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EASTROPAC *Atlas*

Volume 1	Physical oceanographic and meteorological data from principal participating ships, first survey cruise, February-March 1967.	Published June 1972
Volume 2	Biological and nutrient chemistry data from principal participating ships, first survey cruise, February-March 1967.	Published April 1971
Volume 3	Physical oceanographic and meteorological data from principal participating ships, first and second monitor cruises, April-July 1967.	Published September 1971
Volume 4	Biological and nutrient chemistry data from principal participating ships, first and second monitor cruises, April-July 1967.	Published November 1970
Volume 5	Physical oceanographic and meteorological data from principal participating ships, second survey cruise, August-September 1967.	Published September 1972
Volume 6	Biological and nutrient chemistry data from principal participating ships, second survey cruise, August-September 1967.	Published December 1972
Volume 7	Physical oceanographic and meteorological data from principal participating ships and *Oceanographer,* third and fourth monitor cruises, October 1967-January 1968.	Published July 1973
Volume 8	Biological and nutrient chemistry data from principal participating ships and *Oceanographer,* third and fourth monitor cruises, October 1967-January 1968.	Published March 1974
Volume 9	Physical oceanographic and meteorological data from principal participating ships, third survey cruise, February-March 1968.	Published February 1975
Volume 10	Biological and nutrient chemistry data from principal participating ships, third survey cruise, February-March 1968.	Published December 1975
Volume 11	Data from Latin American cooperating ships and ships of opportunity, all cruises, February 1967-March 1968.	Published July 1977

ABSTRACT

This atlas contains charts depicting the distribution of physical, chemical, and biological oceanographic properties and associated meteorological properties observed during EASTROPAC. EASTROPAC was an international cooperative investigation of the eastern tropical Pacific Ocean (20° N. to 20° S., and from the west coasts of the American continents to 119° W.) which was intended to provide data necessary for a more effective use of the marine resources of the area, especially tropical tunas, and also to increase knowledge of the ocean circulation, air-sea interaction, and ecology. The Bureau of Commercial Fisheries (now National Marine Fisheries Service) was the coordinating agency. The field work, from February 1967 through March 1968, was divided into seven 2-month cruise periods. During each cruise period one or more ships were operating in the study area.

On completion of the field work the data seemed too numerous for a classical data report. Instead, it was decided to produce an 11-volume atlas of the results, with 5 volumes containing physical oceanographic and meteorological data from the principal participating ships, 5 volumes containing biological and nutrient chemistry data from the same ships, and 1 volume containing all data from Latin American cooperating ships and ships of opportunity. Extensive use was made of a computer and automatic plotter in preparation of the atlas charts. Methods used to collect and process the data upon which the atlas is based are described in detail by the contributors of the following categories of charts: temperature, salinity, and derived quantities; thickness of the upper mixed layer; dissolved oxygen; meteorology; nutrient chemistry; phytoplankton standing stocks and production; zooplankton and fish larvae; micronekton; birds, fish schools, and marine mammals.

Cover. Immature magnificent frigatebirds near Cocos Island.
Photo by John H. Taylor, Scripps Institution of Oceanography.

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EASTROPAC ATLAS

VOLUME II

PHYSICAL OCEANOGRAPHIC AND METEOROLOGICAL DATA FROM
LATIN AMERICAN SHIPS AND SHIPS OF OPPORTUNITY
FEBRUARY 1967—MARCH 1968

CUTHBERT M. LOVE,
ROY M. ALLEN, *Editors*

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INTRODUCTION

EASTROPAC was an international cooperative investigation of the eastern tropical Pacific Ocean which was intended to provide data necessary for a more efficient use of the marine resources of the area, especially tropical tunas, and also to increase knowledge of the ocean circulation, air-sea interaction, and ecology. The former Bureau of Commercial Fisheries (BCF) (now National Marine Fisheries Service) was the coordinating agency. The field work, from February 1967 through March 1968, was divided into seven 2-month cruise periods. There were three general classes of ships taking part in the field operations: the principal participating ships, all operated by U.S. organizations; Latin American cooperating ships; and ships of opportunity. See figure 1 for a summary of EASTROPAC cruises. Table 1 shows the affiliations of ships participating in EASTROPAC.

At a meeting of the EASTROPAC coordinating committee held in La Jolla in April 1968, it was decided that the data derived from the cruises were so numerous as to render classical data reports impractical and that a comprehensive atlas of the physical and biological results of the project should be produced instead. The atlas has been divided into 11 volumes, with five volumes containing physical oceanographic and meteorological data from the principal participating ships, and five volumes containing biological and nutrient chemistry data from the same ships. Volume 11 contains all data from the Latin American cooperating ships and ships of opportunity.

EASTROPAC CRUISES

The cruises of all EASTROPAC ships have been described in the volume 1 introduction but a review of the Latin American and ships of opportunity cruises is in order here. Cruises by Latin American cooperating ships were usually timed to coincide with the multiship survey cruises and their geographical coverage was designed to supplement that of other vessels involved.

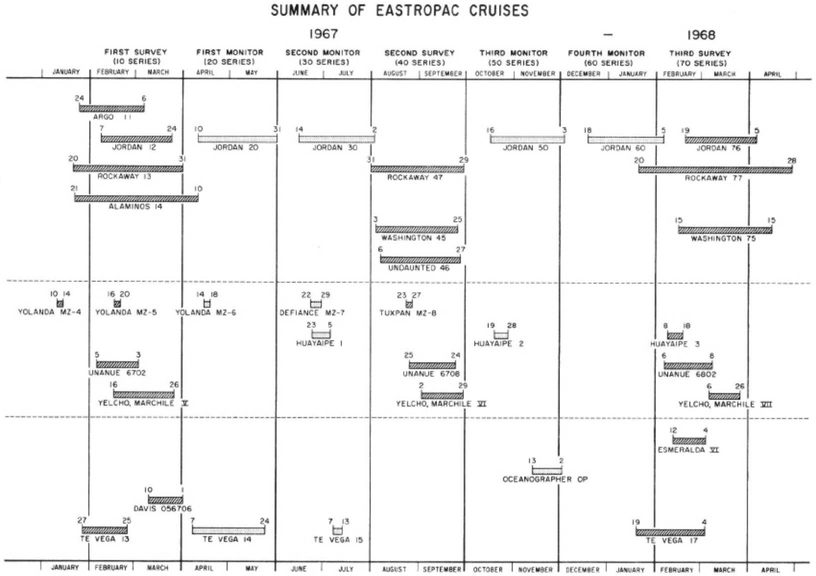

FIGURE 1. — Summary of EASTROPAC cruises.

Figure 1 is a graphical summary of EASTROPAC cruises. The affiliations of the participating ships are shown in the accompanying table (table 1).

TABLE 1.—Affiliations of ships participating in EASTROPAC (1967-68).

Category and ship	Country	Agency or institution
Principal participating ships:		
Alaminos	U.S.A.	Department of Oceanography, Texas A & M University
Argo	U.S.A.	Scripps Institution of Oceanography, University of California
David Starr Jordan	U.S.A.	Bureau of Commercial Fisheries, La Jolla
Rockaway	U.S.A.	U.S. Coast Guard
Undaunted	U.S.A.	Bureau of Commercial Fisheries, Miami
Thomas Washington	U.S.A.	Scripps Institution of Oceanography, University of California
Latin American cooperating ships:		
Defiance	Mexico & U.S.A.	Dirección General de Pesca e Industrias Conexas, Mexico, and U.S. Bureau of Sport Fisheries and Wildlife
Huayaipe	Ecuador	Instituto Nacional de Pesca
Tuxpan	Mexico	Dirección General de Pesca e Industrias Conexas
Unanue	Peru	Instituto del Mar
Yelcho	Chile	Instituto Hidrográfico de la Armada
Yolanda	Mexico	Dirección General de Pesca e Industrias Conexas
Ships of opportunity:		
Charles H. Davis	U.S.A.	U.S. Naval Oceanographic Office
Esmeralda	Chile	Instituto Hidrográfico de la Armada
Oceanographer	U.S.A.	Environmental Science Services Administration, U.S. Coast & Geodetic Survey
Te Vega	U.S.A.	Stanford Oceanographic Expeditions, Stanford University

The field work began with the first survey cruise in February-March 1967 (see figures 10-TC-a, 10-TC-b). In addition to the four principal participating ships, the following were involved: *Yolanda* of the Direccion General de Pesca e Industrias Conexas, Mexico, (DGPIC) operating out of Mazatlan in a joint project with the Inter-American Tropical Tuna Commission (IATTC); *Unanue* of the Instituto del Mar, Peru, (IMP) from Callao; and the MARCHILE V cruise run by *Yelcho* of the Instituto Hidrografico de la Armada, Chile, (IHA) from Valparaiso. Actually, *Yolanda* made two cruises during what might be considered the first survey period. The first cruise (MZ-4) was in January 1967, shortly before the other ships put to sea, and the second (MZ-5) took place in February. Ships of opportunity operating during the period were the USNS *Charles H. Davis* of the U.S. Naval Oceanographic Office from San Diego, which ran a north-south section on 85°W; and *Te Vega* of Stanford Oceanographic Expeditions, Stanford University, from Pacific Grove, which operated on a line from Cape San Lucas to the Galapagos.

During the first monitor cruise period in April-May 1967 (fig. 20-TC) *Yolanda* again operated from Mazatlan and *Te Vega* worked off the coast of Mexico between 13° and 24°N. During the second monitor period, June-July, (fig. 30-TC) *Defiance*, a chartered U.S. fishing vessel, operated out of Mazatlan instead of *Yolanda* for a joint cruise sponsored by DGPIC, the U.S. Bureau of Sport Fisheries and Wildlife, and the IATTC. Meanwhile, *Huayaipe* of the Instituto Nacional de Pesca, Ecuador (INPE), in conjunction with IATTC, operated in the waters between Guayaquil and the Galapagos, and *Te Vega* occupied stations in the entrance to the Gulf of California.

The second survey cruise took place in August-September 1967 (figs. 40-TC-a, 40-TC-b). There were three principal participating ships as well as the following: *Tuxpan* of DGPIC and IATTC operating in the area south of the entrance to the Gulf of California, *Unanue* running a network of stations off the coast of Peru, and *Yelcho* (MARCHILE VI) running five lines off northern and central Chile.

The third monitor cruise period was October-November 1967 (fig. 50-TC). During that period *Huayaipe* made another cruise in the area between the mainland of Ecuador and the Galapagos, and the U.S. Coast and Geodetic survey ship *Oceanographer* made observations during part of her track between Callao and San Diego. (The *Oceanographer* data will not be found in this volume; they are contained in Volumes 7 and 8.) There was little activity during the fourth monitor period, December 1967-January 1968, except by the principal ship, *Jordan* (fig. 60-TC). *Te Vega* ran a north-south line on 100°W and some stations in the vicinity of the Galapagos in a time period which overlapped between the fourth monitor and third survey cruise periods.

During the third survey cruise period in February-March 1968 (figs. 70-TC-a, 70-TC-b), Latin American cooperating ships included *Huayaipe*, *Unanue*, and *Yelcho* (MARCHILE VII), all operating in the same areas as before. (The MARCHILE VII data are not included in the atlas.) *Esmeralda*, a training ship of the Chilean Navy, has been listed as a ship of opportunity. Her personnel made a series of mechanical bathythermograph observations during a voyage from Valparaiso to Panama.

OBSERVATIONS MADE AND TYPES OF DATA PRESENTED

The EASTROPAC program of observations has been described in general in the volume 1 introduction, and EASTROPAC Information Papers Number 6, 8 and 9 (Longhurst, 1967, 1968, 1969) contain detailed listings of the observations made by each ship. Some of the Latin American ships and ships of opportunity followed the EASTROPAC routine of observations as well as their equipment, personnel, and time schedules would permit, while others followed their own routines. Plans for the *Unanue* and *Yelcho* cruises called for the three types of stations and station spacing based on time of day as specified for EASTROPAC observations. None of the Latin American ships was equipped with an STD, however, nor were they able to make all the specified plankton or micronekton collections. *Charles H. Davis* made the extra observations requested in equatorial regions during her transect on 85°W.

However, not all the data collected by the Latin American ships and ships of opportunity were made available or were appropriate for inclusion in the atlas. What are presented in this volume are vertical sections of temperature, salinity, certain derived physical quantities, and dissolved oxygen. Surface temperature and salinity values were included in the charts of horizontal distribution of those properties for the appropriate cruise periods and are to be found in volumes 1, 3, 5, 7, and 9; but the same charts have been repeated in this volume for the sake of completeness. Values of phosphate-phosphorus and silicate-silicon at 10 meters from *Unanue* cruise 6702 are included in the charts in volume 2.

Table 2 shows the types of data presented in this volume for each cruise along with notes on the sampling methods used and the sources of the data. It will be noted that only a few vertical sections of geostrophic velocity have been presented. The reasons are as follows: First, some of the ships operated entirely within a few degrees of latitude from the Equator where the assumptions concerning geostrophic flow are invalid. Second, many stations extend only to 300 m. depth, but the geostrophic calculations for other volumes were made relative to the 500 db. surface, which is found at a depth of approximately 500 m. Third, there were uncertainties about the sampling depths from *Unanue* and *Yelcho* stations (See the next section.)

Attention is drawn to the cruise abbreviations listed in Table 2 and also in Table 3. These abbreviations are used in the figure captions to indicate the ship and cruise number in the same way that the numbers 11, 12, 20, 30, etc., were used in previous volumes.

The user may notice that some of the station numbers on the track charts showing the *Yelcho* MARCHILE V and MARCHILE VI cruises have been revised (figs. 10-TC-b, 40-TC-b). The chilean Instituto Hidrografico de la Armada revised some station numbers after these cruises had taken place. The revised station numbers were used in preparing the atlas sections and the track charts have been revised accordingly.

Some of the vertical sections included in this volume have already been published by various operating agencies (Naval Oceanographic Office, 1968, Stevenson, 1970; Zuta y Guillen, 1970). However, this volume presents the sections in a format consistent with those in other volumes of the atlas to facilitate their use and comparison with other EASTROPAC data. There may be minor differences between the sections in this volume and those published elsewhere. These differences are due partly to the different methods used to prepare the sections and partly to differences in subjective interpretation of the data by different contributers.

Table 2. Volume 11: Types of data presented, sampling methods used, and sources of data.

Ship and cruise number	Cruise abbreviation	Vertical sections: Temperature	Salinity	Themosteric anomaly	Geostrophic velocity	Dissolved oxygen	Sampling methods used	Sources of data
Yolanda, MZ4	MZ4	X	X	X			All MZ cruises; Temperature was obtained by mechanical BT; salinity samples were collected with Knudsen-Morrison bottles.	All MZ cruises: Published data report (Leet and Stevenson, 1969)
Yolanda, MZ5	MZ5	X	X	X				
Yolanda, MZ6	MZ6	X	X	X				
Defiance, MZ7	MZ7	X	X	X				
Tuxpan, MZ8	MZ8	X	X	X				
Huayaipe, 1	H1	X	X	X		0	Data obtained by Nansen casts	Publ.data report (Stevenson & Santoro, 1967)
Huayaipe, 2	H2	X	X	X		X	Data obtained by Nansen casts	Publ.data report (Stevenson & Santoro, 1968a)
Huayaipe, 3	H3	X	X	X		X	Data obtained by Nansen casts	Publ.data report (Stevenson & Santoro, 1968b)
Unanue 6702	U1	X	X	X		0	Data obtained by Nansen casts	Data listing supplied by operating agency
Unanue 6708	U2	X	X	X		X	Data obtained by Nansen casts	Data listing supplied by operating agency
Unanue 6802	U3	X	X	X		X	Data obtained by Nansen casts	Data listing supplied by operating agency
Yelcho, MARCHILE V	Y5	X	X	X			Data obtained by Nansen casts	Data listing supplied by operating agency
Yelcho, MARCHILE VI	Y6	X	X	X		X	Data obtained by Nansen casts	Data listing supplied by operating agency
Charles H. Davis	CD	X	0	0	0	0	Ramsay probe used for temperature on some stations; data obtained by Nansen casts at remaining stations.	Ramsay probe data from listing supplied by operating agency; Nansen cast data from published data report (Naval Oceanographic Office, 1968)
Te Vega 13	T3	X	X	X	X		Data obtained by Nansen casts	Data listing supplied by operating agency
Te Vega 14	T4	X	X	X	X		Data obtained by Nansen casts	Data listing supplied by operating agency
Te Vega 15	T5	X	X	X	X		Data obtained by Nansen casts	Data listing supplied by operating agency
Te Vega 17	T7	X	X	X	0		Data obtained by Nansen casts	Data listing supplied by operating agency

X: Property shown for all sections of this cruise.
0: Property shown for only some sections of this cruise.

PROCESSING AND NOTES ON THE DATA

Nansen Cast Data and Data from Mazatlan (MZ) Cruises

For each station, observed values of depth and salinity were plotted against the common abscissa of temperature on a graph with imprinted isopleths of thermosteric anomaly, δ_T (Montgomery, 1954; Montgomery and Wooster, 1954). For MZ cruises the digitized BT temperature values found in the data report (Leet and Stevenson, 1969) were used. Because there is a good correlation between temperature and salinity for temperatures below about 13°C in the region between 20°N and 20°S and below about 10°C in the region farther south, erroneous values of temperature and salinity for the deeper layers could be easily noted and either corrected or rejected. For shallower depths, where larger variations of temperature and salinity occur, only obviously incorrect values, such as those indicating hydrostatic instability or an abnormal deviation from nearby stations, were rejected.

The observed data were also compared with existing data from the same area. It was found that some of the data being checked showed systematic errors in salinity which were independent of depth. These errors were sometimes sporadic and at other times extended over a series of stations during a cruise. The correction applied for this error was generally less than 0.05 ‰, but in some cases it exceeded 0.20 ‰.

During the checking process it was discovered that depth values from *Unanue* and *Yelcho* cruises contained random errors, probably as high as 25%, which possibly arose from inadequate calibration of unprotected reversing thermometers. Since no simple way of correcting these errors could be found, vertical sections from these cruises were limited to the upper 500 m. Although the charts for the upper 500 m. do not definitely indicate erratic distributions of properties, these charts should be interpreted with caution. For this reason, no sections of geostrophic velocity were drawn for these cruises.

The corrected values of temperature and salinity were then interpolated linearly with respect to depth. These interpolated values were used to prepare the vertical sections of temperature and salinity and also to compute thermosteric anomaly and geostrophic velocity if desired. The vertical sections were drawn by automatic plotter. The computing and plotting procedures have been described in the volume 1 introduction.

The method of checking the oxygen data and preparing the oxygen sections has also been described in the volume 1 introduction.

Ramsay Probe Data from *Davis* Cruise

Temperature readings from each station were plotted manually against depth and the plots compared with temperature data from *Davis* Nansen cast stations which were made less frequently. The Ramsay temperatures were found to be consistently too high by an average of 0.5°C, so this error was corrected by subtracting 0.5°C from all Ramsay temperature readings. It was also noted that in the upper 50 m. the Ramsay probe sometimes gave obviously low temperature readings. Many such low readings were rejected.

After applying corrections to the data, the depth of each isotherm was read from the temperature-depth plot. The vertical section (Fig. CD-T-v1) was plotted and contoured by hand.

Notes on the Data

The contributors to the physical oceanography sections of this atlas have informed the editor that in their opinion some of the data in Volume 11 are not of comparable quality to those in previous volumes. Some of their reasons have been mentioned in the preceding paragraphs. The causes of the uncertainties and errors in the data may be among the following: insufficient or inadequate equipment; lack of calibration of some equipment; and inexperienced personnel. However, after the careful checking described, the contributors are of the opinion that since these data provide useful information about major features in the EASTROPAC area and, in some cases, extend the coverage of the atlas in time and space, they should certainly be included in this atlas.

Cuthbert M. Love
Editor

TABLE 4.—Abbreviations used in figure designation system.

Cruise or cruise period

Numbers 11, 12, 13, etc., indicate principal cruises. See figure 1.

Letters or letter-number combinations indicate cruises of Latin American cooperating ships or ships of opportunity, as follows:

MZ-4	*Yolanda*, MZ-4
MZ-5	*Yolanda*, MZ-5
MZ-6	*Yolanda*, MZ-6
MZ-7	*Defiance*, MZ-7
MZ-8	*Tuxpan*, MZ-8
H1	*Huayaipe*-1
H2	*Huayaipe*-2
H3	*Huayaipe*-3
U1	*Unanue* 6702
U2	*Unanue* 6708
U3	*Unanue* 6802
Y5	*Yelcho* MARCHILE V
Y6	*Yelcho* MARCHILE VI
Y7	*Yelcho* MARCHILE VII
E6	*Esmeralda* BE VI
OP	*Oceanographer*
CD	*Charles H. Davis*
T3	*Te Vega* 13
T4	*Te Vega* 14
T5	*Te Vega* 15
T6	*Te Vega* 16
T7	*Te Vega* 17

Numbers 10, 20, 30, 40, 50, 60, 70, indicate 2-month cruise periods.

Property represented / Mnemonic to explain choice of letters

Abbreviation	Property represented	Mnemonic to explain choice of letters
T	Temperature	
S	Salinity	
δ	Thermosteric anomaly (δ_T)	
G	Geostrophic velocity	
O_2	Oxygen concentration	
O_2Sa	Oxygen saturation	
ML	Thickness of the mixed layer	
$\delta300$	300 cl./t. thermosteric anomaly surface	
AP	Acceleration Potential	
P	Phosphate-phosphorus	
Si	Silicate-silicon	
NO_3	Nitrate-nitrogen	
NO_2	Nitrite-nitrogen	
NH_3	Ammonia-nitrogen	
Ch	Chlorophyll-a	
Ph	Phaeophytin	
PP	Primary production	
EL	Thickness of the euphotic layer	
FCp	Fish and cephalopod standing stock	
Cr	Crustacean standing stock	
Nk	Total micronekton standing stock	
ZhN	Zooplankton standing stock from 50-cm. net hauls, night	Zooplankton, half-meter, Night
Z1N	Zooplankton standing stock from 1-m. net hauls, night	Zooplankton, 1-meter, Night
ZhD	Zooplankton standing stock from 50-cm. net hauls, day	Zooplankton, half-meter, Day
Z1D	Zooplankton standing stock from 1-m. net hauls, day	Zooplankton, 1-meter, Day
FLN	Total fish larvae, night hauls	Fish Larvae, Night
FLD	Total fish larvae, day hauls	Fish Larvae, Day
FE	Total fish eggs	
FS	Total skipjack tuna larvae	Fish, Skipjack
FA	Total *Auxis* larvae	Fish, *Auxis*
FC	Total *Coryphaena* larvae	Fish, *Coryphaena*
FMN	Total myctophid larvae, night hauls	Fish, Myctophid, Night
FMD	Total myctophid larvae, day hauls	Fish, Myctophid, Day
FGN	Total gonostomatid and sternoptychid larvae, night hauls	Fish, Gonostomatid, Night
FGD	Total gonostomatid and sternoptychid larvae, day hauls	Fish, Gonostomatid, Day
BP	Relative abundance of plankton-feeding birds	Birds, Plankton-feeding
BF	Relative abundance of fish and cephalopod-feeding birds	Birds, Fish-feeding
SP	Porpoise sightings	Sightings, Porpoise
SW	Whale sightings	Sightings, Whales
ST	Tuna school sightings, all cruises	Sightings, Tuna
UA	Upper atmosphere meteorology	
MW	Surface meteorological analysis, winds and pressure	Meteorology, Winds
MC	Surface meteorological analysis, clouds, dewpoint, temperature	Meteorology, Clouds
MT	Surface meteorological analysis, sea temperature, sea-air temperature difference, sea temperature anomaly	Meteorology, Temperature
RM	Reference map	
TC	Track chart	

Indicator for vertical sections or type of horizontal surface

v1, v2, etc., indicate vertical sections.

Vertical sections are assigned consecutive numbers within each cruise which follow the chronological order in which the ship ran the sections.

Number 10 or 100 following O_2Sa or horizontal P, Si, NO_3, NO_2, or NH_3 charts indicates distribution at that depth (m.).

s	Distribution at the sea surface
$\delta300$	Distribution on the surface where δ_T=300 cl./t.
ei	Distribution integrated over the euphotic layer
150i	Distribution integrated to 150 m. depth
z	Depth of a surface

Number 1 or 2 following SP or SW charts indicates one of two 6-month periods into which those observations were divided.

Numbers 1 to 4 or 1 to 6 following MT or MW charts indicate one of the approximate 2-week periods into which those observations were divided. For all cruise periods except 40, the MT and MW charts were drawn for four 2-week periods. For the 40 cruise period these charts were drawn for six periods ranging from 12 to 16 days in length, but with several days overlap between some periods. Number 1 or 2 following MC charts indicates one of the monthly periods for which those charts were drawn.

LIST OF FIGURES

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Temperature and salinity—White pages

FIGURE MZ5-T-v3.—Vertical distribution of temperature (°C.) along 106°38′ W. from Cape Corrientes to Mazatlan, February 19-20, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ5-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°54′ N. across the entrance to the Gulf of California, February 16-17, 1967.

FIGURE MZ5-S-v2.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, February 17-19, 1967.

FIGURE MZ5-S-v3.—Vertical distribution of salinity (°/oo) along 106°38′ W. from Cape Corrientes to Mazatlan, February 19-20, 1967.

Thermosteric anomaly—Yellow pages

FIGURE MZ5-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°54′ N. across the entrance to the Gulf of California, February 16-17, 1967.

FIGURE MZ5-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, February 17-19, 1967.

FIGURE MZ5-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°38′ W. from Cape Corrientes to Mazatlan, February 19-20, 1967.

Temperature and salinity—White pages

FIGURE MZ6-T-v1.—Vertical distribution of temperature (°C.) along a section on 22°56′ N. across the entrance to the Gulf of California, April 14-15, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ6-T-v2.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, April 16-17, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ6-T-v3.—Vertical distribution of temperature (°C.) along 106°33′ W. from Cape Corrientes to Mazatlan, April 17-18, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ6-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°56′ N. across the entrance to the Gulf of California, April 14-15, 1967.

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FIGURE MZ6-S-v3.—Vertical distribution of salinity (°/oo) along 106°33′ W. from Cape Corrientes to Mazatlan, April 17-18, 1967.

Thermosteric anomaly—Yellow pages

FIGURE MZ6-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°56′ N. across the entrance to the Gulf of California, April 14-15, 1967.

FIGURE MZ6-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, April 16-17, 1967.

FIGURE MZ6-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°33′ W. from Cape Corrientes to Mazatlan, April 17-18, 1967.

Temperature and salinity—White pages

FIGURE MZ7-T-v1.—Vertical distribution of temperature (°C.) along a section on 22°54′ N. across the entrance to the Gulf of California, June 22-23, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ7-T-v5.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, June 23 and 27-28, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ7-T-v3.—Vertical distribution of temperature (°C.) along 18° N., June 25, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ7-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°54′ N. across the entrance to Gulf of California, June 22-23, 1967.

FIGURE MZ7-S-v5.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, June 23 and 27-28, 1967.

FIGURE MZ7-S-v3.—Vertical distribution of salinity (°/oo) along 18° N., June 25, 1967.

FIGURE MZ7-T-v2.—Vertical distribution of temperature (°C.) along a northeast-southwest section located south of Cape San Lucas, from 21°42′ N., 109°41′ W. to 18°03′ N., 111°10′ W., June 23-25, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ7-T-v4.—Vertical distribution of temperature (°C.) along a southwest-northeast section located south of Cape San Lucas, from 18°03′ N., 109°58′ W. to 21°20′ N., 109°06′ W., June 25-26, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ7-T-v6.—Vertical distribution of temperature (°C.) along 106°38′ W. from Cape Corrientes to Mazatlan, June 28-29, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ7-S-v2.—Vertical distribution of salinity (°/oo) along a northeast-southwest section located south of Cape Lucas, from 21°42′ N., 109°41′ W. to 18°03′ N., 11°10′ W., June 23-25, 1967.

FIGURE MZ7-S-v4.—Vertical distribution of salinity (°/oo) along a southwest-northeast section located south of Cape San Lucas, from 18°03′ N., 109°58′ W. to 21°20′ N., 109°06′ W., June 25-27, 1967.

FIGURE MZ7-S-v6.—Vertical distribution of salinity (°/oo) along 106°38′ W. from Cape Corrientes to Mazatlan, June 28-29, 1967.

Thermosteric anomaly—Yellow pages

FIGURE MZ7-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°54′ N. across the entrance to the Gulf of California, June 22-23, 1967.

FIGURE MZ7-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, June 23 and 27-28, 1967.

FIGURE MZ7-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 18° N., June 25, 1967.

FIGURE MZ7-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section located south of Cape San Lucas, from 21°42′ N., 109°41′ W. to 18°03′ N., 111°10′ W., June 23-25, 1967.

FIGURE MZ7-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section located south of Cape San Lucas, from 18°03′ N., 109°58′ W. to 21°20′ N., 109°06′ W., June 25-27, 1967.

FIGURE MZ7-δ-v6.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°38′ W. from Cape Corrientes to Mazatlan, June 28-29, 1967.

Temperature and salinity—White pages

FIGURE MZ8-T-v1.—Vertical distribution of temperature (°C.) along a section on 22°56′ N. across the entrance to the Gulf of California, August 23-24, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ8-T-v2.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, August 25-26, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ8-T-v3.—Vertical distribution of temperature (°C.) along 106°38′ W. from Cape Corrientes to Mazatlan, August 26-27, 1967. These contours are based on mechanical bathythermograph data.

FIGURE MZ8-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°56′ N. across the entrance to the Gulf of California, August 23-24, 1967.

FIGURE MZ8-S-v2.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, August 25-26, 1967.

FIGURE MZ8-S-v3.—Vertical distribution of salinity (°/oo) along 106°38′ W. from Cape Corrientes to Mazatlan, August 26-27, 1967.

Thermosteric anomaly—Yellow pages

FIGURE MZ8-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°56′ N. across the entrance to the Gulf of California, August 23-24, 1967.

FIGURE MZ8-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, August 25-26, 1967.

FIGURE MZ8-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°38′ W. from Cape Corrientes to Mazatlan, August 26-27, 1967.

Temperature and salinity—White pages

Thermosteric anomaly—Yellow pages

Oxygen—Green pages

Temperature and salinity—White pages

Thermosteric anomaly—Yellow pages

Oxygen—Green pages

Temperature and salinity—White pages

Thermosteric anomaly—Yellow pages

Oxygen—Green pages

Temperature and salinity—White pages

Thermosteric anomaly—Yellow pages

Oxygen—Green pages

Temperature and salinity—White pages

Thermosteric anomaly—Yellow pages

Oxygen—Green pages

FIGURE U2-O_2-v22.—Vertical distribution of oxygen (ml./l.) along a southeast-northwest section from 21°03′ S., 75°19′ W. to 17°56′ S., 79°37′ W., September 21-22, 1967.

FIGURE U2-O_2-v21.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 21°03′ S., 75°19′ W., September 19-21, 1967.

Temperature and salinity—White pages

FIGURE U3-T-v1.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

FIGURE U3-T-v7.—Vertical distribution of temperature (°C.) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

FIGURE U3-T-v9.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

FIGURE U3-T-v10.—Vertical distribution of temperature (°C.) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

FIGURE U3-T-v6.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

FIGURE U3-T-v8.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.

FIGURE U3-T-v5.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

FEBRUARY U3-T-v3.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

FIGURE U3-T-v4.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

FIGURE U3-T-v2.—Vertical distribution of temperature (°C.) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.

FIGURE U3-T-v11.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

FIGURE U3-T-v14.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

FIGURE U3-T-v13.—Vertical distribution of temperature (°C.) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.

FIGURE U3-T-v12.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.

FIGURE U3-S-v1.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

FIGURE U3-S-v7.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

FIGURE U3-S-v9.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

FIGURE U3-S-v10.—Vertical distribution of salinity (°/oo) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

FIGURE U3-S-v6.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

FIGURE U3-S-v8.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.

FIGURE U3-S-v5.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

FIGURE U3-S-v3.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

FIGURE U3-S-v4.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

FIGURE U3-S-v2.—Vertical distribution of salinity (°/oo) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.

FIGURE U3-S-v11.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

FIGURE U3-S-v14.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

FIGURE U3-S-v13.—Vertical distribution of salinity (°/oo) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.

FIGURE U3-S-v12.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.

Thermosteric anomaly—Yellow pages

FIGURE U3-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

FIGURE U3-δ-v7.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

FIGURE U3-δ-v9.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

FIGURE U3-δ-v10.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

FIGURE U3-δ-v6.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

FIGURE U3-δ-v8—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.

FIGURE U3-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

FIGURE U3-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

FIGURE U3-δ-v4.—Vertical Distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

FIGURE U3-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.

FIGURE U3-δ-v11.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

FIGURE U3-δ-v14.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

FIGURE U3-δ-v13.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.

FIGURE U3-δ-v12.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.

Oxygen—Green pages

FIGURE U3-O_2-v1.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

FIGURE U3-O_2-v7.—Vertical distribution of oxygen (ml./l.) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

FIGURE U3-O_2-v9.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

FIGURE U3-O_2-v10.—Vertical distribution of oxygen (ml./l.) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

FIGURE U3-O_2-v6.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

FIGURE U3-O_2-v8.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.

FIGURE U3-O_2-v5.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

FIGURE U3-O_2-v3.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

FIGURE U3-O_2-v4.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

FIGURE U3-O_2-v2.—Vertical distribution of oxygen (ml./l.) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.

FIGURE U3-O_2-v11.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

FIGURE U3-O_2-v14.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

FIGURE U3-O_2-v13.—Vertical distribution of oxygen (ml./l.) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.

FIGURE U3-O_2-v12.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.

Temperature and salinity—White pages

FIGURE Y5-T-v1.—Vertical distribution of temperature (°C.) west along 18° S. from the coast of Chile to 73°57′ W., February-March 1967.

FIGURE Y5-T-v2.—Vertical distribution of temperature (°C.) west along 20° S. from the coast of Chile to 74°12′ W., February-March 1967.

FIGURE Y5-T-v3.—Vertical distribution of temperature (°C.) east along 24° S. from 79°01′ W. to the coast of Chile, February-March 1967.

FIGURE Y5-T-v4.—Vertical distribution of temperature (°C.) east along 28° S. from 80°40′ W. to the coast of Chile, March 1967.

FIGURE Y5-T-v5.—Vertical distribution of temperature (°C.) west along 33° S. from Valparaiso, Chile to 80°49′ W., March 1967.

FIGURE Y5-S-v1.—Vertical distribution of salinity (°/oo) west along 18° S. from the coast of Chile to 73°57′ W., February-March 1967.

FIGURE Y5-S-v2.—Vertical distribution of salinity (°/oo) west along 20° S. from the coast of Chile to 74°12′ W., February-March 1967.

FIGURE Y5-S-v3.—Vertical distribution of salinity (°/oo) east along 24° S. from 79°01′ W. to the coast of Chile, February-March 1967.

FIGURE Y5-S-v4.—Vertical distribution of salinity (°/oo) east along 28° S. from 80°40′ W. to the coast of Chile, March 1967.

FIGURE Y5-S-v5.—Vertical distribution of salinity (°/oo) west along 33° S. from Valparaiso, Chile to 80°49′ W., March 1967.

Thermosteric anomaly—Yellow pages

FIGURE Y5-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 18° S. from the coast of Chile to 73°57′ W., February-March 1967.

FIGURE Y5-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 20° S. from the coast of Chile to 74°12′ W., February-March 1967.

FIGURE Y5-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 24° S. from 79°01′ W. to the coast of Chile, February-March 1967.

FIGURE Y5-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 28° S. from 80°40′ W. to the coast of Chile, March 1967.

FIGURE Y5-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 33° S. from Valparaiso, Chile to 80°49′ W., March 1967.

Temperature and salinity—White pages

FIGURE Y6-T-v1.—Vertical distribution of temperature (°C.) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

FIGURE Y6-T-v2.—Vertical distribution of temperature (°C.) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

FIGURE Y6-T-v3.—Vertical distribution of temperature (°C.) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.

FIGURE Y6-T-v4.—Vertical distribution of temperature (°C.) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

FIGURE Y6-T-v5.—Vertical distribution of temperature (°C.) east along 33° S. from 81°14′ W. to Valparaiso, Chile, September 1967.

FIGURE Y6-S-v1.—Vertical distribution of salinity (°/oo) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

FIGURE Y6-S-v2.—Vertical distribution of salinity (°/oo) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

FIGURE Y6-S-v3.—Vertical distribution of salinity (°/oo) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.

FIGURE Y6-S-v4.—Vertical distribution of salinity (°/oo) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

FIGURE Y6-S-v5.—Vertical distribution of salinity (°/oo) east along 33° S. from 81°14′ W. to Valparaiso, Chile, September 1967.

Thermosteric anomaly—Yellow pages

FIGURE Y6-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

FIGURE Y6-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

FIGURE Y6-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.

FIGURE Y6-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

FIGURE Y6-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 33° S. from 81°14′ W. to Valparaiso, Chile, September 1967.

Oxygen—Green pages

FIGURE Y6-O_2-v1.—Vertical distribution of oxygen (ml./l.) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

FIGURE Y6-O_2-v2.—Vertical distribution of oxygen (ml./l.) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

FIGURE Y6-O_2-v3.—Vertical distribution of oxygen (ml./l.) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.

FIGURE Y6-O_2-v4.—Vertical distribution of oxygen (ml./l.) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

FIGURE Y6-O_2-v5.—Vertical distribution of oxygen (ml./l.) east along 33° S. from 81°14′ W. to Valparaiso, Chile, September 1967.

Temperature and salinity—White pages

FIGURE CD-T-v1.—Vertical distribution of temperature (°C.) along 85° W. from 7°56′ N. to 11°59′ S., March 20-26, 1967. Ramsay probe used for temperature on some stations; data obtained by Nansen casts at remaining stations.

FIGURE CD-T-v2.—Vertical distribution of temperature (°C.) along a section from 11°59′ S., 85°01′ W. to 9°31′ S., 80°38′ W., March 26-28, 1967.

FIGURE CD-S-v1.—Vertical distribution of salinity (°/oo) along 85° W. from 10°01′ S. to 11°59′ S., March 26, 1967.

FIGURE CD-S-v2.—Vertical distribution of salinity (°/oo) along a section from 11°59′ S., 85°01′ W. to 9°31′ S., 80°38′ W., March 26-28, 1967.

Thermosteric anomaly and geostrophic velocity—Yellow pages

FIGURE CD-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 85° W. from 10°01′ S. to 11°59′ S., March 1967.

FIGURE CD-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 11°59′ S., 85°01′ W. to 9°31′ S., 80°38′ W., March 26-28, 1967.

FIGURE CD-G-v2.—Vertical distribution of the zonal component of geostrophic velocity (cm./sec.), relative to 500 db., normal to a southeast-northwest section from 11°59′ S., 85°01′ W. to 9°59′ S., 81°28′ W., March 26-27, 1968. Dark shading indicates flow toward the southeast with a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.

Oxygen—Green pages

FIGURE CD-O_2-v1.—Vertical distribution of oxygen (ml./l.) along 85° W. from the Equator to 10°01′ S., March 22-25, 1967.

Temperature and salinity—White pages

FIGURE T3-T-v1.—Vertical distribution of temperature (°C.) from the tip of Baja California, Mexico, southeast to the Galapagos Islands, January 27-February 25, 1967.

FIGURE T3-S-v1.—Vertical distribution of salinity (°/oo) from the tip of Baja California, Mexico, southeastward to the Galapagos Islands, January 27-February 25, 1967.

Thermosteric anomaly and geostrophic velocity—Yellow pages

FIGURE T3-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) from the tip of Baja California, Mexico, southeastward to the Galapagos Islands, January 27-February 25, 1967.

FIGURE T3-G-v1.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., normal to a northwest-southeast section from the tip of Baja California to 2°00′ S., 92°00′ W., January 27-February 24, 1967. Dark shading indicates flow toward the northeast with a velocity greater than 5 cm/sec.; light shading indicates flow toward the southwest with a velocity greater than 5 cm./sec.

Temperature and salinity—White pages

FIGURE T4-T-v3.—Vertical distribution of temperature (°C.) along a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967.

FIGURE T4-T-v2.—Vertical distribution of temperature (°C.) along a section from 13°39′ N., 100°22′ W., northwest to the entrance to the Gulf of California, April 17-29, 1967.

FIGURE T4-T-v1.—Vertical distribution of temperature (°C.) along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967.

FIGURE T4-S-v3.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967.

FIGURE T4-S-v2.—Vertical distribution of salinity (°/oo) along a section from 13°39′ N., 100°22′ W., northwest to the entrance to the Gulf of California, April 17-29, 1967.

FIGURE T4-S-v1.—Vertical distribution of salinity (°/oo) along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967.

Thermosteric anomaly and geostrophic velocity—Yellow pages

FIGURE T4-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967.

FIGURE T4-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 13°39′ N., 100°22′ W., northwest to the entrance to the Gulf of California, April 17-29, 1967.

FIGURE T4-δ-v1.—Vertical distribution of thermosteric anomaly, [illegible] (cl./t.) along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967.

FIGURE T4-G-v3.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., normal to a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967. Dark shading indicates flow toward the southeast with a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.

FIGURE T4-G-v2.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., normal to a section from 13°39′ N., 100°22′ W., northwest to the entrance to the Gulf of California, April 17-29, 1967. Dark shading indicates flow toward the southeast with a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.

FIGURE T4-G-v1.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967. Dark shading indicates flow toward the southeast with a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.

Temperature, salinity and thermosteric anomaly—White pages

FIGURE T5-T-v1.—Vertical distribution of temperature (°C.) along a section in the western portion of the entrance to the Gulf of California, July 13, 1967.

FIGURE T5-S-v1.—Vertical distribution of salinity (°/oo) along a section in the western portion of the entrance to the Gulf of California, July 13, 1967.

FIGURE T5-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section in the western portion of the entrance to the Gulf of California, July 13, 1967.

Temperature and salinity—White pages

FIGURE T7-T-v1.—Vertical distribution of temperature (°C.) along a section on 100° W. from 13°20′ N. to 4°11′ S., January 19-February 1, 1968.

FIGURE T7-T-v2.—Vertical distribution of temperature (°C.) along a section on 94° W. from 2°00′ S. to the Equator, February 5-8, 1968.

FIGURE T7-S-v1.—Vertical distribution of salinity (°/oo) along a section on 100° W. from 13°20′ N. to 4°11′ S., January 19-February 1, 1968.

FIGURE T7-S-v2.—Vertical distribution of salinity (°/oo) along a section on 94° W. from 2°00′ S. to the Equator, February 5-8, 1968.

Thermosteric anomaly and geostrophic velocity—Yellow pages

FIGURE T7-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 100° W. from 13°20′ N. to 4°11′ S., January 19-February 1, 1968.

FIGURE T7-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 94° W. from 2°00′ S. to the Equator, February 5-8, 1968.

FIGURE T7-G-v1.—Vertical distribution of the component of geostrophic velocity (cm./sec.), along 100° W. from 13°20′ N. to 4°11′ S., January 19-February 2, 1968. Dark shading indicates eastward flow with a velocity greater than 5 cm./sec.; light shading indicates westward flow with a velocity greater than 5 cm./sec.

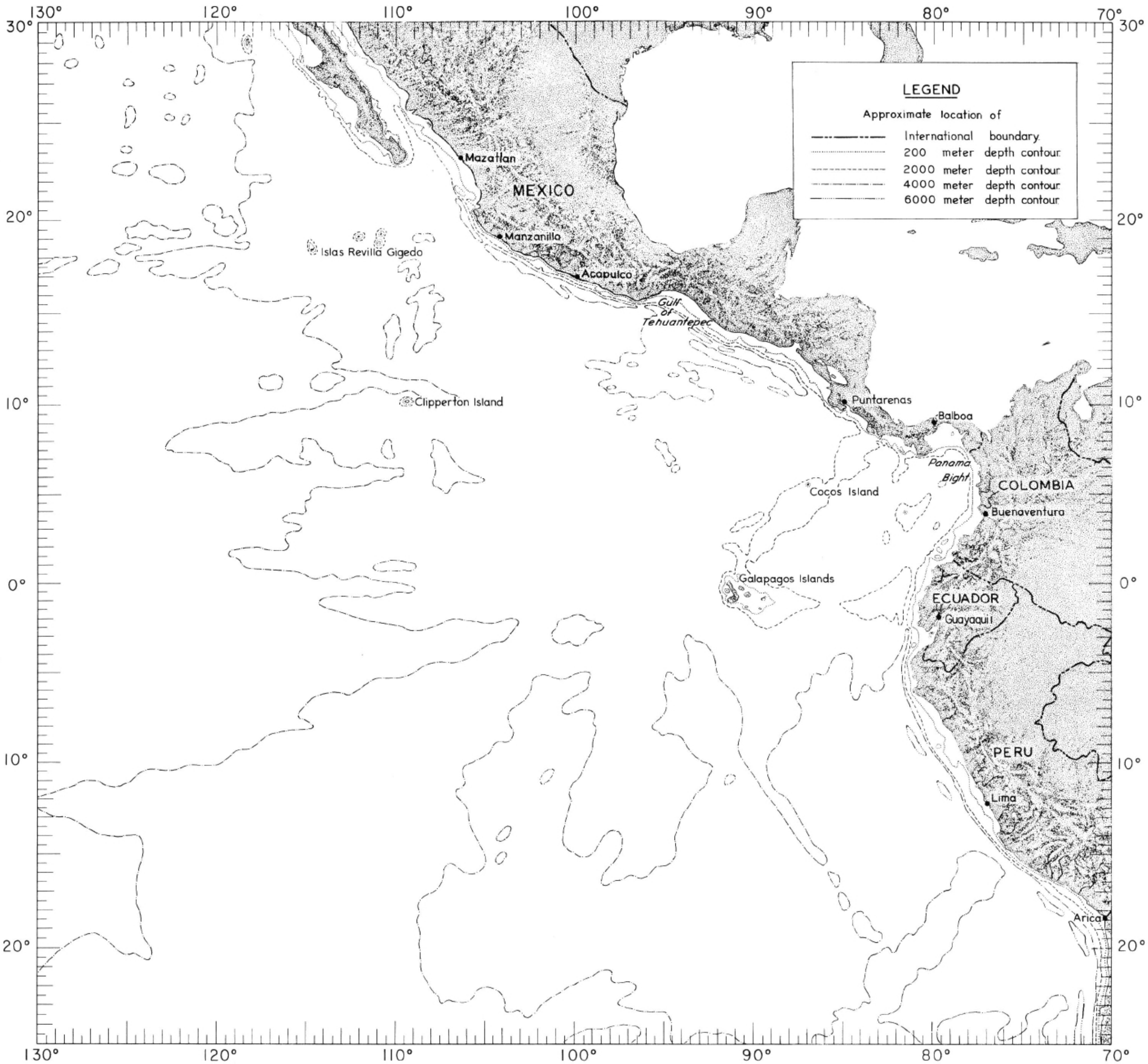


FIGURE RM-a. — Reference map of the main portion of the EASTROPAC area. The topographic shading and bathymetric contours are approximate only and should not be considered as portraying the latest available information.

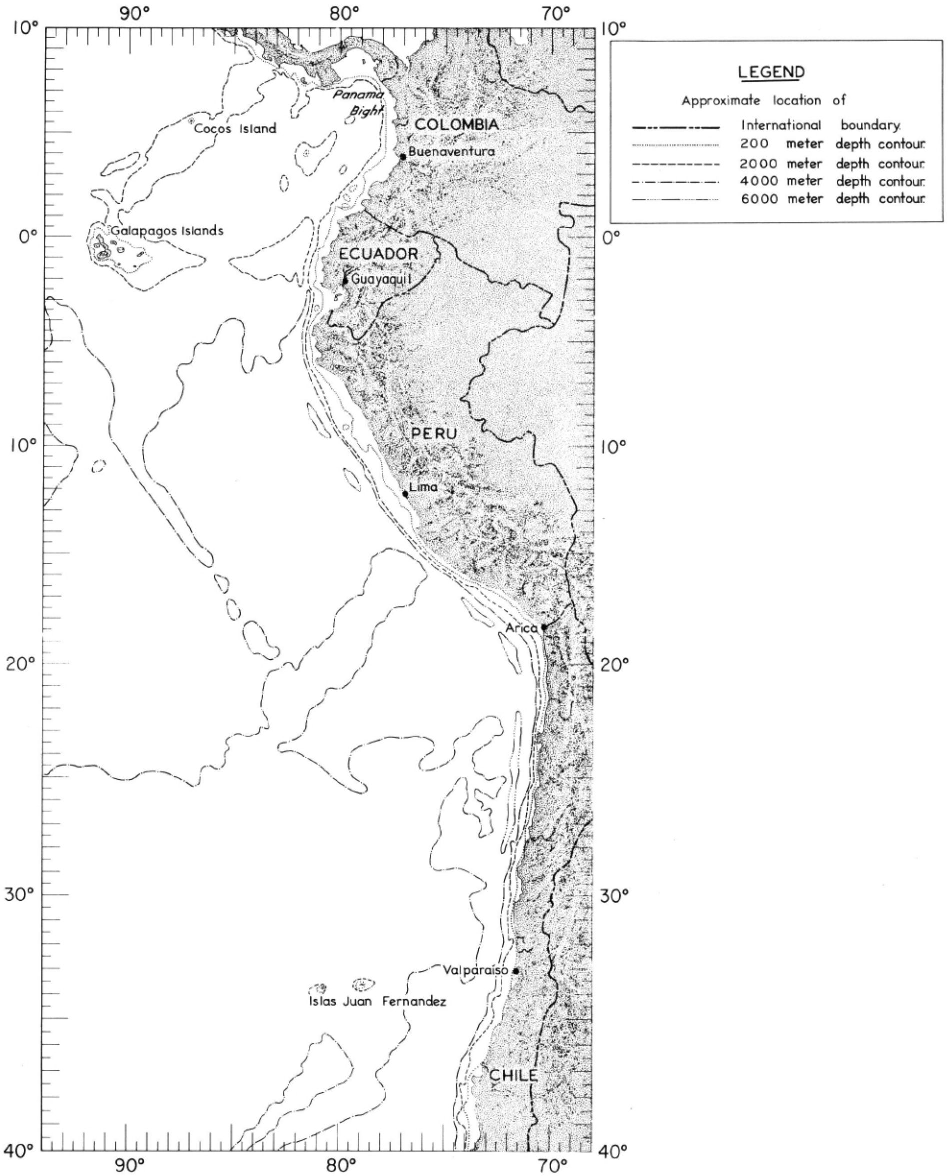


FIGURE RM-b — Reference map of the southern coastal portion of the EASTROPAC area. The topographic shading and bathymetric contours are approximate only and should not be considered as portraying the latest available information.

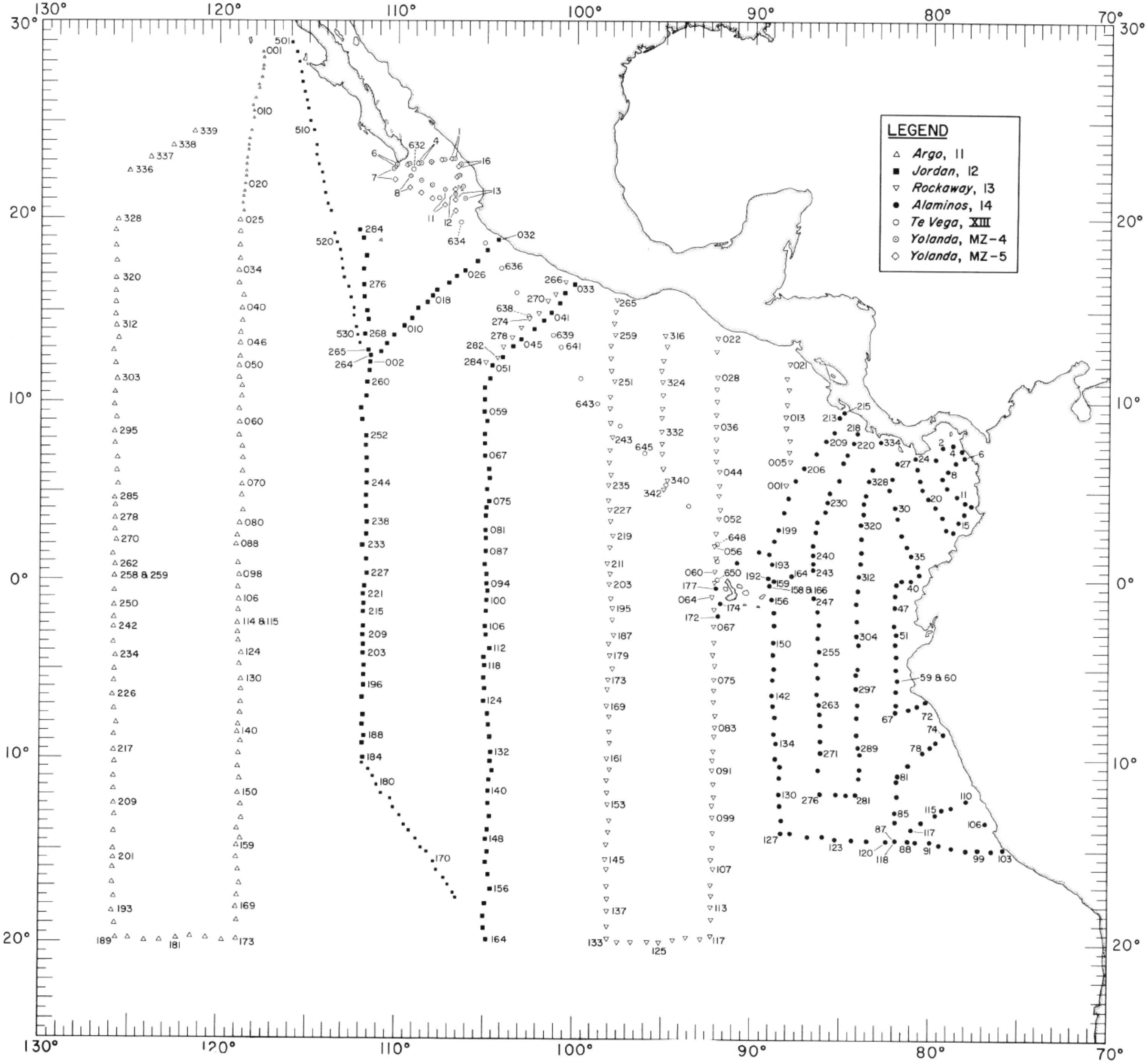


FIGURE 10-TC-a. — Locations of stations occupied by participating ships in the main portion of the EASTROPAC area during the first survey period, February-March 1967.

10-TC-a.

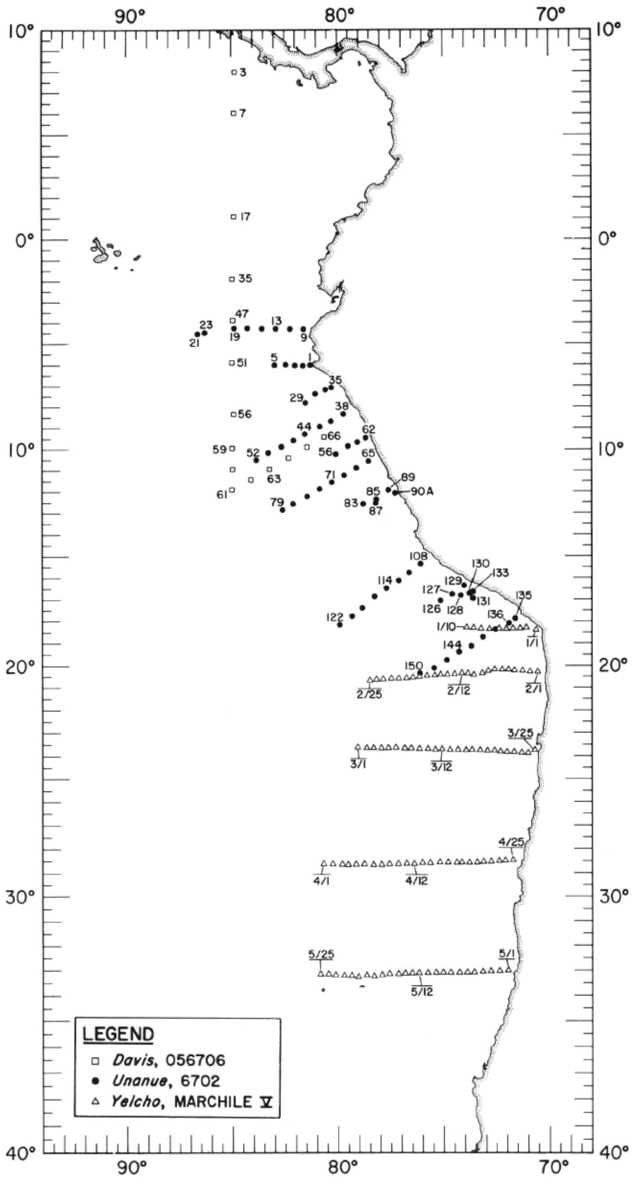


FIGURE 10-TC-b. — Locations of stations occupied by participating ships in the southern coastal portion of the EASTROPAC area during the first survey period, February-March 1967.

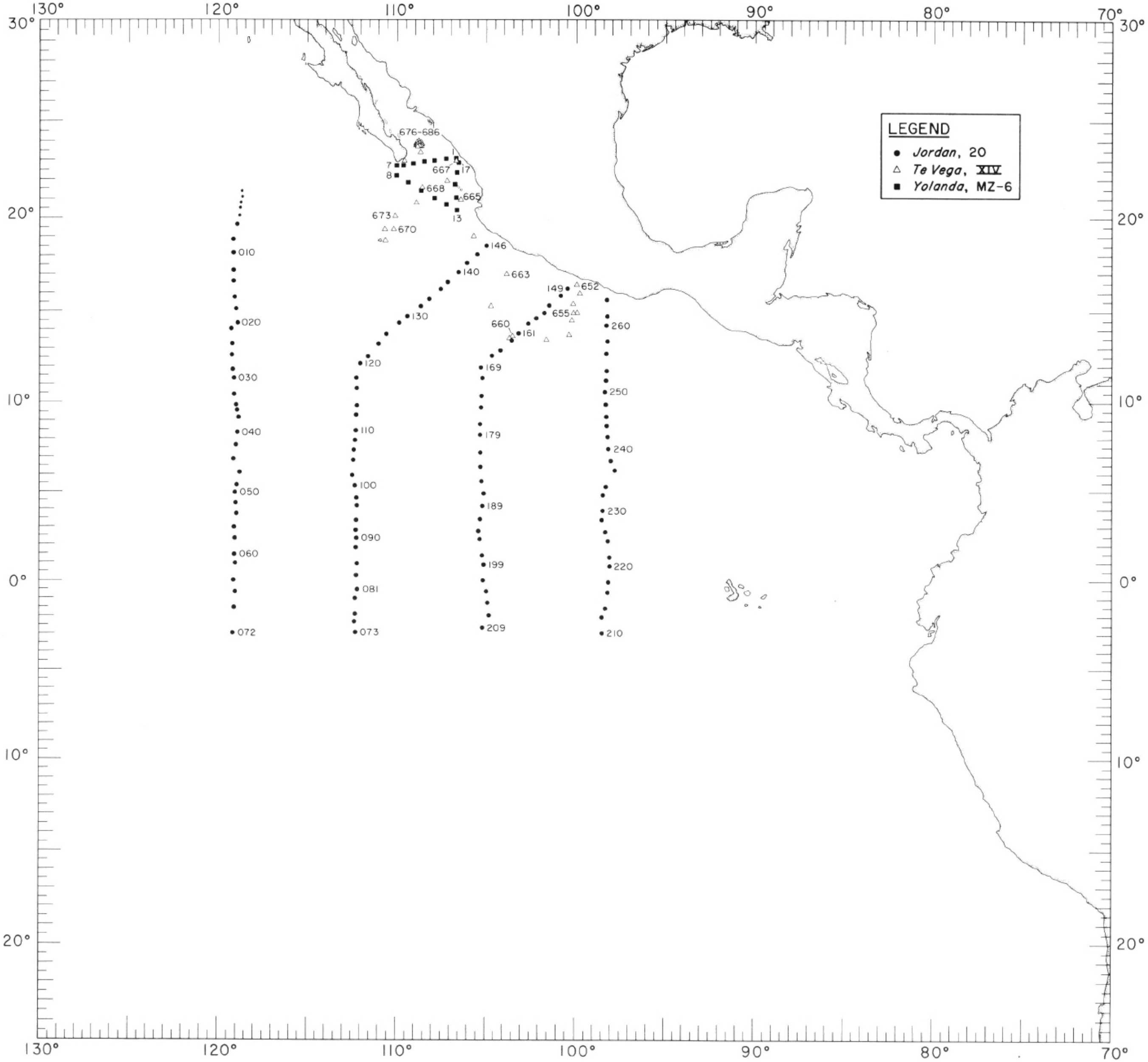


FIGURE 20-TC. — Locations of stations occupied by participating ships during the first monitor period, April-May 1967.

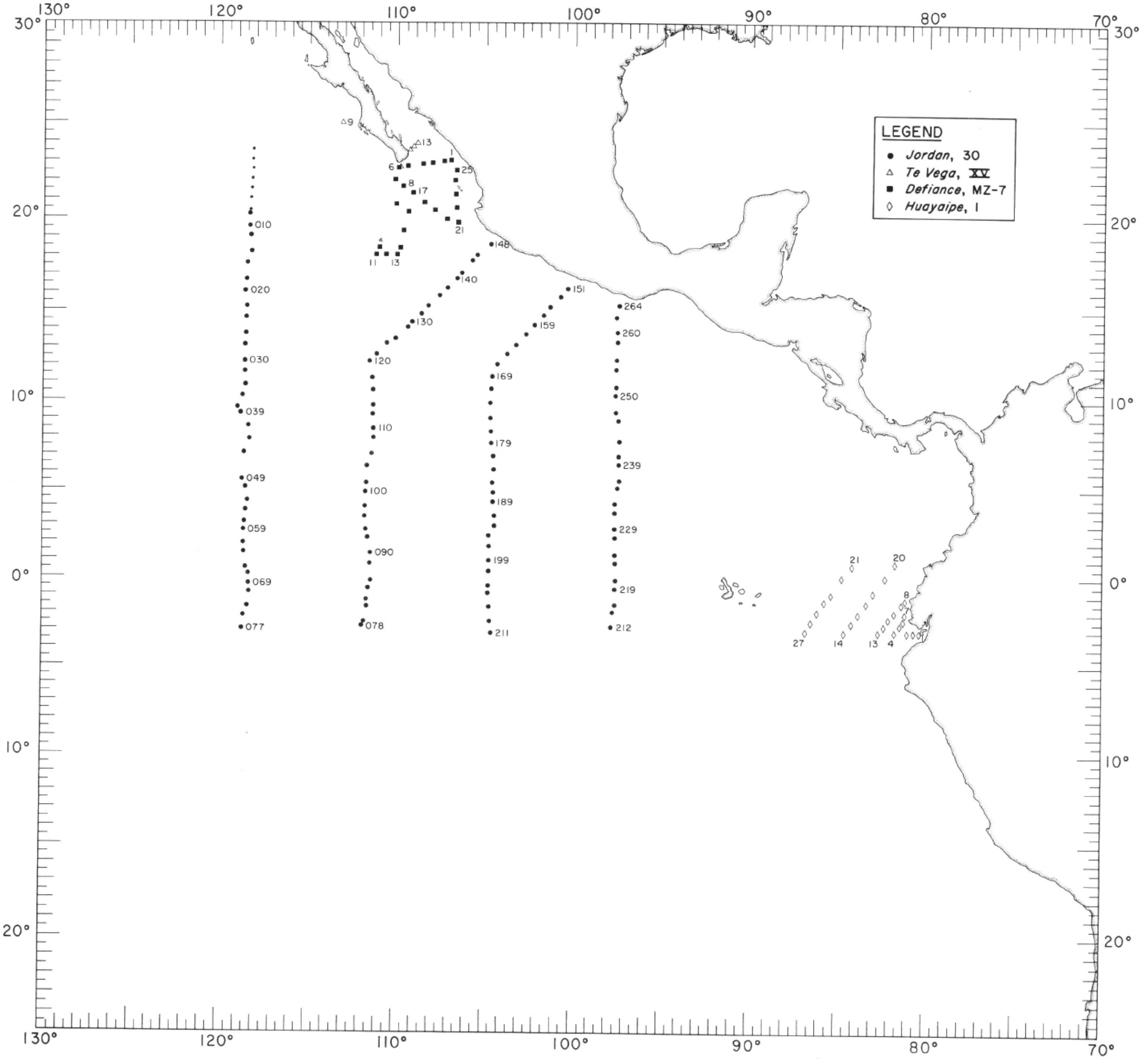


FIGURE 30-TC. — Locations of stations occupied by participating ships during the second monitor period, June-July 1967.

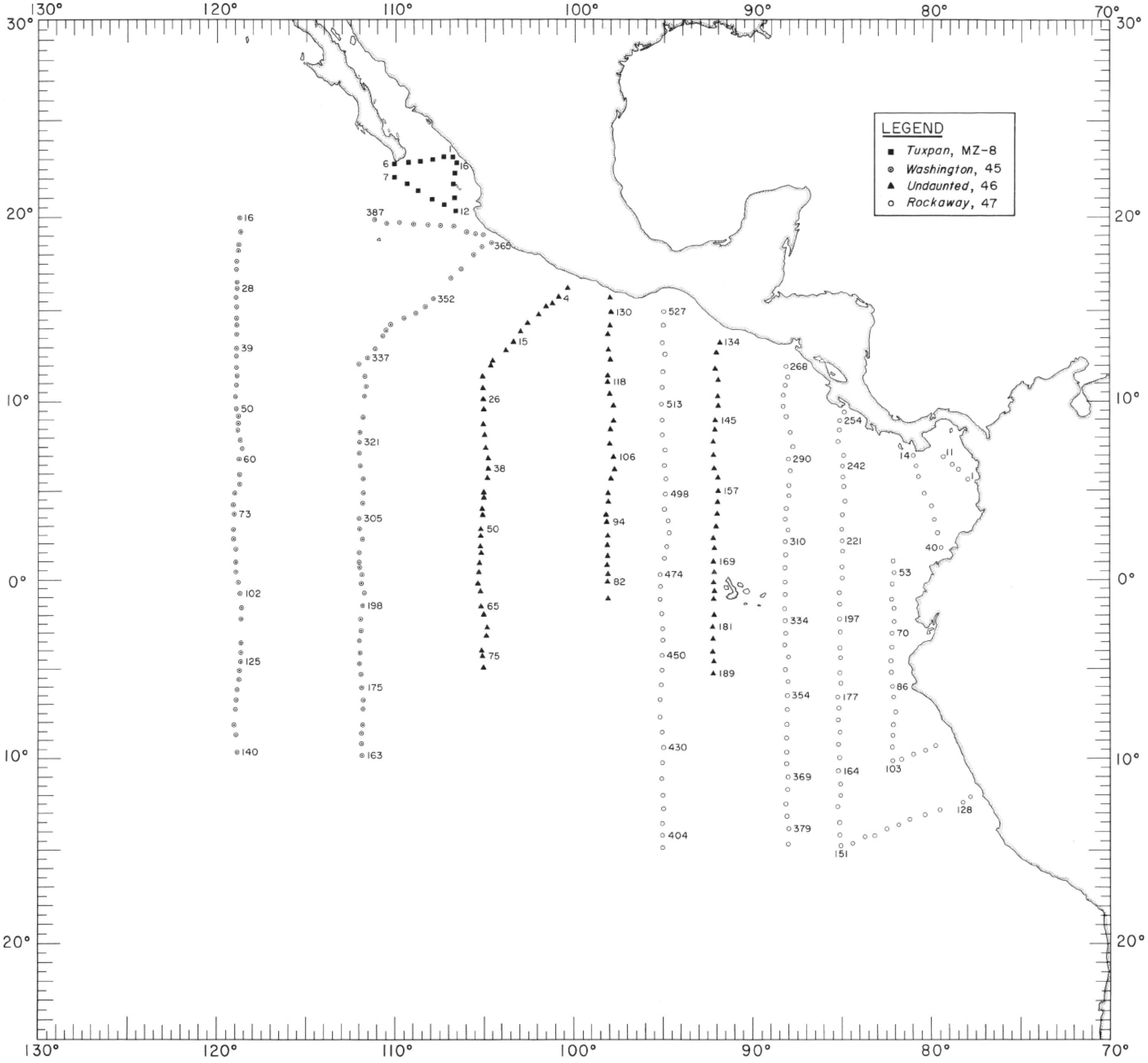
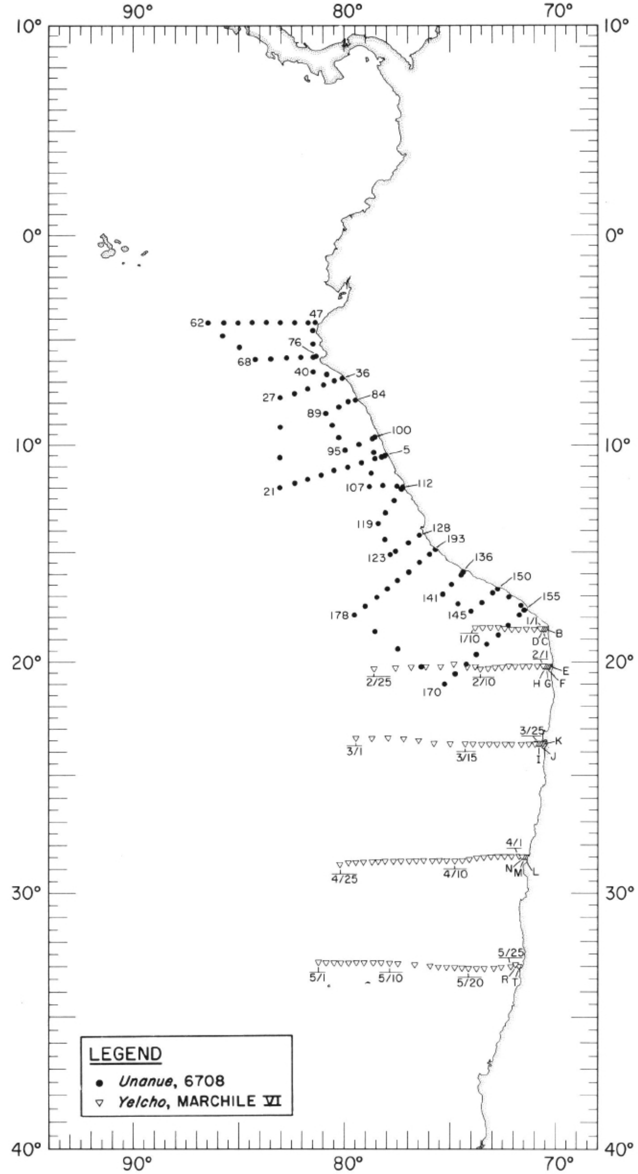


FIGURE 40-TC-a. — Locations of stations occupied by participating ships in the main portion of the EASTROPAC area during the second survey period, August-September 1967.

40-TC-a.



40-TC-b.

FIGURE 40-TC-b. — Locations of stations occupied by participating ships in the southern coastal portion of the EASTROPAC area during the second survey period, August-September 1967.

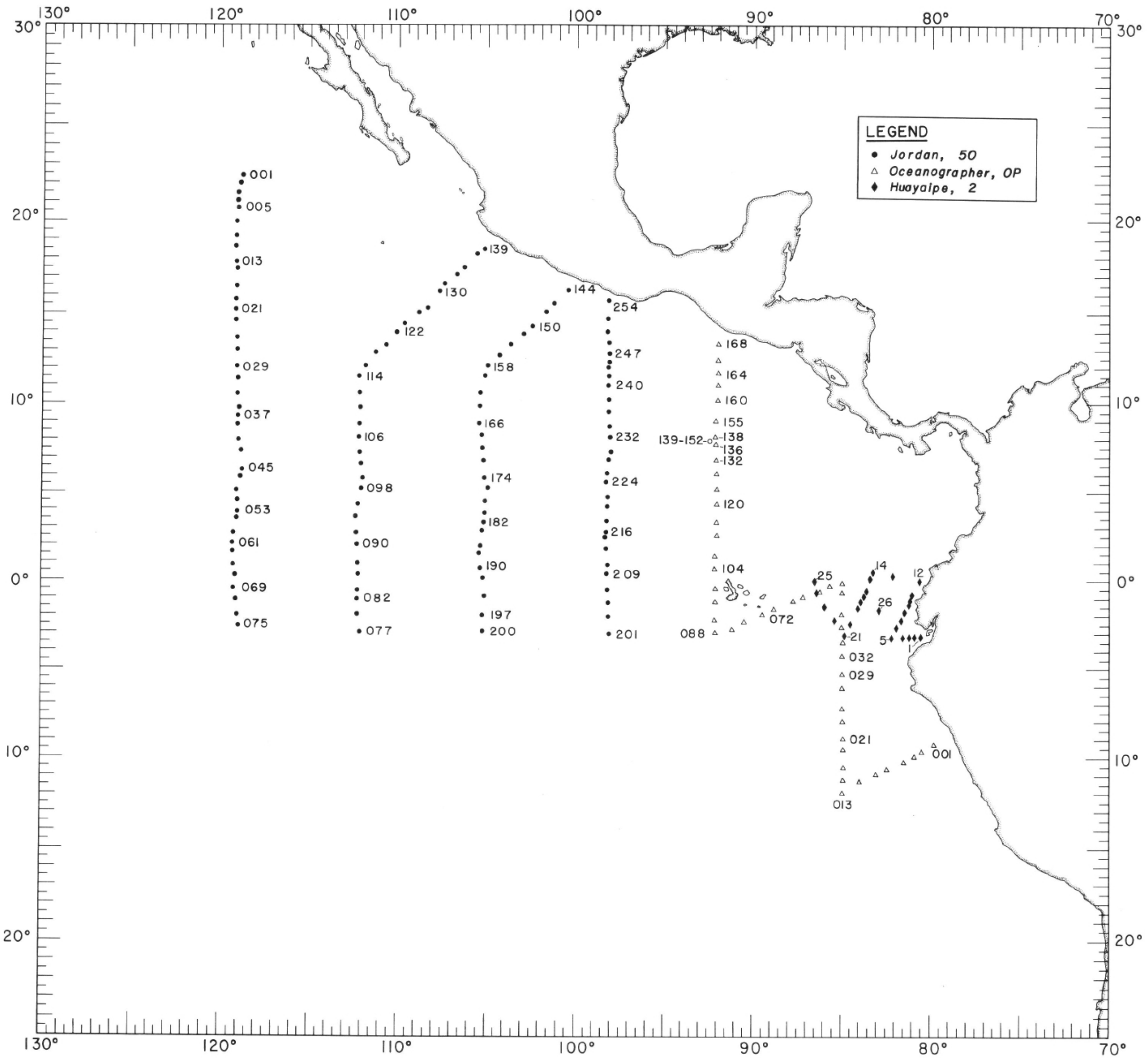
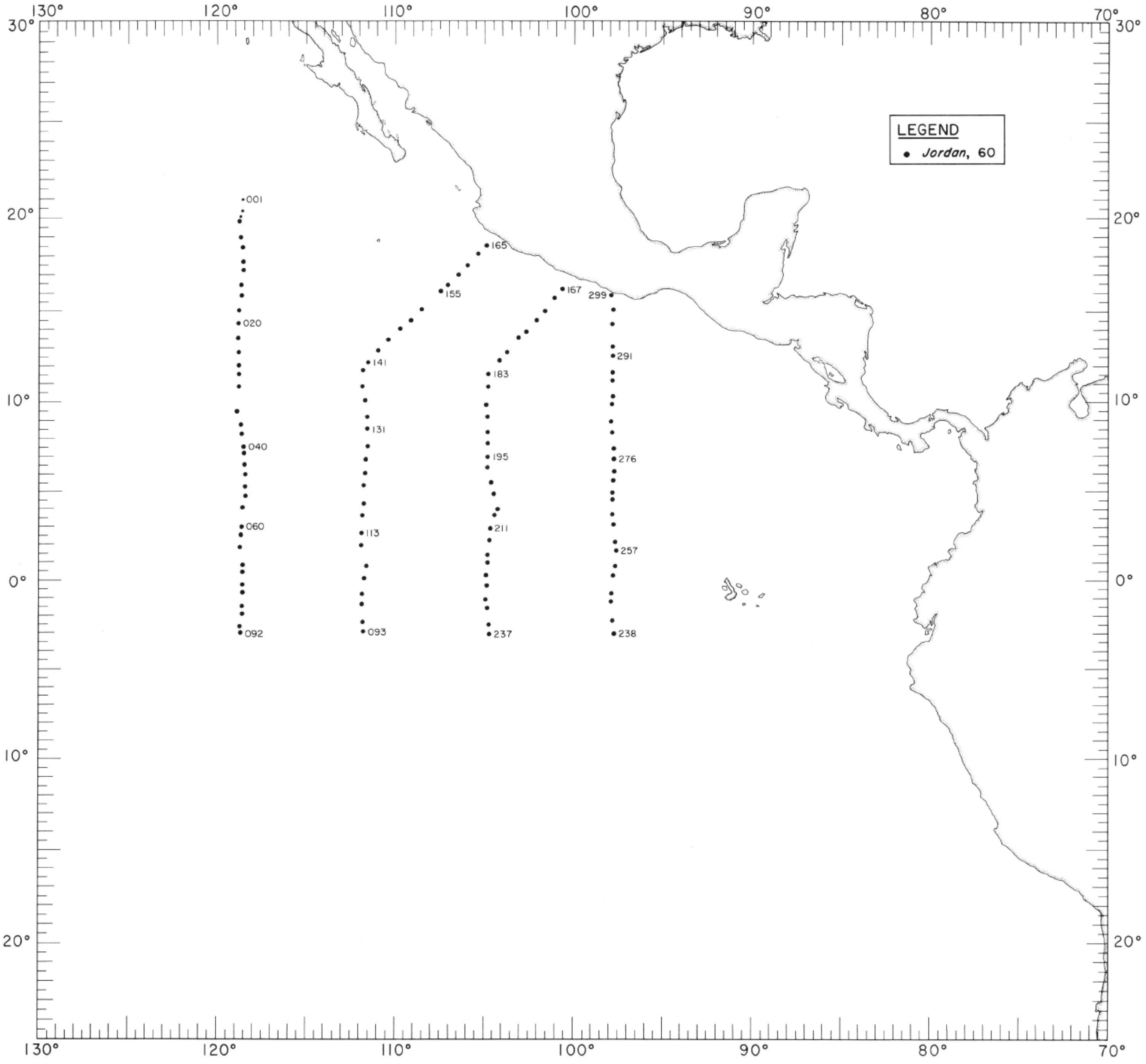


FIGURE 50-TC. — Locations of stations occupied by participating ships during the third monitor period, October-November 1967.



60-TC.

FIGURE 60-TC. — Locations of stations occupied by participating ships during the fourth monitor period, December 1967-January 1968.

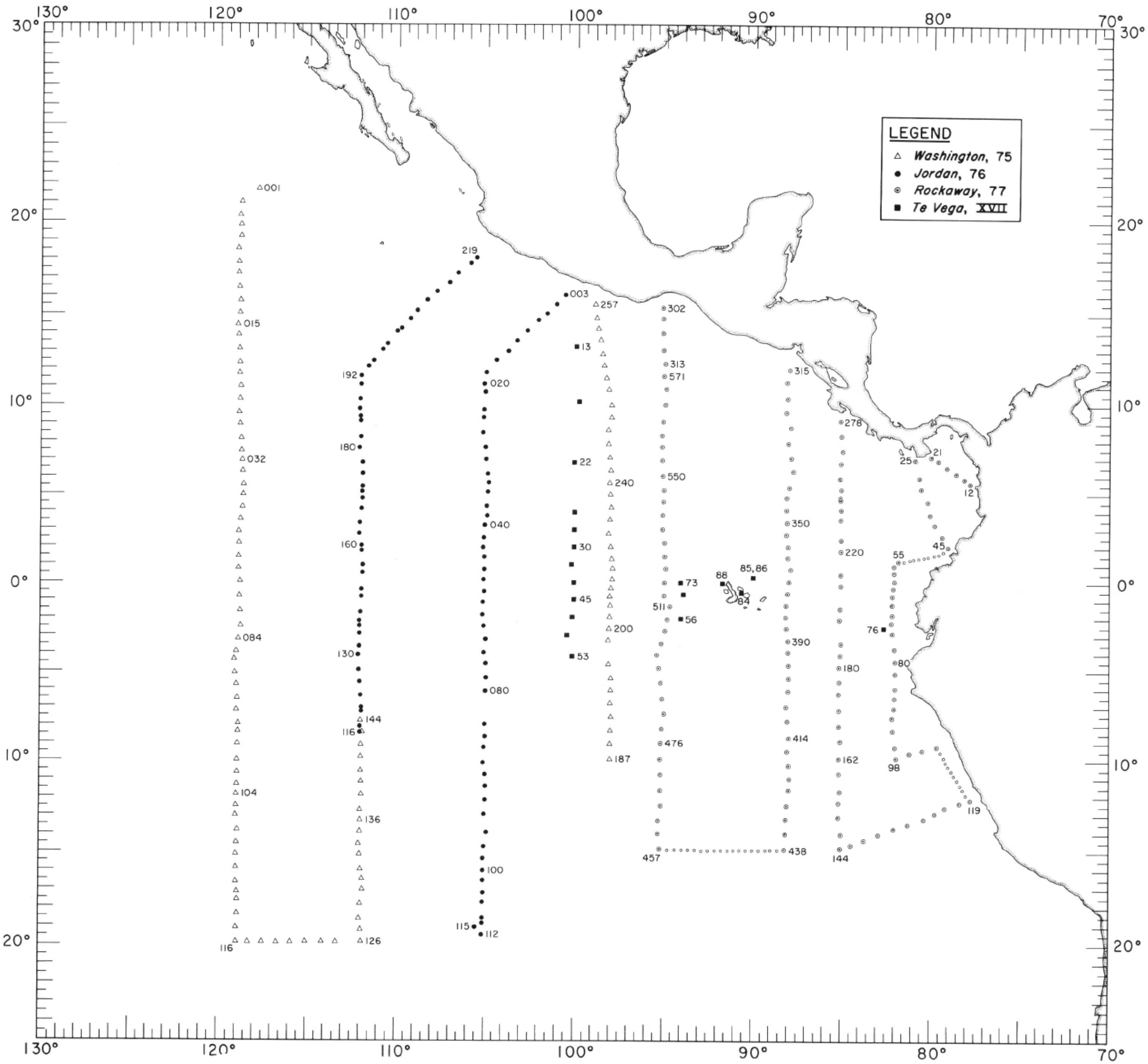


FIGURE 70-TC-a. — Locations of stations occupied by participating ships in the main portion of the EASTROPAC area during the third survey period, February-March 1968.

70-TC-a.

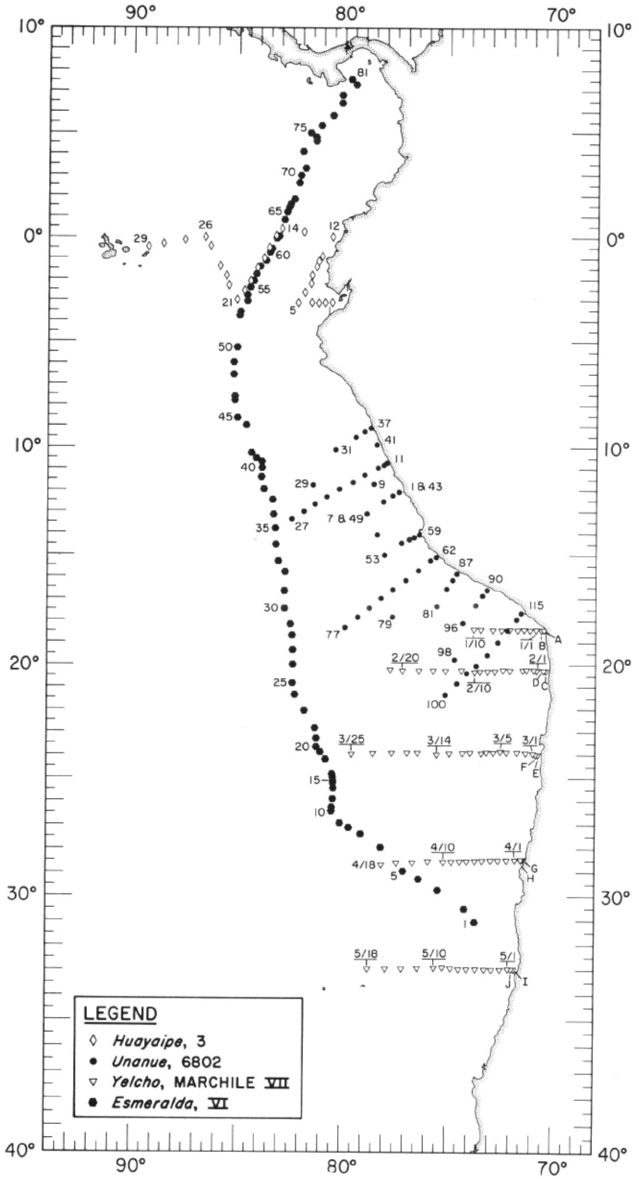


FIGURE 70-TC-b. — Locations of stations occupied by participating ships in the southern coastal portion of the EASTROPAC area during the third survey period, February-March 1968.

70-TC-b.

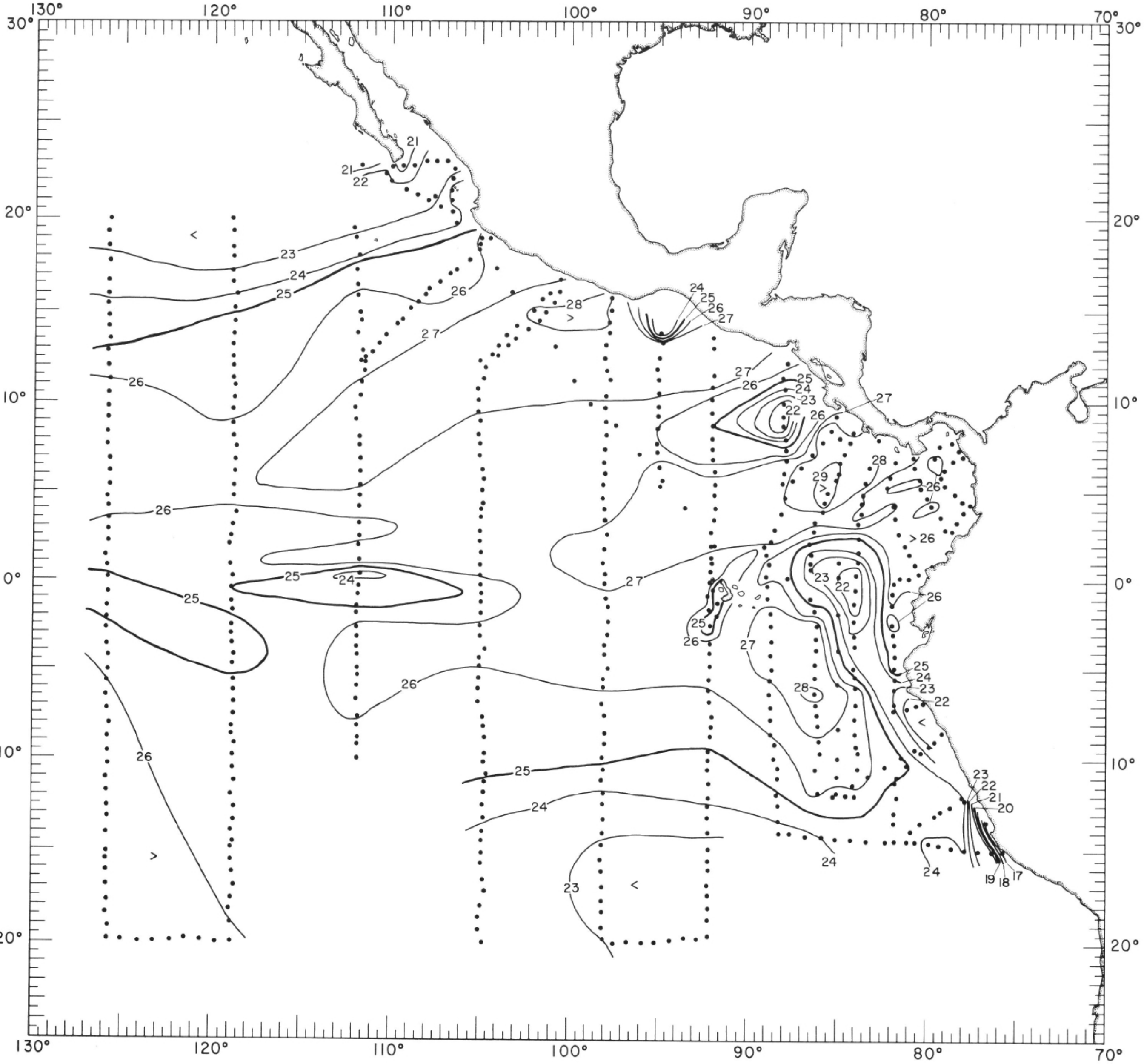


FIGURE 10-T-s(a).—Temperature (°C.) at the sea surface in the main portion of the EASTROPAC area, February-March 1967. These contours are based on Nansen cast data from all cruises except *Alaminos* 14, for which STD data were used. The *Alaminos* stations are, in general, those in the eastern part of the area, from the coast to 88° W.; see figure 10-TC-a for more exact station locations.

10-T-s(a).

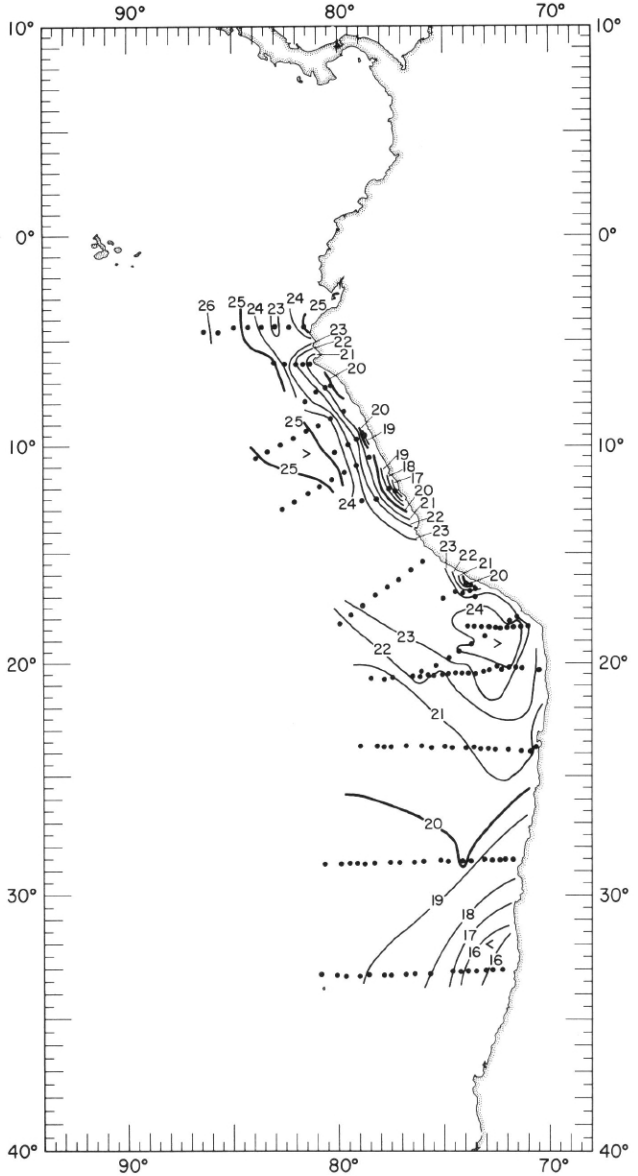
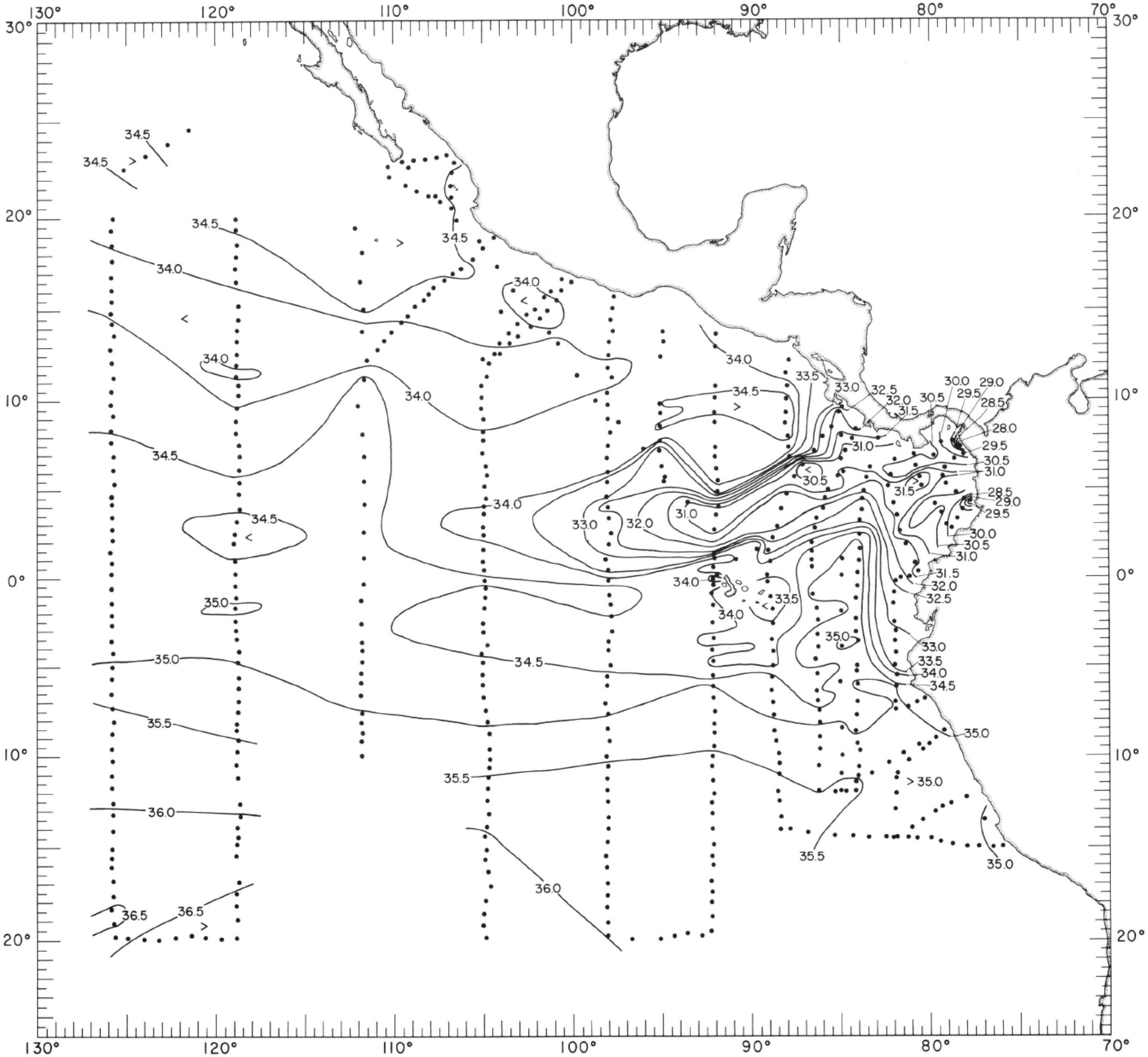
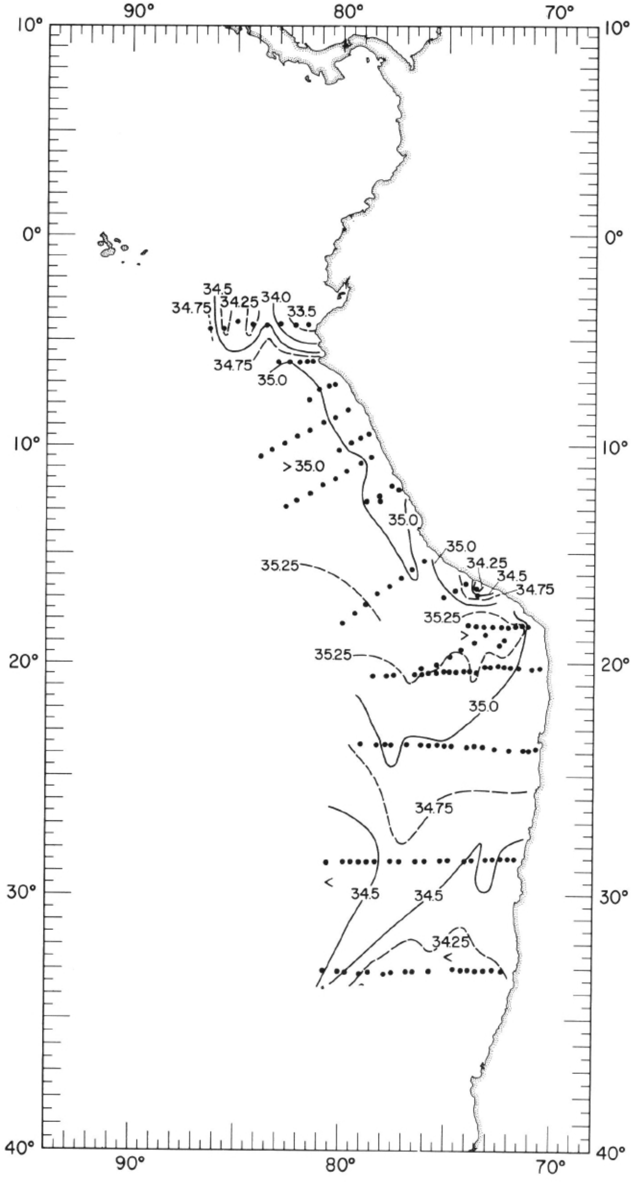


FIGURE 10-T-s(b).—Temperature (°C.) at the sea surface in the southern coastal portion of the EASTROPAC area, February-March 1967. These contours are based on Nansen cast data.



10-S-s(a).

FIGURE 10-S-s(a).—Salinity (‰) at the sea surface in the main portion of the EASTROPAC area, February-March 1967. These contours are based on Nansen cast data.



10-S-s(b).

FIGURE 10-S-s(b).—Salinity (‰) at the sea surface in the southern coastal portion of the EASTROPAC area, February-March 1967. These contours are based on Nansen cast data.

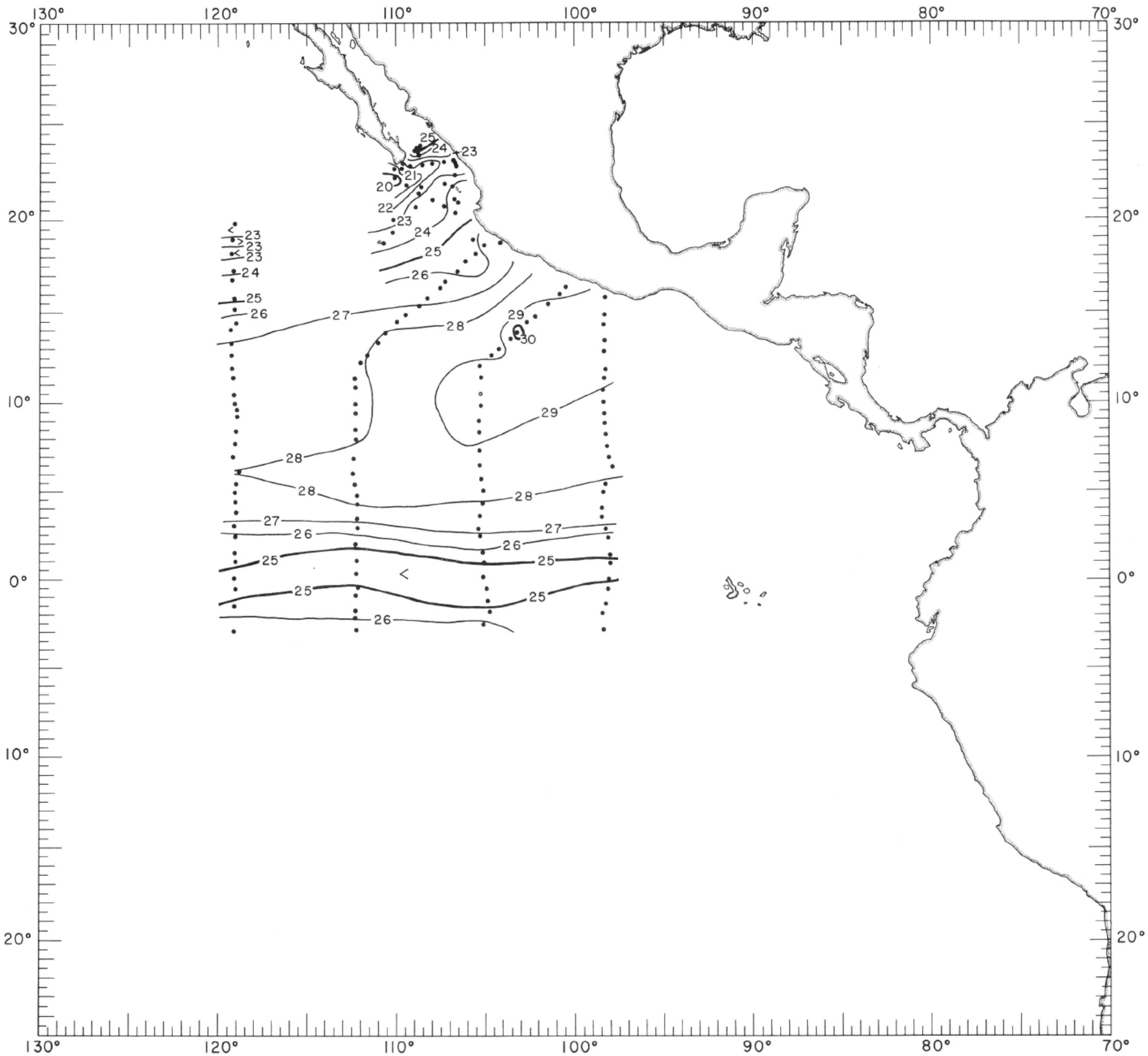


FIGURE 20-T-s. — Temperature (°C) at the sea surface, April-May 1967. These contours are based on Nansen cast data.

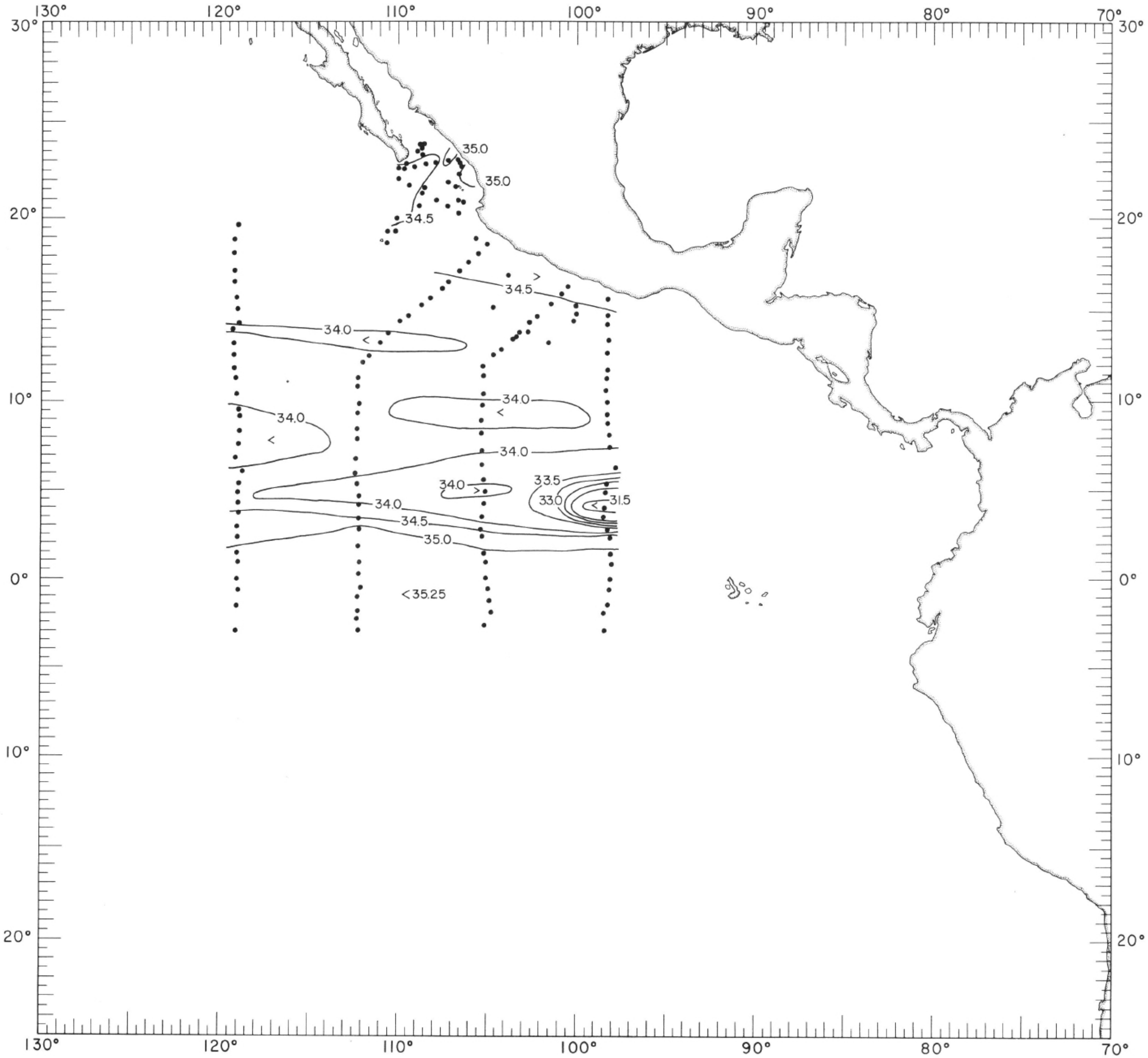


FIGURE 20-S-s.—Salinity (‰) at the sea surface, April-May 1967. These contours are based on Nansen cast data.

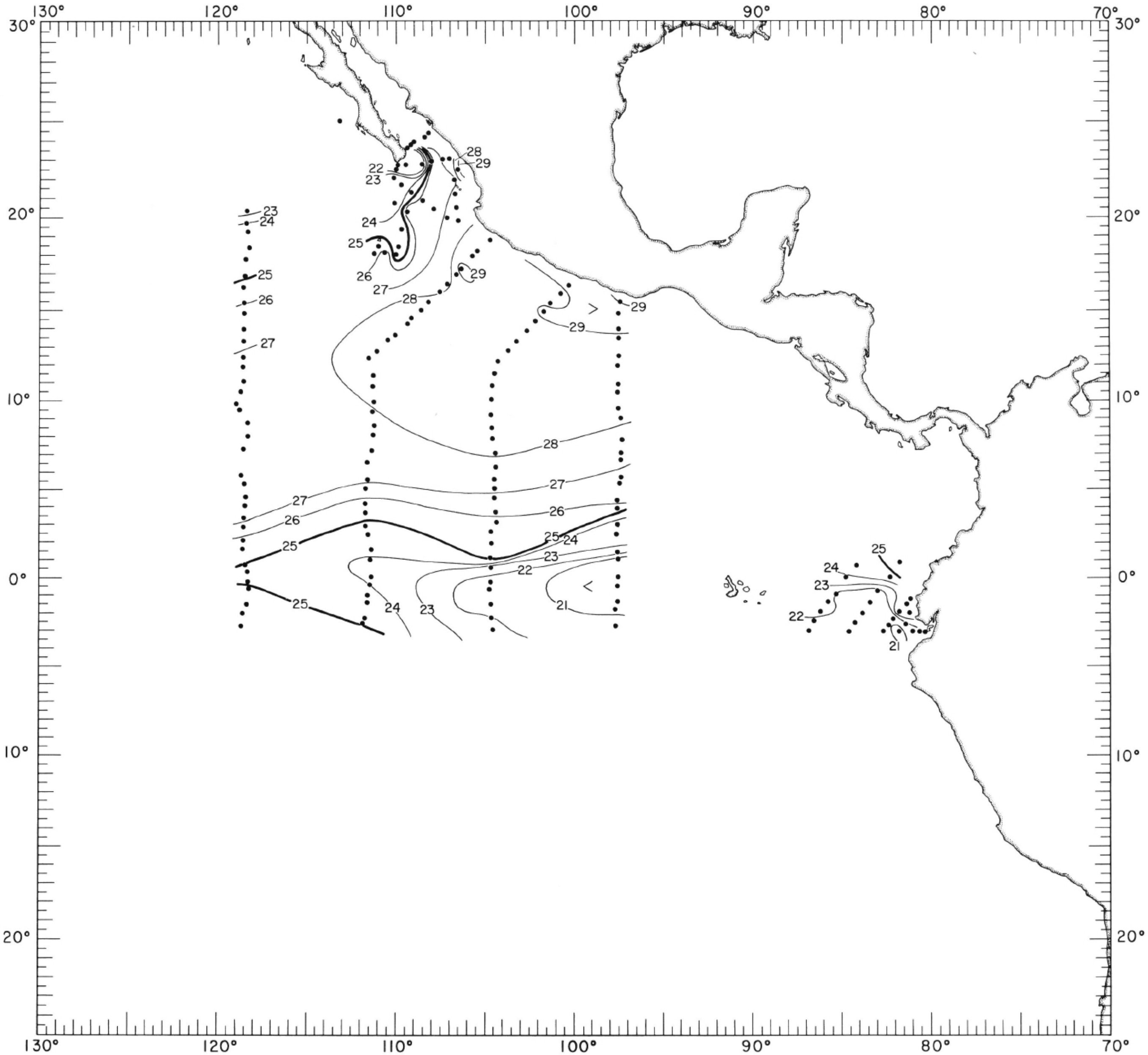


FIGURE 30-T-s. — Temperature (°C.) at the sea surface, June-July 1967. These contours are based on Nansen cast data.

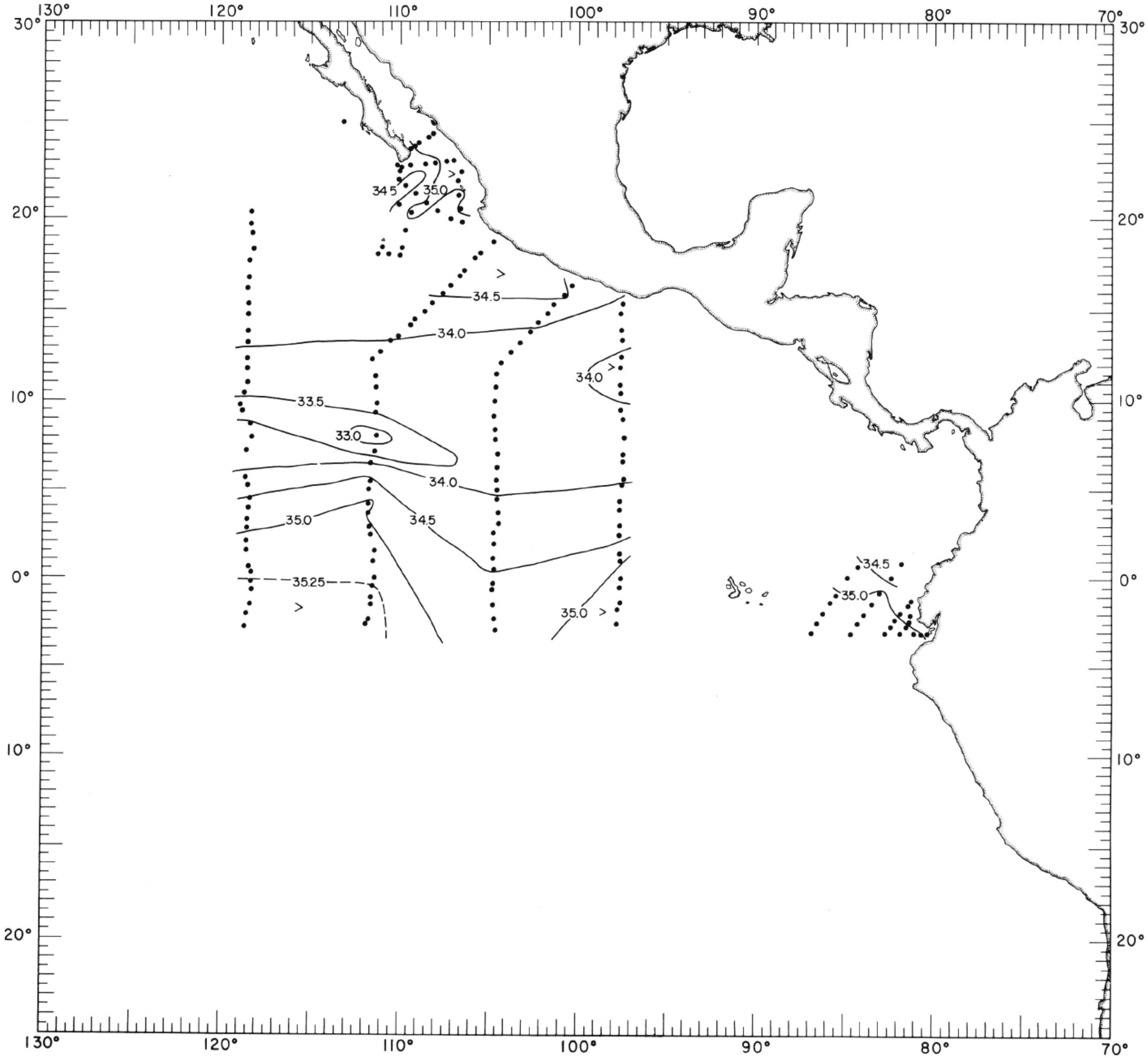
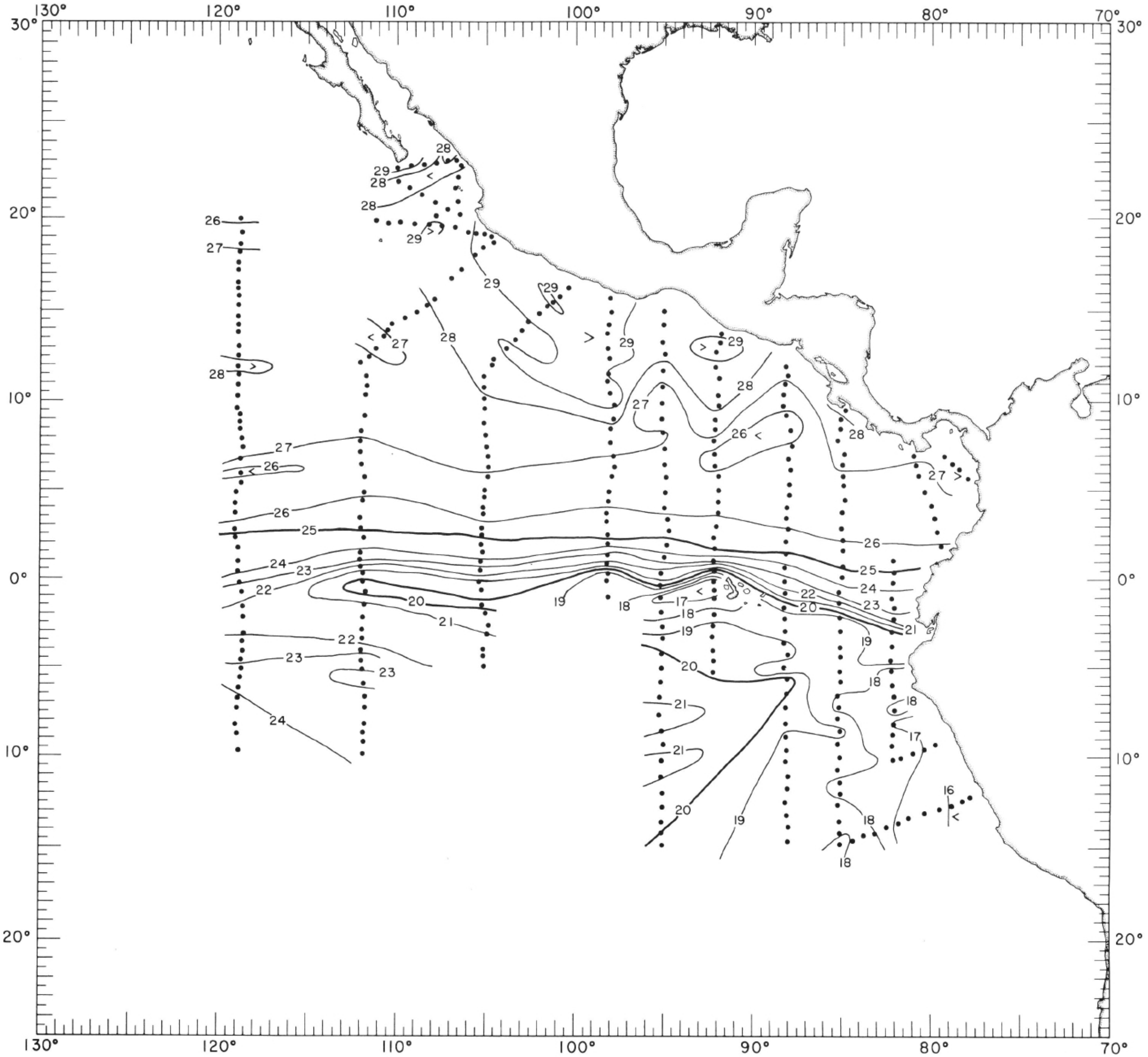
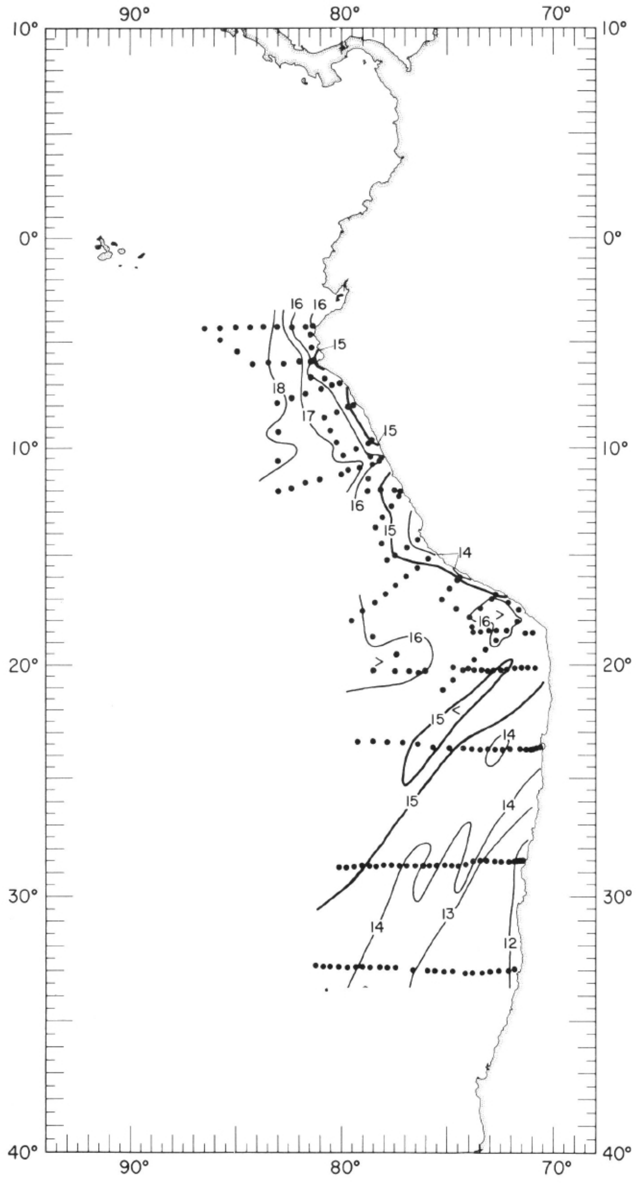


FIGURE 30-S-s.—Salinity (‰) at the sea surface, June-July 1967. These contours are based on Nansen cast data.



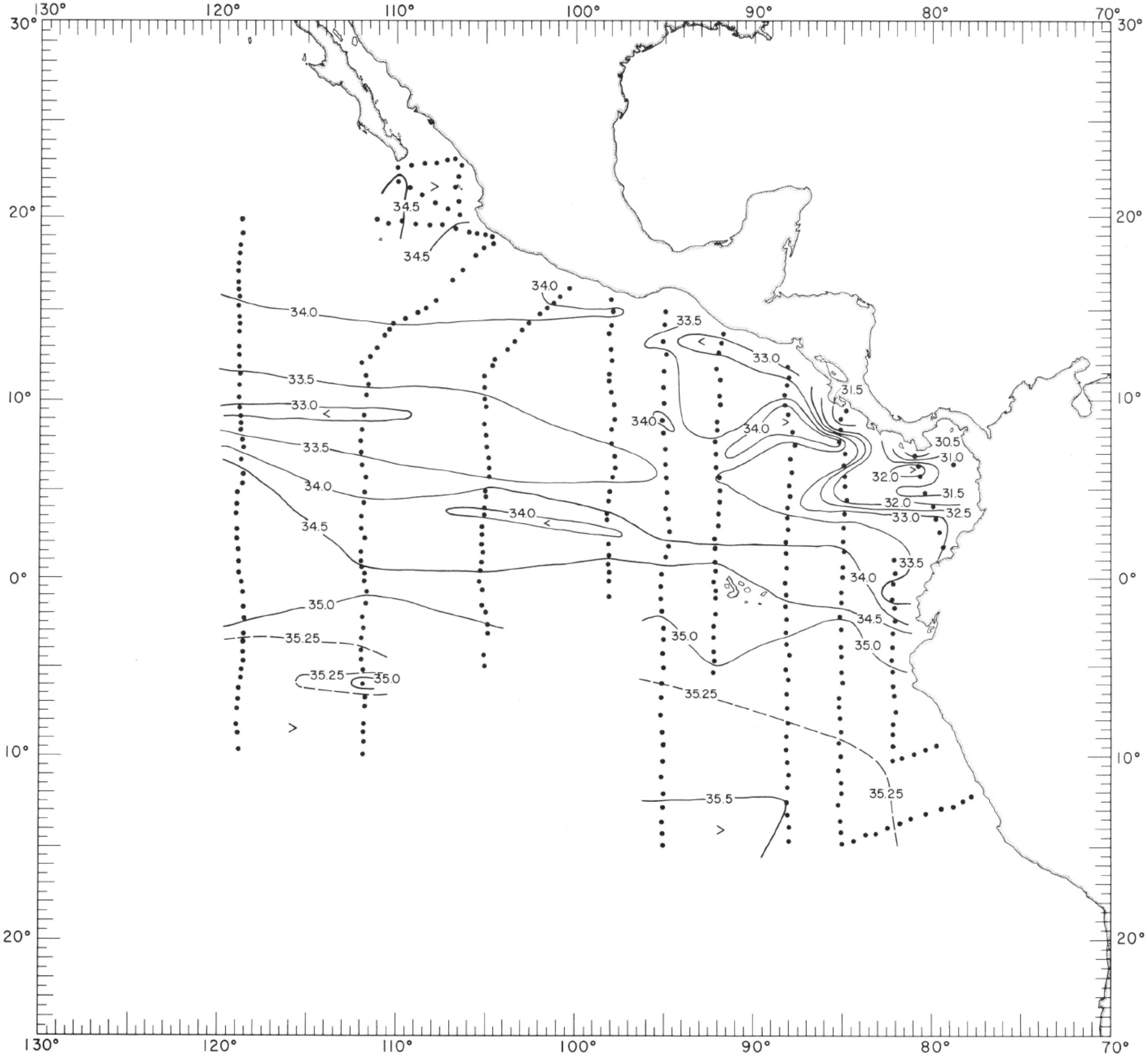
40-T-s(a).

FIGURE 40-T-s(a).—Temperature (°C.) at the sea surface in the main portion of the EASTROPAC area, August-September 1967. These contours are based on Nansen cast data.



40-T-s(b).

FIGURE 40-T-s(b).—Temperature (°C.) at the sea surface in the southern coastal portion of the EASTROPAC area, August-September 1967. These contours are based on Nansen cast data.



40-S-s(a).

FIGURE 40-S-s(a).—Salinity (‰) at the sea surface in the main portion of the EASTROPAC area, August-September 1967. These contours are based on Nansen cast data.

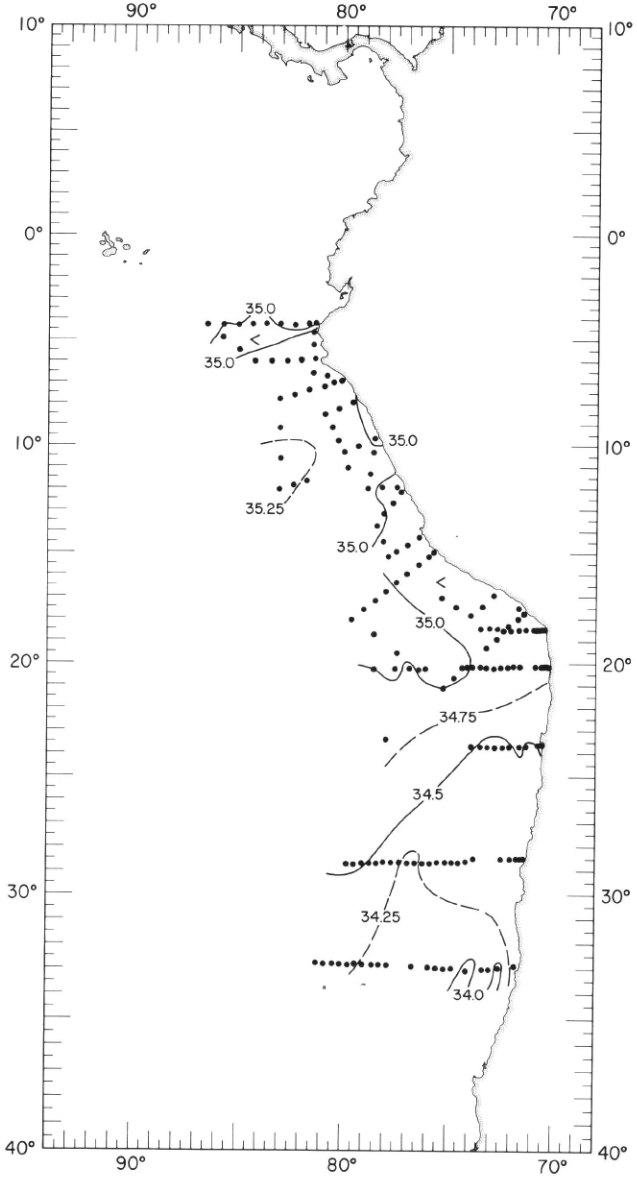


FIGURE 40-S-s(b).—Salinity (‰) at the sea surface in the southern coastal portion of the EASTROPAC area, August-September 1967. These contours are based on Nansen cast data.

40-S-s(b).

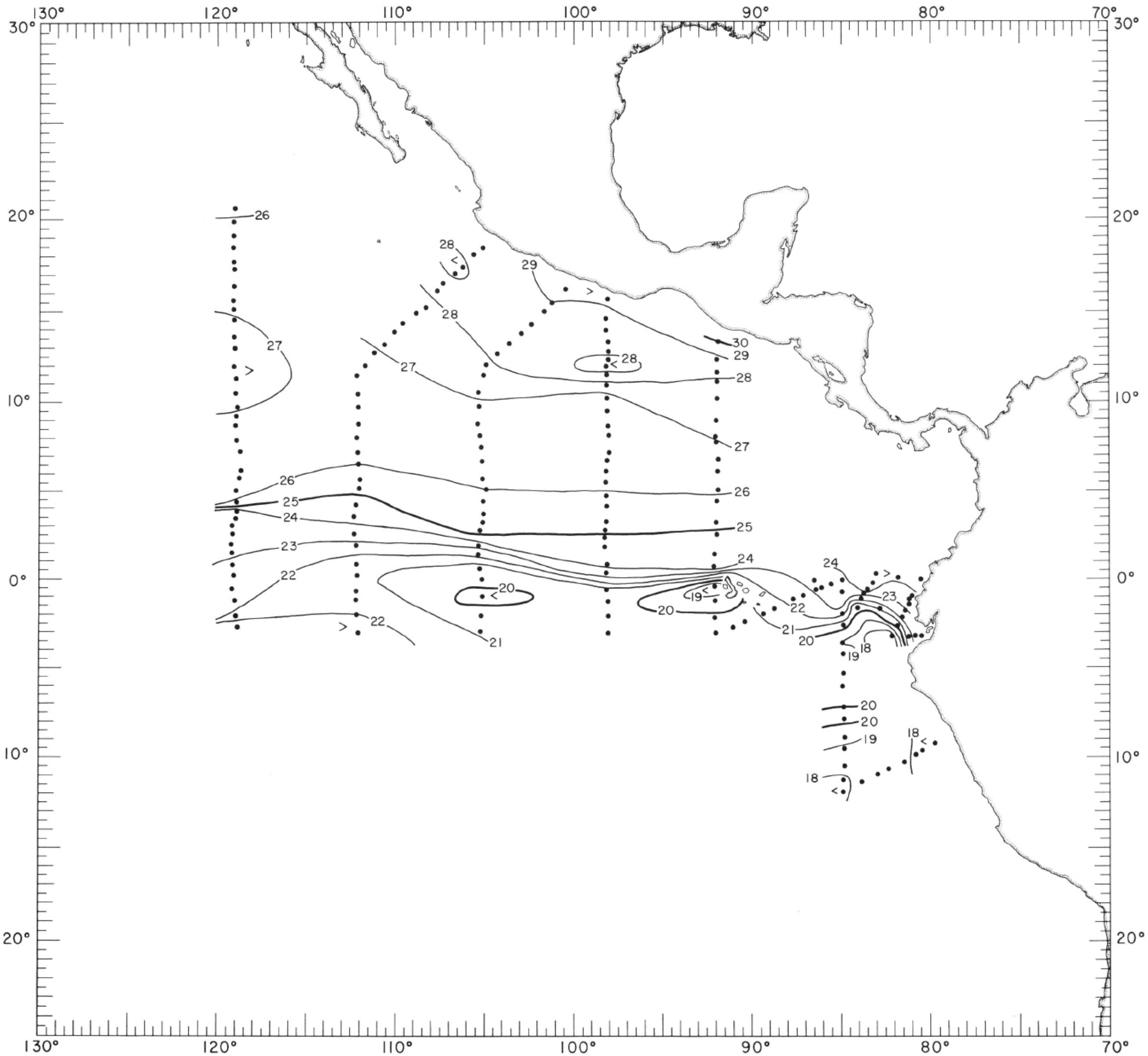


FIGURE 50-T-s.—Temperature (°C.) at the sea surface, October-November 1967. These contours are based on Nansen cast data.

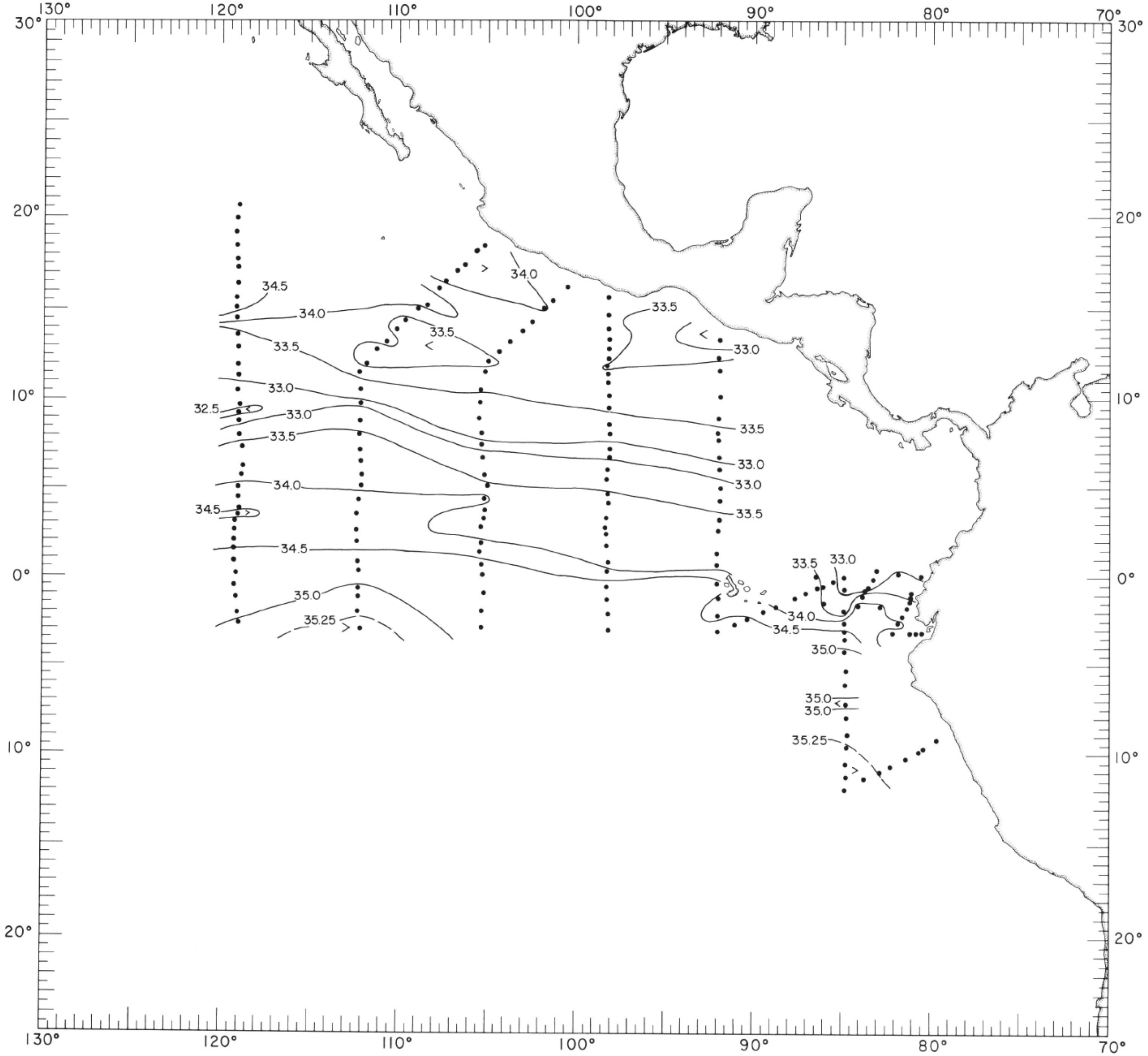
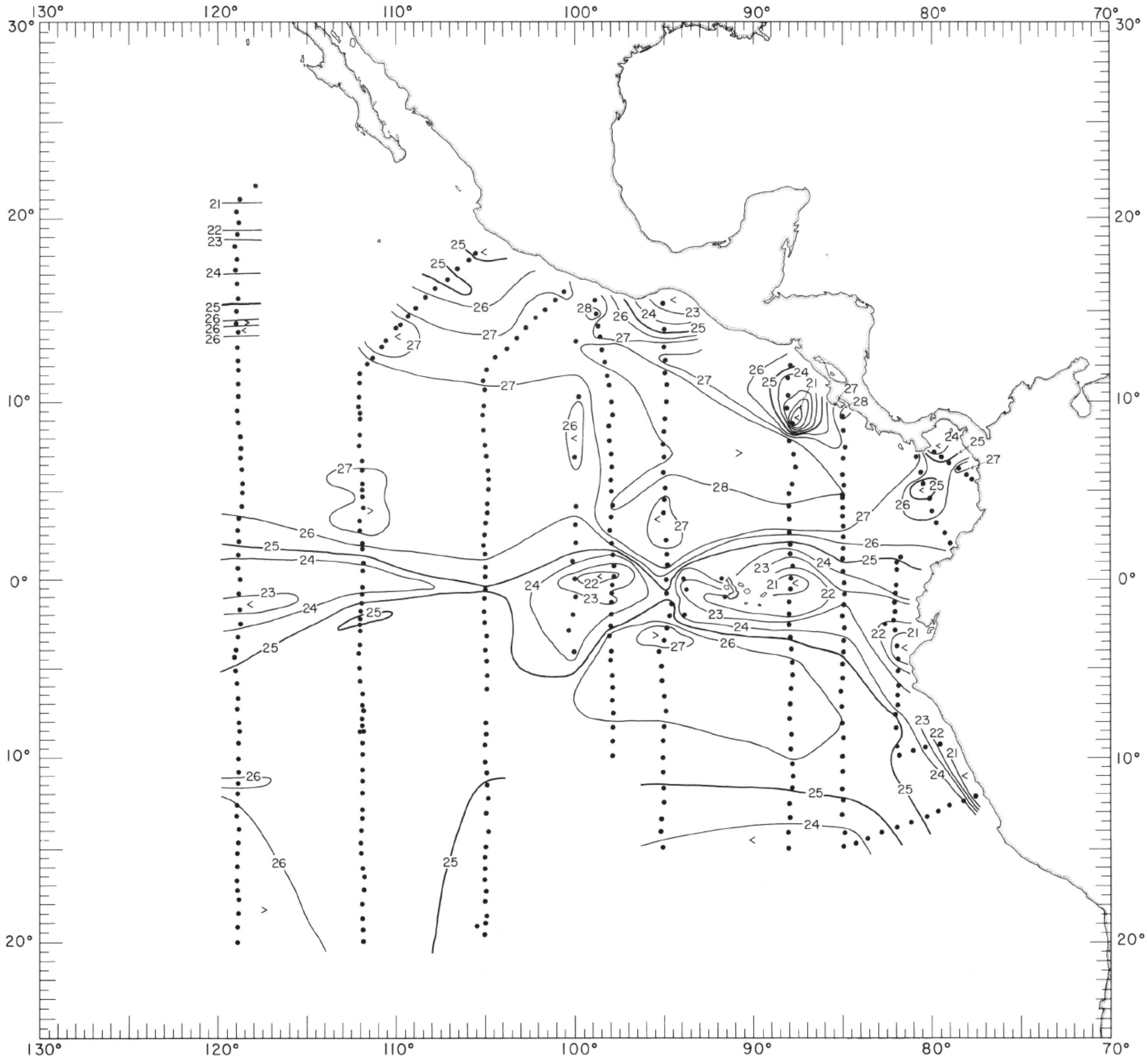
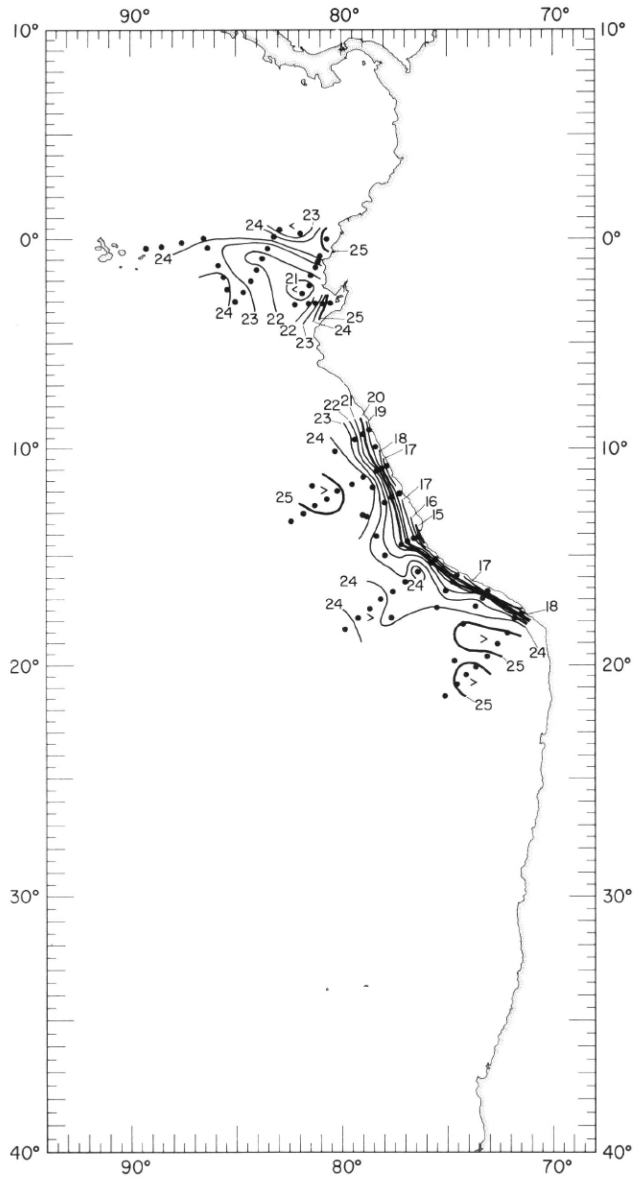


FIGURE 50-S-s.—Salinity (‰) at the sea surface, October-November 1967. These contours are based on Nansen cast data.



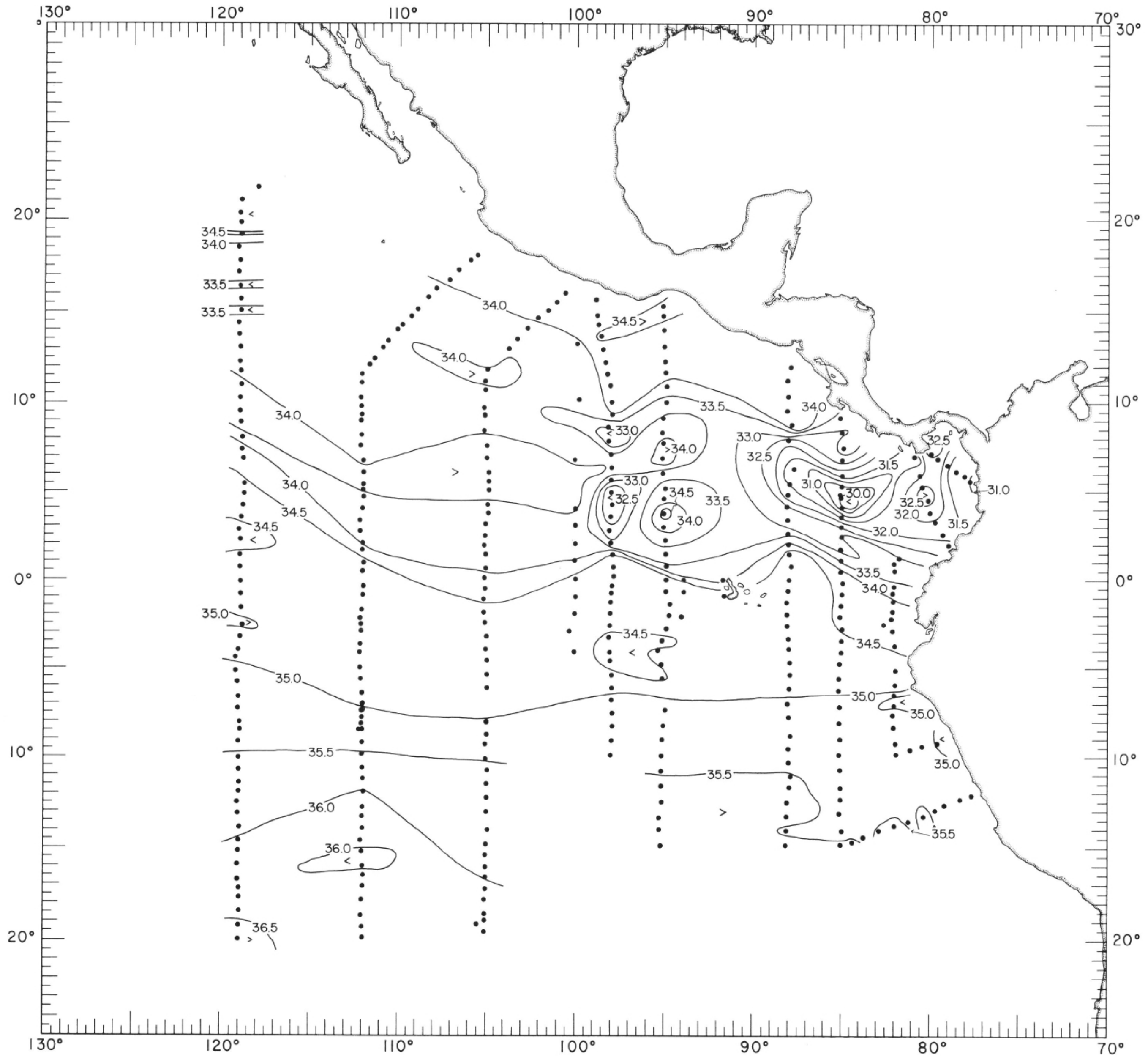
70-T-s(a).

FIGURE 70-T-s(a).—Temperature (°C.) at the sea surface in the main portion of the EASTROPAC area, February-March 1968. These contours are based on Nansen cast data.



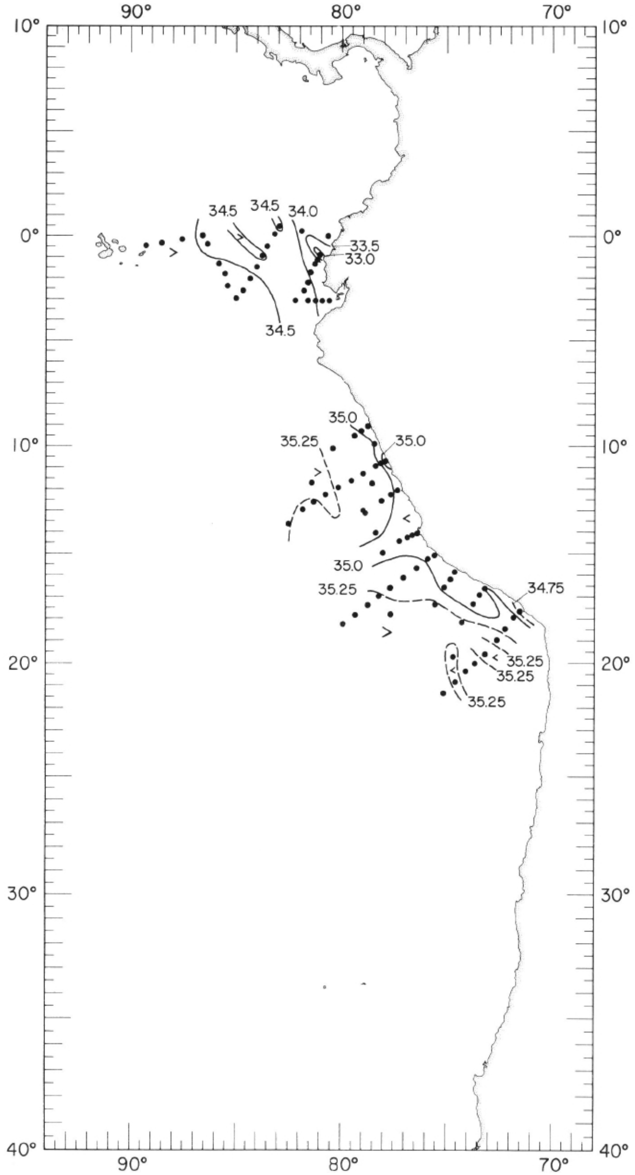
70-T-s(b).

FIGURE 70-T-s(b).—Temperature (°C.) at the sea surface in the southern coastal portion of the EASTROPAC area, February-March 1968. These contours are based on Nansen cast data.



70-S-s(a).

FIGURE 70-S-s(a).—Salinity (‰) at the sea surface in the main portion of the EASTROPAC area, February-March 1968. These contours are based on Nansen cast data.



70-S-s(b).

FIGURE 70-S-s(b).—Salinity (‰) at the sea surface in the southern coastal portion of the EASTROPAC area, February-March 1968. These contours are based on Nansen cast data.

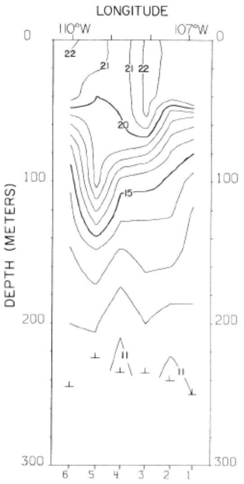


FIGURE MZ4-T-v1.—Vertical distribution of temperature (°C.) along a section on 23° N. across the entrance to the Gulf of California, January 10-11, 1967. These contours are based on mechanical bathythermograph data.

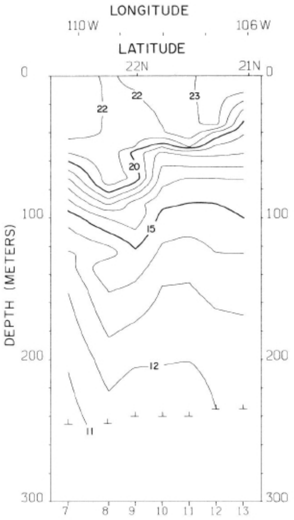


FIGURE MZ4-T-v2.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to the Tres Marias Islands, January 11-13, 1967. These contours are based on mechanical bathythermograph data.

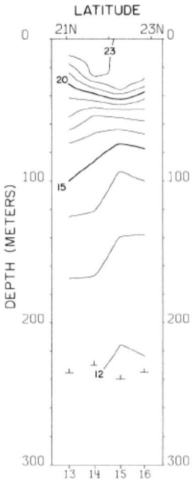


FIGURE MZ4-T-v3.—Vertical distribution of temperature (°C.) along 106°18′ W. from the Tres Marias Islands to Mazatlan, Mexico, January 13-14, 1967. These contours are based on mechanical bathythermograph data.

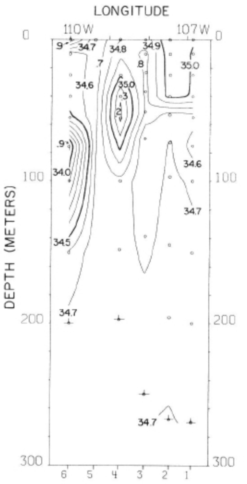


FIGURE MZ4-S-v1.—Vertical distribution of salinity (°/oo) along a section on 23° N. across the entrance to the Gulf of California, January 10-11, 1967.

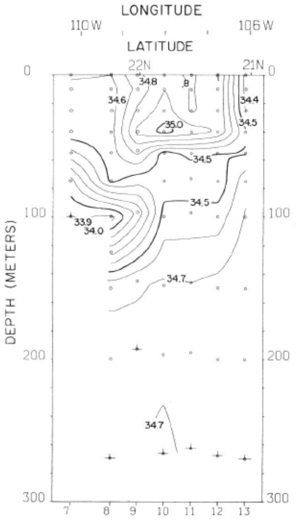


FIGURE MZ4-S-v2.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to the Tres Marias Islands, January 11-13, 1967.

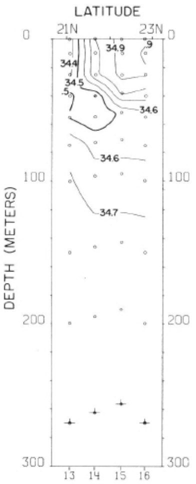
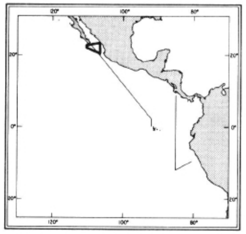


FIGURE MZ4-S-v3.—Vertical distribution of salinity (°/oo) along 106°18′ W. from the Tres Marias Islands to Mazatlan, Mexico, January 13-14, 1967.



MZ4-T-v1.

MZ4-T-v2.

MZ4-T-v3.

MZ4-S-v1.

MZ4-S-v2.

MZ4-S-v3.

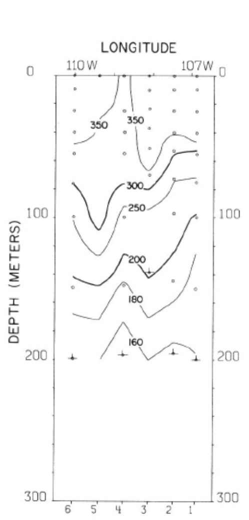


FIGURE MZ4-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 23° N. across the entrance to the Gulf of California, January 10-11, 1967.

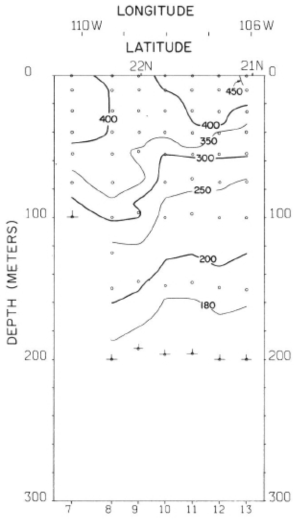


FIGURE MZ4-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to the Tres Marias Islands, January 11-13, 1967.

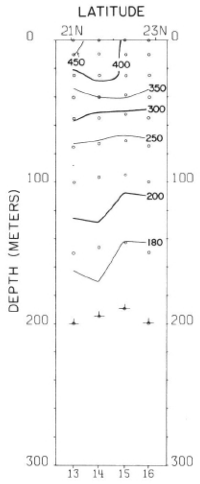
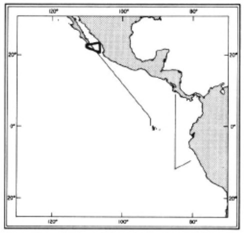


FIGURE MZ4-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°18′ W. from the Tres Marias Islands to Mazatlan, Mexico, January 13-14, 1967.



MZ4-δ-v1.

MZ4-δ-v2.

MZ4-δ-v3.

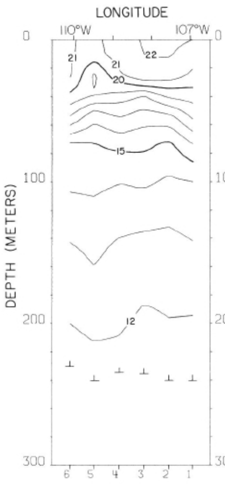


FIGURE MZ5-T-v1.—Vertical distribution of temperature (°C.) along a section on 22°54′ N. across the entrance to the Gulf of California, February 16-17, 1967. These contours are based on mechanical bathythermograph data.

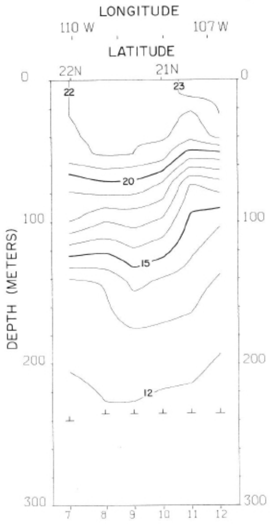


FIGURE MZ5-T-v2.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, February 17-19, 1967. These contours are based on mechanical bathythermograph data.

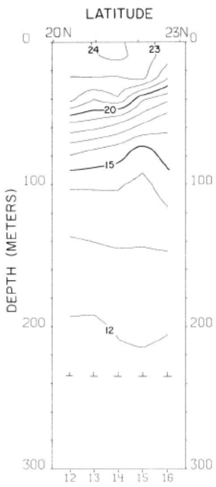


FIGURE MZ5-T-v3.—Vertical distribution of temperature (°C.) along 106°38′ W. from Cape Corrientes to Mazatlan, February 19-20, 1967. These contours are based on mechanical bathythermograph data.

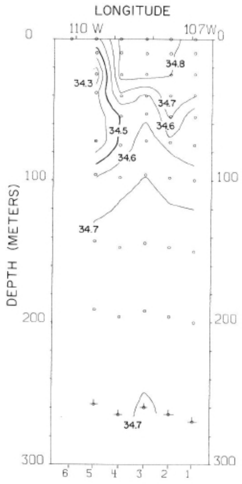


FIGURE MZ5-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°54′ N. across the entrance to the Gulf of California, February 16-17, 1967.

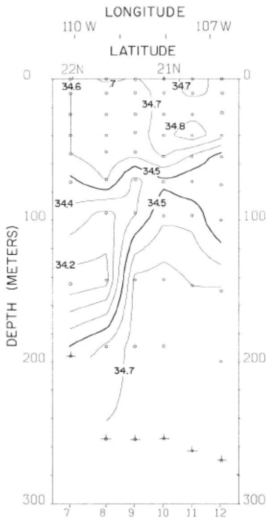


FIGURE MZ5-S-v2.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, February 17-19, 1967.

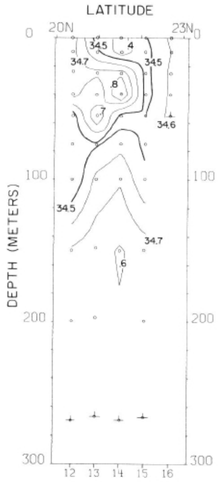
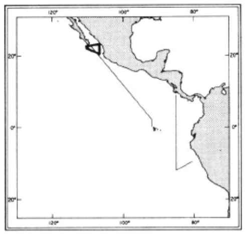


FIGURE MZ5-S-v3.—Vertical distribution of salinity (°/oo) along 106°38′ W. from Cape Corrientes to Mazatlan, February 19-20, 1967.



MZ5-T-v1.

MZ5-T-v2.

MZ5-T-v3.

MZ5-S-v1.

MZ5-S-v2.

MZ5-S-v3.

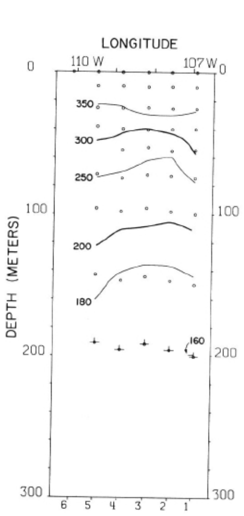


FIGURE MZ5-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°54′ N. across the entrance to the Gulf of California, February 16-17, 1967.

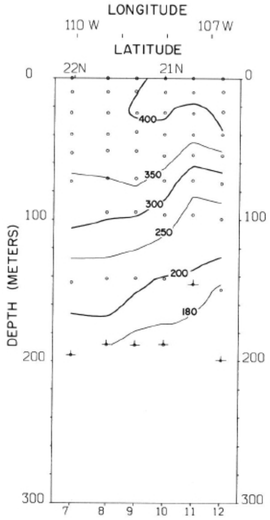


FIGURE MZ5-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, February 17-19, 1967.

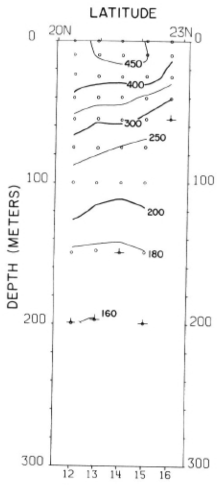
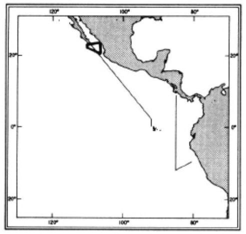


FIGURE MZ5-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°38′ W. from Cape Corrientes to Mazatlan, February 19-20, 1967.



MZ5-δ-v1.

MZ5-δ-v2.

MZ5-δ-v3.

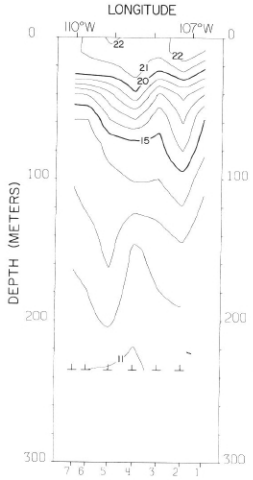


FIGURE MZ6-T-v1.—Vertical distribution of temperature (°C.) along a section on 22°56′ N. across the entrance to the Gulf of California, April 14-15, 1967. These contours are based on mechanical bathythermograph data.

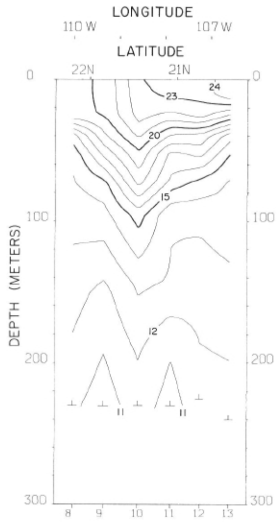


FIGURE MZ6-T-v2.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, April 16-17, 1967. These contours are based on mechanical bathythermograph data.

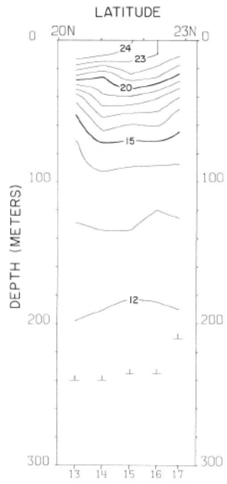


FIGURE MZ6-T-v3.—Vertical distribution of temperature (°C.) along 106°33′ W. from Cape Corrientes to Mazatlan, April 17-18, 1967. These contours are based on mechanical bathythermograph data.

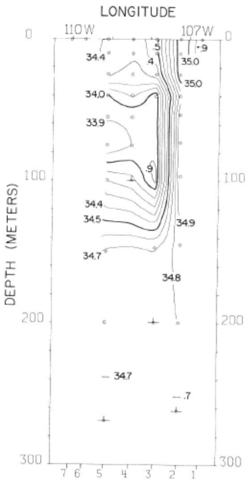


FIGURE MZ6-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°56′ N. across the entrance to the Gulf of California, April 14-15, 1967.

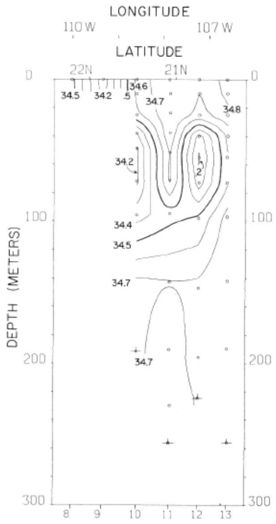


FIGURE MZ6-S-v2.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, April 16-17, 1967.

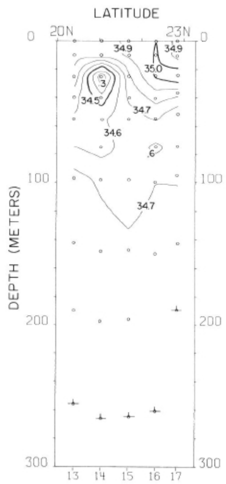
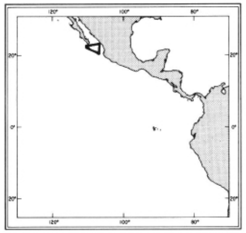


FIGURE MZ6-S-v3.—Vertical distribution of salinity (°/oo) along 106°33′ W. from Cape Corrientes to Mazatlan, April 17-18, 1967.



MZ6-T-v1.
MZ6-T-v2.
MZ6-T-v3.
MZ6-S-v1.
MZ6-S-v2.
MZ6-S-v3.

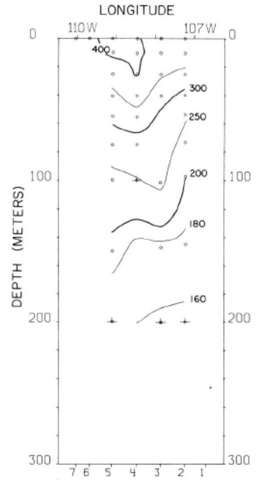


FIGURE MZ6-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°56′ N. across the entrance to the Gulf of California, April 14-15, 1967.

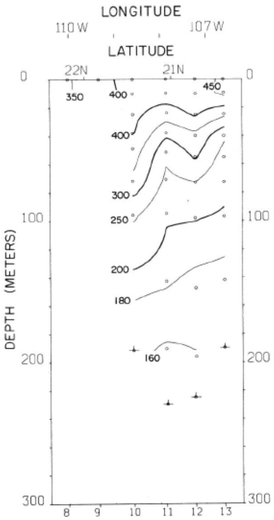


FIGURE MZ6-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, April 16-17, 1967.

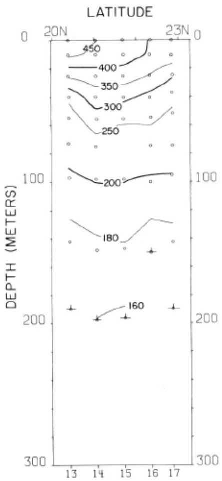
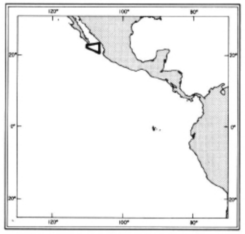


FIGURE MZ6-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°33′ W. from Cape Corrientes to Mazatlan, April 17-18, 1967.



MZ6-δ-v1.

MZ6-δ-v2.

MZ6-δ-v3.

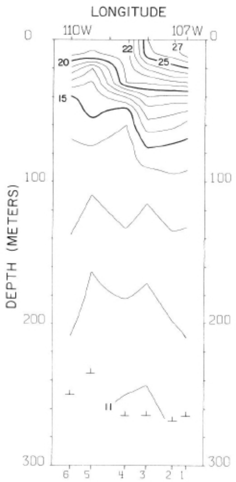


FIGURE MZ7-T-v1.—Vertical distribution of temperature (°C.) along a section on 22°54′ N. across the entrance to the Gulf of California, June 22-23, 1967. These contours are based on mechanical bathythermograph data.

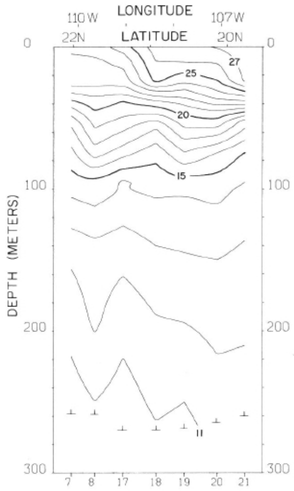


FIGURE MZ7-T-v5.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, June 23 and 27-28, 1967. These contours are based on mechanical bathythermograph data.

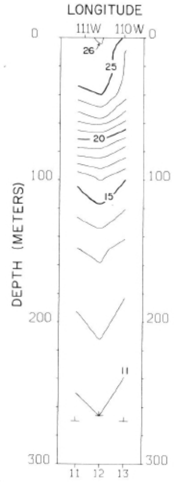


FIGURE MZ7-T-v3.—Vertical distribution of temperature (°C.) along 18° N., June 25, 1967. These contours are based on mechanical bathythermograph data.

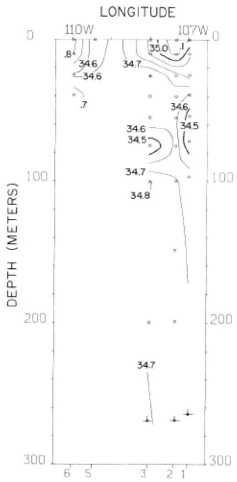


FIGURE MZ7-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°54′ N. across the entrance to the Gulf of California, June 22-23, 1967.

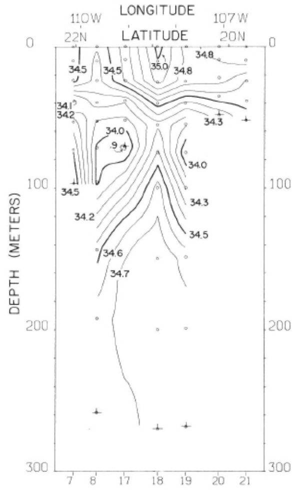


FIGURE MZ7-S-v5.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, June 23 and 27-28, 1967.

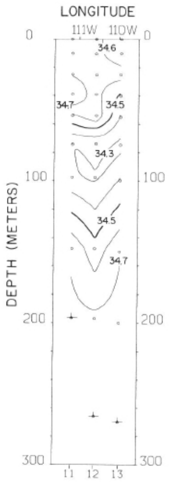
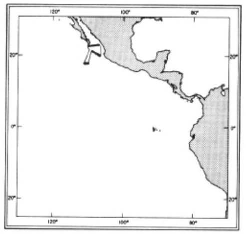


FIGURE MZ7-S-v3.—Vertical distribution of salinity (°/oo) along 18° N., June 25, 1967.



MZ7-T-v1.

MZ7-T-v5.

MZ7-T-v3.

MZ7-S-v1.

MZ7-S-v5.

MZ7-S-v3.

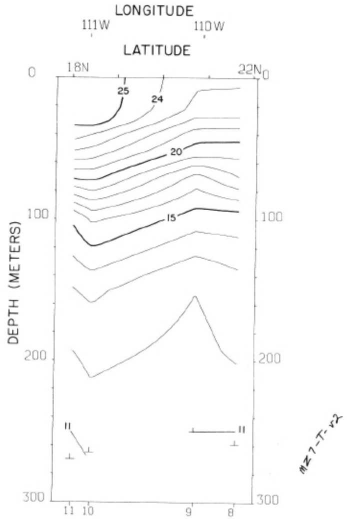


FIGURE MZ7-T-v2.—Vertical distribution of temperature (°C.) along a northeast-southwest section located south of Cape San Lucas, from 21°42′ N., 109°41′ W. to 18°03′ N., 111°10′ W., June 23-25, 1967. These contours are based on mechanical bathythermograph data.

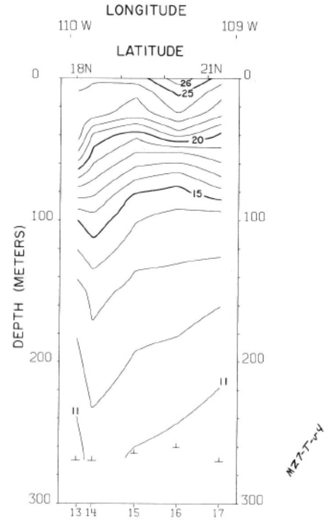


FIGURE MZ7-T-v4.—Vertical distribution of temperature (°C.) along a southwest-northeast section located south of Cape San Lucas, from 18°03′ N., 109°58′ W. to 21°20′ N., 109°06′ W., June 25-27, 1967. These contours are based on mechanical bathythermograph data.

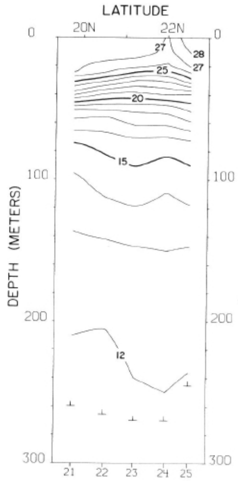


FIGURE MZ7-T-v6.—Vertical distribution of temperature (°C.) along 106°38′ W. from Cape Corrientes to Mazatlan, June 28-29, 1967. These contours are based on mechanical bathythermograph data.

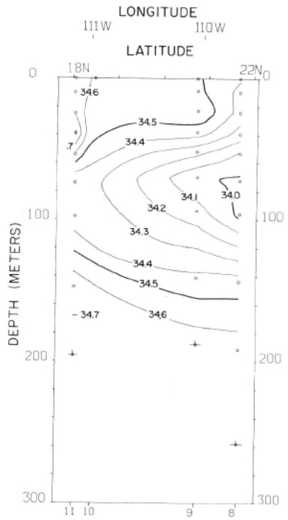


FIGURE MZ7-S-v2.—Vertical distribution of salinity (°/oo) along a northeast-southwest section located south of Cape San Lucas, from 21°42′ N., 109°41′ W. to 18°03′ N., 111°10′ W., June 23-25, 1967.

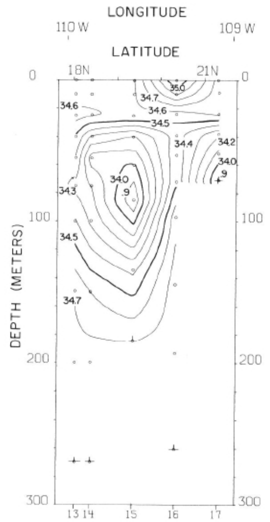


FIGURE MZ7-S-v4.—Vertical distribution of salinity (°/oo) along a southwest-northeast section located south of Cape San Lucas, from 18°03′ N., 109°58′ W. to 21°20′ N., 109°06′ W., June 25-27, 1967.

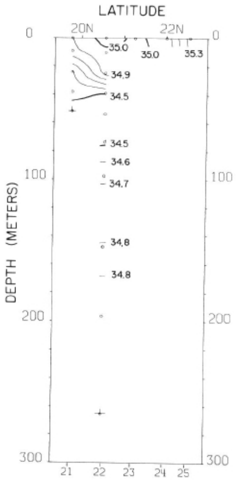
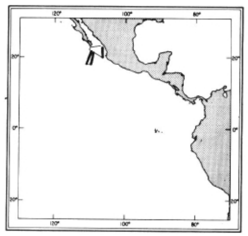


FIGURE MZ7-S-v6.—Vertical distribution of salinity (°/oo) along 106°38′ W. from Cape Corrientes to Mazatlan, June 28-29, 1967.



MZ7-T-v2.

MZ7-T-v4.

MZ7-T-v6.

MZ7-S-v2.

MZ7-S-v4.

MZ7-S-v6.

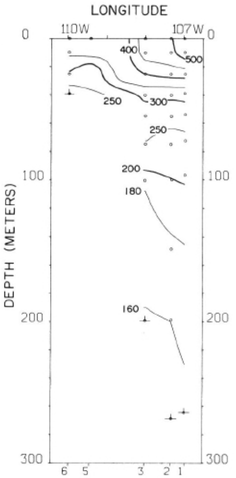


FIGURE MZ7-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°54′ N. across the entrance to the Gulf of California, June 22-23, 1967.

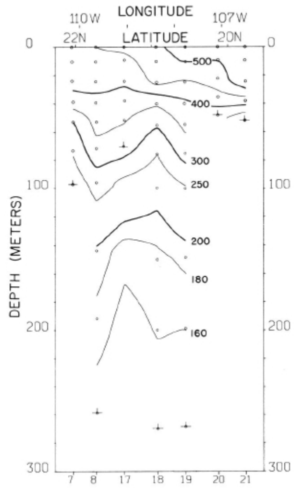


FIGURE MZ7-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, June 23 and 27-28, 1967.

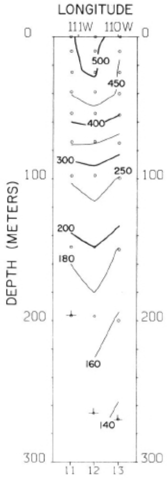


FIGURE MZ7-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 18° N., June 25, 1967.

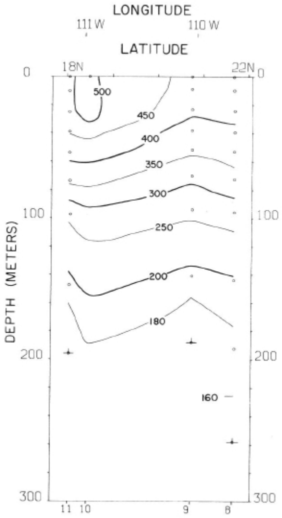


FIGURE MZ7-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section located south of Cape San Lucas, from 21°42′ N., 109°41′ W. to 18°03′ N., 111°10′ W., June 23-25, 1967.

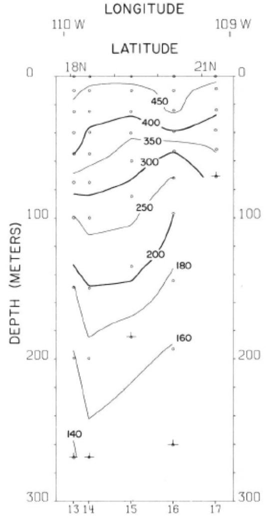


FIGURE MZ7-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section located south of Cape San Lucas, from 18°03′ N., 109°58′ W. to 21°20′ N., 109°06′ W., June 25-27, 1967.

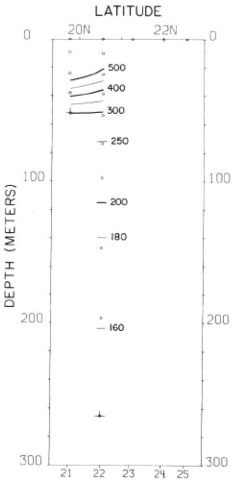
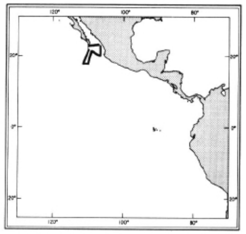


FIGURE MZ7-δ-v6.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°38′ W. from Cape Corrientes to Mazatlan, June 28-29, 1967.



MZ7-δ-v1.

MZ7-δ-v5.

MZ7-δ-v3.

MZ7-δ-v2.

MZ7-δ-v4.

MZ7-δ-v6.

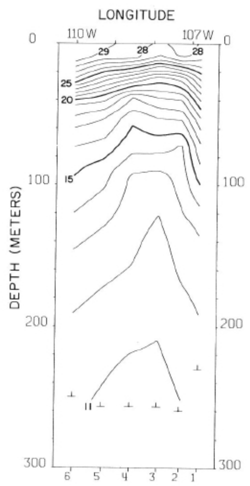


FIGURE MZ8-T-v1.—Vertical distribution of temperature (°C.) along a section on 22°56′ N. across the entrance to the Gulf of California, August 23-24, 1967. These contours are based on mechanical bathythermograph data.

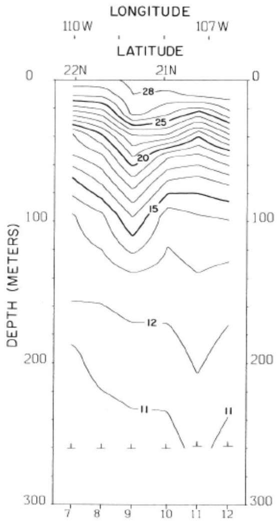


FIGURE MZ8-T-v2.—Vertical distribution of temperature (°C.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, August 25-26, 1967. These contours are based on mechanical bathythermograph data.

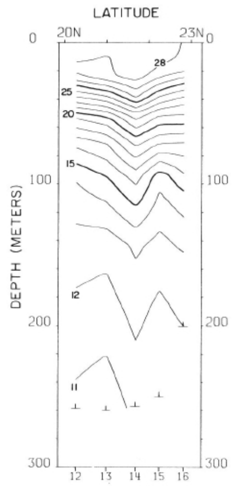


FIGURE MZ8-T-v3.—Vertical distribution of temperature (°C) along 106°38′ W. from Cape Corrientes to Mazatlan, August 26-27, 1967. These contours are based on mechanical bathythermograph data.

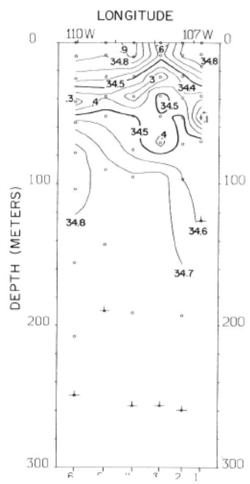


FIGURE MZ8-S-v1.—Vertical distribution of salinity (°/oo) along a section on 22°56′ N. across the entrance to the Gulf of California, August 23-24, 1967.

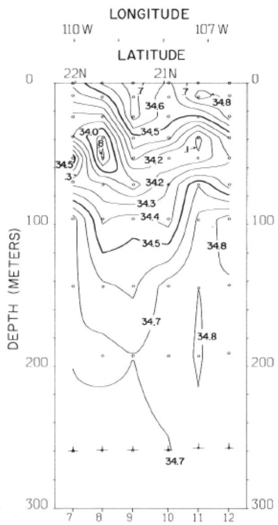


FIGURE MZ8-S-v2.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, August 25-26, 1967.

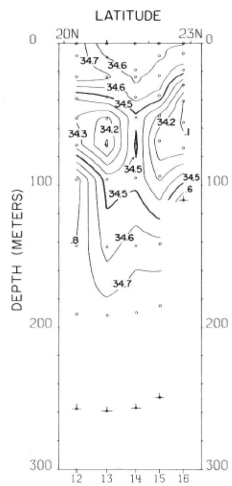
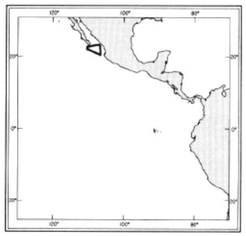


FIGURE MZ8-S-v3.—Vertical distribution of salinity (°/oo) along 106°38′ W. from Cape Corrientes to Mazatlan, August 26-27, 1967.



MZ8-T-v1.

MZ8-T-v2.

MZ8-T-v3.

MZ8-S-v1.

MZ8-S-v2.

MZ8-S-v3.

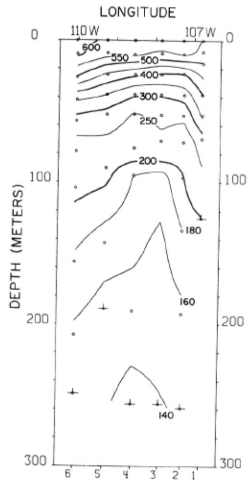


FIGURE MZ8-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 22°56′ N. across the entrance to the Gulf of California, August 23-24, 1967.

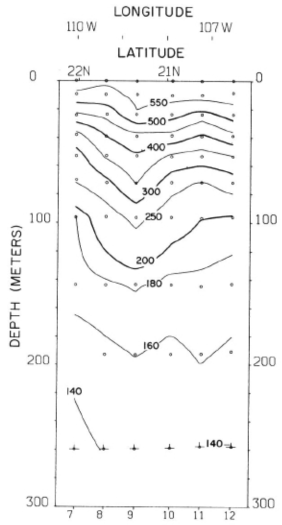


FIGURE MZ8-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from Cape San Lucas to Cape Corrientes, August 25-26, 1967.

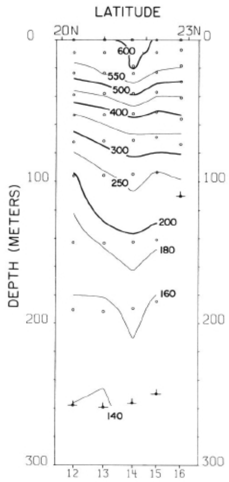
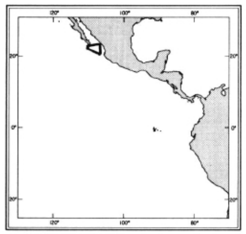


FIGURE MZ8-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 106°38′ W. from Cape Corrientes to Mazatlan, August 26-27, 1967.



MZ8-δ-v1.

MZ8-δ-v2.

MZ8-δ-v3.

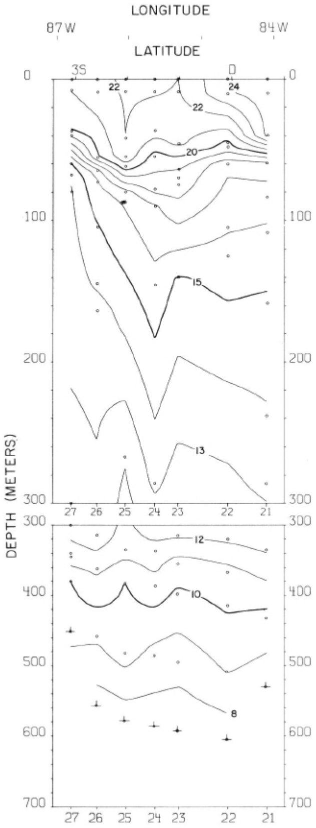


FIGURE H1-T-v5.—Vertical distribution of temperature (°C.) along a northeast-southwest section across the Equator from 0°39′ N., 84°06′ W. to 3°06′ S., 86°49′ W., June 30-July 2, 1967.

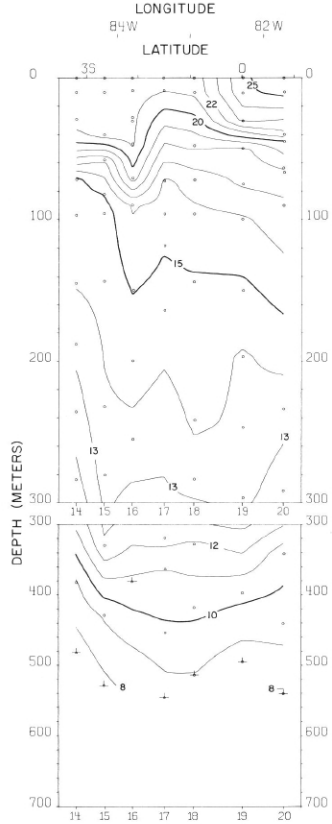


FIGURE H1-T-v4.—Vertical distribution of temperature (°C.) along a southwest-northeast section across the Equator, from 3°11′ S., 84°34′ W. to 0°48′ N., 81°43′ W., June 27-29, 1967.

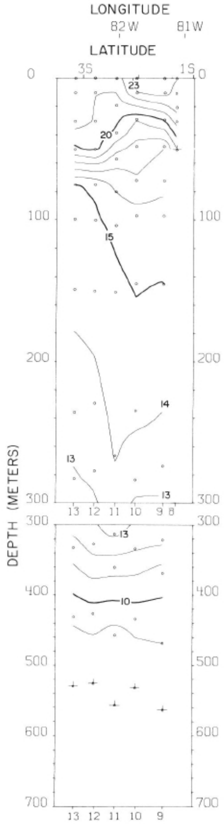


FIGURE H1-T-v3.—Vertical distribution of temperature (°C.) along a northeast-southwest section from Cape San Lorenzo to 3°09′ S., 82°40′ W., June 25-26, 1967.

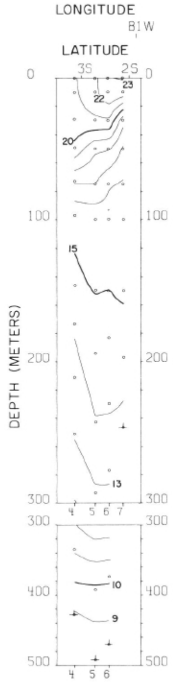


FIGURE H1-T-v2.—Vertical distribution of temperature (°C.) along a southwest-northeast section at the entrance to the Gulf of Guayaquil, June 25, 1967.

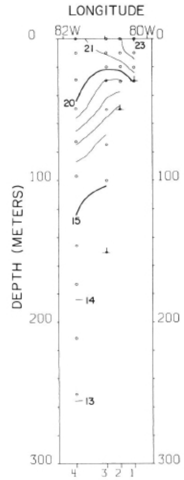
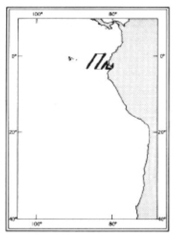


FIGURE H1-T-v1.—Vertical distribution of temperature (°C.) along 3°10′ S. in the Gulf of Guayaquil, June 24-25, 1967.



H1-T-v5.

H1-T-v4.

H1-T-v3.

H1-T-v2.

H1-T-v1.

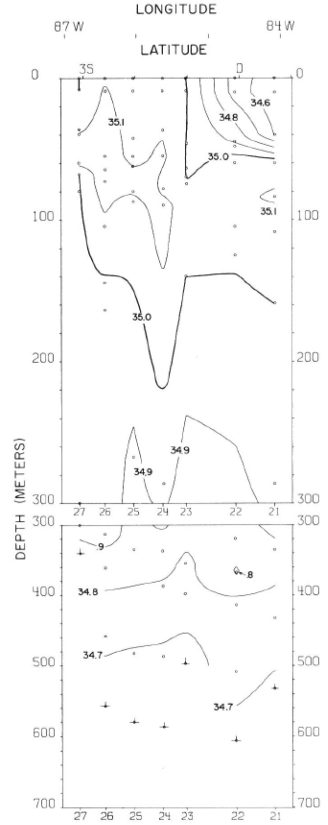


FIGURE H1-S-v5.—Vertical distribution of salinity (°/oo) along a northeast-southwest section across the Equator from 0°39′ N., 84°06′ W. to 3°06′ S., 86°49′ W., June 30-July 2, 1967.

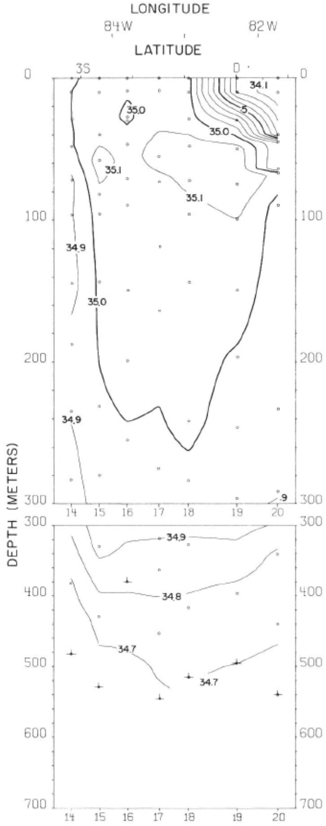


FIGURE H1-S-v4.—Vertical distribution of salinity (°/oo) along a southwest-northeast section across the Equator, from 3°11′ S., 84°34′ W. to 0°48′ N., 81°43′ W., June 27-29, 1967.

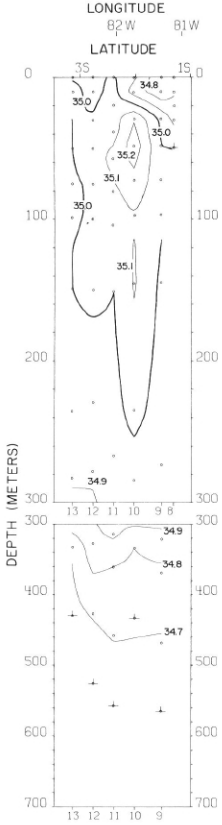


FIGURE H1-S-v3.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from Cape San Lorenzo to 3°09′ S., 82°40′ W., June 25-26, 1967.

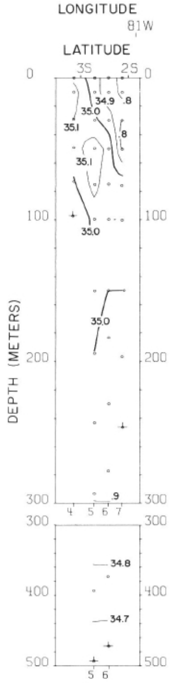


FIGURE H1-S-v2.—Vertical distribution of salinity (°/oo) along a southwest-northeast section at the entrance to the Gulf of Guayaquil, June 25, 1967.

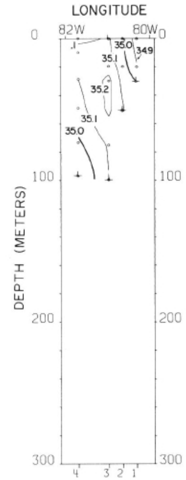
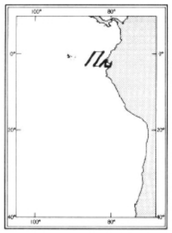


FIGURE H1-S-v1.—Vertical distribution of salinity (°/oo) along 3°10′ S. in the Gulf of Guayaquil, June 24-25, 1967.



H1-S-v5.

H1-S-v4.

H1-S-v3.

H1-S-v2.

H1-S-v1.

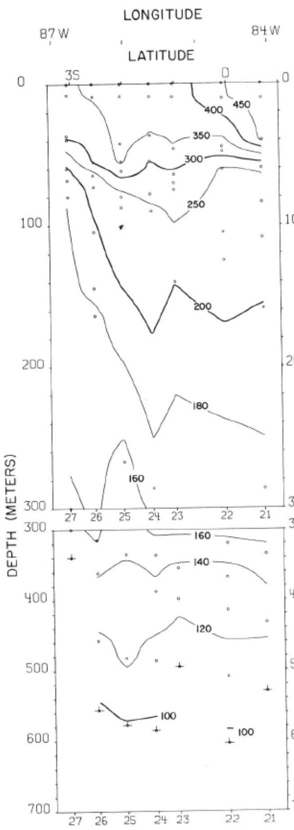


FIGURE H1-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section across the Equator from 0°39′ N., 84°06′ W. to 3°06′ S., 86°49′ W., June 30-July 2, 1967.

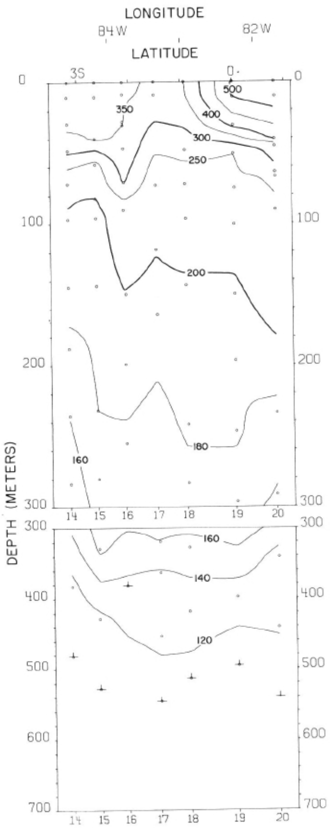


FIGURE H1-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section across the Equator, from 3°11′ S., 84°34′ W. to 0°48′ N., 81°43′ W., June 27-29, 1967.

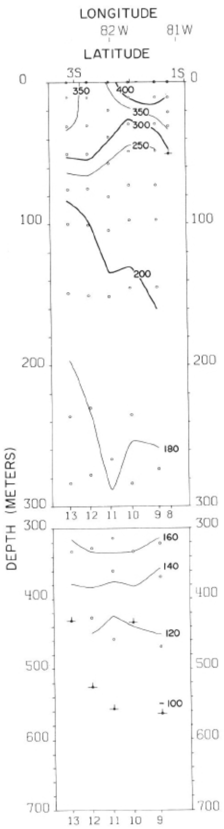


FIGURE H1-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from Cape San Lorenzo to 3°09′ S., 82°40′ W., June 25-26, 1967.

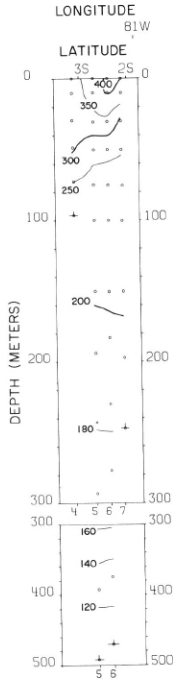


FIGURE H1-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section at the entrance to the Gulf of Guayaquil, June 25, 1967.

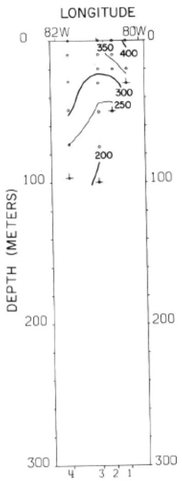
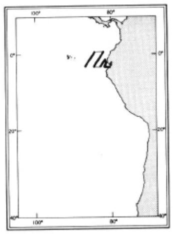


FIGURE H1-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 3°10′ S. in the Gulf of Guayaquil, June 24-25, 1967.



H1-δ-v5.

H1-δ-v4.

H1-δ-v3.

H1-δ-v2.

H1-δ-v1.

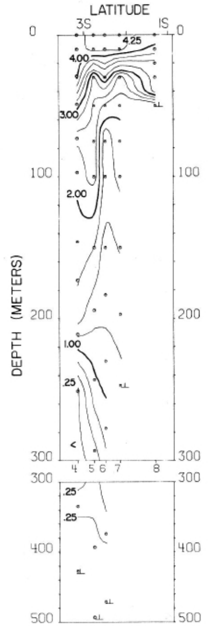


FIGURE H1-O_2-v2.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section at the entrance to the Gulf of Guayaquil, June 25, 1967.

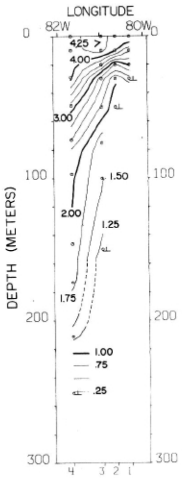
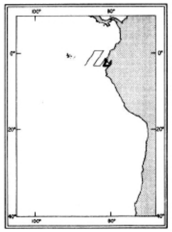


FIGURE H1-O_2-v1.—Vertical distribution of oxygen (ml./l.) 3°10′ S. in the Gulf of Guayaquil, June 24-25, 1967.



H1-O_2-v2.

H1-O_2-v1.

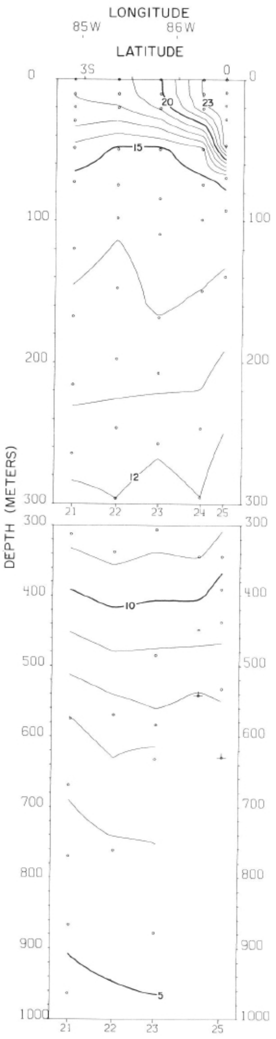


FIGURE H2-T-v5.—Vertical distribution of temperature (°C) along a southeast-northwest section from 3°12′ S., 84°56′ W. to the Equator at 86°33′ W., October 24-26, 1967.

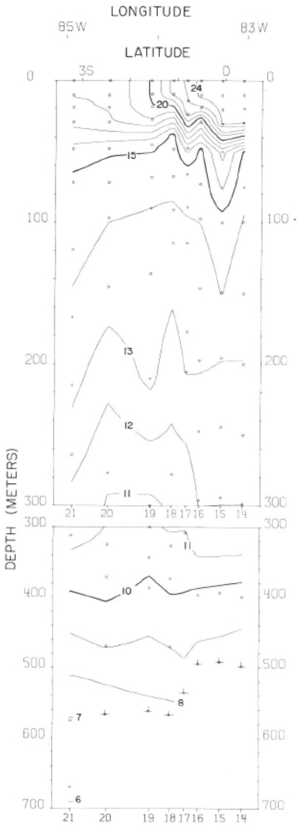


FIGURE H2-T-v4.—Vertical distribution of temperature (°C.) along a northeast-southwest section across the Equator, from 0°22′ N., 83°02′ W. to 3°12′ S., 84°56′ W., October 22-24, 1967.

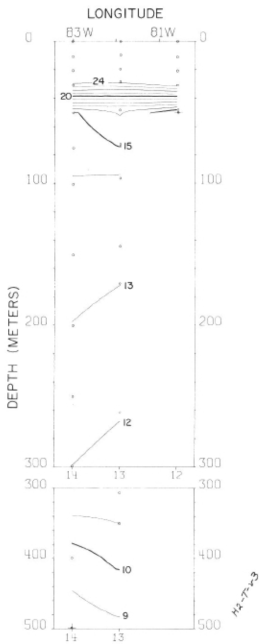


FIGURE H2-T-v3.—Vertical distribution of temperature (°C.) along 0°11′ N. from the coast of Ecuador to 83°02′ W., October 22, 1967.

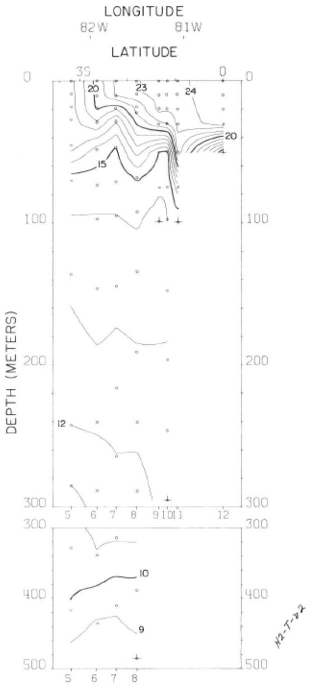


FIGURE H2-T-v2.—Vertical distribution of temperature (°C.) along a southwest-northeast section near the coast of Ecuador from the Gulf of Guayaquil to the Equator, October 20-22, 1967.

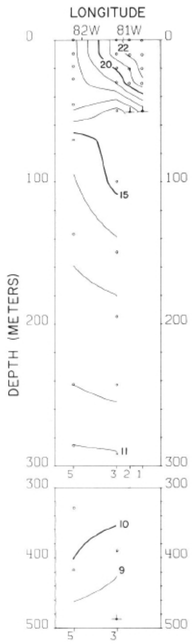
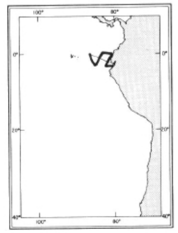


FIGURE H2-T-v1.—Vertical distribution of temperature (°C.) along 3°12′ S. in the Gulf of Guayaquil, October 19-20, 1967.



H2-T-v5.

H2-T-v4.

H2-T-v3.

H2-T-v2.

H2-T-v1.

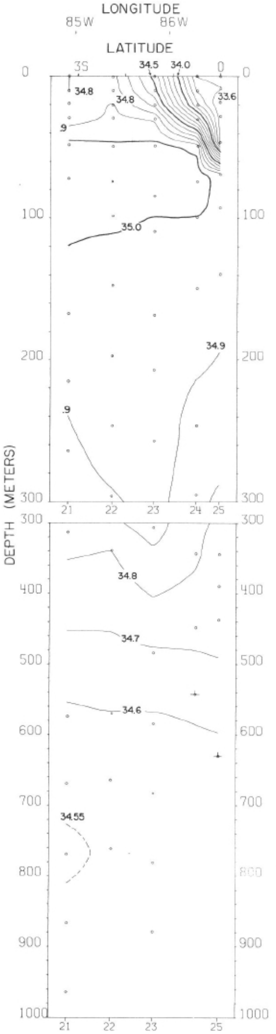


FIGURE H2-S-v5.—Vertical distribution of salinity (°/oo) along a southeast-northwest section from 3°12′ S., 84°56′ W. to the Equator at 86°33′ W., October 24-26, 1967.

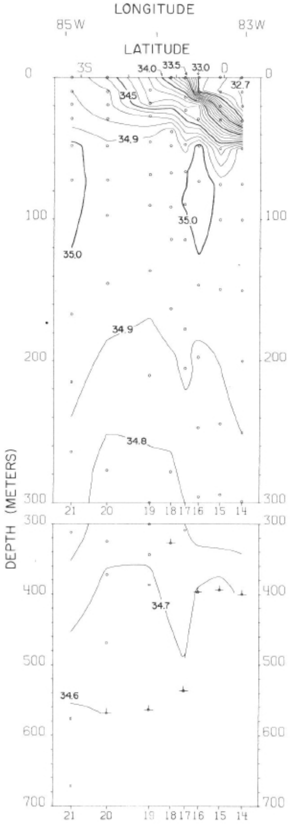


FIGURE H2-S-v4.—Vertical distribution of salinity (°/oo) along a northeast-southwest section across the Equator, from 0°22′ N., 83°02′ W. to 3°12′ S., 84°56′ W., October 22-24, 1967.

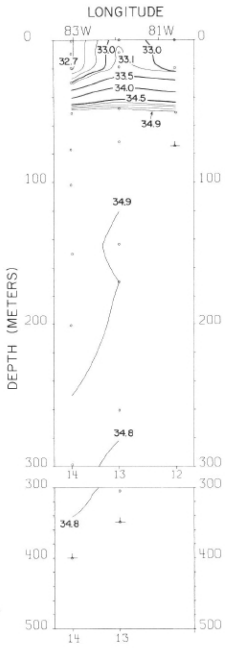


FIGURE H2-S-v3.—Vertical distribution of salinity (°/oo) along 0°11′ N. from the coast of Ecuador to 83°02′ W., October 22, 1967.

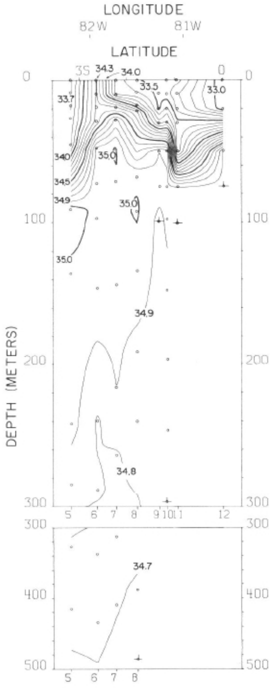


FIGURE H2-S-v2.—Vertical distribution of salinity (°/oo) along a southwest-northeast section near the coast of Ecuador from the Gulf of Guayaquil to the Equator, October 20-22, 1967.

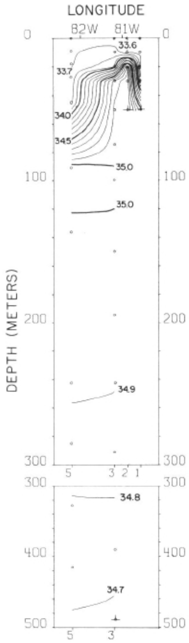
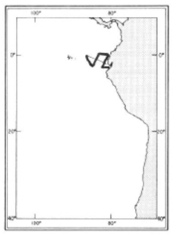


FIGURE H2-S-v1.—Vertical distribution of salinity (°/oo) along 3°12′ S. in the Gulf of Guayaquil, October 19-20, 1967.



H2-S-v5.

H2-S-v4.

H2-S-v3.

H2-S-v2.

H2-S-v1.

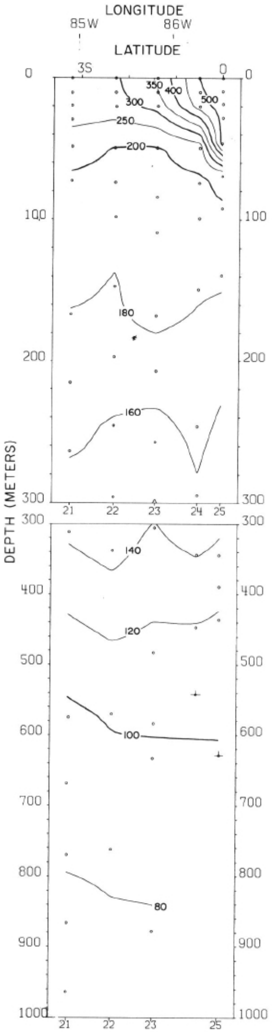


FIGURE H2-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southeast-northwest section from 3°12′ S., 84°56′ W. to the Equator at 86°33′ W., October 24-26, 1967.

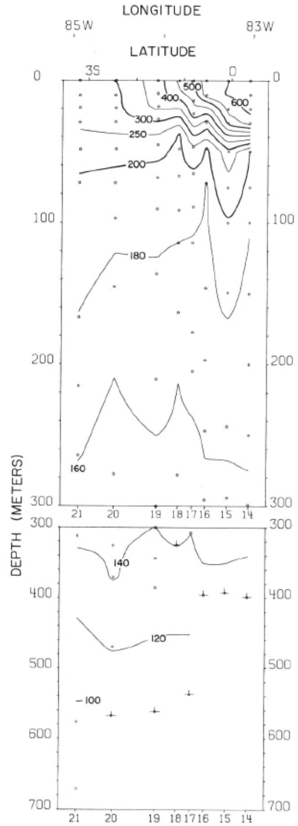


FIGURE H2-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section across the Equator, from 0°22′ N., 83°02′ W. to 3°12′ S., 84°56′ W., October 22-24, 1967.

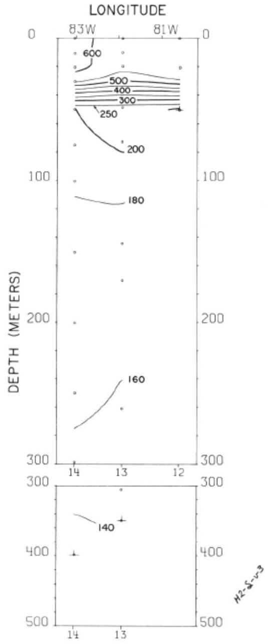


FIGURE H2-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 0°11′ N. from the coast of Ecuador to 83°02′ W., October 22, 1967.

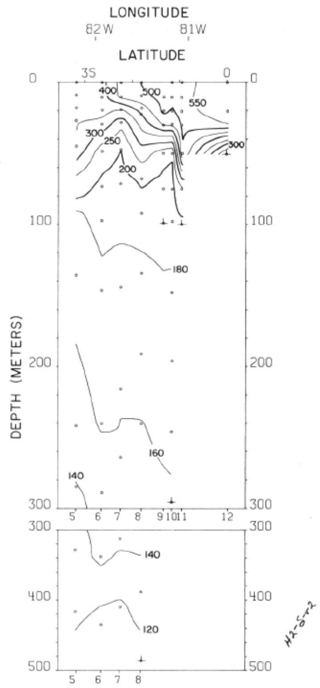


FIGURE H2-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section near the coast of Ecuador from the Gulf of Guayaquil to the Equator, October 20-22, 1967.

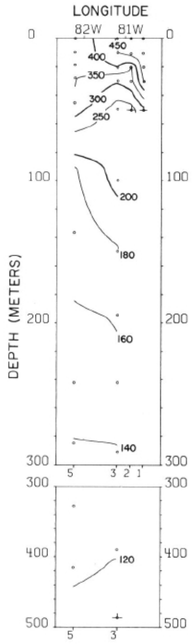
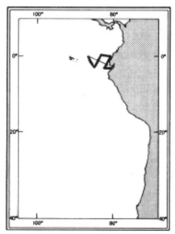


FIGURE H2-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 3°12′ S. in the Gulf of Guayaquil, October 19-20, 1967.



H2-δ-v5.

H2-δ-v4.

H2-δ-v3.

H2-δ-v2.

H2-δ-v1.

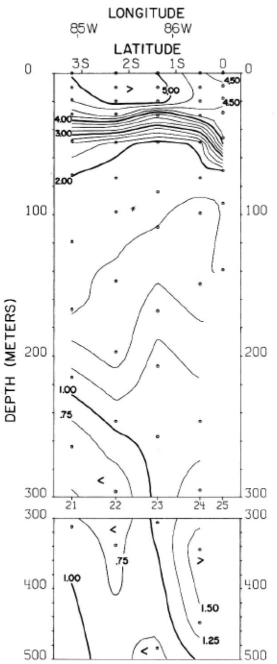


FIGURE H2-O₂-v5.—Vertical distribution of oxygen (ml./l.) along a southeast-northwest section from 3°12′ S., 84°56′ W. to the Equator at 86°33′ W., October 24-26, 1967.

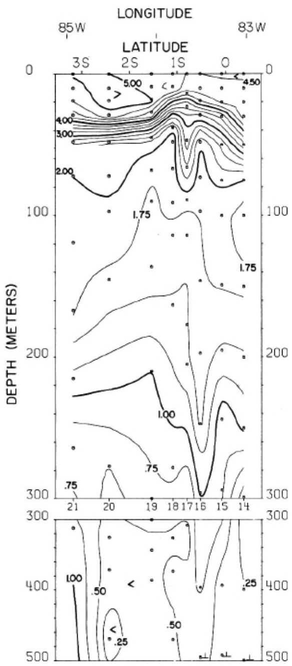


FIGURE H2-O₂-v4.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section across the Equator, from 0°22′ N., 83°02′ W. to 3°12′ S., 84°56′ W., October 22-24, 1967.

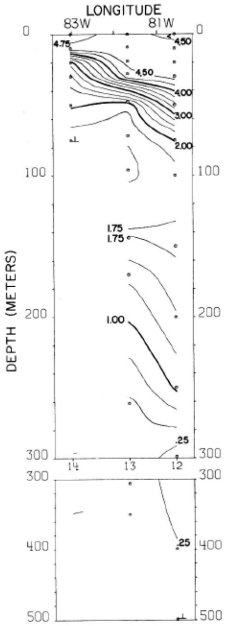


FIGURE H2-O₂-v3.—Vertical distribution of oxygen (ml./l.) along 0°11′ N. from the coast of Ecuador to 83°02′ W., October 22, 1967.

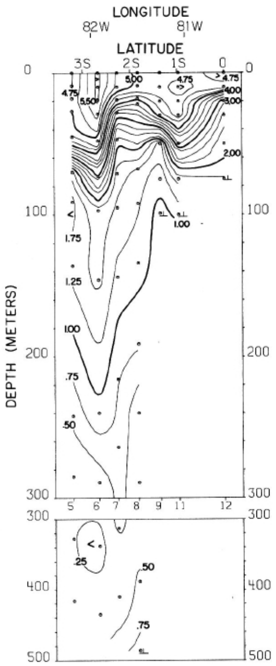


FIGURE H2-O₂-v2.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section near the coast of Ecuador from the Gulf of Guayaquil to the Equator, October 20-22, 1967.

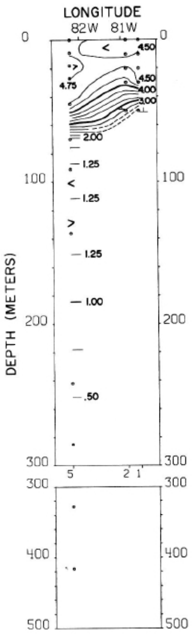
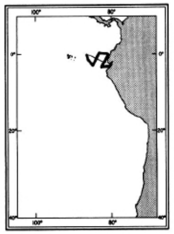


FIGURE H2-O₂-v1.—Vertical distribution of oxygen (ml./l.) along 3°12′ S. in the Gulf of Guayaquil, October 19-20, 1967.



H2-O₂-v5.

H2-O₂-v4.

H2-O₂-v3.

H2-O₂-v2.

H2-O₂-v1.

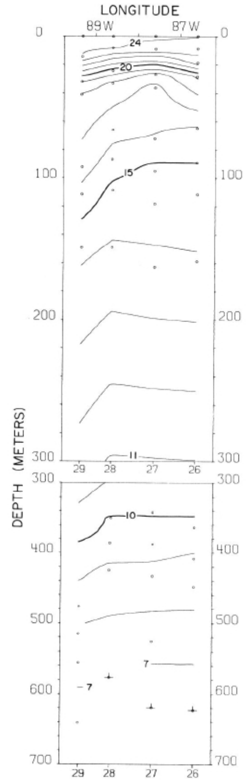


FIGURE H3-T-v6.—Vertical distribution of temperature (°C.) along 0°15′ S. from 86°36′ W. to 89°20′ W., February 14-15, 1968.

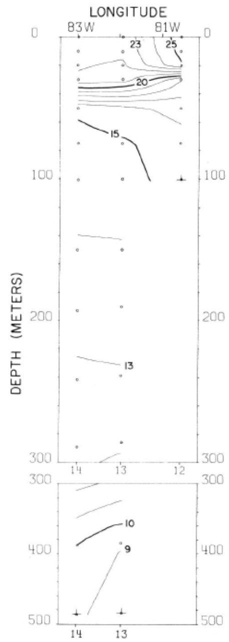


FIGURE H3-T-v3.—Vertical distribution of temperature (°C) along 0°12′ N. from the coast of Ecuador to 83°00′ W., February 10-11, 1968.

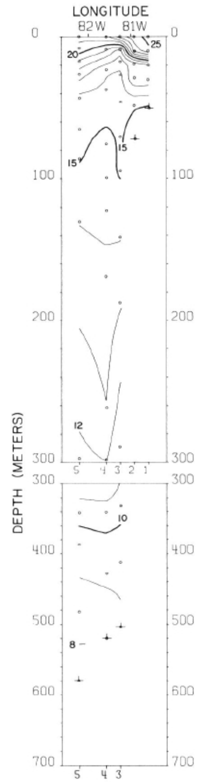
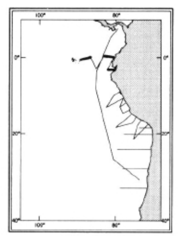


FIGURE H3-T-v1.—Vertical distribution of temperature (°C.) along 3°09′ in the Gulf of Guayaquil, February 8, 1968.



H3-T-v6.

H3-T-v3.

H3-T-v1.

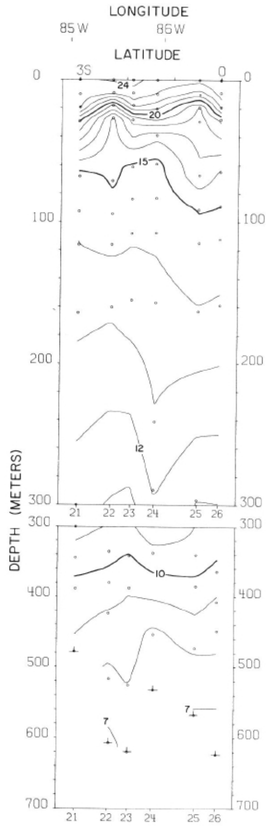


FIGURE H3-T-v5.—Vertical distribution of temperature (°C.) along a southeast-northwest section from 3°00′ S., 85°06′ W. to the Equator at 86°36′ W., February 13-14, 1968.

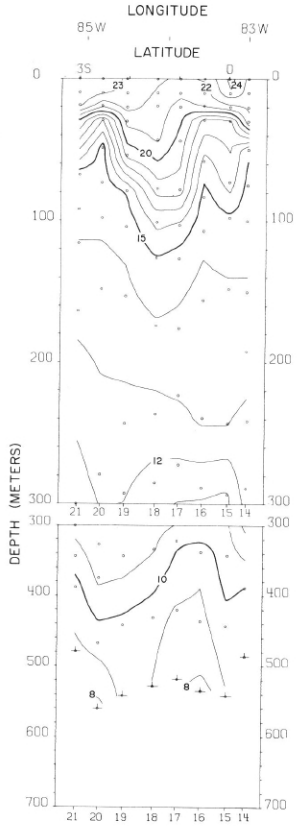


FIGURE H3-T-v4.—Vertical distribution of temperature (°C.) along a northeast-southwest section across the Equator, from 0°24′ N., 83°00′ W. to 3°00′ S., 85°06′ W., February 11-13, 1968.

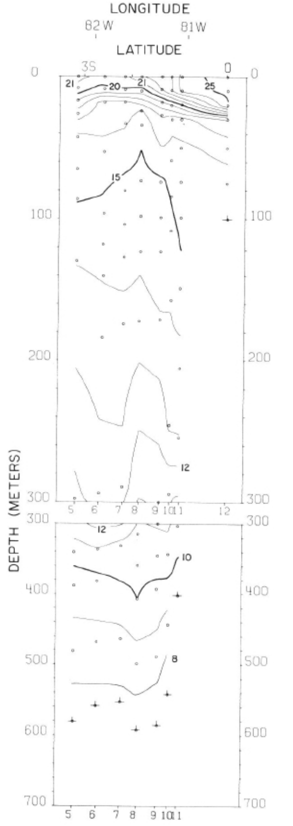
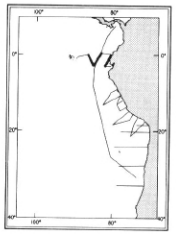


FIGURE H3-T-v2.—Vertical distribution of temperature (°C.) along a southwest-northeast section near the coast of Equador from the Gulf of Guayaquil to the Equator, February 8-10, 1968.



H3-T-v5.

H3-T-v4.

H3-T-v2.

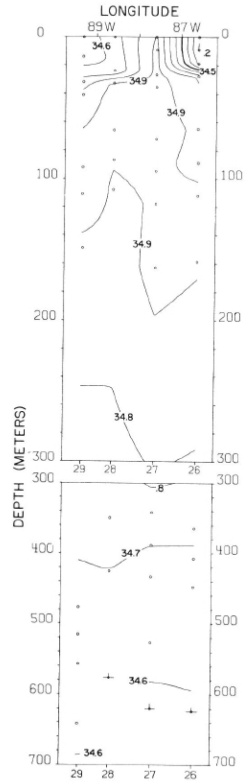


FIGURE H3-S-v6.—Vertical distribution of salinity (°/oo) along 0°15′ S. from 86°36′ W. to 89°20′ W., February 14-15, 1968.

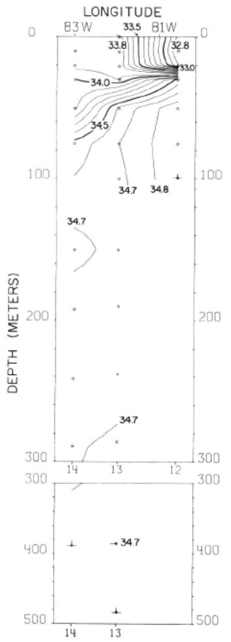


FIGURE H3-S-v3.—Vertical distribution of salinity (°/oo) along 0°12′ N. from the coast of Ecuador to 83°00′ W., February 10-11, 1968.

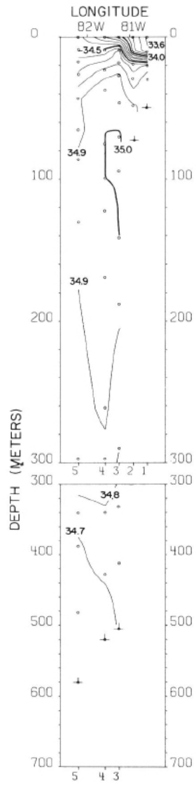
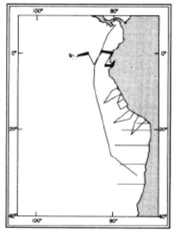


FIGURE H3-S-v1.—Vertical distribution of salinity (°/oo) along 3°09′ S. in the Gulf of Guayaquil, February 8, 1968.



H3-S-v6.

H3-S-v3.

H3-S-v1.

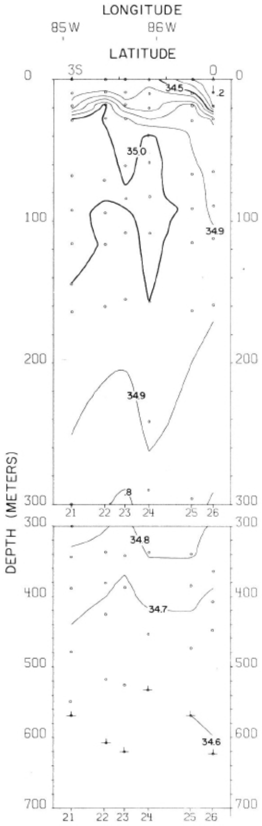


FIGURE H3-S-v5.—Vertical distribution of salinity (°/oo) along a southeast-northwest section from 3°00′ S., 85°06′ W. to the Equator at 86°36′ W., February 13-14, 1968.

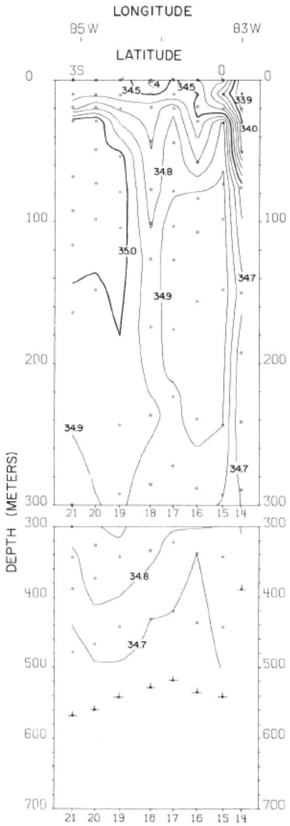


FIGURE H3-S-v4.—Vertical distribution of salinity (°/oo) along a northeast-southwest section across the Equator, from 0°24′ N., 83°00′ S., 85°06′ W., February 11-13, 1968.

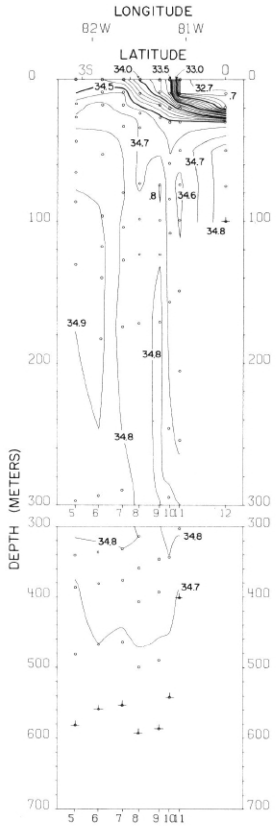
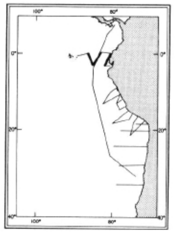


FIGURE H3-S-v2.—Vertical distribution of salinity (°/oo) along a southwest-northeast section near the coast of Ecuador from the Gulf of Guayaquil to the Equator, February 8-10, 1968.



H3-S-v5.

H3-S-v4.

H3-S-v2.

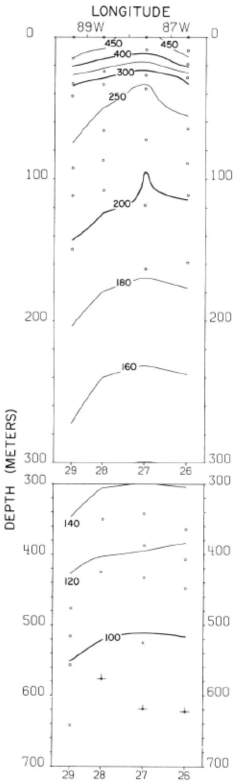


FIGURE H3-δ-v6.—Vertical distribution of thermosteric anomaly, δт, (cl./t.) along 0°15′ S. from 86°36′ W. to 89°20′ W., February 14-15, 1968.

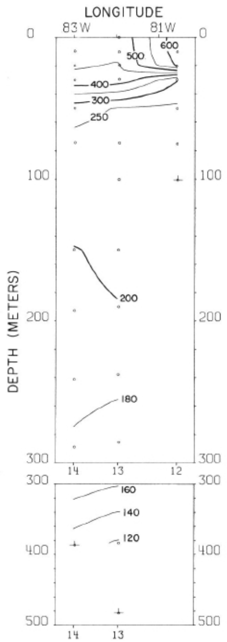


FIGURE H3-δ-v3.—Vertical distribution of thermosteric anomaly, δт, (cl./t.) along 0°12′ N. from the coast of Ecuador to 83°00′ W., February 10-11, 1968.

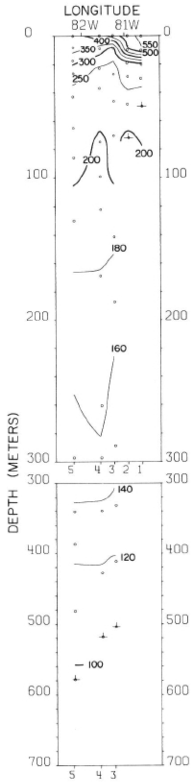
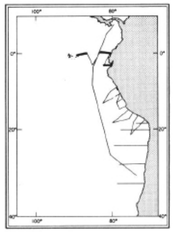


FIGURE H3-δ-v1.—Vertical distribution of thermosteric anomaly, δт, (cl./t.) along 3°09′ S. in the Gulf of Guayaquil, February 8, 1968.



H3-δ-v6.

H3-δ-v3.

H3-δ-v1.

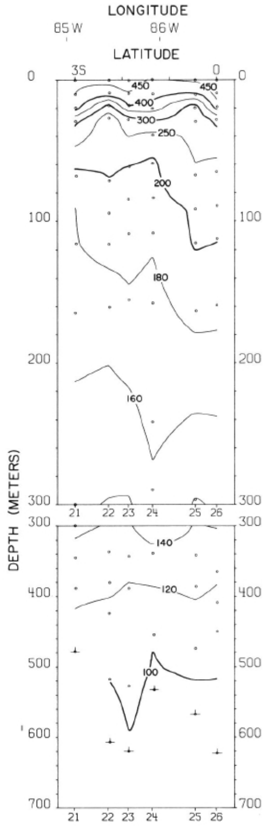


FIGURE H3-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southeast-northwest section from 3°00′ S., 85°06′ W. to the Equator at 86°36′ W., February 13-14, 1968.

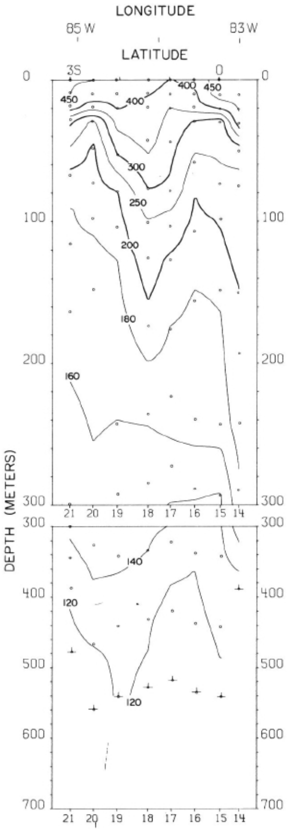


FIGURE H3-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section across the Equator, from 0°24′ N., 83°00′ W. to 3°00′ S., 85°06′ W., February 11-13, 1968.

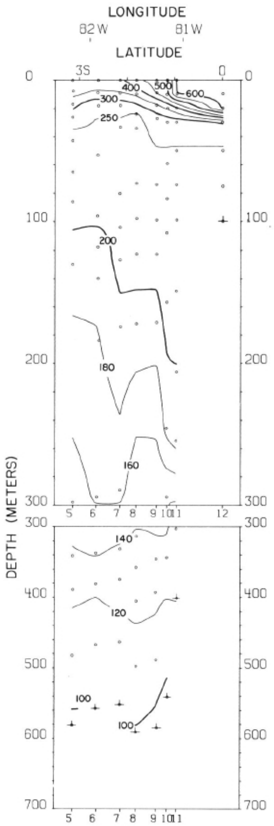
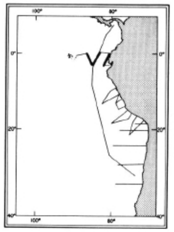


FIGURE H3-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section near the coast of Ecuador from the Gulf of Guayaquil to the Equator, February 8-10, 1968.



H3-δ-v5.

H3-δ-v4.

H3-δ-v2.

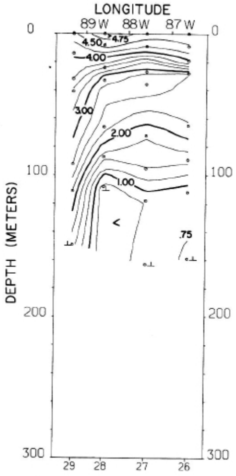


FIGURE H3-0₂-v6.—Vertical distribution of oxygen (ml./l.) along 0°15′ S. from 86°36′ W. to 89°20′ W., February 14-15, 1968.

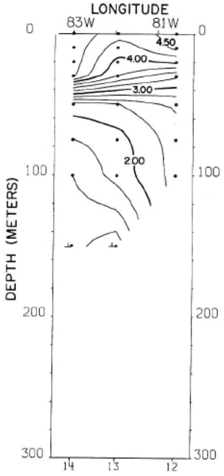


FIGURE H3-0₂-v3.—Vertical distribution of oxygen (ml./l.) along 0°12′ N. from the coast of Ecuador to 83°00′ W., February 10-11, 1968.

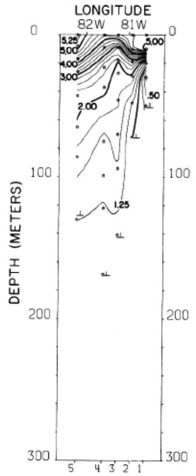
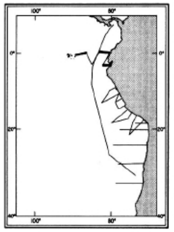


FIGURE H3-0₂-v1.—Vertical distribution of oxygen (ml./l.) along 3°09′ S. in the Gulf of Guayaquil, February 8, 1968.



H3-0₂-v6.

H3-0₂-v3.

H3-0₂-v1.

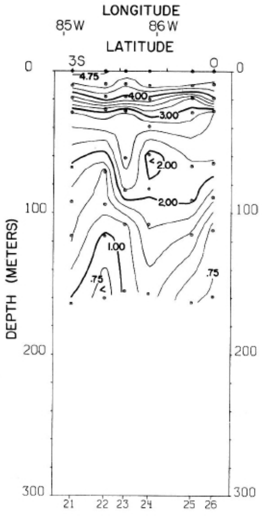


FIGURE H3-0₂-v5.—Vertical distribution of oxygen (ml./l.) along a southeast-northwest section from 3°00′ S., 85°06′ W. to the Equator at 86°36′ W., February 13-14, 1968.

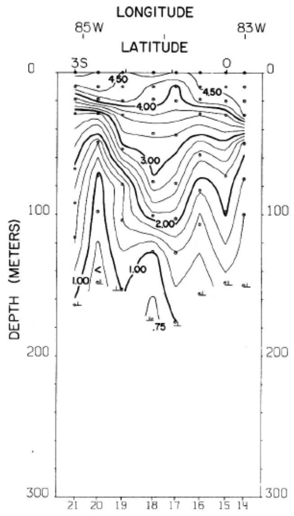


FIGURE H3-0₂-v4.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section across the Equator, from 0°24′ N., 83°00′ W. to 3°00′ S., 85°06′ W., February 11-13, 1968.

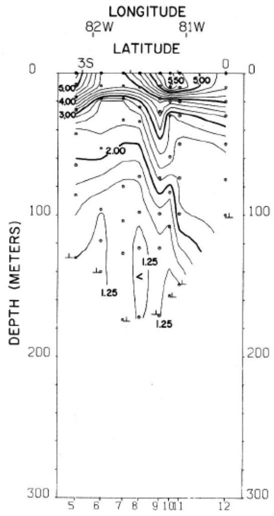
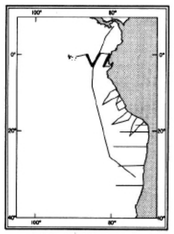


FIGURE H3-0₂-v2.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section near the coast of Ecuador from the Gulf of Guayaquil to the Equator, February 8-10, 1968.



H3-0₂-v5.

H3-0₂-v4.

H3-0₂-v2.

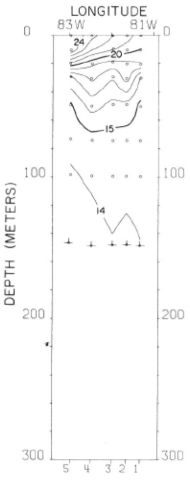


FIGURE U1-T-v1.—Vertical distribution of temperature (°C.) along 6°00′ S. from the coast of Peru to 83°00′ W., February 5, 1967.

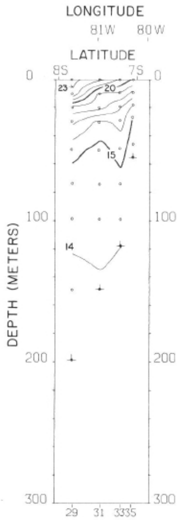


FIGURE U1-T-v3.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 7°48′ S., 81°31′ W. to the coast of Peru, February 9, 1967.

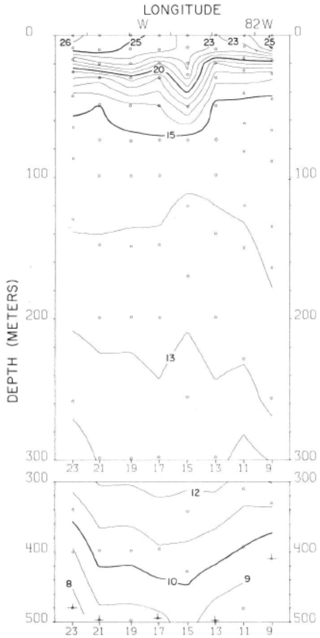


FIGURE U1-T-v2.—Vertical distribution of temperature (°C.) along 4°22′ S. from the coast of Peru to 86°20′ W., February 6-8, 1967.

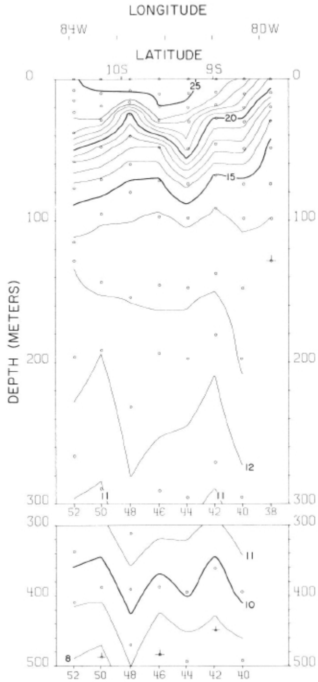


FIGURE U1-T-v4.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 10°30′ S., 83°55′ W., February 11-13, 1967.

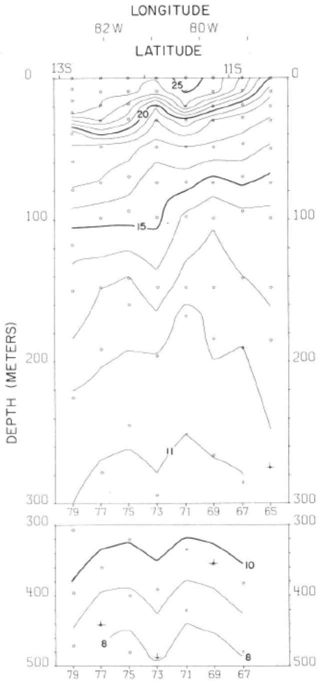
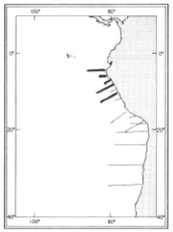


FIGURE U1-T-v6.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 12°51′ S., 82°40′ W., February 15-16, 1967.



U1-T-v1.

U1-T-v2.

U1-T-v4.

U1-T-v6.

U1-T-v3.

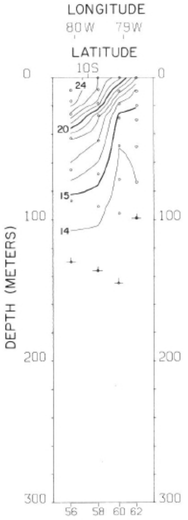


FIGURE U1-T-v5.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 10°12′ S., 80°06′ W. to the coast of Peru, February 14, 1967.

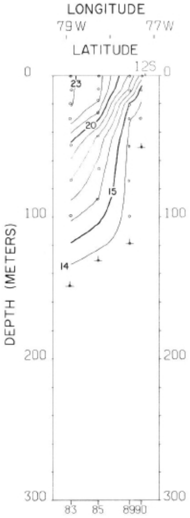


FIGURE U1-T-v7.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 12°32′ S., 78°53′ W. to the coast of Peru, February 17, 1967.

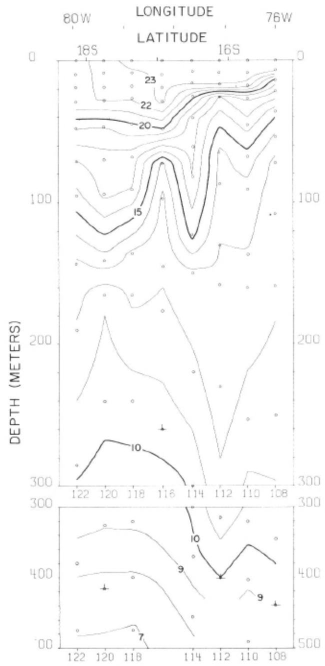


FIGURE U1-T-v8.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 18°08′ S., 79°58′ W., February 25-26, 1967.

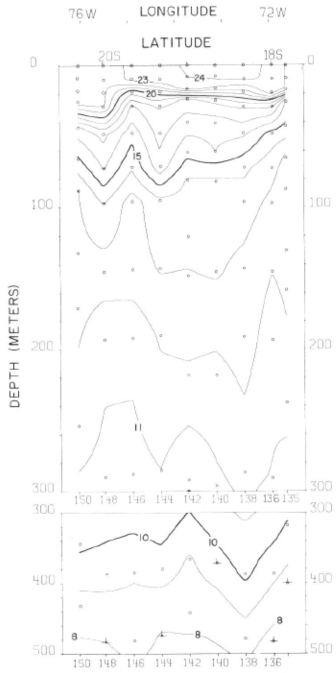


FIGURE U1-T-v10.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 20°18′ S., 76°05′ W. March 2-3, 1967.

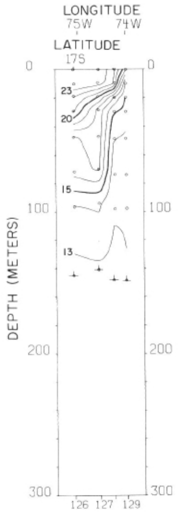
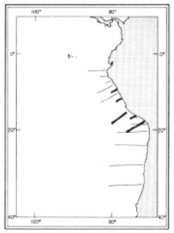


FIGURE U1-T-v9.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 17°00′ S., 75°05′ W. to the coast of Peru, February 28, 1967.



U1-T-v5.

U1-T-v8.

U1-T-v10.

U1-T-v9.

U1-T-v7.

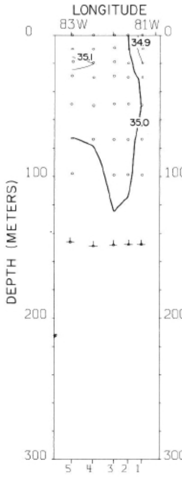


FIGURE U1-S-v1.—Vertical distribution of salinity (°/oo) along 6°00′ S. from the coast of Peru to 83°00′ W., February 5, 1967.

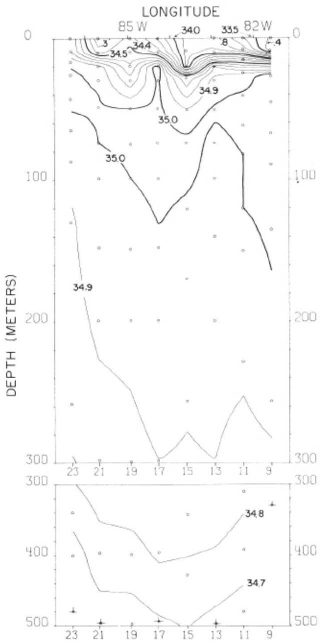


FIGURE U1-S-v2.—Vertical distribution of salinity (°/oo) along 4°22′ S. from the coast of Peru to 86°20′ W., February 6-8, 1967.

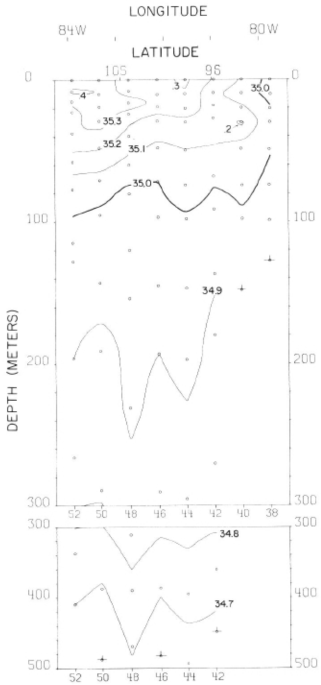


FIGURE U1-S-v4.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 10°30′ S., 83°55′ W., February 11-13, 1967.

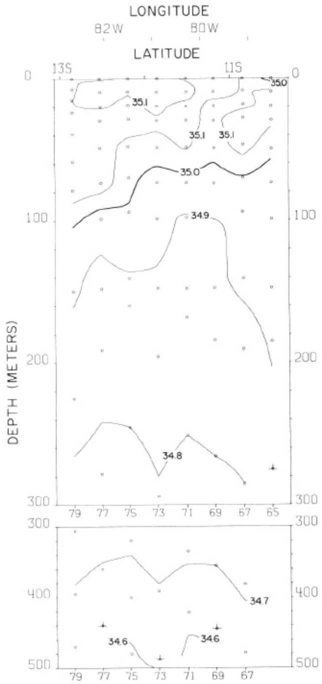


FIGURE U1-S-v6.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 12°51′ S., 82°40′ W., February 15-16, 1967.

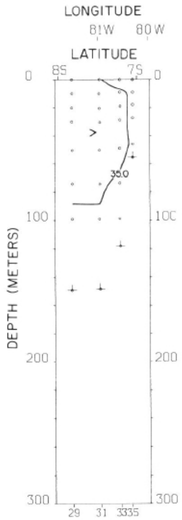
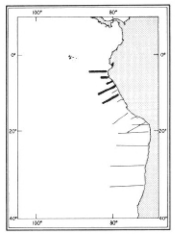


FIGURE U1-S-v3.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 7°48′ S., 81°31′ W. to the coast of Peru, February 9, 1967.



U1-S-v1.

U1-S-v2.

U1-S-v4.

U1-S-v6.

U1-S-v3.

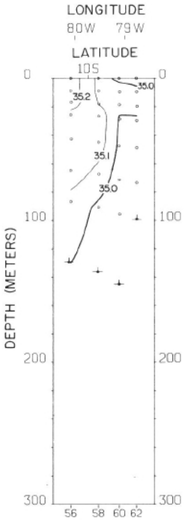


FIGURE U1-S-v5.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 10°12′ S., 80°06′ W. to the coast of Peru, February 14, 1967.

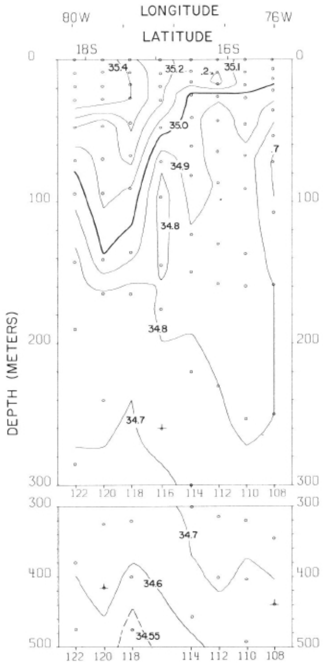


FIGURE U1-S-v8.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 18°08′ S., 79°58′ W., February 25-26, 1967.

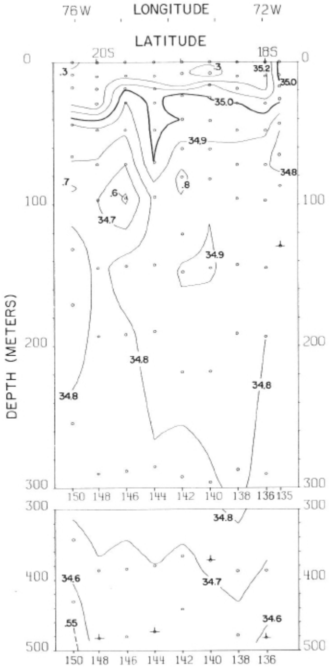


FIGURE U1-S-v10.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 20°18′ S., 76°05′ W., March 2-3, 1967.

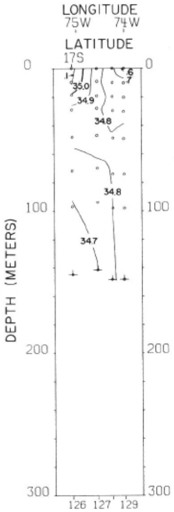


FIGURE U1-S-v9.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 17°00′ S., 75°05′ W. to the coast of Peru, February 28, 1967.

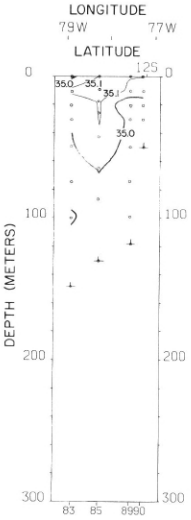
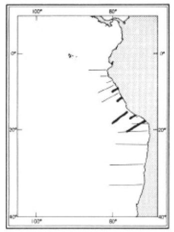


FIGURE U1-S-v7.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 12°32′ S., 78°53′ W. to the coast of Peru, February 17, 1967.



U1-S-v5.

U1-S-v8.

U1-S-v10.

U1-S-v9.

U1-S-v7.

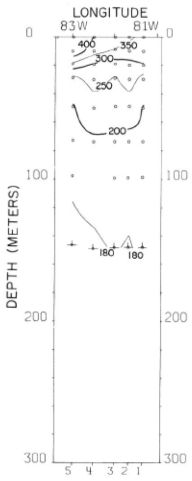


FIGURE U1-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 6°00′ S. from the coast of Peru to 83°W., February 5, 1967.

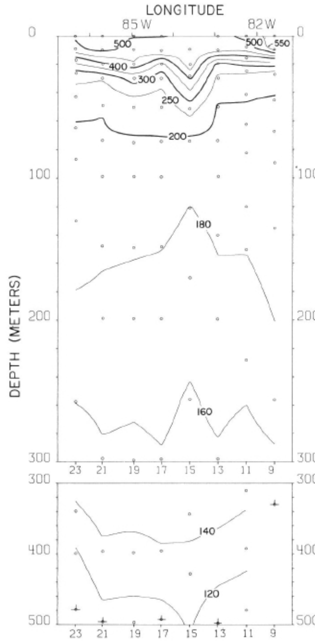


FIGURE U1-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 4°22′ S. from the coast of Peru to 86°20′ W., February 6-8, 1967.

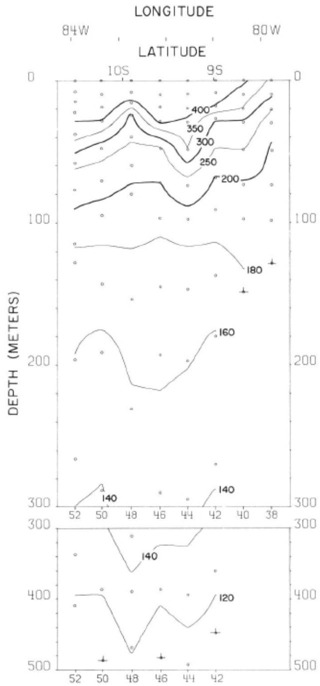


FIGURE U1-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 10°30′ S., 83°55′ W., February 11-13, 1967.

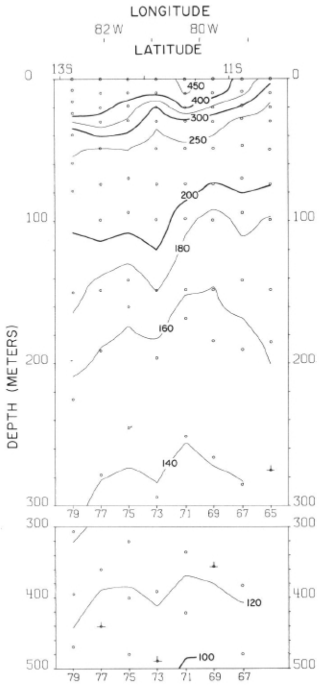


FIGURE U1-δ-v6.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 12°51′ S., 82°40′ W., February 15-16, 1967.

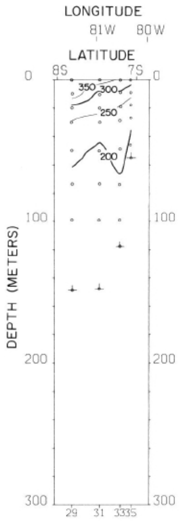
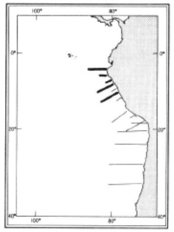


FIGURE U1-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 7°48′ S., 81°31′ W. to the coast of Peru, February 9, 1967.



U1-δ-v1.

U1-δ-v2.

U1-δ-v4.

U1-δ-v6.

U1-δ-v3.

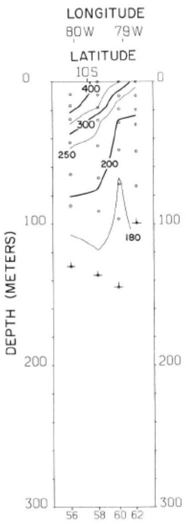


FIGURE U1-δ-v5.—Vertical distribution of thermosteric anomaly, δT, (cl./t.) along a southwest-northeast section from 10°12′ S., 80°06′ W., to the coast of Peru, February 14, 1967.

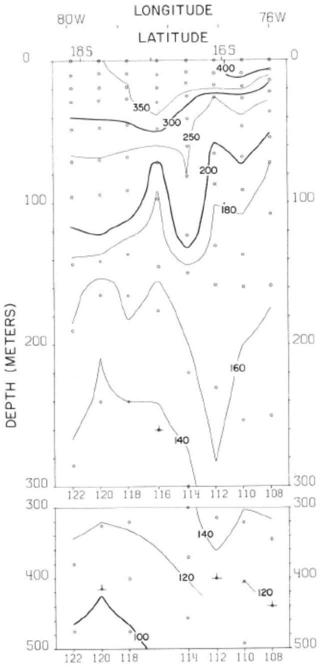


FIGURE U1-δ-v8.—Vertical distribution of thermosteric anomaly, δT, (cl./t.) along a northeast-southwest section from the coast of Peru to 18°08′ S., 79°58′ W., February 25-26, 1967.

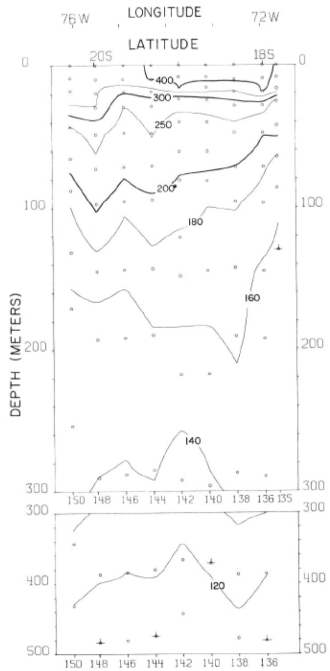


FIGURE U1-δ-v10.—Vertical distribution of thermosteric anomaly, δT, (cl./t.) along a northeast-southwest section from coast of Peru to 20°18′ S., 76°05′ W., March 2-3, 1967.

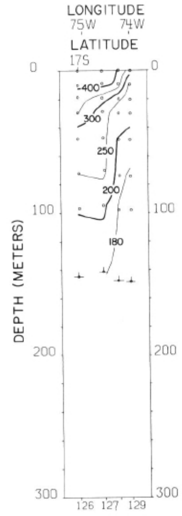


FIGURE U1-δ-v9.—Vertical distribution of thermosteric anomaly, δT, (cl./t.) along a southwest-northeast section from 17°00′ S., 75°05′ W. to the coast of Peru, February 28, 1967.

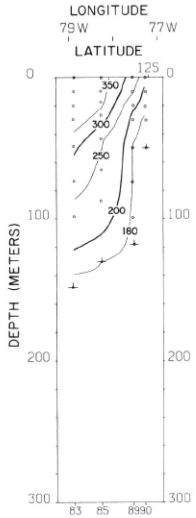
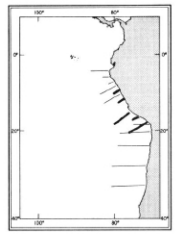


FIGURE U1-δ-v7.—Vertical distribution of thermosteric anomaly, δT, (cl./t.) along a southwest-northeast section from 12°32′ S., 78°53′ W. to the coast of Peru, February 17, 1967.



U1-δ-v5.

U1-δ-v8.

U1-δ-v10.

U1-δ-v9.

U1-δ-v7.

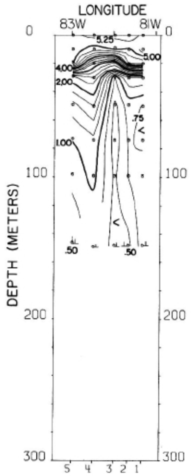


FIGURE U1-O_2-v1.—Vertical distribution of oxygen (ml./l.) along 6°00′ S. from the coast of Peru to 83°00′ W., February 5, 1967.

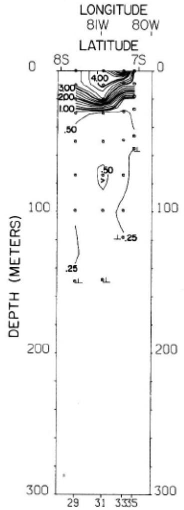


FIGURE U1-O_2-v3.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 7°48′ S., 81°31′ W. to the coast of Peru, February 9, 1967.

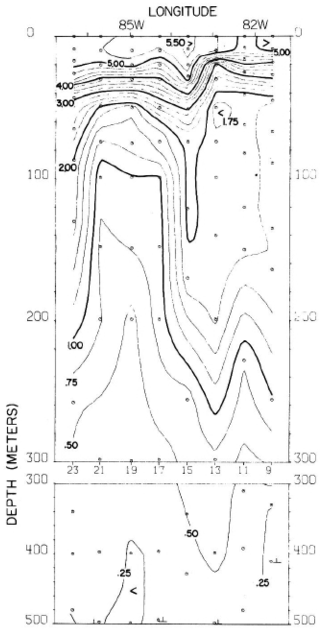


FIGURE U1-O_2-v2.—Vertical distribution of oxygen (ml./l.) along 4°22′ S. from the coast of Peru to 86°20′ W., February 6-8, 1967.

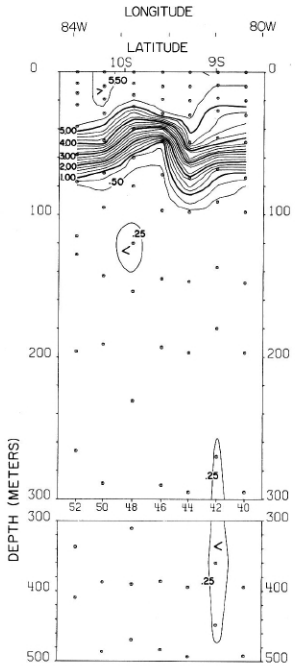


FIGURE U1-O_2-v4.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 10°30′ S., 83°55′ W., February 11-13, 1967.

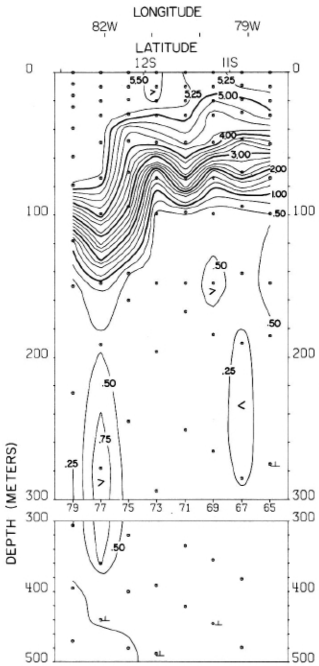
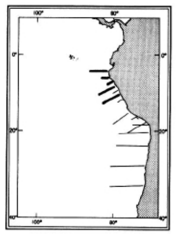


FIGURE U1-O_2-v6.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 12°51′ S., 82°40′ W., February 15-16, 1967.



U1-O_2-v1.

U1-O_2-v2.

U1-O_2-v4.

U1-O_2-v6.

U1-O_2-v3.

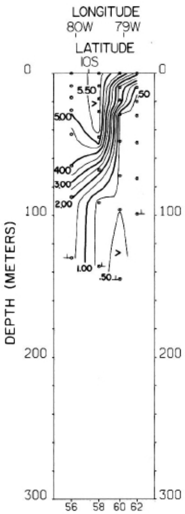


FIGURE U1-O₂-v5.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 10°12′ S., 80°06′ W. to the coast of Peru, February 14, 1967.

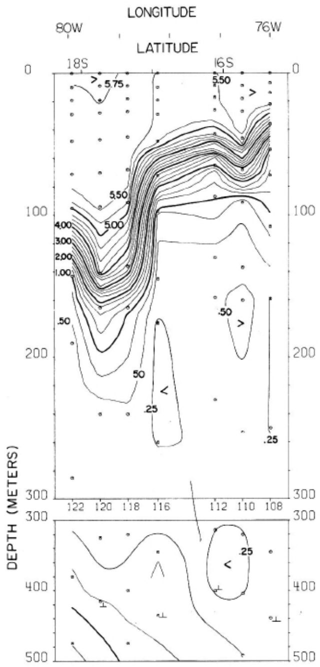


FIGURE U1-O₂-v8.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 18°08′ S., 79°58′ W., February 25-26, 1967.

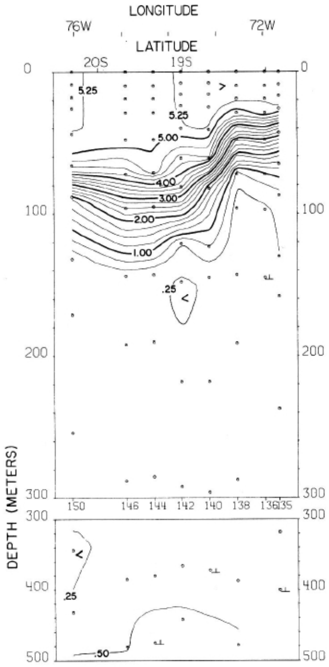


FIGURE U1-O₂-v10.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 20°18′ S., 76°05′ W., March 2-3, 1967.

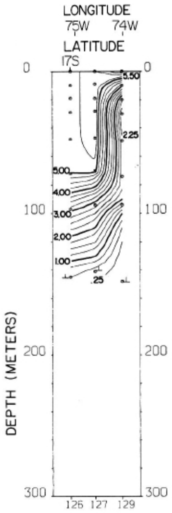


FIGURE U1-O₂-v9.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 17°00′ S., 75°05′ W. to the coast of Peru, February 28, 1967.

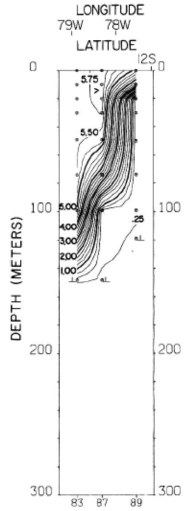
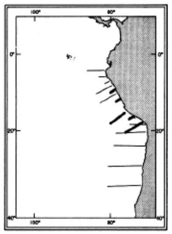


FIGURE U1-O₂-v7.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section 12°32′ S., 78°53′ W. to the coast of Peru, February 17, 1967.



U1-O₂-v5.

U1-O₂-v8.

U1-O₂-v10.

U1-O₂-v9.

U1-O₂-v7.

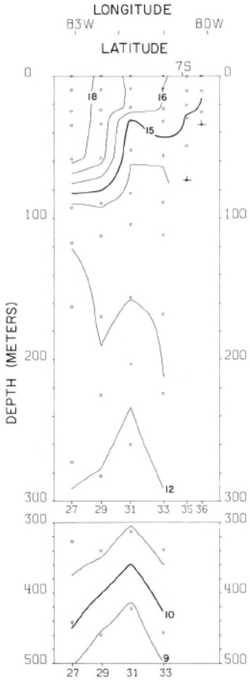


FIGURE U2-T-v3.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 7°48′ S., 83°06′ W. to the coast of Peru, August 28-29, 1967.

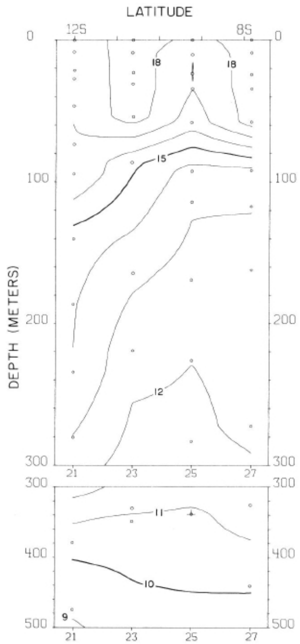


FIGURE U2-T-v2.—Vertical distribution of temperature (°C.) north along 83°06′ W. from 12°00′ S. to 7°48′ S., August 27-28, 1967.

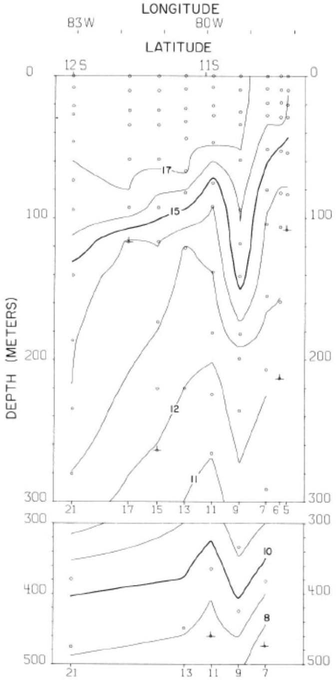


FIGURE U2-T-v1.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 12°00′ S., 83°06′ W., August 25-27, 1967.

U2-T-v3.

U2-T-v2.

U2-T-v1.

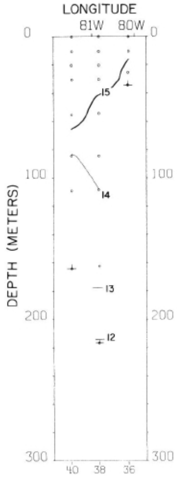


FIGURE U2-T-v4.—Vertical distribution of temperature (°C.) along a section northwest from the coast of Peru to 6°35′ S., 81°30′ W., August 29-30, 1967.

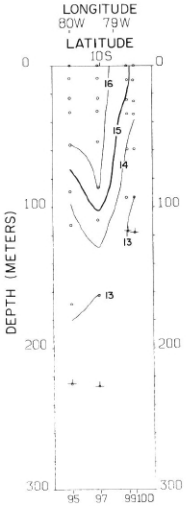


FIGURE U2-T-v11.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 10°17′ S., 80°00′ W. to the coast of Peru, September 6-7, 1967.

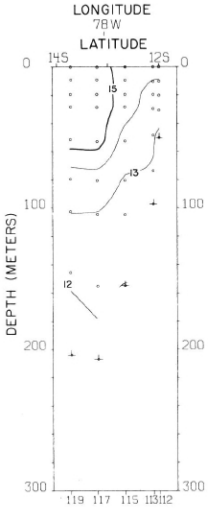


FIGURE U2-T-v14.—Vertical distribution of temperature (°C) along a northeast-southwest section from the coast of Peru to 13°43′ S., 78°28′ W., September 13-14, 1967.

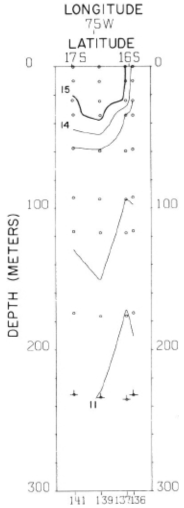


FIGURE U2-T-v17.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 16°59′ S., 75°22′ W., September 16, 1967.

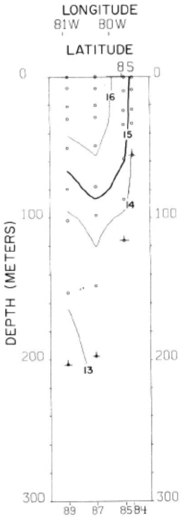


FIGURE U2-T-v9.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 8°33′ S., 80°55′ W., September 5-6, 1967.

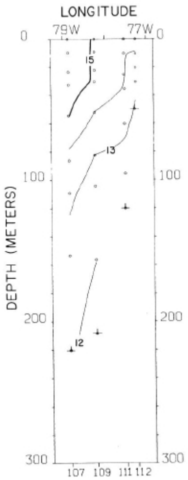


FIGURE U2-T-v13.—Vertical distribution of temperature (°C.) east along 12°00′ S. from 78°52′ W. to the coast of Peru, September 8, 1967.

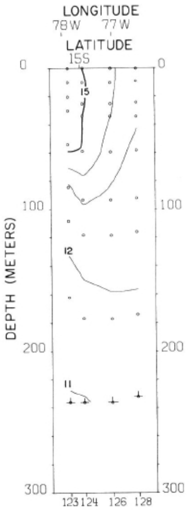


FIGURE U2-T-v16.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 15°09′ S., 77°53′ W. to the coast of Peru, September 14-15, 1967.

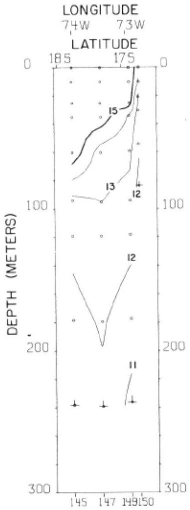
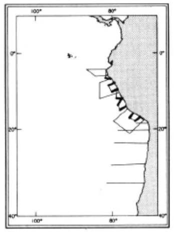


FIGURE U2-T-v19.—Vertical distribution of temperature (°C.) along a southwest-northwest section from 17°47′ S., 74°00′ W. to the coast of Peru, September 16-17, 1967.



U2-T-v4.
U2-T-v11.
U2-T-v14.
U2-T-v17.
U2-T-v9.
U2-T-v13.
U2-T-v16.
U2-T-v19.

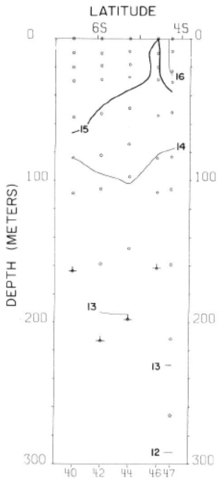


FIGURE U2-T-v5.—Vertical distribution of temperature (°C.) north along the coast of Peru from 6°35′ S., to 4°15′ S., August 30-31, 1967.

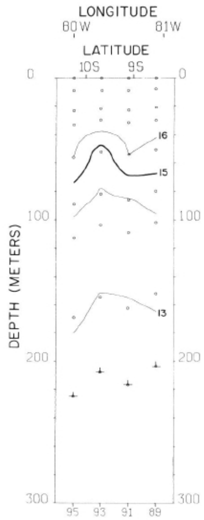


FIGURE U2-T-v10.—Vertical distribution of temperature (°C.) along a northwest-southeast section from 8°33′ S., 80°55′ W. to 10°17′ S., 80°00′ W., September 6, 1967.

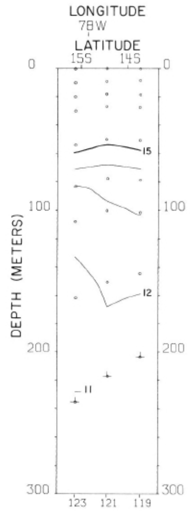


FIGURE U2-T-v15.—Vertical distribution of temperature (°C.) along a northwest-southeast section from 13°43′ S., 78°28′ W. to 15°09′ S., 77°53′ W., September 14, 1967.

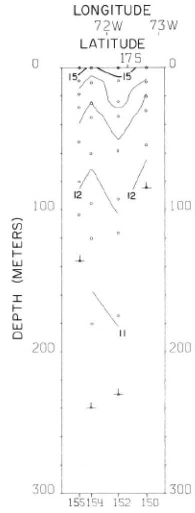


FIGURE U2-T-v20.—Vertical distribution of temperature (°C.) southeast along the coast of Peru from 16°44′ S., to 17°42′ S., September 17-19, 1967.

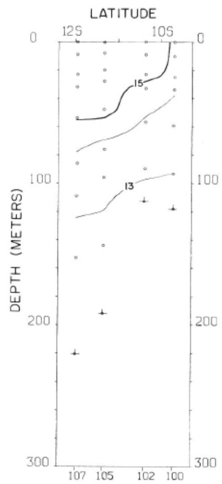


FIGURE U2-T-v12.—Vertical distribution of temperature (°C.) south along 78°44′ W. from the coast of Peru to 11°59′ S., September 7-8, 1967.

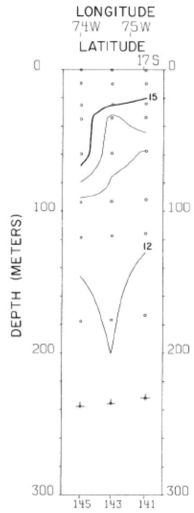
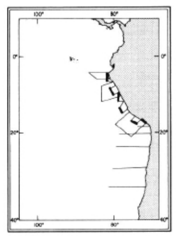


FIGURE U2-T-v18.—Vertical distribution of temperature (°C.) along a northwest-southeast section from 16°59′ S., 79°22′ W. to 17°47′ S., 74°00′ W., September 16, 1967.



U2-T-v5.

U2-T-v10.

U2-T-v15.

U2-T-v20.

U2-T-v12.

U2-T-v18.

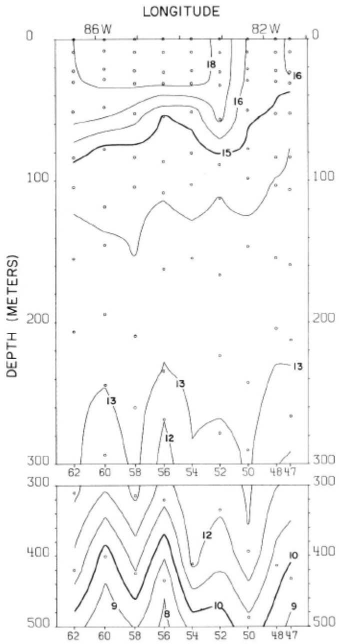


FIGURE U2-T-v6.—Vertical distribution of temperature (°C.) west along 4°15′ S. from 81°24′ W. to 86°32′ W., August 31-September 2, 1967.

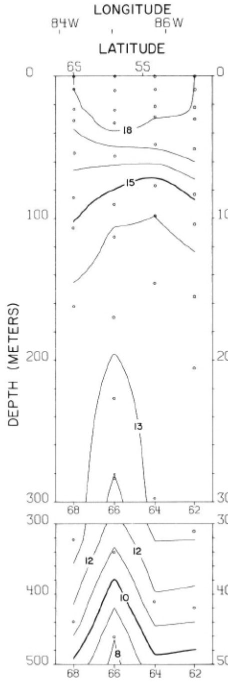


FIGURE U2-T-v7.—Vertical distribution of temperature (°C.) along a northwest-southeast section from 4°15′ S., 86°32′ W. to 6°00′ W. to 6°00′ S., 84°16′ W., September 2-3, 1967.

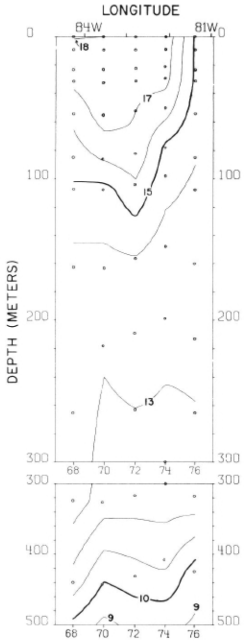
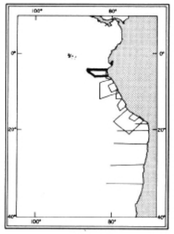


FIGURE U2-T-v8.—Vertical distribution of temperature (°C.) along 5°55′ S. from 84°16′ W. to the coast of Peru, September 3-4, 1967.



U2-T-v6.

U2-T-v7.

U2-T-v8.

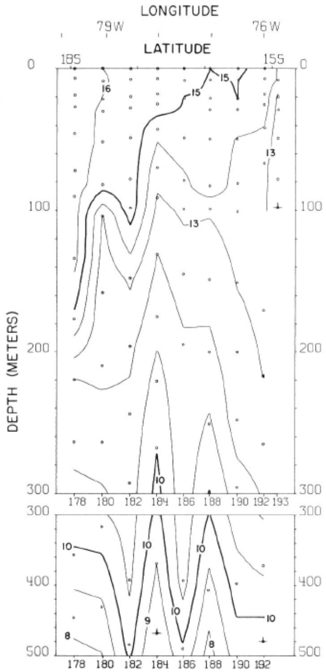


FIGURE U2-T-v23.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 17°56′ S., 79°37′ W. to the coast of Peru, September 22-24, 1967.

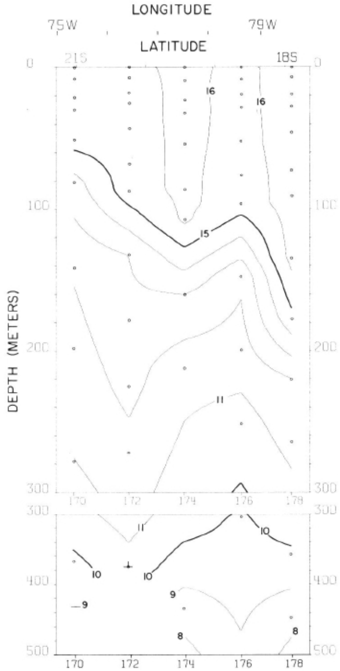


FIGURE U2-T-v22.—Vertical distribution of temperature (°C.) along a southeast-northwest section from 21°03′ S., 75°19′ W. to 17°56′ S., 79 37′ W., September 21-22, 1967.

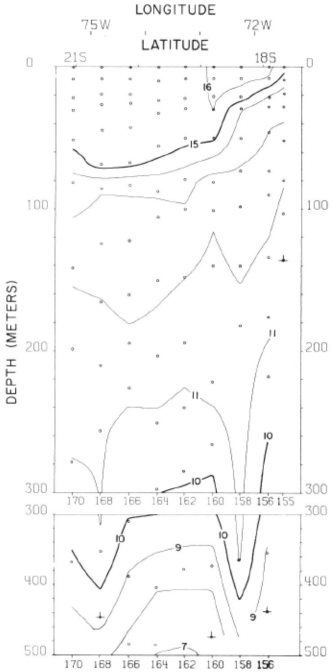
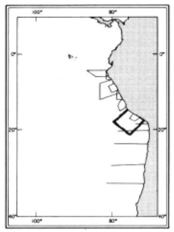


FIGURE U2-T-v21.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 21°03′ S., 75°19′ W., September 19-21, 1967.



U2-T-v23.

U2-T-v22.

U2-T-v21.

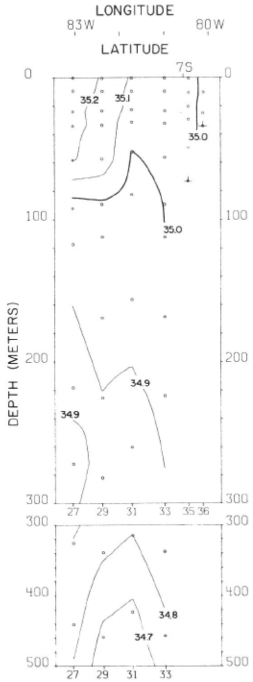


FIGURE U2-S-v3.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 7°48′ S., 83°06′ W. to the coast of Peru, August 28-29, 1967.

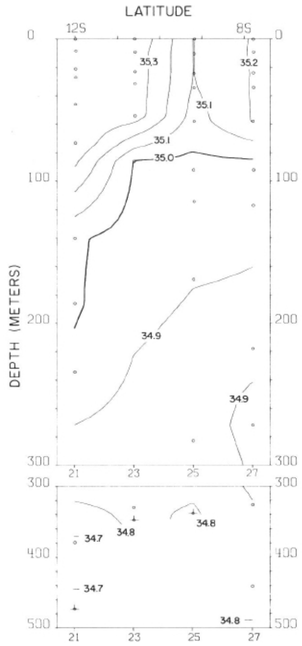


FIGURE U2-S-v2.—Vertical distribution of salinity (°/oo) north along 83°06′ W. from 12°00′ S. to 7°48′ S., August 27-28, 1967.

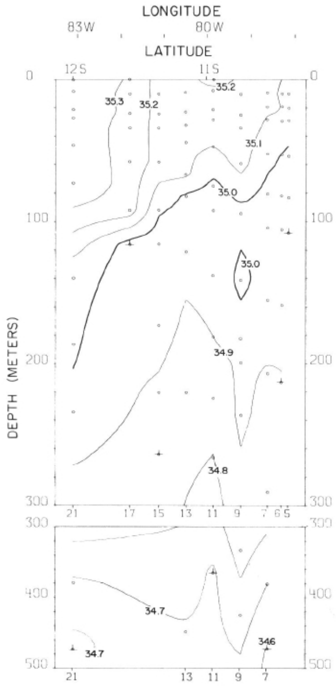
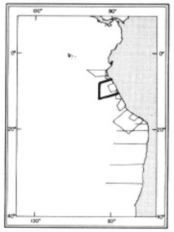


FIGURE U2-S-v1.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 12°00′ S., 83°06′ W., August 25-27, 1967.



U2-S-v3.

U2-S-v2.

U2-S-v1.

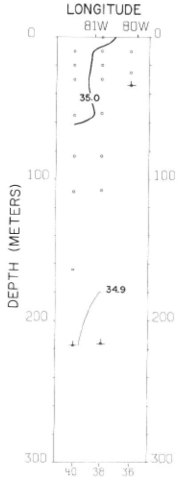


FIGURE U2-S-v4.—Vertical distribution of salinity (°/oo) along a section northwest from the coast of Peru to 6°35′ S., 81°30′ W., August 29-30, 1967.

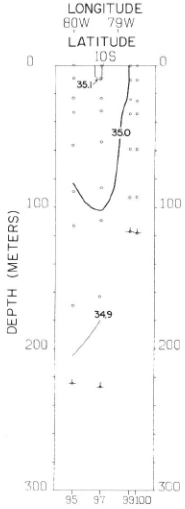


FIGURE U2-S-v11.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 10°17′ S., 80°00′ W. to the coast of Peru, September 6-7, 1967.

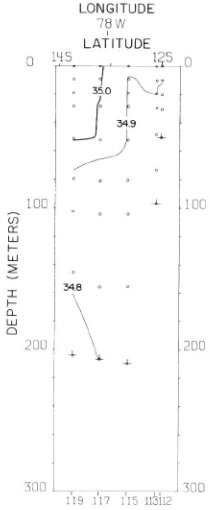


FIGURE U2-S-v14.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 13-43′ S., 78°28′ W., September 13-14, 1967.

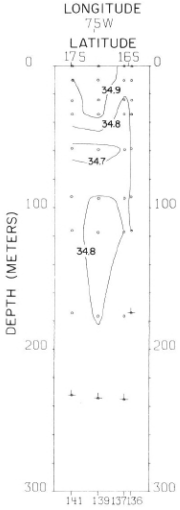


FIGURE U2-S-v17.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 16°59′ S., 75°22′ W., September 16, 1967.

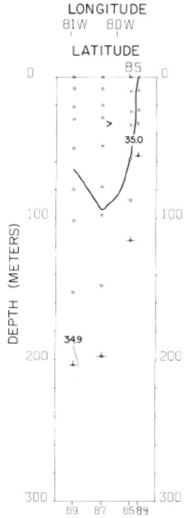


FIGURE U2-S-v9.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 8°33′ S., 80°55′ W., September 5-6, 1967.

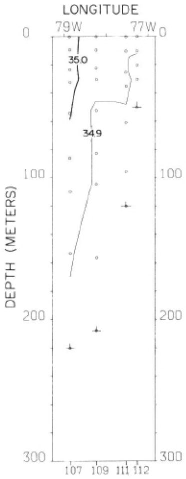


FIGURE U2-S-v13.—Vertical distribution of salinity (°/oo) east along 12°00′ S. from 78°52′ W. to the coast of Peru, September 8, 1967.

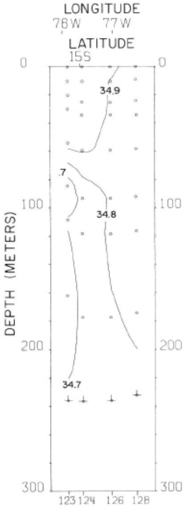


FIGURE U2-S-v16.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 15°09′ S., 77°53′ W. to the coast of Peru, September 14-15, 1967.

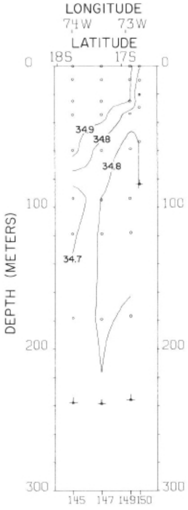
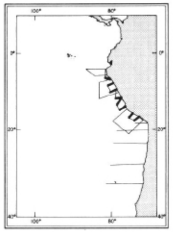


FIGURE U2-S-v19.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 17°47′ S., 74°00′ W. to the coast of Peru, September 16-17, 1967.



U2-S-v4.

U2-S-v11.

U2-S-v14.

U2-S-v17.

U2-S-v9.

U2-S-v13.

U2-S-v16.

U2-S-v19.

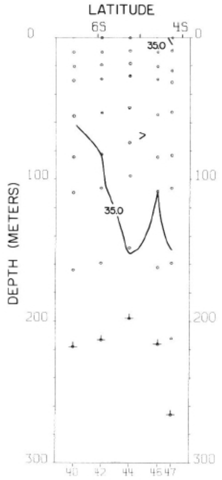


FIGURE U2-S-v5.—Vertical distribution of salinity (°/oo) north along the coast of Peru from 6°35′ S., to 4°15′ S., August 30-31, 1967.

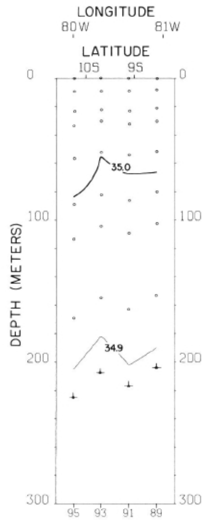


FIGURE U2-S-v10.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from 8°33′ S., 80°55′ W. to 10°17′ S., 80°00′ W., September 6, 1967.

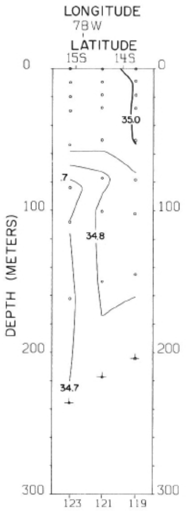


FIGURE U2-S-v15.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from 13°43′ S., 78°28′ W. to 15°09′ S., 77°53′ W., September 14, 1967.

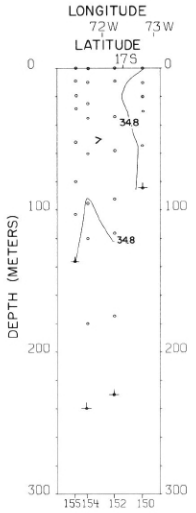


FIGURE U2-S-v20.—Vertical distribution of salinity (°/oo) southeast along the coast of Peru from 16°44′ S. to 17°42′ S., September 17-19, 1967.

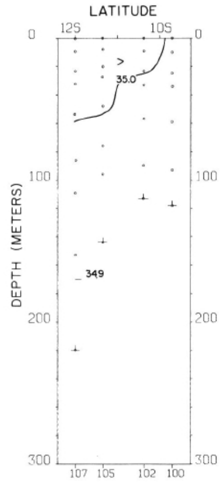


FIGURE U2-S-v12.—Vertical distribution of salinity (°/oo) south along 78°44′ W. from the coast of Peru to 11°59′ S., September 7-8, 1967.

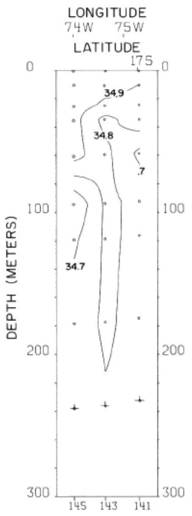
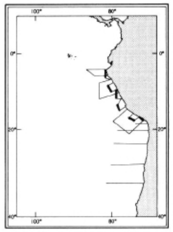


FIGURE U2-S-v18.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from 16°59′ S., 79°22′ W. to 17°47′ S., 74°00′ W., September 16, 1967.



U2-S-v5.

U2-S-v10.

U2-S-v15.

U2-S-v20.

U2-S-v12.

U2-S-v18.

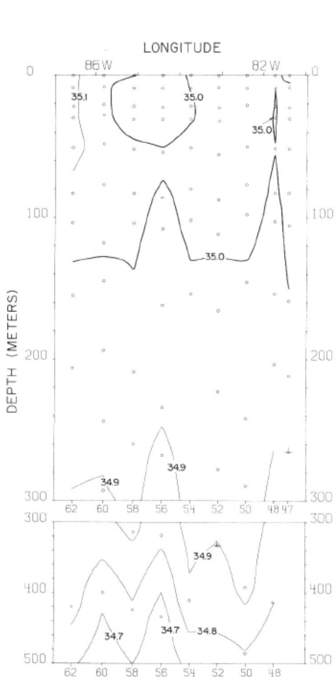


FIGURE U2-S-v6.—Vertical distribution of salinity (°/oo) west along 4°15′ S. from 81°24′ W. to 86°32′ W., August 31- September 2, 1967.

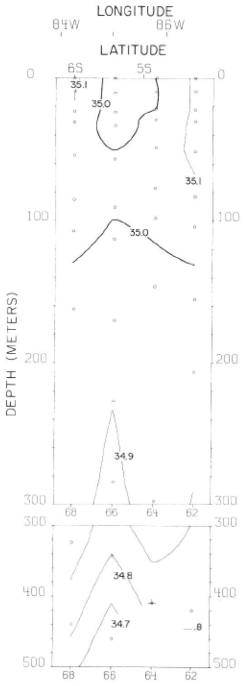


FIGURE U2-S-v7.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from 4°15′ S., 86°32′ W. to 6°00′ S., 84°16′ W., September 2-3, 1967.

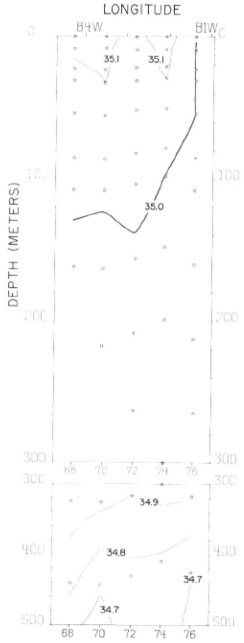
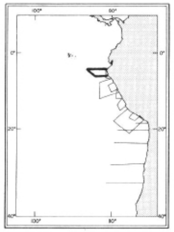


FIGURE U2-S-v8.—Vertical distribution of salinity (°/oo) east along 5°55′ S. from 84°16′ W. to the coast of Peru, September 3-4, 1967.



U2-S-v6.

U2-S-v7.

U2-S-v8.

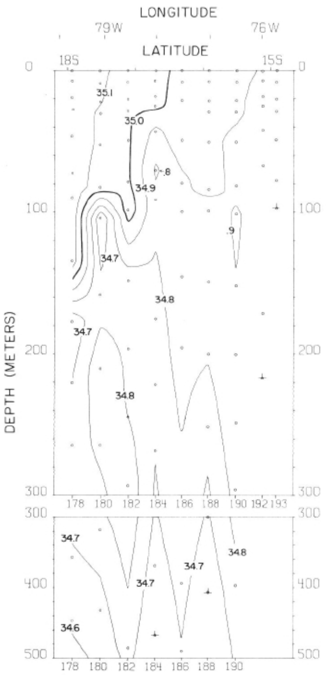


FIGURE U2-S-v23.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 17°56′ S., 79°37′ W. to the coast of Peru, September 22-24, 1967.

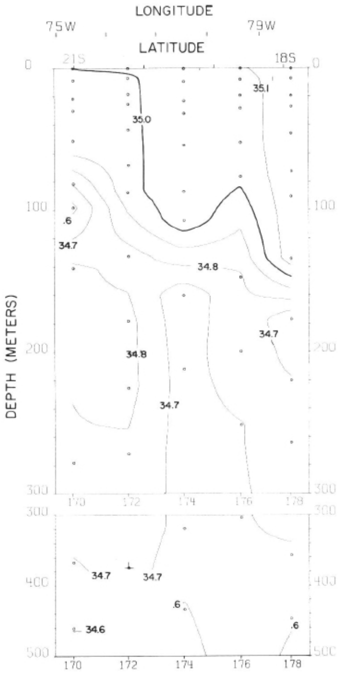


FIGURE U2-S-v22.—Vertical distribution of salinity (°/oo) along a southeast-northwest section from 21°03′ S., 75°19′ W. to 17°56′ S., 79°37′ W., September 21-22, 1967.

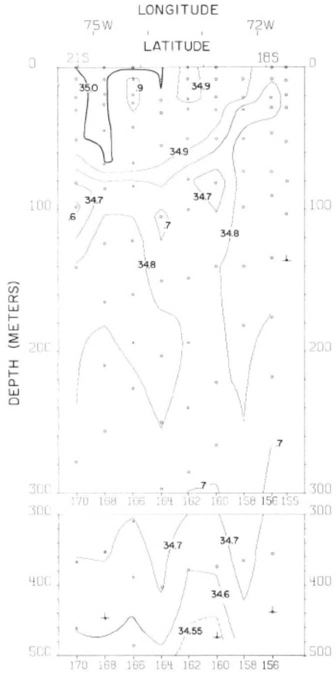
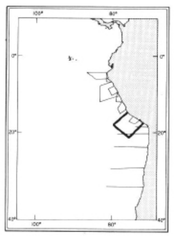


FIGURE U2-S-v21.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 21°03′ S., 75°19′ W., September 19-21, 1967.



U2-S-v23.

U2-S-v22.

U2-S-v21.

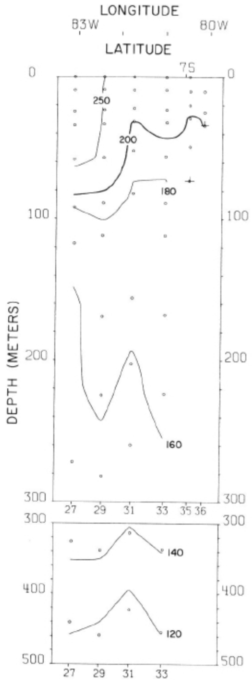


FIGURE U2-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 7°48′ S., 83°06′ W. to the coast of Peru, August 28-29, 1967.

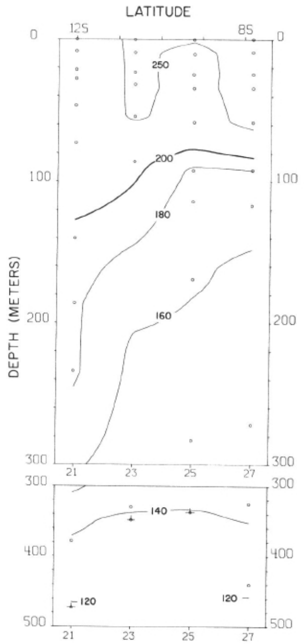


FIGURE U2-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) north along 83°06′ W. from 12°00′ S. to 7°48′ S., August 27-28, 1967.

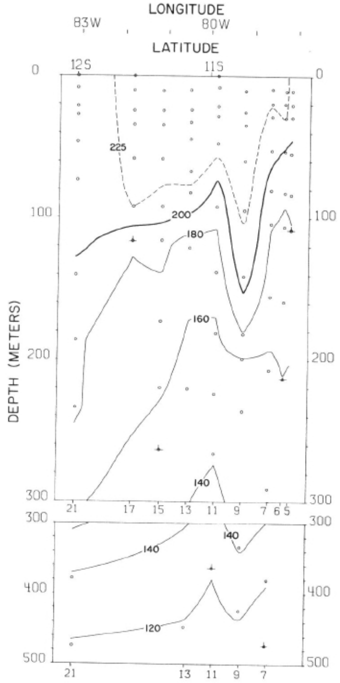
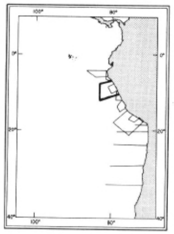


FIGURE U2-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 12°00′ S., 83°06′ W., August 25-27, 1967.



U2-δ-v3.

U2-δ-v2.

U2-δ-v1.

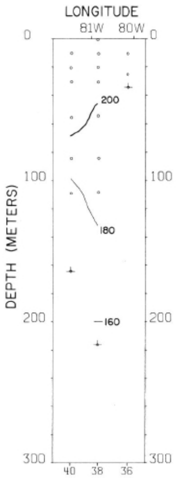


FIGURE U2-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section northwest from the coast of Peru to 6°35′ S., 81°30′ W., August 29-30, 1967.

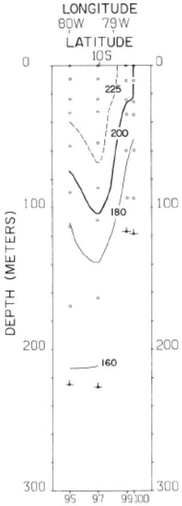


FIGURE U2-δ-v11.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 10°17′ S., 80°00′ W. to the coast of Peru, September 6-7, 1967.

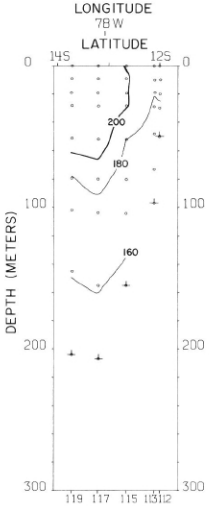


FIGURE U2-δ-v14.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 13°43′ S., 78°28′ W., September 13-14, 1967.

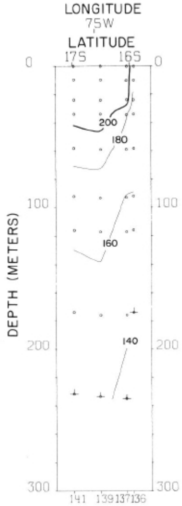


FIGURE U2-δ-v17.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 16°59′ S., 75°22′ W., September 16, 1967.

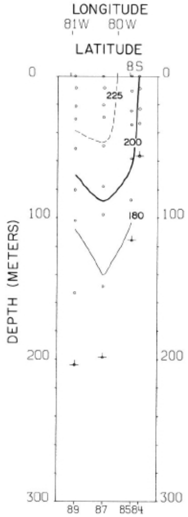


FIGURE U2-δ-v9.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 8°33′ S., 80°55′ W., September 5-6, 1967.

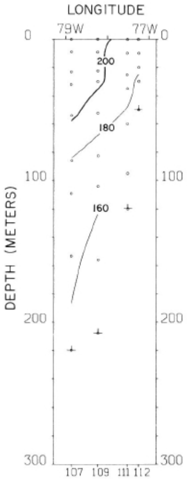


FIGURE U2-δ-v13.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 12°00′ S., from 78°52′ W. to the coast of Peru, September 8, 1967.

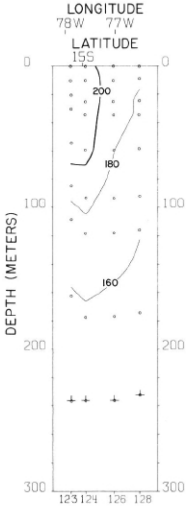


FIGURE U2-δ-v16.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 15°09′ S., 77°53′ W. to the coast of Peru, September 14-15, 1967.

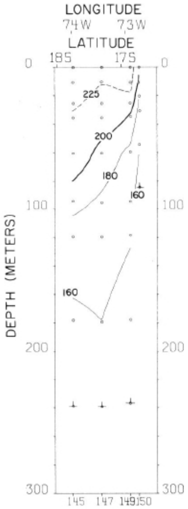
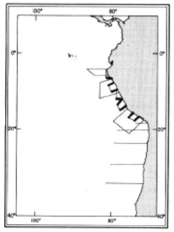


FIGURE U2-δ-v19.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 17°47′ S., 74°00′ W. to the coast of Peru, September 16-17, 1967.



U2-δ-v4.

U2-δ-v11.

U2-δ-v14.

U2-δ-v17.

U2-δ-v9.

U2-δ-v13.

U2-δ-v16.

U2-δ-v19.

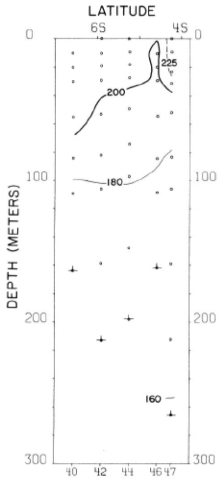


FIGURE U2-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) north along the coast of Peru from 6°35′ S. to 4°15′ S., August 30-31, 1967.

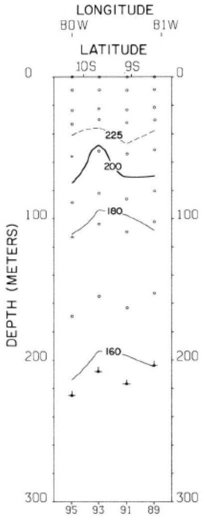


FIGURE U2-δ-v10.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from 8°33′ S., 80°55′ W. to 10°17′ S., 80°00′ W., September 6, 1967.

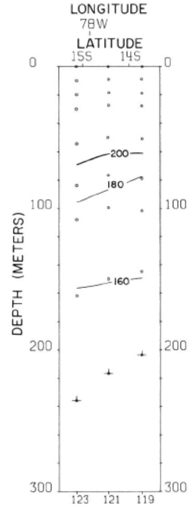


FIGURE U2-δ-v15.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from 13°43′ S., 78°28′ W. to 15°09′ S., 77°53′ W., September 14, 1967.

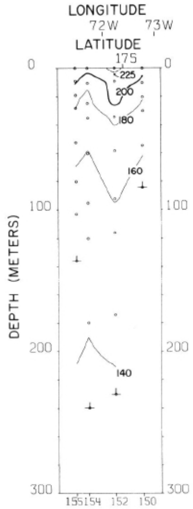


FIGURE U2-δ-v20.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) southeast along the coast of Peru from 16°44′ S., to 17°42′ S., September 17-19, 1967.

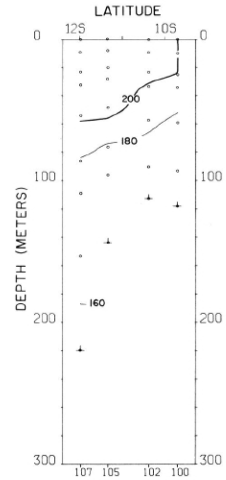


FIGURE U2-δ-v12.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) south along 78°44′ W. from the coast of Peru to 11°59′ S., September 7-8, 1967.

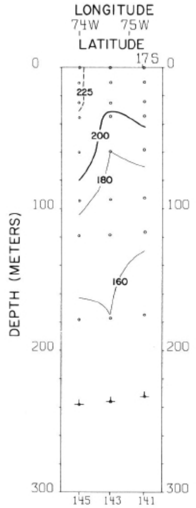
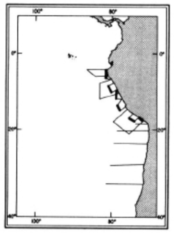


FIGURE U2-δ-v18.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from 16°59′ S., 79°22′ W. to 17°47′ S., 74°00′ W., September 16, 1967.



U2-δ-v5.

U2-δ-v10.

U2-δ-v15.

U2-δ-v20.

U2-δ-v12.

U2-δ-v18.

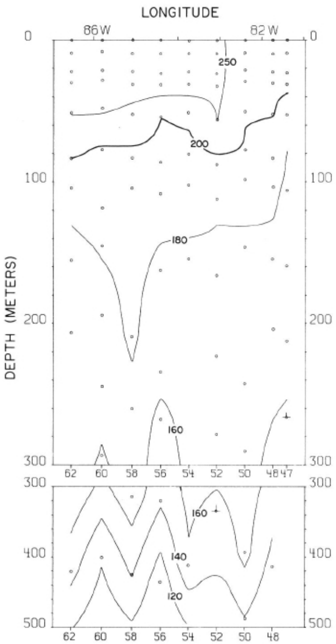


FIGURE U2-δ-v6.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 4°15′ S. from 81°24′ W. to 86°32′ W., August 31-September 2, 1967.

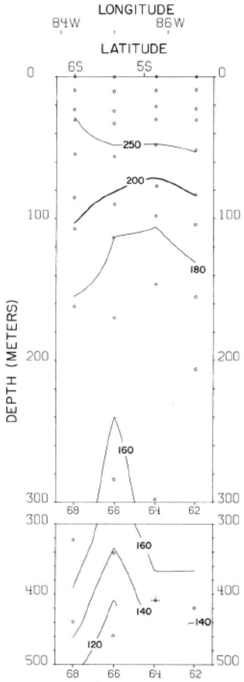


FIGURE U2-δ-v7.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from 4°15′ S., 86 32′ W. to 6°00′ S., 84°16′ W., September 2-3, 1967.

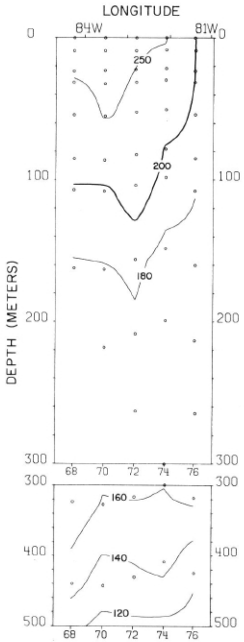
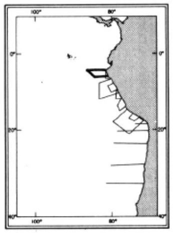


FIGURE U2-δ-v8.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 5°55′ S. from 84°16′ W. to the coast of Peru, September 3-4, 1967.



U2-δ-v6.

U2-δ-v7.

U2-δ-v8.

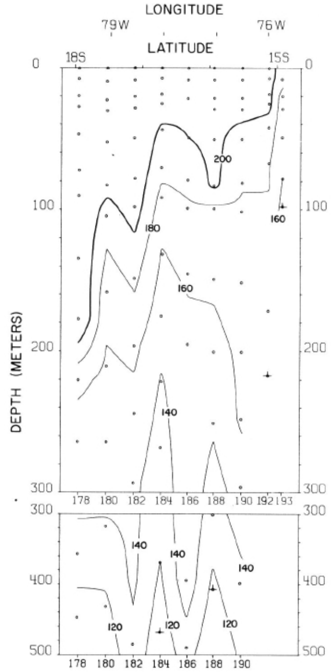


FIGURE U2-δ-v23.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 17°56′ S., 79°37′ W. to the coast of Peru, September 22-24, 1967.

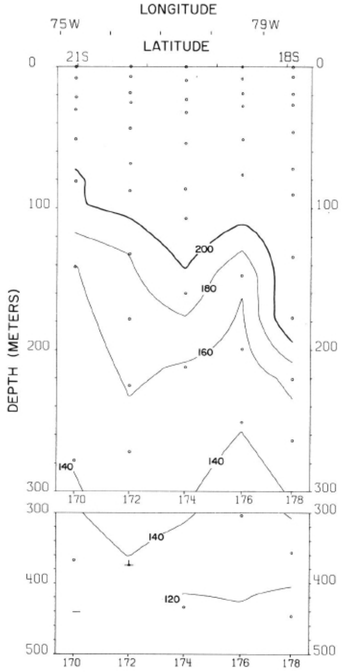


FIGURE U2-δ-v22.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southeast-northwest section from 21°03′ S., 75°19′ W. to 17°56′ S., 79°37′ W., September 21-22, 1967.

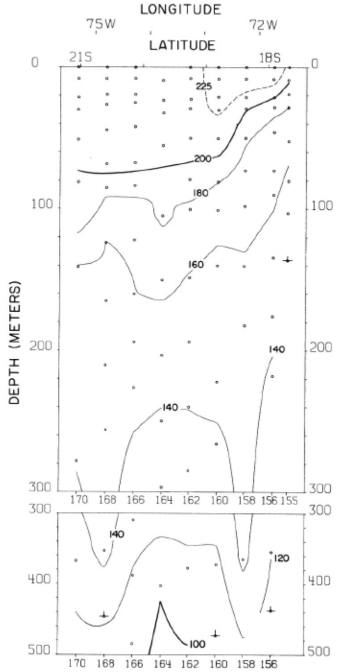
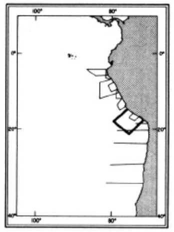


FIGURE U2-δ-v21.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 21°03′ S., 75°19′ W., September 19-21, 1967.



U2-δ-v23.

U2-δ-v22.

U2-δ-v21.

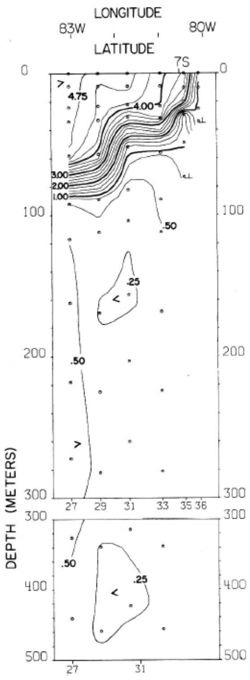


FIGURE U2-O₂-v3.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 7°48′ S., 83°06′ W. to the coast of Peru, August 28-29, 1967.

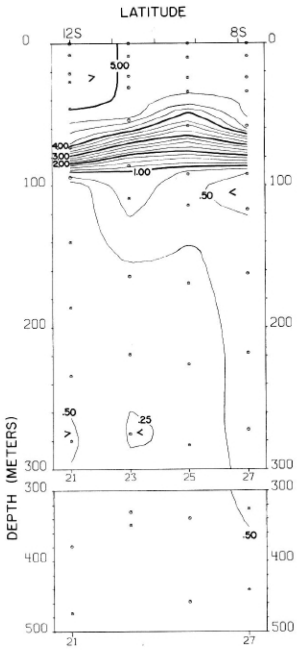


FIGURE U2-O₂-v2.—Vertical distribution of oxygen (ml./l.) north along 83°06′ W. from 12°00′ S. to 7°48′ S., August 27-28, 1967.

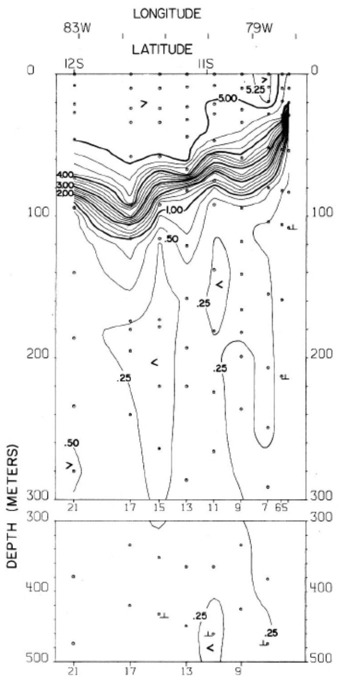
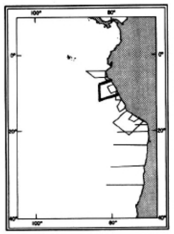


FIGURE U2-O₂-v1.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 12°00′ S., 83°06′ W., August 25-27, 1967.



U2-O₂-v3.

U2-O₂-v2.

U2-O₂-v1.

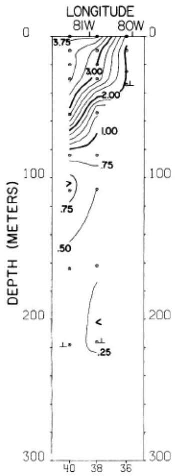


FIGURE U2-O₂-v4.—Vertical distribution of oxygen (ml./l.) along a section northwest from the coast of Peru to 6°35′ S., 81°30′ W., August 29-30, 1967.

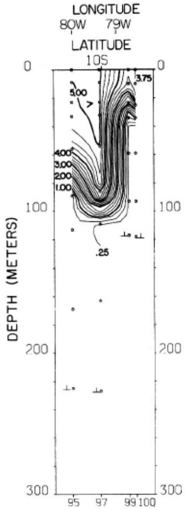


FIGURE U2-O₂-v11.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 10°17′ S., 80°00′ W. to the coast of Peru, September 6-7, 1967.

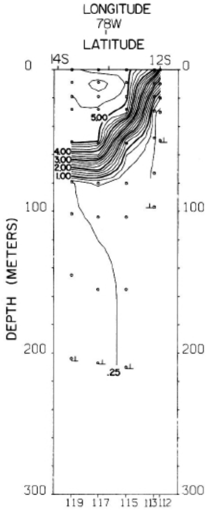


FIGURE U2-O₂-v14.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 13°43′ S., 78°28′ W., September 13-14, 1967.

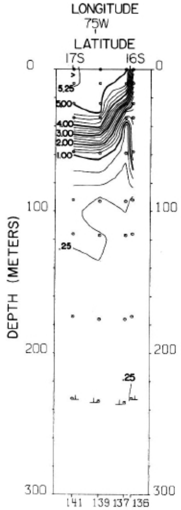


FIGURE U2-O₂-v17.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 16°59′ S., 75°22′ W., September 16, 1967.

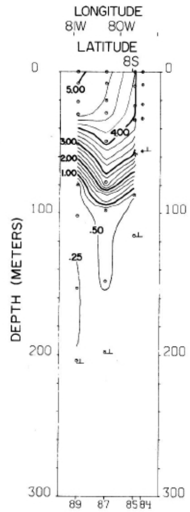


FIGURE U2-O₂-v9.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 8°33′ S., 80°55′ W., September 5-6, 1967.

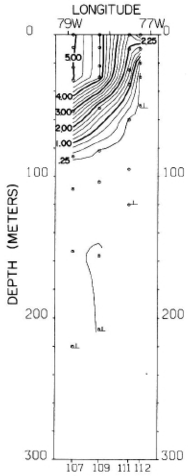


FIGURE U2-O₂-v13.—Vertical distribution of oxygen (ml./l.) east along 12°00′ S. from 78°52′ W. to the coast of Peru, September 8, 1967.

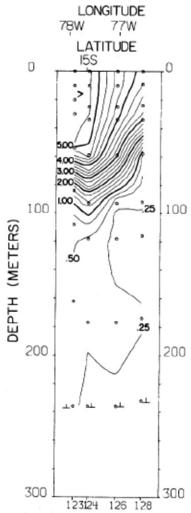


FIGURE U2-O₂-v16.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 15°09′ S., 77°53′ W. to the coast of Peru, September 14-15, 1967.

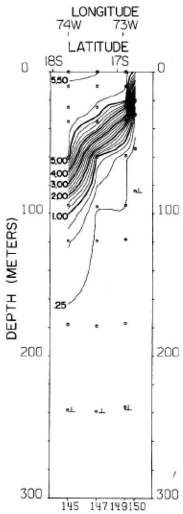
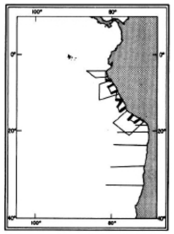


FIGURE U2-O₂-v19.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 17°47′ S., 74°00′ W. to the coast of Peru, September 16-17, 1967.



U2-O₂-v4.
U2-O₂-v11.
U2-O₂-v14.
U2-O₂-v17.
U2-O₂-v9.
U2-O₂-v13.
U2-O₂-v16.
U2-O₂-v19.

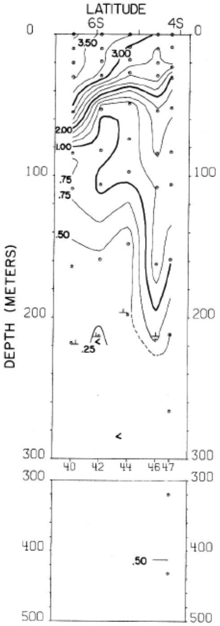


FIGURE U2-O₂-v5.—Vertical distribution of oxygen (ml./l.) north along the coast of Peru from 6°35′ S. to 4°15′ S., August 30-31, 1967.

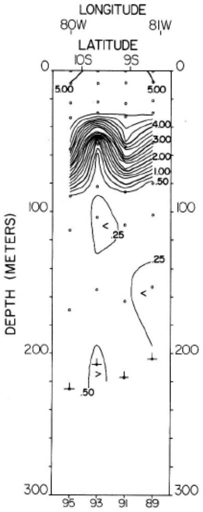


FIGURE U2-O₂-v10.—Vertical distribution of oxygen (ml./l.) along a northwest-southeast section from 8°33′ S., 80°55′ W. to 10°17′ S., 80°00′ W., September 6, 1967.

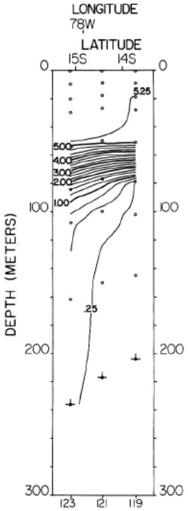


FIGURE U2-O₂-v15.—Vertical distribution of oxygen (ml./l.) along a northwest-southeast section from 13°43′ S., 78°28′ W. to 15°09′ S., 77°53′ W., September 14, 1967.

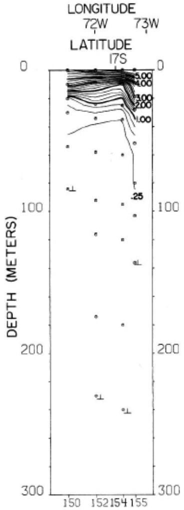


FIGURE U2-O₂-v20.—Vertical distribution of oxygen (ml./l.) southeast along the coast of Peru from 16°44′ S. to 17°42′ S., September 17-19, 1967.

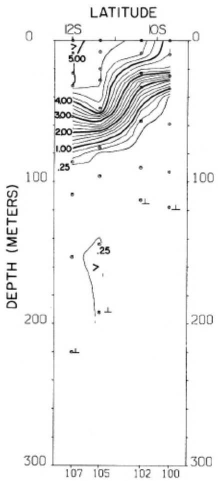


FIGURE U2-O₂-v12.—Vertical distribution of oxygen (ml./l.) south along 78°44′ W. from the coast of Peru to 11°59′ S., September 7-8, 1967.

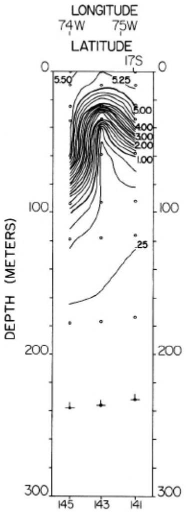
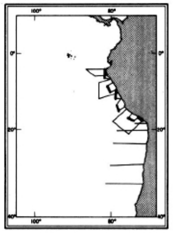


FIGURE U2-O₂-v18.—Vertical distribution of oxygen (ml./l.) along a northwest-southeast section from 16°59′ S., 79°22′ W. to 17°47′ S., 74°00′ W., September 16, 1967.



U2-O₂-v5.

U2-O₂-v10.

U2-O₂-v15.

U2-O₂-v20.

U2-O₂-v12.

U2-O₂-v18.

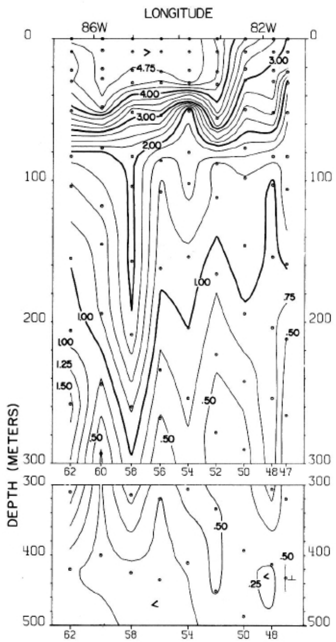


FIGURE U2-O_2-v6.—Vertical distribution of oxygen (ml./l.) west along 4°15′ S. from 81°24′ W. to 86°32′ W., August 31-September 2, 1967.

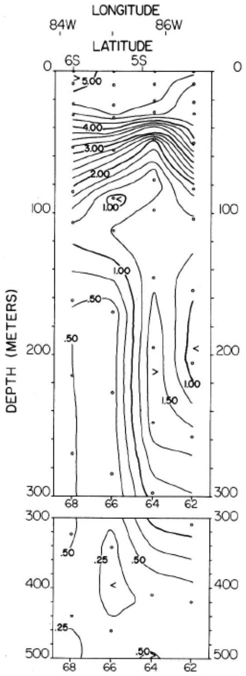


FIGURE U2-O_2-v7.—Vertical distribution of oxygen (ml./l.) along a northwest-southeast section from 4°15′ S., 86°32′ W. to 6°00′ S., 84°16′ W., September 2-3, 1967.

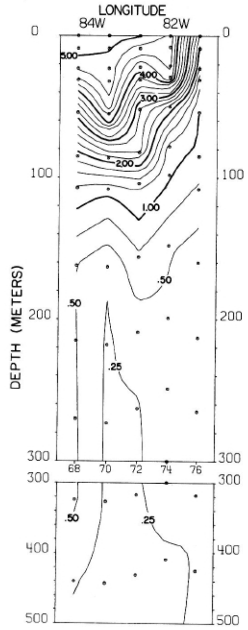
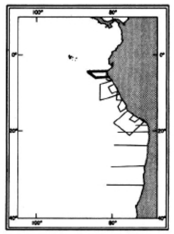


FIGURE U2-O_2-v8.—Vertical distribution of oxygen (ml./l.) east along 5°55′ S. from 84°16′ W. to the coast of Peru, September 3-4, 1967.



U2-O_2-v6.

U2-O_2-v7.

U2-O_2-v8.

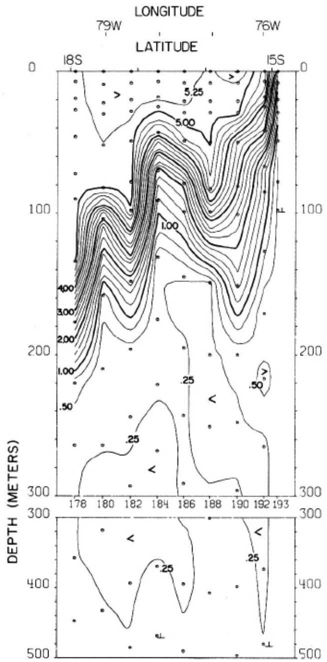


FIGURE U2-O₂-v23.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 17°56′ S., 79°37′ W. to the coast of Peru, September 22-24, 1967.

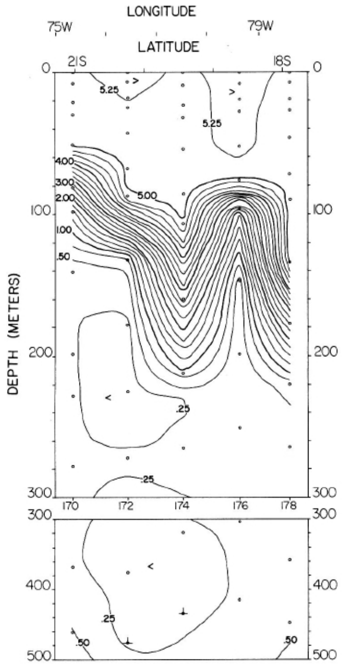


FIGURE U2-O₂-v22.—Vertical distribution of oxygen (ml./l.) along a southeast-northwest section from 21°03′ S., 75°19′ W. to 17°56′ S., 79°37′ W., September 21-22, 1967.

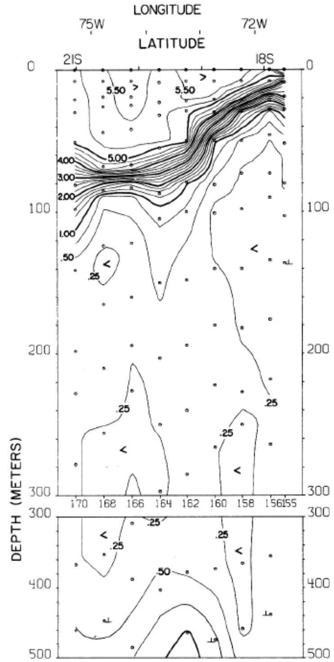
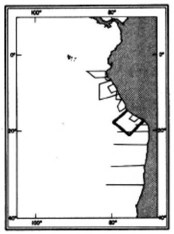


FIGURE U2-O₂-v21.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 21°03′ S., 75°19′ W., September 19-21, 1967.



U2-O₂-v23.

U2-O₂-v22.

U2-O₂-v21.

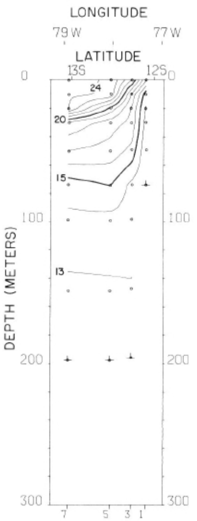


FIGURE U3-T-v1.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

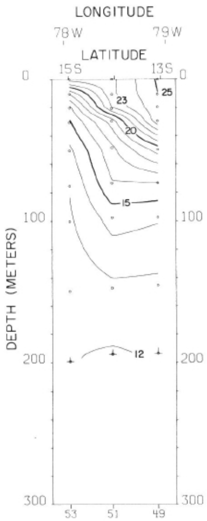


FIGURE U3-T-v7.—Vertical distribution of temperature (°C.) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

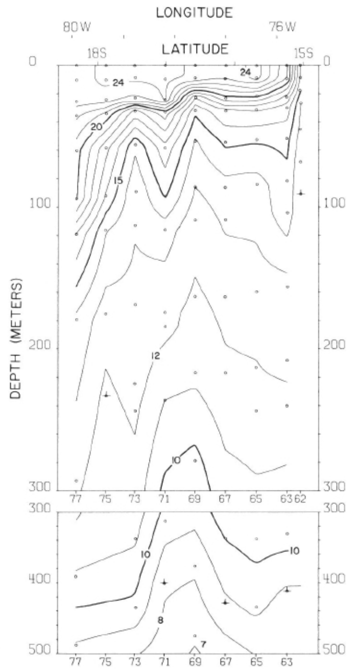


FIGURE U3-T-v9.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

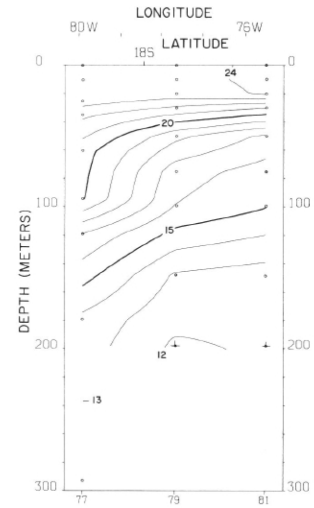


FIGURE U3-T-v10.—Vertical distribution of temperature (°C.) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

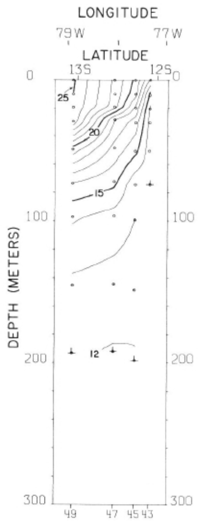


FIGURE U3-T-v6.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

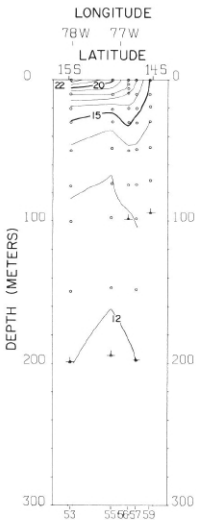
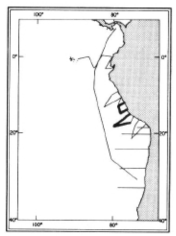


FIGURE U3-T-v8.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.



U3-T-v1.

U3-T-v7.

U3-T-v9.

U3-T-v10.

U3-T-v6.

U3-T-v8.

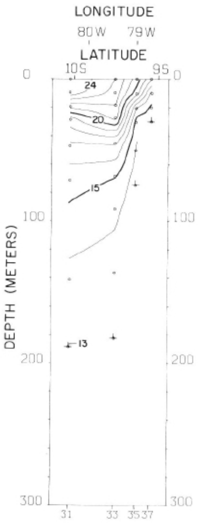


FIGURE U3-T-v5.—Vertical distribution of temperature Z°C.) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

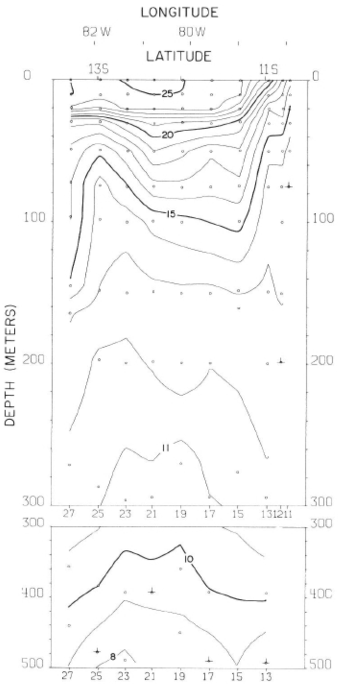


FIGURE U3-T-v3.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

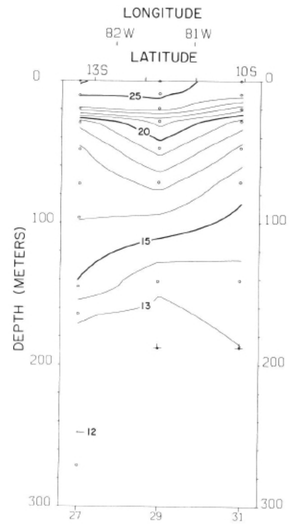


FIGURE U3-T-v4.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

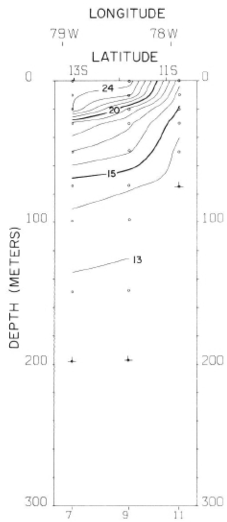
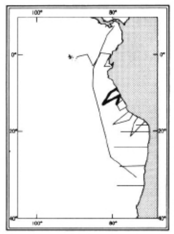


FIGURE U3-T-v2.—Vertical distribution of temperature (°C.) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.



U3-T-v5.

U3-T-v3.

U3-T-v4.

U3-T-v2.

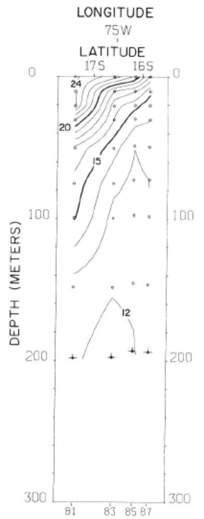


FIGURE U3-T-v11.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

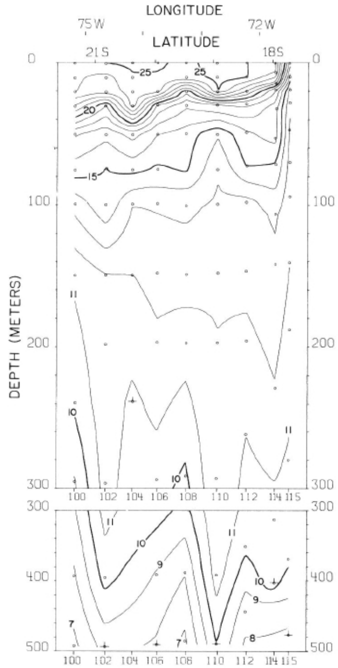


FIGURE U3-T-v14.—Vertical distribution of temperature (°C.) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

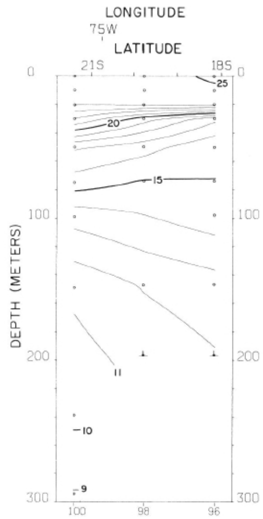


FIGURE U3-T-v13.—Vertical distribution of temperature (°C.) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.

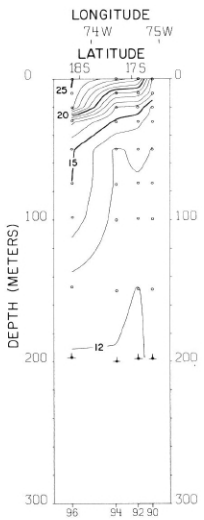
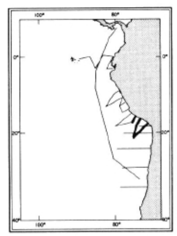


FIGURE U3-T-v12.—Vertical distribution of temperature (°C.) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.



U3-T-v11.

U3-T-v14.

U3-T-v13.

U3-T-v12.

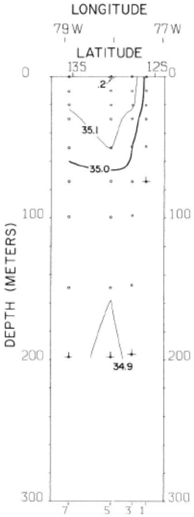


FIGURE U3-S-v1.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

U3-S-v1

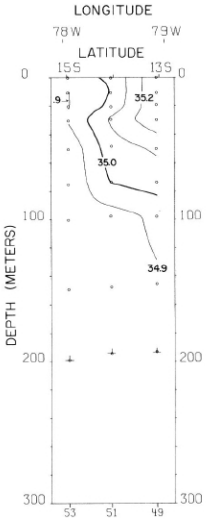


FIGURE U3-S-v7.—Vertical distribution of salinity (°/oo) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

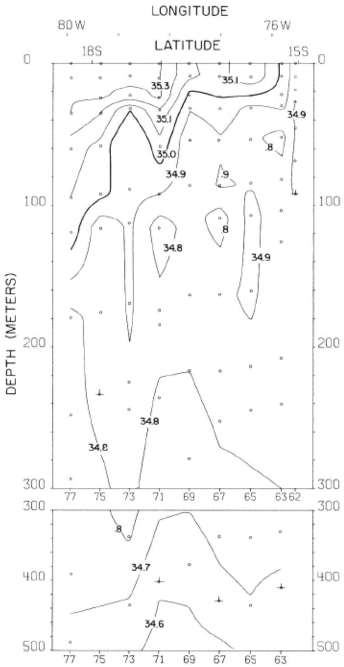


FIGURE U3-S-v9.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

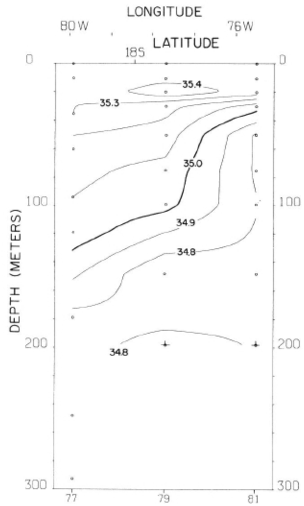


FIGURE U3-S-v10.—Vertical distribution of salinity (°/oo) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

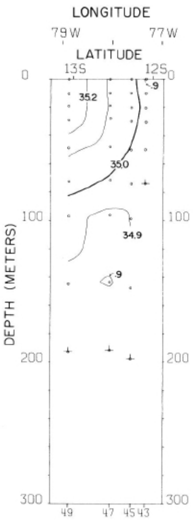


FIGURE U3-S-v6.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

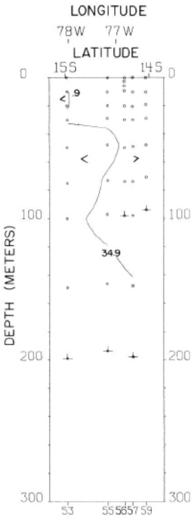
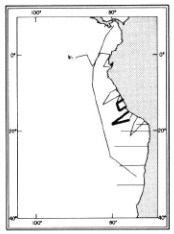


FIGURE U3-S-v8.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.



U3-S-v1.

U3-S-v7.

U3-S-v9.

U3-S-v10.

U3-S-v6.

U3-S-v8.

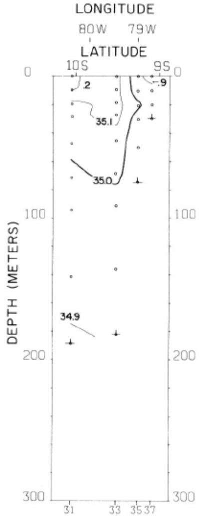


FIGURE U3-S-v5.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

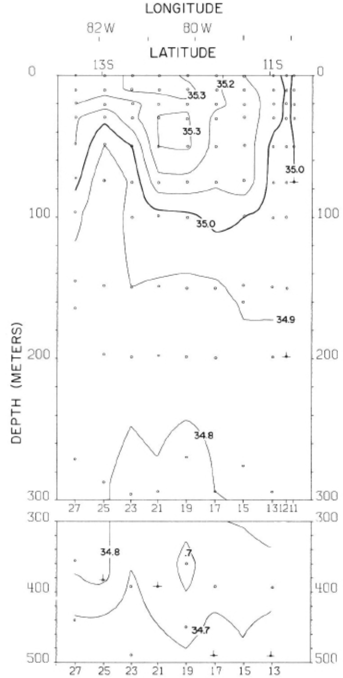


FIGURE U3-S-v3.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

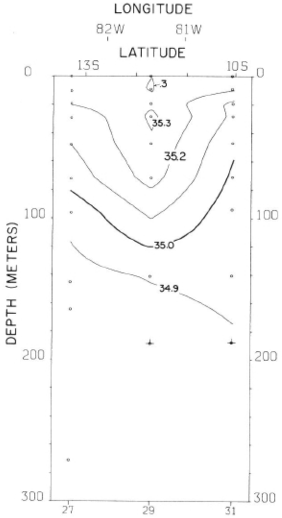


FIGURE U3-S-v4.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

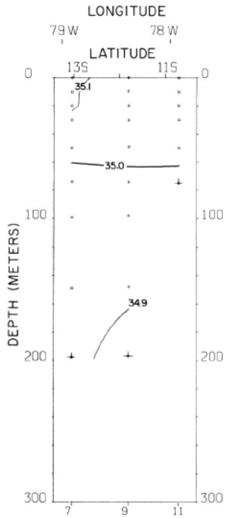
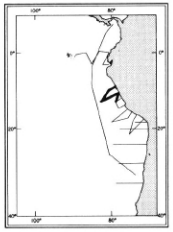


FIGURE U3-S-v2.—Vertical distribution of salinity (°/oo) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.



U3-S-v5.

U3-S-v3.

U3-S-v4.

U3-S-v2.

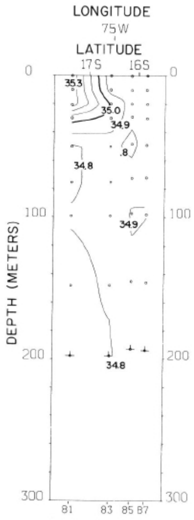


FIGURE U3-S-v11.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

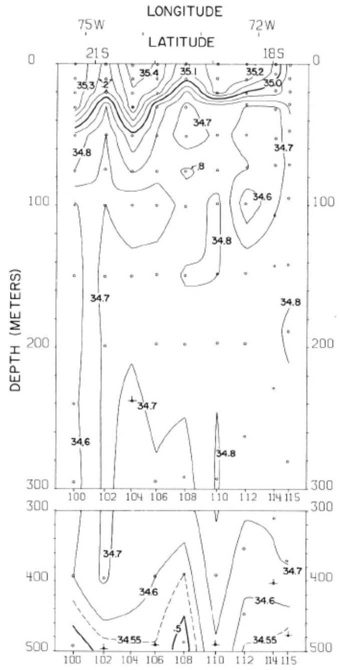


FIGURE U3-S-v14.—Vertical distribution of salinity (°/oo) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

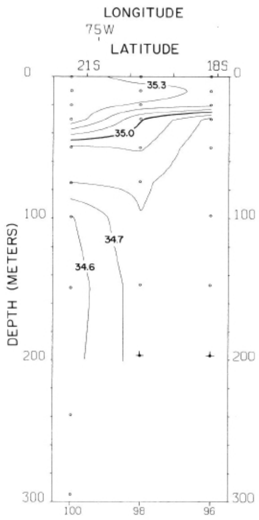


FIGURE U3-S-v13.—Vertical distribution of salinity (°/oo) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.

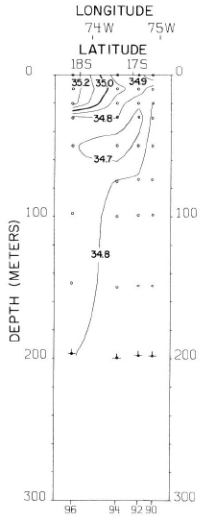
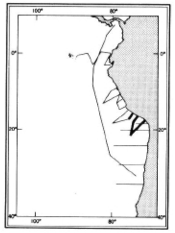


FIGURE U3-S-v12.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.



U3-S-v11.

U3-S-v14.

U3-S-v13.

U3-S-v12.

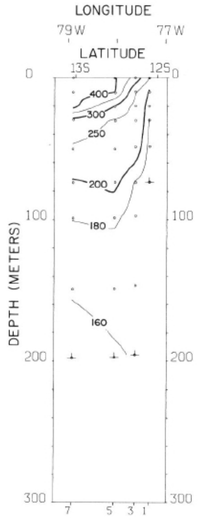


FIGURE U3-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

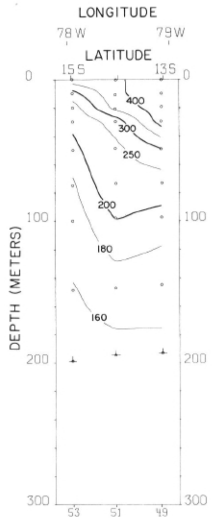


FIGURE U3-δ-v7.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

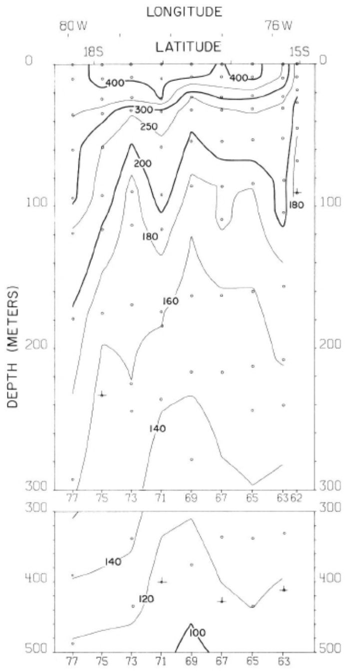


FIGURE U3-δ-v9.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

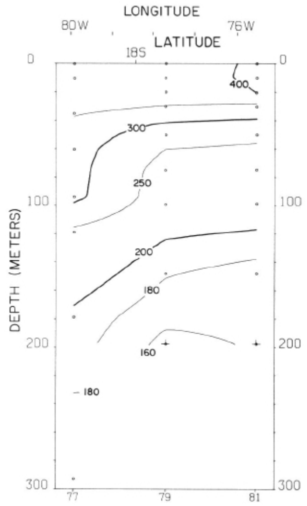


FIGURE U3-δ-v10.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

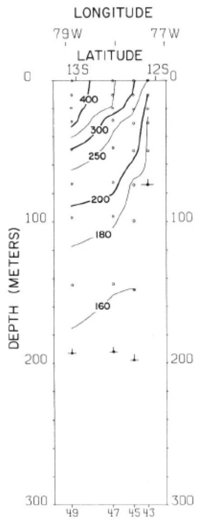


FIGURE U3-δ-v6.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

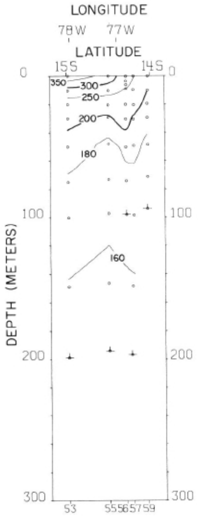
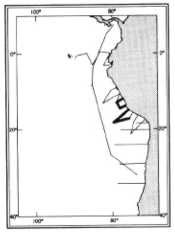


FIGURE U3-δ-v8.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.



U3-δ-v1.

U3-δ-v7.

U3-δ-v9.

U3-δ-v10.

U3-δ-v6.

U3-δ-v8.

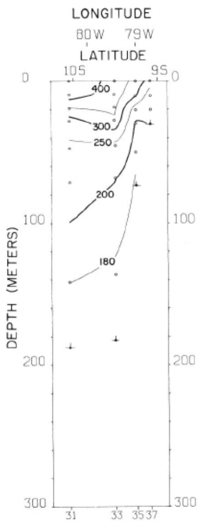


FIGURE U3-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

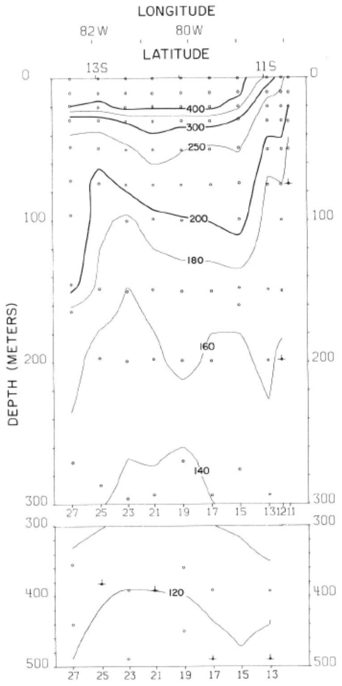


FIGURE U3-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

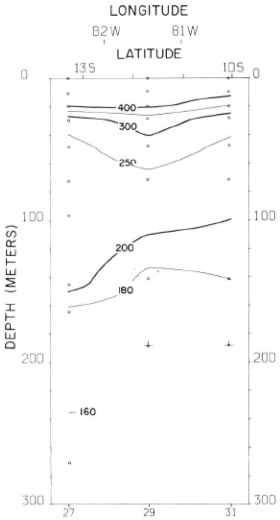


FIGURE U3-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

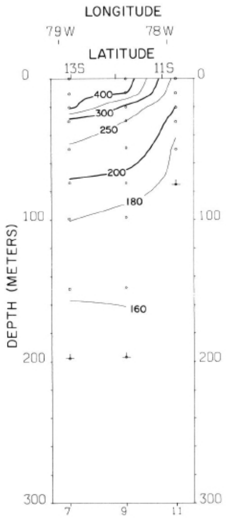
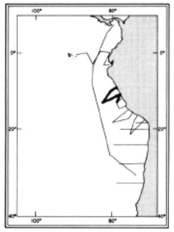


FIGURE U3-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.



U3-δ-v5.

U3-δ-v3.

U3-δ-v4.

U3-δ-v2.

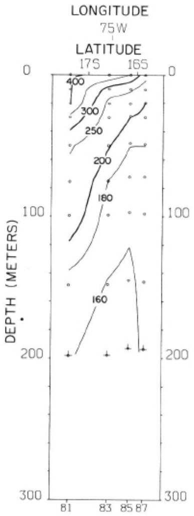


FIGURE U3-δ-v11.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

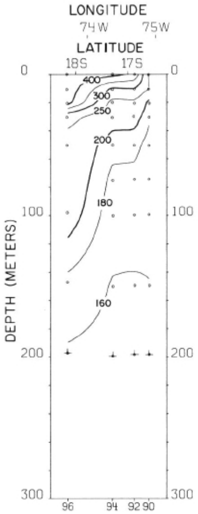


FIGURE U3-δ-v12.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.

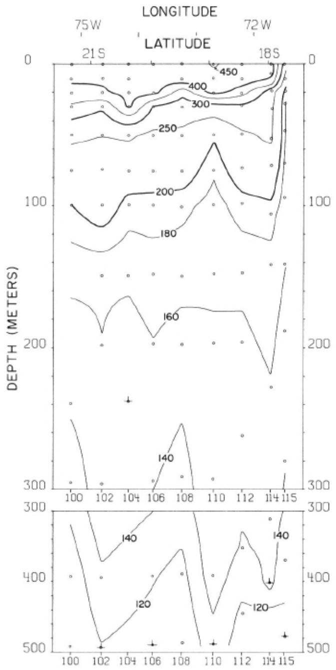


FIGURE U3-δ-v14.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

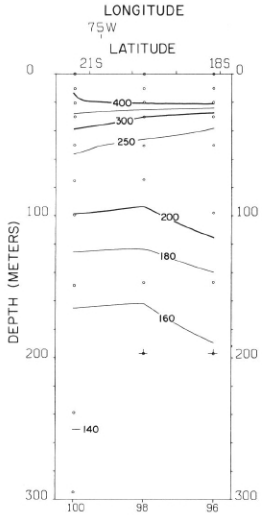
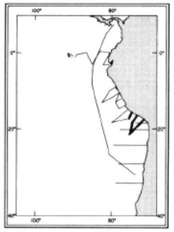


FIGURE U3-δ-v13.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.



U3-δ-v11.

U3-δ-v14.

U3-δ-v13.

U3-δ-v12.

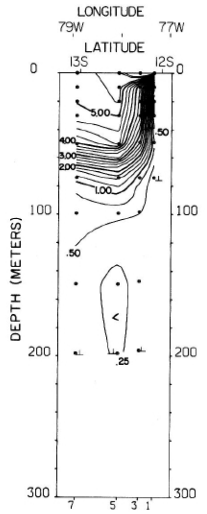


FIGURE U3-O_2-v1.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 13°03′ S., 78°56′ W., February 6-7, 1968.

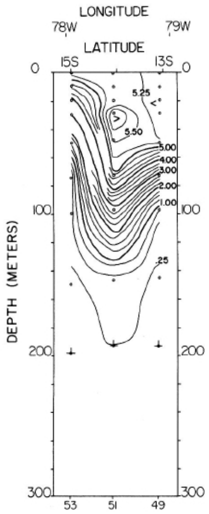


FIGURE U3-O_2-v7.—Vertical distribution of oxygen (ml./l.) along a northwest-southeast section from 13°04′ S., 78°54′ W. to 14°58′ S., 78°03′ W., February 24-25, 1968.

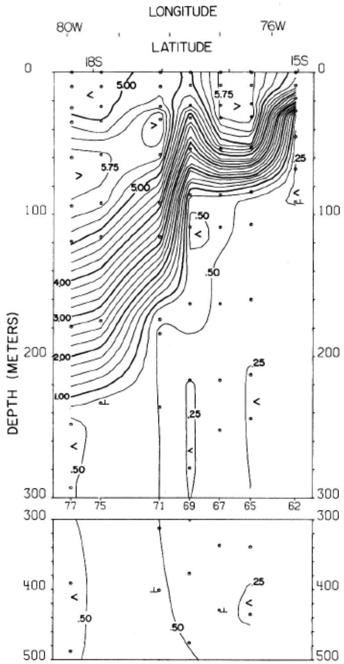


FIGURE U3-O_2-v9.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 18°18′ S., 79°56′ W., February 26-28, 1968.

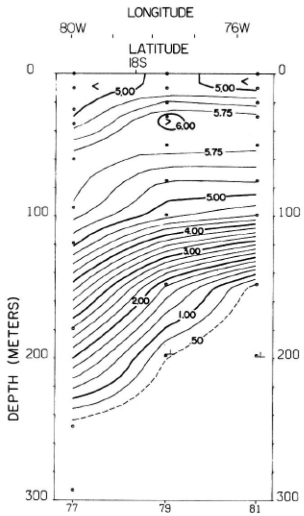


FIGURE U3-O_2-v10.—Vertical distribution of oxygen (ml./l.) along a section from 18°18′ S., 79°56′ W. to 17°22′ S., 75°37′ W., February 28-29, 1968.

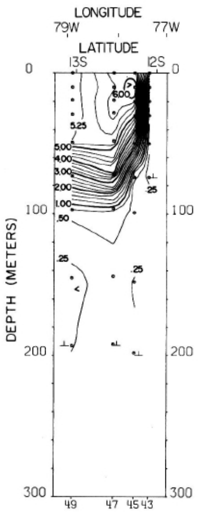


FIGURE U3-O_2-v6.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 13°04′ S., 78°54′ W., February 24, 1968.

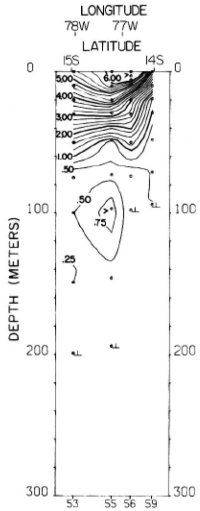
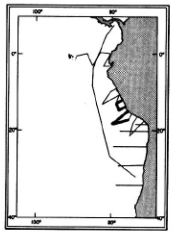


FIGURE U3-O_2-v8.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 14°58′ S., 78°03′ W. to the coast of Peru, February 25, 1968.



U3-O_2-v1.

U3-O_2-v7.

U3-O_2-v9.

U3-O_2-v10.

U3-O_2-v6.

U3-O_2-v8.

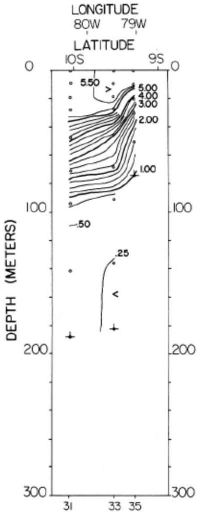


FIGURE U3-O₂-v5.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 10°03′ S., 80°23′ W. to the coast of Peru, February 11-12, 1968.

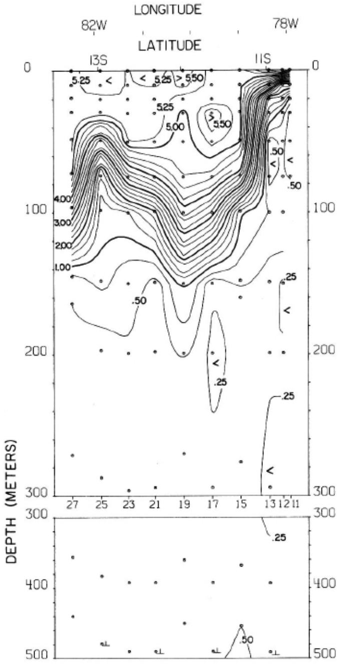


FIGURE U3-O₂-v3.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 13°18′ S., 82°29′ W., February 8-10, 1968.

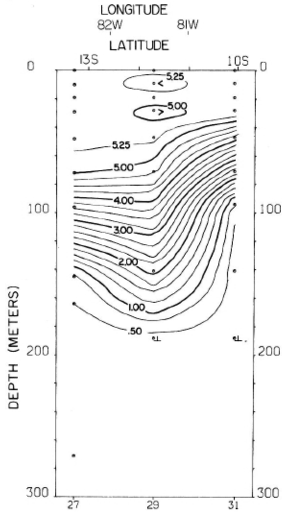


FIGURE U3-O₂-v4.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 13°18′ S., 82°29′ W. to 10°03′ S., 80°23′ W., February 10-11, 1968.

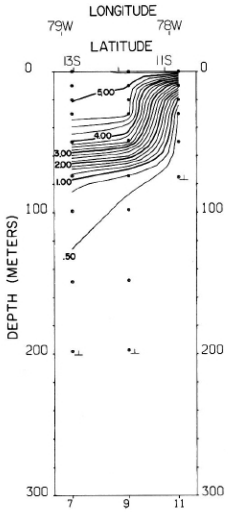
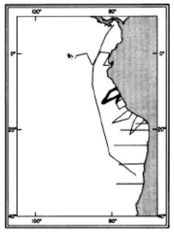


FIGURE U3-O₂-v2.—Vertical distribution of oxygen (ml./l.) along a section from 13°03′ S., 78°56′ W. to 11°54′ S., 78°33′ W., February 7, 1968.



U3-O₂-v5.

U3-O₂-v3.

U3-O₂-v4.

U3-O₂-v2.

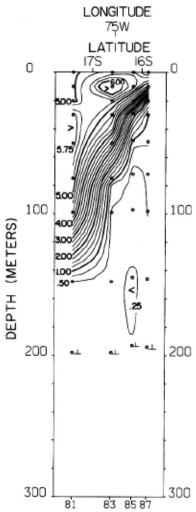


FIGURE U3-O₂-v11.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 17°22′ S., 75°37′ W. to the coast of Peru, February 29, 1968.

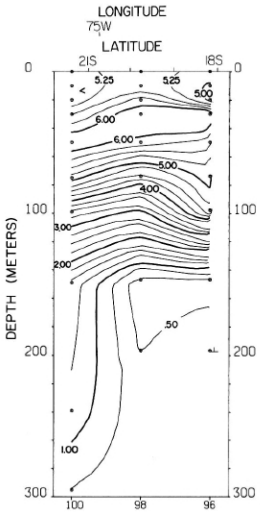


FIGURE U3-O₂-v12.—Vertical distribution of oxygen (ml./l.) along a northeast-southwest section from the coast of Peru to 18°09′ S., 74°18′ W., March 1-2, 1968.

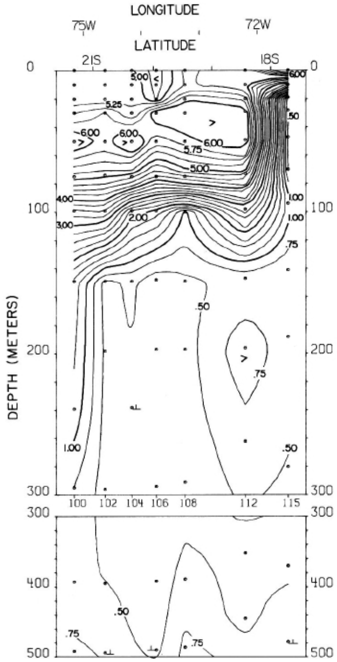


FIGURE U3-O₂-v14.—Vertical distribution of oxygen (ml./l.) along a southwest-northeast section from 21°22′ S., 75°10′ W. to the coast of Peru, March 3-4, 1968.

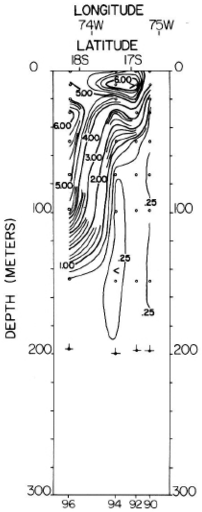
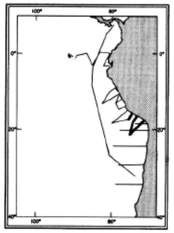


FIGURE U3-O₂-v13.—Vertical distribution of oxygen (ml./l.) along a section from 18°09′ S., 74°18′ W. to 21°22′ S., 75°10′ W., March 2-3, 1968.



U3-O₂-v11.

U3-O₂-v14.

U3-O₂-v13.

U3-O₂-v12.

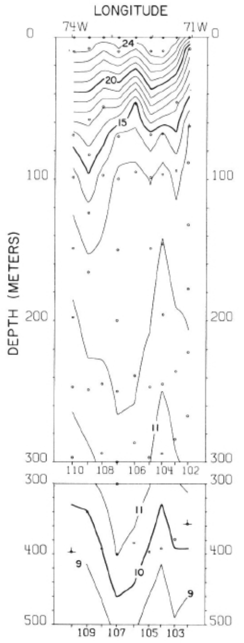


FIGURE Y5-T-v1.—Vertical distribution of temperature (°C.) west along 18° S. from the coast of Chile to 73°57′ W., February-March 1967.

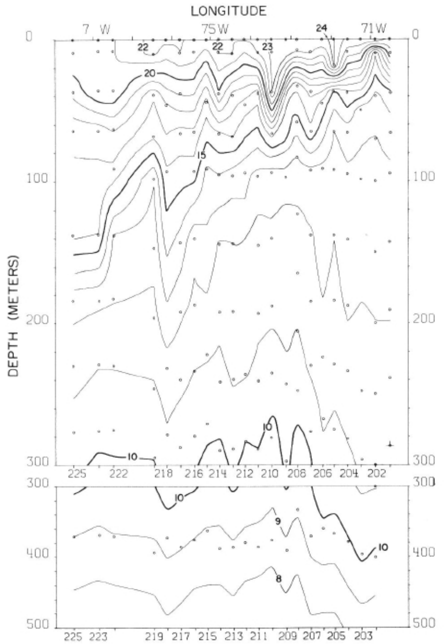


FIGURE Y5-T-v2.—Vertical distribution of temperature (°C.) west along 20° S. from the coast of Chile to 74°12′ W., February-March 1967.

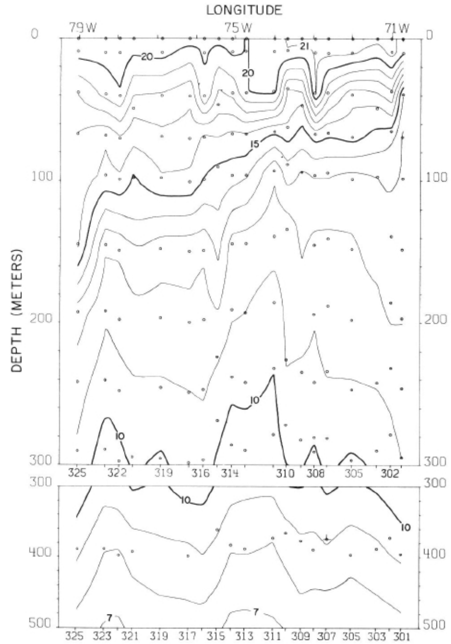
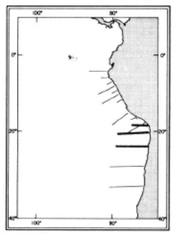


FIGURE Y5-T-v3.—Vertical distribution of temperature (°C.) east along 24° S. from 79°01′ W. to the coast of Chile, February-March 1967.



Y5-T-v1.

Y5-T-v2.

Y5-T-v3.

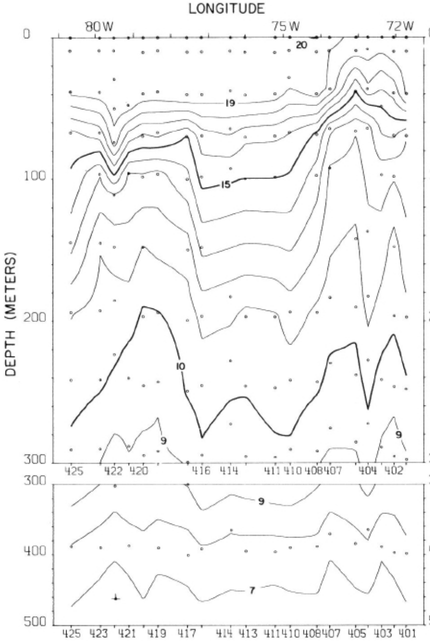


FIGURE Y5-T-v4.—Vertical distribution of temperature (°C.) east along 28° S. from 80°40′ W. to the coast of Chile, March 1967.

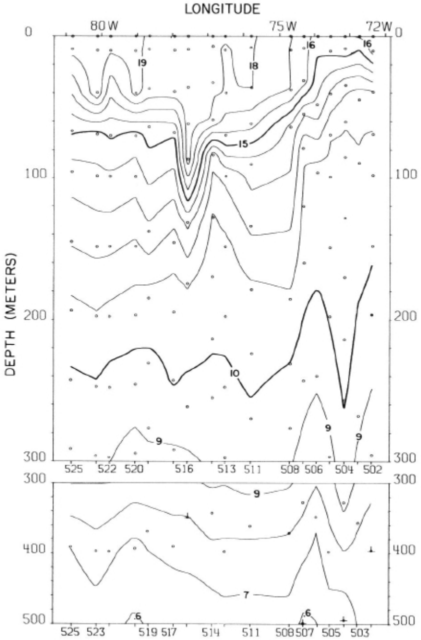
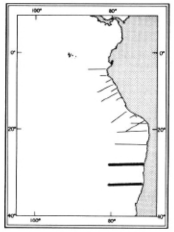


FIGURE Y5-T-v5.—Vertical distribution of temperature (°C.) west along 33° S. from Valparaiso, Chile to 80°49′ W., March 1967.



Y5-T-v4.

Y5-T-v5.

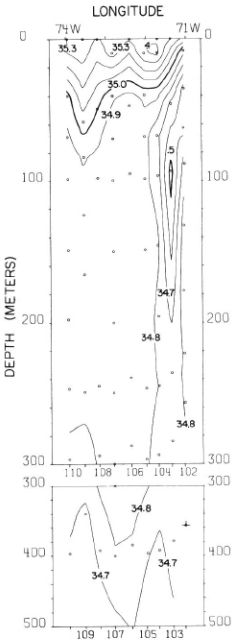


FIGURE Y5-S-v1.—Vertical distribution of salinity (°/oo) west along 18° S. from the coast of Chile to 73°57′ W., February-March 1967.

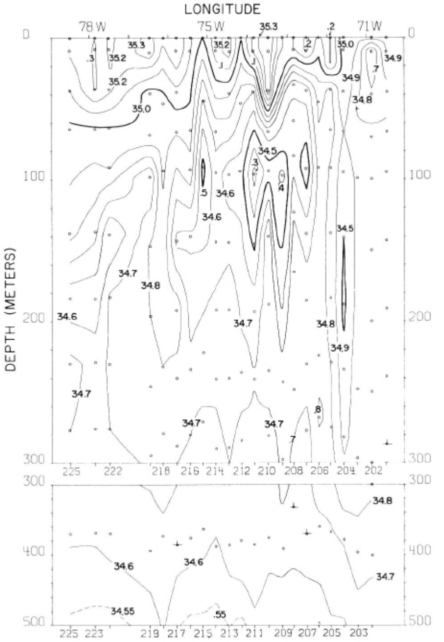


FIGURE Y5-S-v2.—Vertical distribution of salinity (°/oo) west along 20° S. from the coast of Chile to 74°12′ W., February-March 1967.

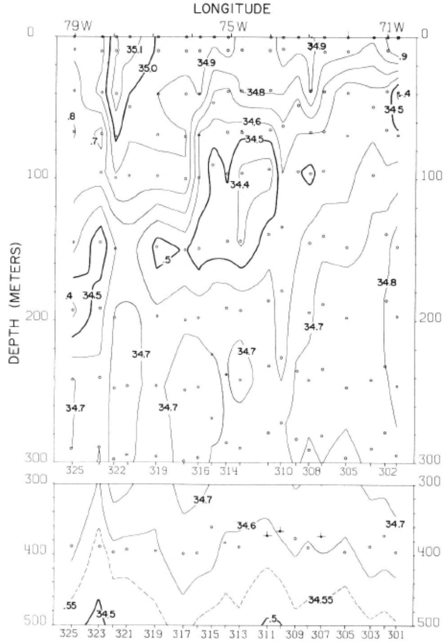
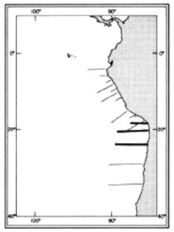


FIGURE Y5-S-v3.—Vertical distribution of salinity (°/oo) east along 24° S. from 79°01′ W. to the coast of Chile, February-March 1967.



Y5-S-v1.

Y5-S-v2.

Y5-S-v3.

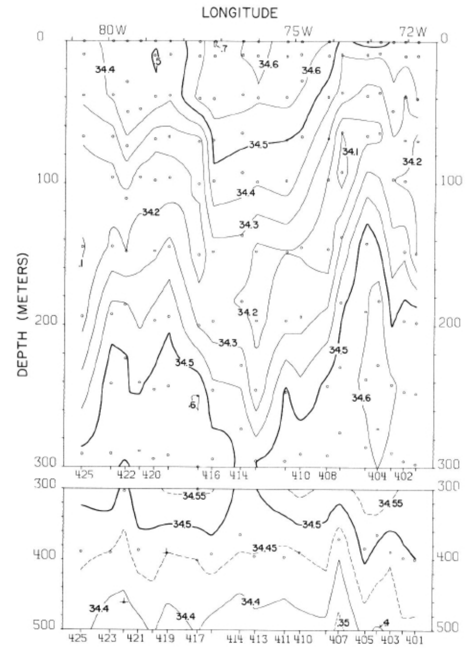


FIGURE Y5-S-v4.—Vertical distribution of salinity (°/oo) east along 28° S. from 80°40′ W. to the coast of Chile, March 1967.

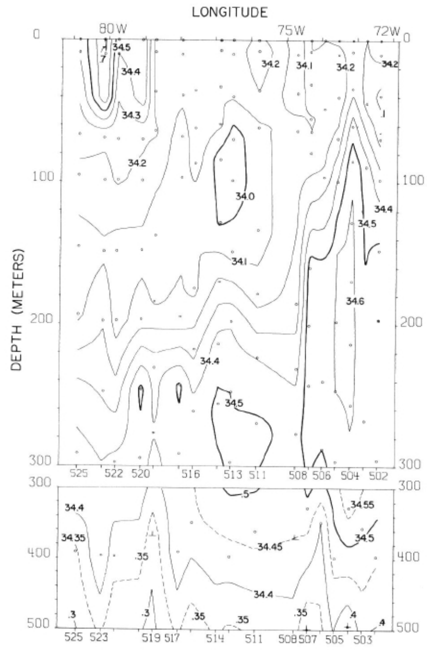
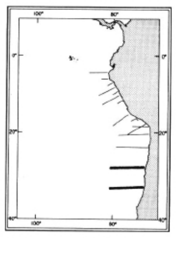


FIGURE Y5-S-v5.—Vertical distribution of salinity (°/oo) west along 33° S. from Valparaiso, Chile to 80°49′ W., March 1967.



Y5-S-v4.

Y5-S-v5.

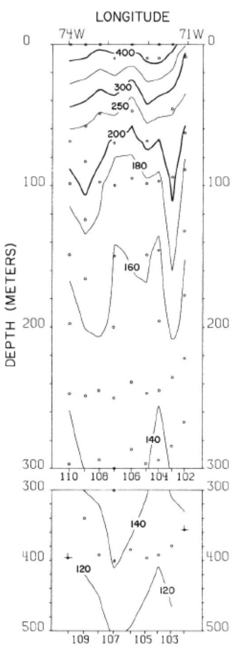


FIGURE Y5-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 18° S. from the coast of Chile to 73°57′ W., February-March 1967.

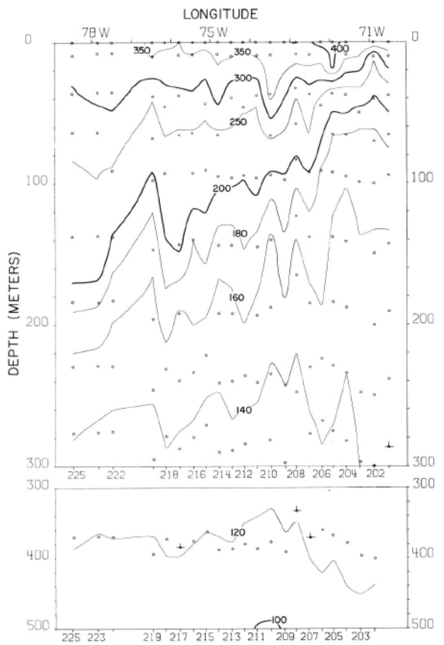


FIGURE Y5-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 20° S. from the coast of Chile to 74°12′ W., February-March 1967.

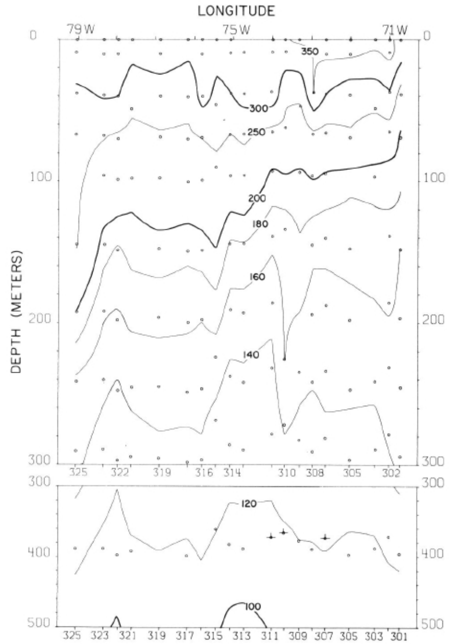
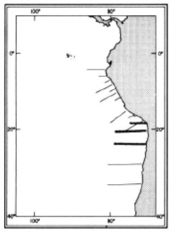


FIGURE Y5-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (c./t.) east along 24° S. from 79°01′ W. to the coast of Chile, February-March 1967.



Y5-δ-v1.

Y5-δ-v2.

Y5-δ-v3.

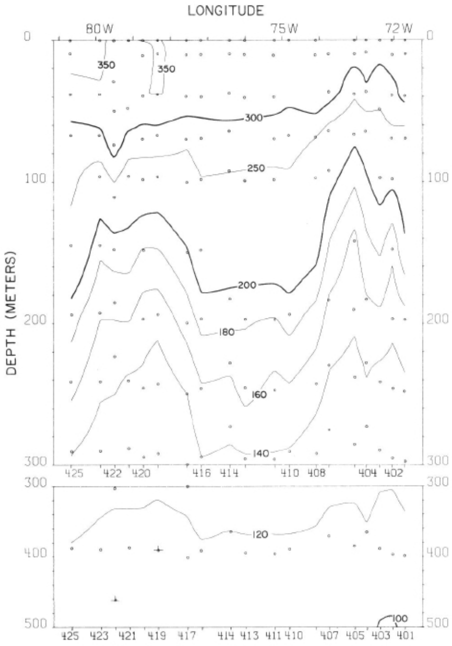


FIGURE Y5-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 28° S. from 80°40′ W. to the coast of Chile, March 1967.

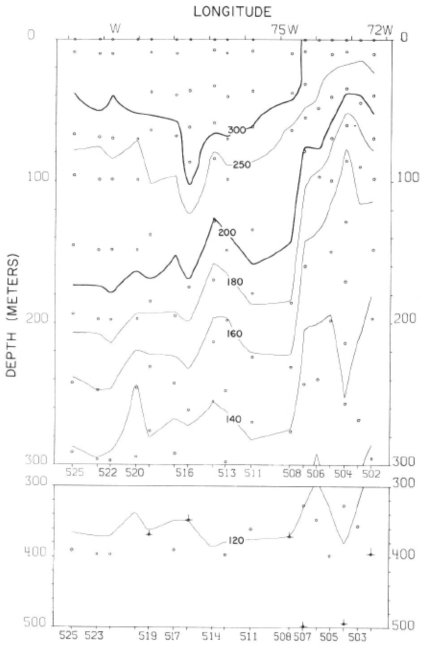
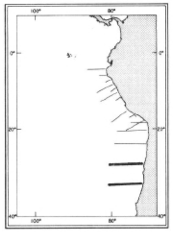


FIGURE Y5-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 33° S. from Valparaiso, Chile to 80°49′ W., March 1967.



Y5-δ-v4.

Y5-δ-v5.

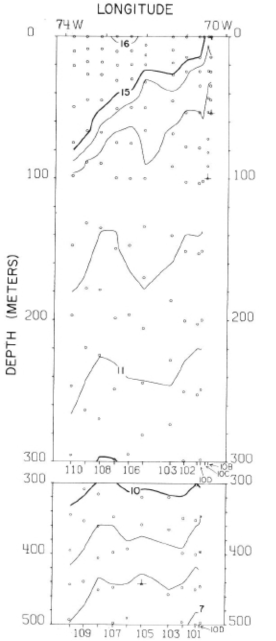


FIGURE Y6-T-v1.—Vertical distribution of temperature (°C.) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

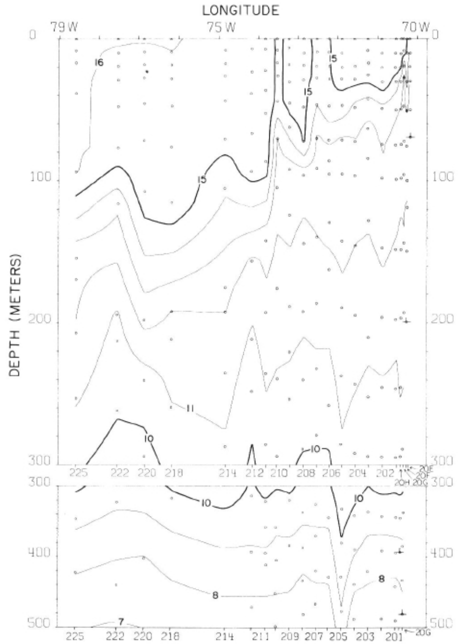


FIGURE Y6-T-v2.—Vertical distribution of temperature (°C.) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

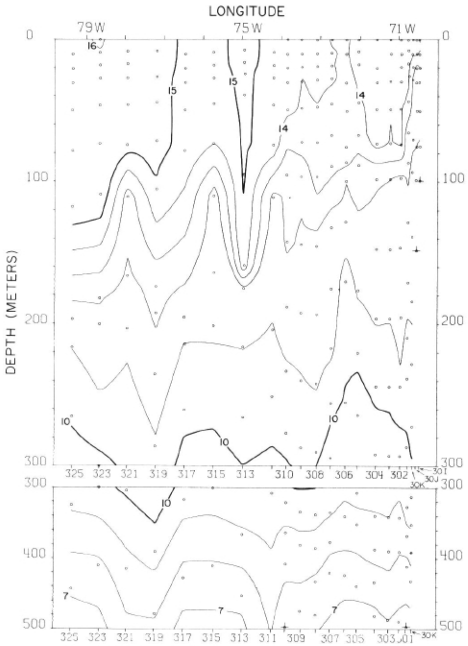


FIGURE Y6-T-v3.—Vertical distribution of temperature (°C.) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.

Y6-T-v1.

Y6-T-v2.

Y6-T-v3.

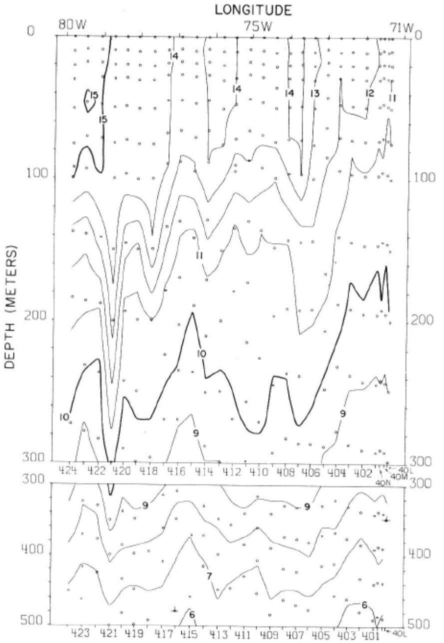


FIGURE Y6-T-v4.—Vertical distribution of temperature (°C.) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

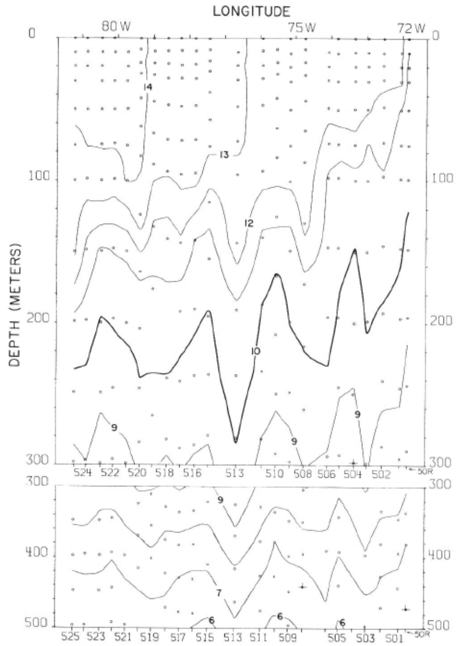


FIGURE Y6-T-v5.—Vertical distribution of temperature (°C.) east along 33° S. from 81°14′ to Valparaiso, Chile, September 1967.

Y6-T-v4.

Y6-T-v5.

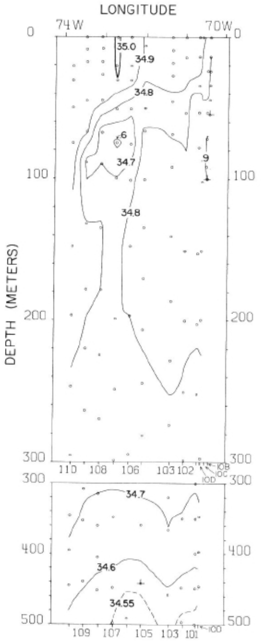


FIGURE Y6-S-v1.—Vertical distribution of salinity (°/oo) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

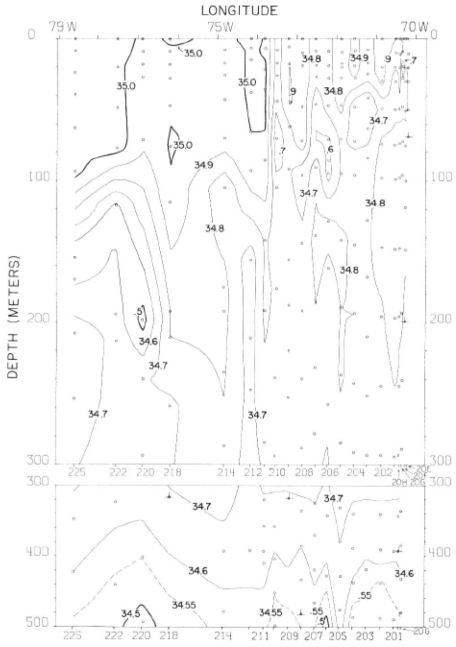


FIGURE Y6-S-v2.—Vertical distribution of salinity (°/oo) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

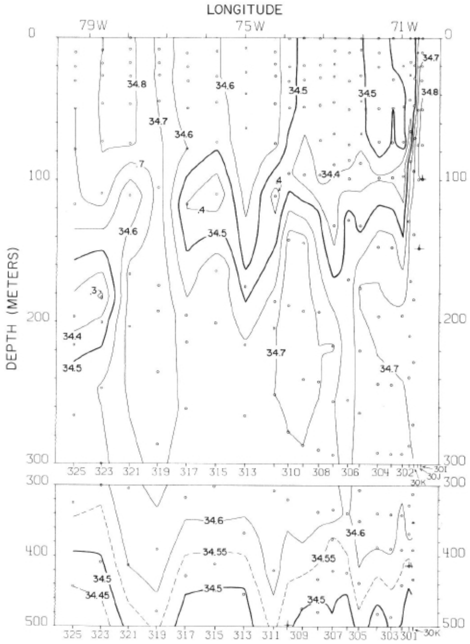


FIGURE Y6-S-v3.—Vertical distribution of salinity (°/oo) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.

Y6-S-v1.

Y6-S-v2.

Y6-S-v3.

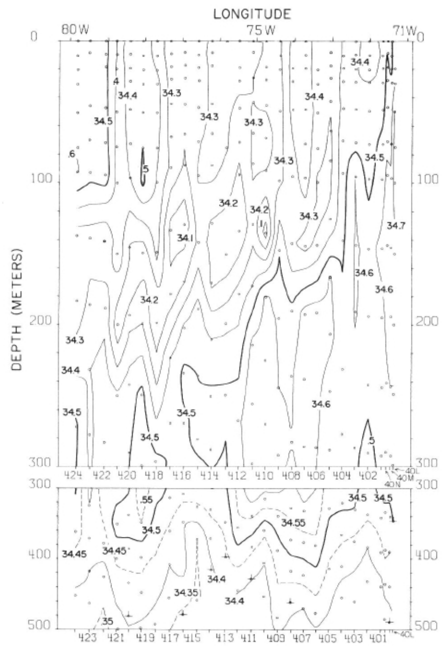


FIGURE Y6-S-v4.—Vertical distribution of salinity (°/oo) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

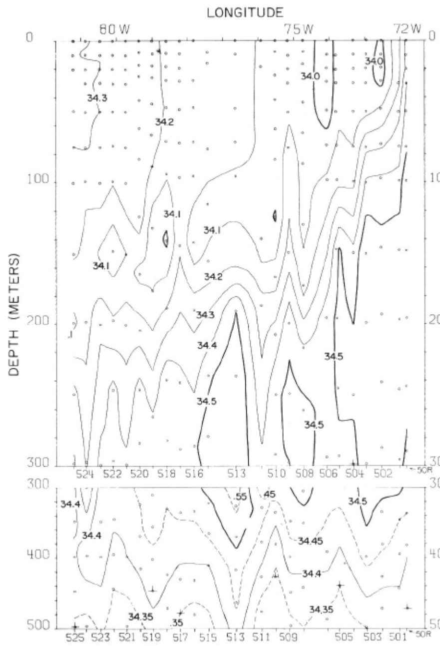


FIGURE Y6-S-v5.—Vertical distribution of salinity (°/oo) east along 33° S. from 81°14′ W. to Valparaiso, Chile, September 1967.

Y6-S-v4.

Y6-S-v5.

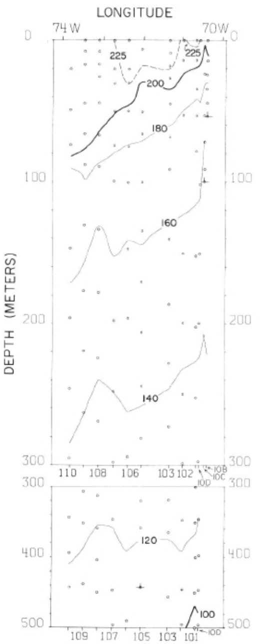


FIGURE Y6-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

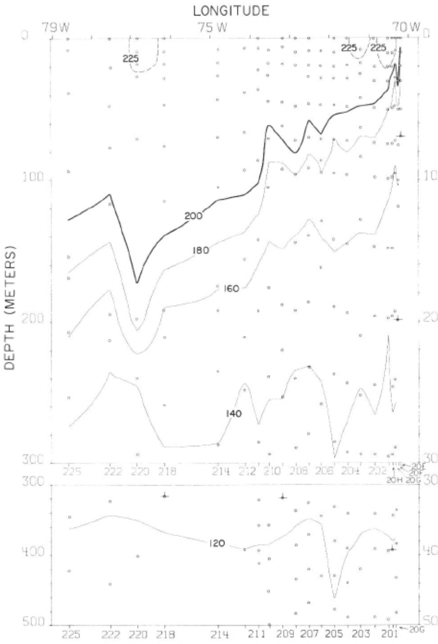


FIGURE Y6-δv2.—Vertical distributation of thermosteric anomaly, δ_T, (cl./t.) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

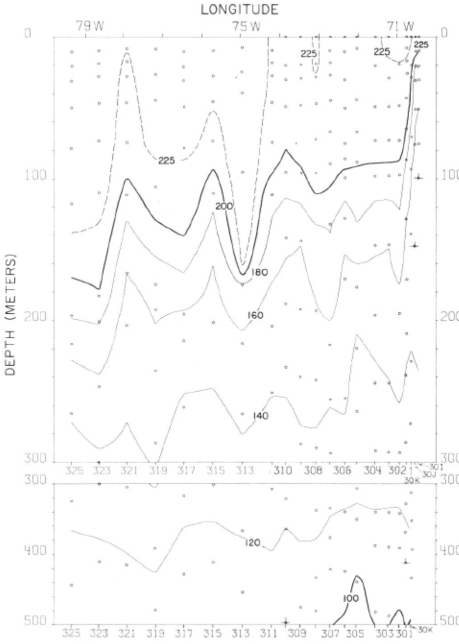
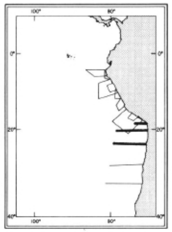


FIGURE Y6-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.



Y6-δ-v1.

Y6-δv2.

Y6-δ-v3.

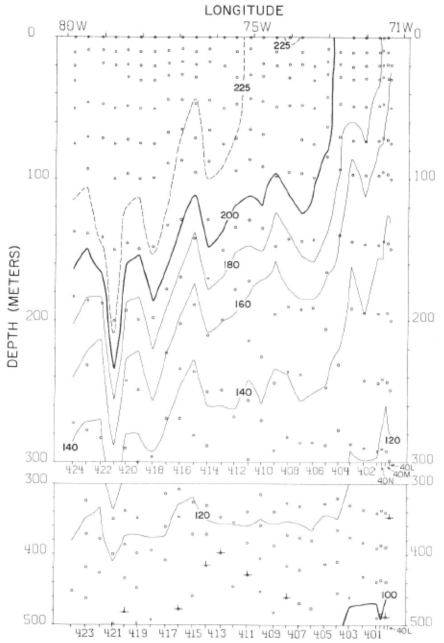


FIGURE Y6-δ-v4.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

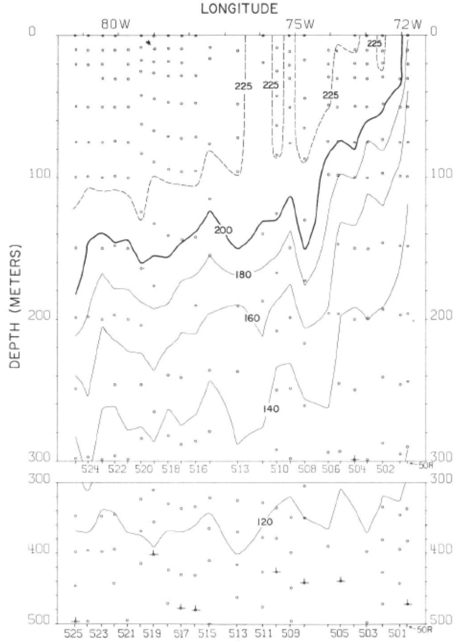
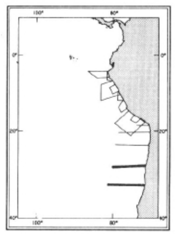


FIGURE Y6-δ-v5.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) east along 33° S. from 81°14′ W. to Valparaiso, Chile, September, 1967.



Y6-δ-v4.

Y6-δ-v5.

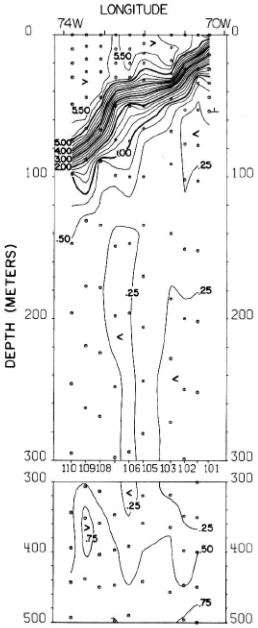


FIGURE Y6-O_2-v1.—Vertical distribution of oxygen (ml./l.) west along 18° S. from the coast of Chile to 73°50′ W., September 1967.

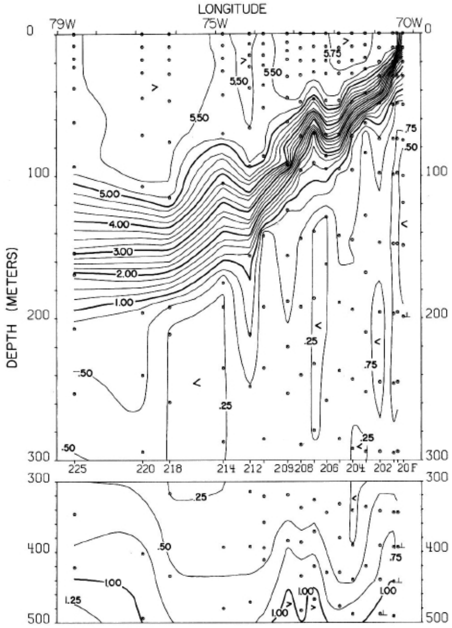


FIGURE Y6-O_2-v2.—Vertical distribution of oxygen (ml./l.) west along 20° S. from the coast of Chile to 78°34′ W., September 1967.

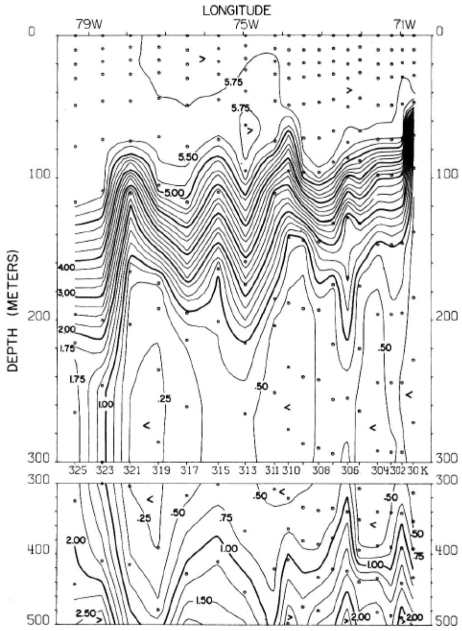
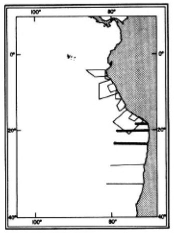


FIGURE Y6-O_2-v3.—Vertical distribution of oxygen (ml./l.) east along 24° S. from 79°22′ W. to the coast of Chile, September 1967.



Y6-O_2-v1.

Y6-O_2-v2.

Y6-O_2-v3.

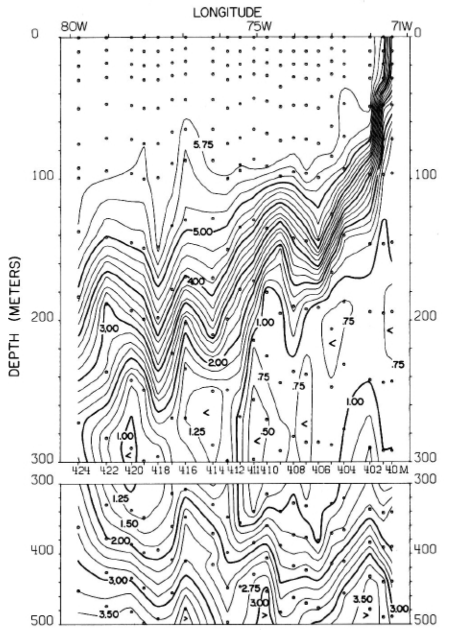


FIGURE Y6-O₂-v4.—Vertical distribution of oxygen (ml./l.) west along 28° S. from the coast of Chile to 80°11′ W., September 1967.

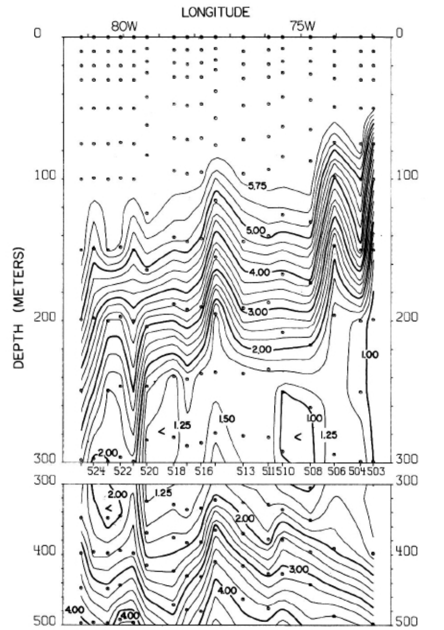
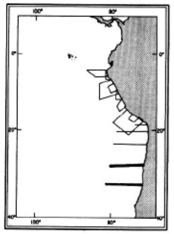


FIGURE Y6-O₂-v5.—Vertical distribution of oxygen (ml./l.) east along 33° S. from 81°14′ W. to Valparaiso, Chile, September 1967.



Y6-O₂-v4.

Y6-O₂-v5.

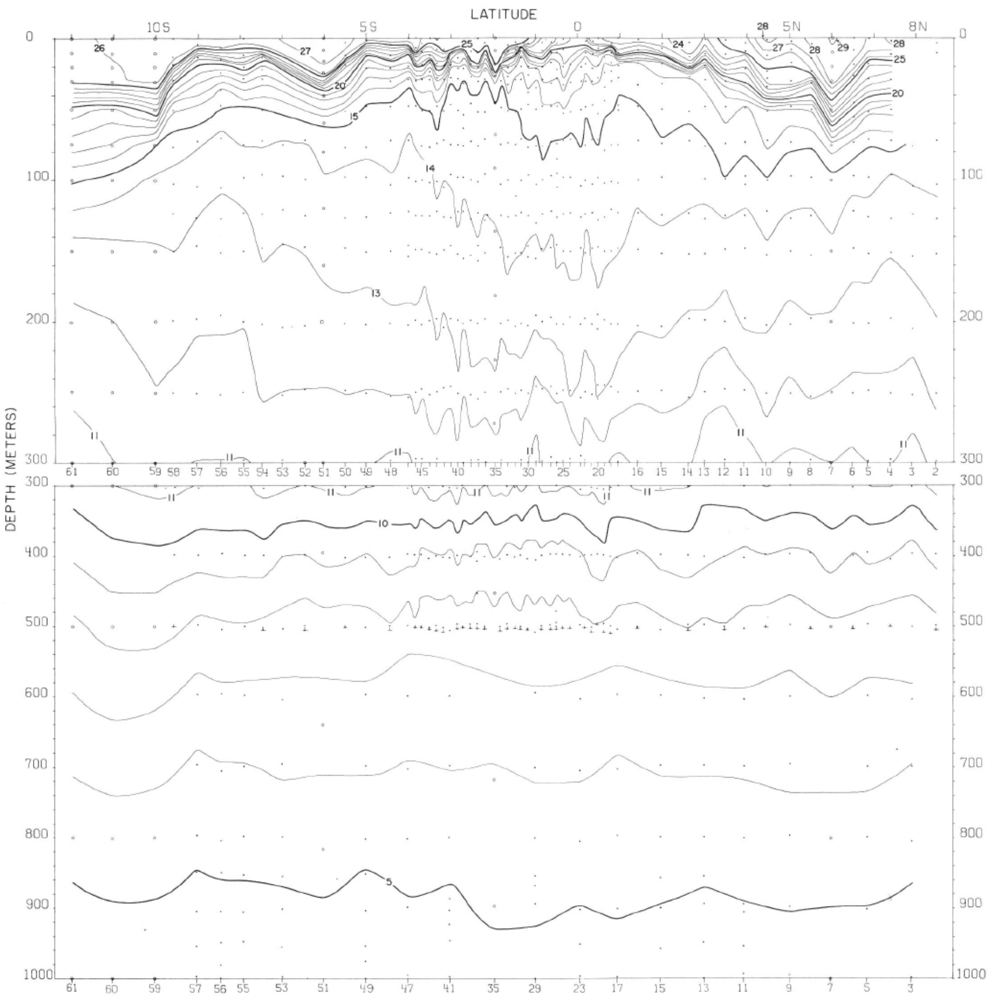


FIGURE CD-T-v1.—Vertical distribution of temperature (°C.) along 85° W. from 7°56′ N. to 11°59′ S., March 20-26, 1967. Ramsay probe used for temperature on some stations; data obtained by Nansen casts at remaining stations.

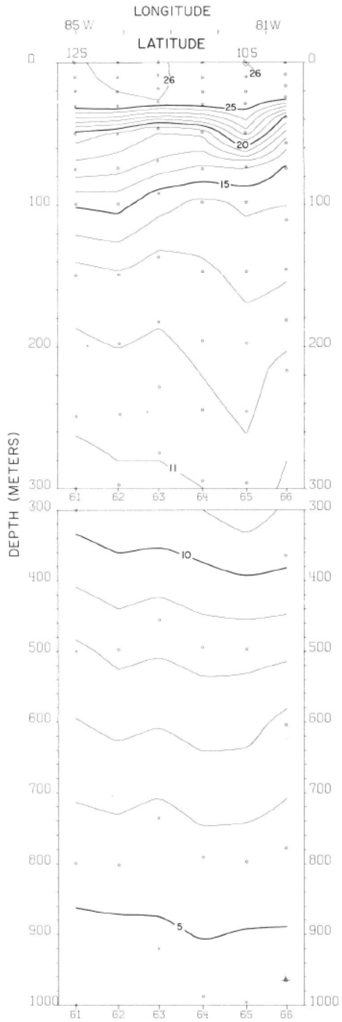
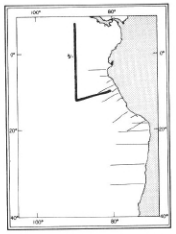


FIGURE CD-T-v2.—Vertical distribution of temperature (°C.) along a section from 11°59′ S., 85°01′ W. to 9°31′ S., 80°38′ W., March 26-28, 1967.



CD-T-v1.

CD-T-v2.

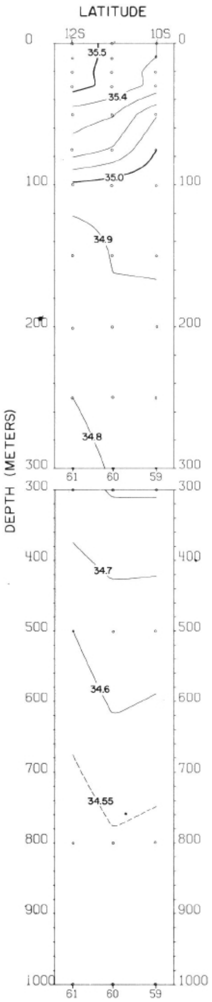


FIGURE CD-S-v1.—Vertical distribution of salinity (°/oo) along 85° W. from 10°01′ S. to 11°59′ S., March 26, 1967.

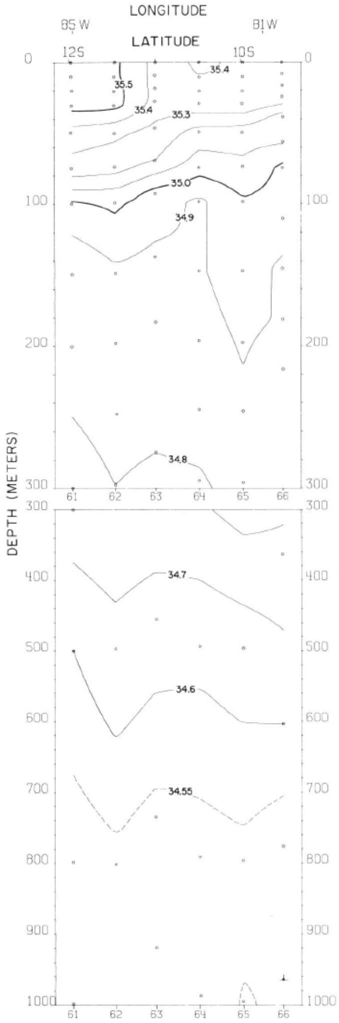
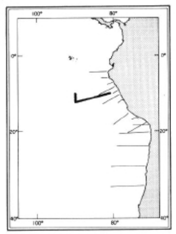


FIGURE CD-S-v2.—Vertical distribution of salinity (°/oo) along a section from 11°59′ S., 85°01′ W. to 9°31′ S., 80°38′ W., March 26-28, 1967.



CD-S-v1.

CD-S-v2.

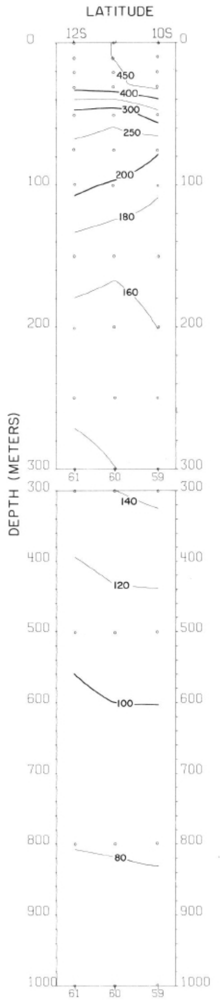


FIGURE CD-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along 85° W. from 10°01′ S. to 11°59′ S., March 1967.

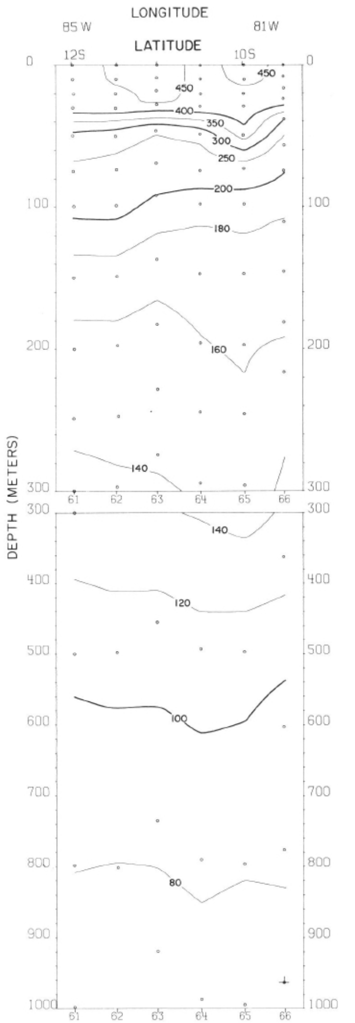
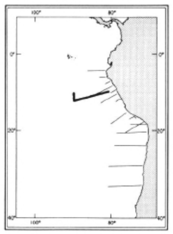


FIGURE CD-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 11°59′ S., 85°01′ W. to 9°31′ S., 80°38′ W., March 26-28, 1967.



CD-δ-v1.

CD-δ-v2.

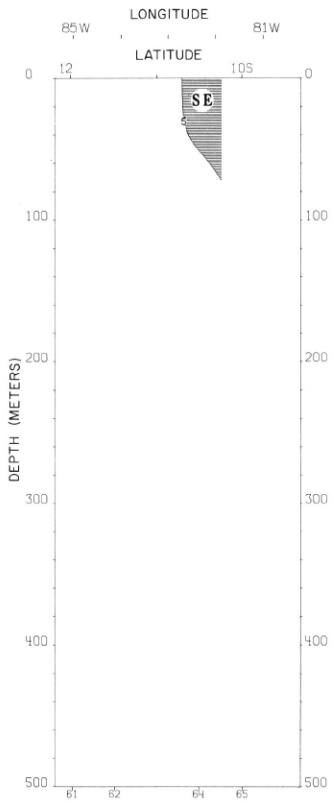
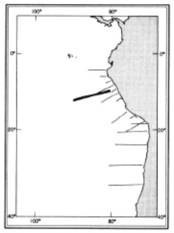


FIGURE CD-G-v2.—Vertical distribution of the zonal component of geostrophic velocity (cm/sec.), relative to 500 db., normal to a southeast-northwest section from 11°59′ S., 85°01′ W. to 9°59′ S., 81°28′ W., March 26-27, 1968. Dark shading indicates flow toward the southeast awith a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.



CD-G-v2.

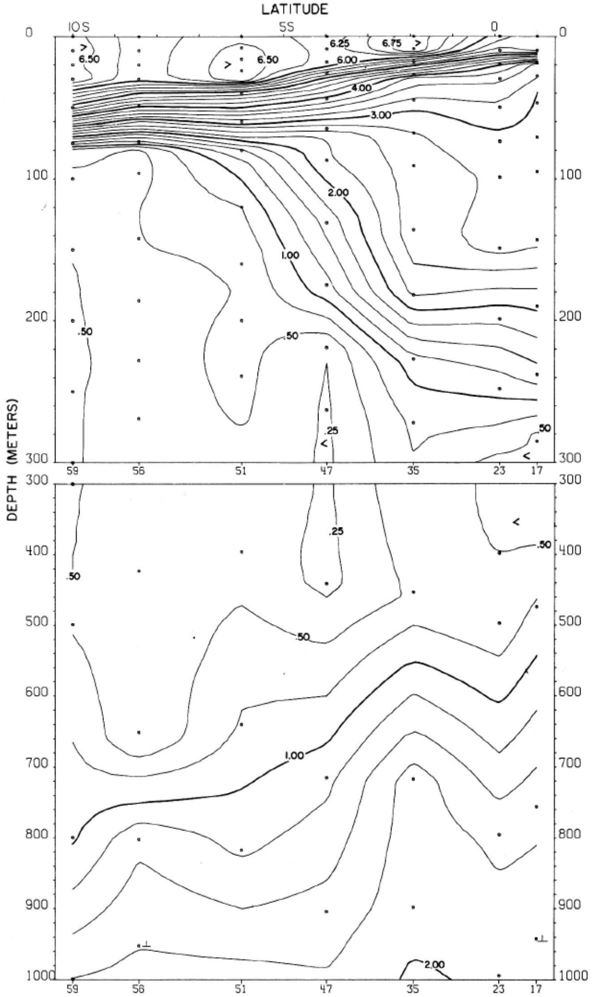
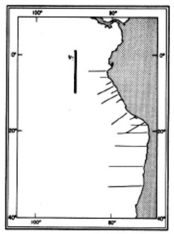


FIGURE CD-O₂-v1.—Vertical distribution of oxygen (ml./l.) along 85° W. from the Equator to 10°01′ S., March 22-25, 1967.



CD-O₂-v1.

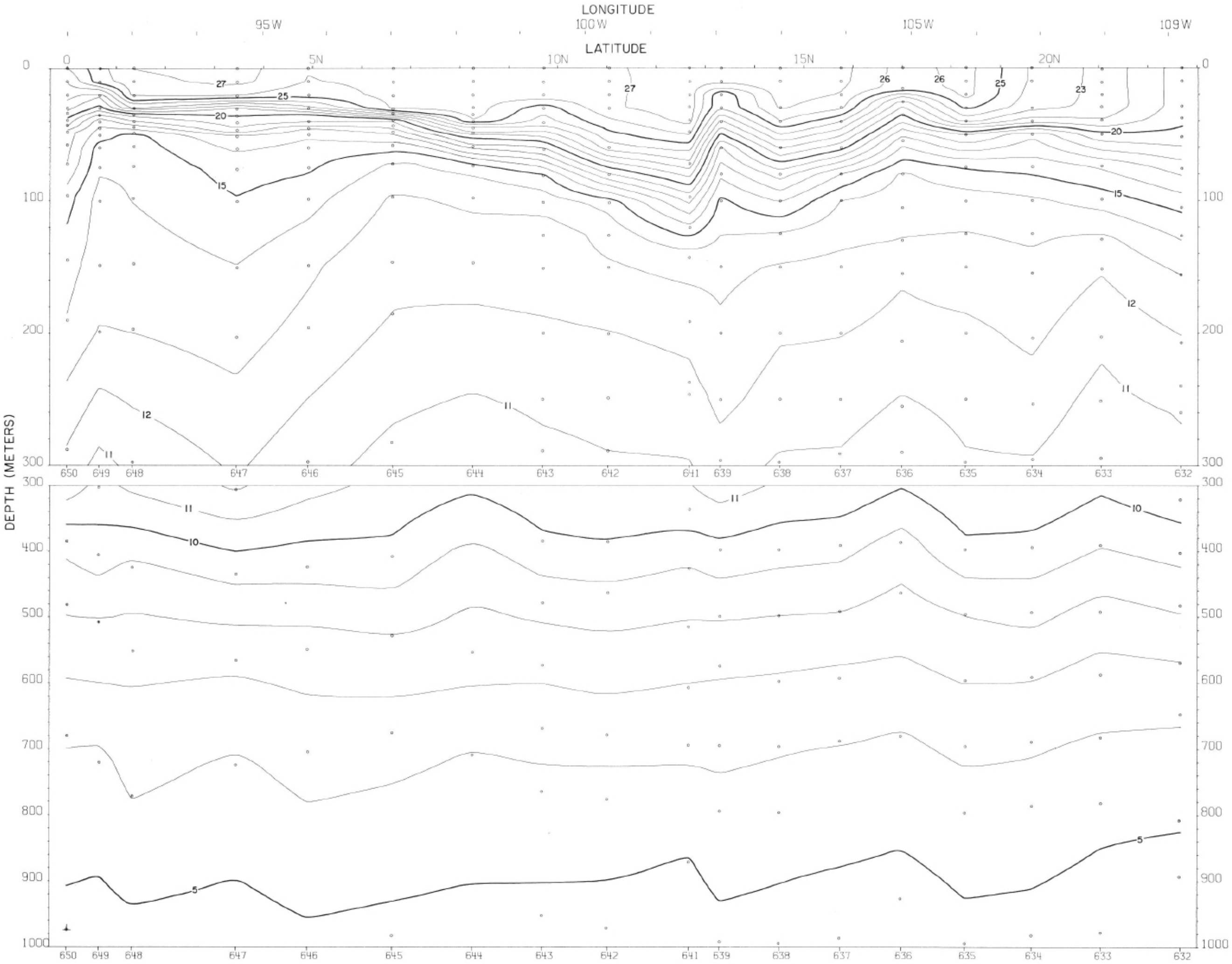
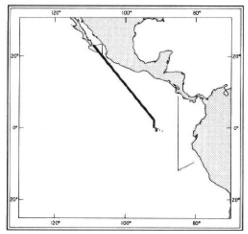


FIGURE T3-T-v1.—Vertical distribution of temperature (°C.) from the tip of Baja California, Mexico, southeast to the Galapagos Islands, January 27-February 25, 1967.



T3-T-v1.

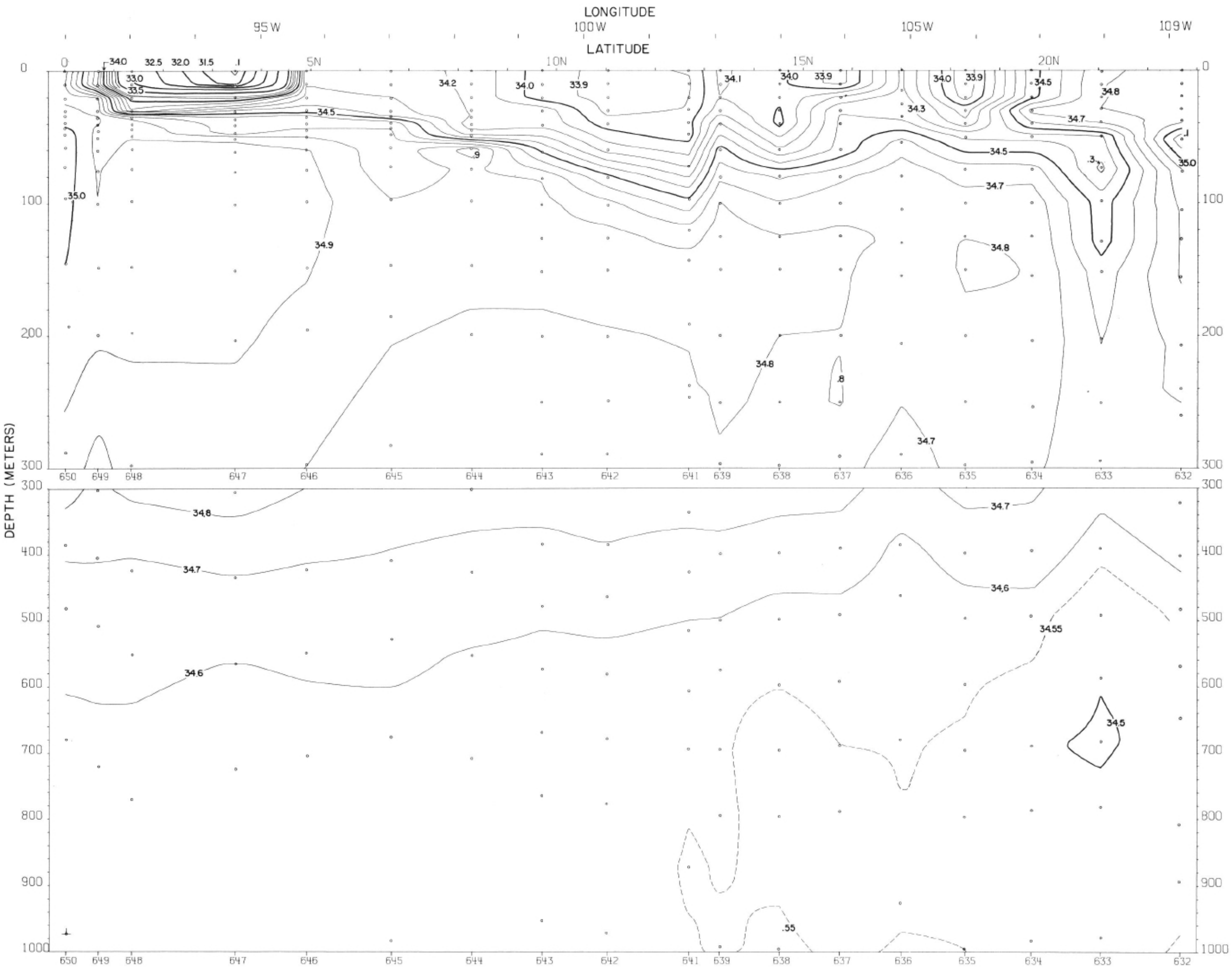
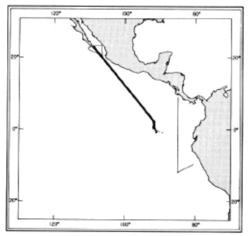


FIGURE T3-S-v1.—Vertical distribution of salinity (°/oo) from the tip of Baja California, Mexico, southeastward to Galapagos Islands, January 27-February 25, 1967.



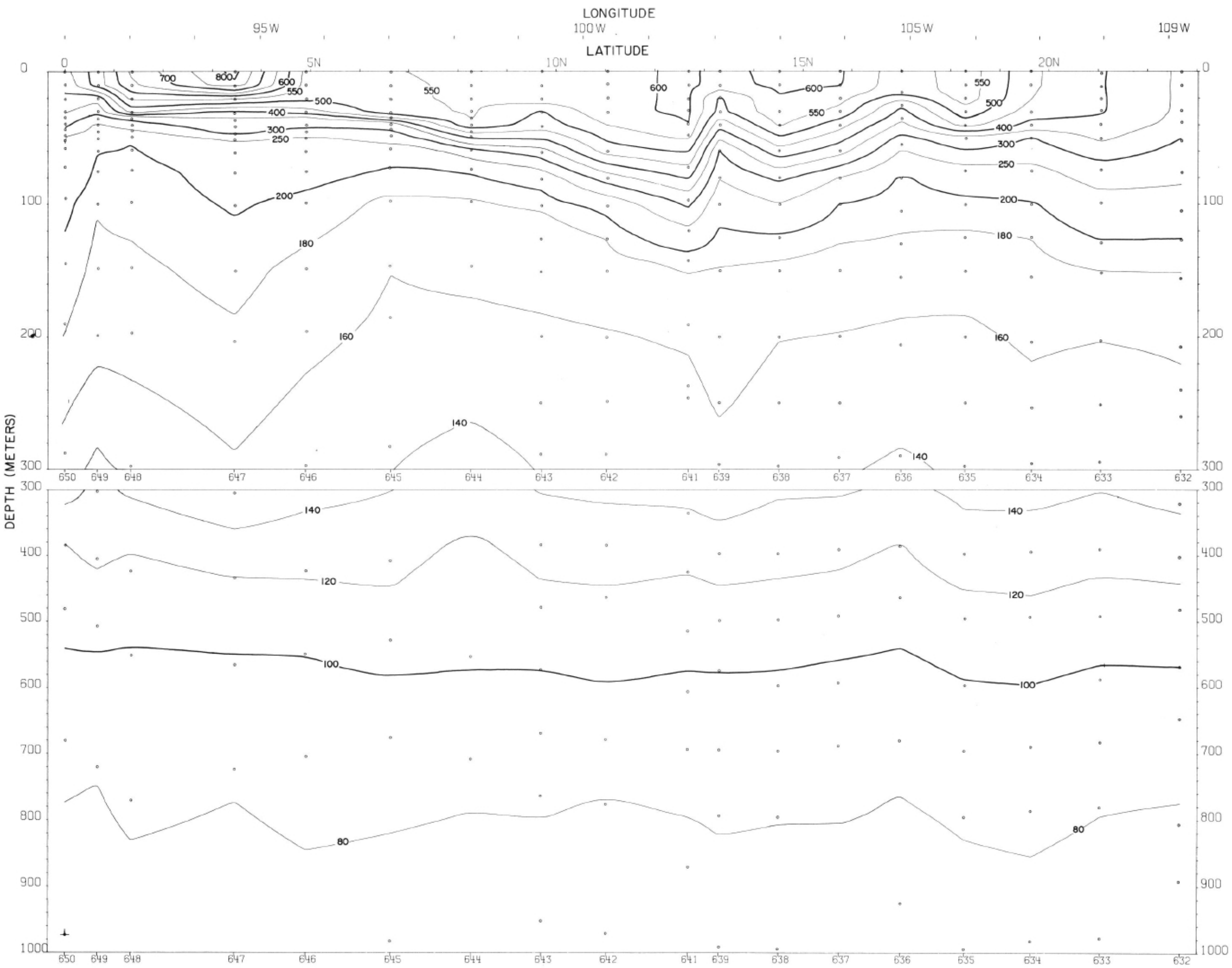
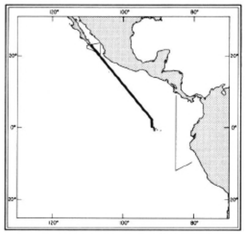


FIGURE T3-δ-v1.—Vertical distribution of thermosteric anomaly. δ_T. (cl./t.) from the tip of Baja California, Mexico, southeastward to the Galapagos Islands. January 27-February 25, 1967.



T3-δ-v1.

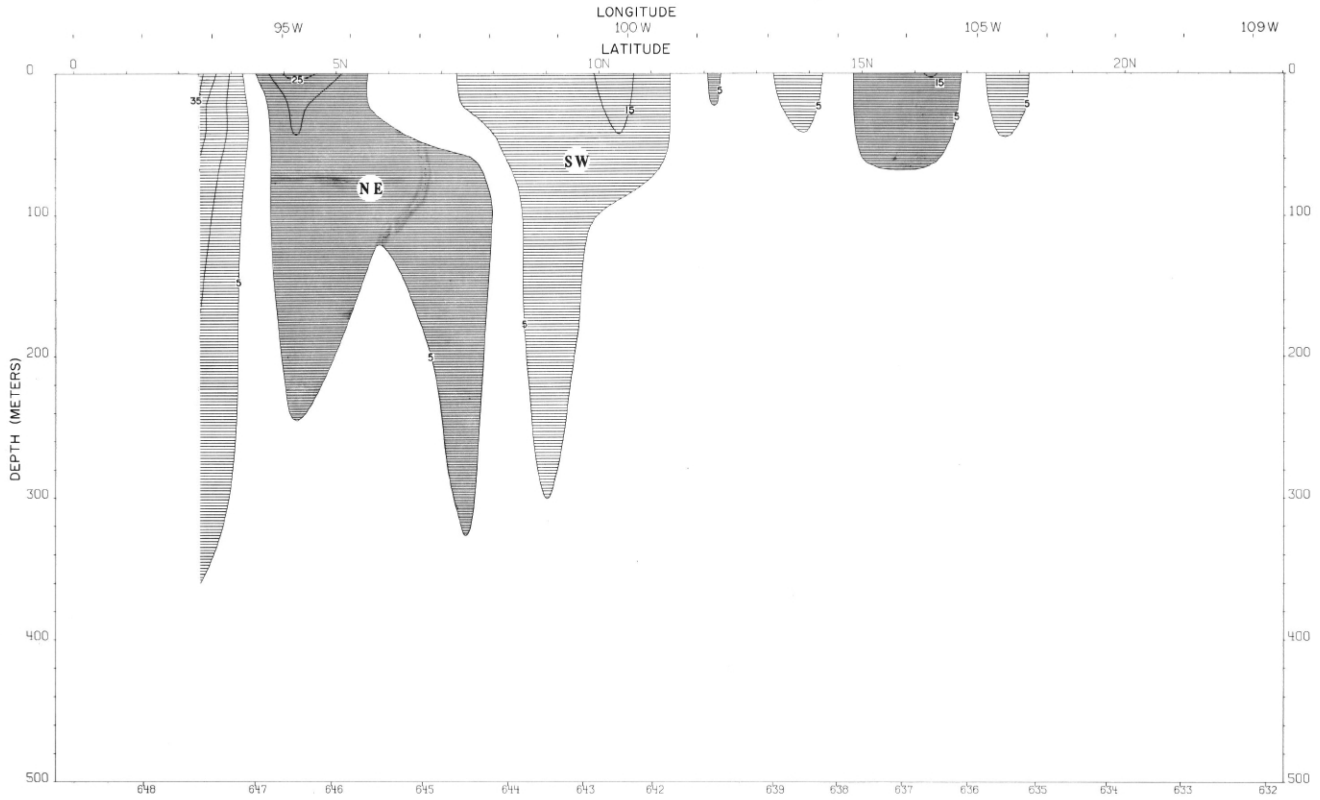
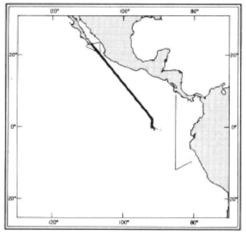


FIGURE T3-G-v1.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., normal to a northwest-southeast section from the tip of Baja California to 2°00′ S., 92°00′ W., January 27-February 24, 1967. Dark shading indicates flow toward the northeast with a velocity greater than 5 cm/sec.; light shading indicates flow toward the southwest with a velocity greater than 5 cm./sec.



T3-G-v1.

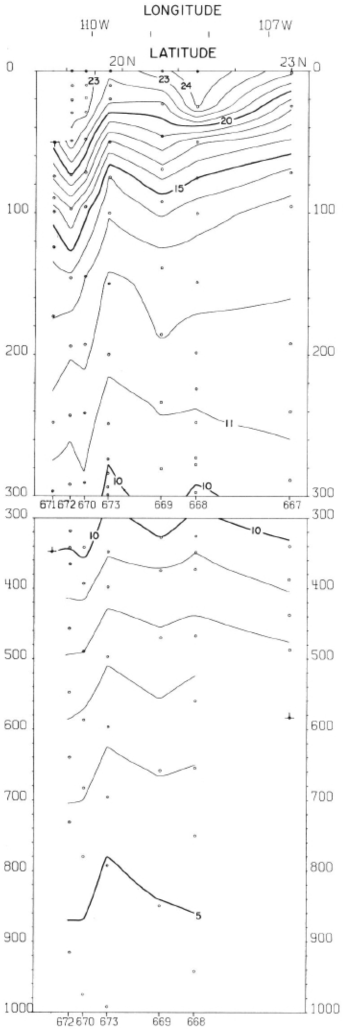


FIGURE T4-T-v3.—Vertical distribution of temperature (°C.) along a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967.

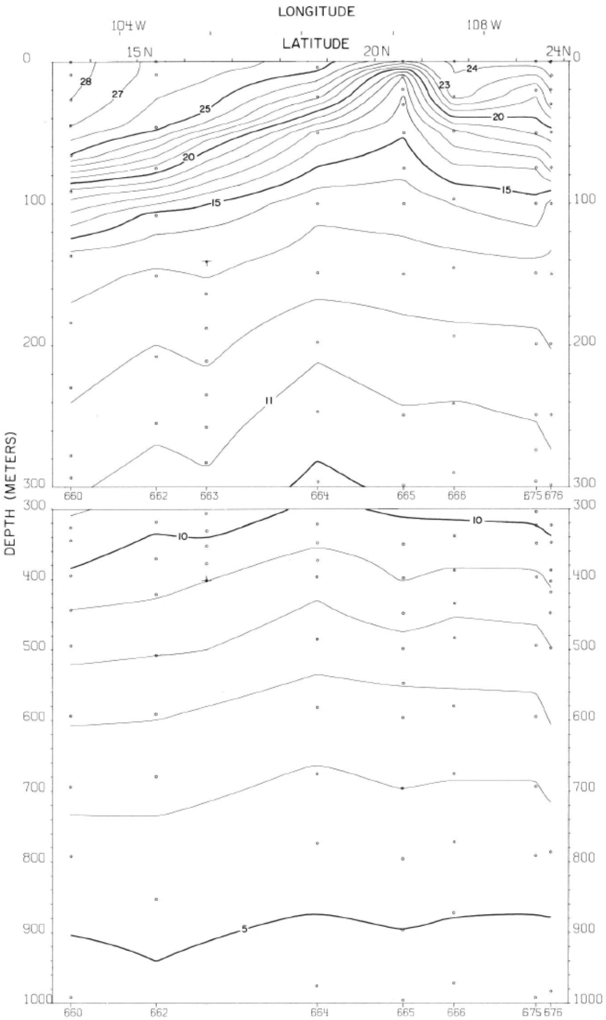


FIGURE T4-T-v2.—Vertical distribution of temperature (°C.) along a section from 13°39′ N., 100°22′ W., northwest to the entrance to the Gulf of California, April 17-29, 1967.

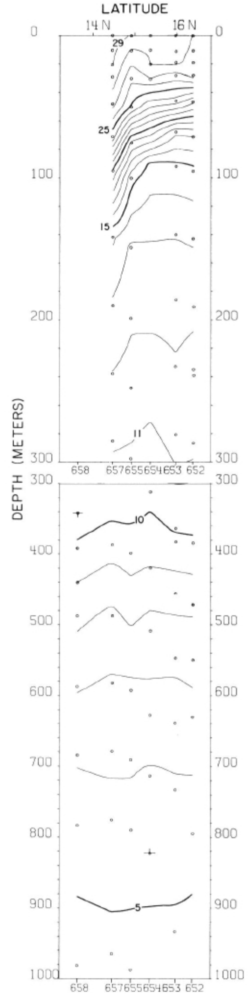
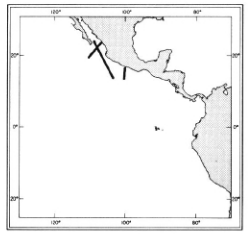


FIGURE T4-T-v1.—Vertical distribution of temperature (°C.) along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967.



T4-T-v3.

T4-T-v2.

T4-T-v1.

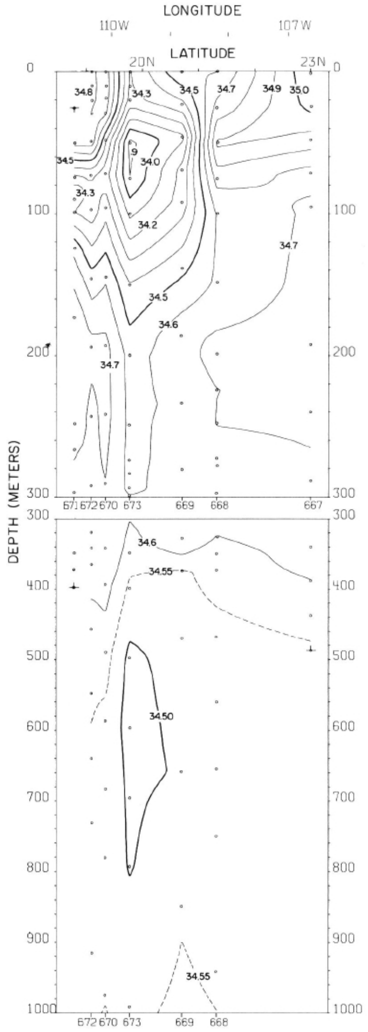


FIGURE T4-S-v3.—Vertical distribution of salinity (°/oo) along a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967.

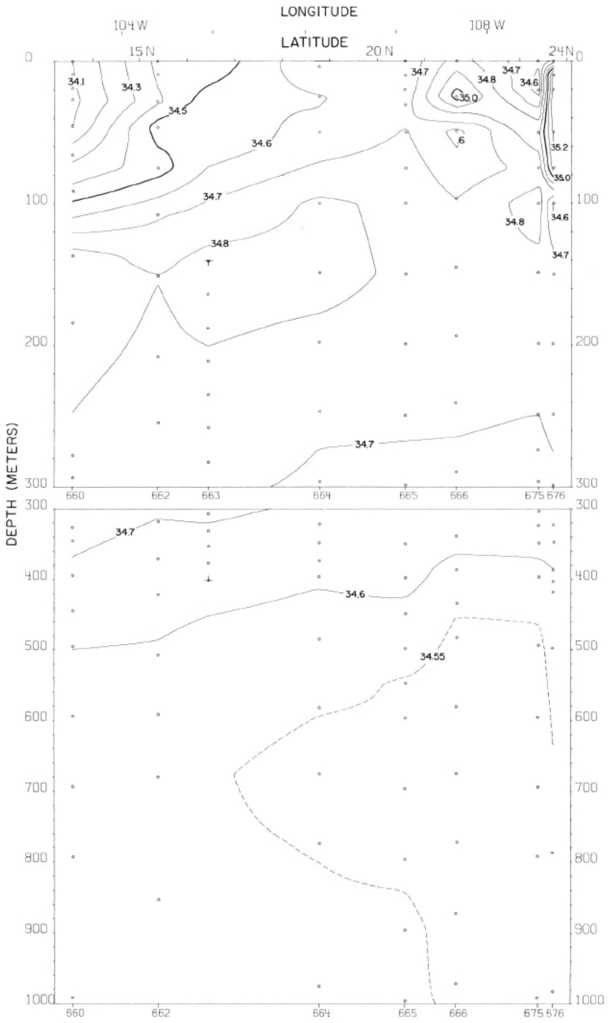


FIGURE T4-S-v2.—Vertical distribution of salinity (°/oo) along a section from 13°39′ N., 100°22′ W., northwest to the entrance to the Gulf of California, April 17-29, 1967.

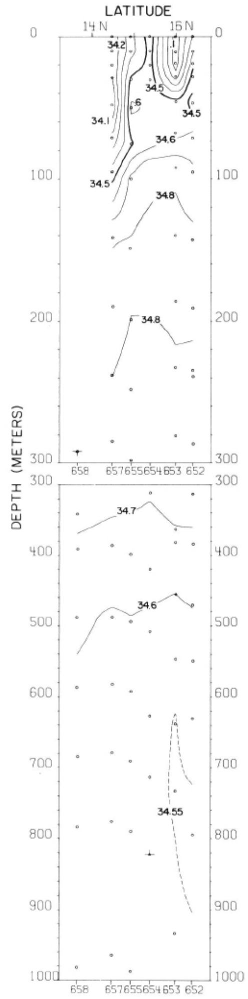
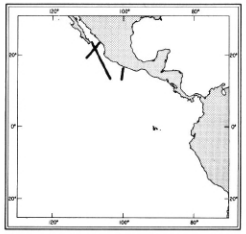


FIGURE T4-S-v1.—Vertical distribution of salinity (°/oo) along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967.



T4-S-v3.

T4-S-v2.

T4-S-v1.

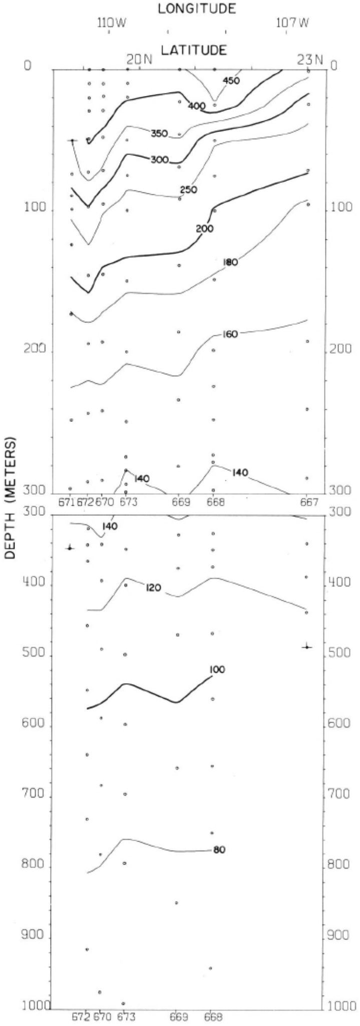


FIGURE T4-δ-v3.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967.

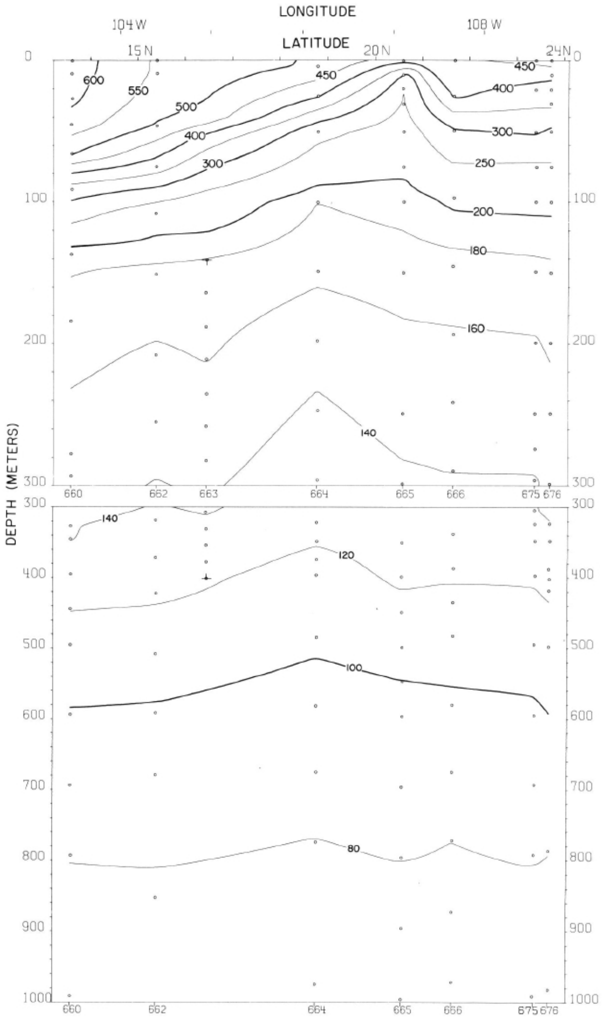


FIGURE T4-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from 13°39′ N., 100°22° W., northwest to the entrance to the Gulf of California, April 17-29, 1967.

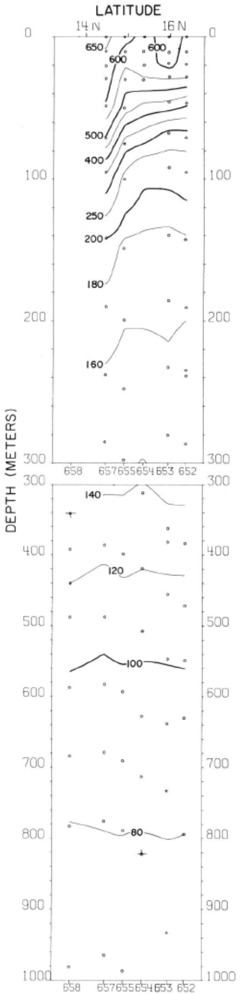
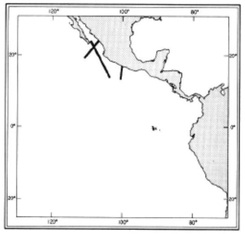


FIGURE T4-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967.



T4-δ-v3.

T4-δ-v2.

T4-δ-v1.

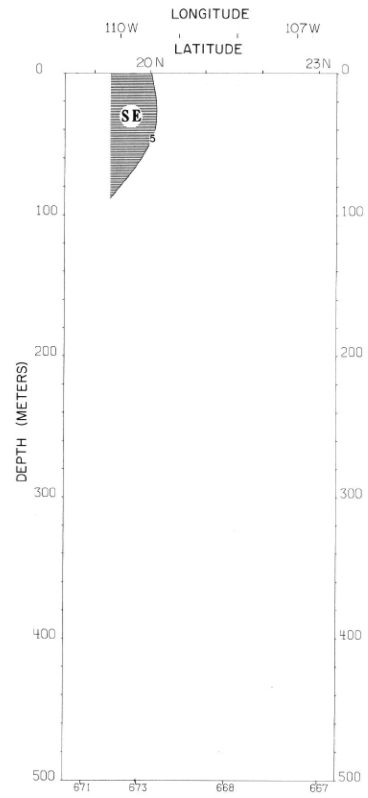


FIGURE T4-G-v3.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., normal to a northeast-southwest section from Mazatlan, Mexico to 18°48′ N., 110°38′ W., May 8-22, 1967. Dark shading indicates flow toward the southeast with a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.

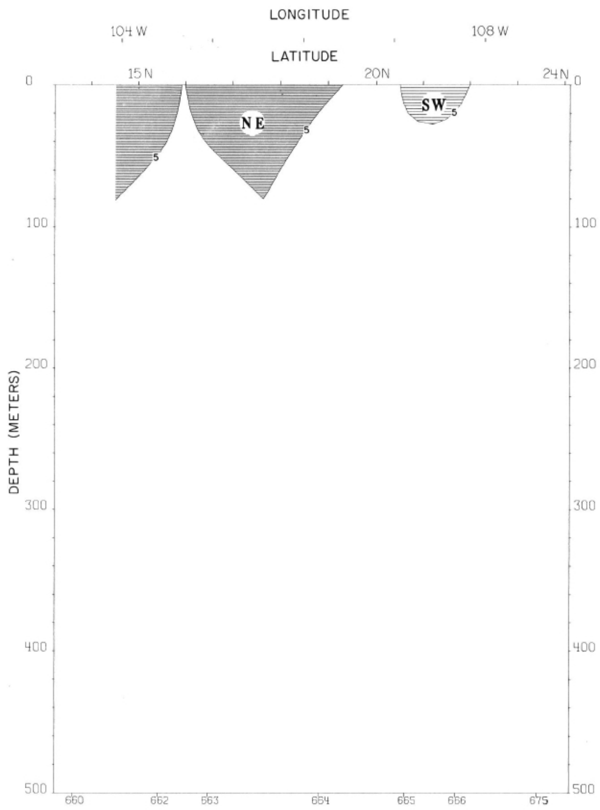


FIGURE T4-G-v2.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., normal to a section from 13°39′ N., 100°22′ W., northwest to the entrance to the Gulf of California, April 17-29, 1967. Dark shading indicates flow toward the southeast with a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.

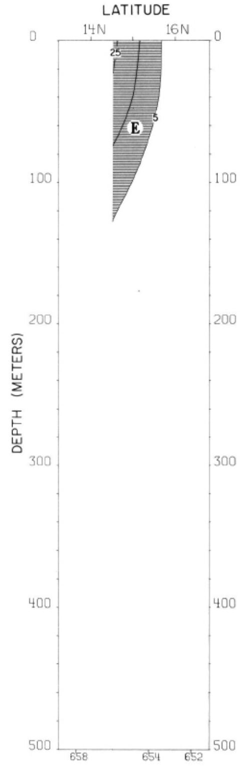
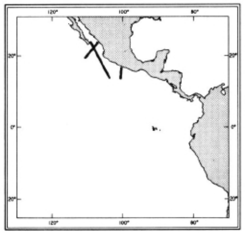


FIGURE T4-G-v1.—Vertical distribution of the component of geostrophic velocity (cm./sec.), relative to 500 db., along a section from Acapulco, Mexico southwest to 13°39′ N., 100°22′ W., April 7-13, 1967. Dark shading indicates flow toward the southeast with a velocity greater than 5 cm./sec.; light shading indicates flow toward the northwest with a velocity greater than 5 cm./sec.



T4-G-v3.

T4-G-v2.

T4-G-v1.

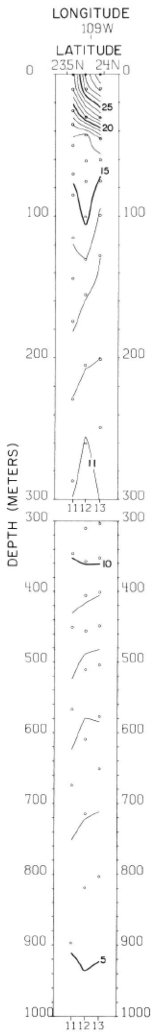


FIGURE T5-T-v1.—Vertical distribution of temperature (°C.) along a section in the western portion of the entrance to the Gulf of California. July 13, 1967.

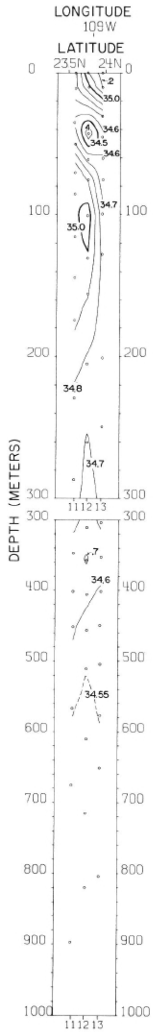


FIGURE T5-S-v1.—Vertical distribution of salinity (°/oo) along a section in the western portion of the entrance to the Gulf of California. July 13, 1967.

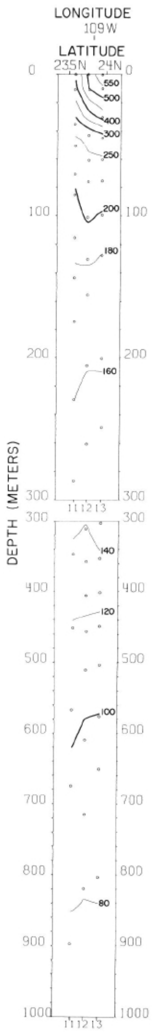
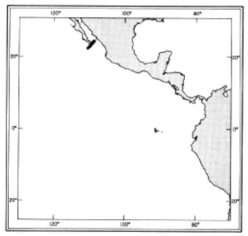


FIGURE T5-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section in the western portion of the entrance to the Gulf of California. July 13, 1967.



T5-T-v1.

T5-S-v1.

T5-δ-v1.

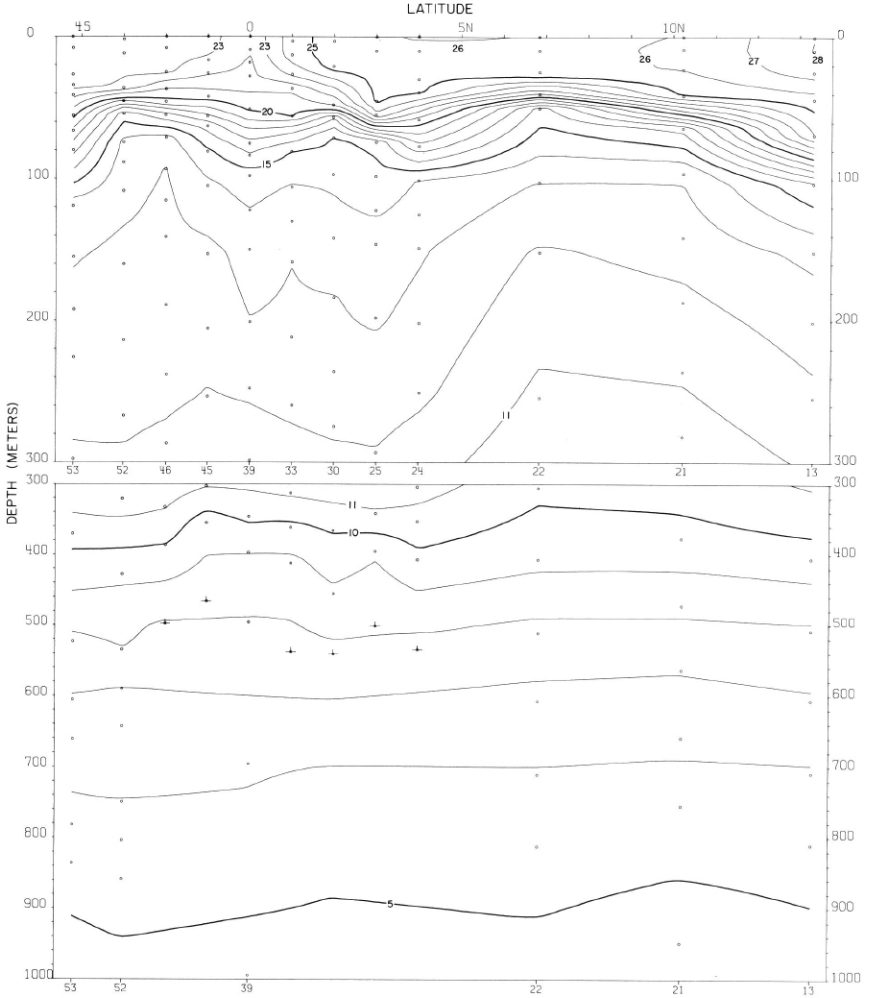


FIGURE T7-T-v1.—Vertical distribution of temperature (°C.) along a section on 100° W. from 13°20′ N. to 4°11′ S., January 19-February 1, 1968.

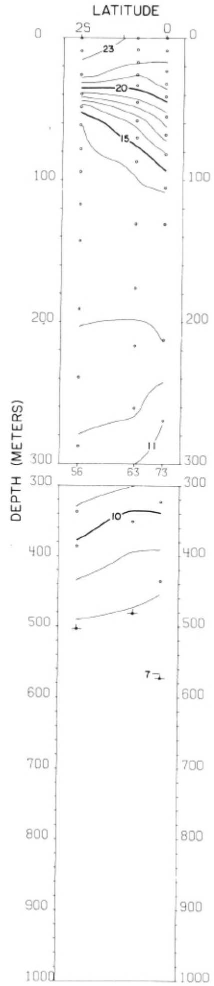
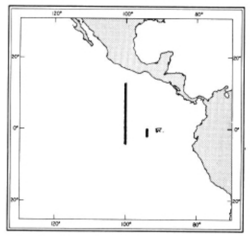


FIGURE T7-T-v2.—Vertical distribution of temperature (°C.) along a section on 94° W. from 2°00′ S. to the Equator, February 5-8, 1968.



T7-T-v1.

T7-T-v2.

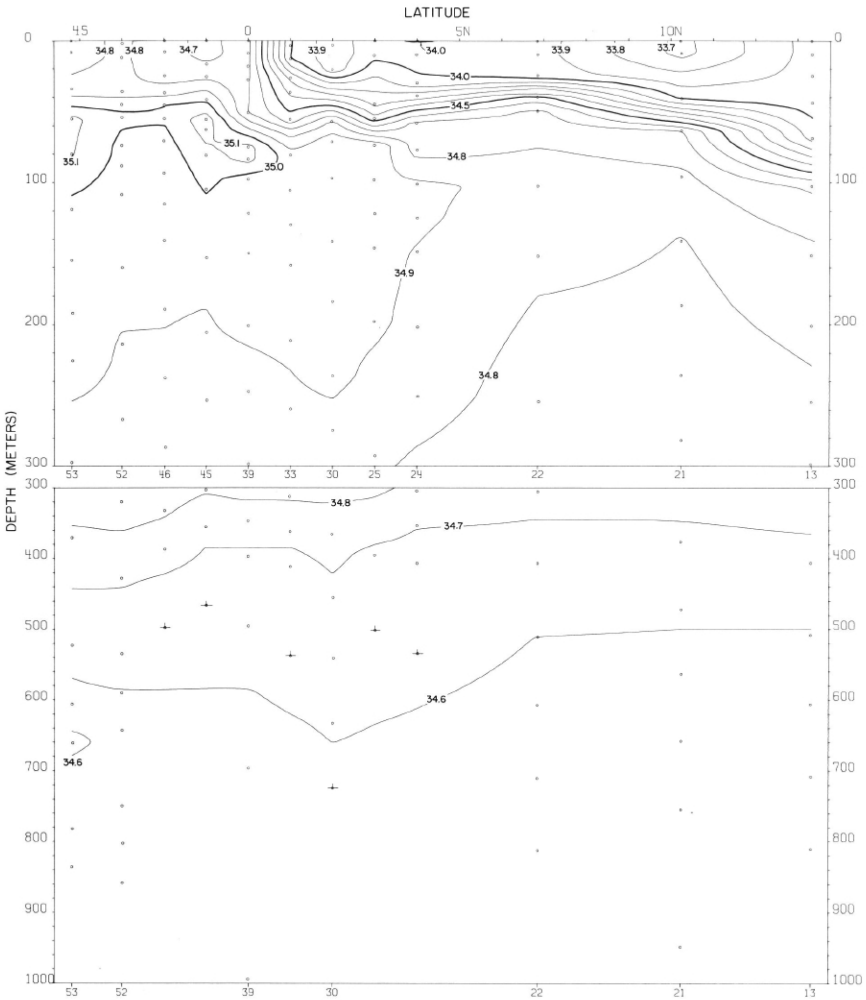


FIGURE T7-S-v1.—Vertical distribution of salinity (°/oo) along a section on 100° W. from 13°20′ N. to 4°11′ S., January 19-February 1, 1968.

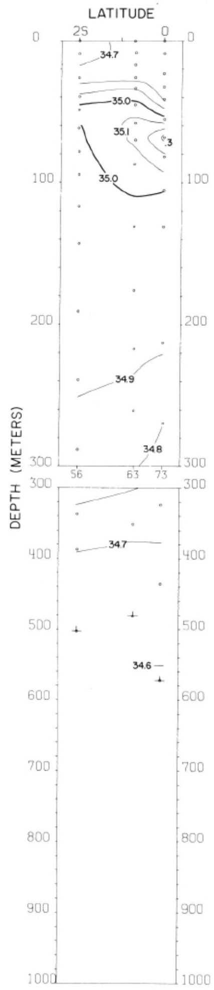
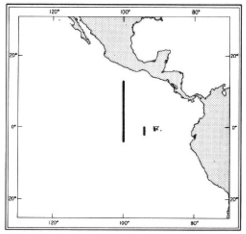


FIGURE T7-S-v2.—Vertical distribution of salinity (°/oo) along a section on 94° W. from 2°00′ S. to the Equator, February 5-8, 1968.



T7-S-v1.

T7-S-v2.

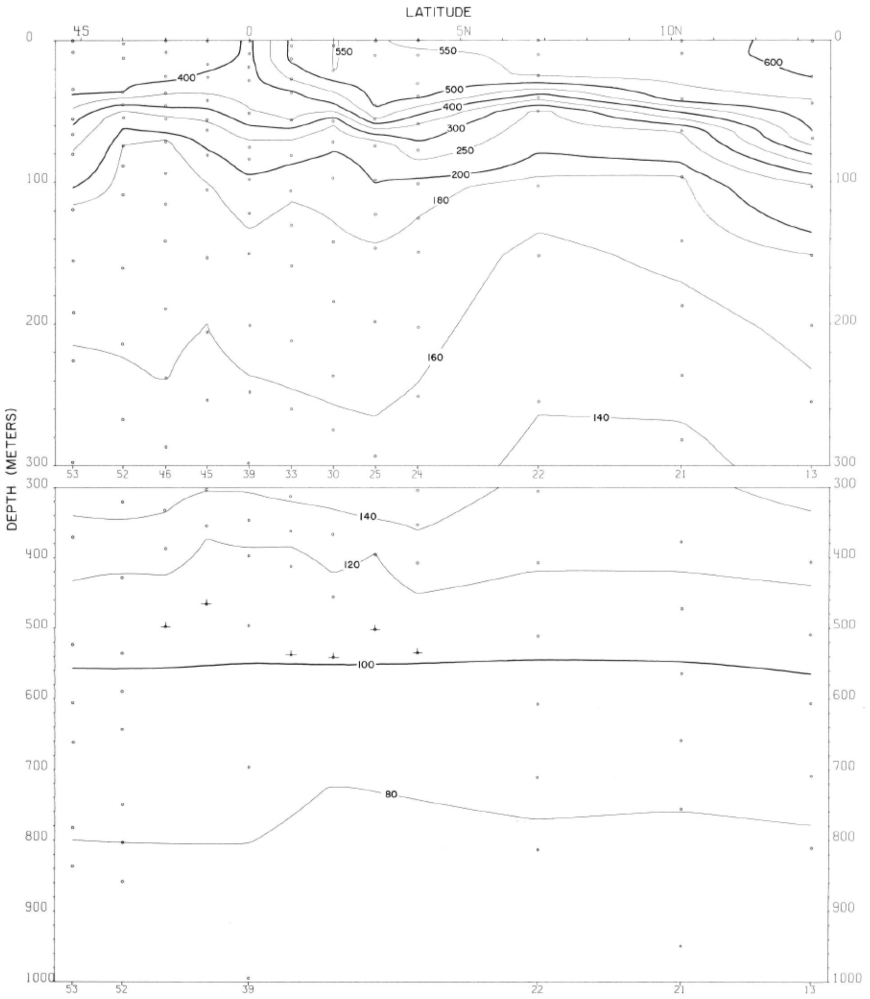


FIGURE T7-δ-v1.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 100° W. from 13°20′ N. to 4°11′ S., January 19-February 1, 1968.

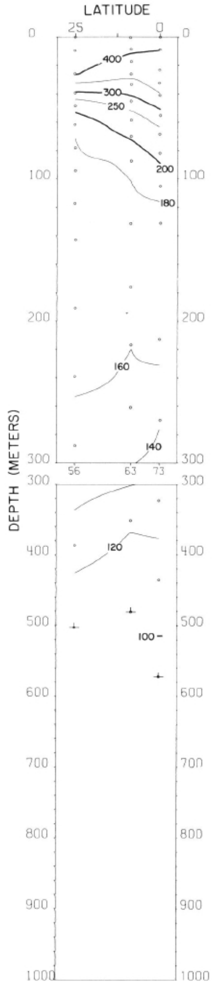
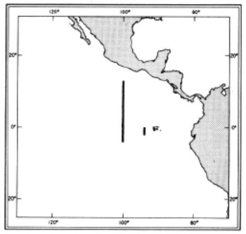


FIGURE T7-δ-v2.—Vertical distribution of thermosteric anomaly, δ_T, (cl./t.) along a section on 94° W. from 2°00′ S. to the Equator, February 5-8, 1968.



T7-δ-v1.

T7-δ-v2.

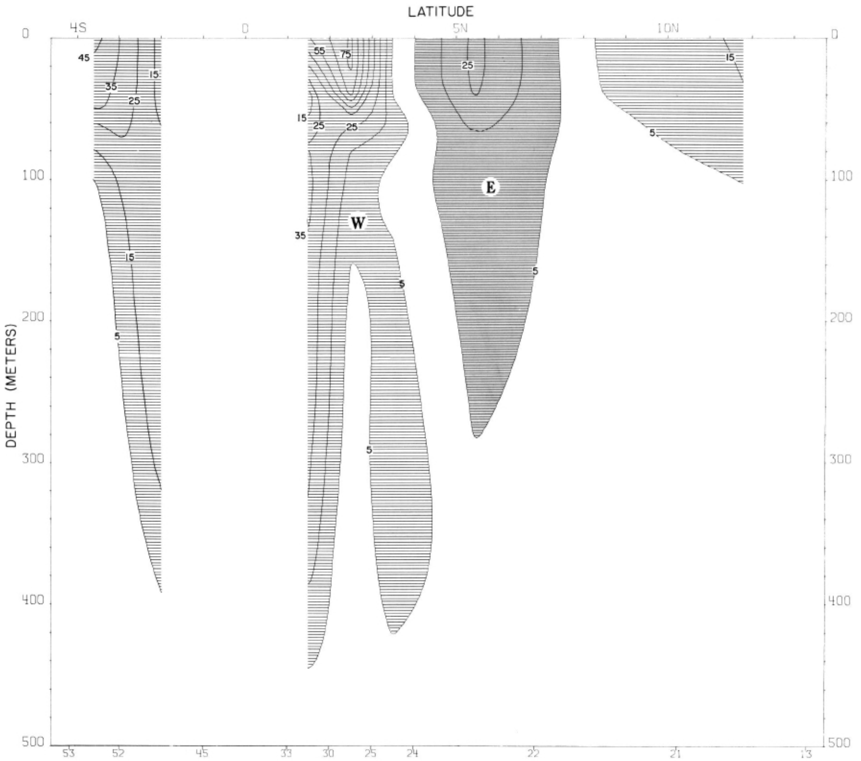
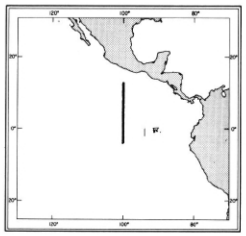


FIGURE T7-G-v1.—Vertical distribution of the component of geostrophic velocity (cm./sec.), along 100° W. from 13°20′ N. to 4°11′ S., January 19-February 2, 1968. Dark shading indicates eastward flow with a velocity greater than 5 cm./sec.; light shading indicates westward flow with a velocity greater than 5 cm./sec.



T7-G-v1.