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A COMPILATION OF WIND, CURRENT, BOTTOM-PRESSURE, AND STD/CTD MEASUREMENTS IN THE NORTHEAST GULF OF ALASKA, FEBRUARY-MAY 1975

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Seattle, Washington
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Computer-generated summaries of moored wind recorder, current-meter, and bottom-pressure measurements obtained from February to May 1975 on the Northeast Gulf of Alaska continental shelf about 25 km southwest of Icy Bay are presented. Included are statistics, histograms, time series, stick diagrams, progressive vector diagrams, and density spectra.

Summaries of salinity-temperature-depth/conductivity-temperature-depth (STD/CTD) measurements recorded in an 800- by 200-km region bounded by the Alaskan coast and 58° N and by 141° W and 149° W are also presented. These computer-generated outputs include vertical profiles of temperature, salinity, and sigma-t and tables of temperature, salinity, sigma-t, and dynamic height anomaly at selected depths. Meteorological observations associated with each STD/CTD cast are given.

1. INTRODUCTION

During February-May 1975, current, temperature, and bottom-pressure measurements were made on the continental shelf about 25 km southwest of Icy Bay. The water depth was 100 m at the two mooring sites, which were separated by about 0.5 km, and the bathymetric contours were approximately parallel to the coast. Hydrographic surveys were made from the NOAA research ships *Oceanographer* and *Rainier* during February and May, respectively. In this report we present a compilation of the wind, current, and bottom-pressure time-series and STD/CTD measurements.

Figure 1 shows the positions of the two moorings (stations 63 and 63½) and the locations of STD casts 1-81 taken during February from the *Oceanographer*. Figure 2 shows the locations of CTD casts 76-139 taken during May from the *Rainier*. Schematic diagrams of the moorings at stations 63 and 63½ are illustrated in figures 3 and 4, respectively.

Record lengths of the data are given in figure 5. During recovery, all instrumentation below the uppermost AMF current meter at station 63 was lost when a ½-in shackle broke. Subsequent dragging efforts failed to retrieve these instruments. Wind recorder VAWR 0237 malfunctioned on February 12 during a severe 4-day storm, and the current meter at

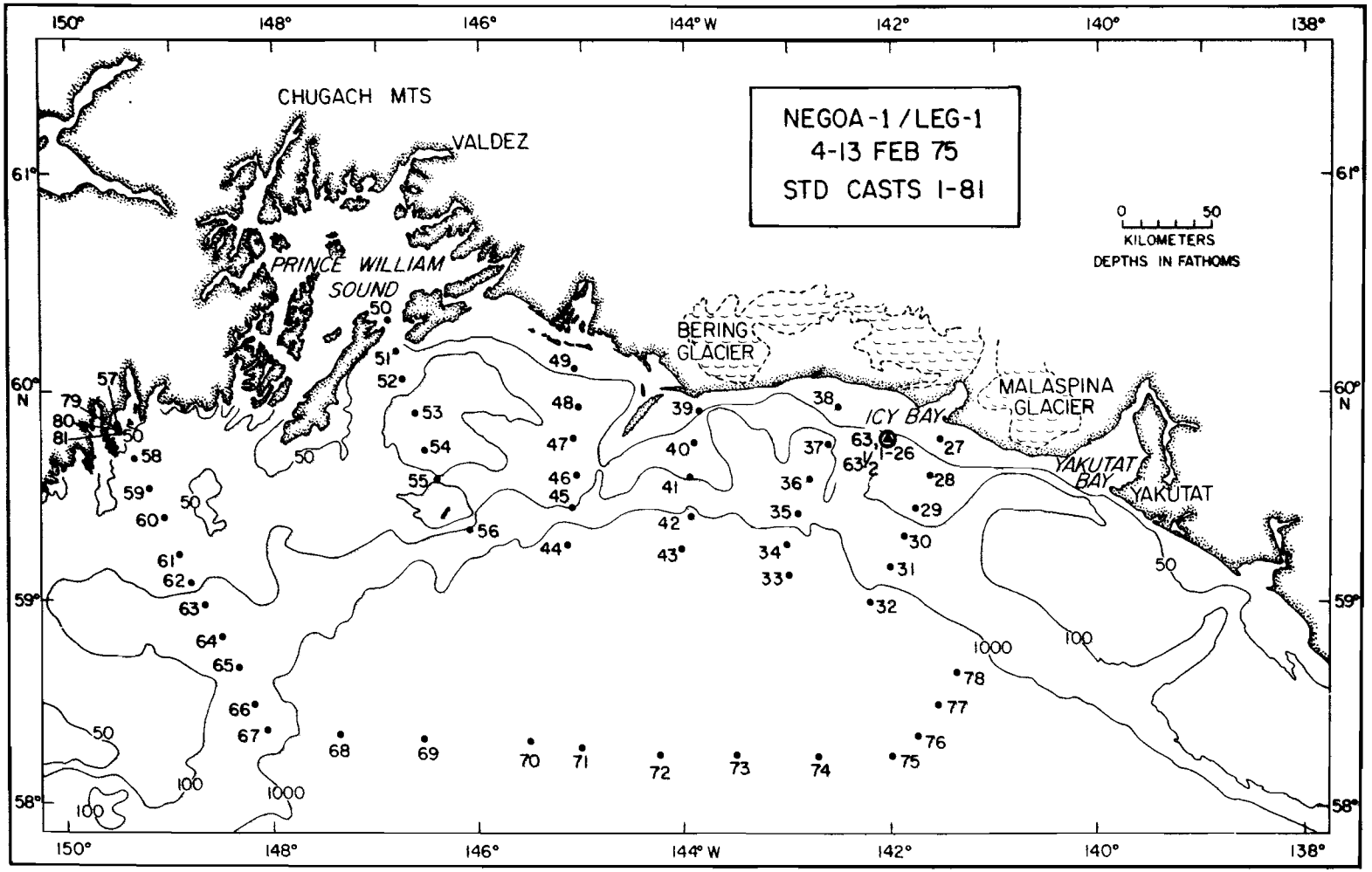

Figure 1. Location chart showing the positions of the surface and subsurface moored buoys (stations 63 and 63½, respectively, ⓐ) and the STD casts (stations 1-81, •) taken by the *Oceanographer* in February 1975.

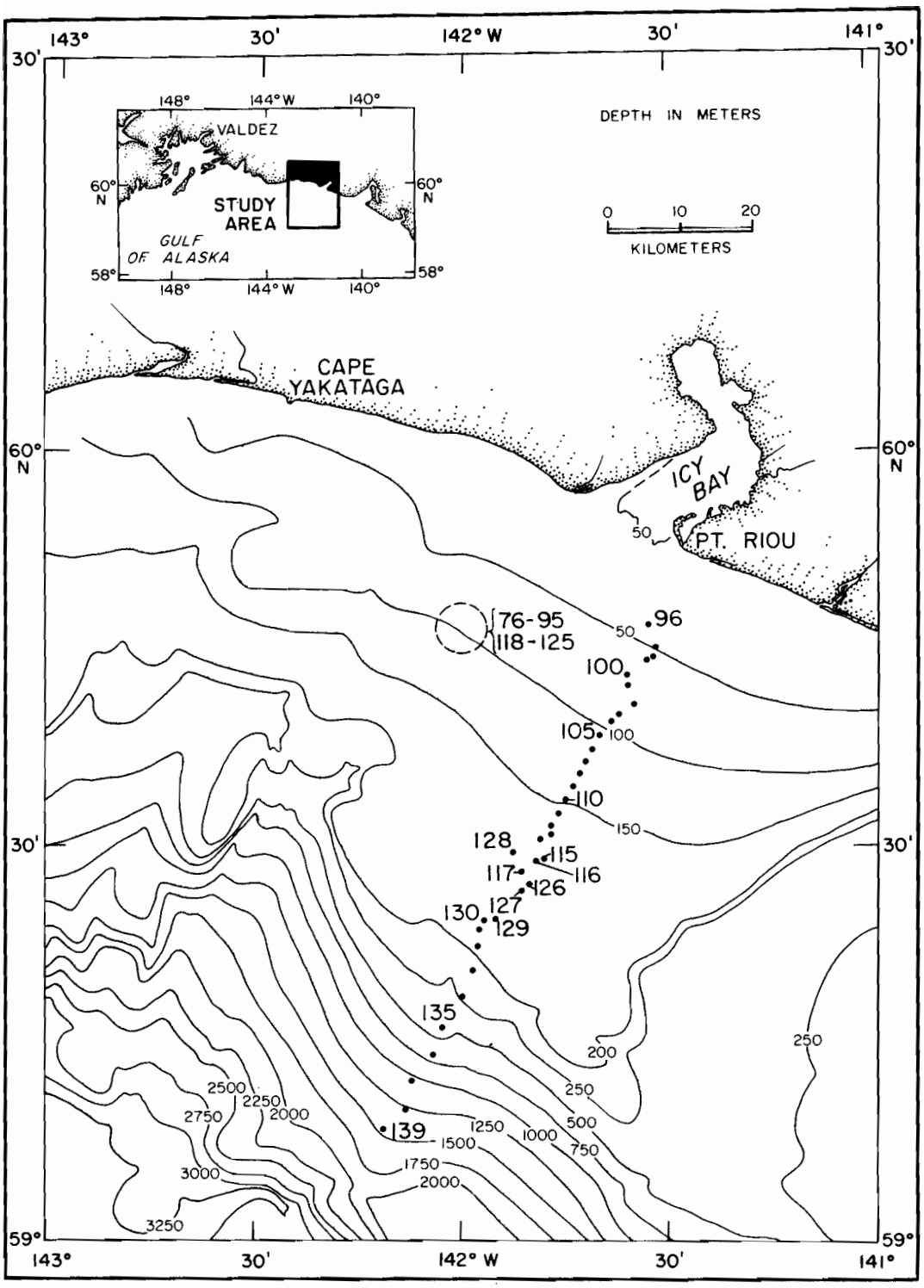

Figure 2. Location chart showing the positions of the CTD casts (stations 76-139, •) taken by the *Rainier* in May 1975.

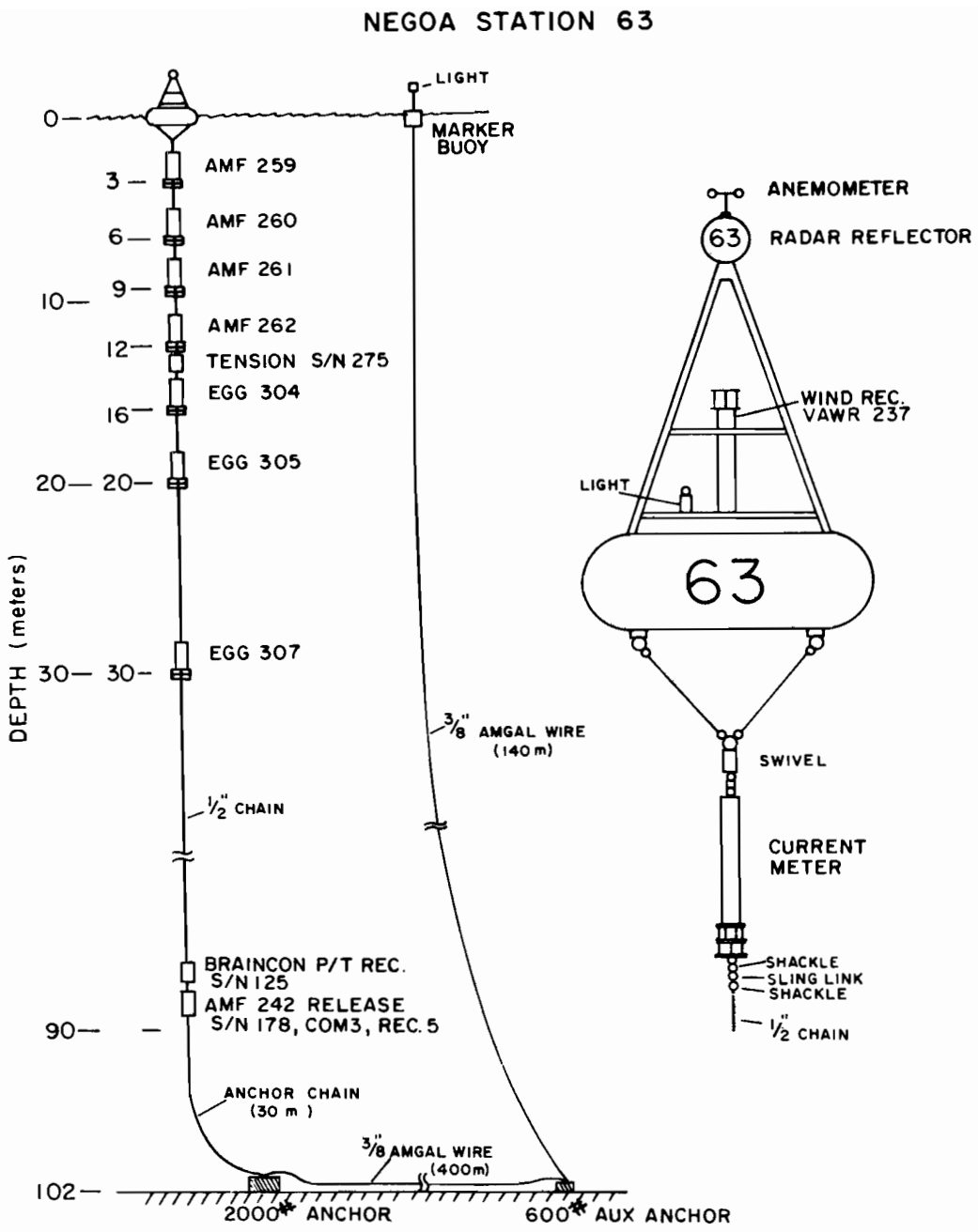

Figure 3. Schematic diagram showing details of surface buoy at station 63 and attached marker buoy.

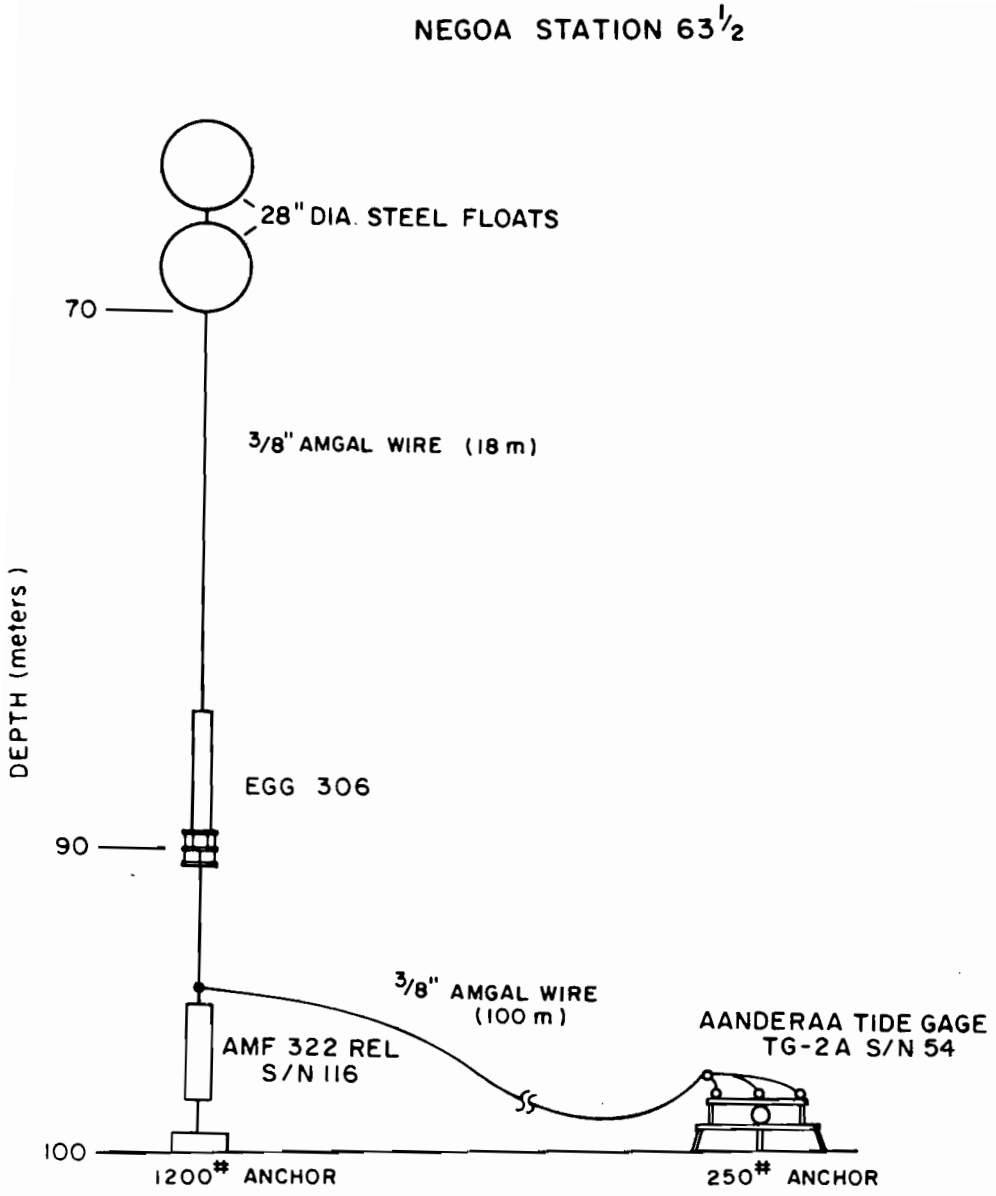

Figure 4. Schematic diagram showing details of subsurface buoy at station 63½.

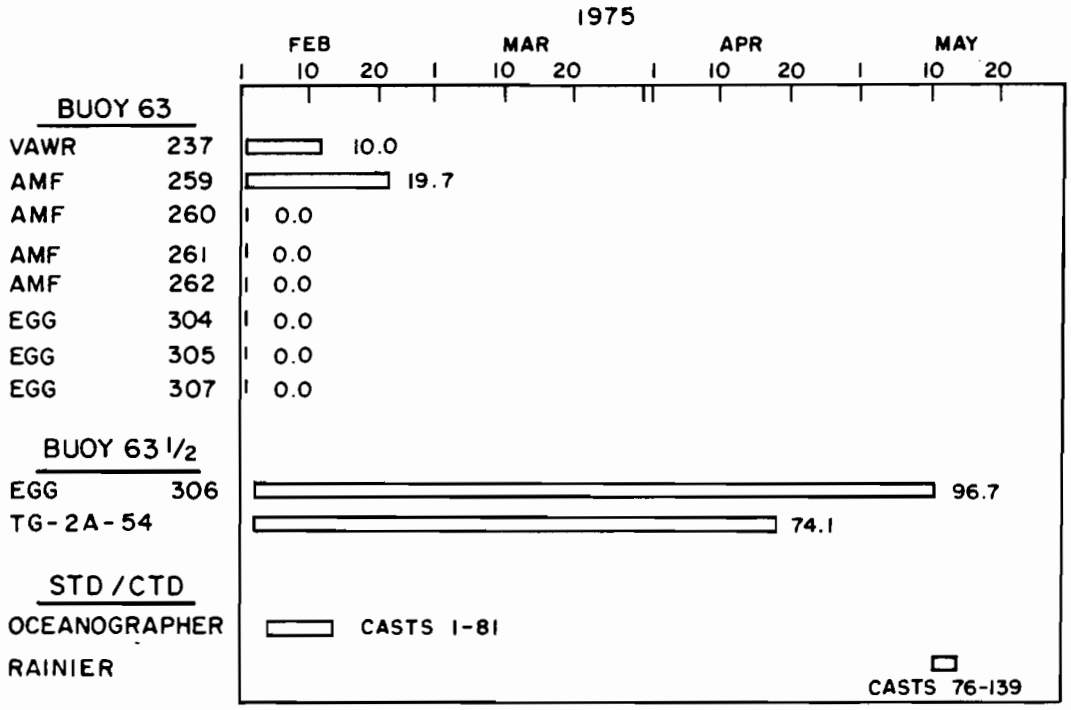

Figure 5. Record length distribution of time series data recorded at stations 63 and 63½ and of STD/CTD data recorded by the *Oceanographer* and *Rainier*.

3-m depth ceased functioning on February 21 due to Savonius rotor failure. Thus only a 10-day wind record and a 19.7-day current record at 3-m depth were obtained from station 63. Data from the bottom-pressure recorder at station 63½ was considered unreliable after 74.0 days due to synch-pulse problems. In addition, a total of 81 STD casts and 64 CTD casts were taken in support of the time-series measurements.

Instrument descriptions, data processing, and data presentation for the time series of winds, currents and bottom pressure, and STD/CTD measurements are described in the subsequent sections.

2. INSTRUMENTATION

2.1 Wind Measurements

The wind recorder was constructed from an AMF vector-averaging current meter operating in an inverted position. Wind speed was measured by a Climet 3-cup anemometer, and wind direction by a balanced vane. These sensors were coupled to the internal vector-averaging computer such that two vector computations were made for each anemometer revolution. Every 7.5 min, a seven-word logical record containing east, north, and rotor counts, instantaneous compass and vane, clock, and temperature information, was written on magnetic cassette tape.

Based on calibration data from the Atmospheric Science Department's wind tunnel at the University of Washington, the following equation was used to convert the recorded counts per minute, Ω, to wind speed, s, in meters per second:

$$s = 0.26 + 0.01165\Omega \ .$$

The standard error of this linear least-squares fit was ~0.1 m/s.

2.2 Current Measurements

Two types of self-recording current meters were used: the AMF vector-averaging current meter (VACM) and the EG&G Geodyne 850 current meter.

The AMF model 610 tape recording current meter is manufactured by the AMF Electrical Products Division of AMF, Inc., Alexandria, Virginia, and is based on a model designed and developed at the Woods Hole Oceanographic Institution. This instrument, which contains a Savonius rotor, a direction vane, a magnetic compass, and a thermistor, measures current speed and direction and water temperature continuously. When one of the eight small magnets mounted on the rotor passes the Sony magneto diode mounted on the case, instantaneous vane and compass directions are sampled and used to convert a unit vector to Cartesian coordinates. These resulting components are added to the east and north counting registers. In this experiment the accumulated components, as well as rotor counts and

instantaneous compass and vane words, were recorded on magnetic cassette tape at 7.5-min intervals.

The calibration equations used to compute the U (east-west) and V (north-south) components of water velocity in centimeters per second are based upon tow tank runs made by John Cherriman at the Institute of Oceanographic Sciences in England (McCullough, 1975):

$$U\ (\text{east}) = \left(\frac{2*E-R}{R}\right) * \left(B + A * \frac{R}{8*\Delta T}\right) ,$$

$$V\ (\text{North}) = \left(\frac{2*N-R}{R}\right) * \left(B + A * \frac{R}{8*\Delta T}\right) ,$$

where E, N, R = east, north, and rotor integer values,

ΔT = sampling time interval in seconds (7.5 min),

$$A = \begin{cases} 36.1; & \frac{R}{8*\Delta T} < 0.915 \\ 32.6; & \frac{R}{8*\Delta T} \geq 0.915 \end{cases} ,$$

and

$$B = \begin{cases} 2.0; & \frac{R}{8*\Delta T} < 0.915 \\ 5.2; & \frac{R}{8*\Delta T} \geq 0.915 \end{cases} .$$

The Geodyne model A-850 tape recording current meter is manufactured by the Geodyne Division of EG&G International, Waltham, Massachusetts, and is based on a film recording model originally developed by Richardson (Richardson et al., 1963). Although the instrument can record data in a nearly continuous mode, in this experiment the instrument recorded 14 sequential samples during a 74-s interval every 30 min. Each sample consisted of a speed measured over a 5.265-s interval and an instantaneous compass and vane direction. Between bursts the instrument was in a "shutdown" mode.

The calibration equations used to convert revolutions per second, Ω, to current speed, s, in centimeters per second are (Fofonoff and Ercan, 1967):

$$s = 0; \quad \Omega = 0 .$$

$$s = 1.334 + 38.91*\Omega; \quad 0 < \Omega \leq 1.2 .$$

$$s = 4.197 + 36.49*\Omega; \quad 1.2 < \Omega .$$

2.3 Bottom-Pressure Measurements

The Aanderaa TC-2A water level gage utilizes a quartz crystal pressure transducer as a sensing element with a 400-psi (275-m) range. Pressure was integrated over 4 min and recorded on magnetic tape every 15 min. The manufacturer quoted accuracy as 0.01% of range (3 cm) with a resolution of 0.001% of range. The instrument was calibrated prior to deployment at the factory. After recovery it was calibrated at the Northwest Regional Calibration Center (NWRCC) in Bellevue, Washington, using a precision dead weight tester. Both calibrations were at 3°C. A third-order polynomial regression was made to the calibration data. The relative calibration curves agreed within the accuracy of the tester (0.025% of applied pressure).

2.4 STD/CTD Measurements

Eighty-one STD vertical profiles were made from the NOAA research ship *Oceanographer* with a Hytech model 9006 STD profiling system and were recorded on seven-track magnetic tape by a Bissett-Berman model 8114A digital data logger. The data were recorded only during the descent of the instrument at a rate of one scan every 0.2 s. The descent rate was approximately 30 m/min in the upper 200 m and 45 m/min below 200 m.

Sixty-four CTD vertical profiles were made from the NOAA research ship *Rainier* with a Plessey model 9040 CTD profiling system and were recorded on seven-track magnetic tape by a Plessey model 8400 digital data logger. The data were recorded only during the descent of the instrument at a rate of one scan every 0.2 s. The descent rate was approximately 30 m/min in the upper 200 m and 45 m/min below 200 m. Both instruments were calibrated at NWRCC.

3. DATA PROCESSING

3.1 Time Series

Time-series data processing and editing followed previously established procedures (Halpern, 1972a; Halpern et al., 1973; Halpern et al., 1974; Holbrook and Halpern, 1975) which include: (1) four-track cassette or two-track cartridge to seven-track tape translation; (2) bit pattern unpacking and conversion to cgs units (using calibration equations discussed earlier); (3) byte structure, parity and consistency checking; (4) linear interpolation about "bad" data values; (5) data stripping; and (6) date/time group addition.

The resulting edited basic data sets are archived on seven-track magnetic tape at the National Oceanographic Data Center (NODC) in Washington, D. C.

3.2 STD/CTD

STD/CTD data processing and editing followed the procedures and formats developed in previous reports (Halpern, 1972b; Halpern and Holbrook, 1973; Holbrook and Halpern, 1974; Holbrook, 1975). The principal steps include: (1) bit pattern unpacking and conversion to cgs units (using NWRCC calibration equations); (2) arranging each cast such that depth increases monotonically by dropping out-of-order scans; (3) applying temperature and salinity corrections based on Nansen and Niskin bottle comparisons (figs. 6 and 7 for *Oceanographer* and *Rainier* cruises, respectively), (4) averaging temperature and salinity over 1-m depth intervals, and (5) dropping anomalous temperature and salinity values.

The edited 1-m averaged data sets are archived on seven-track magnetic tape at NODC.

4. DATA PRESENTATION

4.1 Time-Series Measurements

Edited wind and current time-series data are presented in the form of (1) standard statistics, (2) histograms of speed and direction, (3) time series of hourly values of speed, direction, north-south (V) and east-west (U) components of velocity, (4) low-pass filtered "stick" diagram, (5) progressive vector diagram, and (6) spectral density estimates of U, V, kinetic energy, and clockwise and counterclockwise rotary components. A description of the computer software used to present these data has been given elsewhere (Holbrook and Halpern, 1975). Edited bottom pressure time-series data are presented in the form of (1) standard statistics, (2) histograms, (3) spectral density estimates, and (4) time series of hourly values.

4.2 STD/CTD Measurements

Edited, 1-m averaged data from the STD/CTD casts are presented as vertical profiles of temperature, salinity, and sigma-t and tables of selected values of temperature, salinity, sigma-t, and dynamic height anomaly. The shallowest and deepest 1-m averaged values of each set of STD measurements are shown in the table. When the uppermost depth was not equal to 0 m, surface values of temperature and salinity were computed from a least-squares linear fit of the data recorded above 7 m below the surface. Sigma-t and the anomaly of specific volume were computed from equations developed by Ekman and Knudsen (Sweers, 1971). Depth in meters was defined as equivalent to pressure in decibars. The trapezoidal method of integration was used to calculate the anomaly of dynamic depth. Tables 1 to 6 contain the abbreviations and units used to describe the data summaries.

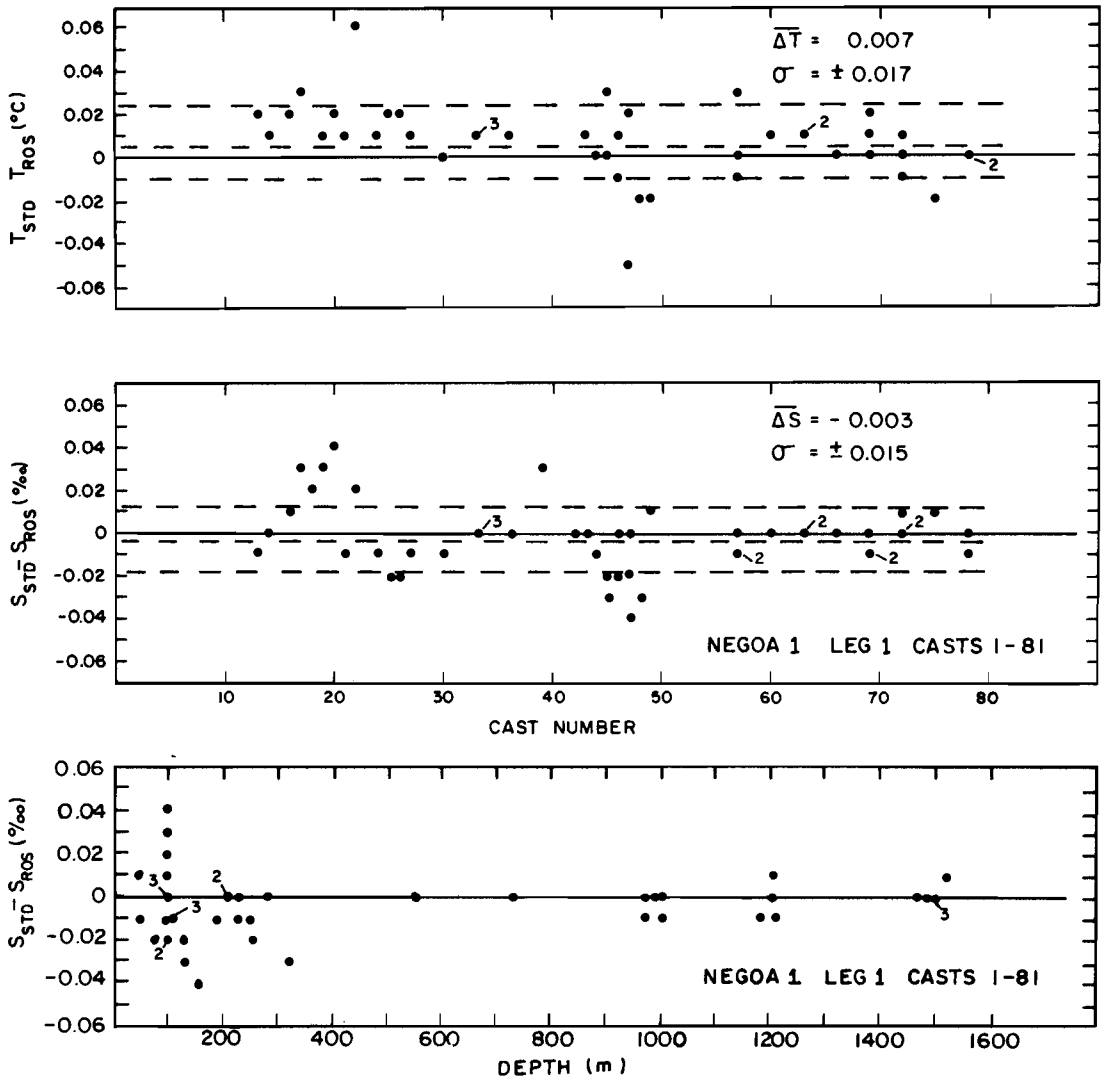

Figure 6. Temperature and salinity comparisons between Niskin bottle and STD data taken by the *Oceanographer*. Temperature and salinity values were corrected by adding 0.007°C and -0.003 °/$_{oo}$, respectively. No significant depth dependency was found for the salinity correction.

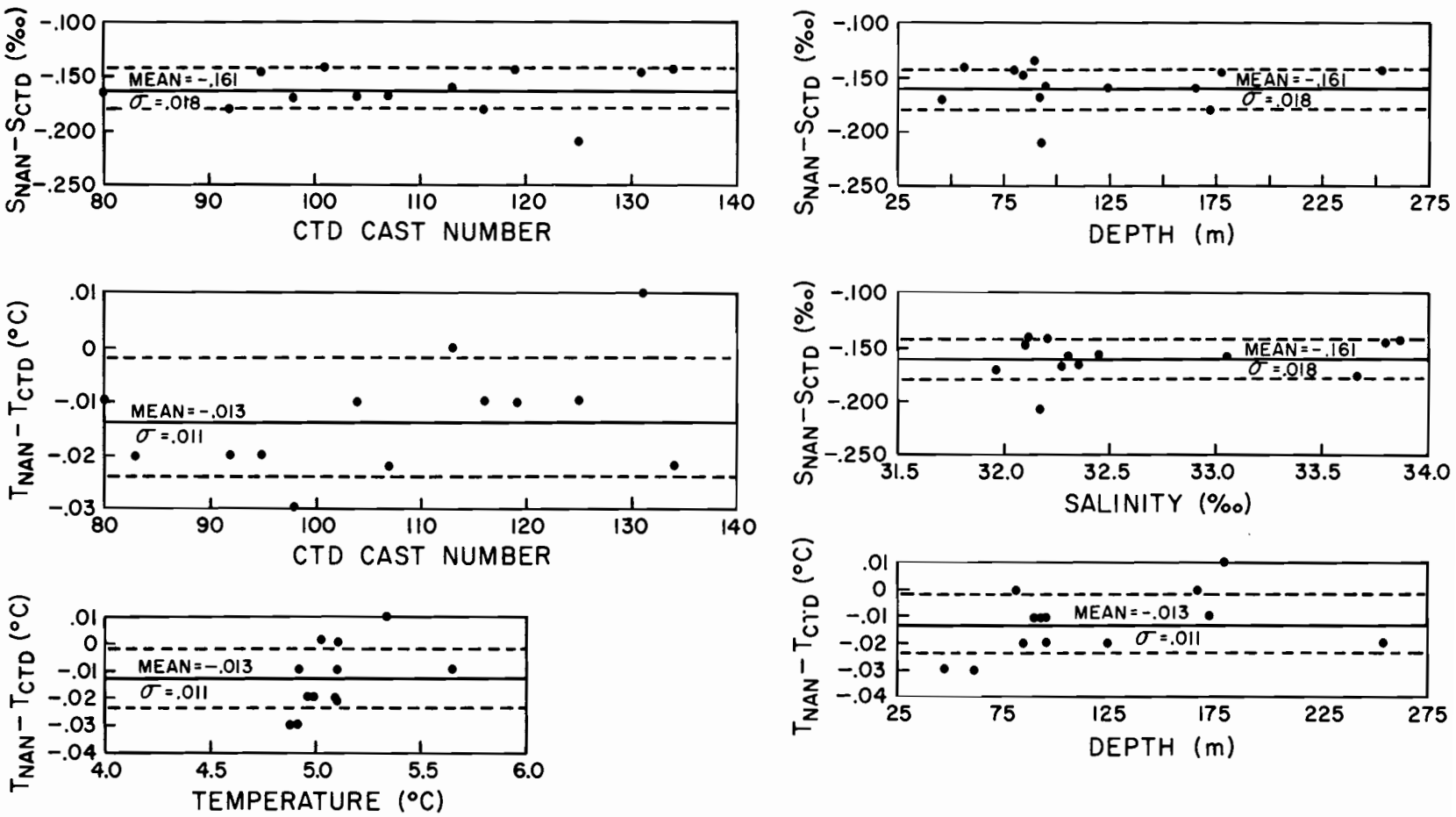

Figure 7. Temperature and salinity comparisons between Nansen bottle and CTD data taken by the *Rainier*. Temperature and salinity values were corrected by adding -0.013°C and -0.161 °/₀₀, respectively. No significant depth dependency was found for the salinity correction.

Table 1. Abbreviations and units used to describe each set of STD measurements.

SALINITY	Salinity, parts per thousand (°/₀₀)
TEMPERATURE	Temperature (°C)
CAST NEGOA-1-OC-007	STD measurement station 007 made from the research vessel *Oceanographer* during NEGOA-1
DATE	Day, month, year
TIME	Hours and minutes, Greenwich Mean Time (GMT)
LAT	Latitude, degrees and minutes north
LONG	Longitude, degrees and minutes west
WEATHER	Present weather conditions (see table 2)
SEA STATE	Present sea state conditions (see table 3)
BAROMETER	Sea level atmospheric pressure, millibars (mb) over 1,000 mb
WIND DIR	Wind direction, degrees True from which the wind blows
SPD	Wind speed, knots
VISIBILITY	Visibility (see table 4)
CLOUD	Cloud type (see table 5)
AMOUNT	Amount of cloud cover (see table 6)
DRY	Dry air temperature (C°)
WET	Wet bulb temperature (C°)
DEPTH	Depth to the bottom (m)

Table 2. Weather condition code used to describe each set of STD measurements.

Code	Weather Condition
0	Clear (no cloud)
1	Partly cloudy
2	Continuous layer(s) of cloud(s)
3	Sandstorm, duststorm, or blowing snow
4	Fog, thick dust, or haze
5	Drizzle
6	Rain
7	Snow, or rain and snow mixed
8	Shower(s)
9	Thunderstorms

Table 3. Sea state code used to describe each set of STD measurements.

Code	Height (m)	Description
0	0	Calm-glassy
1	0-0.1	Calm-rippled
2	0.1-0.5	Smooth-wavelet
3	0.5-1.25	Slight
4	1.25-2.5	Moderate
5	2.5-4	Rough
6	4-6	Very rough
7	6-9	High
8	9-14	Very high
9	> 14	Phenomenal

Table 4. Visibility code used to describe each set of STD measurements.

Code	Visibility
0	< 50 m
1	50-200 m
2	200-500 m
3	500-1,000 m
4	1-2 km
5	2-4 km
6	4-10 km
7	10-20 km
8	20-50 km
9	50 km or more

Table 5. Cloud type code used to describe each set of STD measurements.

Code	Cloud Type
0	Cirrus
1	Cirrocumulus
2	Cirrostratus
3	Altocumulus
4	Altostratus
5	Nimbostratus
6	Stratocumulus
7	Stratus
8	Cumulus
9	Cumulonimbus
X	Clouds not visible

Table 6. Cloud amount code used to describe each set of STD measurements.

Code	Cloud Amount
0	0
1	1/10 or less, but not zero
2	2/10-3/10
3	4/10
4	5/10
5	6/10
6	7/10-8/10
7	9/10 or more, but not 10/10
8	10/10
9	Sky obscured or not determined

5. ACKNOWLEDGMENTS

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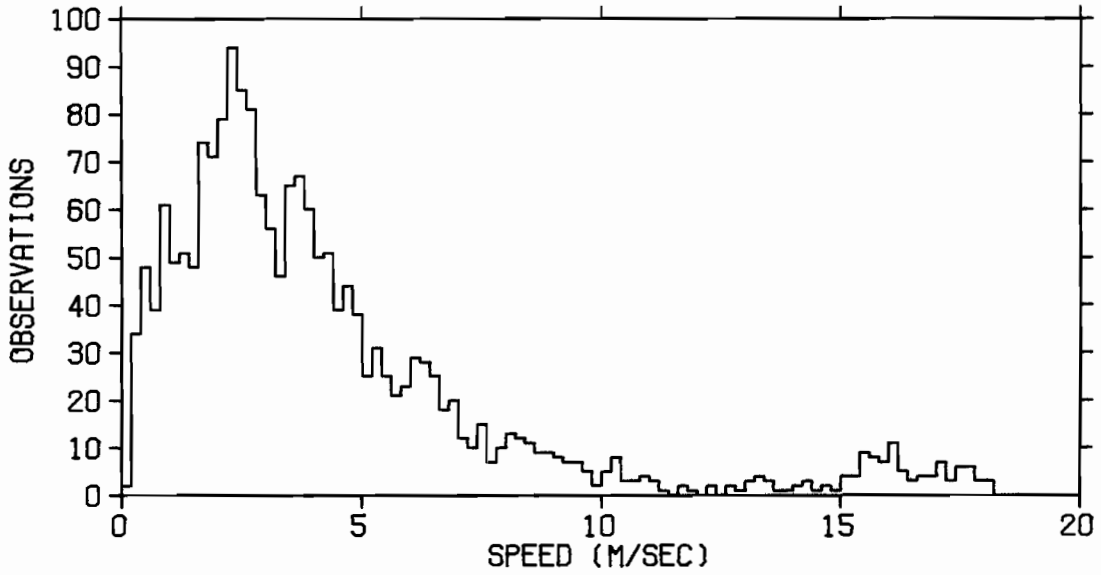
APPENDIX A

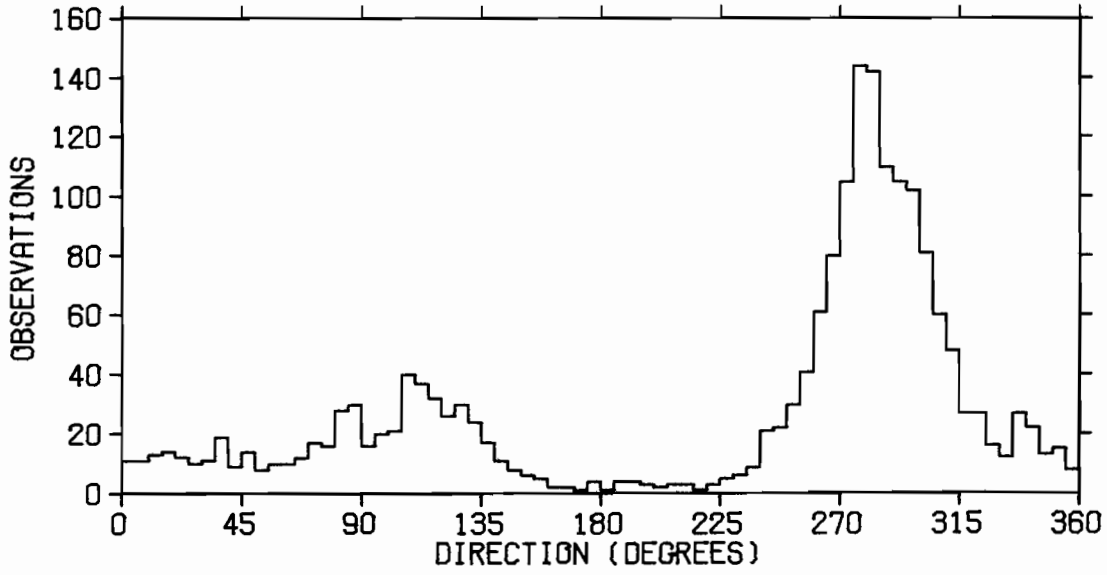
COMPILATION OF WINDS

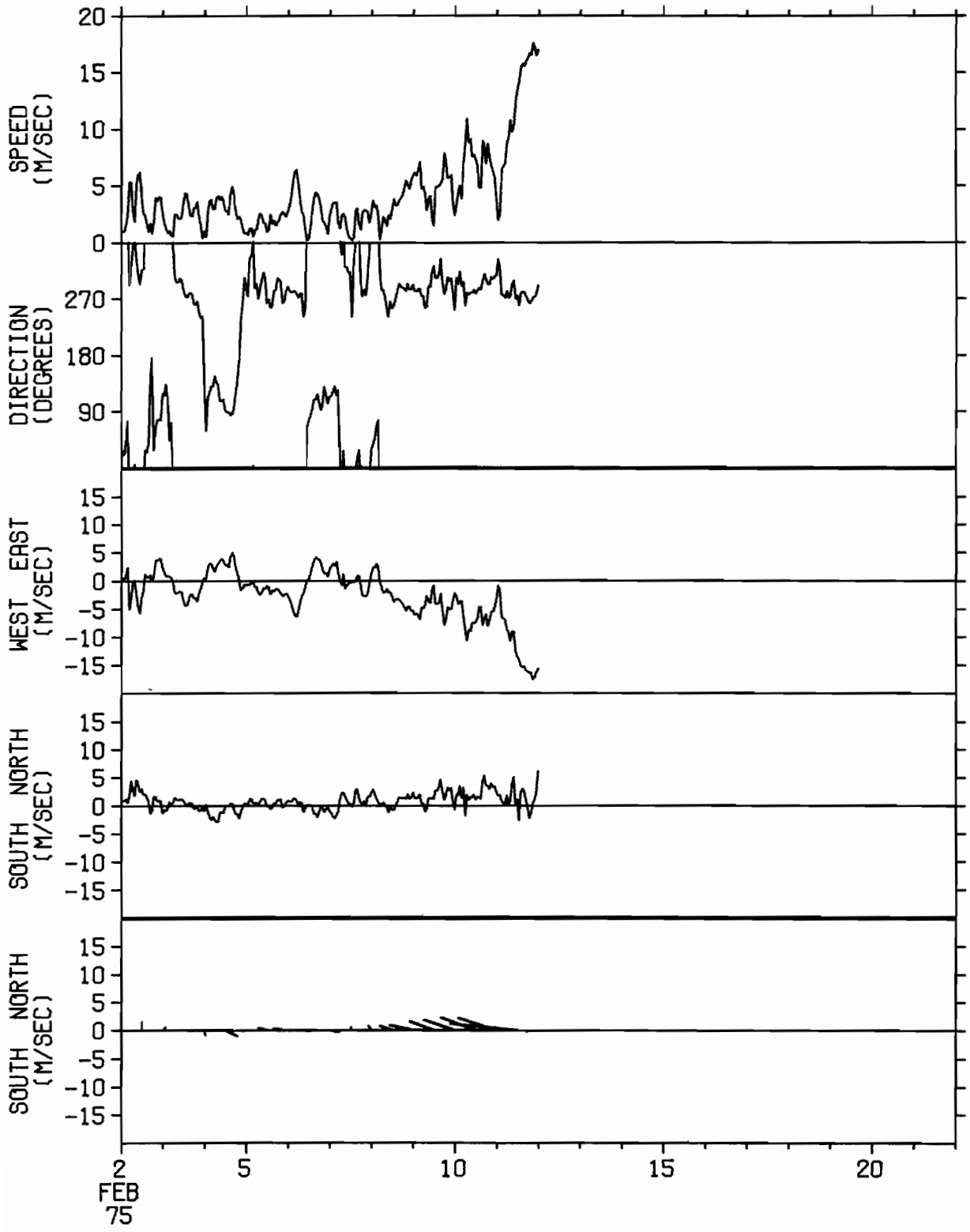
STATISTICS AND HISTOGRAMS OF WINDS AT NEGOA 63.VAWR 0237
LOCATION = LAT 59 46.6N, LONG 141 59.2W, HEIGHT = 4 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 2352 11 FEB 75 (10.0 DAYS)
N = 1920, DT = 7.50 MINUTES, UNITS = (M/SEC)

	MEAN	VARIANCE	ST-DEV	SKEW	KURT	MAX	MIN
S	4.32	13.38	3.66	1.904	6.672	18.13	.19
U	-2.62	21.69	4.66	-1.122	4.495	5.15	-18.10
V	.76	2.89	1.70	.409	3.779	6.81	-5.11

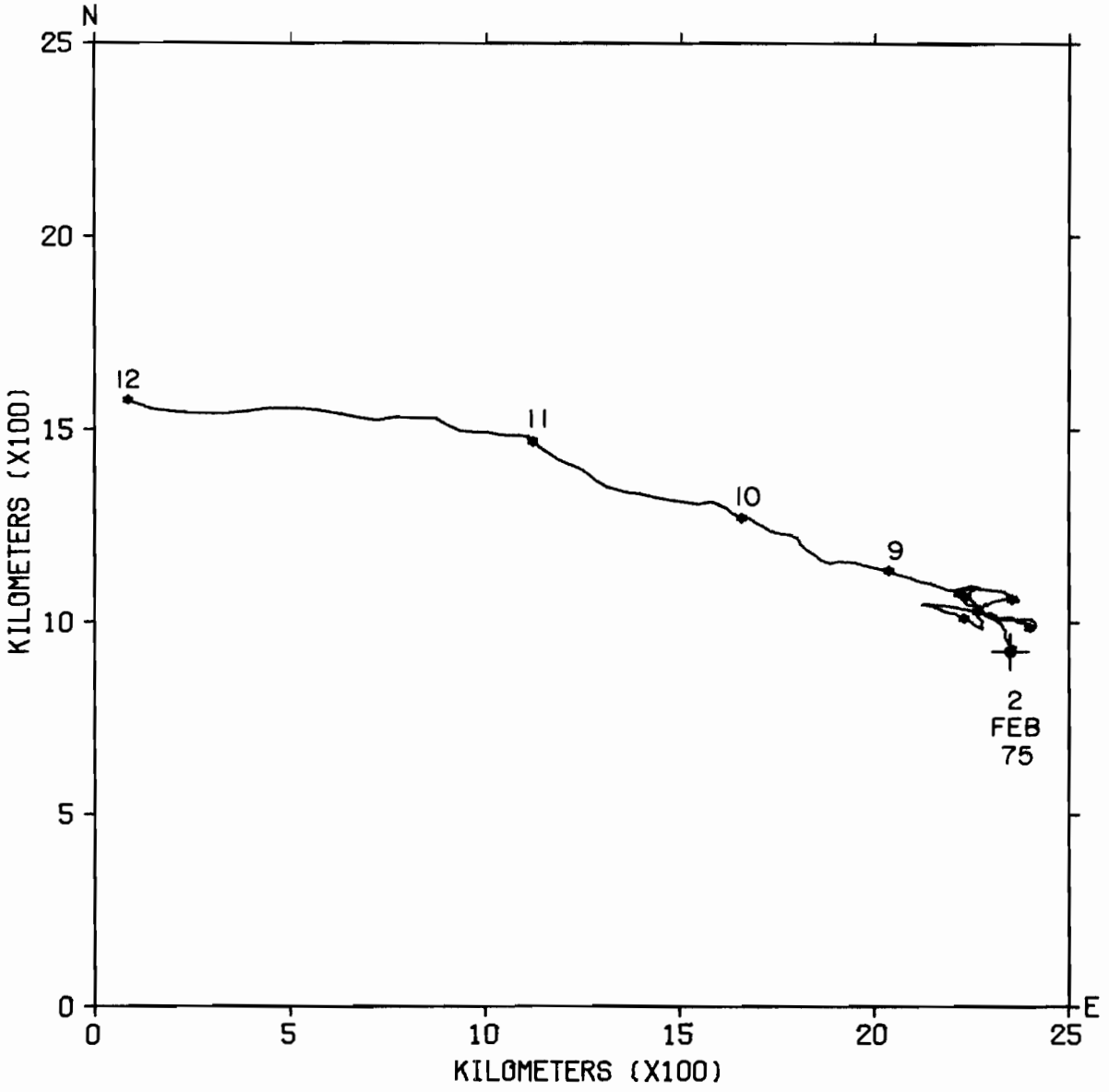
S = SPEED
U = EAST-WEST COMPONENT OF VELOCITY, EAST = POSITIVE U
V = NORTH-SOUTH COMPONENT OF VELOCITY, NORTH = POSITIVE V

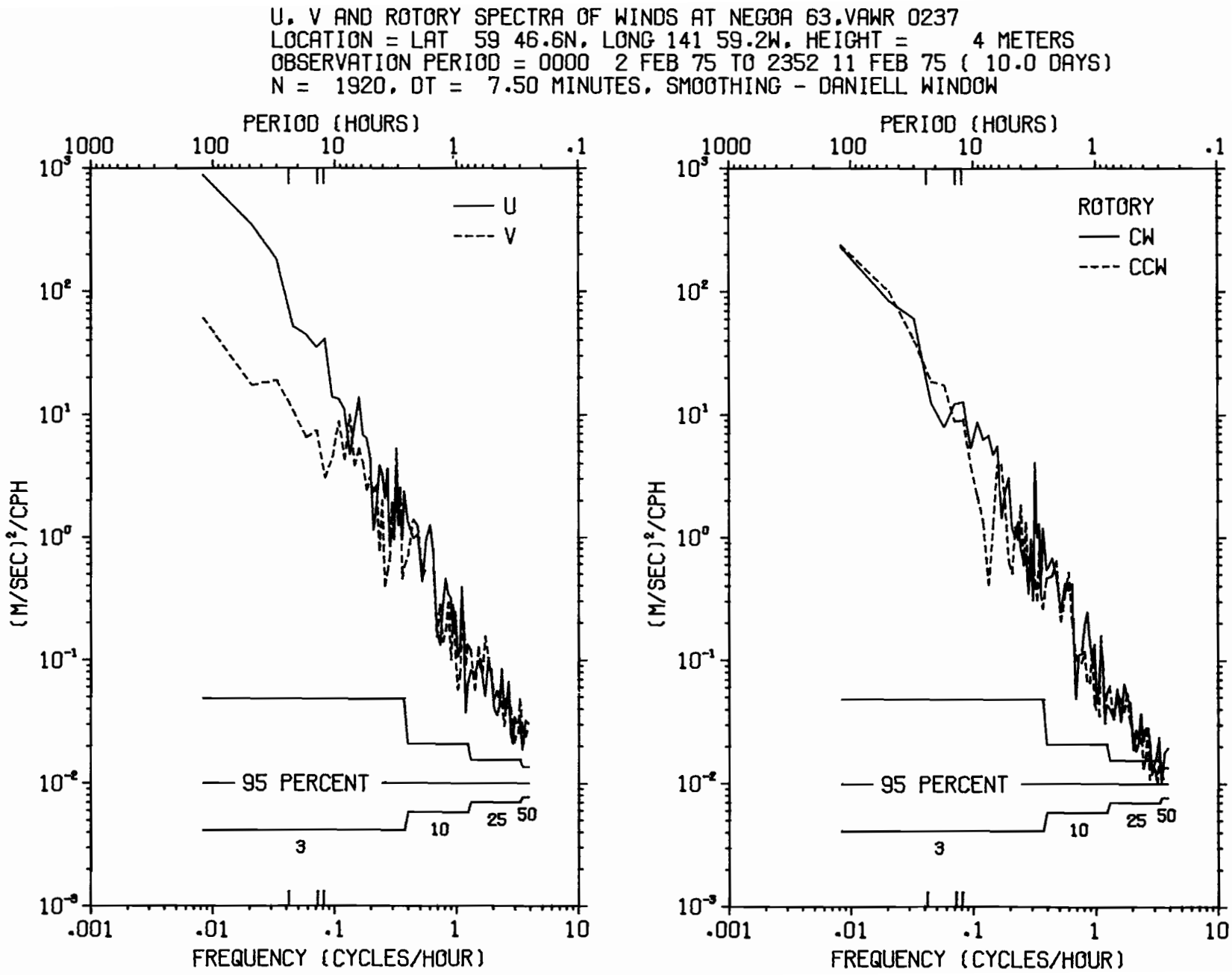




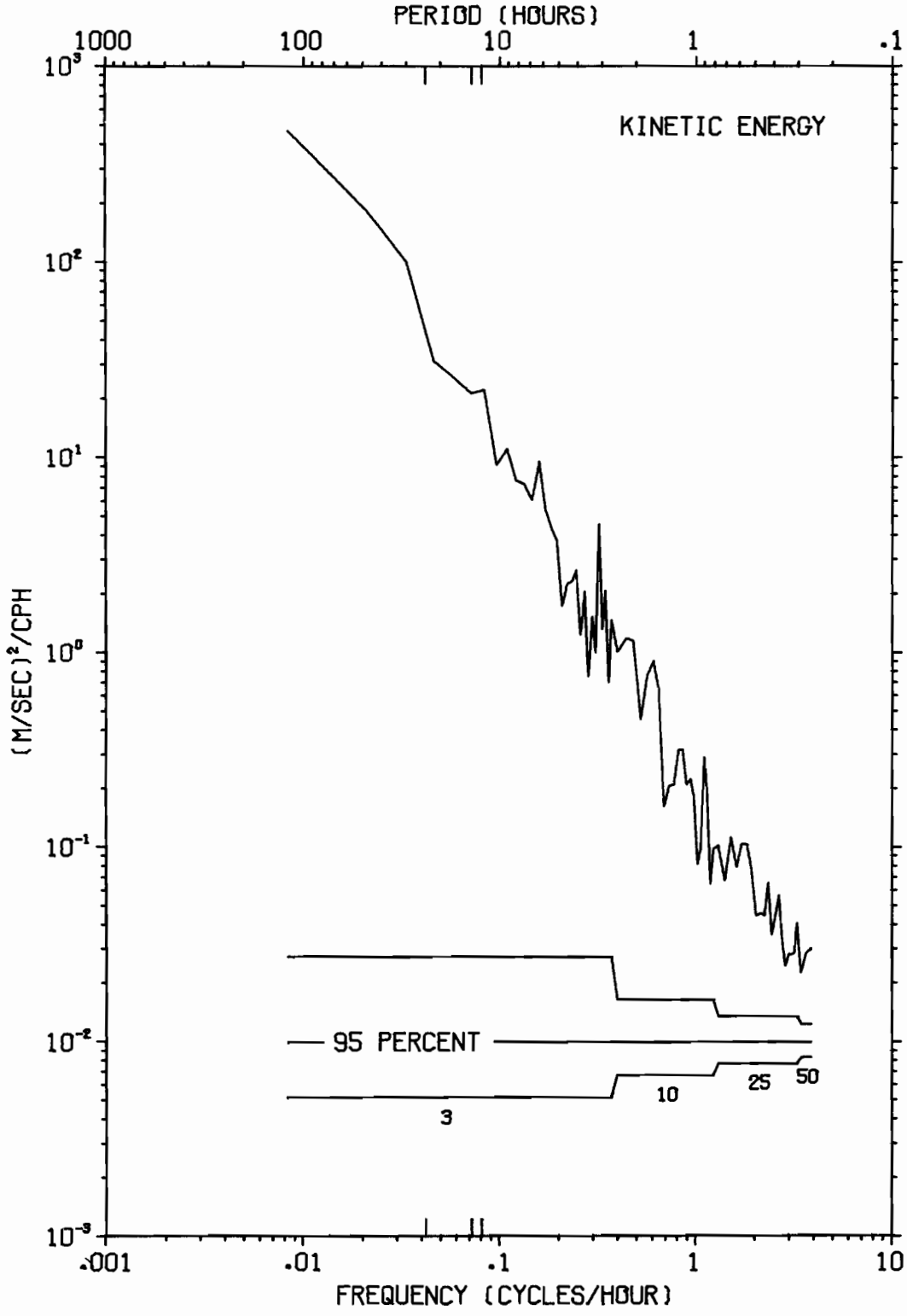

TIME SERIES OF VECTOR AVERAGED WINDS AT NEGOA 63,VAWR 0237
LOCATION = LAT 59 46.6N, LONG 141 59.2W, HEIGHT = 4 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 2352 11 FEB 75 (10.0 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (8 POINTS)
SPEED (M/SEC)
DIRECTION (DEGREES)
WEST EAST (M/SEC)
SOUTH NORTH (M/SEC)
SOUTH NORTH (M/SEC)
2 FEB 75
5
10
15
20

PROGRESSIVE VECTOR DIAGRAM OF WINDS AT NEGOA 63,VAWR 0237
LOCATION = LAT 59 46.6N, LONG 141 59.2W, HEIGHT = 4 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 2352 11 FEB 75 (10.0 DAYS)
* EVERY 1.0 DAYS BEGINNING AT 0000 2 FEB 75




U, V AND ROTORY SPECTRA OF WINDS AT NEGOA 63.VAWR 0237
LOCATION = LAT 59 46.6N, LONG 141 59.2W, HEIGHT = 4 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 2352 11 FEB 75 (10.0 DAYS)
N = 1920, DT = 7.50 MINUTES, SMOOTHING - DANIELL WINDOW
PERIOD (HOURS)
1000
100
10
1
.1
U
V
95 PERCENT
3
10
25
50
(M/SEC)²/CPH
FREQUENCY (CYCLES/HOUR)
.001
.01
.1
1
10
ROTORY
CW
CCW

KINETIC ENERGY SPECTRUM OF WINDS AT NEGOA 63,VAWR 0237
LOCATION = LAT 59 46.6N, LONG 141 59.2W, HEIGHT = 4 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 2352 11 FEB 75 (10.0 DAYS)
N = 1920, DT = 7.50 MINUTES, SMOOTHING - DANIELL WINDOW



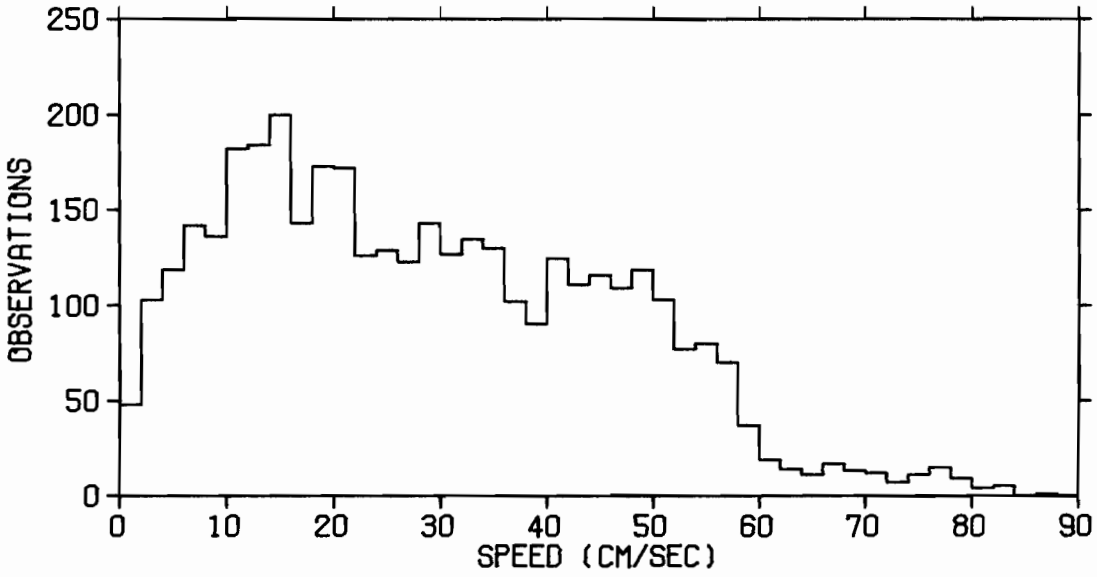
APPENDIX B

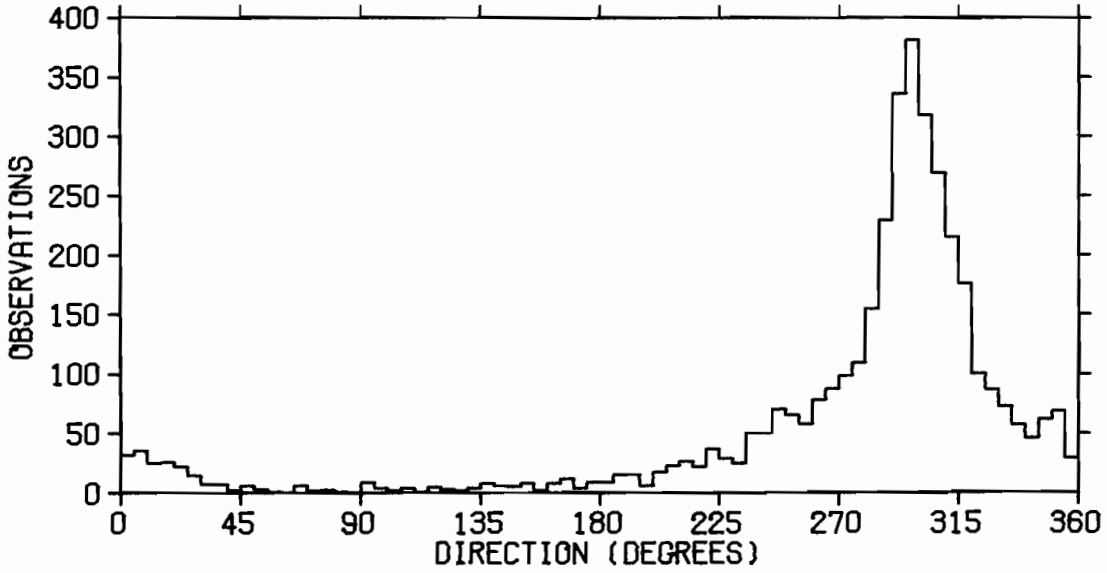
COMPILATION OF CURRENTS

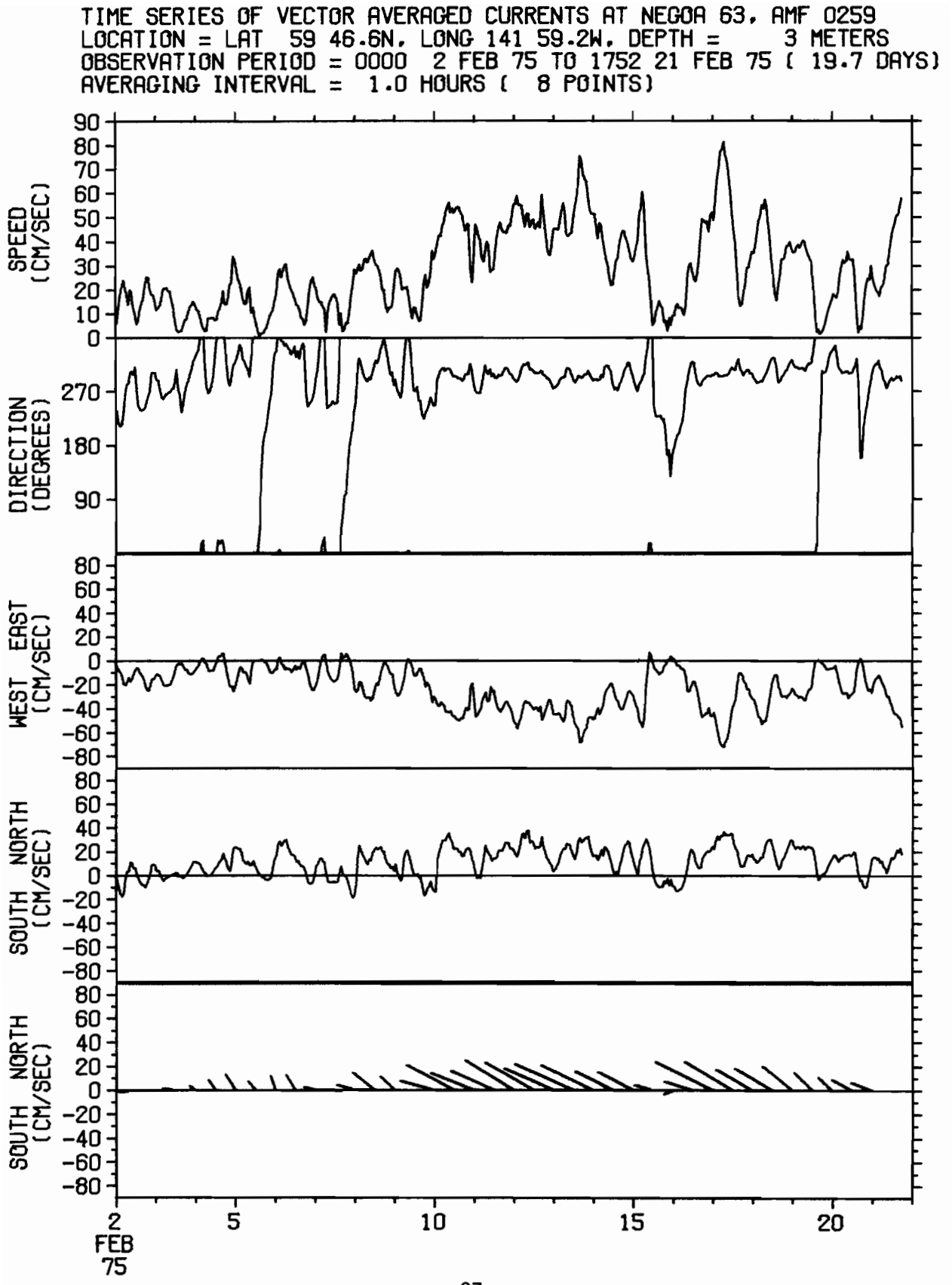
STATISTICS AND HISTOGRAMS OF CURRENTS AT NEGOA 63, AMF 0259
LOCATION = LAT 59 46.6N, LONG 141 59.2W, DEPTH = 3 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 1752 21 FEB 75 (19.7 DAYS)
N = 3792, DT = 7.50 MINUTES, UNITS = (CM/SEC)

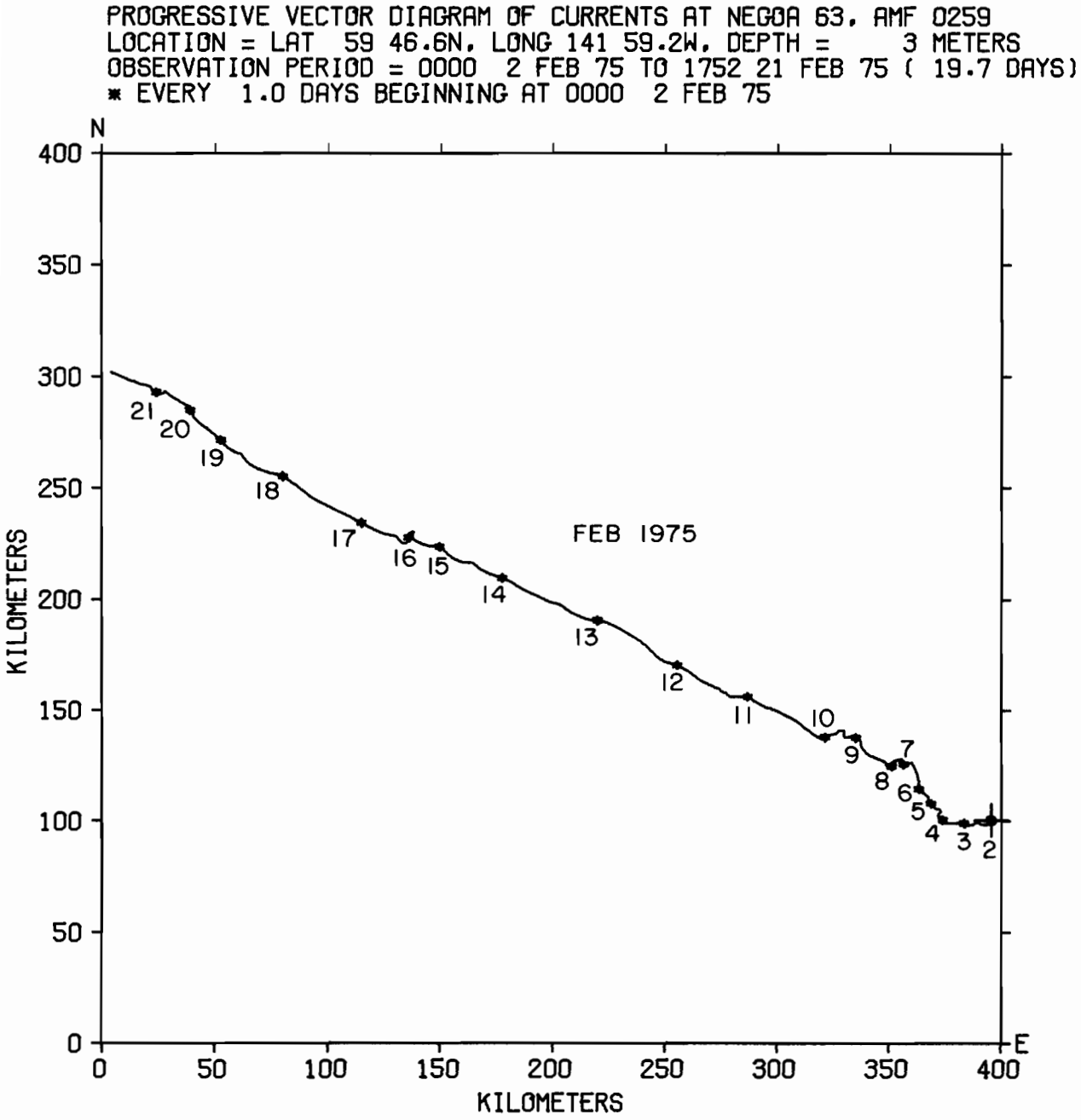
	MEAN	VARIANCE	ST-DEV	SKEW	KURT	MAX	MIN
S	28.86	303.41	17.42	.485	2.528	86.24	.10
U	-22.93	310.85	17.63	-.407	2.383	9.81	-78.22
V	11.81	160.10	12.65	-.158	2.368	45.32	-20.89

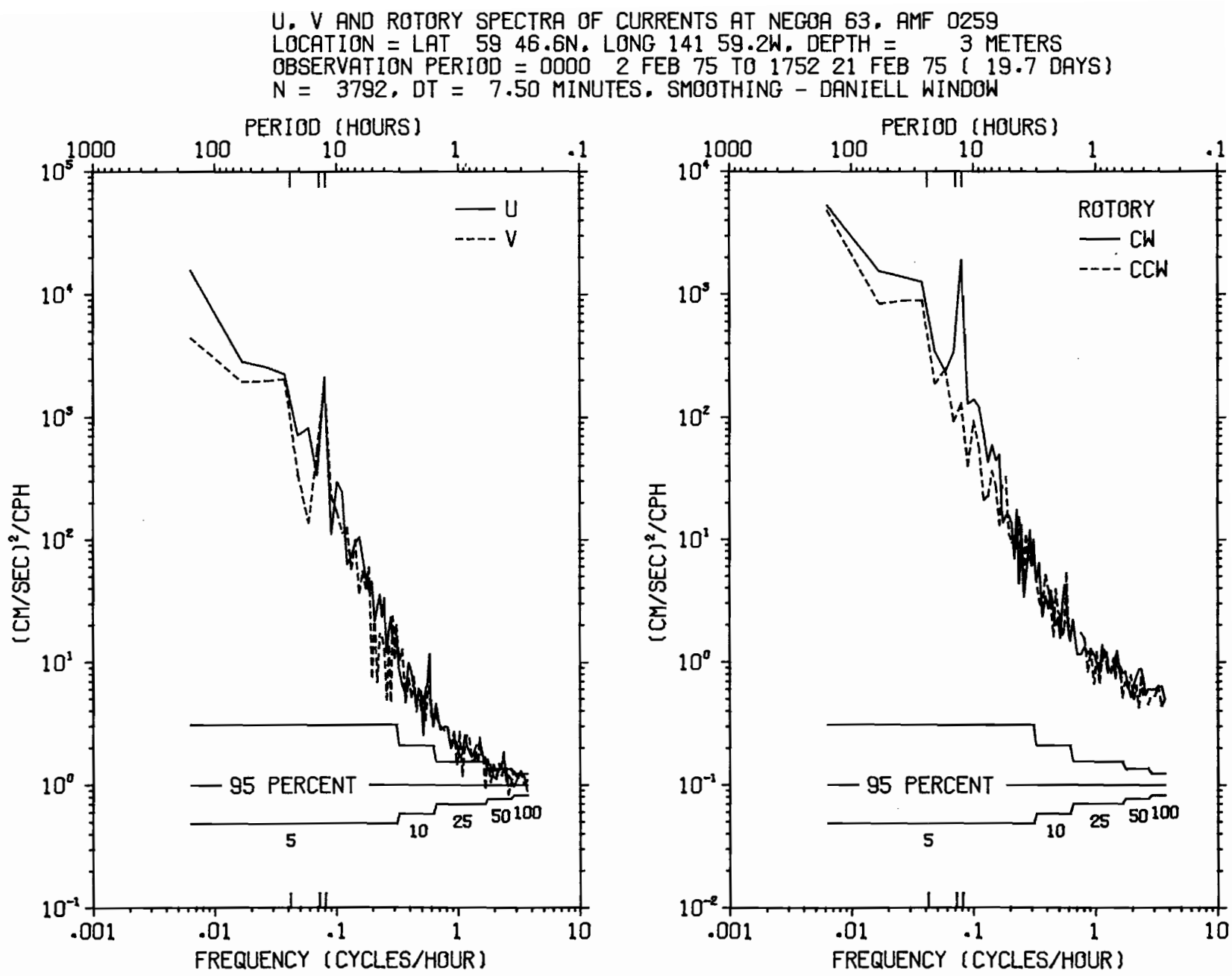
S = SPEED
U = EAST-WEST COMPONENT OF VELOCITY, EAST = POSITIVE U
V = NORTH-SOUTH COMPONENT OF VELOCITY, NORTH = POSITIVE V

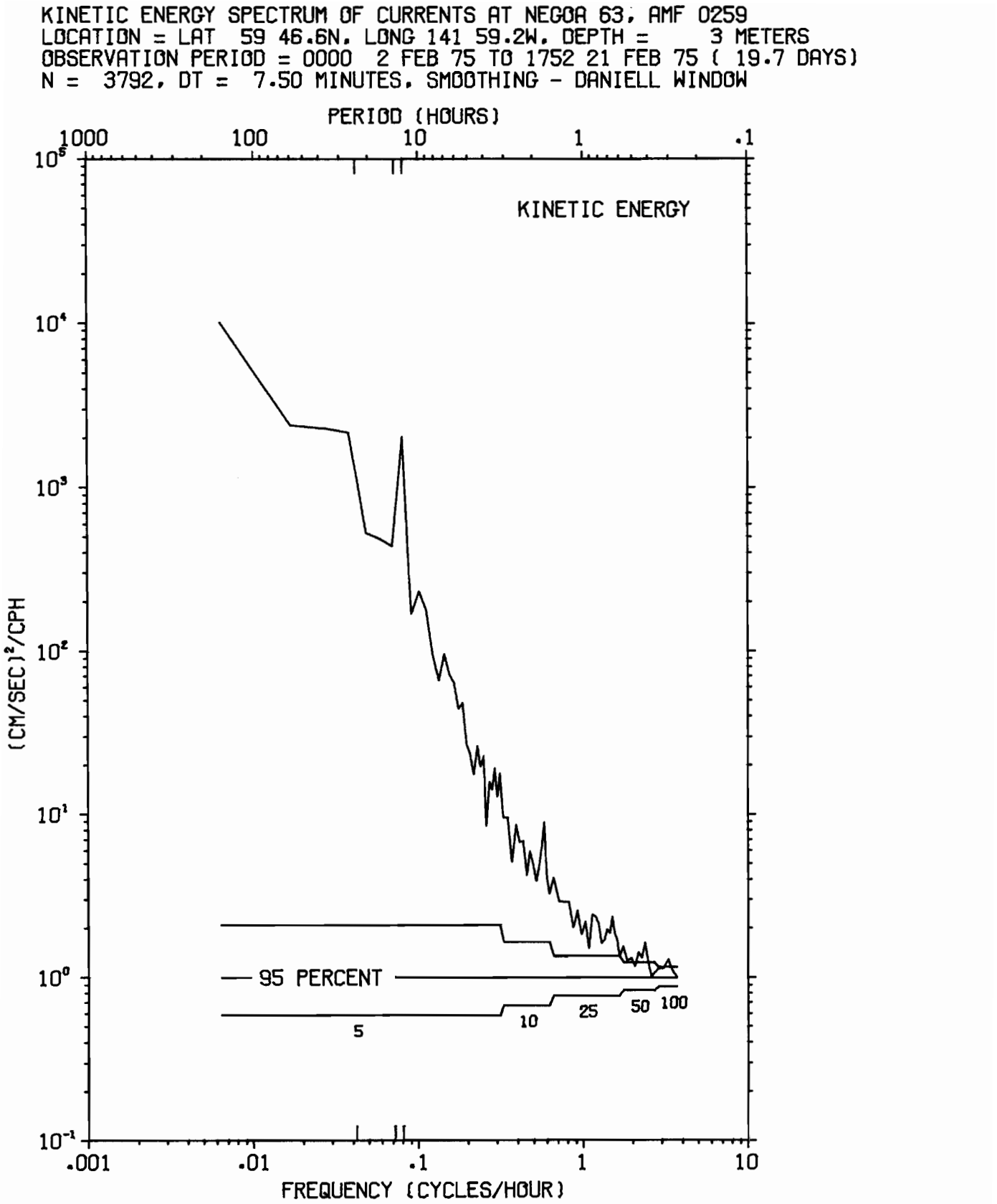





TIME SERIES OF VECTOR AVERAGED CURRENTS AT NEGOA 63, AMF 0259
LOCATION = LAT 59 46.6N, LONG 141 59.2W, DEPTH = 3 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 1752 21 FEB 75 (19.7 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (8 POINTS)
SPEED (CM/SEC)
DIRECTION (DEGREES)
WEST EAST (CM/SEC)
SOUTH NORTH (CM/SEC)
SOUTH NORTH (CM/SEC)
2 FEB 75
5
10
15
20


PROGRESSIVE VECTOR DIAGRAM OF CURRENTS AT NEGOA 63, AMF 0259
LOCATION = LAT 59 46.6N, LONG 141 59.2W, DEPTH = 3 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 1752 21 FEB 75 (19.7 DAYS)
* EVERY 1.0 DAYS BEGINNING AT 0000 2 FEB 75
N
E
KILOMETERS
KILOMETERS
FEB 1975
0
50
100
150
200
250
300
350
400
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

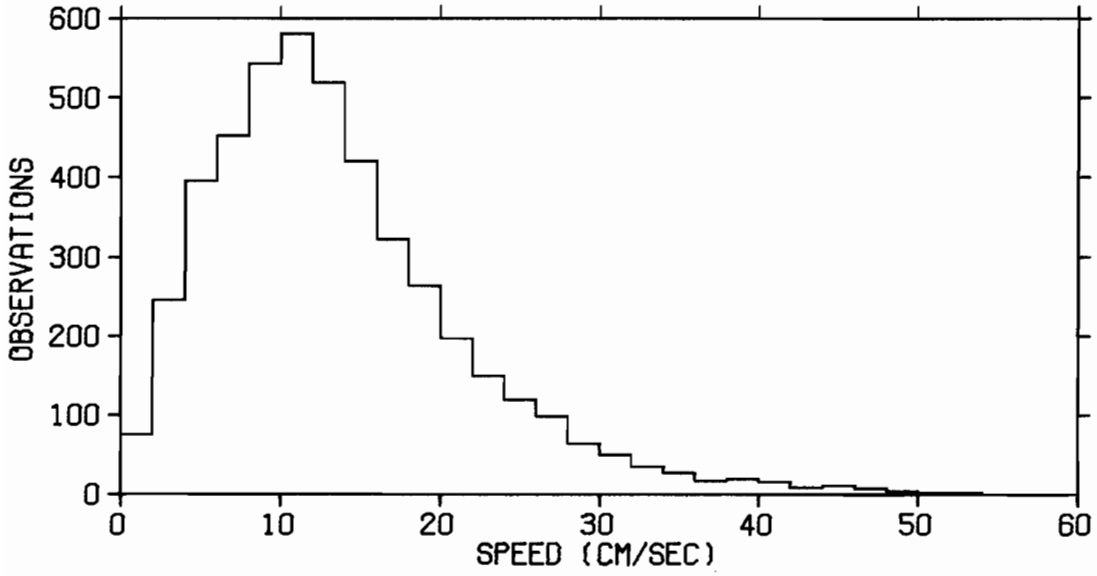

U, V AND ROTORY SPECTRA OF CURRENTS AT NEGOA 63, AMF 0259
LOCATION = LAT 59 46.6N, LONG 141 59.2W, DEPTH = 3 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 1752 21 FEB 75 (19.7 DAYS)
N = 3792, DT = 7.50 MINUTES, SMOOTHING - DANIELL WINDOW
PERIOD (HOURS)
1000
100
10
1
.1
U
V
95 PERCENT
5
10
25
50
100
(CM/SEC)²/CPH
FREQUENCY (CYCLES/HOUR)
.001
.01
.1
1
10
ROTORY
CW
CCW

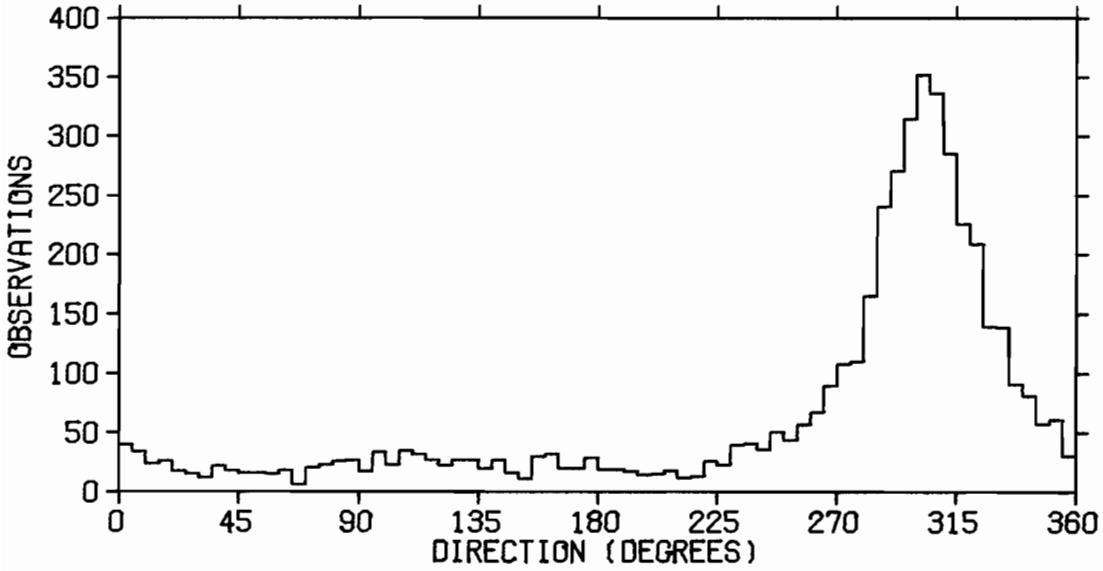

KINETIC ENERGY SPECTRUM OF CURRENTS AT NEGOA 63, AMF 0259
LOCATION = LAT 59 46.6N, LONG 141 59.2W, DEPTH = 3 METERS
OBSERVATION PERIOD = 0000 2 FEB 75 TO 1752 21 FEB 75 (19.7 DAYS)
N = 3792, DT = 7.50 MINUTES, SMOOTHING - DANIELL WINDOW
PERIOD (HOURS)
1000
100
10
1
.1
KINETIC ENERGY
95 PERCENT
5
10
25
50
100
(CM/SEC)²/CPH
FREQUENCY (CYCLES/HOUR)
.001
.01
.1
1
10

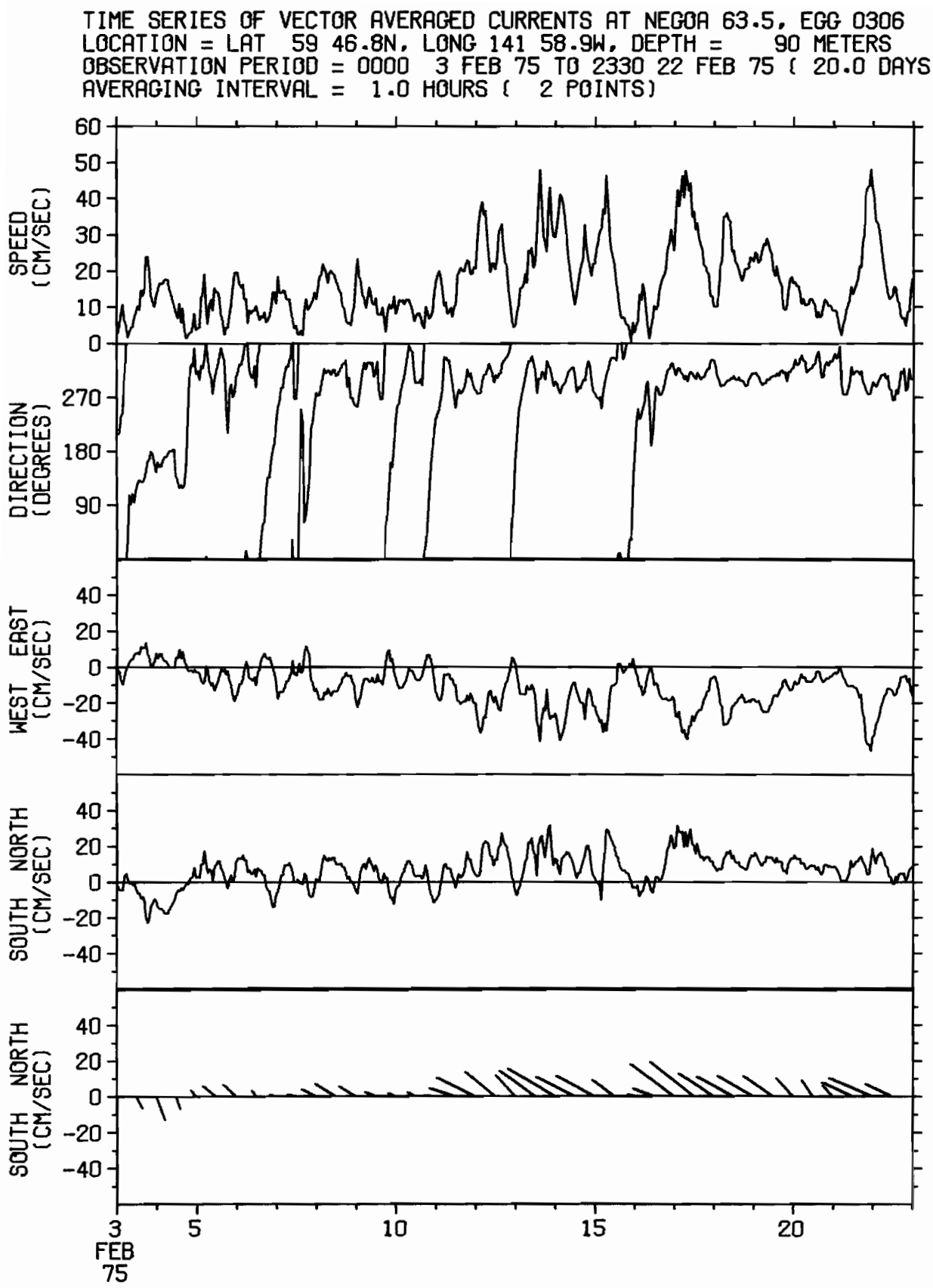
STATISTICS AND HISTOGRAMS OF CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 3 FEB 75 TO 1730 10 MAY 75 (96.7 DAYS)
N = 4644, DT = 30.00 MINUTES, UNITS = (CM/SEC)

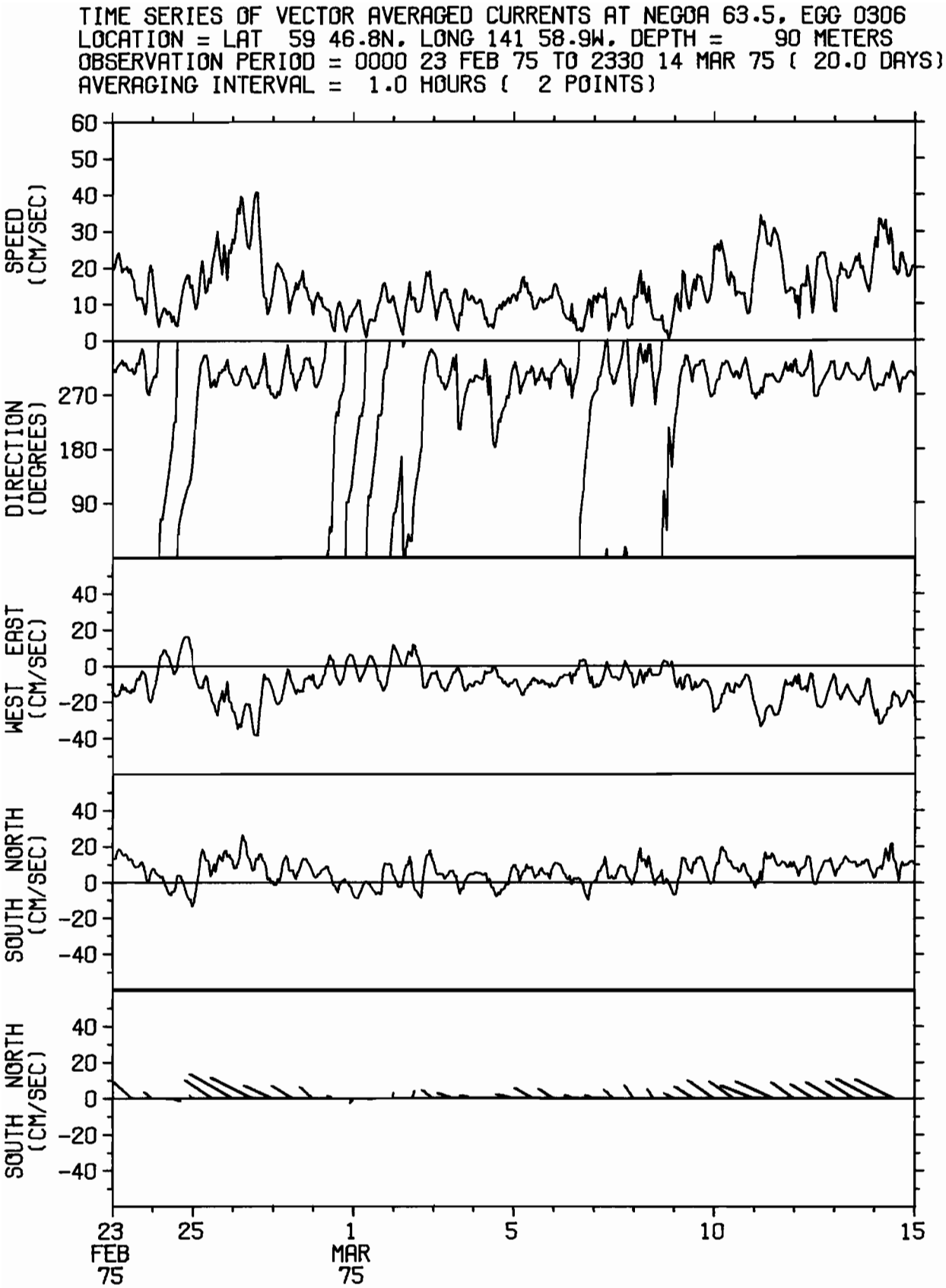
	MEAN	VARIANCE	ST-DEV	SKEW	KURT	MAX	MIN
S	13.57	64.30	8.02	1.219	5.110	53.40	.05
U	-8.75	89.80	9.48	-.413	3.654	21.23	-48.54
V	5.30	53.96	7.35	-.006	3.688	35.41	-24.23

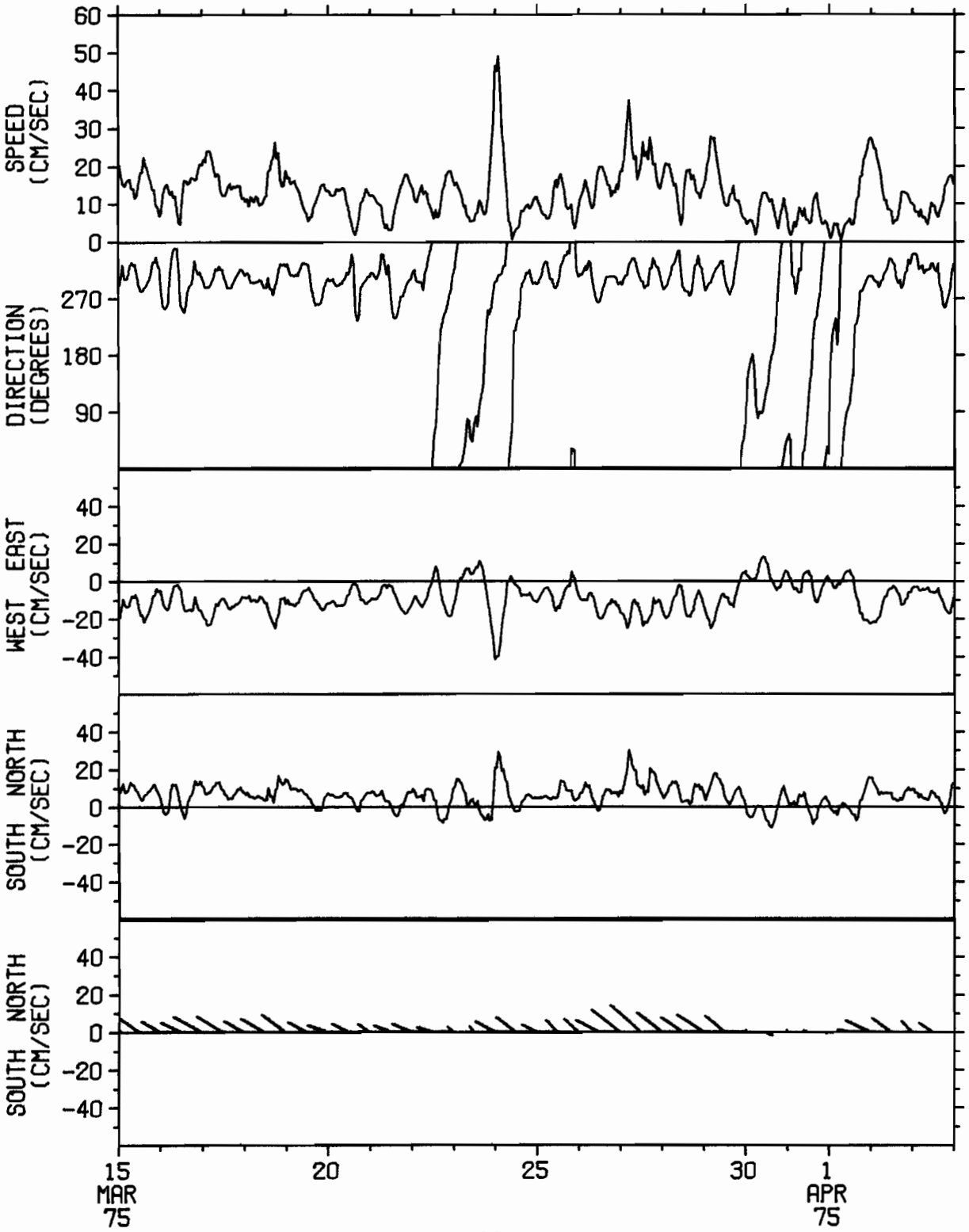
S = SPEED
U = EAST-WEST COMPONENT OF VELOCITY, EAST = POSITIVE U
V = NORTH-SOUTH COMPONENT OF VELOCITY, NORTH = POSITIVE V

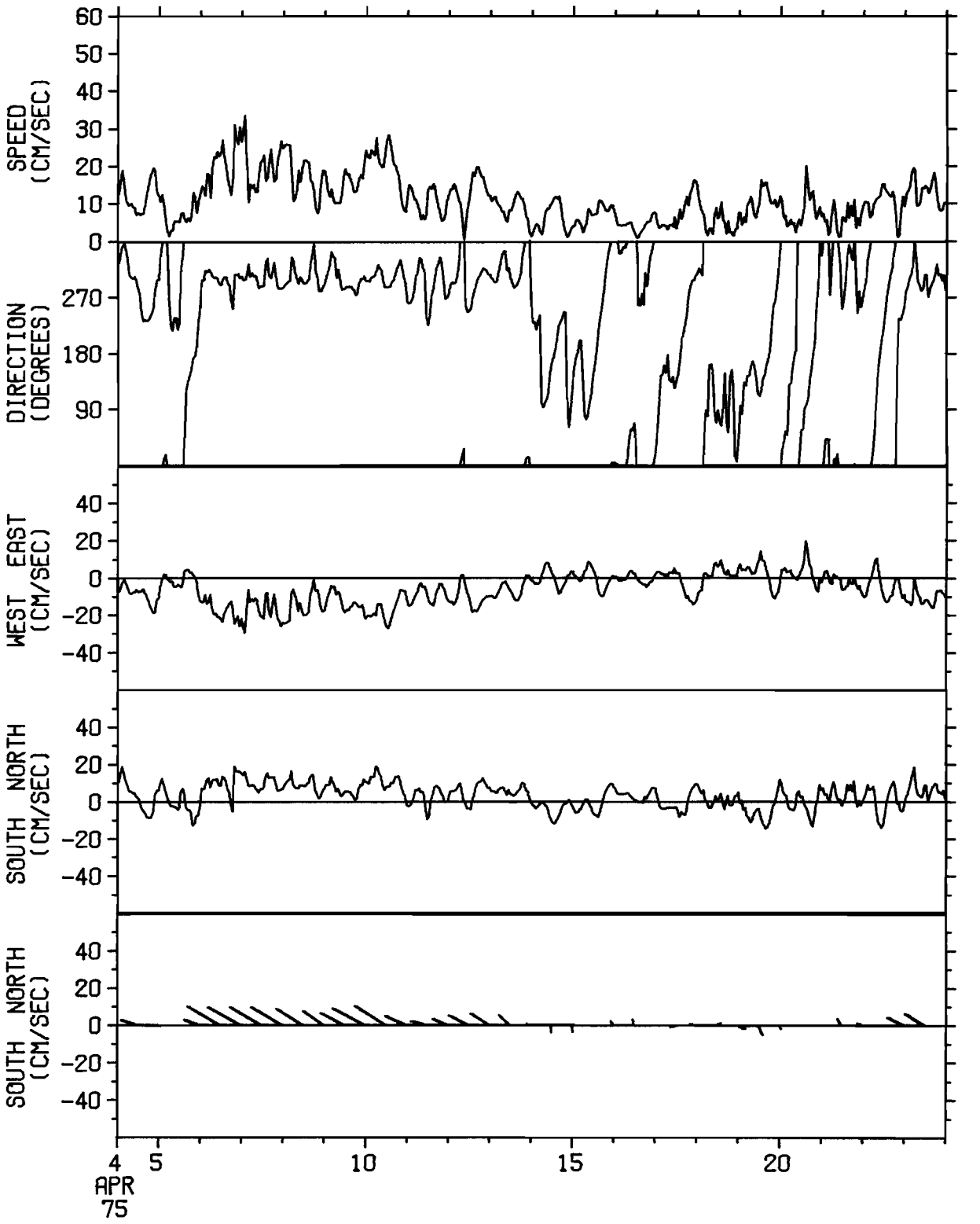


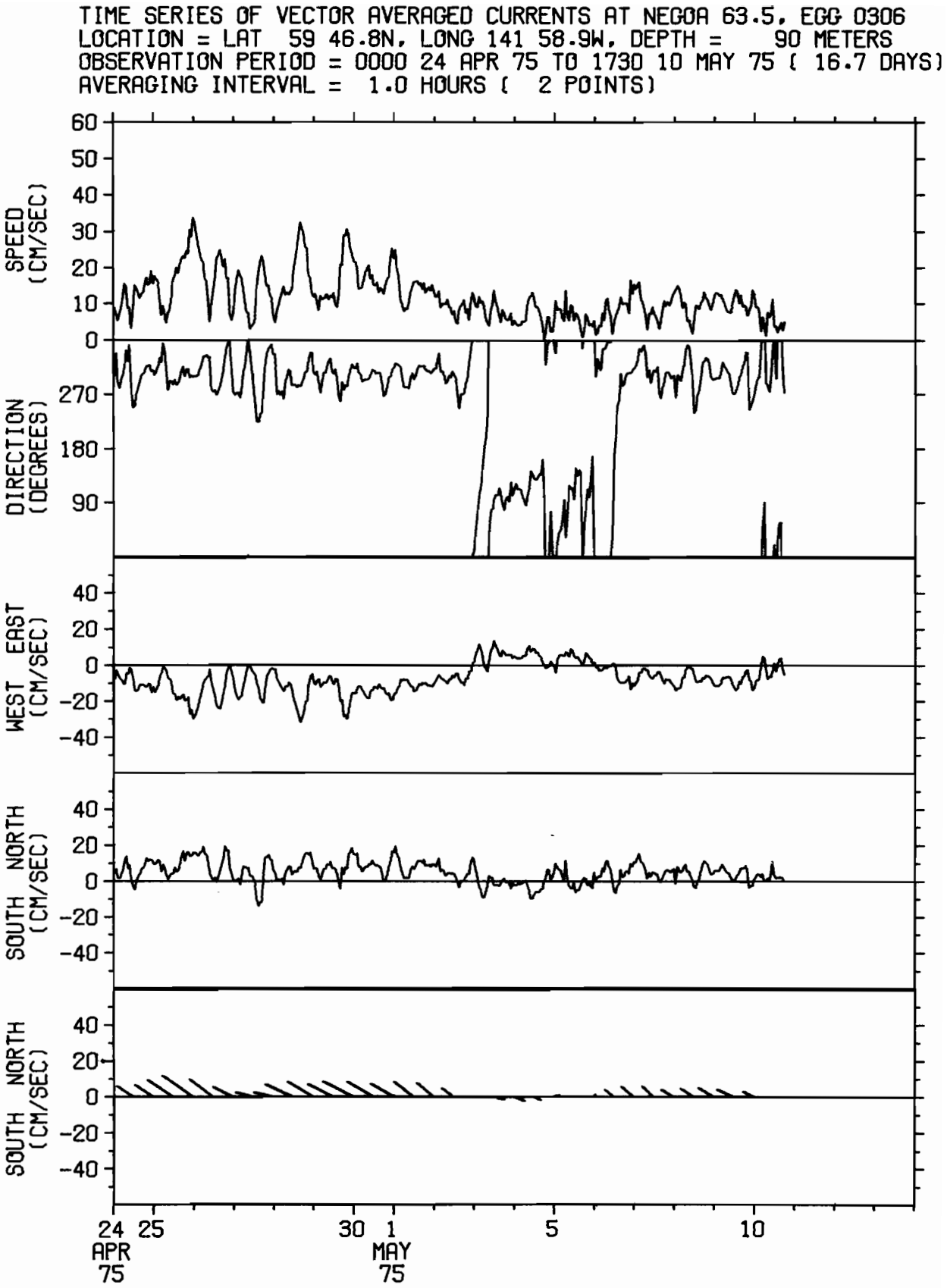


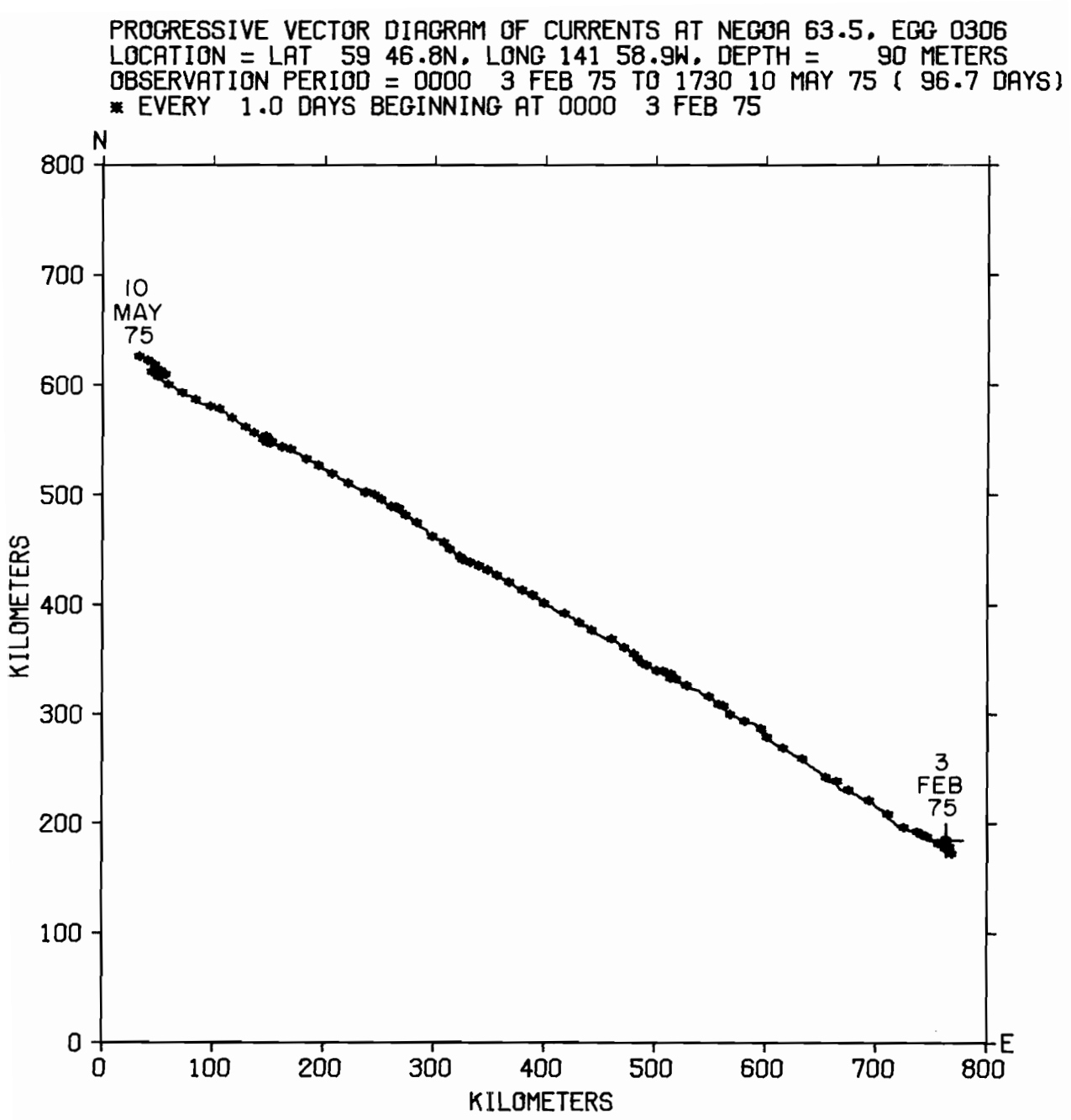

TIME SERIES OF VECTOR AVERAGED CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 3 FEB 75 TO 2330 22 FEB 75 (20.0 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (2 POINTS)
SPEED (CM/SEC)
DIRECTION (DEGREES)
WEST EAST (CM/SEC)
SOUTH NORTH (CM/SEC)
SOUTH NORTH (CM/SEC)
3 FEB 75
5
10
15
20

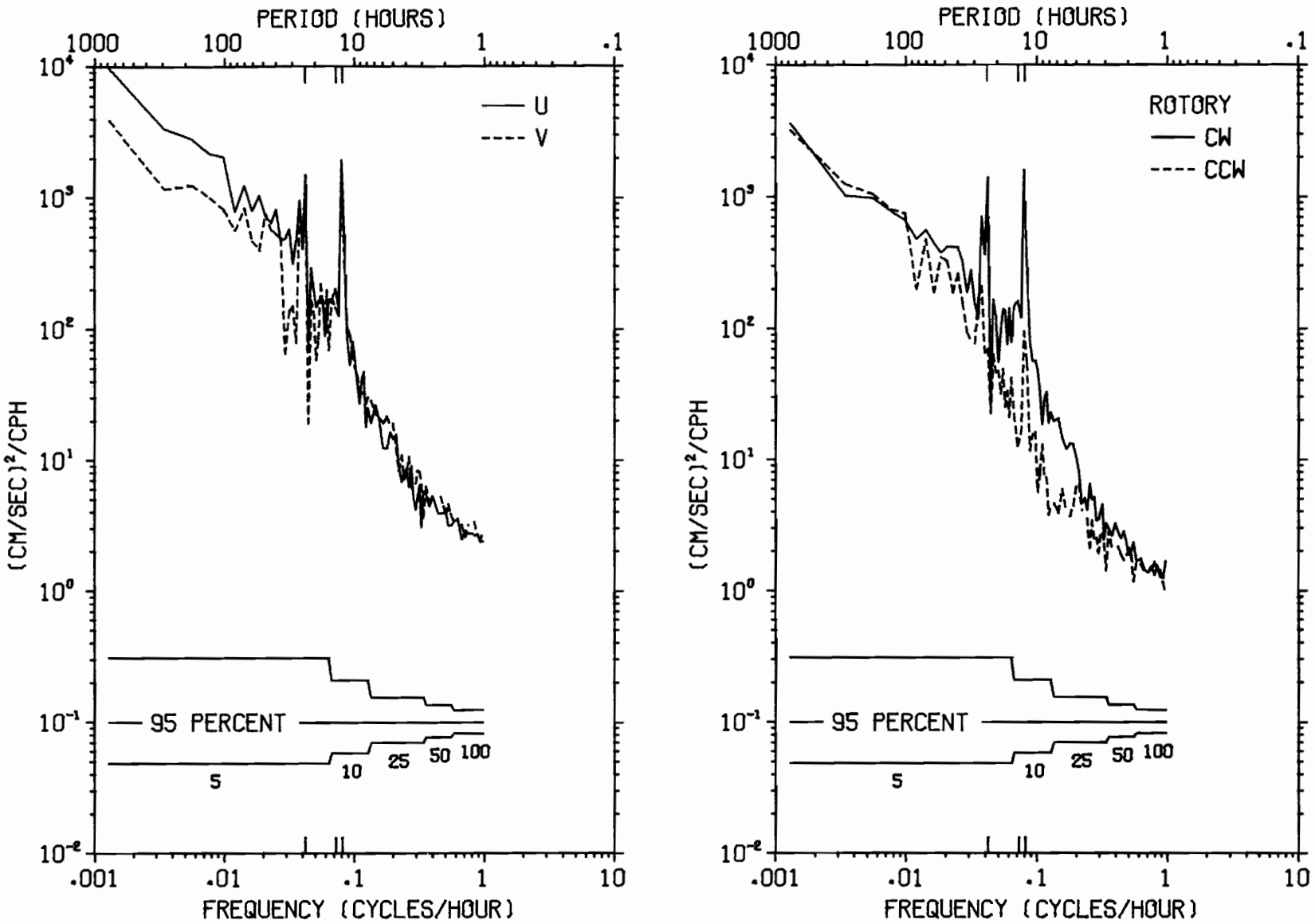

TIME SERIES OF VECTOR AVERAGED CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 23 FEB 75 TO 2330 14 MAR 75 (20.0 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (2 POINTS)
SPEED (CM/SEC)
DIRECTION (DEGREES)
WEST EAST (CM/SEC)
SOUTH NORTH (CM/SEC)
SOUTH NORTH (CM/SEC)
23 FEB 75
25
1 MAR 75
5
10
15

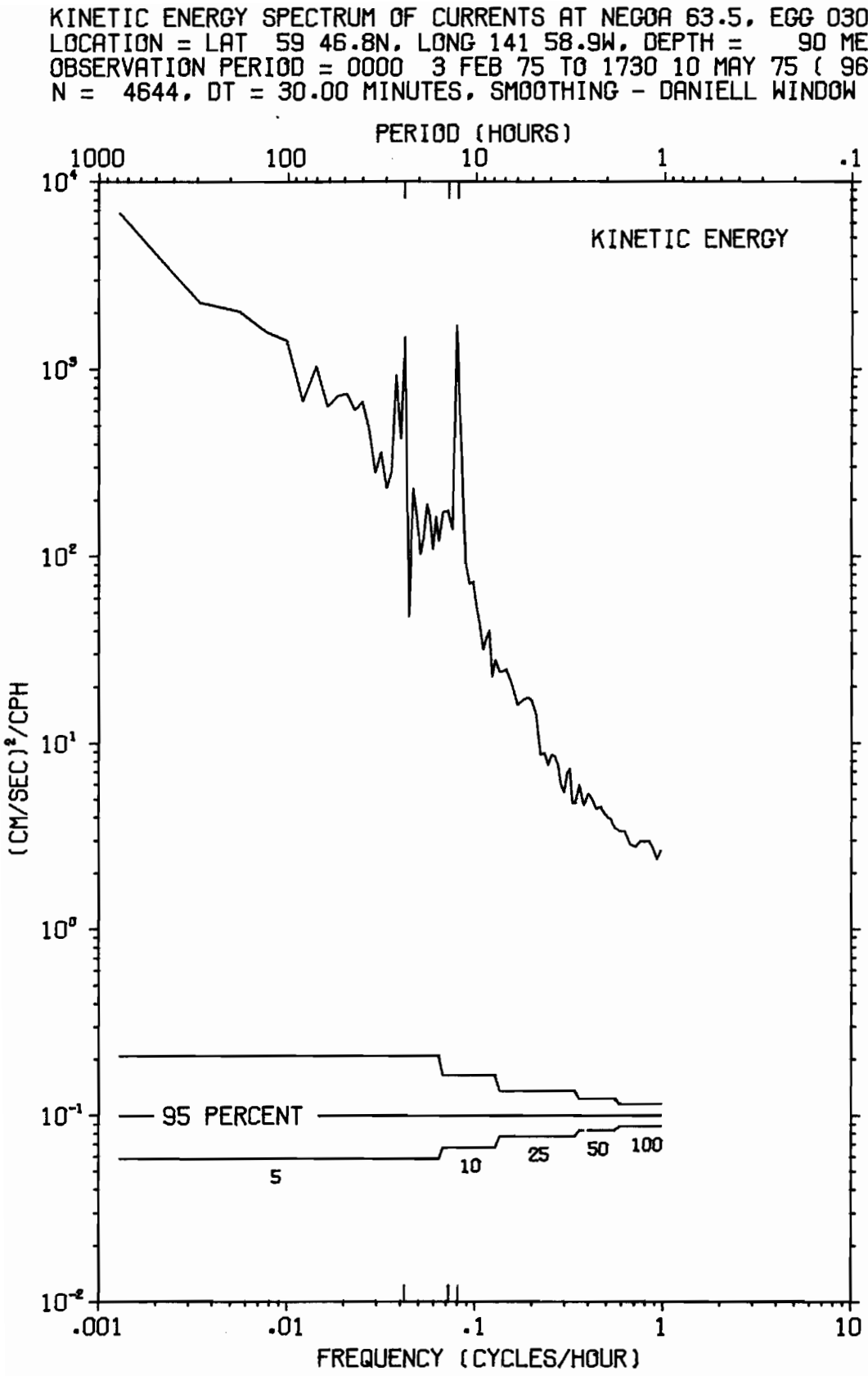

TIME SERIES OF VECTOR AVERAGED CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 15 MAR 75 TO 2330 3 APR 75 (20.0 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (2 POINTS)
SPEED (CM/SEC)
60
50
40
30
20
10
0
DIRECTION (DEGREES)
270
180
90
WEST EAST (CM/SEC)
40
20
0
-20
-40
SOUTH NORTH (CM/SEC)
40
20
0
-20
-40
SOUTH NORTH (CM/SEC)
40
20
0
-20
-40
15
MAR
75
20
25
30
1
APR
75


TIME SERIES OF VECTOR AVERAGED CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 4 APR 75 TO 2330 23 APR 75 (20.0 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (2 POINTS)
SPEED (CM/SEC)
60
50
40
30
20
10
0
DIRECTION (DEGREES)
270
180
90
WEST EAST (CM/SEC)
40
20
0
-20
-40
SOUTH NORTH (CM/SEC)
40
20
0
-20
-40
SOUTH NORTH (CM/SEC)
40
20
0
-20
-40
4
APR
75
5
10
15
20


TIME SERIES OF VECTOR AVERAGED CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 24 APR 75 TO 1730 10 MAY 75 (16.7 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (2 POINTS)
SPEED (CM/SEC)
DIRECTION (DEGREES)
WEST EAST (CM/SEC)
SOUTH NORTH (CM/SEC)
SOUTH NORTH (CM/SEC)
24 APR 75
25
30
1 MAY 75
5
10


PROGRESSIVE VECTOR DIAGRAM OF CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 3 FEB 75 TO 1730 10 MAY 75 (96.7 DAYS)
* EVERY 1.0 DAYS BEGINNING AT 0000 3 FEB 75
N
E
10 MAY 75
3 FEB 75
KILOMETERS
KILOMETERS
0
100
200
300
400
500
600
700
800


U, V AND ROTORY SPECTRA OF CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 3 FEB 75 TO 1730 10 MAY 75 (96.7 DAYS)
N = 4644, DT = 30.00 MINUTES, SMOOTHING - DANIELL WINDOW
PERIOD (HOURS)
1000
100
10
1
.1
U
V
95 PERCENT
5
10
25
50
100
(CM/SEC)²/CPH
FREQUENCY (CYCLES/HOUR)
.001
.01
.1
1
10
ROTORY
CW
CCW

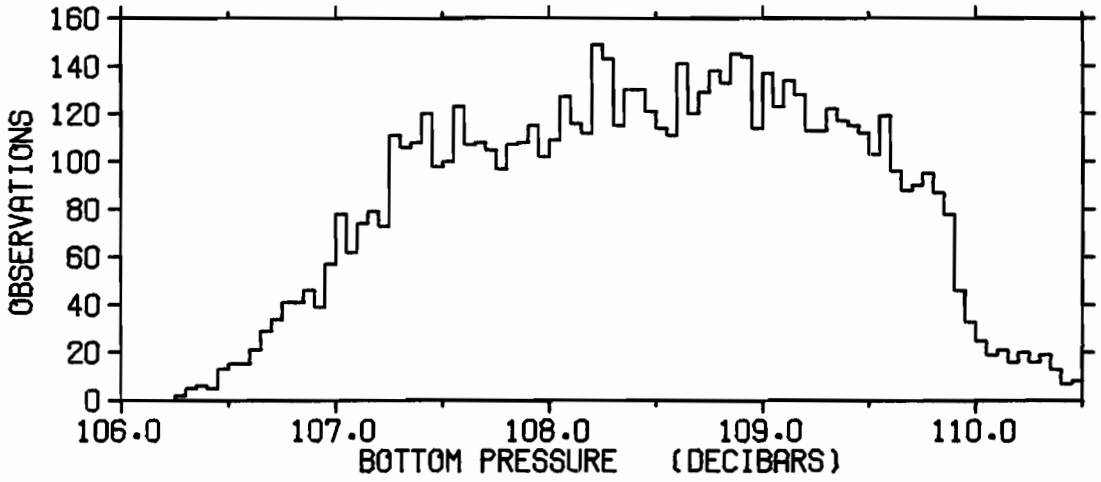

KINETIC ENERGY SPECTRUM OF CURRENTS AT NEGOA 63.5, EGG 0306
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 90 METERS
OBSERVATION PERIOD = 0000 3 FEB 75 TO 1730 10 MAY 75 (96.7 DAYS)
N = 4644, DT = 30.00 MINUTES, SMOOTHING - DANIELL WINDOW
PERIOD (HOURS)
1000
100
10
1
.1
KINETIC ENERGY
95 PERCENT
5
10
25
50
100
(CM/SEC)²/CPH
FREQUENCY (CYCLES/HOUR)
.001
.01
.1
1
10

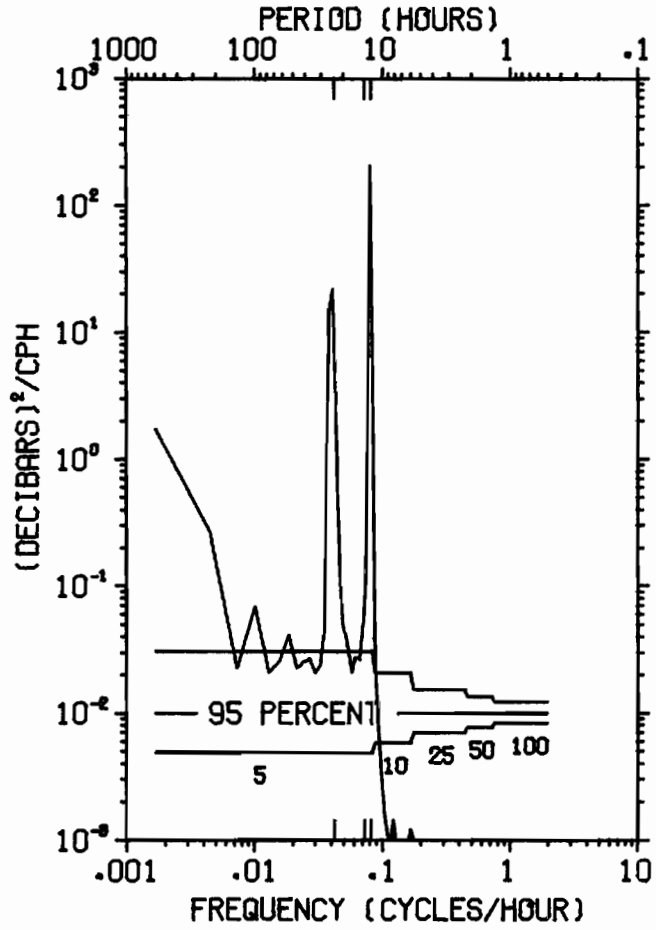
APPENDIX C

COMPILATION OF BOTTOM PRESSURE

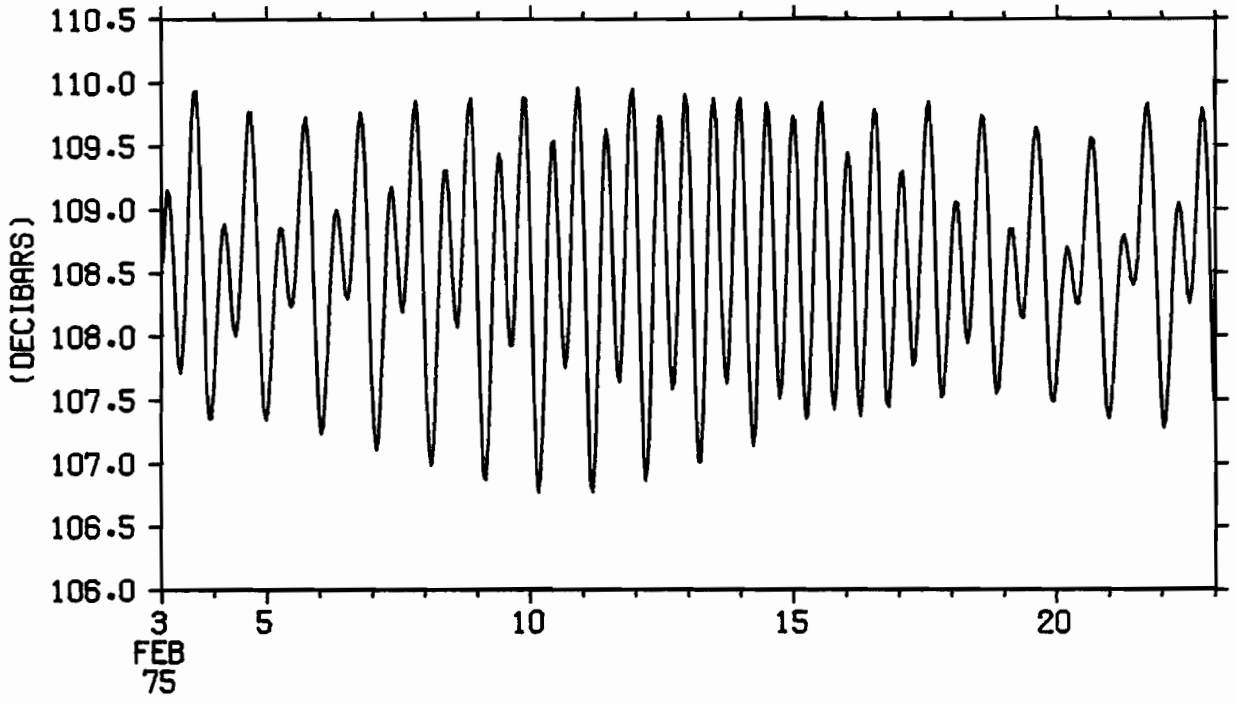
STATISTICS, HISTOGRAM AND SPECTRUM OF BOTTOM PRESSURE AT BUOY 63.5, ATG-54
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 100 METERS
OBSERVATION PERIOD = 0000 3 FEB 75 TO 2345 17 APR 75 (74.0 DAYS)
N = 7104, DT = 15.00 MINUTES, UNITS = (DECIBARS)

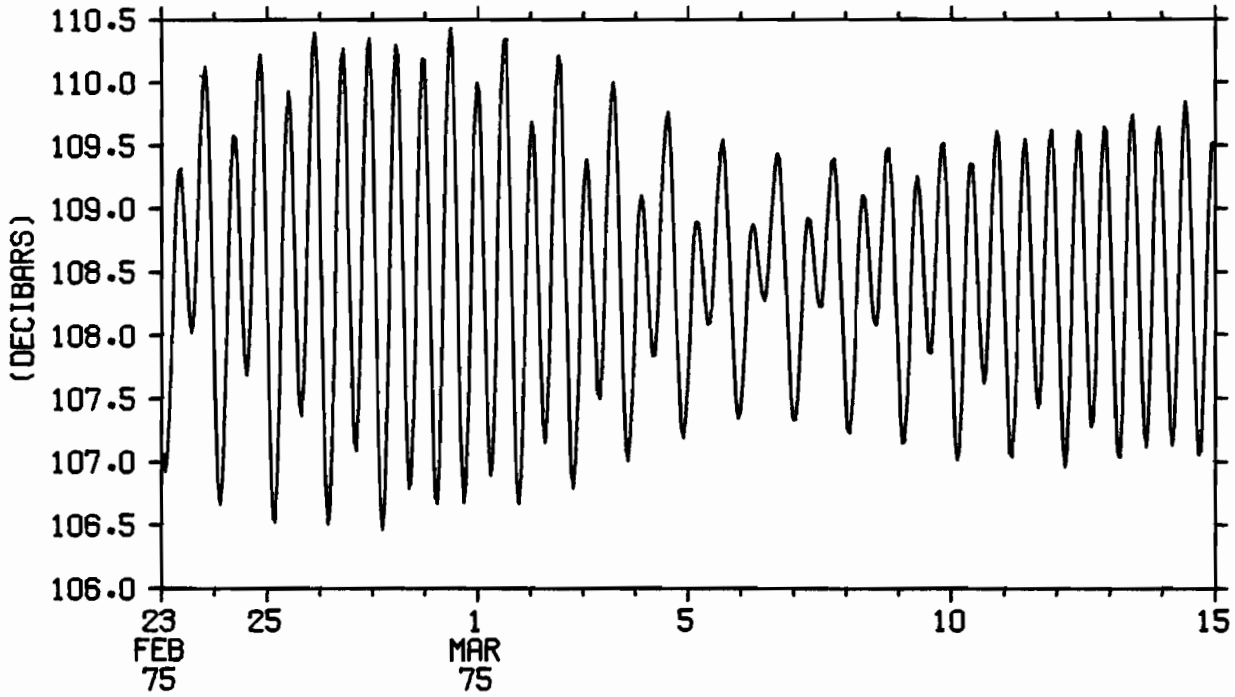
MEAN	VARIANCE	ST-DEV	SKEW	KURT	MAX	MIN
108.45	.808	.90	-.087	2.124	110.48	106.30



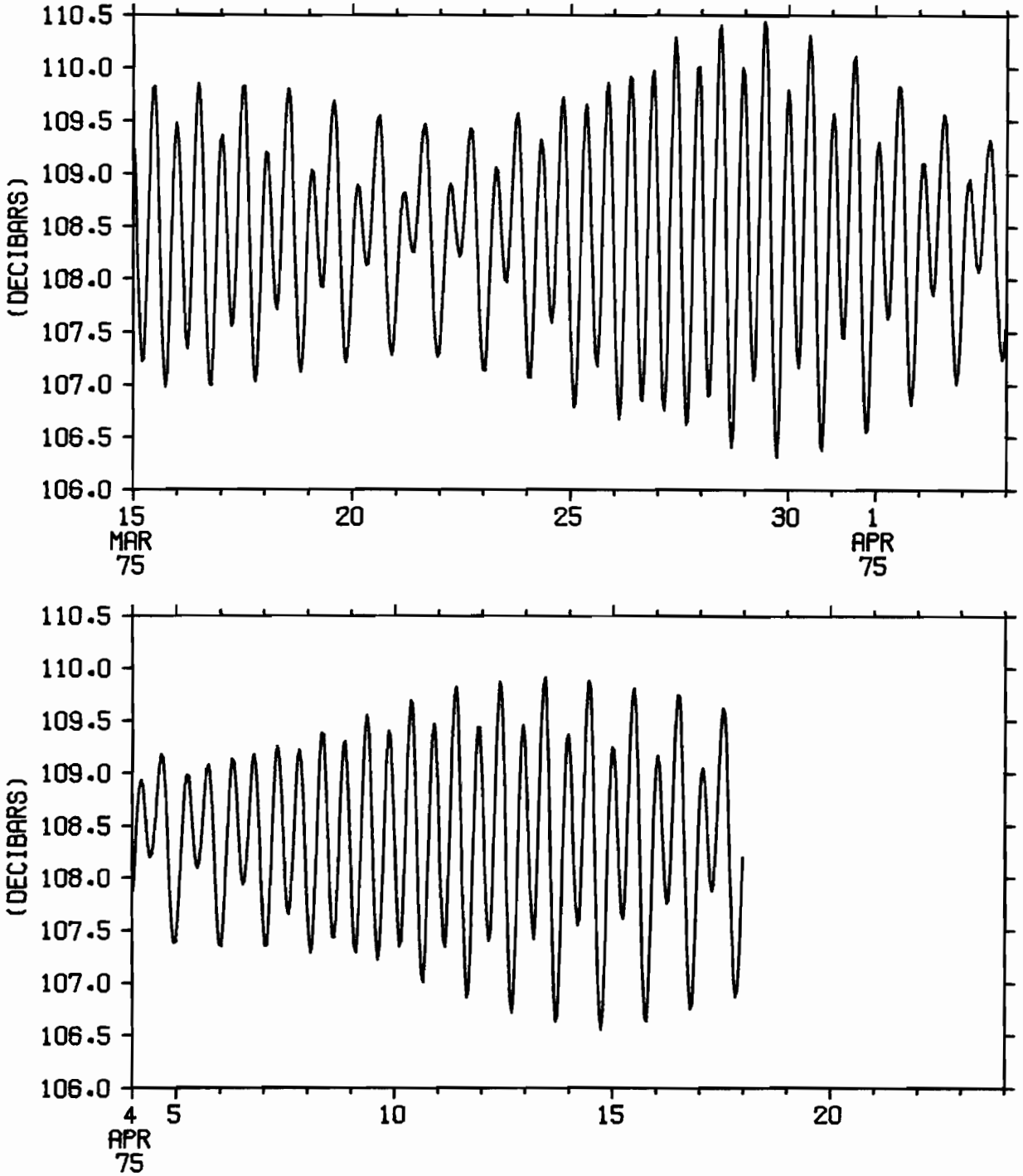


TIME SERIES OF AVERAGED BOTTOM PRESSURE AT BUOY 63.5, ATG-54
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 100 METERS
OBSERVATION PERIOD = 0000 3 FEB 75 TO 2300 14 MAR 75 (40.0 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (4 POINTS)



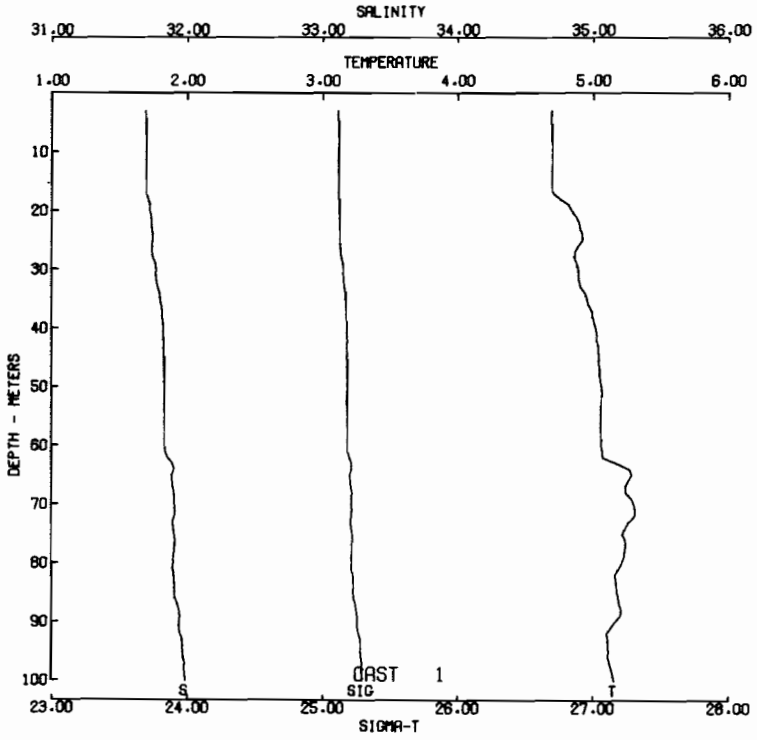


TIME SERIES OF AVERAGED BOTTOM PRESSURE AT BUOY 63.5, ATG-54
LOCATION = LAT 59 46.8N, LONG 141 58.9W, DEPTH = 100 METERS
OBSERVATION PERIOD = 0000 15 MAR 75 TO 2300 17 APR 75 (34.0 DAYS)
AVERAGING INTERVAL = 1.0 HOURS (4 POINTS)



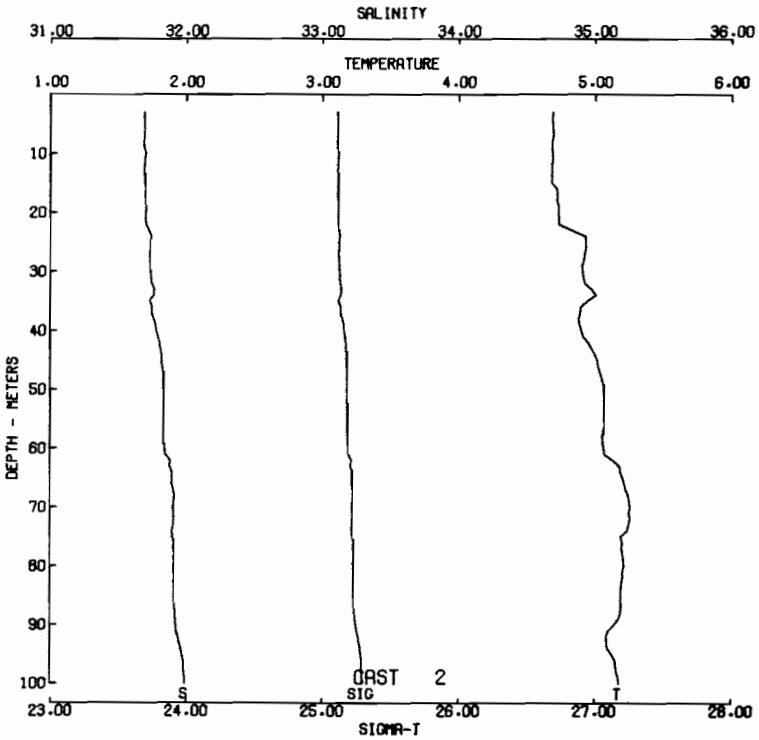
APPENDIX D

COMPILATION OF *Oceanographer* STD CASTS 1-81



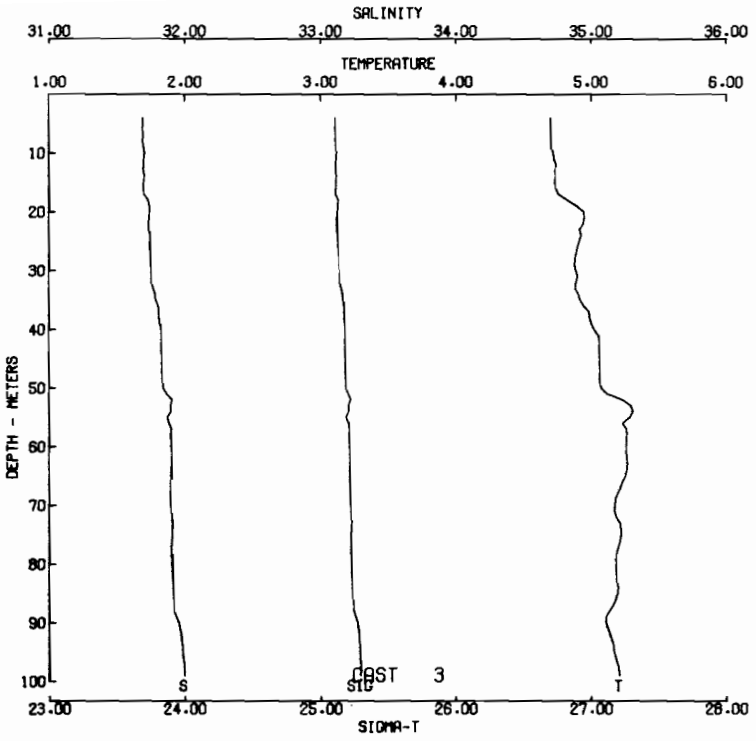
CAST NEGOA-1-OC-001 DATE 04 FEB 75 TIME 0732 GMT
LAT 59 45.9N LONG 141 59.3W WEATHER 0 SEA STATE 1
BAROMETER 27 WIND DIR 320 T SPD 08 KT VISIBILITY 8
CLOUD 1 AMOUNT 1 DRY 01.5 WET 00.0 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.69	31.69	25.11	0.000
3	4.69	31.69	25.11	
5	4.69	31.69	25.11	.014
10	4.70	31.69	25.11	.029
15	4.70	31.70	25.12	.043
20	4.84	31.72	25.12	.057
25	4.92	31.74	25.13	.071
30	4.89	31.77	25.15	.086
35	4.95	31.80	25.17	.100
40	5.02	31.82	25.18	.114
45	5.04	31.83	25.18	.128
50	5.06	31.83	25.18	.142
75	5.22	31.90	25.22	.211
100	5.15	31.98	25.29	.280
103	5.23	32.01	25.30	



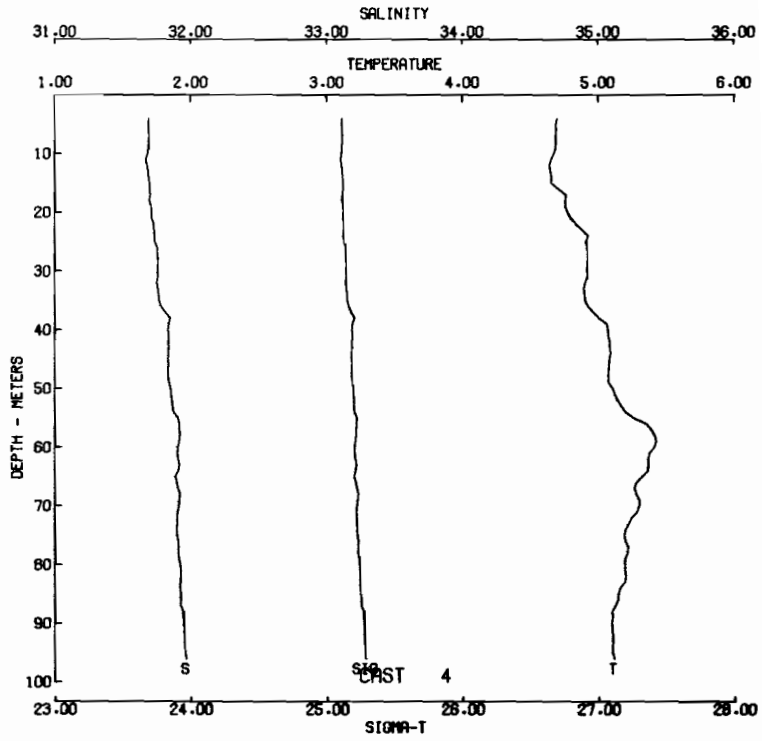
CAST NEGOA-1-OC-002 DATE 04 FEB 75 TIME 0838 GMT
LAT 59 45.9N LONG 141 59.3W WEATHER 1 SEA STATE 3
BAROMETER 27 WIND DIR 320 T SPD 08 KT VISIBILITY 7
CLOUD 9 AMOUNT 1 DRY 01.5 WET 00.0 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.68	31.68	25.11	0.000
3	4.69	31.69	25.11	
5	4.69	31.69	25.11	.014
10	4.68	31.70	25.12	.029
15	4.68	31.69	25.11	.043
20	4.73	31.70	25.11	.057
25	4.93	31.73	25.12	.072
30	4.91	31.73	25.12	.086
35	4.95	31.73	25.11	.100
40	4.98	31.77	25.16	.114
45	5.02	31.81	25.18	.128
50	5.06	31.83	25.18	.142
75	5.19	31.90	25.22	.212
100	5.18	31.99	25.29	.283



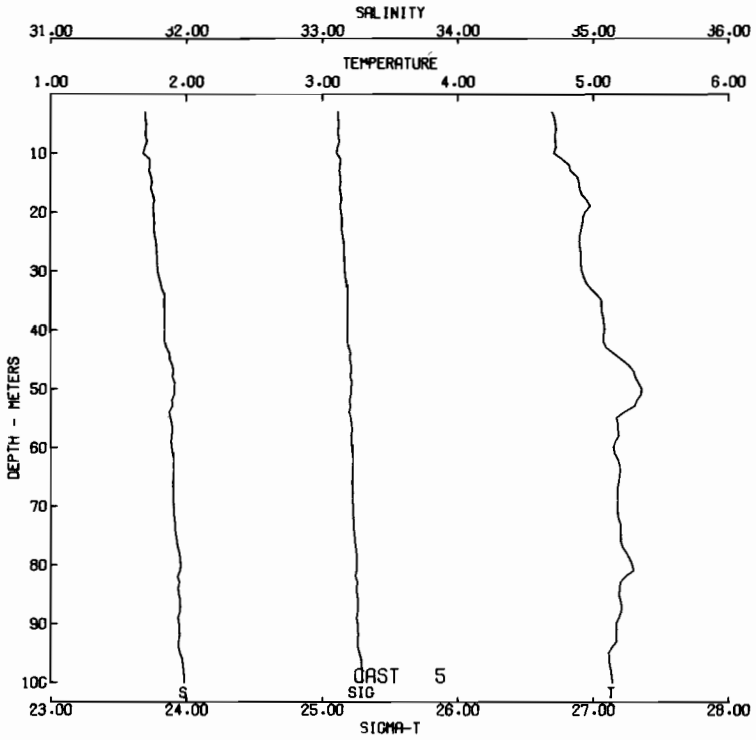
CAST NEGOA-1-OC-003 DATE 14 FEB 75 TIME 0931 GMT
LAT 59 45.9N LONG 141 59.3W WEATHER 1 SEA STATE 3
BAROMETER 27 WIND DIR 310 T SPD 07 KT VISIBILITY 7
CLOUD AMOUNT 2 DRY 01.5 WET 00.0 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.69	31.68	25.11	0.000
4	4.70	31.69	25.11	
5	4.70	31.69	25.11	.014
10	4.72	31.70	25.12	.029
15	4.73	31.70	25.11	.043
20	4.95	31.74	25.12	.057
25	4.91	31.74	25.13	.071
30	4.88	31.75	25.14	.086
35	4.92	31.78	25.16	.100
40	5.02	31.82	25.18	.114
45	5.06	31.83	25.18	.128
50	5.07	31.84	25.19	.142
75	5.22	31.91	25.22	.211
99	5.21	32.08	25.30	



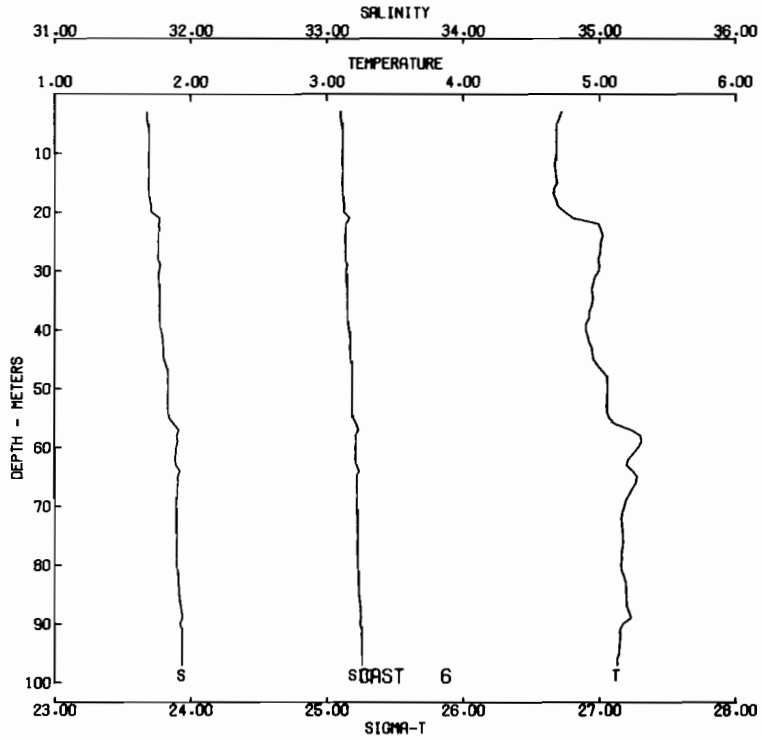
CAST NEGOA-1-OC-004 DATE 14 FEB 75 TIME 1040 GMT
LAT 59 46.0N LONG 141 59.3W WEATHER 1 SEA STATE 3
BAROMETER 27 WIND DIR 300 T SPD 06 KT VISIBILITY 8
CLOUD AMOUNT 2 DRY 00.0 WET 01.5 DEPTH 0102 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.71	31.69	25.11	0.000
4	4.70	31.69	25.11	
5	4.69	31.69	25.11	.014
10	4.68	31.68	25.11	.029
15	4.66	31.70	25.12	.043
20	4.78	31.71	25.12	.057
25	4.91	31.74	25.12	.071
30	4.92	31.76	25.14	.086
35	4.98	31.77	25.15	.100
40	5.07	31.83	25.18	.114
45	5.08	31.83	25.18	.128
50	5.11	31.85	25.19	.142
75	5.19	31.90	25.22	.211
96	5.11	31.96	25.28	



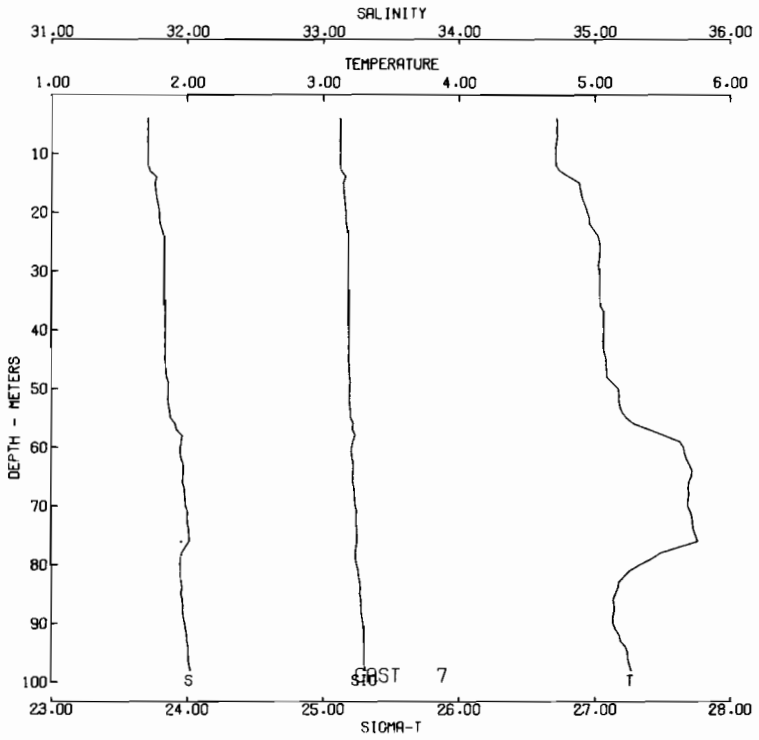
CAST NEGOA-1-OC-005 DATE 04 FEB 75 TIME 1136 GMT
LAT 59 46.2N LONG 141 59.2W WEATHER 1 SEA STATE 3
BAROMETER 27 WIND DIR 300 T SPD 26 KT VISIBILITY 8
CLOUD AMOUNT 2 DRY 00.0 WET 31.5 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.69	31.69	25.11	0.000
3	4.70	31.69	25.11	
5	4.72	31.70	25.12	.014
10	4.71	31.68	25.10	.029
15	4.89	31.74	25.13	.043
20	4.94	31.75	25.14	.057
25	4.98	31.77	25.16	.071
30	4.91	31.78	25.16	.085
35	5.06	31.83	25.18	.099
40	5.08	31.84	25.19	.113
45	5.21	31.88	25.20	.127
50	5.36	31.91	25.21	.141
75	5.20	31.92	25.24	.210
100	5.14	31.98	25.29	.278
103	5.21	32.02	25.32	



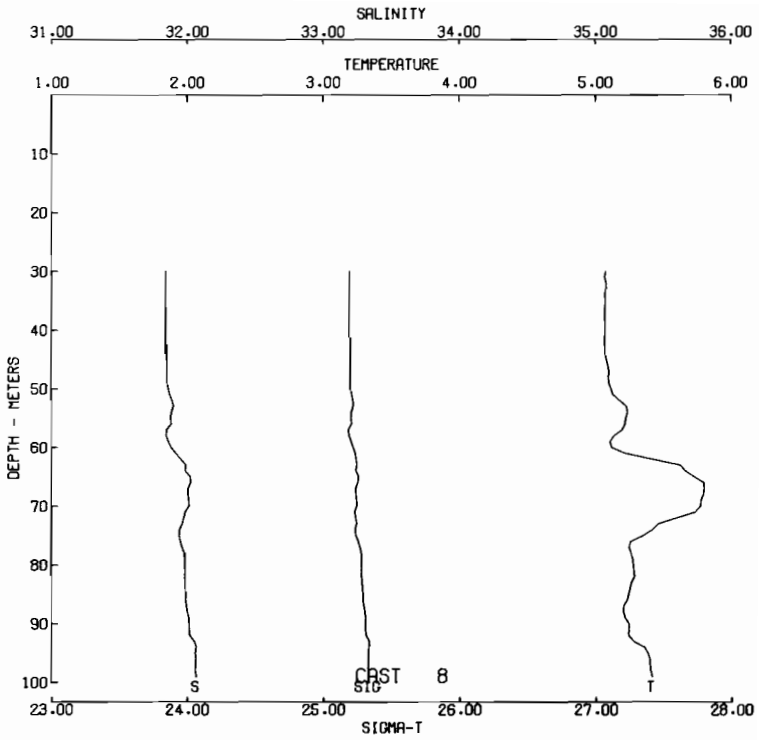
CAST NEGOA-1-OC-006 DATE 04 FEB 75 TIME 1231 GMT
LAT 59 46.2N LONG 141 59.2W WEATHER 1 SEA STATE 3
BAROMETER 27 WIND DIR 300 T SPD 25 KT VISIBILITY 8
CLOUD AMOUNT 2 DRY 00.0 WET 31.5 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.74	31.66	25.08	0.000
3	4.72	31.68	25.10	
5	4.69	31.68	25.11	.014
10	4.68	31.69	25.11	.029
15	4.69	31.69	25.11	.043
20	4.74	31.71	25.12	.057
25	5.01	31.76	25.13	.071
30	5.00	31.77	25.14	.086
35	4.95	31.77	25.15	.100
40	4.90	31.78	25.16	.114
45	4.95	31.80	25.17	.128
50	5.06	31.83	25.19	.142
75	5.17	31.90	25.23	.211
97	5.13	31.94	25.26	



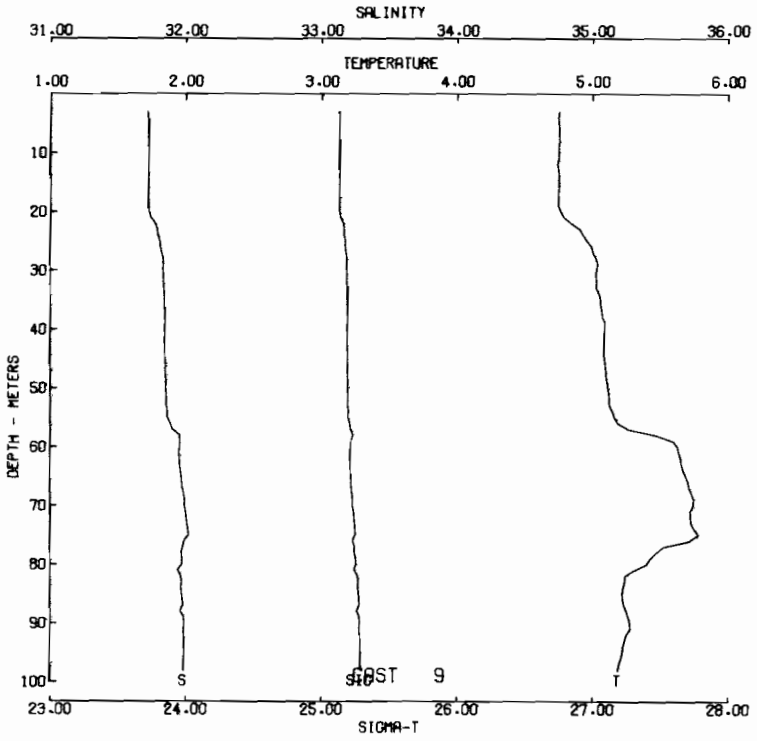
CAST NEGOA-1-OC-007 DATE 04 FEB 75 TIME 1332 GMT
LAT 59 46.2N LONG 141 59.2W WEATHER 1 SEA STATE 2
BAROMETER 27 WIND DIR 300 T SPD 25 KT VISIBILITY 8
CLOUD AMOUNT 9 DRY 00.0 WET 01.5 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.72	31.78	25.16	0.000
4	4.72	31.78	25.16	
5	4.72	31.71	25.16	.014
10	4.71	31.71	25.12	.029
15	4.88	31.76	25.15	.043
20	4.94	31.79	25.17	.057
25	5.03	31.83	25.18	.071
30	5.03	31.83	25.18	.085
35	5.04	31.83	25.19	.099
40	5.07	31.84	25.19	.113
45	5.08	31.83	25.18	.127
50	5.17	31.86	25.19	.141
75	5.74	32.01	25.25	.210
98	6.27	32.02	25.31	



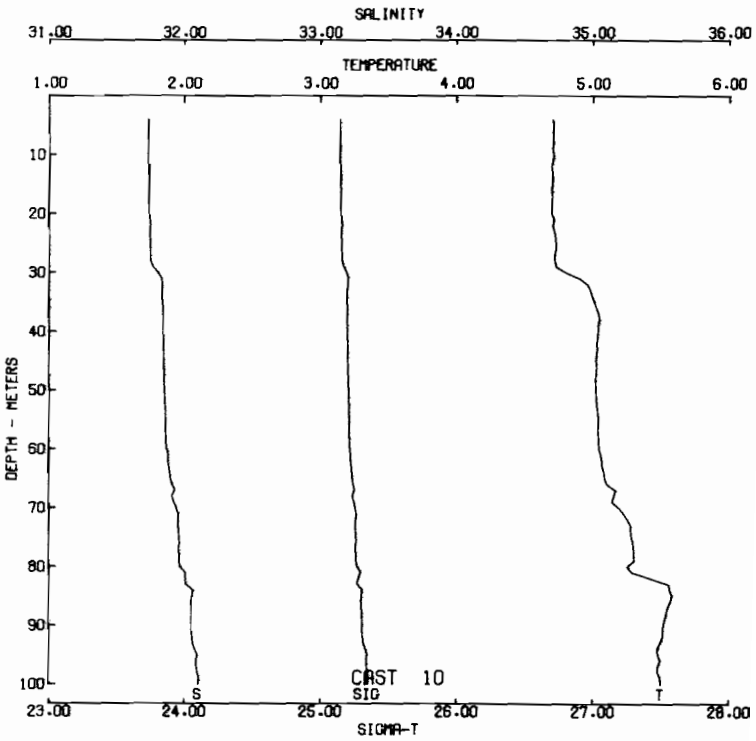
CAST NEGOA-1-OC-008 DATE 04 FEB 75 TIME 1431 GMT
LAT 59 46.2N LONG 141 59.6W WEATHER 1 SEA STATE 2
BAROMETER 27 WIND DIR 300 T SPD 38 KT VISIBILITY 8
CLOUD AMOUNT 9 DRY 01.7 WET 02.7 DEPTH 0105 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
30	5.07	31.84	25.19	
35	5.07	31.84	25.19	.098
40	5.07	31.84	25.19	.112
45	5.08	31.85	25.20	.126
50	5.11	31.86	25.20	.139
75	5.34	31.94	25.24	.208
99	5.41	32.06	25.33	



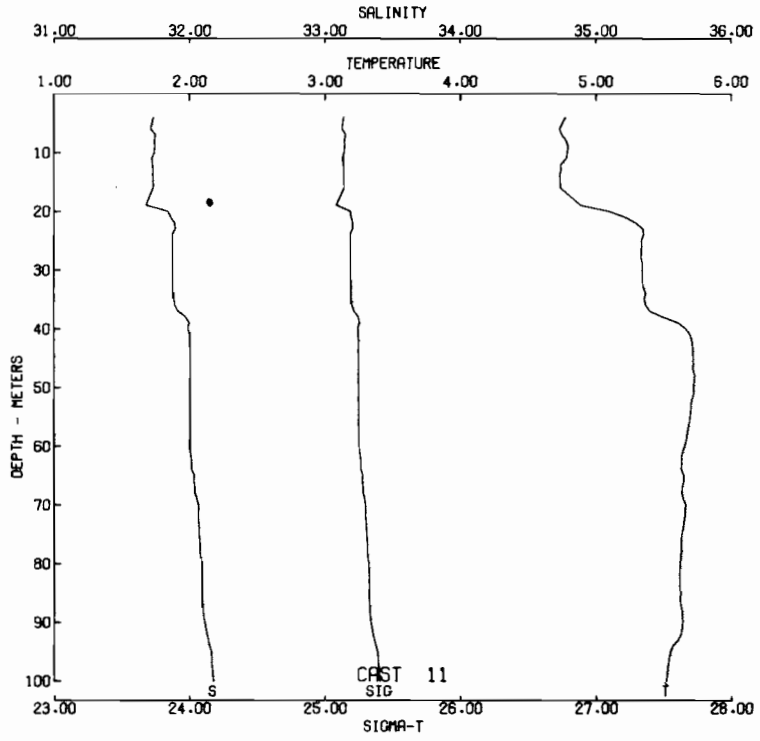
CAST NEGOA-1-OC-009 DATE 04 FEB 75 TIME 1529 GMT
LAT 59 46.2N LONG 141 59.0W WEATHER 1 SEA STATE 2
BAROMETER 27 WIND DIR 300 T SPD 28 KT VISIBILITY 8
CLOUD AMOUNT 9 DRY 01.7 WET 02.7 DEPTH 0105 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.75	31.71	25.12	0.000
4	4.75	31.71	25.12	
5	4.75	31.72	25.13	.014
10	4.75	31.72	25.13	.028
15	4.75	31.72	25.13	.043
20	4.76	31.72	25.13	.057
25	4.96	31.80	25.17	.071
30	5.03	31.83	25.18	.085
35	5.06	31.84	25.19	.099
40	5.09	31.84	25.19	.113
45	5.09	31.84	25.19	.127
50	5.11	31.85	25.19	.141
75	5.78	32.02	25.25	.210
98	5.19	31.95	25.29	



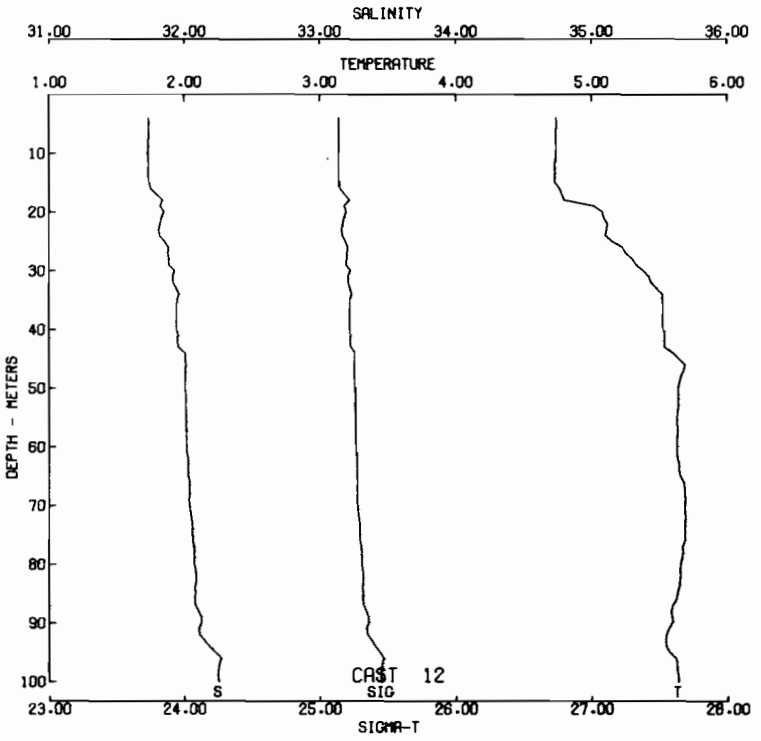
CAST NEGOA-1-OC-010 DATE 04 FEB 75 TIME 1630 GMT
LAT 59 46.2N LONG 141 59.1W WEATHER 1 SEA STATE 2
BAROMETER 27 WIND DIR 300 T SPD 28 KT VISIBILITY 8
CLOUD AMOUNT 9 DRY 01.7 WET 02.7 DEPTH 0105 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.70	31.73	25.14	0.000
4	4.70	31.73	25.14	
5	4.71	31.73	25.14	.014
10	4.71	31.73	25.14	.028
15	4.70	31.74	25.15	.042
20	4.70	31.74	25.15	.057
25	4.73	31.75	25.15	.071
30	4.80	31.80	25.19	.085
35	5.01	31.84	25.19	.099
40	5.04	31.84	25.20	.113
45	5.02	31.85	25.20	.127
50	5.02	31.85	25.21	.140
75	5.28	31.96	25.26	.209
100	5.50	32.10	25.35	.276
102	5.53	32.11	25.35	



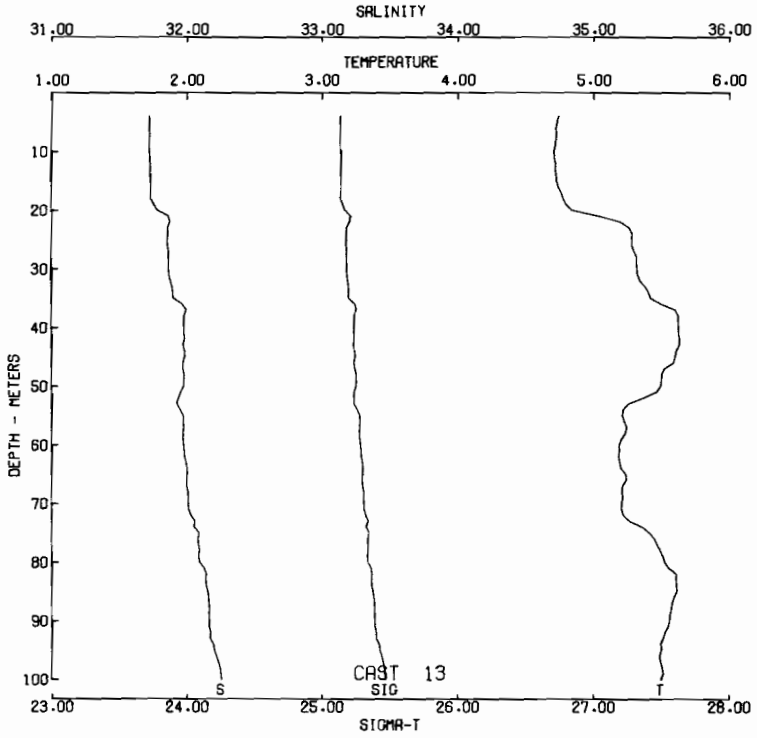
CAST NEGOA-1-OC-011 DATE 04 FEB 75 TIME 1730 GMT
LAT 59 45.0N LONG 141 56.5W WEATHER 0 SEA STATE 2
BAROMETER 27 WIND DIR 300 T SPD 08 KT VISIBILITY 8
CLOUD AMOUNT 0 DRY 01.7 WET 02.7 DEPTH 0105 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.81	31.72	25.12	0.000
4	4.77	31.73	25.14	
5	4.75	31.72	25.13	.014
10	4.79	31.74	25.14	.028
15	4.74	31.73	25.14	.043
20	5.09	31.84	25.18	.057
25	5.33	31.87	25.18	.071
30	5.34	31.87	25.19	.085
35	5.35	31.88	25.19	.099
40	5.66	31.99	25.24	.113
45	5.72	32.00	25.25	.126
50	5.72	32.01	25.25	.140
75	5.63	32.07	25.31	.208
100	5.52	32.18	25.40	.274
101	5.51	32.18	25.41	



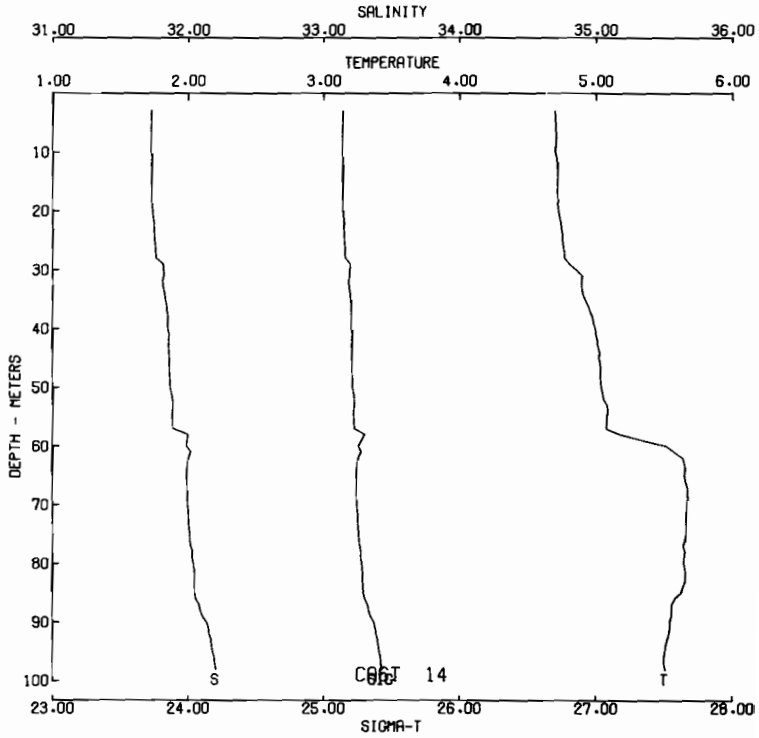
CAST NEGOA-1-OC-012 DATE 04 FEB 75 TIME 1828 GMT
LAT 59 45.0N LONG 141 56.5W WEATHER 0 SEA STATE 1
BAROMETER 27 WIND DIR 340 T SPD 04 KT VISIBILITY 9
CLOUD 0 AMOUNT 0 DRY 01.3 WET 00.4 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.74	31.73	25.13	0.000
4	4.74	31.73	25.14	
5	4.74	31.73	25.14	.014
10	4.74	31.73	25.14	.028
15	4.73	31.74	25.15	.043
20	5.08	31.85	25.19	.057
25	5.15	31.85	25.19	.071
30	5.38	31.93	25.22	.084
35	5.52	31.95	25.22	.098
40	5.53	31.94	25.22	.112
45	5.64	32.01	25.26	.126
50	5.64	32.01	25.26	.139
75	5.69	32.06	25.29	.207
100	5.64	32.25	25.45	.273
106	5.65	32.24	25.44	



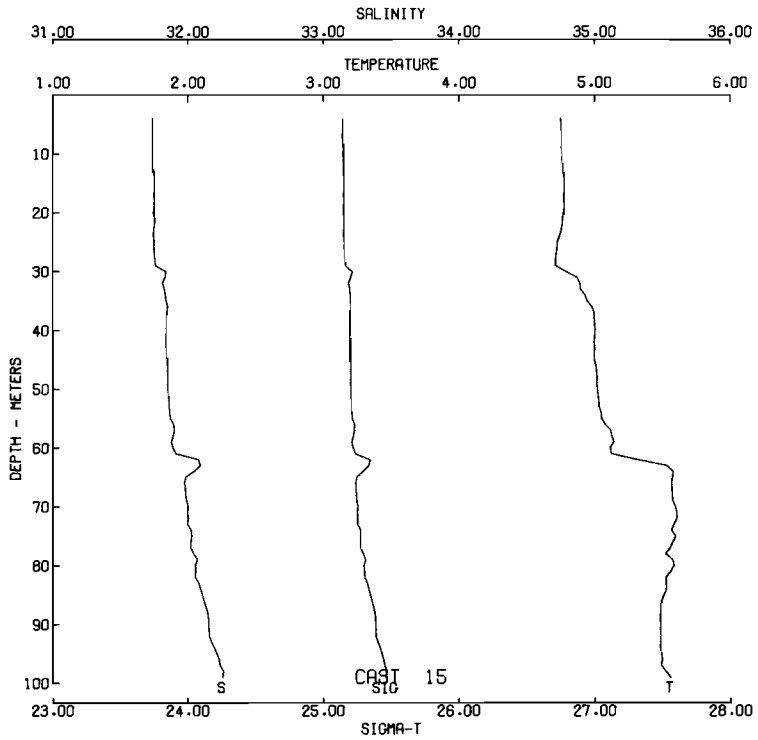
CAST NEGOA-1-OC-013 DATE 04 FEB 75 TIME 1932 GMT
LAT 59 45.0N LONG 141 58.5W WEATHER 0 SEA STATE 2
BAROMETER 26 WIND DIR 360 T SPD 06 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 02.6 WET 01.8 DEPTH 0105 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.76	31.72	25.13	0.000
4	4.74	31.72	25.13	
5	4.73	31.72	25.13	.014
10	4.70	31.72	25.13	.028
15	4.72	31.73	25.14	.043
20	4.84	31.78	25.17	.057
25	5.28	31.85	25.18	.071
30	5.32	31.86	25.18	.085
35	5.42	31.90	25.19	.099
40	5.63	31.98	25.23	.112
45	5.60	31.98	25.24	.126
50	5.49	31.98	25.25	.140
75	5.42	32.09	25.35	.207
100	5.50	32.25	25.47	.272
103	5.39	32.27	25.49	



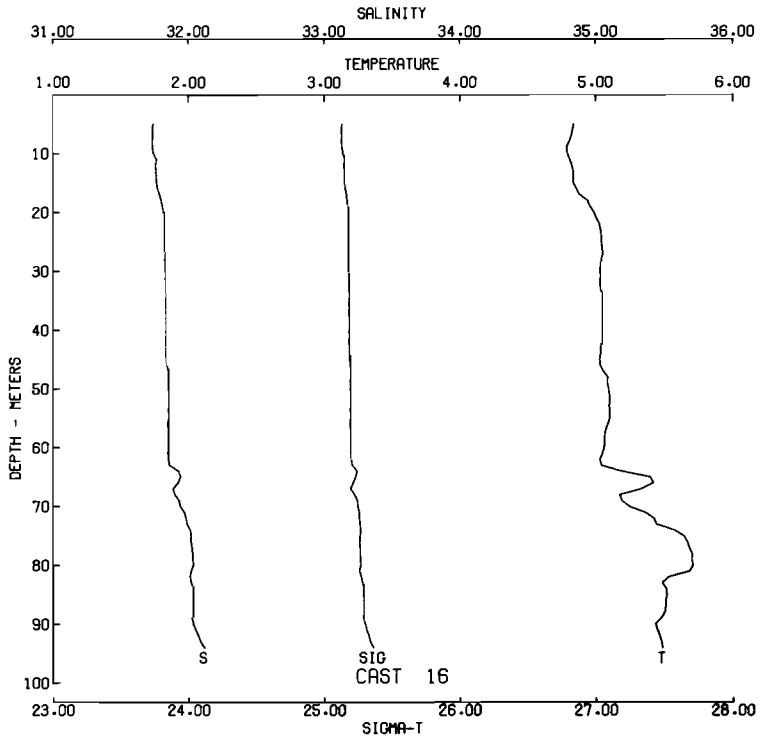
CAST NEGOA-1-OC-014 DATE 04 FEB 75 TIME 2047 GMT
LAT 59 45.6N LONG 141 58.5W WEATHER 1 SEA STATE 3
BAROMETER 27 WIND DIR 060 T SPD 02 KT VISIBILITY 9
CLOUD 6 AMOUNT 2 DRY 01.8 WET 01.0 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.69	31.72	25.14	0.000
4	4.70	31.72	25.14	
5	4.70	31.73	25.14	.014
10	4.70	31.72	25.14	.028
15	4.72	31.73	25.14	.043
20	4.73	31.74	25.14	.057
25	4.76	31.75	25.15	.071
30	4.86	31.82	25.19	.085
35	4.92	31.83	25.20	.099
40	5.00	31.85	25.20	.113
45	5.02	31.86	25.21	.127
50	5.04	31.86	25.21	.140
75	5.66	32.01	25.26	.209
98	5.51	32.21	25.43	



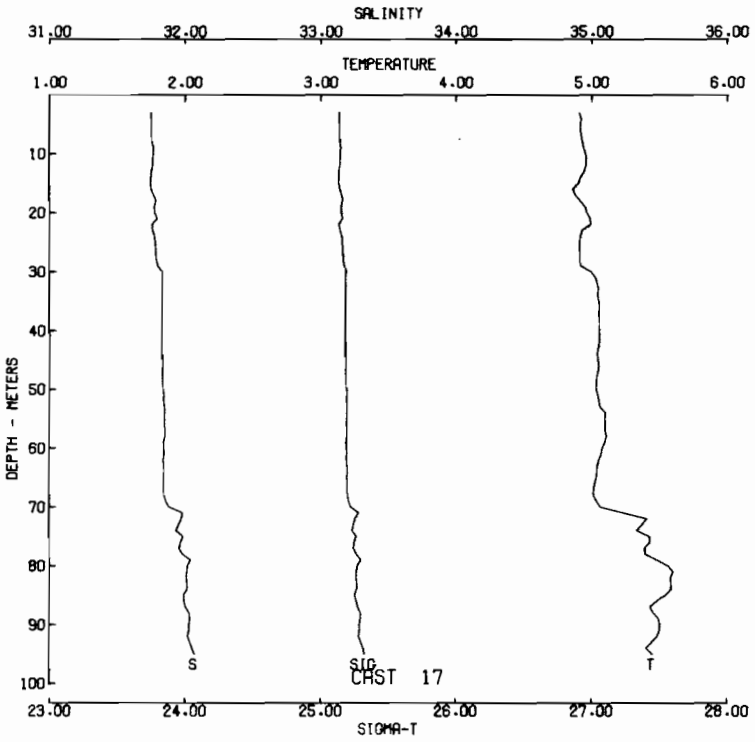
CAST NEGOA-1-OC-015 DATE 04 FEB 75 TIME 2133 GMT
LAT 59 45.0N LONG 141 58.5W WEATHER 1 SEA STATE 2
BAROMETER 27 WIND DIR 060 T SPD 22 KT VISIBILITY 8
CLOUD 6 AMOUNT 2 DRY 01.8 WET 31.0 DEPTH 0104 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.74	31.74	25.15	0.000
4	4.75	31.74	25.14	
5	4.76	31.74	25.14	.014
10	4.76	31.74	25.14	.028
15	4.78	31.76	25.15	.042
20	4.77	31.75	25.15	.057
25	4.72	31.75	25.16	.071
30	4.79	31.83	25.21	.085
35	4.94	31.94	25.20	.099
40	5.00	31.84	25.20	.113
45	5.00	31.85	25.20	.126
50	5.02	31.85	25.20	.140
75	5.60	32.03	25.28	.209
99	5.56	32.26	25.46	



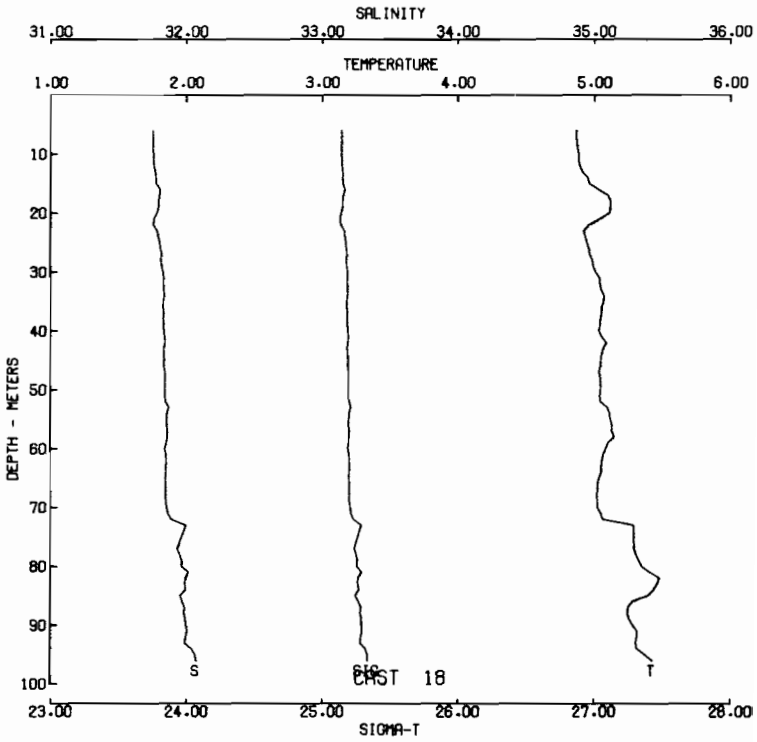
CAST NEGOA-1-OC-016 DATE 04 FEB 75 TIME 2238 GMT
LAT 59 45.0N LONG 141 58.5W WEATHER 0 SEA STATE 2
BAROMETER 27 WIND DIR 000 T SPD 00 KT VISIBILITY 7
CLOUD 0 AMOUNT 0 DRY 03.0 WET 04.5 DEPTH 0102 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.88	31.75	25.14	0.000
5	4.84	31.74	25.13	
10	4.80	31.74	25.14	.028
15	4.84	31.76	25.15	.043
20	4.99	31.81	25.18	.057
25	5.04	31.82	25.18	.071
30	5.03	31.83	25.18	.085
35	5.05	31.83	25.19	.099
40	5.05	31.83	25.19	.112
45	5.03	31.83	25.19	.126
50	5.09	31.85	25.19	.140
75	5.64	32.02	25.26	.209
94	5.48	32.11	25.36	



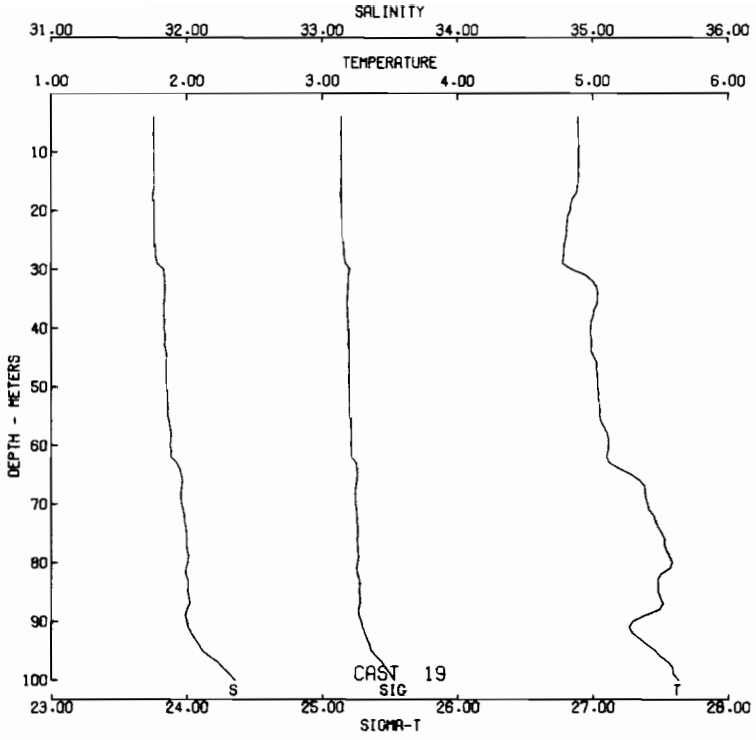
CAST NEGOA-1-OL-017 DATE 04 FEB 75 TIME 2346 GMT
LAT 59.45.0N LONG 141 58.5W WEATHER 0 SEA STATE 1
BAROMETER 27 WIND DIR 000 T SPD 00 KT VISIBILITY 7
CLOUD AMOUNT 0 DRY 03.0 WET 04.5 DEPTH 0104 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.90	31.74	25.13	0.000
3	4.91	31.75	25.13	
5	4.92	31.75	25.14	.014
10	4.95	31.76	25.14	.028
15	4.90	31.74	25.13	.043
20	4.96	31.77	25.15	.057
25	4.91	31.78	25.16	.071
30	4.99	31.83	25.19	.085
35	5.05	31.83	25.18	.099
40	5.06	31.83	25.18	.113
45	5.05	31.84	25.19	.127
50	5.04	31.84	25.19	.141
75	5.43	31.99	25.26	.210
95	5.45	32.07	25.33	



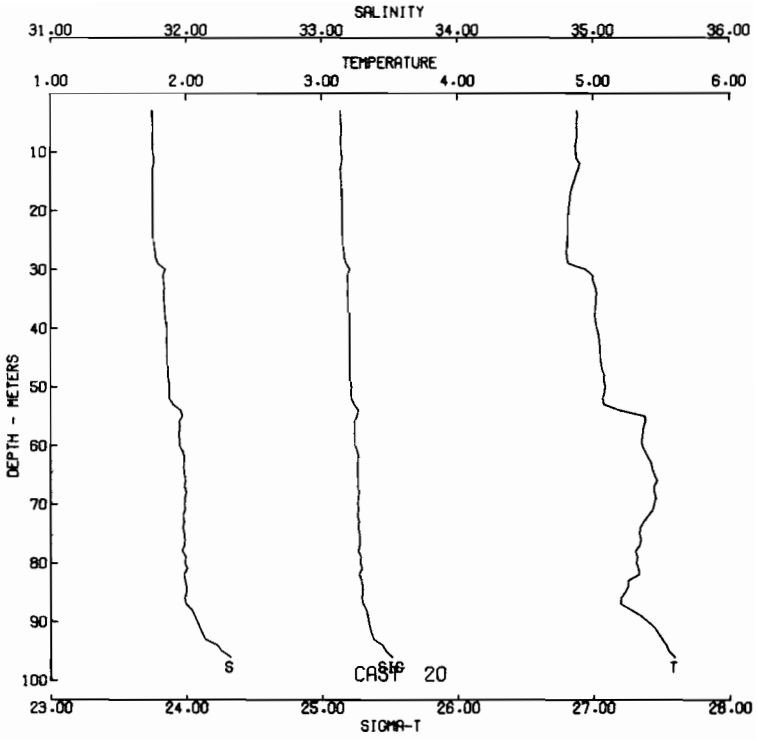
CAST NEGOA-1-OL-018 DATE 05 FEB 75 TIME 0029 GMT
LAT 59.45.0N LONG 141 58.5W WEATHER 0 SEA STATE 1
BAROMETER 27 WIND DIR 000 T SPD 00 KT VISIBILITY 7
CLOUD AMOUNT 0 DRY 03.1 WET 04.5 DEPTH 0104 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.88	31.75	25.14	0.000
6	4.87	31.75	25.14	
10	4.89	31.75	25.14	.028
15	4.96	31.78	25.15	.042
20	5.11	31.78	25.14	.057
25	4.95	31.80	25.17	.071
30	5.01	31.83	25.19	.085
35	5.07	31.83	25.18	.099
40	5.03	31.83	25.19	.113
45	5.05	31.84	25.19	.127
50	5.05	31.84	25.19	.141
75	5.29	31.96	25.26	.210
96	5.42	32.07	25.33	



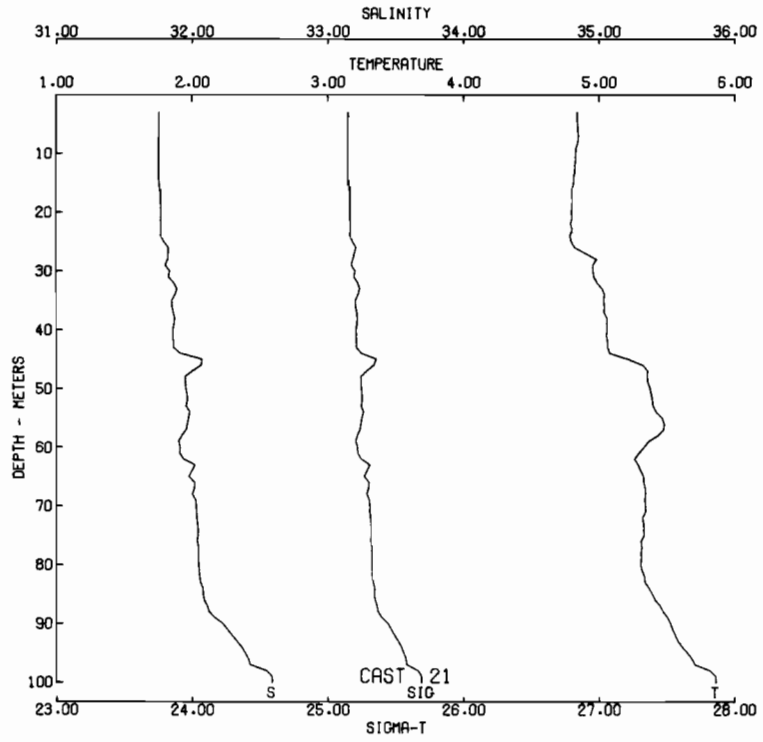
CAST NEGOA-1-OC-019 DATE 05 FEB 75 TIME 0128 GMT
LAT 59 45.8N LONG 141 58.5W WEATHER 3 SEA STATE 1
BAROMETER 27 WIND DIR 030 T SPD 00 KT VISIBILITY 7
CLOUD AMOUNT 0 DRY 03.1 WET 14.5 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.83	31.76	25.14	0.000
4	4.89	31.76	25.14	
5	4.89	31.75	25.14	.014
10	4.90	31.76	25.14	.028
15	4.89	31.76	25.14	.042
20	4.84	31.75	25.15	.057
25	4.80	31.76	25.15	.071
30	4.84	31.83	25.20	.085
35	5.03	31.83	25.19	.099
40	4.98	31.83	25.19	.113
45	5.01	31.85	25.20	.127
50	5.04	31.85	25.20	.141
75	5.51	32.00	25.26	.209
100	5.63	32.35	25.53	.279



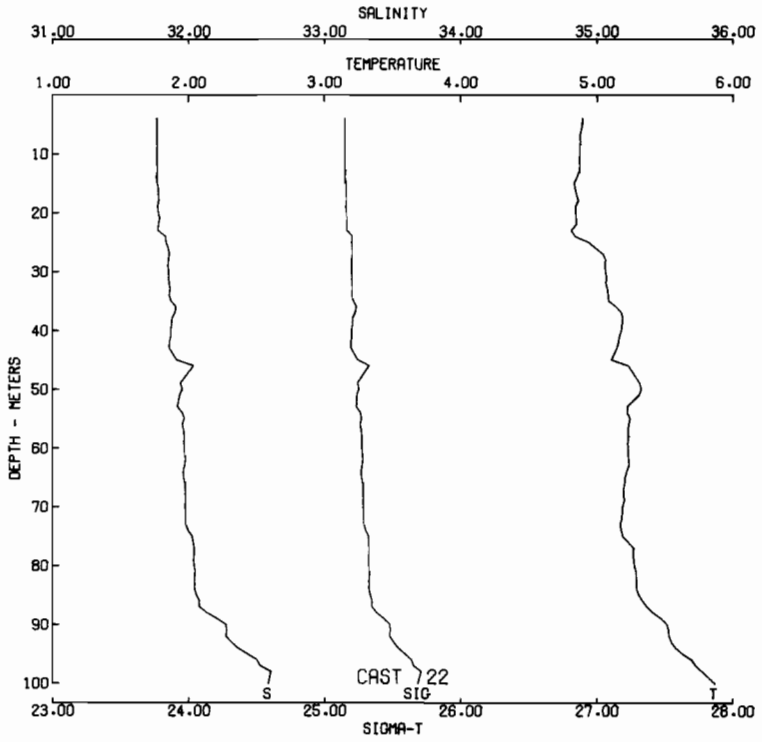
CAST NEGOA-1-OC-020 DATE 05 FEB 75 TIME 0228 GMT
LAT 59 45.8N LONG 141 59.4W WEATHER 0 SEA STATE 0
BAROMETER 29 WIND DIR 000 T SPD 00 KT VISIBILITY 8
CLOUD AMOUNT 0 DRY 04.4 WET 12.7 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.88	31.74	25.13	0.000
3	4.88	31.75	25.14	
5	4.88	31.75	25.14	.014
10	4.87	31.75	25.14	.028
15	4.86	31.75	25.14	.043
20	4.82	31.75	25.15	.057
25	4.81	31.76	25.15	.071
30	4.94	31.84	25.21	.085
35	5.02	31.84	25.19	.099
40	5.03	31.86	25.21	.113
45	5.05	31.86	25.20	.127
50	5.39	31.88	25.22	.140
75	5.34	31.98	25.27	.209
96	5.59	32.32	25.51	



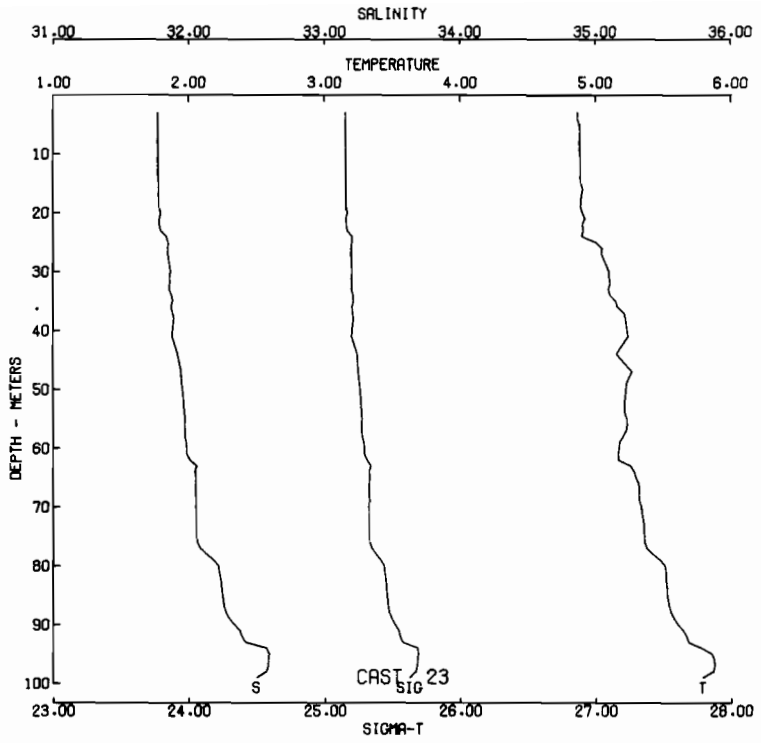
CAST NEGOA-1-DC-021 DATE 05 FEB 75 TIME 0335 GMT
LAT 59 46.1N LONG 141 59.4W WEATHER 0 SEA STATE 0
BAROMETER 29 WIND DIR 000 T SPD 00 KT VISIBILITY 8
CLOUD AMOUNT 0 DRY 04.4 WET 02.7 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	4.83	31.76	25.15	0.000
3	4.84	31.76	25.15	
5	4.84	31.76	25.15	.014
10	4.83	31.75	25.14	.028
15	4.81	31.76	25.15	.042
20	4.80	31.77	25.16	.056
25	4.80	31.79	25.18	.071
30	4.96	31.84	25.20	.084
35	5.03	31.85	25.20	.098
40	5.06	31.86	25.21	.112
45	5.22	32.07	25.36	.126
50	5.38	31.95	25.25	.139
75	5.33	32.04	25.32	.277
100	5.86	32.59	25.69	.274



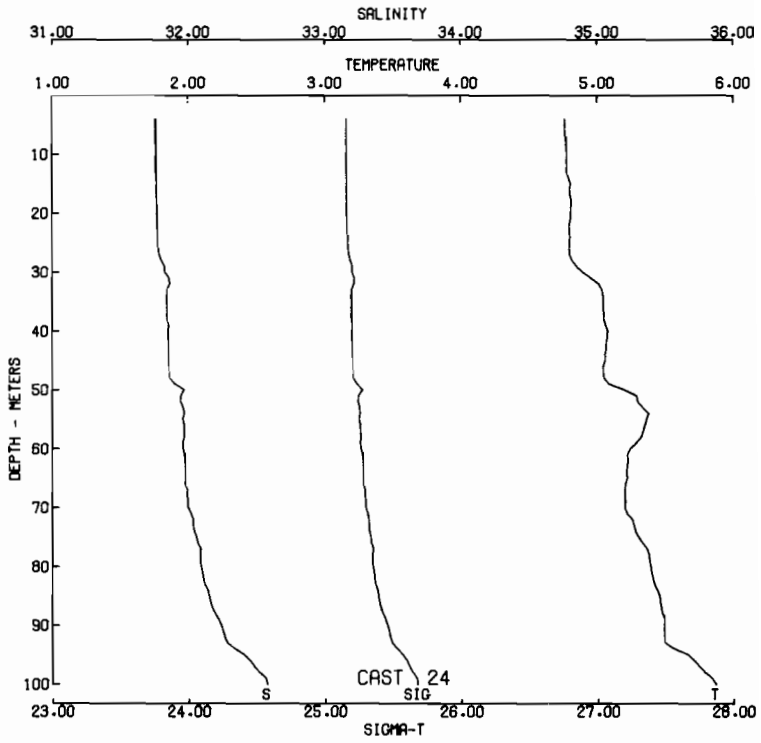
CAST NEGOA-1-DC-022 DATE 05 FEB 75 TIME 0431 GMT
LAT 59 47.5N LONG 142 06.3W WEATHER 0 SEA STATE 0
BAROMETER 29 WIND DIR 000 T SPD 00 KT VISIBILITY 5
CLOUD AMOUNT 0 DRY 04.4 WET 02.7 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.92	31.76	25.14	0.000
4	4.90	31.76	25.15	
5	4.89	31.76	25.15	.014
10	4.88	31.76	25.15	.028
15	4.83	31.77	25.16	.042
20	4.84	31.78	25.16	.056
25	4.94	31.83	25.20	.070
30	5.06	31.85	25.20	.084
35	5.09	31.87	25.21	.098
40	5.10	31.87	25.20	.112
45	5.11	31.91	25.24	.126
50	5.33	31.95	25.25	.139
75	5.19	32.02	25.32	.277
100	5.87	32.58	25.69	.276



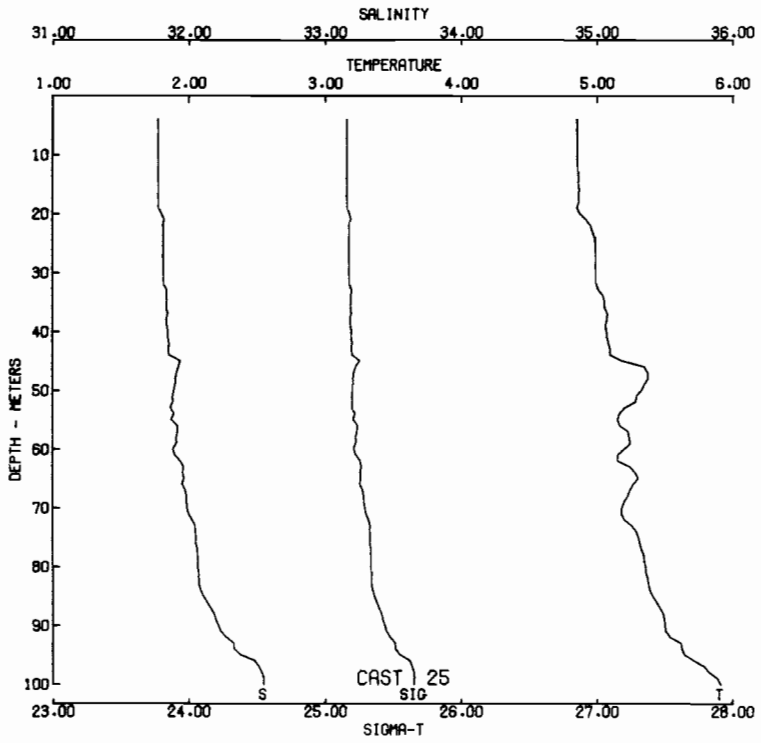
CAST NEGOA-1-OC-023 DATE 05 FEB 75 TIME 0530 GMT
LAT 59 47.5N LONG 142 30.2W WEATHER 0 SEA STATE 0
BAROMETER 27 WIND DIR 000 T SPD 00 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 04.4 WET 02.7 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.85	31.77	25.16	0.000
3	4.87	31.77	25.15	
5	4.88	31.77	25.15	.014
10	4.88	31.77	25.15	.028
15	4.89	31.78	25.16	.042
20	4.90	31.79	25.17	.056
25	5.00	31.85	25.20	.070
30	5.10	31.86	25.20	.084
35	5.15	31.88	25.21	.098
40	5.23	31.88	25.20	.112
45	5.19	31.92	25.24	.126
50	5.23	31.95	25.26	.140
75	5.36	32.06	25.33	.207
99	5.79	32.50	25.63	



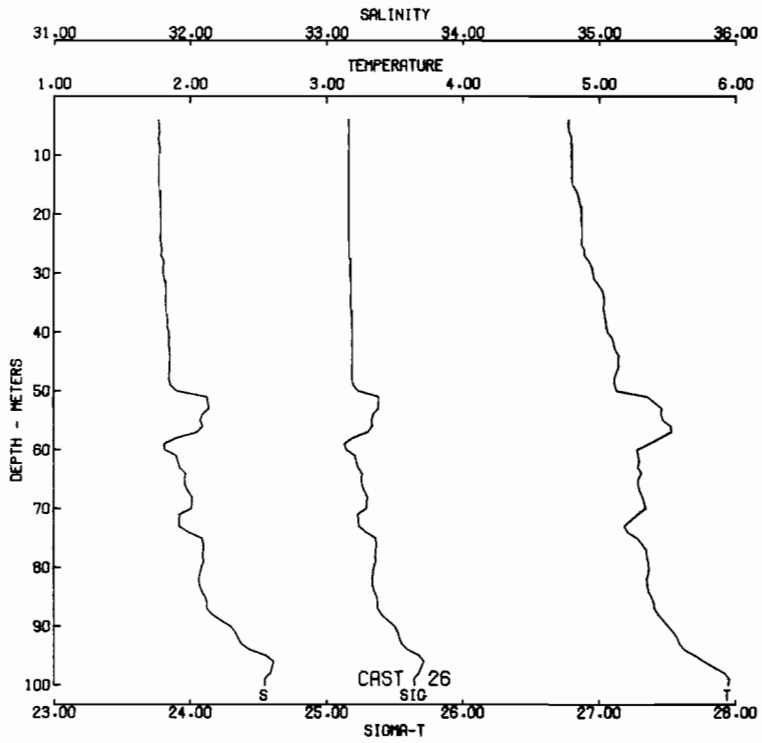
CAST NEGOA-1-OC-024 DATE 05 FEB 75 TIME 0635 GMT
LAT 59 47.5N LONG 142 30.2W WEATHER 0 SEA STATE 3
BAROMETER 30 WIND DIR 090 T SPD 04 KT VISIBILITY 7
CLOUD AMOUNT 0 DRY 02.5 WET 01.2 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.76	31.76	25.16	0.000
4	4.76	31.76	25.16	
5	4.76	31.76	25.16	.014
10	4.78	31.76	25.16	.028
15	4.81	31.77	25.16	.042
20	4.81	31.77	25.16	.056
25	4.80	31.78	25.17	.070
30	4.89	31.83	25.20	.084
35	5.34	31.84	25.19	.098
40	5.08	31.85	25.20	.112
45	5.06	31.86	25.21	.126
50	5.20	31.97	25.28	.140
75	5.30	32.06	25.33	.207
100	5.87	32.57	25.68	.271
104	5.89	32.58	25.68	



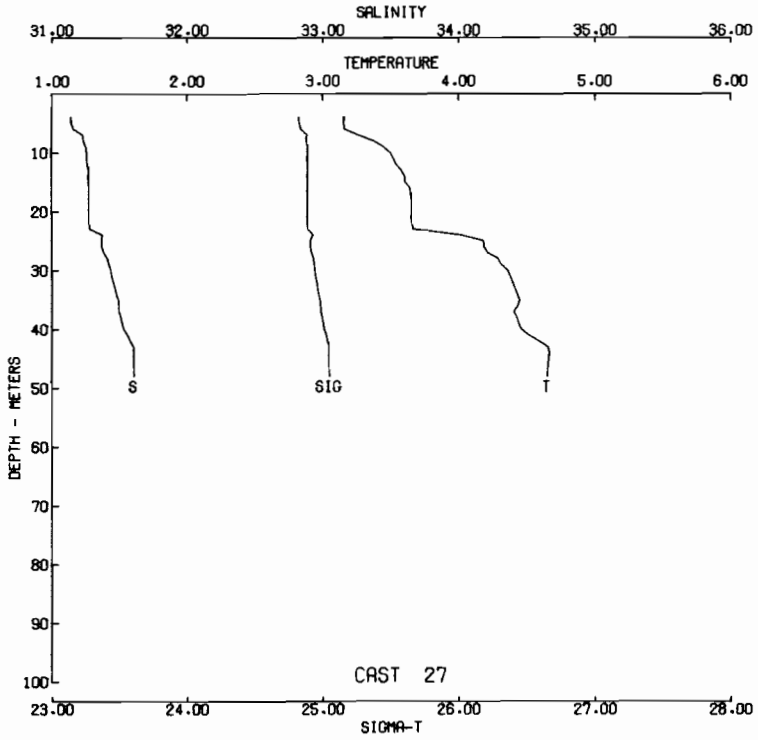
CAST NEGOA-1-OC-025 DATE 04 FEB 75 TIME 0736 GMT
LAT 59 47.5N LONG 142 00.2W WEATHER 0 SEA STATE 3
BAROMETER 30 WIND DIR 110 T SPD 02 KT VISIBILITY 7
CLOUD AMOUNT 0 DRY 02.5 WET 01.2 DEPTH 0106 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.85	31.77	25.16	0.000
4	4.85	31.77	25.16	
5	4.86	31.77	25.16	.014
10	4.85	31.77	25.16	.028
15	4.86	31.78	25.16	.042
20	4.87	31.80	25.18	.056
25	4.99	31.81	25.17	.070
30	4.99	31.81	25.17	.084
35	5.05	31.84	25.19	.098
40	5.07	31.84	25.19	.112
45	5.19	31.94	25.25	.126
50	5.33	31.89	25.20	.140
75	5.60	32.05	25.33	.208
100	5.91	32.55	25.72	.272
105	5.92	32.55	25.65	



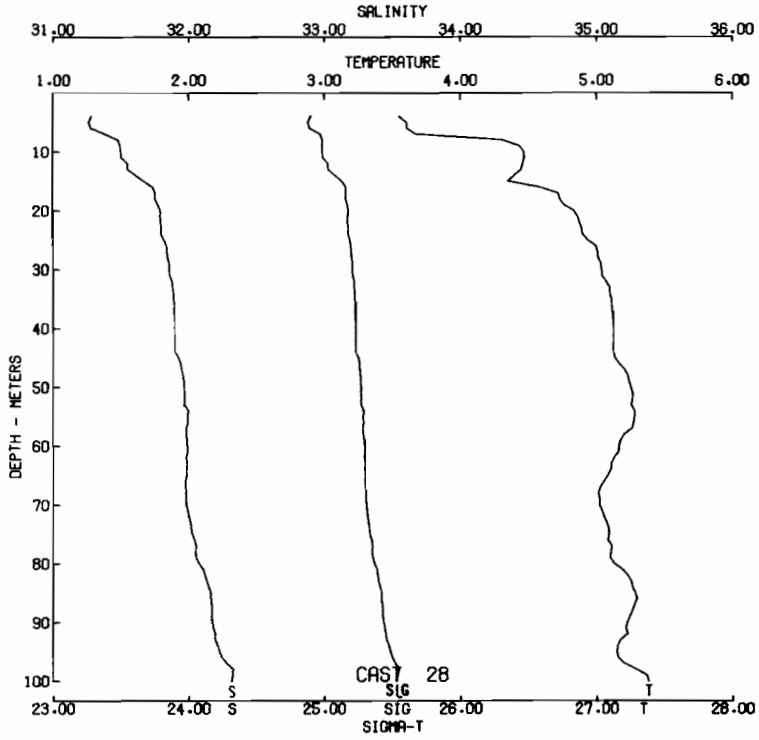
CAST NEGOA-1-OC-026 DATE 05 FEB 75 TIME 0828 GMT
LAT 59 47.5N LONG 142 04.2W WEATHER 4 SEA STATE 3
BAROMETER 30 WIND DIR 120 T SPD 04 KT VISIBILITY 7
CLOUD AMOUNT 0 DRY 01.3 WET 00.5 DEPTH 0104 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.75	31.76	25.16	0.000
4	4.78	31.77	25.16	
5	4.77	31.77	25.16	.014
10	4.80	31.77	25.16	.028
15	4.81	31.77	25.16	.042
20	4.87	31.78	25.16	.056
25	4.97	31.78	25.17	.070
30	4.95	31.80	25.17	.084
35	5.04	31.82	25.18	.098
40	5.06	31.84	25.19	.112
45	5.14	31.85	25.19	.126
50	5.13	31.90	25.23	.140
75	5.28	32.09	25.36	.208
100	5.95	32.55	25.65	.271
103	5.95	32.54	25.64	



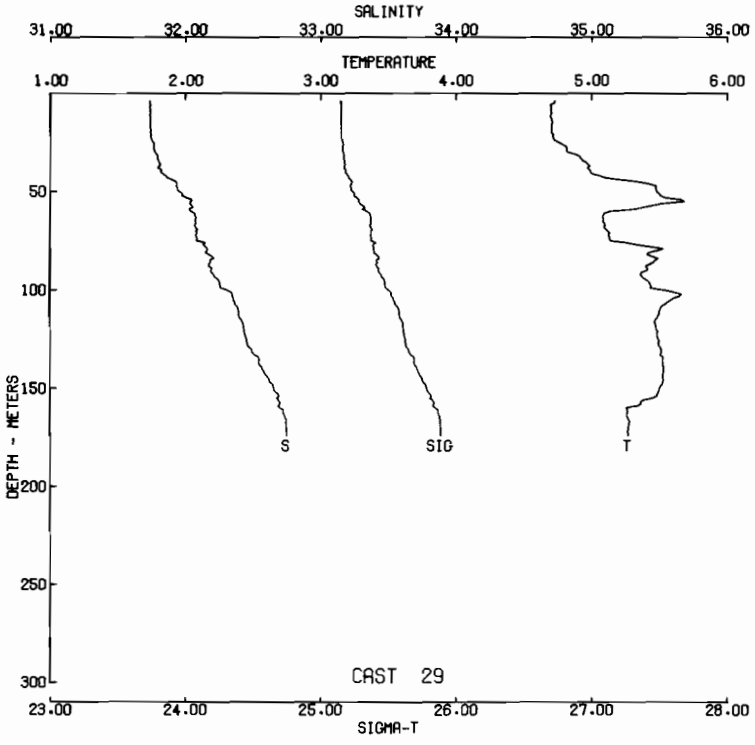
CAST NEGOA-1-DC-027 DATE 05 FEB 75 TIME 1034 GMT
LAT 59 44.0N LONG 141 30.3W WEATHER 0 SEA STATE 3
BAROMETER 32 WIND DIR 160 T SPD 35 KT VISIBILITY 8
CLOUD AMOUNT 1 DRY 00.0 WET 31.5 DEPTH 0057 M

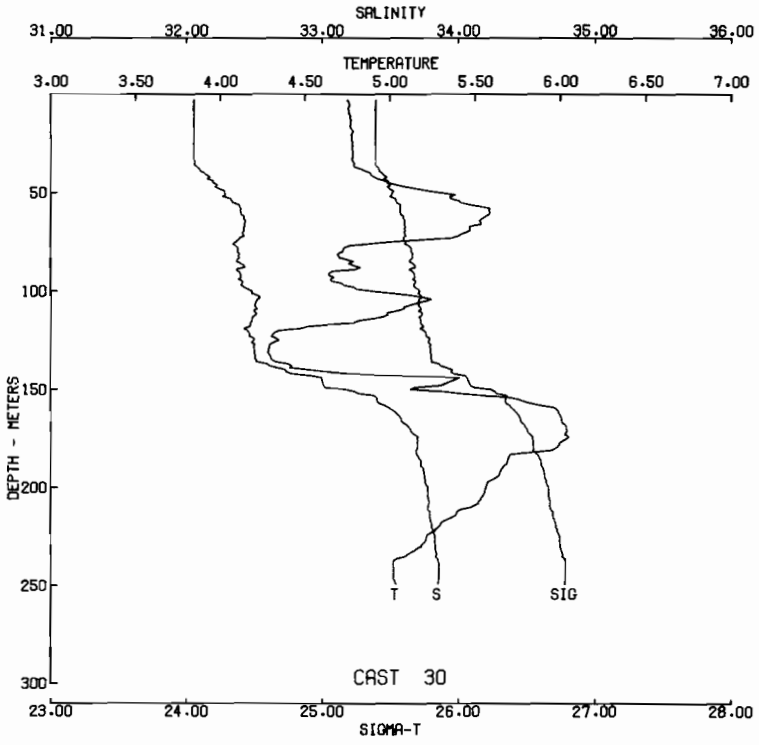
DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.01	31.01	24.73	0.000
4	3.15	31.14	24.82	
5	3.15	31.14	24.82	.016
10	3.49	31.25	24.88	.031
15	3.96	31.27	24.89	.047
20	3.65	31.27	24.98	.062
25	4.18	31.36	24.90	.078
30	4.36	31.43	24.94	.093
35	4.44	31.49	24.98	.108
40	4.46	31.53	25.01	.123
45	4.66	31.60	25.04	.137
49	4.65	31.60	25.05	



CAST NEGOA-1-DC-028 DATE 05 FEB 75 TIME 1207 GMT
LAT 59 35.0N LONG 141 37.0W WEATHER 0 SEA STATE 3
BAROMETER 32 WIND DIR 100 T SPD 34 KT VISIBILITY 8
CLOUD AMOUNT 1 DRY 00.0 WET 31.5 DEPTH 0136 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.41	31.12	24.78	0.000
4	3.55	31.28	24.90	
5	3.60	31.26	24.88	.016
10	4.46	31.50	24.96	.031
15	4.34	31.67	25.13	.045
20	4.83	31.79	25.17	.059
25	4.93	31.82	25.19	.073
30	5.04	31.85	25.20	.087
35	5.11	31.89	25.22	.101
40	5.13	31.90	25.23	.115
45	5.13	31.92	25.25	.129
50	5.25	31.97	25.27	.142
75	5.09	32.02	25.33	.210
100	5.38	32.31	25.53	.274
103	5.35	32.33	25.54	



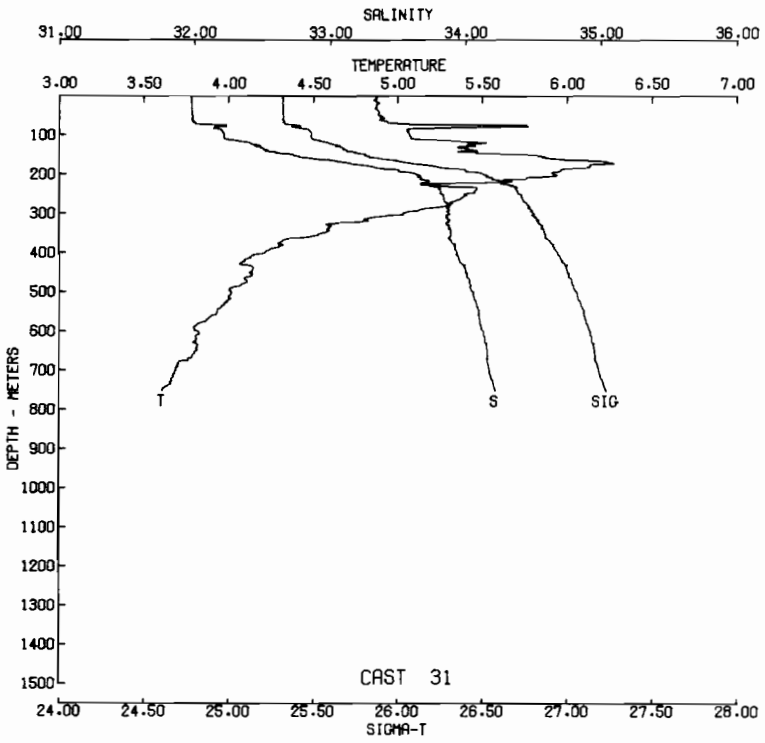


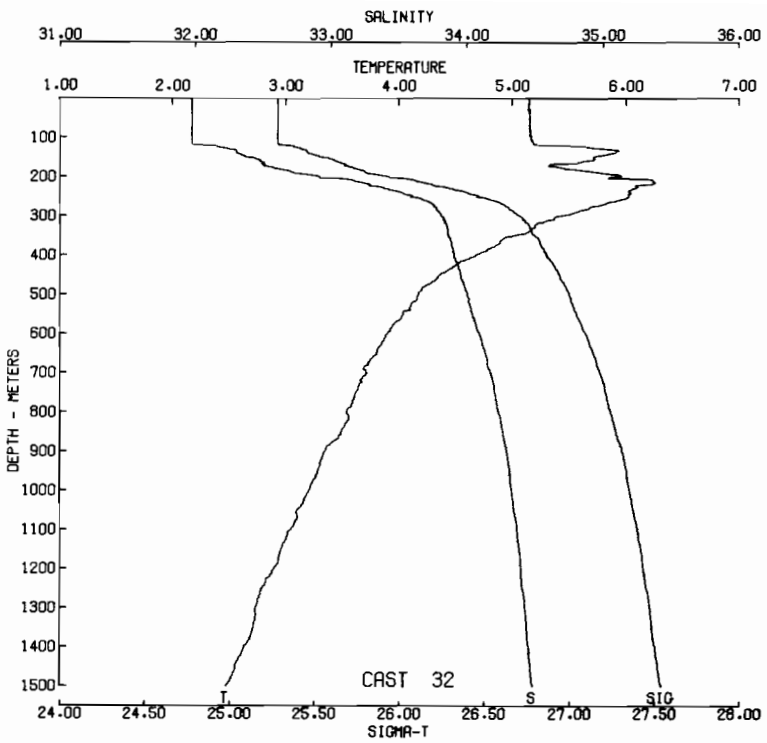
CAST NEGOA-1-OC-029 DATE 05 FEB 75 TIME 1338 GMT
LAT 59 24.0N LONG 141 46.3W WEATHER , SEA STATE 2
BAROMETER 30 WIND DIR 070 T SPD 04 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 03.3 WET 02.2 DEPTH 0178 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.77	31.73	25.14	0.000
4	4.73	31.74	25.14	
5	4.72	31.73	25.14	.014
10	4.70	31.74	25.15	.028
15	4.71	31.74	25.15	.042
20	4.70	31.74	25.15	.057
25	4.75	31.76	25.16	.071
30	4.82	31.77	25.16	.085
35	4.95	31.80	25.17	.099
40	4.99	31.82	25.18	.113
45	5.34	31.91	25.23	.127
50	5.48	31.95	25.23	.140
75	5.14	32.08	25.37	.207
100	5.54	32.30	25.50	.271
150	5.50	32.65	25.78	.390
174	5.27	32.75	25.89	

CAST NEGOA-1-OC-030 DATE 05 FEB 75 TIME 1521 GMT
LAT 59 17.0N LONG 141 56.4W WEATHER 0 SEA STATE 2
BAROMETER 30 WIND DIR 070 T SPD 04 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 03.3 WET 02.2 DEPTH 0253 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.75	32.05	25.39	0.000
3	4.75	32.05	25.39	
5	4.76	32.05	25.39	.013
10	4.76	32.05	25.39	.026
15	4.77	32.05	25.39	.039
20	4.77	32.05	25.39	.052
25	4.78	32.05	25.39	.065
30	4.78	32.05	25.39	.078
35	4.79	32.06	25.39	.091
40	4.88	32.13	25.44	.104
45	4.99	32.19	25.48	.116
50	5.30	32.28	25.51	.129
75	4.99	32.36	25.61	.190
100	4.89	32.48	25.72	.248
150	5.12	33.18	26.24	.358
200	5.56	33.77	26.66	.436
249	5.03	33.85	26.78	



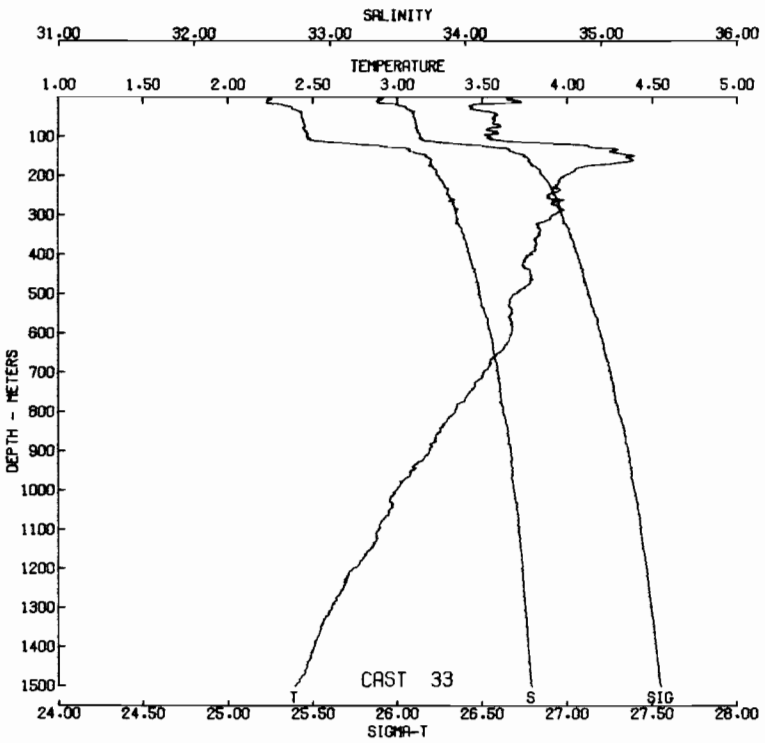


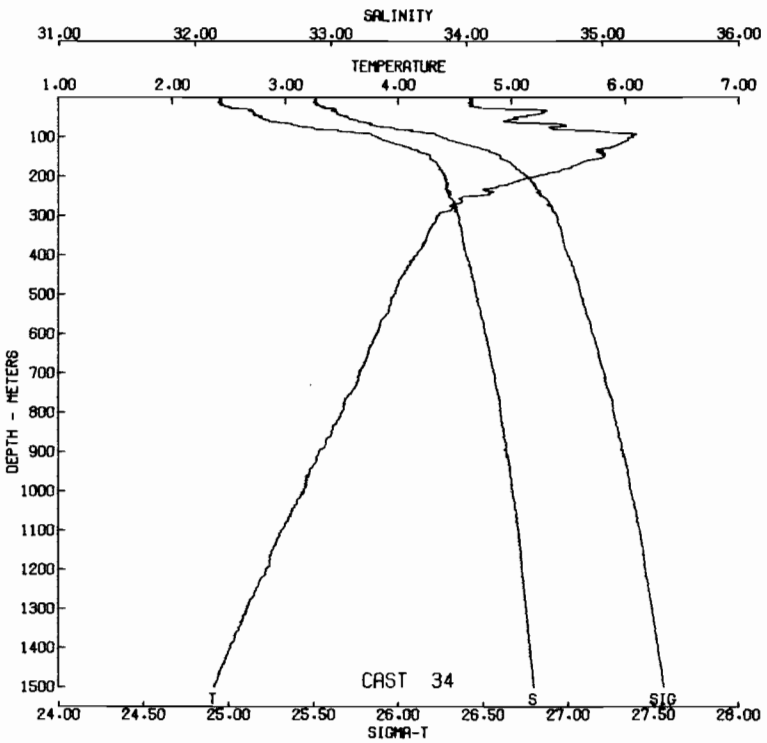
CAST NEGOA-1-OC-031 DATE 05 FEB 75 TIME 1705 GMT
LAT 59 08.3N LONG 142 00.1W WEATHER 0 SEA STATE 2
BAROMETER 30 WIND DIR 350 T SPD 03 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 03.9 WET 02.7 DEPTH 0756 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.88	31.97	25.31	0.000
3	4.88	31.97	25.32	
5	4.87	31.97	25.32	.013
10	4.87	31.98	25.32	.027
15	4.87	31.98	25.32	.040
20	4.88	31.98	25.32	.053
25	4.87	31.97	25.32	.067
30	4.87	31.98	25.32	.080
35	4.88	31.98	25.32	.093
40	4.89	31.98	25.32	.107
45	4.89	31.98	25.32	.120
50	4.89	31.99	25.32	.133
75	5.76	32.21	25.49	.200
100	6.07	32.21	25.49	.263
150	5.75	32.72	25.91	.383
200	5.92	33.03	26.51	.478
300	5.03	33.87	26.86	.616
500	4.02	34.06	27.36	.849
750	3.61	34.22	27.63	1.095
751	3.61	34.22	27.23	

CAST NEGOA-1-OC-032 DATE 05 FEB 75 TIME 1920 GMT
LAT 59 58.1N LONG 142 16.5W WEATHER 0 SEA STATE 0
BAROMETER 30 WIND DIR 340 T SPD 06 KT VISIBILITY 9
CLOUD 9 AMOUNT 1 DRY 03.2 WET 02.8 DEPTH 2257 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.15	31.97	25.29	0.000
3	5.15	31.97	25.29	
5	5.15	31.97	25.29	.013
10	5.15	31.97	25.29	.027
15	5.14	31.97	25.29	.040
20	5.14	31.97	25.29	.054
25	5.14	31.97	25.29	.067
30	5.14	31.97	25.29	.081
35	5.15	31.97	25.29	.094
40	5.15	31.97	25.29	.108
45	5.15	31.97	25.29	.121
50	5.15	31.98	25.29	.135
75	5.16	31.97	25.28	.202
100	5.17	31.98	25.29	.270
150	5.71	32.37	25.74	.401
200	5.91	32.91	26.23	.516
300	5.41	33.81	26.71	.680
500	4.17	34.00	27.00	.926
750	3.62	34.20	27.21	1.179
1000	3.20	34.33	27.35	1.394
1250	2.79	34.41	27.45	1.582
1500	2.47	34.48	27.54	1.752
1503	2.46	34.48	27.54	



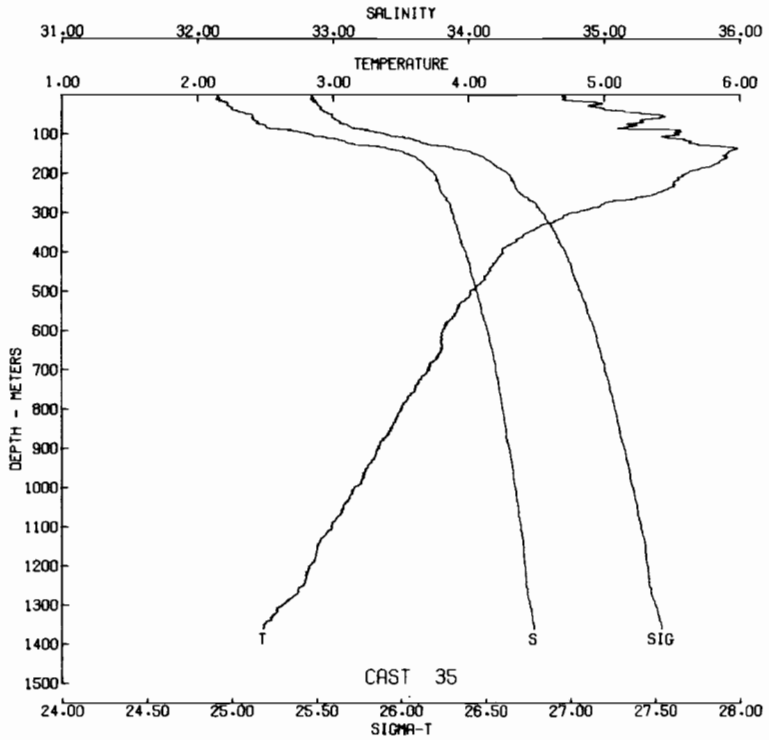


CAST NEGOA-1-OC-033 DATE 05 FEB 75 TIME 2238 GMT
LAT 59 28.4N LONG 142 57.4W WEATHER 0 SEA STATE 3
BAROMETER 29 WIND DIR 320 T SPD 06 KT VISIBILITY 6
CLOUD 1 AMOUNT 2 DRY 03.4 WET 02.2 DEPTH 1991 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.65	32.58	25.92	0.000
4	3.65	32.57	25.91	
5	3.67	32.56	25.90	.010
10	3.72	32.54	25.88	.021
15	3.68	32.54	25.88	.032
20	3.44	32.65	26.00	.042
25	3.43	32.72	26.05	.052
30	3.43	32.72	26.05	.062
35	3.49	32.76	26.08	.072
40	3.57	32.79	26.09	.081
45	3.58	32.79	26.09	.091
50	3.57	32.79	26.10	.101
75	3.61	32.82	26.11	.149
100	3.53	32.84	26.13	.196
150	4.40	33.71	26.75	.276
200	3.99	33.80	26.86	.339
300	3.91	33.93	26.97	.455
500	3.70	34.10	27.12	.665
750	3.43	34.26	27.28	.894
1000	2.99	34.36	27.38	1.095
1250	2.67	34.43	27.46	1.275
1500	2.39	34.49	27.55	1.438
1503	2.39	34.49	27.55	

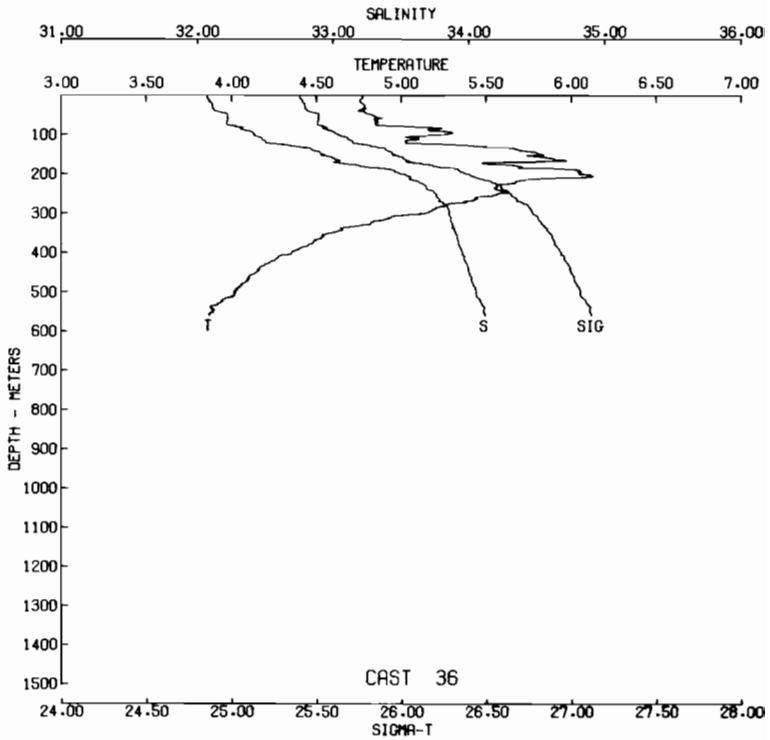
CAST NEGOA-1-OC-034 DATE 06 FEB 75 TIME 0227 GMT
LAT 59 17.1N LONG 143 00.9W WEATHER 1 SEA STATE 2
BAROMETER 29 WIND DIR 100 T SPD 06 KT VISIBILITY 9
CLOUD 6 AMOUNT 3 DRY 05.0 WET 03.3 DEPTH 2809 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.65	32.20	25.52	0.000
3	4.65	32.19	25.51	
5	4.63	32.19	25.51	.012
10	4.64	32.19	25.51	.025
15	4.62	32.23	25.54	.037
20	4.65	32.20	25.52	.050
25	4.73	32.25	25.55	.062
30	4.99	32.38	25.62	.074
35	5.11	32.40	25.60	.086
40	5.28	32.44	25.64	.098
45	5.19	32.45	25.66	.110
50	5.03	32.47	25.69	.121
75	5.36	32.78	25.96	.177
100	6.07	33.34	26.25	.225
150	5.82	33.74	26.60	.306
200	5.22	33.84	26.76	.375
300	4.37	33.94	26.93	.499
500	3.96	34.07	27.07	.719
750	3.58	34.23	27.24	.960
1000	3.16	34.34	27.37	1.170
1250	2.74	34.43	27.47	1.354
1500	2.37	34.50	27.56	1.517
1505	2.37	34.50	27.56	



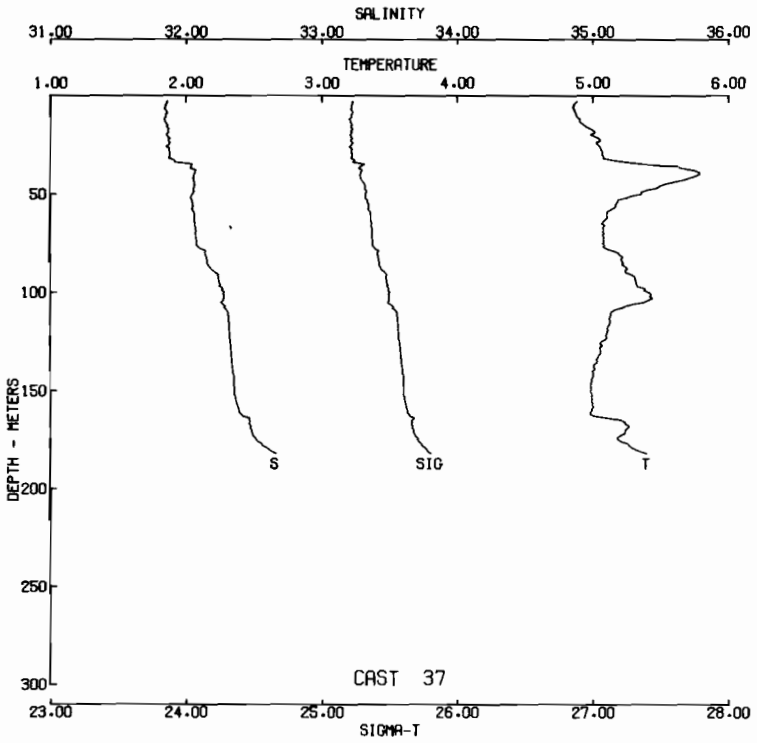
CAST NEGOA-1-OC-035 DATE 06 FEB 75 TIME 0439 GMT
LAT 59 25.8N LONG 142 56.0W WEATHER 1 SEA STATE 3
BAROMETER 29 WIND DIR 120 T SPD 10 KT VISIBILITY 8
CLOUD 6 AMOUNT 5 DRY 04.4 WET 03.9 DEPTH 1366 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.66	32.14	25.47	0.000
4	4.69	32.14	25.47	
5	4.69	32.14	25.47	.013
10	4.71	32.14	25.47	.025
15	4.76	32.16	25.48	.038
20	4.85	32.21	25.50	.050
25	4.95	32.22	25.50	.063
30	4.89	32.22	25.51	.075
35	4.99	32.25	25.52	.088
40	5.13	32.26	25.53	.100
45	5.18	32.33	25.56	.112
50	5.35	32.40	25.60	.124
75	5.16	32.46	25.67	.184
100	5.53	32.81	25.91	.240
150	5.90	33.23	26.43	.333
200	5.91	33.74	26.83	.410
300	4.77	33.97	26.93	.565
500	4.01	34.45	27.26	.774
750	3.60	34.22	27.23	1.018
1000	3.15	34.34	27.37	1.229
1450	2.77	34.42	27.47	1.413
1361	2.48	34.48	27.54	



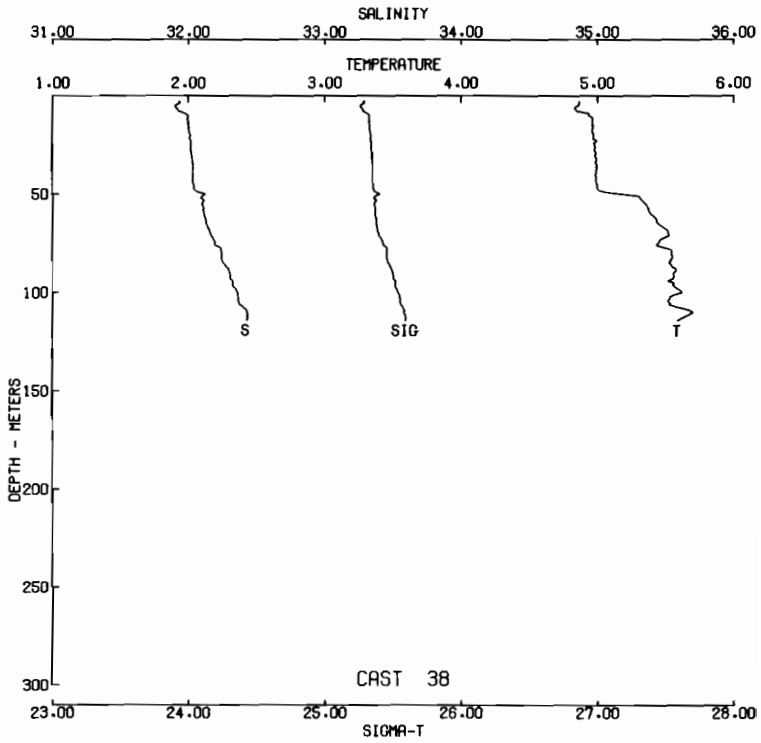
CAST NEGOA-1-OC-036 DATE 06 FEB 75 TIME 0718 GMT
LAT 59 35.6N LONG 142 49.7W WEATHER 1 SEA STATE 3
BAROMETER 28 WIND DIR 100 T SPD 04 KT VISIBILITY 7
CLOUD 6 AMOUNT 4 DRY 02.6 WET 01.8 DEPTH 0565 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.77	32.07	25.46	0.000
4	4.77	32.07	25.46	
5	4.77	32.07	25.46	.013
10	4.76	32.08	25.47	.026
15	4.76	32.09	25.48	.039
20	4.77	32.10	25.48	.052
25	4.79	32.11	25.49	.064
30	4.78	32.11	25.49	.077
35	4.77	32.11	25.49	.090
40	4.75	32.12	25.50	.103
45	4.79	32.18	25.54	.115
50	4.83	32.21	25.56	.128
75	4.85	32.22	25.57	.190
100	5.23	32.41	25.68	.241
150	5.82	32.92	25.96	.362
200	6.05	33.59	26.39	.456
300	5.14	33.85	26.77	.601
500	4.01	34.05	27.05	.835
560	3.86	34.12	27.12	



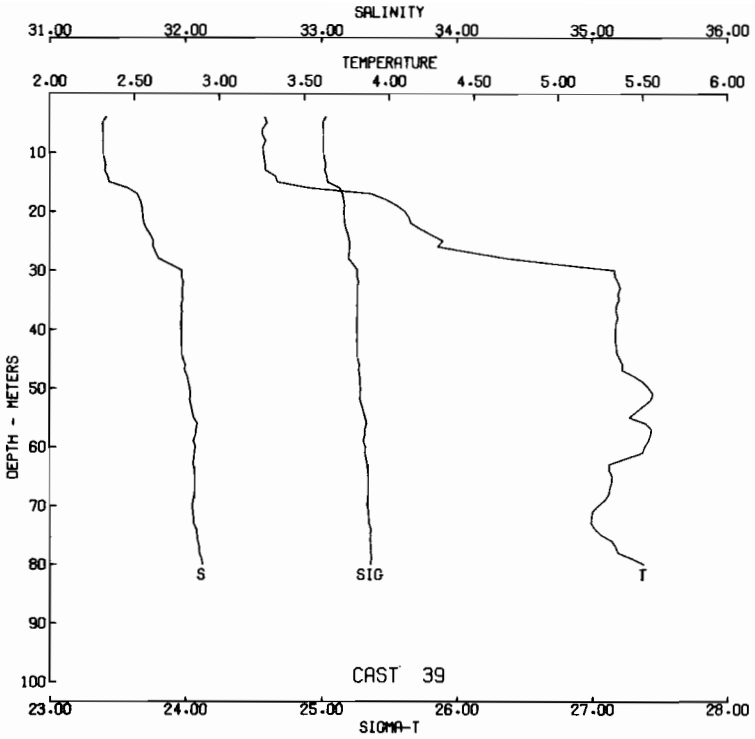
CAST NEGOA-1-OC-037 DATE 06 FEB 75 TIME 0914 GMT
LAT 59 44.9N LONG 142 41.5W WEATHER 1 SEA STATE 0
BAROMETER 28 WIND DIR 100 T SPD 04 KT VISIBILITY 9
CLOUD 9 AMOUNT 3 DRY 02.9 WET 01.9 DEPTH 0195 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.90	31.87	25.26	0.000
3	4.88	31.86	25.22	
5	4.86	31.85	25.22	.014
10	4.86	31.85	25.22	.028
15	4.94	31.86	25.25	.041
20	4.98	31.95	25.21	.055
25	5.04	31.87	25.22	.069
30	5.07	31.88	25.22	.083
35	5.39	32.04	25.31	.097
40	5.79	32.16	25.28	.110
45	5.53	32.06	25.31	.124
50	5.36	32.05	25.32	.137
75	5.08	32.18	25.37	.203
100	5.41	32.28	25.50	.266
150	4.98	32.36	25.61	.388
182	5.40	32.66	25.80	



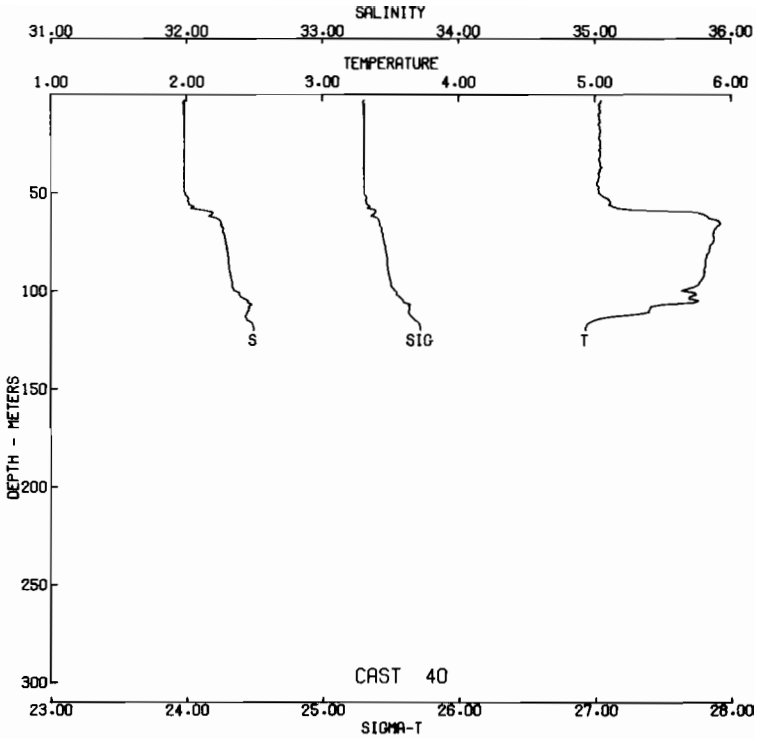
CAST NEGOA-1-OC-038 DATE 06 FEB 75 TIME 1102 GMT
LAT 59 56.2N LONG 142 36.1W WEATHER 0 SEA STATE 3
BAROMETER 27 WIND DIR 030 T SPD 04 KT VISIBILITY 7
CLOUD AMOUNT 2 DRY 02.3 WET 01.1 DEPTH 0123 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.90	31.94	25.29	0.000
3	4.87	31.93	25.28	
5	4.86	31.90	25.26	.013
10	4.96	31.99	25.32	.027
15	4.96	32.00	25.33	.040
20	4.97	32.01	25.34	.054
25	4.98	32.02	25.34	.067
30	4.98	32.02	25.34	.080
35	5.00	32.03	25.35	.093
40	4.98	32.03	25.35	.106
45	5.06	32.04	25.35	.120
50	5.18	32.12	25.40	.133
75	5.44	32.19	25.42	.198
100	5.62	32.36	25.54	.261
114	5.59	32.42	25.59	



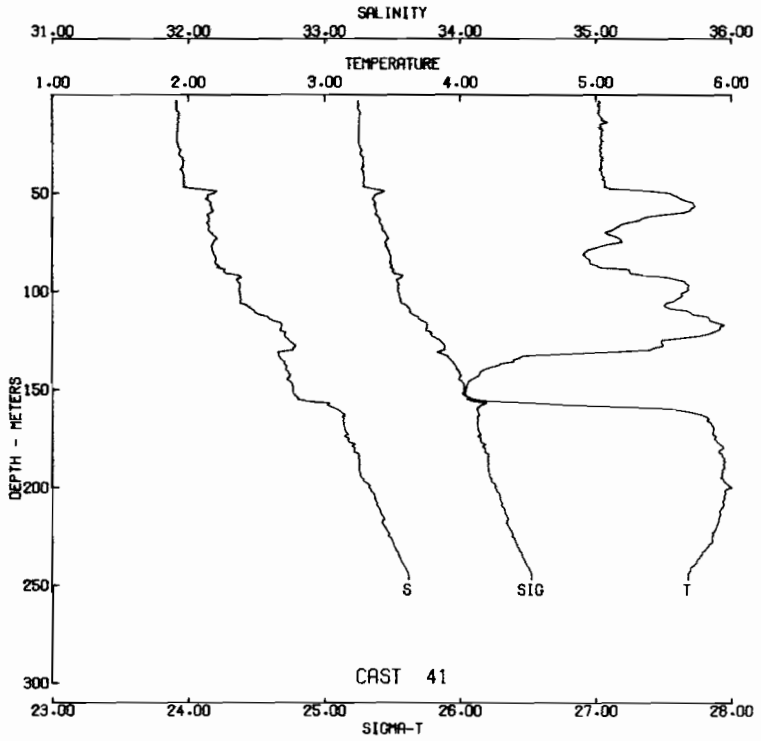
CAST NEGOA-1-OC-039 DATE 06 FEB 75 TIME 1436 GMT
LAT 59 55.5N LONG 143 51.3W WEATHER 1 SEA STATE 3
BAROMETER 24 WIND DIR 330 T SPD 12 KT VISIBILITY 8
CLOUD 8 AMOUNT 3 DRY 00.6 WET 01.2 DEPTH 0088 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	3.30	31.42	25.04	0.000
4	3.26	31.41	25.03	
5	3.28	31.39	25.01	.015
10	3.25	31.39	25.01	.029
15	3.34	31.44	25.04	.044
20	4.09	31.68	25.16	.058
25	4.32	31.76	25.20	.072
30	5.33	31.97	25.27	.086
35	5.36	31.98	25.27	.100
40	5.34	31.97	25.26	.113
45	5.36	31.98	25.27	.127
50	5.53	32.03	25.29	.141
75	5.25	32.08	25.36	.207
80	5.50	32.12	25.36	



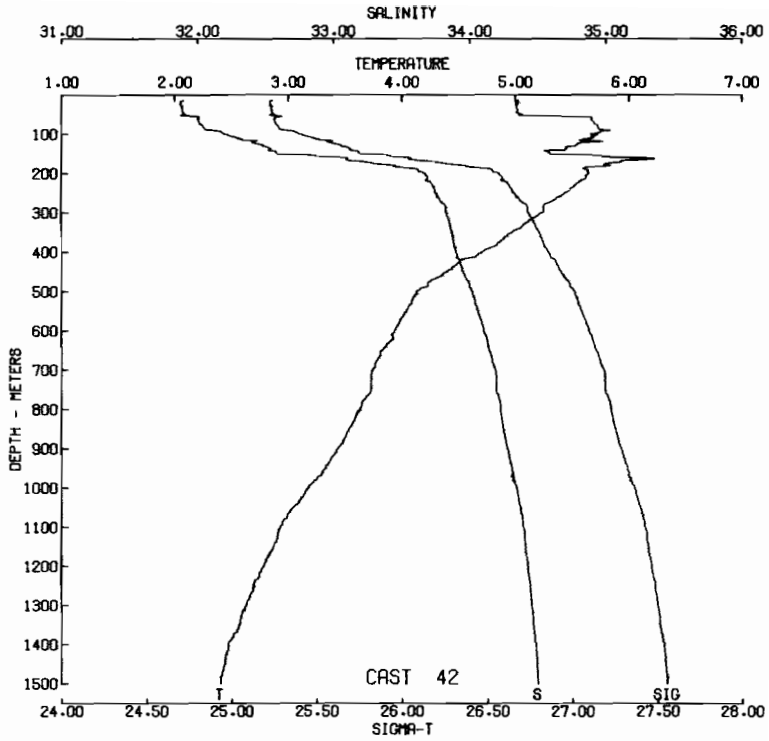
CAST NEGOA-1-OC-040 DATE 06 FEB 75 TIME 1602 GMT
LAT 59 45.0N LONG 143 52.9W WEATHER 1 SEA STATE 3
BAROMETER 24 WIND DIR 330 T SPD 12 KT VISIBILITY 8
CLOUD 8 AMOUNT 3 DRY 00.6 WET -1.2 DEPTH 0127 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.05	31.98	25.30	0.000
3	5.04	31.98	25.30	
5	5.03	31.97	25.30	.013
10	5.03	31.98	25.30	.027
15	5.03	31.98	25.31	.040
20	5.04	31.98	25.30	.054
25	5.04	31.98	25.31	.067
30	5.04	31.98	25.30	.080
35	5.04	31.98	25.31	.094
40	5.03	31.98	25.30	.107
45	5.01	31.98	25.31	.121
50	5.03	31.99	25.31	.134
75	5.07	32.29	25.45	.199
100	5.63	32.35	25.53	.262
120	4.93	32.49	25.72	



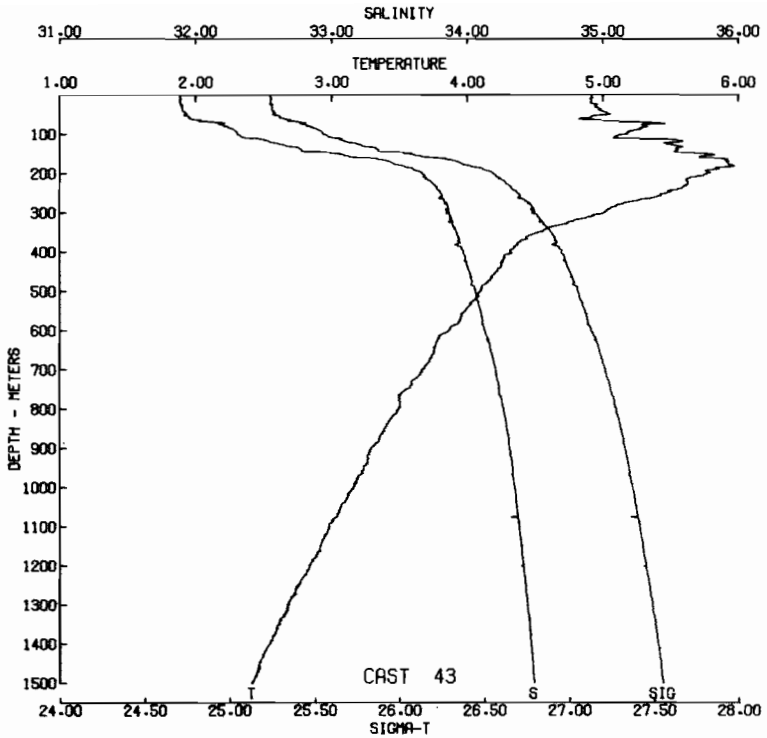
CAST NEGOA-1-OC-041 DATE 06 FEB 75 TIME 1717 GMT
LAT 59 35.8N LONG 143 56.6W WEATHER 1 SEA STATE 3
BAROMETER 22 WIND DIR 335 T SPD 12 KT VISIBILITY 8
CLOUD 8 AMOUNT 3 DRY 02.7 WET 02.2 DEPTH 0252 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.02	31.91	25.25	0.000
3	5.02	31.91	25.25	
5	5.01	31.91	25.25	.014
10	5.02	31.92	25.26	.027
15	5.03	31.92	25.26	.041
20	5.04	31.91	25.25	.055
25	5.04	31.92	25.25	.068
30	5.04	31.93	25.26	.082
35	5.04	31.96	25.29	.095
40	5.04	31.96	25.29	.109
45	5.07	31.96	25.29	.122
50	5.54	32.19	25.42	.135
75	5.13	32.18	25.45	.200
100	5.67	32.37	25.54	.263
150	6.04	32.77	25.73	.373
200	6.46	33.33	26.26	.467
247	5.68	33.62	26.52	



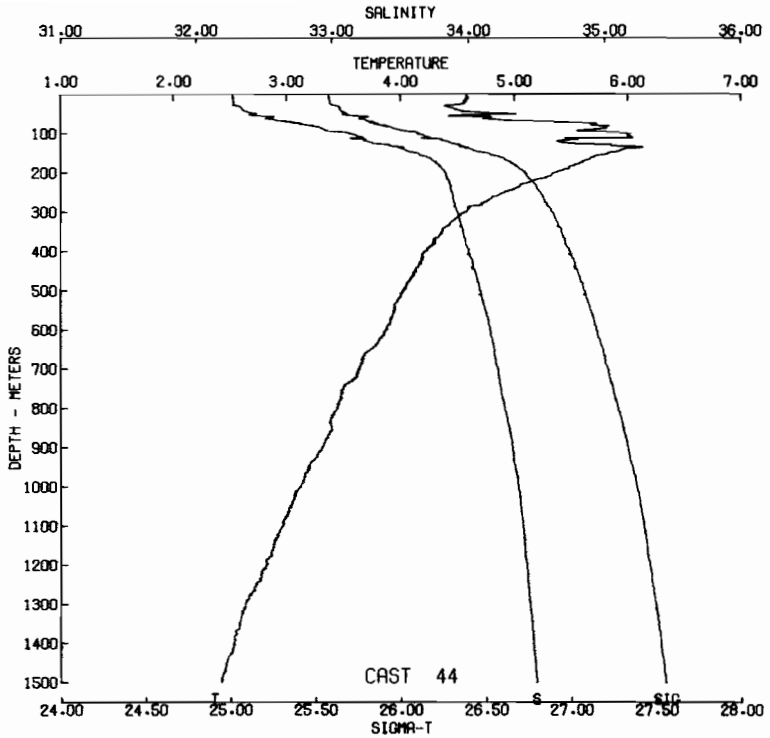
CAST NEGOA-1-OC-042 DATE 06 FEB 75 TIME 1900 GMT
LAT 59 24.8N LONG 143 55.1W WEATHER 1 SEA STATE 1
BAROMETER 21 WIND DIR 340 T SPD 08 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 02.6 WET 00.5 DEPTH 2462 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
14	5.02	31.84	25.23	
15	5.02	31.89	25.23	.041
20	5.02	31.87	25.22	.055
25	5.01	31.87	25.22	.069
30	5.01	31.89	25.23	.082
35	5.01	31.88	25.23	.096
40	5.02	31.89	25.23	.110
45	5.01	31.89	25.24	.124
50	5.04	31.90	25.24	.137
75	5.71	32.02	25.26	.206
100	5.66	32.19	25.40	.273
150	5.30	32.59	25.76	.393
200	5.64	33.07	26.57	.493
300	5.23	33.82	26.74	.625
500	4.13	34.41	27.31	.872
750	3.73	34.19	27.19	1.124
1000	3.18	34.34	27.36	1.342
1250	2.70	34.44	27.49	1.525
1500	2.40	34.49	27.56	1.686
1501	2.40	34.50	27.56	



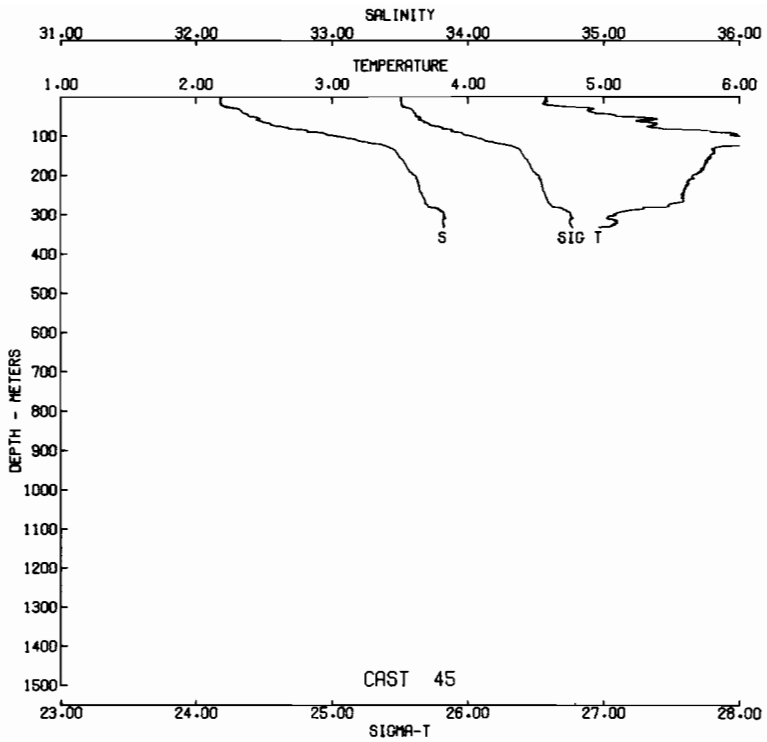
CAST NEGOA-1-OC-043 DATE 06 FEB 75 TIME 2120 GMT
LAT 59 15.7N LONG 144 00.5W WEATHER 0 SEA STATE 4
BAROMETER 20 WIND DIR 320 T SPD 18 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 02.8 WET 01.8 DEPTH 3356 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.91	31.87	25.23	0.000
5	4.92	31.88	25.24	
10	4.91	31.88	25.24	.027
15	4.92	31.88	25.24	.041
20	4.91	31.88	25.24	.055
25	4.95	31.90	25.25	.069
30	4.95	31.90	25.25	.082
35	4.97	31.90	25.25	.096
40	4.99	31.91	25.25	.110
45	5.03	31.92	25.26	.123
50	5.05	31.93	25.26	.137
75	5.35	32.17	25.42	.203
100	5.18	32.30	25.54	.265
150	5.76	33.06	26.08	.379
200	5.77	33.66	26.55	.464
300	5.01	33.86	26.79	.604
500	4.18	34.06	27.05	.836
750	3.55	34.23	27.24	1.080
1000	3.16	34.34	27.36	1.288
1250	2.76	34.43	27.47	1.473
1500	2.41	34.49	27.55	1.637
1501	2.41	34.49	27.55	



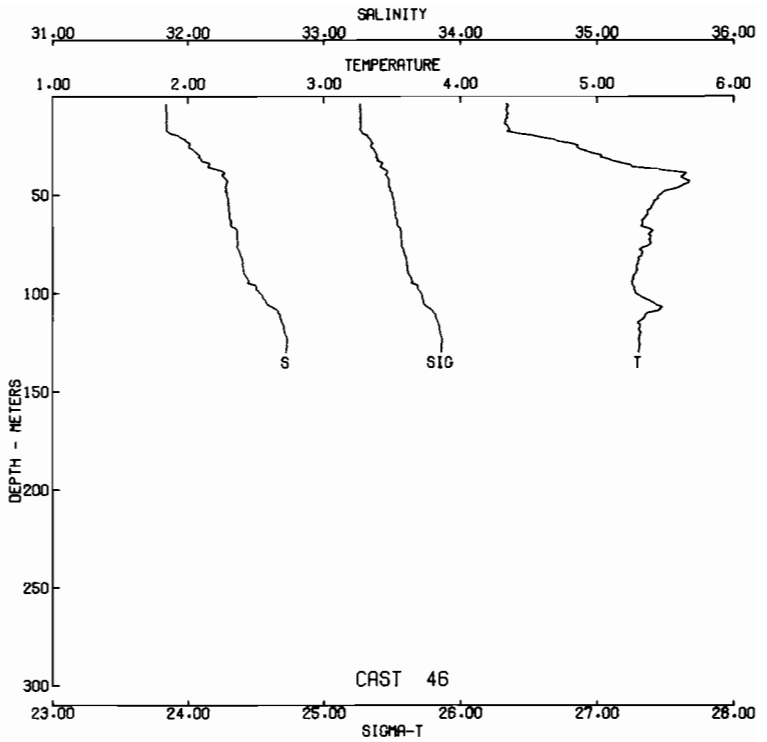
CAST NEGOA-1-OC-044 DATE 06 FEB 75 TIME 0238 GMT
LAT 59 18.9N LONG 144 16.1W WEATHER 1 SEA STATE 3
BAROMETER 19 WIND DIR 010 T SPD 05 KT VISIBILITY 8
CLOUD 2 AMOUNT 2 DRY 02.2 WET 01.7 DEPTH 2255 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.56	32.26	25.58	0.000
5	4.58	32.27	25.58	
10	4.58	32.27	25.58	.024
15	4.58	32.27	25.58	.036
20	4.56	32.27	25.58	.048
25	4.54	32.27	25.59	.060
30	4.38	32.30	25.62	.072
35	4.44	32.33	25.65	.084
40	4.48	32.34	25.65	.096
45	4.59	32.38	25.67	.108
50	4.97	32.44	25.68	.119
75	5.73	32.78	25.85	.175
100	5.98	33.14	26.11	.226
150	5.82	33.62	26.51	.314
200	5.35	33.82	26.73	.386
300	4.57	33.91	26.89	.513
500	4.01	34.08	27.07	.776
750	3.49	34.23	27.25	.977
1000	3.12	34.36	27.39	1.183
1250	2.73	34.43	27.48	1.365
1500	2.42	34.49	27.55	1.528
1517	2.37	34.50	27.57	



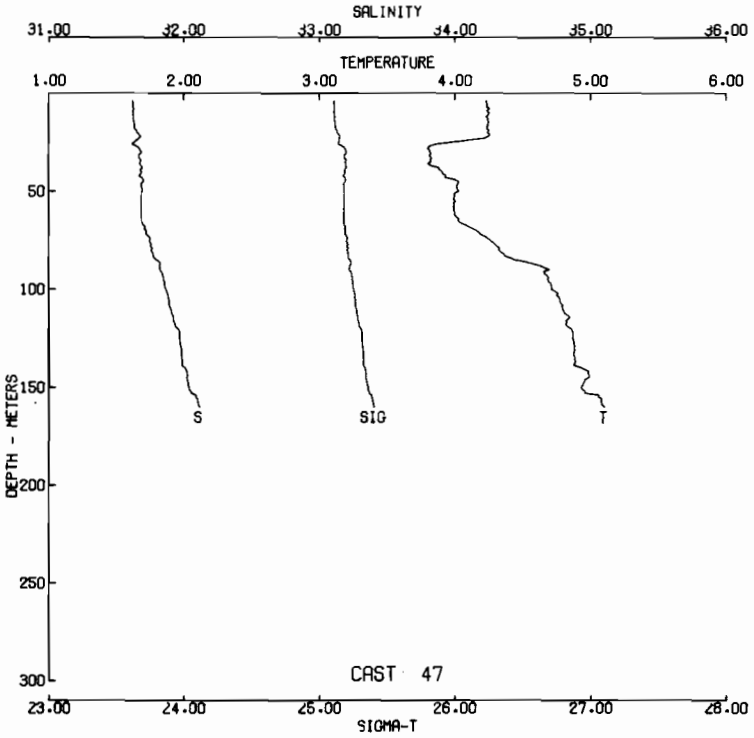
CAST NEGOA-1-OC-045 DATE 06 FEB 75 TIME 0650 GMT
LAT 59 27.0N LONG 145 11.0W WEATHER 0 SEA STATE 1
BAROMETER 18 WIND DIR 020 T SPD 06 KT VISIBILITY 9
CLOUD AMOUNT 0 DRY 02.5 WET 01.5 DEPTH 0335 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.57	32.18	25.51	0.000
4	4.58	32.18	25.51	
5	4.58	32.18	25.51	.012
10	4.57	32.18	25.51	.025
15	4.57	32.18	25.51	.037
20	4.56	32.19	25.52	.050
25	4.70	32.22	25.53	.062
30	4.91	32.31	25.57	.074
35	4.88	32.33	25.60	.086
40	4.91	32.34	25.60	.098
45	5.04	32.37	25.61	.110
50	5.09	32.39	25.62	.122
75	5.33	32.51	25.76	.185
100	5.99	33.01	26.11	.234
150	5.79	33.49	26.41	.323
200	5.65	33.61	26.52	.403
300	5.07	33.82	26.76	.551
332	4.97	33.82	26.77	



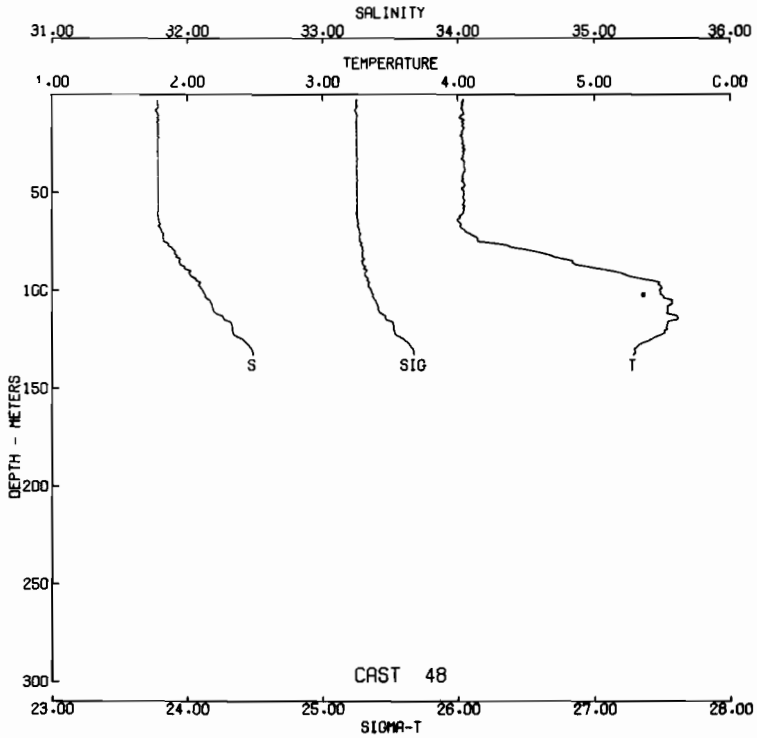
CAST NEGOA-1-OC-046 DATE 07 FEB 75 TIME 1018 GMT
LAT 59 37.2N LONG 145 05.2W WEATHER 6 SEA STATE 3
BAROMETER 18 WIND DIR 050 T SPD 08 KT VISIBILITY 7
CLOUD AMOUNT 1 DRY 03.4 WET 02.2 DEPTH 0156 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.35	31.84	25.26	0.000
4	4.34	31.84	25.26	
5	4.35	31.84	25.26	.014
10	4.34	31.84	25.27	.027
15	4.34	31.84	25.27	.041
20	4.53	31.93	25.32	.054
25	4.86	32.01	25.34	.067
30	5.03	32.09	25.39	.081
35	5.24	32.16	25.42	.094
40	5.64	32.25	25.45	.106
45	5.63	32.28	25.47	.119
50	5.46	32.29	25.50	.132
75	5.39	32.36	25.57	.193
100	5.28	32.53	25.71	.253
130	5.30	32.72	25.86	



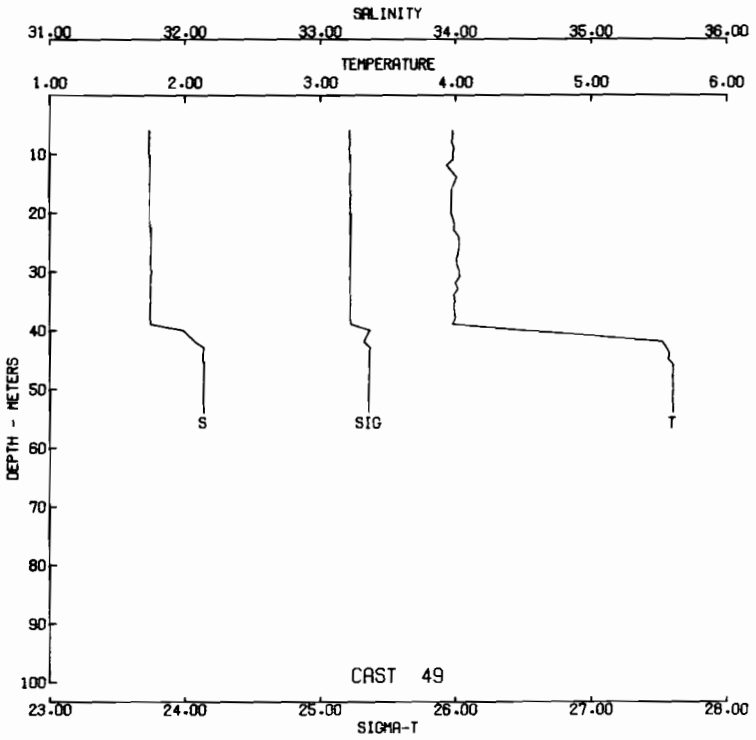
CAST NEGOA-1-OC-047 DATE 07 FEB 75 TIME 1235 GMT
LAT 59 48.2N LONG 145 10.1W WEATHER 0 SEA STATE 3
BAROMETER 20 WIND DIR 050 T SPD 28 KT VISIBILITY 7
CLOUD AMOUNT 1 DRY 03.4 WET 03.2 DEPTH 0170 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.22	31.62	25.10	0.000
4	4.23	31.62	25.10	
5	4.23	31.62	25.10	.014
10	4.25	31.62	25.10	.029
15	4.25	31.63	25.11	.043
20	4.24	31.65	25.13	.057
25	3.97	31.57	25.09	.072
30	3.81	31.69	25.20	.086
35	3.82	31.68	25.19	.100
40	3.90	31.68	25.18	.114
45	4.02	31.70	25.19	.128
50	4.02	31.69	25.18	.142
75	4.26	31.75	25.20	.211
100	4.71	31.87	25.25	.280
150	4.93	32.04	25.36	.415
160	5.10	32.11	25.43	



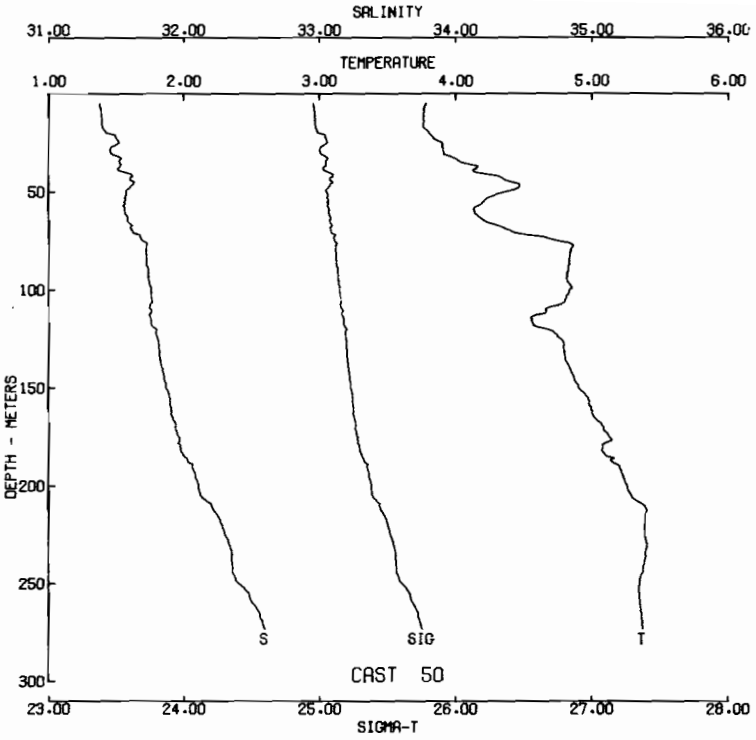
CAST NEGOA-1-OC-048 DATE 07 FEB 75 TIME 1448 GMT
LAT 59 57.8N LONG 145 36.3W WEATHER 0 SEA STATE 2
BAROMETER 19 WIND DIR 025 T SPD 14 KT VISIBILITY 8
CLOUD AMOUNT 0 DRY -1.2 WET -2.3 DEPTH 0142 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.05	31.77	25.24	0.000
3	4.04	31.78	25.25	
5	4.03	31.78	25.25	.014
10	4.04	31.78	25.25	.027
15	4.04	31.78	25.25	.041
20	4.03	31.78	25.25	.055
25	4.03	31.78	25.25	.068
30	4.04	31.78	25.25	.082
35	4.05	31.78	25.25	.096
40	4.04	31.78	25.25	.109
45	4.04	31.78	25.25	.123
50	4.04	31.78	25.25	.137
75	4.15	31.82	25.27	.205
100	5.48	32.11	25.36	.272
133	5.29	32.48	25.67	



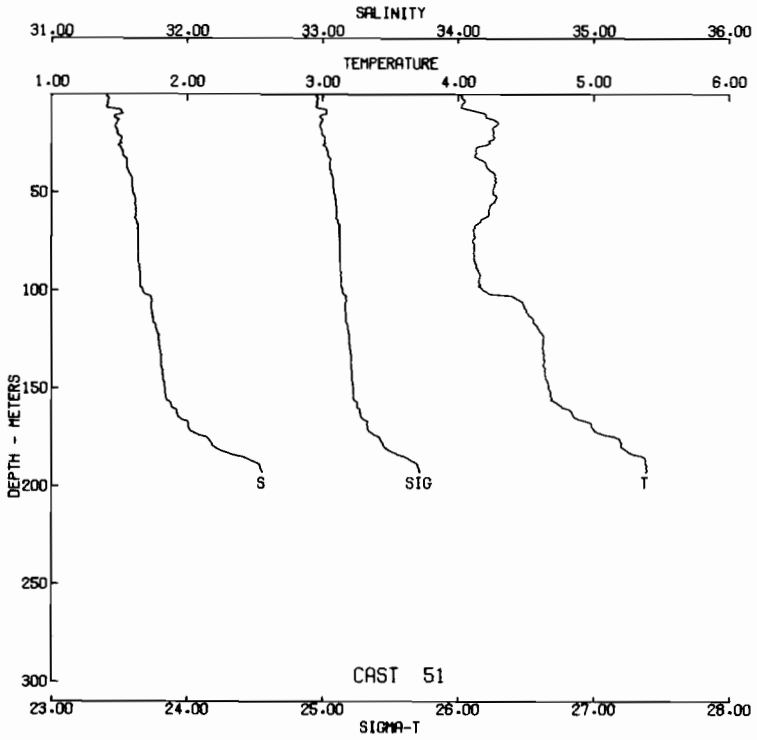
CAST NEGDA-1-OC-049 DATE 07 FEB 75 TIME 1718 GMT
LAT 60 08.1N LONG 145 09.4W WEATHER 0 SEA STATE 1
BAROMETER 20 WIND DIR 045 T SPD 26 KT VISIBILITY 8
CLOUD 0 AMOUNT 0 DRY -3.9 WET -3.5 DEPTH 0155 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.97	31.73	25.22	0.000
6	3.98	31.73	25.22	
10	3.98	31.73	25.21	.028
15	3.99	31.73	25.22	.041
20	3.96	31.74	25.22	.055
25	4.02	31.75	25.22	.069
30	4.02	31.75	25.22	.083
35	3.99	31.74	25.22	.097
40	4.48	31.98	25.37	.110
45	5.57	32.13	25.36	.123
50	5.61	32.13	25.36	.137
54	5.61	32.14	25.36	



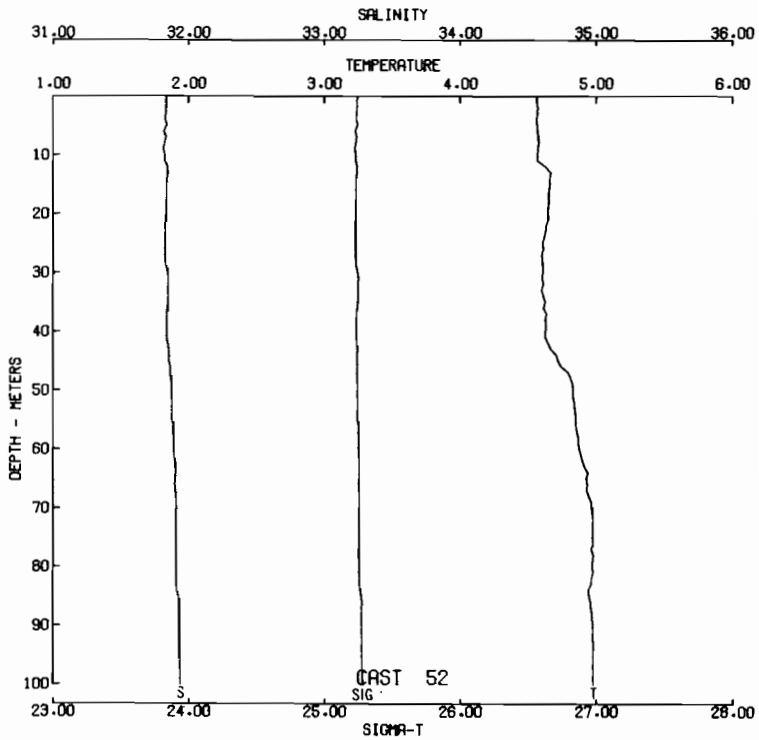
CAST NEGDA-1-OC-050 DATE 07 FEB 75 TIME 2241 GMT
LAT 60 22.4N LONG 146 53.6W WEATHER 0 SEA STATE 0
BAROMETER 23 WIND DIR 180 T SPD 04 KT VISIBILITY 8
CLOUD 0 AMOUNT 1 DRY 03.8 WET 03.6 DEPTH 0282 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.81	31.37	24.94	0.000
5	3.78	31.38	24.95	
10	3.76	31.39	24.96	.030
15	3.76	31.39	24.97	.045
20	3.80	31.42	24.99	.060
25	3.90	31.52	25.05	.075
30	3.91	31.45	25.00	.090
35	4.03	31.52	25.04	.104
40	4.14	31.55	25.06	.119
45	4.40	31.63	25.09	.133
50	4.37	31.57	25.05	.148
75	4.75	31.70	25.11	.220
100	4.84	31.75	25.15	.292
150	4.90	31.86	25.23	.431
200	5.26	32.11	25.38	.567
273	5.37	32.69	25.75	



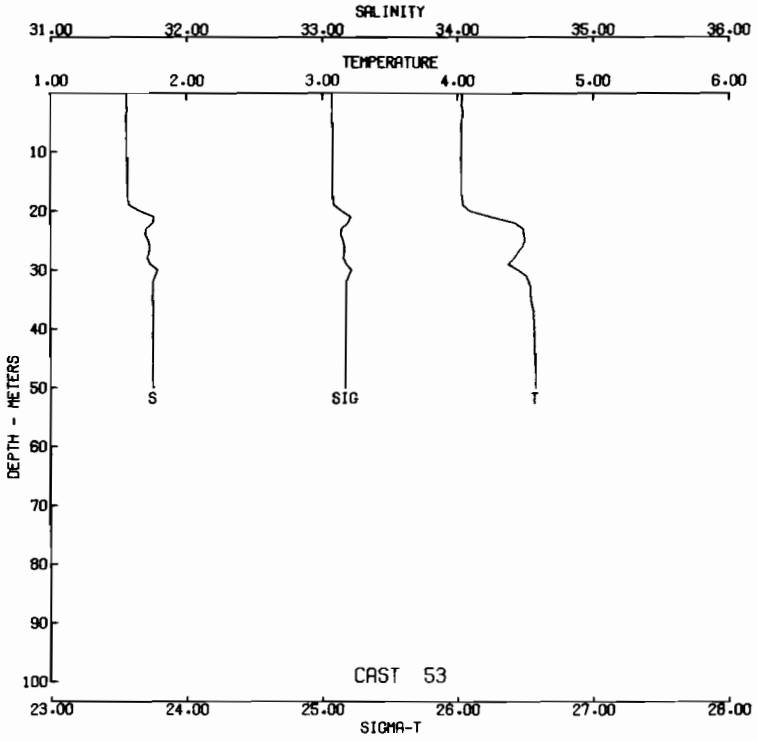
CAST NEGOA-1-OC-051 DATE 08 FEB 75 TIME 0034 GMT
LAT 62 13.6N LONG 146 48.4W WEATHER 2 SEA STATE 2
BAROMETER 24 WIND DIR 064 T SPD 12 KT VISIBILITY 8
CLOUD AMOUNT 2 DRY 04.5 WET 03.4 DEPTH 0208 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.03	31.41	24.96	0.000
5	4.03	31.41	24.96	.015
10	4.20	31.52	25.03	.030
15	4.30	31.48	24.98	.045
20	4.26	31.48	24.99	.060
25	4.23	31.51	25.02	.075
30	4.13	31.53	25.04	.089
35	4.20	31.55	25.05	.104
40	4.26	31.57	25.06	.118
45	4.28	31.59	25.07	.133
50	4.26	31.60	25.08	.147
75	4.10	31.63	25.13	.219
100	4.18	31.67	25.15	.290
150	4.66	31.93	25.23	.430
193	5.39	32.55	25.72	



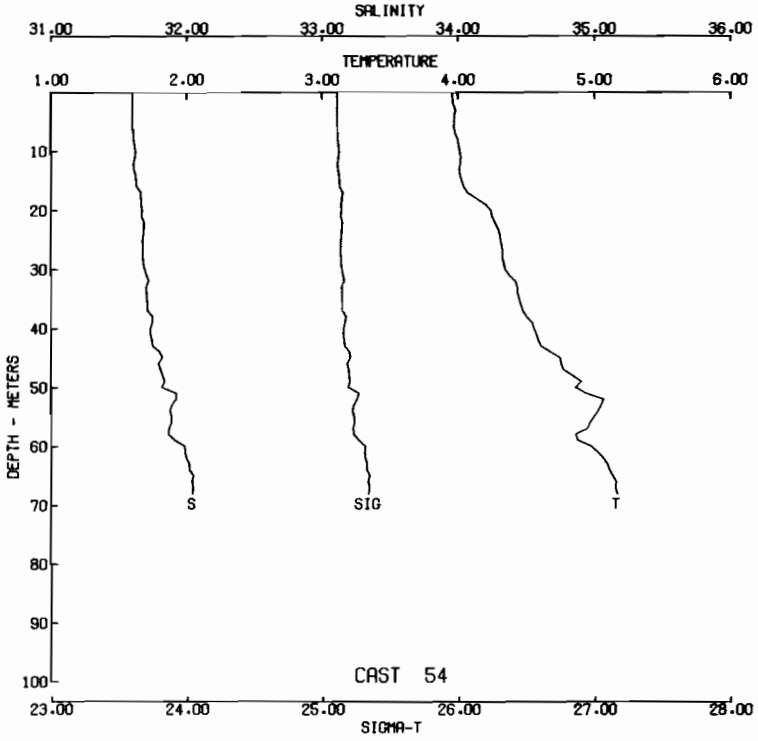
CAST NEGOA-1-OC-052 DATE 08 FEB 75 TIME 0223 GMT
LAT 62 05.2N LONG 146 42.5W WEATHER 2 SEA STATE 2
BAROMETER 24 WIND DIR 070 T SPD 10 KT VISIBILITY 8
CLOUD 7 AMOUNT 7 DRY 03.4 WET 02.3 DEPTH 0118 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.56	31.83	25.24	0.000
5	4.56	31.84	25.24	.014
10	4.57	31.82	25.23	.027
15	4.66	31.84	25.24	.041
20	4.64	31.83	25.23	.055
25	4.60	31.82	25.23	.069
30	4.61	31.84	25.24	.082
35	4.62	31.85	25.24	.096
40	4.62	31.84	25.23	.110
45	4.71	31.85	25.24	.124
50	4.83	31.87	25.24	.137
75	4.97	31.91	25.25	.206
100	4.98	31.94	25.28	.274
109	5.04	31.96	25.28	



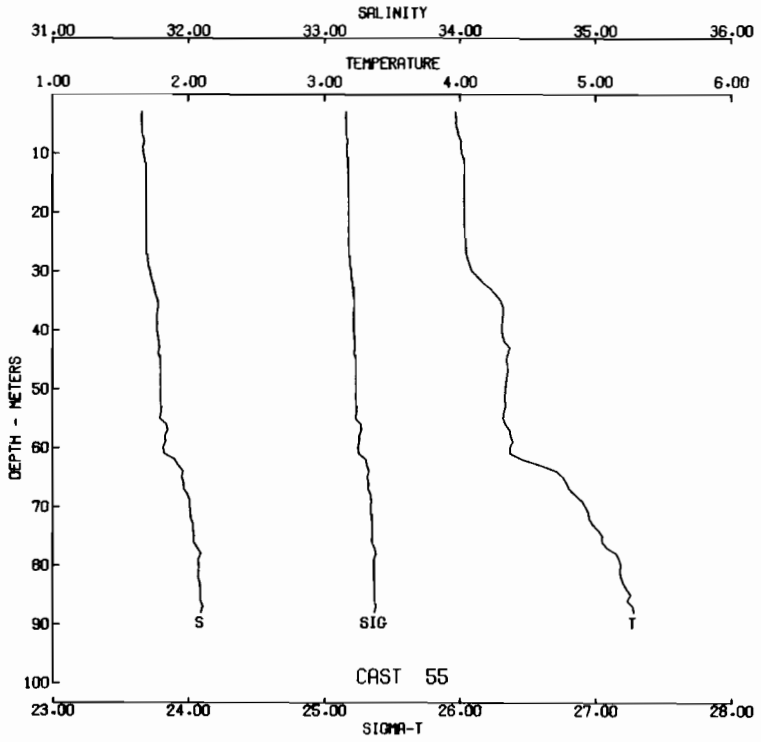
CAST NEGOA-1-OC-053 DATE 08 FEB 75 TIME 0357 GMT
LAT 59 55.3N LONG 146 37.3W WEATHER 2 SEA STATE 2
BAROMETER 24 WIND DIR 030 T SPD 03 KT VISIBILITY 8
CLOUD 7 AMOUNT 7 DRY 03.9 WET 02.8 DEPTH 0062 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.03	31.56	25.07	0.000
5	4.03	31.55	25.07	.014
10	4.03	31.56	25.07	.029
15	4.03	31.56	25.08	.043
20	4.09	31.65	25.14	.058
25	4.49	31.72	25.15	.072
30	4.44	31.78	25.21	.086
35	4.54	31.75	25.17	.100
40	4.57	31.75	25.17	.114
45	4.57	31.75	25.17	.128
50	4.58	31.75	25.17	.145



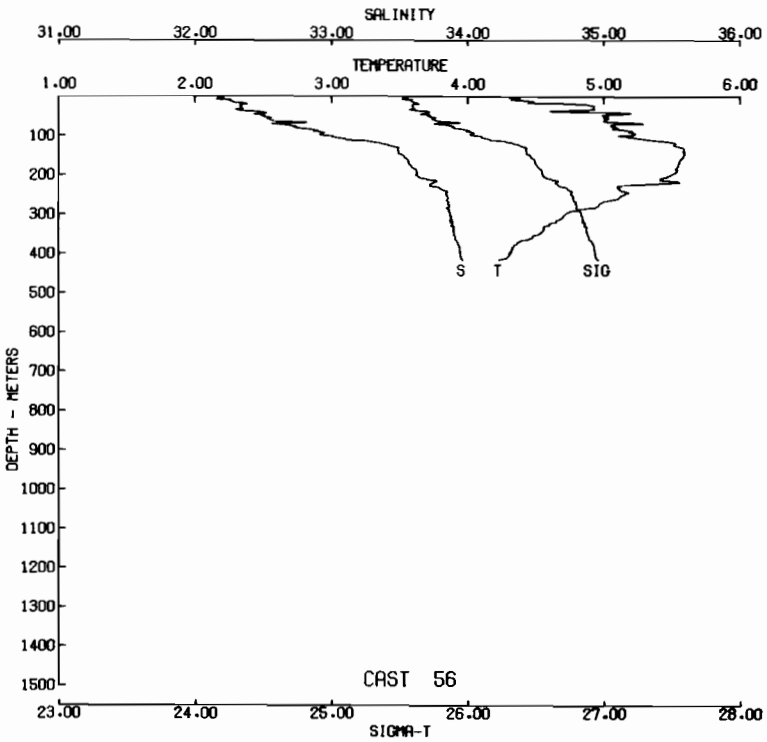
CAST NEGOA-1-OC-054 DATE 08 FEB 75 TIME 0540 GMT
LAT 59 45.4N LONG 146 32.4W WEATHER 1 SEA STATE 3
BAROMETER 24 WIND DIR 330 T SPD 06 KT VISIBILITY 7
CLOUD 6 AMOUNT 4 DRY 02.4 WET 01.8 DEPTH 0077 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.95	31.60	25.11	0.000
5	3.97	31.60	25.11	.014
10	4.01	31.62	25.12	.029
15	4.03	31.63	25.13	.043
20	4.24	31.67	25.14	.057
25	4.31	31.67	25.14	.071
30	4.34	31.69	25.14	.085
35	4.45	31.70	25.15	.100
40	4.55	31.73	25.16	.114
45	4.74	31.82	25.21	.128
50	4.86	31.81	25.19	.142
68	5.16	32.04	25.34	



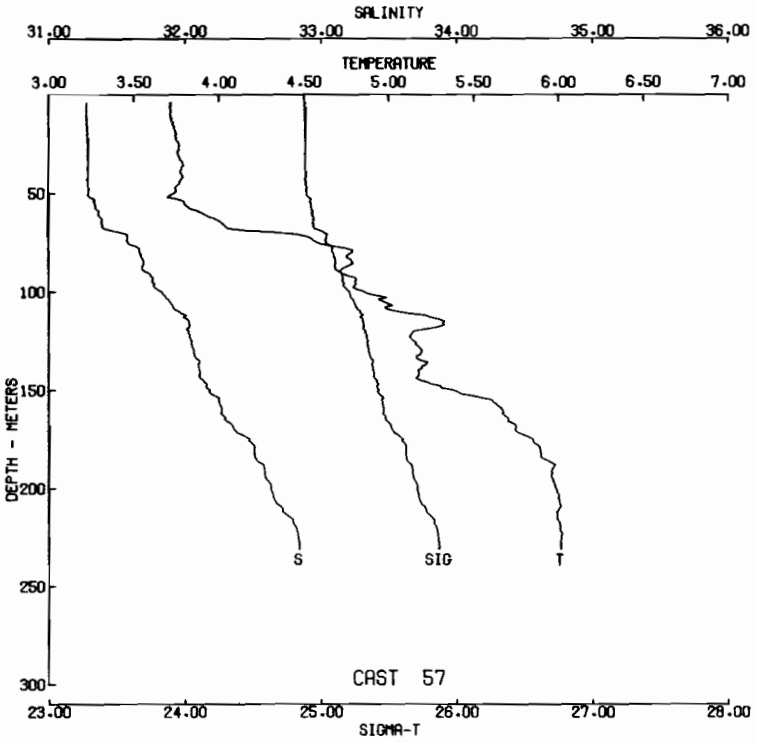
CAST NEGOA-1-OC-055 DATE 08 FEB 75 TIME 0705 GMT
LAT 59 36.4N LONG 146 26.1W WEATHER 1 SEA STATE 1
BAROMETER 23 WIND DIR 280 T SPD 04 KT VISIBILITY 9
CLOUD 6 AMOUNT 3 DRY 02.5 WET 02.0 DEPTH 0097 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.94	31.65	25.15	0.000
1	3.96	31.66	25.16	
5	3.97	31.65	25.16	.014
10	4.01	31.67	25.16	.028
15	4.03	31.68	25.17	.042
20	4.03	31.69	25.18	.056
25	4.04	31.69	25.18	.070
30	4.09	31.72	25.19	.084
35	4.30	31.77	25.22	.098
40	4.31	31.77	25.21	.112
45	4.34	31.79	25.24	.126
50	4.33	31.80	25.23	.139
75	5.05	32.14	25.35	.207
88	5.28	32.39	25.36	



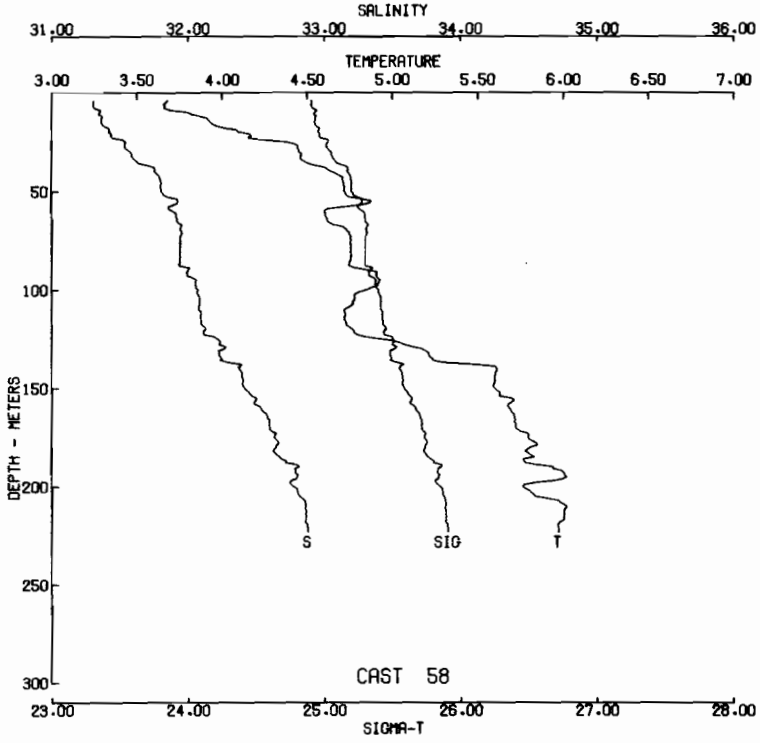
CAST NEGOA-1-OC-056 DATE 08 FEB 75 TIME 1004 GMT
LAT 59 22.0N LONG 146 14.5W WEATHER 0 SEA STATE 4
BAROMETER 23 WIND DIR 250 T SPD 06 KT VISIBILITY 7
CLOUD AMOUNT 1 DRY 04.0 WET 02.8 DEPTH 0448 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.33	32.21	25.56	0.000
5	4.38	32.19	25.54	.012
10	4.41	32.24	25.58	.024
15	4.46	32.28	25.60	.037
20	4.47	32.38	25.64	.048
25	4.93	32.33	25.59	.060
30	4.92	32.34	25.60	.072
35	4.79	32.31	25.59	.084
40	4.65	32.47	25.71	.096
45	5.13	32.45	25.66	.108
50	5.03	32.49	25.71	.119
75	5.05	32.70	25.87	.175
100	5.10	32.92	26.04	.226
150	5.59	33.52	26.46	.312
200	5.49	33.62	26.55	.389
300	4.71	33.87	26.83	.524
416	4.23	33.96	26.96	



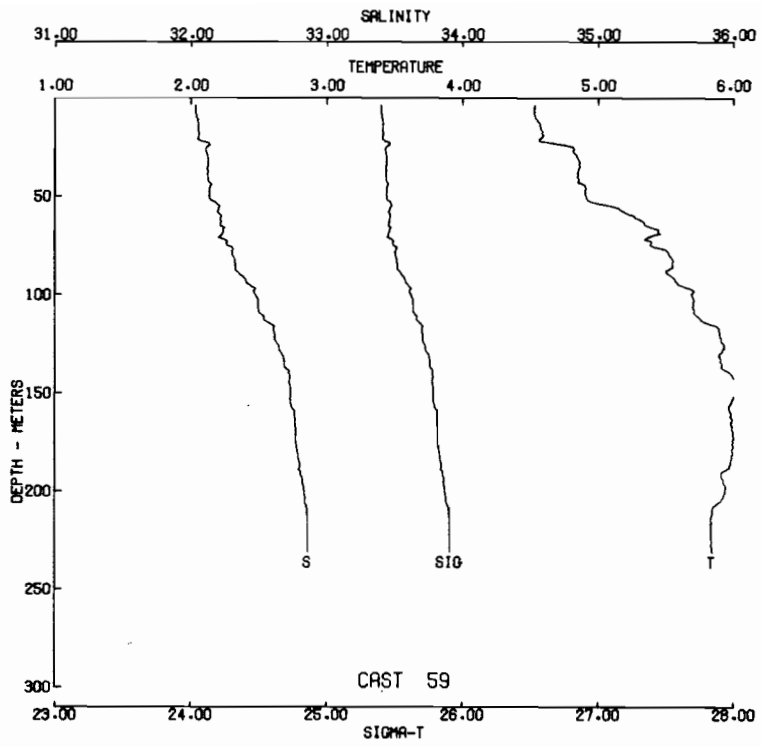
CAST NEGOA-1-OC-057 DATE 08 FEB 75 TIME 2000 GMT
LAT 59 51.2N LONG 149 30.3W WEATHER 1 SEA STATE 1
BAROMETER 18 WIND DIR 000 T SPD 06 KT VISIBILITY 7
CLOUD 3 AMOUNT 2 DRY 01.5 WET 00.6 DEPTH 0235 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.72	31.24	24.88	0.000
4	3.71	31.28	24.88	
5	3.72	31.28	24.88	.015
10	3.71	31.28	24.88	.031
15	3.73	31.28	24.88	.046
20	3.75	31.28	24.88	.062
25	3.76	31.29	24.88	.077
30	3.76	31.29	24.89	.092
35	3.79	31.29	24.89	.108
40	3.77	31.29	24.89	.123
45	3.77	31.29	24.89	.139
50	3.73	31.29	24.89	.154
75	4.57	31.58	25.03	.229
100	4.85	31.83	25.20	.301
150	5.37	32.19	25.43	.434
200	5.98	32.63	25.71	.556
231	6.31	32.84	25.87	



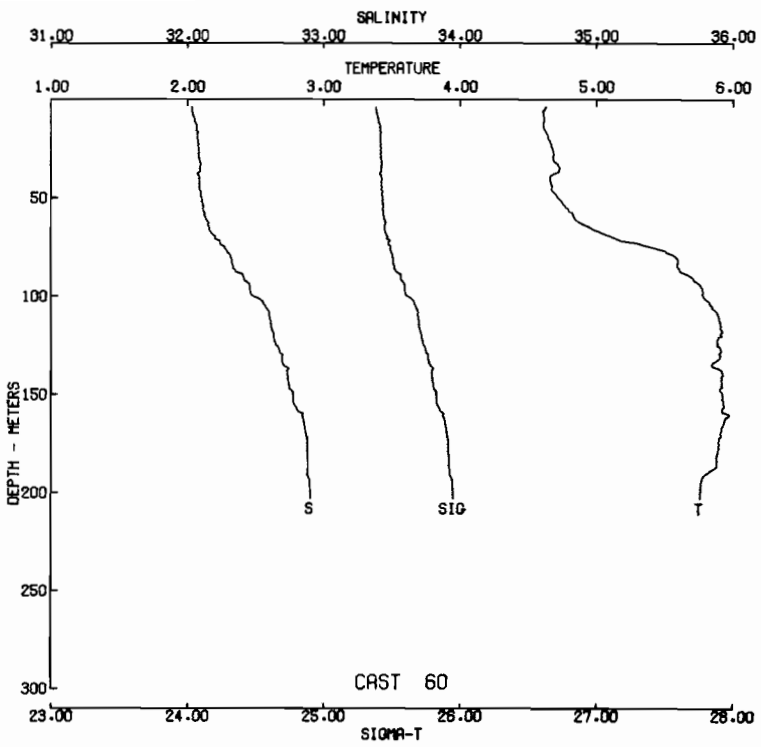
CAST NEGOA-1-OC-058 DATE 08 FEB 75 TIME 2253 GMT
LAT 59 41.0N LONG 149 21.6W WEATHER 0 SEA STATE 3
BAROMETER 18 WIND DIR 300 T SPD 04 KT VISIBILITY 7
CLOUD 2 AMOUNT 1 DRY 03.4 WET 01.2 DEPTH 0226 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.70	31.30	24.90	0.000
4	3.68	31.30	24.90	
5	3.67	31.30	24.90	.015
10	3.79	31.35	24.93	.031
15	3.93	31.36	24.93	.046
20	4.09	31.42	24.95	.061
25	4.37	31.54	25.03	.076
30	4.45	31.58	25.05	.090
35	4.48	31.62	25.08	.105
40	4.64	31.75	25.17	.119
45	4.71	31.80	25.20	.133
50	4.71	31.80	25.20	.147
75	4.76	31.94	25.30	.215
100	4.85	32.07	25.39	.281
150	5.60	32.41	25.68	.407
200	5.76	32.77	25.85	.522
223	5.97	32.88	25.90	



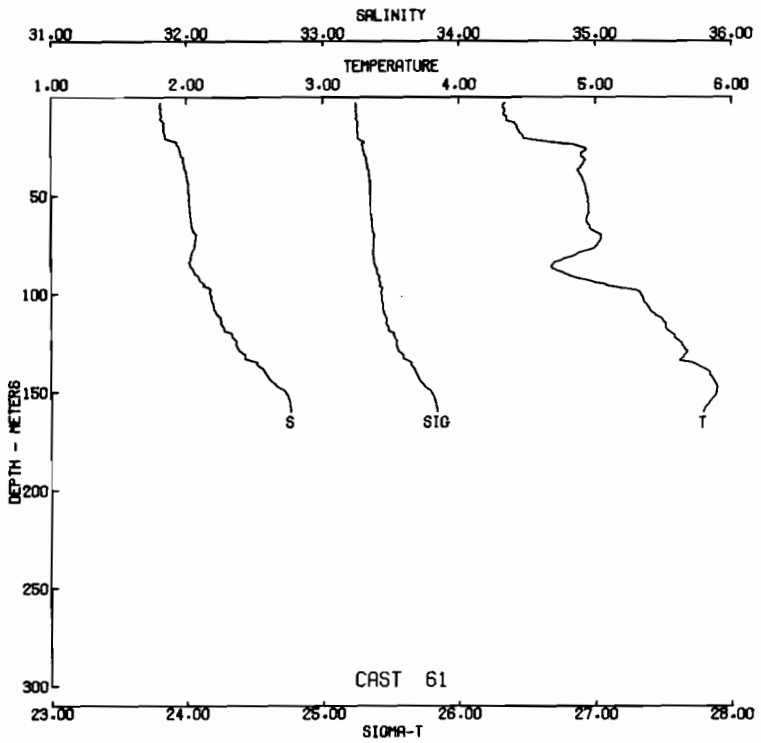
CAST NEGOA-1-OC-059 DATE 09 FEB 75 TIME 0015 GMT
LAT 59 33.5N LONG 149 13.5W WEATHER 3 SEA STATE 3
BAROMETER 16 WIND DIR 230 T SPD 06 KT VISIBILITY 7
CLOUD 2 AMOUNT 1 DRY 04.0 WET 03.8 DEPTH 0237 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.53	32.02	25.39	0.000
4	4.53	32.03	25.40	
5	4.53	32.03	25.40	.013
10	4.53	32.04	25.40	.026
15	4.57	32.05	25.41	.039
20	4.59	32.05	25.41	.052
25	4.81	32.11	25.43	.064
30	4.86	32.12	25.44	.077
35	4.87	32.12	25.44	.090
40	4.85	32.12	25.43	.103
45	4.90	32.14	25.44	.116
50	4.91	32.13	25.44	.128
75	5.38	32.26	25.49	.192
100	5.69	32.47	25.62	.253
150	6.01	32.73	25.78	.368
200	5.94	32.83	25.87	.478
231	5.54	32.86	25.91	



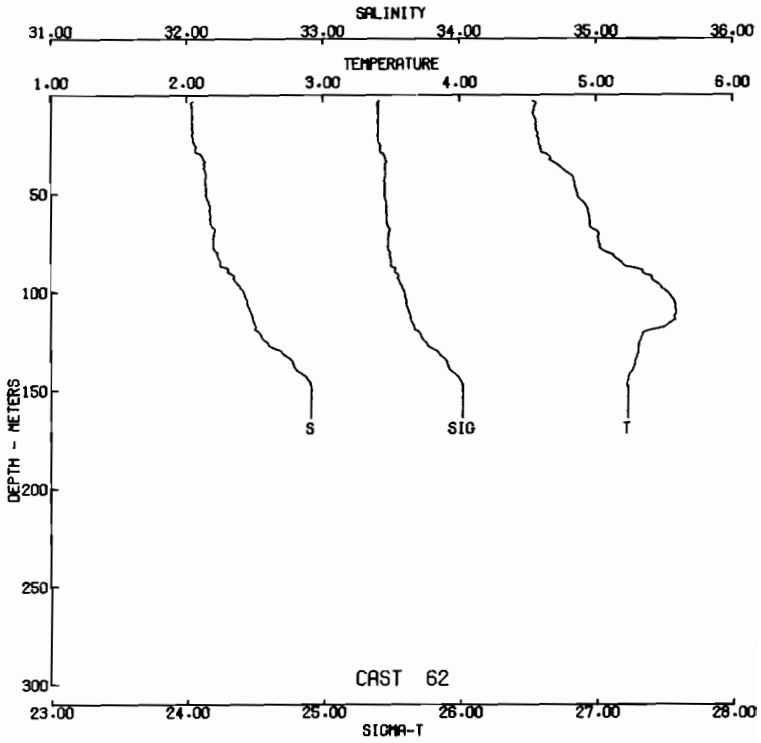
CAST NEGOA-1-OC-060 DATE 09 FEB 75 TIME 0143 GMT
LAT 59 24.7N LONG 149 04.8W WEATHER 1 SEA STATE 4
BAROMETER 15 WIND DIR 280 T SPD 12 KT VISIBILITY 9
CLOUD 6 AMOUNT 6 DRY 03.9 WET 03.3 DEPTH 0208 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.66	32.02	25.38	0.000
4	4.63	32.03	25.39	
5	4.62	32.03	25.39	.014
10	4.62	32.05	25.40	.026
15	4.61	32.06	25.42	.039
20	4.64	32.07	25.42	.052
25	4.67	32.08	25.42	.065
30	4.68	32.08	25.42	.077
35	4.73	32.09	25.44	.090
40	4.66	32.08	25.43	.103
45	4.67	32.09	25.43	.116
50	4.71	32.10	25.43	.129
75	5.39	32.27	25.49	.192
100	5.78	32.47	25.61	.254
150	5.92	32.77	25.83	.368
200	5.76	32.90	25.95	.474
203	5.76	32.90	25.95	



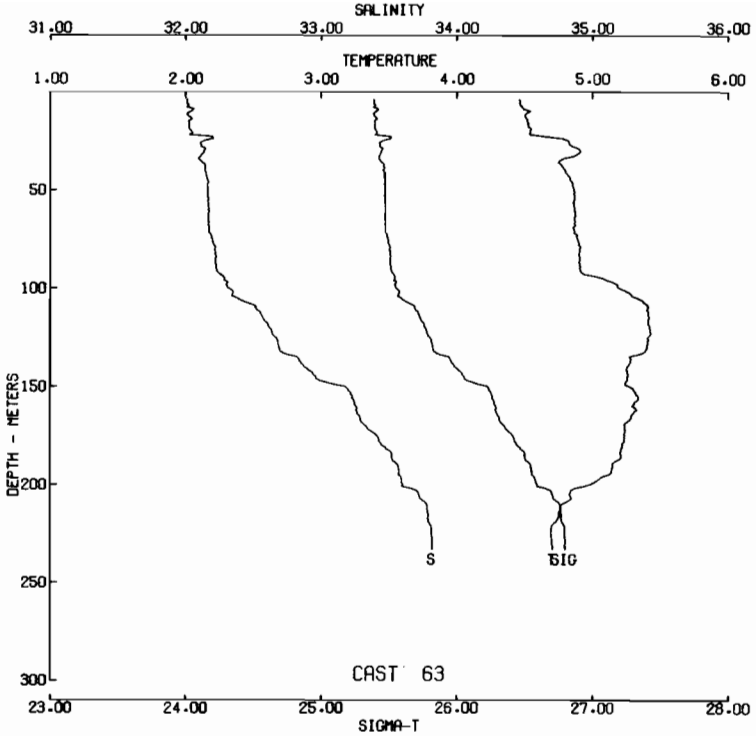
CAST NEGOA-1-OC-061 DATE 09 FEB 75 TIME 0403 GMT
LAT 59 14.6N LONG 148 55.8W WEATHER 1 SEA STATE 4
BAROMETER 15 WIND DIR 280 T SPD 12 KT VISIBILITY 9
CLOUD 6 AMOUNT 8 DRY 05.0 WET 03.9 DEPTH 0164 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.32	31.80	25.24	0.000
3	4.34	31.80	25.24	
5	4.32	31.80	25.24	.014
10	4.35	31.81	25.24	.027
15	4.43	31.83	25.25	.041
20	4.47	31.84	25.25	.055
25	4.88	31.94	25.29	.068
30	4.89	31.96	25.30	.082
35	4.89	31.98	25.32	.095
40	4.89	32.00	25.33	.108
45	4.92	32.01	25.34	.122
50	4.94	32.02	25.34	.135
75	5.01	32.06	25.37	.201
100	5.33	32.17	25.42	.266
150	5.69	32.72	25.79	.388
160	5.79	32.76	25.83	



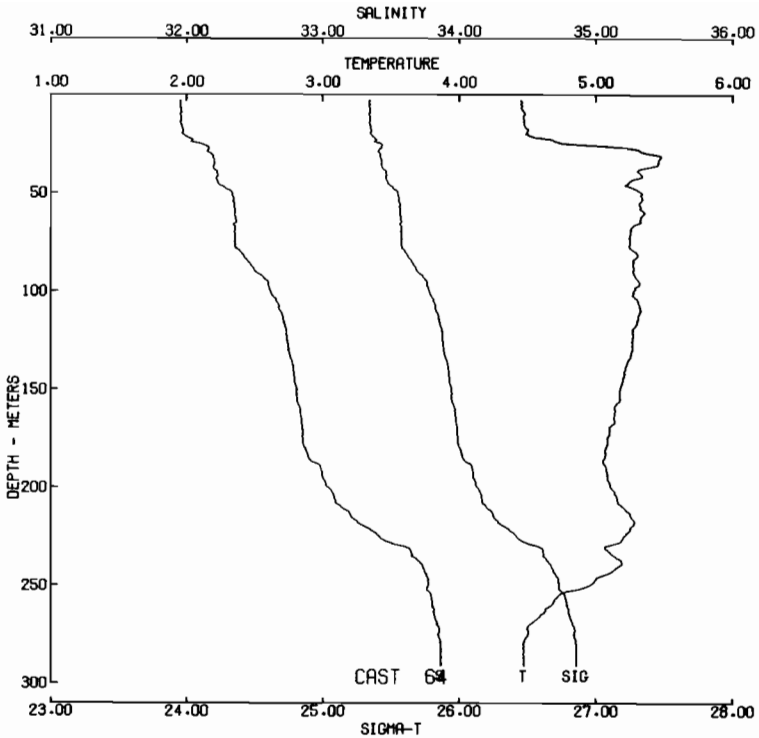
CAST NEGOA-1-OC-062 DATE 09 FEB 75 TIME 0532 GMT
LAT 59 06.0N LONG 148 48.9W WEATHER 1 SEA STATE 4
BAROMETER 14 WIND DIR 290 T SPD 07 KT VISIBILITY 9
CLOUD 8 AMOUNT 2 DRY 05.0 WET 03.9 DEPTH 0170 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.54	32.04	25.41	0.000
3	4.53	32.05	25.41	
5	4.55	32.03	25.40	.013
10	4.53	32.04	25.40	.026
15	4.55	32.04	25.40	.039
20	4.57	32.04	25.40	.052
25	4.57	32.05	25.41	.065
30	4.63	32.10	25.44	.077
35	4.70	32.12	25.45	.090
40	4.80	32.14	25.45	.103
45	4.84	32.14	25.45	.116
50	4.86	32.14	25.45	.128
75	5.02	32.19	25.47	.192
100	5.52	32.41	25.59	.254
150	6.23	32.91	26.02	.366
164	6.22	32.91	26.02	



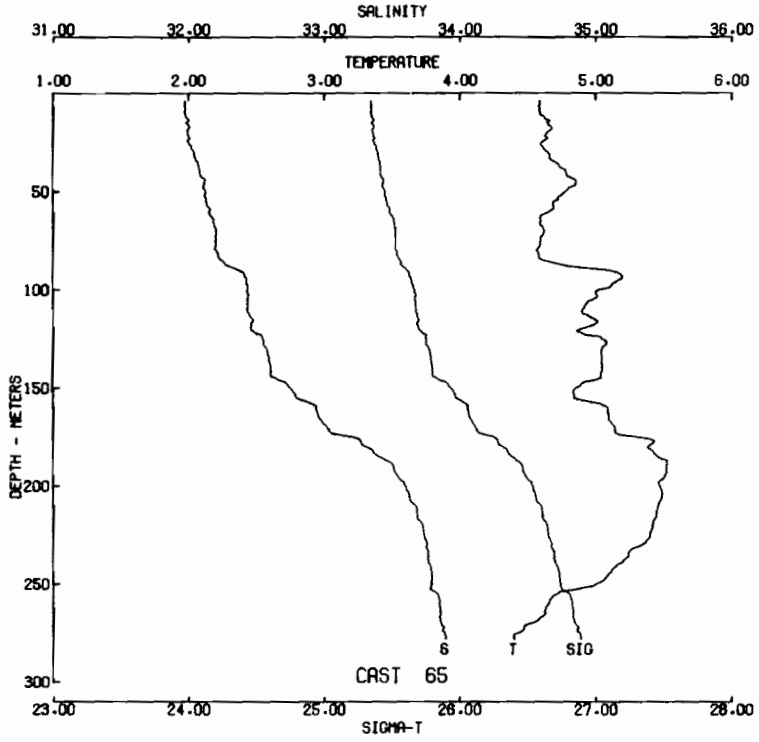
CAST NEGOA-1-OC-063 DATE 09 FEB 75 TIME 0727 GMT
LAT 58 59.2N LONG 148 40.4W WEATHER 1 SEA STATE 1
BAROMETER 14 WIND DIR 100 T SPD 05 KT VISIBILITY 9
CLOUD 8 AMOUNT 2 DRY 02.5 WET 01.8 DEPTH 0240 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.45	31.99	25.37	0.000
4	4.46	32.01	25.39	
5	4.46	32.01	25.39	.013
10	4.54	32.04	25.41	.026
15	4.52	32.02	25.39	.039
20	4.54	32.04	25.40	.052
25	4.62	32.14	25.45	.065
30	4.71	32.14	25.44	.077
35	4.76	32.10	25.43	.090
40	4.79	32.14	25.46	.103
45	4.83	32.16	25.47	.115
50	4.86	32.16	25.47	.128
75	4.89	32.19	25.49	.191
100	5.20	32.31	25.55	.253
150	5.27	33.18	26.22	.363
200	4.98	33.60	26.59	.446
233	4.70	33.82	26.80	



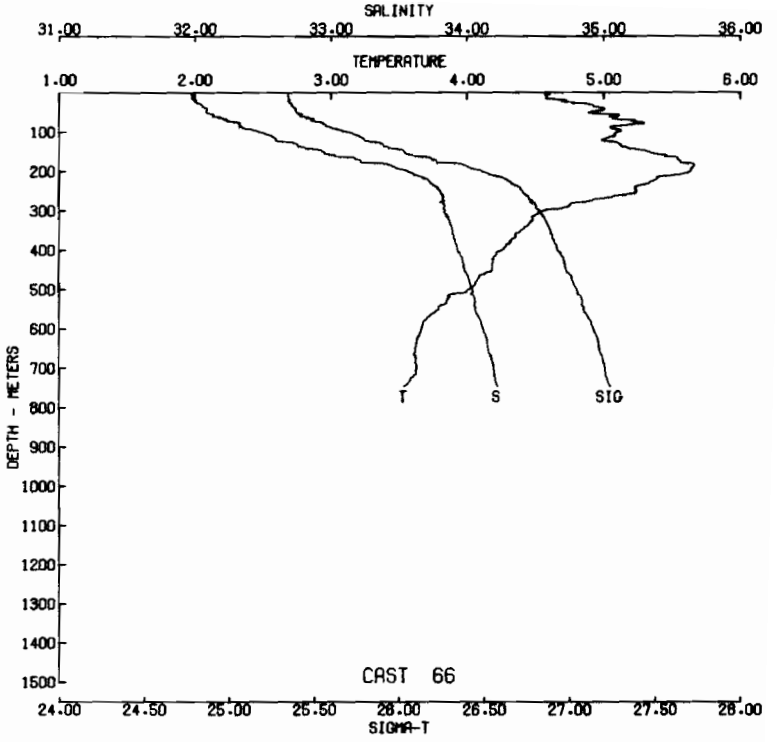
CAST NEGOA-1-OC-064 DATE 09 FEB 75 TIME 1019 GMT
LAT 58 50.0N LONG 148 34.2W WEATHER 0 SEA STATE 3
BAROMETER 14 WIND DIR 070 T SPD 02 KT VISIBILITY 7
CLOUD AMOUNT 2 DRY 02.8 WET 01.6 DEPTH 0293 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.45	31.95	25.34	0.000
4	4.45	31.95	25.34	
5	4.45	31.95	25.34	.013
10	4.48	31.95	25.34	.026
15	4.47	31.95	25.34	.040
20	4.49	31.96	25.35	.053
25	4.75	32.10	25.43	.066
30	5.38	32.18	25.42	.079
35	5.45	32.20	25.43	.092
40	5.32	32.22	25.46	.104
45	5.23	32.23	25.48	.117
50	5.34	32.33	25.55	.129
75	5.24	32.35	25.58	.190
100	5.27	32.61	25.78	.248
150	5.18	32.81	25.94	.356
200	5.11	33.04	26.13	.457
291	4.47	33.87	26.96	



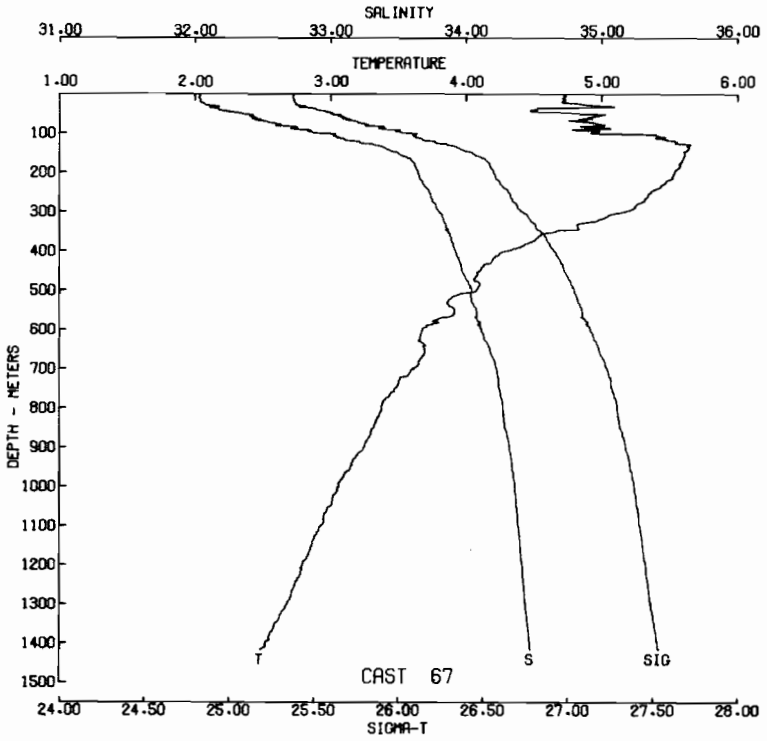
CAST NEGOA-1-OC-065 DATE 09 FEB 75 TIME 1204 GMT
LAT 58 41.3N LONG 148 21.1W WEATHER 3 SEA STATE 3
BAROMETER 14 WIND DIR 060 T SPD 10 KT VISIBILITY 7
CLOUD AMOUNT 1 DRY 03.6 WET 03.4 DEPTH 0282 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.60	31.97	25.34	0.000
4	4.59	31.97	25.34	
5	4.59	31.97	25.34	.013
10	4.59	31.97	25.34	.026
15	4.64	31.98	25.33	.040
20	4.64	31.99	25.36	.053
25	4.60	32.00	25.36	.066
30	4.94	32.04	25.39	.079
35	4.76	32.07	25.41	.092
40	4.78	32.08	25.41	.105
45	4.86	32.12	25.43	.118
50	4.78	32.13	25.45	.130
75	4.59	32.20	25.53	.193
100	5.02	32.44	25.67	.253
150	4.86	32.75	25.93	.367
200	5.47	33.60	26.54	.457
278	4.40	33.90	26.84	



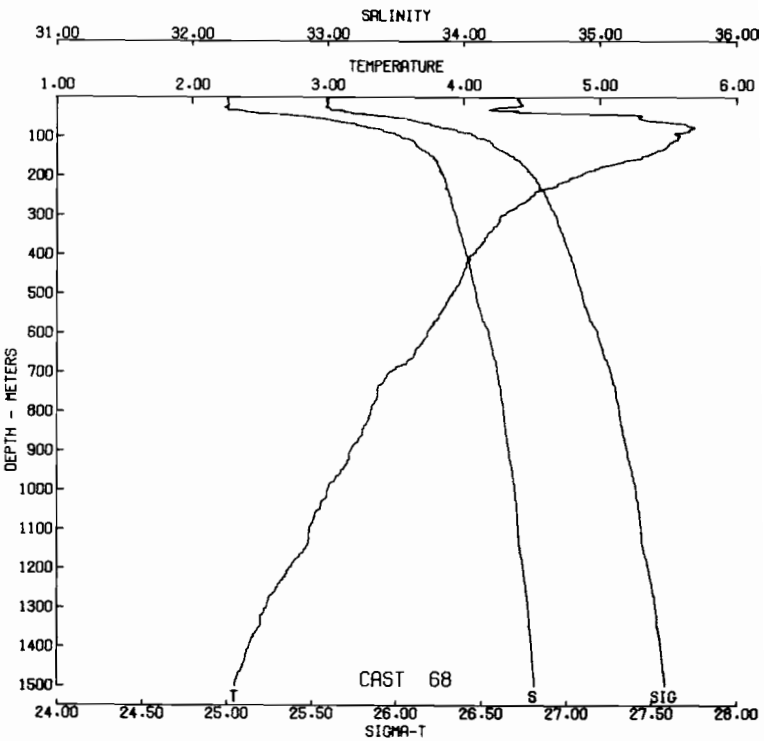
CAST NEGOA-1-OC-066 DATE 09 FEB 75 TIME 1338 GMT
LAT 58 30.6N LONG 148 11.8W WEATHER 1 SEA STATE 3
BAROMETER 13 WIND DIR 050 T SPD 10 KT VISIBILITY 8
CLOUD 8 AMOUNT 2 DRY 02.2 WET 01.2 DEPTH 0837 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.57	31.97	25.35	0.000
4	4.57	31.97	25.35	
5	4.59	31.98	25.35	.013
10	4.58	31.98	25.35	.026
15	4.58	31.98	25.35	.040
20	4.73	32.00	25.35	.053
25	4.76	32.01	25.36	.066
30	4.89	32.04	25.37	.079
35	4.93	32.05	25.37	.092
40	4.99	32.08	25.39	.105
45	5.00	32.09	25.39	.118
50	4.91	32.08	25.40	.131
75	5.25	32.28	25.52	.195
100	5.11	32.47	25.69	.255
150	5.32	32.94	26.03	.363
200	5.64	33.57	26.49	.453
300	4.56	33.84	26.83	.591
500	4.01	34.04	27.04	.823
746	3.54	34.22	27.24	



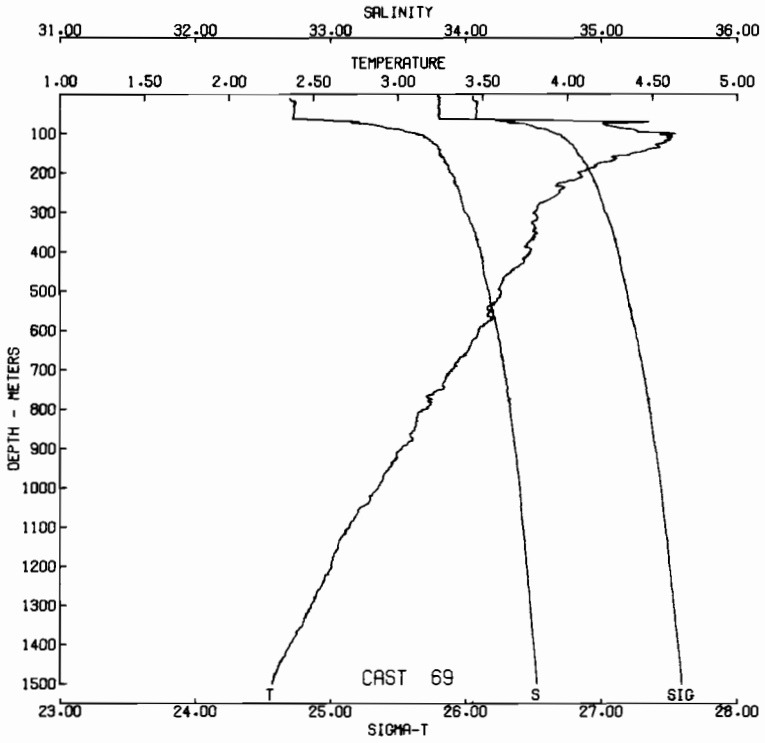
CAST NEGOA-1-OC-067 DATE 09 FEB 75 TIME 1641 GMT
LAT 58 22.2N LONG 148 04.2W WEATHER 1 SEA STATE 3
BAROMETER 13 WIND DIR 050 T SPD 16 KT VISIBILITY 8
CLOUD 8 AMOUNT 2 DRY 02.8 WET 00.6 DEPTH 1420 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.74	32.03	25.38	0.000
4	4.73	32.03	25.38	
5	4.73	32.03	25.37	.013
10	4.71	32.03	25.38	.026
15	4.72	32.03	25.38	.039
20	4.71	32.03	25.38	.052
25	4.84	32.06	25.49	.065
30	4.98	32.11	25.41	.078
35	4.75	32.12	25.45	.091
40	4.50	32.17	25.51	.103
45	4.52	32.26	25.58	.116
50	4.65	32.34	25.61	.128
75	4.96	32.59	25.80	.186
100	4.95	32.89	26.03	.238
150	5.61	33.52	26.44	.328
200	5.53	33.65	26.56	.405
300	5.15	33.81	26.73	.549
500	4.37	34.04	27.04	.787
750	3.47	34.25	27.26	1.029
1000	3.06	34.36	27.39	1.233
1250	2.74	34.43	27.47	1.415
1415	2.48	34.48	27.54	



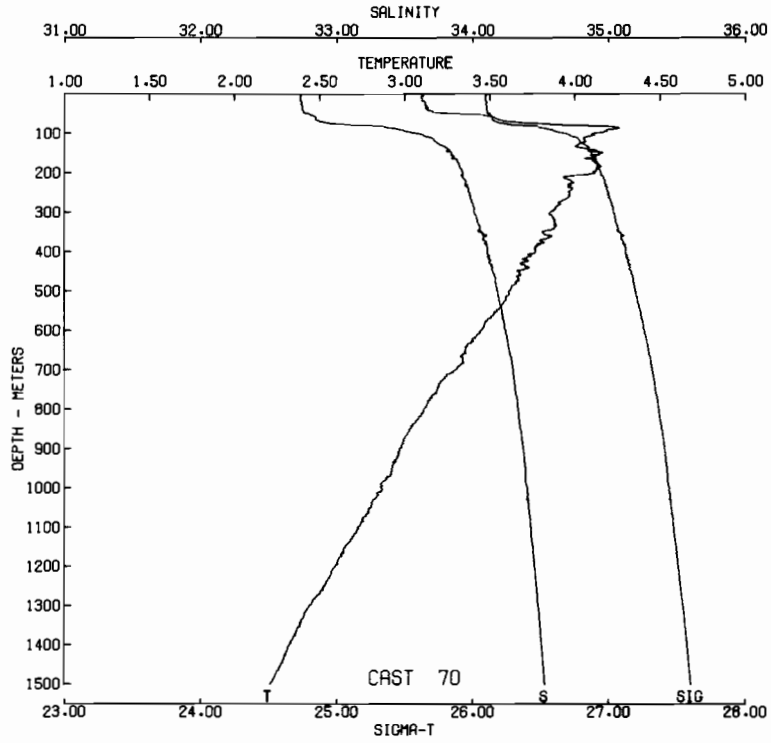
CAST NEGOA-1-OC-068 DATE 09 FEB 75 TIME 2015 GMT
LAT 58 21.4N LONG 147 21.3W WEATHER 1 SEA STATE 3
BAROMETER 12 WIND DIR 010 T SPD 12 KT VISIBILITY 9
CLOUD 8 AMOUNT 2 DRY 02.1 WET 00.0 DEPTH 2374 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.37	32.25	25.59	0.000
4	4.39	32.26	25.59	
5	4.39	32.25	25.59	.012
10	4.40	32.26	25.59	.024
15	4.42	32.26	25.59	.036
20	4.43	32.26	25.59	.048
25	4.33	32.26	25.60	.060
30	4.21	32.26	25.61	.072
35	4.40	32.36	25.67	.084
40	4.52	32.45	25.73	.095
45	5.18	32.65	25.82	.107
50	5.29	32.84	25.96	.117
75	5.67	33.27	26.25	.165
100	5.58	33.53	26.47	.207
150	5.31	33.77	26.69	.281
200	4.85	33.85	26.86	.347
300	4.28	33.94	26.94	.468
500	3.91	34.09	27.09	.685
750	3.36	34.27	27.29	.918
1000	2.99	34.37	27.41	1.118
1250	2.61	34.45	27.50	1.295
1500	2.31	34.51	27.58	1.451
1501	2.31	34.51	27.58	



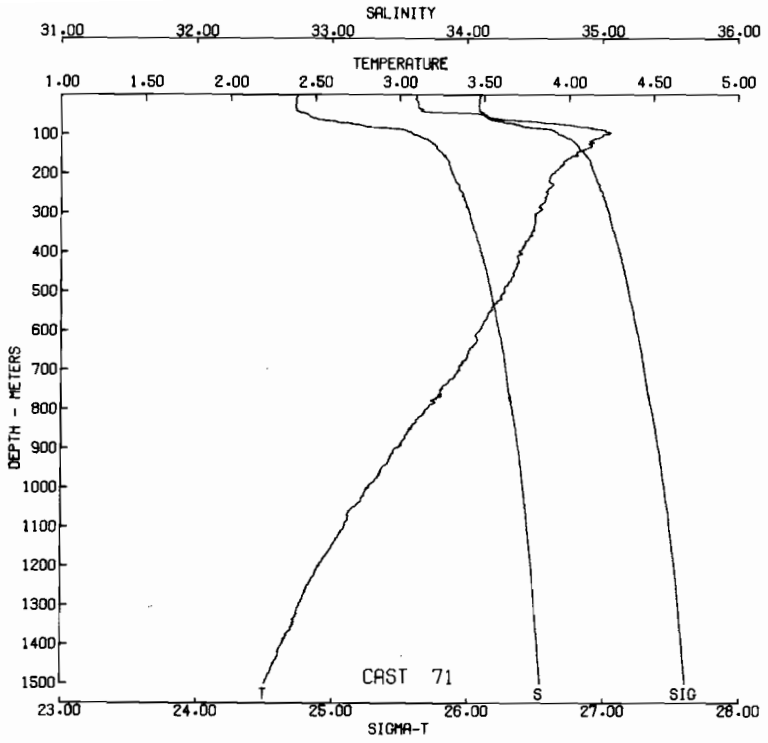
CAST NEGOA-1-OC-069 DATE 09 FEB 75 TIME 2332 GMT
LAT 58 20.1N LONG 146 32.2W WEATHER 1 SEA STATE 4
BAROMETER 10 WIND DIR 010 T SPD 20 KT VISIBILITY 8
CLOUD 8 AMOUNT 2 DRY 01.8 WET 00.0 DEPTH 2500 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.21	32.69	26.05	0.000
5	3.24	32.70	26.05	
10	3.25	32.70	26.05	.020
15	3.24	32.70	26.05	.030
20	3.24	32.74	26.08	.039
25	3.24	32.74	26.08	.049
30	3.24	32.73	26.08	.059
35	3.24	32.73	26.07	.068
40	3.24	32.73	26.08	.078
45	3.25	32.73	26.08	.088
50	3.24	32.73	26.08	.098
75	4.20	33.22	26.38	.144
100	4.91	33.63	26.65	.182
150	4.39	33.81	26.82	.247
200	4.06	33.89	26.92	.307
300	3.80	33.99	27.03	.418
500	3.60	34.17	27.19	.616
750	3.26	34.31	27.33	.832
1000	2.88	34.40	27.44	1.022
1250	2.54	34.46	27.52	1.191
1500	2.25	34.52	27.59	1.344
1502	2.25	34.52	27.59	



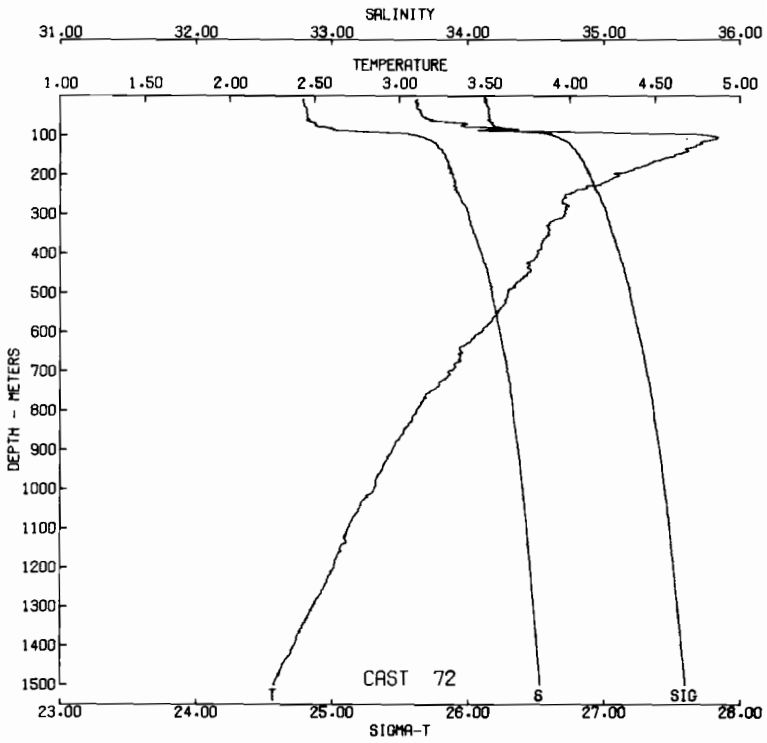
CAST NEGOA-1-OC-070 DATE 10 FEB 75 TIME 0420 GMT
LAT 58 19.9N LONG 145 44.3W WEATHER 1 SEA STATE 4
BAROMETER 08 WIND DIR 000 T SPD 16 KT VISIBILITY 7
CLOUD 6 AMOUNT 2 DRY 01.2 WET -1.2 DEPTH 4000 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.11	32.74	26.09	0.000
2	3.11	32.73	26.09	
5	3.10	32.73	26.09	.010
10	3.09	32.73	26.09	.019
15	3.10	32.73	26.09	.029
20	3.12	32.74	26.10	.039
25	3.12	32.74	26.10	.048
30	3.12	32.74	26.10	.058
35	3.13	32.74	26.10	.067
40	3.13	32.75	26.10	.077
45	3.17	32.75	26.10	.087
50	3.26	32.79	26.12	.096
75	3.76	32.98	26.23	.143
100	4.12	33.57	26.66	.182
150	4.16	33.84	26.87	.245
200	4.11	33.93	26.94	.304
300	3.86	34.01	27.03	.413
500	3.62	34.18	27.19	.611
750	3.19	34.31	27.34	.824
1000	2.87	34.40	27.44	1.011
1250	2.52	34.47	27.53	1.180
1500	2.21	34.53	27.60	1.330
1505	2.20	34.53	27.60	



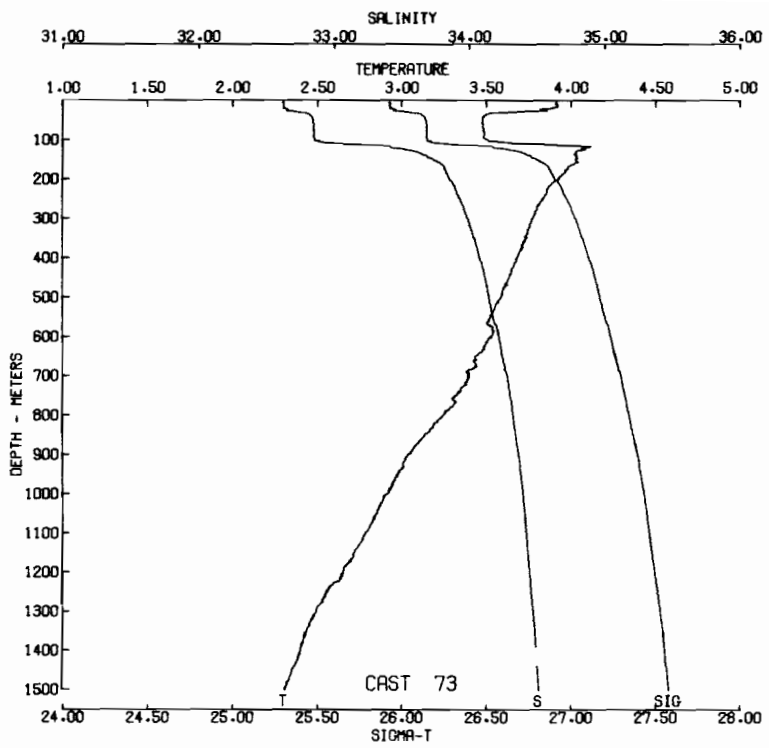
CAST NEGOA-1-OC-071 DATE 10 FEB 75 TIME 0726 GMT
LAT 58 18.0N LONG 145 00.7W WEATHER 1 SEA STATE 4
BAROMETER 07 WIND DIR 350 T SPD 16 KT VISIBILITY 9
CLOUD 8 AMOUNT 2 DRY 00.4 WET 00.0 DEPTH 4800 M

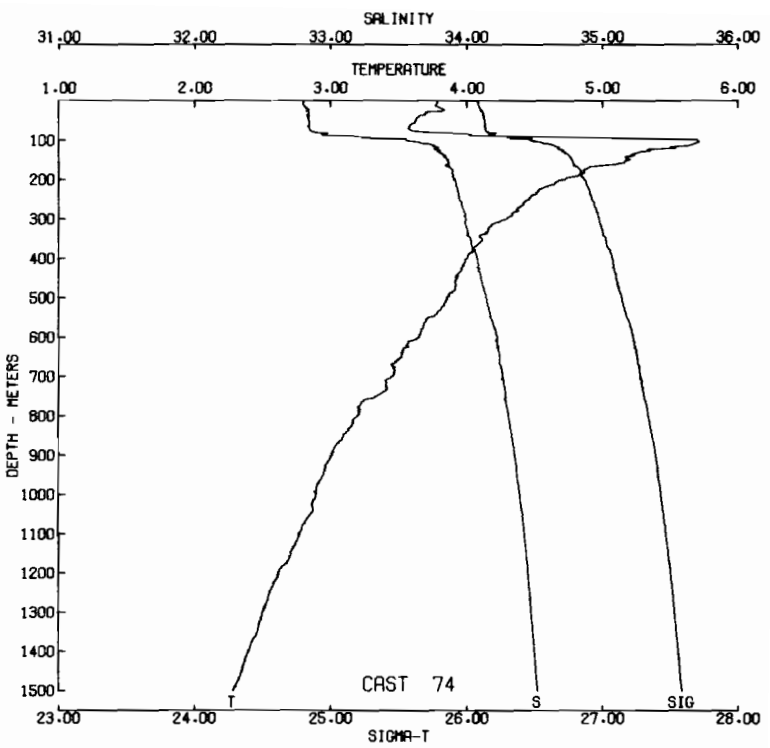
DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.10	32.75	26.10	0.000
4	3.10	32.74	26.10	
5	3.10	32.74	26.09	.010
10	3.09	32.73	26.09	.019
15	3.10	32.73	26.09	.029
20	3.11	32.73	26.09	.039
25	3.11	32.73	26.09	.048
30	3.11	32.72	26.08	.058
35	3.11	32.73	26.09	.068
40	3.13	32.73	26.09	.077
45	3.18	32.75	26.10	.087
50	3.47	32.91	26.12	.097
75	3.94	33.14	26.34	.142
100	4.24	33.59	26.66	.180
150	4.04	33.81	26.86	.244
200	3.90	33.83	26.93	.303
300	3.82	34.01	27.04	.413
500	3.62	34.17	27.19	.610
750	3.24	34.30	27.35	.826
1000	2.81	34.41	27.45	1.014
1250	2.45	34.48	27.54	1.179
1500	2.20	34.53	27.60	1.327
1501	2.20	34.53	27.60	



CAST NEGOA-1-OC-072 DATE 10 FEB 75 TIME 1058 GMT
LAT 58 16.8N LONG 144 14.2W WEATHER 2 SEA STATE 4
BAROMETER 06 WIND DIR 120 T SPD 26 KT VISIBILITY 7
CLOUD AMOUNT 7 DRY -1.1 WET -2.2 DEPTH 3500 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
9	3.10	32.79	26.13	
10	3.11	32.79	26.13	.019
15	3.09	32.79	26.14	.028
20	3.11	32.79	26.14	.038
25	3.11	32.79	26.14	.047
30	3.10	32.81	26.15	.057
35	3.11	32.82	26.16	.066
40	3.12	32.81	26.15	.075
45	3.13	32.81	26.15	.085
50	3.13	32.82	26.16	.094
75	3.37	32.88	26.18	.141
100	4.80	33.61	26.62	.193
150	4.61	33.83	26.82	.249
200	4.28	33.89	26.90	.310
300	3.97	34.00	27.02	.423
500	3.64	34.18	27.19	.622
750	3.18	34.31	27.34	.837
1000	2.84	34.40	27.44	1.025
1250	2.55	34.47	27.52	1.193
1500	2.26	34.53	27.60	1.345
1501	2.26	34.53	27.60	



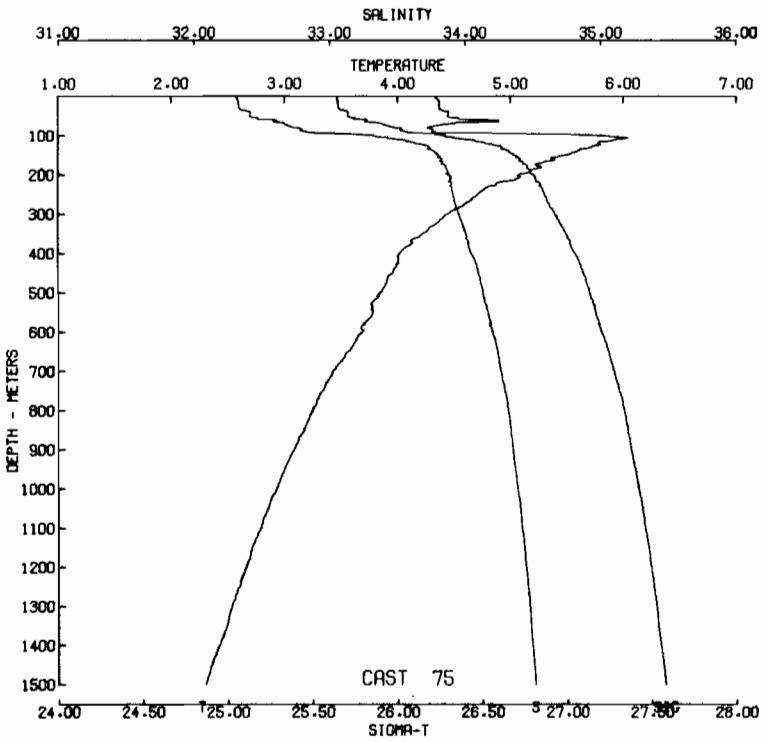


CAST NEGOA-1-OC-073 DATE 10 FEB 75 TIME 1757 GMT
LAT 58 16.2N LONG 143 28.7W WEATHER 2 SEA STATE 5
BAROMETER 03 WIND DIR 080 T SPD 28 KT VISIBILITY 7
CLOUD 6 AMOUNT 6 DRY WET DEPTH 3000 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.90	32.61	25.92	0.000
5	3.91	32.62	25.93	
10	3.91	32.63	25.93	.021
15	3.92	32.62	25.93	.031
20	3.89	32.63	25.94	.042
25	3.83	32.65	25.96	.052
30	3.64	32.70	26.01	.062
35	3.51	32.80	26.11	.072
40	3.48	32.82	26.13	.081
45	3.48	32.83	26.14	.091
50	3.48	32.84	26.14	.100
75	3.48	32.84	26.15	.147
100	3.51	32.85	26.15	.194
150	4.03	33.73	26.80	.270
200	3.92	33.85	26.90	.331
300	3.77	33.99	27.03	.442
400	3.59	34.14	27.17	.542
500	3.32	34.30	27.32	.632
1000	2.91	34.39	27.43	1.054
1250	2.56	34.46	27.51	1.226
1500	2.31	34.51	27.58	1.381
1502	2.30	34.51	27.58	

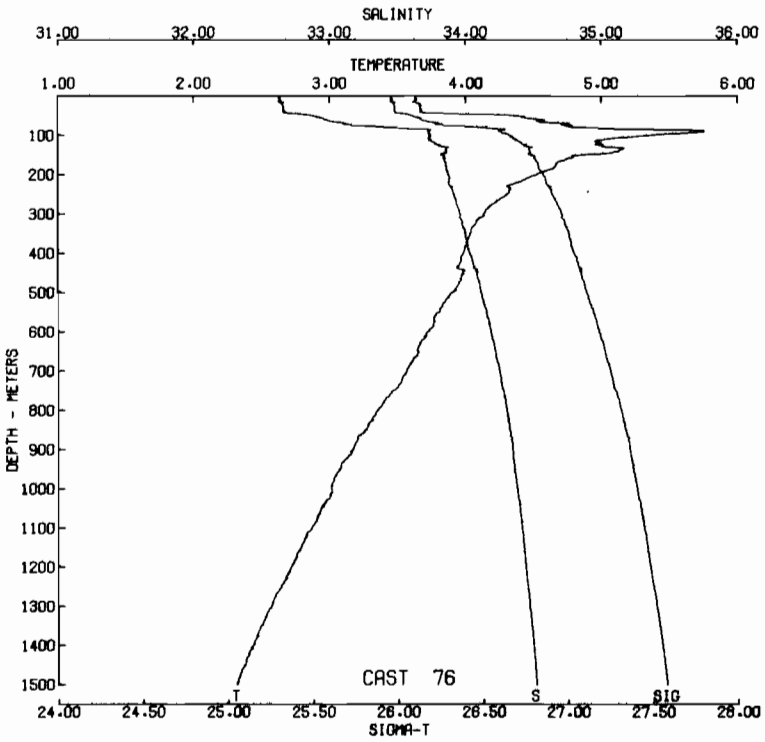
CAST NEGOA-1-OC-074 DATE 10 FEB 75 TIME 2213 GMT
LAT 58 14.0N LONG 142 42.8W WEATHER 1 SEA STATE 4
BAROMETER 11 WIND DIR 070 T SPD 20 KT VISIBILITY 7
CLOUD 8 AMOUNT 1 DRY 02.8 WET 02.6 DEPTH 3000 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.78	32.80	26.08	0.000
2	3.78	32.80	26.08	
5	3.78	32.80	26.08	.010
10	3.77	32.80	26.08	.019
15	3.78	32.81	26.09	.029
20	3.82	32.82	26.10	.039
25	3.83	32.84	26.11	.048
30	3.70	32.83	26.12	.058
35	3.69	32.84	26.12	.067
40	3.65	32.84	26.13	.077
45	3.63	32.84	26.13	.086
50	3.63	32.84	26.13	.096
75	3.59	32.85	26.14	.143
100	3.69	33.55	26.47	.188
150	5.20	33.86	26.77	.258
200	4.73	33.91	26.86	.321
300	4.30	33.99	26.97	.437
500	3.85	34.14	27.14	.645
750	3.34	34.28	27.30	.869
1000	2.89	34.39	27.43	1.062
1250	2.55	34.46	27.52	1.233
1500	2.28	34.52	27.59	1.387
1503	2.28	34.52	27.59	



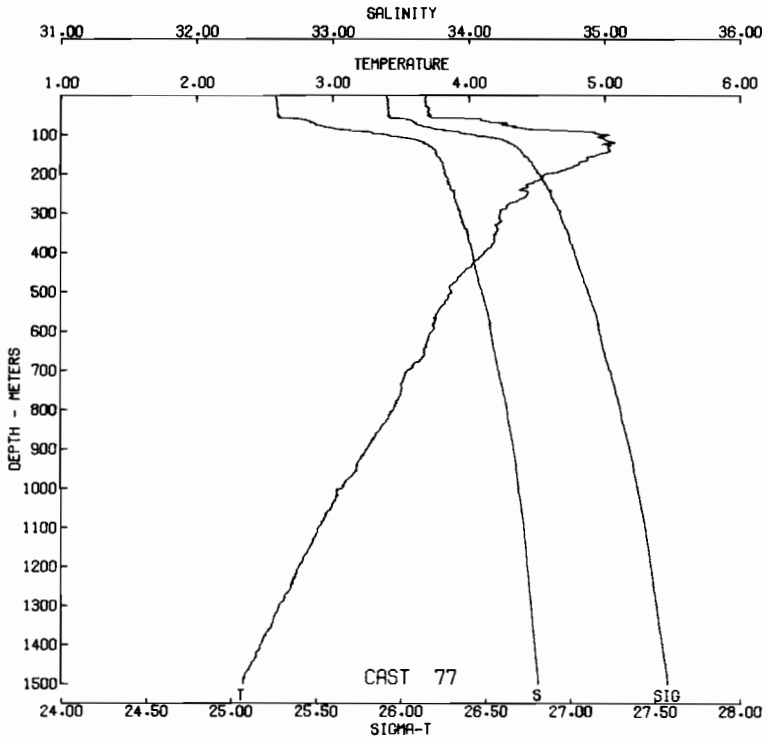
CAST NEGDA-1-OC-075 DATE 11 FEB 75 TIME 0202 GMT
LAT 58 14.8N LONG 141 59.5W WEATHER 1 SEA STATE 4
BAROMETER 13 WIND DIR 070 T SPD 12 KT VISIBILITY 9
CLOUD 8 AMOUNT 4 DRY -3.6 WET -2.7 DEPTH 3616 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.31	32.30	25.64	0.000
4	4.34	32.31	25.64	
5	4.33	32.31	25.64	.012
10	4.36	32.32	25.64	.024
15	4.36	32.32	25.65	.035
20	4.36	32.32	25.65	.047
25	4.36	32.32	25.65	.059
30	4.37	32.33	25.65	.071
35	4.38	32.34	25.66	.082
40	4.45	32.41	25.71	.094
45	4.44	32.41	25.71	.105
50	4.44	32.41	25.71	.117
75	4.74	32.69	25.94	.172
100	5.74	33.33	26.28	.221
150	5.48	33.80	26.69	.297
200	5.07	33.87	26.80	.364
300	4.44	33.95	26.93	.486
500	3.85	34.13	27.13	.698
750	3.34	34.29	27.31	.924
1000	2.93	34.38	27.42	1.118
1250	2.60	34.46	27.51	1.290
1500	2.30	34.52	27.58	1.446
1531	2.28	34.52	27.59	



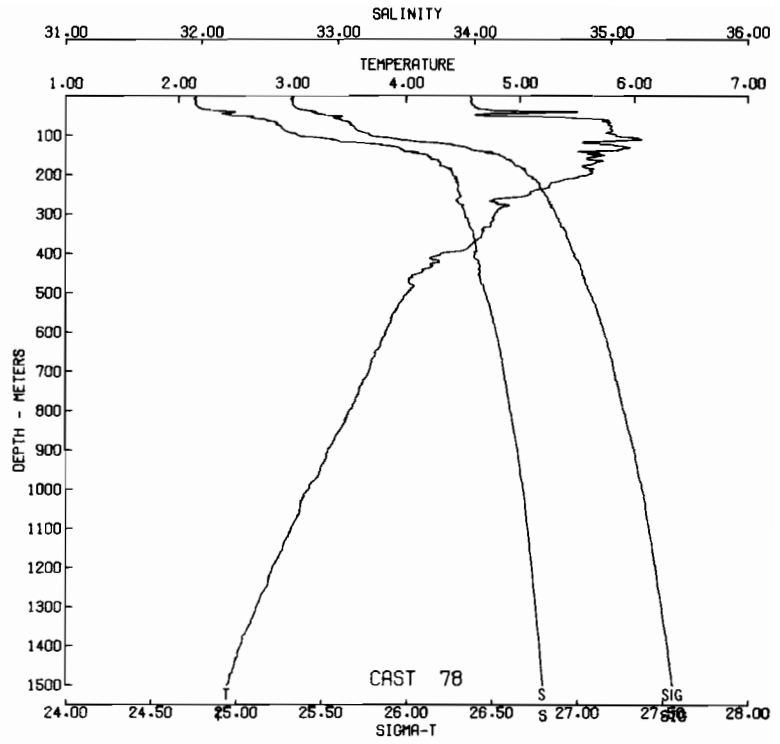
CAST NEGDA-1-OC-076 DATE 11 FEB 75 TIME 0926 GMT
LAT 59 21.1N LONG 141 44.7W WEATHER 1 SEA STATE 4
BAROMETER 12 WIND DIR 110 T SPD 12 KT VISIBILITY 9
CLOUD 8 AMOUNT 2 DRY WET DEPTH 3610 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.63	32.64	25.97	0.000
4	3.63	32.63	25.96	
5	3.65	32.63	25.96	.010
10	3.63	32.63	25.96	.021
15	3.61	32.63	25.96	.031
20	3.66	32.65	25.98	.041
25	3.66	32.66	25.98	.051
30	3.66	32.66	25.98	.061
35	3.67	32.66	25.98	.072
40	3.66	32.66	25.98	.082
45	3.76	32.72	26.02	.092
50	4.73	32.87	26.08	.102
75	4.75	33.16	26.27	.148
100	5.36	33.73	26.65	.186
150	4.86	33.83	26.78	.252
200	4.52	33.87	26.85	.315
300	4.13	33.98	26.97	.432
500	3.90	34.11	27.11	.645
750	3.46	34.27	27.28	.876
1000	3.01	34.39	27.41	1.075
1250	2.64	34.45	27.50	1.250
1500	2.31	34.52	27.58	1.406
1503	2.31	34.51	27.58	



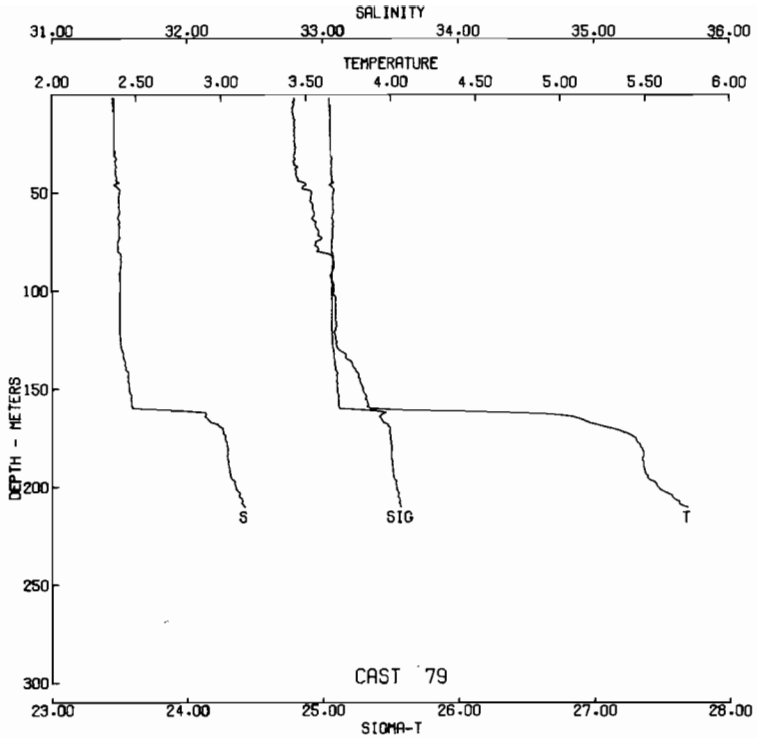
CAST NEGOA-1-OC-077 DATE 11 FEB 75 TIME 0846 GMT
LAT 58 30.0N LONG 141 33.4W WEATHER 1 SEA STATE 4
BAROMETER 11 WIND DIR 160 T SPD 16 KT VISIBILITY 8
CLOUD 8 AMOUNT 2 DRY WET DEPTH 3494 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.70	32.57	25.91	0.000
4	3.68	32.58	25.91	
5	3.68	32.57	25.91	.011
10	3.67	32.58	25.92	.021
15	3.68	32.58	25.92	.031
20	3.68	32.58	25.92	.042
25	3.68	32.58	25.92	.052
30	3.69	32.59	25.92	.063
35	3.71	32.59	25.92	.073
40	3.70	32.59	25.92	.084
45	3.70	32.59	25.92	.094
50	3.71	32.59	25.92	.105
75	4.25	32.87	26.19	.155
100	5.01	33.36	26.40	.200
150	4.96	33.76	26.72	.272
200	4.58	33.82	26.81	.337
300	4.23	33.93	26.94	.458
500	3.87	34.09	27.10	.674
750	3.58	34.25	27.26	.910
1000	3.08	34.37	27.44	1.113
1250	2.69	34.44	27.49	1.291
1500	2.34	34.51	27.57	1.450
1503	2.33	34.51	27.58	



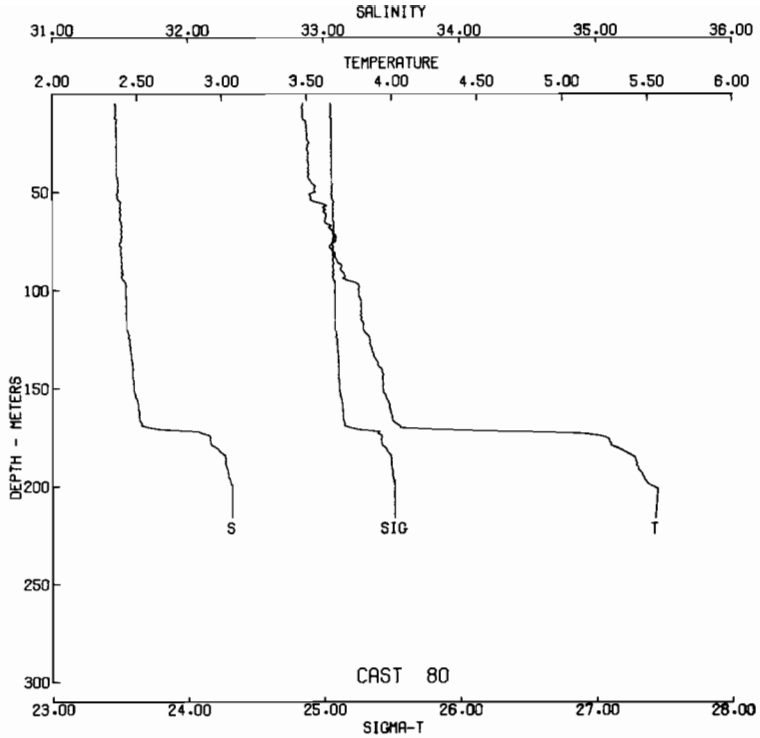
CAST NEGOA-1-OC-078 DATE 11 FEB 75 TIME 1110 GMT
LAT 58 39.2N LONG 141 22.6W WEATHER 7 SEA STATE 4
BAROMETER 11 WIND DIR 160 T SPD 18 KT VISIBILITY 6
CLOUD AMOUNT 9 DRY 02.6 WET 02.4 DEPTH 3367 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	4.55	31.99	25.36	0.000
5	4.56	31.96	25.34	
10	4.57	31.95	25.33	.026
15	4.57	31.95	25.33	.040
20	4.57	31.95	25.33	.053
25	4.59	31.96	25.34	.066
30	4.59	31.97	25.35	.079
35	4.68	32.02	25.37	.093
40	5.14	32.19	25.46	.105
45	4.84	32.16	25.47	.118
50	4.61	32.22	25.54	.131
75	5.79	32.56	25.68	.190
100	5.84	32.70	25.78	.247
150	5.71	33.65	26.55	.339
200	5.60	33.84	26.71	.411
300	4.78	33.93	26.87	.539
500	4.01	34.08	27.08	.764
750	3.58	34.24	27.25	1.003
1000	3.14	34.36	27.38	1.211
1250	2.77	34.43	27.47	1.394
1500	2.42	34.50	27.56	1.557
1552	2.36	34.51	27.57	



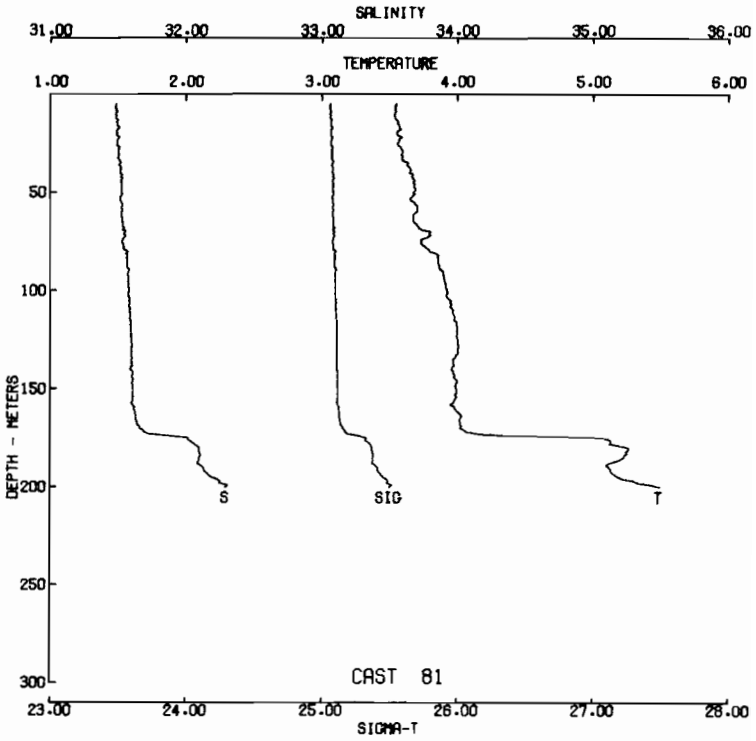
CAST NEGOA-1-OC-079 DATE 13 FEB 75 TIME 2156 GMT
LAT 59 49.4N LONG 149 32.4W WEATHER 6 SEA STATE 3
BAROMETER 89 WIND DIR 030 T SPD 20 KT VISIBILITY 7
CLOUD AMOUNT 2 DRY -6.0 WET -6.9 DEPTH 0220 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.43	31.45	25.04	0.000
5	3.43	31.45	25.05	
10	3.43	31.45	25.05	.015
15	3.42	31.46	25.06	.029
20	3.43	31.46	25.05	.044
25	3.43	31.47	25.05	.058
30	3.43	31.47	25.05	.073
35	3.43	31.47	25.06	.088
40	3.43	31.47	25.06	.102
45	3.44	31.47	25.06	.117
50	3.49	31.50	25.08	.131
75	3.53	31.50	25.07	.146
100	3.56	31.49	25.07	.218
150	3.86	31.50	25.06	.291
200	3.84	31.57	25.10	.436
210	5.58	32.36	25.94	.565
	5.75	32.42	25.57	



CAST NEGOA-1-OC-080 DATE 13 FEB 75 TIME 2249 GMT
LAT 59 49.6N LONG 149 29.7W WEATHER 6 SEA STATE 3
BAROMETER 89 WIND DIR 030 T SPD 20 KT VISIBILITY 7
CLOUD AMOUNT 2 DRY -6.0 WET -6.9 DEPTH 0234 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.49	31.46	25.05	0.000
5	3.48	31.46	25.05	
10	3.48	31.46	25.06	.029
15	3.49	31.47	25.06	.044
20	3.50	31.47	25.05	.058
25	3.51	31.48	25.06	.073
30	3.51	31.47	25.05	.088
35	3.51	31.48	25.06	.102
40	3.51	31.48	25.06	.117
45	3.52	31.48	25.06	.131
50	3.55	31.48	25.06	.146
75	3.67	31.51	25.07	.218
100	3.80	31.54	25.08	.291
150	3.95	31.60	25.11	.435
200	5.53	32.33	25.52	.569
216	5.54	32.32	25.52	

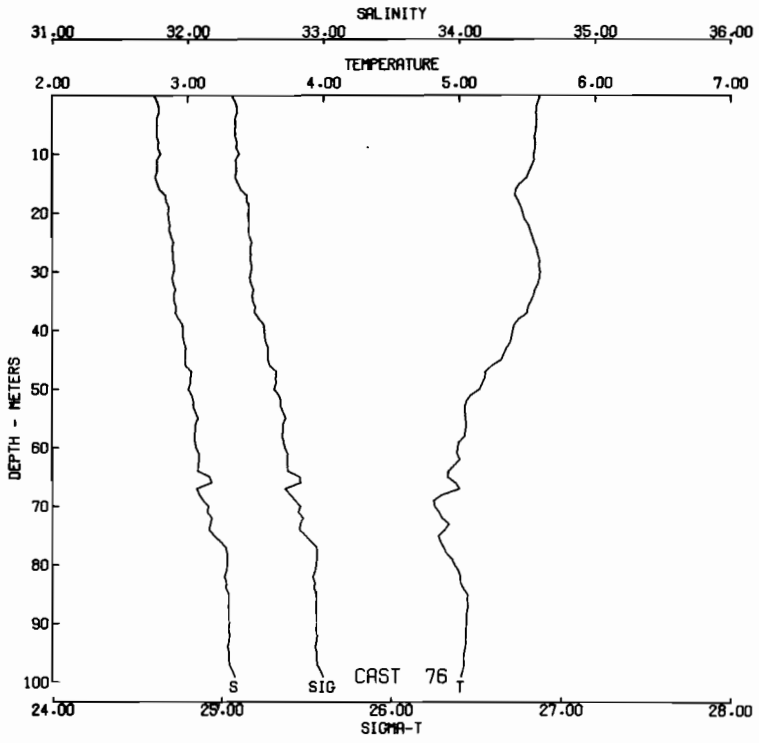


CAST NEGOA-1-OC-081 DATE 13 FEB 75 TIME 2326 GMT
LAT 59 49.1N LONG 149 29.2W WEATHER 0 SEA STATE 3
BAROMETER 89 WIND DIR 030 T SPD 20 KT VISIBILITY 7
CLOUD AMOUNT 2 DRY -6.0 WET -6.9 DEPTH 0259 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	3.57	31.49	25.06	0.000
5	3.55	31.48	25.06	
10	3.54	31.48	25.06	.029
15	3.56	31.49	25.06	.044
20	3.55	31.49	25.06	.058
25	3.56	31.49	25.06	.073
30	3.59	31.50	25.07	.087
35	3.63	31.52	25.08	.102
40	3.65	31.51	25.07	.116
45	3.67	31.52	25.08	.131
50	3.67	31.52	25.08	.145
75	3.73	31.53	25.08	.217
100	3.92	31.58	25.10	.290
150	3.99	31.61	25.12	.433
200	5.49	32.30	25.50	.571

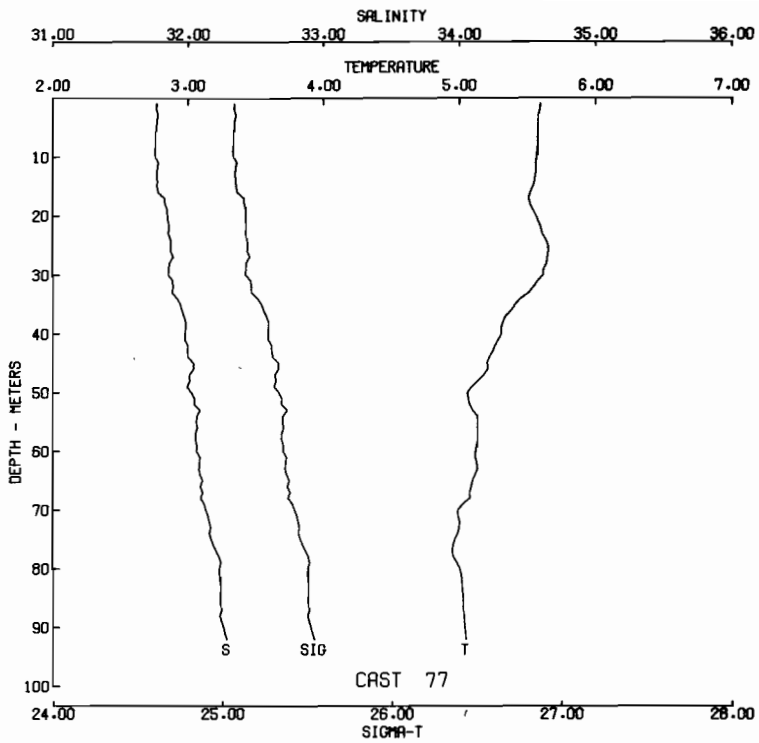
APPENDIX E

COMPILATION OF *Rainier* CTD CASTS 76-139



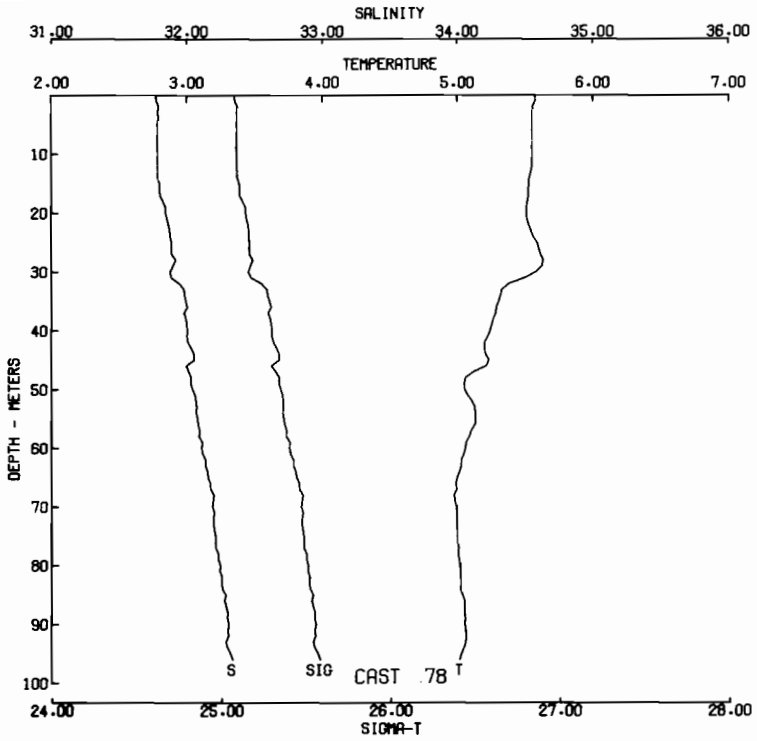
CAST NEGUA-2-RN-076 DATE 10 MAY 75 TIME 2315 GMT
LAT 59 46.5N LONG 142 51.8W WEATHER 4 SEA STATE 3
BAROMETER 11 WIND DIR 090 T SPD 16 KT VISIBILITY 9
CLOUD 7 AMOUNT 6 DRY 06.7 WET 06.7 DEPTH 105. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.60	31.74	25.55	.000
5	5.56	31.77	25.64	.014
10	5.55	31.80	25.70	.029
15	5.44	31.77	25.69	.043
20	5.46	31.85	25.76	.058
25	5.55	31.89	25.77	.072
30	5.53	31.89	25.77	.086
35	5.52	31.90	25.78	.100
40	5.54	31.90	25.78	.113
45	5.34	31.98	25.87	.127
50	5.45	32.03	25.91	.140
75	4.85	32.19	26.09	.205
99	5.01	32.34	25.99	



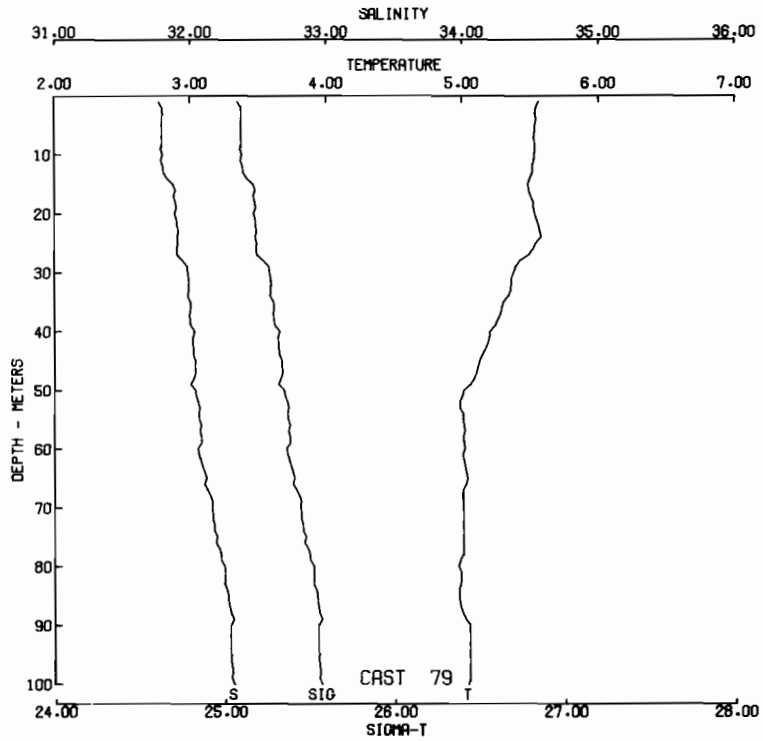
CAST NEGUA-2-RN- 77 DATE 11 MAY 75 TIME 0000 GMT
LAT 59 46.5N LONG 142 51.8W WEATHER 1 SEA STATE 3
BAROMETER 11 WIND DIR 090 T SPD 20 KT VISIBILITY 9
CLOUD 7 AMOUNT 8 DRY 07.2 WET 06.7 DEPTH 99.1 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.60	31.77	25.67	.000
5	5.60	31.76	25.67	
10	5.58	31.76	25.67	.014
15	5.57	31.79	25.77	.029
20	5.54	31.77	25.78	.043
25	5.56	31.84	25.14	.058
30	5.65	31.87	25.15	.072
35	5.62	31.85	25.14	.086
40	5.41	31.94	25.23	.100
45	5.31	31.98	25.27	.114
50	5.25	32.04	25.33	.127
75	4.95	32.12	25.37	.191
99	4.96	32.17	25.46	.266
92	5.04	32.28	25.54	



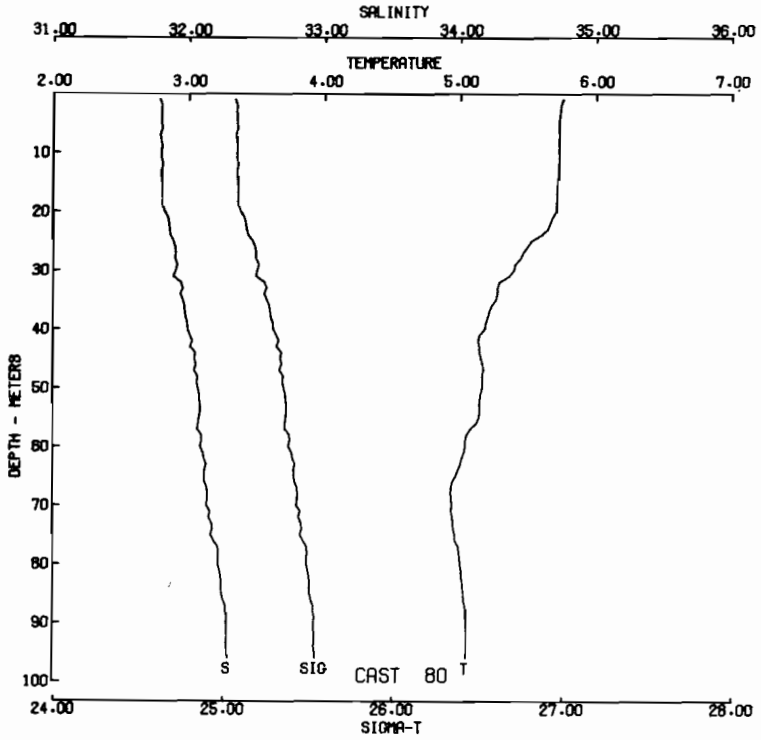
CAST NEGOA-2-RN-078 DATE 11 MAY 75 TIME 0100 GMT
LAT 59 47.5N LONG 142 01.2W WEATHER 1 SEA STATE 3
BAROMETER 12 WIND DIR 090 T SPD 20 KT VISIBILITY 9
CLOUD 7 AMOUNT 8 DRY 07.2 WET 06.7 DEPTH 98.0 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.57	31.77	25.08	.000
5	5.55	31.78	25.09	.014
10	5.55	31.79	25.09	.029
15	5.53	31.80	25.11	.043
20	5.51	31.84	25.14	.057
25	5.53	31.88	25.17	.072
30	5.58	31.88	25.16	.086
35	5.30	31.89	25.20	.099
40	5.24	32.01	25.30	.113
45	5.23	32.05	25.34	.126
50	5.25	32.04	25.35	.139
75	5.99	32.21	25.49	.204
96	6.01	32.33	25.58	



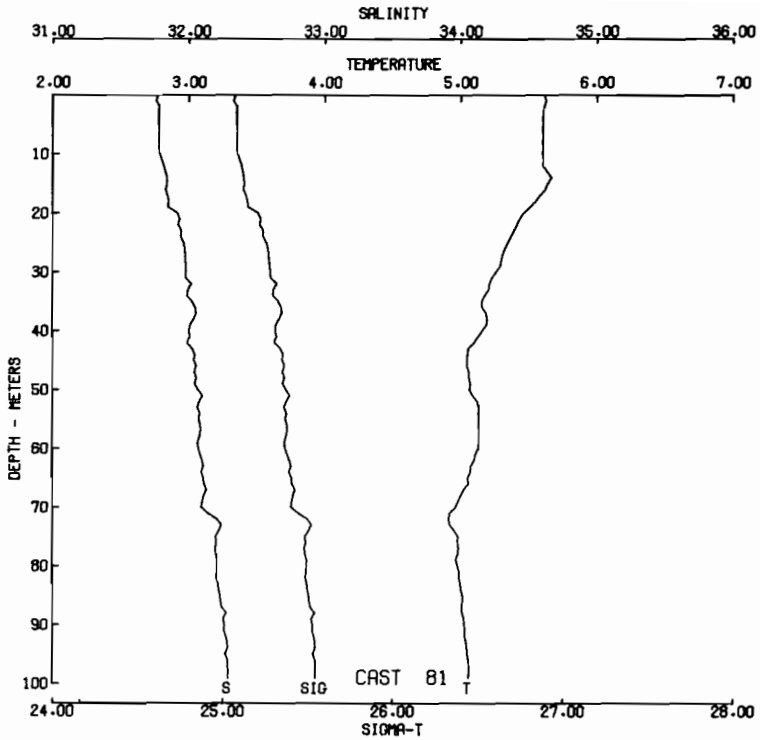
CAST NEGOA-2-RN-079 DATE 11 MAY 75 TIME 0200 GMT
LAT 59 46.6N LONG 142 02.9W WEATHER 1 SEA STATE 3
BAROMETER 12 WIND DIR 090 T SPD 20 KT VISIBILITY 9
CLOUD 5 AMOUNT 6 DRY 07.2 WET 06.7 DEPTH 104. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.56	31.78	25.09	.000
5	5.57	31.77	25.08	
10	5.54	31.79	25.10	.014
15	5.53	31.79	25.10	.029
20	5.48	31.87	25.17	.043
25	5.53	31.88	25.17	.057
30	5.54	31.91	25.19	.071
35	5.38	31.98	25.26	.085
40	5.30	32.04	25.29	.098
45	5.24	32.03	25.32	.112
50	5.13	32.03	25.34	.125
75	5.01	32.13	25.35	.188
96	5.06	32.19	25.47	.251
100	5.04	32.31	25.57	.267



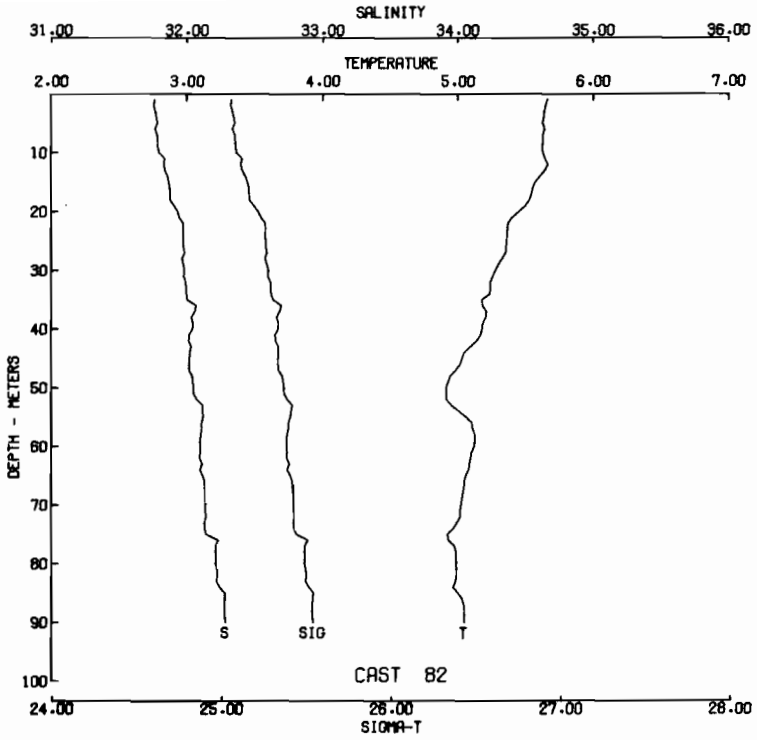
CAST NEGOA-2-PN-080 DATE 11 MAY 75 TIME 0360 GMT
LAT 59 47.6N LONG 141 57.6M WEATHER 1 SEA STATE 3
BAROMETER 12 WIND DIR 090 T SPD 16 KT VISIBILITY 9
CLOUD 5 AMOUNT 6 DRY 08.3 WET 07.2 DEPTH 97.7 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.75	31.79	25.47	.000
1	5.75	31.78	25.47	
5	5.72	31.80	25.48	.014
10	5.72	31.79	25.48	.029
15	5.71	31.81	25.48	.043
20	5.70	31.82	25.49	.058
25	5.56	31.88	25.54	.072
30	5.39	31.98	25.62	.086
35	5.26	31.95	25.62	.100
40	5.18	31.99	25.69	.113
45	5.15	32.04	25.74	.127
50	5.16	32.06	25.76	.140
75	4.98	32.18	25.95	.204
98	5.04	32.28	25.94	



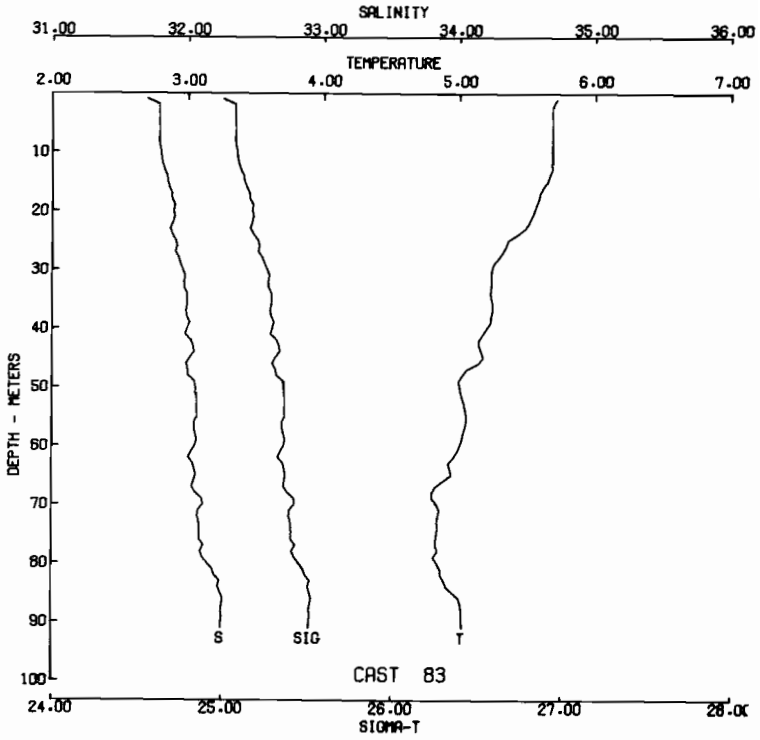
CAST NEGOA-2-PN-081 DATE 11 MAY 75 TIME 0359 GMT
LAT 59 46.6N LONG 141 59.2M WEATHER 1 SEA STATE 3
BAROMETER 12 WIND DIR 090 T SPD 17 KT VISIBILITY 9
CLOUD 5 AMOUNT 6 DRY 08.7 WET 08.1 DEPTH 101. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.61	31.77	25.47	.000
5	5.60	31.77	25.48	.014
10	5.60	31.78	25.48	.029
15	5.64	31.84	25.52	.043
20	5.46	31.91	25.60	.057
25	5.34	31.96	25.65	.071
30	5.26	31.99	25.68	.085
35	5.15	32.02	25.72	.098
40	5.16	32.04	25.74	.112
45	5.05	32.04	25.75	.125
56	5.06	32.07	25.77	.138
75	4.98	32.20	25.88	.203
99	5.06	32.29	25.94	



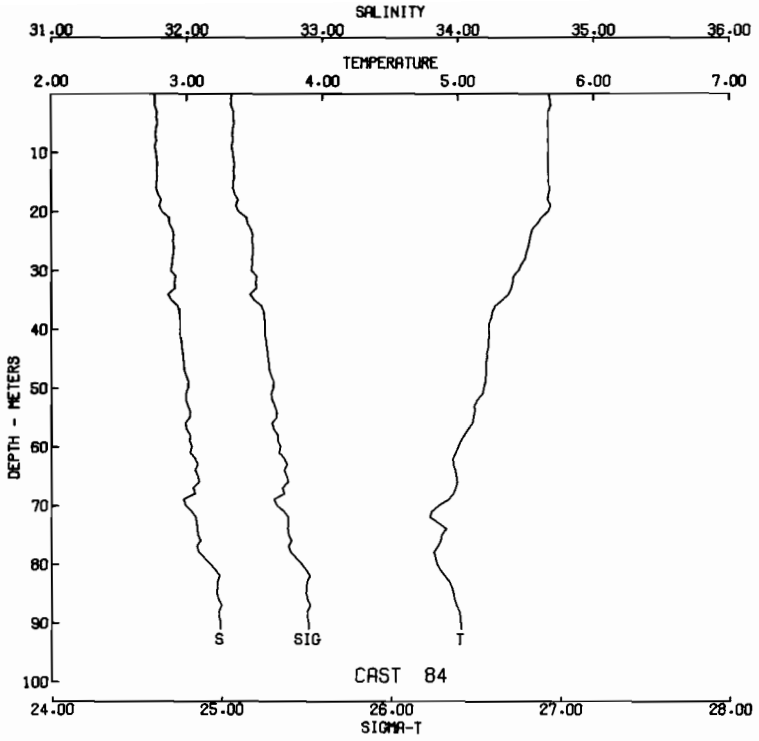
CAST NEGOA-2-RN-082 DATE 11 MAY 75 TIME 0500 GMT
LAT 57 46.6N LONG 141 59.0W WEATHER 2 SEA STATE 3
BAROMETER 12 WIND DIR 130 T SPD 10 KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 68.3 WET 57.2 DEPTH 96.1 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.66	31.75	25.45	.000
1	5.66	31.76	25.46	
5	5.62	31.78	25.48	.015
10	5.62	31.79	25.49	.029
15	5.57	31.80	25.55	.043
20	5.44	31.93	25.62	.057
25	5.39	31.97	25.66	.071
30	5.27	31.98	25.67	.085
35	5.17	32.00	25.74	.098
40	5.17	32.03	25.77	.111
45	5.13	32.01	25.75	.125
50	4.91	32.04	25.87	.138
75	4.91	32.13	25.94	.203
90	5.04	32.23	25.94	



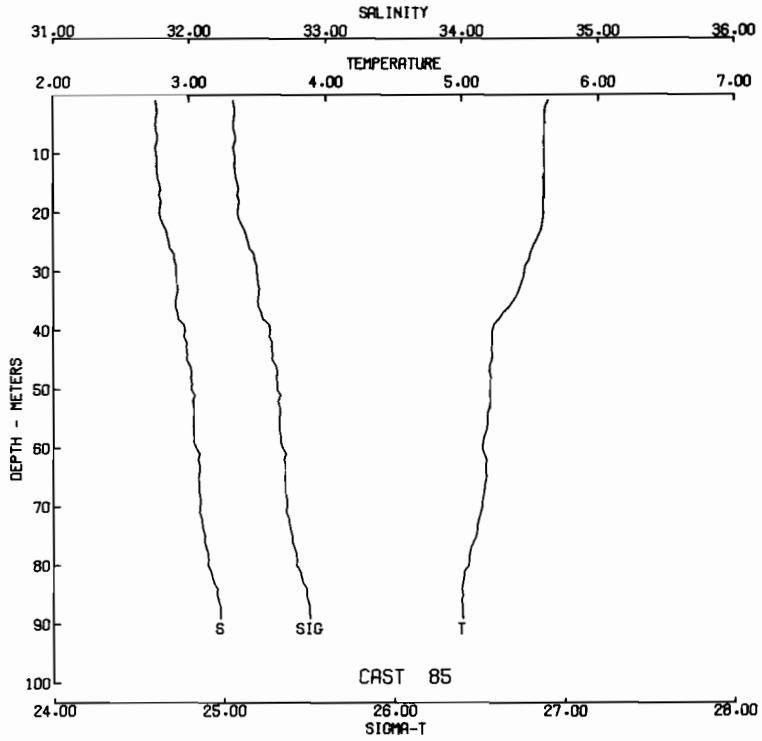
CAST NEGOA-2-RN-083 DATE 11 MAY 75 TIME 0900 GMI
LAT 57 46.6N LONG 141 59.0W WEATHER 2 SEA STATE 3
BAROMETER 12 WIND DIR 130 T SPD 10 KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 68.3 WET 57.2 DEPTH 95.4 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.70	31.73	25.43	.000
1	5.72	31.69	25.00	
5	5.69	31.78	25.47	.015
10	5.68	31.84	25.09	.029
15	5.65	31.85	25.13	.043
20	5.55	31.89	25.18	.057
25	5.35	31.93	25.21	.071
30	5.23	31.96	25.26	.085
35	5.23	31.93	25.24	.099
40	5.26	31.99	25.29	.112
45	5.17	32.01	25.31	.126
50	5.00	32.05	25.36	.139
75	4.83	32.18	25.41	.204
91	5.02	32.24	25.51	



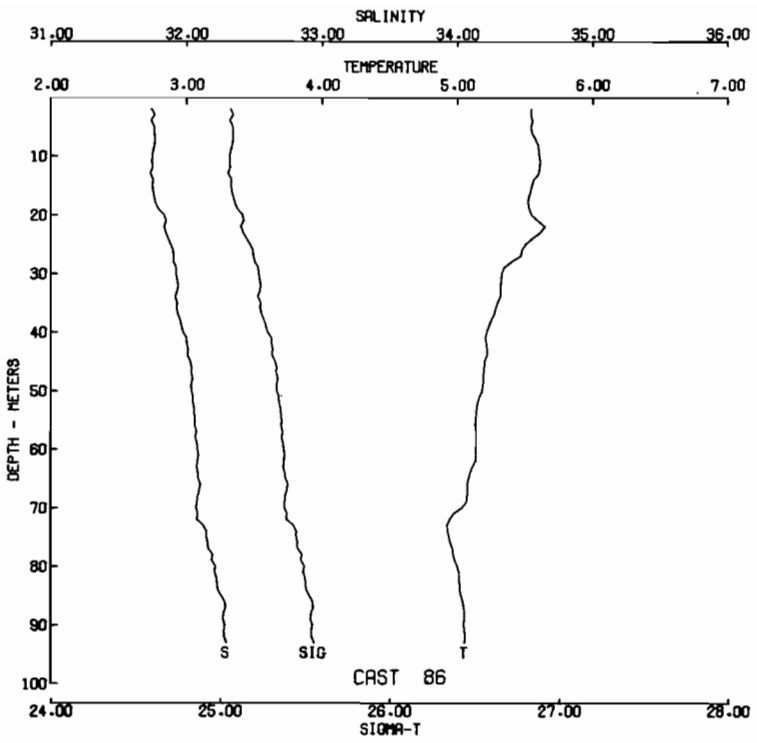
CAST NEGOA-2-RN-084 DATE 11 MAY 75 TIME 0700 GMT
LAT 59 46.0N LONG 141 39.0W WEATHER 2 SEA STATE 3
BAROMETER 1C WIND DIR 080 T SPD 1C KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 07.8 WET 06.7 DEPTH 97.3 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.67	31.76	25.06	.000
5	5.66	31.76	25.08	.015
10	5.65	31.77	25.07	.029
15	5.66	31.78	25.07	.044
20	5.66	31.82	25.10	.058
25	5.52	31.90	25.18	.072
30	5.44	31.88	25.18	.086
35	5.32	31.88	25.19	.100
40	5.22	31.95	25.26	.114
45	5.21	31.97	25.28	.127
50	5.18	32.01	25.31	.141
75	5.07	32.17	25.44	.207
91	5.02	32.24	25.51	



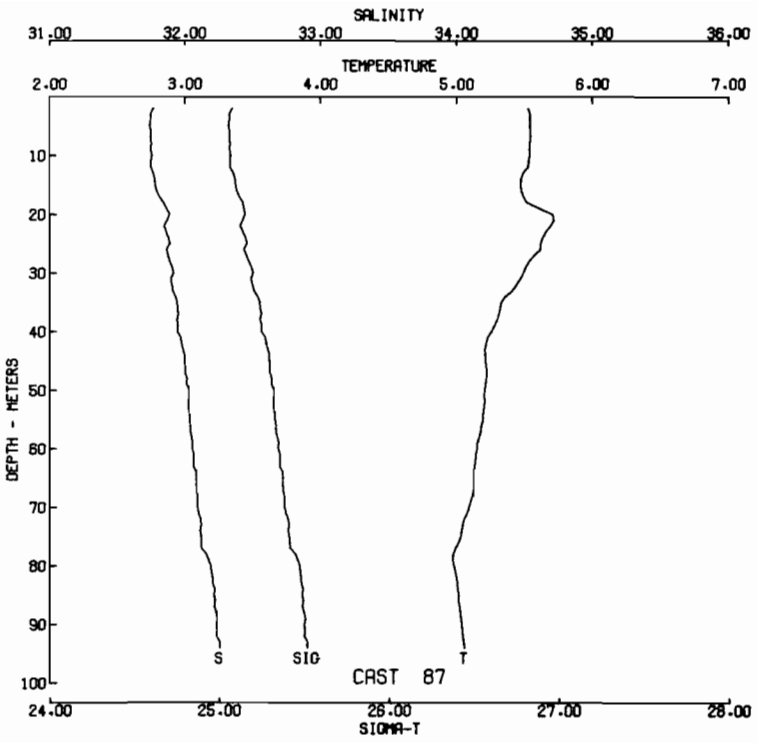
CAST NEGOA-2-RN-085 DATE 11 MAY 75 TIME 0800 GMT
LAT 59 47.0N LONG 141 56.3W WEATHER 2 SEA STATE 3
BAROMETER 1C WIND DIR 080 T SPD 1C KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 08.3 WET 07.2 DEPTH 93.6 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.63	31.75	25.06	.000
5	5.64	31.75	25.06	
10	5.61	31.75	25.06	.015
15	5.66	31.76	25.06	.029
20	5.66	31.78	25.08	.044
25	5.00	31.78	25.08	.058
30	5.54	31.85	25.14	.072
35	5.46	31.91	25.19	.086
40	5.38	31.95	25.25	.100
45	5.22	31.97	25.27	.114
50	5.21	31.98	25.28	.128
75	5.20	32.01	25.31	.141
91	5.10	32.11	25.40	.207
93	5.06	32.22	25.50	



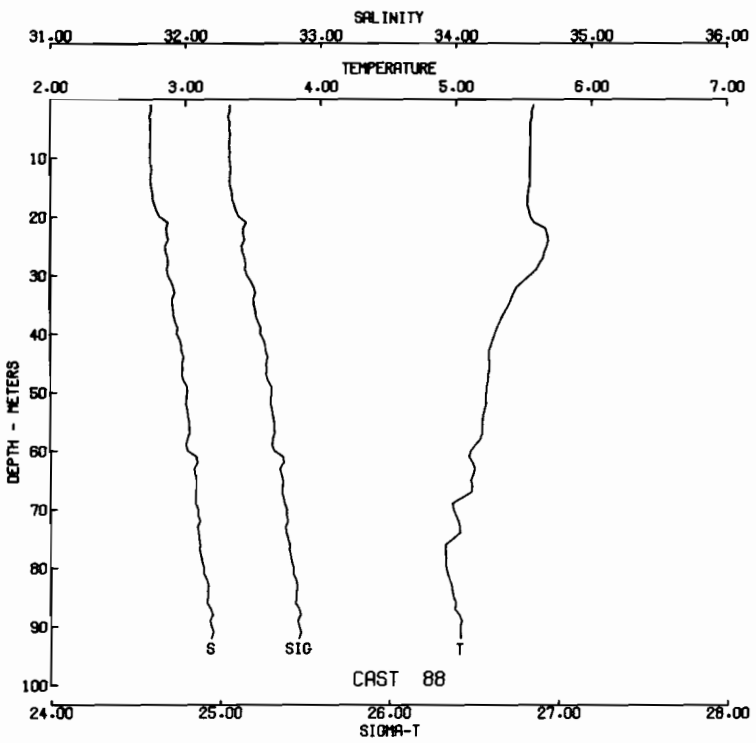
CAST NEGOA-2-RN-086 DATE 11 MAY 75 TIME 0960 GMT
LAT 59 45.5N LONG 141 58.6W WEATHER 2 SEA STATE 3
BAROMETER 12 WIND DIR 080 T SPD 12 KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 68.3 WET 67.2 DEPTH 95.4 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.53	31.73	25.05	.000
2	5.55	31.74	25.05	
5	5.54	31.76	25.07	.015
10	5.60	31.74	25.05	.029
15	5.55	31.75	25.06	.044
20	5.55	31.83	25.14	.058
25	5.54	31.88	25.17	.072
30	5.33	31.92	25.22	.086
35	5.29	31.93	25.23	.100
40	5.21	31.97	25.28	.114
45	5.20	32.02	25.32	.127
50	5.18	32.03	25.34	.140
75	4.93	32.15	25.45	.206
93	5.05	32.29	25.55	



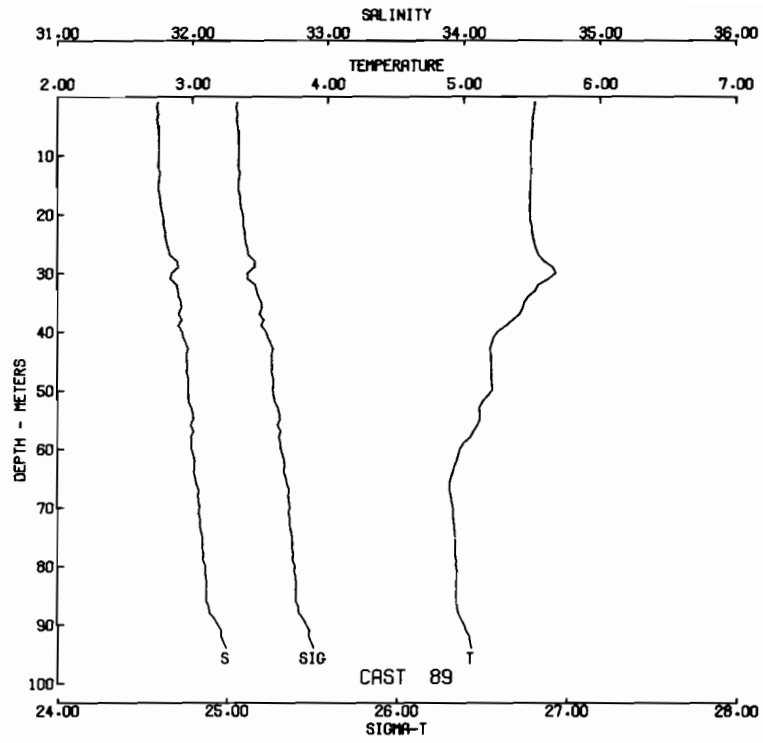
CAST NEGOA-2-RN-087 DATE 11 MAY 75 TIME 1000 GMT
LAT 59 45.5N LONG 141 58.6W WEATHER 2 SEA STATE 3
BAROMETER 13 WIND DIR 080 T SPD 10 KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 67.2 WET 66.7 DEPTH 97.3 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.54	31.76	25.07	.000
2	5.53	31.76	25.08	
5	5.54	31.74	25.06	.015
10	5.54	31.75	25.07	.029
15	5.47	31.78	25.14	.044
20	5.70	31.86	25.15	.058
25	5.62	31.89	25.16	.072
30	5.49	31.91	25.20	.086
35	5.33	31.94	25.24	.100
40	5.25	31.94	25.25	.114
45	5.21	31.99	25.30	.127
50	5.24	32.03	25.32	.140
75	5.03	32.17	25.41	.206
94	5.05	32.25	25.52	



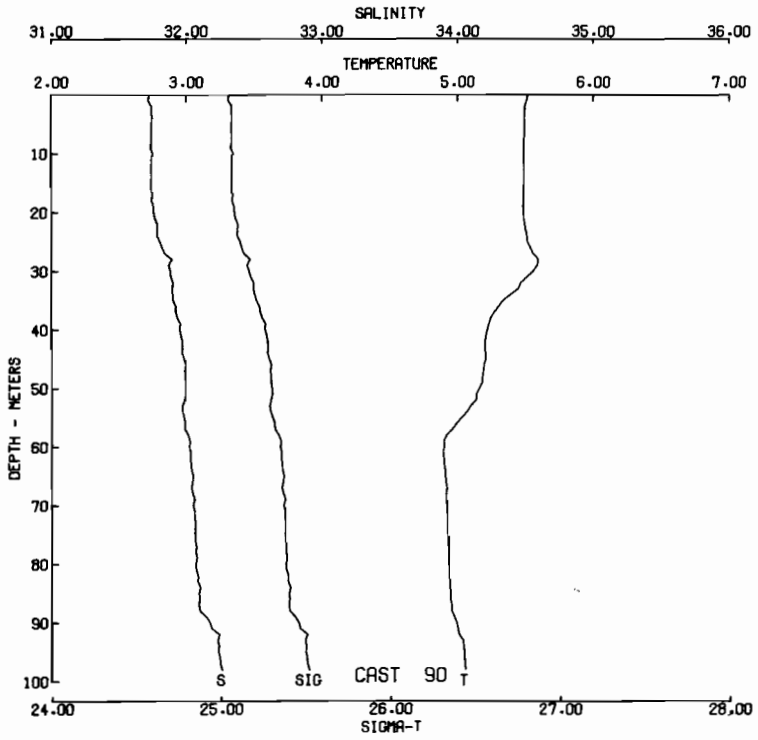
CAST NEGOA-2-RN-088 DATE 11 MAY 75 TIME 1130 GMT
LAT 59 45.5N LONG 141 58.0W WEATHER 2 SEA STATE 3
BAROMETER 13 WIND DIR 080 T SPD 12 KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 07.2 WET 06.7 DEPTH 97.3 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.57	31.74	25.05	.000
1	5.57	31.74	25.06	
5	5.54	31.74	25.08	.015
10	5.54	31.74	25.05	.029
15	5.53	31.74	25.06	.044
20	5.54	31.81	25.11	.058
25	5.67	31.85	25.13	.072
30	5.54	31.87	25.16	.087
35	5.38	31.90	25.20	.100
40	5.28	31.93	25.24	.114
45	5.24	31.97	25.27	.128
50	5.22	32.01	25.32	.141
75	4.97	32.13	25.44	.207
92	5.03	32.19	25.47	



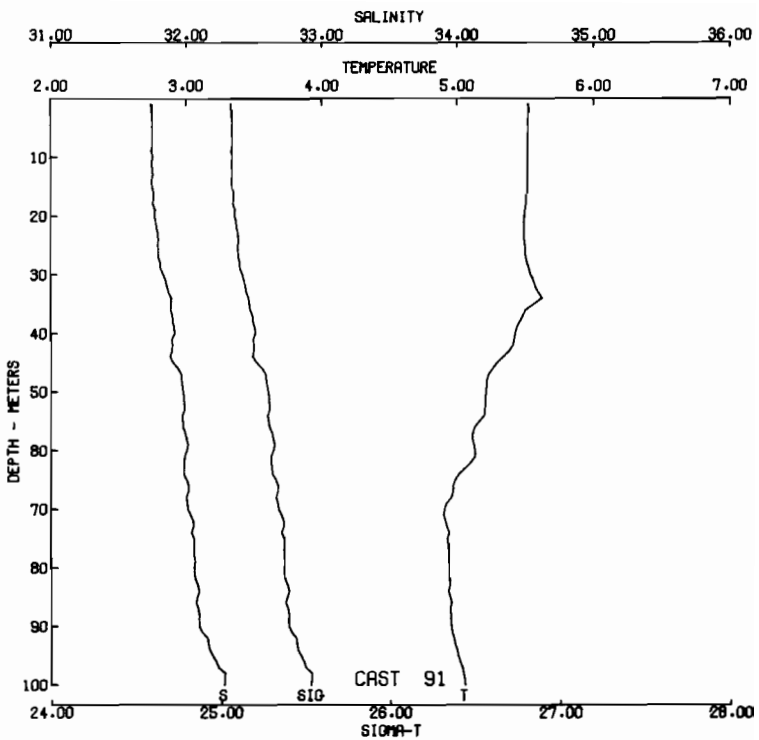
CAST NEGOA-2-RN-089 DATE 11 MAY 75 TIME 1200 GMT
LAT 59 46.0N LONG 142 00.5W WEATHER 2 SEA STATE 3
BAROMETER 13 WIND DIR 080 T SPD 12 KT VISIBILITY 8
CLOUD 5 AMOUNT 7 DRY 06.7 WET 06.2 DEPTH 97.3 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.32	31.74	25.06	.000
1	5.52	31.74	25.08	
5	5.50	31.74	25.09	.015
10	5.49	31.75	25.07	.029
15	5.48	31.75	25.07	.044
20	5.48	31.78	25.09	.058
25	5.51	31.81	25.11	.072
30	5.67	31.84	25.12	.087
35	5.44	31.91	25.20	.101
40	5.24	31.92	25.25	.114
45	5.19	31.95	25.27	.128
50	5.21	31.96	25.29	.142
75	4.33	32.17	25.49	.208
94	5.05	32.24	25.51	



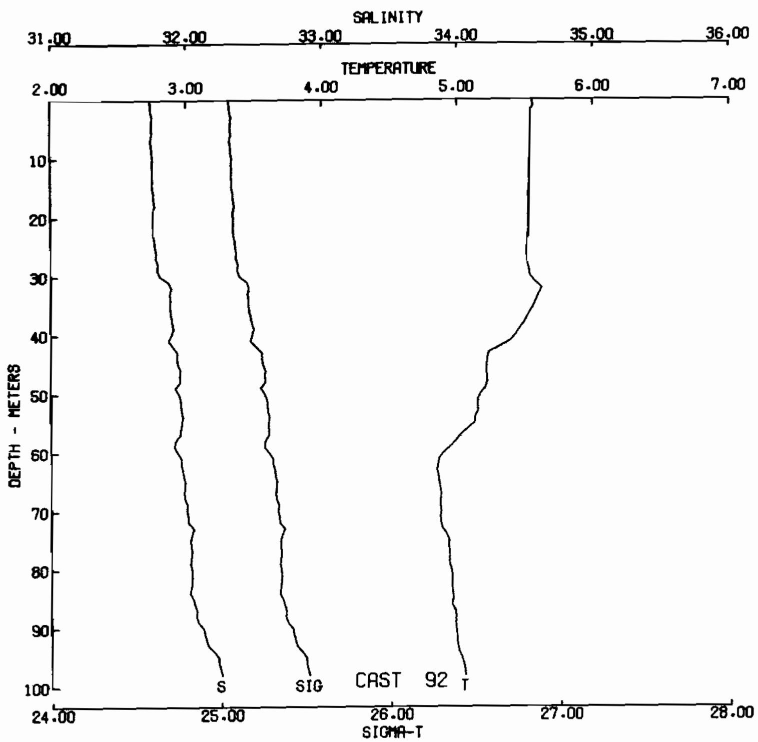
CAST WEGOA-2-RN-090 DATE 11 MAY 75 TIME 1307 GMT
LAT 59 49.1N LONG 141 04.1W WEATHER 5 SEA STATE 3
BAROMETER 29.3 WIND DIR 040 T SPD 16 KT VISIBILITY 8
CLOUD 5 AMOUNT 8 DRY 56.7 WET 56.1 DEPTH 99.9 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.54	31.72	25.15	.000
5	5.49	31.74	25.16	.025
10	5.48	31.75	25.17	.029
15	5.49	31.74	25.16	.054
20	5.48	31.76	25.18	.058
25	5.51	31.80	25.19	.075
30	5.55	31.86	25.17	.087
35	5.64	31.93	25.22	.101
40	5.82	31.99	25.20	.114
45	5.92	32.03	25.20	.126
50	5.95	32.09	25.22	.141
75	6.02	32.16	25.28	.207
98	6.09	32.25	25.32	



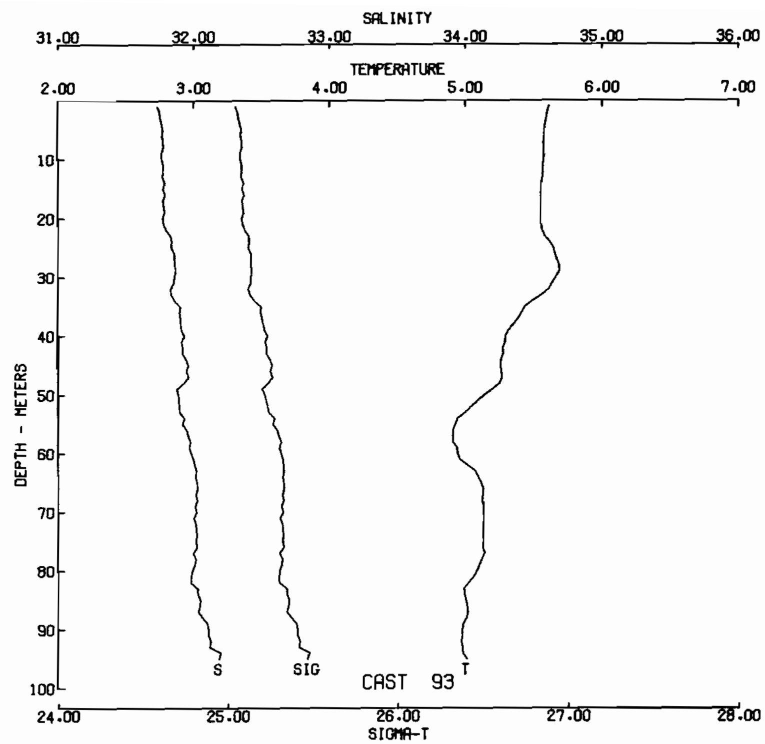
CAST WEGOA-2-RN-091 DATE 11 MAY 75 TIME 1466 GMT
LAT 59 46.6N LONG 141 59.2W WEATHER 5 SEA STATE 3
BAROMETER 29.3 WIND DIR 080 T SPD 14 KT VISIBILITY 7
CLOUD 5 AMOUNT 9 DRY 57.2 WET 56.7 DEPTH 162. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.52	31.74	25.16	.000
5	5.52	31.74	25.16	
10	5.52	31.75	25.17	.015
15	5.51	31.75	25.17	.029
20	5.51	31.79	25.17	.044
25	5.49	31.76	25.18	.058
30	5.49	31.79	25.17	.072
35	5.53	31.83	25.13	.087
40	5.56	31.88	25.17	.101
45	5.62	31.91	25.22	.115
50	5.64	31.94	25.24	.129
75	5.81	31.97	25.28	.192
98	5.92	32.05	25.37	.259
100	5.95	32.07	25.33	.276



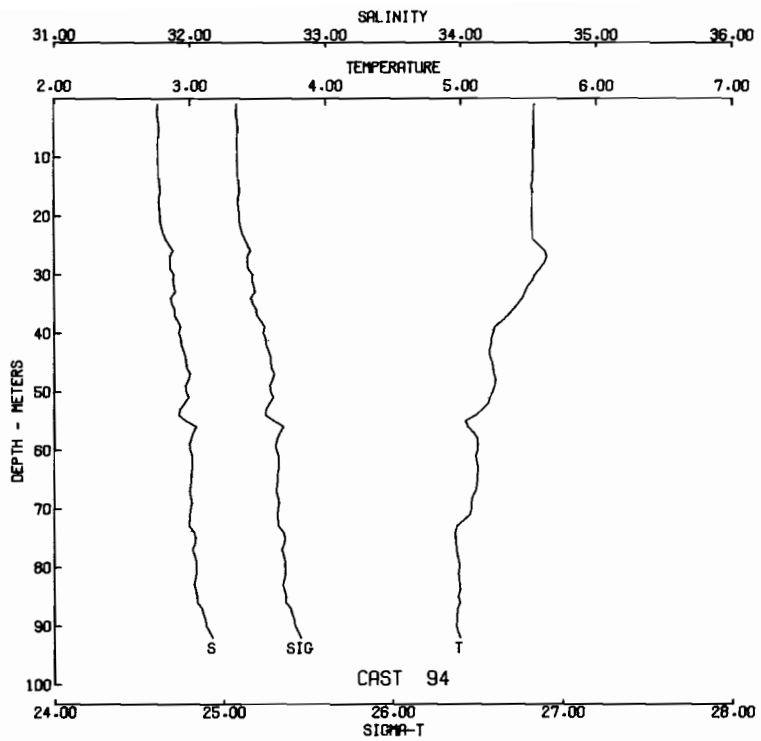
CAST NEGOA-2-RN-092 DATE 11 MAY 75 TIME 1503 GMT
LAT 59 46.6N LONG 141 59.2W WEATHER 3 SEA STATE 3
BAROMETER 13 WIND DIR 030 T SPD 12 KT VISIBILITY 7
CLOUD 5 AMOUNT 9 DRY 07.2 WET 06.7 DEPTH 99.1 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.55	31.73	25.05	.000
5	5.54	31.74	25.06	.015
10	5.53	31.75	25.07	.029
15	5.53	31.75	25.07	.044
20	5.52	31.76	25.07	.058
25	5.51	31.77	25.06	.073
30	5.53	31.80	25.11	.087
35	5.50	31.88	25.16	.101
40	5.43	31.89	25.19	.115
45	5.21	31.93	25.25	.129
50	5.16	31.94	25.26	.143
75	4.93	32.02	25.35	.210
98	5.05	32.25	25.52	



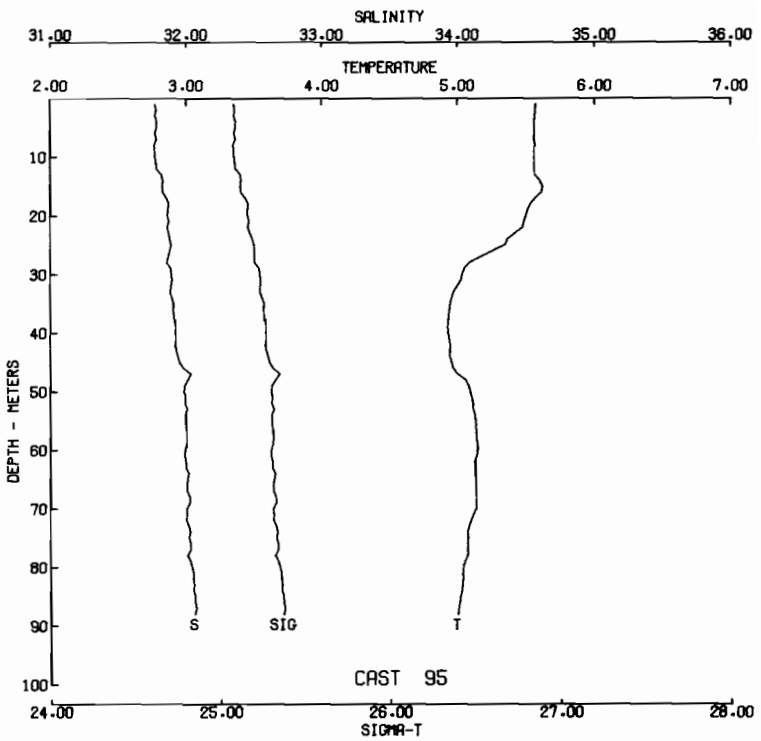
CAST NEGOA-2-RN-093 DATE 11 MAY 75 TIME 1552 GMT
LAT 59 46.6N LONG 141 59.5W WEATHER 3 SEA STATE 3
BAROMETER 14 WIND DIR 080 T SPD 13 KT VISIBILITY 7
CLOUD 5 AMOUNT 9 DRY 07.2 WET 06.7 DEPTH 96.6 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.61	31.73	25.04	.000
1	5.61	31.73	25.04	
5	5.58	31.77	25.06	.015
10	5.57	31.76	25.07	.029
15	5.55	31.77	25.08	.043
20	5.55	31.77	25.08	.058
25	5.64	31.83	25.12	.072
30	5.66	31.85	25.13	.086
35	5.43	31.90	25.19	.101
40	5.29	31.93	25.23	.115
45	5.25	31.96	25.26	.128
50	5.14	31.88	25.22	.142
75	5.13	32.01	25.32	.209
95	5.00	32.19	25.47	



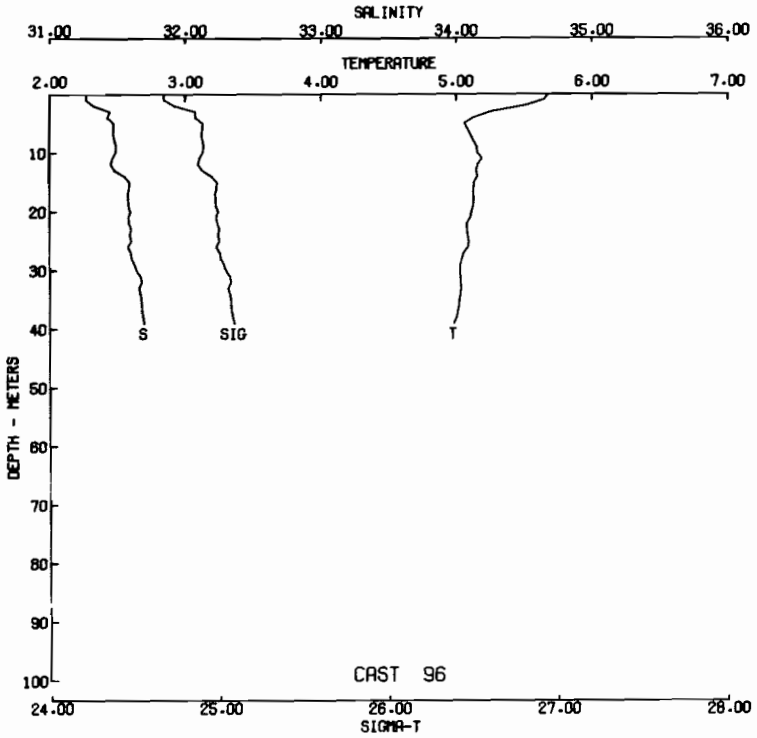
CAST NEGOA-E-RN-094 DATE 11 MAY 75 TIME 1702 GMT
LAT 59 46.9N LONG 142 32.1W WEATHER 3 SEA STATE 3
BAROMETER 14 WIND DIR 08.1 SPD 10 KT VISIBILITY 7
CLOUD 5 AMOUNT 9 DRY 07.2 WET 06.7 DEPTH 95.0 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.54	31.76	25.17	.000
2	5.54	31.76	25.17	
5	5.54	31.77	25.18	.014
10	5.53	31.77	25.18	.029
15	5.52	31.78	25.19	.043
20	5.52	31.78	25.19	.058
25	5.37	31.85	25.26	.072
30	5.55	31.83	25.24	.086
40	5.42	31.87	25.29	.100
50	5.24	31.92	25.34	.114
60	5.14	31.97	25.38	.128
70	5.06	31.97	25.39	.141
75	4.96	32.04	25.46	.208
92	4.99	32.10	25.49	



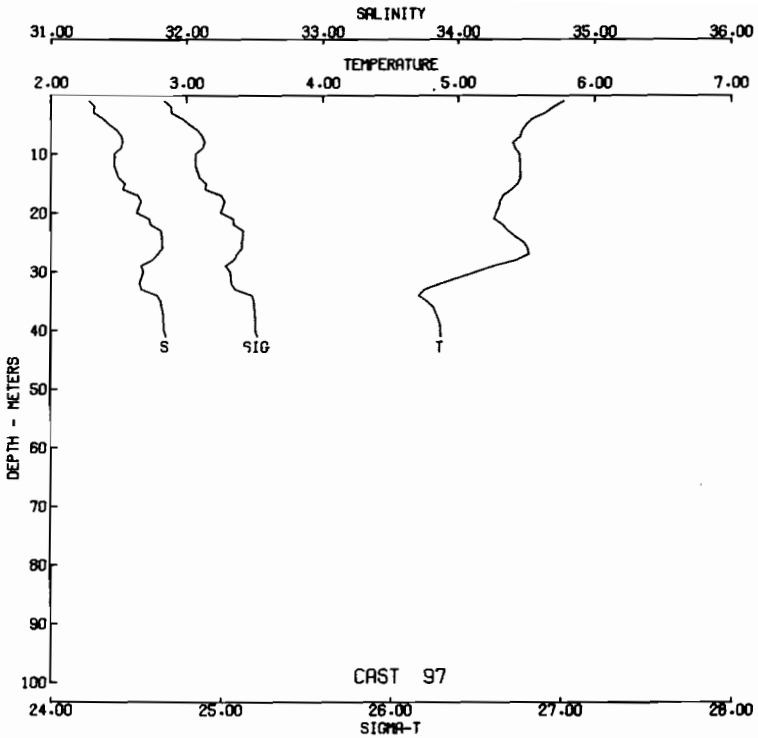
CAST NEGOA-E-RN-095 DATE 11 MAY 75 TIME 1804 GMT
LAT 59 47.5N LONG 142 31.5W WEATHER 3 SEA STATE 3
BAROMETER 14 WIND DIR 08.1 SPD 10 KT VISIBILITY 7
CLOUD 5 AMOUNT 9 DRY 07.2 WET 06.7 DEPTH 89.6 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.57	31.77	25.18	.000
2	5.57	31.77	25.18	
5	5.56	31.78	25.19	.014
10	5.56	31.77	25.18	.029
15	5.52	31.83	25.24	.043
20	5.50	31.85	25.26	.057
25	5.34	31.89	25.29	.071
30	5.33	31.89	25.29	.085
40	4.94	31.93	25.35	.099
50	4.94	31.92	25.34	.113
60	4.99	31.93	25.34	.126
70	5.09	31.98	25.37	.140
75	5.17	32.02	25.41	.206
88	5.10	32.06	25.47	



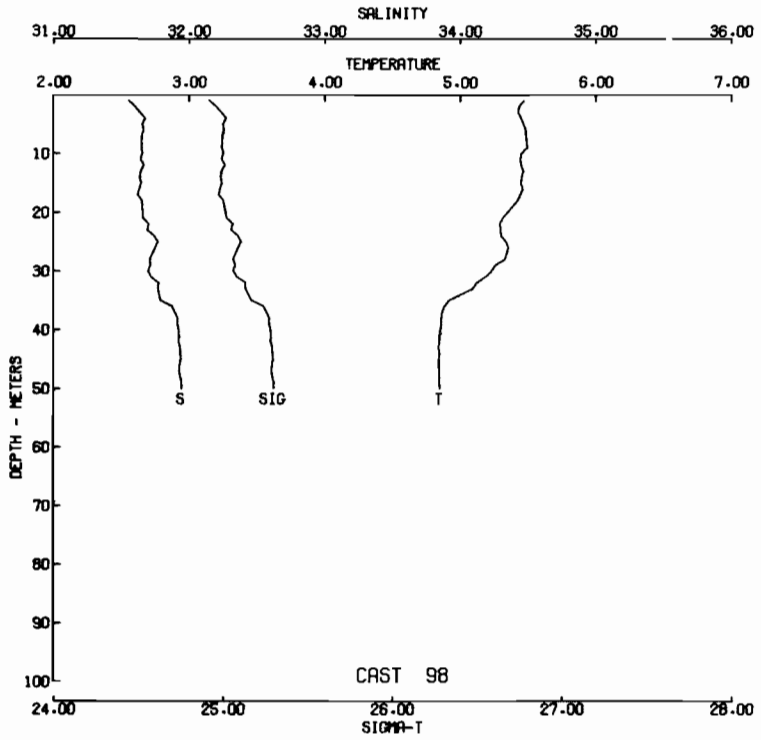
CAST NeGOA-2-PN-096 DATE 11 MAY 75 TIME 2359 GMT
LAT 59 [illegible]N LONG 141 33.3W WEATHER 1 SEA STATE 1
BAROMETER 15 WIND DIR 075 T SPD 10 KT VISIBILITY 9
CLOUD 7 AMOUNT 8 DRY 8.3 WET 7.8 DEPTH 46.0 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
[illegible]	5.88	31.27	24.87	[illegible]
[illegible]	5.86	31.47	24.98	.046
[illegible]	5.15	31.47	24.96	.031
[illegible]	5.13	31.53	24.98	.046
[illegible]	5.11	31.59	24.99	.061
[illegible]	5.09	31.63	25.00	.076
[illegible]	5.02	31.66	25.04	.091
[illegible]	5.02	31.67	25.05	.106
[illegible]	4.98	31.69	25.08	



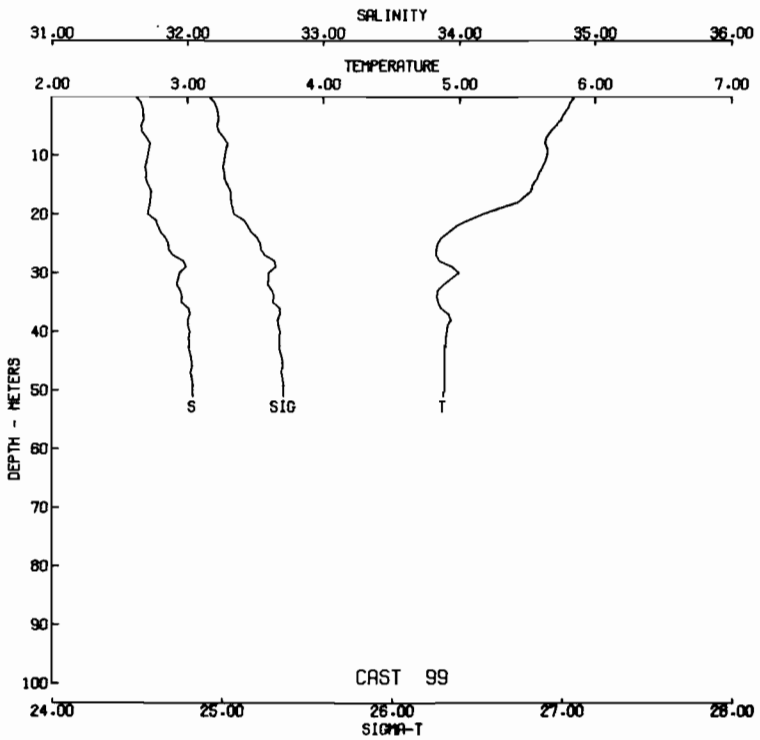
CAST NeGOA-2-PN-097 DATE 12 MAY 75 TIME 1341 GMT
LAT 59 [illegible]5.0N LONG 14[illegible] 32.[illegible]W WEATHER 1 SEA STATE 1
BAROMETER 1[illegible] WIND DIR [illegible] T SPD [illegible] KT VISIBILITY 9
CLOUD 7 AMOUNT 8 DRY [illegible].[illegible] WET 26.7 DEPTH 46.3 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
[illegible]	[illegible].91	31.22	[illegible].02	.000
[illegible]	[illegible].77	31.28	24.97	
[illegible]	[illegible].53	31.43	24.91	.016
12	[illegible].45	31.47	24.95	.032
16	[illegible].44	31.54	24.91	.047
20	5.28	31.63	25.00	.062
25	5.18	31.62	25.12	.076
30	5.13	31.68	25.16	.091
35	4.77	31.80	25.19	.105
40	4.87	31.83	25.20	.119
41	4.87	31.84	25.21	



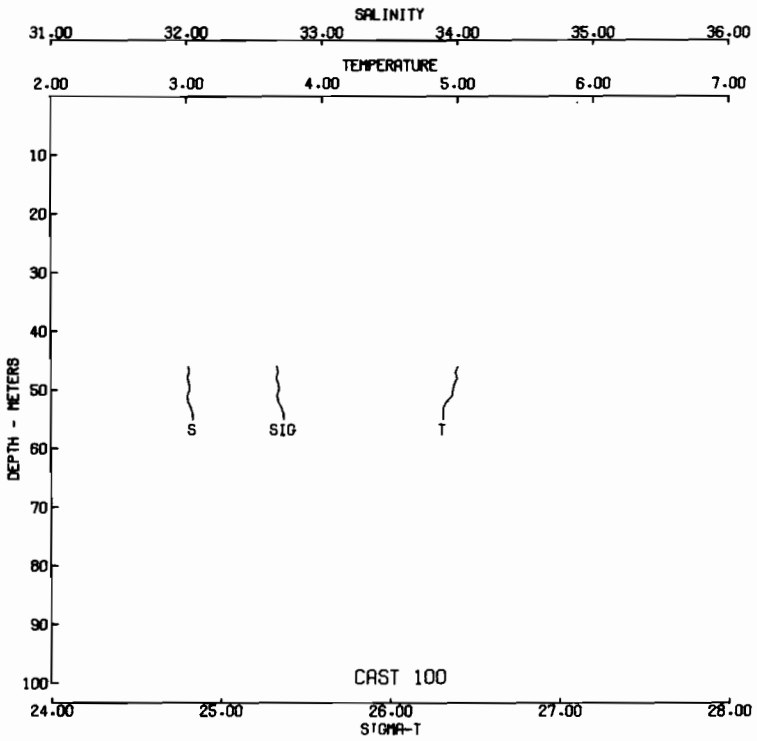
CAST NEGOA-2-RN-098 DATE 16 MAY 75 TIME 0413 GMT
LAT 59 44.1N LONG 141 33.2W WEATHER 1 SEA STATE 1
BAROMETER 14 WIND DIR T SPD KT VISIBILITY 9
CLOUD 7 AMOUNT 6 DRY 07.2 WET 06.7 DEPTH 51.5 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.43	31.27	24.93	.000
5	5.47	31.55	24.92	
10	5.47	31.63	25.04	.015
15	5.45	31.65	25.07	.030
20	5.45	31.64	24.99	.045
25	5.35	31.66	25.11	.060
30	5.34	31.77	25.20	.074
35	5.23	31.70	25.16	.089
40	4.91	31.73	25.26	.103
45	4.85	31.92	25.38	.117
50	4.84	31.94	25.39	.131
51	4.85	31.94	25.39	.146



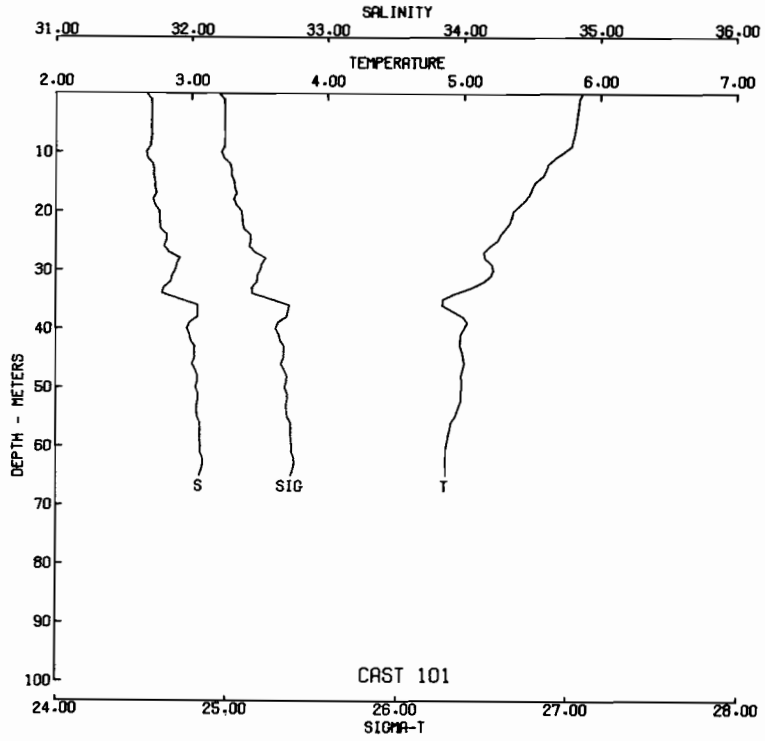
CAST NEGOA-2-RN-099 DATE 16 MAY 75 TIME 0451 GMT
LAT 59 44.9N LONG 141 32.3W WEATHER 1 SEA STATE 1
BAROMETER 15 WIND DIR T SPD KT VISIBILITY 9
CLOUD 7 AMOUNT 6 DRY 07.2 WET 06.7 DEPTH 57.0 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.65	31.61	24.32	.000
5	5.71	31.66	24.97	.015
10	5.64	31.71	25.02	.030
15	5.54	31.71	25.11	.045
20	5.17	31.70	25.07	.059
25	4.84	31.90	25.23	.073
30	4.74	31.94	25.28	.087
35	4.84	31.95	25.27	.101
40	4.96	32.01	25.34	.116
45	4.89	32.03	25.36	.127
50	4.88	32.03	25.36	.140
51	4.88	32.04	25.37	



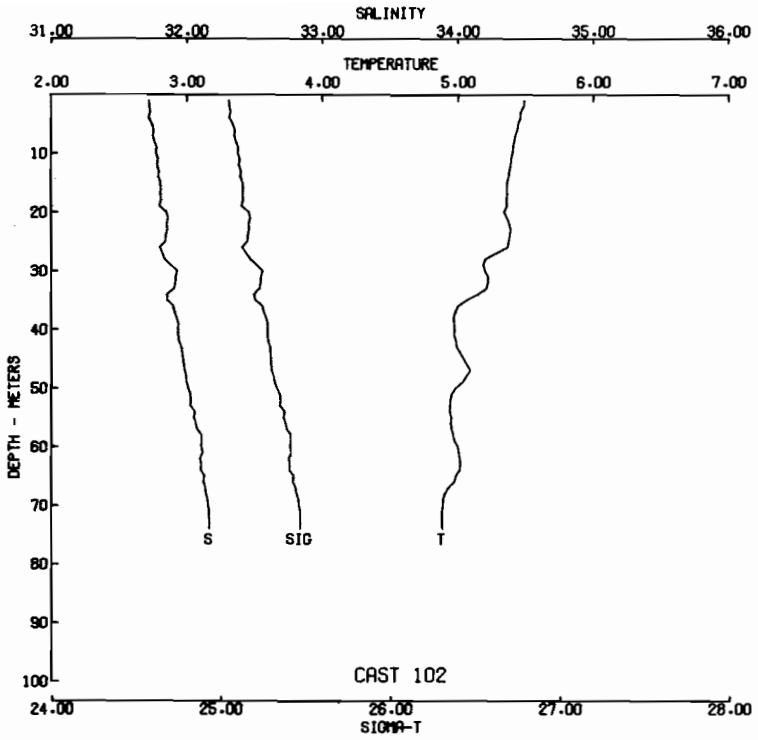
CAST NEGGA-2-RN-100 DATE 12 MAY 75 TIME 0520 GMT
LAT 53 43.3N LONG 141 36.0W WEATHER 1 SEA STATE 1
BAROMETER 15 WIND DIR T SPD KT VISIBILITY 9
CLOUD 7 AMOUNT 8 DRY 07.2 WET 06.7 DEPTH 62.5 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
48	5.06	32.61	25.33	
50	4.96	32.64	25.34	.134
55	4.89	32.65	25.37	



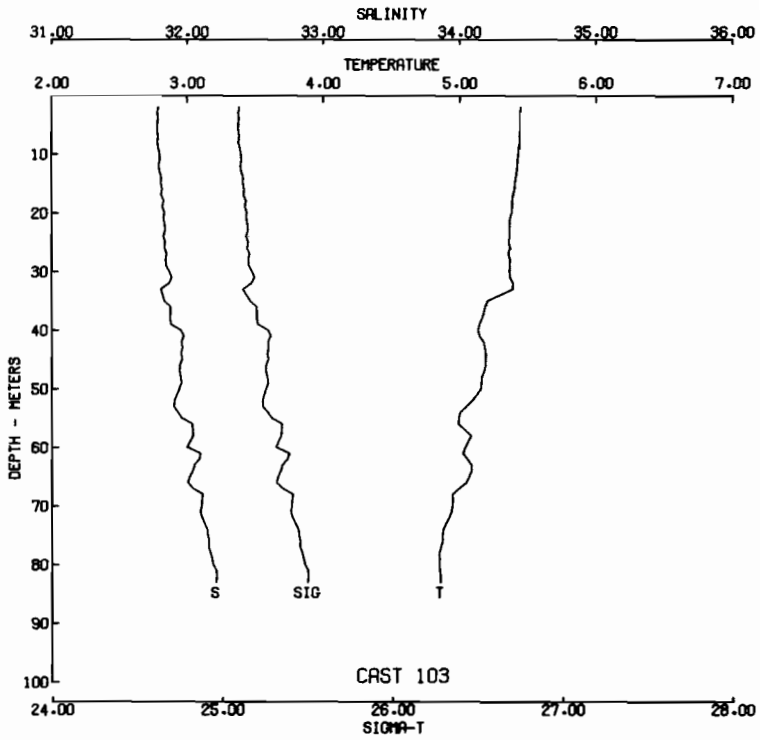
CAST NEGGA-2-RN-101 DATE 12 MAY 75 TIME 0546 GMT
LAT 53 42.4 LONG 141 36.0W WEATHER 1 SEA STATE 1
BAROMETER 15 WIND DIR T SPD KT VISIBILITY 1
CLOUD 7 AMOUNT 8 DRY 07.2 WET 06.7 DEPTH 71.7 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.37	31.66	24.95	.000
5	5.36	31.70	24.99	.035
10	5.23	31.66	24.97	.030
15	5.52	31.72	25.05	.045
20	5.56	31.76	25.09	.059
25	5.24	31.81	25.15	.073
30	5.21	31.83	25.18	.087
35	5.04	31.91	25.27	.101
40	4.99	31.96	25.29	.115
45	4.99	32.02	25.34	.128
50	4.98	32.04	25.35	.141
55	4.80	32.05	25.38	



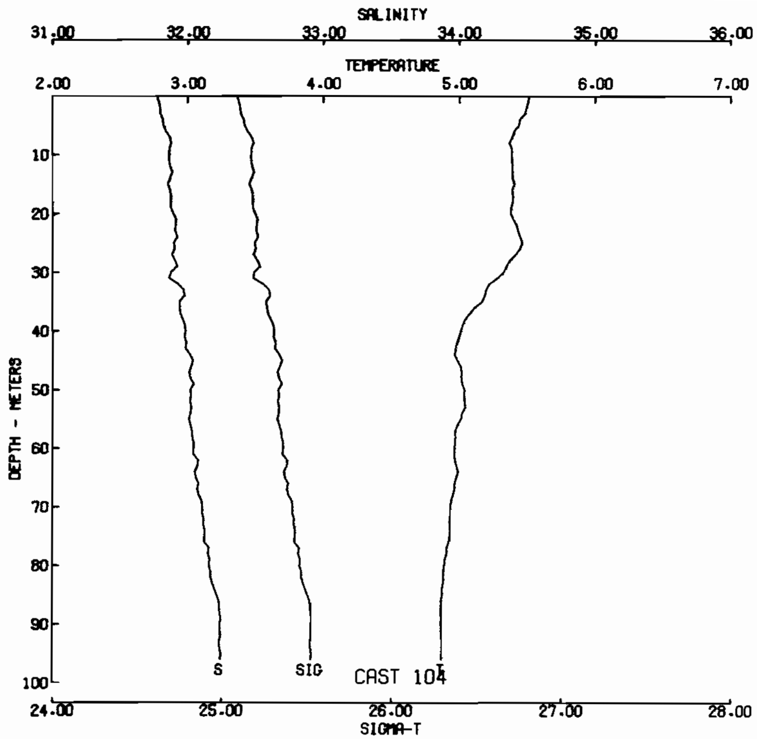
CAST NEGOA-2-RN-102 DATE 12 MAY 75 TIME 0627 GMT
LAT 59 46.9N LONG 144 35.0W WEATHER 1 SEA STATE 1
BAROMETER 29.5 WIND DIR 7 SPD KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 07.2 WET 06.7 DEPTH 00.8 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.56	31.71	25.04	.000
2	5.49	31.72	25.05	
5	5.44	31.74	25.07	.015
10	5.40	31.77	25.14	.029
15	5.36	31.80	25.13	.043
20	5.34	31.85	25.16	.058
25	5.37	31.84	25.15	.072
30	5.26	31.93	25.24	.086
35	5.09	31.85	25.20	.099
40	4.97	31.93	25.27	.113
45	5.04	31.97	25.29	.127
50	4.98	32.01	25.33	.140
74	4.88	32.16	25.46	



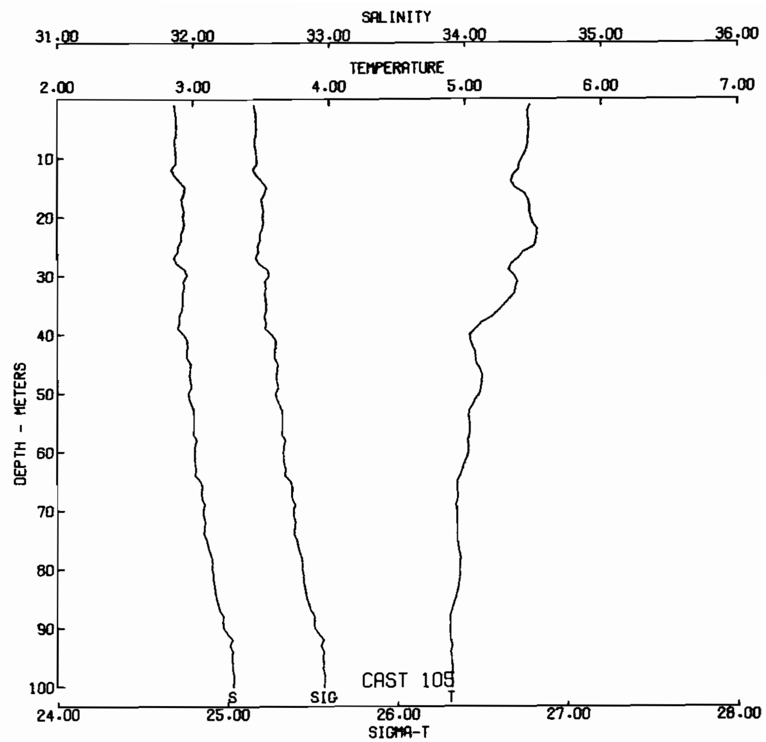
CAST NEGOA-2-RN-103 DATE 12 MAY 75 TIME 0652 GMT
LAT 59 40.0N LONG 141 37.4W WEATHER 1 SEA STATE 1
BAROMETER 29 WIND DIR 295 T SPD 22 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 07.2 WET 06.1 DEPTH 90.0 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.45	31.78	25.11	.000
2	5.45	31.78	25.10	
5	5.44	31.77	25.13	.014
10	5.43	31.79	25.11	.029
15	5.40	31.80	25.12	.043
20	5.38	31.83	25.15	.057
25	5.36	31.83	25.15	.071
30	5.36	31.86	25.16	.085
35	5.20	31.84	25.17	.100
40	5.13	31.93	25.27	.113
45	5.19	31.96	25.27	.127
50	5.15	31.94	25.26	.141
75	4.86	32.14	25.45	.207
83	4.85	32.23	25.50	



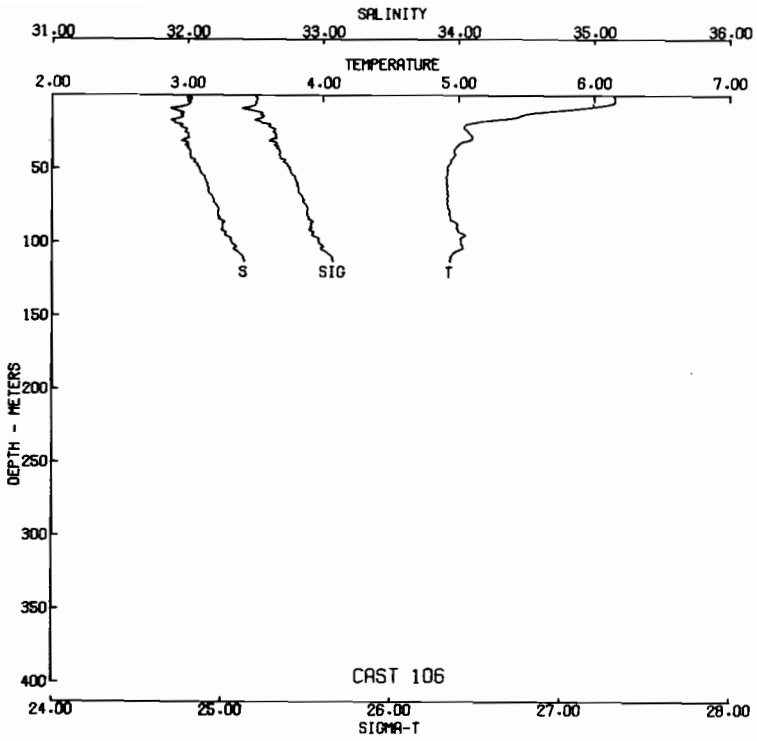
CAST NEGOA-2-RN-104 DATE 12 MAY 75 TIME 0723 GMT
LAT 59 39.5N LONG 141 38.5W WEATHER 1 SEA STATE 1
BAROMETER 15 WIND DIR 090 T SPD 00 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 07.2 WET 96.1 DEPTH 98.4 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.51	31.77	25.08	.000
5	5.44	31.82	25.13	.014
10	5.38	31.86	25.17	.028
15	5.40	31.85	25.16	.042
20	5.37	31.89	25.19	.056
25	5.46	31.90	25.19	.070
30	5.32	31.88	25.19	.084
35	5.17	31.94	25.26	.098
40	5.01	31.98	25.31	.111
45	4.98	32.04	25.36	.125
50	5.04	32.02	25.33	.138
75	4.93	32.12	25.43	.203
96	4.87	32.24	25.53	



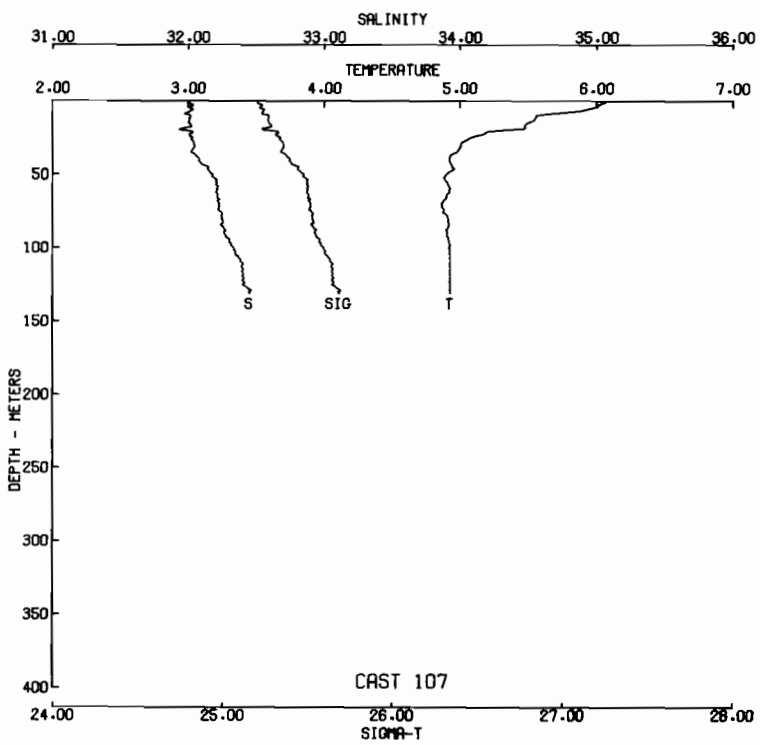
CAST NEGOA-2-RN-105 DATE 12 MAY 75 TIME 0803 GMT
LAT 59 38.5N LONG 141 40.9W WEATHER 1 SEA STATE 1
BAROMETER 16 WIND DIR 290 T SPD 02 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 07.2 WET 06.1 DEPTH 108. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.47	31.86	25.16	.000
1	5.48	31.86	25.16	
5	5.47	31.87	25.17	.014
10	5.42	31.87	25.17	.028
15	5.37	31.94	25.23	.042
20	5.46	31.92	25.21	.056
25	5.51	31.89	25.18	.070
30	5.36	31.95	25.25	.084
35	5.28	31.92	25.23	.097
40	5.03	31.92	25.26	.111
45	5.08	31.98	25.30	.125
50	5.10	31.96	25.28	.138
75	4.34	32.09	25.4[illegible]	.204
100	4.90	32.29	25.56	.267
102	4.90	32.30	25.57	



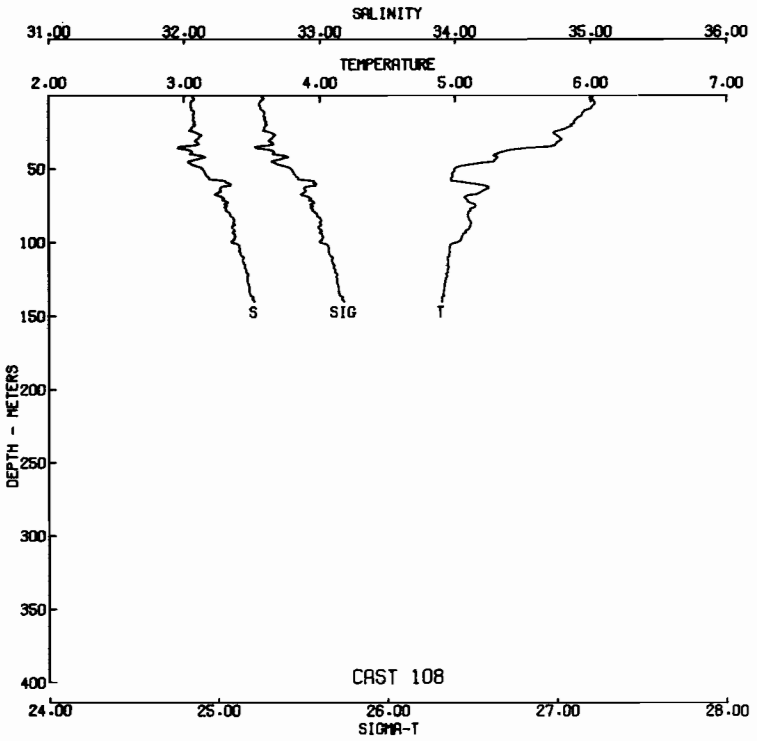
CAST NEGDA-C-RN-106 DATE 16 MAY 75 TIME 0843 GMT
LAT 59 37.1N LONG 141 41.6W WEATHER 1 SEA STATE 1
BAROMETER 16 WIND DIR 030 T SPD 02 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 07.2 WET 06.1 DEPTH 119. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.14	32.01	25.26	.000
5	6.15	32.02	25.26	.014
10	5.79	31.93	25.26	.028
15	5.43	31.96	25.24	.042
20	5.05	31.96	25.29	.055
25	5.07	31.98	25.30	.069
30	5.19	31.98	25.29	.082
35	5.38	32.01	25.33	.096
40	4.97	32.01	25.34	.109
45	4.94	32.04	25.38	.122
50	4.92	32.08	25.40	.135
75	4.92	32.21	25.52	.199
100	3.82	32.32	25.67	.260
113	4.94	32.42	25.66	



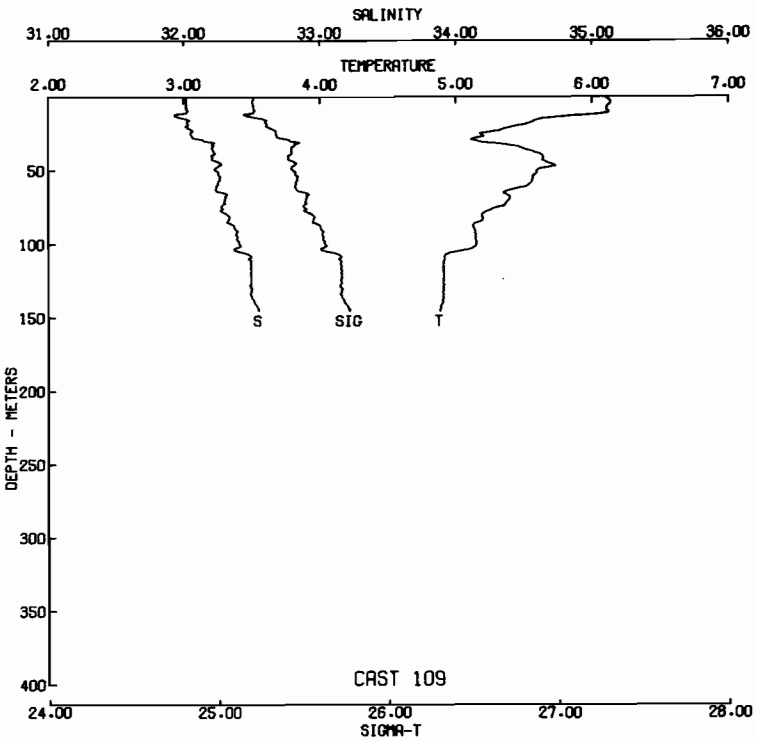
CAST NEGDA-C-RN-107 DATE 16 MAY 75 TIME 0900 GMT
LAT 59 36.5N LONG 141 42.0W WEATHER 1 SEA STATE 1
BAROMETER 16 WIND DIR 330 T SPD 02 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 06.7 WET 06.1 DEPTH 133. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.10	32.01	25.26	.000
5	6.06	32.00	25.26	
10	5.97	32.01	25.26	.014
15	5.90	31.91	25.27	.028
20	5.69	31.98	25.27	.041
25	5.32	31.93	25.26	.055
30	5.08	32.03	25.34	.068
35	5.00	32.04	25.36	.081
40	4.98	32.02	25.34	.094
45	4.92	32.08	25.39	.107
50	4.96	32.15	25.45	.120
75	4.90	32.18	25.48	.133
100	4.88	32.23	25.52	.195
125	4.92	32.33	25.59	.257
131	4.93	32.45	25.69	



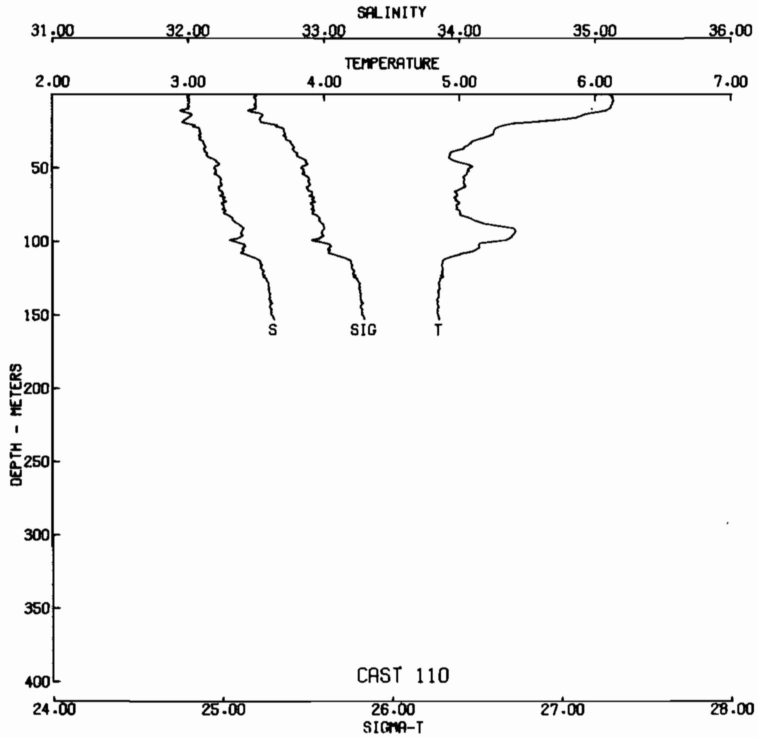
CAST NEGGA-2-RN-108 DATE 12 MAY 75 TIME 0940 GMT
LAT 59 55.5N LONG 141 43.9W WEATHER 1 SEA STATE 1
BAROMETER 16 WIND DIR 090 T SPD 04 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 06.7 WET 05.6 DEPTH 142. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.06	32.47	25.26	.000
1	6.02	32.36	25.25	
5	6.14	32.09	25.24	.014
10	5.97	32.06	25.26	.027
15	5.90	32.07	25.28	.041
20	5.86	32.08	25.29	.054
25	5.75	32.08	25.31	.068
30	5.79	32.09	25.31	.081
35	5.70	32.10	25.32	.095
40	5.56	32.04	25.32	.108
45	5.48	32.03	25.33	.121
50	5.39	32.13	25.43	.134
75	5.15	32.32	25.58	.196
100	5.04	32.35	25.64	.257
140	4.90	32.51	25.74	



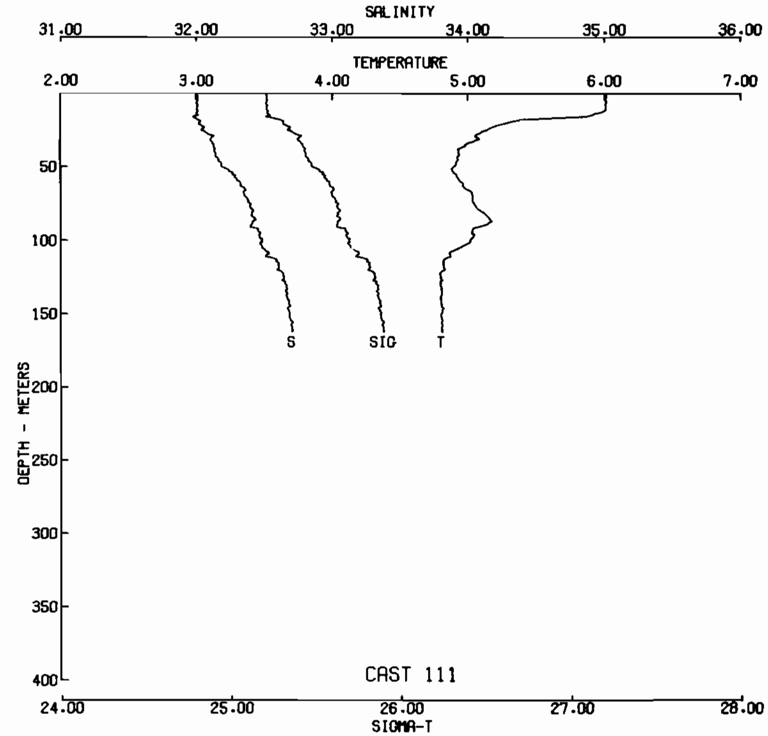
CAST NEGGA-2-RN-109 DATE 12 MAY 75 TIME 1010 GMT
LAT 59 54.5N LONG 141 43.9W WEATHER 1 SEA STATE 1
BAROMETER 16 WIND DIR 090 T SPD 04 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 06.7 WET 05.6 DEPTH 148. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.12	32.21	25.44	.000
1	6.10	32.21	25.21	
5	6.13	32.02	25.21	.014
10	6.16	32.02	25.21	.028
15	5.63	32.02	25.26	.042
20	5.44	32.01	25.29	.055
25	5.38	32.03	25.34	.068
30	5.15	32.15	25.42	.081
35	5.08	32.21	25.48	.094
40	5.04	32.23	25.51	.107
45	5.08	32.27	25.46	.120
50	5.59	32.24	25.44	.133
75	5.30	32.48	25.72	.195
100	5.15	32.41	25.83	.256
145	4.88	32.55	25.77	



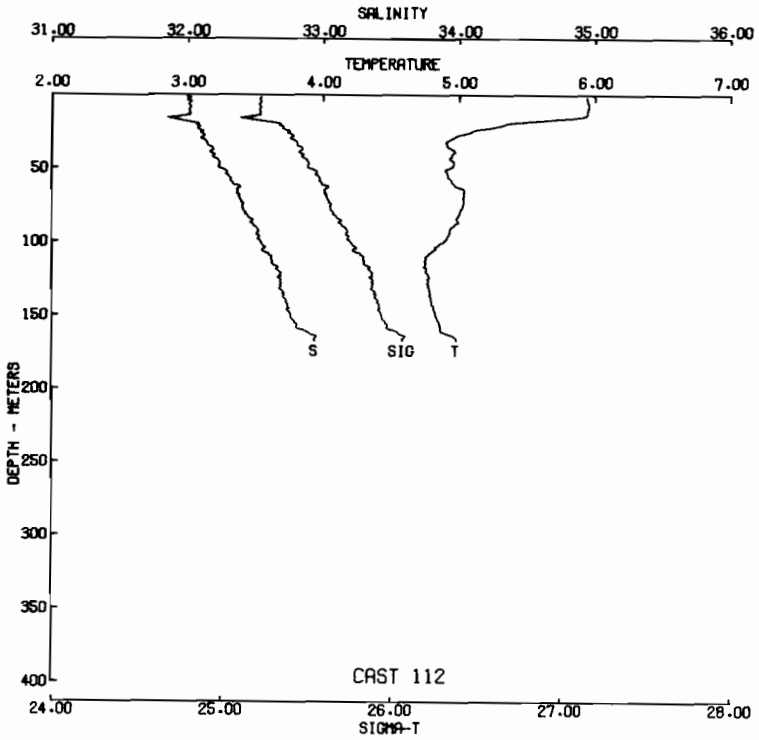
CAST NEGOA-2-RN-110 DATE 12 MAY 75 TIME 1040 GMT
LAT 59 33.5N LONG 141 45.3W WEATHER 1 SEA STATE 1
BAROMETER 16 WIND DIR 095 T SPD 08 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 06.1 WET 05.6 DEPTH 156. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.12	32.00	25.23	.000
1	6.12	32.01	25.24	
5	6.13	32.01	25.25	.014
10	6.10	32.00	25.26	.028
15	5.89	32.02	25.23	.042
20	5.39	31.99	25.26	.055
25	5.25	32.08	25.36	.069
30	5.10	32.08	25.37	.082
35	5.06	32.12	25.41	.095
40	4.93	32.14	25.44	.108
45	4.95	32.21	25.49	.120
50	5.08	32.19	25.46	.133
75	4.97	32.26	25.53	.195
100	5.25	32.34	25.56	.256
150	4.84	32.61	25.83	.369
153	4.84	32.63	25.84	



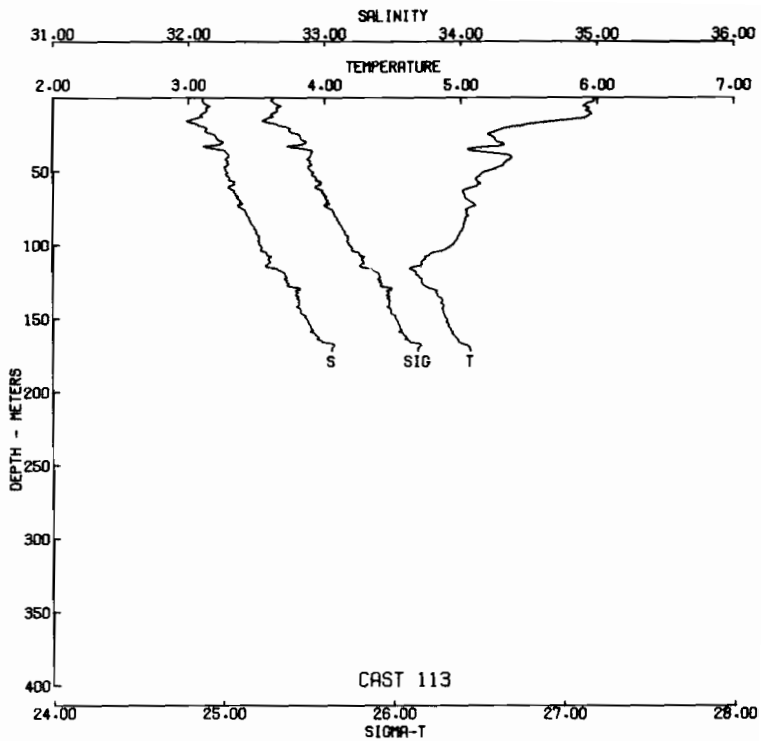
CAST NEGOA-2-RN-111 DATE 12 MAY 75 TIME 1113 GMT
LAT 59 32.4N LONG 141 45.9W WEATHER 1 SEA STATE 1
BAROMETER 17 WIND DIR 095 T SPD 08 KT VISIBILITY 1
CLOUD X AMOUNT 9 DRY 06.1 WET 05.6 DEPTH 164. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.01	32.00	25.21	.000
1	6.01	32.00	25.21	
5	6.01	32.01	25.21	.014
10	6.01	32.00	25.21	.028
15	5.90	32.01	25.23	.041
20	5.29	32.02	25.31	.055
25	5.13	32.03	25.33	.068
30	5.06	32.11	25.41	.081
35	4.98	32.13	25.43	.094
40	4.93	32.14	25.44	.107
45	4.93	32.16	25.46	.120
50	4.89	32.18	25.48	.132
75	5.04	32.40	25.65	.193
100	5.02	32.43	25.70	.252
150	4.80	32.68	25.88	.362
162	4.80	32.73	25.90	



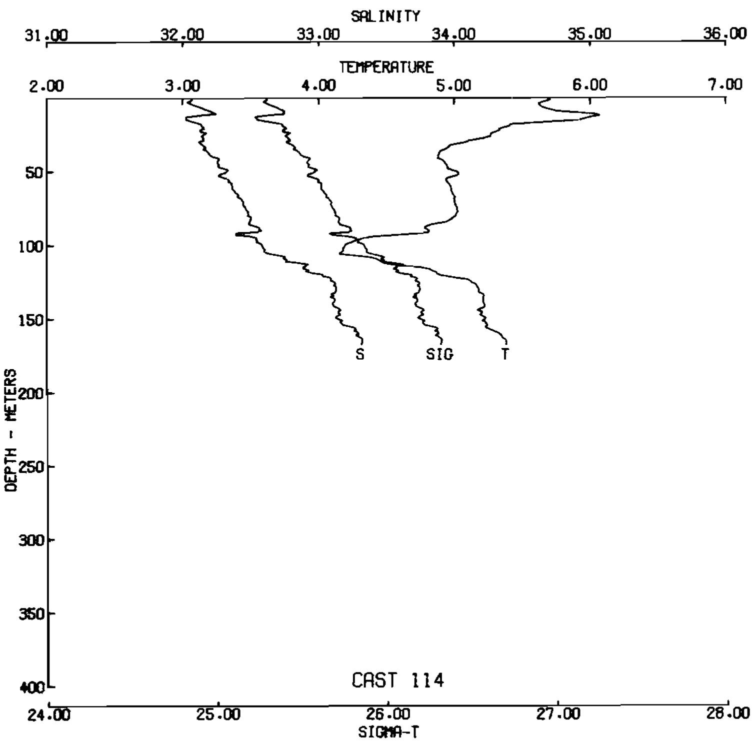
CAST NEGOA-2-RN-112 DATE 12 MAY 75 TIME 1144 GMT
LAT 59 31.5N LONG 141 47.0W WEATHER 1 SEA STATE 1
BAROMETER 18 WIND DIR 110 T SPD 16 KT VISIBILITY 4
CLOUD X AMOUNT 9 DRY 36.1 WET 35.6 DEPTH 169. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
[illegible]	5.96	32.02	25.62	.000
[illegible]	5.94	32.02	25.63	
5	5.94	32.02	25.63	.004
[illegible]	5.95	32.01	25.62	.008
[illegible]	5.91	32.03	25.65	.013
[illegible]	5.94	32.08	25.65	.017
[illegible]	5.94	32.11	25.68	.021
[illegible]	4.95	32.13	25.70	.025
[illegible]	4.91	32.15	25.72	.029
[illegible]	4.95	32.17	25.76	.033
[illegible]	4.95	32.20	25.79	.037
[illegible]	4.93	32.23	25.81	.041
[illegible]	5.03	32.27	25.84	.045
100	4.94	32.29	25.86	.049
125	4.93	32.76	26.34	.357
167	4.98	32.94	26.47	



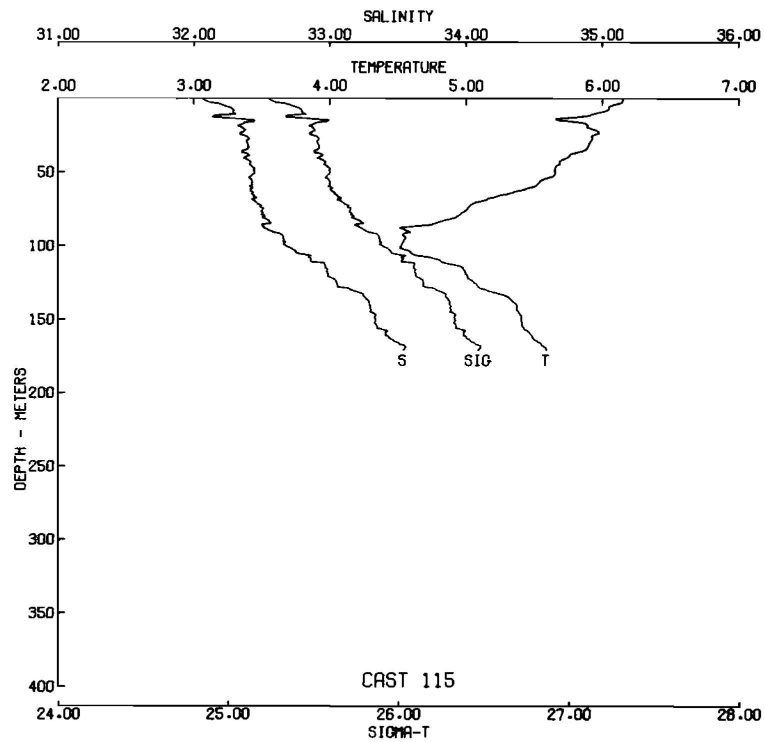
CAST NEGOA-2-RN-113 DATE 12 MAY 75 TIME 1213 GMT
LAT 59 J[illegible]N LONG 141 [illegible]W WEATHER 5 SEA STATE 1
BAROMETER 18 WIND DIR 110 T SPD 16 KT VISIBILITY 2
CLOUD 7 AMOUNT 8 DRY [illegible] WET 35.6 DEPTH 174. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
[illegible]	5.99	32.08	25.28	.000
[illegible]	5.97	32.10	25.29	
5	5.91	32.13	25.32	.013
[illegible]	5.95	32.12	25.31	.027
[illegible]	5.86	32.02	25.24	.040
[illegible]	5.86	32.11	25.37	.054
25	5.84	32.18	25.45	.067
[illegible]	5.82	32.25	25.49	.079
[illegible]	5.85	32.27	25.47	.092
[illegible]	5.86	32.29	25.51	.104
[illegible]	5.81	32.24	25.52	.117
[illegible]	5.78	32.27	25.52	.129
75	5.85	32.38	25.62	.190
[illegible]	4.93	32.52	25.74	.248
150	4.89	32.86	26.01	.354
172	5.06	33.05	26.14	



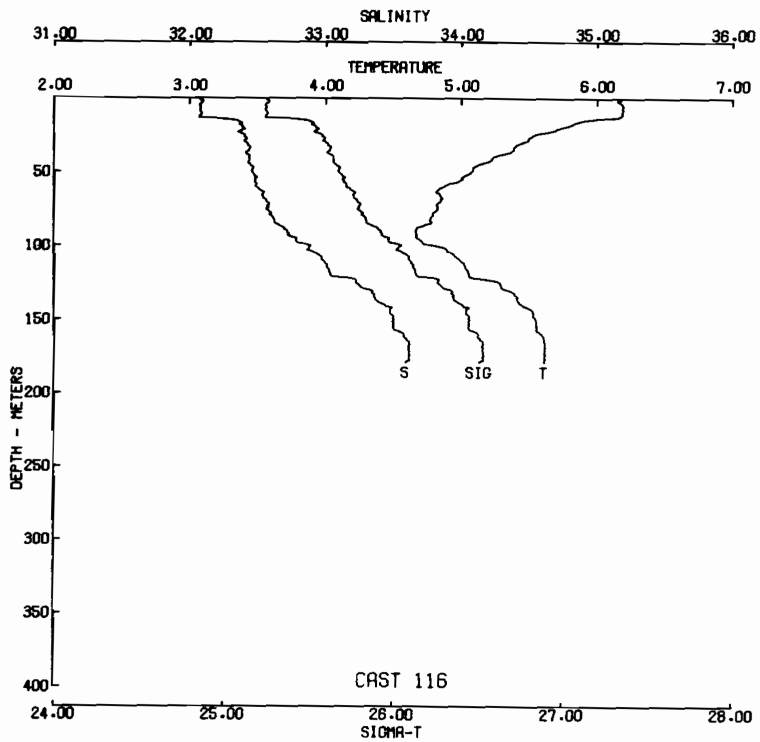
CAST NEGOA-2-PN-114 DATE 12 MAY 75 TIME 1303 GMT
LAT 59 30.8N LONG 141 47.0W WEATHER 5 SEA STATE 1
BAROMETER 19 WIND DIR 100 T SPD 16 KT VISIBILITY 2
CLOUD 7 AMOUNT 8 DRY 06.1 WET 05.6 DEPTH 178. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.71	32.09	25.31	.000
5	5.63	32.08	25.31	.013
10	5.90	32.22	25.40	.027
15	5.92	32.02	25.24	.040
20	5.37	32.15	25.40	.053
25	5.27	32.15	25.41	.066
30	5.08	32.12	25.41	.079
35	4.93	32.15	25.45	.092
40	4.86	32.21	25.51	.104
45	4.94	32.26	25.54	.117
50	5.02	32.32	25.58	.129
75	5.02	32.46	25.69	.166
100	4.19	32.98	25.87	.245
150	5.22	33.14	26.20	.341
167	5.38	33.31	26.32	



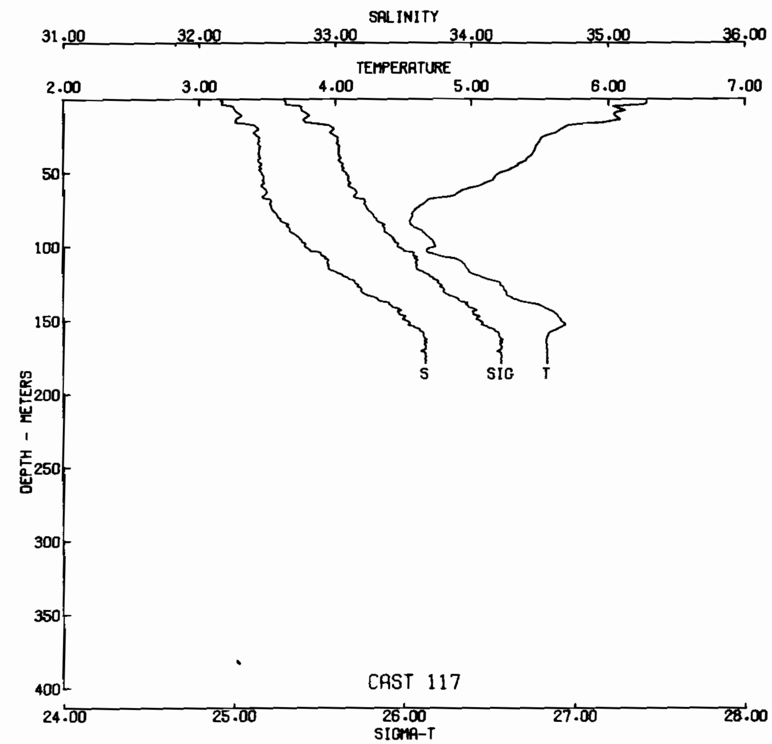
CAST NEGOA-2-PN-115 DATE 12 MAY 75 TIME 1439 GMT
LAT 59 29.0N LONG 141 48.0W WEATHER 5 SEA STATE 1
BAROMETER 20 WIND DIR T SPD KT VISIBILITY 2
CLOUD 7 AMOUNT 8 DRY 05.0 WET 04.4 DEPTH 177. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.19	32.02	25.20	.000
1	6.15	32.07	25.24	
5	6.07	32.21	25.37	.014
10	5.97	32.29	25.44	.026
15	5.67	32.44	25.59	.039
20	5.88	32.35	25.50	.052
25	5.94	32.34	25.48	.064
30	5.91	32.39	25.52	.076
35	5.86	32.39	25.53	.089
40	5.75	32.33	25.54	.101
45	5.66	32.41	25.57	.113
50	5.65	32.44	25.60	.125
75	5.41	32.51	25.72	.185
100	4.52	32.67	25.94	.240
150	5.40	33.33	26.33	.334
171	5.58	33.54	26.47	



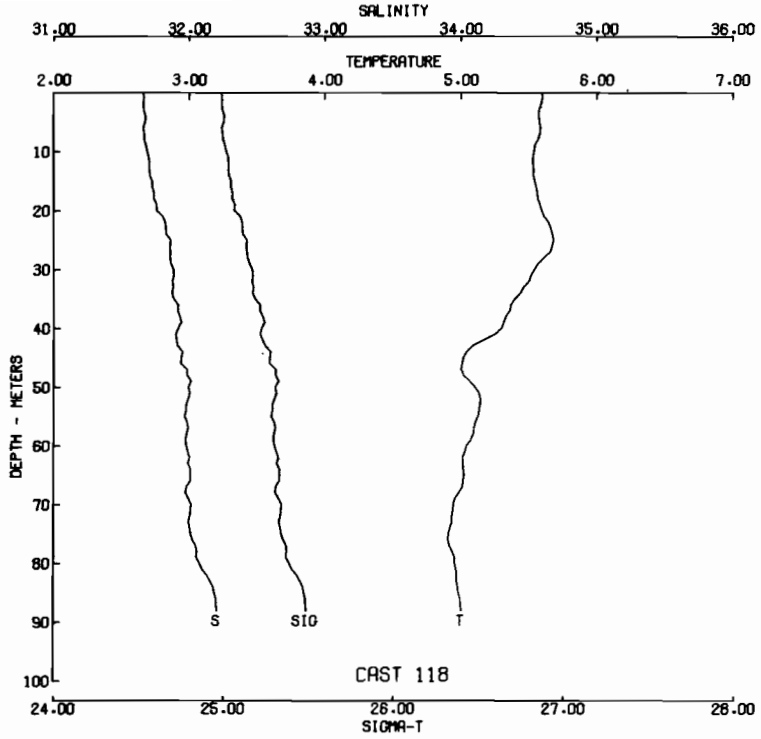
CAST NEGOA-2-RN-116 DATE 12 MAY 75 TIME 1458 GMT
LAT 59 23.8N LONG 141 49.3W WEATHER 5 SEA STATE 1
BAROMETER 20 WIND DIR 280 T SPD 05 KT VISIBILITY 2
CLOUD 7 AMOUNT 8 DRY 05.0 WET 04.4 DEPTH 181. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.16	32.09	25.26	.000
1	6.18	32.07	25.24	
5	6.19	32.07	25.24	.014
10	6.16	32.38	25.25	.027
15	5.94	32.34	25.49	.041
20	5.74	32.38	25.54	.053
25	5.53	32.41	25.58	.065
30	5.46	32.41	25.59	.077
35	5.39	32.43	25.62	.089
40	5.23	32.44	25.64	.101
45	5.13	32.44	25.66	.113
50	5.07	32.45	25.67	.125
75	4.82	32.56	25.79	.161
100	4.79	32.84	26.05	.234
150	5.55	33.51	26.45	.324
179	5.62	33.59	26.51	



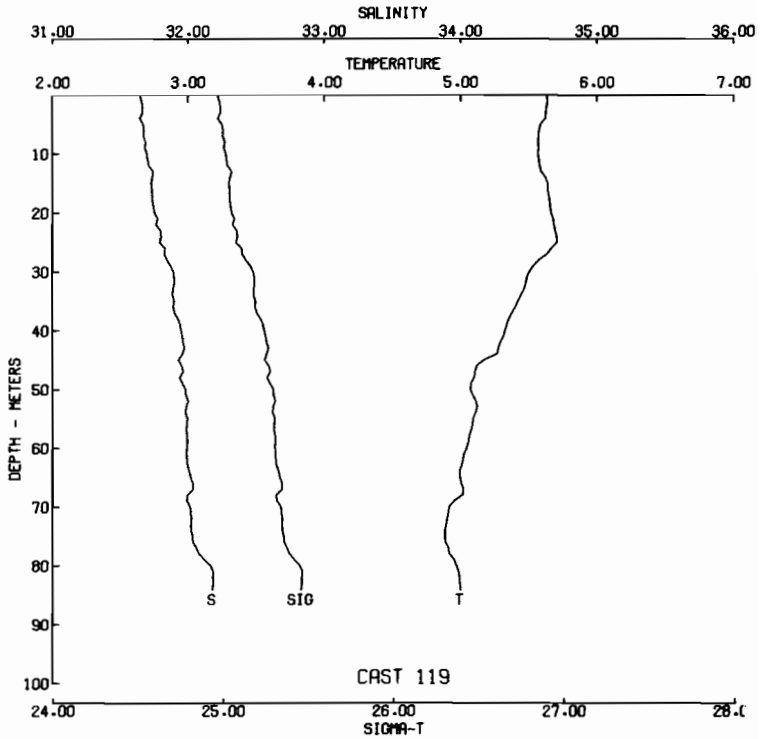
CAST NEGOA-2-RN-117 DATE 12 MAY 75 TIME 1529 GMT
LAT 59 28.0N LONG 141 51.2W WEATHER 5 SEA STATE 1
BAROMETER 20 WIND DIR 180 T SPD 05 KT VISIBILITY 2
CLOUD 7 AMOUNT 8 DRY 05.0 WET 04.4 DEPTH 181. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.38	32.12	25.26	.000
1	6.28	32.15	25.29	
5	6.13	32.24	25.40	.013
10	6.04	32.29	25.43	.026
15	6.02	32.26	25.41	.039
20	5.66	32.43	25.59	.052
25	5.54	32.42	25.59	.064
30	5.49	32.43	25.61	.076
35	5.46	32.44	25.62	.087
40	5.41	32.45	25.63	.099
45	5.33	32.45	25.64	.111
50	5.20	32.46	25.66	.123
75	4.58	32.53	25.79	.180
100	4.73	32.77	25.96	.234
150	5.65	33.52	26.45	.325
179	5.55	33.60	26.57	



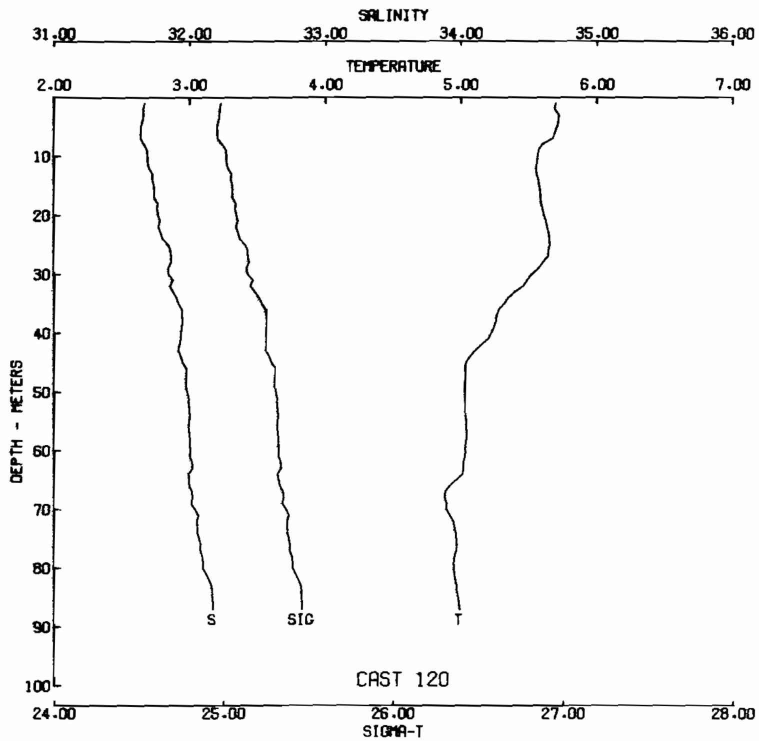
CAST NEGOA-2-PN-118 DATE 14 MAY 75 TIME 1731 GMT
LAT 59°46.6N LONG 146°01.2W WEATHER 5 SEA STATE 1
BAROMETER 22 WIND DIR 1 T SPD [illegible] KT VISIBILITY 9
CLOUD 7 AMOUNT 7 DRY 05.7 WET [illegible] DEPTH 95.4 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
[illegible]	5.92	32.56	24.99	.000
[illegible]	5.98	31.57	25.[illegible]	.035
[illegible]	5.54	32.63	25.[illegible]	.030
15	5.54	31.72	25.[illegible]	.044
[illegible]	5.39	31.76	25.[illegible]	.059
25	5.68	31.85	25.[illegible]	.075
[illegible]	5.54	31.88	25.[illegible]	.087
[illegible]	5.44	31.89	25.[illegible]	.101
[illegible]	5.36	31.92	25.[illegible]	.115
45	5.22	31.94	25.[illegible]	.129
[illegible]	5.12	31.93	25.[illegible]	.142
[illegible]	4.91	32.14	25.[illegible]	.209
60	4.80	32.23	25.43	



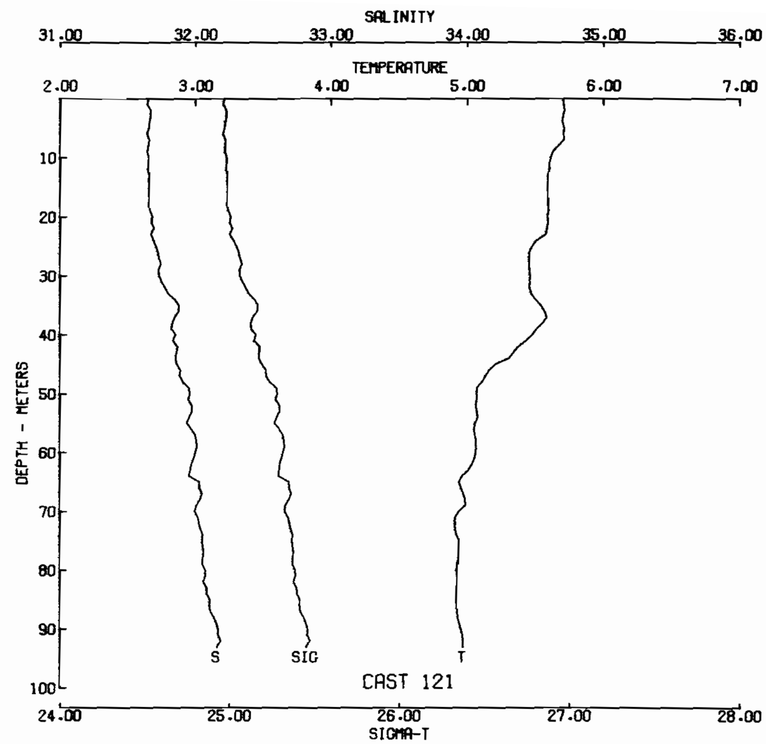
CAST NEGOA-2-PN-119 DATE 12 MAY 75 TIME 1832 GMT
LAT 59°[illegible].3N LONG 146°[illegible]W WEATHER 2 SEA STATE 1
BAROMETER [illegible] WIND DIR 120 T SPD [illegible] KT VISIBILITY 9
CLOUD 7 AMOUNT 8 DRY [illegible] WET [illegible] DEPTH 90.0 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
[illegible]	5.63	32.04	24.97	.000
[illegible]	5.59	31.67	25.[illegible]	.035
[illegible]	5.56	32.09	25.[illegible]	.030
[illegible]	5.04	31.75	25.[illegible]	.044
[illegible]	5.06	31.75	25.[illegible]	.059
[illegible]	5.06	31.79	25.[illegible]	.074
[illegible]	5.50	32.33	25.[illegible]	.088
[illegible]	5.42	31.89	25.[illegible]	.102
[illegible]	5.42	31.94	25.[illegible]	.116
[illegible]	5.17	31.93	25.[illegible]	.129
[illegible]	5.07	31.98	25.[illegible]	.143
[illegible]	4.88	32.03	25.36	.209
[illegible]	4.99	32.17	25.46	



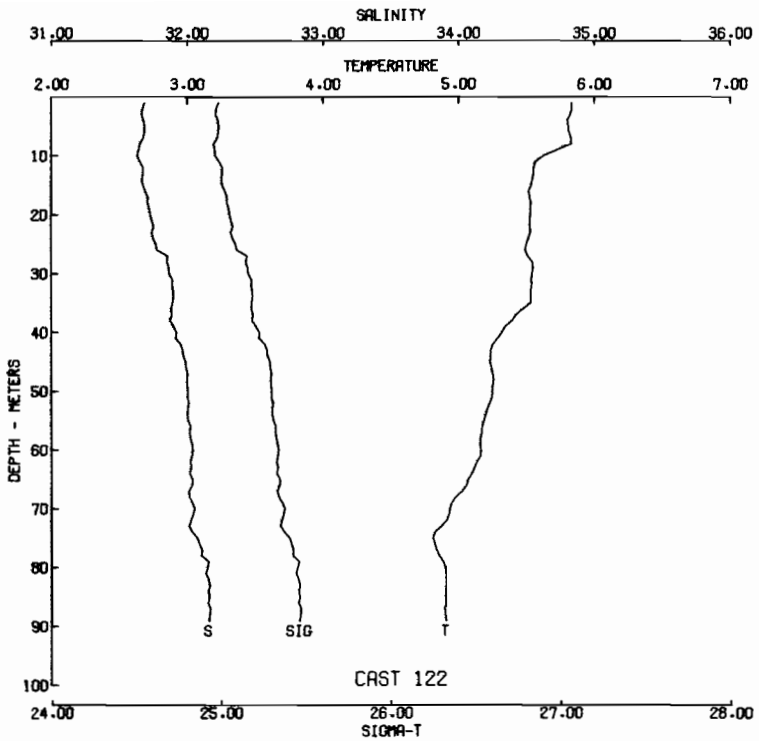
CAST NEGOA-2-FN-120 DATE 12 MAY 75 TIME 1954 GMT
LAT 59 46.4N LONG 142 [illegible] WEATHER 1 SEA STATE 1
BAROMETER 24 WIND DIR T SPD KT VISIBILITY 9
CLOUD 7 AMOUNT 5 DRY 06.1 WET 06.1 DEPTH 9[illegible] M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.71	31.67	24.96	.000
1	5.69	31.66	24.98	
5	5.71	31.6[illegible]	24.9[illegible]	.015
10	5.56	31.6[illegible]	25.0[illegible]	.030
15	5.57	31.73	25.05	.045
20	5.51	31.77	25.[illegible]7	.059
25	5.65	31.84	25.12	.074
30	5.52	31.84	25.14	.086
35	5.32	31.92	25.2[illegible]	.102
40	5.22	31.94	25.25	.115
45	5.04	31.95	25.28	.129
50	5.02	31.93	25.3[illegible]	.14[illegible]
75	4.96	32.07	25.38	.209
87	4.99	32.17	25.46	



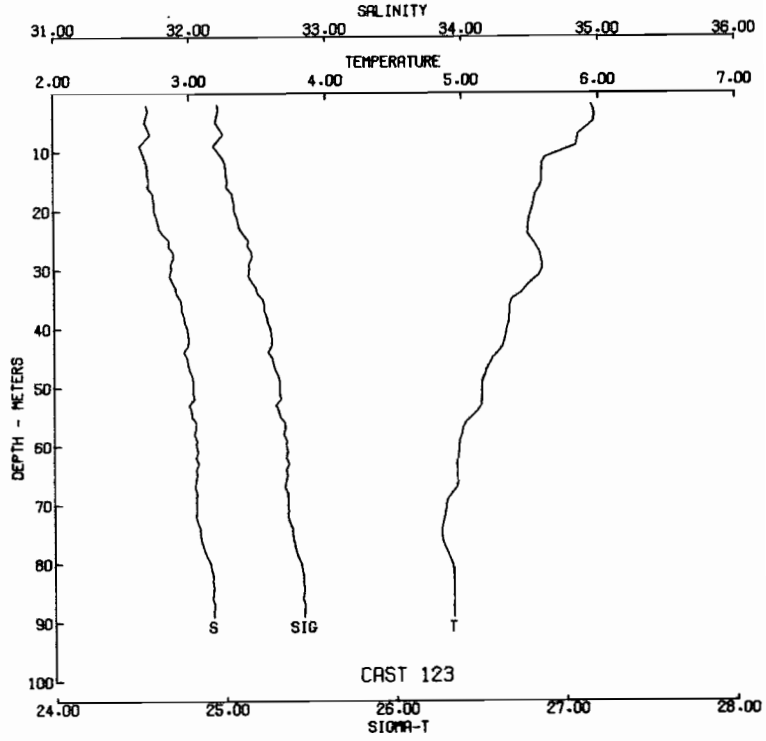
CAST NEGOA-2-FN-121 DATE 12 MAY 75 TIME 2[illegible]32 GMT
LAT 59 46.2N LONG 142 [illegible]1.1W WEATHER 1 SEA STATE 1
BAROMETER 24 WIND DIR T SPD KT VISIBILITY 9
CLOUD 7 AMOUNT 5 DRY 07.8 WET 06.7 DEPTH 97.3 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.70	31.63	24.97	.000
5	5.71	31.63	24.97	.015
10	5.61	31.65	24.98	.030
15	5.58	31.66	24.99	.045
20	5.58	31.68	25.0[illegible]	.060
25	5.47	31.71	25.[illegible]	.075
30	5.45	31.73	25.[illegible]6	.089
35	5.54	31.88	25.17	.103
40	5.47	31.85	25.15	.118
45	5.21	31.85	25.19	.132
50	5.07	31.96	25.28	.145
75	4.94	32.05	25.37	.212
93	4.97	32.16	25.45	



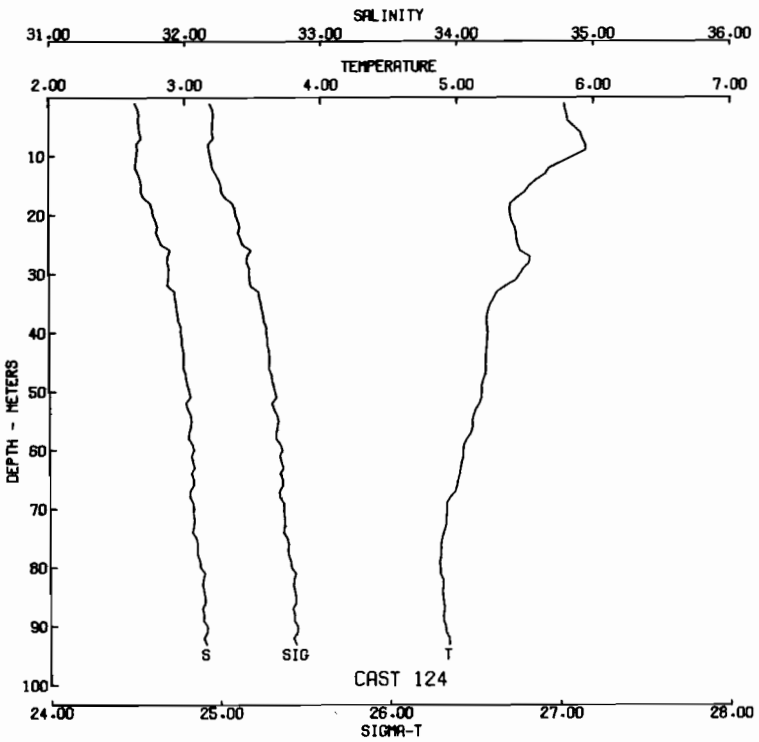
CAST NEGOA-C-PN-122 DATE 16 MAY 75 TIME 2142 GMT
LAT 59 45.4N LONG 141 59.9W WEATHER 1 SEA STATE 1
BAROMETER 25 WIND DIR 260 T SPD 14 KT VISIBILITY 9
CLOUD 7 AMOUNT 9 DRY 53.3 WET 47.2 DEPTH 91.8 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.83	31.67	24.37	.000
2	5.43	31.63	24.38	
5	5.81	31.68	24.38	.015
10	5.83	31.63	24.36	.030
15	5.53	31.67	24.43	.045
20	5.52	31.73	24.50	.060
25	5.34	31.77	24.54	.074
30	5.34	31.77	24.56	.089
40	5.34	31.79	24.58	.104
50	5.33	31.82	24.61	.119
60	5.26	31.83	24.63	.134
70	5.24	31.87	24.67	.149
80	4.91	32.07	24.86	.214
90	4.91	32.16	24.96	



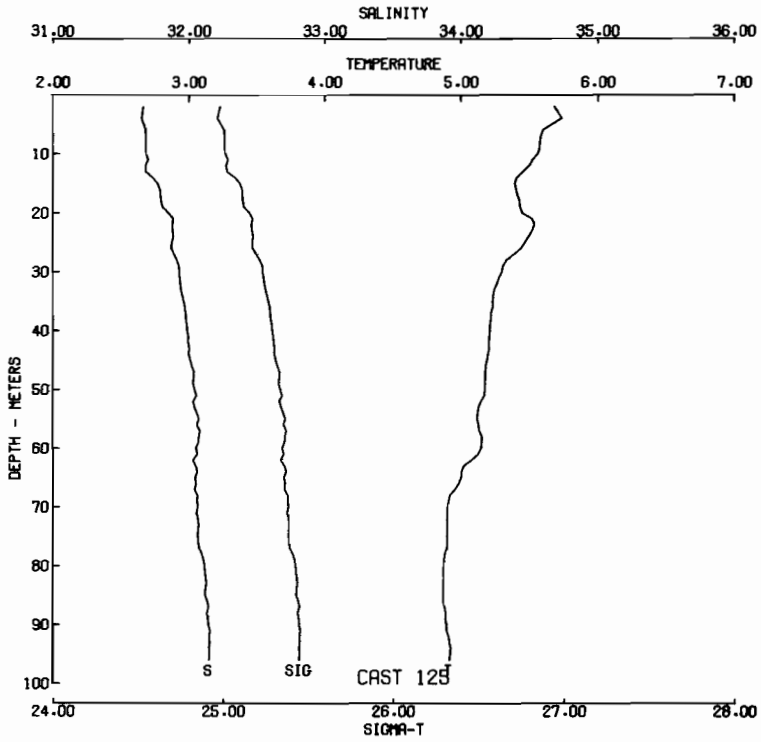
CAST NEGOA-C-PN-123 DATE 16 MAY 75 TIME 2230 GMT
LAT 59 45.9N LONG 141 59.9W WEATHER 4 SEA STATE 3
BAROMETER 25 WIND DIR 160 T SPD 17 KT VISIBILITY 9
CLOUD 7 AMOUNT 9 DRY 57.8 WET 50.7 DEPTH 91.8 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.46	31.67	24.35	.000
2	5.45	31.69	24.36	
5	5.96	31.67	24.35	.015
10	5.72	31.65	24.47	.030
15	5.38	31.70	24.55	.045
20	5.51	31.74	24.58	.059
25	5.31	31.84	24.74	.074
30	5.56	31.86	24.75	.088
40	5.50	31.93	24.82	.102
50	5.32	31.98	24.87	.116
60	5.22	32.07	24.98	.129
70	5.14	32.12	25.04	.143
80	4.83	32.26	25.19	.209
90	4.82	32.26	25.19	



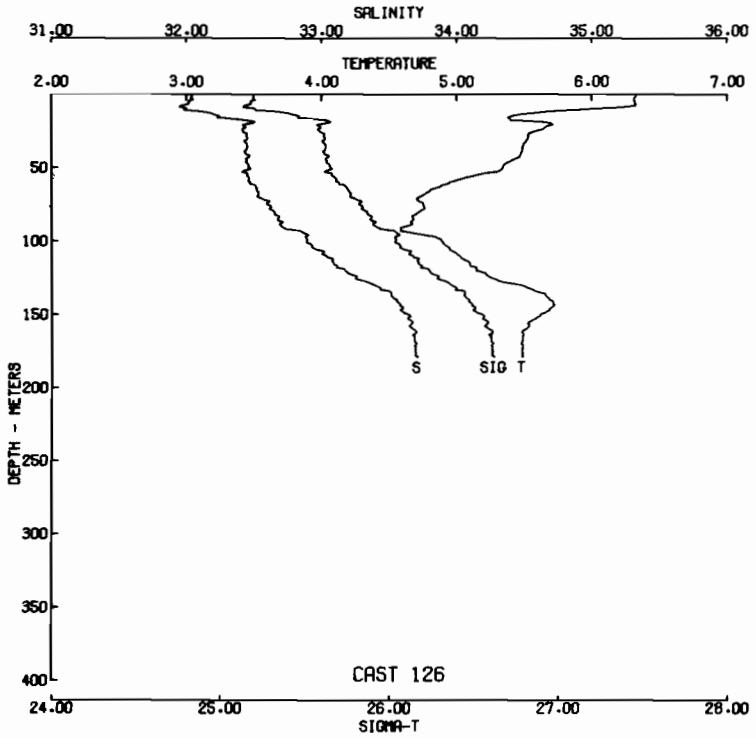
CAST WEGOA-2-RN-124 DATE 12 MAY 75 TIME 2335 GMT
LAT 59 45.9N LONG 141 59.3W WEATHER 1 SEA STATE 1
BAROMETER 29 WIND DIR 120 T SPD 26 KT VISIBILITY 9
CLOUD 3 AMOUNT 3 DRY 06.7 WET 05.6 DEPTH 95.4 M

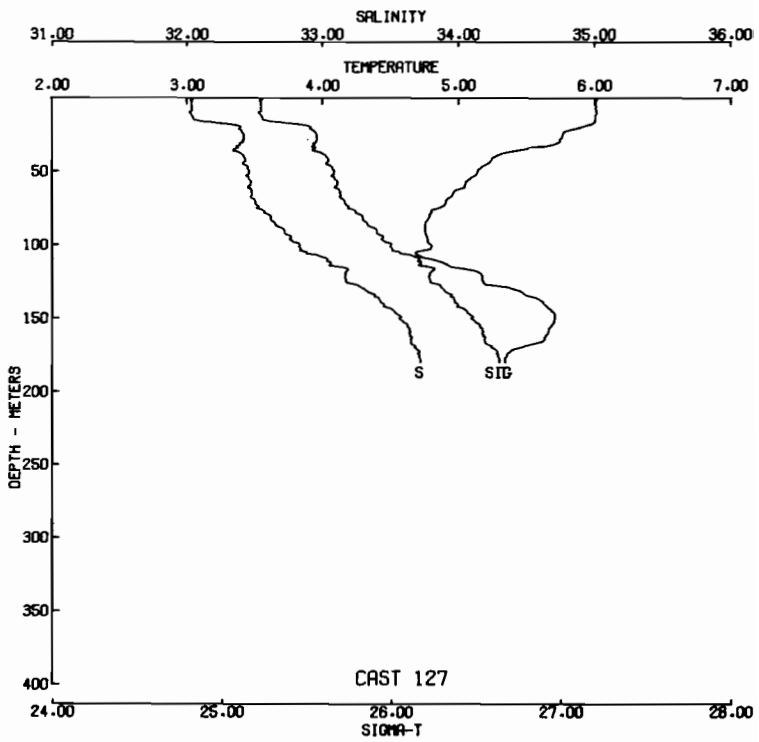
DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.74	31.63	24.95	.000
2	5.79	31.61	24.94	
5	5.86	31.60	24.90	.015
10	5.85	31.69	24.99	.030
15	5.83	31.68	25.01	.045
20	5.39	31.77	25.11	.060
25	5.44	31.82	25.14	.074
30	5.45	31.88	25.18	.088
35	5.46	31.93	25.24	.102
40	5.42	31.97	25.27	.115
45	5.23	31.99	25.34	.129
50	5.17	32.03	25.33	.142
75	4.98	32.07	25.39	.206
95	4.92	32.14	25.44	



CAST WEGOA-2-RN-125 DATE 13 MAY 75 TIME 0829 GMT
LAT 59 45.9N LONG 141 59.4W WEATHER 1 SEA STATE 1
BAROMETER 29 WIND DIR 120 T SPD 26 KT VISIBILITY 9
CLOUD 3 AMOUNT 3 DRY 06.7 WET 05.6 DEPTH 98.3 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	5.77	31.65	24.96	.000
2	5.68	31.66	24.98	
5	5.67	31.67	24.98	.015
10	5.59	31.69	25.04	.030
15	5.39	31.77	25.11	.044
20	5.44	31.85	25.18	.059
25	5.46	31.87	25.17	.073
30	5.29	31.93	25.29	.087
35	5.23	31.96	25.27	.100
40	5.21	31.94	25.29	.114
45	5.19	32.01	25.31	.127
50	5.17	32.04	25.34	.141
75	4.89	32.06	25.38	.206
98	4.91	32.14	25.49	



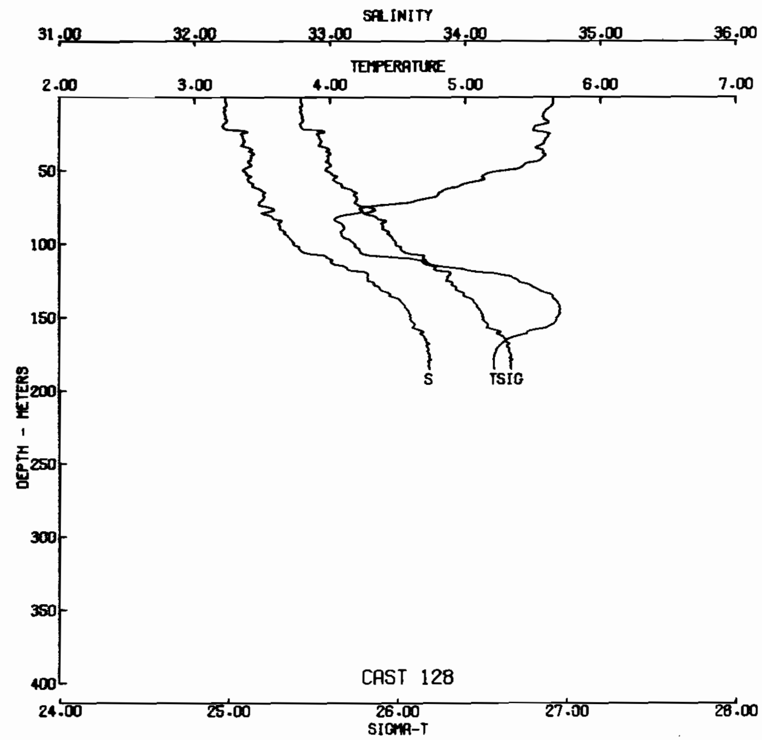


CAST WEGOA-2-PN-126 DATE 13 MAY 75 TIME 0245 GMT
LAT 59 27.1N LONG 141 56.24 WEATHER 1 SEA STATE 3
BAROMETER 29 WIND DIR 69.1 SPD 16 KT VISIBILITY 9
CLOUD 0 AMOUNT 2 DRY 36.7 WET 35.6 DEPTH 381. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	6.32	32.44	25.24	.000
2	6.33	32.44	25.19	
3	6.42	32.44	25.18	.014
4	6.45	32.44	25.21	.027
5	6.46	32.44	25.21	.040
6	6.47	32.44	25.21	.054
7	6.49	32.44	25.22	.067
8	6.49	32.44	25.23	.081
9	6.49	32.44	25.23	.094
10	6.49	32.44	25.23	.108
11	6.49	32.44	25.23	.121
12	6.49	32.44	25.23	.135
13	6.49	32.44	25.23	.148
14	6.49	32.44	25.23	.162
15	6.49	32.44	25.23	.175
16	6.49	32.44	25.23	.189
17	6.49	32.44	25.23	.202
18	6.49	32.44	25.23	.216
19	6.49	32.44	25.23	.229
20	6.49	32.44	25.23	.243
21	6.49	32.44	25.23	.256
22	6.49	32.44	25.23	.270
23	6.49	32.44	25.23	.283
24	6.49	32.44	25.23	.297
25	6.49	32.44	25.23	.310
26	6.49	32.44	25.23	.324
27	6.49	32.44	25.23	.337
28	6.49	32.44	25.23	.351
29	6.49	32.44	25.23	.364
30	6.49	32.44	25.23	.378
31	6.49	32.44	25.23	.391
32	6.49	32.44	25.23	.405
33	6.49	32.44	25.23	.418
34	6.49	32.44	25.23	.432
35	6.49	32.44	25.23	.445
36	6.49	32.44	25.23	.459
37	6.49	32.44	25.23	.472
38	6.49	32.44	25.23	.486
39	6.49	32.44	25.23	.499
40	6.49	32.44	25.23	.513
41	6.49	32.44	25.23	.526
42	6.49	32.44	25.23	.540
43	6.49	32.44	25.23	.553
44	6.49	32.44	25.23	.567
45	6.49	32.44	25.23	.580
46	6.49	32.44	25.23	.594
47	6.49	32.44	25.23	.607
48	6.49	32.44	25.23	.621
49	6.49	32.44	25.23	.634
50	6.49	32.44	25.23	.648
51	6.49	32.44	25.23	.661
52	6.49	32.44	25.23	.675
53	6.49	32.44	25.23	.688
54	6.49	32.44	25.23	.702
55	6.49	32.44	25.23	.715
56	6.49	32.44	25.23	.729
57	6.49	32.44	25.23	.742
58	6.49	32.44	25.23	.756
59	6.49	32.44	25.23	.769
60	6.49	32.44	25.23	.783
61	6.49	32.44	25.23	.796
62	6.49	32.44	25.23	.810
63	6.49	32.44	25.23	.823
64	6.49	32.44	25.23	.837
65	6.49	32.44	25.23	.850
66	6.49	32.44	25.23	.864
67	6.49	32.44	25.23	.877
68	6.49	32.44	25.23	.891
69	6.49	32.44	25.23	.904
70	6.49	32.44	25.23	.918
71	6.49	32.44	25.23	.931
72	6.49	32.44	25.23	.945
73	6.49	32.44	25.23	.958
74	6.49	32.44	25.23	.972
75	6.49	32.44	25.23	.985
76	6.49	32.44	25.23	.999
77	6.49	32.44	25.23	1.012
78	6.49	32.44	25.23	1.026
79	6.49	32.44	25.23	1.039
80	6.49	32.44	25.23	1.053
81	6.49	32.44	25.23	1.066
82	6.49	32.44	25.23	1.080
83	6.49	32.44	25.23	1.093
84	6.49	32.44	25.23	1.107
85	6.49	32.44	25.23	1.120
86	6.49	32.44	25.23	1.134
87	6.49	32.44	25.23	1.147
88	6.49	32.44	25.23	1.161
89	6.49	32.44	25.23	1.174
90	6.49	32.44	25.23	1.188
91	6.49	32.44	25.23	1.201
92	6.49	32.44	25.23	1.215
93	6.49	32.44	25.23	1.228
94	6.49	32.44	25.23	1.242
95	6.49	32.44	25.23	1.255
96	6.49	32.44	25.23	1.269
97	6.49	32.44	25.23	1.282
98	6.49	32.44	25.23	1.296
99	6.49	32.44	25.23	1.309
100	6.49	32.44	25.23	1.323
101	6.49	32.44	25.23	1.336
102	6.49	32.44	25.23	1.350
103	6.49	32.44	25.23	1.363
104	6.49	32.44	25.23	1.377
105	6.49	32.44	25.23	1.390
106	6.49	32.44	25.23	1.404
107	6.49	32.44	25.23	1.417
108	6.49	32.44	25.23	1.431
109	6.49	32.44	25.23	1.444
110	6.49	32.44	25.23	1.458
111	6.49	32.44	25.23	1.471
112	6.49	32.44	25.23	1.485
113	6.49	32.44	25.23	1.498
114	6.49	32.44	25.23	1.512
115	6.49	32.44	25.23	1.525
116	6.49	32.44	25.23	1.539
117	6.49	32.44	25.23	1.552
118	6.49	32.44	25.23	1.566
119	6.49	32.44	25.23	1.579
120	6.49	32.44	25.23	1.593
121	6.49	32.44	25.23	1.606
122	6.49	32.44	25.23	1.620
123	6.49	32.44	25.23	1.633
124	6.49	32.44	25.23	1.647
125	6.49	32.44	25.23	1.660
126	6.49	32.44	25.23	1.674
127	6.49	32.44	25.23	1.687
128	6.49	32.44	25.23	1.701
129	6.49	32.44	25.23	1.714
130	6.49	32.44	25.23	1.728
131	6.49	32.44	25.23	1.741
132	6.49	32.44	25.23	1.755
133	6.49	32.44	25.23	1.768
134	6.49	32.44	25.23	1.782
135	6.49	32.44	25.23	1.795
136	6.49	32.44	25.23	1.809
137	6.49	32.44	25.23	1.822
138	6.49	32.44	25.23	1.836
139	6.49	32.44	25.23	1.849
140	6.49	32.44	25.23	1.863
141	6.49	32.44	25.23	1.876
142	6.49	32.44	25.23	1.890
143	6.49	32.44	25.23	1.903
144	6.49	32.44	25.23	1.917
145	6.49	32.44	25.23	1.930
146	6.49	32.44	25.23	1.944
147	6.49	32.44	25.23	1.957
148	6.49	32.44	25.23	1.971
149	6.49	32.44	25.23	1.984
150	6.49	32.44	25.23	1.998
151	6.49	32.44	25.23	2.011
152	6.49	32.44	25.23	2.025
153	6.49	32.44	25.23	2.038
154	6.49	32.44	25.23	2.052
155	6.49	32.44	25.23	2.065
156	6.49	32.44	25.23	2.079
157	6.49	32.44	25.23	2.092
158	6.49	32.44	25.23	2.106
159	6.49	32.44	25.23	2.119
160	6.49	32.44	25.23	2.133
161	6.49	32.44	25.23	2.146
162	6.49	32.44	25.23	2.160
163	6.49	32.44	25.23	2.173
164	6.49	32.44	25.23	2.187
165	6.49	32.44	25.23	2.200
166	6.49	32.44	25.23	2.214
167	6.49	32.44	25.23	2.227
168	6.49	32.44	25.23	2.241
169	6.49	32.44	25.23	2.254
170	6.49	32.44	25.23	2.268
171	6.49	32.44	25.23	2.281
172	6.49	32.44	25.23	2.295
173	6.48	33.71	26.02	

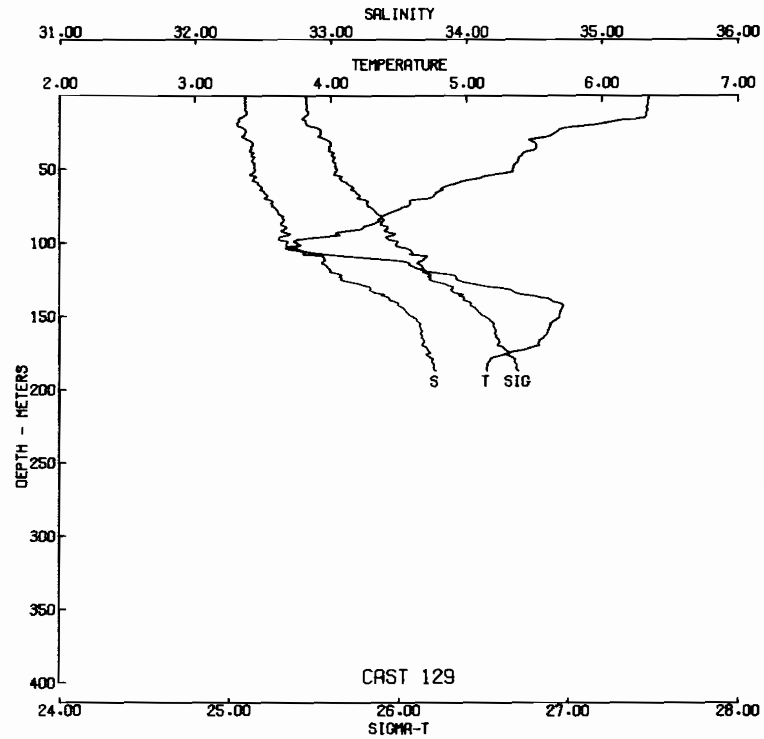
CAST WEGOA-2-PN-127 DATE 13 MAY 75 TIME 0302 GMT
LAT 59 26.6N LONG 141 51.34 WEATHER 1 SEA STATE 3
BAROMETER 29 WIND DIR 69.7 SPD 16 KT VISIBILITY 9
CLOUD 0 AMOUNT 2 DRY 36.7 WET 35.6 DEPTH 183. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
1	6.31	32.42	25.24	.000
2	6.31	32.43	25.24	.014
3	6.31	32.42	25.24	.027
4	6.31	32.43	25.24	.041
5	6.31	32.43	25.24	.054
6	6.31	32.43	25.24	.068
7	6.31	32.43	25.24	.081
8	6.31	32.43	25.24	.095
9	6.31	32.43	25.24	.108
10	6.31	32.43	25.24	.122
11	6.31	32.43	25.24	.135
12	6.31	32.43	25.24	.149
13	6.31	32.43	25.24	.162
14	6.31	32.43	25.24	.176
15	6.31	32.43	25.24	.189
16	6.31	32.43	25.24	.203
17	6.31	32.43	25.24	.216
18	6.31	32.43	25.24	.230
19	6.31	32.43	25.24	.243
20	6.31	32.43	25.24	.257
21	6.31	32.43	25.24	.270
22	6.31	32.43	25.24	.284
23	6.31	32.43	25.24	.297
24	6.31	32.43	25.24	.311
25	6.31	32.43	25.24	.324
26	6.31	32.43	25.24	.338
27	6.31	32.43	25.24	.351
28	6.31	32.43	25.24	.365
29	6.31	32.43	25.24	.378
30	6.31	32.43	25.24	.392
31	6.31	32.43	25.24	.405
32	6.31	32.43	25.24	.419
33	6.31	32.43	25.24	.432
34	6.31	32.43	25.24	.446
35	6.31	32.43	25.24	.459
36	6.31	32.43	25.24	.473
37	6.31	32.43	25.24	.486
38	6.31	32.43	25.24	.500
39	6.31	32.43	25.24	.513
40	6.31	32.43	25.24	.527
41	6.31	32.43	25.24	.540
42	6.31	32.43	25.24	.554
43	6.31	32.43	25.24	.567
44	6.31	32.43	25.24	.581
45	6.31	32.43	25.24	.594
46	6.31	32.43	25.24	.608
47	6.31	32.43	25.24	.621
48	6.31	32.43	25.24	.635
49	6.31	32.43	25.24	.648
50	6.31	32.43	25.24	.662
51	6.31	32.43	25.24	.675
52	6.31	32.43	25.24	.689
53	6.31	32.43	25.24	.702
54	6.31	32.43	25.24	.716
55	6.31	32.43	25.24	.729
56	6.31	32.43	25.24	.743
57	6.31	32.43	25.24	.756
58	6.31	32.43	25.24	.770
59	6.31	32.43	25.24	.783
60	6.31	32.43	25.24	.797
61	6.31	32.43	25.24	.810
62	6.31	32.43	25.24	.824
63	6.31	32.43	25.24	.837
64	6.31	32.43	25.24	.851
65	6.31	32.43	25.24	.864
66	6.31	32.43	25.24	.878
67	6.31	32.43	25.24	.891
68	6.31	32.43	25.24	.905
69	6.31	32.43	25.24	.918
70	6.31	32.43	25.24	.932
71	6.31	32.43	25.24	.945
72	6.31	32.43	25.24	.959
73	6.31	32.43	25.24	.972
74	6.31	32.43	25.24	.986
75	6.31	32.43	25.24	.999
76	6.31	32.43	25.24	1.013
77	6.31	32.43	25.24	1.026
78	6.31	32.43	25.24	1.040
79	6.31	32.43	25.24	1.053
80	6.31	32.43	25.24	1.067
81	6.31	32.43	25.24	1.080
82	6.31	32.43	25.24	1.094
83	6.31	32.43	25.24	1.107
84	6.31	32.43	25.24	1.121
85	6.31	32.43	25.24	1.134
86	6.31	32.43	25.24	1.148
87	6.31	32.43	25.24	1.161
88	6.31	32.43	25.24	1.175
89	6.31	32.43	25.24	1.188
90	6.31	32.43	25.24	1.202
91	6.31	32.43	25.24	1.215
92	6.31	32.43	25.24	1.229
93	6.31	32.43	25.24	1.242
94	6.31	32.43	25.24	1.256
95	6.31	32.43	25.24	1.269
96	6.31	32.43	25.24	1.283
97	6.31	32.43	25.24	1.296
98	6.31	32.43	25.24	1.310
99	6.31	32.43	25.24	1.323
100	6.31	32.43	25.24	1.337
101	6.31	32.43	25.24	1.350
102	6.31	32.43	25.24	1.364
103	6.31	32.43	25.24	1.377
104	6.31	32.43	25.24	1.391
105	6.31	32.43	25.24	1.404
106	6.31	32.43	25.24	1.418
107	6.31	32.43	25.24	1.431
108	6.31	32.43	25.24	1.445
109	6.31	32.43	25.24	1.458
110	6.31	32.43	25.24	1.472
111	6.31	32.43	25.24	1.485
112	6.31	32.43	25.24	1.499
113	6.31	32.43	25.24	1.512
114	6.31	32.43	25.24	1.526
115	6.31	32.43	25.24	1.539
116	6.31	32.43	25.24	1.553
117	6.31	32.43	25.24	1.566
118	6.31	32.43	25.24	1.580
119	6.31	32.43	25.24	1.593
120	6.31	32.43	25.24	1.607
121	6.31	32.43	25.24	1.620
122	6.31	32.43	25.24	1.634
123	6.31	32.43	25.24	1.647
124	6.31	32.43	25.24	1.661
125	6.31	32.43	25.24	1.674
126	6.31	32.43	25.24	1.688
127	6.31	32.43	25.24	1.701
128	6.31	32.43	25.24	1.715
129	6.31	32.43	25.24	1.728
130	6.31	32.43	25.24	1.742
131	6.31	32.43	25.24	1.755
132	6.31	32.43	25.24	1.769
133	6.31	32.43	25.24	1.782
134	6.31	32.43	25.24	1.796
135	6.31	32.43	25.24	1.809
136	6.31	32.43	25.24	1.823
137	6.31	32.43	25.24	1.836
138	6.31	32.43	25.24	1.850
139	6.31	32.43	25.24	1.863
140	6.31	32.43	25.24	1.877
141	6.31	32.43	25.24	1.890
142	6.31	32.43	25.24	1.904
143	6.31	32.43	25.24	1.917
144	6.31	32.43	25.24	1.931
145	6.31	32.43	25.24	1.944
146	6.31	32.43	25.24	1.958
147	6.31	32.43	25.24	1.971
148	6.31	32.43	25.24	1.985
149	6.31	32.43	25.24	1.998
150	6.31	32.43	25.24	2.012
151	6.31	32.43	25.24	2.025
152	6.31	32.43	25.24	2.039
153	6.31	32.43	25.24	2.052
154	6.31	32.43	25.24	2.066
155	6.31	32.43	25.24	2.079
156	6.31	32.43	25.24	2.093
157	6.31	32.43	25.24	2.106
158	6.31	32.43	25.24	2.120
159	6.31	32.43	25.24	2.133
160	6.31	32.43	25.24	2.147
161	6.31	32.43	25.24	2.160
162	6.31	32.43	25.24	2.174
163	6.31	32.43	25.24	2.187
164	6.31	32.43	25.24	2.201
165	6.31	32.43	25.24	2.214
166	6.31	32.43	25.24	2.228
167	6.31	32.43	25.24	2.241
168	6.31	32.43	25.24	2.255
169	6.31	32.43	25.24	2.268
170	6.31	32.43	25.24	2.282
171	6.31	32.43	25.24	2.295
172	6.31	32.43	25.24	2.309
173	6.31	32.43	25.24	2.322
174	6.31	32.43	25.24	2.336
175	6.31	32.43	25.24	2.349
176	6.31	32.43	25.24	2.363
177	6.31	32.43	25.24	2.376
178	6.31	32.43	25.24	2.390
179	6.31	32.43	25.24	2.403
180	6.31	32.43	25.24	2.417
181	6.31	32.43	25.24	2.430
182	6.31	32.43	25.24	2.444
183	6.34	33.71	26.04	



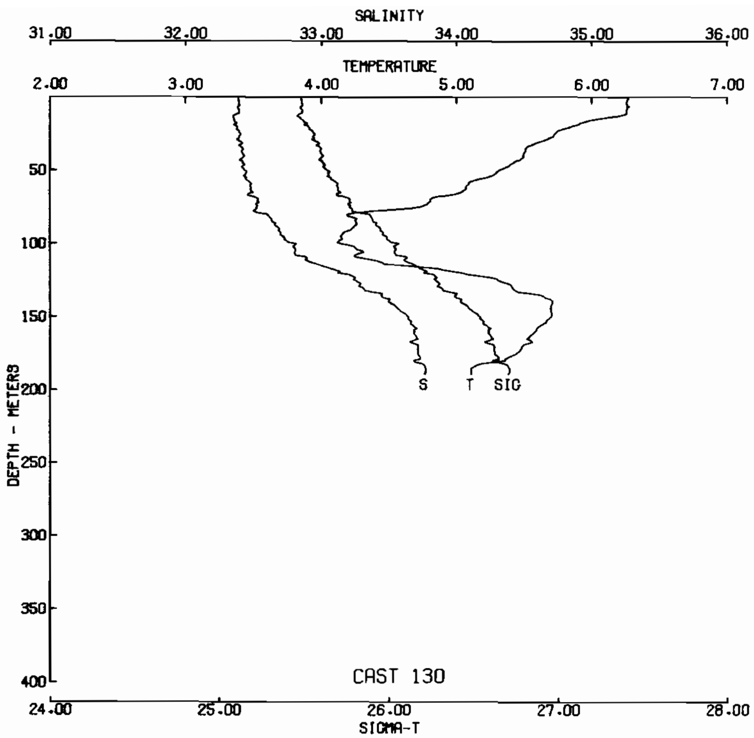
CAST NEGOA-2-PN-128 DATE 13 MAY 75 TIME 5231 GMT
LAT 59 29.5N LONG 141 52.5W WEATHER 1 SEA STATE 3
BAROMETER 24 WIND DIR 090 T SPD 12 KT VISIBILITY 9
CLOUD L AMOUNT 2 DRY 5.6 WET 5.6 DEPTH 188. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.65	32.22	25.43	.000
5	5.65	32.23	25.43	.013
10	5.59	32.21	25.42	.026
15	5.58	32.23	25.44	.038
20	5.62	32.20	25.43	.051
25	5.63	32.34	25.52	.064
30	5.59	32.37	25.55	.076
35	5.52	32.41	25.59	.088
40	5.59	32.42	25.59	.100
45	5.45	32.43	25.59	.112
50	5.29	32.35	25.57	.124
75	4.24	32.94	25.33	.182
100	4.18	32.73	25.39	.235
150	5.08	33.63	26.51	.322
183	5.21	33.74	26.67	



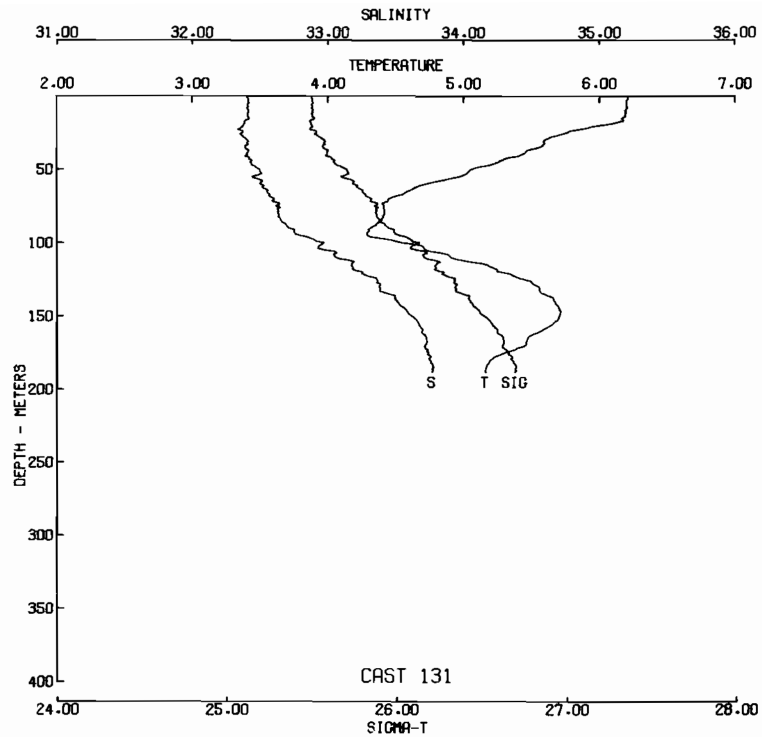
CAST NEGOA-2-PN-129 DATE 13 MAY 75 TIME 0407 GMT
LAT 59 24.3N LONG 141 55.0W WEATHER 1 SEA STATE 3
BAROMETER 24 WIND DIR 090 T SPD 12 KT VISIBILITY 9
CLOUD 5 AMOUNT 4 DRY 5.6 WET 5.6 DEPTH 190. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.34	32.36	25.45	.000
5	6.34	32.36	25.45	.013
10	6.33	32.37	25.46	.025
15	6.32	32.34	25.44	.038
20	5.95	32.31	25.46	.051
25	5.66	32.37	25.54	.063
30	5.46	32.38	25.57	.075
35	5.51	32.41	25.59	.087
40	5.41	32.42	25.61	.099
45	5.38	32.42	25.61	.111
50	5.34	32.44	25.63	.123
75	4.56	32.55	25.82	.181
100	3.74	32.68	25.99	.233
150	5.09	33.63	26.50	.323
187	5.15	33.77	26.71	



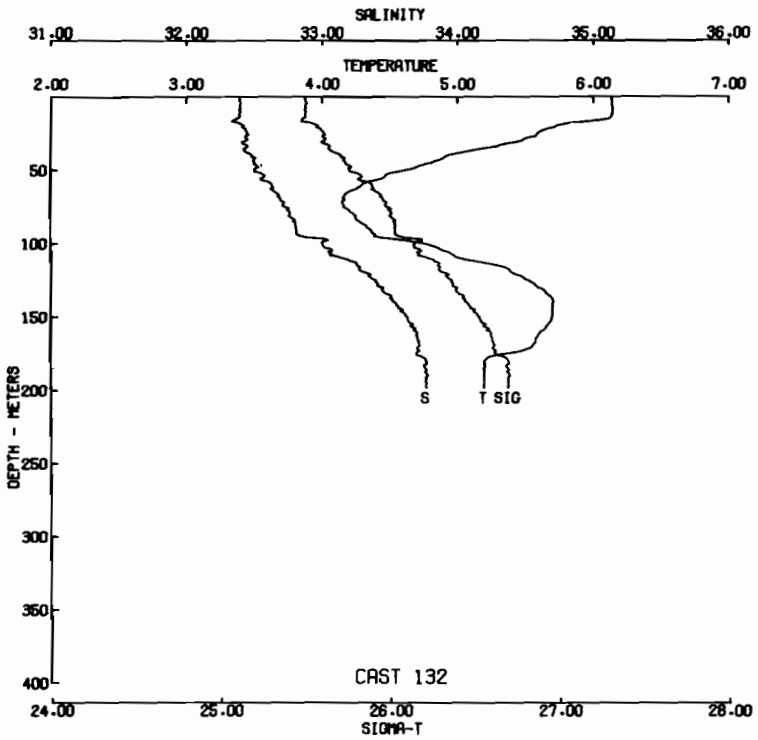
CAST NEGOA-2-PN-130 DATE 13 MAY 75 TIME 0436 GMT
LAT 59 24.2N LONG 141 56.5W WEATHER 1 SEA STATE 3
BAROMETER 24 WIND DIR 090 T SPD 12 KT VISIBILITY 9
CLOUD 5 AMOUNT 4 DRY 05.6 WET 05.0 DEPTH 194. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.27	32.33	25.47	.000
5	6.26	32.39	25.48	.013
10	6.26	32.39	25.48	.025
15	6.25	32.35	25.46	.038
20	5.86	32.37	25.52	.050
25	5.72	32.43	25.56	.062
30	5.63	32.33	25.56	.075
35	5.51	32.42	25.60	.087
40	5.49	32.43	25.61	.099
45	5.41	32.42	25.61	.111
50	5.31	32.43	25.63	.123
75	4.73	32.52	25.76	.180
100	4.24	32.81	26.06	.233
150	5.69	33.64	26.54	.322
183	5.13	33.76	26.70	



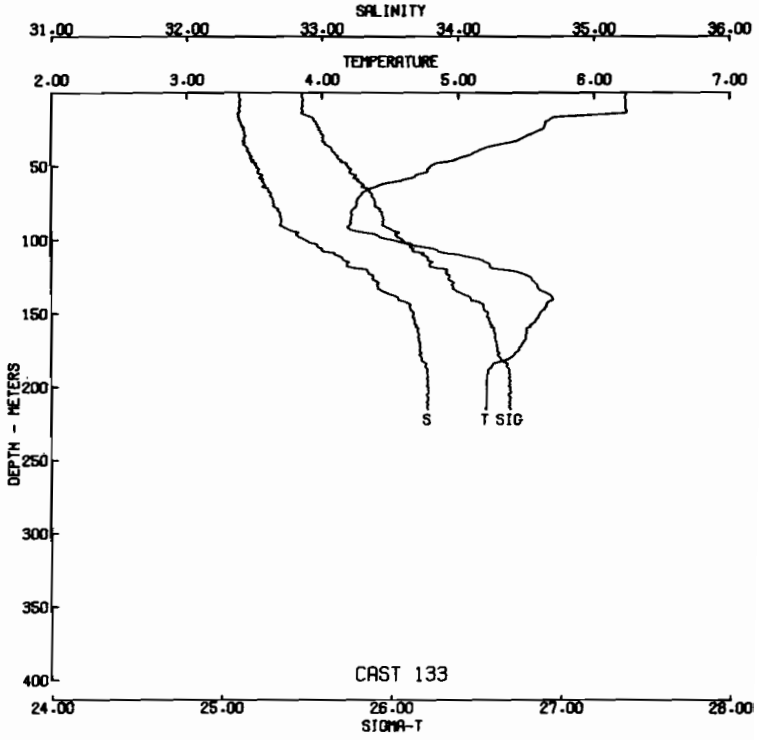
CAST NEGOA-2-PN-131 DATE 13 MAY 75 TIME 0509 GMT
LAT 59 23.6N LONG 141 57.4W WEATHER 1 SEA STATE 3
BAROMETER 24 WIND DIR 091 T SPD 12 KT VISIBILITY 9
CLOUD 5 AMOUNT 4 DRY 05.6 WET 05.0 DEPTH 200. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.21	32.41	25.50	.000
1	6.21	32.40	25.50	
5	6.20	32.41	25.51	.012
10	6.19	32.41	25.51	.025
15	6.17	32.42	25.52	.037
20	5.82	32.39	25.54	.050
25	5.76	32.37	25.53	.062
30	5.59	32.40	25.57	.074
35	5.56	32.39	25.57	.087
40	5.42	32.40	25.59	.099
45	5.25	32.43	25.63	.111
50	5.05	32.49	25.71	.122
75	4.41	32.61	25.87	.178
100	4.54	32.97	26.14	.236
150	5.70	33.62	26.52	.316
183	5.15	33.76	26.70	



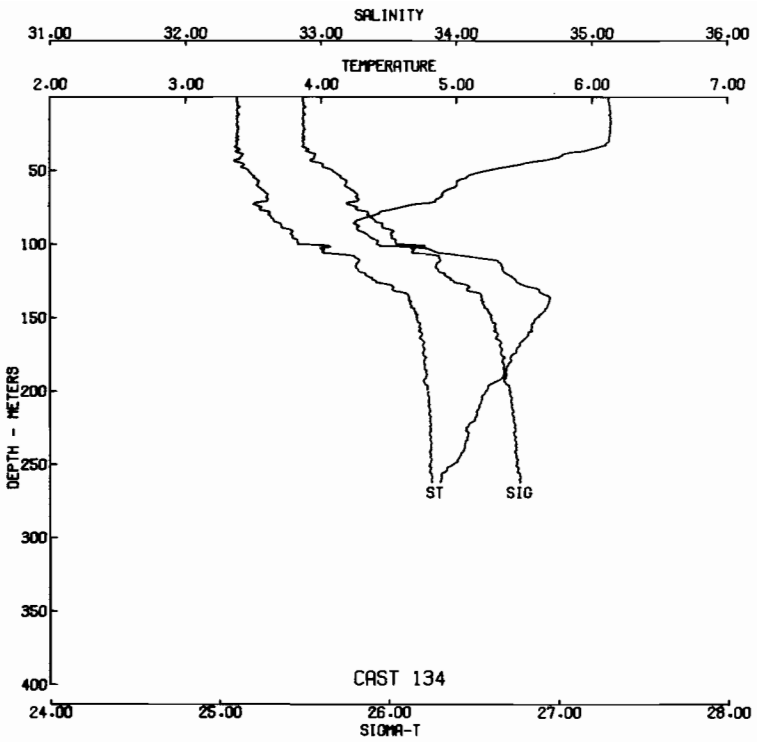
CAST NEGOA-2-RN-132 DATE 13 MAY 75 TIME 0552 GMT
LAT 59 22.2N LONG 141 57.6W WEATHER 1 SEA STATE 3
BAROMETER 29 WIND DIR 065 T SPD 13 KT VISIBILITY 9
CLOUD 5 AMOUNT 4 DRY 05.0 WET 05.0 DEPTH 204. M

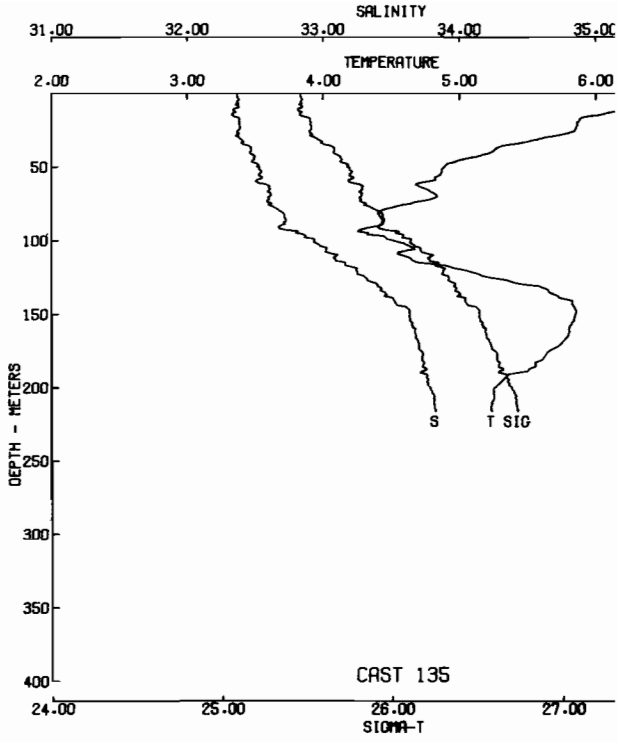
DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.14	32.39	25.56	.000
1	6.14	32.39	25.56	
5	6.14	32.40	25.56	.042
10	6.14	32.39	25.56	.025
15	6.14	32.37	25.55	.037
20	5.73	32.42	25.57	.050
25	5.59	32.44	25.61	.062
30	5.48	32.44	25.62	.074
35	5.42	32.43	25.64	.086
40	4.93	32.48	25.71	.097
45	4.81	32.50	25.74	.109
50	4.82	32.50	25.76	.120
75	4.16	32.72	25.98	.173
100	4.75	33.00	26.14	.225
150	3.69	33.63	26.56	.308
198	3.19	33.76	26.70	



CAST NEGOA-2-RN-133 DATE 13 MAY 75 TIME 0635 GMT
LAT 59 20.4N LONG 141 58.4W WEATHER 1 SEA STATE 3
BAROMETER 29 WIND DIR 075 T SPD 13 KT VISIBILITY 9
CLOUD 5 AMOUNT 4 DRY 05.6 WET 05.6 DEPTH 221. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.23	32.38	25.48	.000
1	6.23	32.38	25.48	
5	6.23	32.39	25.49	.013
10	6.23	32.38	25.48	.025
15	6.66	32.37	25.50	.038
20	6.64	32.39	25.56	.050
25	6.62	32.41	25.58	.062
30	6.59	32.42	25.60	.074
35	6.32	32.41	25.61	.086
40	6.14	32.44	25.66	.098
45	4.99	32.47	25.69	.109
50	4.79	32.51	25.75	.121
75	4.25	32.64	25.92	.175
100	4.50	32.87	26.07	.227
150	3.60	33.67	26.57	.313
200	3.21	33.77	26.70	.384
215	3.23	33.77	26.70	



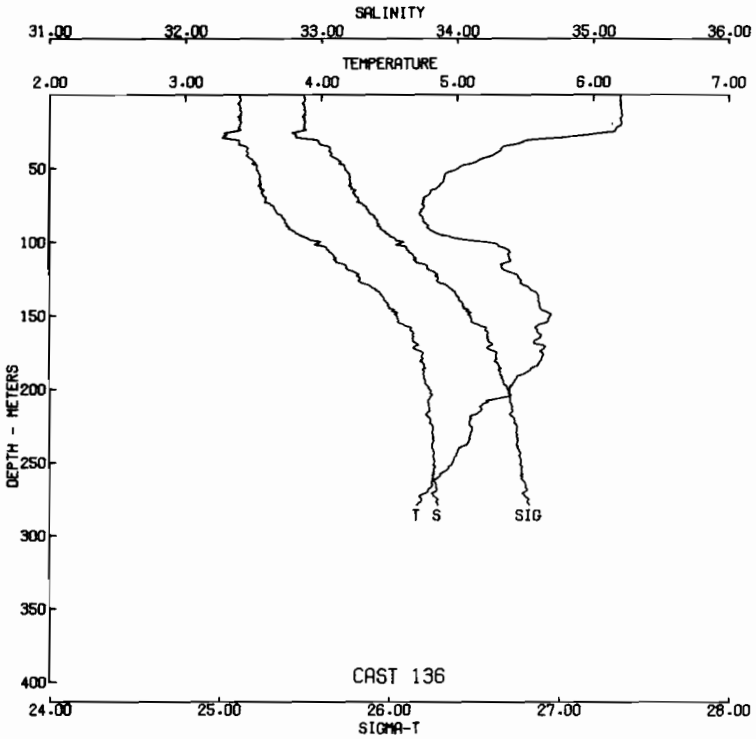


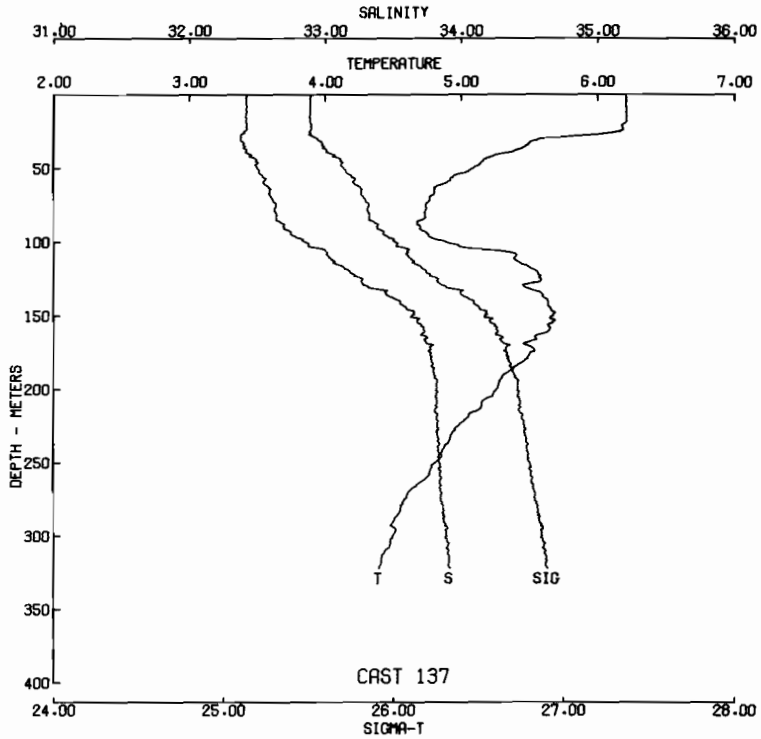
CAST NEGOA-2-PH-134 DATE 13 MAY 75 TIME 0731 GMT
LAT 59 13.6N LONG 141 59.7W WEATHER 1 SEA STATE 3
BAROMETER 23 WIND DIR 270 T SPD 16 KT VISIBILITY 9
CLOUD 5 AMOUNT 4 DRY 55.0 WET 55.0 DEPTH 273. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.14	32.37	25.49	.000
1	6.12	32.37	25.49	
5	6.12	32.38	25.49	.013
10	6.13	32.38	25.49	.025
15	6.14	32.38	25.49	.037
20	6.13	32.38	25.49	.050
25	6.14	32.38	25.49	.062
30	6.12	32.38	25.49	.075
35	6.12	32.39	25.51	.088
40	5.77	32.42	25.56	.100
45	5.64	32.41	25.59	.112
50	5.22	32.46	25.67	.124
75	4.58	32.56	25.81	.188
100	4.46	32.63	25.94	.252
125	3.59	33.71	26.65	.315
150	3.44	33.79	26.72	.385
162	4.30	33.81	26.77	

CAST NEGOA-2-PH-135 DATE 13 MAY 75 TIME 0823 GMT
LAT 59 10.1N LONG 140 52.7W WEATHER 1 SEA STATE 3
BAROMETER 23 WIND DIR 270 T SPD 16 KT VISIBILITY 9
CLOUD 5 AMOUNT 4 DRY 55.0 WET 55.0 DEPTH 231. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.23	32.36	25.46	.000
1	6.23	32.36	25.46	
5	6.23	32.37	25.47	.013
10	6.22	32.37	25.48	.025
15	6.03	32.33	25.46	.038
20	5.86	32.28	25.42	.050
25	5.85	32.28	25.43	.063
30	5.83	32.27	25.44	.075
35	5.37	32.41	25.62	.087
40	5.23	32.46	25.68	.099
45	5.12	32.49	25.71	.110
50	4.89	32.51	25.74	.122
75	4.67	32.62	25.85	.177
100	4.51	32.73	26.01	.229
125	3.85	33.61	26.71	.315
150	3.25	33.78	26.74	.389
216	3.23	33.82	26.73	





CAST NEGDA-2-RN-136 DATE 13 MAY 75 TIME 0911 GMT
LAT 59 14.1N LONG 141 04.0W WEATHER 1 SEA STATE 3
BAROMETER 20 WIND DIR 070 T SPD 16 KT VISIBILITY 5
CLOUD 5 AMOUNT 4 DRY 06.1 WET 05.6 DEPTH 281. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.20	32.40	25.50	.000
1	6.20	32.39	25.49	
5	6.20	32.39	25.49	.012
10	6.20	32.40	25.50	.025
15	6.21	32.39	25.49	.037
20	6.20	32.40	25.50	.050
25	6.15	32.35	25.47	.062
30	5.51	32.37	25.50	.075
35	5.34	32.44	25.63	.087
40	5.28	32.46	25.66	.099
45	5.14	32.50	25.70	.111
50	5.01	32.53	25.74	.122
75	4.75	32.63	25.85	.178
100	5.20	32.99	26.09	.230
150	5.68	33.55	26.47	.318
200	5.38	33.79	26.70	.391
279	4.71	33.86	26.83	

CAST NEGDA-2-RN-137 DATE 13 MAY 75 TIME 1045 GMT
LAT 59 12.1N LONG 142 07.0W WEATHER 1 SEA STATE 3
BAROMETER 20 WIND DIR 065 T SPD 16 KT VISIBILITY 5
CLOUD 5 AMOUNT 4 DRY 06.1 WET 05.6 DEPTH 338. M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.21	32.40	25.50	.000
5	6.21	32.41	25.51	.012
10	6.21	32.42	25.51	.025
15	6.21	32.41	25.50	.037
20	6.19	32.42	25.52	.050
25	6.16	32.40	25.50	.062
30	5.57	32.37	25.55	.074
35	5.47	32.40	25.59	.087
40	5.30	32.43	25.67	.099
45	5.16	32.48	25.69	.110
50	5.09	32.50	25.71	.122
75	4.74	32.64	25.85	.177
100	4.88	32.85	26.01	.230
150	5.67	33.64	26.54	.319
200	5.26	33.82	26.73	.389
300	4.49	33.89	26.88	.518
322	4.39	33.97	26.91	

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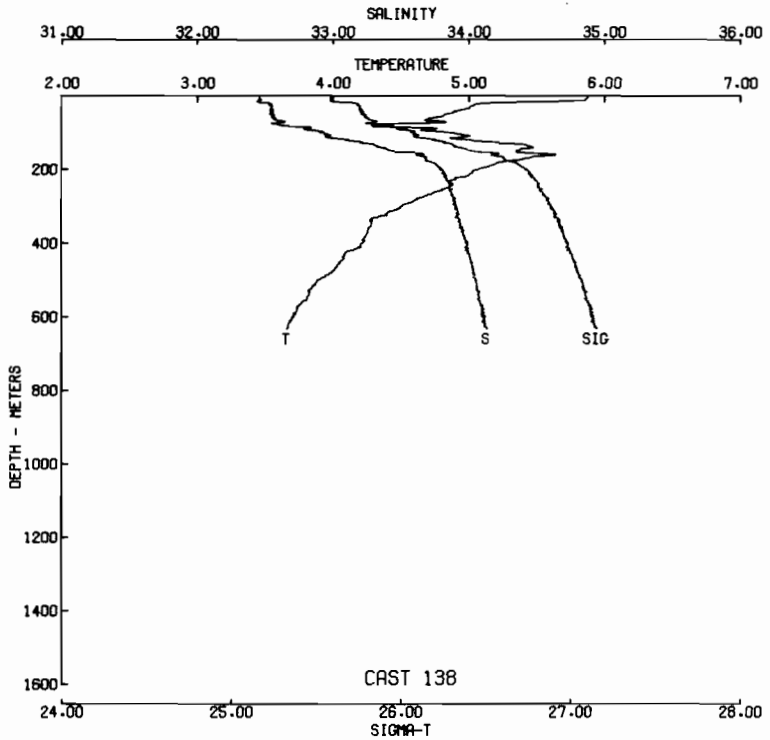
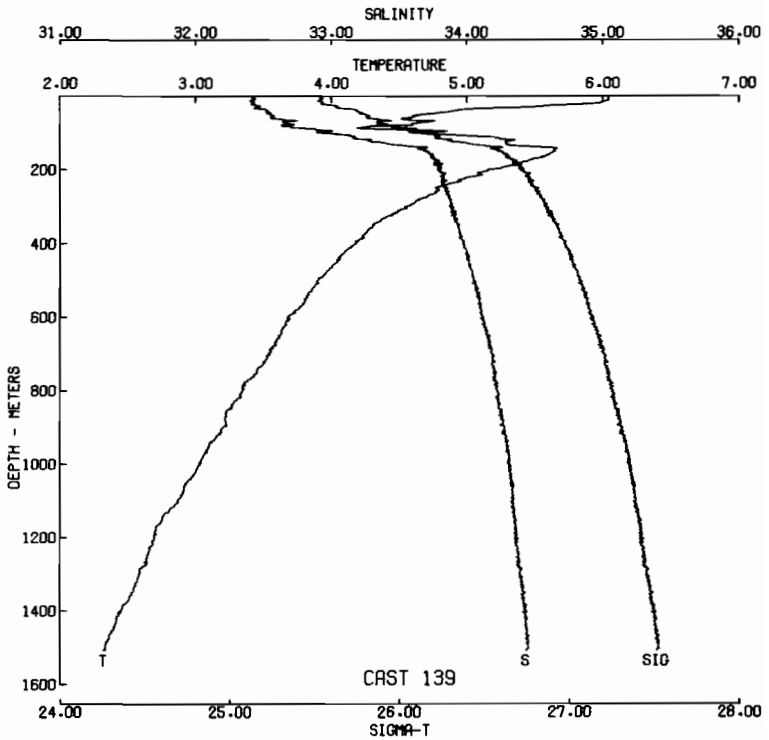


CAST NEGOA-2-RN-138 DATE 13 MAY 75 TIME 1140 GMT
LAT 59 09.9N LONG 142 08.0W WEATHER 4 SEA STATE 4
BAROMETER 20 WIND DIR 080 T SPD 14 KT VISIBILITY 3
CLOUD 5 AMOUNT 4 DRY 06.1 WET 05.6 DEPTH 633. F

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	5.88	32.45	25.58	.000
1	5.88	32.45	25.58	
5	5.87	32.45	25.58	.012
10	5.86	32.46	25.59	.024
15	5.77	32.44	25.59	.036
20	5.15	32.57	25.73	.048
25	5.04	32.64	25.75	.059
30	5.01	32.65	25.76	.071
35	5.00	32.64	25.75	.082
40	4.94	32.63	25.75	.093
45	4.85	32.64	25.76	.104
50	4.84	32.63	25.76	.116
75	4.68	32.64	25.79	.171
100	4.43	32.92	26.07	.222
150	5.35	33.43	26.41	.313
200	5.07	33.80	26.74	.395
300	4.50	33.89	26.88	.512
500	3.88	34.04	27.06	.737
631	3.66	34.13	27.15	



CAST NEGOA-2-RN-139 DATE 13 MAY 75 TIME 1242 GMT
LAT 59 08.5N LONG 142 11.0W WEATHER 6 SEA STATE 4
BAROMETER 20 WIND DIR 080 T SPD 14 KT VISIBILITY 3
CLOUD 5 AMOUNT 4 DRY 06.3 WET 05.6 DEPTH 1754 F

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-D (DYN M)
0	6.05	32.42	25.54	.000
1	6.05	32.42	25.53	.012
10	6.04	32.42	25.53	.025
15	6.02	32.41	25.53	.037
20	5.98	32.43	25.55	.049
25	5.71	32.44	25.59	.061
30	5.52	32.47	25.64	.073
35	5.06	32.48	25.69	.085
40	4.92	32.53	25.75	.096
45	4.82	32.55	25.78	.108
50	4.69	32.56	25.80	.119
75	4.61	32.67	25.90	.173
100	4.66	32.91	26.08	.223
150	5.65	33.68	26.55	.307
200	5.16	33.81	26.73	.377
300	4.55	33.87	26.86	.506
500	3.90	34.04	27.06	.731
750	3.44	34.21	27.24	.935
1000	3.03	34.30	27.34	1.128
1250	2.64	34.37	27.43	1.318
1500	2.33	34.44	27.52	1.505
1507	2.32	34.43	27.51	