.14	34.685	27.41
950	5.15	34.728	27.44
1000	5.07	34.785	27.48
1500	4.35	34.994	27.74
2000	3.58	34.980	27.81
2500	3.09	34.953	27.84
3000	2.76	34.933	27.85
3500	2.49	34.914	27.88
4000	2.29	34.898	27.87
4500	2.21	34.885	27.86
4852	1.79	34.829	27.85

MB-STACS34-89 CTD 18 BALDRIGE

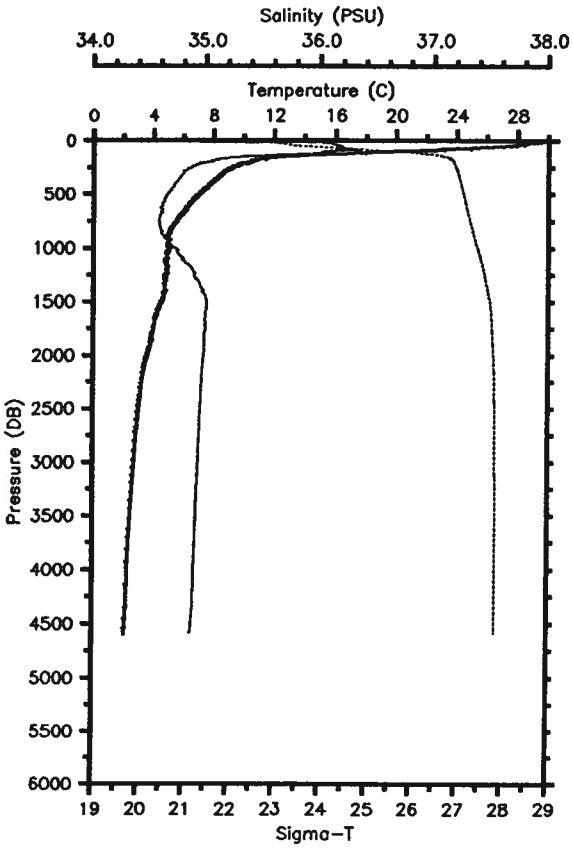
Date 09 02 89 Latitude 8.822 N

Time 1029 Z Longitude 47.338 W



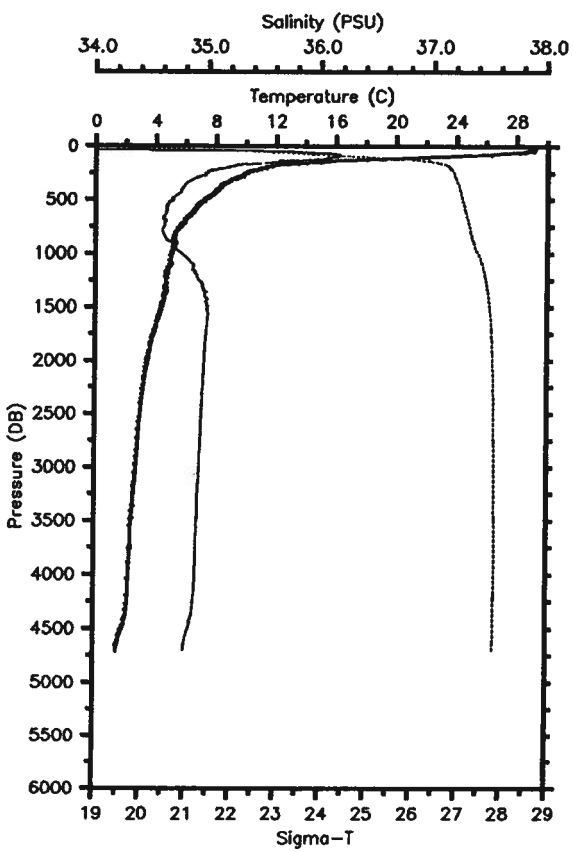
Prs	Tem	Sal	SigT
0	28.77	35.143	22.25
10	28.78	35.144	22.25
20	28.82	35.517	22.52
30	28.70	36.177	23.05
40	28.07	36.369	23.40
50	26.98	36.459	23.83
60	25.48	36.452	24.29
70	24.79	36.412	24.48
80	23.43	36.454	24.91
90	22.08	36.459	25.31
100	20.37	36.448	25.77
110	18.58	36.286	26.10
120	17.30	36.122	26.30
130	16.69	36.071	26.41
140	15.65	35.982	26.58
150	15.16	35.908	26.63
160	14.64	35.805	26.67
170	13.87	35.664	26.73
180	12.99	35.521	26.80
190	12.98	35.515	26.80
200	11.89	35.351	26.88
250	10.93	35.194	26.94
300	9.79	35.021	27.01
350	9.01	34.910	27.05
400	8.49	34.841	27.07
450	7.87	34.767	27.11
500	7.40	34.719	27.14
550	7.02	34.682	27.17
600	6.76	34.671	27.19
650	6.39	34.650	27.23
700	5.87	34.584	27.24
750	5.67	34.590	27.27
800	5.44	34.587	27.30
850	5.20	34.583	27.32
900	5.02	34.591	27.35
950	4.92	34.606	27.37
1000	4.88	34.635	27.40
1500	4.38	34.982	27.73
2000	3.59	34.974	27.81
2500	3.08	34.950	27.84
3000	2.77	34.931	27.85
3500	2.48	34.910	27.86
4000	2.30	34.899	27.87
4500	2.16	34.878	27.86
4696	2.08	34.866	27.86

MB-STACS34-89 CTD 19 BALDRIGE
Date 09 02 89 Latitude 7.906 N
Time 2040 Z Longitude 45.657 W



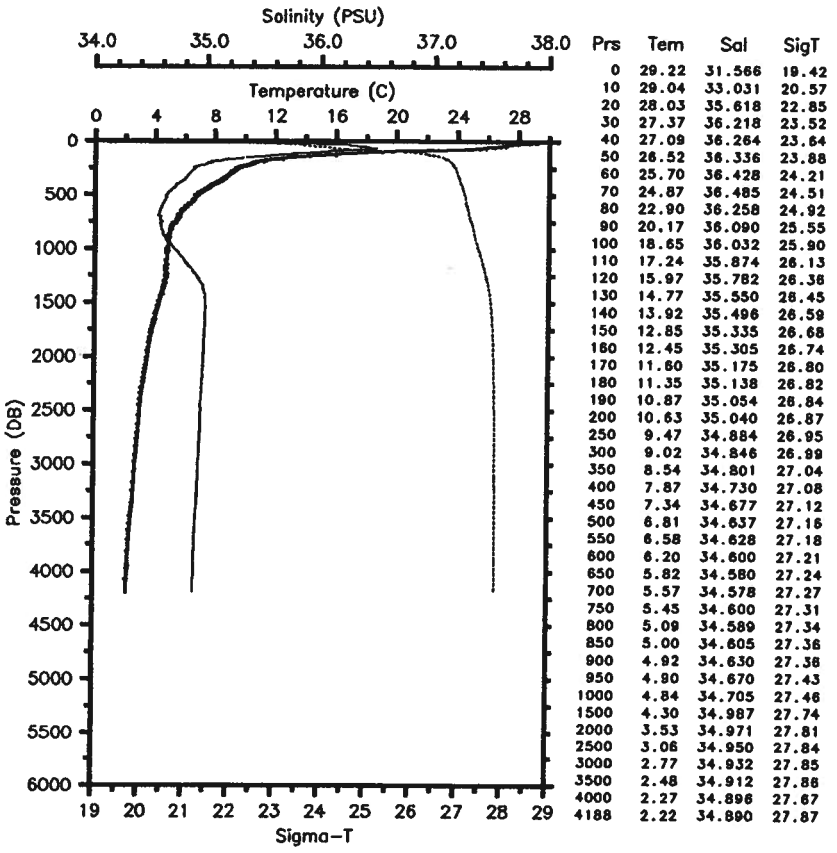
Prs	Tem	Sal	SigT
0	29.35	30.438	18.53
10	29.53	33.219	20.55
20	28.70	36.045	22.95
30	28.25	36.099	23.14
40	27.87	36.130	23.29
50	26.95	36.140	23.59
60	25.85	36.152	23.95
70	24.82	36.178	24.35
80	23.07	36.347	24.94
90	21.87	36.257	25.21
100	19.09	36.007	25.77
110	18.02	36.073	26.09
120	18.90	35.978	26.29
130	14.95	35.723	26.54
140	13.60	35.464	26.63
150	12.26	35.306	26.78
160	11.44	35.192	26.84
170	11.04	35.085	26.83
180	10.72	35.087	26.89
190	10.47	35.057	26.92
200	10.29	35.021	26.92
250	9.24	34.865	26.97
300	8.63	34.801	27.02
350	8.24	34.766	27.05
400	7.79	34.723	27.09
450	7.41	34.690	27.12
500	7.03	34.655	27.14
550	6.62	34.630	27.18
600	6.35	34.617	27.21
650	6.09	34.607	27.23
700	5.76	34.594	27.26
750	5.50	34.582	27.28
800	5.25	34.593	27.32
850	5.08	34.607	27.35
900	4.97	34.631	27.39
950	4.99	34.667	27.41
1000	5.04	34.730	27.46
1500	4.54	35.003	27.73
2000	3.62	34.981	27.81
2500	3.04	34.953	27.84
3000	2.77	34.932	27.85
3500	2.50	34.913	27.88
4000	2.30	34.900	27.87
4500	2.17	34.880	27.88
4586	2.12	34.871	27.88

MB-STACS34-89 CTD 20 BALDRIGE
Date 09 03 89 Latitude 6.998 N
Time 0734 Z Longitude 43.998 W



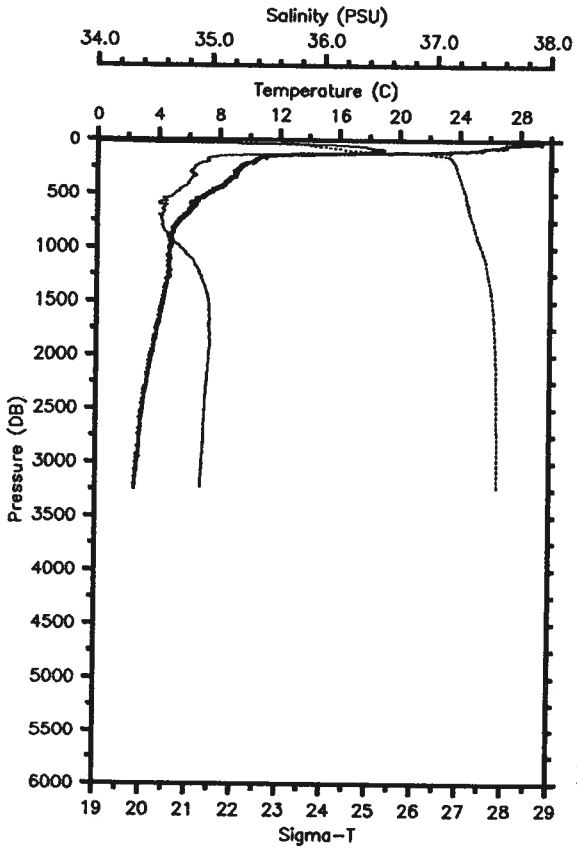
Prs	Tem	Sal	SigT
0	28.82	31.402	19.43
10	28.83	31.396	19.42
20	28.97	32.256	20.02
30	29.07	33.802	21.14
40	29.06	35.193	22.19
50	28.56	35.766	22.79
60	27.79	36.024	23.23
70	26.44	36.145	23.76
80	25.28	36.139	24.12
90	23.80	36.176	24.59
100	22.07	36.127	25.06
110	20.14	36.080	25.55
120	18.23	35.945	25.94
130	16.75	35.812	26.20
140	15.57	35.727	26.41
150	14.28	35.558	26.58
160	13.27	35.405	26.65
170	12.23	35.290	26.77
180	11.79	35.227	26.81
190	11.46	35.194	26.84
200	11.19	35.143	26.85
250	9.99	34.971	26.93
300	9.28	34.874	26.97
350	8.51	34.797	27.04
400	8.16	34.764	27.06
450	7.74	34.721	27.09
500	7.27	34.682	27.13
550	6.78	34.627	27.16
600	6.55	34.624	27.18
650	6.15	34.606	27.22
700	5.95	34.614	27.25
750	5.59	34.600	27.29
800	5.32	34.592	27.31
850	5.24	34.620	27.35
900	5.28	34.687	27.39
950	5.17	34.704	27.42
1000	5.05	34.759	27.48
1500	4.36	34.989	27.74
2000	3.46	34.968	27.81
2500	2.99	34.945	27.84
3000	2.69	34.926	27.85
3500	2.41	34.908	27.86
4000	2.26	34.894	27.87
4500	1.84	34.837	27.85
4700	1.50	34.797	27.85

MB-STACS34-89 CTD 21 BALDRIGE
Date 09 03 89 Latitude 5.993 N
Time 1516 Z Longitude 43.985 W



Prs	Tem	Sal	SigT
0	29.22	31.566	19.42
10	29.04	33.031	20.57
20	28.03	35.618	22.85
30	27.37	36.218	23.52
40	27.09	36.264	23.64
50	26.52	36.336	23.88
60	25.70	36.428	24.21
70	24.87	36.485	24.51
80	22.90	36.258	24.92
90	20.17	36.090	25.55
100	18.65	36.032	25.90
110	17.24	35.874	26.13
120	15.97	35.782	26.36
130	14.77	35.550	26.45
140	13.92	35.496	26.59
150	12.85	35.335	26.68
160	12.45	35.305	26.74
170	11.60	35.175	26.80
180	11.35	35.138	26.82
190	10.87	35.054	26.84
200	10.63	35.040	26.87
250	9.47	34.884	26.95
300	9.02	34.846	26.99
350	8.54	34.801	27.04
400	7.87	34.730	27.08
450	7.34	34.677	27.12
500	6.81	34.637	27.16
550	6.58	34.628	27.18
600	6.20	34.600	27.21
650	5.82	34.580	27.24
700	5.57	34.578	27.27
750	5.45	34.600	27.31
800	5.09	34.589	27.34
850	5.00	34.605	27.36
900	4.92	34.630	27.38
950	4.80	34.670	27.43
1000	4.84	34.705	27.46
1500	4.30	34.987	27.74
2000	3.53	34.971	27.81
2500	3.06	34.950	27.84
3000	2.77	34.932	27.85
3500	2.48	34.912	27.88
4000	2.27	34.896	27.87
4188	2.22	34.890	27.87

MB-STACS34-89 CTD 22 BALDRIGE
Date 09 03 89 Latitude 5.000 N
Time 2210 Z Longitude 44.000 W

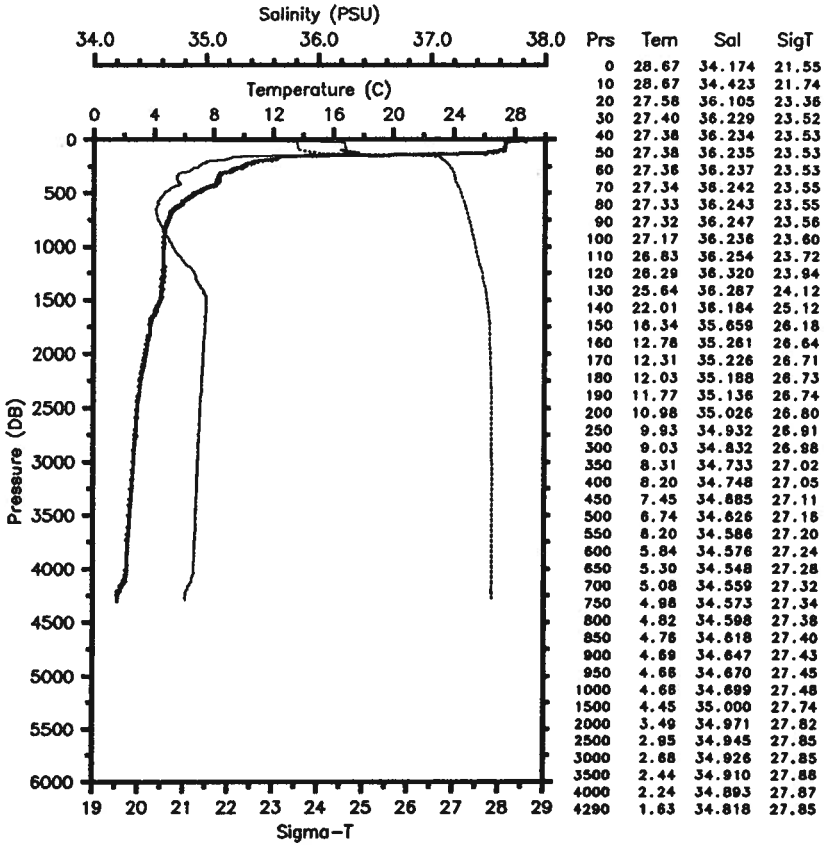


Prs	Tem	Sal	SigT
0	29.28	31.926	19.67
10	29.27	32.032	19.75
20	29.32	32.235	19.89
30	28.31	35.178	22.43
40	27.18	36.042	23.45
50	27.02	36.254	23.66
60	26.69	36.370	23.85
70	25.78	36.420	24.18
80	25.46	36.539	24.37
90	24.73	36.477	24.54
100	23.38	36.487	24.95
110	21.67	36.323	25.32
120	17.53	35.810	26.01
130	15.34	35.621	26.38
140	12.63	35.266	26.67
150	11.45	35.079	26.75
160	10.92	35.004	26.79
170	10.57	34.989	26.83
180	10.48	34.980	26.84
190	10.37	34.969	26.86
200	10.32	34.968	26.87
250	9.40	34.849	26.94
300	9.02	34.807	26.96
350	8.79	34.822	27.01
400	8.40	34.793	27.05
450	7.79	34.729	27.09
500	7.21	34.673	27.13
550	6.51	34.586	27.16
600	6.21	34.579	27.19
650	6.05	34.570	27.21
700	5.66	34.544	27.24
750	5.37	34.560	27.28
800	5.08	34.568	27.32
850	4.93	34.580	27.36
900	4.79	34.616	27.39
950	4.78	34.670	27.44
1000	4.77	34.722	27.48
1500	4.34	34.977	27.73
2000	3.59	34.981	27.81
2500	3.02	34.949	27.84
3000	2.67	34.927	27.86
3228	2.55	34.919	27.86

MB-STACS34-89 CTD 23 BALDRIGE

Date 09 04 89 Latitude 4.005 N

Time 0539 Z Longitude 44.002 W

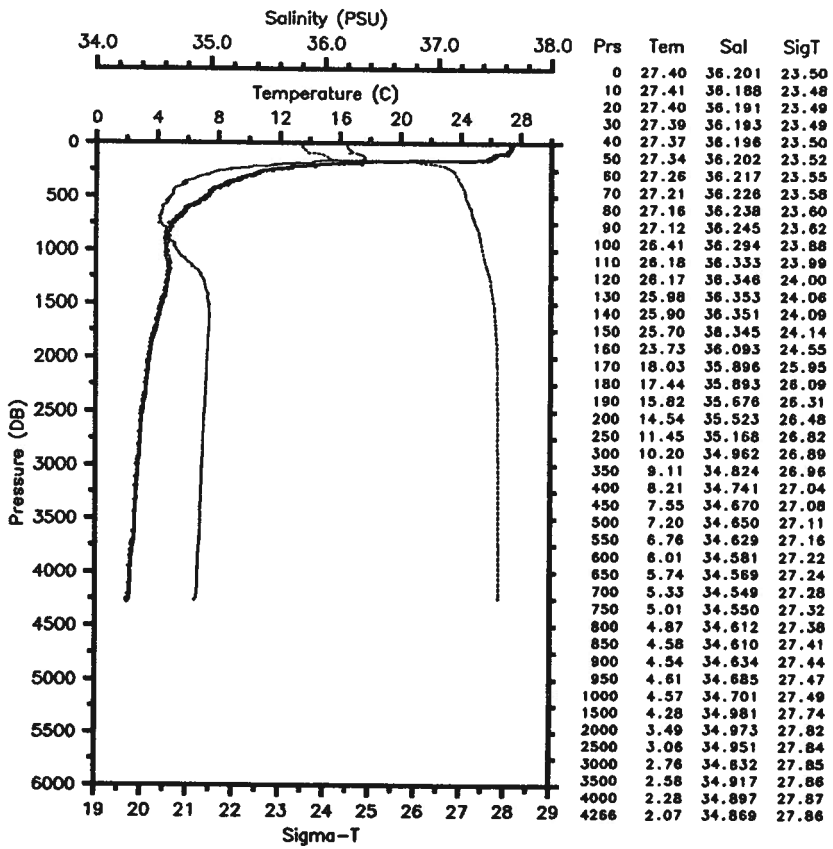


Prs	Tem	Sal	SigT
0	28.67	34.174	21.55
10	28.67	34.423	21.74
20	27.58	36.105	23.36
30	27.40	36.229	23.52
40	27.38	36.234	23.53
50	27.38	36.235	23.53
60	27.38	36.237	23.53
70	27.34	36.242	23.55
80	27.33	36.243	23.55
90	27.32	36.247	23.56
100	27.17	36.236	23.60
110	26.83	36.254	23.72
120	26.29	36.320	23.94
130	25.64	36.287	24.12
140	22.01	36.184	25.12
150	16.34	35.659	26.18
160	12.78	35.261	26.64
170	12.31	35.226	26.71
180	12.03	35.188	26.73
190	11.77	35.136	26.74
200	10.98	35.026	26.80
250	9.93	34.932	26.91
300	9.03	34.832	26.98
350	8.31	34.733	27.02
400	8.20	34.748	27.05
450	7.45	34.685	27.11
500	6.74	34.626	27.18
550	8.20	34.586	27.20
600	5.84	34.576	27.24
650	5.30	34.548	27.28
700	5.08	34.559	27.32
750	4.98	34.573	27.34
800	4.82	34.598	27.38
850	4.76	34.618	27.40
900	4.69	34.647	27.43
950	4.66	34.670	27.45
1000	4.68	34.699	27.48
1500	4.45	35.000	27.74
2000	3.49	34.971	27.82
2500	2.95	34.945	27.85
3000	2.68	34.926	27.85
3500	2.44	34.910	27.88
4000	2.24	34.893	27.87
4290	1.63	34.818	27.85

MB-STACS34-89 CTD 24 BALDRIGE

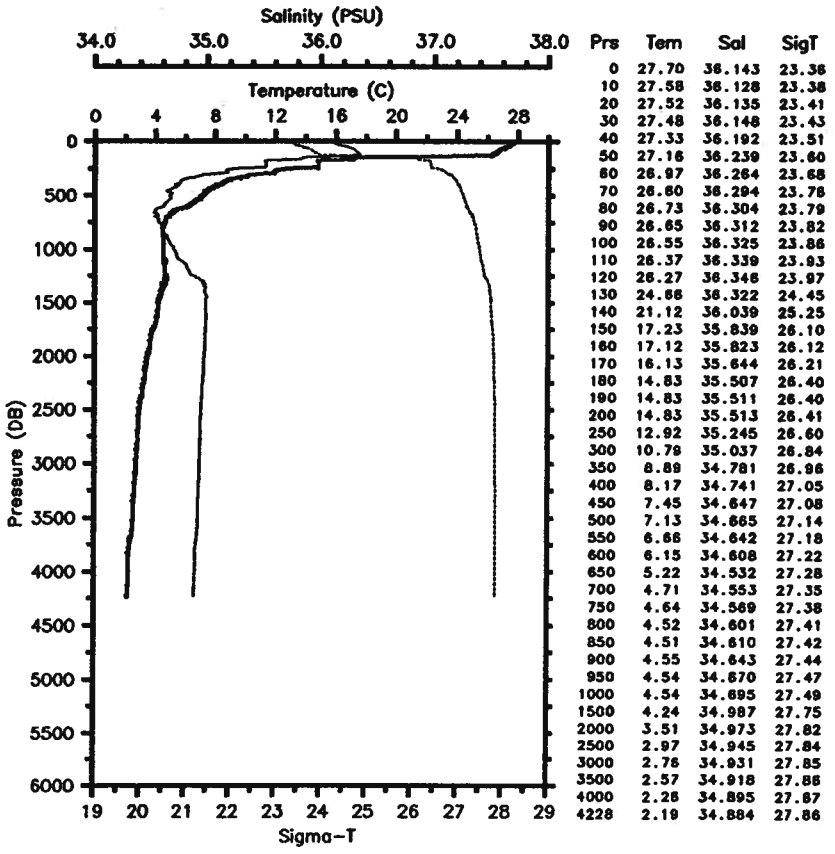
Date 09 04 89 Latitude 2.998 N

Time 1126 Z Longitude 43.997 W



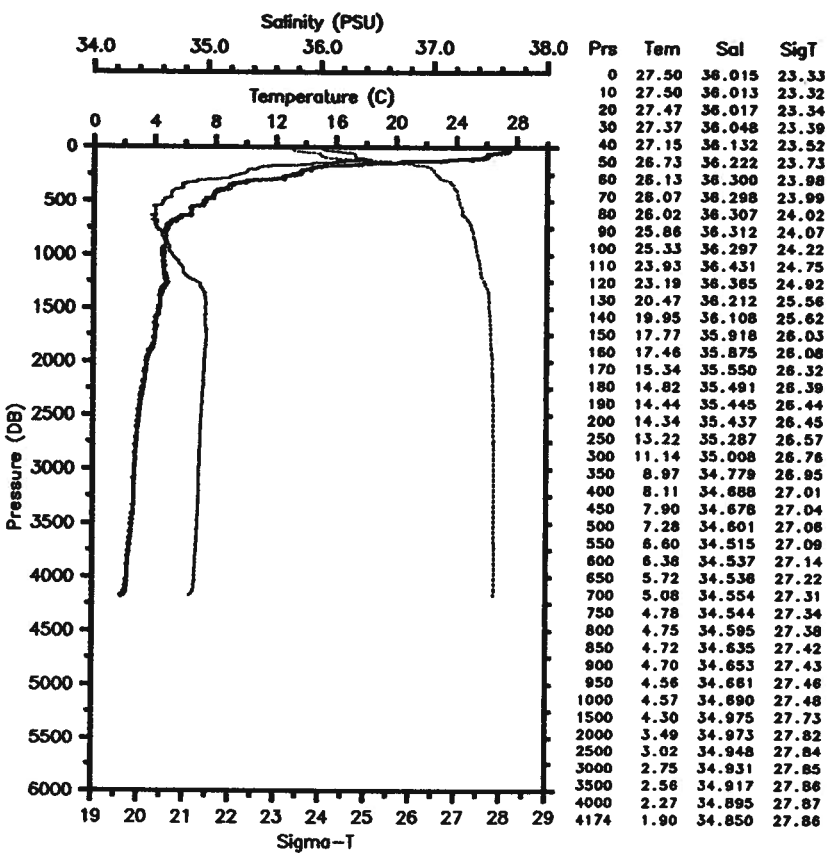
Prs	Tem	Sal	SigT
0	27.40	36.201	23.50
10	27.41	36.188	23.48
20	27.40	36.191	23.49
30	27.39	36.193	23.49
40	27.37	36.196	23.50
50	27.34	36.202	23.52
60	27.26	36.217	23.55
70	27.21	36.226	23.58
80	27.16	36.238	23.60
90	27.12	36.245	23.62
100	26.41	36.294	23.88
110	26.18	36.333	23.99
120	26.17	36.346	24.00
130	25.98	36.353	24.06
140	25.90	36.351	24.09
150	25.70	36.345	24.14
160	23.73	36.093	24.55
170	18.03	35.896	25.95
180	17.44	35.893	26.09
190	15.82	35.676	26.31
200	14.54	35.523	26.48
250	11.45	35.168	26.82
300	10.20	34.962	26.89
350	9.11	34.824	26.96
400	8.21	34.741	27.04
450	7.55	34.670	27.08
500	7.20	34.650	27.11
550	6.76	34.629	27.16
600	6.01	34.581	27.22
650	5.74	34.569	27.24
700	5.33	34.549	27.28
750	5.01	34.550	27.32
800	4.87	34.612	27.38
850	4.58	34.610	27.41
900	4.54	34.634	27.44
950	4.61	34.685	27.47
1000	4.57	34.701	27.49
1500	4.28	34.981	27.74
2000	3.49	34.973	27.82
2500	3.06	34.951	27.84
3000	2.76	34.832	27.85
3500	2.58	34.917	27.86
4000	2.28	34.897	27.87
4266	2.07	34.869	27.86

MB-STACS34-89 CTD 25 BALDRIGE
Date 09 04 89 Latitude 2.481 N
Time 2300 Z Longitude 44.022 W



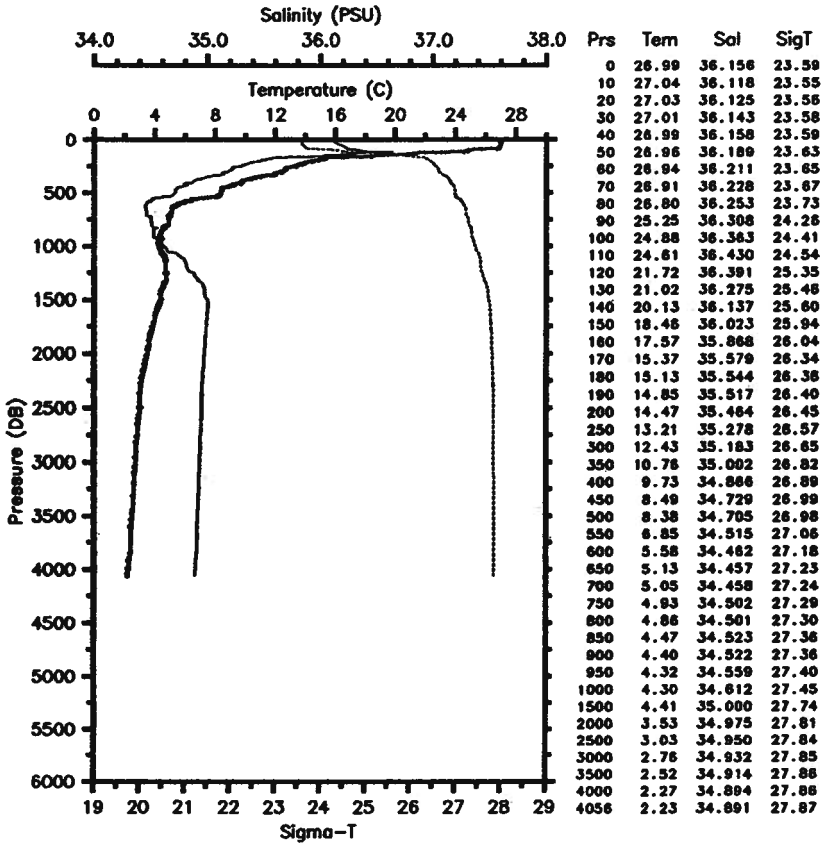
Prs	Tem	Sal	SigT
0	27.70	36.143	23.36
10	27.58	36.128	23.38
20	27.52	36.135	23.41
30	27.48	36.148	23.43
40	27.33	36.192	23.51
50	27.16	36.239	23.60
60	26.97	36.264	23.68
70	26.80	36.294	23.78
80	26.73	36.304	23.79
90	26.65	36.312	23.82
100	26.55	36.325	23.86
110	26.37	36.339	23.93
120	26.27	36.348	23.97
130	24.66	36.322	24.45
140	21.12	36.039	25.25
150	17.23	35.839	26.10
160	17.12	35.823	26.12
170	16.13	35.644	26.21
180	14.83	35.507	26.40
190	14.83	35.511	26.40
200	14.83	35.513	26.41
250	12.92	35.245	26.60
300	10.79	35.037	26.84
350	8.88	34.781	26.96
400	8.17	34.741	27.05
450	7.45	34.647	27.08
500	7.13	34.665	27.14
550	6.66	34.642	27.18
600	6.15	34.608	27.22
650	5.22	34.532	27.28
700	4.71	34.553	27.35
750	4.64	34.569	27.38
800	4.52	34.601	27.41
850	4.51	34.610	27.42
900	4.55	34.643	27.44
950	4.54	34.670	27.47
1000	4.54	34.695	27.49
1500	4.24	34.987	27.75
2000	3.51	34.973	27.82
2500	2.97	34.945	27.84
3000	2.78	34.931	27.85
3500	2.57	34.918	27.86
4000	2.28	34.895	27.87
4228	2.19	34.884	27.86

MB-STACS34-89 CTD 26 BALDRIGE
Date 09 05 89 Latitude 1.675 N
Time 0501 Z Longitude 44.010 W



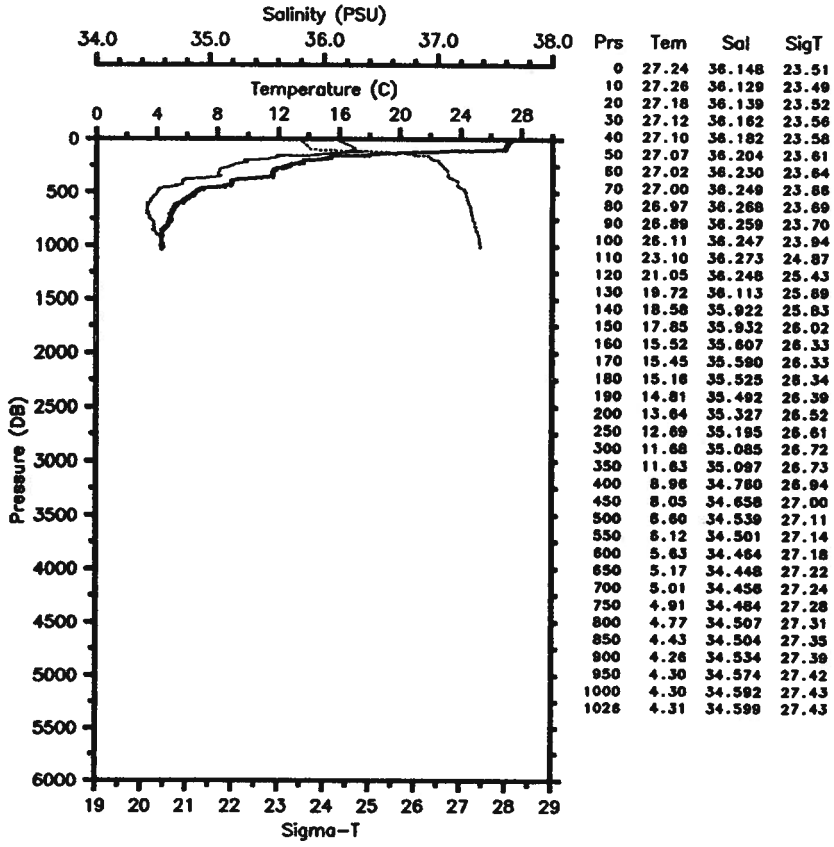
Prs	Tem	Sal	SigT
0	27.50	36.015	23.33
10	27.50	36.013	23.32
20	27.47	36.017	23.34
30	27.37	36.048	23.39
40	27.15	36.132	23.52
50	26.73	36.222	23.73
60	26.13	36.300	23.98
70	26.07	36.298	23.99
80	26.02	36.307	24.02
90	25.86	36.312	24.07
100	25.33	36.297	24.22
110	23.93	36.431	24.75
120	23.19	36.365	24.92
130	20.47	36.212	25.56
140	19.95	36.108	25.62
150	17.77	35.918	26.03
160	17.46	35.875	26.08
170	15.34	35.550	26.32
180	14.82	35.491	26.39
190	14.44	35.445	26.44
200	14.34	35.437	26.45
250	13.22	35.287	26.57
300	11.14	35.008	26.76
350	8.97	34.779	26.95
400	8.11	34.688	27.01
450	7.90	34.678	27.04
500	7.28	34.601	27.06
550	6.60	34.515	27.09
600	6.38	34.537	27.14
650	5.72	34.536	27.22
700	5.08	34.554	27.31
750	4.78	34.544	27.34
800	4.75	34.595	27.38
850	4.72	34.635	27.42
900	4.70	34.653	27.43
950	4.56	34.681	27.46
1000	4.57	34.690	27.48
1500	4.30	34.975	27.73
2000	3.49	34.973	27.82
2500	3.02	34.948	27.84
3000	2.75	34.931	27.85
3500	2.56	34.917	27.86
4000	2.27	34.895	27.87
4174	1.90	34.850	27.86

MB-STACS34-89 CTD 27 BALDRIGE
Date 09 05 89 Latitude 0.837 N
Time 1121 Z Longitude 44.015 W



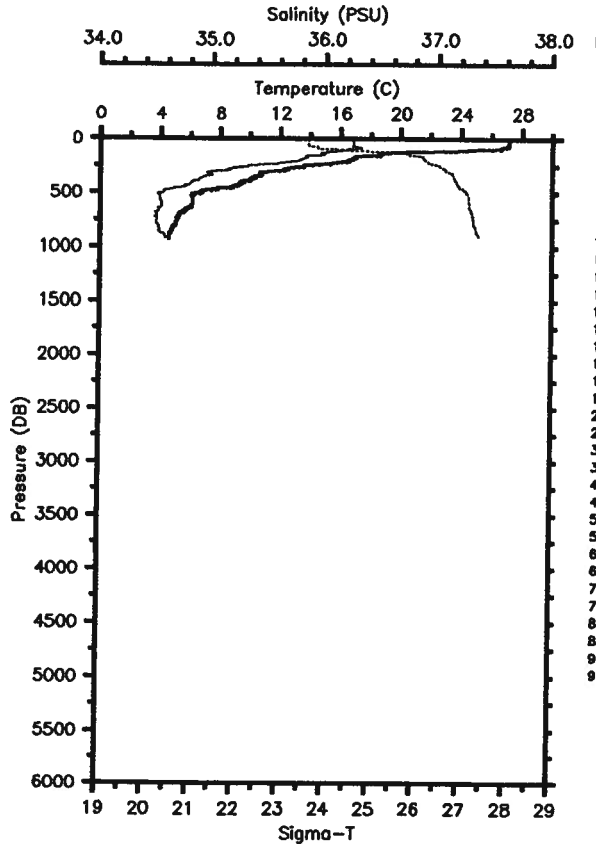
Prs	Tem	Sal	SigT
0	26.99	36.156	23.59
10	27.04	36.118	23.55
20	27.03	36.125	23.56
30	27.01	36.143	23.58
40	26.99	36.158	23.59
50	26.96	36.189	23.63
60	26.94	36.211	23.65
70	26.91	36.228	23.67
80	26.80	36.253	23.73
90	25.25	36.308	24.26
100	24.88	36.363	24.41
110	24.61	36.430	24.54
120	21.72	36.391	25.35
130	21.02	36.275	25.46
140	20.13	36.137	25.60
150	18.46	36.023	25.94
160	17.57	35.868	26.04
170	15.37	35.579	26.34
180	15.13	35.544	26.36
190	14.85	35.517	26.40
200	14.47	35.484	26.45
250	13.21	35.278	26.57
300	12.43	35.183	26.65
350	10.76	35.002	26.82
400	9.73	34.886	26.89
450	8.49	34.729	26.99
500	8.38	34.705	26.98
550	6.85	34.515	27.06
600	5.58	34.462	27.18
650	5.13	34.457	27.23
700	5.05	34.458	27.24
750	4.93	34.502	27.29
800	4.86	34.501	27.30
850	4.47	34.523	27.36
900	4.40	34.522	27.36
950	4.32	34.559	27.40
1000	4.30	34.612	27.45
1500	4.41	35.000	27.74
2000	3.53	34.975	27.81
2500	3.03	34.950	27.84
3000	2.78	34.932	27.85
3500	2.52	34.914	27.88
4000	2.27	34.894	27.88
4056	2.23	34.891	27.87

MB-STACS34-89 CTD 28 BALDRIGE
Date 09 05 89 Latitude 0.501 N
Time 2129 Z Longitude 44.208 W



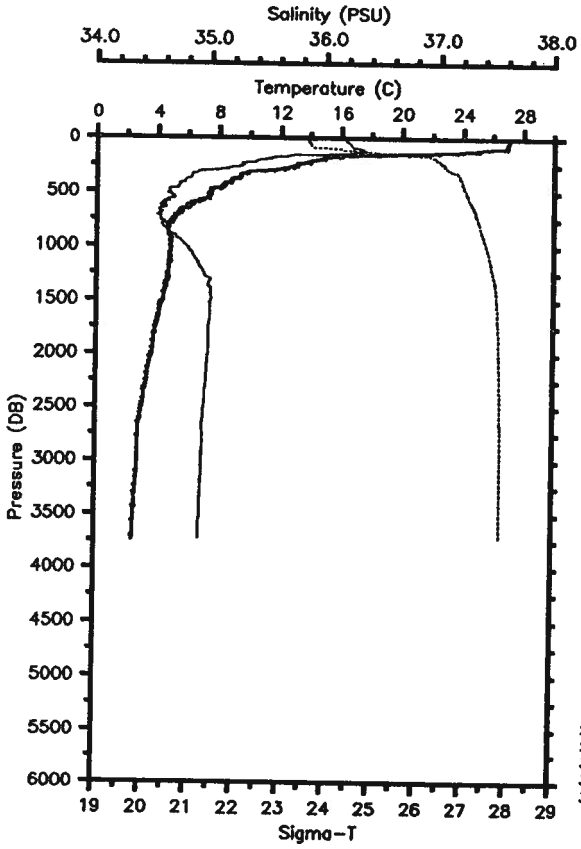
Prs	Tem	Sal	SigT
0	27.24	36.148	23.51
10	27.26	36.129	23.49
20	27.18	36.139	23.52
30	27.12	36.162	23.56
40	27.10	36.182	23.58
50	27.07	36.204	23.61
60	27.02	36.230	23.64
70	27.00	36.249	23.66
80	26.97	36.268	23.69
90	26.89	36.259	23.70
100	26.11	36.247	23.94
110	23.10	36.273	24.87
120	21.05	36.248	25.43
130	19.72	36.113	25.69
140	18.58	35.922	25.83
150	17.85	35.932	26.02
160	15.52	35.607	26.33
170	15.45	35.580	26.33
180	15.16	35.525	26.34
190	14.81	35.492	26.39
200	13.64	35.327	26.52
250	12.69	35.195	26.61
300	11.68	35.085	26.72
350	11.63	35.087	26.73
400	8.96	34.780	26.94
450	8.05	34.658	27.00
500	6.60	34.539	27.11
550	6.12	34.501	27.14
600	5.63	34.464	27.18
650	5.17	34.448	27.22
700	5.01	34.456	27.24
750	4.91	34.484	27.28
800	4.77	34.507	27.31
850	4.43	34.504	27.35
900	4.26	34.534	27.39
950	4.30	34.574	27.42
1000	4.30	34.592	27.43
1026	4.31	34.599	27.43

MB-STACS34-89 CTD 29 BALDRIGE
Date 09 06 89 Latitude 0.141 N
Time 0426 Z Longitude 44.392 W



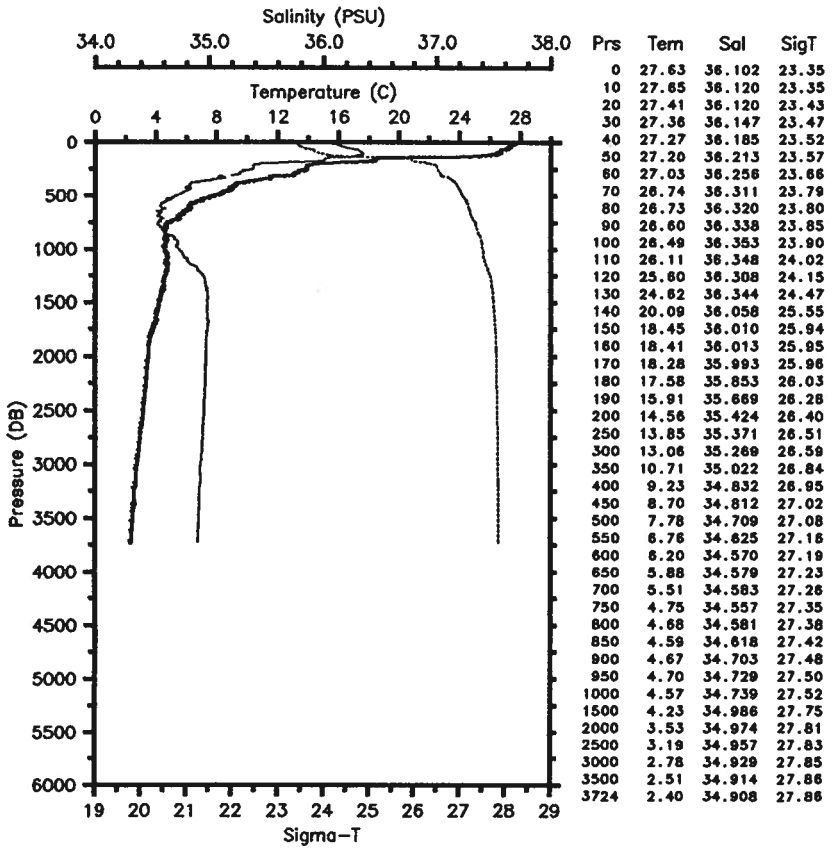
Prs	Tem	Sal	SigT
0	27.09	36.251	23.63
10	27.11	36.244	23.62
20	27.11	36.245	23.62
30	27.11	36.245	23.62
40	27.12	36.245	23.62
50	27.10	36.245	23.63
60	27.10	36.245	23.63
70	26.82	36.275	23.74
80	26.61	36.315	23.83
90	26.35	36.273	23.89
100	24.62	36.201	24.37
110	23.61	36.150	24.63
120	20.87	36.054	25.39
130	19.12	35.991	25.75
140	18.65	35.984	25.87
150	18.63	35.991	25.87
160	17.14	35.845	26.13
170	17.02	35.838	26.15
180	16.83	35.804	26.17
190	16.64	35.780	26.20
200	16.57	35.766	26.21
250	13.59	35.321	26.52
300	11.87	35.046	26.65
350	10.35	34.918	26.83
400	9.45	34.813	26.90
450	8.70	34.736	26.98
500	6.65	34.556	27.12
550	6.13	34.529	27.16
600	6.13	34.542	27.17
650	5.72	34.521	27.21
700	5.28	34.499	27.25
750	5.10	34.503	27.27
800	4.95	34.512	27.29
850	4.73	34.523	27.33
900	4.60	34.575	27.38
916	4.60	34.580	27.39

MB-STACS34-89 CTD 30 BALDRIGE
Date 09 06 89 Latitude 1.457 N
Time 1102 Z Longitude 45.043 W



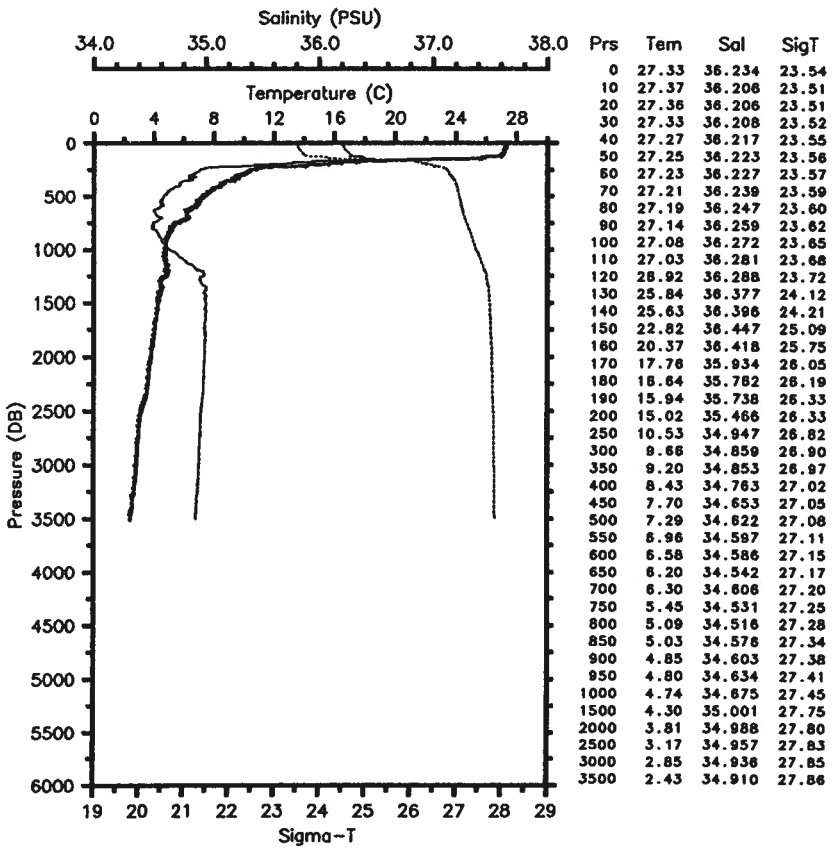
Prs	Tem	Sal	SigT
0	26.98	36.091	23.55
10	27.01	36.159	23.59
20	27.00	36.164	23.60
30	26.98	36.173	23.61
40	26.95	36.194	23.64
50	26.93	36.208	23.65
60	26.92	36.212	23.66
70	26.91	36.219	23.67
80	26.91	36.225	23.67
90	26.00	36.266	23.99
100	25.10	36.316	24.31
110	24.89	36.290	24.35
120	23.81	36.329	24.71
130	22.37	36.314	25.11
140	20.42	36.222	25.58
150	18.72	36.044	25.89
160	16.14	35.678	26.24
170	15.89	35.656	26.28
180	14.95	35.519	26.38
190	14.89	35.517	26.40
200	14.50	35.451	26.43
250	13.11	35.277	26.59
300	11.24	34.977	26.71
350	9.40	34.830	26.92
400	8.78	34.766	26.97
450	8.26	34.715	27.01
500	7.45	34.632	27.07
550	7.37	34.671	27.11
600	6.26	34.572	27.18
650	5.83	34.581	27.23
700	5.32	34.551	27.28
750	5.01	34.555	27.32
800	4.63	34.567	27.37
850	4.65	34.606	27.40
900	4.80	34.685	27.45
950	4.82	34.735	27.49
1000	4.82	34.777	27.52
1500	4.33	35.000	27.75
2000	3.63	34.978	27.81
2500	3.01	34.944	27.84
3000	2.74	34.931	27.85
3500	2.54	34.916	27.86
3730	2.48	34.911	27.86

MB-STACS34-89 CTD 31 BALDRIGE
Date 09 06 89 Latitude 2.751 N
Time 1837 Z Longitude 45.640 W



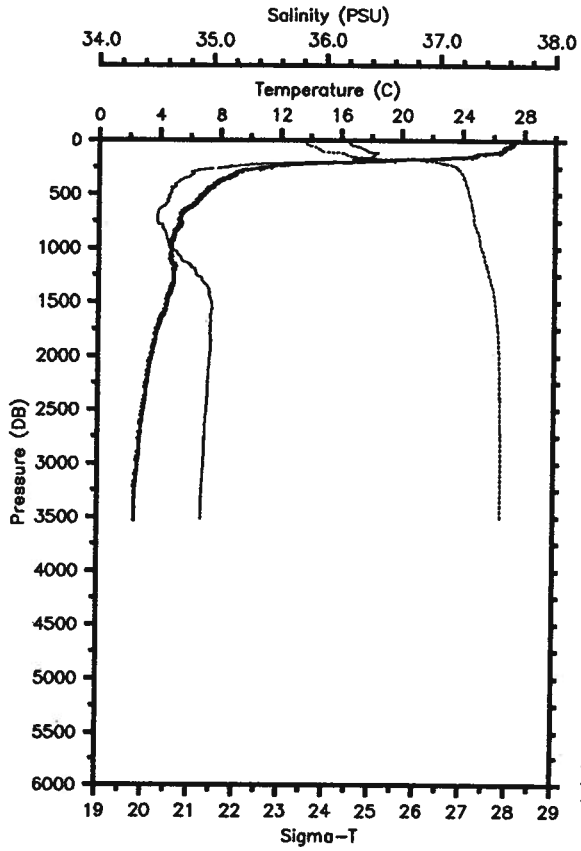
Prs	Tem	Sal	SigT
0	27.63	36.102	23.35
10	27.65	36.120	23.35
20	27.41	36.120	23.43
30	27.36	36.147	23.47
40	27.27	36.185	23.52
50	27.20	36.213	23.57
60	27.03	36.256	23.66
70	26.74	36.311	23.79
80	26.73	36.320	23.80
90	26.60	36.338	23.85
100	26.49	36.353	23.90
110	26.11	36.348	24.02
120	25.60	36.308	24.15
130	24.62	36.344	24.47
140	20.09	36.058	25.55
150	18.45	36.010	25.94
160	18.41	36.013	25.95
170	18.28	35.993	25.96
180	17.58	35.853	26.03
190	15.91	35.669	26.28
200	14.56	35.424	26.40
250	13.85	35.371	26.51
300	13.06	35.269	26.59
350	10.71	35.022	26.84
400	9.23	34.832	26.95
450	8.70	34.812	27.02
500	7.78	34.709	27.08
550	6.76	34.625	27.16
600	6.20	34.570	27.19
650	5.88	34.579	27.23
700	5.51	34.583	27.26
750	4.75	34.557	27.35
800	4.68	34.581	27.38
850	4.59	34.618	27.42
900	4.67	34.703	27.48
950	4.70	34.729	27.50
1000	4.57	34.739	27.52
1500	4.23	34.986	27.75
2000	3.53	34.974	27.81
2500	3.19	34.957	27.83
3000	2.78	34.929	27.85
3500	2.51	34.914	27.86
3724	2.40	34.908	27.86

MB-STACS34-89 CTD 32 BALDRIGE
Date 09 07 89 Latitude 4.038 N
Time 0213 Z Longitude 46.261 W



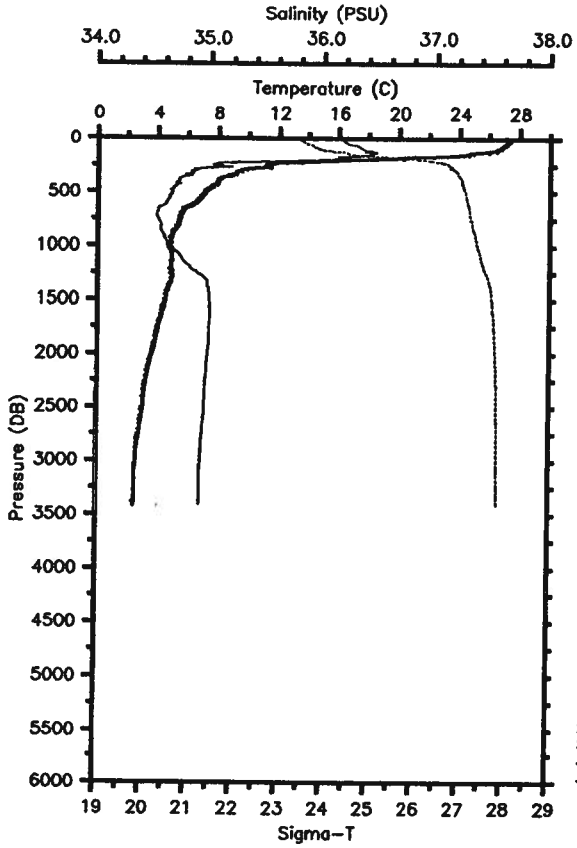
Prs	Tem	Sal	SigT
0	27.33	36.234	23.54
10	27.37	36.206	23.51
20	27.36	36.206	23.51
30	27.33	36.208	23.52
40	27.27	36.217	23.55
50	27.25	36.223	23.56
60	27.23	36.227	23.57
70	27.21	36.239	23.59
80	27.19	36.247	23.60
90	27.14	36.259	23.62
100	27.08	36.272	23.65
110	27.03	36.281	23.68
120	26.92	36.288	23.72
130	25.84	36.377	24.12
140	25.63	36.396	24.21
150	22.82	36.447	25.09
160	20.37	36.418	25.75
170	17.76	35.934	26.05
180	16.64	35.782	26.19
190	15.94	35.738	26.33
200	15.02	35.466	26.33
250	10.53	34.947	26.82
300	9.66	34.859	26.90
350	9.20	34.853	26.97
400	8.43	34.763	27.02
450	7.70	34.653	27.05
500	7.29	34.622	27.08
550	6.96	34.597	27.11
600	6.58	34.586	27.15
650	6.20	34.542	27.17
700	6.30	34.606	27.20
750	5.45	34.531	27.25
800	5.09	34.516	27.28
850	5.03	34.576	27.34
900	4.85	34.603	27.38
950	4.80	34.634	27.41
1000	4.74	34.675	27.45
1500	4.30	35.001	27.75
2000	3.81	34.988	27.80
2500	3.17	34.957	27.83
3000	2.85	34.936	27.85
3500	2.43	34.910	27.86

MB-STACS34-89 CTD 33 BALDRIGE
Date 09 07 89 Latitude 5.333 N
Time 1023 Z Longitude 46.880 W



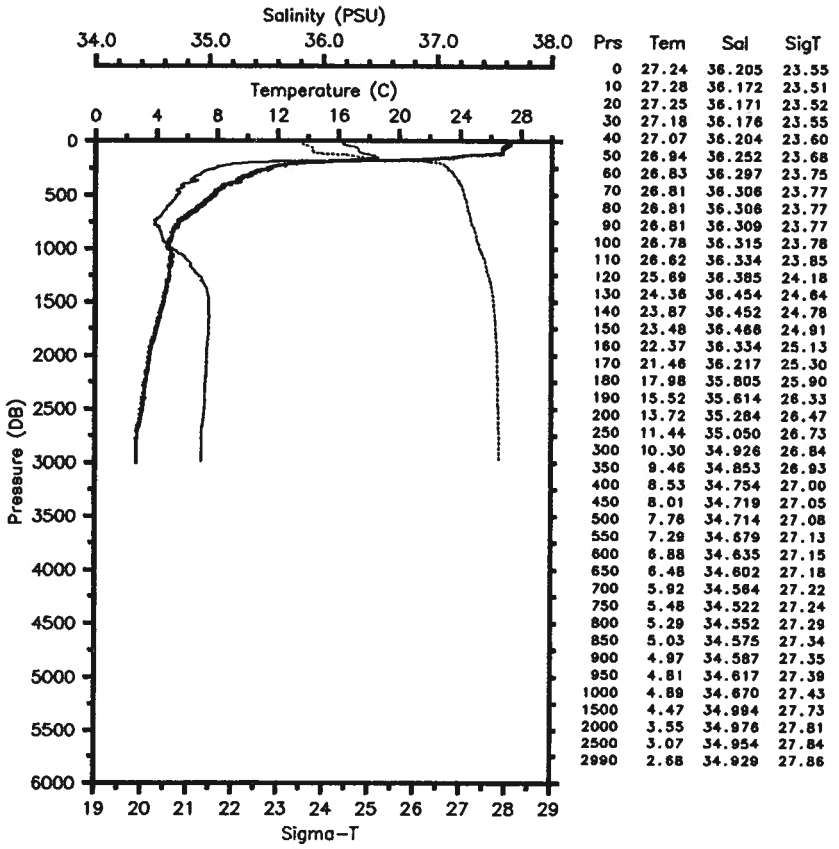
Prs	Tem	Sal	SigT
0	27.28	36.201	23.54
10	27.27	36.202	23.54
20	27.28	36.204	23.54
30	27.21	36.212	23.57
40	27.14	36.220	23.59
50	26.89	36.236	23.65
60	26.78	36.288	23.78
70	26.74	36.315	23.80
80	26.64	36.339	23.84
90	26.57	36.350	23.88
100	26.48	36.363	23.91
110	25.77	36.391	24.16
120	25.10	36.424	24.39
130	24.88	36.426	24.46
140	24.69	36.410	24.50
150	24.34	36.411	24.61
160	22.65	36.355	25.06
170	21.72	36.233	25.24
180	19.59	36.581	26.08
190	18.22	36.353	26.25
200	16.70	36.089	26.42
250	10.91	35.077	26.85
300	9.04	34.826	26.98
350	8.36	34.755	27.03
400	7.63	34.681	27.08
450	7.22	34.645	27.11
500	6.90	34.627	27.14
550	6.51	34.602	27.17
600	6.20	34.584	27.20
650	5.59	34.521	27.23
700	5.39	34.513	27.24
750	5.32	34.513	27.25
800	5.26	34.554	27.29
850	5.02	34.584	27.34
900	4.93	34.597	27.36
950	4.81	34.611	27.39
1000	4.78	34.644	27.42
1500	4.52	34.986	27.72
2000	3.52	34.975	27.82
2500	2.96	34.948	27.85
3000	2.60	34.924	27.86
3500	2.42	34.910	27.86
3522	2.42	34.910	27.88

MB-STACS34-89 CTD 34 BALDRIGE
Date 09 07 89 Latitude 5.087 N
Time 2202 Z Longitude 47.223 W



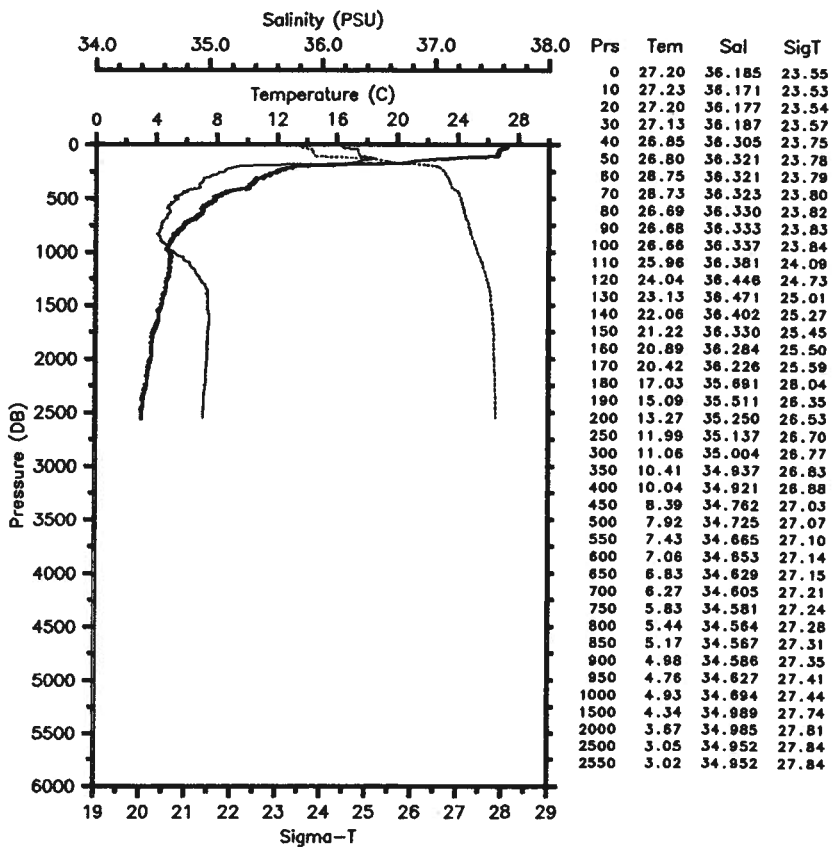
Prs	Tem	Sal	SigT
0	27.42	36.178	23.47
10	27.42	36.175	23.47
20	27.28	36.175	23.51
30	27.23	36.183	23.54
40	27.15	36.198	23.58
50	27.05	36.223	23.62
60	26.89	36.286	23.72
70	26.85	36.307	23.75
80	26.79	36.320	23.78
90	26.54	36.341	23.88
100	26.44	36.360	23.92
110	26.09	36.379	24.05
120	25.87	36.410	24.14
130	24.91	36.452	24.47
140	24.60	36.437	24.55
150	24.02	36.407	24.70
160	22.89	36.298	24.95
170	20.77	36.184	25.46
180	19.94	36.158	25.68
190	18.28	36.134	26.07
200	16.66	35.939	26.32
250	11.10	35.044	26.79
300	9.51	34.867	26.93
350	8.78	34.803	27.00
400	7.99	34.720	27.06
450	7.59	34.673	27.08
500	7.16	34.660	27.13
550	6.86	34.638	27.15
600	6.49	34.601	27.17
650	5.79	34.536	27.21
700	5.54	34.524	27.23
750	5.48	34.532	27.25
800	5.37	34.559	27.28
850	5.14	34.550	27.30
900	4.96	34.591	27.36
950	4.85	34.604	27.38
1000	4.80	34.619	27.40
1500	4.52	34.992	27.72
2000	3.63	34.979	27.81
2500	3.04	34.953	27.84
3000	2.62	34.924	27.86
3404	2.50	34.916	27.88

MB-STACS34-89 CTD 35 BALDRIGE
Date 09 08 89 Latitude 4.837 N
Time 0202 Z Longitude 47.570 W



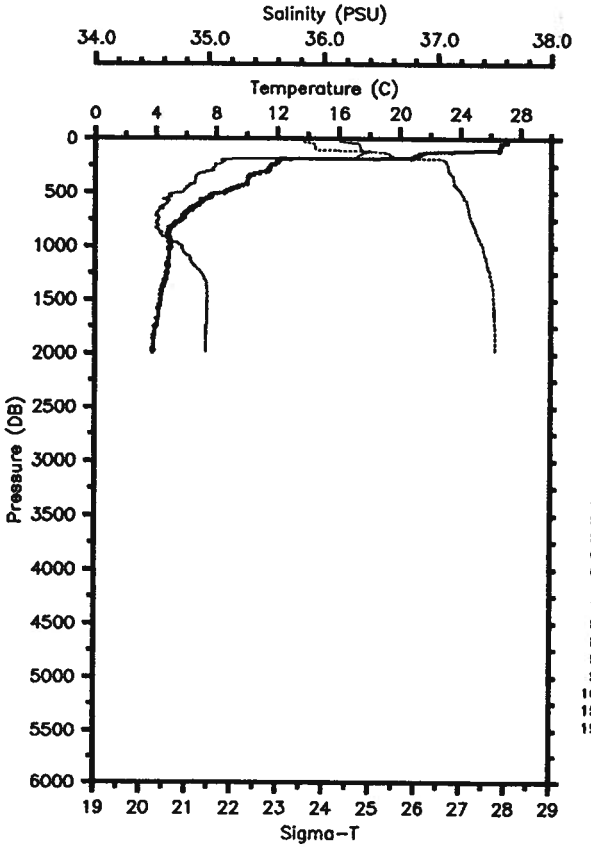
Prs	Tem	Sal	SigT
0	27.24	36.205	23.55
10	27.28	36.172	23.51
20	27.25	36.171	23.52
30	27.18	36.176	23.55
40	27.07	36.204	23.60
50	26.94	36.252	23.68
60	26.83	36.297	23.75
70	26.81	36.306	23.77
80	26.81	36.306	23.77
90	26.81	36.309	23.77
100	26.78	36.315	23.78
110	26.62	36.334	23.85
120	25.69	36.385	24.18
130	24.36	36.454	24.64
140	23.87	36.452	24.78
150	23.48	36.466	24.91
160	22.37	36.334	25.13
170	21.46	36.217	25.30
180	17.98	35.805	25.90
190	15.52	35.614	26.33
200	13.72	35.284	26.47
250	11.44	35.050	26.73
300	10.30	34.926	26.84
350	9.46	34.853	26.93
400	8.53	34.754	27.00
450	8.01	34.719	27.05
500	7.78	34.714	27.08
550	7.29	34.679	27.13
600	6.88	34.635	27.15
650	6.48	34.602	27.18
700	5.92	34.564	27.22
750	5.48	34.522	27.24
800	5.29	34.552	27.29
850	5.03	34.575	27.34
900	4.97	34.587	27.35
950	4.81	34.617	27.39
1000	4.89	34.670	27.43
1500	4.47	34.994	27.73
2000	3.55	34.976	27.81
2500	3.07	34.954	27.84
2990	2.68	34.929	27.86

MB-STACS34-89 CTD 36 BALDRIGE
Date 09 08 89 Latitude 4.585 N
Time 0600 Z Longitude 47.910 W



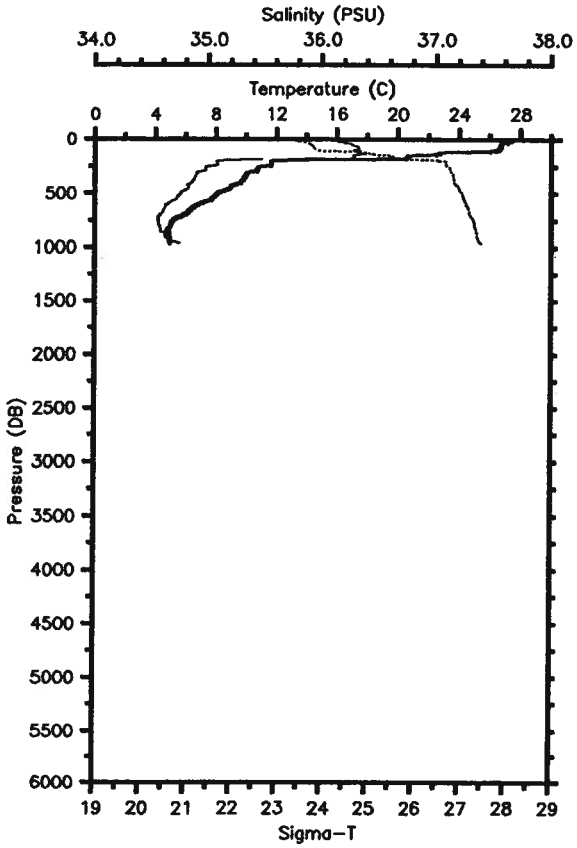
Prs	Tem	Sal	SigT
0	27.20	36.185	23.55
10	27.23	36.171	23.53
20	27.20	36.177	23.54
30	27.13	36.187	23.57
40	26.85	36.305	23.75
50	26.80	36.321	23.78
60	26.75	36.321	23.79
70	26.73	36.323	23.80
80	26.69	36.330	23.82
90	26.68	36.333	23.83
100	26.66	36.337	23.84
110	25.96	36.381	24.09
120	24.04	36.446	24.73
130	23.13	36.471	25.01
140	22.06	36.402	25.27
150	21.22	36.330	25.45
160	20.89	36.284	25.50
170	20.42	36.226	25.59
180	17.03	35.691	26.04
190	15.09	35.511	26.35
200	13.27	35.250	26.53
250	11.99	35.137	26.70
300	11.06	35.004	26.77
350	10.41	34.937	26.83
400	10.04	34.921	26.88
450	8.39	34.762	27.03
500	7.92	34.725	27.07
550	7.43	34.665	27.10
600	7.06	34.653	27.14
650	6.83	34.629	27.15
700	6.27	34.605	27.21
750	5.83	34.581	27.24
800	5.44	34.564	27.28
850	5.17	34.567	27.31
900	4.98	34.586	27.35
950	4.76	34.627	27.41
1000	4.93	34.694	27.44
1500	4.34	34.989	27.74
2000	3.67	34.985	27.81
2500	3.05	34.952	27.84
2550	3.02	34.952	27.84

MB-STACS34-89 CTD 37 BALDRIGE
Date 09 08 90 Latitude 4.422 N
Time 0922 Z Longitude 48.283 W



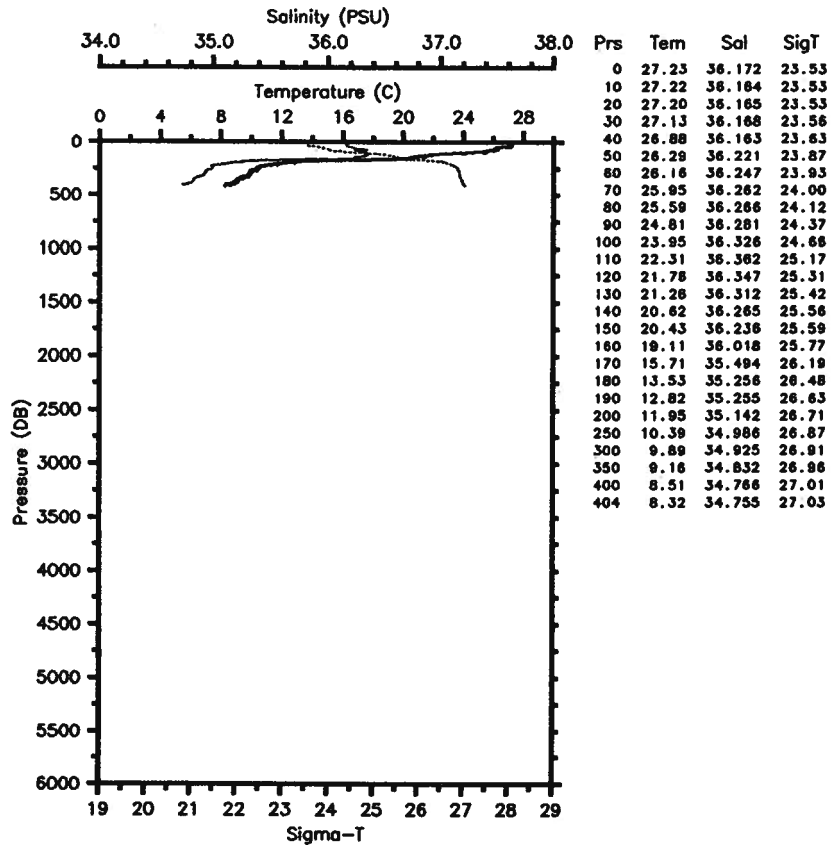
Prs	Tem	Sal	SigT
0	27.07	36.179	23.58
10	27.13	36.147	23.54
20	27.13	36.147	23.54
30	27.05	36.181	23.59
40	26.78	36.296	23.77
50	26.71	36.311	23.80
60	26.69	36.313	23.81
70	26.67	36.316	23.82
80	26.67	36.317	23.82
90	26.65	36.318	23.83
100	26.60	36.325	23.85
110	24.63	36.344	24.47
120	22.70	36.427	25.10
130	21.62	36.359	25.36
140	21.31	36.336	25.43
150	21.11	36.310	25.46
160	20.93	36.297	25.50
170	20.83	36.283	25.52
180	19.90	35.697	25.32
190	12.76	35.160	26.57
200	12.10	35.108	26.65
250	11.57	35.058	26.72
300	11.32	35.012	26.73
350	10.14	34.883	26.84
400	10.04	34.881	26.85
450	9.33	34.800	26.91
500	8.54	34.768	27.01
550	7.44	34.649	27.06
600	6.93	34.634	27.14
650	6.31	34.566	27.17
700	5.91	34.537	27.20
750	5.72	34.559	27.24
800	5.23	34.547	27.29
850	4.92	34.561	27.34
900	4.73	34.586	27.38
950	4.92	34.679	27.43
1000	4.99	34.767	27.49
1500	4.34	34.989	27.74
1984	3.81	34.974	27.78

MB-STACS34-89 CTD 38 BALDRIGE
Date 09 08 89 Latitude 4.043 N
Time 1941 Z Longitude 48.506 W



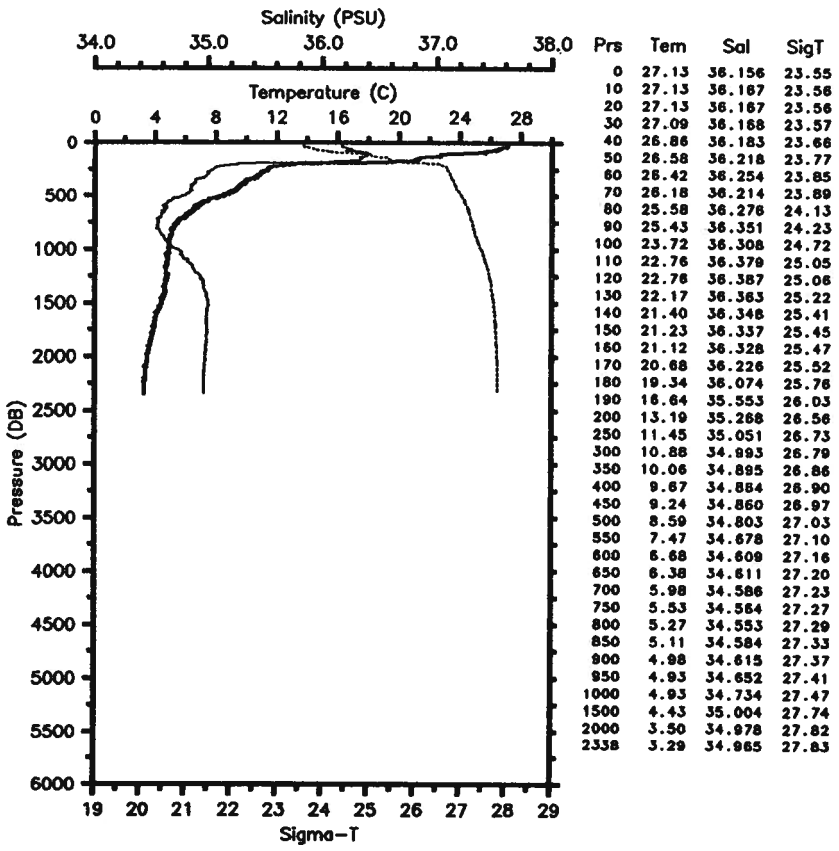
Prs	Tem	Sal	SigT
0	27.43	36.077	23.39
10	27.40	36.143	23.45
20	27.21	36.145	23.52
30	26.90	36.180	23.64
40	26.77	36.244	23.73
50	26.71	36.267	23.77
60	26.63	36.286	23.81
70	26.67	36.321	23.82
80	26.65	36.328	23.83
90	26.52	36.309	23.86
100	26.24	36.264	23.91
110	24.33	36.308	24.54
120	22.78	36.329	25.01
130	22.55	36.351	25.09
140	21.87	36.291	25.24
150	20.69	36.281	25.55
160	20.61	36.278	25.57
170	20.57	36.275	25.58
180	19.41	35.975	25.68
190	13.22	35.242	26.54
200	11.69	35.070	26.70
250	11.20	35.003	26.74
300	10.34	34.910	26.82
350	9.92	34.881	26.87
400	9.68	34.861	26.90
450	8.96	34.824	26.99
500	8.12	34.758	27.07
550	7.74	34.723	27.10
600	6.83	34.629	27.15
650	6.32	34.604	27.20
700	5.82	34.575	27.24
750	5.19	34.553	27.30
800	5.02	34.568	27.33
850	4.77	34.580	27.37
900	4.84	34.615	27.39
950	4.95	34.715	27.46
982	4.97	34.751	27.48

MB-STACS34-89 CTD 39 BALDRIGE
Date 09 09 89 Latitude 3.840 N
Time 0226 Z Longitude 48.790 W



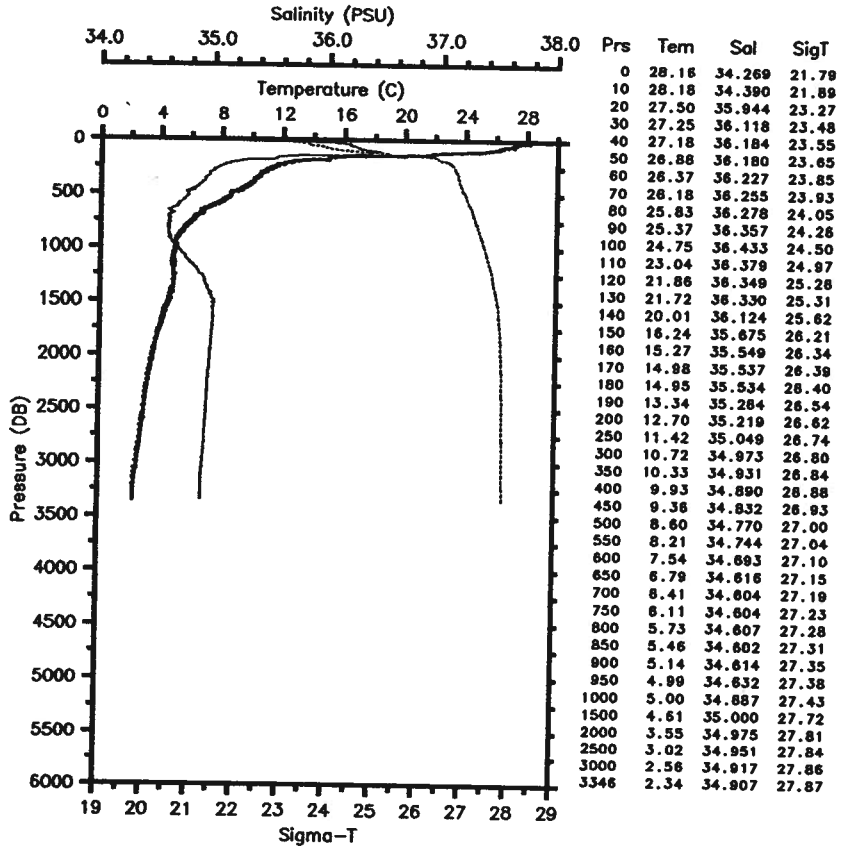
Prs	Tem	Sal	SigT
0	27.23	36.172	23.53
10	27.22	36.164	23.53
20	27.20	36.165	23.53
30	27.13	36.168	23.56
40	26.88	36.163	23.63
50	26.29	36.221	23.87
60	26.16	36.247	23.93
70	25.95	36.262	24.00
80	25.59	36.286	24.12
90	24.81	36.281	24.37
100	23.95	36.326	24.68
110	22.31	36.362	25.17
120	21.78	36.347	25.31
130	21.26	36.312	25.42
140	20.62	36.265	25.56
150	20.43	36.236	25.59
160	19.11	36.018	25.77
170	15.71	35.494	26.19
180	13.53	35.256	26.48
190	12.82	35.255	26.63
200	11.95	35.142	26.71
250	10.39	34.986	26.87
300	9.89	34.925	26.91
350	9.16	34.832	26.96
400	8.51	34.766	27.01
404	8.32	34.755	27.03

MB-STACS34-89 CTD 40 BALDRIGE
Date 09 09 89 Latitude 4.713 N
Time 0647 Z Longitude 49.078 W



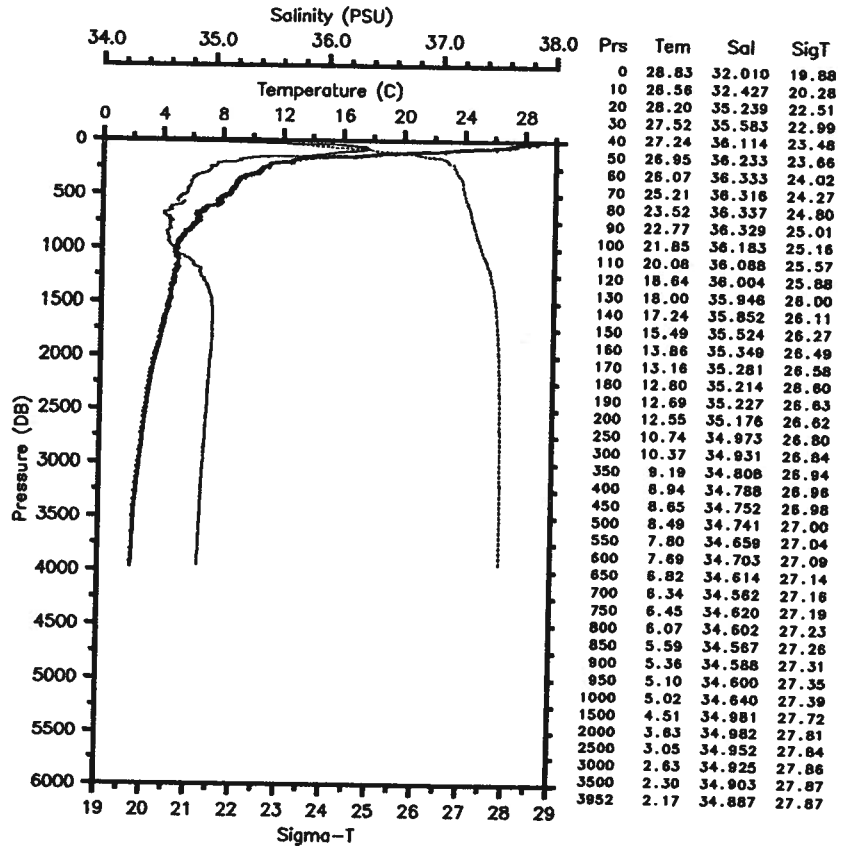
Prs	Tem	Sal	SigT
0	27.13	36.156	23.55
10	27.13	36.167	23.56
20	27.13	36.167	23.56
30	27.09	36.168	23.57
40	26.86	36.183	23.66
50	26.58	36.218	23.77
60	26.42	36.254	23.85
70	26.18	36.214	23.89
80	25.58	36.276	24.13
90	25.43	36.351	24.23
100	23.72	36.308	24.72
110	22.76	36.379	25.05
120	22.76	36.387	25.06
130	22.17	36.383	25.22
140	21.40	36.348	25.41
150	21.23	36.337	25.45
160	21.12	36.328	25.47
170	20.68	36.226	25.52
180	19.34	36.074	25.76
190	16.64	35.553	26.03
200	13.19	35.268	26.56
250	11.45	35.051	26.73
300	10.88	34.993	26.79
350	10.06	34.895	26.86
400	9.67	34.884	26.90
450	9.24	34.860	26.97
500	8.59	34.803	27.03
550	7.47	34.678	27.10
600	6.68	34.609	27.16
650	6.38	34.611	27.20
700	5.98	34.586	27.23
750	5.53	34.564	27.27
800	5.27	34.553	27.29
850	5.11	34.584	27.33
900	4.98	34.615	27.37
950	4.93	34.652	27.41
1000	4.93	34.734	27.47
1500	4.43	35.004	27.74
2000	3.50	34.978	27.82
2338	3.29	34.965	27.83

MB-STACS34-89 CTD 41 BALDRIGE
Date 09 09 89 Latitude 5.652 N
Time 1139 Z Longitude 49.400 W



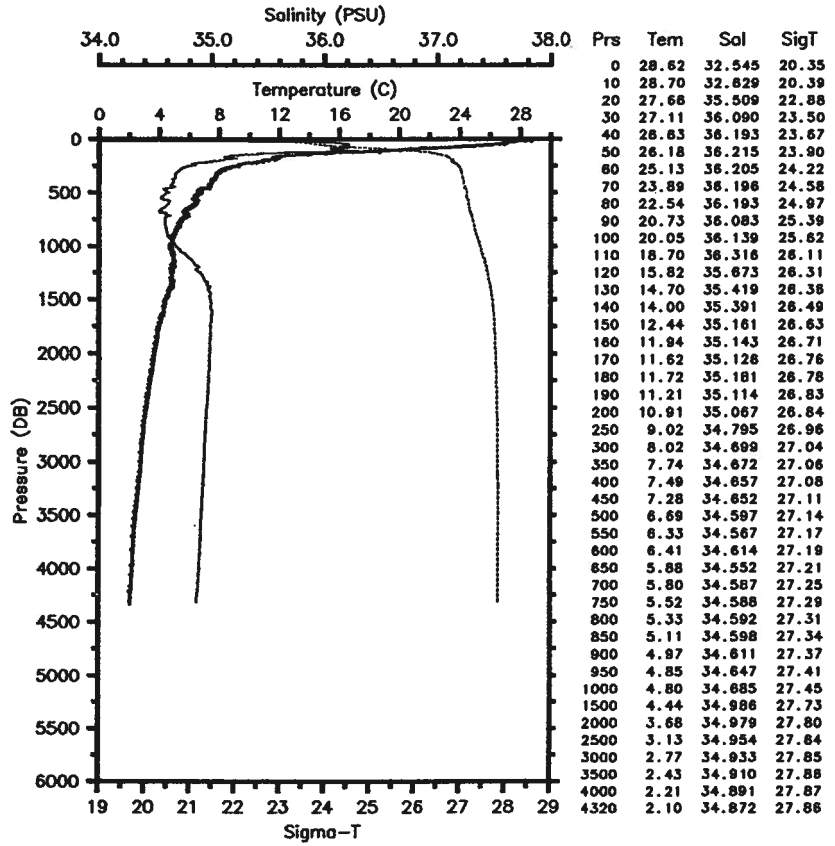
Prs	Tem	Sal	SigT
0	28.16	34.269	21.79
10	28.18	34.390	21.89
20	27.50	35.944	23.27
30	27.25	36.118	23.48
40	27.18	36.184	23.55
50	26.88	36.180	23.65
60	26.37	36.227	23.85
70	26.18	36.255	23.93
80	25.83	36.278	24.05
90	25.37	36.357	24.26
100	24.75	36.433	24.50
110	23.04	36.379	24.97
120	21.86	36.349	25.28
130	21.72	36.330	25.31
140	20.01	36.124	25.62
150	16.24	35.675	26.21
160	15.27	35.549	26.34
170	14.98	35.537	26.39
180	14.95	35.534	26.40
190	13.34	35.284	26.54
200	12.70	35.219	26.62
250	11.42	35.049	26.74
300	10.72	34.973	26.80
350	10.33	34.931	26.84
400	9.93	34.890	26.88
450	9.36	34.832	26.93
500	8.60	34.770	27.00
550	8.21	34.744	27.04
600	7.54	34.693	27.10
650	6.79	34.616	27.15
700	6.41	34.604	27.19
750	6.11	34.604	27.23
800	5.73	34.607	27.28
850	5.46	34.602	27.31
900	5.14	34.614	27.35
950	4.99	34.632	27.38
1000	5.00	34.687	27.43
1500	4.61	35.000	27.72
2000	3.55	34.975	27.81
2500	3.02	34.951	27.84
3000	2.56	34.917	27.86
3346	2.34	34.907	27.87

MB-STACS34-89 CTD 42 BALDRIGE
Date 09 09 89 Latitude 6.572 N
Time 1721 Z Longitude 49.695 W



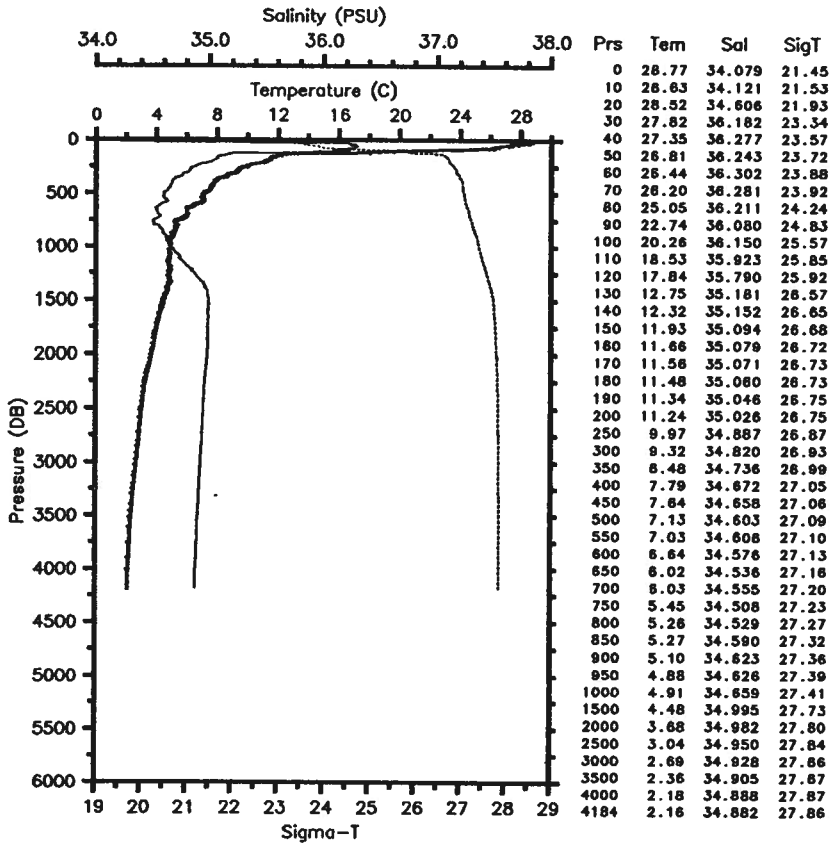
Prs	Tem	Sal	SigT
0	28.83	32.010	19.88
10	28.56	32.427	20.28
20	28.20	35.239	22.51
30	27.52	35.583	22.99
40	27.24	36.114	23.48
50	26.95	36.233	23.66
60	26.07	36.333	24.02
70	25.21	36.316	24.27
80	23.52	36.337	24.80
90	22.77	36.329	25.01
100	21.85	36.183	25.16
110	20.08	36.088	25.57
120	18.64	36.004	25.88
130	18.00	35.946	26.00
140	17.24	35.852	26.11
150	15.49	35.524	26.27
160	13.86	35.349	26.49
170	13.16	35.281	26.58
180	12.80	35.214	26.60
190	12.69	35.227	26.63
200	12.55	35.176	26.62
250	10.74	34.973	26.80
300	10.37	34.931	26.84
350	9.19	34.808	26.94
400	8.94	34.788	26.96
450	8.65	34.752	26.98
500	8.49	34.741	27.00
550	7.80	34.659	27.04
600	7.69	34.703	27.09
650	6.82	34.614	27.14
700	6.34	34.562	27.16
750	6.45	34.620	27.19
800	6.07	34.602	27.23
850	5.59	34.567	27.26
900	5.36	34.588	27.31
950	5.10	34.600	27.35
1000	5.02	34.640	27.39
1500	4.51	34.981	27.72
2000	3.83	34.982	27.81
2500	3.05	34.952	27.84
3000	2.63	34.925	27.86
3500	2.30	34.903	27.87
3952	2.17	34.887	27.87

MB-STACS34-89 CTD 43 BALDRIGE
Date 09 10 89 Latitude 7.522 N
Time 0326 Z Longitude 49.955 W



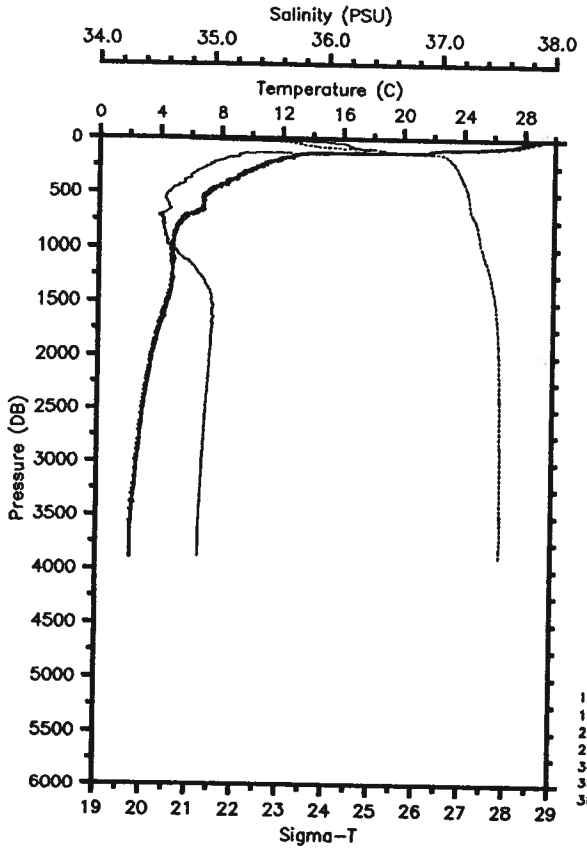
Prs	Tem	Sal	SigT
0	28.62	32.545	20.35
10	28.70	32.629	20.39
20	27.68	35.509	22.88
30	27.11	36.090	23.50
40	26.83	36.193	23.67
50	26.18	36.215	23.90
60	25.13	36.205	24.22
70	23.89	36.196	24.58
80	22.54	36.193	24.97
90	20.73	36.083	25.39
100	20.05	36.139	25.62
110	18.70	36.316	26.11
120	15.82	35.673	26.31
130	14.70	35.419	26.38
140	14.00	35.391	26.49
150	12.44	35.161	26.63
160	11.94	35.143	26.71
170	11.62	35.128	26.76
180	11.72	35.181	26.78
190	11.21	35.114	26.83
200	10.91	35.067	26.84
250	9.02	34.795	26.96
300	8.02	34.699	27.04
350	7.74	34.672	27.06
400	7.49	34.657	27.08
450	7.28	34.652	27.11
500	6.69	34.597	27.14
550	6.33	34.567	27.17
600	6.41	34.614	27.19
650	5.88	34.552	27.21
700	5.80	34.587	27.25
750	5.52	34.588	27.29
800	5.33	34.592	27.31
850	5.11	34.598	27.34
900	4.97	34.611	27.37
950	4.85	34.647	27.41
1000	4.80	34.685	27.45
1500	4.44	34.986	27.73
2000	3.68	34.979	27.80
2500	3.13	34.954	27.84
3000	2.77	34.933	27.85
3500	2.43	34.910	27.88
4000	2.21	34.891	27.87
4320	2.10	34.872	27.86

MB-STACS34-89 CTD 44 BALDRIGE
Date 09 10 89 Latitude 7.108 N
Time 1627 Z Longitude 50.325 W



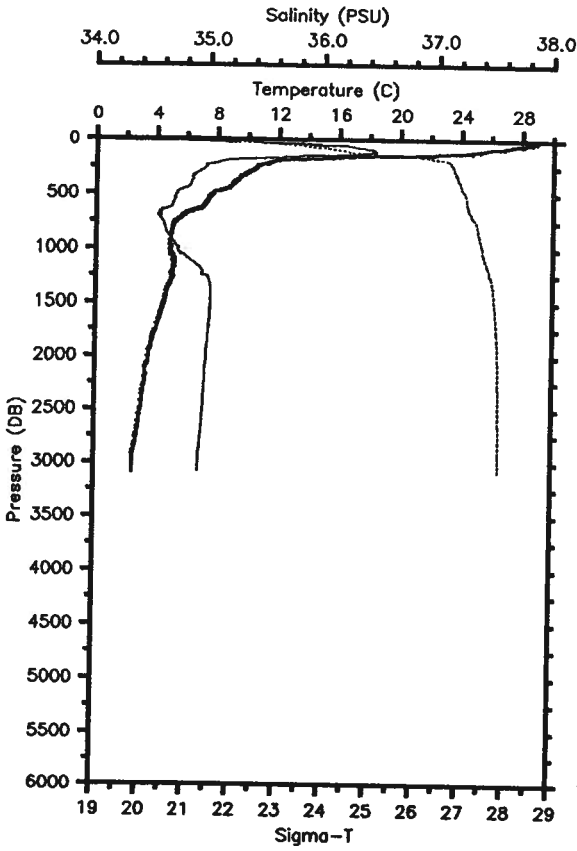
Prs	Tem	Sal	SigT
0	28.77	34.079	21.45
10	28.63	34.121	21.53
20	28.52	34.606	21.93
30	27.82	36.182	23.34
40	27.35	36.277	23.57
50	26.81	36.243	23.72
60	26.44	36.302	23.88
70	26.20	36.281	23.92
80	25.05	36.211	24.24
90	22.74	36.080	24.83
100	20.26	36.150	25.57
110	18.53	35.923	25.85
120	17.84	35.790	25.92
130	12.75	35.181	26.57
140	12.32	35.152	26.65
150	11.93	35.094	26.68
160	11.66	35.079	26.72
170	11.56	35.071	26.73
180	11.48	35.060	26.73
190	11.34	35.046	26.75
200	11.24	35.026	26.75
250	9.97	34.887	26.87
300	9.32	34.820	26.93
350	8.48	34.736	26.99
400	7.79	34.672	27.05
450	7.64	34.658	27.06
500	7.13	34.603	27.09
550	7.03	34.608	27.10
600	6.64	34.576	27.13
650	6.02	34.536	27.16
700	6.03	34.555	27.20
750	5.45	34.508	27.23
800	5.26	34.529	27.27
850	5.27	34.590	27.32
900	5.10	34.623	27.36
950	4.88	34.626	27.39
1000	4.91	34.659	27.41
1500	4.48	34.995	27.73
2000	3.68	34.982	27.80
2500	3.04	34.950	27.84
3000	2.69	34.928	27.86
3500	2.36	34.905	27.87
4000	2.18	34.888	27.87
4184	2.16	34.882	27.86

MB-STACS34-89 CTD 45 BALDRIGE
Date 09 11 89 Latitude 6.681 N
Time 0109 Z Longitude 50.663 W



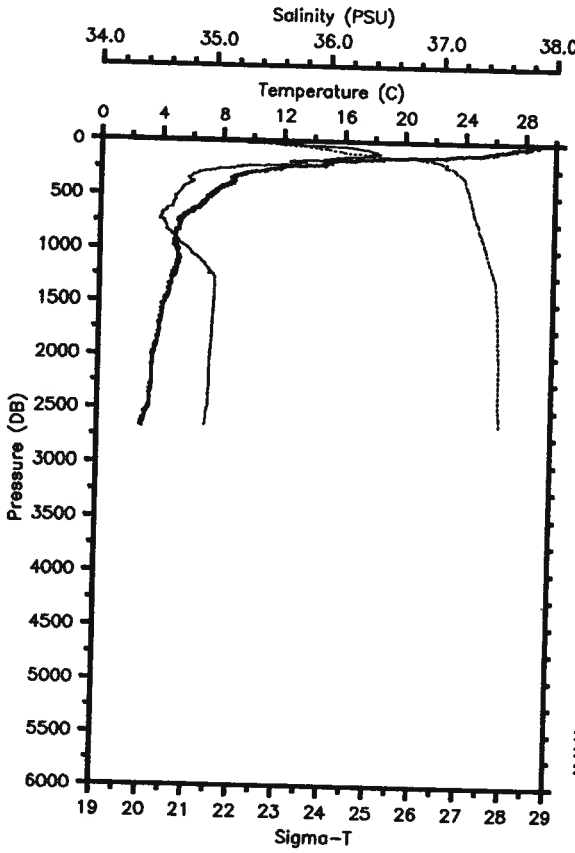
Prs	Tem	Sal	SigT
0	28.93	33.437	20.92
10	28.82	34.354	21.64
20	28.52	35.076	22.28
30	28.14	35.985	23.09
40	27.93	36.127	23.27
50	27.57	36.176	23.42
60	27.28	36.189	23.53
70	26.63	36.218	23.75
80	25.52	36.218	24.10
90	24.14	36.350	24.62
100	22.20	36.350	25.19
110	21.86	36.317	25.26
120	21.63	36.262	25.28
130	16.08	35.543	26.15
140	13.53	35.244	26.48
150	12.89	35.214	26.58
160	12.70	35.218	26.62
170	12.59	35.189	26.62
180	12.00	35.114	26.68
190	11.86	35.102	26.70
200	11.70	35.062	26.69
250	10.67	34.964	26.81
300	9.77	34.871	26.89
350	9.08	34.797	26.95
400	8.43	34.750	27.01
450	7.69	34.660	27.05
500	7.20	34.616	27.09
550	6.85	34.581	27.11
600	6.86	34.606	27.13
650	6.83	34.627	27.15
700	5.97	34.529	27.18
750	5.49	34.563	27.27
800	5.18	34.562	27.31
850	5.05	34.578	27.33
900	4.92	34.586	27.36
950	4.88	34.600	27.37
1000	4.82	34.649	27.42
1500	4.50	34.986	27.72
2000	3.56	34.979	27.81
2500	2.98	34.946	27.84
3000	2.60	34.920	27.86
3500	2.31	34.902	27.87
3882	2.27	34.897	27.87

MB-STACS34-89 CTD 46 BALDRIGE
Date 09 11 89 Latitude 6.220 N
Time 1052 Z Longitude 51.050 W



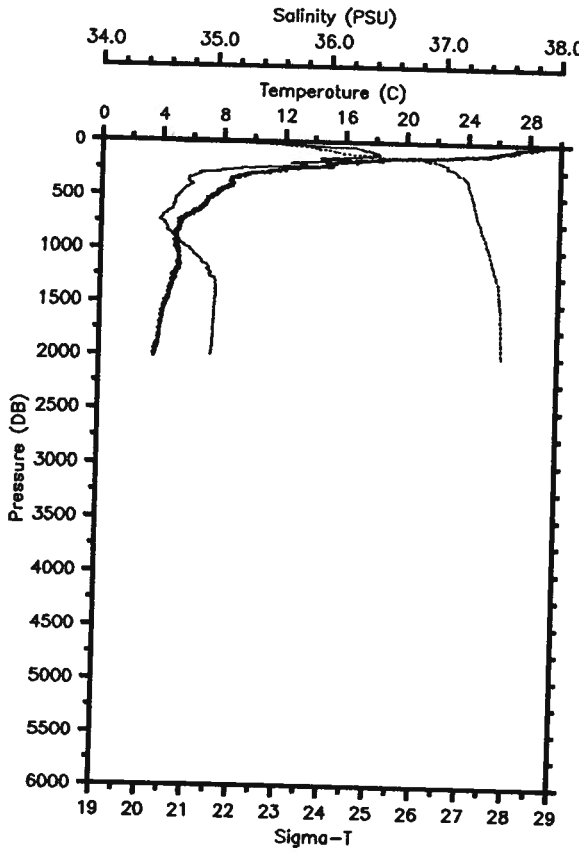
Prs	Tem	Sal	SigT
0	27.92	27.262	18.62
10	28.79	33.491	21.00
20	28.63	35.128	22.29
30	28.48	35.388	22.53
40	28.06	35.950	23.09
50	27.49	35.978	23.30
60	27.14	36.223	23.60
70	26.78	36.296	23.77
80	25.90	36.365	24.10
90	25.51	36.432	24.27
100	25.05	36.423	24.40
110	24.68	36.449	24.53
120	23.46	36.367	24.84
130	22.34	36.371	25.17
140	20.61	36.040	25.39
150	17.04	35.784	26.11
160	15.86	35.632	26.27
170	14.60	35.420	26.38
180	12.94	35.247	26.60
190	11.91	35.145	26.72
200	11.59	35.101	26.75
250	10.62	34.965	26.82
300	10.04	34.901	26.87
350	9.45	34.847	26.93
400	9.07	34.834	26.98
450	8.60	34.778	27.01
500	7.72	34.708	27.09
550	7.41	34.693	27.12
600	7.18	34.673	27.14
650	6.44	34.589	27.17
700	5.72	34.560	27.24
750	5.22	34.581	27.32
800	5.04	34.604	27.36
850	5.00	34.617	27.37
900	4.91	34.650	27.41
950	4.92	34.686	27.44
1000	4.93	34.722	27.46
1500	4.52	35.012	27.74
2000	3.51	34.978	27.82
2500	3.02	34.950	27.84
3000	2.53	34.918	27.86
3078	2.52	34.917	27.86

MB-STACS34-89 CTD 47 BALDRIGE
Date 09 11 89 Latitude 6.044 N
Time 1807 Z Longitude 51.176 W



Prs	Tem	Sal	SigT
0	29.46	26.914	15.86
10	28.82	33.818	21.09
20	28.39	35.436	22.60
30	28.22	35.742	22.88
40	27.88	35.882	23.10
50	27.34	36.217	23.53
60	26.95	36.258	23.68
70	26.35	36.352	23.94
80	26.00	36.362	24.08
90	25.58	36.413	24.23
100	25.24	36.406	24.34
110	23.81	36.427	24.75
120	23.05	36.400	24.98
130	22.60	36.370	25.09
140	19.97	36.130	25.63
150	18.38	36.147	26.08
160	17.24	35.958	26.19
170	16.78	35.938	26.29
180	15.27	35.673	26.43
190	14.68	35.689	26.58
200	14.91	35.729	26.55
250	11.73	35.155	26.76
300	9.46	34.851	26.93
350	8.58	34.762	27.00
400	8.44	34.779	27.03
450	7.71	34.708	27.09
500	7.30	34.672	27.12
550	6.93	34.651	27.15
600	6.61	34.630	27.18
650	6.05	34.574	27.21
700	5.53	34.538	27.25
750	5.23	34.549	27.29
800	5.18	34.577	27.32
850	4.97	34.614	27.37
900	4.85	34.658	27.41
950	4.91	34.687	27.44
1000	5.03	34.770	27.49
1500	4.30	35.006	27.76
2000	3.58	34.978	27.81
2500	3.26	34.962	27.83
2660	2.89	34.941	27.85

MB-STACS34-89 CTD 48 BALDRIGE
Date 09 11 89 Latitude 6.031 N
Time 2108 Z Longitude 51.162 W

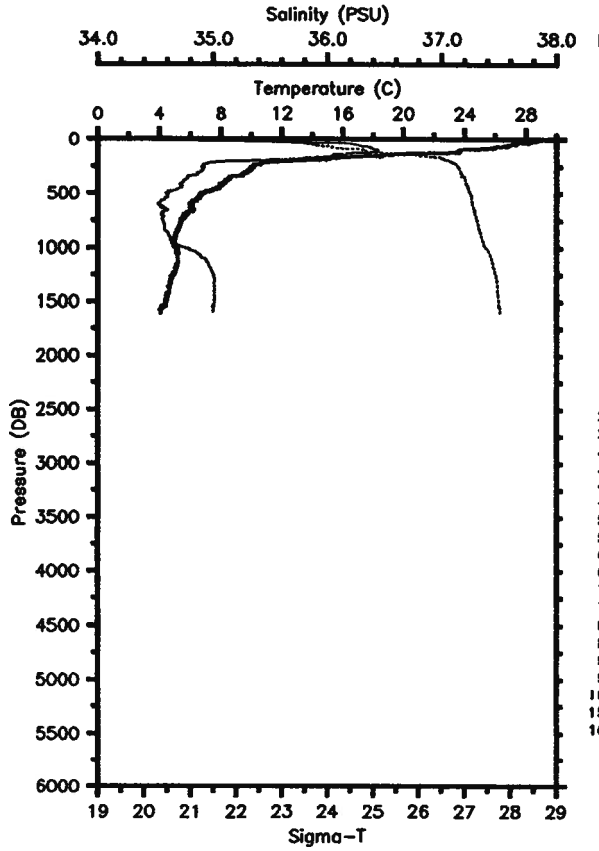


Prs	Tem	Sal	SigT
0	29.04	27.245	16.24
10	28.84	33.785	21.21
20	28.44	35.363	22.52
30	28.15	35.768	22.92
40	27.48	35.924	23.26
50	27.23	36.230	23.57
60	26.91	36.278	23.71
70	26.61	36.313	23.83
80	26.09	36.344	24.02
90	25.83	36.382	24.13
100	25.41	36.416	24.29
110	24.37	36.393	24.59
120	23.20	36.406	24.94
130	22.59	36.354	25.08
140	19.88	36.125	25.65
150	18.20	36.083	26.05
160	18.25	36.126	26.07
170	16.75	35.963	26.31
180	18.37	35.924	26.37
190	15.38	35.737	26.46
200	15.05	35.775	26.56
250	12.08	35.224	26.75
300	9.66	34.875	26.91
350	8.55	34.765	27.01
400	8.61	34.798	27.02
450	7.89	34.730	27.08
500	7.45	34.676	27.10
550	6.98	34.647	27.14
600	6.71	34.634	27.17
650	6.18	34.587	27.20
700	5.83	34.538	27.23
750	5.17	34.540	27.29
800	5.20	34.578	27.32
850	4.97	34.614	27.37
900	4.95	34.664	27.42
950	4.90	34.692	27.44
1000	5.05	34.779	27.49
1500	4.34	35.007	27.76
2000	3.61	34.981	27.81

MB-STACS34-89 CTD 49 BALDRIGE

Date 09 12 89 Latitude 5.913 N

Time 1522 Z Longitude 51.332 W

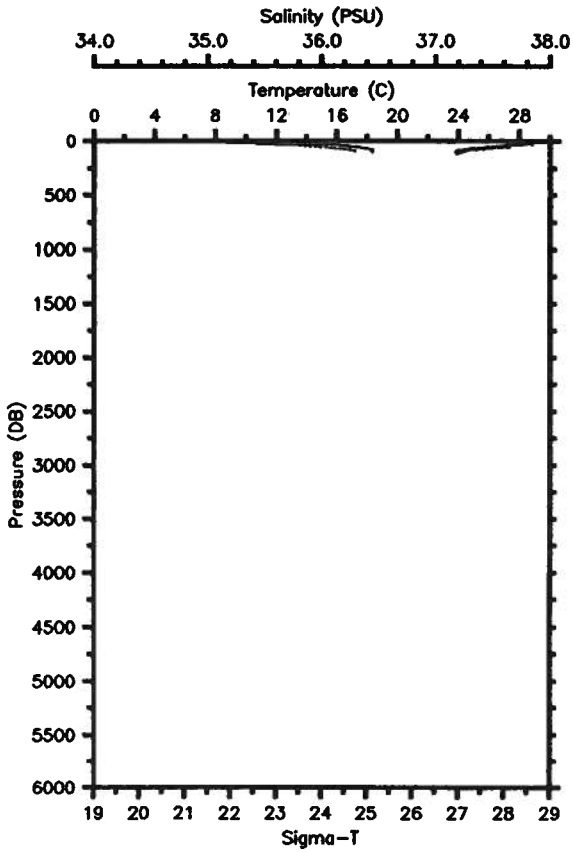


Prs	Tem	Sal	SigT
0	28.54	27.679	16.73
10	28.80	34.505	21.76
20	28.42	35.410	22.57
30	27.72	35.756	23.06
40	27.38	36.206	23.51
50	26.89	36.274	23.71
60	26.59	36.284	23.82
70	26.02	36.379	24.07
80	25.59	36.372	24.20
90	24.04	36.391	24.69
100	23.67	36.446	24.84
110	23.61	36.443	24.85
120	23.07	36.400	24.98
130	20.85	36.163	25.42
140	19.33	36.085	25.77
150	18.57	36.163	26.02
160	16.83	36.025	26.34
170	15.71	35.892	26.50
180	15.01	35.754	26.55
190	14.11	35.575	26.61
200	12.60	35.282	26.69
250	10.16	34.893	26.84
300	9.73	34.889	26.91
350	8.62	34.784	27.01
400	8.23	34.737	27.03
450	7.75	34.707	27.08
500	6.78	34.605	27.14
550	6.45	34.582	27.16
600	6.03	34.531	27.18
650	6.14	34.596	27.22
700	5.62	34.549	27.24
750	5.43	34.566	27.28
800	5.33	34.578	27.30
850	5.15	34.596	27.34
900	5.04	34.625	27.37
950	4.98	34.654	27.41
1000	5.07	34.755	27.47
1500	4.45	35.010	27.75
1600	4.09	35.000	27.78

MB-STACS34-89 CTD 50 BALDRIGE

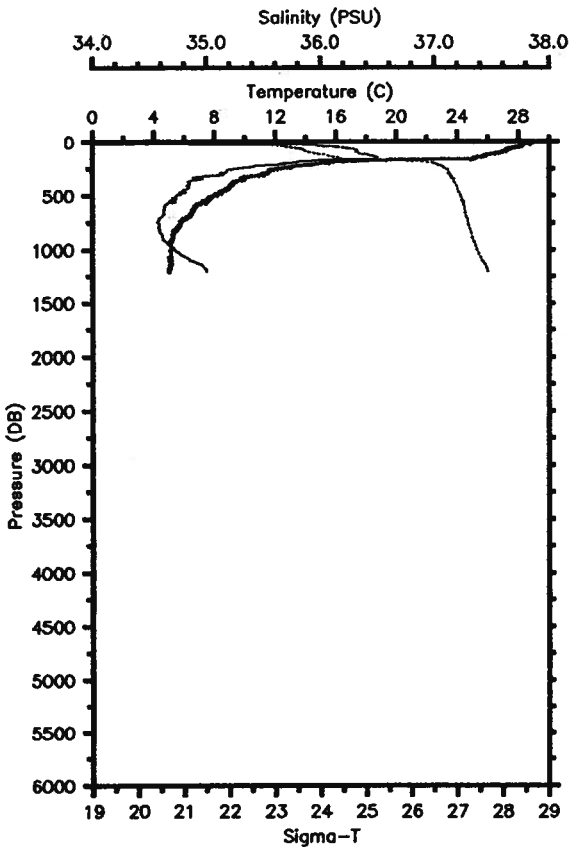
Date 09 12 89 Latitude 5.793 N

Time 1705 Z Longitude 51.438 W



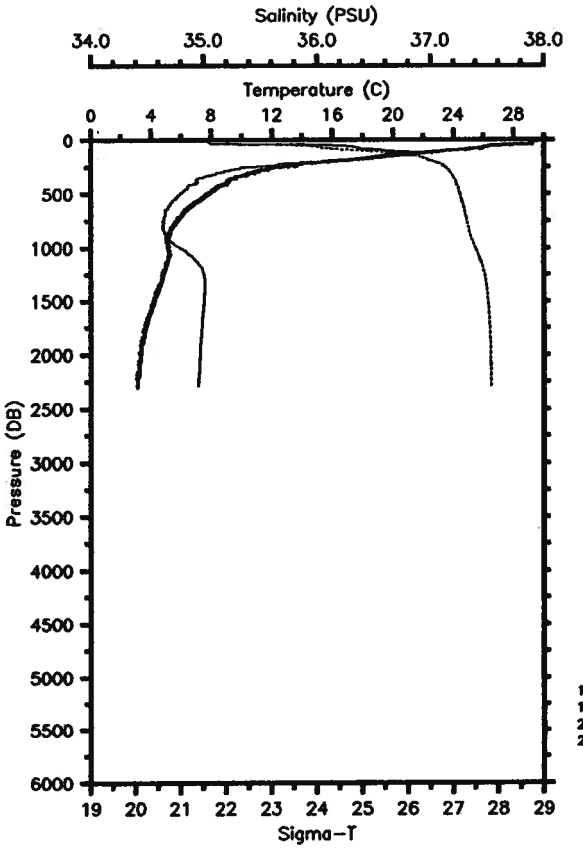
Prs	Tem	Sal	SigT
0	28.83	32.385	20.16
10	28.73	34.811	22.02
20	28.44	35.536	22.66
30	27.73	35.540	22.89
40	27.30	36.220	23.54
50	26.91	36.223	23.67
60	25.91	36.350	24.08
70	24.95	36.405	24.42
80	24.43	36.448	24.61
90	23.98	36.435	24.74
98	23.92	36.448	24.76

MB-STACS34-89 CTD 51 BALDRIGE
Date 09 13 89 Latitude 7.613 N
Time 0640 Z Longitude 52.788 W



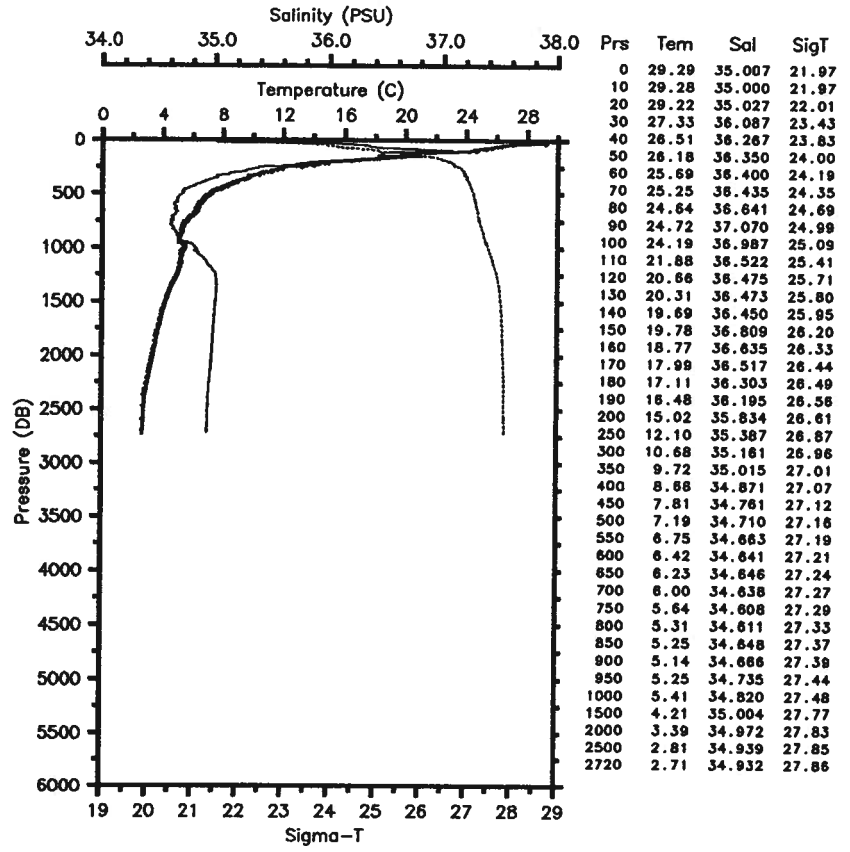
Prs	Tem	Sal	SigT
0	28.78	32.296	20.11
10	28.73	33.353	20.92
20	28.38	35.663	22.77
30	28.24	35.960	23.04
40	28.13	36.077	23.17
50	27.78	36.183	23.36
60	27.37	36.256	23.55
70	27.29	36.314	23.62
80	27.22	36.325	23.65
90	26.94	36.306	23.72
100	26.64	36.335	23.84
110	26.31	36.348	23.96
120	25.93	36.423	24.13
130	25.75	36.455	24.21
140	25.33	36.504	24.38
150	25.11	36.491	24.44
160	24.55	36.309	24.47
170	19.39	36.098	25.75
180	18.82	35.823	26.19
190	15.60	35.787	26.44
200	14.83	35.706	26.55
250	12.10	35.239	26.76
300	11.16	35.132	26.85
350	9.85	34.914	26.91
400	9.10	34.840	26.98
450	8.54	34.792	27.03
500	7.91	34.734	27.08
550	7.30	34.674	27.12
600	6.74	34.632	27.16
650	6.57	34.626	27.18
700	6.22	34.599	27.21
750	5.81	34.573	27.24
800	5.59	34.588	27.28
850	5.36	34.607	27.32
900	5.24	34.622	27.35
950	5.14	34.669	27.40
1000	5.16	34.723	27.44
1204	5.03	35.004	27.68

MB-STACS34-89 CTD 52 BALDRIGE
Date 09 14 89 Latitude 8.995 N
Time 2016 Z Longitude 58.180 W



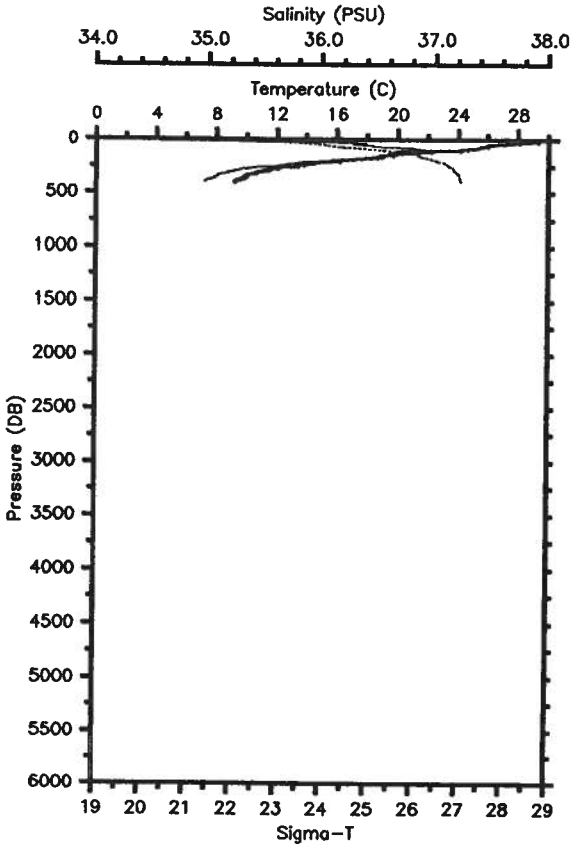
Prs	Tem	Sal	SigT
0	29.50	35.018	21.91
10	29.26	35.031	22.00
20	29.21	35.046	22.03
30	29.20	35.063	22.05
40	28.29	35.821	22.92
50	27.14	36.160	23.55
60	26.18	36.318	23.97
70	25.92	36.361	24.09
80	25.23	36.394	24.33
90	24.53	36.555	24.66
100	23.35	36.626	25.07
110	22.62	36.836	25.44
120	21.44	36.717	25.68
130	19.96	36.590	25.99
140	20.12	36.834	26.13
150	19.21	36.664	26.24
160	18.66	36.592	26.33
170	18.13	36.476	26.37
180	17.62	36.400	26.44
190	16.98	36.274	26.50
200	15.83	36.060	26.60
250	12.56	35.439	26.82
300	10.80	35.166	26.94
350	9.48	34.946	27.00
400	9.02	34.939	27.07
450	8.26	34.859	27.12
500	7.73	34.793	27.15
550	7.31	34.745	27.17
600	6.74	34.699	27.22
650	6.26	34.665	27.26
700	6.02	34.660	27.28
750	5.76	34.645	27.30
800	5.44	34.642	27.34
850	5.30	34.653	27.36
900	5.14	34.669	27.40
950	5.13	34.731	27.45
1000	5.16	34.799	27.50
1500	4.24	35.008	27.77
2000	3.34	34.972	27.83
2292	3.10	34.959	27.84

MB-STACS34-89 CTD 53 BALDRIGE
Date 09 15 89 Latitude 9.498 N
Time 0013 Z Longitude 58.173 W



Prs	Tem	Sal	SigT
0	29.29	35.007	21.97
10	29.28	35.000	21.97
20	29.22	35.027	22.01
30	27.33	36.087	23.43
40	26.51	36.267	23.83
50	26.18	36.350	24.00
60	25.69	36.400	24.19
70	25.25	36.435	24.35
80	24.64	36.641	24.69
90	24.72	37.070	24.99
100	24.19	36.987	25.09
110	21.88	36.522	25.41
120	20.66	36.475	25.71
130	20.31	36.473	25.80
140	19.69	36.450	25.95
150	19.78	36.809	26.20
160	18.77	36.635	26.33
170	17.99	36.517	26.44
180	17.11	36.303	26.49
190	16.48	36.195	26.56
200	15.02	35.834	26.61
250	12.10	35.387	26.87
300	10.68	35.161	26.96
350	9.72	35.015	27.01
400	8.66	34.871	27.07
450	7.81	34.761	27.12
500	7.19	34.710	27.16
550	6.75	34.663	27.19
600	6.42	34.641	27.21
650	6.23	34.646	27.24
700	6.00	34.638	27.27
750	5.64	34.608	27.29
800	5.31	34.611	27.33
850	5.25	34.648	27.37
900	5.14	34.666	27.38
950	5.25	34.735	27.44
1000	5.41	34.820	27.48
1500	4.21	35.004	27.77
2000	3.39	34.972	27.83
2500	2.81	34.939	27.85
2720	2.71	34.932	27.86

MB-STACS34-89 CTD 54 BALDRIGE
Date 09 15 89 Latitude 9.493 N
Time 1137 Z Longitude 59.510 W



Prs	Tem	Sal	SigT
0	29.34	34.567	21.63
10	29.34	34.567	21.63
20	28.60	35.676	22.71
30	27.79	36.291	23.44
40	26.95	36.371	23.77
50	25.97	36.381	24.09
60	25.87	36.440	24.16
70	25.54	36.621	24.40
80	25.20	36.837	24.67
90	24.28	36.806	24.93
100	23.14	36.760	25.23
110	22.12	36.802	25.56
120	21.26	36.759	25.76
130	20.15	36.598	25.94
140	19.72	36.607	26.06
150	19.11	36.496	26.14
160	18.88	36.439	26.15
170	18.32	36.424	26.28
180	17.33	36.239	26.39
190	16.61	36.125	26.47
200	16.20	36.072	26.53
250	13.42	35.616	26.79
300	11.03	35.211	26.93
350	9.93	35.056	27.01
396	9.22	34.984	27.08

APPENDIX C: XBT DATA

Casts are presented by cruise and increasing cast number. Isotherm depths in meters are listed at temperatures ranging from 30 to 6 degrees Centigrade.

ISOTHERM DEPTHS (M)

R/V ALBATROSS IV ALB-STACS33-89

XBT NO.	1	2	3	4	5	6	7
YEAR	89	89	89	89	89	89	89
MONTH	2	2	2	2	2	2	2
DAY (GMT)	6	7	8	9	10	10	11
TIME (GMT)	1328	1310	0038	0022	0001	1313	0026
LAT (N)	22.74	21.24	20.64	20.77	18.90	17.34	17.10
LON (W)	78.50	75.33	73.91	71.14	68.32	66.68	65.68
SURF T (C)	25.4	25.6	25.6	25.5	25.6	25.8	25.9
28							
27							
26						96	
25	103	101	61	86	85	117	119
24	127	114	75	111	102	131	139
23	149	129	108	151	128	151	155
22	167	150	141	171	153	162	166
21	197	177	176	198	171	182	183
20	216	202	211	213	185	195	197
19	238	243	252	239	220	212	214
18	282	309	324	317	266	244	233
17	336	389	367	363	324	268	250
16	353	439		392	364	292	276
15	388			433	413	317	300
14	416				444		331
13							359
12							396
11							429
10							
9							
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V ALBATROSS IV ALB-STACS33-89

XBT NO.	8	9	10	11	12	13	14
YEAR	89	89	89	89	89	89	89
MONTH	2	2	2	2	2	2	2
DAY (GMT)	11	12	16	17	18	20	23
TIME (GMT)	1301	0005	1912	1541	1629	1823	1437
LAT (N)	15.13	13.96	14.50	14.50	14.50	14.50	13.75
LON (W)	63.43	61.78	56.50	55.25	55.25	48.50	43.05
SURF T (C)	26.0	25.8	26.1	25.6	25.6	25.2	24.8
28							
27							
26	38	96	1				
25	119	107	113	98	96	59	
24	139	118	127	115	112	103	76
23	155	133	144	123	127	113	91
22	170	147	157	131	140	126	107
21	186	151	172	144	155	139	119
20	205	163	189	162	172	144	129
19	217	176	215	169	186	154	136
18	238	190	230	174	211	175	152
17	255	201	249	191	236	200	162
16	271	225	273	217	262	223	177
15	299	245	302	229	289	246	204
14	319	269	334	253	305	284	
13	346	297	370	276	334	333	
12	367	331	401	310	358	368	
11	380	363	429	356	407	420	
10		424		394	429	450	
9							
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V ALBATROSS IV ALB-STACS33-89

XBT NO.	15	16	17	18	19	20	21
YEAR	89	89	89	89	89	89	89
MONTH	2	2	2	2	2	2	2
DAY (GMT)	23	24	24	24	24	25	25
TIME (GMT)	1940	0854	1214	1759	2127	0039	1047
LAT (N)	13.03	11.81	11.33	10.83	10.40	9.93	8.91
LON (W)	43.12	44.06	44.03	45.25	45.13	45.13	46.11
SURF T (C)	25.0	25.0	25.1	25.2	25.2	25.4	25.7
28							
27							
26							
25	0		3	86	63	85	76
24	75	68	72	91	74	91	77
23	82	77	76	93	79	94	80
22	87	86	80	94	82	97	89
21	94	94	82	96	87	106	93
20	112	98	85	102	92	111	99
19	121	107	95	107	96	127	102
18	146	120	104	113	99	138	106
17	167	125	117	126	103	143	110
16	182	134	123	137	109	154	119
15	197	140	130	145	135	165	127
14	218	151	138	157	153	188	136
13	238	166	147	168	169	198	149
12	270	199	168	185		215	172
11	297	222	199	214		250	208
10	353	307	278	281		331	279
9		405	403	382		402	392
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V ALBATROSS IV ALB-STACS33-89

XBT NO.	22	23	24	25	26	27	28
YEAR	89	89	89	89	89	89	89
MONTH	2	2	2	2	2	2	2
DAY (GMT)	25	27	27	27	27	28	28
TIME (GMT)	1353	1714	1849	2108	2313	0307	0510
LAT (N)	8.43	4.15	5.30	5.73	6.12	6.83	7.12
LON (W)	47.13	49.13	50.05	50.05	50.23	50.38	50.12
SURF T (C)	25.8	27.5	27.3	27.0	27.0	27.0	27.0
28							
27		88	86	0		0	
26		94	96	104	97	109	122
25	68	103	103	112	104	113	126
24	69	108	110	117	108	118	129
23	71	114	119	122	130	132	136
22	72	117	125	130	140	137	140
21	76	119	130	139	152	141	145
20	86	124	137	156	156	145	150
19	90	131	150	168	157	158	154
18	96	138	158	172	159	161	163
17	103	144	161	174	163	165	180
16	108	148	165	179	171	185	191
15	116	153	169	187	181	189	201
14	122	158	184	189	186	198	211
13	132	171	191	191	189	210	215
12	147	185	199	194	192	214	232
11	159	205	217	216	201	221	273
10	187	236	242		219	277	308
9	269	291	324		307	358	352
8	351	400	398		427	405	428
7							
6							

ISOTHERM DEPTHS (M)

R/V ALBATROSS IV — ALB-STACS33-89

XBT NO.	29	30	31	32	33	34	35
YEAR	89	89	89	89	89	89	89
MONTH	2	2	2	2	2	2	2
DAY (GMT)	28	28	28	28	28	28	28
TIME (GMT)	0717	0904	1107	1307	1503	1712	1920
LAT (N)	7.40	7.76	8.08	8.38	8.71	8.90	9.17
LON (W)	50.52	50.61	50.72	50.83	50.95	51.17	51.52
SURF T (C)	26.8	26.6	26.0	25.9	25.8	25.9	25.9
28							
27							
26	100	92	60				
25	105	95	77	77	66	74	84
24	112	111	83	81	73	76	89
23	117	118	92	91	81	80	95
22	122	125	98	102	86	83	102
21	129	129	105	109	92	104	109
20	132	137	110	113	104	114	115
19	137	142	123	126	112	122	122
18	150	152	133	140	122	132	131
17	165	169	145	150	133	141	148
16	183	184	156	160	144	149	160
15	192	198	171	170	159	155	175
14	204	204	181	179	175	168	183
13	219	216	202	201	199	196	192
12	231	238	220	226	228	207	201
11	255	259	252	256	246	250	240
10	303	290	290	305	290	311	295
9	353	338	347	329	319	343	361
8	411	388	394	397	355	392	404
7			460				
6							

ISOTHERM DEPTHS (M)

R/V ALBATROSS IV — ALB-STACS33-89

XBT NO.	36	37	38	39	40	41	42
YEAR	89	89	89	89	89	89	89
MONTH	2	2	3	3	3	3	3
DAY (GMT)	28	28	2	3	3	3	3
TIME (GMT)	2104	2107	2102	0001	0301	0610	0854
LAT (N)	9.40	9.40	7.34	7.74	8.22	8.68	9.14
LON (W)	51.62	51.62	53.53	53.98	54.38	54.81	55.24
SURF T (C)	25.9	25.1	27.0	27.1	27.0	27.0	26.7
28							
27			0	26		66	
26			91	92	95	101	107
25	91	16	102	107	102	110	113
24	98	95	106	114	107	114	116
23	109	106	108	119	113	118	120
22	112	113	112	121	120	129	126
21	121	116	115	126	131	140	139
20	130	125	119	132	138	148	153
19	138	134	124	141	155	172	174
18	145	144	134	161	198	212	195
17	151	149	152	178	227	233	211
16	165	157	162	193	238	250	230
15	177	171	174	216	258	258	235
14	193	184	190	223	272	276	247
13	210	201	200	238	288	292	258
12	222	225		255	296	312	279
11	267	248		286	330	321	306
10	310	282		330	346	359	352
9	399	325		400	397	422	405
8		425			428		
7		479					
6		586					

ISOTHERM DEPTHS (M)

R/V ALBATROSS IV — ALB-STACS33-89

XBT NO.	43	44	45	46	47	48	49
YEAR	89	89	89	89	89	89	89
MONTH	3	3	3	3	3	3	3
DAY (GMT)	3	3	3	4	4	4	4
TIME (GMT)	1202	1753	2101	0003	0615	0857	1205
LAT (N)	9.54	10.20	10.61	11.05	11.75	11.99	12.42
LON (W)	55.75	56.65	57.09	57.43	58.19	58.54	59.05
SURF T (C)	27.1	26.5	26.4	26.2	26.3	26.3	26.2
28							
27	72						
26	95	68	71	100	101	89	74
25	106	80	101	127	114	99	90
24	110	88	111	136	120	112	96
23	113	107	122	143	137	120	116
22	118	121	135	149	152	138	128
21	124	146	166	153	164	146	139
20	140	159	176	168	174	160	160
19	144	168	185	188	187	172	172
18	155	171	192	216	194	176	189
17	167	182	211	229	201	181	197
16	173	201	227	241	210	204	222
15	186	213	257	261	238	218	232
14	240	228	279	279	267	248	258
13	261	241	302	298	322	280	316
12	273	271	320	311	347	303	342
11	294	293		374	387	346	
10	352	337		411	425	374	
9	404	416		449		429	
8							
7							
6							

ISOTHERM DEPTHS (m)

R/V ALBATROSS IV — ALB-STACS33-89

XBT NO.	50	51	52
YEAR	89	89	89
MONTH	3	3	3
DAY (GMT)	13	13	13
TIME (GMT)	0342	1141	1648
LAT (N)	26.48	26.50	26.47
LON (W)	74.52	75.00	75.52
SURF T (C)	22.4	21.7	24.0
28			
27			
26			
25			
24			
23			0
22	32		110
21	73	89	177
20	106	115	203
19	150	151	227
18	300	326	276
17	429	441	399
16			
15			
14			
13			
12			
11			
10			
9			
8			
7			
6			

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	1	2	3	4	5	6	7
YEAR	89	89	89	89	89	89	89
MONTH	8	8	8	8	8	8	8
DAY (GMT)	22	23	23	23	23	23	23
TIME (GMT)	1657	0236	0250	0338	0405	0432	1655
LAT (N)	25.84	26.03	26.13	26.25	26.36	26.47	25.30
LON (W)	80.05	78.85	78.81	78.76	78.71	78.67	75.93
SURF T (C)	30.3	29.3	29.2	29.3	29.1	29.1	28.9
28	33	49	55	58	65	64	46
27	38	79	69	71	78	76	52
26	40	102	85	84	86	88	65
25	43	118	99	99	96	98	83
24	45	133	119	120	116	110	98
23	46	143	132	145	138	124	118
22	48	153	151	168	165	148	138
21	53	173	165	182	182	181	165
20	57	196	188	208	208	210	199
19	60	224	219	244	242	241	235
18	65		303	321	321	316	328
17	67		354	390	390	394	411
16	70			444			
15	73						
14	88						
13	96						
12	109						
11	126						
10	143						
9	156						
8	183						
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	8	9	10	11	12	13	14
YEAR	89	89	89	89	89	89	89
MONTH	8	8	8	8	8	8	8
DAY (GMT)	24	24	24	24	24	24	24
TIME (GMT)	1655	1751	1843	1931	2023	2113	2208
LAT (N)	21.11	20.91	20.77	20.64	20.51	20.38	20.25
LON (W)	73.87	73.70	73.56	73.42	73.28	73.14	73.00
SURF T (C)	29.0	29.1	28.9	28.9	28.9	28.8	29.0
28	47	61	56	55	44	72	71
27	52	66	72	64	51	84	87
26	66	75	77	72	71	100	96
25	78	97	93	100	124	128	120
24	104	109	120	120	149	148	139
23	123	141	137	143	165	166	167
22	148	162	163	164	182	183	178
21	176	169	200	182	193	202	190
20	197	192	222	212	221	216	210
19	226	222	271	239	258	264	247
18	302		310	328	333	330	304
17	380			401	424	385	354
16	442					429	392
15							425
14							
13							
12							
11							
10							
9							
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	15	16	17	18	19	20	21
YEAR	89	89	89	89	89	89	89
MONTH	8	8	8	8	8	9	8
DAY (GMT)	24	25	25	25	25	24	25
TIME (GMT)	2252	1848	1959	2056	2156	1255	2345
LAT (N)	20.11	18.93	18.87	18.81	18.75	23.44	18.63
LON (W)	72.82	68.62	68.39	68.15	67.92	72.96	67.45
SURF T (C)	29.2	28.4	29.2	28.9	28.9	28.6	28.9
28	65	21	41	41	41	59	44
27	80	30	57	49	58	65	57
26	97	54	70	60	73	78	68
25	110	95	101	91	107	94	88
24	144	130	133	133	131	117	117
23	172	158	159	155	159	139	135
22	197	193	171	168	180	157	148
21	227	216	193	185	198	182	159
20	237	239	224	210	210	207	177
19	254		248	239	231	256	205
18	267		282	274	277	344	225
17	309		323	324	314	427	297
16	348		363	369	372		345
15	388		409	401	425		392
14	423						428
13							
12							
11							
10							
9							
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	22	23	24	25	26	27	28
YEAR	89	89	89	89	89	89	89
MONTH	8	8	8	8	8	8	8
DAY (GMT)	26	26	26	26	26	26	26
TIME (GMT)	0051	1106	1158	1300	1404	1655	1940
LAT (N)	18.58	18.10	18.01	17.92	17.81	17.35	16.90
LON (W)	67.22	64.99	64.78	64.57	64.33	63.88	63.42
SURF T (C)	28.7	28.3	28.7	28.6	28.5	28.9	28.9
28	39	12	24	40	45	36	37
27	55	29	33	50	59	49	49
26	74	46	50	64	70	56	68
25	94	79	77	82	83	80	87
24	119	121	116	107	119	101	114
23	138	137	146	135	148	129	138
22	151	163	158	165	168	146	149
21	172	178	166	184	174	164	163
20	204	199	183	201	199	177	182
19	231	221	224	226	239	206	211
18	268	254	267	260	265	233	234
17	301	313	307	295	301	263	268
16		357	342	338	319	286	293
15		392	388	379	357	323	326
14		427	434	408	384	356	348
13				433	410	373	381
12						419	410
11							
10							
9							
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	29	30	31	32	33	34	35
YEAR	89	89	89	89	89	89	89
MONTH	8	8	8	8	8	8	8
DAY (GMT)	26	27	27	27	27	28	28
TIME (GMT)	2232	0117	0416	0656	1155	1457	1655
LAT (N)	16.43	15.97	15.52	15.00	14.59	14.30	13.82
LON (W)	62.96	62.49	62.05	61.58	61.15	61.24	61.42
SURF T (C)	28.6	29.1	29.0	28.7	28.6	28.9	28.8
28	38	61	67	41	31	32	29
27	57	78	80	60	61	51	44
26	69	88	90	82	74	78	72
25	78	96	104	107	94	108	93
24	105	111	119	115	123	127	112
23	134	125	133	117	132	137	124
22	159	137	144	132	160	145	135
21	173	150	154	158	169	159	142
20	187	165	163	175	177	164	146
19	201	181	176	186	189	170	166
18	223	194	189	194	219	188	177
17	255	217	220	226	235	212	188
16	284	258	241	260	250	225	207
15	310	285	273	275	278	242	246
14	336	320	309	290	297	259	273
13	361	346	346	333	324	304	316
12	390	375	376	364	361	327	360
11	432	438	392	395	391	412	394
10					444		445
9							
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	36	37	38	39	40	41	42
YEAR	89	89	89	89	89	89	89
MONTH	8	8	8	8	8	8	8
DAY (GMT)	28	28	29	29	29	29	29
TIME (GMT)	2059	2300	0122	0254	0450	0652	1655
LAT (N)	13.47	13.05	12.52	12.15	11.73	11.42	12.00
LON (W)	61.58	61.70	61.88	62.01	62.07	61.67	60.10
SURF T (C)	29.4	29.5	29.0	29.4	29.6	30.0	29.9
28	35	25	41	37	21	27	37
27	54	41	53	40	35	31	48
26	62	54	62	53	43	40	64
25	78	62	70	85	73	68	83
24	90	84	85	101	88	75	95
23	104	90	98	108	98	81	103
22	121	98	110	117	107	93	118
21	134	111	116	135	113	99	122
20	148	124	121	143	141	113	134
19	168	152	127	159	155	125	139
18	180	179	150	169	167	130	151
17	205	191	183	189	183		168
16	217	196	192	215	214		181
15	230	226	206	231	239		208
14	239	245	235	248	279		243
13	263	272	262	280	295		268
12	293	310	295	309	307		311
11	352	349	343	345	347		360
10		385	415	383	393		385
9		435		435	440		437
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	43	44	45	46	47	48	49
YEAR	89	89	89	89	89	89	89
MONTH	8	8	8	8	8	8	9
DAY (GMT)	30	31	31	31	31	31	1
TIME (GMT)	1654	0828	1135	1430	1921	2239	0647
LAT (N)	12.99	12.85	12.66	12.48	12.23	11.86	11.27
LON (W)	57.51	55.43	54.73	54.09	53.65	52.97	51.84
SURF T (C)	29.2	28.4	28.3	29.1	29.6	28.8	28.7
28	32	32	22	31	27	31	39
27	42	49	45	43	53	50	53
26	64	73	63	68	72	66	61
25	82	96	82	95	91	83	77
24	118	122	105	109	101	103	96
23	127	139	121	119	113	110	111
22	138	147	130	130	124	127	115
21	150	155	138	136	131	139	119
20	157	168	146	143	138	147	128
19	168	178	153	152	153	160	134
18	177	186	167	166	160	169	140
17	196	200	177	175	167	186	146
16	204	206	197	180	173	202	153
15	221	225	213	187	187	219	165
14	235	241	232	205	201	230	181
13	252	278	252	231	221	245	202
12	263	302	256	275	241	261	217
11	290	327	314	299	264	314	249
10	349	391	353	354	325	385	298
9	395	428	419	407	389	430	392
8							
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	50	51	52	53	54	55	56
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	1	1	1	1	2	2	2
TIME (GMT)	0959	1243	1814	2051	0442	0715	1515
LAT (N)	10.96	10.65	10.36	10.05	9.44	9.13	8.52
LON (W)	51.28	50.71	50.15	49.58	48.47	47.90	46.78
SURF T (C)	29.0	28.7	28.9	28.9	28.4	28.5	28.6
28	43	29	28	37	47	44	37
27	53	44	50	47	58	56	47
26	61	52	59	62	69	68	59
25	69	65	79	74	77	77	75
24	79	79	92	80	84	90	86
23	90	90	98	86	95	95	90
22	98	99	105	96	101	100	93
21	112	109	109	108	109	107	96
20	119	118	120	113	112	111	
19	125	124	134	119	117	119	
18	131	134	144	126	126	125	
17	143	139	151	132	144	133	
16	159	147	163	137	156	146	
15	183	157	176	152	174	163	
14	192	171	186	161	184	178	
13	199	196	202	187	204	194	
12	218	216	235	201	208	198	
11	258	251	296	230	252	239	
10	301	293	340	292	286	271	
9	385	360	425	368	356	344	
8		440			434	390	
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	57	58	59	60	61	62	63
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	2	2	3	3	3	3	4
TIME (GMT)	1521	1750	0137	0429	1237	1947	0200
LAT (N)	8.52	8.21	7.60	7.29	6.50	5.50	4.50
LON (W)	46.78	46.22	45.10	44.54	44.00	44.00	44.00
SURF T (C)	28.7	28.7	28.8	28.7	28.9	29.4	28.9
28							
27	37	30	44	44	43	33	41
26	47	39	57	60	48	45	69
25	59	52	62	65	52	61	92
24	74	62	68	71	60	74	104
23	84	66	73	75	65	81	110
22	88	75	83	82	71	88	116
21	91	78	90	89	78	91	120
20	94	87	95	99	83	94	123
19	97	90	100	103	88	97	124
18	99	95	105	106	98	100	125
17	107	98	108	111	104	104	126
16	124	108	113	115	107	110	128
15	129	113	117	120	109	116	130
14	133	126	122	125	119	123	132
13	153	133	128	134	126	127	136
12	169	144	138	149	138	131	144
11	180	158	158	161	154	143	162
10	196	197	182	175	179	158	188
9	244	244	214	218	238	196	221
8	308	327	275	285	296	257	283
7	374	404	370	358	402	379	405
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	64	65	66	67	68	69	70
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	4	4	5	5	5	5	6
TIME (GMT)	0859	1233	0249	0911	2034	2239	0748
LAT (N)	3.50	2.98	2.09	1.25	0.67	0.33	0.81
LON (W)	44.00	44.00	44.00	44.00	44.12	44.31	44.72
SURF T (C)	27.0	27.5	27.0	27.0	27.3	27.3	26.9
28							
27	99	96	48	22	64	79	62
26	124	134	82	86	90	91	80
25	134	156	119	95	93	96	82
24	160	158	138	103	98	97	83
23	162	159	140	105	109	99	86
22	163	159	142	110	110	102	92
21	164	160	146	113	114	106	98
20	164	160	149	114	119	111	112
19	165	162	151	127	131	117	116
18	166	168	152	135	142	132	137
17	168	179	168	145	147	144	142
16	173	185	172	148	150	160	167
15	175	193	177	160	168	200	184
14	178	203	229	227	201	223	205
13	182	208	256	251	220	250	212
12	185	225	282	277	307	282	266
11	197	244	299	322	337	331	298
10	227	291	330	337	360	348	
9	284	333	352	357	372	412	
8	349	388				438	
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	71	72	73	74	75	76	77
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	6	6	7	7	8	8	8
TIME (GMT)	1543	2304	0711	2056	0051	0446	0821
LAT (N)	2.10	3.39	4.68	5.23	4.95	4.70	4.45
LON (W)	45.34	45.95	46.57	47.02	47.40	47.73	48.08
SURF T (C)	27.5	27.5	27.3	27.5	27.1	26.9	26.8
28							
27	32	94	83	39	33	29	22
26	85	118	117	102	98	113	114
25	109	141	143	113	115	120	118
24	115	146	149	154	143	126	122
23	117	150	156	162	154	142	126
22	120	153	157	169	165	153	132
21	123	155	158	175	175	161	157
20	126	157	160	178	177	169	180
19	134	158	164	181	186	171	181
18	145	161	171	186	191	172	181
17	151	176	178	190	195	175	182
16	154	189	183	196	201	177	182
15	172	213	189	204	204	180	183
14	193	226	193	211	209	185	184
13	243	241	201	224	213	197	188
12	288	252	211	235	230	211	213
11	309	276	223	251	251	271	346
10	342	317	258	259	285	325	414
9	373	372	291	314	344	384	447
8			336	374	388		
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	78	79	80	81	82	83	84
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	8	8	9	9	9	9	10
TIME (GMT)	1837	2104	0354	0908	1512	2125	1134
LAT (N)	4.19	3.90	4.22	5.16	6.10	7.03	7.29
LON (W)	48.37	48.63	48.92	49.22	49.54	49.85	50.18
SURF T (C)	27.6	27.3	27.2	27.0	29.0	28.6	28.7
28					22	21	27
27	53	29	37	45	32	41	42
26	98	94	84	77	45	56	65
25	101	108	96	89	61	61	78
24	107	112	107	97	81	76	83
23	120	118	111	110	94	82	87
22	123	125	120	122	111	87	89
21	141	132	132	142	136	89	93
20	173	150	156	155	139	92	97
19	174	153	162	156	140	99	98
18	174	160	167	157	141	115	103
17	175	164	170	158	144	123	108
16	175	165	172	161	162	127	111
15	176	166	173	165	164	129	118
14	176	167	174	168	166	131	121
13	178	169	179	177	175	134	123
12	199	180	202	202	217	147	130
11	251	243	257	295	248	186	178
10	359	304	297	404	324	235	226
9	441	393	361		412	294	294
8						399	341
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	85	86	87	88	89	90	91
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	10	11	11	12	12	12	12
TIME (GMT)	2045	0516	1426	1343	1927	2140	2341
LAT (N)	6.87	6.45	6.14	6.03	6.25	6.70	7.16
LON (W)	50.53	50.88	51.13	51.17	51.66	51.89	52.10
SURF T (C)	29.0	28.5	28.6	28.7	29.6	29.1	29.1
28	40	44	45	33	43	46	39
27	72	69	63	46	52	69	86
26	82	82	82	83	85	117	121
25	85	95	106	101	114	126	148
24	92	103	112	105	119	136	153
23	96	115	123	114	129	143	157
22	104	124	135	131	151	147	159
21	111	130	137	134	155	148	165
20	128	133	142	138	159	154	168
19	132	136	145	142	165	161	172
18	134	138	151	145	168	165	182
17	136	142	154	164	170	166	194
16	137	144	160	182	173	168	203
15	139	146	186	201	176	174	212
14	143	148	198	215	180	179	220
13	154	159	201	221	187	184	230
12	183	179	215	229	195	209	239
11	223	214	243	246	218	267	254
10	265	298	321	271	255	317	316
9	332	383	377	306	299	331	352
8		433		405	339	367	406
7					415	414	
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	92	93	94	95	96	97	98
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	13	13	13	13	14	14	14
TIME (GMT)	0202	0419	0519	1255	1230	1555	1910
LAT (N)	7.62	8.07	7.83	7.29	8.39	8.67	8.95
LON (W)	52.33	52.57	52.66	52.88	56.67	57.38	58.09
SURF T (C)	28.6	28.8	28.2	28.9	28.2	29.1	29.3
28	44	49	22	35	34	34	48
27	91	81	64	75	54	48	58
26	124	120	104	106	62	59	71
25	150	153	135	135	75	77	78
24	169	161	151	141	93	85	86
23	173	164	159	147	102	90	97
22	177	167	161	151	110	94	111
21	184	168	164	153	118	102	123
20	186	171	168	156	128	135	131
19	188	184	181	162	138	152	148
18	191	192	187	172	144	171	162
17	199	197	192	177	164	183	180
16	205	202	195	186	179	213	195
15	213	209	200	190	189	222	205
14	244	217	205	196	199	240	219
13	252	226	216	209	226	258	242
12	270	237	224	225	243	273	250
11	295	294	280	247	276	296	283
10	344	360	310	279	320	355	323
9	386	432	386	404	357	395	395
8					412		
7							
6							

ISOTHERM DEPTHS (M)

R/V BALDRIGE MB-STACS34-89

XBT NO.	99	100	101	102	103	104	105
YEAR	89	89	89	89	89	89	89
MONTH	9	9	9	9	9	9	9
DAY (GMT)	15	15	20	21	22	23	24
TIME (GMT)	0606	1653	1255	1253	1250	1255	1255
LAT (N)	9.50	9.51	13.21	15.93	17.79	20.26	23.44
LON (W)	58.83	59.46	63.58	68.73	64.76	67.97	72.96
SURF T (C)	29.2	30.1	29.0	29.4	26.8	28.3	28.6
28	31	30	43	31		75	59
27	45	47	57	52		80	65
26	70	63	59	102	74	86	78
25	88	82	66	130	84	98	94
24	106	89	72	163	101	121	117
23	114	103	79	178	129	152	139
22	123	114	89	197	144	168	157
21	134	123	103	212	170	195	182
20	145	131	116	231	187	215	207
19	158	140	136	243	201	256	256
18	172	155	150	269	224	297	344
17	186	166	167	298	245	338	428
16	197	179	204	321	282	377	
15	225	189	230	344	328	428	
14	239	208	243	370	348		
13	264	227	272	401	376		
12	293	247	315	445	423		
11	327	276	339		451		
10	350	333	403				
9	379	403					
8	416						
7							
6							

☆U.S. GOVERNMENT PRINTING OFFICE: 1990-573-007/21008