BERICHTE
aus dem
INSTITUT FÜR MEERESKUNDE
an der
CHRISTIAN-ALBRECHTS-UNIVERSITÄT · KIEL

Nr. 154
1986

TOPOGULF

A joint programme initiated by
IFREMER, Brest (France)
IFM, Kiel (W.Germany)

- Data Report -

Volume 1: CTD, O_2, and Nutrients

by

The TOPOGULF Group

DOI: 10.3289/IFM_BER_154

Copies of the report are available from
Institut für Meereskunde an der Universität Kiel
Abt. Theoretische Ozeanographie
Düsternbrooker Weg 20
D-2300 Kiel 1, FRG

ISSN 0341-8561

Contents

I The TOPOGULF Group

II Introduction

III Acquisition and calibration of the IFREMER CTD-O_2 data and UBO nutrient data

IV Acquisition and processing of the IFM-K CTD, O_2 and nutrient data

V Intercomparison of salinity data

VI Vertical sections

- VI.1 Potential Temperature
- VI.2 Salinity
- VI.3 Potential density referred to the surface
- VI.4 Potential density referred to multiples of 1000db
- VI.5 Dissolved oxygen and nutrients

VII Listings of CTD-O_2 parameters

VIII Listings of rosette-sampled parameters

Summary

From 1983 to 1985 the TOPOGULF-Experiment took place in the North Atlantic to investigate the large scale circulation patterns in the area of the Mid-Atlantic Ridge. With this aim hydrographic parameters were measured from 24°N to 53°N on vertical sections along the eastern and western flanks of the Mid-Atlantic Ridge and perpendicular to it. The obtained CTD, O_2 and nutrient data are presented in this report. Data obtained from moored current meters, SOFAR-floats and geochemical observations will be published in further volumes.

Zusammenfassung

Von 1983 bis 1985 fand im Nordatlantik das TOPOGULF-Experiment statt, um die großskalige Zirkulation im Bereich des Mittelatlantischen Rückens zu untersuchen. Mit diesem Ziele wurden zwischen 25°N und 53°N hydrographische Schnitte entlang der östlichen und westlichen Flanke des Mittelatlantischen Rückens und senkrecht zu ihm aufgenommen. Die gewonnenen CTD-, O_2- und Nährstoffdaten werden im vorliegenden Band dargestellt. Daten, die mit verankerten Strömungsmessern, SOFAR-Floats und geochemischen Verfahren erhalten wurden, werden in späteren Bänden vorgestellt.

I The TOPOGULF Group

The TOPOGULF programme has benefitted from close cooperation between several laboratories. It was initiated by scientists at IFREMER*/Brest and IFM*/Kiel, which carried out the CTD -O_2 and direct current measurements (Eulerian and Lagrangian), and many other scientific groups joined in its experimental and/or data analysis phases. In particular the contribution of several geochemists led to a programme of tracer measurements closely associated with the hydrology work. A summary of all contributions, with domains of interest of each group, and names of principal investigators is given in Table 1. This data report was prepared by:

- M. Arhan, A. Billant (CTD-O_2 calibration), I. Bodevin (programming) and J. Kervella (drawing), from IFREMER.*
- E. Fahrbach, H.H. Hinrichsen (data processing), J. Meincke and A. Sy (CTD calibration and processing), M. Haffar (drawing), all originally from IFM-K*, but see footnote to Table 1 for present affiliations.
- J. Harvey, S. Glynn (salinity calibration and preparation of water sample data), from UEA*.
- P. Tréguer, P. Souchu (analysis of nutrient data), from UBO*.

We also wish to acknowledge the participation of numerous other colleagues who took part in the preparation and execution of the experiment, and the officers and crews of the research vessels LE SUROIT, POSEIDON and METEOR.

* See caption to Table 1 for meanings of acronyms.

Institution	Type of Measurements	Participation in the experimental phase	Participation in the data analysis	Researchers involved
IFREMER	CTD-O_2 Eulerian currents Langrangian currents	X	X	A.Colin de Verdiere M. Arhan H. Mercier M. Ollitrault A. Billant
IFM-K	CTD Nutrients, O_2 Eulerian currents	X	X	J. Meincke(1) H.H.Hinrichsen A. Sy (2) E. Fahrbach (3) A. Wenck
UEA	CTD Nutrients O_2		X	J. Harvey S. Glynn
Univ. Lisboa	CTD		X	I. Ambar
Univ. Paris VI	CTD		X	C. Provost
UBO	Nutrients, O_2	X	X	P. Tréguer P. Souchu
CEN	^3He, Tritium	X	X	L. Merlivat
IUP	Freons, ^3He, Tritium	X	X X	G. Thiele (4) P. Schlosser
Univ. Paris VI	CO_2	X	X	A. Poisson
IPG	Manganese, chromium	X X	X X	J.F. Minster C. Jeundel

Table 1 The TOPOGULF Group

The meanings of the acronyms used in table 1 and the text are as follows:

IFREMER: Institut Francais de Recherche pour l'Exploitation de la Mer (Brest, France)

IFM-K: Institut für Meeresforschung an der Universität Kiel (W.Germany)

UEA: University of East Anglia (Norwich, United Kingdom)

UBO: Université de Bretagne Occidentale (Brest, France)

CEN: Centre d'Etudes Nucleaires (Gif sur Yvette, France)

IPG: Institut de Physique du Globe (Paris, France)

IUP: Institut für Umweltphysik der Universität Heidelberg (W.Germany)

Some members of the Group have changed their affiliation since the experimental phase:

(1) Now at Institut für Meereskunde der Universität Hamburg, (W.Germany) (IFM-HH)

(2) Now at Deutsches Hydrographisches Institut Hamburg, (W.Germany) (DHI)

(3) Now at Alfred-Wegener-Institut für Polar- und Meeresforschung, Bremerhaven (W.Germany) (AWI)

(4) Now at Geophysical Fluid Dynamics Laboratory, (Princeton University) (GFDL)

II Introduction

1. Scientific aims of TOPOGULF

It is well known that the winter climate of western Europe is influenced by the presence of warm water in upper layers of the adjacent Atlantic Ocean. Although it is generally thought that the eastward extension of the Gulf Stream Current system is responsible for this warm water, the intensity of the associated fluxes is still subject to large uncertainties, their very existence naving been questioned by recent studies (WORTHINGTON, 1976). Detailed observations indicate that the world ocean is made turbulent by energetic low frequency currents (0.1, 0.01 cycle per day). Does the nature of these eddy motions allow them to significantly contribute to the meridional oceanic heat transport, as in the mid-latitudes of the atmosphere?

The TOPOGULF programme was designed to study some of the basic processes which are necessary to understand to answer these climatic questions. More specifically the aim was to evaluate at mid-latitudes the exchange between western and eastern basins of the North Atlantic above the Mid-Atlantic Ridge (MAR). This exchange had to be studied as a function of frequency because oceanic turbulence accounts for a large proportion of the energy in the oceans.

The general circulation is more easily obtained from the density field than from direct current measurements, which are very noisy at low frequencies. This, together with the lack of existing meridional hydrological sections in the central part of the Atlantic ocean led us to propose a programme of meridional CTD sections in the vicinity of the MAR, in order to evaluate zonal transports. Two such sections were carried out, one along each

side of the ridge, and since the presence of even a small barotropic component may significantly alter the flux estimates, several transverse shorter sections were designed to form closed boxes allowing a better determination of the reference level by imposing conservation of properties within closed contours (WUNSCH, 1978).

The mesoscale aspect was studied using direct (Eulerian and Lagrangian) current measurements. A set of current-meter moorings was deployed along latitude 48° N between longitudes 20° W and 35° W. This array was designed to investigate the interaction between the ridge and low frequency currents through the spatial distribution of the frequency-energy content and evolution of the mesoscale vertical structure. These measurements extend a series of moored current meter measurements by the IFM-K at the eastern flank of the MAR which began in 1980. They should indicate the link between existing results in the western and eastern basins. The communication at long periods between the two basins is also tested at more southern latitudes using Lagrangian methods: Two clusters of SOFAR floats were launched at positions (36° N, 40° W) and (33° N, 33° W), i.e. one on each flank of the ridge. Latitudes of the Eulerian and Lagrangian arrays were chosen to coincide with possible extensions of Gulf Stream branches: the moorings were deployed south of the Subpolar Front in an area where the North Atlantic Current is expected to be a broad drift to the east with narrow (< 100 km) branches of intense currents superimposed on it, while Lagrangian clusters were launched in the area of the Azores Front. The direct current measurements (Eulerian and Lagrangian) will be described in further data reports to appear in the IFREMER series.

2. The CTD-O_2-Nutrient data

This report is devoted to the presentation of the hydrologic parameters (temperature, salinity, density), dissolved oxygen and nutrients. Data were acquired from a total of 250 stations occupied between 24° N and 53° N (Figure 1). LE SUROIT worked south of the Azores and up to 40° N between July 16 and Sept. 6 1983 whilst POSEIDON and METEOR operated in the northern area, POSEIDON from Sept. 6 to Oct. 13 1983 and METEOR from July 27 to Aug. 25 1984. Hence data from LE SUROIT and POSEIDON can be considered quasi-synoptic, having been collected within a period of three months, but that from METEOR was collected about one year later. Station spacing ranged from 35 to 50 nm (65 to 93 km), and measurements were generally made from near surface down to 4000 decibars (db) (or near bottom when shallower) from LE SUROIT, down to 3000 db (or 2000 db for some stations) from POSEIDON, and to the bottom from METEOR. A description of the equipment used will be given in the following paragraphs as well as of the acquisition and calibration procedures used by the Brest and Kiel groups.

A Neil-Brown CTD-O_2 probe was used on board LE SUROIT, while POSEIDON and METEOR were equipped with a Multisonde-CTD probe, dissolved oxygen being analysed on board the two latter ships from water samples taken at twelve levels. Nutrients were measured from samples taken at all stations occupied by METEOR and at every second or third station occupied by LE SUROIT.

The data presented in this report are in the form of vertical sections and listings of primary parameters at some standard levels. A total of eight sections were defined as shown on figure 1.

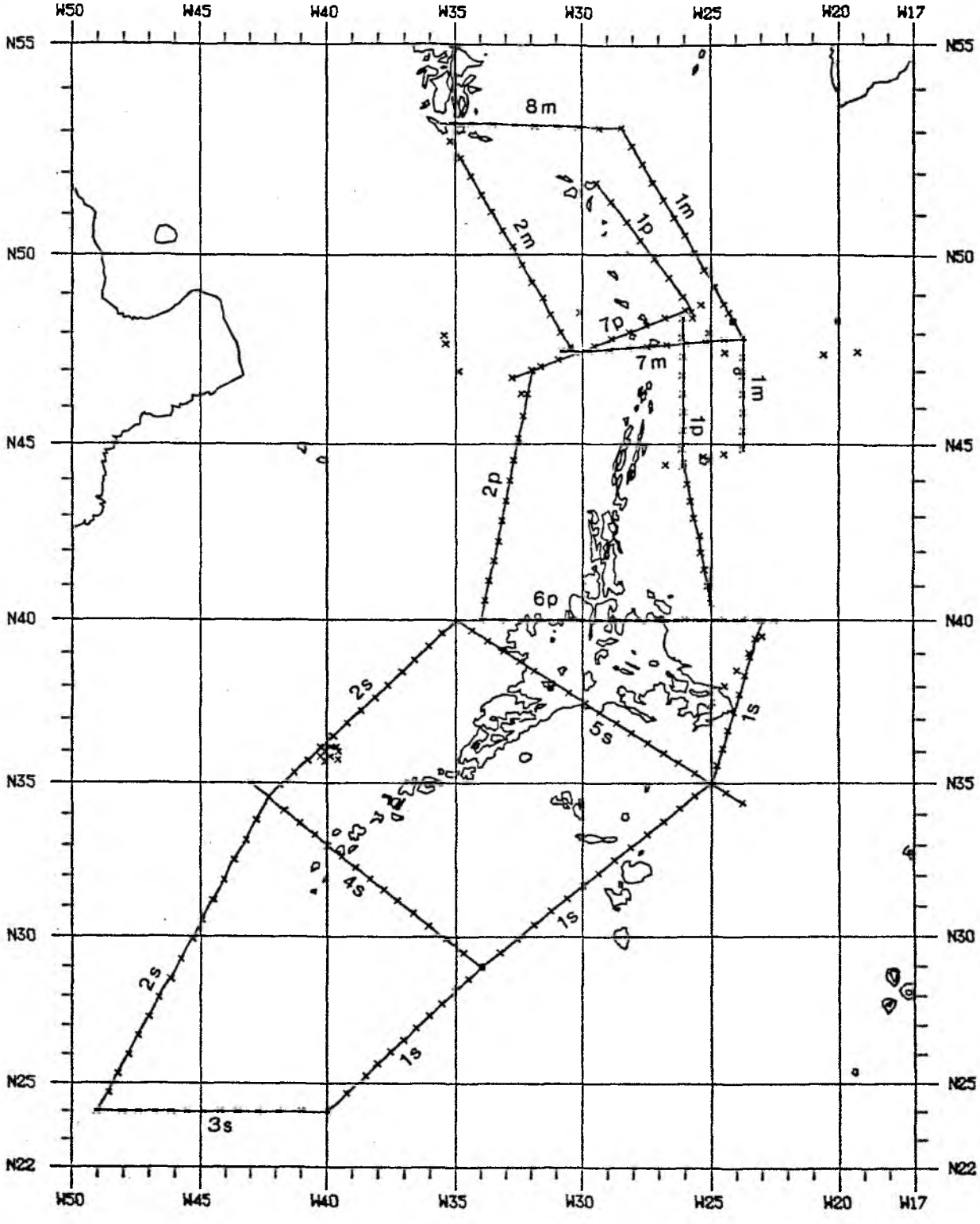


Figure 1 TOPOGULF CTD stations (1983-1984)
(The 2000 m contour is shown).

Suffixes s, p, and m, referring to LE SUROIT, POSEIDON and METEOR respectively, where added to the section numeration. As meridional sections (1 and 2) are composite, a small interval is left in their display between portions carried out by different ships. The section 1m, presenting a considerable latitudinal overlap with section 1p, as well as being occupied one year later, is shown separately on a facing page. All sections were drawn with the same vertical scale, but in order to keep plots of meridional section within one page, their horizontal scale had to be reduced with respect to that of the cross-ridge sections. The plotted parameters are the potential temperature (θ), salinity (S), potential density referred to 0 db (σ_θ) potential density referred to multiples of 1000db (σ_p) (see Table 2), and dissolved oxygen (O_2). The procedures used to compute θ, S and O_2 every decibar from the measured parameters are set out in the following paragraphs. The densities σ_θ and σ_p were computed using the International Equation of State of Seawater 1980 recommended by UNESCO. The potential temperature and density profiles were sufficiently smooth to plot sections of these parameters without any filtering. The salinity and dissolved oxygen had to be passed through running Gaussian filters with standard deviations of 20 db and 5 db respectively.

σ_p	26.00	26.50	26.75	27.00	27.15	31.75	32.00	32.20
ref.pressure(db)	0	0	0	0	0	1000	1000	1000
σ_p	32.30	32.35	36.90	36.95	36.975	37.00	41.45	41.475
ref.pressure(db)	1000	1000	2000	2000	2000	2000	3000	3000
σ_p	41.49	41.50	45.85	45.855				
ref.pressure(db)	3000	3000	4000	4000				

Table 2 Potential density (σp) values of isopycnals shown in vertical sections, and their reference pressures.

The bottle data showed important gaps. The available data were used to obtain interpolated values at 100 db intervals taking account of data at adjacent stations to fit smooth curves through the data points. The resulting computer plots were completed by hand following a subjective analysis carried out by P. Tréguer. The indication of the available data points before interpolation allows the less well sampled areas to be identified.

Listings of the basic physical parameters (P, T, S, O_2) and station labels, are also included in the report. In order to present the complete set of CTD work carried out during TOPOGULF, 13 additional stations occupied by R/V JEAN CHARCOT in June 1983 at the mooring and float launching stations are also included. All stations are numbered according to a "TOPOGULF station number" (in addition to the original cruise station number) ranging from

1	to	115	for the LE SUROIT	stations
116	to	190	for the POSEIDON	stations
191	to	250	for the METEOR	stations
251	to	263	for the JEAN CHARCOT	stations

The depth of water given in the station labels is that recorded at the commencement of each station whereas the depth used in the construction of the vertical sections is that recorded at the end of the down profile.

The final part of this report presents listings of parameters from water-sampling bottles. Where no data are available a space has been left; where a measured value appears anomalous in the profile, and has not been used to obtain interpolated values for the construction of sections, it is followed by a question mark. Values of dissolved oxygen are given in millilitres/litre and of nutrients in micromol/litre. To convert these to micromol/kg they should be multiplied by 43.57 and 0.9756 respectively (this assumes the density of the samples under laboratory conditions to be 1.025 kg/litre).

III. Acquisition and Calibration of the IFREMER CTD-O_2 Data and Nutrient Data

The IFREMER part of the TOPOGULF hydrological sections was realized on board R.V. "LE SUROIT" at 115 stations (1 to 39 during leg 2 and 40 to 115 during leg 3, see Fig. 2) using a Neil-Brown CTD-O_2 probe. The associated rosette allowed twelve samples to be collected on the up profile of each station.

The following paragraphs describe the data acquisition and calibration techniques. More detail about these procedures may be found in the "Rapports Scientifiques et Techniques de l'IFREMER" (BILLANT, 1985).

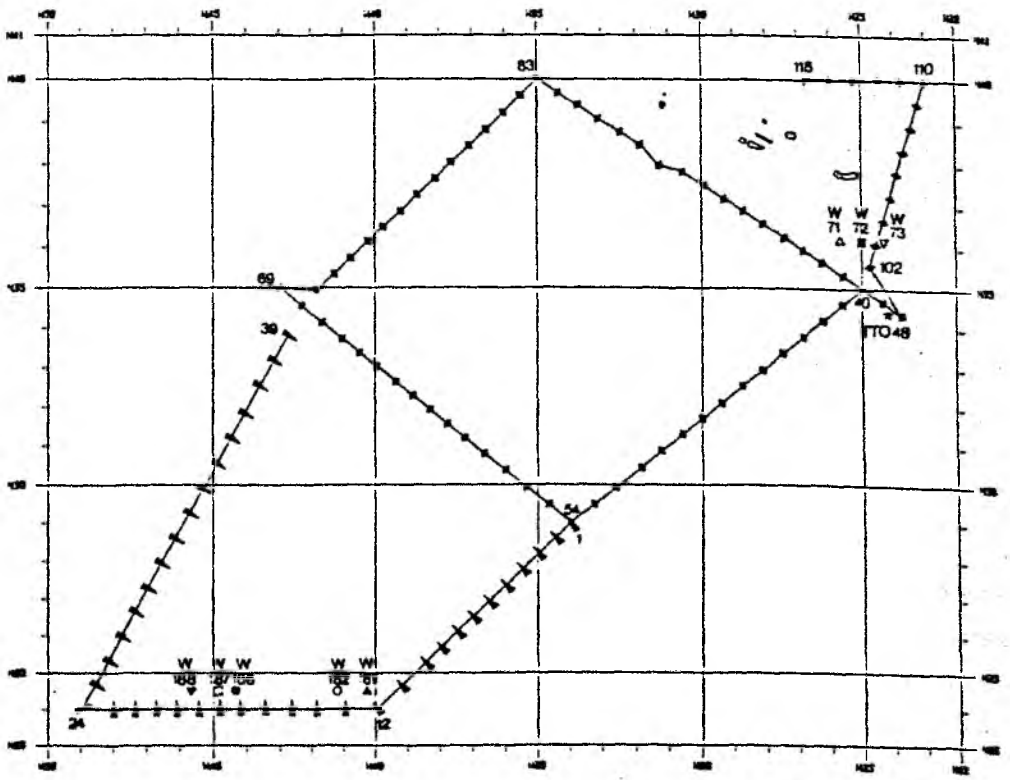


Figure 2 Positions of the IFREMER TOPOGULF stations. Certain stations occupied by WUNSCH in 1981 and TTO station 48 are also indicated.

The profiling CTD-O_2 device consists of an underwater unit comprising electronics and the sensors, connected to the deck unit by a single-conductor armoured cable. The telemetry system determines the sampling interval (32 ms) and allows the following measurements to be obtained with the resolution indicated:

pressure (P):	0.1 db
temperature (T):	0.0005°C
conductivity (C):	0.001mS/cm
dissolved oxygen current (OC):	0.5 nA
dissolved oxygen temperature (OT):	0.13°C

The signals were transmitted to a Hewlett-Packard computer (HP 1000) for real time treatment. After a validation where bad cycles were rejected, the parameters were averaged over 1 db pressure intervals using a Gaussian filter with 0.5 db standard deviation and directly recorded on a 9-track magnetic tape. The probe was lowered and raised at a nominal speed of one meter per second.

After the cruise, the values recorded on the tape (down and up profiles) were calibrated according to the following procedures. The pressure and temperature sensors were calibrated in the laboratory before and after the cruise, which provided a better accuracy than could be obtained from reversing thermometers.

Pressure:

The sensor was calibrated against a deadweight tester "Desgranges et Huot" calibrated at the French Laboratoire National d'Essais (L.N.E.). The accuracy of the reference pressure is 2×10^{-4} of its value. The pressure was measured along a set of increasing and decreasing profiles at different temperatures ranging from 2°C to 23°C. The values obtained were repeatable within 1 db, an

indication that the temperature effect is correctly compensated. The deviation observed between the pressure probe and the reference pressure never exceeded 4 db.

Third order polynomials were then fitted separately to the increasing and decreasing values at 11 points between 0 and 5000 db. The computed standard error was 0.36 db for decreasing pressure and 0.55 db for increasing pressure.

The same procedure applied after the cruise gave values which differed from the ones obtained prior to the cruise by 0.4 db or less. The calibration polynomials determined prior to the cruise were used.

Temperature:

Laboratory calibration of CTD temperature was made against a Rosemount probe with the CTD system immersed in a temperature-regulated bath. The Rosemount probe was calibrated at L.N.E. and periodically referenced to the triple point of water. Temperature is on the 1968 International Practical Temperature Scale.

Prior to the cruise 21 points of comparison, in the range 2°C to 26°C, showed that CTD temperature exceeded the reference temperature uniformly by 0.005°C (ΔT). After the cruise the same measurements indicated that ΔT was 0.003°C. It is impossible to know whether that change in the ΔT value is due to a CTD drift or a slight change in the calibration procedure. The data from the cruise have been reduced by 0.005°C.

CTD Conductivity/Salinity calibration

Since the CTD conductivity was to be calibrated in situ, it was decided to invert the salinity determined from water samples to an in situ conductivity (C_H) using the CTD calibrated temperature and pressure: the 1978 Practical Salinity Scale was used.
During the cruise the conductivity cell of the probe was cleaned periodically (approximatively every 48 hours). The salinity of the samples taken from bottles mounted on the rosette was measured with a Guildline salinometer (G 8400). The mean pressure (P), temperature (T) and conductivity (C) from the CTD were computed for about 15 seconds just before closing the bottle, while the probe was stopped, on the up cast. Because some bottles were leaking (mainly during leg 2), the salinity values from samples were compared with the simultaneous CTD observations and ignored when the difference exceeded 0.02. Out of a total of 463 samples collected during the second leg and 912 during the third, approximatively 20 percent were thus rejected.
First the CTD conductivity was corrected for the sensor deformation with temperature and pressure using a technique given by the manufacturer to obtain C_S. Then, for each leg, the calibrated conductivity was obtained by a polynomial fit of C_S to the sample in situ conductivity (C_H) using standard least-squares regression techniques. The first order polynomial required is expressed by the formula:

$$C_R = C_1 \times C_S + C_0$$

The observations were automatically refitted several times eliminating at each step the residuals exceeding 2.8 standard deviation, until no residual was rejected. For each sample, there was a conductivity residual (ΔC) between the sample derived conductivity (C_H) and the fitted (calibrated) CTD conductivity (C_R). Sets of coefficients C_1 and C_0 were computed separately for leg 2 and leg 3. Within each leg we then verified that the sensor had not been subject to any time drift. Plotting salinity on potential temperature surfaces also revealed a good homogeneity between the two legs.

Nevertheless a detailed examination of the time evolution of residuals at given pressures suggested that some bottles had been leaking at some periods, so it was still possible to improve the calibration by neglecting the corresponding samples. This was done for leg 3 where the samples had a better quality. A new computation then gave the results set out in Table 3. The residuals obtained using these revised coefficients are plotted against pressure in figure 3.

Number of samples	912
Number of good samples retained	561
Retained after computation	532 (58%)
Slope C_{31}	0.999278
Bias C_{30}	+ 0.01682
Standard deviation	0.0025
Maximum residual ΔC_{max} (mS/cm)	0.007

Table 3 Coefficients for salinity calibration, leg 3

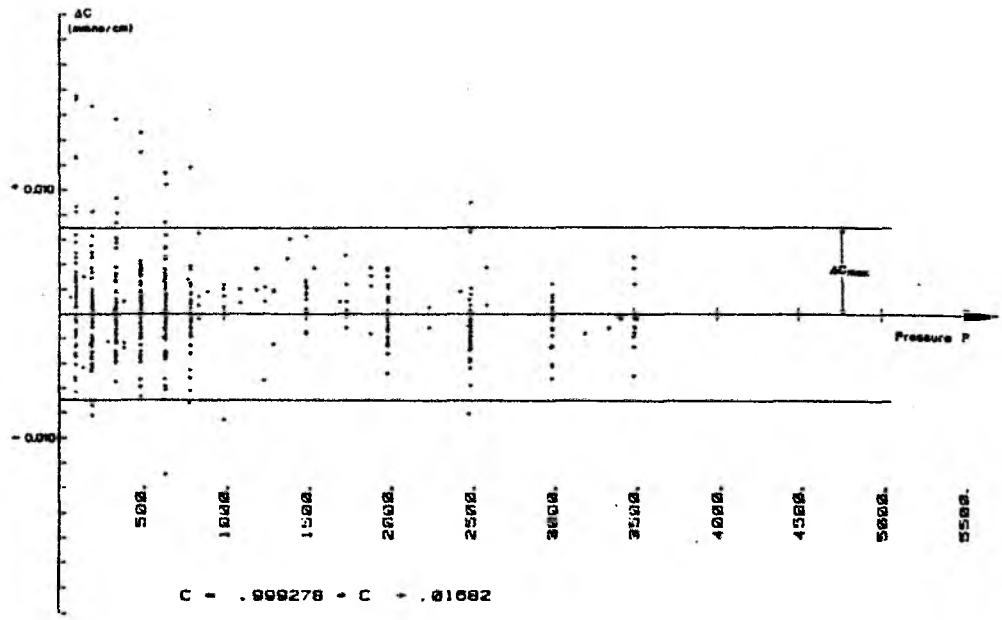


Figure 3 Conductivity residuals versus pressure for leg 3.

The values C_{31} and C_{30} in Table 3 provided a good final calibration of conductivity for leg 3. To maintain the homogeneity between leg 2 and 3 previously verified, the same modification was applied to the coefficients for leg 2 in the range 30 to 50 mS/cm. From this we obtained for leg 2:

$$C_{21} = 0.999283$$
$$C_{20} = 0.01825$$

To check these calibrations with the results of other observations, we compared our calibrated profiles in the deep water ($\theta < 2.5°C$) with those obtained during other recent experiments in the vicinity of TOPOGULF Stations. Some Stations carried out by WUNSCH in 1981 and during TTO were used (see figure 2). We also compared our data with the linear θ -S relation proposed by SAUNDERS (1981) for the deep waters of the North-East Atlantic. This comparison is shown in figure 4(a) for the East and figure 4(b) for the West basins .

It was found that salinities at given potential temperatures rarely differed from those of other investigators by more than 0.004. Finally the internal consistency of the salinity data from LE SUROIT was investigated by plotting salinity on potential temperature surfaces below 2.5°C (Fig. 5). It is seen that differences between adjacent stations even in different legs rarely exceeded 0.002.

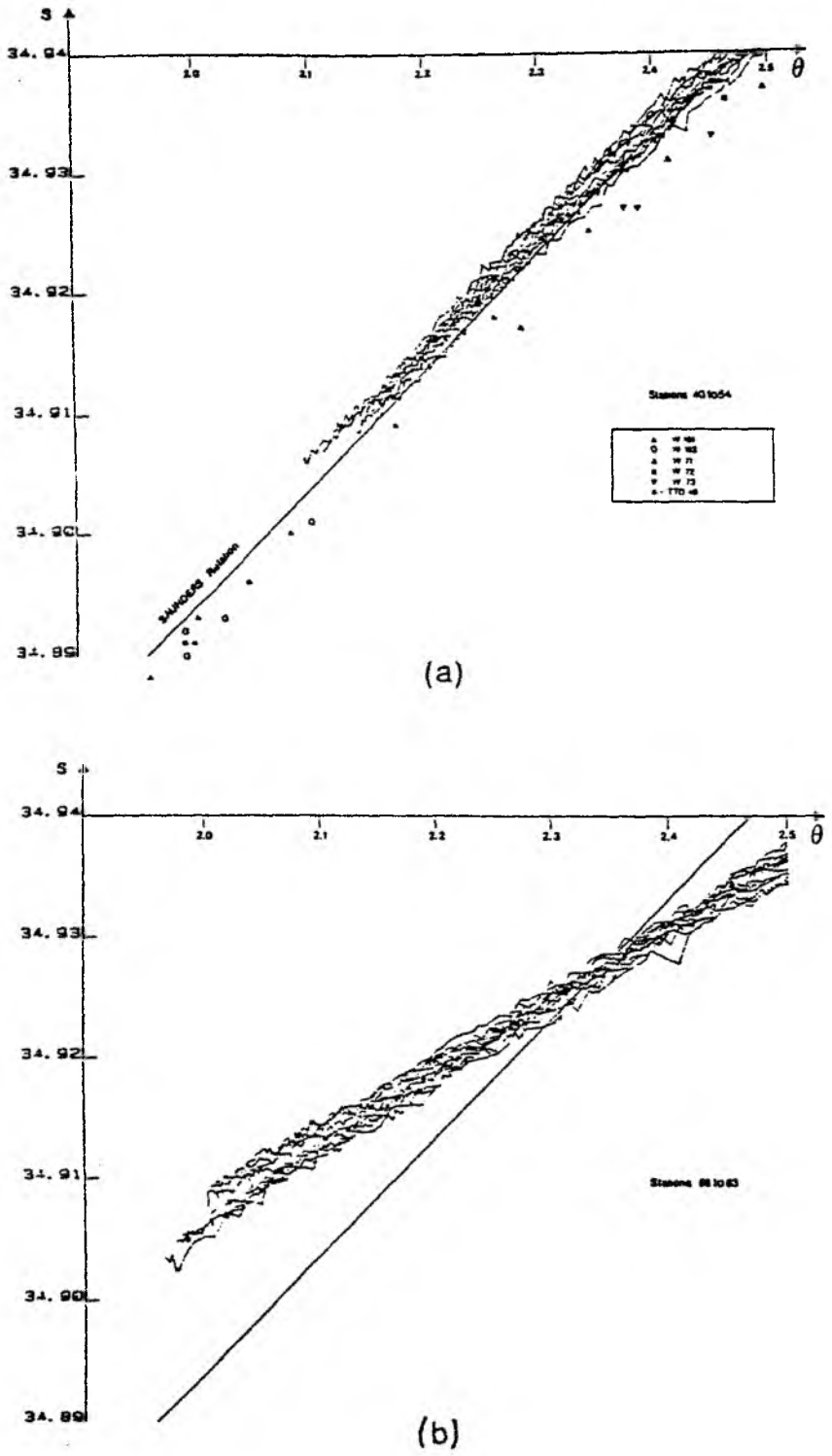
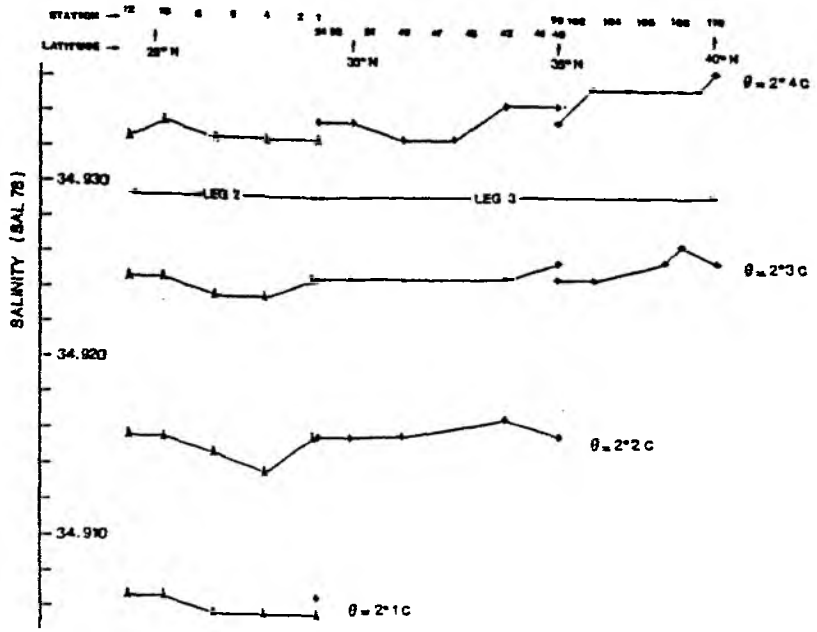
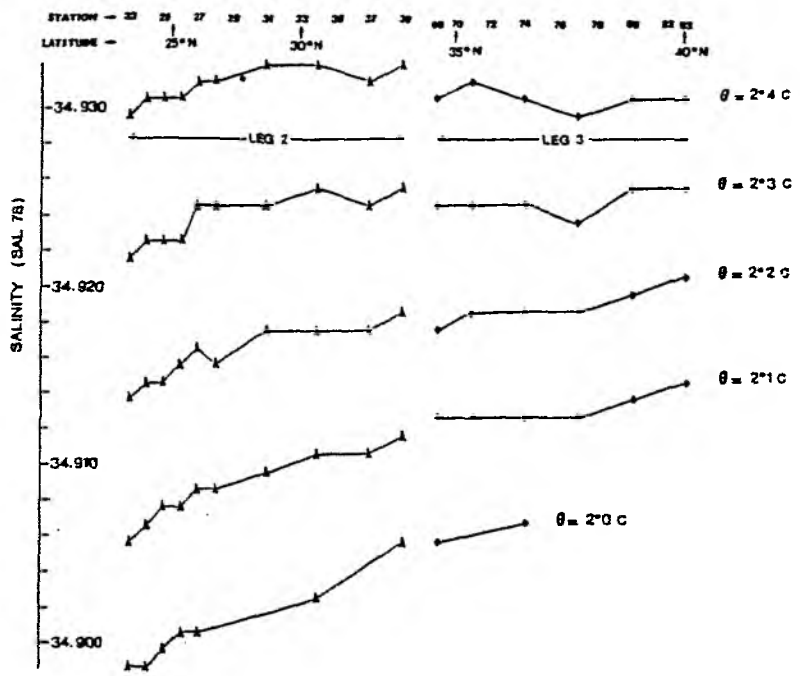


Figure 4 θ-S diagrams for deep water (θ< 2.5°C) at LE SUROIT stations compared with non-Topogulf neighbouring stations and the SAUNDERS (1981) relation.
a) Eastern basin b) Western basin.



(a)



(b)

Figure 5 Salinity on some potential temperature surfaces along LE SUROIT meridional sections.

a) Section 1s east of the ridge

b) Section 2s west of the ridge

Oxygen Calibration

Dissolved oxygen was measured from LE SUROIT with a Beckman polarographic oxygen sensor: an oxygen current (OC) and a temperature (OT) near the electrodes were measured. An algorithm to compute oxygen from the CTD sensors has been adapted from the GEOSECS Group described in MILLARD (1982).

$$OXC\ (ml/l) = soc \times OC \times OXSAT \times e^{(oxtc \times (oxc1 \times T + oxc2 \times (OT-T)) + oxpc \times P)}$$

OC : CTD oxygen current
OT : CTD oxygen (probe) temperature
P : CTD pressure (calibrated)
T : CTD temperature (calibrated)
soc: oxygen current slope
oxc1 = 1
oxc2 = weight fraction of oxygen (probe) temperature
oxpc = pressure correction factor
oxtc = temperature correction factor
OXSAT = oxygen saturation value after WEISS (1970)

The oxygen samples for calibration were drawn from the water-sampling bottles prior to salinity samples and analysed using a Winkler method, precision +/- 0.01 ml/l.

The calibration of oxygen is subject to errors because:

a) there are significant differences between the oxygen values measured by the CTD sensors in the down and up profiles,
b) water samples are collected during the up profiles,
c) the oxygen sensor is disturbed when breaking the profile and switching off the sensors during the closing of each bottle.

Thus we have to distinguish the down and up profiles to calibrate oxygen. The oxygen calibration procedure involves matching the up

profile water sample oxygen to the down profile CTD oxygen at the corresponding pressure. A mean value for each parameter is computed over a thickness of 5 db around the sampled pressures on the down profiles. For the up profiles the measurements are averaged between 6 and 2 db lower than the sampling pressure. The water sample oxygen values (OH) are used together with the corresponding CTD observations to determine the least squares regression coefficients soc, oxc2, oxpc, oxtc. The formula is linearized by taking natural logarithms:

$$\ln \frac{OH}{OC \times OKSAT} = \ln soc + oxtc \times T + oxtc \times oxc2 \times (OT - T) + oxpc \times P$$

OH = water sample oxygen value in ml/l

During the cruise some water sample oxygen values were neglected which appeared erroneous and where problems had been encountered in sampling or analysis. The fit with the remaining values was carried out using the same procedure as for conductivity calibration (elimination of residuals exceeding 2.8 standard deviation). A first determination using all the stations of each leg (down and up profiles) was obtained.

	DOWN PROFILES				UP PROFILES			
	LEG 2		LEG 3		LEG 2		LEG 3	
	Stations 1 to 24	Stations 35 to 39	Stations 40 to 54	Stations 55 to 115	Stations 1 to 24	Stations 25 to 39	Stations 40 to 54	Stations 55 to 115
Number of samples	264	156	192	739	262	154	190	729
Samples retained	227	148	166	664	225	146	175	705
Samples retained after computation	222	137	150	619	220	137	169	675
soc	2.9257	2.8979	2.8935	2.8535	2.9405	2.9227	2.9311	2.8660
oxpc	0.000154	0.000156	0.000153	0.000157	0.000157	0.000157	0.000155	0.000159
oxtc	- 0.0328	- 0.0323	- 0.0295	- 0.0316	- 0.0350	- 0.0330	- 0.0314	- 0.0336
oxc1	1	1	1	1	1	1	1	1
oxc2	0.405	0.398	0.754	0.475	0.779	0.513	0.301	0.639
Standard deviation	0.068	0.044	0.057	0.046	0.079	0.054	0.072	0.047
Maximum residual ΔO_{max} (ml/l)	0.19	0.12	0.16	0.13	0.22	0.15	0.20	0.13

Table 4 Coefficients for oxygen calibrations, legs 2 and 3

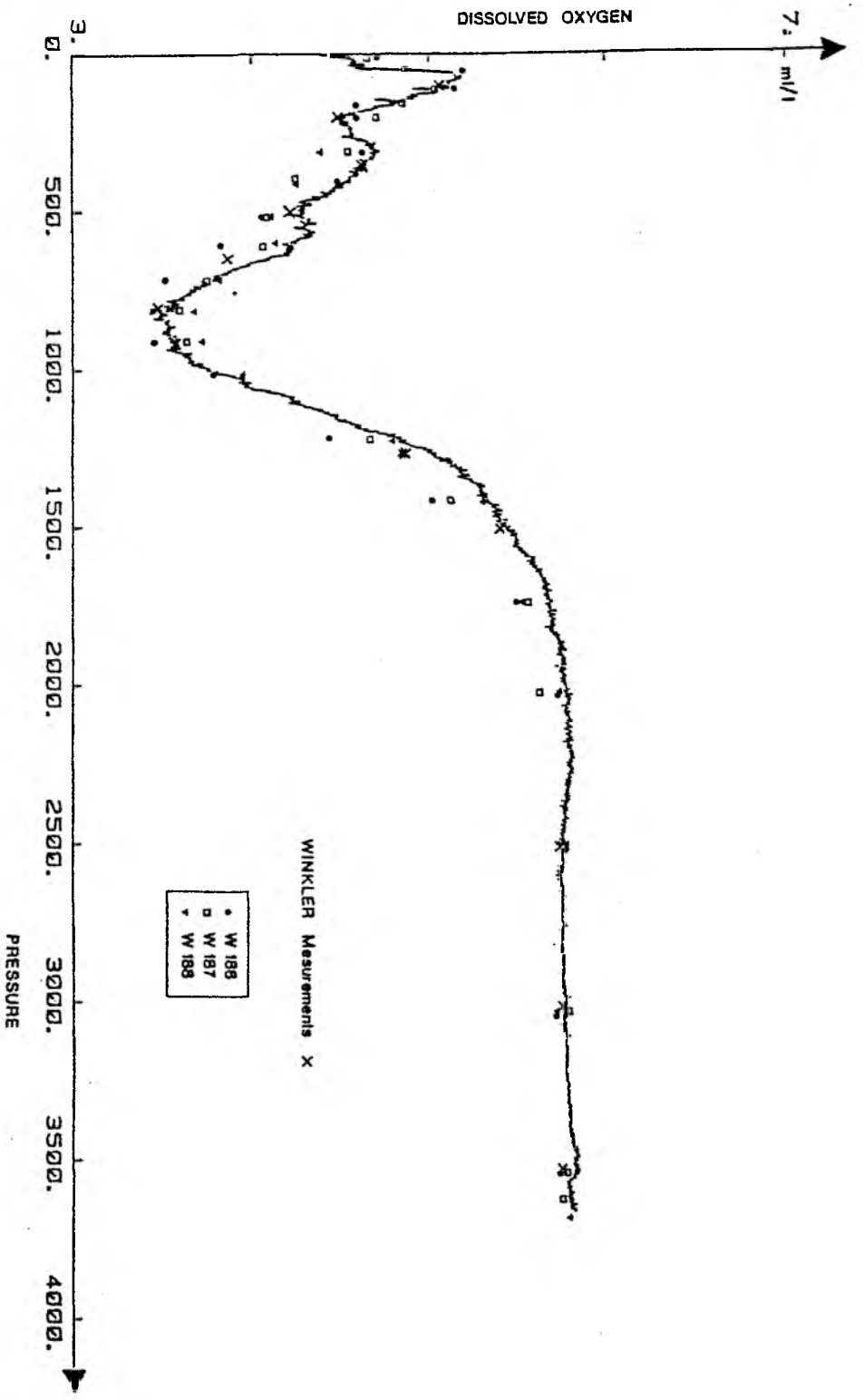


Figure 6 Dissolved oxygen from the CTD-O_2 down profile at station 18 compared with the WINKLER measurements and data from neighbouring stations of WUNSCH in 1981. (See Figure 2 for station positions).

The distribution of the ensuing oxygen residuals versus time revealed a time drift of the sensor response. Thus new fits were made separating each leg into two parts. The results obtained with the new fits are set out in Table 4. The residuals show the calibration to be acceptable in both space and time to an accuracy of better than 0.1 ml/l.

As for salinity, we compared our dissolved oxygen results with those from neighbouring stations of other experiments (see, for example, figure 6). Other comparisons, with GEOSECS and TTO 81, show the difference to be of the same order. Deviations from the water sample oxygen values are also indicated on figure 6 and do not exceed 0.1 ml/l.

Nutrient Data from LE SUROIT

Samples from 2.5 l Niskin bottles mounted in a rosette above the CTD-O_2 probe were used for the determination of nutrient concentrations as well as for the calibration of conductivity and oxygen data. Nutrient data were acquired at up to 12 levels at each of 47 stations. Non-filtered samples were stored in 125 ml polyethylene bottles for silicate determinations and in 125 ml glass bottles for nitrate (+ nitrite) and phosphate determinations, and were kept frozen (-20°C) for two to three months before analysis. Measurements were made according to TREGUER and LE CORRE'S (1975) method for Technicon Auto analyzer with a precision of 1% for phosphate and silicate values, and 1 to 2% for the nitrates. However, because of silica polymerization during freezing, some difficulties were met during the silicate analyses. (A depolymerization of silica is necessary, by treating the sample in boiling water for 15 min inducing a partial dissolution of biogenic silica). This may have lead to errors of up to about 1 micromol/litre in silicate values.

IV. Acquisition and Processing of the IFM-K CTD, O_2 and Nutrient Data

The in-situ measurement of the hydrographic parameters pressure (P), temperature (T) and conductivity (C) was carried out using the 'Multisonde' probe (POSEIDON: MS35, METEOR: MS45) which was developed by the 'Institut für Angewandte Physik' (IAP) in Kiel, F.R.G. The 'Multisonde' is commercially produced by 'Meerestechnik-Elektronik GmbH (ME)' in Trappenkamp, F.R.G. For detailed information about the principle of measuring and data transmission as well as further citations, see KROEBEL et al. (1976) and BIERMANN et al. (1976). The technical data of the probes are summarized in Table 5. The accuracy of temperature and conductivity as specified depends in practice on the quality of the laboratory calibration of the manufacturer. Besides the sensor response characteristics the calibration is the limiting factor on the accuracy.

Table 1: Technical data of the 'Multisonde' according to manufacturer's declaration.

	Pressure	*Temperature*	*Conductivity*
Principle	*Strain- Gauge Pressure Cell*	*Pt Resistance PT200*	*Symmetric Electrode Cell*
Range	*0 - 6000 dbar*	*-2 °C - +35 °C*	*5 - 55 mS/cm*
Resolution	*0.2 dbar*	*2 mK*	*2 µS/cm*
Time-Lag/Cell length		*60 ms (without prot. sheath)*	*10 cm*
Long Form Stability		*±5 mK/0.5y*	*±10 µS cm^{-1}/0.5y*
Accuracy	*0.35 % of range*	*±5 mK*	*±5 µS/cm*

Table 5 Technical data of the 'Multisonde' according to manufacturer's declaration.

The profiling CTD device consists of an underwater unit containing the probes which is connected to the deck unit by a single-conductor armoured cable. Due to damage to this cable the CTD observations during the POSEIDON cruise did not exceed 3000 db. The normal data flow then goes from the deck unit to a 'Data General NOVA' computer which stores pressure, temperature and conductivity in physical units with a sampling rate up to 16 s^{-1} (POSEIDON: 16 s^{-1}, METEOR: 10 s^{-1}). During periods when the ship's computer failed the raw data (frequencies) were recorded on audio tape and transmitted to the computer at a later time.

CTD Laboratory Calibration and in-situ Comparison

The laboratory calibration was carried out prior to the cruise. Due to the total duration of the cruises (METEOR: 6 months) in combination with a large and non-systematic drift of the CTD (METEOR) and due to hardware problems (POSEIDON) no after-cruise laboratory calibration was carried out.
The calibration of pressure was achieved by means of a piston gauge at IFM-K. The r.m.s. error of the approximation, with typical magnitude of 1 to 3 db, is smaller than the error of 0.35% of the total range quoted by the manufacturer. No compensation for temperature effects was carried out.
The temperature and conductivity were calibrated at the IAP in Kiel using a 200 l salt water bath containing the entire probe including the electronics together with calibrated temperature and conductivtiy sensors from the IAP as substandards. The water bath with the probes was cooled from 30°C down to -1°C taking points of comparison for conductivity and temperature about every 2°C. The calibration of conductivity C = C(P,T,S) is performed by using the salinity algorithm of FOFONOFF and MILLARD (1984) with C(0,15,35) = 42.902 mS/cm. The coefficients were calculated by means of standard least-square fits with r.m.s. errors usually clearly below 5 mK for temperature and 5 µS/cm for conductivity. The accuracies for the substandards used were significantly better than the manufacturer's given value. However, various instrumental problems during the cruises made the conductivity laboratory calibration futile.
The laboratory calibration, especially and any drift in the sensor were checked by means of in-situ comparisons using a

'General Oceanics' rosette sampler mounted on the CTD device. The water samples were analysed with a 'Guildline Autosal Laboratory Salinometer Model 8400'. Since an experiment over a long period gave evidence for significant changes of salinity of bottled seawater samples during storage (SY and HINRICHSEN, 1986), the salinity analysis was performed on board only some days after the water samples were collected. The temperature comparisons were achieved using mercury reversing thermometers in a rotating mode to increase the statistical independence. No significant deviation from the laboratory calibration was found for temperature and thus no correction was applied. The pressure correction was restricted to a zero pressure level correction of $\Delta P = -18$ db (POSEIDON) and $\Delta P = 3$ db (METEOR). An additional pressure comparison on the METEOR cruise by means of 10 protected and 21 unprotected thermometers at two pressure levels shows a further possible error of +/- 10 db. This error is composed of the error due to manufacturer's declaration, the hysteresis (3 db maximum) and an error due to the temperature dependence of the pressure sensor.

CTD Data Processing

During the cruises we had serious instrumental problems with both Multisondes used. The salinity signal of MS35 (POSEIDON Cruise P 104) was contaminated by oscillations with a vertical length scale up to about 150 m and an amplitude of the order 0.01. In the deep water (at $P > 2490$ db) 16 profiles showed offsets of about 0.01 (POSEIDON). A further cause of noise was the intense rolling of POSEIDON due to extremely rough weather conditions. The MS45 on the METEOR cruise (M69/2) showed a strong step-like change in salinity with time (0.05 in 23 days) and instability when the lowering speed exceeded 1.3 m/sec. This latter effect, which increased the noise level, was attributed to the mounted rosette sampler changing the form drag of the instrument body.
Due to the bad characteristics of the raw values of salinity the data processing became a time consuming and laborious task. It was performed along the lines of the report by SY (1983). The single steps of processing are documented in flow diagrams (Fig. 7a and 7b).

CTD Processing Cruise P104

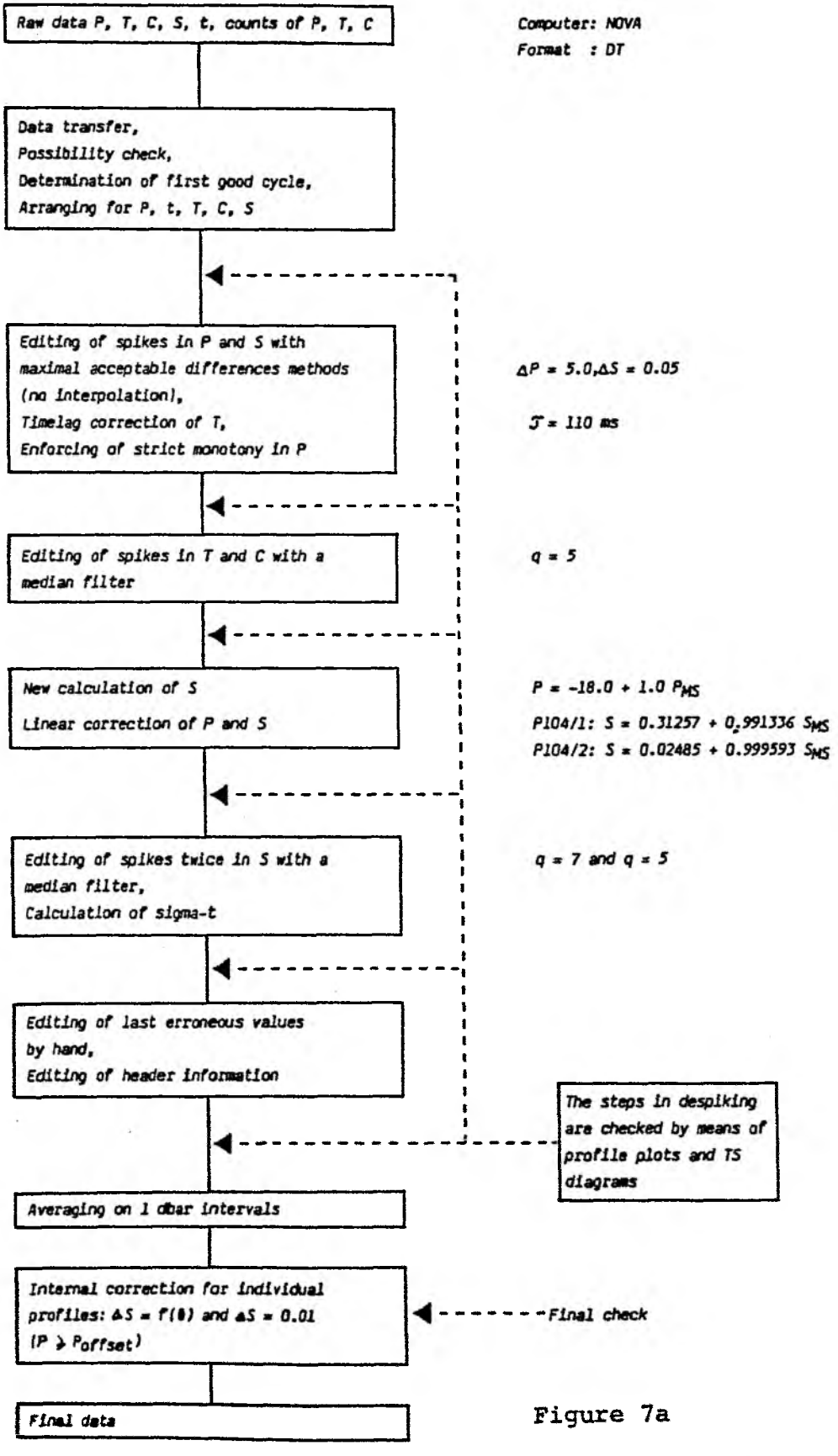


Figure 7a

CTD Processing Cruise M69/2

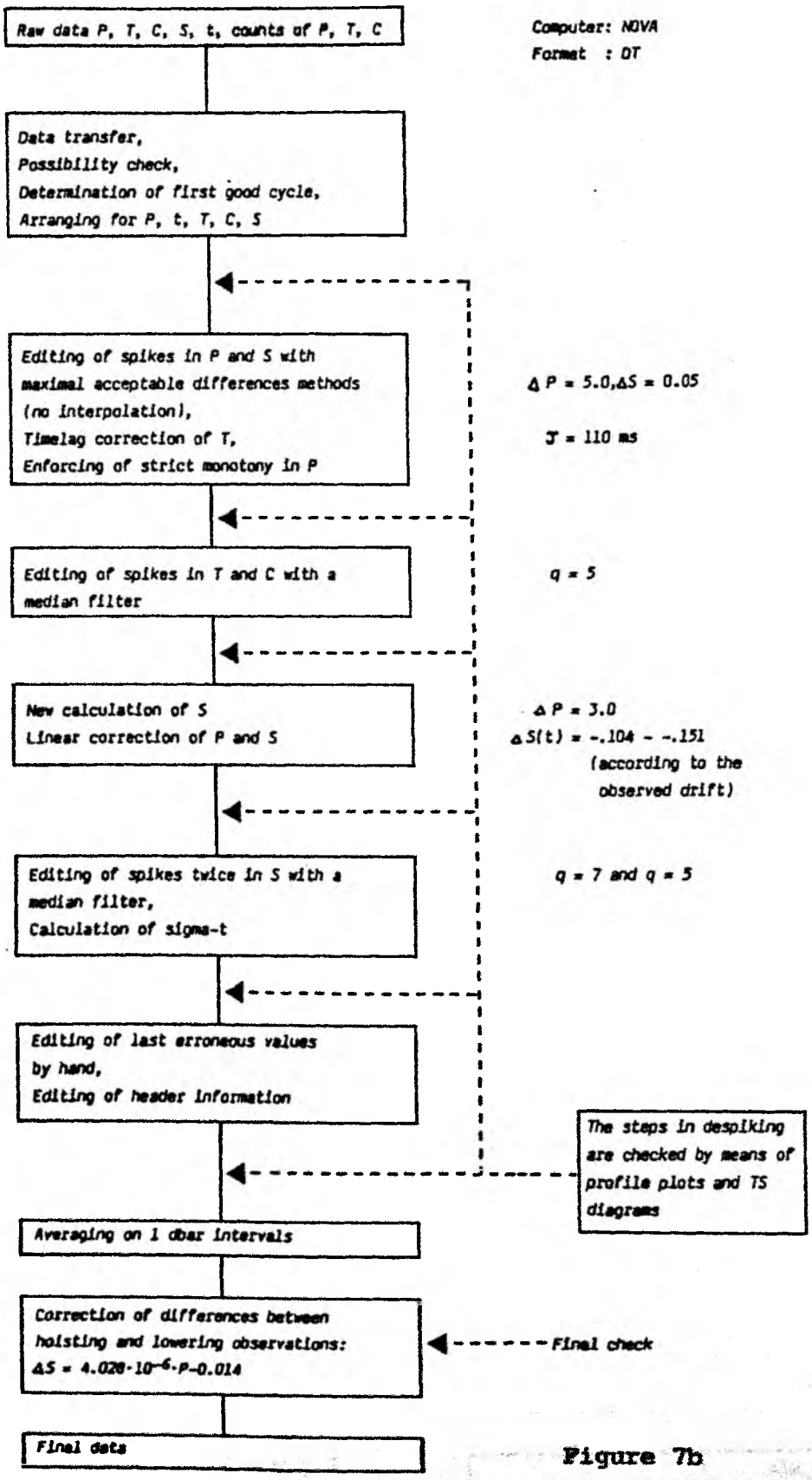


Figure 7b

The high noise level at intermediate depths, especially in the main thermocline, made the application of the median filter (SY, 1985) necessary. A final examination of POSEIDON and METEOR data showed the necessity of a further correction. For METEOR data a correction was applied to the lowering profiles as $\Delta S = 4.028 \times 10^{-6} \times P - 0.014$ to eliminate errors due to differences from the hoisting profile, which seems to be caused by a pressure and/or temperature effect on the conductivity sensor. For the POSEIDON data smoothed plots of salinity against θ from the Multisonde during descent were compared with sample bottle salinity values (collected during ascent) plotted as a function of θ computed from the multisonde record during ascent. Using what appeared to be the most reliable 540 values of ΔS, the difference between the sample bottle salinity value and the salinity from the Multisonde descent profile at the corresponding θ, we established best fit regression lines of S as a function of θ for seven groups of stations and used these to apply further corrections to the Multisonde salinity data. An additional correction of 0.01 was applied below the offsets noted above at 16 POSEIDON stations. Comparing the processed data with a subsample of the bottle data (672 from a total of 740) as a final check we found an overall mean deviation for the POSEIDON data $\overline{\Delta S} = -0.003$, and a standard deviation of $s = 0.012$ (we discarded all doubtful values, i.e. values with residuals outside a 3 standard deviation limit). For the final METEOR data we found with a subsample of 202 bottle values from 311 (here we discarded all values above 200 dbar and outside a 2 standard deviation limit) an overall mean deviation $\overline{\Delta S} = -0.001$ and a standard deviation of $s = 0.007$.

Oxygen and Nutrient Measurements

Oxygen measurements were carried out by means of 'Winkler Titration' on water samples collected with the rosette water sampler at 12 levels. Because of leaking bottles during the POSEIDON cruise a mean error of 3% has to be taken into account. Since the oxygen content in the deep and bottom water is high, degassing should occur if the trapped samples were heated above their saturation temperature (WORTHINGTON, 1982). According to the tables of GREEN and CARRIT (1967) the saturation temperature is not below 6°C for our data. Thus, having the uppermost sampling at 100 db (METEOR), avoiding any long delay in the warm mixed layer and bottling the deep samples first, we reduced the possibility of degassing of O_2.

Measurements of the nutrients (silicate, phosphate and nitrate) were made on the METEOR cruise only. They were sampled at 12 levels and analysed with an automated system (AKEA automatic chemical analysis system). The nutrient analysis was performed according to the procedure described by GRASSHOFF et al. (1983). The standards were prepared from distilled water and nutrient-poor surface sea water. They were used for calibration every 10 sample. One station (METEOR 86) at the end of the cruise was used to estimate the precision of the oxygen and nutrient samples. The values obtained are shown in Table 6 and are close to the analytical precision reported by GRASSHOFF et al. (1983).

	mean	rms	coeff. of variation (%)
Oxygen (ml/l)	5.05	0.043	0.85
Nitrate (micromol/l)	16.30	0.180	1.1
Phosphate (micromol/l)	0.93	0.024	2.6
Silicate (micromol/l)	7.80	0.260	3.3
pH	8.09	0.008	0.1

Table 6 Estimated mean and standard deviation of oxygen and nutrients calculated from 12 samples at 700 db at TOPOGULF station 242 (METEOR Station 86).

V Intercomparison of Salinity Data

Stations were occupied by both POSEIDON and LE SUROIT along 40° N and between 37.5°N and 40° N to the east of the Ridge. Taking mean values for neighbouring groups of about five stations from each ship, comparisons were made between salinities from the two ships at selected values where the θ-S relationship is very consistent: 11 to 14°C in North Atlantic Central Water and 2.5 to 3.25°C. The mean difference between salinities is 0.010, the POSEIDON values being higher, with a standard deviation of 0.005.

No reason could be found, however, for this discrepancy, and comparisons between salinities in the deep water from neighbouring POSEIDON and METEOR stations between 45°N and 50° N showed close agreement (+/- 0.003). Hence no futher adjustment was made to eliminate this difference between salinities from POSEIDON and LE SUROIT at about 40° N which remains evident in the salinity and density sections.

References

BIERMANN, P.H., P. DIECKMANN and B.S. FEDDERS (1976): Die Telemetric der Kieler Multisonde, presented in INTEROCEAN '76 Ref.No. IO 76-403, Düsseldorf, F.R.G., 15-19 June 1976.

BILLANT, A.(1985) : Calibration des mesures d'une sonde $CTDO_2$ Neil-Brown, Exemple de la Campagne TOPOGULF. Rapports Scientifiques et Techniques de l'IFREMER, No. 1-1985.

FOFONOFF, N.P. and R.C, MILLARD Jr. (1984) Algorithms for Computation of fundamental properties of seawater. UNESCO Techn. Pap. in Marine Science, 44, 53 pp.

GRASSHOFF, K., M. ERHARDT and K. KREMLING (1983): Methods of seawater analysis. Verlag Chemie-Weinheim, 419 pp.

GREEN, E.J. and D.E. CARRIT (1967): New tables for oxygen saturation of seawater. J. Mar. Res., 25, 140-147.

KROEBEL, W., P. DIEHL, L. GINZKEY, K.-H. MAHRT, J. RATHLEV, R. SIARA and TH. SCHULZ (1976) Die Kieler Multimeersonde der Jahre 1975/76, ihre Sensoren, Parameter mit Ergebnissen von Datenaufnahmen und Perspektiven für ihre Auswertungen.
Presented in INTEROCEAN '76, Ref. No. IO 76-402, Düsseldorf, FRG. 15-19 June 1976, 1034-1046.

MILLARD, R.C. Jr. (1982): CTD calibration and data processing techniques at WHOI using the 1978 practical salinity scale. Proc. Int. STD Conference and Workshop, La Jolla, Mar.Tech. Soc., 19 pp.

SAUNDERS, P.M. (1981):CTD data from the north Madeira basin 19 January - 12 February 1981 Discovery Cruise 117. Data report 26 IOS, 88 pp. (Unpublished manuscript).

SY, A. (1983):Warmwassersphäre - Handling and processing of hydrographic data. - Technical Report. Berichte aus dem Institut für Meereskunde, Kiel, No. 111, 86 pp.

SY, A. (1985): An alternative editing technique for oceanographic data. Deep-Sea Res., 32, 1591-1599.

SY, A. and H.-H. HINRICHSEN (1986): The influence of long-term storage on the salinity of bottled seawater samples. Dt. Hydrogr. Z. 39, 35 - 40.

TREGUER, P. and P. LE CORRE (1975): Manuel d'analyse automatique des sels nutritifs dans l'eau de mer. 150 pp.

WEISS, R.F. (1970): The solubility of nitrogen, oxygen and argon in water and seawater. Deep-Sea Res., 17, 721-735.

WORTHINGTON, L.V. (1976): On the North Atlantic circulation. The John Hopkins Oceanographic Studies 6: 110 pp.

WORTHINGTON, L.V. (1982): The loss of dissolved oxygen in Nansen bottle samples from the deep Atlantic Ocean. Deep-Sea Res.,29, 1259-1266.

WUNSCH, C. (1978): The North Atlantic circulation west of 50° W determined by inverse methods. Reviews of Geophysics and Space Physics,16, 583-620.

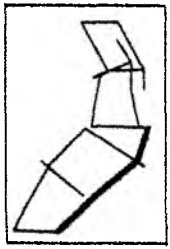
VI Vertical Sections

TOPOGULF

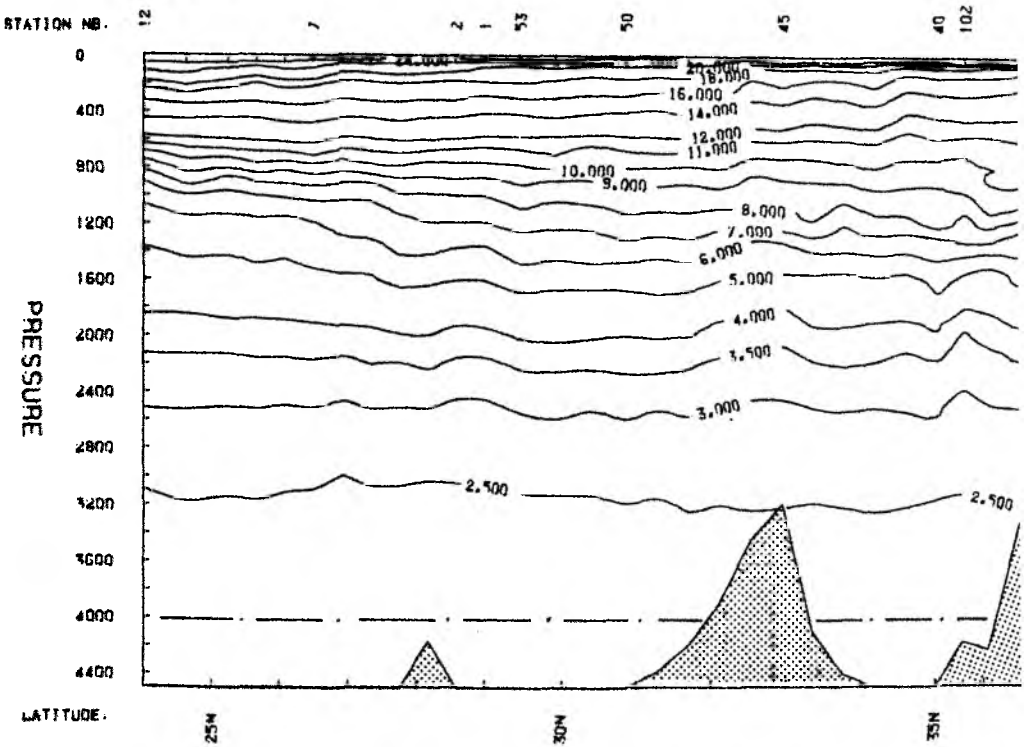
VERTICAL SECTIONS

Theta

(Deg. Cel.)



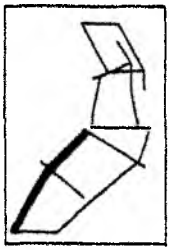
TOPOGULF, SECTION IS -THETA (DEG.CEL.)



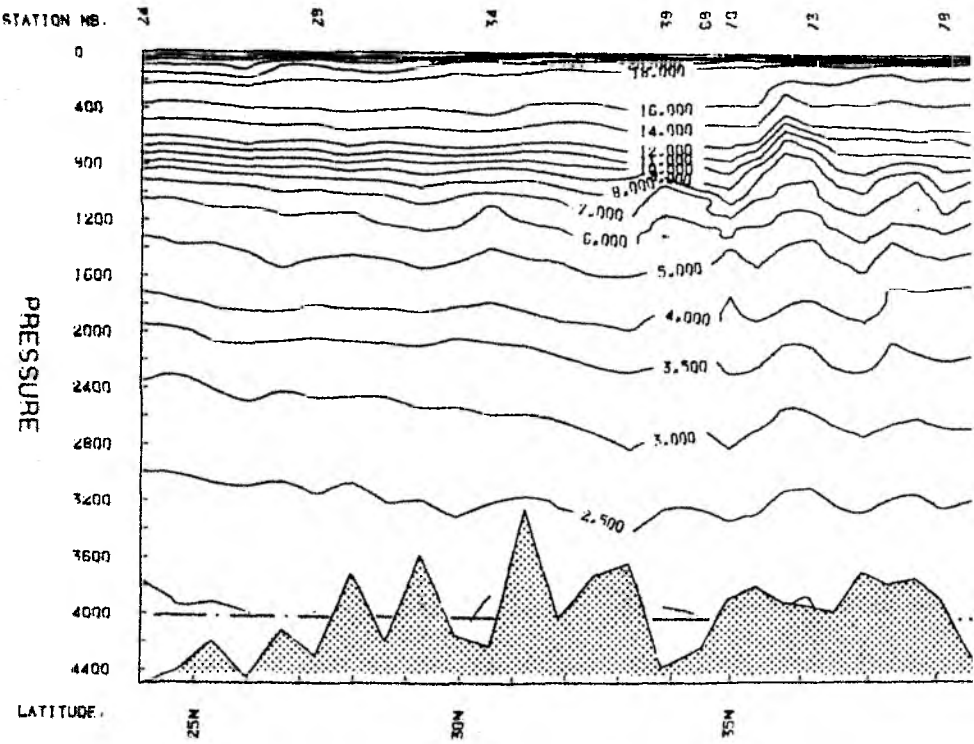
SECTION 1P -THETA (DEC.REL.)
14.000
12.000
11.000
10.000
9.000
7.000
6.000
5.000
4.000
3.500
40N
45N
50N

TOPOCULE: SECTION 1M THETA (DEG.REL.)
STATION NR.
PRESSURE
LATITUDE.
45N
50N
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
1.000
2.000
3.000
4.000
5.000
6.000
7.000
8.000

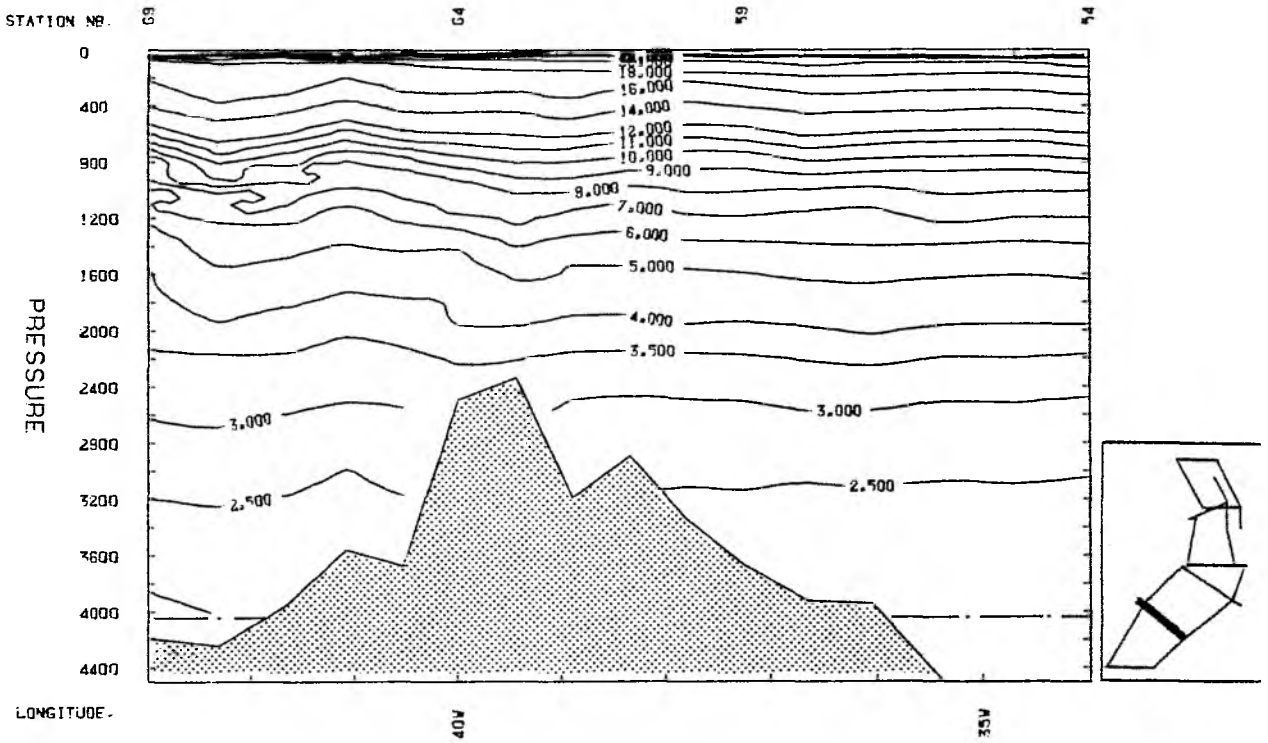
50N
45N
40N
4.000
7.000
3.500
3.000
4.000
5.000
6.000
7.000
8.000
9.000
10.000
12.000
14.000
117
207
297
129
134
93
139
SECTION 2M THETA (DEG.DEL.)
SECTION 2P THETA (DEG.DEL.)



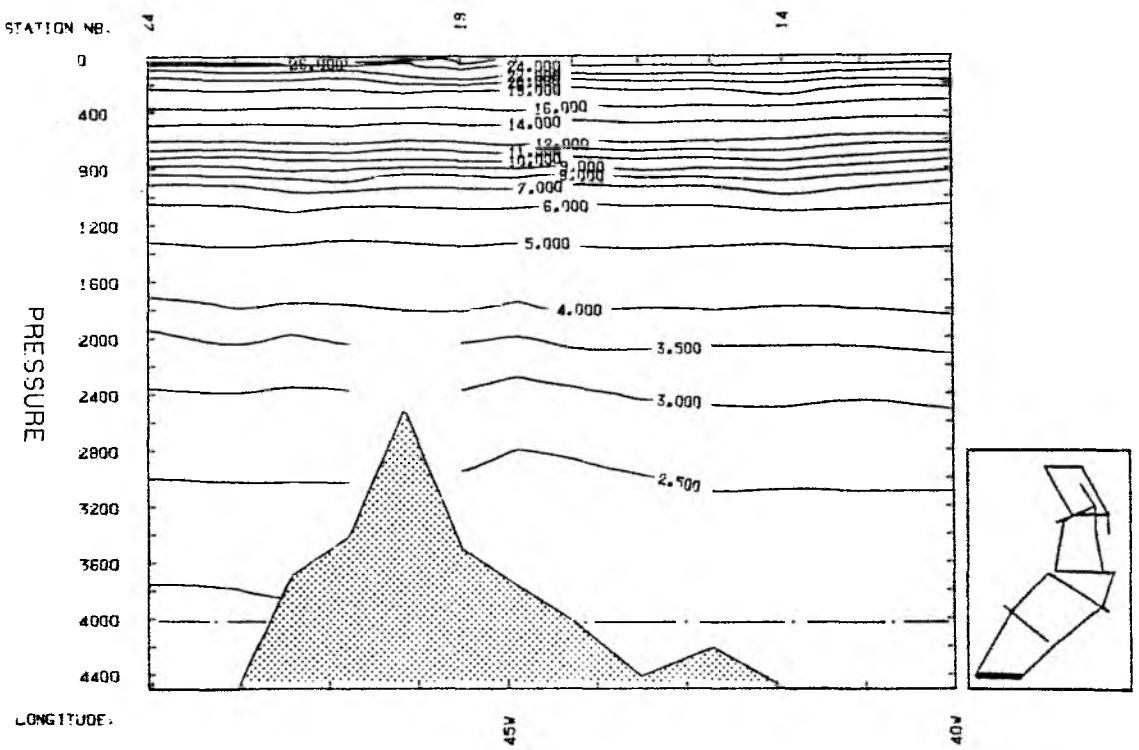
TOPOGULF: SECTION 25 -THETA (DEG.CEL.)



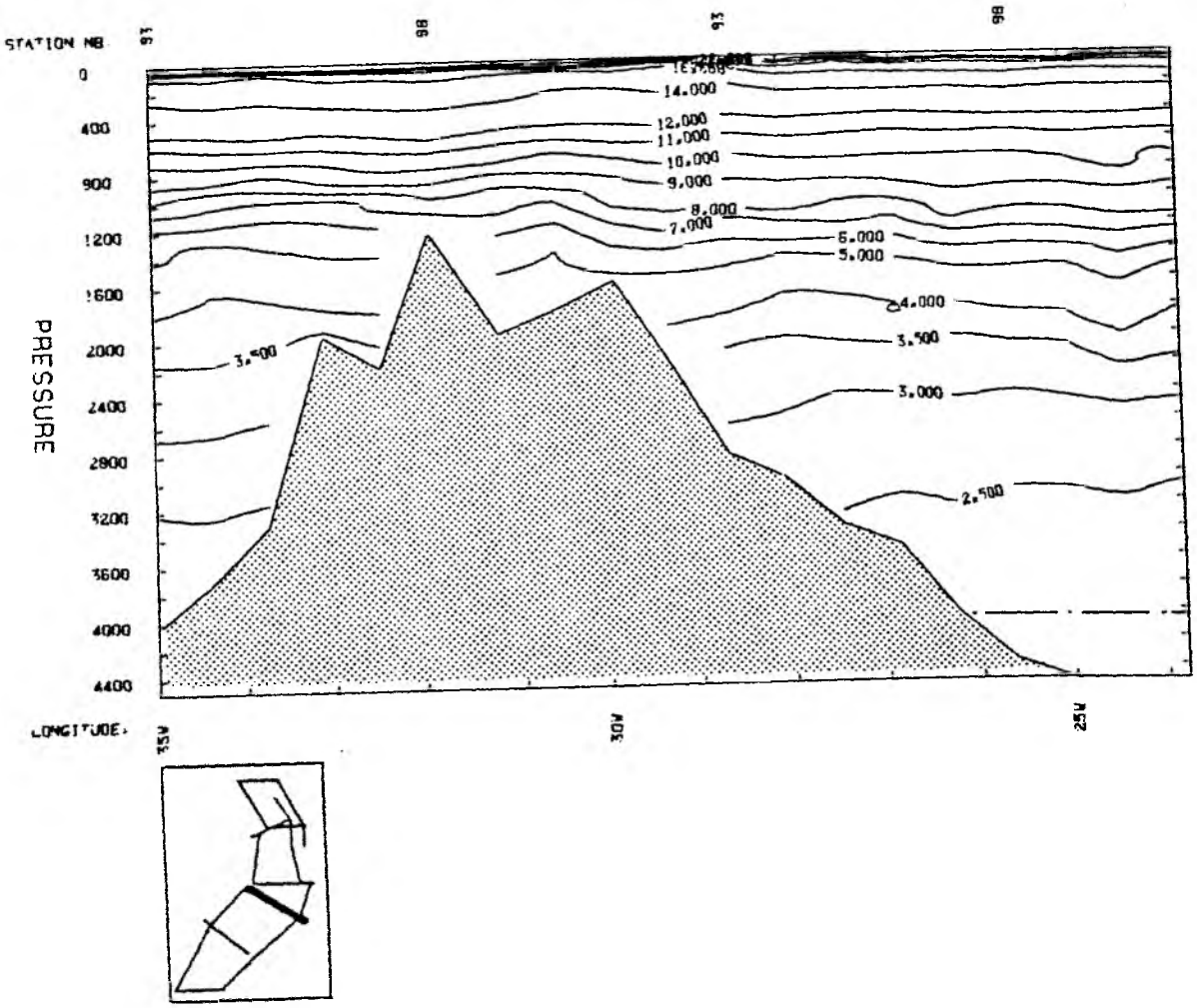
TOPOGULF: SECTION 4S -THETA (DEG.CEL.)



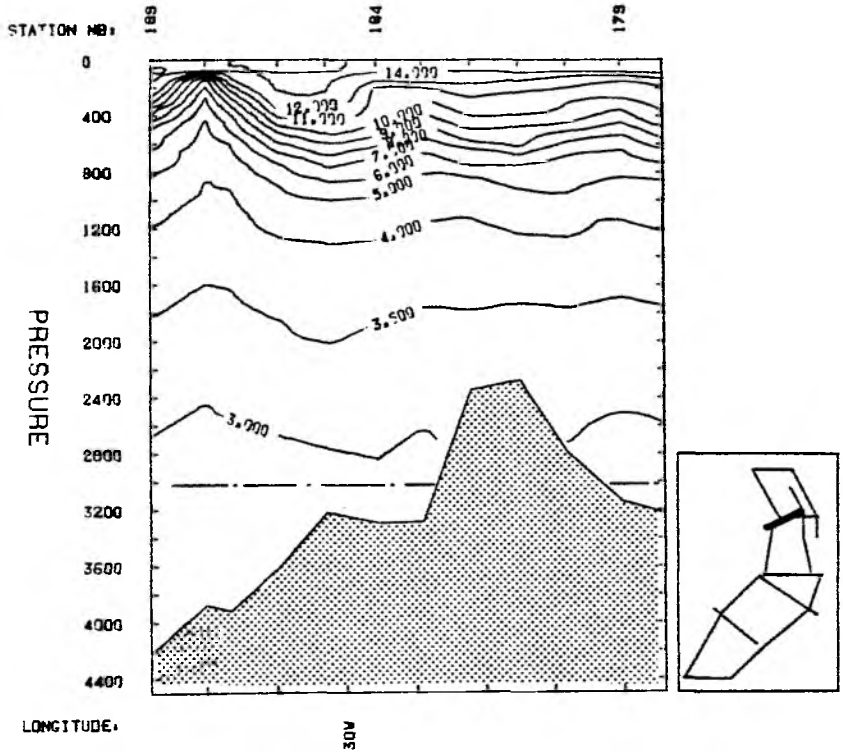
TOPOGULF: SECTION 3S -THETA (DEG.CEL.)



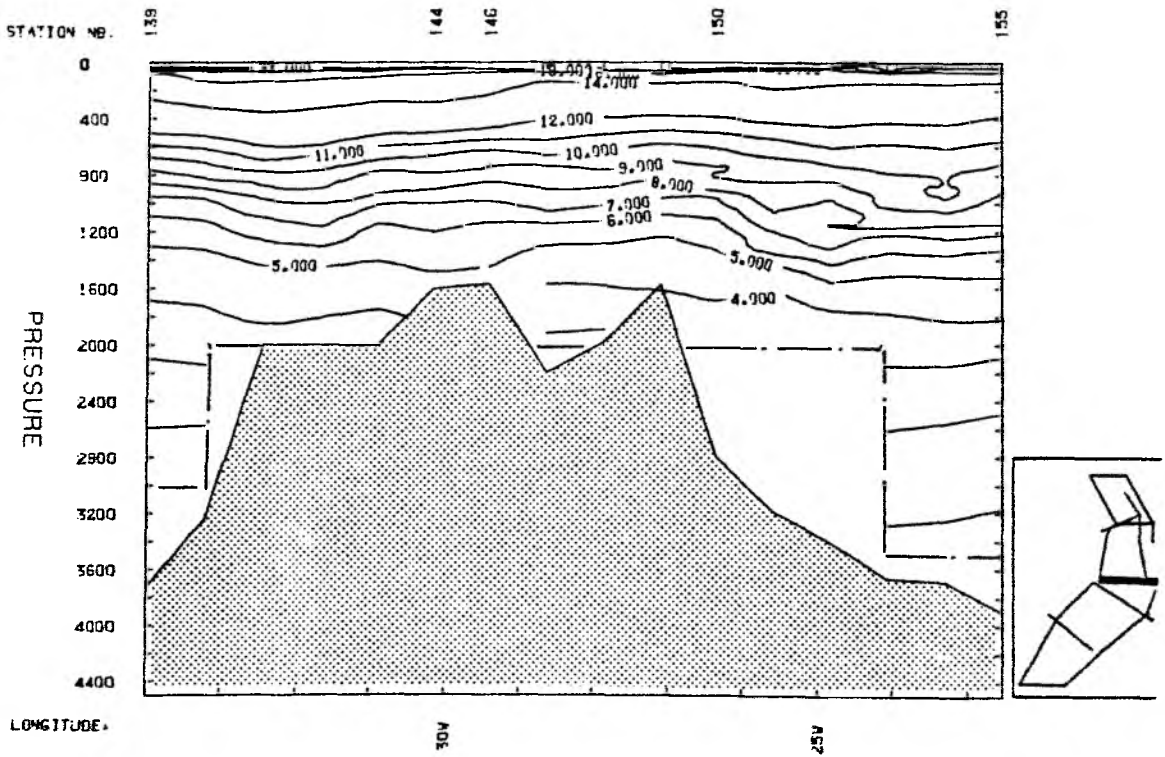
TOPOGULF: SECTION 5S -THETA (DEG.CEL.)

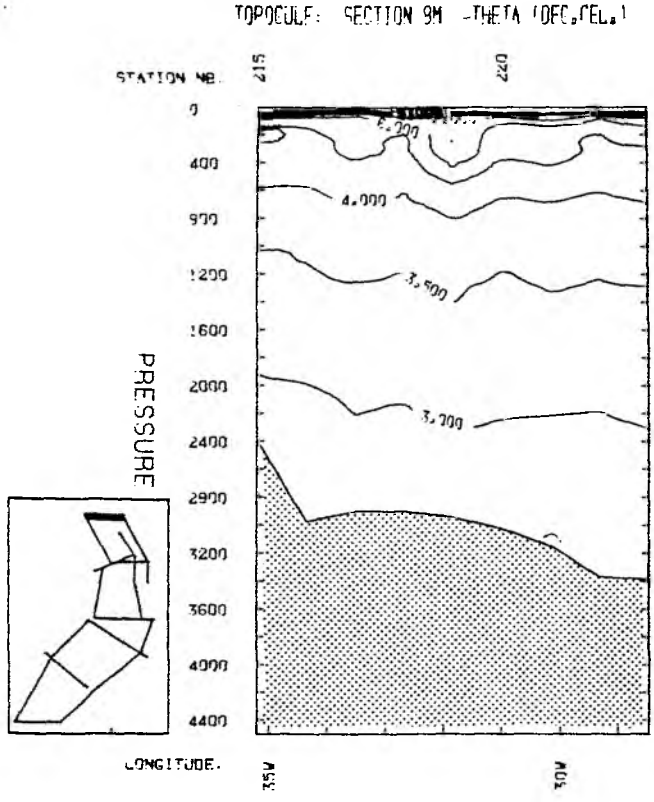


TOPOGULF: SECTION 7P -THETA (DEG.TEL.)

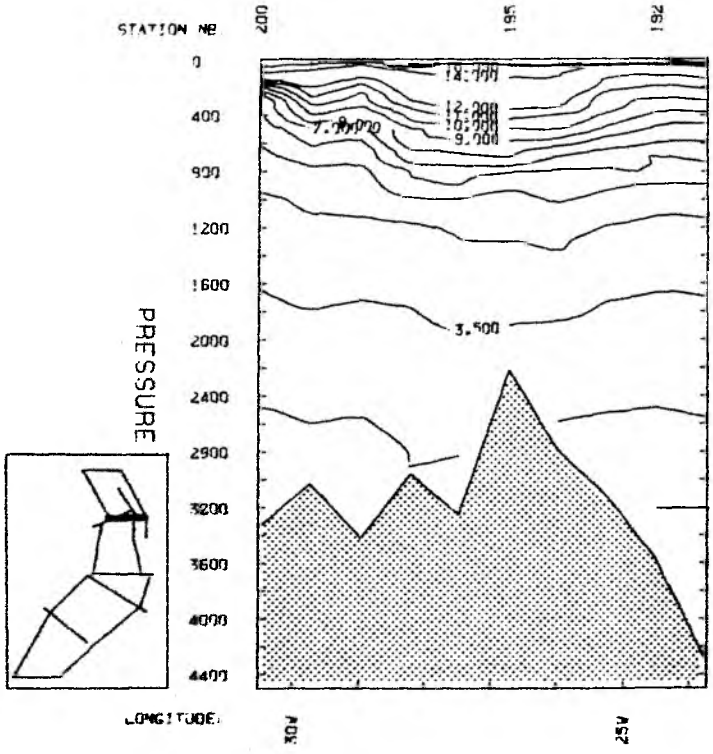


TOPOGULF: SECTION 6P -THETA (DEG.CEL.)




TOPOGULF: SECTION 9M -THETA (DEG.CEL.)
STATION NB.
215
220
PRESSURE
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
4.200
4.000
3.800
3.600
LONGITUDE.
35W
30W

TOPOGULF: SECTION 7M -THETA (DEG.CEL.)

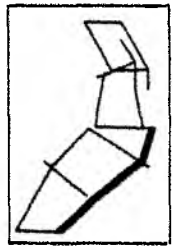


TOPOGULF

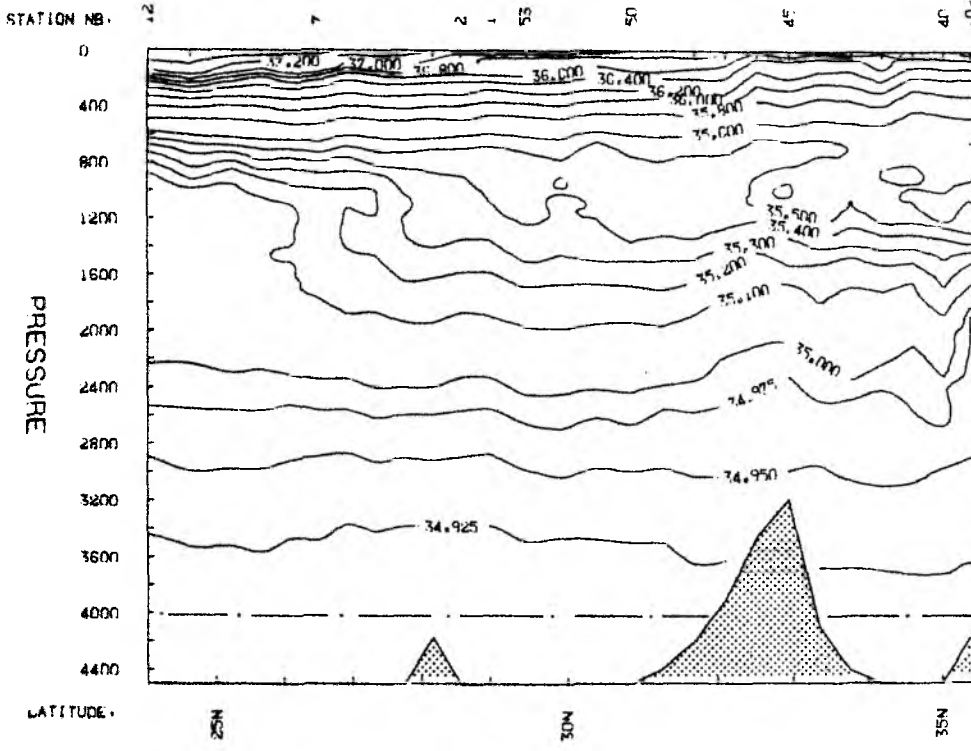
VERTICAL SECTIONS

Salinity

(P.S.U.)

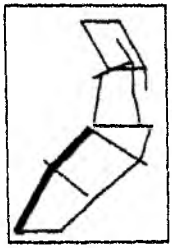


TOPOGULF: SECTION IS SALINITY (P,S,U,)

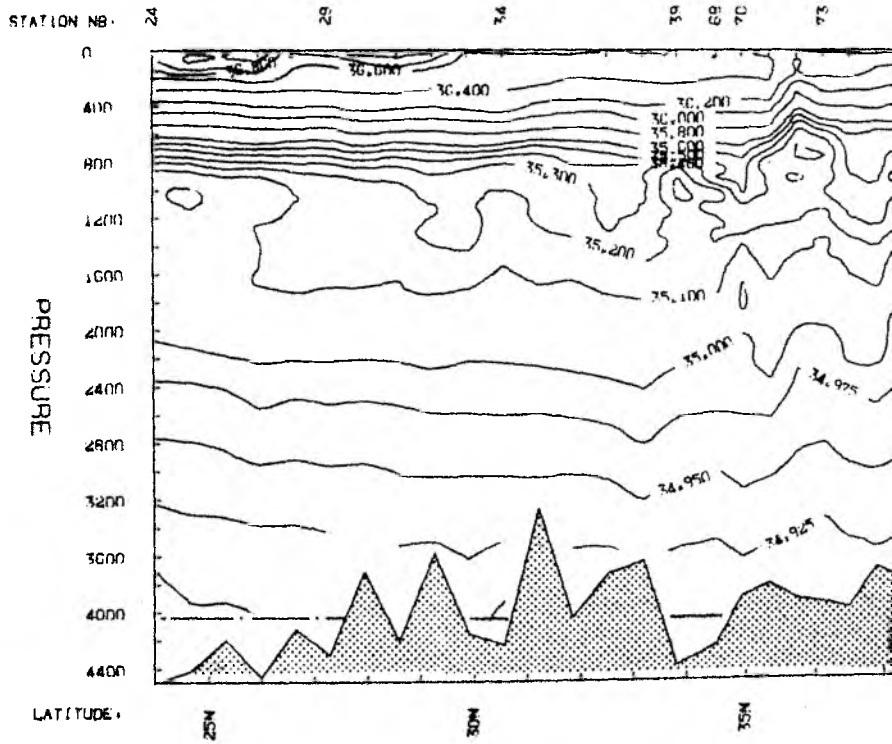


SECTION 1P -SALINITY (P.S.U.)

TOPOGULF SECTION 1M -SALINITY (P,S,U,)
STATION NB.
241
236
231
226
PRESSURE
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
LATITUDE.
45N
50N
U02

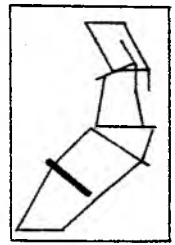


TOPOCULE: SELTION 2S -SALINITY (P,S,U,)

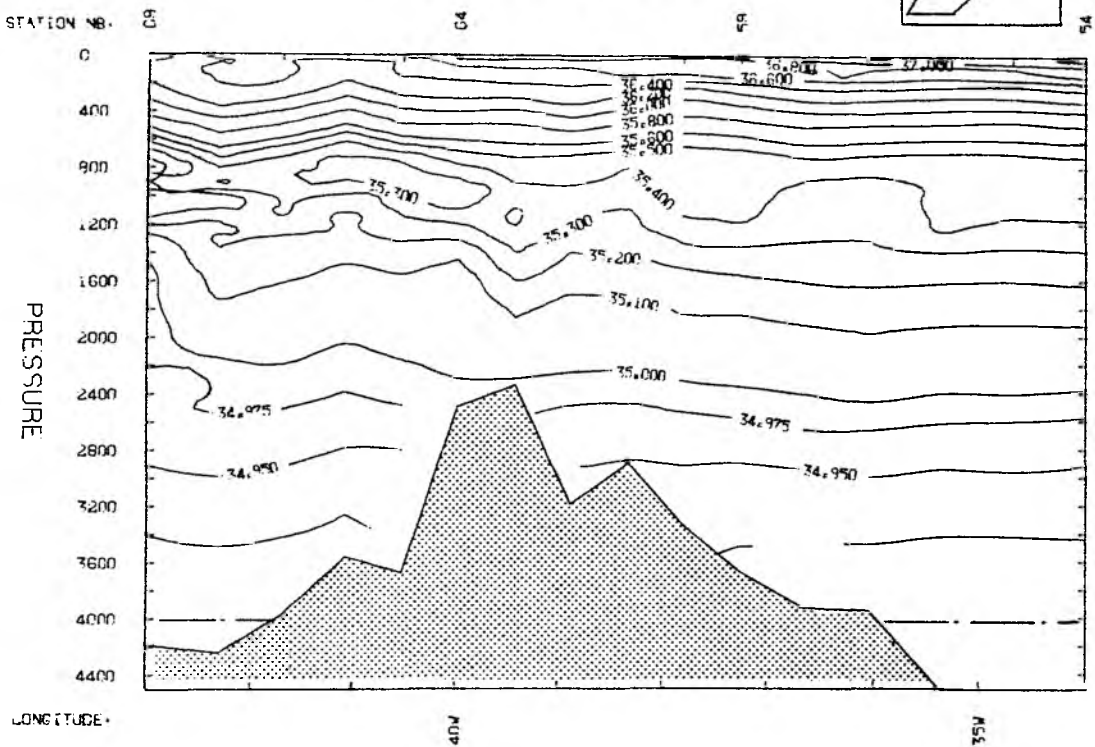


SECTION 2P SALINITY ($P_0S_0U_0$)

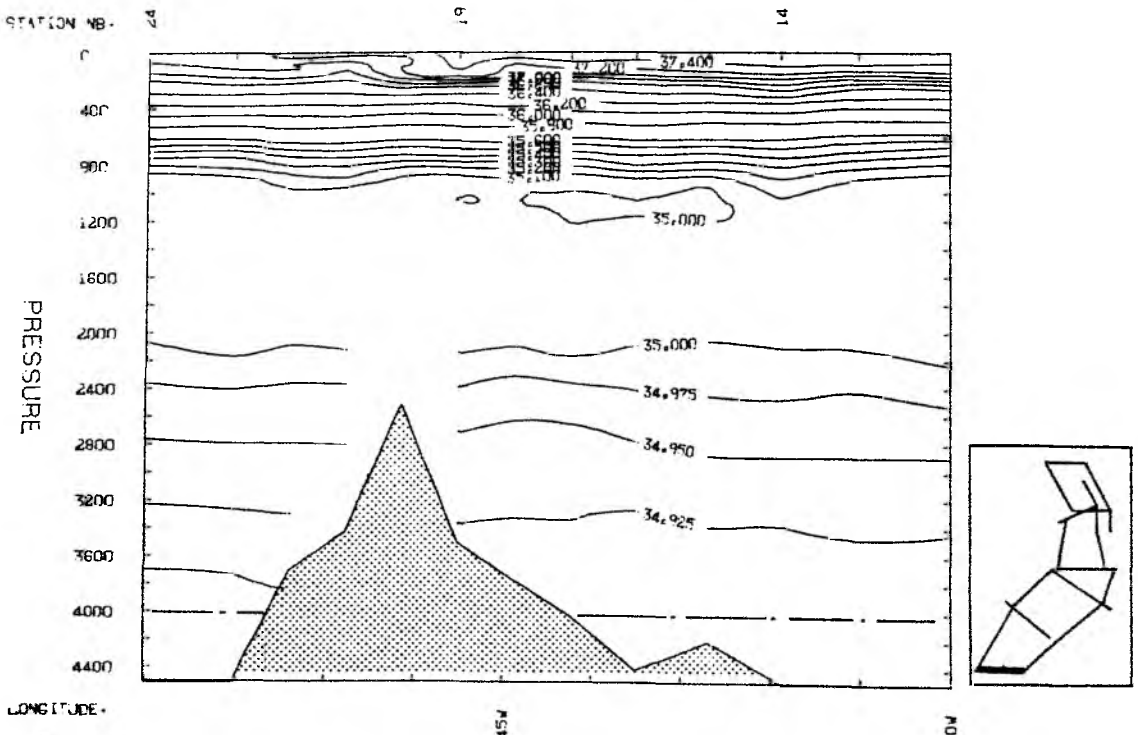
SECTION 2M SALINITY ($P_0S_0U_0$)

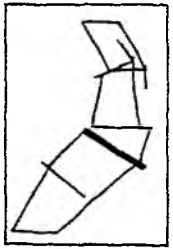


TOPOCULF: SECTION 4S SALINITY (PESEUE)

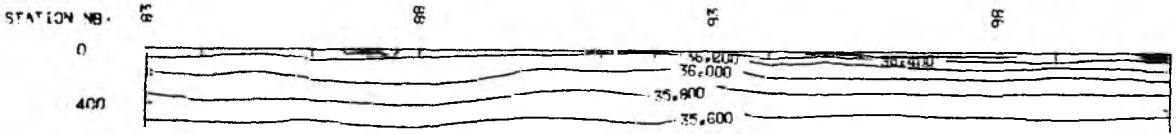


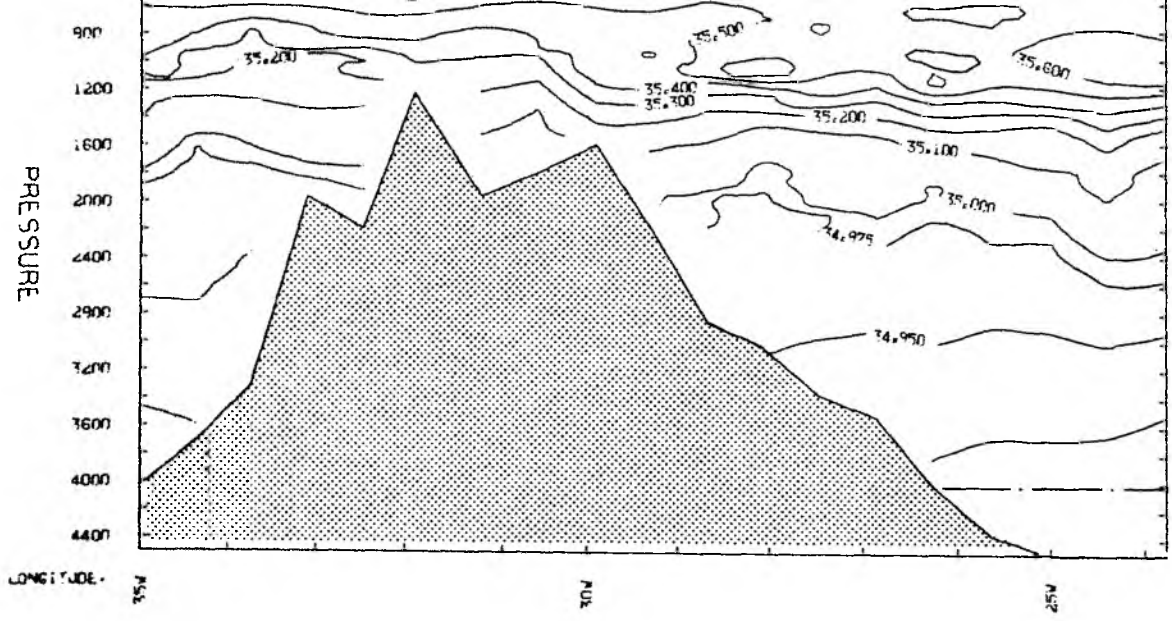
TOPOCULF: SECTION 3S -SALINITY (P,S,U,)



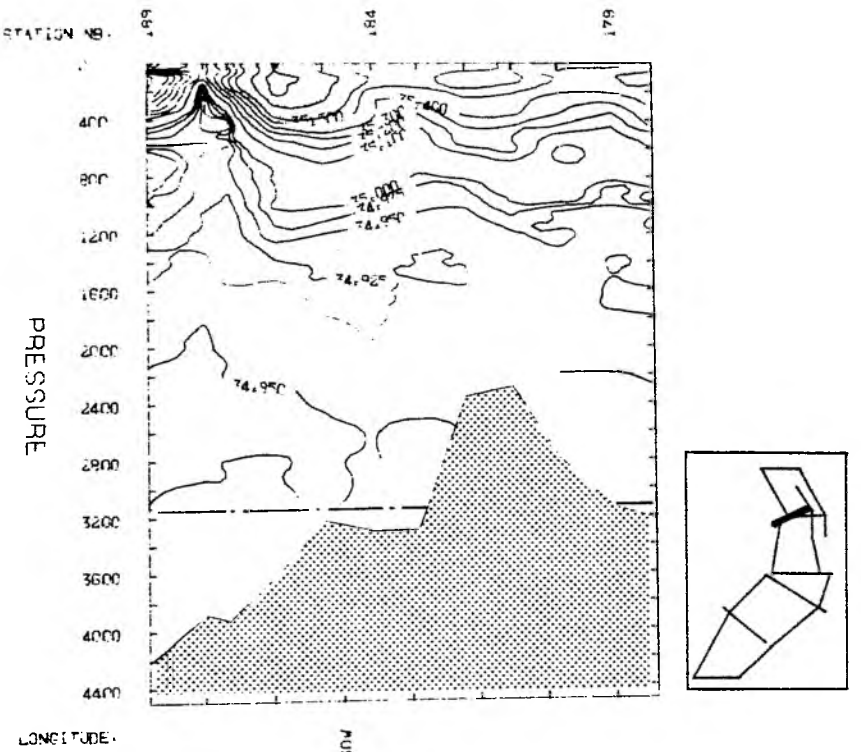


TOPOGULF: SECTION 55 -SALINITY ($P_eS_eU_e$)

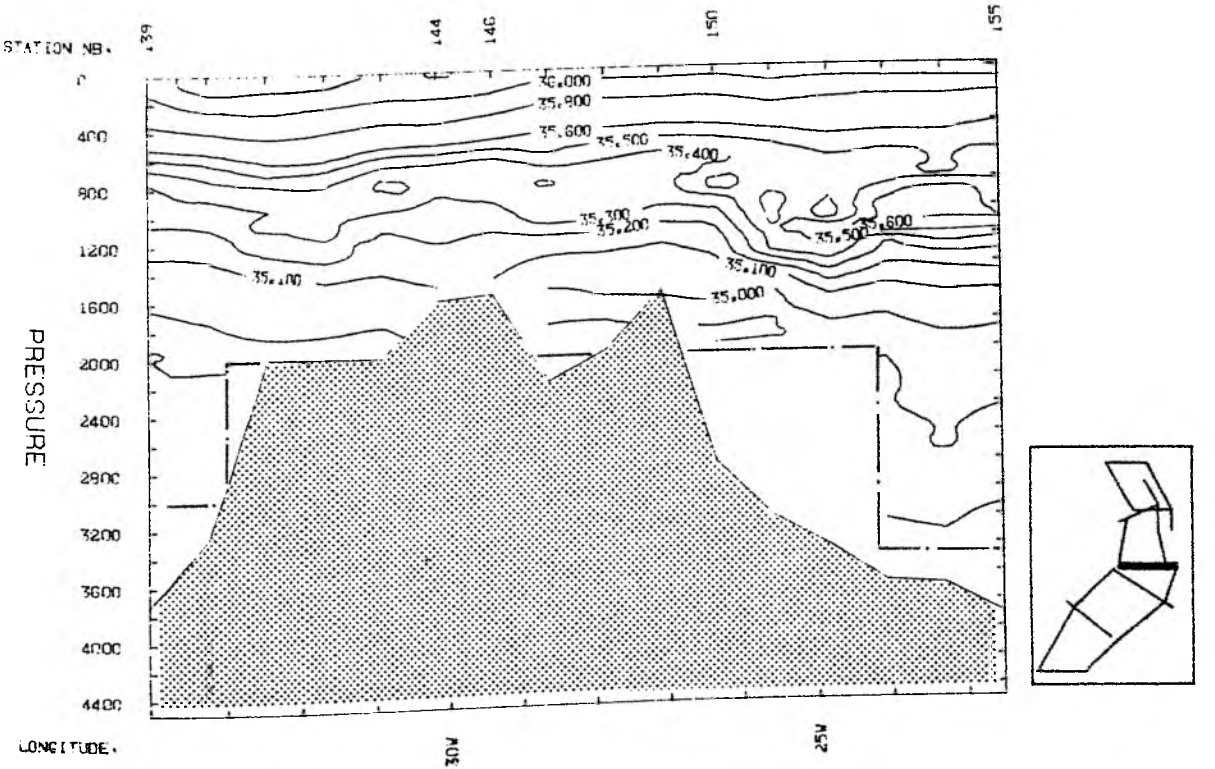



PRESSURE
900
1200
1600
2000
2400
2800
3200
3600
4000
4400
LONGITUDE
35W
30W
25W
35.200
35.500
35.600
35.400
35.300
35.200
35.100
35.000
34.975
34.950

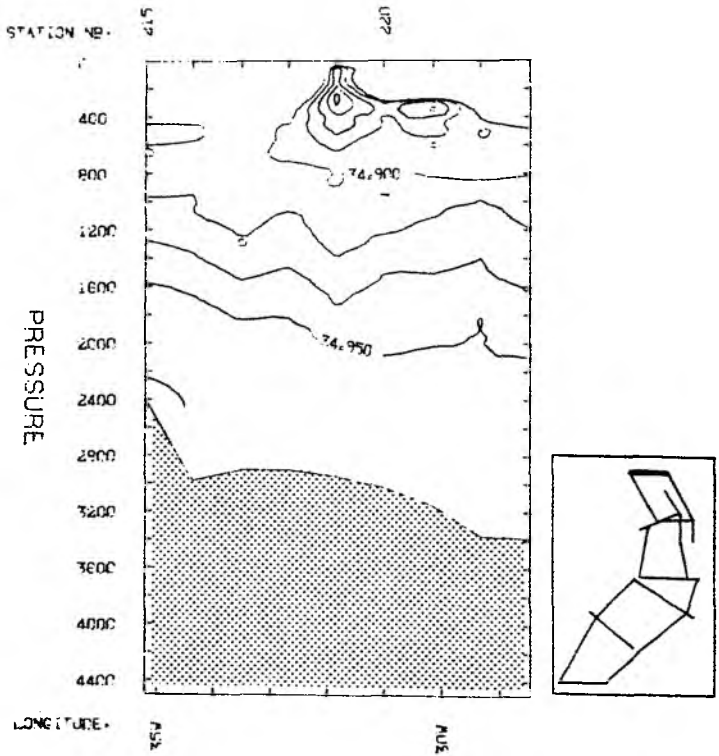
TOPOGULF: SECTION 7P -SALINITY (P.S.U.)



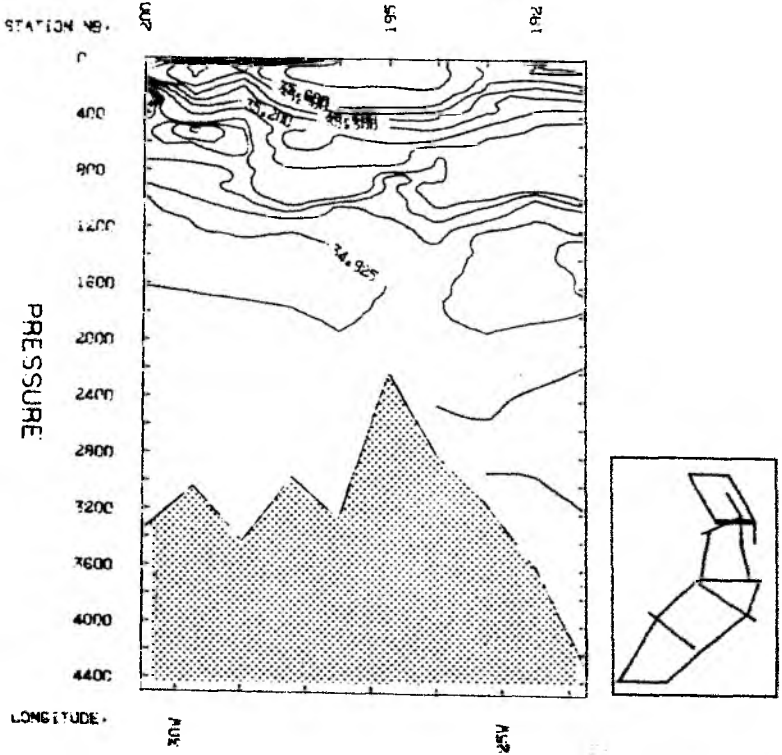
TOPOGULF: SECTION 6P -SALINITY (P.S.U.)



TOPOGULF: SECTION 9M SALINITY (P,S,U,V)



TOPOGULF: SECTION 7M -SALINITY ($P_eS_eU_e$)

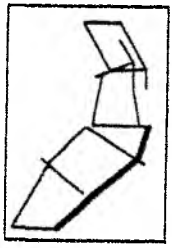


TOPOGULF

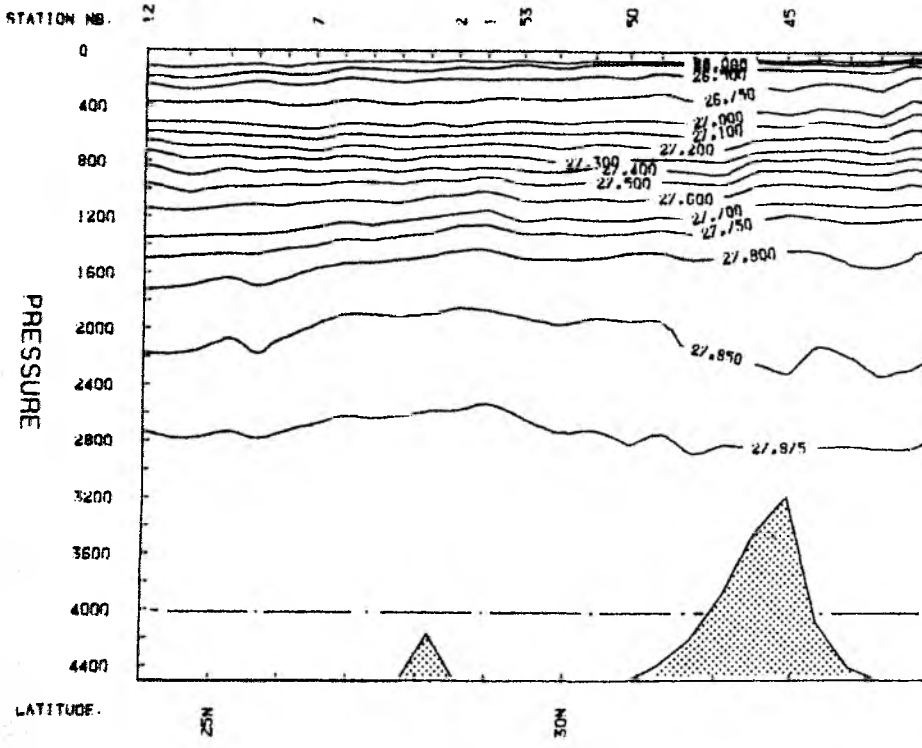
VERTICAL SECTIONS

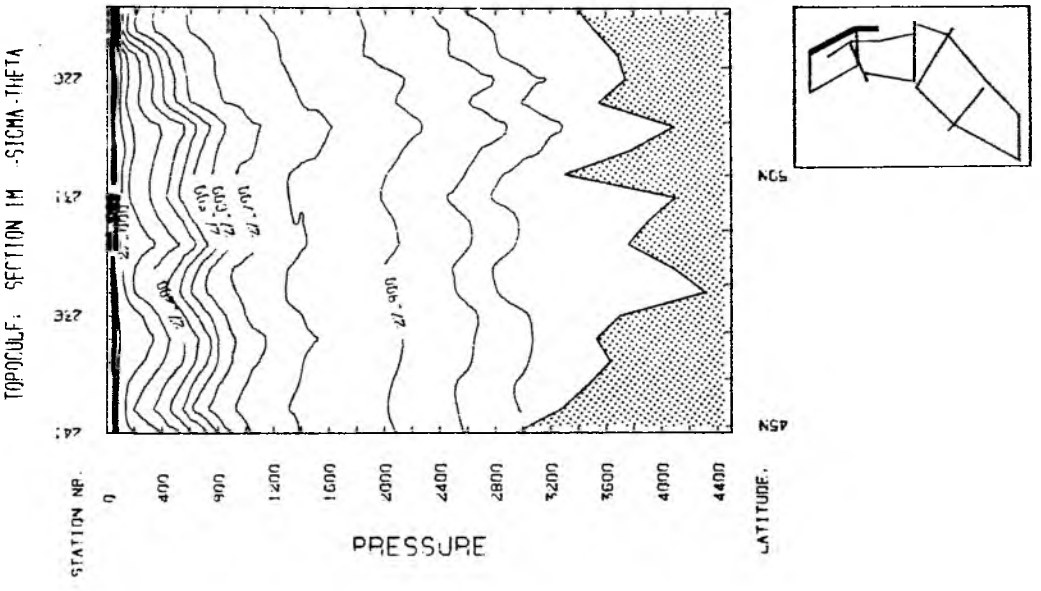
Sigma-Theta

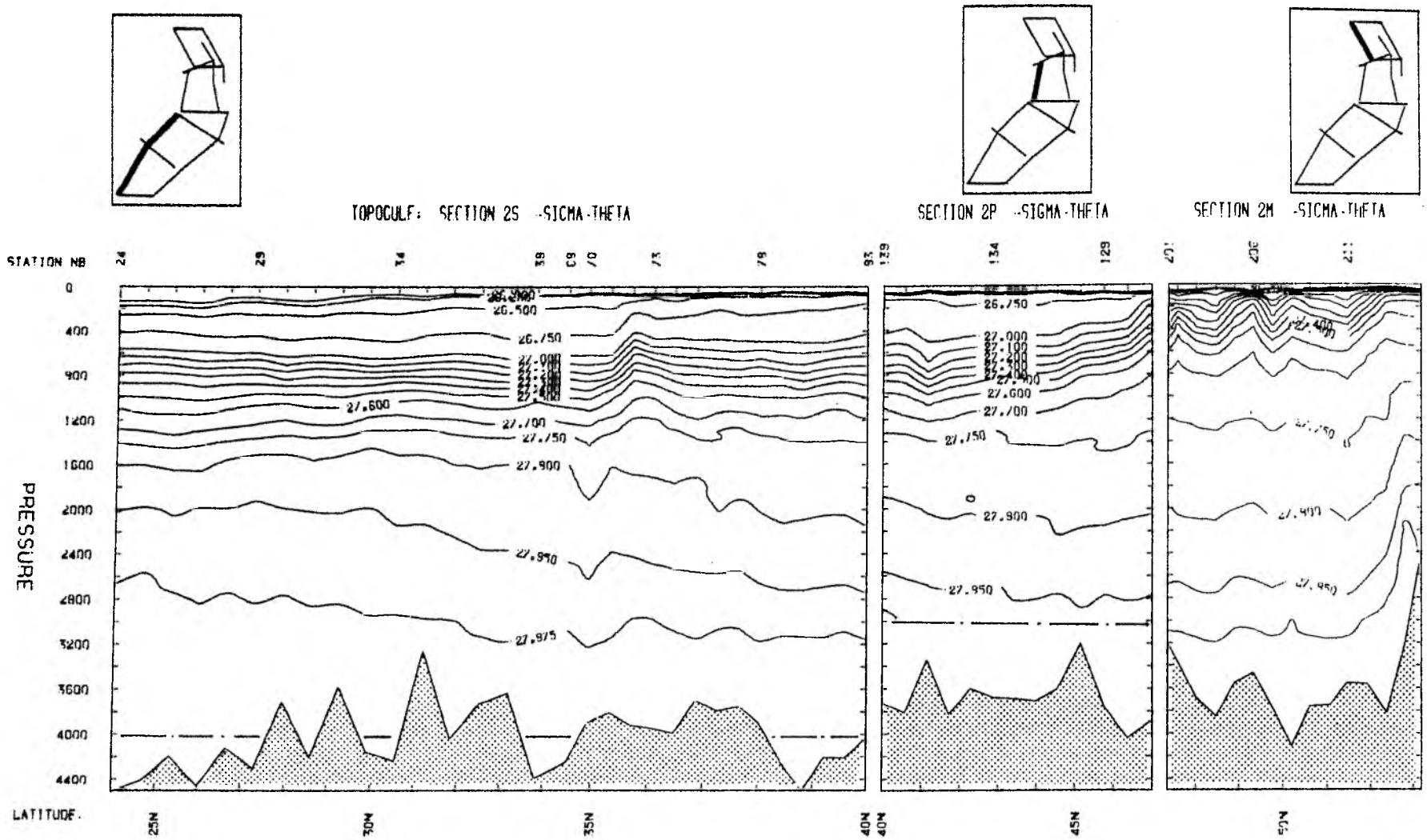
SECTION IP -SIGMA-THETA
50N
45N
40N
35N
27.000
27.050
27.100
27.200
27.300
27.400
27.500
27.600
27.700
27.800
27.900
126
121
120
119
118
125
170
165
152
151
106
102
40



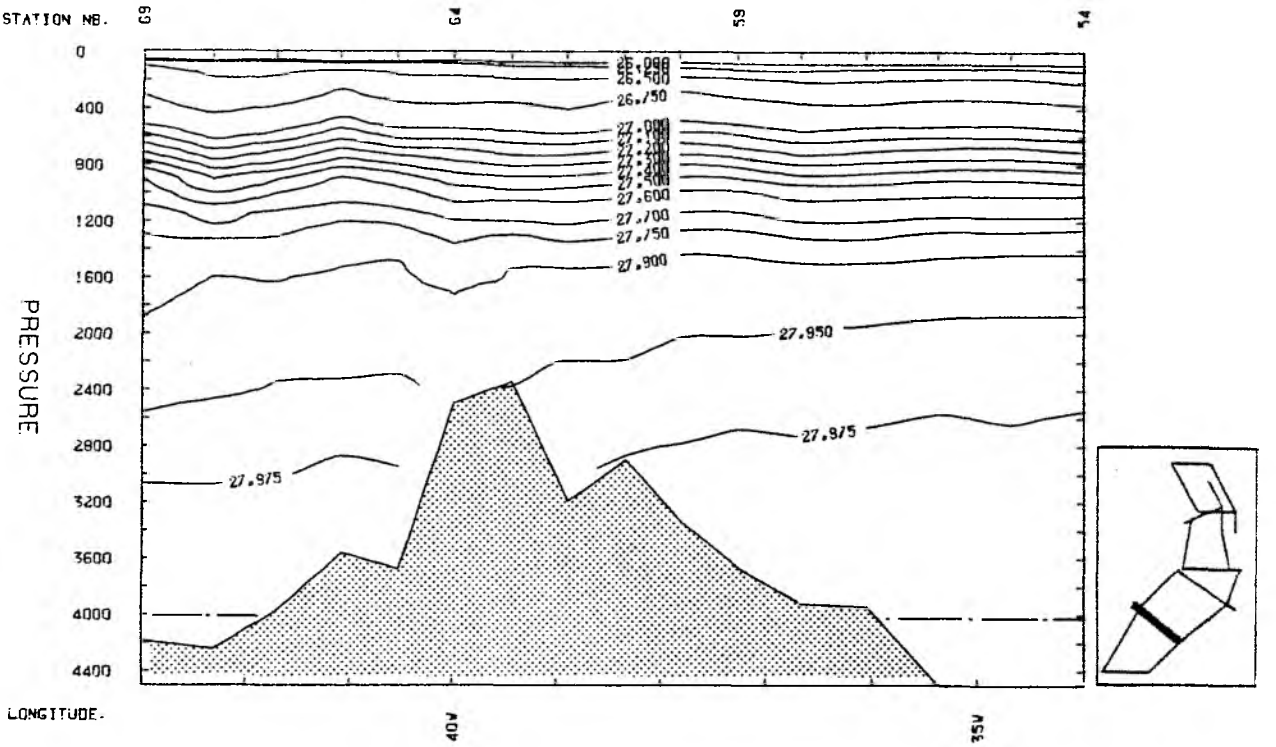
TOPOGULF: SECTION IS -SIGMA-THETA



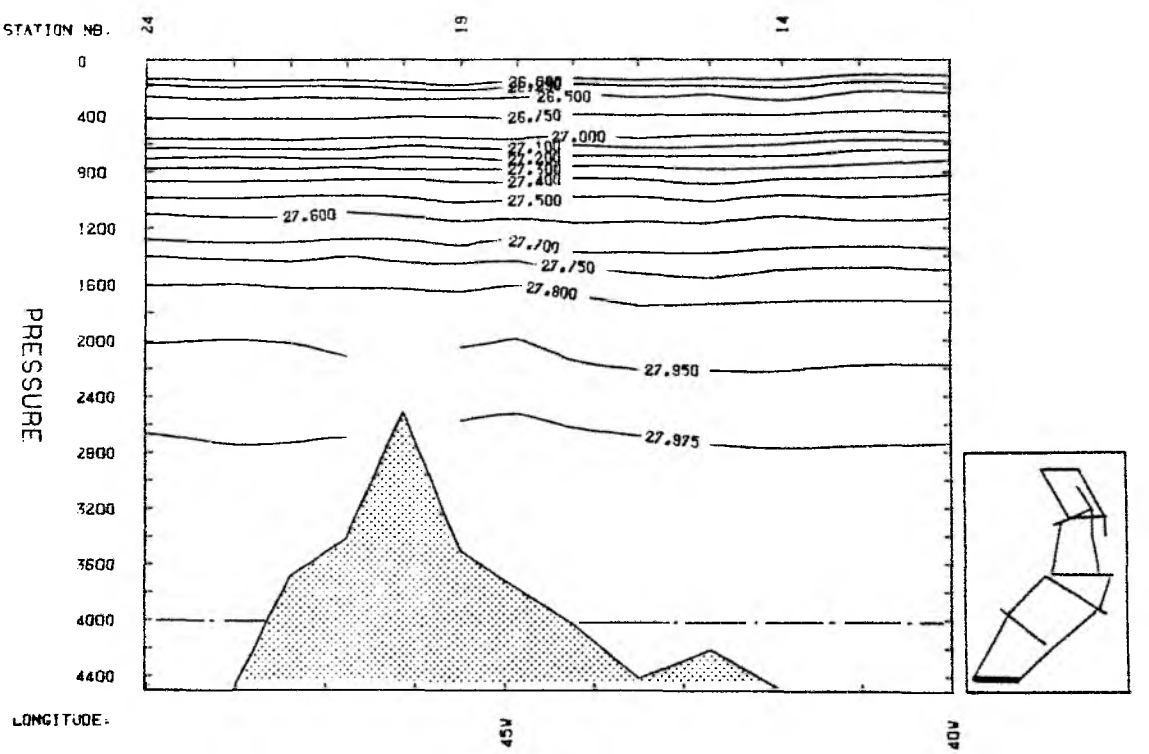

TOPOGULF: SECTION 1M -SIGMA-THETA
STATION NR.
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
PRESSURE
LATITUDE.
45N
50N


TOPOGULF: SECTION 2S -SIGMA-THETA
SECTION 2P -SIGMA-THETA
SECTION 2M -SIGMA-THETA
STATION NB
PRESSURE
LATITUDE.
26.500
26.750
27.000
27.600
27.700
27.750
27.900
27.950
27.975
25N
30N
35N
40N
45N
50N

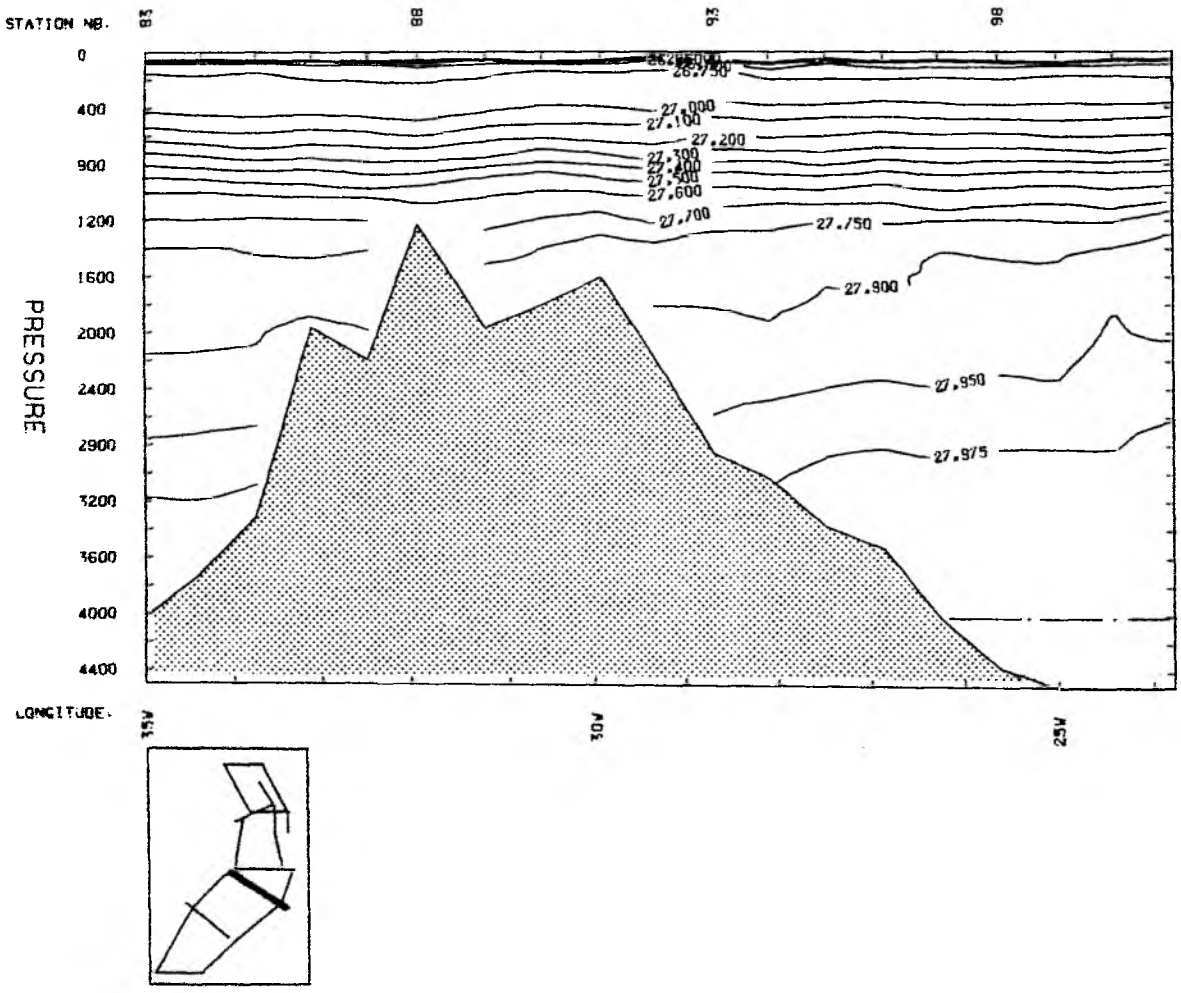
TOPOGULF: SECTION 4S -SIGMA-THETA



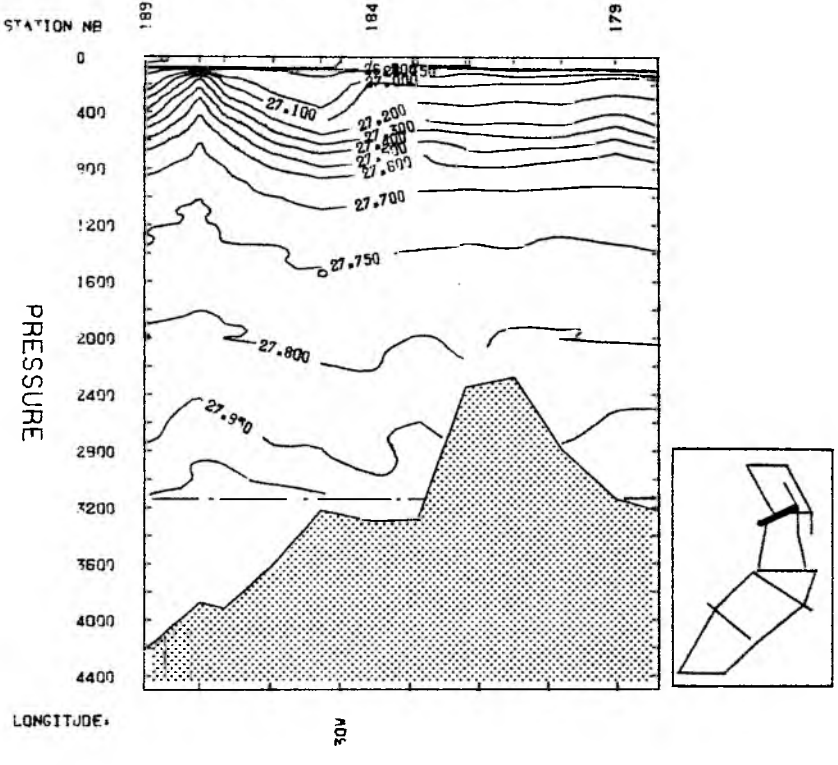
TOPOGULF: SECTION 3S -SIGMA-THETA



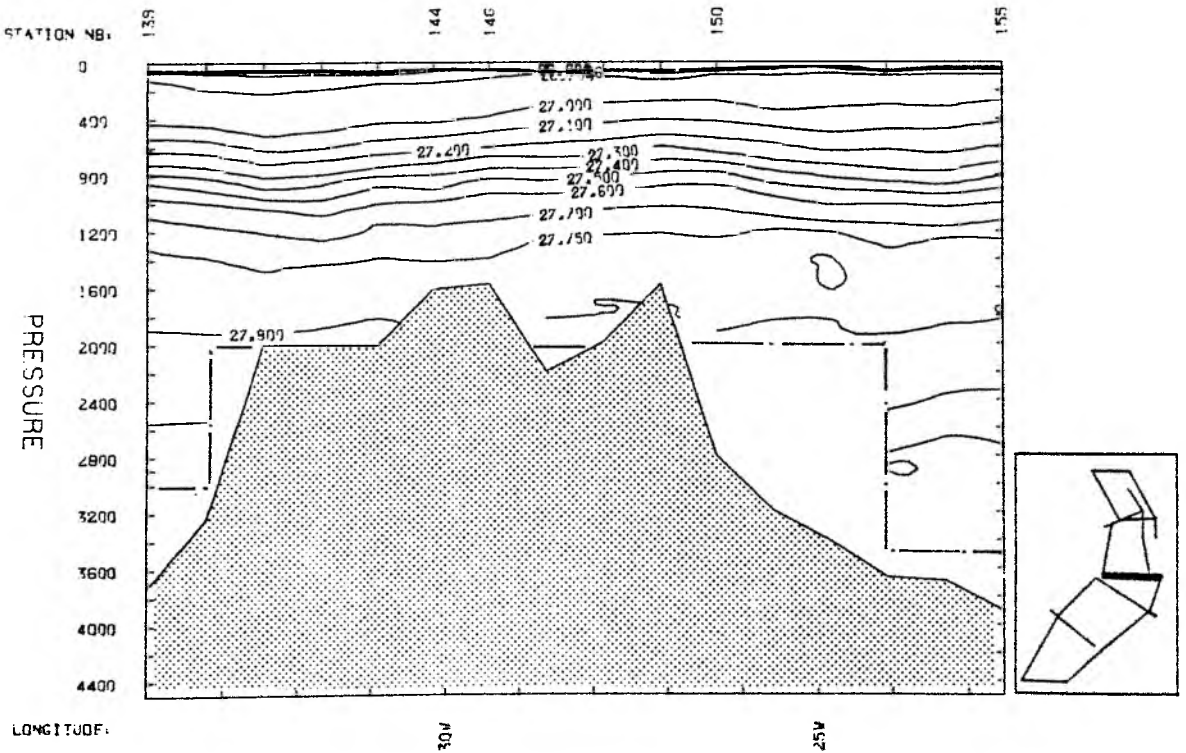
TOPOGULF: SECTION 5S -SIGMA-THETA

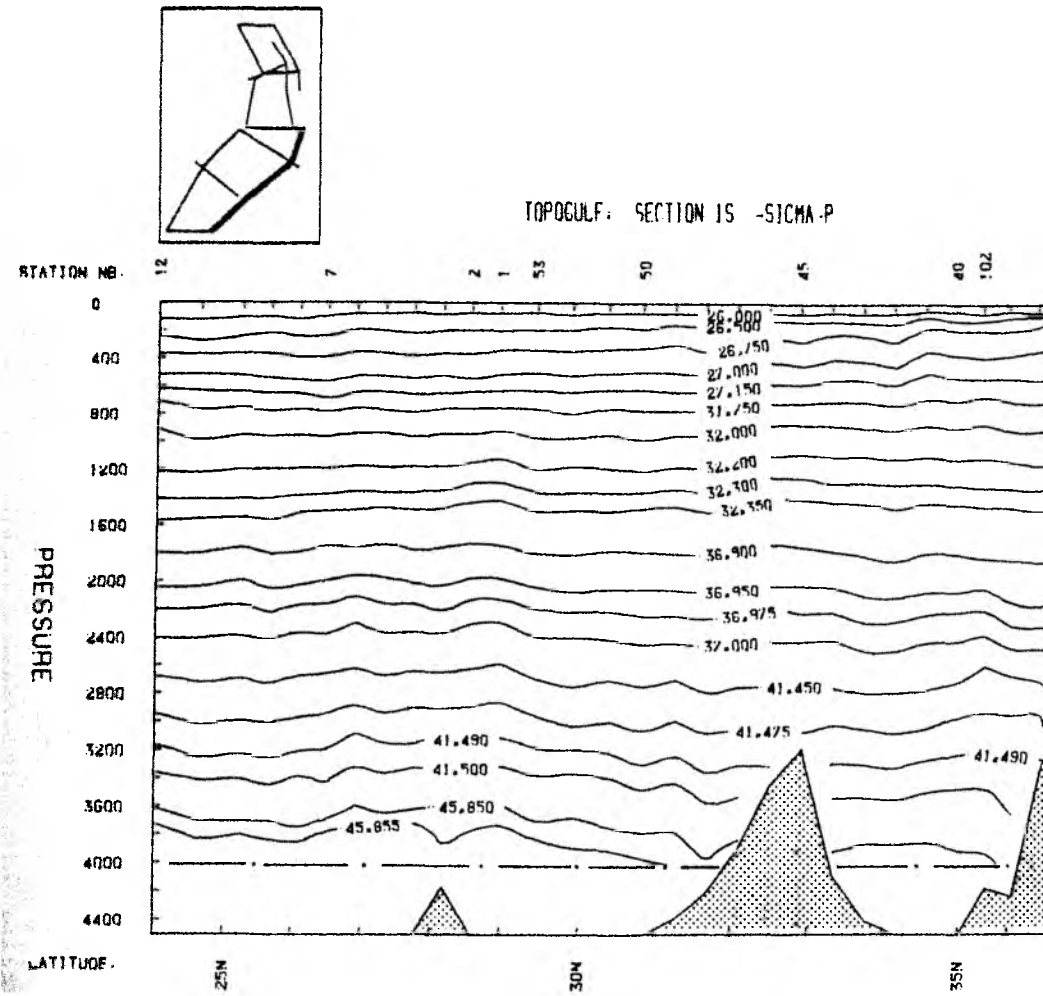


TOPOEULF: SECTION 7P -SIGMA-THETA

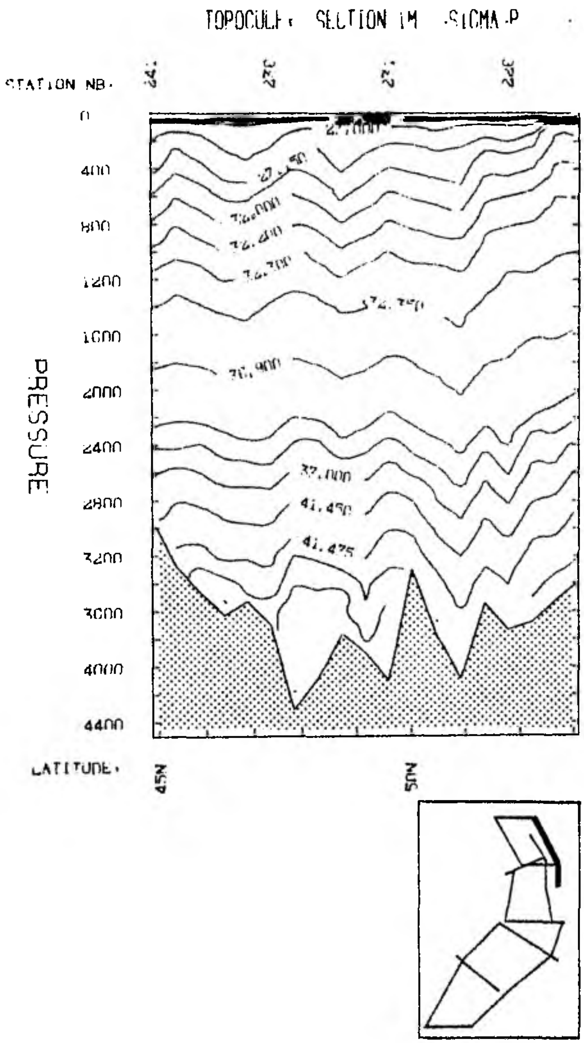


TOPOCULF: SECTION 6P -SIGMA-THETA

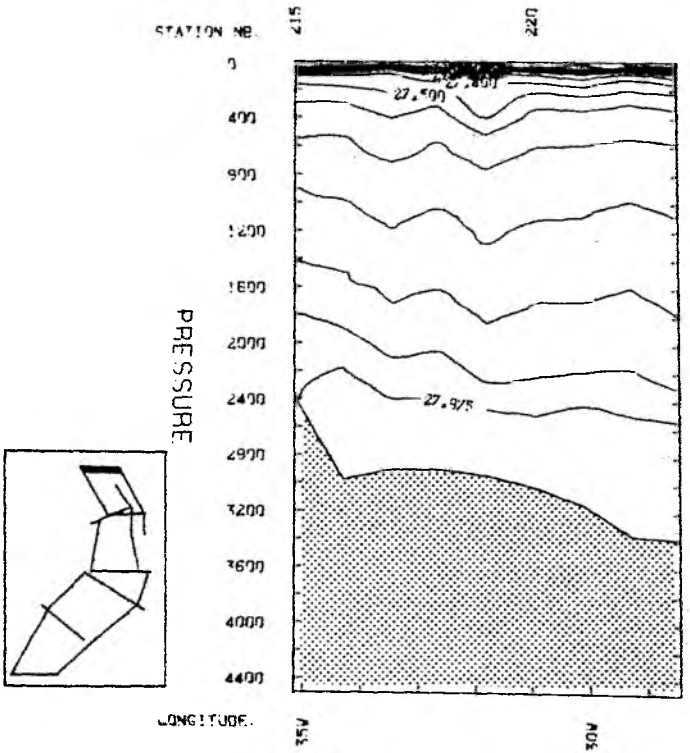



TOPOGULF: SECTION IS -SIGMA-P
STATION NB.
12
7
2
1
53
50
45
40
102
PRESSURE
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
26.000
26.500
26.750
27.000
27.150
31.750
32.000
32.200
32.300
32.350
36.900
36.950
36.975
37.000
41.450
41.475
41.490
41.500
41.490
45.850
45.855
LATITUDE.
25N
30N
35N

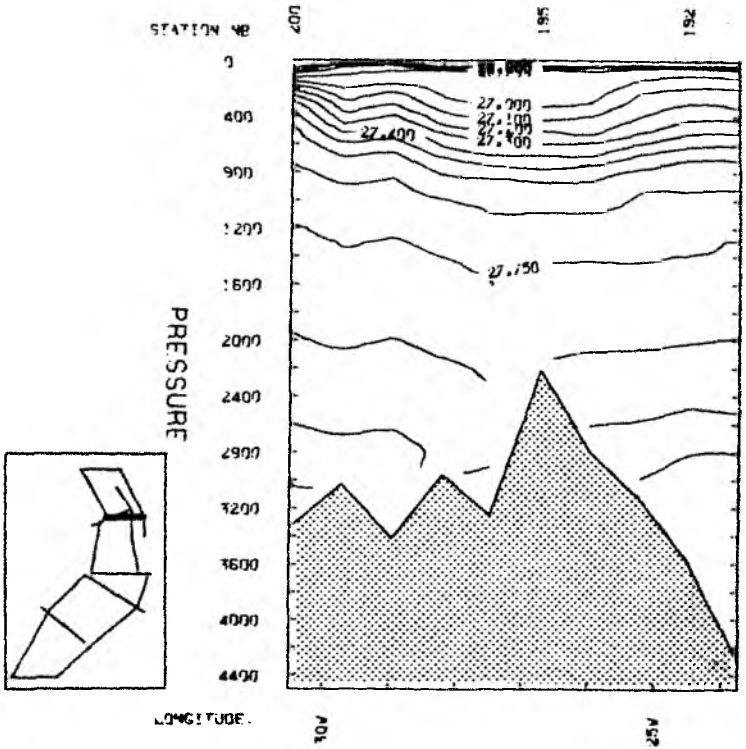
SECTION 1P -SIGMA-P
152
161
165
170
175
121
27.000
27.150
31.750
32.000
32.200
32.300
32.350
36.900
36.950
40N
45N
50N


TOPOGULF, SECTION 1M SIGMA-P
STATION NB.
PRESSURE
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
LATITUDE.
45N
50N
27.000
27.450
32.000
32.400
32.700
32.750
36.900
37.000
41.450
41.475

TOPOGULF: SECTION 9M -SIGMA-THETA



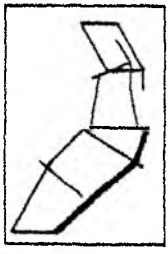
TOPOGULF: SECTION 7M -SIGMA-THETA



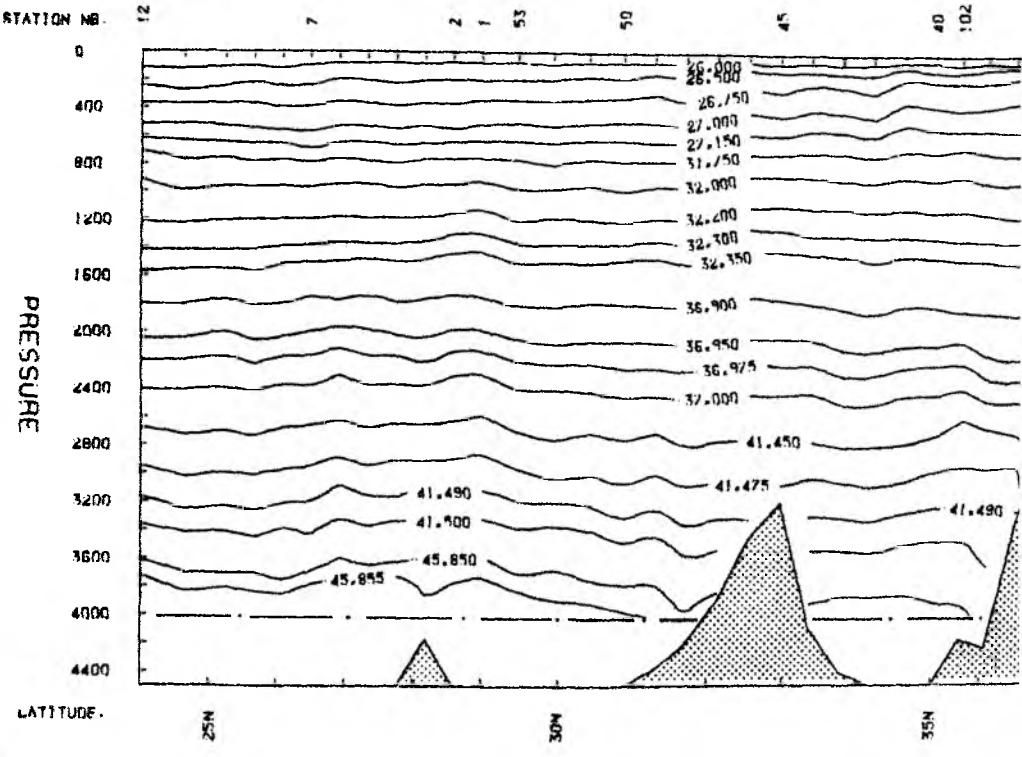
TOPOGULF

VERTICAL SECTIONS

Sigma - p

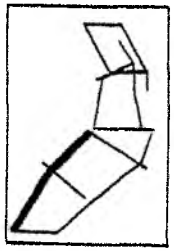


TOPOGULF: SECTION IS -SIGMA-P

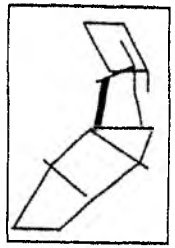


SECTION 1P -SIGMA-P
106
152
161
165
170
175
177
179
120
121
120
27.000
27.150
31.750
32.000
32.200
32.300
32.350
36.900
36.950
40N
40N
45N
50N

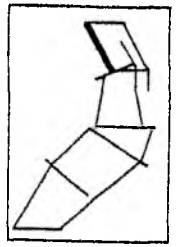
TOPOCOLL, SECTION 1M SIGMA.P
STATION NB.
PRESSURE
LATITUDE.
45N
50N



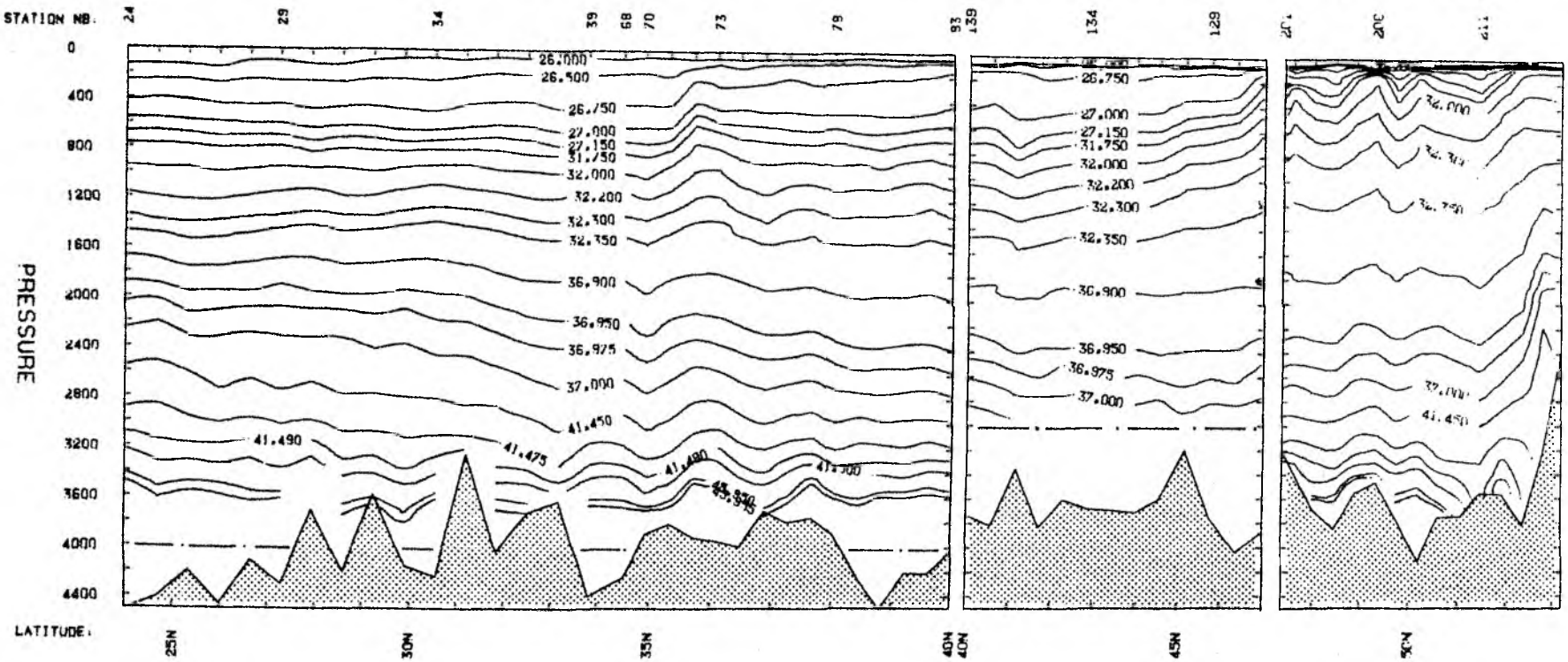
TOPOGULF: SECTION 2S -SIGMA-P



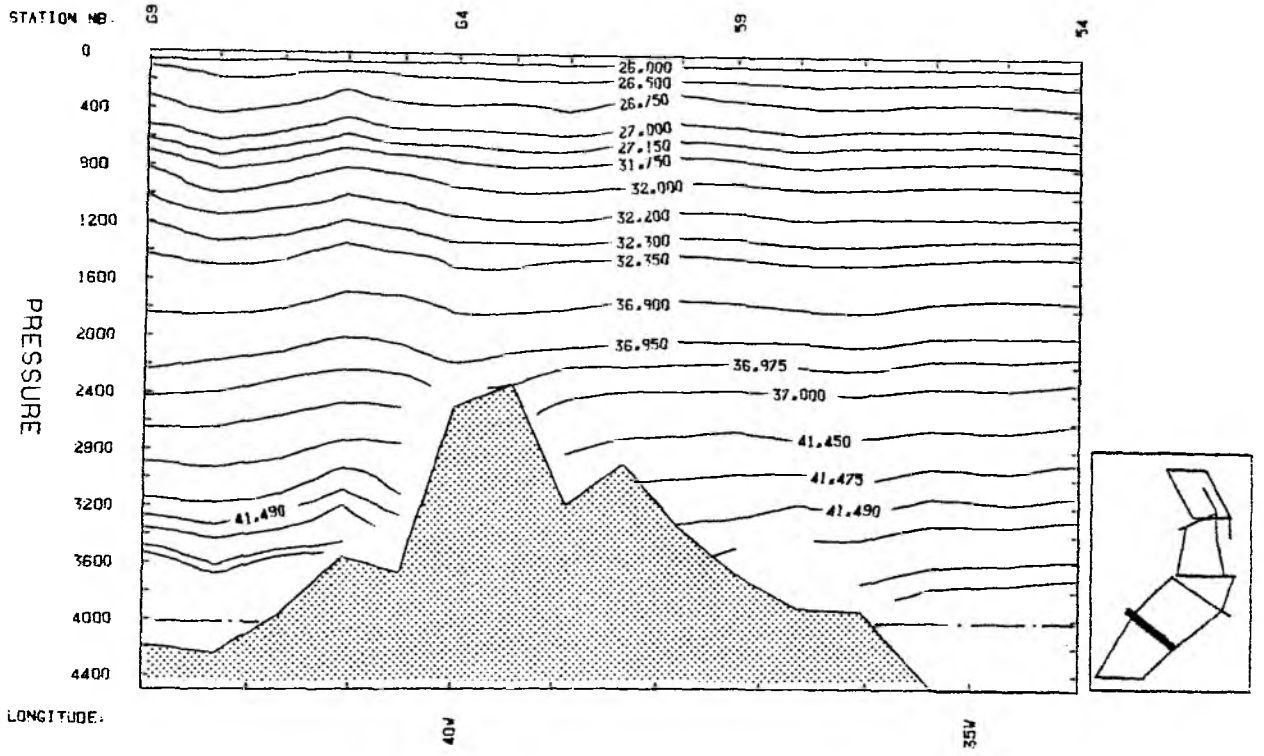
SECTION 2P -SIGMA-P



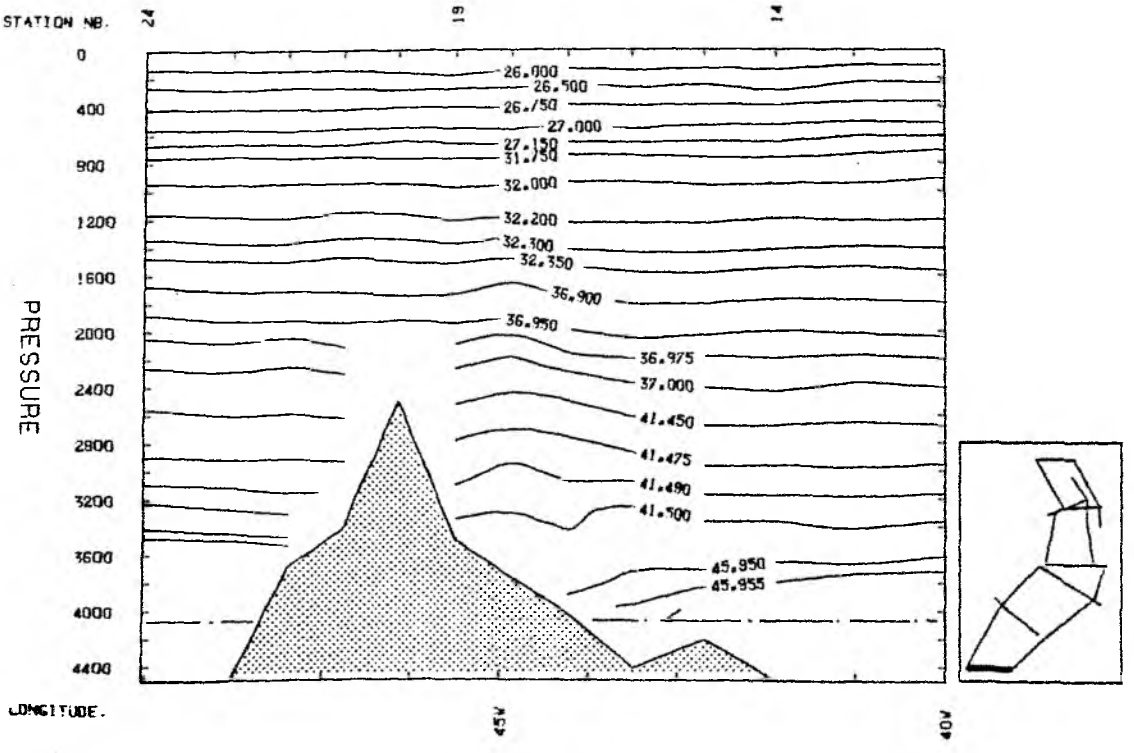
SECTION 2M -SIGMA-P



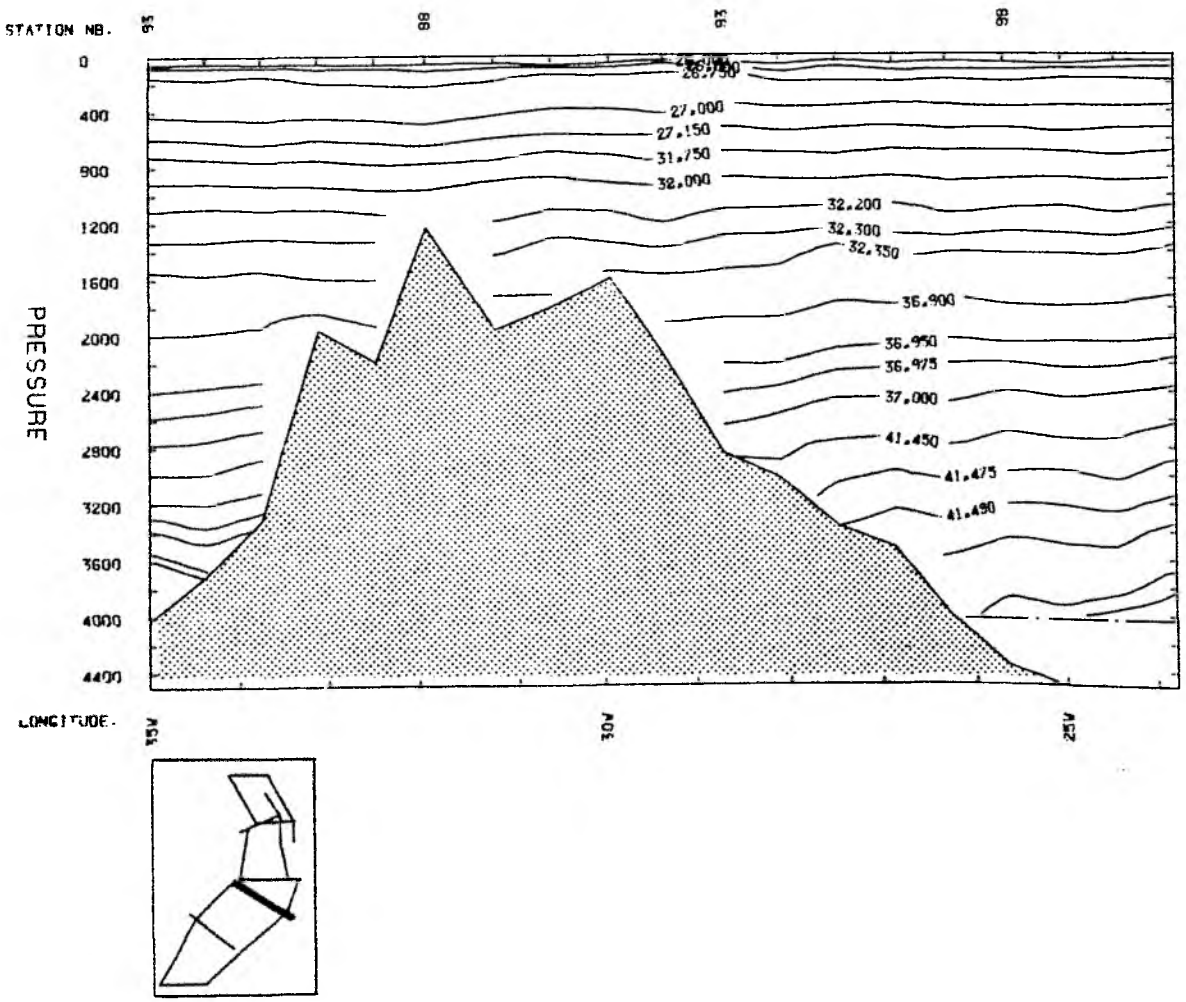
TOPOGULF: SECTION 4S -SIGMA-P



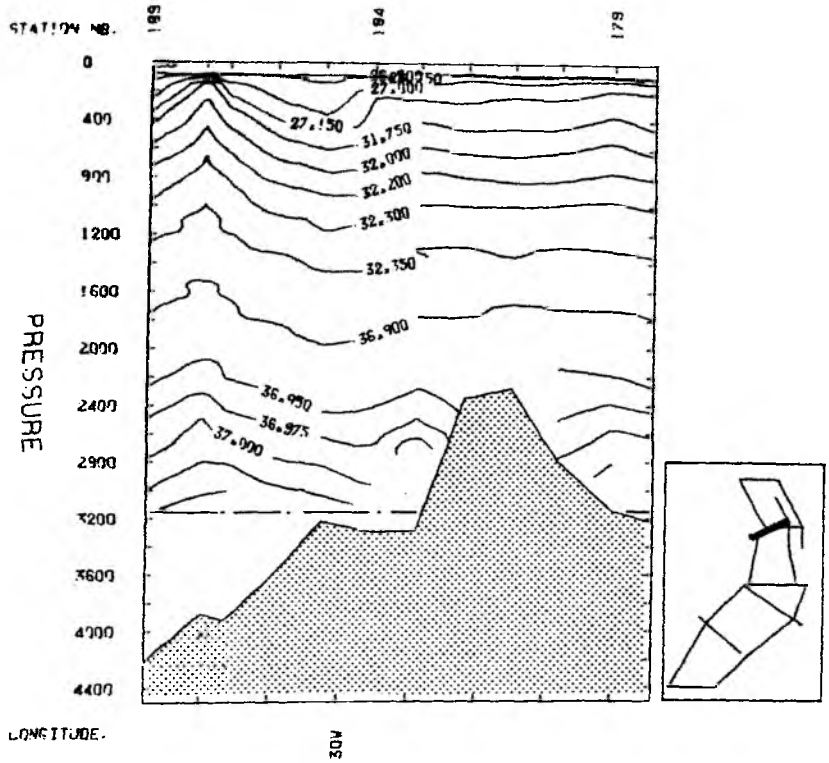
TOPOGULF: SECTION 3S -SIGMA-P

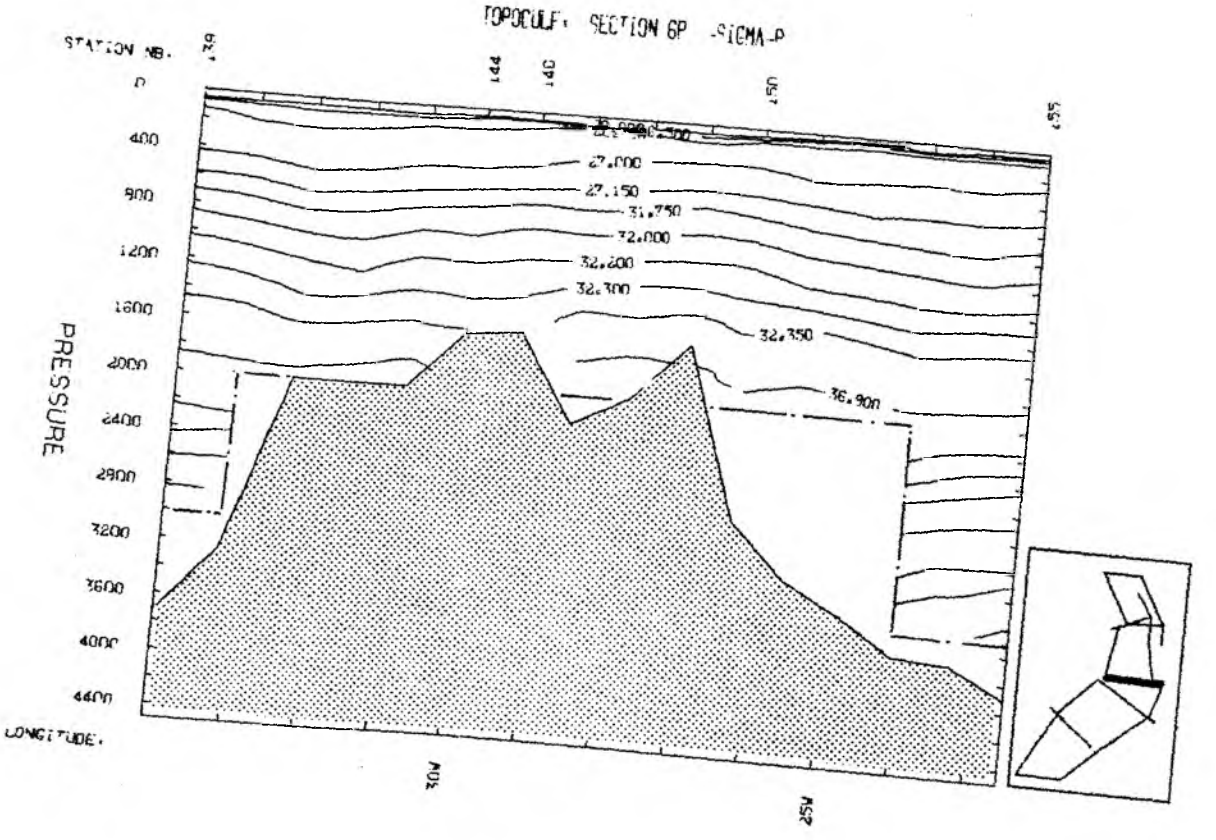


TOPOCULF: SECTION 5S -SIGMA-P



TOPOGULF: SECTION 7P -SIGMA-P




TOPOGULF: SECTION 6P -SIGMA-P
STATION NB.
139
144
140
150
155
PRESSURE
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
LONGITUDE:
30W
25W
27.000
27.150
31.750
32.000
32.200
32.300
32.350
36.900

TOPOGRAPHY SECTION 9M MOTIONS -FROM

PRESSURE
27.000
27.750
31.750
32.000
32.500
34.500
34.750
36.500
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400

TOPOGULF

VERTICAL SECTIONS

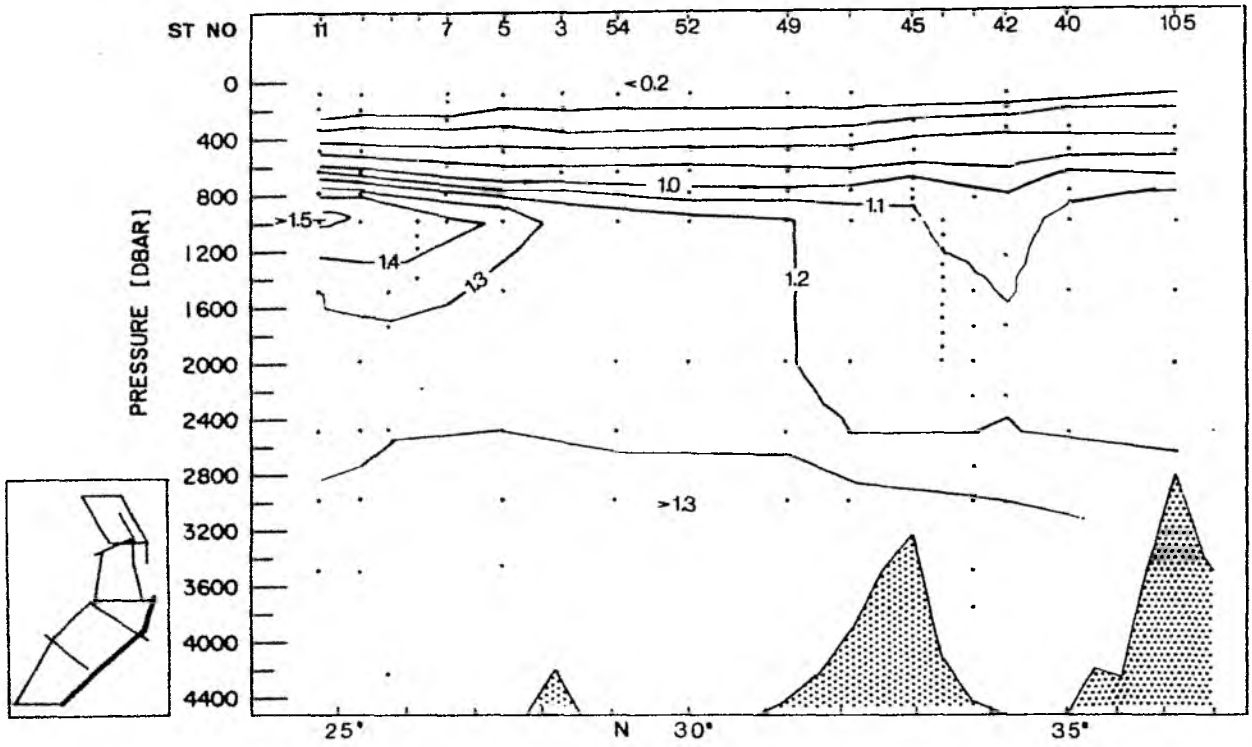
Dissolved oxygen

(ml/l)

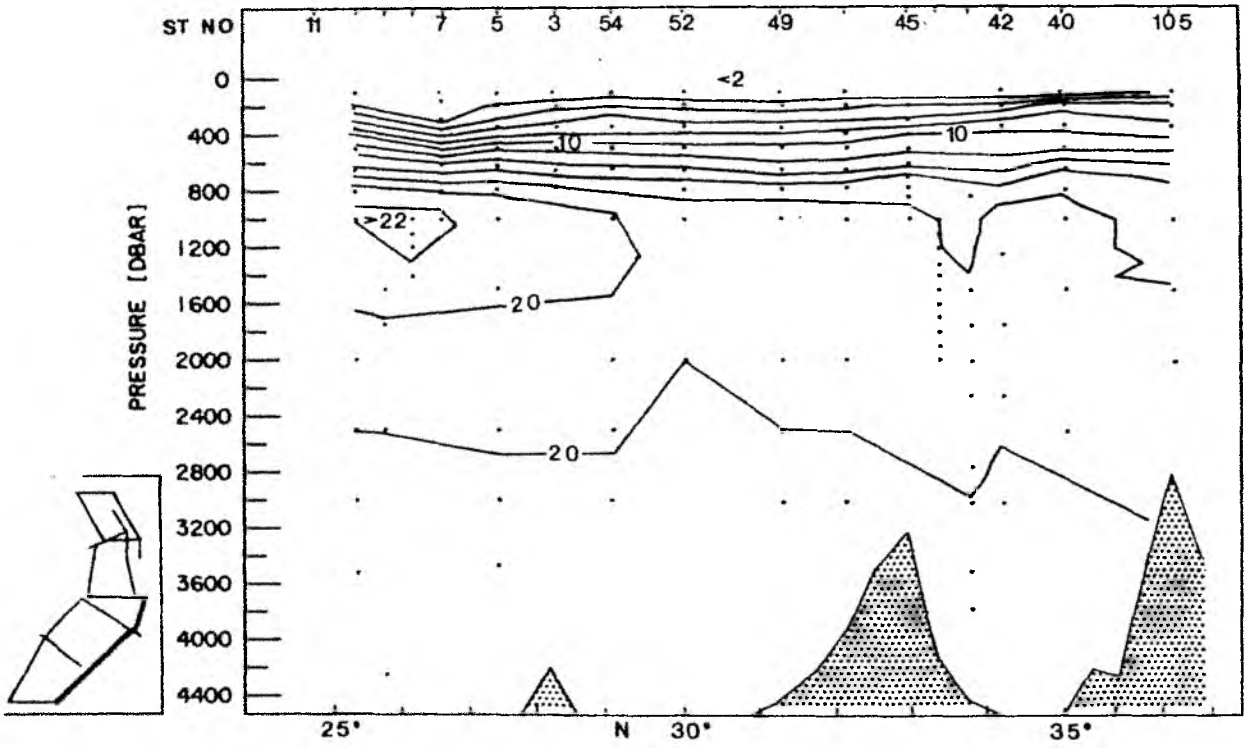
Nutrients

(μmol/l)

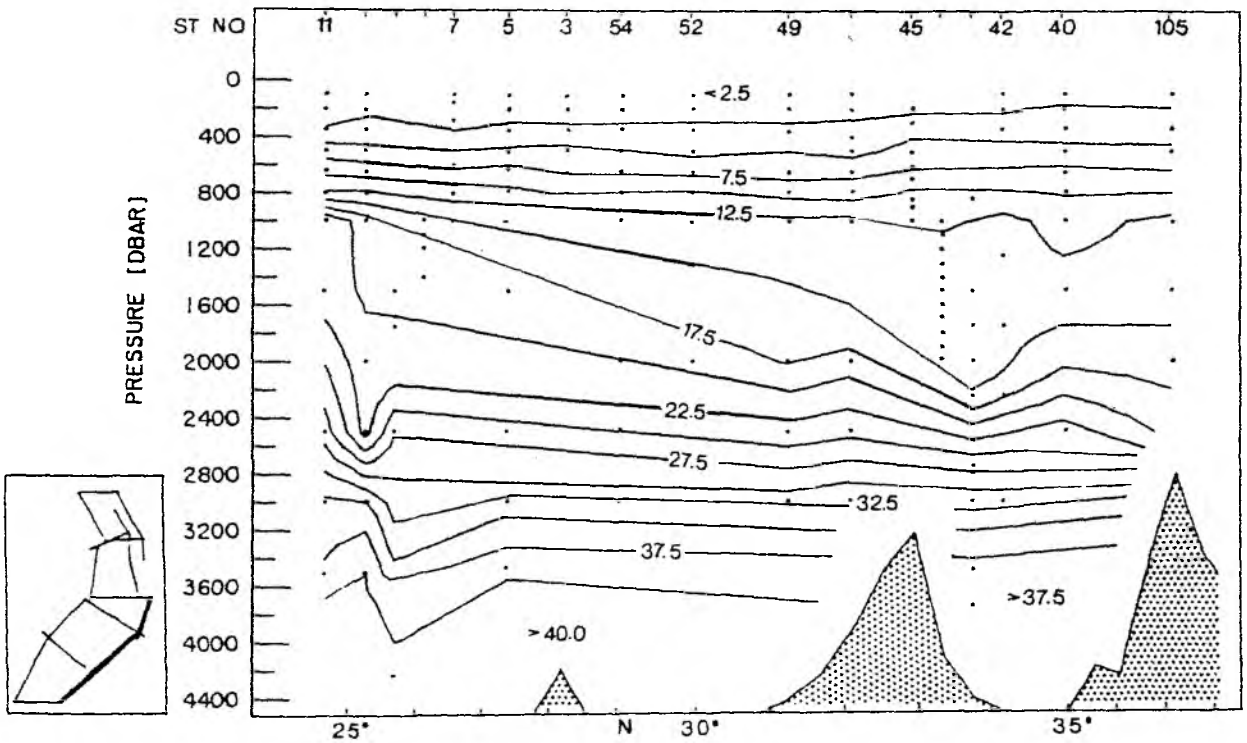
TOPOGULF. SECTION IS PHOSPHATE [µmol/l]



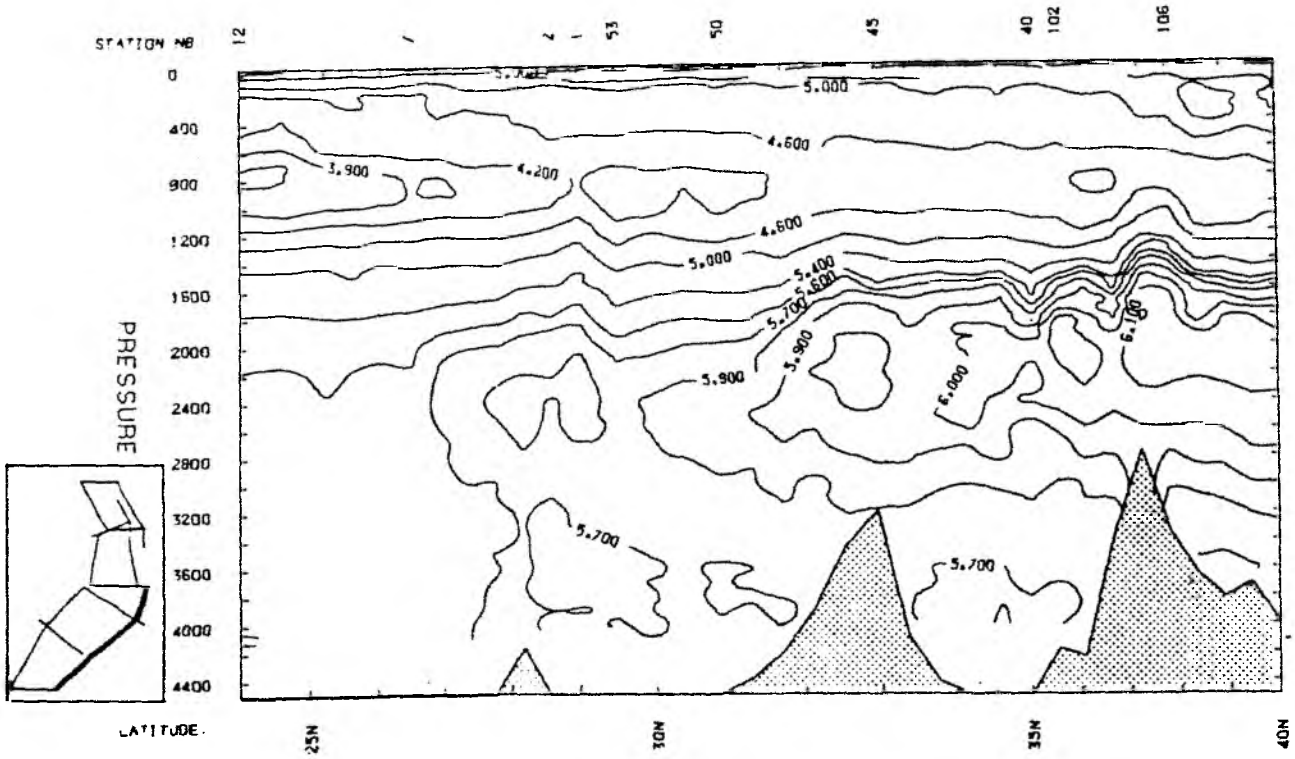
TOPOGULF. SECTION IS NITRATE [µmol/l]

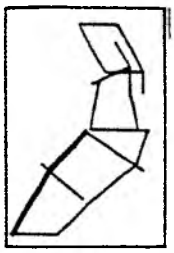


TOPOGULF. SECTION IS SILICATE [µmol/l]

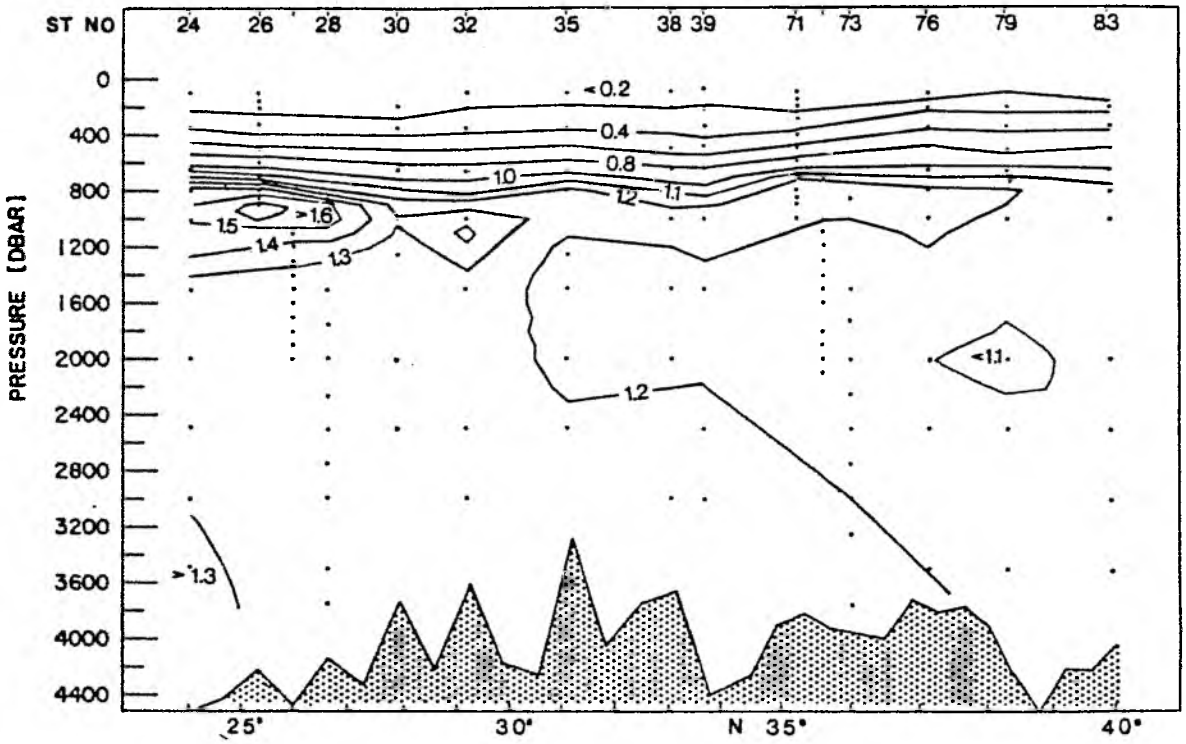


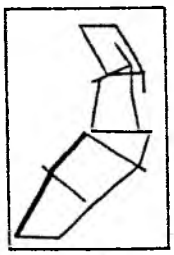
TOPOGULF: SECTION IS -DISSOLVED OXYGEN (ML/L)



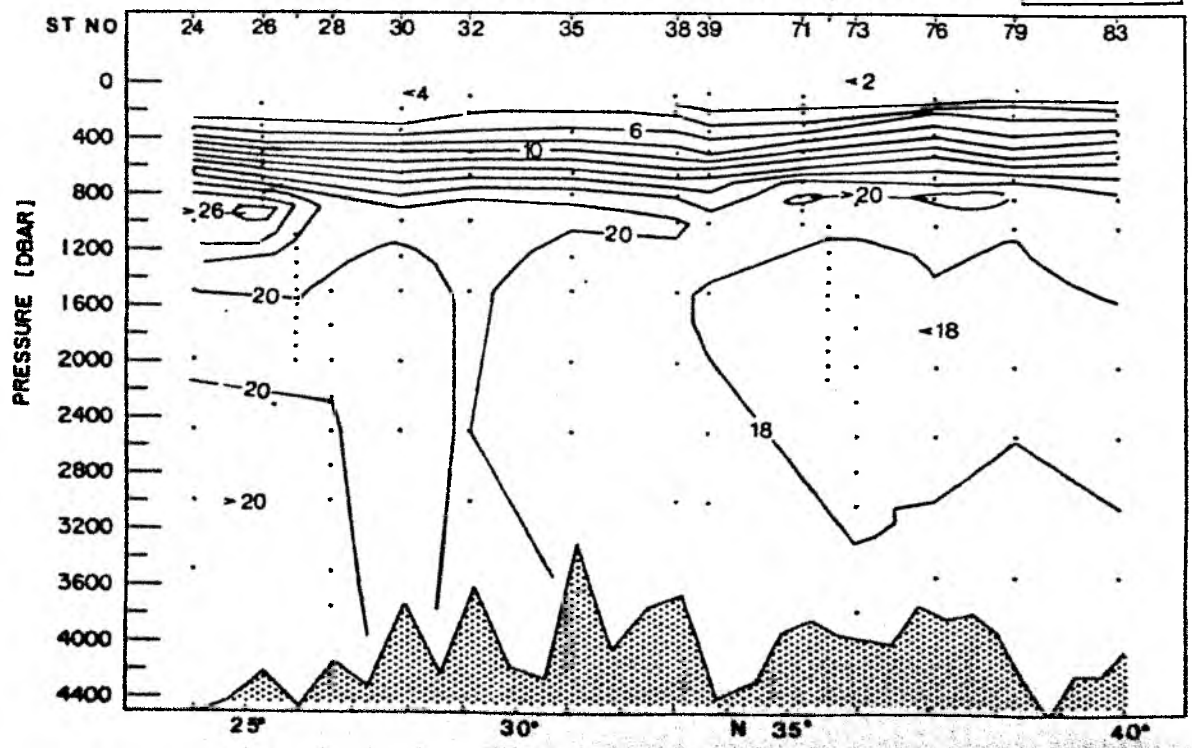


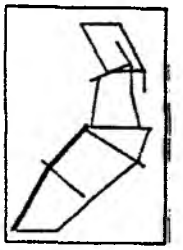
TOPOGULF. SECTION 2S PHOSPHATE [µmol/l]



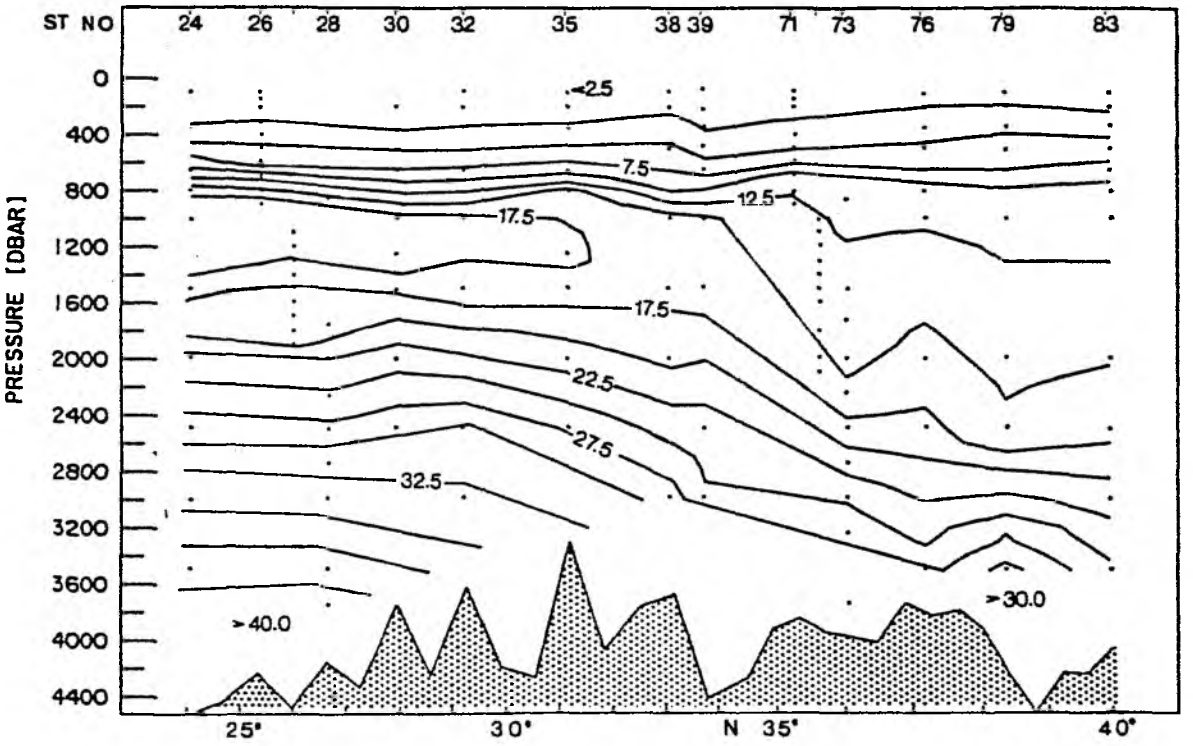


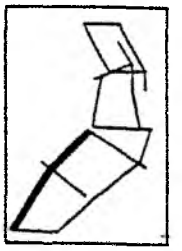
TOPOGULF. SECTION 2S NITRATE [µmol/l]



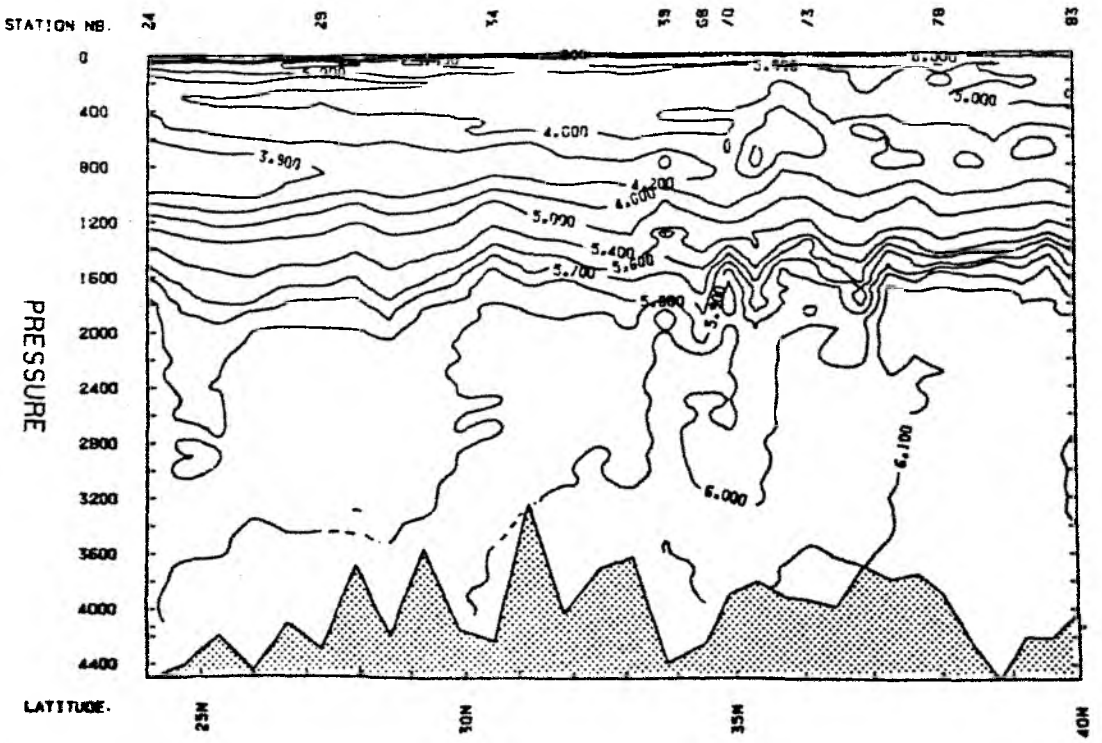


TOPOGULF. SECTION 2S SILICATE [µmol/l]

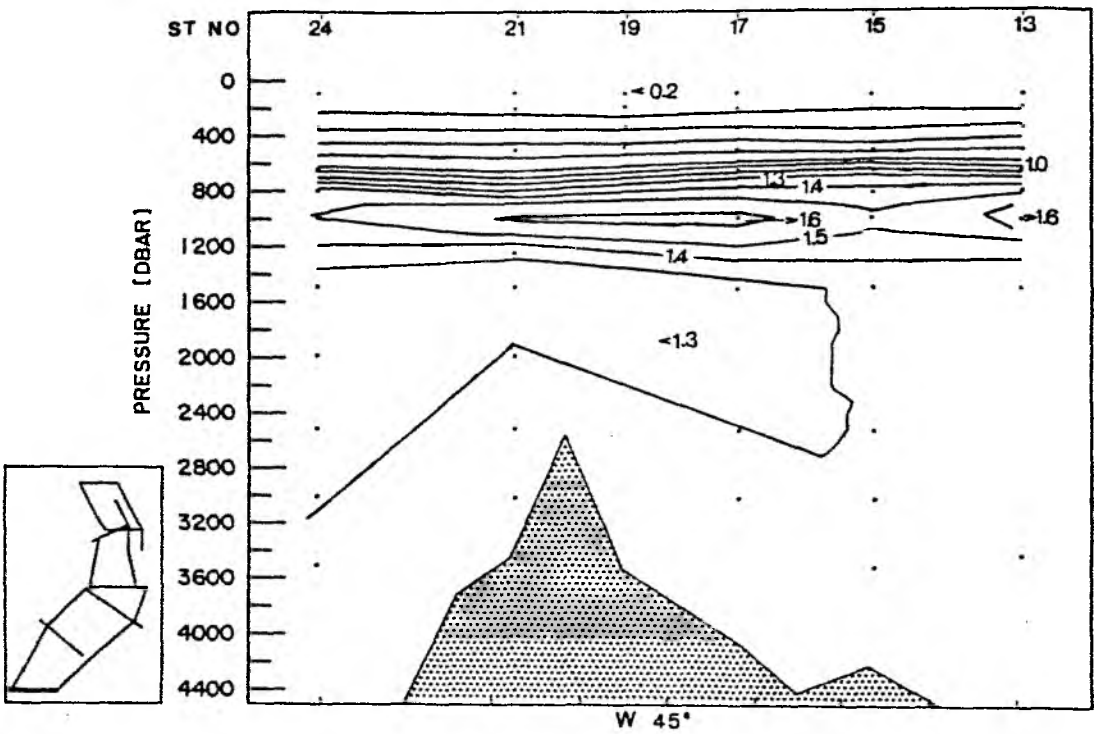




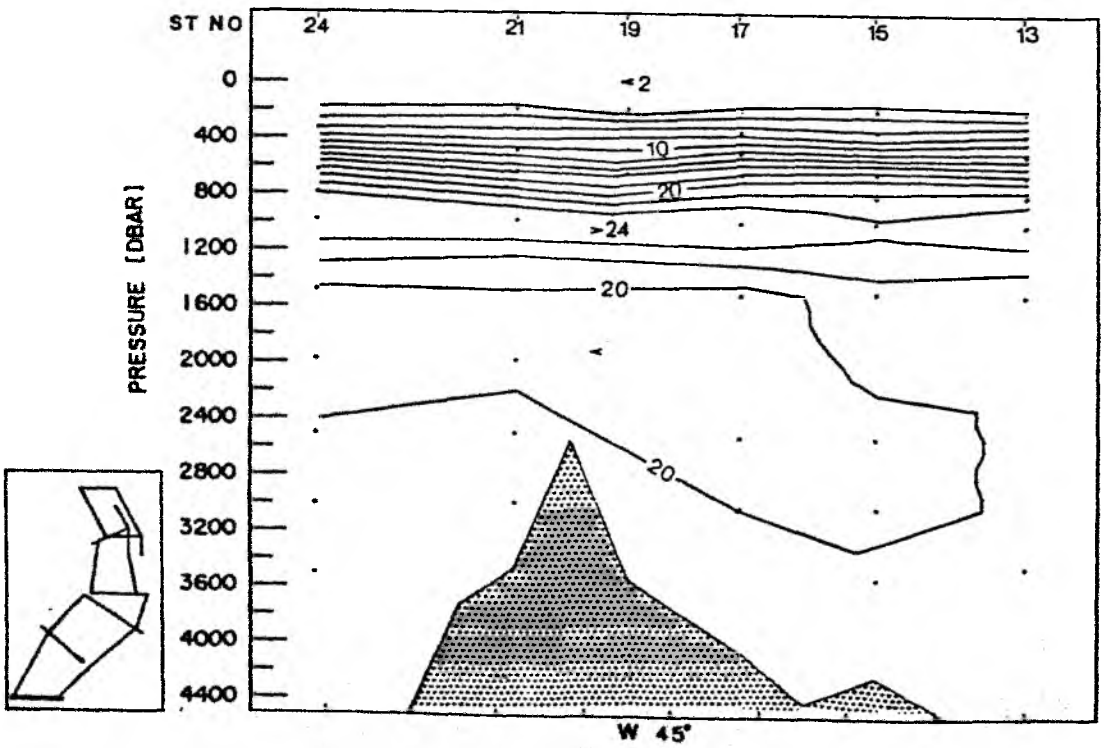
TOPOGULF: SECTION 2S -DISSOLVED OXYGEN (ML/L)



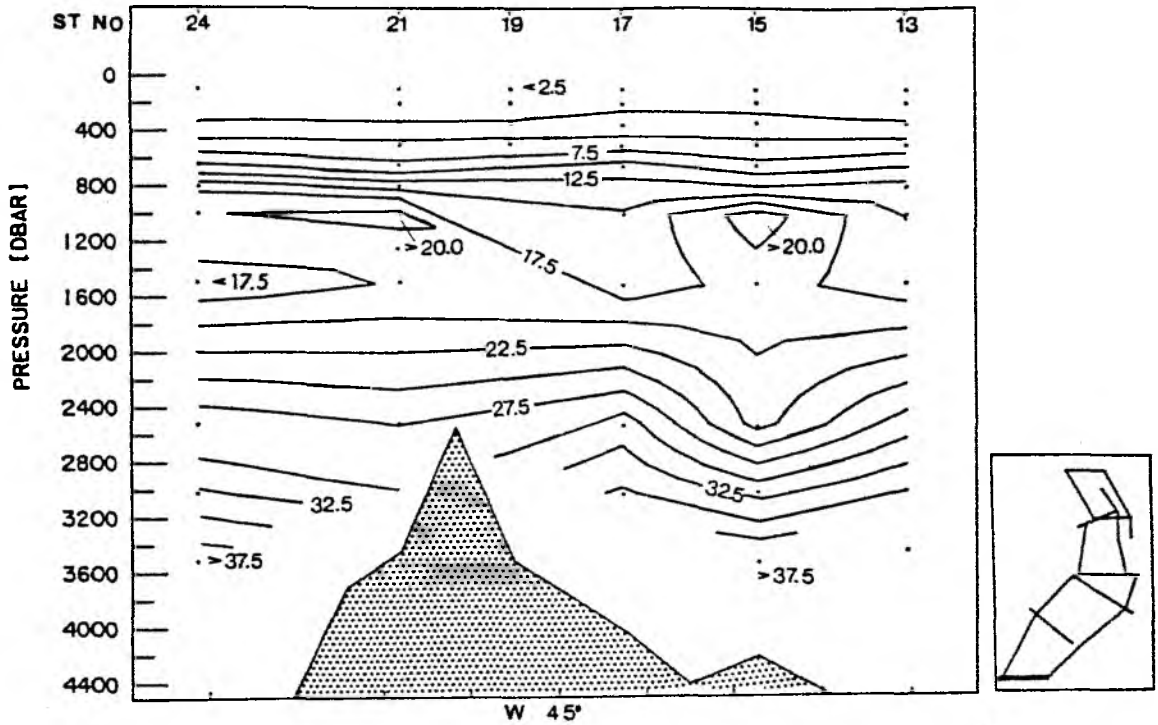
TOPOGULF. SECTION 3S PHOSPHATE [µmol/l]



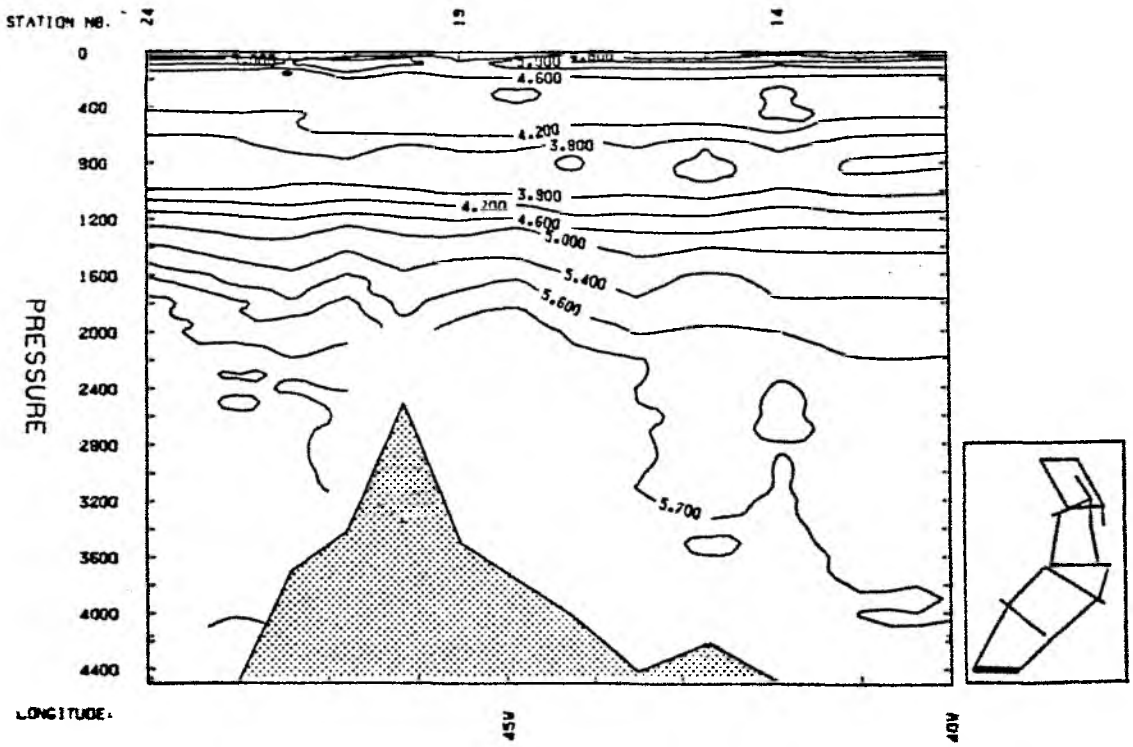
TOPOGULF. SECTION 3S NITRATE [µmol/l]



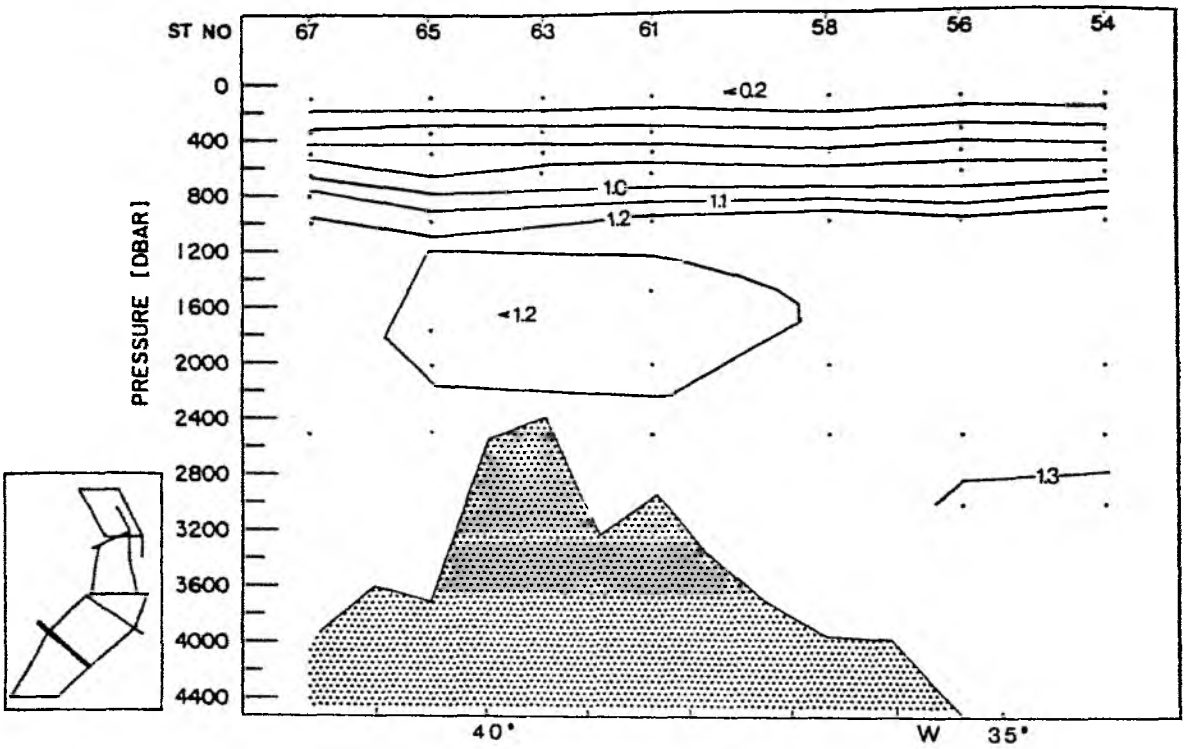
TOPOGULF. SECTION 3S SILICATE [µmol/l]



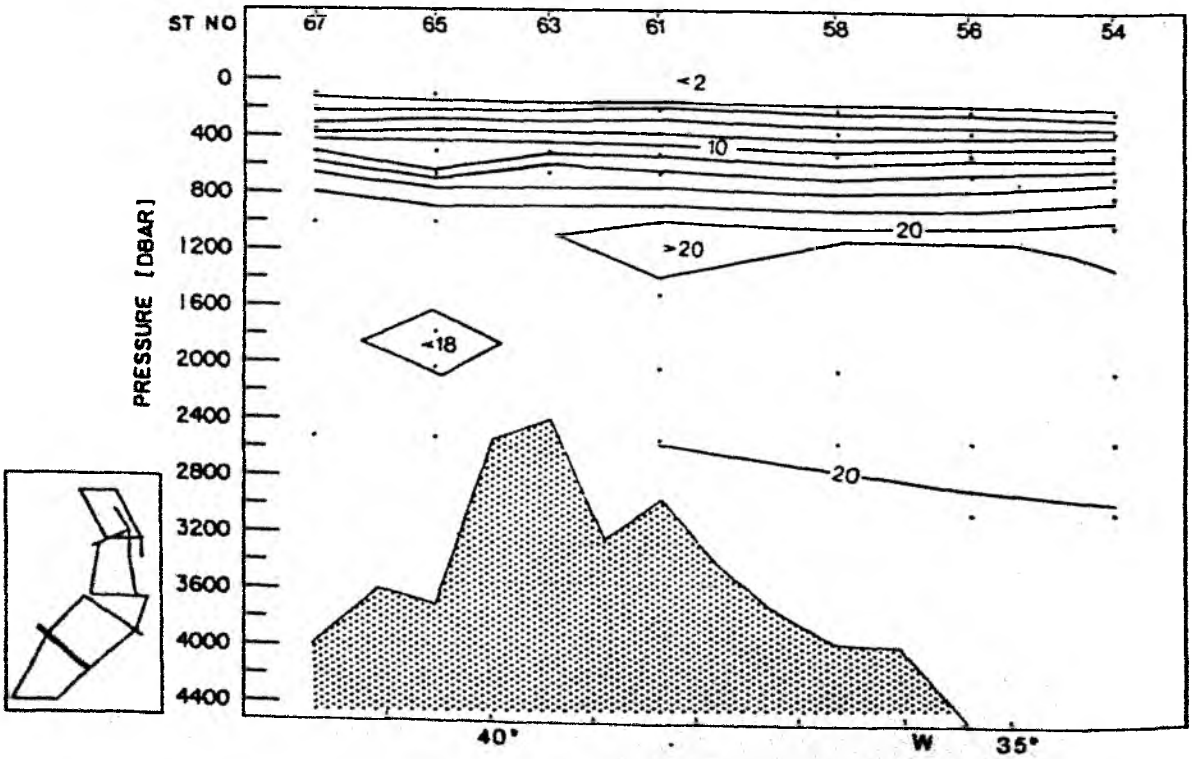
TOPOGULF: SECTION 3S -DISSOLVED OXYGEN (ML/L)



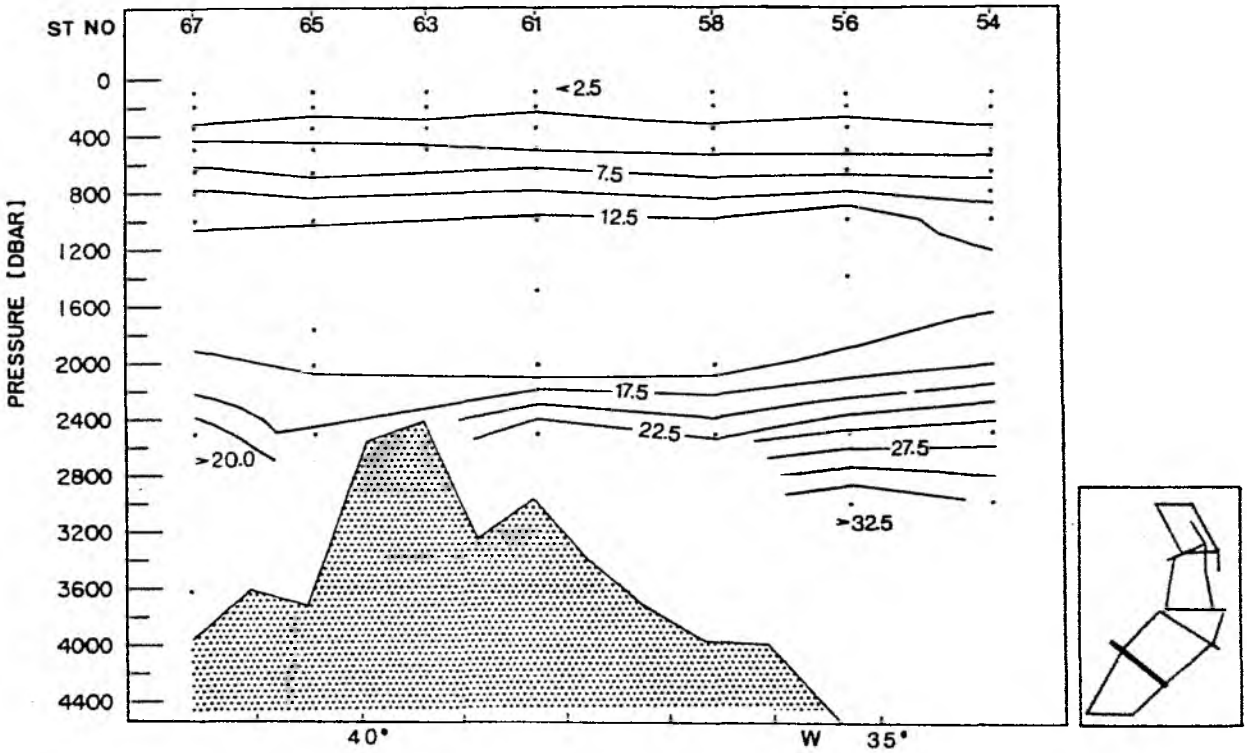
TOPOGULF. SECTION 4S PHOSPHATE [µmol/l]



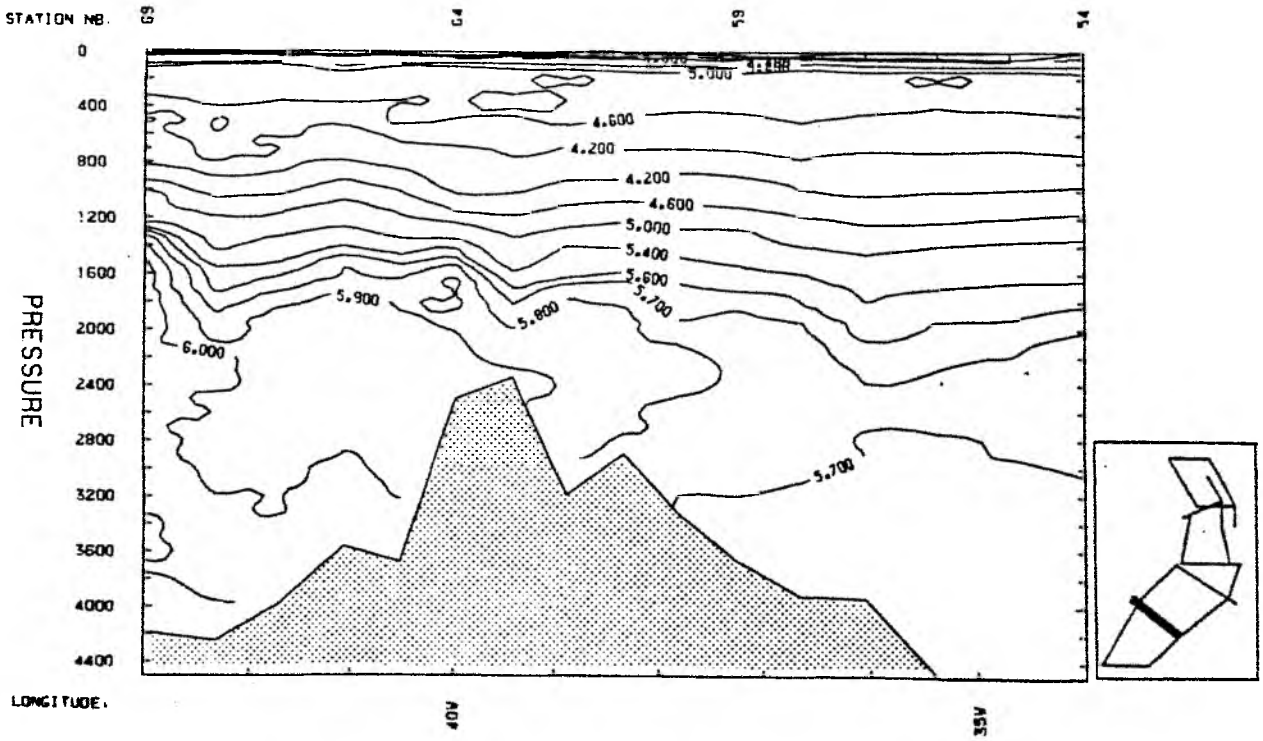
TOPOGULF. SECTION 4S NITRATE [µmol/l]



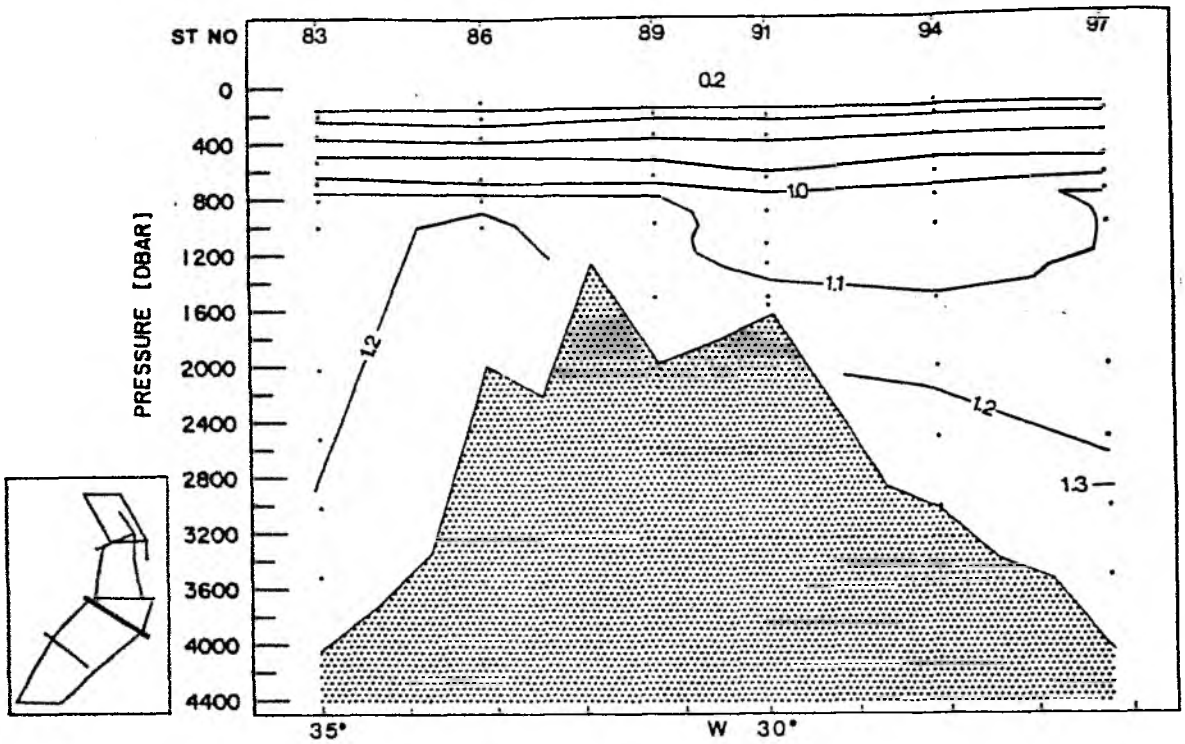
TOPOGULF. SECTION 4S SILICATE [µmol/l]



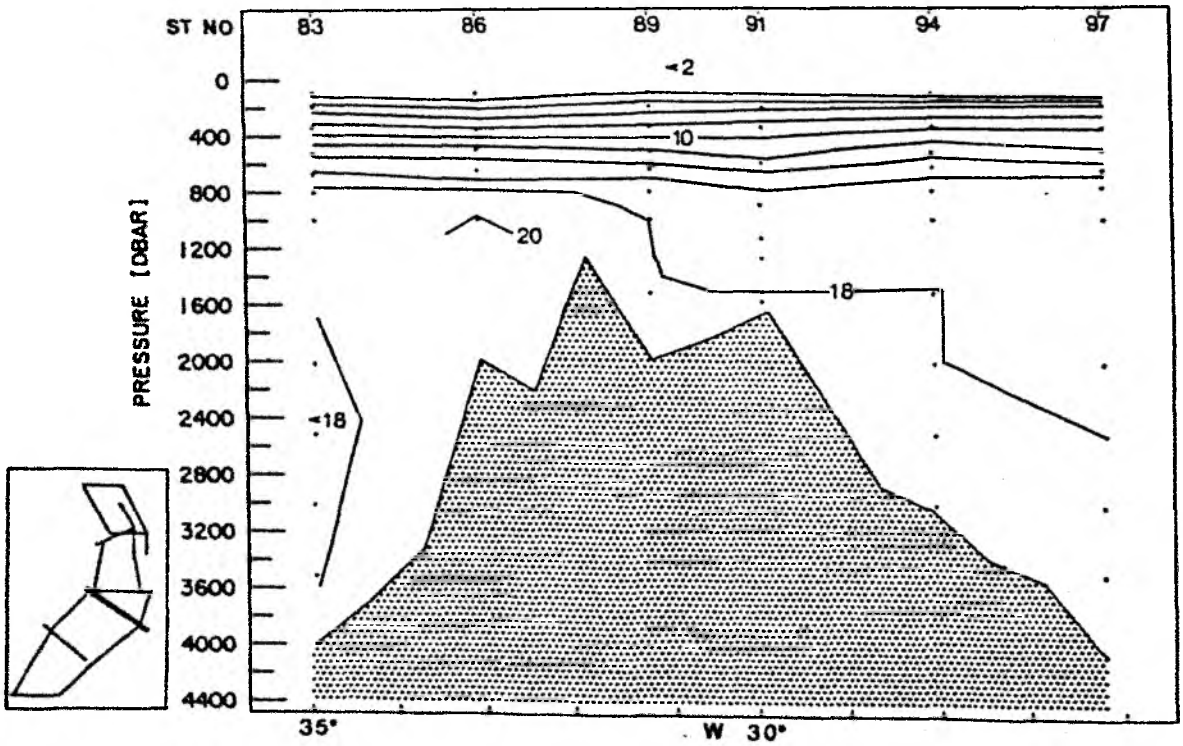
TOPOGULF: SECTION 4S -DISSOLVED OXYGEN (ML/L)



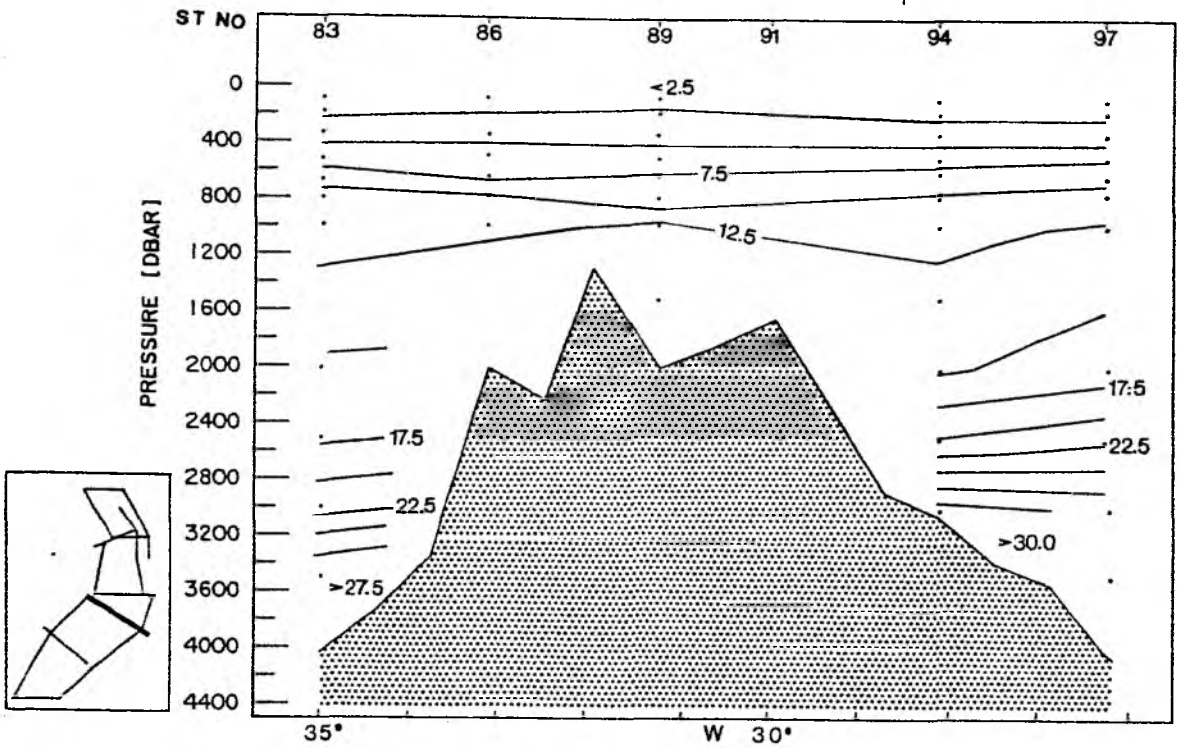
TOPOGULF, SECTION 5S PHOSPHATE [µmol/l]



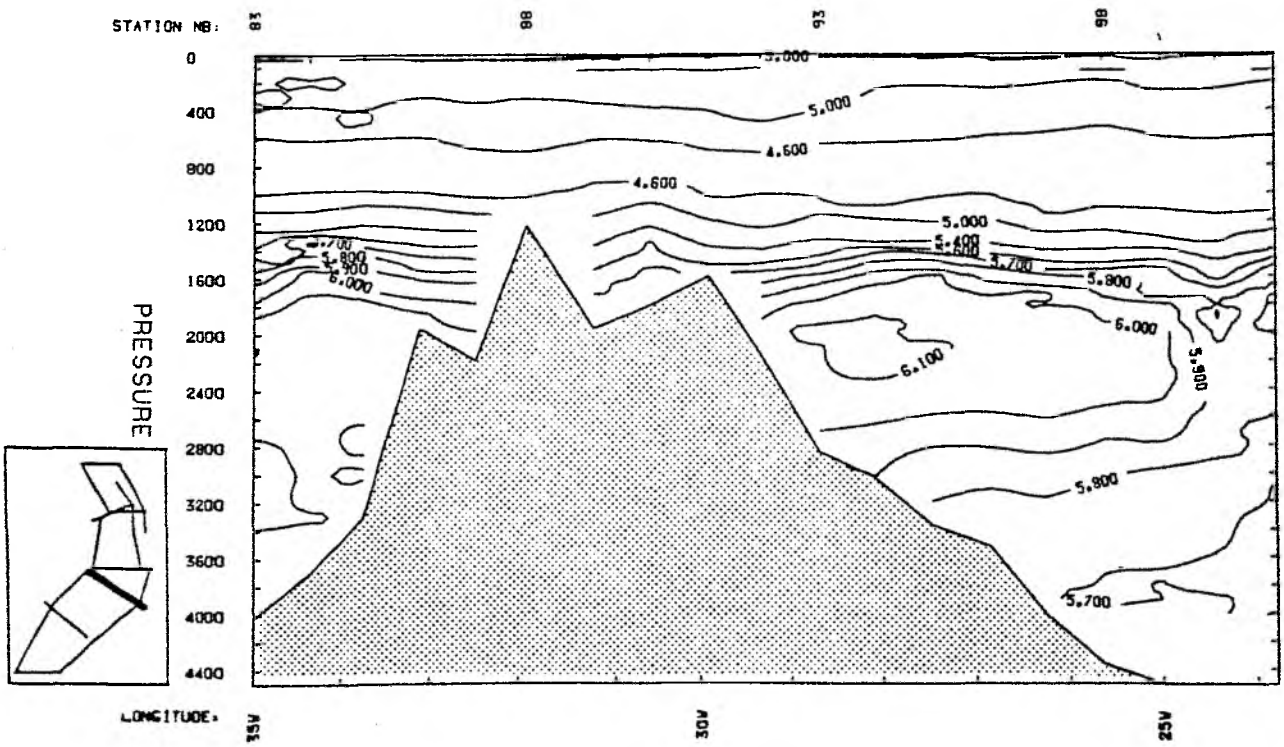
TOPOGULF, SECTION 5S NITRATE [µmol/l]



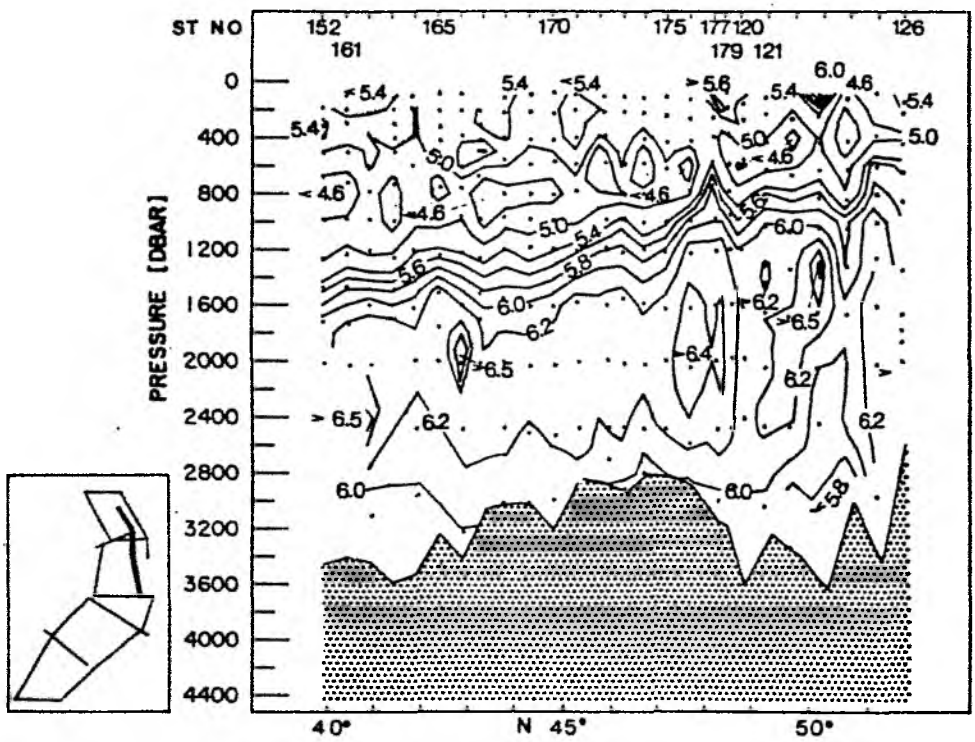
TOPOGULF. SECTION 5S SILICATE [µmol/l]



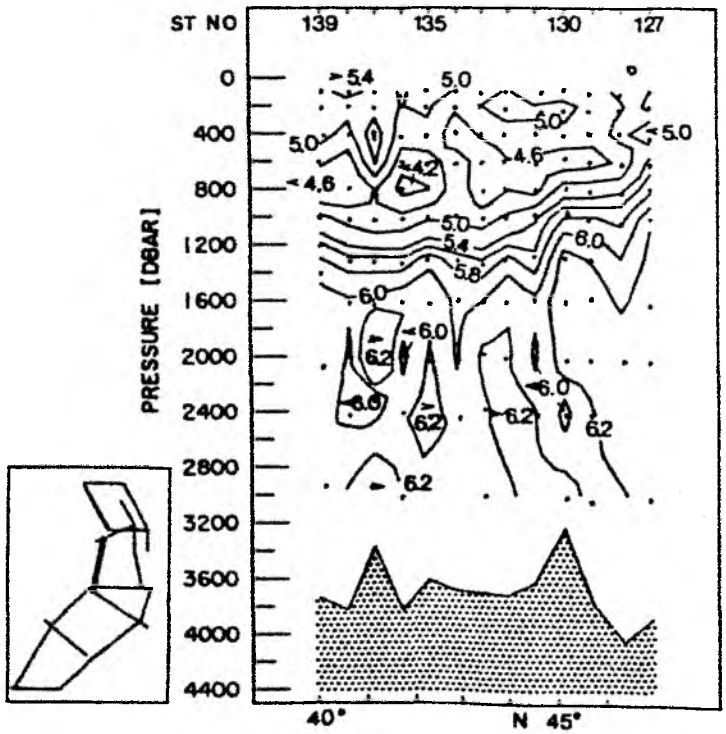
TOPOGULF: SECTION 5S -DISSOLVED OXYGEN (ML/L)



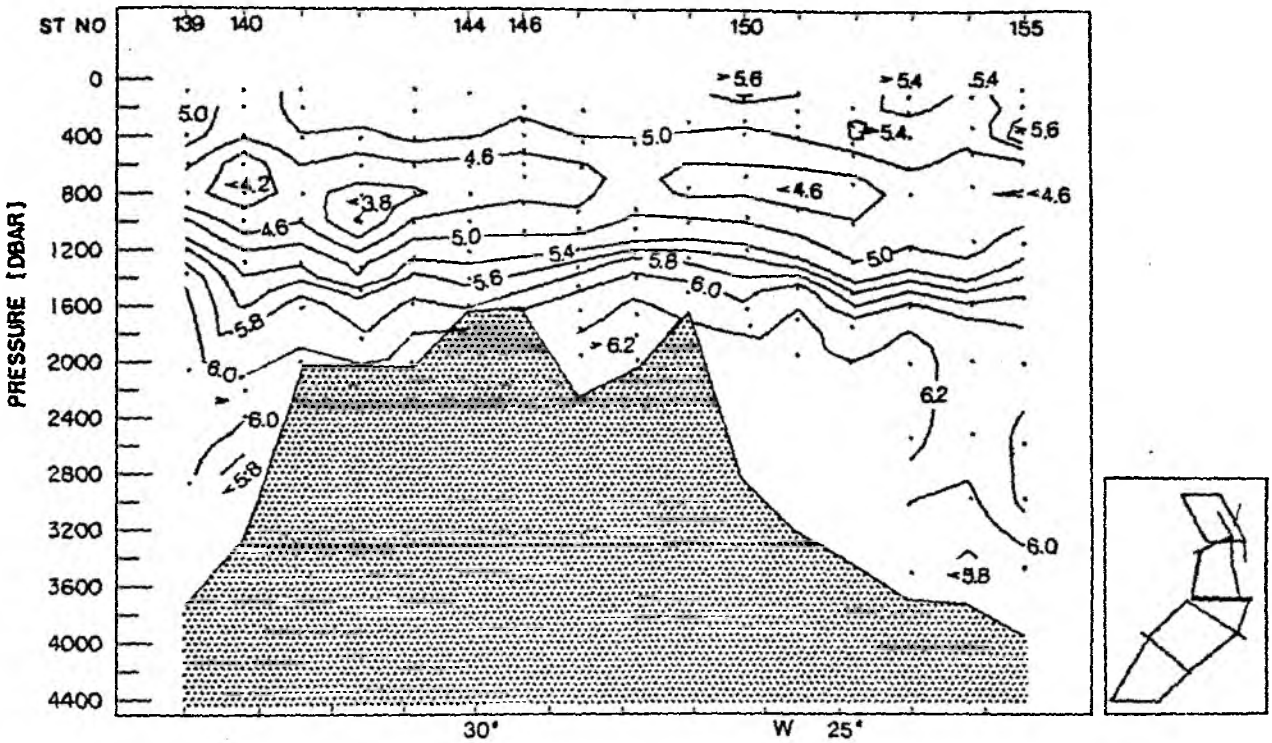
TOPOGULF. SECTION IP OXYGEN [ml/l]



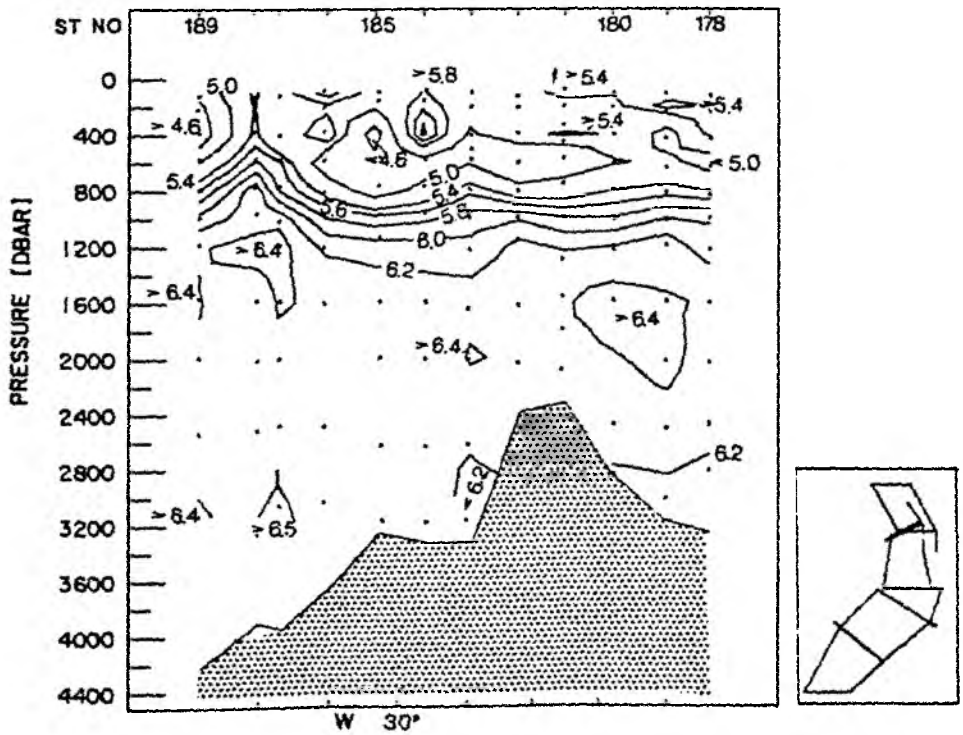
TOPOGULF. SECTION 2P -OXYGEN [ml/l]



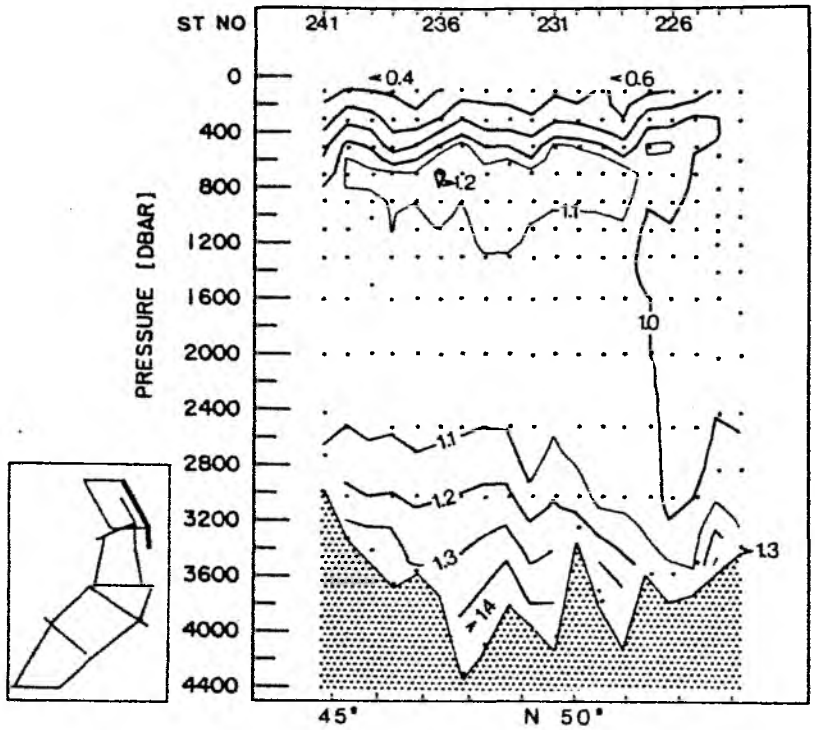
TOPOGULF. SECTION 6P -OXYGEN [ml/l]



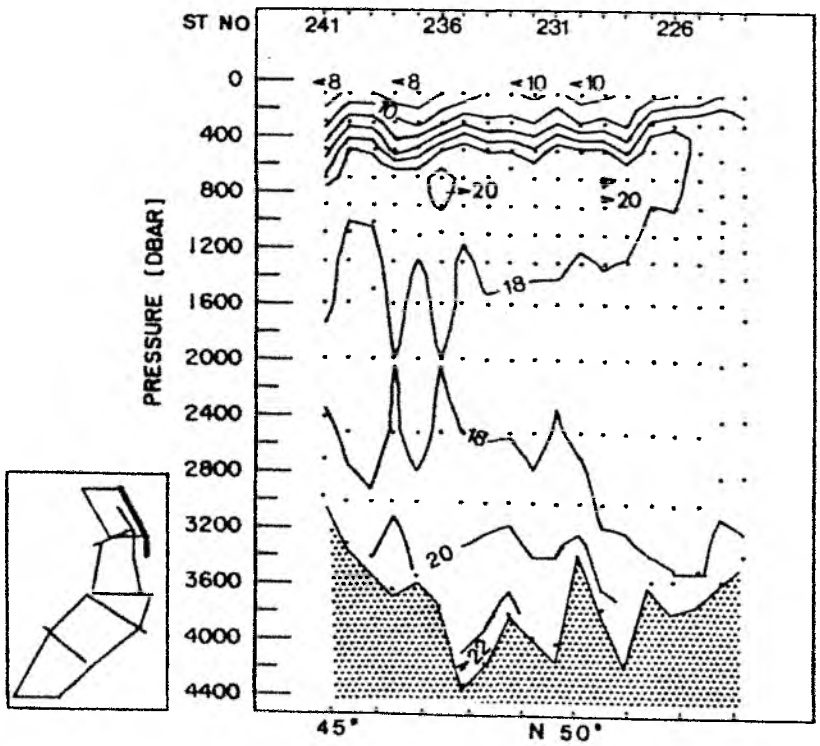
TOPOGULF. SECTION 7P -OXYGEN [ml/l]



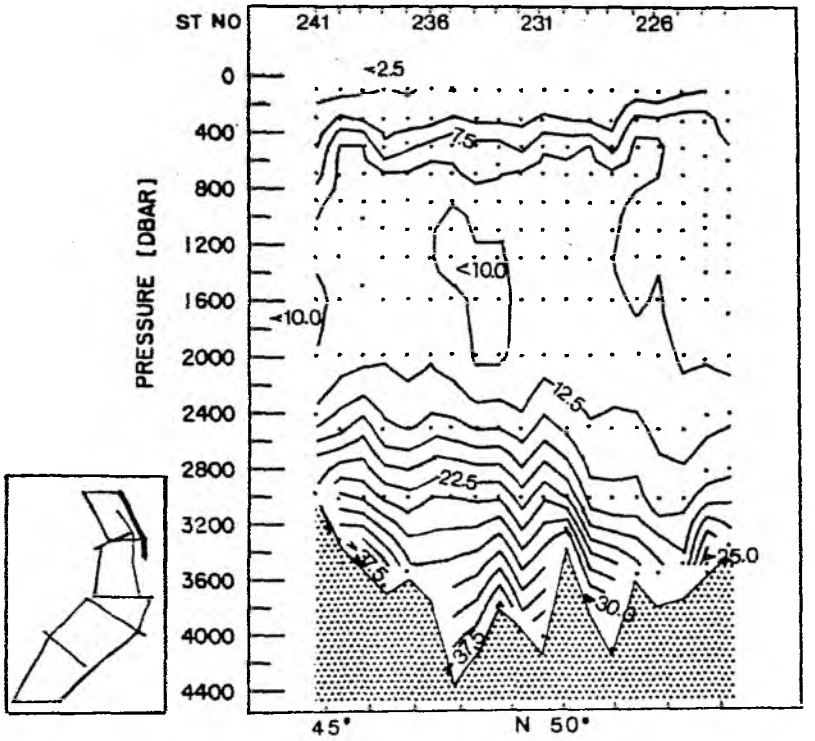
TOPOGULF. SECTION IM PHOSPHATE [µmol/l]



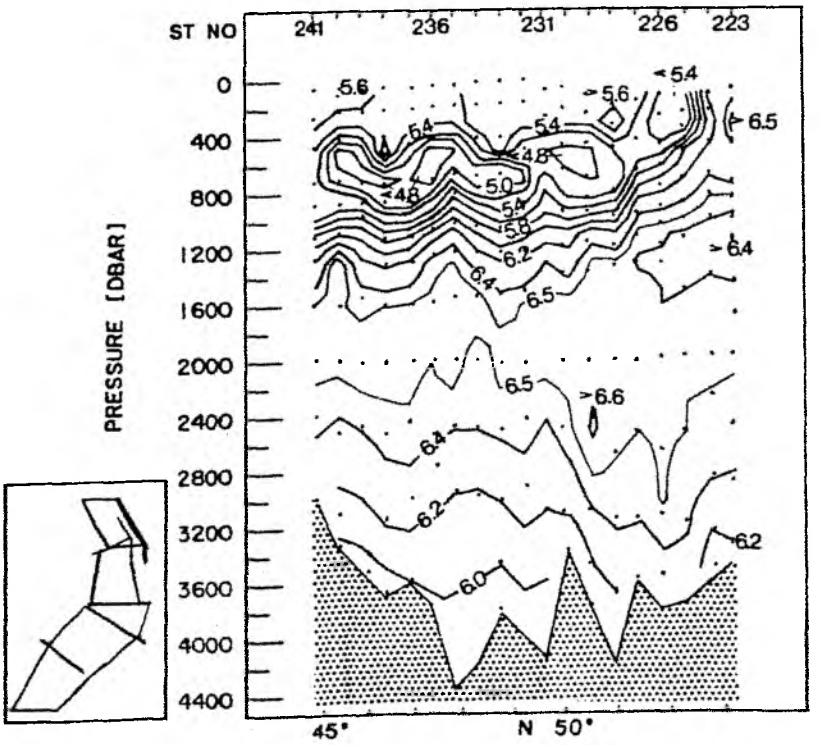
TOPOGULF. SECTION IM NITRATE [µmol/l]



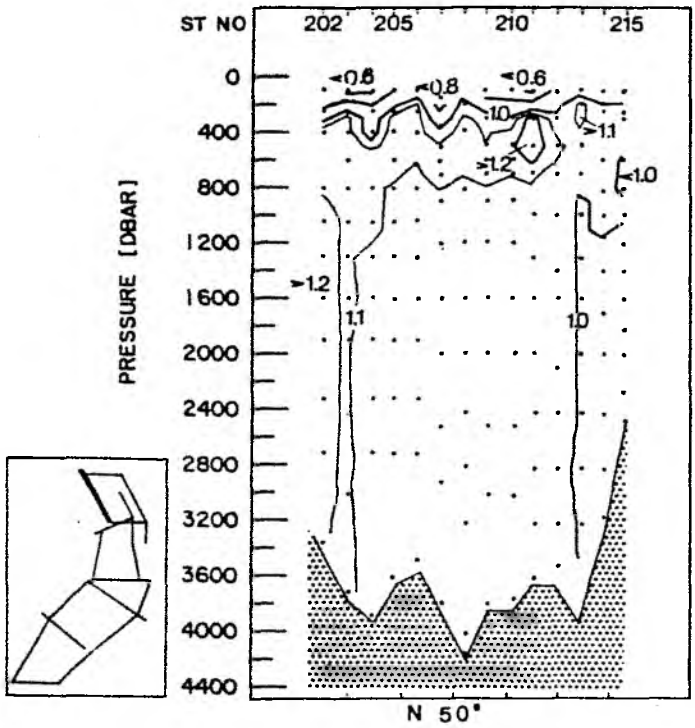
TOPOGULF. SECTION IM SILICATE [µmol/l]



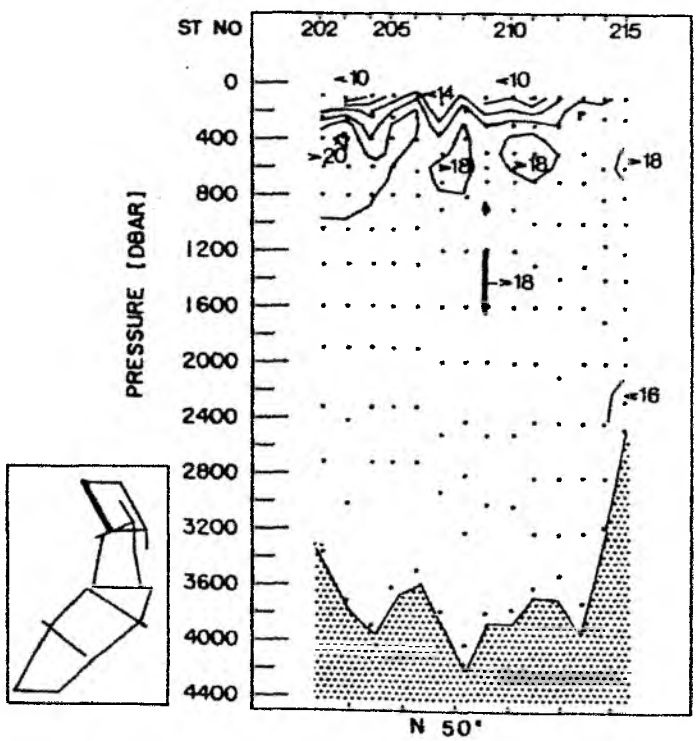
TOPOGULF. SECTION IM OXYGEN [ml/l]



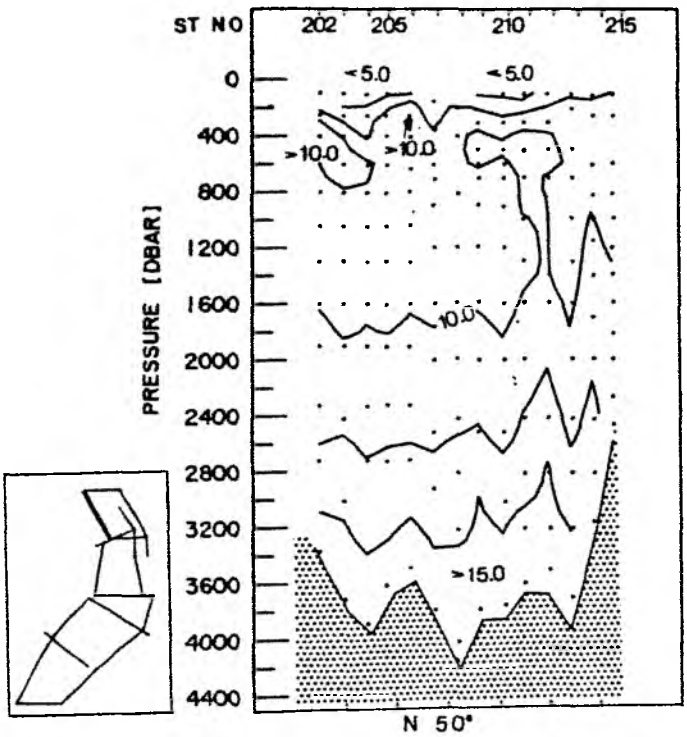
TOPOGULF. SECTION 2M PHOSPHATE [µmol/l]



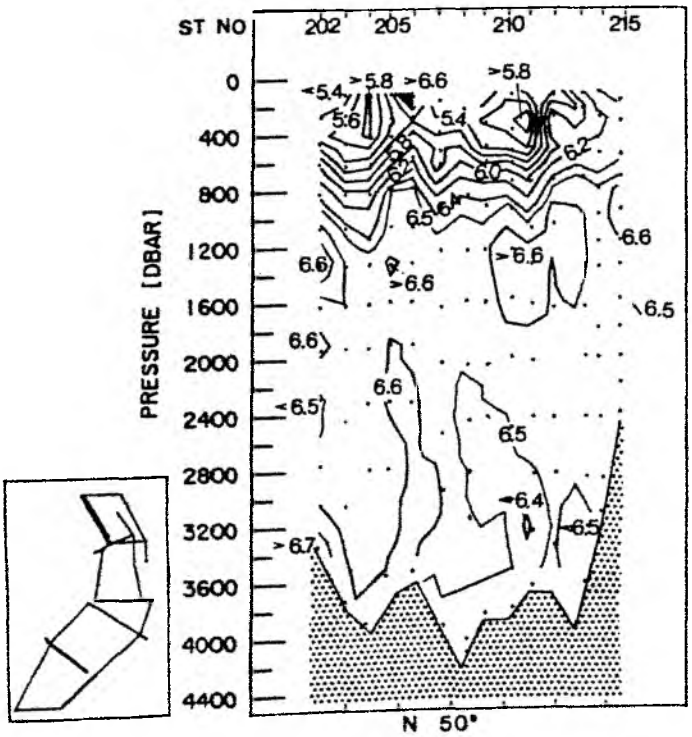
TOPOGULF. SECTION 2M NITRATE [µmol/l]



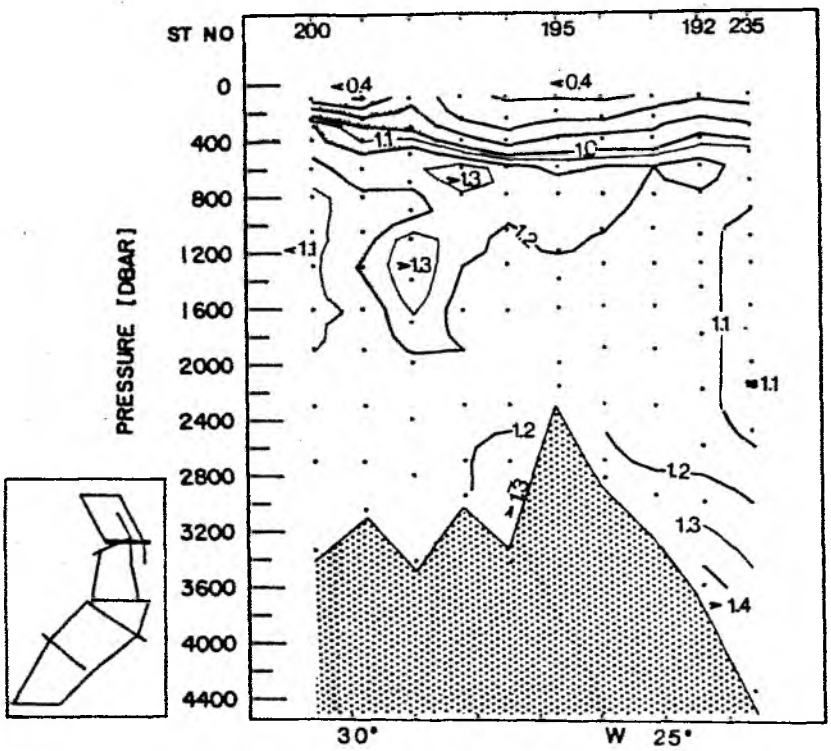
TOPOGULF. SECTION 2M SILICATE [µmol/l]



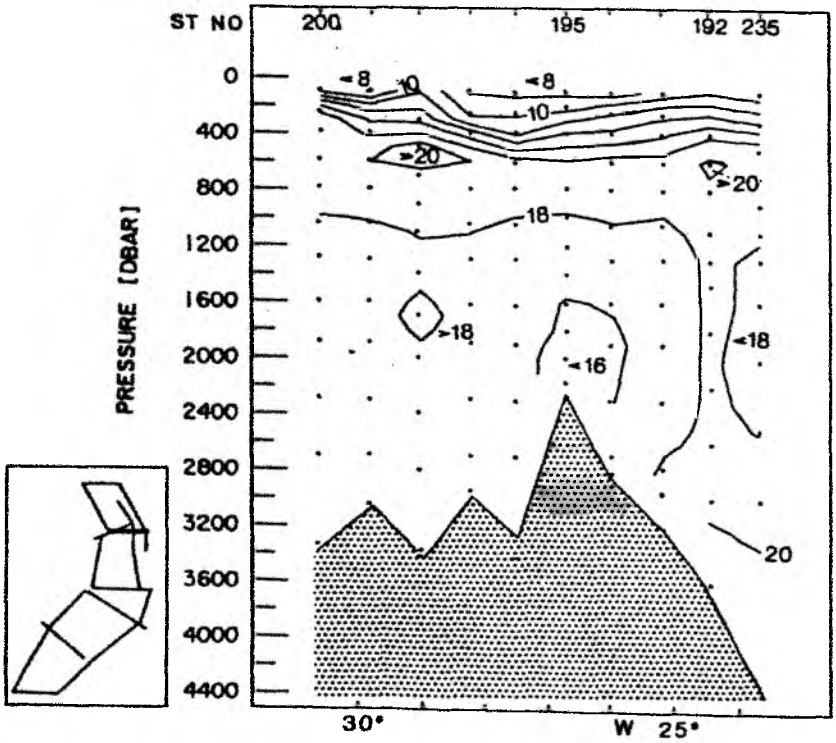
TOPOGULF. SECTION 2M OXYGEN [ml/l]



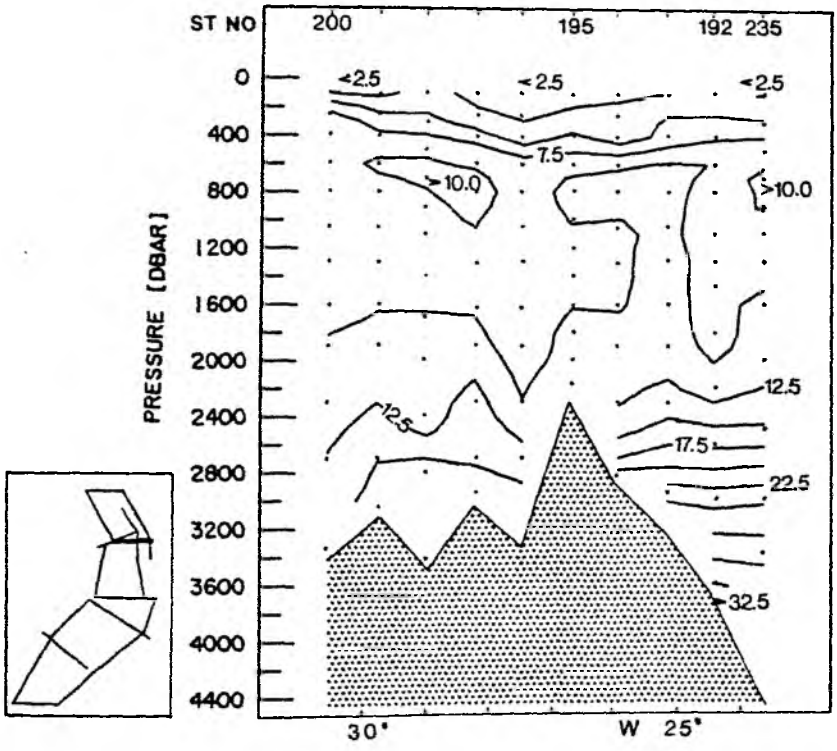
TOPOGULF. SECTION 7M PHOSPHATE [µmol/l]



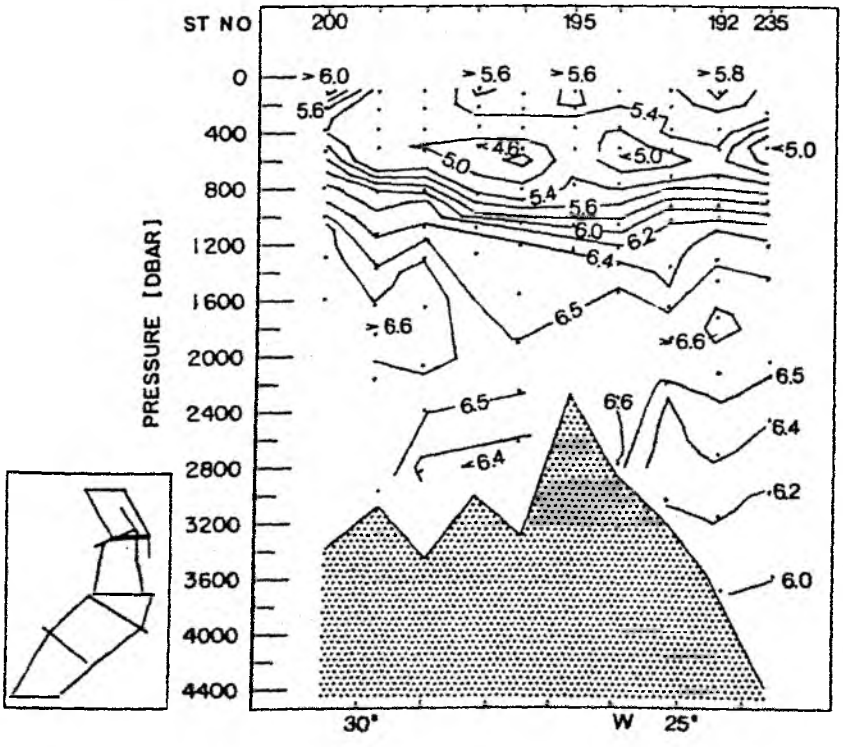
TOPOGULF. SECTION 7M NITRATE [µmol/l]



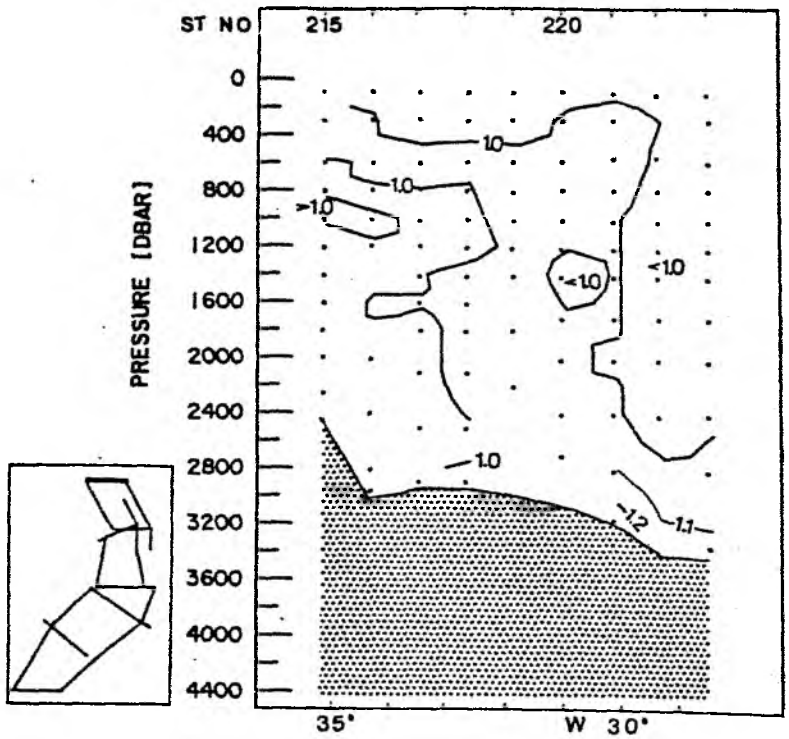
TOPOGULF. SECTION 7M SILICATE [µmol/l]



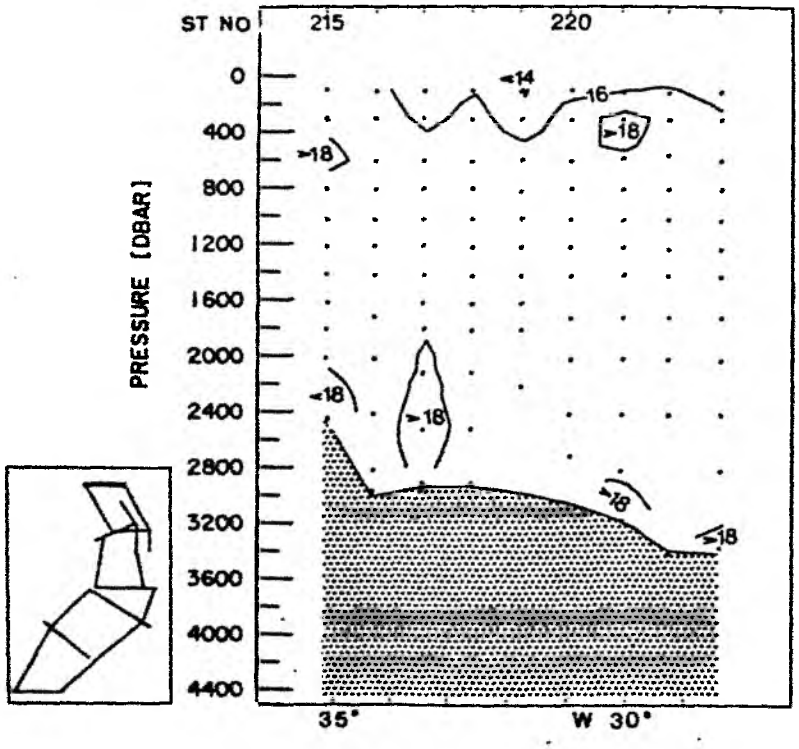
TOPOGULF. SECTION 7M OXYGEN [ml/l]



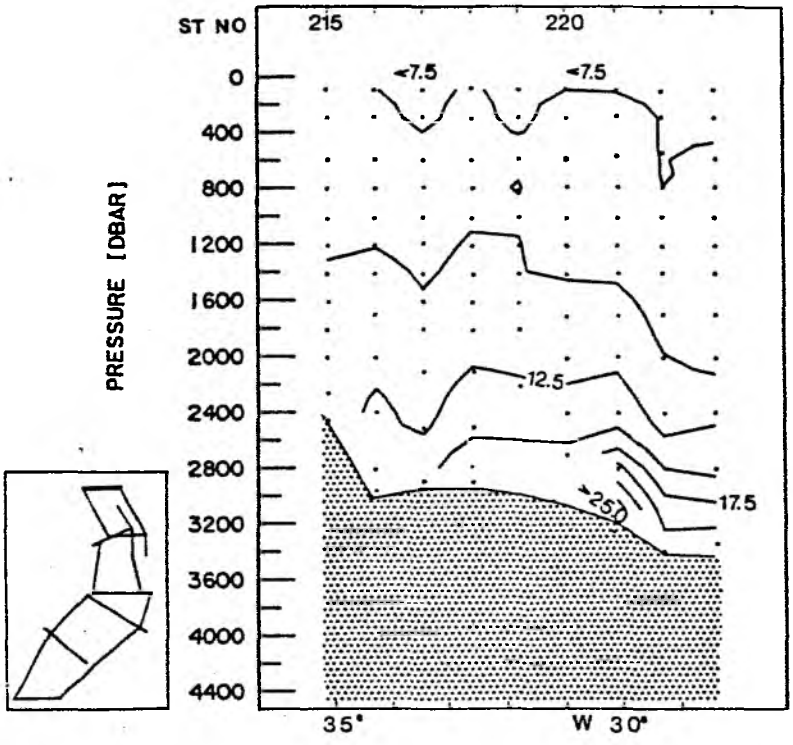
TOPOGULF, SECTION 8M PHOSPHATE [µmol/l]



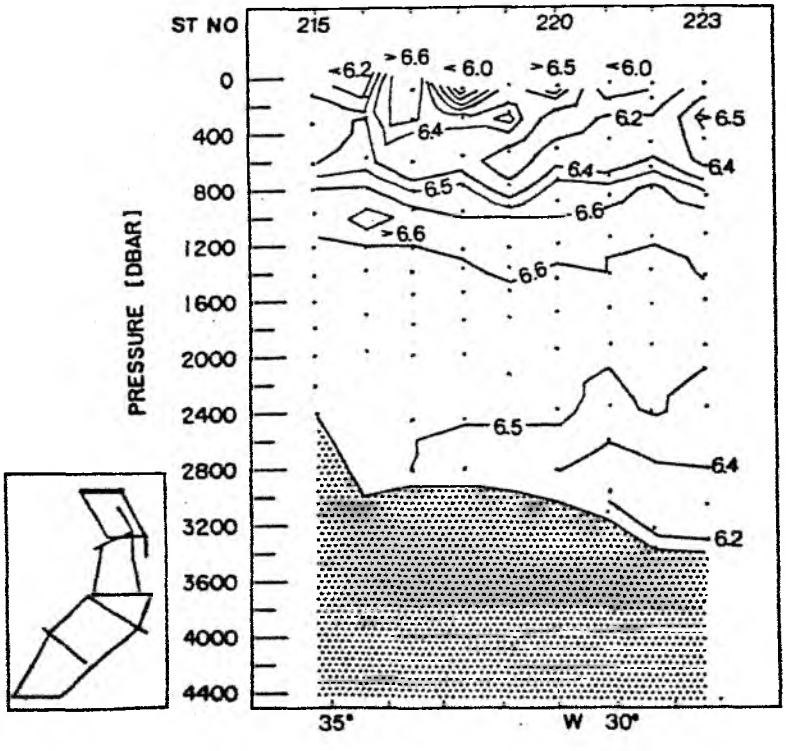
TOPOGULF, SECTION 8M NITRATE [µmol/l]



TOPOGULF, SECTION 8M SILICATE [µmol/l]



TOPOGULF, SECTION 8M OXYGEN [ml/l]



VII Listings of CTD-O_2 parameters

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 1
CRUISE STATION NB: SUROIT 1
POSITION: N 29 .21 W 34 .12
DATE: 83- VII-18
DEPTH OF WATER: 5430M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
6.	24.261	37.138	4.73
10.	24.254	37.139	4.89
20.	24.240	37.137	4.91
30.	23.636	37.092	5.03
40.	22.725	36.944	5.22
50.	21.272	36.772	5.58
60.	20.702	36.700	5.66
70.	20.308	36.692	5.70
80.	20.101	36.697	5.70
90.	19.840	36.694	5.63
100.	19.754	36.749	5.53
200.	17.752	36.505	3.95
300.	15.782	36.143	4.01
400.	14.252	35.915	4.73
500.	12.961	35.737	4.58
600.	11.736	35.579	4.63
700.	10.497	35.477	4.42
800.	9.832	35.451	4.24
900.	8.814	35.423	4.25
1000.	8.110	35.407	4.43
1100.	7.559	35.407	4.67
1200.	7.037	35.375	4.86
1300.	6.398	35.316	5.07
1400.	5.913	35.268	5.24
1500.	5.502	35.229	5.44
1600.	5.152	35.191	5.53
1700.	4.855	35.161	5.60
1800.	4.548	35.127	5.66
1900.	4.263	35.097	5.73
2000.	4.024	35.070	5.78
2200.	3.565	35.021	5.83
2400.	3.259	34.990	5.83
2600.	3.039	34.970	5.84
2800.	2.880	34.955	5.79
3000.	2.770	34.944	5.73
3200.	2.662	34.933	5.73
3400.	2.575	34.923	5.69
3600.	2.516	34.916	5.67
3800.	2.484	34.912	5.69
4000.	2.448	34.906	5.68
4131.	2.446	34.904	5.66

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 2
CRUISE STATION NB: SUROIT 2
POSITION: N 28 35.58 W 34 30.95
DATE: 83- VII-19
DEPTH OF WATER: 5000M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	24.391	37.035	4.66
10.	24.390	37.035	4.75
20.	23.956	36.993	4.77
30.	23.501	37.004	4.86
40.	22.865	36.902	5.03
50.	21.891	36.931	5.34
60.	21.020	36.843	5.44
70.	20.562	36.819	5.50
80.	20.543	36.938	5.41
90.	20.496	36.965	5.26
100.	20.368	36.966	5.18
200.	17.519	36.445	4.67
300.	16.250	36.232	4.67
500.	13.466	35.800	4.64
600.	11.935	35.608	4.40
700.	10.762	35.503	4.24
800.	9.787	35.437	4.09
900.	8.923	35.398	4.01
1000.	8.088	35.370	4.16
1100.	7.510	35.377	4.45
1200.	7.046	35.373	4.69
1300.	6.417	35.318	4.95
1400.	6.039	35.285	5.10
1500.	5.518	35.234	5.30
1600.	5.146	35.194	5.44
1700.	4.834	35.159	5.52
1800.	4.518	35.124	5.61
1900.	4.225	35.090	5.70
2000.	4.019	35.069	5.73
2200.	3.598	35.023	5.79
2400.	3.237	34.986	5.80
2600.	3.072	34.972	5.76
2800.	2.882	34.955	5.73
3000.	2.776	34.944	5.73
3200.	2.650	34.932	5.67
3400.	2.575	34.923	5.67
3600.	2.531	34.917	5.68
3800.	2.491	34.912	5.68
4000.	2.447	34.905	5.69
4029.	2.447	34.905	5.69

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 3
CRUISE STATION NB: SUROIT 3
POSITION: N 28 10.08 W 35 1.16
DATE: 83- VII-19
DEPTH OF WATER: 4500M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	24.539	37.173	4.63
10.	24.538	37.173	4.74
20.	24.168	37.085	4.81
30.	23.486	37.072	4.98
40.	23.162	37.051	5.06
50.	22.268	37.027	5.31
60.	21.716	37.024	5.37
70.	21.489	37.012	5.36
80.	20.966	36.968	5.42
90.	20.841	36.965	5.38
100.	20.494	36.908	5.39
200.	17.628	36.470	4.73
300.	16.191	36.229	4.67
400.	14.826	36.004	4.64
500.	13.060	35.757	4.48
600.	12.053	35.633	4.37
700.	10.877	35.510	4.20
800.	9.701	35.420	4.02
900.	8.784	35.395	4.13
1100.	7.510	35.353	4.33
1200.	7.013	35.339	4.59
1300.	6.658	35.333	4.82
1400.	6.192	35.297	5.06
1600.	5.258	35.203	5.44
1700.	4.877	35.164	5.58
1800.	4.661	35.142	5.62
1900.	4.370	35.109	5.70
2000.	4.158	35.085	5.75
2200.	3.753	35.041	5.76
2400.	3.336	34.998	5.83
2600.	3.098	34.974	5.82
2800.	2.891	34.955	5.78
3000.	2.773	34.944	5.75
3200.	2.693	34.931	5.70
3400.	2.584	34.924	5.70
3600.	2.512	34.915	5.71
3800.	2.506	34.912	5.70
4000.	2.471	34.907	5.72
4167.	2.453	34.903	5.72

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 4
CRUISE STATION NB: SUROIT 4
POSITION: N 27 45.56 W 35 31.61
DATE: 83- VII-19
DEPTH OF WATER: 4690M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
7.	24.471	37.293	4.67
10.	24.477	37.293	4.74
20.	24.233	37.257	4.81
30.	23.875	37.252	4.91
40.	23.139	37.190	5.08
50.	22.418	37.125	5.26
60.	21.839	37.115	5.36
70.	21.444	37.115	5.35
80.	20.901	37.050	5.36
90.	20.764	37.034	5.32
100.	20.639	37.026	5.30
200.	18.074	36.554	4.76
300.	16.402	36.262	4.75
400.	15.104	36.048	4.48
500.	13.376	35.797	4.50
600.	12.156	35.644	4.35
700.	11.106	35.534	4.20
800.	9.991	35.435	3.98
900.	8.801	35.351	3.94
1000.	7.932	35.299	4.06
1100.	7.263	35.273	4.25
1200.	6.960	35.316	4.53
1300.	6.521	35.300	4.77
1400.	6.214	35.286	4.95
1500.	5.728	35.247	5.18
1600.	5.403	35.216	5.29
1700.	5.009	35.176	5.44
1800.	4.623	35.134	5.56
1900.	4.411	35.113	5.63
2000.	4.112	35.080	5.69
2200.	3.652	35.031	5.79
2400.	3.341	34.998	5.82
2600.	3.102	34.974	5.79
2800.	2.693	34.956	5.71
3000.	2.776	34.944	5.69
3200.	2.676	34.933	5.69
3400.	2.591	34.924	5.66
3600.	2.526	34.917	5.68
3800.	2.455	34.908	5.70
4000.	2.427	34.903	5.71
4136.	2.418	34.902	5.72

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 5
CRUISE STATION NB: SUROIT 5
POSITION: N 27 20.38 W 36 2.57
DATE: 83- VII-20
DEPTH OF WATER: 555 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
7.	24.252	37.285	4.69
10.	24.257	37.285	4.73
20.	24.129	37.275	4.81
30.	24.108	37.274	4.85
40.	23.104	37.163	5.08
50.	22.372	37.146	5.26
60.	22.073	37.195	5.29
70.	21.745	37.152	5.29
80.	21.306	37.099	5.31
90.	20.678	36.950	5.36
100.	20.514	37.019	5.27
200.	17.594	36.453	4.76
300.	16.458	36.277	4.62
400.	14.733	35.999	4.49
500.	13.292	35.787	4.55
600.	11.950	35.622	4.48
700.	10.891	35.521	4.21
800.	9.704	35.420	3.94
900.	8.204	35.254	3.83
1000.	7.319	35.197	4.02
1100.	6.806	35.195	4.26
1200.	6.468	35.211	4.57
1300.	6.172	35.215	4.76
1400.	5.773	35.210	4.97
1500.	5.400	35.192	5.17
1600.	5.067	35.162	5.30
1700.	4.768	35.139	5.42
1800.	4.495	35.114	5.53
1900.	4.250	35.092	5.63
2000.	3.980	35.064	5.72
2200.	3.698	35.034	5.77
2400.	3.355	35.000	5.78
2600.	3.124	34.976	5.78
2800.	2.956	34.961	5.74
3000.	2.793	34.945	5.69
3200.	2.680	34.934	5.66
3400.	2.604	34.925	5.69
3600.	2.533	34.917	5.69
3800.	2.492	34.912	5.67
4000.	2.456	34.906	5.69
4158.	2.429	34.901	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 6
CRUISE STATION NB: SUROIT 6
POSITION: N 26 54.86 W 36 31.94
DATE: 83- VII-21
DEPTH OF WATER: 505 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	24.586	37.349	4.61
10.	24.590	37.349	4.68
20.	24.590	37.349	4.68
30.	24.550	37.335	4.74
40.	23.201	37.101	4.98
50.	22.232	37.046	5.26
60.	21.837	36.963	5.39
70.	21.236	36.898	5.41
80.	20.727	36.887	5.32
90.	20.777	37.017	5.11
100.	20.844	37.094	5.04
200.	17.410	36.425	4.62
300.	16.198	36.220	4.70
400.	14.759	35.988	4.54
500.	13.126	35.755	4.49
600.	11.826	35.598	4.29
700.	10.679	35.482	4.05
800.	9.287	35.344	3.73
900.	8.262	35.251	3.74
1000.	7.324	35.197	3.99
1100.	6.789	35.194	4.25
1200.	6.408	35.213	4.55
1300.	6.088	35.221	4.78
1400.	5.741	35.204	4.98
1500.	5.426	35.191	5.14
1600.	5.033	35.162	5.28
1700.	4.767	35.139	5.39
1800.	4.594	35.128	5.47
1900.	4.242	35.091	5.60
2000.	3.960	35.062	5.66
2200.	3.567	35.021	5.69
2400.	3.262	34.991	5.72
2600.	3.061	34.969	5.70
2800.	2.888	34.955	5.69
3000.	2.739	34.940	5.64
3200.	2.652	34.931	5.64
3400.	2.579	34.923	5.67
3600.	2.517	34.916	5.67
3800.	2.477	34.911	5.68
4000.	2.444	34.905	5.68
4143.	2.426	34.902	5.68

IFREMER/CB TOPOGULF

TOPOGULF STATION Nb: 7
CRUISE STATION NB: SUROIT 7
POSITION: N 26 30.65 W 37 1.99
DATE: 83- VII-21
DEPTH OF WATER: 4750M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	24.670	37.454	4.55
10.	24.671	37.454	4.68
20.	24.672	37.454	4.74
30.	24.557	37.392	4.75
40.	23.248	37.345	5.08
50.	22.972	37.348	5.14
60.	22.786	37.360	5.19
70.	22.581	37.349	5.14
80.	22.283	37.314	5.16
90.	22.005	37.313	5.12
100.	21.793	37.307	5.05
200.	18.443	36.638	4.54
300.	16.601	36.303	4.52
400.	15.091	36.044	4.52
500.	13.783	35.854	4.47
600.	12.318	35.665	4.27
700.	11.275	35.546	4.12
800.	9.649	35.376	3.86
900.	8.466	35.275	3.83
1000.	7.383	35.191	3.95
1100.	6.737	35.181	4.20
1200.	6.049	35.127	4.46
1300.	5.687	35.138	4.79
1400.	5.454	35.142	4.97
1500.	5.212	35.147	5.12
1600.	4.664	35.129	5.29
1700.	4.662	35.117	5.37
1800.	4.371	35.091	5.49
1900.	4.162	35.073	5.50
2000.	3.968	35.056	5.56
2200.	3.623	35.023	5.62
2400.	3.322	34.991	5.64
2600.	3.091	34.969	5.67
2800.	2.918	34.955	5.63
3000.	2.806	34.944	5.62
3200.	2.699	34.935	5.63
3400.	2.637	34.928	5.61
3600.	2.555	34.918	5.66
3800.	2.490	34.912	5.65
4000.	2.454	34.906	5.67
4046.	2.444	34.905	5.66

IFREMER/CB TOPOGULF

TOPOGULF STATION Nb: 8
CRUISE STATION NB: SUROIT 8
POSITION: N 26 5.14 W 37 32.22
DATE: 83- VII-21
DEPTH OF WATER: 5045M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	24.774	37.399	4.62
10.	24.775	37.399	4.67
20.	24.726	37.395	4.69
30.	24.663	37.393	4.74
40.	24.591	37.378	4.73
50.	23.863	37.296	4.89
60.	22.893	37.330	5.16
70.	22.753	37.342	5.10
80.	22.529	37.292	5.15
90.	22.186	37.254	5.18
100.	21.966	37.239	5.15
200.	18.916	36.747	4.54
300.	16.754	36.322	4.5[illegible]
400.	15.231	36.070	4.3[illegible]
500.	13.636	35.831	4.42
600.	12.236	35.656	4.25
700.	10.871	35.498	3.97
800.	9.306	35.336	3.63
900.	8.224	35.243	3.69
1000.	7.173	35.162	3.94
1100.	6.383	35.094	4.15
1200.	5.858	35.090	4.50
1300.	5.541	35.095	4.76
1400.	5.236	35.099	5.01
1500.	4.983	35.103	5.19
1600.	4.775	35.094	5.27
1700.	4.557	35.086	5.37
1800.	4.351	35.074	5.41
1900.	4.136	35.061	5.52
2000.	3.981	35.051	5.54
2200.	3.577	35.014	5.62
2400.	3.288	34.986	5.65
2600.	3.100	34.968	5.67
2800.	2.932	34.955	5.62
3000.	2.804	34.945	5.64
3200.	2.712	34.936	5.63
3400.	2.623	34.928	5.64
3600.	2.566	34.920	5.64
3800.	2.519	34.914	5.62
4000.	2.468	34.908	5.67
4063.	2.452	34.905	5.63

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 9
CRUISE STATION NB: SUPOIT 9
POSITION: N 25 40.57 W 38 2.07
DATE: 83- VII-21
DEPTH OF WATER: 5500M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	24.687	37.437	4.61
10.	24.685	37.437	4.62
20.	24.693	37.439	4.72
30.	24.699	37.453	4.71
40.	24.565	37.452	4.73
50.	23.532	37.305	5.04
60.	22.913	37.328	5.19
70.	22.568	37.274	5.16
80.	21.942	37.163	5.26
90.	21.561	37.130	5.24
100.	21.446	37.140	5.16
200.	17.848	36.497	4.60
300.	16.562	36.297	4.55
400.	14.766	35.998	4.44
500.	13.416	35.805	4.39
600.	12.126	35.642	4.21
700.	10.903	35.508	3.91
800.	9.589	35.366	3.69
900.	8.138	35.202	3.60
1000.	7.089	35.125	3.82
1100.	6.371	35.094	4.18
1200.	5.808	35.076	4.45
1300.	5.497	35.077	4.66
1400.	5.268	35.092	4.89
1500.	5.077	35.100	4.99
1600.	4.873	35.099	5.15
1700.	4.540	35.073	5.30
1800.	4.294	35.057	5.42
1900.	4.117	35.051	5.47
2000.	3.956	35.041	5.50
2200.	3.589	35.006	5.61
2400.	3.332	34.986	5.64
2600.	3.149	34.973	5.61
2800.	2.973	34.959	5.63
3000.	2.840	34.948	5.64
3200.	2.746	34.940	5.62
3400.	2.662	34.932	5.62
3600.	2.524	34.916	5.64
4000.	2.465	34.908	5.70
4200.	2.434	34.904	5.67
4400.	2.424	34.900	5.68
4600.	2.410	34.895	5.75
4800.	2.409	34.893	5.72
5046.	2.424	34.891	5.74

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 10
CRUISE STATION NB: SUPOIT 10
POSITION: N 25 14.35 W 38 31.11
DATE: 83- VII-22
DEPTH OF WATER: 4830M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
25.	24.651	37.429	4.71
30.	24.653	37.430	4.74
40.	24.711	37.468	4.74
50.	24.367	37.444	4.82
60.	23.116	37.285	5.14
70.	22.739	37.271	5.21
80.	22.415	37.247	5.22
90.	22.053	37.210	5.23
100.	21.645	37.180	5.18
200.	19.029	36.725	4.61
300.	16.603	36.304	4.52
400.	14.643	35.983	4.50
500.	13.238	35.788	4.38
600.	11.929	35.615	4.19
700.	10.499	35.445	3.79
800.	9.113	35.291	3.48
900.	7.775	35.156	3.50
1000.	6.862	35.084	3.78
1100.	6.287	35.078	4.16
1200.	5.796	35.070	4.45
1300.	5.463	35.071	4.76
1400.	5.203	35.076	4.93
1500.	4.936	35.076	5.10
1600.	4.796	35.098	5.22
1700.	4.546	35.087	5.27
1800.	4.256	35.068	5.42
1900.	4.105	35.057	5.44
2000.	3.868	35.037	5.50
2200.	3.562	35.010	5.59
2400.	3.327	34.990	5.62
2600.	3.114	34.971	5.61
2800.	2.961	34.960	5.60
3000.	2.833	34.948	5.62
3200.	2.738	34.940	5.61
3400.	2.633	34.928	5.64
3600.	2.571	34.922	5.65
3800.	2.504	34.914	5.67
4000.	2.468	34.909	5.69
4108.	2.434	34.905	5.69

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 11
CRUISE STATION NB: SUROIT 11
POSITION: N 24 38.51 W 39 15.43
DATE: 83- VII-22
DEPTH OF WATER: 5045M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
6.	24.994	37.630	4.60
10.	24.987	37.630	4.65
20.	24.978	37.626	4.65
30.	24.955	37.628	4.68
40.	24.841	37.623	4.69
50.	24.669	37.565	4.76
60.	23.396	37.416	5.12
70.	23.036	37.412	5.17
80.	22.840	37.413	5.18
90.	22.652	37.413	5.15
100.	22.482	37.404	5.10
200.	20.438	37.071	4.62
300.	17.167	36.423	4.40
400.	14.878	36.023	4.18
500.	13.066	35.763	3.91
600.	11.824	35.607	3.67
700.	10.536	35.441	3.35
800.	9.450	35.337	3.42
900.	8.433	35.233	3.47
1000.	6.984	35.069	3.67
1100.	6.391	35.056	3.95
1200.	5.851	35.058	4.33
1300.	5.504	35.070	4.66
1400.	5.230	35.080	4.91
1500.	4.985	35.082	5.06
1600.	4.692	35.069	5.25
1700.	4.455	35.061	5.38
1800.	4.256	35.051	5.41
1900.	4.048	35.038	5.49
2000.	3.869	35.027	5.56
2200.	3.546	35.002	5.63
2400.	3.319	34.986	5.64
2600.	3.118	34.970	5.61
2800.	2.978	34.958	5.61
3000.	2.852	34.949	5.63
3200.	2.750	34.940	5.61
3400.	2.644	34.930	5.61
3600.	2.568	34.922	5.64
3800.	2.524	34.916	5.63
4000.	2.465	34.909	5.68
4039.	2.462	34.908	5.67

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 12
CRUISE STATION NB: SUROIT 12
POSITION: N 24 1.07 W 39 59.60
DATE: 83- VII-23
DEPTH OF WATER: 4725M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	25.347	37.463	4.51
10.	25.359	37.463	4.54
20.	25.363	37.462	4.55
30.	25.364	37.463	4.63
40.	25.348	37.473	4.62
50.	24.268	37.489	4.87
60.	23.317	37.429	5.11
70.	22.960	37.413	5.16
80.	22.829	37.410	5.15
90.	22.488	37.362	5.03
100.	22.169	37.340	5.02
200.	19.049	36.773	4.33
300.	16.352	36.259	4.30
400.	14.732	35.992	4.24
500.	13.191	35.777	4.19
600.	11.468	35.549	3.75
700.	9.716	35.340	3.42
800.	8.302	35.177	3.36
900.	7.058	35.061	3.57
1000.	6.439	35.021	3.76
1100.	5.891	35.010	4.10
1200.	5.558	35.020	4.38
1300.	5.282	35.032	4.65
1400.	5.009	35.043	4.91
1500.	4.784	35.045	5.09
1600.	4.578	35.046	5.25
1700.	4.389	35.045	5.35
1800.	4.212	35.044	5.44
1900.	4.046	35.036	5.50
2000.	3.887	35.028	5.53
2200.	3.550	35.002	5.61
2400.	3.309	34.985	5.63
2600.	3.090	34.968	5.63
2800.	2.929	34.955	5.62
3000.	2.805	34.945	5.63
3200.	2.690	34.936	5.63
3400.	2.608	34.927	5.65
3600.	2.531	34.919	5.66
3800.	2.473	34.911	5.68
4000.	2.427	34.904	5.69
4122.	2.413	34.902	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 13
CRUISE STATION NB: SUROIT 13
POSITION: N 23 59.55 W 40 56.33
DATE: 83- VII-23
DEPTH OF WATER: 4200M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.052	37.636	4.54
10.	25.034	37.636	4.48
20.	25.024	37.637	4.57
30.	25.025	37.637	4.51
40.	25.025	37.637	4.66
50.	25.019	37.634	4.63
60.	23.687	37.441	4.93
70.	23.246	37.419	5.04
80.	23.007	37.419	5.05
90.	22.756	37.412	5.08
100.	22.239	37.358	5.05
200.	18.499	36.658	4.43
300.	16.410	36.270	4.54
400.	14.622	35.983	4.36
500.	13.057	35.762	4.12
600.	11.522	35.569	3.82
700.	10.225	35.407	3.52
800.	8.720	35.230	3.37
900.	7.487	35.100	3.46
1000.	6.538	35.022	3.71
1100.	6.060	35.014	3.99
1200.	5.630	35.028	4.34
1300.	5.349	35.046	4.68
1400.	5.042	35.056	4.96
1500.	4.778	35.051	5.12
1600.	4.532	35.048	5.29
1700.	4.396	35.045	5.31
1800.	4.138	35.036	5.45
1900.	3.937	35.025	5.48
2000.	3.788	35.014	5.53
2200.	3.475	34.993	5.59
2400.	3.240	34.977	5.65
2600.	3.050	34.963	5.67
2800.	2.922	34.953	5.71
3200.	2.698	34.935	5.67
3400.	2.640	34.929	5.69
3600.	2.554	34.919	5.69
3800.	2.460	34.910	5.70
4000.	2.426	34.904	5.69
4171.	2.419	34.901	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 14
CRUISE STATION NB: SUROIT 14
POSITION: N 24 .17 W 41 53.56
DATE: 83- VII-23
DEPTH OF WATER: 4800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	25.496	37.646	4.42
10.	25.464	37.647	4.56
20.	25.429	37.645	4.64
30.	25.351	37.646	4.65
40.	25.339	37.646	4.67
50.	25.077	37.577	4.71
60.	23.878	37.483	5.03
70.	23.704	37.475	5.02
80.	23.432	37.458	5.00
90.	23.343	37.442	5.01
100.	22.930	37.391	4.97
200.	19.797	36.884	4.41
300.	17.467	36.460	4.14
400.	15.134	36.055	4.18
500.	13.404	35.798	4.27
600.	11.959	35.624	4.14
700.	10.568	35.458	3.87
800.	9.237	35.321	3.65
900.	7.927	35.195	3.61
1000.	6.954	35.124	3.88
1100.	6.133	35.053	4.19
1200.	5.500	35.013	4.46
1300.	5.204	35.023	4.75
1400.	4.979	35.032	4.95
1500.	4.746	35.040	5.14
1600.	4.482	35.038	5.27
1700.	4.335	35.037	5.38
1800.	4.099	35.029	5.46
1900.	3.880	35.016	5.50
2000.	3.771	35.006	5.60
2200.	3.502	34.993	5.68
2400.	3.315	34.980	5.73
2600.	3.101	34.967	5.73
2800.	2.948	34.956	5.70
3000.	2.791	34.943	5.69
3200.	2.681	34.933	5.71
3400.	2.609	34.925	5.71
3600.	2.542	34.918	5.72
3800.	2.496	34.912	5.74
4000.	2.480	34.908	5.75
4075.	2.461	34.905	5.72

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 15
CRUISE STATION NB: SUROIT 15
POSITION: N 24 .56 W 42 41.10
DATE: 83- VII-24
DEPTH OF WATER: 4140M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.533	37.630	4.38
10.	25.536	37.630	4.45
20.	25.536	37.630	4.51
30.	25.471	37.628	4.54
40.	25.379	37.628	4.56
50.	25.203	37.593	4.65
60.	24.698	37.504	4.80
70.	23.697	37.398	5.05
80.	23.364	37.376	5.08
90.	22.978	37.350	5.13
100.	22.637	37.303	5.14
200.	19.262	36.785	4.57
300.	17.040	36.369	4.57
400.	15.106	36.049	4.44
500.	13.378	35.801	4.22
600.	12.127	35.640	3.90
700.	10.338	35.405	3.40
800.	9.018	35.243	3.25
900.	7.497	35.053	3.36
1000.	6.543	34.998	3.60
1100.	5.869	34.977	3.93
1200.	5.545	34.998	4.29
1300.	5.266	35.010	4.62
1400.	4.999	35.023	5.00
1500.	4.783	35.031	5.19
1600.	4.588	35.042	5.50
1700.	4.376	35.036	5.53
1800.	4.158	35.028	5.58
1900.	3.940	35.014	5.59
2000.	3.744	35.004	5.61
2200.	3.457	34.989	5.65
2400.	3.281	34.979	5.62
2600.	3.100	34.966	5.65
2800.	2.918	34.954	5.64
3000.	2.804	34.944	5.67
3200.	2.675	34.932	5.68
3400.	2.601	34.924	5.72
3600.	2.539	34.918	5.71
3800.	2.501	34.912	5.73
4000.	2.477	34.908	5.72
4140.	2.477	34.906	5.74

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 16
CRUISE STATION NB: SUROIT 16
POSITION: N 24 .66 W 43 30.68
DATE: 83- VII-24
DEPTH OF WATER: 4075M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	25.662	37.499	4.37
10.	25.662	37.500	4.53
20.	25.665	37.500	4.56
30.	25.667	37.500	4.59
40.	25.663	37.500	4.61
50.	25.618	37.492	4.60
60.	24.157	37.349	4.96
70.	23.690	37.281	5.07
80.	23.370	37.296	5.08
90.	22.968	37.256	5.08
100.	22.828	37.249	5.06
200.	19.027	36.692	4.48
300.	17.145	36.384	4.51
400.	15.242	36.071	4.27
500.	13.690	35.842	4.26
600.	12.300	35.647	4.04
700.	10.579	35.457	3.77
800.	9.348	35.319	3.65
900.	7.391	35.089	3.58
1000.	6.486	35.015	3.77
1100.	5.887	34.993	4.05
1200.	5.566	35.006	4.31
1300.	5.274	35.020	4.64
1400.	5.037	35.032	4.86
1500.	4.774	35.035	5.12
1600.	4.558	35.037	5.22
1700.	4.352	35.034	5.36
1800.	4.111	35.019	5.44
1900.	3.936	35.011	5.53
2000.	3.787	35.005	5.61
2200.	3.515	34.995	5.71
2400.	3.242	34.976	5.69
2600.	3.022	34.962	5.72
2800.	2.854	34.949	5.73
3000.	2.724	34.937	5.71
3200.	2.635	34.928	5.70
3400.	2.563	34.921	5.72
3600.	2.542	34.917	5.72
3800.	2.529	34.914	5.73
4000.	2.507	34.911	5.73
4012.	2.503	34.910	5.73

FREMER/CO TOPOGULF

TOPOGULF STATION NB: 17
CRUISE STATION NB: SUROIT 17
POSITION: N 24 .81 W 44 15.15
DATE: 83- VII-24
DEPTH OF WATER: 3865M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.771	37.534	4.44
10.	25.757	37.533	4.56
20.	25.626	37.537	4.65
30.	25.596	37.540	4.58
40.	25.580	37.541	4.62
50.	25.548	37.538	4.58
60.	25.294	37.497	4.69
70.	23.763	37.282	5.09
80.	23.546	37.336	5.09
90.	23.238	37.306	5.14
100.	23.013	37.329	5.12
200.	18.476	36.610	4.46
300.	16.633	36.296	4.51
400.	15.167	36.063	4.44
500.	13.256	35.788	4.27
600.	11.924	35.609	3.92
700.	10.358	35.416	3.52
800.	8.626	35.204	3.35
900.	7.205	35.055	3.46
1000.	6.328	34.991	3.68
1100.	5.876	34.990	4.00
1200.	5.518	34.996	4.32
1300.	5.234	35.015	4.83
1400.	4.966	35.030	5.09
1500.	4.905	35.069	5.26
1600.	4.658	35.068	5.39
1700.	4.396	35.055	5.49
1800.	4.206	35.049	5.59
1900.	4.047	35.040	5.64
2000.	3.786	35.019	5.70
2200.	3.487	34.997	5.72
2400.	3.102	34.970	5.73
2600.	2.937	34.956	5.74
2800.	2.761	34.940	5.73
3000.	2.691	34.933	5.73
3200.	2.638	34.927	5.73
3400.	2.616	34.924	5.74
3600.	2.586	34.920	5.74
3800.	2.542	34.914	5.78
3860.	2.518	34.911	5.80

FREMER/CO TOPOGULF

TOPOGULF STATION NB: 18
CRUISE STATION NB: SUROIT 18
POSITION: N 24 .54 W 44 52.70
DATE: 83- VII-24
DEPTH OF WATER: 3700M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.953	37.454	4.42
10.	25.960	37.453	4.43
20.	25.959	37.453	4.57
30.	25.935	37.451	4.60
40.	25.892	37.452	4.59
50.	24.997	37.267	4.74
60.	23.862	37.254	5.11
70.	23.267	37.235	5.16
80.	22.649	37.176	5.15
90.	22.224	37.136	5.11
100.	22.063	37.129	5.10
200.	19.430	36.785	4.52
300.	17.151	36.386	4.66
400.	15.840	36.163	4.53
500.	13.956	35.881	4.29
600.	12.525	35.687	4.17
700.	11.024	35.495	3.78
800.	8.977	35.243	3.57
900.	7.615	35.075	3.60
1000.	6.676	35.031	3.78
1100.	5.966	35.010	4.20
1200.	5.488	35.036	4.76
1300.	5.184	35.069	5.10
1400.	4.990	35.068	5.29
1500.	4.745	35.073	5.42
1600.	4.548	35.072	5.55
1700.	4.197	35.057	5.66
1800.	4.077	35.049	5.67
1900.	3.835	35.031	5.75
2000.	3.636	35.014	5.76
2200.	3.278	34.985	5.80
2400.	3.051	34.967	5.75
2600.	2.867	34.952	5.70
2800.	2.723	34.939	5.72
3000.	2.657	34.932	5.73
3200.	2.622	34.927	5.74
3400.	2.586	34.923	5.78
3600.	2.558	34.919	5.77
3657.	2.536	34.917	5.79

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 19
CRUISE STATION NB: SUROIT 19
POSITION: N 23 59.79 W 45 29.94
DATE: 83- VII-25
DEPTH OF WATER: 365 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	26.067	37.517	4.49
10.	26.076	37.516	4.51
20.	26.078	37.516	4.55
30.	26.080	37.516	4.55
40.	26.080	37.515	4.54
50.	26.075	37.514	4.54
60.	25.678	37.484	4.56
70.	25.301	37.467	4.67
80.	24.567	37.471	4.85
90.	24.152	37.464	4.87
100.	23.871	37.453	4.77
200.	20.172	36.888	4.52
300.	17.151	36.380	4.51
400.	15.380	36.093	4.39
500.	13.935	35.876	4.28
600.	12.148	35.643	4.21
700.	10.706	35.467	3.83
800.	8.805	35.221	3.51
900.	7.324	35.055	3.55
1000.	6.616	35.000	3.72
1100.	6.040	35.017	4.17
1200.	5.609	35.018	4.55
1300.	5.384	35.058	4.94
1400.	5.068	35.073	5.27
1500.	4.799	35.065	5.45
1600.	4.625	35.071	5.53
1700.	4.399	35.065	5.58
1800.	4.162	35.053	5.67
1900.	3.947	35.038	5.70
2000.	3.722	35.019	5.74
2200.	3.393	34.992	5.78
2400.	3.159	34.974	5.75
2600.	2.934	34.957	5.73
2800.	2.792	34.944	5.75
3000.	2.716	34.937	5.74
3200.	2.645	34.929	5.72
3400.	2.606	34.924	5.77
3600.	2.542	34.917	5.82
3609.	2.541	34.917	5.81

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 20
CRUISE STATION NB: SUROIT 20
POSITION: N 24 .11 W 46 8.90
DATE: 83- VII-25
DEPTH OF WATER: 1915M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.079	37.265	4.45
10.	26.073	37.266	4.48
20.	26.060	37.266	4.56
30.	26.004	37.256	4.60
40.	24.504	37.050	4.97
50.	23.672	37.075	5.12
60.	23.627	37.237	5.06
70.	23.565	37.234	5.07
80.	22.711	37.062	5.11
90.	22.638	37.135	5.06
100.	22.825	37.310	4.89
200.	19.934	36.866	4.30
300.	17.217	36.399	4.33
400.	15.381	36.090	4.30
500.	13.539	35.824	4.30
600.	12.070	35.637	4.14
700.	10.595	35.448	3.65
800.	8.853	35.225	3.49
900.	7.395	35.077	3.60
1000.	6.509	35.026	3.85
1100.	5.889	35.015	4.30
1200.	5.508	35.046	4.66
1300.	5.189	35.052	4.99
1400.	4.948	35.057	5.16
1500.	4.718	35.058	5.30
1600.	4.456	35.054	5.44
1700.	4.347	35.052	5.49
1800.	4.155	35.042	5.56
1900.	3.877	35.025	5.62
1954.	3.666	35.013	5.65

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 21
CRUISE STATION NB: SUROIT 21
POSITION: N 24 .27 W 46 46.81
DATE: 83- VII-25
DEPTH OF WATER: 3160M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	26.406	37.207	4.35
10.	26.356	37.203	4.56
20.	26.324	37.201	4.54
30.	26.286	37.199	4.59
40.	26.266	37.201	4.60
50.	25.394	37.041	4.81
60.	24.248	36.946	5.08
70.	23.325	36.869	5.21
80.	22.873	36.898	5.29
90.	22.410	36.908	5.31
100.	21.912	36.899	5.25
200.	18.732	36.593	4.49
300.	17.115	36.382	4.60
400.	15.561	36.120	4.49
500.	13.909	35.871	4.46
600.	12.338	35.666	4.10
700.	10.787	35.474	3.94
800.	9.103	35.306	3.71
900.	7.977	35.183	3.67
1000.	6.457	35.041	3.96
1100.	5.913	35.043	4.34
1200.	5.428	35.033	4.85
1300.	5.121	35.046	5.16
1400.	4.905	35.065	5.36
1500.	4.672	35.065	5.51
1600.	4.497	35.061	5.62
1700.	4.318	35.057	5.66
1800.	4.032	35.038	5.74
1900.	3.863	35.029	5.77
2000.	3.749	35.018	5.77
2200.	3.396	34.989	5.82
2400.	3.155	34.971	5.81
2600.	3.010	34.959	5.80
2800.	2.864	34.949	5.76
3000.	2.757	34.938	5.78
3153.	2.679	34.932	5.79

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 22
CRUISE STATION NB: SUROIT 22
POSITION: N 24 .76 W 47 24.71
DATE: 83- VII-25
DEPTH OF WATER: 4275M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.420	37.244	4.37
10.	26.420	37.244	4.38
20.	26.380	37.236	4.41
30.	26.306	37.239	4.46
40.	26.291	37.237	4.45
50.	26.276	37.234	4.36
60.	24.180	36.877	4.84
70.	23.374	36.902	5.04
80.	23.093	36.887	5.05
90.	22.701	37.039	4.92
100.	22.406	37.046	4.85
200.	18.743	36.616	4.35
300.	17.082	36.372	4.52
400.	15.527	36.110	4.30
500.	13.794	35.854	4.20
700.	10.709	35.471	3.87
800.	9.286	35.309	3.56
900.	7.664	35.148	3.73
1000.	6.776	35.077	3.92
1100.	6.147	35.044	4.21
1200.	5.660	35.050	4.61
1300.	5.178	35.045	4.95
1500.	4.749	35.065	5.29
1600.	4.467	35.057	5.46
1700.	4.247	35.049	5.58
1800.	4.042	35.039	5.66
1900.	3.856	35.027	5.73
2000.	3.616	35.010	5.76
2200.	3.324	34.986	5.80
2400.	3.136	34.971	5.80
2600.	2.989	34.959	5.81
2800.	2.860	34.949	5.81
3000.	2.758	34.938	5.81
3200.	2.653	34.929	5.83
3400.	2.544	34.919	5.85
3600.	2.423	34.907	5.89
3800.	2.360	34.901	5.89
4000.	2.263	34.892	5.91
4120.	2.227	34.887	5.86

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 23
CRUISE STATION NB: SUROIT 23
POSITION: N 24 .42 W 48 1.83
DATE: 83- VII-26
DEPTH OF WATER: 4150M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
7.	26.414	37.129	4.54
10.	26.414	37.128	4.48
20.	26.413	37.129	4.35
30.	26.413	37.128	4.55
40.	26.187	37.100	4.62
50.	24.702	37.070	5.02
60.	24.135	37.132	5.07
70.	23.287	37.040	5.17
80.	22.731	37.009	5.09
90.	22.532	37.079	4.96
100.	22.443	37.108	4.83
200.	19.064	36.668	4.30
300.	17.129	36.378	4.52
400.	15.564	36.122	4.35
500.	13.662	35.831	4.00
600.	12.053	35.598	3.84
700.	10.188	35.375	3.57
800.	8.905	35.238	3.52
900.	7.256	35.049	3.54
1000.	6.331	34.997	3.88
1100.	5.783	34.992	4.26
1200.	5.408	35.019	4.73
1300.	5.273	35.055	4.96
1400.	5.017	35.070	5.20
1500.	4.852	35.086	5.44
1600.	4.601	35.082	5.55
1700.	4.351	35.067	5.65
1800.	4.117	35.052	5.72
1900.	3.920	35.040	5.74
2000.	3.750	35.027	5.73
2700.	3.391	34.992	5.83
2400.	3.176	34.973	5.80
2600.	3.012	34.961	5.81
2800.	2.874	34.949	5.83
3000.	2.762	34.939	5.82
3200.	2.641	34.928	5.84
3400.	2.528	34.917	5.86
3600.	2.394	34.905	5.86
3800.	2.316	34.898	5.90
4000.	2.278	34.894	5.89
4150.	2.242	34.889	5.90

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 24
CRUISE STATION NB: SUROIT 24
POSITION: N 24 1.05 W 49 1.95
DATE: 83- VII-26
DEPTH OF WATER: 4600M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	26.623	37.024	4.37
10.	26.604	37.025	4.45
20.	26.582	37.032	4.49
30.	26.575	37.036	4.51
40.	25.640	37.027	4.73
50.	24.464	37.024	4.99
60.	23.721	36.960	5.06
70.	23.355	37.046	5.08
80.	22.555	36.958	5.18
90.	22.059	36.949	5.06
100.	21.666	36.924	4.94
200.	18.489	36.575	4.36
300.	17.133	36.380	4.41
400.	15.505	36.101	4.22
500.	13.839	35.859	4.14
600.	12.051	35.613	3.82
700.	10.457	35.395	3.53
800.	8.632	35.181	3.44
900.	7.131	35.039	3.57
1000.	6.428	35.008	3.89
1100.	5.863	35.024	4.39
1200.	5.501	35.051	4.84
1300.	5.153	35.051	5.18
1400.	4.853	35.056	5.46
1500.	4.632	35.057	5.60
1600.	4.407	35.053	5.67
1700.	4.147	35.041	5.77
1800.	3.870	35.021	5.84
1900.	3.778	35.015	5.84
2000.	3.581	35.005	5.83
2200.	3.329	34.986	5.82
2400.	3.148	34.970	5.82
2600.	2.958	34.957	5.83
2800.	2.861	34.948	5.82
3000.	2.737	34.937	5.83
3200.	2.612	34.927	5.86
3400.	2.499	34.916	5.87
3600.	2.377	34.904	5.88
3800.	2.297	34.896	5.88
4000.	2.226	34.889	5.88
4155.	2.210	34.886	5.86

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 25
CRUISE STATION NB: SUROIT 25
POSITION: N 24 40.08 W 48 34.81
DATE: 83-VIII-03
DEPTH OF WATER: 4300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	26.745	37.215	4.35
10.	26.717	37.208	4.52
20.	26.575	37.211	4.50
30.	26.394	37.153	4.59
40.	25.490	37.095	4.77
50.	24.572	37.291	5.07
60.	23.992	37.256	5.16
70.	23.508	37.238	5.22
80.	23.178	37.209	5.23
90.	22.715	37.170	5.25
100.	22.134	37.159	5.18
200.	18.505	36.605	4.52
300.	16.946	36.356	4.62
400.	15.284	36.074	4.48
500.	13.887	35.868	4.32
600.	12.188	35.634	3.85
700.	10.426	35.420	3.68
800.	8.623	35.195	3.49
900.	7.430	35.074	3.50
1000.	6.391	34.991	3.88
1100.	5.919	35.000	4.24
1200.	5.540	35.025	4.70
1300.	5.310	35.062	4.97
1400.	5.064	35.070	5.22
1500.	4.773	35.077	5.40
1600.	4.537	35.071	5.51
1700.	4.287	35.061	5.62
1800.	4.049	35.046	5.66
1900.	3.811	35.028	5.72
2000.	3.601	35.012	5.77
2200.	3.304	34.986	5.78
2400.	3.102	34.972	5.79
2600.	2.968	34.960	5.79
2800.	2.841	34.948	5.79
3000.	2.750	34.940	5.77
3200.	2.667	34.931	5.82
3400.	2.565	34.920	5.84
3600.	2.485	34.914	5.88
3800.	2.395	34.906	5.90
4000.	2.314	34.897	5.92
4159.	2.272	34.892	5.95

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 26
CRUISE STATION NB: SUROIT 26
POSITION: N 25 20.29 W 48 12.24
DATE: 83-VIII-03
DEPTH OF WATER: 4250M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	26.748	37.174	4.31
10.	26.755	37.174	4.46
20.	26.705	37.167	4.55
30.	26.409	37.179	4.59
40.	25.805	37.189	4.75
50.	24.479	37.223	5.06
60.	24.223	37.303	5.13
70.	23.279	37.179	5.19
80.	22.544	37.060	5.20
90.	22.275	37.094	5.07
100.	21.856	37.028	5.04
200.	18.625	36.600	4.55
300.	17.055	36.370	4.58
400.	15.551	36.123	4.56
500.	13.929	35.872	4.37
600.	12.476	35.679	4.05
700.	10.837	35.473	3.81
800.	9.171	35.279	3.55
900.	7.507	35.083	3.53
1000.	6.745	35.039	3.74
1200.	5.681	35.031	4.47
1300.	5.282	35.040	4.81
1400.	5.059	35.058	5.19
1500.	4.860	35.070	5.35
1600.	4.655	35.074	5.47
1700.	4.469	35.072	5.51
1800.	4.194	35.058	5.61
1900.	3.991	35.042	5.66
2000.	3.747	35.023	5.71
2200.	3.429	34.995	5.79
2400.	3.200	34.976	5.80
2600.	3.019	34.963	5.78
2800.	2.900	34.953	5.81
3000.	2.789	34.942	5.82
3200.	2.672	34.931	5.82
3400.	2.553	34.921	5.86
3600.	2.464	34.913	5.89
3800.	2.357	34.903	5.93
4000.	2.310	34.898	5.95
4015.	2.308	34.898	5.95

IFREMER/Cb TOPOGULF

TOPOGULF STATION NB: 27
CRUISE STATION NB: SUROIT 27
POSITION: N 25 59.37 W 47 47.90
DATE: 83-VIII-04
DEPTH OF WATER: 4050M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.407	37.289	4.35
10.	26.424	37.301	4.51
20.	26.481	37.456	4.45
30.	26.343	37.461	4.47
40.	26.187	37.436	4.56
50.	25.097	37.277	4.76
60.	23.944	37.180	5.09
70.	23.412	37.159	5.17
80.	23.001	37.163	5.21
90.	22.817	37.196	5.20
100.	22.440	37.171	5.20
200.	19.239	36.723	4.58
300.	17.162	36.388	4.62
400.	16.010	36.196	4.53
500.	14.250	35.914	4.44
600.	12.593	35.697	4.15
700.	11.176	35.497	3.85
800.	9.442	35.295	3.61
900.	7.754	35.100	3.51
1000.	6.855	35.035	3.73
1100.	6.144	35.025	4.11
1200.	5.820	35.062	4.55
1300.	5.655	35.119	4.88
1400.	5.197	35.095	5.15
1500.	4.988	35.099	5.29
1600.	4.808	35.100	5.41
1700.	4.598	35.104	5.54
1800.	4.232	35.067	5.62
1900.	4.023	35.054	5.76
2000.	3.798	35.034	5.80
2200.	3.460	35.003	5.84
2400.	3.258	34.983	5.86
2600.	3.129	34.972	5.85
2800.	2.972	34.957	5.85
3000.	2.831	34.946	5.87
3200.	2.684	34.933	5.89
3400.	2.573	34.923	5.92
3600.	2.477	34.914	5.92
3800.	2.404	34.907	5.94
4000.	2.336	34.900	5.96
4029.	2.334	34.900	5.94

IFREMER/Cb TOPOGULF

TOPOGULF STATION NB: 28
CRUISE STATION NB: SUROIT 28
POSITION: N 26 38.17 W 47 24.29
DATE: 83-VIII-04
DEPTH OF WATER: 3920M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
6.	26.811	36.813	4.43
10.	26.751	36.803	4.54
20.	26.688	36.810	4.55
30.	25.156	36.726	4.92
40.	24.006	36.785	5.22
50.	23.217	36.789	5.35
60.	22.412	36.797	5.47
70.	21.538	36.757	5.42
80.	20.919	36.707	5.42
90.	20.265	36.652	5.42
100.	19.882	36.616	5.36
200.	18.073	36.511	4.54
300.	17.083	36.378	4.67
400.	16.130	36.210	4.50
500.	14.428	35.937	4.44
600.	12.701	35.685	4.26
700.	11.087	35.490	3.98
800.	9.443	35.309	3.76
900.	8.000	35.173	3.77
1000.	7.069	35.105	3.93
1100.	6.322	35.100	4.37
1200.	5.043	35.128	4.70
1300.	5.737	35.148	4.98
1400.	5.550	35.166	5.21
1500.	5.246	35.159	5.38
1600.	4.848	35.127	5.52
1700.	4.567	35.109	5.65
1800.	4.303	35.082	5.71
1900.	4.026	35.056	5.78
2000.	3.796	35.034	5.82
2200.	3.444	35.000	5.85
2400.	3.210	34.978	5.85
2600.	3.068	34.967	5.85
2800.	2.927	34.955	5.84
3000.	2.795	34.944	5.85
3200.	2.665	34.933	5.87
3400.	2.571	34.923	5.90
3600.	2.501	34.915	5.93
3800.	2.430	34.910	5.92
3992.	2.407	34.906	5.93

IFREMER/Cs TOPOGULF

TOPOGULF STATION NB: 29
CRUISE STATION NB: SUROIT 29
POSITION: N 27 17.27 W 47 .27
DATE: 83-VIII-04
DEPTH OF WATER: 4100M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	27.065	36.941	4.37
10.	26.723	36.922	4.58
20.	25.650	36.814	4.77
30.	24.169	36.765	5.11
40.	23.238	36.796	5.38
50.	21.993	36.735	5.56
60.	21.344	36.707	5.55
70.	20.982	36.689	5.45
80.	20.437	36.674	5.34
90.	20.120	36.624	5.30
100.	19.831	36.593	5.32
200.	17.892	36.486	4.56
300.	17.107	36.377	4.63
400.	16.045	36.196	4.48
500.	14.325	35.918	4.55
600.	12.603	35.671	4.24
700.	11.050	35.486	4.03
800.	9.248	35.293	3.81
900.	8.024	35.189	3.84
1000.	6.896	35.129	4.17
1100.	6.226	35.119	4.55
1200.	5.900	35.139	4.83
1300.	5.725	35.161	5.03
1400.	5.359	35.152	5.23
1500.	5.017	35.138	5.38
1600.	4.726	35.117	5.52
1700.	4.442	35.098	5.65
1800.	4.144	35.069	5.73
1900.	3.918	35.048	5.76
2000.	3.711	35.027	5.81
2200.	3.453	35.002	5.85
2400.	3.244	34.982	5.86
2600.	3.123	34.971	5.82
2800.	2.985	34.959	5.85
3000.	2.840	34.947	5.85
3200.	2.733	34.938	5.88
3400.	2.600	34.926	5.90
3600.	2.494	34.916	5.92
3800.	2.378	34.906	5.93
4000.	2.337	34.900	5.95
4017.	2.335	34.901	5.95

IFREMER/Cs TOPOGULF

TOPOGULF STATION NB: 30
CRUISE STATION NB: SUROIT 30
POSITION: N 27 56.36 W 46 35.32
DATE: 83-VIII-05
DEPTH OF WATER: 3400M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.706	37.041	4.26
10.	26.708	37.043	4.45
20.	26.583	37.093	4.39
30.	26.322	37.137	4.56
40.	25.941	37.082	4.61
50.	24.125	36.824	4.96
60.	22.940	36.791	5.34
70.	22.355	36.820	5.43
80.	21.692	36.786	5.46
90.	21.409	36.841	5.34
100.	20.972	36.813	5.20
200.	18.056	36.504	4.43
300.	17.214	36.403	4.73
400.	16.412	36.268	4.66
500.	14.911	36.010	4.43
600.	13.299	35.771	4.36
700.	11.716	35.561	4.05
800.	9.904	35.350	3.87
900.	8.186	35.205	3.96
1000.	7.224	35.176	4.30
1100.	6.390	35.160	4.70
1200.	5.885	35.153	4.96
1300.	5.552	35.147	5.25
1400.	5.249	35.146	5.36
1500.	5.001	35.138	5.47
1600.	4.677	35.117	5.60
1700.	4.433	35.097	5.66
1800.	4.231	35.077	5.74
1900.	4.000	35.054	5.76
2000.	3.788	35.033	5.82
2200.	3.441	35.000	5.85
2400.	3.247	34.982	5.85
2600.	3.073	34.967	5.84
2800.	2.967	34.959	5.85
3000.	2.810	34.945	5.85
3200.	2.657	34.932	5.86
3370.	2.565	34.924	5.87

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 31
CRUISE STATION NB: SUROIT 31
POSITION: N 28 35.32 W 46 10.01
DATE: 83-VIII-05
DEPTH OF WATER: 4120M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	26.932	37.221	4.23
10.	26.837	37.189	4.52
20.	26.289	37.107	4.64
30.	25.840	37.043	4.74
40.	25.101	37.035	4.91
50.	23.577	36.979	5.21
60.	22.642	36.978	5.35
70.	22.461	36.955	5.32
80.	21.828	36.925	5.31
90.	21.570	36.894	5.33
100.	21.238	36.883	5.24
200.	18.122	36.510	4.57
300.	17.264	36.409	4.74
400.	16.210	36.230	4.66
500.	14.776	35.990	4.43
600.	12.923	35.713	4.27
700.	11.220	35.498	3.99
800.	9.627	35.333	3.83
900.	8.320	35.228	3.89
1000.	7.245	35.171	4.14
1100.	6.722	35.179	4.40
1200.	6.318	35.190	4.75
1300.	5.854	35.189	5.01
1400.	5.381	35.153	5.20
1500.	4.999	35.125	5.36
1600.	4.767	35.109	5.46
1700.	4.529	35.098	5.56
1800.	4.215	35.071	5.65
1900.	4.032	35.055	5.71
2000.	3.839	35.037	5.78
2200.	3.452	35.001	5.83
2400.	3.241	34.982	5.84
2600.	3.123	34.971	5.82
2800.	3.021	34.962	5.84
3000.	2.883	34.951	5.87
3200.	2.768	34.941	5.88
3400.	2.650	34.930	5.89
3600.	2.558	34.921	5.91
3800.	2.493	34.916	5.93
4000.	2.453	34.911	5.97
4100.	2.445	34.909	5.97

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 32
CRUISE STATION NB: SUROIT 32
POSITION: N 29 19.40 W 45 43.43
DATE: 83-VIII-05
DEPTH OF WATER: 4365M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	27.438	37.100	4.30
10.	27.145	37.078	4.52
20.	26.507	37.046	4.59
30.	25.773	37.001	4.74
40.	23.621	36.831	5.20
50.	22.566	36.803	5.43
60.	21.517	36.756	5.53
70.	21.298	36.849	5.41
80.	20.780	36.809	5.34
90.	20.367	36.773	5.16
100.	20.135	36.746	5.12
200.	17.840	36.476	4.57
300.	17.064	36.379	4.73
400.	15.970	36.189	4.65
500.	14.631	35.959	4.54
600.	12.988	35.721	4.34
700.	11.468	35.537	4.14
800.	9.901	35.378	3.96
900.	8.584	35.274	3.94
1000.	7.761	35.241	4.19
1100.	6.838	35.195	4.50
1200.	6.370	35.203	4.81
1300.	6.011	35.214	5.07
1400.	5.588	35.195	5.29
1500.	5.294	35.178	5.43
1600.	4.935	35.147	5.55
1700.	4.579	35.111	5.67
1800.	4.285	35.079	5.76
1900.	4.050	35.058	5.81
2000.	3.861	35.040	5.84
2200.	3.504	35.006	5.86
2400.	3.336	34.989	5.86
2600.	3.154	34.974	5.87
2800.	3.018	34.962	5.86
3000.	2.903	34.952	5.86
3200.	2.766	34.941	5.89
3400.	2.643	34.930	5.91
3600.	2.533	34.920	5.94
3800.	2.424	34.911	5.99
4000.	2.363	34.905	6.02
4156.	2.362	34.903	6.02

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 33
CRUISE STATION NB: SUROIT 33
POSITION: N 29 52.39 W 45 20.42
DATE: 83-VIII-06
DEPTH OF WATER: 4180M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	27.080	36.669	4.26
10.	27.038	36.653	4.45
20.	26.352	36.611	4.55
30.	24.839	36.523	4.85
40.	22.648	36.518	5.37
50.	21.282	36.534	5.72
60.	20.340	36.540	5.84
70.	19.788	36.547	5.77
80.	19.206	36.519	5.65
90.	18.780	36.489	5.44
100.	18.623	36.480	5.27
200.	17.725	36.443	4.86
300.	17.163	36.396	4.73
400.	16.346	36.251	4.65
500.	14.945	36.008	4.56
600.	13.384	35.768	4.47
700.	11.696	35.541	4.21
800.	9.718	35.322	3.98
900.	8.335	35.242	4.09
1000.	7.228	35.209	4.39
1100.	6.681	35.216	4.69
1200.	6.249	35.231	4.98
1300.	5.975	35.233	5.15
1400.	5.582	35.210	5.38
1500.	5.126	35.167	5.56
1600.	4.751	35.129	5.67
1700.	4.465	35.099	5.74
1800.	4.195	35.071	5.81
1900.	3.950	35.047	5.85
2000.	3.718	35.025	5.88
2200.	3.471	35.001	5.90
2400.	3.285	34.984	5.90
2600.	3.166	34.974	5.90
2800.	3.028	34.962	5.88
3000.	2.900	34.950	5.90
3200.	2.815	34.943	5.90
3400.	2.701	34.934	5.93
3600.	2.610	34.926	5.94
3800.	2.517	34.917	5.97
4000.	2.464	34.912	5.99
4079.	2.457	34.911	5.98

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 34
CRUISE STATION NB: SUROIT 34
POSITION: N 30 33.56 W 44 55.90
DATE: 83-VIII-06
DEPTH OF WATER: 4415M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	26.575	36.669	4.38
10.	26.564	36.669	4.54
20.	25.039	36.594	4.84
30.	23.930	36.598	5.20
40.	21.842	36.494	5.66
50.	20.650	36.548	5.94
60.	19.891	36.553	5.82
70.	19.595	36.547	5.73
80.	19.349	36.532	5.65
90.	19.056	36.506	5.59
100.	18.629	36.481	5.48
200.	17.705	36.434	4.91
300.	17.254	36.402	5.09
400.	16.734	36.326	4.82
500.	15.072	36.031	4.59
600.	13.346	35.764	4.45
700.	11.404	35.504	4.06
800.	9.415	35.286	3.97
900.	8.322	35.282	4.26
1000.	6.997	35.168	4.68
1100.	5.972	35.130	5.21
1200.	5.760	35.162	5.35
1300.	5.359	35.138	5.53
1400.	5.088	35.135	5.64
1500.	4.732	35.106	5.73
1600.	4.513	35.082	5.85
1700.	4.271	35.062	5.91
1800.	4.101	35.049	5.91
1900.	3.943	35.036	5.93
2000.	3.755	35.021	5.94
2200.	3.527	35.002	5.94
2400.	3.336	34.986	5.93
2600.	3.189	34.975	5.91
2800.	3.036	34.962	5.91
3000.	2.903	34.951	5.86
3200.	2.775	34.941	5.93
3400.	2.644	34.930	5.98
3600.	2.507	34.919	6.01
3800.	2.372	34.907	6.02
4000.	2.258	34.895	6.01
4200.	2.194	34.888	6.00
4231.	2.184	34.887	6.00

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 35
CRUISE STATION NB: SUROIT 35
POSITION: N 31 11.13 W 44 30.03
DATE: 83-VIII-06
DEPTH OF WATER: 3200M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	26.465	36.738	4.40
10.	26.401	36.736	4.59
20.	25.794	36.654	4.72
30.	24.179	36.507	5.14
40.	22.385	36.520	5.51
50.	21.721	36.536	5.63
60.	21.091	36.523	5.75
70.	20.326	36.510	5.89
80.	19.638	36.484	5.95
90.	19.119	36.500	5.81
100.	18.875	36.496	5.67
200.	17.630	36.453	4.61
300.	16.912	36.351	4.79
400.	15.746	36.145	4.68
500.	14.347	35.923	4.64
600.	12.947	35.710	4.49
700.	11.041	35.445	4.02
800.	9.558	35.316	3.97
900.	8.132	35.243	4.17
1000.	7.168	35.227	4.55
1100.	6.608	35.218	4.82
1200.	6.135	35.209	5.12
1300.	5.710	35.193	5.37
1400.	5.327	35.164	5.54
1500.	5.037	35.142	5.63
1600.	4.764	35.119	5.69
1700.	4.472	35.089	5.82
1800.	4.222	35.065	5.89
1900.	3.996	35.044	5.92
2000.	3.797	35.025	5.94
2200.	3.547	35.003	5.97
2400.	3.360	34.988	5.95
2600.	3.191	34.973	5.95
2800.	3.072	34.964	5.95
3000.	2.933	34.952	5.94
3200.	2.714	34.937	5.99
3236.	2.698	34.934	5.99

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 36
CRUISE STATION NB: SUROIT 36
POSITION: N 31 50.89 W 44 5.67
DATE: 83-VIII-06
DEPTH OF WATER: 4135M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.530	36.762	4.35
10.	26.534	36.762	4.51
20.	24.296	36.552	4.95
30.	23.496	36.584	5.19
40.	21.871	36.568	5.55
50.	20.559	36.538	5.86
60.	19.548	36.577	5.87
70.	19.006	36.521	5.74
80.	18.714	36.511	5.55
90.	18.450	36.501	5.36
100.	18.165	36.475	5.15
200.	17.302	36.393	5.02
300.	16.749	36.313	4.82
400.	15.553	36.109	4.70
500.	13.926	35.861	4.75
600.	12.665	35.677	4.45
700.	11.109	35.488	4.30
800.	10.031	35.419	4.13
900.	8.592	35.293	4.10
1000.	7.573	35.251	4.37
1100.	6.903	35.239	4.70
1200.	6.319	35.231	5.07
1300.	5.897	35.208	5.32
1400.	5.450	35.171	5.50
1500.	5.102	35.138	5.64
1600.	4.787	35.107	5.76
1700.	4.529	35.084	5.84
1800.	4.431	35.087	5.87
1900.	4.188	35.065	5.89
2000.	3.963	35.040	5.92
2200.	3.627	35.008	5.97
2400.	3.410	34.989	5.96
2600.	3.225	34.974	5.96
2800.	3.067	34.962	5.97
3000.	2.918	34.950	6.00
3200.	2.783	34.941	6.03
3400.	2.677	34.930	6.01
3600.	2.541	34.921	6.06
3800.	2.485	34.916	6.09
4000.	2.440	34.911	6.06
4103.	2.424	34.909	6.10

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 37
CRUISE STATION NB: SUROIT 37
POSITION: N 32 31.00 W 43 38.29
DATE: 83-VIII-07
DEPTH OF WATER: 4000M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	26.344	36.595	4.46
10.	26.299	36.594	4.58
20.	25.540	36.479	4.75
30.	23.187	36.519	5.31
40.	21.477	36.539	5.74
50.	20.496	36.538	5.92
60.	19.912	36.533	5.78
70.	19.216	36.506	5.79
80.	18.870	36.498	5.62
90.	18.521	36.507	5.39
100.	18.311	36.487	5.27
200.	17.395	36.402	4.79
300.	16.767	36.320	4.76
400.	15.379	36.075	4.69
500.	14.022	35.862	4.68
600.	12.797	35.696	4.57
700.	11.475	35.536	4.34
800.	10.152	35.404	4.16
900.	9.120	35.354	4.15
1000.	8.106	35.336	4.36
1100.	7.574	35.330	4.58
1200.	6.987	35.319	4.84
1300.	6.505	35.292	5.06
1400.	5.920	35.236	5.35
1500.	5.507	35.197	5.50
1600.	5.035	35.140	5.71
1700.	4.751	35.113	5.79
1800.	4.529	35.094	5.82
1900.	4.213	35.057	5.94
2000.	4.023	35.038	5.93
2200.	3.775	35.013	5.99
2400.	3.484	34.992	5.97
2600.	3.315	34.979	5.98
2800.	3.154	34.967	5.99
3000.	2.977	34.953	6.01
3200.	2.833	34.942	6.04
3400.	2.696	34.932	6.05
3600.	2.557	34.921	6.06
3800.	2.489	34.915	6.08
4000.	2.423	34.909	6.07
4016.	2.404	34.907	6.08

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 38
CRUISE STATION NB: SUROIT 38
POSITION: N 33 10.72 W 43 12.49
DATE: 83-VIII-07
DEPTH OF WATER: 3480M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.430	36.697	4.45
10.	26.441	36.698	4.60
20.	25.027	36.604	4.92
30.	23.388	36.571	5.28
40.	22.218	36.563	5.55
50.	21.180	36.525	5.78
60.	20.350	36.531	5.86
70.	19.771	36.534	5.83
80.	19.214	36.529	5.74
90.	18.730	36.503	5.52
100.	18.478	36.493	5.38
200.	17.454	36.406	4.91
300.	17.012	36.357	4.84
400.	16.085	36.180	4.95
500.	14.754	35.982	4.72
600.	13.452	35.793	4.67
700.	11.966	35.596	4.42
800.	10.333	35.394	4.02
900.	8.827	35.291	4.04
1000.	8.185	35.329	4.28
1100.	7.358	35.284	4.53
1200.	6.667	35.255	4.88
1300.	6.426	35.272	5.00
1400.	6.096	35.260	5.21
1500.	5.600	35.206	5.41
1600.	5.050	35.144	5.65
1700.	4.741	35.116	5.74
1800.	4.523	35.092	5.82
1900.	4.288	35.068	5.87
2000.	4.090	35.047	5.93
2200.	3.785	35.020	5.94
2400.	3.557	35.000	5.98
2600.	3.402	34.987	5.99
2800.	3.248	34.974	5.98
3000.	3.098	34.963	5.95
3200.	2.941	34.950	6.02
3400.	2.807	34.939	6.05
3530.	2.637	34.928	6.03

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 39
CRUISE STATION NB: SUROIT 39
POSITION: N 33 48.69 W 42 46.78
DATE: 83-VIII-07
DEPTH OF WATER: 4460M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.869	36.578	4.38
10.	26.728	36.594	4.56
20.	25.809	36.532	4.76
30.	22.818	36.399	5.47
40.	20.868	36.411	5.92
50.	19.938	36.422	5.98
60.	19.259	36.413	5.87
70.	18.698	36.419	5.62
80.	18.459	36.454	5.47
90.	18.292	36.472	5.27
100.	18.136	36.460	5.05
200.	17.492	36.421	4.85
300.	17.006	36.355	4.85
400.	15.827	36.135	4.61
500.	14.672	35.959	4.64
600.	13.270	35.752	4.53
700.	11.469	35.483	4.16
800.	9.461	35.256	3.73
900.	7.771	35.111	4.06
1000.	6.459	35.087	4.77
1100.	6.081	35.142	5.09
1200.	5.784	35.152	5.34
1300.	5.030	35.059	5.74
1400.	5.406	35.169	5.50
1500.	5.127	35.142	5.62
1600.	4.862	35.120	5.76
1700.	4.679	35.109	5.77
1800.	4.262	35.048	5.95
1900.	3.991	35.016	6.05
2000.	3.935	35.024	6.00
2200.	3.703	35.005	6.02
2400.	3.478	34.989	6.05
2600.	3.296	34.975	6.03
2800.	3.116	34.964	6.01
3000.	2.962	34.951	6.03
3200.	2.709	34.941	6.07
3400.	2.670	34.932	6.06
3600.	2.551	34.922	6.11
3800.	2.423	34.912	6.14
4000.	2.307	34.903	6.15
41[illegible]9.	2.295	34.901	6.16

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 40
CRUISE STATION NB: SUROIT 40
POSITION: N 35 .05 W 24 59.46
DATE: 83-VIII-16
DEPTH OF WATER: 4830M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
9.	22.256	36.559	5.31
10.	22.256	36.559	5.28
20.	22.210	36.556	5.27
30.	21.737	36.541	5.30
40.	21.067	36.441	5.42
50.	19.150	36.367	5.84
60.	18.607	36.357	6.01
70.	18.279	36.342	5.96
80.	17.812	36.307	5.90
90.	17.539	36.290	5.81
100.	17.338	36.278	5.67
200.	14.936	36.004	4.92
300.	13.574	35.815	4.83
400.	12.382	35.660	4.73
500.	11.582	35.574	4.87
600.	11.008	35.532	4.73
700.	10.399	35.525	4.44
800.	9.610	35.499	4.27
900.	9.208	35.549	4.34
1000.	8.839	35.593	4.45
1100.	8.859	35.697	4.59
1200.	8.323	35.649	4.73
1300.	7.007	35.428	5.04
1400.	6.411	35.353	5.18
1500.	5.955	35.305	5.40
1600.	5.329	35.215	5.56
1700.	5.047	35.186	5.67
1800.	4.625	35.125	5.81
1900.	4.223	35.069	5.94
2000.	3.853	35.016	6.06
2200.	3.617	35.012	5.98
2400.	3.278	34.977	6.04
2600.	3.192	34.980	5.85
2800.	2.961	34.960	5.85
3000.	2.824	34.948	5.83
3200.	2.745	34.941	5.78
3400.	2.674	34.934	5.72
3600.	2.676	34.928	5.71
3800.	2.569	34.921	5.70
4000.	2.549	34.915	5.68
4097.	2.524	34.912	5.69

IFREMER/CS TOPOGULF

TOPOGULF STATION NB: 41
CRUISE STATION NB: SUROIT 41
POSITION: N 34 34.36 W 25 43.34
DATE: 83-VIII-16
DEPTH OF WATER: 4920M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.783	36.582	4.10
10.	22.775	36.594	5.28
20.	22.524	36.553	5.31
30.	21.611	36.512	5.45
40.	20.124	36.327	5.76
50.	19.015	36.313	5.97
60.	18.598	36.294	5.98
70.	17.920	36.303	5.92
80.	17.371	36.286	5.79
90.	16.991	36.254	5.64
100.	16.716	36.241	5.58
200.	14.673	35.959	5.01
300.	13.172	35.756	4.93
400.	12.077	35.623	4.72
500.	11.309	35.543	4.70
600.	10.647	35.506	4.55
700.	10.301	35.519	4.41
800.	9.881	35.607	4.35
900.	9.420	35.625	4.38
1000.	8.823	35.608	4.50
1100.	8.285	35.582	4.66
1200.	7.641	35.515	4.82
1300.	6.844	35.402	5.13
1400.	6.099	35.296	5.37
1500.	5.402	35.198	5.60
1600.	4.325	35.123	5.83
1700.	4.522	35.088	5.92
1800.	4.325	35.066	5.97
1900.	4.104	35.042	6.03
2000.	3.877	35.019	6.04
2200.	3.518	34.990	6.06
2400.	3.308	34.981	5.96
2600.	3.156	34.973	5.93
2800.	3.001	34.958	5.91
3000.	2.875	34.952	5.84
3200.	2.770	34.943	5.76
3400.	2.690	34.936	5.71
3600.	2.633	34.929	5.69
3800.	2.578	34.922	5.70
4000.	2.531	34.913	5.70
4037.	2.514	34.911	5.70

IFREMER/CS TOPOGULF

TOPOGULF STATION NB: 42
CRUISE STATION NB: SUROIT 42
POSITION: N 34 11.54 W 26 16.45
DATE: 83-VIII-16
DEPTH OF WATER: 4530M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	22.982	36.630	5.02
10.	22.986	36.630	5.23
20.	22.891	36.628	5.21
30.	21.924	36.546	5.43
40.	21.546	36.499	5.58
50.	20.163	36.420	5.83
60.	19.895	36.404	5.86
70.	18.927	36.440	5.86
80.	18.598	36.460	5.80
90.	18.385	36.486	5.67
100.	18.152	36.486	5.66
200.	16.368	36.248	4.83
300.	14.781	35.987	4.84
400.	13.345	35.783	4.75
500.	12.156	35.633	4.86
600.	11.200	35.533	4.61
700.	10.527	35.504	4.45
800.	10.074	35.569	4.34
900.	9.433	35.587	4.38
1000.	8.711	35.559	4.52
1100.	8.235	35.556	4.67
1200.	7.712	35.521	4.85
1300.	6.846	35.398	5.14
1400.	6.227	35.313	5.37
1500.	5.549	35.215	5.57
1600.	5.015	35.143	5.76
1700.	4.686	35.100	5.84
1800.	4.360	35.061	5.97
1900.	4.146	35.037	6.06
2000.	3.943	35.021	6.06
2200.	3.635	35.003	6.02
2400.	3.316	34.974	6.03
2600.	3.128	34.964	6.01
2800.	3.029	34.962	5.89
3000.	2.910	34.954	5.80
3200.	2.790	34.945	5.76
3400.	2.713	34.937	5.73
3600.	2.646	34.929	5.70
3800.	2.575	34.921	5.68
4000.	2.528	34.913	5.69
4039.	2.501	34.910	5.69

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 43
CRUISE STATION NB: SUROIT 43
POSITION: N 33 45.88 W 26 53.63
DATE: 83-VIII-17
DEPTH OF WATER: 3990M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	23.072	36.660	5.08
20.	23.083	36.658	5.35
30.	22.586	36.649	5.40
40.	21.672	36.536	5.55
50.	20.766	36.422	5.75
60.	19.551	36.346	5.92
70.	19.211	36.365	5.99
80.	18.688	36.335	5.98
90.	18.071	36.308	5.89
100.	17.692	36.292	5.81
200.	15.542	36.082	5.06
300.	14.101	35.883	4.81
400.	12.876	35.717	4.83
500.	11.974	35.613	4.66
600.	11.057	35.526	4.62
700.	10.327	35.498	4.39
800.	9.565	35.495	4.27
900.	9.068	35.570	4.33
1000.	8.559	35.549	4.54
1100.	7.864	35.493	4.69
1200.	7.126	35.410	4.92
1300.	6.686	35.373	5.12
1400.	6.020	35.271	5.36
1500.	5.274	35.176	5.55
1600.	4.899	35.130	5.77
1700.	4.577	35.091	5.83
1800.	4.323	35.060	5.93
1900.	4.292	35.059	5.97
2000.	4.099	35.059	5.94
2200.	3.693	35.017	5.95
2400.	3.349	34.933	5.98
2600.	3.149	34.966	5.95
2800.	3.036	34.963	5.97
3000.	2.890	34.952	5.82
3200.	2.770	34.942	5.76
3400.	2.698	34.935	5.73
3600.	2.627	34.927	5.68
3800.	2.572	34.920	5.68
3968.	2.527	34.913	5.68

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 44
CRUISE STATION NB: SUROIT 44
POSITION: N 33 21.62 W 27 31.21
DATE: 83-VIII-17
DEPTH OF WATER: 4130M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.034	36.626	5.02
10.	23.035	36.628	5.19
20.	22.747	36.578	5.26
30.	21.537	36.504	5.46
40.	20.565	36.428	5.67
50.	19.950	36.397	5.79
60.	19.166	36.362	5.85
70.	18.717	36.323	5.83
80.	18.095	36.317	5.74
90.	17.784	36.310	5.66
100.	17.443	36.295	5.50
200.	15.532	36.080	4.98
300.	13.752	35.840	4.88
400.	12.755	35.707	4.74
500.	11.740	35.585	4.74
600.	10.992	35.512	4.55
700.	10.220	35.476	4.26
800.	9.610	35.526	4.30
900.	9.044	35.545	4.35
1000.	8.613	35.556	4.46
1100.	8.356	35.600	4.63
1200.	7.802	35.546	4.78
1300.	6.970	35.430	5.02
1400.	6.045	35.294	5.35
1500.	5.393	35.203	5.57
1600.	4.952	35.150	5.70
1700.	4.660	35.115	5.83
1800.	4.441	35.095	5.86
1900.	4.199	35.069	5.91
2000.	3.955	35.043	5.93
2200.	3.631	35.015	5.94
2400.	3.300	34.982	5.94
2600.	3.094	34.961	5.97
2800.	2.989	34.958	5.85
3000.	2.845	34.948	5.82
3200.	2.755	34.941	5.79
3400.	2.696	34.935	5.75
3600.	2.632	34.928	5.72
3800.	2.583	34.921	5.70
4000.	2.531	34.913	5.70
4090.	2.510	34.910	5.69

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 45
CRUISE STATION NB: SUROIT 45
POSITION: N 32 56.25 W 28 8.99
DATE: 83-VIII-17
DEPTH OF WATER: 3300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	23.655	36.754	5.00
10.	23.532	36.750	5.05
20.	23.419	36.749	5.14
30.	23.222	36.743	5.32
40.	22.322	36.622	5.49
50.	21.335	36.566	5.80
60.	20.112	36.412	5.97
70.	19.193	36.373	6.00
80.	18.355	36.340	5.88
90.	18.035	36.340	5.73
100.	17.410	36.302	5.59
200.	16.215	36.206	4.86
300.	14.498	35.939	4.92
400.	13.278	35.765	4.71
500.	12.180	35.634	4.73
600.	11.126	35.527	4.44
700.	10.338	35.483	4.27
800.	9.499	35.489	4.20
900.	8.849	35.508	4.41
1000.	8.257	35.498	4.49
1100.	7.942	35.528	4.67
1200.	7.501	35.502	4.86
1300.	6.313	35.316	5.22
1400.	5.729	35.239	5.46
1500.	5.407	35.209	5.48
1600.	4.848	35.135	5.66
1700.	4.521	35.094	5.86
1800.	4.107	35.034	6.00
1900.	3.980	35.030	6.01
2000.	3.768	35.011	6.02
2200.	3.466	34.984	6.04
2400.	3.247	34.970	6.00
2600.	3.098	34.961	6.02
2800.	2.962	34.956	5.92
3000.	2.877	34.950	5.85
3200.	2.773	34.942	5.78
3271.	2.741	34.939	5.76

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 46
CRUISE STATION NB: SUROIT 46
POSITION: N 32 32.55 W 28 48.36
DATE: 83-VIII-17
DEPTH OF WATER: 3430M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.355	36.647	5.08
10.	23.252	36.614	5.21
20.	22.156	36.567	5.43
30.	21.108	36.508	5.75
40.	20.465	36.475	5.84
50.	20.058	36.449	5.83
60.	19.289	36.385	5.87
70.	18.166	36.338	5.82
80.	17.790	36.318	5.71
90.	17.485	36.302	5.55
100.	17.306	36.287	5.46
200.	15.561	36.093	4.99
300.	14.229	35.906	4.94
400.	12.990	35.729	4.84
500.	12.047	35.606	4.62
600.	11.072	35.504	4.37
700.	10.325	35.463	4.34
800.	9.365	35.459	4.29
900.	8.861	35.504	4.39
1000.	8.402	35.515	4.53
1100.	7.911	35.503	4.72
1200.	7.107	35.411	4.94
1300.	6.225	35.306	5.27
1400.	5.570	35.216	5.53
1500.	5.154	35.160	5.64
1600.	4.715	35.114	5.80
1700.	4.371	35.070	5.91
1800.	4.153	35.046	5.95
1900.	3.984	35.032	6.00
2000.	3.782	35.013	6.00
2200.	3.453	34.987	6.02
2400.	3.241	34.970	6.03
2600.	3.092	34.964	5.97
2800.	2.966	34.955	5.88
3000.	2.861	34.949	5.82
3200.	2.783	34.942	5.81
3400.	2.683	34.933	5.74
3470.	2.645	34.929	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 47
CRUISE STATION NB: SUROIT 47
POSITION: N 32 5.17 W 29 24.27
DATE: 83-VIII-18
DEPTH OF WATER: 4030M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	23.049	36.797	5.06
10.	23.059	36.799	5.28
20.	22.853	36.788	5.38
30.	22.569	36.749	5.42
40.	22.196	36.754	5.51
50.	22.032	36.749	5.50
60.	21.852	36.738	5.51
70.	21.274	36.710	5.52
80.	20.052	36.610	5.69
90.	19.448	36.611	5.53
100.	19.243	36.605	5.44
200.	17.374	36.393	4.87
300.	16.152	36.217	4.79
400.	14.710	35.979	4.73
500.	13.078	35.742	4.67
600.	11.689	35.598	4.77
700.	10.958	35.517	4.48
800.	10.088	35.468	4.24
900.	9.479	35.465	4.22
1000.	8.603	35.459	4.41
1100.	8.033	35.482	4.62
1200.	7.373	35.434	4.80
1300.	6.765	35.374	5.00
1400.	6.102	35.290	5.30
1500.	5.515	35.218	5.46
1600.	5.111	35.167	5.64
1700.	4.686	35.107	5.82
1800.	4.425	35.079	5.85
1900.	4.109	35.044	5.99
2000.	3.898	35.025	5.97
2200.	3.535	34.993	6.01
2400.	3.321	34.985	5.93
2600.	3.143	34.970	5.88
2800.	3.000	34.961	5.85
3000.	2.871	34.952	5.75
3200.	2.763	34.941	5.75
3400.	2.693	34.934	5.72
3600.	2.621	34.926	5.72
3800.	2.558	34.918	5.69
3971.	2.503	34.910	5.68

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 48
CRUISE STATION NB: SUROIT 48
POSITION: N 31 44.93 W 30 2.24
DATE: 83-VIII-18
DEPTH OF WATER: 4200M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	23.913	36.958	4.86
10.	23.718	36.954	5.16
20.	23.682	36.954	5.15
30.	23.286	36.901	5.20
40.	23.090	36.907	5.27
50.	22.583	36.800	5.27
60.	21.092	36.680	5.69
70.	20.587	36.698	5.78
80.	20.106	36.678	5.75
90.	19.564	36.651	5.70
100.	19.082	36.622	5.67
200.	17.254	36.396	4.86
300.	15.901	36.168	4.77
400.	14.437	35.938	4.74
500.	13.047	35.740	4.67
600.	11.938	35.603	4.49
700.	11.030	35.538	4.34
800.	9.890	35.433	4.22
900.	9.154	35.440	4.28
1000.	8.619	35.455	4.38
1100.	8.182	35.463	4.45
1200.	7.633	35.439	4.68
1300.	7.168	35.421	4.91
1400.	6.555	35.352	5.06
1500.	5.974	35.287	5.26
1600.	5.483	35.225	5.44
1700.	5.045	35.173	5.61
1800.	4.636	35.122	5.71
1900.	4.372	35.091	5.81
2000.	4.150	35.069	5.83
2200.	3.730	35.025	5.88
2400.	3.387	34.991	5.91
2600.	3.177	34.972	5.92
2800.	3.016	34.959	5.86
3000.	2.886	34.952	5.82
3200.	2.784	34.942	5.78
3400.	2.711	34.935	5.74
3600.	2.638	34.926	5.72
3800.	2.592	34.919	5.71
4000.	2.544	34.913	5.69
4083.	2.529	34.911	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 49
CRUISE STATION NB: SURDIT 49
POSITION: N 31 17.28 W 30 37.52
DATE: 83-VIII-18
DEPTH OF WATER: 4330M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	24.167	36.966	5.03
10.	24.085	36.948	5.05
20.	23.786	36.955	4.89
30.	23.564	36.915	5.01
40.	22.975	36.837	5.25
50.	21.443	36.698	5.60
60.	20.553	36.681	5.72
70.	20.008	36.657	5.73
80.	19.608	36.664	5.61
90.	19.052	36.657	5.54
100.	18.967	36.697	5.38
200.	16.946	36.385	4.68
300.	15.340	36.101	4.62
400.	13.888	35.864	4.63
500.	12.624	35.725	4.58
600.	11.836	35.607	4.49
700.	11.050	35.539	4.36
800.	10.064	35.492	4.11
900.	9.319	35.488	4.10
1000.	8.557	35.459	4.24
1100.	8.153	35.494	4.37
1200.	7.640	35.460	4.55
1300.	7.031	35.414	4.81
1400.	6.414	35.340	5.09
1500.	5.977	35.300	5.18
1600.	5.458	35.239	5.39
1700.	5.167	35.204	5.49
1800.	4.763	35.153	5.59
1900.	4.485	35.121	5.65
2000.	4.202	35.089	5.76
2200.	3.793	35.042	5.78
2400.	3.387	34.995	5.87
2600.	3.129	34.971	5.89
2800.	2.964	34.960	5.85
3000.	2.833	34.948	5.80
3200.	2.737	34.939	5.76
3400.	2.648	34.930	5.72
3600.	2.580	34.922	5.69
3800.	2.538	34.916	5.69
4000.	2.520	34.912	5.71
4084.	2.514	34.910	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 50
CRUISE STATION NB: SURDIT 50
POSITION: N 30 51.32 W 31 14.36
DATE: 83-VIII-19
DEPTH OF WATER: 4610M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	24.074	36.993	4.90
10.	24.083	36.994	5.08
20.	23.927	36.969	5.11
30.	23.661	36.935	5.29
40.	22.524	36.780	5.53
50.	21.417	36.771	5.80
60.	20.867	36.769	5.85
70.	20.319	36.739	5.81
80.	19.390	36.658	5.66
90.	19.143	36.649	5.59
100.	19.073	36.670	5.54
200.	17.295	36.404	4.89
300.	15.754	36.152	4.69
400.	14.077	35.894	4.68
500.	12.771	35.719	4.57
600.	11.690	35.598	4.47
700.	10.889	35.525	4.33
800.	10.061	35.482	4.13
900.	9.351	35.471	3.98
1000.	8.794	35.470	4.13
1100.	8.258	35.469	4.27
1200.	7.832	35.476	4.47
1300.	7.238	35.437	4.69
1400.	6.511	35.359	4.96
1500.	5.945	35.291	5.16
1600.	5.458	35.237	5.37
1700.	5.020	35.181	5.49
1800.	4.704	35.145	5.58
1900.	4.421	35.112	5.65
2000.	4.151	35.082	5.70
2200.	3.795	35.042	5.75
2400.	3.436	35.003	5.78
2600.	3.196	34.981	5.82
2800.	2.983	34.959	5.83
3000.	2.863	34.949	5.77
3200.	2.754	34.939	5.76
3400.	2.666	34.930	5.72
3600.	2.577	34.920	5.68
3800.	2.531	34.915	5.69
4000.	2.514	34.911	5.71
4088.	2.511	34.909	5.69

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 51
CRUISE STATION NB: SUROIT 51
POSITION: N 30 24.48 W 31 54.83
DATE: 83-VIII-19
DEPTH OF WATER: 4450M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	24.242	37.026	4.82
10.	24.243	37.026	5.05
20.	23.947	37.013	4.92
30.	23.740	36.958	5.12
40.	22.985	36.820	5.28
50.	21.569	36.674	5.57
60.	20.553	36.676	5.71
70.	19.930	36.660	5.72
80.	19.504	36.661	5.57
90.	19.239	36.651	5.48
100.	18.880	36.635	5.30
200.	17.107	36.378	4.72
300.	15.718	36.130	4.66
400.	14.219	35.911	4.71
500.	12.778	35.705	4.52
600.	11.634	35.569	4.41
700.	10.506	35.455	4.25
800.	9.634	35.426	4.15
900.	9.031	35.441	4.21
1000.	8.466	35.442	4.27
1100.	7.804	35.404	4.38
1200.	7.382	35.394	4.46
1300.	6.792	35.353	4.76
1400.	6.369	35.321	4.91
1500.	6.016	35.298	5.14
1600.	5.481	35.241	5.38
1700.	4.984	35.176	5.49
1800.	4.711	35.147	5.57
1900.	4.396	35.111	5.66
2000.	4.202	35.088	5.69
2200.	3.746	35.038	5.77
2400.	3.406	35.002	5.82
2600.	3.127	34.975	5.82
2800.	2.964	34.961	5.81
3000.	2.830	34.947	5.78
3200.	2.721	34.938	5.74
3400.	2.623	34.927	5.71
3600.	2.568	34.921	5.71
3800.	2.529	34.915	5.70
4000.	2.504	34.911	5.71
4089.	2.497	34.908	5.71

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 52
CRUISE STATION NB: SUROIT 52
POSITION: N 29 54.74 W 32 36.49
DATE: 83-VIII-19
DEPTH OF WATER: 4420M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	24.774	37.078	4.91
10.	24.707	37.070	5.01
20.	24.446	37.047	5.05
30.	24.040	36.984	5.08
40.	23.158	36.804	5.25
50.	22.087	36.721	5.59
60.	21.250	36.712	5.67
70.	20.687	36.717	5.65
80.	20.428	36.703	5.64
90.	19.980	36.701	5.60
100.	19.744	36.686	5.52
200.	17.598	36.468	4.70
300.	16.056	36.200	4.65
400.	14.599	35.968	4.58
500.	13.208	35.770	4.53
600.	11.879	35.615	4.46
700.	11.147	35.552	4.29
800.	10.275	35.482	4.07
900.	8.964	35.393	3.95
1000.	8.519	35.427	4.04
1100.	7.760	35.388	4.24
1200.	7.304	35.392	4.59
1300.	6.806	35.362	4.82
1400.	6.338	35.317	4.96
1500.	5.884	35.274	5.15
1600.	5.417	35.225	5.31
1700.	5.029	35.182	5.47
1800.	4.781	35.154	5.55
1900.	4.492	35.121	5.61
2000.	4.254	35.094	5.66
2200.	3.780	35.043	5.74
2400.	3.402	35.003	5.81
2600.	3.197	34.983	5.81
2800.	3.012	34.964	5.79
3000.	2.876	34.953	5.77
3200.	2.707	34.936	5.72
3400.	2.617	34.927	5.71
3600.	2.552	34.920	5.69
3800.	2.530	34.916	5.70
4000.	2.502	34.911	5.69
4102.	2.504	34.910	5.69

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 53
CRUISE STATION NB: SURDIT 53
POSITION: N 29 26.38 W 33 18.02
DATE: 83-VIII-19
DEPTH OF WATER: 4920M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	2-.582	37.052	4.92
10.	24.597	37.051	5.12
20.	24.104	37.036	5.16
30.	23.531	36.975	5.27
40.	22.909	36.912	5.44
50.	21.179	36.701	5.76
60.	20.472	36.701	5.82
70.	20.196	36.699	5.75
80.	19.686	36.663	5.71
90.	19.530	36.701	5.66
100.	19.266	36.718	5.53
200.	17.912	36.568	4.92
300.	16.081	36.210	4.75
400.	14.355	35.936	4.68
500.	12.926	35.737	4.60
600.	11.799	35.604	4.50
700.	10.777	35.513	4.27
800.	9.920	35.457	3.98
900.	9.231	35.451	3.94
1000.	8.530	35.432	4.01
1100.	8.035	35.423	4.16
1200.	7.511	35.408	4.36
1300.	6.895	35.373	4.61
1400.	6.537	35.352	4.85
1500.	6.032	35.299	5.08
1600.	5.496	35.234	5.30
1700.	5.073	35.187	5.37
1800.	4.764	35.154	5.47
1900.	4.501	35.124	5.55
2000.	4.208	35.091	5.62
2200.	3.756	35.042	5.73
2400.	3.415	35.006	5.76
2600.	3.150	34.980	5.77
2800.	2.974	34.962	5.80
3000.	2.821	34.949	5.76
3200.	2.708	34.937	5.73
3400.	2.623	34.928	5.71
3600.	2.560	34.921	5.70
3800.	2.512	34.914	5.71
4000.	2.474	34.909	5.71
4093.	2.468	34.907	5.73

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 54
CRUISE STATION NB: SURDIT 54
POSITION: N 29 .26 W 34 .42
DATE: 83-VIII-20
DEPTH OF WATER: 5440M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	24.801	37.256	4.84
10.	24.802	37.256	4.95
20.	24.501	37.226	5.11
30.	24.502	37.248	5.14
40.	23.681	37.173	5.29
50.	22.322	36.999	5.58
60.	21.866	36.998	5.65
70.	21.548	36.993	5.64
80.	21.365	36.988	5.62
90.	20.833	36.975	5.54
100.	20.583	36.962	5.44
200.	18.074	36.542	4.77
300.	16.449	36.275	4.68
400.	14.873	36.002	4.60
500.	13.445	35.798	4.57
600.	12.052	35.617	4.46
700.	10.985	35.518	4.32
800.	9.945	35.447	4.15
900.	8.974	35.416	4.13
1000.	8.160	35.406	4.24
1100.	7.689	35.414	4.46
1200.	7.105	35.385	4.66
1300.	6.544	35.337	4.91
1400.	6.073	35.292	5.07
1500.	5.657	35.250	5.19
1600.	5.299	35.212	5.34
1700.	4.891	35.167	5.47
1800.	4.539	35.127	5.59
1900.	4.325	35.104	5.62
2000.	4.049	35.073	5.70
2200.	3.609	35.026	5.76
2400.	3.294	34.994	5.77
2600.	3.056	34.971	5.79
2800.	2.919	34.959	5.74
3000.	2.770	34.944	5.71
3200.	2.661	34.933	5.69
3400.	2.602	34.927	5.67
3600.	2.516	34.917	5.68
3800.	2.480	34.912	5.65
4000.	2.458	34.908	5.67
4097.	2.450	34.906	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 55
CRUISE STATION NB: SUROIT 55
POSITION: N 29 28.36 W 34 40.46
DATE: 83-VIII-20
DEPTH OF WATER: 4940M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	25.096	37.123	4.58
10.	25.051	37.115	4.72
20.	24.824	37.114	4.74
30.	24.652	37.096	4.77
40.	24.435	37.092	4.82
50.	24.370	37.108	4.75
60.	22.170	36.826	5.28
70.	21.530	36.786	5.42
80.	20.649	36.760	5.52
90.	20.017	36.761	5.52
100.	19.675	36.761	5.44
200.	17.195	36.393	4.62
300.	15.912	36.177	4.61
400.	14.412	35.939	4.62
500.	12.967	35.734	4.46
600.	11.777	35.584	4.39
700.	10.631	35.494	4.20
800.	9.618	35.436	4.05
900.	8.887	35.438	4.05
1000.	8.179	35.413	4.20
1100.	7.725	35.417	4.44
1200.	7.120	35.381	4.63
1300.	6.523	35.331	4.85
1400.	5.983	35.281	5.06
1500.	5.546	35.236	5.23
1600.	5.175	35.195	5.33
1700.	4.839	35.161	5.46
1800.	4.533	35.126	5.54
1900.	4.296	35.100	5.60
2000.	4.060	35.074	5.64
2200.	3.676	35.033	5.69
2400.	3.362	35.000	5.74
2600.	3.094	34.973	5.73
2800.	2.954	34.961	5.71
3000.	2.813	34.946	5.69
3200.	2.704	34.937	5.67
3400.	2.598	34.926	5.63
3600.	2.525	34.917	5.65
3800.	2.491	34.913	5.63
4000.	2.468	34.908	5.66
4039.	2.459	34.906	5.67

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 56
CRUISE STATION NB: SUROIT 56
POSITION: N 29 55.38 W 35 21.74
DATE: 83-VIII-20
DEPTH OF WATER: 4100M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.420	37.179	4.55
10.	25.408	37.173	4.65
20.	24.717	37.126	4.76
30.	24.548	37.120	4.83
40.	23.855	36.993	4.98
50.	23.011	36.911	5.21
60.	21.438	36.727	5.54
70.	20.829	36.704	5.60
80.	20.307	36.699	5.58
90.	20.009	36.749	5.49
100.	19.735	36.725	5.40
200.	17.465	36.442	4.59
300.	15.882	36.179	4.65
400.	14.551	35.963	4.60
500.	13.156	35.756	4.49
600.	11.775	35.587	4.34
700.	10.673	35.486	4.24
800.	9.733	35.437	4.07
900.	8.775	35.411	4.06
1000.	8.254	35.419	4.18
1100.	7.726	35.421	4.38
1200.	7.310	35.416	4.56
1300.	6.748	35.367	4.79
1400.	6.034	35.282	5.02
1500.	5.652	35.244	5.19
1600.	5.263	35.204	5.30
1700.	4.914	35.166	5.41
1800.	4.618	35.135	5.50
1900.	4.330	35.104	5.59
2000.	4.057	35.072	5.63
2200.	3.655	35.030	5.69
2400.	3.345	34.999	5.71
2600.	3.110	34.976	5.71
2800.	2.912	34.958	5.70
3000.	2.805	34.947	5.68
3200.	2.670	34.933	5.65
3400.	2.592	34.925	5.62
3600.	2.530	34.918	5.63
3800.	2.496	34.913	5.66
4000.	2.461	34.908	5.66
4099.	2.462	34.907	5.66

IFREMER/CB — TOPOGULF

TOPOGULF STATION NB: 57
CRUISE STATION NB: SURGIT 57
POSITION: N 30 23.69 W 36 2.41
DATE: 83-VIII-21
DEPTH OF WATER: 3700M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.459	37.208	4.35
10.	25.117	37.175	4.66
20.	24.706	37.179	4.80
30.	24.602	37.171	4.84
40.	23.743	37.038	4.96
50.	22.696	36.930	5.26
60.	21.645	36.853	5.47
70.	21.186	36.859	5.48
80.	20.606	36.820	5.51
90.	20.067	36.775	5.47
100.	19.884	36.788	5.41
200.	17.723	36.493	4.61
300.	16.226	36.233	4.65
400.	14.895	36.015	4.63
500.	13.163	35.762	4.51
600.	12.018	35.612	4.38
700.	10.923	35.508	4.27
800.	9.861	35.429	4.01
900.	8.800	35.377	4.00
1000.	7.957	35.350	4.12
1100.	7.254	35.316	4.34
1200.	6.851	35.311	4.53
1300.	6.496	35.300	4.71
1400.	6.171	35.277	4.88
1500.	5.728	35.248	5.07
1600.	5.359	35.211	5.21
1700.	5.029	35.178	5.35
1800.	4.812	35.155	5.41
1900.	4.445	35.117	5.50
2000.	4.244	35.092	5.58
2200.	3.807	35.044	5.65
2400.	3.434	35.006	5.70
2600.	3.176	34.981	5.70
2800.	2.959	34.961	5.69
3000.	2.851	34.950	5.69
3200.	2.735	34.937	5.69
3400.	2.638	34.928	5.68
3600.	2.558	34.919	5.66
3800.	2.532	34.915	5.66
3815.	2.532	34.915	5.66

IFREMER/CB — TOPOGULF

TOPOGULF STATION NB: 58
CRUISE STATION NB: SURGIT 58
POSITION: N 30 47.89 W 36 37.71
DATE: 83-VIII-21
DEPTH OF WATER: 3450M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.502	37.007	4.40
10.	25.453	37.010	4.62
20.	25.349	37.003	4.57
30.	25.341	37.085	4.55
40.	22.820	36.633	5.19
50.	21.816	36.735	5.47
60.	21.337	36.712	5.53
70.	20.913	36.709	5.51
80.	20.505	36.732	5.44
90.	20.486	36.871	5.21
100.	20.330	36.862	5.16
200.	17.617	36.443	4.61
300.	16.252	36.236	4.57
400.	14.703	35.983	4.65
500.	13.478	35.803	4.60
600.	12.279	35.641	4.48
700.	11.144	35.524	4.29
800.	10.017	35.439	4.17
900.	9.006	35.399	4.13
1000.	8.074	35.360	4.22
1100.	7.374	35.324	4.42
1200.	6.881	35.315	4.64
1300.	6.521	35.307	4.81
1400.	6.042	35.271	5.00
1500.	5.695	35.243	5.14
1600.	5.288	35.201	5.43
1700.	4.882	35.154	5.54
1800.	4.646	35.133	5.60
1900.	4.377	35.102	5.66
2000.	4.094	35.072	5.72
2200.	3.709	35.031	5.75
2400.	3.376	34.999	5.77
2600.	3.182	34.980	5.77
2800.	2.979	34.961	5.74
3000.	2.802	34.945	5.72
3200.	2.694	34.934	5.69
3400.	2.633	34.927	5.66
3475.	2.621	34.925	5.68

IFREMER/CB TOPOGULF

TOPOGULF STATION N°: 59
CRUISE STATION N°: SUROIT 59
POSITION: N 31 13.33 W 37 15.68
DATE: 83-VIII-21
DEPTH OF WATER: 3875M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	26.251	36.842	4.44
10.	25.930	36.824	4.47
20.	25.312	36.788	4.59
30.	24.909	36.764	4.75
40.	24.418	36.713	4.81
50.	22.581	36.666	5.17
60.	21.404	36.645	5.46
70.	20.787	36.682	5.54
80.	20.174	36.685	5.53
90.	19.861	36.674	5.53
100.	19.634	36.684	5.45
200.	16.957	36.346	4.65
300.	15.544	36.109	4.64
400.	14.134	35.899	4.64
500.	12.831	35.710	4.50
600.	11.596	35.565	4.42
700.	10.454	35.459	4.21
800.	9.432	35.420	4.11
900.	8.821	35.449	4.21
1000.	8.165	35.452	4.42
1100.	7.656	35.436	4.58
1200.	7.046	35.387	4.79
1300.	6.450	35.321	5.08
1400.	5.936	35.268	5.21
1500.	5.514	35.228	5.32
1600.	5.100	35.176	5.50
1700.	4.779	35.143	5.57
1800.	4.512	35.112	5.66
1900.	4.251	35.084	5.72
2000.	4.046	35.063	5.74
2200.	3.625	35.021	5.76
2400.	3.328	34.993	5.78
2600.	3.109	34.972	5.76
2800.	2.926	34.955	5.74
3000.	2.811	34.945	5.72
3200.	2.740	34.937	5.67
3400.	2.650	34.928	5.69
3600.	2.569	34.919	5.67
3800.	2.518	34.914	5.66
3859.	2.504	34.912	5.66

IFREMER/CB TOPOGULF

TOPOGULF STATION N°: 60
CRUISE STATION N°: SUROIT 60
POSITION: N 31 33.68 W 37 47.76
DATE: 83-VIII-22
DEPTH OF WATER: 3640M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.760	36.811	4.51
10.	25.577	36.800	4.66
20.	25.200	36.781	4.74
30.	23.124	36.591	5.16
40.	21.961	36.664	5.46
50.	21.201	36.677	5.46
60.	20.686	36.672	5.53
70.	20.214	36.668	5.54
80.	19.709	36.664	5.52
90.	19.447	36.658	5.48
100.	19.255	36.659	5.41
200.	16.500	36.254	4.77
300.	14.891	36.009	4.67
400.	13.778	35.840	4.65
500.	12.496	35.667	4.42
600.	11.333	35.539	4.34
700.	10.316	35.465	4.17
800.	9.463	35.458	4.16
900.	8.824	35.458	4.24
1000.	8.178	35.458	4.38
1100.	7.563	35.420	4.63
1200.	6.917	35.362	4.87
1300.	6.321	35.306	5.12
1400.	5.835	35.257	5.27
1500.	5.322	35.196	5.44
1600.	5.005	35.165	5.56
1700.	4.691	35.128	5.64
1800.	4.462	35.108	5.66
1900.	4.253	35.085	5.69
2000.	4.043	35.063	5.71
2200.	3.596	35.013	5.84
2400.	3.293	34.986	5.83
2600.	3.098	34.970	5.78
2800.	2.934	34.954	5.78
3000.	2.825	34.945	5.72
3200.	2.728	34.936	5.69
3400.	2.691	34.931	5.69
3600.	2.658	34.927	5.70
3635.	2.652	34.925	5.69

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 61
CRUISE STATION NB: SUROIT 61
POSITION: N 31 55.33 W 38 20.59
DATE: 83-VIII-22
DEPTH OF WATER: 3200M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	25.625	36.852	4.48
10.	25.633	36.850	4.63
20.	25.561	36.839	4.66
30.	24.371	36.762	4.92
40.	22.833	36.691	5.24
50.	21.272	36.690	5.53
60.	20.681	36.703	5.55
70.	20.351	36.693	5.55
80.	19.697	36.691	5.54
90.	19.557	36.684	5.47
100.	19.290	36.675	5.34
200.	17.052	36.369	4.60
300.	15.690	36.142	4.59
400.	14.381	35.936	4.66
500.	12.965	35.724	4.55
600.	11.825	35.584	4.37
700.	10.757	35.481	4.19
800.	9.598	35.391	4.09
900.	8.655	35.349	4.17
1000.	7.768	35.322	4.43
1100.	7.016	35.292	4.74
1200.	6.577	35.287	4.95
1300.	6.005	35.228	5.23
1400.	5.580	35.192	5.40
1500.	5.281	35.170	5.51
1600.	4.881	35.137	5.65
1700.	4.486	35.087	5.77
1800.	4.306	35.071	5.77
1900.	4.104	35.051	5.83
2000.	3.976	35.047	5.82
2200.	3.548	35.001	5.89
2400.	3.265	34.980	5.85
2600.	3.084	34.965	5.81
2800.	2.951	34.954	5.78
3000.	2.818	34.943	5.76
3200.	2.762	34.937	5.74
3214.	2.763	34.937	5.73

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 62
CRUISE STATION NB: SUROIT 62
POSITION: N 32 16.43 W 38 53.03
DATE: 83-VIII-22
DEPTH OF WATER: 3000M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	25.784	36.934	4.47
10.	25.694	36.920	4.63
20.	25.485	36.893	4.68
30.	23.317	36.706	5.06
40.	21.636	36.645	5.45
50.	21.215	36.677	5.49
60.	20.543	36.652	5.61
70.	20.155	36.656	5.64
80.	19.597	36.610	5.55
90.	19.158	36.579	5.34
100.	18.865	36.557	5.19
200.	17.370	36.411	4.48
300.	16.466	36.275	4.66
400.	15.282	36.066	4.67
500.	13.906	35.861	4.72
600.	12.250	35.627	4.41
700.	11.092	35.499	4.16
800.	10.019	35.438	4.14
900.	9.204	35.416	4.17
1000.	8.321	35.388	4.33
1100.	7.322	35.309	4.63
1200.	6.739	35.277	4.86
1300.	6.264	35.255	5.11
1400.	5.585	35.191	5.41
1500.	5.214	35.163	5.54
1600.	5.091	35.161	5.54
1700.	4.565	35.093	5.77
1800.	4.364	35.072	5.80
1900.	4.132	35.049	5.85
2000.	3.942	35.035	5.91
2200.	3.572	35.004	5.90
2400.	3.339	34.984	5.90
2600.	3.106	34.965	5.85
2800.	3.017	34.956	5.94
2979.	2.925	34.949	5.81

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 63
CRUISE STATION NB: SUROIT 63
POSITION: N 32 36.43 W 39 25.41
DATE: 83-VIII-22
DEPTH OF WATER: 2300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.333	36.886	4.52
10.	26.258	36.890	4.62
20.	25.709	36.829	4.57
30.	24.008	36.735	5.00
40.	22.598	36.699	5.34
50.	21.465	36.639	5.60
60.	20.534	36.648	5.58
70.	19.944	36.617	5.52
80.	19.384	36.616	5.41
90.	19.144	36.600	5.29
100.	18.898	36.595	5.23
200.	17.273	36.390	4.63
300.	15.987	36.188	4.57
400.	14.460	35.941	4.60
500.	13.181	35.756	4.54
600.	12.123	35.618	4.33
700.	11.158	35.517	4.30
800.	10.106	35.440	4.15
900.	9.187	35.407	4.14
1000.	8.264	35.363	4.22
1100.	7.894	35.411	4.44
1200.	7.326	35.400	4.70
1300.	6.696	35.352	4.95
1400.	6.129	35.292	5.12
1500.	5.643	35.259	5.28
1600.	5.292	35.184	5.51
1700.	4.849	35.139	5.64
1800.	4.580	35.111	5.71
1900.	4.345	35.083	5.76
2000.	4.041	35.051	5.83
2200.	3.695	35.012	5.89
2400.	3.428	34.985	5.93
2502.	3.389	34.980	5.90

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 64
CRUISE STATION NB: SUROIT 64
POSITION: N 33 .67 W 39 58.61
DATE: 83-VIII-22
DEPTH OF WATER: 2300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.312	36.820	4.30
10.	26.315	36.820	4.43
20.	26.263	36.831	4.48
30.	25.530	36.863	4.71
40.	22.561	36.679	5.31
50.	21.501	36.632	5.61
60.	20.195	36.622	5.73
70.	19.553	36.609	5.54
80.	19.058	36.599	5.28
90.	18.772	36.564	5.19
100.	18.446	36.535	5.01
200.	17.059	36.358	4.67
300.	16.170	36.221	4.62
400.	14.786	35.988	4.64
500.	13.154	35.751	4.56
600.	11.872	35.589	4.39
700.	10.625	35.468	4.06
800.	9.522	35.367	3.90
900.	8.290	35.272	3.97
1000.	7.551	35.247	4.15
1100.	7.307	35.322	4.54
1200.	6.630	35.279	4.91
1300.	5.936	35.203	5.26
1400.	5.218	35.118	5.61
1500.	4.858	35.080	5.73
1600.	4.540	35.046	5.87
1700.	4.378	35.047	5.91
1800.	4.189	35.032	5.92
1900.	4.211	35.046	5.86
2000.	4.036	35.031	5.87
2200.	3.723	35.007	5.92
2363.	3.546	34.993	5.92

IFREMER/CB TOPOGULF

TOPOGULF STATION NO: 65
CRUISE STATION NB: SUROIT 65
POSITION: N 33 23.05 W 40 32.09
DATE: 83-VIII-23
DEPTH OF WATER: 3270M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.030	36.593	4.53
10.	26.032	36.594	4.55
20.	25.766	36.540	4.59
30.	23.400	36.413	5.24
40.	21.851	36.398	5.66
50.	20.852	36.352	5.82
60.	20.374	36.420	5.84
70.	19.214	36.460	5.84
80.	18.369	36.436	5.45
90.	18.205	36.456	5.27
100.	18.016	36.434	4.90
200.	17.109	36.357	4.87
300.	16.015	36.148	4.91
400.	14.572	35.593	4.63
500.	13.278	35.768	4.73
600.	11.651	35.534	4.30
700.	10.003	35.365	4.05
800.	8.676	35.295	4.04
900.	7.592	35.262	4.34
1000.	7.333	35.324	4.61
1100.	6.862	35.313	4.86
1200.	6.266	35.266	5.07
1300.	5.761	35.216	5.32
1400.	5.230	35.159	5.46
1500.	4.823	35.116	5.67
1600.	4.532	35.082	5.78
1700.	4.306	35.060	5.85
1800.	4.051	35.035	5.88
1900.	3.914	35.020	5.94
2000.	3.778	35.008	5.95
2200.	3.547	34.996	5.92
2400.	3.374	34.981	5.95
2600.	3.144	34.965	5.95
2800.	2.930	34.949	5.94
3000.	2.644	34.943	5.98
3200.	2.736	34.935	5.99
3364.	2.656	34.928	6.04

IFREMER/CB TOPOGULF

TOPOGULF STATION NO: 66
CRUISE STATION NB: SUROIT 66
POSITION: N 33 43.28 W 41 5.43
DATE: 83-VIII-23
DEPTH OF WATER: 3530M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	26.257	36.506	4.49
10.	26.221	36.504	4.57
20.	26.197	36.506	4.52
30.	25.518	36.386	4.65
40.	23.650	36.288	5.14
50.	21.860	36.318	5.57
60.	20.535	36.302	5.85
70.	18.550	36.281	5.97
80.	18.064	36.272	5.85
90.	17.577	36.259	5.69
100.	17.416	36.266	5.51
200.	15.955	36.165	4.87
300.	14.734	35.978	4.69
400.	13.319	35.757	4.54
500.	11.967	35.565	4.28
600.	10.594	35.405	4.03
700.	9.311	35.321	4.07
800.	7.955	35.242	4.27
900.	7.644	35.357	4.52
1000.	6.792	35.260	4.87
1100.	6.179	35.223	5.14
1200.	5.645	35.177	5.37
1300.	5.355	35.166	5.47
1400.	5.044	35.134	5.62
1500.	4.652	35.086	5.76
1600.	4.480	35.075	5.80
1700.	4.186	35.043	5.90
1800.	3.956	35.018	5.94
1900.	3.821	35.009	5.99
2000.	3.714	35.004	5.96
2200.	3.495	34.987	5.96
2400.	3.300	34.973	6.00
2600.	3.098	34.959	6.01
2800.	2.914	34.948	6.00
3000.	2.730	34.935	6.03
3200.	2.596	34.926	6.03
3400.	2.539	34.922	6.06
3562.	2.467	34.915	6.07

IFREMER/CB TOPOGULF

TOPOGULF STATION N°: 67
CRUISE STATION N°: SURUIT 67
POSITION: N 34 6.83 W 41 43.30
DATE: 83-VIII-23
DEPTH OF WATER: 3900M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	26.108	36.486	4.49
10.	26.102	36.485	4.58
20.	25.936	36.485	4.51
30.	23.069	36.375	5.38
40.	21.528	36.387	5.69
50.	19.934	36.370	5.91
60.	19.081	36.434	5.53
70.	18.523	36.426	5.40
80.	18.304	36.432	5.27
90.	17.974	36.440	4.99
100.	17.878	36.443	4.85
200.	17.245	36.391	4.77
300.	16.291	36.215	4.72
400.	14.744	35.967	4.51
500.	13.411	35.767	4.35
600.	12.074	35.586	4.28
700.	10.544	35.426	4.20
800.	9.638	35.388	4.17
900.	8.751	35.412	4.31
1000.	7.756	35.350	4.54
1100.	7.193	35.355	4.79
1200.	6.399	35.264	5.05
1300.	5.666	35.175	5.38
1400.	5.294	35.148	5.51
1500.	5.073	35.129	5.62
1600.	4.782	35.103	5.69
1700.	4.521	35.075	5.77
1800.	4.241	35.046	5.86
1900.	3.974	35.019	5.94
2000.	3.831	35.008	5.95
2200.	3.614	34.996	5.91
2400.	3.388	34.982	5.94
2600.	3.206	34.968	5.98
2800.	3.057	34.958	5.95
3000.	2.904	34.946	5.99
3200.	2.737	34.936	6.00
3400.	2.602	34.926	6.00
3600.	2.468	34.917	6.05
3800.	2.386	34.909	6.06
3938.	2.352	34.906	6.09

IFREMER/CB TOPOGULF

TOPOGULF STATION N°: 68
CRUISE STATION N°: SURUIT 68
POSITION: N 34 32.92 W 42 21.12
DATE: 83-VIII-24
DEPTH OF WATER: 4220M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	25.921	36.510	4.42
10.	25.922	36.510	4.42
20.	25.758	36.493	4.61
30.	23.130	36.352	5.44
40.	21.801	36.371	5.69
50.	21.442	36.366	5.81
60.	20.315	36.405	5.94
70.	19.186	36.414	5.92
80.	18.468	36.444	5.54
90.	18.135	36.454	5.16
100.	17.988	36.449	4.93
200.	17.318	36.397	4.72
300.	16.992	36.351	4.74
400.	15.661	36.099	4.58
500.	14.102	35.885	4.61
600.	12.963	35.715	4.54
700.	11.529	35.539	4.42
800.	10.144	35.400	4.17
900.	9.322	35.401	4.20
1000.	7.357	35.159	4.32
1100.	7.090	35.259	4.65
1200.	6.228	35.189	5.06
1300.	6.025	35.222	5.22
1400.	5.615	35.187	5.30
1500.	5.310	35.163	5.49
1600.	4.945	35.129	5.61
1700.	4.713	35.105	5.69
1800.	4.462	35.082	5.76
1900.	4.249	35.059	5.82
2000.	4.043	35.040	5.86
2200.	3.597	34.984	6.05
2400.	3.427	34.976	6.03
2600.	3.277	34.970	6.00
2800.	3.134	34.964	5.97
3000.	2.941	34.949	5.97
3200.	2.804	34.940	6.00
3400.	2.649	34.929	6.00
3600.	2.546	34.921	6.03
3800.	2.442	34.913	6.07
4000.	2.351	34.905	6.13
4057.	2.315	34.903	6.14

IFREMER/Cb TOPOGULF

TOPOGULF STATION NB: 69
CRUISE STATION NB: SUROIT 69
POSITION: N 35 .37 W 43 .08
DATE: 83-VIII-24
DEPTH OF WATER: 4275M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	25.674	36.058	4.38
10.	25.474	35.990	4.62
20.	25.248	36.016	4.58
30.	25.093	36.180	4.64
50.	20.256	36.192	5.95
60.	18.695	36.292	5.99
70.	17.829	36.271	6.10
80.	17.506	36.269	5.76
90.	17.199	36.266	5.53
100.	17.007	36.276	5.23
200.	16.164	36.195	4.67
300.	15.102	36.020	4.68
400.	14.076	35.870	4.54
500.	12.536	35.616	3.69
600.	10.907	35.429	3.98
700.	9.044	35.209	3.76
800.	7.243	35.085	4.11
900.	7.554	35.314	4.41
1000.	6.112	35.135	5.04
1100.	6.047	35.200	5.17
1200.	5.826	35.206	5.16
1300.	4.021	35.053	5.72
1400.	4.425	35.006	5.95
1500.	4.276	34.989	6.00
1600.	4.077	34.980	6.06
1700.	4.029	34.993	6.07
1800.	3.930	34.979	6.05
1900.	3.825	34.975	6.08
2000.	3.766	34.977	6.05
2200.	3.610	34.976	6.07
2400.	3.409	34.968	6.07
2600.	3.234	34.961	6.04
2800.	3.051	34.955	6.03
3000.	2.890	34.945	6.07
3200.	2.756	34.937	6.07
3400.	2.595	34.925	6.13
3600.	2.451	34.915	6.16
3800.	2.345	34.907	6.12
4000.	2.288	34.901	6.13
4090.	2.271	34.900	6.12

IFREMER/Cb TOPOGULF

TOPOGULF STATION NB: 70
CRUISE STATION NB: SUROIT 70
POSITION: N 34 54.21 W 41 49.40
DATE: 83-VIII-24
DEPTH OF WATER: 3800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.137	36.506	4.53
10.	25.827	36.470	4.66
20.	25.265	36.428	4.73
30.	21.679	36.340	5.73
40.	20.573	36.407	5.95
50.	19.442	36.446	5.96
60.	18.738	36.447	5.71
70.	18.402	36.444	5.41
80.	18.123	36.450	5.16
90.	17.960	36.447	4.84
100.	17.848	36.446	4.83
200.	17.303	36.394	4.82
300.	16.765	36.303	4.77
400.	15.556	36.091	4.70
500.	14.144	35.889	4.67
600.	12.920	35.715	4.55
700.	11.689	35.561	4.64
800.	10.643	35.471	4.42
900.	9.645	35.422	4.29
1000.	8.776	35.407	4.32
1100.	7.420	35.268	4.54
1200.	6.827	35.282	4.91
1300.	6.174	35.233	5.14
1400.	5.030	35.077	5.62
1500.	4.710	35.045	5.77
1600.	4.393	35.011	5.95
1700.	4.180	34.991	6.04
1800.	4.059	34.984	6.07
1900.	4.109	35.010	5.98
2000.	3.961	35.000	6.04
2200.	3.757	34.993	6.01
2400.	3.555	34.985	6.02
2600.	3.366	34.973	6.02
2800.	3.237	34.971	5.94
3000.	3.059	34.957	5.98
3200.	2.910	34.946	5.99
3400.	2.731	34.934	6.03
3600.	2.616	34.926	6.07
3800.	2.429	34.912	6.07
3814.	2.418	34.912	6.07

IFREMER/C8 TOPOGULF

TOPOGULF STATION NB: 71
CRUISE STATION NB: SURDIT 71
POSITION: N 35 18.43 W 41 17.19
DATE: 83-VIII-24
DEPTH OF WATER: 3840M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	26.167	36.325	4.46
10.	25.984	36.474	4.61
20.	22.475	36.340	5.45
30.	21.425	36.369	5.65
40.	20.683	36.373	5.69
50.	19.600	36.422	5.51
60.	18.754	36.419	5.58
70.	18.474	36.447	5.35
80.	18.179	36.446	5.14
90.	18.032	36.452	4.86
100.	17.937	36.452	4.85
200.	17.416	36.404	4.81
300.	16.924	36.337	4.76
400.	15.482	36.073	4.44
500.	14.095	35.872	4.42
600.	12.577	35.638	4.03
700.	10.724	35.392	3.70
800.	8.933	35.187	3.67
900.	8.083	35.260	4.24
1000.	7.658	35.376	4.52
1100.	6.729	35.241	4.82
1200.	6.431	35.275	5.07
1300.	5.457	35.140	5.44
1400.	5.494	35.185	5.39
1500.	5.204	35.155	5.54
1600.	4.875	35.117	5.61
1700.	4.534	35.079	5.75
1800.	4.447	35.082	5.71
1900.	4.169	35.049	5.85
2000.	3.959	35.028	5.90
2200.	3.729	35.013	5.88
2400.	3.510	34.994	5.91
2600.	3.300	34.975	5.91
2800.	3.130	34.962	5.95
3000.	2.982	34.952	5.97
3200.	2.839	34.941	5.97
3400.	2.696	34.932	6.04
3600.	2.546	34.921	6.09
3800.	2.446	34.913	6.10
3853.	2.429	34.912	6.10

IFREMER/C8 TOPOGULF

TOPOGULF STATION NB: 72
CRUISE STATION NB: SURDIT 72
POSITION: N 35 41.85 W 40 45.53
DATE: 83-VIII-25
DEPTH OF WATER: 3870M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	26.333	36.394	4.33
10.	25.782	36.368	4.54
20.	25.561	36.374	4.53
30.	23.693	36.172	4.94
40.	21.326	36.233	5.78
50.	20.091	36.227	6.07
60.	19.096	36.209	6.11
70.	18.089	36.169	5.99
80.	17.511	36.162	5.73
90.	17.228	36.158	5.53
100.	17.045	36.179	5.32
200.	15.874	36.115	4.60
300.	13.725	35.785	4.43
400.	12.598	35.645	4.13
500.	10.755	35.399	3.86
600.	9.151	35.245	3.84
700.	8.041	35.193	4.13
800.	7.349	35.221	4.46
900.	7.290	35.332	4.71
1000.	6.768	35.291	4.87
1100.	6.180	35.242	5.09
1200.	5.777	35.202	5.29
1300.	5.466	35.176	5.41
1400.	4.973	35.117	5.64
1500.	4.552	35.060	5.79
1600.	4.309	35.032	5.94
1700.	4.245	35.034	5.88
1800.	4.147	35.034	5.89
1900.	3.961	35.018	5.95
2000.	3.751	34.996	5.95
2200.	3.530	34.980	6.02
2400.	3.313	34.969	6.03
2600.	3.154	34.961	6.04
2800.	2.998	34.952	6.07
3000.	2.876	34.945	6.05
3200.	2.694	34.933	6.06
3400.	2.542	34.923	6.09
3600.	2.436	34.914	6.08
3800.	2.360	34.909	6.10
3907.	2.338	34.907	6.12

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 73
CRUISE STATION NB: SUROIT 73
POSITION: N 36 5.55 W 40 14.94
DATE: 83-VIII-25
DEPTH OF WATER: 4170M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
6.	26.108	36.459	4.44
10.	25.644	36.449	4.56
20.	24.858	36.380	4.81
30.	21.801	36.272	5.69
40.	20.775	36.275	5.95
50.	19.765	36.318	6.01
60.	18.539	36.238	6.05
70.	17.700	36.296	5.85
80.	17.415	36.312	5.53
90.	17.234	36.323	5.23
100.	17.158	36.329	5.00
200.	16.011	36.167	4.98
300.	14.874	35.985	4.58
400.	13.568	35.796	4.52
500.	12.066	35.580	4.19
600.	10.046	35.323	3.86
700.	8.550	35.226	3.95
800.	7.603	35.228	4.38
900.	7.034	35.238	4.66
1000.	6.845	35.311	4.89
1100.	6.243	35.251	5.12
1200.	5.672	35.188	5.41
1300.	5.255	35.136	5.56
1400.	4.911	35.114	5.76
1500.	4.607	35.070	5.81
1600.	4.436	35.052	5.85
1700.	4.199	35.025	5.96
1800.	4.078	35.018	5.96
1900.	3.920	35.004	5.99
2000.	3.764	34.990	6.02
2200.	3.565	34.983	6.03
2400.	3.357	34.969	6.06
2600.	3.161	34.959	6.07
2800.	2.986	34.950	6.05
3000.	2.837	34.942	6.04
3200.	2.674	34.931	6.06
3400.	2.545	34.922	6.09
3600.	2.430	34.914	6.13
3800.	2.340	34.907	6.14
4000.	2.328	34.905	6.15
4067.	2.327	34.905	6.17

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 74
CRUISE STATION NB: SUROIT 74
POSITION: N 36 29.74 W 39 44.72
DATE: 83-VIII-25
DEPTH OF WATER: 4050M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	27.762	36.536	4.25
10.	26.040	36.461	4.55
20.	25.458	36.467	4.66
30.	22.469	36.303	5.35
40.	20.903	36.253	5.74
50.	20.163	36.259	5.89
60.	19.059	36.249	6.04
70.	18.350	36.308	5.99
80.	17.996	36.331	5.64
90.	17.597	36.325	5.40
100.	17.359	36.301	5.34
200.	16.105	36.178	4.72
300.	14.703	35.971	4.83
400.	13.448	35.797	4.84
500.	12.188	35.626	4.60
600.	11.061	35.502	4.49
700.	10.065	35.443	4.33
800.	9.234	35.428	4.28
900.	8.261	35.391	4.48
1000.	7.680	35.374	4.66
1100.	7.075	35.340	4.87
1200.	6.530	35.291	5.10
1300.	5.970	35.230	5.27
1400.	5.359	35.153	5.50
1500.	5.002	35.114	5.66
1600.	4.789	35.100	5.72
1700.	4.323	35.032	5.93
1800.	4.207	35.031	5.96
1900.	4.057	35.020	5.98
2000.	3.933	35.013	6.02
2700.	3.741	35.005	5.95
2400.	3.457	34.978	6.03
2600.	3.266	34.967	6.05
2800.	3.102	34.958	6.02
3000.	2.933	34.947	6.02
3200.	2.779	34.938	6.04
3400.	2.648	34.929	6.08
3600.	2.523	34.919	6.08
3800.	2.454	34.914	6.14
4000.	2.368	34.908	6.13
4058.	2.332	34.905	6.16

IFREMER/CS TOPOGULF

TOPOGULF STATION NB: 75
CRUISE STATION NB: SUROIT 75
POSITION: N 36 52.84 W 39 11.88
DATE: 83-VIII-26
DEPTH OF WATER: 3990M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.600	36.480	4.37
10.	25.354	36.464	4.70
20.	24.957	36.468	4.72
30.	22.659	36.462	5.21
40.	20.413	36.319	5.80
50.	19.411	36.235	5.97
60.	18.836	36.347	5.92
70.	18.383	36.336	5.82
80.	17.948	36.304	5.70
90.	17.135	36.239	5.58
100.	16.714	36.212	5.36
200.	15.679	36.122	5.15
300.	14.651	35.968	5.00
400.	13.701	35.832	4.91
500.	12.291	35.618	4.33
600.	10.908	35.451	4.19
700.	10.162	35.443	4.31
800.	9.414	35.443	4.29
900.	8.690	35.426	4.34
1000.	8.010	35.393	4.53
1100.	7.302	35.337	4.79
1200.	6.937	35.333	4.97
1300.	6.301	35.262	5.16
1400.	5.688	35.185	5.44
1500.	5.300	35.150	5.57
1600.	5.019	35.128	5.66
1700.	4.669	35.085	5.79
1800.	4.576	35.090	5.75
1900.	4.171	35.029	5.94
2000.	3.811	35.008	5.97
2400.	3.514	34.981	6.04
2600.	3.310	34.970	6.06
2800.	3.166	34.961	6.03
3000.	2.981	34.949	6.08
3200.	2.809	34.939	6.06
3400.	2.702	34.932	6.07
3600.	2.569	34.923	6.10
3800.	2.482	34.917	6.11
3999.	2.345	34.907	6.14

IFREMER/CS TOPOGULF

TOPOGULF STATION NB: 76
CRUISE STATION NB: SUROIT 76
POSITION: N 37 16.02 W 38 40.69
DATE: 83-VIII-26
DEPTH OF WATER: 3800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	25.142	36.392	4.37
10.	24.732	36.367	4.72
20.	24.075	36.295	4.83
30.	21.005	36.268	5.73
40.	20.247	36.256	5.82
50.	19.233	36.270	5.95
60.	18.482	36.266	5.94
70.	17.430	36.226	5.93
80.	17.063	36.240	5.61
90.	16.700	36.196	5.52
100.	16.420	36.189	5.35
200.	15.268	36.063	4.96
300.	14.190	35.896	4.91
400.	13.134	35.738	4.69
500.	12.287	35.621	4.50
600.	11.026	35.449	4.21
700.	10.056	35.376	4.22
800.	8.370	35.298	4.09
900.	7.258	35.149	4.47
1000.	7.212	35.287	4.70
1100.	6.596	35.253	4.91
1200.	6.089	35.218	5.21
1300.	5.314	35.124	5.57
1400.	4.642	35.059	5.74
1500.	4.443	35.009	5.86
1600.	4.269	34.998	6.01
1700.	4.032	34.972	6.12
1800.	3.955	34.973	6.13
1900.	3.843	34.968	6.16
2000.	3.717	34.958	6.19
2200.	3.563	34.962	6.14
2400.	3.456	34.973	6.08
2600.	3.253	34.962	6.10
2800.	3.080	34.954	6.09
3000.	2.898	34.944	6.08
3200.	2.746	34.936	6.10
3400.	2.610	34.927	6.08
3600.	2.524	34.920	6.11
3800.	2.424	34.913	6.13
3804.	2.424	34.913	6.13

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 77
CRUISE STATION NB: SUROIT 77
POSITION: N 37 40.20 W 38 8.93
DATE: 83-VIII-26
DEPTH OF WATER: 3810M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
6.	25.236	36.375	4.64
10.	25.184	36.370	4.72
20.	24.731	36.363	4.85
30.	23.971	36.321	4.97
40.	20.640	36.280	5.92
50.	18.938	36.283	6.14
60.	18.029	36.283	5.99
70.	17.577	36.327	5.66
80.	17.278	36.335	5.29
90.	17.148	36.343	5.02
100.	17.014	36.326	4.91
200.	15.712	36.128	4.95
300.	14.507	35.937	4.67
400.	13.592	35.814	4.85
500.	12.559	35.669	4.71
600.	11.270	35.491	4.41
700.	10.152	35.375	4.21
800.	8.552	35.230	4.17
900.	7.073	35.109	4.52
1000.	6.607	35.167	4.87
1100.	6.079	35.163	5.19
1200.	6.236	35.254	5.20
1300.	5.511	35.159	5.54
1400.	5.206	35.131	5.62
1500.	4.791	35.075	5.78
1600.	4.489	35.043	5.93
1700.	4.079	34.984	6.06
1800.	3.942	34.972	6.14
1900.	3.897	34.983	6.14
2000.	3.778	34.975	6.12
2200.	3.619	34.977	6.10
2400.	3.413	34.970	6.11
2600.	3.208	34.959	6.10
2800.	3.030	34.948	6.15
3000.	2.882	34.943	6.13
3200.	2.707	34.932	6.16
3400.	2.529	34.922	6.14
3600.	2.415	34.914	6.16
3775.	2.349	34.909	6.16

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 78
CRUISE STATION NB: SUROIT 78
POSITION: N 38 2.68 W 37 37.66
DATE: 83-VIII-26
DEPTH OF WATER: 3910M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	25.883	36.451	4.62
10.	24.990	36.428	4.79
20.	24.638	36.427	4.87
30.	22.887	36.329	5.16
40.	20.960	36.257	5.85
50.	19.852	36.248	6.01
60.	18.827	36.257	6.07
70.	17.680	36.251	5.91
80.	17.211	36.242	5.68
90.	16.937	36.254	5.44
100.	16.861	36.270	5.16
200.	15.647	36.116	5.07
300.	14.680	35.969	4.98
400.	13.665	35.875	4.74
500.	12.584	35.670	4.59
600.	10.980	35.452	4.07
700.	10.186	35.437	4.30
800.	9.272	35.394	4.26
900.	8.701	35.412	4.35
1000.	7.694	35.350	4.59
1100.	7.304	35.355	4.82
1200.	6.530	35.276	5.12
1300.	5.978	35.215	5.30
1400.	5.531	35.167	5.49
1500.	4.832	35.064	5.79
1600.	4.223	34.982	6.07
1700.	4.050	34.966	6.11
1800.	3.994	34.972	6.12
1900.	3.949	34.979	6.13
2000.	3.854	34.975	6.13
2200.	3.665	34.971	6.17
2400.	3.476	34.965	6.15
2600.	3.267	34.957	6.14
2800.	3.107	34.952	6.11
3000.	2.958	34.945	6.11
3200.	2.806	34.937	6.10
3400.	2.623	34.925	6.16
3600.	2.490	34.916	6.15
3800.	2.383	34.910	6.14
3929.	2.348	34.907	6.16

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 79
CRUISE STATION NB: SUROIT 79
POSITION: N 38 26.60 W 37 5.30
DATE: 83-VIII-27
DEPTH OF WATER: 4640M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	25.524	36.329	4.50
10.	25.072	36.298	4.71
20.	24.398	36.272	4.73
30.	22.185	36.208	5.13
40.	19.267	36.200	6.11
50.	18.050	36.297	5.96
60.	17.630	36.312	5.58
70.	17.314	36.327	5.29
80.	17.204	36.338	4.99
90.	17.118	36.339	4.94
100.	17.001	36.330	4.91
200.	15.544	36.092	4.92
300.	14.408	35.935	5.11
400.	13.548	35.815	4.83
500.	12.644	35.690	4.65
600.	11.383	35.500	4.34
700.	10.335	35.404	4.22
800.	9.316	35.365	4.15
900.	8.034	35.294	4.43
1000.	7.595	35.326	4.58
1100.	6.786	35.273	4.90
1200.	6.098	35.203	5.23
1300.	5.588	35.149	5.42
1400.	5.163	35.102	5.57
1500.	4.847	35.076	5.74
1600.	4.378	35.009	5.97
1700.	4.086	34.971	6.08
1800.	3.949	34.961	6.14
1900.	3.884	34.964	6.14
2000.	3.756	34.952	6.16
2200.	3.641	34.958	6.18
2400.	3.499	34.961	6.17
2600.	3.293	34.955	6.19
2800.	3.073	34.948	6.20
3000.	2.908	34.941	6.19
3200.	2.755	34.934	6.17
3400.	2.637	34.927	6.15
3600.	2.536	34.921	6.14
3800.	2.433	34.914	6.18
4000.	2.371	34.909	6.19
4091.	2.356	34.908	6.19

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 80
CRUISE STATION NB: SUROIT 80
POSITION: N 38 49.79 W 36 34.23
DATE: 83-VIII-27
DEPTH OF WATER: 4230M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	24.600	36.269	4.60
10.	24.601	36.275	4.72
20.	24.414	36.260	4.73
30.	23.734	36.232	4.83
40.	20.125	36.206	5.93
50.	18.910	36.355	5.86
60.	17.792	36.280	5.62
70.	17.772	36.440	4.97
80.	17.621	36.418	4.86
90.	16.915	36.252	4.99
100.	16.548	36.193	5.23
200.	15.262	36.054	5.00
300.	14.514	35.961	5.24
400.	13.692	35.819	5.03
500.	12.786	35.708	4.83
600.	11.768	35.578	4.71
700.	10.756	35.469	4.53
800.	9.684	35.386	4.26
900.	8.437	35.314	4.22
1000.	7.473	35.297	4.63
1100.	6.706	35.247	4.96
1200.	5.932	35.169	5.28
1300.	5.439	35.123	5.46
1400.	5.092	35.091	5.65
1500.	4.534	35.019	5.86
1600.	4.357	35.006	5.98
1700.	4.107	34.979	6.10
1800.	3.911	34.957	6.19
1900.	3.815	34.952	6.20
2000.	3.740	34.951	6.18
2200.	3.626	34.957	6.20
2400.	3.461	34.954	6.20
2600.	3.278	34.955	6.17
2800.	3.115	34.948	6.16
3000.	2.936	34.941	6.20
3200.	2.762	34.935	6.18
3400.	2.630	34.928	6.17
3600.	2.495	34.919	6.17
3800.	2.419	34.914	6.16
4000.	2.385	34.910	6.20
4090.	2.364	34.909	6.19

IFREMER/CS TOPOGULF

TOPOGULF STATION Nº: 81
CRUISE STATION Nº: SUROIT 81
POSITION: N 39 12.64 W 36 2.49
DATE: 83-VIII-27
DEPTH OF WATER: 4220M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
6.	24.718	36.306	4.69
10.	24.664	36.307	4.77
20.	24.580	36.309	4.79
30.	24.431	36.347	4.85
40.	22.667	36.180	5.19
50.	19.502	36.192	6.05
60.	18.346	36.226	6.01
70.	17.571	36.274	5.77
80.	17.138	36.246	5.60
90.	16.820	36.228	5.31
100.	16.699	36.219	5.18
200.	15.161	36.029	4.96
300.	14.455	35.943	5.13
400.	13.593	35.793	4.84
500.	12.565	35.649	4.67
600.	11.044	35.436	4.25
700.	9.864	35.332	4.04
800.	8.202	35.162	4.29
900.	7.324	35.186	4.52
1000.	6.968	35.248	4.73
1100.	6.650	35.271	5.02
1200.	6.167	35.227	5.15
1300.	5.408	35.123	5.51
1400.	4.968	35.072	5.67
1500.	4.638	35.038	5.84
1600.	4.438	35.021	5.93
1700.	4.173	34.991	6.04
1800.	4.035	34.980	6.10
1900.	3.926	34.972	6.13
2000.	3.788	34.963	6.17
2200.	3.645	34.965	6.14
2400.	3.459	34.958	6.15
2600.	3.278	34.954	6.17
2800.	3.091	34.949	6.17
3000.	2.936	34.943	6.18
3200.	2.790	34.937	6.19
3400.	2.642	34.928	6.17
3600.	2.500	34.920	6.20
3800.	2.420	34.914	6.19
4000.	2.375	34.911	6.19
4066.	2.358	34.909	6.16

IFREMER/CS TOPOGULF

TOPOGULF STATION Nº: 82
CRUISE STATION Nº: SUROIT 82
POSITION: N 39 36.96 W 35 30.65
DATE: 83-VIII-27
DEPTH OF WATER: 4020M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	24.232	36.271	4.63
10.	24.239	36.271	4.80
20.	24.217	36.269	4.84
30.	20.973	36.146	5.44
40.	19.697	36.186	6.09
50.	18.355	36.171	6.18
60.	17.321	36.169	6.01
70.	16.751	36.217	5.65
80.	16.514	36.220	5.20
90.	16.191	36.178	5.08
100.	16.066	36.165	5.05
200.	14.949	36.008	5.02
300.	14.314	35.925	5.23
400.	13.371	35.771	5.01
500.	12.337	35.628	4.69
600.	10.758	35.423	4.26
700.	9.471	35.280	4.08
800.	8.104	35.192	4.22
900.	7.158	35.176	4.51
1000.	6.418	35.156	4.94
1100.	6.387	35.229	5.05
1200.	5.659	35.154	5.38
1300.	5.132	35.088	5.64
1400.	4.645	35.027	5.84
1500.	4.372	35.000	5.97
1600.	4.193	34.983	6.04
1700.	4.086	34.981	6.06
1800.	3.956	34.969	6.12
1900.	3.852	34.962	6.13
2000.	3.784	34.963	6.14
2200.	3.650	34.964	6.14
2400.	3.426	34.955	6.16
2600.	3.267	34.956	6.12
2800.	3.072	34.948	6.15
3000.	2.914	34.942	6.14
3200.	2.752	34.935	6.19
3400.	2.608	34.927	6.18
3600.	2.489	34.920	6.20
3800.	2.405	34.914	6.17
4000.	2.368	34.910	6.19
4051.	2.364	34.909	6.16

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 83
CRUISE STATION NB: SUROIT 83
POSITION: N 40 .31 W 34 59.10
DATE: 83-VIII-28
DEPTH OF WATER: 426 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	23.800	36.320	4.73
10.	23.802	36.320	4.83
20.	23.806	36.320	4.85
30.	23.807	36.320	4.84
40.	21.563	36.211	5.48
50.	19.238	36.198	6.10
60.	18.036	36.188	6.08
70.	17.266	36.209	5.84
80.	16.585	36.156	5.53
90.	16.114	36.127	5.40
100.	15.813	36.100	5.26
200.	14.504	35.942	5.03
300.	13.718	35.827	4.86
400.	12.808	35.696	4.97
500.	12.072	35.615	4.73
600.	10.981	35.480	4.55
700.	10.160	35.443	4.49
800.	9.580	35.455	4.33
900.	8.853	35.453	4.38
1000.	7.941	35.380	4.64
1100.	6.630	35.227	4.96
1200.	6.091	35.192	5.23
1300.	5.438	35.117	5.48
1400.	5.142	35.096	5.63
1500.	4.916	35.084	5.71
1600.	4.639	35.051	5.85
1700.	4.357	35.017	5.97
1800.	4.162	34.997	6.05
1900.	3.942	34.971	6.12
2000.	3.829	34.963	6.13
2200.	3.636	34.952	6.21
2400.	3.498	34.956	6.17
2600.	3.317	34.954	6.19
2800.	3.118	34.946	6.22
3000.	2.934	34.941	6.22
3200.	2.793	34.937	6.22
3400.	2.620	34.926	6.20
3600.	2.502	34.920	6.18
3800.	2.420	34.914	6.20
4000.	2.392	34.911	6.18
4093.	2.363	34.909	6.18

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 84
CRUISE STATION NB: SUROIT 84
POSITION: N 39 40.95 W 34 22.05
DATE: 83-VIII-28
DEPTH OF WATER: 376 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.630	36.357	4.66
10.	23.633	36.356	4.82
20.	23.626	36.355	4.73
30.	23.520	36.339	4.73
40.	19.827	36.159	5.70
50.	18.262	36.158	6.05
60.	17.421	36.176	5.93
70.	17.092	36.201	5.79
80.	16.763	36.211	5.61
90.	16.378	36.200	5.27
100.	16.131	36.178	5.12
200.	14.755	35.981	5.00
300.	14.044	35.881	5.07
400.	13.196	35.756	4.88
500.	12.171	35.620	4.95
600.	11.253	35.518	4.69
700.	10.289	35.440	4.39
800.	9.440	35.399	4.24
900.	8.249	35.313	4.36
1000.	7.249	35.262	4.65
1100.	6.337	35.184	4.96
1200.	5.923	35.158	5.23
1300.	4.860	35.014	5.76
1400.	5.036	35.086	5.71
1500.	4.490	35.010	5.91
1600.	4.206	34.976	6.08
1700.	4.096	34.972	6.09
1800.	3.937	34.959	6.14
1900.	3.841	34.956	6.15
2000.	3.790	34.955	6.17
2200.	3.620	34.953	6.20
2400.	3.456	34.955	6.18
2600.	3.265	34.950	6.16
2800.	3.104	34.947	6.17
3000.	2.942	34.941	6.20
3200.	2.804	34.936	6.20
3400.	2.671	34.929	6.21
3600.	2.592	34.925	6.19
3800.	2.466	34.916	6.21
3826.	2.426	34.914	6.17

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 85
CRUISE STATION NB: SUROIT 85
POSITION: N 39 22.26 W 33 43.59
DATE: 83-VIII-28
DEPTH OF WATER: 3420M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.498	36.297	4.90
10.	23.446	36.296	4.91
20.	23.295	36.298	4.91
30.	23.214	36.266	4.94
40.	20.351	36.096	5.65
50.	18.741	36.086	5.99
60.	17.840	36.092	6.03
70.	16.950	36.020	6.04
80.	15.957	36.005	5.92
90.	15.598	36.060	5.59
100.	15.582	36.085	5.24
200.	14.469	35.942	5.04
300.	13.933	35.868	5.13
400.	13.113	35.747	5.00
500.	12.415	35.649	5.00
600.	11.210	35.485	4.58
700.	10.297	35.387	4.36
800.	9.096	35.292	4.26
900.	8.102	35.251	4.36
1000.	6.972	35.185	4.75
1100.	6.233	35.152	5.12
1200.	5.665	35.127	5.34
1300.	5.229	35.087	5.53
1400.	4.851	35.049	5.74
1500.	4.510	35.016	5.91
1600.	4.317	34.998	5.97
1700.	4.133	34.985	6.00
1800.	3.926	34.965	6.15
1900.	3.844	34.963	6.14
2000.	3.756	34.959	6.14
2200.	3.606	34.957	6.14
2400.	3.390	34.949	6.18
2600.	3.182	34.946	6.18
2800.	3.009	34.942	6.21
3000.	2.656	34.939	6.23
3200.	2.726	34.932	6.18
3400.	2.599	34.926	6.17
3410.	2.593	34.926	6.18

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 86
CRUISE STATION NB: SUROIT 86
POSITION: N 39 4.82 W 33 7.69
DATE: 83-VIII-28
DEPTH OF WATER: 2080M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.801	36.362	4.71
10.	23.807	36.363	4.83
20.	23.782	36.363	4.88
30.	23.727	36.359	4.91
40.	21.247	36.188	5.49
50.	19.444	36.235	5.96
60.	18.057	36.200	6.06
70.	17.249	36.212	5.90
80.	16.942	36.210	5.58
90.	16.633	36.145	5.68
100.	16.292	36.133	5.60
200.	15.009	36.015	5.16
300.	14.103	35.887	5.03
400.	13.150	35.749	4.61
500.	12.080	35.608	4.54
600.	11.198	35.508	4.60
700.	10.264	35.426	4.32
800.	9.428	35.379	4.25
900.	8.754	35.383	4.39
1000.	6.961	35.162	4.46
1100.	6.263	35.165	5.03
1200.	5.737	35.132	5.33
1300.	5.484	35.129	5.47
1400.	5.050	35.080	5.65
1500.	4.740	35.044	5.76
1600.	4.474	35.016	5.89
1700.	4.303	35.004	5.96
1800.	4.015	34.982	6.05
1900.	3.709	34.964	6.11
2000.	3.503	34.957	6.15
2077.	3.491	34.957	6.15

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 87
CRUISE STATION NB: SURDIT 87
POSITION: N 38 44.95 W 32 27.45
DATE: 83-VIII-29
DEPTH OF WATER: 2190M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	23.700	36.433	4.79
10.	23.712	36.432	4.75
20.	23.701	36.427	4.85
30.	23.627	36.424	4.91
40.	21.878	36.234	5.37
50.	19.499	36.196	5.90
60.	18.429	36.170	6.00
70.	17.628	36.182	5.95
80.	16.939	36.175	5.91
90.	16.377	36.161	5.76
100.	16.312	36.163	5.66
200.	15.245	36.061	5.19
300.	14.333	35.926	5.16
400.	13.285	35.775	4.91
500.	12.311	35.646	4.85
600.	11.460	35.549	4.71
700.	10.686	35.434	4.49
800.	9.846	35.432	4.40
900.	8.700	35.317	4.25
1000.	7.170	35.175	4.54
1100.	6.629	35.210	4.89
1200.	5.962	35.164	5.24
1300.	5.394	35.108	5.47
1400.	5.113	35.091	5.62
1500.	4.809	35.057	5.75
1600.	4.579	35.033	5.86
1700.	4.346	35.010	5.94
1800.	4.147	34.989	6.01
1900.	3.958	34.977	6.06
2000.	3.732	34.965	6.12
2167.	3.341	34.957	6.11

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 88
CRUISE STATION NB: SURDIT 88
POSITION: N 38 28.61 W 31 54.57
DATE: 83-VIII-29
DEPTH OF WATER: 1135M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.371	36.378	4.66
10.	23.355	36.381	4.83
20.	23.299	36.381	4.80
30.	22.971	36.294	4.90
40.	20.706	36.192	5.53
50.	19.126	36.180	5.85
60.	18.216	36.165	5.97
70.	17.851	36.112	5.92
80.	17.268	36.163	5.87
90.	17.043	36.152	5.88
100.	16.624	36.135	5.76
200.	15.291	36.055	5.22
300.	14.399	35.931	5.04
400.	13.463	35.790	4.81
500.	12.585	35.680	4.92
600.	11.613	35.551	4.61
700.	10.677	35.475	4.60
800.	9.773	35.424	4.48
900.	8.809	35.362	4.35
1000.	7.880	35.317	4.56
1100.	6.928	35.229	4.85
1122.	6.569	35.207	5.00

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 89
CRUISE STATION NB: SUROIT 89
POSITION: N 37 57.82 W 31 16.89
DATE: 83-VIII-29
DEPTH OF WATER: 2565M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	23.485	36.363	4.75
10.	23.025	36.347	4.92
20.	22.704	36.296	4.97
30.	20.496	36.177	5.49
40.	19.503	36.144	5.83
50.	18.096	36.133	5.95
60.	17.339	36.117	5.85
70.	16.782	36.120	5.82
80.	16.503	36.117	5.74
90.	16.262	36.106	5.60
100.	15.922	36.091	5.43
200.	14.886	35.996	5.16
300.	13.976	35.871	5.07
400.	12.960	35.731	4.89
500.	11.968	35.600	4.73
600.	11.083	35.505	4.62
700.	10.350	35.443	4.48
800.	9.205	35.364	4.36
900.	8.114	35.314	4.56
1000.	7.564	35.292	4.76
1100.	7.107	35.261	4.89
1200.	6.427	35.207	5.12
1300.	5.903	35.166	5.30
1400.	5.545	35.134	5.44
1500.	5.203	35.104	5.56
1600.	5.029	35.090	5.64
1700.	4.849	35.075	5.66
1800.	4.732	35.067	5.72
1900.	4.671	35.061	5.77
2000.	4.646	35.060	5.78
2200.	4.614	35.055	5.79
2400.	4.603	35.052	5.81
2598.	4.569	35.045	5.86

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 90
CRUISE STATION NB: SUROIT 90
POSITION: N 37 49.61 W 30 32.64
DATE: 83-VIII-29
DEPTH OF WATER: 1950M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	23.702	36.307	4.63
10.	22.761	36.256	4.97
20.	22.459	36.269	5.01
30.	21.730	36.235	5.17
40.	21.263	36.182	5.25
50.	19.849	36.127	5.66
60.	18.766	36.081	5.85
70.	17.090	36.061	6.00
80.	16.205	36.034	5.89
90.	15.616	36.038	5.59
100.	15.444	36.051	5.41
200.	14.135	35.888	5.23
300.	13.387	35.790	5.11
400.	12.538	35.680	4.95
500.	11.771	35.574	4.80
600.	10.788	35.468	4.63
700.	9.775	35.399	4.45
800.	9.226	35.421	4.46
900.	8.498	35.419	4.61
1000.	7.257	35.273	4.85
1100.	6.575	35.222	5.10
1200.	5.893	35.165	5.35
1300.	5.397	35.118	5.55
1400.	5.097	35.091	5.61
1500.	4.971	35.078	5.68
1600.	4.815	35.066	5.73
1700.	4.761	35.062	5.75
1800.	4.715	35.059	5.75
1900.	4.684	35.058	5.75
1903.	4.671	35.056	5.78

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 91
CRUISE STATION NB: SUROIT 91
POSITION: N 37 30.25 W 29 55.26
DATE: 83-VIII-30
DEPTH OF WATER: 1555M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.702	36.252	4.62
10.	22.492	36.238	4.98
20.	21.976	36.195	5.06
30.	20.616	36.147	5.37
40.	19.633	36.129	5.71
50.	18.763	36.130	5.85
60.	17.536	36.079	6.04
70.	17.117	36.067	6.01
80.	16.415	36.050	5.96
90.	16.090	36.121	5.67
100.	15.725	36.087	5.45
200.	14.161	35.891	5.04
300.	13.350	35.787	5.09
400.	12.621	35.688	5.02
500.	11.850	35.596	4.85
600.	11.082	35.512	4.73
700.	10.193	35.445	4.59
800.	9.288	35.408	4.48
900.	8.824	35.438	4.49
1000.	8.422	35.483	4.58
1100.	7.692	35.437	4.81
1200.	6.999	35.370	5.00
1300.	6.414	35.298	5.23
1400.	5.804	35.219	5.43
1500.	5.358	35.162	5.58
1562.	5.002	35.119	5.73

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 92
CRUISE STATION NB: SUROIT 92
POSITION: N 37 11.37 W 29 18.39
DATE: 83-VIII-30
DEPTH OF WATER: 2050M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.250	36.235	4.87
10.	22.125	36.228	5.04
20.	21.099	36.115	5.26
30.	19.210	36.086	5.82
40.	17.406	36.060	6.04
50.	16.623	36.074	6.00
60.	16.173	36.064	5.87
70.	15.841	36.061	5.63
80.	15.649	36.055	5.52
90.	15.406	36.040	5.45
100.	15.274	36.032	5.37
200.	14.444	35.938	5.30
300.	13.649	35.829	5.26
400.	12.896	35.725	5.14
500.	12.110	35.625	4.96
600.	11.225	35.525	4.81
700.	10.544	35.475	4.60
800.	9.791	35.443	4.46
900.	9.230	35.443	4.50
1000.	8.535	35.438	4.59
1100.	8.181	35.463	4.68
1200.	7.526	35.421	4.84
1300.	6.774	35.332	5.11
1400.	5.969	35.235	5.40
1500.	5.407	35.161	5.59
1600.	5.011	35.118	5.74
1700.	4.686	35.082	5.86
1800.	4.390	35.047	5.98
1900.	4.216	35.036	6.00
2000.	3.929	35.004	6.04
2057.	3.798	34.995	6.07

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 93
CRUISE STATION NB: SUROIT 93
POSITION: N 36 51.80 W 28 41.00
DATE: 83-VIII-30
DEPTH OF WATER: 3040M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	22.415	36.315	4.58
10.	22.319	36.314	4.93
20.	22.110	36.310	4.97
30.	20.252	36.176	5.43
40.	19.388	36.128	5.67
50.	18.576	36.090	5.88
60.	18.042	36.071	5.93
70.	17.169	36.016	5.96
80.	16.125	35.975	5.99
90.	15.830	35.986	5.77
100.	15.491	35.994	5.62
200.	13.913	35.855	5.24
300.	13.025	35.741	5.14
400.	12.247	35.640	5.02
500.	11.379	35.541	4.81
600.	10.750	35.487	4.66
700.	10.044	35.449	4.55
800.	9.687	35.516	4.41
900.	8.969	35.531	4.47
1000.	8.362	35.498	4.57
1100.	7.980	35.511	4.69
1200.	6.865	35.371	5.09
1300.	6.311	35.296	5.26
1400.	5.562	35.184	5.52
1500.	5.154	35.130	5.69
1600.	4.798	35.087	5.84
1700.	4.502	35.053	5.93
1800.	4.238	35.027	6.06
1900.	4.048	35.011	6.06
2000.	3.746	34.977	6.15
2200.	3.577	34.974	6.08
2400.	3.397	34.966	6.10
2600.	3.252	34.962	6.05
2800.	3.066	34.956	5.97
3000.	2.902	34.947	5.98
3047.	2.879	34.946	5.97

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 94
CRUISE STATION NB: SUROIT 94
POSITION: N 36 33.27 W 28 5.65
DATE: 83-VIII-30
DEPTH OF WATER: 3130M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.039	36.588	4.83
10.	22.638	36.563	4.95
20.	22.520	36.579	5.03
30.	22.432	36.568	5.05
40.	22.215	36.484	5.08
50.	20.482	36.349	5.59
60.	19.687	36.307	5.76
70.	18.952	36.263	5.82
80.	17.906	36.187	5.91
90.	17.281	36.203	5.91
100.	17.161	36.191	5.72
200.	14.779	35.965	5.05
300.	13.408	35.789	4.92
400.	12.493	35.670	4.83
500.	11.640	35.573	4.79
600.	10.967	35.514	4.72
700.	10.290	35.499	4.40
800.	9.651	35.525	4.33
900.	9.127	35.544	4.37
1000.	8.996	35.635	4.43
1100.	8.320	35.599	4.65
1200.	7.017	35.378	5.06
1300.	6.332	35.304	5.29
1400.	5.181	35.120	5.67
1500.	4.830	35.076	5.81
1600.	4.475	35.036	5.94
1700.	4.155	34.997	6.04
1800.	4.005	34.987	6.12
1900.	3.884	34.981	6.10
2000.	3.680	34.965	6.15
2200.	3.527	34.964	6.14
2400.	3.323	34.962	6.08
2600.	3.177	34.961	6.00
2800.	3.028	34.956	5.95
3000.	2.953	34.951	5.90
3165.	2.869	34.946	5.85

IFREMER/CB TOPOGULF

TOPOGULF STATION NB : 95
CRUISE STATION NB: SUROIT 95
POSITION: N 36 14.90 W 27 27.63
DATE: 83-VIII-30
DEPTH OF WATER: 3400M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.184	36.607	4.61
10.	22.851	36.548	4.91
20.	22.495	36.501	5.04
30.	20.400	36.316	5.50
40.	19.432	36.243	5.84
50.	17.963	36.207	5.95
60.	17.711	36.184	5.92
70.	17.017	36.184	5.80
80.	16.779	36.193	5.64
90.	16.461	36.171	5.56
100.	16.301	36.185	5.25
200.	14.719	35.961	5.04
300.	13.454	35.798	4.92
400.	12.364	35.656	4.80
500.	11.487	35.559	4.76
600.	10.898	35.512	4.64
700.	10.415	35.511	4.44
800.	9.724	35.497	4.38
900.	9.024	35.520	4.43
1000.	8.630	35.546	4.50
1100.	7.814	35.504	4.78
1200.	7.203	35.441	4.98
1300.	6.410	35.338	5.24
1400.	5.437	35.200	5.62
1500.	4.820	35.104	5.80
1600.	4.306	35.032	6.00
1700.	4.191	35.026	6.04
1800.	4.052	35.015	6.08
1900.	3.966	35.018	6.03
2000.	3.881	35.019	6.02
2200.	3.497	34.979	6.06
2400.	3.207	34.959	6.05
2600.	3.088	34.957	5.99
2800.	2.966	34.954	5.90
3000.	2.870	34.949	5.83
3200.	2.795	34.943	5.81
3400.	2.730	34.937	5.76
3418.	2.717	34.936	5.74

IFREMER/CB TOPOGULF

TOPOGULF STATION NB : 96
CRUISE STATION NB: SUROIT 96
POSITION: N 35 56.52 W 26 51.02
DATE: 83-VIII-31
DEPTH OF WATER: 3480M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.948	36.659	4.74
10.	22.950	36.660	4.92
20.	22.907	36.654	4.96
30.	22.885	36.652	4.95
40.	22.708	36.611	5.02
50.	20.400	36.349	5.59
60.	19.192	36.290	5.86
70.	18.138	36.214	5.95
80.	17.332	36.210	5.89
90.	17.161	36.209	5.66
100.	16.905	36.189	5.66
200.	14.874	35.981	5.12
300.	13.354	35.779	4.86
400.	12.182	35.637	4.71
500.	11.411	35.554	4.63
600.	10.705	35.506	4.60
700.	10.218	35.514	4.39
800.	9.671	35.556	4.27
900.	9.169	35.587	4.36
1000.	8.374	35.546	4.58
1100.	7.627	35.474	4.83
1200.	6.957	35.387	5.05
1300.	6.153	35.272	5.33
1400.	5.719	35.229	5.44
1500.	4.894	35.097	5.68
1600.	4.731	35.088	5.84
1700.	4.324	35.037	5.99
1800.	4.143	35.032	6.02
1900.	4.048	35.031	6.02
2000.	3.813	35.009	6.04
2200.	3.518	34.989	6.02
2400.	3.232	34.963	6.05
2600.	3.072	34.958	5.99
2800.	2.952	34.955	5.92
3000.	2.819	34.947	5.82
3200.	2.744	34.940	5.78
3400.	2.712	34.937	5.74
3502.	2.704	34.934	5.75

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 97
CRUISE STATION NB: SUROIT 97
POSITION: N 35 38.92 W 26 15.90
DATE: 83-VIII-31
DEPTH OF WATER: 4050M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	23.004	36.643	4.79
10.	22.982	36.641	4.88
20.	22.905	36.640	4.96
30.	22.791	36.624	5.00
40.	20.736	36.347	5.51
50.	19.228	36.349	5.86
60.	18.462	36.331	5.85
70.	17.797	36.307	5.82
80.	17.617	36.293	5.74
90.	17.360	36.274	5.65
100.	17.004	36.240	5.60
200.	14.548	35.938	5.04
300.	13.453	35.794	4.95
400.	12.341	35.654	4.76
500.	11.570	35.564	4.73
600.	10.798	35.503	4.53
700.	10.235	35.497	4.33
800.	9.738	35.517	4.23
900.	9.419	35.589	4.27
1000.	9.011	35.625	4.40
1100.	8.429	35.589	4.53
1200.	7.957	35.573	4.77
1300.	6.376	35.404	5.06
1400.	6.006	35.289	5.39
1500.	5.299	35.193	5.62
1600.	4.737	35.111	5.82
1700.	4.259	35.047	6.01
1800.	4.110	35.037	5.99
1900.	3.764	34.992	6.09
2000.	3.702	34.996	6.07
2200.	3.363	34.965	6.08
2400.	3.245	34.962	6.06
2600.	3.127	34.961	6.01
2800.	3.004	34.956	5.93
3000.	2.872	34.950	5.85
3200.	2.777	34.943	5.79
3400.	2.711	34.937	5.75
3600.	2.659	34.930	5.73
3800.	2.638	34.925	5.72
4000.	2.610	34.921	5.71
4067.	2.611	34.920	5.72

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 98
CRUISE STATION NB: SUROIT 98
POSITION: N 35 18.22 W 25 37.77
DATE: 83-VIII-31
DEPTH OF WATER: 4130M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	23.028	36.620	5.00
10.	22.998	36.619	5.01
20.	22.698	36.606	5.02
30.	22.645	36.615	5.02
40.	22.242	36.550	5.04
50.	20.188	36.371	5.59
60.	19.170	36.339	5.83
70.	18.484	36.315	5.85
80.	17.803	36.285	5.82
90.	17.409	36.294	5.66
100.	17.136	36.283	5.55
200.	14.848	35.982	4.97
300.	13.530	35.802	4.95
400.	12.487	35.670	4.74
500.	11.517	35.559	4.63
600.	10.709	35.495	4.49
700.	10.190	35.498	4.34
800.	9.774	35.549	4.23
900.	9.262	35.577	4.28
1000.	8.747	35.593	4.43
1100.	8.222	35.570	4.59
1200.	7.446	35.486	4.83
1300.	6.672	35.379	5.14
1400.	5.908	35.270	5.41
1500.	5.309	35.188	5.58
1600.	4.876	35.127	5.79
1700.	4.575	35.092	5.89
1800.	4.264	35.056	5.93
1900.	4.020	35.030	6.00
2000.	3.804	35.008	6.02
2200.	3.438	34.981	6.04
2400.	3.212	34.967	6.03
2600.	3.053	34.960	5.97
2800.	2.930	34.953	5.89
3000.	2.822	34.946	5.82
3200.	2.722	34.938	5.78
3400.	2.659	34.931	5.73
3600.	2.626	34.927	5.71
3800.	2.584	34.921	5.69
4000.	2.529	34.913	5.72
4088.	2.508	34.910	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 99
CRUISE STATION NB: SUROIT 99
POSITION: N 34 59.18 W 24 59.95
DATE: 83- IX -01
DEPTH OF WATER: 4800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	22.874	36.572	4.67
10.	22.880	36.571	4.84
20.	22.835	36.568	4.95
30.	22.729	36.563	4.99
40.	22.666	36.568	4.98
50.	22.615	36.556	5.02
60.	20.560	36.344	5.56
70.	18.771	36.271	5.95
80.	17.961	36.279	5.91
90.	17.196	36.220	5.83
100.	16.752	36.208	5.64
200.	14.459	35.929	5.06
300.	13.337	35.778	4.92
400.	12.381	35.657	4.81
500.	11.677	35.576	4.73
600.	10.907	35.511	4.60
700.	10.300	35.511	4.37
800.	9.916	35.584	4.25
900.	9.447	35.637	4.26
1000.	8.776	35.607	4.41
1100.	8.202	35.582	4.58
1200.	7.597	35.505	4.80
1300.	6.885	35.424	4.98
1400.	5.841	35.254	5.43
1500.	5.205	35.169	5.62
1600.	4.914	35.140	5.76
1700.	4.816	35.141	5.76
1800.	4.403	35.081	5.92
1900.	4.087	35.040	6.00
2000.	3.795	35.012	6.02
2200.	3.513	34.989	6.03
2400.	3.253	34.969	6.03
2600.	3.090	34.961	5.96
2800.	2.964	34.956	5.89
3000.	2.822	34.948	5.77
3200.	2.732	34.940	5.73
3400.	2.669	34.933	5.71
3600.	2.630	34.927	5.73
3800.	2.581	34.921	5.72
4000.	2.533	34.913	5.71
4086.	2.514	34.911	5.71

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 100
CRUISE STATION NB: SUROIT 100
POSITION: N 34 40.92 W 24 23.81
DATE: 83- IX -01
DEPTH OF WATER: 4575M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.620	36.564	4.85
10.	22.627	36.565	4.94
20.	22.486	36.551	5.01
30.	22.311	36.537	5.07
40.	20.057	36.298	5.72
50.	18.571	36.239	6.00
60.	18.098	36.259	5.97
70.	17.524	36.247	5.89
80.	17.209	36.241	5.77
90.	16.949	36.242	5.67
100.	16.690	36.224	5.54
200.	14.442	35.928	5.03
300.	13.328	35.779	5.00
400.	12.446	35.666	4.82
500.	11.504	35.557	4.75
600.	10.893	35.508	4.62
700.	10.481	35.519	4.41
800.	10.320	35.672	4.21
900.	9.316	35.576	4.28
1000.	8.874	35.604	4.41
1100.	8.608	35.630	4.49
1200.	7.789	35.540	4.72
1300.	7.151	35.466	4.95
1400.	6.455	35.370	5.14
1500.	5.757	35.272	5.46
1600.	5.316	35.216	5.55
1700.	4.917	35.164	5.72
1800.	4.567	35.119	5.80
1900.	4.532	35.132	5.69
2000.	4.222	35.092	5.77
2200.	3.767	35.038	5.82
2400.	3.392	34.999	5.84
2600.	3.121	34.972	5.85
2800.	2.969	34.957	5.85
3000.	2.866	34.951	5.79
3200.	2.755	34.942	5.75
3400.	2.684	34.935	5.71
3600.	2.627	34.928	5.69
3800.	2.575	34.921	5.68
4000.	2.513	34.913	5.72
4085.	2.500	34.910	5.69

FREMER/CB TOPOGULF

TOPOGULF STATION NO: 101
CRUISE STATION NB: SUROIT 101
POSITION: N 34 21.89 W 23 46.60
DATE: 83- IX -01
DEPTH OF WATER: 4700M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	22.962	36.651	4.92
10.	22.700	36.639	5.06
20.	22.595	36.633	5.05
30.	22.447	36.639	5.06
40.	20.787	36.386	5.31
50.	18.885	36.344	5.95
60.	18.404	36.325	6.03
70.	17.730	36.309	5.98
80.	17.217	36.283	5.83
90.	16.859	36.260	5.65
100.	16.633	36.253	5.51
200.	14.629	35.954	4.99
300.	13.323	35.775	4.93
400.	12.301	35.647	4.79
500.	11.445	35.553	4.71
600.	10.774	35.506	4.53
700.	10.240	35.509	4.37
800.	9.729	35.555	4.31
900.	9.283	35.601	4.29
1000.	8.969	35.662	4.45
1100.	8.677	35.704	4.53
1200.	7.504	35.526	4.89
1300.	6.639	35.401	5.15
1400.	5.933	35.295	5.40
1500.	5.138	35.173	5.68
1600.	4.766	35.124	5.80
1700.	4.502	35.099	5.87
1800.	4.245	35.069	5.90
1900.	3.954	35.033	5.98
2000.	3.881	35.033	5.91
2200.	3.608	35.021	5.85
2400.	3.315	34.991	5.83
2600.	3.071	34.971	5.79
2800.	2.902	34.958	5.75
3000.	2.784	34.947	5.73
3200.	2.689	34.937	5.69
3400.	2.614	34.929	5.67
3600.	2.561	34.922	5.67
3800.	2.514	34.915	5.68
4000.	2.488	34.910	5.68
4087.	2.477	34.908	5.69

FREMER/CB TOPOGULF

TOPOGULF STATION NO: 102
CRUISE STATION NB: SUROIT 102
POSITION: N 35 33.59 W 24 47.12
DATE: 83- IX -01
DEPTH OF WATER: 4125M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	22.754	36.622	4.75
10.	22.723	36.627	4.92
20.	22.579	36.609	4.90
30.	22.475	36.622	4.92
40.	22.331	36.607	4.94
50.	20.722	36.443	5.37
60.	19.751	36.369	5.72
70.	18.788	36.312	5.84
80.	18.335	36.323	5.82
90.	17.680	36.305	5.70
100.	17.405	36.285	5.62
200.	14.912	35.991	4.95
300.	13.677	35.823	4.86
400.	12.615	35.687	4.81
500.	11.627	35.572	4.73
600.	10.781	35.510	4.56
700.	10.078	35.496	4.33
800.	9.647	35.549	4.25
900.	9.177	35.578	4.29
1000.	8.869	35.627	4.40
1100.	8.229	35.564	4.57
1200.	7.921	35.553	4.68
1300.	7.339	35.491	4.94
1400.	6.319	35.319	5.26
1500.	5.441	35.203	5.55
1600.	4.925	35.128	5.78
1700.	4.572	35.079	5.92
1800.	4.088	35.008	6.06
1900.	3.734	34.970	6.17
2000.	3.599	34.974	6.11
2200.	3.375	34.968	6.09
2400.	3.160	34.961	6.04
2600.	2.993	34.958	5.93
2800.	2.900	34.952	5.86
3000.	2.804	34.946	5.80
3200.	2.724	34.939	5.75
3400.	2.675	34.933	5.72
3600.	2.612	34.926	5.70
3800.	2.573	34.920	5.67
4000.	2.542	34.914	5.70
4085.	2.517	34.911	5.67

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 103
CRUISE STATION NB: SUROIT 103
POSITION: N 36 6.62 W 24 33.09
DATE: 83- IX -02
DEPTH OF WATER: 438 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.356	36.618	4.81
10.	22.343	36.613	4.98
20.	22.109	36.591	5.01
30.	22.070	36.617	5.03
40.	20.173	36.401	5.62
50.	18.776	36.360	5.94
60.	18.193	36.336	6.00
70.	17.734	36.320	5.97
80.	17.345	36.299	5.85
90.	17.162	36.280	5.74
100.	16.910	36.263	5.65
200.	14.930	35.995	5.11
300.	13.513	35.805	4.82
400.	12.425	35.664	4.69
500.	11.669	35.576	4.60
600.	10.869	35.510	4.74
700.	10.479	35.542	4.34
800.	10.032	35.598	4.18
900.	10.193	35.764	4.18
1000.	9.674	35.780	4.25
1100.	9.292	35.775	4.36
1200.	8.324	35.629	4.59
1300.	7.266	35.471	4.97
1400.	6.077	35.285	5.36
1500.	5.155	35.141	5.72
1600.	4.698	35.079	5.89
1700.	4.318	35.034	6.00
1800.	4.251	35.042	6.01
1900.	3.988	35.010	6.04
2000.	3.803	34.993	6.12
2200.	3.504	34.972	6.13
2400.	3.303	34.970	6.07
2600.	3.066	34.960	6.00
2800.	2.913	34.953	5.92
3000.	2.815	34.947	5.80
3200.	2.749	34.941	5.78
3400.	2.711	34.938	5.75
3600.	2.684	34.932	5.71
3800.	2.637	34.926	5.70
4000.	2.601	34.920	5.72
4087.	2.568	34.916	5.72

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 104
CRUISE STATION NB: SUROIT 104
POSITION: N 36 40.66 W 24 20.10
DATE: 83- IX -02
DEPTH OF WATER: 333 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	22.473	36.578	4.89
10.	22.466	36.579	4.97
20.	22.451	36.604	4.96
30.	22.285	36.651	4.95
40.	21.788	36.530	5.02
50.	20.469	36.416	5.40
60.	18.889	36.296	5.81
70.	18.236	36.234	5.89
80.	17.192	36.274	5.90
90.	16.762	36.228	5.78
100.	16.391	36.224	5.58
200.	14.426	35.929	5.13
300.	13.203	35.762	4.83
400.	12.275	35.650	4.83
500.	11.662	35.581	4.80
600.	11.087	35.544	4.66
700.	10.551	35.539	4.39
800.	10.542	35.715	4.18
900.	10.297	35.784	4.15
1000.	9.364	35.694	4.33
1100.	8.755	35.631	4.48
1200.	7.324	35.417	4.91
1300.	6.676	35.347	5.12
1400.	6.235	35.303	5.32
1500.	5.739	35.246	5.42
1600.	5.293	35.191	5.66
1700.	4.604	35.082	5.84
1800.	4.569	35.101	5.89
1900.	4.253	35.056	5.95
2000.	3.931	35.016	6.04
2200.	3.630	34.990	6.07
2400.	3.338	34.974	6.03
2600.	3.101	34.962	5.96
2800.	2.931	34.955	5.91
3000.	2.815	34.948	5.83
3200.	2.752	34.942	5.77
3387.	2.699	34.937	5.74

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 105
CRUISE STATION NB: SUROIT 105
POSITION: N 37 13.64 W 24 7.54
DATE: 83- IX -02
DEPTH OF WATER: 3500M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	22.156	36.218	4.73
10.	22.154	36.216	5.00
20.	21.545	36.150	5.18
30.	19.833	36.088	5.61
40.	17.991	36.048	5.99
50.	17.522	36.032	6.04
60.	16.292	36.005	6.03
70.	15.670	36.005	5.83
80.	15.168	35.966	5.74
90.	14.930	35.964	5.54
100.	14.776	35.958	5.48
200.	13.405	35.793	5.27
300.	12.639	35.689	5.14
400.	11.894	35.595	5.00
500.	11.223	35.500	4.87
600.	10.477	35.442	4.64
700.	9.876	35.425	4.41
800.	9.206	35.467	4.39
900.	8.381	35.421	4.54
1000.	7.544	35.353	4.74
1100.	6.935	35.330	5.01
1200.	6.203	35.233	5.25
1300.	5.383	35.136	5.59
1400.	4.903	35.078	5.78
1500.	4.412	35.017	6.01
1600.	4.150	34.986	6.08
1700.	3.953	34.969	6.16
1800.	3.823	34.961	6.22
1900.	3.730	34.960	6.18
2000.	3.607	34.961	6.18
2200.	3.372	34.961	6.15
2400.	3.218	34.959	6.08
2600.	3.093	34.956	5.99
2800.	3.077	34.955	5.97
3000.	3.060	34.955	5.96
3200.	2.823	34.944	5.87
3400.	2.710	34.937	5.75
3517.	2.667	34.932	5.72

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 106
CRUISE STATION NB: SUROIT 106
POSITION: N 37 46.74 W 23 54.05
DATE: 83- IX -03
DEPTH OF WATER: 3265M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	22.070	36.223	4.91
10.	22.020	36.223	4.98
20.	22.021	36.223	4.99
30.	20.752	36.076	5.27
40.	19.107	36.077	5.71
50.	17.854	36.021	6.06
60.	16.632	36.009	6.14
70.	15.861	35.969	6.00
80.	15.439	35.986	5.79
90.	15.192	35.996	5.52
100.	14.986	35.981	5.35
200.	13.846	35.851	5.31
300.	12.854	35.716	5.17
400.	12.078	35.616	5.03
500.	11.233	35.510	4.79
600.	10.546	35.453	4.72
700.	9.608	35.377	4.44
800.	8.736	35.344	4.39
900.	8.010	35.333	4.53
1000.	7.189	35.296	4.82
1100.	6.363	35.237	5.14
1200.	5.782	35.174	5.38
1300.	5.318	35.132	5.59
1400.	4.954	35.092	5.75
1500.	4.554	35.042	5.94
1600.	4.213	35.002	6.06
1700.	4.018	34.981	6.16
1800.	3.838	34.967	6.16
1900.	3.715	34.964	6.18
2000.	3.610	34.964	6.20
2200.	3.407	34.963	6.15
2400.	3.201	34.964	6.08
2600.	3.017	34.959	5.99
2800.	2.866	34.951	5.87
3000.	2.770	34.944	5.81
3200.	2.710	34.939	5.77
3355.	2.674	34.935	5.73

IFREMER/CB TOPOGULF
********** ********

TOPOGULF STATION NB: 107
CRUISE STATION NB: SUROIT 107
POSITION: N 38 20.31 W 23 39.62
DATE: 83- IX -03
DEPTH OF WATER: 365 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	21.442	36.048	5.01
10.	21.438	36.048	5.13
20.	21.351	36.011	5.19
30.	19.818	35.907	5.50
40.	17.496	35.917	6.04
50.	16.313	35.904	6.25
60.	15.110	35.901	6.37
70.	14.848	35.934	5.96
80.	14.619	35.917	5.77
90.	14.468	35.898	5.59
100.	14.173	35.851	5.52
200.	13.193	35.769	5.50
300.	12.548	35.678	5.51
400.	11.943	35.597	5.40
500.	11.251	35.516	5.11
600.	10.647	35.470	4.86
700.	10.217	35.474	4.57
800.	9.715	35.516	4.33
900.	10.046	35.728	4.21
1000.	9.663	35.783	4.31
1100.	9.234	35.755	4.40
1200.	8.339	35.641	4.70
1300.	6.941	35.409	5.09
1400.	6.115	35.287	5.36
1500.	5.343	35.164	5.55
1600.	4.750	35.087	5.86
1700.	4.621	35.085	5.91
1800.	4.497	35.078	5.89
1900.	4.070	35.019	6.08
2000.	3.776	34.986	6.14
2200.	3.528	34.975	6.12
2400.	3.314	34.968	6.09
2600.	3.101	34.964	6.00
2800.	2.942	34.957	5.94
3000.	2.796	34.947	5.85
3200.	2.728	34.940	5.78
3400.	2.673	34.934	5.74
3600.	2.646	34.930	5.68
3732.	2.633	34.927	5.69

IFREMER/CB TOPOGULF
********** ********

TOPOGULF STATION NB: 108
CRUISE STATION NB: SUROIT 108
POSITION: N 38 53.19 W 23 27.77
DATE: 83- IX -03
DEPTH OF WATER: 392 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	21.592	35.998	5.10
10.	21.348	35.981	5.05
20.	20.872	35.962	5.21
30.	18.607	35.838	5.63
40.	16.065	35.887	6.31
50.	15.468	35.902	6.30
60.	14.974	35.894	6.19
70.	14.555	35.879	5.94
80.	14.499	35.919	5.56
90.	14.304	35.897	5.47
100.	13.981	35.855	5.42
200.	13.061	35.745	5.30
300.	12.544	35.679	5.52
400.	12.062	35.614	5.49
500.	11.425	35.535	5.03
600.	10.838	35.479	4.86
700.	10.384	35.466	4.67
800.	10.048	35.537	4.35
900.	9.674	35.614	4.33
1000.	9.330	35.657	4.35
1100.	8.598	35.589	4.52
1200.	8.236	35.600	4.65
1300.	7.016	35.413	5.10
1400.	5.958	35.245	5.39
1500.	5.497	35.198	5.54
1600.	4.934	35.126	5.77
1700.	4.454	35.055	5.97
1800.	4.122	35.011	6.08
1900.	3.944	34.996	6.14
2000.	3.774	34.980	6.17
2200.	3.535	34.972	6.13
2400.	3.286	34.967	6.09
2600.	3.092	34.963	6.01
2800.	2.938	34.957	5.94
3000.	2.826	34.949	5.86
3200.	2.734	34.942	5.78
3400.	2.681	34.935	5.72
3600.	2.648	34.931	5.70
3800.	2.641	34.928	5.68
3933.	2.635	34.925	5.68

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 109
CRUISE STATION NB: SUROIT 109
POSITION: N 39 26.47 W 23 14.80
DATE: 83- IX -03
DEPTH OF WATER: 3675M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	21.406	36.061	4.96
10.	21.415	36.062	5.12
20.	21.393	36.079	5.14
30.	20.071	36.026	5.42
40.	19.492	36.074	5.64
50.	17.635	36.041	6.08
60.	16.554	36.032	6.14
70.	15.871	36.037	6.04
80.	15.457	36.039	5.76
90.	15.355	36.033	5.62
100.	15.178	36.016	5.56
200.	13.574	35.809	5.22
300.	12.773	35.705	5.21
400.	12.063	35.614	5.05
500.	11.450	35.545	4.94
600.	10.943	35.506	4.72
700.	10.626	35.542	4.55
800.	10.230	35.576	4.35
900.	10.115	35.667	4.26
1000.	9.676	35.701	4.32
1100.	8.507	35.535	4.57
1200.	8.201	35.575	4.72
1300.	6.902	35.373	5.06
1400.	6.321	35.317	5.32
1500.	5.791	35.249	5.48
1600.	5.175	35.156	5.72
1700.	4.711	35.091	5.90
1800.	4.185	35.009	6.09
1900.	4.011	34.987	6.15
2000.	3.871	34.980	6.19
2200.	3.659	34.978	6.18
2400.	3.397	34.971	6.08
2600.	3.190	34.965	6.04
2800.	3.032	34.959	5.98
3000.	2.880	34.953	5.90
3200.	2.755	34.943	5.82
3400.	2.685	34.936	5.76
3600.	2.657	34.931	5.70
3695.	2.652	34.929	5.70

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 110
CRUISE STATION NB: SUROIT 110
POSITION: N 39 59.13 W 22 58.79
DATE: 83- IX -04
DEPTH OF WATER: 4025M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	21.503	36.163	4.96
10.	21.503	36.163	5.06
20.	21.507	36.163	5.05
30.	21.305	36.139	5.09
40.	19.524	36.005	5.46
50.	16.925	36.002	6.08
60.	16.075	35.998	6.16
70.	15.563	36.015	6.02
80.	15.177	36.004	5.85
90.	14.970	35.989	5.71
100.	14.690	35.955	5.58
200.	13.556	35.807	5.45
300.	12.972	35.732	5.45
400.	12.497	35.660	5.28
500.	11.686	35.569	5.04
600.	11.143	35.530	4.87
700.	10.676	35.497	4.74
800.	10.631	35.597	4.45
900.	10.697	35.754	4.25
1000.	8.303	35.325	4.49
1100.	7.735	35.333	4.63
1200.	7.025	35.297	4.89
1300.	6.848	35.353	5.06
1400.	6.053	35.254	5.35
1500.	5.553	35.190	5.49
1600.	4.960	35.108	5.77
1700.	4.582	35.055	5.89
1800.	4.274	35.019	6.05
1900.	4.113	35.005	6.09
2000.	3.981	34.999	6.11
2200.	3.654	34.978	6.13
2400.	3.439	34.974	6.07
2600.	3.211	34.966	6.04
2800.	3.040	34.960	5.97
3000.	2.883	34.953	5.90
3200.	2.782	34.945	5.84
3400.	2.712	34.939	5.75
3600.	2.676	34.932	5.70
3800.	2.657	34.929	5.71
4000.	2.644	34.926	5.68
4076.	2.642	34.924	5.68

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 111
CRUISE STATION NB: SUROIT 111
POSITION: N 40 .08 W 23 45.22
DATE: 83- IX -04
DEPTH OF WATER: 3870M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	21.286	36.082	5.02
10.	21.281	36.084	5.10
20.	20.861	35.997	5.08
30.	19.454	35.965	5.46
40.	17.089	36.065	6.13
50.	16.484	36.105	6.07
60.	16.012	36.071	5.97
70.	15.474	36.032	5.84
80.	15.267	36.018	5.68
90.	14.979	35.993	5.53
100.	14.813	35.969	5.36
200.	13.719	35.831	5.39
300.	13.053	35.741	5.40
400.	12.302	35.642	5.12
500.	11.630	35.562	4.99
600.	11.041	35.509	4.89
700.	10.549	35.487	4.68
800.	10.382	35.580	4.35
900.	9.718	35.574	4.32
1000.	9.330	35.600	4.37
1100.	8.239	35.477	4.61
1200.	7.697	35.454	4.77
1300.	5.323	35.252	5.20
1400.	5.093	35.176	5.43
1500.	5.217	35.131	5.64
1600.	4.696	35.060	5.84
1700.	4.412	35.029	5.99
1800.	4.189	35.001	6.06
1900.	3.982	34.983	6.11
2000.	3.845	34.975	6.15
2200.	3.606	34.970	6.14
2400.	3.383	34.967	6.09
2600.	3.190	34.964	6.02
2800.	3.017	34.958	5.94
3000.	2.888	34.952	5.87
3200.	2.789	34.945	5.81
3400.	2.720	34.939	5.74
3600.	2.682	34.933	5.70
3800.	2.657	34.928	5.66
3922.	2.649	34.926	5.65

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 112
CRUISE STATION NB: SUROIT 112
POSITION: N 40 .31 W 24 30.59
DATE: 83- IX -04
DEPTH OF WATER: 3760M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.023	36.239	4.39
10.	21.916	36.233	5.05
20.	21.750	36.236	5.11
30.	21.675	36.221	5.10
40.	20.538	36.145	5.35
50.	17.838	36.033	5.96
60.	16.948	36.029	6.09
70.	16.351	36.026	6.09
80.	16.077	36.023	6.04
90.	15.731	35.998	6.02
100.	15.356	35.995	5.91
200.	13.766	35.831	5.34
300.	12.951	35.723	5.20
400.	12.401	35.658	5.01
500.	11.656	35.568	4.89
600.	10.829	35.472	4.74
700.	9.970	35.386	4.43
800.	9.269	35.385	4.36
900.	8.885	35.496	4.36
1000.	8.027	35.416	4.60
1100.	8.125	35.546	4.59
1200.	7.816	35.553	4.77
1300.	7.127	35.459	5.05
1400.	6.286	35.335	5.28
1500.	5.379	35.191	5.52
1600.	4.660	35.081	5.86
1700.	4.206	35.013	6.05
1800.	3.988	34.990	6.12
1900.	3.833	34.977	6.16
2000.	3.715	34.973	6.17
2200.	3.504	34.970	6.13
2400.	3.293	34.968	6.06
2600.	3.085	34.961	5.96
2800.	2.923	34.954	5.94
3000.	2.819	34.947	5.84
3200.	2.755	34.942	5.79
3400.	2.719	34.937	5.72
3600.	2.695	34.932	5.71
3772.	2.683	34.931	5.67

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 113
CRUISE STATION NB: SUROIT 113
POSITION: N 40 .15 W 25 17.12
DATE: 83- IX -04
DEPTH OF WATER: 2900M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
4.	22.055	36.169	4.90
10.	22.063	36.169	5.01
20.	21.902	36.166	5.08
30.	20.993	36.097	5.17
40.	19.139	36.046	5.69
50.	17.191	35.904	6.20
60.	16.559	35.988	6.15
70.	15.857	36.003	6.06
80.	15.318	35.993	5.66
90.	15.096	35.968	5.50
100.	14.838	35.954	5.47
200.	13.628	35.821	5.17
300.	12.781	35.705	5.04
400.	12.029	35.610	4.97
500.	11.280	35.519	4.87
600.	10.666	35.472	4.67
700.	10.214	35.462	4.49
800.	9.556	35.462	4.31
900.	8.945	35.489	4.35
1000.	8.379	35.507	4.52
1100.	7.929	35.514	4.72
1200.	7.393	35.487	4.90
1300.	6.940	35.434	5.07
1400.	6.043	35.292	5.38
1500.	5.192	35.160	5.71
1600.	4.644	35.079	5.86
1700.	4.231	35.018	6.03
1800.	3.944	34.985	6.12
1900.	3.833	34.978	6.13
2000.	3.658	34.964	6.14
2200.	3.450	34.963	6.17
2400.	3.247	34.961	6.08
2600.	3.065	34.958	5.99
2800.	2.964	34.953	5.91
2881.	2.912	34.953	5.90

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 114
CRUISE STATION NB: SUROIT 114
POSITION: N 40 .44 W 26 2.98
DATE: 83- IX -05
DEPTH OF WATER: 3050M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
3.	22.100	36.160	4.78
10.	22.106	36.162	4.95
20.	22.088	36.158	4.99
30.	21.985	36.153	5.07
40.	20.960	36.086	5.34
50.	17.839	35.959	6.02
60.	16.280	35.964	6.16
70.	15.972	35.997	5.94
80.	15.373	35.947	5.91
90.	14.938	35.930	5.72
100.	14.686	35.932	5.57
200.	13.299	35.776	5.21
300.	12.671	35.692	5.05
400.	11.939	35.591	4.93
500.	10.973	35.471	4.76
600.	10.115	35.386	4.60
700.	9.359	35.350	4.36
800.	8.492	35.350	4.40
900.	7.487	35.295	4.66
1000.	6.990	35.298	4.90
1100.	6.083	35.187	5.24
1200.	5.582	35.143	5.41
1300.	5.073	35.082	5.63
1400.	4.815	35.065	5.76
1500.	4.364	35.006	6.00
1600.	4.178	34.986	6.05
1700.	3.982	34.965	6.12
1800.	3.934	34.971	6.11
1900.	3.809	34.964	6.15
2000.	3.703	34.962	6.17
2200.	3.510	34.963	6.13
2400.	3.301	34.960	6.09
2600.	3.151	34.957	6.01
2800.	3.079	34.956	5.97
3000.	3.030	34.955	5.93
3031.	3.009	34.954	5.92

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 115
CRUISE STATION NB: SUROIT 115
POSITION: N 40 .27 W 26 48.61
DATE: 83- IX -05
DEPTH OF WATER: 2300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.
OXYGEN	ML/L

PRESS.	TEMP.	SALINITY	OXYGEN
5.	21.851	36.172	4.92
10.	21.840	36.171	4.99
20.	21.827	36.170	4.94
30.	21.710	36.151	5.00
40.	20.172	36.059	5.41
50.	18.773	36.022	5.76
60.	18.008	35.990	5.98
70.	15.914	35.935	6.26
80.	15.273	35.926	6.07
90.	14.893	35.928	5.90
100.	14.562	35.912	5.61
200.	13.270	35.774	5.24
300.	12.607	35.681	5.13
400.	11.898	35.586	4.96
500.	11.096	35.487	4.83
600.	10.311	35.409	4.60
700.	9.377	35.355	4.42
800.	8.590	35.353	4.39
900.	7.804	35.323	4.58
1000.	7.017	35.296	4.85
1100.	5.972	35.184	5.34
1200.	5.368	35.117	5.54
1300.	4.943	35.071	5.70
1400.	4.700	35.045	5.81
1500.	4.584	35.032	5.87
1600.	4.410	35.013	5.91
1700.	4.191	34.991	6.01
1800.	3.883	34.965	6.14
1900.	3.722	34.959	6.17
2000.	3.582	34.956	6.14
2200.	3.438	34.956	6.14
2227.	3.418	34.957	6.14

IFMK TOPOGULF

TOPOGULF STATION NB: 116
CRUISE STATION NB: POSEIDON 514
POSITION: N 47 .00 W 24 .00
DATE: 83- IX -13
DEPTH OF WATER: 3140M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	16.781	35.545
20.	16.723	35.547
30.	16.615	35.581
40.	16.515	35.615
50.	16.461	35.627
60.	16.372	35.635
70.	16.335	35.641
80.	16.260	35.663
90.	15.829	35.705
100.	15.040	35.738
200.	12.700	35.669
300.	11.678	35.531
400.	10.894	35.419
500.	10.255	35.340
600.	9.575	35.290
700.	8.665	35.203
800.	7.499	35.138
900.	5.996	35.017
1000.	5.564	35.029
1100.	5.163	35.020
1200.	4.331	34.940
1300.	4.205	34.942
1400.	4.106	34.937
1500.	4.022	34.938
1600.	3.921	34.941
1700.	3.818	34.933
1800.	3.732	34.927
1900.	3.675	34.933
2000.	3.640	34.942
2200.	3.553	34.942
2400.	3.437	34.945
2600.	3.314	34.946
2800.	3.168	34.951
3000.	3.073	34.947
3034.	3.055	34.948

IFMK TOPOGULF

TOPOGULF STATION NB: 117
CRUISE STATION NB: POSEIDON 516
POSITION: N 47 28.00 W 24 28.50
DATE: 83- IX -13
DEPTH OF WATER: 3530M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	17.106	35.730
20.	17.087	35.741
30.	17.036	35.753
40.	16.843	35.793
50.	16.755	35.797
60.	16.271	35.810
70.	15.201	35.805
80.	14.271	35.809
90.	13.739	35.815
100.	13.473	35.794
200.	12.799	35.711
300.	12.443	35.668
400.	11.860	35.588
500.	10.875	35.439
600.	9.749	35.310
700.	8.487	35.192
800.	6.666	35.033
900.	6.116	35.048
1000.	5.319	35.018
1100.	4.768	34.977
1200.	4.300	34.939
1300.	4.137	34.938
1400.	4.025	34.932
1500.	3.870	34.930
1600.	3.810	34.931
1700.	3.761	34.929
1800.	3.697	34.935
1900.	3.671	34.942
2000.	3.622	34.929
2200.	3.543	34.940
2400.	3.440	34.938
2600.	3.322	34.951
2640.	3.300	34.945

IFMK

TOPOGULF

TOPOGULF STATION NB: 118
CRUISE STATION NB: POSEIDON 518
POSITION: N 47 58.70 W 25 5.10
DATE: 83- IX -14
DEPTH OF WATER: 3800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
12.	16.799	35.518
20.	16.805	35.514
30.	16.810	35.515
40.	16.808	35.511
50.	16.734	35.525
60.	16.505	35.547
70.	15.705	35.603
80.	14.939	35.584
90.	14.113	35.557
100.	13.080	35.545
200.	10.871	35.418
300.	9.609	35.256
400.	8.733	35.163
500.	7.765	35.098
600.	6.653	35.035
700.	5.774	34.996
800.	5.392	35.018
900.	4.769	34.973
1000.	4.366	34.954
1100.	4.115	34.938
1200.	3.943	34.929
1300.	3.903	34.934
1400.	3.856	34.930
1500.	3.802	34.934
1600.	3.762	34.942
1700.	3.714	34.938
1800.	3.657	34.937
1900.	3.624	34.943
2000.	3.580	34.947
2200.	3.505	34.940
2400.	3.383	34.942
2600.	3.253	34.956
2637.	3.231	34.954

IFMK

TOPOGULF

TOPOGULF STATION NB: 119
CRUISE STATION NB: POSEIDON 520
POSITION: N 48 22.00 W 25 43.00
DATE: 83- IX -14
DEPTH OF WATER: 3750M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	16.860	35.523
20.	16.862	35.519
30.	16.863	35.524
40.	16.865	35.530
50.	16.862	35.525
60.	16.040	35.561
70.	14.012	35.580
80.	12.934	35.580
90.	12.654	35.582
100.	12.528	35.580
200.	11.081	35.431
300.	10.442	35.394
400.	9.412	35.266
500.	7.983	35.114
600.	6.765	35.047
700.	5.955	35.031
800.	5.816	35.089
900.	4.981	35.000
1000.	4.777	35.007
1100.	4.556	35.004
1200.	4.106	34.947
1300.	3.927	34.942
1400.	3.854	34.939
1500.	3.779	34.941
1600.	3.696	34.932
1700.	3.631	34.940
1800.	3.599	34.932
1900.	3.561	34.929
2000.	3.535	34.937
2200.	3.450	34.952
2400.	3.345	34.951
2600.	3.236	34.958
2800.	3.071	34.956
2925.	2.971	34.962

IFMK TOPOGULF

TOPOGULF STATION NB: 120
CRUISE STATION NB: POSEIDON 522
POSITION: N 48 55.00 W 26 6.50
DATE: 83- IX -14
DEPTH OF WATER: 3570M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	15.850	35.466
20.	15.855	35.467
30.	15.856	35.465
40.	15.857	35.463
50.	15.862	35.465
60.	15.842	35.467
70.	14.432	35.496
80.	12.489	35.503
90.	11.749	35.475
100.	11.485	35.459
200.	10.380	35.363
300.	9.375	35.229
400.	8.424	35.128
500.	7.386	35.058
600.	6.629	35.055
700.	6.023	35.063
800.	5.378	35.052
900.	5.005	35.041
1000.	4.600	34.996
1100.	4.266	34.970
1200.	4.107	34.960
1300.	3.978	34.946
1400.	3.858	34.945
1500.	3.733	34.931
1600.	3.670	34.932
1700.	3.637	34.933
1800.	3.601	34.943
1900.	3.575	34.938
2000.	3.544	34.945
2200.	3.449	34.938
2400.	3.329	34.957
2600.	3.229	34.949
2800.	3.096	34.951
2958.	3.018	34.947

IFMK TOPOGULF

TOPOGULF STATION NB: 121
CRUISE STATION NB: POSEIDON 524
POSITION: N 49 25.00 W 26 38.00
DATE: 83- IX -15
DEPTH OF WATER: 3280M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	14.931	35.272
20.	14.932	35.277
30.	14.938	35.280
40.	14.939	35.281
50.	14.936	35.288
60.	14.629	35.438
70.	14.290	35.472
80.	13.978	35.497
90.	13.218	35.497
100.	12.443	35.460
200.	10.367	35.309
300.	9.031	35.107
400.	7.768	34.987
500.	7.244	35.024
600.	5.721	34.939
700.	5.079	34.932
800.	4.752	34.935
900.	4.582	34.956
1000.	4.217	34.941
1100.	4.085	34.943
1200.	3.955	34.936
1300.	3.830	34.929
1400.	3.771	34.932
1500.	3.691	34.926
1600.	3.651	34.935
1700.	3.615	34.930
1800.	3.582	34.921
1900.	3.551	34.927
2000.	3.523	34.934
2200.	3.448	34.941
2400.	3.341	34.945
2600.	3.232	34.950
2800.	3.147	34.950
2943.	3.084	34.954

IFMK TOPOGULF

TOPOGULF STATION NB: 122
CRUISE STATION NB: POSEIDON 526
POSITION: N 49 54.00 W 27 11.20
DATE: 83- IX -15
DEPTH OF WATER: 3511M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	15.066	35.375
20.	15.062	35.376
30.	15.065	35.374
40.	15.062	35.377
50.	15.039	35.379
60.	14.242	35.528
70.	13.340	35.596
80.	12.804	35.602
90.	12.535	35.603
100.	12.275	35.582
200.	10.592	35.353
300.	9.878	35.284
400.	8.812	35.158
500.	7.346	35.023
600.	6.222	34.997
700.	5.405	34.963
800.	4.833	34.957
900.	4.394	34.948
1000.	4.109	34.926
1100.	3.932	34.918
1200.	3.821	34.918
1300.	3.758	34.914
1400.	3.712	34.921
1500.	3.712	34.929
1600.	3.672	34.926
1700.	3.638	34.923
1800.	3.603	34.920
1900.	3.553	34.933
2000.	3.533	34.928
2200.	3.451	34.931
2400.	3.272	34.944
2600.	3.217	34.950
2800.	3.132	34.945
3000.	3.031	34.954
3200.	2.891	34.944
3400.	2.892	34.951
3562.	2.651	34.920

IFMK TOPOGULF

TOPOGULF STATION NB: 123
CRUISE STATION NB: POSEIDON 528
POSITION: N 50 21.80 W 27 44.30
DATE: 83- IX -15
DEPTH OF WATER: 3277M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	15.349	35.422
20.	15.351	35.423
30.	15.352	35.422
40.	15.345	35.421
50.	15.338	35.422
60.	14.892	35.446
70.	13.778	35.418
80.	13.512	35.452
90.	13.340	35.452
100.	12.203	35.398
200.	9.497	35.253
300.	8.419	35.125
400.	7.406	35.038
500.	6.467	35.011
600.	5.776	35.002
700.	5.414	35.023
800.	5.003	35.025
900.	4.529	34.981
1000.	4.239	34.955
1100.	3.996	34.939
1200.	3.894	34.935
1300.	3.820	34.929
1400.	3.739	34.929
1500.	3.677	34.927
1600.	3.622	34.930
1700.	3.574	34.938
1800.	3.546	34.931
1900.	3.519	34.939
2000.	3.505	34.937
2200.	3.408	34.944
2400.	3.292	34.951
2600.	3.174	34.952
2800.	3.034	34.956
2995.	2.922	34.955

IFMK TOPOGULF

TOPOGULF STATION NB: 124
CRUISE STATION NB: POSEIDON 530
POSITION: N 50 48.60 W 28 15.80
DATE: 83- IX -16
DEPTH OF WATER: 2870M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	14.512	35.484
20.	14.518	35.486
30.	14.502	35.478
40.	14.503	35.484
50.	14.489	35.486
60.	14.491	35.495
70.	13.940	35.508
80.	12.505	35.555
90.	12.397	35.597
100.	12.188	35.567
200.	10.689	35.420
300.	9.939	35.329
400.	8.955	35.202
500.	7.656	35.043
600.	6.526	35.003
700.	5.798	34.998
800.	5.650	35.059
900.	5.216	35.059
1000.	4.686	34.999
1100.	4.376	34.974
1200.	4.243	34.977
1300.	4.107	34.964
1400.	3.968	34.947
1500.	3.858	34.946
1600.	3.707	34.923
1700.	3.682	34.918
1800.	3.604	34.917
1900.	3.565	34.922
2000.	3.545	34.935
2200.	3.464	34.940
2400.	3.350	34.948
2600.	3.206	34.945
2800.	3.104	34.955
2897.	3.063	34.951

IFMK TOPOGULF

TOPOGULF STATION NB: 125
CRUISE STATION NB: POSEIDON 532
POSITION: N 51 19.00 W 28 52.00
DATE: 83- IX -16
DEPTH OF WATER: 3527M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	14.538	35.213
20.	14.543	35.209
30.	14.542	35.212
40.	14.545	35.211
50.	14.546	35.213
60.	14.546	35.213
70.	13.528	35.281
80.	12.099	35.295
90.	11.174	35.262
100.	10.595	35.201
200.	9.494	35.160
300.	8.394	35.059
400.	7.223	35.011
500.	6.054	34.938
600.	5.423	34.931
700.	4.933	34.952
800.	4.531	34.930
900.	4.306	34.936
1000.	4.056	34.929
1100.	3.939	34.917
1200.	3.857	34.915
1300.	3.793	34.917
1400.	3.767	34.924
1500.	3.719	34.918
1600.	3.665	34.931
1700.	3.624	34.921
1800.	3.598	34.920
1900.	3.563	34.929
2000.	3.541	34.932
2200.	3.460	34.941
2400.	3.357	34.951
2600.	3.222	34.958
2800.	3.094	34.951
3000.	2.997	34.954
3002.	2.997	34.953

IFMK TOPOGULF

TOPOGULF STATION NB: 126
CRUISE STATION NB: POSEIDON 534
POSITION: N 51 47.00 W 29 25.80
DATE: 83- IX -16
DEPTH OF WATER: 1992M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	14.131	35.217
20.	14.126	35.221
30.	14.127	35.219
40.	14.120	35.221
50.	14.104	35.218
60.	14.086	35.223
70.	14.068	35.237
80.	12.469	35.402
90.	11.993	35.428
100.	11.693	35.420
200.	9.941	35.236
300.	8.542	35.046
400.	7.559	34.980
500.	6.100	34.898
600.	5.569	34.923
700.	5.121	34.941
800.	4.478	34.937
900.	4.311	34.939
1000.	4.134	34.932
1100.	3.892	34.911
1200.	3.823	34.908
1300.	3.801	34.912
1400.	3.722	34.921
1500.	3.703	34.926
1600.	3.676	34.927
1700.	3.637	34.931
1800.	3.611	34.921
1900.	3.574	34.926
1994.	3.542	34.926

IFMK TOPOGULF

TOPOGULF STATION NB: 127
CRUISE STATION NB: POSEIDON 538
POSITION: N 47 .00 W 32 .30
DATE: 83- IX -18
DEPTH OF WATER: 3949M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
9.	16.023	35.062
10.	16.020	35.064
20.	16.004	35.063
30.	15.983	35.062
40.	15.799	35.100
50.	14.687	35.226
60.	13.805	35.258
70.	13.408	35.265
80.	12.392	35.322
90.	11.998	35.343
100.	11.656	35.341
200.	9.503	35.158
300.	8.110	35.002
400.	7.263	35.006
500.	5.596	34.899
600.	4.938	34.920
700.	4.649	34.941
800.	4.447	34.950
900.	4.208	34.935
1000.	4.063	34.939
1100.	3.841	34.912
1200.	3.764	34.904
1300.	3.697	34.902
1400.	3.660	34.905
1500.	3.696	34.916
1600.	3.689	34.918
1700.	3.656	34.925
1800.	3.619	34.929
1900.	3.565	34.934
2000.	3.531	34.932
2200.	3.457	34.943
2400.	3.316	34.948
2600.	3.180	34.944
2800.	3.081	34.940
3000.	2.934	34.934
3002.	2.929	34.942

IFMK TOPOGULF

TOPOGULF STATION NB: 128
CRUISE STATION NB: POSEIDON 540
POSITION: N 46 22.00 W 32 11.00
DATE: 83- IX -18
DEPTH OF WATER: 4100M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	18.029	35.543
20.	18.079	35.558
30.	18.188	35.586
40.	18.385	35.665
50.	18.326	35.652
60.	18.130	35.603
70.	16.941	36.025
80.	15.515	35.917
90.	15.057	35.904
100.	14.695	35.900
200.	13.806	35.825
300.	12.386	35.608
400.	10.575	35.321
500.	8.905	35.138
600.	7.016	34.994
700.	6.221	35.032
800.	5.150	34.964
900.	4.691	34.961
1000.	4.384	34.950
1100.	4.061	34.921
1200.	3.894	34.905
1300.	3.773	34.903
1400.	3.738	34.904
1500.	3.702	34.914
1600.	3.716	34.919
1700.	3.712	34.930
1800.	3.665	34.928
1900.	3.629	34.933
2000.	3.591	34.934
2200.	3.540	34.942
2400.	3.426	34.948
2600.	3.304	34.942
2800.	3.149	34.944
2999.	3.020	34.945

IFMK TOPOGULF

TOPOGULF STATION NB: 129
CRUISE STATION NB: POSEIDON 542
POSITION: N 45 46.00 W 32 22.00
DATE: 83- IX -19
DEPTH OF WATER: 3691M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	17.188	35.399
20.	17.206	35.402
30.	17.195	35.432
40.	17.191	35.433
50.	17.212	35.550
60.	16.442	35.848
70.	15.513	35.942
80.	15.366	35.982
90.	15.050	35.934
100.	14.791	35.887
200.	14.165	35.887
300.	12.941	35.695
400.	11.199	35.415
500.	9.548	35.202
600.	7.983	35.065
700.	6.504	34.997
800.	5.417	34.952
900.	5.085	34.979
1000.	4.567	34.952
1100.	4.295	34.951
1200.	4.114	34.941
1300.	3.919	34.923
1400.	3.733	34.904
1500.	3.688	34.902
1600.	3.722	34.914
1700.	3.742	34.929
1800.	3.681	34.932
1900.	3.651	34.931
2000.	3.618	34.935
2200.	3.552	34.941
2400.	3.441	34.952
2600.	3.323	34.951
2800.	3.175	34.952
3000.	3.005	34.942
3031.	2.987	34.940

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 130
CRUISE STATION NB: POSEIDON 544
POSITION: N 45 9.00 W 32 33.00
DATE: 83- IX -19
DEPTH OF WATER: 3600M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	19.124	35.708
20.	18.432	35.683
30.	17.855	35.585
40.	17.835	35.579
50.	17.835	35.581
60.	17.538	35.712
70.	16.829	35.869
80.	16.374	36.040
90.	15.513	35.985
100.	15.267	35.974
200.	14.077	35.869
300.	12.811	35.680
400.	11.542	35.472
500.	10.124	35.282
600.	8.469	35.097
700.	7.181	35.069
800.	5.540	34.952
900.	5.016	34.961
1000.	4.470	34.937
1100.	4.252	34.932
1200.	4.147	34.939
1300.	3.884	34.914
1400.	3.925	34.934
1500.	3.888	34.933
1600.	3.813	34.938
1700.	3.769	34.931
1800.	3.726	34.931
1900.	3.659	34.931
2000.	3.607	34.932
2200.	3.555	34.941
2400.	3.451	34.951
2600.	3.324	34.950
2800.	3.244	34.949
2967.	3.083	34.952

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 131
CRUISE STATION NB: POSEIDON 546
POSITION: N 44 33.00 W 32 43.00
DATE: 83- IX -19
DEPTH OF WATER: 3561M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
37.	20.539	35.873
40.	19.789	35.945
50.	17.413	36.096
60.	16.258	36.097
70.	16.022	36.084
80.	15.649	36.031
90.	15.420	36.005
100.	15.265	35.995
200.	14.532	35.950
300.	13.829	35.846
400.	12.818	35.691
500.	11.920	35.548
600.	10.140	35.298
700.	8.992	35.220
800.	7.500	35.114
900.	6.064	35.020
1000.	5.409	35.033
1100.	4.917	35.005
1200.	4.492	34.969
1300.	4.228	34.953
1400.	4.066	34.941
1500.	4.035	34.947
1600.	3.922	34.946
1700.	3.815	34.938
1800.	3.737	34.931
1900.	3.682	34.933
2000.	3.634	34.932
2200.	3.570	34.935
2400.	3.478	34.952
2600.	3.357	34.955
2800.	3.164	34.956
3000.	3.086	34.947
3002.	3.079	34.951

IFMK TOPOGULF

TOPOGULF STATION NB: 132
CRUISE STATION NB: POSEIDON 548
POSITION: N 43 59.10 W 32 52.90
DATE: 83- IX -19
DEPTH OF WATER: 3820M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	21.016	35.758
20.	21.013	35.760
30.	21.010	35.763
40.	20.982	35.757
50.	18.045	36.087
60.	16.947	36.210
70.	16.376	36.160
80.	16.124	36.136
90.	15.858	36.080
100.	15.719	36.068
200.	14.801	35.974
300.	14.314	35.938
400.	12.923	35.690
500.	12.046	35.590
600.	10.392	35.333
700.	8.942	35.175
800.	7.738	35.113
900.	6.927	35.129
1000.	6.153	35.128
1100.	5.434	35.070
1200.	4.992	35.039
1300.	4.704	35.021
1400.	4.430	34.992
1500.	4.222	34.979
1600.	4.043	34.961
1700.	3.921	34.951
1800.	3.870	34.951
1900.	3.783	34.953
2000.	3.705	34.951
2200.	3.609	34.962
2400.	3.472	34.956
2600.	3.338	34.961
2800.	3.173	34.948
3000.	3.033	34.950
3025.	3.015	34.948

IFMK TOPOGULF

TOPOGULF STATION NB: 133
CRUISE STATION NB: POSEIDON 550
POSITION: N 43 25.00 W 33 1.90
DATE: 83- IX -19
DEPTH OF WATER: 3400M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	21.279	35.864
20.	21.287	35.879
30.	21.290	35.882
40.	21.220	35.909
50.	18.282	36.104
60.	17.534	36.135
70.	16.866	36.216
80.	16.432	36.203
90.	16.044	36.127
100.	15.803	36.093
200.	14.677	35.970
300.	13.989	35.867
400.	13.229	35.764
500.	12.105	35.599
600.	10.395	35.334
700.	8.980	35.208
800.	7.632	35.135
900.	6.701	35.103
1000.	5.889	35.079
1100.	5.353	35.051
1200.	4.939	35.027
1300.	4.600	35.010
1400.	4.357	34.985
1500.	4.198	34.976
1600.	4.030	34.954
1700.	3.942	34.954
1800.	3.823	34.948
1900.	3.758	34.940
2000.	3.709	34.956
2200.	3.585	34.953
2400.	3.471	34.953
2600.	3.337	34.947
2800.	3.172	34.946
3000.	2.995	34.944
3012.	2.979	34.945

IFMK TOPOGULF

TOPOGULF STATION NB: 134
CRUISE STATION NB: POSEIDON 552
POSITION: N 42 52.00 W 33 12.00
DATE: 83- IX -20
DEPTH OF WATER: 3563M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	21.414	35.871
20.	21.408	35.868
30.	21.367	35.871
40.	20.273	35.960
50.	18.397	36.139
60.	17.381	36.162
70.	16.396	36.149
80.	16.094	36.136
90.	15.886	36.127
100.	15.756	36.117
200.	14.673	35.984
300.	13.949	35.870
400.	12.965	35.705
500.	11.917	35.573
600.	10.478	35.381
700.	8.941	35.207
800.	8.311	35.265
900.	7.519	35.264
1000.	6.826	35.241
1100.	5.998	35.169
1200.	5.291	35.104
1300.	4.814	35.053
1400.	4.487	35.008
1500.	4.310	34.994
1600.	4.148	34.980
1700.	4.017	34.975
1800.	3.963	34.975
1900.	3.800	34.955
2000.	3.729	34.959
2200.	3.606	34.967
2400.	3.436	34.956
2600.	3.266	34.954
2800.	3.115	34.953
3000.	2.958	34.937
3004.	2.952	34.943

IFMK TOPOGULF

TOPOGULF STATION NB: 135
CRUISE STATION NB: POSEIDON 554
POSITION: N 42 16.70 W 33 21.30
DATE: 83- IX -20
DEPTH OF WATER: 3500M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	21.826	35.940
20.	21.828	35.936
30.	21.830	35.944
40.	20.297	36.226
50.	18.088	36.199
60.	16.572	36.142
70.	16.191	36.115
80.	15.937	36.089
90.	15.828	36.083
100.	15.877	36.127
200.	14.872	36.005
300.	14.122	35.903
400.	13.154	35.756
500.	12.296	35.640
600.	10.974	35.451
700.	9.682	35.315
800.	8.619	35.247
900.	6.930	35.107
1000.	5.963	35.061
1100.	5.810	35.123
1200.	5.530	35.130
1300.	4.896	35.050
1400.	4.589	35.024
1500.	4.400	35.011
1600.	4.277	35.004
1700.	4.102	34.984
1800.	3.964	34.979
1900.	3.863	34.983
2000.	3.785	34.964
2200.	3.631	34.959
2400.	3.500	34.958
2600.	3.297	34.957
2800.	3.121	34.955
3000.	2.963	34.939
3004.	2.959	34.941

IFMK TOPOGULF

TOPOGULF STATION Nº: 136
CRUISE STATION NB: POSEIDON 556
POSITION: N 41 43.00 W 33 31.00
DATE: 83- IX -20
DEPTH OF WATER: 3452M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	22.171	36.240
20.	22.153	36.230
30.	22.111	36.198
40.	21.231	36.180
50.	18.833	36.199
60.	17.667	36.217
70.	17.270	36.256
80.	16.925	36.271
90.	16.639	36.247
100.	16.412	36.210
200.	14.935	36.019
300.	14.239	35.929
400.	13.446	35.802
500.	12.560	35.669
600.	11.276	35.490
700.	9.931	35.321
800.	8.879	35.272
900.	7.705	35.197
1000.	7.089	35.216
1100.	5.966	35.112
1200.	5.450	35.089
1300.	4.900	35.038
1400.	4.655	35.026
1500.	4.473	35.014
1600.	4.112	34.975
1700.	4.004	34.963
1800.	3.912	34.962
1900.	3.858	34.964
2000.	3.791	34.964
2200.	3.676	34.958
2400.	3.522	34.969
2600.	3.346	34.958
2800.	3.122	34.958
2999.	2.979	34.934

IFMK TOPOGULF

TOPOGULF STATION Nº: 137
CRUISE STATION NB: POSEIDON 558
POSITION: N 41 9.40 W 33 41.50
DATE: 83- IX -20
DEPTH OF WATER: 3300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	22.271	36.356
20.	22.255	36.349
30.	21.658	36.143
40.	18.001	36.145
50.	16.597	36.155
60.	16.251	36.173
70.	16.005	36.169
80.	15.841	36.161
90.	15.674	36.133
100.	15.531	36.107
200.	14.206	35.922
300.	13.760	35.880
400.	13.341	35.790
500.	12.820	35.722
600.	12.331	35.668
700.	11.502	35.532
800.	10.092	35.365
900.	8.887	35.306
1000.	7.641	35.254
1100.	6.766	35.197
1200.	5.804	35.132
1300.	5.367	35.103
1400.	4.997	35.080
1500.	4.655	35.044
1600.	4.338	35.003
1700.	4.124	34.980
1800.	4.034	34.984
1900.	3.892	34.971
2000.	3.849	34.971
2200.	3.722	34.970
2400.	3.514	34.960
2600.	3.291	34.959
2800.	3.158	34.959
2967.	3.001	34.950

IFMK TOPOGULF
**** *******

TOPOGULF STATION NB: 138
CRUISE STATION NB: POSEIDON 560
POSITION: N 40 35.00 W 33 51.00
DATE: 83- IX -21
DEPTH OF WATER: 3520M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	22.833	36.130
20.	22.833	36.131
30.	22.805	36.131
40.	22.620	36.135
50.	20.645	36.106
60.	18.331	36.076
70.	16.965	36.052
80.	16.265	36.040
90.	15.566	36.022
100.	15.271	36.022
200.	14.156	35.925
300.	13.474	35.819
400.	12.679	35.706
500.	11.887	35.590
600.	10.839	35.455
700.	9.690	35.332
800.	8.523	35.273
900.	7.722	35.260
1000.	6.563	35.151
1100.	5.743	35.099
1200.	5.389	35.093
1300.	4.982	35.064
1400.	4.674	35.043
1500.	4.421	35.019
1600.	4.227	35.003
1700.	4.132	34.994
1800.	3.983	34.983
1900.	3.904	34.980
2000.	3.800	34.982
2200.	3.629	34.968
2400.	3.429	34.960
2600.	3.213	34.953
2800.	3.042	34.957
3000.	2.908	34.948
3200.	2.746	34.940
3400.	2.591	34.934
3486.	2.568	34.927

IFMK TOPOGULF
**** *******

TOPOGULF STATION NB: 139
CRUISE STATION NB: POSEIDON 562
POSITION: N 40 .00 W 34 .30
DATE: 83- IX -21
DEPTH OF WATER: 3800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	22.545	36.053
20.	22.551	36.054
30.	22.532	36.055
40.	20.775	36.084
50.	18.483	36.091
60.	16.721	36.099
70.	16.326	36.139
80.	15.647	36.069
90.	15.488	36.056
100.	15.363	36.054
200.	14.360	35.948
300.	13.770	35.857
400.	13.000	35.736
500.	12.034	35.614
600.	10.879	35.459
700.	9.640	35.326
800.	8.499	35.275
900.	7.494	35.239
1000.	6.837	35.234
1100.	5.976	35.167
1200.	5.572	35.137
1300.	5.093	35.088
1400.	4.742	35.053
1500.	4.502	35.035
1600.	4.267	35.011
1700.	4.107	34.993
1800.	3.986	34.984
1900.	3.867	34.982
2000.	3.769	34.974
2200.	3.576	34.973
2400.	3.384	34.961
2600.	3.204	34.962
2800.	3.010	34.953
2987.	2.866	34.953

MK TOPOGULF

OPOGULF STATION NB: 140
RUISE STATION NB: POSEIDON 564
OSITION: N 40 .00 W 33 14.00
ATE: 83- IX -21
EPTH OF WATER: 3407M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	23.460	36.342
20.	23.450	36.344
30.	23.430	36.344
40.	20.484	36.257
50.	19.293	36.285
60.	18.195	36.301
70.	17.261	36.297
80.	16.890	36.289
90.	16.712	36.271
100.	16.543	36.263
200.	15.200	36.070
300.	14.196	35.920
400.	13.306	35.801
500.	12.313	35.656
600.	11.220	35.518
700.	10.224	35.420
800.	9.360	35.397
900.	7.959	35.258
1000.	6.859	35.196
1100.	6.226	35.171
1200.	5.763	35.155
1300.	5.292	35.108
1400.	4.828	35.058
1500.	4.651	35.049
1600.	4.374	35.016
1700.	4.183	35.004
1800.	4.043	34.995
1900.	3.924	34.985
2000.	3.810	34.980
2200.	3.629	34.974
2400.	3.397	34.969
2600.	3.189	34.960
2800.	3.027	34.953
2875.	2.960	34.949

IFMK TOPOGULF

TOPOGULF STATION NB: 141
CRUISE STATION NB: POSEIDON 566
POSITION: N 40 .20 W 32 27.20
DATE: 83- IX -21
DEPTH OF WATER: 2039M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	23.295	36.385
20.	23.296	36.385
30.	23.281	36.385
40.	20.138	36.268
50.	18.468	36.259
60.	18.068	36.263
70.	17.500	36.241
80.	17.076	36.237
90.	16.901	36.238
100.	16.606	36.243
200.	15.370	36.082
300.	14.470	35.960
400.	13.739	35.850
500.	12.938	35.732
600.	11.993	35.614
700.	11.016	35.512
800.	9.665	35.336
900.	8.983	35.354
1000.	7.818	35.318
1100.	7.098	35.277
1200.	6.552	35.256
1300.	5.826	35.162
1400.	5.300	35.100
1500.	4.898	35.065
1600.	4.712	35.056
1700.	4.447	35.031
1800.	4.277	35.009
1900.	4.008	34.991
2000.	3.741	34.979
2067.	3.613	34.976

IFMK TOPOGULF

TOPOGULF STATION NB: 142
CRUISE STATION NB: POSEIDON 568
POSITION: N 39 59.80 W 31 40.30
DATE: 83- IX -21
DEPTH OF WATER: 205 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	23.204	36.351
20.	23.205	36.346
30.	23.107	36.353
40.	20.592	36.251
50.	18.903	36.246
60.	17.883	36.226
70.	17.293	36.225
80.	16.840	36.221
90.	16.556	36.211
100.	16.236	36.192
200.	15.081	36.040
300.	14.262	35.933
400.	13.457	35.804
500.	12.746	35.717
600.	11.883	35.603
700.	10.694	35.469
800.	9.722	35.379
900.	9.039	35.385
1000.	8.092	35.333
1100.	7.495	35.328
1200.	6.611	35.217
1300.	6.167	35.223
1400.	5.385	35.121
1500.	4.982	35.082
1600.	4.761	35.068
1700.	4.466	35.039
1800.	4.154	35.009
1900.	3.862	34.985
2000.	3.753	34.972
2059.	3.645	34.973

IFMK TOPOGULF

TOPOGULF STATION NB: 143
CRUISE STATION NB: POSEIDON 570
POSITION: N 39 59.90 W 30 54.60
DATE: 83- IX -22
DEPTH OF WATER: 212 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	22.527	36.124
20.	22.536	36.123
30.	22.545	36.120
40.	22.488	36.123
50.	19.574	36.103
60.	18.109	36.074
70.	17.570	36.105
80.	16.745	36.103
90.	16.167	36.108
100.	16.032	36.150
200.	14.627	35.978
300.	13.851	35.875
400.	12.978	35.738
500.	12.209	35.631
600.	11.045	35.466
700.	9.938	35.360
800.	8.773	35.290
900.	8.323	35.356
1000.	7.160	35.242
1100.	6.415	35.204
1200.	5.839	35.163
1300.	5.467	35.126
1400.	5.148	35.100
1500.	4.863	35.073
1600.	4.624	35.059
1700.	4.320	35.023
1800.	4.007	34.995
1900.	3.811	34.983
2000.	3.700	34.976
2142.	3.599	34.969

IFMK TOPOGULF

TOPOGULF STATION NB: 144
CRUISE STATION NB: POSEIDON 572
POSITION: N 39 59.50 W 30 9.30
DATE: 83- IX -22
DEPTH OF WATER: 1880M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
11.	22.427	35.971
20.	22.437	35.967
30.	22.437	35.967
40.	19.739	36.122
50.	17.442	36.164
60.	16.809	36.216
70.	16.499	36.210
80.	16.146	36.184
90.	15.871	36.149
100.	15.649	36.120
200.	14.585	35.972
300.	13.888	35.878
400.	12.962	35.741
500.	12.036	35.611
600.	10.833	35.454
700.	9.669	35.342
800.	8.779	35.306
900.	8.083	35.283
1000.	7.092	35.247
1100.	6.599	35.228
1200.	6.115	35.198
1300.	5.723	35.159
1400.	5.339	35.131
1500.	5.081	35.102
1600.	4.710	35.068
1700.	4.420	35.037
1800.	4.316	35.022
1882.	4.273	35.016

IFMK TOPOGULF

TOPOGULF STATION NB: 145
CRUISE STATION NB: POSEIDON 576
POSITION: N 39 59.10 W 30 9.30
DATE: 83- IX -30
DEPTH OF WATER: 1930M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	20.520	36.120
20.	20.526	36.120
30.	20.531	36.114
40.	20.531	36.120
50.	20.537	36.131
60.	17.749	36.126
70.	16.624	36.073
80.	16.067	36.092
90.	15.710	36.102
100.	15.472	36.051
200.	14.310	35.941
300.	13.481	35.817
400.	12.723	35.702
500.	11.853	35.588
600.	10.617	35.430
700.	9.658	35.333
800.	8.689	35.288
900.	7.702	35.256
1000.	6.889	35.220
1100.	6.142	35.183
1200.	5.748	35.150
1300.	5.589	35.150
1400.	5.253	35.111
1500.	4.907	35.080
1600.	4.597	35.053
1700.	4.387	35.034
1800.	4.277	35.016
1868.	4.256	35.016

IFMK TOPOGULF

TOPOGULF STATION NB: 146
CRUISE STATION NB: POSEIDON 578
POSITION: N 40 .00 W 29 24.50
DATE: 83- IX -30
DEPTH OF WATER: 1524M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	20.357	36.069
20.	20.363	36.064
30.	20.366	36.064
40.	20.349	36.081
50.	17.809	36.107
60.	16.461	36.128
70.	15.998	36.137
80.	15.756	36.128
90.	15.450	36.091
100.	15.330	36.082
200.	14.222	35.929
300.	13.388	35.802
400.	12.678	35.704
500.	11.694	35.581
600.	10.472	35.411
700.	9.294	35.325
800.	8.496	35.334
900.	7.710	35.308
1000.	6.996	35.263
1100.	6.339	35.213
1200.	5.895	35.168
1300.	5.578	35.149
1400.	5.300	35.122
1451.	5.141	35.103

IFMK TOPOGULF

TOPOGULF STATION NB: 147
CRUISE STATION NB: POSEIDON 580
POSITION: N 40 .00 W 28 37.80
DATE: 83- IX -30
DEPTH OF WATER: 2320M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	19.651	36.045
20.	19.651	36.046
30.	19.650	36.049
40.	19.644	36.052
50.	19.555	36.061
60.	16.861	36.016
70.	15.563	35.992
80.	15.110	35.969
90.	14.773	35.964
100.	14.587	35.947
200.	13.402	35.807
300.	12.763	35.718
400.	12.016	35.614
500.	11.433	35.551
600.	10.745	35.505
700.	9.445	35.354
800.	8.350	35.282
900.	8.081	35.384
1000.	7.370	35.360
1100.	6.493	35.261
1200.	5.591	35.159
1300.	5.084	35.099
1400.	4.617	35.045
1500.	4.276	35.007
1600.	4.064	34.987
1700.	3.939	34.970
1800.	3.824	34.972
1900.	3.671	34.975
2000.	3.568	34.974
2010.	3.564	34.967

IFMK TOPOGULF

TOPOGULF STATION NB: 148
CRUISE STATION NB: POSEIDON 582
POSITION: N 39 59.60 W 27 52.00
DATE: 83- IX -30
DEPTH OF WATER: 2050M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
15.	19.982	36.082
20.	19.986	36.083
30.	19.984	36.085
40.	19.981	36.092
50.	19.888	36.087
60.	17.456	36.038
70.	16.021	35.974
80.	15.624	35.960
90.	15.136	35.960
100.	14.776	35.946
200.	13.413	35.807
300.	12.782	35.724
400.	11.955	35.615
500.	11.190	35.513
600.	10.305	35.422
700.	9.559	35.384
800.	8.773	35.383
900.	8.022	35.369
1000.	7.178	35.347
1100.	6.385	35.260
1200.	5.586	35.165
1300.	5.027	35.088
1400.	4.583	35.034
1500.	4.305	35.008
1600.	4.115	34.997
1700.	3.923	34.994
1800.	3.771	34.970
1900.	3.652	34.971
1988.	3.557	34.972

IFMK TOPOGULF

TOPOGULF STATION NB: 149
CRUISE STATION NB: POSEIDON 584
POSITION: N 40 .00 W 27 5.50
DATE: 83- IX -30
DEPTH OF WATER: 1837M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
29.	19.935	36.054
30.	19.936	36.055
40.	19.936	36.055
50.	19.925	36.054
60.	17.632	36.014
70.	16.705	35.992
80.	16.095	35.979
90.	15.724	35.973
100.	15.394	35.965
200.	13.405	35.806
300.	12.629	35.707
400.	11.842	35.601
500.	10.864	35.479
600.	9.780	35.393
700.	8.993	35.359
800.	8.205	35.354
900.	7.602	35.347
1000.	6.741	35.282
1100.	5.888	35.189
1200.	5.322	35.122
1300.	4.841	35.064
1400.	4.543	35.042
1500.	4.391	35.022
1600.	4.172	35.004
1700.	3.954	34.985
1800.	3.796	34.978
1834.	3.733	34.976

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 150
CRUISE STATION NB: POSEIDON 586
POSITION: N 40 .30 W 26 21.00
DATE: 83- X -01
DEPTH OF WATER: 2738M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
15.	20.436	36.084
20.	20.442	36.095
30.	20.442	36.085
40.	20.221	36.099
50.	18.250	36.047
60.	16.401	35.972
70.	15.572	35.945
80.	15.184	35.982
90.	14.833	35.978
100.	14.539	35.925
200.	13.344	35.800
300.	12.696	35.718
400.	11.929	35.606
500.	11.063	35.502
600.	10.122	35.403
700.	9.418	35.421
800.	9.186	35.543
900.	8.225	35.482
1000.	6.926	35.303
1100.	6.183	35.218
1200.	5.665	35.159
1300.	5.231	35.116
1400.	4.929	35.086
1500.	4.612	35.053
1600.	4.328	35.021
1700.	4.115	34.996
1800.	3.972	34.977
1900.	3.810	34.968
1990.	3.729	34.971

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 151
CRUISE STATION NB: POSEIDON 588
POSITION: N 40 .00 W 25 35.50
DATE: 83- X -01
DEPTH OF WATER: 3300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
22.	20.454	36.153
30.	20.448	36.153
40.	17.233	36.061
50.	16.322	36.061
60.	15.551	36.039
70.	15.333	36.030
80.	15.303	36.041
90.	15.143	36.036
100.	14.995	36.017
200.	13.946	35.887
300.	13.050	35.757
400.	12.332	35.662
500.	11.309	35.528
600.	10.662	35.471
700.	9.682	35.366
800.	9.618	35.520
900.	8.885	35.506
1000.	8.456	35.528
1100.	7.960	35.517
1200.	7.119	35.426
1300.	6.851	35.422
1400.	5.594	35.223
1500.	4.404	35.022
1600.	4.135	34.990
1700.	4.027	34.988
1800.	3.855	34.972
1900.	3.750	34.980
2000.	3.773	34.995
2001.	3.771	34.994

IFMK TOPOGULF

TOPOGULF STATION NB: 152
CRUISE STATION NB: POSEIDON 590
POSITION: N 40 .00 W 24 48.90
DATE: 83- X -01
DEPTH OF WATER: 3400M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
22.	20.496	36.150
30.	20.475	36.152
40.	16.217	36.037
50.	15.719	36.052
60.	15.361	36.030
70.	15.099	36.007
80.	14.961	36.006
90.	14.815	35.988
100.	14.642	35.968
200.	13.517	35.818
300.	12.941	35.739
400.	12.356	35.657
500.	11.745	35.582
600.	11.113	35.520
700.	10.301	35.457
800.	9.377	35.396
900.	8.783	35.421
1000.	7.940	35.367
1100.	7.417	35.358
1200.	7.935	35.564
1300.	7.247	35.487
1400.	6.345	35.349
1500.	5.578	35.233
1600.	4.843	35.118
1700.	4.271	35.029
1800.	4.026	34.998
1900.	3.887	34.984
2000.	3.763	34.978
2003.	3.750	34.976

IFMK TOPOGULF

TOPOGULF STATION NB: 153
CRUISE STATION NB: POSEIDON 592
POSITION: N 40 .00 W 24 3.80
DATE: 83- X -01
DEPTH OF WATER: 3840M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	20.395	36.085
20.	20.394	36.098
30.	20.385	36.087
40.	20.372	36.078
50.	20.255	36.113
60.	16.744	36.037
70.	15.854	36.009
80.	15.450	36.013
90.	15.097	36.004
100.	14.788	35.973
200.	13.443	35.808
300.	12.788	35.717
400.	12.235	35.647
500.	11.653	35.575
600.	10.930	35.497
700.	10.409	35.472
800.	10.028	35.475
900.	9.621	35.566
1000.	9.453	35.678
1100.	8.578	35.584
1200.	7.529	35.443
1300.	6.421	35.288
1400.	5.737	35.200
1500.	5.195	35.137
1600.	4.651	35.057
1700.	4.325	35.019
1800.	4.108	34.998
1900.	3.922	34.976
2000.	3.832	34.983
2200.	3.622	34.971
2400.	3.416	34.966
2600.	3.223	34.972
2800.	3.035	34.968
3000.	2.915	34.961
3200.	2.807	34.953
3400.	2.748	34.942
3507.	2.725	34.944

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 154
CRUISE STATION NB: POSEIDON 594
POSITION: N 40 .00 W 23 17.00
DATE: 83- X -01
DEPTH OF WATER: 3423M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
23.	20.234	36.061
30.	20.234	36.062
40.	17.642	36.070
50.	16.714	36.095
60.	16.044	36.083
70.	15.638	36.061
80.	15.235	36.030
90.	14.954	36.001
100.	14.759	35.975
200.	13.505	35.815
300.	12.870	35.727
400.	12.311	35.655
500.	11.694	35.588
600.	11.127	35.531
700.	10.688	35.505
800.	10.140	35.486
900.	10.400	35.697
1000.	9.754	35.711
1100.	8.580	35.576
1200.	7.717	35.492
1300.	6.463	35.322
1400.	5.912	35.249
1500.	5.184	35.144
1600.	4.850	35.100
1700.	4.396	35.037
1800.	4.209	35.020
1900.	3.995	35.001
2000.	3.889	34.995
2200.	3.596	34.992
2400.	3.387	34.985
2600.	3.167	34.973
2800.	3.023	34.971
3000.	2.917	34.967
3200.	2.789	34.954
3400.	2.723	34.938
3559.	2.681	34.946

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 155
CRUISE STATION NB: POSEIDON 596
POSITION: N 39 59.80 W 22 31.60
DATE: 83- X -02
DEPTH OF WATER: 3751M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
23.	20.453	35.979
30.	20.453	35.987
40.	17.881	36.055
50.	16.807	36.138
60.	16.372	36.142
70.	16.002	36.152
80.	15.771	36.134
90.	15.040	36.018
100.	14.753	35.983
200.	13.383	35.789
300.	12.574	35.692
400.	11.931	35.605
500.	11.387	35.548
600.	10.859	35.502
700.	10.173	35.458
800.	9.694	35.482
900.	9.218	35.515
1000.	8.672	35.533
1100.	8.549	35.610
1200.	7.285	35.425
1300.	6.475	35.327
1400.	5.832	35.248
1500.	5.228	35.157
1600.	4.767	35.092
1700.	4.398	35.046
1800.	4.249	35.029
1900.	3.885	34.988
2000.	3.769	34.988
2200.	3.538	34.981
2400.	3.295	34.978
2600.	3.120	34.976
2800.	2.958	34.961
3000.	2.840	34.950
3200.	2.751	34.948
3400.	2.665	34.936
3457.	2.660	34.932

IFMK TOPOGULF

TOPOGULF STATION NB: 156
CRUISE STATION NB: POSEIDON 598
POSITION: N 39 30.00 W 22 59.80
DATE: 83- X -02
DEPTH OF WATER: 3700M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
23.	20.251	36.046
30.	20.225	36.054
40.	17.536	36.062
50.	16.405	36.051
60.	15.903	36.067
70.	15.632	36.063
80.	15.366	36.039
90.	15.071	36.016
100.	14.949	36.004
200.	13.750	35.853
300.	13.035	35.755
400.	12.396	35.662
500.	11.774	35.599
600.	11.158	35.530
700.	10.697	35.522
800.	10.487	35.591
900.	10.140	35.663
1000.	10.015	35.756
1100.	9.476	35.741
1200.	8.110	35.548
1300.	6.967	35.395
1400.	6.154	35.282
1500.	5.184	35.136
1600.	5.084	35.151
1700.	4.623	35.086
1800.	4.294	35.042
1900.	4.097	35.026
2000.	3.944	35.005
2200.	3.669	34.993
2400.	3.454	34.977
2600.	3.197	34.976
2800.	3.037	34.970
3000.	2.917	34.957
3200.	2.792	34.957
3400.	2.731	34.936
3478.	2.711	34.935

IFMK TOPOGULF

TOPOGULF STATION NB: 157
CRUISE STATION NB: POSEIDON 600
POSITION: N 39 .40 W 23 29.90
DATE: 83- X -02
DEPTH OF WATER: 3790M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
25.	20.576	36.130
30.	20.504	36.119
40.	18.608	36.085
50.	17.296	36.036
60.	15.776	36.019
70.	15.383	35.992
80.	15.141	35.986
90.	14.809	35.955
100.	14.632	35.953
200.	13.316	35.792
300.	12.725	35.715
400.	12.227	35.643
500.	11.557	35.560
600.	11.033	35.511
700.	10.604	35.506
800.	10.213	35.558
900.	10.300	35.726
1000.	9.355	35.649
1100.	8.766	35.633
1200.	7.981	35.556
1300.	7.264	35.472
1400.	6.002	35.272
1500.	5.294	35.163
1600.	4.867	35.113
1700.	4.443	35.057
1800.	4.228	35.029
1900.	4.031	35.013
2000.	3.889	35.005
2200.	3.573	34.995
2400.	3.337	34.979
2600.	3.130	34.976
2800.	2.959	34.963
3000.	2.851	34.959
3200.	2.754	34.948
3400.	2.695	34.946
3600.	2.670	34.936
3800.	2.650	34.937
3812.	2.651	34.930

IFMK TOPOGULF

TOPOGULF STATION NB: 159
CRUISE STATION NB: POSEIDON 602
POSITION: N 38 30.00 W 24 .00
DATE: 83- X -02
DEPTH OF WATER: 3620M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
24.	20.840	36.214
30.	20.824	36.233
40.	20.816	36.233
50.	19.046	36.187
60.	16.906	36.041
70.	16.246	36.040
80.	15.686	36.019
90.	15.378	36.027
100.	15.093	36.010
200.	13.583	35.814
300.	12.624	35.693
400.	11.864	35.609
500.	11.182	35.544
600.	10.795	35.531
700.	10.413	35.557
800.	10.194	35.649
900.	9.622	35.708
1000.	9.587	35.768
1100.	8.728	35.675
1200.	7.669	35.529
1300.	6.464	35.344
1400.	5.697	35.240
1500.	5.337	35.200
1600.	4.810	35.116
1700.	4.458	35.072
1800.	4.163	35.035
1900.	3.954	35.004
2000.	3.798	34.993
2200.	3.535	34.986
2400.	3.241	34.977
2600.	3.010	34.963
2800.	2.906	34.957
3000.	2.844	34.955
3200.	2.785	34.951
3245.	2.767	34.943

IFMK TOPOGULF

TOPOGULF STATION NB: 159
CRUISE STATION NB: POSEIDON 604
POSITION: N 38 .40 W 24 29.60
DATE: 83- X -03
DEPTH OF WATER: 3034M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
22.	20.798	36.116
30.	20.364	36.108
40.	17.630	36.078
50.	16.319	36.064
60.	15.990	36.052
70.	15.521	36.042
80.	15.250	36.019
90.	15.141	36.013
100.	15.001	36.002
200.	13.983	35.880
300.	13.197	35.768
400.	12.531	35.685
500.	11.754	35.591
600.	11.034	35.516
700.	10.422	35.480
800.	9.653	35.458
900.	9.207	35.523
1000.	8.713	35.551
1100.	8.200	35.554
1200.	7.529	35.487
1300.	6.537	35.353
1400.	5.591	35.204
1500.	4.747	35.079
1600.	4.394	35.024
1700.	4.197	35.006
1800.	3.961	34.987
1900.	3.798	34.967
2000.	3.673	34.970
2200.	3.487	34.963
2400.	3.266	34.968
2600.	3.102	34.973
2800.	2.965	34.956
3000.	2.855	34.948
3007.	2.856	34.948

IFMK TOPOGULF

TOPOGULF STATION NB: 160
CRUISE STATION NB: POSEIDON 606
POSITION: N 37 30.40 W 24 59.50
DATE: 83- X -03
DEPTH OF WATER: 1990M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
23.	20.965	35.911
30.	20.954	35.909
40.	20.397	36.077
50.	17.881	36.053
60.	16.323	36.026
70.	15.520	36.022
80.	15.229	36.015
90.	15.019	36.001
100.	14.976	35.992
200.	13.171	35.767
300.	12.413	35.669
400.	11.703	35.586
500.	11.181	35.536
600.	10.800	35.526
700.	10.335	35.546
800.	9.693	35.512
900.	8.634	35.448
1000.	7.717	35.361
1100.	7.022	35.321
1200.	6.273	35.239
1300.	5.752	35.183
1400.	5.226	35.122
1500.	4.817	35.078
1600.	4.382	35.031
1700.	4.153	35.004
1800.	4.017	34.999
1900.	3.925	34.990
2000.	3.878	34.986
2007.	3.873	34.987

IFMK TOPOGULF

TOPOGULF STATION NB: 161
CRUISE STATION NB: POSEIDON 618
POSITION: N 40 29.90 W 25 .70
DATE: 83- X -04
DEPTH OF WATER: 3400M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
24.	19.872	36.062
30.	19.879	36.060
40.	19.879	36.060
50.	19.869	36.062
60.	17.282	36.074
70.	16.615	36.051
80.	16.227	36.048
90.	15.610	36.028
100.	15.363	36.027
200.	14.058	35.894
300.	13.127	35.771
400.	12.428	35.673
500.	11.710	35.586
600.	10.729	35.464
700.	10.174	35.459
800.	9.505	35.445
900.	9.172	35.528
1000.	8.229	35.434
1100.	7.897	35.495
1200.	7.478	35.479
1300.	6.760	35.388
1400.	5.946	35.274
1500.	5.036	35.132
1600.	4.641	35.071
1700.	4.324	35.034
1800.	4.086	35.007
1900.	3.958	34.999
2000.	3.804	34.992
2042.	3.778	34.994

IFMK TOPOGULF

TOPOGULF STATION NB: 162
CRUISE STATION NB: POSEIDON 620
POSITION: N 40 58.90 W 25 8.10
DATE: 83- X -04
DEPTH OF WATER: 3090M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
10.	19.854	36.074
20.	19.823	36.077
30.	19.805	36.084
40.	19.797	36.084
50.	19.158	36.093
60.	16.818	36.039
70.	16.087	36.033
80.	15.356	36.015
90.	15.096	36.012
100.	14.923	36.006
200.	13.430	35.807
300.	12.772	35.718
400.	12.149	35.645
500.	11.449	35.567
600.	10.881	35.519
700.	10.511	35.552
800.	10.276	35.636
900.	10.061	35.721
1000.	9.114	35.603
1100.	8.459	35.575
1200.	7.731	35.504
1300.	7.111	35.444
1400.	5.955	35.253
1500.	5.100	35.133
1600.	4.568	35.052
1700.	4.289	35.025
1800.	4.047	34.994
1900.	4.048	35.013
2000.	3.827	34.992
2200.	3.623	34.990
2400.	3.383	34.975
2600.	3.203	34.970
2800.	3.028	34.964
3000.	2.925	34.967
3132.	2.885	34.951

IFMK TOPOGULF

TOPOGULF STATION NB: 163
CRUISE STATION NB: POSEIDON 622
POSITION: N 41 27.50 W 25 16.50
DATE: 83- X -04
DEPTH OF WATER: 3042M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
14.	19.736	36.054
20.	19.732	36.057
30.	19.726	36.057
40.	19.640	36.070
50.	17.940	36.147
60.	16.550	36.151
70.	16.191	36.156
80.	15.608	36.059
90.	15.454	36.060
100.	15.161	36.041
200.	13.662	35.849
300.	12.932	35.745
400.	12.330	35.660
500.	11.635	35.579
600.	11.066	35.517
700.	10.590	35.492
800.	9.911	35.483
900.	9.397	35.539
1000.	9.063	35.596
1100.	7.297	35.309
1200.	7.663	35.508
1300.	6.480	35.329
1400.	5.351	35.145
1500.	5.067	35.131
1600.	4.640	35.061
1700.	4.302	35.029
1800.	4.048	34.993
1900.	3.893	34.981
2000.	3.780	34.978
2004.	3.768	34.974

IFMK TOPOGULF

TOPOGULF STATION NB: 164
CRUISE STATION NB: POSEIDON 624
POSITION: N 41 57.00 W 25 25.00
DATE: 83- X -04
DEPTH OF WATER: 325 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	19.367	36.086
20.	19.379	36.090
30.	19.380	36.088
40.	19.382	36.087
50.	19.148	36.105
60.	16.674	36.050
70.	15.749	36.020
80.	15.262	35.987
90.	15.083	35.996
100.	14.859	35.989
200.	13.489	35.814
300.	12.929	35.744
400.	12.234	35.651
500.	11.505	35.562
600.	10.954	35.509
700.	10.120	35.416
800.	9.389	35.394
900.	8.747	35.416
1000.	7.719	35.346
1100.	6.638	35.246
1200.	5.884	35.173
1300.	5.286	35.114
1400.	4.578	35.016
1500.	4.456	35.023
1600.	4.213	34.993
1700.	4.024	34.975
1800.	3.899	34.969
1900.	3.785	34.959
2000.	3.709	34.967
2200.	3.544	34.974
2400.	3.354	34.975
2600.	3.197	34.967
2800.	3.042	34.964
3000.	2.896	34.954
3005.	2.894	34.948

IFMK TOPOGULF

TOPOGULF STATION NB: 165
CRUISE STATION NB: POSEIDON 626
POSITION: N 42 26.40 W 25 27.20
DATE: 83- X -05
DEPTH OF WATER: 342 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	18.438	35.874
20.	18.436	35.876
30.	18.435	35.876
40.	18.204	35.898
50.	17.369	35.920
60.	15.370	35.956
70.	14.833	35.974
80.	14.750	35.965
90.	14.614	35.957
100.	14.422	35.932
200.	13.648	35.843
300.	12.929	35.741
400.	12.372	35.659
500.	11.717	35.568
600.	10.901	35.485
700.	9.949	35.407
800.	9.004	35.350
900.	7.807	35.273
1000.	7.230	35.267
1100.	7.064	35.341
1200.	6.569	35.308
1300.	5.300	35.115
1400.	4.640	35.028
1500.	4.295	34.990
1600.	4.123	34.972
1700.	4.010	34.963
1800.	3.835	34.956
1900.	3.752	34.962
2000.	3.667	34.954
2005.	3.677	34.951

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 166
CRUISE STATION NB: POSEIDON 628
POSITION: N 42 56.00 W 25 41.00
DATE: 83- X -05
DEPTH OF WATER: 3400M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	18.216	35.830
20.	18.214	35.831
30.	18.218	35.837
40.	18.202	35.835
50.	16.454	35.916
60.	15.036	35.973
70.	14.512	35.927
80.	14.376	35.923
90.	14.205	35.915
100.	14.143	35.906
200.	13.362	35.793
300.	12.734	35.703
400.	12.103	35.620
500.	11.225	35.492
600.	10.225	35.378
700.	9.614	35.361
800.	9.167	35.393
900.	8.226	35.348
1000.	7.250	35.289
1100.	7.373	35.409
1200.	6.795	35.369
1300.	6.070	35.271
1400.	5.304	35.161
1500.	4.733	35.083
1600.	4.429	35.034
1700.	4.274	35.018
1800.	4.070	35.000
1900.	3.761	34.958
2000.	3.683	34.961
2200.	3.511	34.966
2400.	3.376	34.963
2600.	3.243	34.967
2800.	3.114	34.963
3000.	2.995	34.958
3200.	2.891	34.948
3271.	2.858	34.949

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 167
CRUISE STATION NB: POSEIDON 630
POSITION: N 43 24.90 W 25 49.00
DATE: 83- X -05
DEPTH OF WATER: 2650M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	18.436	35.866
20.	18.419	35.866
30.	18.389	35.868
40.	18.307	35.875
50.	15.264	35.876
60.	14.121	35.862
70.	14.001	35.852
80.	13.932	35.852
90.	13.736	35.829
100.	13.616	35.831
200.	12.896	35.734
300.	12.361	35.667
400.	11.827	35.593
500.	11.181	35.520
600.	10.551	35.449
700.	9.859	35.395
800.	9.417	35.458
900.	9.020	35.516
1000.	8.998	35.636
1100.	7.958	35.519
1200.	6.910	35.382
1300.	5.864	35.204
1400.	5.338	35.145
1500.	4.821	35.078
1600.	4.479	35.034
1700.	4.148	34.992
1800.	4.030	34.983
1900.	3.869	34.982
2000.	3.779	34.973
2009.	3.771	34.971

IFMK TOPOGULF

TOPOGULF STATION NB: 168
CRUISE STATION NB: POSEIDON 632
POSITION: N 43 53.10 W 25 56.60
DATE: 83- X -05
DEPTH OF WATER: 3300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
14.	18.110	35.915
20.	18.086	35.919
30.	18.078	35.919
40.	18.074	35.918
50.	16.605	35.887
60.	14.793	35.863
70.	14.162	35.853
80.	13.947	35.841
90.	13.729	35.828
100.	13.616	35.821
200.	12.796	35.716
300.	12.290	35.653
400.	11.798	35.590
500.	11.210	35.515
600.	10.639	35.460
700.	10.127	35.455
800.	9.689	35.507
900.	8.749	35.438
1000.	8.191	35.477
1100.	7.034	35.326
1200.	6.125	35.215
1300.	5.353	35.123
1400.	4.974	35.083
1500.	4.536	35.028
1600.	4.350	35.000
1700.	4.116	34.980
1800.	3.904	34.954
1900.	3.751	34.962
2000.	3.681	34.946
2200.	3.540	34.955
2400.	3.389	34.959
2600.	3.238	34.958
2800.	3.137	34.965
3000.	3.074	34.953
3005.	3.073	34.954

IFMK TOPOGULF

TOPOGULF STATION NB: 169
CRUISE STATION NB: POSEIDON 634
POSITION: N 44 23.00 W 26 5.90
DATE: 83- X -05
DEPTH OF WATER: 2980M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	18.116	35.816
20.	18.109	35.813
30.	18.005	35.825
40.	17.941	35.823
50.	16.064	35.930
60.	14.783	35.951
70.	14.528	35.948
80.	14.370	35.938
90.	14.262	35.923
100.	14.153	35.914
200.	13.460	35.807
300.	12.834	35.724
400.	12.187	35.625
500.	11.243	35.498
600.	10.252	35.376
700.	9.624	35.343
800.	8.390	35.229
900.	7.847	35.300
1000.	7.054	35.243
1100.	6.894	35.291
1200.	6.479	35.237
1300.	5.811	35.208
1400.	5.168	35.119
1500.	4.395	35.011
1600.	4.316	35.004
1700.	4.044	34.969
1800.	3.857	34.959
1900.	3.737	34.955
2000.	3.638	34.943
2200.	3.545	34.953
2400.	3.377	34.958
2600.	3.240	34.962
2800.	3.140	34.962
3000.	3.075	34.959
3036.	3.050	34.958

IFMK TOPOGULF

TOPOGULF STATION Nb: 170
CRUISE STATION NB: POSEIDON 636
POSITION: N 44 51.30 W 26 8.00
DATE: 83- X -06
DEPTH OF WATER: 3059M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	17.709	35.837
20.	17.704	35.840
30.	17.672	35.846
40.	17.607	35.839
50.	17.611	35.838
60.	16.545	35.973
70.	15.308	36.006
80.	14.781	35.957
90.	14.506	35.931
100.	14.369	35.922
200.	13.068	35.747
300.	12.638	35.691
400.	12.094	35.618
500.	11.318	35.512
600.	10.445	35.410
700.	9.648	35.340
800.	8.438	35.235
900.	8.003	35.290
1000.	7.517	35.320
1100.	6.854	35.278
1200.	5.915	35.181
1300.	5.033	35.059
1400.	4.573	35.003
1500.	4.320	34.991
1600.	4.156	34.973
1700.	3.962	34.954
1800.	3.871	34.945
1900.	3.779	34.948
2000.	3.692	34.940
2200.	3.573	34.949
2400.	3.431	34.957
2600.	3.246	34.966
2800.	3.188	34.957
2977.	3.140	34.957

IFMK TOPOGULF

TOPOGULF STATION Nb: 171
CRUISE STATION NB: POSEIDON 638
POSITION: N 45 21.70 W 26 6.50
DATE: 83- X -06
DEPTH OF WATER: 2650M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	17.105	35.736
20.	17.105	35.730
30.	17.069	35.735
40.	17.033	35.747
50.	16.974	35.771
60.	14.419	35.825
70.	14.229	35.832
80.	13.950	35.832
90.	13.762	35.825
100.	13.596	35.811
200.	12.859	35.727
300.	12.512	35.687
400.	12.031	35.617
500.	11.339	35.518
600.	10.635	35.430
700.	9.824	35.344
800.	8.935	35.302
900.	7.719	35.263
1000.	6.509	35.145
1100.	6.780	35.288
1200.	5.242	35.060
1300.	4.845	35.030
1400.	4.424	34.988
1500.	4.170	34.975
1600.	3.963	34.946
1700.	3.862	34.944
1800.	3.768	34.937
1900.	3.696	34.936
2000.	3.656	34.941
2200.	3.541	34.946
2400.	3.456	34.954
2600.	3.340	34.963
2686.	3.280	34.963

IFMK TOPOGULF

TOPOGULF STATION NB: 172
CRUISE STATION NB: POSEIDON 640
POSITION: N 45 52.00 W 26 4.50
DATE: 83- X -06
DEPTH OF WATER: 2700M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	15.665	35.670
20.	15.305	35.609
30.	15.133	35.614
40.	15.081	35.597
50.	15.094	35.674
60.	15.036	35.764
70.	14.894	35.835
80.	14.580	35.933
90.	14.375	35.925
100.	14.278	35.917
200.	13.617	35.843
300.	12.916	35.721
400.	12.230	35.622
500.	11.018	35.449
600.	9.829	35.287
700.	7.825	35.067
800.	6.839	35.018
900.	6.139	35.014
1000.	6.187	35.134
1100.	5.526	35.113
1200.	4.960	35.046
1300.	4.481	34.989
1400.	4.228	34.974
1500.	4.090	34.970
1600.	3.962	34.957
1700.	3.849	34.949
1800.	3.762	34.942
1900.	3.671	34.944
2000.	3.591	34.947
2200.	3.512	34.953
2400.	3.364	34.962
2600.	3.282	34.963
2743.	3.252	34.952

IFMK TOPOGULF

TOPOGULF STATION NB: 173
CRUISE STATION NB: POSEIDON 642
POSITION: N 46 22.00 W 26 5.40
DATE: 83- X -07
DEPTH OF WATER: 3150M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	15.430	35.618
20.	15.288	35.598
30.	15.186	35.568
40.	15.191	35.574
50.	15.198	35.580
60.	14.966	35.552
70.	15.034	35.754
80.	14.379	35.905
90.	14.409	35.915
100.	14.268	35.915
200.	13.416	35.805
300.	12.719	35.681
400.	11.488	35.506
500.	10.522	35.396
600.	9.590	35.264
700.	7.220	35.086
800.	6.667	35.051
900.	5.776	35.052
1000.	5.327	35.059
1100.	5.028	35.053
1200.	4.484	34.987
1300.	4.652	35.037
1400.	4.035	34.951
1500.	3.910	34.941
1600.	3.818	34.945
1700.	3.747	34.944
1800.	3.704	34.947
1900.	3.676	34.944
2000.	3.590	34.947
2200.	3.501	34.949
2400.	3.365	34.953
2600.	3.236	34.969
2800.	3.167	34.963
3000.	3.122	34.967
3027.	3.112	34.964

IFMK TOPOGULF

TOPOGULF STATION NB: 174
CRUISE STATION NB: POSEIDON 644
POSITION: N 46 51.60 W 26 7.30
DATE: 83- X -07
DEPTH OF WATER: 3070M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	16.809	35.682
20.	16.811	35.686
30.	16.812	35.687
40.	16.748	35.678
50.	16.564	35.671
60.	15.395	35.765
70.	14.292	35.765
80.	14.151	35.809
90.	14.100	35.811
100.	14.080	35.836
200.	13.626	35.835
300.	12.806	35.704
400.	11.847	35.540
500.	10.608	35.372
600.	9.173	35.203
700.	8.288	35.188
800.	7.160	35.114
900.	6.442	35.106
1000.	6.101	35.144
1100.	5.206	35.042
1200.	4.753	35.008
1300.	4.552	35.001
1400.	4.351	34.988
1500.	4.141	34.976
1600.	4.010	34.963
1700.	3.842	34.949
1800.	3.697	34.937
1900.	3.659	34.943
2000.	3.632	34.953
2200.	3.502	34.946
2400.	3.409	34.959
2600.	3.262	34.955
2800.	3.154	34.960
3000.	3.014	34.962
3109.	2.985	34.955

IFMK TOPOGULF

TOPOGULF STATION NB: 175
CRUISE STATION NB: POSEIDON 646
POSITION: N 47 22.00 W 26 6.50
DATE: 83- X -07
DEPTH OF WATER: 2850M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	16.384	35.761
20.	16.383	35.762
30.	16.383	35.760
40.	16.384	35.763
50.	16.384	35.767
60.	16.378	35.766
70.	16.176	35.770
80.	15.823	35.771
90.	15.019	35.791
100.	14.429	35.814
200.	12.761	35.704
300.	12.325	35.648
400.	11.613	35.540
500.	10.946	35.470
600.	10.078	35.358
700.	9.220	35.289
800.	7.209	35.031
900.	6.299	35.024
1000.	5.499	34.997
1100.	4.999	34.981
1200.	4.657	34.982
1300.	4.273	34.944
1400.	4.078	34.934
1500.	3.968	34.933
1600.	3.873	34.926
1700.	3.787	34.931
1800.	3.743	34.935
1900.	3.709	34.936
2000.	3.688	34.932
2200.	3.611	34.944
2400.	3.520	34.948
2600.	3.395	34.959
2800.	3.098	34.967
2899.	2.987	34.955

IFMK TOPOGULF

TOPOGULF STATION NO: 176
CRUISE STATION NO: POSEIDON 648
POSITION: N 47 51.60 W 26 6.60
DATE: 83- X -07
DEPTH OF WATER: 2610M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	16.359	35.667
20.	16.361	35.664
30.	16.347	35.666
40.	16.332	35.666
50.	16.330	35.666
60.	16.256	35.675
70.	15.525	35.722
80.	14.206	35.782
90.	14.070	35.827
100.	14.091	35.845
200.	12.887	35.687
300.	11.675	35.510
400.	10.491	35.341
500.	10.041	35.333
600.	9.126	35.268
700.	7.971	35.159
800.	7.084	35.155
900.	6.436	35.176
1000.	5.104	34.989
1100.	4.730	34.982
1200.	4.366	34.950
1300.	4.124	34.929
1400.	3.940	34.923
1500.	3.810	34.921
1600.	3.755	34.927
1700.	3.696	34.926
1800.	3.664	34.932
1900.	3.651	34.932
2000.	3.613	34.936
2200.	3.520	34.950
2400.	3.454	34.944
2516.	3.347	34.949

IFMK TOPOGULF

TOPOGULF STATION NO: 177
CRUISE STATION NO: POSEIDON 650
POSITION: N 48 22.00 W 26 6.50
DATE: 83- X -07
DEPTH OF WATER: 2800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	14.625	35.432
20.	14.619	35.432
30.	14.600	35.428
40.	14.594	35.431
50.	14.580	35.434
60.	14.581	35.434
70.	14.589	35.442
80.	14.565	35.444
90.	14.176	35.454
100.	12.204	35.395
200.	9.925	35.229
300.	8.640	35.069
400.	7.496	34.992
500.	6.589	34.969
600.	5.858	34.937
700.	5.391	34.974
800.	4.852	34.957
900.	4.779	34.988
1000.	4.409	34.965
1100.	4.219	34.959
1200.	3.929	34.927
1300.	3.810	34.917
1400.	3.755	34.930
1500.	3.726	34.925
1600.	3.674	34.931
1700.	3.624	34.929
1800.	3.587	34.928
1900.	3.549	34.935
2000.	3.528	34.943
2200.	3.423	34.946
2400.	3.282	34.961
2600.	3.158	34.959
2800.	3.090	34.955
3000.	3.036	34.961
3041.	3.020	34.954

IFMK TOPOGULF

TOPOGULF STATION Nº: 178
CRUISE STATION NB: POSEIDON 652
POSITION: N 48 43.00 W 25 23.50
DATE: 83- X -07
DEPTH OF WATER: 265 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
15.	15.269	35.501
20.	15.274	35.502
30.	15.277	35.499
40.	15.281	35.499
50.	15.287	35.494
60.	15.288	35.493
70.	15.287	35.494
80.	15.270	35.498
90.	14.763	35.538
100.	13.618	35.558
200.	10.950	35.451
300.	10.472	35.411
400.	10.010	35.363
500.	8.583	35.146
600.	7.674	35.125
700.	6.391	35.059
800.	5.441	34.995
900.	4.809	34.974
1000.	4.560	34.965
1100.	4.277	34.944
1200.	4.141	34.941
1300.	3.986	34.932
1400.	3.898	34.929
1500.	3.827	34.934
1600.	3.731	34.923
1700.	3.665	34.924
1800.	3.622	34.928
1900.	3.591	34.936
2000.	3.570	34.933
2200.	3.488	34.944
2400.	3.393	34.950
2600.	3.203	34.959
2774.	3.135	34.955

IFMK TOPOGULF

TOPOGULF STATION NB: 179
CRUISE STATION NB: POSEIDON 654
POSITION: N 48 34.60 W 26 .60
DATE: 83- X -08
DEPTH OF WATER: 332 OM.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
15.	14.436	35.357
20.	14.438	35.359
30.	14.453	35.362
40.	14.577	35.439
50.	14.631	35.476
60.	14.656	35.484
70.	14.703	35.514
80.	14.456	35.503
90.	13.191	35.498
100.	12.288	35.531
200.	10.601	35.397
300.	9.694	35.274
400.	8.611	35.143
500.	7.556	35.093
600.	6.326	34.999
700.	5.862	35.038
800.	5.327	35.017
900.	4.603	34.957
1000.	4.346	34.950
1100.	4.170	34.936
1200.	3.995	34.926
1300.	3.896	34.922
1400.	3.802	34.922
1500.	3.753	34.919
1600.	3.682	34.919
1700.	3.627	34.919
1800.	3.592	34.931
1900.	3.583	34.937
2000.	3.546	34.939
2200.	3.444	34.954
2400.	3.302	34.955
2600.	3.122	34.950
2800.	3.015	34.956
2956.	2.947	34.958

IFMK TOPOGULF

TOPOGULF STATION NB: 180
CRUISE STATION NB: POSEIDON 657
POSITION: N 48 23.00 W 26 48.10
DATE: 83- X -08
DEPTH OF WATER: 2900M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	14.121	35.395
20.	14.126	35.395
30.	14.120	35.392
40.	14.114	35.392
50.	14.095	35.398
60.	14.092	35.400
70.	14.094	35.402
80.	14.091	35.414
90.	13.001	35.493
100.	12.385	35.524
200.	10.993	35.426
300.	10.067	35.303
400.	9.473	35.236
500.	8.161	35.074
600.	6.830	34.995
700.	5.946	34.991
800.	5.593	35.022
900.	5.263	35.042
1000.	4.550	34.980
1100.	4.219	34.948
1200.	4.167	34.961
1300.	3.995	34.945
1400.	3.895	34.940
1500.	3.812	34.937
1600.	3.737	34.936
1700.	3.662	34.933
1800.	3.621	34.935
1900.	3.595	34.935
2000.	3.527	34.936
2200.	3.445	34.957
2400.	3.377	34.952
2600.	3.271	34.953
2800.	3.152	34.958
2948.	3.021	34.956

IFMK TOPOGULF

TOPOGULF STATION NB: 181
CRUISE STATION NB: POSEIDON 659
POSITION: N 48 12.00 W 27 30.00
DATE: 83- X -09
DEPTH OF WATER: 2070M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
25.	15.796	35.608
30.	15.797	35.609
40.	15.797	35.606
50.	15.798	35.607
60.	15.594	35.619
70.	15.328	35.601
80.	14.685	35.616
90.	14.052	35.670
100.	13.376	35.650
200.	11.396	35.522
300.	10.621	35.439
400.	9.912	35.333
500.	8.627	35.195
600.	8.262	35.238
700.	6.679	35.079
800.	5.713	35.025
900.	5.188	35.019
1000.	4.720	35.005
1100.	4.398	34.970
1200.	4.172	34.945
1300.	4.009	34.937
1400.	3.924	34.939
1500.	3.834	34.931
1600.	3.750	34.936
1700.	3.662	34.942
1800.	3.608	34.942
1900.	3.590	34.942
2000.	3.554	34.947
2067.	3.535	34.954

IFMK TOPOGULF
==== ========

TOPOGULF STATION NB: 182
CRUISE STATION NB: POSEIDON 661
POSITION: N 48 1.00 W 28 11.30
DATE: 83- X -09
DEPTH OF WATER: 2750M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
25.	15.763	35.579
30.	15.766	35.579
40.	15.766	35.579
50.	15.763	35.577
60.	15.759	35.581
70.	14.924	35.663
80.	13.414	35.668
90.	12.850	35.677
100.	12.709	35.686
200.	11.547	35.536
300.	10.796	35.444
400.	10.003	35.346
500.	8.944	35.249
600.	7.689	35.157
700.	6.553	35.026
800.	5.408	35.009
900.	4.777	34.970
1000.	4.439	34.956
1100.	4.122	34.940
1200.	3.984	34.932
1300.	3.894	34.926
1400.	3.817	34.924
1500.	3.767	34.923
1600.	3.716	34.926
1700.	3.671	34.929
1800.	3.627	34.934
1900.	3.597	34.935
2000.	3.578	34.935
2200.	3.515	34.937
2400.	3.448	34.938
2600.	3.409	34.952
2773.	3.371	34.945

IFMK TOPOGULF
==== ========

TOPOGULF STATION NB: 183
CRUISE STATION NB: POSEIDON 663
POSITION: N 47 50.00 W 28 53.00
DATE: 83- X -09
DEPTH OF WATER: 3395M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
25.	15.865	35.582
30.	15.865	35.581
40.	15.860	35.579
50.	15.847	35.582
60.	15.455	35.574
70.	15.053	35.536
80.	14.799	35.511
90.	14.686	35.511
100.	13.289	35.572
200.	11.003	35.406
300.	9.818	35.250
400.	8.659	35.146
500.	7.611	35.045
600.	6.524	35.007
700.	5.712	35.019
800.	5.134	34.997
900.	4.703	34.959
1000.	4.408	34.958
1100.	4.205	34.946
1200.	4.065	34.930
1300.	3.947	34.934
1400.	3.850	34.929
1500.	3.761	34.923
1600.	3.703	34.931
1700.	3.656	34.930
1800.	3.606	34.932
1900.	3.582	34.934
2000.	3.512	34.940
2200.	3.456	34.942
2400.	3.351	34.952
2600.	3.237	34.960
2798.	3.143	34.978

IFMK TOPOGULF

TOPOGULF STATION NB: 184
CRUISE STATION NB: POSEIDON 665
POSITION: N 47 39.00 W 29 33.30
DATE: 83- X -09
DEPTH OF WATER: 3360M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
25.	14.828	35.525
30.	14.830	35.522
40.	14.696	35.516
50.	14.434	35.479
60.	14.378	35.478
70.	14.363	35.487
80.	14.248	35.524
90.	13.836	35.564
100.	13.104	35.608
200.	10.955	35.423
300.	10.710	35.432
400.	10.449	35.395
500.	9.690	35.266
600.	8.242	35.112
700.	7.186	35.046
800.	6.406	35.050
900.	5.727	35.037
1000.	4.992	34.996
1100.	4.507	34.957
1200.	4.207	34.937
1300.	4.090	34.929
1400.	3.997	34.932
1500.	3.873	34.930
1600.	3.785	34.916
1700.	3.734	34.923
1800.	3.679	34.919
1900.	3.637	34.927
2000.	3.626	34.929
2200.	3.552	34.934
2400.	3.432	34.942
2600.	3.349	34.946
2800.	3.256	34.938
3000.	3.117	34.949
3162.	2.910	34.940

IFMK TOPOGULF

TOPOGULF STATION NB: 185
CRUISE STATION NB: POSEIDON 667
POSITION: N 47 28.00 W 30 16.00
DATE: 83- X -09
DEPTH OF WATER: 3315M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
17.	16.839	35.772
20.	16.835	35.769
30.	16.354	35.767
40.	16.852	35.769
50.	16.839	35.787
60.	16.786	35.754
70.	16.644	35.748
80.	16.318	35.837
90.	15.722	35.978
100.	15.481	36.004
200.	14.166	35.873
300.	13.191	35.727
400.	11.979	35.557
500.	10.531	35.331
600.	8.987	35.167
700.	7.695	35.106
800.	6.801	35.083
900.	5.780	35.046
1000.	5.065	35.002
1100.	4.704	34.984
1200.	4.335	34.944
1300.	4.112	34.935
1400.	4.009	34.931
1500.	3.910	34.928
1600.	3.858	34.924
1700.	3.787	34.922
1800.	3.756	34.918
1900.	3.707	34.932
2000.	3.669	34.937
2200.	3.560	34.940
2400.	3.471	34.946
2600.	3.382	34.957
2800.	3.205	34.954
3000.	3.038	34.952
3164.	2.927	34.950

IFMK TOPOGULF

TOPOGULF STATION NB: 186
CRUISE STATION NB: POSEIDON 669
POSITION: N 47 17.00 W 30 58.00
DATE: 83- X -10
DEPTH OF WATER: 3326M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
17.	17.323	36.019
20.	17.322	36.015
30.	17.323	36.003
40.	17.333	36.000
50.	17.330	36.002
60.	17.320	35.998
70.	17.296	35.987
80.	16.952	35.938
90.	15.713	36.180
100.	15.458	36.162
200.	14.284	36.054
300.	12.816	35.780
400.	11.193	35.515
500.	9.276	35.229
600.	7.846	35.102
700.	6.440	35.011
800.	5.767	35.013
900.	5.068	34.998
1000.	4.918	35.012
1100.	4.486	34.984
1200.	4.290	34.976
1300.	3.993	34.933
1400.	3.835	34.924
1500.	3.802	34.928
1600.	3.793	34.922
1700.	3.732	34.930
1800.	3.674	34.931
1900.	3.639	34.935
2000.	3.632	34.946
2200.	3.528	34.953
2400.	3.402	34.950
2600.	3.269	34.954
2800.	3.088	34.942
3000.	2.945	34.948
3040.	2.935	34.952

IFMK TOPOGULF

TOPOGULF STATION NB: 187
CRUISE STATION NB: POSEIDON 671
POSITION: N 47 6.60 W 31 39.50
DATE: 83- X -10
DEPTH OF WATER: 3460M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
17.	15.998	35.402
20.	15.998	35.400
30.	15.986	35.396
40.	15.531	35.321
50.	15.288	35.291
60.	15.189	35.270
70.	15.047	35.344
80.	13.604	35.499
90.	12.858	35.463
100.	12.342	35.420
200.	10.436	35.288
300.	8.383	35.018
400.	6.846	34.915
500.	6.156	34.982
600.	5.070	34.917
700.	4.737	34.948
800.	4.362	34.938
900.	4.129	34.927
1000.	3.938	34.907
1100.	3.834	34.901
1200.	3.735	34.901
1300.	3.687	34.897
1400.	3.684	34.906
1500.	3.671	34.920
1600.	3.641	34.929
1700.	3.609	34.930
1800.	3.580	34.938
1900.	3.552	34.941
2000.	3.527	34.936
2200.	3.421	34.944
2400.	3.309	34.948
2600.	3.178	34.949
2800.	2.990	34.951
3000.	2.817	34.944
3055.	2.779	34.943

IFMK TOPOGULF

TOPOGULF STATION NB: 188
CRUISE STATION NB: POSEIDON 672
POSITION: N 47 .30 W 32 .00
DATE: 83- X -10
DEPTH OF WATER: 3750M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	14.974	35.158
20.	14.969	35.148
30.	14.960	35.154
40.	14.952	35.157
50.	14.943	35.155
60.	14.926	35.161
70.	14.409	35.173
80.	13.182	35.184
90.	11.614	35.189
100.	10.675	35.171
200.	6.838	34.907
300.	5.818	34.914
400.	5.210	34.916
500.	4.806	34.933
600.	4.586	34.959
700.	4.275	34.937
800.	4.101	34.938
900.	4.026	34.936
1000.	3.912	34.931
1100.	3.780	34.931
1200.	3.723	34.919
1300.	3.682	34.922
1400.	3.674	34.928
1500.	3.674	34.934
1600.	3.619	34.937
1700.	3.583	34.947
1800.	3.570	34.944
1900.	3.534	34.952
2000.	3.492	34.953
2200.	3.355	34.957
2400.	3.229	34.958
2600.	3.101	34.953
2800.	2.990	34.954
3000.	2.858	34.945
3200.	2.667	34.946
3267.	2.607	34.939

IFMK TOPOGULF

TOPOGULF STATION NB: 189
CRUISE STATION NB: POSEIDON 674
POSITION: N 46 48.10 W 32 46.80
DATE: 83- X -10
DEPTH OF WATER: 3800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	15.078	34.960
20.	15.075	34.962
30.	15.162	35.026
40.	15.356	35.160
50.	15.348	35.184
60.	16.007	35.421
70.	16.662	35.815
80.	15.720	35.911
90.	15.582	36.007
100.	15.159	35.929
200.	13.388	35.769
300.	11.384	35.482
400.	8.898	35.094
500.	6.934	34.933
600.	6.389	35.029
700.	5.910	35.079
800.	5.201	35.031
900.	4.771	35.000
1000.	4.491	34.974
1100.	4.253	34.956
1200.	4.049	34.941
1300.	3.862	34.919
1400.	3.785	34.915
1500.	3.741	34.921
1600.	3.731	34.929
1700.	3.696	34.936
1800.	3.654	34.933
1900.	3.599	34.946
2000.	3.572	34.941
2200.	3.498	34.950
2400.	3.372	34.950
2600.	3.261	34.955
2800.	3.140	34.954
3000.	2.979	34.946
3150.	2.845	34.954

IFMK TOPOGULF

TOPOGULF STATION NB: 190
CRUISE STATION NB: POSEIDON 677
POSITION: N 46 22.00 W 32 25.00
DATE: 83- X -10
DEPTH OF WATER: 4160M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
16.	17.089	35.762
20.	17.106	35.765
30.	17.105	35.755
40.	17.109	35.763
50.	17.134	35.780
60.	17.165	35.789
70.	17.173	35.788
80.	17.050	35.775
90.	16.384	36.173
100.	15.924	36.103
200.	14.366	35.956
300.	12.378	35.591
400.	10.203	35.339
500.	8.563	35.157
600.	6.644	35.015
700.	5.702	35.004
800.	5.152	35.012
900.	4.720	34.984
1000.	4.365	34.965
1100.	4.106	34.947
1200.	3.947	34.930
1300.	3.795	34.923
1400.	3.727	34.917
1500.	3.717	34.929
1600.	3.710	34.937
1700.	3.689	34.934
1800.	3.656	34.947
1900.	3.616	34.939
2000.	3.579	34.946
2099.	3.544	34.951

IFMK TOPOGULF

TOPOGULF STATION NB: 191
CRUISE STATION NB: METEOR 24
POSITION: N 48 18.30 W 24 8.80
DATE: 04-VIII-02
DEPTH OF WATER: 4100M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	18.224	35.617
10.	18.226	35.616
20.	18.226	35.616
30.	16.176	35.560
40.	14.905	35.510
50.	14.416	35.676
60.	13.872	35.691
70.	13.167	35.668
80.	12.896	35.643
90.	12.673	35.639
100.	12.591	35.631
200.	11.078	35.394
300.	10.483	35.351
400.	9.238	35.171
500.	8.374	35.113
600.	7.337	35.061
700.	6.611	35.079
800.	5.912	35.075
900.	5.254	35.033
1000.	4.717	34.988
1100.	4.374	34.962
1200.	4.137	34.945
1300.	3.974	34.925
1400.	3.859	34.915
1500.	3.613	34.915
1600.	3.741	34.914
1700.	3.665	34.917
1800.	3.613	34.918
1900.	3.574	34.921
2000.	3.553	34.931
2200.	3.470	34.943
2400.	3.314	34.949
2600.	3.162	34.954
2800.	3.073	34.952
3000.	2.877	34.947
3200.	2.772	34.940
3400.	2.674	34.928
3600.	2.623	34.923
3800.	2.589	34.911
4000.	2.588	34.913
4133.	2.592	34.910

IFMK TOPOGULF

TOPOGULF STATION NB: 192
CRUISE STATION NB: METEOR 21
POSITION: N 47 48.10 W 24 29.90
DATE: 04-VIII-02
DEPTH OF WATER: 3585M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	17.683	35.611
10.	17.677	35.615
20.	17.680	35.618
30.	17.572	35.641
40.	14.046	35.591
50.	13.131	35.572
60.	12.723	35.592
70.	12.741	35.622
80.	12.717	35.642
90.	12.499	35.615
100.	12.247	35.581
200.	10.835	35.383
300.	9.844	35.275
400.	8.781	35.150
500.	7.827	35.085
600.	7.004	35.073
700.	5.991	35.041
800.	5.776	35.090
900.	4.999	35.012
1000.	4.308	34.942
1100.	4.115	34.927
1200.	3.957	34.916
1300.	3.888	34.917
1400.	3.786	34.916
1500.	3.694	34.912
1600.	3.666	34.917
1700.	3.619	34.919
1800.	3.583	34.920
1900.	3.557	34.929
2000.	3.512	34.932
2200.	3.429	34.947
2400.	3.261	34.955
2600.	3.114	34.960
2800.	2.963	34.957
3000.	2.838	34.948
3200.	2.771	34.942
3400.	2.725	34.938
3600.	2.696	34.931
3618.	2.699	34.931

IFMK TOPOGULF

TOPOGULF STATION NB: 193
CRUISE STATION NB: METEOR 27
POSITION: N 47 44.60 W 25 12.90
DATE: 84-VIII-03
DEPTH OF WATER: 3140M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
8.	17.392	35.560
10.	17.392	35.560
20.	17.391	35.556
30.	17.266	35.551
40.	15.064	35.518
50.	13.438	35.460
60.	12.958	35.487
70.	12.896	35.544
80.	12.807	35.571
90.	12.707	35.606
100.	12.515	35.571
200.	11.479	35.489
300.	10.240	35.292
400.	9.818	35.269
500.	8.757	35.153
600.	7.584	35.085
700.	6.448	35.044
800.	5.792	35.052
900.	5.191	35.035
1000.	4.679	34.988
1100.	4.322	34.955
1200.	4.046	34.926
1300.	3.904	34.915
1400.	3.841	34.914
1500.	3.780	34.915
1600.	3.680	34.911
1700.	3.650	34.916
1800.	3.612	34.915
1900.	3.565	34.924
2000.	3.531	34.929
2200.	3.411	34.940
2400.	3.286	34.946
2600.	3.144	34.953
2800.	3.026	34.950
3000.	2.903	34.948
3159.	2.839	34.945

IFMK TOPOGULF

TOPOGULF STATION NB: 194
CRUISE STATION NB: METEOR 28
POSITION: N 47 42.80 W 25 59.00
DATE: 84-VIII-04
DEPTH OF WATER: 2800M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	18.533	35.866
10.	18.512	35.857
20.	18.511	35.857
30.	18.511	35.857
40.	18.264	35.867
50.	15.856	35.845
60.	15.179	35.863
70.	14.770	35.850
80.	14.566	35.880
90.	14.337	35.889
100.	14.159	35.894
200.	13.417	35.794
300.	12.459	35.631
400.	10.948	35.395
500.	10.039	35.276
600.	8.353	35.125
700.	6.972	34.988
800.	5.982	34.997
900.	5.690	35.033
1000.	5.211	35.014
1100.	4.733	34.985
1200.	4.406	34.961
1300.	4.163	34.948
1400.	4.029	34.938
1500.	3.934	34.933
1600.	3.814	34.932
1700.	3.738	34.927
1800.	3.694	34.927
1900.	3.619	34.931
2000.	3.564	34.932
2200.	3.459	34.939
2400.	3.351	34.950
2600.	3.198	34.953
2800.	3.066	34.952
2834.	3.050	34.953

IFMK TOPOGULF

TOPOGULF STATION NB: 195
CRUISE STATION NB: METEOR 29
POSITION: N 47 40.00 W 26 43.60
DATE: 84-VIII-04
DEPTH OF WATER: 2215M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
8.	18.491	35.863
10.	18.496	35.859
20.	18.499	35.860
30.	18.488	35.860
40.	18.136	35.844
50.	15.968	35.855
60.	15.298	35.896
70.	14.607	35.885
80.	14.497	35.896
90.	14.323	35.890
100.	14.270	35.907
200.	13.424	35.793
300.	12.733	35.677
400.	11.485	35.459
500.	9.964	35.297
600.	8.834	35.186
700.	8.019	35.189
800.	6.187	34.982
900.	5.329	34.964
1000.	4.779	34.953
1100.	4.509	34.952
1200.	4.283	34.939
1300.	4.095	34.936
1400.	3.979	34.935
1500.	3.903	34.932
1600.	3.772	34.928
1700.	3.726	34.927
1800.	3.695	34.931
1900.	3.649	34.930
2000.	3.612	34.932
2141.	3.500	34.936

IFMK TOPOGULF

TOPOGULF STATION NB: 196
CRUISE STATION NB: METEOR 30
POSITION: N 47 38.20 W 27 29.50
DATE: 84-VIII-04
DEPTH OF WATER: 3250M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	18.504	35.827
10.	18.510	35.828
20.	18.499	35.828
30.	18.477	35.827
40.	16.641	35.837
50.	15.181	35.826
60.	14.939	35.835
70.	14.807	35.905
80.	14.571	35.914
90.	14.444	35.916
100.	14.297	35.899
200.	13.515	35.800
300.	12.745	35.680
400.	11.394	35.451
500.	9.729	35.225
600.	8.940	35.199
700.	7.824	35.148
800.	6.372	35.050
900.	6.042	35.084
1000.	5.018	34.982
1100.	4.437	34.940
1200.	4.177	34.934
1300.	4.085	34.928
1400.	3.948	34.921
1500.	3.851	34.914
1600.	3.779	34.909
1700.	3.741	34.916
1800.	3.724	34.920
1900.	3.690	34.925
2000.	3.641	34.927
2200.	3.572	34.933
2400.	3.501	34.937
2600.	3.428	34.941
2800.	3.270	34.945
3000.	3.044	34.949
3200.	3.027	34.947
3400.	3.043	34.949
3435.	3.048	34.948

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 197
CRUISE STATION NB: METEOR 31
POSITION: N 47 35.90 W 28 12.90
DATE: 84-VIII-04
DEPTH OF WATER: 2950M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	17.460	35.183
10.	17.425	35.188
20.	17.408	35.214
30.	18.197	35.567
40.	18.324	35.825
50.	16.911	35.808
60.	15.450	35.857
70.	14.650	35.870
80.	14.242	35.881
90.	14.013	35.870
100.	13.915	35.866
200.	12.965	35.720
300.	11.959	35.542
400.	10.443	35.322
500.	8.859	35.147
600.	8.650	35.254
700.	7.595	35.207
800.	6.141	35.051
900.	5.766	35.093
1000.	4.934	35.014
1100.	4.402	34.969
1200.	4.003	34.926
1300.	3.891	34.921
1400.	3.802	34.915
1500.	3.767	34.918
1600.	3.722	34.920
1700.	3.663	34.923
1800.	3.631	34.926
1900.	3.603	34.932
2000.	3.577	34.931
2200.	3.473	34.940
2400.	3.398	34.943
2600.	3.306	34.946
2800.	3.246	34.948
2965.	3.212	34.943

IFMK TOPOGULF
**** ********

TOPOGULF STATION NB: 198
CRUISE STATION NB: METEOR 32
POSITION: N 47 32.50 W 28 58.20
DATE: 84-VIII-04
DEPTH OF WATER: 3420M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	16.642	34.973
10.	16.628	34.982
20.	16.285	35.045
30.	14.419	35.405
40.	13.969	35.501
50.	13.491	35.462
60.	13.169	35.440
70.	13.175	35.469
80.	12.916	35.452
90.	12.876	35.498
100.	12.824	35.521
200.	10.654	35.279
300.	9.675	35.218
400.	7.861	35.014
500.	6.755	34.975
600.	5.849	34.960
700.	5.361	34.9[illegible]
800.	4.856	34.979
900.	4.632	34.983
1000.	4.426	34.973
1100.	4.124	34.945
1200.	3.963	34.934
1300.	3.836	34.923
1400.	3.756	34.921
1500.	3.721	34.922
1600.	3.669	34.922
1700.	3.640	34.925
1800.	3.609	34.930
1900.	3.564	34.932
2000.	3.525	34.939
2200.	3.417	34.942
2400.	3.286	34.944
2600.	3.181	34.947
2800.	3.035	34.950
3000.	2.928	34.945
3200.	2.843	34.941
3400.	2.795	34.939
3435.	2.783	34.935

IFMK TOPOGULF

TOPOGULF STATION NO: 201
CRUISE STATION NO: METEOR 39
POSITION: N 47 30.40 W 30 49.90
DATE: 84-VIII-06
DEPTH OF WATER: 3200M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	17.535	35.340
10.	17.534	35.337
20.	17.506	35.338
30.	17.540	35.369
40.	16.763	35.295
50.	14.970	35.364
60.	13.807	35.583
70.	13.171	35.570
80.	12.867	35.563
90.	12.592	35.588
100.	12.409	35.582
200.	10.545	35.335
300.	9.179	35.152
400.	7.638	35.036
500.	6.228	34.972
600.	5.450	34.980
700.	5.128	34.989
800.	4.619	34.975
900.	4.304	34.955
1000.	4.141	34.944
1100.	3.985	34.934
1200.	3.839	34.922
1300.	3.738	34.916
1400.	3.737	34.922
1500.	3.693	34.923
1600.	3.665	34.927
1700.	3.645	34.930
1800.	3.613	34.935
1900.	3.582	34.935
2000.	3.538	34.942
2200.	3.464	34.945
2400.	3.336	34.945
2600.	3.197	34.946
2800.	3.031	34.945
3000.	2.892	34.941
3200.	2.728	34.941
3310.	2.612	34.935

IFMK TOPOGULF

TOPOGULF STATION NO: 202
CRUISE STATION NO: METEOR 44
POSITION: N 47 33.70 W 30 28.80
DATE: 84-VIII-09
DEPTH OF WATER: 3360M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	17.947	35.058
10.	17.885	35.063
20.	17.773	35.089
30.	17.368	35.136
40.	16.893	35.229
50.	15.942	35.280
60.	14.793	35.356
70.	14.076	35.397
80.	13.723	35.421
90.	13.292	35.433
100.	13.053	35.438
200.	8.963	35.038
300.	6.448	34.892
400.	5.771	34.952
500.	5.253	34.966
600.	4.894	34.978
700.	4.517	34.959
800.	4.309	34.947
900.	4.110	34.933
1000.	3.953	34.922
1100.	3.840	34.914
1200.	3.763	34.910
1300.	3.706	34.912
1400.	3.692	34.914
1500.	3.673	34.917
1600.	3.648	34.919
1700.	3.623	34.922
1800.	3.592	34.922
1900.	3.560	34.926
2000.	3.521	34.929
2200.	3.402	34.936
2400.	3.299	34.936
2600.	3.125	34.939
2800.	2.973	34.940
3000.	2.865	34.935
3200.	2.686	34.930
3400.	2.546	34.917
3458.	2.504	34.919

IFM TOPOGULF

TOPOGULF STATION NO: 199
CRUISE STATION NO: METEOR 35
POSITION: N 47 30.70 W 29 44.30
DATE: 84-VIII-09
DEPTH OF WATER: 3030M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	17.839	35.135
10.	17.827	35.130
20.	17.501	35.184
30.	16.339	35.477
40.	15.373	35.649
50.	15.004	35.739
60.	14.774	35.731
70.	14.126	35.624
80.	13.876	35.598
90.	13.782	35.618
100.	13.546	35.592
200.	11.909	35.494
300.	10.351	35.290
400.	8.641	35.113
500.	6.819	34.913
600.	6.116	34.975
700.	5.465	34.981
800.	4.862	34.967
900.	4.623	34.974
1000.	4.214	34.943
1100.	4.074	34.933
1200.	3.939	34.925
1300.	3.841	34.918
1400.	3.781	34.917
1500.	3.730	34.918
1600.	3.708	34.923
1700.	3.669	34.926
1800.	3.630	34.928
1900.	3.601	34.932
2000.	3.565	34.934
2200.	3.451	34.940
2400.	3.325	34.946
2600.	3.206	34.946
2800.	3.021	34.947
3000.	2.927	34.943
3051.	2.880	34.940

IFM TOPOGULF

TOPOGULF STATION NO: 200
CRUISE STATION NO: METEOR 36
POSITION: N 47 37.30 W 30 29.50
DATE: 84-VIII-06
DEPTH OF WATER: 3335M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	17.927	35.217
10.	17.925	35.219
20.	17.926	35.216
30.	17.565	35.226
40.	16.839	35.238
50.	16.086	35.273
60.	15.908	35.297
70.	15.325	35.334
80.	14.608	35.374
90.	14.102	35.400
100.	13.819	35.425
200.	8.901	35.036
300.	5.803	34.802
400.	5.789	34.946
500.	5.380	34.991
600.	5.102	34.995
700.	4.742	34.979
800.	4.430	34.963
900.	4.224	34.950
1000.	3.925	34.921
1100.	3.845	34.918
1200.	3.795	34.919
1300.	3.738	34.921
1400.	3.691	34.920
1500.	3.672	34.924
1600.	3.630	34.922
1700.	3.613	34.924
1800.	3.590	34.933
1900.	3.559	34.940
2000.	3.510	34.940
2200.	3.400	34.943
2400.	3.256	34.944
2600.	3.116	34.945
2900.	3.010	34.946
3000.	2.874	34.941
3200.	2.709	34.936
3349.	2.614	34.931

IFMK TOPOGULF

TOPOGULF STATION N°: 203
CRUISE STATION NB: METEOR 45
POSITION: N 48 .10 W 30 50.70
DATE: 84-VIII-09
DEPTH OF WATER: 3680M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	17.665	35.048
10.	17.651	35.051
20.	17.557	35.115
30.	17.468	35.098
40.	15.624	35.026
50.	14.183	35.153
60.	13.417	35.276
70.	13.096	35.363
80.	12.467	35.376
90.	12.385	35.412
100.	12.022	35.400
200.	10.441	35.282
300.	9.115	35.112
400.	7.618	34.980
500.	6.022	34.914
600.	5.541	34.967
700.	5.122	34.993
800.	4.555	34.961
900.	4.224	34.937
1000.	4.038	34.924
1100.	3.890	34.914
1200.	3.802	34.907
1300.	3.771	34.907
1400.	3.701	34.910
1500.	3.672	34.915
1600.	3.641	34.914
1700.	3.616	34.917
1800.	3.590	34.921
1900.	3.559	34.924
2000.	3.527	34.926
2200.	3.439	34.936
2400.	3.311	34.938
2600.	3.186	34.940
2800.	3.033	34.939
3000.	2.892	34.937
3200.	2.753	34.933
3400.	2.656	34.929
3600.	2.495	34.918
3700.	2.394	34.911

IFMK TOPOGULF

TOPOGULF STATION N°: 204
CRUISE STATION NB: METEOR 46
POSITION: N 48 27.40 W 31 14.50
DATE: 84-VIII-09
DEPTH OF WATER: 3850M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	17.255	34.758
10.	17.261	34.753
20.	17.150	34.739
30.	15.673	34.747
40.	13.987	35.417
50.	13.604	35.462
60.	13.406	35.437
70.	13.222	35.419
80.	13.038	35.408
90.	12.937	35.408
100.	12.941	35.463
200.	11.886	35.496
300.	9.664	35.193
400.	7.948	34.997
500.	6.205	34.880
600.	5.499	34.941
700.	5.173	34.989
800.	4.620	34.960
900.	4.345	34.945
1000.	4.175	34.947
1100.	4.020	34.930
1200.	3.890	34.923
1300.	3.791	34.914
1400.	3.722	34.910
1500.	3.661	34.907
1600.	3.654	34.911
1700.	3.613	34.914
1800.	3.620	34.924
1900.	3.585	34.924
2000.	3.534	34.927
2200.	3.456	34.937
2400.	3.376	34.943
2600.	3.217	34.940
2800.	3.062	34.941
3000.	2.925	34.940
3200.	2.779	34.933
3400.	2.642	34.926
3600.	2.512	34.919
3800.	2.407	34.914
3850.	2.367	34.908

IFMK TOPOGULF

TOPOGULF STATION NU: 205
CRUISE STATION NB: METEOR 47
POSITION: N 48 54.10 W 31 32.80
DATE: 84-VIII-09
DEPTH OF WATER: 3550M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	16.933	34.696
10.	16.933	34.692
20.	16.792	34.745
30.	15.792	34.857
40.	13.738	34.989
50.	12.337	35.007
60.	11.587	35.112
70.	10.810	35.082
80.	10.618	35.112
90.	9.946	35.082
100.	9.881	35.103
200.	7.505	34.923
300.	6.330	34.862
400.	5.556	34.894
500.	5.063	34.927
600.	4.673	34.933
700.	4.410	34.933
800.	4.169	34.918
900.	4.015	34.914
1000.	3.880	34.908
1100.	3.787	34.905
1200.	3.726	34.905
1300.	3.692	34.907
1400.	3.662	34.913
1500.	3.637	34.913
1600.	3.610	34.916
1700.	3.568	34.916
1800.	3.550	34.924
1900.	3.517	34.928
2000.	3.484	34.931
2200.	3.340	34.937
2400.	3.248	34.941
2600.	3.099	34.942
2800.	3.002	34.944
3000.	2.838	34.937
3200.	2.735	34.931
3400.	2.520	34.921
3600.	2.395	34.915
3500.	2.395	34.915

IFMK TOPOGULF

TOPOGULF STATION NO: 206
CRUISE STATION NB: METEOR 46
POSITION: N 49 17.60 W 32 .00
DATE: 84-VIII-10
DEPTH OF WATER: 3460M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	17.000	34.638
10.	16.999	34.639
20.	17.007	34.638
30.	16.551	34.696
40.	14.937	34.728
50.	13.496	34.748
60.	11.569	34.709
70.	9.924	34.692
80.	9.293	34.746
90.	7.898	34.696
100.	7.127	34.678
200.	5.339	34.739
300.	5.491	34.899
400.	5.054	34.925
500.	4.626	34.919
600.	4.343	34.929
700.	4.147	34.923
800.	3.978	34.917
900.	3.861	34.913
1000.	3.773	34.906
1100.	3.693	34.900
1200.	3.652	34.897
1300.	3.625	34.902
1400.	3.614	34.908
1500.	3.584	34.906
1600.	3.563	34.915
1700.	3.554	34.918
1800.	3.530	34.923
1900.	3.497	34.927
2000.	3.452	34.932
2200.	3.357	34.937
2400.	3.236	34.941
2600.	3.099	34.939
2800.	2.934	34.937
3000.	2.821	34.935
3200.	2.665	34.929
3400.	2.484	34.916
3479.	2.435	34.913

IFMK TOPOGULF

TOPOGULF STATION NB: 207
CRUISE STATION NB: METEOR 49
POSITION: N 49 44.10 W 32 22.70
DATE: 84-VIII-10
DEPTH OF WATER: 3760M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	16.449	34.480
10.	16.448	34.480
20.	16.364	34.508
30.	14.359	34.914
40.	13.713	35.339
50.	13.309	35.424
60.	13.146	35.421
70.	12.979	35.419
80.	12.914	35.484
90.	12.203	35.366
100.	11.829	35.310
200.	10.309	35.254
300.	8.789	35.070
400.	6.883	34.880
500.	5.735	34.877
600.	5.140	34.899
700.	4.649	34.918
800.	4.474	34.938
900.	4.165	34.916
1000.	4.008	34.909
1100.	3.883	34.904
1200.	3.713	34.889
1300.	3.637	34.892
1400.	3.665	34.905
1500.	3.641	34.908
1600.	3.630	34.911
1700.	3.615	34.916
1800.	3.582	34.920
1900.	3.550	34.926
2000.	3.512	34.928
2200.	3.435	34.935
2400.	3.314	34.942
2600.	3.137	34.938
2800.	3.039	34.941
3000.	2.910	34.938
3200.	2.794	34.930
3400.	2.626	34.930
3600.	2.518	34.920
3800.	2.410	34.912
3807.	2.408	34.915

IFMK TOPOGULF

TOPOGULF STATION NB: 208
CRUISE STATION NB: METEOR 50
POSITION: N 50 12.20 W 32 44.10
DATE: 84-VIII-10
DEPTH OF WATER: 4110M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	16.352	34.796
10.	16.353	34.797
20.	16.304	34.796
30.	16.281	34.796
40.	14.969	34.910
50.	12.530	34.983
60.	11.259	35.043
70.	10.807	35.104
80.	10.421	35.160
90.	10.094	35.196
100.	9.316	35.088
200.	7.364	34.913
300.	6.016	34.866
400.	5.311	34.864
500.	5.101	34.936
600.	4.710	34.954
700.	4.240	34.928
800.	4.100	34.917
900.	3.954	34.913
1000.	3.843	34.903
1100.	3.730	34.898
1200.	3.704	34.904
1300.	3.699	34.911
1400.	3.651	34.910
1500.	3.638	34.915
1600.	3.592	34.920
1700.	3.590	34.921
1800.	3.547	34.925
1900.	3.513	34.931
2000.	3.480	34.933
2200.	3.399	34.941
2400.	3.279	34.948
2600.	3.146	34.944
2800.	3.031	34.949
3000.	2.901	34.948
3200.	2.730	34.936
3400.	2.607	34.930
3600.	2.500	34.921
3800.	2.432	34.918
4000.	2.405	34.914
4156.	2.397	34.911

IFMK TOPOGULF

TOPOGULF STATION NB: 209
CRUISE STATION NB: METEOR 51
POSITION: N 50 35.30 W 33 9.00
DATE: 84-VIII-10
DEPTH OF WATER: 3755M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	16.376	34.809
10.	16.364	34.804
20.	16.250	34.807
30.	16.014	34.803
40.	14.592	34.982
50.	13.017	35.069
60.	11.903	35.082
70.	11.407	35.193
80.	11.114	35.243
90.	10.918	35.262
100.	10.553	35.243
200.	9.211	35.131
300.	7.051	34.900
400.	5.925	34.872
500.	5.776	34.972
600.	4.934	34.942
700.	4.511	34.930
800.	4.266	34.925
900.	3.995	34.910
1000.	3.922	34.912
1100.	3.802	34.905
1200.	3.727	34.904
1300.	3.683	34.903
1400.	3.661	34.909
1500.	3.647	34.914
1600.	3.623	34.919
1700.	3.593	34.921
1800.	3.564	34.924
1900.	3.537	34.929
2000.	3.493	34.934
2200.	3.387	34.945
2400.	3.288	34.950
2600.	3.191	34.951
2800.	3.073	34.954
3000.	2.992	34.950
3200.	2.903	34.951
3400.	2.731	34.941
3600.	2.590	34.929
3800.	2.452	34.921
3905.	2.434	34.919

IFMK TOPOGULF

TOPOGULF STATION NB: 210
CRUISE STATION NB: METEOR 52
POSITION: N 51 3.90 W 33 34.70
DATE: 84-VIII-11
DEPTH OF WATER: 3745M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	15.244	34.507
10.	15.243	34.508
20.	15.152	34.503
30.	14.150	34.572
40.	12.493	34.727
50.	11.731	34.860
60.	10.774	34.910
70.	10.425	34.927
80.	10.632	35.121
90.	10.596	35.177
100.	10.526	35.188
200.	9.140	35.067
300.	7.872	34.954
400.	6.497	34.875
500.	5.459	34.867
600.	4.931	34.891
700.	4.321	34.892
800.	4.217	34.919
900.	3.908	34.895
1000.	3.846	34.899
1100.	3.731	34.890
1200.	3.662	34.899
1300.	3.630	34.893
1400.	3.606	34.895
1500.	3.585	34.902
1600.	3.561	34.908
1700.	3.592	34.917
1800.	3.583	34.925
1900.	3.552	34.930
2000.	3.514	34.934
2200.	3.436	34.940
2400.	3.316	34.946
2600.	3.272	34.947
2800.	3.121	34.953
3000.	3.005	34.951
3200.	2.917	34.950
3400.	2.792	34.945
3600.	2.716	34.940
3745.	2.631	34.929

IFMK TOPOGULF

TOPOGULF STATION NB: 211
CRUISE STATION NB: METEOR 53
POSITION: N 51 27.70 W 33 56.60
DATE: 84-VIII-11
DEPTH OF WATER: 3555M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	15.985	34.803
10.	15.992	34.802
20.	15.677	34.795
30.	15.207	34.765
40.	13.089	34.912
50.	12.317	35.036
60.	11.971	35.120
70.	11.927	35.288
80.	11.868	35.345
90.	11.706	35.360
100.	11.584	35.359
200.	10.334	35.230
300.	8.453	34.993
400.	6.641	34.850
500.	5.840	34.915
600.	5.161	34.924
700.	4.685	34.922
800.	4.334	34.917
900.	4.175	34.916
1000.	4.009	34.911
1100.	3.870	34.899
1200.	3.673	34.887
1300.	3.602	34.892
1400.	3.590	34.888
1500.	3.547	34.887
1600.	3.523	34.893
1700.	3.547	34.898
1800.	3.584	34.913
1900.	3.573	34.921
2000.	3.540	34.926
2200.	3.456	34.934
2400.	3.341	34.939
2600.	3.230	34.940
2800.	3.115	34.945
3000.	3.004	34.951
3200.	2.903	34.950
3400.	2.837	34.946
3600.	2.831	34.944
3606.	2.828	34.945

IFMK TOPOGULF

TOPOGULF STATION NB: 212
CRUISE STATION NB: METEOR 54
POSITION: N 51 55.20 W 34 22.80
DATE: 84-VIII-11
DEPTH OF WATER: 3555M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.971	33.944
10.	12.969	33.946
20.	12.927	33.942
30.	11.464	34.022
40.	7.623	34.153
50.	8.595	34.627
60.	8.041	34.610
70.	8.382	34.763
80.	7.690	34.663
90.	8.142	34.786
100.	8.595	34.934
200.	6.543	34.755
300.	5.593	34.830
400.	4.132	34.760
500.	4.935	34.965
600.	3.807	34.844
700.	4.104	34.906
800.	4.096	34.930
900.	3.964	34.921
1000.	3.684	34.887
1100.	3.654	34.889
1200.	3.696	34.905
1300.	3.569	34.892
1400.	3.605	34.906
1500.	3.605	34.910
1600.	3.583	34.914
1700.	3.560	34.918
1800.	3.537	34.922
1900.	3.509	34.927
2000.	3.468	34.931
2200.	3.347	34.935
2400.	3.240	34.942
2600.	3.126	34.944
2800.	2.986	34.944
3000.	2.694	34.949
3200.	2.777	34.943
3400.	2.676	34.933
3505.	2.578	34.926

IFMK TOPOGULF

TOPOGULF STATION Nº: 213
CRUISE STATION NB: METEOR 55
POSITION: N 52 21.70 W 34 46.60
DATE: 84-VIII-11
DEPTH OF WATER: 3920M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.902	34.049
10.	12.849	34.048
20.	12.184	34.103
30.	9.011	34.432
40.	7.302	34.502
50.	6.483	34.559
60.	5.793	34.609
70.	5.686	34.631
80.	5.726	34.677
90.	5.483	34.672
100.	5.033	34.649
200.	4.630	34.787
300.	4.809	34.908
400.	4.377	34.903
500.	4.335	34.935
600.	4.113	34.921
700.	3.867	34.902
800.	3.759	34.892
900.	3.717	34.895
1000.	3.667	34.897
1100.	3.509	34.876
1200.	3.487	34.876
1300.	3.504	34.887
1400.	3.515	34.894
1500.	3.543	34.909
1600.	3.538	34.920
1700.	3.506	34.927
1800.	3.478	34.932
1900.	3.434	34.936
2000.	3.381	34.937
2200.	3.244	34.941
2400.	3.139	34.948
2600.	3.040	34.952
2800.	2.978	34.957
3000.	2.955	34.964
3200.	2.902	34.961
3400.	2.893	34.964
3600.	2.870	34.959
3800.	2.858	34.954
3806.	2.857	34.952

IFMK TOPOGULF

TOPOGULF STATION Nº: 214
CRUISE STATION NB: METEOR 56
POSITION: N 52 45.30 W 35 12.90
DATE: 84-VIII-11
DEPTH OF WATER: 3213M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.394	34.508
10.	12.394	34.508
20.	12.395	34.510
30.	11.745	34.538
40.	8.606	34.616
50.	7.314	34.650
60.	6.444	34.663
70.	5.581	34.690
80.	5.422	34.672
90.	5.196	34.681
100.	5.075	34.688
200.	4.896	34.826
300.	4.432	34.838
400.	4.362	34.879
500.	4.171	34.893
600.	3.967	34.902
700.	3.891	34.905
800.	3.797	34.909
900.	3.704	34.913
1000.	3.647	34.918
1100.	3.611	34.923
1200.	3.565	34.927
1300.	3.542	34.939
1400.	3.478	34.946
1500.	3.441	34.955
1600.	3.411	34.958
1700.	3.336	34.966
1800.	3.277	34.968
1900.	3.158	34.971
2000.	3.096	34.971
2200.	3.025	34.974
2400.	3.006	34.975
2600.	3.006	34.975
2800.	3.006	34.975
3000.	3.003	34.973
3200.	3.012	34.971
3203.	3.012	34.972

IFMK TOPOGULF

TOPOGULF STATION NB: 215
CRUISE STATION NB: METEOR 57
POSITION: N 53 12.10 W 35 11.90
DATE: 84-VIII-12
DEPTH OF WATER: 2400M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.662	34.528
10.	12.663	34.527
20.	12.653	34.527
30.	12.542	34.529
40.	12.133	34.531
50.	8.896	34.618
60.	7.668	34.633
70.	6.735	34.700
80.	6.159	34.708
90.	5.605	34.716
100.	5.465	34.735
200.	5.270	34.883
300.	4.853	34.893
400.	4.436	34.889
500.	4.188	34.904
600.	3.993	34.898
700.	3.828	34.897
800.	3.656	34.899
900.	3.635	34.900
1000.	3.632	34.912
1100.	3.570	34.911
1200.	3.563	34.921
1300.	3.565	34.929
1400.	3.497	34.937
1500.	3.438	34.945
1600.	3.418	34.955
1700.	3.399	34.962
1800.	3.223	34.971
1900.	3.153	34.973
2000.	3.141	34.973
2200.	3.126	34.977
2400.	3.080	34.973
2466.	3.076	34.979

IFMK TOPOGULF

TOPOGULF STATION NB: 216
CRUISE STATION NB: METEOR 58
POSITION: N 53 11.30 W 34 21.90
DATE: 84-VIII-12
DEPTH OF WATER: 2975M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.831	34.558
10.	12.833	34.558
20.	12.835	34.559
30.	11.606	34.587
40.	9.246	34.573
50.	7.610	34.615
60.	6.678	34.626
70.	6.123	34.653
80.	5.664	34.679
90.	5.529	34.702
100.	5.353	34.718
200.	4.822	34.782
300.	4.701	34.866
400.	4.511	34.889
500.	4.219	34.902
600.	3.959	34.895
700.	3.724	34.893
800.	3.700	34.892
900.	3.670	34.897
1000.	3.640	34.902
1100.	3.584	34.902
1200.	3.577	34.910
1300.	3.569	34.919
1400.	3.542	34.926
1500.	3.472	34.938
1600.	3.444	34.947
1700.	3.391	34.956
1800.	3.335	34.958
1900.	3.235	34.968
2000.	3.137	34.972
2200.	3.029	34.972
2400.	2.924	34.976
2600.	2.939	34.972
2800.	2.956	34.971
2954.	2.969	34.970

IFMK TOPOGULF

TOPOGULF STATION NB: 217
CRUISE STATION NB: METEOR 59
POSITION: N 53 10.50 W 33 31.00
DATE: 84-VIII-12
DEPTH OF WATER: 2900M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.305	34.463
10.	12.304	34.458
20.	11.652	34.539
30.	9.232	34.642
40.	7.966	34.674
50.	6.439	34.727
60.	6.222	34.769
70.	5.919	34.760
80.	5.932	34.784
90.	5.947	34.808
100.	5.814	34.798
200.	5.414	34.824
300.	5.258	34.871
400.	4.908	34.887
500.	4.582	34.890
600.	4.333	34.896
700.	4.108	34.896
800.	3.858	34.891
900.	3.763	34.891
1000.	3.656	34.894
1100.	3.616	34.887
1200.	3.615	34.896
1300.	3.544	34.899
1400.	3.585	34.915
1500.	3.551	34.921
1600.	3.520	34.931
1700.	3.474	34.933
1800.	3.466	34.948
1900.	3.389	34.956
2000.	3.298	34.959
2200.	3.178	34.965
2400.	3.061	34.973
2600.	2.912	34.970
2800.	2.877	34.968
2857.	2.880	34.966

IFMK TOPOGULF

TOPOGULF STATION NB: 218
CRUISE STATION NB: METEOR 60
POSITION: N 53 10.20 W 32 40.60
DATE: 84-VIII-12
DEPTH OF WATER: 2900M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.960	34.533
10.	12.955	34.537
20.	12.910	34.538
30.	12.803	34.538
40.	11.837	34.571
50.	8.363	34.423
60.	7.680	34.470
70.	6.898	34.591
80.	6.260	34.624
90.	5.916	34.636
100.	5.767	34.640
200.	4.992	34.775
300.	4.859	34.865
400.	4.548	34.895
500.	4.295	34.903
600.	4.061	34.905
700.	3.913	34.900
800.	3.747	34.890
900.	3.695	34.895
1000.	3.580	34.882
1100.	3.623	34.905
1200.	3.584	34.906
1300.	3.581	34.915
1400.	3.551	34.921
1500.	3.533	34.925
1600.	3.499	34.935
1700.	3.443	34.940
1800.	3.395	34.951
1900.	3.368	34.958
2000.	3.286	34.964
2200.	3.134	34.968
2400.	3.071	34.972
2600.	2.943	34.971
2800.	2.860	34.967
2896.	2.834	34.963

IFMK

TOPOGULF

TOPOGULF STATION NB: 219
CRUISE STATION NB: METEOR 61
POSITION: N 53 7.30 W 31 51.40
DATE: 84-VIII-12
DEPTH OF WATER: 2945M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	13.186	34.805
10.	13.187	34.805
20.	13.065	34.810
30.	11.028	34.907
40.	9.844	35.029
50.	8.566	34.998
60.	7.923	34.987
70.	7.788	34.971
80.	7.595	34.972
90.	7.485	34.968
100.	7.428	34.972
200.	6.948	34.980
300.	6.934	35.001
400.	6.206	34.963
500.	5.451	34.953
600.	4.805	34.930
700.	4.279	34.907
800.	4.060	34.902
900.	3.949	34.901
1000.	3.777	34.890
1100.	3.672	34.886
1200.	3.665	34.894
1300.	3.618	34.895
1400.	3.608	34.899
1500.	3.592	34.910
1600.	3.572	34.918
1700.	3.537	34.923
1800.	3.505	34.931
1900.	3.468	34.942
2000.	3.414	34.945
2200.	3.300	34.961
2400.	3.100	34.965
2600.	2.947	34.969
2800.	2.849	34.969
3000.	2.794	34.962
3124.	2.808	34.964

IFMK

TOPOGULF

TOPOGULF STATION NB: 220
CRUISE STATION NB: METEOR 63
POSITION: N 53 7.30 W 31 .70
DATE: 84-VIII-13
DEPTH OF WATER: 3025M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	13.337	34.771
10.	13.337	34.774
20.	13.337	34.770
30.	13.338	34.772
40.	11.018	34.817
50.	8.531	34.822
60.	7.906	34.812
70.	7.037	34.765
80.	6.752	34.751
90.	6.323	34.739
100.	6.224	34.739
200.	5.458	34.822
300.	5.307	34.909
400.	4.837	34.915
500.	4.473	34.921
600.	4.132	34.901
700.	3.961	34.901
800.	3.828	34.899
900.	3.758	34.893
1000.	3.689	34.895
1100.	3.613	34.892
1200.	3.581	34.897
1300.	3.560	34.903
1400.	3.568	34.915
1500.	3.542	34.925
1600.	3.483	34.929
1700.	3.461	34.932
1800.	3.414	34.937
1900.	3.363	34.940
2000.	3.324	34.947
2200.	3.201	34.954
2400.	3.072	34.964
2600.	2.958	34.966
2800.	2.874	34.963
3000.	2.796	34.957
3001.	2.795	34.959

IFMK TOPOGULF
==== ========

TOPOGULF STATION NB: 221
CRUISE STATION NB: METEOR 65
POSITION: N 53 6.50 W 30 8.30
DATE: 84-VIII-14
DEPTH OF WATER: 3155M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	12.896	34.741
10.	12.865	34.738
20.	12.573	34.754
30.	12.498	34.779
40.	12.456	34.784
50.	9.839	34.721
60.	7.946	34.688
70.	7.634	34.734
80.	7.610	34.815
90.	7.277	34.801
100.	6.790	34.768
200.	5.233	34.740
300.	5.687	34.967
400.	5.138	34.951
500.	4.582	34.939
600.	4.288	34.928
700.	4.018	34.911
800.	3.851	34.902
900.	3.738	34.898
1000.	3.679	34.895
1100.	3.644	34.899
1200.	3.622	34.906
1300.	3.607	34.912
1400.	3.579	34.921
1500.	3.542	34.923
1600.	3.515	34.930
1700.	3.474	34.935
1800.	3.426	34.939
1900.	3.365	34.944
2000.	3.321	34.949
2200.	3.182	34.958
2400.	3.052	34.968
2600.	2.916	34.967
2800.	2.821	34.962
3000.	2.761	34.956
3164.	2.720	34.947

IFMK TOPOGULF
==== ========

TOPOGULF STATION NB: 222
CRUISE STATION NB: METEOR 66
POSITION: N 53 5.80 W 29 19.80
DATE: 84-VIII-14
DEPTH OF WATER: 337 0M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	13.659	34.634
10.	13.639	34.634
20.	13.493	34.636
30.	13.433	34.636
40.	10.509	34.692
50.	7.480	34.654
60.	7.163	34.742
70.	6.618	34.706
80.	6.264	34.715
90.	5.913	34.710
100.	5.854	34.729
200.	4.990	34.775
300.	4.688	34.857
400.	4.522	34.897
500.	4.216	34.898
600.	4.065	34.910
700.	3.961	34.913
800.	3.807	34.901
900.	3.688	34.897
1000.	3.632	34.900
1100.	3.615	34.906
1200.	3.597	34.916
1300.	3.582	34.918
1400.	3.554	34.928
1500.	3.510	34.929
1600.	3.499	34.938
1700.	3.460	34.945
1800.	3.416	34.950
1900.	3.337	34.951
2000.	3.280	34.952
2200.	3.161	34.958
2400.	3.061	34.962
2600.	2.974	34.970
2800.	2.887	34.967
3000.	2.842	34.963
3200.	2.816	34.958
3354.	2.772	34.953

IFMK TOPOGULF

TOPOGULF STATION NB: 223
CRUISE STATION NB: METEOR 67
POSITION: N 53 5.90 W 28 28.30
DATE: 84-VIII-15
DEPTH OF WATER: 3387M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	13.917	34.672
10.	13.843	34.663
20.	13.740	34.657
30.	13.224	34.676
40.	10.738	34.781
50.	9.753	34.776
60.	8.369	34.767
70.	7.697	34.765
80.	7.271	34.779
90.	6.688	34.746
100.	6.536	34.737
200.	5.315	34.775
300.	4.724	34.830
400.	4.626	34.894
500.	4.354	34.905
600.	4.243	34.924
700.	4.023	34.912
800.	3.839	34.899
900.	3.760	34.897
1000.	3.684	34.895
1100.	3.634	34.898
1200.	3.627	34.902
1300.	3.588	34.906
1400.	3.582	34.906
1500.	3.559	34.914
1600.	3.554	34.923
1700.	3.521	34.929
1800.	3.488	34.935
1900.	3.443	34.940
2000.	3.406	34.946
2200.	3.265	34.949
2400.	3.113	34.960
2600.	3.000	34.969
2800.	2.915	34.967
3000.	2.864	34.963
3200.	2.818	34.959
3366.	2.759	34.951

IFMK TOPOGULF

TOPOGULF STATION NB: 224
CRUISE STATION NB: METEOR 68
POSITION: N 52 39.60 W 28 3.80
DATE: 84-VIII-15
DEPTH OF WATER: 3530M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	13.910	34.593
10.	13.910	34.582
20.	13.728	34.597
30.	13.545	34.578
40.	11.347	34.593
50.	10.182	34.640
60.	8.723	34.662
70.	8.035	34.736
80.	7.130	34.785
90.	6.486	34.732
100.	6.257	34.728
200.	5.447	34.835
300.	4.705	34.827
400.	4.332	34.855
500.	4.387	34.905
600.	4.094	34.903
700.	3.959	34.904
800.	3.871	34.900
900.	3.771	34.895
1000.	3.692	34.893
1100.	3.673	34.900
1200.	3.613	34.894
1300.	3.520	34.887
1400.	3.603	34.913
1500.	3.587	34.915
1600.	3.573	34.917
1700.	3.559	34.928
1800.	3.526	34.933
1900.	3.461	34.933
2000.	3.432	34.940
2200.	3.348	34.945
2400.	3.224	34.955
2600.	3.114	34.957
2800.	2.990	34.961
3000.	2.908	34.959
3200.	2.813	34.953
3400.	2.761	34.946
3550.	2.655	34.931

IFMK TOPOGULF

TOPOGULF STATION NB: 225
CRUISE STATION NB: METEOR 69
POSITION: N 52 14.30 W 27 38.00
DATE: 84-VIII-15
DEPTH OF WATER: 3655M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	13.686	34.190
10.	13.436	34.184
20.	13.386	34.193
30.	11.372	34.765
40.	10.900	34.931
50.	10.521	34.984
60.	10.156	34.986
70.	9.932	35.003
80.	9.669	35.026
90.	9.631	35.000
100.	9.530	35.012
200.	8.420	34.982
300.	7.433	34.960
400.	5.854	34.844
500.	5.025	34.880
600.	4.593	34.899
700.	4.294	34.903
800.	4.082	34.906
900.	3.949	34.900
1000.	3.838	34.900
1100.	3.735	34.896
1200.	3.692	34.895
1300.	3.624	34.899
1400.	3.600	34.906
1500.	3.596	34.913
1600.	3.587	34.920
1700.	3.548	34.928
1800.	3.520	34.932
1900.	3.470	34.934
2000.	3.421	34.935
2200.	3.385	34.940
2400.	3.226	34.954
2600.	3.132	34.957
2800.	3.051	34.964
3000.	2.949	34.962
3200.	2.888	34.963
3400.	2.859	34.958
3524.	2.844	34.958

IFMK TOPOGULF

TOPOGULF STATION NB: 226
CRUISE STATION NB: METEOR 70
POSITION: N 51 46.50 W 27 14.90
DATE: 84-VIII-15
DEPTH OF WATER: 3740M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	14.741	34.398
10.	14.767	34.437
20.	14.839	34.508
30.	14.974	34.670
40.	12.658	34.985
50.	11.890	35.039
60.	11.628	35.220
70.	11.683	35.331
80.	11.111	35.274
90.	11.127	35.308
100.	11.021	35.330
200.	9.591	35.161
300.	8.170	35.018
400.	6.369	34.857
500.	5.631	34.906
600.	4.831	34.905
700.	4.614	34.942
800.	4.300	34.930
900.	4.079	34.923
1000.	3.890	34.906
1100.	3.765	34.896
1200.	3.696	34.897
1300.	3.658	34.896
1400.	3.650	34.902
1500.	3.627	34.908
1600.	3.588	34.912
1700.	3.580	34.913
1800.	3.555	34.922
1900.	3.539	34.923
2000.	3.526	34.927
2200.	3.478	34.934
2400.	3.407	34.940
2600.	3.304	34.946
2800.	3.174	34.950
3000.	3.088	34.958
3200.	2.950	34.951
3400.	2.902	34.952
3600.	2.878	34.953
3738.	2.879	34.950

IFMK TOPOGULF

TOPOGULF STATION No: 227
CRUISE STATION NB: METEOR 71
POSITION: N 51 21.50 W 26 50.30
DATE: 84-VIII-15
DEPTH OF WATER: 3544M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	15.616	34.732
10.	15.602	34.738
20.	15.410	34.757
30.	14.184	34.822
40.	12.763	34.887
50.	10.933	34.896
60.	10.871	35.019
70.	10.640	35.067
80.	10.318	35.105
90.	10.050	35.104
100.	9.949	35.112
200.	9.061	35.079
300.	7.883	34.978
400.	6.510	34.863
500.	5.588	34.869
600.	5.411	34.959
700.	4.879	34.950
800.	4.577	34.948
900.	4.159	34.913
1000.	4.006	34.907
1100.	3.895	34.900
1200.	3.805	34.900
1300.	3.753	34.901
1400.	3.714	34.905
1500.	3.692	34.905
1600.	3.667	34.913
1700.	3.622	34.915
1800.	3.585	34.918
1900.	3.556	34.925
2000.	3.516	34.927
2200.	3.425	34.935
2400.	3.309	34.945
2600.	3.187	34.952
2800.	3.087	34.958
3000.	3.007	34.960
3200.	2.930	34.958
3400.	2.880	34.957
3569.	2.854	34.953

IFMK TOPOGULF

TOPOGULF STATION No: 228
CRUISE STATION NB: METEOR 72
POSITION: N 50 55.00 W 26 25.10
DATE: 84-VIII-16
DEPTH OF WATER: 4090M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	16.424	34.923
10.	16.424	34.928
20.	16.441	34.994
30.	15.868	35.247
40.	13.476	35.514
50.	12.956	35.553
60.	12.627	35.583
70.	12.417	35.584
80.	12.305	35.579
90.	12.246	35.581
100.	12.058	35.554
200.	10.775	35.390
300.	10.257	35.339
400.	9.972	35.316
500.	9.016	35.171
600.	7.790	35.051
700.	6.639	34.992
800.	5.587	34.933
900.	5.257	34.973
1000.	4.842	34.978
1100.	4.397	34.932
1200.	4.099	34.913
1300.	3.928	34.903
1400.	3.833	34.897
1500.	3.757	34.896
1600.	3.745	34.903
1700.	3.690	34.904
1800.	3.657	34.909
1900.	3.629	34.910
2000.	3.601	34.916
2200.	3.539	34.926
2400.	3.440	34.936
2600.	3.382	34.944
2800.	3.261	34.951
3000.	3.148	34.954
3200.	3.065	34.959
3400.	2.973	34.956
3600.	2.923	34.953
3800.	2.903	34.950
4000.	2.846	34.942
4144.	2.718	34.925

IFMK TOPOGULF

TOPOGULF STATION NB: 229
CRUISE STATION NB: METEOR 73
POSITION: N 50 28.60 W 26 1.10
DATE: 84-VIII-16
DEPTH OF WATER: 3775M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	17.910	35.599
10.	17.914	35.598
20.	17.844	35.644
30.	17.843	35.646
40.	15.477	35.625
50.	13.941	35.619
60.	13.459	35.600
70.	13.000	35.596
80.	12.804	35.607
90.	12.658	35.608
100.	12.553	35.606
200.	11.150	35.453
300.	10.390	35.358
400.	9.593	35.261
500.	8.583	35.147
600.	7.790	35.132
700.	6.988	35.120
800.	6.307	35.111
900.	5.561	35.051
1000.	4.630	34.955
1100.	4.234	34.930
1200.	4.050	34.919
1300.	3.883	34.910
1400.	3.790	34.905
1500.	3.741	34.902
1600.	3.727	34.912
1700.	3.700	34.916
1800.	3.653	34.918
1900.	3.607	34.925
2000.	3.580	34.930
2200.	3.496	34.941
2400.	3.396	34.950
2600.	3.288	34.953
2800.	3.176	34.955
3000.	3.068	34.960
3200.	2.966	34.958
3400.	2.872	34.952
3600.	2.815	34.947
3767.	2.742	34.939

IFMK TOPOGULF

TOPOGULF STATION N.: 230
CRUISE STATION NB: METEOR 74
POSITION: N 50 2.10 W 25 38.10
DATE: 84-VIII-16
DEPTH OF WATER: 3300M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	18.119	35.567
10.	17.999	35.564
20.	17.918	35.561
30.	15.627	35.442
40.	14.480	35.517
50.	14.184	35.588
60.	13.292	35.582
70.	12.848	35.574
80.	12.516	35.572
90.	12.316	35.577
100.	12.183	35.582
200.	10.601	35.359
300.	10.162	35.340
400.	9.253	35.218
500.	8.153	35.122
600.	7.649	35.178
700.	6.733	35.130
800.	5.984	35.097
900.	5.513	35.077
1000.	4.955	35.025
1100.	4.582	34.989
1200.	4.208	34.954
1300.	4.099	34.953
1400.	3.944	34.940
1500.	3.803	34.921
1600.	3.731	34.921
1700.	3.654	34.920
1800.	3.617	34.927
1900.	3.582	34.928
2000.	3.532	34.936
2200.	3.468	34.947
2400.	3.338	34.952
2600.	3.206	34.959
2800.	3.028	34.961
3000.	2.908	34.958
3200.	2.807	34.950
3329.	2.683	34.936

IFMK TOPOGULF

TOPOGULF STATION NO: 231
CRUISE STATION NO: METEOR 75
POSITION: N 49 35.70 W 25 16.00
DATE: 84-VIII-16
DEPTH OF WATER: 4100M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	17.781	35.315
10.	17.775	35.312
20.	17.749	35.310
30.	17.657	35.352
40.	16.413	35.476
50.	14.731	35.447
60.	13.846	35.588
70.	13.118	35.575
80.	12.628	35.579
90.	12.222	35.544
100.	12.100	35.547
200.	10.163	35.269
300.	9.644	35.229
400.	8.541	35.099
500.	7.523	35.040
600.	6.127	34.941
700.	5.554	34.964
800.	5.276	35.006
900.	5.100	35.026
1000.	4.673	34.998
1100.	4.393	34.973
1200.	4.147	34.954
1300.	4.005	34.941
1400.	3.862	34.924
1500.	3.772	34.925
1600.	3.696	34.924
1700.	3.633	34.926
1800.	3.597	34.930
1900.	3.554	34.939
2000.	3.517	34.941
2200.	3.411	34.951
2400.	3.271	34.960
2600.	3.124	34.961
2800.	2.976	34.961
3000.	2.865	34.953
3200.	2.785	34.946
3400.	2.708	34.939
3600.	2.650	34.932
3800.	2.634	34.923
4000.	2.621	34.922
4155.	2.632	34.915

IFMK TOPOGULF

TOPOGULF STATION NO: 232
CRUISE STATION NO: METEOR 76
POSITION: N 49 10.20 W 24 52.90
DATE: 84-VIII-17
DEPTH OF WATER: 3900M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	18.090	35.461
10.	18.090	35.460
20.	18.102	35.460
30.	17.861	35.466
40.	15.879	35.545
50.	14.234	35.588
60.	13.390	35.603
70.	12.965	35.624
80.	12.806	35.650
90.	12.708	35.640
100.	12.477	35.608
200.	11.214	35.426
300.	10.759	35.421
400.	10.295	35.332
500.	9.388	35.261
600.	8.314	35.189
700.	7.452	35.175
800.	6.684	35.145
900.	6.155	35.152
1000.	5.216	35.074
1100.	4.740	35.013
1200.	4.273	34.962
1300.	4.096	34.947
1400.	3.992	34.937
1500.	3.915	34.946
1600.	3.790	34.928
1700.	3.699	34.927
1800.	3.657	34.924
1900.	3.606	34.929
2000.	3.566	34.934
2200.	3.462	34.943
2400.	3.357	34.953
2600.	3.221	34.956
2800.	3.086	34.961
3000.	2.960	34.957
3200.	2.888	34.953
3400.	2.808	34.950
3600.	2.752	34.939
3800.	2.715	34.935
3958.	2.649	34.927

IFMK TOPOGULF

TOPOGULF STATION NB: 233
CRUISE STATION NB: METEOR 77
POSITION: N 48 44.10 W 24 29.90
DATE: 84-VIII-17
DEPTH OF WATER: 3760M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	18.254	35.656
10.	18.253	35.652
20.	18.161	35.655
30.	16.642	35.722
40.	14.254	35.715
50.	13.558	35.723
60.	13.396	35.723
70.	13.181	35.717
80.	13.110	35.731
90.	12.991	35.717
100.	12.934	35.722
200.	12.229	35.626
300.	11.705	35.547
400.	10.955	35.444
500.	10.284	35.356
600.	9.381	35.235
700.	8.127	35.138
800.	7.301	35.160
900.	6.417	35.126
1000.	5.538	35.054
1100.	5.126	35.045
1200.	4.586	34.990
1300.	4.382	34.973
1400.	4.028	34.940
1500.	3.931	34.934
1600.	3.810	34.923
1700.	3.725	34.923
1800.	3.671	34.923
1900.	3.637	34.927
2000.	3.588	34.935
2200.	3.500	34.942
2400.	3.407	34.952
2600.	3.249	34.957
2800.	3.083	34.961
3000.	2.963	34.958
3200.	2.822	34.951
3400.	2.713	34.942
3600.	2.641	34.928
3800.	2.623	34.927
3805.	2.625	34.926

IFMK TOPOGULF

TOPOGULF STATION NB: 234
CRUISE STATION NB: METEOR 78
POSITION: N 48 17.90 W 24 7.20
DATE: 84-VIII-17
DEPTH OF WATER: 4035M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	18.145	35.537
10.	18.143	35.538
20.	17.993	35.548
30.	15.951	35.586
40.	14.278	35.607
50.	13.482	35.624
60.	13.096	35.630
70.	12.839	35.610
80.	12.568	35.591
90.	12.391	35.571
100.	12.272	35.597
200.	11.130	35.445
300.	10.397	35.379
400.	9.612	35.276
500.	8.781	35.182
600.	7.719	35.133
700.	7.258	35.219
800.	6.529	35.191
900.	5.824	35.145
1000.	5.203	35.083
1100.	4.659	35.006
1200.	4.352	34.970
1300.	4.077	34.951
1400.	3.968	34.947
1500.	3.802	34.936
1600.	3.698	34.922
1700.	3.666	34.924
1800.	3.646	34.930
1900.	3.604	34.934
2000.	3.550	34.942
2200.	3.457	34.950
2400.	3.310	34.960
2600.	3.165	34.965
2800.	3.016	34.965
3000.	2.896	34.956
3200.	2.790	34.951
3400.	2.702	34.941
3600.	2.631	34.931
3800.	2.596	34.921
4000.	2.592	34.921
4155.	2.593	34.918

IFMK — TOPOGULF

TOPOGULF STATION NB: 235
CRUISE STATION NB: METEOR 79
POSITION: N 47 51.50 W 23 43.80
DATE: 84-VIII-17
DEPTH OF WATER: 4310M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
8.	19.140	35.539
10.	19.139	35.540
20.	18.533	35.551
30.	17.232	35.563
40.	15.617	35.581
50.	14.482	35.596
60.	13.751	35.606
70.	13.354	35.601
80.	13.068	35.613
90.	12.780	35.597
100.	12.567	35.599
200.	11.170	35.452
300.	10.024	35.273
400.	8.771	35.131
500.	7.653	35.053
600.	7.010	35.088
700.	6.295	35.086
800.	5.815	35.077
900.	5.068	35.020
1000.	4.603	34.989
1100.	4.147	34.937
1200.	3.986	34.931
1300.	3.976	34.942
1400.	3.910	34.943
1500.	3.604	34.929
1600.	3.714	34.927
1700.	3.630	34.923
1800.	3.601	34.926
1900.	3.565	34.931
2000.	3.557	34.943
2200.	3.446	34.952
2400.	3.315	34.958
2600.	3.175	34.964
2800.	3.034	34.965
3000.	2.902	34.955
3200.	2.770	34.949
3400.	2.691	34.937
3600.	2.613	34.930
3800.	2.589	34.923
4000.	2.599	34.921
4200.	2.604	34.920
4322.	2.611	34.919

IFMK — TOPOGULF

TOPOGULF STATION NB: 236
CRUISE STATION NB: METEOR 80
POSITION: N 47 22.00 W 23 45.10
DATE: 84-VIII-18
DEPTH OF WATER: 3700M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
8.	19.157	35.409
10.	19.156	35.413
20.	19.000	35.501
30.	17.850	35.667
40.	16.799	35.684
50.	15.082	35.631
60.	14.178	35.620
70.	13.727	35.650
80.	13.844	35.737
90.	13.790	35.766
100.	13.742	35.767
200.	12.661	35.639
300.	11.764	35.508
400.	10.773	35.392
500.	9.420	35.239
600.	8.501	35.179
700.	7.111	35.077
800.	6.098	35.027
900.	5.810	35.070
1000.	5.160	35.046
1100.	4.526	34.978
1200.	4.209	34.954
1300.	4.043	34.940
1400.	3.852	34.920
1500.	3.808	34.924
1600.	3.753	34.922
1700.	3.705	34.926
1800.	3.662	34.931
1900.	3.612	34.934
2000.	3.573	34.939
2200.	3.488	34.945
2400.	3.407	34.949
2600.	3.272	34.952
2800.	3.123	34.960
3000.	3.012	34.958
3200.	2.914	34.955
3400.	2.834	34.949
3600.	2.761	34.946
3724.	2.740	34.941

IFMK TOPOGULF

TOPOGULF STATION NB: 237
CRUISE STATION NB: METEOR 81
POSITION: N 46 51.90 W 23 46.20
DATE: 84-VIII-18
DEPTH OF WATER: 3530M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
9.	19.176	35.516
10.	19.173	35.517
20.	19.189	35.517
30.	18.516	35.516
40.	15.933	35.697
50.	15.641	35.730
60.	15.124	35.768
70.	14.941	35.775
80.	14.583	35.806
90.	14.388	35.846
100.	14.300	35.859
200.	13.371	35.789
300.	12.827	35.706
400.	11.670	35.495
500.	10.162	35.274
600.	9.340	35.225
700.	8.030	35.093
800.	7.737	35.222
900.	7.077	35.214
1000.	5.932	35.104
1100.	5.348	35.056
1200.	4.598	34.983
1300.	4.279	34.952
1400.	4.051	34.936
1500.	3.915	34.926
1600.	3.835	34.925
1700.	3.768	34.923
1800.	3.693	34.926
1900.	3.653	34.929
2000.	3.613	34.932
2200.	3.526	34.941
2400.	3.417	34.950
2600.	3.271	34.957
2800.	3.131	34.961
3000.	3.004	34.957
3200.	2.895	34.953
3400.	2.799	34.947
3574.	2.756	34.943

IFMK TOPOGULF

TOPOGULF STATION NB: 238
CRUISE STATION NB: METEOR 82
POSITION: N 46 22.10 W 23 45.30
DATE: 84-VIII-18
DEPTH OF WATER: 3628M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
9.	19.342	35.623
10.	19.343	35.624
20.	19.343	35.623
30.	17.804	35.734
40.	16.507	35.808
50.	14.989	35.708
60.	14.537	35.736
70.	14.131	35.749
80.	14.052	35.775
90.	14.007	35.810
100.	13.983	35.840
200.	12.898	35.704
300.	12.186	35.597
400.	11.309	35.476
500.	10.326	35.336
600.	9.256	35.220
700.	8.184	35.157
800.	7.898	35.269
900.	7.280	35.269
1000.	6.043	35.127
1100.	5.474	35.089
1200.	5.007	35.050
1300.	4.453	34.988
1400.	4.193	34.962
1500.	3.963	34.944
1600.	3.846	34.932
1700.	3.775	34.930
1800.	3.689	34.927
1900.	3.639	34.928
2000.	3.604	34.934
2200.	3.534	34.951
2400.	3.391	34.955
2600.	3.253	34.958
2800.	3.103	34.958
3000.	2.996	34.956
3200.	2.876	34.947
3400.	2.738	34.943
3600.	2.662	34.935
3679.	2.644	34.932

IFMK TOPOGULF

TOPOGULF STATION NB: 239
CRUISE STATION NB: METEOR 83
POSITION: N 45 52.10 W 23 45.20
DATE: 84-VIII-18
DEPTH OF WATER: 3465M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	19.602	35.687
10.	19.601	35.694
20.	19.598	35.686
30.	19.570	35.685
40.	18.636	35.768
50.	15.932	35.711
60.	14.221	35.692
70.	13.912	35.684
80.	13.436	35.685
90.	13.177	35.683
100.	12.945	35.684
200.	11.704	35.517
300.	10.919	35.415
400.	10.120	35.321
500.	9.073	35.201
600.	7.913	35.116
700.	7.431	35.171
800.	6.861	35.192
900.	6.084	35.132
1000.	5.241	35.058
1100.	4.753	35.014
1200.	4.377	34.989
1300.	4.152	34.956
1400.	3.949	34.935
1500.	3.846	34.928
1600.	3.760	34.925
1700.	3.682	34.926
1800.	3.627	34.926
1900.	3.591	34.927
2000.	3.551	34.934
2200.	3.466	34.948
2400.	3.314	34.958
2600.	3.169	34.957
2800.	3.038	34.958
3000.	2.908	34.951
3200.	2.785	34.940
3400.	2.686	34.933
3407.	2.683	34.935

IFMK TOPOGULF

TOPOGULF STATION NB: 240
CRUISE STATION NB: METEOR 84
POSITION: N 45 22.10 W 23 45.00
DATE: 84-VIII-18
DEPTH OF WATER: 3280M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	19.797	35.696
10.	19.795	35.697
20.	19.794	35.697
30.	18.352	35.724
40.	16.842	35.688
50.	14.754	35.658
60.	13.835	35.615
70.	13.221	35.576
80.	12.931	35.570
90.	12.711	35.566
100.	12.572	35.571
200.	11.130	35.449
300.	10.178	35.323
400.	9.296	35.218
500.	8.544	35.207
600.	7.587	35.175
700.	6.966	35.182
800.	6.204	35.144
900.	5.826	35.134
1000.	5.091	35.053
1100.	4.484	34.985
1200.	4.179	34.957
1300.	3.989	34.938
1400.	3.906	34.937
1500.	3.834	34.933
1600.	3.747	34.930
1700.	3.662	34.924
1800.	3.597	34.922
1900.	3.554	34.929
2000.	3.514	34.933
2200.	3.426	34.943
2400.	3.312	34.949
2600.	3.115	34.956
2800.	2.993	34.953
3000.	2.891	34.949
3200.	2.796	34.943
3306.	2.747	34.937

IFMK TOPOGULF

TOPOGULF STATION NB: 241
CRUISE STATION NB: METEOR 85
POSITION: N 44 52.00 W 23 45.20
DATE: 84-VIII-19
DEPTH OF WATER: 2955M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	19.520	35.715
10.	19.527	35.716
20.	19.533	35.719
30.	19.541	35.722
40.	18.185	35.768
50.	16.463	35.753
60.	14.861	35.744
70.	14.099	35.721
80.	13.879	35.727
90.	13.611	35.732
100.	13.548	35.767
200.	12.739	35.699
300.	12.031	35.591
400.	11.493	35.523
500.	10.601	35.401
600.	9.004	35.198
700.	8.259	35.153
800.	7.023	35.088
900.	6.287	35.091
1000.	6.001	35.154
1100.	5.101	35.052
1200.	4.535	34.987
1300.	4.259	34.974
1400.	4.056	34.950
1500.	3.932	34.940
1600.	3.805	34.927
1700.	3.720	34.929
1800.	3.663	34.930
1900.	3.619	34.932
2000.	3.585	34.931
2200.	3.479	34.941
2400.	3.316	34.951
2600.	3.169	34.953
2800.	3.084	34.954
2969.	3.026	34.949

IFMK TOPOGULF

TOPOGULF STATION NB: 242
CRUISE STATION NB: METEOR 86
POSITION: N 44 43.50 W 24 29.50
DATE: 84-VIII-19
DEPTH OF WATER: 2355M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	19.725	35.833
10.	19.734	35.833
20.	19.724	35.834
30.	19.705	35.834
40.	17.767	35.892
50.	16.313	35.888
60.	15.295	35.873
70.	14.899	35.884
80.	14.730	35.889
90.	14.465	35.901
100.	14.333	35.892
200.	13.361	35.797
300.	12.825	35.729
400.	12.150	35.634
500.	11.359	35.508
600.	10.498	35.387
700.	9.845	35.341
800.	8.705	35.217
900.	7.345	35.105
1000.	6.378	35.077
1100.	5.648	35.053
1200.	4.839	34.989
1300.	4.575	34.981
1400.	4.268	34.958
1500.	4.103	34.947
1600.	3.987	34.943
1700.	3.892	34.935
1800.	3.771	34.933
1900.	3.691	34.926
2000.	3.651	34.932
2200.	3.546	34.948
2400.	3.385	34.956
2400.	3.385	34.956

IFMK TOPOGULF

TOPOGULF STATION NB: 243
CRUISE STATION NB: METEOR 87
POSITION: N 44 38.50 W 25 17.20
DATE: 84-VIII-19
DEPTH OF WATER: 2500M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
8.	20.135	35.872
10.	20.135	35.875
20.	20.137	35.874
30.	20.135	35.874
40.	18.291	35.944
50.	16.391	35.892
60.	15.167	35.873
70.	14.437	35.838
80.	14.046	35.829
90.	13.821	35.833
100.	13.683	35.832
200.	13.046	35.757
300.	12.678	35.712
400.	12.099	35.630
500.	11.465	35.533
600.	10.895	35.472
700.	10.478	35.459
800.	9.412	35.374
900.	7.833	35.178
1000.	7.501	35.297
1100.	7.836	35.465
1200.	7.111	35.405
1300.	5.463	35.133
1400.	4.896	35.056
1500.	4.492	35.007
1600.	4.229	34.979
1700.	4.037	34.963
1800.	3.899	34.953
1900.	3.779	34.944
2000.	3.697	34.946
2200.	3.601	34.953
2400.	3.417	34.955
2517.	3.283	34.957

IFMK TOPOGULF

TOPOGULF STATION NB: 244
CRUISE STATION NB: METEOR 88
POSITION: N 44 28.90 W 26 4.40
DATE: 84-VIII-19
DEPTH OF WATER: 3155M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	20.003	35.807
10.	20.005	35.805
20.	20.008	35.806
30.	19.821	35.839
40.	17.785	35.922
50.	16.394	35.866
60.	15.629	35.854
70.	15.188	35.850
80.	14.681	35.844
90.	14.271	35.843
100.	14.000	35.837
200.	13.185	35.779
300.	12.725	35.713
400.	12.114	35.622
500.	11.456	35.531
600.	10.735	35.457
700.	10.003	35.395
800.	8.745	35.286
900.	7.462	35.177
1000.	6.759	35.174
1100.	6.339	35.190
1200.	5.561	35.128
1300.	5.143	35.083
1400.	4.747	35.040
1500.	4.383	35.003
1600.	4.186	34.983
1700.	3.993	34.970
1800.	3.850	34.955
1900.	3.741	34.949
2000.	3.644	34.943
2200.	3.540	34.951
2400.	3.340	34.957
2600.	3.213	34.957
2800.	3.158	34.957
3000.	3.152	34.955
3165.	3.083	34.954

IFMK TOPOGULF

TOPOGULF STATION NB: 245
CRUISE STATION NB: METEOR 89
POSITION: N 44 25.40 W 26 46.40
DATE: 84-VIII-20
DEPTH OF WATER: 2935M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
8.	19.836	35.759
10.	19.837	35.756
20.	19.838	35.758
30.	19.145	35.796
40.	17.497	35.827
50.	16.176	35.851
60.	15.530	35.864
70.	15.010	35.870
80.	14.643	35.874
90.	14.386	35.887
100.	14.193	35.870
200.	13.283	35.777
300.	12.860	35.721
400.	12.124	35.598
500.	11.071	35.448
600.	9.962	35.309
700.	9.043	35.260
800.	8.340	35.284
900.	8.137	35.396
1000.	6.597	35.246
1100.	6.265	35.246
1200.	5.418	35.126
1300.	4.973	35.075
1400.	4.477	35.014
1500.	4.311	34.995
1600.	4.013	34.970
1700.	3.861	34.947
1800.	3.778	34.942
1900.	3.697	34.942
2000.	3.624	34.947
2200.	3.494	34.957
2400.	3.309	34.956
2600.	3.226	34.952
2800.	3.192	34.954
2887.	3.165	34.955

IFMK TOPOGULF

TOPOGULF STATION NB: 246
CRUISE STATION NB: METEOR 18
POSITION: N 47 29.70 W 19 15.30
DATE: 84- VII-30
DEPTH OF WATER: 45[illegible]0M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	16.355	35.560
10.	18.350	35.559
20.	17.791	35.597
30.	14.642	35.611
40.	13.262	35.637
50.	12.920	35.628
60.	12.420	35.588
70.	12.214	35.582
80.	12.125	35.588
90.	11.997	35.579
100.	11.838	35.578
200.	11.264	35.498
300.	10.799	35.441
400.	10.241	35.375
500.	9.338	35.248
600.	9.023	35.305
700.	8.418	35.307
800.	8.247	35.389
900.	7.664	35.355
1000.	6.428	35.203
1100.	5.519	35.096
1200.	4.980	35.044
1300.	4.400	34.977
1400.	4.140	34.954
1500.	4.001	34.947
1600.	3.883	34.942
1700.	3.710	34.925
1800.	3.664	34.925
1900.	3.622	34.929
2000.	3.599	34.942
2200.	3.521	34.960
2400.	3.365	34.966
2600.	3.195	34.964
2800.	3.024	34.960
3000.	2.886	34.955
3200.	2.775	34.948
3400.	2.685	34.937
3600.	2.614	34.928
3800.	2.579	34.923
4000.	2.569	34.918
4104.	2.568	34.917

IFMK TOPOGULF

TOPOGULF STATION NB: 247
CRUISE STATION NB: METEOR 20
POSITION: N 47 25.40 W 20 36.50
DATE: 84- VII-31
DEPTH OF WATER: 4470M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	.000	35.630
10.	18.400	35.630
20.	18.320	35.633
30.	16.637	35.644
40.	14.929	35.655
50.	13.858	35.653
60.	13.536	35.662
70.	13.290	35.676
80.	13.033	35.661
90.	12.883	35.683
100.	12.977	35.726
200.	11.978	38.546
300.	11.161	35.458
400.	10.405	35.357
500.	10.093	35.332
600.	9.197	35.217
700.	8.235	35.142
800.	7.464	35.130
900.	7.090	35.207
1000.	6.426	35.187
1100.	5.680	35.115
1200.	5.149	35.053
1300.	4.676	35.003
1400.	4.398	34.979
1500.	4.094	34.950
1600.	3.931	34.935
1700.	3.805	34.924
1800.	3.786	34.938
1900.	3.656	34.929
2000.	3.623	34.933
2200.	3.500	34.944
2400.	3.340	34.952
2600.	3.185	34.955
2800.	3.038	34.957
3000.	2.888	34.946
3200.	2.774	34.938
3400.	2.653	34.925
3600.	2.610	34.921
3800.	2.547	34.915
4000.	2.552	34.909
4200.	2.550	34.903
4400.	2.555	34.901
4404.	2.556	34.901

IFMK TOPOGULF

TOPOGULF STATION NB: 248
CRUISE STATION NB: METEOR 26
POSITION: N 48 31.50 W 25 45.50
DATE: 84-VIII-03
DEPTH OF WATER: 3450M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	17.012	35.337
10.	16.987	35.335
20.	16.771	35.359
30.	15.860	35.573
40.	14.882	35.852
50.	14.838	35.927
60.	14.834	35.954
70.	14.643	35.937
80.	14.614	35.933
90.	14.556	35.925
100.	14.492	35.907
200.	13.087	35.688
300.	11.891	35.512
400.	10.822	35.356
500.	9.973	35.290
600.	7.805	35.040
700.	6.742	35.041
800.	6.084	35.017
900.	5.524	35.024
1000.	4.870	34.982
1100.	4.427	34.945
1200.	4.147	34.933
1300.	3.948	34.912
1400.	3.835	34.903
1500.	3.764	34.904
1600.	3.707	34.908
1700.	3.667	34.911
1800.	3.678	34.911
1900.	3.593	34.919
2000.	3.554	34.924
2200.	3.480	34.932
2400.	3.350	34.944
2600.	3.214	34.953
2800.	3.058	34.952
3000.	2.947	34.951
3001.	2.946	34.951

IFMK TOPOGULF

TOPOGULF STATION NB: 249
CRUISE STATION NB: METEOR 41
POSITION: N 46 59.30 W 34 52.40
DATE: 84-VIII-07
DEPTH OF WATER: 4330M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	18.597	34.616
10.	18.332	34.612
20.	18.270	34.612
30.	17.853	34.661
40.	15.425	34.821
50.	13.679	34.701
60.	11.226	34.502
70.	11.184	34.747
80.	9.471	34.649
90.	8.705	34.634
100.	9.529	34.954
200.	8.009	34.941
300.	7.079	34.962
400.	5.649	34.925
500.	5.696	35.016
600.	4.918	34.971
700.	4.484	34.954
800.	4.314	34.950
900.	4.043	34.925
1000.	3.925	34.922
1100.	3.841	34.915
1200.	3.777	34.912
1300.	3.741	34.915
1400.	3.693	34.917
1500.	3.630	34.915
1600.	3.612	34.914
1700.	3.584	34.918
1800.	3.564	34.923
1900.	3.553	34.928
2000.	3.509	34.932
2200.	3.411	34.938
2400.	3.230	34.940
2600.	3.143	34.938
2800.	3.001	34.937
3000.	2.664	34.935
3200.	2.726	34.931
3400.	2.561	34.920
3600.	2.394	34.913
3800.	2.309	34.908
4000.	2.259	34.905
4200.	2.237	34.901
4307.	2.237	34.902

IFMK TOPOGULF

TOPOGULF STATION NB: 250
CRUISE STATION NB: METEOR 43
POSITION: N 47 55.80 W 35 25.70
DATE: 84-VIII-08
DEPTH OF WATER: 4340M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
6.	18.002	34.483
10.	17.985	34.502
20.	17.894	34.786
30.	15.849	35.282
40.	14.874	35.245
50.	15.267	35.626
60.	15.310	35.796
70.	14.858	35.735
80.	14.592	35.707
90.	14.041	35.628
100.	13.833	35.593
200.	12.303	35.455
300.	10.743	35.291
400.	9.205	35.113
500.	7.299	34.923
600.	6.138	34.932
700.	5.428	34.959
800.	5.074	34.971
900.	4.802	34.982
1000.	4.282	34.931
1100.	4.251	34.947
1200.	3.940	34.914
1300.	3.895	34.912
1400.	3.975	34.940
1409.	3.928	34.934

IFREMER/CO TOPOGULF

TOPOGULF STATION N°: 251
CRUISE STATION NB: J.CHARCOT 1
POSITION: N 48 18.69 W 29 2.41
DATE: 83- VI -24
DEPTH OF WATER: 4405M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
0.	14.589	35.433
10.	14.586	35.635
20.	14.237	35.683
30.	13.865	35.672
40.	13.664	35.702
50.	13.354	35.689
60.	13.103	35.675
70.	13.044	35.697
80.	12.945	35.697
90.	12.719	35.657
100.	12.692	35.676
200.	12.401	35.674
300.	12.075	35.621
400.	11.233	35.479
500.	10.421	35.378
600.	9.633	35.299
700.	7.979	35.114
800.	7.603	35.224
900.	6.098	35.050
1000.	6.009	35.120
1100.	5.335	35.059
1200.	4.781	35.007
1300.	4.410	34.974
1400.	4.108	34.936
1500.	3.999	34.932
1600.	3.882	34.923
1700.	3.711	34.910
1800.	3.646	34.910
1900.	3.591	34.911
2000.	3.570	34.918
2200.	3.520	34.942
2400.	3.393	34.951
2600.	3.230	34.956
2800.	3.058	34.956
3000.	2.927	34.951
3200.	2.805	34.946
3400.	2.705	34.936
3600.	2.619	34.925
3800.	2.568	34.918
4000.	2.545	34.912
4200.	2.537	34.908
4400.	2.545	34.907
4422.	2.546	34.907

IFREMER/CO TOPOGULF

TOPOGULF STATION N°: 252
CRUISE STATION N°: J.CHARCOT 2
POSITION: N 49 31.36 W 24 17.25
DATE: 83- VI -26
DEPTH OF WATER: 3638M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
0.	15.502	35.518
10.	15.158	35.503
20.	13.649	35.499
30.	13.304	35.518
40.	12.811	35.524
50.	12.506	35.530
60.	12.323	35.556
70.	12.036	35.540
80.	11.792	35.520
90.	11.591	35.497
100.	11.193	35.423
200.	10.629	35.405
300.	9.719	35.250
400.	8.946	35.191
500.	7.623	35.074
600.	6.450	35.011
700.	5.746	35.006
800.	5.331	35.015
900.	5.092	35.024
1000.	4.581	34.974
1100.	4.231	34.945
1200.	4.048	34.932
1300.	3.899	34.924
1400.	3.806	34.917
1500.	3.723	34.915
1600.	3.679	34.919
1700.	3.618	34.919
1800.	3.575	34.921
2000.	3.536	34.938
2200.	3.437	34.947
2400.	3.298	34.950
2600.	3.191	34.954
2800.	3.009	34.956
3000.	2.903	34.954
3200.	2.798	34.949
3600.	2.692	34.935
3703.	2.690	34.933

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 253
CRUISE STATION NB: J.CHARCOT 3
POSITION: N 48 30.19 W 30 4.72
DATE: 83- VI -28
DEPTH OF WATER: 3455M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	16.191	35.565
10.	16.187	35.567
20.	15.916	35.548
30.	14.759	35.645
40.	14.414	35.647
50.	14.241	35.623
60.	13.606	35.565
70.	13.515	35.692
80.	13.317	35.649
90.	13.008	35.581
100.	13.007	35.629
200.	11.565	35.467
300.	10.596	35.359
400.	9.248	35.159
500.	7.564	34.968
600.	6.275	34.925
700.	5.261	34.904
800.	4.832	34.929
900.	4.359	34.908
1000.	4.330	34.939
1100.	4.085	34.920
1200.	3.942	34.912
1300.	3.816	34.903
1400.	3.754	34.901
1500.	3.738	34.904
1600.	3.674	34.901
1700.	3.673	34.910
1800.	3.647	34.916
1900.	3.606	34.919
2000.	3.565	34.920
2200.	3.511	34.930
2400.	3.431	34.936
2600.	3.295	34.937
2800.	3.183	34.939
3000.	3.057	34.943
3200.	2.929	34.943
3400.	2.724	34.937
3481.	2.589	34.931

IFREMER/CO TOPOGULF

TOPOGULF STATION NB: 254
CRUISE STATION NB: J.CHARCOT 4
POSITION: N 47 52.09 W 35 23.51
DATE: 83- VI -30
DEPTH OF WATER: 4343M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
4.	16.730	35.656
10.	16.692	35.669
20.	16.594	35.678
30.	15.400	35.895
40.	15.219	35.904
50.	15.202	35.909
60.	15.153	35.912
70.	15.133	35.914
80.	14.833	35.891
90.	14.790	35.945
100.	14.878	36.020
200.	14.035	35.870
300.	13.091	35.722
400.	12.118	35.559
500.	10.527	35.301
600.	9.107	35.163
700.	8.141	35.126
800.	5.923	35.035
1000.	5.378	35.036
1100.	5.067	35.029
1200.	4.553	34.974
1300.	4.281	34.950
1400.	4.086	34.933
1500.	3.963	34.925
1600.	3.879	34.924
1700.	3.792	34.919
1800.	3.729	34.917
1900.	3.684	34.921
2000.	3.639	34.923
2200.	3.589	34.931
2400.	3.500	34.936
2600.	3.400	34.943
3000.	3.138	34.943
3200.	2.993	34.940
3600.	2.668	34.929
3800.	2.521	34.922
4000.	2.376	34.914
4200.	2.313	34.909
4400.	2.270	34.907
4419.	2.255	34.906

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 255
CRUISE STATION NB: J.CHARCOT 5
POSITION: N 36 8.22 W 40 16.87
DATE: 83- VII-04
DEPTH OF WATER: 4275M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
3.	23.482	36.392
10.	23.489	36.391
20.	22.810	36.338
30.	20.523	36.366
40.	19.461	36.408
50.	18.691	36.397
60.	18.253	36.452
70.	18.066	36.452
80.	17.960	36.452
90.	17.900	36.460
100.	17.812	36.449
200.	17.033	36.351
300.	15.443	36.025
400.	14.295	35.905
500.	12.934	35.709
600.	11.337	35.477
700.	9.815	35.308
800.	8.455	35.244
900.	7.673	35.265
1000.	7.070	35.282
1100.	6.576	35.274
1200.	6.064	35.230
1300.	5.717	35.212
1400.	5.138	35.141
1500.	4.792	35.097
1600.	4.506	35.065
1700.	4.268	35.040
1800.	3.979	35.006
1900.	3.800	34.990
2000.	3.720	34.987
2200.	3.533	34.978
2400.	3.336	34.968
2600.	3.192	34.962
2800.	3.046	34.954
3000.	2.871	34.944
[illegible]	2.705	34.934
[illegible]	2.589	34.925
[illegible]	2.474	34.917
[illegible]	2.400	34.912
[illegible]	2.359	34.908
[illegible]	2.316	34.904
[illegible]	2.304	34.903

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 256
CRUISE STATION NB: J.CHARCOT 6
POSITION: N 36 7.78 W 39 51.30
DATE: 83- VII-04
DEPTH OF WATER: 3701M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
5.	23.530	36.247
10.	23.106	36.212
20.	22.583	36.194
30.	21.822	36.243
40.	21.321	36.275
50.	19.713	36.269
60.	18.596	36.218
70.	17.829	36.216
80.	17.484	36.230
90.	17.342	36.245
100.	17.168	36.234
200.	16.218	36.195
300.	14.462	35.908
400.	13.322	35.744
500.	11.772	35.540
600.	10.179	35.345
700.	8.699	35.207
800.	7.705	35.204
900.	6.810	35.179
1000.	6.628	35.248
1100.	6.425	35.268
1200.	5.947	35.222
1300.	5.497	35.174
1400.	5.081	35.129
1500.	4.710	35.087
1600.	4.509	35.067
1700.	4.113	35.012
1800.	3.986	35.001
1900.	3.900	35.000
2000.	3.830	35.003
2200.	3.505	34.977
2400.	3.334	34.969
2600.	3.159	34.960
2800.	2.968	34.950
3000.	2.842	34.943
3200.	2.673	34.932
3400.	2.527	34.922
3552.	2.435	34.916

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 257
CRUISE STATION NB: J.CHARCOT 7
POSITION: N 36 6.50 W 39 39.97
DATE: 83- VII-05
DEPTH OF WATER: 4040M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
2.	23.237	36.218
10.	23.181	36.196
20.	21.983	36.090
30.	21.090	36.231
40.	20.068	36.286
50.	18.880	36.223
60.	17.958	36.176
70.	17.583	36.167
80.	17.334	36.170
90.	17.175	36.184
100.	17.065	36.202
200.	16.086	36.160
300.	14.201	35.861
400.	13.074	35.715
500.	11.539	35.500
600.	9.692	35.279
700.	8.434	35.191
800.	7.539	35.177
900.	6.989	35.221
1000.	6.752	35.264
1100.	6.530	35.285
1200.	5.951	35.227
1300.	5.513	35.178
1400.	4.941	35.103
1500.	4.718	35.089
1600.	4.511	35.065
1700.	4.149	35.015
1800.	3.989	35.004
1900.	3.908	35.006
2000.	3.802	35.002
2200.	3.546	34.981
2400.	3.362	34.972
2600.	3.186	34.962
2800.	3.023	34.954
3000.	2.876	34.945
3200.	2.704	34.934
3400.	2.533	34.922
3600.	2.428	34.914
3800.	2.359	34.909
3948.	2.332	34.906

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 258
CRUISE STATION NB: J.CHARCOT 8
POSITION: N 35 58.77 W 39 31.79
DATE: 83- VII-06
DEPTH OF WATER: 4045M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
3.	23.760	36.391
10.	23.465	36.353
20.	22.251	36.295
30.	20.985	36.307
40.	19.631	36.367
60.	18.410	36.389
70.	17.885	36.373
80.	17.677	36.357
90.	17.596	36.350
100.	17.503	36.350
200.	16.487	36.239
300.	15.442	36.082
400.	14.099	35.881
500.	12.759	35.676
600.	11.119	35.454
700.	9.313	35.276
800.	8.136	35.244
900.	7.626	35.275
1000.	6.951	35.267
1100.	6.694	35.294
1200.	6.205	35.256
1300.	5.645	35.192
1400.	5.008	35.109
1500.	4.946	35.123
1600.	4.366	35.038
1700.	4.185	35.021
1800.	4.006	35.005
1900.	3.883	34.997
2000.	3.762	34.989
2200.	3.601	34.989
2400.	3.341	34.968
2600.	3.187	34.962
2800.	3.028	34.953
3000.	2.867	34.944
3200.	2.682	34.931
3400.	2.518	34.920
3600.	2.433	34.914
3800.	2.374	34.909
3898.	2.341	34.906

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 259
CRUISE STATION NB: J.CHARCOT 9
POSITION: N 35 59.23 W 40 4.67
DATE: 83- VII-06
DEPTH OF WATER: 3710M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
3.	23.540	36.399
10.	23.553	36.401
20.	22.838	36.406
30.	21.129	36.464
40.	20.072	36.478
50.	19.547	36.463
60.	19.159	36.480
70.	18.852	36.464
80.	18.502	36.454
90.	18.280	36.471
100.	18.192	36.477
200.	17.258	36.391
300.	16.440	36.265
400.	14.694	35.915
500.	13.354	35.734
600.	11.665	35.516
700.	10.154	35.371
800.	8.399	35.219
900.	7.810	35.266
1000.	7.184	35.278
1100.	6.740	35.276
1200.	6.348	35.269
1300.	5.869	35.223
1400.	5.260	35.153
1500.	4.904	35.108
1600.	4.610	35.075
1700.	4.384	35.051
1800.	4.085	35.011
1900.	3.956	35.001
2000.	3.924	35.014
2200.	3.580	34.982
2400.	3.384	34.972
2600.	3.211	34.964
2800.	3.034	34.952
3000.	2.866	34.943
3200.	2.706	34.932
3400.	2.540	34.921
3600.	2.451	34.914
3741.	2.419	34.912

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 260
CRUISE STATION NB: J.CHARCOT 10
POSITION: N 35 50.12 W 40 15.43
DATE: 83- VII-06
DEPTH OF WATER: 4110M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
3.	23.822	36.414
10.	23.824	36.413
20.	23.172	36.383
30.	22.066	36.457
40.	21.035	36.558
50.	20.385	36.557
60.	19.877	36.543
70.	19.435	36.544
80.	19.049	36.532
90.	18.762	36.525
100.	18.626	36.519
200.	17.336	36.402
300.	16.446	36.272
400.	15.333	36.076
500.	13.876	35.841
600.	12.515	35.649
700.	11.043	35.471
800.	9.501	35.324
900.	7.986	35.226
1000.	7.216	35.231
1100.	7.010	35.316
1200.	6.362	35.260
1300.	5.838	35.207
1400.	5.278	35.136
1500.	4.983	35.110
1600.	4.521	35.049
1700.	4.299	35.026
1800.	4.136	35.010
1900.	3.969	34.998
2000.	3.878	34.999
2200.	3.662	34.990
2400.	3.411	34.974
2600.	3.229	34.964
2800.	3.052	34.953
3000.	2.903	34.944
3200.	2.764	34.936
3400.	2.598	34.925
3600.	2.485	34.917
3800.	2.408	34.911
3857.	2.390	34.910

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 261
CRUISE STATION NB: J.CHARCOT 11
POSITION: N 35 40.50 W 40 5.79
DATE: 83- VII-07
DEPTH OF WATER: 3730M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
3.	23.820	36.415
10.	23.824	36.415
20.	22.940	36.356
30.	21.371	36.500
40.	20.727	36.552
50.	20.212	36.562
60.	19.919	36.556
70.	19.644	36.553
80.	19.292	36.542
90.	19.047	36.539
100.	18.836	36.546
200.	17.482	36.414
300.	16.757	36.321
400.	15.714	36.137
500.	14.296	35.910
600.	12.917	35.702
700.	11.277	35.486
800.	9.609	35.315
900.	8.391	35.284
1000.	7.135	35.195
1100.	7.156	35.325
1200.	6.391	35.261
1300.	5.734	35.190
1400.	5.331	35.150
1500.	4.900	35.096
1600.	4.771	35.091
1700.	4.498	35.064
1800.	4.108	35.012
1900.	3.972	35.002
2000.	3.850	34.998
2200.	3.710	35.003
2400.	3.457	34.980
2600.	3.267	34.968
2800.	3.092	34.957
3000.	2.937	34.947
3200.	2.776	34.938
3400.	2.604	34.925
3529.	2.521	34.920

IFREMER/CB TOPOGULF

TOPOGULF STATION NB: 262
CRUISE STATION NB: J.CHARCOT 12
POSITION: N 35 49.67 W 39 51.66
DATE: 83- VII-07
DEPTH OF WATER: 3729M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
4.	23.962	36.401
10.	23.937	36.400
20.	23.755	36.401
30.	22.898	36.384
40.	21.374	36.531
50.	20.660	36.564
60.	20.097	36.552
70.	19.725	36.539
80.	19.289	36.557
90.	18.970	36.529
100.	18.459	36.463
200.	17.363	36.407
300.	16.518	36.271
400.	15.169	36.043
500.	13.803	35.840
600.	12.325	35.616
700.	10.536	35.422
800.	8.657	35.207
900.	7.740	35.203
1000.	7.413	35.273
1100.	6.838	35.282
1200.	6.469	35.264
1300.	5.942	35.217
1400.	5.368	35.159
1500.	4.962	35.110
1600.	4.637	35.075
1700.	4.428	35.059
1800.	4.259	35.043
1900.	4.051	35.025
2000.	3.907	35.013
2200.	3.594	34.984
2400.	3.351	34.968
2600.	3.205	34.962
2800.	3.051	34.953
3000.	2.878	34.943
3200.	2.725	34.934
3400.	2.551	34.922
3600.	2.440	34.914
3684.	2.392	34.911

IFREMER/CR TOPOGULF

TOPOGULF STATION NB: 263
CRUISE STATION NB: J.CHARCOT 13
POSITION: N 35 44.92 W 39 34.63
DATE: 83- VII-07
DEPTH OF WATER: 3261M.

PARAMETERS	UNITS
PRESS.	DECIBARS
TEMP.	DEG.CELS.
SALINITY	P.S.U.

PRESS.	TEMP.	SALINITY
4.	23.860	36.431
10.	23.861	36.431
20.	23.841	36.425
30.	22.059	36.485
40.	20.518	36.474
50.	19.352	36.393
60.	18.711	36.401
70.	18.501	36.413
80.	18.264	36.432
90.	18.131	36.440
100.	17.936	36.439
200.	17.307	36.393
300.	16.543	36.275
400.	15.208	36.056
500.	13.985	35.865
600.	12.650	35.664
700.	11.056	35.470
800.	9.167	35.295
900.	7.921	35.225
1000.	7.959	35.394
1100.	6.956	35.282
1200.	6.354	35.256
1300.	5.860	35.223
1400.	5.343	35.160
1500.	4.863	35.098
1600.	4.537	35.051
1700.	4.356	35.038
1800.	3.986	34.990
1900.	3.573	34.990
2000.	3.917	35.019
2200.	3.690	34.997
2400.	3.402	34.972
2600.	3.275	34.962
2800.	3.035	34.953
3000.	2.878	34.945
3190.	2.746	34.935

VIII Listings of rosette-sampled parameters

49 SUROIT STATIONS

Parameters	Units
Pressure	: decibars
Dissolved Oxygen	: millilitre / litre
Dissolved Nitrate	: micromol / litre
Dissolved Phosphate	: micromol / litre
Dissolved Silicate	: micromol / litre

TOPOGULF STATION NO: 1
CRUISE STATION NO: SUROIT : 1

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.58	0.90	0.06	
349		9.20	0.52	4.00

TOPOGULF STATION NO: 3
CRUISE STATION NO: SUROIT : 3

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.33		0.03	0.40
201	5.15	3.60	0.20	1.70
350	4.68	8.70	0.41	3.00
502	4.46	11.60	0.67	5.50
650	4.32	15.30	0.94	7.50
800	4.03	19.40	1.21	10.00

TOPOGULF STATION NO: 5
CRUISE STATION NO: SUROIT : 5

Pressure	Oxygen	Nitrate	Phosphate	Silicate
97	5.26	0.10	0.07	0.70
199	4.77	2.40	0.23	1.90
351	4.48	5.40	0.47	3.00
518	4.48	12.90	0.70	6.00
636	4.39	16.00	0.89	8.50
792	3.87		1.21	10.80
997	3.94		1.42	15.40
1513	5.19	19.20	1.22	
2495	5.75	19.70	1.26	29.70
3000	5.82	20.70	1.36	36.60
3461	4.867	20.90	1.37	40.10

TOPOGULF STATION NO: 7
CRUISE STATION NO: SUROIT : 7

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.08		0.03	1.00
150	4.90	0.30	0.04	1.20
300	5.33?	1.70		1.60
600	4.23	14.30	0.89	7.00
800	3.81	20.30	1.29	11.90
1000	3.99	23.70	1.46	15.00

TOPOGULF STATION NO: 8
CRUISE STATION NO: SUROIT : 8

Pressure	Oxygen	Nitrate	Phosphate	Silicate
1000	3.87	23.50	1.49	15.80
1101	4.19	23.30	1.45	13.10
1200	4.52	23.00	1.43	14.10
1400	4.99	21.00	1.37	18.40

TOPOGULF STATION NO: 9
CRUISE STATION NO: SUROIT : 9

Pressure	Oxygen	Nitrate	Phosphate	Silicate
1500	5.02	21.00	1.38	18.40
1750	5.37	20.50	1.33	20.80
2000	5.55	20.30	1.31	20.60
2500	5.71	20.00	1.30	28.00
4250	5.75	22.50	1.46	42.80

TOPOGULF STATION NO: 10
CRUISE STATION NO: SUROIT : 10

Pressure	Oxygen	Nitrate	Phosphate	Silicate
99	5.17	0.50	0.03	0.80
200	4.68	2.70	0.14	1.40
352	4.46	7.90	0.45	3.10
503	4.32	12.10	0.76	6.00
654	3.85	17.20		9.20
806	3.49	21.90	1.43	13.30
1010	3.74	22.10	1.50	19.10
1983	5.51	19.70	1.25	
2510	5.64	20.00	1.32	22.30
3032	5.64	20.90	1.36	36.90
3543	5.73	20.80	1.37	41.50

TOPOGULF STATION NO: 11
CRUISE STATION NO: SUROIT : 11

Pressure	Oxygen	Nitrate	Phosphate	Silicate
98	5.13		0.03	0.80
199	4.79		0.05	1.00
350	4.16		0.45	2.80
505	4.03		0.81	6.60
657	3.40		1.23	10.00
808	3.45		1.45	13.10
1008	3.81		1.53	23.10
1504	5.11		1.33	21.40
2511	5.67		1.32	29.70
3018	5.67		1.35	36.80
3530	5.67		1.38	39.10

TOPOGULF STATION NO: 13
CRUISE STATION NO: SUROIT : 13

ressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.13		0.02	1.00
200	4.50	2.70	0.16	1.20
350	4.48	8.30	0.46	3.10
499	4.08	13.00	0.81	6.50
649	3.58	19.60	1.20	10.70
800	3.27	24.00	1.52	14.00
1000	3.72	26.00	1.62	15.30
1500	5.11	20.50	1.31	16.60
3000	5.67	20.80	1.38	36.20

TOPOGULF STATION NO: 15
CRUISE STATION NO: SUROIT : 15

Pressure	Oxygen	Nitrate	Phosphate	Silicate
98	5.11	0.60	0.07	1.20
200	4.25	3.50	0.17	1.80
348	4.46	6.00	0.41	3.50
500	4.21	12.50	0.74	6.00
648	3.27	20.00	1.31	8.50
797	3.54	23.00	1.46	13.10
995	3.78	25.00	1.56	21.90
1500	5.19	21.70	1.36	18.90
2500	5.60	20.00	1.34	22.10
3000	5.67	19.80	1.35	32.50
3499	5.80	20.20	1.37	39.00

TOPOGULF STATION NO: 17
CRUISE STATION NO: SUROIT : 17

Pressure	Oxygen	Nitrate	Phosphate	Silicate
97	5.11		0.02	1.00
198	4.50	3.00	0.14	1.30
348	4.46	7.30	0.43	3.50
501	4.16	13.10	0.77	6.50
647	3.49	19.10	1.23	11.90
998	3.69	26.50	1.67	15.80
1500	5.28	19.50	1.28	16.40
2500	5.75	19.70	1.30	32.10
3000	5.73	20.00	1.36	36.20

TOPOGULF STATION NO: 19
CRUISE STATION NO: SUROIT : 19

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	4.93		0.02	0.70
201	4.55	1.10	0.05	1.10
352	4.48	7.80	0.40	2.90
503	4.30	10.70	0.69	6.50

TOPOGULF STATION NO: 21
CRUISE STATION NO: SUROIT : 21

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.13		0.03	1.30
199	4.46	3.30	0.13	1.60
350	4.46	6.60	0.38	2.50
501	4.30	11.40	0.71	6.00
649	3.99	16.60	1.01	8.10
799	3.74			
1000	3.90	26.20	1.65	21.10
1255	4.99	22.00	1.34	18.80
1500	5.46	20.40	1.26	18.10
2000	5.75	20.00	1.22	23.10
2501	5.73	21.20	1.31	
3000	5.73	20.90	1.31	30.80

TOPOGULF STATION NO: 24
CRUISE STATION NO: SUROIT : 24

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	4.99		0.03	1.10
350	4.48	6.50	0.38	2.50
650	3.47	20.00	1.11	10.60
800	3.45	24.70	1.50	16.90
1000	3.94	25.90	1.54	20.40
1500	5.73	20.00	1.25	16.70
2000	5.75	19.80	1.22	23.10
2500	5.37?	20.60		29.80
3000	5.82	20.00	1.29	31.50
3500	5.82	20.20	1.33	38.80

TOPOGULF STATION NO: 26
CRUISE STATION NO: SUROIT : 26

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.11		0.03	0.70
150	4.72	0.30	0.02	0.90
200	4.59	1.90	0.10	1.20
300	4.70	5.10	0.30	2.50
400	4.50	8.70	0.41	4.00
500	4.34	11.10	0.65	5.50
607	4.05	15.50	0.95	6.10
700	3.76	19.20	1.17	11.90
800	3.63	23.40	1.48	15.80
850	3.61	24.60	1.57	17.10
900	3.52	26.60	1.67	20.00

TOPOGULF STATION NO: 27
CRUISE STATION NO: SUROIT : 27

Pressure	Oxygen	Nitrate	Phosphate	Silicate
1100	4.14	22.80	1.50	19.00
1200	4.59	21.40	1.39	19.20
1298	4.90	20.60	1.36	17.50
1400	5.17	20.20	1.29	17.20
1500	5.26	20.20	1.28	
1598	5.49	20.00	1.25	18.00
1700	5.53	19.90	1.24	19.10
1800	5.64	19.90	1.25	19.00
1900	5.71	19.20	1.24	20.10
2000	5.67	20.20	1.24	23.00

TOPOGULF STATION NO: 28
CRUISE STATION NO: SUROIT : 28

Pressure	Oxygen	Nitrate	Phosphate	Silicate
846	3.65		1.45	17.50
1500	5.40	20.00	1.25	
1750	5.64	20.00	1.24	19.00
2000	5.80	20.00	1.24	23.10
2250	5.84	20.40	1.25	26.20
2500	5.89	20.70	1.29	28.90
2750	5.91	20.40	1.30	32.00
3000	5.84	20.70	1.29	34.70
3500	5.93	20.90	1.29	38.70
3750	5.91	20.10	1.29	40.90

TOPOGULF STATION NO: 30
CRUISE STATION NO: SUROIT : 30

Pressure	Oxygen	Nitrate	Phosphate	Silicate
200	4.55	2.60	0.10	1.30
350	4.75	5.20	0.30	2.10
500	4.46	10.50	0.60	5.00
650	4.16	14.80	0.90	7.80
1000	4.43	21.80?	1.34?	19.10
1250	5.06	19.50	1.28	18.40
1500	5.46	19.50	1.23	17.50
2000	5.82	19.40	1.23	24.80
2500	5.87	19.10	1.29	29.80

TOPOGULF STATION NO: 32
CRUISE STATION NO: SUROIT : 32

Pressure	Oxygen	Nitrate	Phosphate	Silicate
102	5.40	0.20	0.03	0.90
200	4.61	3.90	0.20	1.60
350	4.75	6.00	0.34	2.50
500	4.52	10.60	0.61	5.00
650	4.19	15.60	0.92	8.20
1000	4.25	22.60	1.41	18.90
1500	5.37	20.90	1.30?	17.00
2500	5.87	20.00	1.28	30.70
3000	5.87	20.40	1.31	35.90

TOPOGULF STATION NO: 35
CRUISE STATION NO: SUROIT : 35

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.33		0.03	0.80
200	4.59	4.60	0.23	1.70
351	4.72	8.50	0.38	2.70
652	4.12	15.70	0.97	
800	3.94	19.80	1.26	18.20
1250	4.99	19.20	1.19	18.20
1500	5.60	19.00	1.18	17.00
2000	5.91	19.10	1.20	21.80
2500	5.91	19.10	1.25	27.90

TOPOGULF STATION NO: 38
CRUISE STATION NO: SUROIT : 38

Pressure	Oxygen	Nitrate	Phosphate
100	5.04	0.70	0.02
202	4.97	3.60	0.19
500	4.68	9.30	0.53
650	4.46	13.70	0.87
800	4.10	18.20	1.12
1000	4.30	20.80	1.27
1500	5.64	18.80	1.16
2000	5.87	15.50?	1.17
3000	6.05	19.00	

TOPOGULF STATION NO: 39
CRUISE STATION NO: SUROIT : 39

Pressure	Oxygen	Nitrate	Phosphate
99	5.04	0.80	0.05
200	4.84	2.20	0.22
350	4.77	5.50	0.32
500	4.68	8.20	0.51
650	4.30	14.70	0.87
1000	4.70	20.00	1.31
1500	5.62	18.10	1.16
2500	6.02	19.00	1.22
3000	6.00	19.00	1.24

TOPOGULF STATION NO: 40
CRUISE STATION NO: SUROIT : 40

Pressure	Oxygen	Nitrate	Phosphate
100	5.53		
202	4.84	7.70	0.40
350	4.86	10.00	0.58
507	4.86	12.00	0.72
650	4.50	16.90	1.08
779	4.39	18.40	1.12
1000	4.52	18.70	1.15
1500		18.50	1.18
2500	6.00	19.40	1.20

TOPOGULF STATION NO: 42
CRUISE STATION NO: SUROIT : 42

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
1.00	100		0.20	0.04	1.30
2.00	200	4.86	4.70	0.27	2.20
5.70	351	4.86	10.30	0.59	4.20
6.90	500	4.86	11.50	0.69	6.00
10.20	1000	4.52	19.30	1.10	13.70
16.70	1500	5.58	19.40	1.12	13.90
17.10	1994	6.09	19.10	1.15	15.00
19.90	3000	5.82	21.40	1.33	32.40
29.50					

TOPOGULF STATION NO: 43
CRUISE STATION NO: SUROIT : 43

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
1.20	850	4.34	17.70	1.08	10.50
1.80	1500	5.58	18.60	1.14	14.00
2.30	1750	6.20?	18.60	1.14	14.30
4.00	2000	5.91	18.80	1.14	14.00
6.70	2250	5.96	19.50	1.20	16.00
16.00	2750	5.96	19.70	1.26	27.80
16.40	3000	5.82	20.70	1.33	32.50
24.50	3500	5.75	21.50	1.40	38.00
26.00	3750	5.71	21.80	1.44	39.70

TOPOGULF STATION NO: 44
CRUISE STATION NO: SUROIT : 44

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
1.00	1000	4.46	18.50	1.12	12.20
3.30	1100	4.59	18.50	1.12	13.00
4.20	1200	4.77	18.50	1.12	14.00
6.00	1300	5.04	18.70	1.15	14.00
8.50	1400	5.33	18.90	1.15	13.50
10.00	1500	5.55	18.20	1.14	14.00
11.80	1600	5.73	18.60	1.14	14.00
14.00	1700	5.80	18.70	1.15	14.00
24.50	1800	5.87	18.70	1.14	14.00
	1900		18.70	1.14	14.50
	2000		18.70	1.15	15.00

TOPOGULF STATION NO: 46
CRUISE STATION NO: SUROIT : 46

Pressure	Oxygen	Nitrate	Phosphate	Silicate
200	4.90	4.70	0.27	2.10
298	4.84	6.40	0.44	3.50
400	4.81	10.20	0.60	5.00
500	4.66	11.90	0.72	6.00
600	4.58	13.30	0.83	7.00
700	4.21	17.00	1.05	9.40
800	4.28	17.70	1.09	10.60
849	4.32	13.20	1.12	11.00
900	4.37	16.50	1.13	11.60
990	4.50	18.90	1.14	13.30

TOPOGULF STATION NO: 47
CRUISE STATION NO: SUROIT : 47

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.26	0.70	0.04	0.90
200	4.93	3.50	0.19	1.60
401	4.75	9.00	0.53	3.90
500	4.68	11.00	0.66	4.30
650	4.66	13.60	0.84	7.00
800	4.30	16.20	1.12	9.10
1000	4.46	18.70	1.14	13.50
2000	5.68	19.90	1.16	19.30
2500	5.96	20.00	1.23	24.90
3000	5.80	20.10	1.32	33.00

TOPOGULF STATION NO: 49
CRUISE STATION NO: SUROIT : 49

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.35		0.02	0.60
194	4.75	3.00	0.21	1.30
349	4.61	7.30	0.44	3.30
499	4.59	11.00	0.67	5.10
650	4.46	13.30	0.87	6.70
802	4.16	18.00	1.09	9.60
1000	4.30	19.60	1.24	13.40
2000	5.71	19.60	1.24	17.60
2500	5.91	20.00	1.30	24.10
3000	5.78	19.60	1.31	32.00

TOPOGULF STATION NO: 52
CRUISE STATION NO: SUROIT : 52

Pressure	Oxygen	Nitrate	Phosphate
99	5.40	0.10	0.02
200	4.75	3.60	0.21
347	4.64	7.00	0.42
498	4.59	11.00	0.66
650	4.30	15.10	0.93
798	4.10	17.60	1.09
1000	4.08	19.70	1.28
2000	5.64	20.00	1.24

TOPOGULF STATION NO: 54
CRUISE STATION NO: SUROIT : 54

Pressure	Oxygen	Nitrate	Phosphate
101	5.11		0.03
202	4.64	2.70	0.20
348	4.59	7.10	0.40
501	4.52	11.30	0.67
650	4.39	15.70	0.91
800	4.14	18.00	1.12
1000	4.46	21.00	1.29
2000	5.69	19.30	1.24
2500	5.73	19.50	1.26
3000	5.69	20.60	1.37

TOPOGULF STATION NO: 56
CRUISE STATION NO: SUROIT : 56

Pressure	Oxygen	Nitrate	Phosphate
100	5.31		0.03
200	4.77	3.70	0.23
350	4.64	7.40	0.45
500	4.50	11.50	0.70
850	4.32	14.90	0.90
1000	4.28	20.20	1.24
2500	5.73	20.00	1.28
3000	5.67	20.80	1.35

TOPOGULF STATION NO: 58
CRUISE STATION NO: SUROIT : 58

Silicate
0.90
1.50
3.20
4.50
7.00
10.60
13.80
19.10

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.13		0.04	0.80
200		9.60	0.16	1.40
350	4.64	7.30	0.42	3.00
500	4.57	10.60	0.63	4.50
1000	4.30	20.00	1.26	12.90
2000	5.71	19.30	1.22	14.00
2500	5.78	19.30	1.24	21.80

TOPOGULF STATION NO: 61
CRUISE STATION NO: SUROIT : 61

Silicate
0.60
1.10
2.70
4.40
6.60
9.40
11.50
17.40
26.80
32.70

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.17		0.03	0.90
200	4.68	4.90	0.24	2.30
350	4.66	7.60	0.46	3.50
500	4.46	11.80	0.70	5.00
650	4.30	15.00	0.92	8.40
1000	4.43	20.50	1.27	13.40
1500	5.51	18.10	1.16	13.60
2000	5.87		1.16	13.60
2500	5.64	20.00	1.27	25.20

TOPOGULF STATION NO: 63
CRUISE STATION NO: SUROIT : 63

Silicate
0.50
1.80
3.50
4.50
7.00
14.10
35.60

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.13		0.03	1.10
200	4.75	3.60	0.22	1.60
350	4.57	8.00	0.48	3.30
500	4.48	11.90	0.70	5.70
650	4.28	16.00	0.91	7.00

TOPOGULF STATION NO: 65
CRUISE STATION NO: SUROIT : 65

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	4.93	0.80	0.07	0.90
200	4.86	3.60	0.23	1.80
350	4.52	8.60	0.52	3.60
500	6.027	11.10	0.70	5.30
650	4.23	16.80	0.88	9.10
1000	4.66	19.10	1.23	13.70
1750	5.84	18.00	1.19	14.00
2000	5.88	18.00	1.18	15.50
2500	5.93	19.10	1.24	16.00

TOPOGULF STATION NO: 67
CRUISE STATION NO: SUROIT : 67

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	4.88	1.60	0.06	1.30
200	4.90	3.60	0.22	1.80
350	4.61	7.50	0.45	2.80
500	4.937	12.00	0.70	6.00
650	4.12	18.50	1.03	8.50
800	4.21	19.50	1.16	10.60
1000	4.57	19.20	1.25	12.50
2500	6.00	18.40	1.22	22.40

TOPOGULF STATION NO: 71
CRUISE STATION NO: SUROIT : 71

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.02	0.40	0.04	1.00
150	4.84	1.40	0.07	1.20
200		2.70	0.16	1.10
300	4.84	4.70	0.27	2.70
400	4.57	8.00	0.48	8.50
500	4.39	11.20	0.67	5.00
600	4.08	14.50	0.90	7.40
702	3.72	19.30	1.20	11.70
800	3.81	20.50	1.31	
850	4.10	20.20	1.27	12.60
900	4.28	20.10	1.28	13.90
1000	4.57	20.20	1.27	12.70

TOPOGULF STATION NO: 72
CRUISE STATION NO: SUROIT : 72

Pressure	Oxygen	Nitrate	Phosphate
998	4.90	19.00	1.24
1100	5.13	18.40	1.16
1200	5.35	18.00	1.17
1300	5.53	18.00	1.13
1390	5.67	17.00	1.20
1500	5.82	17.20	1.16
1600	5.93	17.50	1.15
1800	5.96	17.50	1.17
1900	5.98	17.80	1.17
2000	6.05	17.80	1.16
2100	6.07	17.70	1.16

TOPOGULF STATION NO: 73
CRUISE STATION NO: SUROIT : 73

Pressure	Oxygen	Nitrate	Phosphate
850	4.48	19.90	1.25
1500	5.78	17.20	1.14
1710	5.93	17.40	1.14
2000	6.02	17.70	1.15
2250	6.07	17.80	1.15
2500	6.05	18.20	1.18
2750	6.227	18.40	1.18
3000	6.02	18.40	1.20
3250	6.02	18.40	1.22
3750	6.02	18.70	1.21
4000	6.11	18.80	1.24

TOPOGULF STATION NO: 76
CRUISE STATION NO: SUROIT : 76

Pressure	Oxygen	Nitrate	Phosphate
101	5.15	0.40	0.06
200	4.93	6.30	0.37
342	4.84	8.70	0.57
500	4.43	14.30	0.87
650	4.28	17.50	1.06
800	4.06	20.20	1.26
980	4.61	18.10	1.26
2000	6.09	17.50	1.13
2500	6.07	18.20	1.18
3500	6.09	18.70	

TOPOGULF STATION NO: 79
CRUISE STATION NO: SUROIT : 79

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
13.00	100		3.10	0.21	1.70
13.00	200	4.88	5.60	0.33	2.70
13.20	350	4.93	8.10	0.59	4.90
13.40	500	4.64	12.00	0.73	5.70
13.40	650	4.19	18.00	1.10	7.60
13.50	800	4.16	20.00	1.24	6.90?
13.80	1000	4.64	18.70	1.21	12.10
13.90	2000	6.20	17.20	1.10	
14.10	2500	6.16	16.00	1.16	15.90
	3500	6.14		1.19	31.60

TOPOGULF STATION NO: 83
CRUISE STATION NO: SUROIT : 83

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
	100	5.31	1.70		1.20
12.20	202	5.04	5.40	0.35	2.10
13.50	350	5.02	9.50	0.59	4.30
13.90	500	4.75	13.50	0.84	6.20
	650	4.41	16.70	1.04	8.70
16.20	800	4.32	19.20	1.17	11.50
16.80	1000	4.70	19.50	1.20	11.70
22.10	2000	6.16	17.50	1.16	15.20
25.40	2500	6.25	17.00	1.12	17.00
27.20	3000	6.20	16.00	1.17	22.00
28.00	3500	6.16	16.00	1.19	26.20
29.30					

TOPOGULF STATION NO: 86
CRUISE STATION NO: SUROIT : 86

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
0.50					
2.70	100	5.46	0.60	0.09	0.50
4.00	200	5.17	4.00	0.32	2.70
5.60	350	4.86	8.50	0.54	4.50
7.50	500	4.48	13.30	0.83	6.20
12.10	650	4.43	16.00	0.96	8.60
12.50	800	4.25	19.00	1.16	11.00
16.30	1000	4.70	20.00	1.25	11.50
16.70					
27.10					

TOPOGULF STATION NO: 89
CRUISE STATION NO: SUROIT : 89

Pressure	Oxygen	Nitrate	Phosphate	Silicate
102	5.26	2.70		1.50
200	5.17	5.30	0.36	3.40
350	4.95	9.00	0.58	4.10
500	4.75	12.30	0.77	6.90
650	4.48	15.50	0.97	8.00
800	4.37	18.00	1.13	8.60
1000	4.75	18.40	1.15	14.00
1500	5.60	18.50	1.18	16.40
2000	5.80	19.00	1.20	13.40
2600	5.84	18.50	1.17	12.90

TOPOGULF STATION NO: 91
CRUISE STATION NO: SUROIT : 91

Pressure	Oxygen	Nitrate	Phosphate	Silicate
200	5.06	5.70	0.35	
550	5.06	9.40	0.58	
800	4.81	12.80	0.79	
850	4.61	15.00	0.93	
800	4.48	16.50	1.05	
900	4.50	17.50	1.10	
1100	4.75	16.90	1.06	
1250	5.19	17.00	1.09	
1500	5.58	18.40	1.16	
1550	5.69	18.40	1.15	

TOPOGULF STATION NO: 94
CRUISE STATION NO: SUROIT : 94

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.35	0.90	0.08	0.70
200	4.97	6.10	0.39	2.30
350	4.84	10.30	0.62	3.60
500	4.72	13.40	0.79	7.20
630	4.43	15.70	1.00	8.40
800	4.32	17.20	1.12	11.00
1000	4.43	17.00	1.06	12.10
1500	5.78	18.50	1.13	13.60
2000	6.16	18.50	1.11	15.00
2500	6.05	19.50	1.22	20.60
3000	5.91	19.80	1.27	31.70

TOPOGULF STATION NO: 97
CRUISE STATION NO: SUROIT : 97

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.42		0.03	0.60
202	4.97	6.30	0.38	2.30
350	4.86	10.30	0.64	4.10
500	4.70	12.30	0.75	7.50
646	4.43	15.80	1.00	9.70
800	4.25	17.70	1.13	11.60
1000	4.43	17.50	1.13	13.20
2000	6.09	17.50	1.15	16.80
2500	6.05	16.40	1.20	22.30
3000	5.87	19.40	1.30	30.30
3500	5.78	20.30	1.41	36.50

TOPOGULF STATION NO: 105
CRUISE STATION NO: SUROIT : 105

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.35	2.50	0.20	1.20
200	5.19	7.10	0.40	2.70
350	5.04	8.70	0.55	4.30
500	4.84	12.00	0.78	5.50
1000	4.86	18.20	1.19	13.50
1500	5.89	18.50	1.16	14.00
2000	6.16	18.50	1.15	16.80
3000	5.96	18.70	1.25	22.70
3200	5.84	19.60	1.32	31.10
3350	5.75	21.00	1.35	32.30
3515	5.71	21.80	1.41	37.80

75 POSEIDON STATIONS

Parameters	Units
Pressure	: decibars
Dissolved Oxygen	: millilitre / litre

TOPOGULF STATION NO: 116
CRUISE STATION NO: POSEIDON : 514

Pressure	Oxygen
182	5.29
367	5.27
739	4.53
1043	5.33
1380	6.11
1979	6.25
2288	6.24
2498	6.047
2584	6.20
2918	6.04
3022	5.257

TOPOGULF STATION NO: 117
CRUISE STATION NO: POSEIDON : 516

Pressure	Oxygen
50	5.45
103	5.30
199	5.39
601	4.69
802	4.76
996	5.35
1601	5.93
2004	6.26
2398	6.23
2604	6.20

TOPOGULF STATION NO: 118
CRUISE STATION NO: POSEIDON : 518

Pressure	Oxygen
100	5.50
198	5.38
410	5.14
600	4.99
803	5.52
1003	6.00
1299	6.23
1601	6.25
2016	6.31
2403	6.37
2641	6.43

TOPOGULF STATION NO: 119
CRUISE STATION NO: POSEIDON : 520

Pressure	Oxygen
138	5.07
194	5.34
397	4.39
602	4.82
801	5.18
1000	5.55
1298	5.76
1595	6.16
2001	6.22
2917	6.10

TOPOGULF STATION NO: 120
CRUISE STATION NO: POSEIDON : 522

Pressure	Oxygen
35	5.56
161	5.33
299	5.40
402	5.09
613	4.76
902	5.43
1200	6.01
1607	6.21
2010	6.18
2598	6.14

TOPOGULF STATION NO: 121
CRUISE STATION NO: POSEIDON : 524

Pressure	Oxygen
32	5.48
98	5.30
201	5.37
399	5.01
599	4.87
800	5.61
995	5.99
1298	6.21
1605	6.20
1996	6.17
2399	6.23
2936	5.99

TOPOGULF STATION NO: 122
CRUISE STATION NO: POSEIDON : 526

Pressure	Oxygen
29	5.23
203	5.01
402	4.73
602	4.96
1000	5.99
1295	6.13
1607	6.20
2005	6.28
2400	6.21
3401	5.22

TOPOGULF STATION NO: 123
CRUISE STATION NO: POSEIDON : 528

Pressure	Oxygen
28	5.69
100	6.20
198	5.52
398	5.03
600	5.16
801	5.63
1001	5.94
1295	6.53
1601	6.40
1998	6.02
2398	5.86
2988	5.98

TOPOGULF STATION NO: 124
CRUISE STATION NO: POSEIDON : 530

Pressure	Oxygen
28	5.51
101	4.81
399	4.30
601	4.80
802	5.03
1003	5.74
1301	5.79
1599	6.04
2002	5.98
2402	6.02
2803	5.61

TOPOGULF STATION NO: 125
CRUISE STATION NO: POSEIDON : 532

Pressure	Oxygen
26	5.62
60	5.84
99	5.35
394	4.93
596	5.72
807	5.67
1000	6.16
1299	6.18
1568	6.34
1997	6.33
2990	6.15

TOPOGULF STATION NO: 126
CRUISE STATION NO: POSEIDON : 534

Pressure	Oxygen
29	5.62
130	4.96
200	5.21
401	4.96
603	5.58
800	5.74
1300	5.94
1600	5.777
1702	5.667
1799	5.977
1900	5.607

TOPOGULF STATION NO: 127
CRUISE STATION NO: POSEIDON : 538

Pressure	Oxygen
33	5.64
101	5.20
205	5.27
406	4.75
605	5.49
806	5.75
996	6.14
1600	6.31
2000	6.33
3000	6.26

TOPOGULF STATION NO: 128
CRUISE STATION NO: POSEIDON : 540

Pressure	Oxygen
29	5.61
101	5.06
200	4.95
405	5.13
604	4.67
802	5.35
1004	5.73
2000	6.31

TOPOGULF STATION NO: 129
CRUISE STATION NO: POSEIDON : 542

Pressure	Oxygen
30	5.38
102	4.84
200	4.66
404	4.76
600	4.45
800	5.24
1000	5.81
1300	6.17
1600	6.32
2000	6.30
2406	6.20
3006	6.11

TOPOGULF STATION NO: 130
CRUISE STATION NO: POSEIDON : 544

Pressure	Oxygen
31	5.57
103	4.81
200	5.12
400	4.90
598	4.33
800	5.22
995	5.79
1305	6.29
1604	6.35
2002	6.31
2404	5.95
2963	6.29

TOPOGULF STATION NO: 131
CRUISE STATION NO: POSEIDON : 546

Pressure	Oxygen
31	5.22
98	4.86
200	5.01
402	4.99
602	4.50
802	4.42
1002	5.35
1303	5.66
1600	6.05
2000	5.97
2400	6.20
3000	6.23

TOPOGULF STATION NO: 132
CRUISE STATION NO: POSEIDON : 548

Pressure	Oxygen
26	4.92
100	5.03
200	5.30
406	4.74
603	4.59
803	4.59
1000	5.07
1304	5.84
1600	6.16
2000	6.23
2400	5.727

TOPOGULF STATION NO: 133
CRUISE STATION NO: POSEIDON : 550

Pressure	Oxygen
22	4.42
100	4.86
200	4.99
400	4.65
602	4.40
800	4.34
1005	4.78
1300	5.57
1600	5.99
2000	6.23
2400	6.18
3010	5.617

TOPOGULF STATION NO: 134
CRUISE STATION NO: POSEIDON : 552

Pressure	Oxygen
24	5.08
100	4.98
204	4.69
404	4.39
600	4.83
1000	4.89
1300	5.69
1600	5.96
1996	5.98
2408	6.04

TOPOGULF STATION NO: 135
CRUISE STATION NO: POSEIDON : 554

Pressure	Oxygen
20	5.09
100	5.13
200	5.07
403	4.90
600	4.43
800	4.19
1005	4.93
1300	5.89
1603	6.14
2004	6.22
2400	6.31

TOPOGULF STATION NO: 136
CRUISE STATION NO: POSEIDON : 556

Pressure	Oxygen
24	5.01
121	4.94
202	4.99
402	4.80
605	4.38
804	4.09
1000	4.70
1304	5.63
1600	6.12
2004	5.96
2400	6.15
2998	6.17

TOPOGULF STATION NO: 137
CRUISE STATION NO: POSEIDON : 558

Pressure	Oxygen
15	5.42
104	5.27
203	5.22
405	5.83
600	5.43
800	4.62
1000	4.65
1303	5.65
1605	6.05
2005	6.31
2333	5.93
2965	6.39

TOPOGULF STATION NO: 138
CRUISE STATION NO: POSEIDON : 560

Pressure	Oxygen
100	5.58
200	5.15
400	4.87
600	4.40
800	4.25
1010	4.87
1314	5.88
1604	6.02
2005	5.96
2405	5.67?

TOPOGULF STATION NO: 139
CRUISE STATION NO: POSEIDON : 562

Pressure	Oxygen
15	5.21
100	5.21
204	5.41
407	5.16
602	4.69
805	4.26
1000	5.06
1200	5.63
1387	5.95
2080	6.19
2887	6.05

TOPOGULF STATION NO: 140
CRUISE STATION NO: POSEIDON : 564

Pressure	Oxygen
16	4.63
100	4.84
200	4.87
403	4.67
604	3.95
801	4.09
1002	4.30
1303	5.30
1603	5.56
2200	5.58
2400	6.01
2800	5.64

TOPOGULF STATION NO: 141
CRUISE STATION NO: POSEIDON : 566

Pressure	Oxygen
60	5.52
100	5.08
200	5.17
400	4.98
802	4.28
1000	4.58
1300	5.37
1600	5.91
2000	4.59?

TOPOGULF STATION NO: 142
CRUISE STATION NO: POSEIDON : 568

Pressure	Oxygen
400	4.90
600	4.39
815	4.07
998	3.76
1318	4.98
1522	5.62
1832	5.77

TOPOGULF STATION NO: 143
CRUISE STATION NO: POSEIDON : 570

Pressure	Oxygen
29	5.05
100	5.03
200	5.12
398	5.09
600	4.56
802	4.14
1000	4.65
1315	5.52
1600	5.84
2000	6.17

TOPOGULF STATION NO: 144
CRUISE STATION NO: POSEIDON : 572

Pressure	Oxygen
15	5.18
100	5.09
300	5.21
500	4.78
700	4.26
898	4.56
1100	5.477
1300	5.39
1600	6.04

TOPOGULF STATION NO: 145
CRUISE STATION NO: POSEIDON : 576

Pressure	Oxygen
8	5.23
47	5.24
99	5.27
400	5.14
595	4.59
794	4.53
997	4.96
1197	5.37
1397	5.71
1593	5.84
1853	5.98

TOPOGULF STATION NO: 146
CRUISE STATION NO: POSEIDON :

Pressure	Oxygen
9	5.17
49	5.23
199	5.14
299	4.95
397	4.88
499	4.64
599	4.46
698	4.30
900	4.69
1097	5.09

TOPOGULF STATION NO: 147
CRUISE STATION NO: POSEIDON :

Pressure	Oxygen
42	5.27
231	5.29
483	4.86
681	4.40
925	4.63
1081	4.95
1231	5.50
1380	5.80
1529	6.05
1681	6.14
1826	6.21
2006	6.20

TOPOGULF STATION NO: 148
CRUISE STATION NO: POSEIDON

Pressure	Oxygen
462	4.90
930	4.96
1079	5.18
1228	5.81
1376	6.00
1529	6.21
1679	6.25
1826	6.567
1975	6.35

578

TOPOGULF STATION NO: 149
CRUISE STATION NO: POSEIDON : 584

Pressure	Oxygen
40	5.25
290	5.11
740	4.36
989	5.03
1244	5.70
1489	6.09
1716	6.20
1809	6.14

580

TOPOGULF STATION NO: 150
CRUISE STATION NO: POSEIDON : 586

Pressure	Oxygen
38	5.94
188	5.24
287	5.09
388	4.89
738	4.48
998	4.99
1243	5.60
1488	5.92
1736	6.15
1807	6.17

: 582

TOPOGULF STATION NO: 151
CRUISE STATION NO: POSEIDON : 588

Pressure	Oxygen
36	5.95
87	5.41
187	5.37
291	5.22
389	5.03
483	4.94
740	4.33
919	4.63
1241	5.32
1485	6.15
1737	6.24
1934	6.24

TOPOGULF STATION NO: 152
CRUISE STATION NO: POSEIDON : 590

Pressure	Oxygen
38	5.23
192	5.34
291	5.42
395	5.43
493	5.00
739	4.44
988	4.61
1241	4.89
1492	5.57
1739	6.14
1988	6.15

TOPOGULF STATION NO: 153
CRUISE STATION NO: POSEIDON : 592

Pressure	Oxygen
41	6.07
88	5.53
186	5.48
391	5.22
589	5.09
795	4.89
1185	5.00
1589	6.04
1991	6.27
2490	6.27
2989	6.00
3492	5.87

TOPOGULF STATION NO: 154
CRUISE STATION NO: POSEIDON : 594

Pressure	Oxygen
90	5.36
188	5.32
390	5.09
592	4.89
792	4.63
1192	4.83
1592	5.85
1943	6.13
2490	6.08
2991	5.94
3542	5.71

TOPOGULF STATION NO: 155
CRUISE STATION NO: POSEIDON

Pressure	Oxygen
37	6.01
87	5.45
187	5.46
386	5.84
586	4.88
790	4.55
1187	5.29
1588	5.90
1988	6.12
2489	6.23
2982	6.25
3438	5.67

TOPOGULF STATION NO: 156
CRUISE STATION NO: POSEIDON

Pressure	Oxygen
37	5.95
88	5.41
188	5.46
388	5.20
588	4.93
789	4.49
1189	4.62
1589	5.66
1987	6.15
2345	6.21
2988	5.99
3464	5.74

TOPOGULF STATION NO: 157
CRUISE STATION NO: POSEIDON

Pressure	Oxygen
36	5.99
86	5.42
185	5.35
387	5.51
586	4.90
782	4.42
1187	4.65
1590	5.76
1987	6.07
2487	6.13
2986	5.94
3786	5.64

: 596

TOPOGULF STATION NO: 158
CRUISE STATION NO: POSEIDON : 602

Pressure	Oxygen
38	5.62
89	5.55
189	5.18
390	4.90
588	4.70
788	4.34
989	4.34
1191	4.90
1589	5.87
1989	6.17
2489	6.07
3230	5.77

: 598

TOPOGULF STATION NO: 159
CRUISE STATION NO: POSEIDON : 604

Pressure	Oxygen
89	5.38
189	5.22
389	4.99
590	4.78
787	4.64
986	4.62
1188	4.96
1586	5.99
1985	6.20
2486	6.14
2993	6.12

: 600

TOPOGULF STATION NO: 160
CRUISE STATION NO: POSEIDON : 606

Pressure	Oxygen
36	5.41
90	5.82
286	5.16
384	4.99
487	5.21
988	4.83
1239	5.43
1491	6.01
1738	6.41
1982	6.18

TOPOGULF STATION NO: 161
CRUISE STATION NO: POSEIDON : 618

Pressure	Oxygen
87	5.57
184	5.51
285	5.37
386	5.11
488	4.96
788	4.45
987	4.62
1238	5.14
1483	5.79
1737	6.25
2027	6.27

TOPOGULF STATION NO: 162
CRUISE STATION NO: POSEIDON : 620

Pressure	Oxygen
49	5.55
197	5.50
393	5.00
595	5.05
796	4.71
996	4.87
1196	4.86
1595	6.14
1996	6.38
2496	6.63
3111	5.70

TOPOGULF STATION NO: 163
CRUISE STATION NO: POSEIDON : 622

Pressure	Oxygen
14	5.34
90	5.43
190	5.37
289	5.34
392	5.21
492	4.96
741	4.48
988	4.40
1236	5.01
1486	5.76
1734	6.27

TOPOGULF STATION NO: 164
CRUISE STATION NO: POSEIDON : 624

Pressure	Oxygen
94	5.31
195	4.98
394	4.98
595	4.78
993	4.92
1190	5.38
1590	6.09
1990	6.24
2487	6.14
2987	5.94

TOPOGULF STATION NO: 165
CRUISE STATION NO: POSEIDON : 626

Pressure	Oxygen
92	5.41
191	5.33
290	5.23
391	5.17
489	5.18
740	4.40
991	4.84
1242	5.54
1491	6.26
1743	6.89?
1994	6.25

TOPOGULF STATION NO: 166
CRUISE STATION NO: POSEIDON : 628

Pressure	Oxygen
17	5.80
91	5.47
191	5.26
392	5.37
592	5.50
792	4.71
992	5.03
1191	5.33
1592	6.20
1992	6.62
2489	6.35
3257	5.99

TOPOGULF STATION NO: 167
CRUISE STATION NO: POSEIDON : 630

Pressure	Oxygen
194	5.46
287	5.49
393	5.33
492	5.63
741	4.40
992	4.45
1242	5.26
1489	5.77
1768	6.18
1997	6.18

TOPOGULF STATION NO: 168
CRUISE STATION NO: POSEIDON : 632

Pressure	Oxygen
18	5.49
91	5.47
191	5.42
392	5.48
591	5.01
793	4.49
991	4.71
1190	5.39
1592	5.99
1994	6.34
2493	6.25
2996	6.10

TOPOGULF STATION NO: 169
CRUISE STATION NO: POSEIDON : 634

Pressure	Oxygen
12	5.41
92	5.31
191	5.28
394	5.08
585	4.84
794	4.51
979	4.80
1191	5.22
1593	6.05
1991	6.29
2487	6.17
3019	6.00

TOPOGULF STATION NO: 170
CRUISE STATION NO: POSEIDON : 636

Pressure	Oxygen
16	5.45
92	5.33
196	5.34
395	5.23
589	4.74
789	4.49
983	4.95
1193	5.37
1587	6.14
1990	6.30
2488	6.22
2955	5.97

TOPOGULF STATION NO: 171
CRUISE STATION NO: POSEIDON : 638

Pressure	Oxygen
16	5.71
91	5.44
191	5.53
391	5.56
591	6.16
791	4.74
991	4.96
1190	5.54
1892	6.29
1990	6.30
2466	6.35
2561	6.29

TOPOGULF STATION NO: 172
CRUISE STATION NO: POSEIDON : 640

Pressure	Oxygen
17	5.62
92	5.24
194	5.42
394	4.96
595	4.49
794	4.83
992	5.18
1192	5.77
1591	6.25
1991	6.28
2492	6.17
2716	6.13

TOPOGULF STATION NO: 173
CRUISE STATION NO: POSEIDON : 642

Pressure	Oxygen
17	5.66
95	5.27
192	5.24
603	5.01
792	4.78
991	5.49
1189	5.83
1585	6.35
1966	6.38
2469	6.24
3004	5.87

TOPOGULF STATION NO: 174
CRUISE STATION NO: POSEIDON : 644

Pressure	Oxygen
16	5.54
90	5.19
189	5.22
390	4.93
578	4.83
790	4.84
990	5.12
1189	5.64
1591	6.15
1988	6.32
2490	6.04
2991	5.96

TOPOGULF STATION NO: 175
CRUISE STATION NO: POSEIDON : 646

Pressure	Oxygen
10	5.58
91	5.31
191	5.35
390	5.18
591	4.99
792	4.86
991	5.32
1193	5.78
1590	6.25
1992	6.36
2490	6.33

TOPOGULF STATION NO: 176
CRUISE STATION NO: POSEIDON : 648

Pressure	Oxygen
15	5.71
91	5.15
191	5.22
390	5.19
593	4.67
792	4.93
990	5.82
1190	6.24
1592	6.44
1989	6.46
2549	6.35

TOPOGULF STATION NO: 177
CRUISE STATION NO: POSEIDON : 650

Pressure	Oxygen
69	5.66
188	5.82
391	5.20
584	5.40
786	5.90
990	6.00
1190	6.28
1589	6.38
1990	6.40
2485	6.25
2993	6.15

TOPOGULF STATION NO: 178
CRUISE STATION NO: POSEIDON : 652

Pressure	Oxygen
11	5.70
94	5.39
196	5.59
399	5.47
596	4.84
793	5.37
978	5.96
1190	6.10
1588	6.38
1991	6.34
2459	6.25
2745	6.19

TOPOGULF STATION NO: 179
CRUISE STATION NO: POSEIDON : 654

Pressure	Oxygen
11	5.87
91	5.44
196	5.69
391	4.88
601	5.09
796	5.49
993	5.99
1191	6.29
1589	6.42
1989	6.44
2482	6.547
2931	6.16

TOPOGULF STATION NO: 180
CRUISE STATION NO: POSEIDON : 657

Pressure	Oxygen
9	5.87
87	5.43
186	5.32
389	5.40
588	4.93
787	5.38
986	5.79
1187	6.19
1588	6.45
2488	6.31
2933	6.10

TOPOGULF STATION NO: 181
CRUISE STATION NO: POSEIDON : 659

Pressure	Oxygen
88	5.60
188	5.22
288	5.11
390	5.50
486	4.84
736	5.01
987	5.80
1238	6.23
1487	6.38
1738	6.39
2049	6.33

TOPOGULF STATION NO: 182
CRUISE STATION NO: POSEIDON : 661

Pressure	Oxygen
9	5.66
90	5.19
190	5.09
390	5.32
588	4.59
790	5.14
990	5.96
1190	6.25
1589	6.37
1990	6.38
2489	6.37
2760	6.25

TOPOGULF STATION NO: 183
CRUISE STATION NO: POSEIDON : 663

Pressure	Oxygen
10	5.74
90	5.30
159	5.23
403	4.94
506	4.77
606	4.96
803	5.54
1006	5.90
1605	6.33
1972	6.42
2370	6.29
2836	6.16

TOPOGULF STATION NO: 184
CRUISE STATION NO: POSEIDON : 665

Pressure	Oxygen
87	5.39
189	5.53
388	5.90
589	4.81
787	5.09
987	5.73
1186	6.06
1588	6.33
1987	6.31
2489	6.29
3149	6.32

TOPOGULF STATION NO: 185
CRUISE STATION NO: POSEIDON : 667

Pressure	Oxygen
14	5.51
90	5.08
190	5.07
392	4.42
587	4.75
790	4.73
974	5.64
1187	6.08
1587	6.34
1990	6.35
3183	6.32

TOPOGULF STATION NO: 186
CRUISE STATION NO: POSEIDON : 669

Pressure	Oxygen
12	5.50
91	5.51
188	5.12
390	5.39
588	4.68
793	5.29
990	5.81
1192	6.14
1589	6.38
2487	6.37
3025	6.35

TOPOGULF STATION NO: 187
CRUISE STATION NO: POSEIDON : 671

Pressure	Oxygen
1	5.63
88	5.09
392	5.00
589	5.66
788	5.79
1000	6.34
1190	6.46
1588	6.41
1987	6.37
2444	6.37
3034	6.41

TOPOGULF STATION NO: 188
CRUISE STATION NO: POSEIDON : 672

Pressure	Oxygen
10	5.60
90	5.45
188	5.41
391	5.47
590	5.82
788	6.35
989	6.31
1190	6.46
1588	6.25
1989	6.38
2490	6.39
3255	6.38

TOPOGULF STATION NO: 189
CRUISE STATION NO: POSEIDON : 674

Pressure	Oxygen
12	5.78
90	4.74
187	4.53
386	4.33
589	5.00
788	5.60
990	6.06
1187	6.38
1589	6.41
1990	6.35
2489	6.33
3136	6.41

TOPOGULF STATION NO: 190
CRUISE STATION NO: POSEIDON : 677

Pressure	Oxygen
90	5.55
187	4.78
289	4.96
490	4.57
990	6.10
1240	6.47
1490	6.48
2085	6.46

53 METEOR STATIONS

Parameters	Units
Pressure	: decibars
Dissolved Oxygen	: millilitre / litre
Dissolved Nitrate	: micromol / litre
Dissolved Phosphate	: micromol / litre
Dissolved Silicate	: micromol / litre

TOPOGULF STATION NO: 192
CRUISE STATION NO: METEOR : 21

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.86	10.30	0.57	3.00
402	5.53	18.10	1.07	7.30
601	5.28	20.80	1.28	10.20
801	5.60	19.70	1.22	9.50
1100	6.40	18.90	1.13	8.90
1301	6.747	18.70	1.13	9.30
1501	6.57	18.70	1.13	9.30
1801	6.63	18.70	1.13	9.30
2201	6.51	18.70	1.13	11.60
2604	6.49	18.70	1.18	17.60
3003	6.25	20.10	1.29	25.00
3609	6.07	21.90	1.49	33.90

TOPOGULF STATION NO: 193
CRUISE STATION NO: METEOR : 27

Pressure	Oxygen	Nitrate	Phosphate	Silicate
103	5.56	9.10	0.44	2.60
248	5.39	13.80	0.75	5.30
400	5.51	16.20	0.87	6.10
600	4.81	19.30	1.23	10.50
791	5.57	19.00	1.19	10.80
1044	6.23	18.20	1.13	10.80
1300	6.36	17.70	1.11	11.10
1600	6.41	17.50	1.11	11.10
1895	6.53	17.50	1.11	11.60
2300	6.40	17.70	1.13	14.20
2678	6.077	18.40	1.21	19.00
3154	6.19	20.00	1.35	29.00

TOPOGULF STATION NO: 194
CRUISE STATION NO: METEOR : 28

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.49	7.10	0.36	2.30
251	5.40	12.80	0.58	3.10
400	4.98	14.80	0.89	3.50
601	4.73	19.50	1.23	9.90
801	5.38	19.60	1.31	11.10
1049	5.84	18.30	1.23	9.90
1300	6.38	17.40	1.19	9.90
1601	6.58	16.50	1.17	10.10
1900	6.56	16.00	1.14	11.10
2301	6.58	16.40	1.21	12.70
2700	6.64	16.80	1.25	18.10
2832	6.54	16.90	1.27	22.60

TOPOGULF STATION NO: 195
CRUISE STATION NO: METEOR : 29

Pressure	Oxygen	Nitrate	Phosphate
100	5.62	7.80	0.39
200	5.65	9.30	0.49
400	5.09	14.60	0.85
600	5.30	18.70	1.20
802	5.46	19.30	1.28
1000		18.20	
1201		17.10	1.24
1400		16.80	1.14
1604		16.30	1.13
1802		16.10	
2002		15.30	1.14
2186		15.20	1.22

TOPOGULF STATION NO: 196
CRUISE STATION NO: METEOR : 30

Pressure	Oxygen	Nitrate	Phosphate
100	5.54	7.60	0.38
251	5.47	9.90	0.51
401	5.18	12.00	0.69
602	4.46	19.40	1.27
801	5.11	19.90	1.33
1051	5.99	17.90	1.21
1303	6.43	17.30	1.21
1601	6.46	17.20	1.14
1901	6.51	17.20	
2301	6.50	17.30	1.17
2701	6.37	17.70	1.33
3431	6.20	18.40	1.35

TOPOGULF STATION NO: 197
CRUISE STATION NO: METEOR : 31

Pressure	Oxygen	Nitrate	Phosphate
100	5.64	8.00	0.48
253	5.46	9.80	0.57
400	5.07	15.30	0.91
600	4.80	20.50	1.41
799	5.32	19.90	1.31
1053	6.04	18.60	
1303		18.00	1.23
1600		18.00	1.17
1900		18.00	1.23
2304		18.10	1.21
2703		18.10	1.21
2958		18.20	1.21

TOPOGULF STATION NO: 198
CRUISE STATION NO: METEOR : 32

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
1.90	100	5.04	12.10	0.77	3.50
2.60	303	5.38	15.70	0.97	5.80
5.60	500	4.96	21.50	1.33	10.00
9.40	720	5.59	19.90	1.24	10.50
10.80	903	6.25	19.20	1.19	9.80
10.40	1103	6.45	18.50	1.41	9.80
9.40	1402	6.66	18.20	1.41	9.80
9.90	1707		18.90	1.31	10.30
10.10	2006	6.63	18.00	1.19	10.80
11.10	2402	6.50	18.00	1.19	11.80
11.30	2798	6.37	18.30	1.21	16.30
12.70	3427	6.51	17.80	1.21	17.50

TOPOGULF STATION NO: 199
CRUISE STATION NO: METEOR : 35

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
1.40	101	5.31	8.10	0.39	2.00
2.20	251	5.05	15.00	0.86	5.40
3.40	400	5.09	18.00	1.12	8.20
9.20	602	5.06	20.50	1.29	10.60
9.40	800	5.98	19.20	1.20	9.40
8.40	1051	6.33	18.30	1.16	9.40
8.00	1300	6.50	18.20	1.25	9.40
8.40	1600	6.60	18.00	1.14	10.10
8.80	1900	6.63	17.90	1.17	11.10
10.40	2301	6.52	17.90	1.17	12.80
14.00	2703	6.56	18.00	1.22	15.30
20.00	3047	6.58	17.90	1.22	16.10

TOPOGULF STATION NO: 200
CRUISE STATION NO: METEOR : 38

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
1.80	100	6.11	9.80	0.50	2.30
2.90	250	5.44	19.20	1.19	8.60
6.20	400	5.39	20.30	1.27	10.20
10.00	600	5.82	19.50	1.19	9.50
10.90	800	6.26	19.40	1.09	9.10
10.30	1050	6.63	18.10	1.11	8.80
9.70	1299	6.65	18.20	1.11	9.10
10.00	1600		17.80	1.11	9.50
11.20	1900		18.10	1.13	10.50
13.80	2300		17.80	1.13	11.40
15.00	2700		17.50	1.13	13.00
17.70	3346		17.30	1.13	16.30

TOPOGULF STATION NO: 202
CRUISE STATION NO: METEOR : 44

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.94	10.40	0.55	2.30
250	5.30	15.70	0.88	9.40
400	5.24	20.00	1.20	11.20
600	5.93	20.20	1.23	10.30
800	6.34	19.30	1.14	9.70
1050	6.63	18.10	1.08	9.40
1300	6.79	17.80	1.08	9.90
1588	6.55	17.80	1.03	10.10
1901	6.63	17.80	1.08	11.00
2300	6.48	17.80	1.08	11.90
2700	6.92?	17.80	1.08	13.10
3345	6.80	17.30	1.10	17.00

TOPOGULF STATION NO: 203
CRUISE STATION NO: METEOR : 45

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.56	8.10	0.55	3.00
251	5.24	18.90	1.17	8.50
401	5.12	20.90	1.17	10.10
601	5.43	19.40	1.23	11.00
802	6.03	18.80	1.16	10.10
1053	6.46	18.20	1.14	9.20
1300	6.60	18.10		9.20
1601	6.60	18.40	1.16	9.70
1899	6.55	17.70	1.14	10.40
2403	6.58	17.70	1.14	12.30
3000	6.55	17.60	1.14	14.90
3705	6.66	17.20	1.20	17.20

TOPOGULF STATION NO: 204
CRUISE STATION NO: METEOR : 46

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	4.95	10.60	0.59	3.20
247	4.96	15.60	0.93	6.60
399	4.96	18.40	0.95	7.20
600	5.52	19.40	1.23	10.60
797	6.02	18.60	1.15	10.00
1050	6.33	17.90	1.19	9.60
1299	6.56	17.70	1.09	9.40
1601	6.58	17.70	1.09	10.00
1901	6.50	17.70	1.09	10.40
2300	6.52	17.70	1.09	11.70
[illegible]	[illegible]	17.30	1.11	12.80
[illegible]	[illegible]	[illegible]	1.07	17.20

TOPOGULF STATION NO: 205
CRUISE STATION NO: METEOR : 47

Pressure	Oxygen	Nitrate	Phosphate
100	5.53	13.10	0.82
251	5.37	18.10	1.12
402	5.46	19.00	1.20
600	5.97	18.40	1.16
800	6.50	18.00	1.12
1050	6.55	17.70	1.08
1301	6.61	17.70	1.10
1600	6.57	17.70	1.12
1900	6.61	17.60	1.12
2301	6.62	17.30	1.12
2700	6.56	17.30	1.12
3593	6.61	17.00	1.12

TOPOGULF STATION NO: 206
CRUISE STATION NO: METEOR : 48

Pressure	Oxygen	Nitrate	Phosphate
100	6.62	16.00	0.90
250	5.47	19.10	1.20
400	5.86	18.40	1.16
630	6.31	17.70	1.12
800	6.53	17.40	1.10
1030	6.61	17.50	1.08
1300	6.58	17.30	1.08
1600	6.55	17.30	1.12
1901	6.59	17.10	1.10
2290	6.62	17.10	1.08
2700	6.61	17.10	1.08
3468	6.62	16.90	1.10

TOPOGULF STATION NO: 207
CRUISE STATION NO: METEOR : 49

Pressure	Oxygen	Nitrate	Phosphate
140	5.22	11.10	0.63
352	5.49	16.30	1.02
502	5.78	18.10	1.14
599	5.68	18.90	1.18
700	5.87	18.70	1.16
899	6.34	17.70	1.08
1200	6.56	17.30	1.08
1598	6.56	17.30	1.08
1999	6.52	17.30	1.08
2500	6.57	17.10	1.08
3000	6.63	17.00	1.10
3774	6.44	16.00	1.10

TOPOGULF STATION NO: 208
CRUISE STATION NO: METEOR : 50

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
4.80	200	5.30	17.60	1.09	8.50
8.80	400	5.65	19.10	1.17	10.00
9.90	795	6.36	18.40	1.11	9.60
9.50	1200	6.58	17.80	1.09	9.20
9.00	1600	6.55	18.10	1.07	10.00
8.60	2000	6.50	17.50	1.09	11.00
9.10	2400	6.48	17.80	1.09	12.10
9.50	2800	6.51	17.80	1.09	14.00
10.50	3200	6.52	17.80	1.09	14.60
11.60	3600	6.58	17.90	1.11	17.30
13.10	4000	6.60	17.80	1.11	17.30
16.60	4147	6.62	17.60	1.09	17.30

TOPOGULF STATION NO: 209
CRUISE STATION NO: METEOR : 51

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
4.90	100	5.61	11.20	0.71	4.80
10.50	300	5.18	16.60	1.11	9.80
10.10	500	5.40	17.10	1.13	10.80
9.30	602	5.77	17.90	1.21	10.60
9.30	700	6.10	17.00	1.21	9.60
8.90	900	6.43	16.20	1.05	9.80
9.30	1201	6.56	18.50	1.05	9.40
10.10	1600	6.53	18.50	1.05	10.00
9.70?	1998	6.50	18.30	1.05	11.70
11.80	2500	6.49	18.20	1.05	12.90
13.20	2998	6.48	17.90	1.05	15.40
17.10	3787	6.58	17.70	1.05	16.70

TOPOGULF STATION NO: 210
CRUISE STATION NO: METEOR : 52

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
4.20	100	5.25	12.30	0.71	4.60
7.80	300	5.09	17.40	1.05	8.30
9.70	500	5.35	19.50	1.21	10.80
9.90	601	5.81	18.50	1.15	9.80
9.70	702	6.12	18.20	1.13	9.00
9.50	893	6.50	17.60	1.07	9.00
9.00	1200	6.68	17.00	1.05	8.50
9.90	1601	6.63	17.20	1.05	9.60
10.70	2000	6.54	17.20	1.05	10.60
12.20	2500	6.49	17.00	1.05	11.90
14.10	2999	6.49	17.00	1.05	14.60
16.80	3740	6.53	17.00	1.05	16.90

TOPOGULF STATION NO: 211
CRUISE STATION NO: METEOR : 53

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.45	10.10	0.59	3.80
299	4.82	17.70	1.29	9.20
499	5.19	20.00	1.31	11.50
700	5.93	18.40	1.14	10.60
1003	6.47	17.70	1.10	10.20
1300	6.68	17.00	1.06	9.80
1600	6.68	17.20	1.06	10.40
2000	6.50	17.30	1.10	11.50
2400	6.58	17.20	1.10	12.90
2800		16.60	1.10	13.60
3200	6.38	17.00	1.10	16.30
3593	6.49	17.00	1.10	16.90

TOPOGULF STATION NO: 212
CRUISE STATION NO: METEOR : 54

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.53	14.00	0.88	8.70
301	6.19	18.50	1.06	8.80
500	5.91	18.50	1.18	11.50
700	6.38	17.70	1.10	10.20
1000	6.63	17.40	1.06	10.40
1390	6.59	17.60	1.08	10.40
1601	6.59	17.30	1.08	11.00
2101	6.58	17.30	1.08	12.90
2402	6.50	17.10	1.08	13.80
2800	6.54	16.90	1.08	15.60
3201	6.50	17.00	1.08	16.30
3503	6.53	16.90	1.08	16.90

TOPOGULF STATION NO: 213
CRUISE STATION NO: METEOR : 55

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	6.09	15.80	0.96	6.70
200	5.76	18.50	1.16	9.70
500	6.20	17.80	1.08	9.20
700	6.50	17.20	1.04	8.70
1000	6.64	17.10	1.02	8.70
1300	6.69	16.90	1.02	9.00
1600	6.61	17.10	1.02	9.90
2000	6.54	17.10	1.02	10.80
2400	6.51	16.80	1.02	12.20
2801	6.51	16.80	1.00	13.30
3200	6.45	16.90	1.02	15.20
3702	6.43	17.40	1.04	17.70

TOPOGULF STATION NO: 214
CRUISE STATION NO: METEOR : 56

Pressure	Oxygen	Nitrate	Phosphate
100	6.40	16.00	0.96
301	6.13	18.10	1.06
600	6.32	18.20	1.06
835	6.55	17.60	1.04
1006	6.55	17.90	1.04
1167	6.52	17.60	1.02
1400	6.51	17.50	1.02
1700	6.54	17.00	1.02
2000	6.54	16.70	0.98
2400	6.58	16.60	1.00
2800	6.53	16.90	1.00
3168	6.51	17.00	1.02

TOPOGULF STATION NO: 215
CRUISE STATION NO: METEOR : 57

Pressure	Oxygen	Nitrate	Phosphate
101	6.49	16.80	0.98
300	6.28	18.30	1.06
600	6.40	18.60	1.02
800	6.62	18.00	1.02
1000	6.64	18.00	1.04
1205	6.58	17.70	1.02
1400	6.52	17.60	1.00
1601	6.50	17.30	1.00
1800	6.51	16.50	1.00
2001	6.53	16.50	1.107
2250	6.52	16.30	0.98
2462	6.54	16.00	0.98

TOPOGULF STATION NO: 216
CRUISE STATION NO: METEOR : 58

Pressure	Oxygen	Nitrate	Phosphate
100	6.02	16.80	1.00
300	6.44	17.70	1.04
600	6.45	18.50	1.04
799	6.62	17.90	1.02
1000	6.74	17.90	1.04
1200	6.60	17.70	1.02
1400	6.58	17.90	
1700	6.52	17.40	1.04
2000	6.54	16.80	0.98
2400	6.54	16.70	1.00
2802	6.57	16.70	1.02
2947	6.55	16.70	1.00

TOPOGULF STATION NO: 217
CRUISE STATION NO: METFOR : 59

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
7.30	100	6.78?	15.20	0.94	6.70
8.90	300	6.84?	15.70	0.94	6.90
9.30	602	6.23	18.00	1.08	9.20
9.60	800	6.49	17.70	1.02	9.40
10.40	1003	6.67	17.50	1.02	9.20
10.90	1196	6.60	17.20	1.02	9.40
11.30	1403	6.58	17.20	1.02	8.20?
11.30	1600	6.54	17.10	1.04	10.40
12.40	1803	6.52	16.50	1.00	9.60?
13.30	2100	6.51	16.30	1.00	11.40
13.30	2501	6.51	16.00	1.00	12.50
14.20	2881	6.48	16.20	1.02	14.70

TOPOGULF STATION NO: 218
CRUISE STATION NO: METFOR : 60

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
7.70	100	5.65	16.20	0.98	8.10
9.20	300	6.40	17.30	1.02	9.00
9.20	600	6.33	17.90	1.04	10.20
9.20	800	6.55	17.40	1.02	10.00
9.40	1000	6.60	17.40	1.00	10.00
9.80	1200	6.61	17.30	0.98	10.50
10.60	1400	6.58	17.30	1.06	11.00
10.60	1600	6.53	17.30	1.04	11.70
11.30	1800	6.52	17.00	1.06	11.20
11.50	2098	6.51	16.80	1.06	12.90
11.70	2498	6.50	16.80	1.02	14.60
11.90	2886	6.41	17.30	1.04	19.00

TOPOGULF STATION NO: 219
CRUISE STATION NO: METFOR : 61

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
7.80	100	6.29	14.30	0.88	6.70
8.90	303	6.55	14.60	0.90	6.70
9.70	600	6.03	17.70	1.10	10.10
9.70	820	6.34	17.70	1.10	10.30
9.70	1000	6.60	17.20	1.08	10.10
10.10	1213	6.62	17.30	1.06	10.30
11.10	1400	6.62	17.50	1.06	10.30
11.50	1600	6.56	17.40		11.50
12.20	1800	6.51	17.30	1.06	11.70
13.20	2200	6.53	17.00	1.08	13.00
13.20					
12.90					

TOPOGULF STATION NO: 220
CRUISF STATION NO: MFTFOR : 63

Pressure	Oxygen	Nitrate	Phosphate	Silicate
93	6.59	15.00	0.89	7.70
300	6.03	18.10	1.07	9.60
603	6.36	18.40	1.05	10.00
804	6.56	17.90	1.03	9.50
1000	6.60	17.80	1.03	9.50
1200	6.63	17.50	1.03	9.50
1400	6.58	17.50	1.01	10.00
1700	6.55	17.50	1.03	11.30
2001	6.51	17.30	1.03	12.10
2399	6.51	16.90	1.03	13.60
2966	6.46	17.20	1.05	18.30
2996	6.31			

TOPOGULF STATION NO: 221
CRUISF STATION NO: MFTFOR : 65

Pressure	Oxygen	Nitrate	Phosphate	Silicate
103	5.90	16.30	0.98	7.50
304	6.23	18.80	1.12	9.90
580	6.27	18.50	1.08	9.70
616	6.54	17.90	1.08	9.00
1003	6.63	17.70	1.04	9.20
1198	6.60	17.70	1.04	9.60
1402	6.60	17.20	1.04	9.90
1700	6.53	17.20	1.04	11.30
2002	6.50	17.20	1.02	12.20
2402	6.48	17.20	1.04	14.30
2804	6.33	18.10	1.13	21.20
3159	6.13	19.40	1.27	28.00

TOPOGULF STATION NO: 222
CRUISF STATION NO: MFTFOR : 66

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	6.01	16.60	0.92	6.30
300	6.22	18.10	1.02	7.50
550	6.37	18.10	1.00	7.50
804	6.63	17.80	0.98	7.70
1000	6.66	17.60	0.96	8.10
1205	6.60	17.50	0.96	7.90
1400	6.55	17.50	0.96	8.90
1700	6.50	17.50	0.96	9.50
2000	6.49	17.10	0.96	10.30
2400	6.51	17.00	0.98	11.70
3377	6.20	18.30	1.18	22.00

TOPOGULF STATION NO: 223
CRUISF STATION NO: MFTFOR : 67

Pressure	Oxygen	Nitrate	Phosphate
101	6.32	15.10	0.90
300	6.56	16.80	0.96
600	6.26	18.10	1.02
802	6.48	17.80	1.00
1003	6.65	17.40	0.98
1202	6.60	17.50	0.98
1399	6.61	17.40	0.98
1699	6.56	17.40	1.00
2002	6.51	16.90	0.96
2401	6.46	17.20	1.02
2800	6.40	17.40	1.04
3359	6.19	18.90	1.16

TOPOGULF STATION NO: 224
CRUISF STATION NO: MFTFOR : 68

Pressure	Oxygen	Nitrate	Phosphate
98	6.29	14.60	0.88
300	6.06	17.60	1.04
548	6.30	17.90	1.02
800	6.49	17.60	1.02
998	6.60	17.40	1.00
1194	6.69	17.10	1.00
1400	6.60	17.20	1.00
1599	6.58	17.40	1.00
2000	6.51	16.40	1.00
2400	6.49	16.90	1.02
2860	6.40	17.40	1.06
3538	6.02	20.60	1.38

TOPOGULF STATION NO: 225
CRUISF STATION NO: MFTFOR : 69

Pressure	Oxygen	Nitrate	Phosphate
100	5.33	12.40	0.84
304	5.18	16.10	1.06
500	6.03	17.60	1.04
703	6.22	17.20	1.02
901	6.45	17.50	1.02
1101	6.62	17.10	0.98
1301	6.66	16.90	0.98
1600	6.56	17.10	0.98
2002	6.51	17.10	0.98
2501	6.50	16.50	0.96
3004	6.44	17.10	1.02
3515	6.35	17.60	1.12

TOPOGULF STATION NO: 226
CRUISE STATION NO: METEOR : 70

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
5.50	102	5.38	12.50	0.63	3.20
6.90	301	5.24	17.80	0.96	7.90
8.20	497	5.50	20.20	1.14	10.80
7.80	697	6.01	19.30	1.06	10.30
7.80	900	6.36	18.50	1.04	9.70
8.20	1110	6.59	18.20	1.02	9.70
8.20	1301	6.61	17.90	1.00	10.00
9.00	1601	6.60	17.90	1.00	10.50
9.40	1998	6.56	17.90	1.00	11.10
12.20	2503	6.51	17.70	1.00	12.10
14.50	3000	6.51	17.50	1.00	13.70
22.40	3730	6.29	19.10	1.29	24.20

TOPOGULF STATION NO: 227
CRUISE STATION NO: METEOR : 71

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
5.20	96	5.75	11.50	0.59	3.90
8.30	300	5.53	16.90	0.94	8.30
8.30	500	5.50	19.90	1.14	10.90
8.30	700	5.86	19.30	1.08	10.70
7.90	900	6.34	18.40	1.04	9.90
8.30	1104	6.54	18.10	1.00	9.60
8.50	1300	6.62	17.80	0.98	9.10
8.70	1601	6.55	18.10	1.04	9.90
10.00	1997	6.51	17.80	1.04	11.20
11.70	2499	6.50	17.50	1.06	13.30
14.80	3000	6.45	17.50	1.08	16.10
29.40	3556	6.27	18.80	1.22	24.20

TOPOGULF STATION NO: 228
CRUISE STATION NO: METEOR : 72

Silicate	Pressure	Oxygen	Nitrate	Phosphate	Silicate
4.50	99	5.82	10.70	0.55	3.10
8.40	301	5.98	11.80	0.83	4.10
8.40	504	5.44	15.90	0.90	6.70
8.40	702	5.09	20.40	1.20	10.80
8.40	902	5.70	19.40	1.18	10.80
8.20	1101	6.23	18.80	1.10	10.50
8.20	1303	6.52	18.40	1.08	10.30
8.70	1602	6.59	18.40	1.06	10.60
9.90	2002	6.53	17.80	1.06	11.50
11.30	2502	6.52	18.10	1.06	13.30
14.40	3001	6.47	17.90	1.10	15.90
18.80	4134	5.94	21.80	1.53	39.00

TOPOGULF STATION NO: 229
CRUISE STATION NO: METEOR : 73

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.71	9.90	0.65	2.90
300	5.70	13.10	0.65	4.80
500	4.98	19.00	1.06	10.40
701	4.96	20.60	1.20	11.10
900	5.57	20.00	1.16	11.10
1101	6.33	19.00	1.08	10.10
1301	6.32	18.50	1.06	10.10
1600	6.57	18.40	1.08	10.40
2000	6.56	17.90	1.04	11.10
2500	6.62	17.90	1.06	13.00
3002	6.44	18.10	1.10	16.60
3760	6.05	21.20	1.47	33.00

TOPOGULF STATION NO: 230
CRUISE STATION NO: METEOR : 74

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.76	9.40	0.50	2.60
299	5.68	12.30	0.76	5.10
499	4.90	19.00	1.12	9.60
698	5.09	19.50	1.18	10.70
898	5.55	19.20	1.14	10.70
1102	6.09	18.60	1.10	10.40
1298	6.32	18.30	1.08	10.40
1598	6.54	18.10	1.08	10.10
2000	6.55	17.60	1.06	11.30
2500	6.47	18.10	1.08	14.40
2988	6.30	19.20	1.18	22.30
3321	6.03	21.40	1.36	33.20

TOPOGULF STATION NO: 231
CRUISE STATION NO: METEOR : 75

Pressure	Oxygen	Nitrate	Phosphate	Silicate
99	5.68	10.80	0.58	3.10
300	5.77	14.30	0.78	5.80
502	5.02	19.80	1.16	10.10
700	5.54	19.80	1.16	10.70
901	5.70	19.50	1.14	11.60
1100	6.11	19.00	1.10	10.40
1301	6.40	18.70	1.08	10.10
1598	6.54	18.20	1.06	10.10
2000	6.54	18.00	1.04	11.80
3000	6.22	19.30	1.22	25.10
4000	5.84	22.40	1.50	41.10

TOPOGULF STATION NO: 232
CRUISE STATION NO: METEOR : 76

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.62	9.80	0.48	3.10
300	5.68	12.30	0.64	4.50
501	5.23	16.80	0.92	6.90
698	4.94	20.20	1.18	10.80
900	5.39	19.80	1.16	10.80
1105	5.94	19.20	1.12	10.30
1298	6.27	18.70	1.10	10.00
1600	6.51	18.20	1.08	10.00
2002	6.52	17.50	1.06	10.80
2500	6.46	17.80	1.04	13.60
2985	6.30	19.00	1.16	21.10
3946	5.67	22.50	1.50	38.10

TOPOGULF STATION NO: 233
CRUISE STATION NO: METEOR : 77

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.66	10.70	0.56	3.20
300	5.77	12.80	0.68	4.60
502	5.71	18.30	1.02	8.60
636	4.87	20.20	1.16	10.00
900	5.30	19.70	1.18	10.60
1101	5.84	19.80	1.18	10.60
1300	6.21	18.80	1.12	9.70
1600		18.30	1.10	9.70
2000	6.54	17.30	1.02	10.00
2500	6.44	18.30	1.12	14.90
3000	6.21	19.60	1.26	24.90
3802	5.85	23.20	1.56	41.70

TOPOGULF STATION NO: 234
CRUISE STATION NO: METEOR : 78

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.72	10.70	0.56	3.10
300	5.74	12.80	0.66	4.60
501	5.29	18.30	1.02	8.60
700	4.84	20.20	1.16	10.00
900	5.50	19.70	1.18	10.60
1101	6.02	19.80	1.18	10.60
1300	6.33	18.80	1.12	9.70
1599	6.56	18.30	1.10	9.70
2000	6.42	17.30	1.02	10.00
2501	6.40	18.30	1.12	14.90
3000	6.17	19.60	1.26	24.90
4147	5.82	23.20	1.56	41.70

TOPOGULF STATION NO: 235
CRUISE STATION NO: METEOR : 79

Pressure	Oxygen	Nitrate	Phosphate	Silicate
90	5.53	8.90	0.50	2.50
290	5.40	13.70	0.79	5.20
504	4.76	19.80	1.17	9.90
699	5.22	20.00	1.17	10.40
900	5.78	19.40	1.13	10.40
1116	6.35	18.50	1.09	8.60
1300	6.51	18.20	1.07	8.80
1597	6.58	18.20	1.07	11.10
1997	6.56	17.70	1.07	11.60
2500	6.40	18.40	1.11	16.10
3000	6.18	19.70	1.23	25.40
4363	5.81	23.30	1.54	42.00

TOPOGULF STATION NO: 236
CRUISE STATION NO: METEOR : 80

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.44	8.30	0.42	3.00
300	5.43	11.90	0.61	4.20
501	4.70	18.40	1.03	8.60
702	4.68	21.30	1.25	11.40
903	5.29	20.70	1.19	11.40
1090	6.06	19.20	1.13	10.60
1300	6.46	18.90	1.07	10.60
1600	6.52	18.90	1.07	11.10
2002	6.50	18.40	1.11	12.60
2503	6.43	18.90	1.11	16.10
3000	6.26			

TOPOGULF STATION NO: 237
CRUISE STATION NO: METEOR : 81

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.52	6.90	0.30	2.30
302	5.54	9.60	0.46	3.80
488	5.15	14.90	0.81	7.00
700	4.82	19.80	1.13	10.50
900	4.98	20.00	1.13	11.80
1101	5.77	18.20	1.09	11.50
1299	6.23	18.40	1.05	11.00
1598	6.51	17.90	1.05	11.00
2000	6.53	17.80	1.03	12.00
2501	6.48	17.60	1.07	15.00
3002	6.30	19.20	1.21	23.80
3571	6.01	20.30	1.31	32.50

TOPOGULF STATION NO: 238
CRUISE STATION NO: METEOR : 82

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.58	6.80	0.38	2.70
301	5.45	10.90	0.53	4.40
502	5.72	13.20	0.69	5.40
700	4.75	20.20	1.15	10.60
900	4.99	20.00	1.13	11.40
1090	5.64	19.80	1.13	10.80
1300	6.16	19.20	1.09	11.60
1600	6.50	18.90	1.07	11.60
2000	6.56	18.40	1.05	12.60
2500	6.45	18.70	1.11	15.80
3002	6.30	20.00	1.23	24.70
3668	5.91	22.90	1.50	40.50

TOPOGULF STATION NO: 239
CRUISE STATION NO: METEOR : 83

Pressure	Oxygen	Nitrate	Phosphate	Silicate
98	5.70	8.60	0.40	2.20
301	5.46	13.20	0.68	4.70
501	4.88	18.10	1.00	10.30
696	4.80	19.70	1.14	11.10
903	5.36	19.20	1.12	11.10
1029	5.81	18.30	1.09	11.30
1498	6.44	17.60	1.06	10.70
2000	6.52	17.30	1.04	12.20
2500	6.40	17.40	1.10	19.40
3000	6.19	16.60	1.22	27.50
3396	5.95	20.30	1.40	38.60

TOPOGULF STATION NO: 240
CRUISE STATION NO: METEOR : 84

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.80	8.60	0.42	1.80
302	5.48	13.60	0.74	5.60
512	4.70	18.60	1.10	10.80
700	4.95	19.70	1.14	10.80
900	5.34	18.80	1.10	11.00
1090	6.02	18.10	1.08	11.00
1300	6.62	17.60	1.06	11.00
1600	6.51	17.40	1.06	10.80
2005	6.51	17.10	1.04	11.80
2488	6.37	17.80	1.12	16.90
3000	6.16	19.10	1.26	28.70
3300	5.98	20.20	1.38	35.40

TOPOGULF STATION NO: 241
CRUISE STATION NO: METEOR : 85

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.60	7.10	0.34	2.30
301	5.63	9.50	0.50	3.00
500	5.36	13.40	0.76	5.10
703	5.09	17.00	0.92	6.70
900	5.09	20.30	1.10	9.80
1101	5.86	20.00	1.06	10.50
1301	6.28	19.30	1.04	10.50
1601	6.52	19.00	1.04	9.80
2002	6.30?	17.30	0.94?	9.50?
2401	6.43	18.60	1.06	13.50
2701	6.34	19.70	1.14	20.50
2961	6.26	20.30	1.20	23.30

TOPOGULF STATION NO: 242
CRUISE STATION NO: METEOR : 86

Pressure	Oxygen	Nitrate	Phosphate	Silicate
700	5.05	16.30	0.93	7.80

TOPOGULF STATION NO: 243
CRUISE STATION NO: METEOR : 87

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.88	6.40	0.28	1.40
300	5.65	8.00	0.34	2.10
500	5.37	12.70	0.65	4.50
700	5.08	14.70	0.75	5.20
900	4.70	20.50	1.19	11.00
1100	4.89	19.50	1.05	11.00
1170	5.20	19.50	1.07	10.50
1255	5.50	19.50	1.11	11.00
1500	6.11	18.60	1.05	10.50
1713	6.40	18.40	1.05	10.70
2100	6.52	18.20	1.05	12.10
2500	6.38	18.40	1.07	16.90

TOPOGULF STATION NO: 244
CRUISE STATION NO: METEOR : 88

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.70	5.10	0.16	1.30
300	5.67	7.90	0.32	2.10
507	5.09	14.20	0.71	5.50
700	4.69	17.20	1.01	7.50
900	4.77	19.40	1.11	10.60
1100	5.42	18.60	1.09	10.60
1200	5.66	18.30	1.05	10.60
1300	5.88	18.20	1.05	10.90
1598	6.30	17.40	1.03	10.40
2001	6.50	17.40	1.03	11.30
2501	6.42	17.80	1.11	17.00
3150	6.26	18.60	1.21	23.00

TOPOGULF STATION NO: 245
CRUISE STATION NO: METEOR : 89

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.30	5.60	0.16	1.40
300	5.49	9.10	0.38	3.60
504	4.96	14.80	0.75	6.20
700	4.65	18.40	1.05	9.40
901	4.71	18.00	1.03	10.00
1100	5.35	18.00	1.05	10.40
1302	6.04	18.00	1.05	11.00
1602	6.40	17.40	1.03	10.40
1900	5.97?	14.80?	0.83?	9.00?
2251	6.21?	17.60	1.07	14.40
2601	6.38	17.80	1.13	18.40
2863	6.32	18.00	1.13	20.00

TOPOGULF STATION NO: 229
CRUISE STATION NO: METEOR : 73

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.71	9.90	0.65	2.90
300	5.70	13.10	0.65	4.60
500	4.98	19.00	1.06	10.40
701	4.96	20.60	1.20	11.10
900	5.57	20.00	1.16	11.10
1101	6.33	19.00	1.08	10.10
1301	6.52	18.50	1.06	10.10
1600	6.57	18.40	1.08	10.40
2000	6.56	17.90	1.04	11.10
2500	6.62	17.90	1.06	13.00
3002	6.44	18.10	1.10	16.60
3760	6.05	21.20	1.47	33.00

TOPOGULF STATION NO: 230
CRUISE STATION NO: METEOR : 74

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.76	9.40	0.50	2.60
299	5.68	12.30	0.78	5.10
499	4.90	19.00	1.12	9.60
698	5.09	19.50	1.16	10.70
898	5.55	19.20	1.14	10.70
1102	6.09	18.60	1.10	10.40
1298	6.32	18.30	1.08	10.40
1596	6.54	18.10	1.06	10.10
2000	6.55	17.80	1.06	11.30
2500	6.47	18.10	1.06	14.40
2968	6.30	19.20	1.16	22.30
3321	6.03	21.40	1.36	33.20

TOPOGULF STATION NO: 231
CRUISE STATION NO: METEOR : 75

Pressure	Oxygen	Nitrate	Phosphate	Silicate
99	5.68	10.80	0.58	6.10
300	5.77	14.30	0.78	5.60
502	5.02	19.80	1.16	10.10
700	5.54	19.80	1.16	10.70
901	5.70	19.50	1.14	11.60
1100	6.11	19.00	1.10	10.40
1301	6.40	18.70	1.08	10.10
1598	6.54	18.20	1.06	10.10
2000	6.54	18.00	1.04	11.80
3000	6.22	19.30	1.22	25.10
4000	5.84	22.40	1.50	41.10

TOPOGULF STATION NO: 232
CRUISE STATION NO: METEOR : 76

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.62	9.80	0.48	3.10
300	5.68	12.30	0.64	4.50
501	5.23	16.80	0.92	6.90
698	4.94	20.20	1.18	10.60
900	5.39	19.80	1.16	10.60
1105	5.94	19.20	1.12	10.30
1298	6.27	18.70	1.10	10.00
1600	6.51	18.20	1.08	10.00
2002	6.52	17.50	1.06	10.80
2500	6.46	17.80	1.04	13.60
2985	6.30	19.00	1.16	21.10
3946	5.87	22.50	1.50	38.10

TOPOGULF STATION NO: 233
CRUISE STATION NO: METEOR : 77

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.66	10.70	0.56	3.20
300	5.77	12.80	0.68	4.60
502	5.71	18.30	1.02	8.60
636	4.87	20.20	1.16	10.00
900	5.30	19.70	1.18	10.60
1101	5.84	19.80	1.18	10.60
1300	6.21	18.80	1.12	9.70
1600		18.30	1.10	9.70
2000	6.54	17.30	1.02	10.00
2500	6.44	18.30	1.12	14.90
3000	6.21	19.80	1.26	24.90
3802	5.65	26.20	1.56	41.70

TOPOGULF STATION NO: 234
CRUISE STATION NO: METEOR : 78

Pressure	Oxygen	Nitrate	Phosphate	Silicate
101	5.72	10.70	0.56	3.10
300	5.74	12.80	0.68	4.60
501	5.29	18.30	1.02	8.60
700	4.84	20.20	1.16	10.00
900	5.50	19.70	1.16	10.60
1101	6.02	19.80	1.18	10.60
1300	6.33	18.80	1.12	9.70
1599	6.56	18.30	1.10	9.70
2000	6.42	17.30	1.02	10.00
2501	6.40	18.30	1.12	14.90
3000	6.17	19.80	1.26	24.90
4147	5.82	28.20	1.56	41.70

TOPOGULF STATION NO: 235
CRUISE STATION NO: METEOR : 79

Pressure	Oxygen	Nitrate	Phosphate	Silicate
90	5.53	8.90	0.50	2.50
290	5.40	13.70	0.79	5.20
504	4.76	19.80	1.17	9.90
699	5.22	20.00	1.17	10.40
900	5.78	19.40	1.13	10.40
1116	6.35	18.50	1.09	8.60
1300	6.51	18.20	1.07	8.60
1597	6.58	18.20	1.07	11.10
1997	6.56	17.70	1.07	11.60
2500	6.40	18.40	1.11	16.10
3000	6.18	19.70	1.23	25.40
4363	5.81	23.30	1.54	42.00

TOPOGULF STATION NO: 236
CRUISE STATION NO: METEOR : 80

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.44	8.30	0.42	3.00
300	5.43	11.90	0.61	4.20
501	4.70	18.40	1.03	8.60
702	4.68	21.30	1.25	11.40
903	5.29	20.70	1.19	11.40
1090	6.06	19.20	1.13	10.60
1300	6.46	18.90	1.07	10.60
1600	6.52	18.90	1.07	11.10
2002	6.50	18.40	1.11	12.60
2503	6.43	18.90	1.11	18.10
3000	6.26			

TOPOGULF STATION NO: 237
CRUISE STATION NO: METEOR : 81

Pressure	Oxygen	Nitrate	Phosphate	Silicate
100	5.52	8.90	0.30	2.30
302	5.54	8.80	0.46	3.80
496	5.15	14.90	0.81	7.00
700	4.62	19.80	1.13	10.50
900	4.98	20.00	1.13	11.80
1101	5.77	18.20	1.08	11.50
1298	6.23	18.40	1.05	11.00
1598	6.51	17.90	1.05	11.00
2000	6.53	17.80	1.03	12.00
2501	6.48	17.60	1.07	15.00
3002	6.30	19.20	1.21	23.60
3571	6.01	20.30	1.31	32.50