

CENTRAL CALIFORNIA COASTAL CIRCULATION STUDY

CTD OBSERVATIONS

CRUISE 8401, FEBRUARY 1984

by

Dudley B. Chelton

P. Michael Kosro

Data report / College of Oceanography,
Oregon State University,
Corvallis, Oregon 97331

Data Report 126
Reference 87-02
January 1987

Minerals Management Service
U.S. Department of the Interior
Contract No. 14-12-0001-30020

Raytheon Service Company
Subcontract No. 9330936556

PREFACE

This report represents the first in a series of four data reports on CTD data collected as part of the Central California Coastal Circulation Study (CCCCS). The introductory text of each report summarizes the scope and purpose of CCCCCS, gives an overview of oceanographic and meteorological conditions during the particular CCCCCS survey presented in the report, and summarizes the sampling procedures, calibration and data processing techniques applied to the data. Much of this text is the same for all four reports. However, rather than reference the text of the first report in subsequent reports, all of the details are included in the text of each report. Although this results in a certain amount of redundancy, the advantage is that each report is totally self contained. Most of the differences in the text for the four reports are in the overview of oceanographic and meteorological conditions and the discussion of sampling and calibration procedures. These sections are marked with an asterisk in the Table of Contents.

TABLE OF CONTENTS

Preface	i
Abstract	iii
Introduction	1
*Overview of February 1984 oceanographic and meteorological conditions .	6
*Sampling Procedures	17
*Calibration	19
Data Processing	23
Data Presentation	26
Acknowledgements	32
References	33

Figure Sections

Locations, times, and depths of February 1984 CTD stations

Maps of February 1984 CTD station locations and bathymetry

Data Listings at Selected Depths

Vertical Profiles

Temperature-Salinity Plots

Maps, Full CCCCS Region

Maps, Snapshot 1

Maps, Snapshot 2

Difference Maps, Snapshot 2 minus Snapshot 1

Vertical Sections

Difference Sections, Snapshot 2 minus Snapshot 1

* text in sections marked with an asterisk is different in each of the four CCCCS CTD Data Reports. The other sections are essentially identical for all four reports.

ABSTRACT

CTD observations were made over the continental shelf and upper continental slope from the coast to approximately 60 km off central California between latitudes 34°N and 37.5°N. The measurements were made by Raytheon Service Company as part of the Central California Coastal Circulation Study sponsored by the Minerals Management Service. The objectives of this 18-month field program were to obtain a set of observations of the ocean water mass and velocity fields and develop a detailed description of these fields and their seasonal and shorter period variations. The ultimate goal is to assess the impact of exploitation of offshore oil and gas resources of the outer continental shelf region. This data report contains vertical profiles, horizontal maps at selected depths, and vertical sections of temperature, salinity, σ_t , dynamic height and relative geostrophic velocity from a total of 124 CTD casts made between 31 January 1984 and 10 February 1984.

INTRODUCTION

The Central California Coastal Circulation Study (CCCCS) was an 18-month field program designed to study the variability of water mass characteristics and velocity field on the continental shelf and upper continental slope from Point Conception to San Francisco. This study was funded by the U.S. Department of Interior, Minerals Management Service (MMS) as part of an overall assessment of the impact of development of oil and gas resources on the ecosystem of the California Current System. The region from Point Conception to Point Buchon (100 km to the north), extending 50 km offshore, is of particular interest as this will be the focus of oil and gas exploration and production in the immediate future. However, MMS is also interested in how this region relates to the large scale flow of the California Current System.

Historically, repeated surveys of the California Current System have been conducted since 1949 by the California Cooperative Oceanic Fisheries Investigations (CalCOFI). The primary purpose of these surveys is to gain an understanding of the ecological factors controlling the fisheries in this region and develop a useful fisheries management strategy. The area sampled most intensely by CalCOFI ranges from San Francisco in the north to southern Baja California and extends offshore a distance of approximately 500 km. Hydrographic measurements have been made on a geographically fixed grid with 65 km spacing in both the alongshore and cross-shore directions (somewhat tighter cross-shore spacing nearshore).

The 35-year CalCOFI dataset has been very useful for studies of the seasonal (Reid, Roden and Wyllie, 1958; Lynn, 1967; Hickey, 1979; Chelton, 1984) and interannual (Chelton, Bernal and McGowan, 1982) variability of water mass characteristics and the flow field in this region. However, the relatively coarse 65 km grid spacing has restricted these studies to rather large spatial scales of variability. Finer spatial resolution is necessary to study the fate of pollutants associated with oil and gas development on the outer continental shelf. The purpose of CCCCOS was to collect a set of measurements capable of resolving finer spatial scales and shorter temporal scales than can be studied from the CalCOFI data.

The field work for CCCCS was conducted from February 1984 through July 1985 by Raytheon Service Company. Measurements collected during this 18-month field study can be categorized as:

(a) Measurements and data collected over the entire 18-month period.

Measurements of this type included:

(1) Moored current meter data and bottom pressure gauge measurements (30 minute interval).

(2) Meteorological data (hourly interval).

(3) Sea-level (tide gauge) observations (hourly interval).

(4) Infrared satellite imagery (including all sufficiently clear images).

(b) Measurements and observations related to the episodic sampling of summer, fall and winter seasons (with two winter samplings). Measurements of this type included:

(1) Hydrographic measurements (20 km CTD spacing with XBTs in between).

(2) Lagrangian surface current drifter studies.

The continuous measurements extended from February 1984 through July 1985. The episodic operations took place in February, July and October 1984 and January 1985. A preliminary analysis of the entire CCCCS data set is presented in Chelton, Bernstein, Bratkovich and Kosro (1987). This data report deals only with the CTD hydrographic component of the study for Raytheon cruise 8401 carried out from 31 January 1984 to 10 February 1984.

The CCCCS CTD sampling grid was designed to have approximately 20 km cross-shore station spacing along each of six standard CalCOFI lines between Point Conception and San Francisco (CalCOFI lines 63, 67, 70, 73, 77 and 80). These parallel lines (Fig. 1) are oriented approximately perpendicular to the central California coastline. The CCCCS sampling grid extends offshore from the coast to the standard CalCOFI stations 60 along each line (a distance of approximately 60 km). This coupling to the CalCOFI grid was motivated by the desire to relate the CCCCS measurements to historical data at the same locations.

As discussed previously, the standard CalCOFI lines are separated by 65 km in the alongshore direction. The southern portion of the CCCCS sampling region was sampled more closely in the alongshore direction. The line spacing was approximately 10 km from Point Conception at 34.4°N to Point Buchon at 35.25°N. For the first three surveys (February, July and October 1984), this so-called

CalCOFI Grid and CCCCS Sampling Region

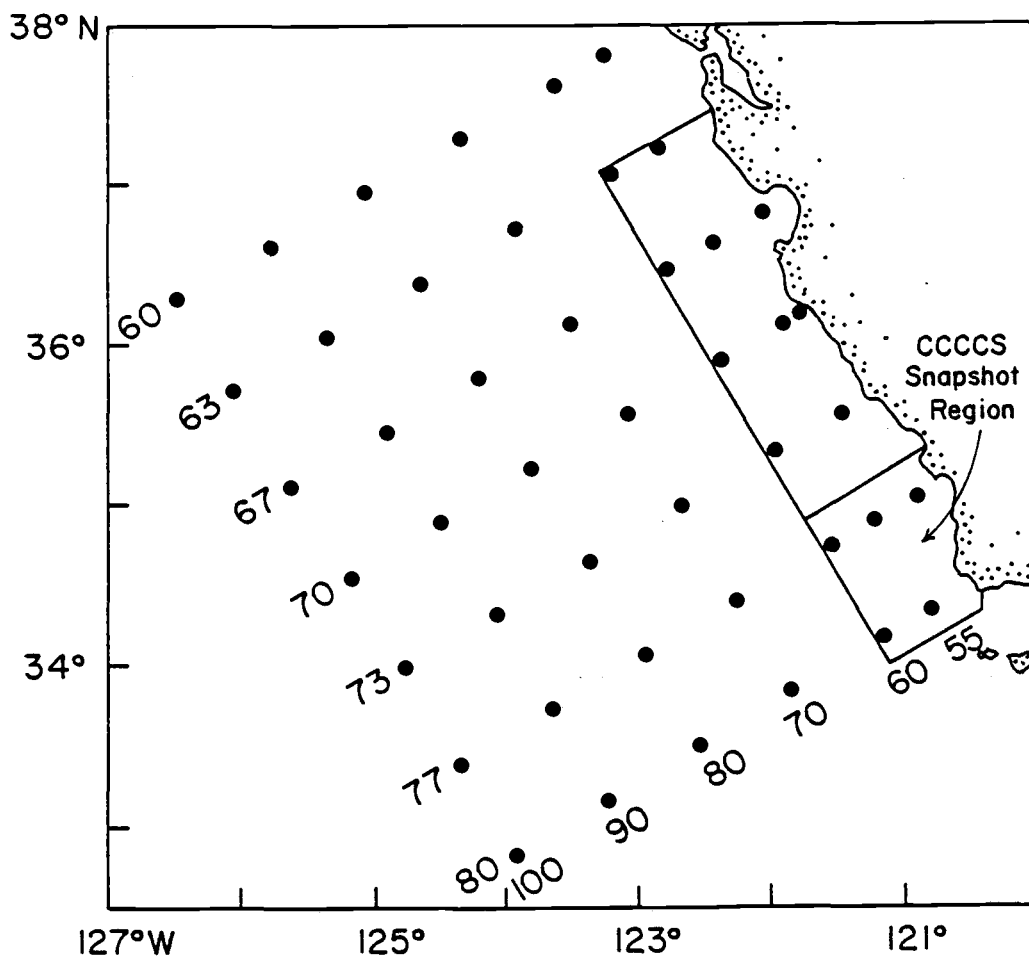


Fig. 1. The standard CalCOFI grid pattern off the central California coast. The numbers at the offshore locations refer to the CalCOFI line numbers. The numbers at the southern locations refer to CalCOFI station numbers along each line. The full CCCCS sample region and the CCCCS snapshot sample region are indicated by the boxed areas.

Table 1. Time, date and Raytheon CTD station number for selected milestones during the February 1984 CCCCS cruise.

Milestone	time (PST)	date	CTD station no.
start of snapshot 1	1950	Jan. 31, 1984	2
end of snapshot 1	0410	Feb. 4, 1984	82
start of snapshot 2	1635	Feb. 4, 1984	102
end of snapshot 2	0540	Feb. 8, 1984	182
last CTD station	0927	Feb. 10, 1984	234

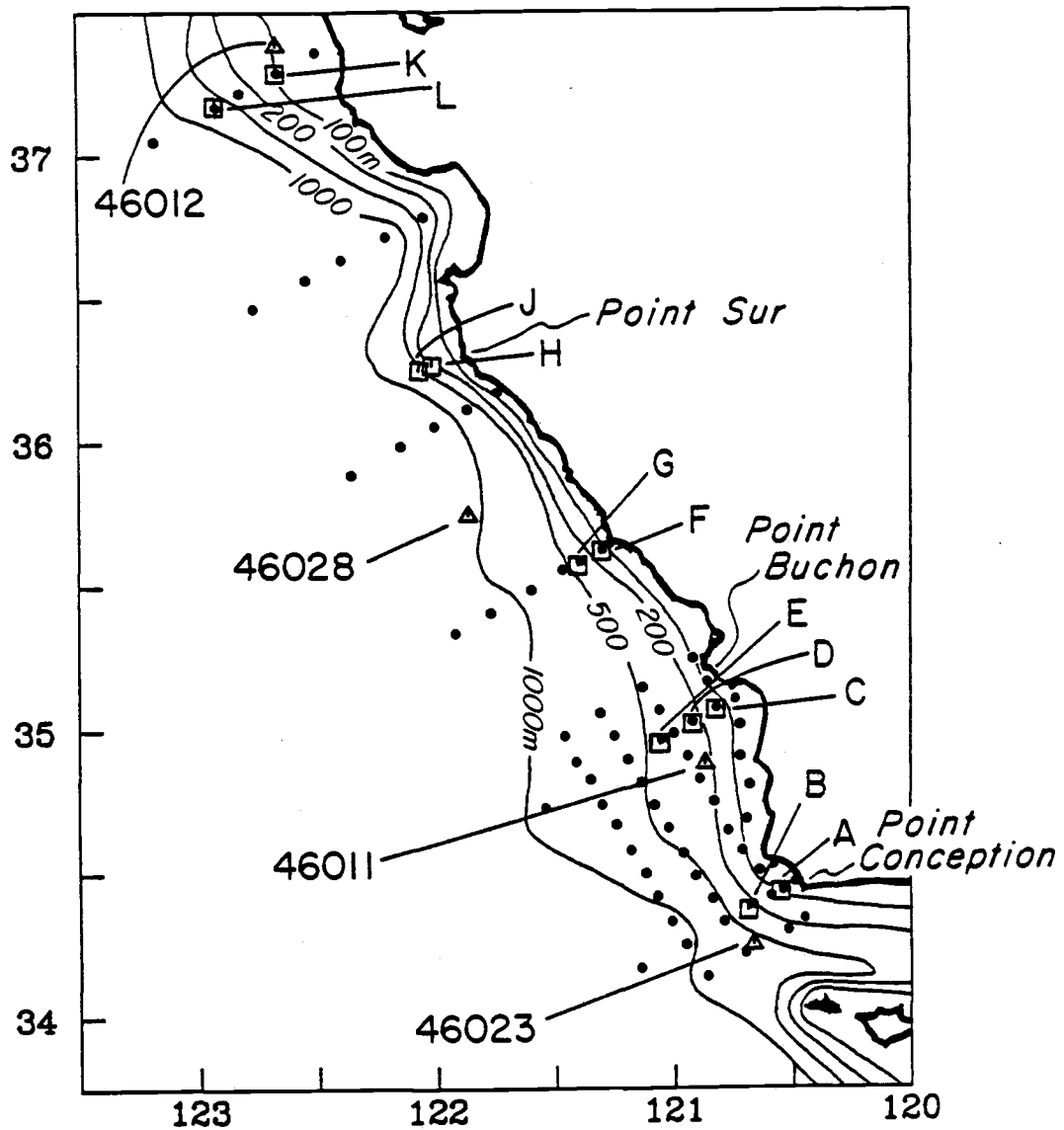


Fig. 2. Map of the CCCCS study region overlaid on depth contours in meters. The dots indicate the locations of CCCCS CTD stations. Current meter moorings are shown by squares and NDBC wind buoys are shown by triangles. Current meter moorings and NDBC buoys are identified by letters and numbers, respectively.

"snapshot region" was sampled twice over an eight day period to investigate how rapidly the water mass and flow field characteristics change in this region. Each CTD station in snapshot 1 was resampled approximately four days later in snapshot 2. For the January 1985 survey, the snapshot region was sampled only once. Some of the important milestones of the February 1984 survey are listed in Table 1.

The relationship between the CCCCS full and snapshot sampling regions and the CalCOFI sampling grid is shown in Fig. 1. The locations of the CCCCS CTD stations for the February 1984 cruise are shown in Fig. 2. Locations of the CCCCS current meter moorings and NDBC wind buoys are shown in the figure as squares and triangles, respectively. For reference, the 100, 200, 500 and 1000 m isobaths for the CCCCS survey region are also shown.

OVERVIEW OF FEBRUARY 1984 OCEANOGRAPHIC AND METEOROLOGICAL CONDITIONS

The seasonal average winds are equatorward throughout the year over the CCCCS sampling region. These equatorward winds are weakest during January and begin to increase in February. The strongest equatorward winds occur in May and June. The average February wind stress is shown in Fig. 3. The cross-shore and alongshore coherences of this large-scale wind field are large. Superimposed on this relatively simple seasonal cycle of wind stress are fluctuating strong poleward and equatorward wind events associated with 2-10 day time scale weather patterns. The frequency and intensity of these short time scale wind events vary from year to year.

Time series of the alongshore component of vector winds and wind stress measured at NDBC buoy 46028 (Fig. 2) during January and February of 1984 are shown in Fig. 4. There were a number of anomalous strong equatorward wind events during the month of January, including a very strong 2 day event on 25-27 January, five days before the start of the February 1984 CCCCS survey. The winds were calm and variable for the first five days of the CCCCS survey. A relatively strong equatorward wind event occurred on 5-6 February and strong equatorward winds were observed during the last two days of the CCCCS survey (9-10 February).

Maps of vector winds measured by a hand-held anemometer on board the ship at most of the February 1984 CCCCS CTD stations during snapshots 1 and 2 are shown in Fig. 5. Consistent with the time series of winds measured at NDBC

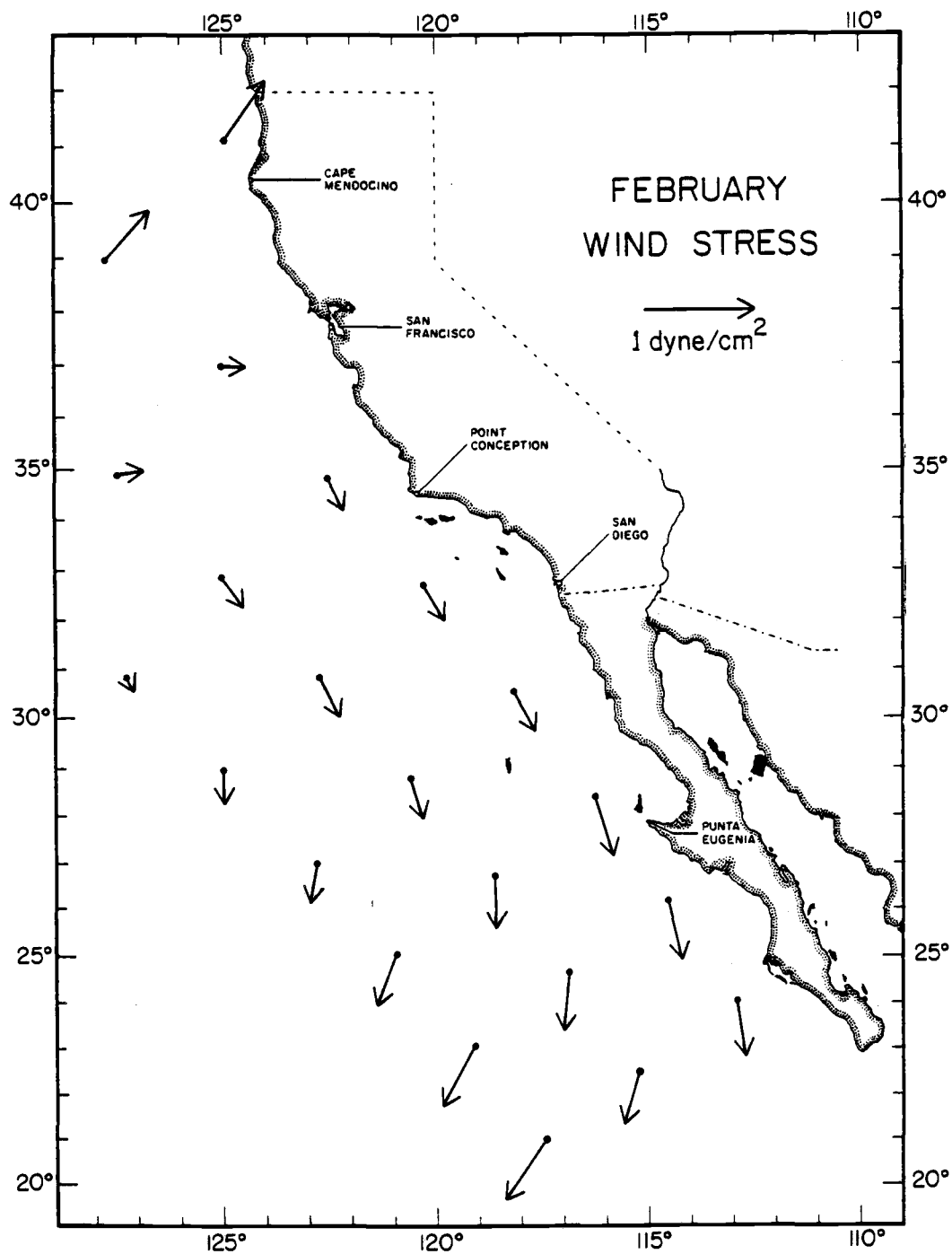


Fig. 3. Map of average seasonal wind stress for the month of February over the California Current region. These wind stresses were calculated at 6-hour intervals from quasi geostrophic vector winds determined from sea level pressure fields generated by Fleet Numerical Oceanography Center. The 6-hourly data were then averaged to obtain monthly averages. The seasonal average was determined from the monthly averages at each grid point by a least squares fit to an annual plus a semiannual harmonic over the period 1946-1976.

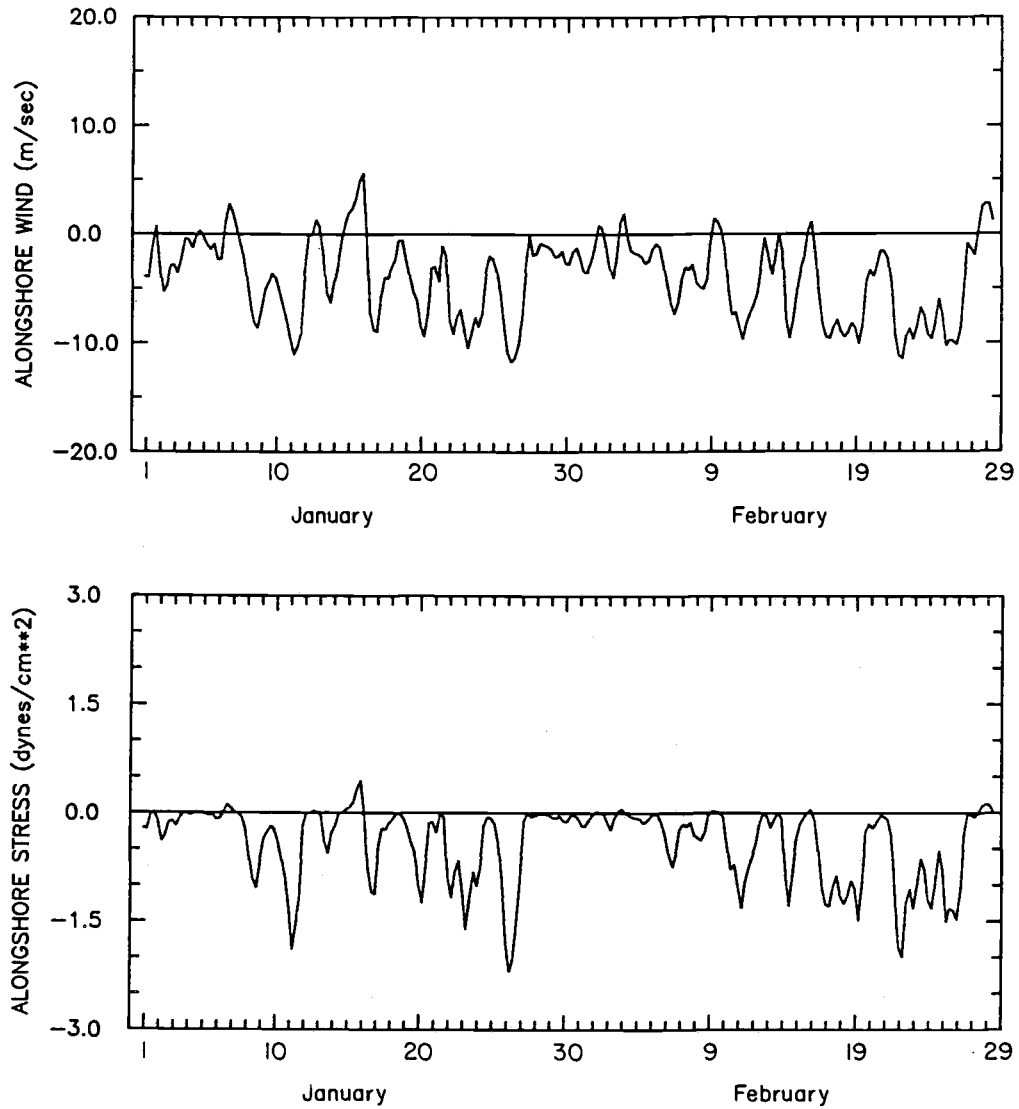


Fig. 4. Time series of the alongshore component (defined to be 325°T) of vector wind and wind stress from measured winds at NDBC buoy 46028 (see Fig. 2) for the period January through February 1984. Negative values indicate equatorward winds. Times are Pacific Standard Time (PST) and tick marks correspond to hour 0000 of the day indicated.

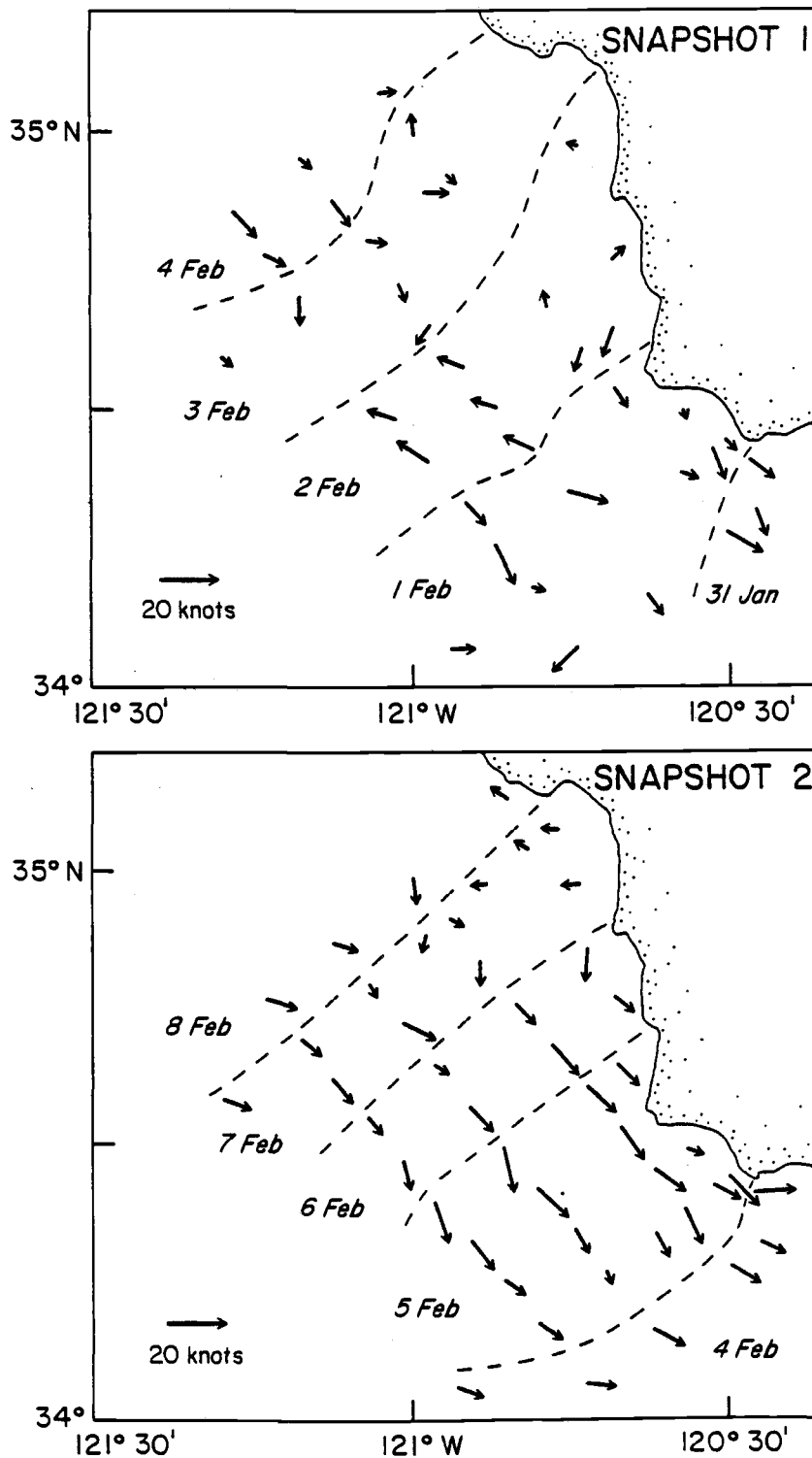


Fig. 5. Maps of vector winds measured by a hand-held anemometer at CTD locations during snapshots 1 and 2 of the February 1984 CCCCS cruise. Dashed lines define day boundaries during the CTD survey. Scale is shown at lower left corner of the maps.

buoy 46028, the maps show that the winds were light and quite variable in both speed and direction during snapshot 1 (the first five days of the survey). During snapshot 2, the winds were much more structured and generally equatorward (except in the northeastern corner of the snapshot region), with wind speeds generally ranging from 10 to 15 knots.

Seasonal variations in the flow field off the central California coast have been described by Reid, Roden and Wyllie (1958), Hickey (1979) and Chelton (1984). In the offshore region (≥ 100 km from the coast), the seasonal average geostrophic surface flow of the California Current is southward year round with the strongest flow from May through July and weakest flow in January-February. Except for March in the seasonal cycle, there is a region of nearshore counterflow present throughout the year just south of Point Conception between the Channel Islands and the coast. This seasonal average nearshore counterflow extends north of Point Conception beginning in September-October and is present everywhere north of 30° latitude from October through February. The poleward nearshore surface counterflow north of Point Conception is known as the Davidson Current. The February seasonal average dynamic height of the surface relative to 500 m is shown in Fig. 6 for the central California Current region. The surface flow is weak and poleward across the inshore 100 km. Beyond approximately 150 km from the coast, the flow is relatively strong and equatorward, with a significant onshore component in the northwest portion of the CalCOFI sample grid.

The seasonal average deep flow of the California Current system (below 150 m) is weak and southwards in the offshore region. There is a nearshore northward flow present in the seasonal cycle throughout the year north of 30° latitude. This undercurrent is strongest in December and weakest in April and flows against the seasonal average surface current from March through August. The February seasonal average dynamic height of the 200 m surface relative to 500 m is shown in Fig. 6 for the central California Current region. The flow at 200 m is weak and poleward over the inshore 100 km, and weak and equatorward beyond 150 km from the coast.

February seasonal average 10 m temperature and salinity in the central California Current region are also shown in Fig. 6. There is a moderately strong temperature front oriented perpendicular to the coast just south of Point Sur near 35.5°N , suggesting a separation of northern subpolar and

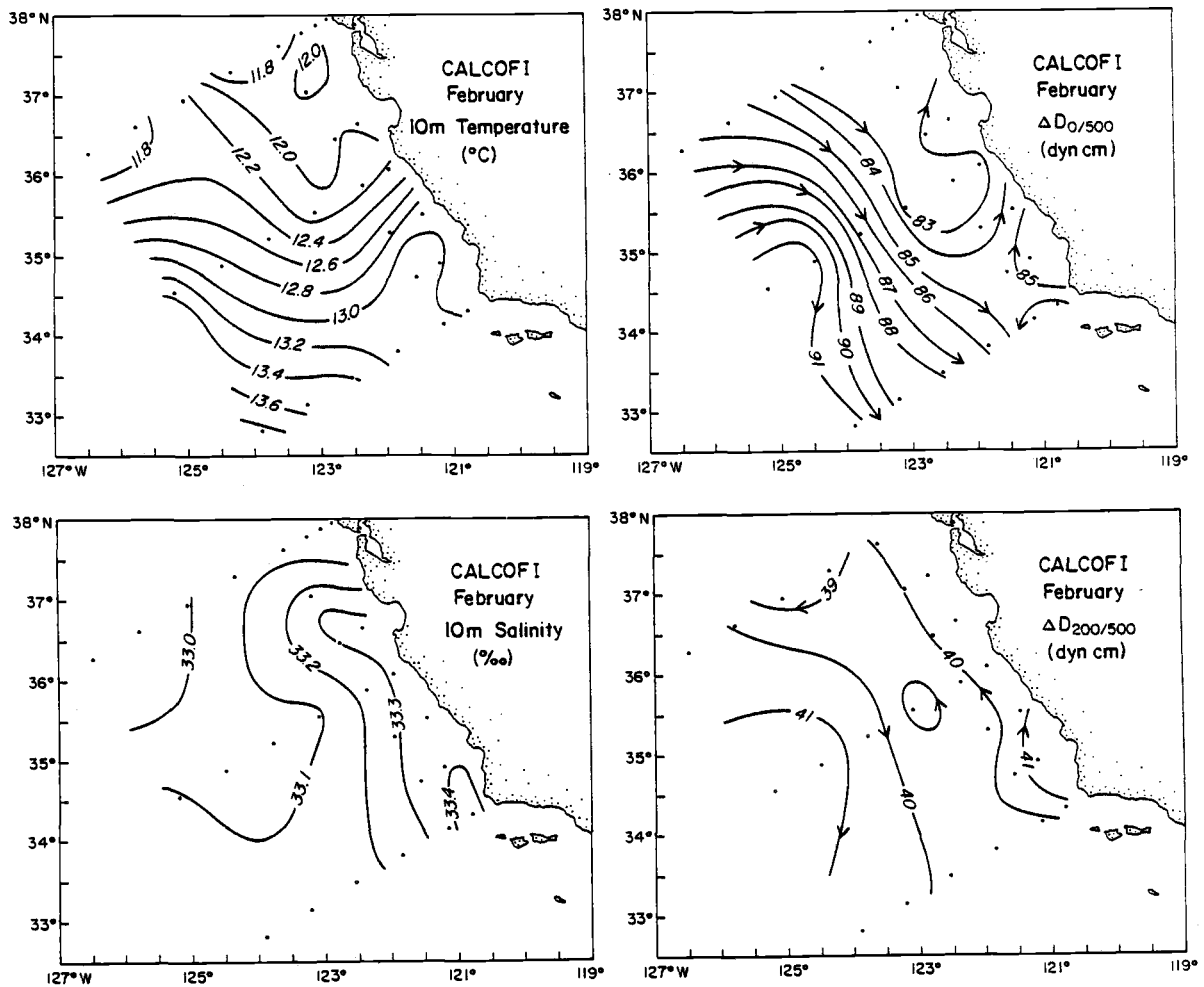


Fig. 6. Seasonal average February temperature and salinity at 10 m depth and dynamic heights of the sea surface and the 200 m surface relative to 500 m for the central California Current region. CalCOFI grid points used are indicated on the plot. The seasonal average was determined at each grid point by a least squares fit to an annual plus a semiannual harmonic over the period 1950-1978.

southern subtropical water masses. The February seasonal average salinity shows clear evidence for the Davidson Current with a broad tongue of high salinity water (33.3‰) near the coast, extending northward from Point Conception to Monterey Bay. Salinities decrease offshore.

These seasonal patterns of the flow field, temperature and salinity smooth out the patterns observed during any particular cruise. There were two CalCOFI hydrographic surveys bracketing the February 1984 CCCCS survey. These data can be used to determine the large scale patterns of temperature, salinity and dynamic height at the time of the CCCCS survey. The first CalCOFI cruise sampled the central portion of the California Current system beginning 12 January, about two and a half weeks before, and ending 25 January, about one week before the start of the CCCCS cruise. The second CalCOFI cruise sampled the same region beginning 9 February, one day before completion, and ending 18 February, about one week after completion of the CCCCS survey.

The January 1984 0/500 m and 200/500 m dynamic heights determined from the CalCOFI data are shown in Fig. 7. The core of the equatorward California Current was located approximately 100 km offshore in the central and northern portion of the sample region. This region of strong flow was deflected offshore at about 35°N . In sharp contrast to the seasonal average geostrophic flow conditions shown in Fig. 6 (which are essentially the same for both January and February), the flow inshore of the core of the California Current was weak and equatorward everywhere. There was no evidence in this CalCOFI data for nearshore poleward surface flow associated with the Davidson Current. The pattern of geostrophic flow at 200 m was essentially the same as at the surface, except reduced in magnitude. There was no evidence for the strong seasonal average poleward undercurrent normally found at this time of year. There was a suggestion of poleward flow at 200 m just north of Point Conception, but the flow was equatorward everywhere else.

Temperature and salinity at 10 m depth from the January 1984 CalCOFI survey are also shown in Fig. 7. In the seasonal cycle, the pattern of 10 m temperature is very similar for January (not shown) and February (Fig. 6), with temperatures slightly warmer (0.1 to 0.4°C) in January. Temperatures during January 1984 were warmer than the seasonal average by 0.8 to 1.5°C over the entire sampling area. These warm temperatures may be remnants from the major El Niño during 1983 along the California Coast (e.g., Lynn, 1983; Simpson,

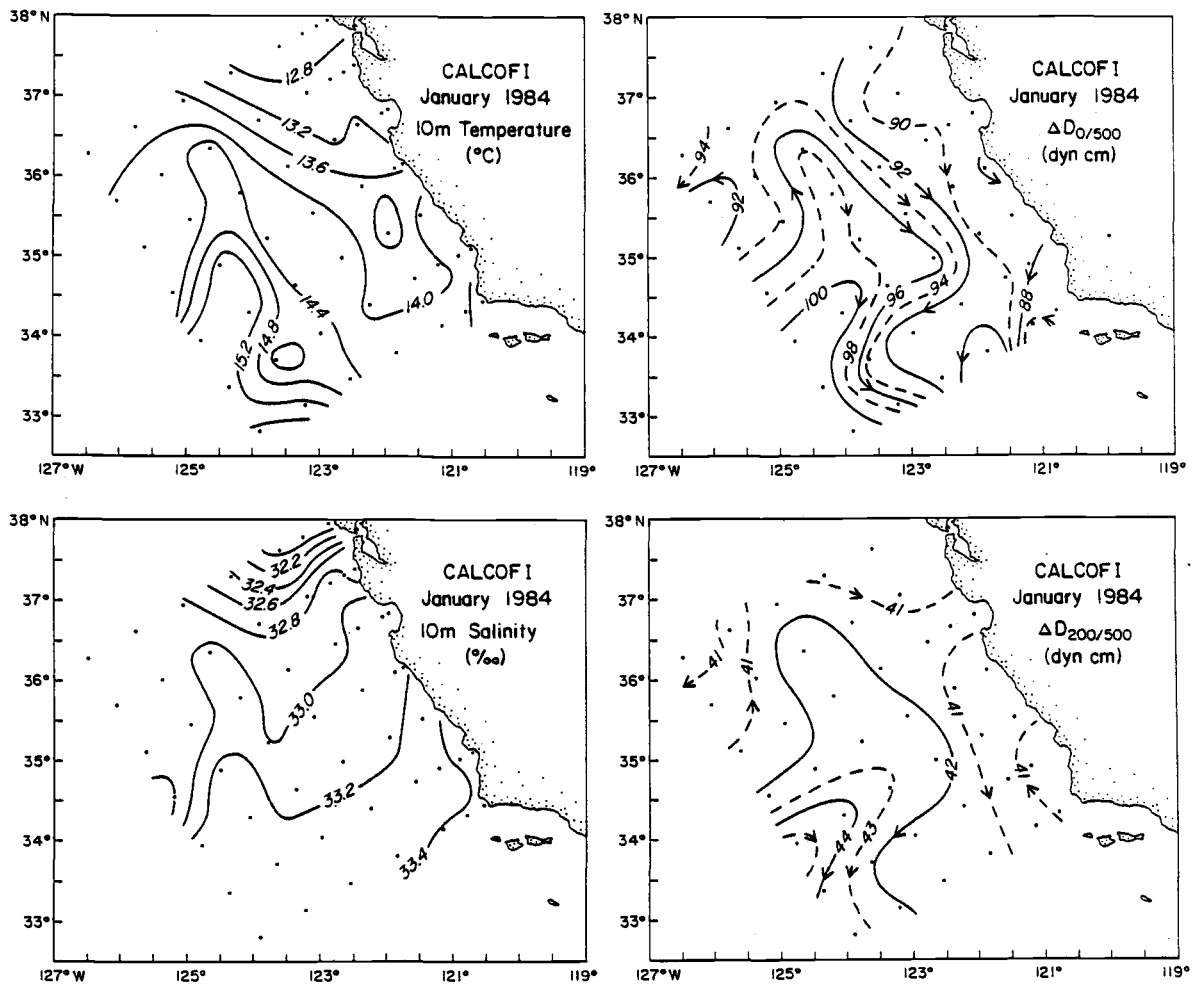


Fig. 7. Maps of temperature and salinity at 10 m depth and dynamic heights of the sea surface and the 200 m surface relative to 500 m determined from the January 1984 CalCOFI data. CalCOFI measurements over this central California Current region were made between 12 and 25 January.

1983; Rienecker and Mooers, 1986). Whereas the January and February seasonal average temperature patterns are characterized by an alongshore temperature gradient near the coast, the January 1984 nearshore temperature field was characterized more by cross-shore gradients. There is evidence for a relatively cool tongue of water from the north extending as far south as 34°N . This tongue was deflected somewhat offshore south of 36°N and there was a tongue of warm water trapped within 50 km of the coast extending northward from Point Conception to 35.5°N . In the offshore region, there was a moderately strong meandering temperature front.

The January 1984 salinity pattern (Fig. 7) also differed remarkably from the seasonal pattern. There was an alongshore gradient in salinity with a pool of very low salinity water nearshore off San Francisco. There was also a narrow tongue of high salinity water trapped within 50 km of the coast, extending northward from Point Conception to about 36°N . The seasonal pattern for February is characterized more by a broad tongue of high salinity water extending poleward with highest values near the coast (Fig. 6).

The February 1984 0/500 m and 200/500 m dynamic heights determined from the CalCOFI data are shown in Fig. 8. The surface geostrophic flow was essentially the same as during the January CalCOFI survey. The flow was equatorward everywhere with the core located approximately 100 km offshore and deflected offshore at about 35°N . There was no evidence for nearshore poleward flow associated with the Davidson Current normally found at this time of year. The geostrophic flow at 200 m was also essentially the same as during the January 1984 CalCOFI survey. The flow pattern resembled the geostrophic flow at the surface, except reduced in magnitude, with no evidence for a poleward undercurrent.

The February 1984 temperature pattern at 10 m (Fig. 8) had evolved somewhat from the January CalCOFI survey. The tongue of cold water from the north was broader and displaced farther offshore. The narrow tongue of warm water trapped near the coast in January was no longer present in February.

The February 1984 salinity pattern at 10 m (Fig. 8) had also evolved since the time of the January CalCOFI survey. The low salinity water nearshore at the northernmost stations in January had spread southward as far as 35°N as a broad tongue centered approximately 100 km offshore. Inshore of this low salinity water was a tongue of high salinity water trapped within about 75 km

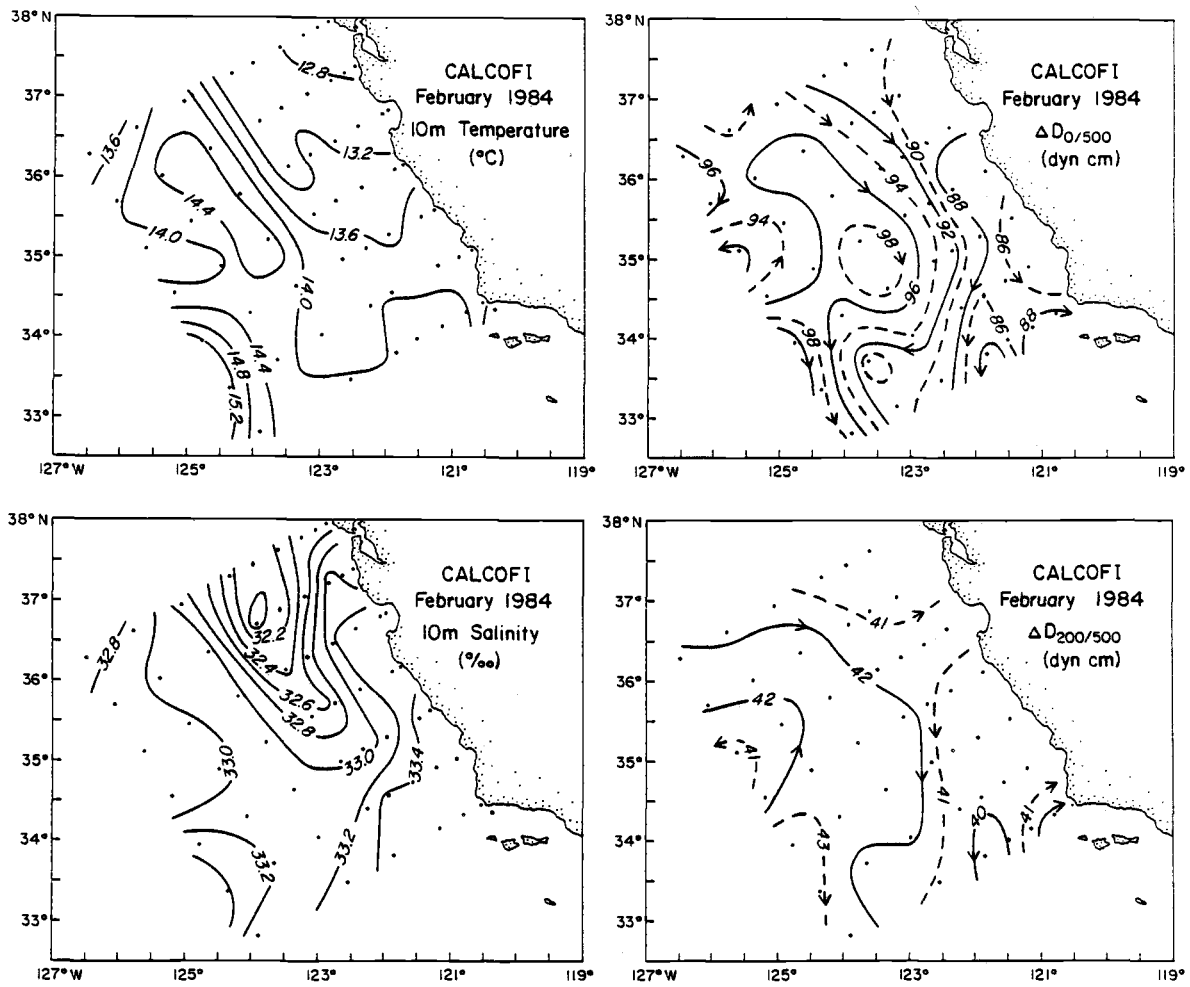


Fig. 8. Maps of temperature and salinity at 10 m depth and dynamic heights of the sea surface and the 200 m surface relative to 500 m determined from the February 1984 CalCOFI data. CalCOFI measurements over this central California Current region were made between 9 and 18 February.

of the coast and extending northward from Point Conception to San Francisco Bay. This tongue of high salinity water had only reached as far north as Point Sur at 36°N in the January survey.

From the CCCCS hydrographic data maps presented in later sections of this report, it can be seen that there are several important differences between fields constructed from the CCCCS data and the CalCOFI data shown in Figs. 7 and 8. The 10 m temperature pattern during the CCCCS survey was similar to that observed during the February CalCOFI survey. There was no evidence for the coastally trapped tongue of warm water extending north from Point Conception as in the January CalCOFI survey. The salinity field showed considerably more structure than that inferred from the CalCOFI data. Part of this is certainly attributable to the coarser CalCOFI station spacing. The low salinity tongue trapped near the coast extended as far north as Monterey Bay during the CCCCS survey. The poleward extent of this low salinity tongue was about half way between the poleward extents observed in the January and February CalCOFI surveys.

The most notable differences between the CalCOFI and CCCCS data are in the dynamic height fields. Whereas there was no evidence for nearshore poleward flow in either the January or February CalCOFI data, the CCCCS data clearly show a strong poleward flow along the entire central California coast. This poleward flow was very narrow and trapped within 30 km of the coast. A narrow poleward undercurrent was also apparent in the CCCCS data. There is a suggestion of an offshore jet-like feature near Point Sur, although the detailed spatial structure of this feature is not resolved in the alongshore direction by the CCCCS data. This offshore jet is consistent with the offshore deflection of the cold water tongue from the north in the CalCOFI surveys.

The significant differences in the flow fields inferred from the CCCCS and CalCOFI data are somewhat surprising. Although there was no evidence for poleward flow in the CalCOFI dynamic heights, the coastally-trapped tongue of high salinity water during the January and February 1984 CalCOFI surveys is consistent with poleward flow nearshore. The differences between flow fields inferred from CalCOFI and CCCCS data may be due to coarse station spacing in the CalCOFI surveys. The width of the nearshore poleward jet is only about 30 km and is thus restricted to the inshore one or two CalCOFI stations.

Finally, for reference we show in Fig. 9 an infrared satellite image taken on 6 February 1984, in the middle of the CCCCS survey. In this image, a meandering tongue of warm water extending northward from Point Conception is clearly evident as far north as about 37°N. These features are suggestive of poleward flow, consistent with the geostrophic flow field inferred from the CCCCS data. There is considerable spatial structure in these temperature patterns. Note that there is no evidence of a cold filament at Point Sur associated with the offshore jet-like feature inferred from the CCCCS dynamic height data. The offshore region is covered with clouds so it is not possible to identify the moderately strong meandering temperature front observed during the two CalCOFI cruises.

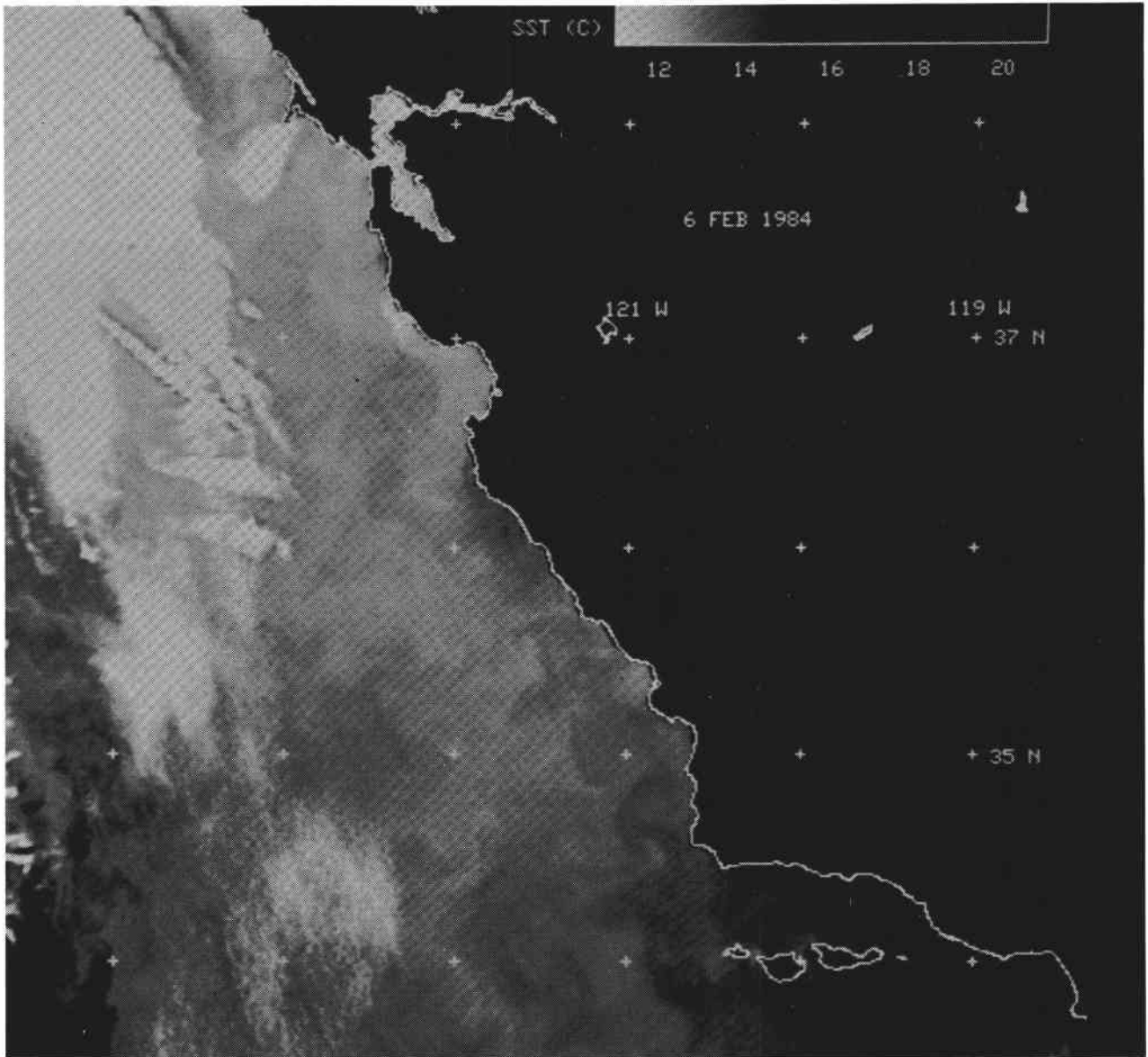
SAMPLING PROCEDURES

A Neil Brown Instrument Systems (NBIS) Mark III conductivity, temperature, depth (CTD) probe was used to obtain vertical profiles of temperature and salinity at a total of 124 stations during February 1984. The CTD was lowered through the water column at a rate of approximately 70-80 m per minute. Measurements of conductivity, temperature and pressure were digitally recorded at a sample interval of 31.25 msec from the sea surface to within 3 m of the bottom or until the cast reached 800 m of cable length. The sample depth at maximum cable outlay varied with current and surface wind conditions.

The conductivity of seawater is a function of both temperature and salinity. The temperature effects are much greater than the salinity effects and therefore must be removed in order to determine salinity from measurements of conductivity. However, the response time of the thermistor is much longer than that of the conductivity probe. This difference in response time must be accounted for when using thermistor measurements of temperature to remove the temperature component of conductivity variations. The method used here "speeds up" the effective response time of the thermistor so that it matches the essentially instantaneous response of the conductivity probe.

The differential equation relating the measured temperature \hat{T} to the true temperature T is

$$\hat{T} + \tau \frac{d\hat{T}}{dt} = T,$$



where τ is the time constant of the thermistor and the independent variable t represents time as the CTD falls through the water column. Assuming an adequately small sample interval Δ , this expression can be solved for the true temperature at time t by first differencing to obtain

$$T(t) = \hat{T}(t) + \frac{\tau}{\Delta} [\hat{T}(t) - \hat{T}(t-\Delta)].$$

The time constant τ for the thermistor on the CTD probe was determined from the phase spectrum between measured temperature and conductivity (see Millard, Toole and Swartz, 1980). The CTD profile at Raytheon station 109 was segmented into seven subrecords of 2048 samples each (corresponding to a depth interval of approximately 70 m). The auto and cross spectra of measured temperature and conductivity were band averaged to obtain 16 degrees of freedom for calculation of coherence and phase. The seven individual coherence and phase plots are shown in Fig. 10. The time constant τ is equal to the slope of the phase spectrum which was determined by least squares to be 0.068 sec.

CALIBRATION

The CTD was calibrated by the manufacturer for conductivity, temperature and pressure on 6 December 1983. Historically, the electronics of this particular CTD have had very little problem with drifts in calibration. During eight hydrographic cruises over a two year period in an experiment on Georges Bank, no calibration drifts were detected in five calibrations by NBIS spread over the two years.

For salinity calibration, a Niskin bottle was mounted 2 m above the CTD probe on eight casts during the February 1984 CCCCS cruise. The Niskin bottles were tripped at the maximum depth of the CTD casts where variations in salinity with depth and over time are generally small. These in situ water samples were processed by D. Hammond at the University of Southern California. The accuracy of salinity determined from these bottle samples is estimated to be 0.001‰. Unfortunately, during the February 1984 CCCCS hydrographic survey, all of the bottle samples were mistakenly capped with non-sealing tops and were therefore not usable for in situ salinity calibration of the CTD.

Coincidentally, A. Huyer at Oregon State University (OSU) made a CTD hydrographic section off Purisima Point (34.75°N) on 4 February (between snapshot 1 and snapshot 2 of the Raytheon survey). These hydrographic data are

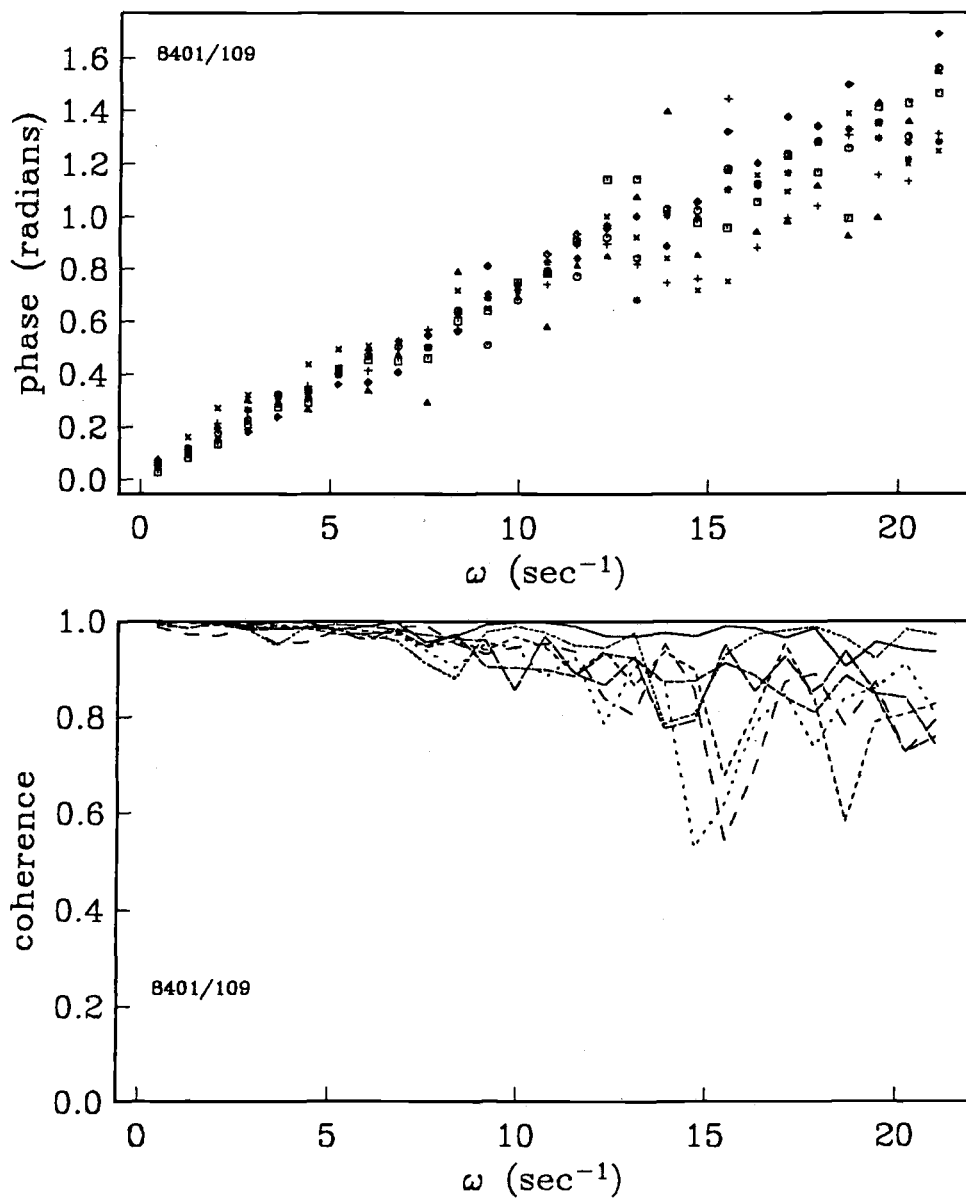


Fig. 10. Squared coherence and phase plots for temperature vs. conductivity at February 1984 Raytheon CTD station 109. Individual points at each frequency correspond to different subrecords of 2048 samples from CTD cast 109. The spectral estimates for each subrecord were based on 16 degrees of freedom. A least squares fit to a straight line for the phase plot gives a slope of 0.068.

summarized by Fleischbein, Schramm, Huyer and Smith (1986). The OSU CTD measurements were properly calibrated against in situ measurements on every cast and estimated salinity accuracy is $0.005^\circ/\text{‰}$. Two of the OSU CTD stations very nearly coincided geographically with Raytheon stations 47 and 50 from snapshot 1 (and stations 147 and 150 from snapshot 2). These OSU data were used to calibrate salinity in the Raytheon measurements.

Temperature-Salinity (T-S) plots for the two OSU casts (solid lines) and Raytheon stations 47 and 50 (dashed lines) are shown in Fig. 11. It is apparent that the Raytheon salinities are systematically higher than OSU salinities. The T-S plots show large variability in the T-S relations near the top and bottom of the casts. These differences are probably attributable to horizontal variations in water mass characteristics and the fact that the Raytheon and OSU casts do not exactly coincide geographically. At mid depths, the water mass characteristics appear to be more similar for all four CTD casts. Statistical analysis of the salinities over the mid depth range determined that the Raytheon salinities were biased high by $0.05^\circ/\text{‰}$. Consequently, all salinities in the 124 CTD stations for the February 1984 CCCCS cruise were corrected for the $0.05^\circ/\text{‰}$ bias. This estimate of salinity bias was confirmed by an independent calibration of July 1984 CCCCS CTD data (see Chelton and Kosro, 1987).

Upon investigation of the history of the Raytheon CTD, it was discovered that, just prior to the February 1984 cruise, an electronic component on one of the circuit boards was damaged on assembly in California after shipment of the instrument from the east coast. Replacement of this component probably explains the change in calibration of the CTD after calibration by the manufacturer on 6 December 1983. Unfortunately, this change in calibration was not discovered until after the Raytheon CTD data were processed in summer of 1984 so there was no immediate post calibration of the instrument by NBIS after the February 1984 cruise.

Because of the lack of in situ Niskin bottle samples and the small number of OSU samples used to calibrate salinity in the Raytheon data, it is not possible to make a definitive statement on the accuracy of the February 1984 CCCCS data. Our feeling is that the Raytheon salinities are likely accurate to at least $0.01^\circ/\text{‰}$. Inspection of the deep salinities from vertical profiles taken at the same locations in snapshot 1 and snapshot 2 (see plots in this

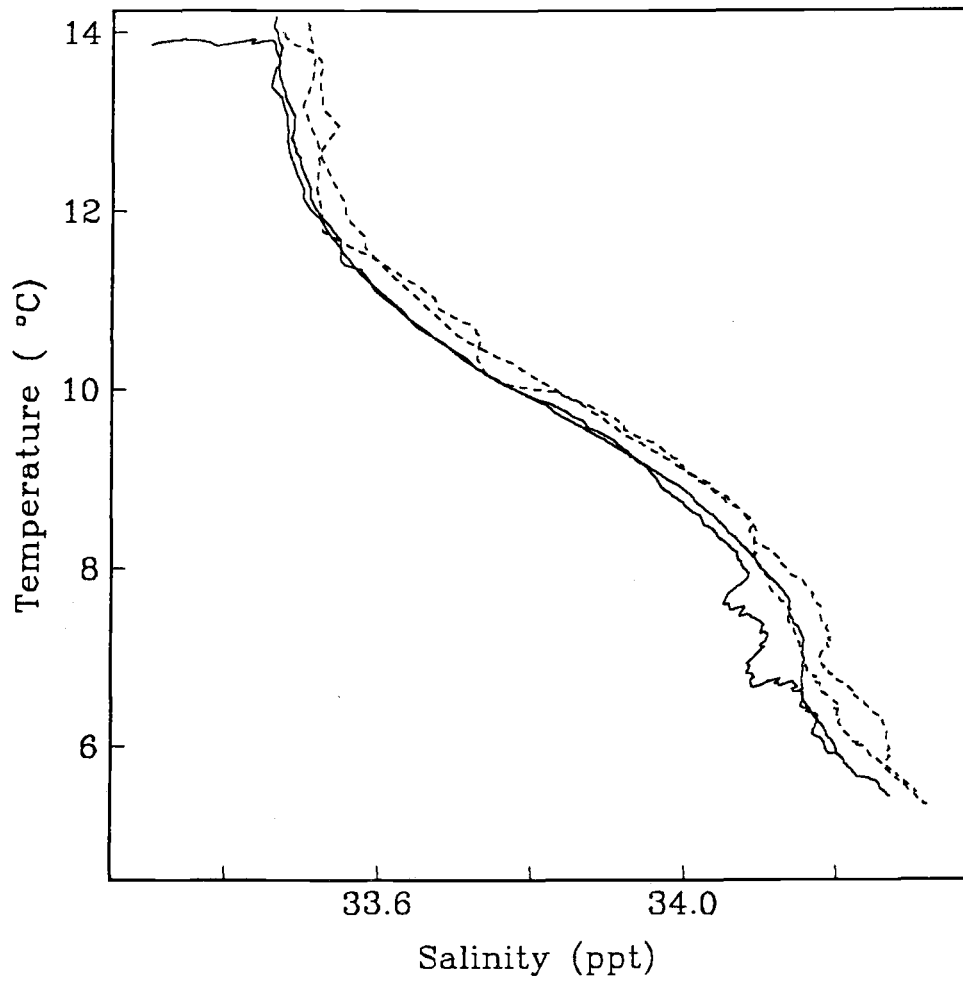


Fig. 11. Temperature-Salinity plots for two pairs of nearly coincident Raytheon and Oregon State University (OSU) CTD casts. Solid lines correspond to the two OSU casts and dashed lines correspond to the two Raytheon casts. OSU data courtesy of A. Huyer.

report) shows that any calibration drifts for this particular CTD are indeed small (at least over the 8-day period over which the two snapshot surveys were made).

DATA PROCESSING

After converting binary field data to engineering units, the first step in the data processing was to search the 31.25 msec digitized temperature and conductivity data for gross spikes. If a value of conductivity or temperature differed from the previous value (31.25 msec earlier) by more than 2 mmhos or 2°C, the sample value was eliminated. The temperature profiles were then corrected for the slower response time of the thermistor relative to the conductivity probe using a time constant of 0.068 sec, as discussed previously. The values of pressure were examined to eliminate ascending data caused by boat roll from wave action. The remaining data were then tested for gross spikes in pressure. Samples where the value of pressure differed from the previous value by more than 10 db were eliminated.

The de-spiked conductivity, temperature and pressure data were subsampled to eliminate measurements separated by less than 0.1 db for the upper 100 db of each cast and 0.2 db for the deeper portion of each cast. Corrections were applied to conductivity and temperature as per calibration by the CTD manufacturer (NBIS). Temperature and conductivity were then tested for smaller single point spikes by comparison of each sample value with the value predicted by linear extrapolation from the previous two sample values. If the measured value differed from the predicted value by more than 0.75°C or 0.75 mmhos, the sample observation was eliminated. Finally, the vertical profiles of temperature and conductivity were smoothed using a five point 1-4-6-4-1 weighted running average filter. Temperature was smoothed once and conductivity was smoothed twice. These de-spiked, subsampled and smoothed measurements of conductivity, temperature and pressure constitute the processed data set used to compute salinity, depth, σ_t , specific volume anomaly and dynamic height.

Since one of the objectives of CCCCS was to compare the CTD measurements with historical CalCOFI data, it is desirable to use the CalCOFI algorithms to compute the various parameters of interest to assure compatibility of the data. However, CalCOFI hydrographic data consist exclusively of Nansen bottle

measurements. The Southwest Fisheries Center (SWFC), National Marine Fisheries Service in La Jolla, California conducts regular CTD surveys on the CalCOFI grid. The CTD data are included in the archived CalCOFI data set. The SWFC algorithms (provided by R. Lynn) were therefore used to process the CCCGS CTD data.

Salinities were calculated from conductivity, pressure and temperature at the subsampled pressure levels using the algorithms for the Practical Salinity Scale 1978 (Lewis and Perkins, 1981). A standard reference conductivity of $C(35,15,0) = 42.9149$ was used. These computed salinities were then corrected for the 0.05‰ bias determined by comparison with nearly coincident OSU CTD data, as discussed in the previous section.

Pressure was converted to depth using the algorithm described by Saunders and Fofonoff (1976). Then the vertical profiles of salinity, temperature and depth were subsampled at 2 m intervals from the surface to the bottom of the cast. Values were determined by linear interpolation between the nearest pair of sample observations.

The temperature and salinity values at 2 m intervals were used to compute the density parameter σ_t and the specific volume anomaly δ using the algorithms described in LaFond (1957). The specific volume anomalies were vertically integrated to obtain the dynamic height of the sea surface relative to pressure at each sample depth (or equivalently, the dynamic depth of each sample pressure surface). Historically, the pressure at 500 m is used as a reference surface for estimating the dynamic topography of the sea surface in the California Current. However, a number of deep water CTD casts did not extend all the way to 500 m. For these casts, it was not possible to use 500 m as a reference level. The dynamic height at depth z relative to z_0 is computed by

$$D_{z,z_0} = \frac{p(z)}{p(z_0)} \int \delta dp,$$

where $p(z)$ and $p(z_0)$ are the pressures at depths z and z_0 . Examination of the specific volume anomaly δ in deep water found that it varied approximately linearly with depth. Thus, dynamic height should show a quadratic dependence on the reference depth z_0 .

Using CTD data from stations that extended deeper than 500 m, we simulated casts to a number of shallower depths between 400 and 470 m. We fit the

dynamic heights relative to the bottom 100 m of reference levels in the simulated shallow casts to a second order polynomial by least squares. The quadratic fit was then extrapolated to a reference level of 500 m. The resulting estimates of dynamic height relative to 500 m were then compared with the actual values. It was found that extrapolations from depths of 440 m or deeper resulted in an average bias of less than 0.5 mm and an rms error of less than 1 mm. Extrapolations from depths of 400 m gave considerably larger errors (a bias of 1.7 mm and an rms error of 2.8 mm). This vertical extrapolation to obtain dynamic heights relative to 500 m was therefore somewhat arbitrarily applied only to CTD casts deeper than 440 m.

Although the 500 m reference level may give adequate representation of the sea surface topography, some other method must be used to estimate the dynamic topography of the sea surface over the upper continental slope and continental shelf where the water is shallower than 500 m. The method commonly used (e.g., Reid and Mantyla, 1976; Huyer, 1980) is to extrapolate isopycnals horizontally from deep water onto the shelf using the method first suggested by Montgomery (1941). The extrapolation of a deep isopycnal into shallow water is based on the last observed cross-shore slope of the isopycnal in the deeper water offshore.

This method of horizontal extrapolation was applied to the CTD data here to stations in water shallower than 500 m to construct horizontal maps of dynamic height and vertical sections of geostrophic velocity relative to 500 m. The same extrapolation technique was applied to CTD data in water shallower than 200 m to construct horizontal maps of dynamic height relative to 200 m. We note, however, that the accuracies of the extrapolations for either the 500 m or 200 m reference level have not yet been thoroughly demonstrated. This is particularly true for geostrophic velocity. Small errors in horizontally extrapolated dynamic height can lead to very large errors in geostrophic velocity (particularly for the close 20 km station spacing used in this study). The bathymetry maps presented in the data report should allow the reader to judge the regions of dynamic height maps that are questionable due to possible errors introduced by horizontal extrapolation. In the vertical section plots of relative geostrophic velocity, the bottom profile can be used to identify questionable areas.

After the figures in this report were generated, two errors were found in the computer software used to compute the specific volume anomaly and dynamic depths at all CTD stations. These errors existed in the original software supplied by R. Lynn at SWFC. The first error was the use of surface pressure rather than in situ pressure for computing specific volume anomaly at all CTD sample depths. This systematically underestimated the actual specific volume anomaly, which resulted in an underestimate of the dynamic depth computed by vertically integrating specific volume anomaly. The second error was the use of geometric depth as the variable of integration rather than pressure. The pressure in decibars is slightly larger than the depth in meters. For example, a pressure of 500 db corresponds to a depth of 496.7 m off the central California coast. This second error also resulted in an underestimate of dynamic depths.

Thus, the net effects of these two computational errors was to underestimate the dynamic depths at all sample depths. Fortunately, these errors are very nearly consistent from station to station so that the errors consist essentially of a depth-dependent constant bias. Thus, horizontal gradients of dynamic depths (used to infer relative geostrophic velocities) are very nearly the same as for correctly computed dynamic depths.

Table 2 gives a summary of the relation between true dynamic heights and the underestimated dynamic heights determined from all 124 CTD stations in the February 1984 CCCGS survey. The table entries include all of the relative dynamic heights presented in this report. The worst case (0/500 m dynamic height) consists of a bias (correct minus incorrect value) of 2.6 dyn cm with an rms deviation of 0.06 dyn cm about this bias. Thus, the erroneous dynamic heights presented in this report can be corrected by simply adding the biases listed in Table 2, and the corrected dynamic heights will be accurate to within an rms error of no worse than 0.06 dyn cm.

DATA PRESENTATION

The hydrographic data are summarized in data listings, vertical profiles, T-S plots, maps and vertical sections. All contouring in the vertical sections and maps was done objectively using an automatic contouring routine based on Laplacian interpolation. The contour plots included in this report were not

Table 2. Statistics for comparison between true dynamic heights and the incorrect dynamic heights for the February 1984 CCCCS data presented in this report (see text for discussion). Column entries are: the relative dynamic height reference surfaces; number of samples at these references surfaces; average bias (correct minus incorrect relative dynamic heights); standard deviation (rms error about average bias); minimum error; maximum error; and range of errors.

Reference Surfaces	Number samples	Bias (dyn cm)	Stnd.Dev. (dyn cm)	Min.error (dyn cm)	Max.error (dyn cm)	Range error (dyn cm)
0/100	89	0.3157	0.0120	0.2907	0.3513	0.0606
0/200	88	0.7499	0.0199	0.7046	0.8163	0.1117
50/200	88	0.6093	0.0182	0.5685	0.6694	0.1009
100/200	88	0.4341	0.0134	0.4073	0.4736	0.0663
0/500	58	2.6158	0.0621	2.4720	2.7348	0.2628
50/500	58	2.4751	0.0626	2.3301	2.6031	0.2730
100/500	58	2.3014	0.0646	2.1552	2.4426	0.2874
200/500	58	1.8697	0.0604	1.7479	1.9952	0.2474

smoothed in any way. We give here a few brief comments on each of the data products contained in this report.

1. Locations, times and depths of CTD stations. The Raytheon station number, date and time, latitude, longitude, maximum sample depth and water depth is listed for each CTD cast in the CCCCS survey. Times for the February 1984 CTD casts are local Pacific Standard Time (PST). Note that the Raytheon station numbering convention was different for each of the four CCCCS CTD surveys.
2. Maps of CTD station locations and bathymetry. Maps are presented showing the geographical locations of each CTD station in the CCCCS full, snapshot 1 and snapshot 2 sample regions. The CTD stations are located at the lower left corner of each station number label. The line numbers define the convention adopted here for plotting vertical sections of temperature, salinity, σ_t , and relative geostrophic velocity. In the southern portion of the full CCCCS sample grid, only the CTD stations along the two long lines of snapshot 2 (lines 13 and 20) are included in the maps of the full CCCCS region. This was done to avoid contour mapping biases introduced by nonhomogeneous sampling of the northern vs. southern portions of the full survey region.

Bathymetry maps for the full and snapshot CCCCS sample region are also presented. Isobaths corresponding to 100 m, 200 m, 500 m and 1000 m bottom depth are shown. These maps have been produced the same size as the data maps presented later in the report and are thus useful for identifying the nearshore CTD stations for which dynamic heights relative to 200 m and 500 m have been extrapolated inshore as described in the previous section.
3. Data listings. The header information for each listing contains the Raytheon CTD station number, and latitude, longitude and water depth at the station location. Sample depth (m), water temperature ($^{\circ}\text{C}$), salinity ($^{\circ}/\text{oo}$), σ_t and dynamic depth (DELD) relative to the sea surface (dyn m) are listed at depth intervals of 10 m from the surface to 200 m, depth intervals of 20 m from 200 to 300 m and depth intervals of 50 m for depths greater than 300 m. Data values at the bottom sample depth are also given. Note that these dynamic depths are systematically low by a depth-dependent, approximately constant bias, as discussed in the previous

section (see Table 2). Note also that the density parameter is σ_t and not the more conventional σ_θ (where θ refers to potential temperature). The two differ by very little for the shallow water depths (less than 500 m) considered here.

If the CTD cast was in water deeper than 500 m and the cast did not extend to a depth of 500 m (but did extend deeper than 440 m), dynamic depth of the 500 m surface was estimated by vertical extrapolation as described in the previous section. These vertically extrapolated dynamic depths are given in the data listings. Finally, dynamic depths of the 200 m and 500 m surfaces in nearshore stations in water shallower than 200 and 500 m were determined by horizontal extrapolation from the deeper stations offshore as discussed in the previous section. These horizontally extrapolated dynamic depths are given in the data listings. Temperature, salinity and σ_t are not given at the depths of these vertically and horizontally extrapolated dynamic depths.

4. Vertical profiles of temperature, salinity and σ_t . Profiles are presented for all 124 CTD casts during the February 1984 CCCCS cruise. CTD profiles from snapshot 1 and snapshot 2 at the same location are superimposed on the same plot (dashed lines for snapshot 1 and continuous lines for snapshot 2).
5. Potential Temperature-Salinity plots. The dots correspond to a potential temperature, salinity pair at 10 m intervals for all CTD casts. Separate plots are included for the full CCCCS region, snapshot 1 and snapshot 2.
6. Maps. Included are maps of temperature, salinity and σ_t at depths of 10 m, 50 m, 100 m, 200 m and 400 m; relative dynamic heights of 0/100 m, 0/200 m, 50/200 m, 100/200 m, 0/500 m, 50/500 m, 100/500 m and 200/500 m surfaces; depth, temperature and salinity on σ_t surfaces of 25.0, 25.8 and 26.6 (corresponding roughly to depths at the bottom of the mixed layer, in the thermocline and below the thermocline). The relative dynamic heights are systematically low due to an error in computation, as discussed in the previous section. If the biases in Table 2 are added, the resulting plots are accurate to within an rms error of no worse than 0.06 dyn cm. Note that the plots on σ_t surfaces are not the more conventional σ_θ surfaces. As mentioned previously, the differences are very small for these water depths less than 500m. Maps are grouped by data type (i.e., all of the

temperature maps together, all of the salinity maps together, etc.). As discussed in the previous section, dynamic heights relative to 200 m and 500 m at nearshore stations in water shallower than 200 m and 500 m were determined by horizontal extrapolation from the deeper stations offshore. The bathymetry maps summarized previously can be used to determine the regions where the extrapolation was used.

The maps for the full CCCCS region, snapshot 1 and snapshot 2 are presented in separate sections of the report. In the full area maps, all of the lines north of the snapshot region are included but only the two longest lines of snapshot 2 (lines 13 and 20) are included so as not to "oversample" the southern portion of the map relative to the northern portion. This avoids mapping biases introduced by the nonhomogeneous sampling of the northern vs. southern portions of the full CCCCS survey region.

For all plots, the data values are written on the plot with the lower left corner of the first character of the data label defining the station location. Contour intervals are 0.5°C, 0.1‰, 0.1, 1 dyn cm and 10 m for maps of temperature, salinity, σ_t , dynamic height, and depth of σ_t surfaces, respectively. In maps where the dynamic range of the variable plotted is small, intermediate contours are drawn as dashed lines.

7. Difference maps. Snapshot 2 minus snapshot 1 temperature, salinity and σ_t differences are presented at depths of 10 m, 50 m, 100 m, 200 m and 400 m. Contour intervals are 0.5°C, 0.05‰, and 0.1 for temperature, salinity, and σ_t , respectively. Negative contours are drawn as dashed lines. Difference maps for dynamic height and variables on σ_t surfaces are not included.
8. Vertical sections. Plots of temperature, salinity, σ_t and geostrophic velocity relative to 500 m are presented for depths from the sea surface to 500 m. Vertical sections include three cross-shore and three alongshore lines in the snapshot region (both snapshot 1 and snapshot 2), all of the cross-shore lines north of the snapshot region and three alongshore lines for the full CCCCS region. As with the maps, the southern portion of the full CCCCS region alongshore sections include only stations from the two long lines in snapshot 2 (lines 13 and 20) so as not to "oversample" the southern portion of the sections relative to the

northern portion. The line numbers correspond to the convention defined in the station location maps discussed previously. For easy reference, a map of the station locations is included with each vertical section. The plots are grouped by data type. Contour intervals are 1°C , $0.1^{\circ}/\text{‰}$, 0.2 , and 5 cm/s for temperature, salinity, σ_t and relative geostrophic velocity, respectively. Positive values correspond to poleward and onshore velocity, respectively, in the cross shore and alongshore geostrophic velocity sections. The CCCCS station numbers and locations are given along the top of the section plots.

9. Difference sections. Vertical sections of snapshot 2 minus snapshot 1 temperature, salinity and σ_t are given for three cross-shore and three alongshore lines in the snapshot region. Contour intervals are 0.5°C , $0.05^{\circ}/\text{‰}$ and 0.1 for temperature, salinity and σ_t , respectively. Negative contours are drawn as dashed lines. For easy reference, a map of the station locations is included with each vertical section. The plots are grouped by data type. The CCCCS station numbers and locations are given along the top of the section plots. The top row of station numbers refers to snapshot 2 and the bottom row refers to snapshot 1. Difference sections for relative geostrophic velocity are not included.

ACKNOWLEDGEMENTS

The collection and initial processing of the CCCCS CTD data presented in this report were carried out by Raytheon Service Company under Minerals Management Service Contract No. 14-12-0001-30020. Gary Parker was chief scientist on the cruises with responsibility for CTD data collection. Initial data processing was done by Marian Falla. The data listings and plots in this report were done at Oregon State University under Raytheon Service Company Subcontract No. 9330936556.

REFERENCES

- Chelton, D.B., 1984: Seasonal variability of alongshore geostrophic velocity off central California. Journal of Geophysical Research, 89, 3473-3486.
- Chelton, D.B., P.A. Bernal, and J.A. McGowan, 1982: Large-scale interannual physical and biological interaction in the California Current. Journal of Marine Research, 40, 1095-1125.
- Chelton, D.B., R.L. Bernstein, A. Bratkovich, and P.M. Kosro, 1987: The central California coastal circulation study. EOS, Trans. Amer. Geophys. Union, 68, pp.1, 12-13.
- Chelton, D. B., and P. M. Kosro, 1987: Central California Coastal Circulation Study CTD observations: Cruise 8403, July 1984. Oregon State University Rep. 127, Ref. 87-03.
- Fleischbein, J., R. Schramm, A. Huyer and R.L. Smith, 1986: CTD observations off Oregon and California: R/V WECOMA. July 1983 April 1984. Rep. 119, Ref. 86-2, Oreg. State Univ.
- Hickey, B.M., 1979: The California Current system - hypotheses and facts. Progress in Oceanography, 8, 191-279.
- Huyer, A., 1980: The offshore structure and subsurface expression of sea level off Peru, 1976-1977. Journal of Physical Oceanography, 10, 1755-1768.
- La Fond, E.C., 1957: Processing Oceanographic Data. Hydrographic Office Pub. 614, U.S. Navy Hydrographic Office.
- Lewis, E.L., and R.G. Perkin, 1981: The Practical Salinity Scale 1978: conversion of existing data. Deep-Sea Research, 28, 307-328.

- Lynn, R.J., 1967: Seasonal variation of temperature and salinity at 10 m in the California Current. California Cooperative Fisheries Investigations Report, 19, 157-174.
- Lynn, R.J., 1983: The 1982-83 warm episode in the California Current. Geophysical Research Letters , 10, 1093-1985.
- Millard, R., J. Toole, and M. Swartz, 1980: A fast responding temperature measurement system for CTD applications. Ocean Engineering, 7, 413-427.
- Montgomery, R.B., 1941: Transport of the Florida Current off Habana. Journal of Marine Research, 4, 198-219.
- Reid, J.L, G.I. Roden, and J.G. Wyllie, 1958: Studies of the California Current System. California Cooperative Oceanic Fisheries Investigations Reports, 5, 28-57.
- Reid, J.L., and A.W. Mantyla, 1976: The effect of the geostrophic flow upon coastal sea level variations in the northern Pacific Ocean. Journal of Geophysical Research, 81, 3100-3110.
- Rienecker, M.M, and C.N.K. Mooers, 1986: The 1982-83 El Niño signal off northern California. Journal of Geophysical Research, 91, 6597-6608.
- Saunders, P.M., and N.P. Fofonoff, 1976: Conversion of pressure to depth in the ocean. Deep-Sea Research, 23, 109-111.
- Simpson, J.J., 1983: Large-scale thermal anomalies in the California Current during the 1982-83 El Niño. Geophysical Research Letters, 10, 937-940.

LISTING OF LOCATION TIMES AND DEPTHS OF CTD STATIONS

RAYTHEON CRUISE 8401

<u>STATION</u>	<u>DAY</u>	<u>HR</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>ZMAX</u>	<u>DEPTH</u>
1	31 Jan	1815	34 25.0	120 27.1	76	77
2		1950	34 20.4	120 27.2	310	320
3		2055	34 18.3	120 31.2	430	435
5		2310	34 12.9	120 42.1	680	690
7	1 Feb	0111	34 8.1	120 52.1	720	737
9		0350	34 10.4	121 8.1	690	720
11		0615	34 15.3	120 56.8	700	950
13		0815	34 20.0	120 47.3	710	713
15		0954	34 23.5	120 40.1	430	440
16		1050	34 25.2	120 35.7	240	240
17		1600	34 26.5	120 32.9	90	92
18		1640	34 28.4	120 29.8	26	27
19		1731	34 31.8	120 34.5	26	33
20		1806	34 30.3	120 38.3	76	84
22		1951	34 24.7	120 50.5	690	823
24		2150	34 20.1	121 0.7	700	1000
25		2350	34 25.3	121 3.9	690	1100
27	2 Feb	0125	34 29.1	120 54.4	680	690
29		0350	34 34.8	120 42.4	60	73
30		0457	34 41.6	120 41.5	40	46
31		0550	34 39.0	120 46.5	86	91
33		0730	34 34.2	120 57.9	640	650
35		0945	34 30.0	121 8.0	720	1105
36		1100	34 34.9	121 10.8	710	915
38		1240	34 39.4	121 1.0	560	572
40		1455	34 44.9	120 49.7	100	111
42		1616	34 48.6	120 40.4	26	32
43		1720	34 54.3	120 43.1	40	44
45		1849	34 49.7	120 53.2	200	212
47		2035	34 44.2	121 4.8	520	540
49		2210	34 39.9	121 14.2	700	732
50		2335	34 44.6	121 17.8	560	570
52	3 Feb	0108	34 49.3	121 8.3	550	556
54		0305	34 54.8	120 56.6	300	320
56		0505	35 0.9	120 43.2	40	47
57		0610	35 6.9	120 44.6	36	44
58		0700	35 4.8	120 49.2	90	99
59		0757	35 1.7	120 55.5	240	247
60		0855	34 59.4	121 0.4	410	422
61		0945	34 57.9	121 3.4	480	495
63		1120	34 53.9	121 11.5	550	565
65		1255	34 49.5	121 21.0	490	500
67		1442	34 44.0	121 32.3	720	915
69		1640	34 53.8	121 24.2	440	457
71		1810	34 58.6	121 15.2	580	588
73		2002	35 4.0	121 3.9	470	484
75		2205	35 10.1	120 51.7	50	59
76		2300	35 15.3	120 55.5	50	56

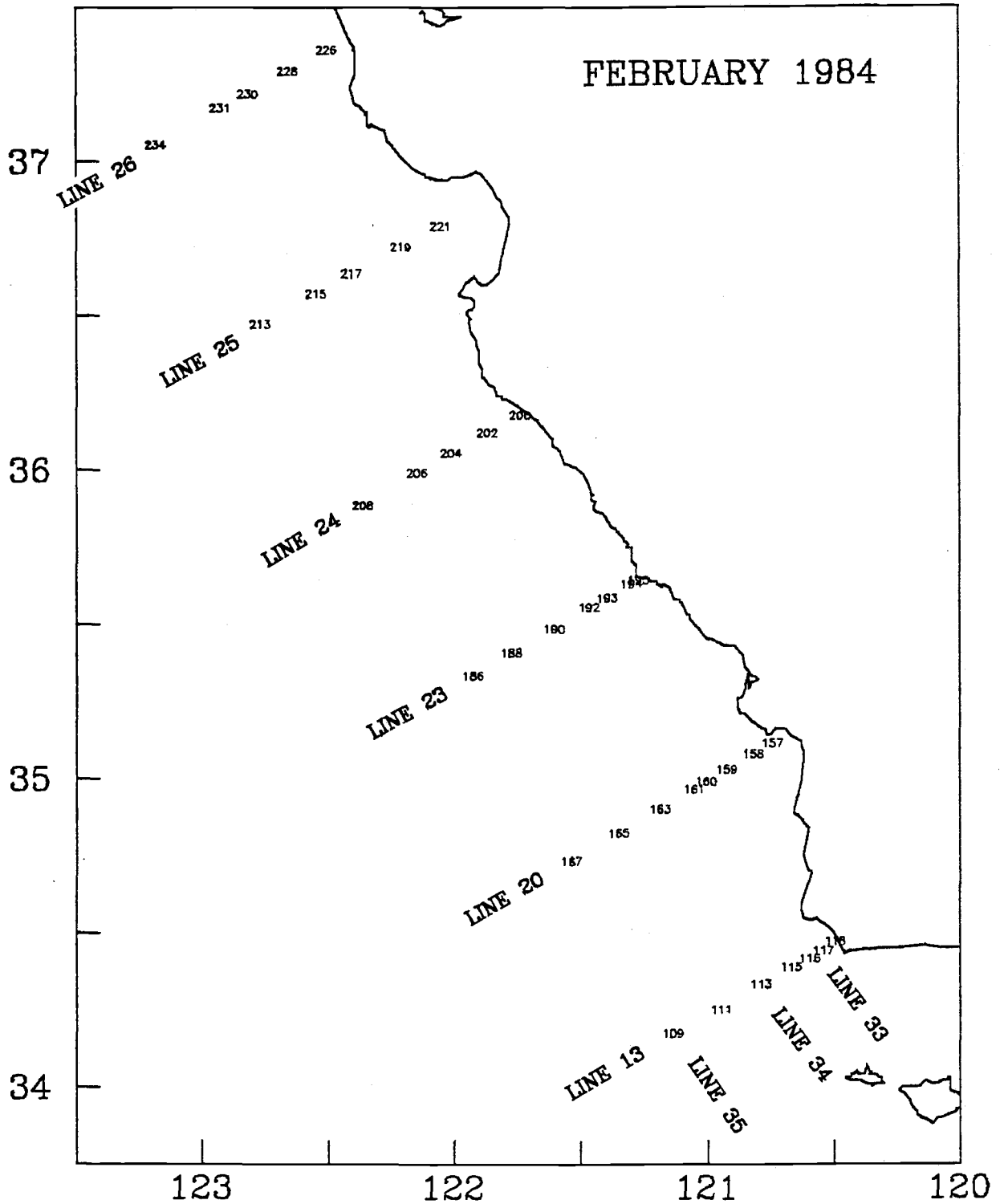
<u>STATION</u>	<u>DAY</u>	<u>HR</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>ZMAX</u>	<u>DEPTH</u>
78	4 Feb	0035	35 9.1	121 7.5	530	544
80		0230	35 3.5	121 18.7	610	620
82		0410	34 59.1	121 27.6	490	507
101		1540	34 25.1	120 27.0	70	75
102		1635	34 20.4	120 27.1	310	321
103		1725	34 18.3	120 31.1	420	431
105		1915	34 12.9	120 42.0	680	705
107		2105	34 8.3	120 51.8	710	914
109		2320	34 10.5	121 8.2	720	2160
111	5 Feb	0105	34 15.2	120 56.7	710	951
113		0250	34 20.0	120 47.2	700	750
115		0415	34 23.5	120 40.1	430	439
116		0510	34 25.1	120 35.7	250	261
117		0550	34 26.5	120 32.5	86	90
118		0625	34 28.4	120 29.7	26	28
119		0748	34 31.6	120 34.5	36	38
120		0849	34 30.4	120 38.6	80	85
122		1030	34 24.8	120 50.4	690	705
124		1220	34 20.0	121 0.5	710	1000
125		1334	34 25.2	121 3.9	710	1095
127		1515	34 29.4	120 54.4	650	690
129		1720	34 34.9	120 42.6	60	64
130		1835	34 41.5	120 41.5	40	42
131		1925	34 38.9	120 46.5	86	92
133		2105	34 34.1	120 57.8	630	650
135		2300	34 29.7	121 7.5	640	1105
136	6 Feb	0720	34 34.8	121 10.8	710	915
138		0905	34 39.5	121 1.0	570	576
140		1100	34 44.8	120 49.8	96	104
142		1225	34 48.4	120 40.6	30	34
143		1810	34 54.3	120 43.0	36	44
145		1955	34 49.7	120 53.2	200	213
147		2140	34 44.3	121 4.7	520	529
149		2315	34 40.1	121 14.2	680	692
150	7 Feb	0040	34 44.6	121 17.9	560	573
152		0218	34 49.2	121 8.3	550	558
154		0412	34 54.9	120 56.5	290	300
156		0624	35 0.9	120 43.2	40	47
157		0725	35 6.9	120 44.4	36	44
158		0812	35 4.8	120 49.1	90	97
159		0905	35 1.9	120 55.4	230	247
160		1004	34 59.5	121 0.3	410	424
161		1046	34 58.0	121 3.1	480	495
163		1210	34 54.2	121 11.2	550	567
165		1350	34 49.6	121 20.9	500	514
167		1555	34 44.0	121 32.1	700	915
169		1800	34 53.7	121 24.6	440	454
171		1935	34 58.5	121 15.3	580	591
173		2125	35 4.1	121 3.7	470	483
175		2325	35 10.2	120 51.8	50	60

<u>STATION</u>	<u>DAY</u>	<u>HOUR</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>ZMAX</u>	<u>DEPTH</u>
176	8 Feb	0030	35 15.3	120 55.3	46	54
178		0212	35 9.2	121 7.6	540	548
180		0355	35 3.7	121 18.4	610	623
182		0540	34 59.0	121 27.7	490	506
186		1020	35 20.2	121 55.4	720	2012
188		1155	35 24.6	121 46.3	710	1100
190		1333	35 29.2	121 36.1	720	954
192		1510	35 33.4	121 27.9	650	666
193		1610	35 35.3	121 23.6	460	474
194		1710	35 38.0	121 17.9	80	86
195		1740	35 38.8	121 16.2	26	30
200		2325	36 10.8	121 44.2	290	301
202	9 Feb	0030	36 7.4	121 51.9	710	1007
204		0200	36 3.4	122 0.6	720	1280
206		0335	35 59.6	122 8.7	720	1555
208		0540	35 53.2	122 21.6	730	2900
213		1200	36 28.4	122 46.0	720	2930
215		1400	36 34.3	122 32.8	720	3020
217		1525	36 38.3	122 24.2	710	2380
219		1710	36 43.4	122 12.5	700	950
221		1840	36 47.6	122 3.0	370	379
226	10 Feb	0208	37 21.8	122 30.2	40	48
228		0400	37 17.7	122 39.5	90	96
230		0555	37 13.2	122 48.9	250	260
231		0705	37 10.5	122 55.4	490	503
234		0927	37 3.3	123 10.8	690	2560

MAPS OF CTD STATION LOCATIONS AND BATHYMETRY

STATION LOCATIONS

FEBRUARY 1984

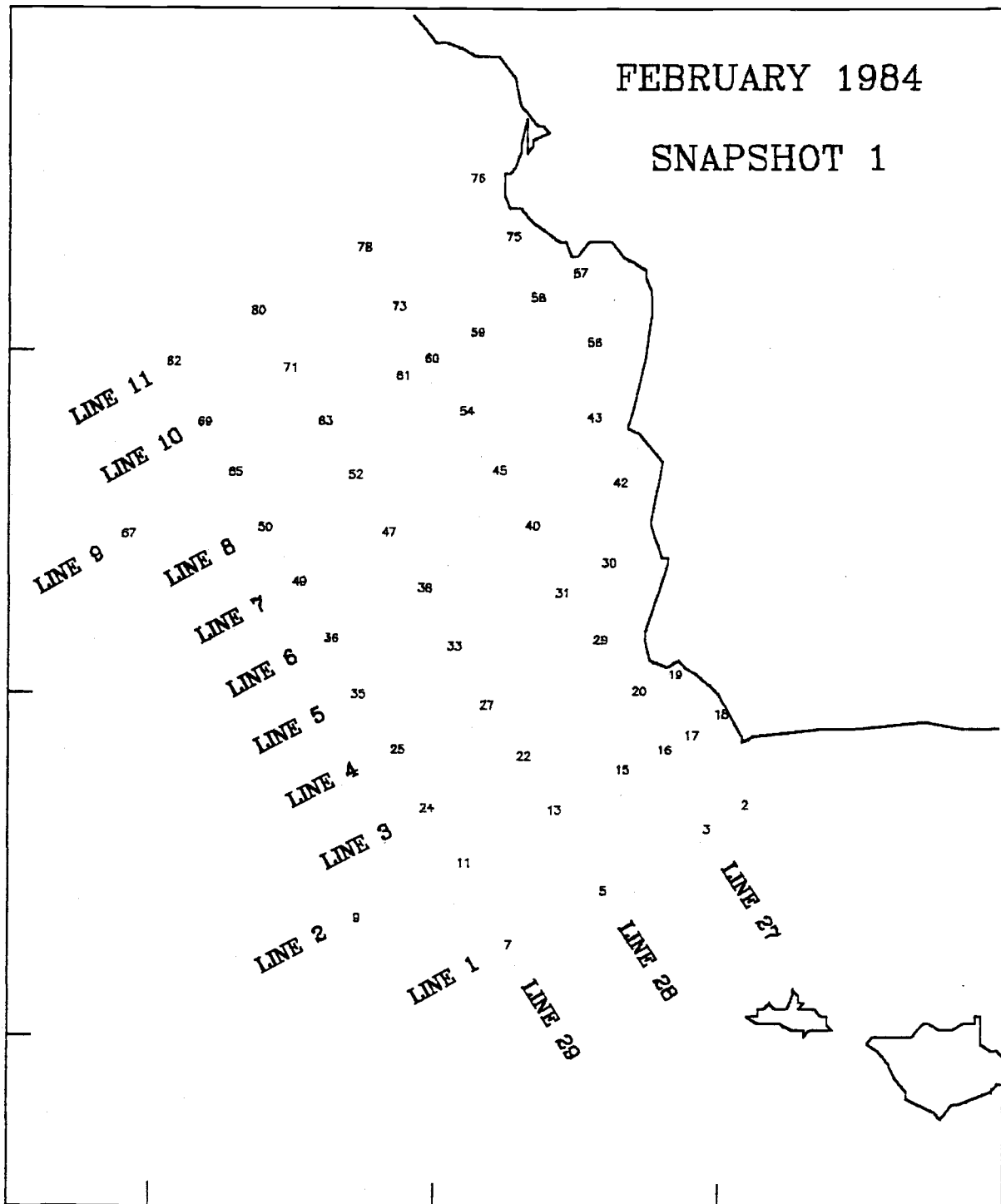


STATION LOCATIONS

FEBRUARY 1984

SNAPSHOT 1

35



121

120

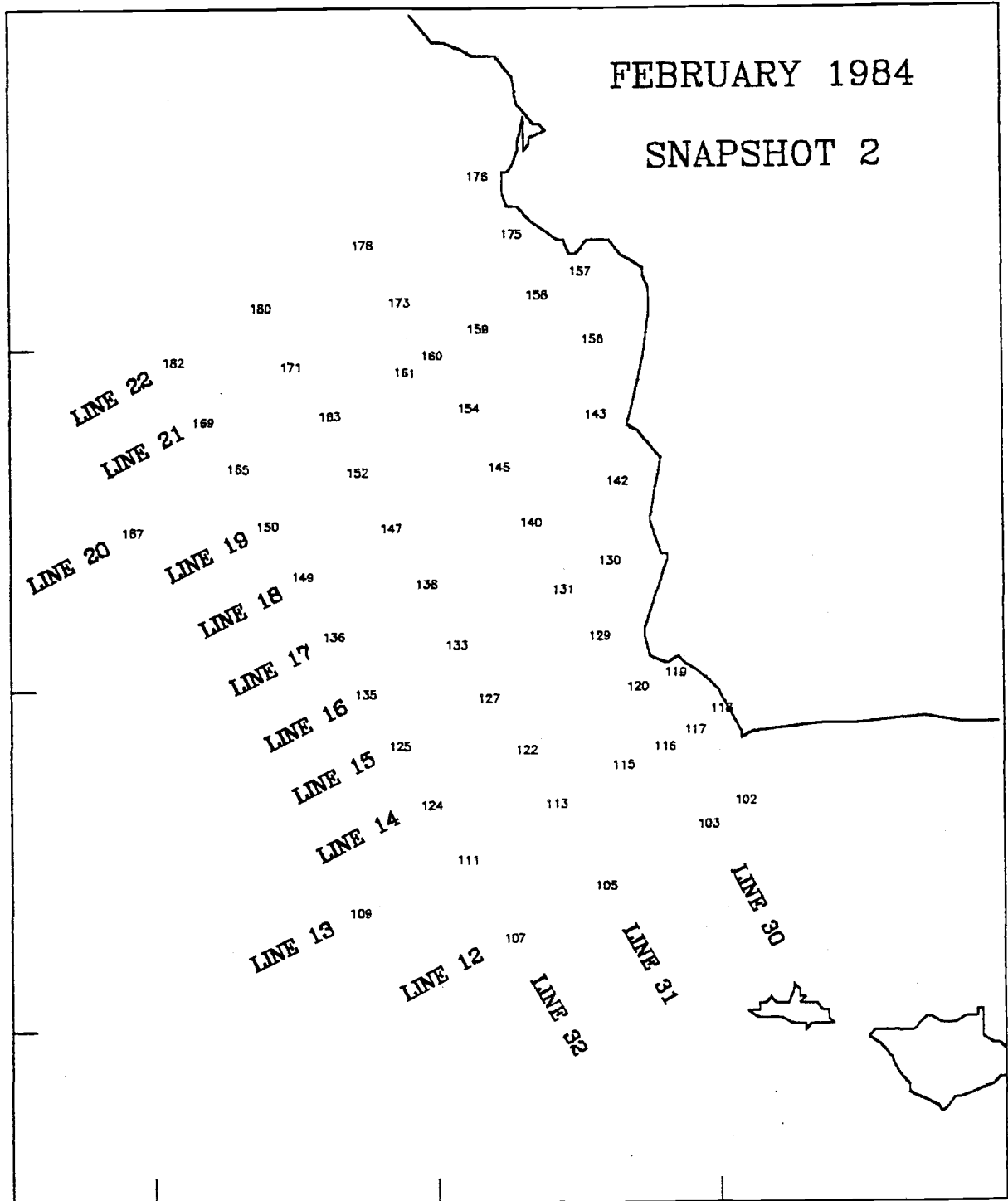
34

STATION LOCATIONS

FEBRUARY 1984

SNAPSHOT 2

35

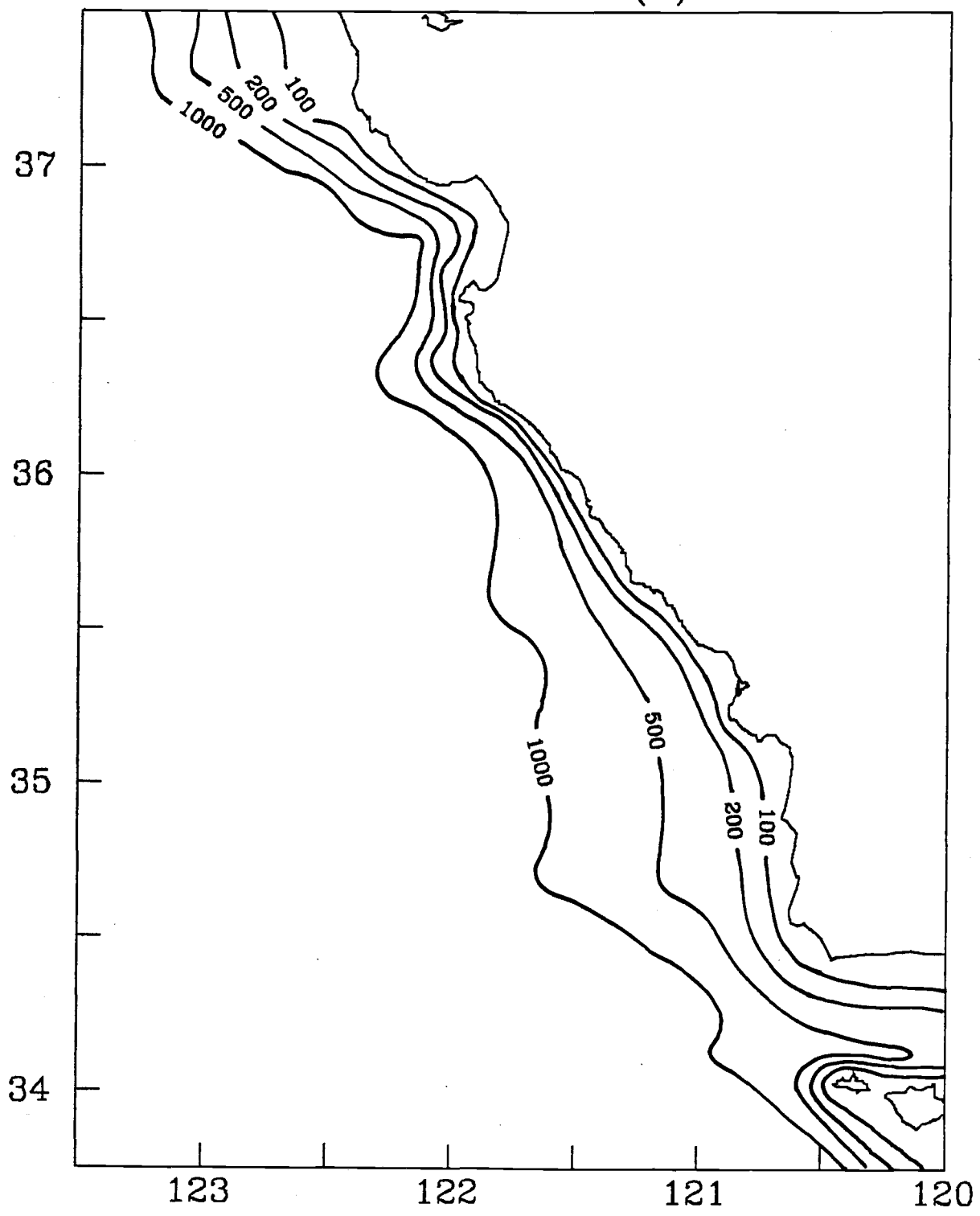


34

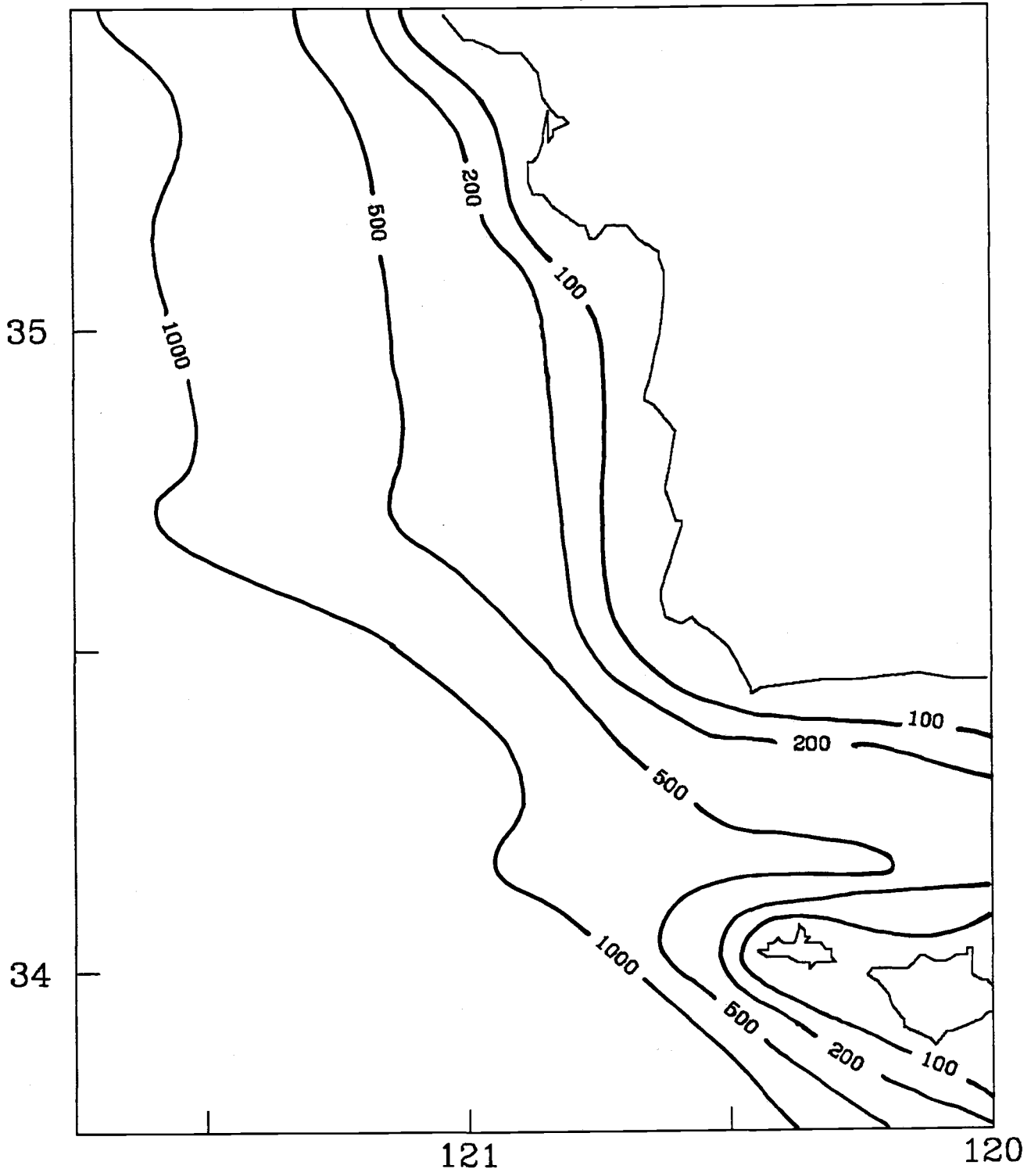
121

120

FULL CCCC'S REGION DEPTH (M)



SNAPSHOT REGION DEPTH (M)



DATA LISTINGS

STA 1 34 25.0N 120 27.1W D- 77

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.881	33.416	24.799	0.000
10.	14.890	33.415	24.796	0.032
20.	14.801	33.416	24.816	0.063
30.	14.106	33.427	24.972	0.094
40.	13.817	33.415	25.022	0.124
50.	13.388	33.432	25.123	0.153
60.	13.153	33.447	25.182	0.181
70.	12.657	33.465	25.293	0.208
76.	12.252	33.496	25.395	0.224

STA 2 34 20.4N 120 27.2W D- 320

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.083	33.441	24.987	0.000
10.	14.086	33.440	24.986	0.030
20.	14.027	33.441	24.999	0.060
30.	12.965	33.446	25.218	0.088
40.	12.239	33.495	25.397	0.115
50.	11.660	33.546	25.545	0.140
60.	11.171	33.620	25.692	0.164
70.	11.017	33.644	25.739	0.187
80.	10.812	33.676	25.800	0.209
90.	10.410	33.734	25.915	0.231
100.	10.122	33.785	26.004	0.251
110.	10.014	33.795	26.031	0.271
120.	9.859	33.823	26.078	0.291
130.	9.822	33.832	26.092	0.310
140.	9.653	33.862	26.143	0.329
150.	9.467	33.903	26.206	0.348
160.	9.184	33.955	26.292	0.366
170.	9.108	33.978	26.322	0.383
180.	8.856	34.018	26.394	0.400
190.	8.596	34.032	26.445	0.416
200.	8.585	34.059	26.468	0.432
220.	8.359	34.099	26.534	0.462
240.	8.117	34.109	26.578	0.492
260.	7.891	34.120	26.621	0.521
280.	7.709	34.122	26.649	0.550
300.	7.680	34.121	26.652	0.578
500.				0.833

STA 3 34 18.3N 120 31.2W D- 435

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.842	33.440	25.036	0.000
10.	13.835	33.443	25.040	0.029
20.	13.843	33.442	25.038	0.059
30.	13.682	33.445	25.073	0.088
40.	12.829	33.455	25.252	0.116
50.	12.324	33.484	25.372	0.143
60.	11.891	33.534	25.493	0.168
70.	11.301	33.612	25.662	0.192
80.	10.683	33.703	25.844	0.215
90.	10.156	33.789	26.002	0.236
100.	9.720	33.937	26.190	0.256
110.	9.628	33.884	26.164	0.274
120.	9.424	33.919	26.225	0.293
130.	9.382	33.931	26.241	0.311
140.	9.306	33.947	26.266	0.328
150.	9.050	33.972	26.327	0.346
160.	8.909	33.988	26.362	0.363
170.	8.861	34.013	26.389	0.379
180.	8.755	34.039	26.426	0.396
190.	8.637	34.043	26.447	0.412
200.	8.610	34.048	26.456	0.428
220.	8.468	34.059	26.486	0.459
240.	8.244	34.082	26.538	0.489
260.	8.066	34.077	26.561	0.519
280.	7.791	34.093	26.614	0.549
300.	7.645	34.111	26.650	0.577
350.	7.154	34.136	26.739	0.646
400.	6.776	34.157	26.807	0.709
500.				0.832

STA 5 34 12.9N 120 42.1W D- 690

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.396	33.453	24.931	0.000
10.	14.406	33.452	24.928	0.030
20.	14.268	33.447	24.953	0.061
30.	13.501	33.452	25.115	0.090
40.	12.510	33.450	25.310	0.118
50.	11.590	33.527	25.544	0.143
60.	11.325	33.588	25.640	0.167
70.	11.116	33.624	25.705	0.190
80.	10.818	33.672	25.796	0.213
90.	10.570	33.714	25.872	0.235
100.	10.293	33.756	25.953	0.256
110.	10.173	33.772	25.986	0.276
120.	9.857	33.833	26.087	0.296
130.	9.764	33.850	26.115	0.315
140.	9.617	33.882	26.165	0.334
150.	9.572	33.891	26.179	0.353
160.	9.437	33.918	26.222	0.371
170.	9.250	33.959	26.285	0.389
180.	9.112	33.972	26.317	0.406
190.	8.913	34.000	26.371	0.423
200.	8.721	34.012	26.410	0.439
220.	8.458	34.023	26.459	0.471
240.	8.238	34.050	26.514	0.503
260.	8.103	34.071	26.551	0.533
280.	7.819	34.102	26.617	0.562
300.	7.634	34.117	26.656	0.590
350.	7.284	34.150	26.732	0.658
400.	6.792	34.146	26.797	0.723
450.	6.250	34.144	26.867	0.784
500.	5.978	34.185	26.934	0.842
550.	5.698	34.213	26.991	0.898
600.	5.350	34.257	27.068	0.949
650.	5.040	34.299	27.137	0.998
680.	4.973	34.312	27.155	1.026

STA 7 34 8.1N 120 52.1W D- 737

DEPTH	TEMP	SAL	SIGMA	DELD
0.	15.014	33.475	24.815	0.000
10.	15.012	33.475	24.816	0.031
20.	13.850	33.451	25.043	0.063
30.	13.616	33.464	25.101	0.092
40.	13.107	33.470	25.209	0.120
50.	11.145	33.575	25.662	0.146
60.	10.815	33.662	25.788	0.168
70.	10.545	33.708	25.872	0.190
80.	10.156	33.774	25.990	0.211
90.	10.012	33.797	26.032	0.231
100.	9.724	33.848	26.120	0.251
110.	9.506	33.889	26.188	0.269
120.	9.392	33.906	26.220	0.288
130.	9.256	33.923	26.256	0.305
140.	9.224	33.927	26.264	0.323
150.	9.122	33.959	26.305	0.341
160.	9.005	33.973	26.335	0.358
170.	8.875	33.992	26.370	0.375
180.	8.804	34.002	26.389	0.391
190.	8.662	34.017	26.423	0.408
200.	8.578	34.030	26.446	0.424
220.	8.477	34.042	26.471	0.455
240.	8.346	34.059	26.505	0.486
260.	8.128	34.075	26.550	0.517
280.	7.970	34.088	26.584	0.546
300.	7.785	34.109	26.628	0.575
350.	7.128	34.156	26.758	0.643
400.	6.526	34.182	26.861	0.705
450.	6.080	34.158	26.900	0.764
500.	5.903	34.225	26.975	0.821
550.	5.689	34.237	27.011	0.874
600.	5.283	34.277	27.092	0.926
650.	5.043	34.311	27.147	0.973
700.	4.802	34.342	27.199	1.019
720.	4.724	34.350	27.214	1.036

STA 9 34 10.4N 121 8.1W D- 720

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.210	33.447	24.965	0.000
10.	14.214	33.447	24.965	0.030
20.	14.220	33.446	24.963	0.060
30.	13.539	33.442	25.100	0.090
40.	12.586	33.482	25.320	0.117
50.	12.234	33.492	25.396	0.144
60.	11.557	33.569	25.582	0.169
70.	11.234	33.604	25.668	0.192
80.	10.831	33.651	25.777	0.215
90.	10.521	33.704	25.873	0.237
100.	10.280	33.749	25.949	0.258
110.	10.127	33.778	25.998	0.278
120.	9.903	33.818	26.067	0.298
130.	9.762	33.844	26.111	0.318
140.	9.669	33.860	26.139	0.337
150.	9.496	33.888	26.189	0.355
160.	9.242	33.930	26.263	0.373
170.	9.212	33.939	26.275	0.391
180.	9.139	33.949	26.295	0.409
190.	9.042	33.971	26.327	0.426
200.	8.945	33.980	26.350	0.443
220.	8.505	34.022	26.451	0.475
240.	8.375	34.056	26.498	0.507
260.	8.007	34.083	26.575	0.537
280.	7.849	34.100	26.611	0.566
300.	7.661	34.120	26.654	0.594
350.	7.065	34.129	26.746	0.662
400.	6.596	34.162	26.836	0.725
450.	6.279	34.199	26.906	0.785
500.	5.796	34.221	26.985	0.841
550.	5.480	34.252	27.048	0.894
600.	5.162	34.294	27.119	0.944
650.	4.947	34.321	27.166	0.990
690.	4.669	34.354	27.223	1.026

STA 11 34 15.3N 120 56.8W D- 950

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.197	33.455	24.974	0.000
10.	14.205	33.454	24.972	0.030
20.	14.085	33.448	24.992	0.060
30.	12.896	33.469	25.250	0.088
40.	11.977	33.525	25.470	0.115
50.	11.663	33.561	25.557	0.139
60.	11.430	33.571	25.607	0.164
70.	10.952	33.606	25.721	0.187
80.	10.619	33.666	25.826	0.209
90.	10.190	33.734	25.953	0.231
100.	10.013	33.765	26.007	0.251
110.	9.749	33.814	26.090	0.271
120.	9.638	33.839	26.128	0.290
130.	9.552	33.848	26.149	0.309
140.	9.347	33.896	26.220	0.327
150.	9.285	33.909	26.240	0.345
160.	9.051	33.940	26.302	0.363
170.	8.927	33.965	26.341	0.380
180.	8.898	33.972	26.351	0.397
190.	8.744	33.993	26.392	0.413
200.	8.656	34.003	26.413	0.430
220.	8.536	34.025	26.449	0.462
240.	8.386	34.047	26.489	0.493
260.	8.200	34.068	26.534	0.524
280.	8.005	34.079	26.572	0.554
300.	7.830	34.097	26.612	0.583
350.	7.471	34.112	26.675	0.653
400.	7.081	34.133	26.747	0.720
450.	6.599	34.175	26.845	0.783
500.	6.081	34.211	26.941	0.842
550.	5.582	34.250	27.034	0.896
600.	5.003	34.294	27.138	0.945
650.	4.853	34.328	27.182	0.990
700.	4.731	34.349	27.212	1.034

STA 13 34 20.0N 120 47.3W D- 713

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.421	33.446	24.920	0.000
10.	14.425	33.445	24.919	0.030
20.	13.992	33.439	25.005	0.061
30.	12.487	33.497	25.351	0.088
40.	11.927	33.531	25.484	0.114
50.	11.456	33.579	25.609	0.139
60.	11.298	33.615	25.665	0.162
70.	11.201	33.626	25.691	0.185
80.	11.120	33.636	25.714	0.208
90.	10.993	33.656	25.752	0.231
100.	10.836	33.680	25.799	0.254
110.	10.334	33.762	25.950	0.275
120.	10.164	33.794	26.004	0.295
130.	10.145	33.798	26.011	0.315
140.	10.030	33.819	26.047	0.335
150.	9.957	33.830	26.067	0.355
160.	9.756	33.867	26.130	0.374
170.	9.399	33.930	26.238	0.392
180.	9.326	33.945	26.261	0.410
190.	9.238	33.964	26.291	0.428
200.	9.131	33.977	26.318	0.445
220.	8.705	33.997	26.401	0.479
240.	8.547	34.032	26.453	0.511
260.	8.376	34.060	26.501	0.542
280.	8.287	34.067	26.520	0.573
300.	8.009	34.089	26.579	0.603
350.	7.195	34.116	26.718	0.674
400.	6.580	34.165	26.840	0.737
450.	6.094	34.193	26.925	0.797
500.	5.784	34.220	26.986	0.852
550.	5.462	34.252	27.050	0.905
600.	5.232	34.279	27.099	0.955
650.	4.877	34.328	27.179	1.001
700.	4.697	34.360	27.225	1.045
710.	4.680	34.362	27.228	1.053

STA 15 34 23.5N 120 40.1W D= 440

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.561	33.445	24.890	0.000
10.	14.391	33.433	24.917	0.031
20.	13.792	33.449	25.054	0.060
30.	13.486	33.457	25.122	0.089
40.	12.899	33.478	25.256	0.117
50.	12.277	33.523	25.411	0.144
60.	11.971	33.546	25.487	0.169
70.	11.685	33.568	25.558	0.194
80.	11.075	33.646	25.730	0.217
90.	10.960	33.662	25.763	0.240
100.	10.886	33.665	25.778	0.262
110.	10.523	33.718	25.883	0.284
120.	10.224	33.763	25.970	0.305
130.	10.011	33.795	26.031	0.325
140.	9.907	33.817	26.066	0.345
150.	9.802	33.841	26.102	0.364
160.	9.739	33.852	26.121	0.383
170.	9.615	33.883	26.166	0.402
180.	9.412	33.922	26.230	0.420
190.	9.291	33.950	26.271	0.438
200.	9.244	33.967	26.292	0.456
220.	9.033	34.005	26.355	0.490
240.	8.706	34.044	26.438	0.523
260.	8.147	34.067	26.541	0.554
280.	7.733	34.098	26.627	0.583
300.	7.467	34.120	26.682	0.611
350.	6.946	34.145	26.775	0.677
400.	6.848	34.151	26.793	0.741
500.				0.854

STA 16 34 25.2N 120 35.7W D= 240

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.671	33.446	24.867	0.000
10.	14.591	33.444	24.883	0.031
20.	14.484	33.448	24.908	0.062
30.	14.033	33.442	24.998	0.092
40.	13.178	33.448	25.177	0.120
50.	12.658	33.460	25.289	0.148
60.	12.077	33.496	25.429	0.175
70.	11.916	33.523	25.480	0.200
80.	11.548	33.579	25.592	0.225
90.	11.449	33.595	25.622	0.248
100.	11.282	33.623	25.674	0.272
110.	11.110	33.644	25.722	0.295
120.	10.819	33.695	25.813	0.317
130.	10.486	33.744	25.910	0.339
140.	9.753	33.850	26.117	0.359
150.	9.618	33.889	26.170	0.378
160.	9.586	33.894	26.179	0.396
170.	9.481	33.910	26.209	0.415
180.	9.190	33.961	26.296	0.432
190.	9.165	33.966	26.304	0.450
200.	9.119	33.966	26.311	0.467
220.	9.051	33.973	26.328	0.501
240.	8.670	34.023	26.427	0.535
500.				0.860

STA 17 34 26.5N 120 32.9W D= 92

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.727	33.435	24.847	0.000
10.	14.531	33.438	24.891	0.031
20.	14.204	33.447	24.967	0.061
30.	13.852	33.448	25.041	0.091
40.	13.721	33.454	25.072	0.120
50.	13.292	33.462	25.165	0.149
60.	12.976	33.472	25.236	0.176
70.	12.575	33.494	25.332	0.204
80.	12.407	33.503	25.371	0.230
90.	11.789	33.559	25.532	0.256
200.				0.476
500.				0.865

STA 18 34 28.4N 120 29.7W D= 27

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.491	33.439	24.900	0.000
10.	14.451	33.442	24.911	0.031
20.	13.571	33.458	25.106	0.060
200.				0.486
500.				0.870

STA 22 34 24.7N 120 50.5W D- 823

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.457	33.449	24.915	0.000
10.	14.451	33.448	24.915	0.030
20.	14.179	33.434	24.962	0.061
30.	13.966	33.442	25.012	0.091
40.	13.046	33.465	25.217	0.119
50.	12.391	33.503	25.374	0.146
60.	12.020	33.541	25.474	0.172
70.	11.507	33.584	25.603	0.196
80.	11.372	33.597	25.638	0.220
90.	11.261	33.611	25.669	0.243
100.	10.781	33.647	25.783	0.266
110.	10.405	33.724	25.908	0.288
120.	10.223	33.759	25.967	0.308
130.	9.896	33.801	26.055	0.328
140.	9.703	33.838	26.116	0.348
150.	9.554	33.874	26.169	0.367
160.	9.402	33.897	26.212	0.385
170.	9.206	33.929	26.268	0.403
180.	9.131	33.940	26.289	0.420
190.	8.975	33.964	26.333	0.438
200.	8.842	33.985	26.370	0.455
220.	8.616	34.027	26.438	0.487
240.	8.487	34.043	26.471	0.519
260.	8.274	34.062	26.518	0.550
280.	7.984	34.091	26.584	0.580
300.	7.884	34.094	26.601	0.609
350.	7.386	34.129	26.701	0.679
400.	6.799	34.157	26.804	0.744
450.	6.463	34.185	26.871	0.805
500.	5.972	34.181	26.932	0.863
550.	5.652	34.231	27.011	0.918
600.	5.160	34.293	27.119	0.968
650.	4.961	34.323	27.166	1.015
690.	4.714	34.360	27.223	1.050

STA 24 34 20.1N 121 0.7W D-1000

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.445	33.428	24.901	0.000
10.	14.469	33.447	24.911	0.031
20.	14.452	33.449	24.916	0.061
30.	14.366	33.453	24.937	0.092
40.	13.915	33.454	25.032	0.122
50.	13.243	33.457	25.171	0.150
60.	12.134	33.498	25.419	0.177
70.	11.154	33.589	25.671	0.201
80.	10.858	33.632	25.758	0.224
90.	10.605	33.713	25.865	0.246
100.	10.530	33.726	25.888	0.267
110.	10.191	33.747	25.963	0.289
120.	9.912	33.797	26.049	0.309
130.	9.759	33.823	26.095	0.328
140.	9.609	33.851	26.142	0.347
150.	9.584	33.856	26.150	0.366
160.	9.456	33.882	26.191	0.385
170.	9.247	33.924	26.258	0.403
180.	9.147	33.942	26.288	0.420
190.	9.059	33.955	26.312	0.438
200.	9.028	33.961	26.322	0.455
220.	8.833	34.001	26.384	0.489
240.	8.546	34.038	26.458	0.521
260.	8.407	34.048	26.487	0.552
280.	8.318	34.061	26.511	0.583
300.	8.115	34.086	26.561	0.613
350.	7.677	34.127	26.658	0.686
400.	6.891	34.151	26.787	0.752
450.	6.297	34.180	26.889	0.813
500.	5.892	34.226	26.977	0.870
550.	5.602	34.256	27.037	0.923
600.	5.364	34.275	27.080	0.974
650.	5.194	34.316	27.133	1.022
700.	4.907	34.322	27.171	1.069

STA 19 34 31.8N 120 34.5W D- 33

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.303	33.459	24.955	0.000
10.	14.265	33.453	24.958	0.030
20.	13.935	33.467	25.038	0.060
200.				0.460
500.				0.859

STA 20 34 30.3N 120 38.3W D- 84

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.197	33.454	24.973	0.000
10.	14.095	33.456	24.996	0.030
20.	13.979	33.457	25.021	0.060
30.	13.259	33.473	25.180	0.088
40.	13.060	33.490	25.233	0.116
50.	12.617	33.521	25.344	0.143
60.	12.266	33.552	25.436	0.169
70.	12.051	33.568	25.489	0.194
200.				0.458
500.				0.860

STA 25 34 25.2N 121 3.9W D-1100

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.900	33.350	24.955	0.000
10.	14.000	33.446	25.008	0.030
20.	13.814	33.458	25.056	0.059
30.	13.783	33.460	25.064	0.088
40.	13.564	33.428	25.084	0.117
50.	13.217	33.423	25.150	0.146
60.	12.673	33.413	25.250	0.174
70.	11.910	33.534	25.490	0.200
80.	11.359	33.593	25.637	0.224
90.	10.912	33.659	25.769	0.247
100.	10.701	33.690	25.830	0.269
110.	10.204	33.761	25.972	0.290
120.	9.888	33.792	26.049	0.311
130.	9.662	33.844	26.128	0.330
140.	9.451	33.886	26.195	0.348
150.	9.344	33.906	26.228	0.367
160.	9.256	33.924	26.256	0.384
170.	9.128	33.944	26.293	0.402
180.	8.898	33.982	26.359	0.419
190.	8.842	33.997	26.379	0.436
200.	8.703	34.014	26.415	0.452
220.	8.608	34.021	26.435	0.485
240.	8.457	34.042	26.474	0.516
260.	8.206	34.065	26.531	0.547
280.	8.037	34.093	26.578	0.577
300.	7.824	34.109	26.622	0.606
350.	7.375	34.137	26.709	0.675
400.	6.993	34.165	26.784	0.741
450.	6.363	34.184	26.884	0.802
500.	6.085	34.220	26.948	0.860
550.	5.763	34.246	27.009	0.914
600.	5.374	34.280	27.083	0.965
650.	5.172	34.313	27.133	1.014
690.	4.967	34.338	27.177	1.050

STA 27 34 29.1N 120 54.4W D- 690

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.188	33.437	24.962	0.000
10.	14.197	33.438	24.961	0.030
20.	14.210	33.441	24.961	0.060
30.	13.799	33.441	25.046	0.090
40.	13.370	33.461	25.149	0.119
50.	13.086	33.461	25.206	0.147
60.	12.133	33.446	25.379	0.174
70.	11.508	33.541	25.570	0.199
80.	10.885	33.599	25.727	0.223
90.	10.672	33.655	25.808	0.245
100.	10.396	33.702	25.893	0.267
110.	10.200	33.741	25.957	0.288
120.	10.000	33.771	26.014	0.308
130.	9.735	33.829	26.104	0.328
140.	9.579	33.858	26.152	0.347
150.	9.465	33.879	26.187	0.365
160.	9.318	33.908	26.234	0.383
170.	9.258	33.917	26.251	0.401
180.	9.135	33.937	26.286	0.419
190.	9.044	33.954	26.314	0.436
200.	8.890	33.981	26.359	0.453
220.	8.682	34.021	26.423	0.486
240.	8.548	34.039	26.458	0.518
260.	8.283	34.062	26.517	0.549
280.	7.997	34.085	26.578	0.579
300.	7.826	34.097	26.612	0.608
350.	7.356	34.128	26.704	0.678
400.	6.739	34.167	26.820	0.743
450.	6.277	34.189	26.899	0.803
500.	6.028	34.224	26.958	0.859
550.	5.772	34.230	26.995	0.914
600.	5.471	34.267	27.061	0.966
650.	5.052	34.304	27.140	1.015
680.	4.902	34.327	27.175	1.043

STA 29 34 34.8N 120 42.4W D- 73

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.393	33.448	24.928	0.000
10.	14.432	33.446	24.918	0.030
20.	14.413	33.445	24.921	0.061
30.	14.284	33.447	24.950	0.091
40.	13.756	33.459	25.069	0.121
50.	13.236	33.482	25.192	0.150
60.	12.158	33.532	25.441	0.176
200.				0.457
500.				0.861

STA 30 34 41.6N 120 41.5W D- 46

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.862	33.462	25.049	0.000
10.	13.839	33.444	25.040	0.029
20.	13.612	33.461	25.100	0.058
30.	13.548	33.464	25.115	0.087
40.	13.167	33.480	25.204	0.115
200.				0.439
500.				0.846

STA 31 34 39.ON 120 46.5W D- 91

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.151	33.450	24.980	0.000
10.	14.078	33.463	25.005	0.030
20.	13.728	33.460	25.075	0.059
30.	13.113	33.480	25.215	0.088
40.	12.710	33.495	25.306	0.115
50.	12.491	33.511	25.361	0.141
60.	11.913	33.555	25.505	0.167
70.	11.340	33.610	25.654	0.191
80.	11.057	33.628	25.719	0.214
200.				0.444
500.				0.849

STA 33 34 34.2N 120 57.9W D- 650

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.095	33.440	24.984	0.000
10.	14.099	33.436	24.980	0.030
20.	14.103	33.438	24.981	0.060
30.	14.027	33.441	24.999	0.090
40.	13.685	33.408	25.044	0.119
50.	13.249	33.372	25.105	0.148
60.	12.427	33.400	25.288	0.176
70.	11.757	33.444	25.448	0.202
80.	11.215	33.497	25.589	0.227
90.	10.917	33.538	25.674	0.251
100.	10.392	33.633	25.840	0.273
110.	10.126	33.680	25.922	0.295
120.	9.827	33.729	26.011	0.315
130.	9.675	33.831	26.115	0.335
140.	9.568	33.857	26.153	0.354
150.	9.425	33.883	26.197	0.372
160.	9.287	33.908	26.239	0.390
170.	9.180	33.932	26.275	0.408
180.	9.060	33.954	26.311	0.425
190.	8.992	33.968	26.333	0.443
200.	8.889	33.985	26.363	0.459
220.	8.606	34.023	26.437	0.492
240.	8.341	34.059	26.506	0.524
260.	8.095	34.078	26.558	0.554
280.	7.842	34.107	26.618	0.583
300.	7.498	34.120	26.678	0.611
350.	6.997	34.152	26.773	0.678
400.	6.780	34.172	26.819	0.741
450.	6.341	34.184	26.887	0.801
500.	6.069	34.206	26.939	0.859
550.	5.842	34.237	26.992	0.914
600.	5.513	34.247	27.040	0.967
640.	5.316	34.273	27.085	1.007

STA 35 34 30.ON 121 8.0W D-1105

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.910	33.434	25.018	0.000
10.	13.863	33.437	25.030	0.030
20.	13.853	33.445	25.038	0.059
30.	13.737	33.460	25.073	0.088
40.	13.557	33.467	25.116	0.117
50.	13.228	33.474	25.187	0.145
60.	12.599	33.497	25.329	0.173
70.	11.805	33.552	25.523	0.198
80.	11.392	33.594	25.632	0.222
90.	10.910	33.647	25.760	0.245
100.	10.535	33.693	25.862	0.267
110.	10.332	33.743	25.936	0.289
120.	10.176	33.775	25.987	0.309
130.	9.938	33.816	26.060	0.329
140.	9.835	33.824	26.083	0.349
150.	9.538	33.847	26.150	0.368
160.	9.444	33.873	26.186	0.386
170.	9.289	33.904	26.236	0.405
180.	9.027	33.939	26.305	0.422
190.	8.891	33.965	26.347	0.439
200.	8.741	33.995	26.394	0.456
220.	8.528	34.026	26.451	0.488
240.	8.305	34.052	26.506	0.520
260.	7.964	34.092	26.588	0.550
280.	7.809	34.109	26.624	0.579
300.	7.547	34.124	26.674	0.607
350.	7.009	34.122	26.748	0.674
400.	6.619	34.175	26.843	0.737
450.	6.157	34.200	26.923	0.796
500.	5.826	34.236	26.993	0.851
550.	5.558	34.261	27.046	0.904
600.	5.286	34.278	27.092	0.954
650.	5.030	34.311	27.148	1.002
700.	4.882	34.332	27.182	1.047
720.	4.847	34.339	27.191	1.065

STA 36 34 34.9N 121 10.8W D- 915

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.970	33.418	24.993	0.000
10.	13.930	33.418	25.001	0.030
20.	13.917	33.417	25.003	0.059
30.	13.915	33.439	25.021	0.089
40.	13.855	33.459	25.048	0.118
50.	13.662	33.455	25.085	0.148
60.	13.096	33.453	25.198	0.176
70.	11.891	33.440	25.420	0.203
80.	11.172	33.561	25.646	0.227
90.	10.563	33.637	25.813	0.250
100.	10.221	33.677	25.904	0.272
110.	9.991	33.714	25.971	0.292
120.	9.799	33.762	26.041	0.313
130.	9.598	33.867	26.156	0.332
140.	9.503	33.871	26.175	0.350
150.	9.277	33.916	26.247	0.368
160.	9.193	33.940	26.279	0.386
170.	8.974	33.978	26.344	0.404
180.	8.838	33.999	26.382	0.420
190.	8.674	34.020	26.424	0.437
200.	8.561	34.037	26.455	0.453
220.	8.254	34.066	26.524	0.484
240.	8.051	34.086	26.570	0.514
260.	7.806	34.104	26.621	0.543
280.	7.658	34.115	26.651	0.571
300.	7.446	34.131	26.694	0.599
350.	6.808	34.123	26.776	0.665
400.	6.383	34.125	26.835	0.728
450.	6.115	34.156	26.894	0.788
500.	5.849	34.200	26.962	0.845
550.	5.576	34.237	27.025	0.899
600.	5.218	34.281	27.102	0.949
650.	4.887	34.331	27.180	0.996
700.	4.681	34.364	27.230	1.040
710.	4.627	34.372	27.242	1.048

STA 38 34 39.4N 121 1.0W D- 572

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.255	33.438	24.949	0.000
10.	14.121	33.435	24.975	0.030
20.	14.051	33.441	24.994	0.060
30.	14.032	33.443	24.999	0.090
40.	13.998	33.447	25.010	0.119
50.	13.852	33.439	25.034	0.149
60.	12.991	33.462	25.225	0.178
70.	12.275	33.486	25.383	0.204
80.	11.327	33.560	25.617	0.229
90.	11.007	33.609	25.713	0.253
100.	10.672	33.659	25.811	0.275
110.	10.491	33.684	25.862	0.297
120.	10.235	33.724	25.938	0.318
130.	9.997	33.775	26.018	0.338
140.	9.807	33.812	26.079	0.358
150.	9.641	33.846	26.133	0.377
160.	9.547	33.869	26.166	0.396
170.	9.398	33.895	26.211	0.414
180.	9.278	33.917	26.247	0.432
190.	9.121	33.944	26.294	0.450
200.	8.863	33.983	26.365	0.467
220.	8.564	34.012	26.435	0.500
240.	8.243	34.049	26.513	0.531
260.	7.786	34.091	26.613	0.561
280.	7.544	34.110	26.663	0.589
300.	7.271	34.124	26.713	0.617
350.	6.817	34.168	26.811	0.682
400.	6.386	34.187	26.883	0.742
450.	6.145	34.216	26.937	0.800
500.	5.658	34.225	27.005	0.855
550.	5.511	34.248	27.041	0.907
560.	5.403	34.262	27.065	0.918

STA 40 34 44.9N 120 49.7W D- 111

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.374	33.449	24.932	0.000
10.	14.335	33.452	24.943	0.030
20.	14.180	33.450	24.974	0.060
30.	13.426	33.460	25.137	0.089
40.	12.902	33.483	25.259	0.117
50.	12.356	33.519	25.393	0.144
60.	11.988	33.546	25.484	0.169
70.	11.592	33.575	25.580	0.194
80.	10.956	33.645	25.750	0.218
90.	10.470	33.718	25.892	0.239
100.	10.268	33.755	25.956	0.260
200.				0.465
500.				0.848

STA 42 34 48.6N 120 40.4W D- 32

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.675	33.462	25.088	0.000
10.	13.592	33.462	25.105	0.029
20.	13.472	33.472	25.137	0.057
200.				0.460
500.				0.839

STA 43 34 54.3N 120 43.1W D- 44

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.028	33.469	25.020	0.000
10.	14.003	33.471	25.027	0.030
20.	13.897	33.470	25.048	0.059
30.	13.573	33.470	25.115	0.088
40.	12.579	33.513	25.346	0.116
200.				0.437
500.				0.846

STA 45 34 49.7N 120 53.2W D- 212

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.197	33.455	24.974	0.000
10.	14.210	33.450	24.968	0.030
20.	14.196	33.451	24.971	0.060
30.	14.191	33.451	24.972	0.090
40.	14.117	33.449	24.986	0.120
50.	13.606	33.448	25.091	0.149
60.	12.635	33.473	25.304	0.177
70.	11.512	33.551	25.577	0.203
80.	11.018	33.611	25.713	0.226
90.	10.578	33.694	25.855	0.249
100.	10.345	33.748	25.937	0.270
110.	9.916	33.807	26.056	0.290
120.	9.534	33.873	26.171	0.309
130.	9.470	33.881	26.188	0.327
140.	9.224	33.928	26.265	0.345
150.	9.180	33.937	26.279	0.363
160.	9.177	33.937	26.279	0.381
170.	9.165	33.939	26.283	0.398
180.	9.162	33.939	26.283	0.415
190.	9.148	33.941	26.287	0.433
200.	9.031	33.956	26.318	0.450
500.				0.851

STA 47 34 44.2N 121 4.8W D- 540

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.178	33.460	24.982	0.000
10.	14.130	33.457	24.990	0.030
20.	14.039	33.459	25.010	0.060
30.	13.995	33.457	25.018	0.089
40.	13.923	33.457	25.033	0.119
50.	13.441	33.455	25.130	0.148
60.	13.012	33.467	25.225	0.176
70.	12.253	33.481	25.384	0.202
80.	11.769	33.520	25.505	0.228
90.	10.877	33.630	25.753	0.252
100.	10.462	33.697	25.878	0.274
110.	10.391	33.707	25.898	0.295
120.	10.143	33.749	25.973	0.315
130.	9.820	33.809	26.074	0.335
140.	9.653	33.844	26.129	0.355
150.	9.450	33.885	26.194	0.373
160.	9.304	33.917	26.243	0.391
170.	9.195	33.938	26.277	0.409
180.	9.003	33.971	26.334	0.426
190.	8.830	33.995	26.380	0.443
200.	8.553	34.029	26.450	0.459
220.	8.289	34.063	26.517	0.490
240.	8.033	34.093	26.579	0.520
260.	7.813	34.110	26.624	0.549
280.	7.569	34.129	26.675	0.577
300.	7.382	34.130	26.702	0.605
350.	7.026	34.153	26.770	0.671
400.	6.681	34.181	26.839	0.734
450.	6.258	34.179	26.893	0.793
500.	5.852	34.203	26.964	0.850
520.	5.607	34.236	27.020	0.872

STA 49 34 39.9N 121 14.2W D- 732

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.086	33.471	25.010	0.000
10.	14.059	33.470	25.015	0.030
20.	13.946	33.467	25.036	0.059
30.	13.798	33.463	25.063	0.088
40.	13.292	33.465	25.168	0.117
50.	12.382	33.489	25.365	0.144
60.	11.555	33.533	25.555	0.170
70.	10.974	33.566	25.686	0.193
80.	10.412	33.642	25.843	0.216
90.	10.321	33.688	25.895	0.237
100.	10.138	33.746	25.971	0.258
110.	9.772	33.823	26.093	0.278
120.	9.731	33.832	26.107	0.297
130.	9.612	33.837	26.130	0.316
140.	9.305	33.873	26.209	0.335
150.	9.266	33.919	26.251	0.353
160.	9.171	33.936	26.280	0.370
170.	9.049	33.954	26.313	0.388
180.	8.908	33.974	26.351	0.405
190.	8.797	33.999	26.388	0.421
200.	8.704	34.013	26.414	0.438
220.	8.280	34.055	26.512	0.469
240.	8.051	34.073	26.560	0.499
260.	7.789	34.093	26.615	0.529
280.	7.454	34.115	26.680	0.557
300.	7.179	34.104	26.710	0.584
350.	6.636	34.140	26.813	0.649
400.	6.172	34.165	26.893	0.709
450.	5.900	34.195	26.952	0.766
500.	5.683	34.212	26.992	0.821
550.	5.434	34.255	27.056	0.873
600.	5.106	34.301	27.131	0.923
650.	4.915	34.330	27.176	0.969
700.	4.800	34.348	27.204	1.013

STA 50 34 44.6N 121 17.8W D- 570

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.104	33.457	24.995	0.000
10.	14.114	33.456	24.992	0.030
20.	14.075	33.460	25.004	0.060
30.	13.974	33.462	25.026	0.089
40.	13.801	33.463	25.063	0.118
50.	13.665	33.467	25.094	0.147
60.	13.168	33.452	25.182	0.176
70.	12.248	33.497	25.397	0.203
80.	11.726	33.532	25.522	0.228
90.	10.400	33.699	25.890	0.251
100.	10.292	33.729	25.932	0.272
110.	9.972	33.788	26.032	0.293
120.	9.858	33.812	26.070	0.312
130.	9.656	33.848	26.132	0.331
140.	9.397	33.897	26.213	0.350
150.	9.194	33.936	26.276	0.368
160.	9.059	33.959	26.315	0.385
170.	8.888	33.989	26.366	0.402
180.	8.666	34.025	26.429	0.419
190.	8.563	34.037	26.454	0.435
200.	8.453	34.044	26.477	0.451
220.	8.083	34.047	26.535	0.481
240.	7.717	34.071	26.608	0.511
260.	7.511	34.092	26.654	0.539
280.	7.199	34.101	26.705	0.566
300.	7.018	34.108	26.736	0.593
350.	6.475	34.153	26.845	0.656
400.	6.278	34.155	26.872	0.717
450.	6.009	34.186	26.931	0.775
500.	5.697	34.222	26.998	0.830
550.	5.394	34.264	27.068	0.882
560.	5.341	34.272	27.081	0.892

STA 52 34 49.3N 121 8.3W D= 556

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.094	33.459	24.999	0.000
10.	14.098	33.458	24.997	0.030
20.	14.071	33.457	25.002	0.059
30.	13.777	33.454	25.061	0.089
40.	13.106	33.475	25.213	0.117
50.	12.410	33.508	25.374	0.144
60.	12.020	33.535	25.470	0.170
70.	11.206	33.580	25.655	0.194
80.	10.844	33.646	25.771	0.217
90.	10.439	33.701	25.885	0.239
100.	10.008	33.774	26.015	0.260
110.	9.853	33.812	26.071	0.279
120.	9.663	33.846	26.129	0.299
130.	9.492	33.876	26.181	0.317
140.	9.373	33.896	26.216	0.336
150.	9.181	33.934	26.276	0.353
160.	9.142	33.938	26.286	0.371
170.	9.001	33.967	26.331	0.388
180.	8.829	33.998	26.382	0.405
190.	8.727	34.014	26.411	0.421
200.	8.601	34.028	26.441	0.437
220.	8.362	34.061	26.504	0.469
240.	8.133	34.084	26.557	0.499
260.	7.995	34.093	26.584	0.528
280.	7.712	34.117	26.645	0.557
300.	7.553	34.132	26.679	0.585
350.	7.062	34.139	26.754	0.652
400.	6.620	34.153	26.825	0.715
450.	6.028	34.189	26.931	0.775
500.	5.756	34.219	26.988	0.830
550.	5.444	34.257	27.057	0.883

STA 54 34 54.8N 120 56.6W D= 320

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.188	33.459	24.979	0.000
10.	14.182	33.459	24.980	0.030
20.	14.096	33.459	24.998	0.060
30.	14.033	33.452	25.006	0.089
40.	13.924	33.459	25.034	0.119
50.	13.674	33.451	25.079	0.148
60.	12.658	33.475	25.301	0.176
70.	11.518	33.547	25.572	0.201
80.	10.921	33.642	25.754	0.224
90.	10.744	33.687	25.820	0.246
100.	10.227	33.757	25.965	0.268
110.	9.934	33.804	26.051	0.288
120.	9.772	33.830	26.098	0.307
130.	9.501	33.879	26.181	0.326
140.	9.316	33.914	26.239	0.344
150.	9.285	33.920	26.249	0.362
160.	9.240	33.927	26.261	0.380
170.	9.014	33.964	26.326	0.397
180.	8.801	33.995	26.384	0.414
190.	8.714	34.009	26.409	0.430
200.	8.628	34.018	26.429	0.447
220.	8.494	34.032	26.461	0.479
240.	8.271	34.058	26.515	0.510
260.	8.257	34.059	26.518	0.540
280.	8.231	34.061	26.524	0.571
300.	8.182	34.063	26.533	0.601
500.				0.857

STA 56 35 0.9N 120 43.2W D= 47

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.851	33.472	25.059	0.000
10.	13.688	33.476	25.096	0.029
20.	13.334	33.478	25.169	0.058
30.	12.931	33.502	25.268	0.085
40.	12.692	33.519	25.328	0.112
200.				0.449
500.				0.879

STA 57 35 6.9N 120 44.6W D= 44

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.453	33.474	25.142	0.000
10.	13.450	33.473	25.142	0.028
20.	13.284	33.479	25.180	0.056
30.	13.136	33.479	25.210	0.084
200.				0.442
500.				0.877

STA 58 35 4.8N 120 49.2W D- 99

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.179	33.491	25.210	0.000
10.	12.792	33.506	25.299	0.027
20.	12.383	33.534	25.400	0.054
30.	12.243	33.547	25.437	0.080
40.	12.079	33.557	25.475	0.105
50.	11.936	33.571	25.513	0.130
60.	11.785	33.586	25.553	0.154
70.	11.635	33.606	25.597	0.179
80.	11.558	33.614	25.617	0.203
90.	11.508	33.621	25.632	0.227
200.				0.440
500.				0.866

STA 59 35 1.7N 120 55.5W D- 247

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.091	33.465	25.004	0.000
10.	14.070	33.466	25.009	0.030
20.	14.003	33.469	25.025	0.059
30.	13.947	33.465	25.034	0.089
40.	13.575	33.466	25.111	0.118
50.	13.180	33.472	25.196	0.146
60.	12.519	33.502	25.349	0.173
70.	11.967	33.545	25.487	0.199
80.	11.394	33.598	25.635	0.223
90.	10.932	33.633	25.745	0.246
100.	10.586	33.714	25.869	0.268
110.	10.347	33.755	25.943	0.289
120.	10.128	33.780	26.000	0.309
130.	9.973	33.803	26.044	0.329
140.	9.909	33.813	26.062	0.349
150.	9.663	33.853	26.134	0.368
160.	9.481	33.886	26.190	0.387
170.	9.316	33.914	26.239	0.405
180.	9.158	33.943	26.287	0.423
190.	9.019	33.965	26.326	0.440
200.	8.787	33.997	26.388	0.457
220.	8.725	34.006	26.405	0.490
240.	8.648	34.016	26.425	0.522
500.				0.869

STA 60 34 59.4N 121 0.4W D- 422

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.775	33.454	25.061	0.000
10.	13.638	33.454	25.089	0.029
20.	13.638	33.456	25.091	0.058
30.	13.636	33.457	25.092	0.087
40.	13.546	33.462	25.114	0.116
50.	13.204	33.473	25.191	0.144
60.	12.606	33.513	25.340	0.171
70.	12.566	33.515	25.350	0.197
80.	11.331	33.554	25.612	0.222
90.	10.728	33.671	25.811	0.245
100.	10.448	33.722	25.899	0.266
110.	10.255	33.757	25.960	0.287
120.	10.025	33.796	26.029	0.308
130.	9.744	33.836	26.108	0.327
140.	9.690	33.844	26.123	0.346
150.	9.593	33.857	26.149	0.365
160.	9.535	33.874	26.172	0.384
170.	9.359	33.908	26.227	0.402
180.	9.279	33.921	26.250	0.420
190.	9.071	33.957	26.312	0.437
200.	8.706	34.015	26.415	0.454
220.	8.535	34.038	26.459	0.486
240.	8.308	34.063	26.514	0.517
260.	7.989	34.095	26.587	0.547
280.	7.846	34.096	26.609	0.576
300.	7.590	34.101	26.650	0.605
350.	7.071	34.124	26.741	0.672
400.	6.660	34.159	26.825	0.736
500.				0.855

STA 61 34 57.9N 121 3.4W D- 495

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.011	33.457	25.015	0.000
10.	13.980	33.459	25.023	0.030
20.	13.973	33.460	25.025	0.059
30.	13.966	33.458	25.025	0.088
40.	13.918	33.454	25.032	0.118
50.	13.640	33.454	25.089	0.147
60.	13.053	33.469	25.218	0.176
70.	12.172	33.519	25.428	0.202
80.	11.606	33.573	25.576	0.227
90.	11.144	33.628	25.703	0.251
100.	10.892	33.668	25.779	0.274
110.	10.456	33.722	25.898	0.295
120.	10.134	33.768	25.989	0.316
130.	9.984	33.794	26.035	0.336
140.	9.781	33.831	26.098	0.356
150.	9.580	33.867	26.159	0.374
160.	9.289	33.916	26.245	0.393
170.	9.162	33.936	26.281	0.410
180.	9.043	33.959	26.318	0.428
190.	8.839	33.996	26.379	0.445
200.	8.826	33.998	26.383	0.461
220.	8.435	34.048	26.483	0.493
240.	8.188	34.079	26.544	0.524
260.	8.079	34.090	26.569	0.554
280.	7.698	34.095	26.629	0.583
300.	7.433	34.101	26.672	0.611
350.	6.863	34.137	26.780	0.677
400.	6.613	34.160	26.832	0.740
450.	6.271	34.179	26.892	0.800
500.				0.857

STA 63 34 53.9N 121 11.5W D- 565

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.215	33.461	24.975	0.000
10.	14.153	33.464	24.990	0.030
20.	14.126	33.464	24.996	0.060
30.	14.009	33.462	25.019	0.089
40.	13.058	33.467	25.216	0.118
50.	12.517	33.489	25.339	0.145
60.	11.983	33.518	25.463	0.171
70.	11.534	33.568	25.586	0.195
80.	11.056	33.624	25.716	0.219
90.	10.670	33.674	25.823	0.241
100.	10.358	33.717	25.911	0.263
110.	10.128	33.757	25.982	0.283
120.	9.915	33.793	26.046	0.303
130.	9.848	33.806	26.067	0.323
140.	9.617	33.848	26.138	0.342
150.	9.503	33.867	26.172	0.361
160.	9.384	33.890	26.209	0.379
170.	9.285	33.914	26.244	0.397
180.	9.146	33.942	26.288	0.415
190.	9.021	33.968	26.328	0.432
200.	8.955	33.977	26.346	0.449
220.	8.555	34.029	26.449	0.482
240.	8.126	34.071	26.547	0.513
260.	7.943	34.093	26.592	0.543
280.	7.637	34.121	26.659	0.571
300.	7.400	34.132	26.701	0.599
350.	6.692	34.144	26.809	0.664
400.	6.340	34.164	26.871	0.725
450.	5.974	34.202	26.948	0.783
500.	5.681	34.231	27.007	0.837
550.	5.363	34.264	27.072	0.888

STA 65 34 49.5N 121 21.0W D- 500

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.757	33.134	24.818	0.000
10.	13.637	33.137	24.845	0.031
20.	13.559	33.149	24.870	0.062
30.	13.639	33.231	24.917	0.093
40.	12.758	33.226	25.089	0.123
50.	12.317	33.275	25.212	0.151
60.	11.840	33.499	25.476	0.178
70.	11.285	33.529	25.601	0.202
80.	10.991	33.615	25.721	0.226
90.	10.481	33.688	25.867	0.248
100.	10.372	33.702	25.897	0.269
110.	10.236	33.731	25.943	0.290
120.	10.145	33.748	25.972	0.311
130.	9.912	33.797	26.049	0.331
140.	9.729	33.844	26.117	0.350
150.	9.536	33.881	26.177	0.369
160.	9.456	33.896	26.202	0.387
170.	9.270	33.914	26.246	0.405
180.	9.129	33.933	26.284	0.423
190.	8.917	33.966	26.343	0.440
200.	8.703	33.997	26.401	0.457
220.	8.192	34.013	26.492	0.489
240.	7.737	34.025	26.569	0.519
260.	7.612	34.091	26.639	0.548
280.	7.339	34.101	26.686	0.576
300.	7.229	34.107	26.706	0.603
350.	6.731	34.099	26.768	0.669
400.	6.296	34.152	26.867	0.731
450.	5.890	34.204	26.960	0.788
500.				0.843

STA 67 34 44.0N 121 32.3W D- 915

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.923	33.326	24.932	0.000
10.	13.920	33.351	24.952	0.030
20.	13.944	33.421	25.001	0.060
30.	13.896	33.429	25.017	0.090
40.	13.582	33.421	25.075	0.119
50.	13.523	33.430	25.094	0.148
60.	12.616	33.436	25.279	0.176
70.	12.029	33.478	25.424	0.203
80.	11.391	33.546	25.595	0.227
90.	11.084	33.596	25.689	0.251
100.	10.672	33.653	25.807	0.274
110.	10.437	33.680	25.869	0.295
120.	10.136	33.745	25.971	0.316
130.	9.900	33.796	26.051	0.336
140.	9.707	33.845	26.121	0.356
150.	9.520	33.868	26.170	0.375
160.	9.240	33.917	26.254	0.393
170.	9.126	33.945	26.294	0.410
180.	8.871	33.979	26.361	0.427
190.	8.696	34.000	26.405	0.444
200.	8.578	34.008	26.429	0.460
220.	8.256	34.031	26.496	0.492
240.	8.001	34.048	26.548	0.522
260.	7.630	34.063	26.614	0.551
280.	7.316	34.083	26.675	0.580
300.	7.172	34.092	26.702	0.607
350.	6.760	34.123	26.783	0.672
400.	6.294	34.147	26.863	0.735
450.	6.048	34.180	26.921	0.793
500.	5.834	34.210	26.972	0.849
550.	5.505	34.246	27.041	0.902
600.	5.247	34.272	27.092	0.952
650.	5.016	34.315	27.153	1.000
700.	4.800	34.352	27.207	1.045
720.	4.773	34.355	27.212	1.062

STA 69 34 53.8N 121 24.2W D- 457

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.692	33.155	24.848	0.000
10.	13.666	33.151	24.850	0.031
20.	13.611	33.155	24.864	0.062
30.	13.589	33.163	24.875	0.093
40.	13.582	33.185	24.893	0.124
50.	13.413	33.205	24.943	0.155
60.	12.835	33.281	25.116	0.184
70.	11.609	33.280	25.349	0.211
80.	11.368	33.357	25.453	0.237
90.	10.914	33.462	25.616	0.261
100.	10.447	33.519	25.742	0.285
110.	10.294	33.627	25.852	0.307
120.	9.990	33.721	25.977	0.328
130.	9.735	33.738	26.033	0.348
140.	9.634	33.809	26.105	0.368
150.	9.497	33.848	26.158	0.386
160.	9.392	33.855	26.181	0.405
170.	9.169	33.908	26.258	0.423
180.	8.975	33.937	26.312	0.441
190.	8.647	33.957	26.379	0.458
200.	8.547	34.006	26.432	0.474
220.	8.047	34.021	26.520	0.505
240.	7.678	34.022	26.575	0.535
260.	7.645	34.098	26.639	0.564
280.	7.529	34.100	26.658	0.592
300.	7.229	34.094	26.696	0.619
350.	6.676	34.135	26.804	0.685
400.	5.966	34.198	26.946	0.744
500.				0.849

STA 71 34 58.6N 121 15.2W D- 588

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.965	33.354	24.945	0.000
10.	14.038	33.406	24.970	0.030
20.	14.002	33.464	25.022	0.060
30.	13.942	33.459	25.030	0.089
40.	13.845	33.461	25.052	0.119
50.	13.136	33.473	25.205	0.147
60.	12.059	33.512	25.444	0.174
70.	11.265	33.592	25.654	0.198
80.	11.159	33.605	25.683	0.221
90.	10.915	33.635	25.750	0.244
100.	10.492	33.692	25.868	0.266
110.	10.114	33.768	25.993	0.287
120.	9.871	33.812	26.068	0.307
130.	9.649	33.860	26.142	0.326
140.	9.543	33.876	26.172	0.345
150.	9.504	33.884	26.185	0.363
160.	9.366	33.904	26.223	0.381
170.	9.207	33.932	26.271	0.399
180.	9.101	33.951	26.302	0.417
190.	8.820	33.998	26.384	0.434
200.	8.584	34.029	26.445	0.450
220.	8.135	34.053	26.532	0.481
240.	7.984	34.084	26.579	0.511
260.	7.778	34.092	26.615	0.540
280.	7.572	34.098	26.650	0.568
300.	7.356	34.113	26.693	0.596
350.	6.752	34.133	26.792	0.661
400.	6.172	34.138	26.872	0.723
450.	5.955	34.172	26.927	0.781
500.	5.616	34.220	27.007	0.836
550.	5.279	34.254	27.074	0.888
580.	5.119	34.280	27.113	0.918

STA 73 35 4.0N 121 3.9W D- 484

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.989	33.458	25.020	0.000
10.	13.981	33.456	25.020	0.030
20.	13.480	33.455	25.122	0.059
30.	13.094	33.473	25.213	0.087
40.	12.335	33.514	25.393	0.113
50.	11.623	33.565	25.567	0.139
60.	11.366	33.574	25.621	0.163
70.	10.842	33.639	25.766	0.186
80.	10.751	33.659	25.797	0.208
90.	10.636	33.680	25.834	0.230
100.	10.491	33.712	25.884	0.252
110.	10.173	33.768	25.983	0.272
120.	9.936	33.811	26.056	0.292
130.	9.777	33.832	26.099	0.312
140.	9.671	33.849	26.130	0.331
150.	9.486	33.883	26.187	0.350
160.	9.427	33.894	26.205	0.368
170.	9.210	33.932	26.270	0.386
180.	9.100	33.951	26.303	0.403
190.	8.948	33.977	26.347	0.420
200.	8.881	33.987	26.366	0.437
220.	8.629	34.024	26.434	0.470
240.	8.409	34.045	26.484	0.501
260.	8.168	34.064	26.536	0.532
280.	7.841	34.088	26.603	0.562
300.	7.621	34.090	26.637	0.590
350.	7.082	34.119	26.736	0.658
400.	6.600	34.154	26.829	0.722
450.	6.331	34.172	26.878	0.782
500.				0.841

STA 75 35 10.1N 120 51.7W D- 59

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.343	33.478	25.167	0.000
10.	13.293	33.471	25.172	0.028
20.	13.194	33.471	25.192	0.056
30.	13.184	33.471	25.194	0.084
40.	13.153	33.475	25.203	0.112
50.	12.897	33.490	25.266	0.139
200.				0.432
500.				0.855

STA 76 35 15.3N 120 55.5W D- 56

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.310	33.388	25.105	0.000
10.	13.275	33.451	25.160	0.028
20.	13.278	33.463	25.169	0.057
30.	13.224	33.468	25.184	0.084
40.	13.180	33.471	25.195	0.112
50.	13.064	33.478	25.223	0.140
200.				0.436
500.				0.839

STA 78 35 9.1N 121 7.5W D= 544

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.672	33.461	25.088	0.000
10.	13.531	33.458	25.114	0.029
20.	13.427	33.453	25.131	0.057
30.	13.089	33.477	25.218	0.085
40.	12.735	33.495	25.301	0.113
50.	12.402	33.528	25.391	0.139
60.	11.977	33.560	25.497	0.165
70.	11.452	33.563	25.597	0.189
80.	11.200	33.585	25.660	0.213
90.	10.841	33.637	25.764	0.236
100.	10.371	33.726	25.916	0.257
110.	10.287	33.745	25.945	0.278
120.	10.201	33.763	25.974	0.299
130.	9.890	33.813	26.065	0.319
140.	9.642	33.850	26.136	0.338
150.	9.483	33.881	26.186	0.357
160.	9.336	33.909	26.232	0.375
170.	9.233	33.927	26.263	0.393
180.	8.996	33.967	26.332	0.410
190.	8.886	33.987	26.365	0.427
200.	8.846	33.993	26.376	0.444
220.	8.425	34.026	26.467	0.476
240.	8.149	34.056	26.532	0.507
260.	7.983	34.079	26.575	0.537
280.	7.668	34.094	26.633	0.566
300.	7.476	34.101	26.666	0.594
350.	6.947	34.135	26.767	0.661
400.	6.536	34.157	26.840	0.724
450.	5.996	34.179	26.927	0.783
500.	5.685	34.215	26.994	0.839
530.	5.502	34.238	27.035	0.870

STA 80 35 3.5N 121 18.7W D= 620

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.654	33.252	24.930	0.000
10.	13.687	33.255	24.926	0.030
20.	13.848	33.333	24.953	0.061
30.	13.944	33.402	24.986	0.091
40.	13.457	33.402	25.086	0.120
50.	13.051	33.432	25.190	0.148
60.	12.405	33.435	25.319	0.176
70.	12.048	33.467	25.412	0.202
80.	11.694	33.458	25.471	0.227
90.	11.321	33.540	25.603	0.252
100.	10.911	33.592	25.717	0.275
110.	10.311	33.701	25.907	0.297
120.	10.020	33.778	26.016	0.317
130.	9.859	33.805	26.064	0.337
140.	9.596	33.842	26.137	0.356
150.	9.354	33.903	26.224	0.375
160.	9.295	33.917	26.245	0.393
170.	9.075	33.960	26.314	0.410
180.	9.014	33.962	26.325	0.428
190.	8.752	33.997	26.394	0.444
200.	8.563	34.026	26.446	0.461
220.	8.316	34.050	26.502	0.492
240.	8.085	34.068	26.551	0.523
260.	7.847	34.089	26.603	0.552
280.	7.604	34.110	26.655	0.580
300.	7.373	34.112	26.689	0.608
350.	6.757	34.114	26.776	0.674
400.	6.440	34.157	26.852	0.736
450.	5.946	34.188	26.940	0.794
500.	5.462	34.230	27.033	0.848
550.	5.288	34.264	27.081	0.899
600.	5.046	34.300	27.138	0.947
610.	5.023	34.302	27.142	0.956

STA 82 34 59.1N 121 27.6W D= 507

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.627	33.318	24.987	0.000
10.	13.638	33.321	24.987	0.030
20.	13.654	33.338	24.996	0.060
30.	13.712	33.420	25.048	0.089
40.	13.209	33.432	25.159	0.118
50.	12.896	33.396	25.193	0.146
60.	12.022	33.430	25.388	0.173
70.	11.184	33.406	25.524	0.198
80.	10.640	33.509	25.700	0.222
90.	10.500	33.541	25.750	0.245
100.	10.099	33.707	25.948	0.266
110.	9.992	33.727	25.981	0.286
120.	9.816	33.806	26.072	0.306
130.	9.438	33.877	26.190	0.325
140.	9.343	33.899	26.223	0.344
150.	9.079	33.942	26.299	0.361
160.	8.923	33.965	26.342	0.379
170.	8.840	33.976	26.363	0.395
180.	8.654	34.009	26.418	0.412
190.	8.619	34.015	26.428	0.428
200.	8.538	34.022	26.446	0.444
220.	8.276	34.060	26.516	0.475
240.	8.098	34.076	26.555	0.505
260.	7.897	34.096	26.601	0.535
280.	7.672	34.112	26.646	0.564
300.	7.426	34.128	26.694	0.591
350.	6.700	34.161	26.821	0.656
400.	6.107	34.192	26.923	0.715
450.	5.793	34.219	26.984	0.771
500.				0.824

STA 101 34 25.1N 120 27.0W D= 75

DEPTH	TEMP	SAL	SIGMA	DELD
0.	15.255	33.481	24.767	0.000
10.	15.227	33.479	24.772	0.032
20.	15.179	33.478	24.782	0.064
30.	14.968	33.468	24.820	0.095
40.	14.667	33.457	24.876	0.127
50.	14.002	33.453	25.013	0.157
60.	13.795	33.456	25.058	0.186
70.	13.703	33.461	25.081	0.215

STA 102 34 20.4N 120 27.1W D- 321

DEPTH	TEMP	SAL	SIGMA	DELD
0.	15.039	33.477	24.811	0.000
10.	15.034	33.481	24.816	0.031
20.	14.710	33.477	24.882	0.063
30.	14.578	33.481	24.914	0.094
40.	13.367	33.479	25.163	0.123
50.	13.074	33.480	25.223	0.151
60.	12.704	33.505	25.315	0.178
70.	12.290	33.517	25.404	0.204
80.	12.014	33.542	25.476	0.230
90.	11.757	33.578	25.552	0.254
100.	11.377	33.615	25.651	0.279
110.	11.161	33.649	25.717	0.302
120.	11.070	33.660	25.741	0.324
130.	10.687	33.703	25.843	0.346
140.	10.581	33.721	25.875	0.368
150.	10.379	33.769	25.948	0.389
160.	10.226	33.797	25.996	0.410
170.	9.892	33.833	26.081	0.429
180.	9.704	33.886	26.153	0.449
190.	9.489	33.934	26.226	0.467
200.	9.351	33.963	26.271	0.485
220.	8.942	34.033	26.392	0.519
240.	8.690	34.083	26.470	0.551
260.	8.531	34.099	26.508	0.582
280.	8.359	34.110	26.543	0.612
300.	8.135	34.134	26.595	0.642
500.				0.894

STA 103 34 18.3N 120 31.1W D- 431

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.650	33.482	24.899	0.000
10.	14.655	33.483	24.899	0.031
20.	14.636	33.482	24.902	0.061
30.	14.528	33.479	24.923	0.092
40.	14.222	33.474	24.984	0.122
50.	14.064	33.467	25.011	0.152
60.	13.898	33.472	25.050	0.181
70.	13.169	33.462	25.190	0.210
80.	12.718	33.489	25.300	0.237
90.	12.397	33.516	25.383	0.263
100.	12.158	33.537	25.445	0.289
110.	11.591	33.584	25.588	0.314
120.	11.014	33.669	25.758	0.337
130.	10.773	33.698	25.824	0.359
140.	10.360	33.768	25.950	0.380
150.	10.010	33.839	26.065	0.401
160.	9.783	33.871	26.129	0.420
170.	9.434	33.942	26.242	0.438
180.	9.167	33.974	26.310	0.456
190.	9.052	34.019	26.363	0.473
200.	8.939	34.040	26.398	0.489
220.	8.644	34.074	26.471	0.521
240.	8.062	34.108	26.586	0.552
260.	7.858	34.123	26.628	0.581
280.	7.789	34.130	26.644	0.609
300.	7.668	34.140	26.669	0.637
350.	7.284	34.157	26.737	0.705
400.	6.994	34.171	26.789	0.770
500.				0.887

STA 105 34 12.9N 120 42.0W D- 705

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.871	33.479	24.849	0.000
10.	14.874	33.481	24.850	0.031
20.	14.747	33.479	24.876	0.062
30.	14.096	33.475	25.011	0.092
40.	13.752	33.479	25.085	0.122
50.	13.654	33.479	25.105	0.150
60.	13.189	33.474	25.195	0.179
70.	12.179	33.537	25.441	0.206
80.	11.399	33.602	25.637	0.230
90.	11.163	33.645	25.713	0.253
100.	10.901	33.672	25.781	0.276
110.	10.624	33.720	25.867	0.298
120.	10.269	33.783	25.978	0.319
130.	9.953	33.838	26.074	0.339
140.	9.877	33.851	26.097	0.358
150.	9.711	33.882	26.149	0.377
160.	9.527	33.913	26.204	0.396
170.	9.448	33.940	26.238	0.414
180.	9.121	33.976	26.319	0.431
190.	8.928	33.994	26.364	0.448
200.	8.836	34.005	26.387	0.465
220.	8.581	34.031	26.447	0.497
240.	8.329	34.078	26.522	0.528
260.	8.033	34.107	26.589	0.558
280.	7.790	34.121	26.636	0.587
300.	7.623	34.139	26.675	0.615
350.	7.269	34.173	26.752	0.682
400.	6.646	34.143	26.814	0.746
450.	6.263	34.184	26.897	0.806
500.	5.823	34.219	26.980	0.863
550.	5.619	34.251	27.031	0.916
600.	5.270	34.290	27.103	0.967
650.	4.983	34.335	27.172	1.014
680.	4.826	34.360	27.210	1.040

STA 107 34 8.3N 120 51.8W D- 914

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.486	33.484	24.936	0.000
10.	14.413	33.487	24.953	0.030
20.	14.240	33.491	24.993	0.060
30.	14.226	33.493	24.997	0.090
40.	14.103	33.495	25.025	0.119
50.	12.845	33.482	25.270	0.148
60.	11.534	33.521	25.549	0.174
70.	11.250	33.560	25.631	0.198
80.	10.889	33.620	25.743	0.221
90.	10.525	33.654	25.833	0.243
100.	10.157	33.721	25.949	0.265
110.	9.880	33.779	26.041	0.285
120.	9.652	33.826	26.115	0.304
130.	9.434	33.865	26.182	0.323
140.	9.327	33.894	26.222	0.341
150.	9.239	33.934	26.267	0.359
160.	9.135	33.968	26.310	0.377
170.	9.096	33.977	26.324	0.394
180.	8.967	33.996	26.359	0.411
190.	8.840	34.013	26.392	0.427
200.	8.807	34.020	26.403	0.444
220.	8.547	34.050	26.467	0.476
240.	8.371	34.064	26.505	0.507
260.	7.990	34.084	26.578	0.537
280.	7.784	34.100	26.621	0.566
300.	7.659	34.119	26.654	0.594
350.	7.090	34.122	26.737	0.662
400.	6.593	34.152	26.828	0.726
450.	6.229	34.194	26.909	0.786
500.	5.955	34.235	26.976	0.842
550.	5.594	34.258	27.039	0.895
600.	5.361	34.277	27.082	0.946
650.	5.139	34.308	27.133	0.994
700.	4.830	34.356	27.207	1.039
710.	4.825	34.356	27.207	1.048

STA 109 34 10.5N 121 8.2W D-2160

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.485	33.468	24.924	0.000
10.	14.482	33.468	24.924	0.030
20.	14.265	33.463	24.966	0.061
30.	14.090	33.490	25.024	0.090
40.	13.487	33.493	25.150	0.119
50.	12.644	33.495	25.319	0.147
60.	11.273	33.563	25.630	0.172
70.	10.900	33.628	25.747	0.195
80.	10.481	33.696	25.873	0.218
90.	10.019	33.759	26.002	0.238
100.	9.764	33.808	26.083	0.258
110.	9.609	33.871	26.157	0.277
120.	9.491	33.913	26.210	0.296
130.	9.331	33.937	26.254	0.313
140.	9.166	33.969	26.306	0.331
150.	9.065	33.983	26.333	0.348
160.	8.969	33.997	26.359	0.365
170.	8.789	34.021	26.407	0.382
180.	8.569	34.052	26.465	0.398
190.	8.505	34.056	26.478	0.413
200.	8.461	34.063	26.490	0.429
220.	8.204	34.092	26.552	0.459
240.	8.024	34.111	26.594	0.489
260.	7.904	34.120	26.619	0.517
280.	7.718	34.136	26.659	0.546
300.	7.611	34.145	26.681	0.573
350.	7.299	34.171	26.746	0.640
400.	6.793	34.197	26.837	0.704
450.	6.459	34.199	26.883	0.764
500.	5.924	34.210	26.960	0.821
550.	5.650	34.266	27.039	0.875
600.	5.375	34.297	27.096	0.925
650.	5.190	34.317	27.134	0.973
700.	4.875	34.347	27.194	1.019
720.	4.755	34.368	27.225	1.036

STA 111 34 15.2N 120 56.7W D- 951

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.876	33.496	24.861	0.000
10.	14.867	33.496	24.863	0.031
20.	14.009	33.473	25.027	0.061
30.	13.855	33.491	25.073	0.091
40.	13.476	33.483	25.144	0.119
50.	12.514	33.499	25.347	0.147
60.	11.977	33.519	25.465	0.173
70.	11.057	33.581	25.682	0.197
80.	10.711	33.628	25.780	0.220
90.	10.449	33.695	25.878	0.241
100.	10.228	33.773	25.977	0.262
110.	10.216	33.793	25.995	0.283
120.	9.946	33.840	26.077	0.303
130.	9.655	33.891	26.165	0.322
140.	9.389	33.911	26.225	0.340
150.	9.304	33.924	26.249	0.358
160.	9.212	33.945	26.280	0.376
170.	9.131	33.954	26.300	0.393
180.	9.076	33.965	26.317	0.410
190.	8.971	33.986	26.350	0.427
200.	8.859	34.004	26.382	0.444
220.	8.577	34.043	26.457	0.476
240.	8.277	34.069	26.523	0.508
260.	8.022	34.088	26.576	0.537
280.	7.834	34.107	26.619	0.566
300.	7.622	34.128	26.666	0.594
350.	7.062	34.158	26.769	0.661
400.	6.636	34.172	26.838	0.724
450.	6.146	34.206	26.929	0.783
500.	5.924	34.231	26.977	0.839
550.	5.660	34.263	27.035	0.892
600.	5.371	34.278	27.082	0.942
650.	5.197	34.293	27.114	0.991
700.	4.938	34.329	27.173	1.037
710.	4.918	34.332	27.178	1.047

STA 113 34 20.0N 120 47.2W D- 750

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.825	33.486	24.865	0.000
10.	14.826	33.487	24.865	0.031
20.	14.816	33.486	24.867	0.062
30.	13.986	33.481	25.038	0.092
40.	13.848	33.485	25.070	0.121
50.	13.580	33.486	25.126	0.150
60.	12.720	33.482	25.294	0.178
70.	11.774	33.546	25.524	0.204
80.	11.264	33.599	25.659	0.228
90.	10.794	33.648	25.781	0.250
100.	10.460	33.687	25.870	0.272
110.	10.262	33.761	25.962	0.293
120.	10.156	33.804	26.013	0.313
130.	10.021	33.827	26.054	0.333
140.	9.857	33.849	26.099	0.353
150.	9.764	33.867	26.129	0.372
160.	9.636	33.892	26.169	0.391
170.	9.547	33.915	26.202	0.409
180.	9.322	33.950	26.266	0.427
190.	9.265	33.953	26.278	0.445
200.	9.142	33.952	26.297	0.462
220.	8.739	34.005	26.402	0.496
240.	8.476	34.041	26.471	0.528
260.	8.143	34.088	26.558	0.559
280.	7.926	34.108	26.606	0.588
300.	7.688	34.119	26.650	0.616
350.	7.243	34.151	26.738	0.685
400.	6.721	34.154	26.813	0.749
450.	6.350	34.189	26.889	0.809
500.	5.978	34.210	26.954	0.866
550.	5.634	34.247	27.026	0.921
600.	5.256	34.286	27.102	0.971
650.	4.971	34.328	27.168	1.018
700.	4.714	34.373	27.233	1.062

STA 115 34 23.5N 120 40.1W D- 439

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.767	33.494	24.883	0.000
10.	14.774	33.494	24.882	0.031
20.	14.771	33.494	24.882	0.062
30.	14.650	33.486	24.902	0.092
40.	14.128	33.476	25.005	0.123
50.	13.575	33.479	25.121	0.152
60.	12.878	33.490	25.269	0.180
70.	12.362	33.521	25.394	0.206
80.	11.765	33.560	25.537	0.231
90.	11.753	33.568	25.545	0.256
100.	11.325	33.593	25.643	0.280
110.	10.837	33.653	25.778	0.303
120.	10.804	33.692	25.814	0.325
130.	10.596	33.734	25.883	0.347
140.	10.392	33.767	25.944	0.368
150.	10.156	33.809	26.017	0.388
160.	10.038	33.829	26.053	0.408
170.	9.998	33.836	26.065	0.428
180.	9.904	33.853	26.094	0.447
190.	9.615	33.898	26.177	0.466
200.	9.350	33.953	26.264	0.484
220.	8.906	34.035	26.399	0.518
240.	8.726	34.061	26.448	0.550
260.	8.154	34.095	26.562	0.581
280.	7.856	34.111	26.619	0.610
300.	7.563	34.130	26.676	0.638
350.	6.909	34.160	26.792	0.704
400.	6.509	34.186	26.866	0.766
500.				0.884

STA 116 34 25.1N 120 35.7W D= 261

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	15.035	33.482	24.816	0.000
10.	15.042	33.481	24.814	0.031
20.	15.045	33.481	24.813	0.063
30.	14.661	33.472	24.889	0.094
40.	14.085	33.453	24.996	0.125
50.	13.605	33.453	25.095	0.154
60.	13.241	33.482	25.191	0.182
70.	12.726	33.498	25.305	0.209
80.	12.410	33.513	25.378	0.236
90.	12.000	33.553	25.487	0.261
100.	11.950	33.559	25.501	0.286
110.	11.713	33.571	25.555	0.311
120.	11.422	33.586	25.620	0.335
130.	11.137	33.617	25.696	0.359
140.	10.539	33.741	25.898	0.381
150.	10.344	33.774	25.958	0.402
160.	10.255	33.793	25.988	0.422
170.	9.851	33.851	26.102	0.442
180.	9.537	33.910	26.200	0.460
190.	9.196	33.968	26.300	0.478
200.	9.041	33.994	26.346	0.495
220.	8.657	34.044	26.445	0.528
240.	8.318	34.076	26.522	0.559
500.				0.889

STA 117 34 26.5N 120 32.5W D= 90

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.973	33.474	24.823	0.000
10.	14.991	33.474	24.820	0.031
20.	14.954	33.472	24.826	0.063
30.	14.342	33.453	24.942	0.094
40.	14.193	33.458	24.977	0.124
50.	13.699	33.459	25.080	0.153
60.	13.369	33.469	25.155	0.182
70.	13.300	33.471	25.171	0.210
80.	13.150	33.478	25.206	0.238
200.				0.503
500.				0.892

STA 118 34 28.4N 120 29.7W D= 28

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.681	33.452	24.869	0.000
10.	14.687	33.452	24.868	0.031
20.	14.678	33.453	24.871	0.062
200.				0.510
500.				0.894

STA 119 34 31.6N 120 34.5W D= 38

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.694	33.458	24.871	0.000
10.	14.695	33.457	24.870	0.031
20.	14.694	33.457	24.871	0.062
30.	14.292	33.455	24.954	0.092
200.				0.478
500.				0.882

STA 120 34 30.4N 120 38.6W D- 85

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.752	33.459	24.860	0.000
10.	14.749	33.459	24.860	0.031
20.	14.746	33.460	24.862	0.062
30.	14.734	33.463	24.867	0.093
40.	14.345	33.484	24.965	0.124
50.	14.082	33.483	25.020	0.153
60.	13.288	33.479	25.179	0.182
70.	12.907	33.491	25.264	0.210
80.	12.683	33.503	25.318	0.237
200.				0.474
500.				0.879

STA 122 34 24.8N 120 50.4W D- 705

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.974	33.483	25.042	0.000
10.	13.966	33.482	25.043	0.029
20.	13.902	33.485	25.059	0.058
30.	13.345	33.482	25.170	0.087
40.	12.813	33.502	25.291	0.115
50.	12.145	33.545	25.454	0.141
60.	11.921	33.561	25.508	0.166
70.	11.653	33.587	25.579	0.190
80.	11.315	33.624	25.669	0.214
90.	11.047	33.657	25.743	0.237
100.	10.865	33.672	25.787	0.259
110.	10.577	33.700	25.860	0.281
120.	10.416	33.739	25.918	0.303
130.	10.135	33.781	25.999	0.323
140.	9.833	33.830	26.088	0.343
150.	9.693	33.859	26.134	0.362
160.	9.536	33.881	26.177	0.381
170.	9.463	33.891	26.197	0.399
180.	9.342	33.909	26.231	0.417
190.	9.283	33.920	26.249	0.435
200.	9.151	33.944	26.289	0.453
220.	8.839	34.003	26.385	0.467
240.	8.502	34.049	26.473	0.519
260.	8.233	34.079	26.538	0.550
280.	7.999	34.102	26.591	0.580
300.	7.795	34.105	26.623	0.608
350.	7.207	34.145	26.739	0.677
400.	6.784	34.172	26.818	0.741
450.	6.308	34.198	26.902	0.801
500.	5.917	34.232	26.979	0.858
550.	5.602	34.257	27.037	0.911
600.	5.218	34.296	27.114	0.961
650.	4.867	34.339	27.189	1.007
690.	4.737	34.362	27.222	1.042

STA 124 34 20.0N 121 0.5W D-1000

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.240	33.482	24.986	0.000
10.	14.199	33.480	24.993	0.030
20.	14.145	33.483	25.007	0.060
30.	13.884	33.464	25.046	0.089
40.	13.024	33.485	25.237	0.117
50.	12.387	33.513	25.383	0.144
60.	11.974	33.553	25.492	0.169
70.	11.865	33.562	25.520	0.194
80.	11.460	33.612	25.633	0.219
90.	11.287	33.635	25.683	0.242
100.	11.150	33.649	25.719	0.265
110.	11.054	33.658	25.743	0.288
120.	10.504	33.728	25.894	0.310
130.	10.016	33.786	26.023	0.331
140.	9.858	33.817	26.074	0.350
150.	9.582	33.870	26.161	0.369
160.	9.427	33.901	26.211	0.388
170.	9.352	33.920	26.238	0.406
180.	9.236	33.938	26.271	0.424
190.	9.133	33.958	26.303	0.441
200.	9.058	33.969	26.323	0.458
220.	8.818	34.004	26.389	0.492
240.	8.479	34.062	26.487	0.524
260.	8.277	34.080	26.532	0.555
280.	8.105	34.072	26.551	0.585
300.	7.841	34.107	26.618	0.614
350.	7.361	34.155	26.725	0.682
400.	6.897	34.176	26.806	0.747
450.	6.291	34.204	26.909	0.807
500.	6.027	34.246	26.976	0.863
550.	5.604	34.265	27.043	0.917
600.	5.367	34.293	27.094	0.967
650.	5.067	34.330	27.159	1.014
700.	4.944	34.351	27.190	1.060
710.	4.899	34.354	27.197	1.069

STA 125 34 25.2N 121 3.9W D-1095

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.534	33.488	24.928	0.000
10.	14.413	33.479	24.947	0.030
20.	14.098	33.476	25.011	0.060
30.	13.027	33.489	25.239	0.088
40.	12.031	33.520	25.456	0.115
50.	11.588	33.576	25.582	0.140
60.	11.172	33.623	25.694	0.163
70.	10.948	33.643	25.750	0.186
80.	10.893	33.651	25.766	0.208
90.	10.589	33.691	25.851	0.230
100.	10.378	33.723	25.912	0.252
110.	10.270	33.754	25.955	0.273
120.	10.068	33.801	26.026	0.293
130.	9.936	33.816	26.060	0.313
140.	9.734	33.841	26.113	0.332
150.	9.508	33.884	26.184	0.351
160.	9.410	33.902	26.214	0.369
170.	9.367	33.911	26.228	0.387
180.	9.285	33.930	26.256	0.405
190.	9.185	33.948	26.287	0.423
200.	9.066	33.968	26.321	0.440
220.	8.782	34.022	26.408	0.474
240.	8.649	34.042	26.445	0.506
260.	8.506	34.065	26.485	0.537
280.	8.344	34.082	26.523	0.568
300.	8.113	34.097	26.570	0.598
350.	7.478	34.145	26.700	0.670
400.	6.954	34.171	26.794	0.735
450.	6.471	34.196	26.879	0.797
500.	6.010	34.228	26.964	0.854
550.	5.658	34.264	27.036	0.908
600.	5.387	34.289	27.089	0.958
650.	5.041	34.326	27.159	1.006
700.	4.807	34.355	27.208	1.050
710.	4.724	34.413	27.264	1.059

STA 127 34 29.4N 120 54.4W D- 690

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.634	33.486	24.906	0.000
10.	14.624	33.487	24.909	0.031
20.	14.146	33.477	25.002	0.061
30.	13.726	33.465	25.080	0.090
40.	12.958	33.480	25.246	0.118
50.	12.350	33.519	25.394	0.145
60.	11.799	33.559	25.530	0.170
70.	11.257	33.602	25.663	0.194
80.	11.052	33.638	25.728	0.217
90.	10.832	33.671	25.792	0.240
100.	10.596	33.706	25.861	0.262
110.	10.369	33.753	25.937	0.283
120.	10.223	33.780	25.983	0.303
130.	10.077	33.803	26.026	0.323
140.	9.976	33.824	26.060	0.343
150.	9.741	33.845	26.115	0.363
160.	9.518	33.892	26.189	0.381
170.	9.311	33.914	26.240	0.400
180.	9.197	33.929	26.270	0.417
190.	8.853	33.992	26.374	0.434
200.	8.699	34.018	26.418	0.451
220.	8.505	34.042	26.467	0.483
240.	8.223	34.070	26.532	0.514
260.	8.110	34.092	26.566	0.544
280.	7.929	34.107	26.605	0.573
300.	7.613	34.123	26.664	0.601
350.	7.149	34.151	26.751	0.668
400.	6.594	34.188	26.856	0.731
450.	6.120	34.224	26.947	0.789
500.	5.863	34.244	26.995	0.844
550.	5.408	34.266	27.068	0.896
600.	5.175	34.298	27.121	0.945
650.	5.050	34.317	27.151	0.992

STA 129 34 34.9N 120 42.6W D- 64

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.383	33.466	24.944	0.000
10.	14.381	33.466	24.944	0.030
20.	14.370	33.466	24.946	0.061
30.	14.047	33.474	25.020	0.090
40.	13.565	33.472	25.118	0.119
50.	13.479	33.477	25.139	0.148
60.	13.291	33.487	25.185	0.176
200.				0.461
500.				0.829

STA 130 34 41.5N 120 41.5W D- 42

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.372	33.459	24.941	0.000
10.	14.364	33.461	24.944	0.030
20.	14.317	33.461	24.954	0.061
30.	14.154	33.464	24.990	0.090
40.	13.818	33.467	25.062	0.120
200.				0.484
500.				0.877

STA 131 34 38.9N 120 46.5W D- 92

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.419	33.466	24.936	0.000
10.	14.419	33.466	24.936	0.030
20.	14.406	33.468	24.940	0.061
30.	14.046	33.475	25.021	0.091
40.	13.861	33.487	25.069	0.120
50.	13.844	33.487	25.072	0.149
60.	13.712	33.487	25.099	0.178
70.	13.370	33.488	25.170	0.206
80.	12.931	33.507	25.272	0.234
200.				0.474
500.				0.867

STA 133 34 34.1N 120 57.8W D- 650

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.616	33.489	24.912	0.000
10.	14.610	33.488	24.912	0.030
20.	14.372	33.472	24.951	0.061
30.	13.578	33.476	25.118	0.090
40.	13.233	33.486	25.196	0.118
50.	12.628	33.450	25.287	0.146
60.	11.889	33.549	25.505	0.172
70.	11.576	33.577	25.585	0.196
80.	11.348	33.599	25.644	0.220
90.	10.785	33.664	25.795	0.243
100.	10.513	33.707	25.876	0.265
110.	10.299	33.734	25.934	0.285
120.	9.974	33.768	26.016	0.306
130.	9.886	33.818	26.070	0.326
140.	9.580	33.822	26.124	0.345
150.	9.320	33.856	26.193	0.364
160.	9.154	33.895	26.250	0.382
170.	8.988	33.927	26.302	0.399
180.	8.852	33.941	26.334	0.416
190.	8.812	34.010	26.394	0.433
200.	8.708	34.021	26.419	0.449
220.	8.452	34.057	26.487	0.481
240.	8.288	34.075	26.526	0.512
260.	8.030	34.095	26.581	0.542
280.	7.728	34.107	26.634	0.571
300.	7.470	34.106	26.671	0.599
350.	7.217	34.153	26.744	0.666
400.	6.670	34.190	26.848	0.729
450.	6.221	34.209	26.922	0.788
500.	5.838	34.217	26.977	0.844
550.	5.591	34.245	27.029	0.898
600.	5.407	34.269	27.070	0.949
630.	5.074	34.313	27.145	0.978

STA 135 34 29.7N 121 7.5W D-1105

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.019	33.452	25.009	0.000
10.	14.021	33.453	25.009	0.030
20.	13.961	33.457	25.025	0.059
30.	13.798	33.470	25.069	0.088
40.	13.771	33.473	25.076	0.117
50.	13.674	33.475	25.098	0.146
60.	12.953	33.481	25.248	0.174
70.	11.582	33.539	25.554	0.200
80.	10.797	33.660	25.790	0.223
90.	10.437	33.720	25.900	0.245
100.	10.219	33.760	25.968	0.266
110.	9.890	33.827	26.076	0.286
120.	9.703	33.853	26.128	0.305
130.	9.521	33.883	26.181	0.324
140.	9.424	33.903	26.213	0.342
150.	9.338	33.919	26.239	0.360
160.	9.224	33.941	26.275	0.378
170.	9.044	33.968	26.325	0.395
180.	8.960	33.984	26.351	0.412
190.	8.870	34.000	26.377	0.429
200.	8.760	34.016	26.407	0.445
220.	8.523	34.048	26.469	0.477
240.	8.342	34.079	26.521	0.508
260.	8.158	34.093	26.560	0.538
280.	7.943	34.099	26.597	0.568
300.	7.809	34.110	26.625	0.597
350.	7.109	34.156	26.761	0.665
400.	6.677	34.185	26.843	0.727
450.	6.241	34.218	26.926	0.786
500.	5.901	34.241	26.988	0.842
550.	5.584	34.275	27.054	0.894
600.	5.237	34.312	27.125	0.943
640.	5.067	34.332	27.160	0.981

STA 136 34 34.8N 121 10.8W D- 915

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.009	33.467	25.023	0.000
10.	14.016	33.464	25.019	0.030
20.	13.946	33.468	25.037	0.059
30.	13.774	33.473	25.076	0.088
40.	13.704	33.475	25.092	0.117
50.	13.479	33.479	25.141	0.146
60.	13.028	33.486	25.237	0.174
70.	11.829	33.538	25.508	0.199
80.	11.160	33.594	25.674	0.223
90.	10.679	33.656	25.808	0.246
100.	10.517	33.687	25.860	0.268
110.	10.338	33.721	25.918	0.289
120.	10.062	33.795	26.022	0.309
130.	9.934	33.815	26.060	0.329
140.	9.735	33.850	26.120	0.348
150.	9.614	33.875	26.160	0.367
160.	9.409	33.905	26.217	0.386
170.	9.279	33.928	26.256	0.404
180.	9.128	33.939	26.289	0.421
190.	8.848	33.993	26.375	0.438
200.	8.555	34.035	26.454	0.454
220.	8.377	34.058	26.499	0.486
240.	8.202	34.082	26.545	0.516
260.	7.655	34.074	26.619	0.546
280.	7.310	34.071	26.666	0.574
300.	7.164	34.111	26.718	0.601
350.	6.949	34.153	26.781	0.666
400.	6.571	34.194	26.864	0.728
450.	6.060	34.229	26.958	0.786
500.	5.776	34.256	27.015	0.840
550.	5.511	34.276	27.063	0.892
600.	5.301	34.300	27.108	0.941
650.	5.123	34.317	27.142	0.989
700.	4.925	34.335	27.179	1.035
710.	4.895	34.339	27.186	1.044

STA 138 34 39.5N 121 1.0W D- 576

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.542	33.489	24.928	0.000
10.	14.539	33.490	24.929	0.030
20.	14.521	33.489	24.932	0.061
30.	14.358	33.471	24.953	0.091
40.	13.811	33.421	25.028	0.121
50.	13.398	33.450	25.135	0.150
60.	12.676	33.440	25.270	0.178
70.	11.735	33.508	25.502	0.204
80.	11.442	33.534	25.576	0.228
90.	10.944	33.625	25.737	0.252
100.	10.676	33.685	25.831	0.274
110.	10.444	33.723	25.901	0.295
120.	10.029	33.761	26.002	0.316
130.	9.944	33.759	26.014	0.336
140.	9.670	33.796	26.089	0.356
150.	9.503	33.864	26.169	0.375
160.	9.396	33.900	26.215	0.393
170.	9.248	33.926	26.259	0.411
180.	9.057	33.964	26.320	0.428
190.	8.792	34.009	26.397	0.445
200.	8.557	34.039	26.457	0.461
220.	8.238	34.071	26.531	0.493
240.	8.038	34.097	26.581	0.522
260.	7.835	34.111	26.622	0.551
280.	7.718	34.119	26.645	0.579
300.	7.488	34.136	26.692	0.607
350.	7.096	34.144	26.753	0.674
400.	6.687	34.175	26.834	0.737
450.	6.326	34.197	26.899	0.797
500.	5.812	34.212	26.976	0.853
550.	5.636	34.243	27.022	0.906
570.	5.458	34.261	27.058	0.927

STA 140 34 44.8N 120 49.8W D- 104

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.417	33.376	24.867	0.000
10.	14.404	33.471	24.943	0.030
20.	14.348	33.460	24.946	0.061
30.	14.333	33.473	24.960	0.091
40.	14.290	33.471	24.967	0.121
50.	14.242	33.472	24.978	0.151
60.	14.199	33.472	24.987	0.181
70.	13.760	33.474	25.080	0.210
80.	13.514	33.488	25.141	0.239
90.	12.331	33.525	25.403	0.266
200.				0.479
500.				0.877

STA 142 34 48.4N 120 40.6W D- 34

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.191	33.475	24.991	0.000
10.	14.011	33.473	25.027	0.030
20.	13.921	33.477	25.049	0.059
30.	13.810	33.471	25.067	0.088
200.				0.489
500.				0.893

STA 143 34 54.3N 120 43.0W D- 44

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.029	33.477	25.026	0.000
10.	14.019	33.478	25.029	0.029
20.	13.141	33.503	25.227	0.058
30.	12.646	33.535	25.350	0.085
200.				0.450
500.				0.883

STA 145 34 49.7N 120 53.2W D- 213

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.544	33.485	24.924	0.000
10.	14.544	33.485	24.924	0.030
20.	14.534	33.483	24.925	0.061
30.	14.534	33.484	24.925	0.091
40.	14.374	33.471	24.949	0.122
50.	14.135	33.481	25.007	0.152
60.	13.132	33.489	25.218	0.180
70.	11.922	33.559	25.507	0.206
80.	11.679	33.583	25.571	0.231
90.	11.498	33.601	25.618	0.255
100.	10.932	33.599	25.719	0.278
110.	10.648	33.681	25.833	0.301
120.	10.069	33.780	26.010	0.322
130.	9.775	33.832	26.100	0.341
140.	9.564	33.876	26.169	0.360
150.	9.367	33.911	26.228	0.379
160.	9.148	33.947	26.292	0.396
170.	8.985	33.974	26.339	0.413
180.	8.923	33.985	26.357	0.430
190.	8.913	33.987	26.360	0.447
200.	8.722	34.011	26.409	0.464
500.				0.879

STA 147 34 44.3N 121 4.7W D- 529

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.112	33.461	24.997	0.000
10.	14.114	33.460	24.995	0.030
20.	14.111	33.460	24.996	0.060
30.	14.093	33.459	24.999	0.089
40.	14.001	33.461	25.020	0.119
50.	13.827	33.459	25.054	0.148
60.	13.199	33.466	25.187	0.177
70.	12.403	33.465	25.342	0.204
80.	11.477	33.529	25.566	0.229
90.	11.007	33.596	25.703	0.253
100.	10.527	33.654	25.833	0.275
110.	10.392	33.684	25.880	0.297
120.	10.099	33.765	25.993	0.318
130.	9.796	33.824	26.090	0.337
140.	9.693	33.845	26.123	0.357
150.	9.680	33.848	26.128	0.376
160.	9.556	33.874	26.169	0.394
170.	9.453	33.896	26.203	0.413
180.	9.398	33.906	26.219	0.431
190.	9.267	33.931	26.260	0.449
200.	9.108	33.957	26.306	0.467
220.	8.837	33.988	26.373	0.500
240.	8.516	34.028	26.454	0.533
260.	8.056	34.074	26.560	0.563
280.	7.715	34.107	26.636	0.592
300.	7.357	34.131	26.707	0.620
350.	7.025	34.162	26.777	0.686
400.	6.472	34.163	26.853	0.748
450.	6.245	34.190	26.904	0.807
500.	5.700	34.232	27.006	0.863
520.	5.560	34.251	27.038	0.884

STA 149 34 40.1N 121 14.2W D- 692

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.099	33.425	24.972	0.000
10.	14.102	33.426	24.972	0.030
20.	14.118	33.440	24.979	0.060
30.	13.908	33.464	25.041	0.090
40.	13.799	33.473	25.071	0.119
50.	13.586	33.472	25.114	0.148
60.	12.939	33.476	25.246	0.176
70.	12.320	33.507	25.391	0.202
80.	11.831	33.522	25.495	0.228
90.	11.372	33.575	25.621	0.252
100.	10.881	33.676	25.788	0.275
110.	10.676	33.694	25.838	0.297
120.	10.299	33.721	25.924	0.318
130.	10.108	33.766	25.992	0.339
140.	9.814	33.770	26.045	0.359
150.	9.517	33.839	26.148	0.378
160.	9.258	33.928	26.259	0.397
170.	9.157	33.944	26.288	0.414
180.	8.931	33.981	26.353	0.431
190.	8.748	34.013	26.407	0.448
200.	8.493	34.050	26.475	0.464
220.	8.131	34.088	26.560	0.494
240.	7.879	34.100	26.607	0.524
260.	7.658	34.114	26.650	0.552
280.	7.453	34.135	26.696	0.580
300.	7.278	34.146	26.729	0.606
350.	6.927	34.166	26.794	0.671
400.	6.638	34.187	26.850	0.733
450.	6.191	34.224	26.937	0.791
500.	5.682	34.256	27.027	0.845
550.	5.616	34.256	27.035	0.897
600.	5.377	34.281	27.084	0.948
650.	5.210	34.300	27.118	0.996
680.	4.872	34.344	27.192	1.024

STA 150 34 44.6N 121 17.9W D- 573

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.000	33.424	24.991	0.000
10.	14.009	33.424	24.990	0.030
20.	14.008	33.424	24.990	0.060
30.	13.867	33.438	25.030	0.089
40.	13.747	33.469	25.078	0.118
50.	13.604	33.476	25.113	0.147
60.	13.312	33.477	25.173	0.176
70.	12.293	33.469	25.367	0.203
80.	11.432	33.554	25.594	0.228
90.	11.170	33.602	25.678	0.252
100.	10.767	33.662	25.797	0.275
110.	10.360	33.680	25.882	0.296
120.	10.033	33.736	25.981	0.317
130.	9.696	33.857	26.132	0.336
140.	9.449	33.897	26.204	0.355
150.	9.350	33.922	26.240	0.373
160.	9.231	33.942	26.275	0.391
170.	9.021	33.969	26.329	0.409
180.	8.806	34.007	26.393	0.425
190.	8.743	34.013	26.408	0.442
200.	8.603	34.030	26.443	0.458
220.	8.192	34.066	26.534	0.489
240.	8.012	34.084	26.575	0.519
260.	7.622	34.123	26.662	0.547
280.	7.261	34.142	26.729	0.574
300.	7.156	34.141	26.743	0.601
350.	6.700	34.162	26.822	0.664
400.	6.564	34.176	26.851	0.725
450.	6.285	34.212	26.916	0.784
500.	5.750	34.220	26.990	0.839
550.	5.536	34.250	27.040	0.892
560.	5.482	34.258	27.053	0.903

STA 152 34 49.2N 121 8.3W D- 558

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.827	33.264	24.904	0.000
10.	13.831	33.263	24.902	0.031
20.	13.946	33.360	24.953	0.061
30.	13.979	33.467	25.029	0.091
40.	13.908	33.469	25.045	0.120
50.	13.573	33.467	25.112	0.149
60.	12.894	33.492	25.268	0.177
70.	12.708	33.493	25.305	0.204
80.	11.102	33.580	25.674	0.229
90.	10.643	33.667	25.823	0.252
100.	10.330	33.719	25.917	0.273
110.	10.143	33.756	25.978	0.294
120.	9.963	33.794	26.038	0.314
130.	9.906	33.806	26.057	0.334
140.	9.615	33.863	26.150	0.353
150.	9.329	33.919	26.241	0.371
160.	9.295	33.925	26.251	0.389
170.	9.253	33.933	26.264	0.407
180.	9.040	33.966	26.324	0.424
190.	8.886	33.992	26.369	0.441
200.	8.715	34.011	26.410	0.457
220.	8.351	34.062	26.506	0.489
240.	8.031	34.097	26.582	0.519
260.	7.790	34.109	26.627	0.548
280.	7.566	34.126	26.673	0.576
300.	7.427	34.141	26.704	0.603
350.	6.936	34.177	26.801	0.669
400.	6.292	34.159	26.873	0.730
450.	6.002	34.203	26.945	0.788
500.	5.720	34.233	27.004	0.843
550.	5.260	34.261	27.082	0.894

STA 154 34 54.9N 120 56.5W D- 300

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.638	33.488	24.906	0.000
10.	14.641	33.488	24.906	0.031
20.	14.449	33.477	24.938	0.061
30.	14.086	33.463	25.004	0.091
40.	13.993	33.460	25.021	0.121
50.	13.849	33.462	25.052	0.150
60.	13.522	33.459	25.117	0.179
70.	12.684	33.452	25.278	0.207
80.	12.107	33.453	25.390	0.233
90.	11.310	33.523	25.592	0.258
100.	10.860	33.614	25.743	0.281
110.	10.422	33.695	25.883	0.303
120.	9.840	33.819	26.079	0.324
130.	9.754	33.837	26.107	0.343
140.	9.502	33.883	26.184	0.362
150.	9.308	33.920	26.245	0.380
160.	9.257	33.929	26.260	0.398
170.	9.088	33.958	26.310	0.415
180.	8.831	33.991	26.377	0.432
190.	8.709	34.015	26.414	0.449
200.	8.708	34.015	26.415	0.465
220.	8.700	34.016	26.417	0.497
240.	8.424	34.049	26.485	0.529
260.	8.288	34.066	26.519	0.560
280.	8.236	34.072	26.532	0.591
500.				0.860

STA 156 35 0.9N 120 43.2W D- 47

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	13.997	33.477	25.033	0.000
10.	13.996	33.477	25.033	0.029
20.	13.988	33.476	25.034	0.059
30.	13.763	33.478	25.082	0.088
40.	13.192	33.495	25.211	0.117
200.				0.469
500.				0.875

STA 157 35 6.9N 120 44.4W D- 44

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	13.883	33.475	25.055	0.000
10.	13.892	33.477	25.055	0.029
20.	13.899	33.477	25.053	0.058
30.	13.699	33.477	25.094	0.087
200.				0.473
500.				0.923

STA 158 35 4.8N 120 49.1W D- 97

<u>DEPTH</u>	<u>TEMP</u>	<u>SAL</u>	<u>SIGMA</u>	<u>DELD</u>
0.	14.171	33.465	24.987	0.000
10.	14.191	33.463	24.982	0.030
20.	14.188	33.464	24.983	0.060
30.	13.987	33.461	25.023	0.089
40.	13.682	33.468	25.091	0.118
50.	12.891	33.473	25.254	0.147
60.	12.318	33.506	25.391	0.174
70.	12.026	33.552	25.482	0.199
80.	11.767	33.579	25.551	0.224
90.	11.564	33.592	25.599	0.248
200.				0.472
500.				0.909

STA 159 35 1.9N 120 55.4W D- 247

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.039	33.468	25.017	0.000
10.	14.035	33.469	25.019	0.030
20.	14.029	33.468	25.019	0.059
30.	13.953	33.470	25.037	0.088
40.	13.794	33.462	25.063	0.118
50.	13.091	33.466	25.209	0.146
60.	12.590	33.459	25.302	0.174
70.	12.500	33.452	25.314	0.200
80.	12.146	33.426	25.361	0.227
90.	11.405	33.512	25.566	0.252
100.	10.940	33.602	25.720	0.275
110.	10.540	33.698	25.865	0.297
120.	10.334	33.744	25.936	0.318
130.	10.084	33.788	26.013	0.339
140.	9.764	33.841	26.108	0.359
150.	9.573	33.873	26.165	0.377
160.	9.412	33.902	26.214	0.396
170.	9.403	33.903	26.216	0.414
180.	9.363	33.909	26.227	0.432
190.	9.276	33.924	26.253	0.450
200.	9.260	33.927	26.258	0.468
220.	9.162	33.942	26.286	0.503
500.				0.885

STA 160 34 59.5N 121 0.3W D- 424

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.991	33.399	24.974	0.000
10.	13.941	33.396	24.982	0.030
20.	13.933	33.396	24.984	0.060
30.	13.870	33.398	24.998	0.090
40.	13.020	33.436	25.200	0.118
50.	12.558	33.477	25.322	0.145
60.	12.322	33.495	25.381	0.172
70.	11.664	33.547	25.545	0.197
80.	11.293	33.587	25.645	0.221
90.	10.818	33.648	25.777	0.244
100.	10.737	33.662	25.802	0.266
110.	10.355	33.729	25.921	0.288
120.	10.057	33.789	26.019	0.308
130.	9.830	33.829	26.088	0.328
140.	9.569	33.874	26.166	0.347
150.	9.509	33.886	26.186	0.366
160.	9.418	33.901	26.212	0.384
170.	9.288	33.924	26.251	0.402
180.	9.136	33.948	26.294	0.419
190.	8.968	33.978	26.345	0.437
200.	8.868	33.994	26.373	0.453
220.	8.600	34.037	26.449	0.486
240.	8.433	34.055	26.488	0.517
260.	8.271	34.078	26.531	0.548
280.	8.023	34.100	26.585	0.578
300.	7.855	34.114	26.621	0.607
350.	7.350	34.136	26.711	0.677
400.	6.747	34.155	26.810	0.742
500.				0.857

STA 161 34 58.0N 121 3.1W D- 495

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.056	33.448	24.998	0.000
10.	14.015	33.448	25.007	0.030
20.	13.995	33.449	25.012	0.059
30.	13.890	33.441	25.027	0.089
40.	13.618	33.420	25.067	0.118
50.	13.159	33.370	25.121	0.147
60.	12.782	33.465	25.269	0.175
70.	11.869	33.542	25.503	0.201
80.	11.616	33.563	25.567	0.225
90.	11.114	33.608	25.693	0.249
100.	10.638	33.676	25.831	0.271
110.	10.405	33.716	25.902	0.293
120.	10.156	33.761	25.980	0.313
130.	9.874	33.821	26.074	0.334
140.	9.608	33.868	26.155	0.353
150.	9.540	33.882	26.177	0.371
160.	9.361	33.909	26.228	0.389
170.	9.248	33.934	26.266	0.407
180.	9.161	33.951	26.293	0.425
190.	9.033	33.970	26.328	0.442
200.	8.828	33.995	26.380	0.459
220.	8.563	34.034	26.452	0.491
240.	8.331	34.069	26.515	0.523
260.	8.004	34.103	26.591	0.553
280.	7.880	34.114	26.618	0.582
300.	7.689	34.128	26.657	0.610
350.	7.209	34.150	26.742	0.677
400.	6.757	34.161	26.813	0.741
450.	6.180	34.193	26.914	0.801
500.				0.856

STA 163 34 54.2N 121 11.2W D- 567

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.253	33.461	24.967	0.000
10.	13.990	33.465	25.025	0.030
20.	13.962	33.467	25.032	0.059
30.	13.955	33.466	25.033	0.089
40.	13.952	33.466	25.034	0.118
50.	13.950	33.466	25.034	0.147
60.	13.796	33.463	25.064	0.177
70.	12.661	33.485	25.308	0.205
80.	12.034	33.525	25.459	0.231
90.	11.592	33.564	25.572	0.255
100.	10.425	33.706	25.891	0.278
110.	10.135	33.762	25.984	0.299
120.	9.827	33.817	26.079	0.319
130.	9.513	33.879	26.179	0.338
140.	9.329	33.916	26.238	0.356
150.	9.179	33.942	26.283	0.373
160.	9.058	33.964	26.319	0.391
170.	9.003	33.976	26.338	0.408
180.	8.899	33.993	26.367	0.425
190.	8.743	34.019	26.412	0.441
200.	8.606	34.040	26.450	0.457
220.	8.403	34.061	26.498	0.489
240.	8.048	34.100	26.582	0.519
260.	7.797	34.120	26.635	0.548
280.	7.506	34.141	26.693	0.576
300.	7.380	34.154	26.721	0.603
350.	6.841	34.151	26.794	0.667
400.	6.455	34.168	26.859	0.729
450.	6.050	34.191	26.930	0.788
500.	5.580	34.200	26.995	0.843
550.	5.232	34.266	27.089	0.895

STA 165 34 49.6N 121 20.9W D- 514

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.046	33.285	24.875	0.000
10.	13.987	33.279	24.883	0.031
20.	13.999	33.362	24.944	0.061
30.	13.817	33.413	25.021	0.091
40.	13.615	33.427	25.073	0.120
50.	13.269	33.428	25.144	0.149
60.	12.437	33.454	25.327	0.176
70.	11.642	33.503	25.515	0.202
80.	11.196	33.559	25.640	0.227
90.	10.763	33.633	25.775	0.249
100.	10.081	33.761	25.993	0.271
110.	9.751	33.832	26.104	0.291
120.	9.680	33.845	26.125	0.310
130.	9.314	33.913	26.238	0.328
140.	8.965	33.955	26.327	0.346
150.	8.888	33.975	26.355	0.363
160.	8.677	33.990	26.400	0.379
170.	8.548	34.006	26.432	0.396
180.	8.450	34.018	26.457	0.411
190.	8.304	34.037	26.494	0.427
200.	8.238	34.048	26.513	0.443
220.	7.991	34.057	26.557	0.473
240.	7.788	34.068	26.595	0.502
260.	7.625	34.085	26.632	0.531
280.	7.308	34.084	26.677	0.559
300.	7.072	34.093	26.717	0.586
350.	6.542	34.122	26.811	0.651
400.	6.177	34.176	26.901	0.712
450.	5.869	34.208	26.966	0.768
500.	5.769	34.222	26.989	0.822

STA 167 34 44.0N 121 32.1W D- 915

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.031	33.408	24.973	0.000
10.	14.000	33.407	24.978	0.030
20.	13.909	33.405	24.996	0.060
30.	13.849	33.415	25.016	0.089
40.	13.440	33.445	25.122	0.118
50.	12.041	33.467	25.413	0.146
60.	11.305	33.551	25.614	0.170
70.	11.019	33.574	25.684	0.194
80.	10.679	33.677	25.824	0.216
90.	10.457	33.709	25.888	0.238
100.	10.242	33.728	25.940	0.258
110.	10.057	33.795	26.023	0.279
120.	9.865	33.826	26.080	0.298
130.	9.669	33.851	26.132	0.318
140.	9.435	33.885	26.197	0.336
150.	9.240	33.915	26.252	0.354
160.	9.087	33.961	26.312	0.372
170.	8.900	33.983	26.359	0.389
180.	8.767	33.998	26.392	0.405
190.	8.538	34.013	26.439	0.422
200.	8.317	34.033	26.489	0.438
220.	8.085	34.047	26.535	0.468
240.	7.794	34.064	26.591	0.498
260.	7.615	34.082	26.631	0.527
280.	7.426	34.089	26.664	0.555
300.	7.247	34.109	26.705	0.582
350.	6.716	34.127	26.792	0.647
400.	6.331	34.156	26.866	0.709
450.	6.015	34.185	26.929	0.767
500.	5.734	34.220	26.992	0.822
550.	5.340	34.269	27.079	0.874
600.	5.195	34.292	27.114	0.923
650.	4.913	34.337	27.182	0.970
700.	4.742	34.365	27.224	1.014

STA 169 34 53.7N 121 24.6W D- 454

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.950	33.206	24.834	0.000
10.	13.952	33.208	24.835	0.031
20.	13.903	33.225	24.858	0.063
30.	13.870	33.264	24.895	0.093
40.	13.844	33.343	24.961	0.124
50.	13.793	33.387	25.006	0.153
60.	13.508	33.370	25.051	0.183
70.	12.257	33.340	25.274	0.211
80.	11.381	33.463	25.532	0.237
90.	10.700	33.613	25.771	0.261
100.	10.438	33.671	25.862	0.283
110.	10.260	33.741	25.947	0.304
120.	10.055	33.755	25.992	0.324
130.	9.331	33.858	26.193	0.344
140.	9.119	33.938	26.289	0.362
150.	9.065	33.940	26.300	0.379
160.	8.709	33.961	26.372	0.396
170.	8.518	33.981	26.417	0.413
180.	8.361	33.988	26.447	0.429
190.	8.287	34.009	26.475	0.445
200.	8.180	34.017	26.497	0.460
220.	8.125	34.062	26.540	0.491
240.	7.934	34.083	26.585	0.520
260.	7.829	34.095	26.610	0.549
280.	7.694	34.104	26.637	0.578
300.	7.613	34.103	26.648	0.606
350.	6.835	34.140	26.786	0.672
400.	6.120	34.180	26.912	0.733
500.				0.842

STA 171 34 58.5N 121 15.3W D- 591

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.236	33.465	24.974	0.000
10.	14.167	33.452	24.978	0.030
20.	13.954	33.456	25.026	0.060
30.	13.940	33.457	25.029	0.089
40.	13.455	33.468	25.137	0.118
50.	12.894	33.484	25.262	0.146
60.	12.142	33.538	25.449	0.172
70.	11.379	33.603	25.641	0.197
80.	10.914	33.668	25.776	0.220
90.	10.418	33.720	25.903	0.241
100.	10.183	33.758	25.973	0.262
110.	10.099	33.772	25.998	0.282
120.	9.955	33.797	26.042	0.302
130.	9.931	33.803	26.051	0.322
140.	9.878	33.811	26.066	0.342
150.	9.660	33.853	26.135	0.361
160.	9.421	33.901	26.212	0.380
170.	9.178	33.945	26.285	0.397
180.	9.045	33.968	26.325	0.415
190.	8.741	34.014	26.409	0.431
200.	8.450	34.028	26.465	0.447
220.	8.145	34.058	26.534	0.478
240.	7.866	34.086	26.598	0.508
260.	7.581	34.094	26.646	0.536
280.	7.355	34.110	26.690	0.564
300.	7.146	34.119	26.727	0.591
350.	6.506	34.157	26.844	0.655
400.	6.149	34.175	26.904	0.714
450.	5.836	34.183	26.950	0.771
500.	5.542	34.227	27.021	0.825
550.	5.244	34.270	27.091	0.876
580.	5.118	34.287	27.119	0.905

STA 173 35 4.1N 121 3.7W D- 483

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.956	33.372	24.961	0.000
10.	13.955	33.374	24.962	0.030
20.	13.984	33.417	24.989	0.060
30.	14.013	33.458	25.015	0.090
40.	13.617	33.461	25.099	0.119
50.	13.174	33.469	25.194	0.147
60.	12.485	33.511	25.362	0.174
70.	11.812	33.555	25.524	0.199
80.	10.771	33.660	25.795	0.223
90.	10.323	33.745	25.939	0.244
100.	10.013	33.796	26.031	0.265
110.	9.889	33.818	26.070	0.284
120.	9.797	33.834	26.097	0.304
130.	9.738	33.843	26.114	0.323
140.	9.570	33.873	26.165	0.342
150.	9.460	33.893	26.199	0.360
160.	9.440	33.897	26.205	0.378
170.	9.397	33.904	26.218	0.397
180.	9.185	33.943	26.283	0.414
190.	9.118	33.956	26.304	0.432
200.	9.022	33.971	26.331	0.449
220.	8.648	34.031	26.436	0.482
240.	8.443	34.052	26.484	0.513
260.	8.115	34.093	26.566	0.543
280.	7.822	34.104	26.618	0.572
300.	7.370	34.113	26.691	0.600
350.	6.870	34.140	26.781	0.666
400.	6.422	34.169	26.864	0.728
450.	6.244	34.180	26.896	0.788
500.				0.844

STA 175 35 10.2N 120 51.8W D- 60

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.060	33.469	25.014	0.000
10.	13.985	33.468	25.028	0.030
20.	13.870	33.474	25.057	0.059
30.	13.764	33.469	25.075	0.088
40.	13.545	33.475	25.124	0.117
50.	13.218	33.497	25.207	0.145
200.				0.447
500.				0.858

STA 176 35 15.3N 120 55.3W D- 54

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.019	33.475	25.027	0.000
10.	14.020	33.475	25.027	0.029
20.	13.932	33.478	25.047	0.059
30.	13.894	33.477	25.054	0.088
40.	13.699	33.482	25.098	0.117
200.				0.409
500.				0.814

STA 178 35 9.2N 121 7.6W D- 548

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.133	33.469	24.998	0.000
10.	14.137	33.468	24.997	0.030
20.	13.954	33.468	25.035	0.059
30.	13.841	33.463	25.054	0.088
40.	13.343	33.473	25.164	0.117
50.	11.773	33.537	25.517	0.144
60.	11.137	33.610	25.691	0.168
70.	10.849	33.666	25.786	0.191
80.	10.752	33.677	25.811	0.213
90.	10.461	33.719	25.895	0.235
100.	10.297	33.748	25.946	0.256
110.	10.103	33.781	26.005	0.276
120.	9.969	33.805	26.046	0.296
130.	9.657	33.858	26.139	0.315
140.	9.601	33.869	26.157	0.334
150.	9.583	33.873	26.163	0.353
160.	9.448	33.897	26.204	0.371
170.	9.278	33.924	26.253	0.389
180.	9.066	33.964	26.318	0.407
190.	8.883	33.995	26.371	0.424
200.	8.773	34.013	26.403	0.440
220.	8.577	34.040	26.454	0.472
240.	8.263	34.075	26.530	0.503
260.	8.052	34.098	26.580	0.533
280.	7.750	34.107	26.631	0.562
300.	7.501	34.109	26.669	0.590
350.	7.086	34.140	26.752	0.657
400.	6.510	34.166	26.850	0.720
450.	5.952	34.169	26.925	0.779
500.	5.443	34.246	27.048	0.833
540.	5.256	34.268	27.088	0.873

STA 180 35 3.7N 121 18.4W D- 623

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.099	33.462	25.000	0.000
10.	14.099	33.462	25.000	0.030
20.	14.014	33.459	25.016	0.059
30.	13.949	33.462	25.031	0.089
40.	13.854	33.457	25.047	0.118
50.	13.524	33.469	25.124	0.147
60.	13.381	33.476	25.158	0.175
70.	13.163	33.480	25.205	0.203
80.	12.460	33.521	25.375	0.231
90.	11.697	33.541	25.535	0.256
100.	11.480	33.601	25.621	0.280
110.	11.010	33.654	25.748	0.303
120.	10.373	33.724	25.914	0.325
130.	9.937	33.806	26.052	0.346
140.	9.689	33.860	26.136	0.365
150.	9.586	33.871	26.161	0.384
160.	9.299	33.912	26.240	0.402
170.	8.970	33.963	26.333	0.419
180.	8.812	33.987	26.376	0.436
190.	8.688	33.999	26.405	0.453
200.	8.605	34.008	26.425	0.469
220.	8.274	34.039	26.500	0.500
240.	8.111	34.064	26.544	0.531
260.	7.773	34.059	26.590	0.561
280.	7.445	34.098	26.668	0.589
300.	7.321	34.126	26.708	0.616
350.	6.655	34.147	26.816	0.681
400.	6.122	34.183	26.914	0.741
450.	5.890	34.187	26.947	0.798
500.	5.668	34.220	27.000	0.852
550.	5.300	34.268	27.082	0.903
600.	5.105	34.293	27.125	0.952
610.	5.067	34.300	27.135	0.961

STA 182 34 59.0N 121 27.7W D- 506

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.713	33.245	24.913	0.000
10.	13.725	33.248	24.913	0.030
20.	13.724	33.247	24.912	0.061
30.	13.732	33.269	24.927	0.091
40.	13.544	33.365	25.040	0.122
50.	12.686	33.377	25.220	0.150
60.	11.538	33.316	25.390	0.177
70.	10.988	33.395	25.551	0.202
80.	10.775	33.438	25.622	0.226
90.	10.545	33.500	25.710	0.249
100.	10.198	33.548	25.807	0.272
110.	10.118	33.675	25.920	0.293
120.	10.007	33.714	25.969	0.314
130.	9.649	33.712	26.027	0.334
140.	9.519	33.761	26.087	0.354
150.	9.355	33.818	26.158	0.373
160.	9.048	33.873	26.250	0.391
170.	8.924	33.919	26.306	0.409
180.	8.822	33.981	26.370	0.426
190.	8.671	34.010	26.416	0.442
200.	8.411	34.039	26.479	0.458
220.	8.122	34.075	26.551	0.489
240.	7.991	34.093	26.585	0.518
260.	7.768	34.105	26.627	0.547
280.	7.669	34.115	26.649	0.575
300.	7.434	34.125	26.691	0.603
350.	6.709	34.155	26.815	0.668
400.	6.283	34.184	26.894	0.729
450.	5.846	34.209	26.969	0.785
500.				0.838

STA 186 35 20.2N 121 55.4W D-2012

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.568	33.001	24.754	0.000
10.	13.563	33.001	24.755	0.032
20.	13.469	33.059	24.819	0.064
30.	13.199	33.109	24.912	0.095
40.	13.153	33.138	24.943	0.125
50.	12.803	33.159	25.029	0.155
60.	12.433	33.177	25.114	0.184
70.	12.173	33.199	25.181	0.212
80.	11.534	33.328	25.400	0.239
90.	10.949	33.417	25.575	0.265
100.	10.391	33.487	25.727	0.288
110.	10.051	33.548	25.832	0.310
120.	9.770	33.612	25.929	0.331
130.	9.657	33.650	25.977	0.352
140.	9.526	33.697	26.036	0.372
150.	9.441	33.768	26.105	0.392
160.	9.215	33.815	26.178	0.410
170.	8.968	33.863	26.255	0.428
180.	8.806	33.921	26.326	0.446
190.	8.625	33.947	26.374	0.463
200.	8.428	33.970	26.423	0.479
220.	8.213	33.987	26.469	0.511
240.	7.894	34.015	26.538	0.542
260.	7.577	34.033	26.598	0.571
280.	7.391	34.043	26.633	0.600
300.	7.171	34.049	26.668	0.628
350.	6.599	34.068	26.761	0.695
400.	6.203	34.088	26.829	0.758
450.	5.581	34.106	26.921	0.817
500.	5.115	34.137	27.001	0.872
550.	5.265	34.239	27.064	0.924
600.	4.937	34.273	27.129	0.973
650.	4.809	34.305	27.169	1.020
700.	4.665	34.352	27.222	1.064
720.	4.569	34.355	27.235	1.081

STA 188 35 24.6N 121 46.3W D-1100

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.738	33.170	24.850	0.000
10.	13.730	33.170	24.852	0.031
20.	13.691	33.167	24.857	0.062
30.	13.034	33.180	24.999	0.093
40.	12.596	33.258	25.145	0.122
50.	12.484	33.381	25.262	0.150
60.	11.844	33.442	25.431	0.176
70.	11.388	33.530	25.583	0.201
80.	11.007	33.498	25.627	0.225
90.	10.583	33.510	25.711	0.249
100.	10.215	33.569	25.821	0.271
110.	9.817	33.618	25.926	0.293
120.	9.558	33.687	26.022	0.313
130.	9.351	33.743	26.100	0.333
140.	9.184	33.762	26.142	0.352
150.	8.960	33.809	26.214	0.370
160.	8.783	33.866	26.286	0.388
170.	8.694	33.889	26.318	0.405
180.	8.595	33.908	26.348	0.422
190.	8.490	33.927	26.379	0.439
200.	8.387	33.959	26.420	0.455
220.	8.141	33.999	26.489	0.487
240.	7.905	34.020	26.540	0.518
260.	7.747	34.037	26.577	0.547
280.	7.364	34.061	26.651	0.576
300.	7.055	34.071	26.702	0.604
350.	6.531	34.101	26.796	0.669
400.	6.239	34.148	26.871	0.730
450.	5.854	34.182	26.947	0.788
500.	5.564	34.210	27.005	0.842
550.	5.303	34.249	27.067	0.894
600.	5.059	34.287	27.126	0.943
650.	4.866	34.329	27.181	0.990
700.	4.632	34.373	27.242	1.033
710.	4.609	34.376	27.247	1.042

STA 190 35 29.2N 121 36.1W D= 954

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.121	33.434	24.974	0.000
10.	13.859	33.431	25.026	0.030
20.	13.788	33.433	25.042	0.059
30.	13.562	33.406	25.068	0.088
40.	12.856	33.458	25.249	0.117
50.	12.536	33.512	25.353	0.144
60.	11.778	33.538	25.517	0.169
70.	11.217	33.606	25.673	0.193
80.	10.732	33.682	25.819	0.216
90.	10.635	33.701	25.850	0.237
100.	10.595	33.708	25.863	0.259
110.	10.343	33.746	25.936	0.280
120.	10.177	33.774	25.987	0.301
130.	10.038	33.799	26.030	0.321
140.	9.711	33.863	26.134	0.340
150.	9.636	33.879	26.159	0.359
160.	9.564	33.894	26.183	0.378
170.	9.336	33.939	26.255	0.396
180.	9.135	33.960	26.304	0.413
190.	8.801	33.958	26.355	0.430
200.	8.478	33.983	26.425	0.447
220.	8.099	34.018	26.510	0.478
240.	7.718	34.035	26.579	0.508
260.	7.379	34.048	26.638	0.537
280.	7.053	34.054	26.689	0.564
300.	6.879	34.065	26.721	0.591
350.	6.488	34.092	26.795	0.656
400.	6.223	34.131	26.860	0.718
450.	5.906	34.173	26.934	0.776
500.	5.675	34.204	26.987	0.831
550.	5.436	34.241	27.045	0.884
600.	5.182	34.283	27.108	0.934
650.	4.907	34.309	27.161	0.981
700.	4.720	34.353	27.217	1.026
720.	4.660	34.366	27.234	1.043

STA 192 35 33.4N 121 27.9W D= 666

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.198	33.460	24.978	0.000
10.	13.943	33.456	25.028	0.030
20.	13.755	33.467	25.075	0.059
30.	13.418	33.478	25.152	0.088
40.	13.046	33.463	25.215	0.116
50.	12.210	33.537	25.435	0.142
60.	11.887	33.576	25.526	0.167
70.	11.670	33.592	25.579	0.192
80.	11.298	33.624	25.672	0.215
90.	10.954	33.667	25.768	0.238
100.	10.634	33.700	25.850	0.260
110.	10.194	33.757	25.970	0.281
120.	9.968	33.789	26.034	0.302
130.	9.707	33.830	26.109	0.321
140.	9.388	33.891	26.209	0.340
150.	9.330	33.899	26.225	0.358
160.	9.004	33.879	26.262	0.375
170.	8.919	33.896	26.288	0.393
180.	8.873	33.900	26.299	0.410
190.	8.752	33.917	26.331	0.428
200.	8.615	33.949	26.377	0.444
220.	8.368	33.945	26.412	0.477
240.	7.941	33.961	26.489	0.509
260.	7.715	34.059	26.599	0.539
280.	7.597	34.065	26.620	0.568
300.	7.256	34.063	26.667	0.596
350.	6.968	34.106	26.741	0.664
400.	6.379	34.151	26.856	0.727
450.	5.988	34.174	26.924	0.786
500.	5.664	34.198	26.983	0.841
550.	5.372	34.246	27.057	0.893
600.	5.043	34.290	27.130	0.943
650.	4.812	34.332	27.190	0.988

STA 193 35 35.3N 121 23.6W D= 474

DEPTH	TEMP	SAL	SIGMA	DELD
0.	14.172	33.481	24.999	0.000
10.	13.909	33.482	25.055	0.029
20.	13.835	33.473	25.063	0.058
30.	13.508	33.461	25.121	0.087
40.	13.025	33.484	25.236	0.115
50.	12.200	33.549	25.446	0.142
60.	11.978	33.565	25.501	0.167
70.	11.609	33.591	25.590	0.191
80.	11.233	33.631	25.690	0.215
90.	10.852	33.673	25.790	0.237
100.	10.564	33.713	25.872	0.259
110.	10.256	33.762	25.964	0.280
120.	10.194	33.771	25.981	0.300
130.	10.019	33.798	26.032	0.321
140.	9.896	33.821	26.071	0.340
150.	9.751	33.845	26.114	0.360
160.	9.583	33.868	26.159	0.379
170.	9.358	33.906	26.226	0.397
180.	9.233	33.927	26.263	0.415
190.	9.114	33.950	26.300	0.432
200.	9.001	33.972	26.335	0.449
220.	8.687	34.010	26.414	0.482
240.	8.390	34.024	26.471	0.514
260.	7.945	34.043	26.552	0.545
280.	7.868	34.051	26.570	0.575
300.	7.658	34.083	26.626	0.604
350.	7.099	34.118	26.733	0.672
400.	6.380	34.155	26.859	0.735
450.	5.862	34.193	26.955	0.793
500.				0.849

STA 194 35 38.0N 121 17.9W D= 86

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.617	33.371	25.029	0.000
10.	13.530	33.382	25.056	0.029
20.	13.469	33.389	25.073	0.058
30.	13.384	33.400	25.099	0.087
40.	13.275	33.415	25.133	0.116
50.	12.944	33.436	25.215	0.144
60.	12.752	33.457	25.269	0.171
70.	12.654	33.469	25.297	0.198
80.	12.507	33.490	25.342	0.225
200.				0.467
500.				0.870

STA 195 35 38.8N 121 16.2W D- 30

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.497	33.380	25.061	0.000
10.	13.497	33.380	25.061	0.029
20.	13.259	33.369	25.100	0.058
200.				0.472
500.				0.876

STA 200 36 10.8N 121 44.2W D- 301

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.750	33.186	24.860	0.000
10.	13.694	33.192	24.876	0.031
20.	13.450	33.200	24.932	0.061
30.	13.285	33.385	25.107	0.091
40.	12.816	33.353	25.176	0.119
50.	12.518	33.365	25.243	0.147
60.	12.204	33.411	25.339	0.174
70.	11.880	33.462	25.439	0.200
80.	11.594	33.507	25.527	0.225
90.	11.443	33.535	25.577	0.250
100.	11.204	33.584	25.658	0.274
110.	11.135	33.599	25.682	0.297
120.	10.759	33.648	25.788	0.320
130.	10.364	33.686	25.886	0.341
140.	9.938	33.759	26.015	0.362
150.	9.705	33.795	26.082	0.382
160.	9.569	33.835	26.136	0.401
170.	9.554	33.839	26.142	0.420
180.	9.401	33.861	26.184	0.438
190.	9.135	33.907	26.263	0.456
200.	8.949	33.933	26.313	0.474
220.	8.559	33.984	26.413	0.508
240.	8.253	34.012	26.482	0.540
260.	8.059	34.030	26.525	0.570
280.	7.876	34.051	26.569	0.600
500.				0.877

STA 202 36 7.4N 121 51.9W D-1007

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.700	33.071	24.781	0.000
10.	13.645	33.058	24.783	0.032
20.	13.580	33.068	24.804	0.063
30.	13.316	33.115	24.893	0.095
40.	13.170	33.144	24.945	0.125
50.	12.788	33.328	25.162	0.154
60.	12.194	33.418	25.346	0.182
70.	12.141	33.431	25.366	0.208
80.	11.583	33.455	25.489	0.233
90.	11.023	33.563	25.675	0.257
100.	10.548	33.614	25.798	0.280
110.	10.482	33.646	25.834	0.302
120.	10.044	33.676	25.933	0.323
130.	9.822	33.741	26.021	0.344
140.	9.600	33.813	26.114	0.363
150.	9.305	33.873	26.209	0.382
160.	9.181	33.903	26.252	0.400
170.	9.023	33.931	26.299	0.418
180.	8.809	33.951	26.349	0.435
190.	8.734	33.980	26.383	0.451
200.	8.639	33.993	26.408	0.468
220.	8.432	34.023	26.463	0.500
240.	8.155	34.033	26.513	0.531
260.	7.980	34.046	26.550	0.561
280.	7.851	34.057	26.577	0.591
300.	7.649	34.065	26.613	0.620
350.	6.904	34.092	26.739	0.688
400.	6.249	34.149	26.871	0.751
450.	5.832	34.162	26.934	0.809
500.	5.504	34.194	27.000	0.864
550.	5.317	34.244	27.061	0.916
600.	5.022	34.286	27.129	0.965
650.	4.774	34.327	27.190	1.011
700.	4.642	34.343	27.217	1.054
710.	4.615	34.349	27.225	1.063

STA 204 36 3.4N 122 0.6W D-1280

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.702	33.232	24.905	0.000
10.	13.696	33.270	24.935	0.030
20.	13.663	33.268	24.941	0.061
30.	13.360	33.322	25.044	0.091
40.	12.889	33.361	25.168	0.119
50.	11.806	33.259	25.296	0.147
60.	11.252	33.352	25.470	0.173
70.	11.132	33.518	25.620	0.197
80.	10.983	33.559	25.679	0.221
90.	10.580	33.647	25.818	0.243
100.	10.398	33.681	25.876	0.265
110.	10.056	33.722	25.967	0.285
120.	10.032	33.769	26.007	0.306
130.	9.686	33.805	26.093	0.326
140.	9.555	33.847	26.148	0.345
150.	9.355	33.898	26.220	0.363
160.	9.223	33.920	26.259	0.381
170.	9.004	33.957	26.323	0.398
180.	8.862	33.967	26.350	0.415
190.	8.746	33.992	26.391	0.432
200.	8.605	34.007	26.424	0.448
220.	8.224	34.029	26.500	0.480
240.	7.898	34.039	26.556	0.510
260.	7.719	34.053	26.593	0.540
280.	7.391	34.063	26.648	0.568
300.	7.062	34.051	26.685	0.596
350.	6.538	34.072	26.772	0.662
400.	5.992	34.096	26.862	0.725
450.	5.550	34.134	26.947	0.783
500.	5.160	34.184	27.033	0.837
550.	5.007	34.230	27.087	0.887
600.	4.838	34.280	27.146	0.935
650.	4.806	34.327	27.186	0.981
700.	4.630	34.349	27.223	1.024
720.	4.580	34.363	27.240	1.042

STA 206 35 59.6N 122 8.7W D-1555

DEPTH	TEMP	SAL	SIGMA	DELTD
0.	13.785	33.191	24.856	0.000
10.	13.753	33.211	24.878	0.031
20.	13.679	33.328	24.984	0.061
30.	13.295	33.334	25.066	0.091
40.	12.949	33.363	25.157	0.119
50.	12.268	33.398	25.317	0.147
60.	11.903	33.442	25.420	0.173
70.	11.172	33.471	25.576	0.198
80.	10.538	33.548	25.749	0.221
90.	10.587	33.632	25.805	0.244
100.	10.016	33.620	25.894	0.265
110.	9.695	33.682	25.996	0.286
120.	9.519	33.727	26.060	0.306
130.	9.302	33.784	26.140	0.325
140.	9.184	33.853	26.213	0.344
150.	9.006	33.912	26.287	0.362
160.	8.711	33.943	26.358	0.379
170.	8.534	33.978	26.413	0.395
180.	8.268	33.986	26.459	0.411
190.	8.128	34.000	26.492	0.427
200.	8.007	34.007	26.515	0.442
220.	7.771	34.022	26.562	0.472
240.	7.633	34.032	26.589	0.502
260.	7.506	34.040	26.614	0.531
280.	7.189	34.053	26.669	0.559
300.	7.002	34.068	26.707	0.586
350.	6.662	34.080	26.762	0.652
400.	6.138	34.108	26.853	0.715
450.	5.879	34.161	26.927	0.774
500.	5.499	34.187	26.995	0.829
550.	5.267	34.224	27.052	0.881
600.	4.958	34.259	27.115	0.931
650.	4.728	34.302	27.175	0.978
700.	4.560	34.339	27.223	1.022
720.	4.500	34.350	27.239	1.039

STA 208 35 53.2N 122 21.6W D-2900

DEPTH	TEMP	SAL	SIGMA	DELTD
0.	13.562	33.018	24.769	0.000
10.	13.553	33.026	24.777	0.032
20.	13.452	33.064	24.826	0.063
30.	13.370	33.079	24.854	0.095
40.	12.964	33.155	24.994	0.125
50.	12.220	33.282	25.236	0.154
60.	11.640	33.357	25.403	0.180
70.	11.022	33.430	25.572	0.206
80.	10.499	33.498	25.716	0.229
90.	10.229	33.549	25.803	0.251
100.	9.992	33.601	25.883	0.273
110.	9.668	33.672	25.993	0.294
120.	9.442	33.723	26.070	0.314
130.	9.239	33.789	26.154	0.333
140.	8.999	33.874	26.259	0.351
150.	8.856	33.898	26.300	0.368
160.	8.725	33.920	26.338	0.386
170.	8.587	33.945	26.379	0.402
180.	8.470	33.959	26.408	0.419
190.	8.338	33.994	26.455	0.435
200.	8.226	34.006	26.481	0.451
220.	7.808	34.012	26.548	0.481
240.	7.538	34.027	26.599	0.511
260.	7.237	34.020	26.636	0.539
280.	7.073	34.057	26.688	0.567
300.	6.805	34.050	26.719	0.594
350.	6.420	34.068	26.785	0.660
400.	6.011	34.100	26.863	0.722
450.	5.664	34.121	26.923	0.780
500.	5.266	34.141	26.986	0.836
550.	5.117	34.204	27.053	0.888
600.	4.824	34.231	27.108	0.938
650.	4.665	34.284	27.168	0.985
700.	4.538	34.317	27.208	1.029
730.	4.441	34.343	27.239	1.055

STA 213 36 28.4N 122 46.0W D-2930

DEPTH	TEMP	SAL	SIGMA	DELTD
0.	13.341	32.703	24.570	0.000
10.	13.313	32.721	24.590	0.034
20.	13.326	32.776	24.630	0.067
30.	13.240	32.861	24.712	0.100
40.	13.050	32.864	24.752	0.132
50.	13.067	32.963	24.825	0.164
60.	12.912	33.073	24.941	0.195
70.	12.534	33.138	25.065	0.225
80.	12.005	33.311	25.299	0.252
90.	11.590	33.410	25.453	0.279
100.	10.764	33.454	25.636	0.303
110.	10.465	33.495	25.720	0.326
120.	10.035	33.651	25.915	0.348
130.	9.774	33.683	25.984	0.368
140.	9.569	33.753	26.072	0.388
150.	9.414	33.795	26.130	0.408
160.	9.245	33.849	26.200	0.426
170.	9.073	33.894	26.262	0.444
180.	8.934	33.920	26.305	0.461
190.	8.757	33.932	26.342	0.479
200.	8.614	33.948	26.377	0.495
220.	8.277	33.998	26.467	0.528
240.	7.924	34.016	26.534	0.559
260.	7.576	34.035	26.600	0.588
280.	7.413	34.040	26.627	0.617
300.	7.199	34.051	26.666	0.645
350.	6.545	34.072	26.772	0.712
400.	6.211	34.117	26.851	0.774
450.	5.873	34.170	26.935	0.833
500.	5.541	34.200	27.000	0.888
550.	5.138	34.254	27.090	0.939
600.	4.905	34.285	27.142	0.987
650.	4.664	34.311	27.190	1.032
700.	4.475	34.333	27.228	1.076
720.	4.410	34.345	27.244	1.093

STA 215 36 34.3N 122 32.7W D-3020

DEPTH	TEMP	SAL	SIGMA	DELTD
0.	13.544	33.184	24.900	0.000
10.	13.501	33.187	24.911	0.031
20.	13.477	33.195	24.922	0.061
30.	13.390	33.291	25.014	0.091
40.	13.201	33.354	25.100	0.120
50.	12.996	33.382	25.163	0.149
60.	12.529	33.408	25.274	0.177
70.	12.074	33.475	25.413	0.203
80.	11.805	33.518	25.497	0.228
90.	11.588	33.543	25.556	0.253
100.	11.300	33.573	25.632	0.277
110.	10.820	33.612	25.749	0.300
120.	10.066	33.576	25.851	0.322
130.	9.782	33.634	25.944	0.343
140.	9.657	33.732	26.041	0.364
150.	9.505	33.758	26.086	0.383
160.	9.374	33.798	26.139	0.402
170.	9.086	33.845	26.222	0.421
180.	8.930	33.904	26.293	0.438
190.	8.805	33.934	26.336	0.456
200.	8.629	33.950	26.376	0.472
220.	8.286	33.994	26.463	0.505
240.	7.988	34.007	26.518	0.536
260.	7.667	34.032	26.584	0.566
280.	7.390	34.040	26.630	0.594
300.	7.207	34.051	26.665	0.622
350.	6.580	34.072	26.767	0.690
400.	6.191	34.146	26.876	0.752
450.	5.748	34.162	26.945	0.810
500.	5.402	34.214	27.028	0.863
550.	5.091	34.256	27.098	0.914
600.	4.929	34.289	27.142	0.962
650.	4.665	34.320	27.197	1.007
700.	4.546	34.351	27.234	1.050
720.	4.465	34.361	27.251	1.067

STA 217 36 38.3N 122 24.2W D=2380

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.636	33.232	24.918	0.000
10.	13.607	33.239	24.930	0.030
20.	13.606	33.259	24.945	0.061
30.	13.519	33.292	24.988	0.091
40.	13.252	33.377	25.108	0.120
50.	13.092	33.385	25.146	0.148
60.	12.448	33.390	25.276	0.176
70.	11.576	33.479	25.509	0.202
80.	11.324	33.533	25.597	0.226
90.	11.111	33.580	25.672	0.250
100.	10.956	33.591	25.708	0.273
110.	10.696	33.658	25.806	0.295
120.	10.424	33.690	25.879	0.317
130.	10.349	33.716	25.912	0.338
140.	10.084	33.715	25.956	0.359
150.	9.938	33.753	26.011	0.379
160.	9.738	33.803	26.083	0.399
170.	9.515	33.829	26.140	0.418
180.	9.396	33.867	26.189	0.437
190.	9.293	33.885	26.220	0.455
200.	9.087	33.902	26.266	0.473
220.	8.771	33.972	26.371	0.508
240.	8.433	34.001	26.446	0.540
260.	8.007	34.040	26.541	0.571
280.	7.659	34.053	26.602	0.601
300.	7.413	34.075	26.655	0.629
350.	6.830	34.067	26.729	0.698
400.	6.304	34.113	26.835	0.761
450.	5.796	34.158	26.935	0.820
500.	5.461	34.197	27.007	0.875
550.	5.127	34.241	27.081	0.926
600.	4.959	34.291	27.140	0.974
650.	4.738	34.329	27.196	1.020
700.	4.588	34.352	27.231	1.063
710.	4.551	34.357	27.239	1.072

STA 219 36 43.4N 122 12.5W D= 950

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.606	33.155	24.865	0.000
10.	13.605	33.155	24.865	0.031
20.	13.609	33.154	24.864	0.062
30.	13.517	33.253	24.959	0.093
40.	12.891	33.336	25.148	0.122
50.	12.632	33.355	25.213	0.150
60.	11.358	33.517	25.578	0.176
70.	11.069	33.556	25.661	0.200
80.	10.872	33.593	25.725	0.223
90.	10.829	33.605	25.742	0.246
100.	10.703	33.610	25.768	0.268
110.	10.497	33.640	25.827	0.291
120.	10.381	33.687	25.884	0.312
130.	10.219	33.720	25.937	0.333
140.	10.025	33.732	25.980	0.354
150.	9.812	33.765	26.041	0.374
160.	9.636	33.800	26.098	0.393
170.	9.482	33.829	26.146	0.412
180.	9.282	33.863	26.205	0.431
190.	9.057	33.898	26.268	0.449
200.	8.899	33.918	26.309	0.466
220.	8.687	33.959	26.374	0.500
240.	8.521	33.974	26.411	0.533
260.	8.355	34.001	26.458	0.565
280.	7.974	34.011	26.523	0.596
300.	7.665	34.030	26.583	0.626
350.	6.998	34.061	26.702	0.696
400.	6.458	34.113	26.815	0.761
450.	6.051	34.137	26.887	0.821
500.	5.671	34.172	26.962	0.879
550.	5.359	34.229	27.045	0.933
600.	5.013	34.280	27.126	0.982
650.	4.800	34.305	27.170	1.029
700.	4.618	34.337	27.215	1.073

STA 221 36 47.6N 122 3.0W D= 379

DEPTH	TEMP	SAL	SIGMA	DELD
0.	13.084	33.191	24.998	0.000
10.	13.089	33.191	24.997	0.030
20.	13.050	33.261	25.059	0.059
30.	12.604	33.265	25.149	0.088
40.	12.389	33.318	25.232	0.116
50.	12.101	33.390	25.342	0.143
60.	11.544	33.459	25.499	0.169
70.	11.349	33.487	25.557	0.193
80.	11.064	33.536	25.646	0.218
90.	10.907	33.572	25.702	0.241
100.	10.783	33.590	25.738	0.263
110.	10.599	33.625	25.798	0.286
120.	10.583	33.625	25.801	0.308
130.	10.410	33.654	25.853	0.330
140.	10.255	33.683	25.902	0.351
150.	10.009	33.724	25.976	0.372
160.	9.515	33.819	26.132	0.392
170.	9.342	33.847	26.182	0.410
180.	9.154	33.870	26.231	0.429
190.	8.706	33.920	26.341	0.446
200.	8.495	33.937	26.387	0.463
220.	8.132	33.979	26.474	0.495
240.	7.813	34.007	26.544	0.526
260.	7.565	34.030	26.598	0.555
280.	7.387	34.042	26.632	0.584
300.	7.280	34.049	26.653	0.612
350.	6.889	34.073	26.726	0.681
500.				0.867

STA 226 37 21.8N 122 30.2W D= 48

DEPTH	TEMP	SAL	SIGMA	DELD
0.	12.775	32.465	24.498	0.000
10.	12.850	32.637	24.616	0.034
20.	12.634	33.152	25.056	0.065
30.	12.358	33.253	25.187	0.093
40.	12.205	33.319	25.267	0.121
200.				0.464
500.				0.883

STA 228 37 17.7N 122 39.5W D- 96

DEPTH	TEMP	SAL	SIGMA	DELD
0.	12.772	32.345	24.406	0.000
10.	12.787	32.566	24.574	0.034
20.	12.740	33.182	25.059	0.066
30.	12.607	33.251	25.138	0.095
40.	12.238	33.342	25.279	0.122
50.	11.932	33.398	25.380	0.149
60.	11.755	33.417	25.428	0.175
70.	11.578	33.435	25.475	0.200
80.	11.438	33.479	25.534	0.225
90.	11.013	33.518	25.641	0.249
200.				0.457
500.				0.866

STA 230 37 13.2N 122 48.9W D- 260

DEPTH	TEMP	SAL	SIGMA	DELD
0.	12.754	32.854	24.803	0.000
10.	12.759	32.847	24.796	0.032
20.	12.810	33.042	24.937	0.063
30.	12.404	33.302	25.216	0.092
40.	12.034	33.379	25.346	0.119
50.	11.484	33.455	25.507	0.145
60.	11.037	33.525	25.643	0.169
70.	10.698	33.546	25.719	0.192
80.	10.421	33.628	25.831	0.215
90.	10.214	33.684	25.910	0.236
100.	10.111	33.701	25.941	0.257
110.	10.014	33.725	25.976	0.277
120.	9.926	33.745	26.006	0.298
130.	9.843	33.757	26.030	0.318
140.	9.667	33.792	26.086	0.337
150.	9.554	33.805	26.115	0.357
160.	9.295	33.851	26.193	0.375
170.	9.096	33.886	26.253	0.393
180.	8.685	33.934	26.355	0.411
190.	8.672	33.936	26.358	0.428
200.	8.614	33.940	26.371	0.444
220.	8.492	33.949	26.396	0.477
240.	8.194	33.972	26.460	0.510
500.				0.844

STA 231 37 10.5N 122 55.4W D- 503

DEPTH	TEMP	SAL	SIGMA	DELD
0.	12.853	33.039	24.926	0.000
10.	12.854	33.046	24.931	0.030
20.	12.876	33.053	24.932	0.061
30.	12.878	33.053	24.932	0.091
40.	12.895	33.070	24.942	0.121
50.	12.545	33.205	25.114	0.151
60.	12.153	33.346	25.298	0.179
70.	11.814	33.393	25.398	0.205
80.	11.394	33.418	25.495	0.231
90.	10.916	33.465	25.618	0.255
100.	10.611	33.525	25.718	0.278
110.	10.387	33.596	25.812	0.301
120.	10.024	33.716	25.967	0.322
130.	9.789	33.778	26.055	0.342
140.	9.498	33.838	26.150	0.361
150.	9.251	33.891	26.232	0.379
160.	8.977	33.935	26.310	0.397
170.	8.813	33.946	26.344	0.414
180.	8.773	33.954	26.357	0.431
190.	8.571	33.971	26.401	0.448
200.	8.302	33.990	26.457	0.464
220.	8.131	34.009	26.498	0.495
240.	7.764	34.030	26.569	0.525
260.	7.567	34.036	26.602	0.554
280.	7.335	34.045	26.642	0.583
300.	7.083	34.051	26.682	0.611
350.	6.644	34.082	26.766	0.677
400.	6.339	34.101	26.821	0.740
450.	6.120	34.121	26.865	0.801
500.				0.858

STA 234 37 3.3N 123 10.8W D-2560

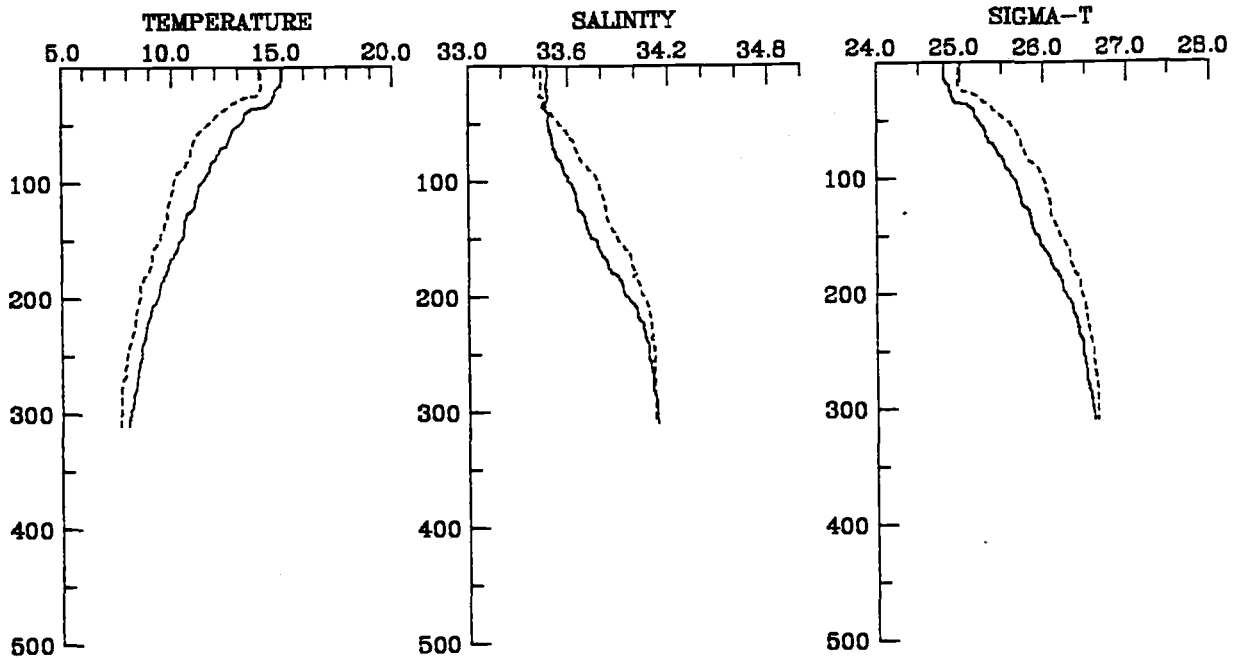
DEPTH	TEMP	SAL	SIGMA	DELD
0.	12.886	32.628	24.602	0.000
10.	12.888	32.629	24.603	0.034
20.	13.065	32.881	24.762	0.067
30.	12.982	33.003	24.873	0.098
40.	12.870	33.100	24.970	0.129
50.	12.625	33.138	25.047	0.158
60.	12.025	33.324	25.305	0.186
70.	11.809	33.333	25.353	0.213
80.	11.077	33.371	25.516	0.238
90.	10.733	33.495	25.673	0.262
100.	10.509	33.574	25.774	0.285
110.	10.049	33.650	25.912	0.307
120.	9.822	33.679	25.973	0.327
130.	9.578	33.754	26.071	0.347
140.	9.348	33.804	26.148	0.366
150.	9.095	33.854	26.228	0.385
160.	8.941	33.876	26.269	0.402
170.	8.793	33.896	26.308	0.420
180.	8.590	33.931	26.367	0.437
190.	8.381	33.963	26.424	0.453
200.	8.326	33.972	26.440	0.469
220.	7.985	34.007	26.518	0.501
240.	7.774	34.022	26.561	0.531
260.	7.594	34.036	26.598	0.560
280.	7.367	34.038	26.632	0.589
300.	7.107	34.042	26.672	0.617
350.	6.514	34.050	26.758	0.684
400.	6.015	34.087	26.852	0.747
450.	5.655	34.133	26.933	0.805
500.	5.365	34.186	27.010	0.860
550.	5.070	34.224	27.075	0.911
600.	4.884	34.272	27.134	0.960
650.	4.634	34.296	27.181	1.006
690.	4.528	34.321	27.213	1.042

VERTICAL PROFILES

FEBRUARY 1984

STATION 2 (-----)

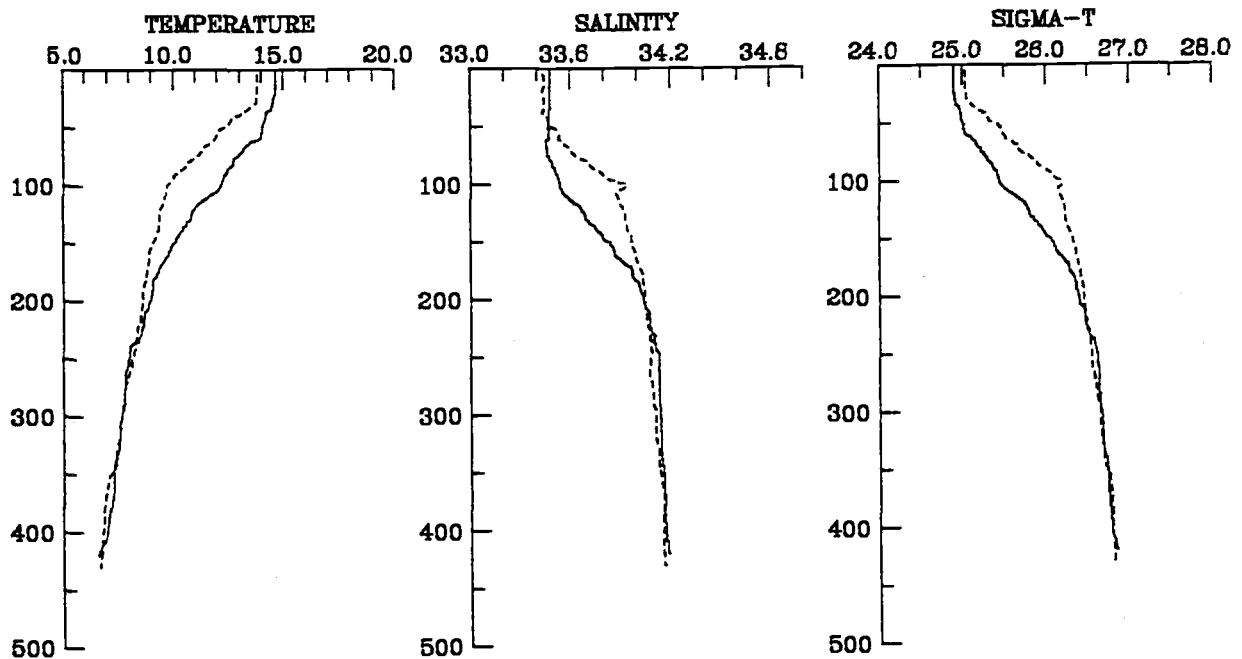
STATION 102 (—)



FEBRUARY 1984

STATION 3 (-----)

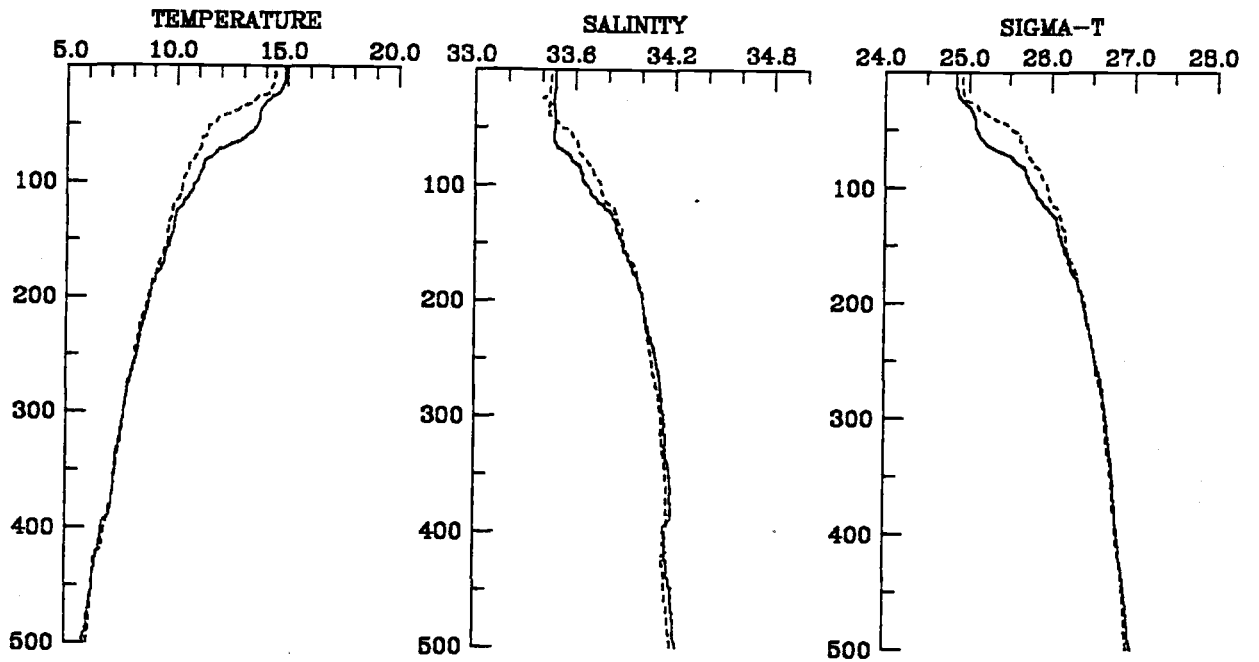
STATION 103 (—)



FEBRUARY 1984

STATION 5 (-----)

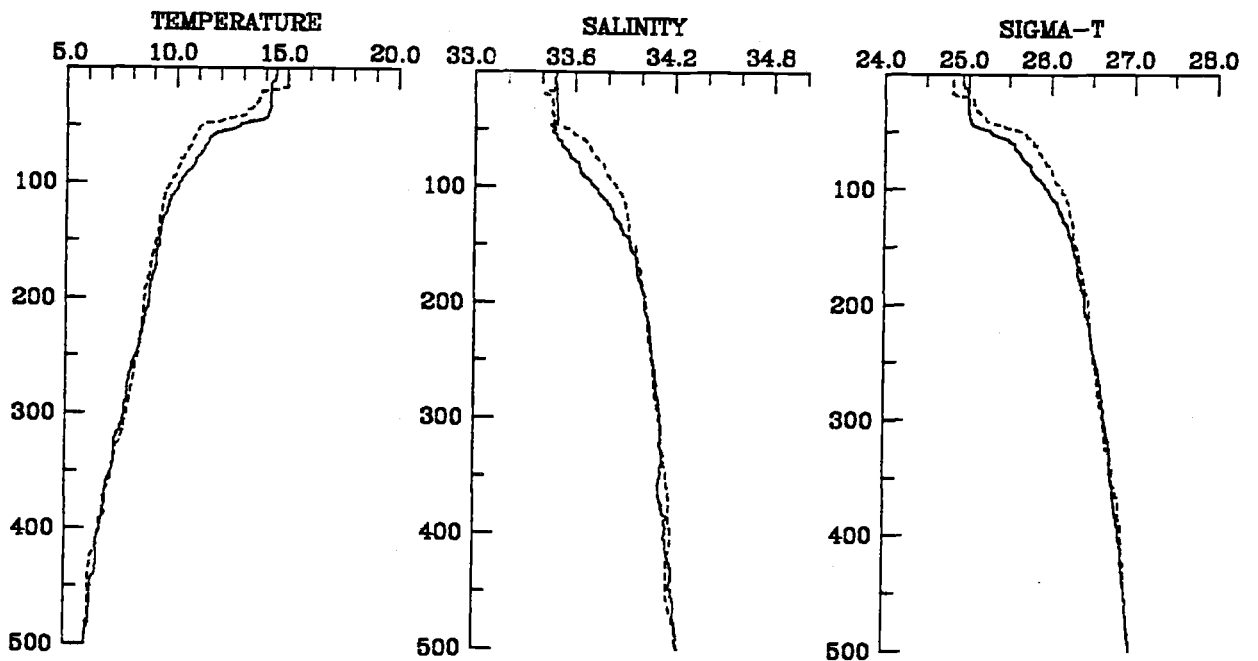
STATION 105 (—)



FEBRUARY 1984

STATION 7 (-----)

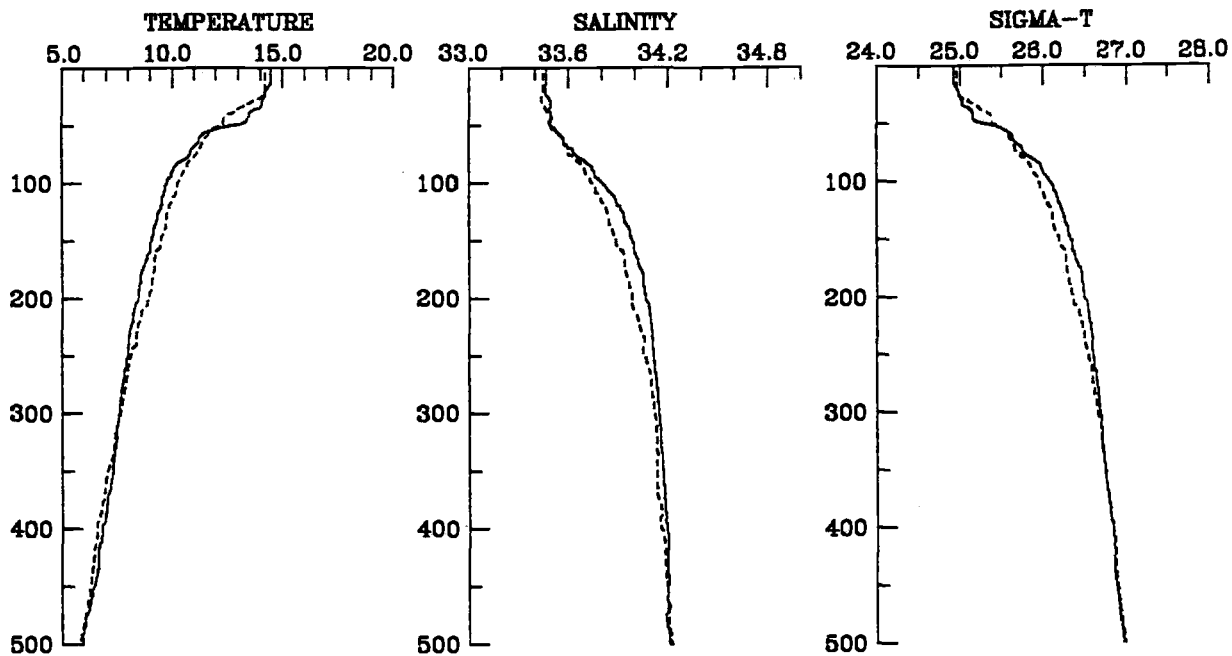
STATION 107 (—)



FEBRUARY 1984

STATION 9 (-----)

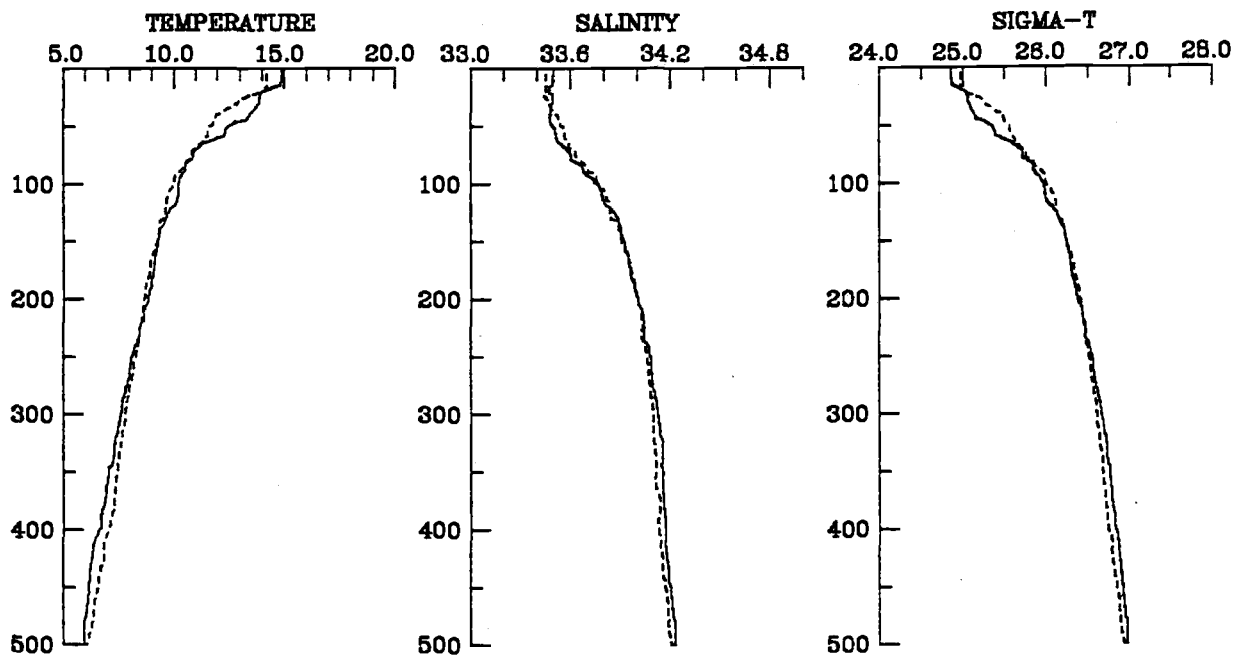
STATION 109 (—)



FEBRUARY 1984

STATION 11 (-----)

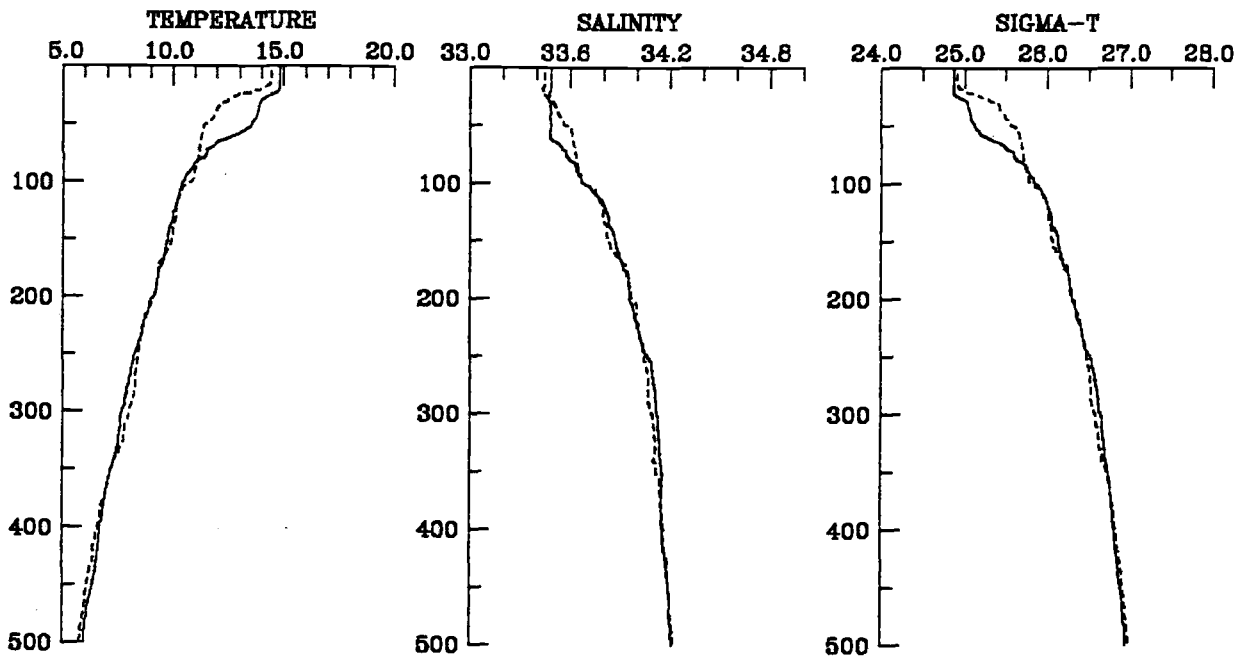
STATION 111 (—)



FEBRUARY 1984

STATION 13 (-----)

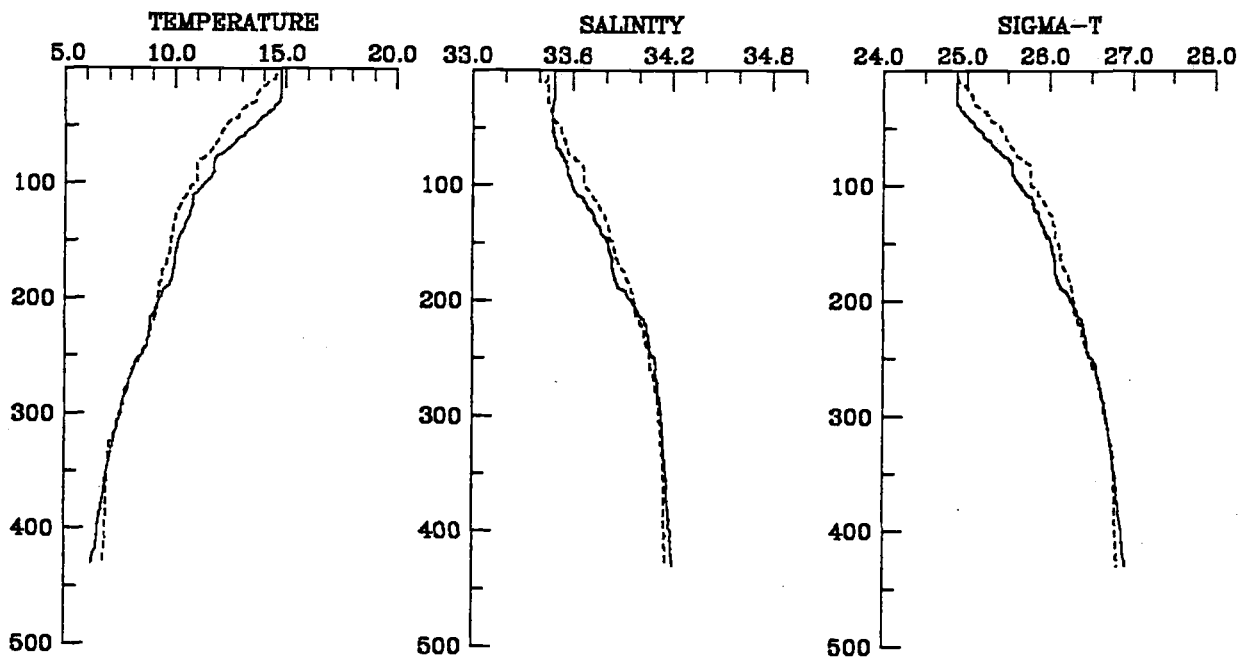
STATION 113 (—)



FEBRUARY 1984

STATION 15 (-----)

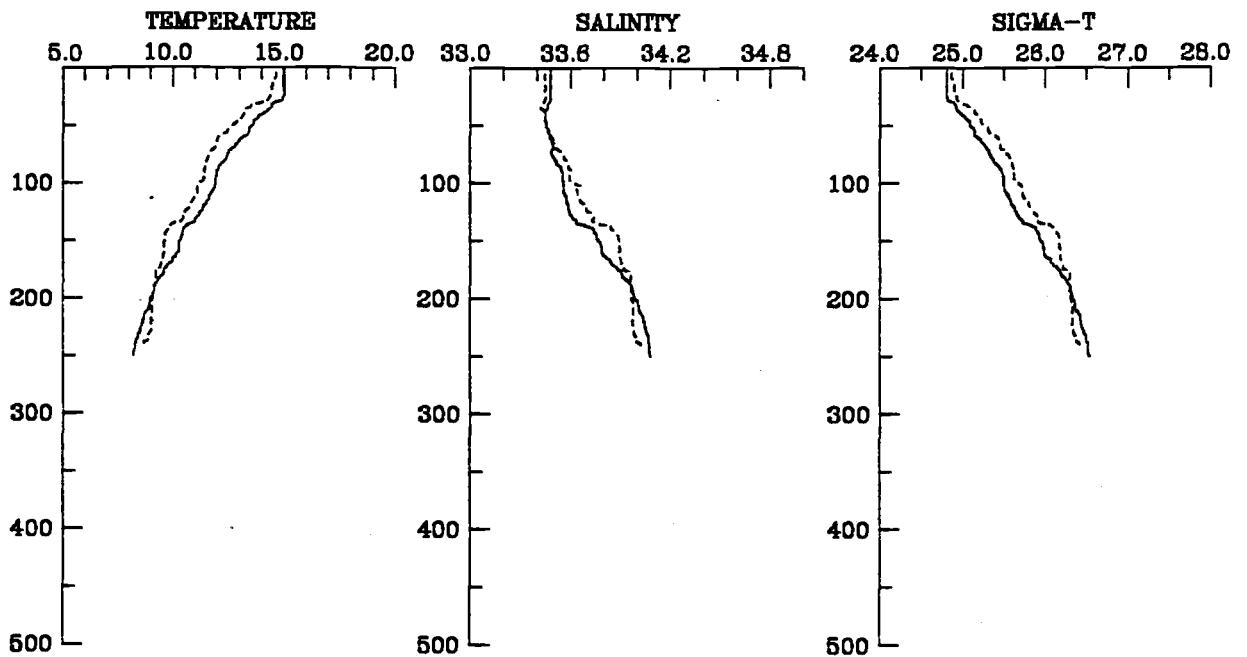
STATION 115 (—)



FEBRUARY 1984

STATION 16 (-----)

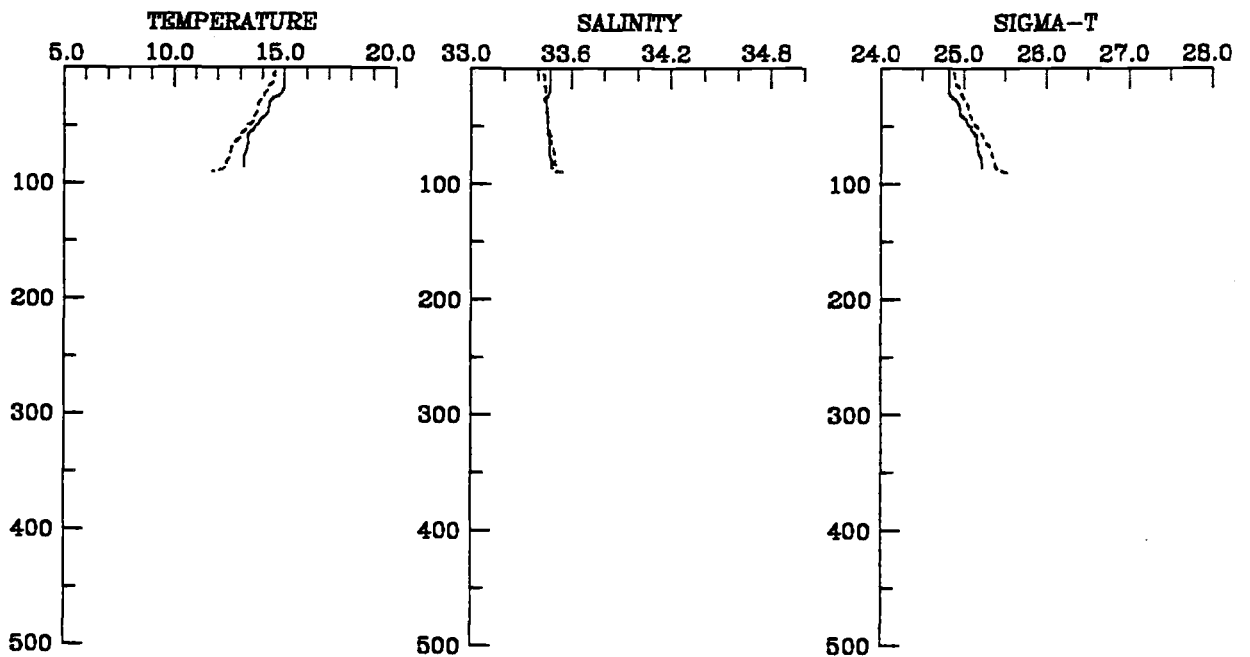
STATION 116 (—)



FEBRUARY 1984

STATION 17 (-----)

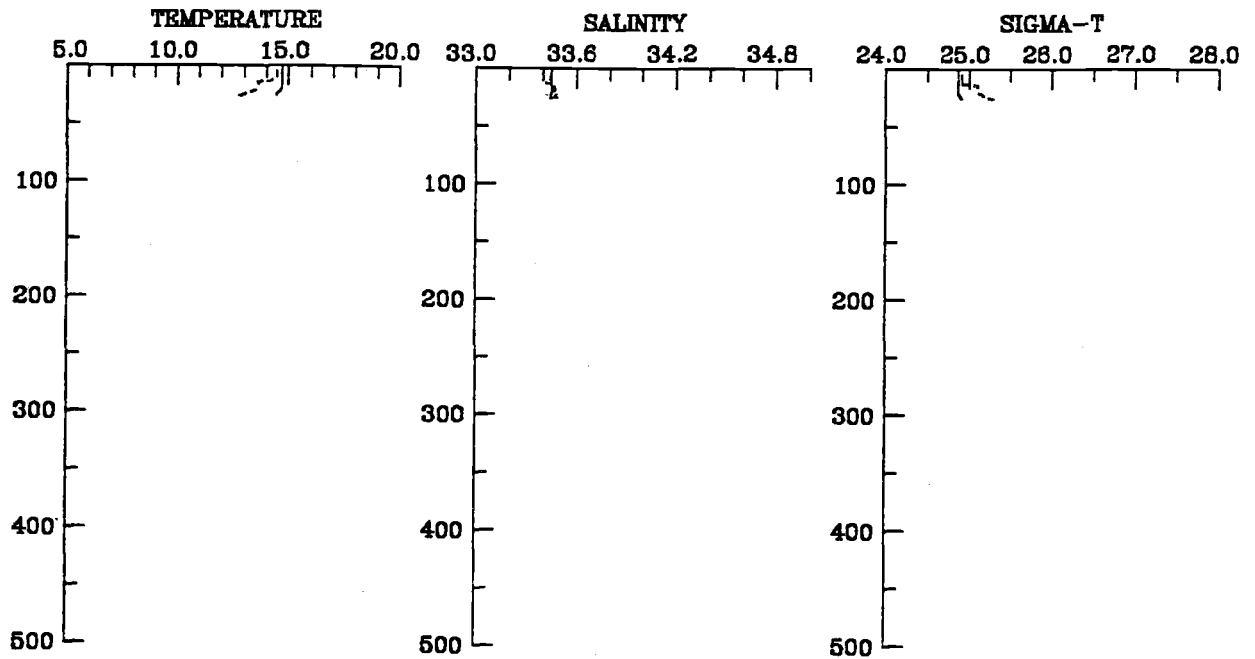
STATION 117 (—)



FEBRUARY 1984

STATION 18 (-----)

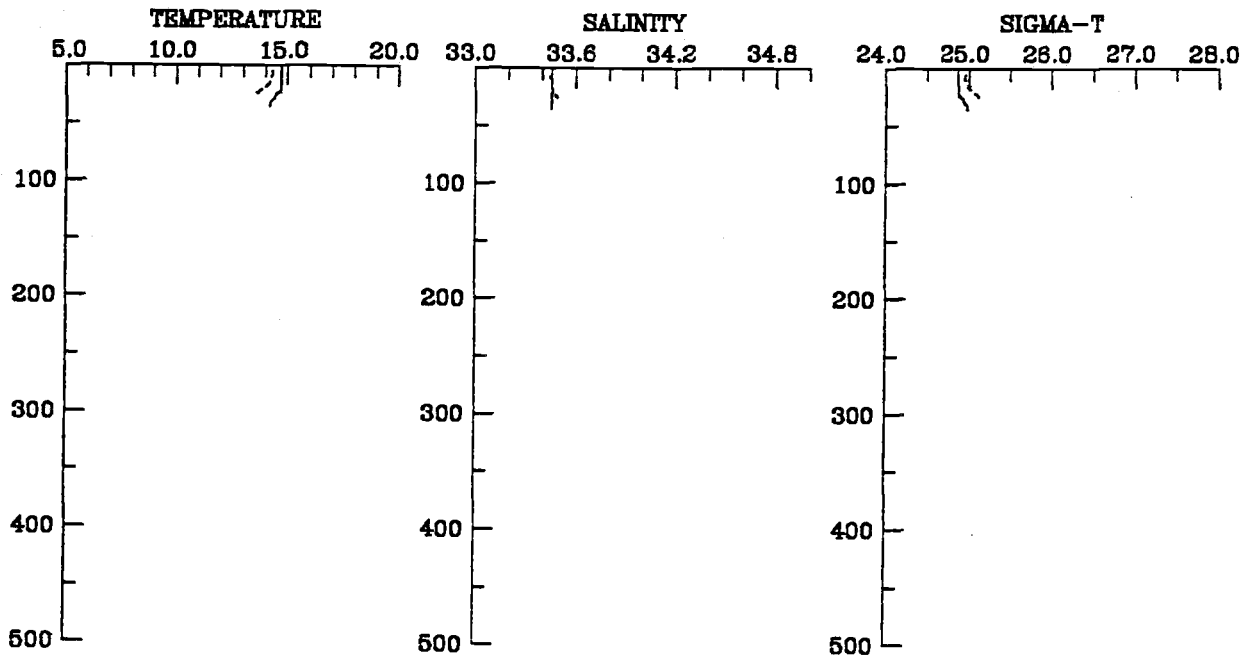
STATION 118 (—)



FEBRUARY 1984

STATION 19 (-----)

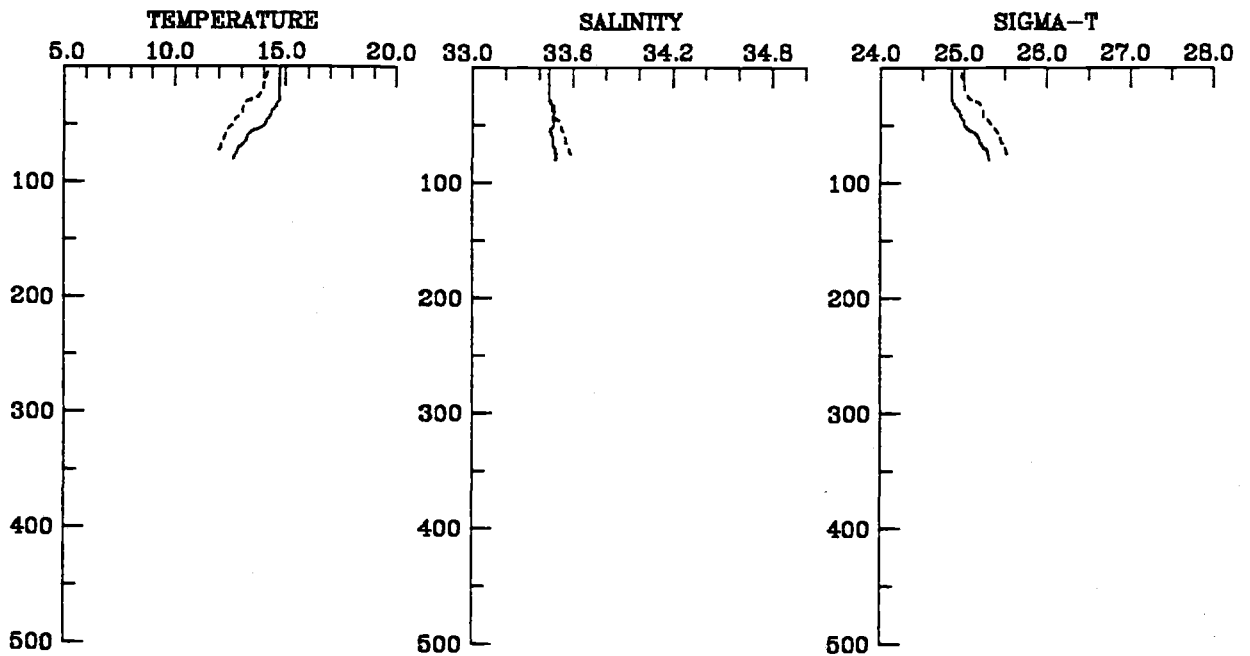
STATION 119 (—)



FEBRUARY 1984

STATION 20 (-----)

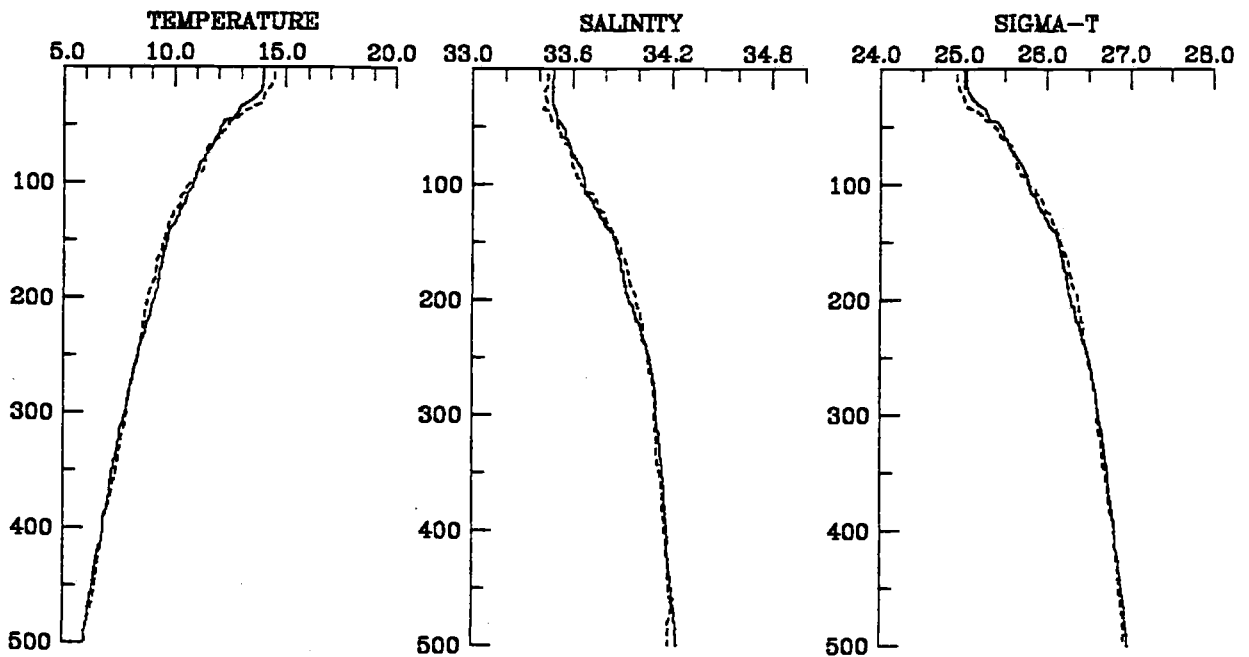
STATION 120 (—)



FEBRUARY 1984

STATION 22 (-----)

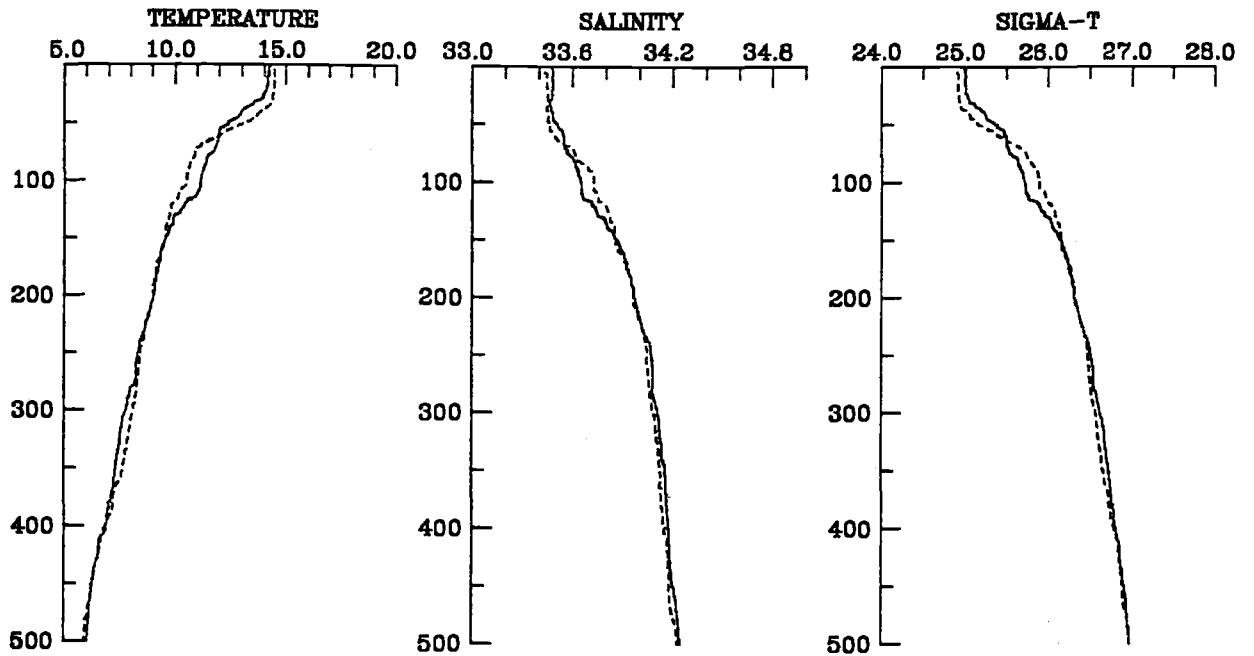
STATION 122 (—)



FEBRUARY 1984

STATION 24 (-----)

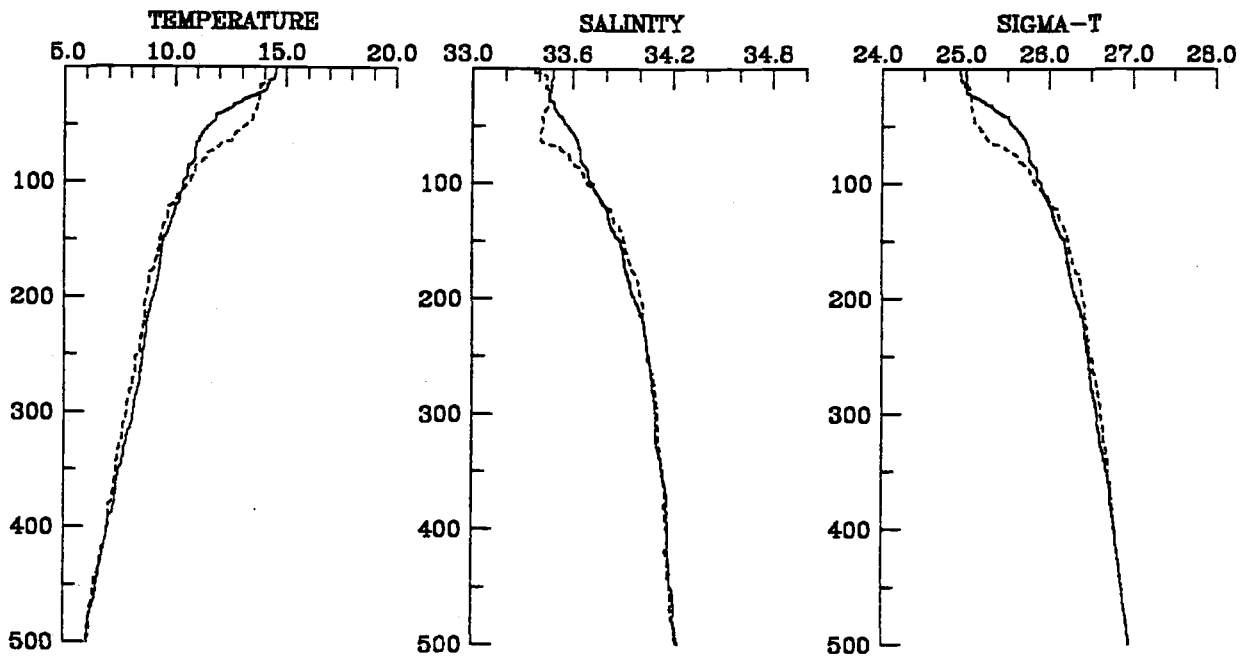
STATION 124 (—)



FEBRUARY 1984

STATION 25 (-----)

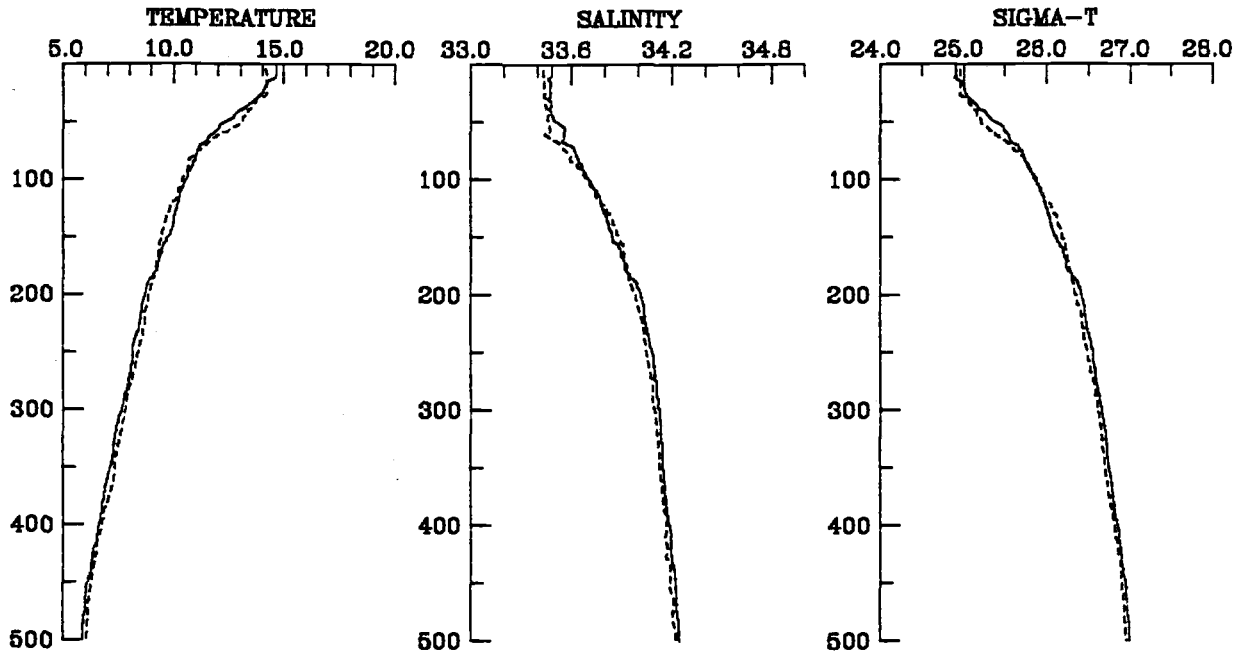
STATION 125 (—)



FEBRUARY 1984

STATION 27 (-----)

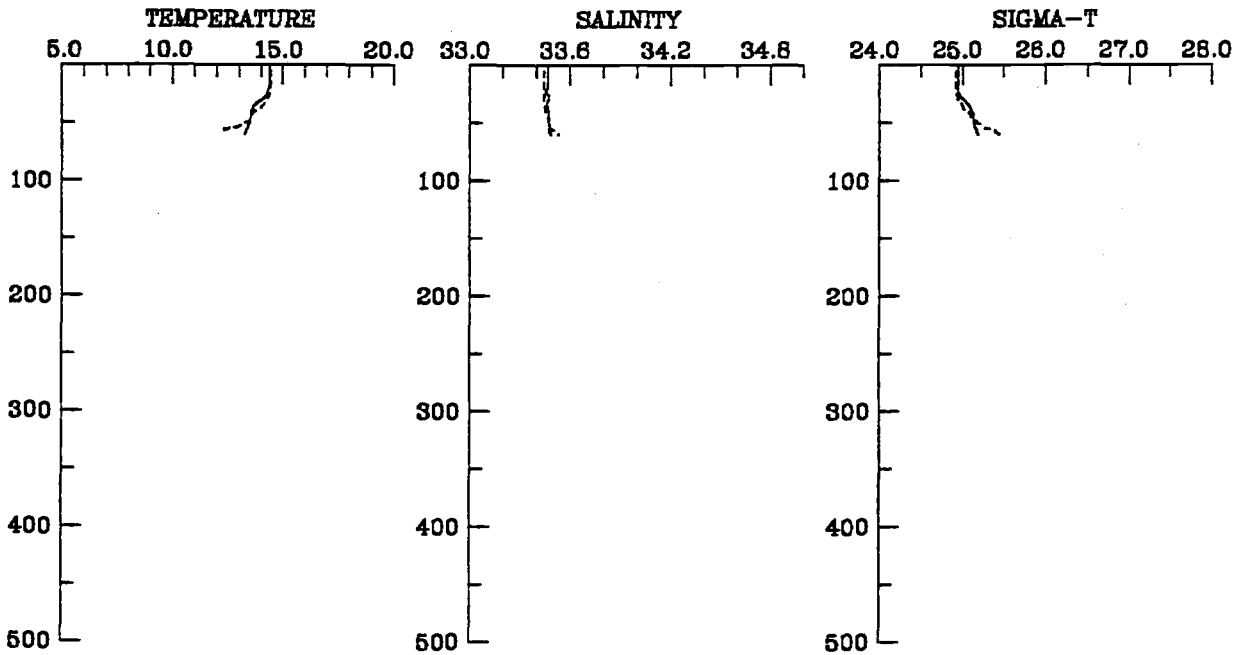
STATION 127 (—)



FEBRUARY 1984

STATION 29 (-----)

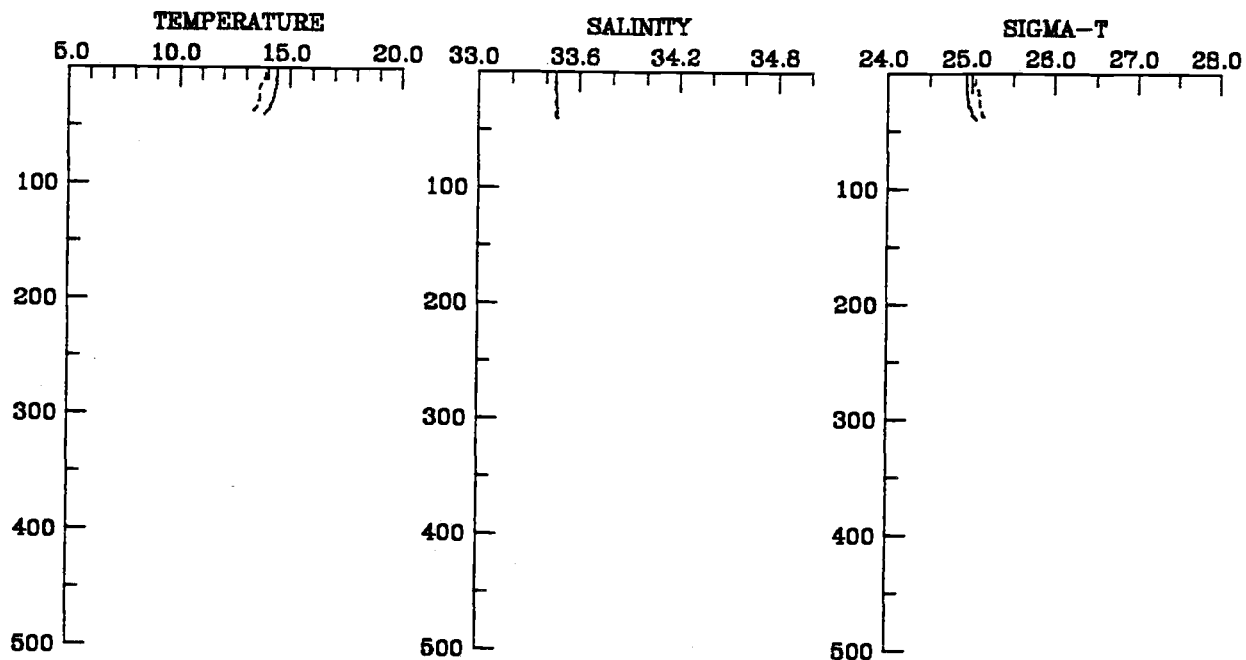
STATION 129 (—)



FEBRUARY 1984

STATION 30 (-----)

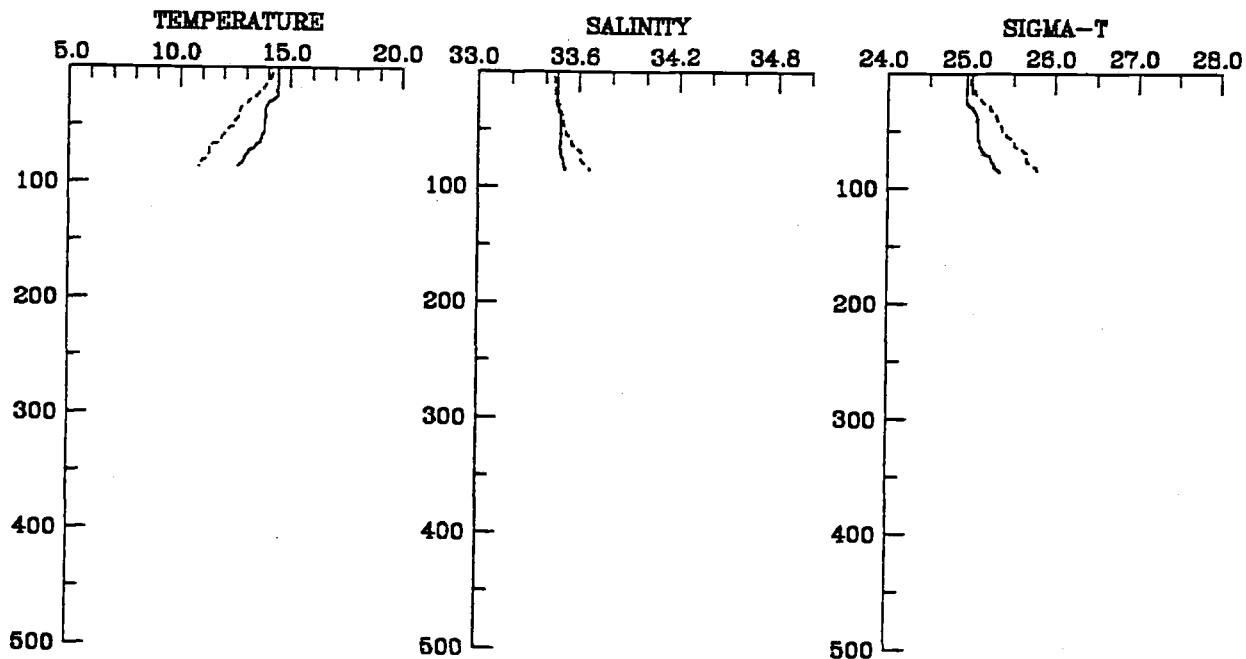
STATION 130 (—)



FEBRUARY 1984

STATION 31 (-----)

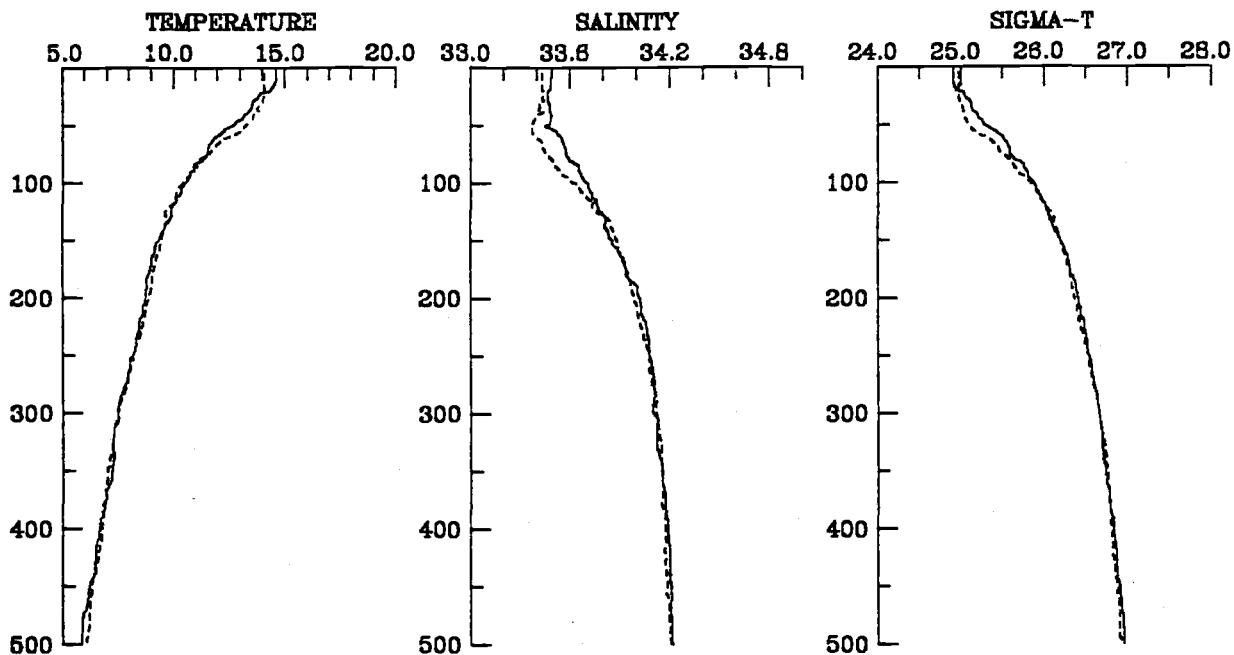
STATION 131 (—)



FEBRUARY 1984

STATION 33 (-----)

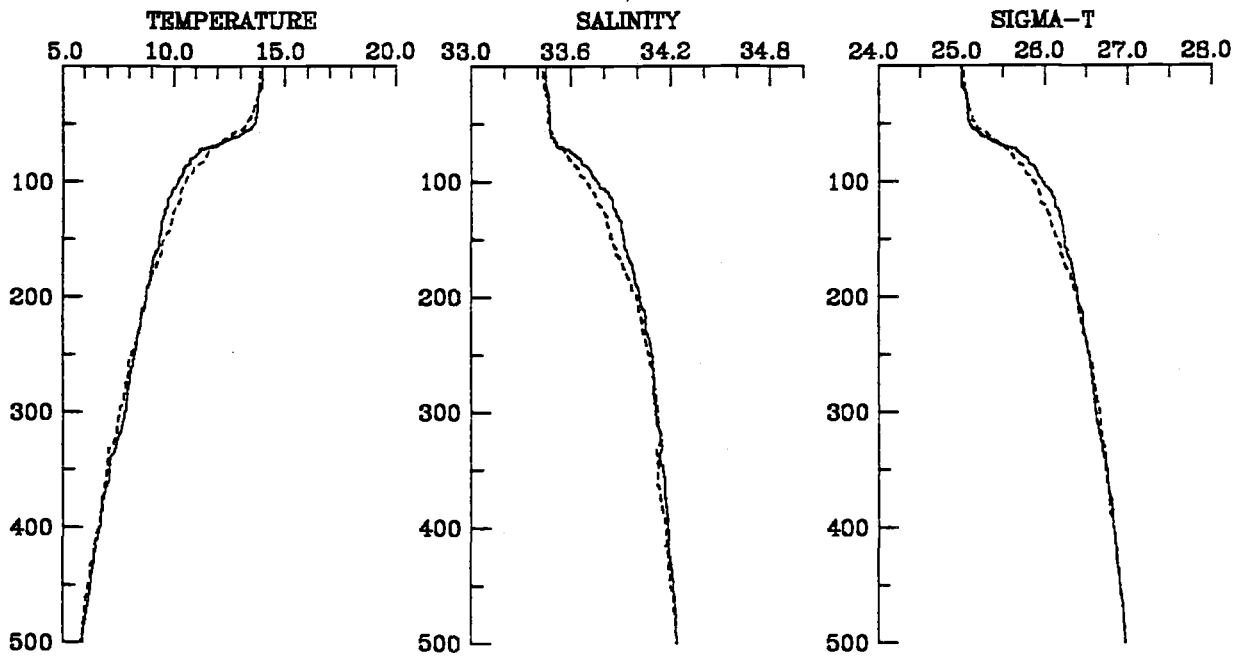
STATION 133 (—)



FEBRUARY 1984

STATION 35 (-----)

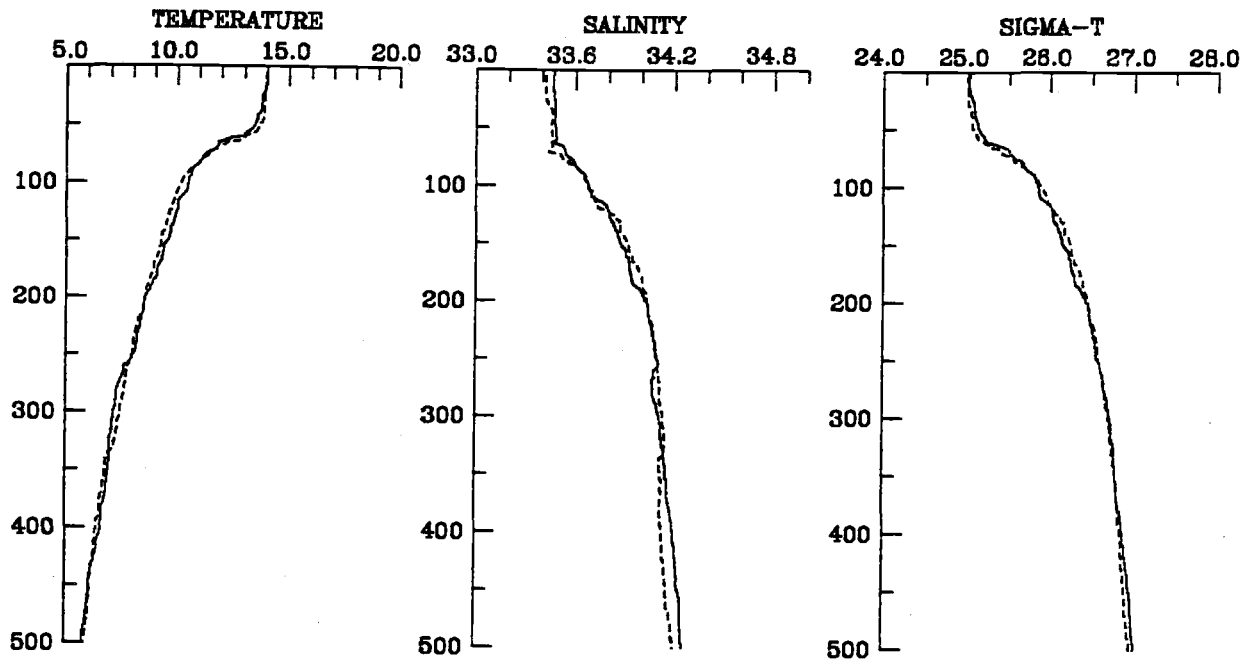
STATION 135 (—)



FEBRUARY 1984

STATION 36 (-----)

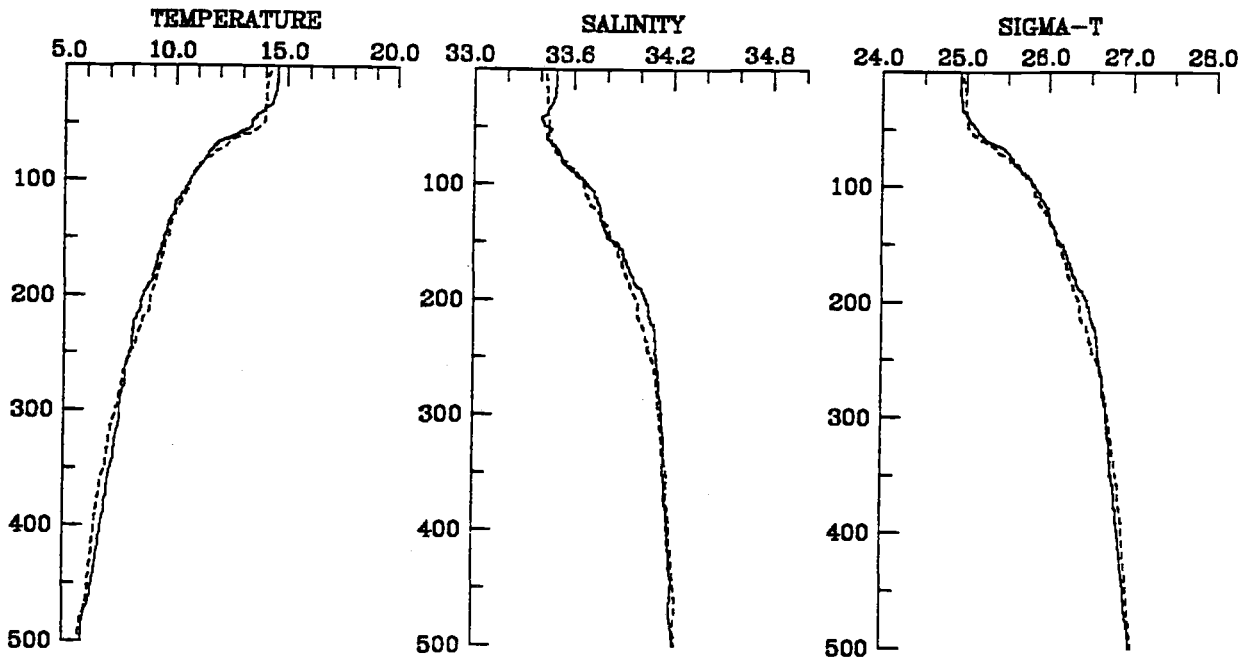
STATION 136 (—)



FEBRUARY 1984

STATION 38 (-----)

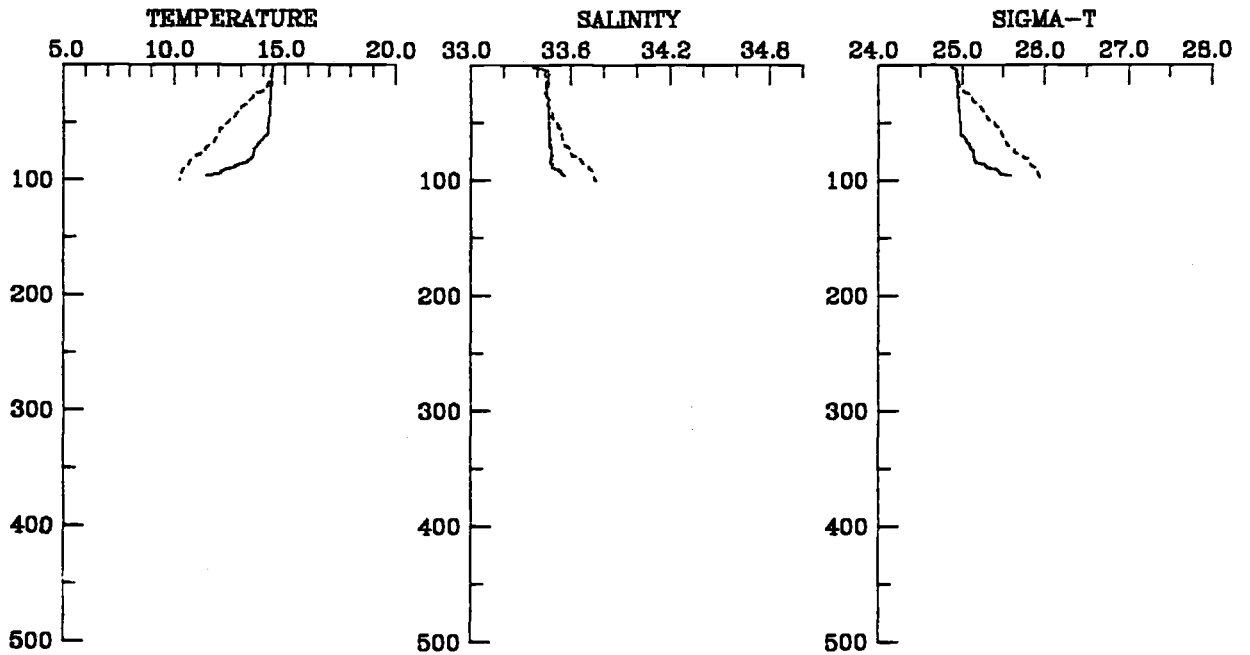
STATION 138 (—)



FEBRUARY 1984

STATION 40 (-----)

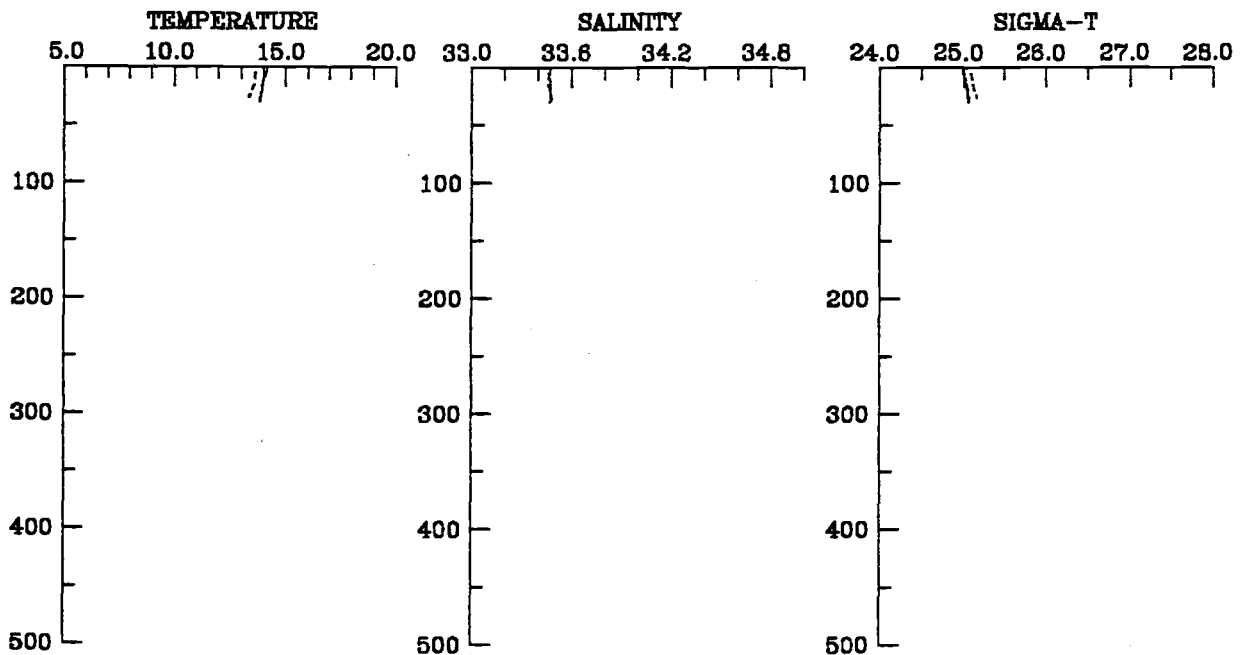
STATION 140 (—)



FEBRUARY 1984

STATION 42 (-----)

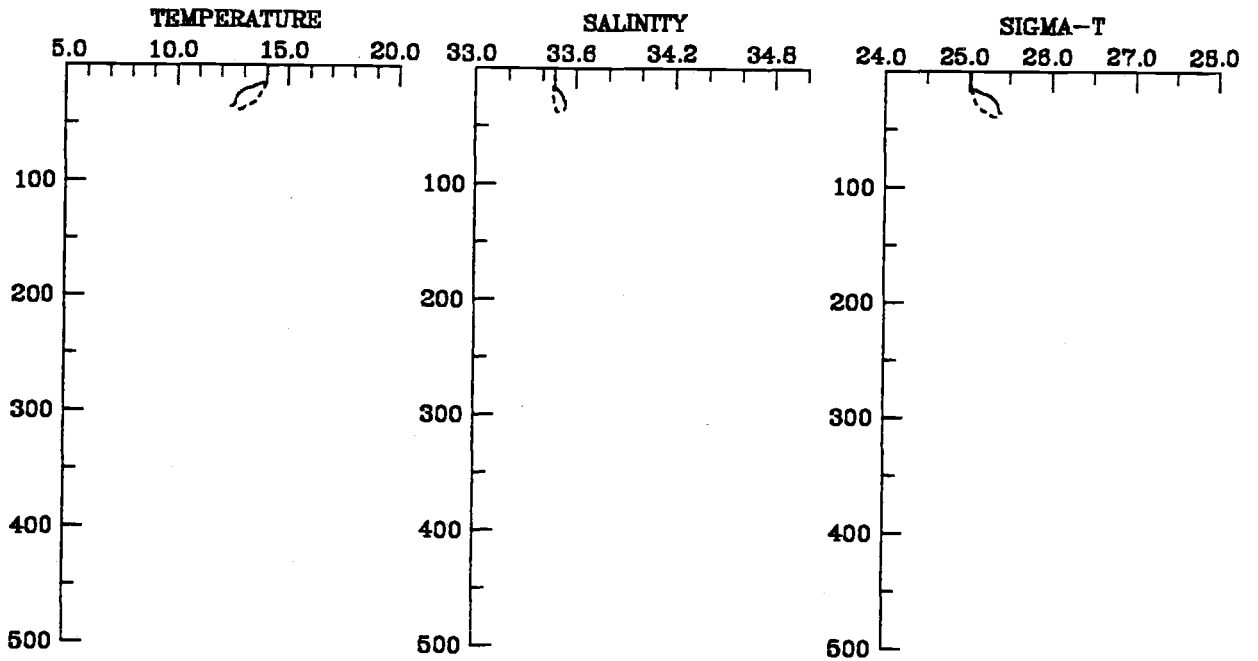
STATION 142 (—)



FEBRUARY 1984

STATION 43 (-----)

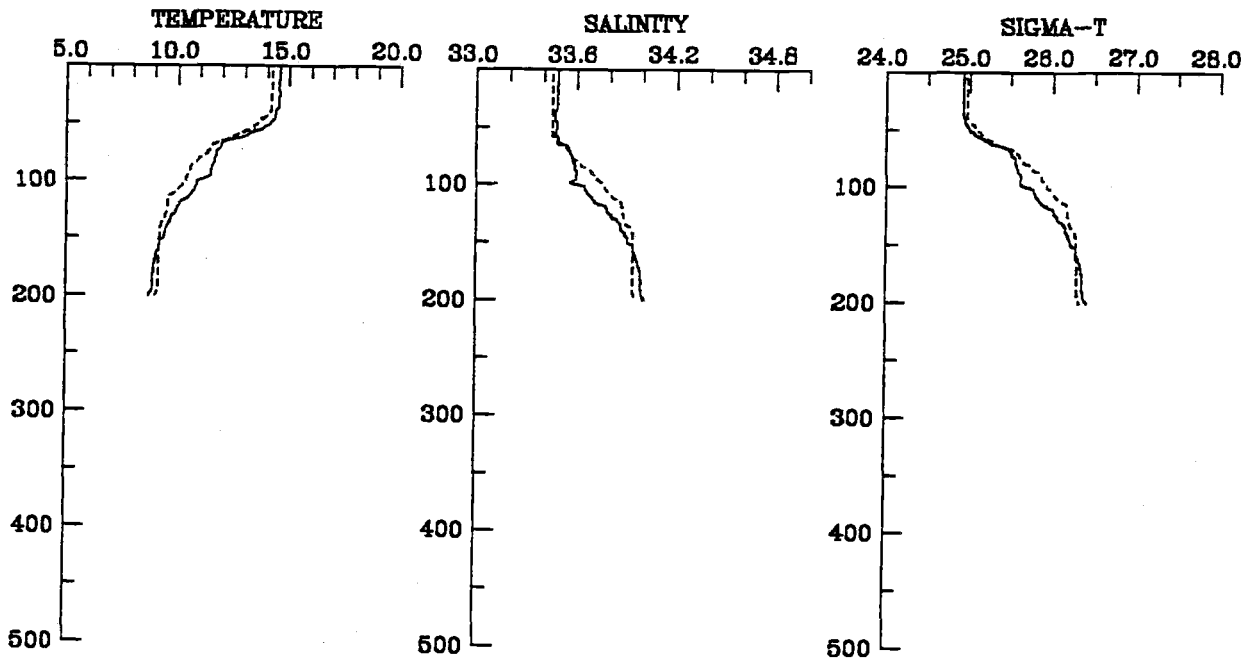
STATION 143 (—)



FEBRUARY 1984

STATION 45 (-----)

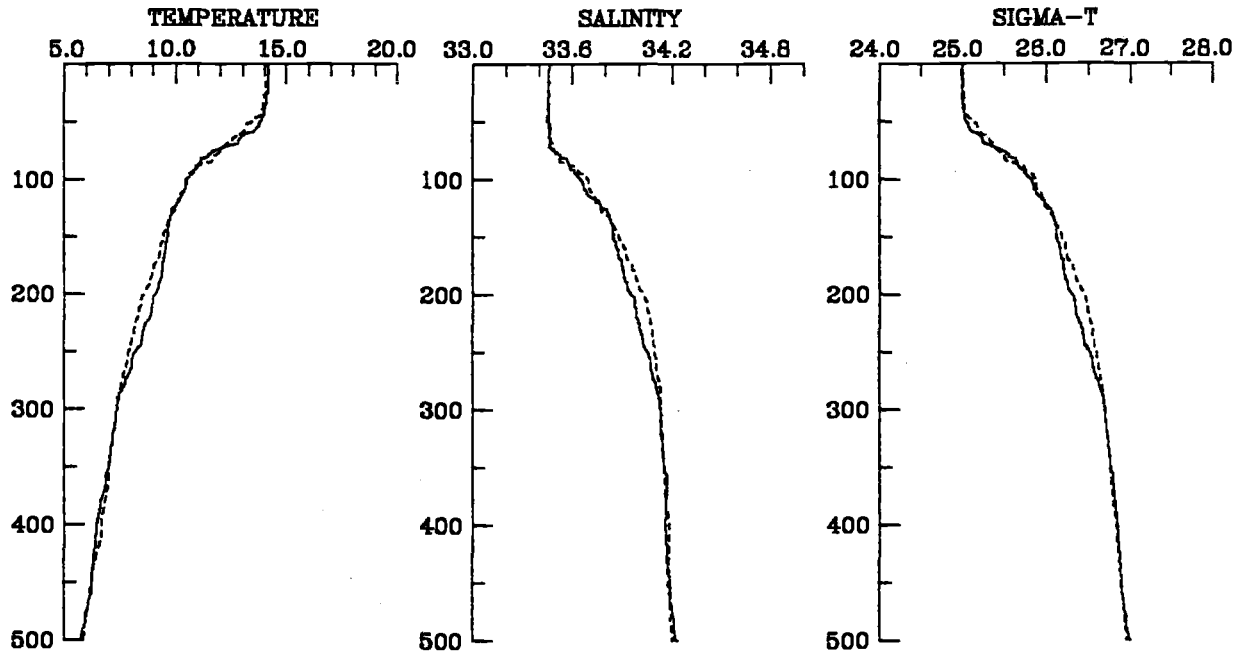
STATION 145 (—)



FEBRUARY 1984

STATION 47 (-----)

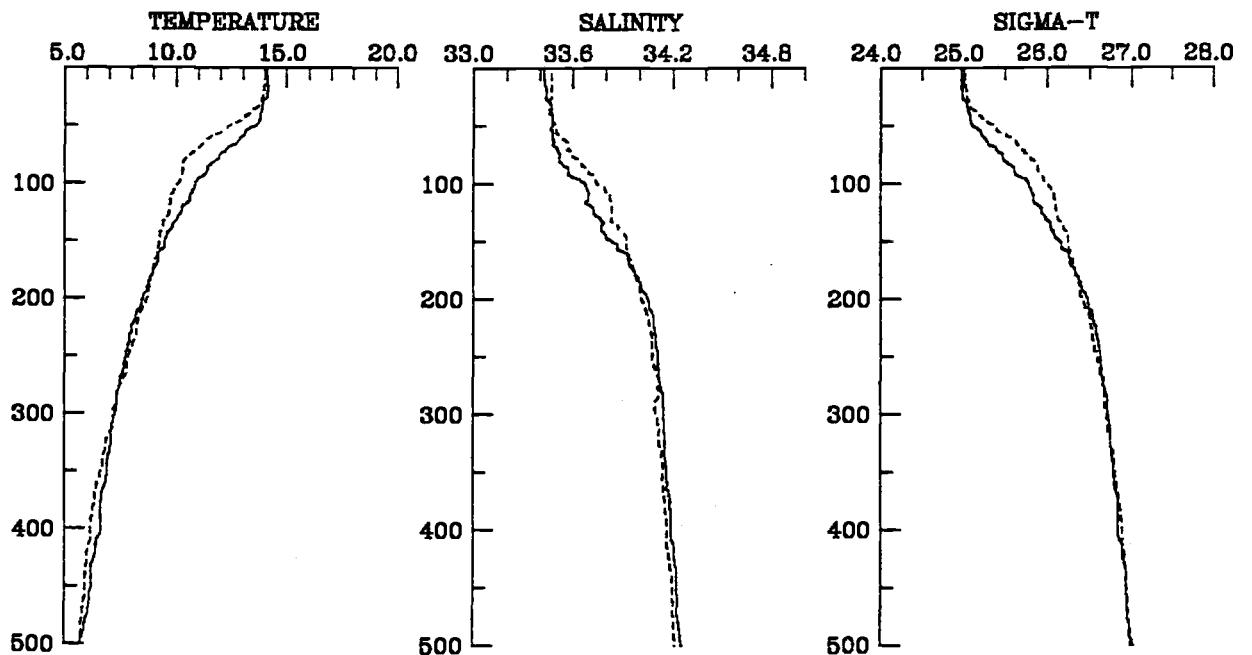
STATION 147 (—)



FEBRUARY 1984

STATION 49 (-----)

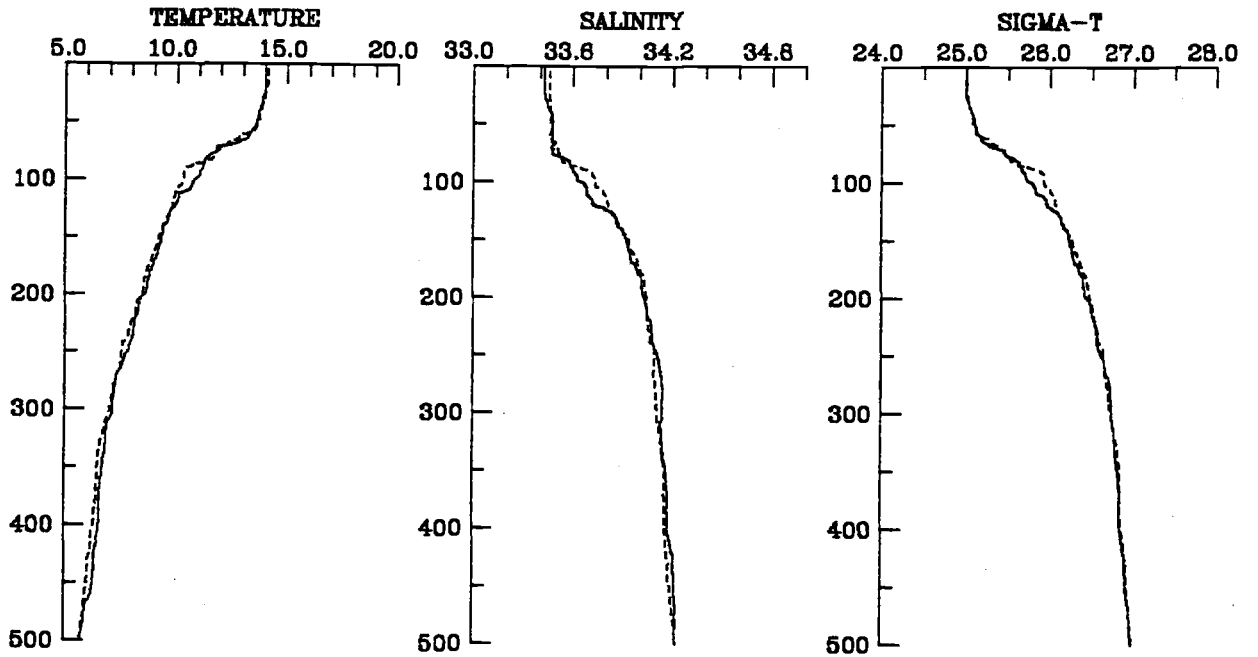
STATION 149 (—)



FEBRUARY 1984

STATION 50 (-----)

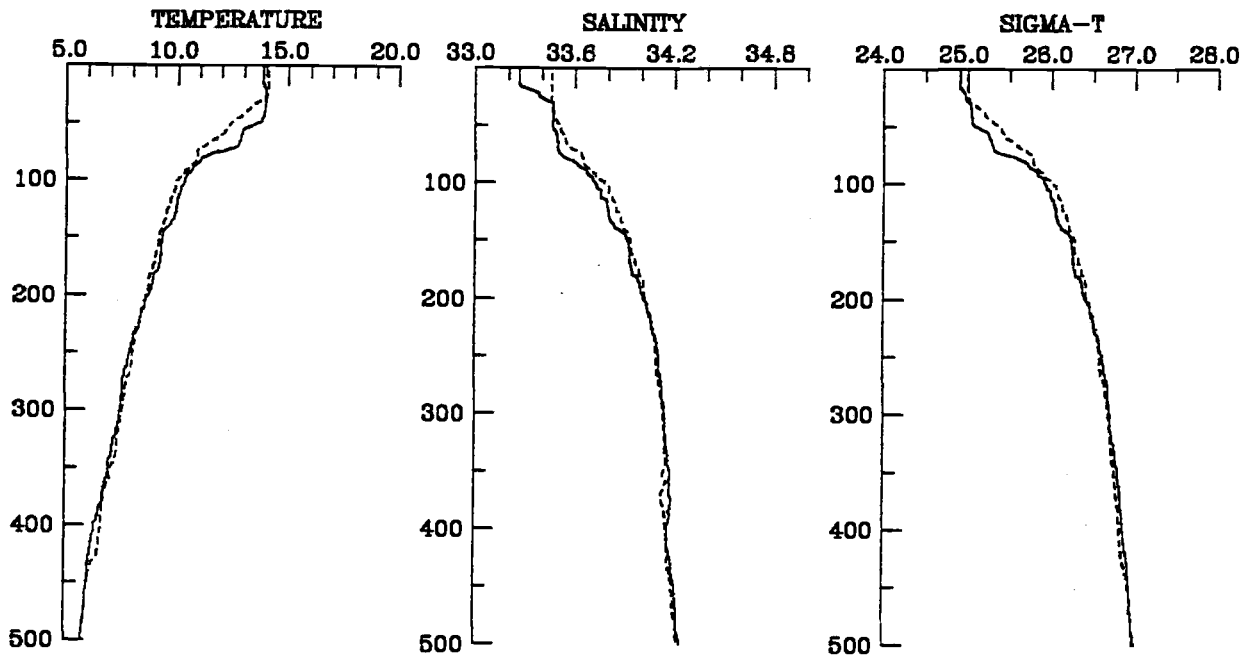
STATION 150 (—)



FEBRUARY 1984

STATION 52 (-----)

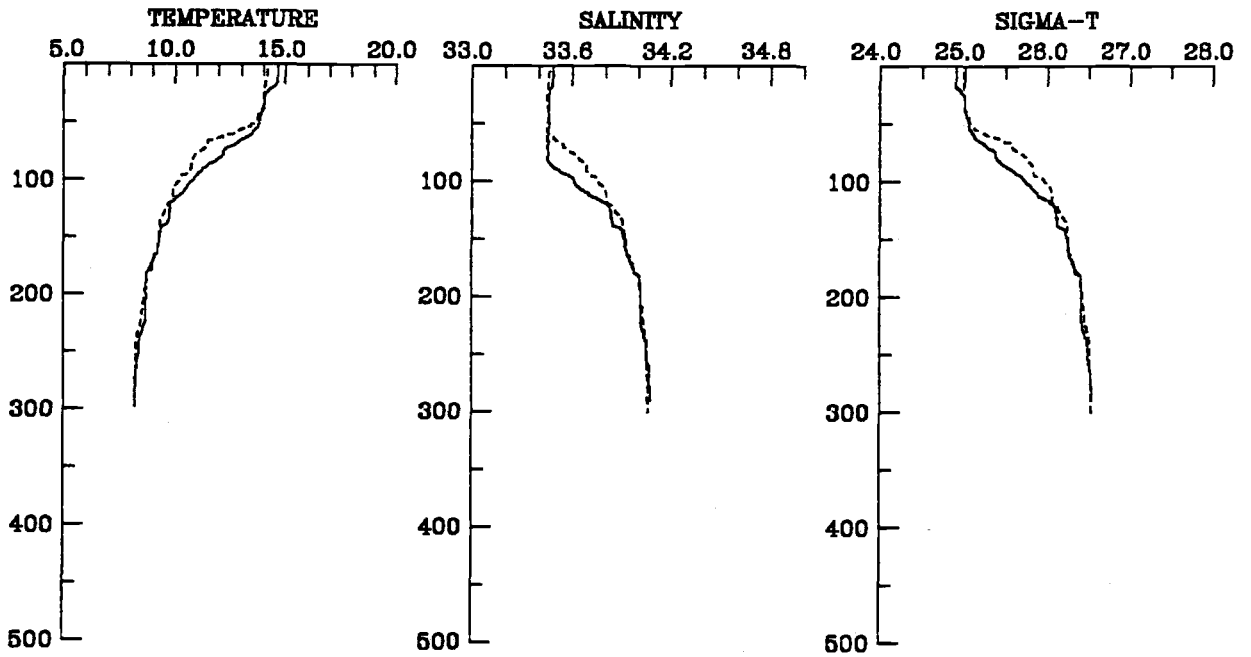
STATION 152 (—)



FEBRUARY 1984

STATION 54 (-----)

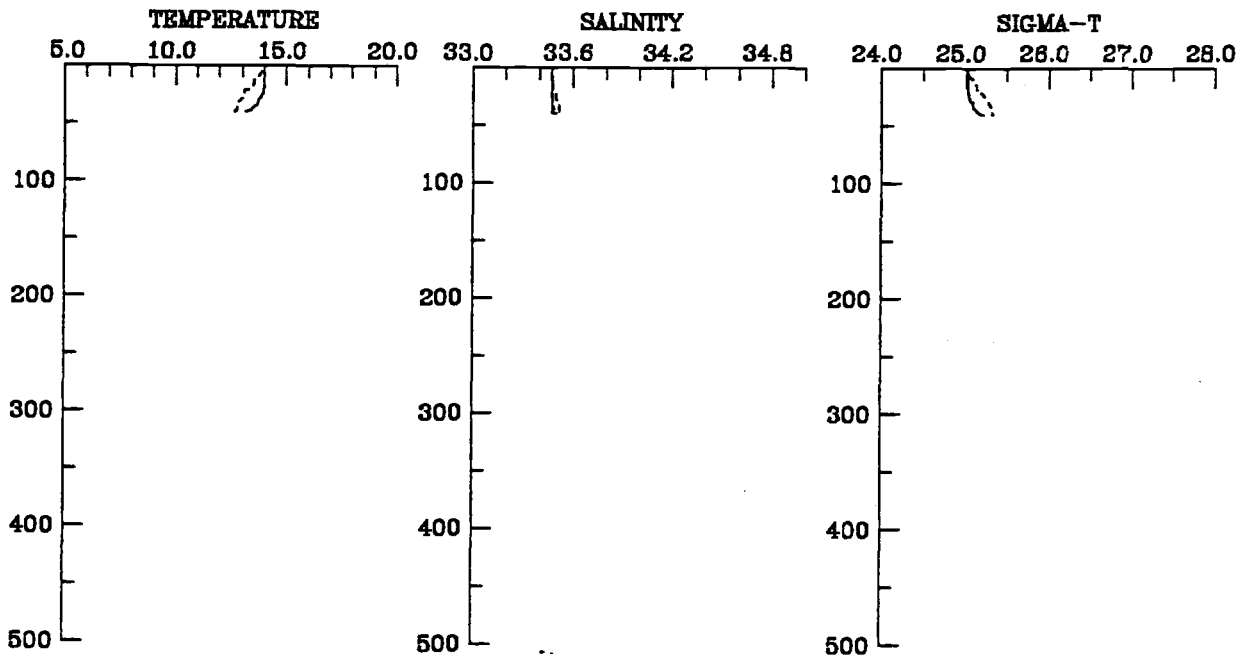
STATION 154 (—)



FEBRUARY 1984

STATION 56 (-----)

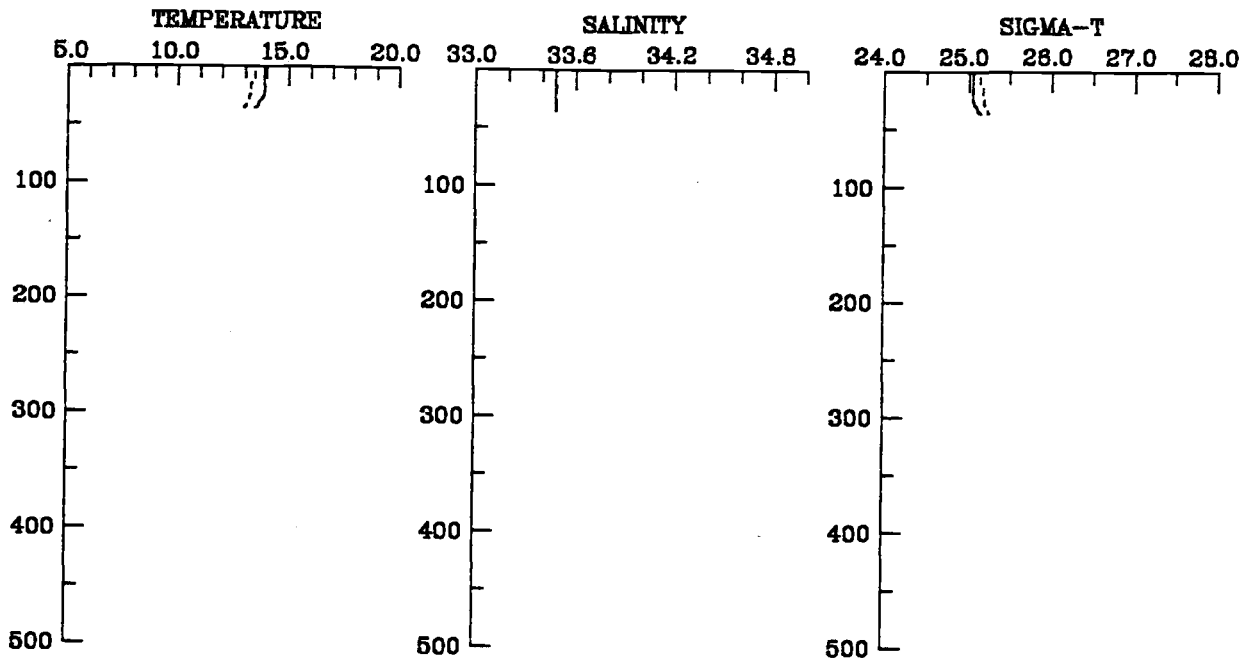
STATION 156 (—)



FEBRUARY 1984

STATION 57 (-----)

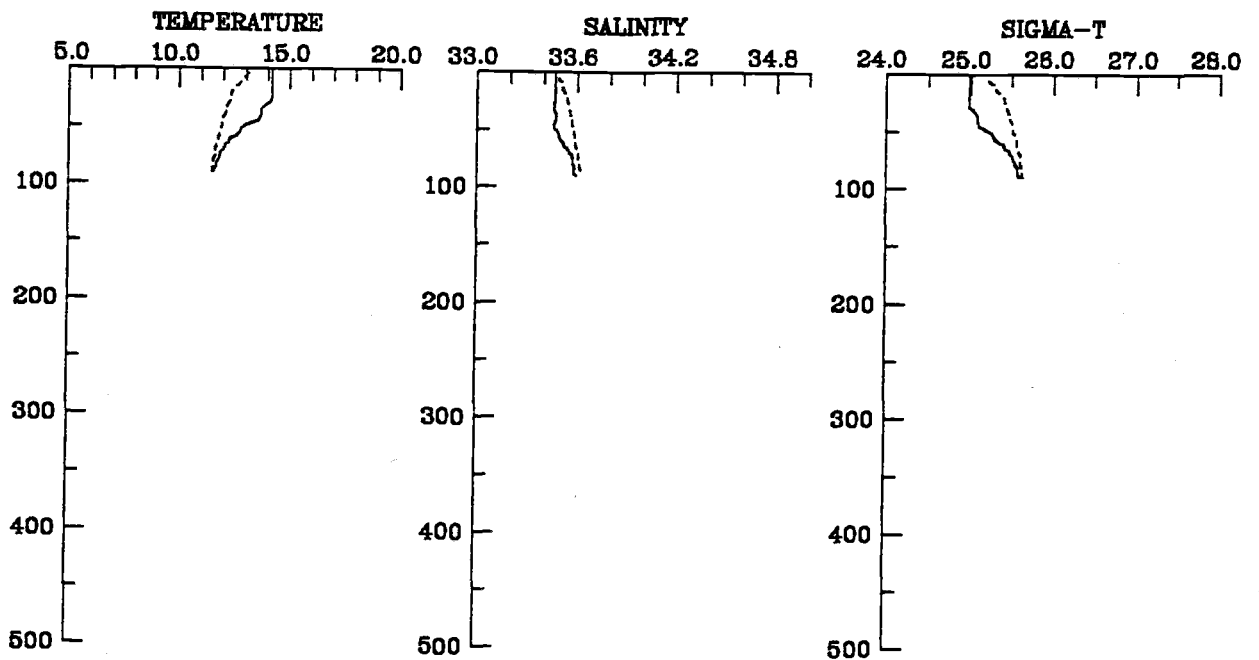
STATION 157 (—)



FEBRUARY 1984

STATION 58 (-----)

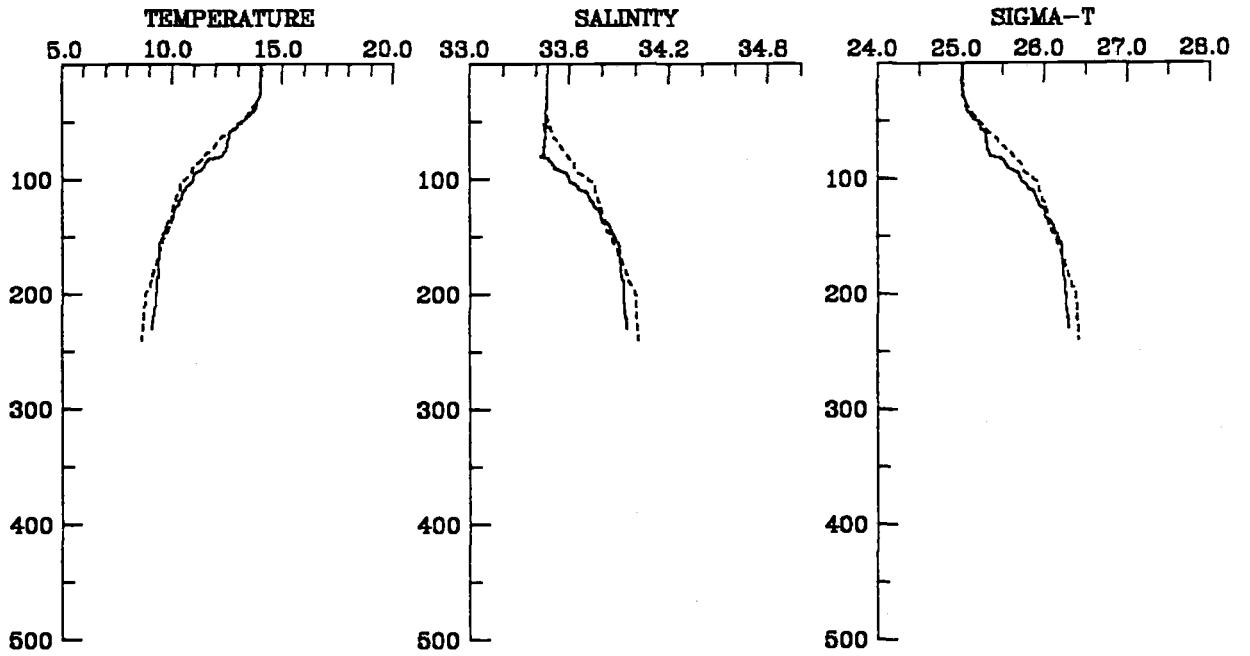
STATION 158 (—)



FEBRUARY 1984

STATION 59 (-----)

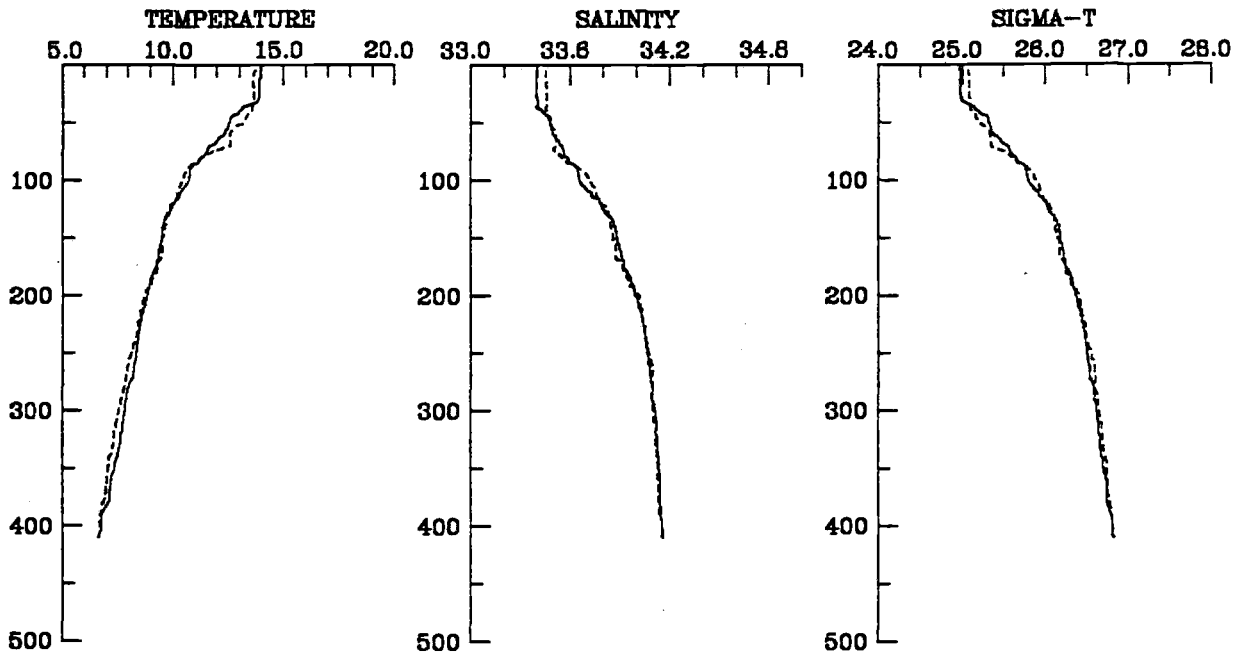
STATION 159 (—)



FEBRUARY 1984

STATION 60 (-----)

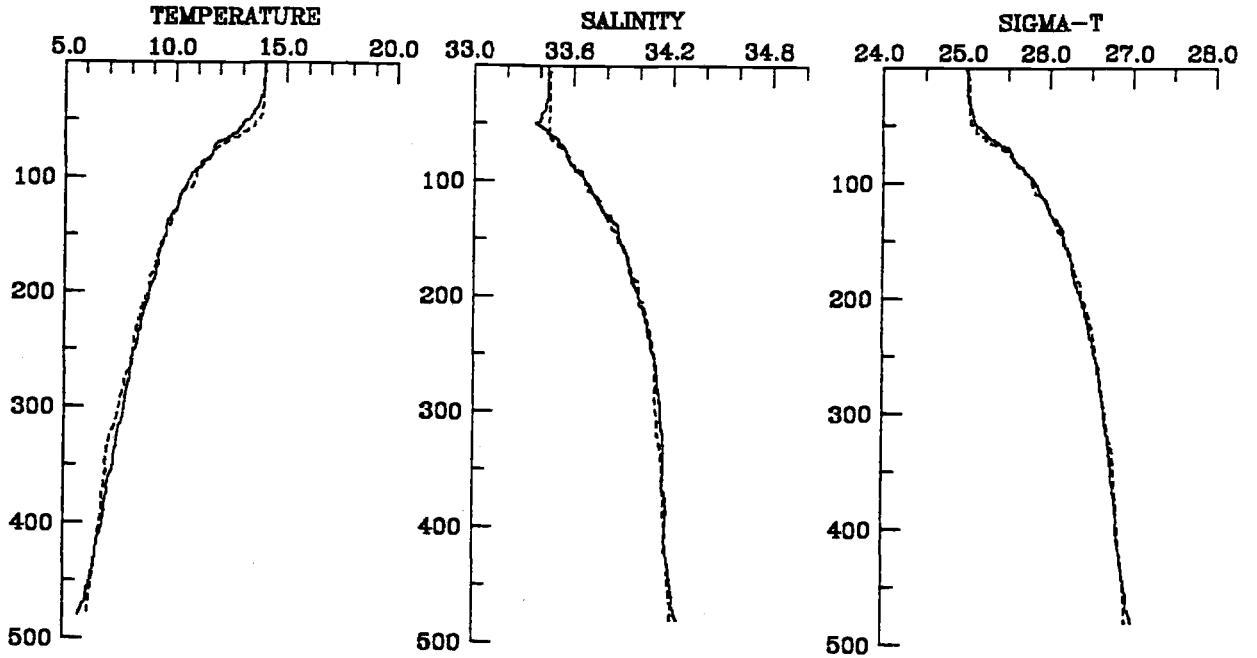
STATION 160 (—)



FEBRUARY 1984

STATION 61 (-----)

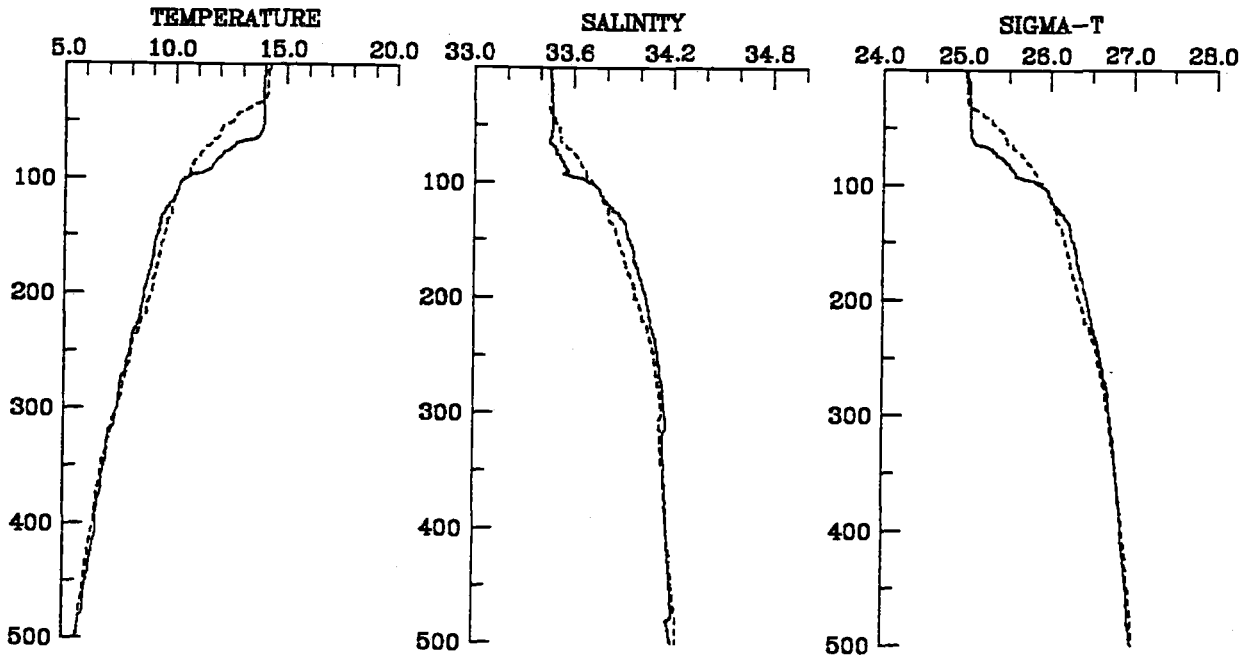
STATION 161 (—)



FEBRUARY 1984

STATION 63 (-----)

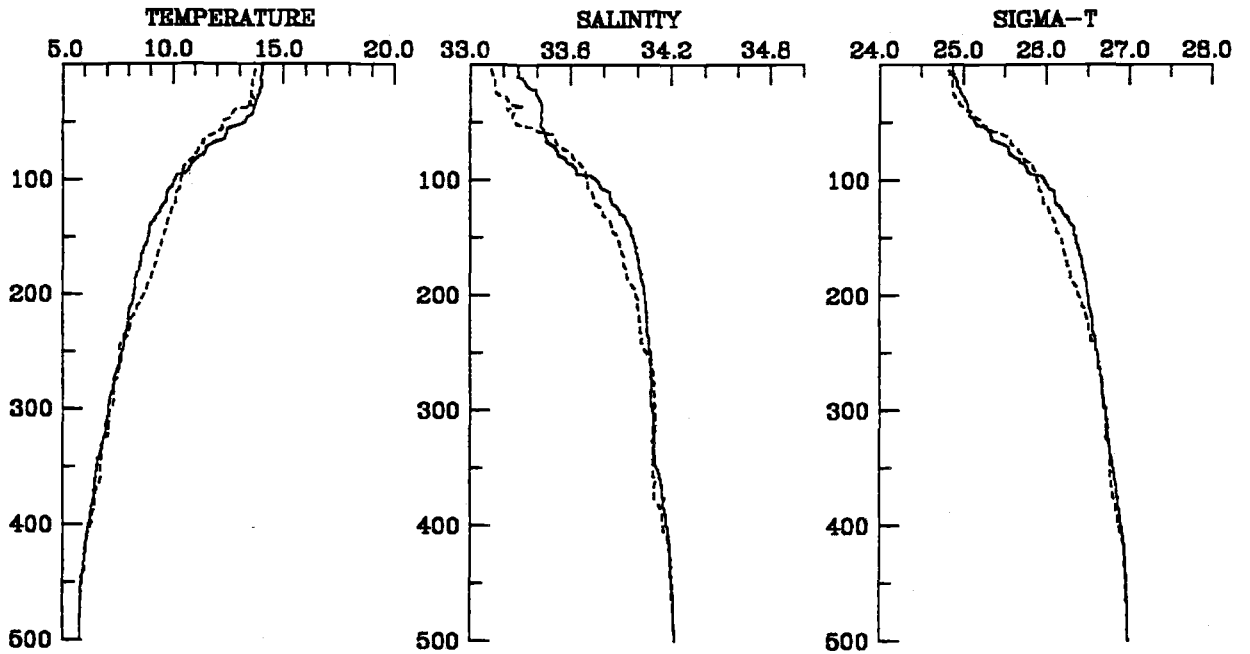
STATION 163 (—)



FEBRUARY 1984

STATION 65 (-----)

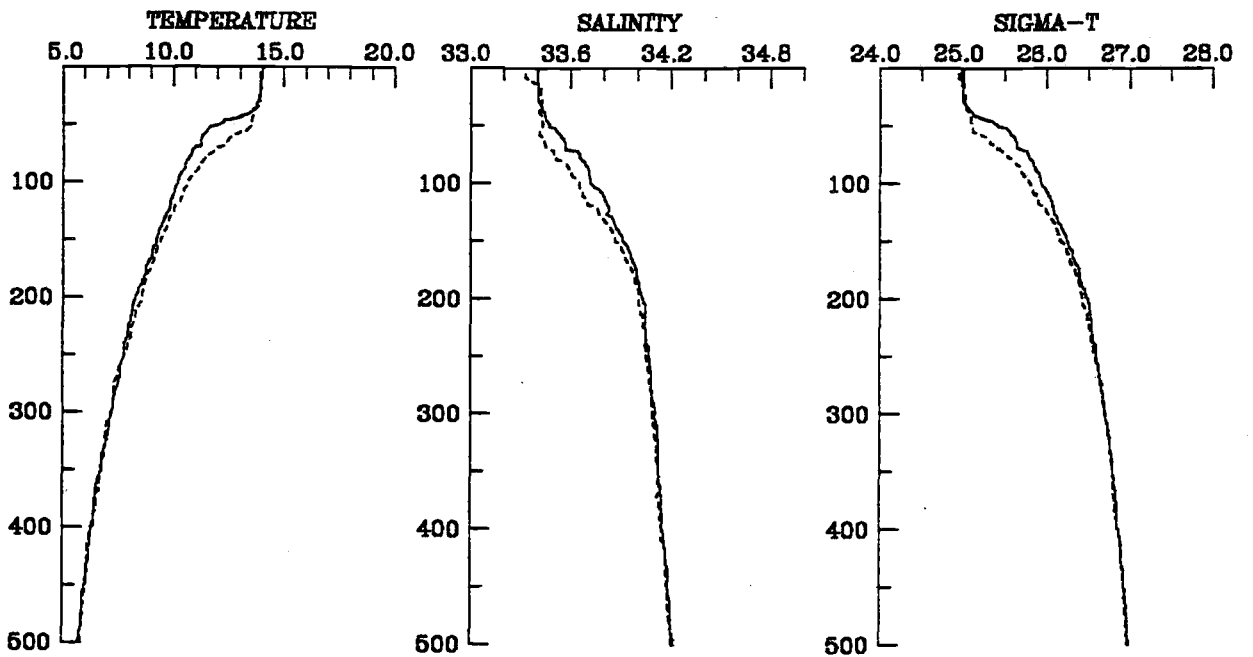
STATION 165 (—)



FEBRUARY 1984

STATION 67 (-----)

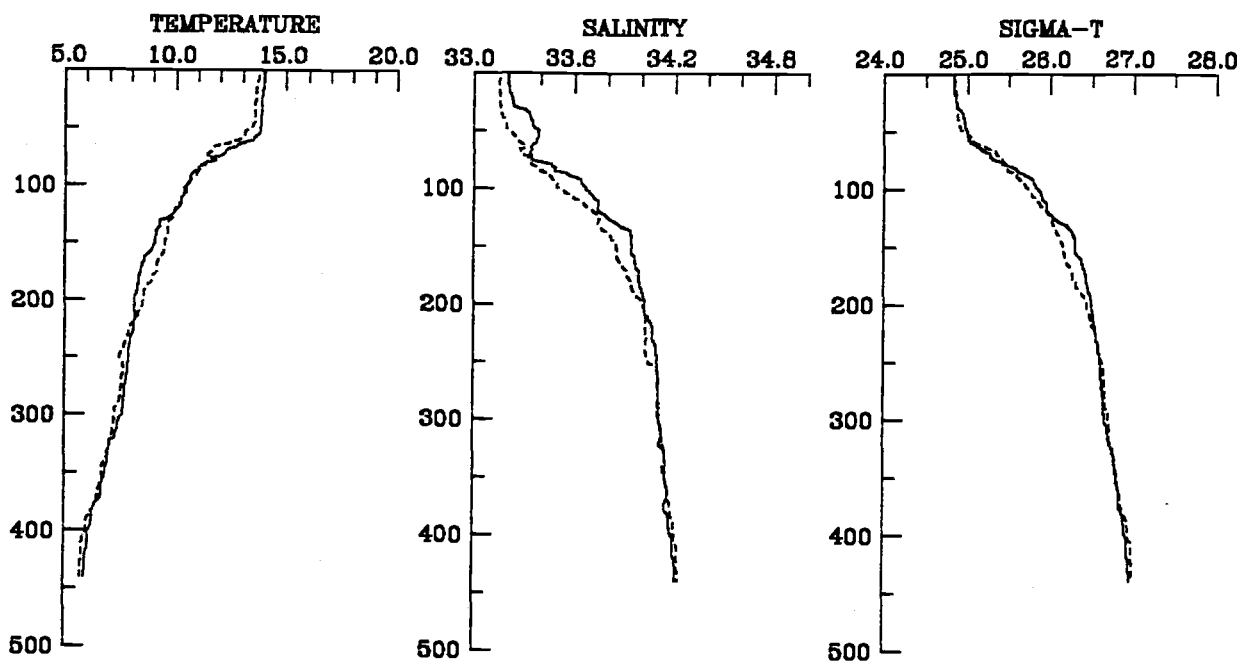
STATION 167 (—)



FEBRUARY 1984

STATION 69 (-----)

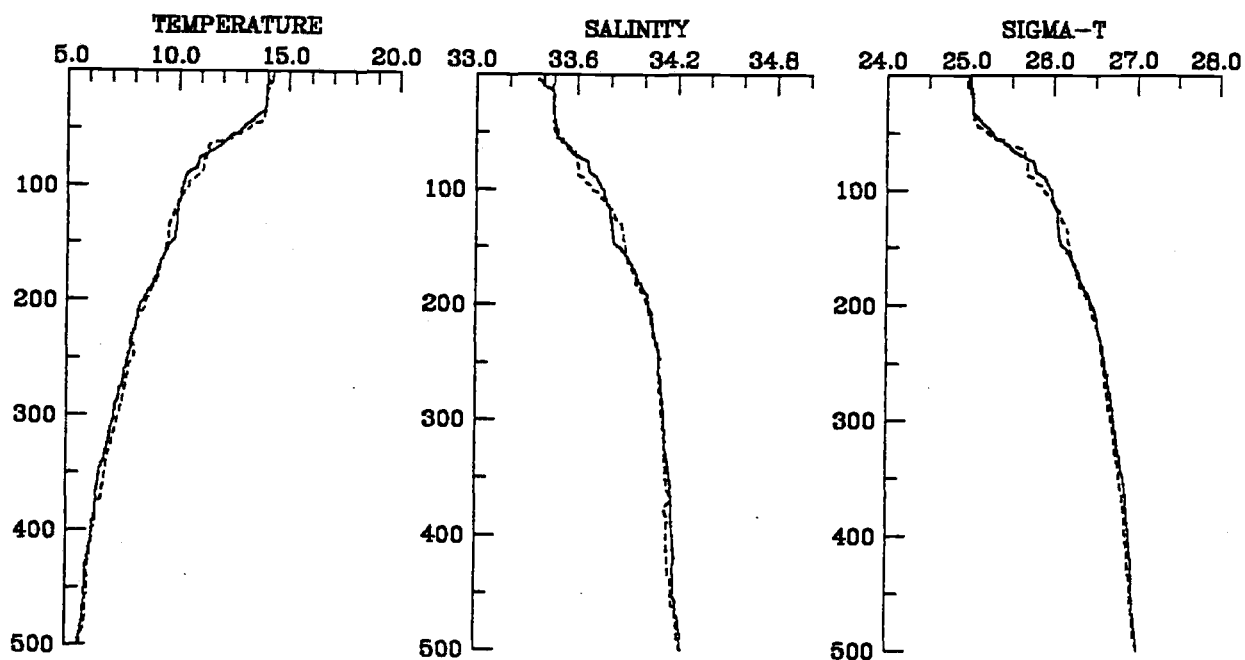
STATION 169 (—)



FEBRUARY 1984

STATION 71 (-----)

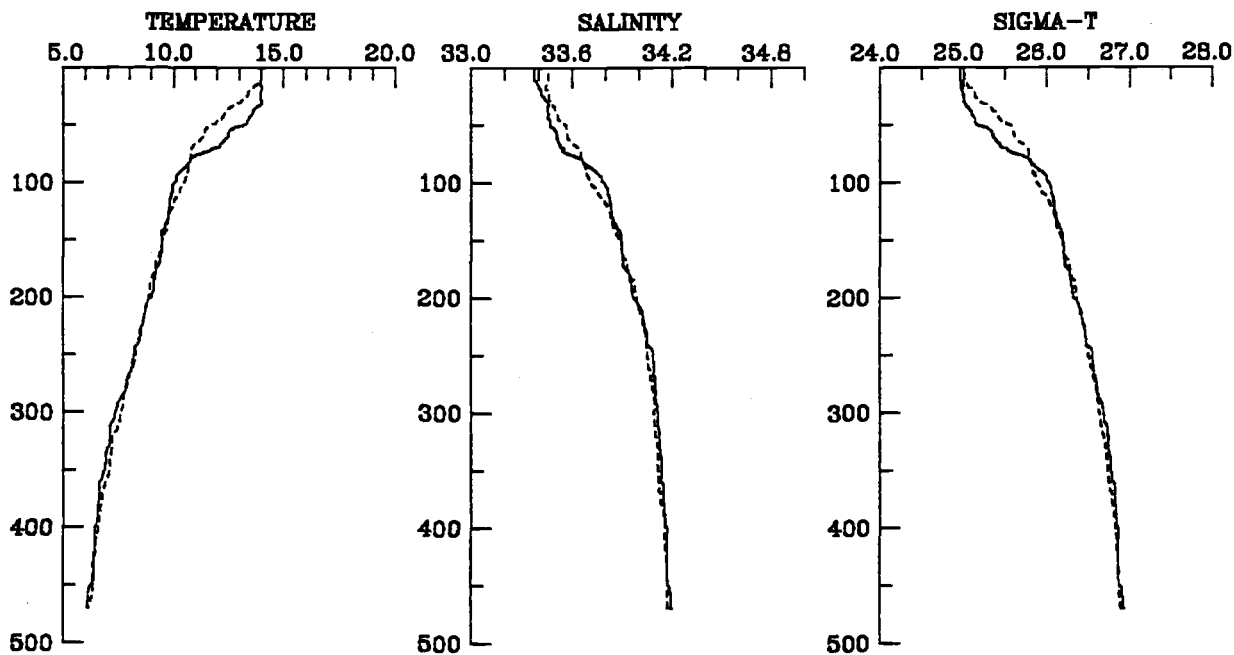
STATION 171 (—)



FEBRUARY 1984

STATION 73 (-----)

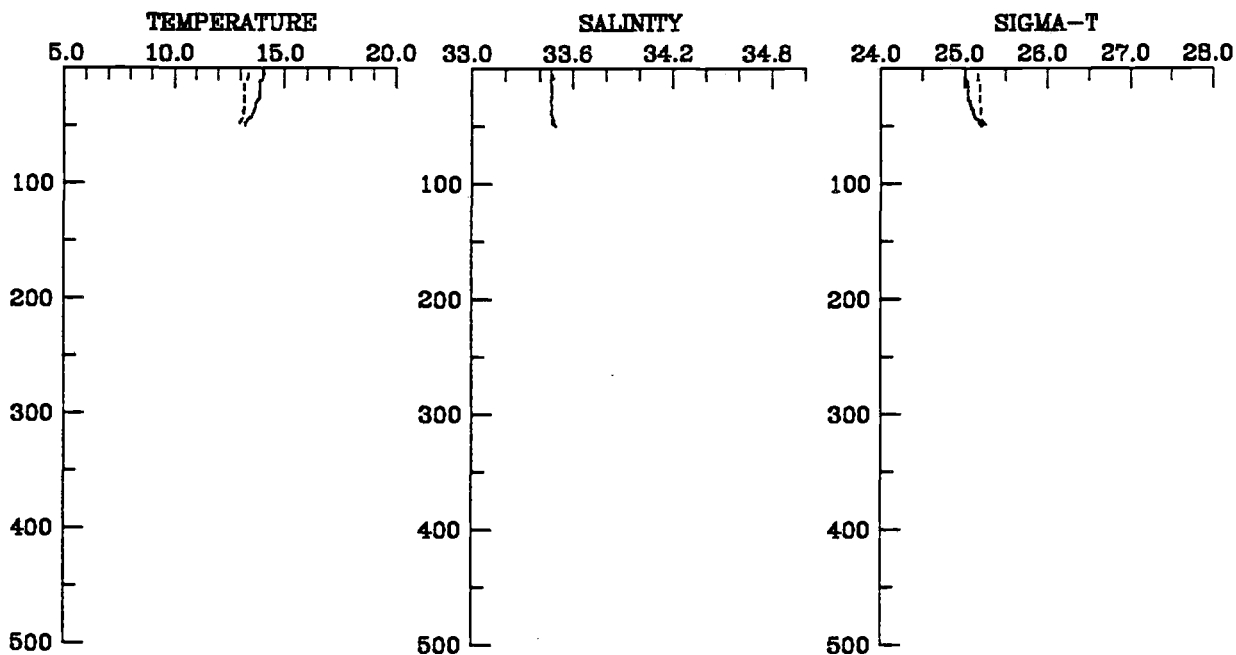
STATION 173 (—)



FEBRUARY 1984

STATION 75 (-----)

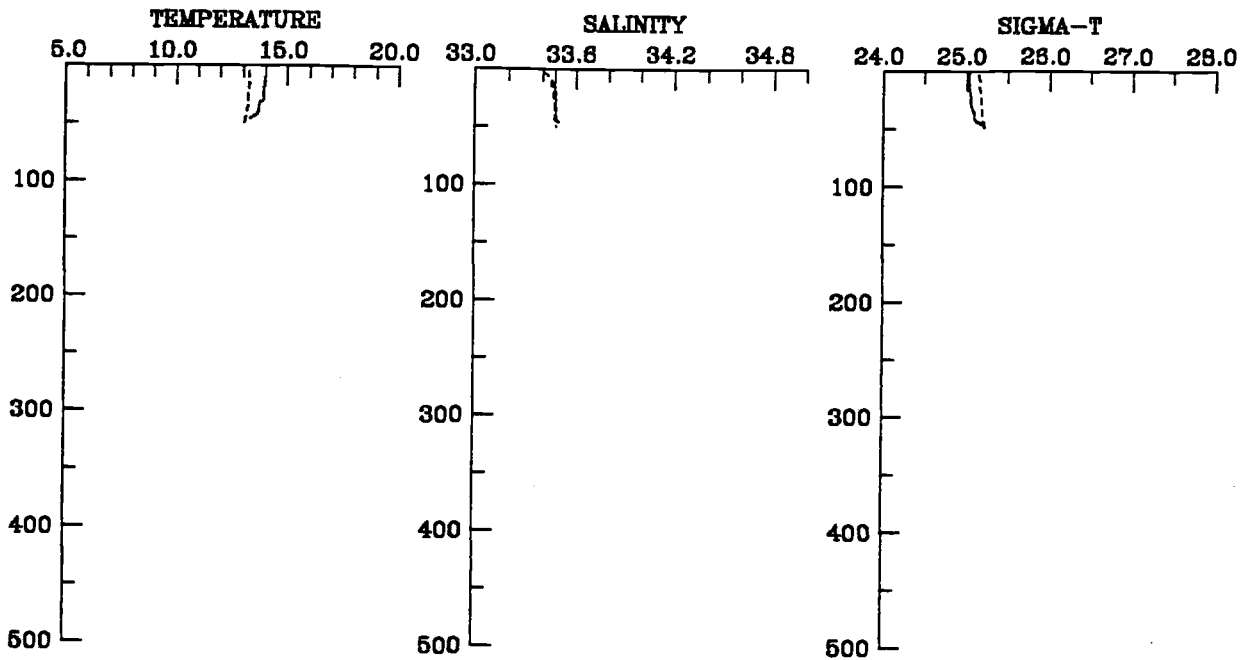
STATION 175 (—)



FEBRUARY 1984

STATION 76 (-----)

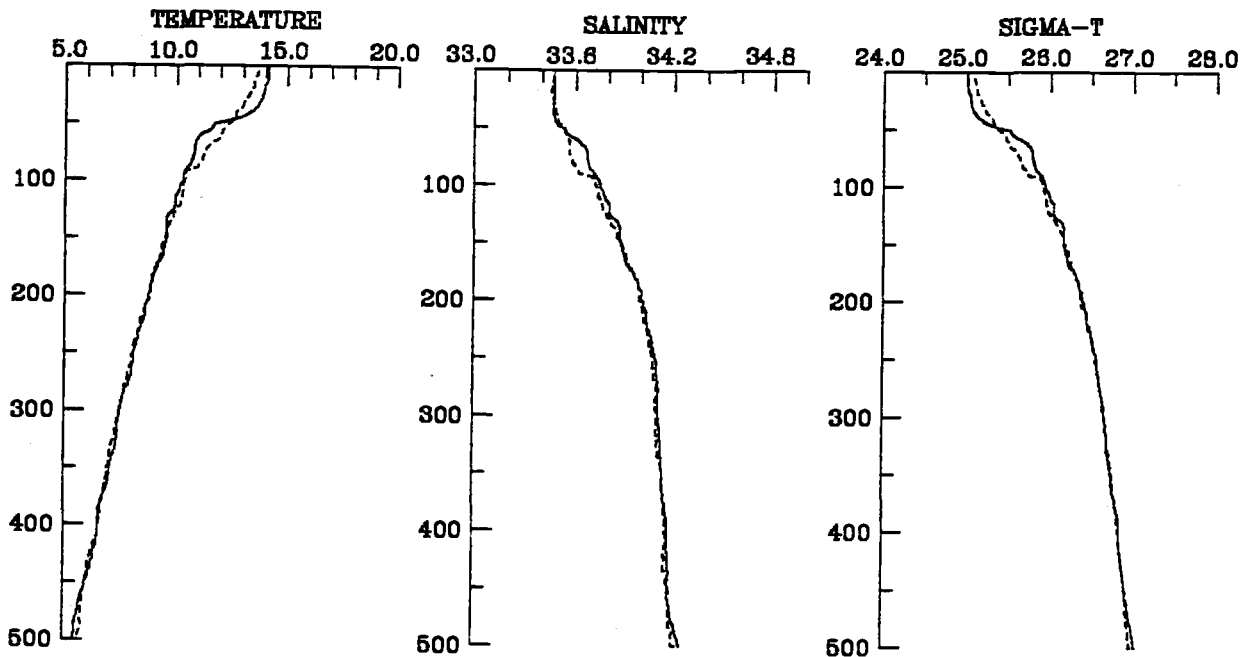
STATION 176 (—)



FEBRUARY 1984

STATION 78 (-----)

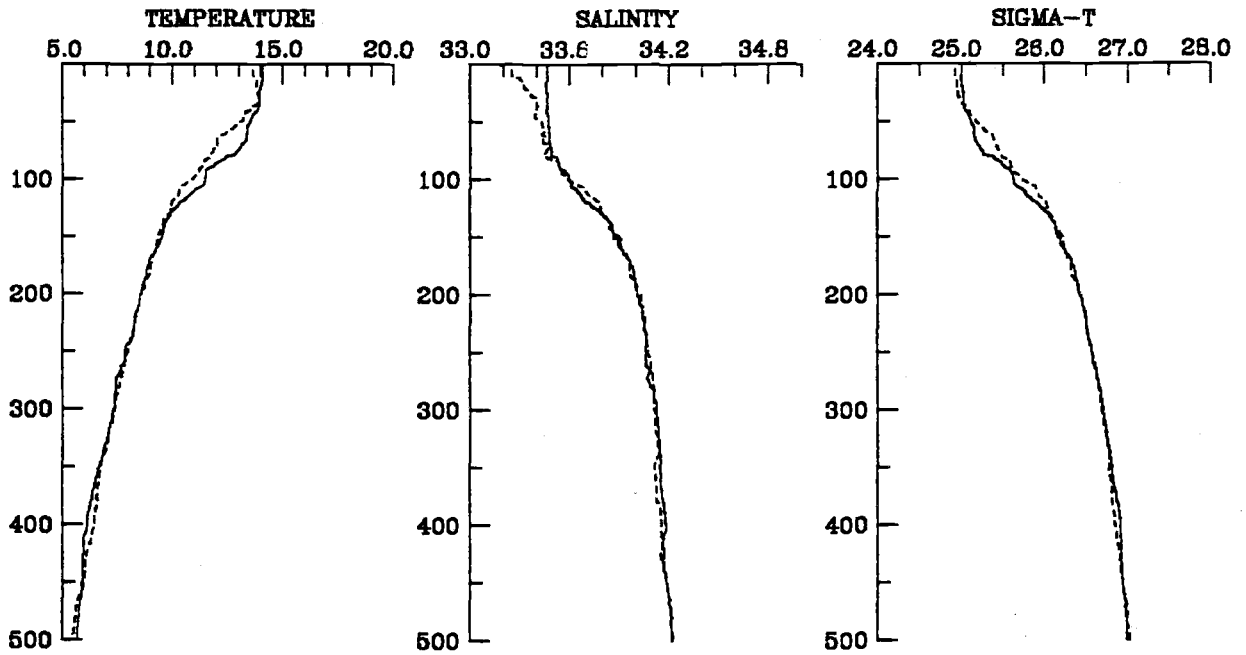
STATION 178 (—)



FEBRUARY 1984

STATION 80 (-----)

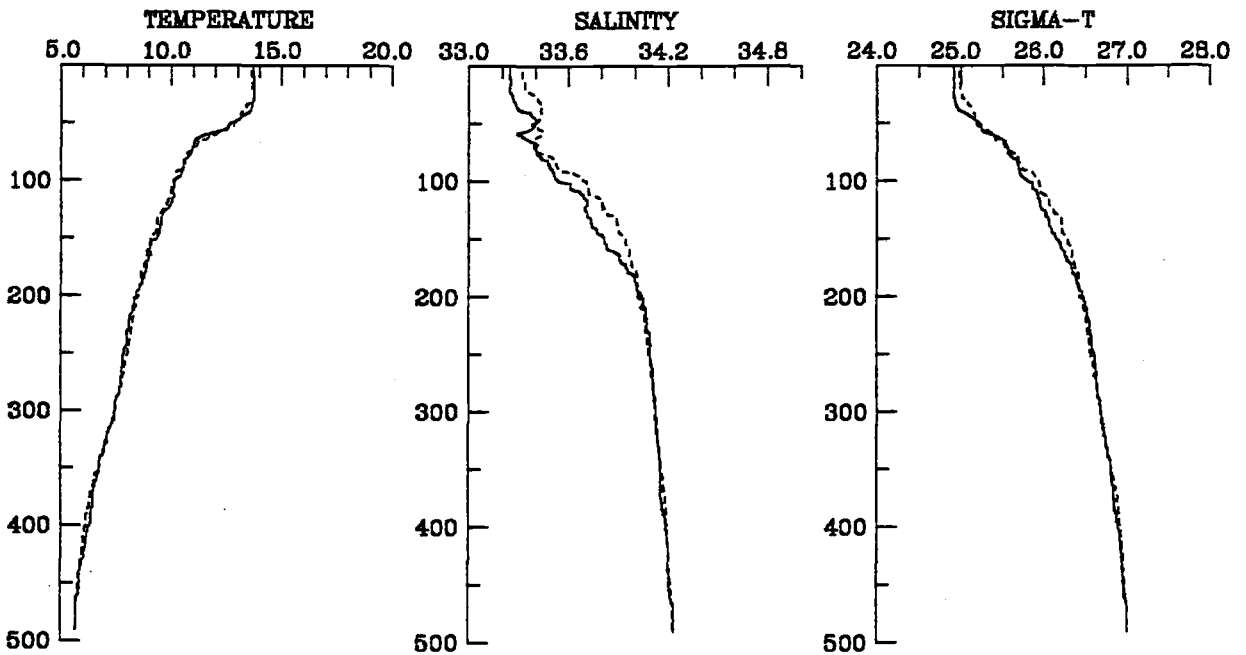
STATION 180 (—)



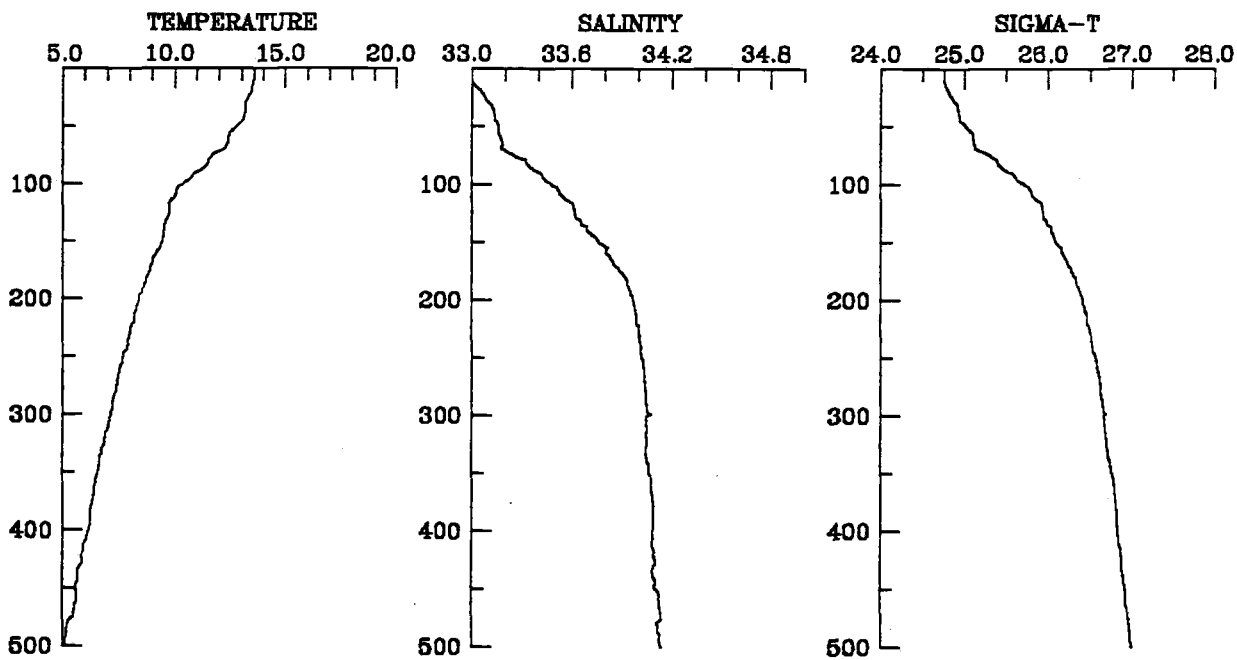
FEBRUARY 1984

STATION 82 (-----)

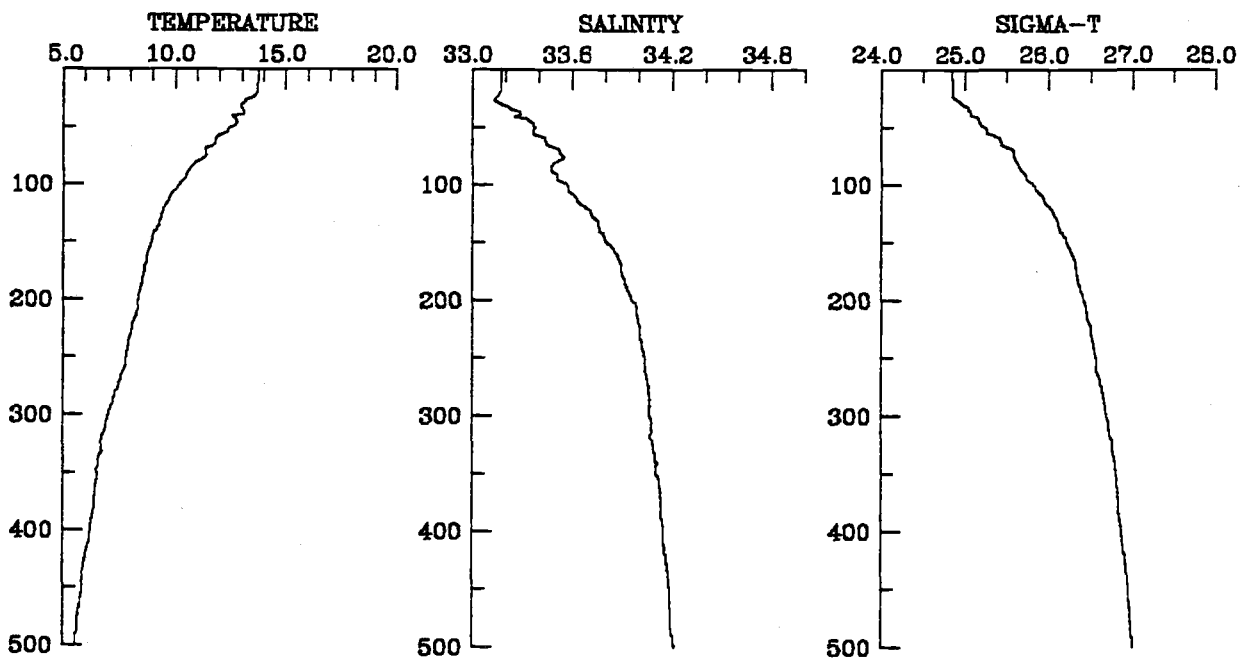
STATION 182 (—)



FEBRUARY 1984 STATION 186

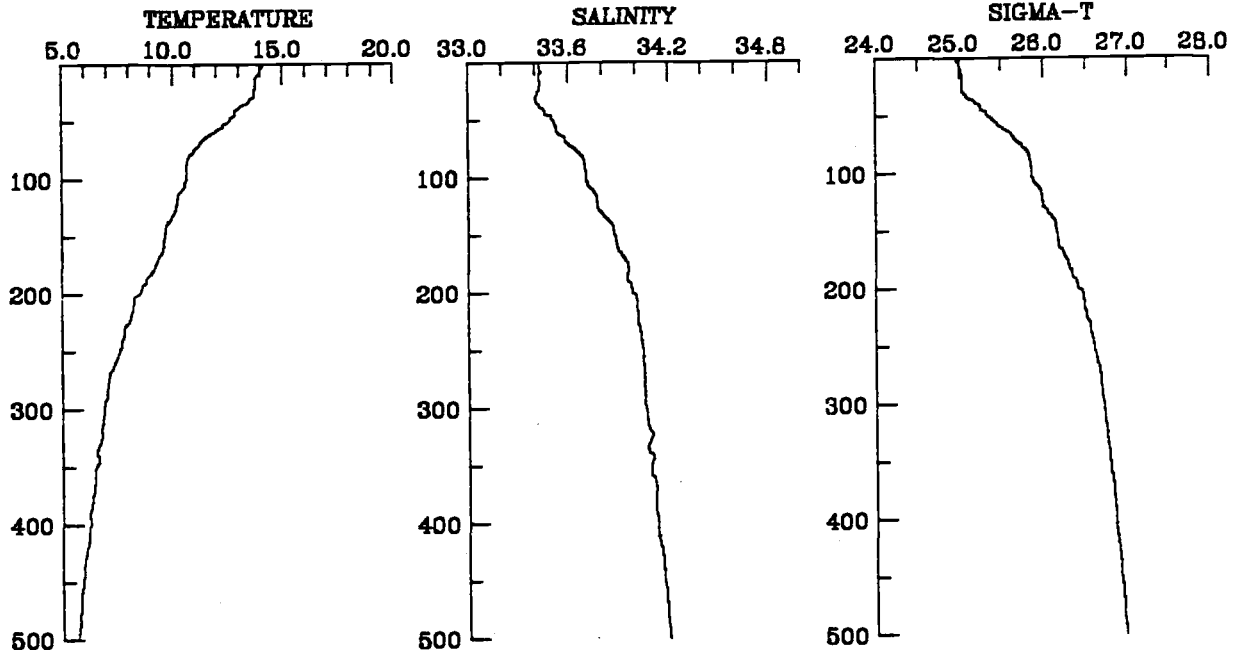


FEBRUARY 1984 STATION 188



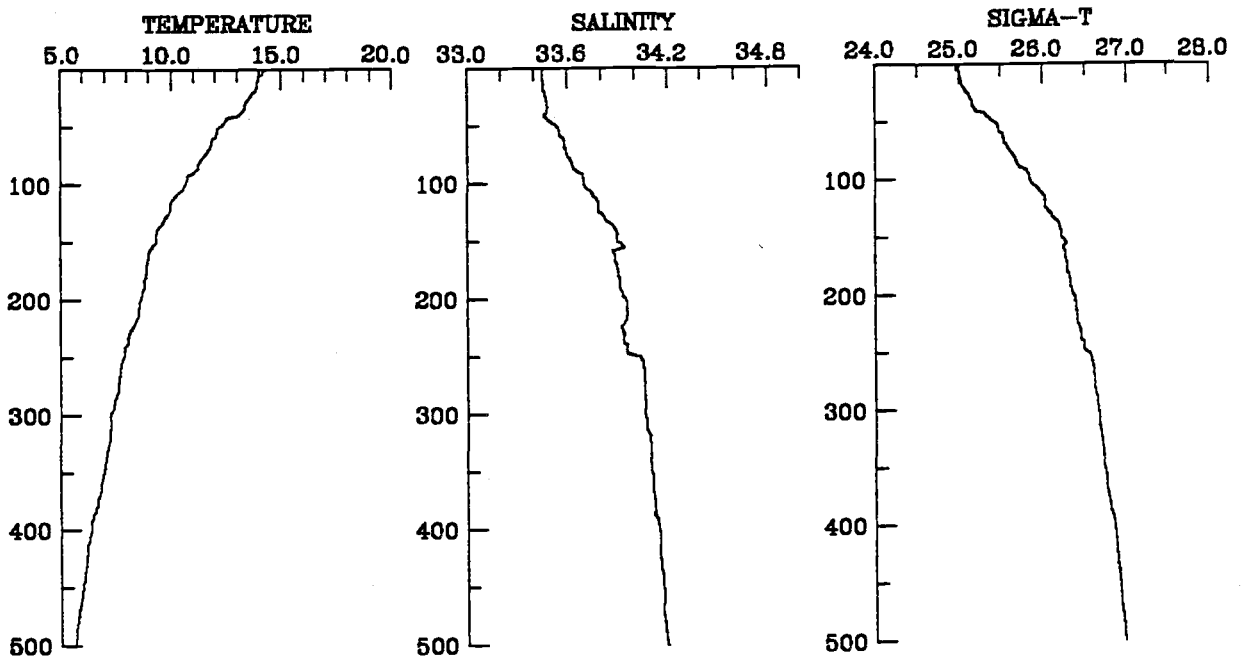
FEBRUARY 1984

STATION 190



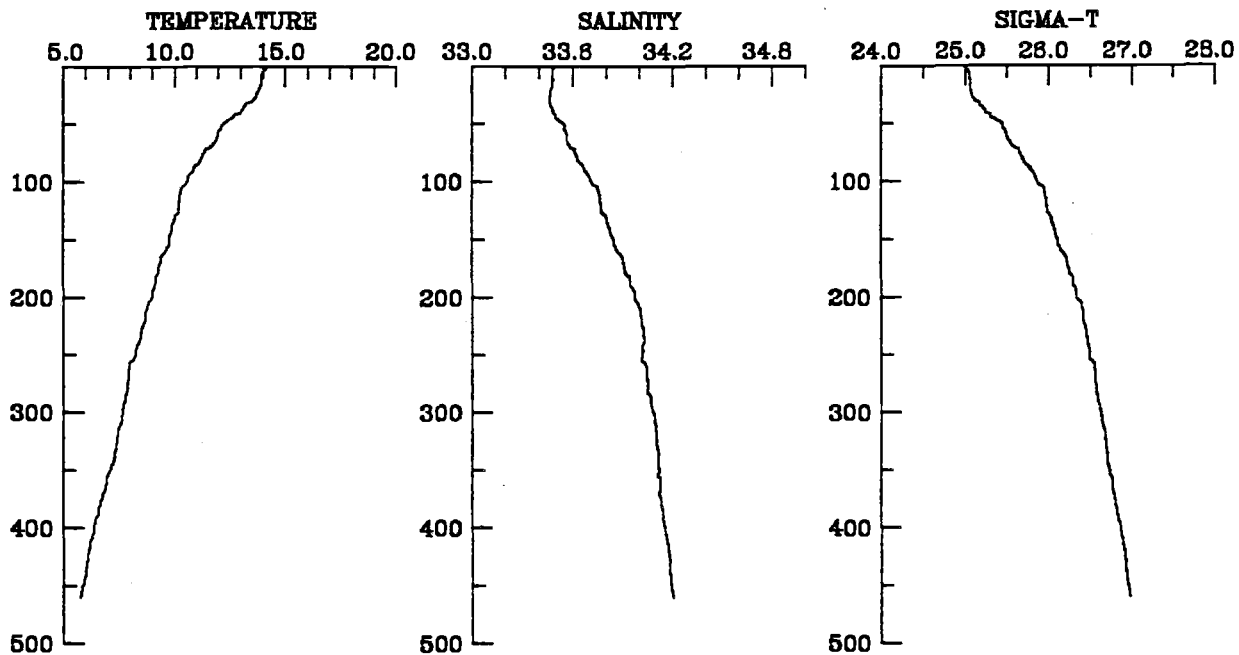
FEBRUARY 1984

STATION 192



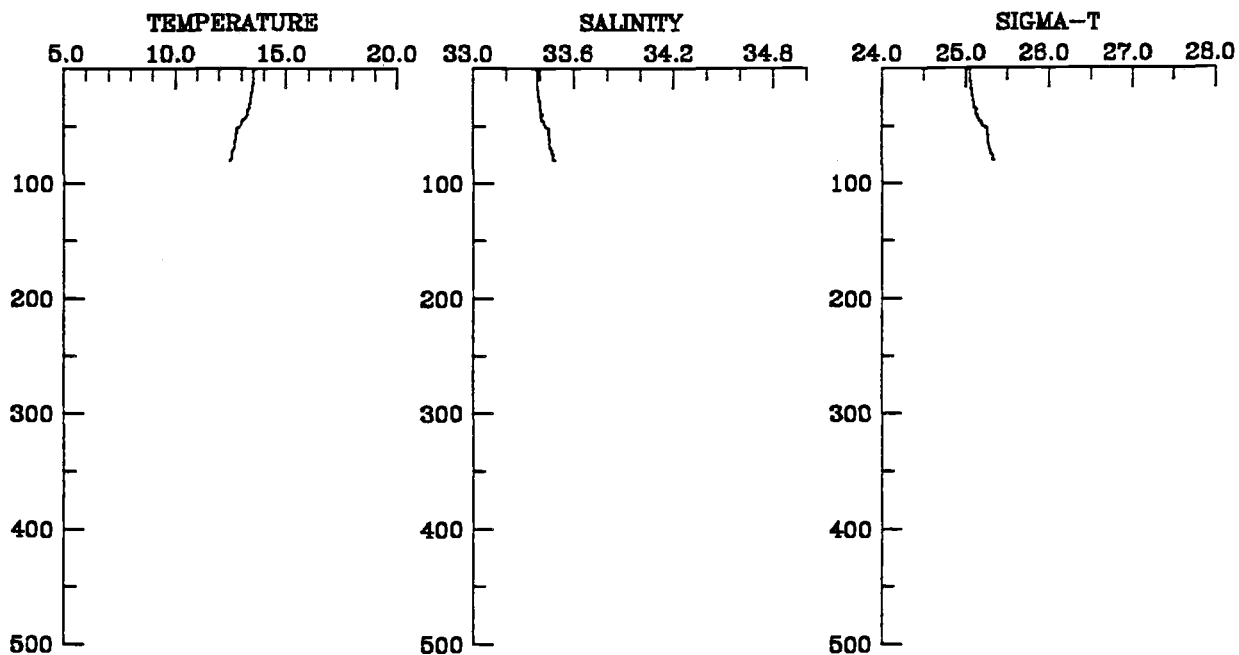
FEBRUARY 1984

STATION 193



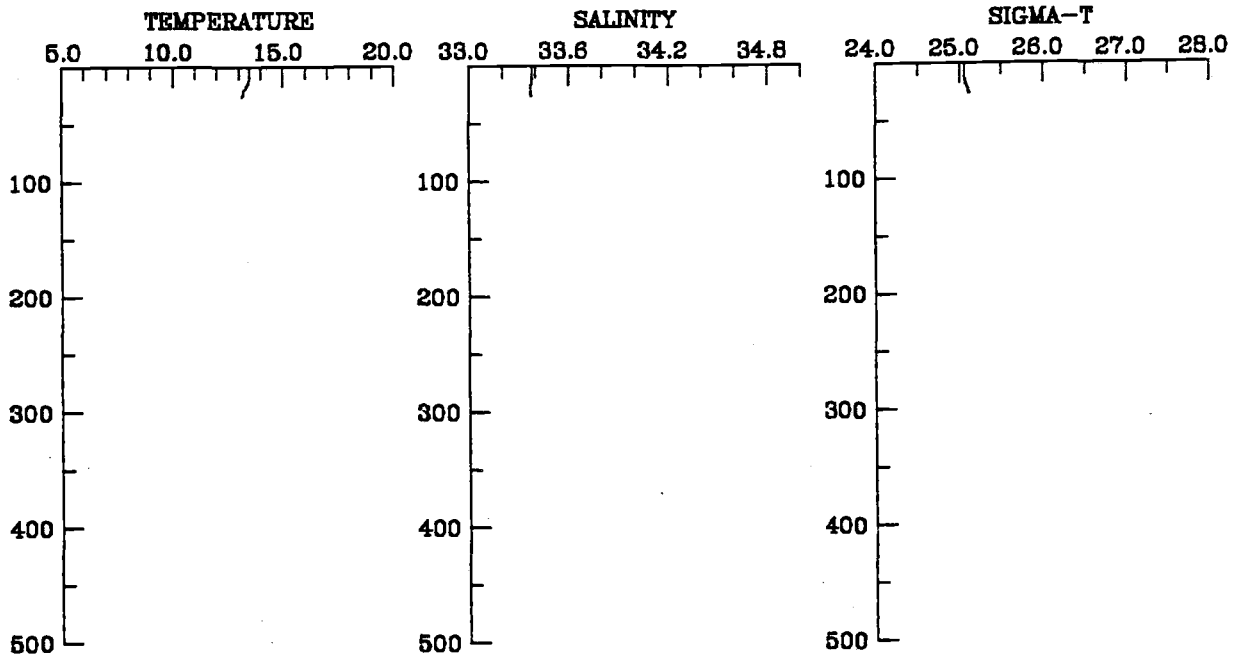
FEBRUARY 1984

STATION 194



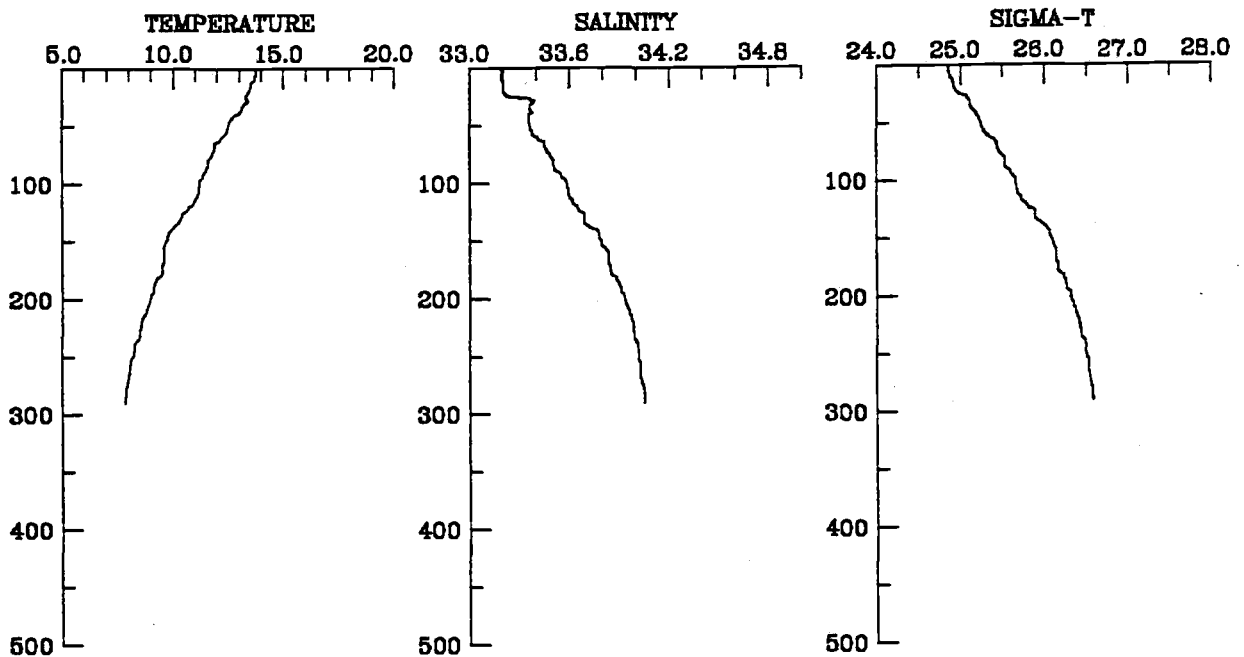
FEBRUARY 1984

STATION 195



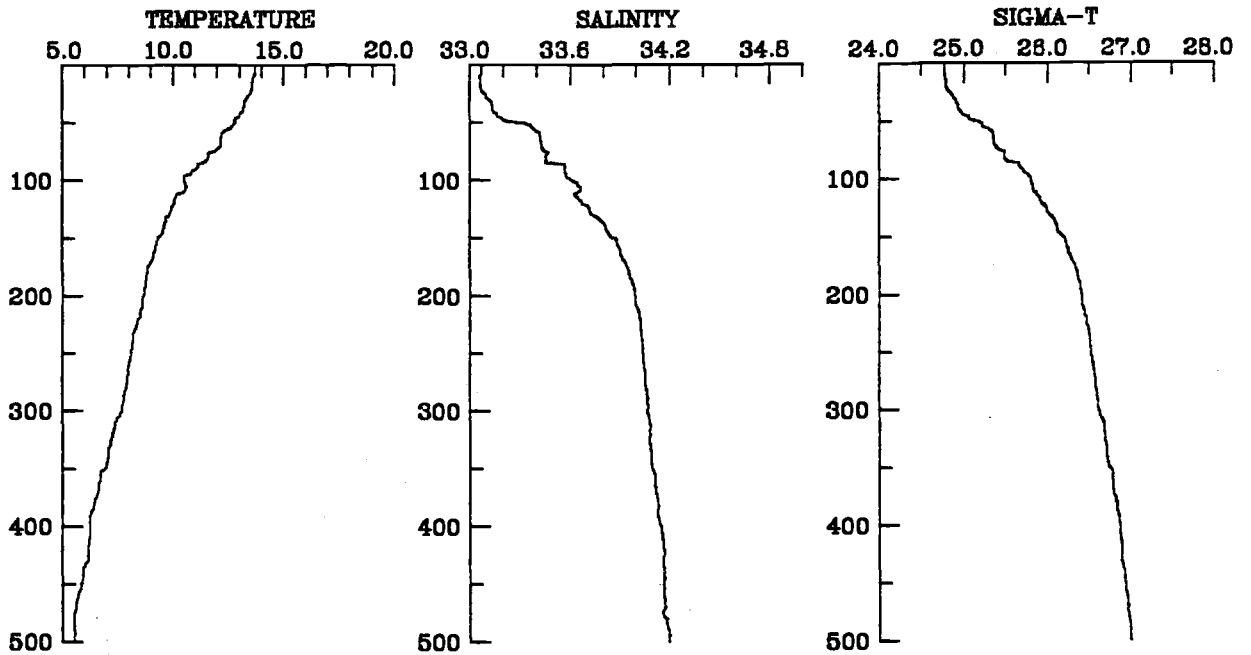
FEBRUARY 1984

STATION 200



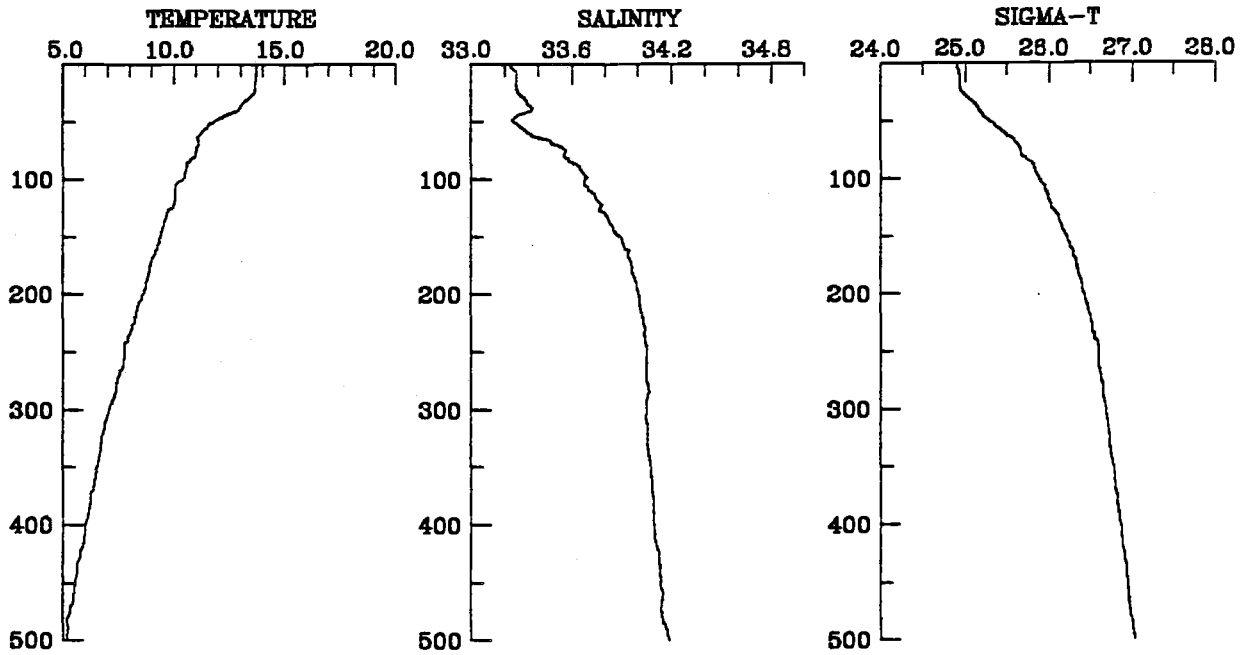
FEBRUARY 1984

STATION 202



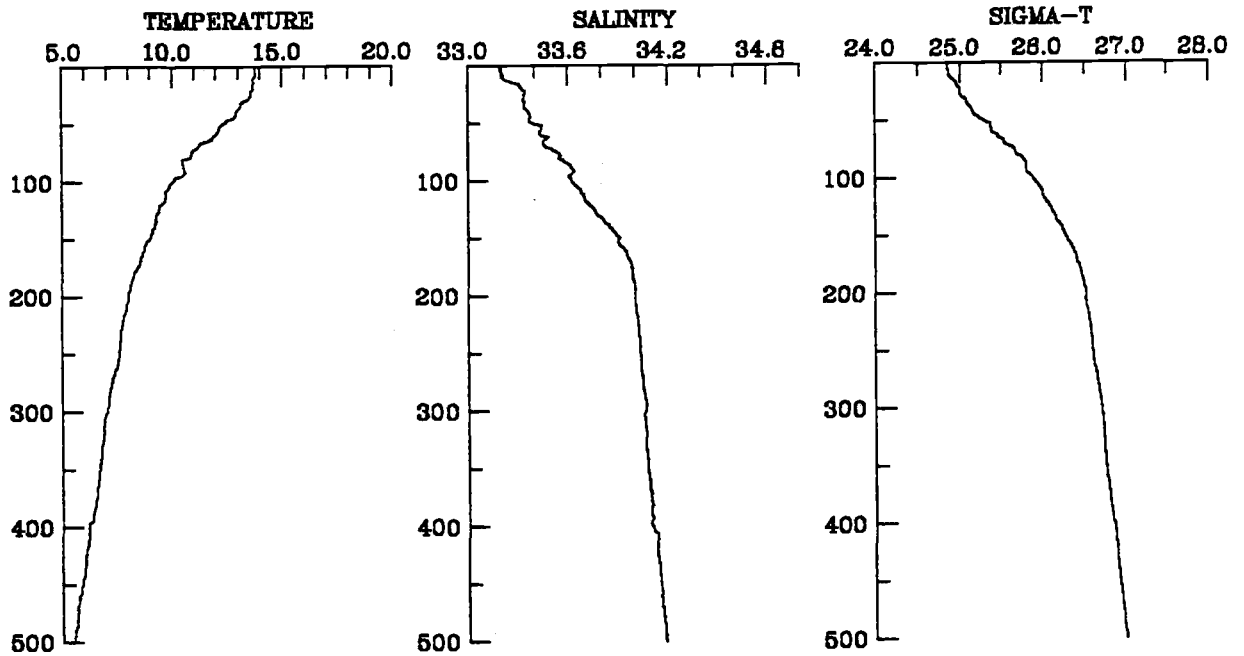
FEBRUARY 1984

STATION 204



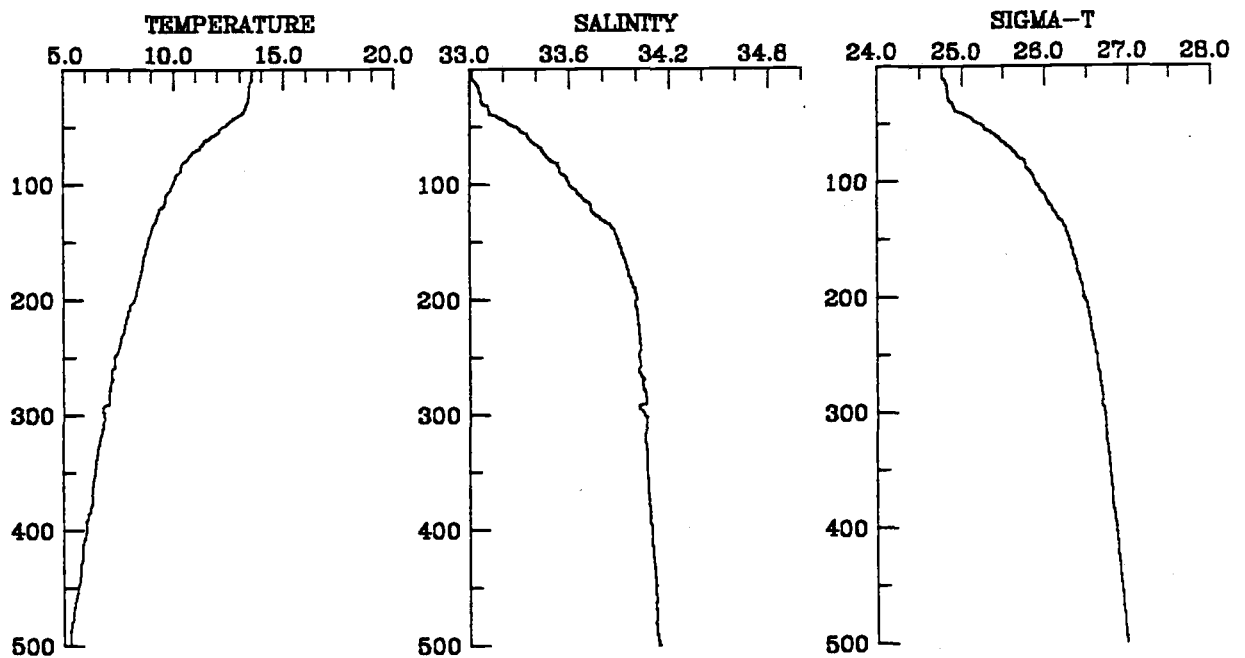
FEBRUARY 1984

STATION 206



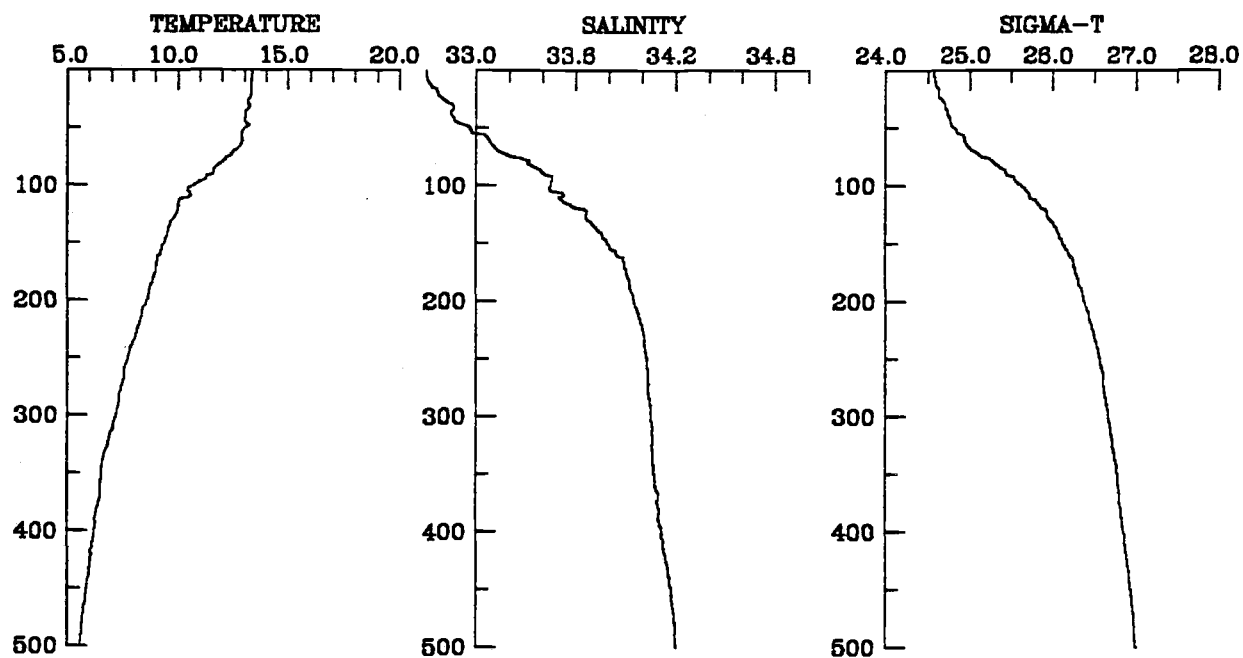
FEBRUARY 1984

STATION 208



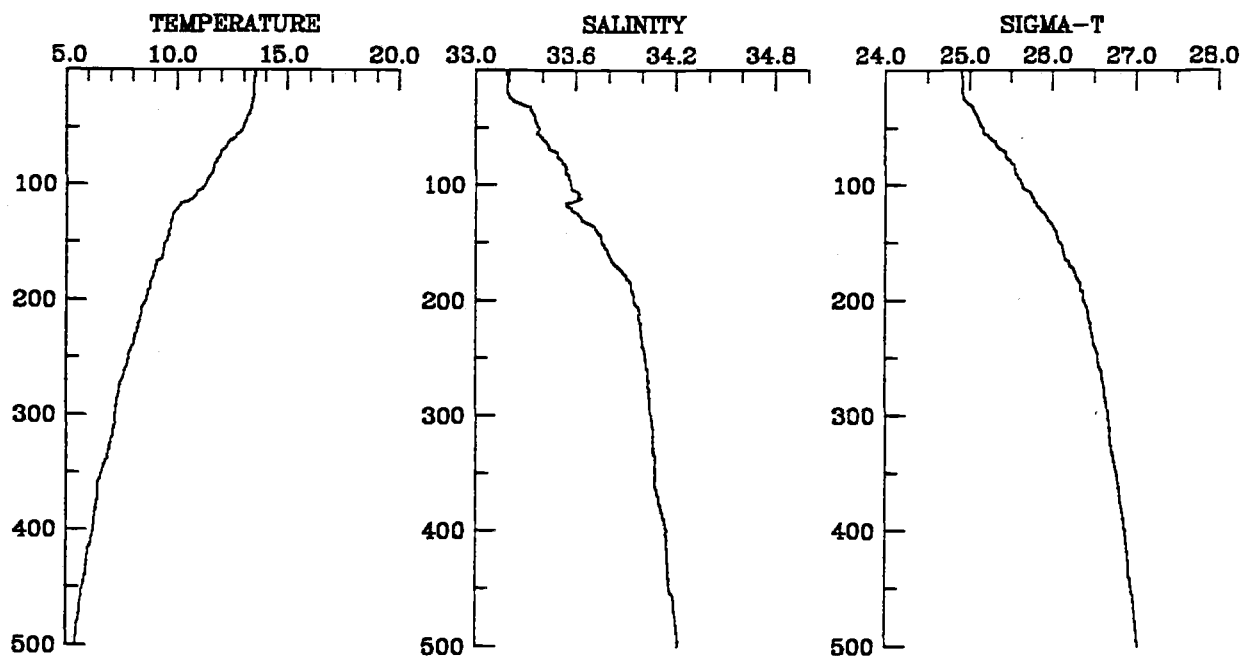
FEBRUARY 1984

STATION 213



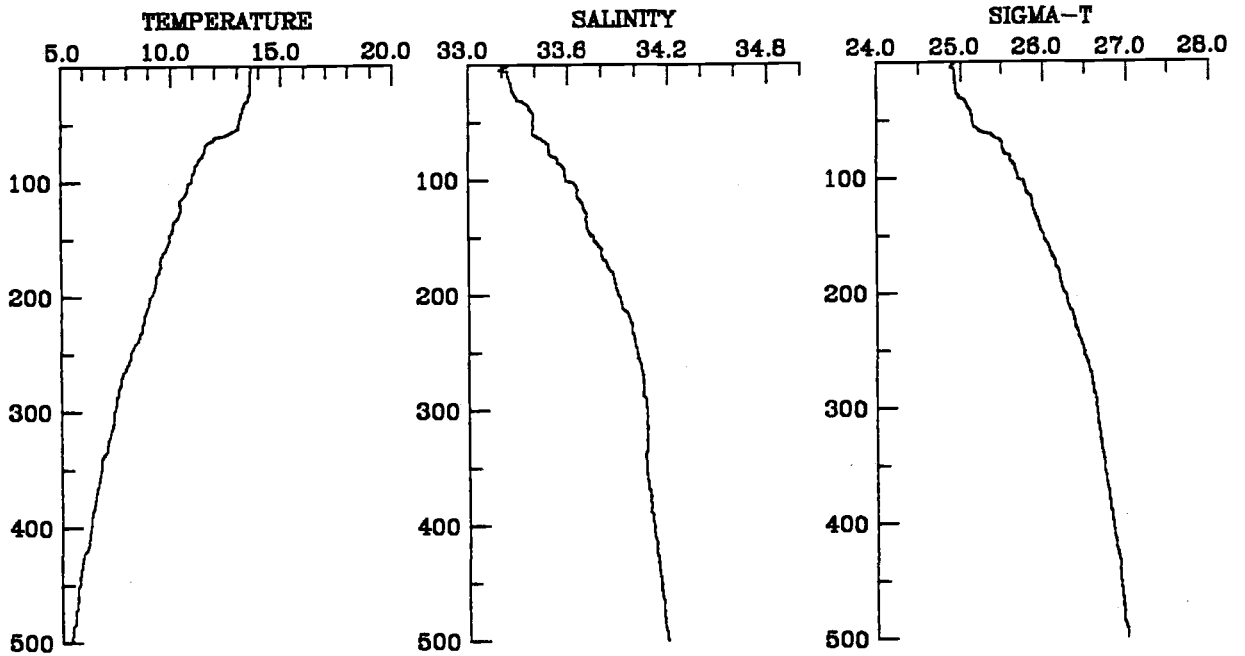
FEBRUARY 1984

STATION 215



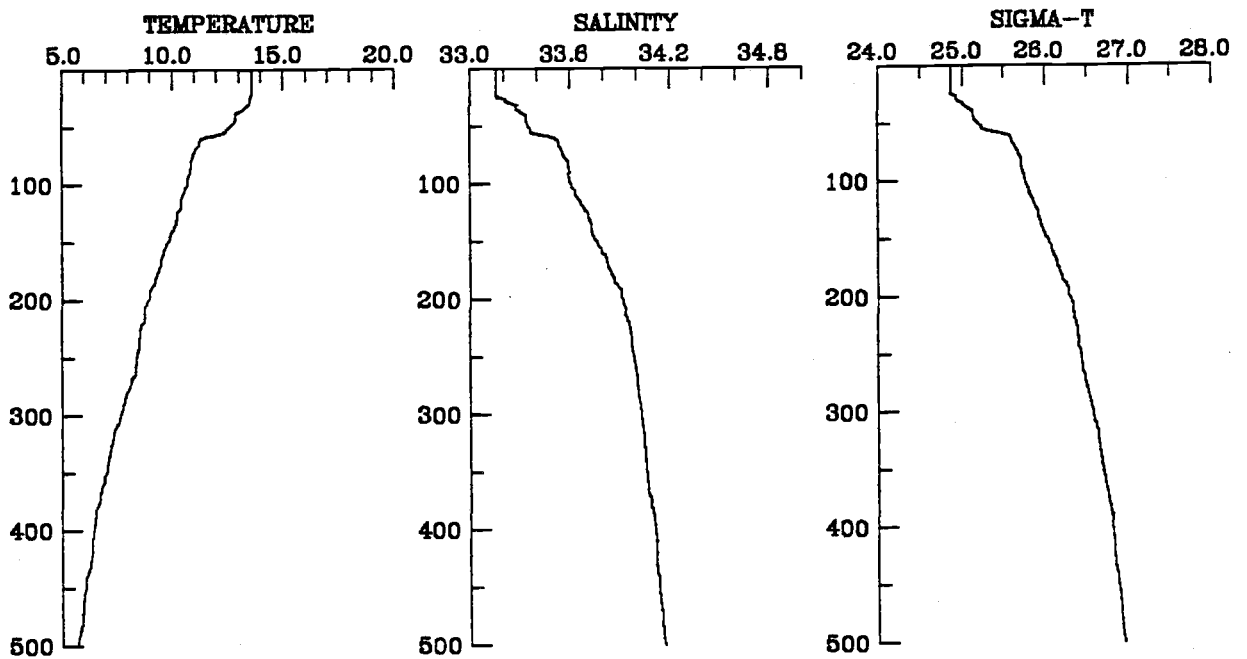
FEBRUARY 1984

STATION 217

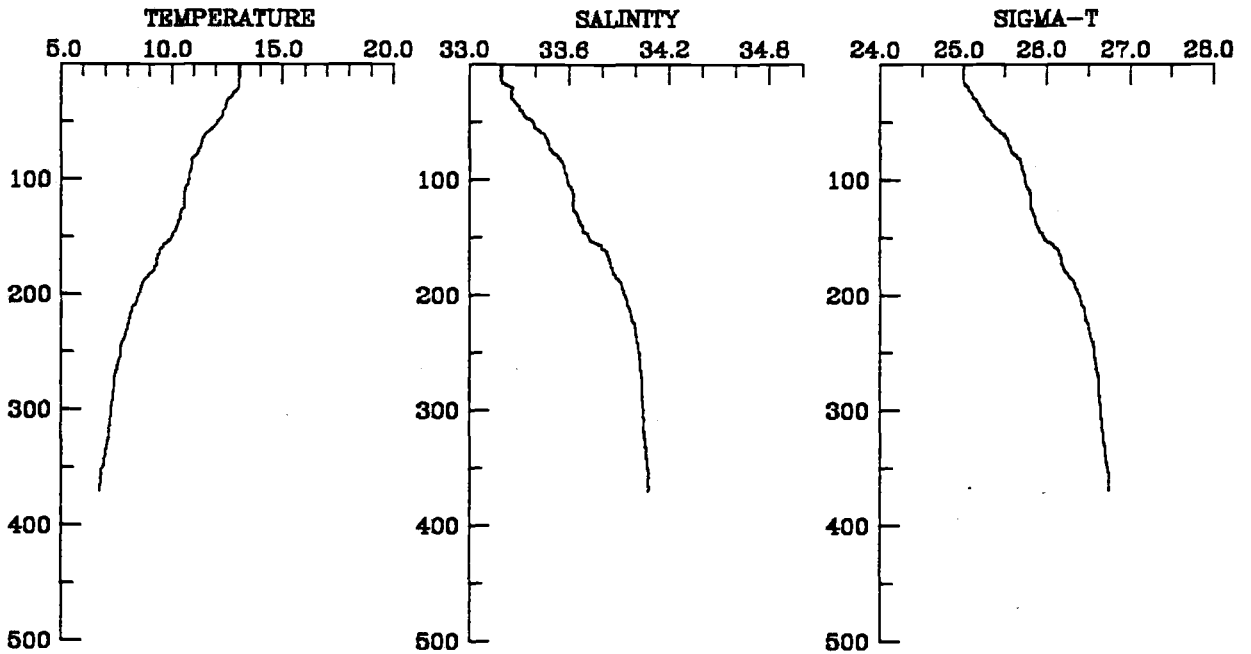


FEBRUARY 1984

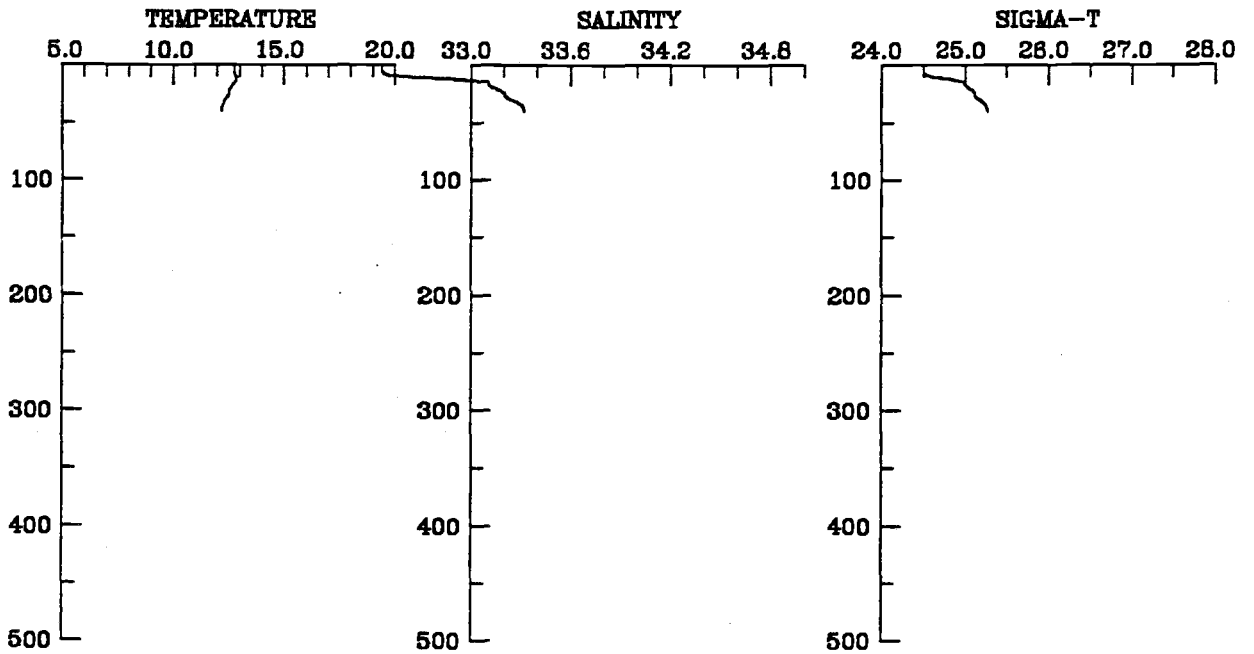
STATION 219



FEBRUARY 1984 STATION 221

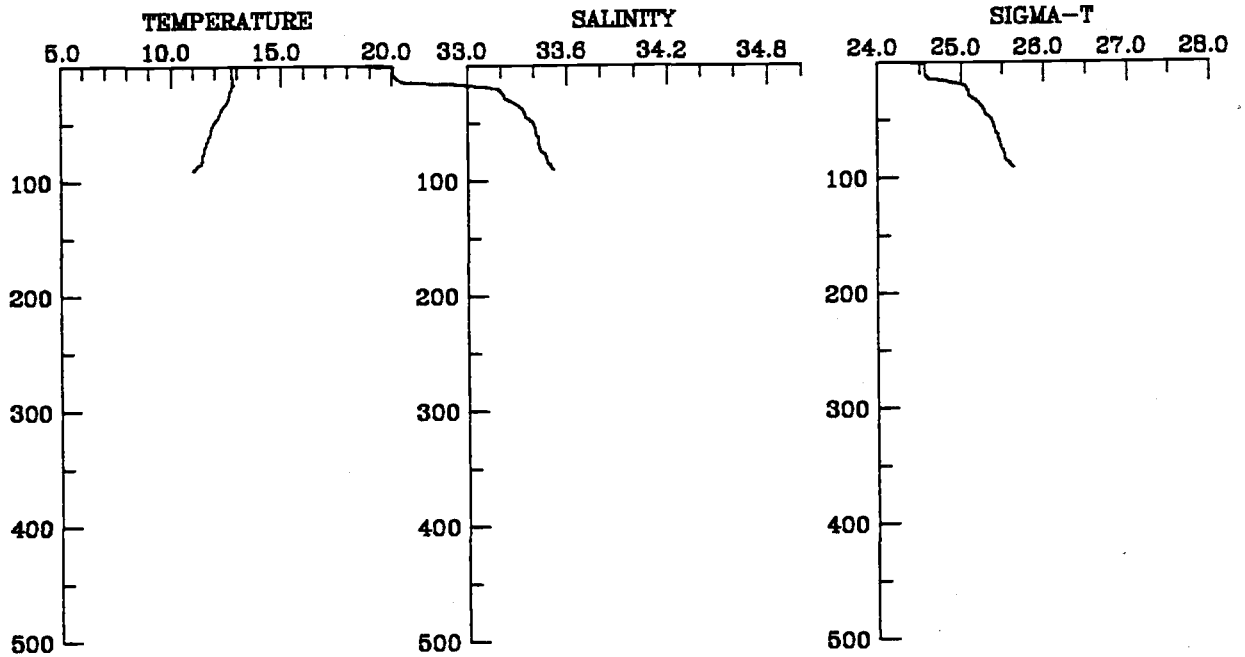


FEBRUARY 1984 STATION 226



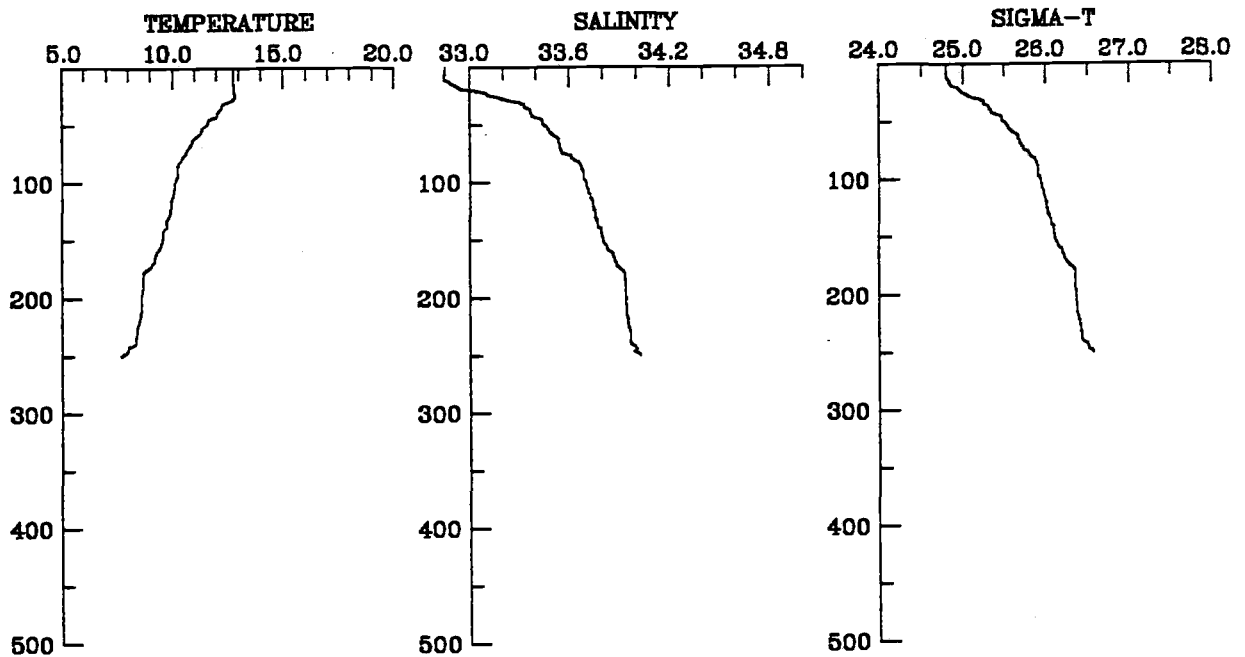
FEBRUARY 1984

STATION 228



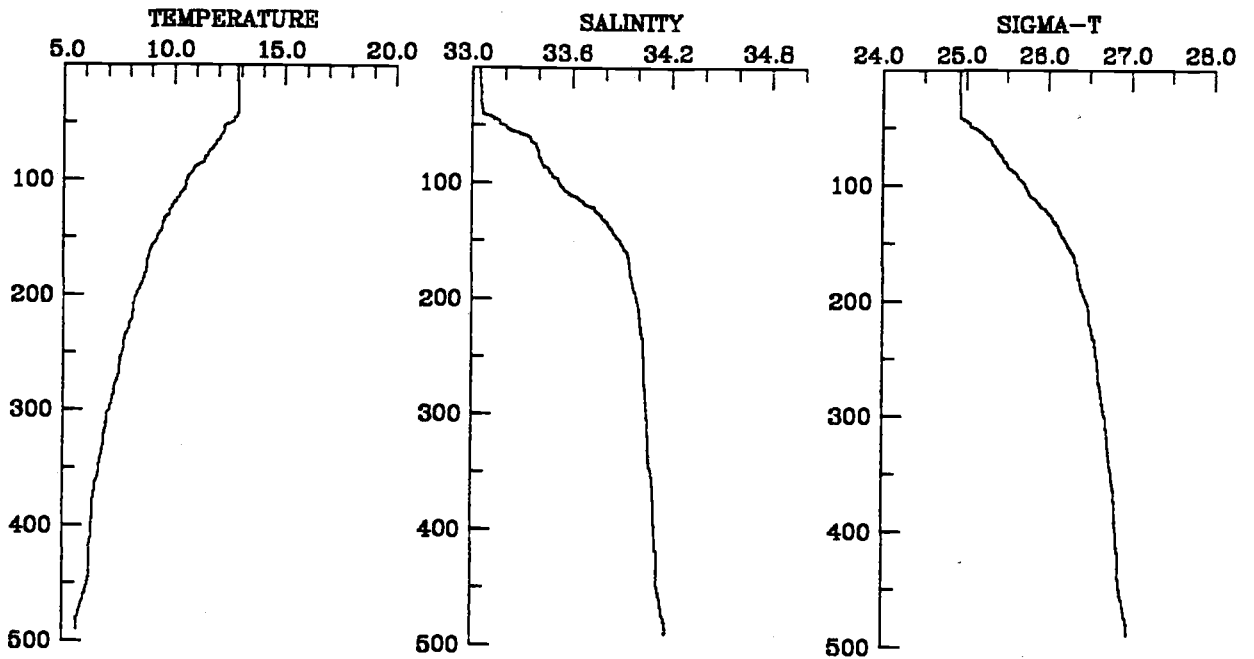
FEBRUARY 1984

STATION 230



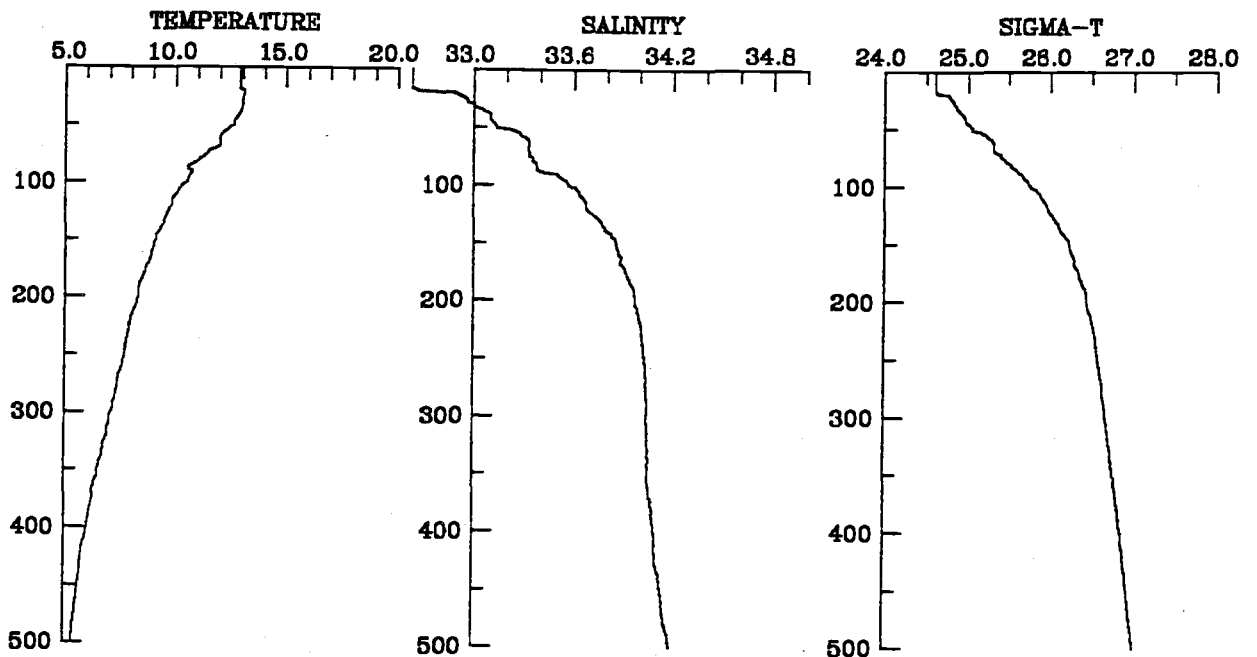
FEBRUARY 1984

STATION · 231



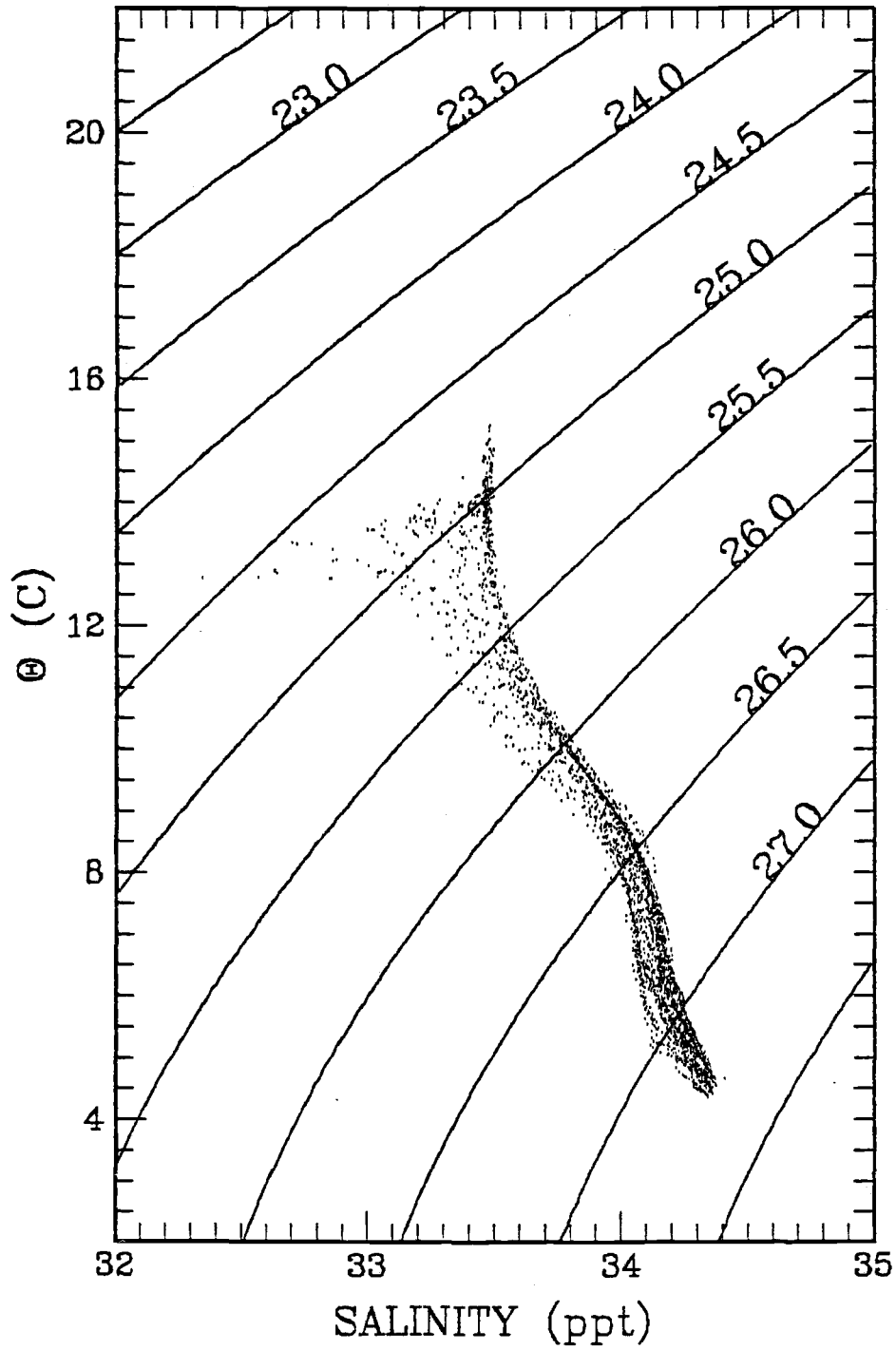
FEBRUARY 1984

STATION 234



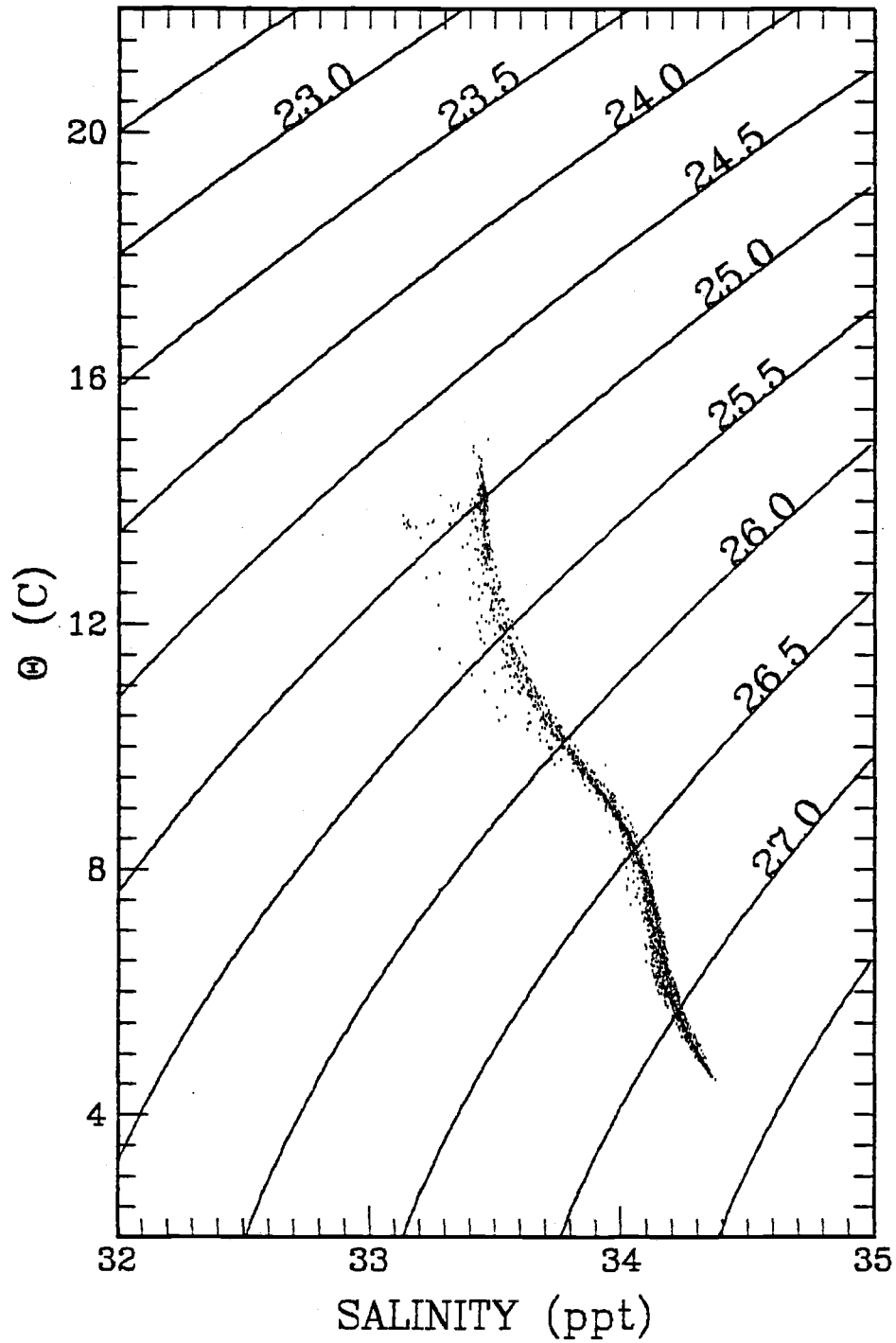
POTENTIAL TEMPERATURE-SALINITY PLOTS

FEBRUARY 1984



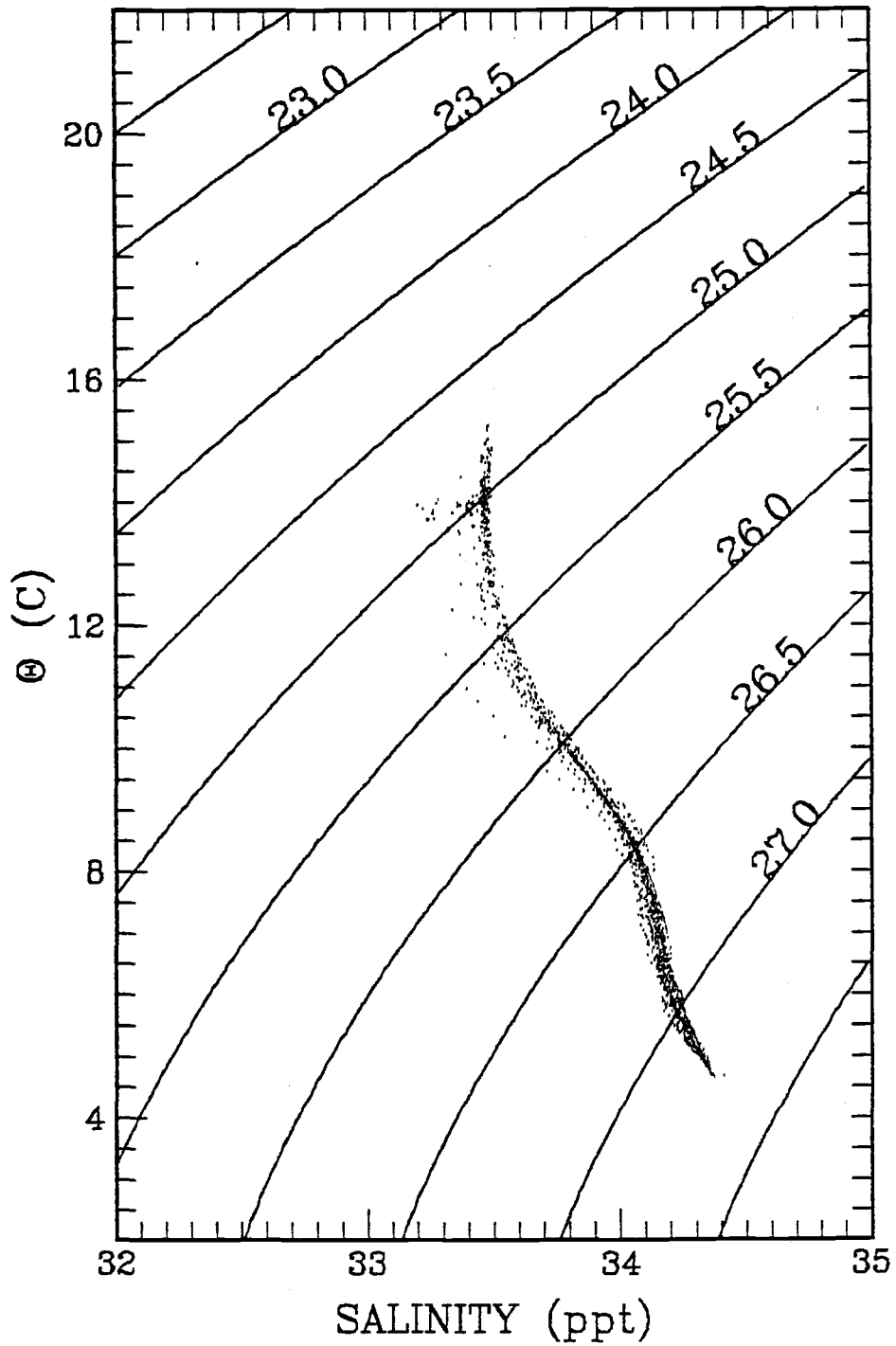
FEBRUARY 1984

SNAPSHOT 1



FEBRUARY 1984

SNAPSHOT 2

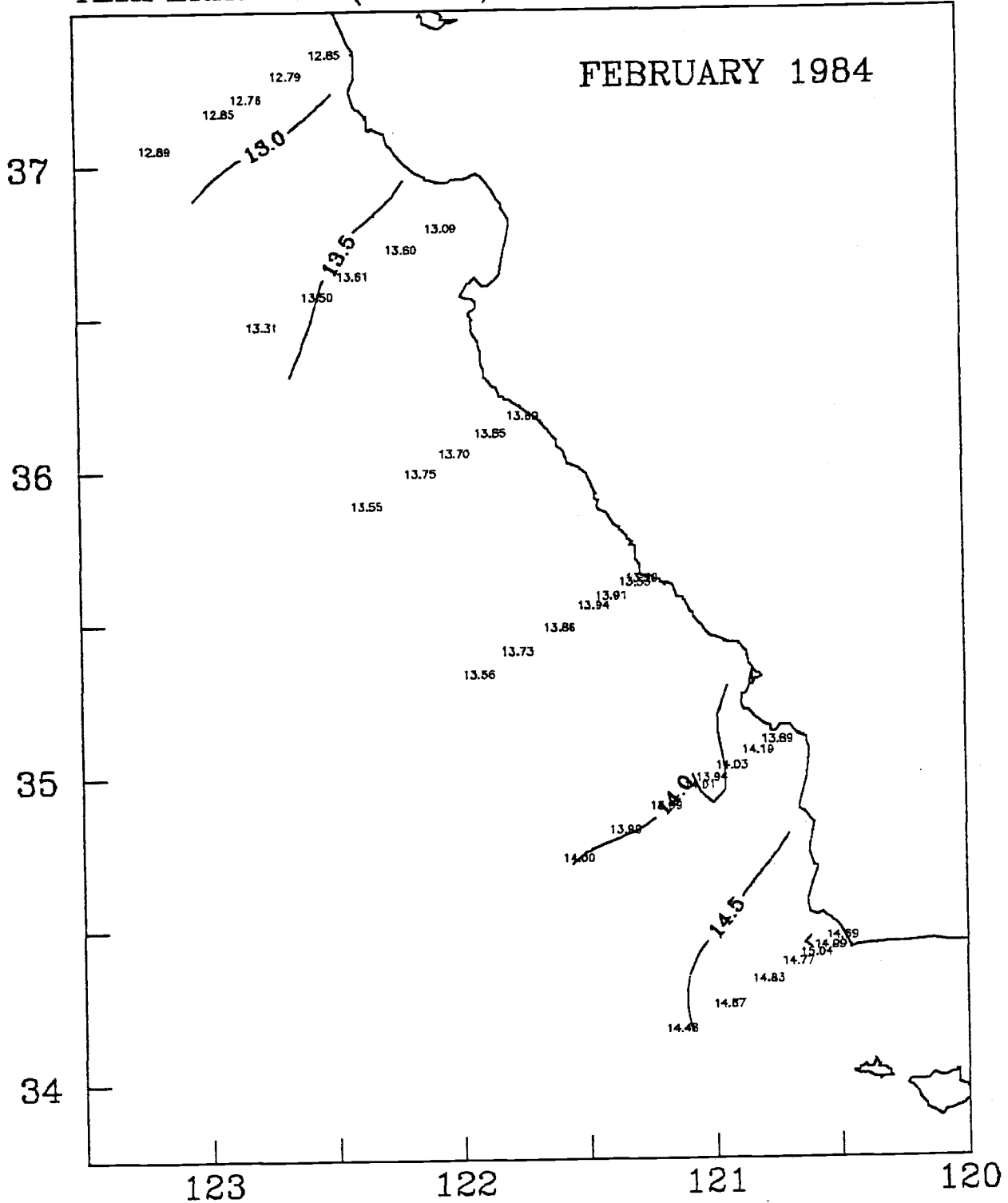


MAPS, FULL CCCCS REGION

TEMPERATURE (DEG C)

10 M

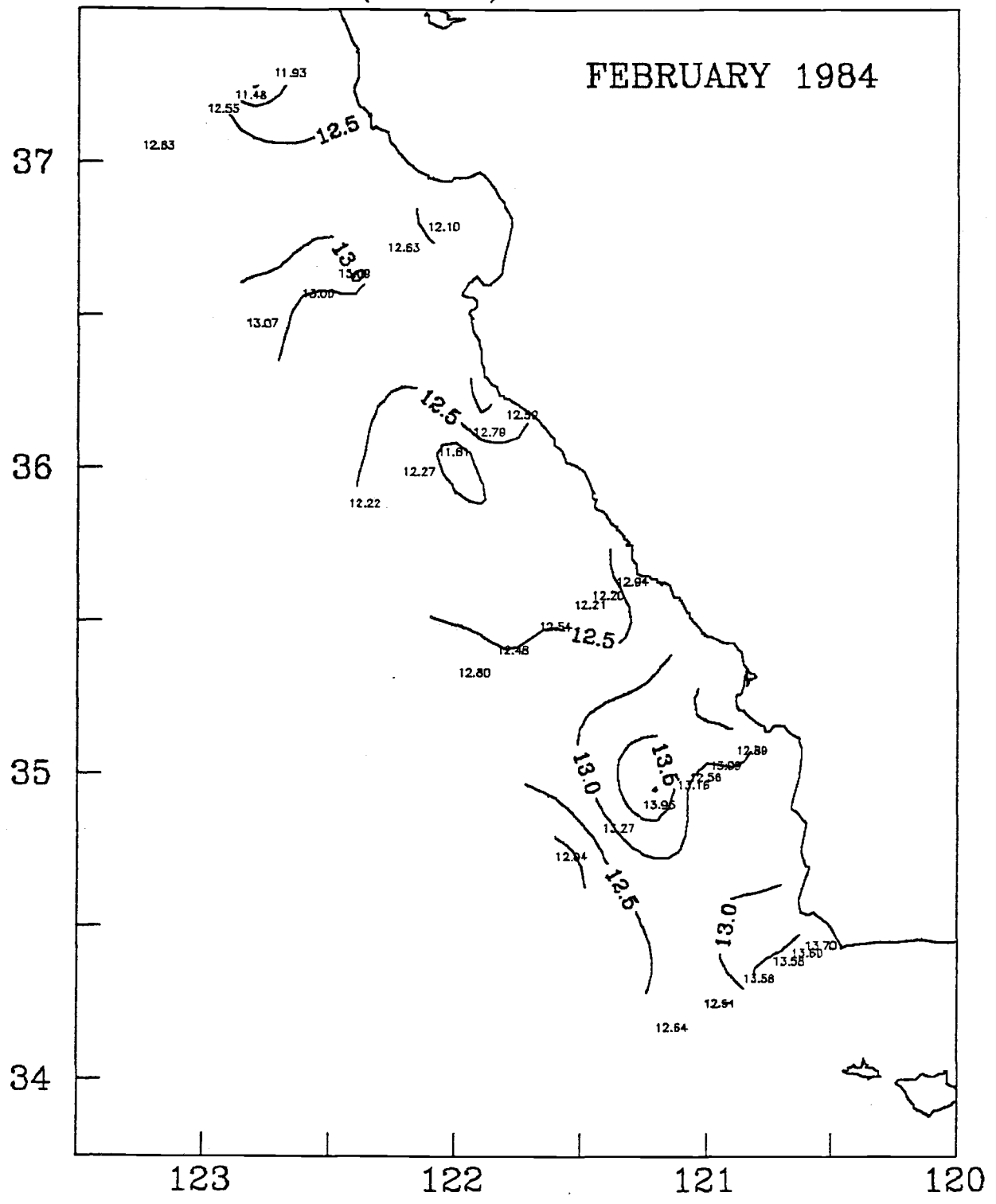
FEBRUARY 1984



TEMPERATURE (DEG C)

50 M

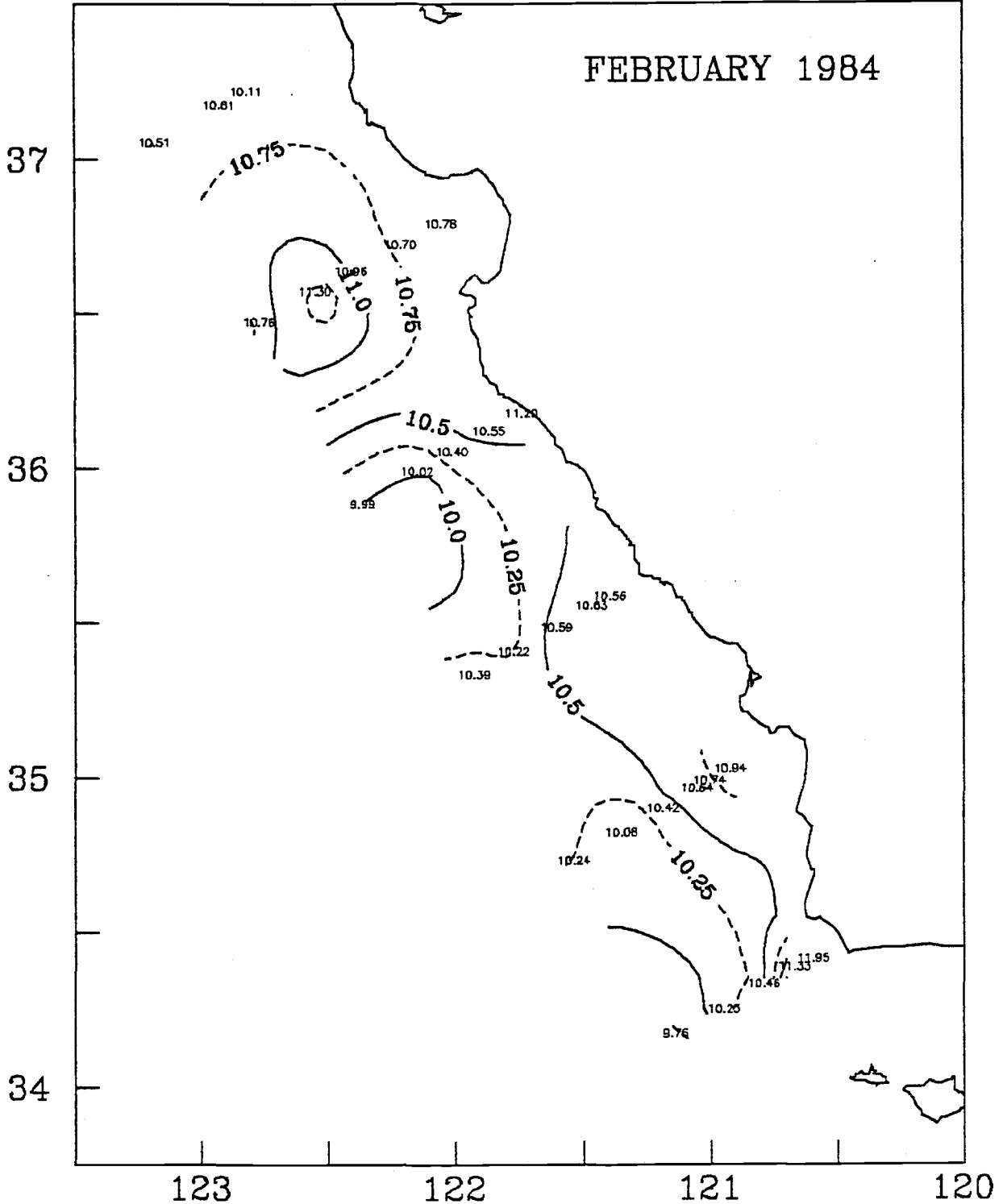
FEBRUARY 1984



TEMPERATURE (DEG C)

100 M

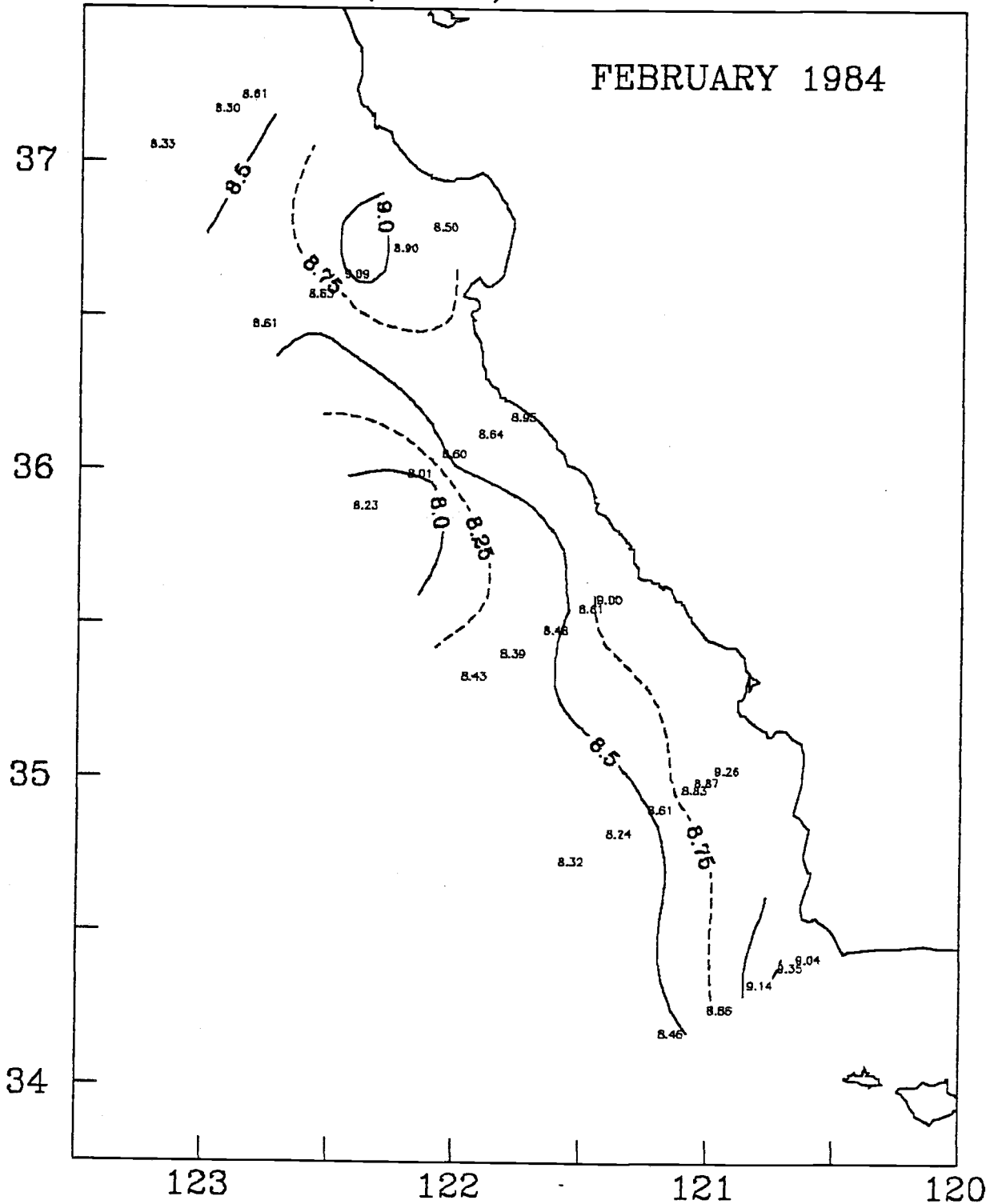
FEBRUARY 1984



TEMPERATURE (DEG C)

200 M

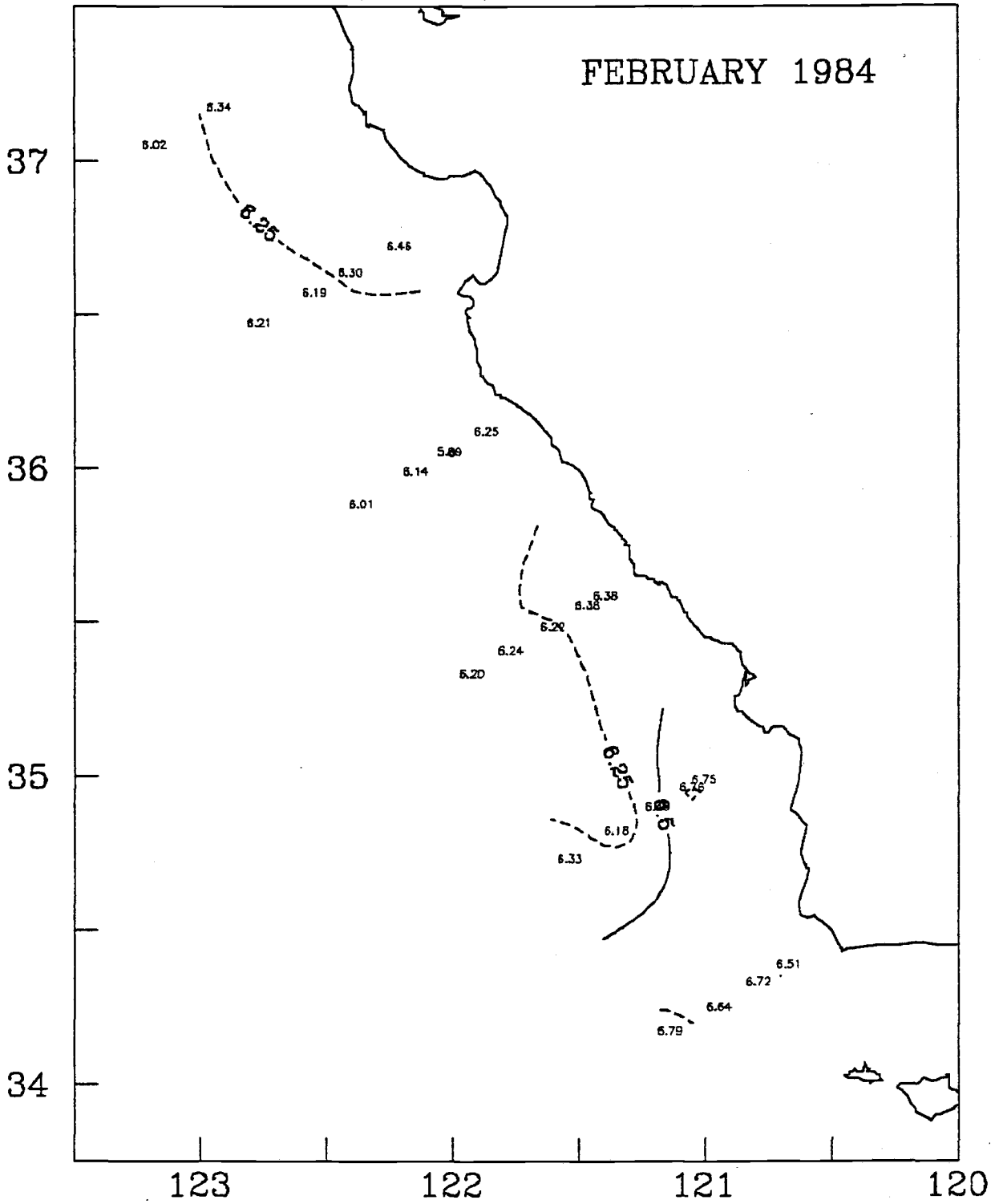
FEBRUARY 1984



TEMPERATURE (DEG C)

400 M

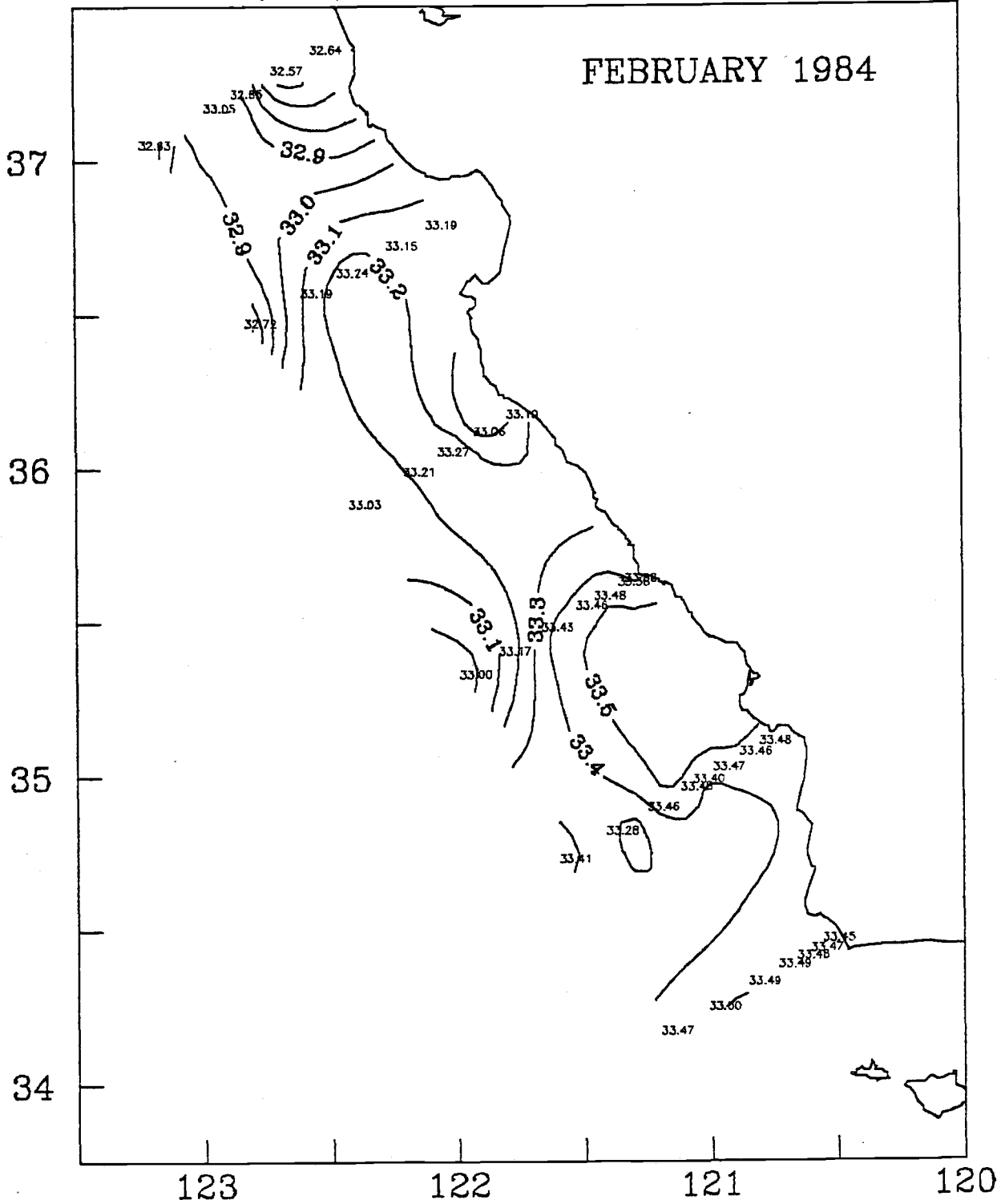
FEBRUARY 1984



SALINITY (PPT)

10 M

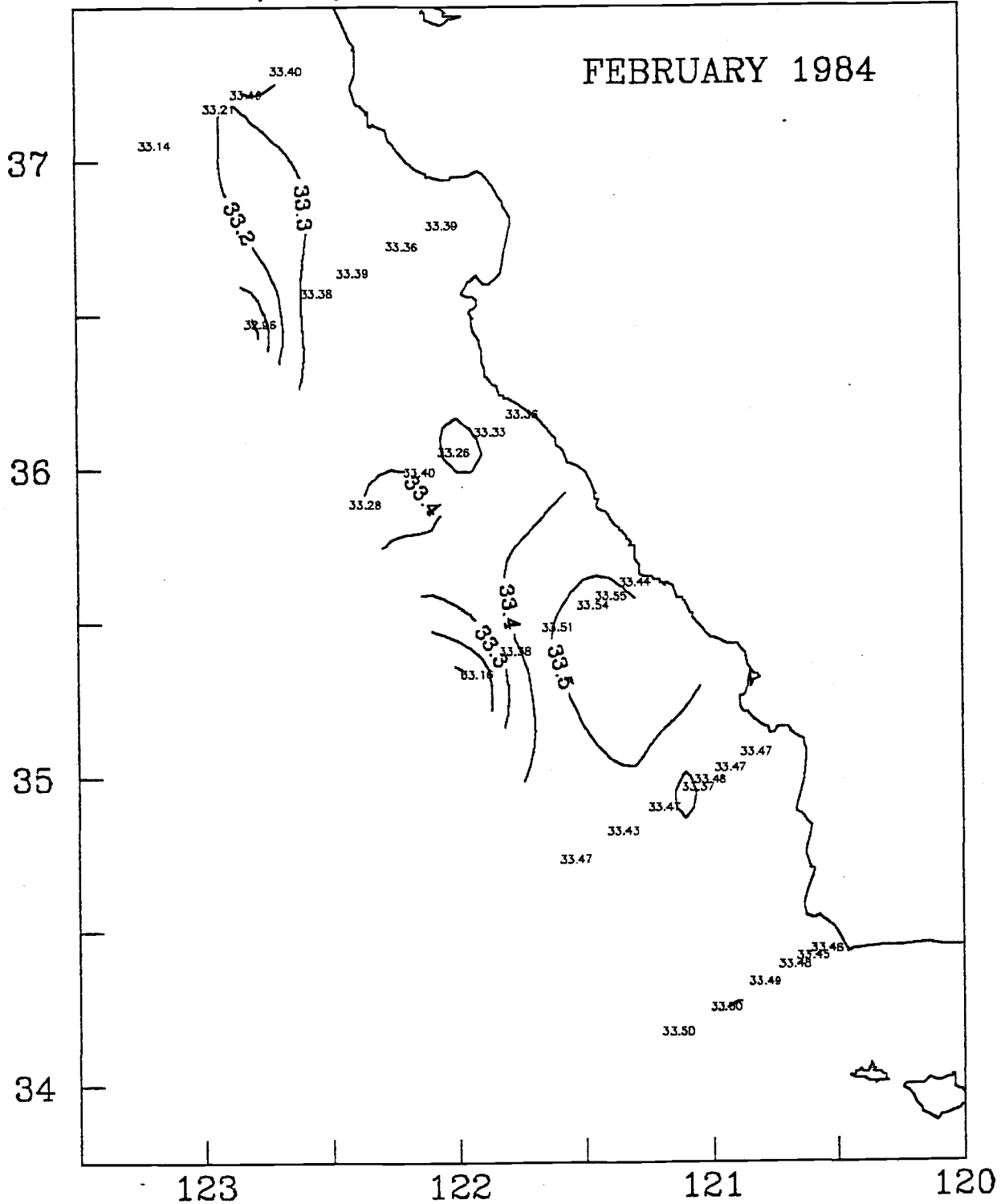
FEBRUARY 1984



SALINITY (PPT)

50 M

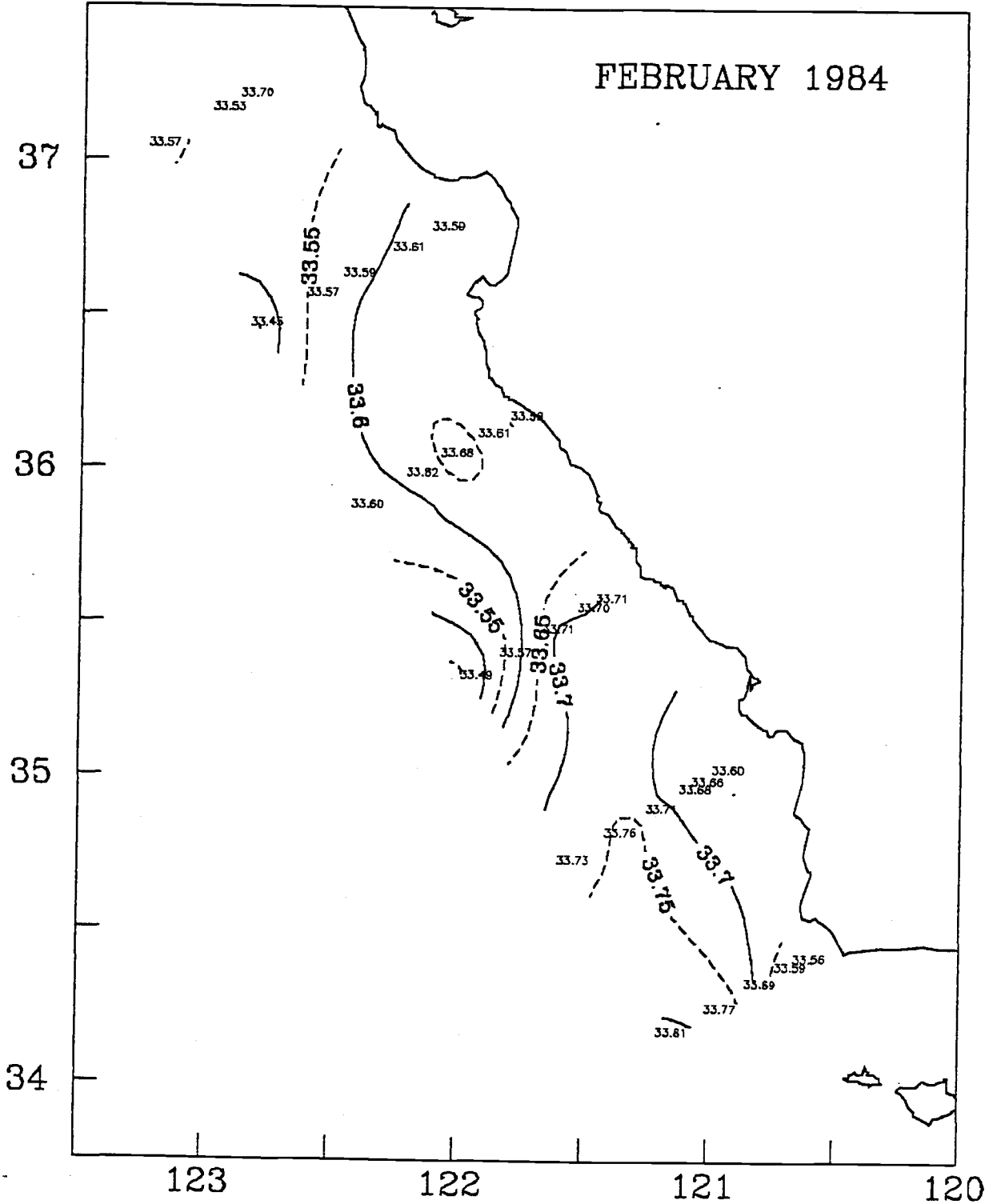
FEBRUARY 1984



SALINITY (PPT)

100 M

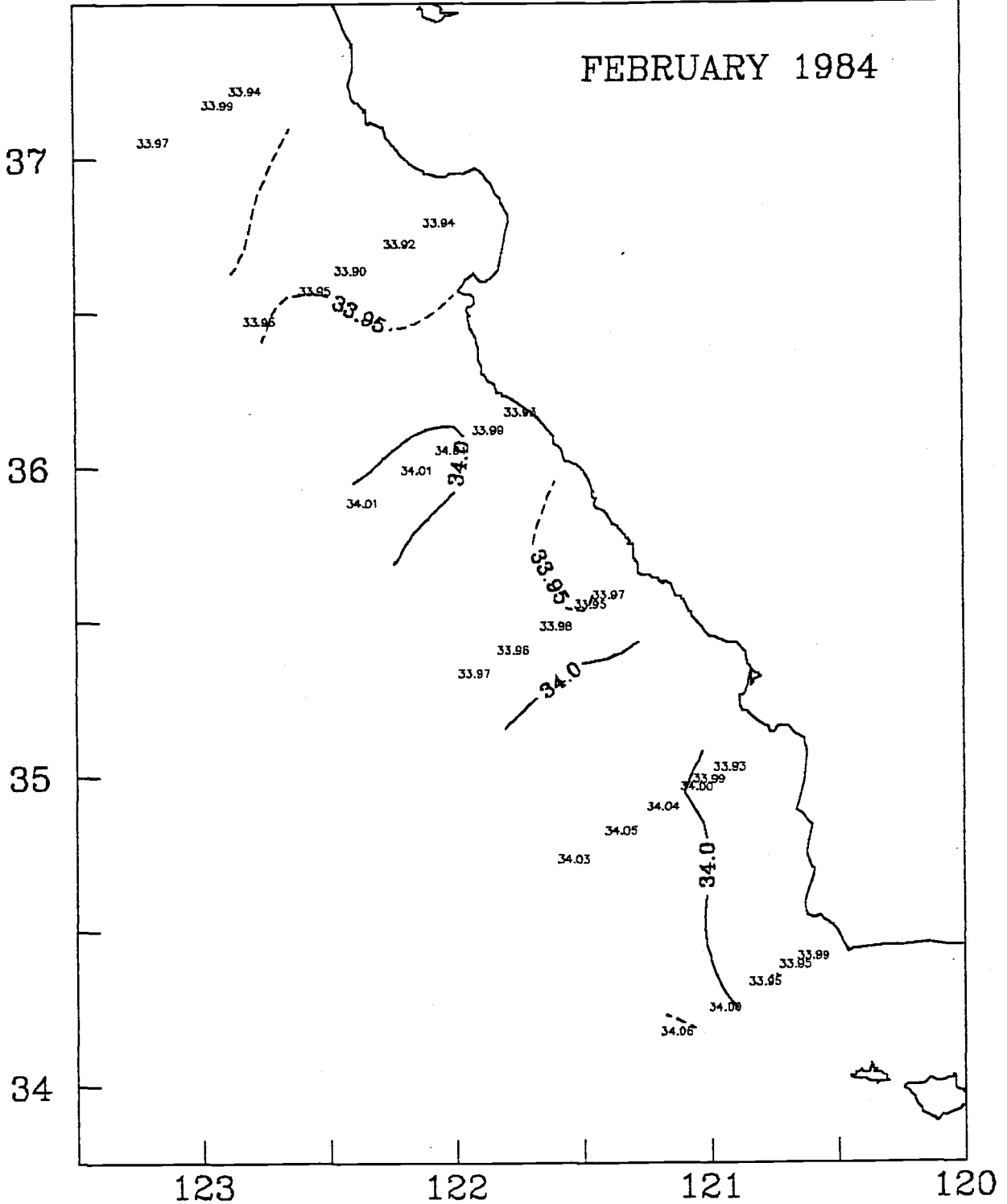
FEBRUARY 1984



SALINITY (PPT)

200 M

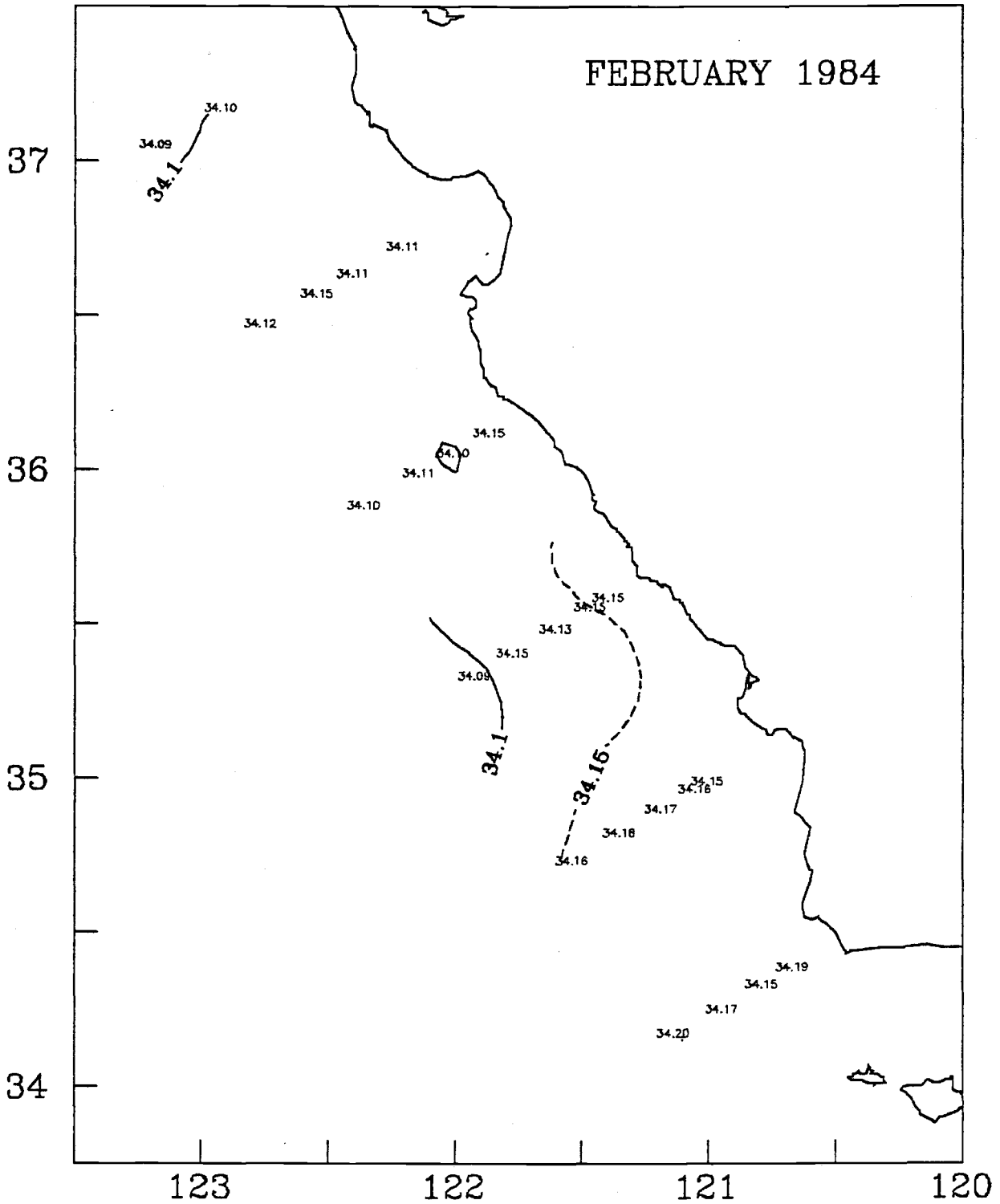
FEBRUARY 1984



SALINITY (PPT)

400 M

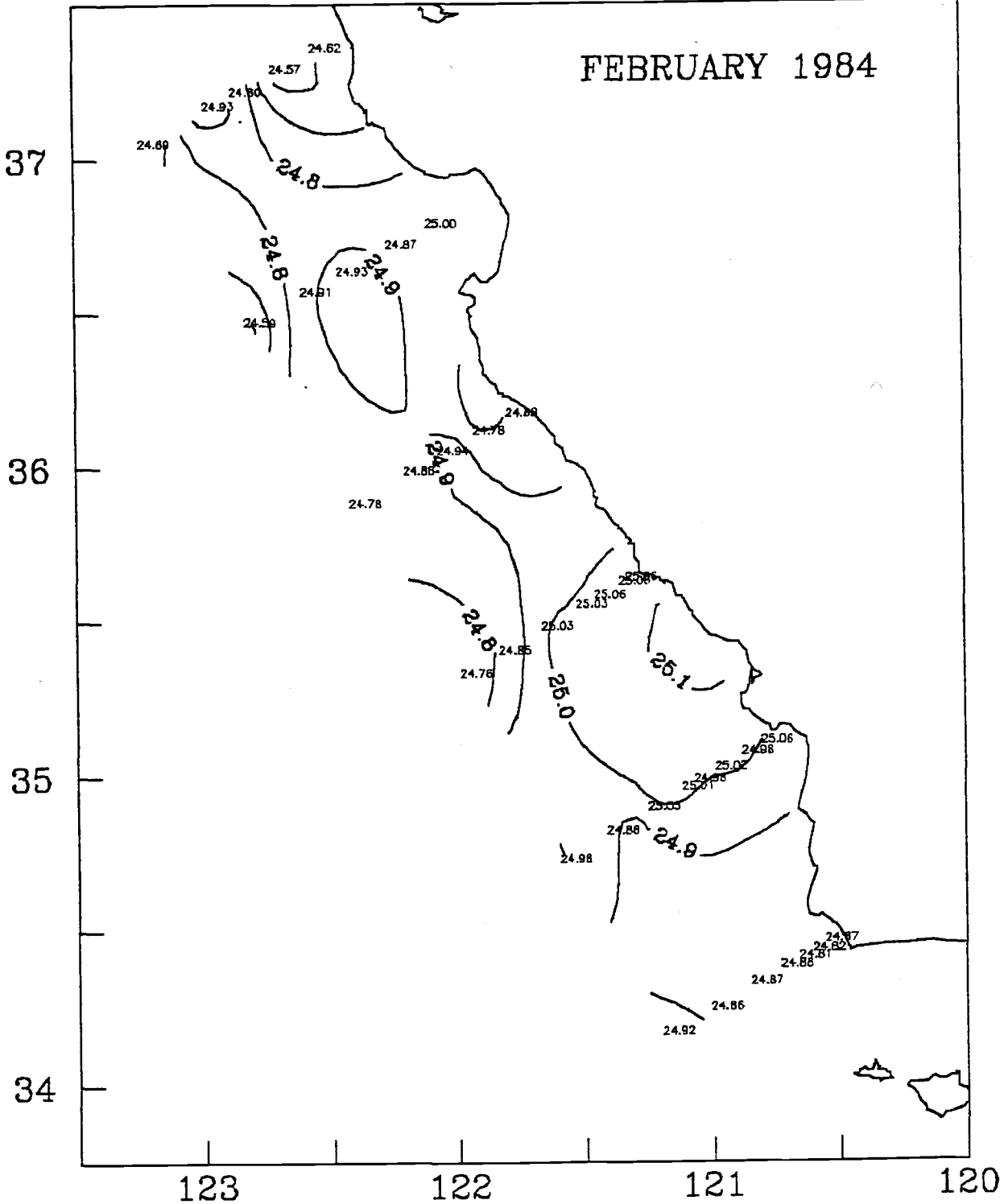
FEBRUARY 1984



SIGMA-T

10 M

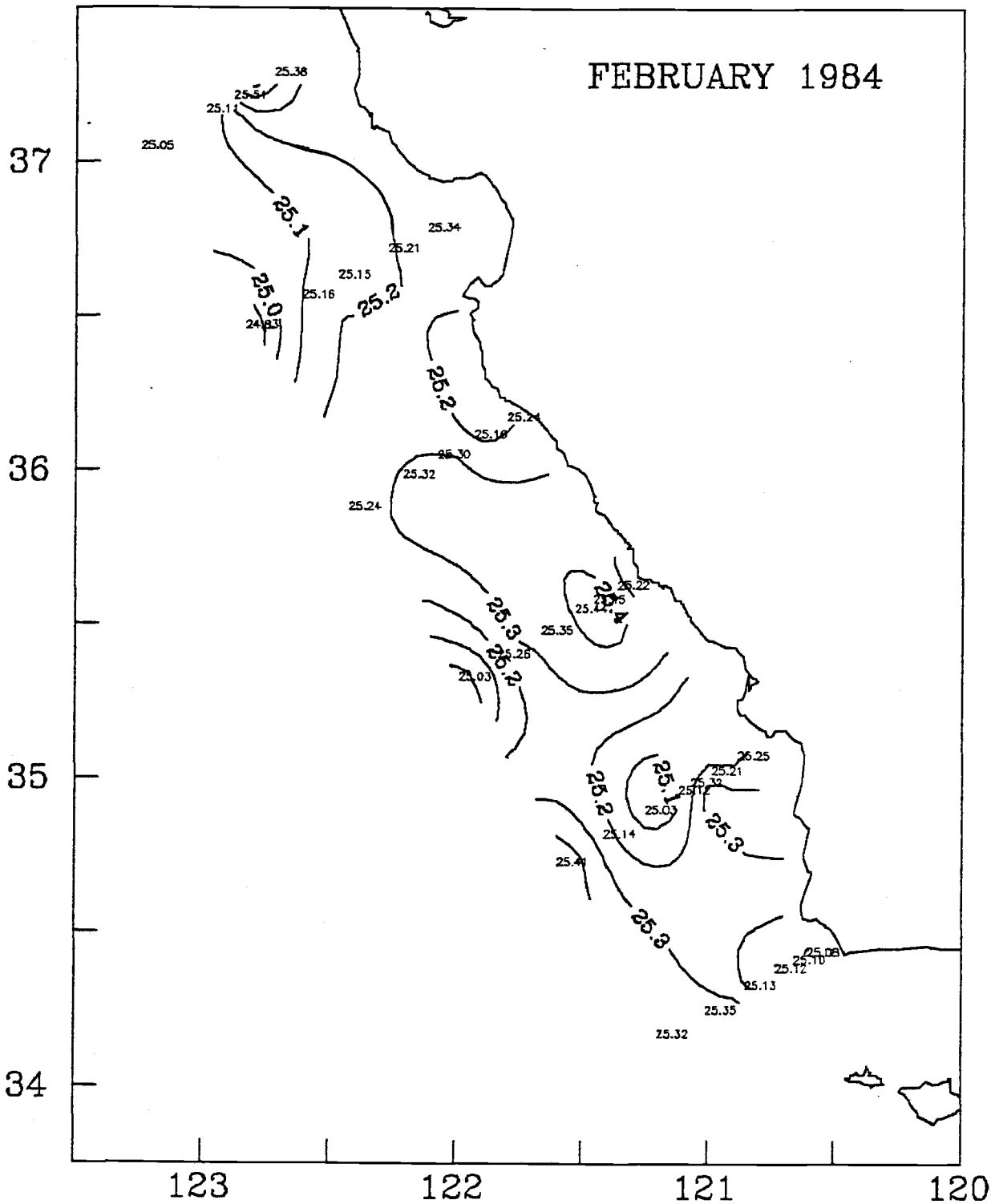
FEBRUARY 1984



SIGMA-T

50 M

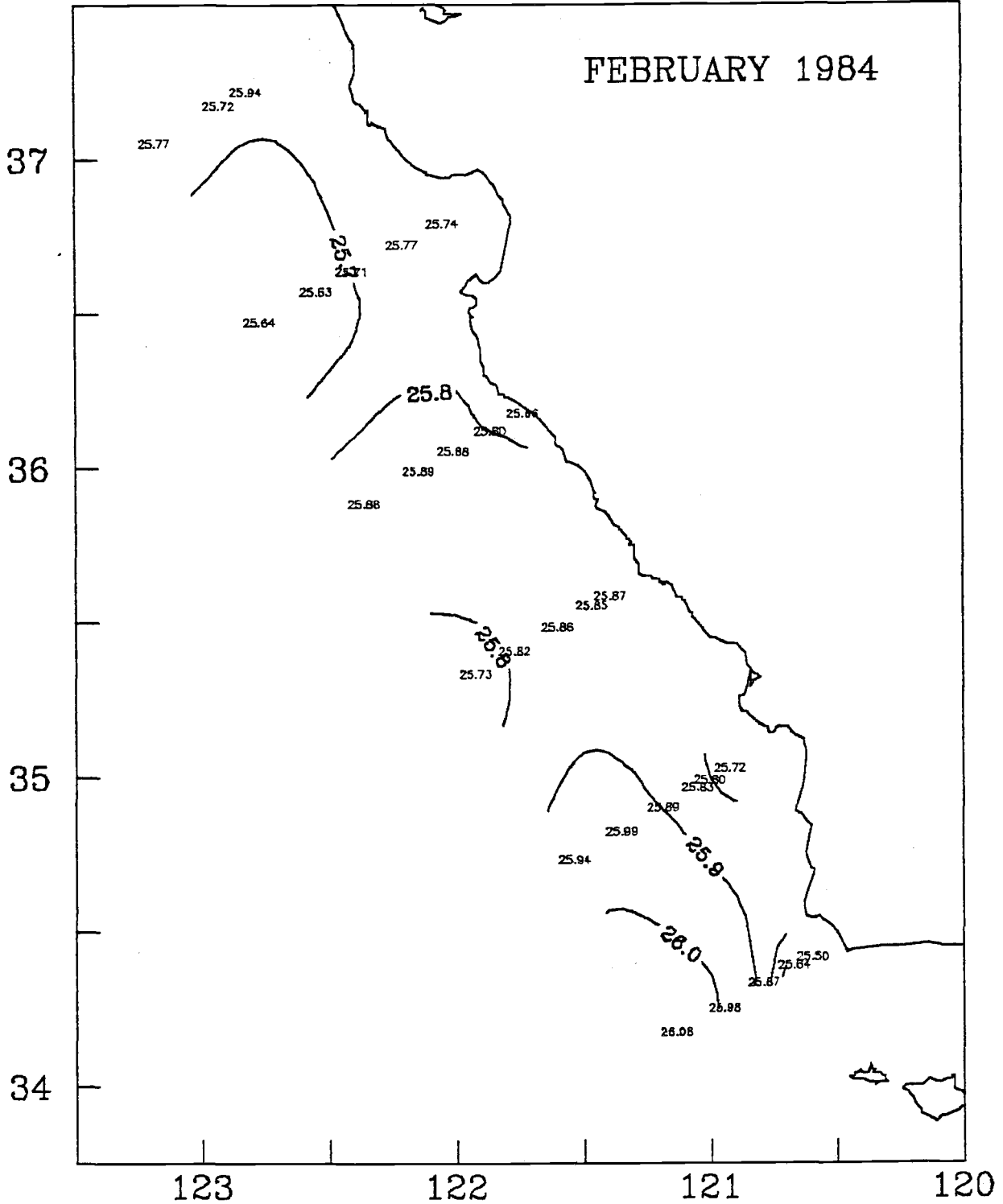
FEBRUARY 1984



SIGMA-T

100 M

FEBRUARY 1984



SIGMA-T

200 M

FEBRUARY 1984

37

36

35

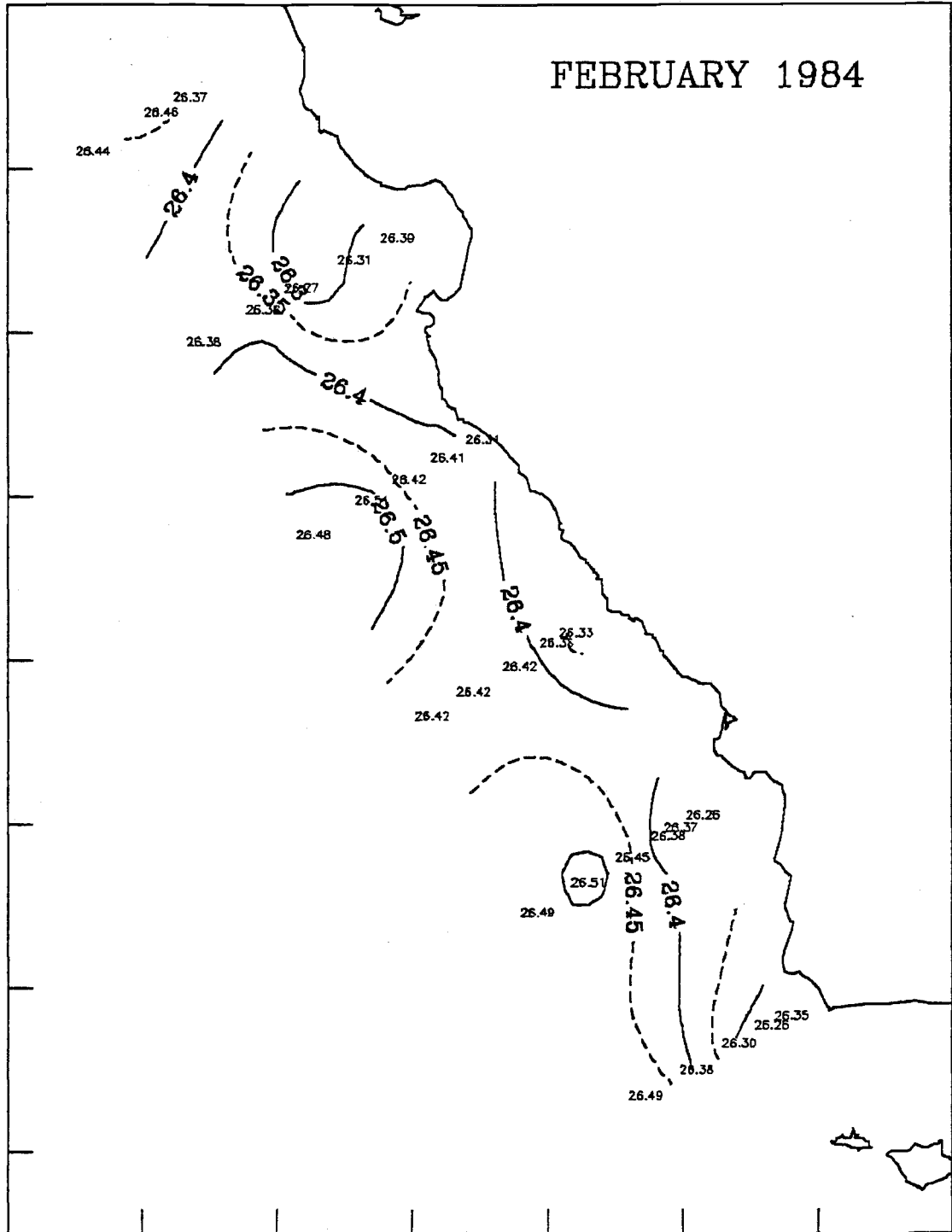
34

123

122

121

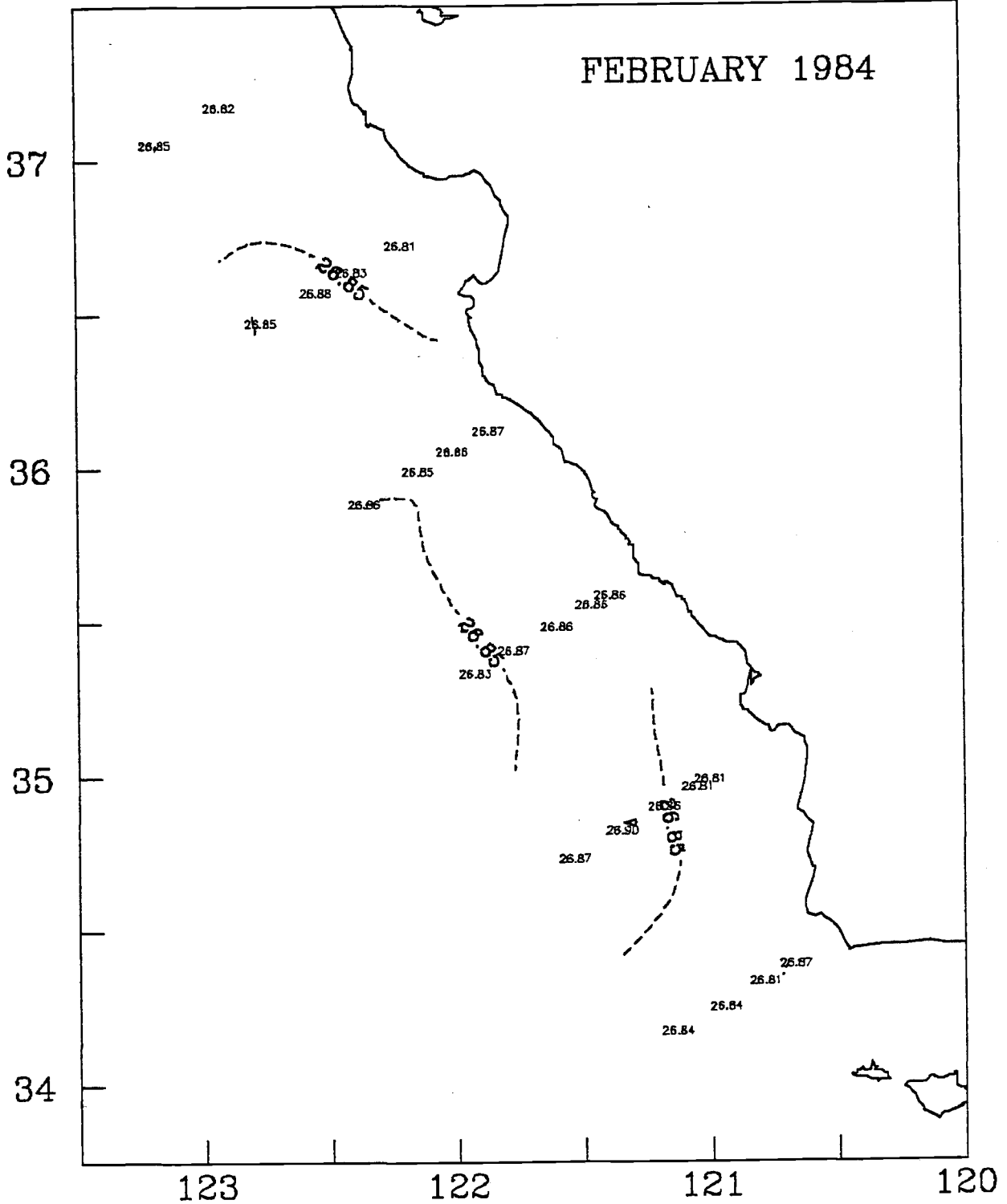
120



SIGMA-T

400 M

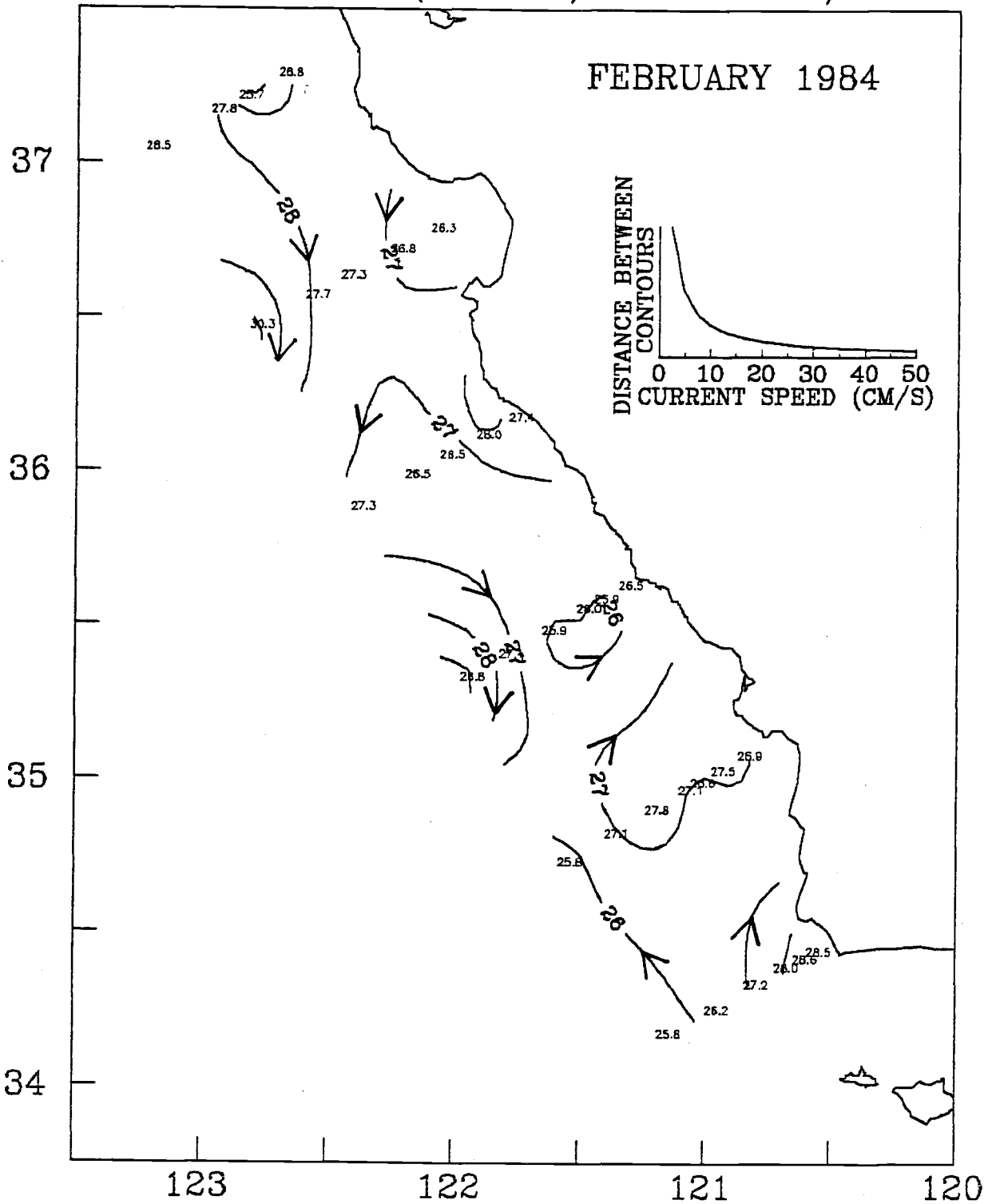
FEBRUARY 1984



DYNAMIC HEIGHT (DYN CM)

0/100 M

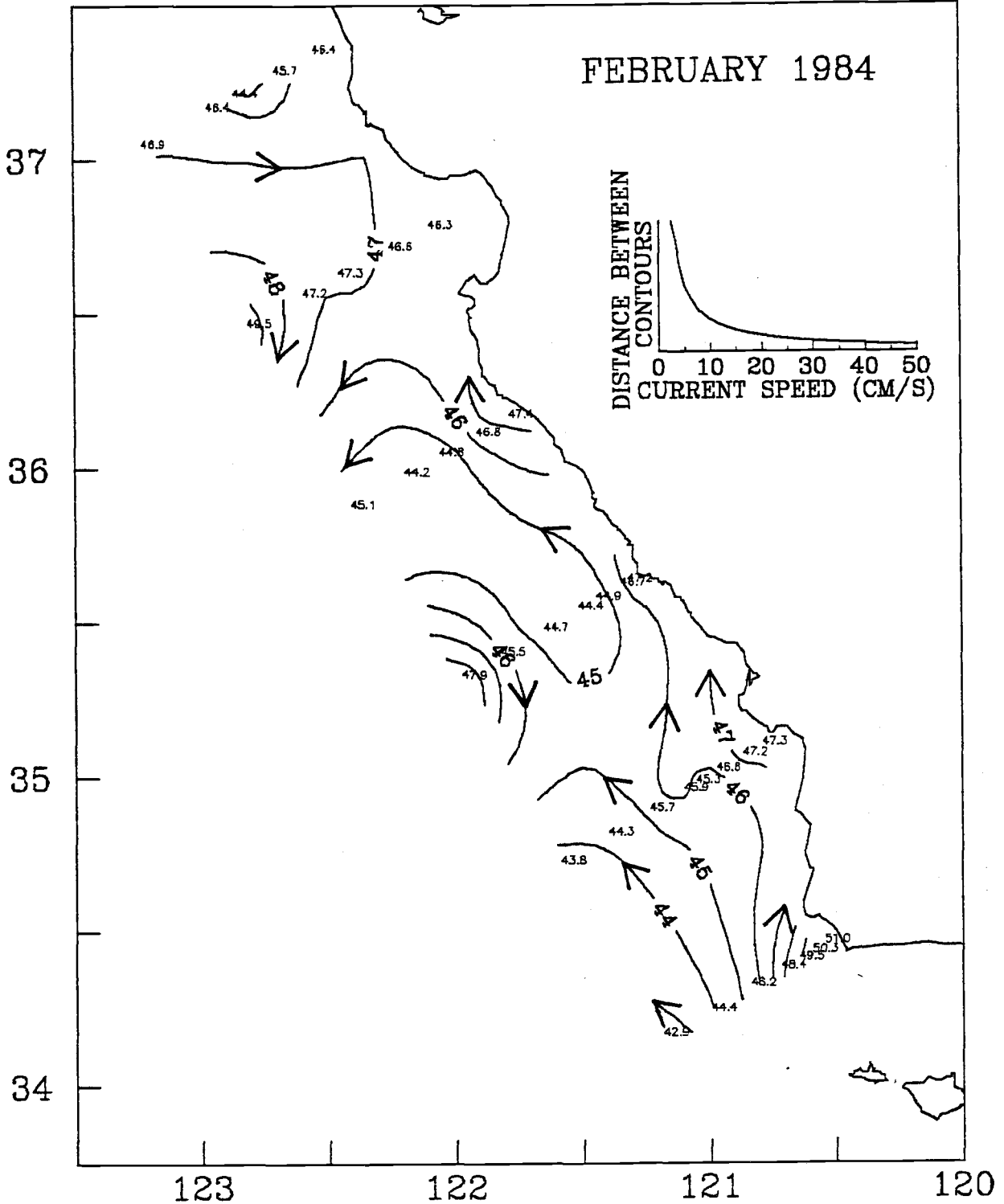
FEBRUARY 1984



DYNAMIC HEIGHT (DYN CM)

0/200 M

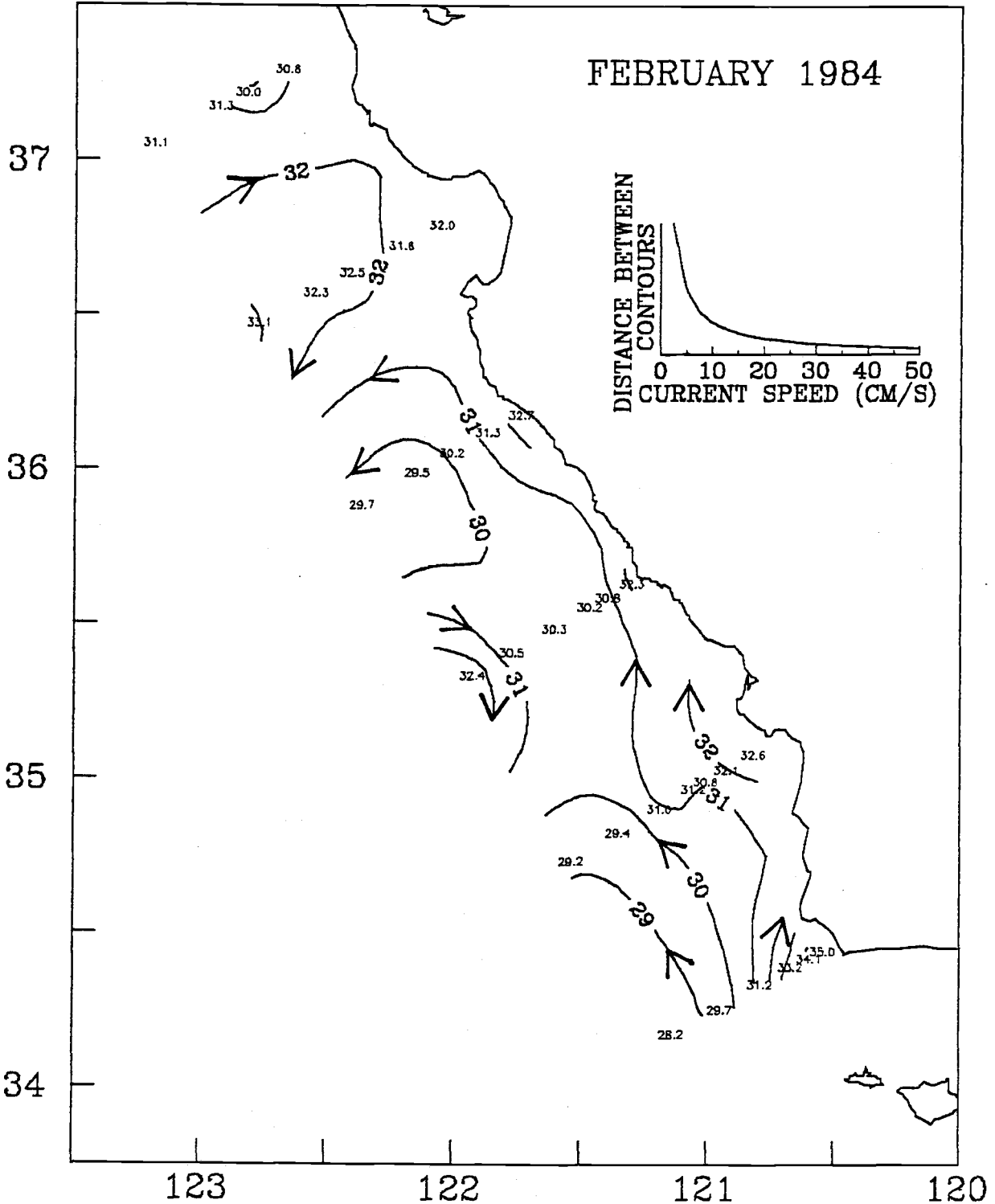
FEBRUARY 1984



DYNAMIC HEIGHT (DYN CM)

50/200 M

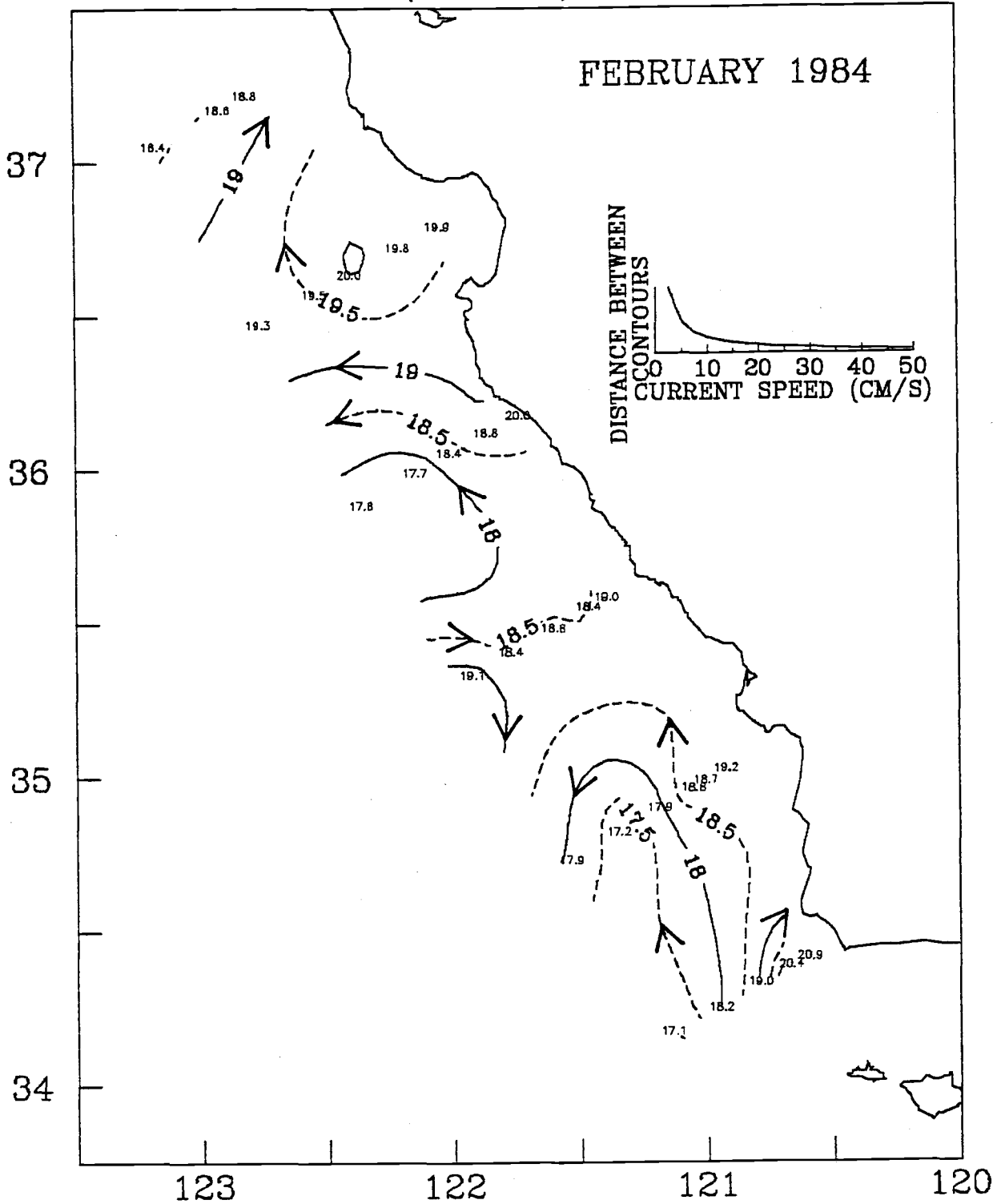
FEBRUARY 1984



DYNAMIC HEIGHT (DYN CM)

100/200 M

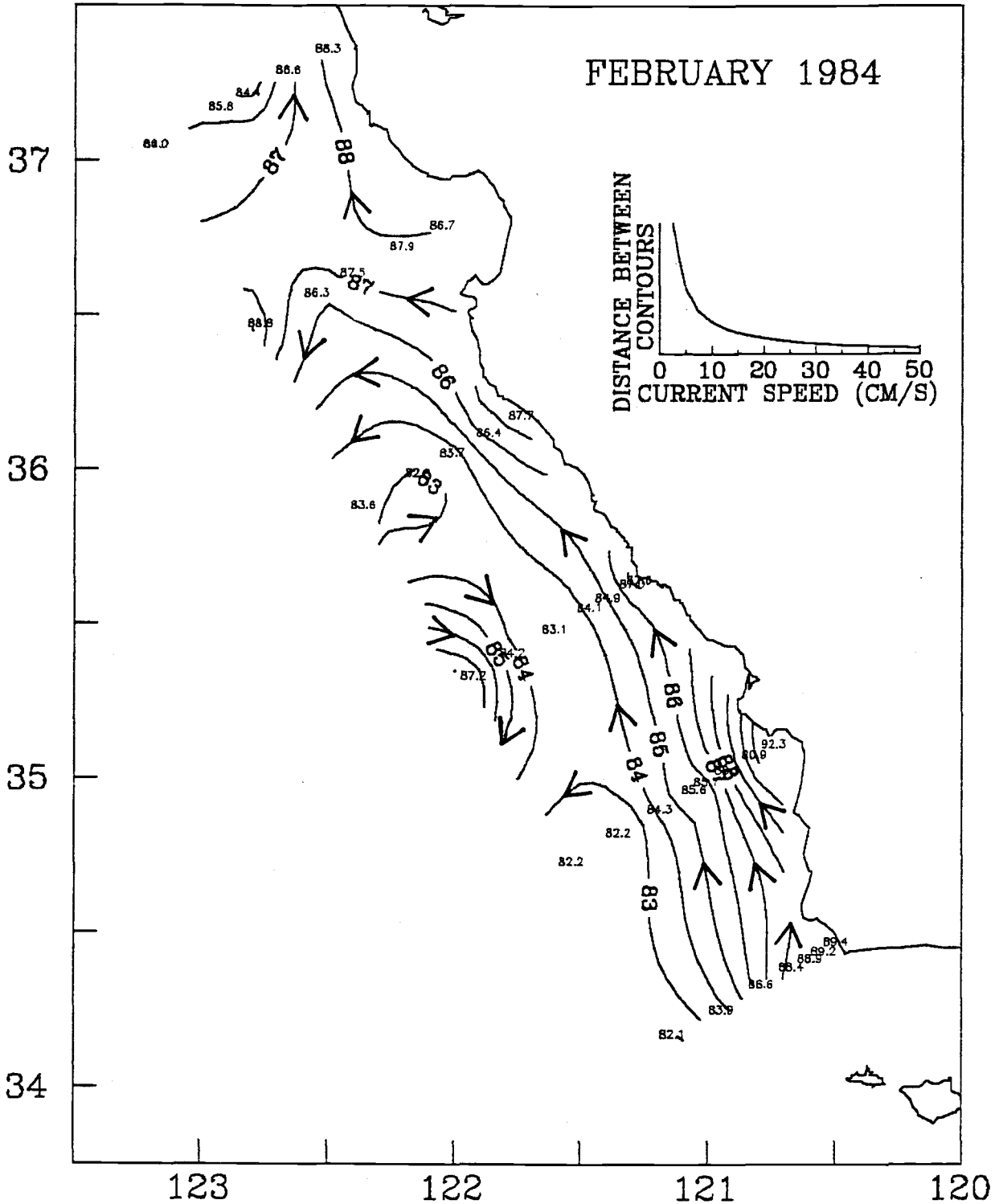
FEBRUARY 1984



DYNAMIC HEIGHT (DYN CM)

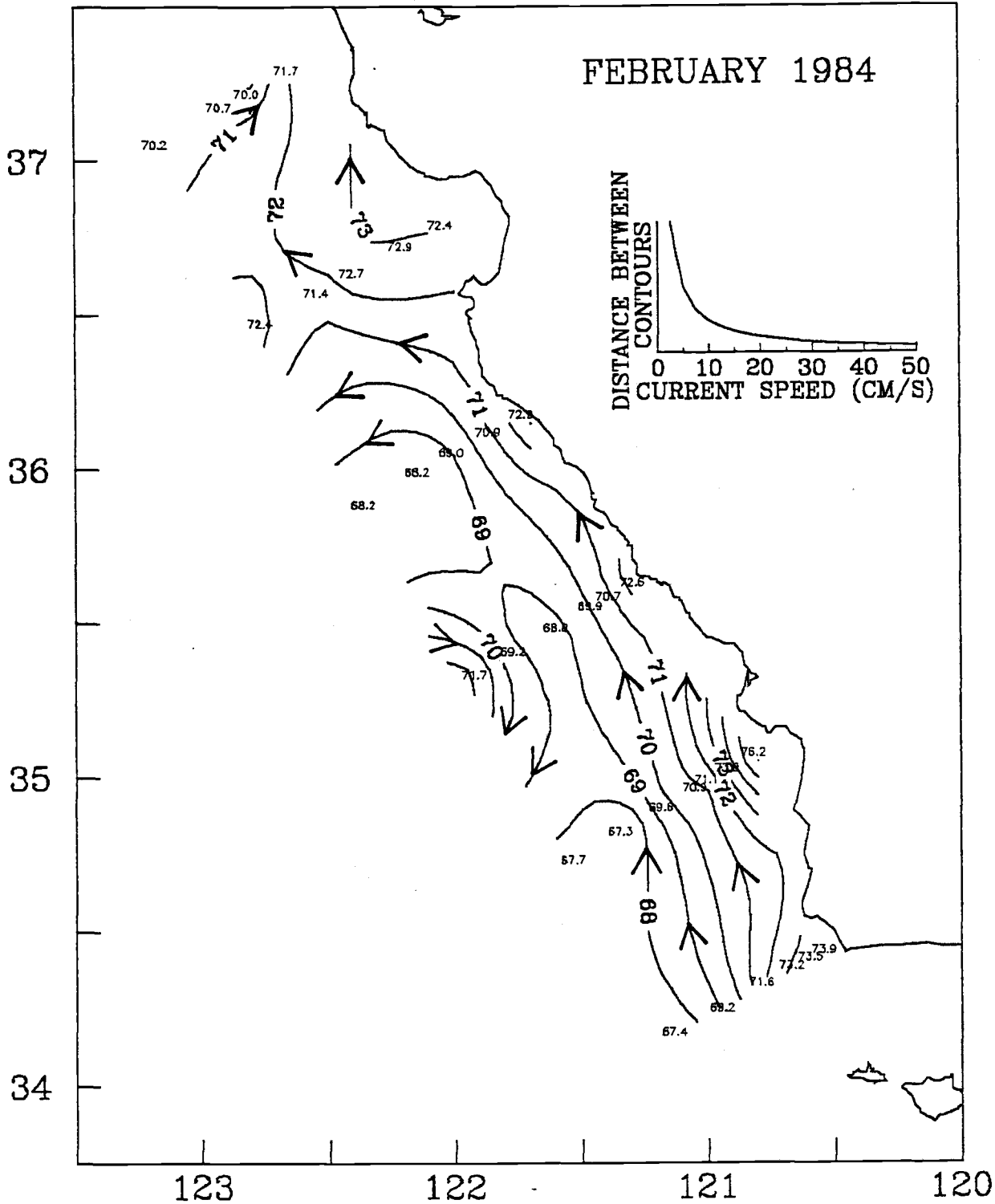
0/500 M

FEBRUARY 1984



DYNAMIC HEIGHT (DYN CM)

50/500 M



DYNAMIC HEIGHT (DYN CM)

100/500 M

FEBRUARY 1984

37

36

35

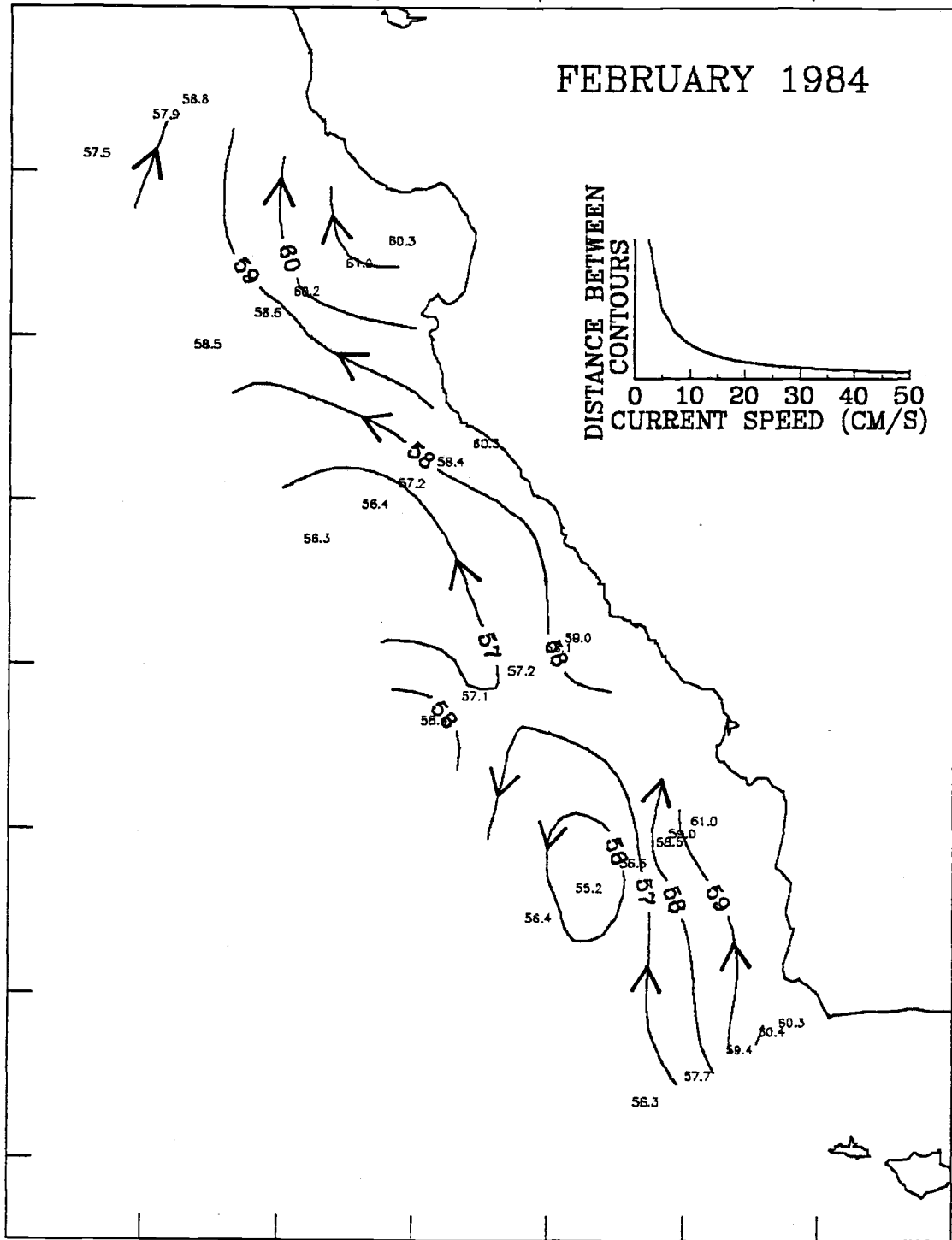
34

123

122

121

120



DYNAMIC HEIGHT (DYN CM)

200/500 M

FEBRUARY 1984

37

36

35

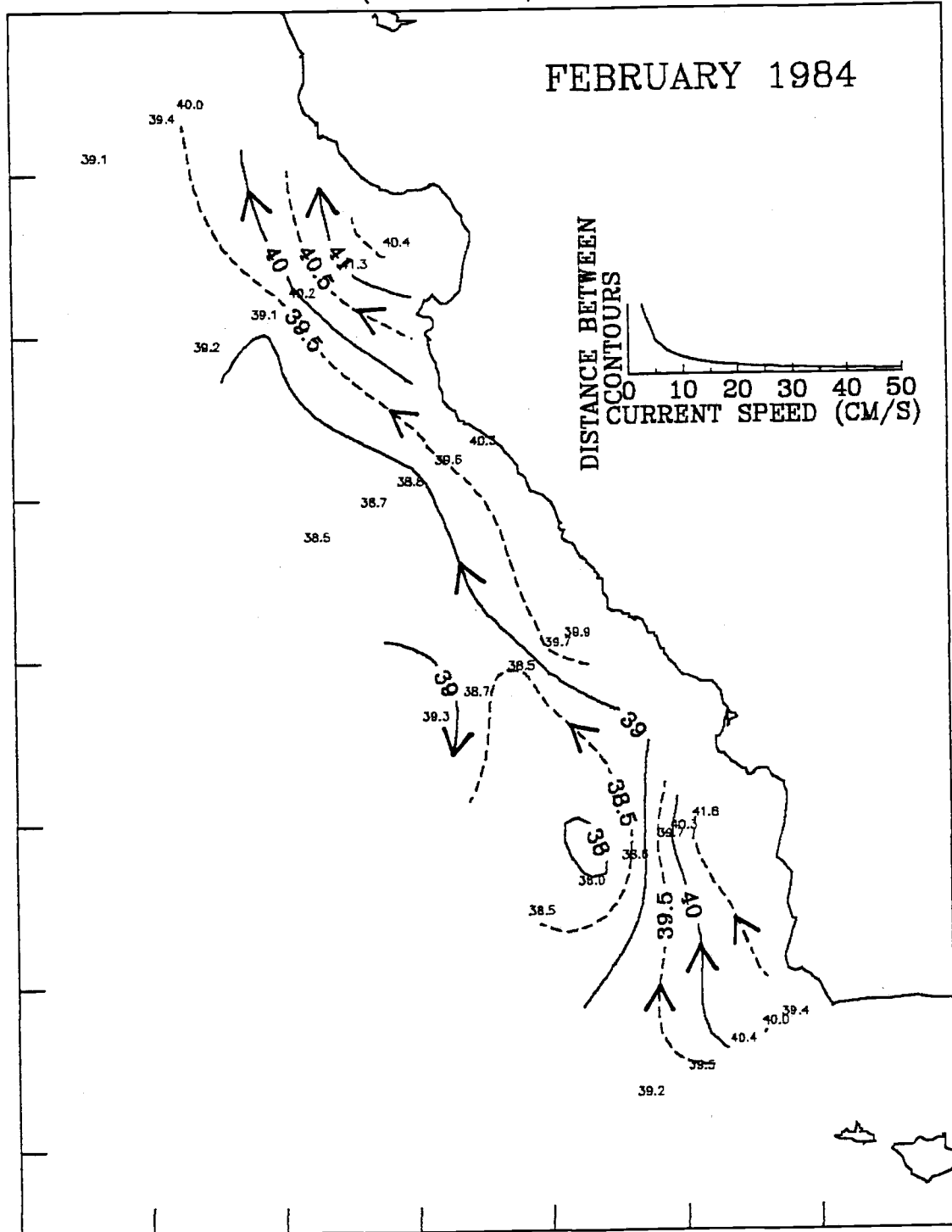
34

123

122

121

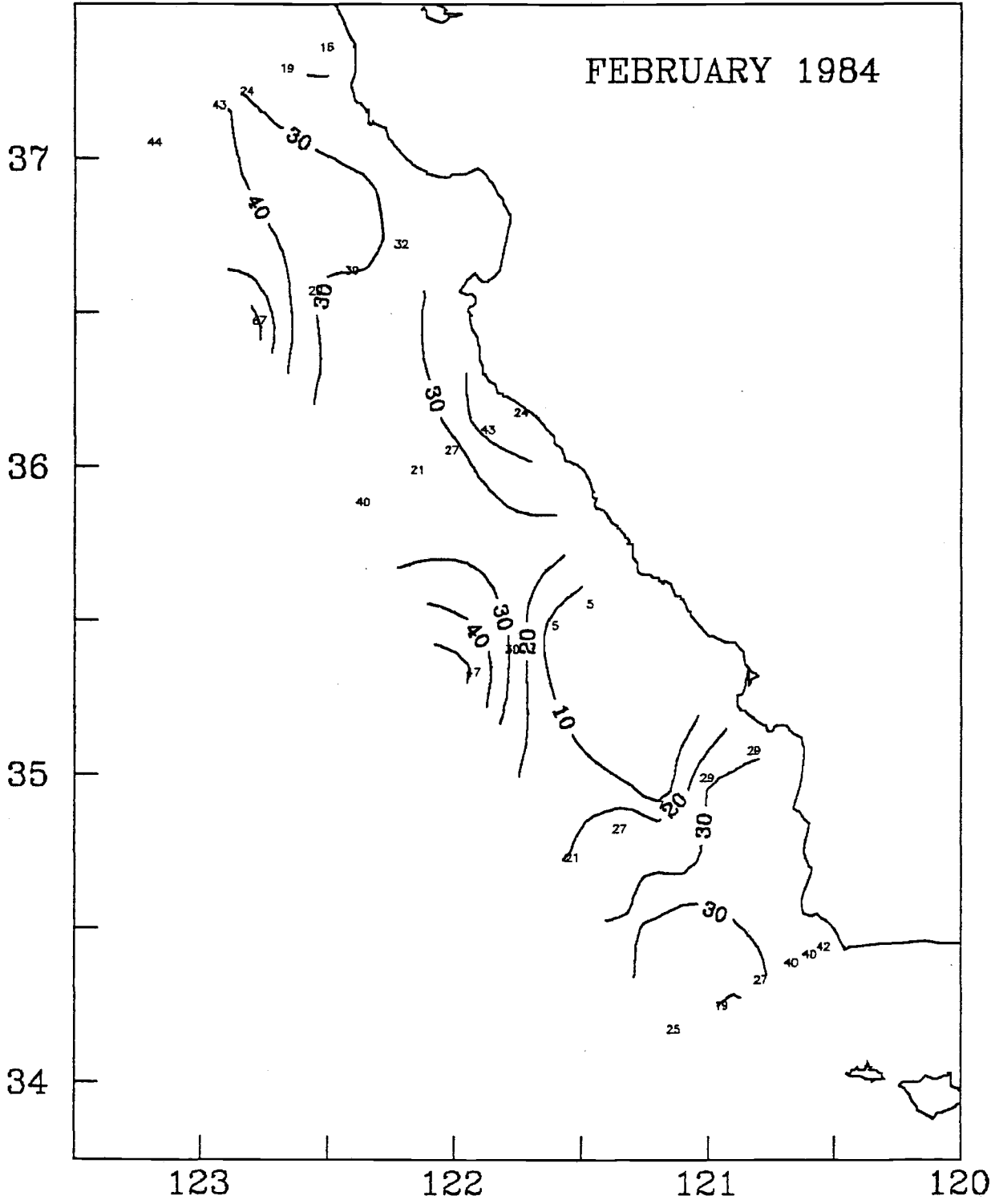
120



DEPTH (M)

$\sigma_t = 25.0$

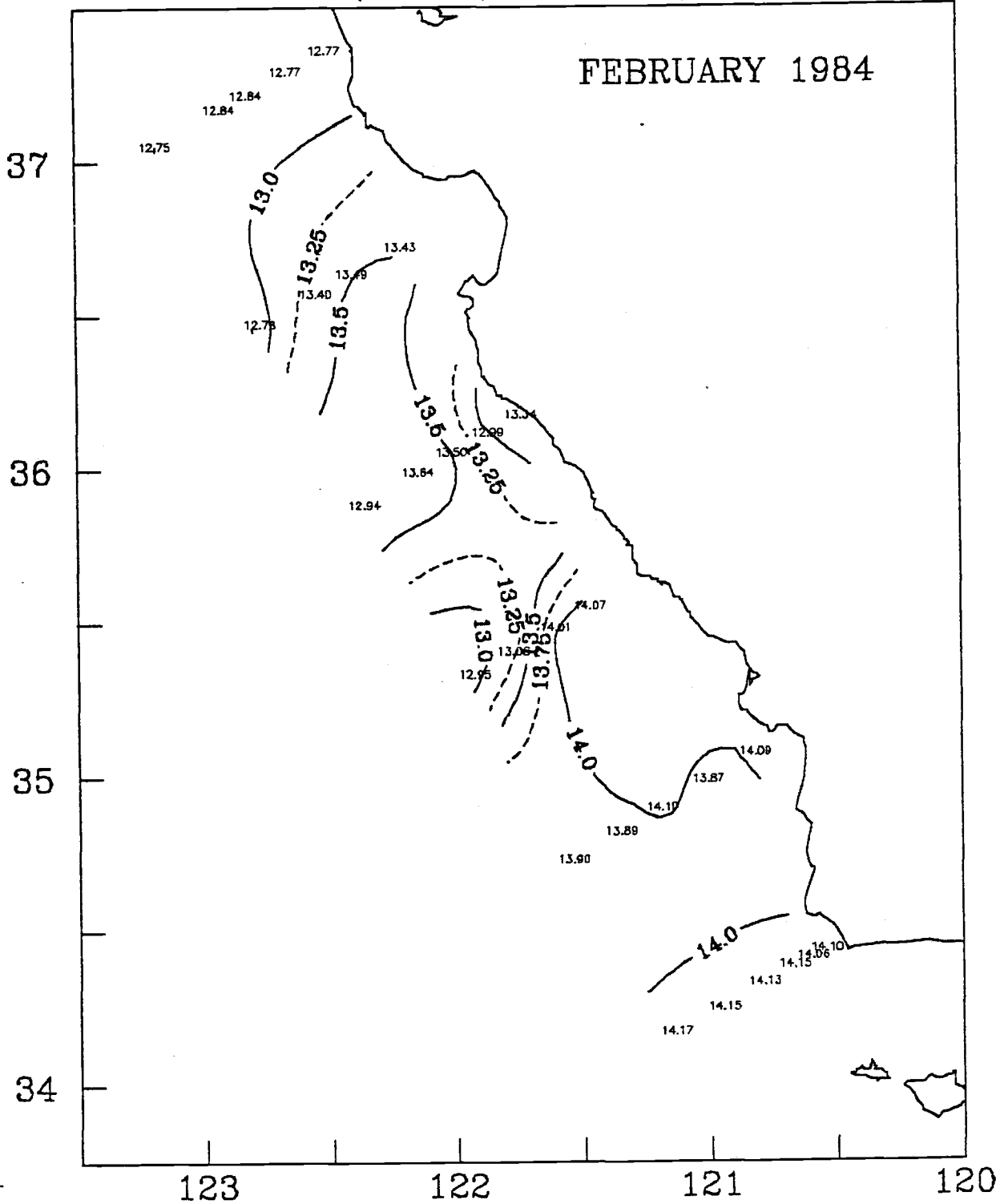
FEBRUARY 1984



TEMPERATURE (DEG C)

$\sigma_t = 25.0$

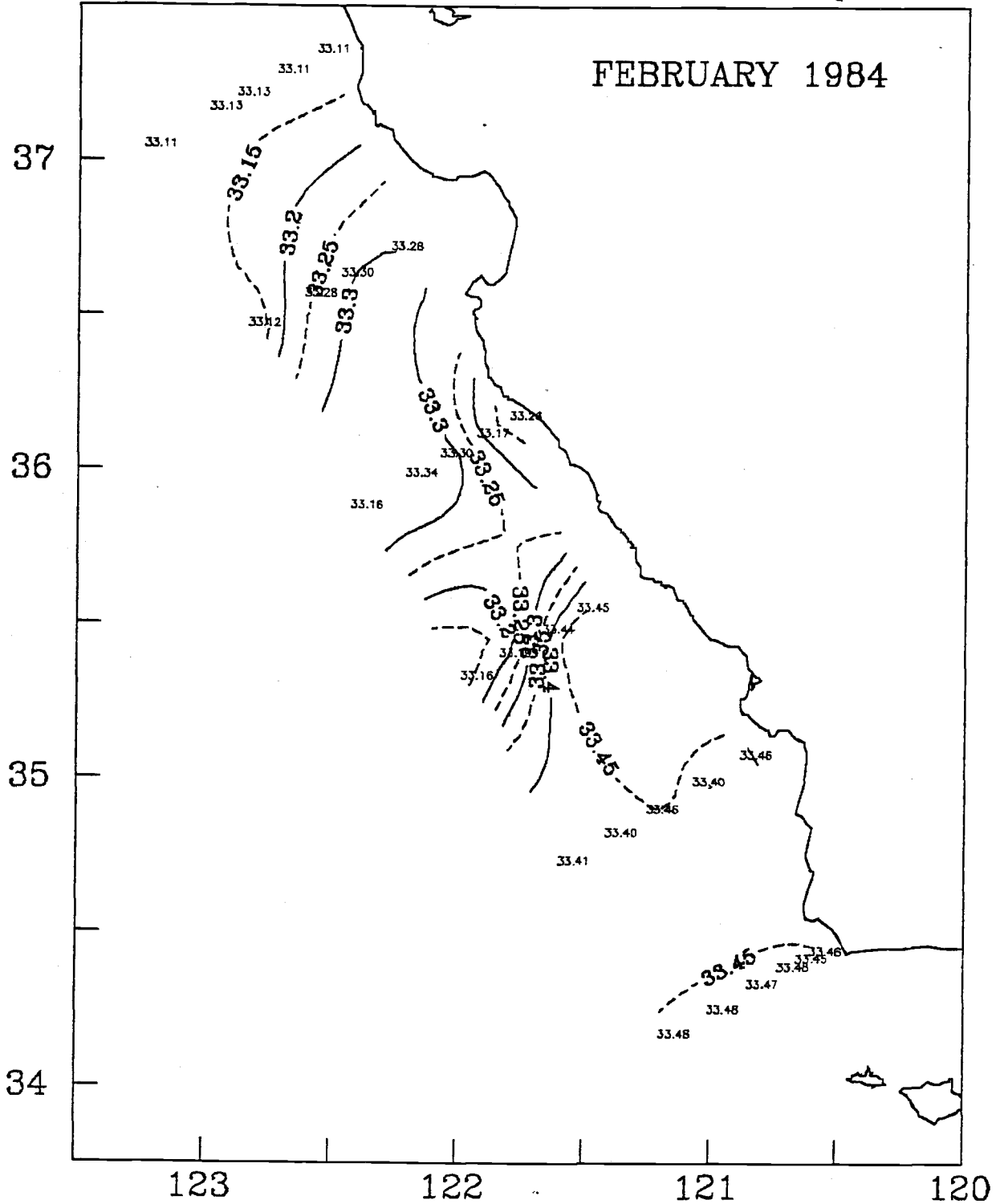
FEBRUARY 1984



SALINITY (PPT)

$\sigma_t=25.0$

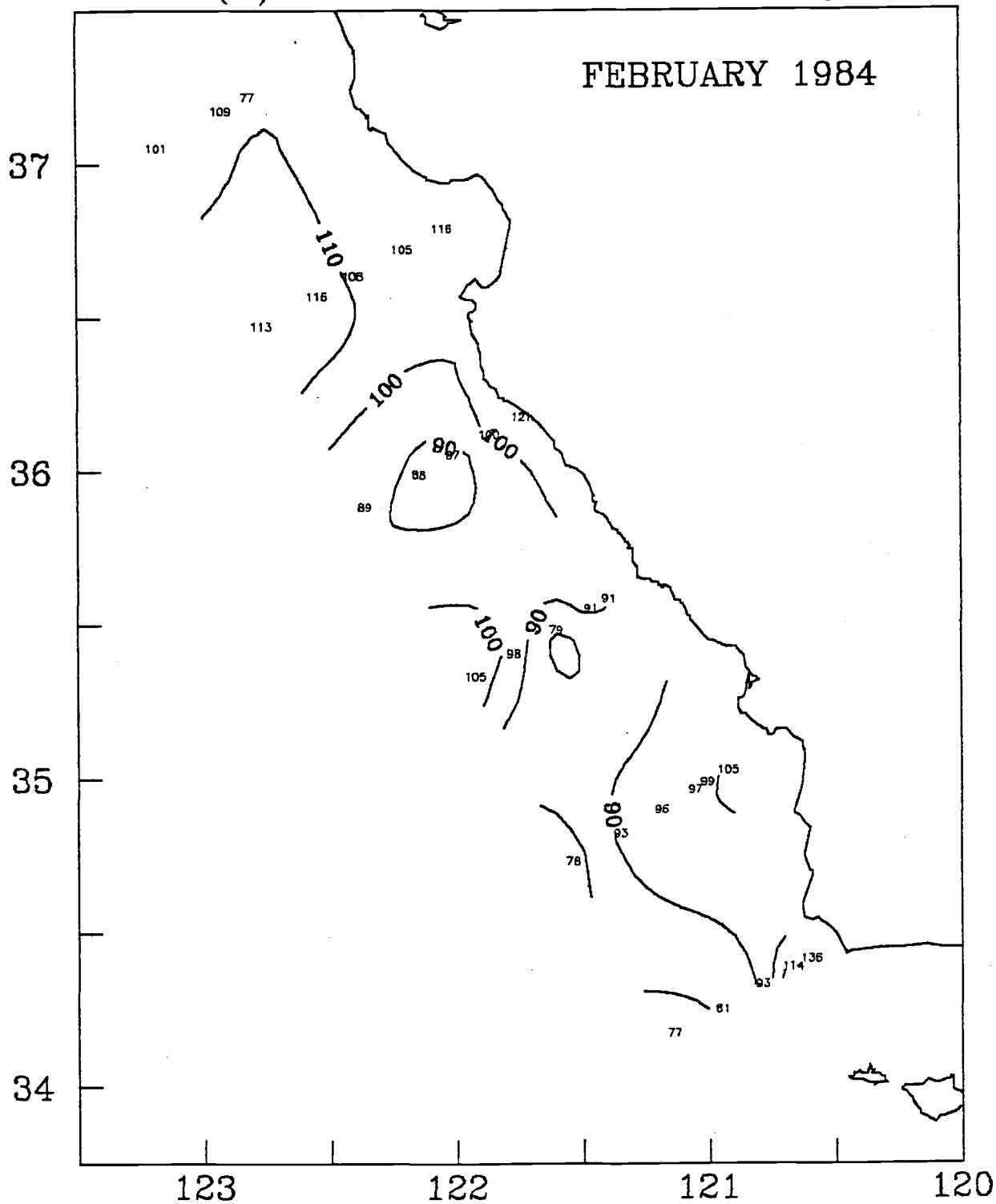
FEBRUARY 1984



DEPTH (M)

$\sigma_t = 25.8$

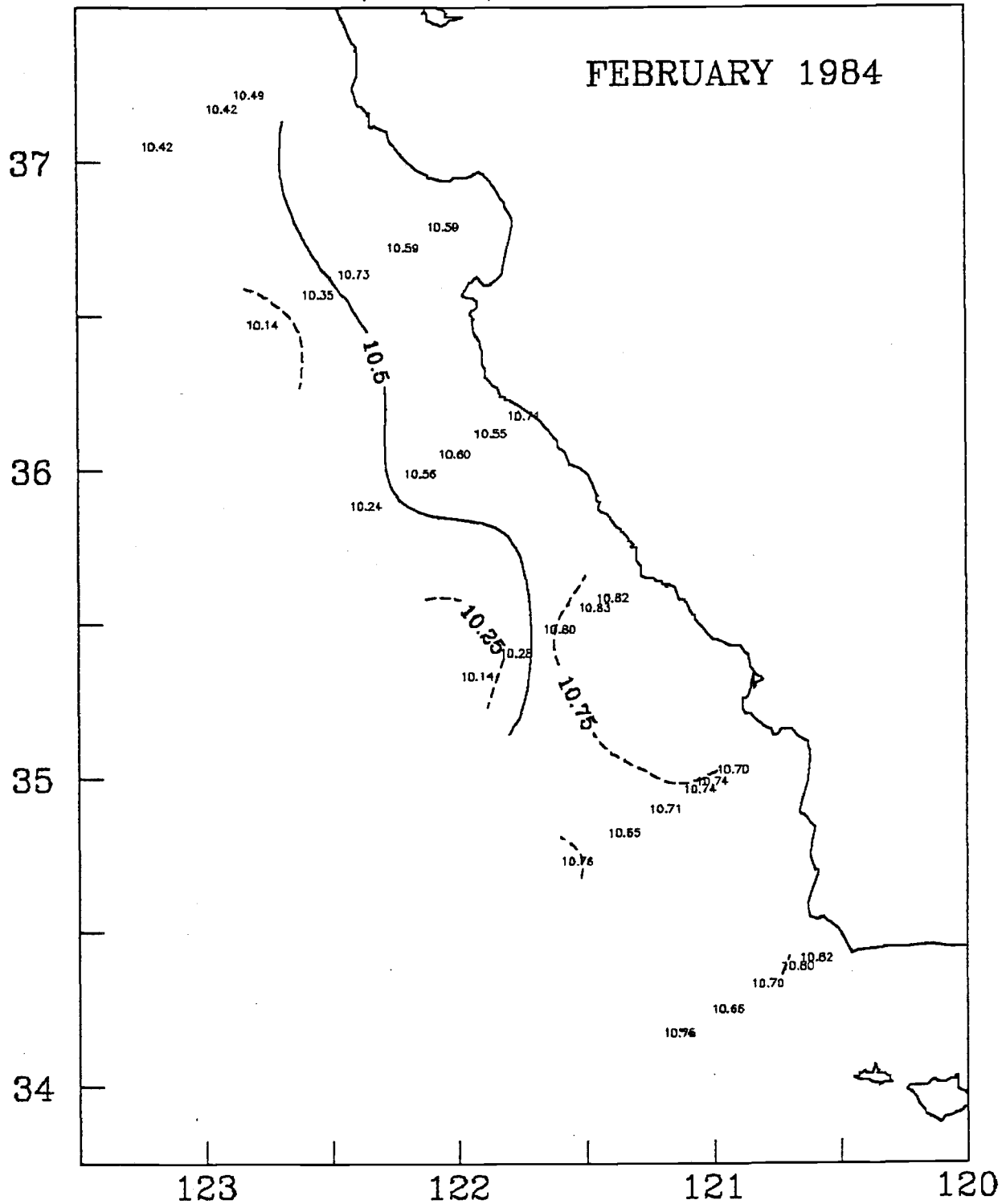
FEBRUARY 1984



TEMPERATURE (DEG C)

$\sigma_t = 25.8$

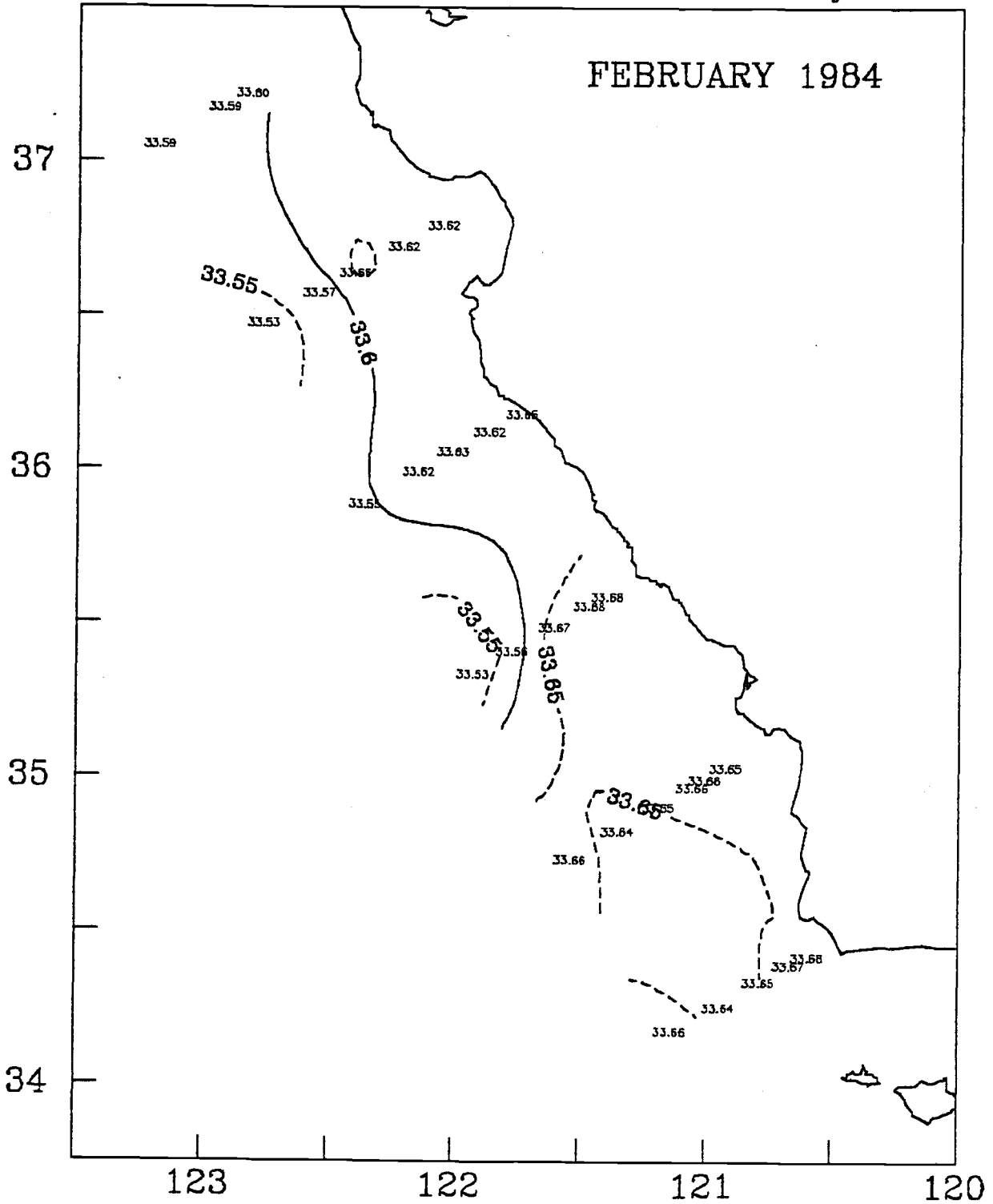
FEBRUARY 1984



SALINITY (PPT)

$\sigma_t = 25.8$

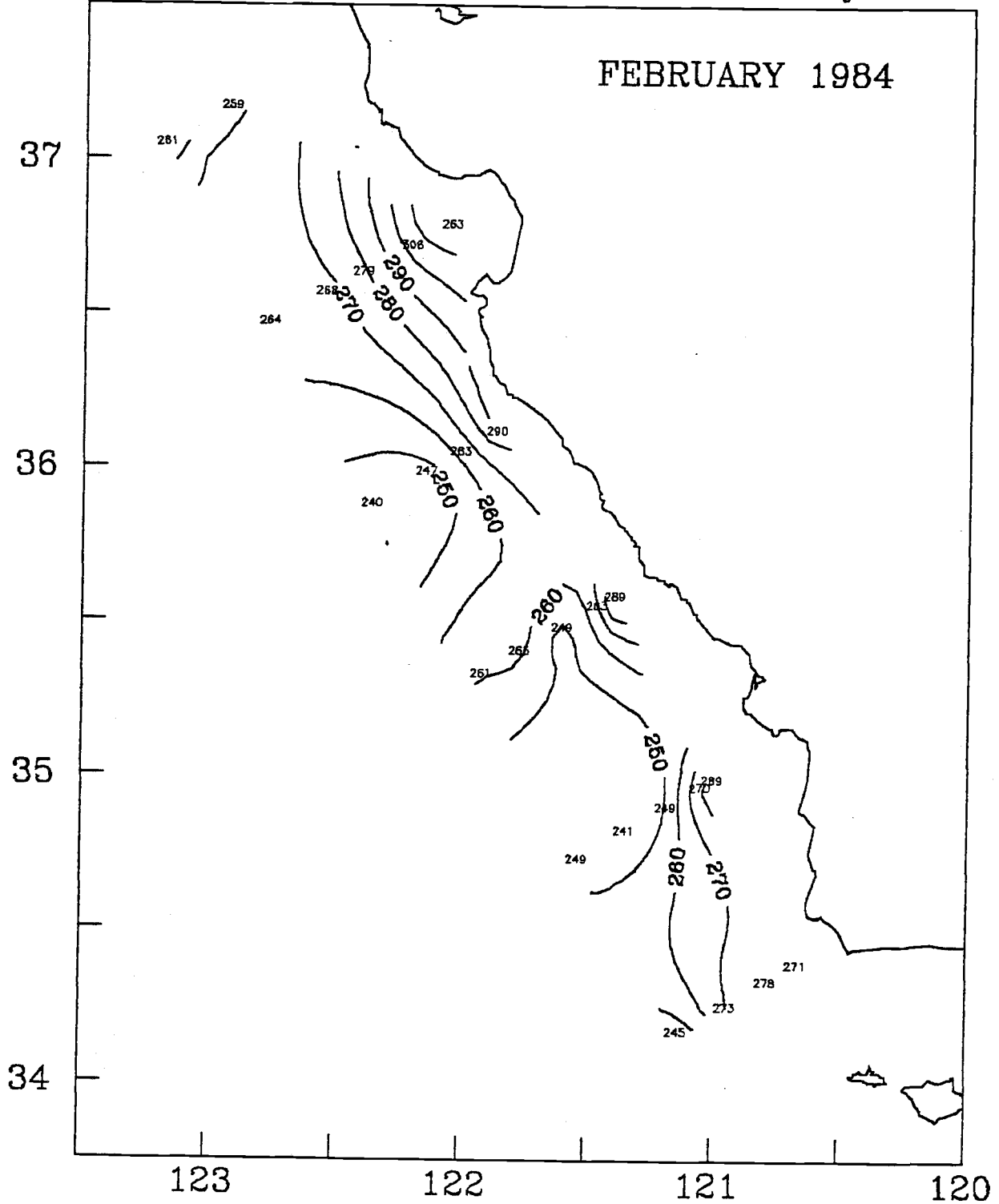
FEBRUARY 1984



DEPTH (M)

$\sigma_t = 26.6$

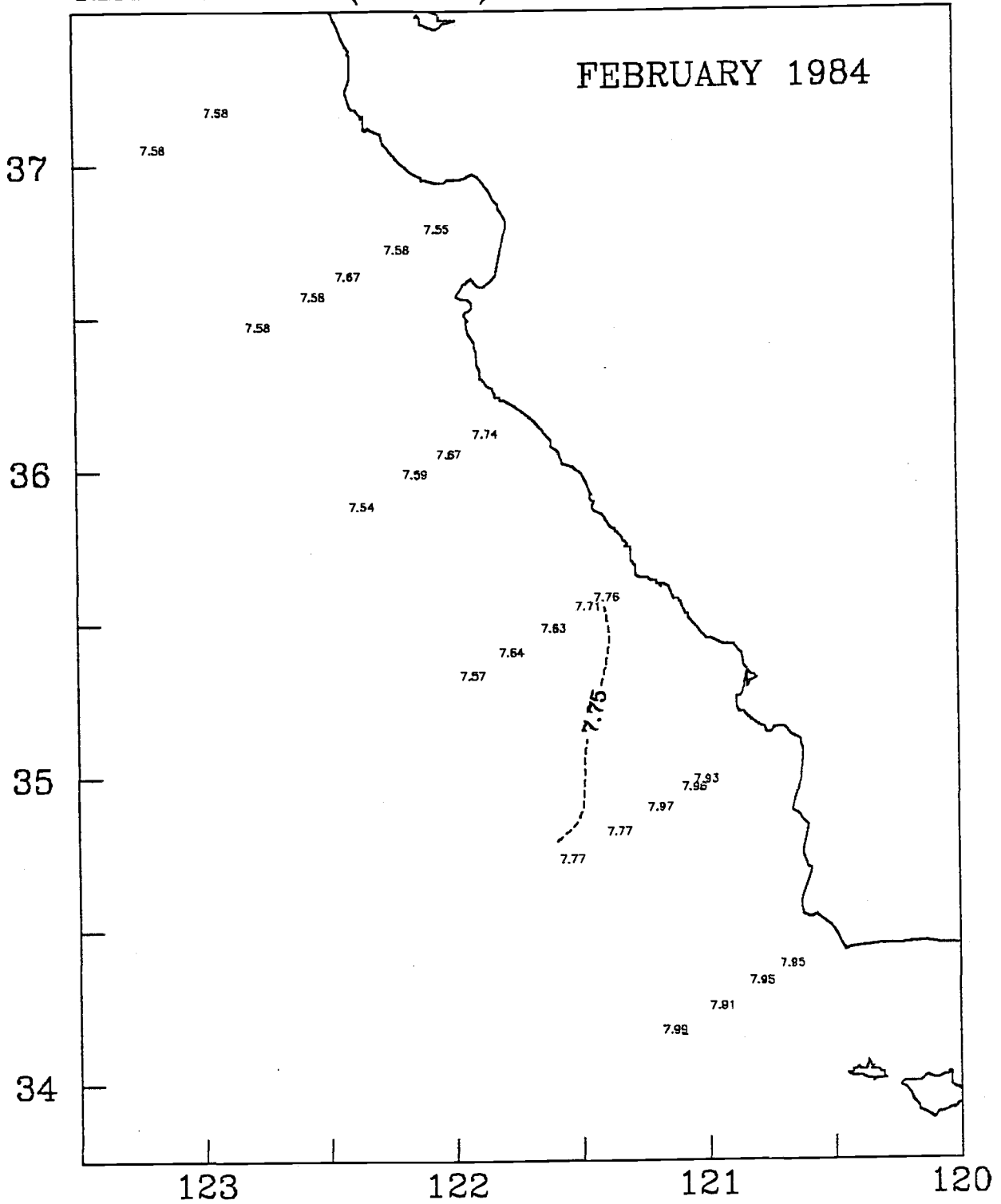
FEBRUARY 1984



TEMPERATURE (DEG C)

$\sigma_t = 26.6$

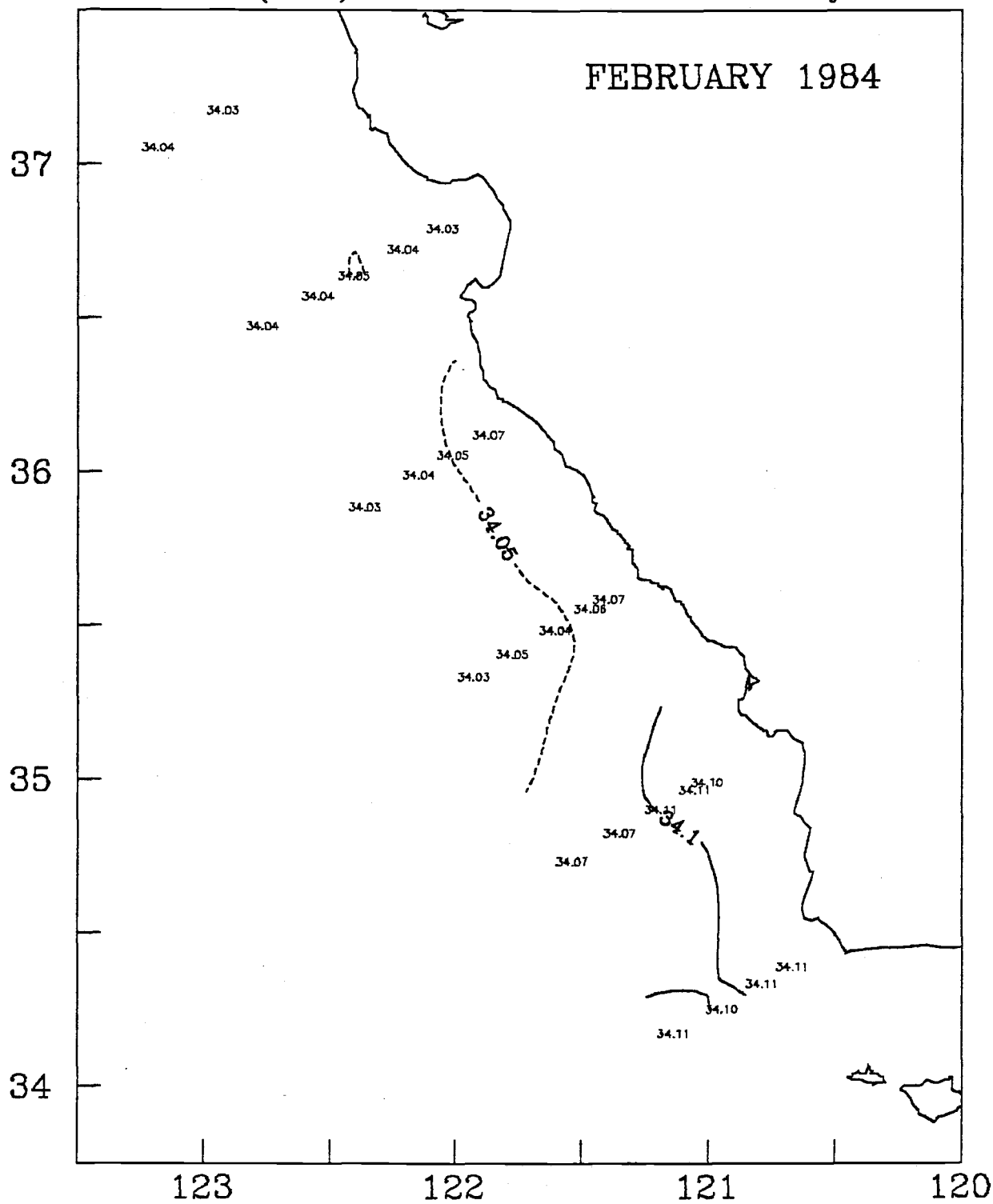
FEBRUARY 1984



SALINITY (PPT)

$\sigma_t = 26.6$

FEBRUARY 1984



MAPS, SNAPSHOT 1

TEMPERATURE (DEG C)

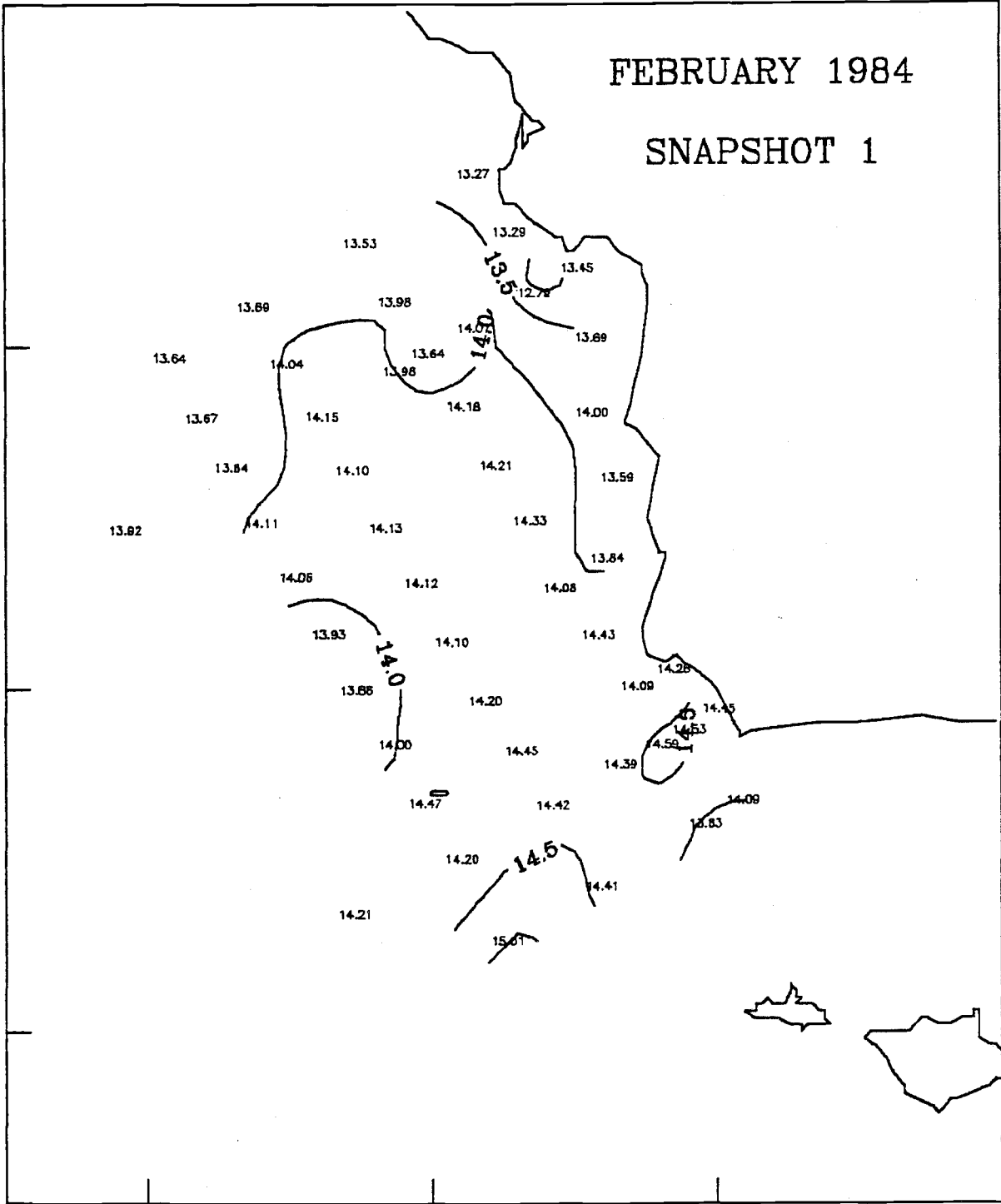
10 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

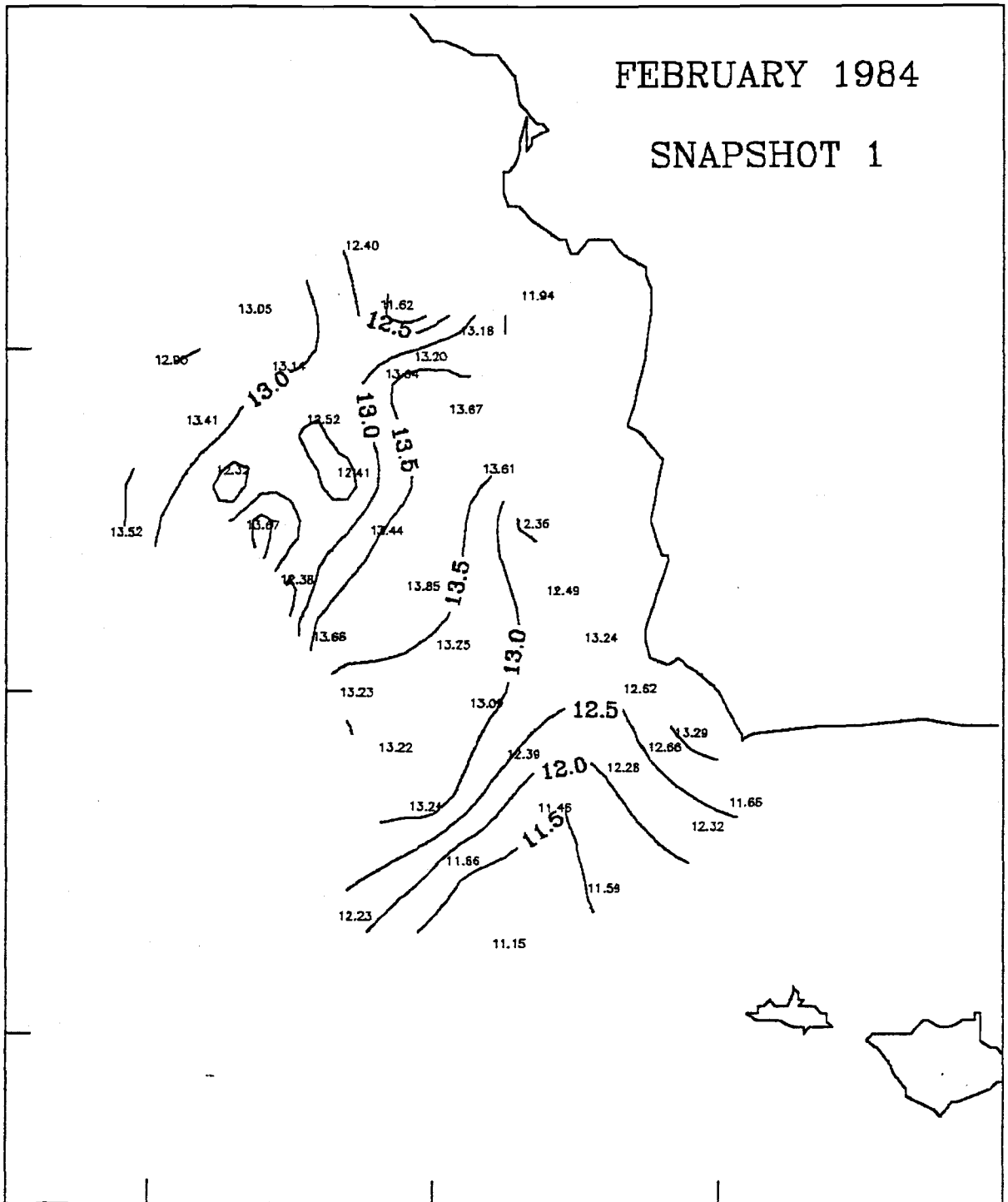
50 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

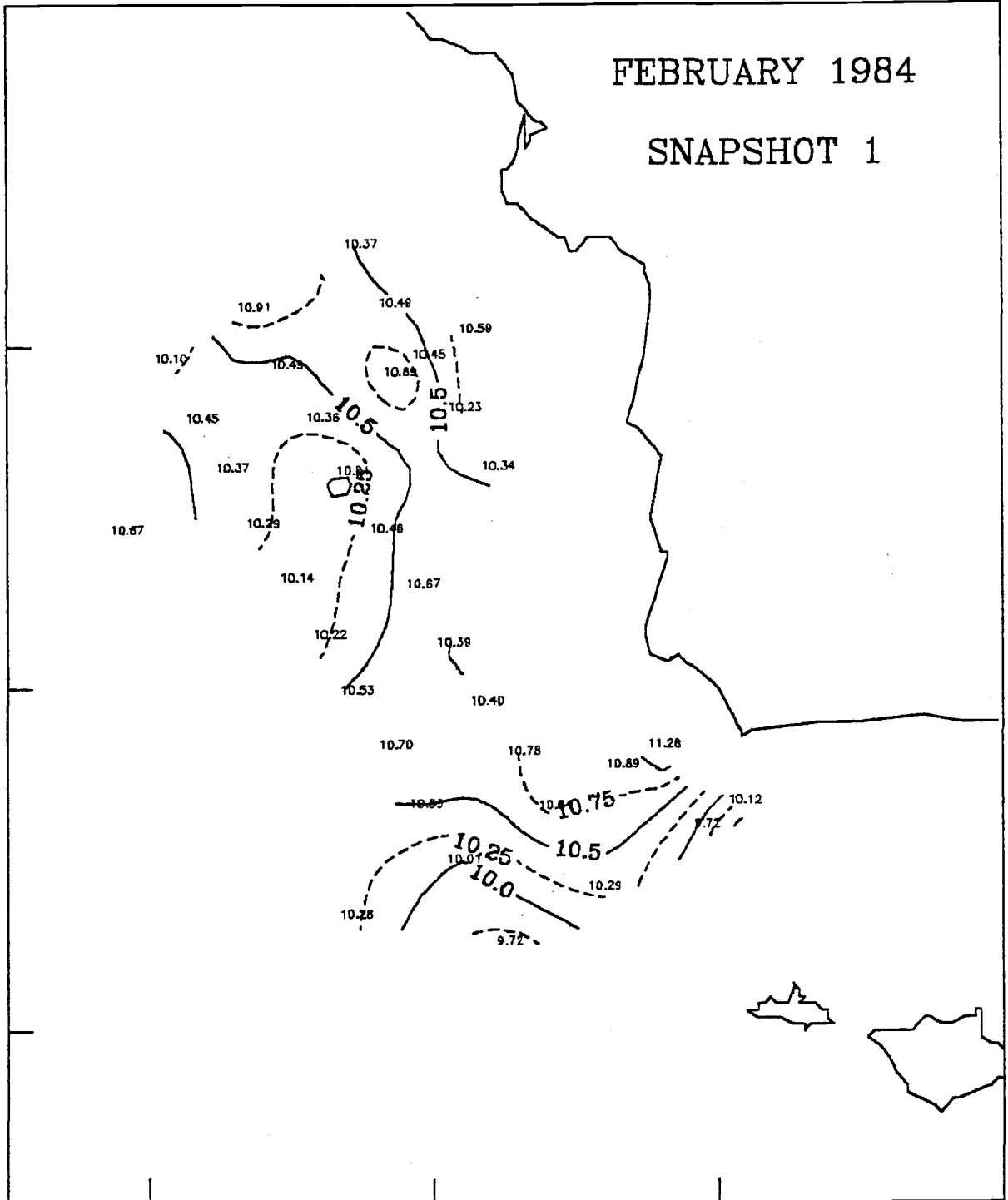
100 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

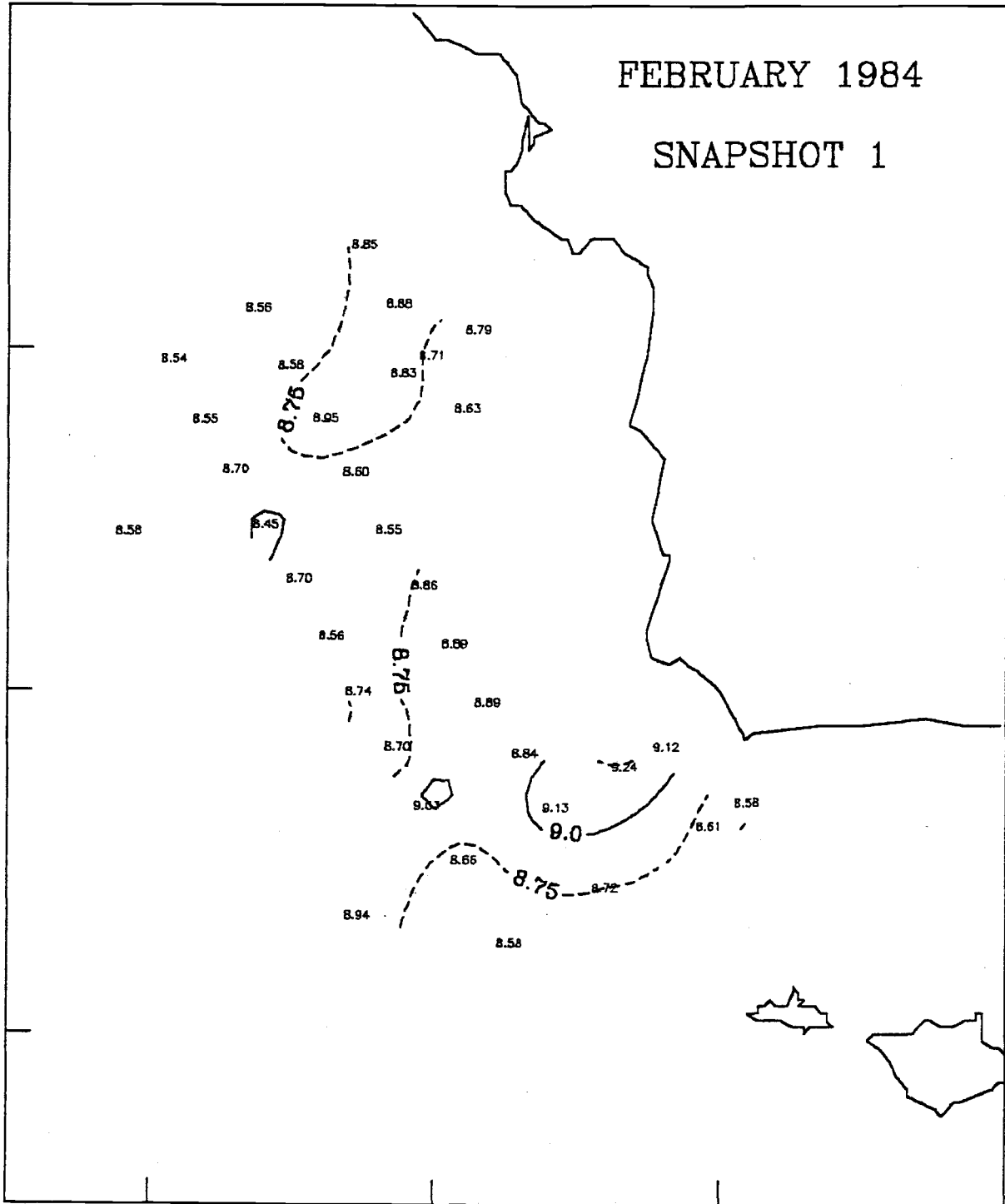
200 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

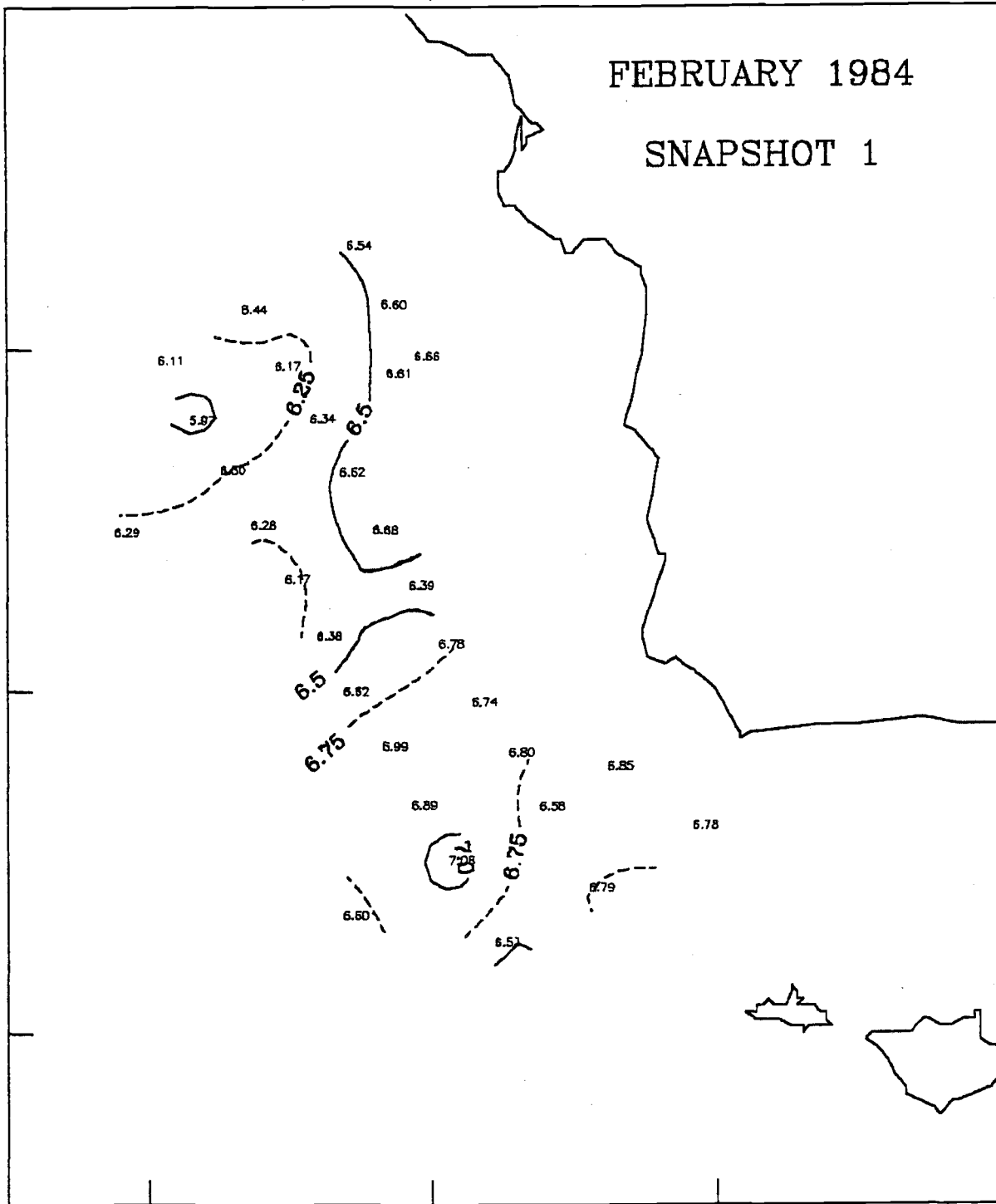
400 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

SALINITY (PPT)

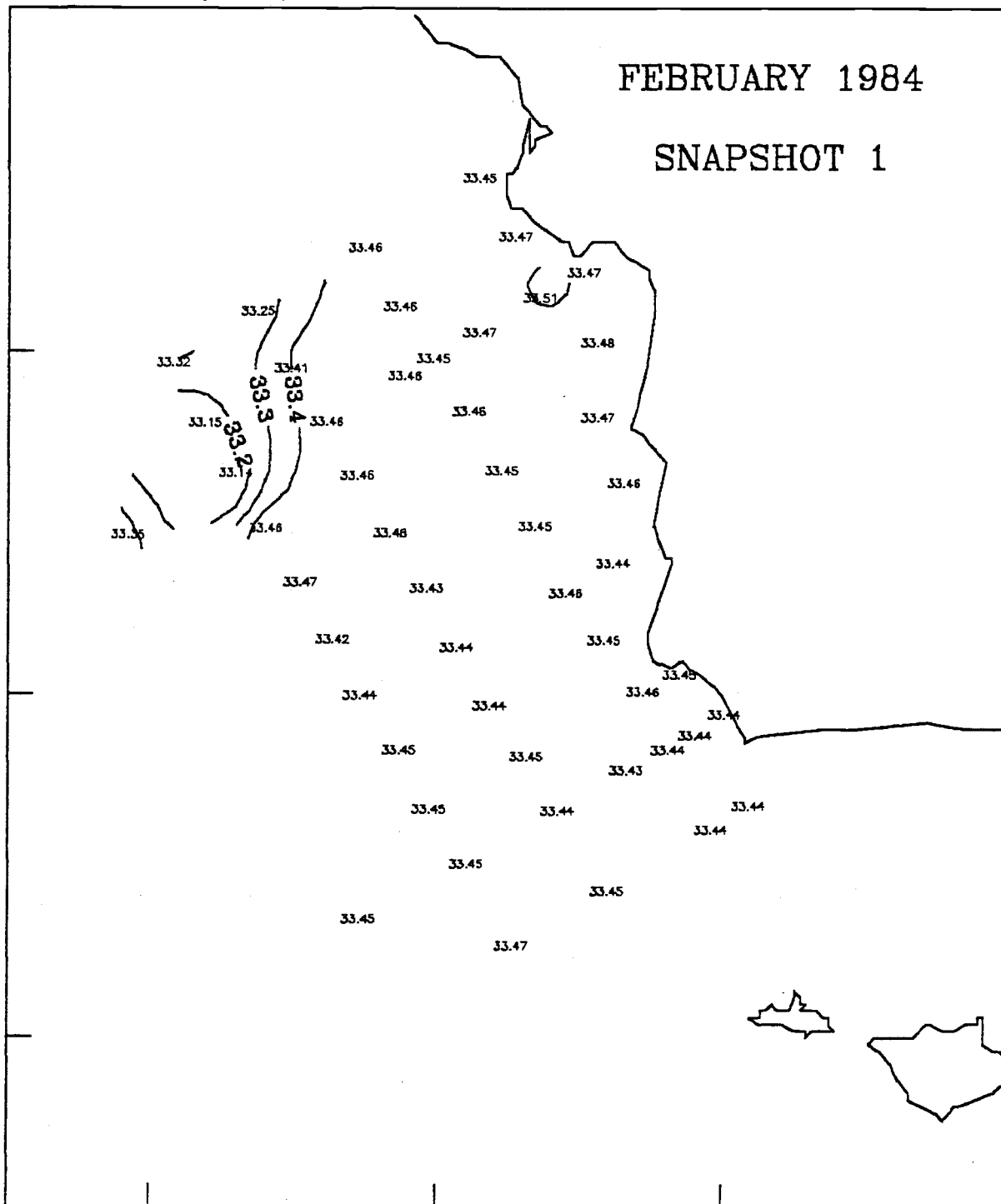
10 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

SALINITY (PPT)

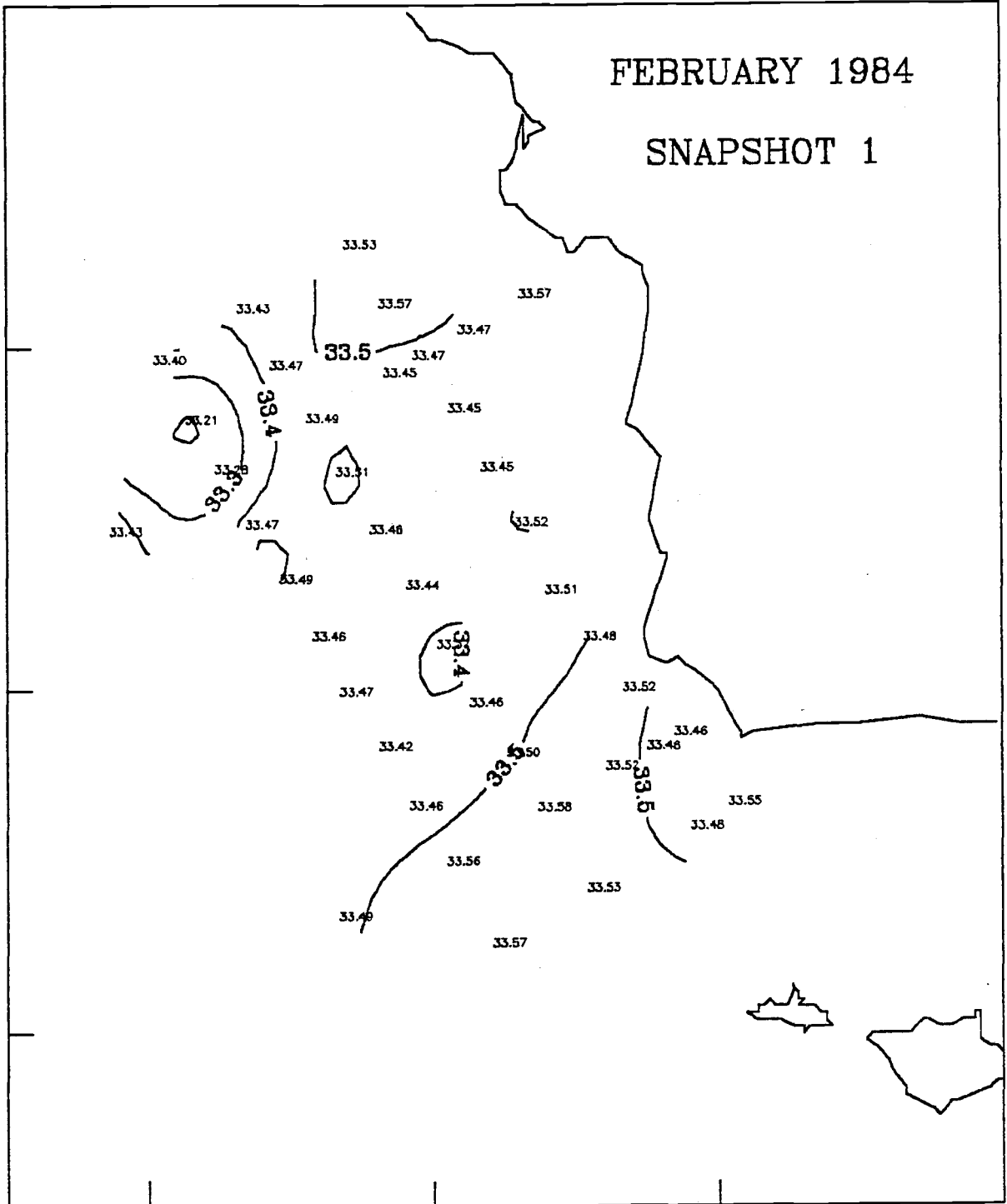
50 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

SALINITY (PPT)

100 M

FEBRUARY 1984

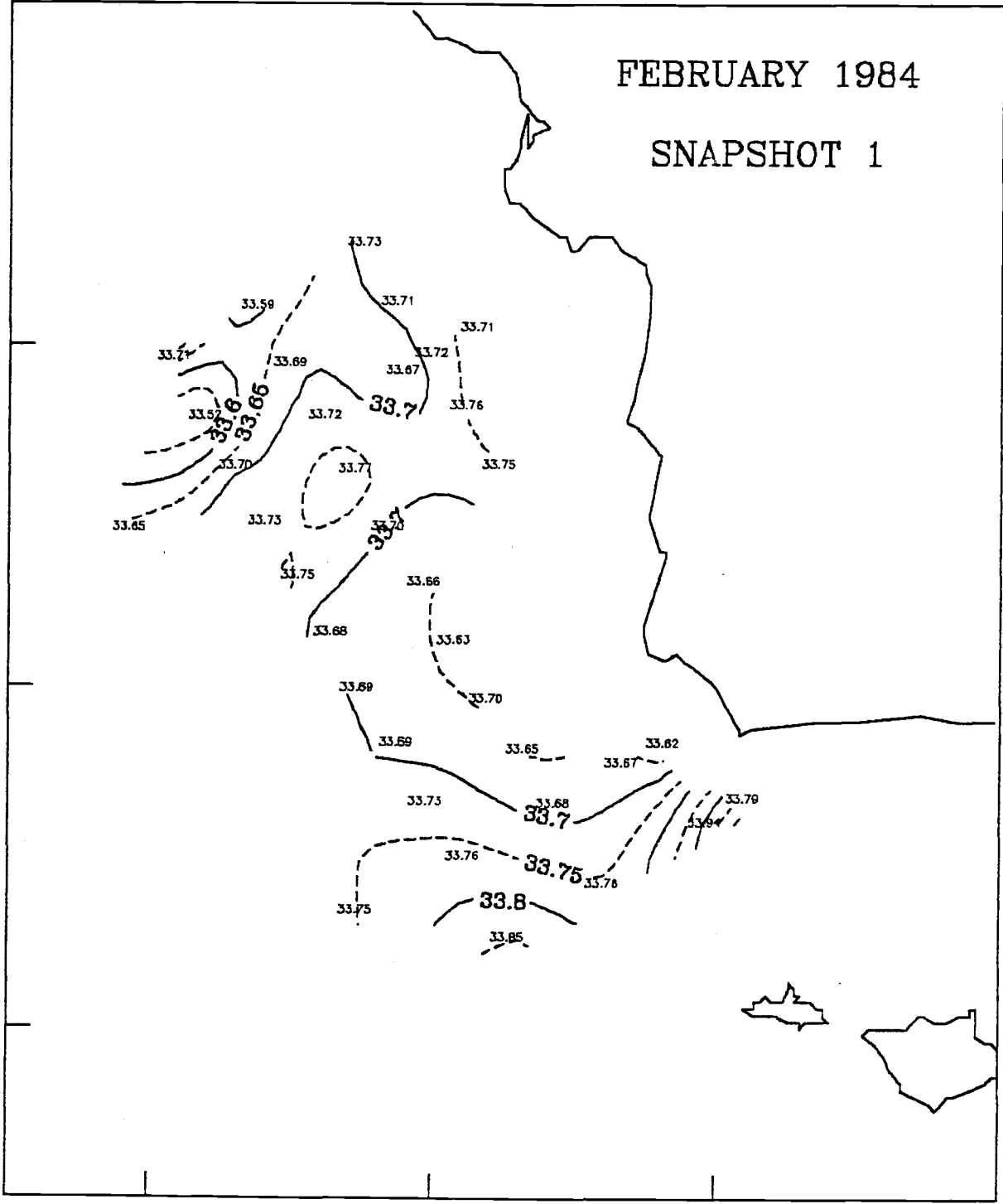
SNAPSHOT 1

35

34

121

120



SALINITY (PPT)

200 M

FEBRUARY 1984

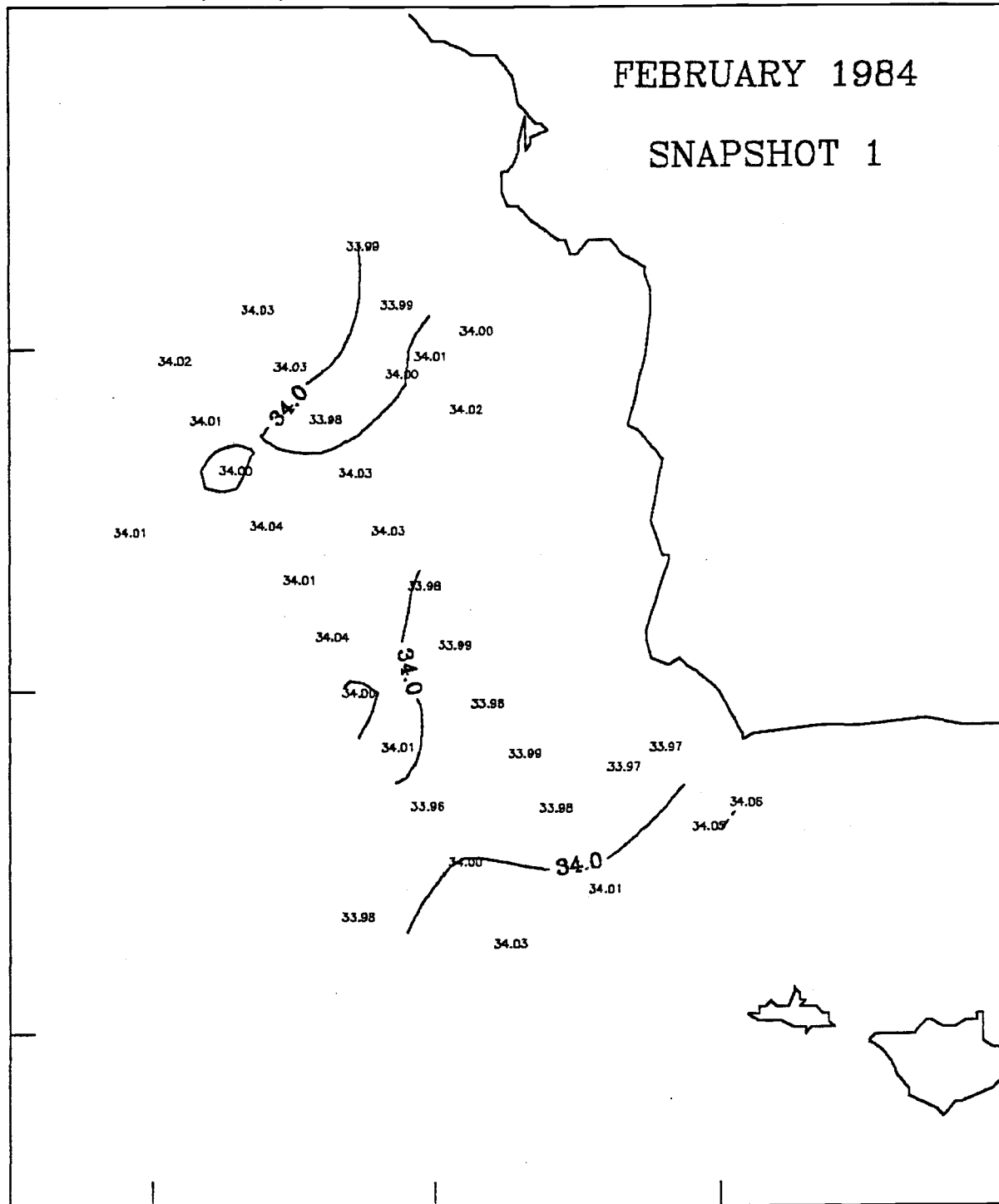
SNAPSHOT 1

35

34

121

120



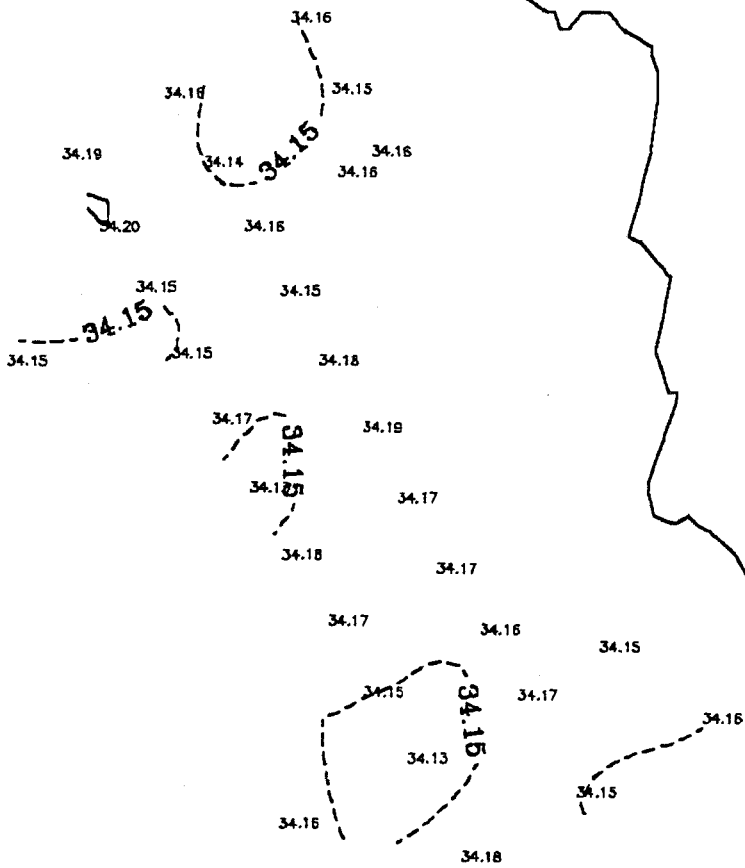
SALINITY (PPT)

400 M

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

SIGMA-T

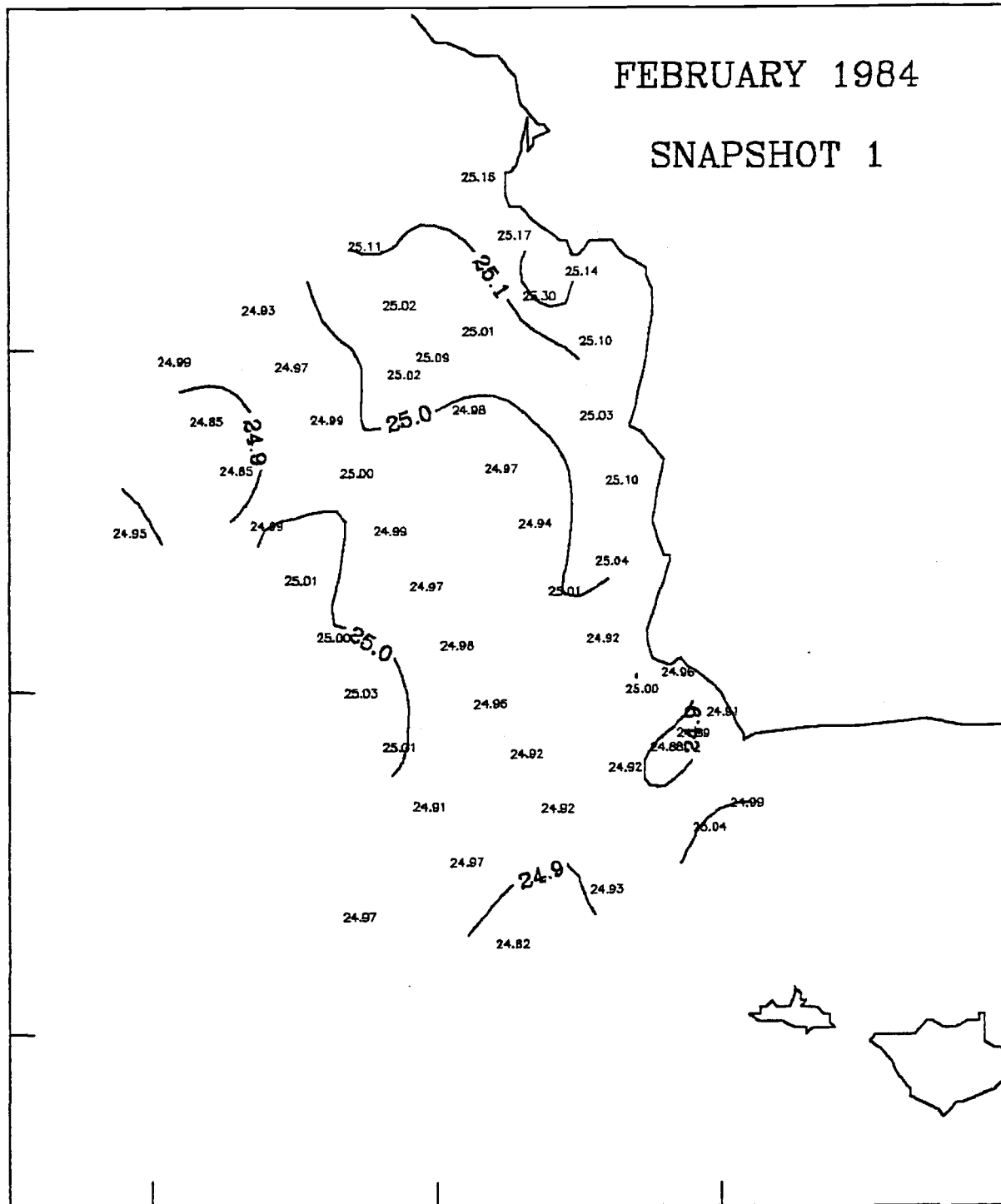
10 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

SIGMA-T

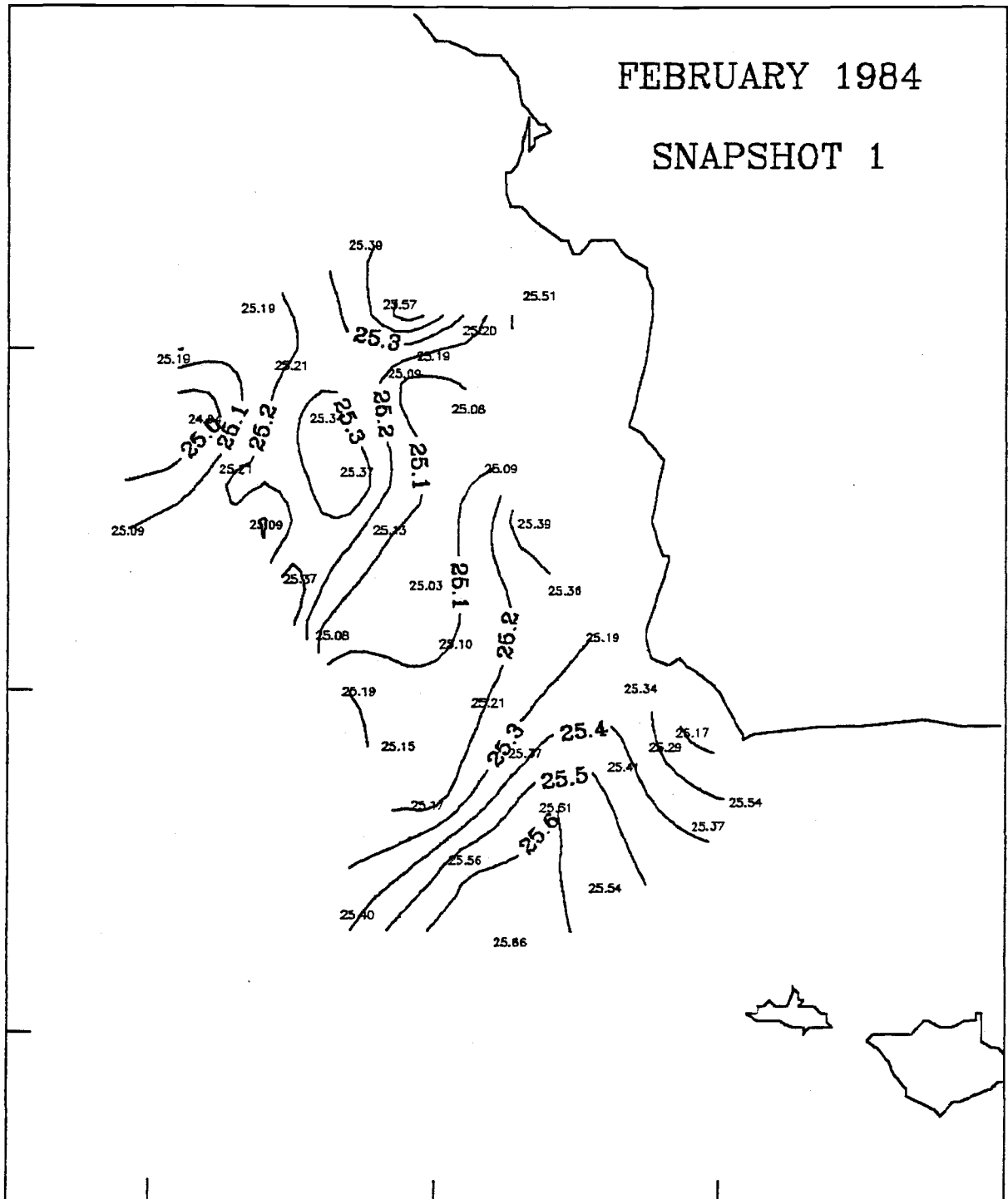
50 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

SIGMA-T

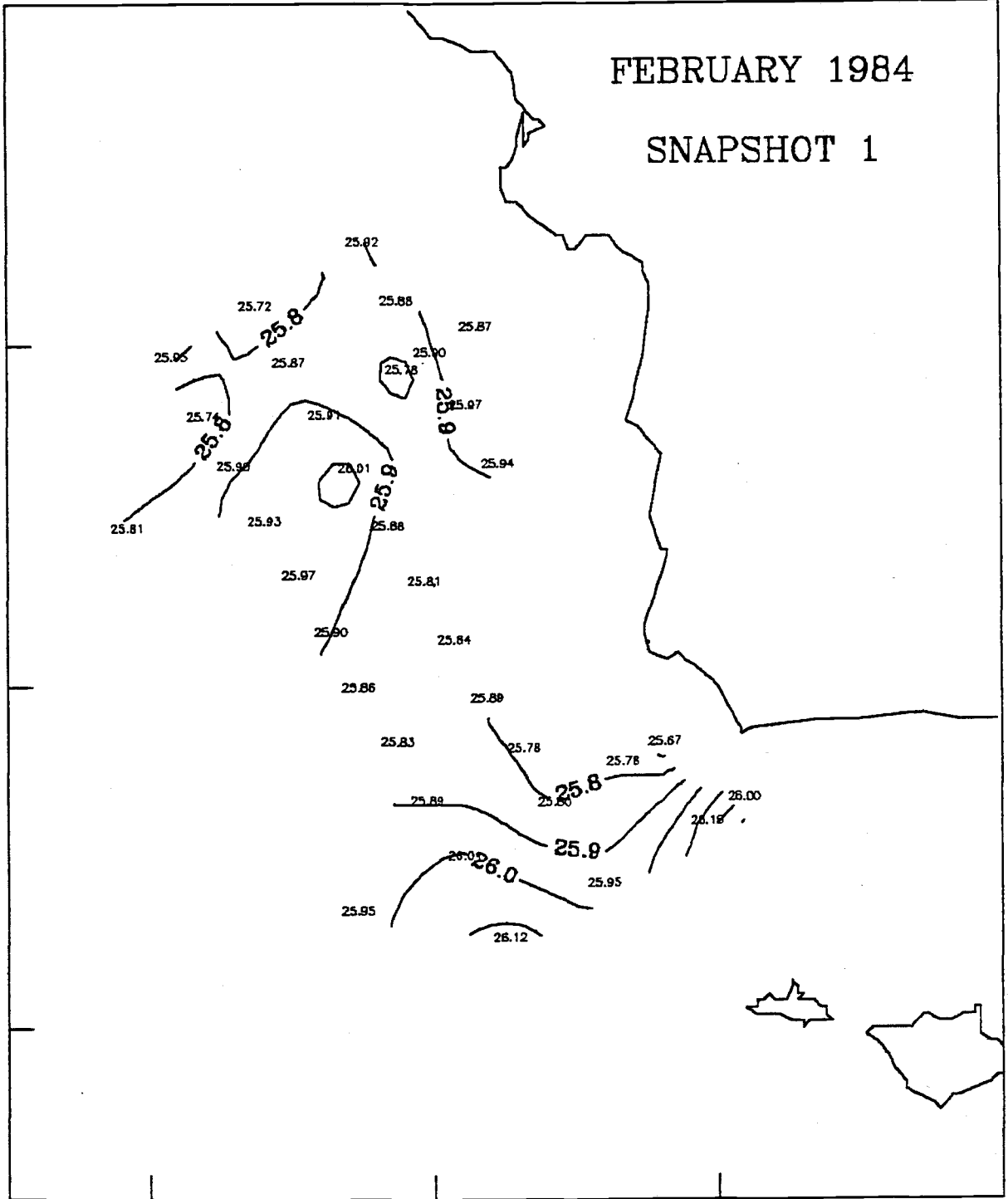
100 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

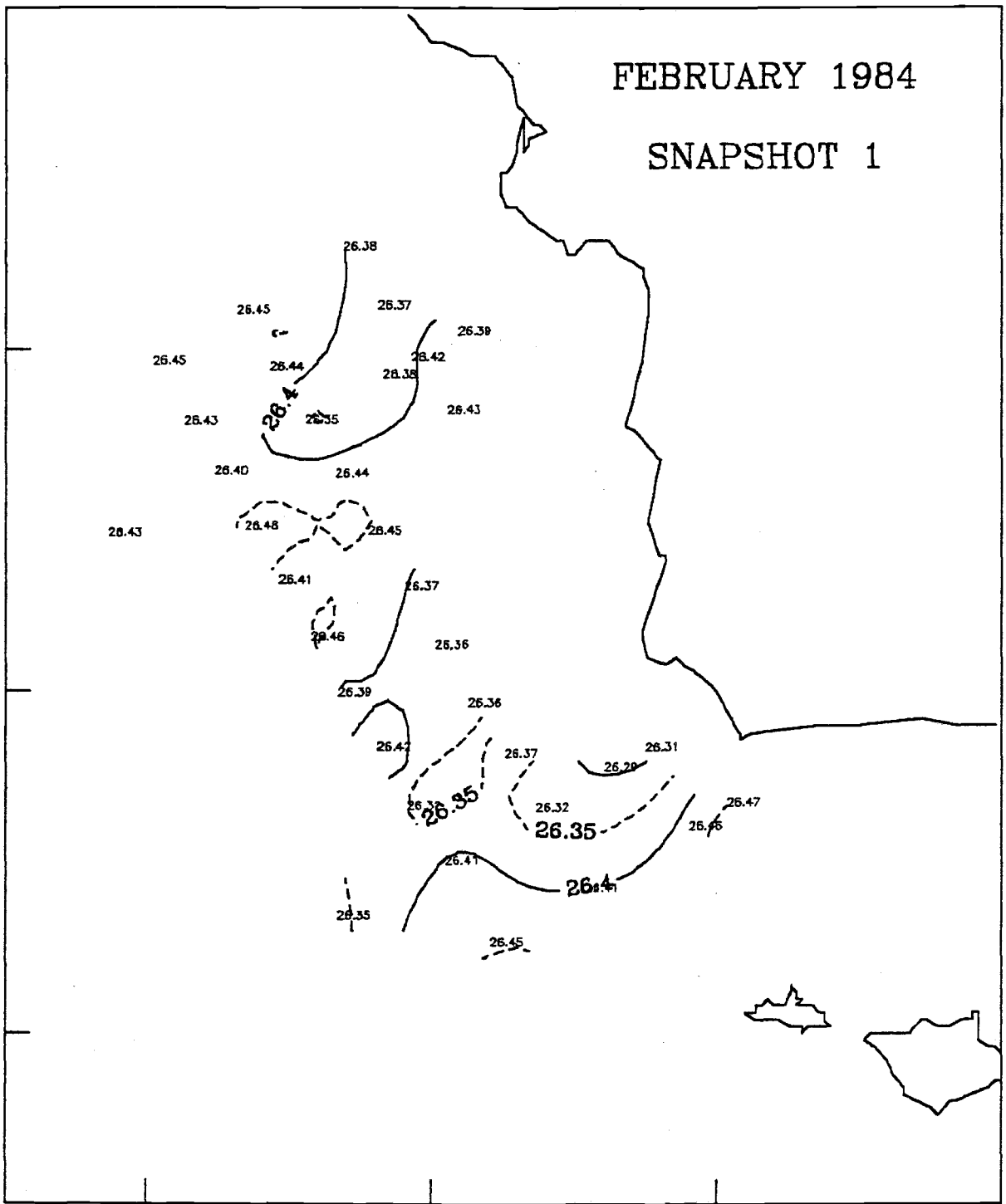
SIGMA-T

200 M

FEBRUARY 1984
SNAPSHOT 1

35

34



121

120

SIGMA-T

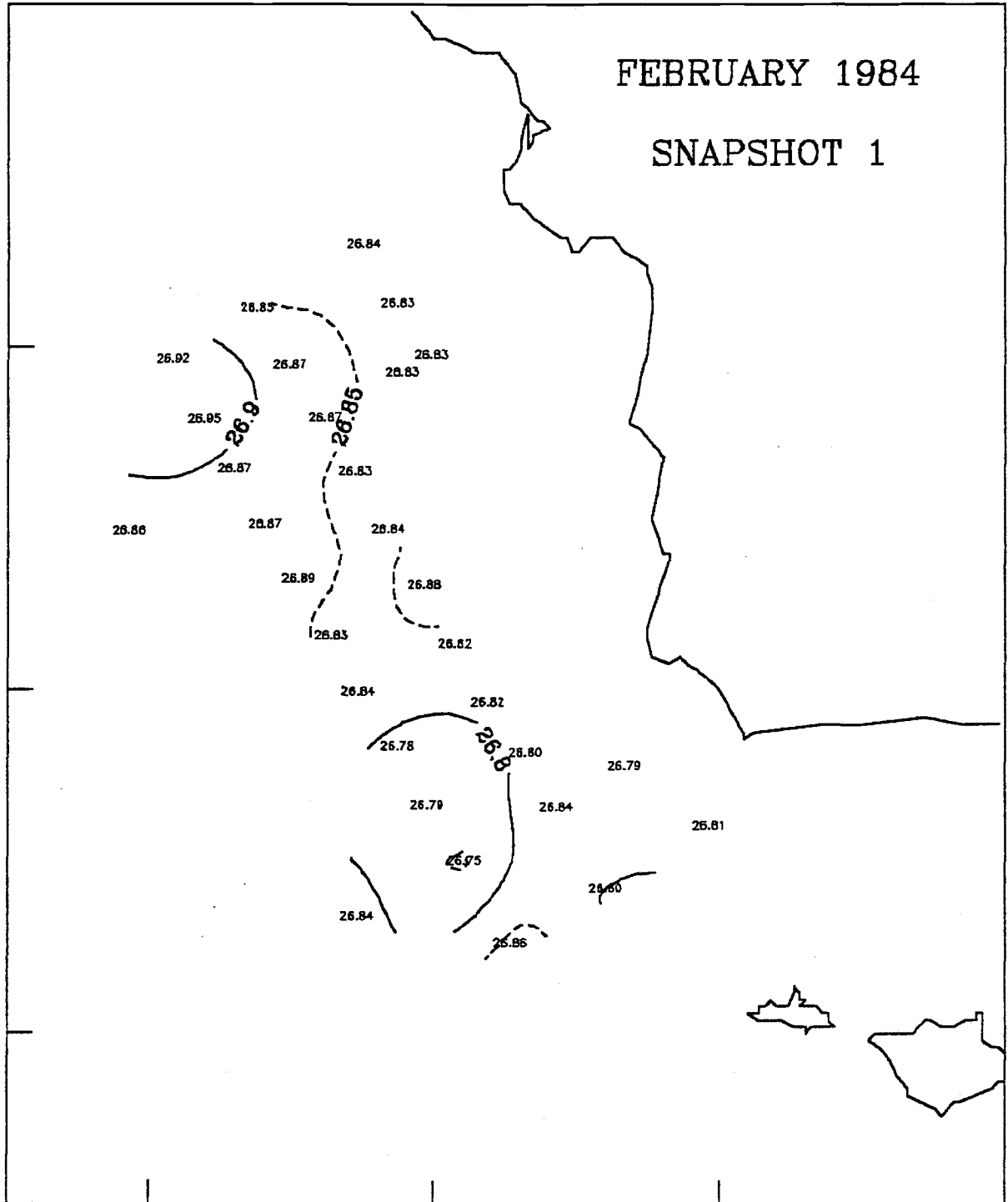
400 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

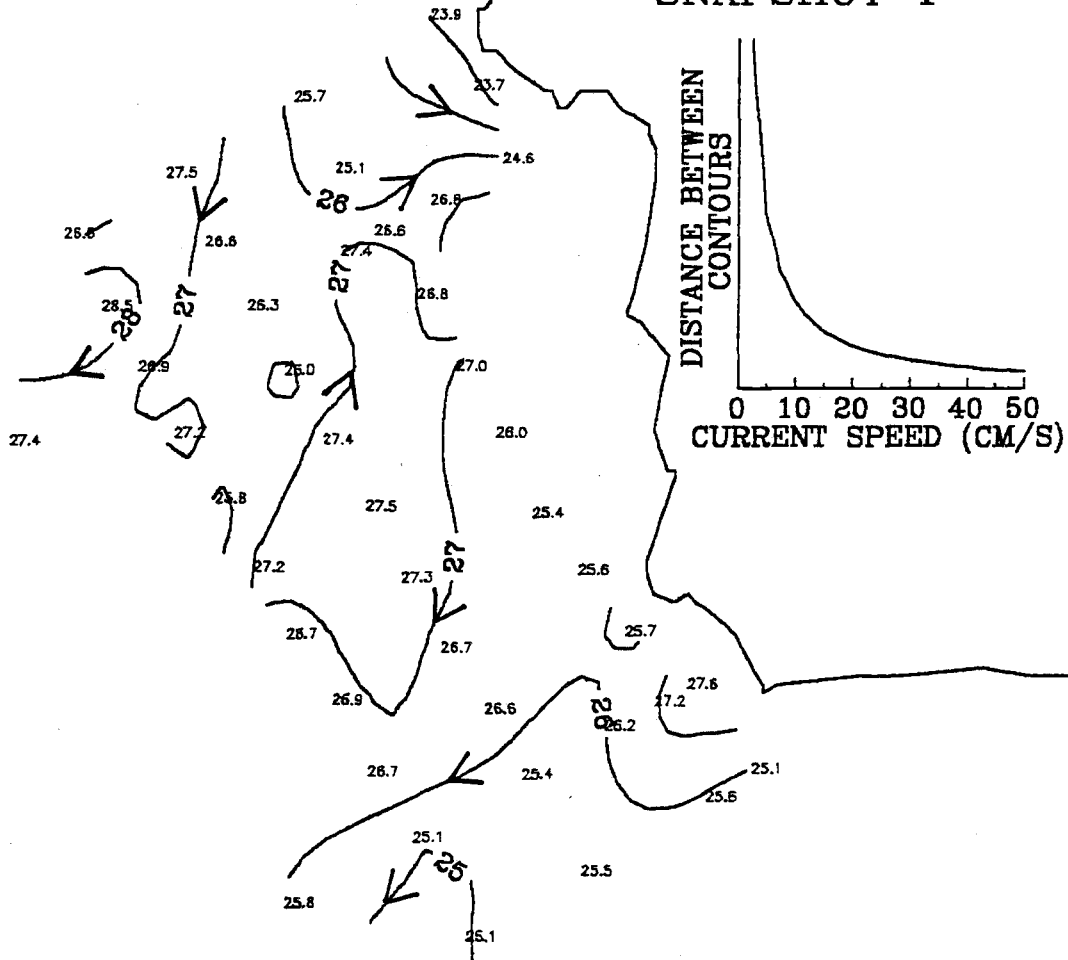
DYNAMIC HEIGHT (DYN CM)

0/100 M

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

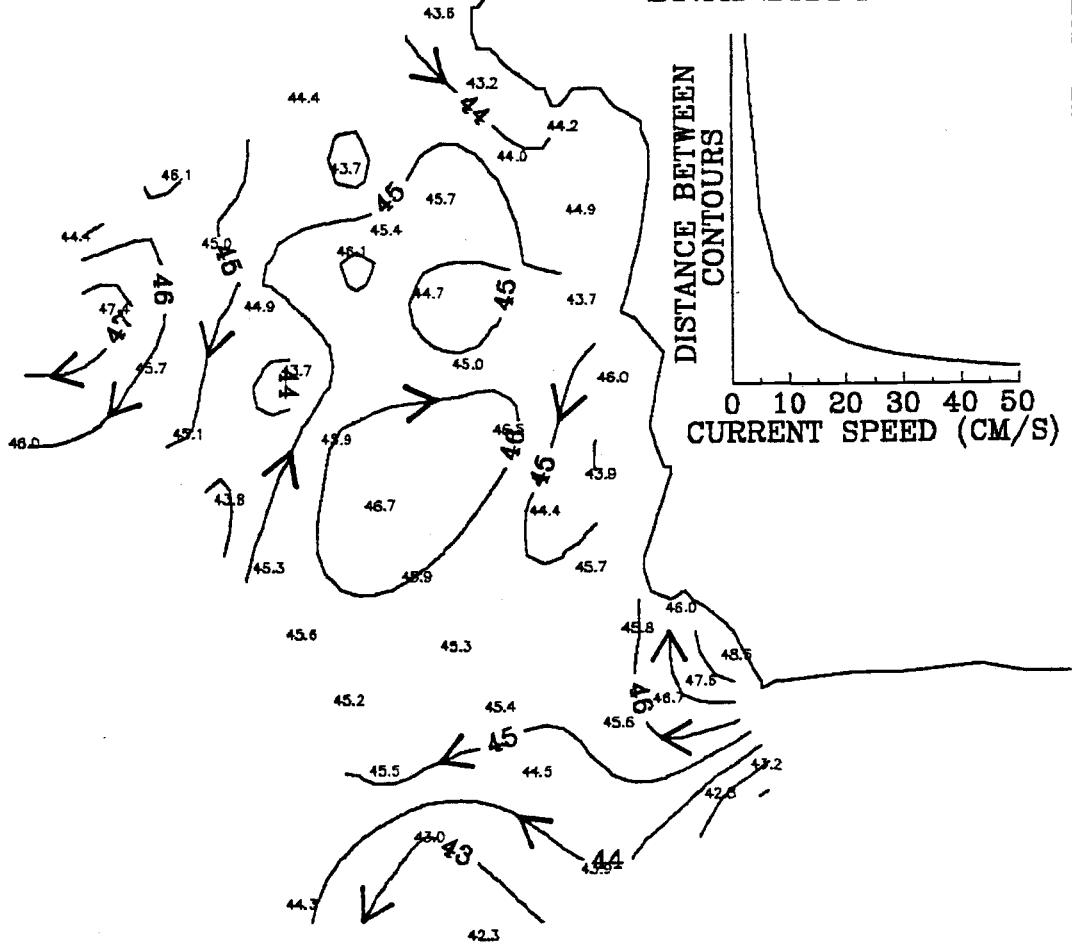
DYNAMIC HEIGHT (DYN CM)

0/200 M

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

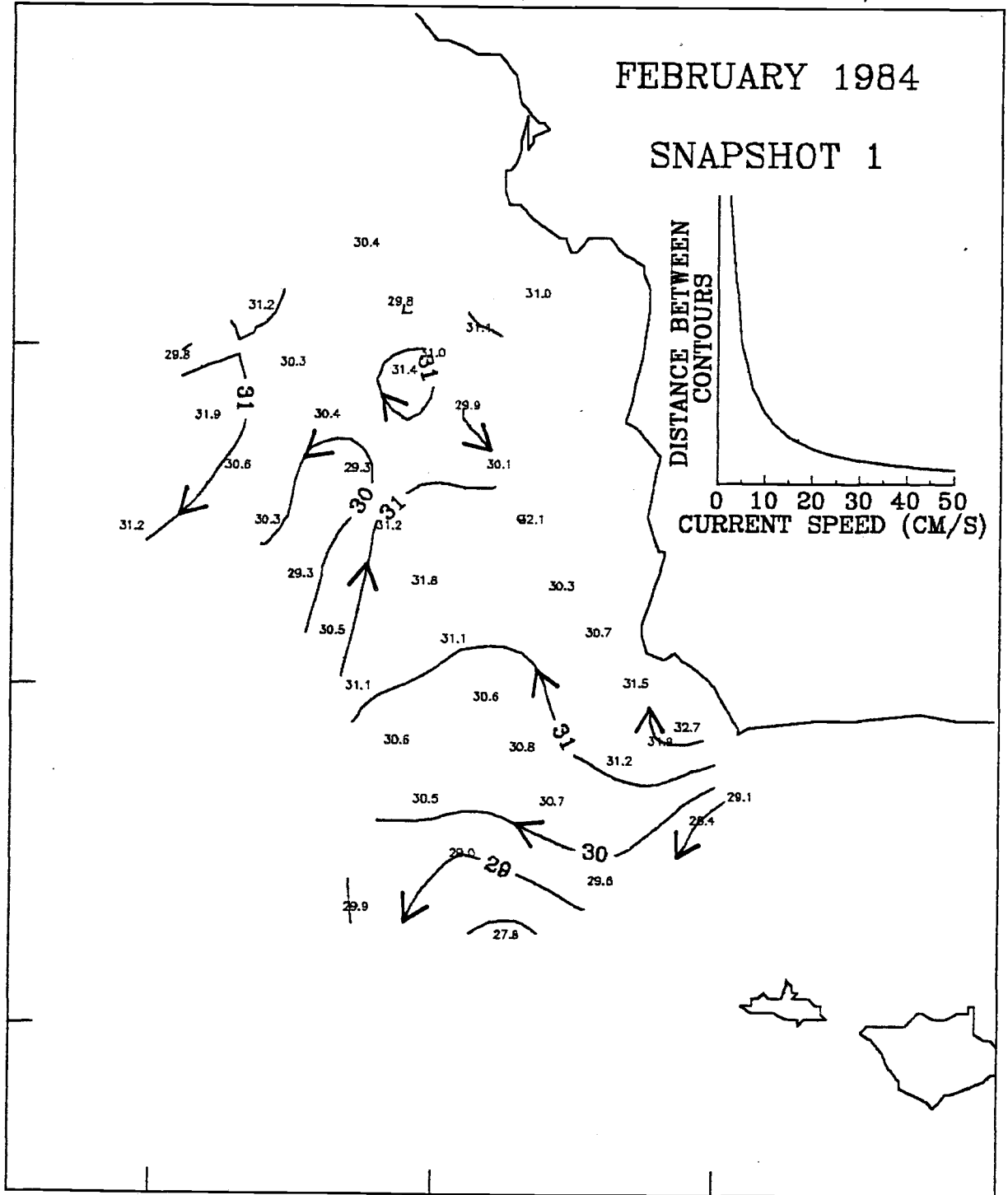
DYNAMIC HEIGHT (DYN CM)

50/200 M

FEBRUARY 1984

SNAPSHOT 1

35



DISTANCE BETWEEN CONTOURS

0 10 20 30 40 50
CURRENT SPEED (CM/S)

34

121

120

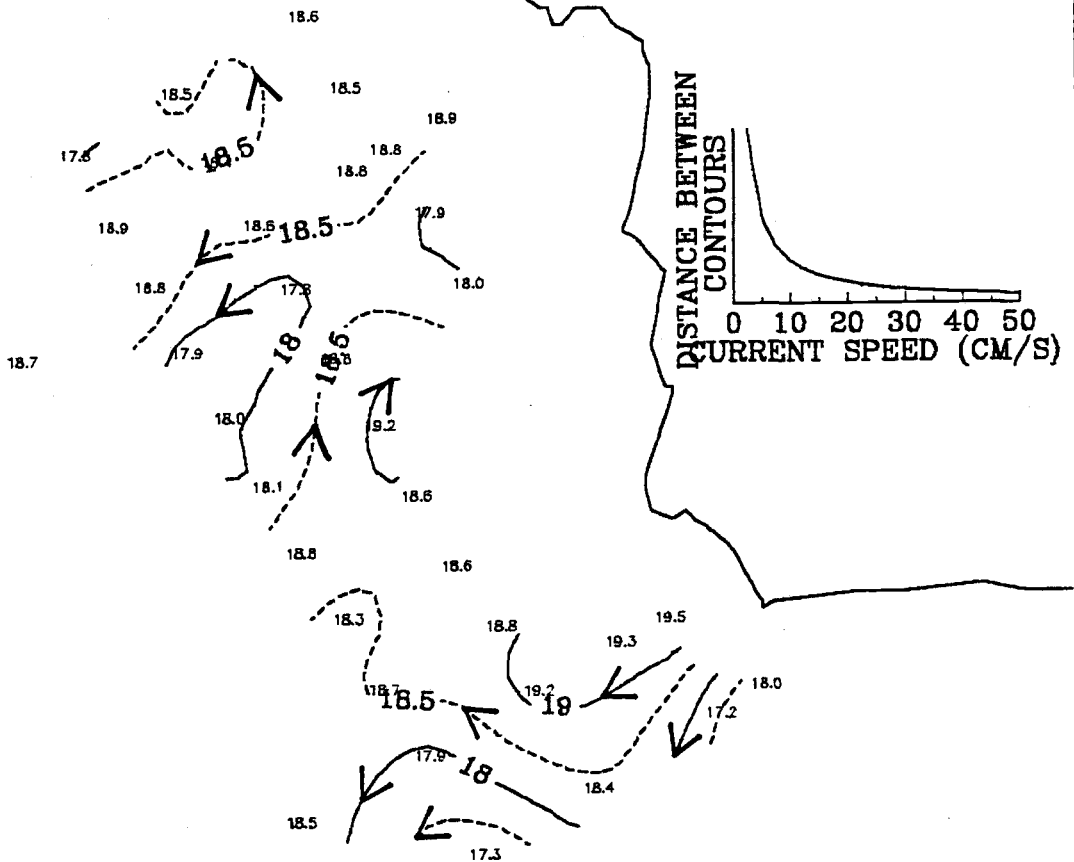
DYNAMIC HEIGHT (DYN CM)

100/200 M

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

DYNAMIC HEIGHT (DYN CM)

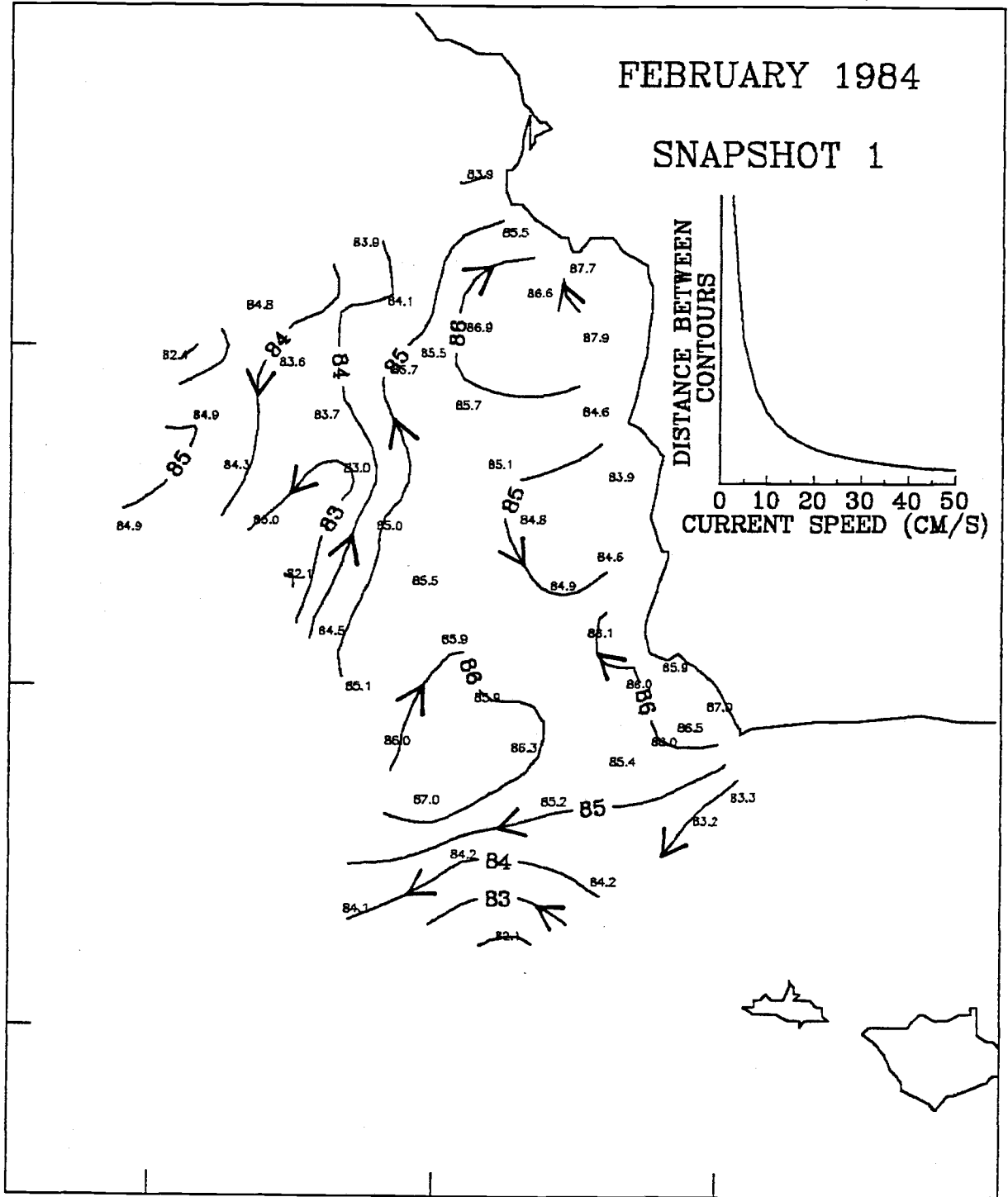
0/500 M

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

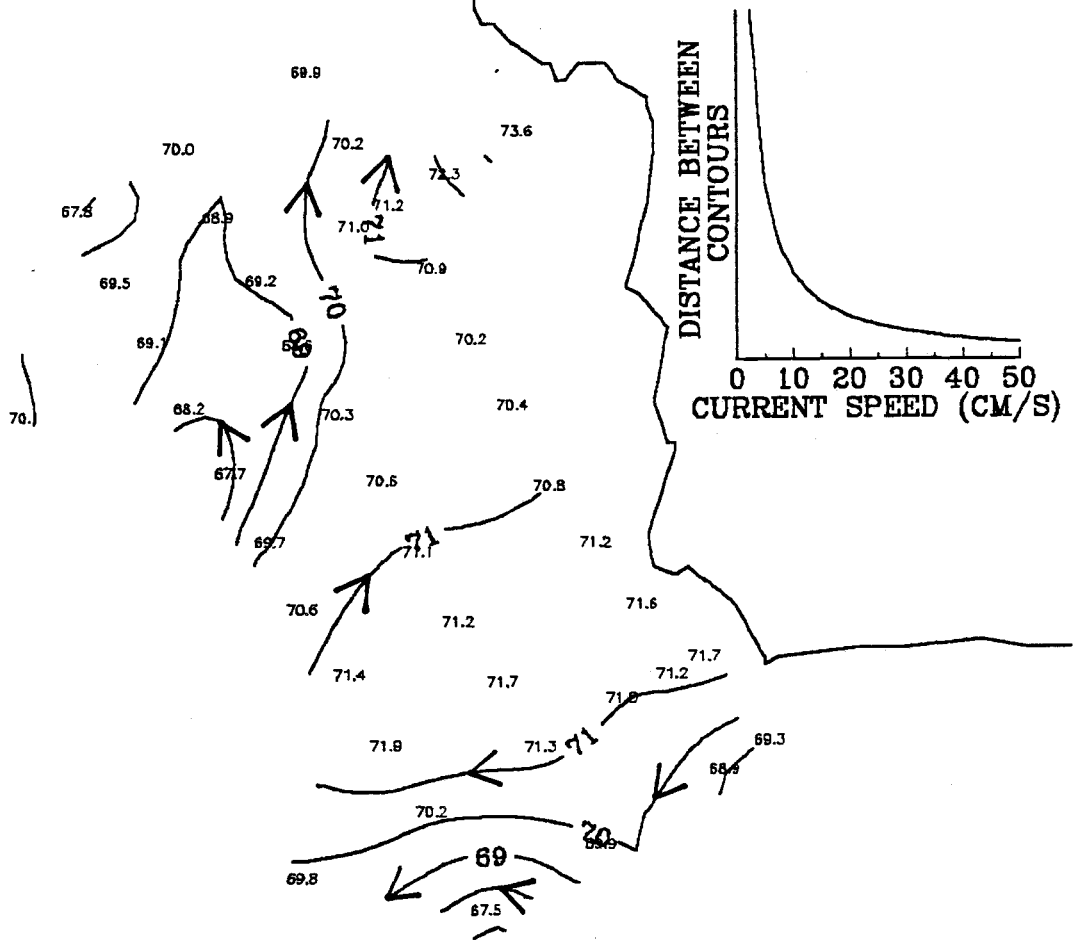
DYNAMIC HEIGHT (DYN CM)

50/500 M

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

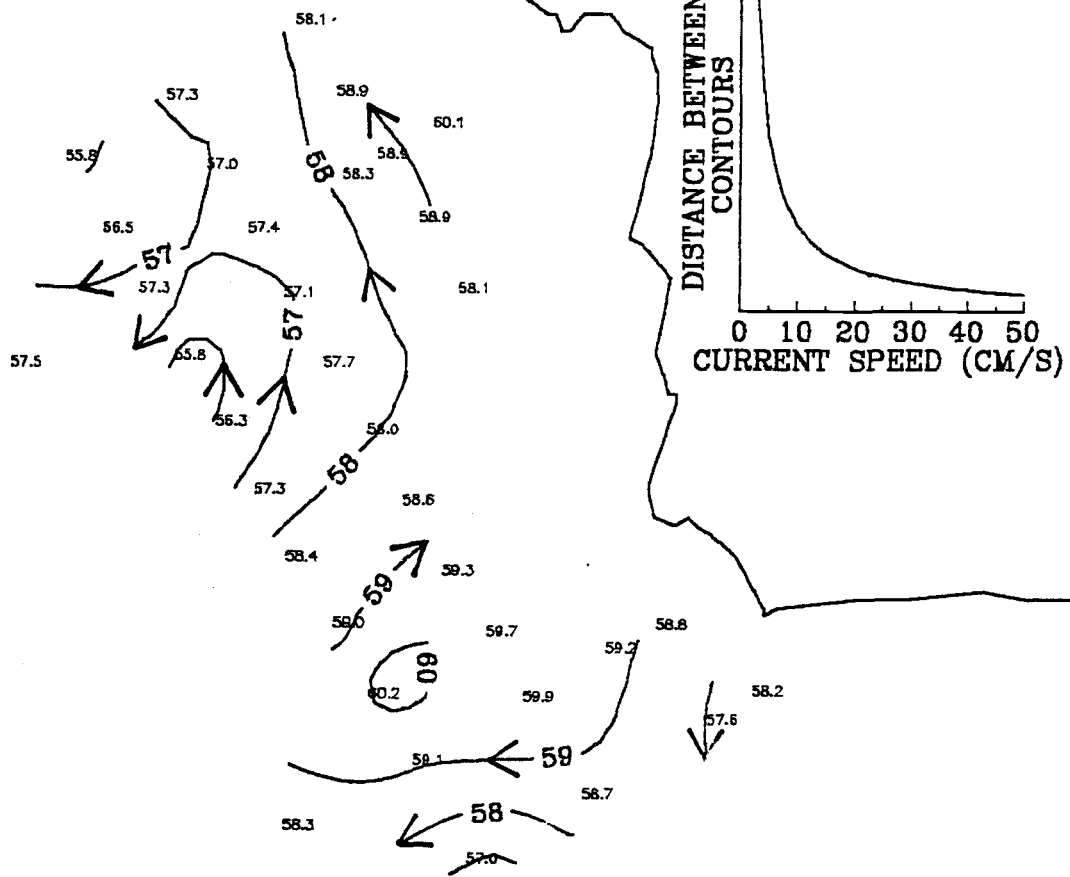
DYNAMIC HEIGHT (DYN CM)

100/500 M

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

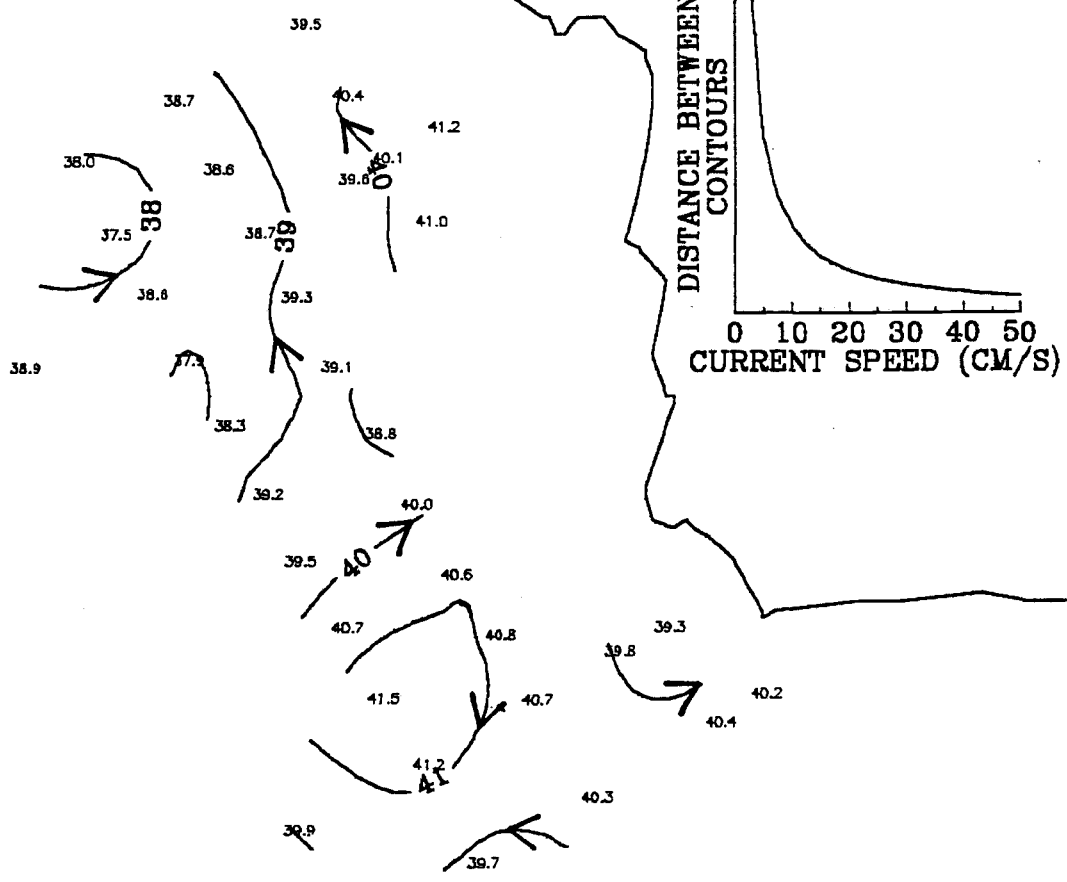
DYNAMIC HEIGHT (DYN CM)

200/500 M

FEBRUARY 1984

SNAPSHOT 1

35



DISTANCE BETWEEN
CONTOURS

0 10 20 30 40 50
CURRENT SPEED (CM/S)

34

121

120

DEPTH (M)

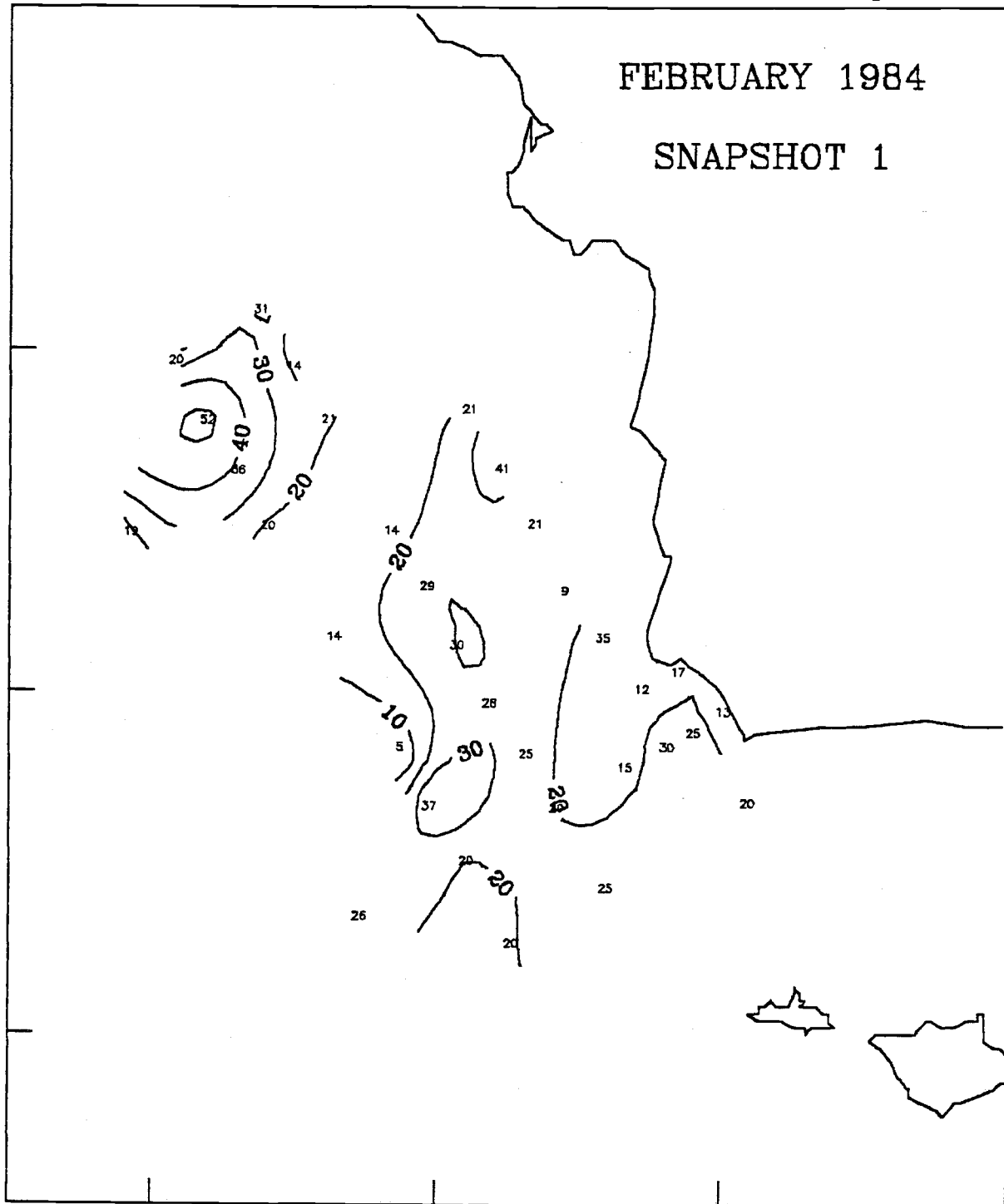
$\sigma_t = 25.0$

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

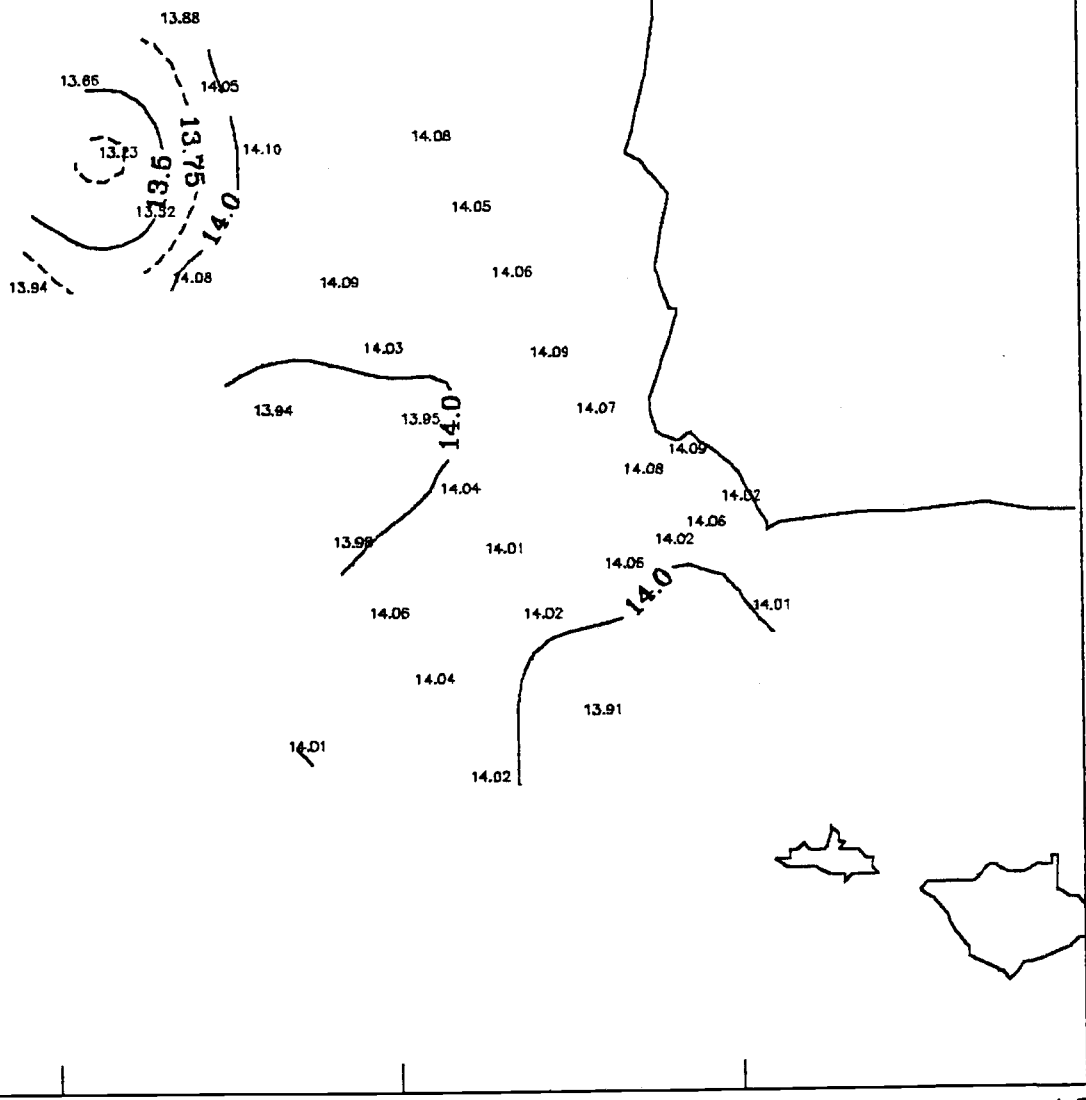
TEMPERATURE (DEG C)

$\sigma_t = 25.0$

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

SALINITY (PPT)

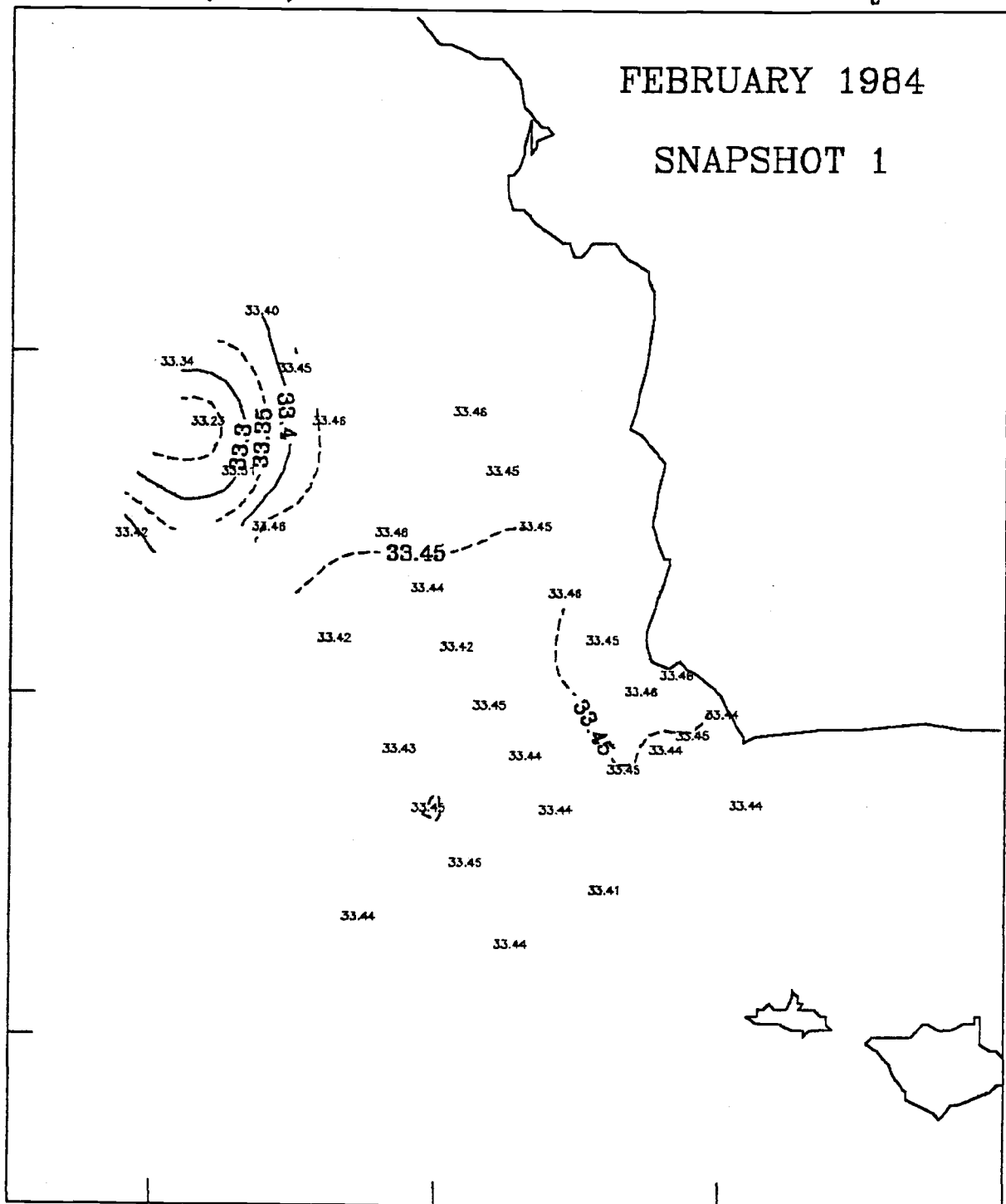
$\sigma_t = 25.0$

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

DEPTH (M)

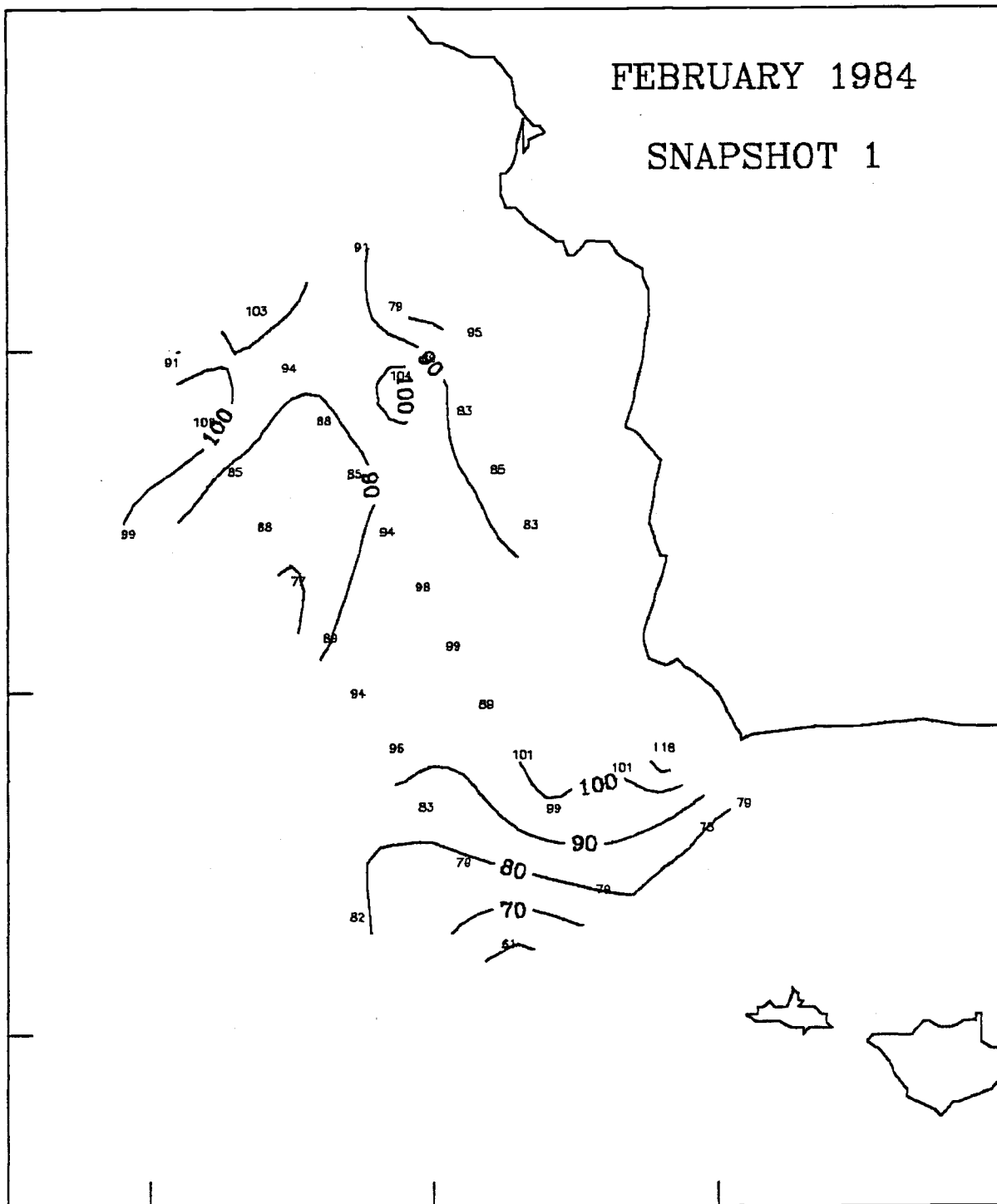
$\sigma_t = 25.8$

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

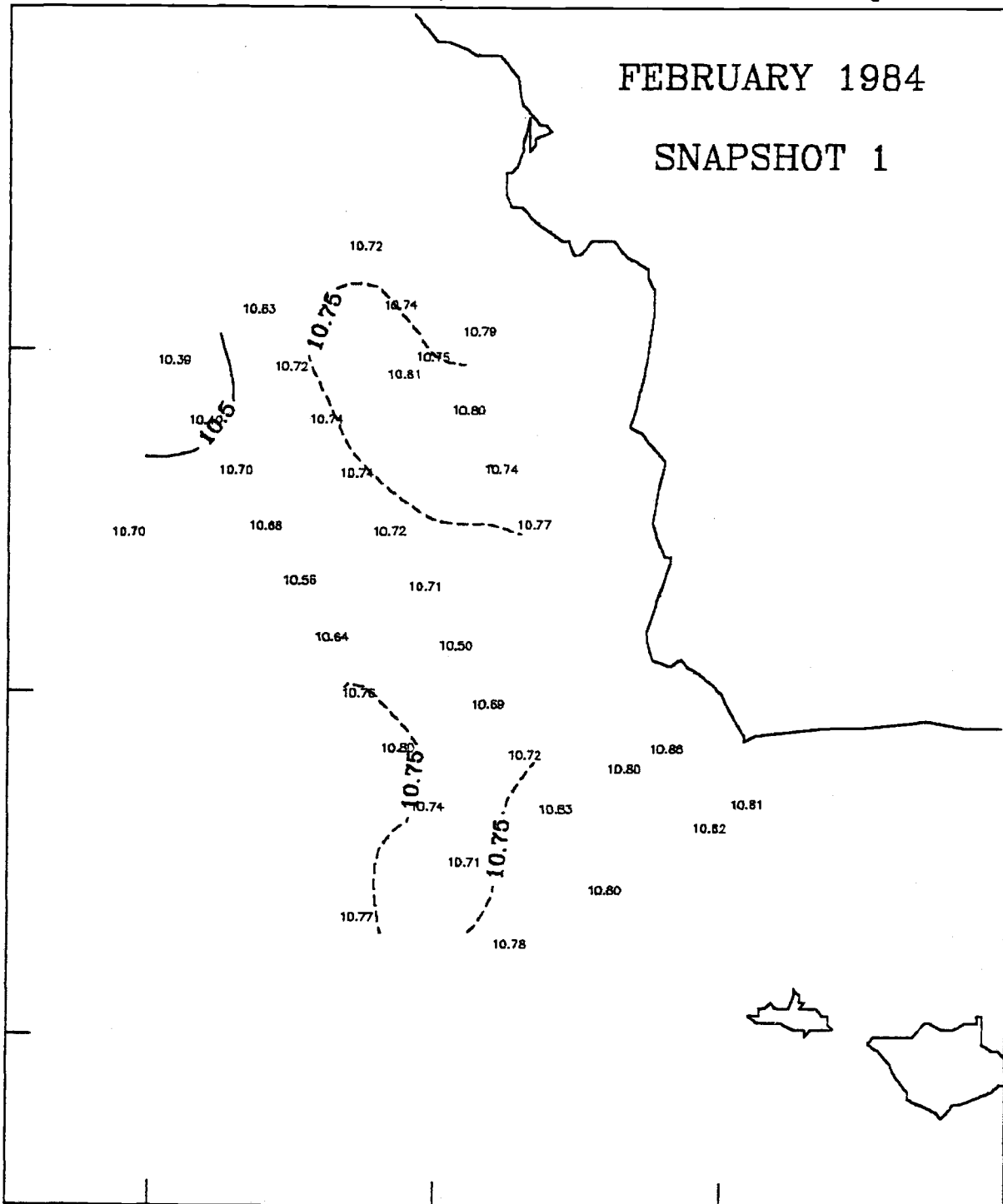
$\sigma_t=25.8$

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

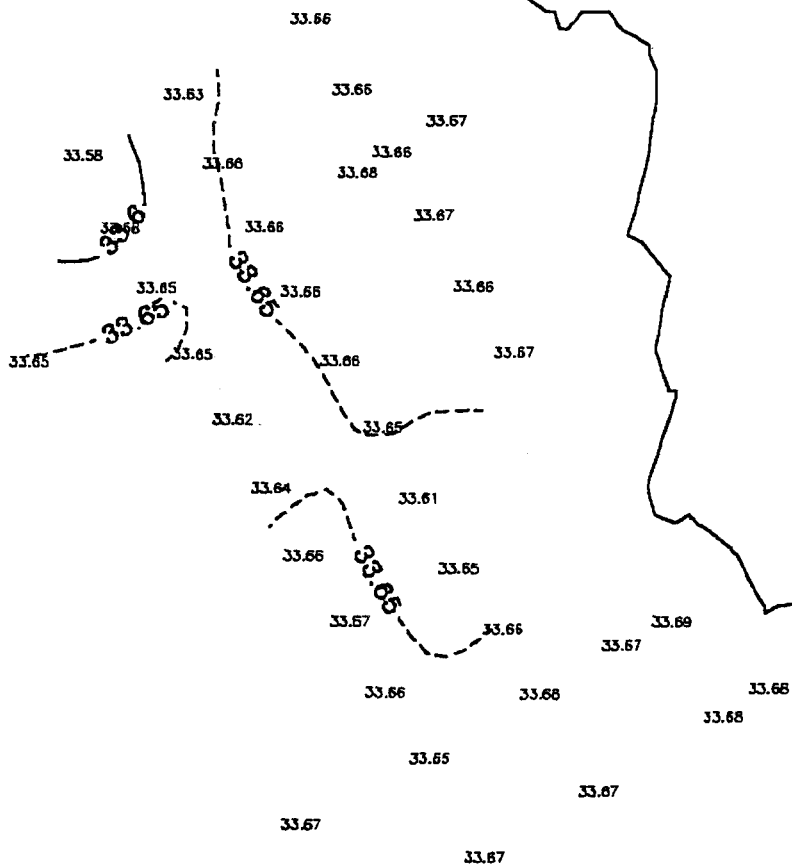
SALINITY (PPT)

$\sigma_t = 25.8$

FEBRUARY 1984

SNAPSHOT 1

35



34

121

120

DEPTH (M)

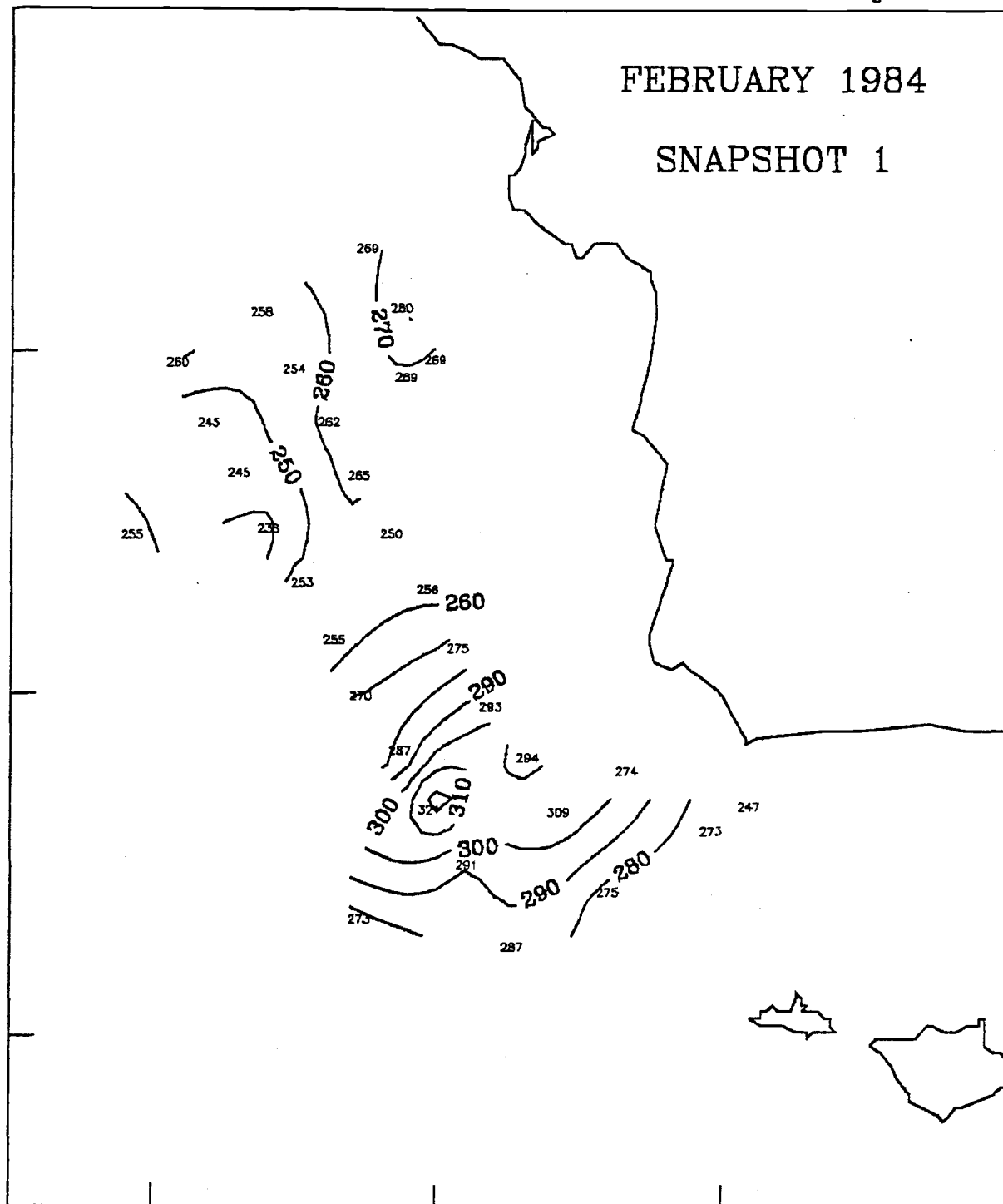
$\sigma_t = 26.6$

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

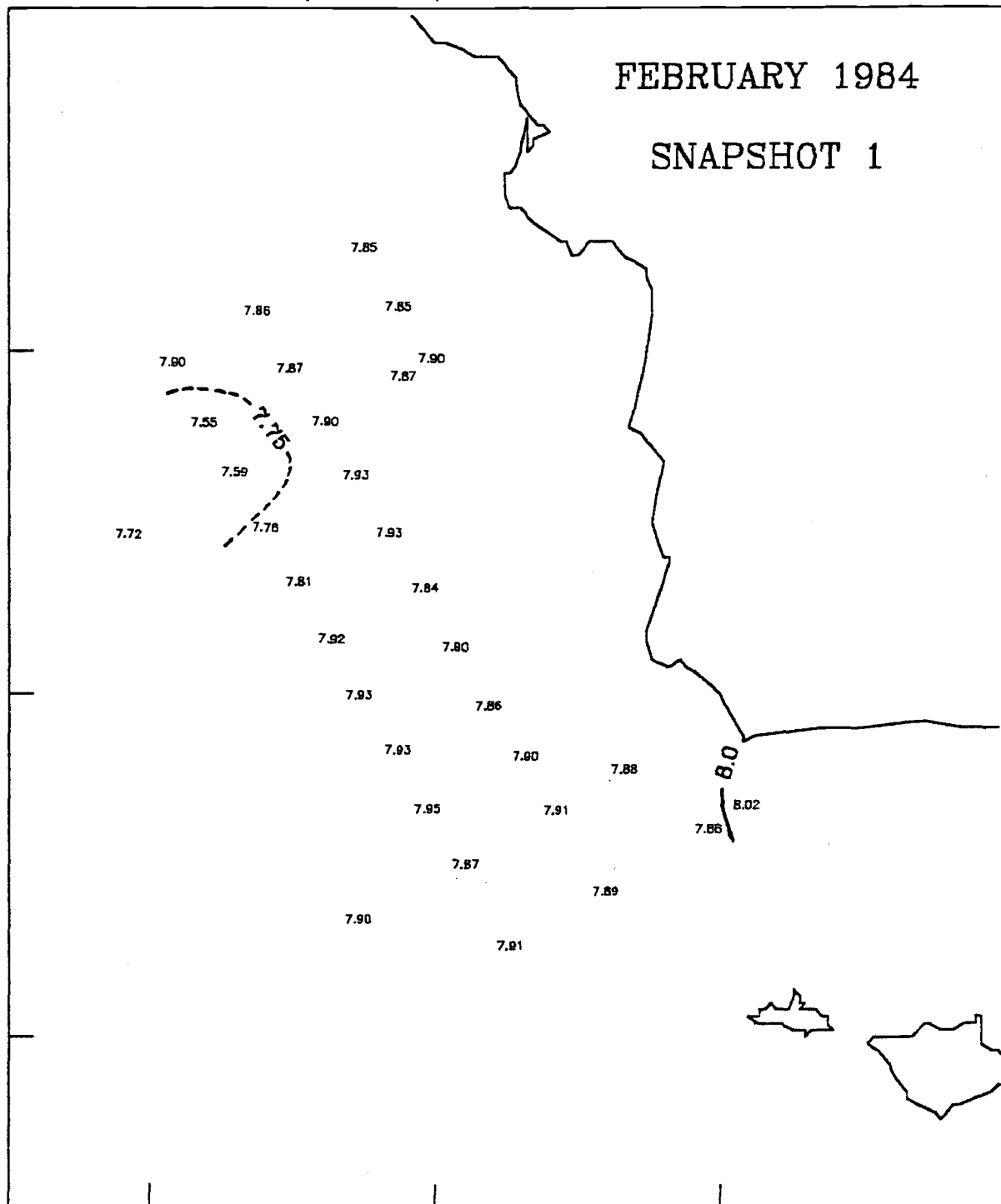
$\sigma_t = 26.6$

FEBRUARY 1984

SNAPSHOT 1

35

34



121

120

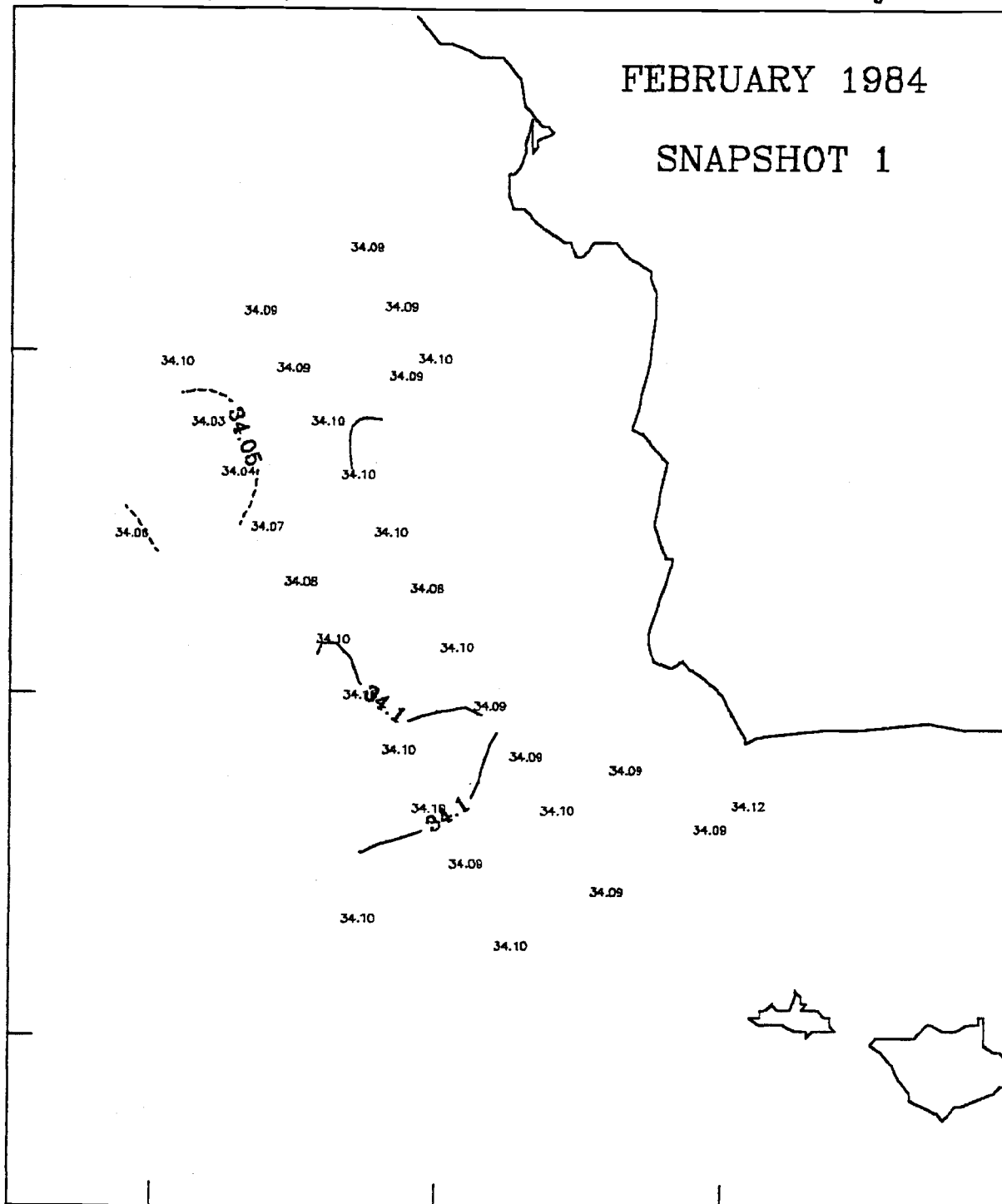
SALINITY (PPT)

$\sigma_t = 26.6$

FEBRUARY 1984

SNAPSHOT 1

35



34

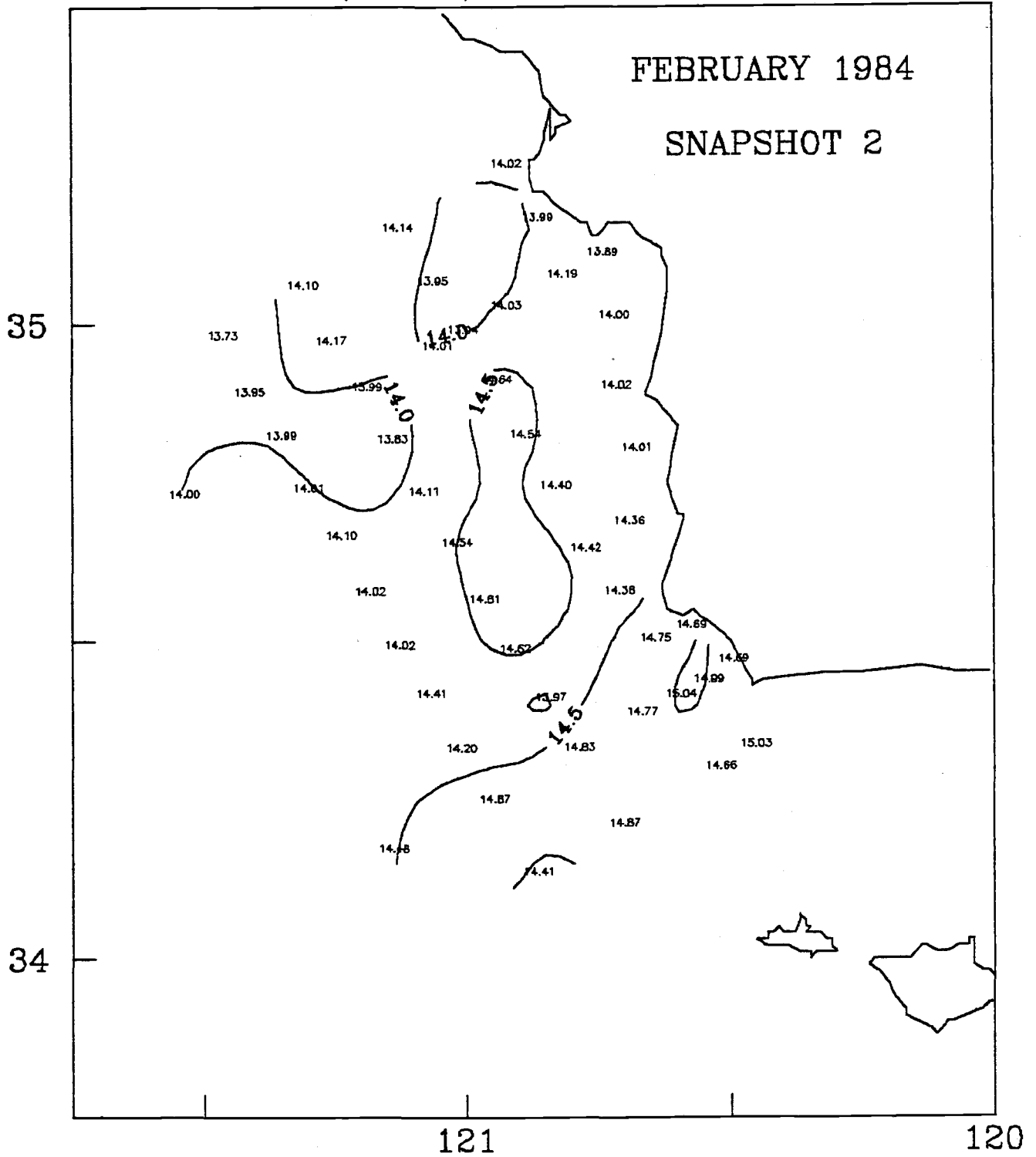
121

120

MAPS, SNAPSHOT 2

TEMPERATURE (DEG C)

10 M



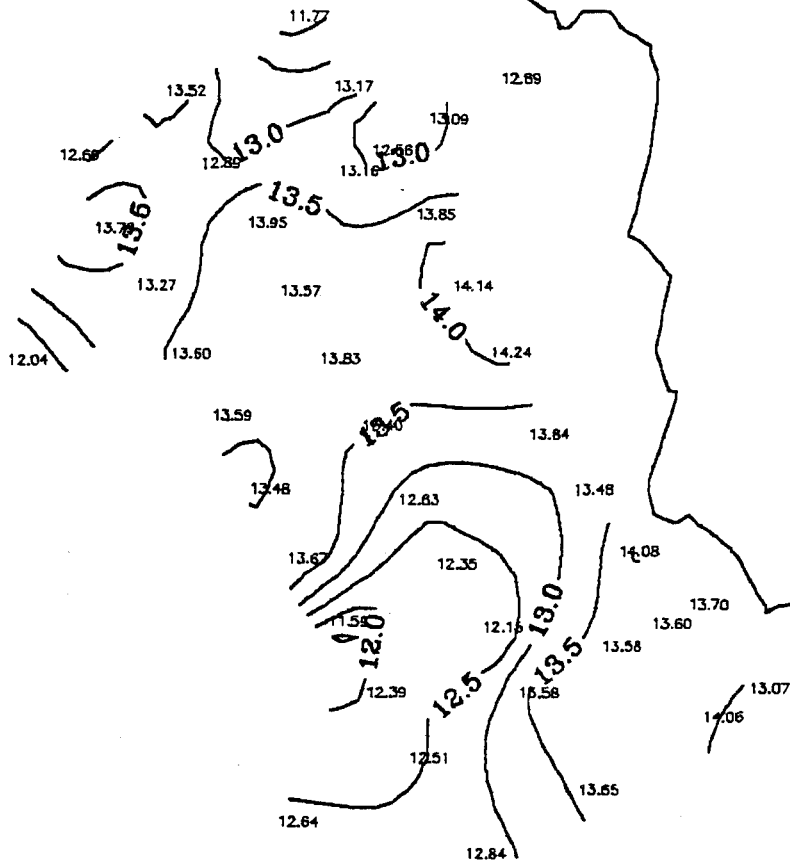
TEMPERATURE (DEG C)

50 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

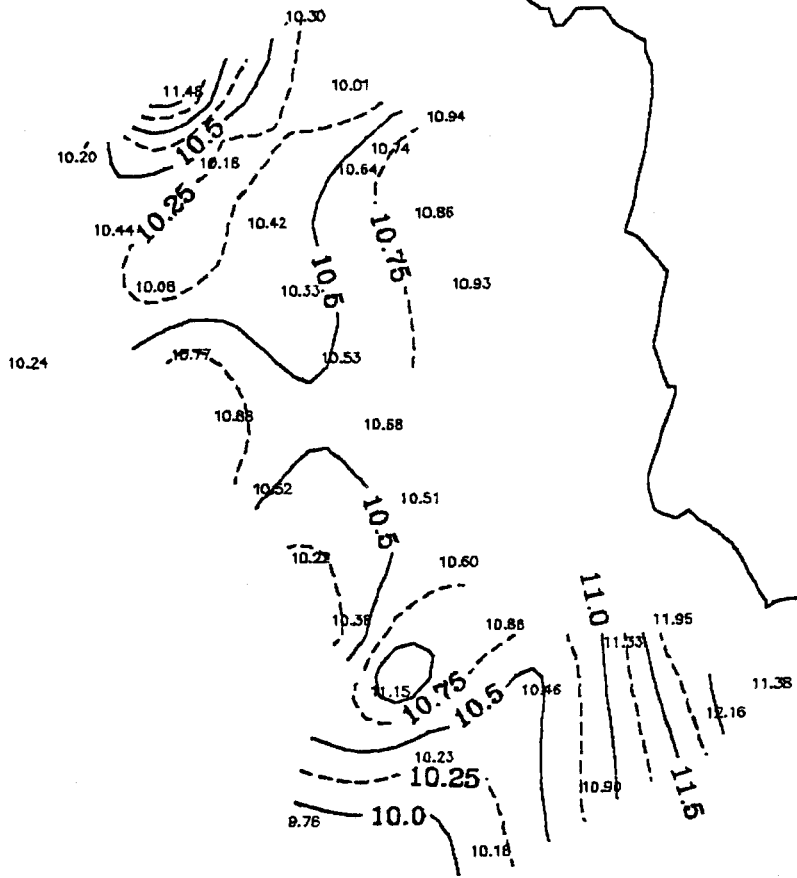
TEMPERATURE (DEG C)

100 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

TEMPERATURE (DEG C)

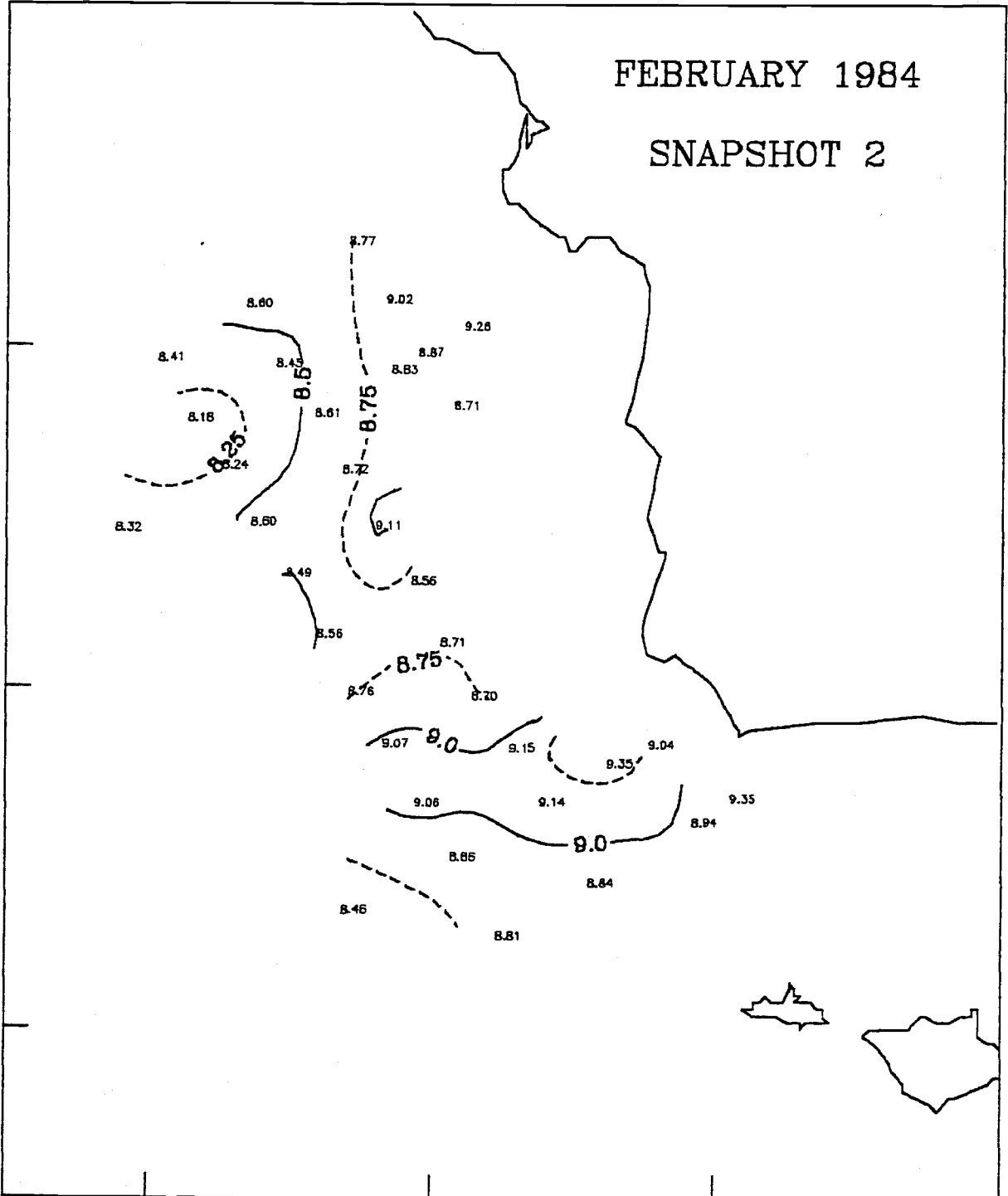
200 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

TEMPERATURE (DEG C)

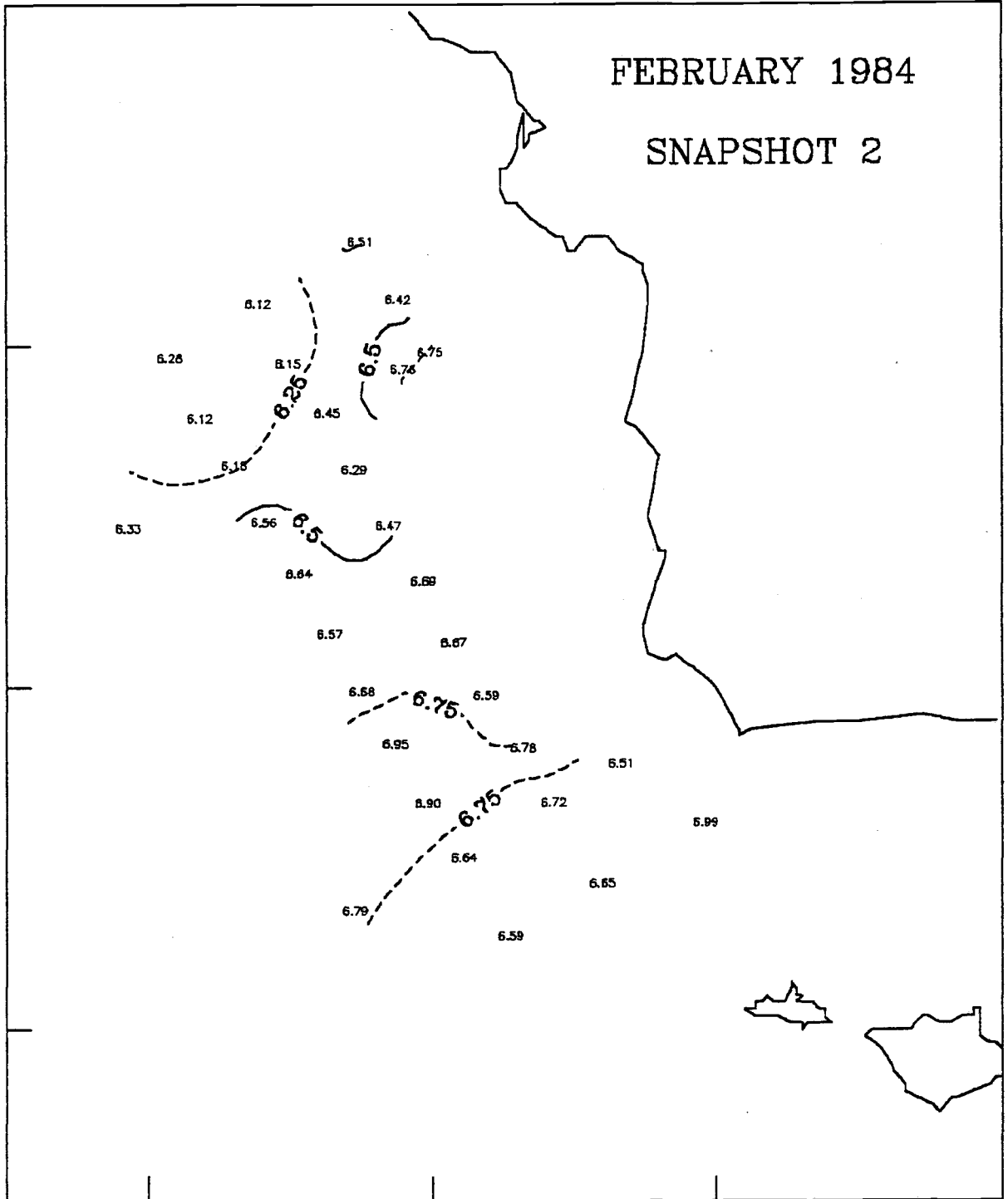
400 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

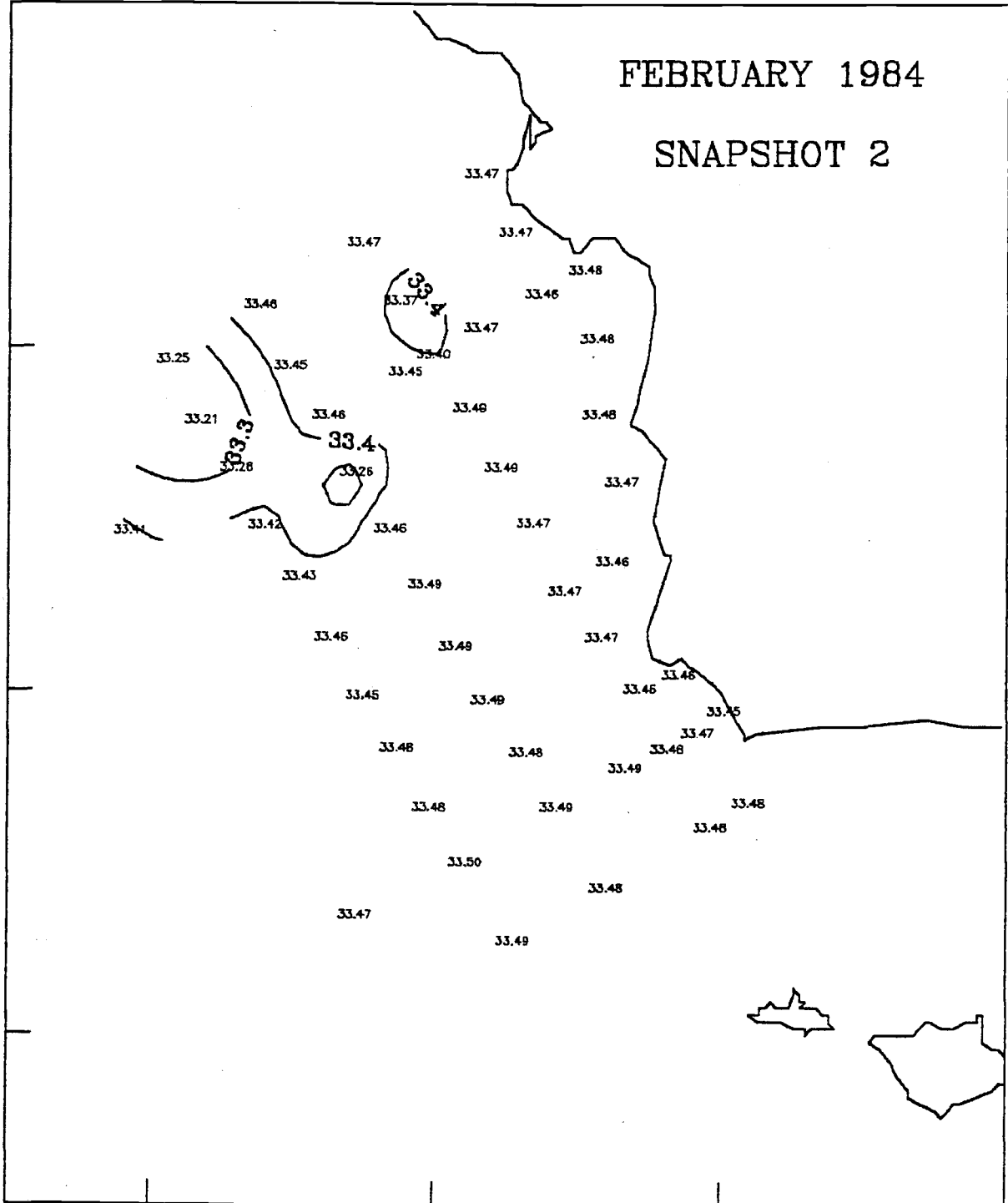
SALINITY (PPT)

10 M

FEBRUARY 1984

SNAPSHOT 2

35



121

120

34

SALINITY (PPT)

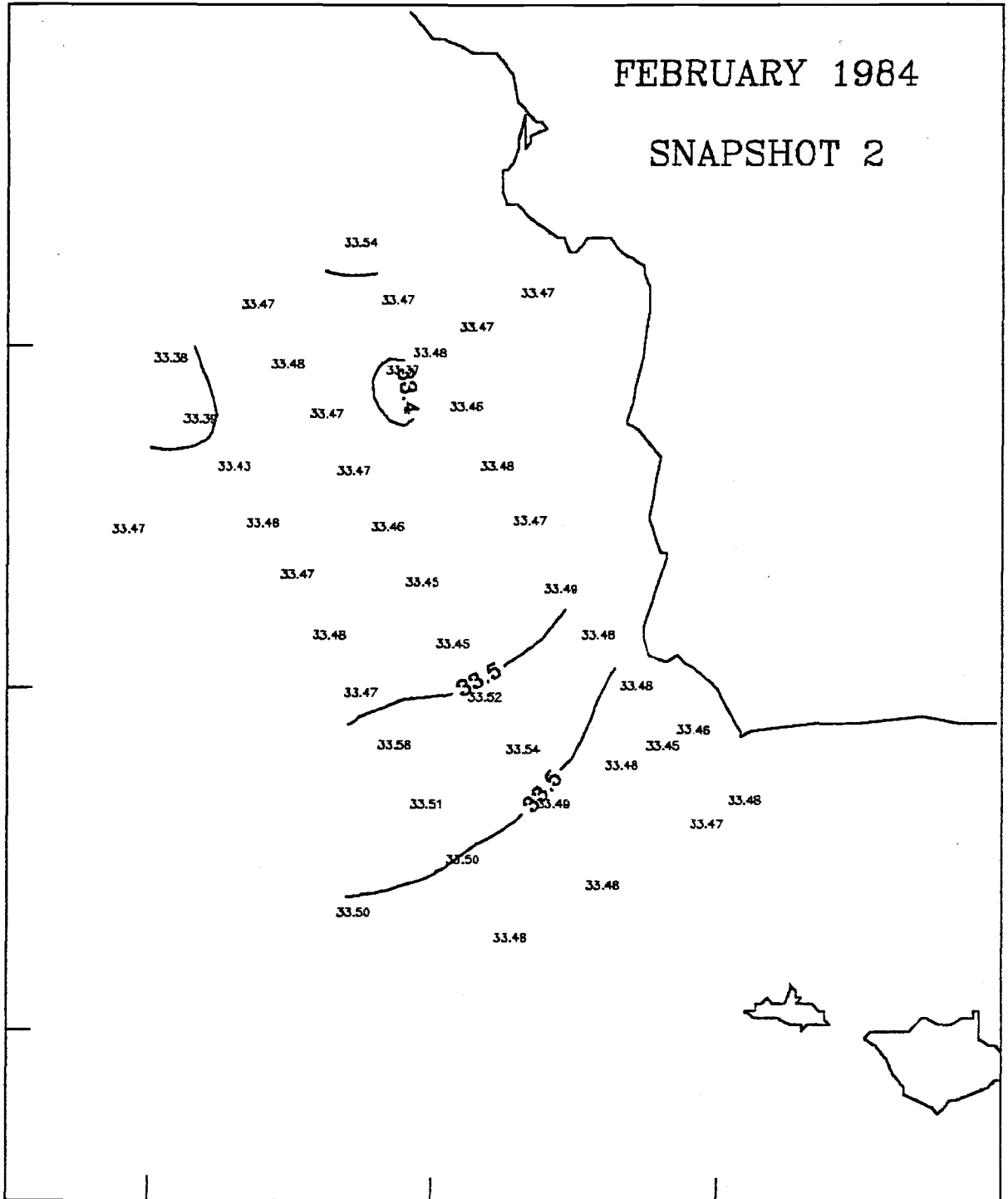
50 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

SALINITY (PPT)

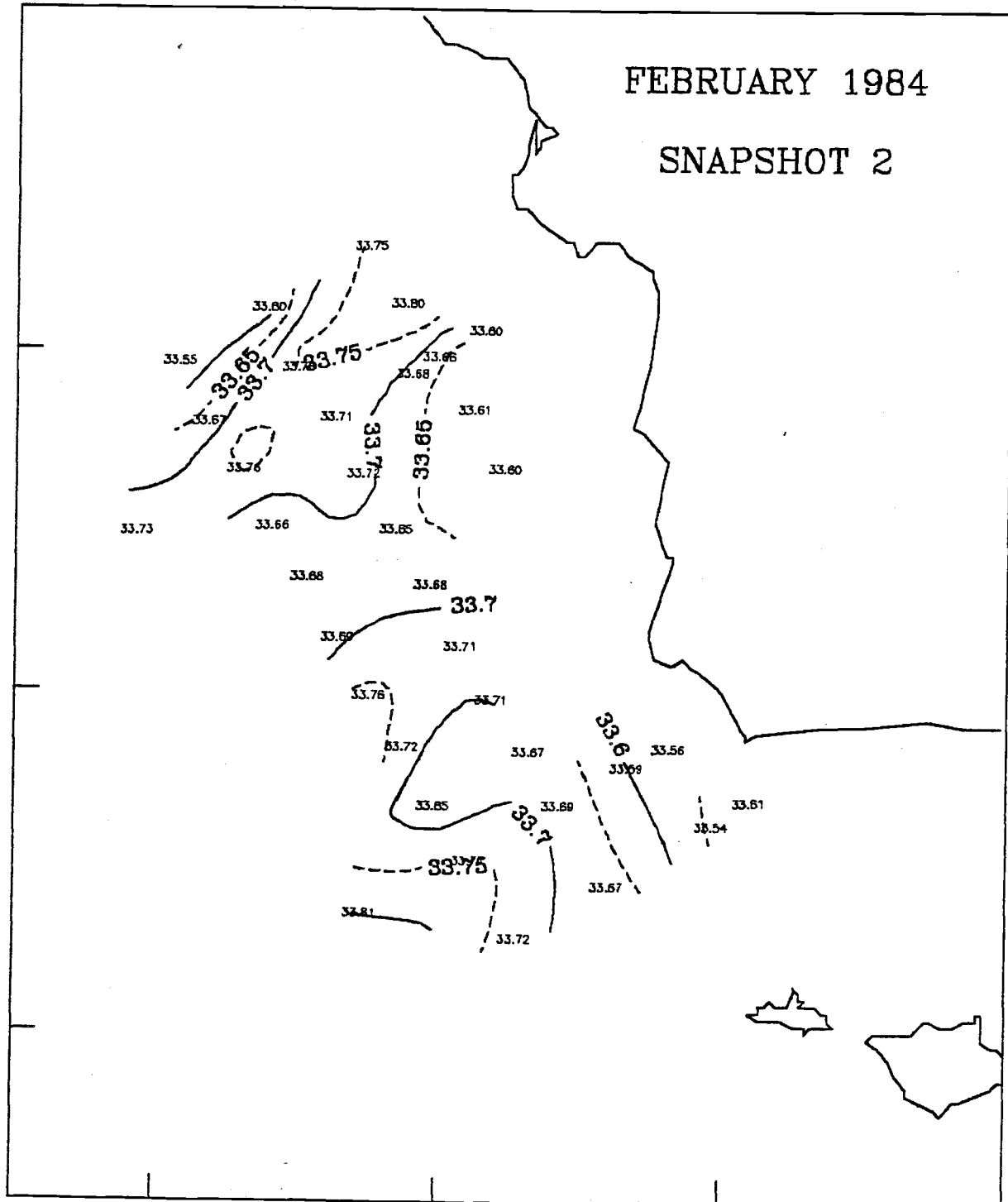
100 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

SALINITY (PPT)

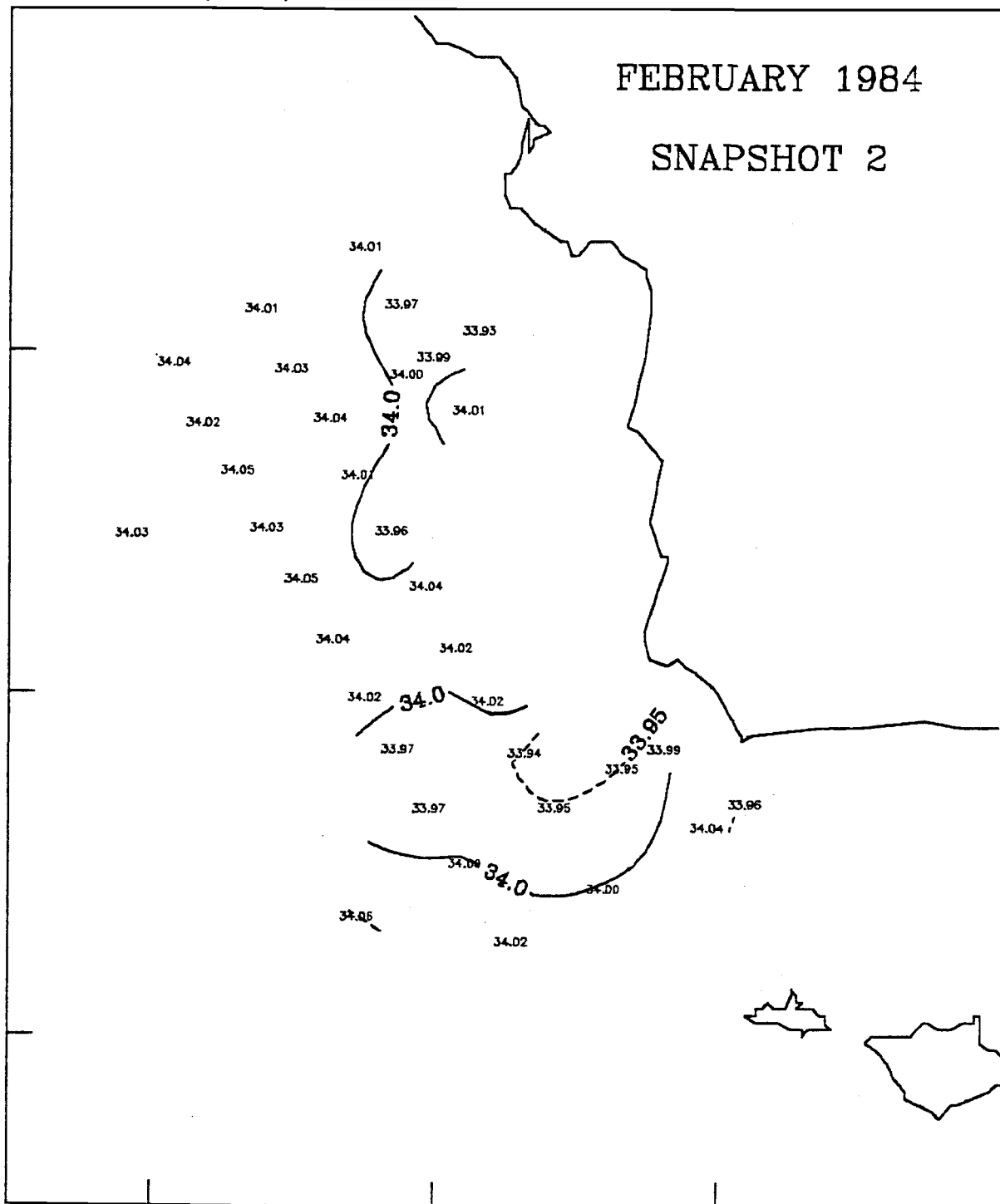
200 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

SALINITY (PPT)

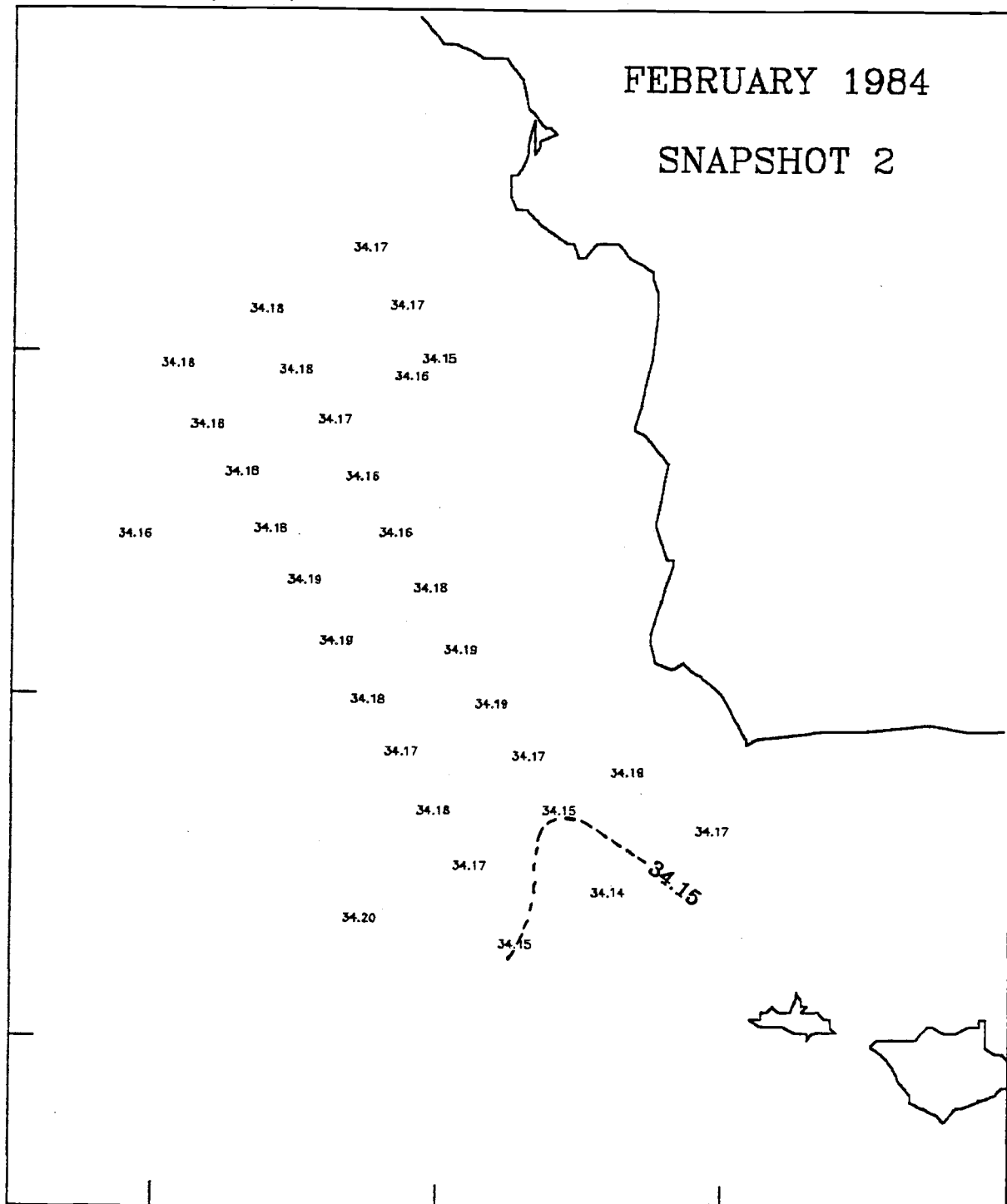
400 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

SIGMA-T

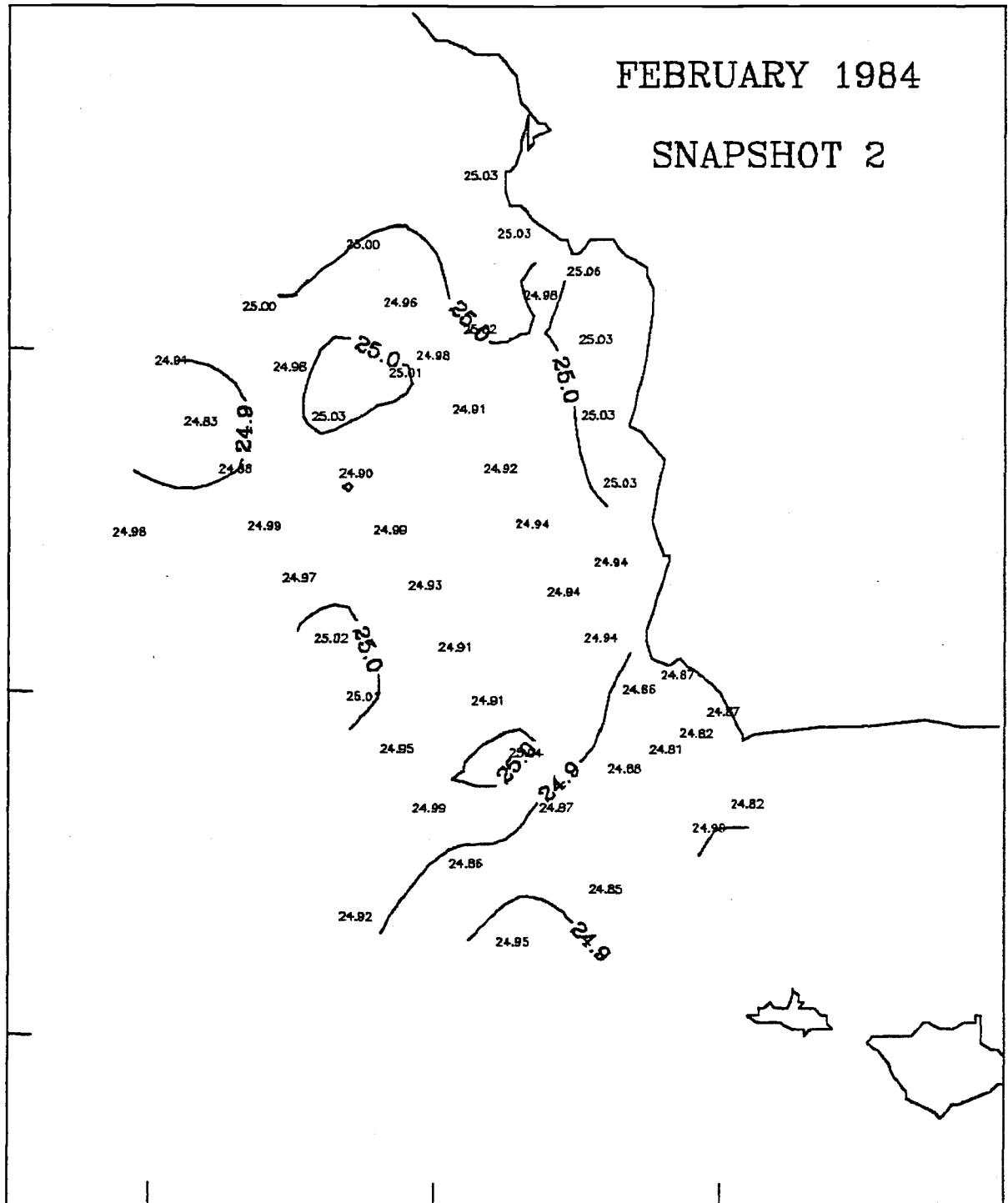
10 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

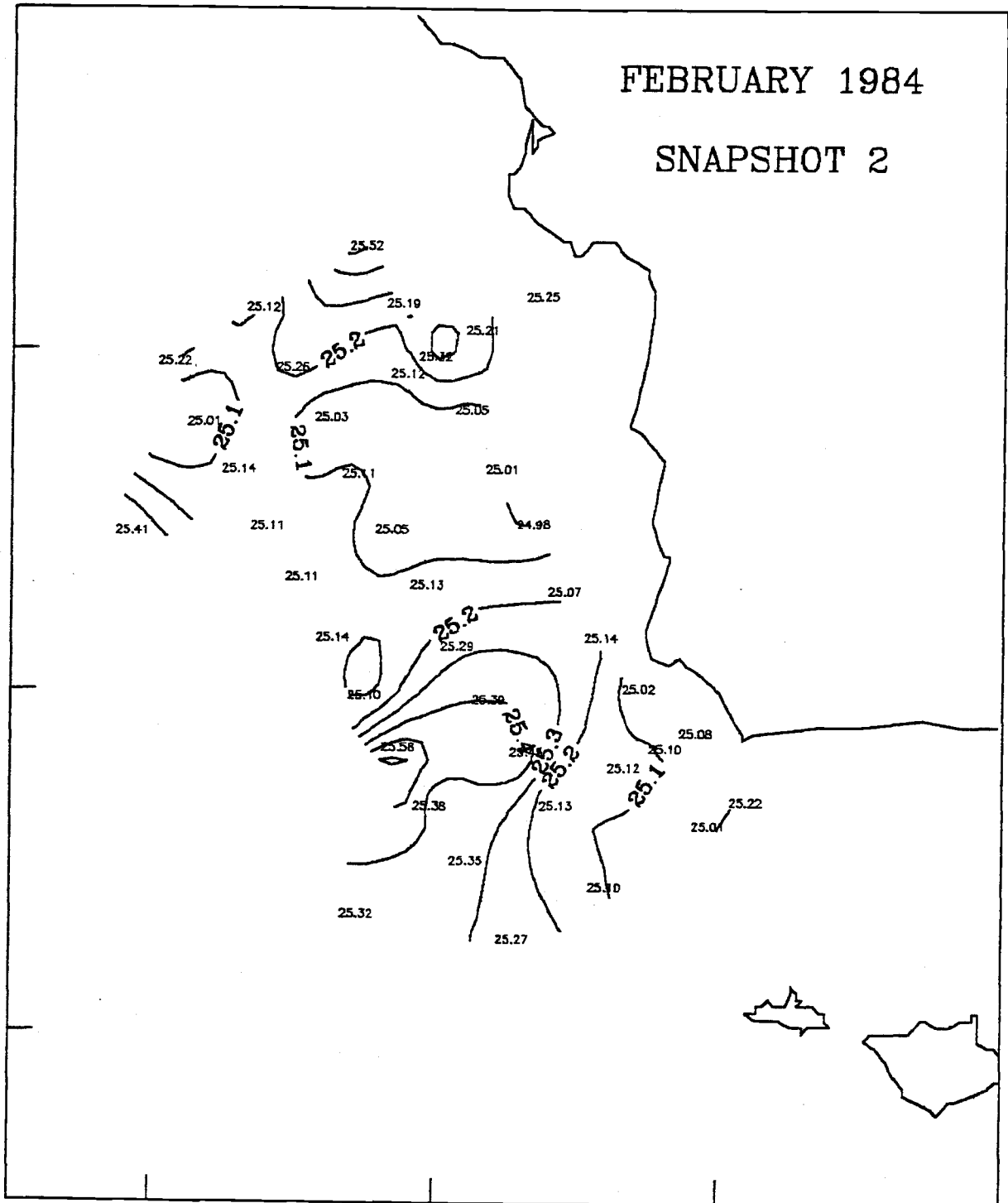
SIGMA-T

50 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

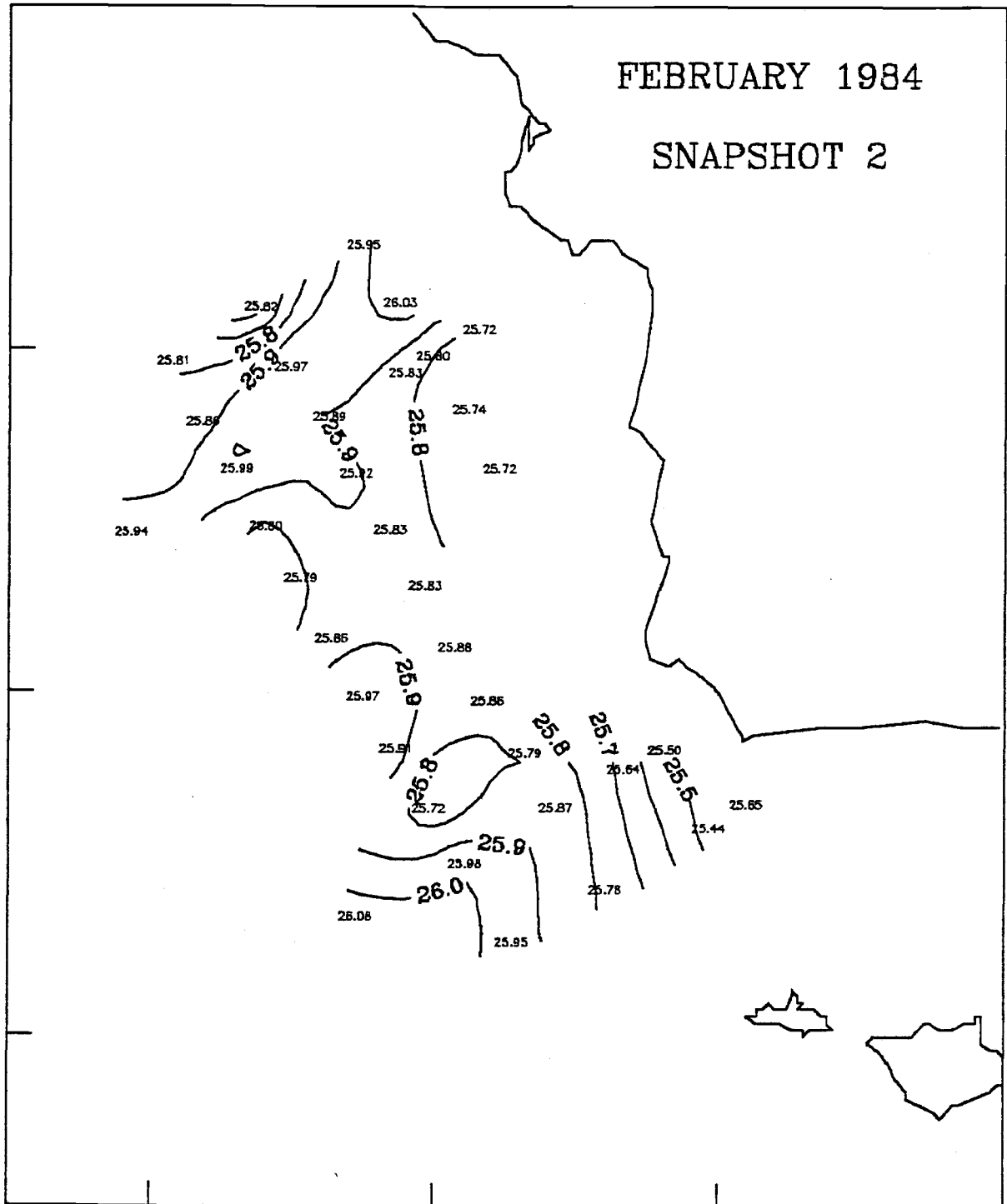
SIGMA-T

100 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

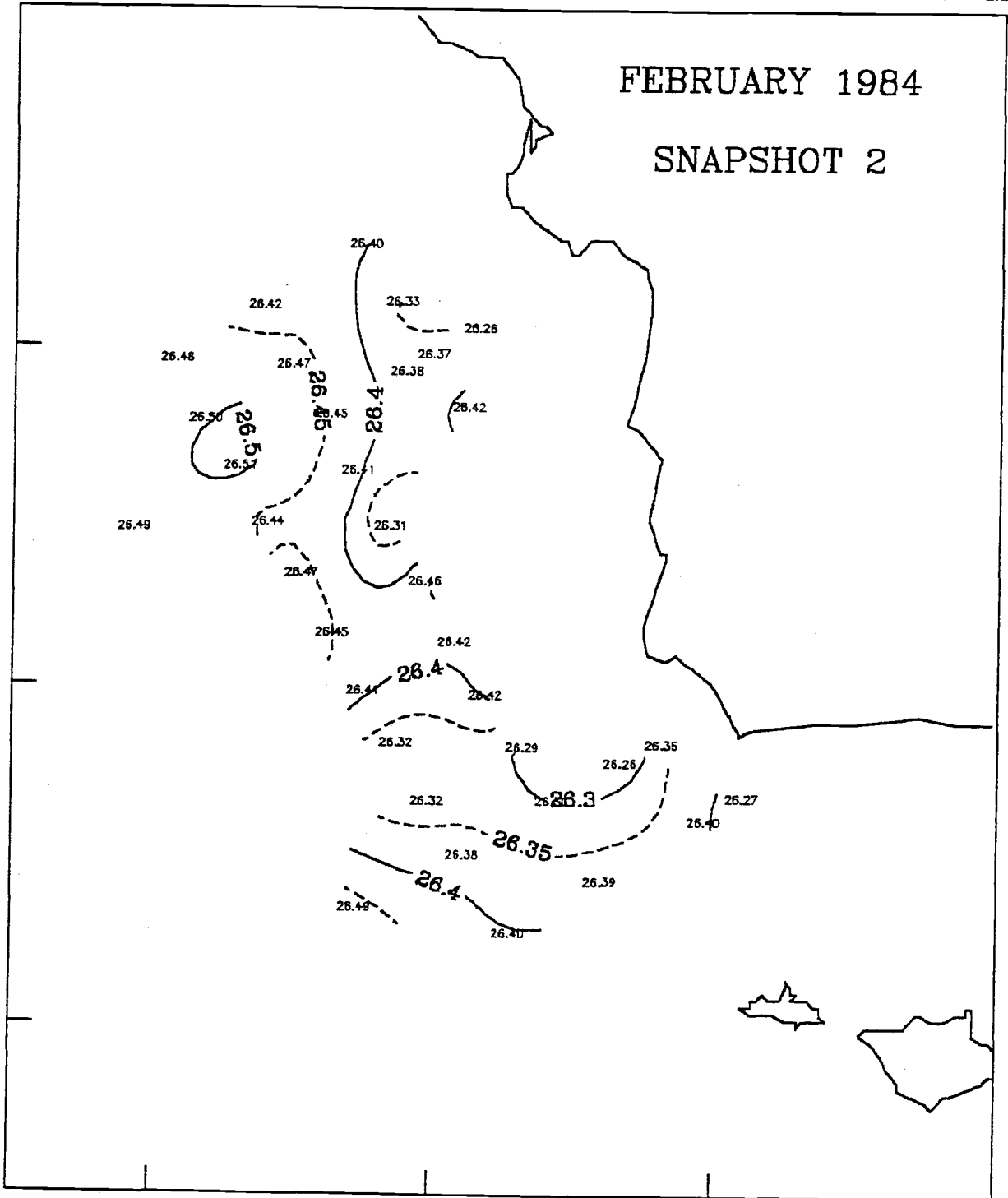
SIGMA-T

200 M

FEBRUARY 1984

SNAPSHOT 2

35



121

120

34

SIGMA-T

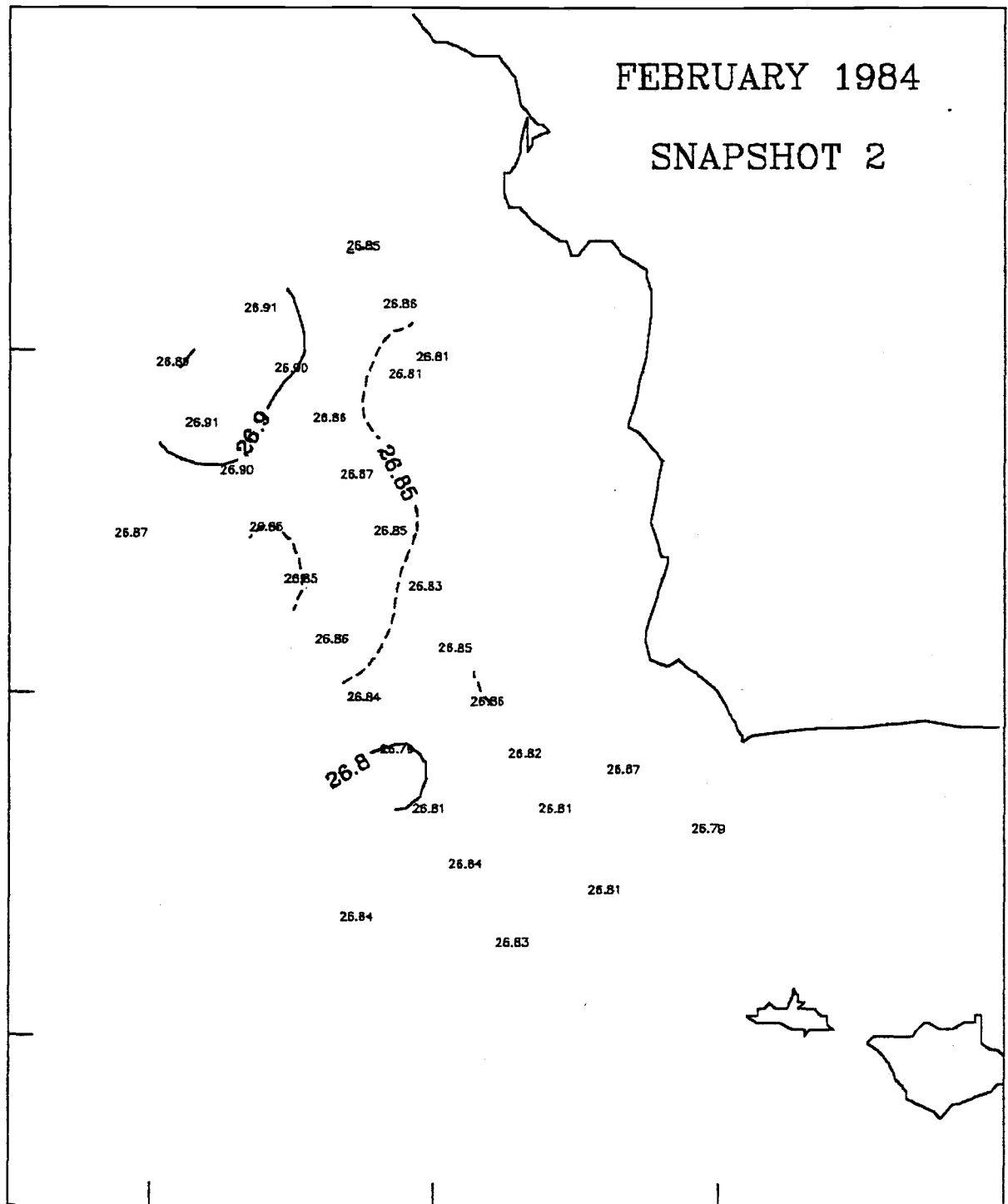
400 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

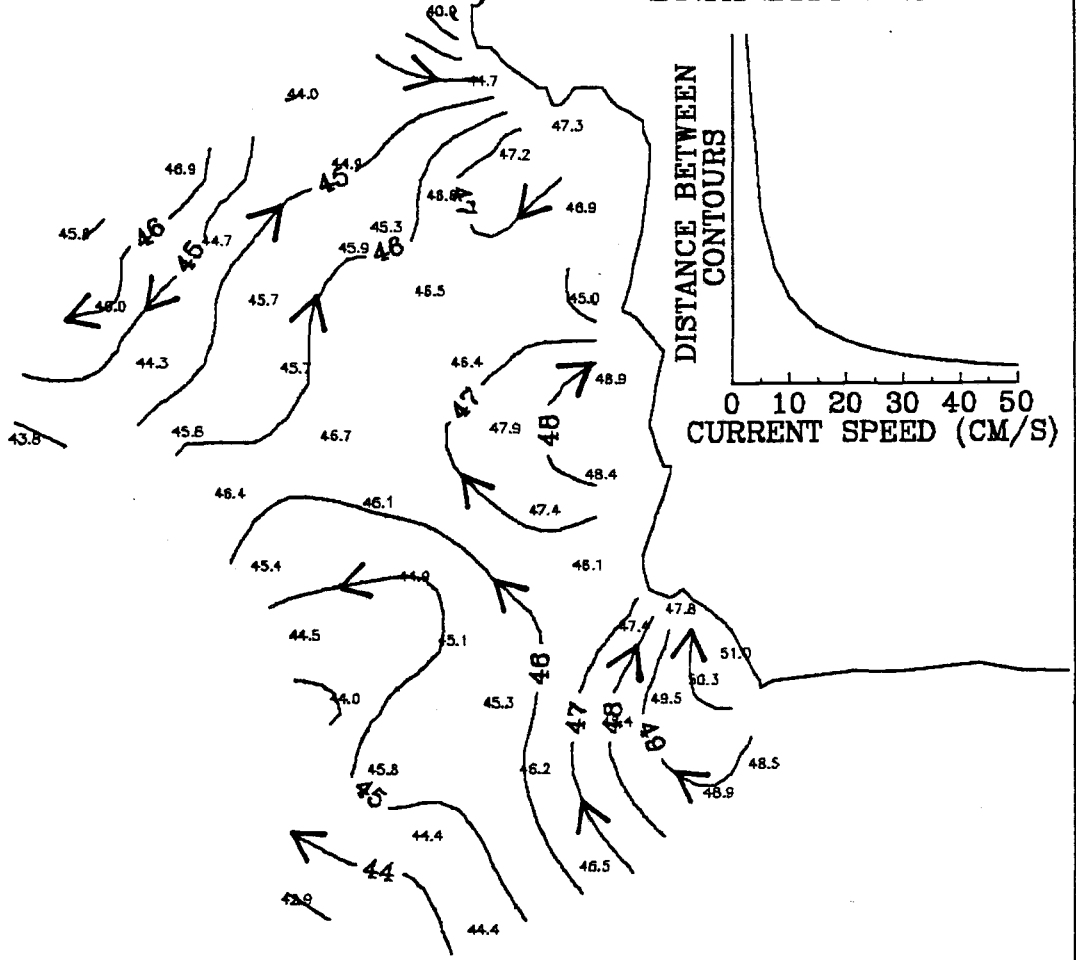
DYNAMIC HEIGHT (DYN CM)

0/200 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

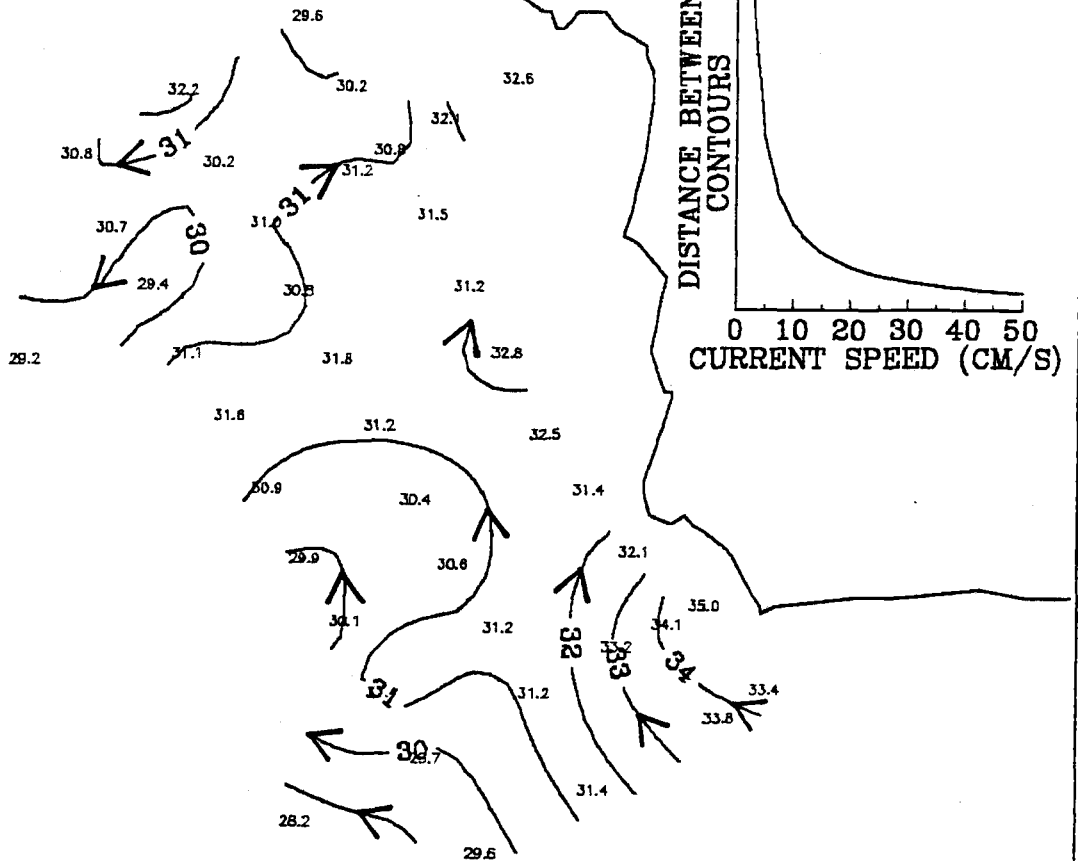
DYNAMIC HEIGHT (DYN CM)

50/200 M

FEBRUARY 1984

SNAPSHOT 2

35



DISTANCE BETWEEN CONTOURS

0 10 20 30 40 50
CURRENT SPEED (CM/S)

34

121

120

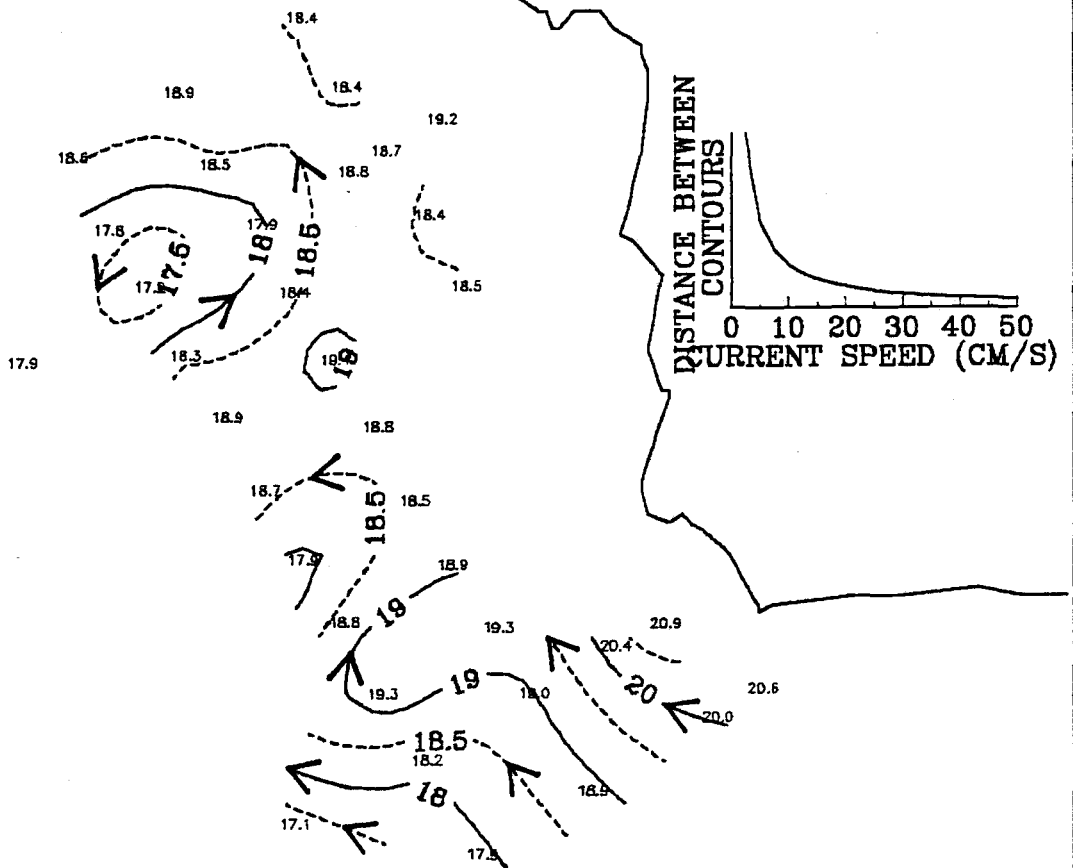
DYNAMIC HEIGHT (DYN CM)

100/200 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

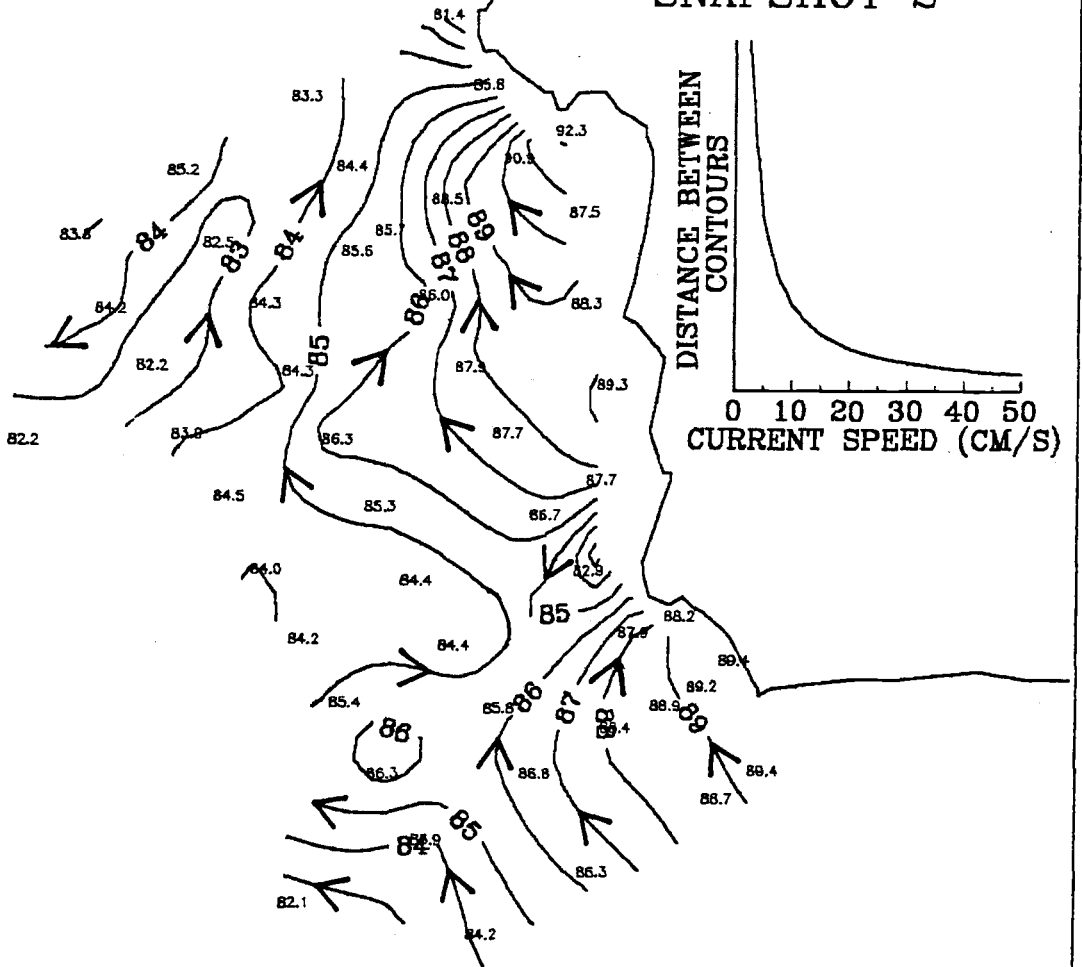
DYNAMIC HEIGHT (DYN CM)

0/500 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

DYNAMIC HEIGHT (DYN CM)

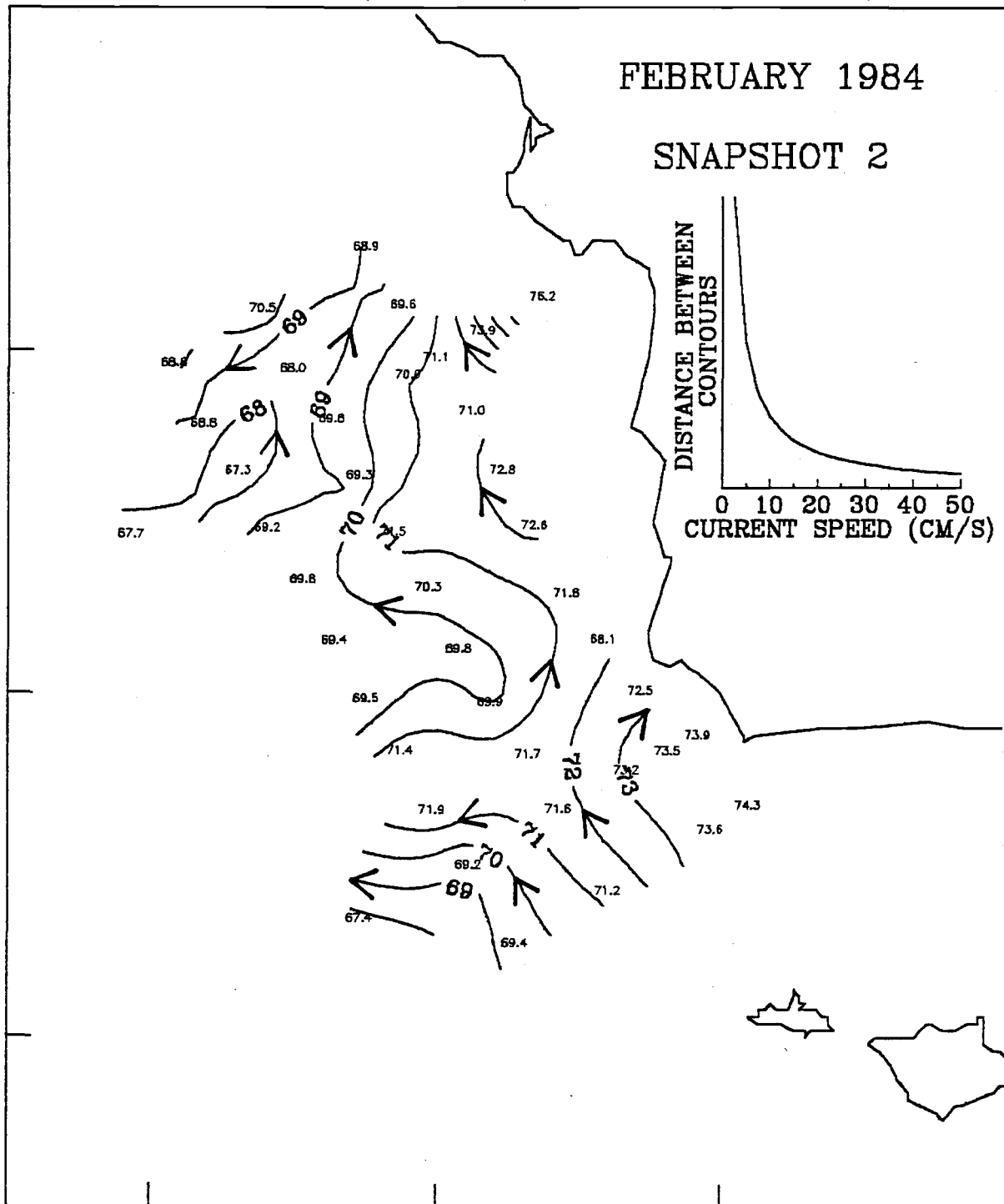
50/500 M

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

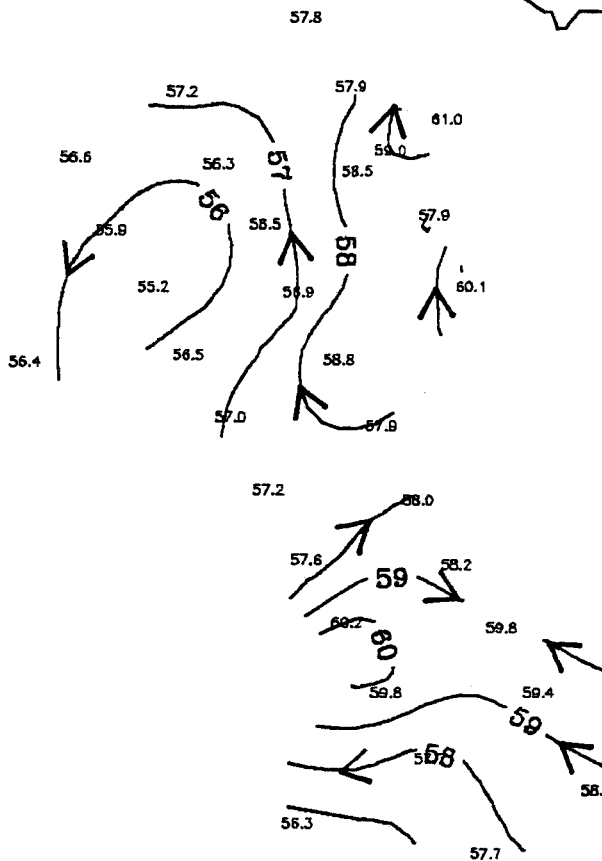
DYNAMIC HEIGHT (DYN CM)

100/500 M

FEBRUARY 1984

SNAPSHOT 2

35



DISTANCE BETWEEN
CONTOURS

0 10 20 30 40 50
CURRENT SPEED (CM/S)

34

121

120

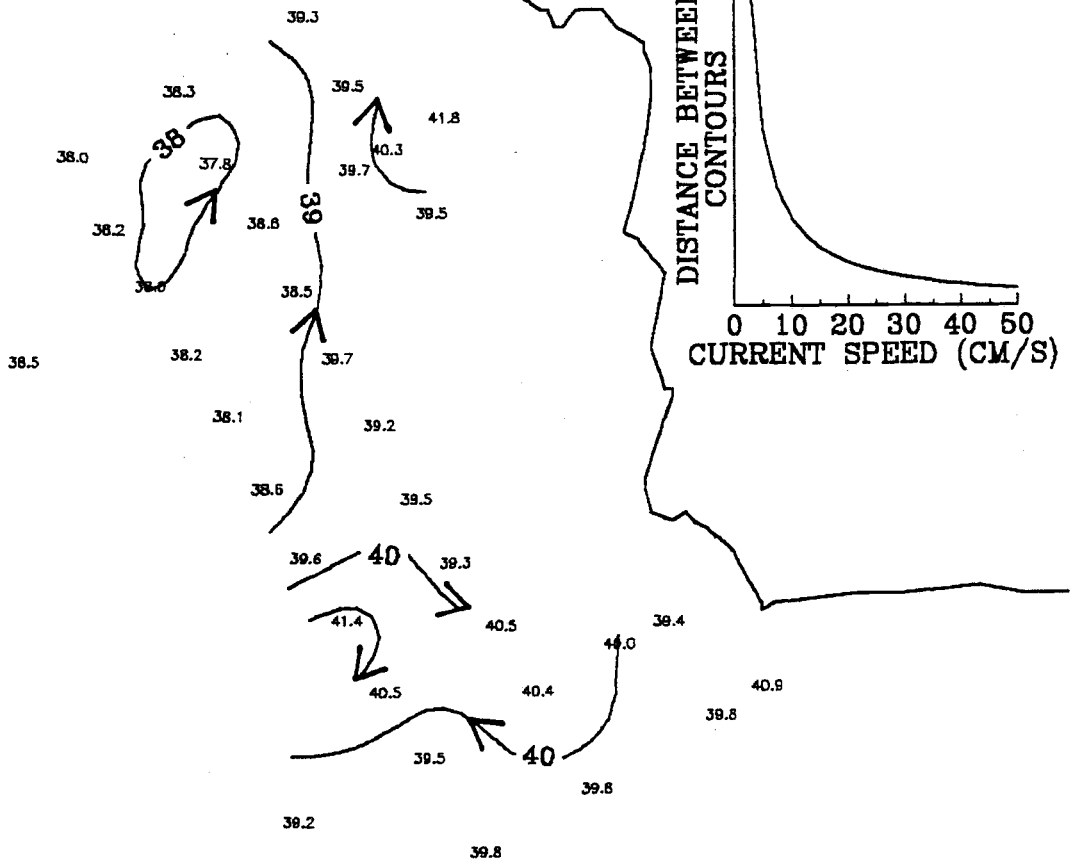
DYNAMIC HEIGHT (DYN CM)

200/500 M

FEBRUARY 1984

SNAPSHOT 2

35



34

121

120

DEPTH (M)

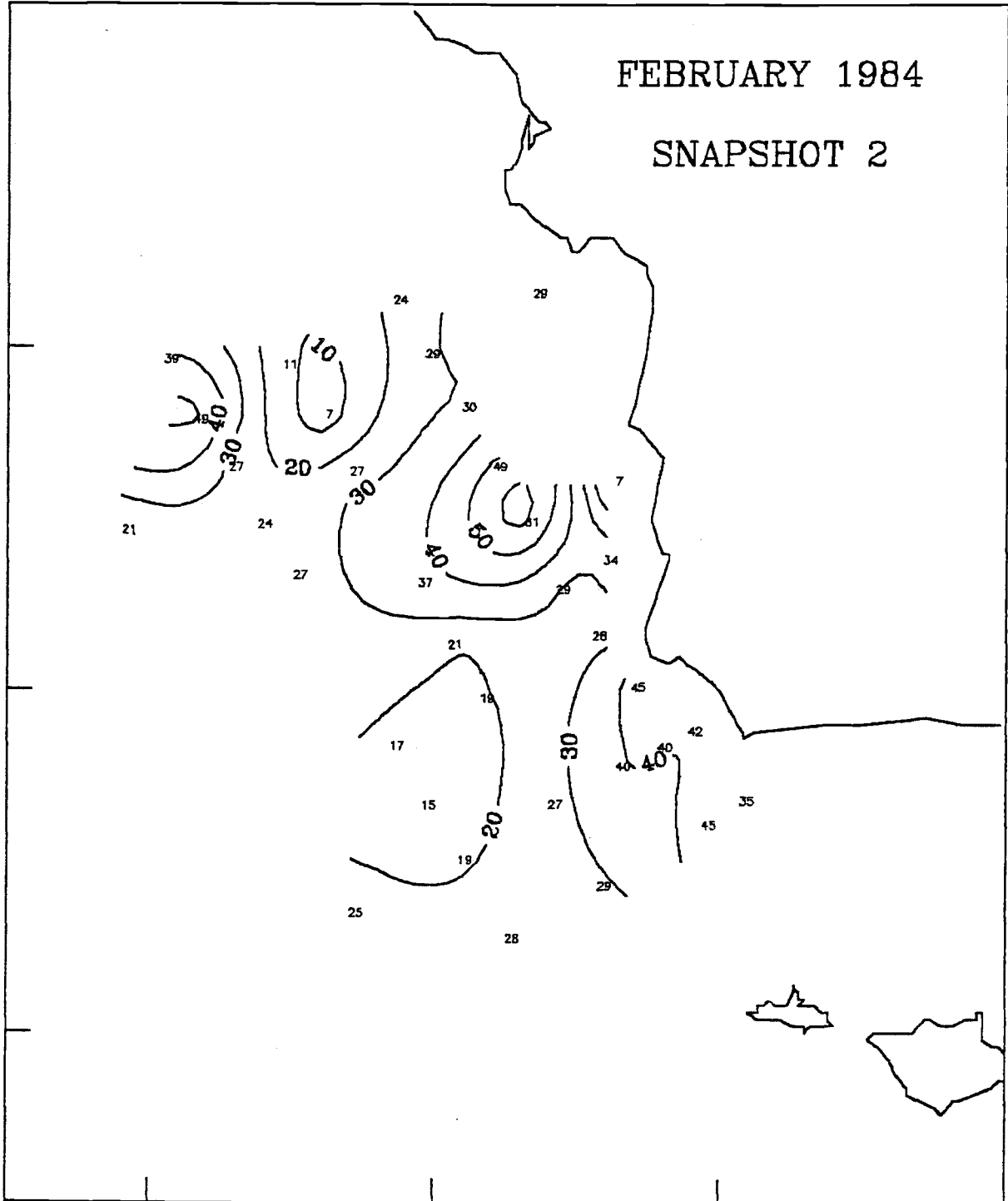
$\sigma_t = 25.0$

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

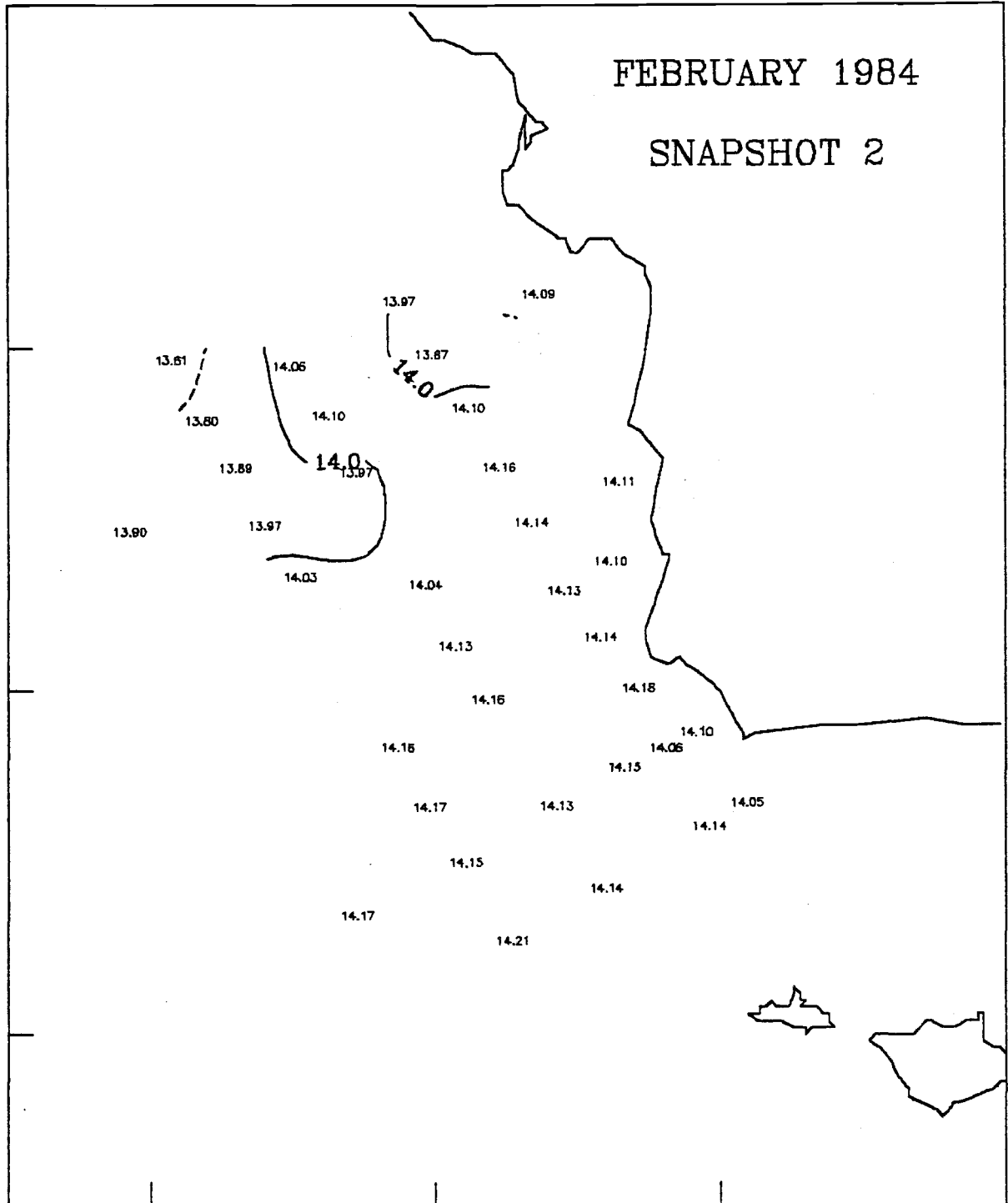
TEMPERATURE (DEG C)

$\sigma_t = 25.0$

FEBRUARY 1984

SNAPSHOT 2

35



121

120

34

SALINITY (PPT)

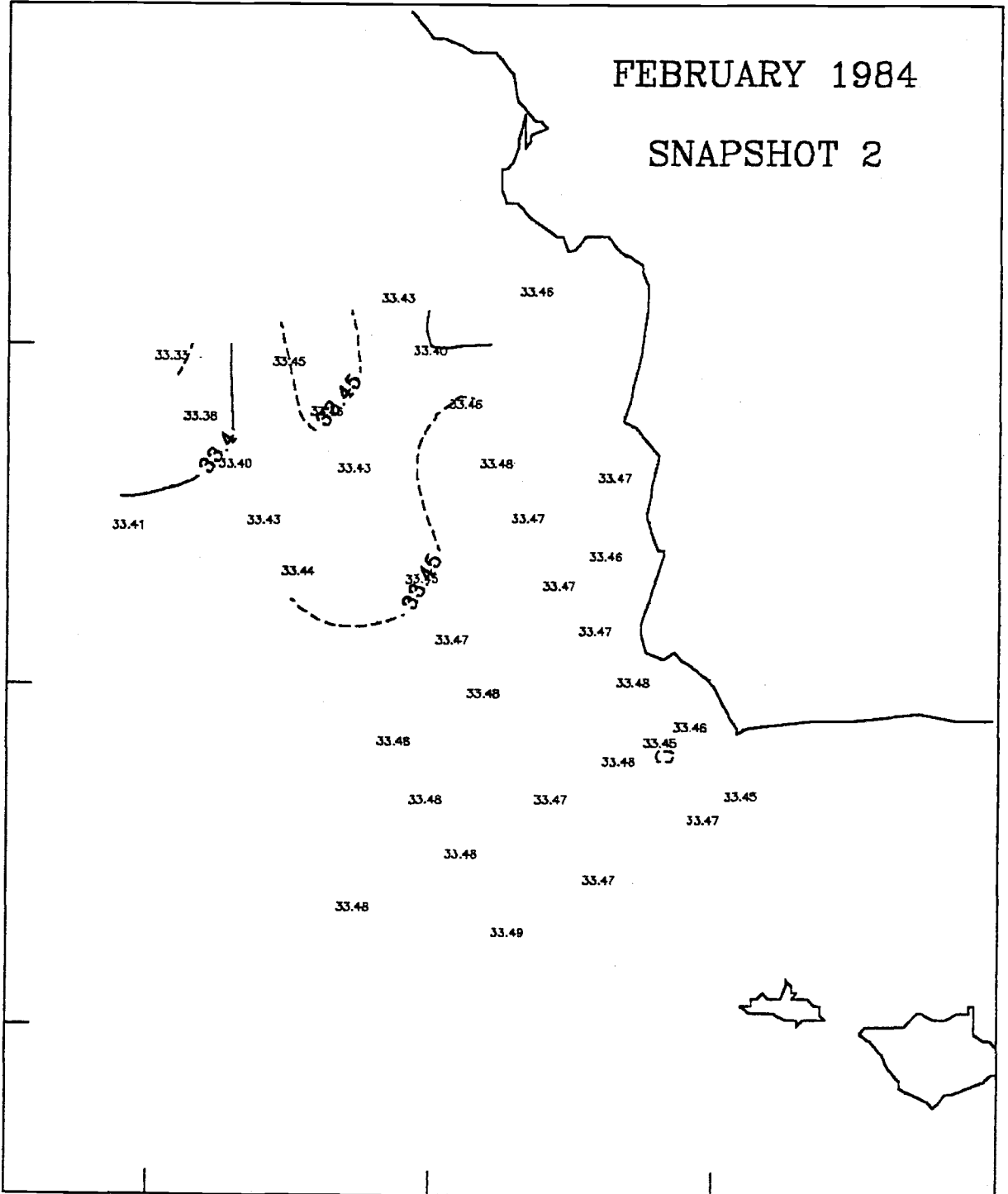
$\sigma_t = 25.0$

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

DEPTH (M)

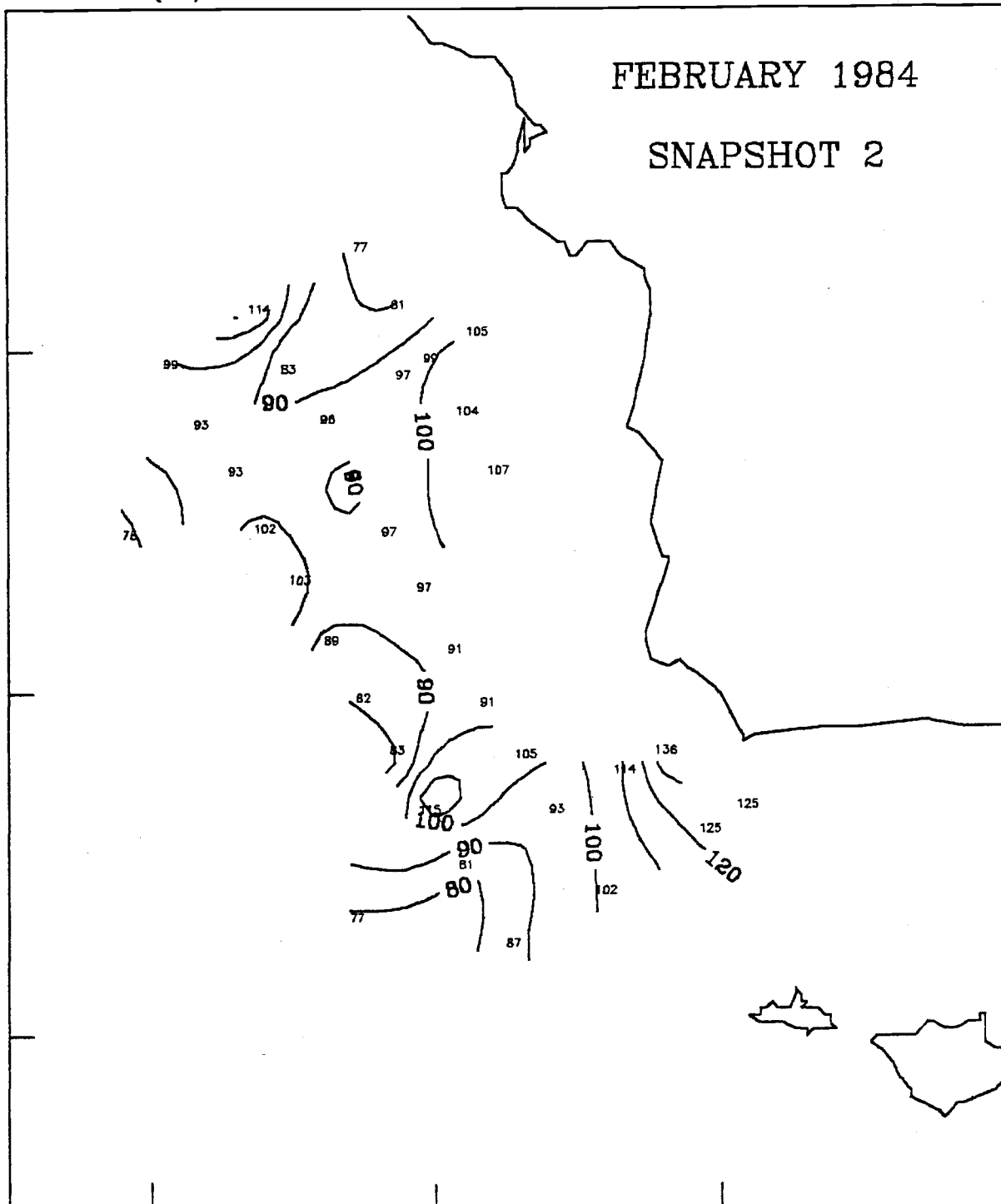
$\sigma_t = 25.8$

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

SALINITY (PPT)

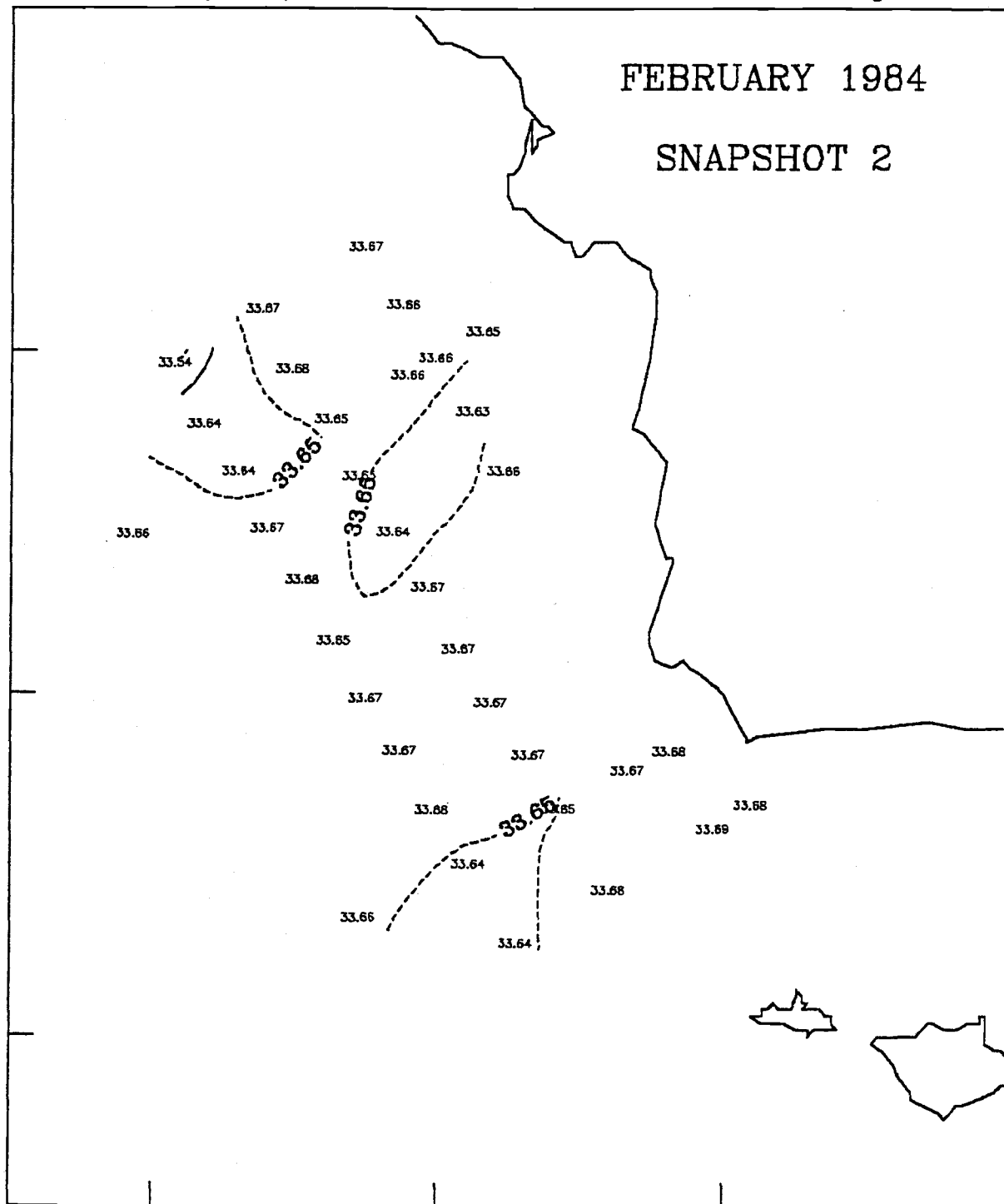
$\sigma_t = 25.8$

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

TEMPERATURE (DEG C)

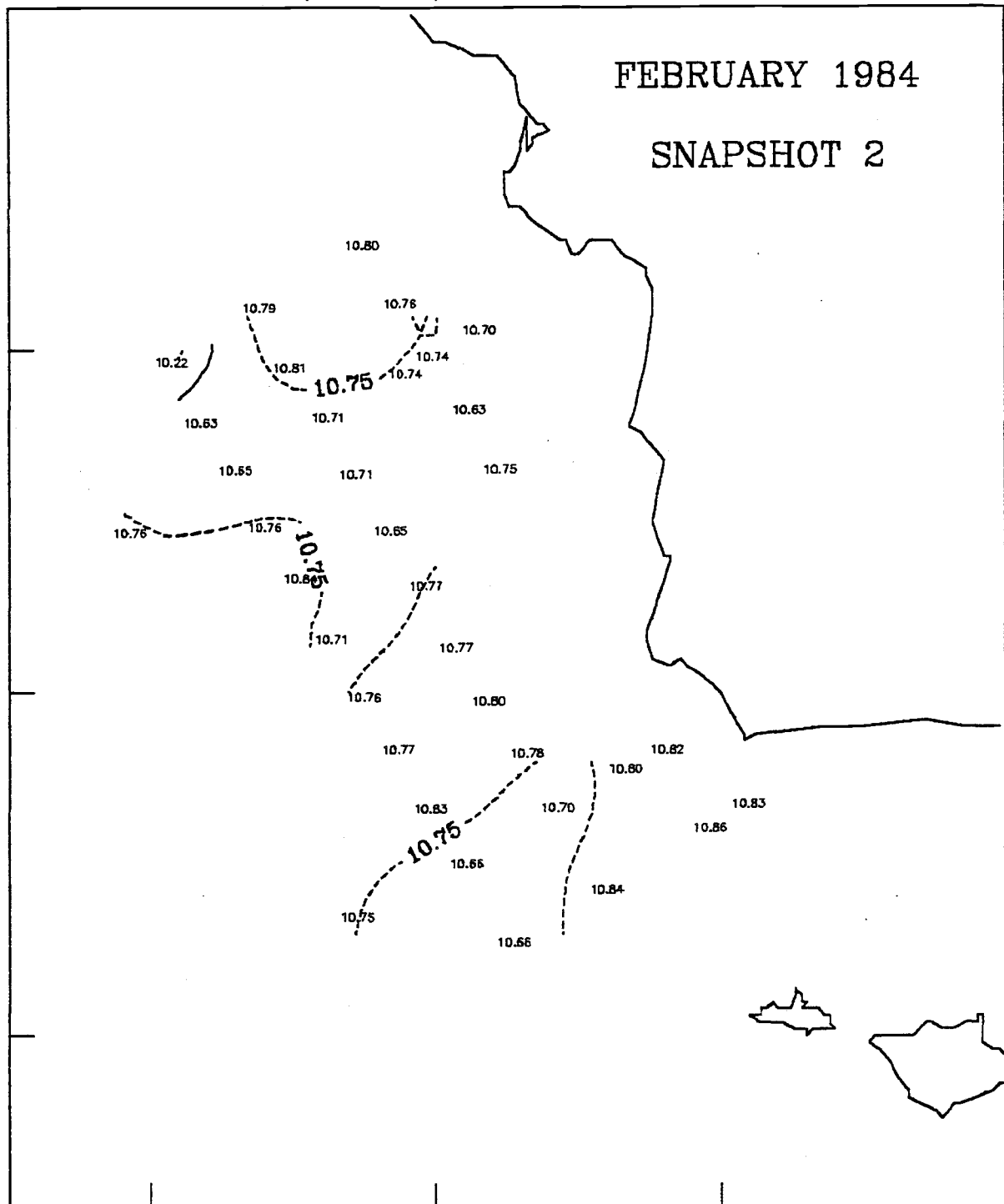
$\sigma_t=25.8$

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

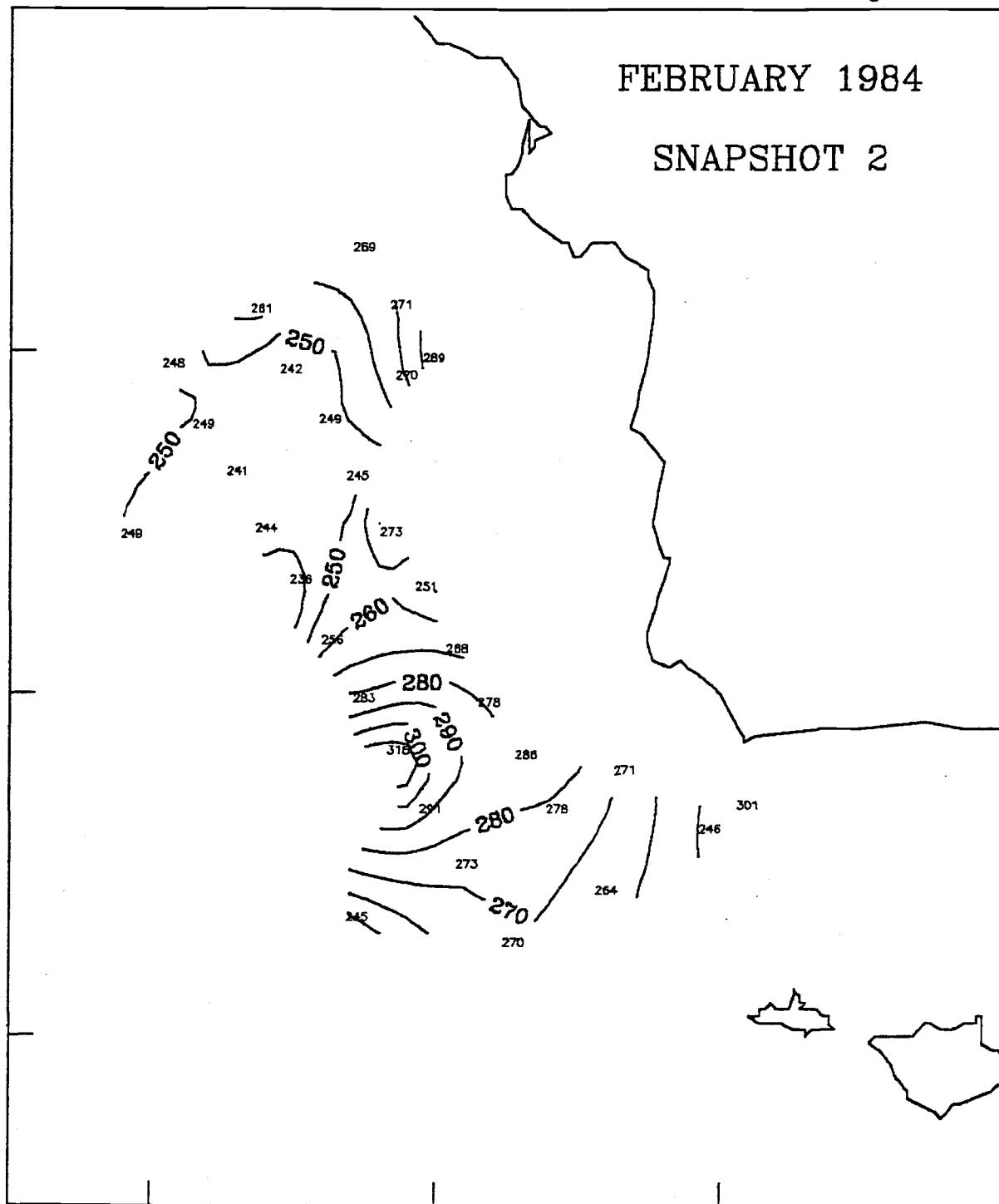
DEPTH (M)

$\sigma_t = 26.6$

FEBRUARY 1984

SNAPSHOT 2

35



121

120

SALINITY (PPT)

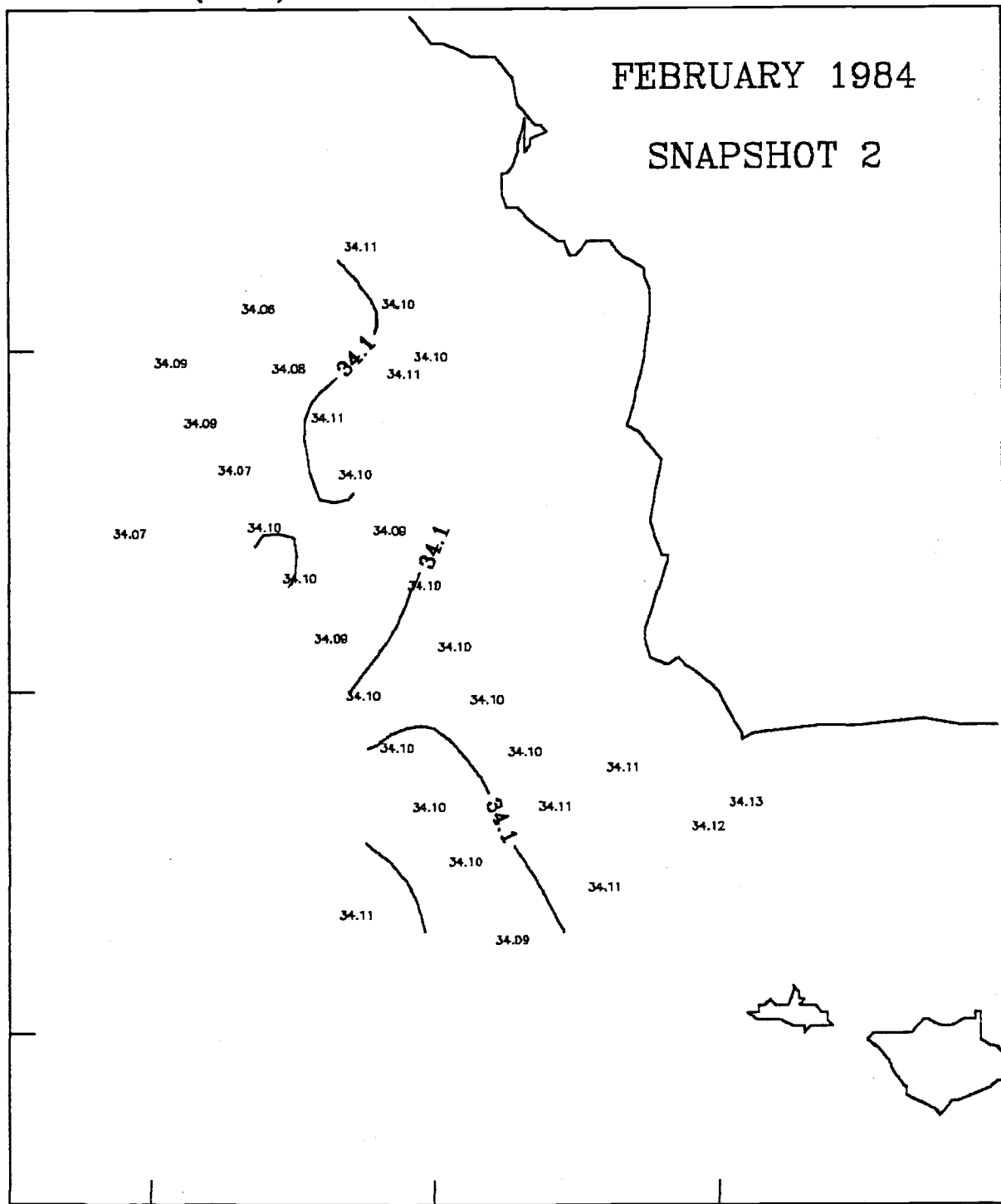
$\sigma_t=26.6$

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

TEMPERATURE (DEG C)

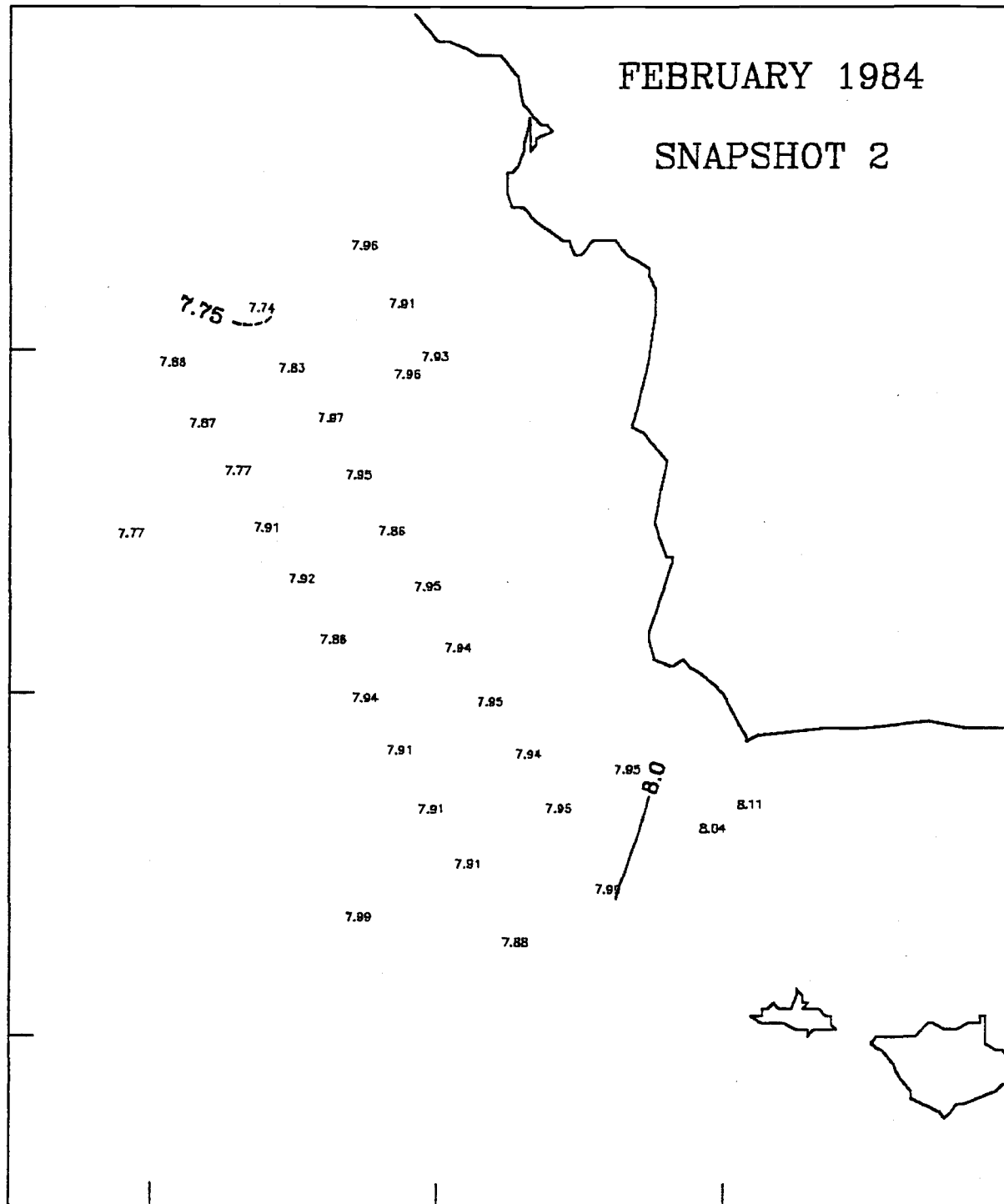
$\sigma_t = 26.6$

FEBRUARY 1984

SNAPSHOT 2

35

34



121

120

DIFFERENCE MAPS, SNAPSHOT 2 MINUS SNAPSHOT 1

TEMPERATURE (DEG C)

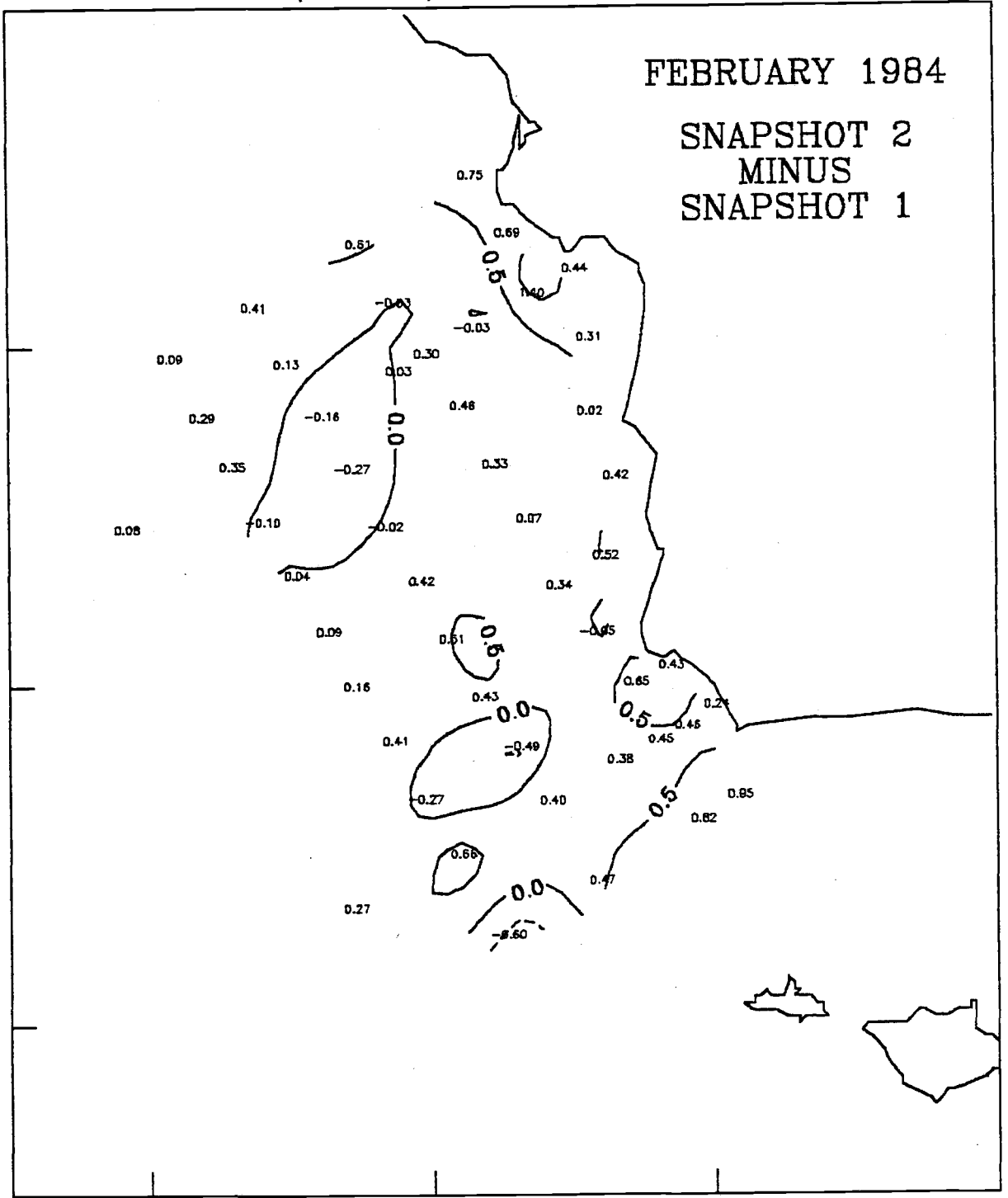
10 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

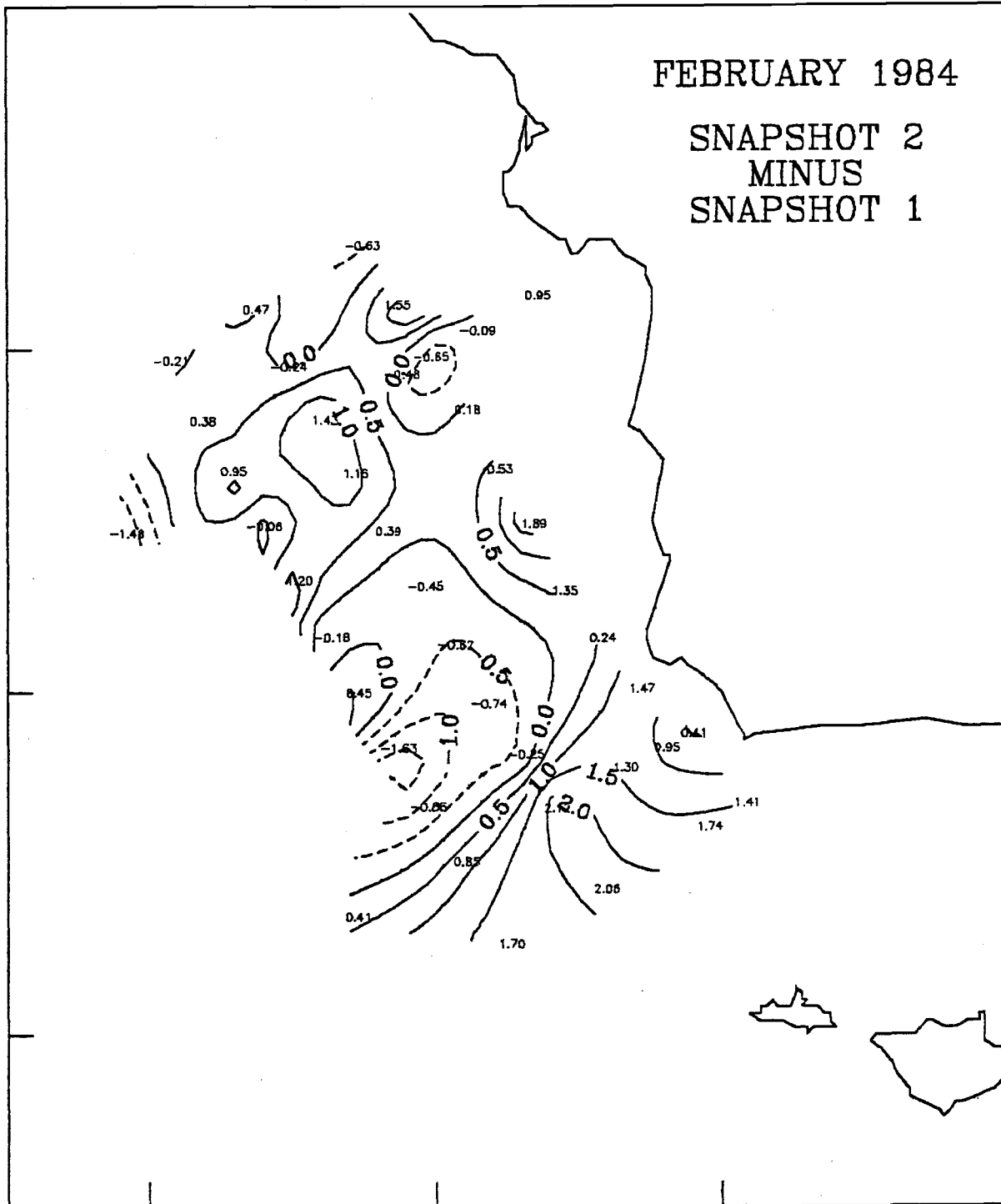
50 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34



121

120

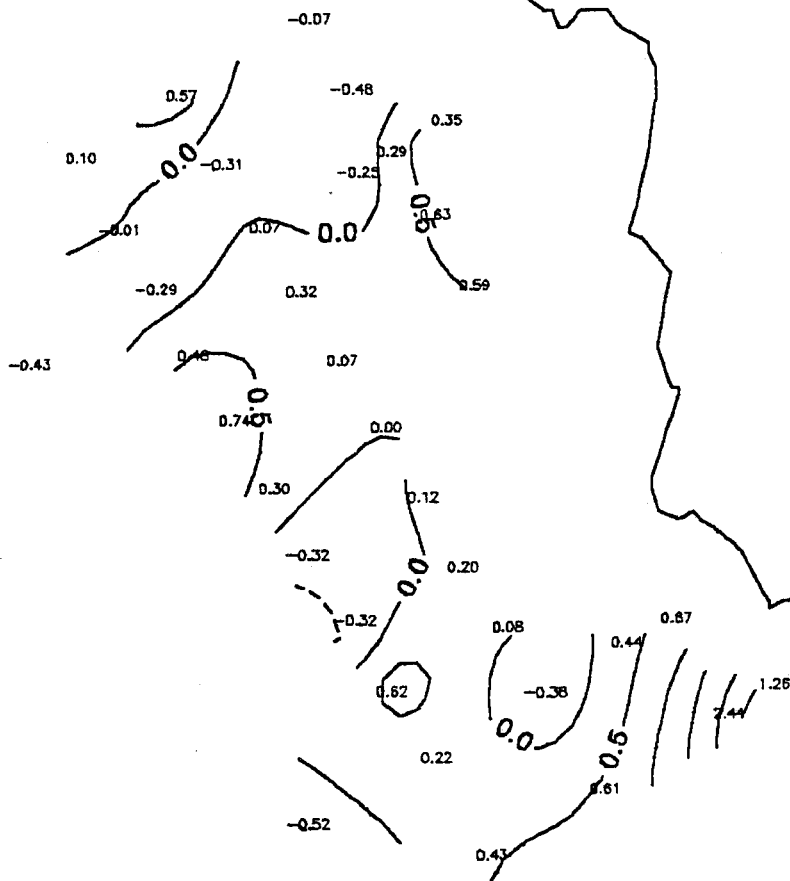
TEMPERATURE (DEG C)

100 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35



34

121

120

TEMPERATURE (DEG C)

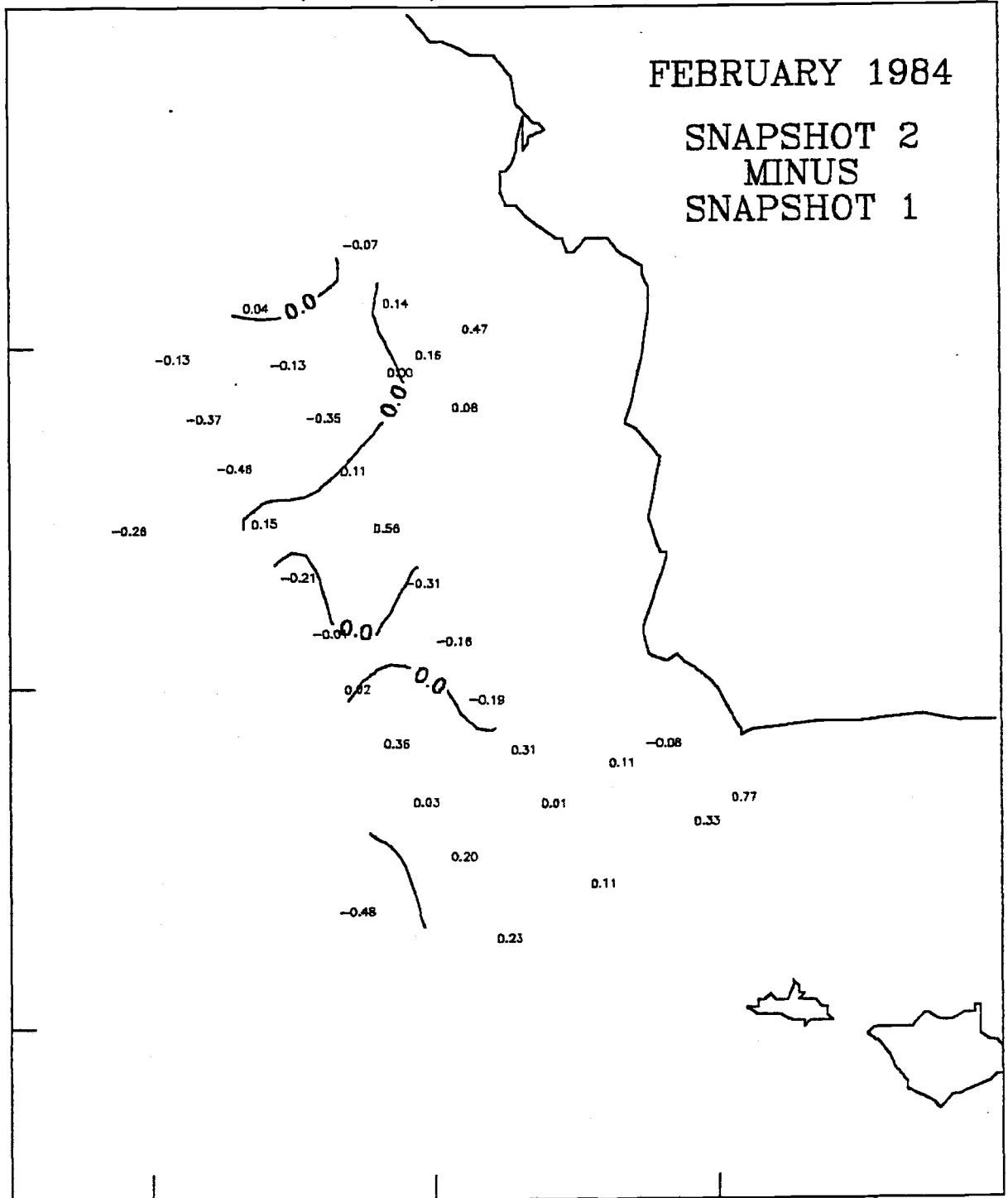
200 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34



121

120

TEMPERATURE (DEG C)

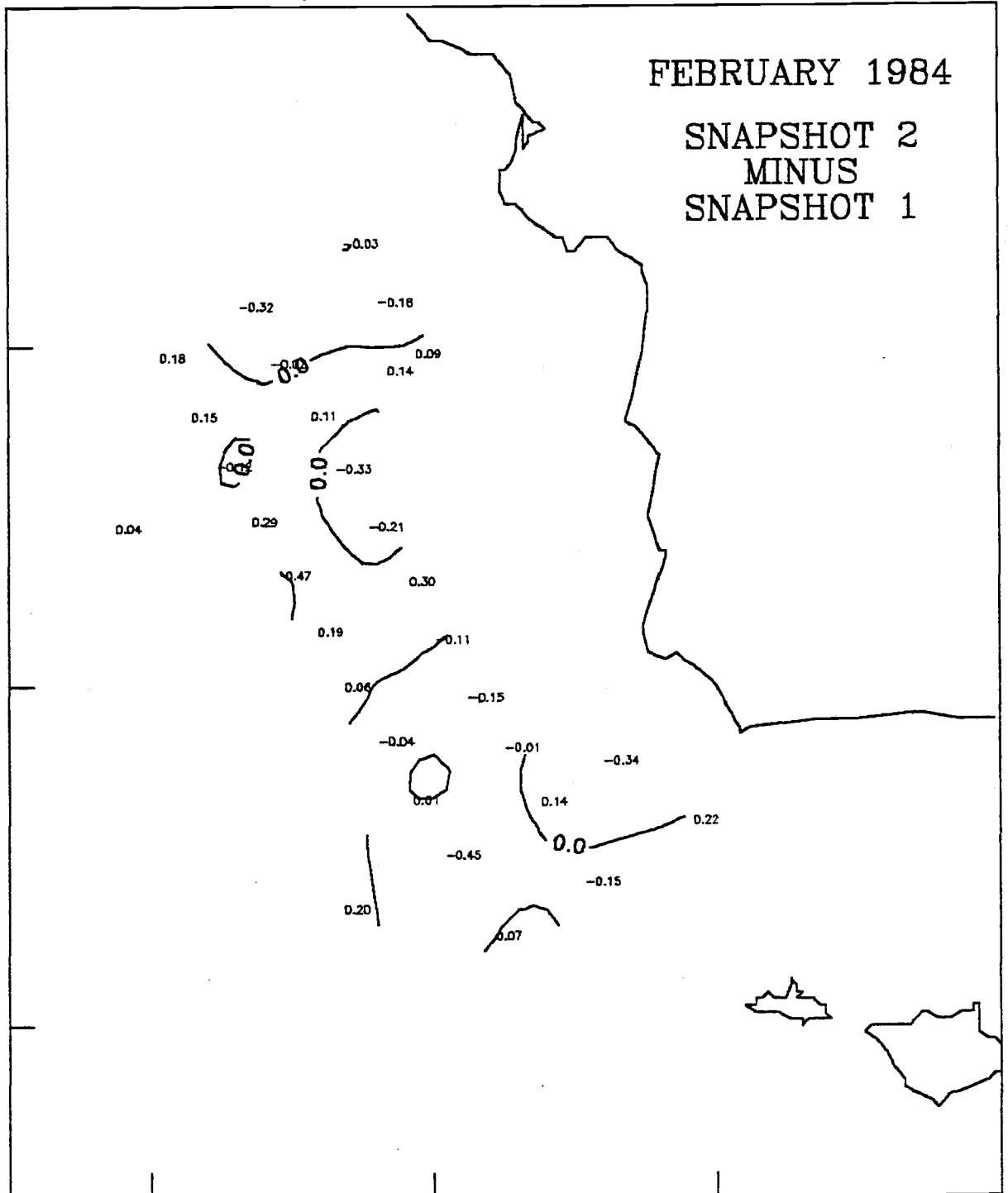
400 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34



121

120

SALINITY (PPT)

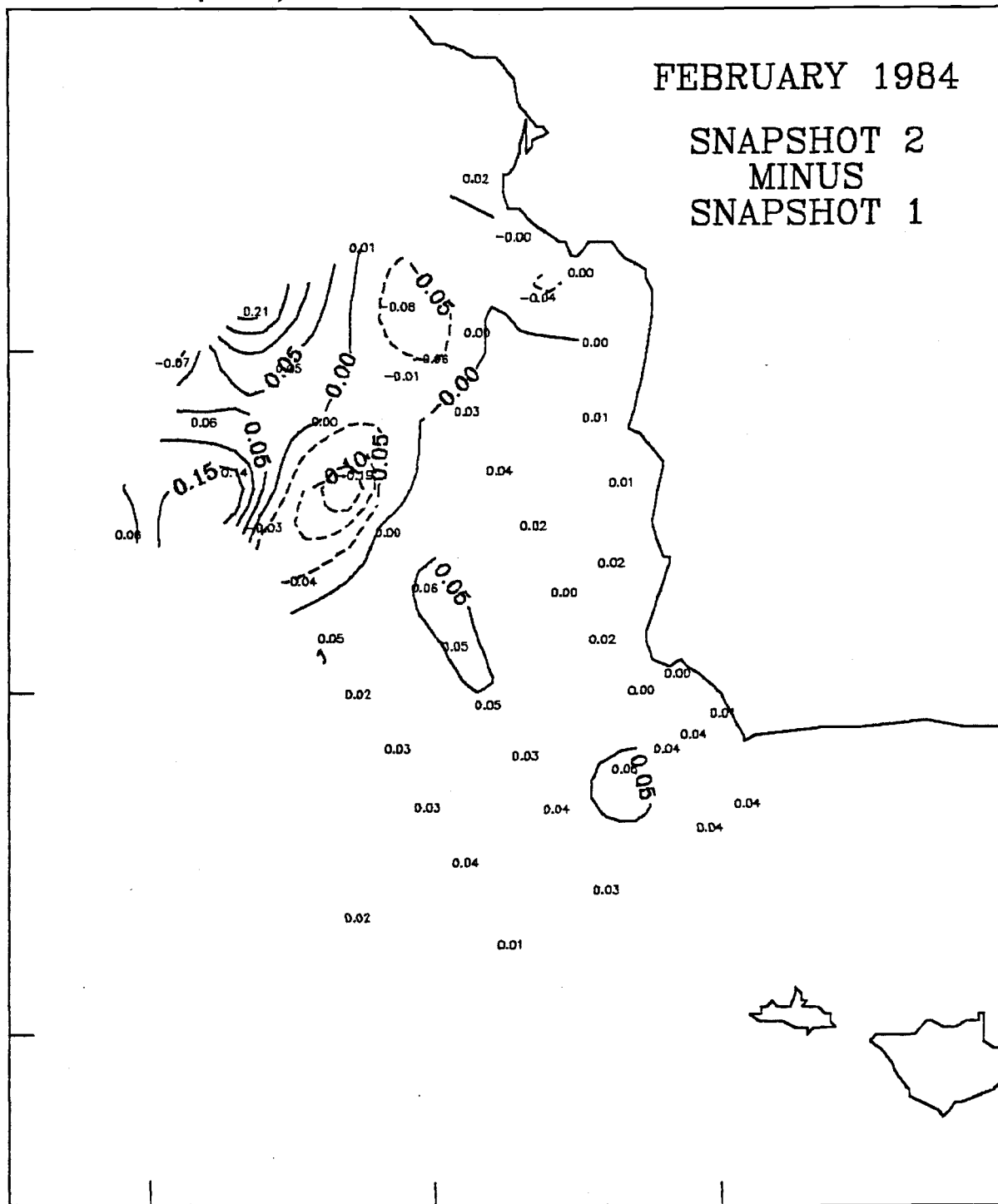
10 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34



121

120

SALINITY (PPT)

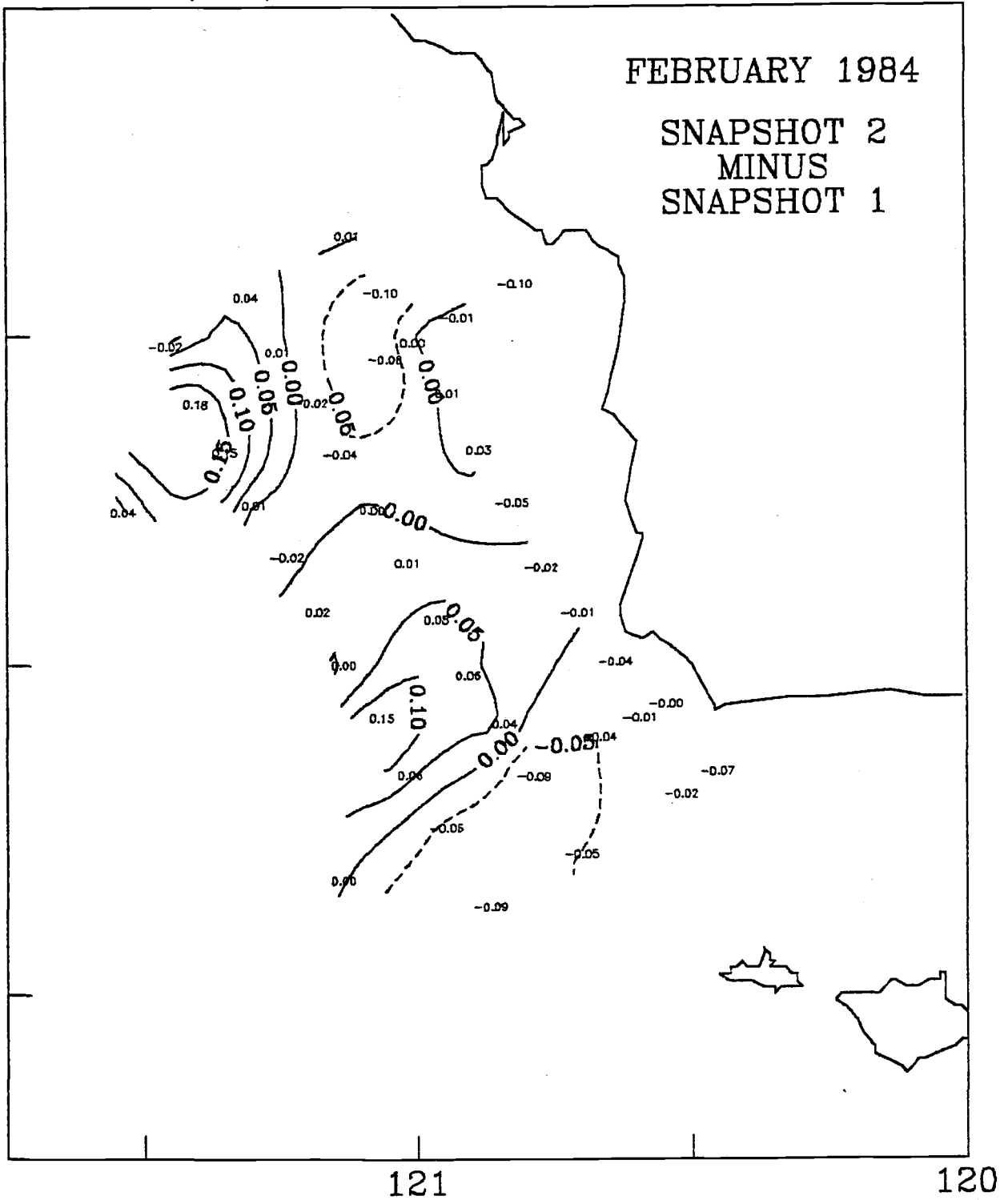
50 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34

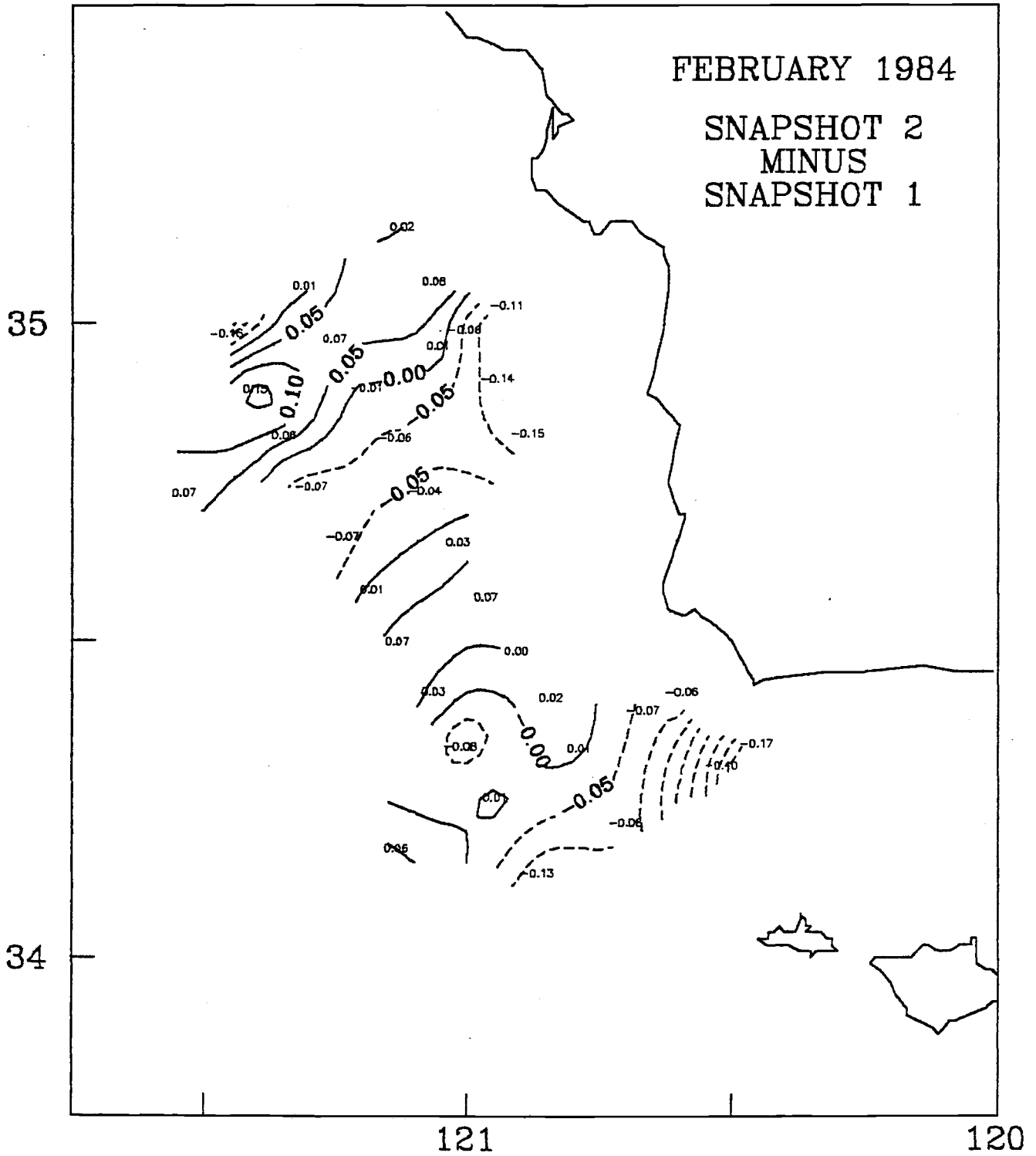


121

120

SALINITY (PPT)

100 M



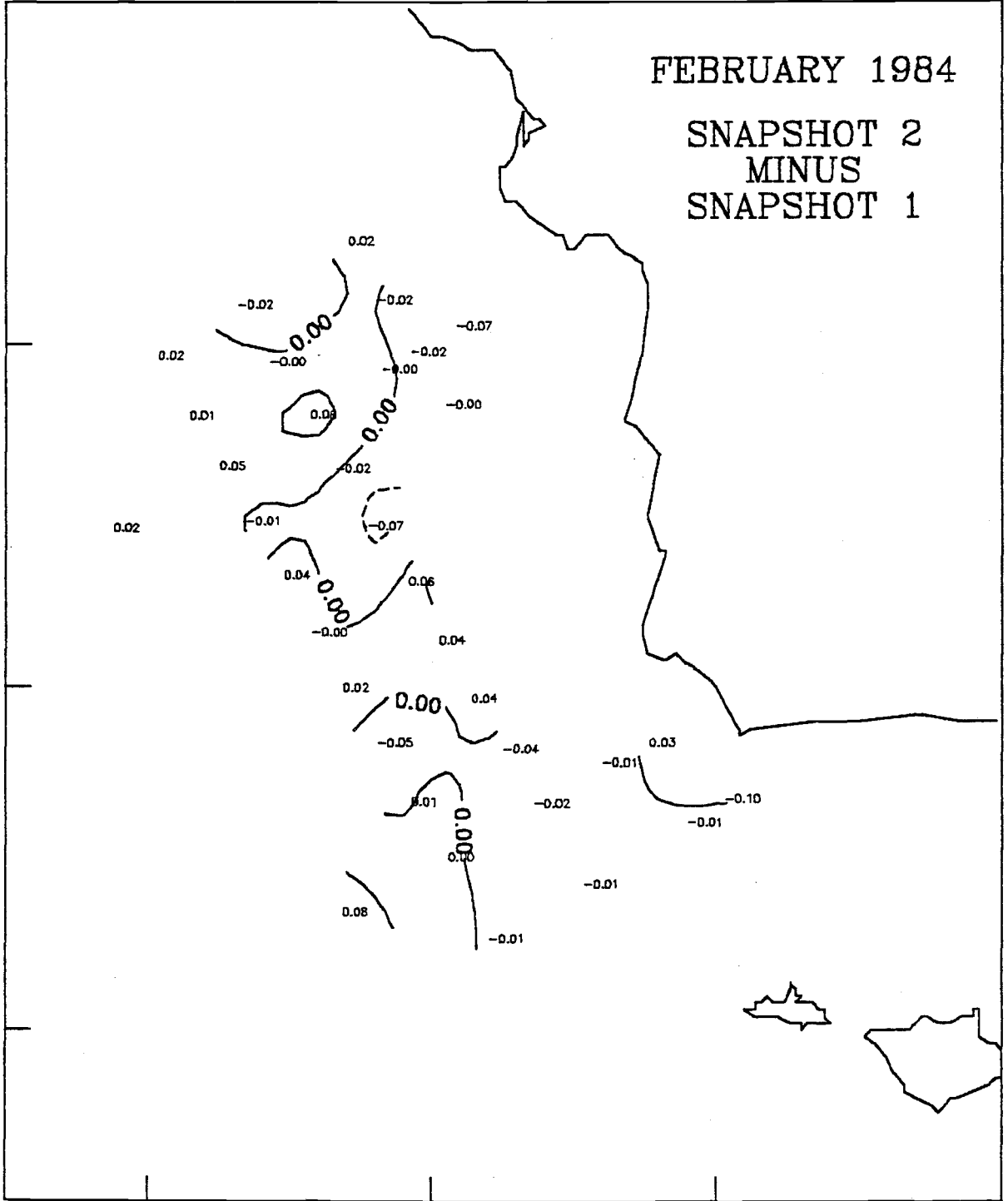
SALINITY (PPT)

200 M

FEBRUARY 1984
SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34

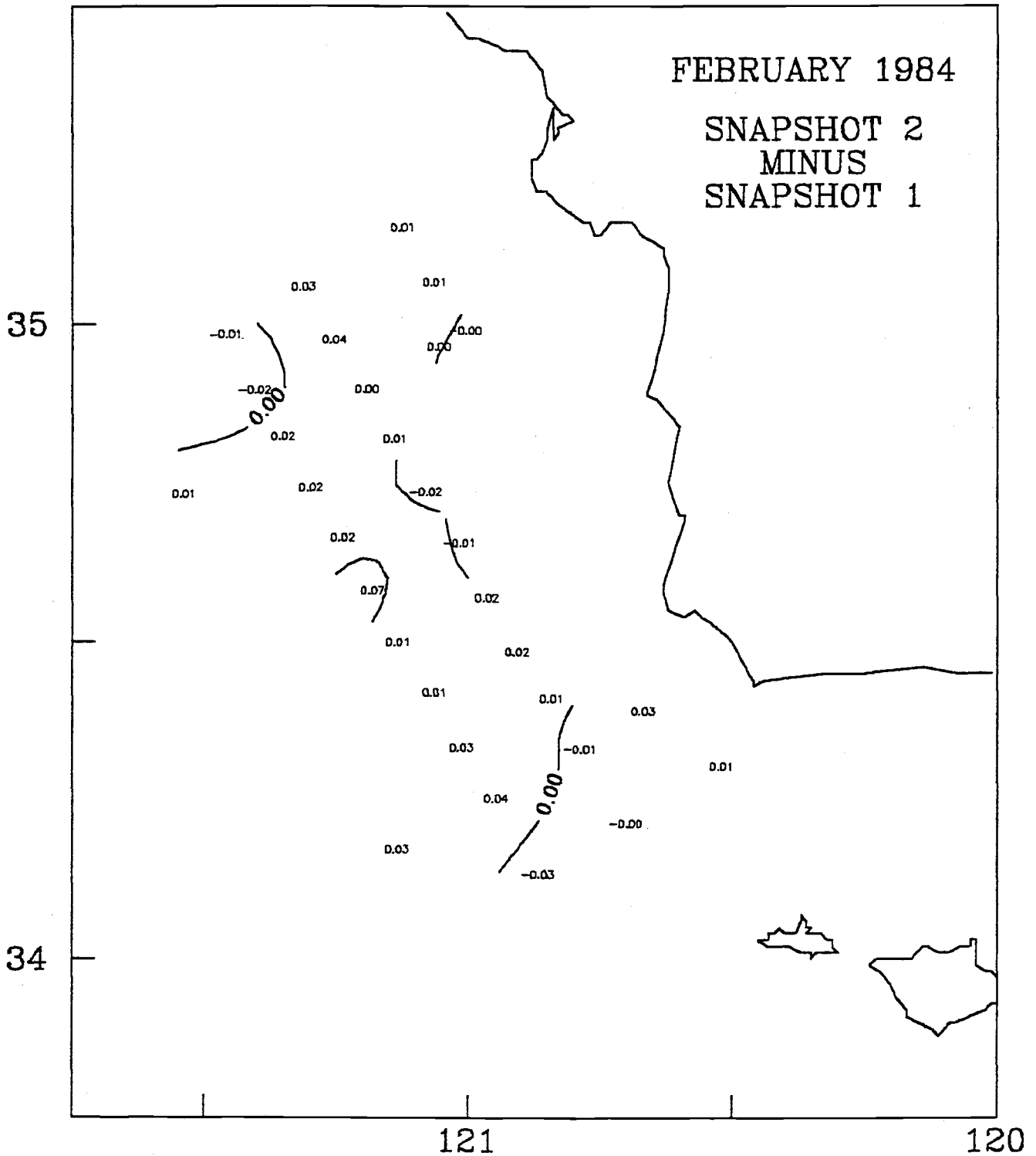


121

120

SALINITY (PPT)

400 M



SIGMA-T

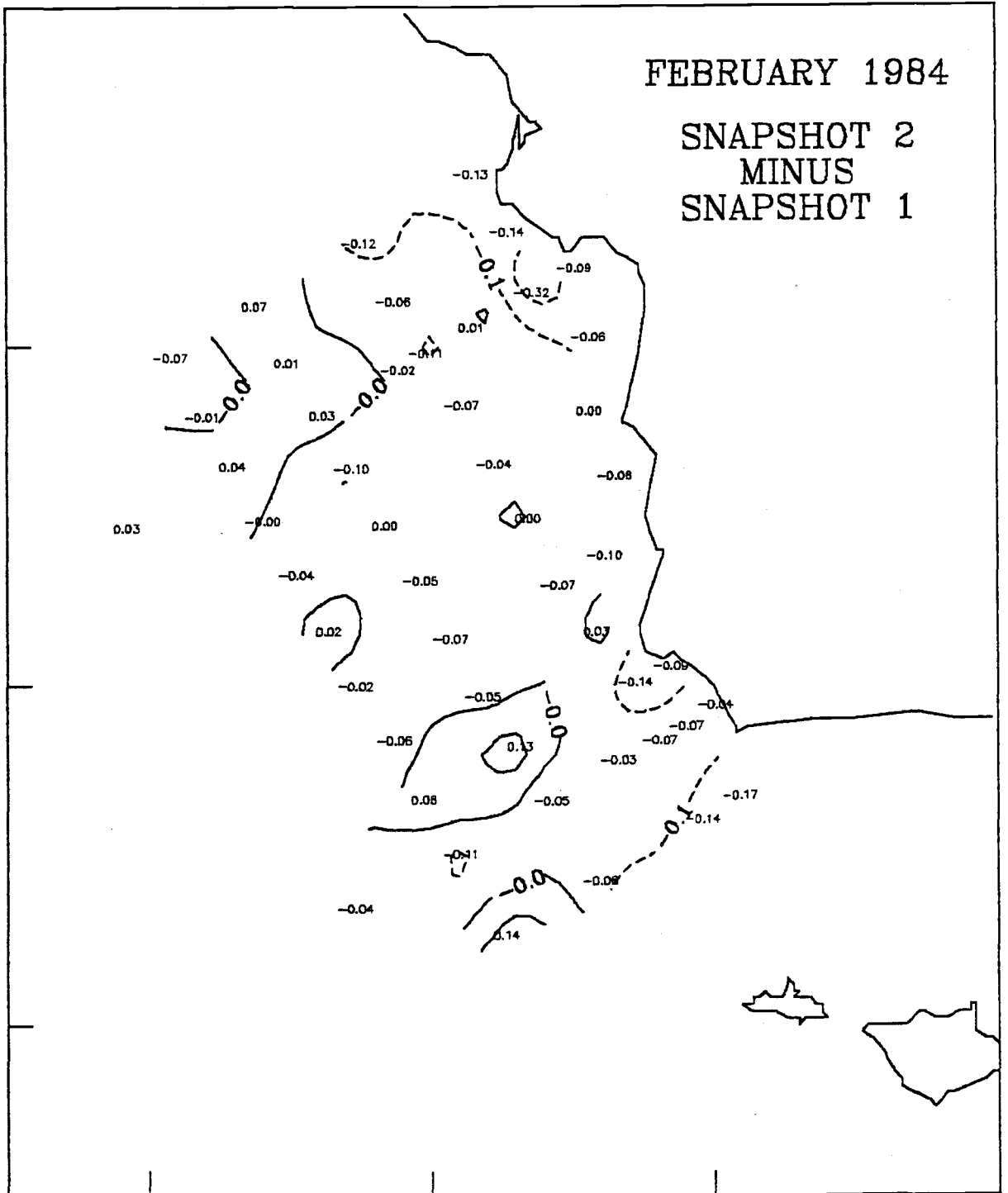
10 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34



121

120

SIGMA-T

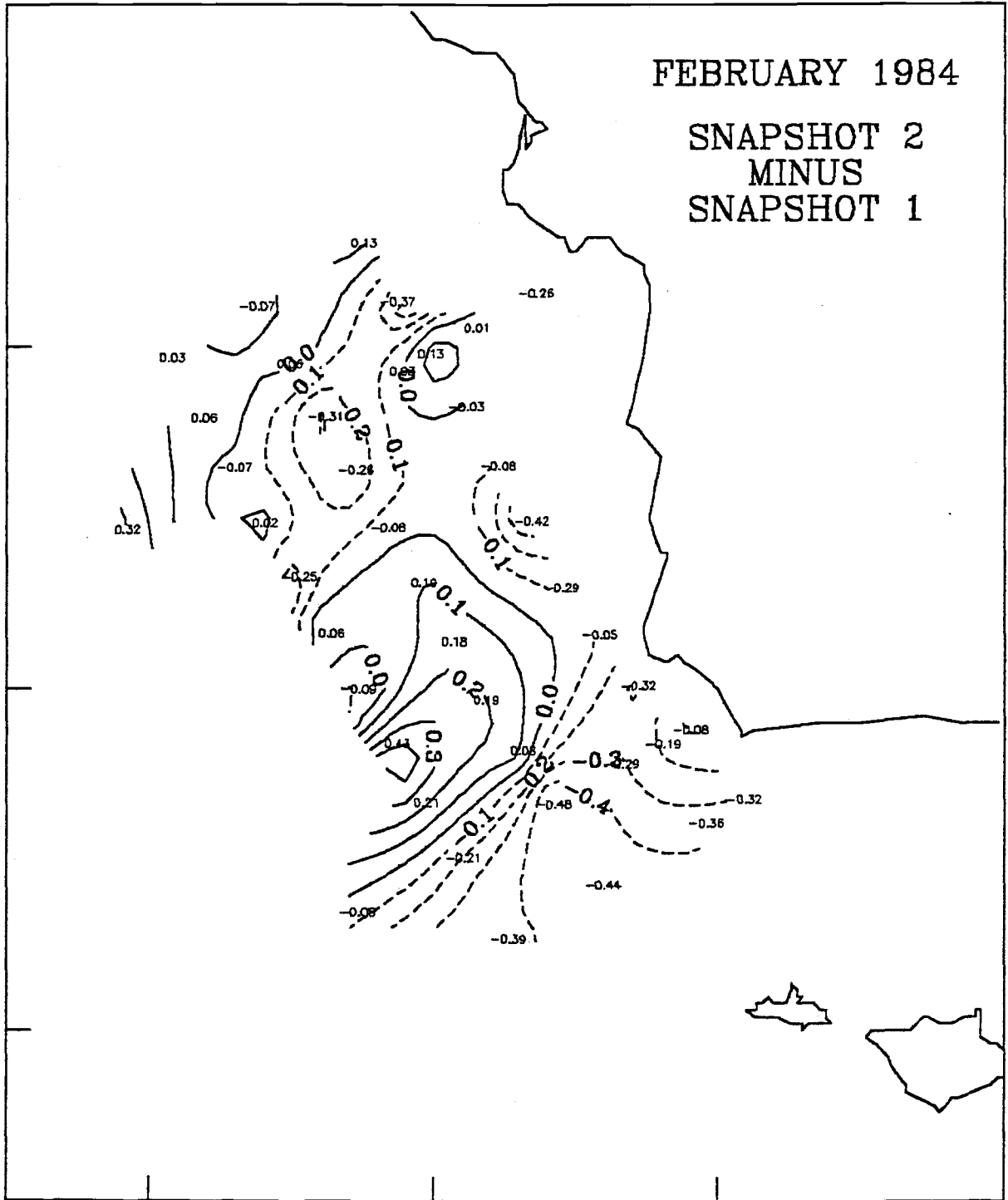
50 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

34



121

120

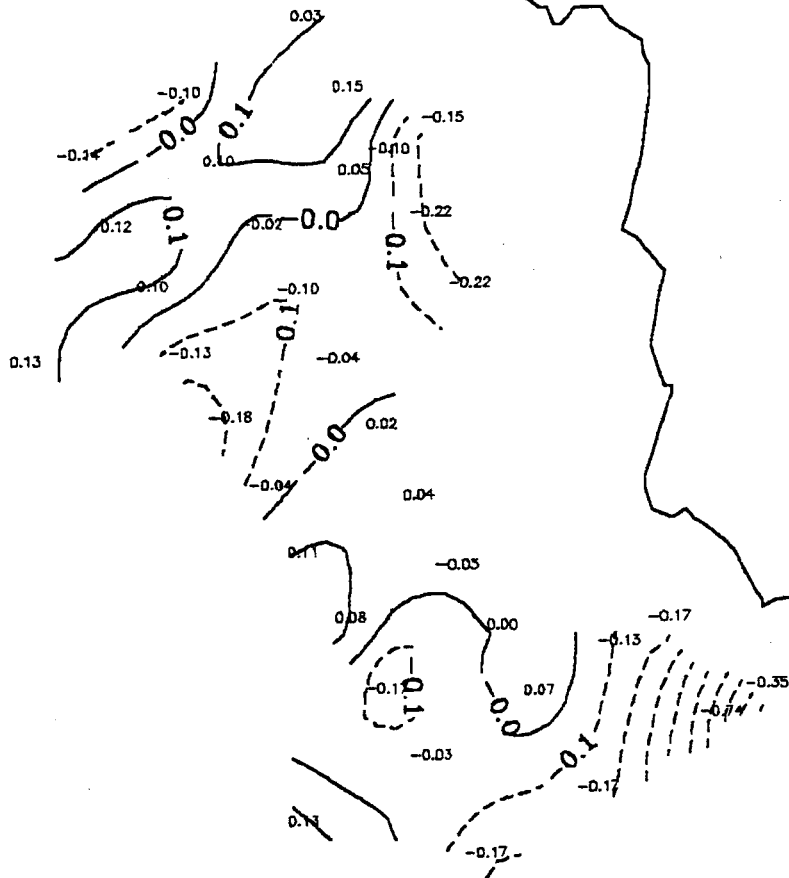
SIGMA-T

100 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35



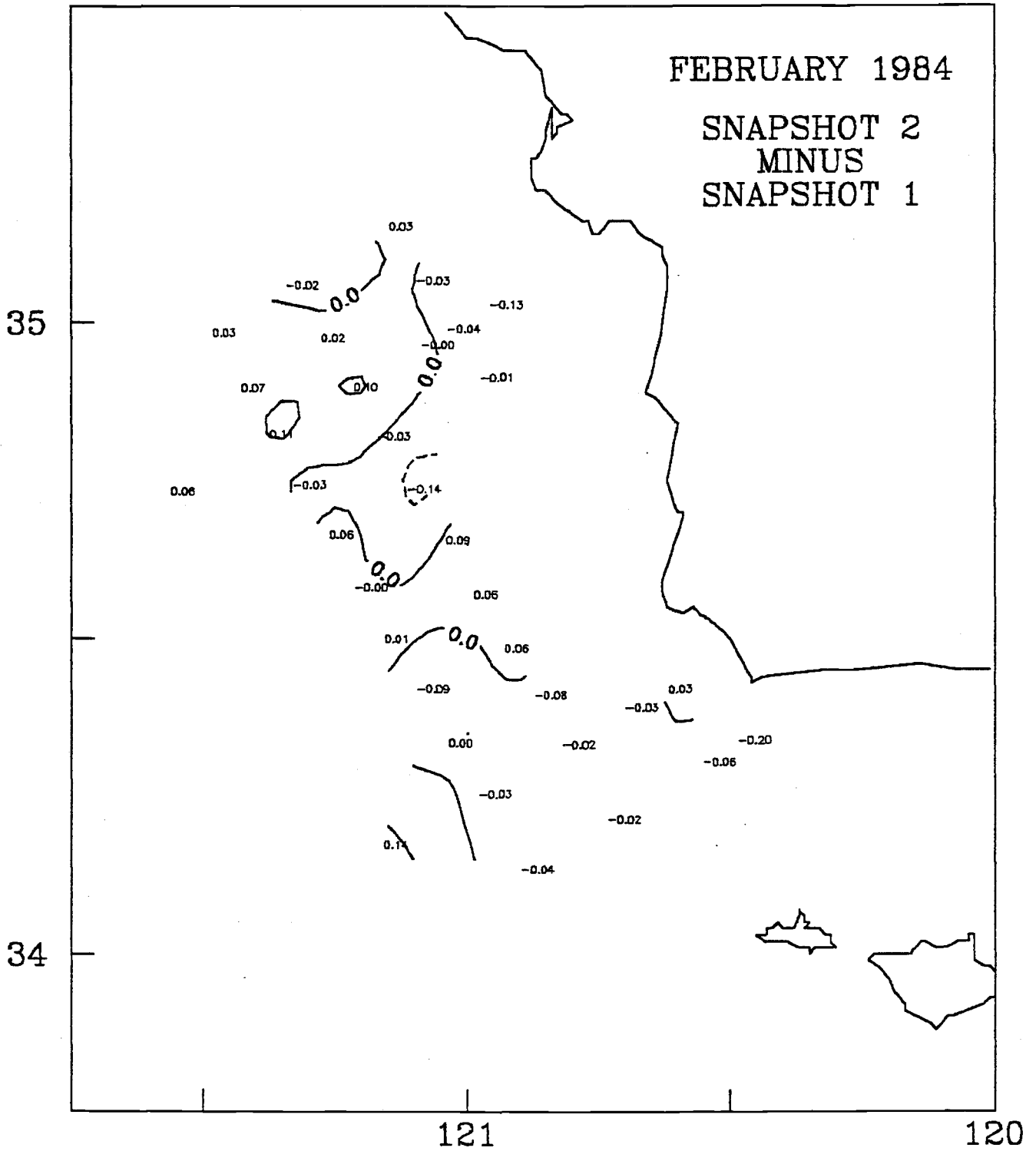
34

121

120

SIGMA-T

200 M



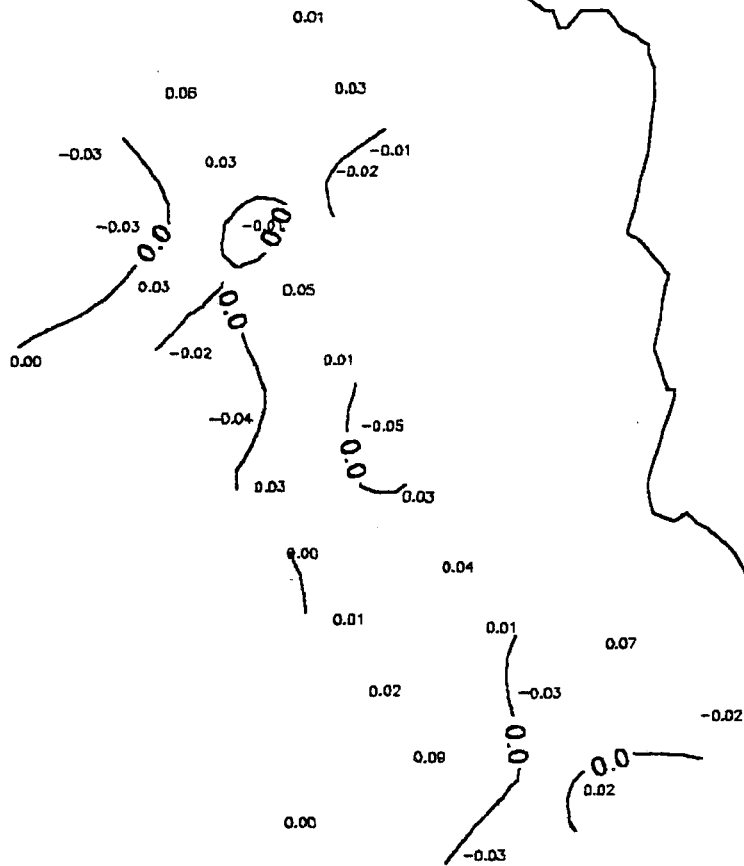
SIGMA-T

400 M

FEBRUARY 1984

SNAPSHOT 2
MINUS
SNAPSHOT 1

35

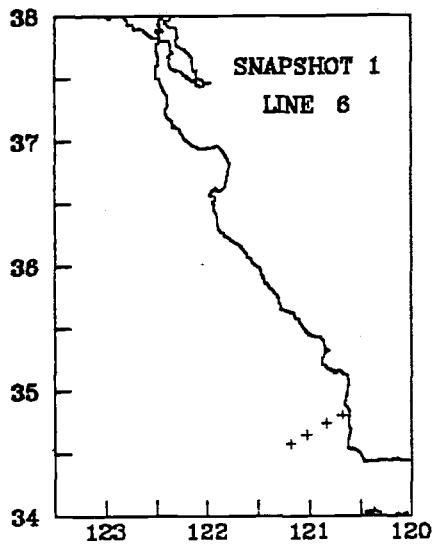
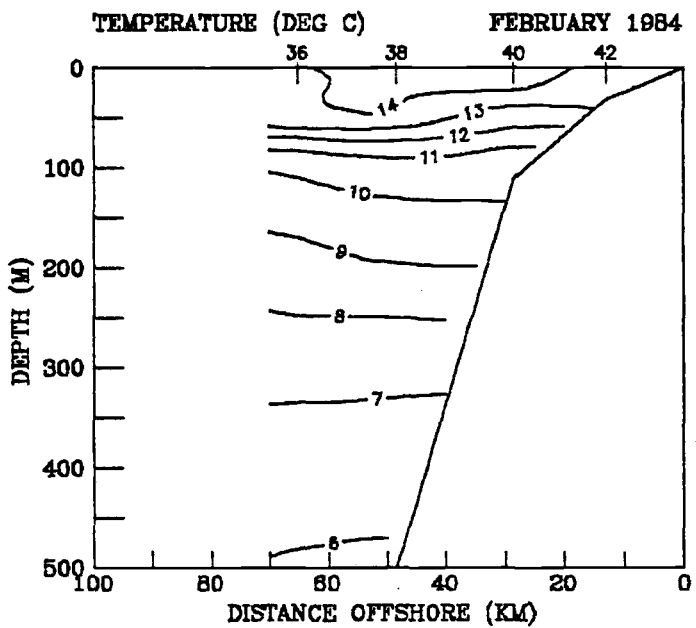
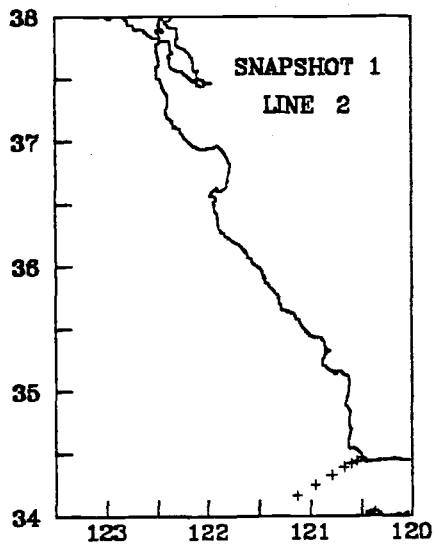
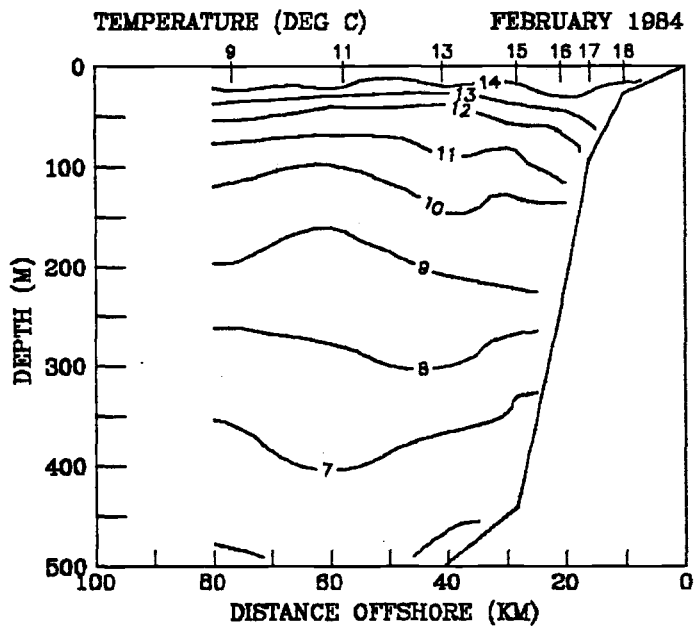


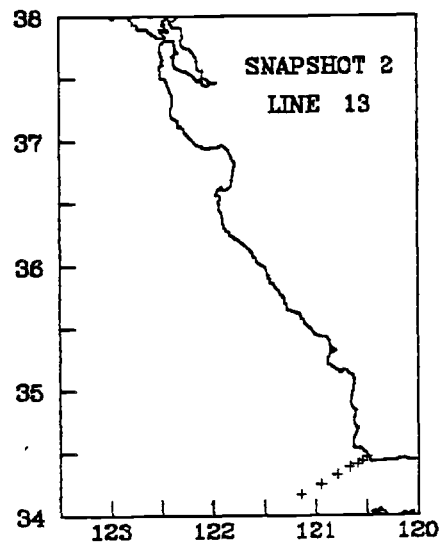
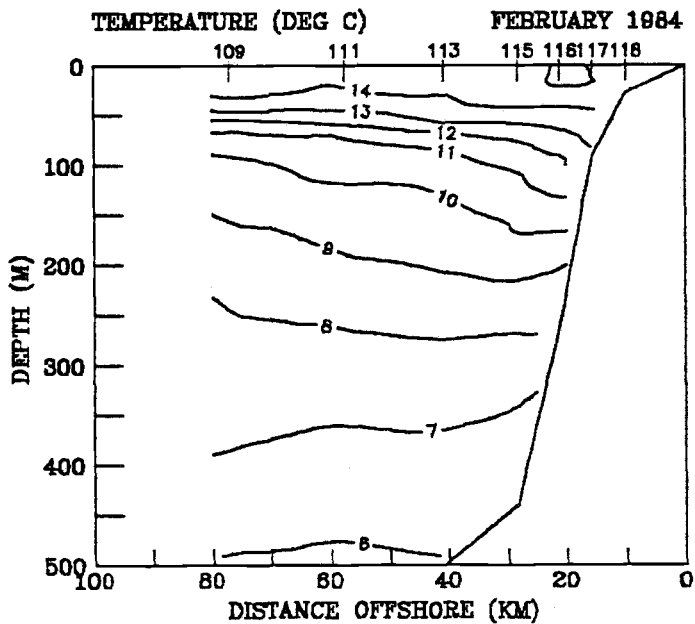
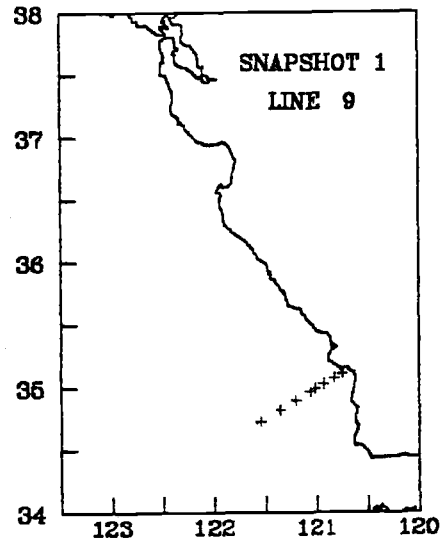
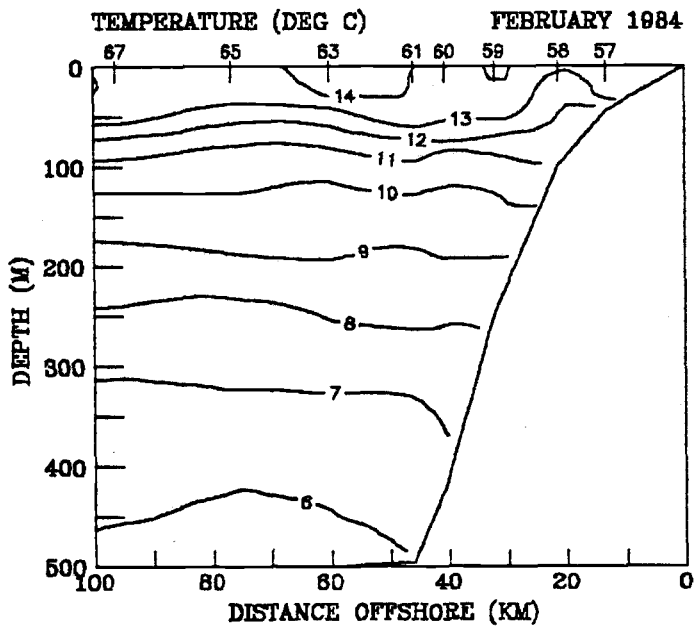
34

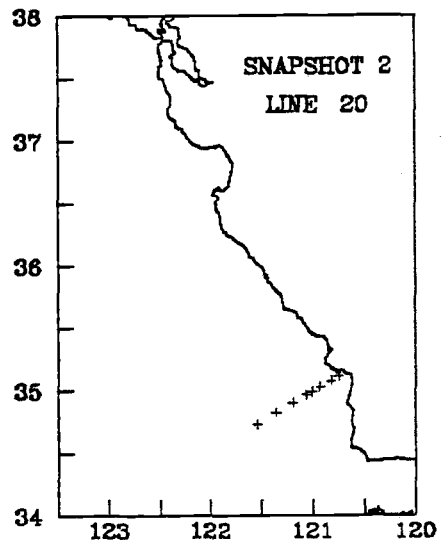
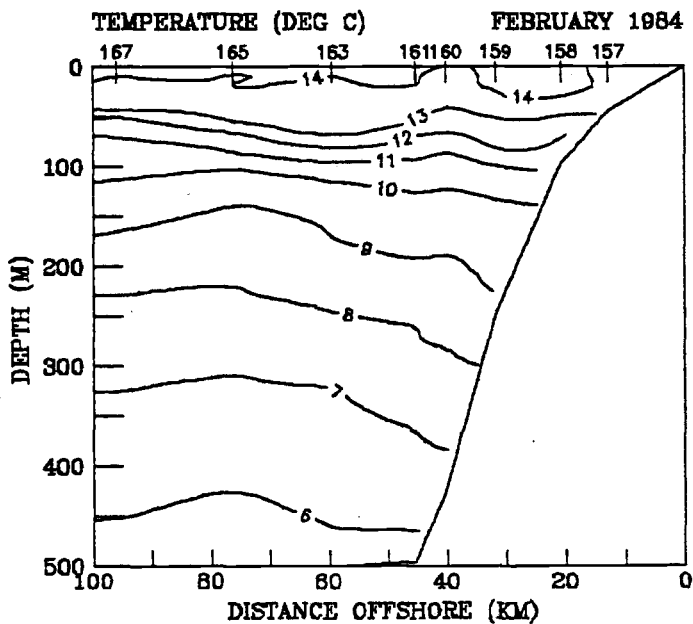
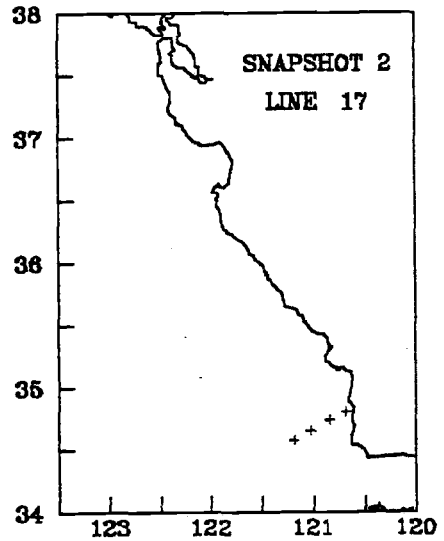
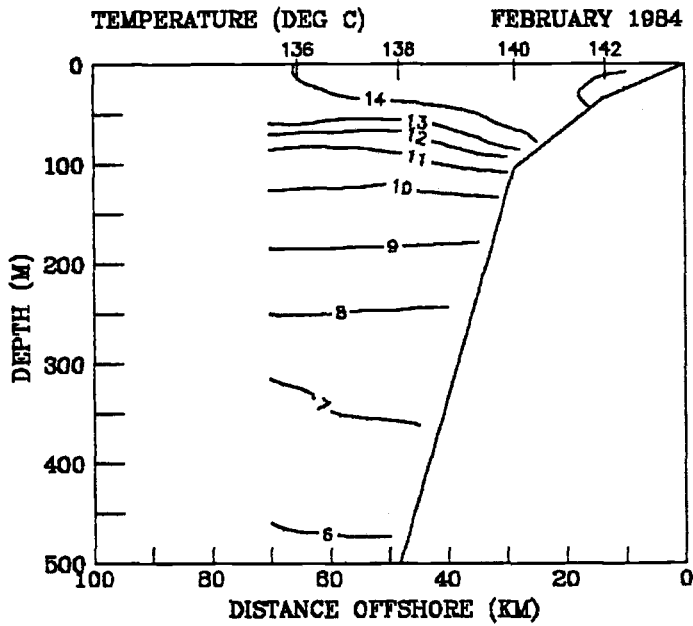
121

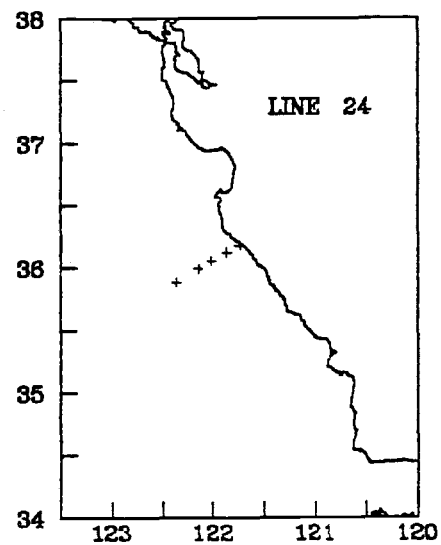
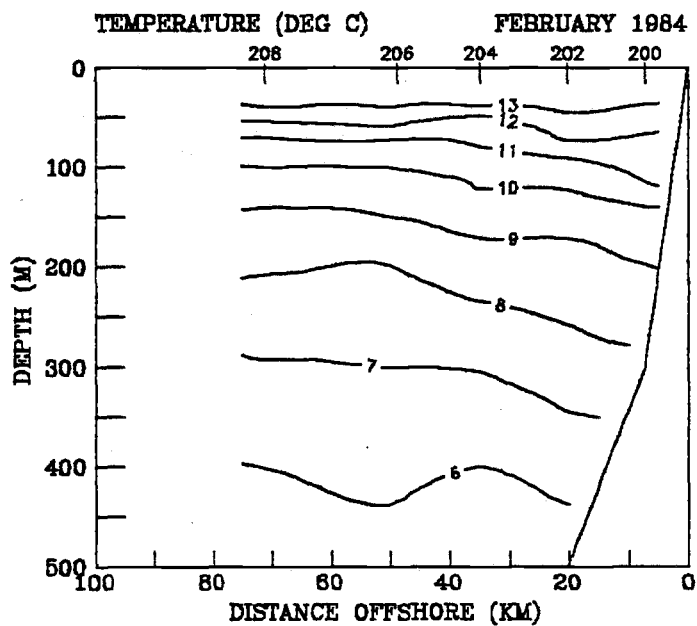
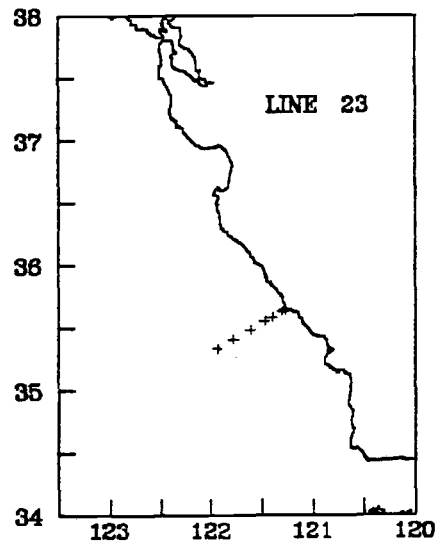
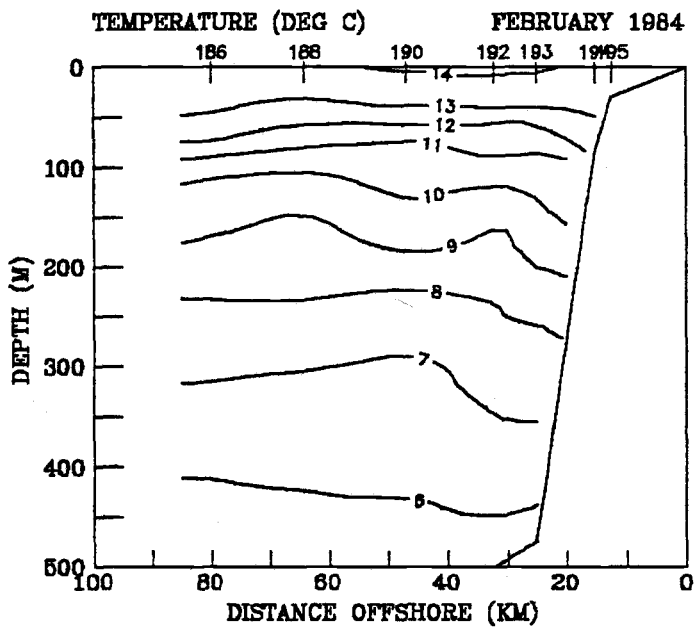
120

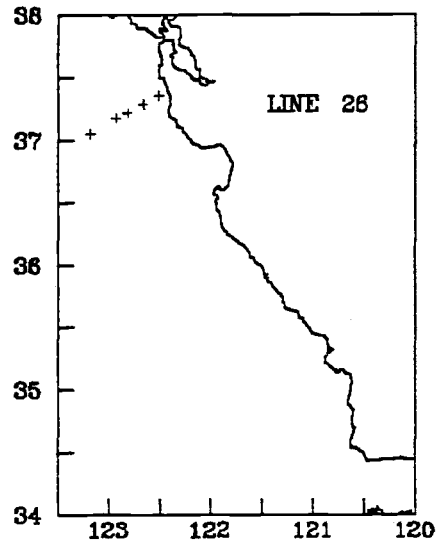
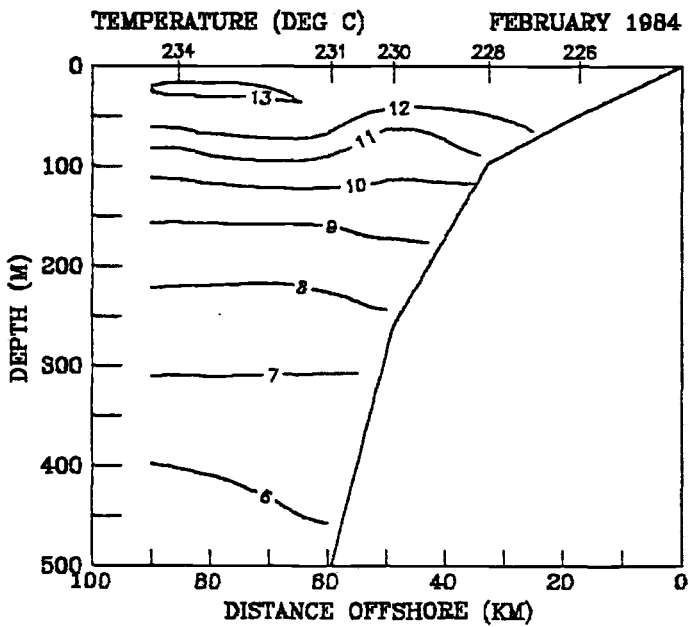
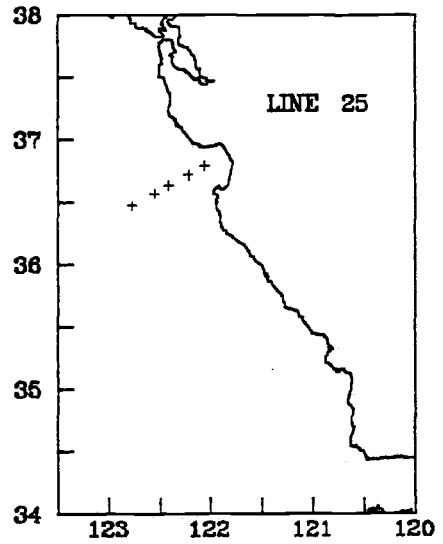
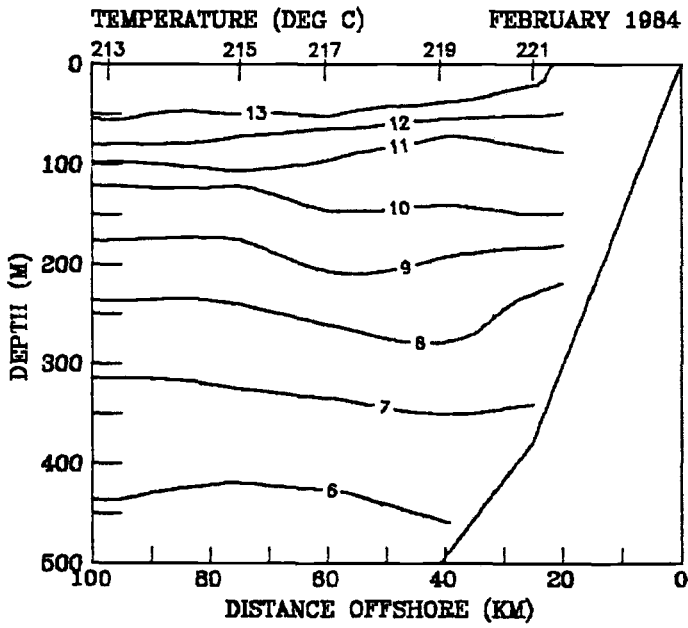
VERTICAL SECTIONS

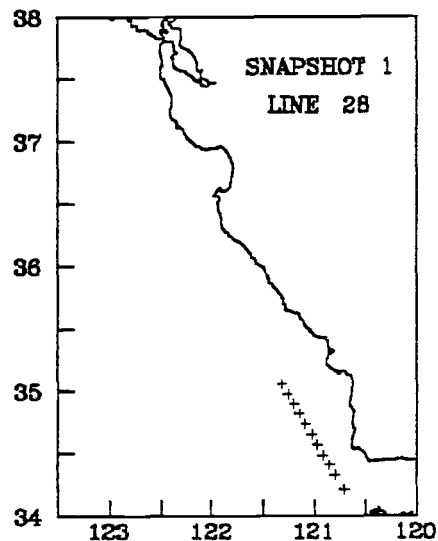
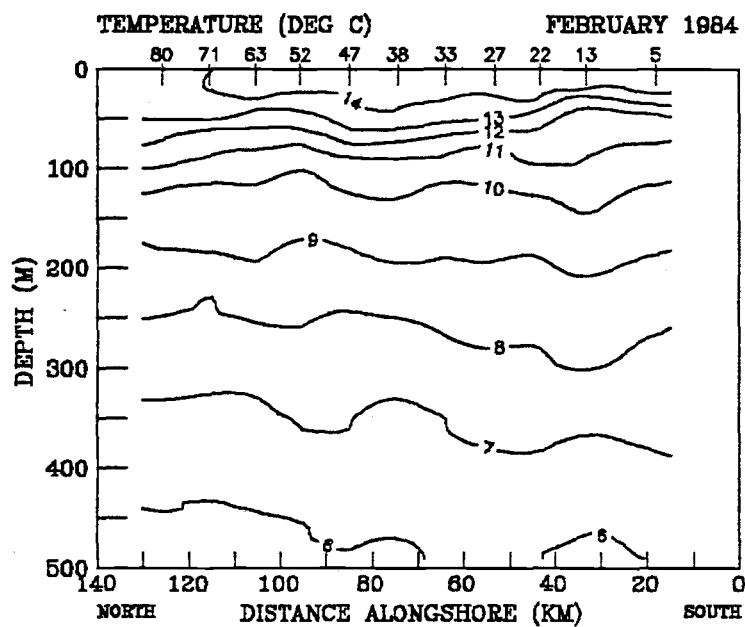
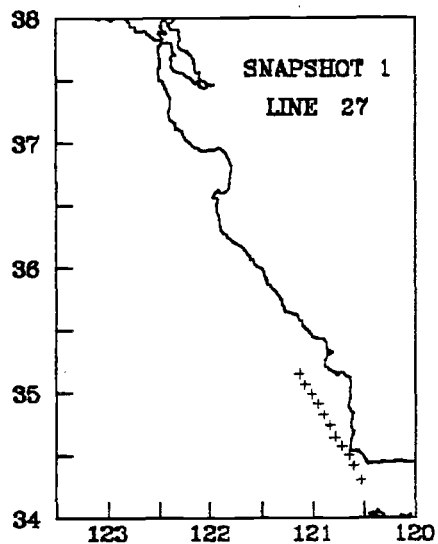
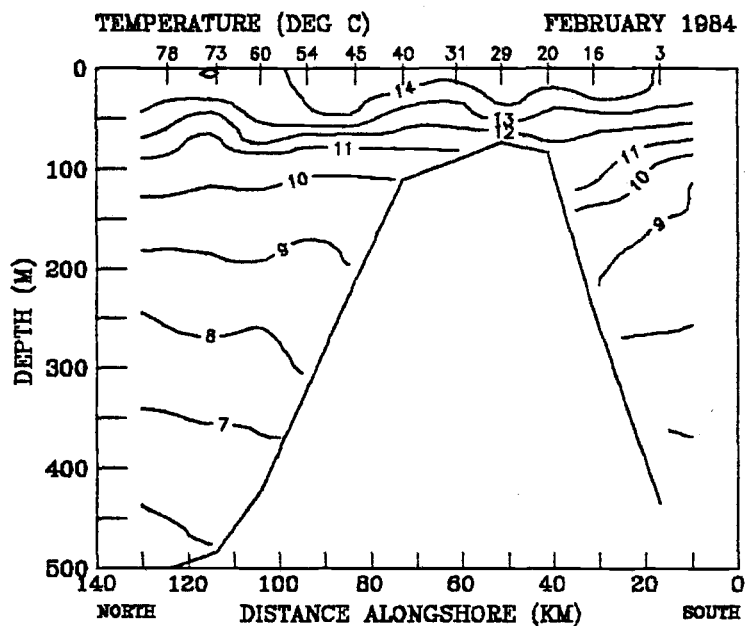


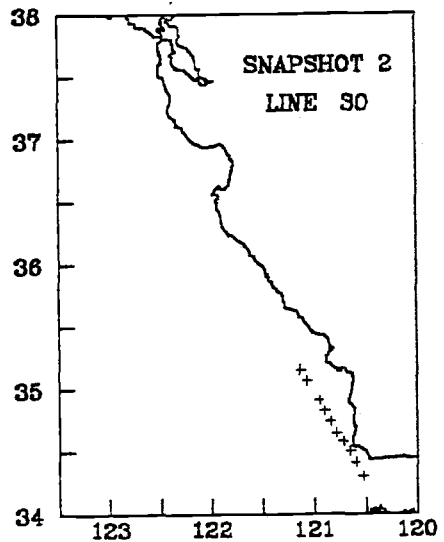
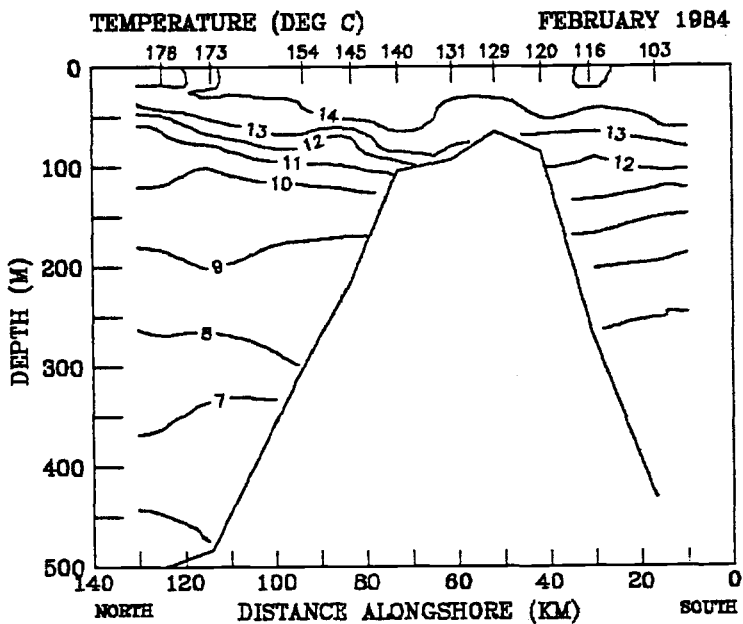
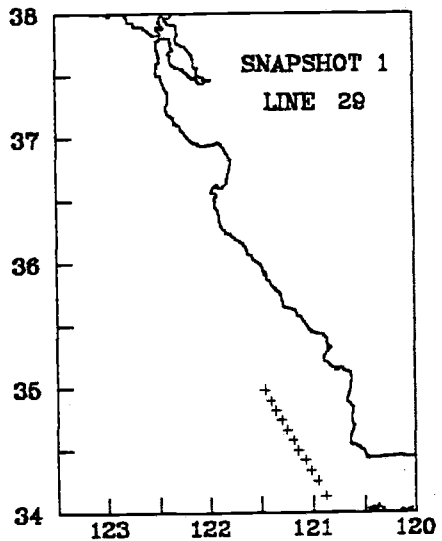
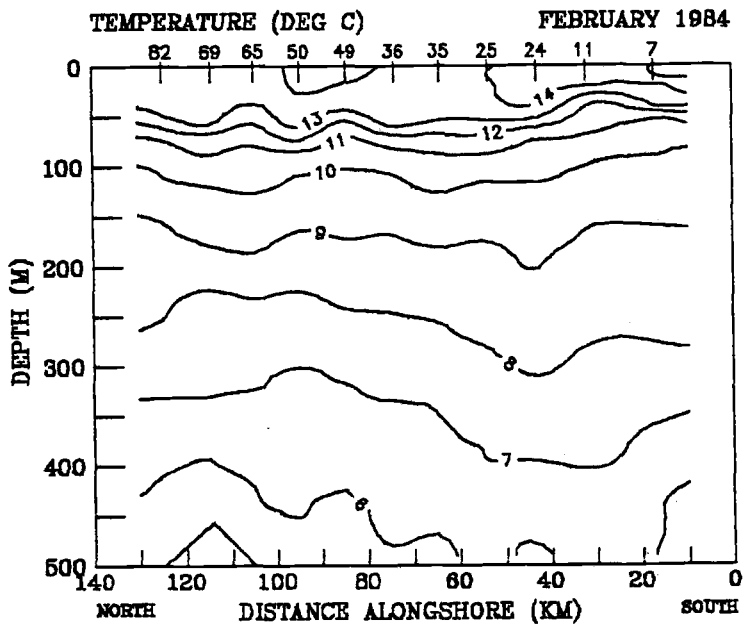


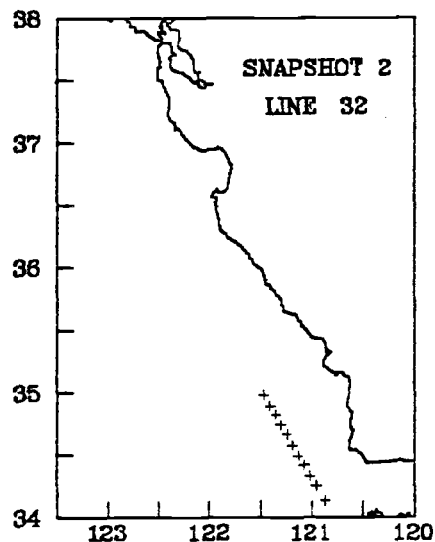
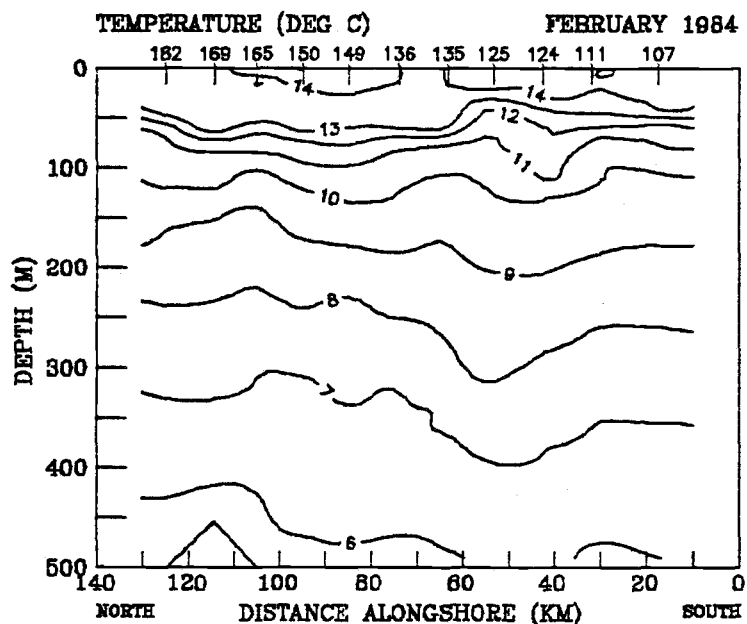
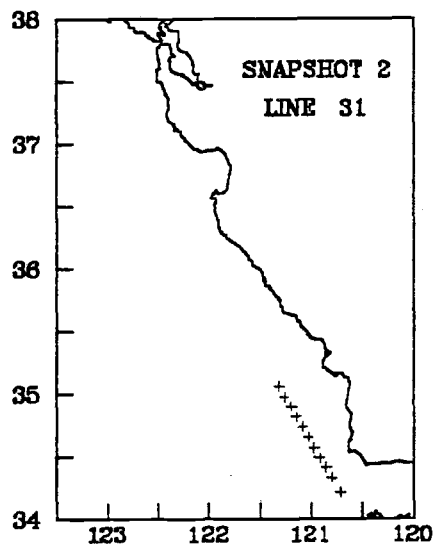
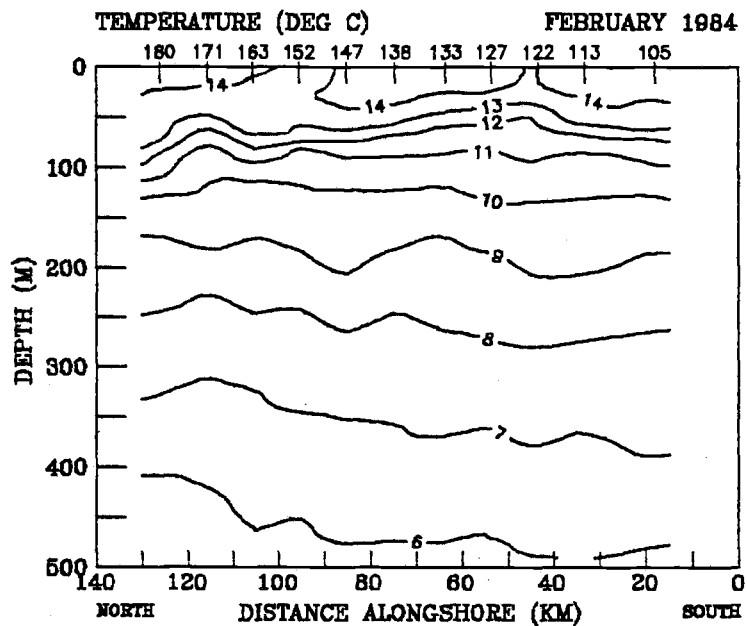


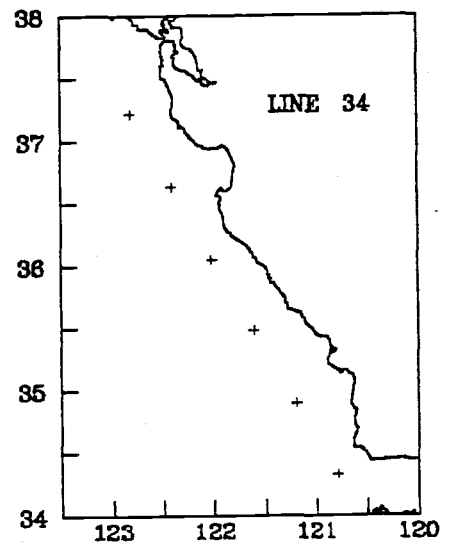
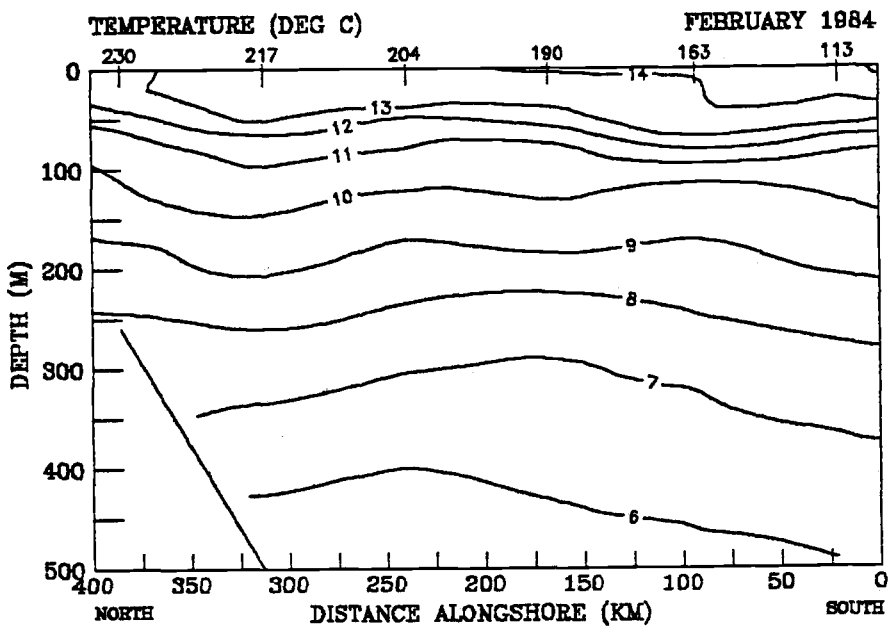
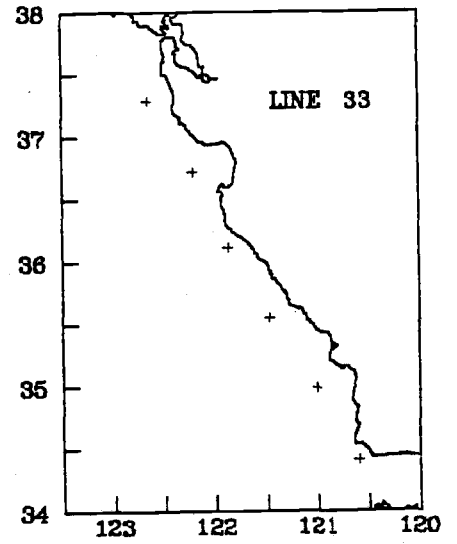
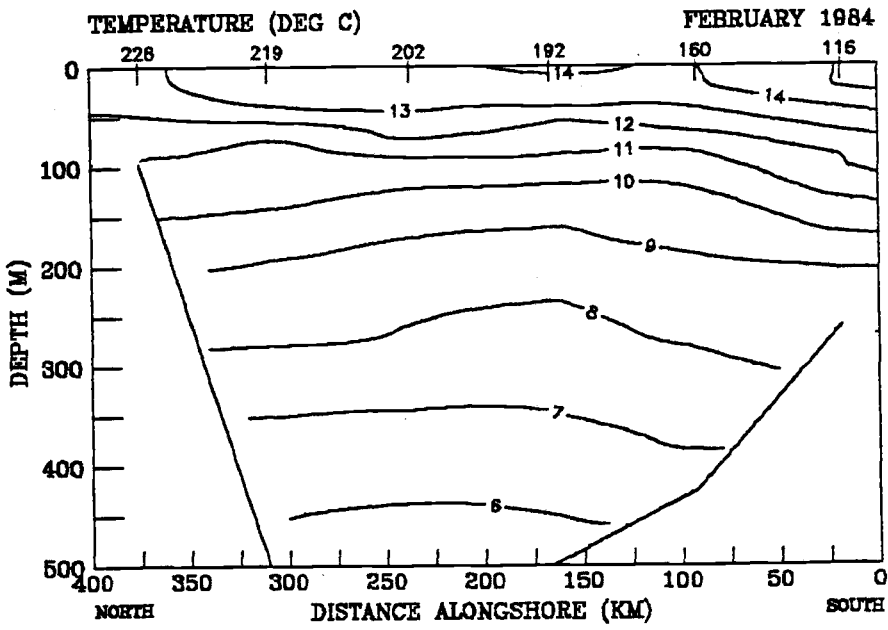


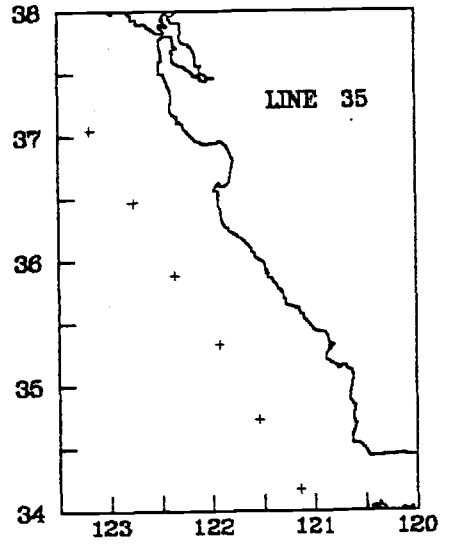
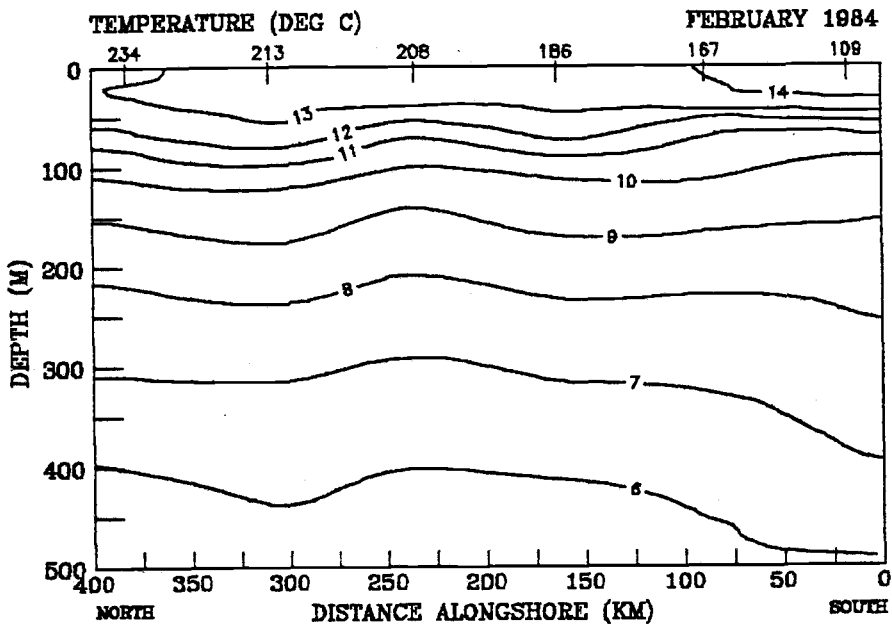


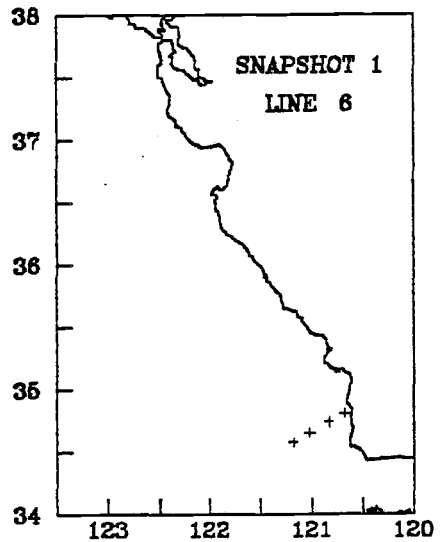
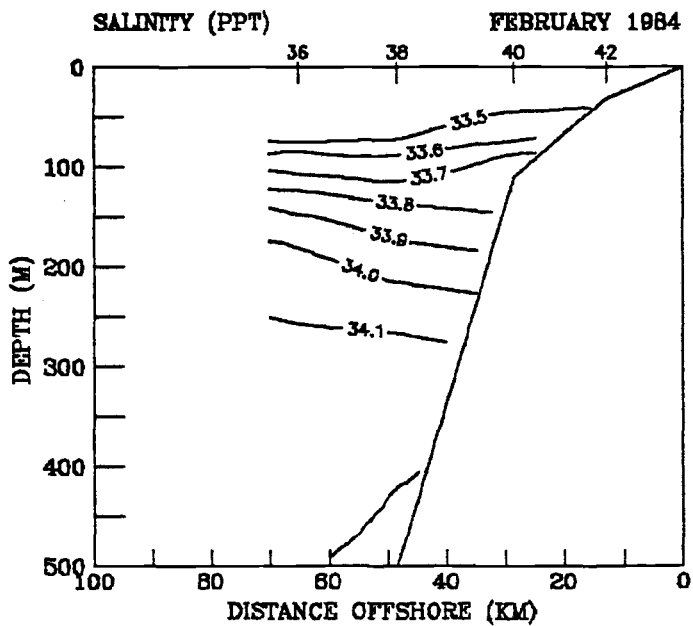
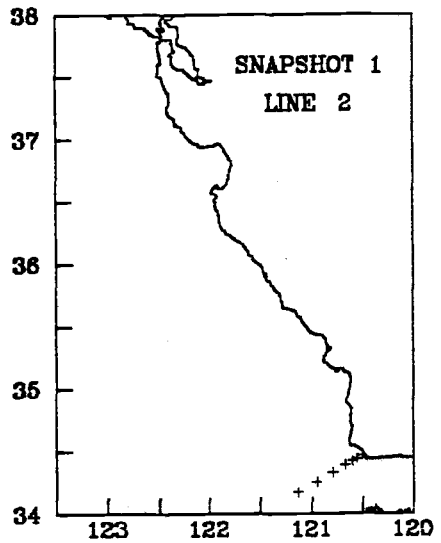
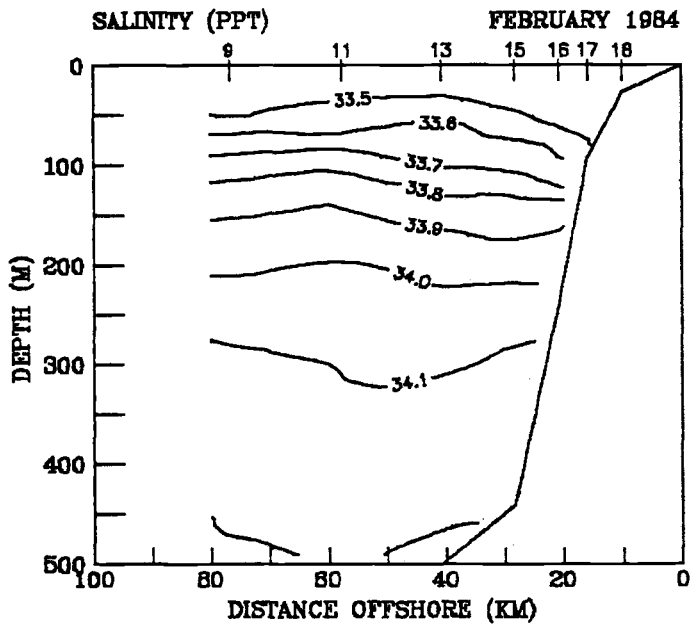


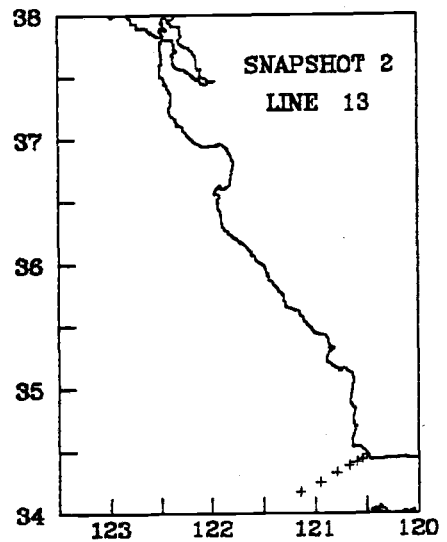
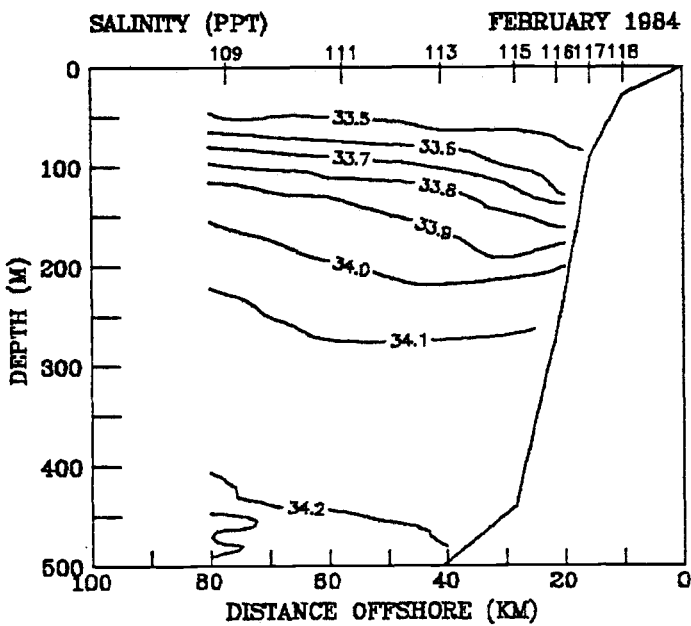
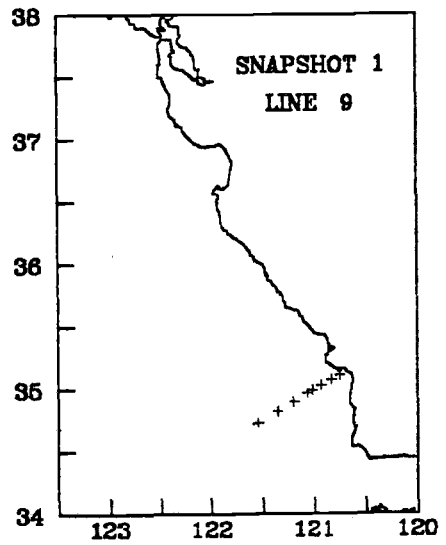
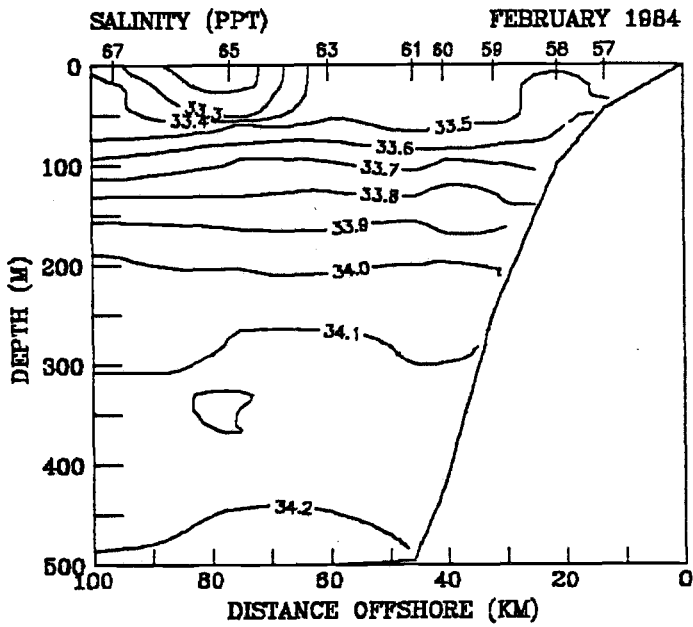


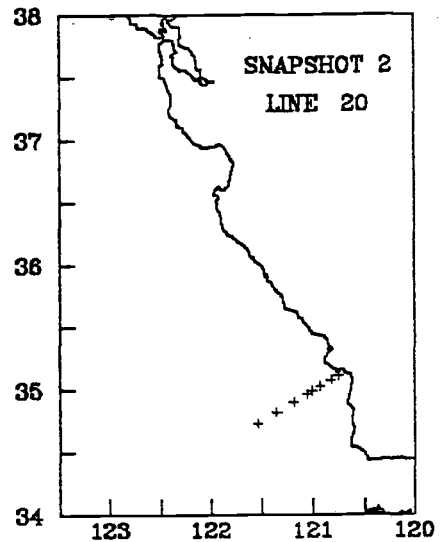
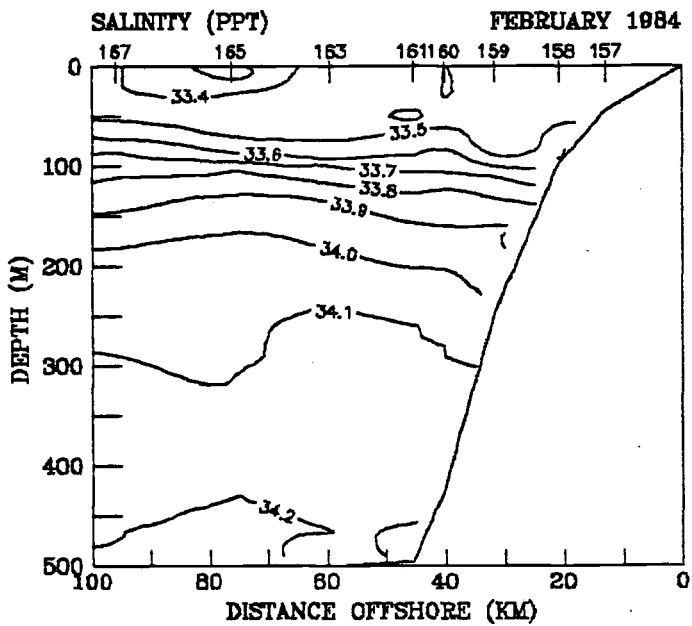
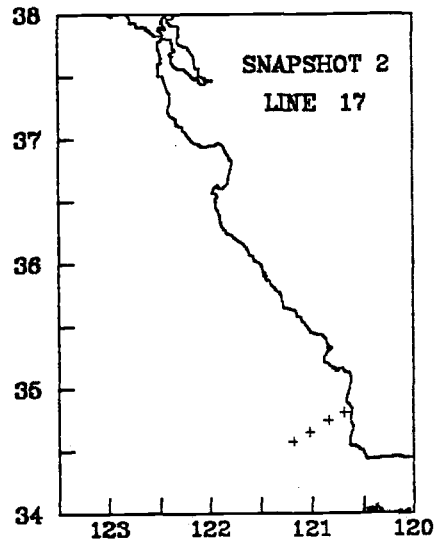
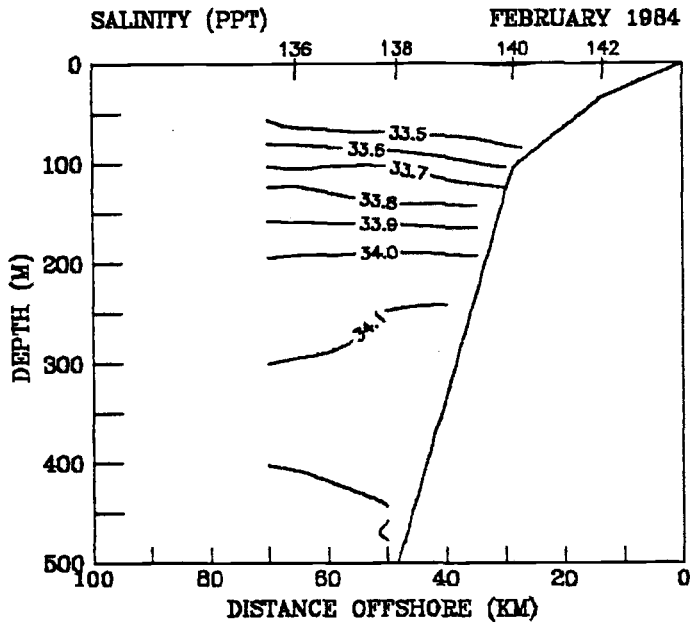


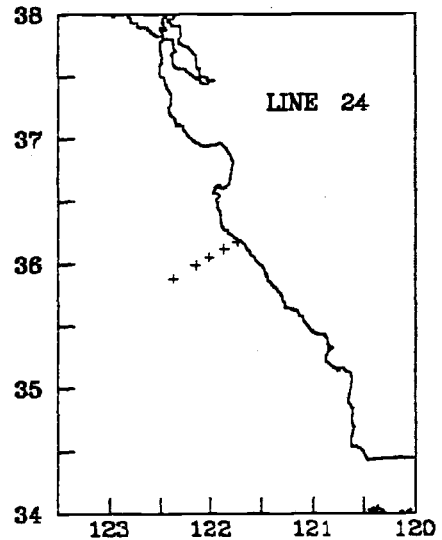
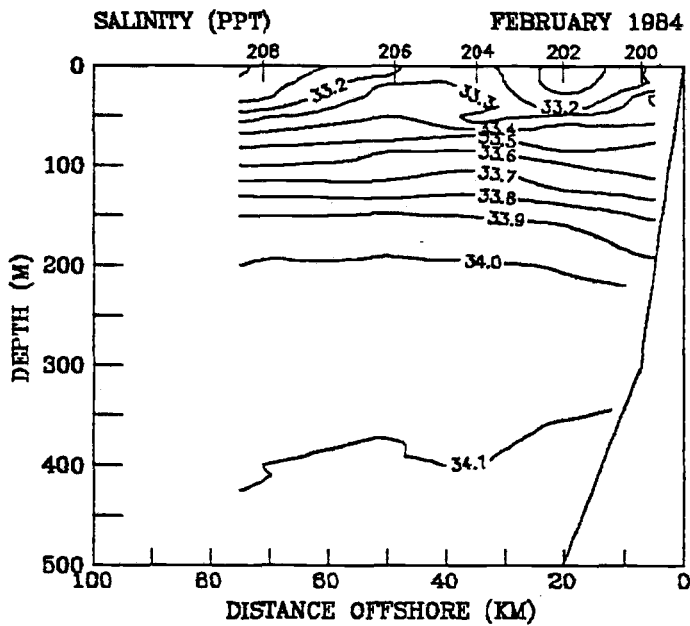
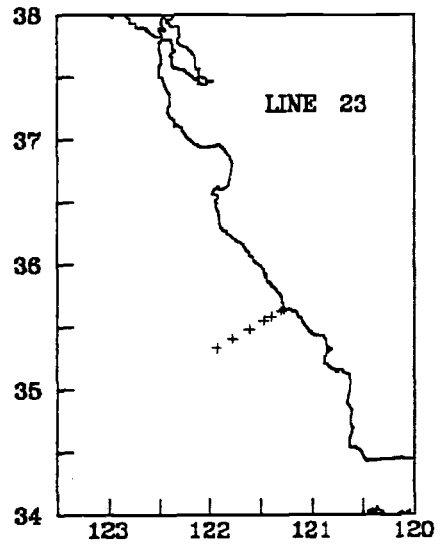
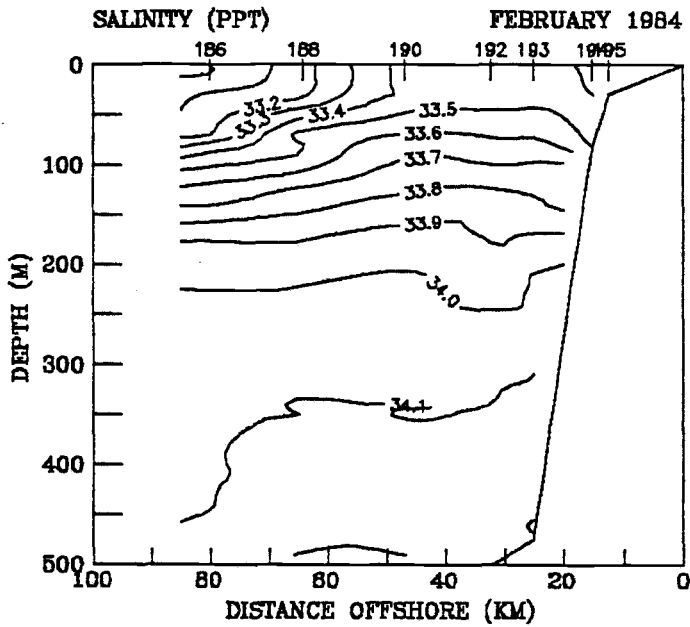


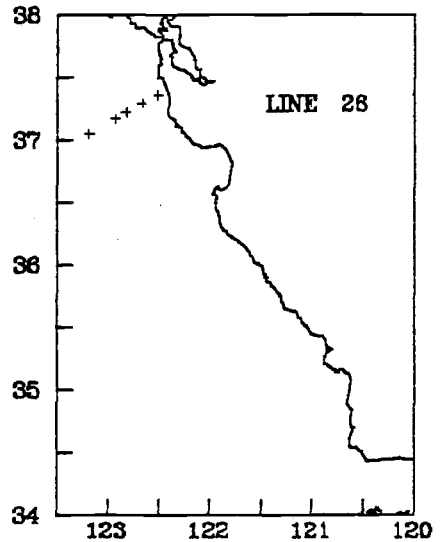
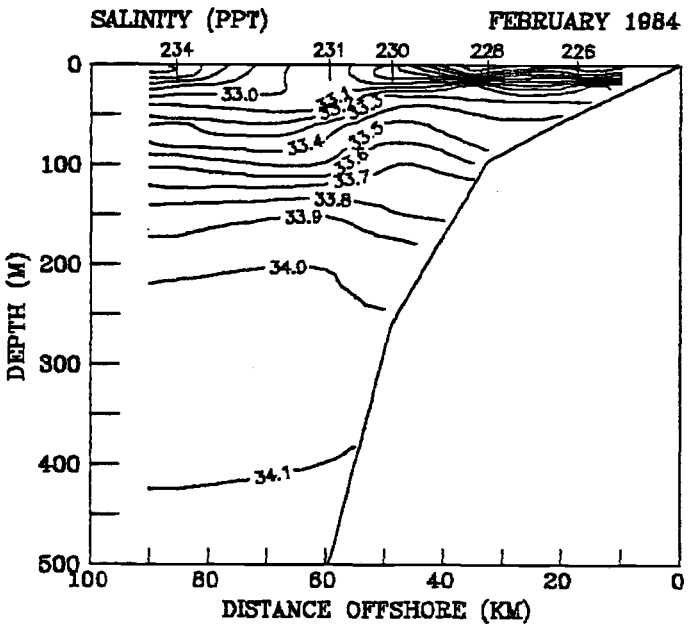
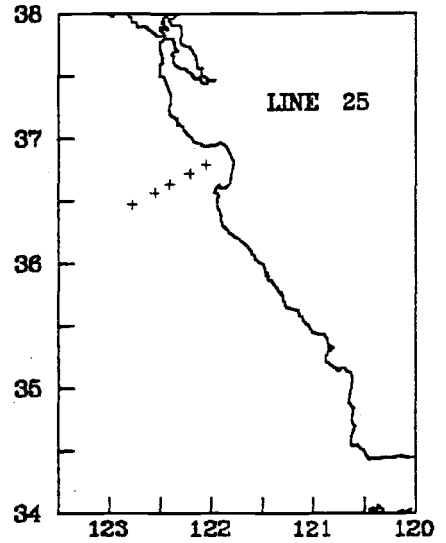
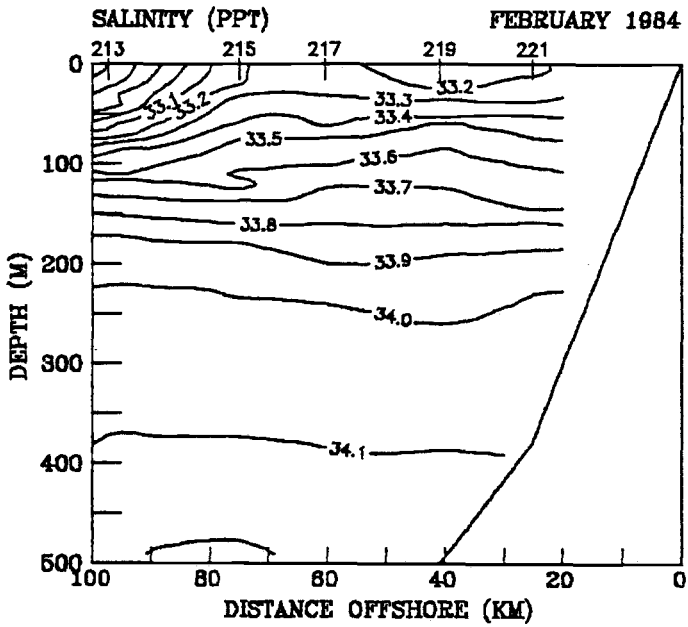


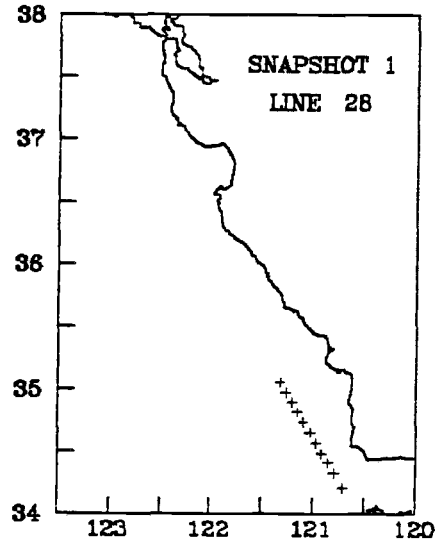
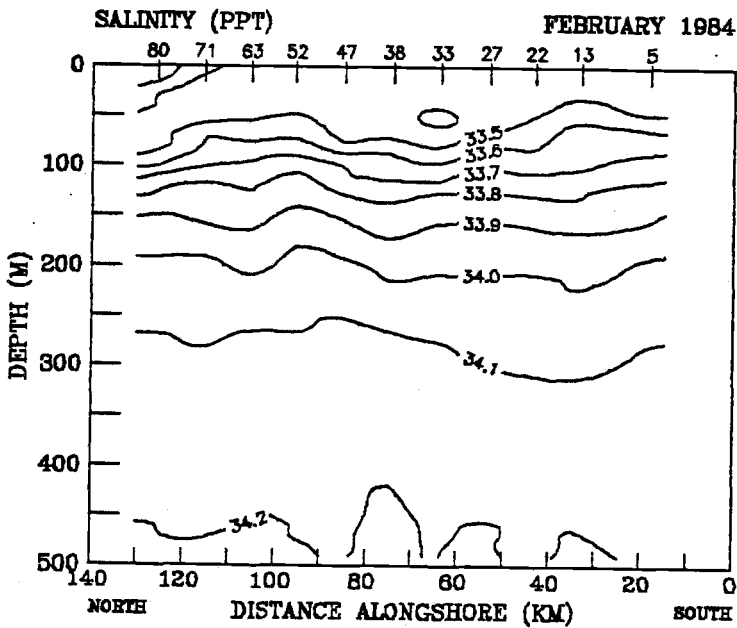
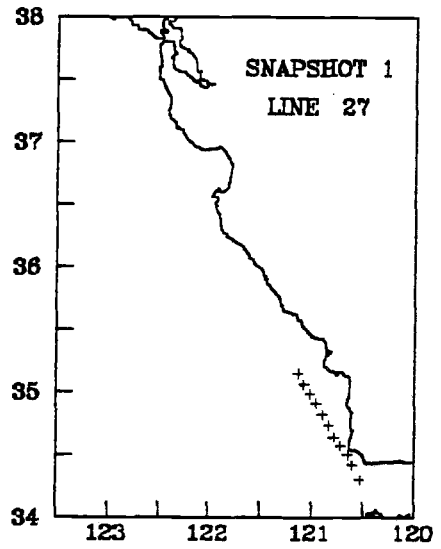
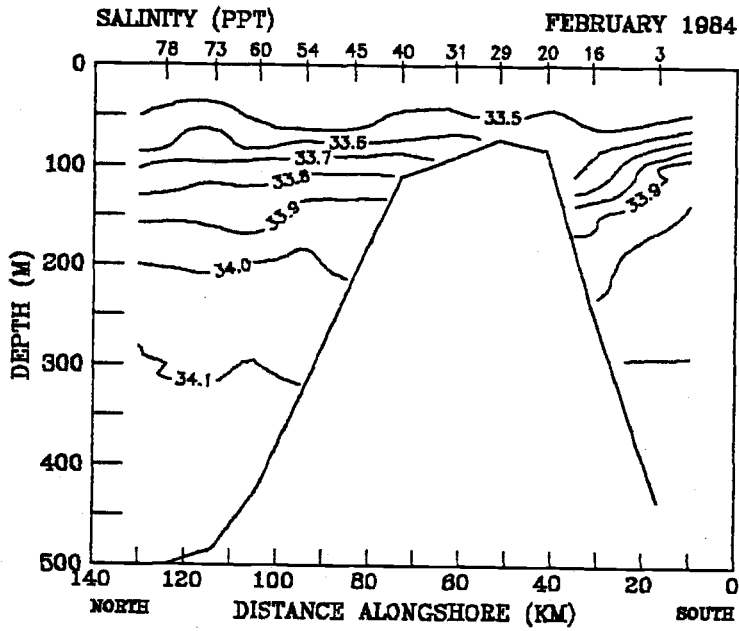


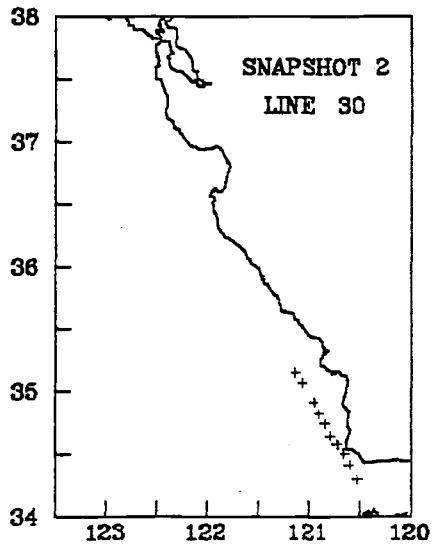
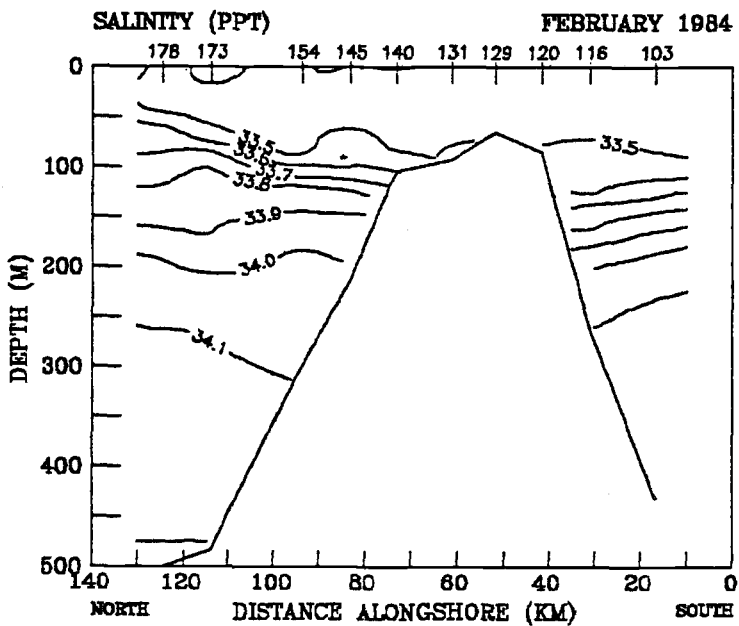
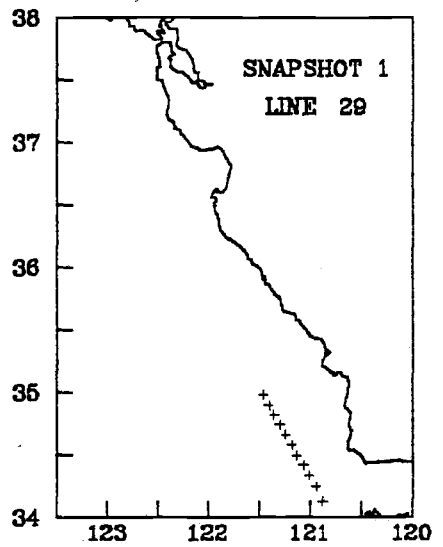
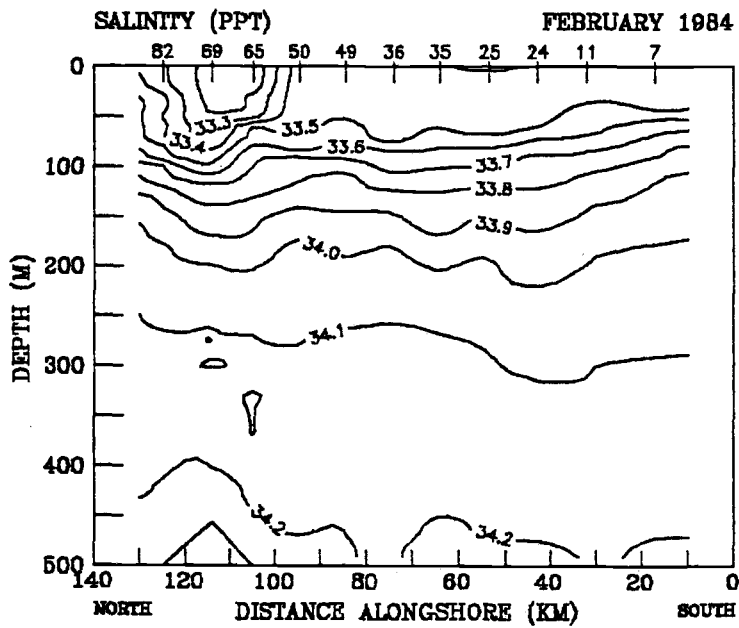


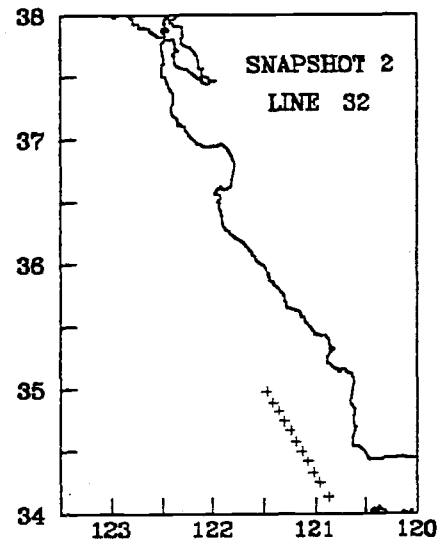
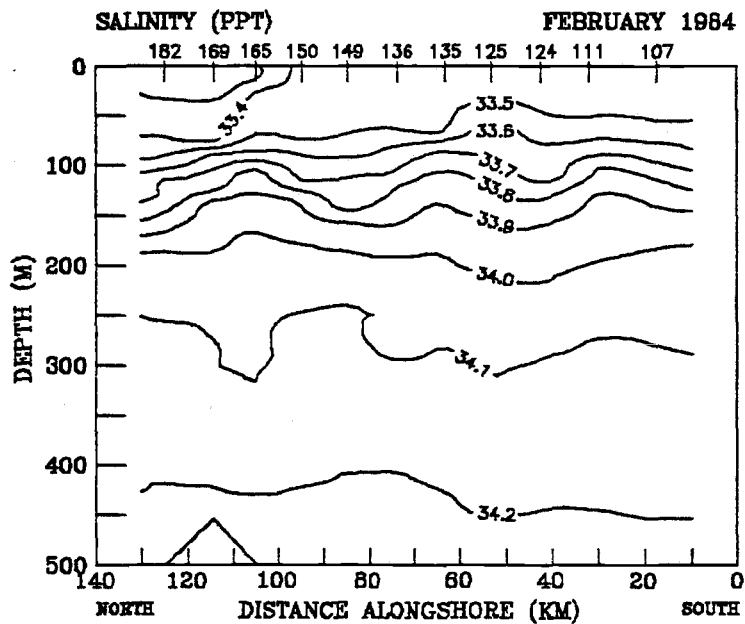
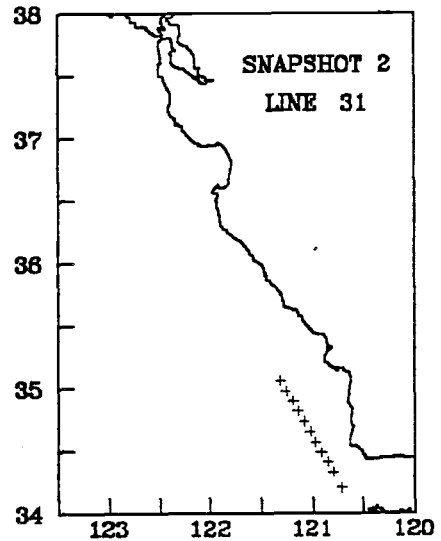
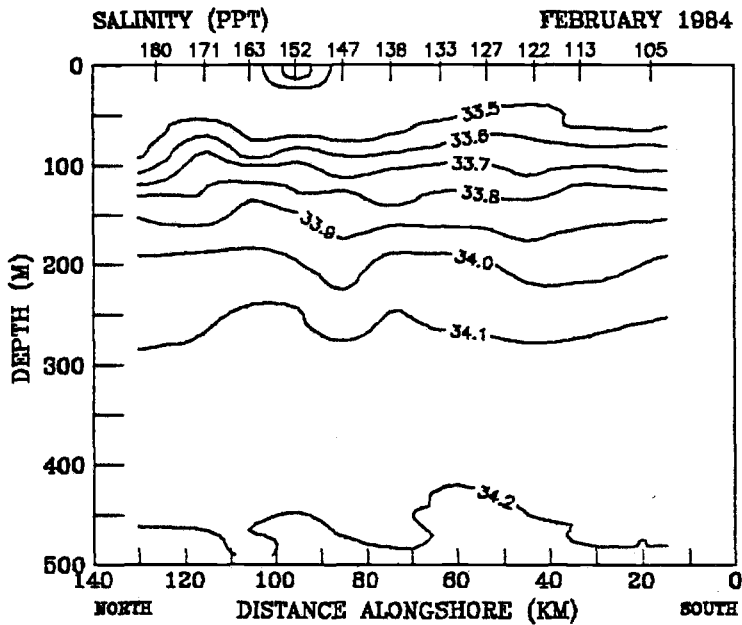


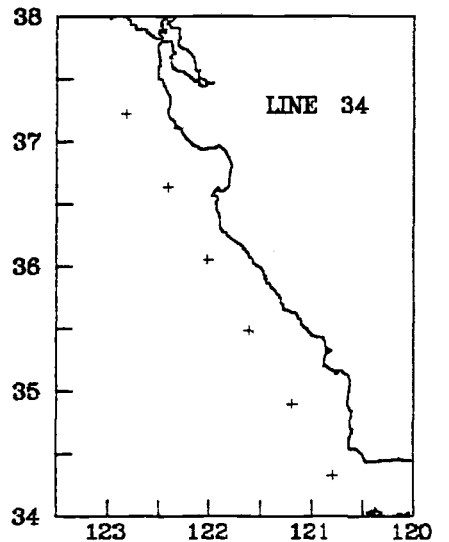
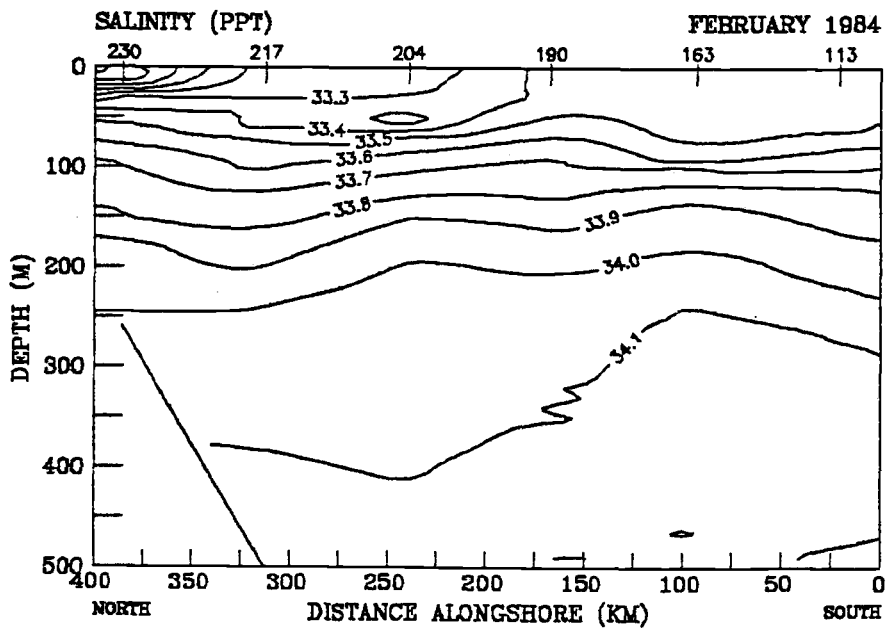
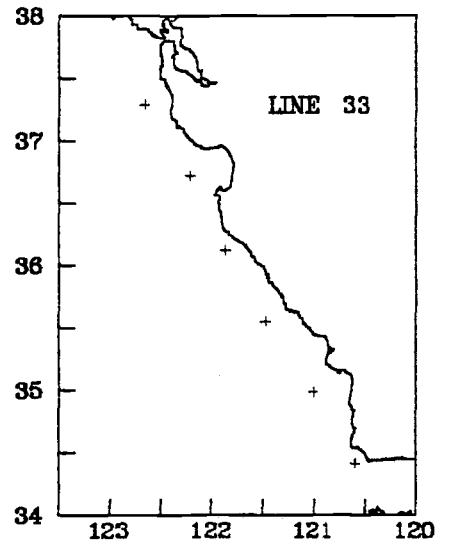
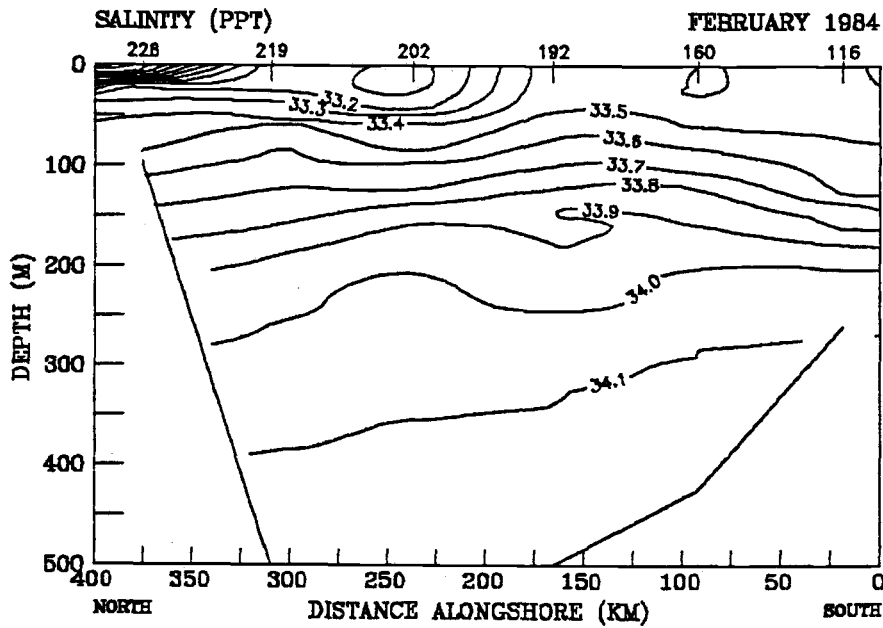


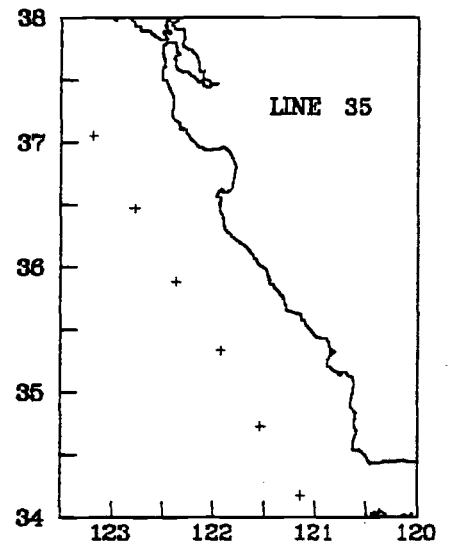
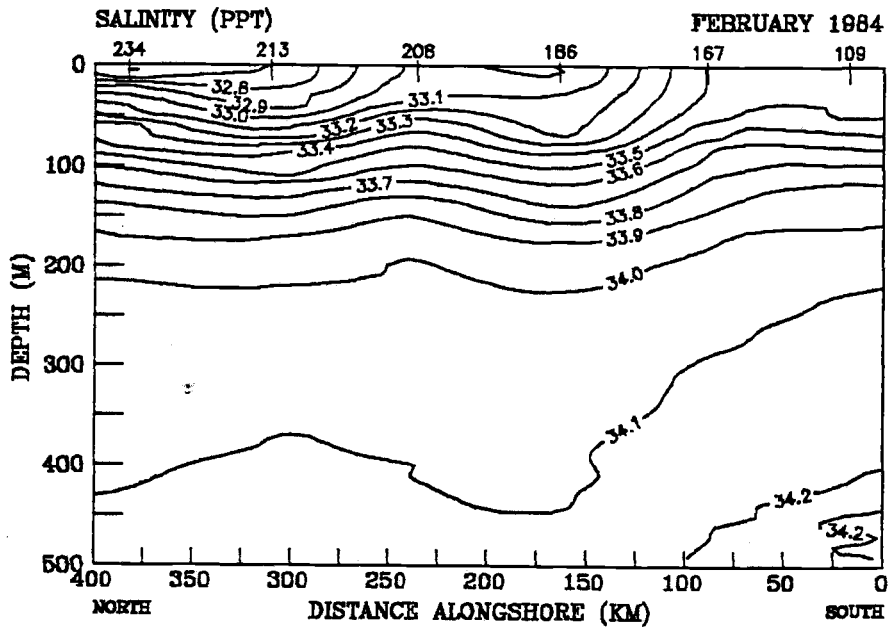


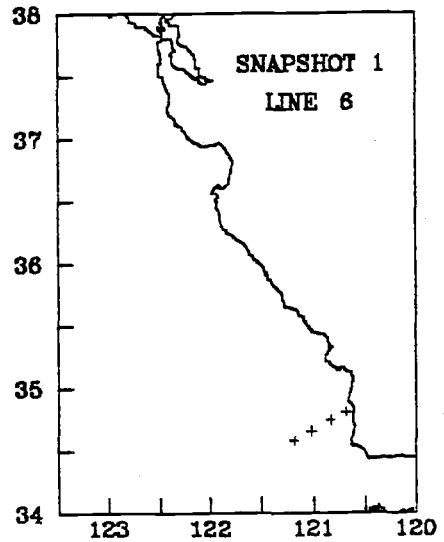
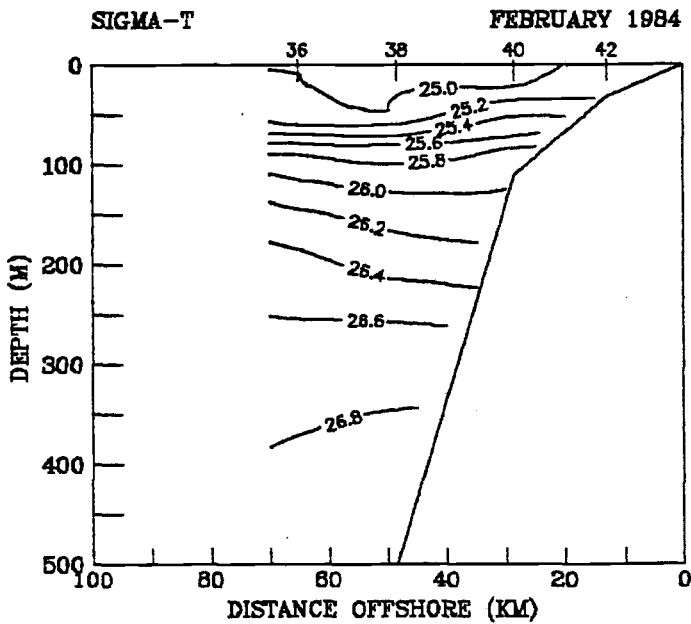
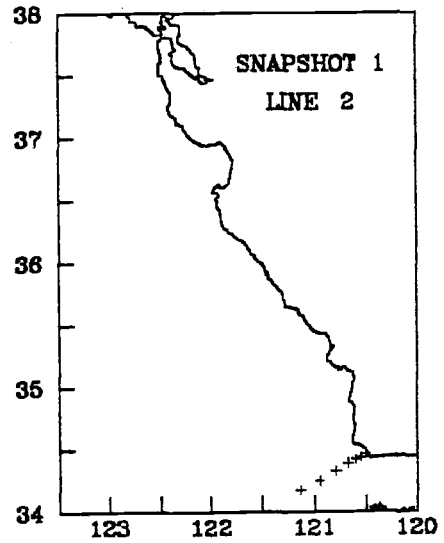
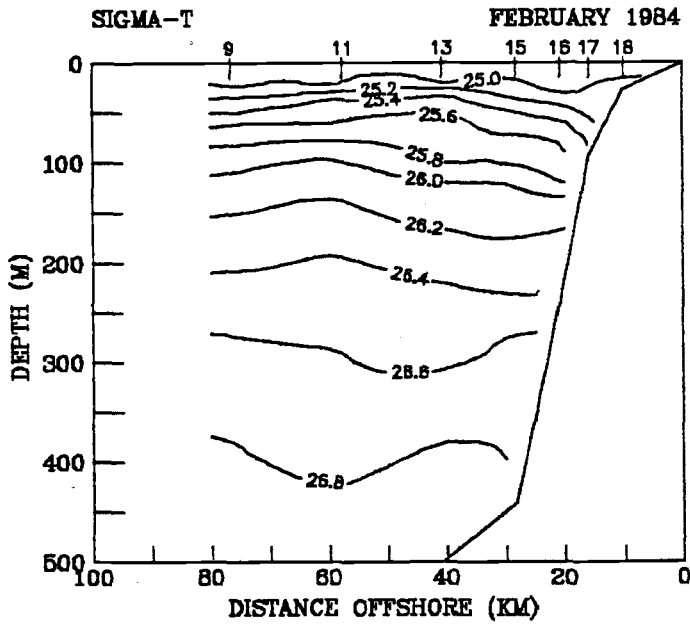


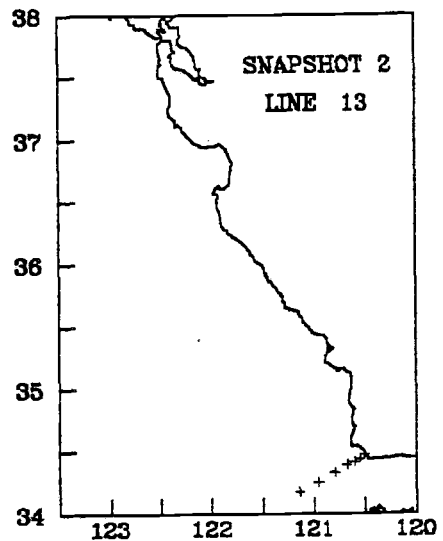
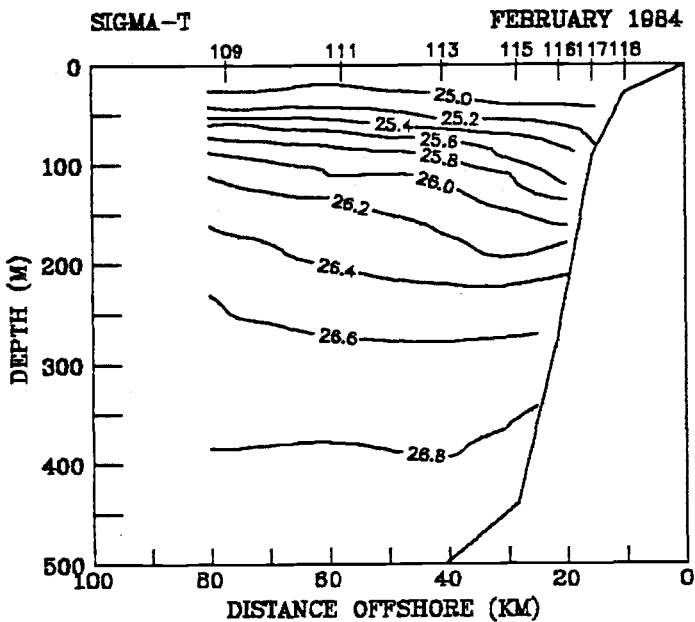
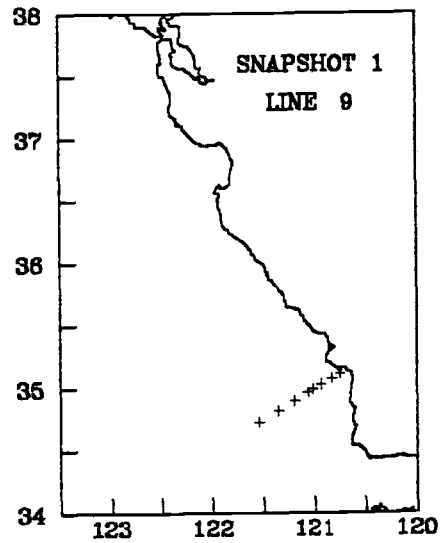
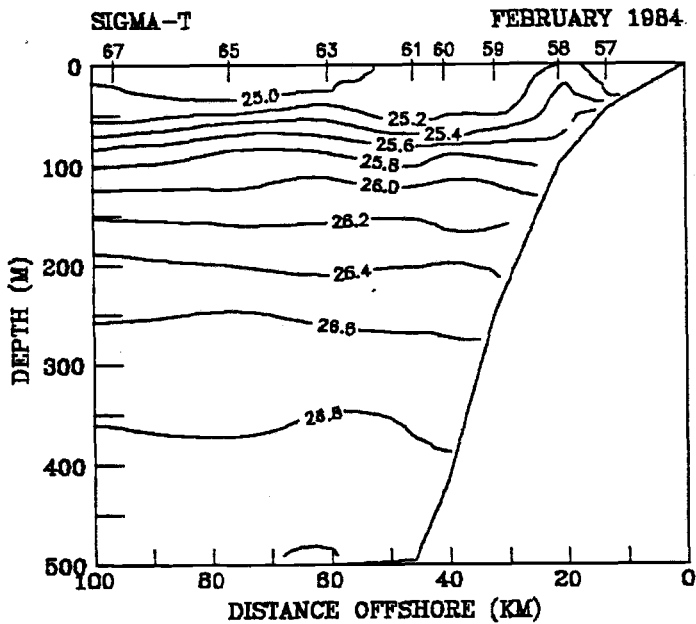


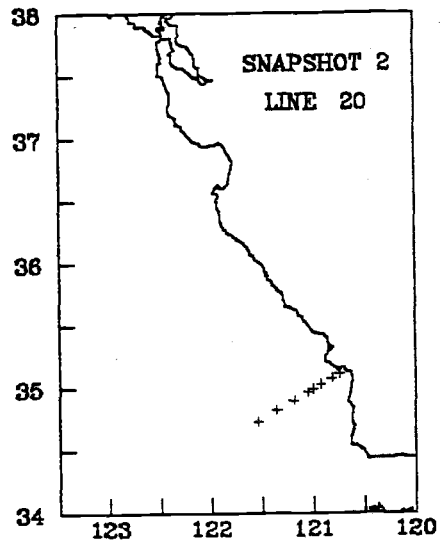
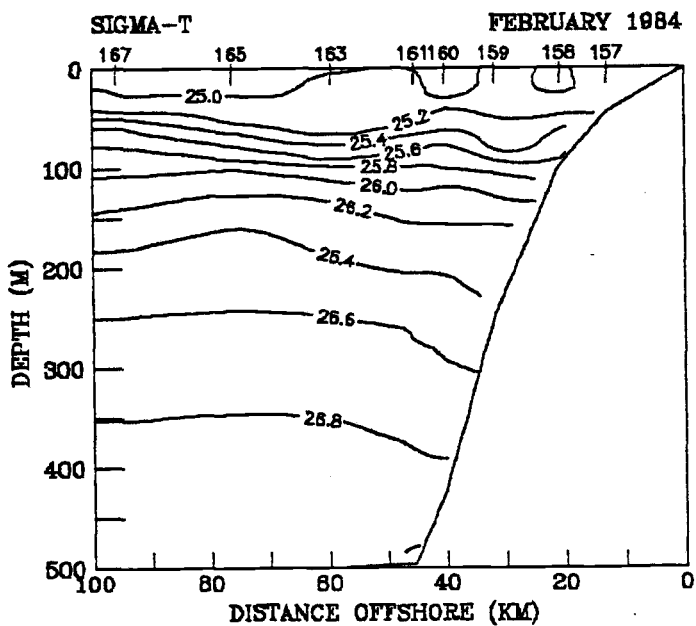
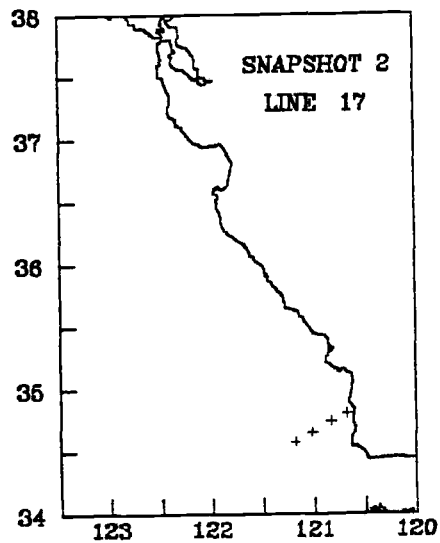
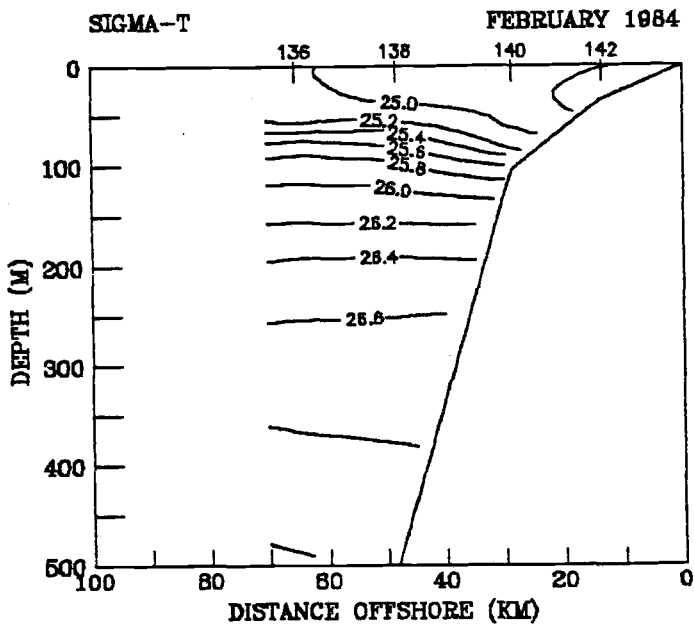


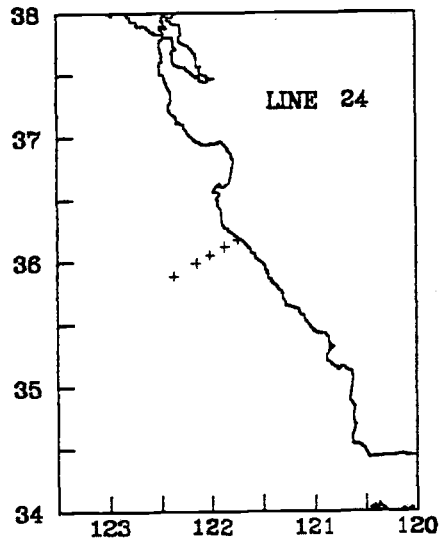
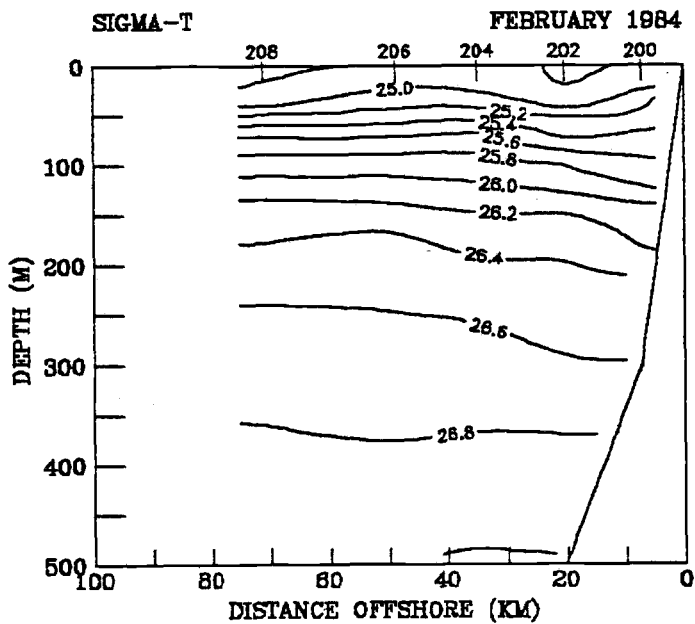
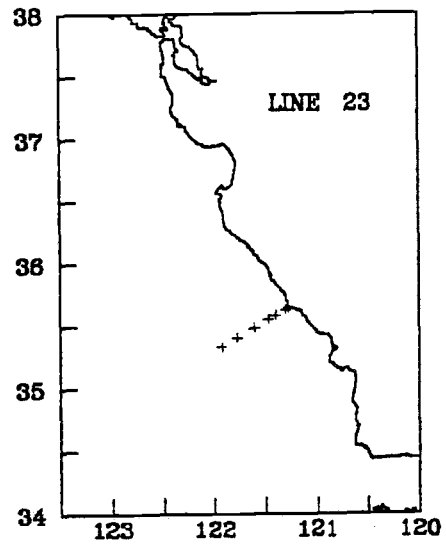
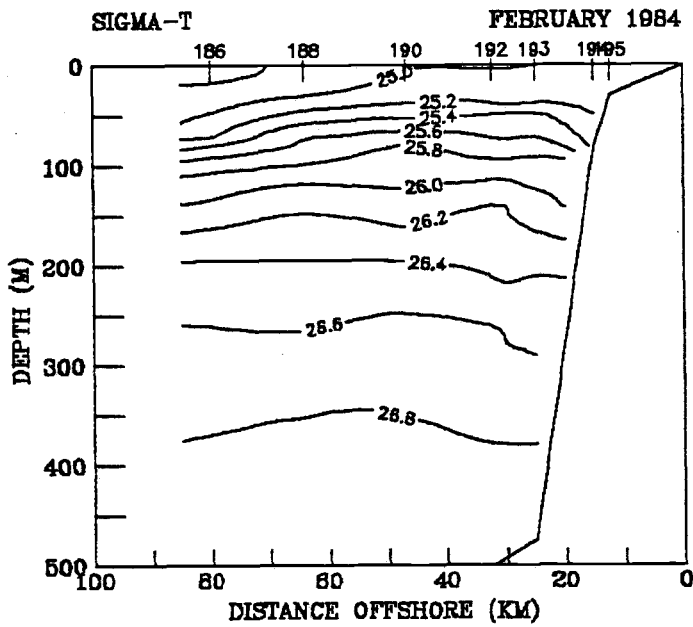


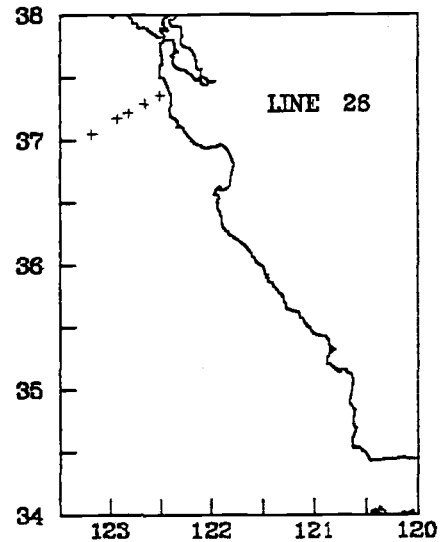
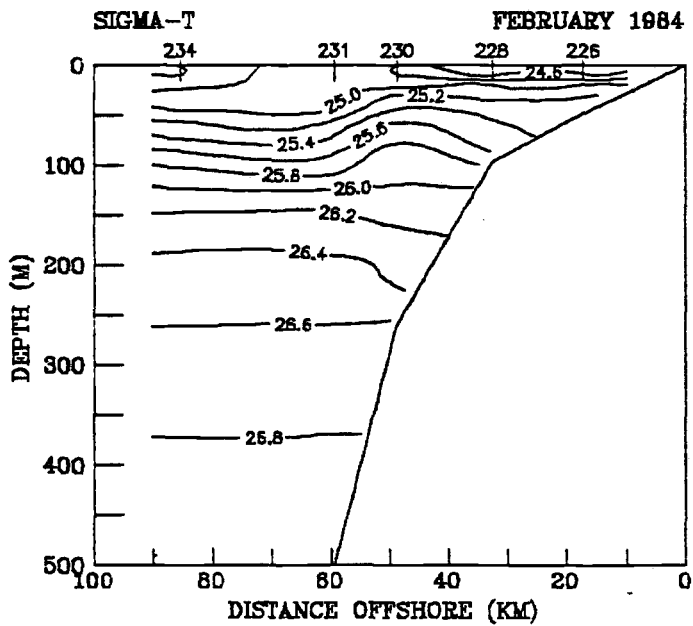
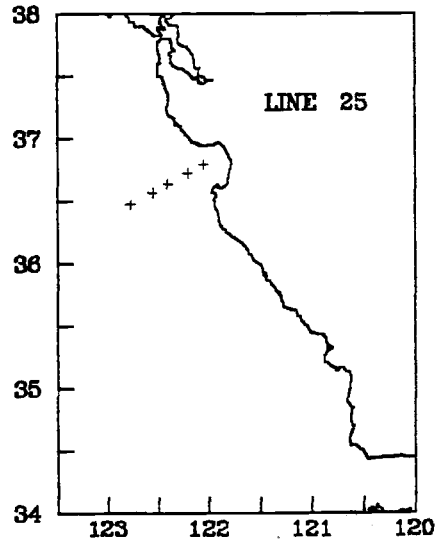
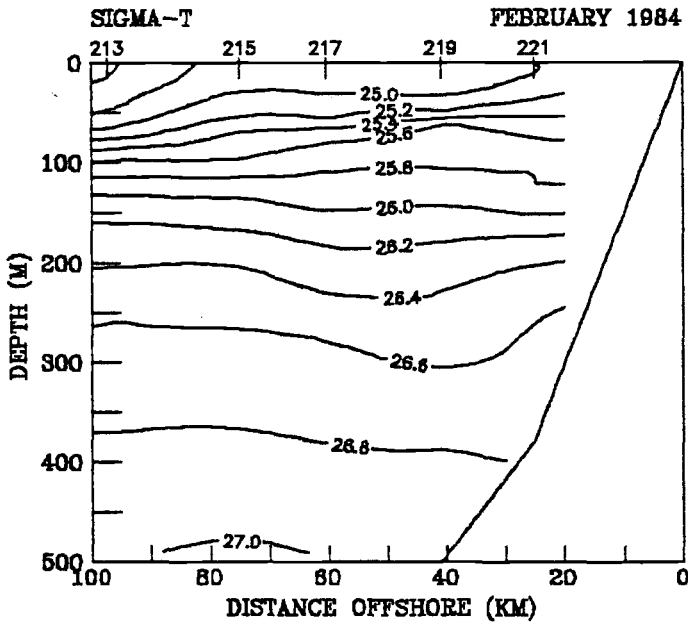


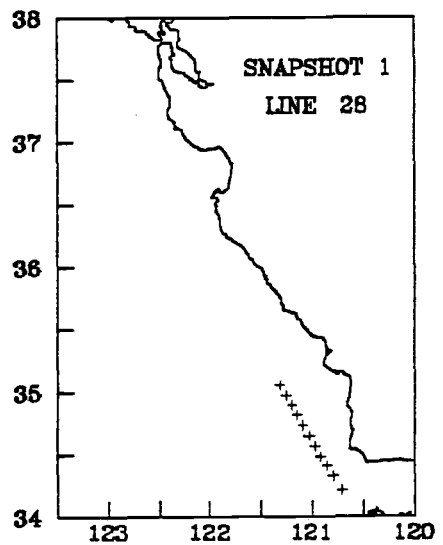
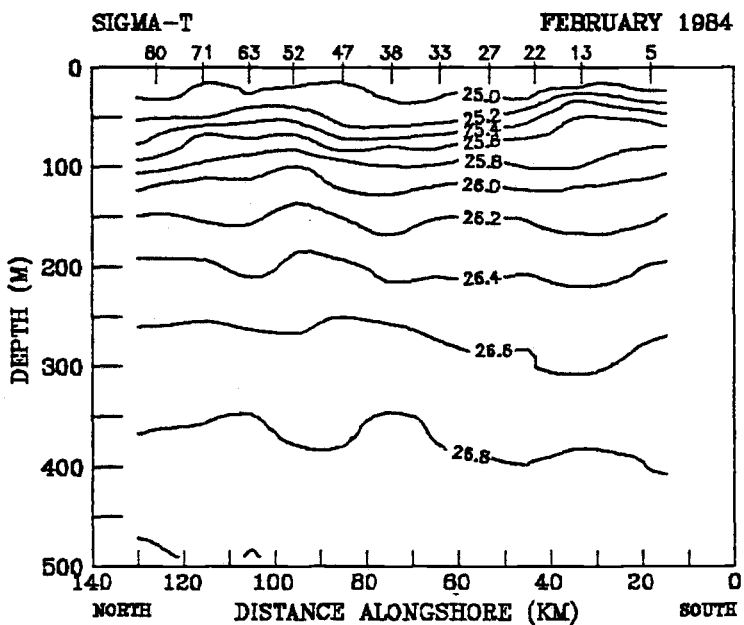
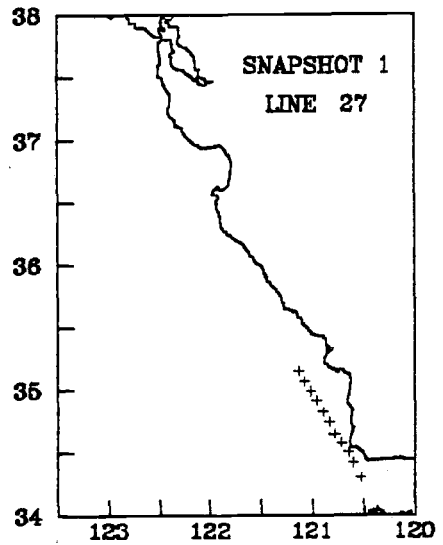
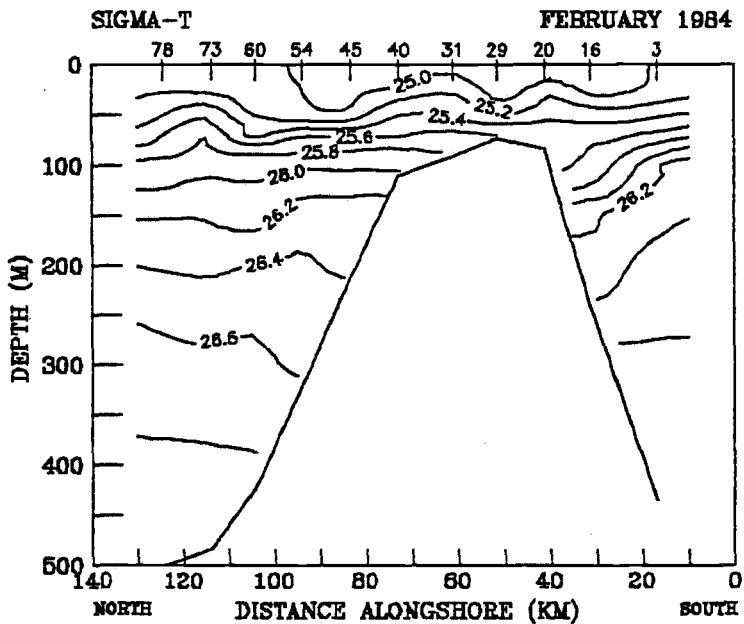


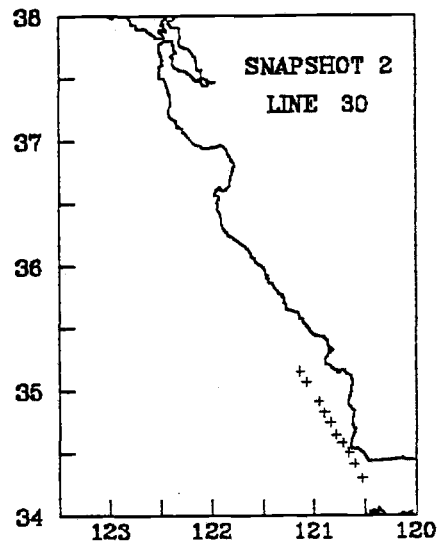
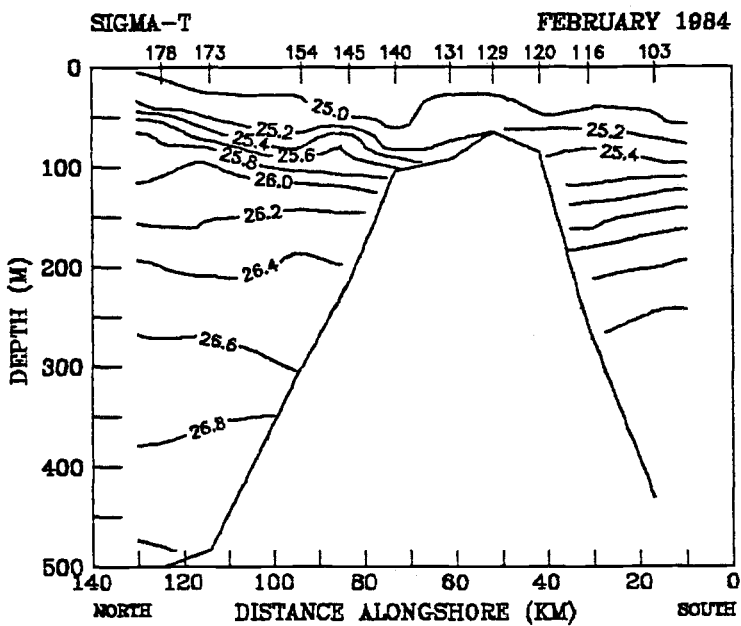
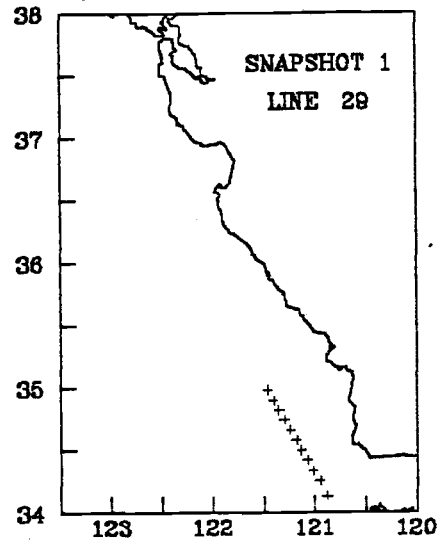
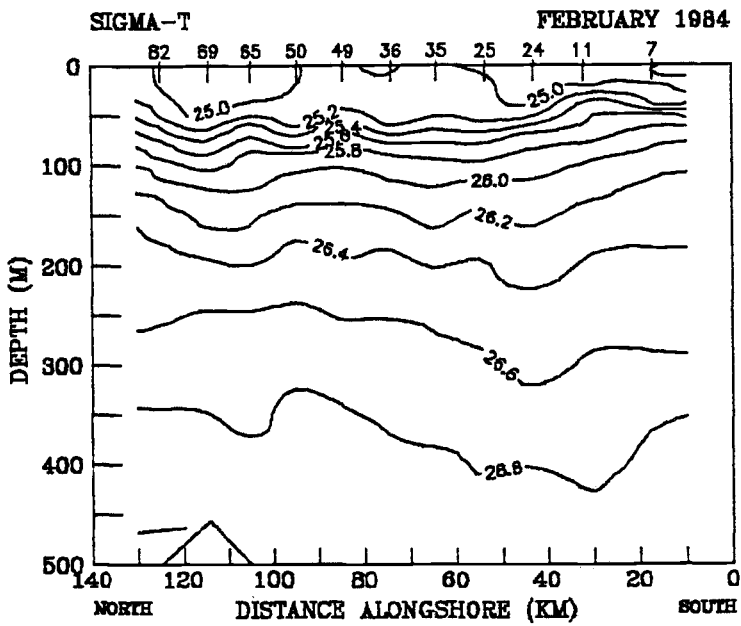


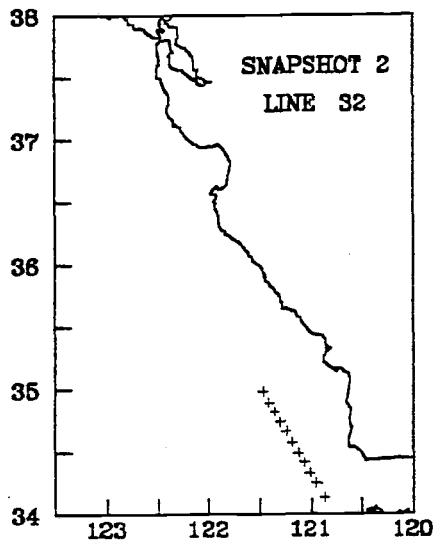
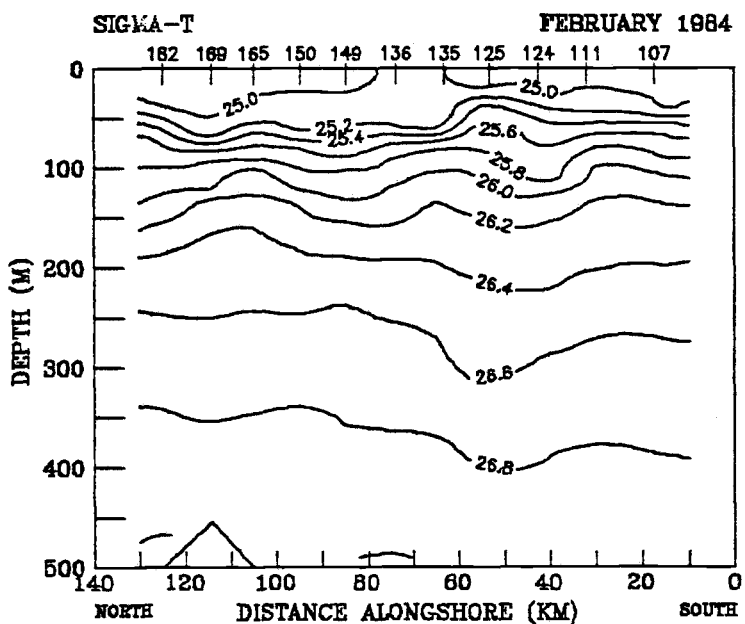
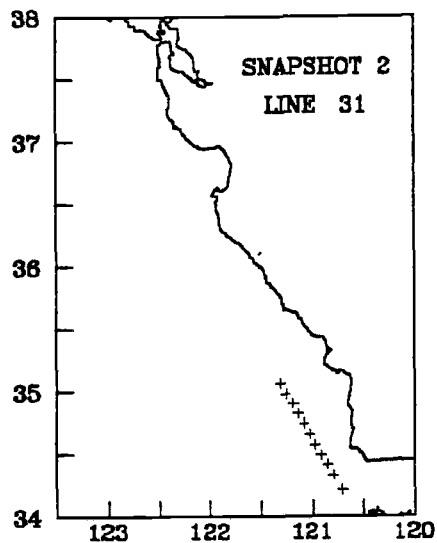
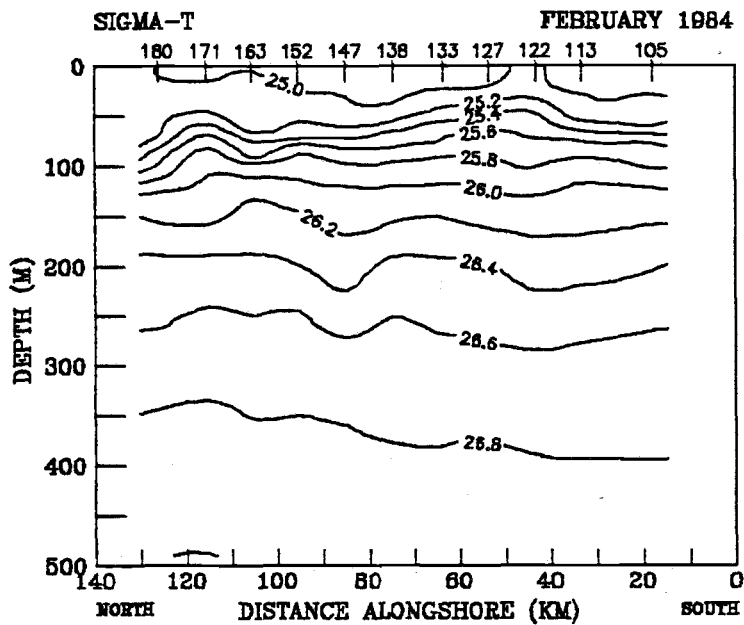


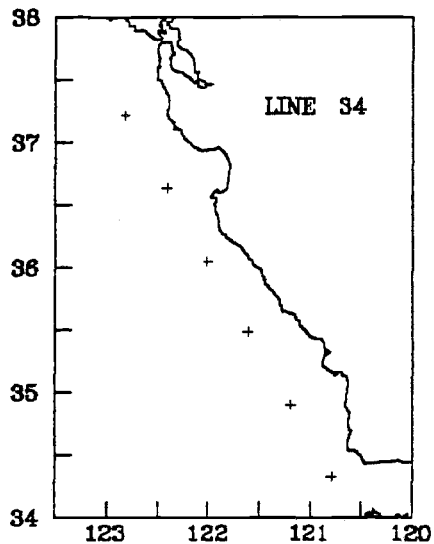
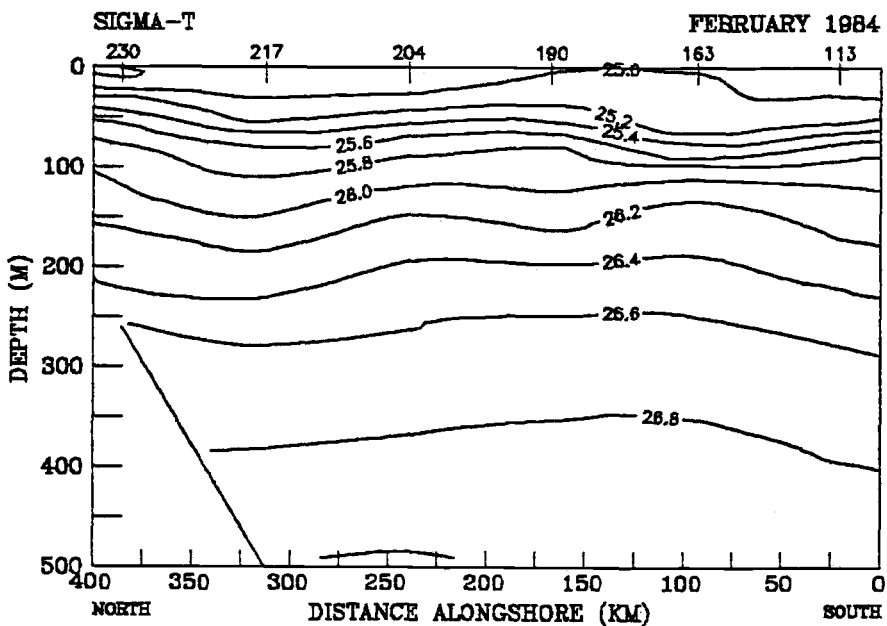
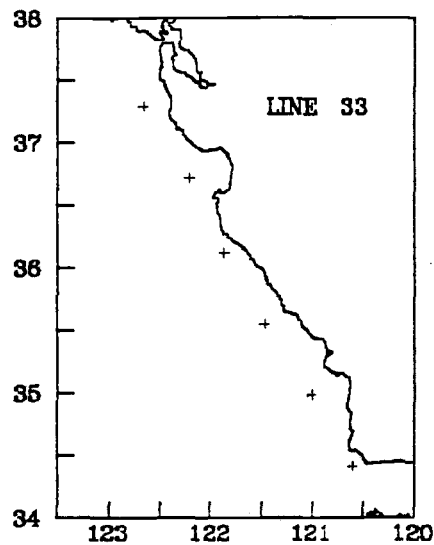
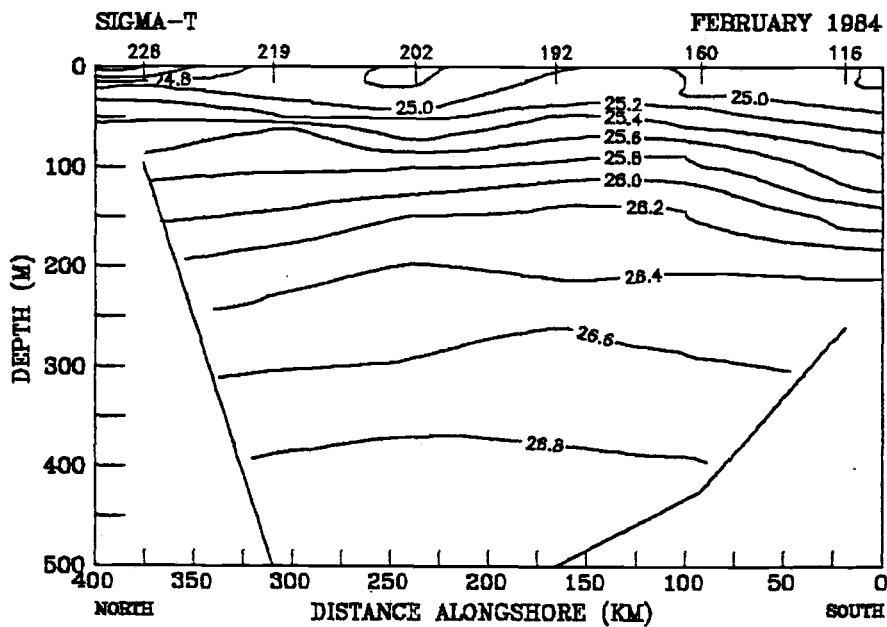


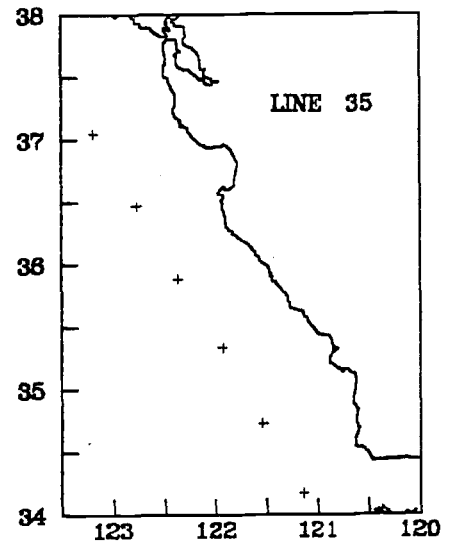
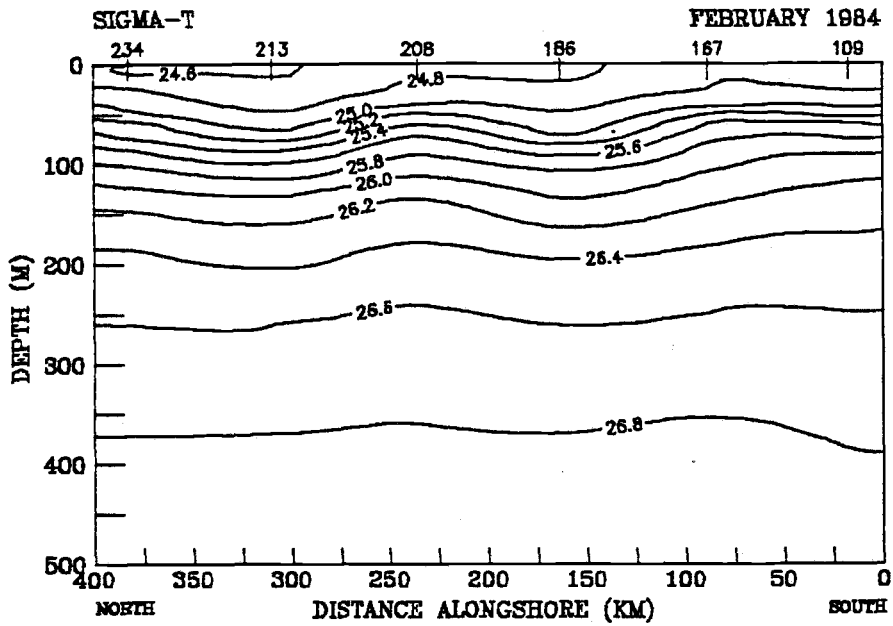


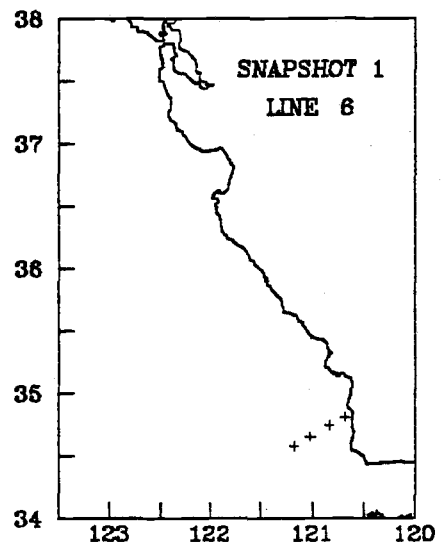
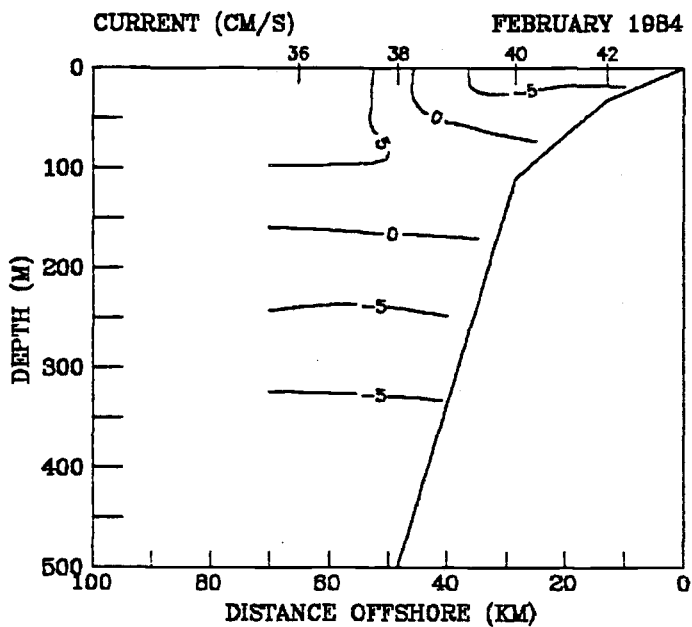
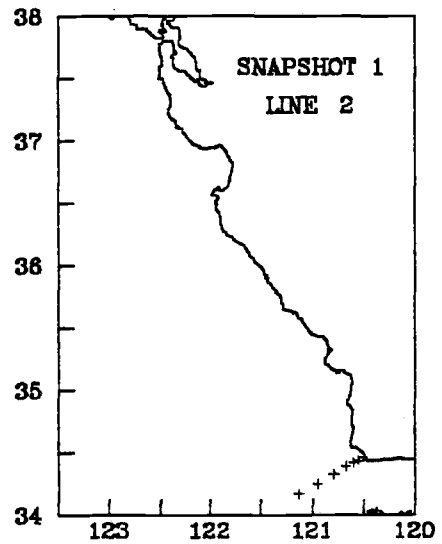
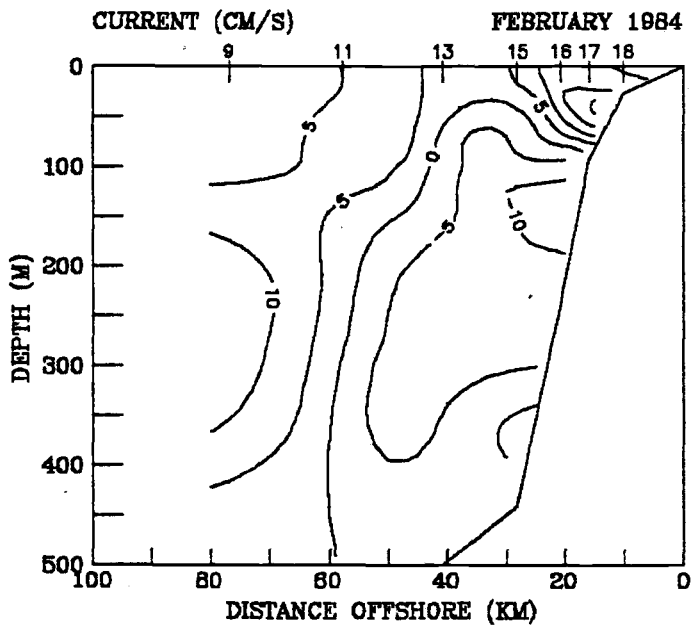


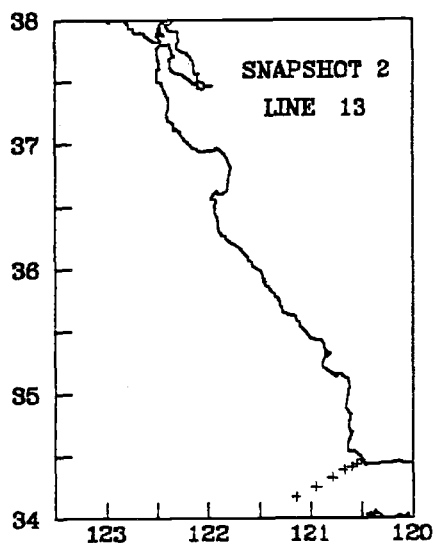
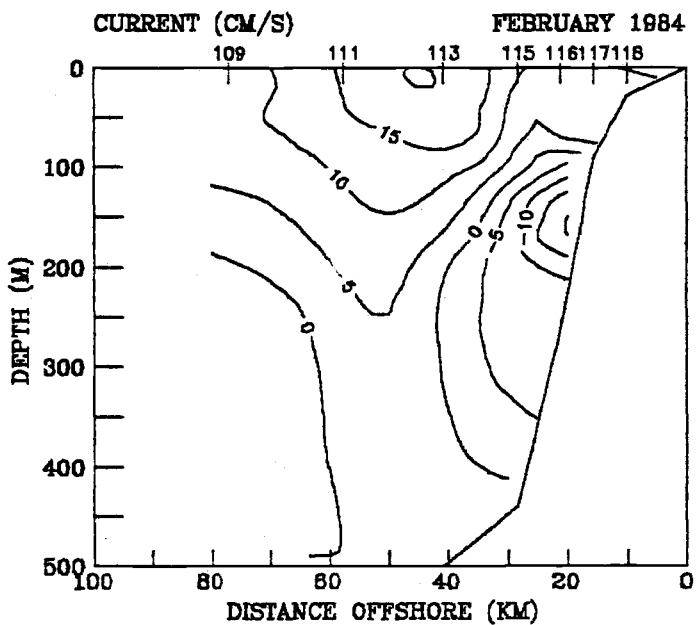
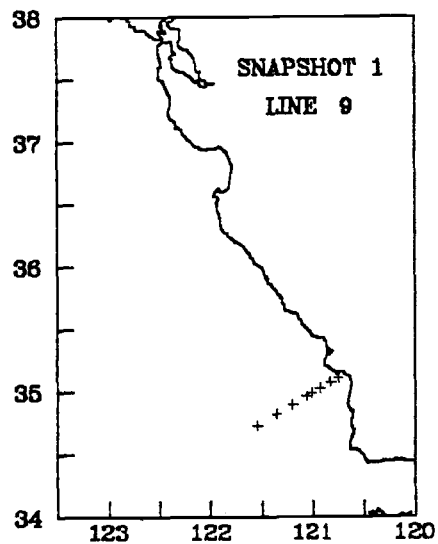
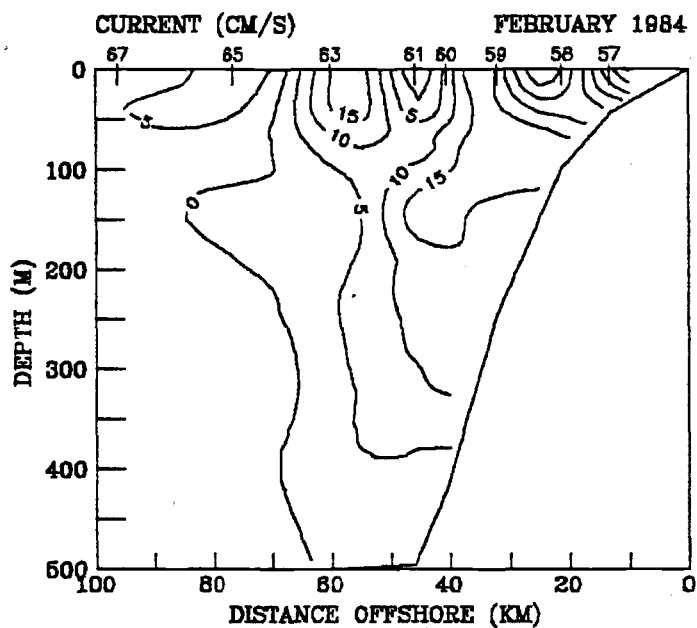


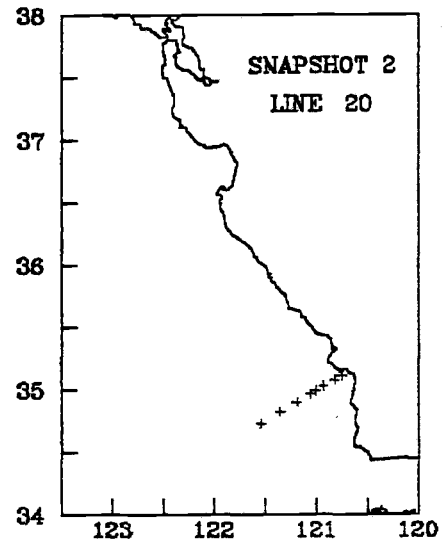
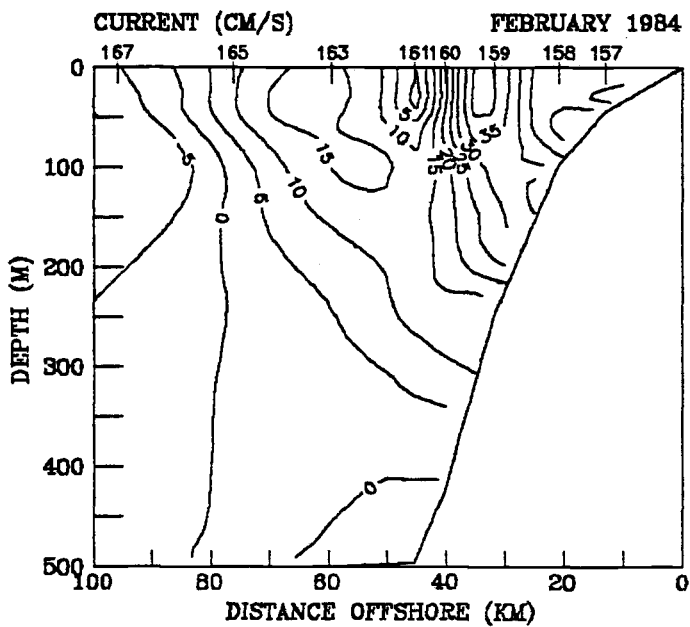
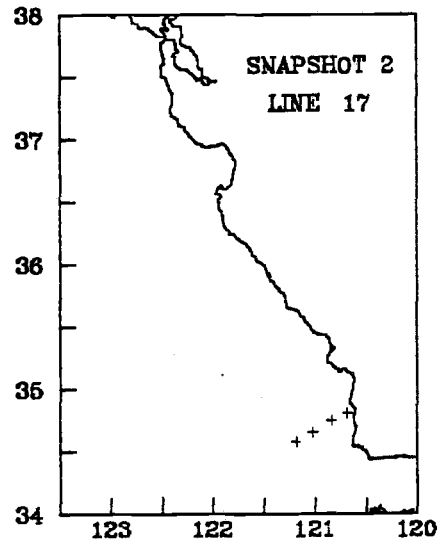
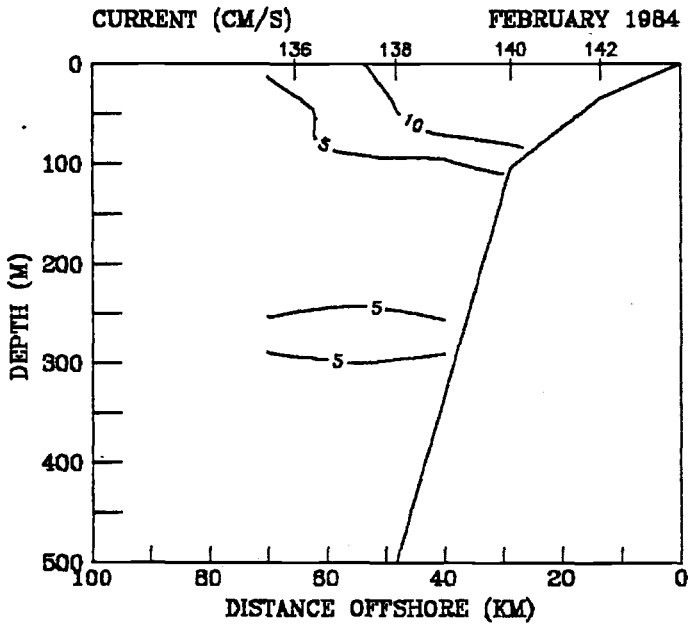


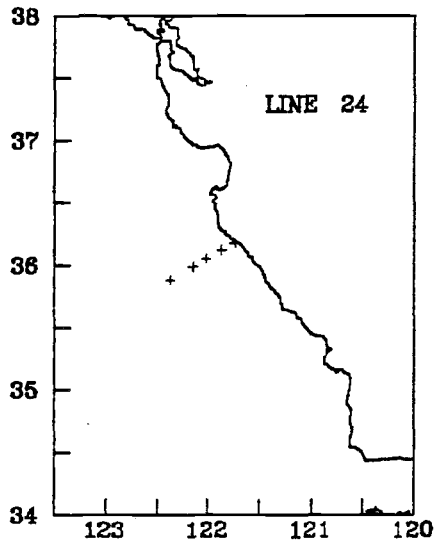
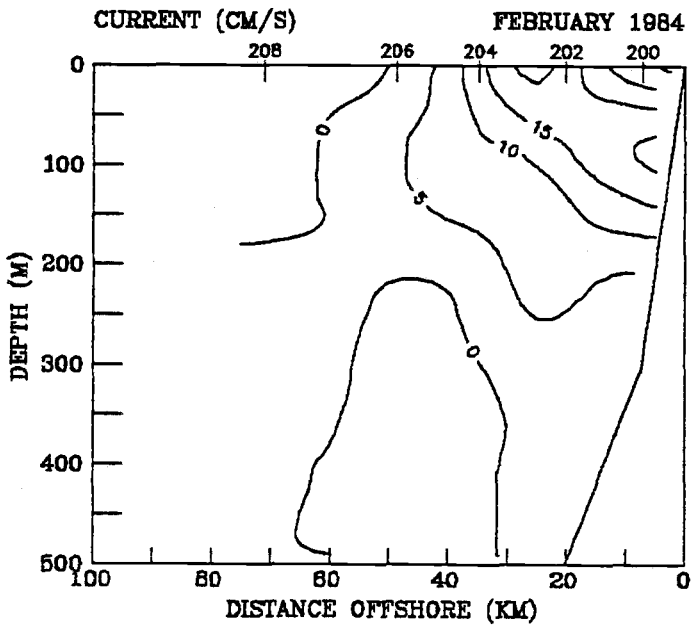
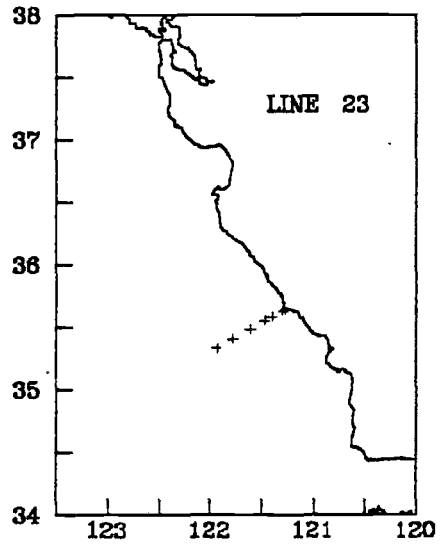
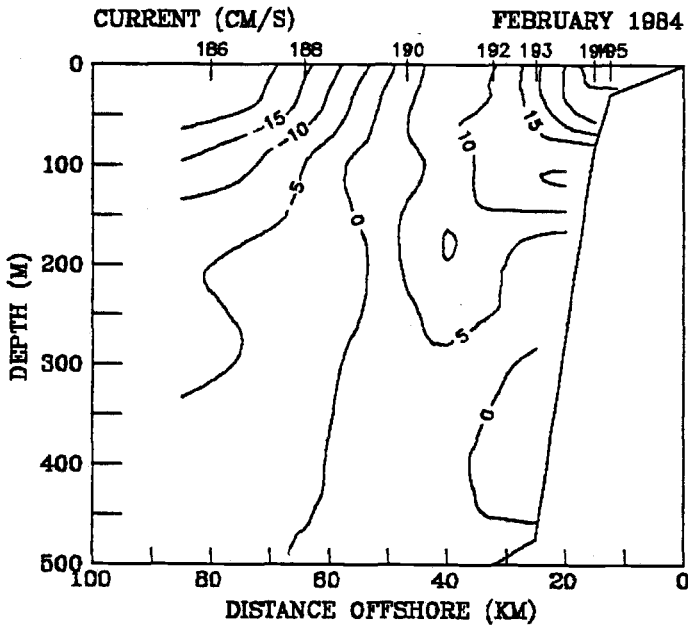


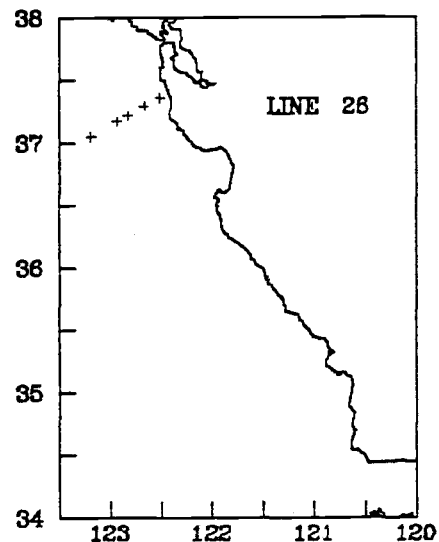
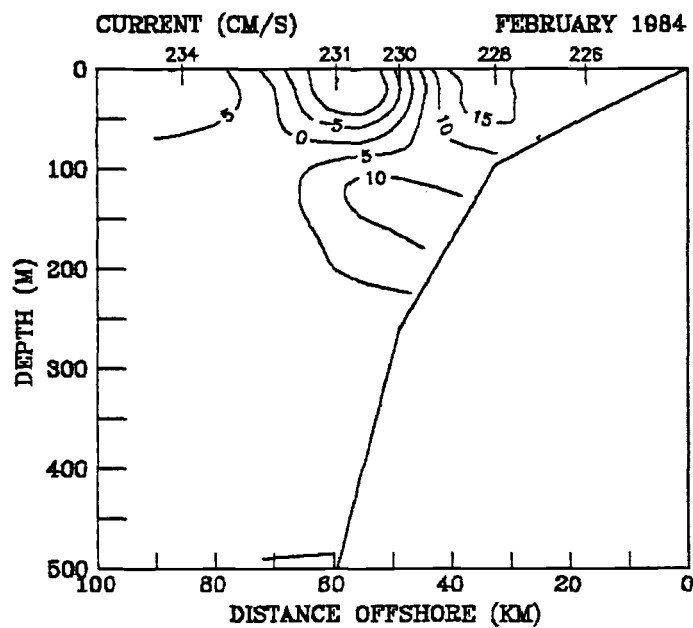
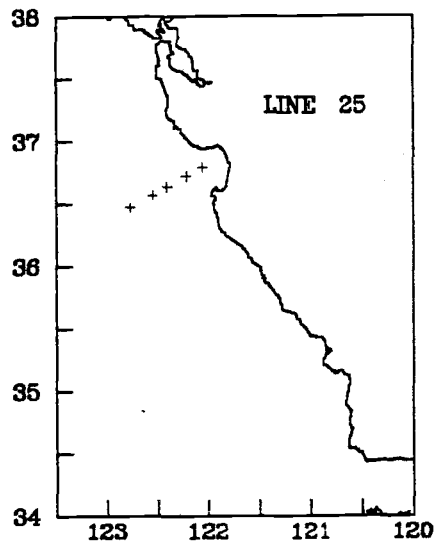
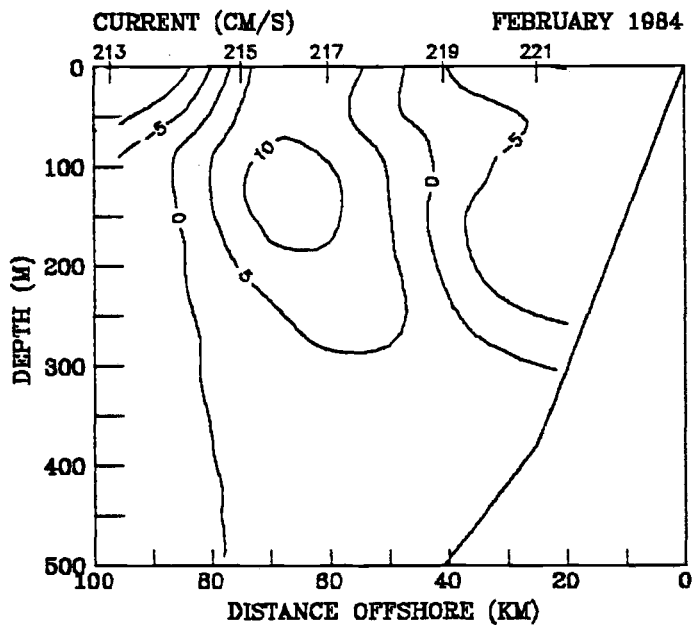


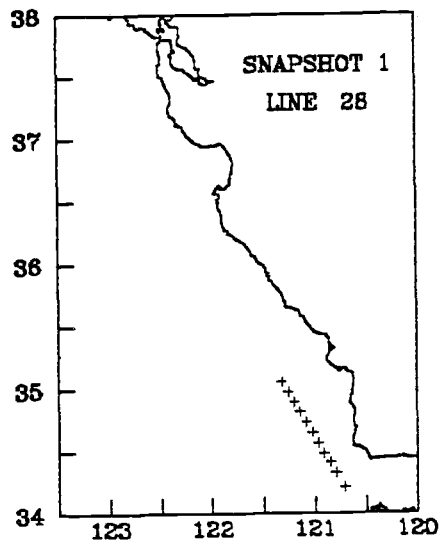
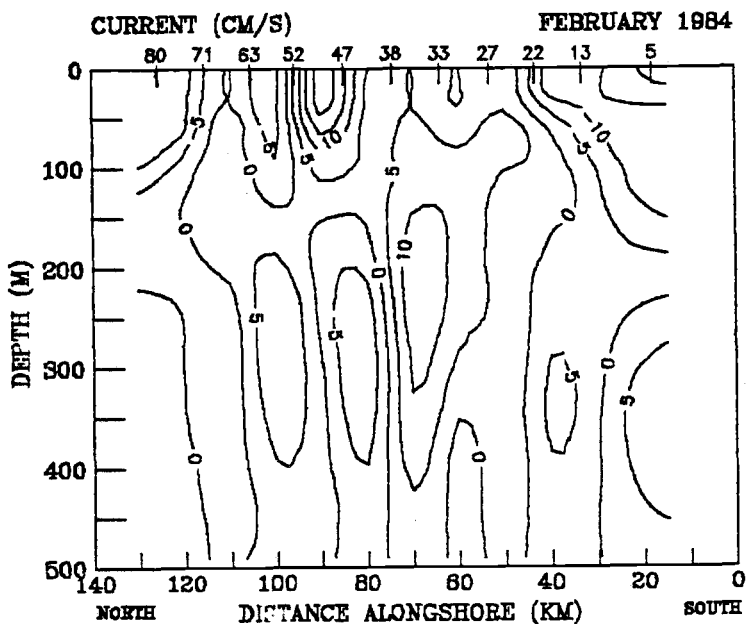
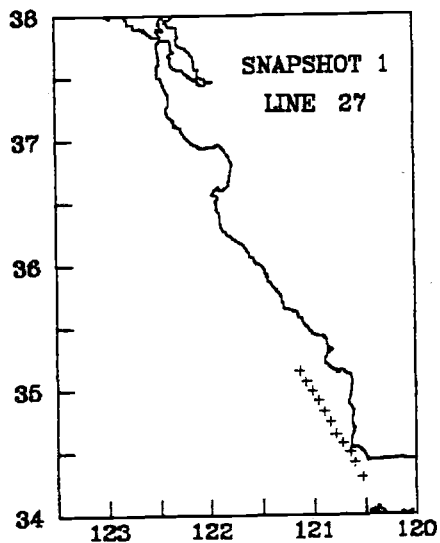
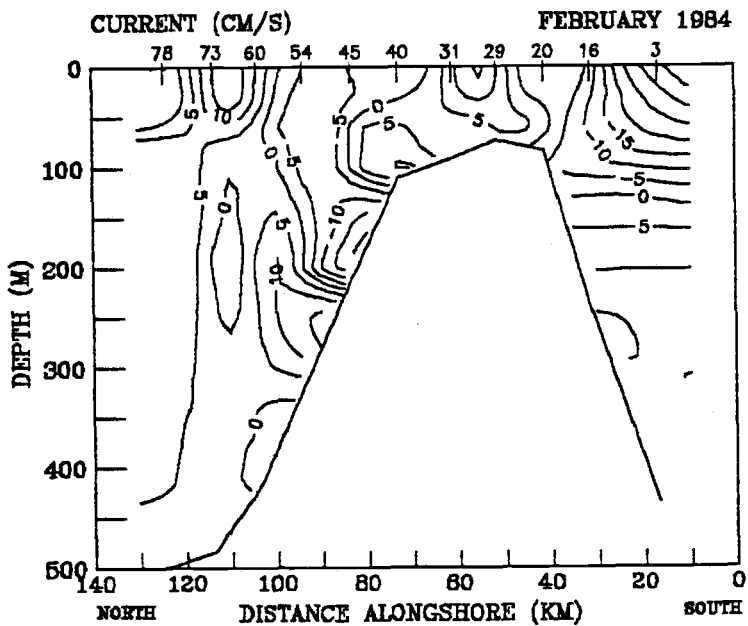


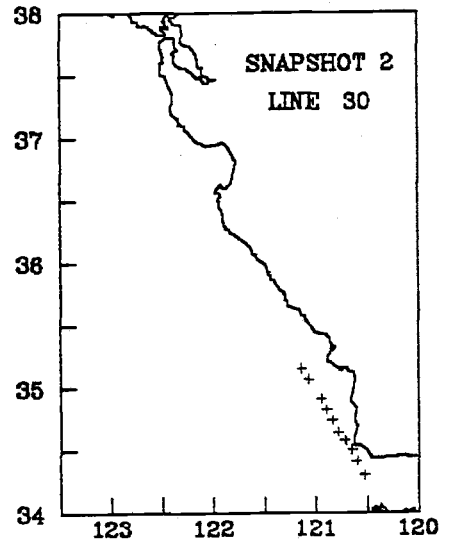
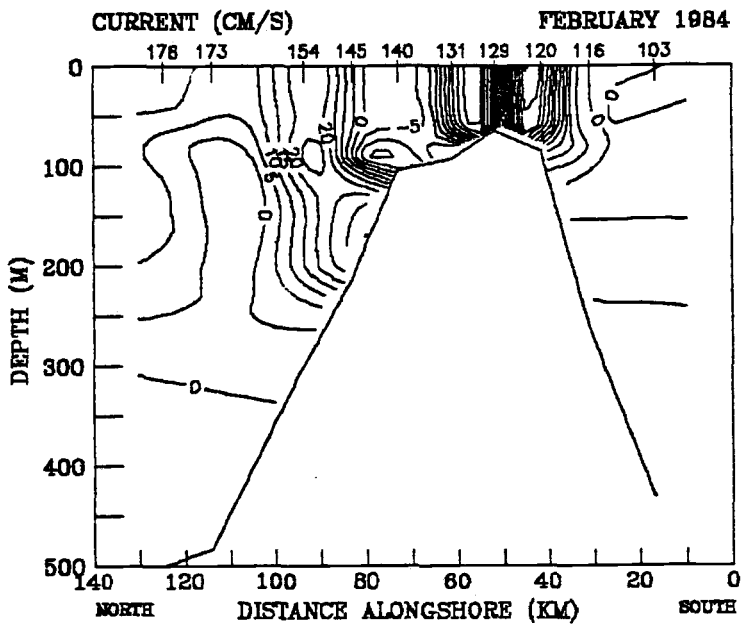
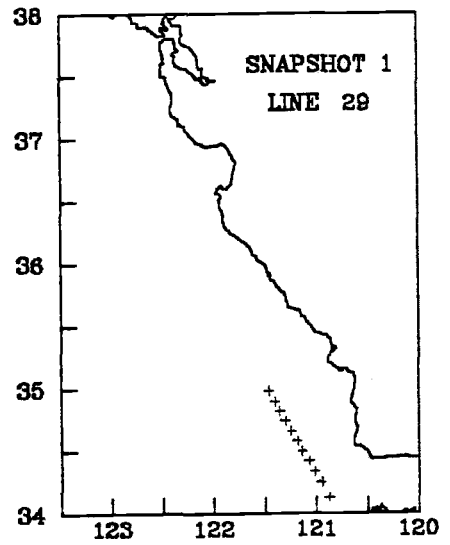
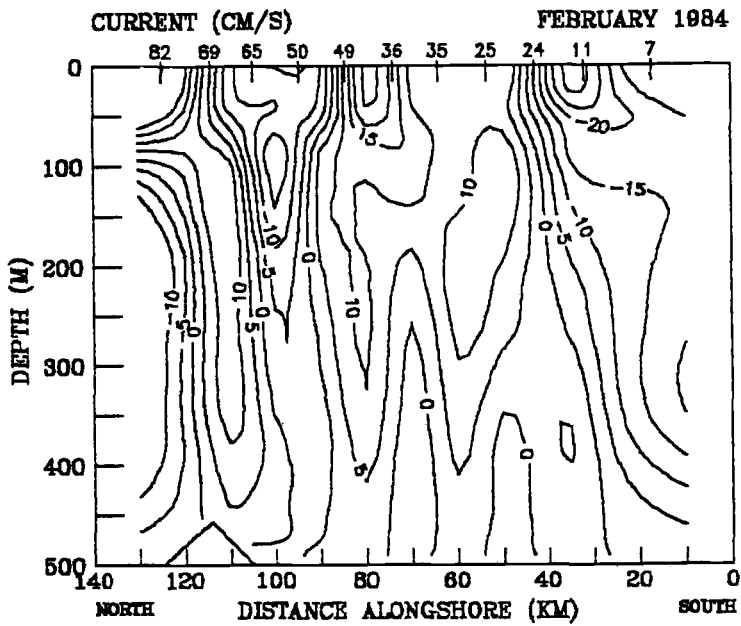


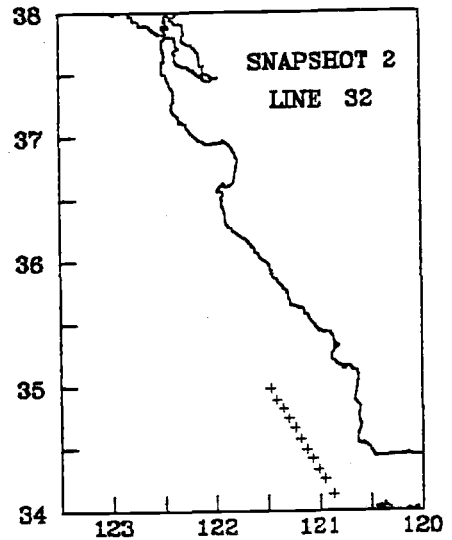
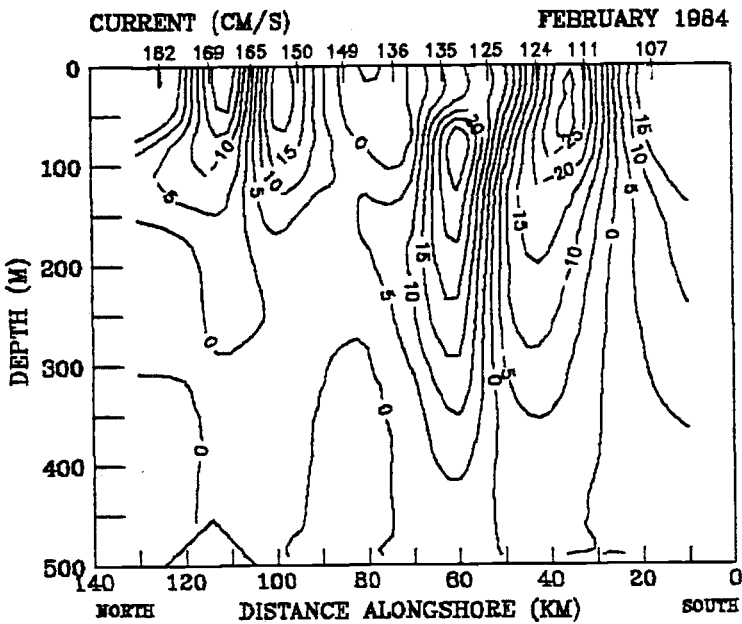
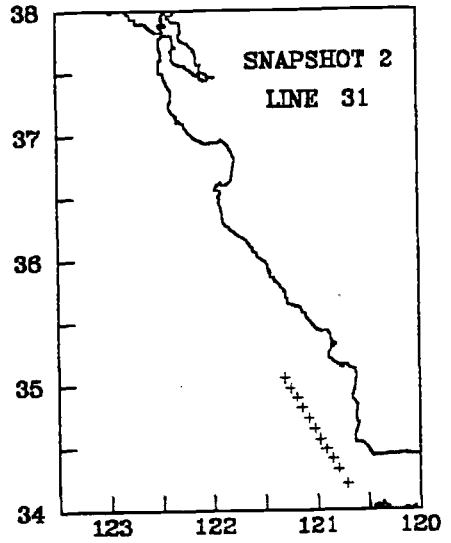
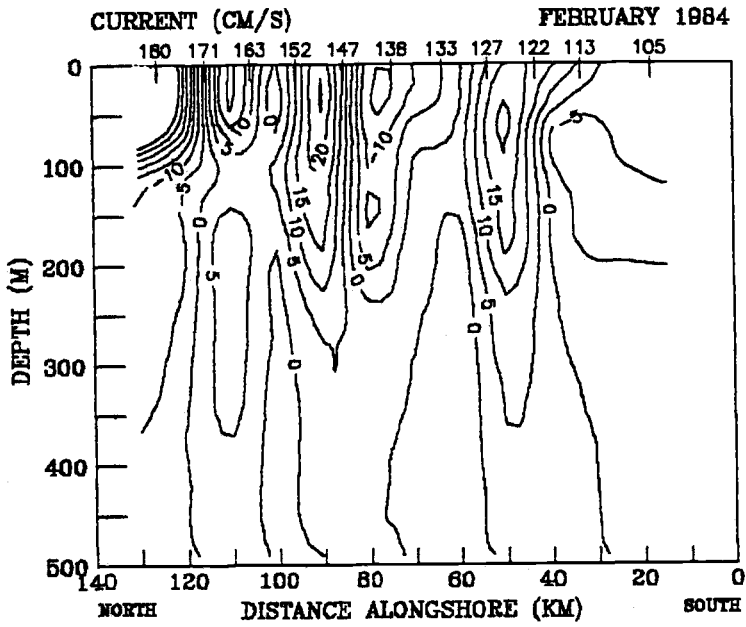


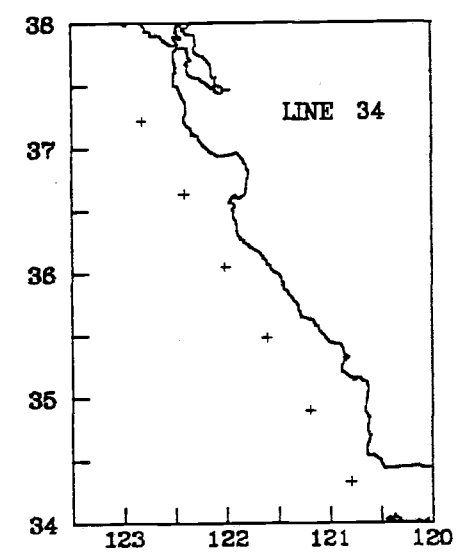
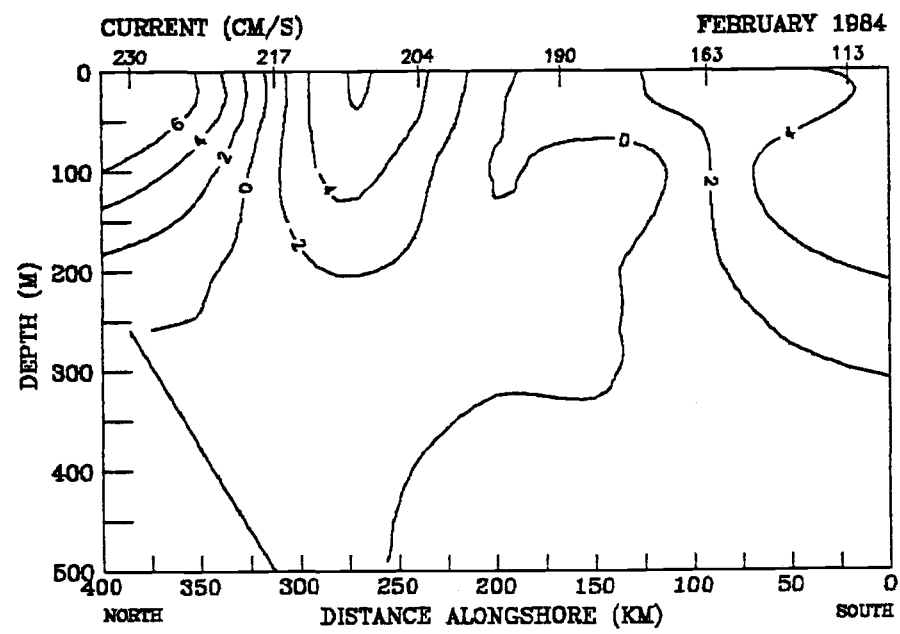
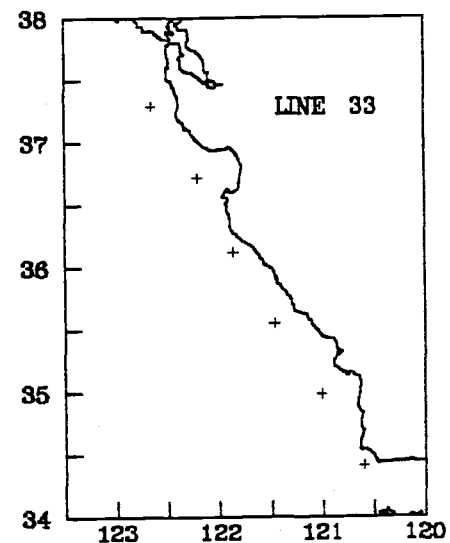
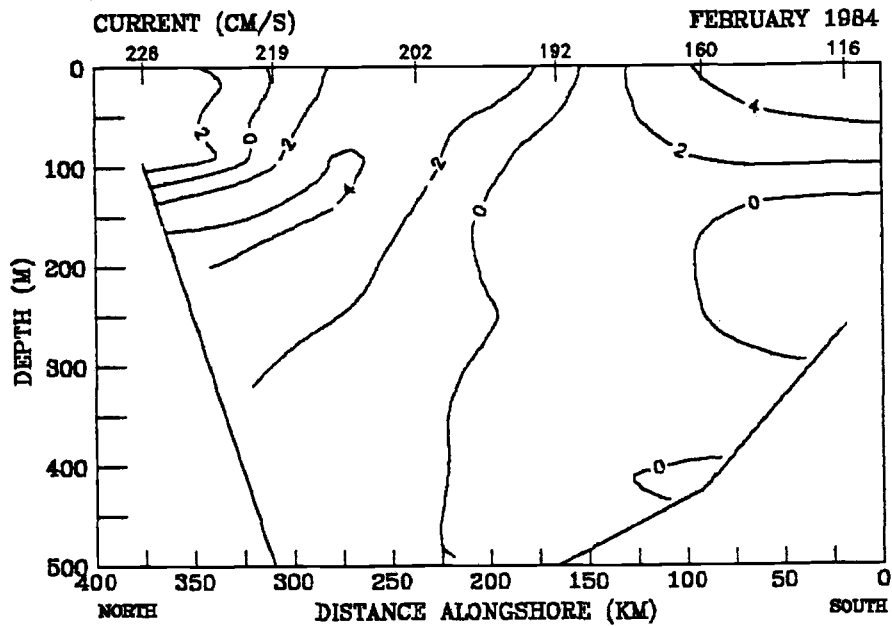


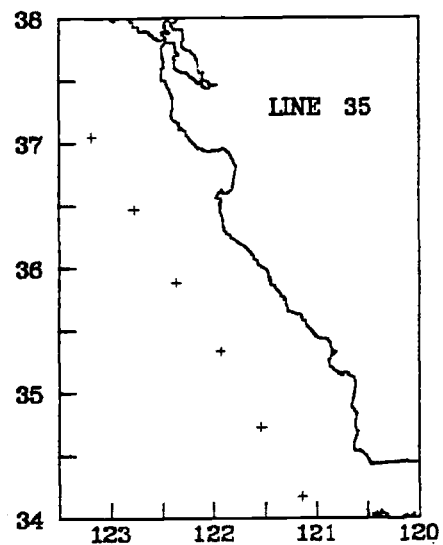
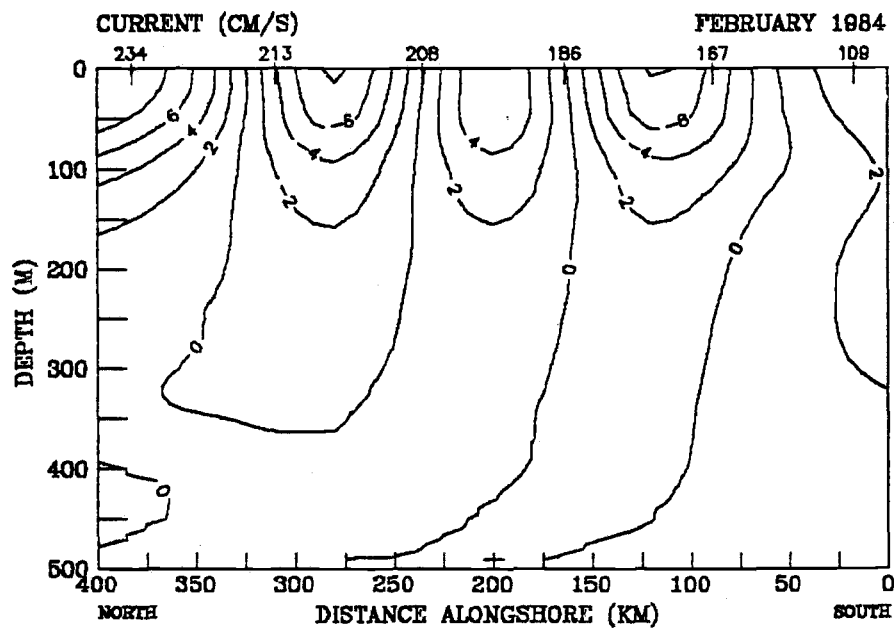






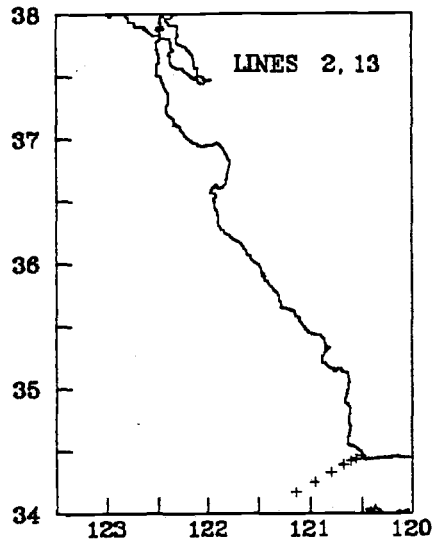
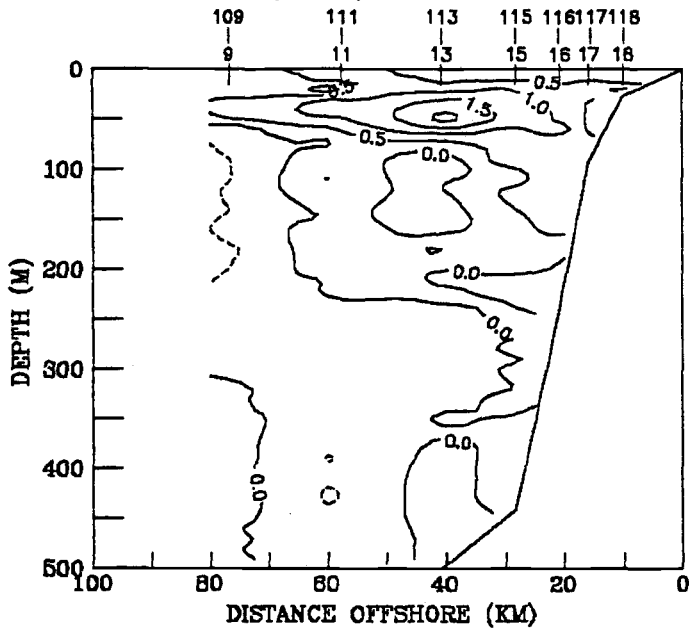




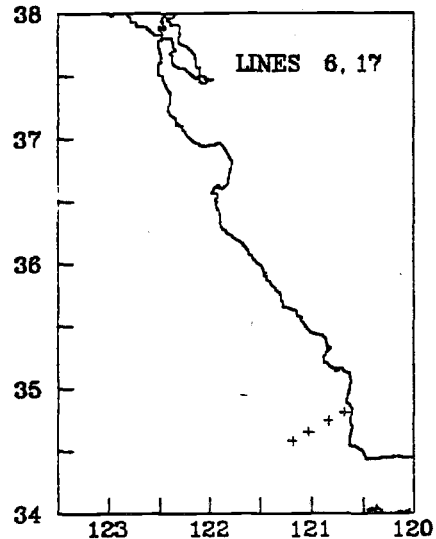
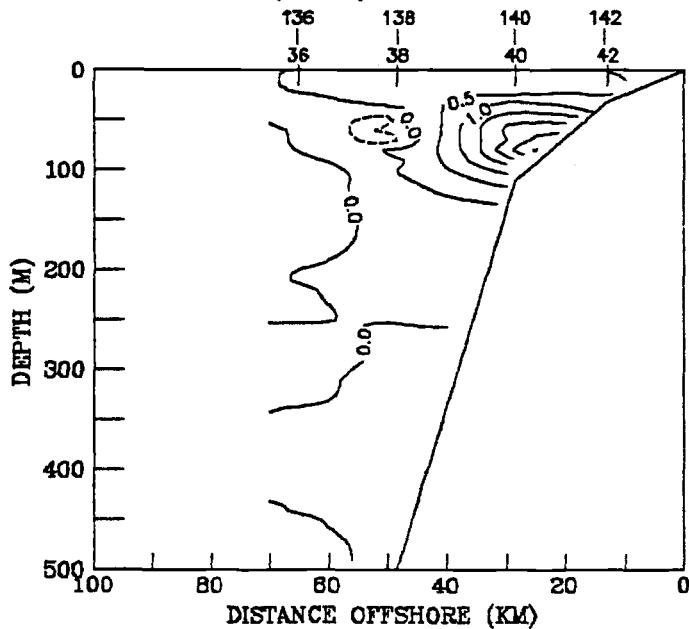


DIFFERENCE SECTIONS, SNAPSHOT 2 MINUS SNAPSHOT 1

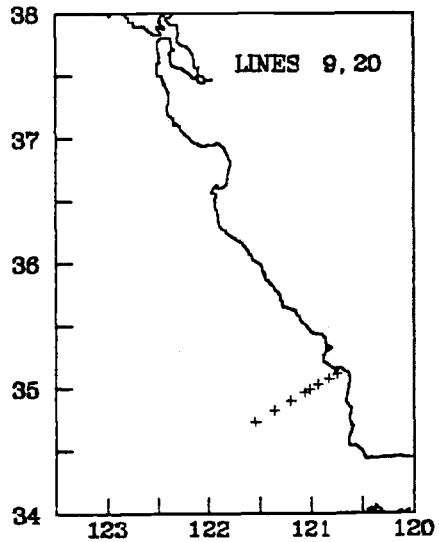
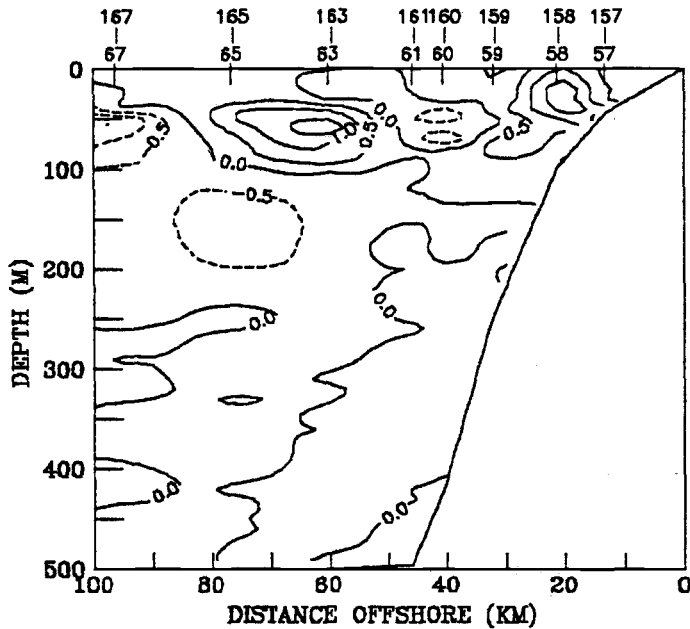
SNAPSHOT 2 MINUS SNAPSHOT 1
 TEMPERATURE (DEG C) FEBRUARY 1984



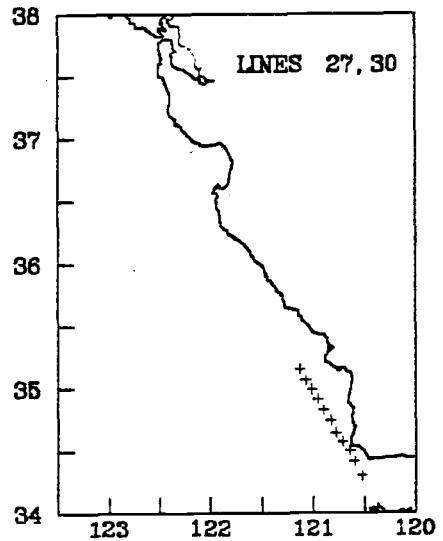
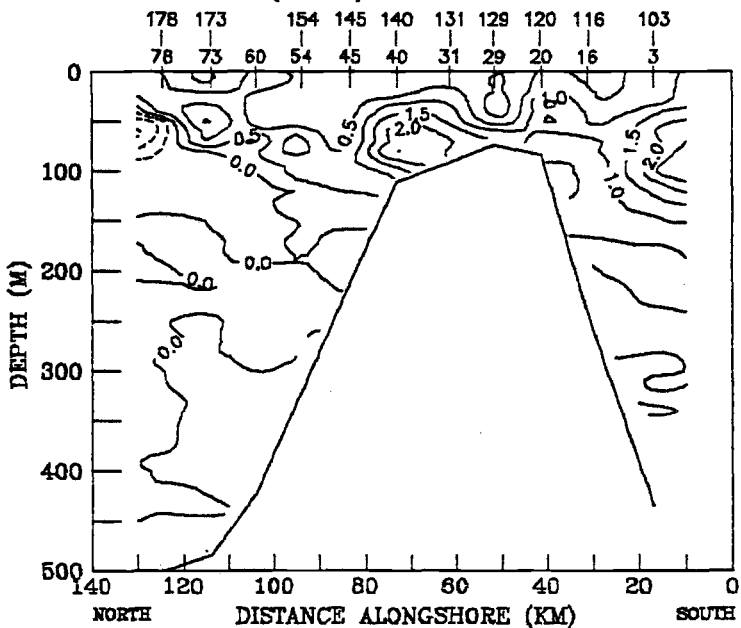
SNAPSHOT 2 MINUS SNAPSHOT 1
 TEMPERATURE (DEG C) FEBRUARY 1984

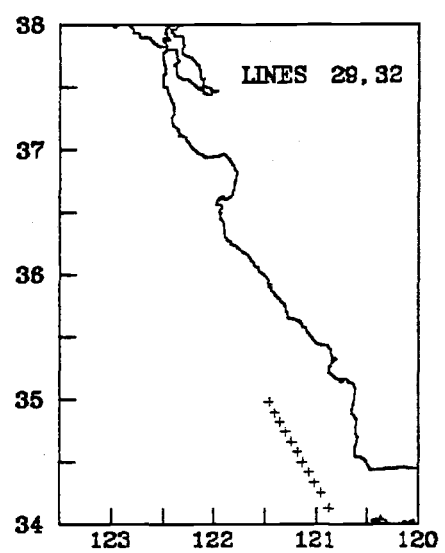
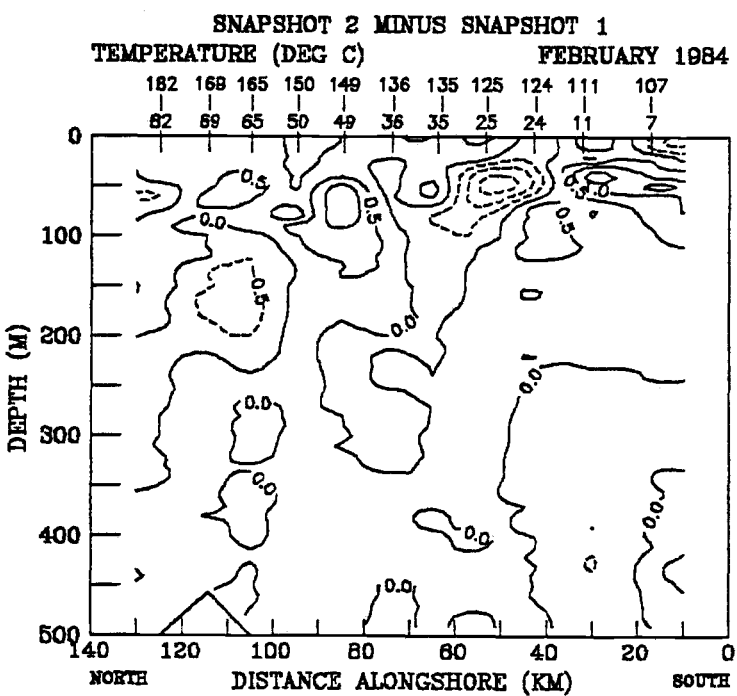
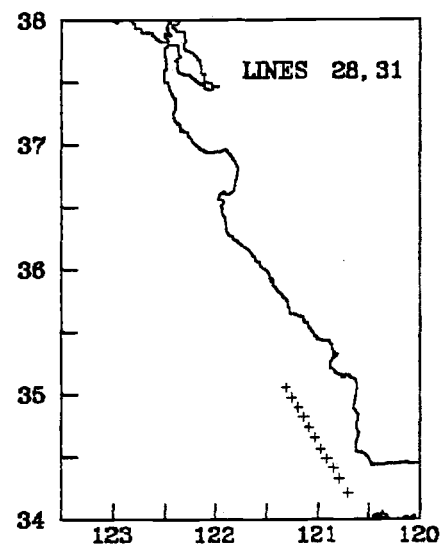
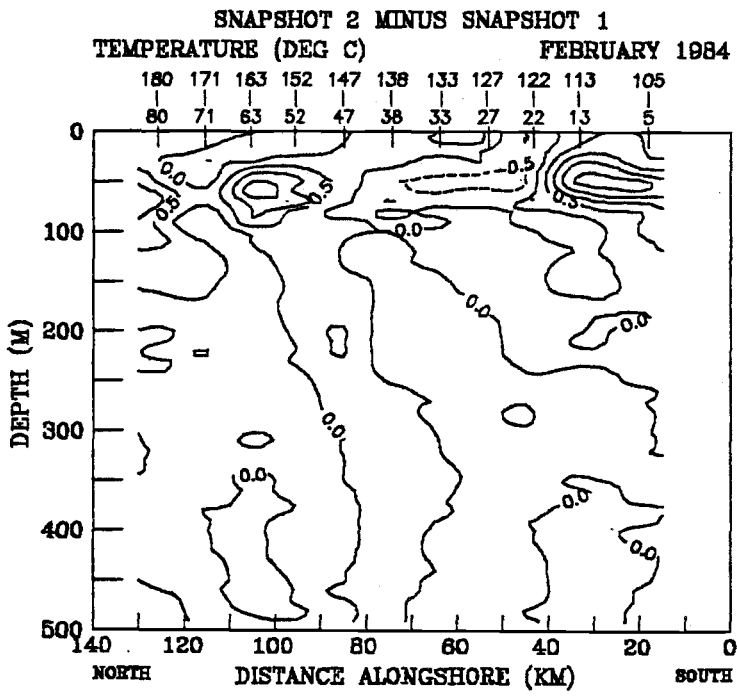


SNAPSHOT 2 MINUS SNAPSHOT 1
TEMPERATURE (DEG C) FEBRUARY 1984

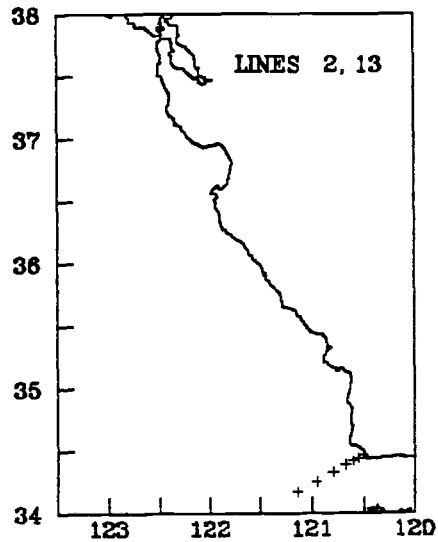
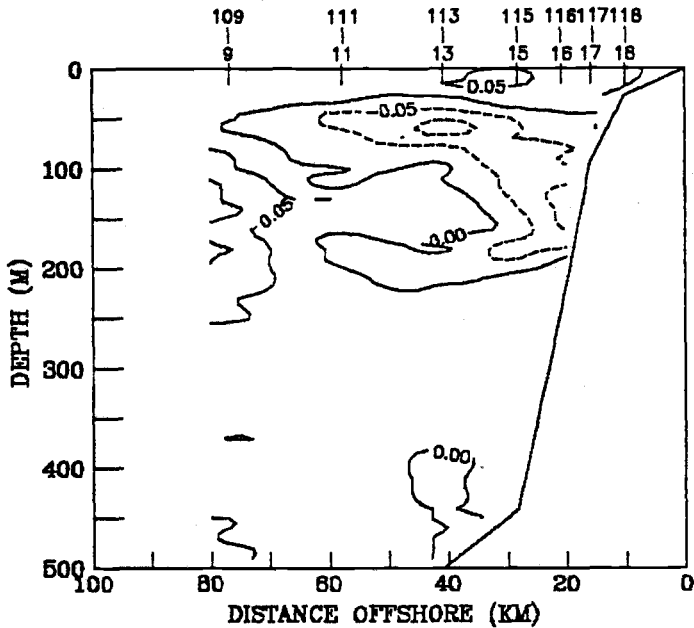


SNAPSHOT 2 MINUS SNAPSHOT 1
TEMPERATURE (DEG C) FEBRUARY 1984

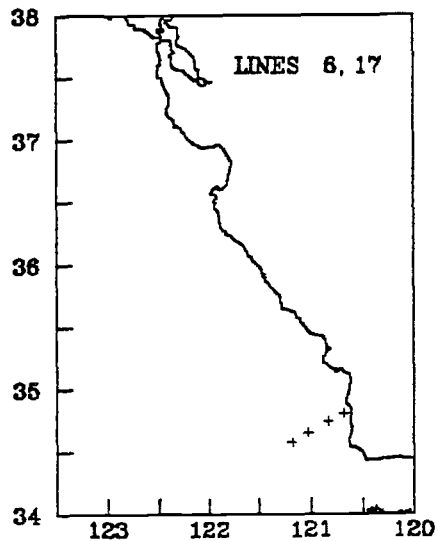
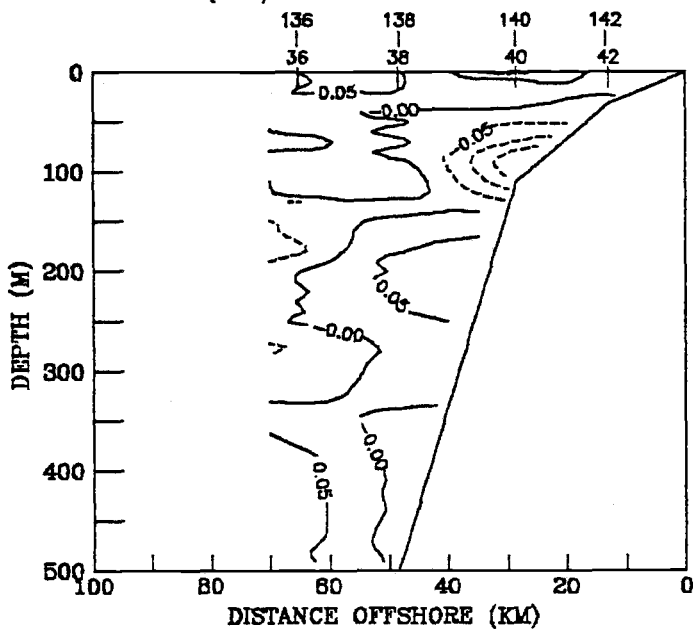


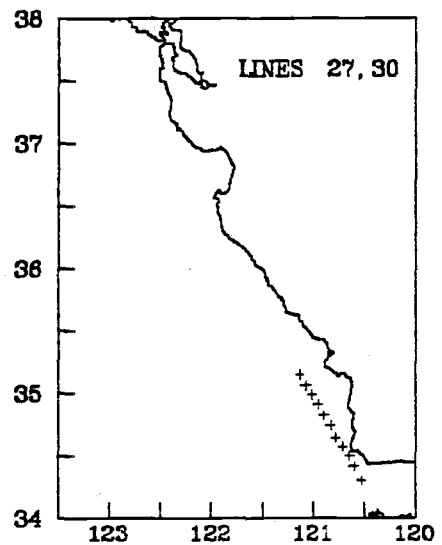
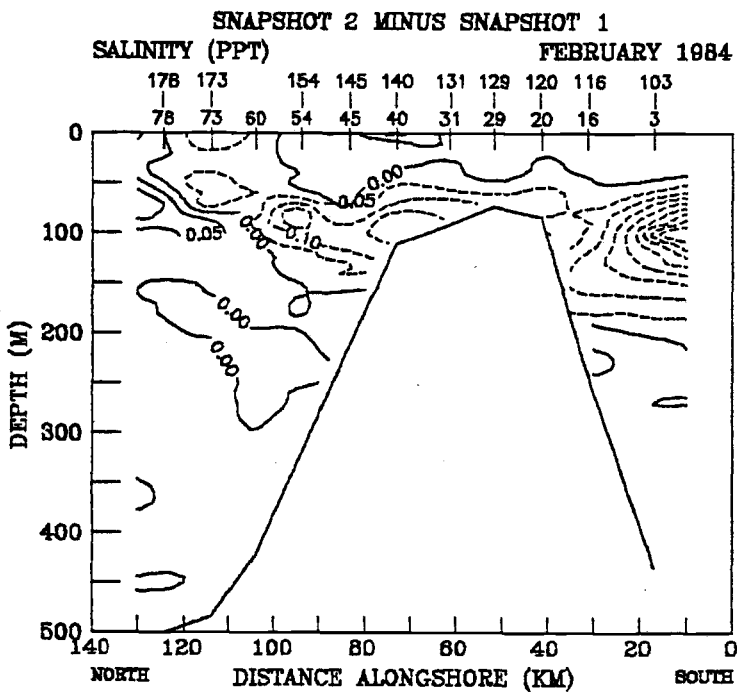
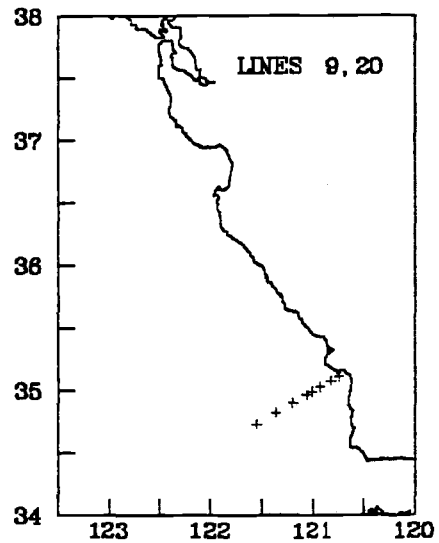
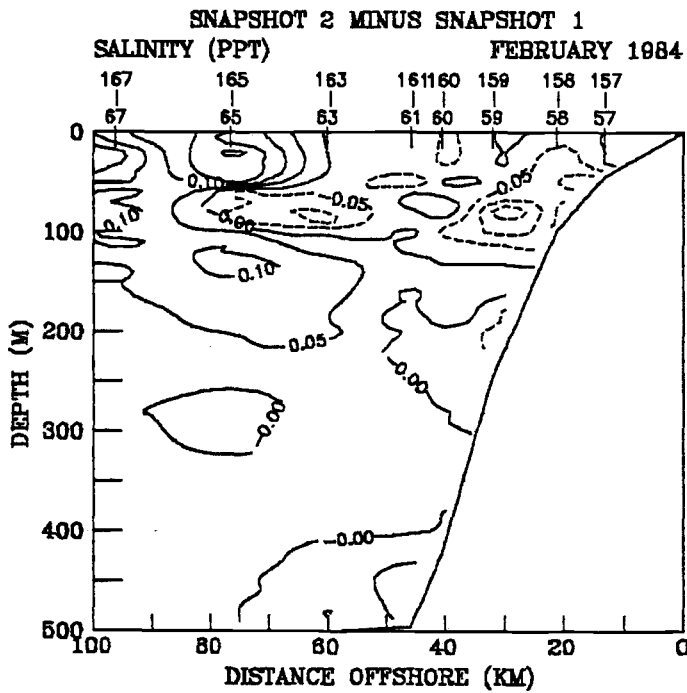


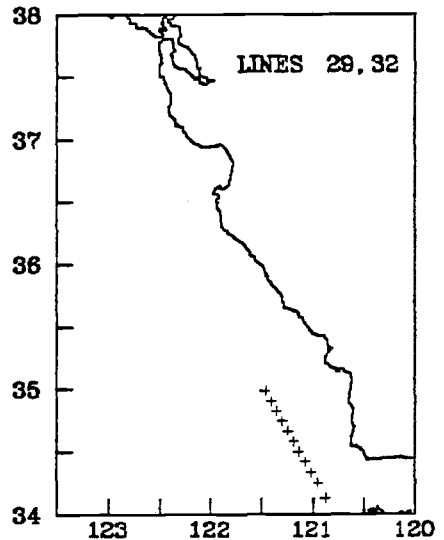
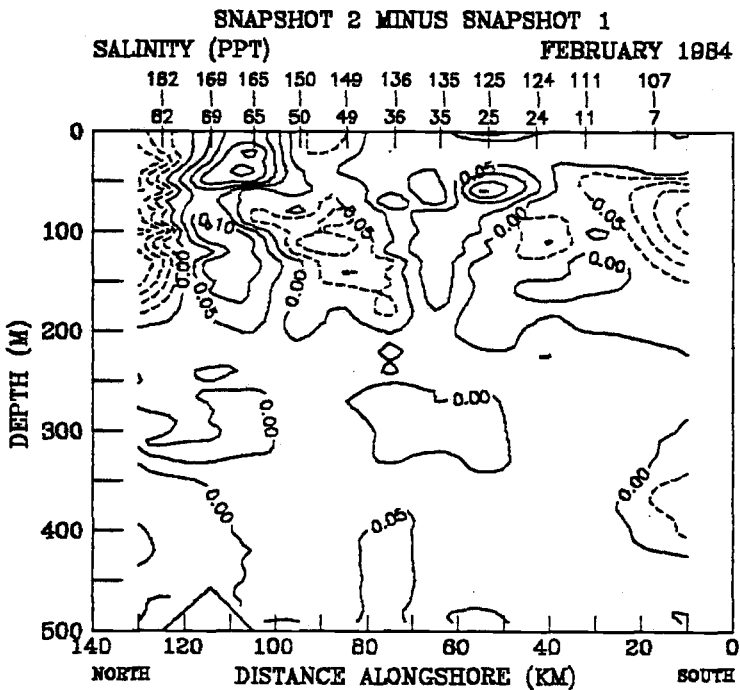
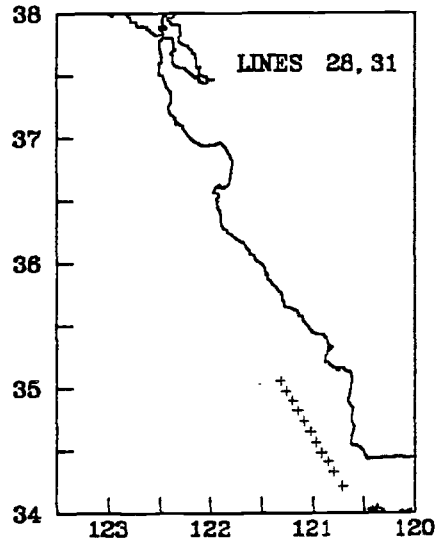
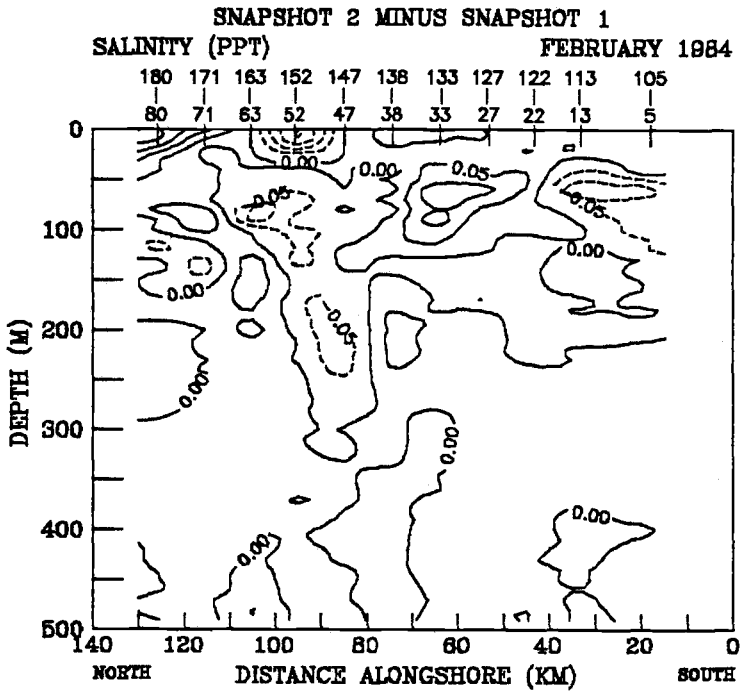
SNAPSHOT 2 MINUS SNAPSHOT 1
 SALINITY (PPT) FEBRUARY 1984



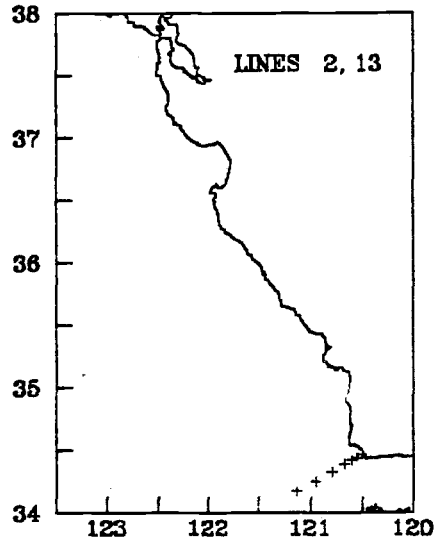
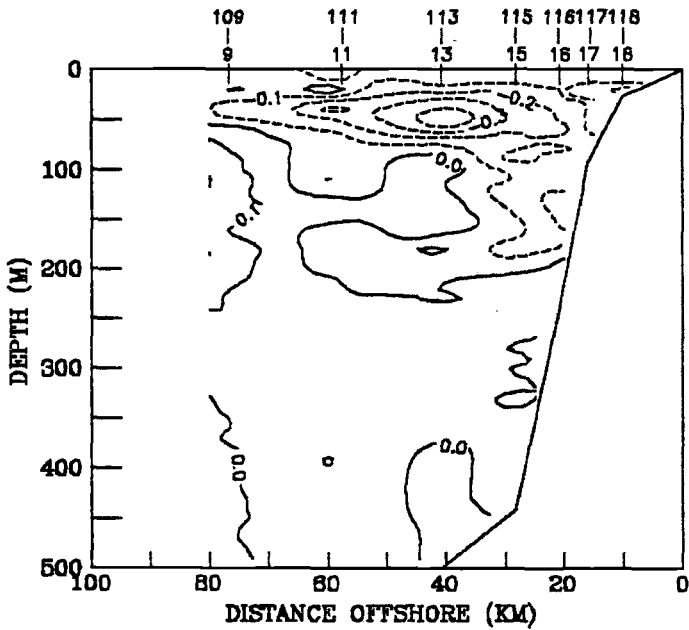
SNAPSHOT 2 MINUS SNAPSHOT 1
 SALINITY (PPT) FEBRUARY 1984



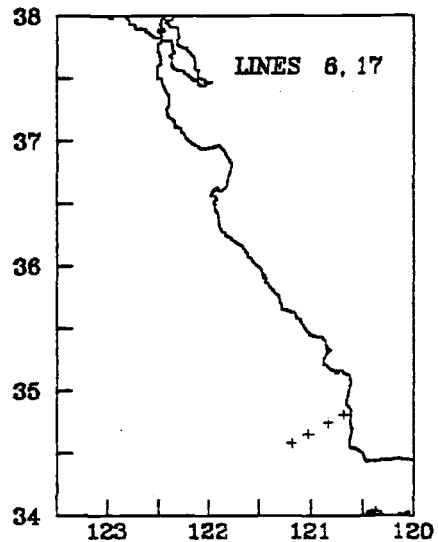
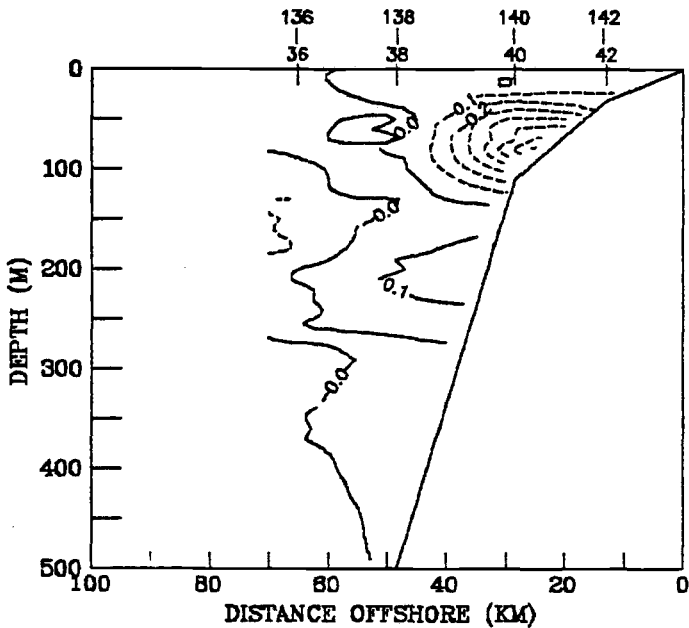




SNAPSHOT 2 MINUS SNAPSHOT 1
SIGMA-T FEBRUARY 1984

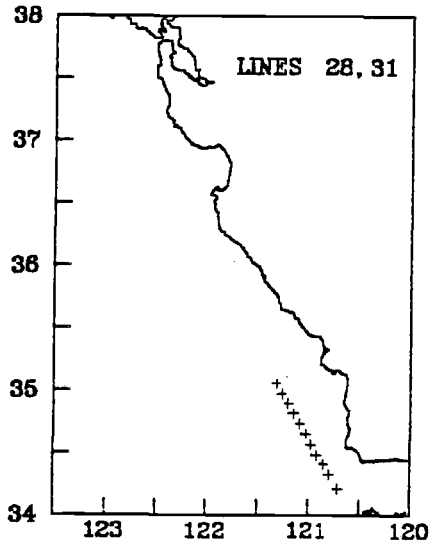
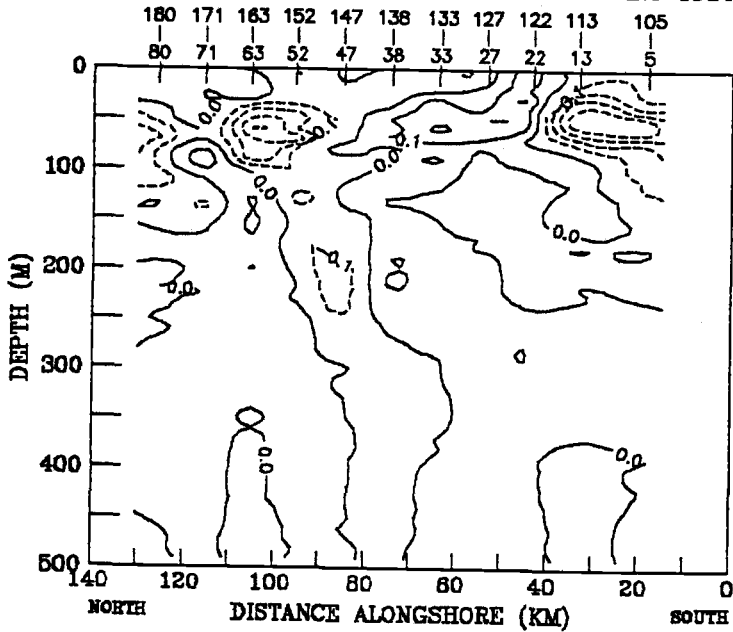


SNAPSHOT 2 MINUS SNAPSHOT 1
SIGMA-T FEBRUARY 1984



SNAPSHOT 2 MINUS SNAPSHOT 1

SIGMA-T FEBRUARY 1984



SNAPSHOT 2 MINUS SNAPSHOT 1

SIGMA-T FEBRUARY 1984

