

# DATOS INFORMATIVOS

INSTITUTO DE INVESTIGACIONES PESQUERAS

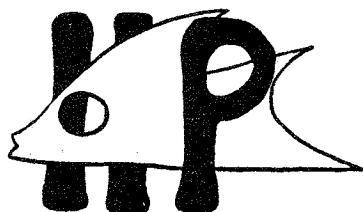
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F. VIVES

(Jefe de Misión)



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\* \* \*

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## I N T R O D U C C I Ó N

La campaña oceanográfica Mediterráneo I constituye el inicio de un vasto plan de campañas a realizar con vistas a estudiar el ecosistema del Mediterráneo occidental.

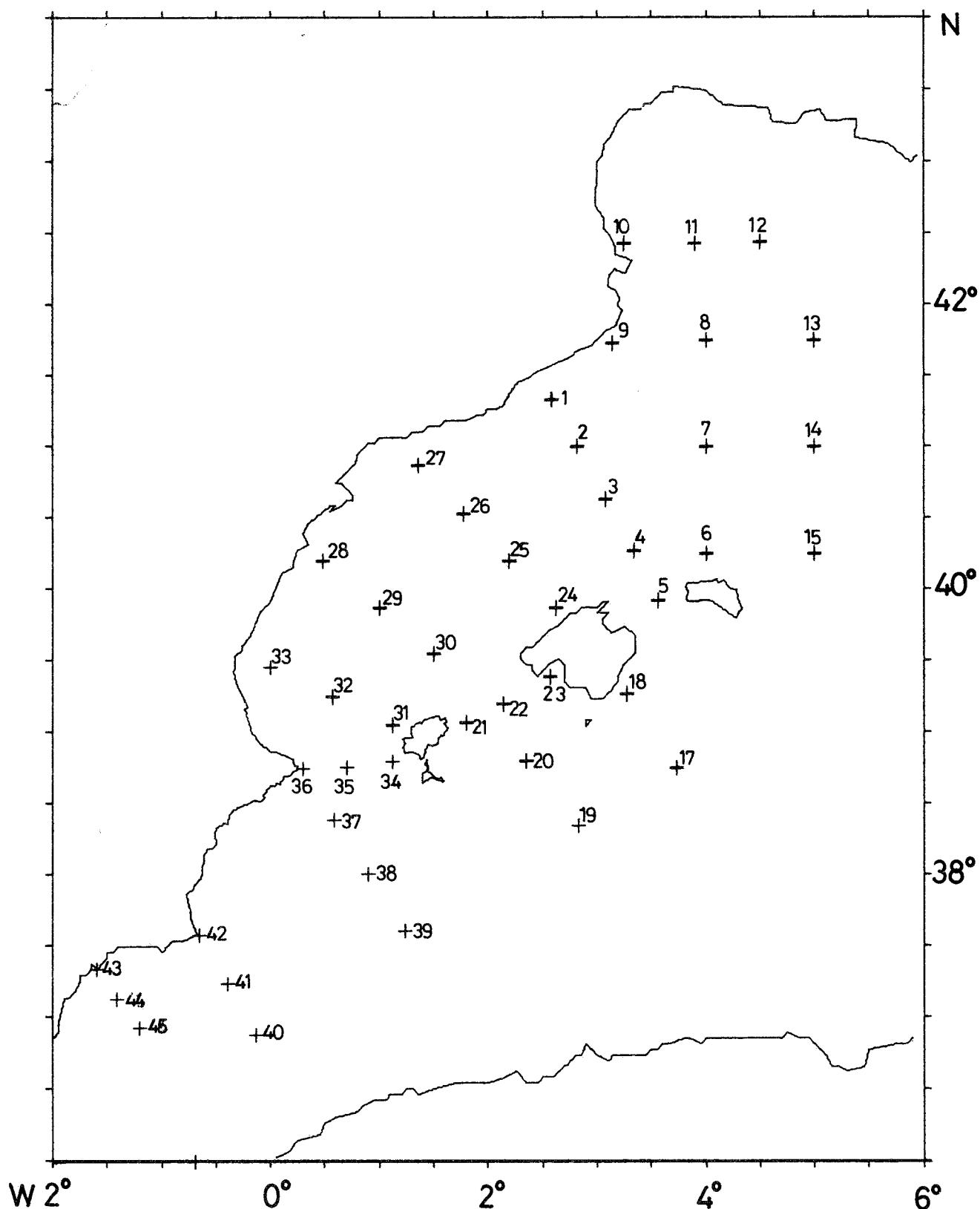
Durante muchos años los laboratorios de Blanes, Barcelona, Castellón y el desaparecido de Vinaroz trabajaron sobre la hidrografía y planctología de las aguas costeras próximas a los mismos, pero hasta 1976 no se presentó la oportunidad de poder realizar una prospección mucho más amplia que viniese a explicar buena parte de los interrogantes planteados por los estudios de plataforma.

Esta primera campaña, aparte de sus objetivos básicos, tiene un carácter general de exploración. Por este motivo abarca una extensa área geográfica que se extiende desde el cabo de Creus hasta el golfo de Vera (entre los cabos de Palos y Gata), incluyendo los alrededores de las islas Baleares. Se llevó a cabo durante el mes de octubre de 1976 a bordo del CORNIDE DE SAAVEDRA.

El motivo fundamental de este tipo de campañas es poner en claro la hidrografía del Mediterráneo occidental en relación con la producción de sus aguas, lo que nos servirá de base para los estudios de plataforma, con vistas a un mejor conocimiento de los cambios que en ella se operan y que tanto afectan a la producción de las especies explotadas por el hombre.

El presente informe consiste en una recopilación de los datos obtenidos durante la campaña, los cuales han sido clasificados en siete grupos: METEOROLOGÍA, HIDROGRAFÍA, BACTERIOLOGÍA, SESTON, FITOPLANCTON, ZOOPLANCTON y BENTOS.

A continuación se exponen los métodos empleados, la presentación de los datos, así como los listados de los mismos.



MAPA 1.- Distribución de las estaciones realizadas durante la campaña  
MEDITERRÁNEO I.

LISTA DE PARTICIPANTES

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La edición de los resultados, proceso de la información y trazado de los gráficos han sido efectuados por: Luis MIRALLES y Conchita ALLUÉ.

Expresamos nuestro agradecimiento a la Sra. Antonia CRUZ por la confección del manuscrito y a Cristina BAS por la ayuda prestada en la elaboración de los datos.

También queremos agradecer al Capitán D. Raúl GARCÍA, a los Oficiales y a toda la tripulación B/O Cornide de Saavedra su constante colaboración a lo largo de toda la Campaña.

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\* Responsables de los diferentes subprogramas.

## MÉTODOS

### METEOROLOGÍA

En cada estación se tomaron medidas de los siguientes parámetros meteorológicos: temperatura del aire, presión, humedad relativa, intensidad y dirección del viento, nubosidad e iluminación (los dos últimos sólo en las estaciones diurnas).

Para la presión y la temperatura se utilizaron un termómetro de mercurio y un barómetro de membrana situados, respectivamente, en el exterior y en el interior del puente de mando del barco. La humedad relativa se calculó por medio de los valores de temperatura del termómetro seco y termómetro húmedo (psicómetro). El viento se midió en la cubierta superior (a barlovento) con un anemómetro y una veleta manuales. La nubosidad se indicó con el número de octantes de cielo cubierto. La iluminación se midió con un fotómetro convencional regulado a 100 ASA anotando los valores de velocidad correspondientes al diafragma 11, valores que luego fueron transformados a lux.

### HIDROGRAFÍA

- Estaciones. Se tomaron muestras de agua con botellas de PVC, tipo Niskin, con termómetros reversibles incorporados.

Los parámetros medidos de temperatura, salinidad, nutrientes, oxígeno disuelto, etc... fueron deducidas de las observaciones y muestras mediante los análisis, fórmulas y algoritmos habituales, descritos en otros trabajos (CRUZADO y MANRÍQUEZ, 1974). El proceso de cálculo y presentación definitiva se realizó mediante el sistema de IBM 1130 instalado a bordo, y fue completado en el laboratorio de Barcelona usando el mismo instrumento.

- Perfiles. Se realizaron perfiles de temperatura empleando una sonda MARTEK modelo EBT; cada segundo se recibía una medida que era almacenada en cinta de papel mediante un DATA LOGGER HP 2012-A y simultáneamente era transmitida al ordenador de a bordo, mediante el sistema de toma de datos WDV, para ser procesada. Los perfiles obtenidos fueron corregidos según las calibraciones y contraste con los datos de temperatura de las estaciones, y finalmente dispuestos en ficheros con promedios cada medio metro y presentados en promedios cada 5 m., mediante el sistema de computación ya descrito. Para la realización del dibujo se usó el sistema de trazado automático de dibujos IBM 1627 conectado al ordenador.
- Transectos y mapas de superficie. Para realizar esta presentación se utilizó la metodología usual ya descrita en el nº 1 de la presente colección de Datos Informativos (MANRIQUEZ y RUCABADO).

## BACTERIOLOGÍA

- Recuento de bacterias heterótrofas y fijadoras. Para la toma de muestras se utilizaron botellas Niskin sin esterilizar. Se recogió agua de superficie, 10, 20, 50, 100, 200, 500, 700, 800 y 1000 metros; en las estaciones más costeras se redujo el número de muestras en función de la profundidad. Inmediatamente después de la llegada a cubierta de cada muestra, se recogía un litro de agua en botella estéril y opaca y se procedía a la siembra sobre placa (dos por cada nivel).

Se sembró mediante pipeta estéril 0,1 ml de muestra en cada una de las placas, extendiéndose el volumen mediante un asa de Driglasky.

Las placas se incubaron a la estufa a 30°C y el recuento de las colonias se llevaba a cabo entre las 24 y 48 horas de realizada la siembra mediante un Colony Counter BZG 24.

El medio de cultivo empleado para el recuento de heterótrofos fue el 2216 de ZoBell modificado: Extracto de levadura, 1 g.; bactopectona, 5 g.; fosfato férrico, 0,01 g.; nitrato potásico, 1,0 g.; agua de mar filtrada,

600 ml; agua destilada, 400 ml; agar agar, 15 g. El pH se mantenía entre 7,2 y 7,4.

Para el recuento de fijadoras se utilizó un medio libre de nitrógeno de composición: Manitol, 10 g; glucosa, 10 g; molibdato de sodio, 0,1 g; Fosfato dipotásico 0,2 g; agua de mar artificial S<sub>36</sub> 1000 ml.; agar 15 g.

- Determinación de la presencia de bacterias Sulfato reductoras (S-R): La determinación se realizó mediante la siembra de 1 ml de muestra en viales que contenían 30 ml del medio de cultivo: Lactato de sodio al 60%, 20 ml; extracto de levadura, 1 g; sulfato de magnesio, 2 g; fosfato dipotásico, 0,01 g; agua de mar, 750 ml; y agua destilada, 250 ml; añadiéndose estérilmente un trozo de hierro.

Los viales se cerraron herméticamente y se incubaron a 30°C durante 30 días, considerándose positivas aquellas muestras que viraron a color negro.

- Amonio. Se determinó manualmente mediante el método de KOROLEFF (1970).

## SESTON

Se utilizó un contador Coulter (mod. TA) para el recuento de partículas en suspensión de muestras de agua sin fijar. Se analizaron muestras tomadas de las botellas Niskin de 5 litros (las de hidrografía) y de los botellones de plástico (muestras de más de 30 litros) de los que se sacaban submuestras para pigmentos y carbono y nitrógeno particulados.

El tubo usado en el contador Coulter fue de 140  $\mu$  de orificio, usando como canales activos los de numeración superior o igual a 3 (14-3). El aparato se calibró con bolitas de látex de forma a obtener las partículas de 12,5  $\mu$  de diámetro entre los canales 8 y 9, lo que representa contar las partículas a partir 3,125  $\mu$  de diámetro (empezando en el canal 3). A pesar de que las muestras se contaban dos veces, 8,5 ml cada vez, los contajes de los canales 15 y 16 no son significativos ya que las muestras en general eran muy pobres. Las condiciones del aparato

fueron:

ORIFICE DIAMETER	140 $\mu$	MODE	Volume
SIZE CALIBRATION	120	ACTIVE CHANNELS	14-3
AP. MATCHING SW.	4 mA	SAMPLING TIME	100 s
PREAMP STEP GAIN	1		

El diámetro de los sucesivos canales y volumen medios de las partículas vienen determinados por las expresiones:

$$\bar{V}_i = 5,70911 \times 2^{(i-1)} \quad \bar{D}_i = 2 \times \sqrt[3]{\frac{3 \times \bar{V}_i}{4 \pi}}$$

$\bar{V}_i$  = volumen medio partículas correspondientes al canal i según calibración.

$\bar{D}_i$  = diámetro medio partículas del canal i según calibración.

- Nitrógeno y carbono orgánicos particulados. De los niveles de 0,20,50,75 y 100 metros de profundidad, se filtraron muestras de 2,25 litros ( algo menos cuando los filtros se taponaban rápidamente) sobre filtros Wathman GF/C de 25 mm de diámetro. Dichas muestras se tomaron del agua de los "botellones", correspondiéndose por lo tanto con los análisis de clorofila, (calculada mediante extracción en acetona y lectura en espectrofotómetro ) y con los de partículas (listado con el indicativo "Botellón"). Después de pasarse unas horas en el secador, los filtros se almacenaron en tubitos de cristal tapados con tapones de corcho recubiertos de papel de aluminio. Los análisis fueron realizados en el laboratorio del I.I.P. de Vigo por Fernando Fraga y Carmen Mouríño en un Perkin-Elmer 240 CNH analyzer ( Fraga, 1976.

## FITOPLANCTON

- Determinación de clorofilas. Para determinación de clorofilas se tomaban alrededor de 8 litros de agua de cada uno de los niveles (0, 20, 50, 75 y

100 m) muestrados en la tirada especial para biología. El agua se filtraba a través de un filtro de fibra de vidrio Whatman GF/C, de 5,5 cm de diámetro; terminada la filtración se introducía el filtro en un tubo de vidrio Pyrex que contenía unos 6 ml de acetona 90%, se tapaba herméticamente y se colocaba, a oscuras, en una nevera. Pasadas 24 horas, se trituraba el filtro en un homogeneizador de vidrio; la suspensión resultante se hacía pasar a través de varios filtros de fibra de vidrio para separar las partículas, del extracto acetónico. Mediante un espectrofotómetro Perkin Elmer se registraba de modo continuo la absorbancia del extracto entre 350 y 750 nm.

La fórmula empleada para la determinación de la concentración de clorofila fue (MARGALEF, 1972):

$$\text{Clorofila a mg m}^{-3} = 12,6 \times D_{665} \times \text{sol/vol}$$

donde:  $D_{665}$  = absorbancia del extracto acetónico a 665 nm

sol = volumen de extracto en mililitros

vol = volumen de agua filtrada en litros.

- Determinación de clorofila por fluorimetría. Para las determinaciones de clorofila por fluorimetría se tomaron de las botellas hidrográficas cantidades de agua del orden de 0,1 litros para los niveles 0,5,10,20,30,40 y 50 m y de 0,2 a 0,5 litros para las profundidades de 75,100,150,200,300, 400 y 600 m. Cada muestra se filtraba a través de un filtro de fibra de vidrio Whatman GF/C, de 2,5 cm de diámetro, previa adición de 1 ml de suspensión de  $MgCO_3$  al 1%. Seguidamente, se introducía el filtro en un homogeneizador de vidrio con unos ml de acetona 90% y se trituraba; la suspensión resultante se vertía en un tubo de tapón de rosca Sovirel y se añadía acetona 90% hasta completar un volumen determinado (10,6 ml en este caso). Los tubos se guardaban en una nevera, a oscuras, durante una media hora; pasada ésta, se agitaban y se centrifugaban durante 10 minutos. La lectura de la fluorescencia se realizó utilizando el mismo tubo como cubeta, en un fluorómetro Turner 111. De las lecturas se restó un blanco obtenido con una solución de acetona 90%.

El factor para estimar la concentración de clorofila a partir de la lectura del fluorómetro se obtuvo determinando en un espectrofotómetro Perkin Elmer la absorbancia de extractos de pigmentos que después se diluyeron y se leyeron en el fluorómetro. Se consideró preferible no utilizar ninguna corrección para la concentración de feofitina, debido a que las bajas concentraciones de pigmentos existentes hacían muy probable la introducción de errores importantes.

#### ZOOPLANCTON

En las estaciones pelágicas se efectuaron pescas verticales con la red estándar internacional WP-2 provista de cono filtrante de 250 micras entre los siguientes niveles:

1000 - 500 m
500 - 200 "
200 - 50 "
50 - 0 "

Asimismo y en todas las estaciones se realizó una pesca vertical de 200 m. a la superficie con la misma red WP-2 pero con mallas de 200  $\mu$  para las valoraciones de la biomasa (biovolumen).

En las estaciones neríticas aquellas pescas se efectuaron entre los niveles que permitía la profundidad.

En las mismas profundidades en que se recogieron las muestras de agua para los estudios de productividad se tomaron muestras de 12-15 litros para valorar la biomasa que no atraviesa las mallas de 50 micras, así como para las valoraciones de carbono-nitrógeno.

En todas las estaciones también se han llevado a cabo pescas horizontales con red Bogorov de 250  $\mu$  de malla.

Todas las pescas se han efectuado a una velocidad de tracción de 1 m/s y la duración de las horizontales ha sido de 15 minutos. Una vez concentrada la pesca se fijó en formol al 6-10%.

Los biovolúmenes se han valorado por el método del "volumen desplaza-

"do", refiriéndose a la totalidad del agua filtrada:  $50 \text{ m}^3$  (valor teórico). En ellos se han distinguido dos fracciones: la que atraviesa una red de malla de 2 mm (micro) y la que es retenida por dicha red (macro).

Una vez en tierra las muestras de macroplancton se han separado manualmente por grupos zoológicos para facilitar los estudios sistemáticos. El resto de la muestra constituida principalmente por mesoplancton se deja sin separar y los recuentos de los diversos grupos que la integran (copéodos, cladóceros, ostrácodos, protozoos etc.) se efectúan sobre una parte alícuota de la misma, mayor o menor según sea su riqueza.

- Ictioplancton. Para el estudio del ictioplancton, se efectuaron pescas inclinadas con redes de tipo Bongo en 40 de las 45 estaciones visitadas durante la campaña, utilizándose en 36 de ellas un modelo de acero inoxidable de 60 cm. de diámetro de boca, con mangas de  $333 \mu$  y  $505 \mu$  de abertura de malla y un medidor de flujo T.S.K. a la entrada de una ellas. Las 4 pescas restantes se realizaron con un modelo de polivinilo de 40 cm. de diámetro, cuyas redes eran ambas de  $505 \mu$  de abertura de malla.

Las pescas se realizaron desde 200 m. de profundidad hasta la superficie, o desde cerca del fondo en las estaciones de profundidad inferior a aquella. La red, después de dejarla durante 1 min. en el fondo para que se estabilizase, era recuperada a razón de 20 m./min., o a 10 m./min. en las estaciones más someras. La velocidad del barco durante toda la operación era de 2 nudos. En todos los casos se cronometró la duración de la pesca, desde la llegada de la red a la profundidad deseada hasta su aparición en superficie.

La calibración de los flowmeters se efectuó a partir de las lecturas de los mismos y del volumen teórico filtrado en cada pesca, calculado teniendo en cuenta la duración de la misma y asignándole a la red una eficiencia de filtrado de 0,96 (TRANTER and SMITH, 1968). De este modo se determinó un valor medio para la campaña que resultó de  $31.59 \text{ m}^3/1000$  vueltas, para el Bongo de 60 cm y de  $10,61 \text{ m}^3/1000$  vueltas, para el de 40 cm.

Los biovolúmenes se calcularon por desplazamiento de volumen, siguien-

do los mismos métodos que en ocasiones anteriores (RUBIÉS, 1976).

- Micronecton. Únicamente se llevó a cabo un lance de prueba entre Ibiza y Mallorca con un modelo de 6 pies de la red pelágica de Isaacs y Kidd, que resultó satisfactorio.

#### BENTOS

En todas las estaciones cuya profundidad era inferior a 1000 m se tomaron muestras de agua a unos 40 cm. de distancia sobre el fondo y también testigos y muestras de sedimento, excepto en los casos de fondos duros que imposibilitaban el correcto funcionamiento de la draga o el "corer".

Se utilizó una draga Van-Veen modificada de 1/10 de m de superficie abarcada y 32 kg de peso. El material obtenido se tamizó a través de malla de 500  $\mu$  guardándose la fracción retenida en una solución de formol neutro al 10 -12% a fin de estudiar posteriormente la macrofauna.

Paralelamente se tomaron los testigos de sedimento mediante un corer de gravedad de 50 kg de peso con un tubo de 50 cm de longitud (PVC de 35 mm de Ø interior protegido por una vaina metálica) a partir de los cuales se llevó a cabo el análisis de características físicas y químicas del sedimento.

Las muestras de agua de fondo se tomaron utilizando una botella tipo Niskin de General Oceanics ligeramente modificada, trabajando invertida de modo que cerrase al ponerse en contacto con el fondo un peso suspendido inmediatamente debajo de la misma.

Estas muestras se analizaron juntamente con el agua de los restantes niveles de cada estación midiéndose los mismos parámetros.

A partir de cada muestra de draga se midió, recién llegada a cubierta, el pH del sedimento y también su temperatura aproximada siempre que el volumen y textura del mismo garantizase la suficiente inercia térmica para hacerla fiable.

## P R E S E N T A C I O N D E L O S D A T O S

### HIDROGRAFÍA Y METEOROLOGÍA

De este subprograma se presentan los datos físicos y químicos obtenidos en cada una de las estaciones cubiertas durante la campaña así como los perfiles térmicos realizados en cada estación.

- Estaciones. La red de estaciones se ha distribuido en radiales más o menos perpendiculares a la costa de forma que permitan la construcción de los cortes o transectos hidrográficos necesarios para facilitar la interpretación de las masas de agua existentes así como de sus respectivas dinámicas.

La tabla de las páginas 22-41 , encabezada con los datos de situación geográfica fecha y hora en que se realizó la estación, acompañadas además de los datos meteorológicos,\* incluyen un total de 15 columnas en las que, por profundidades estándar, se registran los siguientes parámetros: temperatura, salinidad, sigma-t, oxígeno, nitrito, nitrato, fosfato y silicato. Aunque se trate de datos que corresponden a otros subprogramas, se incluyen en esta misma tabla en aras a una mayor comodidad en la exposición y consulta, algunos datos referentes a fitoplancton y a bacteriología como son: clorofila-a, feofitinas, fluorescencia, amoniaco, bacterias heterótrofas y bacterias fijadoras de nitrógeno.

- Perfiles. En todas las estaciones y a barco parado, se ha efectuado el registro vertical de temperatura cuyas gráficas se exponen en las páginas 42-61 . Las "x" que figuran en los mismos gráficos se refieren a los valores de temperatura de la correspondiente estación registrada en los termómetros basculantes.

Junto a la figura, se expone la correspondiente tabla de valores numéricos (promediados cada 5 metros) y registrados en la bajada y subida del sensor, además de los valores obtenidos en las estaciones.

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\* La toma de datos meteorológicos se realizó al comienzo de la estación.

- Transectos y mapas de superficie. La distribución numerada de los transectos se expone en los mapas 7, 8 y 9 (pág. 64). Para cada transecto se han elaborado las gráficas correspondientes a los siguientes parámetros: temperatura, salinidad, sigma-t, oxígeno, silicato, nitrato y clorofila-a (pag. 63-102).

Los mapas de superficie corresponden a la distribución en 0 metros de la zona estudiada y para cada una de las siguientes variables: temperatura, salinidad, sigma-t, oxígeno disuelto y clorofila-a. Cabe señalar que la clorofila-a se adjunta a los transectos y mapas de superficie hidrográficos por las mismas razones que se incluyeron sus valores en las tablas de las estaciones.

## BACTERIOLOGÍA

- Estaciones. En el Mapa 10 se consignan las estaciones muestreadas en el recuento de bacterias heterótrofas HET. y bacterias fijadoras de Nitrógeno, FIJ. Los valores de los mismos se recogen en el listado (columna 14 y 15) en cel/ml. del CUADRO I.

En el mismo mapa se presenta una distribución de la concentración de bacterias heterótrofas en cel/cm<sup>2</sup> integrando los valores de 0 a 100 m.

En el Mapa 11 se presentan las estaciones muestreadas para la determinación de la presencia de bacterias sulfato reductoras, los resultados de este estudio se ha presentado por estaciones y niveles, se encuentra en el CUADRO II.

## SESTON

Las columnas de los listados de las estaciones (CUADRO IV) indican:

PROF: niveles de profundidad de las muestras.

N PART: número de partículas por ml; VOL TOT: volumen de seston en el rango contado, expresado en PPM. El resto de columnas expresan el porcentaje en volumen correspondiente a cada canal (del 3 al 16).

Las expresiones siguientes permiten calcular el número de partículas y el volumen de las partículas de cada canal:

$$N_i = \frac{N \text{ PART}}{\bar{V}_i} \times \frac{16}{\frac{3}{\bar{V}_i}} \times \frac{V_i}{(V_i / \bar{V}_i)}$$

donde:  $V_i = N_i \times \bar{V}_i \times 10^{-6}$

$N_i$  = número de partículas por ml en el canal i

N PART= número de partículas por ml totales

$\bar{V}_i$  = volumen de las partículas en el canal i

$\bar{V}_i$  = volumen medio de las partículas del canal i, según la calibración.

Los datos de las estaciones indicadas con la palabra "BOTELLÓN" se corresponden con los de clorofila calculada mediante la filtración de 8 litros de muestra, extracción de pigmentos y medida en el espectrofotómetro, y con los datos de nitrógeno y carbono particulados. Los datos de las demás estaciones se corresponden con los datos de química y con las clorofilas calculadas mediante la lectura de extractos (a partir de una cantidad menor de muestra) en el fluorómetro. (CUADRO V).

- Nitrógeno y carbono orgánicos particulados. En el listado del CUADRO VI representan:

PROF: profundidad correspondiente de la muestra.

NP: nitrógeno orgánico particulado expresado en N at.  $\mu\text{g} \times \text{l}^{-1}$ .

CP: carbono orgánico particulado expresado en C at.  $\mu\text{g} \times \text{l}^{-1}$ .

C/N: relación atómica carbono/nitrógeno.

## FITOPLANCTON

Los valores de clorofila-a (CL-A), de feofitina (FEOF) y de fluorescencia (FLUO) se han incluido en la tabla general de datos hidrográficos (CUADRO I).

## ZOOPLANCTON

En el CUADRO VII de este apartado se indican las condiciones de las pescas de plancton realizadas; en el CUADRO VIII, se expresa el biovolumen de las pescas verticales comprendidas entre 200 m y superficie, indicándose separadamente los valores de "MICRO", "MACRO" y "TOTAL". Se incluye también un mapa con las isopletas de la distribución del biovolumen en el área estudiada.

- Ictioplancton. Los datos correspondientes a las pescas de Bongo se encuentran en los CUADROS IX y X. El significado de cada una de las columnas es el siguiente:

EST.: nº de la estación.

PROF.: Profundidad alcanzada por la red. Los casos señalados con \* son aquellos en que la red se recuperó a 10 m/min., en lugar de los 20 m/min habituales.

VOL. FLTR.: Volumen de agua filtrado durante la pesca, en metros cúbicos. Los valores entre paréntesis son datos estimados por cronómetro, por mal funcionamiento del fluowmeter.

BIOV.: Biovolumen obtenido, en  $\text{ml/m}^3 \times 10^2$ , para cada una de las redes. El signo \* indica que había pintura en la muestra, procedente del casco del buque al rozarla la red durante la pesca, por lo que el valor obtenido es poco representativo.

COMP.: Composición general de la muestra, señalándose los grupos mayoritarios en orden decreciente de abundancia según el código siguiente:

1 Protozoos	9 Decápodos
2 Cnidarios	0 Taliáceos
3 Quetognatos	A Doliólidos
4 Moluscos	B Apendiculariáceos
5 Cladóceros, Ostrácodos	C Peces (huevos y larvas)
6 Copépodos	D Fitoplancton
7 Anfípodos, Isópodos	E Cumáceos
8 Eufausiáceos, Misidáceos	F Cefalocordados

FLWM: Lectura del flowmeter en nº de vueltas. Los datos entre paréntesis representan lecturas erróneas que no se tuvieron en cuenta.

En los Mapas 13 y 14 se muestra la distribución de biovolúmenes para cada manga.

#### BENTOS

Cuadro de estaciones en que se muestreó bentos, con indicación de la profundidad, litros de sedimento recogidos por la draga (que equivale aproximadamente a centímetros profundizados), longitud del corer extraído, pH y naturaleza del sedimento en su capa más superficial (con indicación del espesor de la misma) (CUADRO X).

SUMMARY

This report is a compilation of data taken during the "Mediterráneo I" cruise carried out on board the B/O CORNIDE DE SAAVEDRA in the region between Cabo Creus and the Golfo de Vera and between the mainland of Spain and the Balearic Islands (Fig. 1 ).

Part I collects the methods used by the various sub-programmes development during the cruise covering meteorology, hydrography, bacteriology, seston, phyto and zooplankton and benthos.

Part II presents the hydrographical data together with meteorological observations, chlorophyll concentrations and bacterial counts (table I ). Thermal profiles from surface to a depth of 150 m are plotted and surface maps and 20 vertical sections are drawn to give a general picture of the distribution of the main oceanographic parameters.

Part III presents two maps dealing with the presence of sulphate-reducing bacteria and tables with number of seston particules per milliliter and concentration of particulate carbon and nitrogen for the top-most 100 m.

Part IV presents the characteristics of 305 zooplankton catches. Total biomass for the first 200 m. related to ichthyoplankton studies, is given with the quantitative composition of the organisms caught by Bongo net.

Part V summarizes data relative to the benthos samples.

RESUM

Aquest número és una recopilació de les dades obtingudes en la campanya MEDITERRANEO I, realitzada a bord del V/O CORNIDE DE SAAVE-

DRA en la zona compresa entre el cap de Creus i el golf de Vera (entre els caps de Palos i Gata), incloent els voltants de les illes Balears i Pitiüses (vegeu fig. 1).

D'antuvi s'exposen els mètodes emprats en els diversos subprogrames desenvolupats en aquesta campanya; després es presenten les dades, classificades per subprogrames: meteorologia, hidrografia, bacteriologia, séston, fitoplàncton, zooplàncton i bentos.

En les pàgines següents figuren els llistats de les dades meteòrològiques, hidrogràfiques, de clorofila i bacteriològiques. Per la majoria de les estacions es donen els perfils tèrmics obtinguts dels primers 150 metres. Amb les dades hidrogràfiques de cada estació s'han confeccionat mapes de superfície i una vintena de transectes que donen una informació força detallada dels principals paràmetres mesurats.

Tot seguit s'exposen els comptatges de bacteris heteròtrofs i fixadors de nitrogen, i la presència de reductors de sulfat. Pel que fa al séston, hom dóna el nombre de partícules per millilitre i els valors de nitrogen i carboni orgànic particulat pels primers 100 metres.

Respecte el fitoplàncton, hom dóna els valors de clorofilla-a, de feofitina i de fluoresceïna.

Es feren 305 pesques de zooplàncton, les dades de les quals figuren en les taules corresponents; més endavant s'exposen la composició qualitativa i altres dades de les pesques fetes amb les mànegues BONGO en vistes a l'estudi de l'ictioplàncton.

Finalment es presenten, resumides en una taula, les dades i mostres recollides per a l'estudi del bentos.

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Abreviaciones

PRF. FONDO	Profundidad del fondo en m.
D. SECCHI	Profundidad del disco de Secchi en m.
T. AIRE	Temperatura del aire en °C.
P. ATMOS.	Presión atmósfera en mb.
HUMEDAD	Humedad relativa en %.
ALT. OLAS	Altura de las olas en m.
VEL. VIENTO	Velocidad del viento en m/s.
DIRECCIÓN	Dirección del viento en grados de arco.
ILUM.	Iluminación en lux. $10^3$ .
CIELO	Nubosidad en octavos de cielo cubiertos.
PROF.	Profundidad en m.
TEMP.	Temperatura en °C.
SALN.	Salinidad en %.
SG-T	Sigma-t.
OXIG.	Volumen de oxígeno en ml/l.
NO2	Concentración de nitrito en $\mu\text{g-at}/\text{l}$ .
NO3	Concentración de nitrato en $\mu\text{g-at}/\text{l}$ .
PO4	Concentración de fosfato en $\mu\text{g-at}/\text{l}$ .
SI04	Concentración de silicato en $\mu\text{g-at}/\text{l}$ .
CL-A	Concentración de clorofila-a en $\text{mg}/\text{m}^3$ .
FEOF	Cociente entre la densidad óptica a 663 nm antes y despues de acidificar.
FLUO	Clorofila fluorimétrica en $\text{mg}/\text{m}^3$ .
NH4	Amonio $\mu\text{g-at}/\text{l}$ .
HET.	Heterótrofos.
FIJ.	Fijadores.
N. PART.	número de partículas por ml.
VOL. TOT.	volumen de seston en el rango contado.
NP	nitrógeno orgánico particulado en N at. $\mu\text{g} \times 1^{-1}$
CP	carbono orgánico particulado en C at. $\mu\text{g} \times 1^{-1}$
C/N	relación atómica carbono/nitrogeno.
EST.	estación
FLWM	lectura del "flowmeter" en nº de vueltas.
BIOV.	biovolumen.
COMP.	Composición general de la muestra de zooplancton

HIDROGRAFÍA	págs.
Datos meteorológicos, hidrográficos y biológicos. Cuadro I . . . . .	23-42
Perfiles térmicos. Cuadro II . . . . .	43-62
Temperatura, salinidad y sigma-t. Ma- pas 2,3 y 4 . . . . .	63
Oxígeno y clorofila. Mapas 5 y 6 . . .	64
Transectos de los parámetros físicos y biológicos. Mapas 7,8 y 9. . . . .	65
Transectos (I-XX) de la distribución de temperatura, salinidad, sigma-t, oxígeno, nitrato, silicato y clorofi- la . . . . .	66-103



**CUADRO I.- Datos meteorológicos hidrográficos y biológicos, recogidos en las estaciones realizadas.**

**ESTACIÓN 1**

FECHA 6/10/76 SITUACIÓN 41 20.0 N PRF.FONDO 410  
HORA 1428-1650 2 35.0 E D.SECCHI 20.

T. AIRE 23.6 HUMEDAD 81 VEL.VIENTO 3 ILUM. 21.0  
P.ATMOS 1024 ALT.OLAS 190 DIRECCIÓN CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	18.90	37.677	27.112	5.33	.00	.08	.00	.13	.24					
5	18.86	37.668	27.116	5.31	.01	.08	.00	.16						
10	18.55	37.730	27.242	5.32	.01	.08	.00	.17						
20	18.58	37.913	27.377	5.33	.03	.09	.00	.31	.22					
30	17.95	37.798	27.448	5.36	.03	.13	.00	.10						
40	16.53	37.978	27.933	5.31	.13	.21	.08	.96						
50	14.69	38.039	28.405	5.43	.19	.36	.02	1.46	.48					
75	13.69	38.100	28.669	4.88	.07	2.32	.02	3.68	.30					
100	13.57	38.112	28.705	4.79	.07	3.07	.08	3.91	.21					
125	13.47	38.126	28.737	4.90	.08	3.01	.11	3.29						
150	13.49	38.142	28.745		.06	3.35	.13	3.19						
200	13.26	38.203	28.840	4.78	.06	4.78	.16	2.92						
250	13.28	38.306	28.915	4.68	.06	6.04	.20	3.40						
300	13.26	38.346	28.950	4.51	.05	6.48	.25	3.91						
400	13.08	38.400	29.032	4.51	.04	7.18	.26	4.81						

**ESTACIÓN 2**

FECHA 7/10/76 SITUACIÓN 41 0.0 N PRF.FONDO 1860  
HORA 0145-0410 2 49.0 E D.SECCHI

T. AIRE 20. HUMEDAD 91 VEL.VIENTO 0. ILUM.  
P.ATMOS 1025 ALT.CLAS DIRECCIÓN CIELO

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	20.98	37.906	26.733	5.17	.00	.00	.00	.19	.17			.10	755	5
5	20.98	37.897	26.727	5.13	.00	.00	.00	.20						
10	20.81	37.897	26.773	5.46	.00	.00	.00	.25						
20	18.45	38.011	27.483	5.45	.00	.00	.00	.42	.18			.18	280	30
30	17.40	38.005	27.742	5.43	.00	.00	.00	.60						
40	15.24	38.066	28.301	6.28	.00	.01	.00	.92						
50	14.01	38.098	28.598	4.26	.18	.26	.00	1.15	.30			.10	850	5
75	13.41	38.234	28.833	5.05	.06	1.30	.07	1.84	.19			.90	115	35
100	13.14	38.296	28.937	4.96	.03	4.57	.09	3.18	.18			.10	40	10
125	13.13	38.333	28.969	4.89	.03	6.00	.17	3.72						
150	13.09	38.339	28.981	4.86	.03	6.48	.24	4.17						
200	13.11	38.373	29.005	4.64	.05	7.41	.96	5.17				.90	170	15
250	13.15	38.383	29.003	4.65	.05	7.66	.34	5.66						
300	13.18	38.389	29.002	4.55	.06	7.75	.34	6.08				1.38	225	15
400	13.05	38.371	29.014	4.57	.04	7.80	.34	6.03				.42	45	5
500	13.05	38.366	29.011	4.62	.06	7.84	.35	6.53				.00	95	10
600	13.00	38.361	29.017	4.67	.06	7.99	.35	6.97				.18	155	15
700	13.00	38.367	29.023	4.52	.05	8.14	.38	7.23				.72	400	5
800	12.99	38.361	29.019	4.61	.07	8.14	.40	7.55				.16	10	
1000	12.96	38.353	29.020	4.66	.06	8.14	.40	7.60				.16	1075	55
1250	12.96	38.354	29.020		.06	8.14	.40	7.88						
1500	13.03	38.363	29.013	4.65	.06	8.20	.41	8.13						

## ESTACIÓN 3

FECHA 7/10/76 SITUACIÓN 40 37.5 N PRF.FONDO 2040  
 HORA 1222-1415 3 4.5 E D.SECCHI 33  
 T. AIRE 26. HUMEDAD 67 VEL.VIENTO 3.  
 P.ATMOS 1026 ALT.OLAS 0. DIRECCIÓN 220 CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	23.11	37.984	26.188	5.20	.00	.00	.00	.48						
5	23.25	37.979	26.142	5.00	.00	.00	.00	.48						
10	22.84	37.954	26.243	5.00	.00	.00	.00	.46	,09					
20	22.83	37.955	26.245	5.06	.00	.00	.00	.46						
30	22.80	37.952	26.252	4.50	.00	.00	.00	.48						
40	21.83	37.976	26.548	5.19	.01	.06	.00	.55						
50	19.51	37.996	27.198	5.53	.01	.02	.00	.65	,19					
75	14.29	38.159	28.585	5.39	.02	.03	.00	1.12	,30					
100	13.27	38.243	28.869	5.19	.07	1.82	.00	1.79	,17					
125	13.11	38.312	28.957	4.71	.06	5.36	.19	2.96						
150	13.05	38.361	29.007	4.84	.06	5.99	.21	3.56						
200	13.11	38.395	29.020	4.78	.07	6.82	.37	4.32						
250	13.13	38.426	29.040	4.74	.09	7.40	.34	5.13						
300	13.07	38.434	29.059	4.65	.10	7.94	.34	5.86						
400	13.07	38.437	29.063	4.58	.13	8.42	.43	6.59						
500	13.01	38.442	29.078	4.57	.11	8.53	.43	6.92						
600	13.02	38.432	29.069	4.77	.09	8.48	.43	7.14						
700	13.03	38.435	29.069	4.16	.13	8.59	.43	7.59						
800	12.98	38.398	29.050	4.60	.14	8.64	.46	7.71						
1000	12.96	38.425	29.076	4.60	.15	8.70	.54	7.86						
1200	12.98	38.422	29.070	4.43	.14	8.70	.48	7.86						
1400	13.01	38.444	29.080	4.70	.15	8.70	.46	8.18						

## ESTACIÓN RS3

FECHA 7/10/76 SITUACIÓN 40 37.5 N PRF.FONDO 2040  
 HORA 1222-1415 3 4.5 E D.SECCHI 33

T. AIRE 26. HUMEDAD 67 VEL.VIENTO 3.  
 P.ATMOS 1026 ALT.OLAS 0. DIRECCIÓN 220 CIELO

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
40	17.21	37.996		5.42	.00	.03		.52						
45	16.04	38.011		5.59	.01	.05		.57						
50	15.70	38.035		5.97	.00	.03		.66						
55	15.50	38.048		5.94	.00	.02		.69						
60	15.21	38.088		6.12	.00	.01		.74						
65	14.98	38.149		6.04	.00	.02		.97						
70	14.90	38.174		6.07	.01	.02		1.00						
75	14.33	38.222		5.72	.07	.13		1.13						
80	13.86	38.213		5.81	.07	.13		1.13						
85	13.67	38.254		5.54	.12	.37		1.29						
90	13.48	38.253		5.50	.13	.44		1.34						
95	13.40	38.247		5.30	.08	.91		1.23						

## ESTACIÓN 4

FFCHA 7/10/76 SITUACIÓN 40 16.0 N PRF.FONDO 1560  
HORA 7230-0015 3 20.0 E D.SECCHI

T. AIRE 20.5 HUMEDAD 52 VFL.VIENTO 6.  
P.ATMOS 1025 ALT.OLAS DIRECCIÓN 330 ILUM.  
CIELO

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	22.90	37.301	25.727	4.93	.00	.01	.00	.07	.09				115	2
5	22.91	37.296	25.722	4.91	.00	.02	.00	.03						
10	22.93	37.315	25.731	5.05	.00	.00	.00	.03						
20	22.92	37.321	25.739	4.67	.00	.00	.00	.03	.12				138	25
30	22.93	37.334	25.746	4.97	.00	.02	.00	.03						
40	19.73	37.337	26.636	5.87	.00	.00	.00	.08					248	140
50	17.43	37.580	27.408	6.21	.00	.03	.01	.29	.19				40	8
75	15.22	28.015	28.226	5.87	.06	.01	.01	.36	.30					
100	13.67	38.211	28.716	5.51	.01	.11	.02	.94	.27				275	110
125	13.27	38.281	28.899	5.06	.01	2.79	.07	1.88						
150	12.14	38.312	28.950	5.31	.01	4.69	.13	2.66						
200	12.02	38.345	29.000	4.97	.00	5.47	.34	3.10					155	38
250	13.08	38.392	29.024	4.65	.01	6.14	.22	3.81						
300	13.09	38.422	29.047	4.68	.00	6.63	.26	4.43					138	33
400	13.06	38.459	29.082	4.62	.00	7.65	.28	5.72					25	3
500	13.05	38.467	29.089	4.64	.00	7.92	.31	6.23					75	23
600	13.06	38.455	29.079	4.52	.00	8.06	.32	6.80					250	18
700	13.06	38.432	29.061	4.37	.00	8.21	.34	7.20					138	20
800	13.00	38.404	29.052	4.57	.00	8.26	.35	7.48					90	8
1000	12.98	38.410	29.060	4.58	.00	8.21	.39	7.74					478	88
1200	12.99	38.408	29.056	4.59	.00	8.21	.37	8.06						
1400	13.01	38.417	29.059	4.65	.00	8.21	.37	8.14						

## ESTACIÓN 5

FFCHA 8/10/76 SITUACIÓN 39 55.0 N PRF.FONDO 90  
HORA 0915-0950 3 34.0 E D.SECCHI 32.

T. AIRE 26.2 HUMEDAD 63 VFL.VIENTO 5.5  
P.ATMOS 1024 ALT.OLAS DIRECCIÓN 120 ILUM. 52.5  
CIELO 1/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	22.79	37.483	25.899	5.34	.00	.00	.00	.05						
5	22.78	37.482	25.901	5.14	.00	.03	.00	.07						
10	22.75	37.479	25.908	5.00	.00	.00	.00	.07						
20	22.73	37.484	25.917	4.94	.00	.00	.00	.07						
30	21.66	37.495	26.230	5.30	.00	.00	.00	.09						
40	16.93	37.366	27.366	5.92	.00	.00	.00	.07						
50	16.82	37.920	27.818	5.80	.00	.00	.00	.32						
75	14.50	38.069	28.470	5.40	.02	.01	.00	.41						

## ESTACIÓN 6

FECHA 9/10/76 SITUACIÓN 40 15.0 N PRF.FONDO 640  
 HORA 1635-1810 4 0.0 E D.SECCHI 29.

T. AIRE 25.4 HUMEDAD 58 VEL.VIENTO 4.5 ILUM. 3.5  
 P.ATMOS 1022 ALT.OLAS DIRECCIÓN 110 CIELO 0

PROF	TFMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	EOF	FLUO	NH4	HET.	FIJ.
*****														
0	22.60	37.889	26.263	5.52	.00	.00	.00	.17	.09				905	138
5	22.54	37.914	26.299	5.49	.00	.00	.00	.17						
10	22.54	37.918	26.301	5.08	.00	.00	.00	.06						
20	22.52	37.915	26.307	5.18	.00	.00	.00	.06	.15				298	73
30	22.51	37.915	26.309	5.56	.00	.00	.00	.06						
40	20.27	37.795	26.840	5.03	.00	.00	.00	.10						
50	16.81	37.906	27.811	6.67	.00	.00	.00	.24	.17				570	288
75	14.34	38.157	28.573	5.99	.06	.00	.00	.52	.41				258	83
100	13.44	38.199	28.800	5.92	.02	1.39	.02	1.15	.28				135	56
125	13.18	38.259	28.902	5.34	.01	3.70	.06	1.63						
150	13.01	38.279	28.951	5.66	.01	4.79	.10	2.01						
200	12.97	38.323	28.995	5.09	.00	5.63	.18	2.50					393	240
250	13.04	38.369	29.016	5.21	.00	6.35	.21	3.11						
300	13.09	38.399	29.030	4.78	.00	6.83	.22	3.62					110	30
400	13.10	38.444	29.060	5.17	.00	7.86	.26	4.67					750	75
500	13.11	38.450	29.063	4.51	.00	8.40	.31	5.30					468	88
600	13.11	38.452	29.066	4.69	.01	8.60	.32	5.83					293	

## ESTACIÓN 7

FECHA 9/10/76 SITUACIÓN 41 0.0 N PRF.FONDO 2500  
 HORA 535-732 4 0.0 E D.SECCHI 38.

T. AIRE 20.0 HUMEDAD 79 VEL.VIENTO 4.5 ILUM. 0.9  
 P.ATMOS 1021 ALT.OLAS DIRECCIÓN 110 CIELO 1/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	EOF	FLUO	NH4	HET.	FIJ.
*****														
0	22.21	37.776	26.288	4.90	.00	.00	.00	.00	.09					
5	22.29	37.780	26.268	4.88	.00	.00	.00	.00						
10	22.27	37.766	26.265	5.10	.00	.00	.00	.00						
20	22.28	37.757	26.255	4.91	.00	.00	.00	.00	.10					
30	22.24	37.798	26.296	4.99	.00	.00	.00	.07						
40	17.53	37.914	27.641	6.04	.00	.00	.00	.29						
50	15.40	38.041	28.245	6.21	.00	.00	.00	.46	.32					
75	13.67	38.069	28.649	5.64	.06	1.41	.03	.95	.17					
100	13.26	38.140	28.791	5.56	.02	3.84	.09	1.64	.08					
125	13.04	38.192	28.877	4.87	.02	4.75	.09	2.21						
150	13.05	38.248	28.911	4.83	.00	5.72	.12	2.92						
200	13.28	38.347	28.948		.00	6.89	.18	4.18						
250	13.17	38.330	28.958	4.70	.00	6.92	.18	4.48						
300	13.27	38.398	28.990		.00	7.52	.22	5.30						
400	13.20	38.402	29.008		.00	8.14	.25	6.22						
500	13.12	38.402	29.024	4.33	.00	8.37	.30	6.88						
600	13.07	38.370	29.010		.00	8.37	.30	7.15						
700	13.05	38.369	29.013	4.38	.00	8.33	.31	7.32						
800	13.04	38.367	29.014		.00	8.47	.31	7.55						
1000	12.97	38.358	29.023	4.41	.00	8.58	.34	8.12						
1200	12.98	38.348	29.011		.00	8.37	.31	8.02						
1400	13.01	38.363	29.017	4.30	.00	8.33	.31	8.07						

## ESTACIÓN 8

FECHA 9/10/76 SITUACIÓN 41 45.0 N PRF.FONDO 2360  
HORA 1725-1916 4 0.0 E D.SECCHI

T. AIRE 23.7 HUMEDAD 68 VEL.VIENTO 5.  
P.ATMOS 1021 ALT.OLAS DIRECCIÓN 150 ILUM. 0.2  
CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	18.84	37.922	27.315	5.54	.00	.00	.00	.00	.08			1.88	1678	720
5	18.83	37.913	27.312	5.42	.00	.00	.00	.00						
10	18.23	37.913	27.464	5.50	.00	.00	.00	.00						
20	17.98	37.909	27.524	5.44	.00	.00	.00	.00	.00			1.02	1280	88
30	17.80	37.884	27.551	5.43	.00	.00	.00	.00						
40	14.35	38.062	28.498	5.86	.00	.00	.00	.67				1.00	110	68
50	13.62	38.176	28.744	5.42	.01	.01	.02	1.15	.32			.35	393	45
75	13.15	38.255	28.903	4.97	.03	3.09	.03	2.13	.24			.29	50	28
100	13.01	38.315	28.979	4.96	.02	5.85	.08	3.08						
125	13.07	38.346	28.991	4.82	.01	6.23	.12	3.56						
150	13.13	38.380	29.006	4.70	.00	6.63	.15	3.96						
200	13.26	38.415	29.004	4.56	.00	7.12	.17	4.97				.22	145	95
250	13.30	38.465	29.035	4.53	.00	7.64	.17	5.60				2.58	6350	78
300	13.24	38.460	29.044	4.42	.00	7.64	.17	5.91				.42	923	418
400	13.17	38.445	29.048	4.40	.00	8.34	.20	6.45				.10	2400	500
500	13.10	38.433	29.054	4.46	.00	8.43	.20	6.84				.62	383	260
600	13.09	38.427	29.050	4.46	.00	8.43	.21	7.08				.02	640	288
700	13.07	38.421	29.049	4.54	.00	8.43	.23	7.37				.40	838	113
800	13.02	38.429	29.066	4.54	.00	8.53	.26	7.69				.66	575	
1000	13.01	38.413	29.056	4.53	.00	8.48	.27	7.92						
1200	12.99	38.394	29.045	4.58	.00	8.53	.20	8.07						
1400	13.02	38.390	29.036	4.63	.00	8.43	.29	8.07						

## ESTACIÓN 9

FECHA 10/10/76 SITUACIÓN 41 44.0 N PRF.FONDO 105  
HORA 430- 510 3 9.0 E D.SECCHI 27.

T. AIRE 18.5 HUMEDAD 89 VEL.VIENTO 2  
P.ATMOS 1019 ALT.OLAS DIRECCIÓN 230 ILUM. 1/8  
CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	18.61	37.560	27.098	5.32	.00	.00	.00	.00	.17					
5	18.41	37.654	27.220	5.33	.00	.00	.00	.00						
10	18.22	37.695	27.301	5.35	.00	.00	.00	.00						
20	17.90	37.829	27.483	5.34	.00	.00	.00	.02	.18					
30	17.34	37.875	27.658	5.25	.03	.02	.02	.02	.11					
40	16.99	37.917	27.774	5.30	.07	.06	.04	.04	.14					
50	15.88	37.962	28.073	5.26	.27	.23	.06	.55	.30					
75	13.88	38.092	28.621	5.03	.12	1.21	.06	2.70	.15					
100	13.65	38.114	28.688	4.93	.07	1.86	.09	2.92	.13					

## ESTACIÓN 10

FECHA 10/10/76 SITUACIÓN 42 26.0 N PRF.FONDO 110  
HORA 1310-1342 3 15.0 E D.SECCHI 14.

T. AIRE 25.0 HUMEDAD 66 VEL.VIENTO 13.  
P.ATMOS 1016 ALT.CLAS 0.3 DIRECCIÓN 150 ILUM. 43.8  
CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	18.90	37.081	26.655	5.64	.00	.00	.00	.00	.29				275	215
5	18.90	37.077	26.653	5.62	.00	.00	.00	.00						
10	18.88	37.090	26.668	5.53	.00	.00	.00	.00						
20	18.23	37.846	27.414	5.32	.00	.00	.00	.01	.29				913	303
30	18.28	37.875	27.423	5.38	.00	.01	.00	.03						
40	17.16	37.849	27.683	5.50	.00	.00	.00	.06						
50	14.85	37.869	28.237	5.53	.07	.04	.07	.08	.37				1430	345
75	13.72	37.874	28.489	4.90	.08	1.67	.12	2.86	.46				273	115
100	13.48	38.001	28.637	4.74	.08	2.83	.15	3.15	.28				183	95

## ESTACIÓN RS11

FECHA 10/10/76 SITUACIÓN 42 26.0 N PRF. FONDO 980  
HORA 2020-2140 3 54.0 E D. SECCHI

T. AIRE P. ATMOS	HUMEDAD ALT. CLAS	VEL. VIENTO DIRECCIÓN	ILUM. CIELO											
PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SiO4	CL-A	FEOF	FLUO	NH4	MET.	FIJ.
0	37.981		5.39	.00	.00	.00	.00	.00						
5	37.980		5.36	.00	.00	.00	.00	.00						
10	37.978		5.36	.00	.02	.00	.00	.00						
20	37.971		5.41	.00	.00	.00	.00	.00						
30	38.076		5.97	.00	.00	.00	.00	.20						
-30	38.084		5.97	.00	.00	.00	.00	.62						
40	38.074		5.42	.00	.00	.00	.00	.69						
50	38.119		5.06	.09	.91							1.05		
75	38.190		4.78	.04	3.89	.17						1.73		
100	38.227		4.76	.03	5.70	.09						2.15		
125	38.197		4.83	.03	5.67	.09						2.15		
150	38.306		4.71	.04	6.39	.17						2.61		

## ESTACIÓN 12

FECHA 11/10/76 SITUACIÓN 42 26.5 N PRF. FONDO 1860  
HORA 0046-0238 4 30.0 E D. SECCHI

T. AIRE 20.3 P. ATMOS 1013	HUMEDAD 81 ALT. OLAS 0.5	VEL. VIENTO 10 DIRECCIÓN 100	ILUM. CIELO 4/8											
PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SiO4	CL-A	FEOF	FLUO	NH4	MET.	FIJ.
0	19.23	37.918	27.212	5.36	.00	.00	.00	.02	.11			.25	63	48
5	19.22	37.913	27.210	5.00	.00	.00	.00	.02						
10	19.11	37.908	27.234	5.18	.00	.00	.00	.02						
20	18.00	37.868	27.488	5.52	.00	.00	.00	.00	.11			1.57	488	178
30	15.48	38.041	28.228	5.74	.00	.00	.00	.15						
40	14.17	38.135	28.592	5.94	.00	.00	.00	.03	.89					
50	13.59	38.197	28.766	5.56	.00	.00	.13	1.20	.20			.83	278	273
75	13.13	38.257	28.909	4.79	.04	4.91	.15	2.82	.33			.28	298	215
100	13.09	38.290	28.944	4.86	.03	6.02	.19	3.23	.22			.23	823	680
125	13.13	38.325	28.963	4.91	.02	6.42	.19	3.67						
150	13.25	38.369	28.973	4.63	.01	6.79	.19	4.27						
200	13.23	38.395	28.996	4.61	.00	7.04	.26	4.56				.95	338	141
250	13.20	38.403	29.009	4.48	.00	7.23	.28	5.05						
300	13.21	38.419	29.020	4.43	.00	7.58	.31	5.49				1.69	400	98
400	13.21	38.415	29.016	4.41	.00	7.86	.31	6.15				.42	330	25
500	13.16	38.380	29.000	4.58	.00	7.93	.33	6.15				.12	125	105
600	13.08	38.378	29.013	4.67	.00	7.86	.33	6.38				.14	135	
700	13.06	38.377	29.017	4.62	.00	7.93	.33	6.73				1.00	1195	
800	13.02	38.368	29.020	4.57	.00	8.10	.35	6.96				.24	1265	
1000	13.00	38.367	29.021	4.66	.00	8.17	.38	7.33				.54	540	
1200	12.98	38.355	29.017	4.65	.00	8.24	.39	7.55						
1400	13.03	38.352	29.004	4.68	.00	8.07	.39	7.65						

## ESTACIÓN 13

FECHA 11/10/76 SITUACIÓN 41 45.0 N PRF.FONDO 2400  
HORA 1700-1950 5 0.0 E D.SECCHI

T. AIRE 21. HUMEDAD 69 VEL.VIENTO 15 ILUM. 0.4  
P.ATMOS 1008 ALT.OLAS 2.5 DIRECCIÓN 200 CIELO

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	21.50	37.680	26.416	5.03	.00	.00	.00	.00	.00	.00	.00	.00	.10	
5	21.48	37.662	26.407	5.02	.00	.00	.00	.00	.00	.00	.00	.00		
10	21.49	37.676	26.416	5.03	.00	.00	.00	.00	.00	.00	.00	.00		
20	21.50	37.668	26.408	5.00	.00	.00	.00	.00	.00	.00	.00	.00		
30	21.15	37.786	26.593	5.08	.00	.00	.00	.00	.00	.00	.00	.00	.13	
40	20.72	37.794	26.717	5.10	.00	.00	.00	.00	.00	.00	.00	.00		
50	18.30	37.804	27.364	5.59	.00	.00	.00	.00	.00	.00	.00	.00		
75	14.80	38.089	28.417	5.93	.06	.00	.00	.00	.00	.39	.30	.00		
100	13.36	38.155	28.782	5.32	.04	.60	.06	.78	.06	.00	.00	.00	.14	
125	13.03	38.203	28.889	4.95	.02	4.98	.08	.08	2.31					
150	13.05	38.246	28.917	4.83	.02	5.49	.10	.10	2.91					
200	13.14	38.316	28.953	4.67	.02	7.03	.24	.24	3.97					
250	13.20	38.366	28.979	4.55	.02	6.90	.22	.22	4.59					
300	13.25	38.374	28.975	4.40	.02	7.72	.26	.26	5.27					
400	13.18	38.387	29.001	4.35	.02	8.08	.30	.30	6.00					
500	13.14	38.364	28.990	4.29	.02	8.41	.37	.37	6.64					
600	13.06	38.349	28.995	4.40	.02	4.98	.30	.30	6.31					
700	13.04	38.382	29.025	4.44	.02	8.26	.39	.39	7.03					
800	13.02	38.379	29.028	4.41	.02	8.45	.41	.41	7.43					
1000	13.02	38.376	29.026	4.48	.02	8.49	.45	.45	7.60					
1200	13.00	38.361	29.018	4.45	.01	8.26	.43	.43	7.55					
1400	12.98	38.350	29.013	4.61	.01	8.37	.45	.45	7.70					

## ESTACION 14

FECHA 12/10/76 SITUACIÓN 41 0.0 N PRF.FONDO 2600  
HORA 850-1100 5 0.0 E D.SECCHI

T. AIRE 17.0 HUMEDAD 82 VEL.VIENTO 10 ILUM. 8.8  
P.ATMOS 1002 ALT.OLAS 3 DIRECCIÓN 340 CIELO 8/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	22.25	37.800	26.294	4.97	.00	.00	.00	.00	.07			.18	1168	350
5	22.23	37.816	26.312	4.94	.00	.00	.00	.00						
10	22.27	37.815	26.300	4.96	.00	.00	.00	.00						
20	22.24	37.813	26.309	4.91	.00	.00	.00	.00						
30	22.25	37.793	26.289	4.98	.00	.00	.00	.00						
40	22.11	37.755	26.302	5.06	.00	.00	.00	.00						
50	19.86	37.457	26.693	5.66	.00	.00	.00	.00						
75	14.96	37.495	27.924	5.64	.00	.00	.00	.00						
100	13.92	37.726	28.330	5.16	.06	1.23	.04	.50						
125	13.55	37.891	28.538	5.05	.06	2.65	.07	.85						
150	13.35	37.977	28.647	5.03	.03	2.81	.07	1.24						
200	13.12	38.064	28.761	4.92	.01	5.19	.09	2.06						
250	13.34	38.176	28.804	4.66	.00	6.84	.14	3.28						
300	13.54	38.278	28.840	4.38	.00	7.59	.19	4.31						
400	13.53	38.320	28.773	4.28	.00	8.03	.21	5.27						
500	13.33	38.314	28.911	4.26	.00	8.47	.26	6.12						
600	13.19	38.290	28.922	4.28	.00	8.69	.26	6.61						
700	13.12	38.248	28.905	4.32	.00	8.61	.28	7.28						
800	13.09	38.239	28.904	4.44	.00	8.88	.38	7.28						
1000	13.05	38.241	28.914	4.44	.00	8.54	.40	7.55						
1200	12.98	38.243	28.929	4.46	.00	8.72	.42	7.80						
1400	13.02	38.264	28.939	4.51	.00	8.61	.45	7.87						

## ESTACIÓN 15

FECHA 12/10/76 SITUACIÓN 40 15.0 N PRF.FONDO 2620  
HORA 2230-0075 5 0.0 E D.SECCHI

T. AIRE	18.4	HUMFDAD	69	VFL.VIENTO	15	ILUM.								
P.ATMOS	1002	ALT.CLAS	3	DIRECCIÓN	255	CIELO 8/8								
PROF	TEMP	SALN	SG-T	OXIG	Nº2	Nº3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	21.73	37.714	26.378	5.11	.00	.00								
5	21.75	37.702	26.362	5.03	.00	.00								
10	21.76	37.703	26.360	5.13	.00	.00								
20	21.77	37.700	26.354	5.21	.00	.00								
30	21.77	37.699	26.355	5.06	.00	.00								
40	21.76	37.725	26.377	5.08	.00	.00								
50	21.75	37.763	26.408	5.38	.00	.00								
75	15.33	37.595	27.916	5.89	.00	.00								
100	13.87	37.802	28.399	5.20	.00	.75								
125	13.52	38.006	28.634	5.15	.06	3.63								
150	13.33	38.125	28.766	5.04	.10	2.96								
200	13.05	38.237	28.910	4.93	.11	5.68								
250	13.24	38.344	28.953	4.67	.12	6.72								
300	13.36	38.402	28.974	4.50	.13	7.51								
400	13.33	38.430	29.003	4.49	.13	8.17								
500	13.24	38.411	29.006	4.35	.15	8.51								
600	13.10	38.395	29.022	4.44	.17	8.48								
700	13.07	38.384	29.021	4.50	.17	8.48								
800	13.07	38.375	29.015	4.49	.17	8.39								
1000	13.07	38.366	29.007	4.43	.17	8.64								
1200	13.08	38.379	29.014	4.71	.17	8.26								
1400	13.07	38.362	29.004	4.81	.17	8.45								

## ESTACIÓN 17

FECHA 17/10/76 SITUACIÓN 38 45.0 N PRF.FONDO 2400  
HORA 2320-0232 3 44.0 E D.SECCHI

T. AIRE	20.9	HUMFDAD	82	VFL.VIENTO	8	ILUM.								
P.ATMOS	1011	ALT.CLAS	1	DIRECCIÓN	250	CIELO								
PROF	TEMP	SALN	SG-T	OXIG	Nº2	Nº3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	21.49	36.969	25.878	5.08	.00	.00	.00	.00	.17			.90	520	150
5	21.49	36.973	25.880	5.04	.00	.00	.00	.00						
10	21.48	36.961	25.873	5.13	.00	.00	.00	.00						
20	21.48	36.961	25.875	5.04	.00	.00	.00	.00						
30	21.48	36.958	25.871	5.04	.00	.00	.00	.00						
40	21.49	36.959	25.870	5.12	.00	.00	.00	.00						
50	16.71	36.646	26.866	5.15	.00	.00	.00	.00						
75	15.38	37.328	27.699	5.77	.00	.01	.02	.12						
100	14.34	37.647	28.179	5.36	.12	.41	.02	.34						
125	13.84	37.811	28.414	5.10	.03	1.82	.04	.59						
150	13.58	38.011	28.625	5.16	.03	2.09	.05	.95						
200	13.30	38.132	28.778	5.00	.04	3.58	.09	1.65						
250	13.07	38.192	28.871	4.95	.10	5.21	.15	2.26						
300	13.12	38.273	28.925	4.80	.07	5.18	.18	2.98						
400	13.27	38.380	28.975	4.60	.05	7.30	.26	4.40						
500	13.20	38.368	28.980	4.47	.10	7.69	.24	5.23						
600	13.10	38.381	29.013	4.53	.07	8.30	.27	6.01						
700	13.09	38.371	29.006	4.47	.06	8.43	.27	6.59						
800	13.09	38.360	28.999	4.52	.06	8.56	.27	7.00						
1000	13.04	38.351	29.002	4.54	.09	8.48	.31	7.45						
1200	12.98	38.349	29.012	4.64	.05	8.66	.33	7.81						
1400	13.01	38.359	29.015	4.74	.03	8.56	.37	7.79						

## ESTACIÓN 18

FECHA 17/10/76 SITUACIÓN 39 16.0 N PRF. FONDO 235  
 HORA 1345-1421 3 16.2 E D. SECCHI 18

T. AIRE 21.3 HUMEDAD VEL. VIENTO 14 ILUM. 26.3  
 P. ATMOS 1009 ALT. OLAS 1 DIRECCIÓN 230 CIELO 7/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FE0F	FLUO	NH4	HET.	FIJ.
0	21.36	37.568	26.371	5.05	.00	.00	.00	.00	.17			.72	838	135
5	21.36	37.553	26.358	5.01	.00	.00	.00	.00						
10	21.36	37.560	26.364	5.02	.00	.00	.00	.00						
20	21.30	37.570	26.387	5.01	.00	.00	.00	.00	.16			.14	740	195
30	21.18	37.583	26.430	5.05	.00	.00	.00	.00						
40	19.51	37.575	26.877	5.57	.00	.00	.00	.00				.48	1230	358
50	17.01	37.778	27.664	6.04	.00	.00	.00	.00				.11	2015	625
75	14.12	37.955	28.465	5.38	.25	1.00	.02	.02	.36	.35				
100	13.49	38.040	28.665	5.18	.04	1.85	.05	1.12	.13			.13	1650	375
125	13.27	38.077	28.742	5.14	.02	3.02	.07	.07	1.83					
150	13.16	38.134	28.809	5.03	.08	3.43	.10	.10	2.01					
200	13.02	38.171	28.866	4.98	.02	4.46	.12	.12	2.18			.37	695	95

## ESTACIÓN 19/2

FECHA 18/10/76 SITUACIÓN 38 20.5 N PRF. FONDO 2680  
 HORA 1530-1610 2 50.0 E D. SECCHI 14.

T. AIRE 22.3 HUMEDAD 83 VEL. VIENTO 10.5 ILUM. 5.3  
 P. ATMOS 1011 ALT. OLAS 2.5 DIRECCIÓN 225 CIELO 2/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FE0F	FLUO	NH4	HET.	FIJ.
0	20.88	36.815	25.927	5.00	.00	.00	.00	.00	.19					
5	20.89	36.811	25.923	4.99	.00	.00	.00	.00						
10	20.90	36.821	25.928	4.98	.00	.00	.00	.00						
20	20.90	36.813	25.922	4.95	.00	.00	.00	.00						
30	20.78	36.812	25.955	4.97	.00	.00	.00	.00				.21		
40	16.40	36.502	26.828	5.72	.00	.00	.00	.00				.22		
50	15.63	36.568	27.058	4.92	.12	.00	.00	.00				.22		
75	14.76	37.049	27.623	4.54	.06	6.22	.04	.04	.99	1.64				
100	14.35	37.543	28.095	4.82	.05	2.82	.10	.10	.83					
125	13.83	37.894	28.480	4.52	.04	4.92	.19	.19	1.48					
150	13.46	38.065	28.692	4.49	.04	5.35	.17	.17	1.81					
200	13.14	38.181	28.850	4.72	.03	5.25	.15	.15	2.24					

## ESTACIÓN 20

FECHA 18/10/76 SITUACIÓN 38 48.0 N PRF.FONDO 720  
HORA 2305-0025 2 21.0 E D.SECCHI

T. AIRE 20.0 HUMEDAD 73 VEL.VIENTO 4.8 ILUM.  
P.ATMOS 1016 ALT.CLAS 0.5 DIRECCIÓN 0 CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FE OF	FLUO	NH4	HET.	FIJ.
0	20.60	36.957	26.113	4.99	.00	.00	.00	.00	.16			.55	785	
5	20.59	36.953	26.111	5.00	.00	.00	.00	.00						
10	20.61	36.955	26.108	4.94	.00	.00	.00	.00						
20	20.64	36.956	25.826	4.88	.00	.00	.00	.00						
30	20.65	36.954	25.821	4.79	.00	.00	.00	.00						
40	16.39	36.927	27.157	6.15	.00	.00	.00	.00						
50	15.75	37.169	27.492	5.59	.00	.00	.00	.00						
75	14.58	37.483	28.000	4.99	.05	1.20	.05	.29						
100	14.00	37.837	28.400	4.87	.05	2.36	.08	.77						
125	13.64	38.033	28.629	4.96	.04	2.99	.14	1.26						
150	13.34	38.116	28.757	4.80	.04	2.57	.17	1.96						
200	13.12	38.166	28.841	4.90	.04	4.03	.20	2.05						
250	13.00	38.199	28.891	4.86	.05	4.54	.22	2.22						
300	12.97	38.243	28.932	4.73	.08	4.43	.25	2.66						
400	13.08	38.334	28.980	4.60	.04	6.62	.31	3.87						
500	13.10	38.406	29.031	4.24	.04	8.30	.34	5.84						
600	13.11	38.402	29.028	4.26	.04	8.98	.37	6.74						
700	13.02	38.395	29.039	4.24	.04	9.02	.43	7.28						

## ESTACIÓN 21

FECHA 19/10/76 SITUACIÓN 39 4.0 N PRF.FONDO 500  
HORA 0950-1045 1 48.0 E D.SECCHI 33

T. AIRE 20.9 HUMEDAD 65 VEL.VIENTO 2.7 ILUM. 66.4  
P.ATMOS 1017 ALT.CLAS 0.5 DIRECCIÓN 210 CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FE OF	FLUO	NH4	HET.	FIJ.
0	20.49	37.115	26.264	4.92	.00	.00	.00	.00	.10					
5	20.41	37.196	26.345	4.96	.00	.00	.00	.00						
10	20.35	37.255	26.397	4.97	.00	.00	.00	.00						
20	20.28	37.280	26.446	4.96	.00	.00	.00	.00						
30	18.39	37.068	26.778	5.57	.00	.00	.00	.00						
40	16.82	37.416	27.431	5.53	.00	.00	.00	.00						
50	15.50	37.636	27.009	5.49	.00	.00	.00	.00						
75	13.89	37.993	28.544	4.97	.10	1.34	.03	.88						
100	13.59	38.104	28.695	4.90	.05	1.43	.09	1.71						
125	13.37	38.138	28.767	4.79	.03	2.58	.14	2.24						
150	13.22	38.176	28.828	4.73	.03	3.46	.17	2.17						
200	13.12	38.284	28.933	4.70	.03	4.79	.21	2.67						
250	13.03	38.330	28.988	4.68	.03	5.40	.24	3.24						
300	13.09	38.369	29.004	4.51	.05	5.66	.30	4.11						
400	13.11	38.410	29.033	4.40	.02	7.55	.35	5.42						

## ESTACIÓN 22

FECHA 19/10/76 SITUACIÓN 39 12.0 N PRF.FONDO 740  
HORA 1935-2115 2 8.0 E D.SECCHI

T. AIPF 18.7 HUMEDAD 81 VEL.VIENTO 7.5 ILUM.  
P.ATMOS 1013 ALT.OLAS DIRECCIÓN 250 CIELO

PROF	TFMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	21.10	36.909	25.940	5.06	.00	.00	.00	.10	1.47	.13	.19	925	73	
5	21.11	36.893	25.924	5.11	.00	.00	.00		1.60	.09				
10	21.10	36.881	25.917	5.08	.00	.00	.00		1.58	.16				
20	21.07	36.890	25.932	5.10	.00	.00	.00	.08	1.67	.07	.70	515	110	
30	21.10	36.856	25.899	5.10	.00	.00	.00		1.51	.11				
40	16.47	36.805	27.045	6.03	.00	.00	.00		1.81	.29				
50	15.64	37.110	27.474	5.84	.00	.00	.00	.26	1.64	.25	.24	155	110	
75	14.48	37.592	28.105	5.34	.13	.30	.05	.62	1.47	.37	.12	1203	843	
100	13.73	37.787	28.419	4.79	.04	3.64	.12	1.66	.11	1.20	.08	875	573	
125	13.42	37.874	28.553	5.03	.03	2.91	.14	1.73						
150	13.23	37.958	28.657	4.95	.03	3.83	.17	2.11	1.03	.03				
200	12.97	38.020	28.759	5.05	.03	4.41	.21	2.40	1.00	.00	.00	9999	70	
250	13.00	38.062	28.785	4.92	.03	5.35	.24	2.77						
300	13.01	38.071	28.791	4.85	.03	5.62	.26	3.41	1.06	.01	.12	2438	198	
400	13.05	38.154	28.846	4.58	.03	7.55	.31	5.16	1.20	.00	.11	760	80	
500	13.09	38.202	28.875	4.43	.04	8.47	.33	6.59			.07	680	300	
600	13.04	38.232	28.909	4.40	.03	8.87	.35	7.24	2.00	.00	.11	1950	1150	
700	13.01	38.190	28.882	4.43	.04	8.95	.40	7.86			.00	4750	188	

## ESTACIÓN 23

FECHA 20/10/76 SITUACIÓN 39 23.3 N PRF.FONDO 65  
HORA 0410-0505 2 34.0 E D.SECCHI

T. AIRE 15.5 HUMEDAD 66 VEL.VIENTO 10 ILUM.  
P.ATMOS 1008 ALT.OLAS DIRECCIÓN CIELO 3/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	20.70	37.117	26.208	5.15	.00	.00	1.00							
5	20.69	37.115	26.208	5.16	.00	.00	1.00							
10	20.75	37.126	26.200	5.16	.00	.00	1.00							
20	20.63	37.320	26.382	5.13	.00	.00	1.00							
30	20.55	37.398	26.462	5.10	.00	.00	1.00							
40	20.30	37.478	26.591	5.14	.00	.00	1.00							
50	17.02	37.218	27.231	5.94	.01	.04	1.00							
60	15.69	37.459	27.729	5.71	.04	.09	1.00							

## ESTACIÓN 24

FECHA 21/10/76 SITUACIÓN 39 52.2 N PRF.FONDO 740  
HORA 1918-2040 2 37.0 E D.SECCHI

T. AIPE 16.5 HUMEDAD 69 VEL.VIENTO 3.5 ILUM.  
P.ATMOS 1024 ALT.CLAS 2.5 DIRECCIÓN 200 CIELO 0

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.		
0	19.91	37.583	26.776	5.31	.00	.00	.00		.17	1.45	.14	.10	7500	150		
5	19.90	37.582	26.778	5.12	.00	.00	.00			1.37	.12					
10	19.93	37.580	26.767	5.18	.00	.00	.00			1.04	.03					
20	19.92	37.593	26.780	5.18	.00	.00	.00		.20	.77	.02	.28	426	128		
30	19.83	37.581	26.795	5.23	.00	.00	.00			1.52	.16					
40	19.73	37.577	26.818	4.88	.00	.00	.00			1.46	.15					
50	16.11	37.288	27.500	5.88	.00	.00	.00			1.33	.25	.54	1315	605		
75	14.36	38.027	28.467	5.67	.06	.09	.06			1.24	.30	.42	1700	608		
100	13.60	38.081	28.675	5.13	.06	1.76	.14	1.93		.28	.94	.03	.79	1688	33	
125	13.38	38.118	28.748	4.92	.02	2.95	.17	2.52								
150	13.31	38.156	28.794	4.90	.04	2.78	.19	2.09			.94	.02				
200	13.15	38.218	28.875	4.90	.02	4.96	.26	2.76			.92	.01	.83	975	480	
250	13.01	38.252	28.931	4.88	.03	5.70	.29	3.28								
300	13.14	38.305	28.944	4.80	.05	6.01	.30	3.78			1.44	.01	.14	5000	213	
400	13.09	38.339	28.982	4.71	.08	7.10	.39	4.97			1.37	.01	.72	688	158	
500	13.08	38.364	29.003	4.62	.01	7.63	.39	5.99						.64	2450	843
600	13.04	38.361	29.009	4.53	.01	8.06	.42	6.96						.12	3750	
700	13.02	38.356	29.010	4.56	.02	8.21	.50	7.69						.42	850	

## ESTACIÓN 25

FECHA 22/10/76 SITUACIÓN 40 12.0 N PRF.FONDO 1700  
HORA 0525-0725 2 11.2 E D.SFCCHI 34

T. AIRE 16.9 HUMEDAD 70 VEL.VIENTO 3.5 ILUM.  
P.ATMOS 1024 ALT.OLAS 0 DIRECCIÓN 225 CIELO 1/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	19.70	37.798	26.995	5.12	.00	.00	.00	.00	.16	1.45	.10	.17	453	245
5	19.70	37.801	26.999	5.20	.00	.00	.00	.00		1.33	.11			
10	19.73	37.799	26.990	5.23	.00	.00	.00	.00		1.41	.12			
20	19.73	37.782	26.977	5.18	.00	.00	.00	.00	.14	1.37	.10	.16	911	638
30	19.77	37.812	26.988	5.23	.00	.00	.00	.00		1.40	.14			
40	16.39	38.008	27.989	6.19	.00	.00	.00	.00		1.68	.18			
50	15.03	38.090	28.367	6.24	.00	.02	.02	.47	.24	1.53	.21	.47	704	155
75	13.24	38.118	28.779	5.63	.04	.07	.04	.76	.24	1.43	.22	.24	3400	2750
100	12.91	38.119	28.849	4.98	.03	3.63	.07	1.68	.21	1.40	.17	.06	125	60
125	12.85	38.130	28.869	4.97	.01	4.38	.12	1.90						
150	12.84	38.154	28.889	5.16	.03	4.37	.17	2.02		1.40	.03			
200	12.97	38.204	28.902	5.04	.03	4.97	.19	2.58		1.21	.01	.84	225	190
250	12.98	38.252	28.936	4.90	.06	5.31	.22	3.25						
300	13.10	38.315	28.962	4.69	.04	5.47	.26	4.04		.93	.01	.35	625	260
400	13.10	38.355	28.992	4.61	.02	7.71	.31	5.16		1.10	.01	.18	1000	743
500	13.13	38.362	28.992	4.54	.02	6.92	.34	6.06		.85	.00	.18	375	178
600	13.09	38.353	28.994	4.52	.02	8.55	.38	6.60					.11	325
700	13.04	38.358	29.008	4.52	.03	8.66	.41	6.97					.16	465
800	12.99	38.346	29.008	4.53	.23	7.89	.41	7.19					.35	320
1000	12.99	38.331	28.997	4.61	.06	8.66	.46	7.58					.40	557
1200	12.99	38.332	28.997	4.63	.02	.00	.46	7.70						
1400	13.00	38.348	29.008	4.74	.02	8.66	.43	8.21						

## ESTACIÓN 26

FECHA 22/10/76 SITUACIÓN 40 32.0 N PRF.FONDO 1600  
HORA 1650-1842 1 46.0 E D.SECCHI 29

T. AIRE 20.8 HUMEDAD 57 VEL.VIENTO 2 ILUM. 10.5  
P.ATMOS 1021 ALT.OLAS 0 DIRECCIÓN 160 CIELO 5/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	18.19	37.938	27.495	5.25	.00	.00	.00	.00	.12	1.61	.09			
5	18.21	37.903	27.461	5.41	.00	.00	.00	.00		1.55	.10			
10	18.21	37.892	27.455	5.30	.00	.00	.00	.00		1.62	.12			
20	18.20	37.911	27.471	5.35	.00	.00	.00	.00	.13	1.56	.11			
30	17.08	37.916	27.753	5.79	.00	.00	.00	.19		1.53	.15			
40	14.95	37.945	28.273	5.64	.00	.00	.00	.59		1.61	.17			
50	14.05	37.993	28.508	6.02	.00	.00	.00	.59	.25	1.52	.24			
75	13.15	38.089	28.774	4.85	.03	2.19	.06	1.25	.22	1.33	.26			
100	13.10	38.097	28.793	4.91	.02	5.49	.21	2.81	.11	1.63	.01			
125	13.10	38.112	28.803	4.94	.02	5.85	.22	3.17						
150	13.10	38.124	28.813	4.75	.02	6.14	.23	3.54		1.67	.07			
200	13.11	38.181	28.855	4.72	.03	6.76	.26	4.36		1.09	.01			
250	13.10	38.163	28.843	4.54	.02	7.15	.29	4.87						
300	13.10	38.145	28.829	4.93	.01	7.37	.31	5.25		1.04	.30			
400	13.05	38.143	28.837	4.89	.02	7.75	.35	5.88		1.10	.01			
500	13.02	38.177	28.871	4.57	.01	8.23	.38	6.76						
600	12.98	38.168	28.872	4.45	.01	8.23	.41	7.05		1.60	.00			
700	12.99	38.140	28.849	4.56	.02	8.30	.41	7.18						
800	12.94	38.138	28.856	4.53	.02	8.12	.43	7.40						
1000	12.97	38.169	28.875	4.75	.02	8.23	.44	7.53						
1200	12.98	38.184	28.885	4.64	.02	8.12	.46	7.71						
1400	12.99	38.228	28.915	4.68	.02	8.23	.47	8.04						

## ESTACIÓN 27

FECHA 23/10/76		SITUACIÓN 40 52.0 N			PRF.FONDO 290									
HORA 0330-0420		1 21.0 E			D.SECCHI									
T. AIRE	HUMEDAD	84	VEL.VIENTO	5	ILUM.									
P.ATMOS	1016	ALT.OLAS 0	DIRECCIÓN	190	CIELO	2/8								
PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FE0F	FLUO	NH4	HET.	FIJ.
0	17.66	37.810	27.530	5.43	.00	.00	.00	.00	.13	1.85	.14			
5	17.66	37.795	27.518	5.35	.00	.00	.00	.00		1.62	.15			
10	17.66	37.796	27.517	5.29	.00	.00	.00	.00		1.60	.14			
20	17.65	37.787	27.512	5.17	.00	.00	.00	.00	.20	1.71	.14			
30	17.46	37.771	27.549	5.29	.00	.00	.00	.00		1.54	.16			
40	15.41	37.982	28.198	5.42	.06	.07	.03	1.03		1.81	.74			
50	14.55	37.992	28.399	5.44	.15	.42	.04	1.06	.39	1.68	.42			
75	13.58	38.044	28.648	5.08	.03	1.47	.07	1.68	.15	1.77	.15			
100	13.38	38.088	28.725	4.89	.03	2.65	.10	2.08	.11	1.48	.09			
125	13.28	38.127	28.776	4.85	.02	3.38	.13	2.25						
150	13.30	38.167	28.804	4.81	.02	4.25	.15	2.57		1.23	.04			
200	13.25	38.240	28.873	4.72	.02	4.91	.18	2.93		1.40	.03			
250	13.27	38.281	28.899	4.68	.02	5.63	.19	3.48						

## ESTACIÓN 28

FECHA 23/10/76		SITUACIÓN 40 11.8 N			PRF.FONDO 57									
HORA 1445-1505		0 29.2 E			D.SECCHI 21									
T. AIRE	HUMEDAD	75	VEL.VIENTO	5	ILUM.	40.3								
P.ATMOS	1013	ALT.OLAS 0	DIRECCIÓN	160	CIELO	7/8								
PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FE0F	FLUO	NH4	HET.	FIJ.
0	19.21	37.949	27.241	5.25	.00	.00	.00	.00	.23	1.76	.19			
5	19.23	37.932	27.222	5.22	.00	.00	.00	.00		1.84	.20			
10	19.21	37.928	27.224	5.23	.00	.00	.00	.00		1.67	.18			
20	19.17	37.935	27.240	5.24	.00	.00	.00	.00	.31	1.79	.27			
30	18.93	37.925	27.295	5.22	.00	.02	.03	.48		1.65	.97			
40	16.67	37.936	27.866	5.77	.00	.00	.05	.78		1.70	.76			
50	14.38	37.971	28.421	4.68	.12	2.06	.24	5.47	.61	1.63	1.13			

## ESTACIÓN 29

FECHA 23/10/76		SITUACIÓN 39 52.0 N			PRF.FONDO 960									
HORA 2130-2258		1 0.0 E			D.SECCHI									
T. AIRE	HUMEDAD	83	VEL.VIENTO	8	ILUM.									
P.ATMOS	1013	ALT.OLAS 0.5	DIRECCIÓN	190	CIELO									
PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FE0F	FLUO	NH4	HET.	FIJ.
0	18.69	37.978	27.398	5.36	.00	.00	.00	.00	.15	1.64	.19	.46	145	78
5	18.68	37.975	27.397	5.35	.00	.00	.00	.00		1.55	.18			
10	18.66	37.973	27.402	5.27	.00	.00	.00	.00		1.57	.17			
20	18.28	37.964	27.493	5.29	.00	.00	.00	.00	.19	1.62	.25	.35	1750	788
30	18.05	37.972	27.555	5.33	.00	.00	.00	.00		1.60	.20			
40	17.76	37.928	27.595	5.36	.00	.00	.00	.07		1.64	.19			
50	17.40	37.933	27.686	5.59	.00	.01	.02	.28	.11	1.59	.27	.22	1000	428
75	13.48	38.081	28.701	5.09	.08	1.06	.05	1.17	.38	1.48	.52	.78	700	650
100	13.28	38.197	28.833	4.71	.03	3.67	.11	2.26	.13	1.34	.10	.44	510	130
125	13.27	38.211	28.845	4.81	.03	4.09	.13	2.57						
150	13.25	38.258	28.885	4.74	.03	5.19	.16	2.95		1.29	.04			
200	13.27	38.341	28.946	4.63	.02	6.08	.20	3.88		1.35	.01	.45	455	170
250	13.27	38.363	28.963	4.59	.03	6.40	.26	4.27						
300	13.29	38.369	28.963	4.71	.04	6.34	.26	4.50		1.30	.01	.36	1330	213
400	13.24	38.394	28.993	4.52	.02	7.06	.28	5.10		1.27	.01	.13	475	108
500	13.22	38.392	28.996	4.56	.03	7.26	.31	5.52			.34	.500		98
600	13.14	38.385	29.008	4.55	.02	7.58	.37	6.12		1.22	.01	.30	1150	
700	13.10	38.389	29.018	4.61	.02	7.53	.39	6.32			.47			
800	13.08	38.384	29.019	4.54	.02	7.55	.42	6.72			.06			

## ESTACIÓN 30

FECHA 24/10/76		SITUACIÓN 39 33.0 N		PRF.FONDO 1460											
HORA 0800-0945		1 30.0 E		D.SECCHI 34											
T. AIRE 18.4		HUMEDAD 82		VEL.VIENTO 0											
P.ATMOS 1009		ALT.OLAS 0		DIRECCIÓN											
				ILUM. 43.8											
				CIELO 5/8											
PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.	
0	19.52	38.007	27.204	5.20	.00	.00	.00	.00	.11	1.63	.15	.11	1979	950	
5	19.50	37.993	27.198	5.34	.00	.00	.00	.00		1.70	.15				
10	19.49	37.982	27.191	5.33	.00	.00	.00	.00		1.60	.14				
20	19.49	37.981	27.192	5.24	.00	.00	.00	.00	.16	1.60	.17	.23	385	380	
30	19.48	37.990	27.202	5.31	.00	.00	.00	.00		1.77	.16				
40	18.51	38.009	27.468	5.57	.00	.00	.00	.00		1.70	.25				
50	15.01	38.088	28.370	6.08	.00	.00	.00	.54	.22	1.50	.26	.61	390	43	
75	13.63	38.177	28.741	5.62	.00	.07	.02	.54	.25	1.70	.39	.55	1800	400	
100	13.21	38.258	28.894	4.82	.04	4.50	.06	2.18	.10	1.72	.16	.40	6250	1225	
125	13.16	38.301	28.938	4.92	.02	5.70	.09	2.88							
150	13.14	38.328	28.962	4.75	.01	6.05	.11	3.24		1.71	.01				
200	13.15	38.352	28.979	4.73	.03	6.64	.15	3.79		1.29	.01	.18	303	165	
250	13.16	38.379	28.997	4.54	.01	7.27	.19	4.78							
300	13.19	38.389	29.001	4.56	.02	7.40	.25	4.81			.90	.00	.24	700	238
400	13.10	38.390	29.019	4.58	.01	7.79	.29	5.36		1.14	.00		.22	503	313
500	13.05	38.376	29.019	4.62	.01	7.74	.33	5.80					.60	375	98
600	13.02	38.375	29.025	4.62	.01	7.99	.36	6.17		1.40	.00		.26		
700	13.01	38.371	29.023	4.59	.01	8.23	.38	6.47					.59	345	
800	13.02	38.366	29.018	4.59	.01	8.17	.38	6.71					.16		
1000	12.96	38.362	29.026	4.55	.01	8.58	.42	7.40					.16		
1200	12.98	38.348	29.011	4.58	.01	8.54	.44	7.71							
1400	12.99	38.345	29.008	4.62	.01	8.61	.44	8.16							

## ESTACIÓN 31

FECHA 25/10/76		SITUACIÓN 39 3.0 N		PRF.FONDO 380										
HORA 1215-1300		1 7.5 E		D.SECCHI										
T. AIRE 16.1		HUMEDAD 65		VEL.VIENTO 12.5										
P.ATMOS 1005		ALT.OLAS 2		DIRECCIÓN 280										
				ILUM. 50.4										
PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	18.56	37.479	27.049	5.30	.00	.00	.00	.00	.22	1.74	.32			
5	18.54	37.479	27.053	5.31	.00	.00	.00	.00		1.70	.23			
10	18.53	37.479	27.057	5.30	.00	.00	.00	.00		1.68	.27			
20	18.56	37.448	27.026	5.26	.00	.00	.00	.00	.18	1.60	.25			
30	16.65	37.283	27.368	5.73	.00	.00	.00	.00		1.75	.84			
40	14.95	37.485	27.919	5.55	.08	.15	.01	.15		1.57	1.15			
50	14.56	37.578	28.076	5.46	.13	.44	.02	.22	.62	1.66	1.26			
75	13.95	37.874	28.438	5.27	.10	.65	.03	1.35	.38	1.48	.6			
100	13.39	37.915	28.591	4.91	.02	2.50	.06	2.25		1.45	.18			
125	13.31	37.953	28.636	4.87	.02	3.16	.12	2.52						
150	13.19	37.960	28.667	4.96	.02	3.37	.15	2.16		1.36	.04			
200	13.17	38.043	28.734	4.87	.02	4.28	.25	2.60		1.27	.03			
250	13.06	38.056	28.768	4.90	.02	4.66	.27	2.88						
300	13.05	38.120	28.819	4.79	.02	5.35	.30	3.62		1.13	.01			

## ESTACIÓN 32

FECHA 25/10/76 SITUACIÓN 39 15.0 N PRF.FONDO 1280  
HORA 0500-0645 0 34.0 E D.SECCHI 21

T. AIRE 12.5 HUMEDAD 78 VEL.VIENTO 18 ILUM.  
P.ATMOS 1001 ALT.OLAS 3 DIRECCIÓN 250 CIELO 3/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	18.59	37.391	26.974	5.45	.00	.00	.00	.00	.20	1.82	.19			
5	18.57	37.333	26.935	5.38	.00	.00	.00	.00		1.40	.29			
10	18.56	37.320	26.926	5.31	.00	.00	.00	.00		1.70	.20			
20	18.60	37.320	26.915	5.30	.00	.00	.00	.00	.18	1.70	.20			
30	18.63	37.337	26.923	5.33	.00	.00	.00	.00		1.72	.21			
40	15.53	37.449	27.759	6.32	.00	.00	.00	.00		1.61	.52			
50	14.88	37.483	27.933	5.82	.00	.00	.00	.00	.44	1.58	.56			
75	14.07	37.863	28.404	5.71	.07	1.13	.01	.37	.28	1.59	.41			
100	13.42	37.982	28.635	5.52	.02	1.22	.02	1.02	.13	1.44	.12			
125	13.22	37.954	28.655	5.12	.02	2.68	.03	1.72						
150	13.18	37.955	28.665	5.13	.02	3.23	.05	2.02		1.27	.04			
200	13.11	37.990	28.708	5.17	.02	3.34	.08	1.97		1.23	.02			
250	13.06	38.017	28.738	5.09	.02	3.54	.10	1.98						
300	13.03	38.026	28.752	5.09	.03	3.93	.13	2.13		1.22	.01			
400	13.17	38.128	28.800	4.67	.02	5.55	.19	3.09		1.22	.01			
500	13.16	38.186	28.849	4.69	.03	6.67	.21	4.20						
600	13.14	38.237	28.892	4.58	.02	7.54	.24	5.49		.98	.01			
700	13.14	38.257	28.908	4.54	.02	8.05	.28	6.33						
800	13.03	38.235	28.913	4.58	.02	8.19	.33	7.01						
1000	13.01	38.237	28.919	4.59	.02	8.45	.39	7.51						
1200	12.99	38.300	28.973	4.47	.02	8.45	.44	8.19						

## ESTACIÓN 33

FECHA 24/10/76 SITUACIÓN 39 27.0 N PRF.FONDO 105  
HORA 2255-2325 0 0.0 E D.SECCHI

T. AIRE 14.4 HUMEDAD 88 VEL.VIENTO 4.5 ILUM.  
P.ATMOS 1001 ALT.OLAS 0.5 DIRECCIÓN 290 CIELO

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	18.95	37.732	27.143	5.27	.00	.00	.00	.00	.17	1.52	.16			
5	18.94	37.729	27.143	5.26	.00	.00	.00	.00		1.58	.17			
10	18.96	37.724	27.134	5.24	.00	.00	.00	.00		1.55	.17			
20	19.16	37.916	27.228	5.03	.00	.00	.00	.00	.19	1.58	.17			
30	19.09	37.944	27.268	5.19	.00	.00	.00	.00		1.85	.20			
40	16.75	37.961	27.866	5.90	.00	.00	.00	.00	.38	1.53	.25			
50	14.66	37.972	28.358	5.89	.00	.00	.03	.81	.30	1.48	.31			
75	13.58	38.031	28.639	4.98	.06	2.54	.08	2.85	.47	1.16	.56			
100	13.55	38.035	28.650	5.02	.05	2.95	.13	3.26	.39	1.10	.43			

## ESTACIÓN 34

FECHA 29/10/76 SITUACIÓN 38 47.3 N PRF.FONDO 115  
HORA 1140-1205 1 7.5 E D.SECCHI 25

T. AIRE 16.0 HUMEDAD 82 VEL.VIENTO 1.5 ILUM. 38.5  
P.ATMOS 1004 ALT.OLAS 0.25 DIRECCIÓN 250 CIELO 7/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	17.54	37.333	27.192	5.32	.00	.00	.00	.00	.24	1.58	.24			
5	17.52	37.331	27.196	5.27	.00	.01	.00	.00		1.55	.26			
10	17.54	37.353	27.208	5.37	.00	.02	.00	.00		1.65	.45			
20	17.12	37.315	27.281	5.36	.00	.02	.00	.00	.51	1.61	.53			
30	16.87	37.339	27.359	5.45	.02	.07	.00	.00		1.64	.81			
40	14.66	37.519	28.008	5.14	.37	1.82	.03	.56		1.53	.85			
50	14.37	37.689	28.204	5.11	.31	2.40	.06	.70	.55	1.58	.56			
75	13.65	37.958	28.568	4.90	.05	3.24	.09	1.35	.33	1.30	.23			
100	13.36	38.043	28.695	4.88	.04	3.79	.11	1.88	.13	1.33	.14			

## ESTACIÓN 35

FECHA 29/10/76 SITUACIÓN 38 45.0 N PRF.FONDO 820  
HORA 1700-1820 0 42.0 E D.SFCCHI 26

T. AIRE 15.5 HUMEDAD 79 VEL.VIENTO 2 ILUM.  
P.ATMOS 1005 ALT.OLAS 0 DIRECCIÓN 180 CIELO

PROF	TFMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	18.14	37.703	27.327	5.27	.00	.01	.00	.00	.19	1.88	.10	.72	828	575
5	18.13	37.702	27.328	5.29	.00	.02	.00	.00		1.62	.08			
10	18.13	37.710	27.335	5.26	.00	.02	.00	.00		1.76	.11			
20	18.12	37.712	27.337	5.28	.01	.03	.00	.06	.22	1.83	.20	.24	200	103
30		37.717		5.29	.01	.03	.00	.07		1.70	.25			
40	17.35	37.822	27.614	5.56	.02	.05	.00	.18		1.66	.37			
50	15.26	37.834	28.117	5.71	.08	.21	.01	.36	.50	1.60	.51	.22	938	185
75	13.88	37.925	28.493	5.16	.12	1.99	.07	.73	.42	1.50	.28	.62	495	120
100	13.35	38.046	28.700	4.84	.04	3.24	.11	2.15	.13	1.52	.13	.20	375	43
125	13.22	38.080	28.754	4.94	.04	3.77	.15	2.31						
150	13.14	38.106	28.791		.03	3.75	.15	2.00		1.48	.02			
200	13.00	38.123	28.832	5.09	.03	4.02	.17	2.01		1.27	.01	.12	650	75
250	13.05	38.192	28.877	4.90	.03	5.10	.18	2.57						
300	13.15	38.274	28.919	4.75	.03	5.71	.34	3.55		1.42	.01	.36	230	95
400	13.15	38.323	28.956	4.61	.03	7.09	.32	4.75		1.14	.01	.18	633	155
500	13.14	38.342	28.974	4.51	.03	7.70	.36	5.76			.36	348	183	
600	13.06	38.330	28.981	4.52	.02	7.97	.37	6.54		1.54	.00	.18	615	
700	13.02	38.323	28.984	4.59	.02	8.08	.40	6.82				.36	693	
800	12.99	38.319	28.988	4.61	.02	8.29	.44	7.63				.24	583	

## ESTACIÓN 36

FECHA 30/10/76 SITUACIÓN 38 44.5 N PRF.FONDO 63  
HORA 0120-0150 0 17.5 E D.SECCHI

T. AIRE 14.5 HUMEDAD 80 VEL.VIENTO 3 ILUM.  
P.ATMOS 1004 ALT.OLAS 0 DIRECCIÓN 300 CIELO 2/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	17.73	37.895	27.578	5.18	.02	.15		.16	.44	1.67	.50	.30	1120	
5	17.71	37.903	27.586	5.22	.02	.16		.16		1.64	.56			
10	17.71	37.910	27.594	5.20	.02	.16		.16		1.66	.52			
20	17.73	37.930	27.603	5.20	.02	.16		.19	.47	1.66	.54	.44	1095	
30	17.72	37.940	27.614	5.23	.02	.16		.19		1.65	.54			
40	17.46	37.936	27.674	5.23	.04	.21		.28		1.69	.58			
50	16.04	38.008	28.071	5.48	.12	.40		.91	.66	1.61	.62	.19	1725	

## ESTACIÓN 37

FECHA 30/10/76 SITUACIÓN 38 23.0 N PRF.FONDO 810  
HORA 0700-0840 0 35.0 E D.SECCHI 26

T. AIRE 22.6 HUMEDAD 59 VEL.VIENTO 6.5 ILUM. 10.5  
P.ATMOS 1007 ALT.OLAS 0.75 DIRECCIÓN 025 CIELO 3/8

PROF	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	17.95	37.474	27.199	5.23	.00	.00	.00	.00	.25	1.70	.22	.25	1600	438
5	17.91	37.481	27.213	5.27	.00	.00	.00	.00		1.67	.22			
10	17.95	37.496	27.216	5.27	.00	.00	.00	.00		1.55	.41			
20	17.95	37.503	27.221	5.27	.00	.00	.00	.00	.21	1.70	.18	.16	500	220
30	17.96	37.495	27.211	5.27	.00	.00	.00	.00		1.72	.24			
40	17.95	37.537	27.246	5.27	.00	.00	.00	.00		1.66	.46			
50	17.68	37.592	27.356	5.33	.01	.01	.03	.15	.35	1.56	.33	.54	1730	320
75	14.79	37.875	28.256	5.75	.07	.14	.07	.86	.41	1.62	.38	1.50	1520	438
100	13.66	37.973	28.578	5.24	.10	1.01	.09	1.49	.18	1.38	.15	.56	800	155
125	13.34	38.004	28.069	4.94	.04	2.85	.11	2.19						
150	13.16	38.026	28.724	4.92	.03	3.60	.15	2.30		1.46	.04			
200	13.22			4.77	.02	4.55	.21	2.77		1.38	.04	.25	750	283
250	13.06	38.133	28.829	4.78	.02	5.09	.21	2.92						
300	13.09	38.197	28.871	4.75	.02	5.72	.26	3.74		1.18	.02	.37	1383	175
400	13.10	38.260	28.919	4.58	.02	7.02	.30	5.19		1.11	.01	.28	765	158
500	13.14	38.274	28.921	4.57	.01	7.44	.35	5.80			.25	1080	430	
600	13.02	38.276	28.948	4.46	.01	8.08	.38	7.37		1.43	.01	.37	1400	
700	12.98	38.275	28.954	4.47	.01	8.29	.44	7.90				.37	1750	
800	12.97	38.312	28.985	4.50	.01	8.21	.38	7.93						715

## ESTACIÓN 38

FECHA 30/10/76 SITUACIÓN 38 0.0 N PRF.FONDO 2400  
HORA 1642-1840 0 54.0 E D.SECCHI

T. AIRE 16.5 HUMEDAD 74 VFL.VIENTO 2.5 ILUM. 1.4  
P.ATMOS 1008 ALT.OLAS 0 DIRECCIÓN 320 CIELO 1/8

PROF	TEMP	SALN	SG-T	OXIG	N02	N03	P04	S104	CL-A	EOF	FLUO	NH4	HET.	FIJ.
0	18.28	37.399	27.057	5.27	.00	.00	.00	.00	.16	1.73	.13	.20		
5	18.29	37.390	27.049	5.26	.00	.00	.00	.00		1.72	.13			
10	18.30	37.436	27.082	5.27	.00	.00	.00	.00		1.56	.13			
20	18.30	37.531	27.153	5.27	.00	.01	.00	.07	.16	1.59	.22	.19		
30	18.28	37.546	27.170	5.27	.00	.01	.00	.07		1.50	.17			
40	18.29	37.574	27.190	5.26	.00	.01	.00	.07		1.56	.26			
50	15.65	37.630	27.871	5.74	.02	.04	.06	.25	.62	1.57	.21	.46		
75	14.25	37.839	28.347	5.30	.11	1.03	.08	.48	.48	1.56	.43	.36		
100	13.62	37.996	28.605	4.92	.05	2.94	.12	1.42	.19	1.55	.16	.32		
125	13.29	38.083	28.741	4.82	.03	4.09	.16		1.98					
150	13.13	38.117	28.800	4.84	.03	4.60	.18	2.25		1.34	.03			
200	13.05	38.185	28.870	4.81	.03	5.33	.22	2.77		1.12	.01	.20		
250	13.03	38.226	28.907	4.84	.03	5.53	.24	3.04						
300	13.12	38.286	28.934	4.66	.03	5.81	.27	3.87		1.05	.00	.27		
400	13.20	38.355	28.971	4.35	.02	7.69	.32	5.35		.98	.00	.27		
500	13.13	38.359	28.989	4.39	.02	7.86	.35	6.24			1.00	.29		
600	13.11	38.351	28.986	4.41	.02	8.26	.37	6.70		.93	.00	.27		
700	13.06	38.345	28.993	4.41	.02	8.48	.40	7.05				.45		
800	13.02	38.347	29.002	4.41	.02	8.40	.39	7.54				.54		
1000	13.03	38.339	28.994	4.44	.02	8.69	.40	7.75				.27		
1200	12.97	38.334	29.002	4.48	.02	8.60	.44	8.02						
1400	13.02	38.343	29.000	4.59	.02	8.40	.39	7.94						

## ESTACIÓN 39

FECHA 31/10/76 SITUACIÓN 37 36.0 N PRF.FONDO 2720  
HORA 0335-0535 1 14.0 E D.SECCHI

T. AIRE 15.7 HUMEDAD 82 VEL.VIENTO 12 ILUM.  
P.ATMOS 1012 ALT.OLAS 0.5 DIRECCIÓN 310 CIELO 5/8

PROF	TEMP	SALN	SG-T	OXIG	N02	N03	P04	S104	CL-A	EOF	FLUO	NH4	HET.	FIJ.
0	17.95	36.962	26.806	5.30	.00	.00	.00	.00	.37	1.51	.26	1.78	1590	1015
5	17.96	36.957	26.800	5.33	.00	.00	.00	.00		1.49	.28			
10	17.96	36.961	26.802	5.31	.00	.00	.00	.00		1.46	.29			
20	17.97	36.952	26.794	5.30	.00	.00	.00	.00	.43	1.43	.32	.27	2750	
30	17.92	36.964	26.815	5.29	.00	.02	.00	.02		1.41	.35			
40	14.75	37.143	27.698	5.03	.28	2.44	.05	.72			1.09			
50	14.46	37.310	27.891	4.96	.09	3.23	.08	1.04	.64	1.40	.35	.21	263	88
75	14.27	37.589	28.148	4.94	.05	2.45	.11	.71	.17	1.33	.17	.63	308	323
100	13.78	37.846	28.453	4.75	.03	3.52	.14	1.06	.09	1.27	.08	.45	425	144
125	13.48	38.010	28.644	4.68	.03	4.56	.16	1.65						
150	13.24	38.101	28.766	4.67	.03	5.07	.18	2.00		1.31	.03			
200	13.10	38.190	28.864	4.67	.02	5.70	.21	2.65		1.15	.02	.33	1270	570
250	13.08	38.260	28.923	4.63	.02	6.18	.22	3.24						
300	13.28	38.349	28.950	4.36	.02	7.06	.26	4.28		1.17	.01	.24	1940	1000
400	13.29	38.415	28.999	4.20	.02	8.15	.34	5.44		1.31	.01	.24	558	438
500	13.25	38.411	29.004	4.23	.02	8.61	.36	6.21				1.95	2830	1675
600	13.19	38.404	29.011	4.22	.02	8.73	.37	6.70		1.25	.00	.48	3430	2200
700	13.10	38.386	29.016	4.30	.02	8.82	.39	6.97				.36	2150	568
800	13.06	38.378	29.018	4.35	.02	8.67	.39	7.29				.26	645	428
1000	13.02	38.350	29.004	4.37	.02	8.82	.45	7.60				.16		
1200	13.01	38.367	29.021	4.48	.02	8.67	.46	7.70						
1400	13.01	38.373	29.026	4.52	.02	8.64	.39	7.91		1.00				

## ESTACIÓN 40

FECHA 31/10/76 SITUACIÓN 36 52.0 N PRF.FONDO 2640  
HORA 2250-0038 0 8.0 W D.SECCHI

T. AIRE 16.5 HUMEDAD 85 VEL.VIENTO 8 ILUM.  
P.ATMOS 1020 ALT.OLAS 1 DIRECCIÓN 270 CIELO 2/8

PROF.	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FE0F	FLUO	NH4	HET.	FIJ.
0	17.70	36.762	26.715	5.24	.00	.00	.00	.46	1.94	.38	.36	1725	288	
5	17.70	36.747	26.704	5.24	.00	.00	.00		1.68	.36				
10	17.57	36.746	26.733	5.26	.00	.00	.00		1.71	.36				
20	17.54	36.770	26.761	5.25	.00	.00	.00	.59	1.82	.42	.27	800	290	
30	14.97	37.309	27.777	5.43	.03	.06	.00	.18	1.67	1.70				
40	14.70	37.412	27.918	4.92	.29	2.05	.04	.61	1.49	1.37				
50	14.42	37.588	28.116	4.89	.17	1.68	.01	.26	.81	1.64	.76	.45	345 28	
75	13.84	37.889	28.474	4.88	.04	2.67	.07	.82	.28	1.47	.19	.45	520 348	
100	13.41	38.014	28.662	4.92	.03	2.87	.10	1.21	.07	1.28	.07	.32	713 75	
125	13.15	38.081	28.769	4.79	.03	4.50	.14	1.78						
150	13.13	38.122	28.805	4.68	.03	5.48	.17	2.22	1.18	.02				
200	13.19	38.205	28.857	4.44	.03	6.60	.21	3.12	1.14	.02	.29	2000	148	
250	13.24	38.269	28.897	4.41	.03	7.18	.23	3.81						
300	13.34	38.317	28.911	4.11	.03	8.11	.27	4.90	1.06	.01	.26	915	250	
400	13.30	38.351	28.948	4.12	.03	8.62	.33	5.76	1.08	.01	.29	1400	243	
500	13.17	38.324	28.953	4.24	.03	8.41	.34	6.11		.34	1800	750		
600	13.09	38.326	28.971	4.29	.03	8.41	.35	6.43	1.10	.00	.38	1750	75	
700	13.06	38.307	28.962	4.28	.02	8.54	.35	6.88			.36	1318	53	
800	13.06	38.296	28.954	4.30	.02	8.67	.40	7.19			.22	510	160	
1000	13.04	38.310	28.970	4.30	.02	8.54	.43	7.51			.40	800	20	
1200	13.01	38.303	28.971	4.36	.02	8.67	.46	7.64						
1400	13.00	38.309	28.977	4.42	.02	8.54	.41	7.78						

## ESTACIÓN 41

FECHA 1/11/76 SITUACIÓN 37 14.0 N PRF.FONDO 2500  
HORA 0520-0720 0 24.0 W D.SECCHI 24

T. AIRE 17.9 HUMEDAD 73 VEL.VIENTO 4.5 ILUM. 4.2  
P.ATMOS 1021 ALT.OLAS 0.2 DIRECCIÓN 330 CIELO 1/8

PROF.	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FE0F	FLUO	NH4	HET.	FIJ.
0	17.96	36.907	26.761	5.23	.00	.00	.00	.33	1.77	.32				
5	17.96	36.898	26.753	5.21	.00	.00	.00		1.76	.27				
10	17.96	36.885	26.744	5.21	.00	.00	.00		1.86	.31				
20	17.95	36.873	26.739	5.20	.00	.00	.00	.36	1.82	.32				
30	16.89	37.076	27.153	5.30	.00	.00	.00		1.81	.56				
40	16.31	37.207	27.392	5.27	.03	.07	.05	.15	1.68	.76				
50	14.85	37.246	27.756	4.86	.38	2.38	.08	.94	.63	1.70	.76			
75	14.15	37.753	28.302	4.75	.12	2.24	.08	1.14	.10	1.60	.30			
100	13.71	37.941	28.543	4.70	.04	3.13	.12	1.72	.07	1.56	.11			
125	13.40	38.029	28.676	4.77	.03	3.50	.14	1.74						
150	13.17	38.083	28.766	4.74	.03	4.19	.17	2.21	1.50	.03				
200	13.10	38.147	28.831	4.72	.03	4.91	.19	2.55	1.17	.01				
250	13.13	38.263	28.914	4.50	.03	6.22	.24	3.62						
300	13.29	38.342	28.941	4.24	.03	7.22	.25	4.61	1.18	.01				
400	13.19	38.373	28.989	4.22	.02	7.69	.31	5.69	.69	.00				
500	13.15	38.350	28.977	4.24	.02	7.94	.35	6.53						
600	13.09	38.353	28.992	4.22	.02	8.15	.36	7.09	1.20	.00				
700	13.04	38.345	28.996	4.29	.02	8.15	.36	7.45						
800	13.03	38.338	28.993	4.28	.02	8.11	.40	7.77						
1000	13.02	38.326	28.985	4.32	.02	8.47	.42	8.02						
1200	12.97	38.318	28.990	4.40	.02	8.40	.43	8.10						
1400	13.00	38.341	29.001	4.41	.02	8.40	.42	8.36						

## ESTACIÓN 42

FECHA 1/11/76 SITUACIÓN 37 34.0 N PRF.FONDO 85  
HORA 1400-1428 0 39.0 W D.SECCHI

T. AIRE 21.2 HUMEDAD 63 VEL.VIENTO 3 ILUM. 43.8  
P.ATMOS 1021 ALT.OLAS 0 DIRECCIÓN 210 CIELO 3/8

PROF.	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	16.81	37.006	27.118	5.36	.00	.00	.00	.00	.23	1.77	.21		925	350
5	16.81	37.009	27.119	5.34	.00	.00	.00	.00		1.78	.22			
10	16.74	37.001	27.131	5.37	.00	.00	.00	.00		1.69	.20			
20	16.33	37.128	27.326	5.36	.03	.07	.03	.16	.45	1.70	.64		400	60
30	15.73	37.239	27.552	5.34	.07	.24	.08	.34		1.73	.81			
40	15.43	37.267	27.641	5.10	.17	.97	.10	.82		1.67	.88			
50	15.35	37.255	27.650	5.06	.20	1.19	.13	.87	.81	1.81	1.00		1760	520
75	13.90	37.710	28.323	4.65	.07	2.97	.18	1.96	.27	1.50	.26			578

## ESTACIÓN 43

FECHA 1/11/76 SITUACIÓN 37 20.0 N PRF.FONDO 210  
HORA 2150-2240 1 36.0 W D.SECCHI

T. AIRE 16.4 HUMEDAD 74 VEL.VIENTO 3 ILUM.  
P.ATMOS 1022 ALT.OLAS 0 DIRECCIÓN 290 CIELO 5/8

PROF.	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	16.81	36.958	27.080	5.30	.00	.00	.00	.00	.35	1.65	.15			.26
5	16.81	36.952	27.076	5.31	.00	.00	.00	.00		1.70	.17			
10	16.74	36.979	27.113	5.32	.00	.00	.00	.00		1.56	.22			
20	16.42	37.023	27.223	5.36	.01	.03	.00	.00	.85	1.82	1.49			.29
30	16.26	37.048	27.281	5.40	.01	.03	.00	.00		1.57	.72			
40	16.15	37.084	27.334	5.38	.02	.05	.02	.08		1.74	1.14			
50	15.35	37.117	27.545	5.42	.11	.42	.05	.17	1.33	1.65	.99			.35
75	14.51	37.582	28.092	4.79	.24	2.41	.09	1.13	.46	1.52	.43			.47
100	14.26	37.668	28.212	4.71	.15	2.73	.11	1.31	.32	1.57	.52			
125	13.87	37.820	28.415	4.68	.05	2.94	.14	1.64						
150	13.45	37.982	28.630	4.68	.03	3.37	.18	1.93		1.48	.10			
200	13.21	38.056	28.737	4.75	.02	3.73	.20	2.14		1.20	.06			

## ESTACIÓN 44

FECHA 2/11/76 SITUACIÓN 37 7.2 N PRF.FONDO 2000  
HORA 0350-0555 1 24.5 W D.SECCHI

T. AIRE 15.8 HUMEDAD 78 VEL.VIENTO 4 ILUM.  
P.ATMOS 1021 ALT.OLAS 0 DIRECCIÓN 220 CIELO 0

PROF.	TEMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SIO4	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
*****														
0	17.82	36.792	26.707	5.44	.00	.00	.00	.00	.40	1.85	.24			
5	17.81	36.775	26.697	5.39	.00	.00	.00	.00		1.73	.22			
10	17.80	36.776	26.701	5.35	.00	.00	.00	.00		1.83	.28			
20	17.82	36.772	26.692	5.42	.00	.00	.00	.00	.43	1.82	.31			
30	17.80	36.782	26.706	5.41	.00	.00	.00	.00		1.80	.24			
40	17.73	36.815	26.747	5.41	.01	.01	.00	.00		1.89	.26			
50	15.54	37.098	27.486	6.10	.02	.01	.05	.04	.78	1.90	.78			
75	14.07	37.610	28.209	4.62	.05	3.85	.09	.07	.21	1.67	.19			
100	13.66	37.849	28.481	4.70	.04	3.94	.11	1.46	.11	1.26	.07			
125	13.34	38.005	28.670	4.85	.04	3.63	.12	1.72						
150	13.13	38.065	28.761	4.89	.04	3.88	.16	1.94		1.51	.07			
200	13.00	38.095	28.810	5.03		3.94	.18	2.25		1.24	.02			
250	13.08	38.168	28.852	4.73	.03	-5.43	.23	2.27						
300	13.20	38.230	28.874	4.55	.02	6.01	.23	3.13		1.23	.01			
400	13.33	38.331	28.926	4.33	.02	7.10	.28	3.97		1.36	.01			
500	13.30	38.340	28.939	4.29	.02	7.22	.30	5.37						
600	13.14	38.322	28.959	4.32	.02	7.60	.36	6.24		1.32	.01			
700	13.09	38.340	28.982	4.37	.02	8.20	.37	6.97						
800	13.09	38.323	28.969	4.39	.02	8.56	.39	7.53						
1000	13.04	38.314	28.973	4.50	.02	8.42	.39	7.88						
1200	13.01	38.321	28.983	4.50	.02	8.44	.43	8.17						
1400	13.00	38.330	28.993	4.52	.02	8.20	.36	8.17						

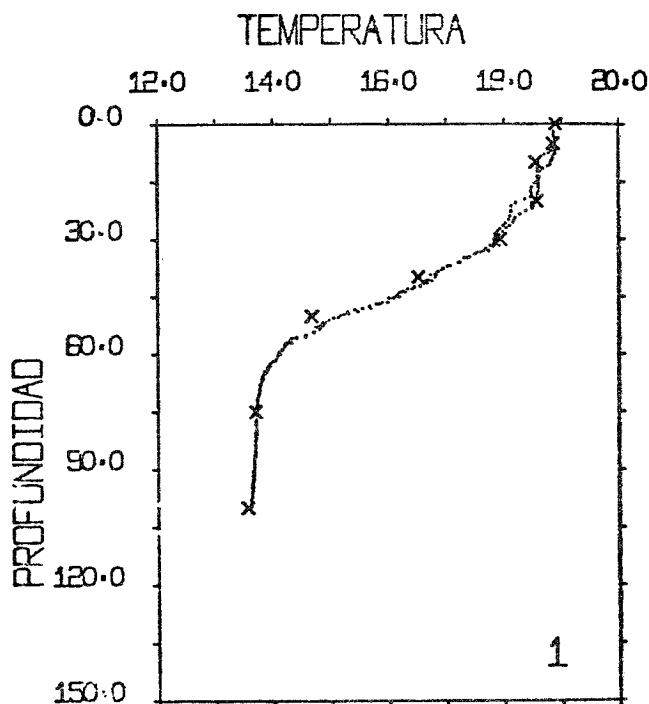
## ESTACIÓN 45

FFCHA 2/11/76 SITUACIÓN 36 55.0 N PRF.FONDO 2500  
HORA 1005-1155 1 12.0 W D.SECCHI 32

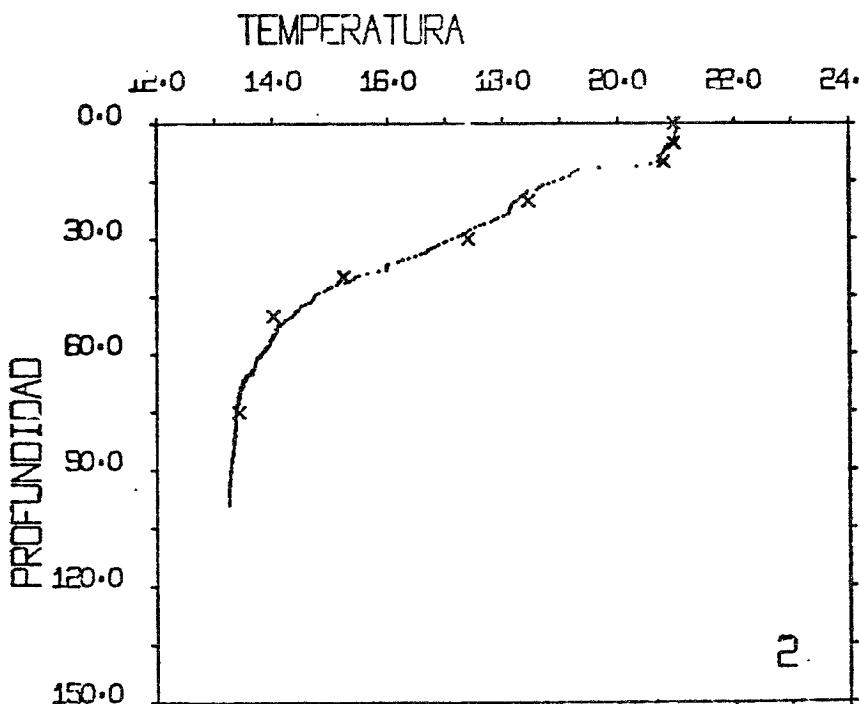
T. AIRE 18.4 HUMEDAD 79 VEL.VIENTO 4 ILUM. 52.5  
P.ATMOS 1023 ALT.CLAS 0.5 DIRFCCIÓN 240 CIELO 1/8

PROF	TFMP	SALN	SG-T	OXIG	NO2	NO3	PO4	SI04	CL-A	FEOF	FLUO	NH4	HET.	FIJ.
0	17.22	37.064	27.064	5.50	.00	.00	.00	.00	.25	1.78	.18	.64	153	5
5	17.22	37.063	27.062	5.49	.00	.00	.00	.00		1.67	.18			
10	17.10	37.062	27.091	5.48	.00	.00	.00	.00		1.81	.15			
20	17.08	37.061	27.094	5.49	.00	.00	.00	.00	.27	1.75	.42	.35	613	40
30	16.76	37.063	27.175	5.59	.00	.02	.00	.15		1.82	1.53			
40	15.18	37.169	27.622	5.44	.07	.51	.02	.51		1.73	1.43			
50	15.00	37.317	27.778	5.49	.03	1.70	.04	.62	1.24	1.64	1.18	.50	343	
75	14.14	37.594	28.180	5.14	.04	1.76	.06	.62	.34	1.45	.21	.29	440	4
100	13.76	37.965	28.550	4.89	.04	3.03	.08	1.10	.22	1.53	.07		438	25
125	13.44	38.085	28.712	4.91	.03	3.27	.10	1.60						
150	13.17	38.142	28.813	4.98	.03	3.69	.14	2.08		1.48	.06			
200	13.05	38.210	28.890	4.90	.03	4.71	.20	2.48		1.33	.02	.23	448	20
250	13.10	38.271	28.928	4.73	.02	6.01	.22	3.09						
300	13.23	38.353	28.963	4.48	.02	7.00	.26	4.09		1.36	.03	.26	278	50
400	13.27	38.415	29.003	4.46	.02	7.64	.31	5.28		1.41	.02	.24	425	
500	13.27	38.441	29.022	4.27	.02	8.35	.39	6.49				3.05	913	150
600	13.14	38.428	29.040	4.31	.02	8.66	.45	6.94		2.16	.02	.78	575	10
700	13.13	38.429	29.042	4.29	.02	8.89	.49	7.58				4.55	685	5
800	13.09	38.417	29.043	4.33	.02	8.79	.49	7.85				.36	885	
1000	13.07	38.395	29.031	4.41	.02	8.74	.53	8.20				.64	718	220
1200	12.99	38.392	29.043	4.62	.02	8.54	.55	8.12						
1400	12.99	38.392	29.043	4.52	.02	8.44	.49	8.26						

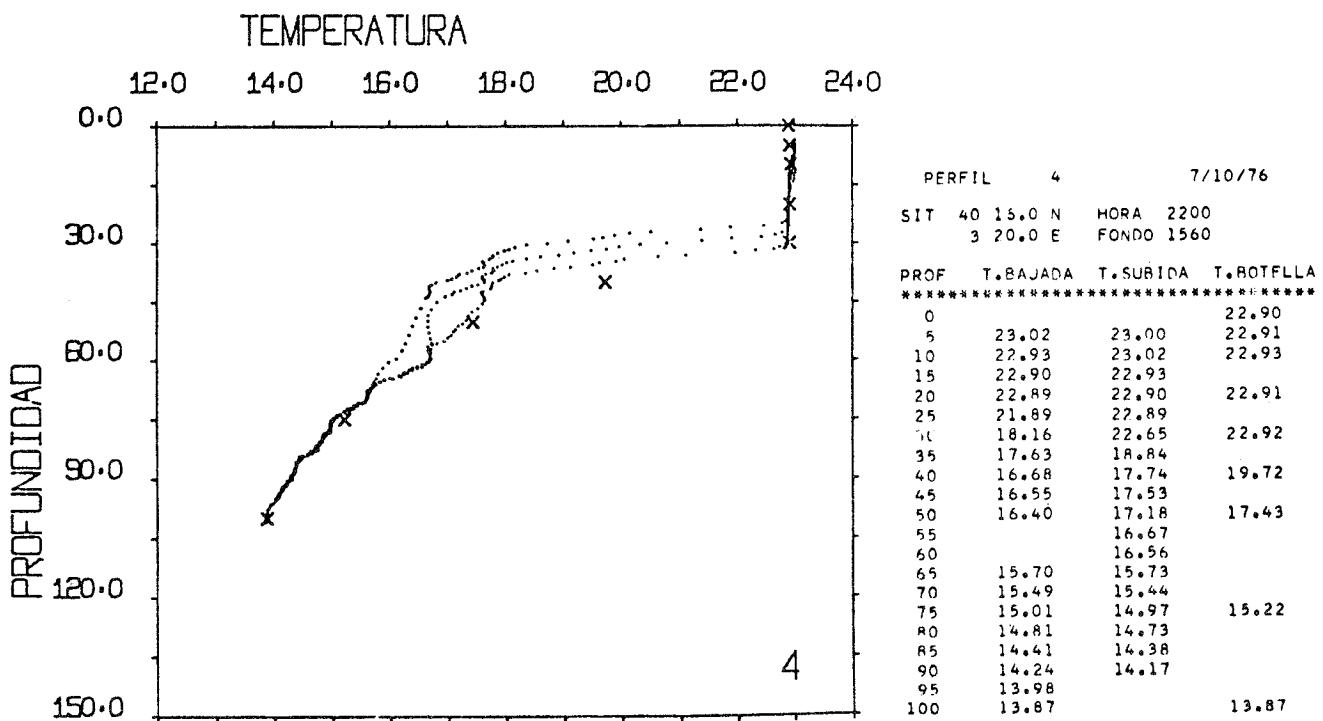
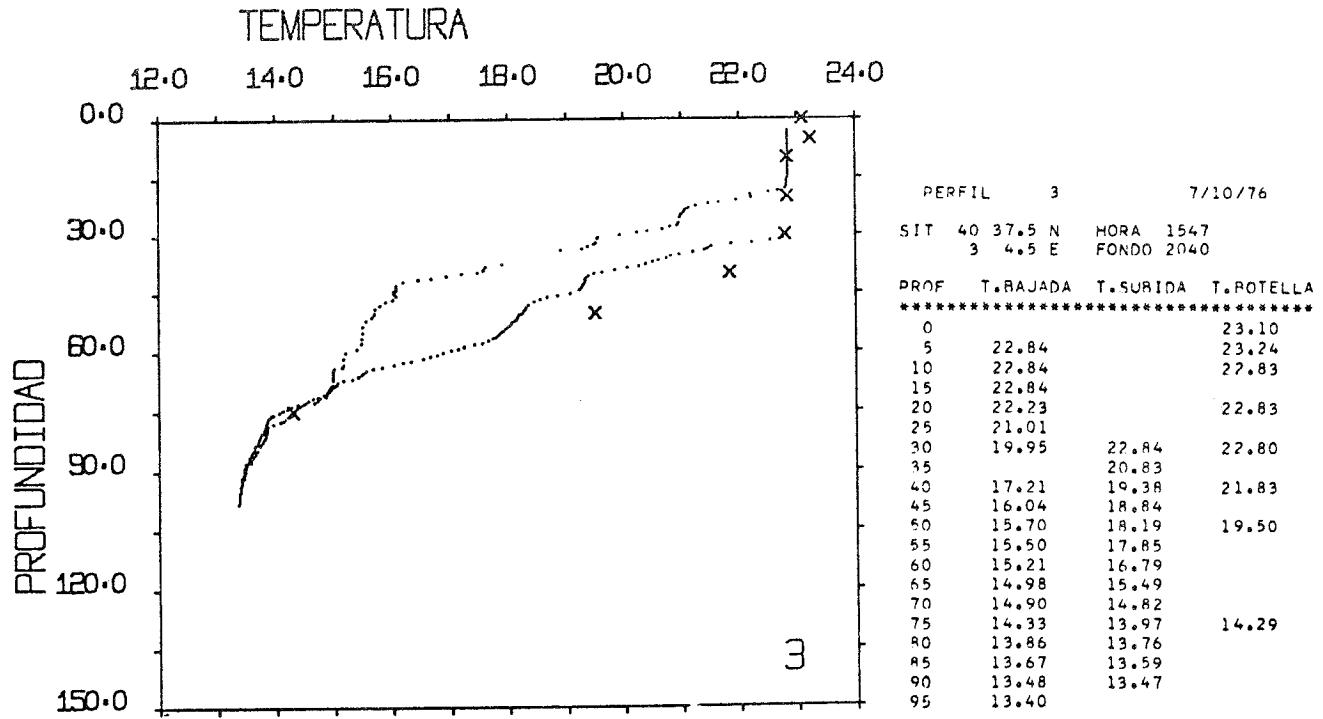
CUADRO II.- Perfiles térmicos obtenidos entre 150-100 m. y la superficie, acompañados de las correspondientes figuras.

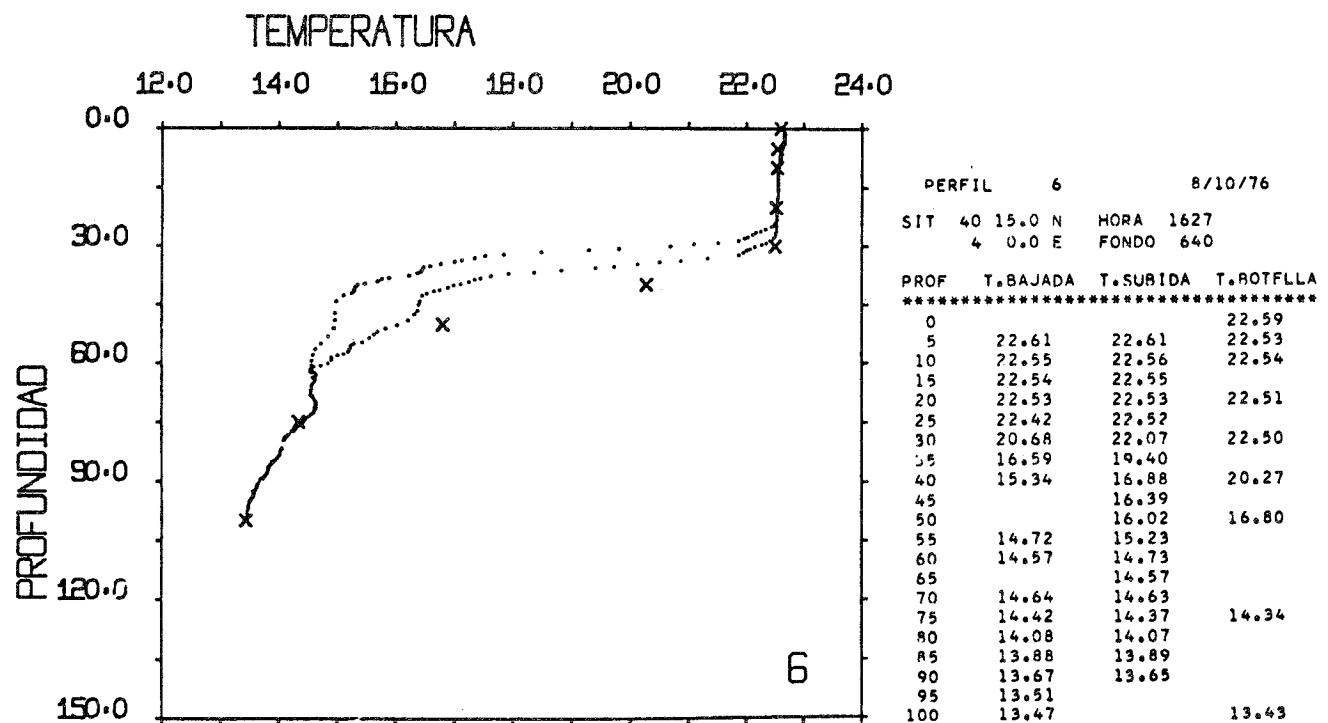
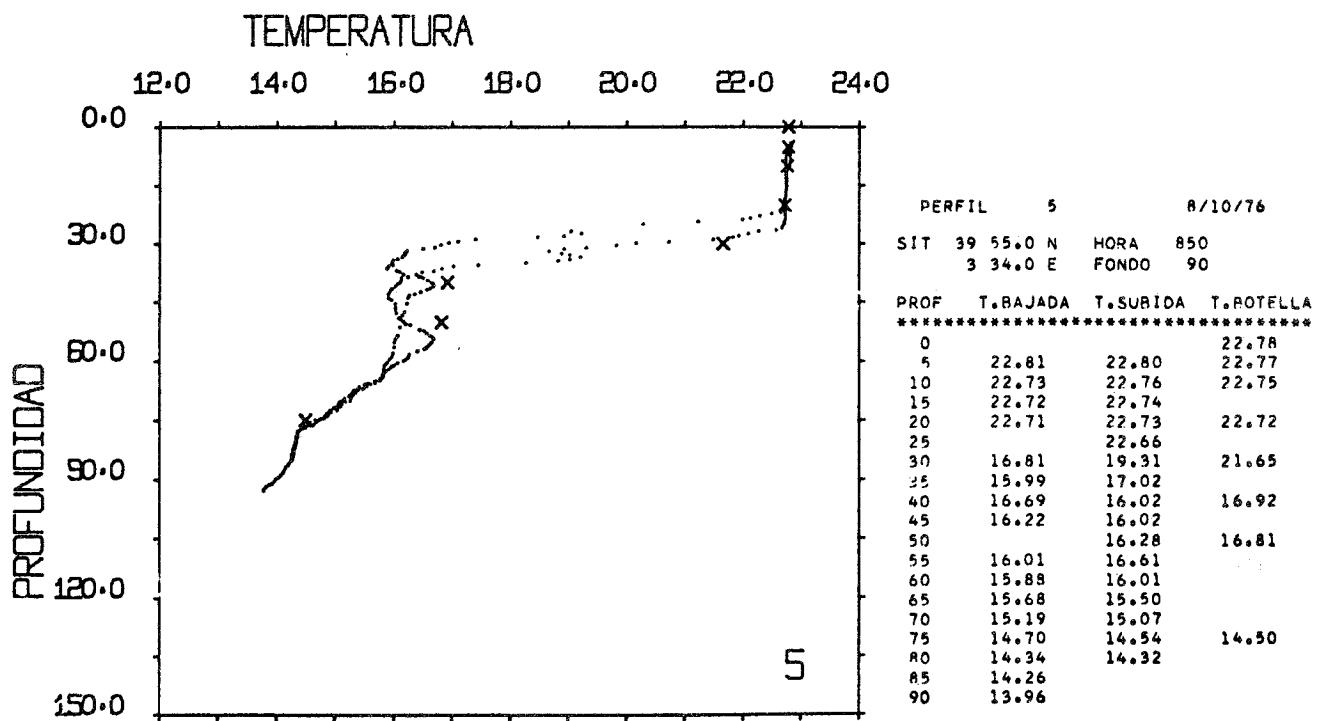


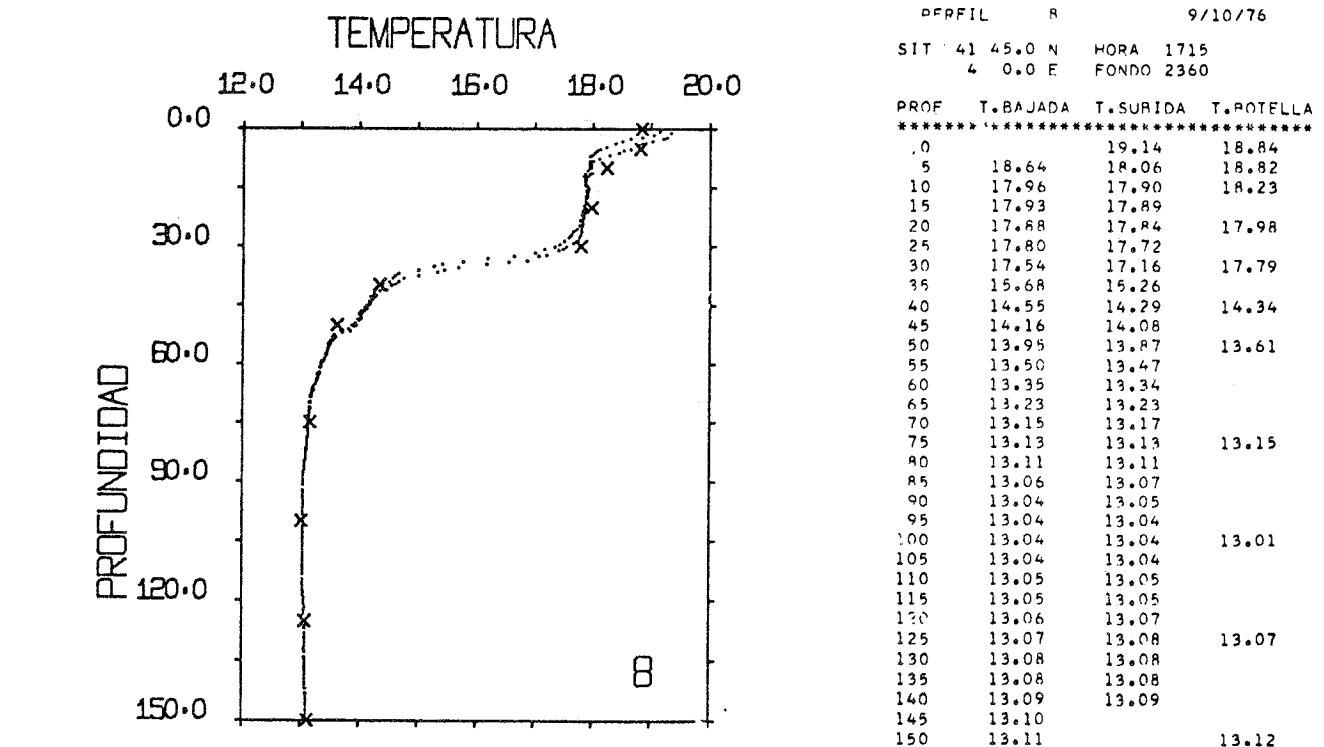
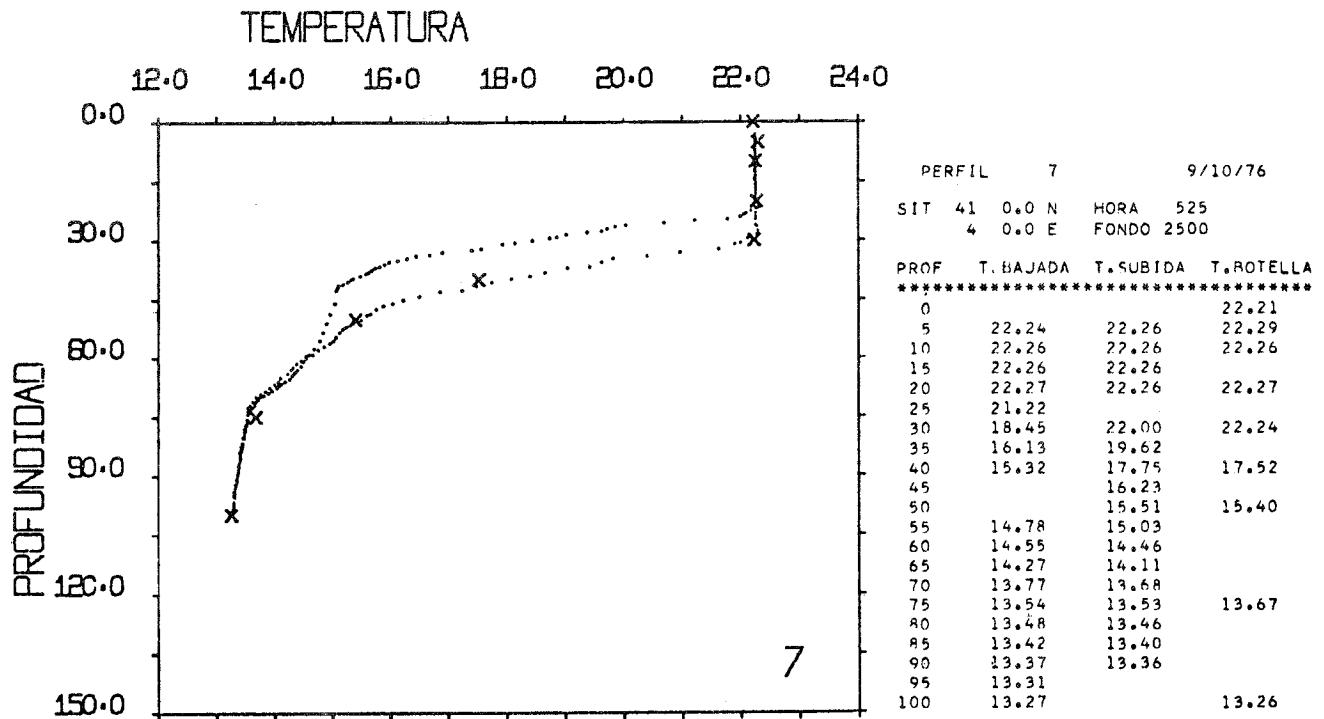
PERFIL 1		6/10/76	
SIT	41 20.0 N 2 35.0 E	HORA	2053
		FONDO	740
<b>PROF T.BAJADA T.SUBIDA T.BOTELLA</b>			
0			18.90
5	18.87	18.85	18.86
10	18.75	18.59	18.55
15	18.59	18.49	
20	18.50	18.13	18.57
25	18.09	17.98	
30	17.91	17.77	17.94
35	17.22	17.21	
40	16.75	16.60	16.52
45	15.98	15.88	
50	14.96	14.87	14.68
55	14.40	14.28	
60	14.07	14.05	
65	13.82	13.80	
70	13.73	13.73	
75	13.71	13.70	13.69
80	13.69	13.70	
85	13.69	13.67	
90	13.68	13.65	
95	13.62		
100	13.60		13.56

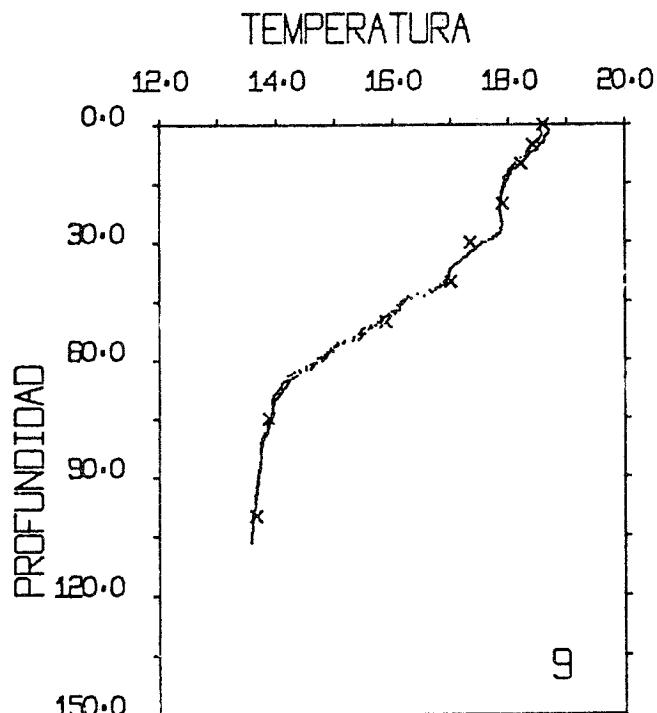


PERFIL 2		7/10/76	
SIT	41 0.0 N 2 49.0 E	HORA	122
		FONDO	1860
<b>PROF T.BAJADA T.SUBIDA T.BOTELLA</b>			
0			20.97
5	20.92		20.97
10	20.68		20.80
15	18.90		
20	18.24		18.45
25	17.86		
30	17.13		17.40
35	16.36		
40	15.44		15.24
45	14.72		
50	14.35	14.28	14.01
55	14.05	13.99	
60	13.83	13.74	
65	13.66	13.54	
70	13.44	13.42	
75	13.38	13.37	13.41
80	13.35		
85	13.32	13.30	
90	13.28	13.27	
95	13.25		

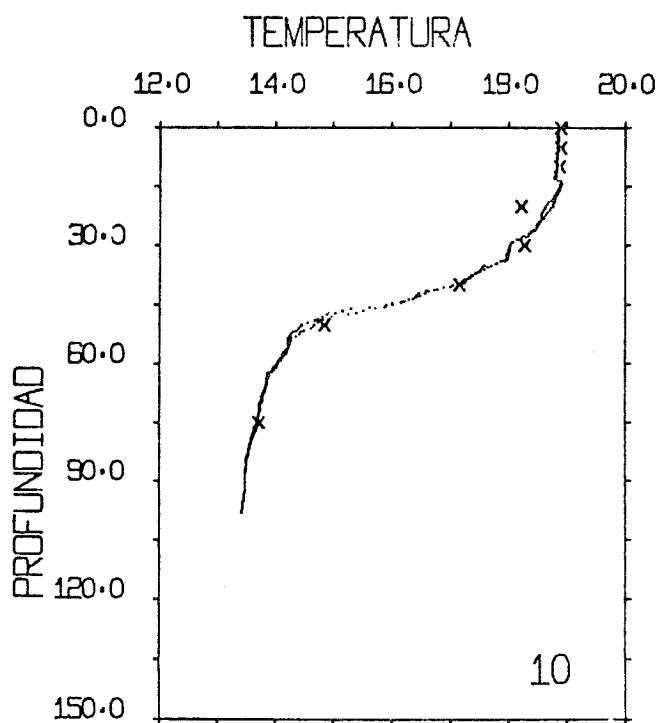




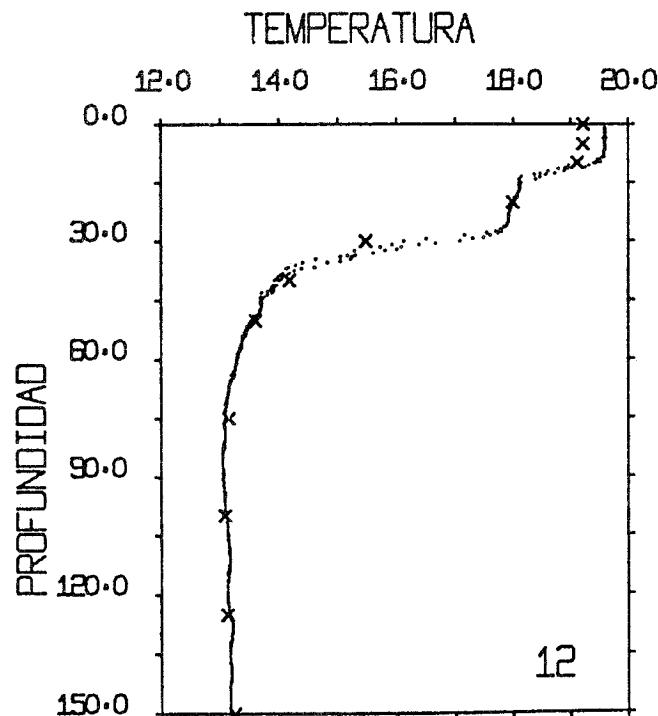




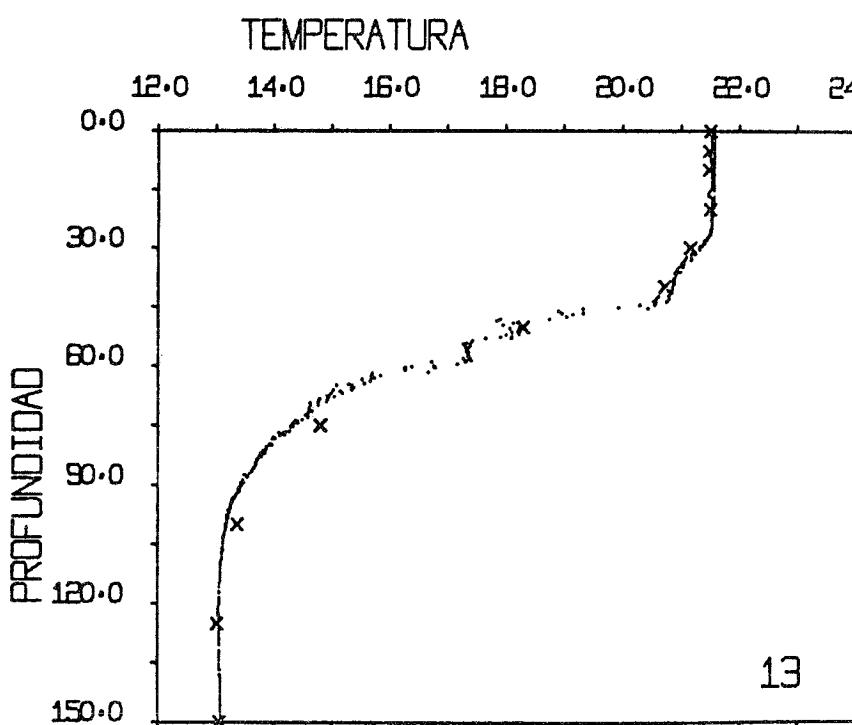
PERFIL	9	10/10/76
SIT	41 44.0 N	HORA 628
	3 9.0 E	FONDO 105
PROF	T.BAJADA	T.SUBIDA T.ROTELLA
*****	*****	*****
0	18.57	18.60
5	18.53	18.43 18.41
10	18.20	18.08 18.21
15	17.95	17.92
20	17.88	17.87 17.89
25	17.90	17.89
30	17.60	17.55 17.34
35	17.13	17.11
40	16.94	16.82 16.99
45	16.20	16.11
50	15.82	15.74 15.88
55	15.32	15.07
60	14.81	14.66
65	14.25	14.14
70	14.00	13.94
75	13.93	13.87 13.88
80	13.81	13.76
85	13.75	13.74
90	13.70	13.69
95	13.67	13.65
100	13.64	13.61 13.65
105	13.59	



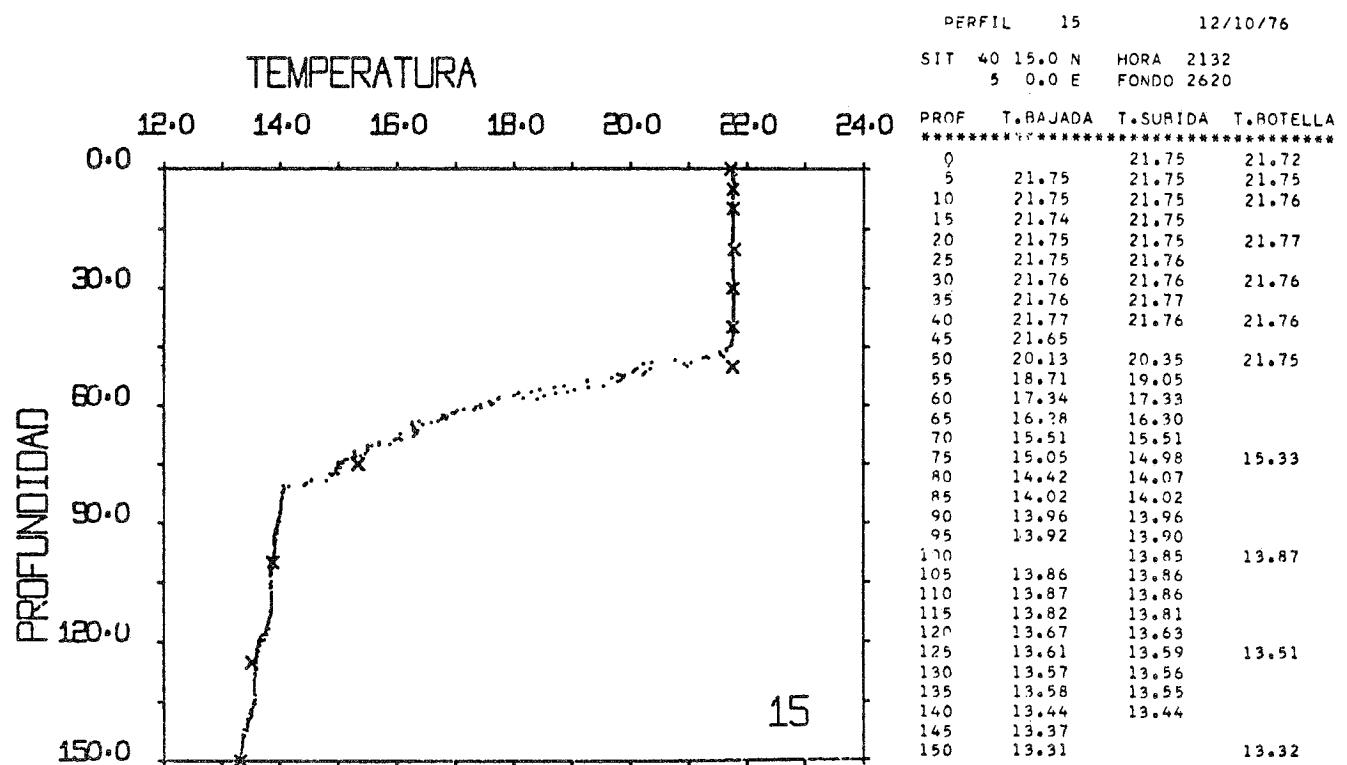
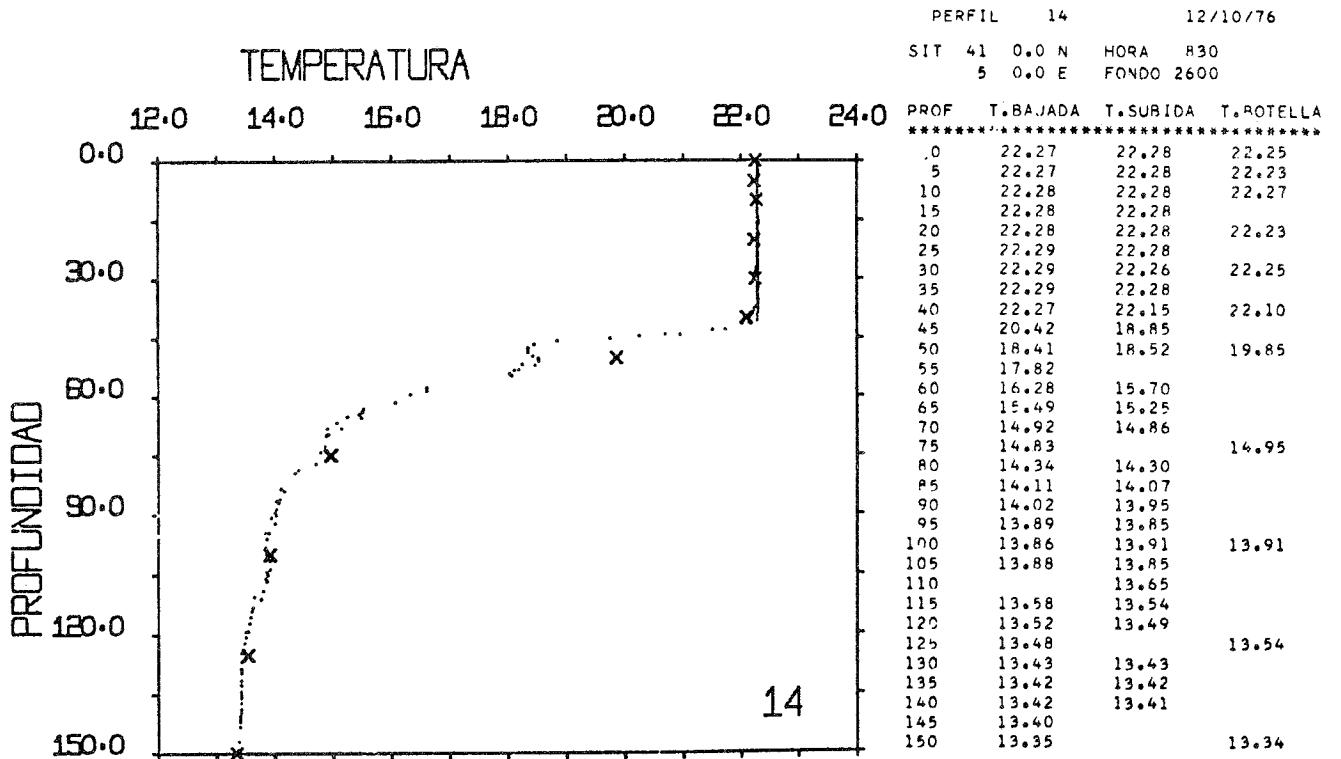
PERFIL	10	10/10/76
SIT	42 26.0 N	HORA 1255
	3 15.0 E	FONDO 110
PROF	T.BAJADA	T.SUBIDA T.ROTELLA
*****	*****	*****
0	18.90	
5	18.86	18.84 18.90
10	18.84	18.82 18.88
15	18.91	18.89
20	18.63	18.72 18.22
25	18.49	18.48
30	18.03	18.01 18.28
35	17.58	17.65
40	17.18	16.89 17.15
45	16.03	15.63
50	14.69	14.44 14.85
55	14.26	14.22
60	14.04	13.99
65	13.87	13.84
70	13.76	13.72
75	13.70	13.69 13.71
80	13.59	13.57
85	13.51	13.50
90	13.49	13.49
95	13.46	

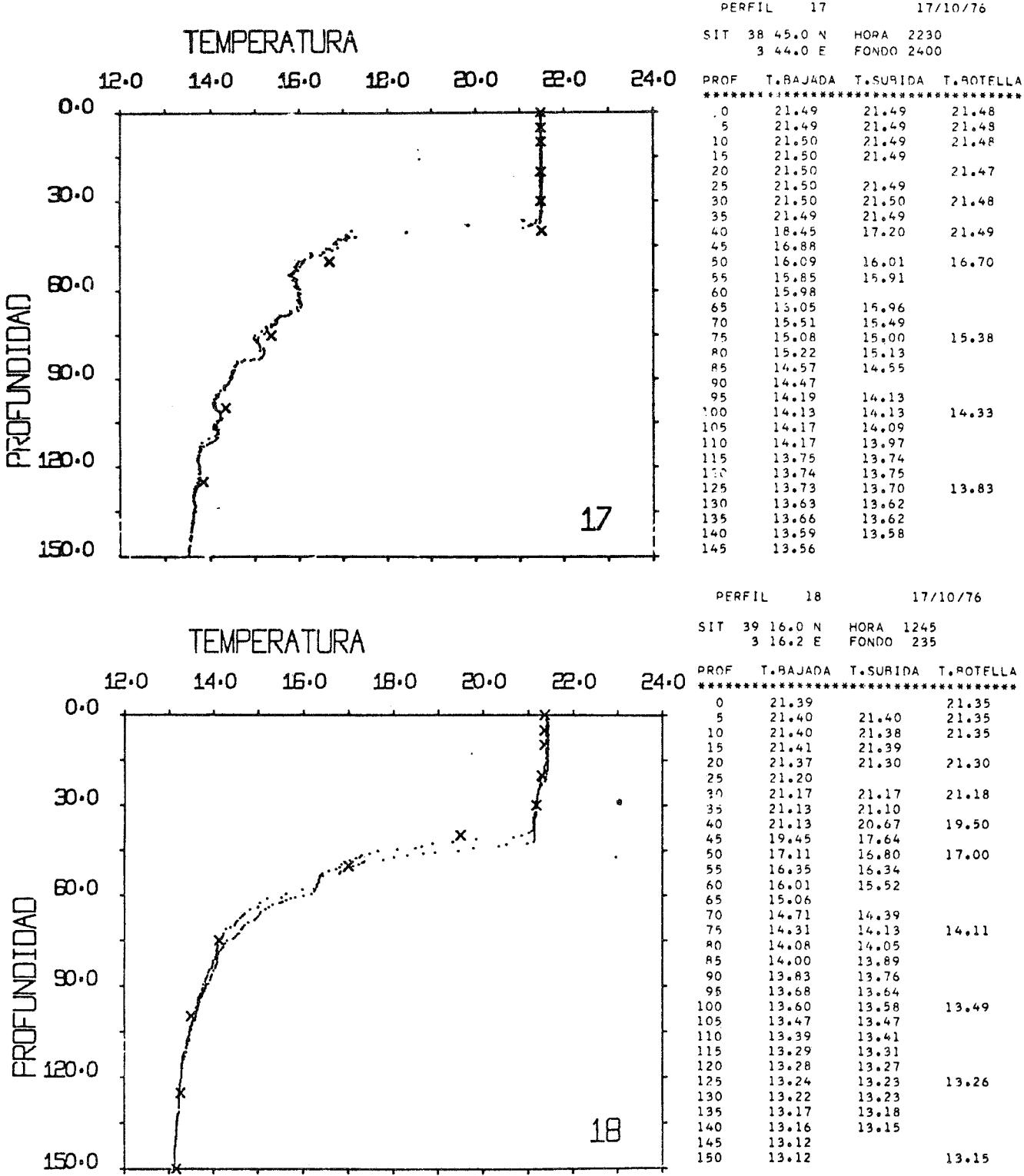


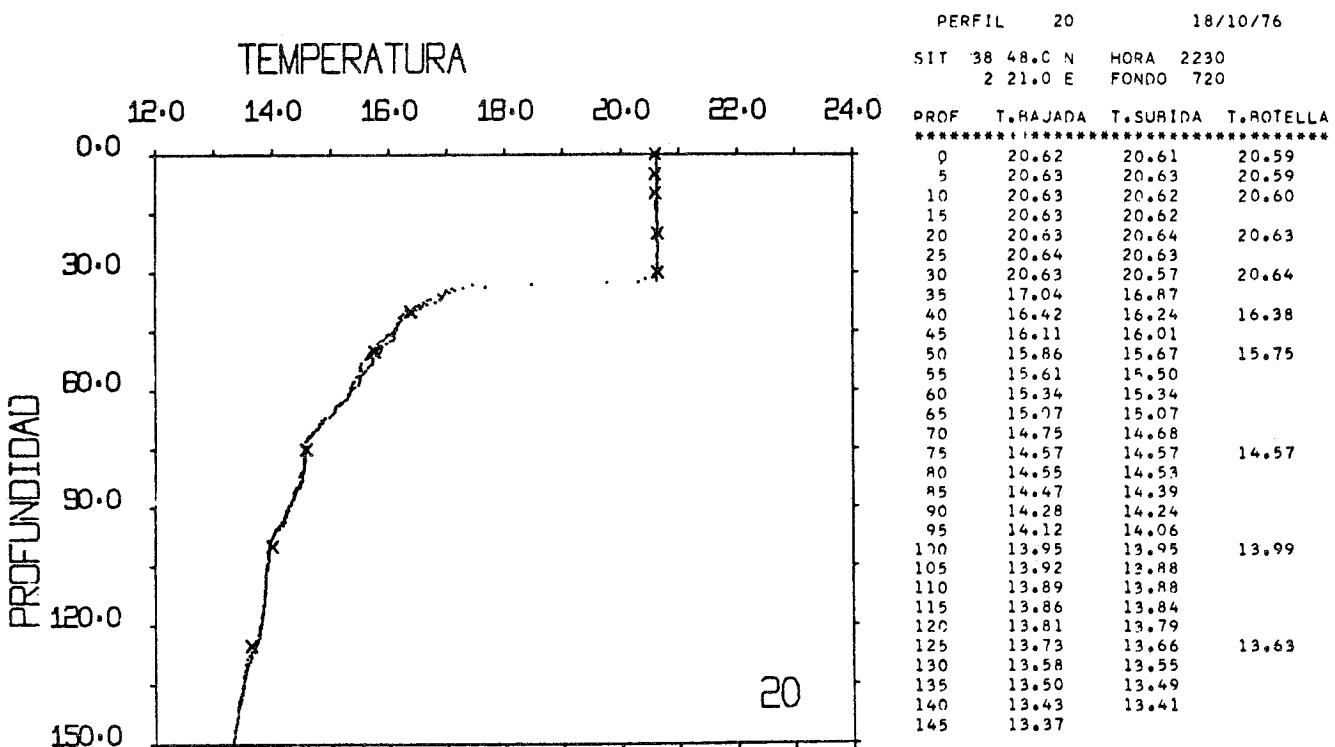
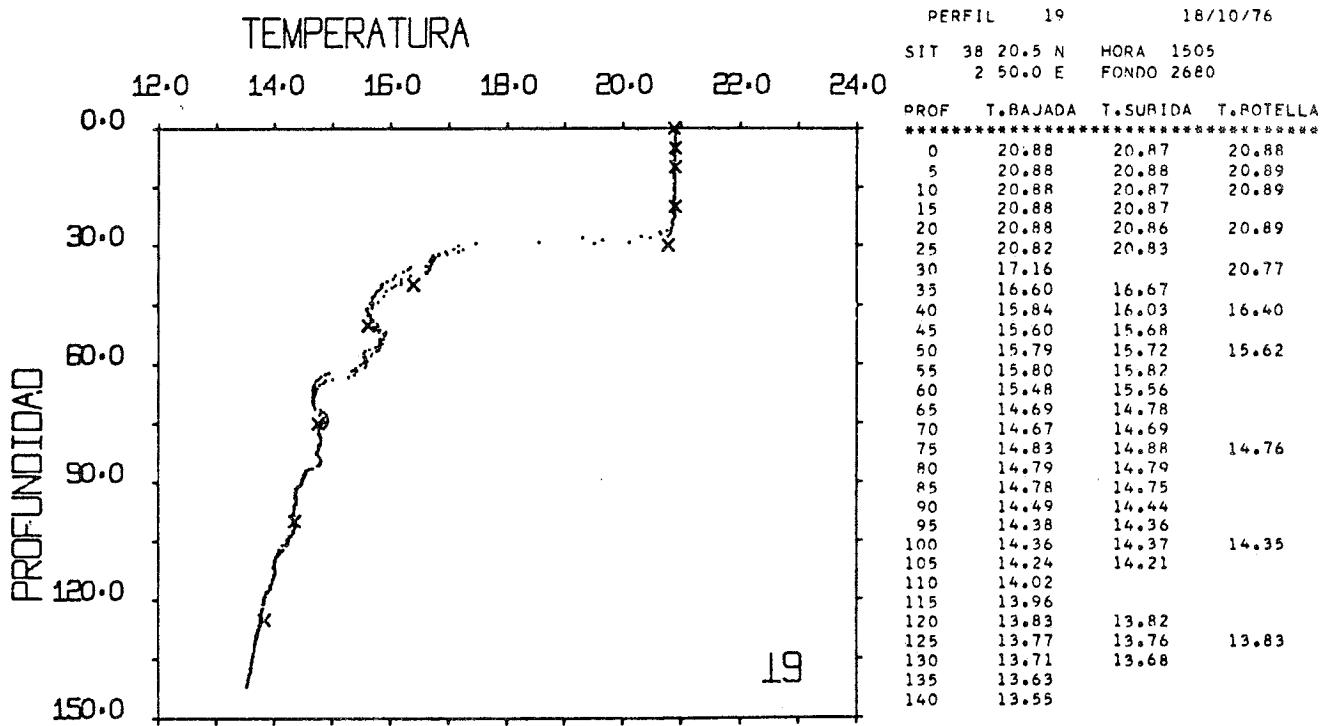
PERFIL 12		11/10/76	
SIT	42 26.5 N 4 30.0 E	HORA	30
		FONDO	1860
PROF	T.BAJADA	T.SURIDA	T.ROTELLA
*****	*****	*****	*****
0	19.59	19.58	19.22
5	19.42	18.96	19.21
10	18.14	18.10	19.11
20	18.01	17.98	18.00
25	17.93	17.91	
30	17.09	16.13	15.47
35	15.04	14.41	
40	14.00	13.92	14.17
45	13.69	13.70	
50	13.63	13.50	13.59
55	13.39	13.36	
60	13.29	13.27	
65	13.19	13.17	
70	13.12	13.10	
75	13.08	13.07	13.13
80	13.08	13.08	
85	13.05	13.04	
90	13.04	13.06	
95	13.07	13.08	
100	13.10	13.12	13.08
105	13.13	13.14	
110	13.16	13.17	
115	13.14	13.13	
120	13.13	13.13	
125	13.15	13.18	13.12
130	13.21	13.19	
135	13.17	13.17	
140	13.18	13.18	
145	13.17		
150	13.16		13.24

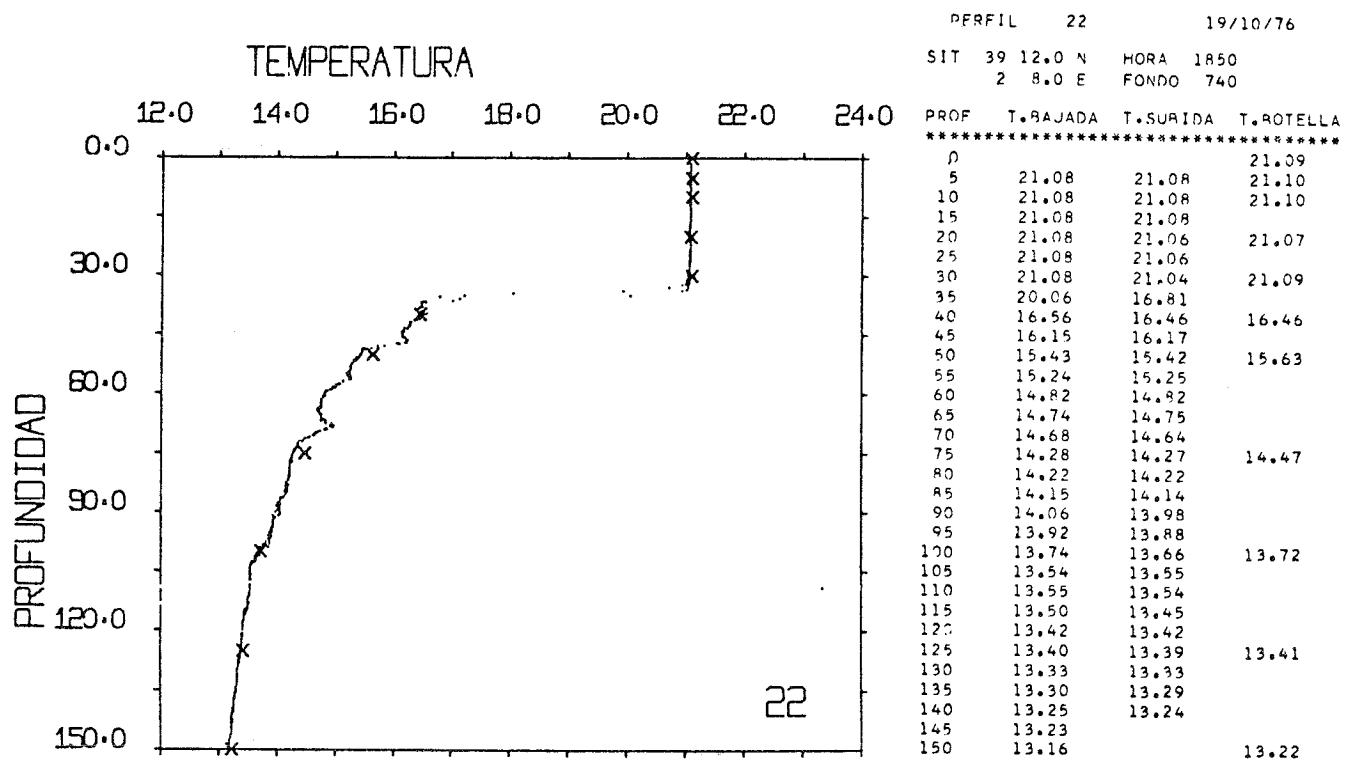
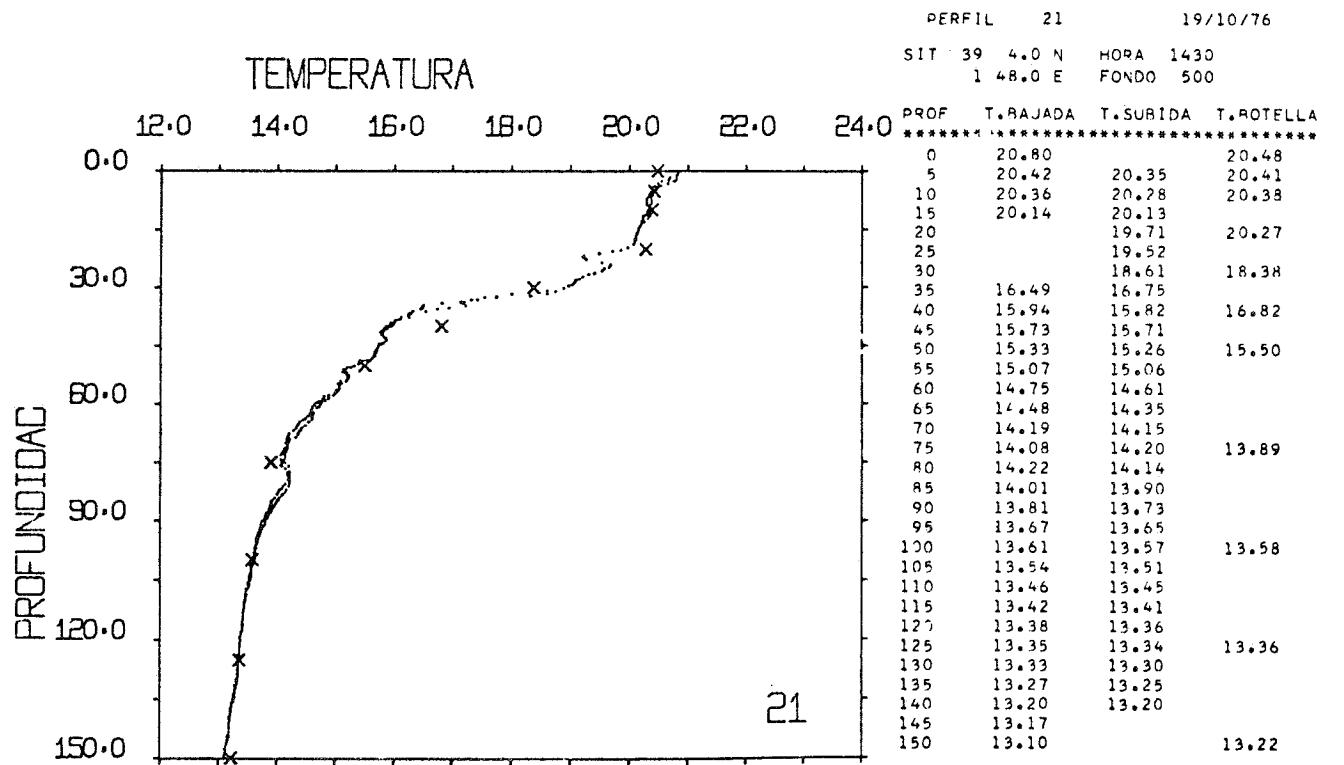


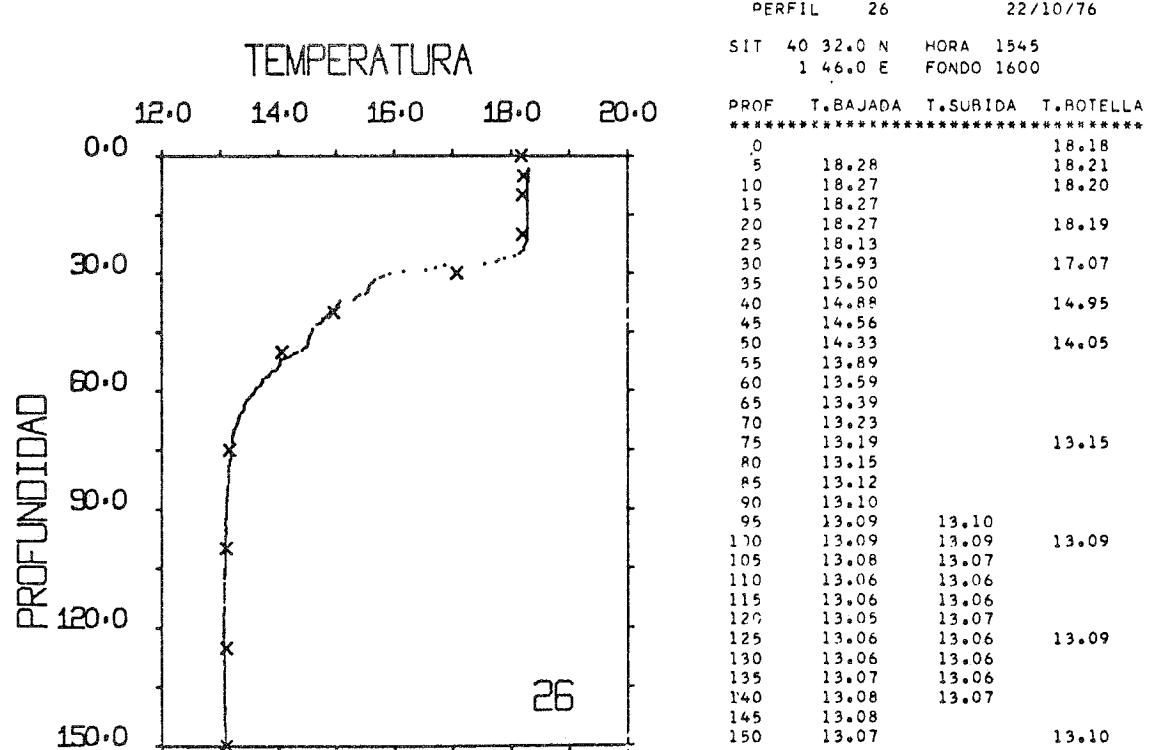
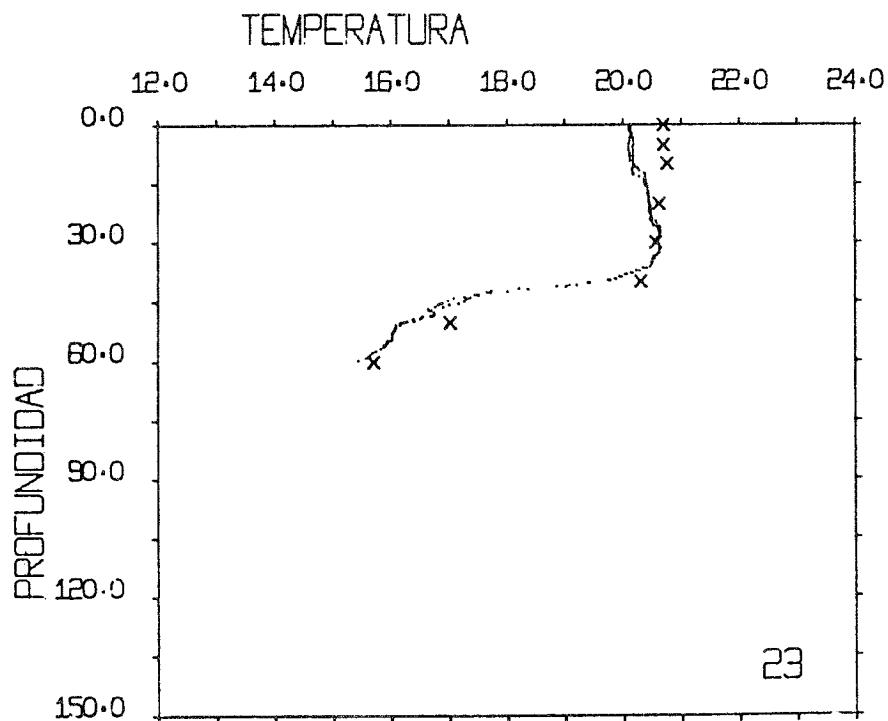
PERFIL 13		11/10/76	
SIT	41 45.0 N 5 0.0 E	HORA	1640
		FONDO	2400
PROF	T.BAJADA	T.SURIDA	T.ROTELLA
*****	*****	*****	*****
0	21.53	21.50	21.49
5	21.53	21.51	21.48
10	21.53	21.52	21.48
15	21.53	21.52	
20	21.52	21.52	21.49
25	21.50	21.52	
30	21.30	21.31	21.15
35	21.03	20.96	
40	20.86	20.85	20.72
45	20.55	19.92	
50	17.95	18.24	18.29
55	17.39	17.30	
60	17.16	16.39	
65	15.56	15.09	
70	14.76	14.62	
75	14.40	14.33	14.80
80	13.96	13.93	
85	13.69	13.68	
90	13.49	13.43	
95	13.26	13.25	
100	13.19	13.17	13.35
105	13.12	13.12	
110	13.09	13.08	
115	13.08		
120	13.06	13.06	
125	13.06	13.06	13.02
130	13.07	13.07	
135	13.07	13.07	
140	13.08	13.08	
145	13.09		
150	13.09		13.05

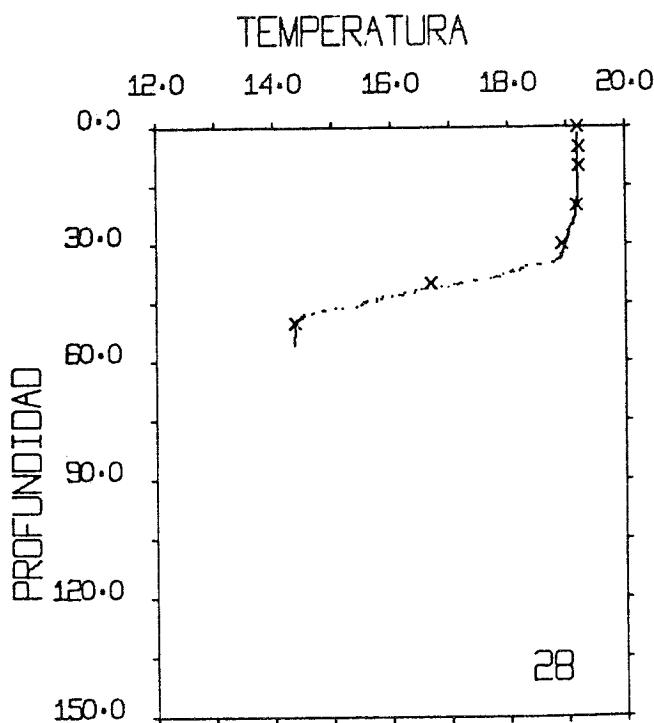
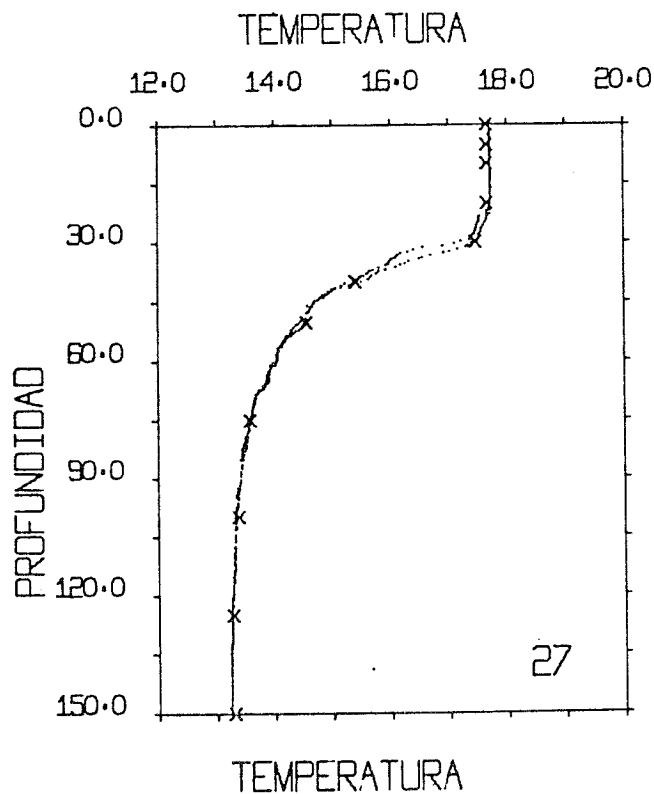












PERFIL 27      23/10/76

SIT 40 52.0 N HORA 605  
1 21.0 E FONDO 290

PROF T.BAJADA T.SURIDA T.ROTELLA

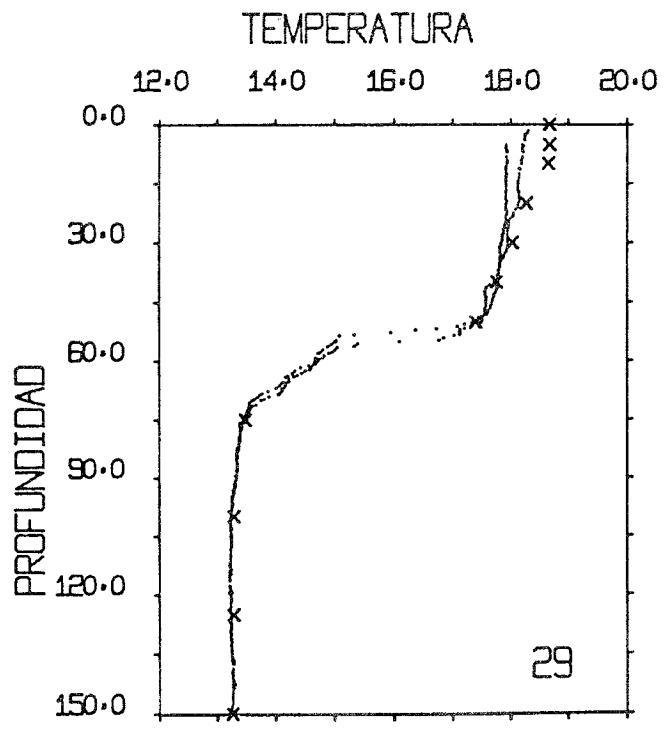
PROF	T.BAJADA	T.SURIDA	T.ROTELLA
0	17.72	17.65	17.65
5	17.73	17.72	17.65
10	17.73	17.72	17.66
15	17.73	17.72	
20	17.73	17.72	17.65
25	17.62	17.49	
30	17.40	16.90	17.45
35	16.27	15.93	
40	15.38	15.16	15.40
45	14.59	14.67	
50	14.43	14.54	14.55
55	14.14	14.15	
60	13.98	14.03	
65	13.90	13.85	
70	13.66	13.66	
75	13.61	13.59	13.58
80	13.54	13.48	
85	13.46		
90	13.42		
95	13.38		
100	13.34	13.33	13.38
105	13.33	13.32	
110	13.32	13.31	
115	13.31	13.30	
120	13.28	13.27	
125	13.27	13.27	13.28
130	13.26	13.26	
135	13.25	13.25	
140	13.24	13.24	
145	13.24		
150	13.24		13.29

PERFIL 28      23/10/76

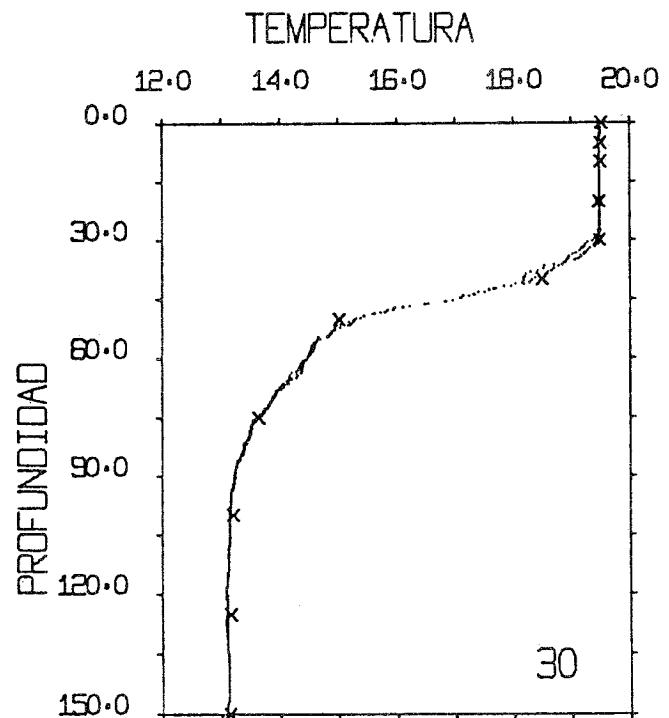
SIT 40 11.8 N HORA 1420  
0 29.2 E FONDO 57

PROF T.BAJADA T.SURIDA T.ROTELLA

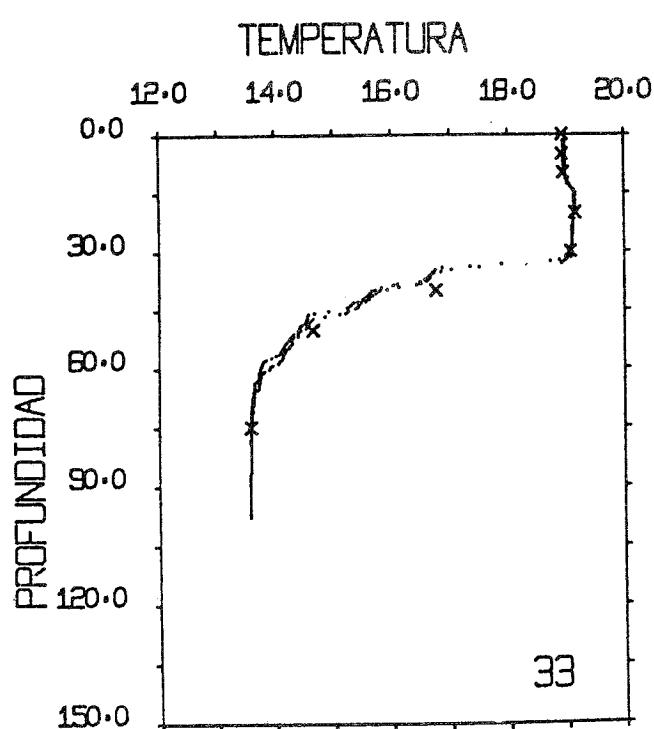
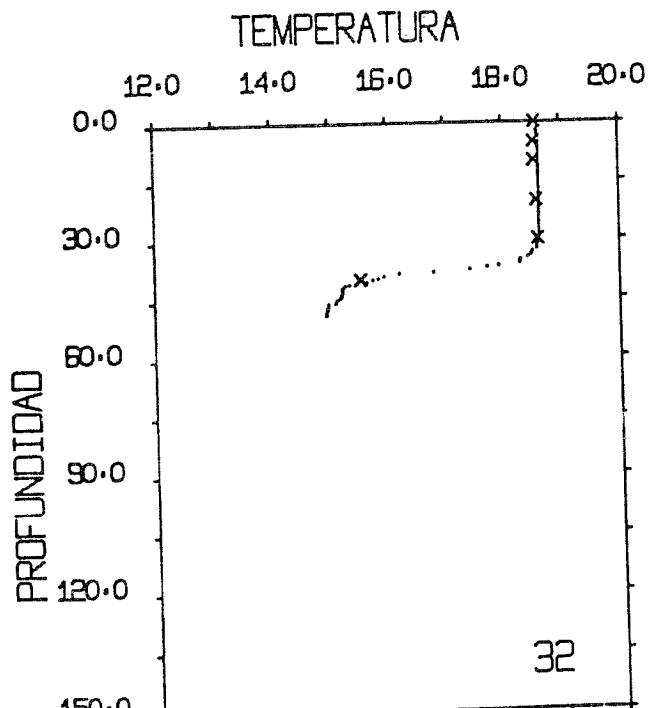
PROF	T.BAJADA	T.SURIDA	T.ROTELLA
0		19.20	19.20
5		19.20	19.22
10	19.20	19.20	19.21
15	19.20	19.20	
20	19.17	19.19	19.17
25	19.10	19.07	
30	18.98	18.96	18.92
35	18.50	18.33	
40	17.08	16.98	16.67
45	15.51	15.42	
50	14.40		14.37
55	14.36		



PERFIL 29		23/10/76	
SIT	39 52.0 N 1 0.0 E	HORA	2045
		FONDO	960
PROF	T.BAJADA	T.SUBIDA	T.BOTELLA
0			18.68
5	17.91	18.22	18.68
10	17.91	18.18	18.65
15	17.90	18.12	
20	17.91	18.13	18.27
25	17.90	17.96	
30	17.82	17.94	18.04
35	17.81	17.80	
40	17.70	17.77	17.75
45	17.56	17.67	
50	17.48	17.21	17.40
55	16.09	14.95	
60	14.72	14.67	
65	14.23	14.11	
70	13.75	13.55	
75	13.50	13.39	13.47
80	13.38	13.37	
85	13.33	13.33	
90	13.32	13.30	
95	13.25	13.25	
100	13.24	13.23	13.27
105	13.23	13.25	
110	13.23	13.23	
115	13.23	13.21	
120	13.25	13.22	
125	13.24	13.23	13.27
130	13.23	13.23	
135	13.25	13.25	
140	13.26	13.26	
145	13.27		
150	13.24		13.25



PERFIL 30		24/10/76	
SIT	39 33.0 N 1 30.0 E	HORA	735
		FONDO	1460
PROF	T.BAJADA	T.SUBIDA	T.BOTELLA
0			19.51
5	19.48	19.49	19.50
10	19.50	19.49	19.49
15	19.49	19.48	
20	19.50	19.48	19.48
25	19.49	19.49	
30	19.49	19.37	19.47
35	19.13	18.92	
40	18.19	18.33	18.50
45	17.08	16.97	
50	15.38	15.26	15.01
55	14.83	14.65	
60	14.49	14.46	
65	14.16	14.20	
70	13.88	13.88	
75	13.63	13.58	13.63
80	13.48	13.48	
85	13.36	13.33	
90	13.24	13.23	
95	13.17	13.16	
100	13.15	13.15	13.20
105	13.15	13.15	
110	13.12	13.13	
115	13.11	13.11	
120	13.09	13.09	
125	13.10	13.10	13.15
130	13.10	13.10	
135	13.12	13.12	
140	13.13	13.13	
145	13.12		
150	13.10		13.14

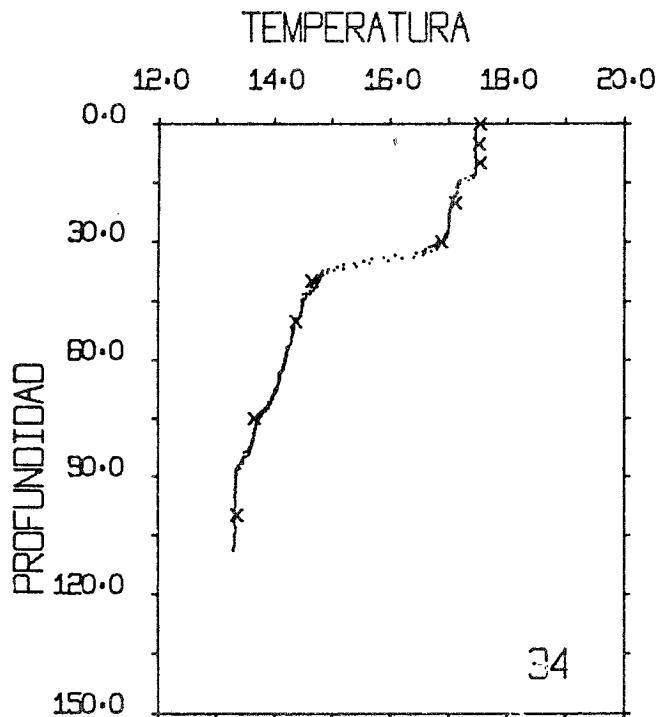


PERFIL 32                    25/10/76  
 SIT 39 15.0 N            HORA 428  
 0 34.0 E                    FONDO 1280

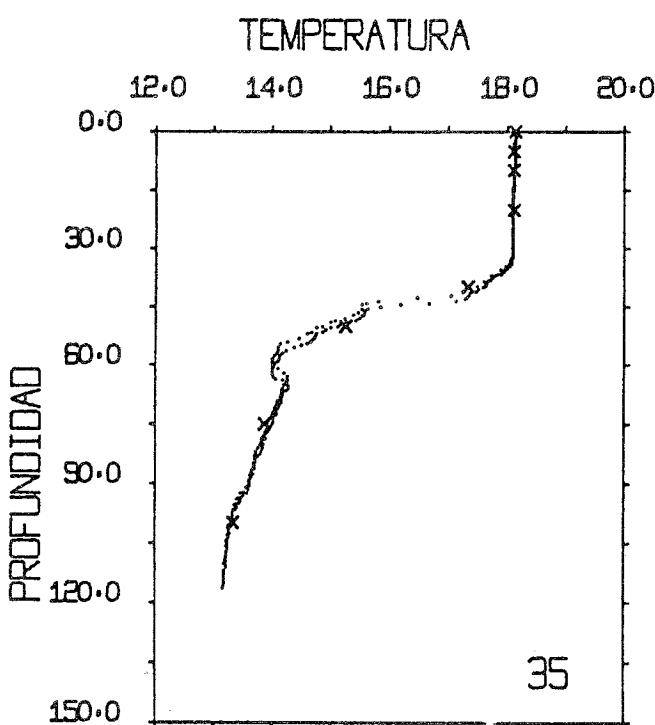
PROF	T.BAJADA	T.SUBIDA	T.ROTFLA
0	18.58		
5	18.62		18.56
10	18.62		18.56
15	18.63		
20	18.63		18.60
25	18.63		
30	18.63		18.62
35	18.31		
40	15.74		15.53
45	15.12		

PERFIL 33                    24/10/76  
 SIT 39 27.0 N            HORA 2215  
 0 0.0 E                    FONDO 105

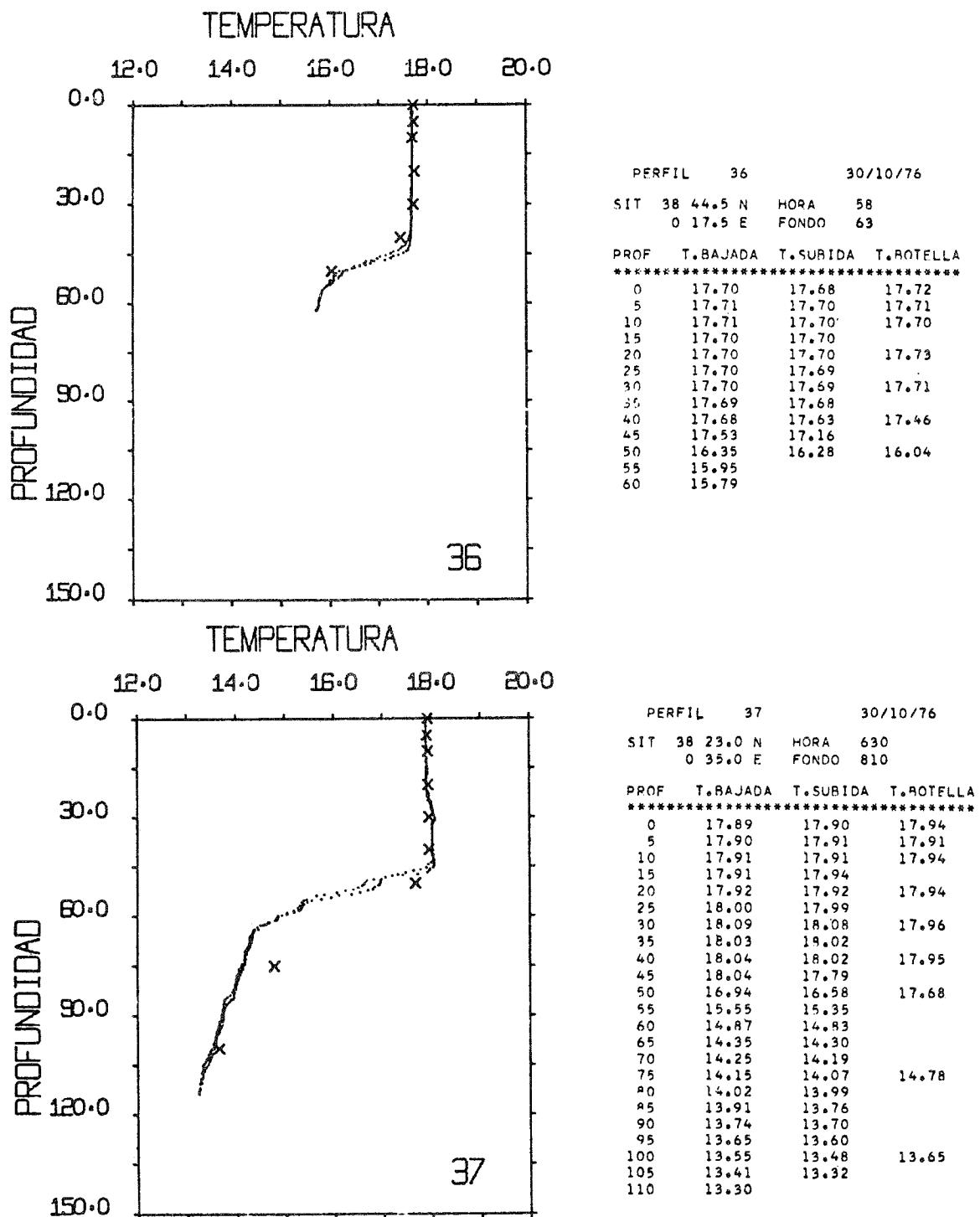
PROF	T.BAJADA	T.SUBIDA	T.BOTELLA
0.			18.94
5	18.98	18.97	18.93
10	18.97	18.98	18.95
15	19.16	19.15	
20	19.14	19.14	19.16
25	19.11		
30	19.10	19.10	19.08
35	16.84	16.68	
40	15.80	15.63	16.75
45	15.26	14.69	
50	14.47	14.40	14.66
55	14.21	14.11	
60	13.90	13.74	
65	13.72	13.64	
70	13.62	13.59	
75	13.59	13.58	13.58
80	13.58	13.58	
85	13.58	13.58	
90	13.57		
95	13.56		

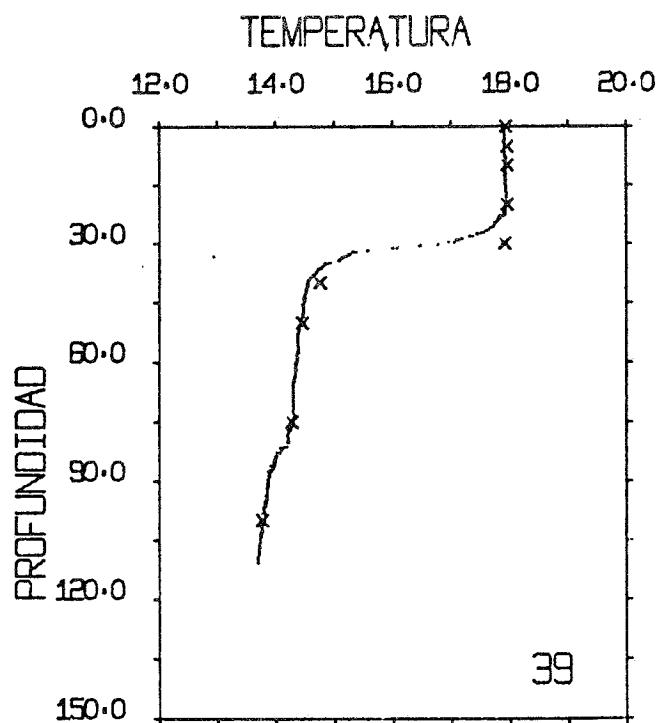
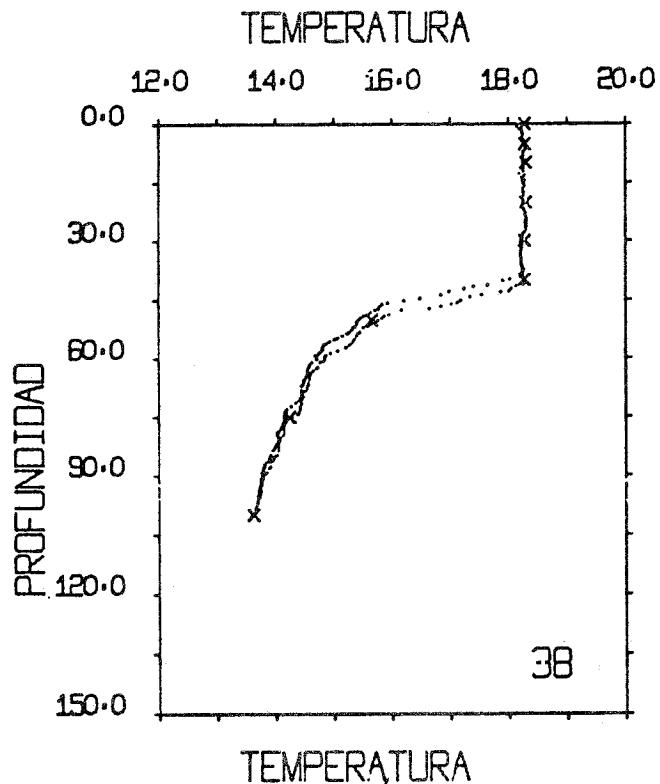


PERFIL 34 29/10/76			
SIT	47.3 N 1 7.5 E	HORA 1105	FONDO 115
PROF	T.BAJADA	T.SURIDA	T.BOTELLA
0	17.47	17.47	17.54
5	17.47	17.47	17.51
10	17.46	17.46	17.53
15	17.21	17.15	
20	17.05	17.05	17.11
25	17.01	17.01	
30	16.87	16.77	16.87
35	15.65	15.21	
40	14.77	14.67	14.66
45	14.51	14.48	
50	14.37	14.34	14.37
55	14.30	14.29	
60	14.20	14.17	
65	14.09	14.08	
70	13.97	13.91	
75	13.74	13.69	13.65
80	13.65	13.63	
85	13.49	13.45	
90	13.34	13.34	
95	13.34	13.33	
100	13.34	13.33	13.35
105	13.33		



PERFIL 35 29/10/76			
SIT	45.0 N 0 42.0 E	HORA 1620	FONDO 820
PROF	T.BAJADA	T.SURIDA	T.BOTELLA
0	18.11	18.12	18.13
5	18.13	18.12	18.12
10	18.10	18.11	18.12
15	18.10	18.09	
20	18.09	18.08	18.12
25	18.08	18.08	
30	18.08	18.08	
35	17.98	17.89	
40	17.58	17.35	17.34
45	15.84	15.52	
50	15.13	14.76	15.26
55	14.50	14.11	
60	14.04	14.02	
65	14.26	14.20	
70	14.15	14.07	
75	14.01	13.92	13.87
80	13.96	13.80	
85	13.71	13.68	
90	13.62	13.59	
95	13.44	13.36	
100	13.32	13.27	13.34
105	13.25	13.23	
110	13.22		
115	13.18		



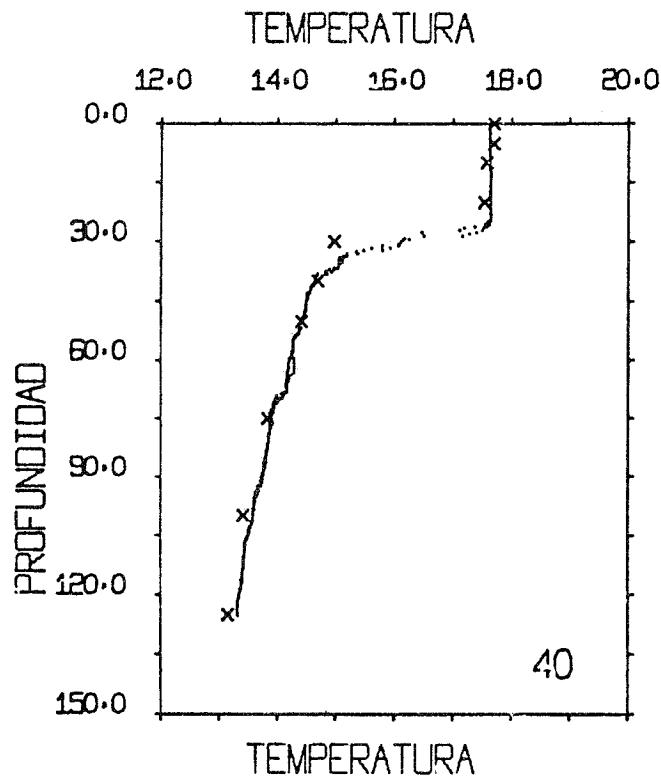


PERFIL 38 30/10/76

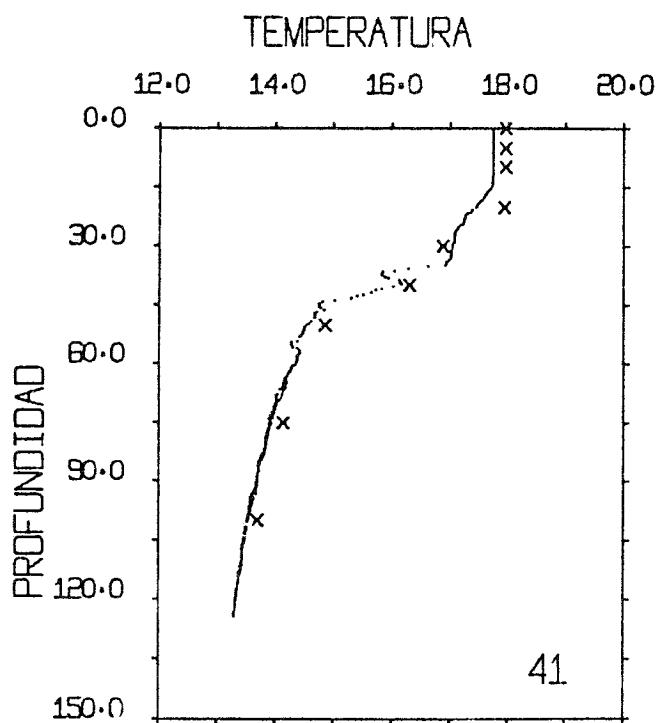
SIT	38	0.0 N	HORA	1620
		0 54.0 E	FONDO	2400
PROF	T.BAJADA	T.SUBIDA	T.ROTELLA	
0		18.15	18.28	
5	18.27	18.28	18.28	
10	18.26	18.25	18.29	
15	18.26	18.25		
20	18.26	18.25	18.30	
25	18.30	18.29		
30	18.22	18.21	18.28	
35	18.21	18.22		
40	18.28	17.90	18.28	
45	17.19	15.93		
50	15.77	15.38	15.65	
55	15.35	14.93		
60	14.84	14.70		
65	14.58	14.49		
70	14.47	14.40		
75	14.28	14.14	14.24	
80	14.09	14.04		
85	13.99	13.89		
90	13.79	13.75		
95	13.73			
100	13.63			13.61

PERFIL 39 31/10/76

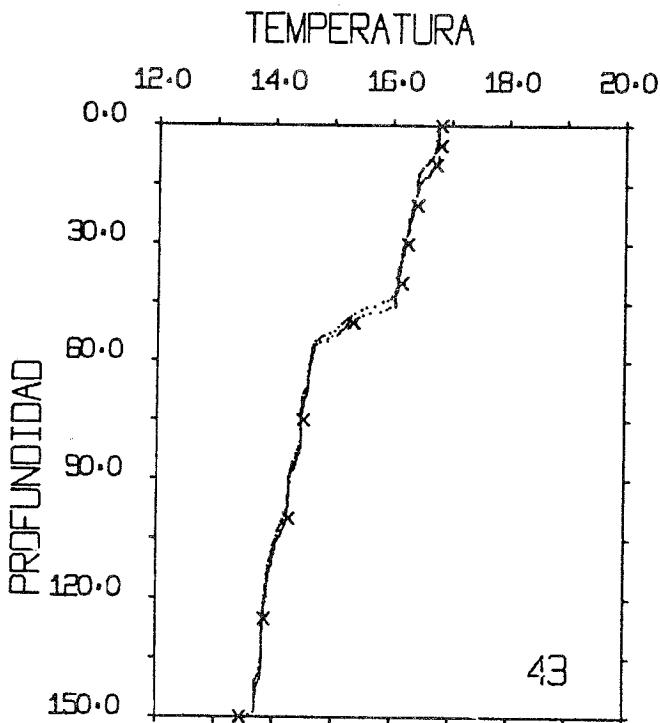
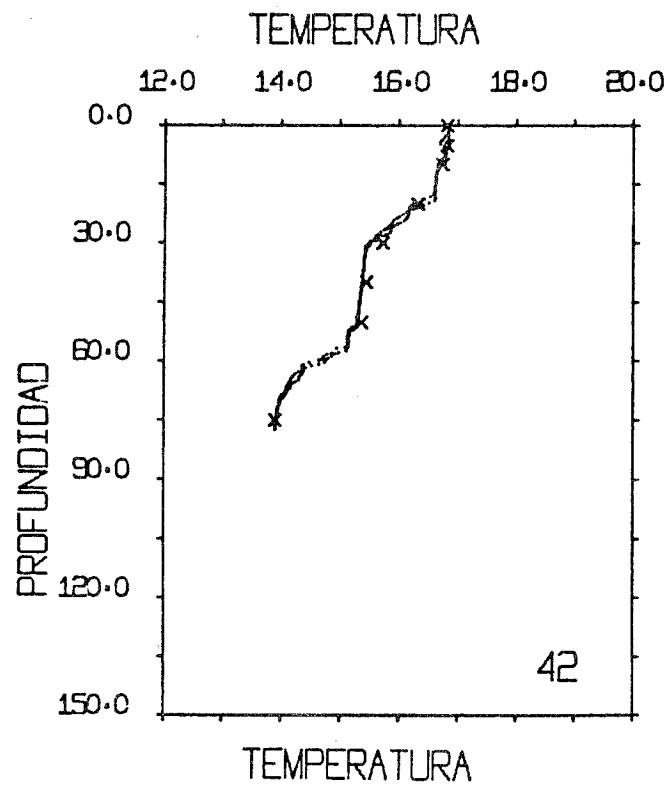
SIT	37	36.0 N	HORA	310
		1 14.0 E	FONDO	2720
PROF	T.BAJADA	T.SUBIDA	T.ROTELLA	
0	17.93		17.94	
5	17.93	17.92	17.95	
10	17.94	17.93	17.96	
15	17.95	17.94		
20	17.95	17.95	17.96	
25	17.78	17.74		
30	16.97	16.79	17.91	
35	14.91	14.85		
40	14.56	14.55	14.75	
45	14.50	14.49		
50	14.46	14.47	14.46	
55	14.39	14.39		
60	14.36	14.37		
65	14.31	14.32		
70	14.30	14.30		
75	14.31	14.30	14.27	
80	14.22	14.20		
85	14.01	13.97		
90	13.89	13.88		
95	13.86	13.83		
100	13.79	13.79	13.78	
105	13.75			
110	13.70			



PERFIL 40		31/10/76	
SIT	36 52.0 N 0 8.0 W	HORA 1935	FONDO 2640
<b>PROF T.BAJADA T.SURIDA T.ROTELLA</b>			
0		17.62	17.69
5	17.61	17.63	17.69
10	17.61	17.63	17.57
15	17.63	17.64	
20	17.63	17.64	17.53
25	17.61	17.54	
30	16.11	16.06	14.97
35	15.05	15.06	
40	14.60	14.62	14.69
45	14.49	14.49	
50	14.40	14.41	14.41
55	14.27	14.27	
60	14.28	14.18	
65	14.19	14.15	
70	14.04	13.94	
75	13.90	13.88	13.83
80	13.85	13.84	
85	13.81	13.78	
90	13.75	13.73	
95	13.64	13.60	
100	13.58	13.59	13.41
105	13.48	13.49	
110	13.43	13.43	
115	13.40	13.40	
120	13.35		
125	13.32		13.15



PERFIL 41		1/11/76	
SIT	37 14.0 N 0 24.0 W	HORA 450	FONDO 2500
<b>PROF T.BAJADA T.SURIDA T.ROTELLA</b>			
0		17.75	17.96
5		17.75	17.96
10		17.70	
15		17.44	17.94
20		17.15	
25		17.04	16.88
30		16.62	
35		16.02	16.30
40		14.77	
45		14.54	14.85
50		14.29	
55		14.35	
60		14.15	
65		14.02	
70		13.93	14.14
75		13.85	
80		13.78	
85		13.70	
90		13.69	
95		13.58	
100		13.55	13.70
105		13.50	13.46
110		13.44	13.44
115		13.38	13.38
120		13.34	



PERFIL 42 1/11/76

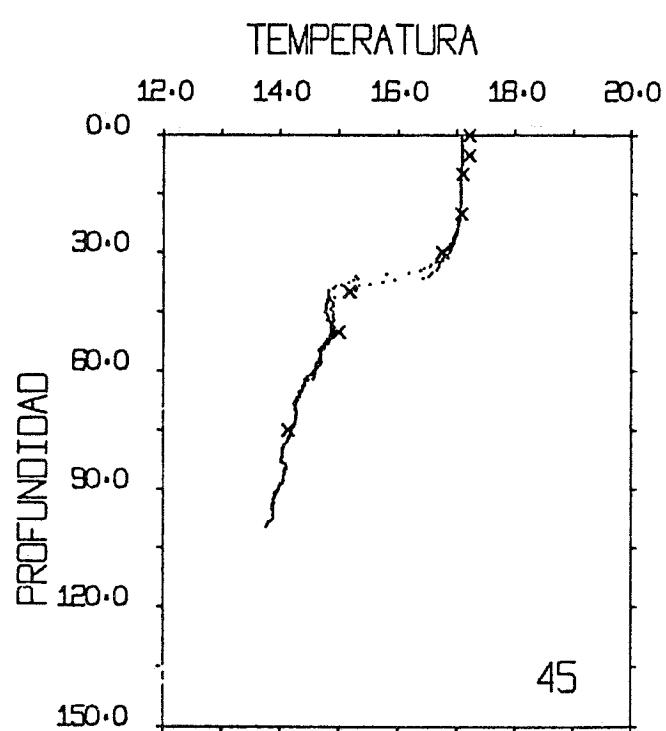
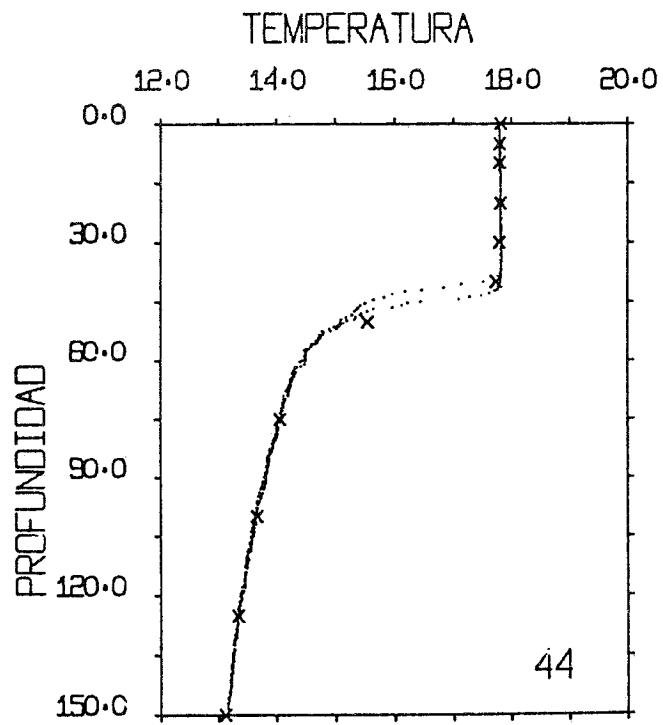
SIT 37 34.0 N HORA 1350  
0 39.0 W FONDO 85

PROF	T.BAJADA	T.SURIDA	T.ROTILLA
0	16.84		16.81
5	16.76	16.83	16.81
10	16.78	16.66	16.74
15	16.62	16.62	
20	16.23	16.36	16.32
25	15.86	15.91	
30	15.47	15.48	15.72
35	15.40	15.40	
40	15.37	15.37	15.43
45	15.34	15.32	
50	15.31	15.26	15.35
55	15.14	15.12	
60	14.75	14.38	
65	14.24	14.12	
70	13.99		
75	13.92		13.89

PERFIL 43 1/11/76

SIT 37 20.0 N HORA 2142  
1 36.0 W FONDO 210

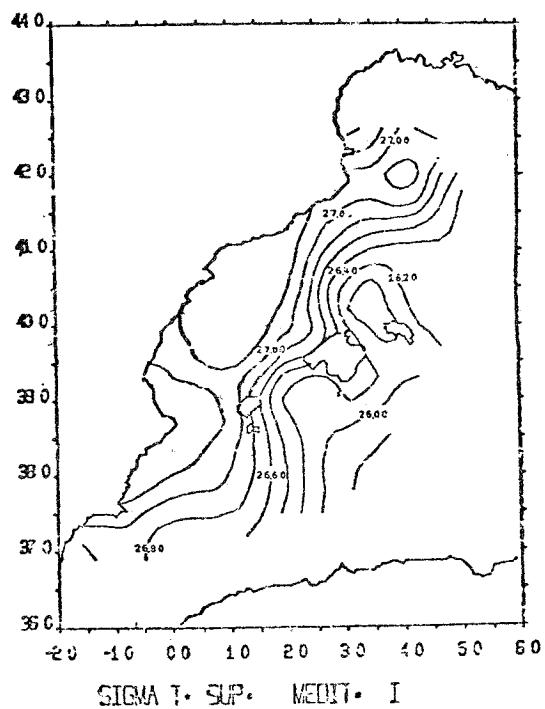
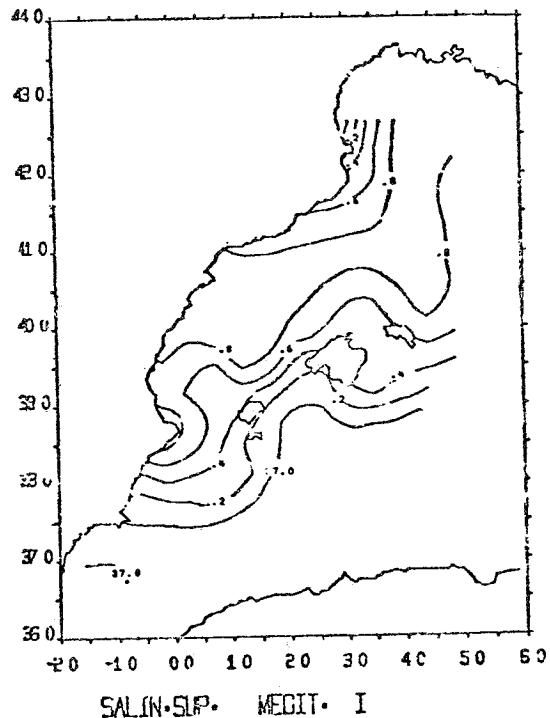
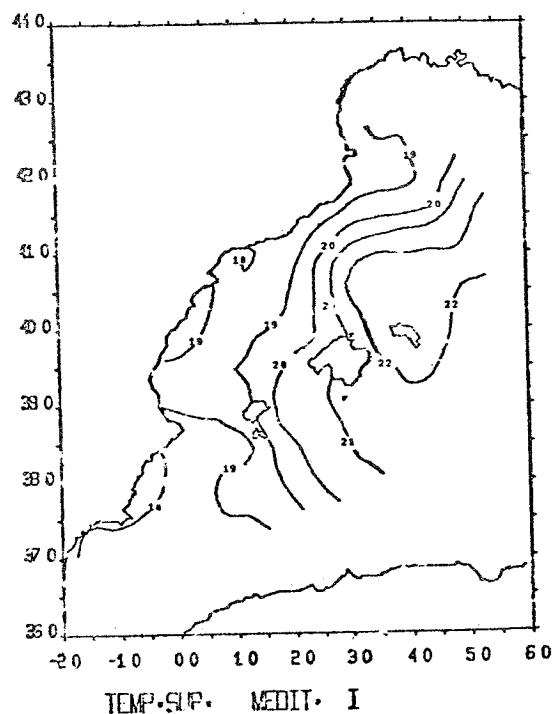
PROF	T.BAJADA	T.SURIDA	T.ROTILLA
0	16.78		16.81
5		16.73	16.81
10	16.74	16.51	16.74
15	16.45	16.43	
20	16.37	16.34	16.42
25	16.28	16.28	
30	16.24	16.19	16.25
35	16.15	16.13	
40	16.10	16.10	16.15
45	16.06	15.70	
50	15.25	15.15	15.34
55	14.79	14.67	
60	14.64	14.61	
65	14.58	14.58	
70	14.52	14.48	
75	14.48	14.47	14.50
80	14.47	14.45	
85	14.40	14.33	
90	14.28	14.27	
95	14.26	14.25	
100	14.24	14.15	14.26
105	14.09	14.03	
110	14.00	13.95	
115	13.92	13.91	
120	13.89	13.86	
125	13.85	13.84	13.86
130	13.83	13.83	
135	13.82	13.81	
140	13.80	13.71	
145	13.71		
150	13.55		13.44



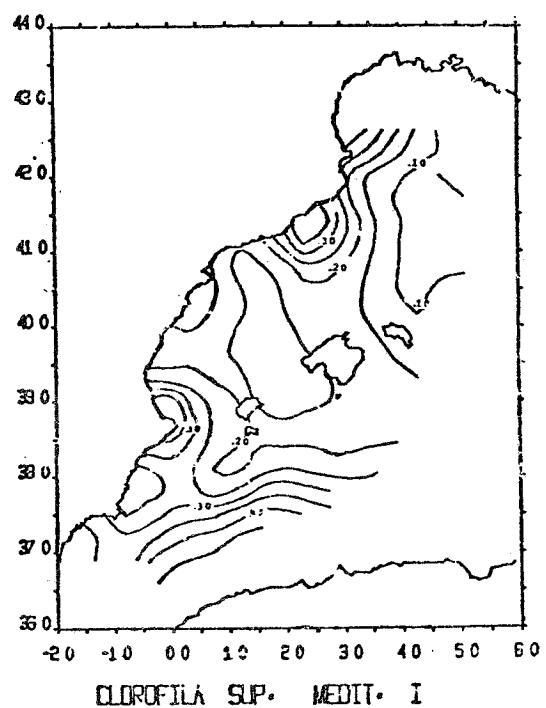
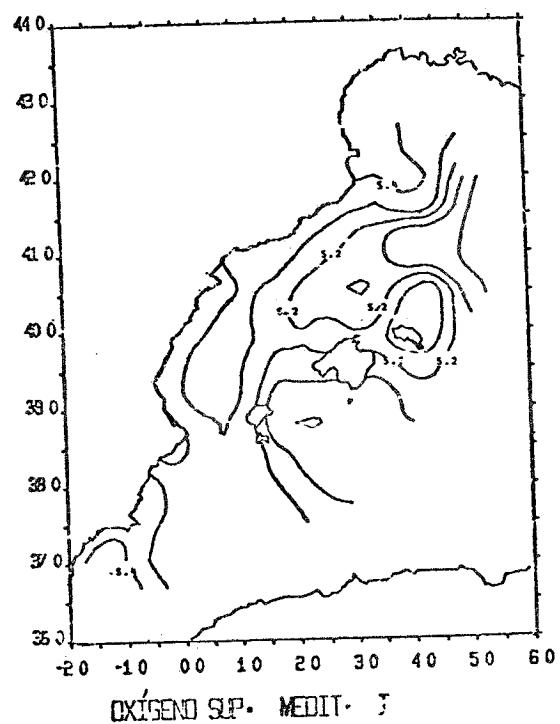
SIT	PERFIL	HORA	242
37	44	FONDO	2000
1	24.5 W		
PROF	TABAJADA	T.SURIDA	T.POTFLA
0	17.81		17.82
5	17.81	17.82	17.80
10	17.81	17.81	17.79
15	17.82	17.83	
20	17.83	17.83	17.82
25	17.83	17.83	
30	17.83	17.84	17.79
35	17.83	17.84	
40	17.82	17.52	17.73
45	17.10	15.64	
50	15.33	15.11	15.54
55	14.74	14.69	
60	14.50	14.45	
65	14.29	14.25	
70	14.17	14.12	
75	14.08	14.05	14.06
80	14.01	13.97	
85	13.90	13.85	
90	13.83	13.79	
95	13.74	13.68	
100	13.67	13.63	13.66
105	13.61	13.56	
110	13.55	13.50	
115	13.48	13.46	
120	13.43	13.38	
125	13.36	13.34	13.33
130	13.33	13.29	
135	13.27	13.24	
140	13.24	13.21	
145	13.21		
150	13.17		13.12

PERFIL	45	2/11/76	
SIT	36 55.0 N	HORA 945	
	1 12.0 W	FONDO 2500	
PROF	T.BAJADA	T.SURIDA	T.BOTELLA
*****	*****	*****	*****
0	17.09		17.21
5	17.08	17.10	17.22
10	17.08	17.09	17.10
15	17.07	17.08	
20	17.07	17.06	17.08
25	17.02	16.97	
30	16.89	16.71	16.75
35	16.59	15.80	
40	15.20	14.82	15.18
45	14.77	14.91	
50	14.92	14.87	14.99
55	14.70	14.70	
60	14.61	14.54	
65	14.38	14.33	
70	14.27	14.28	
75	14.21	14.20	14.14
80	14.05	14.04	
85	14.12	14.07	
90	13.98	13.92	
95	13.88		

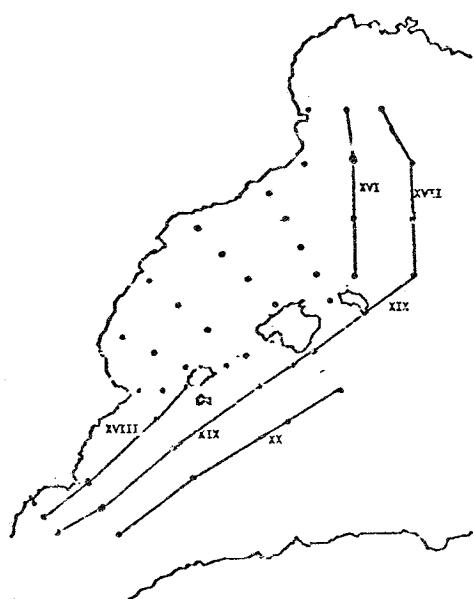
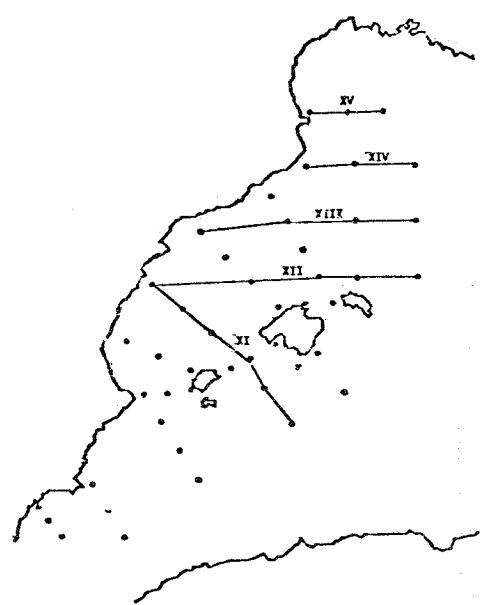
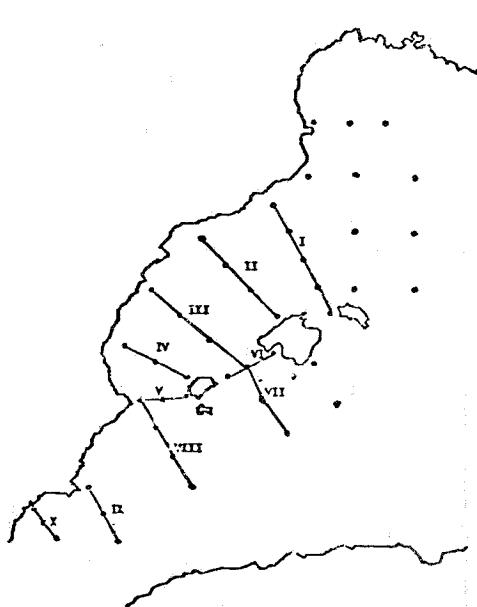
MAPAS 2,3 y 4.- Distribución superficial de temperatura, salinidad y sigma-t.



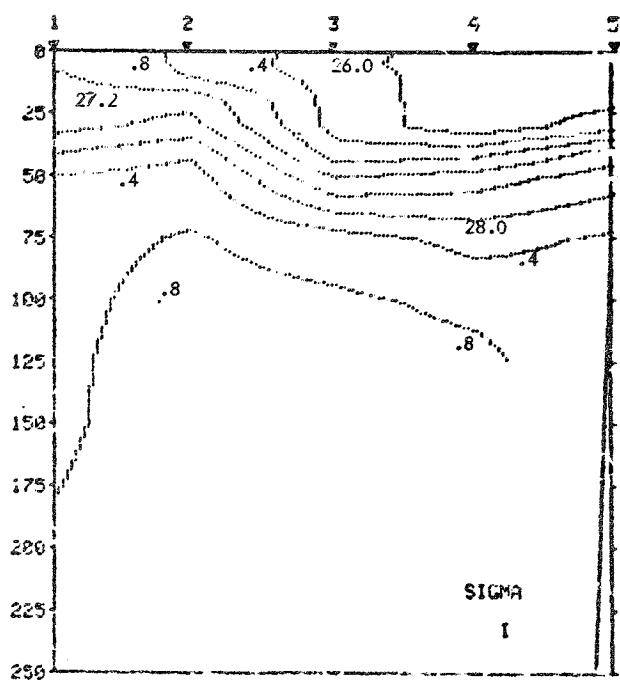
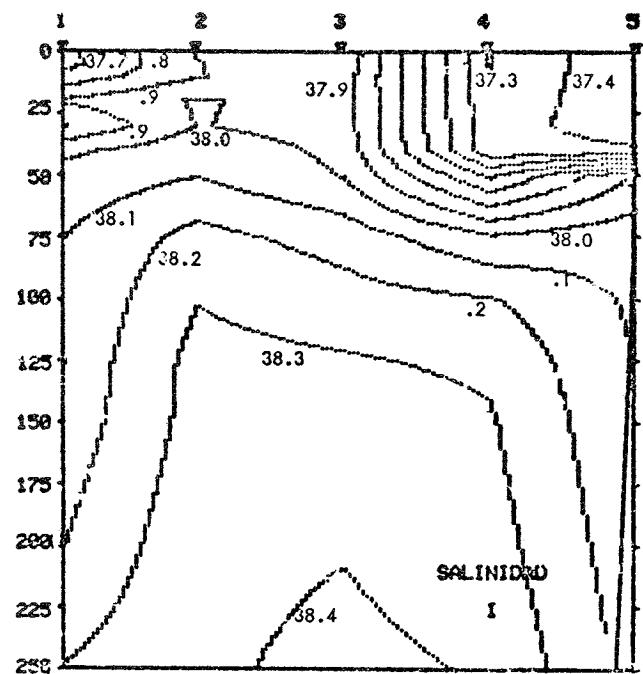
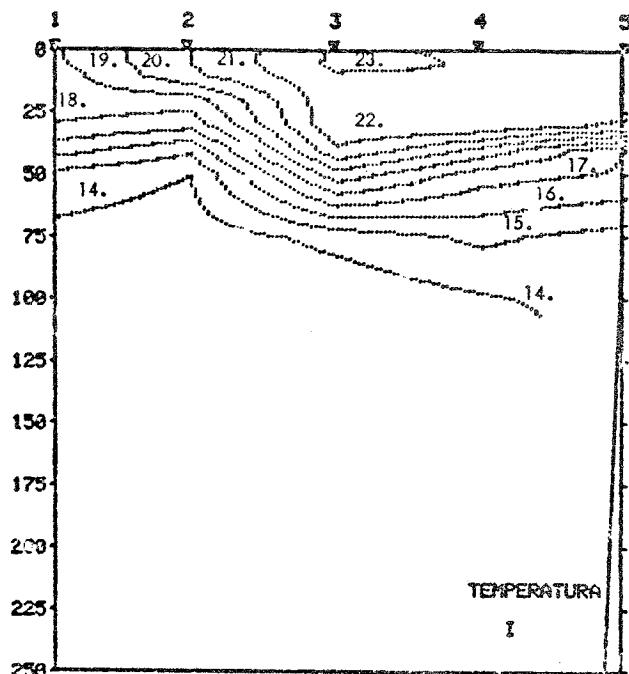
MAPAS 5 y 6.- Distribución superficial de oxígeno y clorofila.

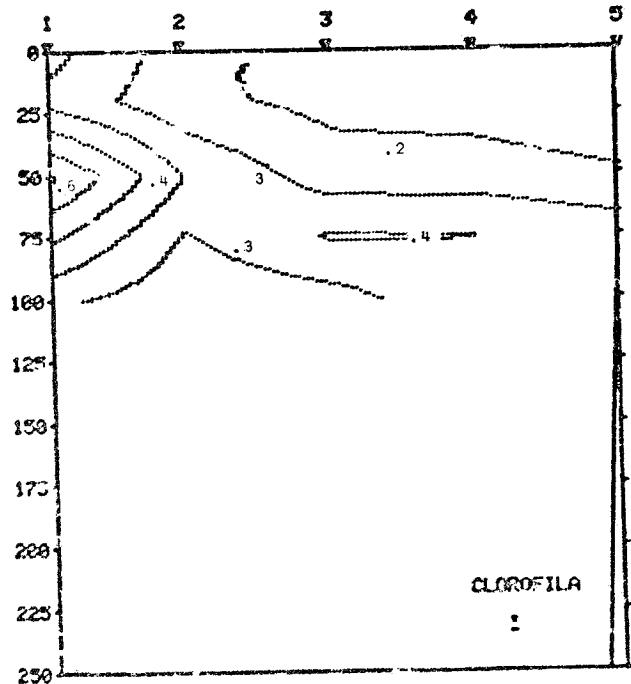
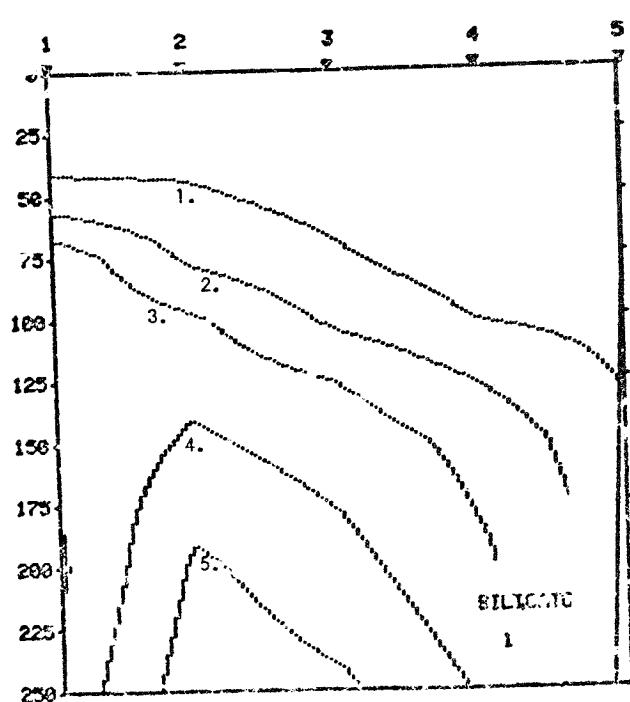
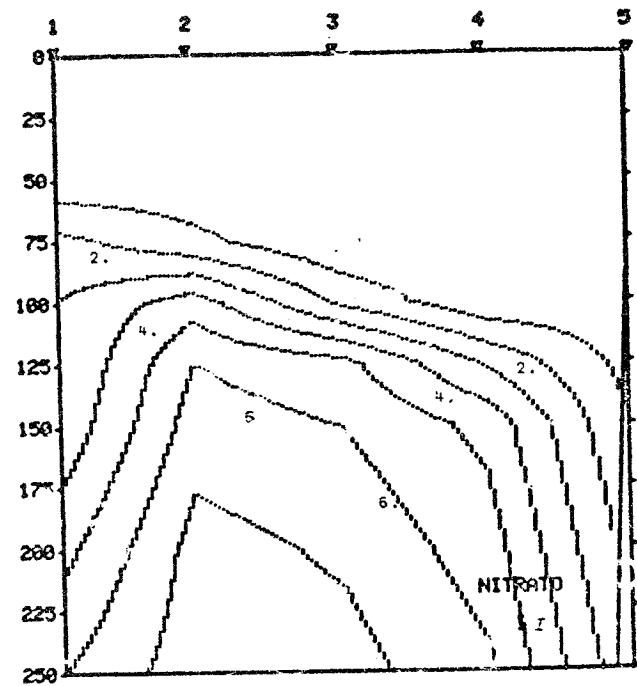
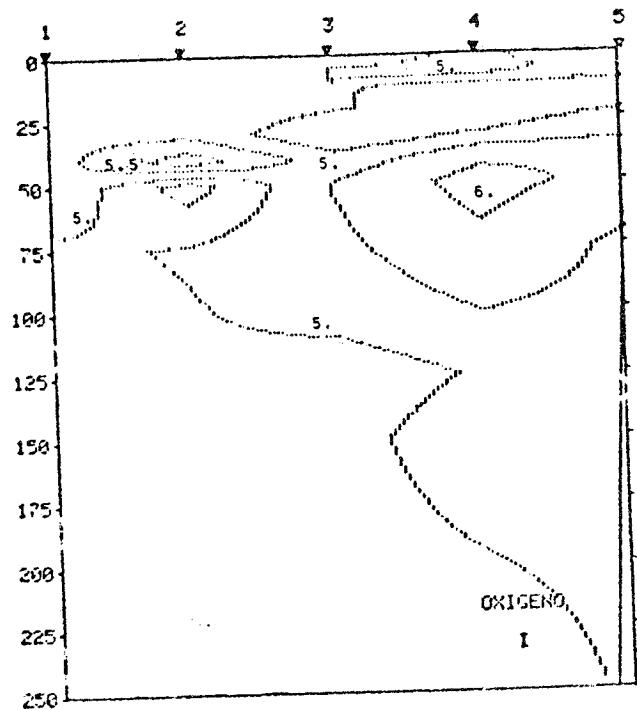


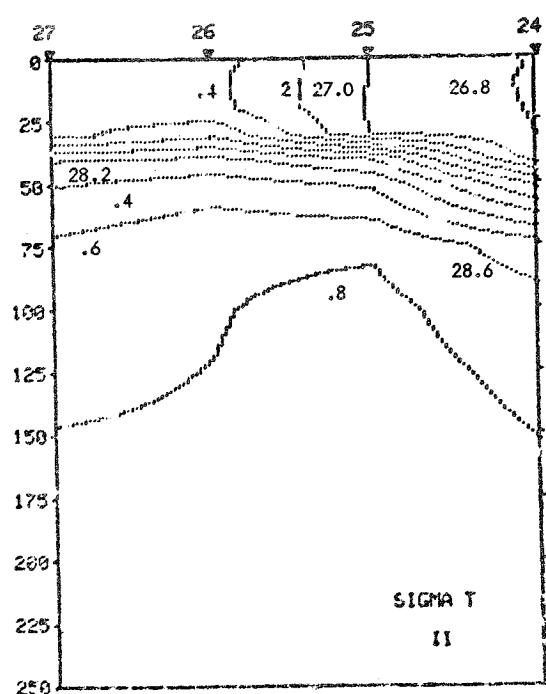
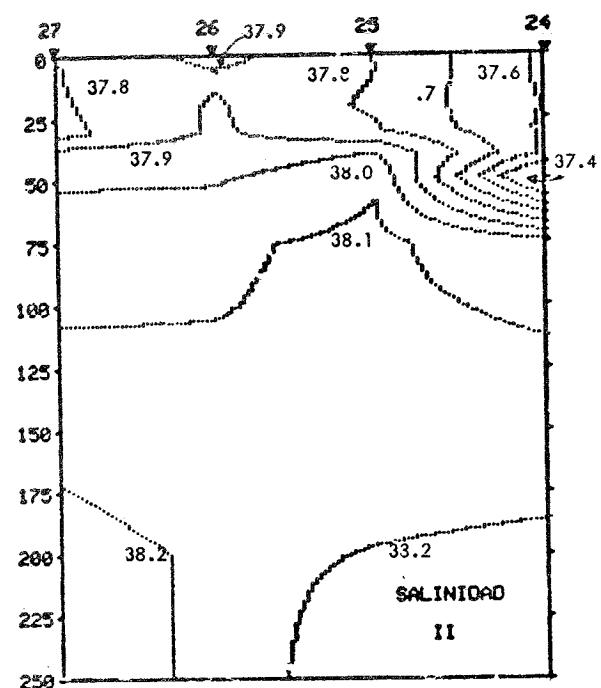
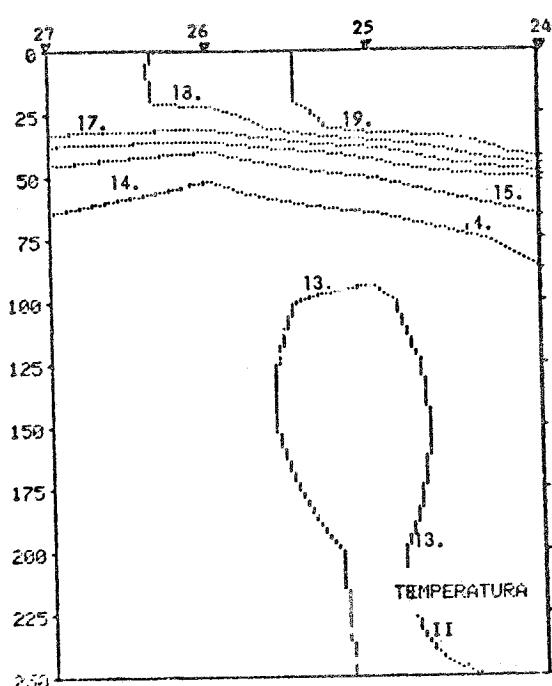
MAPAS 7,8 y 9.- Transectos que se consideran para la distribución de los parámetros físicos y biológicos.

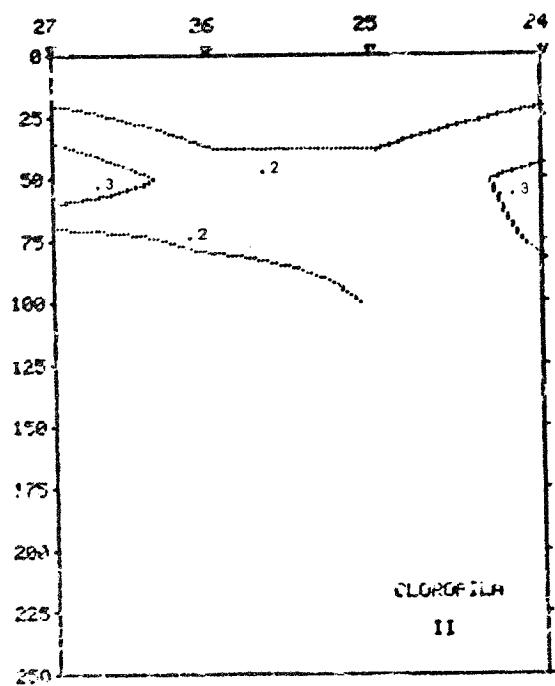
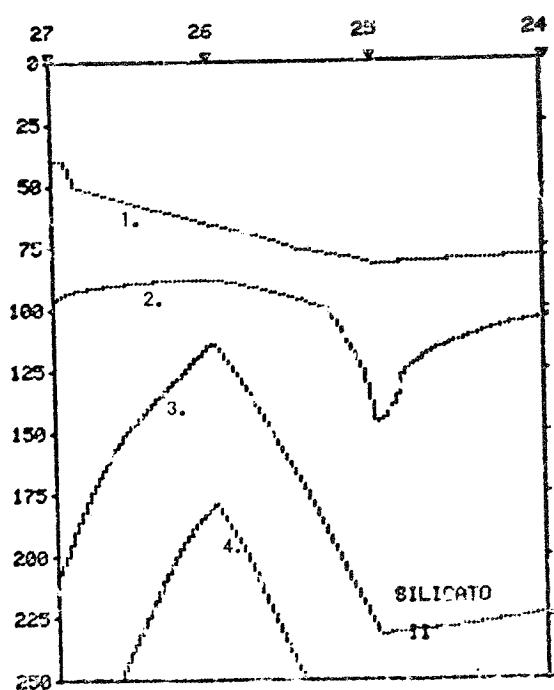
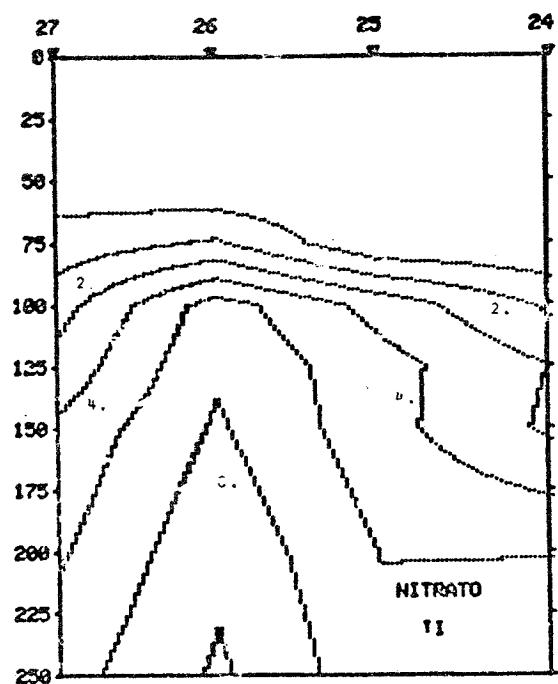
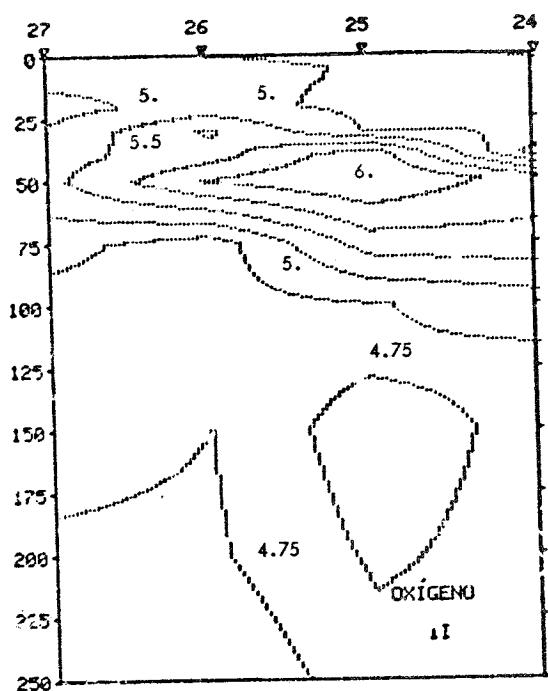


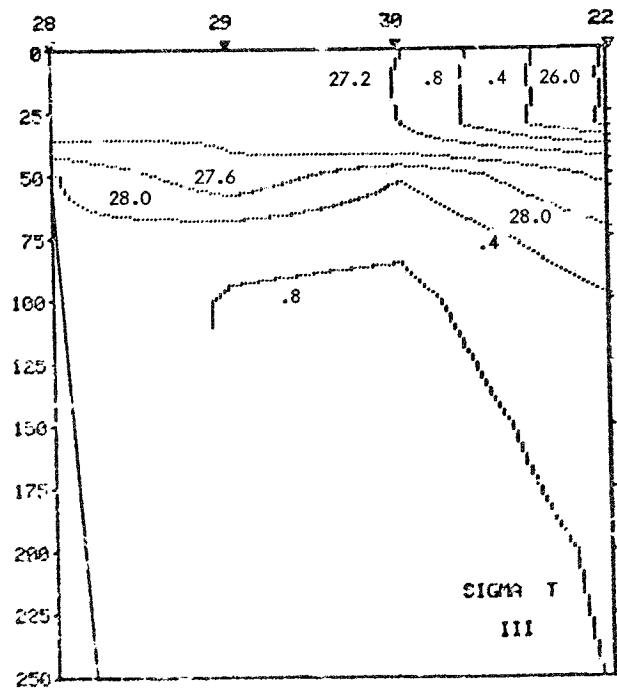
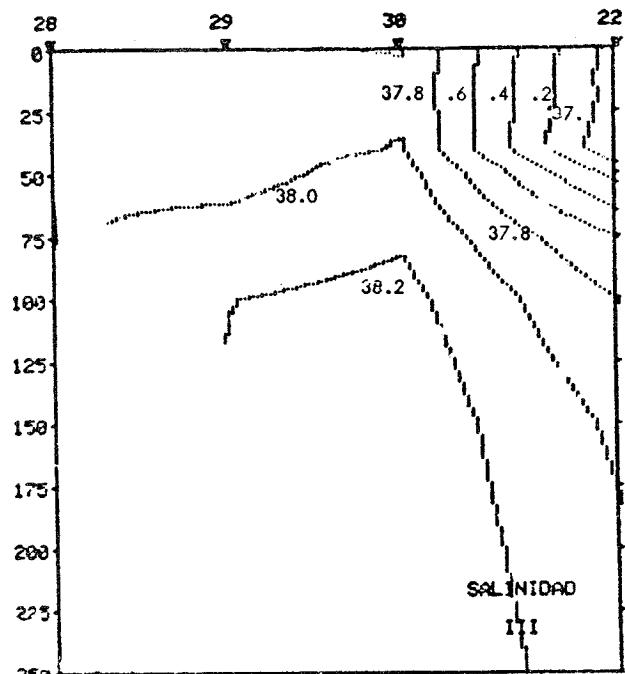
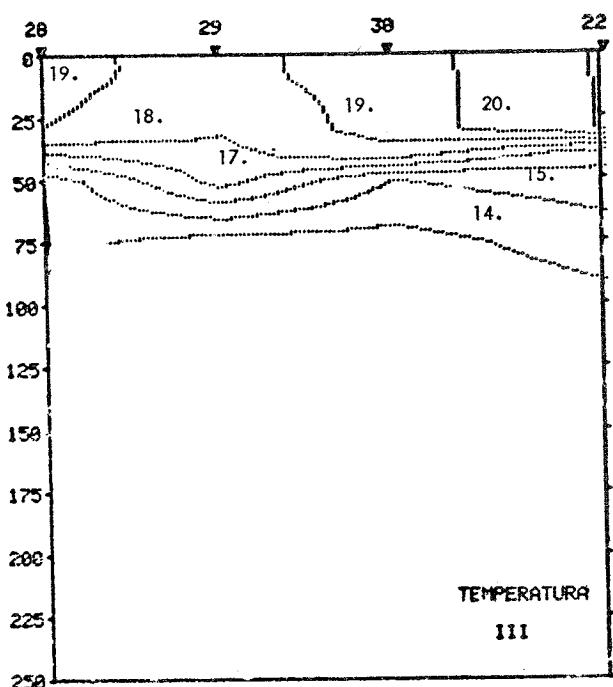
Transectos (I-XX) de la distribución de temperatura, salinidad, sigma-t, oxígeno, nitrato, silicato y clorofila.

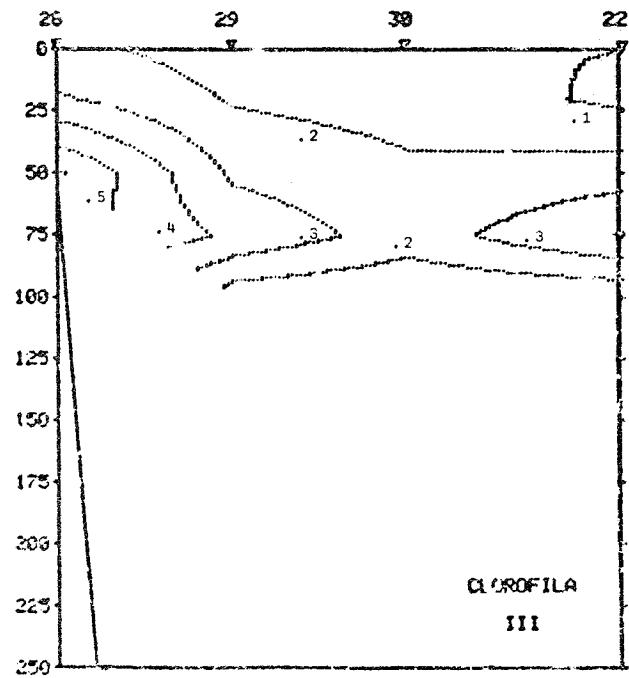
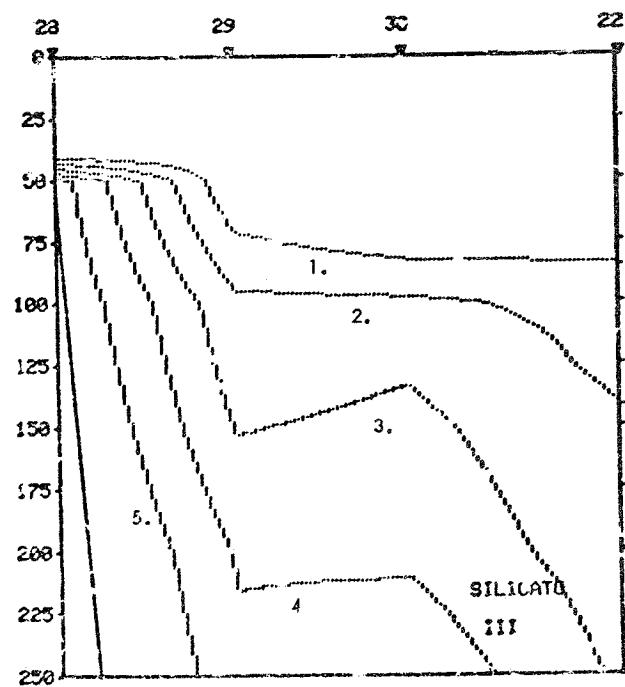
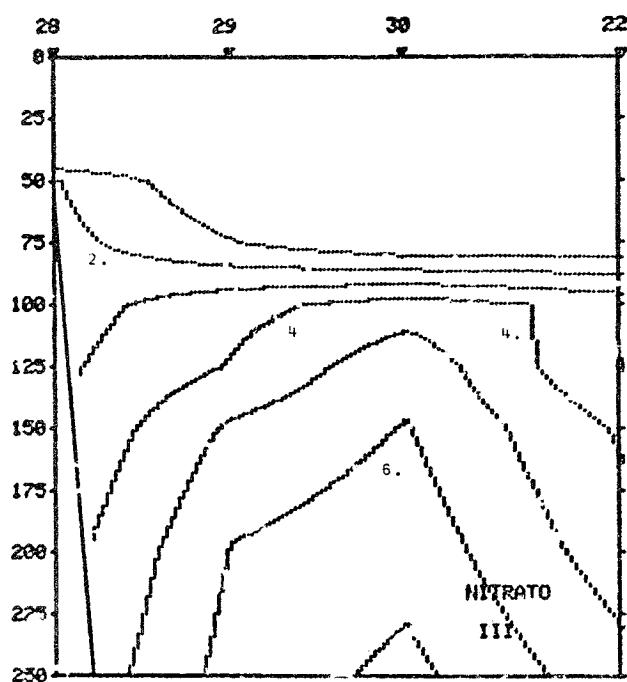
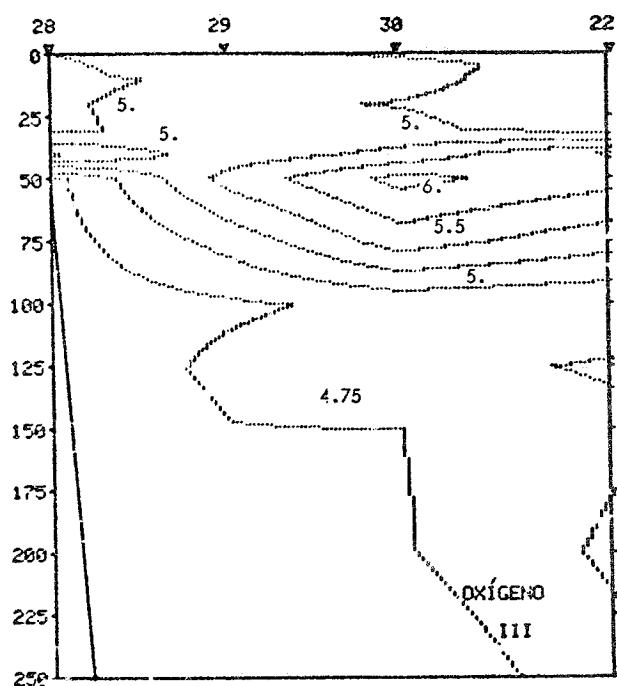


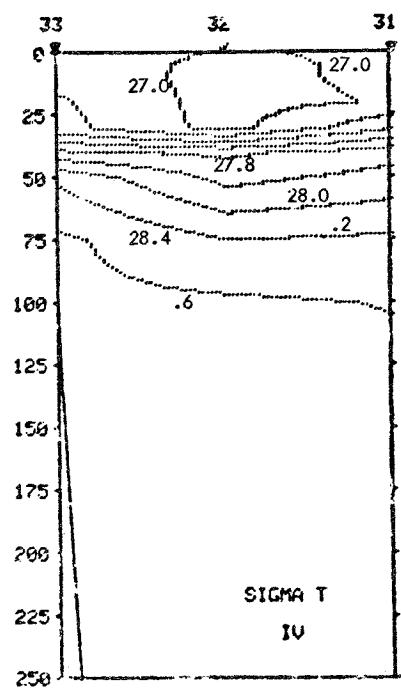
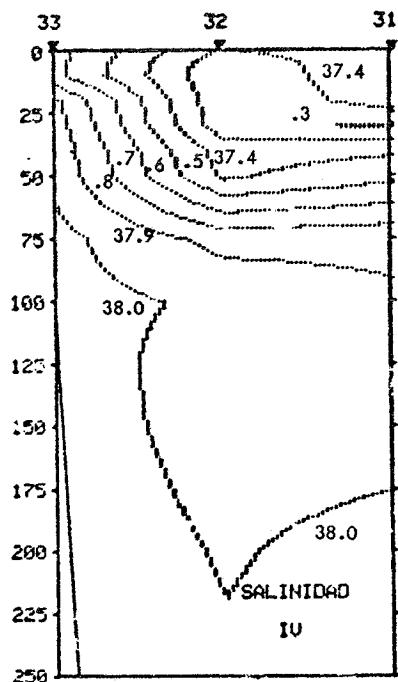
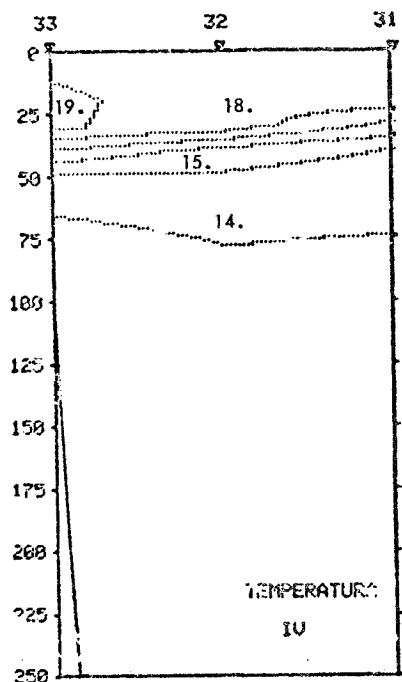


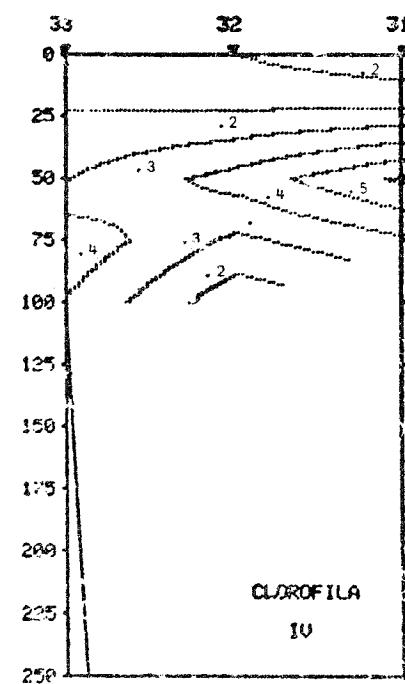
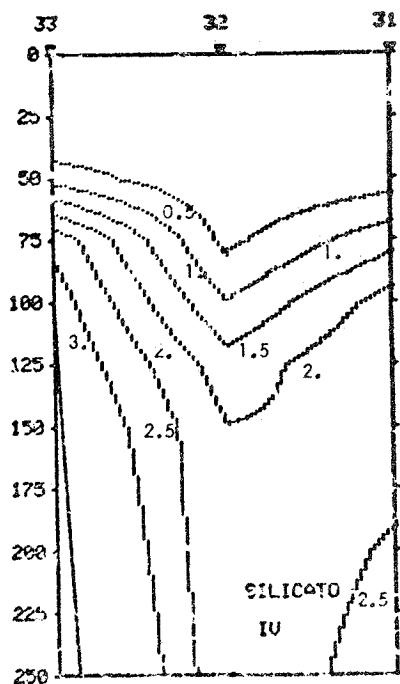
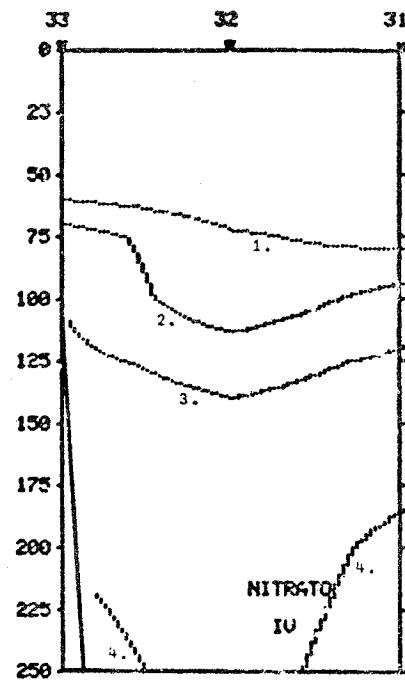
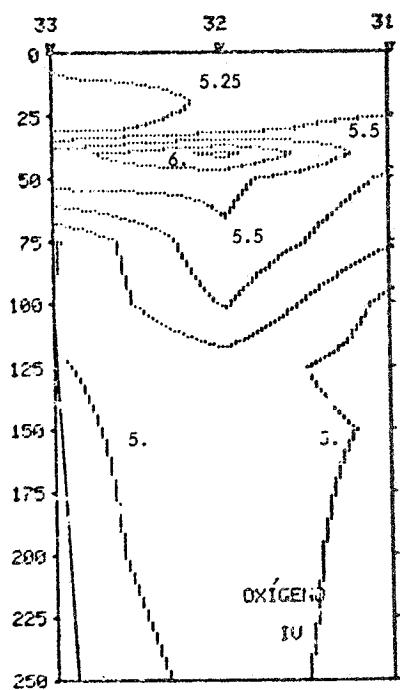


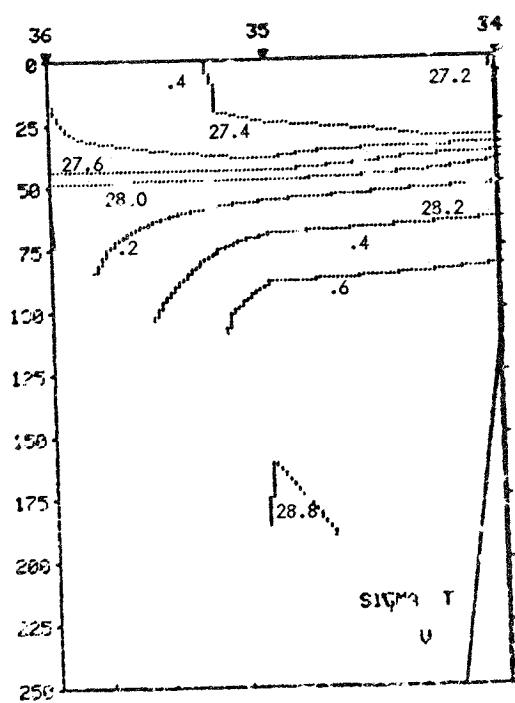
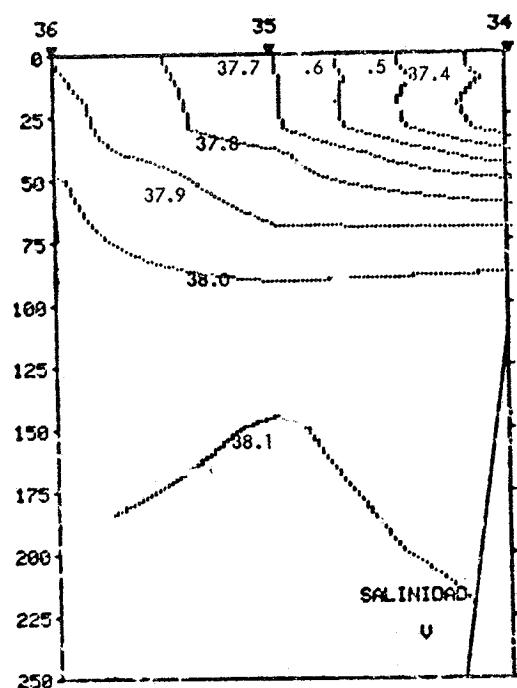
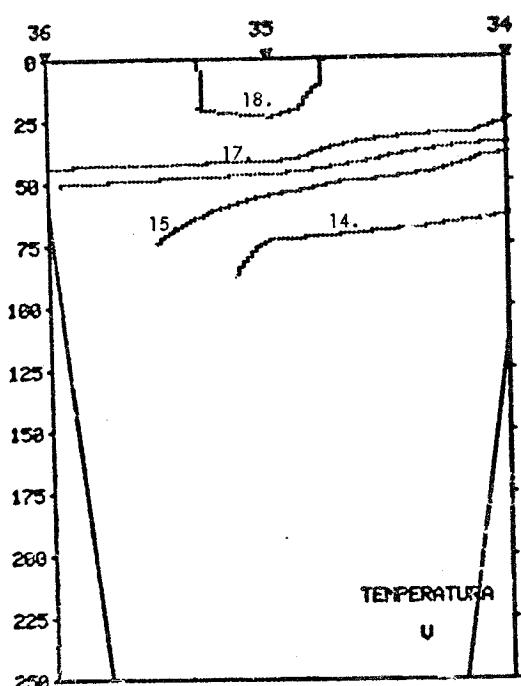


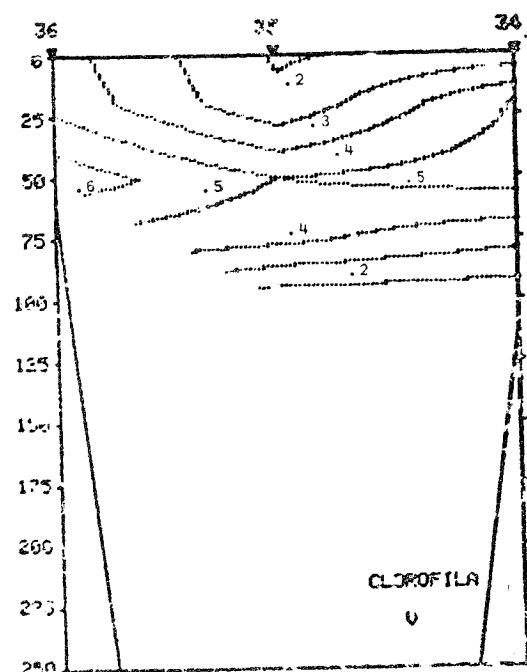
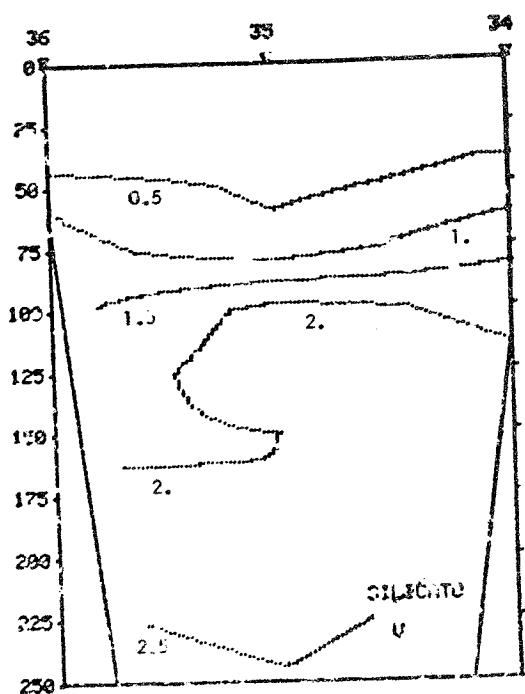
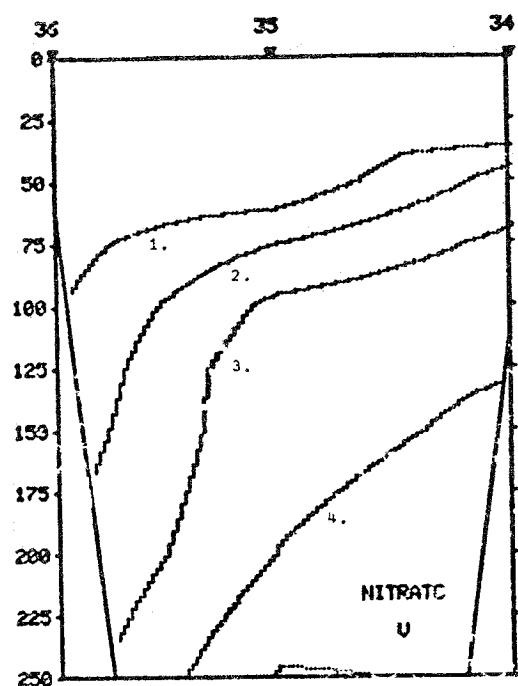
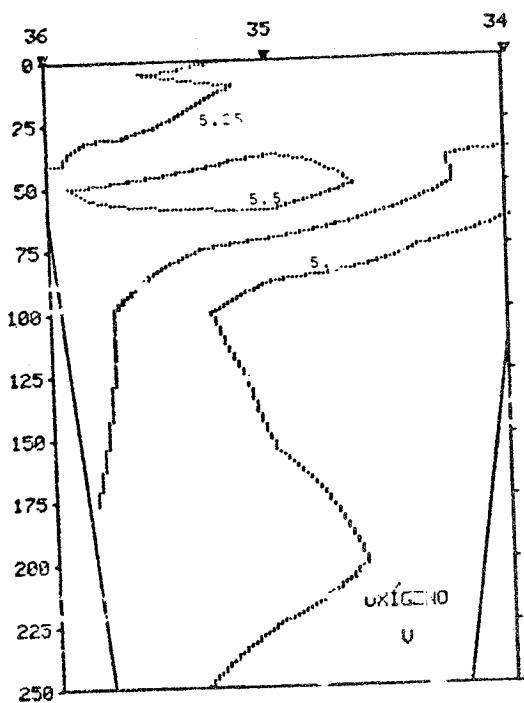


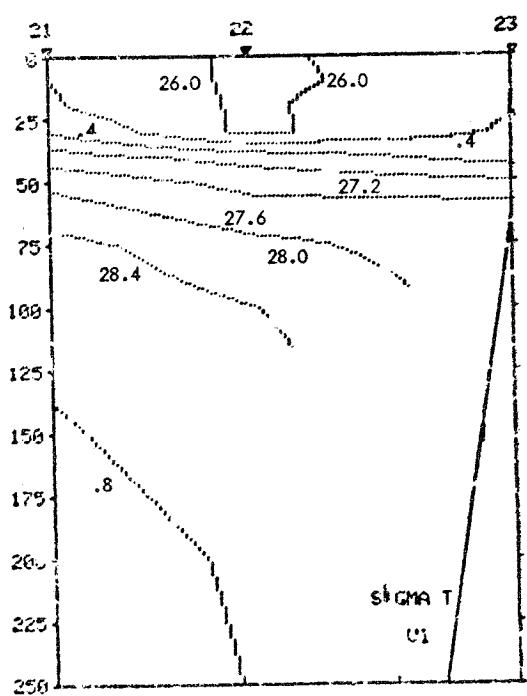
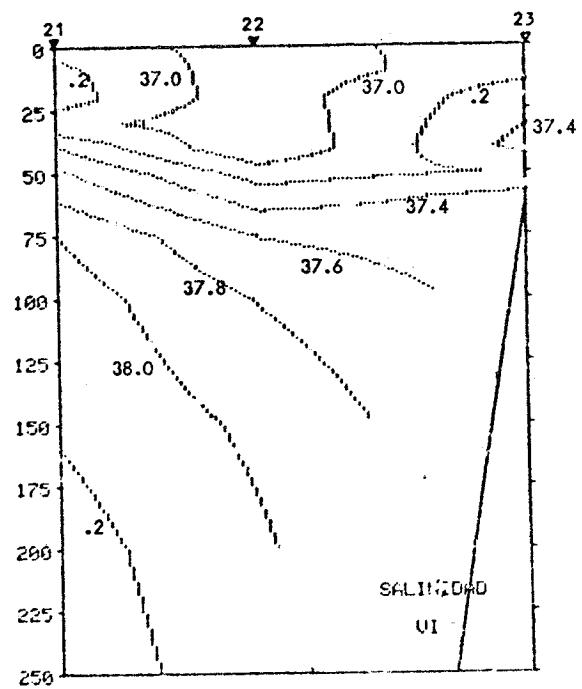
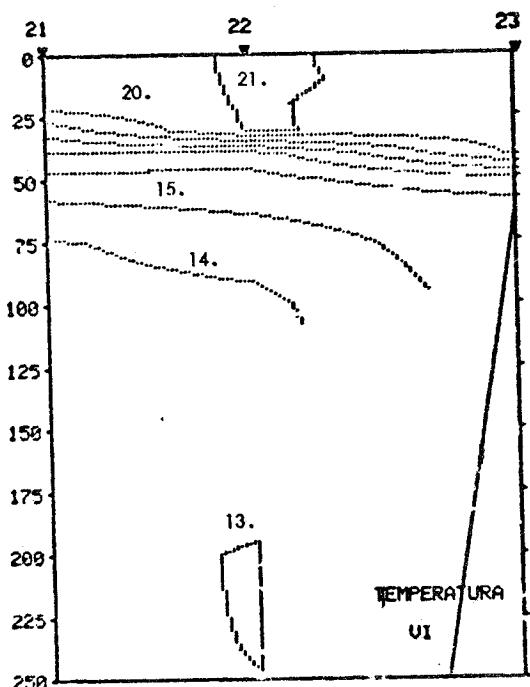


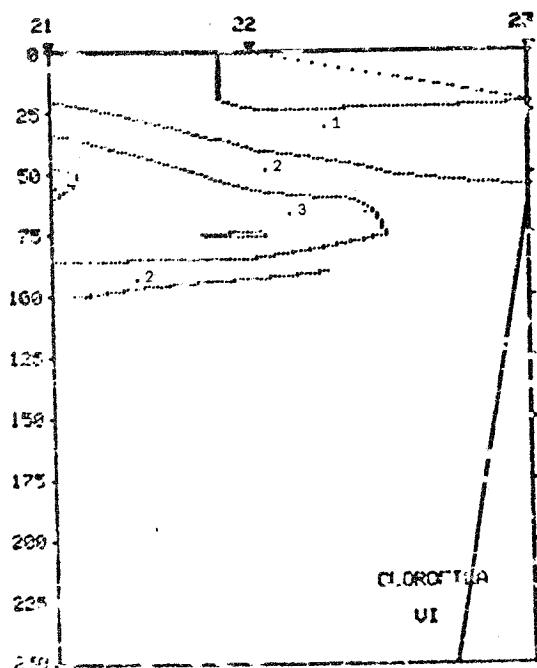
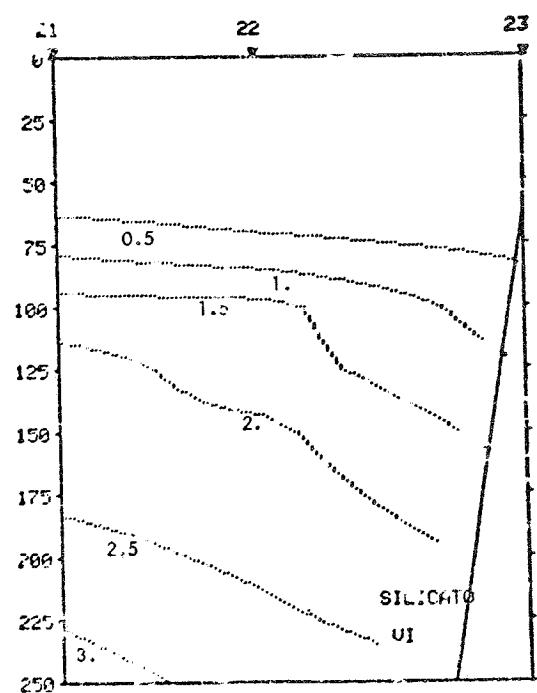
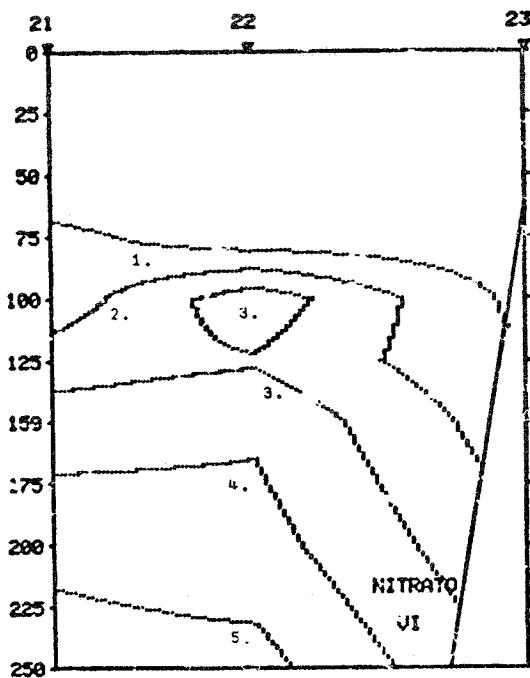
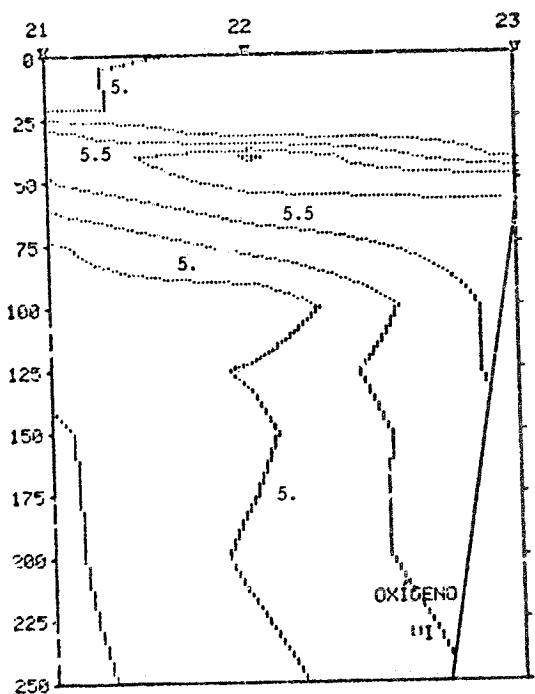


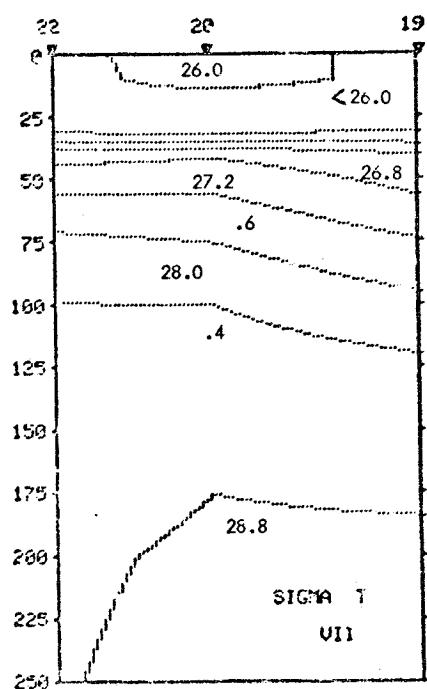
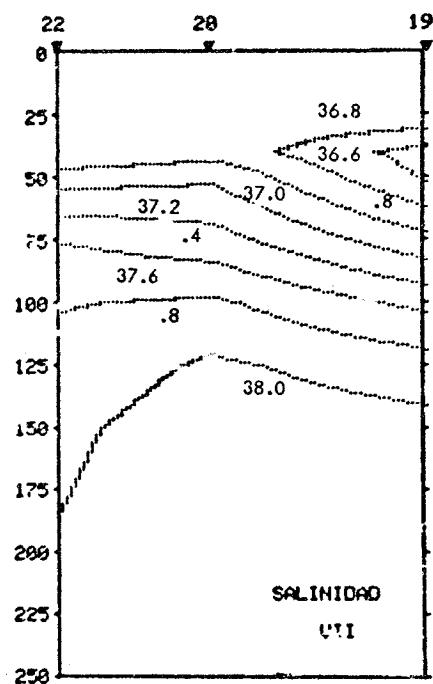
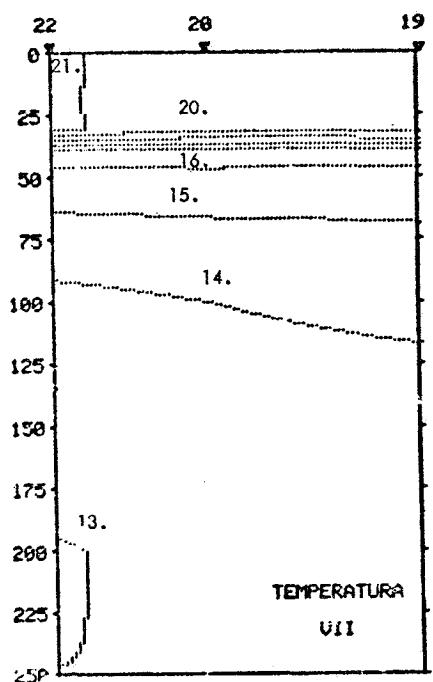


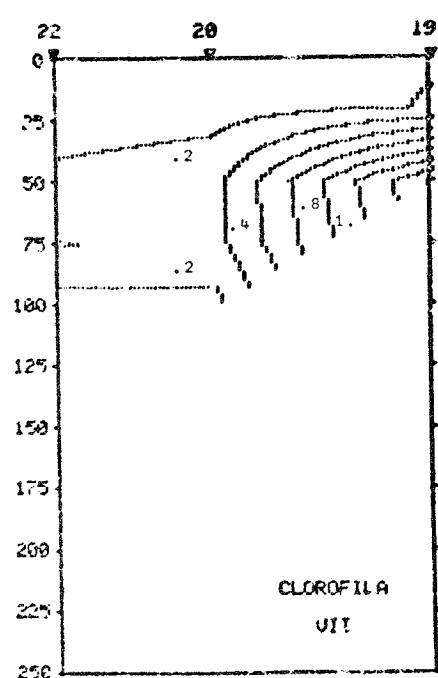
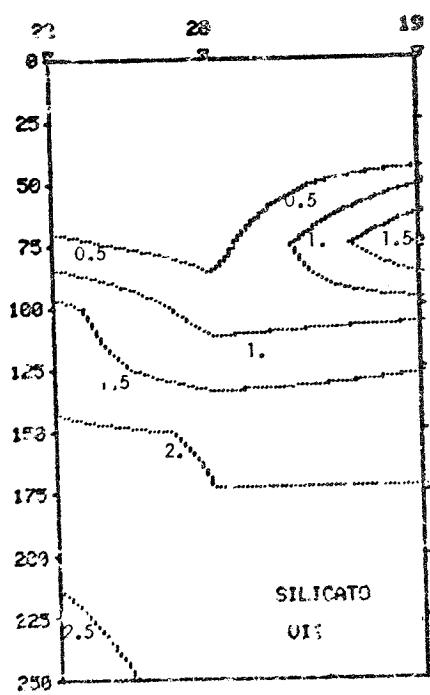
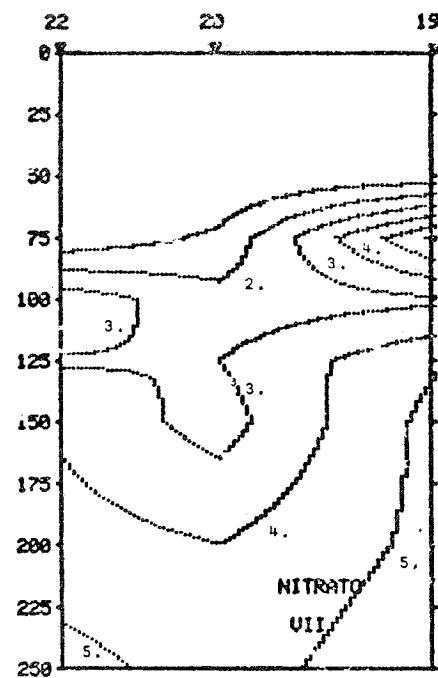
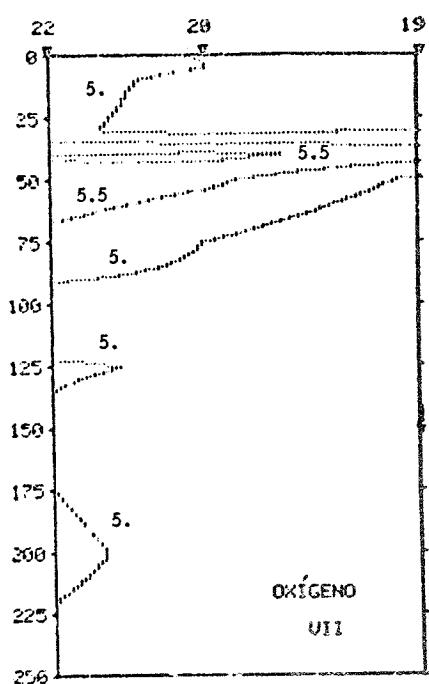


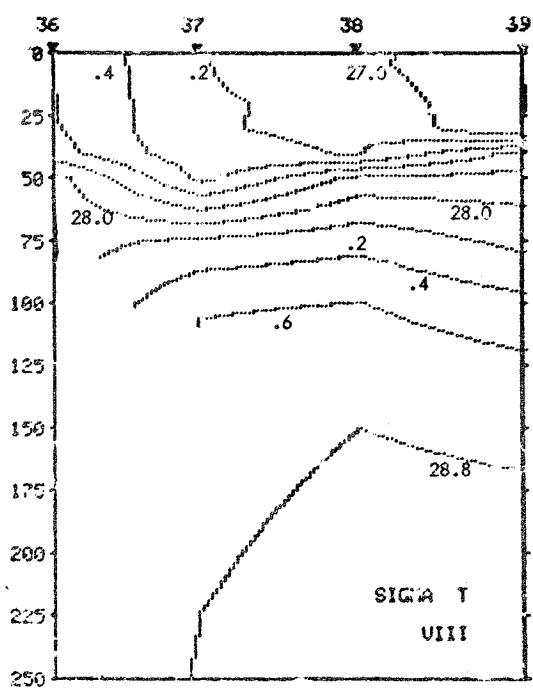
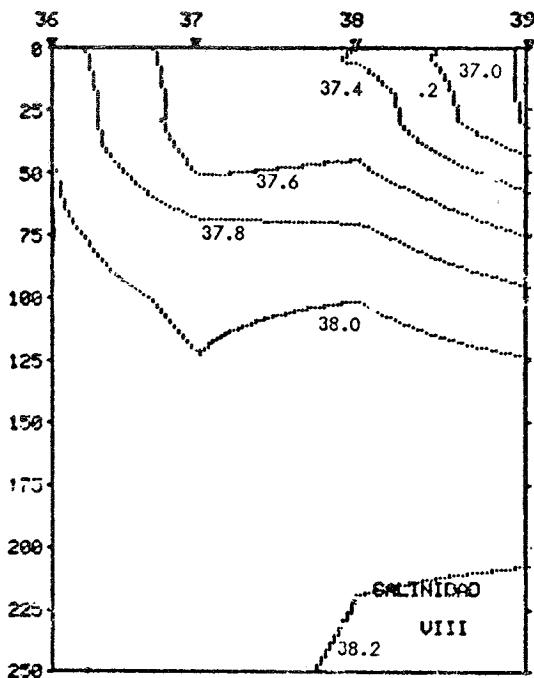
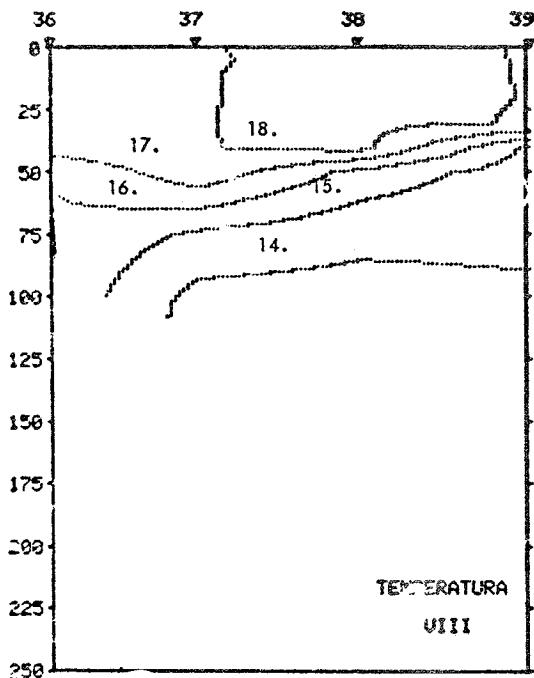


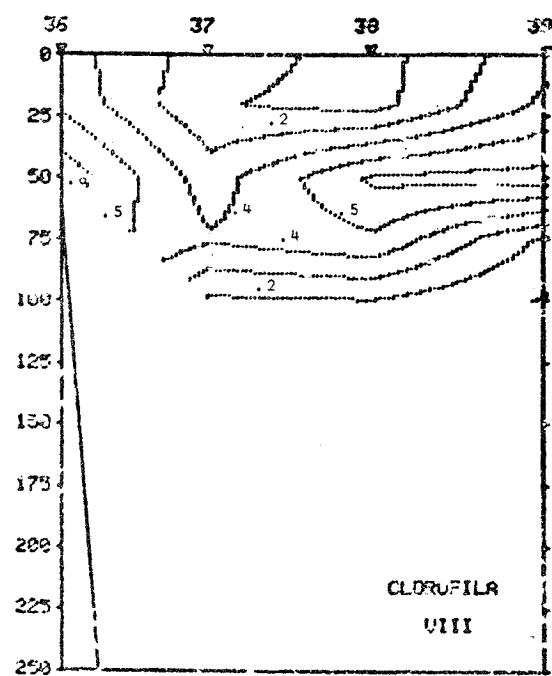
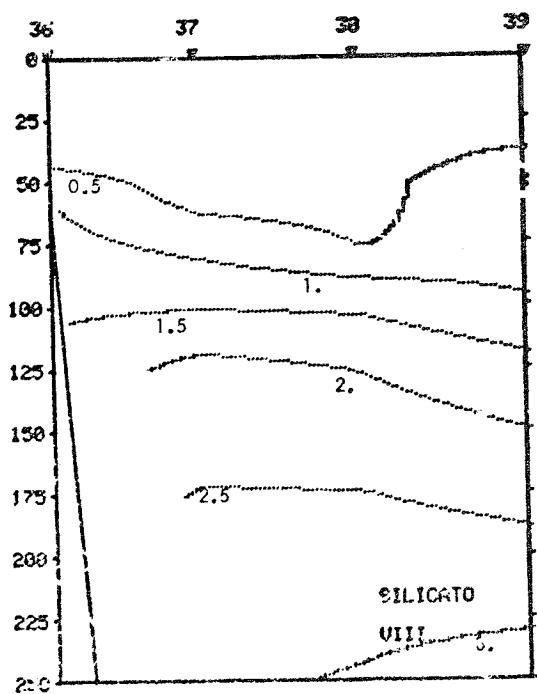
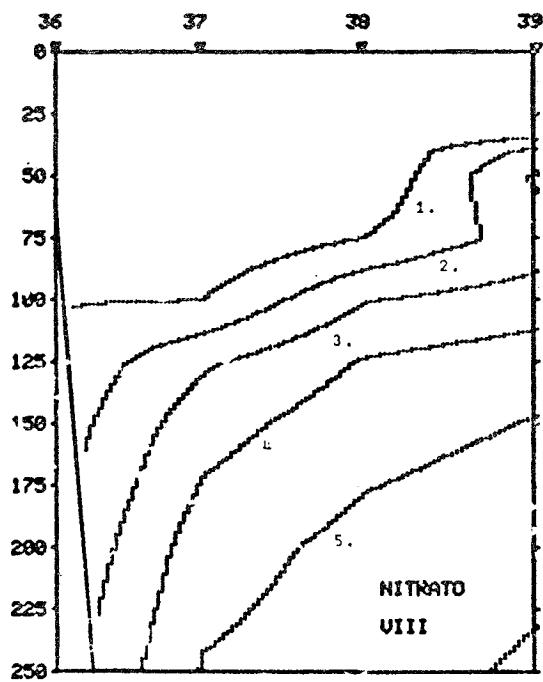
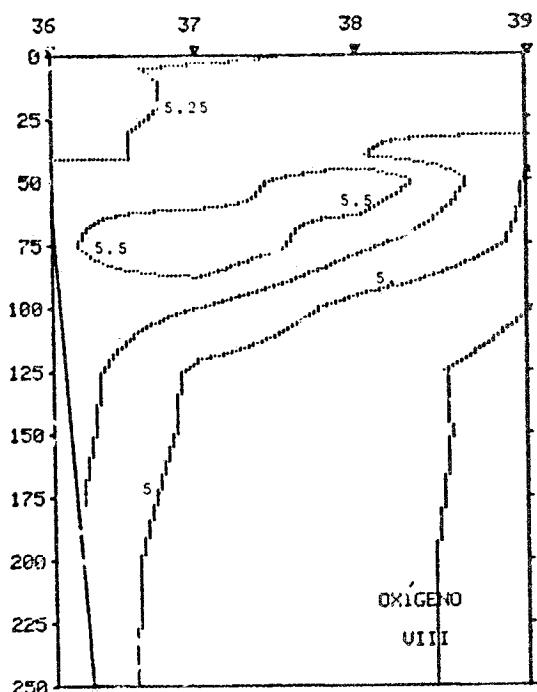


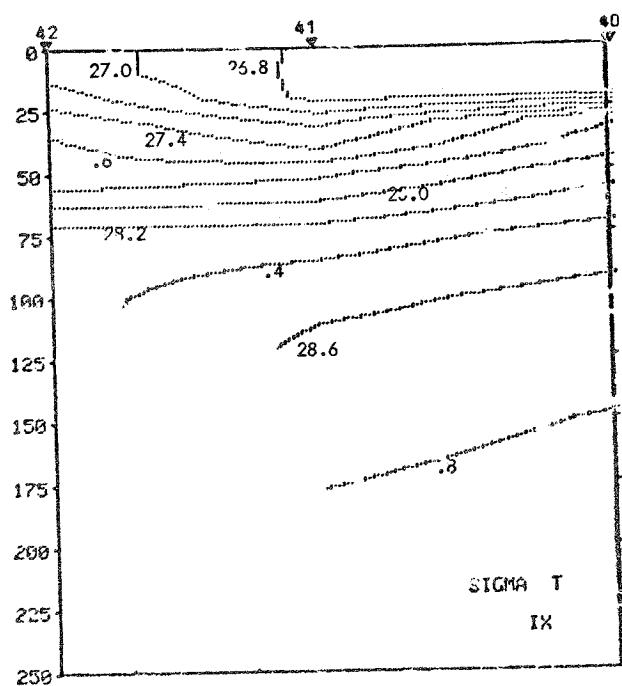
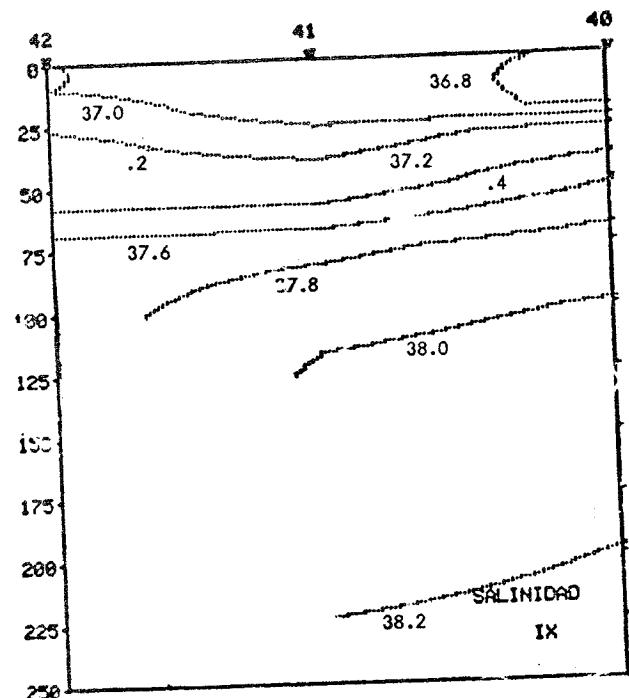
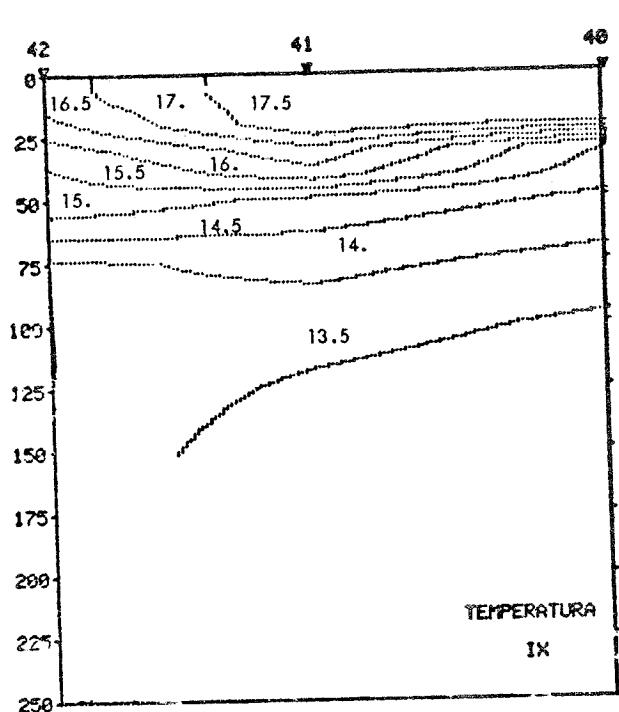


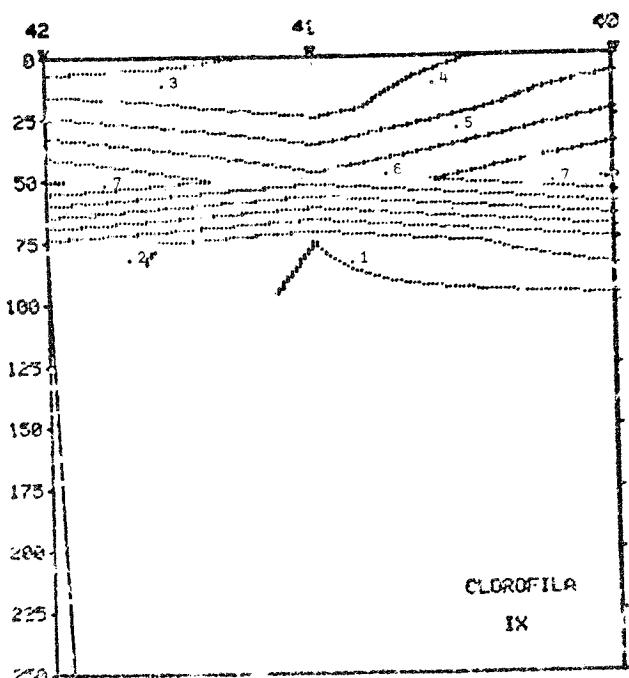
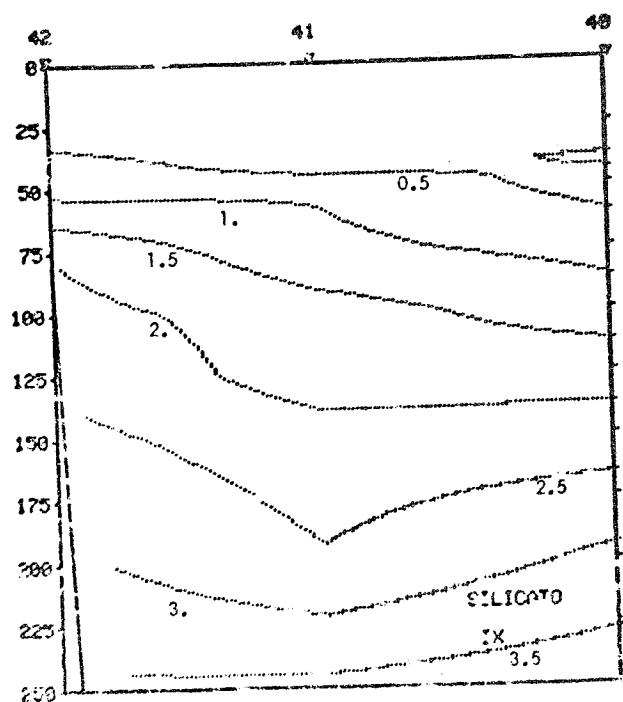
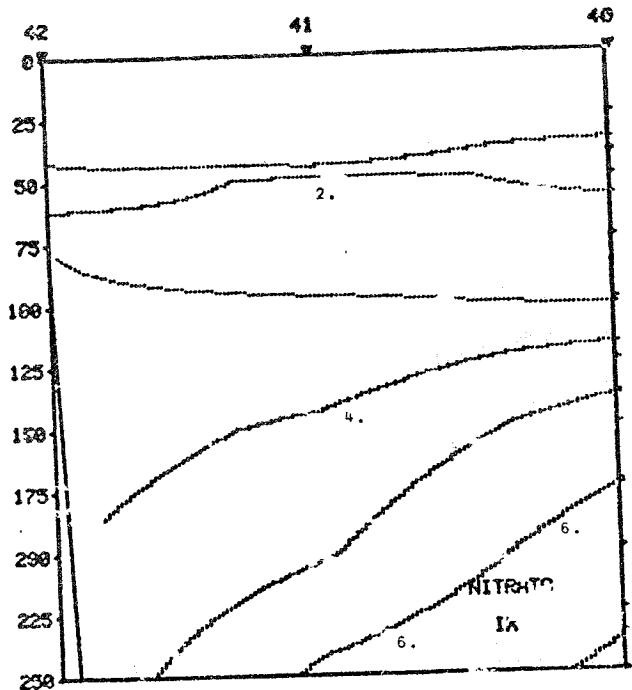
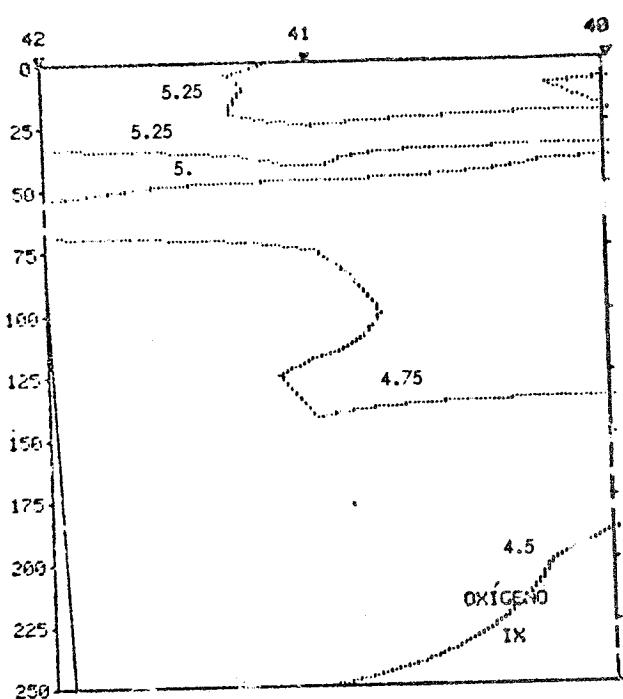


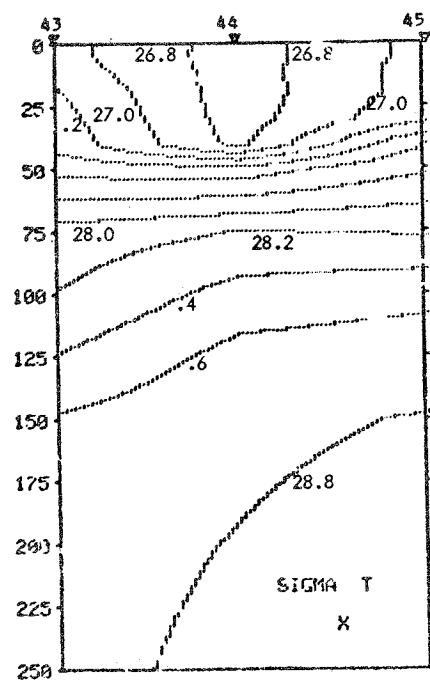
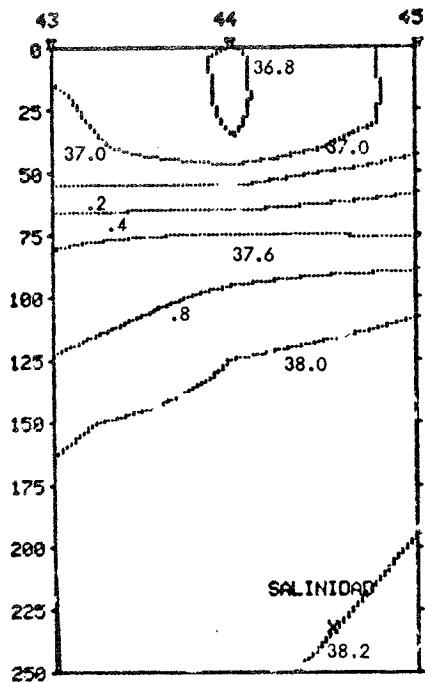
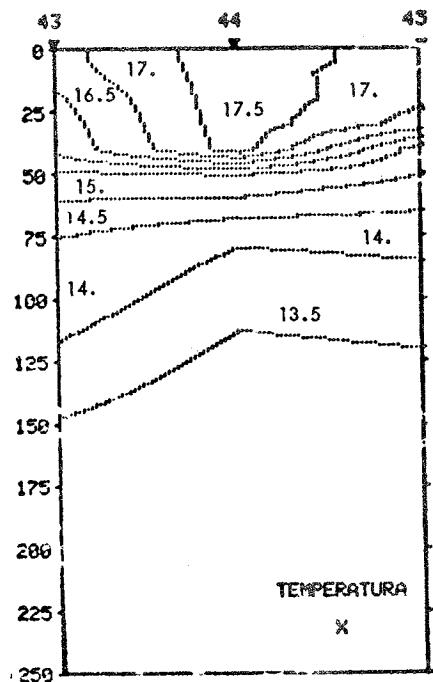


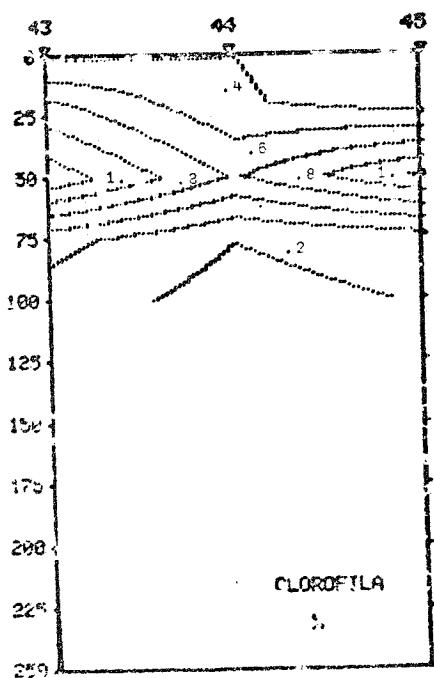
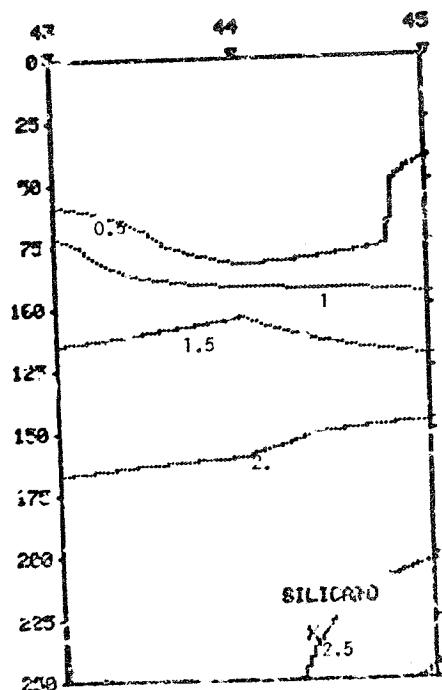
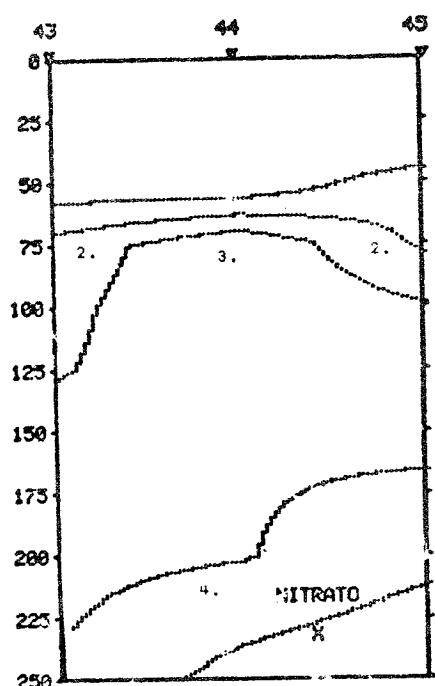
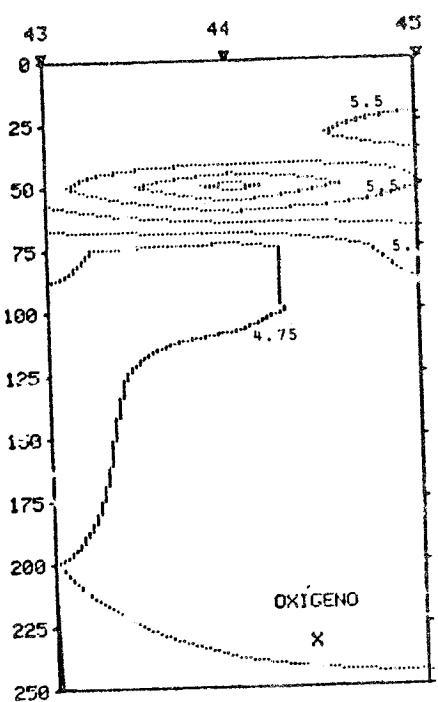


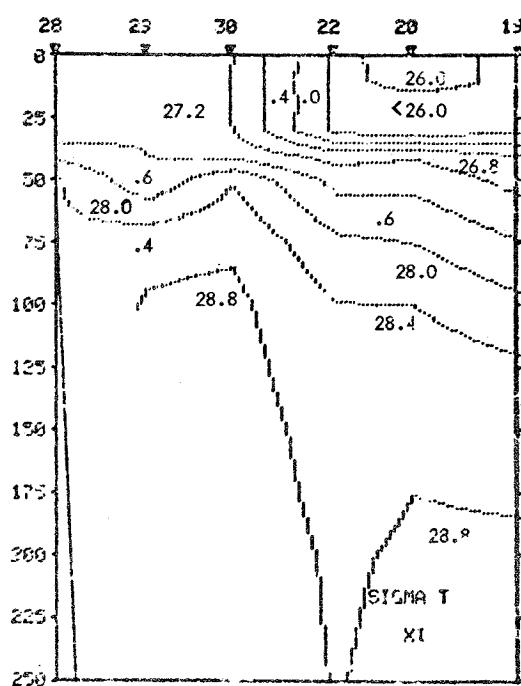
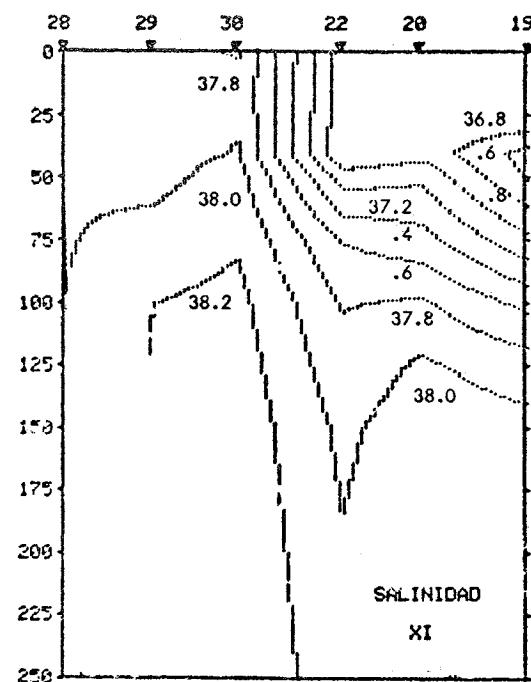
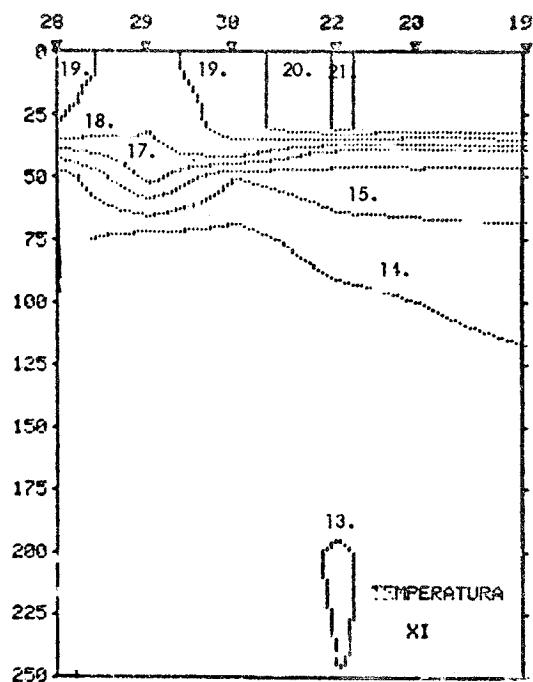


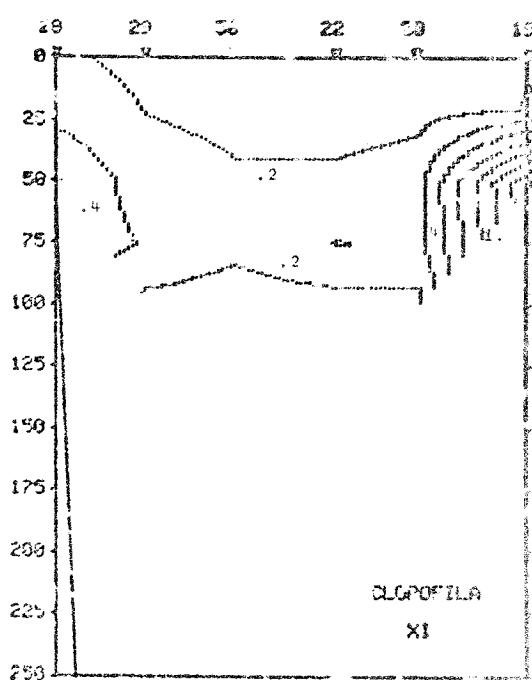
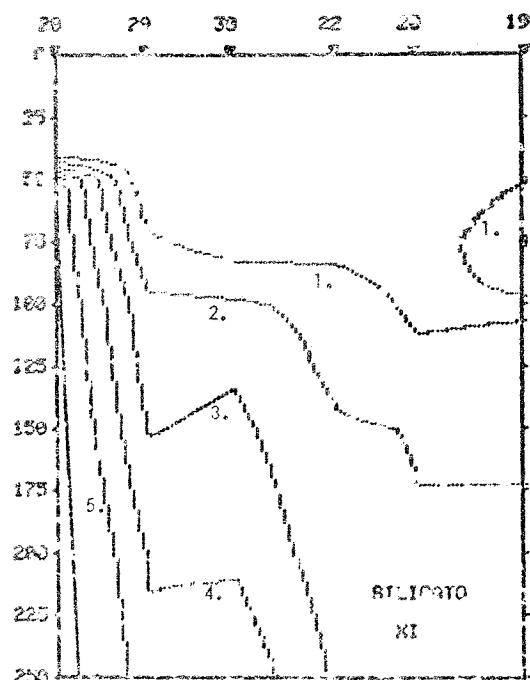
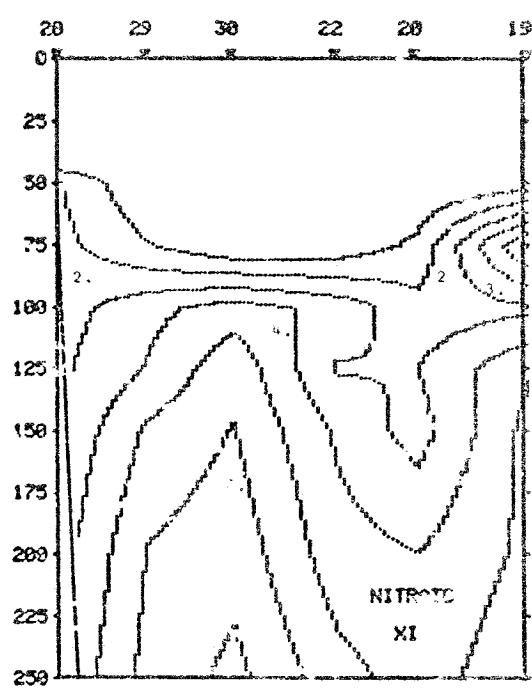
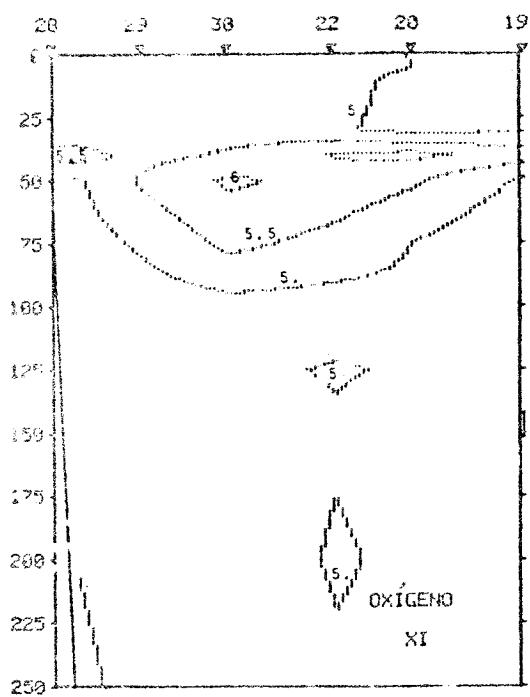


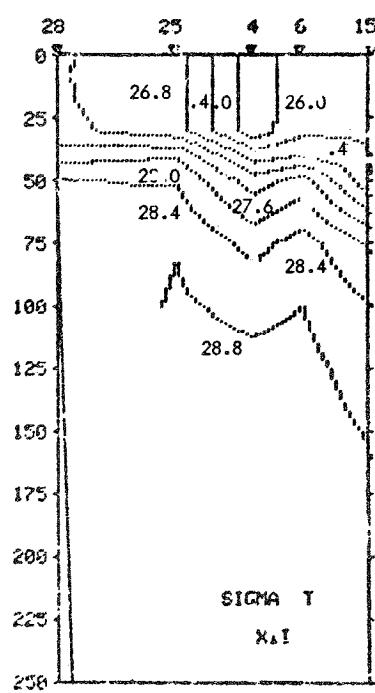
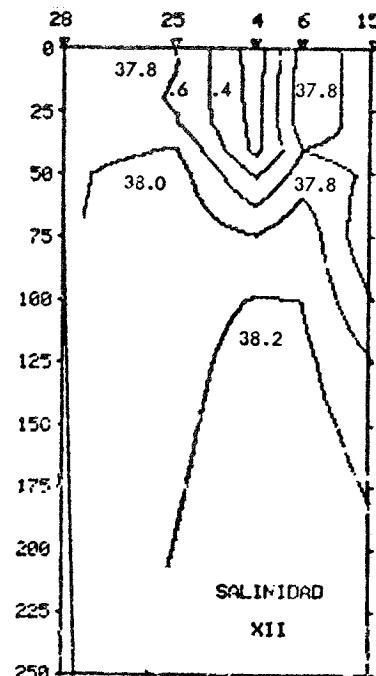
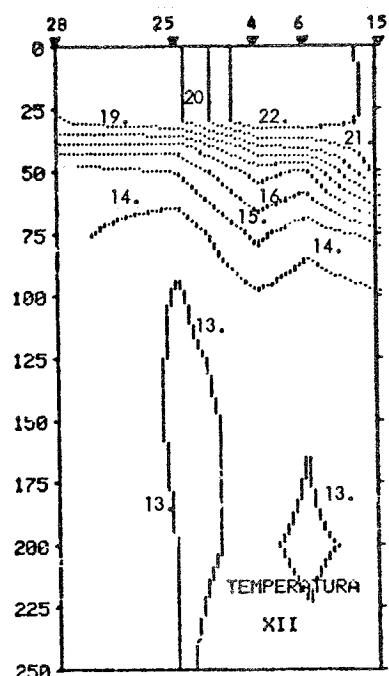


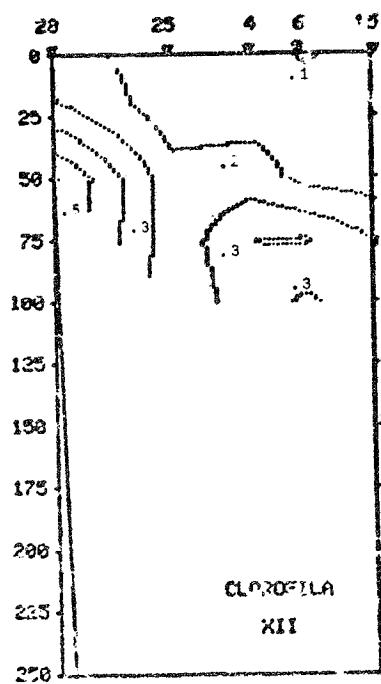
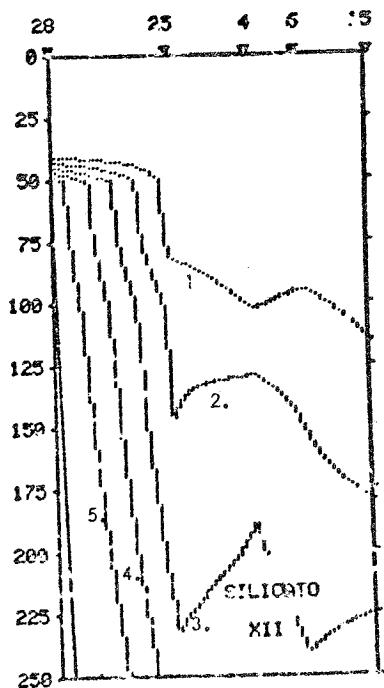
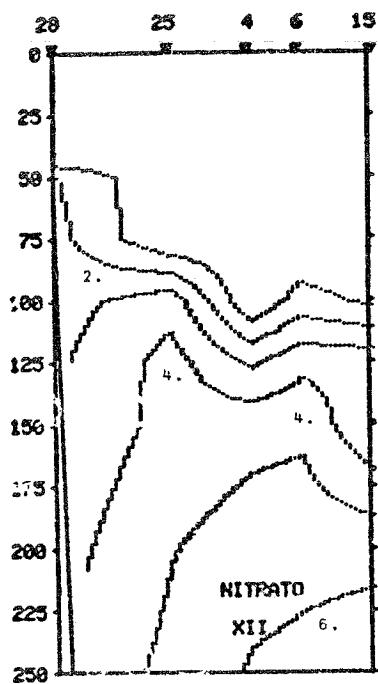
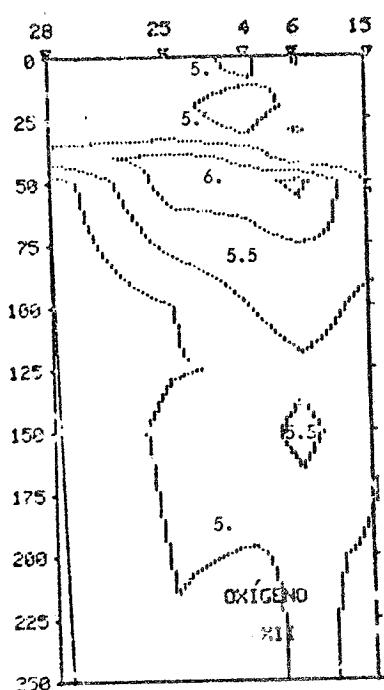


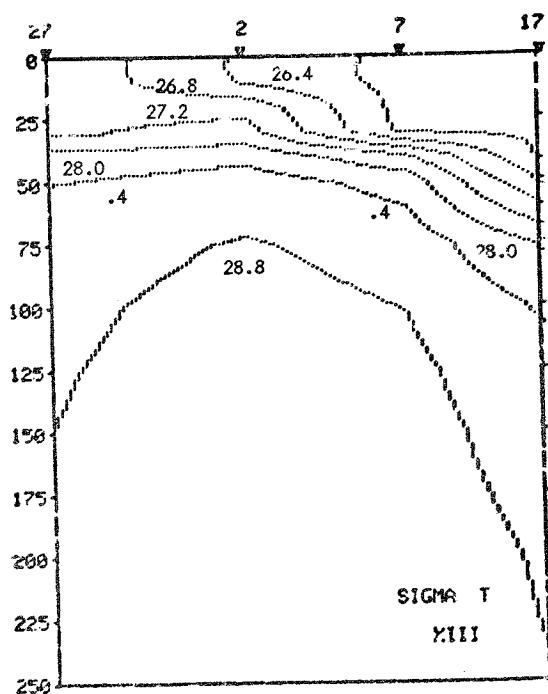
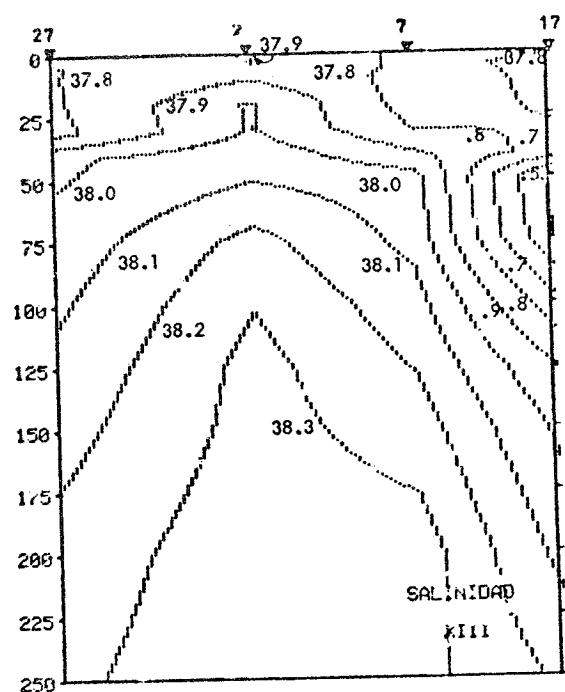
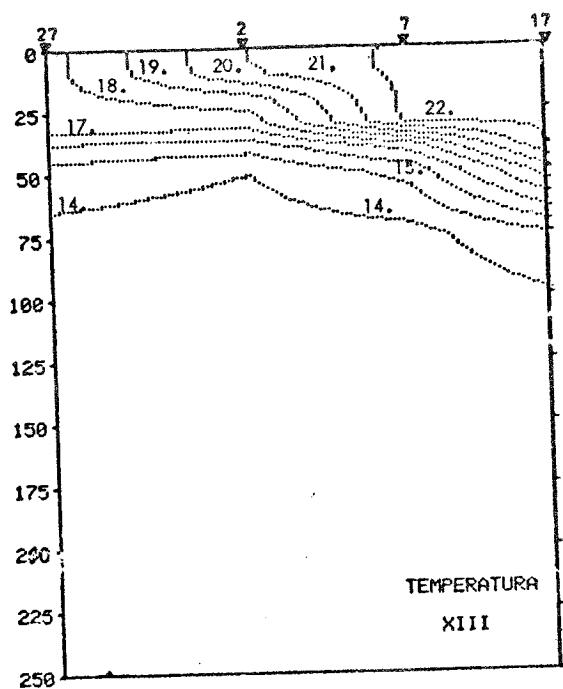


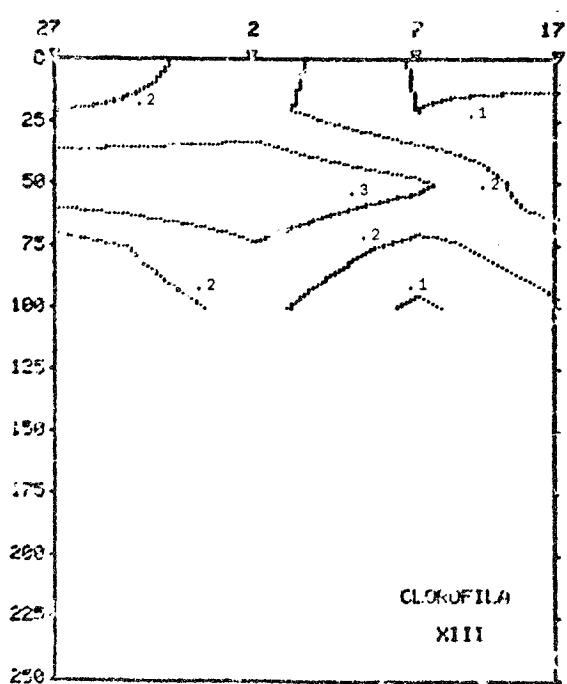
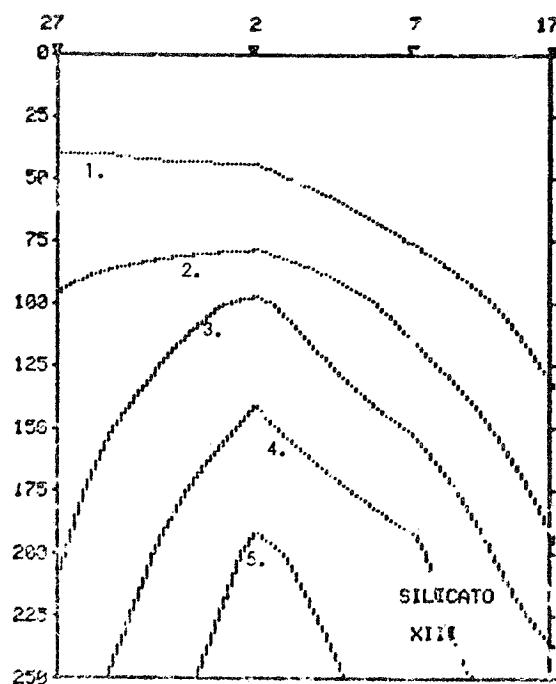
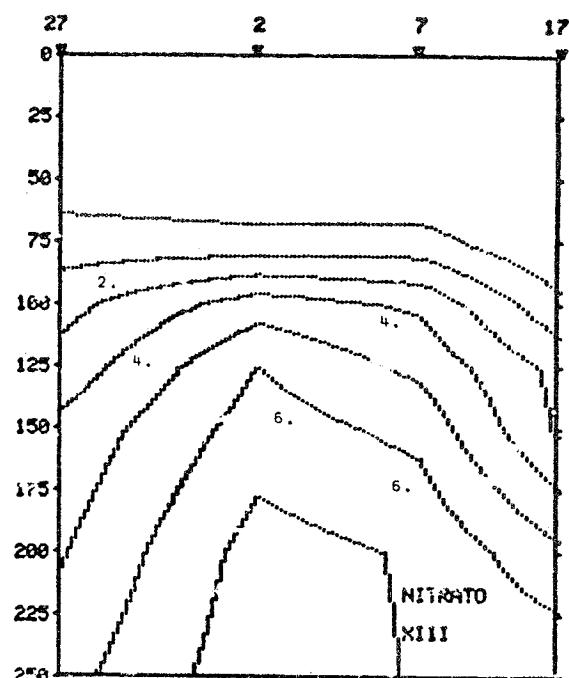
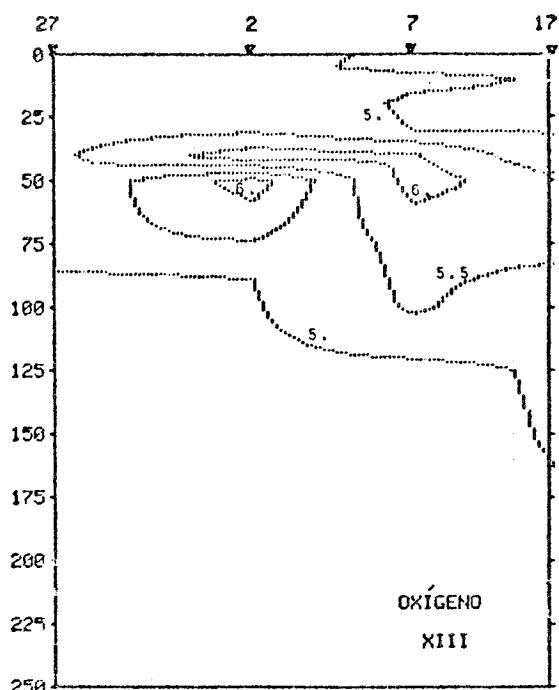


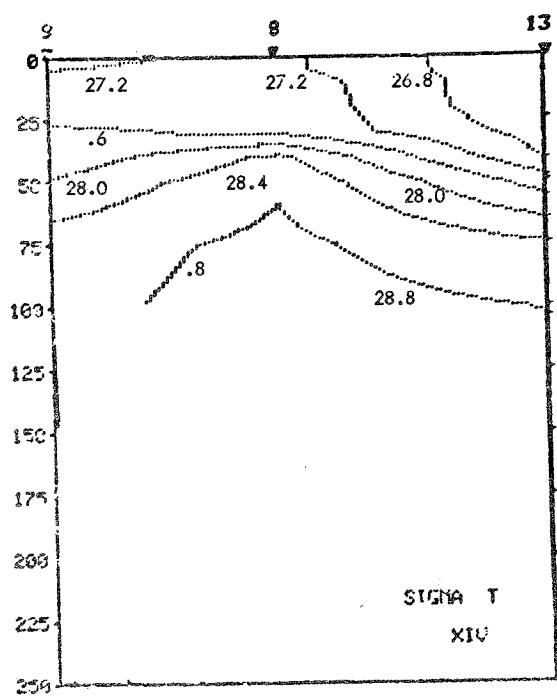
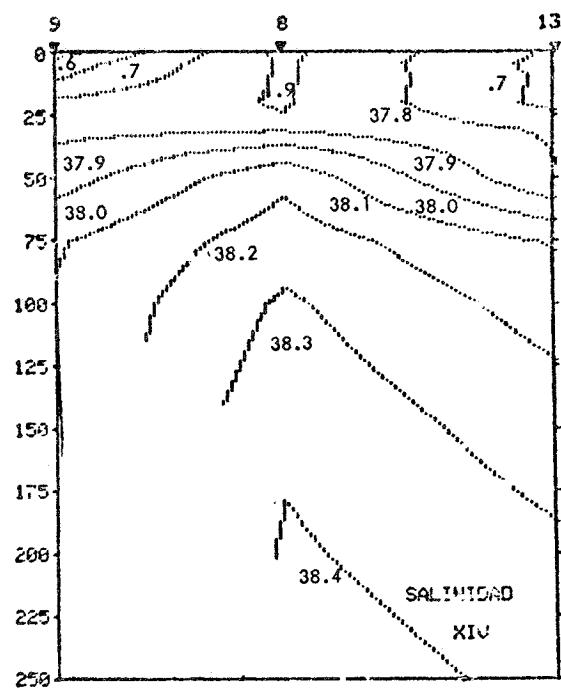
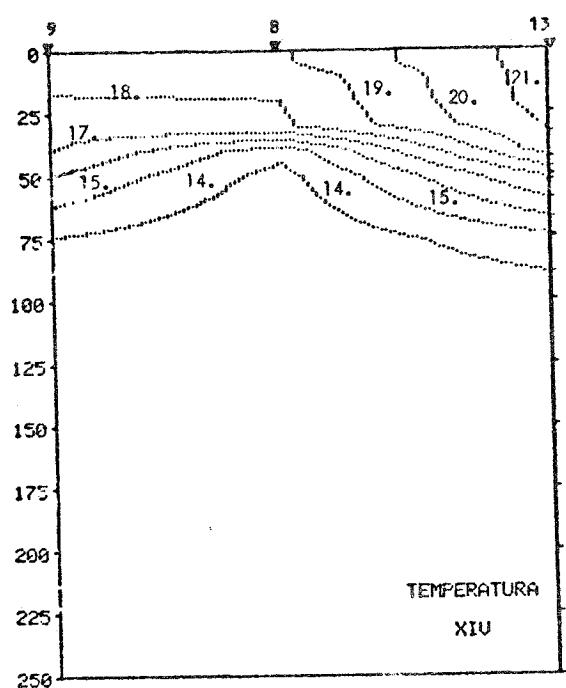


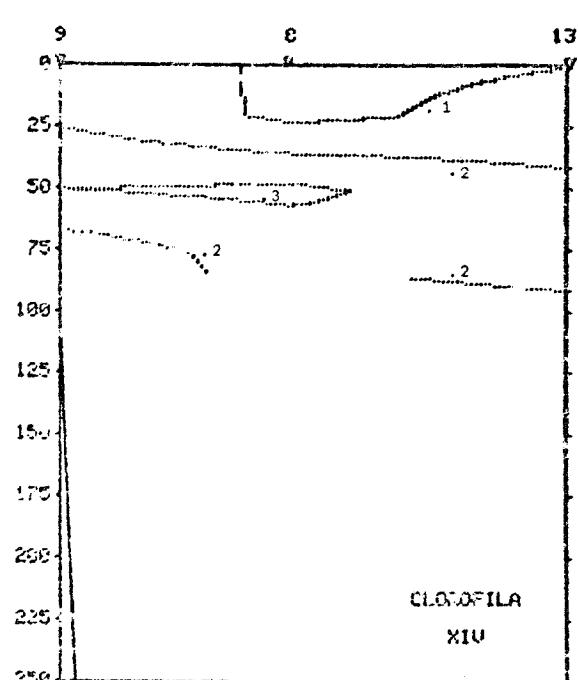
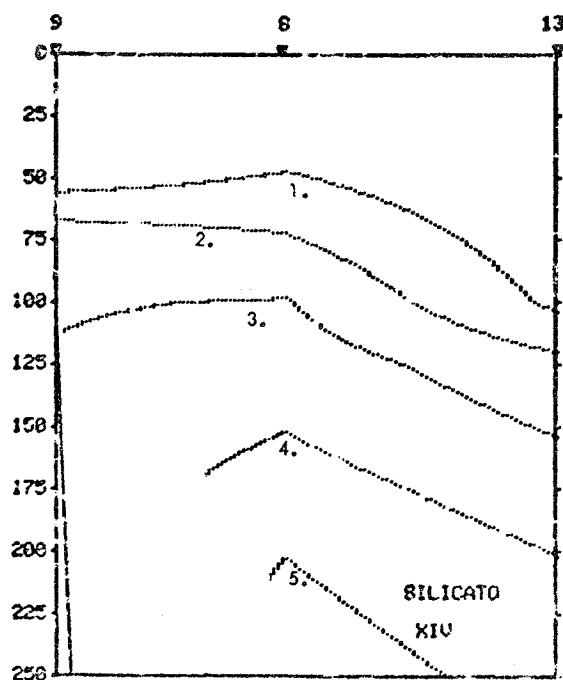
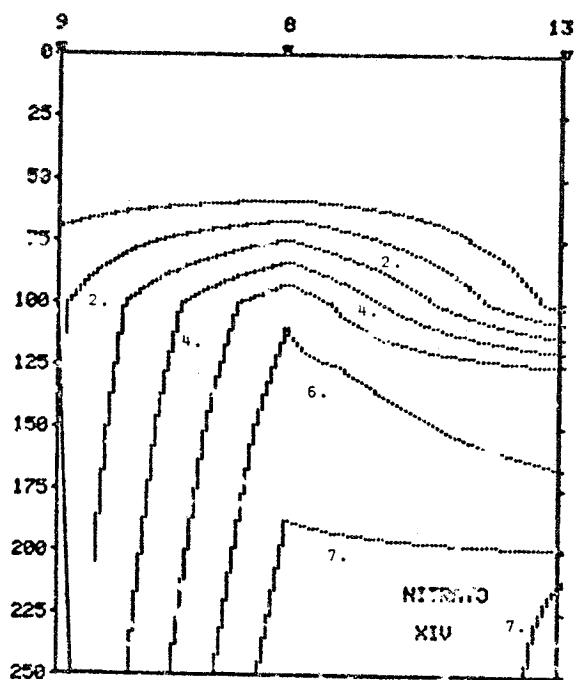
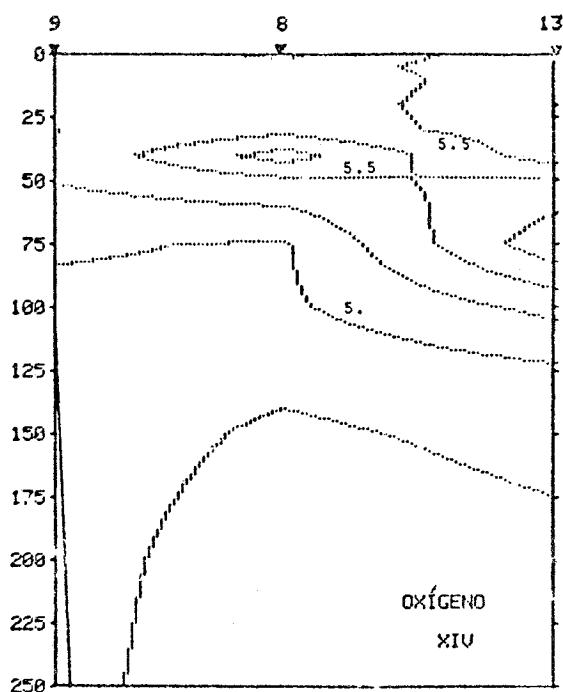


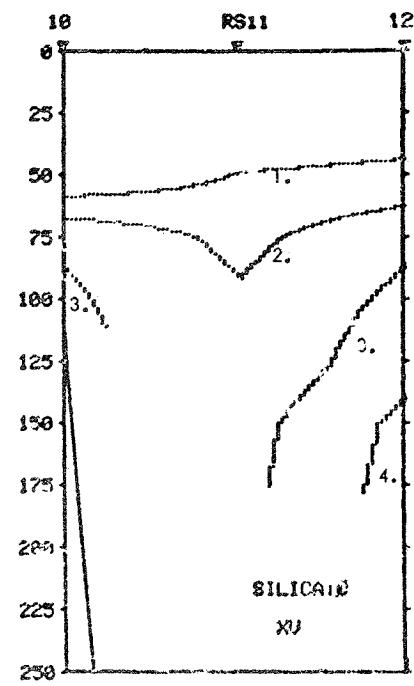
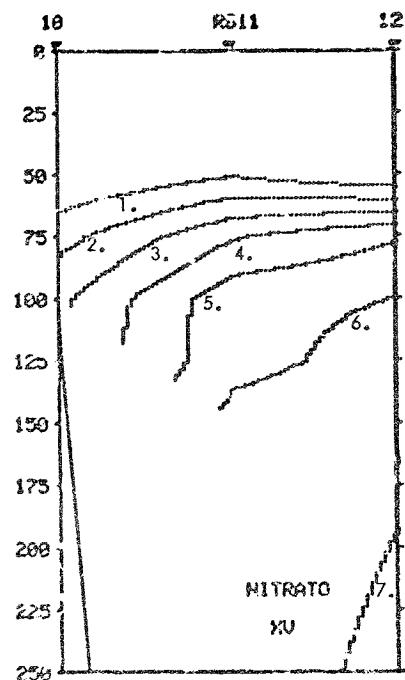
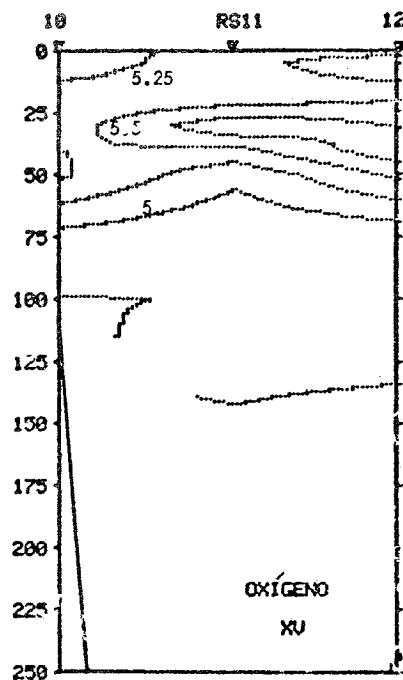
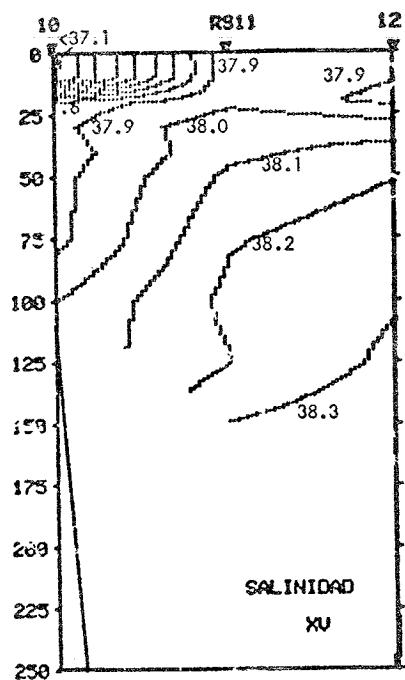


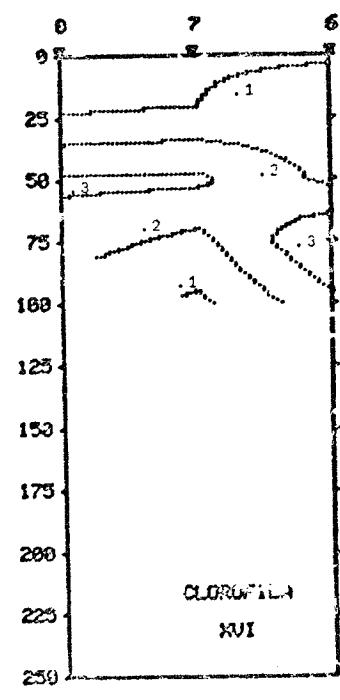
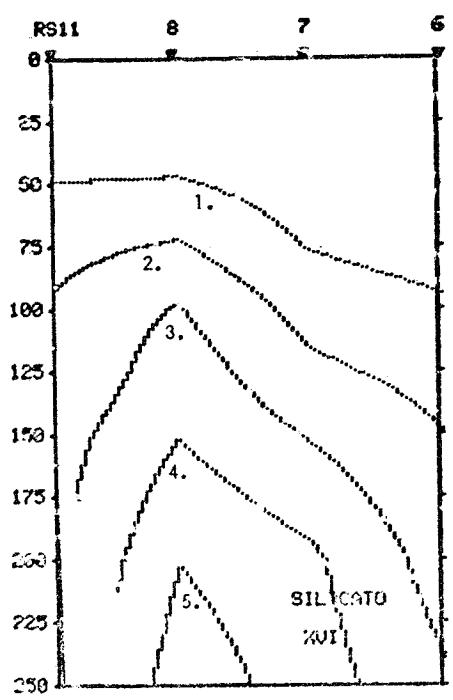
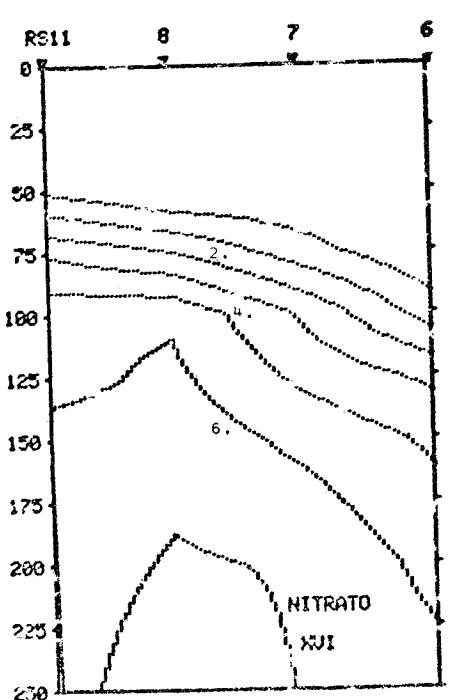
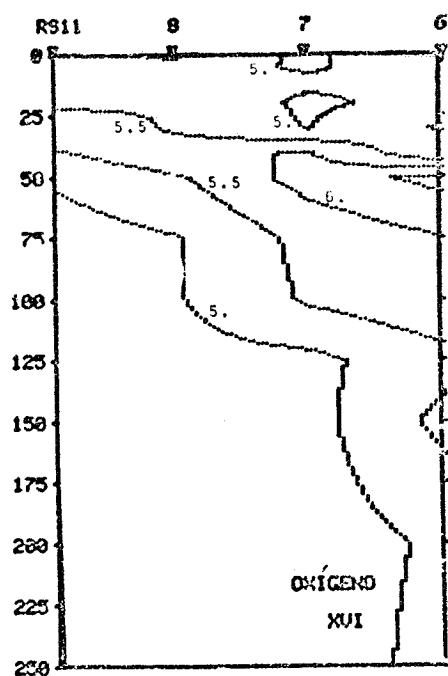
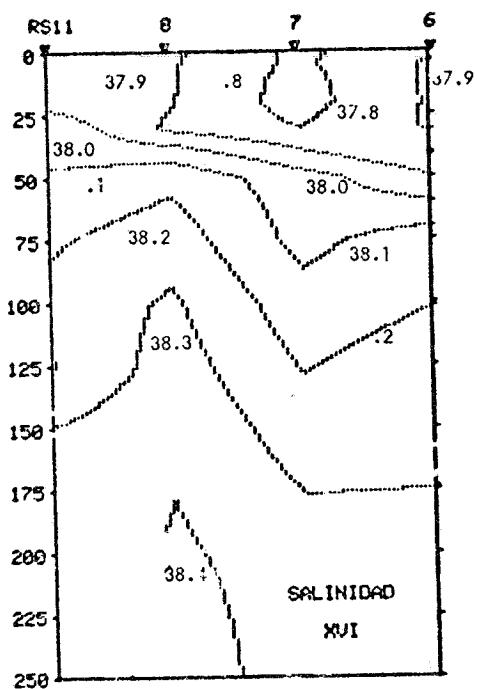


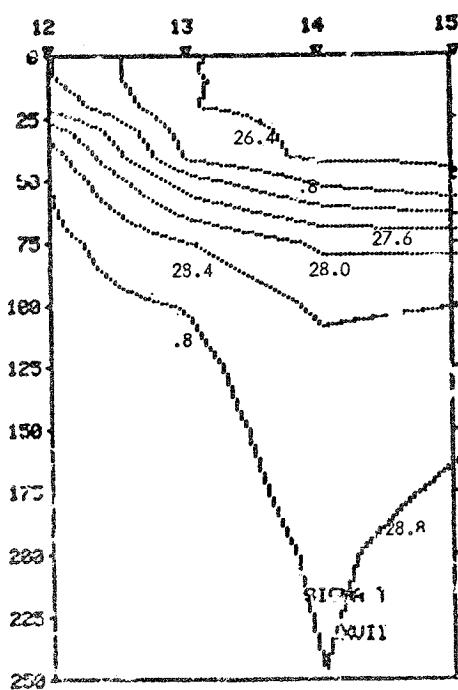
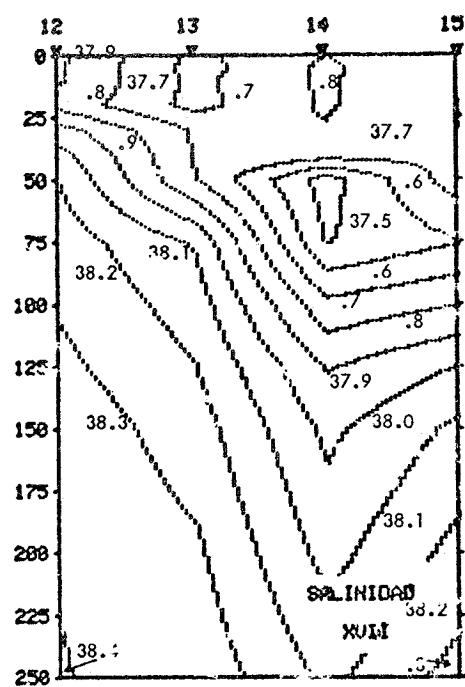
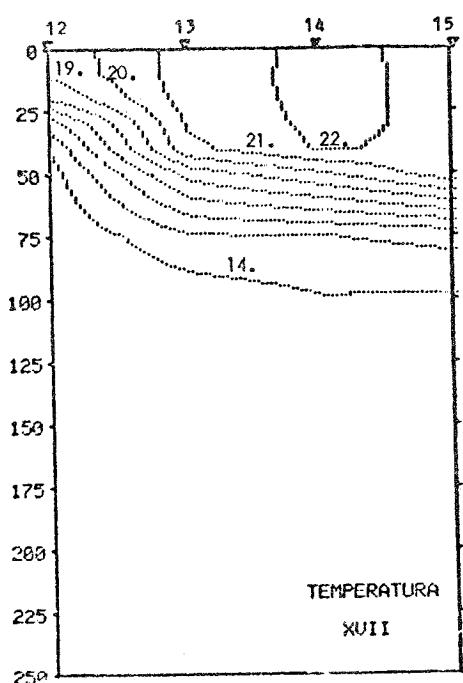


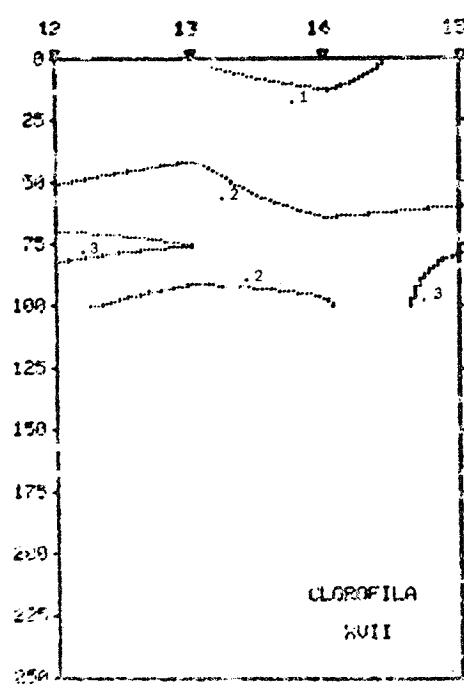
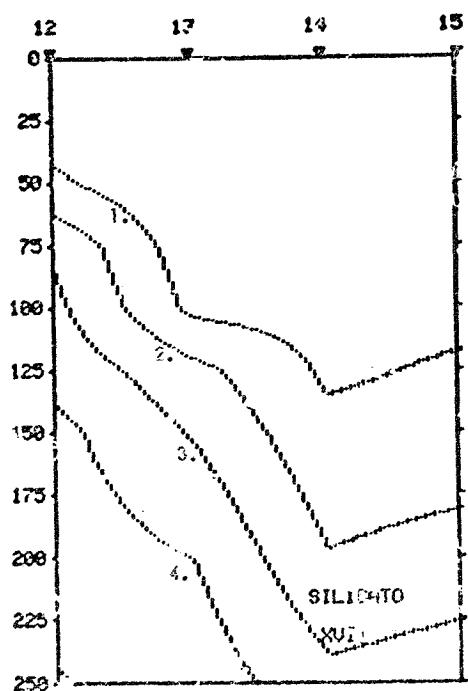
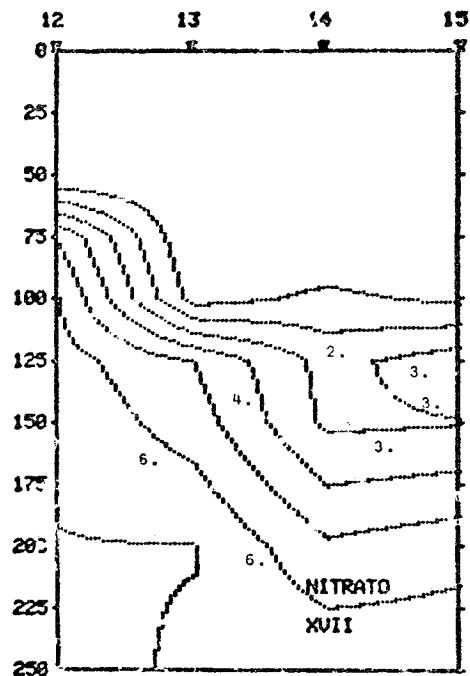
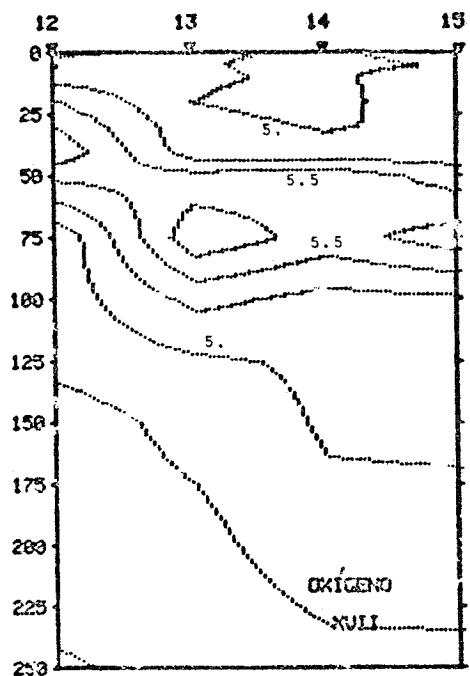


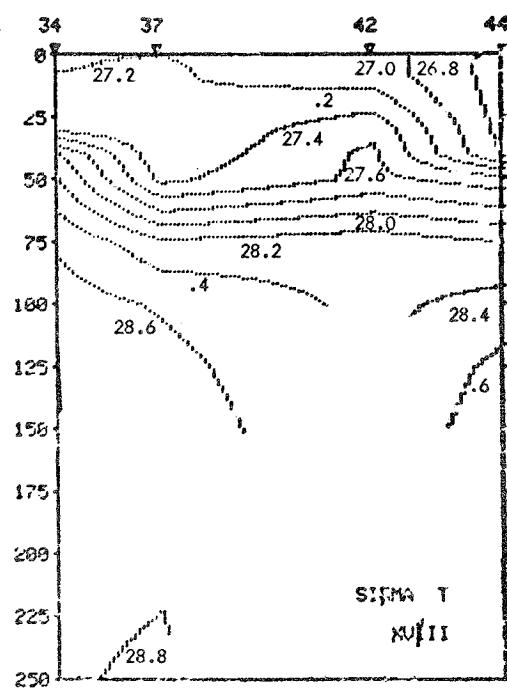
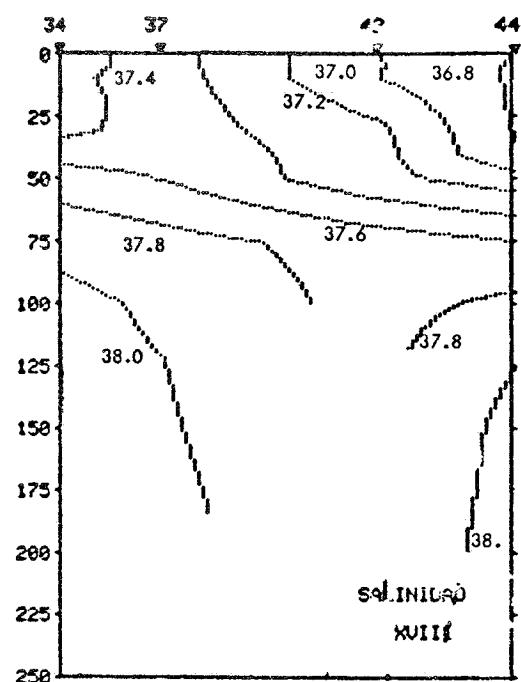
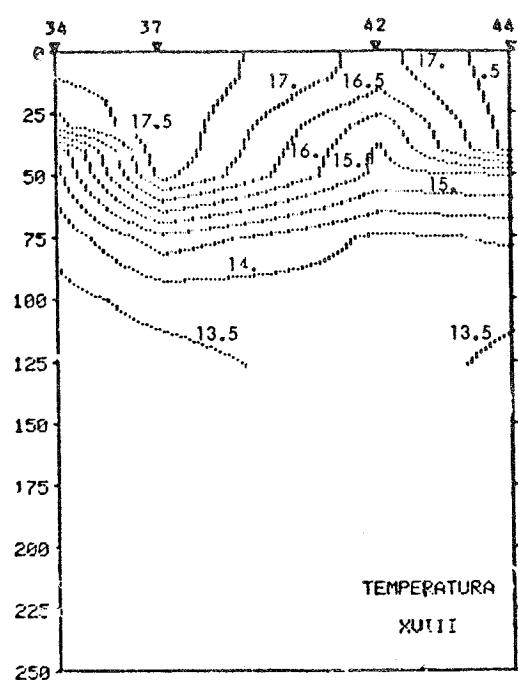


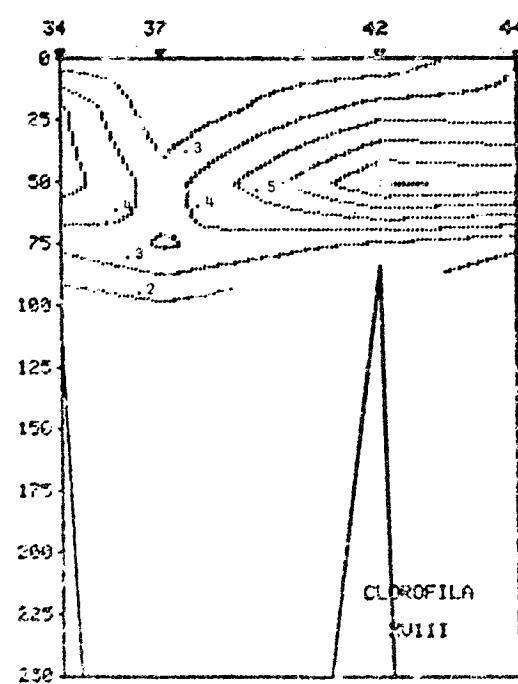
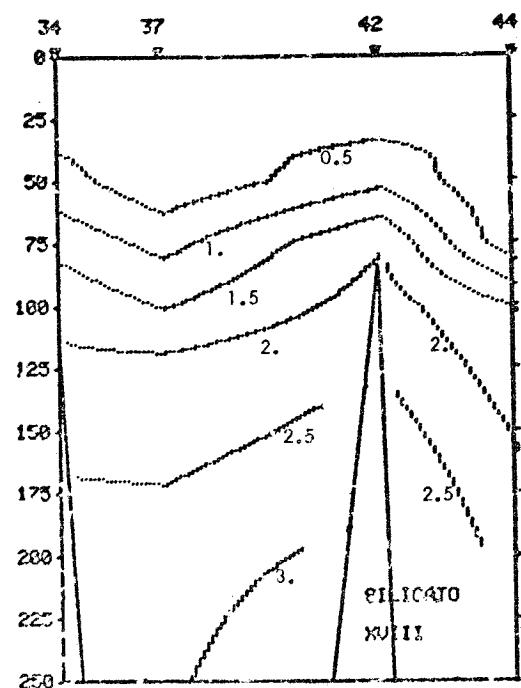
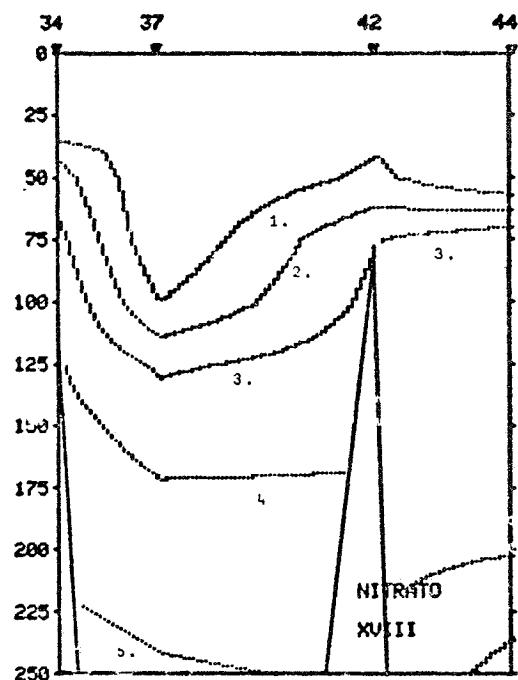
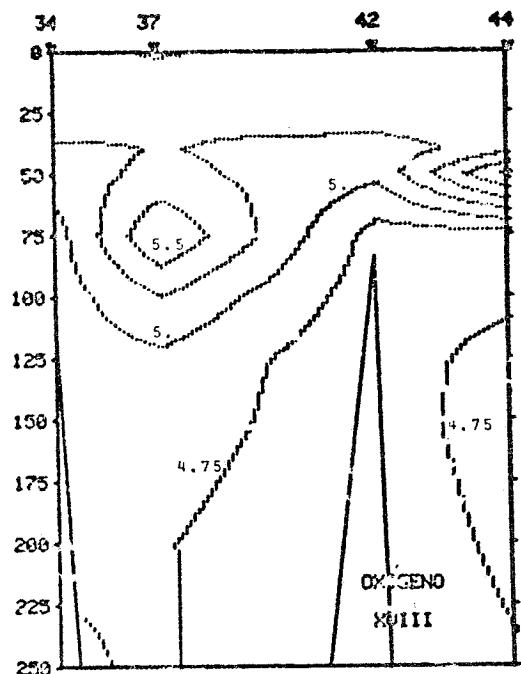


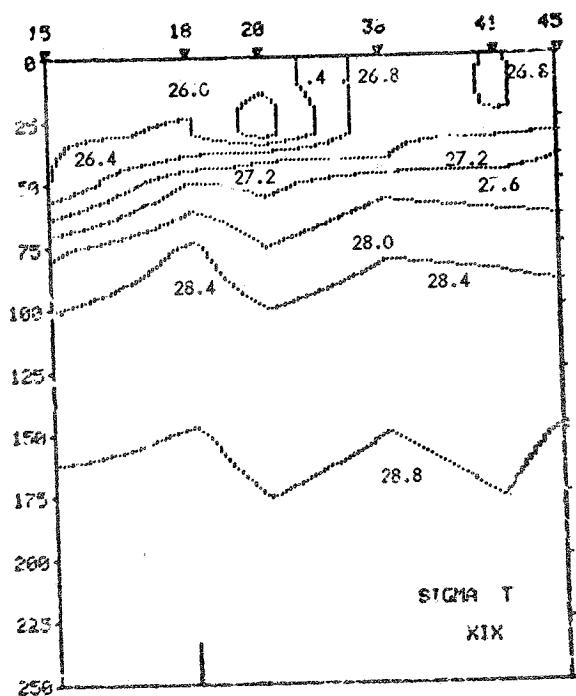
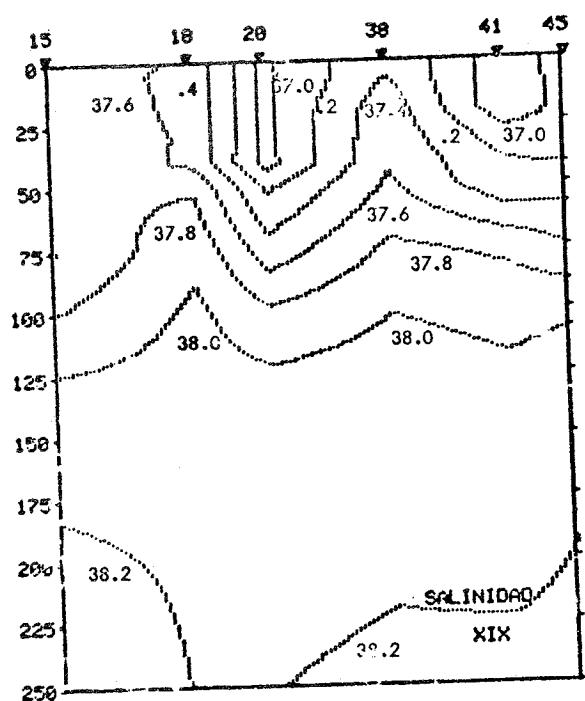
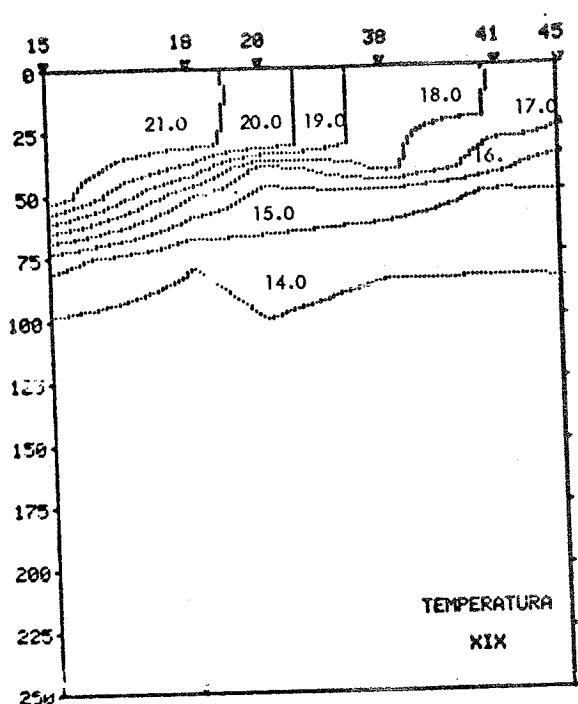


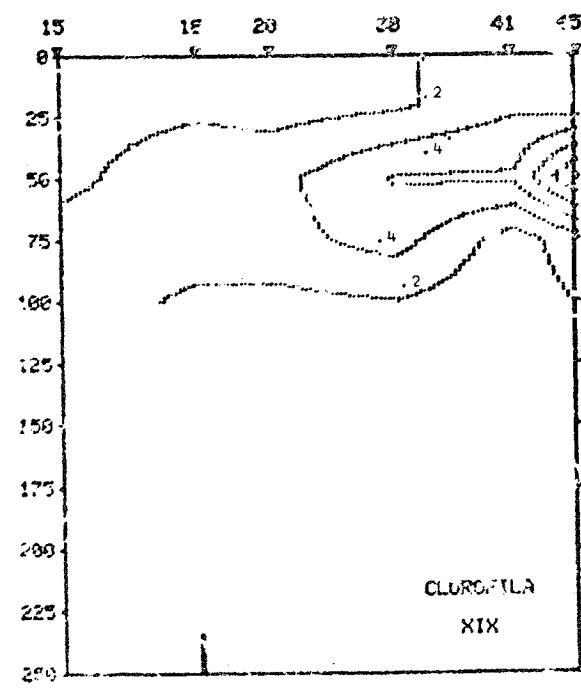
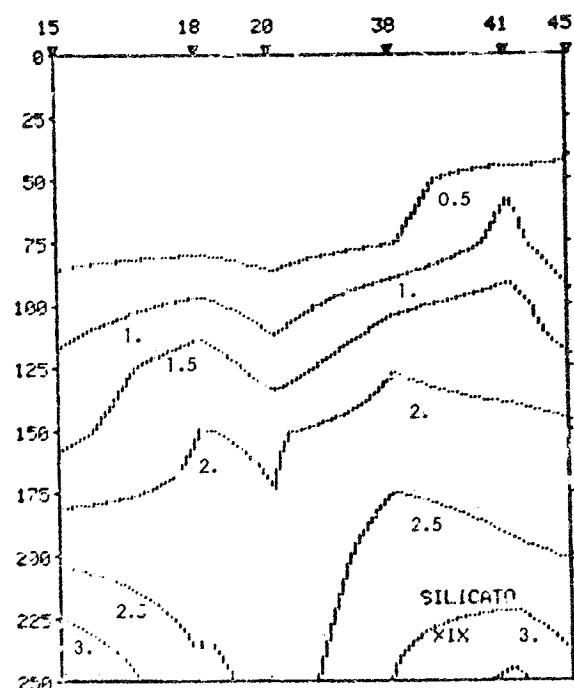
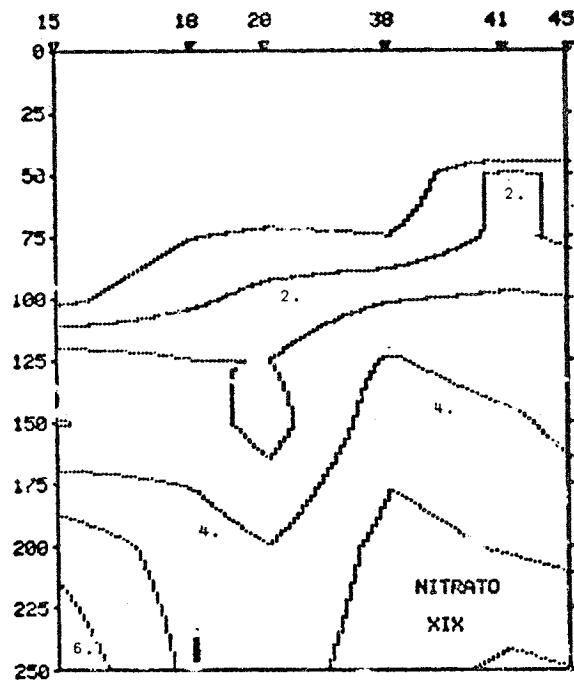
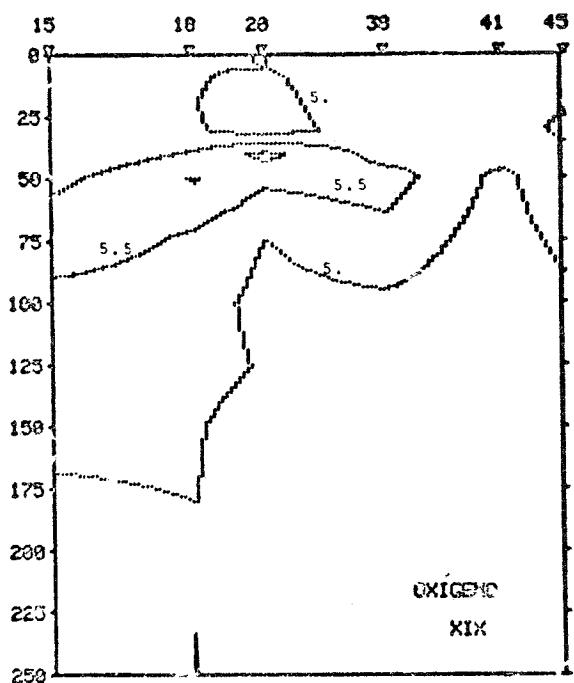


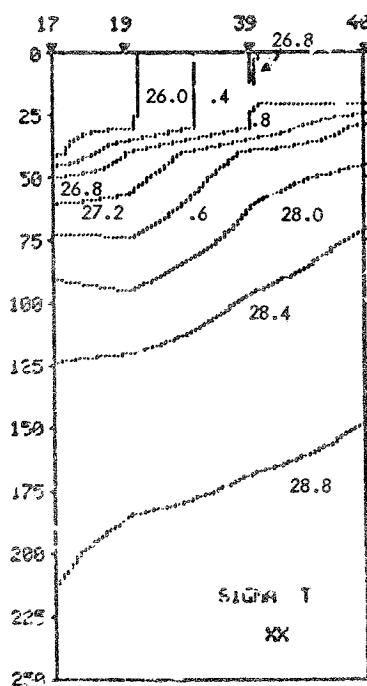
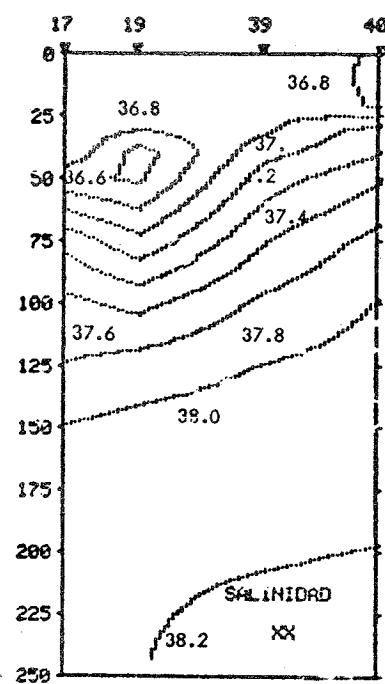
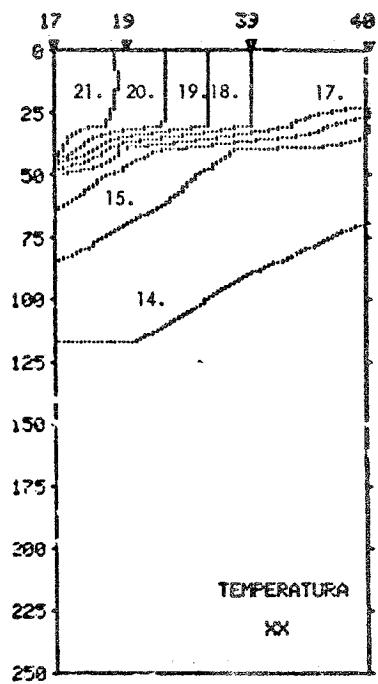


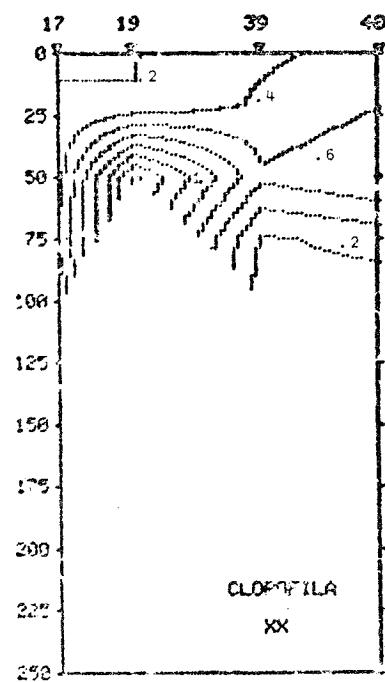
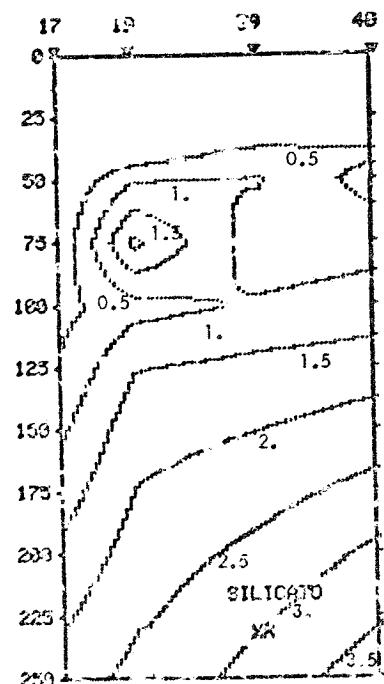
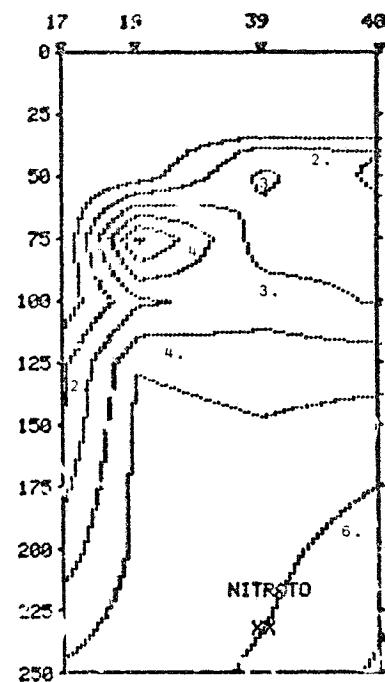
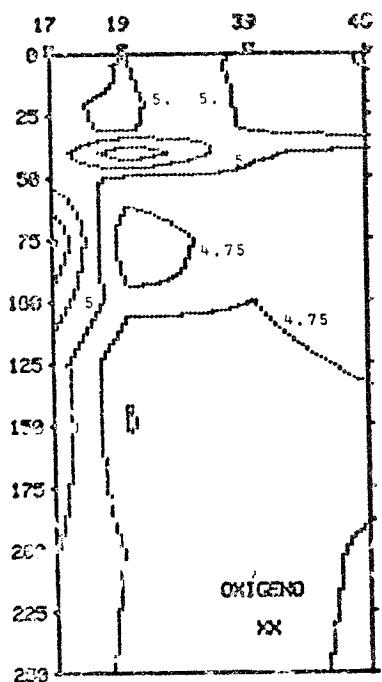










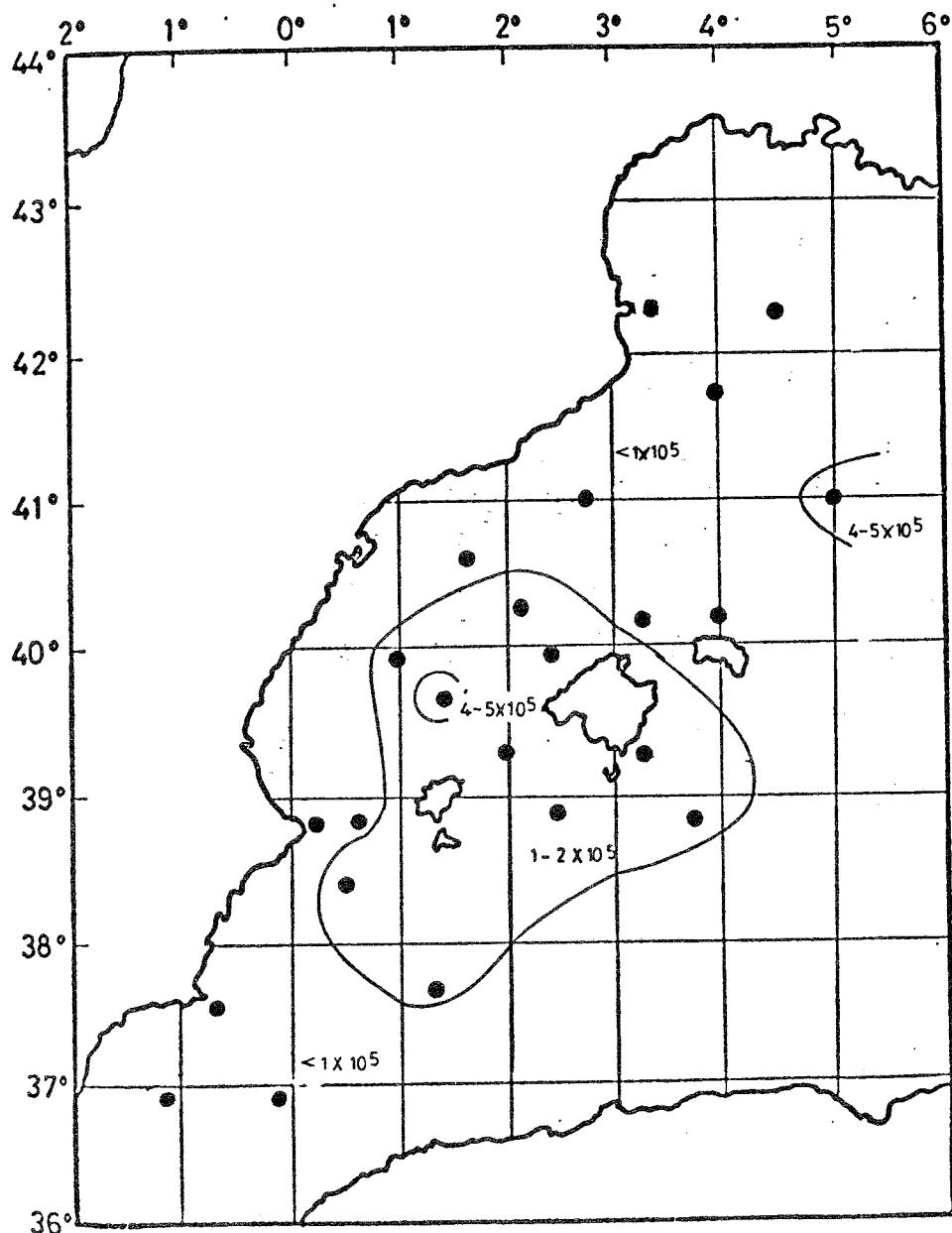




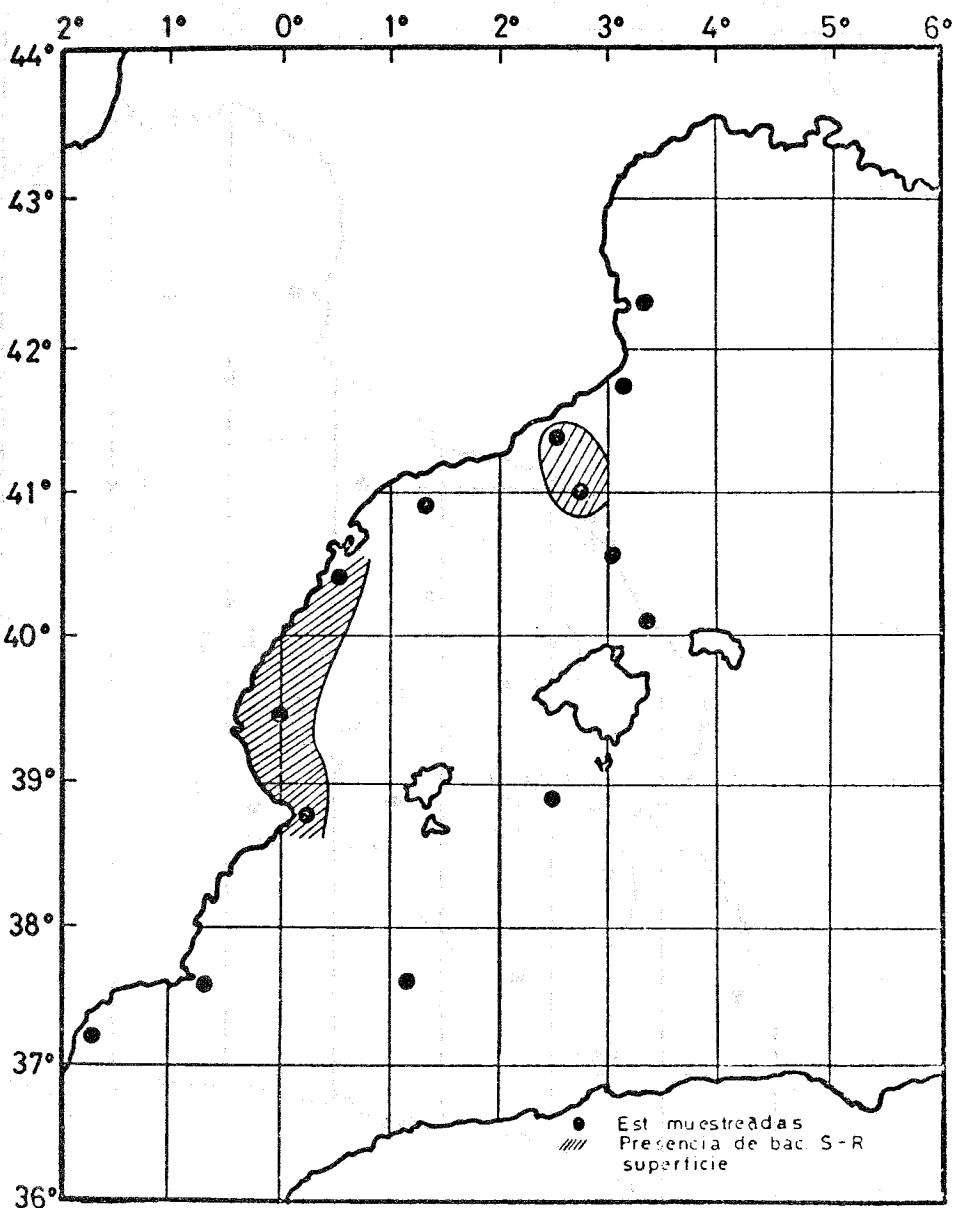
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Mapa 10.- Distribución de la concentración de bacterias heterótrofas en cel/cm<sup>2</sup> integrando los valores de 0-100 m.



Mapa 11.- Presencia de bacterias sulfato-reductoras en las estaciones muestreadas que se indican.



Cuadro III :Estaciones y niveles donde se estudió la presencia de bacterias sulfato reduc-toras. El signo + indica presencia de las mismas.

ESTACIÓN	PROFUNDIDAD (en m)											
	0	20	50	75	100	200	300	500	600	700	800	1000
1	+	-	-	-	-	-	-	-	-	-	-	-
2	+	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-									
10	-	-	-	-	-							
20	-	-	-	-	-	-	-	-	-	-		
27	-	-	-	-	-	-	-					
28	+	+	+									
33	+	+	+	+	+							
36	+	+	-									
39	-	-	-	-	-	-	-	-	-	-	-	-
42	-	-	-	-								
43	-	-	-	-	-	-	+					

**CUADRO IV.- Número de partículas según las diferentes profundidades.**

EST 3

C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1179.0	0.209	5.3	6.8	7.8	7.7	7.6	9.9	13.4	12.6	14.1	5.7	5.4	3.2	0.0	0.0
5	1346.2	0.269	4.8	6.0	6.5	6.3	6.1	8.9	13.5	15.1	17.8	6.5	3.9	2.6	1.2	0.0
10	1437.6	0.380	3.5	4.2	5.0	5.2	5.8	8.4	14.7	18.7	16.3	10.2	2.5	5.1	0.0	0.0
20	1449.9	0.335	4.2	4.8	5.4	5.9	6.7	9.4	14.1	15.3	17.0	11.3	2.7	1.7	0.9	0.0
30	1124.2	0.224	4.6	5.9	6.8	6.9	7.9	10.0	13.1	14.1	11.9	11.8	4.0	2.4	0.0	0.0
40	1230.0	0.246	4.9	5.9	6.5	6.0	6.8	9.4	12.5	11.8	12.6	9.0	5.4	5.0	0.0	3.6
50	1236.4	0.252	4.7	5.8	6.1	6.3	7.6	9.8	12.3	12.2	12.8	10.8	3.9	3.5	0.0	3.8
75	1038.7	0.219	4.9	5.0	5.7	6.5	6.7	9.2	14.4	14.8	12.1	9.8	6.6	3.7	0.0	0.0
100	744.0	0.233	3.1	3.3	3.4	3.8	5.5	8.9	13.3	16.5	20.1	11.7	7.1	0.9	1.8	0.0
150	529.5	0.192	2.7	2.6	2.9	3.7	4.9	8.8	13.2	15.5	17.8	12.6	3.2	5.6	1.6	4.3
200	387.8	0.121	3.0	3.5	3.7	4.1	5.3	8.2	12.7	14.9	8.7	17.3	8.5	6.1	3.2	0.0
300	618.5	0.186	3.1	3.4	3.6	4.3	5.8	12.4	15.7	16.7	15.6	11.4	1.8	2.6	3.0	0.0
400	507.2	0.184	2.5	2.9	3.0	3.3	4.7	9.3	14.2	14.0	17.8	8.0	7.0	2.7	2.6	7.1
600	660.0	0.214	3.1	3.3	2.9	3.4	3.8	9.0	15.8	15.9	15.3	16.1	6.0	2.2	2.5	0.0
800	381.4	0.110	3.6	3.9	3.4	3.6	4.5	6.8	12.5	14.0	14.9	14.9	6.7	10.4	0.0	0.0
1000	433.4	0.174	2.2	2.4	2.8	3.3	4.4	10.1	16.3	16.2	15.3	10.3	8.3	0.0	2.4	5.4

EST 4

C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1264.1	0.217	6.1	7.3	6.1	6.2	7.3	9.8	11.8	15.3	9.0	5.9	8.4	3.3	3.0	0.0
5	1271.0	0.225	6.1	6.6	6.4	5.8	6.8	9.5	11.7	12.5	10.3	7.3	5.7	6.3	4.5	0.0
10	1223.1	0.197	6.5	7.4	7.2	6.8	7.5	10.4	15.4	13.9	10.8	4.3	3.8	5.4	0.0	0.0
20	1004.7	0.120	9.2	9.9	10.2	8.4	9.7	9.7	10.1	7.6	8.2	4.2	2.4	3.4	0.0	6.2
30	1159.7	0.189	6.7	7.0	6.8	5.8	9.1	10.2	13.2	14.2	11.2	6.7	8.6	0.0	0.0	0.0
40	1408.5	0.305	4.3	5.2	5.9	6.6	8.7	10.8	14.5	11.7	15.5	9.6	2.5	0.0	3.1	0.0
50	2109.7	0.510	3.9	4.6	5.7	5.7	6.4	7.9	10.2	9.9	11.5	9.0	9.8	6.2	6.7	1.6
75	1120.8	0.195	5.5	6.7	7.3	8.2	9.9	9.9	13.0	10.6	12.8	7.3	8.4	0.0	0.0	0.0
100	922.8	0.227	4.0	4.3	4.9	5.9	5.9	9.0	12.4	15.1	13.1	14.6	8.1	2.2	0.0	0.0
150	799.4	0.284	2.7	2.8	3.1	3.6	4.4	8.9	11.1	13.7	18.0	17.0	9.1	5.0	0.0	0.0
200	661.4	0.414	1.4	1.5	1.8	2.0	2.9	5.5	6.6	12.8	12.1	19.2	20.0	13.6	0.0	0.0
300	607.2	0.234	2.4	2.7	2.8	3.2	4.5	8.1	12.5	14.5	16.3	9.9	14.1	3.2	5.1	0.0
400	791.4	0.258	3.0	3.1	3.4	4.2	5.4	9.1	15.6	15.9	11.4	11.8	11.4	5.7	0.0	0.0
600	652.9	0.452	1.3	1.4	1.5	1.6	2.1	4.3	8.6	9.9	14.9	19.7	22.6	6.6	4.7	0.0
800	337.3	0.171	1.9	2.0	2.1	2.5	3.5	4.4	7.2	10.4	13.4	16.8	12.8	15.5	0.0	6.7
1000	660.1	0.241	2.6	2.8	3.3	3.8	4.0	7.4	11.8	12.8	14.5	11.4	12.9	12.1	0.0	0.0

## EST 5

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1445.5	0.239	6.1	7.4	7.3	7.1	7.5	10.8	12.2	12.9	9.5	8.1	6.4	4.0	0.0	0.0
5	1432.8	0.317	4.4	5.3	5.4	5.2	6.0	10.5	16.6	16.5	16.2	10.0	3.0	0.4	0.0	0.0
10	1382.1	0.241	5.7	6.6	7.3	7.0	7.8	11.4	15.8	14.9	11.3	6.9	2.6	0.0	2.1	0.0
20	1307.8	0.238	5.3	6.7	7.2	6.9	7.3	10.1	12.7	14.0	11.8	9.2	7.3	1.0	0.0	0.0
30	1194.5	0.178	6.7	8.1	8.1	8.6	9.2	12.2	14.7	12.5	11.7	5.4	2.5	0.0	0.0	0.0
40	1405.3	0.307	4.6	5.0	5.6	6.1	6.9	8.8	12.4	12.8	13.4	10.0	5.6	3.1	5.0	0.0
50	1137.0	0.228	5.2	5.7	5.6	6.0	6.3	9.3	12.2	12.1	10.1	9.8	9.1	5.5	2.4	0.0
75	967.5	0.200	5.2	5.3	5.3	6.0	6.1	8.0	11.3	11.3	12.2	9.5	3.7	7.1	3.7	4.4

## EST 6

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1312.5	0.245	5.5	6.4	6.2	6.0	6.9	9.2	12.1	11.8	11.6	8.2	6.2	4.0	5.2	0.0
5	1032.1	0.175	5.7	7.0	8.0	7.5	8.3	9.9	12.8	10.9	11.0	6.5	6.0	3.5	2.3	0.0
10	1177.3	0.175	6.7	8.0	9.0	8.3	8.5	10.0	11.2	11.3	11.3	7.4	6.7	0.9	0.0	0.0
20	821.6	0.108	8.1	8.9	9.4	8.7	9.5	11.3	11.9	11.6	7.6	7.3	2.8	2.5	0.0	0.0
30	1045.1	0.185	5.7	6.7	7.1	6.2	7.6	9.3	14.5	14.2	13.2	7.8	4.4	2.7	0.0	0.0
40	1403.2	0.274	5.2	5.9	6.4	6.2	6.6	8.9	11.8	12.3	13.8	8.3	3.7	2.5	1.6	6.2
50	1570.5	0.311	4.9	5.7	6.6	7.0	7.1	10.2	13.1	14.7	13.9	10.0	2.9	3.2	0.0	0.0
75	956.9	0.168	5.8	6.2	7.6	7.2	8.3	9.7	12.3	11.7	12.5	9.2	8.1	0.8	0.0	0.0
100	679.3	0.165	4.3	4.3	4.5	5.3	6.1	8.2	13.0	15.8	11.2	11.7	6.4	4.6	3.9	0.0
150	472.1	0.099	5.1	4.7	5.3	5.7	7.9	11.1	15.5	14.0	13.2	11.7	3.1	2.2	0.0	0.0
200	424.2	0.086	4.9	5.0	5.6	7.0	8.3	12.4	17.2	16.3	14.3	6.5	1.9	0.0	0.0	0.0
300	512.0	0.114	5.0	4.5	4.7	4.7	5.8	11.1	12.1	17.9	15.7	8.9	4.4	0.0	4.5	0.0
400	425.4	0.105	3.9	3.8	5.7	5.4	7.0	10.5	15.1	18.6	17.1	6.6	3.6	2.1	0.0	0.0
600	808.2	0.169	5.3	4.9	5.0	4.9	6.1	10.6	15.5	17.3	16.3	5.7	1.5	1.9	4.4	0.0

## EST 7

## C A N A L E S

PROF	N PART	VCL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1201.4	0.266	4.6	5.3	5.4	5.5	5.6	7.4	13.7	13.0	14.8	10.5	3.4	5.2	5.0	0.0
5	1465.9	0.543	2.6	2.9	3.1	2.9	3.5	6.2	14.4	17.6	19.9	16.4	6.6	2.6	0.8	0.0
10	1234.9	0.280	4.5	5.0	5.2	5.4	5.7	7.4	12.7	15.0	13.2	11.5	4.9	5.6	3.1	0.0
20	1250.2	0.397	3.1	3.6	3.7	3.6	4.0	6.0	12.4	15.2	17.2	13.2	6.5	4.5	3.9	2.5
30	1120.0	0.320	3.5	3.9	3.9	4.3	5.0	7.4	13.0	15.2	15.9	11.0	4.2	6.2	3.5	2.4
40	1343.3	0.425	3.0	3.4	4.0	4.1	4.3	6.6	11.7	15.5	17.1	11.9	6.9	2.7	3.7	4.4
50	1307.5	0.336	3.9	4.3	4.8	4.7	4.9	6.3	12.9	16.2	17.4	11.7	5.0	5.5	1.6	0.0
75	853.8	0.176	4.7	5.6	6.4	6.6	7.0	9.4	10.0	11.4	7.2	13.6	2.3	5.6	3.4	6.1
100	821.9	0.284	3.0	2.8	2.8	3.2	3.8	7.6	15.2	18.8	17.8	15.1	5.3	3.7	0.0	3.2
150	735.8	0.207	3.6	3.6	3.9	4.2	5.6	8.8	13.9	15.0	13.8	9.2	9.0	1.2	4.2	3.3
200	620.5	0.227	2.6	2.8	2.8	3.2	5.0	8.9	13.7	17.1	15.9	16.6	4.8	6.1	0.0	0.0
300	635.1	0.247	2.4	2.6	2.8	3.0	4.5	8.5	14.0	14.1	16.4	17.3	8.3	3.6	1.9	0.0
400	504.0	0.197	2.5	2.4	2.6	3.0	4.4	9.6	14.6	16.9	16.1	13.8	9.4	4.2	0.0	0.0
600	446.8	0.120	4.1	3.7	3.6	4.1	4.8	8.0	13.0	16.9	11.4	12.8	7.2	2.0	0.0	7.8
800	239.1	0.109	1.7	2.5	2.5	3.1	4.2	7.4	12.0	16.1	18.0	13.8	8.6	6.6	3.0	0.0
1000	300.4	0.131	2.2	2.1	2.1	2.8	4.1	8.8	14.4	15.1	14.9	12.4	13.5	2.6	4.3	0.0

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## EST 8

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1675.0	0.284	6.3	6.8	7.3	6.6	6.8	8.5	11.7	13.1	13.6	11.5	3.5	3.8	0.0	0.0
5	1731.6	0.341	5.1	6.2	6.4	5.9	5.9	8.0	9.8	12.3	10.6	11.3	5.7	4.7	2.0	5.6
10	1736.8	0.342	5.0	6.0	6.4	6.1	6.9	9.6	12.9	14.1	15.0	9.1	5.9	2.4	0.0	0.0
20	1307.4	0.209	6.6	7.2	7.9	7.6	7.1	8.1	11.8	12.2	12.2	5.1	5.6	4.0	3.9	0.0
30	1624.5	0.422	3.7	4.6	4.6	4.5	5.1	8.4	11.5	13.1	14.6	11.4	7.7	5.2	2.9	2.1
40	1335.8	0.190	7.6	8.2	9.1	7.9	6.3	8.4	10.8	13.0	10.7	6.9	4.5	3.9	0.0	0.0
50	1839.9	0.336	6.3	6.3	5.6	4.8	5.4	7.2	13.4	13.6	13.9	10.5	6.9	4.4	1.2	0.0
75	409.1	0.115	3.8	3.2	4.4	4.3	5.4	7.4	12.0	12.6	15.2	10.2	8.2	2.6	10.1	0.0
100	405.8	0.097	4.7	4.2	4.2	4.9	5.3	7.0	11.8	15.6	17.1	14.5	10.3	0.0	0.0	0.0
150	544.2	0.158	3.7	3.6	3.5	4.0	5.0	7.3	13.4	11.6	13.7	6.8	5.3	3.2	4.8	13.0
200	434.0	0.137	3.6	3.2	3.1	3.4	3.1	7.6	11.4	10.7	13.9	10.9	6.0	1.3	2.7	5.5
300	517.8	0.187	2.8	2.9	2.7	3.0	4.2	9.1	13.0	14.4	14.1	15.3	8.8	4.5	4.6	0.0
400	459.5	0.101	5.0	4.7	4.4	4.5	5.9	12.2	18.1	17.3	15.6	5.4	3.3	3.0	0.0	0.0
600	429.4	0.121	3.7	3.4	3.4	3.9	5.8	11.1	16.5	17.8	15.7	11.8	6.2	0.0	0.0	0.0
800	205.1	0.237	0.0	1.4	0.0	1.9	5.2	8.1	14.8	11.9	17.7	10.8	7.6	2.3	17.8	0.0
1000	253.5	0.067	4.1	3.5	4.1	3.7	4.9	10.9	17.8	13.6	16.2	11.7	5.6	3.5	0.0	0.0

## EST 9

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2150.3	0.261	8.8	10.7	9.9	8.0	7.7	9.2	8.9	8.7	12.6	8.1	2.9	3.9	0.0	0.0
5	2023.1	0.326	6.8	7.5	7.0	6.4	7.0	8.8	9.4	11.0	15.2	10.6	4.3	4.3	1.2	0.0
10	2001.2	0.319	7.0	7.3	6.6	6.4	7.2	9.0	12.1	13.4	12.0	9.5	5.2	2.3	1.5	0.0
20	2064.8	0.412	5.5	5.8	5.5	5.4	5.8	7.9	10.2	11.0	13.3	8.4	5.2	4.4	4.4	6.7
30	2084.6	0.334	6.6	7.3	7.6	7.7	8.0	7.6	8.9	9.5	9.3	8.1	6.9	6.3	2.4	3.0
40	1566.2	0.247	6.7	7.0	7.2	8.5	9.6	11.0	10.8	14.1	11.7	8.2	2.8	1.8	0.0	0.0
50	1635.7	0.261	6.4	6.4	7.5	10.0	11.9	11.2	9.9	9.7	11.5	9.6	2.4	0.0	2.7	0.0
75	1317.8	0.170	8.6	8.7	8.6	9.9	10.1	10.1	11.0	9.8	9.9	3.3	2.1	2.5	4.8	0.0
100	1807.5	0.270	7.2	7.3	7.7	8.9	10.4	10.1	10.5	10.5	10.4	7.2	5.0	1.1	0.0	3.0

## EST 10

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2732.2	0.778	3.3	3.9	4.4	4.8	5.7	7.3	10.5	12.3	17.7	18.7	7.9	1.9	0.8	0.0
5	2435.7	0.781	3.3	3.2	3.6	3.7	4.3	5.8	8.7	12.0	19.9	18.8	9.8	2.3	1.5	2.5
10	2548.2	0.797	3.0	3.4	4.0	4.4	5.2	6.9	9.7	13.4	15.8	17.9	7.9	3.7	3.1	0.3
20	1673.8	0.319	5.3	6.6	6.2	5.5	6.2	7.0	12.0	12.4	13.5	12.9	7.3	2.7	1.6	0.0
30	1414.0	0.298	5.0	5.7	5.4	4.9	5.4	7.3	12.6	13.7	14.8	12.6	6.5	5.5	0.0	0.0
40	1639.2	0.406	4.2	4.7	4.5	4.4	5.1	7.2	10.0	13.3	16.7	13.8	6.3	5.0	4.0	0.0
50	1813.0	0.458	4.0	4.4	4.6	5.4	6.1	7.6	10.0	13.1	14.6	12.8	7.1	6.1	1.2	2.5
75	2287.1	0.434	5.5	5.3	5.9	8.0	10.9	10.7	9.8	8.7	9.8	6.8	4.7	5.0	8.2	0.0
100	3332.2	0.416	8.2	9.2	10.4	11.8	12.5	9.9	8.7	6.7	7.0	7.1	5.0	2.8	0.0	0.0

## EST 12

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	4478.3	0.620	7.6	8.8	8.7	8.4	8.4	9.0	11.2	11.4	9.4	7.1	3.6	2.4	2.0	1.4
5	1535.3	0.253	6.5	7.0	7.1	7.3	8.0	9.1	10.6	12.0	10.2	8.9	4.5	3.4	2.5	2.3
10	1389.5	0.229	6.4	7.1	6.9	6.8	8.2	10.1	13.6	12.7	8.3	9.6	2.8	5.1	0.8	0.8
20	1239.8	0.236	5.5	5.7	5.7	6.3	7.9	11.1	14.1	19.8	10.9	3.9	5.7	2.9	0.0	0.0
30	1152.9	0.222	5.5	5.6	5.9	5.8	7.7	11.5	15.1	14.3	9.1	6.2	3.0	0.0	5.1	4.5
40	1031.9	0.244	4.4	4.7	4.8	4.8	5.6	6.8	13.3	11.0	13.4	18.5	11.5	0.7	0.0	0.0
50	969.0	0.127	2.9	8.6	7.9	8.2	8.3	9.5	10.2	8.5	6.0	10.0	3.4	3.8	0.0	6.0
75	830.1	0.120	8.3	7.5	6.7	6.4	7.2	10.2	12.6	11.4	10.7	7.8	8.1	2.5	0.0	0.0
100	785.0	0.159	5.3	5.2	5.5	6.1	6.8	8.3	13.2	13.9	12.7	5.7	9.3	5.0	2.2	0.0
150	517.2	0.083	6.9	6.8	7.1	7.1	7.5	11.2	11.3	11.1	12.6	10.3	5.3	2.3	0.0	0.0
200	424.2	0.103	4.9	4.2	3.8	3.0	4.6	8.7	12.7	16.2	21.6	8.9	9.3	1.4	0.0	0.0
300	682.3	0.209	3.4	3.4	3.5	3.5	4.5	7.6	12.7	15.1	15.2	13.7	10.0	2.9	3.9	0.0
400	391.5	0.088	5.0	4.9	4.3	4.1	4.8	8.5	12.5	11.7	20.7	9.2	12.0	1.7	0.0	0.0
600	1141.1	0.157	9.0	7.8	7.0	6.5	7.8	8.5	9.4	10.2	7.8	7.1	3.2	5.8	2.8	6.5
800	349.6	0.088	4.5	4.2	3.8	3.6	4.9	8.6	11.5	17.0	13.2	17.6	9.0	1.5	0.0	0.0
1000	443.7	0.096	5.2	4.9	4.5	4.9	5.0	9.5	13.8	13.7	13.2	5.2	4.4	15.1	0.0	0.0

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## EST 13

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1722.7	0.297	5.6	7.0	8.2	7.5	7.0	9.5	12.3	12.8	9.4	7.9	6.2	1.0	1.8	3.3
5	1632.1	0.276	5.4	7.2	9.7	8.3	7.9	9.4	12.1	14.6	14.2	6.8	2.3	2.4	0.0	0.0
10	1433.7	0.227	6.2	7.6	8.8	8.0	7.7	9.5	11.5	11.2	11.1	8.8	2.9	4.3	1.8	0.0
20	1109.3	0.142	7.7	9.9	11.8	9.7	7.5	6.7	7.9	7.9	7.3	6.2	6.1	1.4	0.0	9.2
30	1301.8	0.252	4.8	6.2	7.3	7.0	7.4	9.5	12.6	13.0	14.9	9.3	3.7	2.3	1.4	0.0
40	1364.8	0.250	5.2	6.4	7.2	7.2	7.5	9.7	13.6	15.4	13.6	8.8	3.4	1.4	0.0	0.0
50	1269.3	0.178	7.5	8.5	8.9	8.7	7.8	8.6	9.9	9.9	8.9	8.3	5.9	1.5	5.0	0.0
75	948.5	0.162	6.6	6.6	6.4	5.8	6.7	9.1	13.5	13.4	13.5	10.9	7.0	0.0	0.0	0.0
100	658.8	0.113	6.5	5.9	6.4	7.1	7.4	10.2	13.8	14.5	13.3	9.3	5.1	0.0	0.0	0.0
150	453.1	0.105	4.2	4.5	5.2	5.9	6.9	9.2	13.1	17.4	13.6	12.9	6.5	0.0	0.0	0.0
200	431.3	0.194	2.3	2.0	2.1	2.4	3.3	6.9	11.3	15.8	20.5	16.2	10.0	3.1	3.4	0.0
300	313.1	0.095	3.4	3.4	3.5	3.4	4.7	8.5	13.9	16.2	14.6	12.3	1.0	2.2	0.0	0.0
400	247.0	0.087	5.2	0.0	1.2	0.0	1.7	6.9	16.6	13.1	11.5	26.6	16.7	0.0	0.0	0.0
600	396.1	0.102	4.1	4.4	4.1	4.0	4.5	6.0	14.2	13.0	10.7	13.7	12.4	4.6	3.7	0.0
800	228.6	0.290	0.0	0.9	0.0	3.4	3.7	7.1	10.3	15.7	21.7	16.5	20.3	0.0	0.0	0.0
1000	593.9	0.217	2.8	2.7	2.6	2.8	3.4	7.3	15.1	21.3	14.9	14.8	6.6	3.0	2.0	0.0

## EST 14

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1374.3	0.201	7.2	8.2	8.3	7.6	7.3	10.0	13.1	12.0	10.3	8.9	4.2	2.5	0.0	0.0
5	1392.9	0.167	9.2	10.1	10.1	8.9	8.3	8.9	9.0	9.1	11.3	4.3	1.2	3.7	5.3	0.0
10	1760.5	0.292	6.5	6.8	6.9	6.5	6.6	10.9	13.8	13.5	13.4	9.3	2.7	0.7	1.6	0.0
20	1438.0	0.251	6.5	7.0	6.5	5.9	5.7	10.3	13.8	11.6	13.9	6.6	5.6	2.8	3.2	0.0
30	1151.0	0.159	7.8	8.8	8.4	7.9	8.9	9.0	10.9	10.1	7.4	7.4	5.0	1.2	0.0	6.6
40	1144.1	0.142	8.7	9.8	9.2	8.7	8.9	8.5	10.5	8.7	10.1	8.4	3.0	1.8	3.0	0.0
50	1034.0	0.174	6.4	6.5	7.1	7.2	7.2	8.6	9.7	12.2	12.1	9.9	5.3	3.0	4.2	0.0
75	813.0	0.120	7.4	8.1	7.5	7.3	7.0	9.7	12.3	12.5	12.0	8.5	3.2	3.9	0.0	0.0
100	795.9	0.162	5.5	5.5	5.2	5.1	5.1	7.3	10.4	13.3	13.3	13.9	8.5	3.7	2.5	0.0
150	530.5	0.267	2.0	1.8	1.9	2.1	2.6	5.6	12.6	16.9	15.8	13.8	12.2	9.9	2.1	0.0
200	425.0	0.091	5.4	4.5	4.7	5.3	5.6	8.4	12.3	14.4	14.6	11.9	3.2	2.8	6.3	0.0
300	337.2	0.075	5.0	4.8	4.3	4.3	5.7	9.0	17.2	17.4	16.8	12.7	2.4	0.0	0.0	0.0
400	368.1	0.139	2.7	2.7	2.6	2.9	3.9	7.2	10.6	12.6	11.8	15.0	19.0	6.5	1.9	0.0
600	644.2	0.100	7.3	7.0	6.7	7.4	7.3	9.1	12.9	13.4	11.4	5.1	5.4	6.4	0.0	0.0
800	266.5	0.097	2.6	2.9	3.2	3.6	4.1	5.5	13.6	16.7	16.6	15.2	7.7	7.8	0.0	0.0
1000	277.0	0.104	2.7	2.4	2.6	3.0	4.1	8.0	16.7	16.0	15.7	19.3	5.5	0.0	3.5	0.0

GII

## EST 15

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1278.7	0.220	5.9	7.1	7.2	6.0	6.6	9.7	13.1	14.8	11.8	8.5	5.8	2.9	0.0	0.0
5	1130.4	0.143	8.7	9.6	9.2	8.0	7.7	10.3	13.1	10.9	8.8	7.4	2.6	3.1	0.0	0.0
10	1215.3	0.155	8.5	9.5	10.1	8.1	8.1	8.6	8.0	7.8	6.7	6.6	6.7	7.9	2.7	0.0
20	1113.4	0.148	7.9	9.4	9.0	7.7	8.6	10.3	13.8	13.9	9.3	5.8	3.8	0.0	0.0	0.0
30	1228.8	0.179	7.3	8.3	8.2	6.9	7.5	9.8	14.2	11.6	13.2	4.1	4.5	3.8	0.0	0.0
40	1204.6	0.201	6.3	7.4	7.1	6.3	6.8	8.9	11.0	12.7	11.8	8.5	3.9	5.4	3.2	0.0
50	1536.7	0.264	6.2	6.6	6.6	6.9	7.6	9.9	12.8	13.3	14.7	10.1	2.9	1.8	0.0	0.0
75	1456.4	0.350	4.3	4.8	4.5	4.4	5.3	8.4	12.7	14.2	12.3	10.3	11.1	5.2	1.7	0.0
100	500.8	0.124	4.3	4.1	4.2	5.1	6.0	8.9	14.0	15.2	15.2	4.0	5.6	9.4	3.3	0.0
150	785.8	0.166	5.1	4.8	4.9	5.5	6.9	11.6	17.4	15.3	14.2	8.3	5.5	0.0	0.0	0.0
200	694.2	0.164	4.5	4.4	4.3	4.8	6.0	10.4	15.8	14.8	13.7	10.5	7.4	2.7	0.0	0.0
300	472.7	0.129	3.6	3.9	3.9	5.0	6.1	7.9	15.5	17.3	16.0	11.6	6.7	1.8	0.0	0.0
400	632.8	0.187	3.4	3.7	3.6	4.0	5.0	7.8	14.1	11.8	13.1	16.2	7.8	3.3	1.7	3.9
600	911.3	0.209	4.2	4.6	5.2	6.4	7.0	9.6	15.1	15.9	14.6	10.1	4.7	2.1	0.0	0.0
800	325.8	0.091	3.5	3.8	3.8	4.2	5.1	8.3	18.1	19.0	17.0	8.5	8.1	0.0	0.0	0.0
1000	616.8	0.163	3.8	4.2	4.2	4.4	4.5	9.3	15.7	15.3	12.8	10.8	9.1	2.5	2.6	0.0

## EST 17

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1579.1	0.289	5.9	6.0	6.1	6.4	6.8	9.3	12.8	14.5	13.2	9.7	4.0	2.8	1.9	0.0
5	1851.4	0.260	8.0	8.1	8.1	7.3	7.6	9.4	12.8	11.8	13.6	6.7	2.0	4.0	0.0	0.0
10	1564.8	0.228	7.6	7.6	7.8	7.8	8.5	10.0	12.5	11.6	8.4	6.9	2.7	1.8	6.1	0.0
20	1351.5	0.257	5.4	6.0	6.1	6.3	7.7	9.1	12.3	16.9	11.3	7.0	5.5	5.7	0.0	0.0
30	1282.7	0.174	8.1	8.7	8.1	7.9	9.0	9.2	11.2	10.9	14.0	9.2	0.6	2.7	0.0	0.0
40	1533.1	0.399	3.9	4.2	4.3	4.6	5.6	7.9	13.4	15.5	15.7	12.1	3.5	3.1	3.1	2.4
50	1827.8	0.340	5.8	6.0	6.0	6.2	6.7	9.4	11.0	12.9	11.3	8.6	6.4	2.4	6.6	0.0
75	1182.4	0.254	4.5	4.6	5.0	7.4	12.6	10.5	11.9	12.3	14.7	9.6	2.5	3.6	0.0	0.0
100	1226.7	0.368	3.4	3.4	3.6	4.4	6.0	5.8	9.1	12.9	15.0	15.1	13.2	4.1	3.2	0.0
150	805.6	0.315	2.6	2.5	2.5	2.7	3.0	7.3	14.9	19.4	22.3	12.4	3.6	4.1	2.0	0.0
200	436.4	0.111	4.2	3.7	4.2	4.5	5.6	11.7	13.7	19.5	18.9	8.6	4.9	0.0	0.0	0.0
300	637.2	0.117	6.0	6.0	5.3	5.5	6.3	12.7	16.8	19.6	11.5	8.1	0.0	1.7	0.0	0.0
400	415.8	0.152	2.9	2.6	2.7	3.1	4.3	6.2	12.5	12.8	17.7	19.3	11.3	4.1	0.0	0.0
600	399.4	0.085	5.0	4.8	5.0	6.3	7.8	8.8	13.0	10.8	17.0	16.2	2.0	2.8	0.0	0.0
800	517.6	0.167	3.0	3.0	3.5	3.8	5.1	8.8	18.9	18.2	17.1	8.7	4.3	2.6	2.5	0.0
1000	435.2	0.080	6.3	6.0	5.4	5.0	6.6	9.8	10.6	11.4	12.6	13.0	7.0	1.5	4.0	0.0

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## EST 18

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2172.0	0.283	9.7	7.9	7.4	6.7	7.1	8.6	11.4	10.0	10.5	8.7	6.2	5.3	0.0	0.0
5	2517.8	0.342	9.2	7.6	6.9	6.7	7.2	8.3	11.6	12.3	12.2	8.5	2.7	3.9	2.2	0.0
10	2417.0	0.357	8.3	7.0	7.0	6.1	6.5	7.9	13.0	14.8	11.9	8.4	5.9	0.9	1.7	0.0
20	1817.0	0.430	4.4	4.8	4.9	4.7	5.0	7.5	12.0	12.7	14.2	11.0	5.9	3.9	4.0	4.2
30	1681.0	0.336	5.1	5.8	6.3	5.9	6.1	8.0	11.6	14.1	13.8	11.5	5.3	4.6	1.2	0.0
40	1971.3	0.505	3.9	4.3	4.7	4.4	5.1	7.6	14.0	16.7	14.8	10.6	6.3	3.9	1.4	1.6
50	1521.2	0.276	5.9	6.4	6.7	5.7	5.8	7.6	13.8	13.2	15.9	8.0	5.9	4.5	0.0	0.0
75	1355.1	0.508	2.7	2.8	2.7	3.0	3.8	6.1	14.7	16.5	19.1	14.4	7.4	5.3	0.8	0.0
100	994.2	0.346	2.8	2.9	3.2	3.5	4.5	5.9	15.4	19.4	17.9	11.9	8.6	3.4	0.0	0.0
150	988.5	0.360	2.9	2.7	2.7	2.8	3.0	5.8	16.7	17.2	19.3	16.7	5.7	2.6	1.3	0.0
200	1263.8	0.405	2.9	3.4	3.7	4.0	5.4	7.9	15.2	16.8	16.4	12.9	5.3	2.3	2.4	0.0

## EST 19

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2169.8	0.371	5.7	6.6	7.7	7.8	8.5	11.5	14.2	13.9	11.6	6.2	3.7	1.8	0.0	0.0
5	1640.2	0.277	5.8	6.9	7.9	7.9	8.0	10.0	14.1	13.0	10.1	8.2	4.7	2.7	0.0	0.0
10	2010.5	0.517	3.6	4.2	5.0	5.3	6.1	9.5	15.8	17.5	16.4	9.0	4.8	2.3	0.0	0.0
20	1538.5	0.266	5.6	6.6	7.8	7.4	8.8	11.5	15.5	13.8	9.3	5.8	4.7	2.6	0.0	0.0
30	1482.8	0.286	5.0	5.9	7.2	7.0	7.0	8.1	12.7	11.9	10.4	10.0	8.7	5.5	0.0	0.0
40	2620.1	0.560	4.7	5.4	5.9	6.1	6.1	8.3	11.7	12.0	10.3	8.6	7.3	7.9	5.1	0.0
50	2446.7	0.480	5.1	5.8	6.4	7.0	8.6	8.2	9.2	9.2	9.2	7.1	8.0	2.4	3.4	
75	1170.1	0.280	4.5	4.4	4.6	5.2	5.2	7.3	12.3	14.0	14.3	13.6	8.0	3.8	2.1	0.0
100	921.9	0.234	3.9	4.3	4.3	5.5	6.8	8.3	13.2	14.1	16.2	11.1	3.7	5.7	2.3	0.0
150	956.4	0.268	3.6	3.7	4.0	4.1	5.0	8.6	15.5	16.5	21.2	8.5	4.5	4.2	0.0	0.0
200	703.6	0.235	3.0	2.9	3.0	3.8	4.8	7.2	16.9	18.8	15.5	14.8	4.3	4.4	0.0	0.0

## EST 20

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1085.1	0.151	8.2	8.2	7.8	7.4	8.2	8.9	11.6	12.4	12.3	8.4	1.2	4.9	0.0	0.0
5	1045.7	0.181	6.2	6.5	6.4	7.0	7.9	9.2	9.3	10.7	11.3	7.8	5.0	5.9	6.2	0.0
10	1061.0	0.160	7.1	7.6	7.7	7.8	9.1	10.6	12.5	10.8	8.2	9.7	4.8	0.8	2.7	0.0
20	893.7	0.117	8.6	8.6	8.6	8.2	9.7	9.7	11.8	11.6	6.1	5.4	7.0	4.1	0.0	0.0
30	824.7	0.111	8.1	8.7	9.0	8.3	8.7	8.5	7.9	9.2	9.8	4.7	7.7	5.0	3.7	0.0
40	1085.4	0.166	7.3	7.1	7.3	8.0	8.3	8.5	10.5	12.5	12.2	10.2	4.9	2.5	0.0	0.0
50	1055.2	0.158	7.3	7.6	7.5	8.1	8.0	9.7	10.6	9.4	9.1	8.5	7.4	6.2	0.0	0.0
75	752.2	0.152	5.3	5.3	5.8	5.9	6.7	8.7	9.8	10.1	13.2	16.5	4.3	7.7	0.0	0.0
100	688.4	0.106	7.5	7.4	6.8	6.8	6.0	6.6	10.2	10.6	12.5	10.0	10.1	1.5	3.3	0.0
150	755.3	0.138	6.7	5.9	5.1	4.8	4.3	6.2	11.4	16.1	13.7	9.3	4.7	3.2	8.0	0.0
200	600.1	0.130	5.3	4.8	4.1	5.9	6.7	6.4	10.4	12.8	14.4	9.1	9.1	5.0	5.5	0.0
300	615.4	0.106	6.3	6.6	6.6	7.0	7.9	7.9	11.4	11.0	7.7	16.8	6.5	3.8	0.0	0.0
400	706.8	0.178	4.1	4.0	4.6	4.5	5.9	8.5	14.4	17.0	17.5	13.6	3.1	2.2	0.0	0.0
600	397.1	0.082	4.8	4.8	5.7	8.0	10.2	10.8	13.2	13.1	11.5	10.9	6.4	0.0	0.0	0.0

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## EST 21

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1208.2	0.186	6.6	8.0	8.2	7.7	8.0	8.5	11.9	11.8	10.0	7.1	6.8	2.4	2.3	0.0
5	1396.0	0.206	7.0	8.0	8.5	7.8	8.4	10.8	11.7	13.7	10.2	3.9	4.0	2.7	2.6	0.0
10	1293.7	0.175	7.4	9.1	9.3	9.0	9.8	11.0	13.0	11.4	9.1	1.7	3.9	1.4	3.3	0.0
20	1400.5	0.177	8.2	9.7	10.5	9.5	8.9	9.7	10.8	8.7	9.4	5.7	6.0	2.3	0.0	0.0
30	1370.1	0.219	5.9	7.8	8.6	8.2	7.6	9.6	12.8	11.1	13.0	6.4	4.2	2.0	2.2	0.0
40	1904.4	0.291	6.7	7.8	8.5	7.4	7.5	9.8	12.2	13.0	10.4	7.0	4.0	3.5	1.4	0.0
50	1208.7	0.193	6.5	7.7	7.3	6.7	7.4	9.6	12.0	10.9	12.1	7.6	6.3	5.1	0.0	0.0
75	1109.5	0.436	2.5	2.7	2.5	2.7	3.6	6.9	13.3	14.4	17.1	14.5	10.8	6.9	1.4	0.0
100	775.5	0.151	5.1	5.0	5.3	6.5	7.0	9.0	13.2	15.0	14.1	12.7	5.4	0.0	1.1	0.0
150	654.2	0.157	4.7	4.5	3.9	3.7	4.1	7.7	16.0	15.8	19.7	15.3	2.2	1.8	0.0	0.0
200	608.4	0.148	4.5	4.3	3.6	5.7	6.0	7.7	12.4	11.3	14.2	13.1	12.7	4.0	0.0	0.0
300	435.5	0.078	6.6	5.8	5.7	5.2	5.4	10.3	13.2	17.4	16.8	8.9	1.5	2.3	0.0	0.0
400	583.5	0.109	6.1	5.8	5.1	4.5	6.0	12.1	18.0	17.3	17.4	5.2	0.0	2.1	0.0	0.0

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## EST 22

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1678.1	0.323	5.2	6.0	6.1	6.2	7.3	9.3	15.4	16.8	12.3	7.6	4.6	0.6	1.8	0.0
5	1245.1	0.234	5.4	6.3	6.6	6.2	6.8	8.4	13.1	12.4	12.5	10.7	3.5	1.9	5.6	0.0
10	1512.9	0.209	7.6	8.5	8.9	7.9	9.4	11.1	14.1	12.4	9.2	6.1	4.1	0.0	0.0	0.0
20	1108.1	0.235	4.8	5.4	5.6	5.8	7.2	8.4	10.5	12.7	12.6	11.7	7.7	4.1	2.9	0.0
30	1121.1	0.160	7.1	7.9	8.8	9.3	9.6	13.1	13.5	10.6	9.8	4.5	5.1	0.0	0.0	0.0
40	2168.2	0.363	6.1	6.7	7.3	7.8	8.3	11.0	13.0	12.2	8.7	9.5	4.1	3.7	0.8	0.0
50	1618.8	0.308	6.4	6.7	6.8	6.5	6.5	9.6	12.9	13.7	13.1	9.0	5.9	2.2	0.0	0.0
75	1636.6	0.288	6.4	5.8	6.5	6.4	6.7	9.3	14.4	15.5	12.7	9.4	3.9	2.4	0.0	0.0
100	1246.1	0.299	4.7	4.2	4.3	4.4	4.9	7.3	13.6	16.8	15.6	13.4	7.7	2.5	0.0	0.0
150	1037.9	0.230	4.9	4.9	5.0	4.6	5.5	7.4	14.5	14.3	17.5	8.5	6.3	6.0	0.0	0.0
200	786.1	0.192	4.2	4.3	4.4	5.8	6.4	8.1	12.8	16.0	16.9	9.8	8.8	2.0	0.0	0.0
300	821.6	0.175	5.5	5.1	4.4	4.1	5.0	7.1	13.7	15.9	15.2	12.5	6.6	4.3	0.0	0.0
400	756.1	0.175	4.6	4.5	4.9	4.9	5.1	8.2	14.8	16.0	12.8	14.0	5.8	3.7	0.0	0.0
600	1073.2	0.332	3.2	3.2	3.5	4.2	5.3	8.6	14.6	17.6	15.8	13.6	5.5	3.2	1.0	0.0

## EST 23

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1228.5	0.244	5.1	5.7	5.7	6.1	7.6	9.6	15.3	14.2	13.8	8.2	5.1	3.0	0.0	0.0
5	1082.2	0.143	7.6	9.3	9.5	9.7	10.8	10.3	11.0	11.6	8.5	6.5	2.2	2.6	0.0	0.0
10	1034.2	0.153	7.1	8.4	7.8	7.0	8.2	9.7	11.3	15.0	9.4	8.6	3.9	3.0	0.0	0.0
20	1060.0	0.151	7.5	8.4	7.9	7.9	9.1	9.3	11.5	12.4	12.4	7.1	4.2	1.6	0.0	0.0
40	1392.2	0.231	7.3	6.3	5.6	6.1	6.6	8.9	11.3	13.5	14.1	11.8	6.6	1.4	0.0	0.0
50	1612.3	0.326	5.2	5.6	5.4	5.7	6.3	8.5	13.2	16.5	14.9	9.6	5.4	3.1	0.0	0.0

## EST 24

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	964.1	0.124	8.3	9.3	9.4	8.7	9.6	9.7	9.6	8.7	7.5	9.3	7.9	1.4	0.0	0.0
5	1055.9	0.135	8.5	9.3	9.2	8.5	9.8	8.7	9.4	7.1	8.1	8.3	9.0	3.6	0.0	0.0
10	945.1	0.123	8.0	9.2	9.8	9.2	10.4	9.0	10.4	8.8	9.1	9.9	3.4	2.0	0.0	0.0
20	1183.5	0.150	8.1	9.1	10.4	10.4	11.1	9.3	9.2	8.6	8.0	7.0	4.4	0.0	3.8	0.0
30	908.1	0.115	7.9	9.3	10.7	10.2	11.0	10.8	9.4	8.6	7.9	3.0	3.1	2.1	5.3	0.0
40	1178.4	0.136	9.2	10.1	10.6	10.8	10.6	13.2	10.0	8.5	5.1	7.3	2.6	1.4	0.0	0.0
50	1190.3	0.212	6.0	6.2	7.2	6.8	7.2	7.3	7.5	6.7	6.9	13.1	10.7	9.1	4.5	0.0
75	1199.0	0.137	10.5	9.2	9.6	10.0	10.0	8.8	8.7	9.9	7.8	5.8	5.5	3.6	0.0	0.0
100	610.7	0.110	5.9	5.6	6.5	7.4	11.7	9.0	9.8	10.9	13.3	5.7	7.4	2.0	4.1	0.0
150	652.8	0.109	6.3	6.3	7.1	8.2	8.7	9.0	10.4	13.0	15.4	11.0	1.9	2.2	0.0	0.0
200	573.6	0.119	4.9	5.3	6.0	7.1	7.5	6.5	8.0	8.9	6.5	13.3	14.6	3.3	7.4	0.0
300	672.1	0.108	6.9	7.2	7.1	6.5	7.5	9.3	6.2	11.8	17.1	7.2	5.5	0.0	0.0	0.0
400	856.1	0.212	4.1	4.4	4.6	5.0	5.4	7.5	14.4	15.3	16.0	11.3	8.4	3.1	0.0	0.0

## EST 25

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1342.7	0.279	4.9	5.4	5.8	5.6	6.6	8.7	14.3	17.4	11.5	7.5	4.4	4.5	2.7	0.0
5	1134.1	0.230	5.0	5.8	6.1	5.7	6.2	8.3	12.6	16.4	13.6	10.6	3.6	2.8	2.7	0.0
10	1203.0	0.211	5.8	6.8	6.9	6.9	7.6	7.6	12.1	10.5	12.9	12.2	5.5	4.6	0.0	0.0
20	1056.7	0.210	5.1	6.1	5.9	5.8	6.0	8.0	11.4	14.0	13.2	9.2	5.1	2.0	2.3	5.2
30	1292.1	0.387	3.2	3.7	3.9	4.3	4.8	7.2	13.9	16.9	14.7	11.3	6.5	5.2	1.2	2.5
40	1201.8	0.306	4.0	4.3	4.7	4.9	5.0	7.5	11.7	14.3	16.0	14.0	4.5	5.7	0.0	2.8
50	1105.1	0.234	4.7	5.5	6.2	5.9	5.7	7.6	10.7	12.4	12.5	10.9	8.8	3.4	1.3	3.7
75	946.2	0.210	4.8	4.8	5.0	5.3	5.9	7.7	12.1	15.5	16.3	14.7	4.2	3.1	0.0	0.0
100	435.2	0.100	5.1	4.1	4.5	4.3	5.2	8.0	13.4	16.8	11.3	11.8	5.0	10.0	0.0	0.0
150	657.9	0.211	3.2	3.3	3.3	3.5	4.0	6.0	12.4	14.7	16.8	14.3	11.1	4.6	2.1	0.0
200	643.3	0.172	3.4	3.0	3.3	11.5	12.9	5.2	9.4	11.0	11.2	13.6	8.6	3.6	2.7	0.0
300	424.7	0.248	1.7	1.4	1.3	1.6	2.1	6.0	17.2	20.3	22.6	17.5	4.9	2.8	0.0	0.0
400	585.1	0.175	3.4	3.4	3.7	4.0	4.6	7.7	14.4	16.6	17.8	18.3	5.6	0.0	0.0	0.0
600	481.8	0.138	3.8	3.6	3.2	4.2	5.1	6.6	10.6	14.0	15.7	13.4	8.9	5.4	4.9	0.0
800	576.2	0.251	2.2	2.1	2.4	2.6	3.6	6.7	17.0	19.2	21.1	10.8	8.0	3.6	0.0	0.0
1000	891.3	0.256	2.8	3.2	4.7	7.4	10.0	10.6	11.4	13.5	12.6	12.0	7.6	2.6	0.9	0.0

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## EST 26

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1352.6	0.304	4.1	5.3	5.6	5.8	6.8	9.7	14.8	16.2	14.0	10.8	4.2	2.0	0.0	0.0
5	1384.1	0.328	4.1	4.5	5.4	5.8	6.1	9.0	12.2	15.8	16.7	9.8	5.4	1.7	2.8	0.0
10	1334.6	0.276	4.7	5.5	6.2	6.6	7.4	8.5	10.9	13.1	11.3	11.5	5.0	5.7	3.0	0.0
20	1570.0	0.358	4.3	5.0	5.2	5.2	6.4	9.4	14.5	15.8	15.3	10.2	4.9	3.2	0.0	0.0
30	1188.3	0.215	5.4	6.2	7.5	7.9	7.8	8.3	11.4	13.4	10.7	12.9	7.1	0.8	0.0	0.0
40	1329.0	0.258	5.2	6.0	6.5	6.1	6.0	8.1	11.7	13.1	14.3	13.8	6.0	2.5	0.0	0.0
50	1570.1	0.291	5.4	5.9	7.5	7.8	6.5	8.2	11.3	13.0	13.9	11.3	4.9	0.0	3.8	0.0
75	771.4	0.220	4.0	3.5	3.5	3.5	4.0	6.3	12.4	14.4	17.9	14.9	12.6	2.5	0.0	0.0
100	613.1	0.147	4.3	4.3	4.5	5.1	6.3	8.7	17.9	15.9	17.6	6.7	4.9	3.2	0.0	0.0
150	707.5	0.205	3.5	3.7	3.7	3.9	4.7	7.6	14.1	19.7	17.1	13.0	4.5	4.1	0.0	0.0
200	553.7	0.182	3.2	3.0	3.2	3.6	3.9	6.7	13.5	16.9	22.3	14.0	6.4	2.9	0.0	0.0
300	679.4	0.214	3.2	3.4	3.6	3.4	4.1	7.9	15.1	16.6	17.3	10.9	2.1	0.0	11.8	0.0
400	781.0	0.241	3.3	3.3	3.4	3.4	4.6	8.3	15.0	17.5	15.7	13.4	5.9	3.0	2.3	0.0
600	685.8	0.262	2.4	2.6	2.8	3.1	4.3	9.3	16.8	19.8	18.6	10.6	7.3	1.8	0.0	0.0
800	618.5	0.184	3.5	3.6	3.4	3.6	4.0	7.3	15.1	19.2	17.0	13.5	6.5	2.8	0.0	0.0
1000	860.7	0.214	3.8	4.1	4.8	6.0	7.9	10.8	16.7	16.4	14.2	8.7	2.9	3.3	0.0	0.0

## EST 27

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1543.8	0.294	5.2	6.4	6.2	6.3	7.3	9.7	11.0	14.3	13.2	9.6	6.3	2.7	1.1	0.0
5	1351.1	0.183	7.9	8.8	8.8	7.9	8.2	10.4	13.0	13.2	12.7	4.3	2.9	1.4	0.0	0.0
10	1310.2	0.216	6.4	7.3	7.4	6.7	7.0	8.9	11.4	11.0	10.9	8.5	6.6	3.3	4.1	0.0
20	1587.4	0.220	7.8	8.7	8.5	7.9	8.1	9.6	11.1	12.9	9.4	6.0	3.3	3.7	2.3	0.0
30	1347.4	0.212	6.6	7.3	7.8	7.8	8.0	9.8	12.6	13.3	10.5	7.3	0.7	0.0	2.8	4.9
40	1546.5	0.199	8.9	8.9	8.3	8.0	8.0	9.5	12.9	12.0	11.5	4.7	3.0	1.5	2.1	0.0
50	1190.6	0.259	4.7	5.3	5.3	5.4	6.1	8.5	12.4	14.5	16.8	8.8	2.9	4.9	0.0	3.7
75	672.1	0.119	6.4	5.8	6.1	6.0	7.2	9.8	11.8	12.6	10.7	11.6	7.7	3.7	0.0	0.0
100	369.9	0.044	10.8	8.5	7.3	7.0	6.8	9.0	11.7	11.9	10.0	13.4	3.2	0.0	0.0	0.0
150	719.7	0.110	7.7	7.5	6.4	6.2	6.5	8.3	12.7	13.0	11.4	5.5	9.3	4.9	0.0	0.0
200	466.4	0.085	6.4	5.8	5.4	5.8	6.1	6.2	13.6	15.1	14.6	12.9	7.7	0.0	0.0	0.0

## EST 28

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2258.5	0.434	5.3	6.5	6.7	6.0	4.4	6.7	11.3	13.3	14.5	9.1	6.3	3.1	4.4	1.8
5	1975.3	0.323	6.2	7.6	8.0	6.7	6.5	7.3	11.4	12.9	13.7	8.2	6.5	2.9	1.3	0.0
10	2026.5	0.379	5.4	6.7	6.9	5.7	6.0	6.5	10.1	14.5	16.3	12.3	5.4	1.9	1.7	0.0
20	1974.8	0.296	6.9	8.2	8.7	7.5	7.0	6.8	10.4	12.1	11.5	11.2	4.9	2.1	2.0	0.0
30	4518.1	0.395	14.1	13.8	11.8	9.3	7.5	6.8	7.2	9.7	8.7	3.9	3.5	2.1	1.1	0.0
40	2026.2	0.299	7.2	7.7	8.1	8.5	9.5	9.8	8.5	8.3	9.1	8.1	5.7	3.4	2.1	3.1
50	14747.5	0.920	19.5	20.1	18.0	13.1	8.5	5.4	3.9	2.9	2.9	3.2	2.0	0.0	0.0	0.0

## EST 29

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1552.8	0.331	5.0	5.3	5.4	5.0	5.6	7.0	12.1	15.0	15.5	9.2	5.9	4.1	4.3	0.0
5	1598.1	0.389	4.2	4.7	4.7	4.5	5.3	7.1	13.3	15.1	13.0	12.7	5.1	3.8	3.6	2.2
10	1405.9	0.294	5.0	5.5	5.2	5.7	6.0	7.9	12.8	14.6	14.4	10.2	6.6	3.4	2.0	0.0
20	1632.8	0.350	4.9	5.1	5.2	5.0	6.4	9.4	13.7	17.2	12.7	10.1	7.6	2.0	0.0	0.0
30	2352.8	0.353	7.9	7.2	6.4	6.2	7.0	12.0	14.3	15.4	11.8	5.3	3.1	2.8	0.0	0.0
40	2287.9	0.514	4.8	4.7	4.8	4.7	5.6	8.4	14.1	14.8	15.0	12.3	5.8	2.1	2.1	0.0
50	2339.1	0.514	5.7	4.5	4.0	3.7	4.3	6.5	12.4	15.2	16.0	11.0	6.9	4.0	3.2	1.9
75	2053.3	0.525	4.6	3.8	3.6	3.8	4.3	6.8	12.7	14.5	16.6	13.6	9.3	4.0	1.8	0.0
100	1266.6	0.336	4.6	3.6	3.3	3.1	3.9	6.2	12.5	15.5	20.3	15.0	4.4	7.1	0.0	0.0
150	1198.1	0.312	4.4	4.2	3.5	3.3	3.5	5.6	13.0	16.5	18.9	13.3	5.7	2.7	2.2	2.4
200	916.3	0.201	5.1	5.1	4.7	4.6	4.4	6.4	10.9	15.4	16.5	13.7	6.9	3.8	1.8	0.0
300	785.4	0.224	4.0	3.8	3.3	3.2	3.1	5.2	12.4	15.9	17.2	14.5	7.2	3.5	2.6	3.5
400	916.2	0.169	6.8	5.6	4.6	4.7	4.6	6.6	11.7	14.4	15.5	8.2	8.6	0.0	3.5	4.6
600	893.3	0.120	10.1	6.8	5.8	6.2	6.1	7.6	13.4	13.1	18.1	9.4	2.8	0.0	0.0	0.0
800	808.0	0.099	10.6	8.0	7.3	7.5	8.6	9.7	11.2	13.0	10.3	6.1	7.2	0.0	0.0	0.0

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## EST 30

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1011.1	0.174	6.1	6.7	7.4	6.8	6.7	7.4	11.5	11.3	9.9	10.1	8.0	5.4	2.0	0.0
5	1462.4	0.249	5.9	6.9	7.7	7.6	7.4	9.1	12.2	12.9	12.6	9.3	1.1	2.8	3.8	0.0
10	1375.1	0.268	5.1	5.9	6.5	6.3	7.2	8.8	12.4	14.8	9.4	8.8	5.7	3.2	1.9	3.3
20	1306.2	0.256	5.1	6.0	6.3	6.0	7.0	7.9	14.2	15.3	14.7	10.0	2.5	1.9	2.4	0.0
30	1159.7	0.216	5.3	6.2	6.8	6.5	7.4	10.3	14.2	15.4	13.8	10.0	2.6	0.8	0.0	0.0
40	1130.6	0.236	4.7	5.7	5.9	5.7	6.4	7.7	11.6	14.5	15.3	9.9	5.8	3.9	2.2	0.0
50	920.9	0.123	8.4	8.8	8.8	7.4	7.9	8.5	10.9	10.3	10.3	8.5	3.8	1.6	4.2	0.0
75	943.8	0.168	5.8	6.3	6.9	7.8	7.2	9.6	13.3	12.4	12.5	7.7	3.4	3.8	2.7	0.0
100	831.5	0.209	4.3	4.3	3.9	4.0	5.7	8.1	15.8	17.9	14.0	14.5	3.0	4.0	0.0	0.0
150	710.4	0.156	4.8	4.9	5.2	4.9	6.0	8.5	15.2	16.7	17.4	10.8	5.1	0.0	0.0	0.0
200	602.9	0.145	4.2	4.5	4.6	5.1	6.6	9.3	15.1	14.8	13.2	9.5	9.1	3.3	0.0	0.0
300	676.2	0.212	3.1	3.3	3.6	3.5	4.8	8.2	15.4	18.3	19.1	11.1	6.8	2.2	0.0	0.0
400	539.7	0.105	5.4	5.4	5.9	6.4	7.1	9.7	16.0	12.4	15.3	11.4	4.4	0.0	0.0	0.0
600	654.0	0.170	3.9	3.9	3.9	3.3	6.5	9.6	16.1	16.1	15.1	12.8	3.2	3.1	0.0	0.0
800	613.8	0.161	3.9	4.0	4.4	4.7	5.7	7.9	14.3	13.8	15.0	11.1	6.4	5.5	2.9	0.0
1000	627.7	0.130	4.6	4.7	6.1	8.7	8.5	11.5	14.8	13.4	13.5	7.4	3.9	2.3	0.0	0.0

## EST 31

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1567.5	0.246	6.4	7.7	8.3	7.6	8.1	8.5	11.3	11.5	13.5	8.0	3.1	2.7	2.6	0.0
5	1695.6	0.318	5.5	6.3	6.7	6.4	6.1	7.5	11.4	10.9	13.6	9.8	6.8	3.1	2.5	2.8
10	1434.8	0.209	6.9	8.4	8.6	8.9	8.6	9.0	11.6	9.0	12.2	6.1	5.1	4.8	0.0	0.0
20	1607.4	0.321	5.1	5.8	6.1	6.0	6.2	7.8	12.9	15.2	14.1	10.2	5.7	1.8	2.3	0.0
30	1513.2	0.330	4.8	5.1	5.9	5.4	5.6	7.5	10.7	9.7	9.1	8.2	7.1	11.0	9.3	0.0
40	2436.9	0.289	9.6	9.1	10.2	9.9	9.2	9.4	11.6	9.6	7.1	6.9	3.1	1.7	1.9	0.0
50	1421.4	0.331	4.0	4.9	5.2	6.1	8.4	10.5	11.4	11.2	13.8	11.3	6.5	4.9	1.2	0.0
75	1072.8	0.241	4.7	4.9	5.2	4.8	6.2	7.1	15.2	15.1	16.3	11.2	6.1	2.7	0.0	0.0
100	1377.7	0.227	7.1	6.5	6.2	5.7	6.5	8.3	13.6	15.2	14.5	9.2	6.5	0.0	0.0	0.0
150	981.6	0.185	5.9	5.9	5.6	5.8	6.0	7.9	12.5	14.4	15.9	12.4	4.2	2.9	0.0	0.0
200	603.7	0.098	7.0	6.9	6.6	6.5	7.3	6.8	12.9	16.1	13.4	10.6	5.3	0.0	0.0	0.0
300	607.2	0.153	4.1	4.2	4.4	4.5	5.8	8.3	12.4	17.3	15.2	12.3	6.5	4.5	0.0	0.0

## EST 32

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1740.0	0.263	6.8	7.7	7.8	8.7	9.7	11.7	14.4	11.1	9.2	5.7	2.7	0.0	3.9	0.0
5	1420.1	0.205	7.1	8.0	8.4	9.1	10.1	11.2	13.3	11.6	10.3	5.9	3.0	1.4	0.0	0.0
10	1179.8	0.158	7.7	8.9	9.0	9.9	10.9	9.9	11.2	11.6	11.7	3.9	1.5	0.0	3.1	0.0
20	1250.4	0.164	8.0	9.3	9.1	8.6	9.6	9.6	10.7	10.7	8.2	8.4	3.9	3.2	0.0	0.0
30	1157.7	0.153	8.3	9.1	8.9	8.4	8.5	7.9	8.2	7.9	6.9	6.9	5.7	4.6	8.1	0.0
40	1425.1	0.222	6.6	7.3	7.8	8.7	8.9	9.0	10.6	13.1	12.7	9.3	3.5	0.0	1.8	0.0
50	1122.8	0.166	6.9	8.1	8.6	9.6	8.0	8.1	8.1	9.0	9.2	8.2	9.5	2.9	3.2	0.0
75	1061.4	0.170	6.8	6.9	7.8	7.5	7.1	7.4	10.6	9.8	7.7	7.7	5.3	5.6	9.2	0.0
100	763.3	0.186	4.1	4.3	4.8	5.3	7.6	8.8	10.9	14.0	11.2	11.9	10.0	4.9	1.5	0.0
150	1385.0	0.429	3.0	3.3	3.8	4.4	6.0	8.8	14.9	16.2	15.4	11.0	5.8	6.7	0.0	0.0
200	498.4	0.124	4.4	4.2	4.0	4.4	4.9	7.1	13.2	15.6	15.3	9.3	8.2	4.5	4.2	0.0
300	528.9	0.148	3.9	3.7	3.6	3.9	5.0	6.3	12.2	13.6	13.1	16.3	9.2	8.6	0.0	0.0
400	483.8	0.104	5.2	4.8	4.3	4.8	6.4	9.5	15.0	16.2	18.2	9.9	3.6	1.6	0.0	0.0
600	953.3	0.203	4.9	5.2	5.1	5.4	6.4	9.7	15.4	16.2	17.3	11.3	2.6	0.0	0.0	0.0
800	382.7	0.113	3.6	3.4	3.5	3.7	4.9	8.3	11.2	14.5	15.3	13.5	10.3	2.5	4.5	0.0
1000	497.3	0.125	4.3	3.9	3.8	5.0	6.6	9.1	13.8	15.5	13.7	9.9	5.8	0.0	0.0	8.0

## EST 33

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1946.2	0.353	5.8	6.3	6.7	6.1	7.3	8.7	12.1	13.0	12.5	7.6	4.6	4.3	1.5	2.7
5	1437.7	0.206	7.4	8.4	8.7	7.4	8.5	7.9	11.6	11.7	8.7	4.7	6.9	3.9	3.6	0.0
10	1517.8	0.229	7.0	7.7	8.2	7.7	8.2	8.2	10.3	12.7	13.5	7.8	6.0	2.0	0.0	0.0
20	1385.0	0.188	8.1	9.0	8.6	7.4	7.2	7.4	9.7	12.5	10.7	7.2	7.7	1.8	2.0	0.0
30	1231.1	0.199	6.5	7.2	7.8	6.9	7.3	8.8	10.4	11.4	10.3	8.3	3.3	3.1	8.0	0.0
40	1397.3	0.303	4.9	5.3	5.4	4.7	5.0	6.5	11.7	11.9	15.0	13.5	6.7	5.1	3.5	0.0
50	884.3	0.194	4.7	5.4	5.2	5.0	6.1	7.8	9.7	14.0	13.6	10.5	8.9	2.2	6.2	0.0
75	2698.4	0.281	11.8	10.6	10.2	8.9	7.6	6.7	8.3	8.9	11.7	6.5	3.3	3.3	1.7	0.0
100	4119.3	0.399	11.4	12.2	12.6	12.6	11.9	8.1	7.0	7.4	6.9	5.7	3.1	0.5	0.0	0.0

## EST 34

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1839.4	0.315	6.3	7.1	6.4	6.3	5.9	7.0	12.0	13.7	13.4	10.0	4.1	5.4	1.7	0.0
5	1648.7	0.311	5.5	6.4	6.4	5.7	5.5	6.9	11.8	12.5	14.0	13.2	7.2	2.9	1.3	0.0
10	1806.5	0.370	5.1	5.6	5.7	5.4	6.3	7.2	12.5	14.8	14.8	13.2	6.2	2.5	0.0	0.0
20	1825.7	0.290	7.0	7.2	7.2	6.2	6.8	8.0	12.3	12.6	13.6	7.6	5.1	2.7	0.0	3.0
30	1776.3	0.249	7.9	8.9	8.2	6.6	6.0	8.3	11.6	14.4	11.3	10.1	4.7	0.0	1.6	0.0
40	1403.6	0.377	3.7	4.4	4.3	4.0	4.4	6.8	12.3	14.6	18.9	13.3	4.6	6.2	1.9	0.0
50	1096.7	0.294	4.0	4.3	3.6	4.0	4.6	6.8	11.5	15.5	17.8	13.6	7.3	5.0	1.4	0.0
75	776.4	0.204	3.9	3.9	4.4	4.9	5.4	7.2	13.5	16.0	17.4	12.7	5.8	4.2	0.0	0.0
100	616.1	0.144	4.6	4.3	4.3	5.6	7.9	7.7	12.4	15.8	17.7	10.0	4.6	1.7	2.8	0.0

## EST 35

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1851.8	0.374	4.8	5.9	6.3	6.4	6.8	8.4	12.6	12.8	15.5	9.7	5.2	3.3	1.6	0.0
5	1651.2	0.328	4.9	6.1	6.4	6.1	6.8	8.3	13.1	13.1	11.7	9.5	3.5	5.6	4.4	0.0
10	1960.1	0.380	4.9	6.2	6.7	7.1	8.1	8.8	12.6	12.9	15.4	9.0	3.4	2.1	2.2	0.0
20	1472.1	0.273	5.3	6.5	7.1	6.8	7.1	7.9	11.6	12.0	15.2	12.9	2.9	2.9	1.2	0.0
30	2112.5	0.453	4.6	5.2	5.9	5.7	6.5	8.5	14.5	14.5	14.6	9.3	6.5	2.2	1.3	0.0
40	1953.1	0.433	4.7	4.9	5.5	5.3	4.9	7.9	13.0	15.3	17.2	11.1	3.9	4.8	0.9	0.0
50	1799.1	0.346	5.6	5.7	6.4	5.3	5.5	7.6	13.6	16.1	16.2	10.4	1.3	1.7	3.9	0.0
75	1191.5	0.247	4.8	5.6	5.8	5.6	6.4	9.0	16.0	17.7	14.9	8.4	3.3	1.9	0.0	0.0
100	1178.5	0.258	5.2	4.8	4.5	4.7	5.7	8.0	13.6	17.2	17.1	9.3	5.1	4.3	0.0	0.0
150	1027.2	0.301	3.7	3.6	3.4	3.4	4.6	6.4	14.7	15.2	18.2	12.7	7.2	4.8	1.5	0.0
200	719.0	0.249	2.9	3.0	3.0	3.4	4.3	6.4	14.2	15.7	17.2	12.6	6.6	7.3	2.8	0.0
300	594.8	0.160	4.0	3.8	4.0	4.0	5.2	7.8	14.5	14.2	15.4	11.9	6.6	7.9	0.0	0.0
400	824.4	0.150	6.3	5.9	5.4	5.5	5.9	9.7	16.4	15.0	16.0	10.7	2.8	0.0	0.0	0.0
600	527.4	0.142	4.2	3.6	3.4	3.4	5.3	5.5	14.0	16.3	20.2	8.4	5.9	8.2	0.0	0.0
800	535.8	0.154	3.7	3.5	3.7	4.1	4.5	7.3	10.3	14.4	12.9	10.0	7.3	3.3	14.3	0.0

## EST 36

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2994.3	0.346	9.7	10.7	9.8	8.5	7.7	8.4	10.1	10.8	9.6	5.5	2.8	1.3	4.4	0.0
5	2669.0	0.267	11.7	12.2	11.2	9.0	7.6	6.8	8.3	8.6	8.4	7.0	3.5	0.7	4.2	0.0
10	2871.0	0.285	11.9	12.0	10.8	9.3	8.8	8.3	8.6	10.7	8.4	5.9	2.7	1.5	0.0	0.0
20	2140.6	0.385	9.2	9.6	9.0	8.9	9.4	9.9	9.9	8.2	7.4	4.8	5.5	2.7	4.7	0.0
30	3077.6	0.357	9.8	10.5	9.6	8.4	8.2	8.6	9.9	10.4	10.4	5.5	6.3	1.9	0.0	0.0
40	3850.1	0.467	9.4	9.9	9.2	8.2	7.9	8.1	8.7	9.0	7.8	7.1	5.0	4.7	4.4	0.0
50	4834.4	0.481	12.2	11.6	10.2	9.6	9.0	8.7	8.9	8.1	6.6	4.4	6.1	1.4	0.8	1.7

CUADRO V.- Número de partículas de las mismas muestras que se han utilizado para la valoración de clorofila del contenido en nitrógeno y carbono particulado.

EST 3 ( BOTELLÓN )			C A N A L E S													
PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1339.5	0.140	10.3	11.8	12.4	10.8	8.8	9.7	8.9	9.7	8.1	4.3	3.0	1.6	0.0	0.0
20	1056.9	0.105	10.0	12.6	14.4	13.0	11.2	9.3	7.6	8.1	4.4	5.8	3.1	0.0	0.0	0.0
50	978.6	0.107	9.7	11.4	11.5	10.9	10.5	9.2	9.3	7.0	4.8	1.4	0.0	0.0	4.4	2.8
75	845.9	0.124	7.5	7.6	8.5	8.1	7.5	8.4	8.4	7.7	11.0	6.3	8.2	5.8	4.2	0.0

EST 4 ( BOTELLÓN )			C A N A L E S													
PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1043.3	0.122	9.3	10.1	10.4	9.9	8.4	10.0	12.2	10.7	6.9	8.8	0.9	1.9	0.0	0.0
20	944.0	0.100	10.8	11.2	10.6	9.3	9.7	8.3	7.5	7.9	4.0	8.5	2.4	4.6	4.4	0.0
50	914.3	0.081	12.7	14.2	13.0	10.7	11.0	9.5	8.7	7.6	4.2	3.5	4.5	0.0	0.0	0.0
75	856.2	0.136	6.3	7.6	7.5	8.9	9.7	9.7	9.3	10.0	10.7	7.1	1.1	7.4	3.9	0.0
100	542.4	0.098	5.6	6.2	6.6	8.1	7.9	9.2	9.6	10.7	8.9	12.2	1.8	7.4	5.0	0.0

## EST 5 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2098.7	0.253	8.7	10.3	10.3	9.5	9.6	10.3	9.9	11.4	9.8	5.5	3.1	0.9	0.0	0.0
20	1996.8	0.276	8.0	8.8	8.1	7.2	7.6	9.2	12.3	13.7	12.3	6.2	3.7	2.2	0.0	0.0
50	1139.8	0.184	7.0	7.2	6.6	6.3	6.2	7.9	11.2	13.8	11.2	11.3	7.7	3.2	0.0	0.0
75	961.0	0.107	10.5	10.5	9.4	9.5	9.3	8.5	9.8	8.4	7.3	9.1	3.1	4.0	0.0	0.0

## EST 6 ( BOTELLON )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1736.9	0.189	10.6	10.8	10.6	8.9	8.7	7.7	10.3	10.7	8.8	8.2	1.2	2.8	0.0	0.0
20	2697.1	0.347	9.0	8.9	8.6	7.7	7.5	9.0	11.4	10.5	8.8	7.1	3.9	2.1	1.1	3.6
50	1745.9	0.213	8.6	9.6	10.5	9.9	9.8	11.2	12.0	12.0	9.5	5.7	0.0	0.6	0.0	0.0
75	1274.4	0.145	9.7	10.1	10.4	10.2	10.7	11.6	11.4	9.9	8.9	3.3	1.6	1.6	0.0	0.0
100	584.5	0.087	7.7	7.2	7.4	7.8	9.3	8.2	9.5	8.7	10.9	11.0	9.4	2.2	0.0	0.0

## EST 7 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1405.4	0.203	7.8	8.2	8.3	6.7	6.7	7.1	9.1	10.1	10.7	9.2	4.0	4.8	2.9	3.8
20	1424.2	0.178	8.9	9.7	9.3	8.1	8.6	9.0	10.4	9.2	6.6	5.4	4.8	2.1	7.4	0.0
50	1094.4	0.108	10.9	12.3	12.2	12.6	10.8	8.7	10.9	9.8	8.7	0.0	0.0	2.4	0.0	0.0
75	710.7	0.077	10.0	11.1	11.2	11.3	9.3	8.1	11.6	9.6	7.8	3.3	6.1	0.0	0.0	0.0
100	358.6	0.045	9.6	8.7	7.9	7.1	7.7	6.7	11.6	9.3	4.6	5.0	7.5	2.7	11.0	0.0

## EST 8 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1705.7	0.306	6.0	6.8	6.2	6.1	5.9	6.8	10.5	11.8	14.3	8.1	7.0	5.2	2.0	2.7
20	1818.8	0.279	7.3	7.5	7.3	6.2	7.0	10.0	13.5	15.5	13.7	7.6	0.6	0.6	2.6	0.0
50	2293.2	0.530	4.7	4.6	4.6	5.2	5.7	8.6	13.2	13.2	13.8	11.2	8.0	5.2	1.4	0.0
75	589.7	0.124	5.0	5.3	5.2	5.7	6.7	10.1	13.1	13.2	13.9	8.4	8.5	4.5	0.0	0.0
100	433.0	0.095	4.9	4.6	4.8	5.6	6.7	8.5	15.1	15.3	12.6	13.8	0.0	1.4	0.0	6.1

## EST 9 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2381.0	0.330	8.0	9.7	7.8	6.2	5.5	5.9	6.3	6.9	10.9	10.1	9.0	5.6	5.0	2.6
20	2258.3	0.351	7.1	7.7	7.0	6.1	7.0	9.8	11.8	12.7	14.0	8.9	3.3	4.0	0.0	0.0
50	2655.0	0.389	7.5	7.5	7.8	8.5	9.7	9.6	10.1	10.4	11.2	8.6	5.4	2.3	0.9	0.0
75	1658.1	0.231	8.2	8.1	7.8	7.7	8.9	9.6	9.7	8.5	8.2	6.6	3.5	5.7	3.4	3.3

## EST 10 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2941.0	0.907	3.2	3.5	4.0	3.9	4.4	5.8	10.7	14.3	20.6	18.8	8.7	1.0	0.4	0.0
20	1953.6	0.536	3.4	4.1	4.4	5.1	6.4	8.6	11.9	13.0	13.2	16.6	9.3	2.2	1.3	0.0
50	1753.6	0.374	4.8	5.3	5.6	5.8	6.7	8.5	11.5	13.0	15.4	12.0	7.4	2.5	0.9	0.0
75	2514.3	0.368	7.2	7.3	8.0	9.7	12.3	11.5	11.5	10.2	9.8	9.0	1.9	1.0	0.0	0.0
100	4961.8	0.664	8.7	8.7	7.8	6.8	7.8	8.2	11.5	11.7	11.7	8.5	4.7	3.3	0.0	0.0

## EST 12 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1166.1	0.284	4.2	4.4	4.5	4.8	6.2	8.5	15.0	15.3	16.2	12.2	4.8	3.2	0.0	0.0
20	1382.7	0.214	8.0	6.8	6.1	5.9	6.2	8.6	12.2	13.2	14.1	11.3	4.9	2.2	0.0	0.0
50	736.7	0.118	6.9	7.2	7.3	7.1	6.8	6.7	7.7	12.4	12.4	10.1	2.6	5.7	6.5	0.0
75	670.7	0.086	9.6	8.7	6.5	7.1	8.6	9.2	9.6	9.6	12.5	8.7	4.6	4.8	0.0	0.0
100	450.6	0.060	9.8	8.0	6.2	5.7	4.6	7.6	9.5	12.9	21.0	9.2	1.8	3.1	0.0	0.0

## EST 13 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1742.1	0.239	7.5	9.2	9.4	8.4	7.7	8.7	9.5	10.5	6.6	9.1	4.1	4.0	0.0	4.6
20	1599.3	0.250	6.7	7.9	8.0	6.9	6.8	7.5	10.4	11.6	10.4	12.8	6.0	4.2	0.0	0.0
50	1365.0	0.193	7.7	8.6	7.9	7.4	7.5	9.1	11.2	11.0	11.4	9.0	4.6	3.9	0.0	0.0
75	1081.7	0.171	7.0	7.2	6.9	6.8	7.3	9.1	14.4	13.3	14.1	7.9	4.1	1.3	0.0	0.0
100	1175.6	0.165	7.9	8.1	8.0	7.9	7.3	10.1	14.9	14.2	10.8	8.8	1.3	0.0	0.0	0.0

## EST 14 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1905.4	0.253	8.1	9.3	8.6	8.1	8.5	10.0	12.6	12.7	10.9	5.9	2.8	1.9	0.0	0.0
20	1481.9	0.225	6.9	8.2	7.7	6.8	7.0	9.2	13.9	14.5	12.7	4.9	6.8	0.7	0.0	0.0
50	1410.5	0.237	6.5	6.2	6.7	7.4	8.3	10.2	12.8	13.8	12.4	6.7	3.3	3.3	1.8	0.0
75	1006.4	0.183	6.0	6.2	5.9	5.9	6.7	9.3	13.2	16.0	13.4	9.6	4.9	2.2	0.0	0.0
100	736.2	0.162	4.7	5.0	5.1	5.5	5.9	8.8	13.4	12.4	15.3	13.3	5.3	1.6	3.0	0.0

## EST 15 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1903.5	0.285	7.0	8.1	8.0	7.3	7.7	9.0	13.2	12.2	11.5	7.9	1.5	2.4	0.0	3.5
20	1727.7	0.277	6.6	7.5	7.3	6.7	6.9	8.7	14.2	13.9	12.5	7.4	4.2	0.6	2.9	0.0
50	1417.4	0.232	6.8	7.0	6.6	6.4	7.2	9.1	14.1	13.1	14.2	7.8	3.4	1.9	1.9	0.0
75	1264.2	0.212	6.2	7.0	7.2	6.8	7.3	9.4	11.6	12.7	13.8	7.4	5.3	2.6	2.0	0.0
100	891.1	0.153	5.9	6.8	7.2	6.9	7.7	9.0	14.5	12.8	13.0	6.9	3.3	1.4	3.8	0.0

## EST 17 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1172.0	0.197	6.9	6.7	6.2	5.9	6.3	7.4	9.1	9.7	9.6	8.1	4.3	4.4	10.9	3.9
20	993.7	0.136	8.4	8.3	8.4	7.1	8.2	8.0	8.2	9.1	7.4	5.4	5.4	3.5	5.8	6.1
50	1008.3	0.117	9.9	9.9	9.3	9.4	9.7	8.8	10.3	9.7	8.9	7.0	6.6	0.0	0.0	0.0
75	985.8	0.233	4.0	3.7	3.8	7.5	17.8	12.1	8.6	15.1	11.4	7.5	3.4	4.6	0.0	0.0
100	574.2	0.111	5.1	4.9	5.4	9.7	13.8	9.4	11.7	15.7	14.7	5.5	3.4	0.0	0.0	0.0

## EST 18 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1963.5	0.266	7.7	9.0	9.1	8.6	8.9	9.1	10.9	12.7	8.2	9.7	4.2	1.3	0.0	0.0
20	1458.4	0.176	9.6	9.8	9.0	7.9	8.6	7.7	7.9	8.2	5.9	9.9	5.5	5.8	3.5	0.0
50	1263.1	0.181	8.1	8.7	7.2	5.1	5.8	6.3	10.1	10.4	15.4	10.6	5.7	3.4	2.6	0.0
75	671.7	0.119	6.3	5.9	6.3	6.4	6.7	7.3	10.4	15.4	15.4	10.7	4.9	3.7	0.0	0.0
100	581.1	0.106	5.7	5.8	7.1	6.9	8.1	10.0	13.7	10.7	11.3	7.4	5.9	1.9	4.8	0.0

## EST 19 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1755.1	0.351	5.0	5.7	6.0	6.2	6.6	9.5	15.2	15.6	13.3	7.9	2.7	4.0	1.7	0.0
20	1619.9	0.308	5.5	6.0	6.3	6.2	6.8	8.5	10.8	11.7	11.3	10.1	8.1	5.3	2.9	0.0
50	2560.2	0.454	5.6	6.6	6.8	9.9	7.6	6.2	8.6	11.4	11.7	7.1	7.2	7.3	1.2	2.1

## EST 20 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1239.4	0.224	5.9	6.3	6.1	5.6	7.4	9.5	14.5	15.5	12.7	9.0	3.1	3.8	0.0	0.0
20	921.5	0.150	6.6	7.2	6.9	7.1	7.6	7.6	10.0	12.9	11.8	5.1	6.9	2.5	7.2	0.0
50	1089.4	0.164	7.0	8.1	7.6	7.8	8.1	9.3	7.2	9.6	11.5	9.3	5.7	6.1	1.9	0.0
75	686.4	0.125	5.8	6.4	5.6	6.5	7.8	9.5	12.1	13.9	13.8	12.3	3.4	2.2	0.0	0.0
100	458.1	0.095	4.9	5.4	5.4	6.1	6.6	9.4	15.2	16.2	12.3	11.2	6.9	0.0	0.0	0.0

## EST 21 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1584.1	0.370	4.6	4.8	4.3	4.5	4.9	8.4	15.8	17.3	18.1	9.5	4.2	3.0	0.0	0.0
20	1402.8	0.265	5.6	6.0	5.7	6.0	7.6	9.2	14.2	14.6	13.3	7.1	4.3	1.6	4.3	0.0
50	1379.4	0.201	7.3	8.7	7.5	7.0	7.0	9.1	14.7	14.0	10.3	9.1	1.9	2.8	0.0	0.0
75	763.1	0.161	5.1	5.2	4.5	5.4	7.0	9.8	13.6	13.8	16.3	12.2	6.4	0.0	0.0	0.0
100	548.8	0.129	4.5	4.0	5.2	6.4	8.5	17.3	15.6	16.5	10.6	6.3	0.0	0.0	0.0	0.0

## EST 22 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1210.1	0.210	6.0	6.8	6.5	6.6	7.0	10.1	13.7	18.0	13.4	6.9	3.5	0.9	0.0	0.0
20	1108.7	0.180	6.2	7.2	7.2	8.2	9.5	10.3	13.8	13.6	10.6	8.1	4.7	0.0	0.0	0.0
50	1157.8	0.168	7.2	8.6	8.1	7.1	8.2	9.2	12.0	11.0	14.6	7.5	3.0	2.9	0.0	0.0
75	903.5	0.223	4.1	4.1	4.7	5.5	6.5	8.3	14.8	16.1	14.9	10.7	6.4	3.1	0.0	0.0
100	426.0	0.099	4.7	3.9	4.4	5.9	6.5	9.3	15.0	14.8	13.8	11.0	6.9	3.2	0.0	0.0

## EST 23 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1397.9	0.190	8.4	8.3	7.8	8.1	9.1	9.9	10.2	11.5	9.5	7.8	4.6	2.2	2.2	0.0
20	984.4	0.173	6.0	6.1	6.5	7.5	8.9	9.6	10.7	12.4	13.8	10.3	5.8	1.8	0.0	0.0
50	1001.1	0.161	6.8	7.2	6.7	6.5	7.5	9.8	10.6	12.7	13.7	4.6	6.2	7.2	0.0	0.0

## EST 24 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1614.4	0.175	10.3	11.6	10.6	8.9	8.4	8.9	9.7	10.8	11.4	8.1	0.8	0.0	0.0	0.0
20	1429.5	0.189	7.9	9.1	9.5	8.9	8.9	9.6	11.5	9.7	9.5	9.2	2.7	0.0	2.7	0.0
50	1329.6	0.183	7.6	8.9	8.7	8.2	8.7	10.4	11.5	11.8	10.7	6.5	3.7	0.0	2.6	0.0
75	807.5	0.104	8.9	8.7	8.4	9.1	8.7	9.4	11.9	8.4	12.2	5.5	5.6	2.8	0.0	0.0
100	754.2	0.107	7.7	7.6	7.2	10.0	11.2	10.5	13.8	10.2	8.5	8.3	2.4	1.9	0.0	0.0

## EST 25 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1882.0	0.303	7.0	7.3	6.9	6.2	6.6	7.2	9.7	12.6	12.8	8.7	6.0	4.3	1.2	2.9
20	1715.7	0.273	7.1	7.3	6.9	6.3	6.2	7.4	12.3	13.1	13.7	9.5	1.8	4.2	0.0	3.5
50	1189.8	0.146	9.0	9.9	9.4	8.7	7.4	8.9	13.1	10.1	12.4	5.3	3.7	1.5	0.0	0.0
75	909.5	0.148	7.1	6.8	6.2	7.0	6.6	7.0	10.9	11.3	15.5	8.8	11.0	1.2	0.0	0.0
100	705.4	0.183	4.4	3.9	4.1	4.4	4.5	5.4	9.2	12.1	11.2	11.3	5.3	9.0	7.8	6.6

## EST 26 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1144.7	0.185	6.6	7.2	7.2	6.9	8.0	9.6	12.6	12.5	9.5	10.7	6.6	0.0	2.0	0.0
20	1172.8	0.217	5.7	6.2	6.4	6.5	7.1	7.8	11.5	12.4	11.8	12.4	5.7	3.6	2.2	0.0
50	1255.8	0.240	5.6	6.3	5.7	5.3	5.8	6.8	14.0	14.0	13.3	11.6	6.2	2.6	2.1	0.0
75	673.1	0.150	5.2	4.5	4.6	4.7	5.1	7.6	14.8	13.5	16.7	11.8	7.6	3.3	0.0	0.0
100	716.2	0.097	8.6	7.3	8.1	8.8	8.7	10.3	15.6	14.0	13.7	2.7	1.4	0.0	0.0	0.0

## EST 27 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1542.2	0.266	6.6	6.6	6.1	5.7	6.2	8.2	9.7	13.9	15.1	10.8	6.0	4.5	0.0	0.0
20	1295.5	0.187	7.9	8.3	7.3	6.9	6.4	8.0	10.9	11.4	9.9	8.6	13.0	0.9	0.0	0.0
50	1212.5	0.138	10.4	10.0	9.0	8.2	8.4	9.3	11.5	13.8	11.3	6.6	0.9	0.0	0.0	0.0
75	701.5	0.110	7.9	6.8	5.9	5.2	5.2	6.8	12.3	14.9	18.1	9.5	6.8	0.0	0.0	0.0
100	808.1	0.099	10.3	8.4	7.8	7.2	6.8	6.9	11.9	11.5	10.6	11.3	3.8	2.8	0.0	0.0

## EST 28 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1701.3	0.219	8.2	9.9	9.8	8.2	7.6	8.1	9.1	10.9	11.4	6.2	4.8	5.2	0.0	0.0
20	2192.8	0.261	9.0	10.6	10.5	9.0	7.9	7.0	8.8	11.2	9.6	7.5	4.8	3.5	0.0	0.0
50	12218.7	0.669	23.6	22.7	17.8	11.8	7.5	4.5	3.3	2.6	2.7	1.4	0.7	0.8	0.0	0.0

## EST 29 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1239.2	0.193	6.8	7.7	7.2	7.2	7.7	8.1	12.4	13.9	12.5	11.8	2.9	1.1	0.0	0.0
20	1376.5	0.205	7.3	7.9	7.8	7.6	7.9	8.8	11.2	11.0	11.7	8.9	5.5	3.8	0.0	0.0
50	2273.8	0.232	11.1	12.1	11.1	10.1	9.5	7.9	9.9	9.5	7.1	5.2	2.4	0.9	2.5	0.0
75	974.5	0.189	5.2	5.7	6.3	7.8	7.1	8.2	12.1	13.0	11.1	8.9	9.5	2.1	2.6	0.0
100	892.5	0.202	4.6	4.4	4.9	6.5	7.5	9.1	12.0	13.1	12.5	8.7	3.6	6.2	1.8	4.3

## EST 30 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1287.8	0.169	8.4	9.3	8.5	7.3	7.6	9.7	16.3	13.5	13.5	4.6	0.8	0.0	0.0	0.0
20	1035.9	0.156	6.9	7.9	8.0	7.4	8.6	10.1	13.1	14.2	14.5	6.2	2.5	0.0	0.0	0.0
50	1557.4	0.240	7.1	7.7	7.2	6.6	6.5	8.8	14.0	15.0	13.6	7.9	1.6	3.2	0.0	0.0
75	836.5	0.199	4.5	4.5	4.8	5.4	4.8	6.5	10.1	13.7	17.9	11.6	5.5	3.8	6.3	0.0
100	736.5	0.190	4.2	3.9	4.2	4.9	5.0	7.4	13.6	16.2	14.4	15.0	4.8	5.9	0.0	0.0

## EST 31 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1466.4	0.170	9.1	10.5	11.1	10.2	9.5	9.2	10.1	8.8	3.0	6.6	4.8	0.0	0.0	6.5
20	1358.5	0.204	6.9	8.1	8.6	7.9	8.0	7.9	9.2	9.8	7.9	6.4	4.0	3.0	11.9	0.0
50	1328.4	0.200	6.9	8.4	7.8	7.7	7.5	9.2	8.4	7.6	7.1	6.2	8.7	8.2	5.8	0.0
75	1133.0	0.175	6.0	7.8	8.4	9.9	12.4	11.2	10.8	8.2	7.5	5.0	5.2	3.8	3.2	0.0

## EST 32 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1259.8	0.127	11.4	12.0	11.1	9.6	9.7	8.8	10.0	8.3	6.5	3.3	7.3	1.4	0.0	0.0
20	1428.5	0.236	6.4	7.3	7.4	6.8	6.1	7.0	9.3	10.5	12.1	10.3	3.4	3.5	5.9	3.2
50	1749.6	0.267	6.5	7.6	8.8	9.6	8.3	10.5	10.3	8.7	7.8	6.1	2.1	3.5	2.7	6.9
75	1143.0	0.120	10.6	11.1	11.8	11.4	7.6	7.6	8.5	7.5	9.0	7.1	6.9	0.0	0.0	0.0
100	776.4	0.097	8.8	9.0	9.3	9.8	10.0	8.9	9.6	10.3	8.2	6.2	5.0	0.0	4.3	0.0

## EST 33 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1419.2	0.179	8.4	9.7	9.9	8.6	8.6	9.5	11.7	11.4	10.9	5.9	0.5	4.3	0.0	0.0
20	1413.2	0.178	8.5	9.5	9.9	9.2	9.1	9.9	10.7	12.2	10.5	2.9	4.8	2.3	0.0	0.0
50	1204.8	0.159	8.4	9.0	8.8	8.0	8.0	8.7	10.2	11.0	9.0	5.8	2.1	0.0	3.7	6.5
75	3864.9	0.255	18.7	18.6	16.3	12.3	8.2	5.1	4.1	4.0	4.3	5.2	0.8	1.9	0.0	0.0
100	5069.1	0.426	13.3	14.4	14.5	13.9	11.8	8.8	6.1	5.2	4.5	3.2	2.6	1.1	0.0	0.0

## EST 34 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1605.4	0.190	9.5	10.2	9.7	8.0	8.4	6.9	9.6	9.1	11.3	7.1	5.8	3.6	0.0	0.0
20	1858.0	0.251	8.3	8.8	8.5	7.2	7.3	8.3	10.8	10.8	8.9	9.2	5.0	2.3	4.2	0.0
50	1288.7	0.171	7.9	9.4	9.3	8.4	8.3	8.5	11.1	9.9	9.3	7.0	5.3	0.0	0.0	5.0
75	874.0	0.143	6.3	6.6	7.3	9.7	8.9	7.9	9.8	9.7	8.7	5.8	8.4	5.9	4.3	0.0
100	566.6	0.075	8.1	8.6	9.0	9.2	10.9	8.7	10.3	14.0	11.2	7.8	1.6	0.0	0.0	0.0

## EST 35 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	1786.8	0.285	6.3	7.8	8.0	7.2	7.6	8.3	11.9	11.4	13.5	10.6	5.3	1.6	0.0	0.0
20	1386.2	0.210	6.7	8.2	8.4	8.0	8.1	6.7	10.5	9.2	9.5	7.0	5.0	8.6	3.3	0.0
50	1484.5	0.214	7.1	8.7	8.6	7.9	8.2	9.2	10.4	11.4	9.8	5.9	3.5	1.0	7.8	0.0
75	1466.2	0.190	8.0	9.5	9.7	9.2	7.8	8.4	10.9	11.2	9.9	7.5	5.9	1.3	0.0	0.0
100	1019.7	0.145	7.6	7.9	8.4	9.2	8.7	7.8	10.9	12.0	9.5	7.9	4.7	4.8	0.0	0.0

## EST 36 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	3268.1	0.378	10.1	10.5	9.3	7.8	7.1	6.5	8.8	9.4	9.3	6.2	6.5	1.5	6.2	0.0
20	2937.3	0.321	10.7	11.2	9.9	8.4	7.5	7.5	8.9	9.6	7.7	8.5	4.7	1.5	3.4	0.0
50	5288.8	0.403	16.2	16.0	13.5	10.6	8.0	6.5	7.2	7.0	6.3	4.5	2.5	1.0	0.0	0.0

## EST 37 ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0	2659.1	0.273	11.2	11.4	11.6	10.3	9.4	8.7	8.0	7.0	5.3	6.0	3.9	4.5	2.1	0.0
20	1947.8	0.217	10.9	9.9	9.5	9.1	8.4	8.2	7.5	9.1	6.1	7.1	4.6	1.1	8.0	0.0
50	2352.6	0.242	10.7	12.1	11.5	10.3	9.2	9.8	8.4	7.7	5.3	3.6	6.8	1.0	3.0	0.0
75	1865.8	0.182	14.5	8.2	9.4	10.6	7.9	8.9	8.8	7.5	8.4	6.8	3.8	2.0	2.6	0.0

## EST FI ( BOTELLÓN )

## C A N A L E S

PROF	N PART	VOL TOT	3	4	5	6	7	8	9	10	11	12	13	14	15	16

CUADRO VI.- Valores de nitrógeno y carbono orgánico particulados (en at.  $\mu\text{g} \cdot \text{m}^{-3}$ ).

ESTACIÓN 2

PROF	NP	CP	C/N
*****			
0	1.84	17.43	9.47
20	1.84	21.46	11.69
50	0.55	4.68	8.54
75	0.73	11.39	15.65

ESTACIÓN 3

PROF	NP	CP	C/N
*****			
0	1.13	9.76	8.66
20	0.74	9.48	12.81
50	1.09	7.29	6.70
75	1.12	10.20	9.08

ESTACIÓN 4

PROF	NP	CP	C/N
*****			
0	0.82	5.62	6.89
20	1.05	7.72	7.36
50	1.36	9.24	6.82
75	1.02	8.80	8.65
100	0.96	5.83	6.05

ESTACIÓN 5

PROF	NP	CP	C/N
*****			
0	1.04	10.48	10.09
20	1.60	13.34	8.36
50	1.73	11.43	6.60
75	0.95	8.20	8.61

ESTACIÓN 6

PROF	NP	CP	C/N
*****			
0	1.24	11.14	8.98
20	2.32	15.05	6.49
50		12.97	
75		8.37	

ESTACIÓN 7

PROF	NP	CP	C/N
*****			
0		7.64	
20		9.84	
50		6.20	
75	0.56	5.97	10.73
100	0.43	5.76	13.41

ESTACIÓN 8

PROF	NP	CP	C/N
*****			
0	0.92	9.07	9.84
20	1.14	10.95	9.57
50	1.00	12.72	12.73
75	0.57	6.15	10.71
100	0.46	6.93	15.21

ESTACIÓN 9

PROF	NP	CP	C/N
*****			
0	0.97	9.44	9.74
20	1.10	9.68	8.84
50	0.96	11.27	11.68
75	0.94	9.01	9.60
100	1.12	10.63	9.50

ESTACIÓN 10

PROF	NP	CP	C/N
*****			
0	1.81	15.26	8.43
20	0.70	7.48	10.74
50	0.85	9.17	10.73
75	1.10	9.39	8.56
100	1.11	10.77	9.72

ESTACIÓN 12

PROF	NP	CP	C/N
*****			
0	1.43	11.85	8.32
20	1.32	11.27	8.51
50		7.38	
75	0.76	8.84	11.65
100	0.58	6.36	10.92

ESTACIÓN 13

PROF	NP	CP	C/N
*****			
0	1.12	11.41	10.20
20	1.02	9.58	9.42
50	0.62	8.82	14.16
75	1.12	9.37	8.41
100	1.02	8.85	8.66

ESTACIÓN 14

PROF	NP	CP	C/N
*****			
0	1.12	12.62	11.28
20	1.38	10.08	7.30
50	1.00	8.57	8.61
75	1.38	10.93	7.94
100	1.10	7.84	7.15

## ESTACIÓN 15

PROF	NP	CP	C/N
*****			
0	1.41	11.41	8.11
20	1.24	9.99	8.02
50	1.06	8.91	8.39
75	0.95	9.39	9.91
100	1.06	7.43	7.03

## ESTACIÓN 17

PROF	NP	CP	C/N
*****			
0	1.25	8.16	6.51
20	0.88	6.22	7.06
50	0.90	7.27	8.09
75	1.17	9.19	7.82
100	0.79	5.39	6.87

## ESTACIÓN 18

PROF	NP	CP	C/N
*****			
0	1.32	6.54	7.23
20	1.14	8.16	7.18
50	0.80	6.12	7.67
75	1.10	7.27	6.61
100	1.04	8.25	7.97

## ESTACIÓN 19

PROF	NP	CP	C/N
*****			
0	1.88	14.78	7.88
20	1.78	12.88	7.25
50	1.58	11.71	7.42

## ESTACIÓN 20

PROF	NP	CP	C/N
*****			
0	1.18	9.10	7.72
20	0.55	5.12	9.35
50	1.07	7.97	7.39
75	0.76	7.22	9.57
100	0.75	5.07	6.76

## ESTACIÓN 21

PROF	NP	CP	C/N
*****			
0	1.48	11.32	7.64
20	1.02	7.70	7.53
50	0.81	7.73	9.53
75	0.86	7.59	8.83
100	0.65	5.18	7.92

## ESTACIÓN 22

PROF	NP	CP	C/N
*****			
0	0.99	8.75	8.86
20	0.82	5.78	7.05
50	0.87	7.77	8.90
75	0.84	8.12	9.70
100	0.35	3.72	10.74

## ESTACIÓN 23

PROF	NP	CP	C/N
*****			
0	0.71	7.02	9.89
20	0.60	5.45	9.05
50		7.31	

## ESTACIÓN 24

PROF	NP	CP	C/N
*****			
0	0.67	7.02	10.47
20	2.50	6.59	2.64
50	1.91	7.38	3.87
75	1.32	6.64	5.03
100	0.99	6.52	6.57

## ESTACIÓN 25

PROF	NP	CP	C/N
*****			
0	2.16	10.67	4.95
20	1.83	8.39	4.59
50	1.25	7.92	6.33
75	1.00	7.18	7.18
100	0.99	6.39	6.48

## ESTACIÓN 26

PROF	NP	CP	C/N
*****			
0	0.78	6.52	8.31
20	0.81	6.03	7.44
50	0.81	7.47	9.22
75	0.78	5.76	7.39
100	0.61	4.55	7.48

## ESTACIÓN 27

PROF	NP	CP	C/N
*****			
0	1.12	8.82	7.86
20	0.56	4.68	8.42
50	0.71	7.61	10.81
75	0.47	5.04	10.79
100	0.52	4.35	8.37

## ESTACIÓN 28

PROF	NP	CP	C/N
*****			
0	0.64	6.88	10.84
20	0.61	6.03	9.92
50	0.54	7.83	14.58

## ESTACIÓN 29

PROF	NP	CP	C/N
*****			
0	0.56	5.83	10.34
20	0.60	5.77	9.57
50	0.63	8.44	13.51
75	0.60	5.87	9.87
100	0.71	4.84	6.82

## ESTACIÓN 30

PROF	NP	CP	C/N
*****			
0	0.64	5.48	8.53
20	0.91	4.49	4.93
50	1.26	9.00	7.12
75	0.88	5.48	6.26
100	0.58	4.62	8.01

## ESTACIÓN 31

PROF	NP	CP	C/N
*****			
0	0.51	5.63	11.12
20	0.58	5.96	10.24
50	0.64	4.73	7.35
75	0.49	4.75	9.71

## ESTACIÓN 32

PROF	NP	CP	C/N
*****			
0	0.70	7.26	10.40
20	0.82	7.16	8.75
50	1.08	8.12	7.53
75	0.68	6.57	9.69
100	0.68	6.13	8.99

## ESTACIÓN 33

PROF	NP	CP	C/N
*****			
0	0.62	6.42	10.35
20	0.70	5.92	8.45
50	0.69	5.60	8.14
75	1.20	6.71	5.56
100	1.22	4.85	3.98

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## ESTACIÓN 34

PROF	NP	CP	C/N
*****			
0	1.49	7.23	4.86
20	1.04	6.77	6.53
50	0.86	5.54	6.47
75	0.75	6.84	9.21
100	0.46	4.18	9.18

## ESTACIÓN 35

PROF	NP	CP	C/N
*****			
0	0.73	6.99	9.52
20	0.84	8.08	9.59
50	0.52	5.63	10.79
75	0.95	9.58	10.07
100	0.35	3.95	11.29

## ESTACIÓN 36

PROF	NP	CP	C/N
*****			
0	0.96	10.50	10.99
20	1.16	9.84	8.46
50	0.97	10.58	10.89

## ESTACIÓN 37

PROF	NP	CP	C/N
*****			
0	0.47	7.54	16.16
20	0.52	7.18	13.82
50	0.60	7.34	12.35
75	0.33	4.89	14.81

## ESTACIÓN 39

PROF	NP	CP	C/N
*****			
0	0.64	7.00	10.89
20	0.82	7.13	8.66
50	0.74	6.12	8.22
75	0.38	4.49	11.73
100	0.54	5.97	11.12

## ESTACIÓN 40

PROF	NP	CP	C/N
*****			
0	0.75	7.71	10.23
20	0.81	7.13	8.20
50	1.12	8.53	7.63
75	0.57	6.19	10.81
100	0.57	5.99	10.55

## ESTACIÓN 41

PROF	NP	CP	C/N
0	0.51	5.07	9.93
20	0.67	5.94	8.87
50	0.64		
75	0.27		
100	0.32		

## ESTACIÓN 42

PROF	NP	CP	C/N
0	1.17		
20	0.66	6.24	9.45
50	0.72	6.03	8.45
75	0.55	6.26	13.38

## ESTACIÓN

PROF	NP	CP	C/N
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**CUADRO VII.- Características de las pescas de plancton realizadas durante la campaña.**

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
1	1	06.10.76	20.00	500-200	V	
1	2	"	20.25	200-50	V	
1	3	"	20.45	50-0	V	
1	4	"	21.00	200-0	V	Biom.
1	5	"	22.03	0-1	H	
1	6	"	22.05	0-1	H	Fito
1	7	"	22.33	0-200-0	Inc.	300 m.C.
1	8	"	22.33	0-200-0	Inc.	300 m.C.
2	9	07.10.76	06.50	1000-500	V	
2	10	"	07.40	500-200	V	
2	11	"	08.15	200-50	V	
2	12	"	08.30	50-0	V	
2	13	"	08.45	200-0	V	Biom.
2	14	"	09.10	0-1	H	15 min.
2	15	"	09.10	0-1	H	Fito
2	16	"	09.45	0-200-0	Inc.	300 m.C.
2	17	"	09.45	0-200-0	Inc.	300 m.C.
3	18	"	17.05	1000-500	V	
3	19	"	17.35	500-200	V	
3	20	"	18.05	200-50	V	
3	21	"	18.25	50-0	V	
3	22	"	18.35	200-0	V	Biom.
3	23	"	18.55	0-1	H	
3	24	"	18.55	0-1	H	Fito
3	25	"	19.20	0-200-0	Inc.	300 m.C.

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
3	26	07.10.76	19.20	0-200-0	Inc.	300 m.C.
4	27	08.10.76	03.00	200-0	V	Biom.
4	28	"	03.30	1000-500	V	
4	29	"	04.25	500-200	V	
4	30	"	04.55	200-50	V	
4	31	"	05.15	50-0	V	
4	32	"	05.33	0-1	H	
4	33	"	05.35	0-1	H	Fito
4	34	"	06.05	0-200-0	Inc.	
4	35	"	06.05	0-200-0	Inc.	
5	36	"	12.05	50-0	V	
5	37	"	12.41	0-1	H	
5	38	"	12.41	0-1	H	Fito
5	39	"	13.03	0-80-0	Inc.	120 m.C.
5	40	"	13.03	0-80-0	Inc.	120 m.C.
6	41	"	22.15	200-0	V	Biom.
6	42	"	22.30	500-200	V	
6	43	"	23.00	200-50	V	
6	44	"	23.10	50-0	V	
6	45	"	23.35	0-1	H	
6	46	"	23.40	0-1	H	Fito
6	47	"	24.00	0-200-0	Inc.	300 m.C.
6	48	"	24.00	0-200-0	Inc.	300 m.C.
7	49	09.10.76	10.15	1000-500	V	
7	50	"	10.45	500-200	V	
7	51	"	11.10	200-50	V	
7	52	"	11.28	50-0	V	
7	53	"	11.40	200-0	V	Biom.
7	54	"	12.00	0-1	H	
7	55	"	12.05	0-1	H	Fito
7	56	"	12.25	0-200-0	Inc.	300 m.C.

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
7	57	09.10.76	12.25	0-200-0	Inc.	300 m.C.
8	58	"	21.00	200-0	V	Biom.
8	59	"	21.10	1000-500	V	
8	60	"	22.25	500-200	V	
8	61	"	23.00	200-50	V	
8	62	"	23.15	50-0	V	
8	63	"	23.30	0-1	H	
8	64	"	23.30	0-1	H	Fito
8	65	"	24.00	0-200-0	Inc.	300 m.C.
8	66	"	24.00	0-200-0	Inc.	300 m.C.
9	67	10.10.76	07.00	50-0	V	
9	68	"	07.40	0-1	H	
9	69	"	08.00	0-1	H	Fito
9	70	"	08.05	0-100-0	Inc.	150 m.C.
9	71	"	08.05	0-100-0	Inc.	150 m.C.
10	72	"	16.15	50-0	V	
10	73	"	16.25	0-1	H	
10	74	"	16.25	0-1	H	Fito
10	75	"	16.45	0-90-0	Inc.	
10	76	"	16.45	0-90-0	Inc.	100 m.C.
11	77	"	21.00	0-1	H	
11	78	"	21.00	0-1	H	Fito
12	79	11.10.76	06.15	1000-0	V	630 m.M.
12	80	"	06.50	500-200	V	
12	81	"	07.10	200-0	V	no cerró
12	82	"	07.20	50-0	V	
12	83	"	07.45	0-1	H	Fito
12	83 bis	"	07.45	200-0	V	Biom.
12	84	"	07.45	0-1	H	
12	85	"	08.32	0-200-0	Inc.	300 m.C.
12	86	"	08.32	0-200-0	Inc.	300 m.C.

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
13	87	11.10.76	21.30	500-200	V	
13	88	"	21.50	200-50	V	
13	89	"	23.20	50-0	V	
13	90	"	22.20	1000-500	V	
13	91	"	23.30	200-0	V	Biom.
14	92	12.10.76	12.45	200-0	V	Biom.
14	93	"	13.50	1000-500	V	
14	94	"	13.45	500-200	V	
14	95	"	14.35	200-50	V	
14	96	"	14.53	50-0	V	
14	97	"	15.00	0-1	H	15 min.
14	98	"	15.35	0-200-0	Inc.	300 m.C.
14	99	"	15.35	0-200-0	Inc.	300 m.C.
15	100	13.10.76	01.30	200-0	V	Biom.
15	101	"	02.00	1000-500	V	
15	102	"	03.00	500-200	V	
15	103	"	03.50	50-0	V	
18	104	17.10.76	17.30	200-0	V	Biom.
18	105	"	17.45	200-50	V	
18	106	"	17.55	50-0	V	
18	107	"	18.10	0-1	H	
18	108	"	18.10	0-1	H	Fito
18	109	"	18.25	0-200-0	Inc.	300 m.C.
17	110	"	18.25	0-200-0	Inc.	300 m.C.
17	111	18.10.76	03.45	1000-500	V	
17	112	"	04.45	500-0	V	
17	113	"	05.30	200-50	V	
17	114	"	05.55	50-0	V	
17	115	"	06.00	200-0	V	
17	116	"	06.35	0-1	H	Fito

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
17	117	18.10.76	06.35	0-1	H	
17	118	"	06.55	0-200-0	Inc.	
17	119	"	06.55	0-200-0	Inc.	
19	120	"	17.30	200-50	V	
19	121	"	17.45	50-0	V	
20	122	19.10.76	03.50	500-200	V	
20	123	"	04.20	200-50	V	
20	124	"	04.30	50-0	V	
20	125	"	04.50	200-0	V	Biom.
20	126	"	05.10	0-1	H	
20	127	"	05.10	0-1	H	Fito
20	128	"	05.35	0-200-0	Inc.	
20	129	"	05.35	0-200-0	Inc.	
21	130	"	14.00	200-0	V	
21	131	"	14.40	500-200	V	
21	132	"	15.10	200-50	V	
21	133	"	15.20	50-0	V	
21	134	"	16.30	1-2	H	
21	135	"	17.00	0-1	H	
21	136	"	17.00	0-200-0	Inc.	
21	137	"	17.00	0-200-0	Inc.	
21-22	138	"	18.00	225	H	IKMT
22	139	20.10.76	00.05	500-200	V	
22	140	"	00.20	200-50	V	
22	141	"	00.30	50-0	V	
22	142	"	00.45	200-0	V	Biom.
22	143	"	01.06	0-1	H	
22	144	"	01.10	0-1	H	Fito
22	145	"	01.30	200-0	Inc.	300 m C.
22	146	"	01.30	200-0	Inc.	300 m C.
23	147	"	06.35	50-0	V	

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
23	148	20.10.76	07.00	0-1	H	Fito
23	149	"	07.00	0-1	H	
23	150	"	07.15	0-50-0	Inc.	
23	151	"	07.15	0-50-0	Inc.	
24	152	22.10.76	00.05	500-200	V	
24	153	"	00.30	200-50	V	
24	154	"	00.40	50-0	V	
24	155	"	00.50	200-0	V	
24	156	"	01.22	0-1	H	
24	157	"	01.03	0-1	H	Fito
24	158	"	01.50	0-200-0	Inc.	
24	159	"	01.50	0-200-0	Inc.	
25	160	"	09.20	1000-500	V	
25	161	"	10.25	500-200	V	
25	162	"	10.50	200-50	V	
25	163	"	11.15	50-0	V	
25	164	"	11.25	200-0	V	Biom.
25	165	"	11.40	0-1	H	
25	166	"	11.40	0-1	H	Fito
25	167	"	12.02	0-200-0	Inc.	
25	168	"	12.02	0-200-0	Inc.	
25	169	"	12.30	0-200-0	Inc.	300 m.C.
25	170	"	12.30	0-200-0	Inc.	300 m.C
26	171	"	21.30	1000-500	V	
26	172	"	22.15	500-200	V	
26	173	"	22.40	200-50	V	
26	174	"	22.50	50-0	V	
26	175	"	23.00	200-0	V	Biom.
26	176	"	23.15	0-1	H	
26	177	"	23.15	0-1	H	Fito
26	178	"	23.40	0-200-0	Inc.	300 m.C.

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
26	179	22.10.76	23.40	0-200-0	Inc.	300 m.C.
27	180	23.10.76	05.30	200-50	V	
27	181	"	05.45	50-0	V	
27	182	"	05.55	200-0	V	
27	183	"	07.30	0-1	H	
27	184	"	07.30	0-1	H	Fito
27	185	"	08.00	0-200-0	Inc.	285 m.C.
27	186	"	08.00	0-200-0	Inc.	285 m.C.
28	187	"	16.25	50-0	V	
28	188	"	16.55	2-3	H	
28	189	"	16.55	0-1	H	Fito
28	190	"	17.10	0-40-0	Inc.	56 m.C.
28	191	"	17.10	0-40-0	Inc.	56 m.C.
29	192	24.10.76	02.15	500-200	V	
29	193	"	02.35	200-50	V	
29	194	"	02.50	50-0	V	
29	195	"	03.00	200-0	V	
29	196	"	03.20	0-1	H	
29	197	"	03.23	0-1	H	Fito
29	198	"	03.45	0-200-0	Inc.	
29	199	"	03.45	0-200-0	Inc.	
30	200	"	10.50	1000-500	V	
30	201	"	11.45	500-200	V	
30	202	"	12.10	200-50	V	
30	203	"	12.25	200-0	V	
30	204	"	12.40	200-0	V	
30	205	"	13.10	0-1	H	
30	206	"	13.12	0-1	H	Fito
30	207	"	13.40	0-200-0	Inc.	
30	208	"	13.40	0-200-0	Inc.	
33	209	25.10.76	01.15	50-0	V	

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
33	210	25.10.76	01.25	0-1	H	
33	211	"	01.25	0-1	H	Fito
33	212	"	01.20	0-100-0	Inc.	150 m.C.
33	213	"	01.20	0-100-0	Inc.	150 m.C.
32	214	"	07.45	200-0	V	
32	215	"	08.10	1000-500	V	
32	216	"	10.00	0-1	H	
32	217	"	10.00	0-1	H	Fito
32	218	"	10.15	0-300-0	Inc.	
32	219	"	10.15	0-300-0	Inc.	300 m.C.
34	220	29.10.76	13.20	50-0	V	
34	221	"	14.05	1-2	H	
34	222	"	14.05	0-1	H	Fito
34	223	"	14.30	0-80-0	Inc.	
34	224	"	14.30	0-80-0	Inc.	
35	225	"	21.30	200-0	V	Biom.
35	226	"	21.55	500-200	V	
35	227	"	21.55	200-50	V	
35	228	"	22.30	50-0	V	
35	229	"	22.38	0-1	H	
35	230	"	22.40	0-1	H	Fito
35	231	"	23.00	0-200-0	Inc.	300 m.C.
35	232	"	23.00	0-200-0	Inc.	300 m.C.
36	233	30.10.76	03.20	50-0	V	
36	234	"	03.45	0-1	H	Fito
36	235	"	03.45	0-50-0	Inc.	
36	236	"	03.45	0-50-0	Inc.	
37	237	"	12.05	500-200	V	
37	238	"	12.25	200-50	V	
37	239	"	12.40	50-0	V	
37	240	"	12.55	200-0	V	Biom.

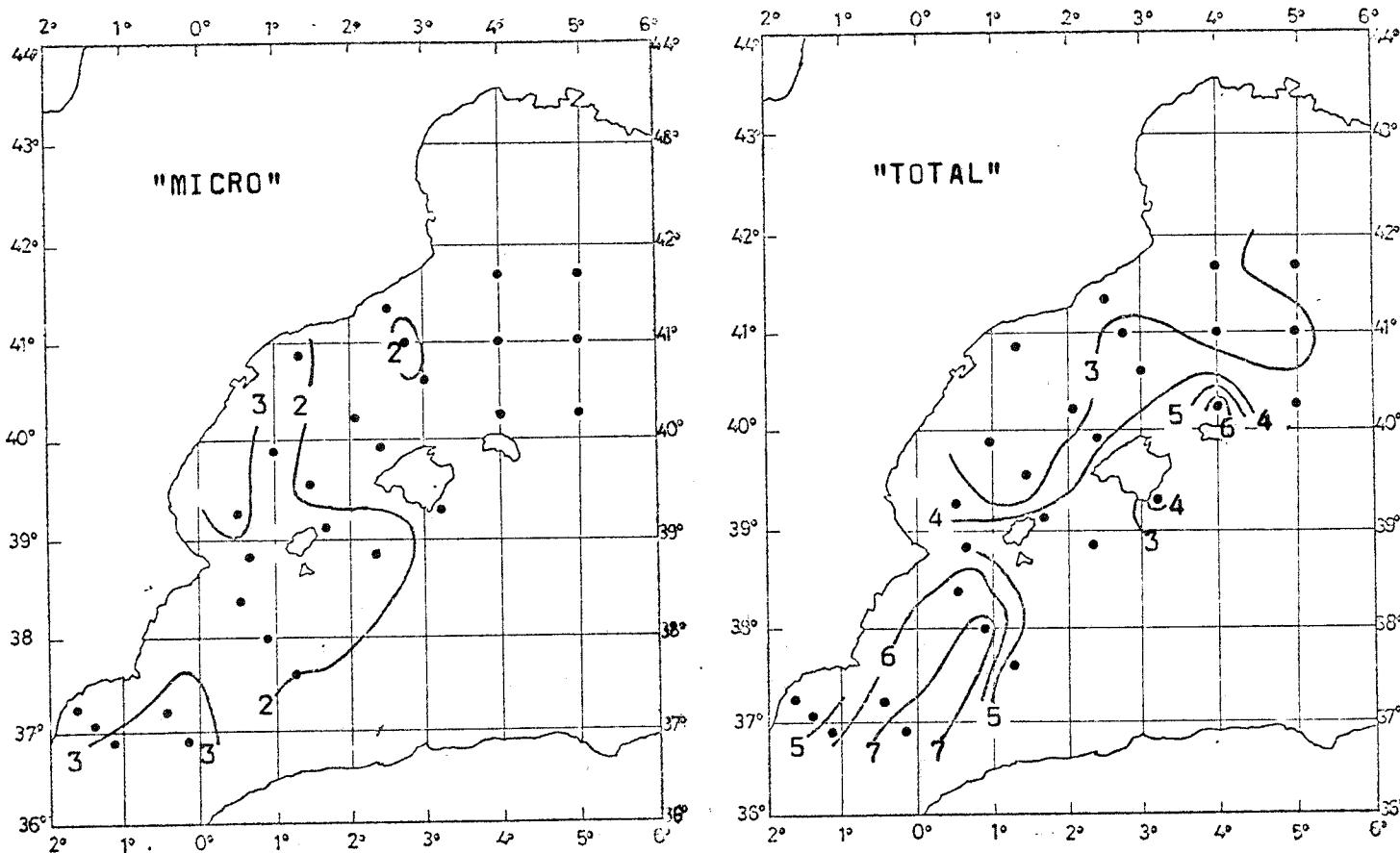
Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Observ.
37	241	30.10.76	13.10	0-1	H	
37	242	"	13.10	0-1	H	Fito
37	243	"	13.35	0-200-0	Inc.	300 m.C.
37	244	"	13.35	0-200-0	Inc.	300 m.C.
38	245	"	20.30	1000-500	V	
38	246	"	21.15	500-200	V	
38	247	"	21.45	200-50	V	
38	248	"	21.55	50-0	V	
38	249	"	22.30	200-0	V	
38	250	"	22.40	0-1	H	
38	251	"	22.40	0-1	H	Fito
38	252	"	23.10	0-200-0	Inc.	
38	253	"	23.10	0-200-0	Inc.	
39	254	31.10.76	06.45	1000-500	V	
39	255	"	08.00	500-200	V	
39	256	"		200-50	V	
39	257	"	08.30	50-0	V	
39	258	"	09.00	200-0	V	
39	259	"	09.20	0-2	H	
39	260	"	09.25	0-1	H	Fito
39	261	"	09.20	0-200-0	Inc.	
39	261bis	"	09.20	0-200-0	Inc.	
40	262	"	21.20	200-0	V	Biom.
40	263	"	22.30	1000-500	V	
40	264	"	22.50	500-200	V	
40	265	"	23.30	200-50	V	
40	266	"	23.50	50-0	V	
40	267	1.11.76	01.35	0-1	H	
40	268	"	01.35	0-1	H	Fito
40	269	"	02.00	0-200-0	Inc.	
40	270	"	02.00	0-200-0	Inc.	

<u>Estación</u>	<u>Nº Pesca</u>	<u>Fecha</u>	<u>Hora inic.</u>	<u>Prof.</u>	<u>Tipo</u>	<u>Observ.</u>
41	271	1.11.76	08.20	1000-500	V	
41	272	"	09.35	500-200	V	
41	273	"	10.10	200-50	V	
41	274	"	10.25	50-0	V	
41	275	"	10.35	200-0	V	
41	276	"	11.20	0-1	H	
41	277	"	11.20	0-1	H	Fito
41	278	"	11.45	0-200-0	Inc.	
41	279	"	11.45	0-200-0	Inc.	
42	280	"	15.50	50-0	V	
42	281	"	16.20	0-1	H	Fito
42	282	"	16.20	0-1	H	
42	283	"	16.30	0-80-0	Inc.	110 m.C.
42	284	"	16.30	0-80-0	Inc.	
43	285	"	24.00	200-50	V	
43	286	2.11.76	00.15	50-0	V	
43	287	"	00.30	200-0	V	Biom.
43	288	"	01.20	0-1	H	
43	289	"	01.20	0-1	H	Fito
43	290	"	01.45	0-200-0	Inc.	
43	291	"	01.45	0-200-0	Inc.	
44	292	"	07.00	200-50	V	
44	293	"	07.20	50-0	V	
44	294	"	07.30	200-0	V	
44	295	"	07.41	0-1	H	
44	296	"	07.45	0-1	H	Fito
44	297	"	08.05	0-200-0	Inc.	
44	298	"	08.05	0-200-0	Inc.	
45	299	"	13.10	200-50	V	
45	300	"	13.20	50-0	V	
45	301	"	13.30	200-0	V	Biom.

Estación	Nº Pesca	Fecha	Hora inic.	Prof.	Tipo	Orserv.
45	302	2.11.76	13.45	0-1	H	
45	303	"	13.45	0-1	H	Fito
45	304	"	14.20	0-200-0	Inc.	
45	305	"	14.20	0-200-0	Inc.	

CUADRO VIII.- Biovolúmenes obtenidos en las diferentes estaciones en 200-0 m.

Estación	Fecha	Hora	Biov. Total	Biov. Micro
1	06.10.76	21.00	2.00	1.80
2	07.10.76	08.45	3.70	2.20
3	07.10.76	18.35	3.15	1.95
6	08.10.76	22.15	6.65	1.90
7	09.10.76	11.40	2.60	1.70
8	09.10.76	21.00	2.60	1.60
13	11.10.76	23.30	3.70	1.50
14	12.10.76	12.25	2.40	1.80
15	13.10.76	01.30	3.25	1.70
18	17.10.76	17.30	2.55	1.90
20	19.10.76	04.50	4.55	2.25
21	19.10.76	14.00	4.15	2.50
24	22.10.76	00.50	3.45	1.80
25	22.10.76	11.25	2.80	1.70
27	23.10.76	05.55	2.10	2.10
29	24.10.76	03.00	2.60	2.60
30	24.10.76	12.40	2.80	1.85
32	25.10.76	07.45	3.15	3.15
35	29.10.76	21.30	4.35	2.25
37	30.10.76	12.55	6.00	2.70
38	30.10.76	22.30	9.55	2.45
39	31.10.76	09.00	4.35	2.00
40	31.10.76	21.20	21.35	3.70
41	01.11.76	10.35	6.50	3.70
43	02.11.76	00.30	3.95	2.10
44	02.11.76	07.30	3.75	2.80
45	02.11.76	13.30	5.60	3.30



Mapa 12.- Biovolúmenes correspondientes a las pescas verticales de 200-0 m.

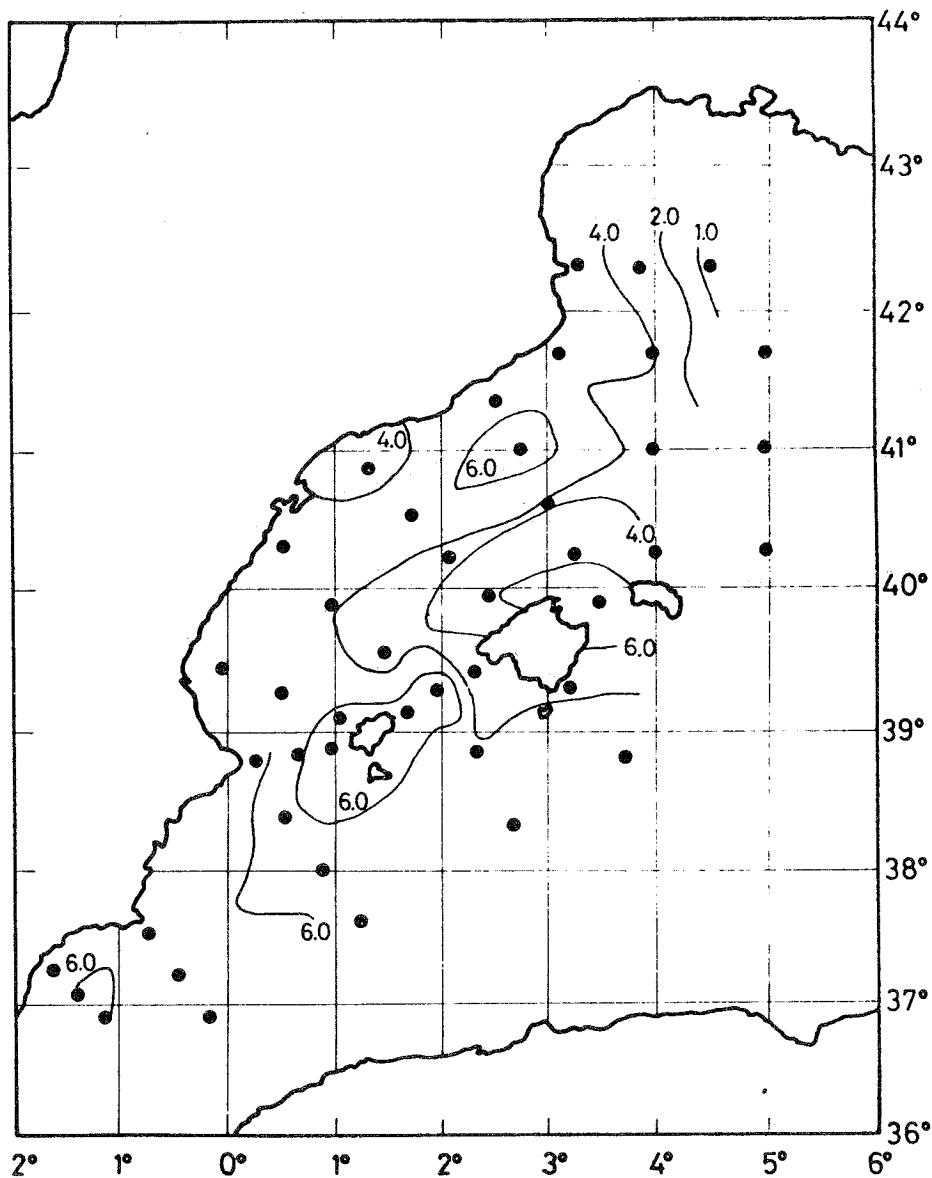
CUADRO IX.- Datos de las pescas de zooplancton realizadas con las redes BONGO (véase texto).

EST.	PROF.	FLWM.	VOL.	FLTR.	BIOV.	<u>333 <math>\mu</math></u>		<u>505 <math>\mu</math></u>	
						COMP.	BIOV.	COMP.	BIOV.
1	200	8350	263.78		5.44*	635	4.28	6352	
2	200	7370	232.82		7.22	36	5.45	36	
3	200	12100	382.24		3.98	1369	4.92	1369	
4	200	12465	393.77		4.95	3169	3.45	3619	
5	80*	6870	217.02		11.10*	36D2	7.14	3D62	
6	200	10890	344.02		*	*	*	*	*
7	200	8360	264.09		3.07	361	3.26	316	
8	200	9150	289.05		4.05	28364	5.36	28364	
9	100	6100	192.70		4.36	36591	1.74	36591	
10	90	5400	170.59		4.89	63D5	2.32	63D5	
12	200	12680	400.56		0.57	D83	0.40	D83	
14	200	12530	395.82		2.30*	D623	0.93	D326	
18	200	12780	403.72		3.91	836C	2.70	836C	
17	200	9850	311.16		5.11	316524	4.79	31624	
20	200	11680	368.97		4.34	3C8126	4.47	3C812	
21	200	11730	370.55		6.84	031658	2.94	3186	
22	200	8610	271.99		7.90	2316C	7.21	231C6	
23	50	3740	118.15		2.45	63C	2.37	63C	
24	200	11810	373.08		5.55	63C2	4.02	63C2	
25	200	10750	339.59		3.56	316	3.15	316C	
26	200	12300	388.56		5.17	2316C8	4.53	236C8	
27	200	10050	317.48		3.28	136	1.80	136	
28	40*	3940	124.46		4.82	D634	2.33	D634	
29	200	10755	339.75		4.12	863C1	3.41	863C	
30	200	9960	314.64		2.94	316	2.26	316	
34	80	6220	196.49		8.40	36DC	-	-	
35	200	11310	357.28		5.71	289C7D	4.25	28C79	
36	50*	4450	140.58		6.12	638C	2.56	638C	
37	200	7760	245.14		5.47	3182	4.61	3812C	
38	200	15450	488.07		4.47	23168C	4.79	236C81	

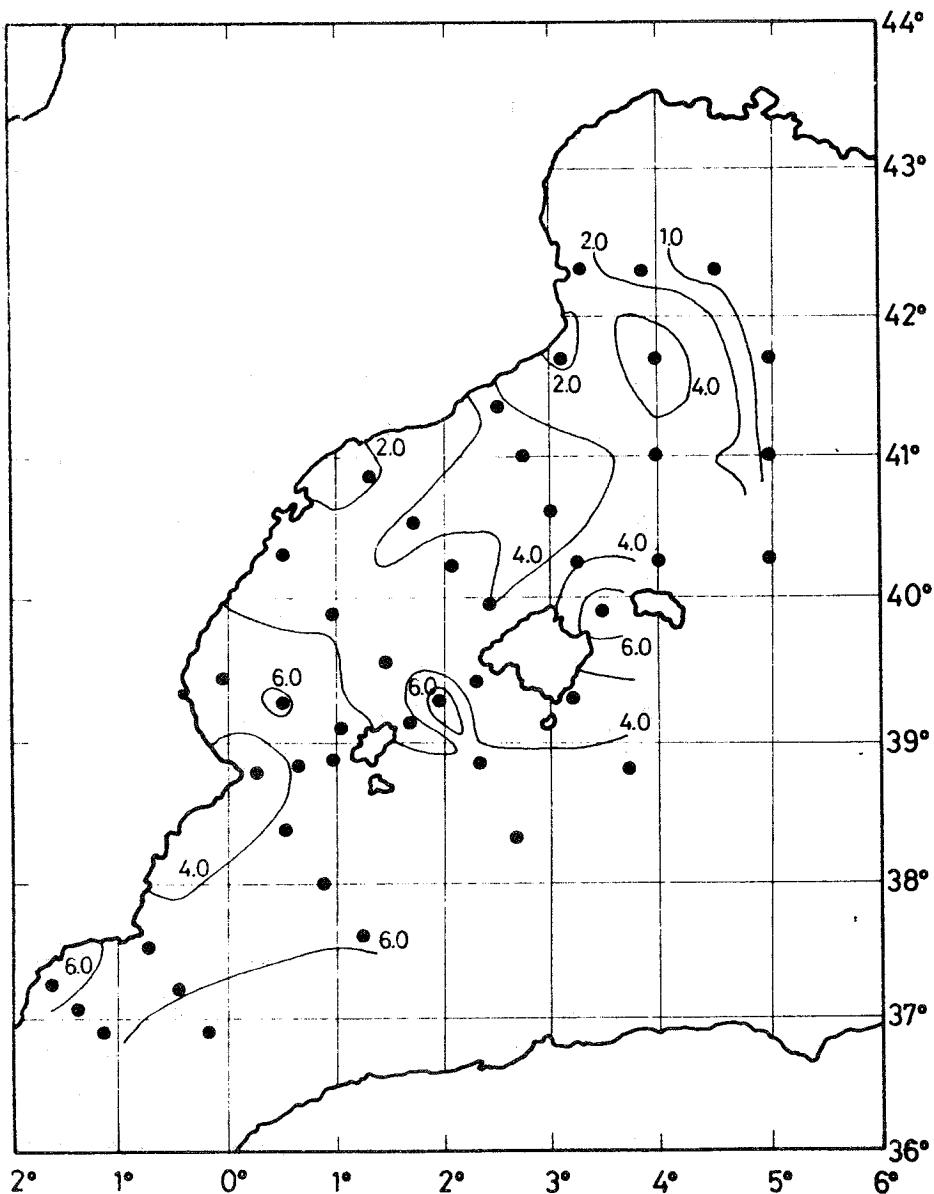
EST.	PROF.	FLWM.	VOL.	FLTR.	BIOV.	<u>333</u> $\mu$		<u>505</u> $\mu$	
						COMP.	BIOV.	COMP.	BIOV.
40	200	10690	337.70		9.62	8C361	7.28	8C36	
41	200	(18610)	(587.89)		(1.50)	3652	(1.28)	365	
42	80	4500	142.16		7.53	3162	4.50	3162	
43	200	10630	335.80		10.99	3168C2	7.80	3618C2	
44	200	13280	419.52		4.65	D3264	4.77	D362	
45	200	7570	239.14		*	3D64	*	3D64	

B O N G O 40 cm.

EST.	PROF.	FLWM.	VOL.	FLTR.	BIOV.1	BIOV.2	COMP.
25	200	(8125)	(151.85)		3.89	4.21	316
33	100	8060	85.52		4.56	6.61	3681C
32	200	14590	154.80		6.33	6.10	3D06C
39	200	10420	110.56		5.97	5.79	34D



Mapa 13.- Distribución de los biovolúmenes de zooplancton correspondientes a las pescas efectuadas con la red BONGO de 335  $\mu$  de malla.



Mapa 14.- Distribución de los biovolúmenes de zooplancton correspondientes a las pescas efectuadas con la red BONGO de 505  $\mu$  de malla.

CUADRO X.- Datos correspondientes a las muestras obtenidas con dragas y "corer" en las estaciones que se indican.

Est.	Prof.	Dm <sup>3</sup>	draga	Cm corer	pH	sedimento	Naturaleza	sedimento
1	450-550	12			7,5			
5	90					duro		
6	700				7,5			
9	108	8,5			7,5			
10	105	4		5	7,55	detrítico, arena y concha		
18	320-375	2			7,6			
20	740	2		20	7,5	"vase jaune" Flandiense (15 cm)		
21	540	4		30	7,35	"vase jaune" Flandiense (4 cm)		
22	610			50				
23	62					duro		
24	610	7			7,7			
27	290	10		50	7,4	"vase jaune" Flandiense (30 cm)		
28	56	10		20	7,5	"vase jaune" Flandiense (total)		
29	860	10		50	7,2	"vase jaune" Flandiense (25 cm)		
33	110	10		40	7,35	"vase jaune" Flandiense ( 7 cm)		
34	115	0,5						
35	820	6,5		50	7,7	"vase jaune" Flandiense ( 9 cm)		
36	60	1				duro (grava, cascajo)		
37	810	5		50	7,7	"vase jaune" Flandiense (13 cm)		
42	85	2		20		arenas relictos del Würm		
43	310	3,5		25	7,7	"vase jaune" Flandiense (2 cm)		