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Programme PROPPAC :
Hydrologie, nutriments, chlorophylle,
phytoplancton et zooplancton des campagnes
SURTROPAC 14 à 17 (1991-1992)

Marie José LANGLADE
Robert LE BORGNE
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Institut de recherche
pour le développement

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RESUME

Ce troisième recueil présente les données de sels nutritifs, oxygène dissous, chlorophylle, phytoplancton et zooplancton obtenues deux fois par an lors de la radiale SURTROPAC, de 20°S à 10°N le long de 165°E. Les campagnes couvrent la période comprise entre mars 91 (SURTROPAC 14) et août 92 (SURTROPAC 17). Les données sont présentées sous forme de coupes 20°S -10°N et sous forme de tableaux.

ABSTRACT

Title : PROPPAC Program : Hydrology, nutrients, chlorophyll, phytoplankton and zooplankton during SURTROPAC 14 to 17 cruises (1991 - 1992)

Data of nutrients, dissolved oxygen, chlorophyll, phytoplankton and zooplankton are presented in the present and last report, and deal with a biannual transect, SURTROPAC, made from 20°S to 10°N along 165°E between March 1991 (SURTROPAC 14) and August 1992 (SURTROPAC 17). Data are presented on diagrams (latitude-depth) and tables.

Campagnes SURTROPAC 1984-1992

N.O. Le Coriolis, le Noroit, le Suroit

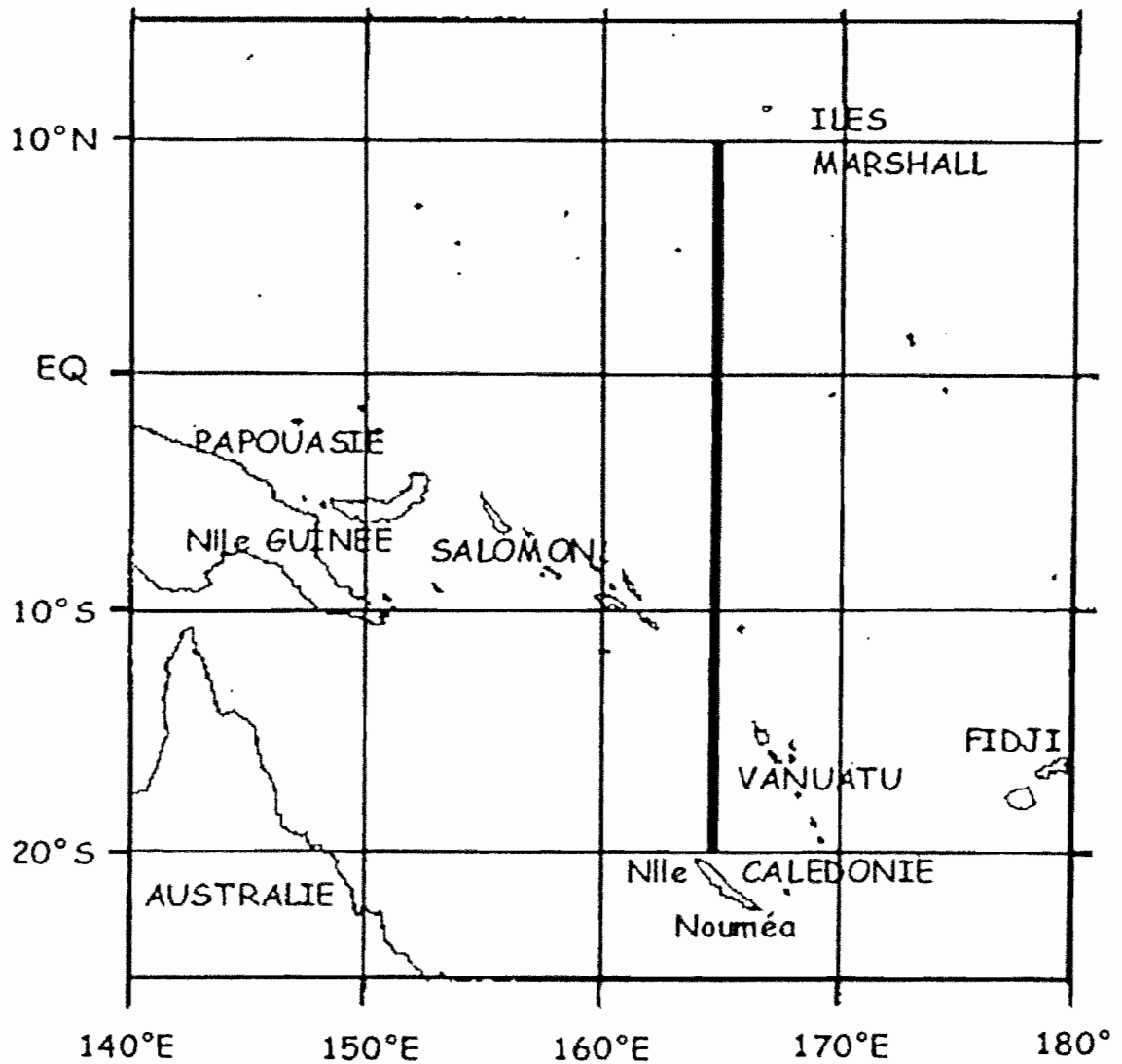


Figure 1: Tracé des radiales SURTROPAC dans le Pacifique sud-ouest

I. INTRODUCTION.

Les campagnes SURTROPAC du Groupe SURTROPAC de l'ORSTOM Nouméa, qui se sont terminées en 1992, ont fait partie du programme international TOGA (Tropical Ocean and Global Atmosphere). Leur objectif était de mesurer les transports de masse et d'énergie par le système des courants équatoriaux, d'étudier leur variabilité et leurs mécanismes.

Les campagnes bisannuelles SUPTROPAC comportaient également une participation du programme PROPPAC de l'ORSTOM Nouméa, dont le thème général était l'étude des relations liant l'hydrologie et la biomasse/production planctonique dans le Pacifique occidental. Cette participation consistait en une série de mesures chimiques et biologiques en stations comportant:

- * Des analyses d'oxygène dissous, de sels nutritifs et de chlorophylle, à partir de prélèvements d'échantillons à 12/13 niveaux à l'aide de la rosette.
- * Des analyses de phytoplancton également, à partir de prélèvements d'échantillons à 12/13 niveaux à l'aide de la rosette, ceci seulement pour la campagne SURTROPAC17.
- * Des mesures de la biomasse et de la composition planctoniques à partir de traits de filets verticaux (0-500m).

Ces mesures venaient en complément du programme de physique en station, comprenant des mesures de salinité (pour étalonnage de la sonde) à partir des prélèvements à la rosette, des profils de température, salinité et oxygène dissous par bathysonde, et des profils de courant par la technique de l'ADCP.

Le but de ce rapport est de présenter les résultats de mesures hydrologiques, chimiques, et biologiques, obtenus à partir des prélèvements à la rosette et au filet à plancton, au cours des quatre dernières radiales SURTROPAC (campagnes SURTROPAC 14 à 17) ayant eu lieu entre 1991 et 1992. Les résultats sont présentés sous forme de tableaux de données et de tracés. Il fait suite aux deux fascicules (Gérard, 1986; Bonnet et al., 1990) relatifs aux treize premières campagnes de la période 1984-1989 (campagnes SURTROPAC 01 à 13).

L'ensemble des données physiques a déjà été publié par le groupe SURTROPAC (Delcroix et al., 1991; Rual et al., 1993; Picaut et al., 1993; Du Penhoat et al., 1993).

II - PLAN, DATES ET DEROULEMENT DES CAMPAGNES.

Les 4 campagnes SURTROPAC se sont déroulées le long du méridien 165°E, entre 20°S et 10°N (*Figure 1*), à bord du navire océanographique le NOROIT.

Tableau 1 : Dates des campagnes SURTROPAC de la période 1991-1992

No	DATES DES CAMPAGNES
14	11 Mars - 08 Avril 91
15	18 Juillet - 15 Août 91
16	19 Janvier - 17 Février 92
17	05 Août 92 - 02 Septembre 92

Les stations ont été effectuées tous les degrés de latitude et, lors de certaines campagnes, tous les demi-degrés dans la zone équatoriale. La limite nord de la radiale ainsi que le nombre de stations varient selon les campagnes. Ci-après (*Tableau 2*), la liste et la position des stations hydrologiques avec trait de sonde et prélèvements à la rosette, effectués à l'aller (du sud au nord) et/ou au retour (du nord au sud).

Le plan ainsi que le déroulement complet des différentes campagnes sont décrits dans les rapports de missions et rapports scientifiques du groupe SURTROPAC (voir références bibliographiques en annexe)

Tableau 2: Position, par campagne, des stations hydrologiques avec prélèvements à la rosette

LATITUDE	14: A & R	15: A & R	16: A & R	17: A & R
20°S	+	+	+	+
19°S	+	+	+	+
18°S	+	+	+	+
17°S	+	+	+	+
16°S	+	+	+	+
15°S	+	+	+	+
14°S	+	+	+	+
13°S	+	+	+	+
12°S	+	+	+	+
11°S	+	+		+
10°S	+	+		+
09°S	+	+		+
08°S	+	+		+
07°S	+	+		+
06°S	+	+	+	+
05°S	+	+	+	+
04°30'S				+
04°S	+	+	+	+
03°30'S				+
03°S	+	+	+	+
02°30'S	+			+
02°S	+	+	+	+
01°30'S	+			+
01°S	+	+	+	+
00°30'S	+			+
EQ	+	+	+	+
00°30'N	+			+
01°N	+	+	+	+
01°30'N	+			+
02°N	+	+	+	+
02°30'N	+			+
03°N	+	+	+	+
03°30'N				+
04°N	+	+	+	+
04°30'N				+
05°N	+	+	+	+
06°N	+	+	+	+
07°N	+	+	+	+
08°N	+	+	+	+
09°N		+	+	
10°N		+	+	

A = aller, du sud au nord

R = retour, du nord au sud

III - METHODES

1 - Hydrologie.

Une sonde CTDO Seabird (SBE 9) est utilisée pour mesurer pression, température, salinité et oxygène dissous, ainsi qu'une rosette General Oceanics modèle 1015-5 sur laquelle sont grées 12 bouteilles de prélèvement Niskin de 5 litres. La sonde effectue 24 cycles de mesure par seconde, pendant la descente à environ 1 m/s. Les capteurs sont étalonnés tous les 6 mois par le constructeur. Le capteur d'oxygène est régulièrement contrôlé par des dosages d'oxygène dissous (méthode de Winkler, voir paragraphe III-3).

Les prélèvements à la bouteille sont effectués à la remontée, généralement entre 0 et 200m, à 12 niveaux différents. Certains prélèvements ont été réalisés lors de stations profondes (0-1000m ou 0-2000m) en vue d'un meilleur recalage des données oxygène de la sonde.

Les données de température et de salinité reportées dans les tableaux sont les données discrètes, mesurées par la sonde à la remontée et correspondant à chaque niveau de prélèvement à la rosette. Les coupes de température et de salinité présentées (0-200m et 0-400m) ont été tracées à partir des données de la sonde, enregistrées à la descente et moyennées tous les 5m.

Nota: 1/ Lors de SURTROPAC 14, les mesures d'oxygène de CTDO2 n'ont pas été corrigées par la méthode de Winkler.

2/ A partir de SURTROPAC 16, un prélèvement d'eau de surface a été effectué avec une bouteille de 1,7l, portant ainsi à 13 le nombre de niveaux de prélèvements.

2 - Sels nutritifs (nitrate + nitrite, phosphate)

Les sels nutritifs sont analysés, à bord, à l'aide d'un Autoanalyseur II Technicon. Le dosage est réalisé selon les méthodes classiques (Strickland et Parsons, 1972). La mesure du "nitrate + nitrite" à faible concentration (< 2micromoles) a été faite selon la méthode d'analyse "haute sensibilité" décrite par Oudot et Montel (1988). La limite de détection de la mesure est de 0,050 μ M (méthode "classique") et 0,020 μ M (méthode "haute sensibilité"). Pour le phosphate, la limite est de l'ordre de 0.02 μ M.

3 - Oxygène dissous

L'oxygène dissous est déterminé par la méthode de titration de Winkler (Strickland et Parsons, 1972) à l'aide d'un dispositif Metrohm comprenant un Titroprocesseur 686 connecté à une burette automatique Dosimat 665. La précision théorique de la mesure en mer est de 0,005ml/l.

4 - Chlorophylle a

Des échantillons de 100 ml sont filtrés sur des filtres Whatman GF/F en fibre de verre ($\phi = 25$ mm) et immédiatement congelés à -20°C . Les mesures de chlorophylle sont effectuées au laboratoire à terre, selon la méthode au méthanol décrite par Herbland et al. (1985): échantillons extraits dans le méthanol à 95% pendant 15 à 90 minutes et analysés avec un fluorimètre Turner modèle 112 (étalonné avec de la chlorophylle a pure Sigma).

Des tests comparatifs ont permis de déterminer que la conservation des échantillons (< 1 mois) entraînait une perte de 10% de la chlorophylle.

5 - Phytoplancton

Au cours de SURTROPAC 17 la composition du phytoplancton a été déterminée en cytofluorimétrie, technique utilisée à bord du bateau sur des échantillons de 0,1ml. Le passage dans le cytomètre en flux FACScan (BECTON DICKINSON) s'est déroulé dans les deux heures qui suivaient le prélèvement. Le détail de la technique utilisée au cours de SURTROPAC 17, est décrit dans Blanchot et Rodier (1996). Les résultats sont donnés en nombre de cellules par millilitre (nb ml⁻¹)

6 - Biomasses de zooplancton.

Le poids sec et le poids sec sans cendre sont déterminés sur la fraction > 200 µm (après tamisage sur 2 mm) pour la colonne d'eau 0-500 m, selon les méthodes décrites par Le Borgne (1975). Le volume filtré par le filet triple 200 µm (WP 2, UNESCO, 1968), opéré en traits verticaux, est mesuré avec deux débitmètres T.S.K La longueur de câble filée est corrigée pour atteindre la profondeur désirée, lorsque l'angle de câble est supérieur à 10°.

Les résultats de biomasse présentés sont rapportés soit à l'unité de volume (m³), soit à l'unité de surface (m²). Les numéros des traits sont précédés de WPv pour le filet WP 2 de 200 µm.

Nota : Il n'y a pas eu de prélèvements de zooplancton à SURTROPAC 15.

IV - ARCHIVAGE DES DONNEES

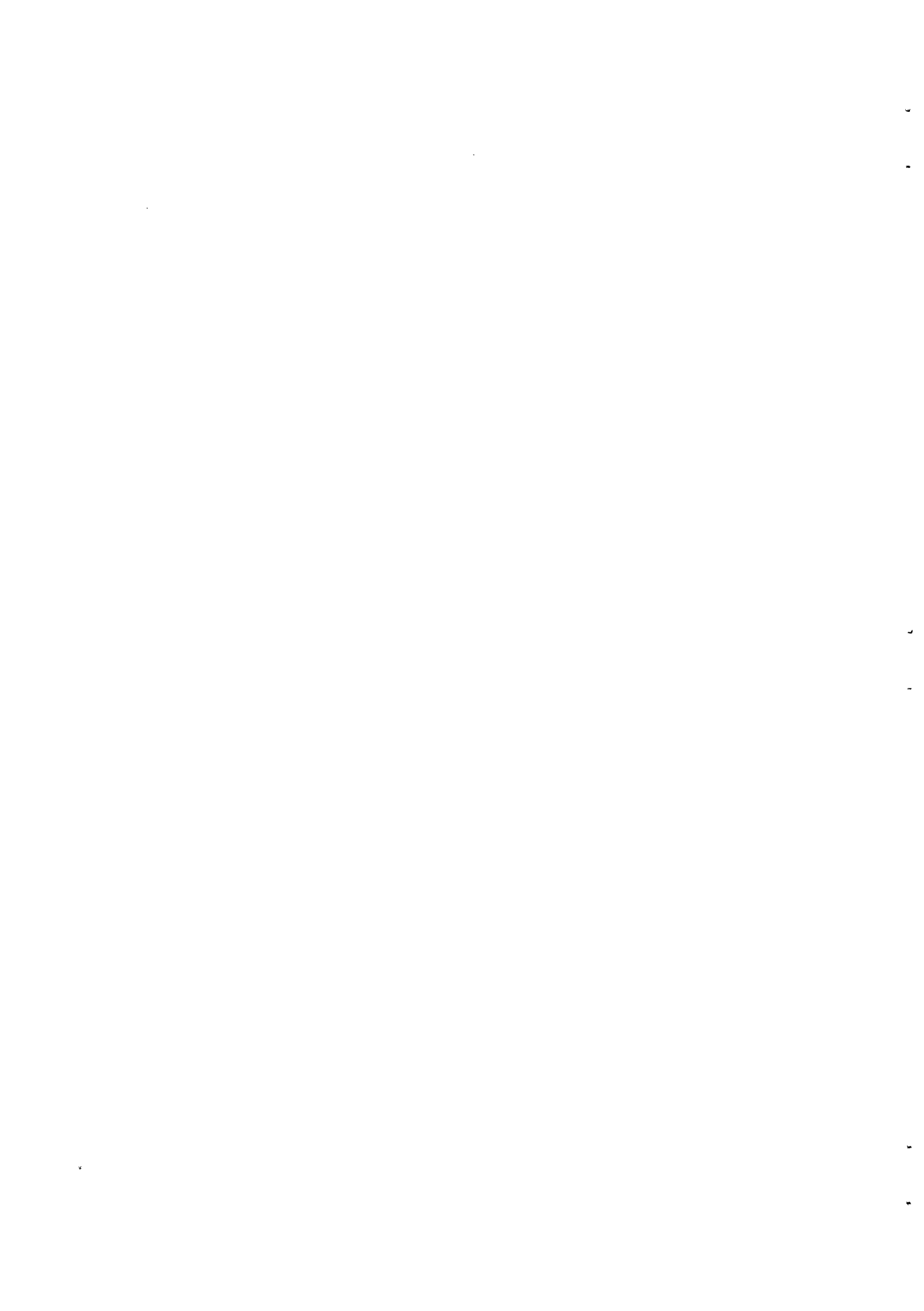
Les données sont archivées dans la banque de données Flupac actuellement (octobre 99) localisée à Marseille, sous support SUN.

Remerciements :

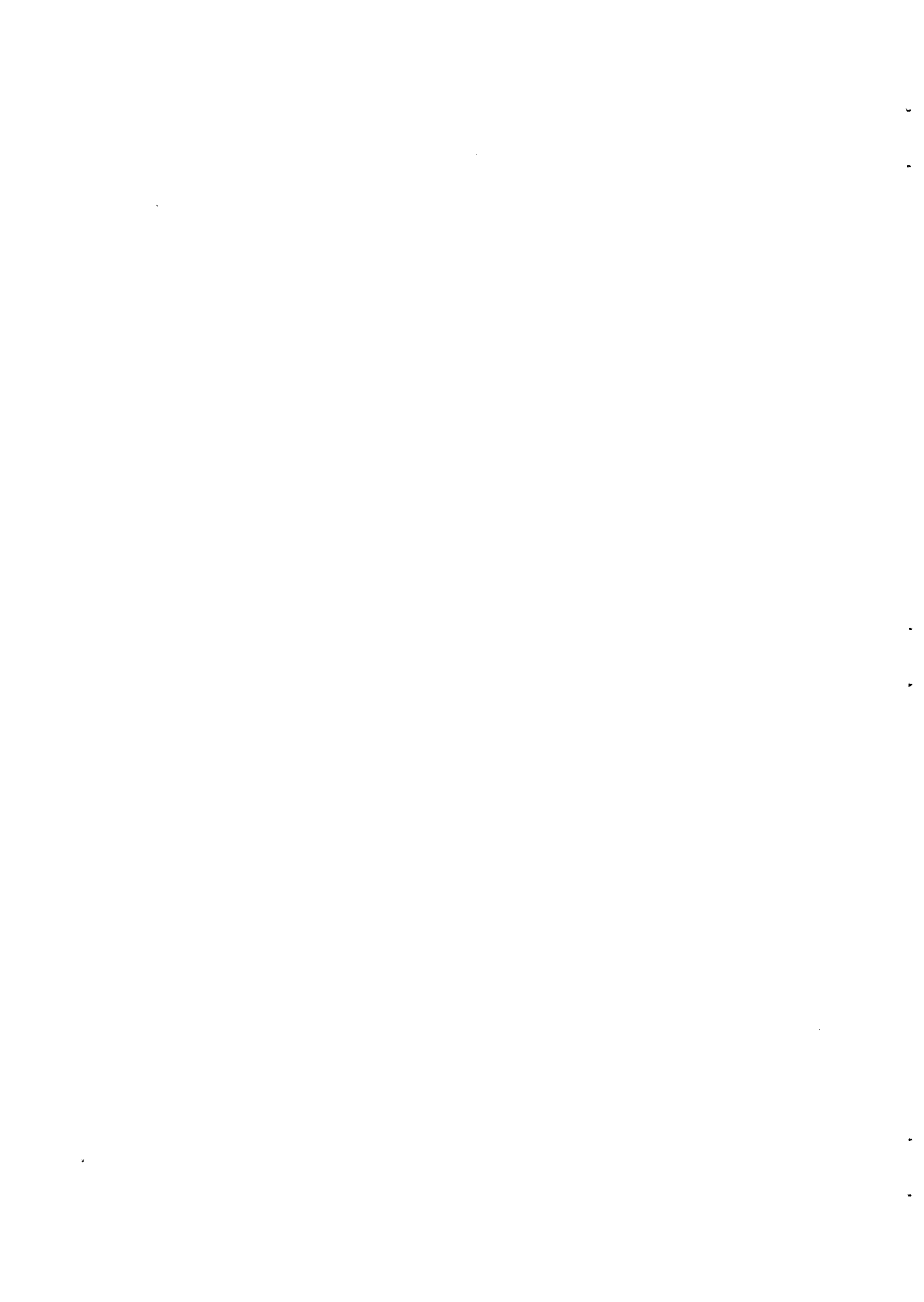
Nous remercions le groupe SURTROPAC de l'organisation des campagnes à la mer.

Nous remercions aussi les équipages des navires océanographiques qui ont largement contribué à la réussite des opérations à la mer par leurs remarquables efficacité et bienveillance.

VI - LES CAMPAGNES UNE A UNE



Surtropac 14 : 11 mars - 08 avril 1991



1.1 - Illustrations

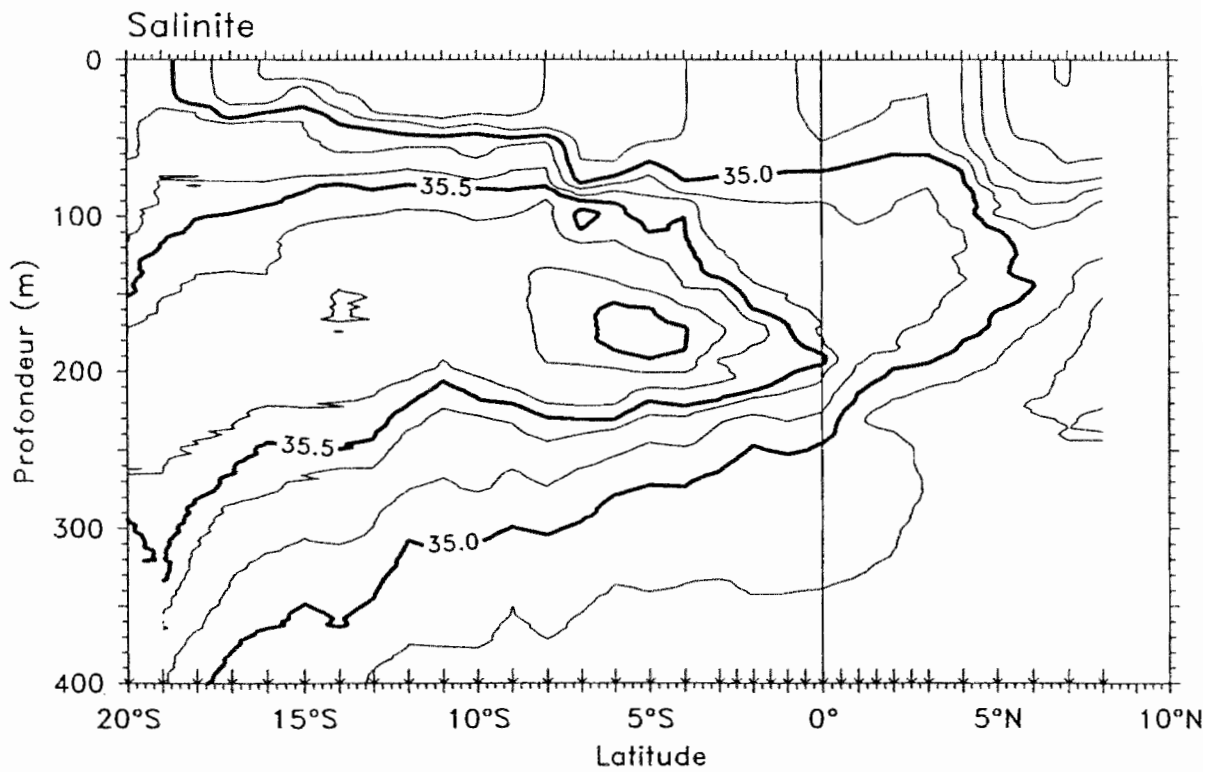
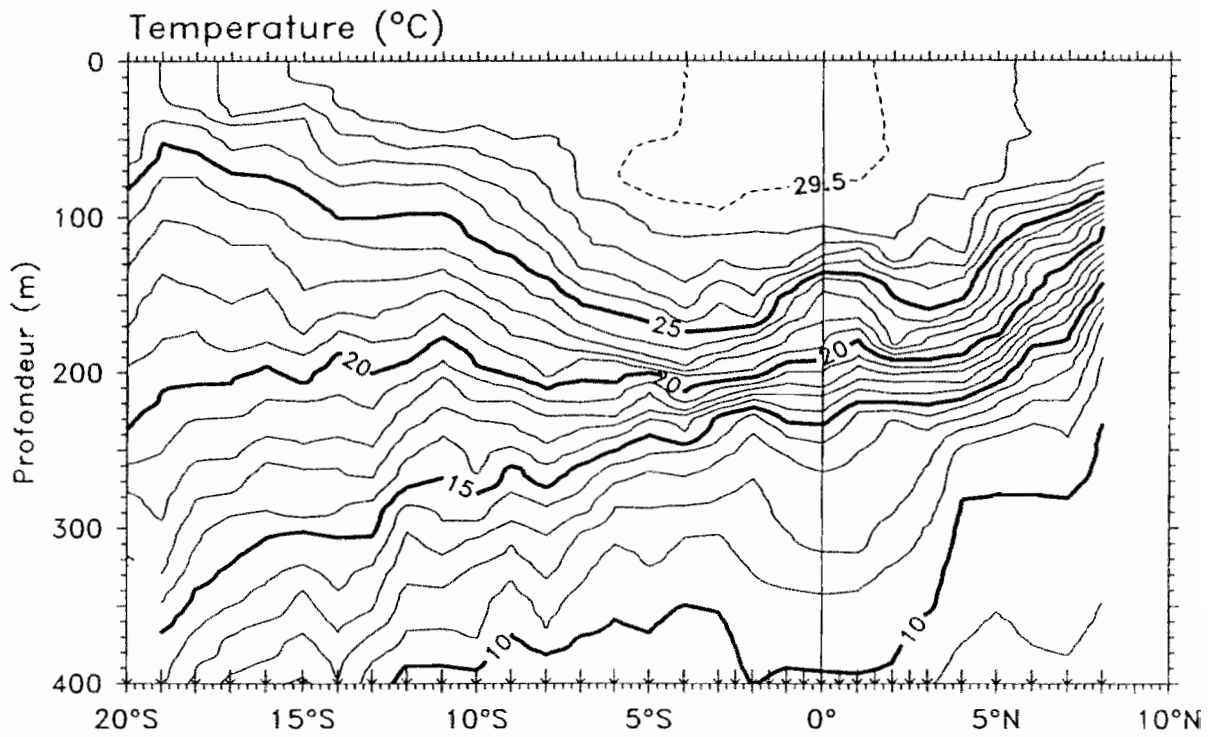
Coupes verticales de température et salinité: (0-200m); (0-400m)

Coupes verticales de sels nutritifs: NO_{23} , PO_4 (0-200m)

Coupes verticales d'oxygène et chlorophylle: (0-200m)

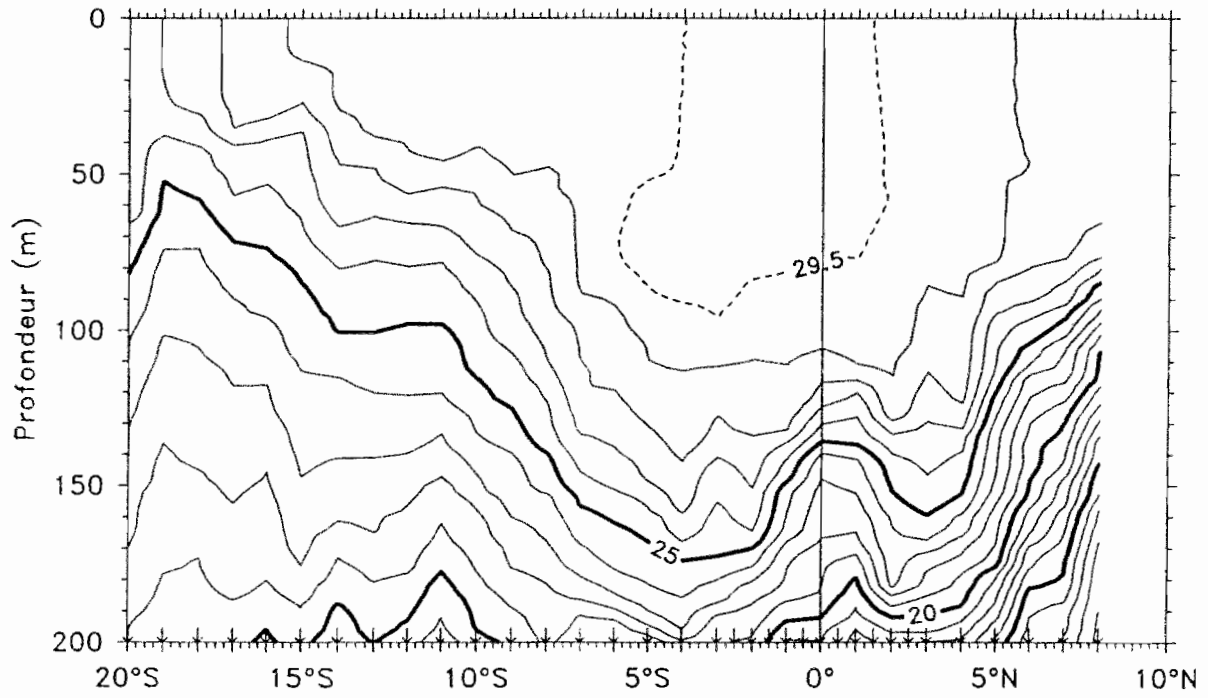
Profils des poids secs de zooplancton

SURTROPAC14 12-22/03/91 St 1-35 Aller

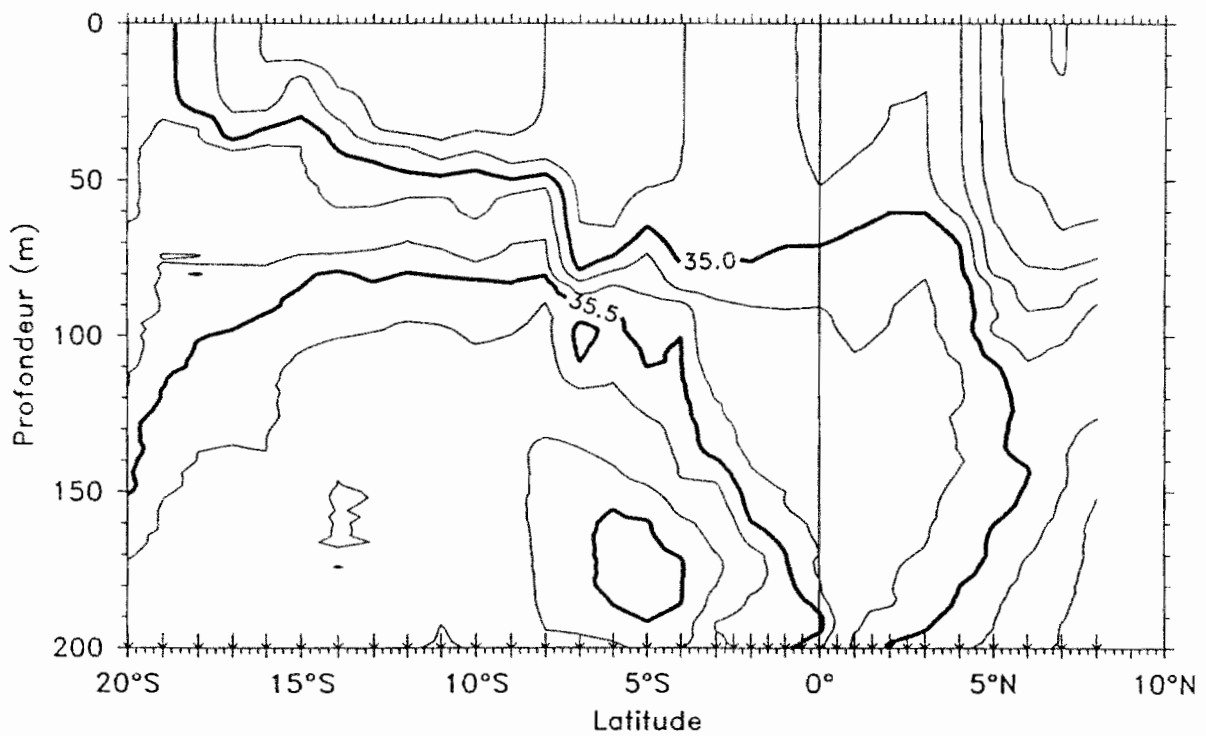


SURTROPAC14 12-22/03/91 St 1-35 Aller

Temperature (°C)

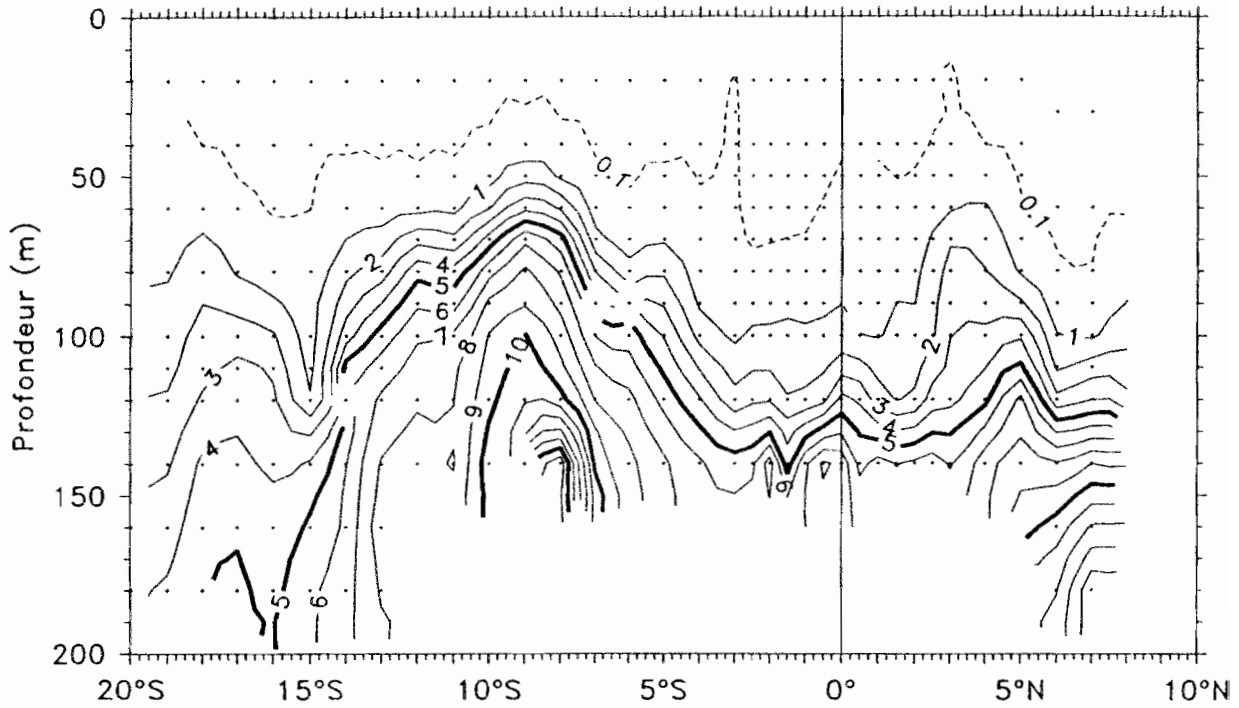


Salinite

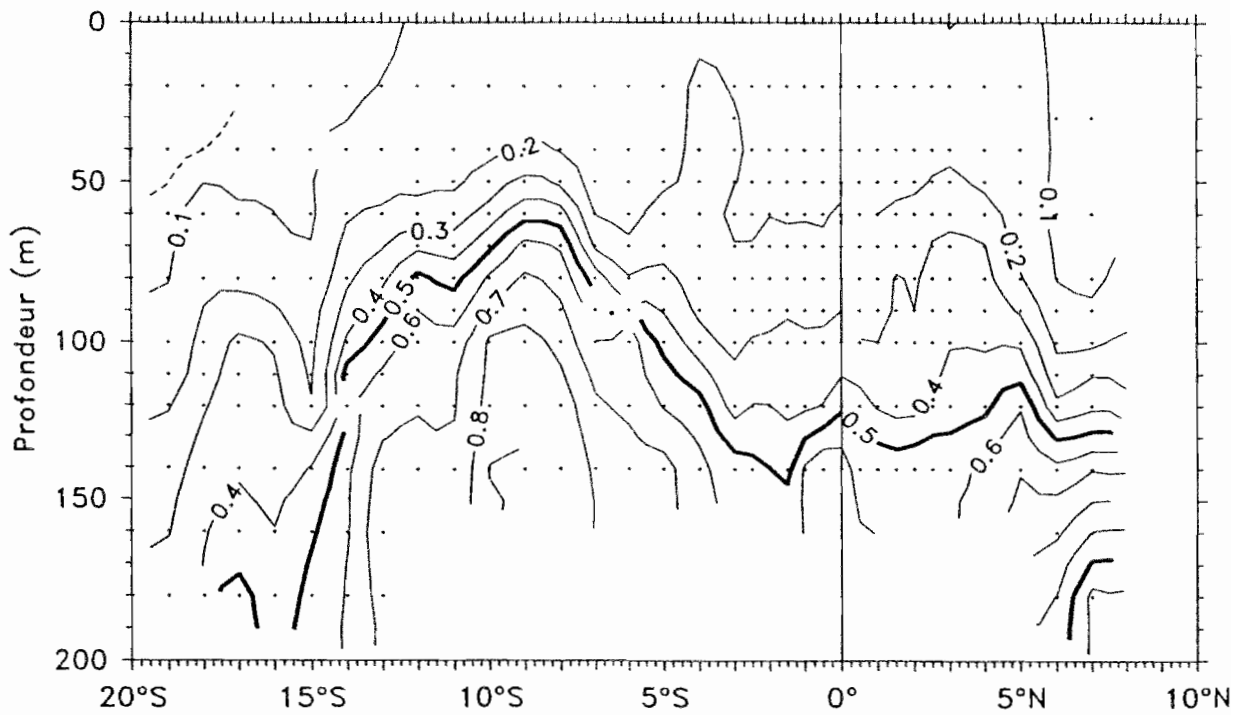


SURTROPAC14 12-22/03/91 St 1-35 Aller

Nitrate+Nitrite (μM)

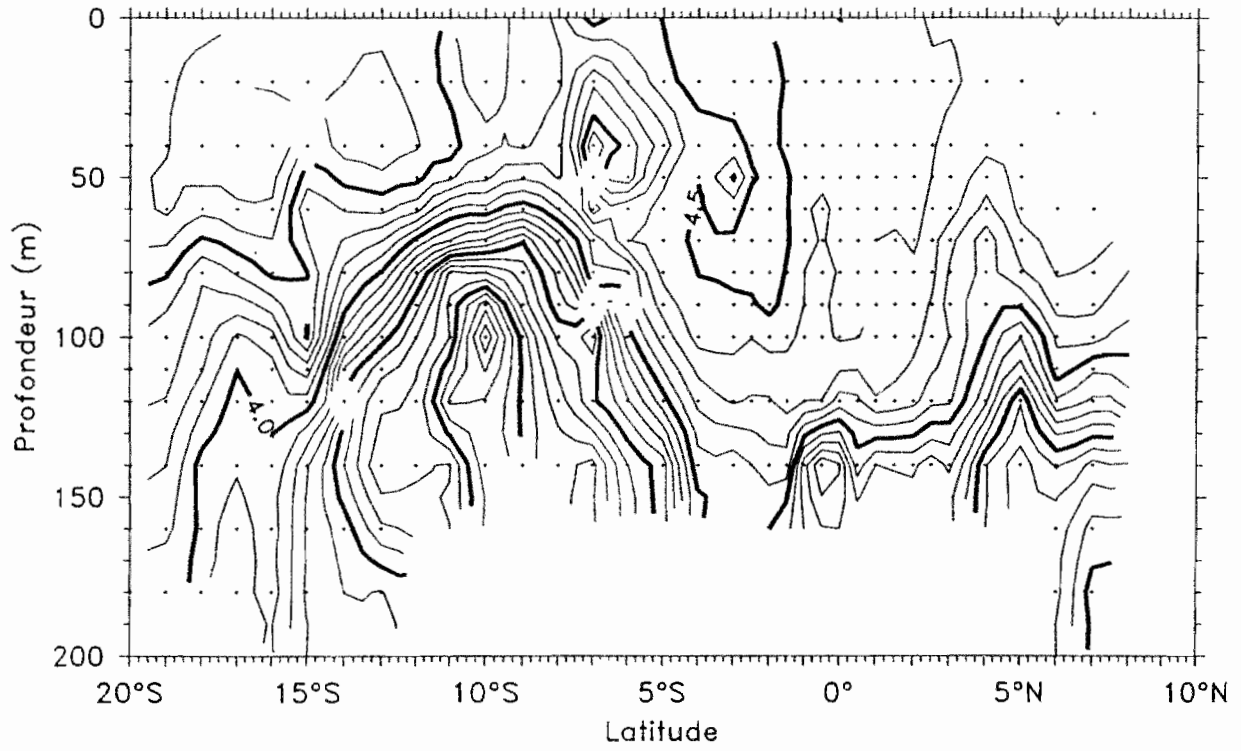


Phosphate (μM)

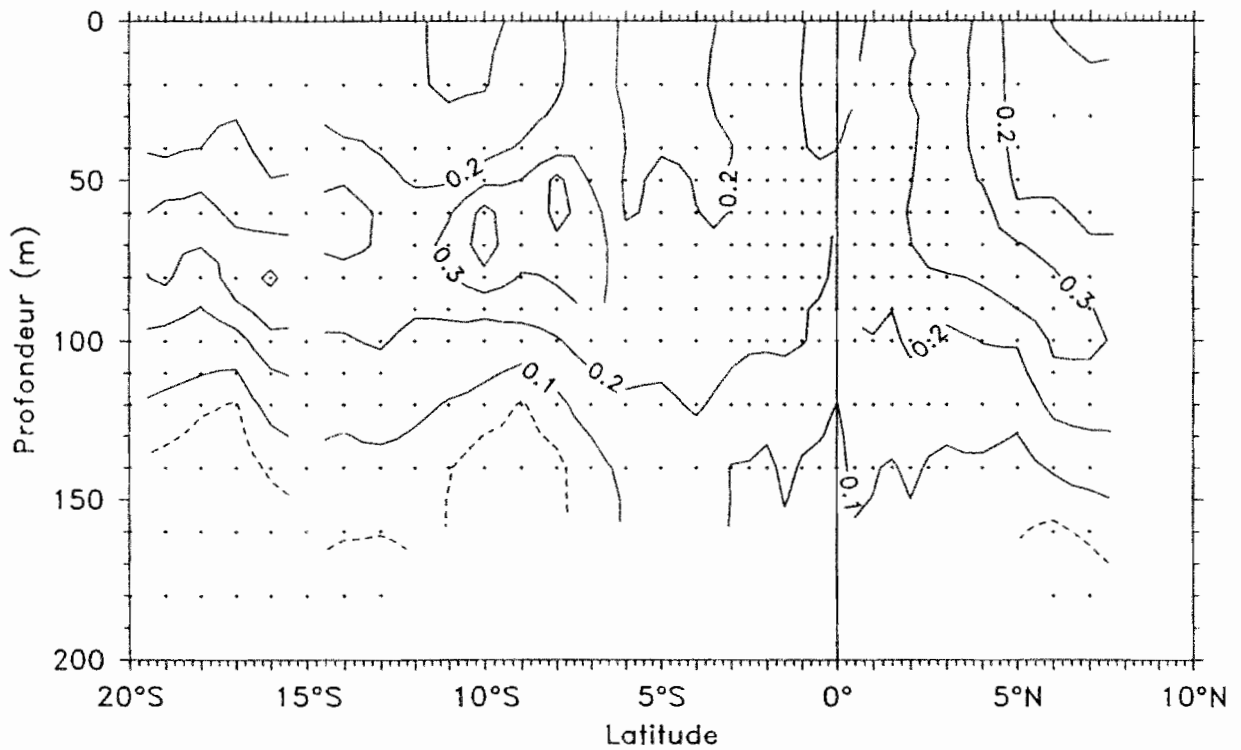


SURTROPAC14 12-22/03/91 St 1-35 Aller

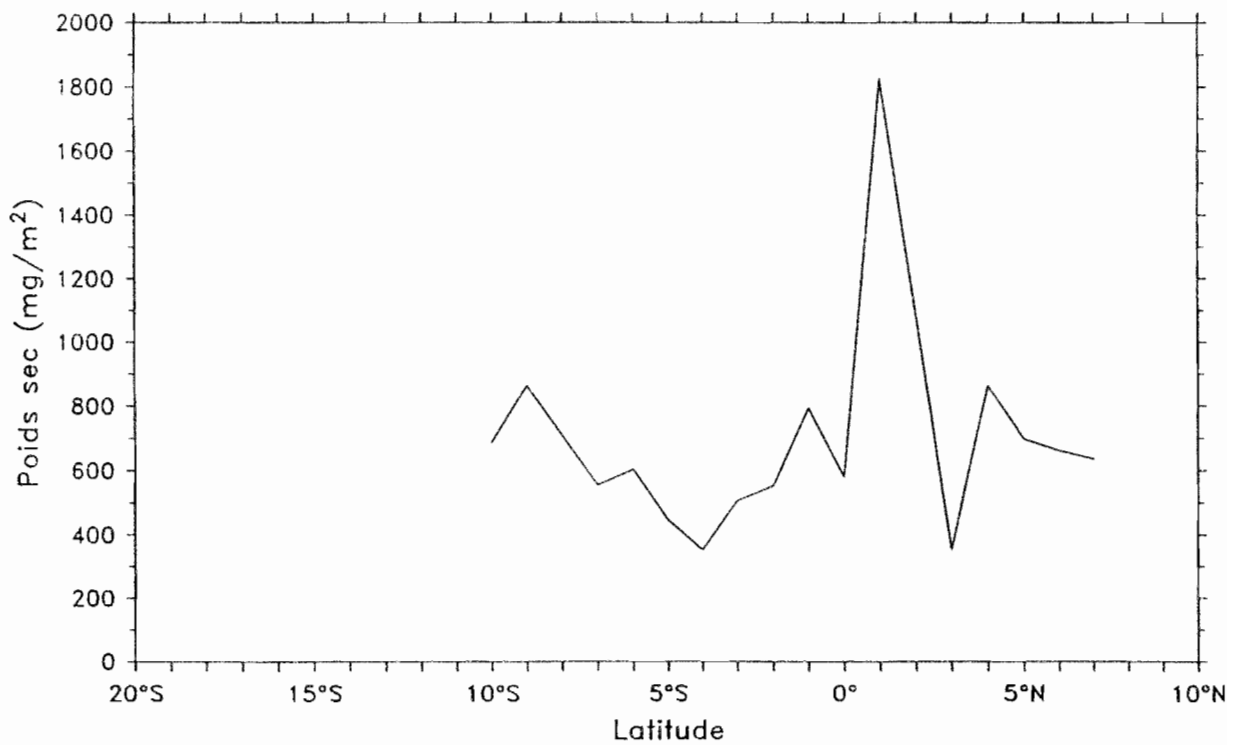
Oxygene (ml/l)



Chlorophyll ($\mu\text{g/l}$)



SURTROPAC14 : ZOOPLANCTON (0-500m) Aller





1.2 - Tableaux de données

Hydrologie
Sels nutritifs
Oxygène
Chlorophylle
Zooplancton



surtropac 14

Station No : 1
 Date : 12/03/91 Heure (GMT) : 04h 30'
 Latitude : 19° 59' S Longitude : 164° 59' E
 air sec/hum. : 26° 7 / 22° 1 vent dir./vit. : 110° / 22 kts fond 3060 m

Z	T	S
0		
20		
40		
60		
80		
100		
110		
120		
140	22.830	35.140
160	22.290	35.460
180	21.600	35.600
1000		

Station No : 2
 Date : 12/03/91 Heure (GMT) : 11h 45'
 Latitude : 19° 0' S Longitude : 165° 0' E
 air sec/hum. : 26° 3 / 22° 7 vent dir./vit. : 110° / 29 kts fond 2775 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	26.990	35.120	4.670	0.010		102.500	0.121	0.070	36.550
20	27.000	35.110	4.668	0.010		102.400	0.106	0.078	42.200
40	26.440	35.080	4.669	0.020		101.400	0.155	0.078	33.470
60	24.760	35.250	4.787	0.050	0.261	100.900	0.358	0.332	48.110
80	24.140	35.320	4.538	0.080	0.671	94.600	0.365	0.425	53.770
100	23.390	35.390	4.324	0.120	1.570	89.000	0.148	0.251	62.960
110	23.170	35.410	4.360	0.150	1.590	89.400	0.111	0.210	65.370
120	22.810	35.430	4.321	0.180	1.950	88.000	0.087	0.139	61.450
140	22.290	35.490	4.237	0.240	2.670	85.400	0.029	0.049	62.590
160	21.730	35.560	4.157	0.280	3.300	83.000	0.008	0.040	83.350
180	20.980	35.610	4.005	0.340	4.200	78.800	0.006	0.030	84.120
1000	4.390	34.470							

Station No : 3
 Date : 12/03/91 Heure (GMT) : 19h 00'
 Latitude : 18° 0' S Longitude : 165° 0' E
 air sec/hum. : 26° 7 / 24° 2 vent dir./vit. : 130° / 27 kts fond m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.630	34.840	4.658	0.000	0.020	103.200	0.198	0.087	30.620
20	27.740	34.830	4.758	0.000	0.041	105.600	0.151	0.092	38.040
40	26.750	35.220	4.859	0.040	0.021	106.200	0.181	0.150	45.290
60	25.160	35.320	4.627	0.190	0.678	98.330	0.406	0.383	48.560
80	23.740	35.350	4.220	0.190	2.120	87.380	0.190	0.284	59.900
100	23.110	35.460	4.264	0.240	2.500	87.320	0.138	0.244	63.950
110	22.810	35.430	4.238	0.210	2.500	86.290	0.107	0.155	59.070
120	22.470	35.510	4.112	0.300	3.250	83.230	0.046	0.105	69.720
140	22.230	35.560	3.899	0.370	4.530	78.580	0.017	0.034	66.960
160	21.550	35.630	3.989	0.400	5.020	79.400	0.005	0.022	80.880
180	20.840	35.640					0.001	0.019	93.420
1000	3.890		3.853	3.350	33.080	52.630			

surtropac 14

Station No : 4
 Date : 13/03/91 Heure (GMT) : 02h 00'
 Latitude : 17° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 7 / 24° 6 vent dir./vit. : 120° / 22 kts fond 3500 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0							0.196	0.107	35.180
20	28.270	34.730			0.007		0.196	0.107	35.180
40	28.060	34.780		0.060	0.009		0.234	0.115	33.010
60	26.160	35.210	4.726	0.100	0.023	102.200	0.261	0.232	47.120
80	25.120	35.190	4.422	0.160	0.669	93.800	0.443	0.400	47.460
100	24.030	35.420	4.018	0.350	2.580	83.700	0.118	0.197	62.590
110	23.550	35.490	3.966	0.390	3.490	80.400	0.078	0.146	65.040
120	23.240	35.500	3.919	0.380	3.930	80.500	0.019	0.070	78.510
140	22.780	35.570	3.889	0.400	4.370	79.200	0.016	0.039	70.790
160	22.070	35.630	3.783	0.450	5.050	76.000	0.006	0.031	84.600
180	21.570	35.650	3.785	0.580	5.430	75.400	0.006	0.027	82.810
1000	3.800	34.490	3.895	3.770	35.650	52.900			

Station No : 5
 Date : 13/03/91 Heure (GMT) : 08h 35'
 Latitude : 16° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 0 / 24° 9 vent dir./vit. : 140° / 22 kts fond 3650 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.600	34.590	4.603	0.080	0.000	103.600	0.117	0.072	38.130
20	28.610	34.550	4.667	0.080	0.007	105.100	0.114	0.067	37.010
40	27.080	35.130	4.879	0.090	0.021	107.200	0.150	0.099	39.730
60	25.630	35.230	4.752	0.100	0.022	101.800	0.216	0.140	39.310
80	24.790	35.340	4.578	0.130	0.077	96.600	0.495	0.486	49.540
100	24.080	35.500	4.083	0.320	2.370	85.100	0.284	0.397	58.260
110	23.540	35.500	4.008	0.330	3.190	82.700	0.190	0.287	60.140
120	22.960	35.460	4.087	0.360	3.450	83.500	0.123	0.243	66.490
140	22.070	35.520	4.024	0.340	3.620	80.800	0.057	0.123	68.430
160	21.440	35.580	4.010	0.380	4.280	79.600	0.024	0.041	62.890
180	21.010	35.350	4.044	0.420	4.440	79.500	0.010	0.033	76.230
1000	4.100	34.480							

Station No : 6
 Date : 13/03/91 Heure (GMT) : 15h 15'
 Latitude : 15° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 3 / 25° 1 vent dir./vit. : 140° / 21 kts fond 3930 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂
0	29.300	34.160				
20	29.250	34.560				
40	27.800	35.620				
60	26.500	35.220	4.148	0.060	0.000	90.300
80	25.250	35.390	4.591	0.060	0.000	97.800
100	24.710	35.420	4.753	0.130	0.006	100.200
110	24.060	35.590	4.295	0.140	0.014	89.600
120	23.990	35.590	4.094	0.130	0.000	85.300
140	23.290	35.650	3.663	0.410	4.281	75.300
160	22.780	35.670	3.661	0.490	5.180	74.600
180	21.730	35.700	3.640	0.540	5.990	72.700
1000	4.100	34.500	3.690	3.580	35.130	50.500

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Station No : 7
 Date : 13/03/91 Heure (GMT) : 21h 38'
 Latitude : 14° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 8 / 25° 5 vent dir./vit. : 150° / 13 kts fond 2100 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.330	34.500	4.576	0.050	0.006	104.320	0.146	0.097	39.810
20	29.220	34.480	4.588	0.070	0.017	104.400	0.153	0.075	33.010
40	28.250	34.980	4.707	0.110	0.020	105.500	0.191	0.138	41.920
60	27.120	35.100	4.421	0.200	0.338	97.200	0.433	0.336	43.690
80	25.700	35.420	4.146	0.290	1.886	89.000	0.262	0.307	53.920
100	24.950	35.510	3.833	0.420	3.440	81.200	0.187	0.277	59.710
110	24.320	35.640	3.522	0.590	6.010	73.800	0.135	0.244	64.340
120	23.960	35.640							
140	23.450	35.690	3.351	0.590	6.040	69.100	0.080	0.174	68.500
160	22.720	35.760	3.601	0.570	5.900	73.300	0.050	0.132	72.560
180	21.920	35.660	3.590	0.600	6.520	72.000	0.035	0.099	73.960
1000	4.140	34.490	3.696	2.700	35.070	50.600			

Station No : 8
 Date : 14/03/91 Heure (GMT) : 04h 00'
 Latitude : 13° 0' S Longitude : 165° 0' E
 air sec/hum. : 27° 9 / 25° 0 vent dir./vit. : 330° / 8 kts fond 3180 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.420	34.540	4.595	0.080	0.004	104.900	0.147	0.074	33.620
20	29.340	34.540	4.625	0.100	0.011	105.500	0.159	0.099	38.310
40	28.610	34.910	4.756	0.160	0.013	107.300	0.183	0.122	40.040
60	27.060	35.200	4.477	0.190	0.030	98.400	0.295	0.218	42.480
80	25.810	35.440	4.014	0.360	2.100	86.400	0.302	0.326	51.910
100	25.280	35.550	3.558	0.550	5.660	75.900	0.226	0.296	56.650
110	24.850	35.620	3.274	0.620	6.580	69.300	0.168	0.293	63.500
120	24.290	35.680	3.184	0.670	7.310	66.700	0.124	0.247	66.620
140	23.460	35.740	2.977	0.780	8.430	61.500	0.089	0.203	69.440
160	22.350	35.750	3.274	0.840	9.290	66.200	0.049	0.112	69.710
180	21.460	35.730	3.663	0.760	8.300	72.800	0.020	0.045	69.020
1000	4.070	34.480	3.818	3.740	36.410	52.200			

Station No : 9
 Date : 14/03/91 Heure (GMT) : 10h 24'
 Latitude : 12° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 9 / 25° 8 vent dir./vit. : 350° / 10 kts fond 3765 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.300	34.480	4.567	0.110	0.000	104.000	0.112	0.074	39.750
20	29.290	34.460	4.548	0.120	0.006	103.600	0.097	0.070	41.830
40	29.230	34.700	4.641	0.120	0.033	105.700	0.137	0.092	40.180
50	28.910	34.950	4.581	0.160	0.012	103.900	0.153	0.122	44.450
60	27.590	35.230	4.430	0.210	0.092	98.300	0.300	0.233	43.730
70	26.520	35.400	3.940	0.390	2.948	85.900	0.280	0.313	52.800
80	25.750	35.520	3.582	0.580	5.320	77.000	0.238	0.315	57.000
90	25.640	35.530	3.413	0.630	6.090	73.200	0.221	0.310	58.360
100	25.100	35.590	3.275	0.670	7.220	69.600	0.142	0.273	65.770
120	24.310	35.660	3.209	0.700	8.040	67.300	0.113	0.241	68.060
140	23.360	35.700	3.185	0.750	8.880	65.600	0.077	0.169	68.620
1000	4.390	34.500	3.474	3.820	34.770	47.900			

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Station No : 10
 Date : 14/03/91 Heure (GMT) : 17h 00'
 Latitude : 11° 0' S Longitude : 165° 0' E
 air sec/hum. : 25° 5 / 24° 7 vent dir./vit. : 300° / 12 kts fond 4475 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.410	34.410					0.076	0.070	47.820
20	29.480	34.470	4.462	0.110	0.002	102.000	0.076	0.070	47.820
40	29.210	35.710	4.632	0.150	0.011	106.100	0.124	0.072	36.730
50	27.700	35.170	4.494	0.160	0.010	99.900	0.163	0.112	40.800
60	27.630	35.280	4.033	0.230	0.239	89.600	0.291	0.233	44.500
70	26.030	35.450	3.942	0.320	1.660	85.200	0.364	0.391	51.770
80	25.400	35.520	2.895	0.470	4.580	61.900	0.285	0.340	54.450
90	25.020	35.590	3.040	0.500	5.030	64.500	0.219	0.347	61.290
100	24.180	35.630	3.235	0.660	7.490	67.600	0.156	0.284	64.640
120	23.720	35.670	2.588	0.670	7.770	53.670	0.091	0.176	65.890
140	22.440	35.760	3.361	0.650	7.220	68.100	0.048	0.109	69.290
1000	4.310	34.520	3.230	3.890	35.500	44.400			

Station No : 11
 Date : 15/03/91 Heure (GMT) : 01h 33'
 Latitude : 10° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 8 / 25° 7 vent dir./vit. : 310° / 17 kts fond 3150 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.200	34.520	4.274	0.140	0.004	86.700	0.090	0.057	38.550
20	29.100	34.530	4.223	0.120	0.019	95.900	0.084	0.067	44.580
40	29.000	34.850	4.472	0.170	0.020	101.500	0.109	0.159	59.190
50	28.760	34.970	4.380	0.210	0.113	99.100	0.272	0.180	39.790
60	27.600	35.150	4.136	0.330	1.427	91.800	0.532	0.494	48.130
70	27.280	35.230	3.723	0.470	4.590	82.200	0.498	0.614	55.210
80	26.760	35.420	3.194	0.630	6.890	69.900	0.429	0.484	52.990
90	26.050	35.530	2.560	0.760	8.780	55.300	0.186	0.337	64.390
100	25.610	35.580	2.227	0.860	9.340	47.800	0.137	0.249	64.490
120	24.850	35.640	2.820	0.840	9.760	59.700	0.080	0.156	66.090
140	23.880	35.730	2.764	0.960	11.180	57.500	0.005	0.050	90.400
1000	4.450	34.510							

Station No : 12
 Date : 15/03/91 Heure (GMT) : 10h 45'
 Latitude : 9° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 8 / 25° 9 vent dir./vit. : 320° / 19 kts fond 3530 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.030	34.440	4.489	0.090	0.000	101.700	0.102	0.078	43.110
20		34.440	4.528	0.110	0.005	103.700	0.123	0.081	39.760
40	29.110	34.490	4.494	0.160	0.066	102.000	0.191	0.174	47.680
50	29.200	34.760	4.207	0.340	1.446	95.800	0.316	0.318	50.090
60	28.510	35.280	3.981	0.460	3.540	89.800	0.305	0.321	51.300
70	28.230	35.310	3.344	0.680	7.850	75.100	0.344	0.406	54.110
80	27.410	35.430	3.307	0.740	8.670	73.200	0.275	0.352	56.190
90	27.150	35.470	3.322	0.760	8.820	73.200	0.284	0.361	56.020
100	26.960	35.470	2.987	0.870	10.720	65.600	0.095	0.188	66.470
120	26.170	35.580	3.029	0.910	10.980	65.700	0.023	0.152	86.820
140	24.920	35.710							
1000	4.380	34.530	3.072	4.030	36.460	42.300	0.003	0.028	90.440

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Station No : 13
 Date : 15/03/91 Heure (GMT) : 20h 55'
 Latitude : 8° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 6 / 26° 0 vent dir./vit. : 290° / 24 kts fond 4950 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.190	34.640	4.349	0.150	0.008	99.000	0.189	0.102	35.170
20	29.200	34.640	4.488	0.170	0.010	102.100	0.181	0.120	39.820
40	29.220	34.670	4.363	0.180	0.010	99.400	0.212	0.135	38.870
50	29.090	34.940	4.413	0.250	0.189	100.400	0.533	0.302	36.210
60	28.870	35.380	4.123	0.480	2.698	93.700	0.456	0.498	52.210
70	28.260	35.460	3.826	0.640	6.190	86.000	0.394	0.391	49.770
80	28.250	35.560	3.554	0.690	7.260	80.000	0.293	0.349	54.390
90	28.100	35.600	3.637	0.720	7.710	81.600	0.285	0.321	53.040
100	27.690	35.640	3.455	0.780	8.750	77.000	0.179	0.280	61.010
120	26.730	35.680	3.261	0.900	9.870	71.400	0.061	0.126	67.300
140	25.620	35.780	3.136	0.910	19.490	67.400	0.029	0.096	76.840
1000	4.430		3.135	3.020	37.530	43.100			

Station No : 14
 Date : 16/03/91 Heure (GMT) : 05h 45'
 Latitude : 7° 0' S Longitude : 165° 0' E
 air sec/hum. : 27° 2 / 25° 1 vent dir./vit. : 290° / 22 kts fond 3525 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.230	34.600	4.598	0.120	0.011	104.700	0.262	0.140	34.830
20	29.240	34.600	4.012	0.120	0.019	91.400	0.248	0.155	38.510
40	29.250	34.600	3.693	0.130	0.013	84.100	0.293	0.138	32.060
50	29.260	34.590		0.120	0.040		0.255	0.150	37.030
60	29.240	34.600	4.541	0.160	0.063	103.400	0.382	0.233	37.900
70	29.180	35.290	4.030	0.220	0.574	92.000	0.417	0.310	42.640
80		35.420	4.154	0.450	2.629	95.800	0.411	0.431	51.170
90	28.790	35.490							
100	28.160	35.390	3.228	0.580	5.740	72.400	0.264	0.319	54.720
120	27.850	35.650	3.565	0.700	7.540	79.700	0.133	0.254	65.580
140	26.410	35.800	2.907	0.780	9.010	63.000	0.060	0.138	69.700
1000	4.450	34.530	2.555	3.910	37.360	35.300			

Station No : 15
 Date : 16/03/91 Heure (GMT) : 13h 10'
 Latitude : 6° 0' S Longitude : 165° 0' E
 air sec/hum. : 27° 2 / 23° 9 vent dir./vit. : 290° / 23 kts fond m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.370	34.660	4.482	0.160	0.023	102.300	0.178	0.129	42.050
20	29.390	34.650	4.341	0.180	0.038	99.100	0.168	0.130	43.530
40	29.380	34.650	3.983	0.180	0.029	90.900	0.196	0.127	39.360
50	29.410	34.660	3.833	0.160	0.029	87.600	0.173	0.124	41.660
60	29.420	34.680	4.540	0.160	0.033	103.800	0.163	0.132	44.690
70	29.460	34.810	4.530	0.180	0.176	103.700	0.205	0.156	43.230
80	29.430	35.130	4.041	0.290	1.067	92.600	0.211	0.186	46.830
90	29.080	35.470							
100	28.880	35.520	3.979	0.710	5.890	90.500	0.290	0.294	50.370
120	27.980	35.620	3.691	0.690	7.620	82.700	0.182	0.261	58.880
140	27.040	35.710	3.386	0.740	8.420	74.600	0.107	0.175	62.050
1000	4.430	34.540	2.639	4.160	37.640	36.400			

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Station No : 16
 Date : 16/03/91 Heure (GMT) : 22h 40'
 Latitude : 5° 0' S Longitude : 165° 0' E
 air sec/hum. : 29° 9 / 25° 8 vent dir./vit. : 310° / 22 kts fond 2355 m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.390	34.680	4.503	0.170	0.032	102.900	0.188	0.156	45.300
20	29.380	34.680	4.521	0.190	0.048	103.200	0.181	0.151	45.600
40	29.390	34.680	4.138	0.170	0.055	94.500	0.191	0.162	45.940
50	29.410	34.700	4.452	0.190	0.076	101.700	0.226	0.155	40.670
60	29.510	34.830	4.426	0.220	0.294	102.000	0.214	0.177	45.210
70	29.650	35.060	4.490	0.250	0.860	103.300	0.247	0.204	45.190
80	29.730	35.390	4.480	0.360	2.005	103.400	0.267	0.231	46.470
90	29.490	35.400	4.343	0.390	3.050	99.800	0.217	0.237	52.160
100	29.350	35.420	4.263	0.470	4.080	97.700	0.224	0.282	55.710
120	28.950	35.450	3.974	0.580	5.650	90.500	0.177	0.267	60.100
140	27.730	35.710	3.392	0.780	7.420	75.700	0.118	0.194	62.140
1000	4.570	34.520	2.987	3.890	36.490	41.300			

Station No : 17
 Date : 17/03/91 Heure (GMT) : 08h 20'
 Latitude : 4° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 8 / 25° 4 vent dir./vit. : 280° / 29 kts fond 3330 m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.490	34.770	4.560	0.200	0.054	104.400	0.183	0.159	46.470
20	29.490	34.770	4.588	0.210	0.068	105.000	0.194	0.149	43.420
40	29.500	34.770	4.468	0.220	0.060	102.300	0.185	0.143	43.670
50	29.500	34.770	4.550	0.200	0.070	104.200	0.198	0.145	42.370
60	29.500	34.770	4.527	0.210	0.088	103.700	0.199	0.160	44.530
70	29.500	34.760	4.535	0.210	0.064	103.800	0.199	0.141	41.530
80	29.540	34.820	4.504	0.220	0.215	103.200	0.214	0.168	44.050
90	29.600	34.970	4.514	0.260	0.515	103.700	0.216	0.188	46.510
100	29.650	35.130	4.488	0.330	1.343	103.200	0.266	0.221	45.370
120	29.150	35.560	4.261	0.580	4.190	97.400	0.221	0.293	57.050
140	28.780	35.530	4.156	0.640	6.420	94.400	0.185	0.256	58.050
1000	4.560	34.540		4.270	37.950				

Station No : 18
 Date : 17/03/91 Heure (GMT) : 17h 00'
 Latitude : 3° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 5 / 26° 4 vent dir./vit. : 260° / 26 kts fond 4300 m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.690	34.960	4.503	0.190	0.099	103.600	0.211	0.185	46.710
20	29.690	34.960	4.506	0.200	0.113	103.600	0.219	0.179	44.980
40	29.700	34.960	4.525	0.210	0.107	104.100	0.186	0.175	48.390
50	29.710	34.960	4.011	0.200	0.107	92.300	0.199	0.167	45.720
60	29.730	34.980	4.513	0.190	0.121	103.900	0.187	0.172	47.930
70	29.730	34.990	4.514	0.200	0.134	103.900	0.197	0.190	49.120
80	29.720	35.010	4.515	0.200	0.162	103.900	0.221	0.184	45.520
90	29.700	35.050	4.502	0.210	0.210	103.600	0.212	0.203	48.940
100	29.620	35.150	4.444	0.240	0.401	102.200	0.217	0.245	53.030
120	29.260	35.210	4.355	0.290	1.557	99.500	0.181	0.213	53.970
140	27.790	35.400	3.965	0.560	5.710	87.900	0.069	0.136	66.290
1000	4.580	34.540	2.095	4.110	37.720	29.000			

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Station No : 19
 Date : 17/03/91 Heure (GMT) : 22h 45'
 Latitude : 2° 30' S Longitude : 165° 0' E
 air sec/hum. : 29° 5 / 26° 0 vent dir./vit. : 260° / 24 kts fond 2405 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.690	34.980	4.572	0.170	0.035	105.200	0.221	0.176	44.310
20	29.690	34.980	4.559	0.180	0.036	104.900	0.235	0.172	42.250
40	29.690	34.980	4.520	0.190	0.043	104.000	0.227	0.187	45.190
50	29.690	34.980	4.552	0.200	0.046	104.700	0.248	0.191	43.500
60	29.690	34.980	4.568	0.190	0.050	105.100	0.245	0.184	42.940
70	29.690	34.980	4.553	0.200	0.054	104.700	0.250	0.196	43.970
80	29.690	34.980	4.535	0.200	0.068	104.300	0.259	0.191	42.530
90	29.490	35.130	4.475	0.220	0.383	102.700	0.248	0.197	44.220
100	29.250	35.270	4.371	0.340	1.465	99.900	0.209	0.243	53.710
120	28.870	35.320	4.290	0.420	2.792	97.400	0.156	0.182	53.940
140	27.930	35.340	4.084	0.540	5.120	91.200	0.095	0.147	60.790
1000	4.580	34.550	2.323	4.250	38.090	32.200			

Station No : 20
 Date : 18/03/91 Heure (GMT) : 04h 30'
 Latitude : 2° 0' S Longitude : 165° 0' E
 air sec/hum. : 30° 0 / 26° 2 vent dir./vit. : 260° / 22 kts fond 4425 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.800	34.850					0.224	0.172	43.460
20	29.690	34.910	4.533	0.190	0.045	104.200	0.224	0.172	43.460
40	29.690	34.910	4.552	0.200	0.048	104.700	0.247	0.179	41.930
50	29.670	34.910	4.519	0.200	0.053	103.900	0.248	0.183	42.520
60	29.660	34.920	4.511	0.200	0.058	103.700	0.243	0.207	46.030
70	29.650	34.930	4.499	0.210	0.082	104.000	0.261	0.199	43.230
80	29.630	34.960	4.591	0.220	0.129	106.100	0.270	0.196	42.070
90	29.550	35.060	4.592	0.240	0.259	105.400	0.256	0.194	43.170
100	29.230	35.250	4.439	0.330	1.351	101.400	0.217	0.230	51.460
120	28.870	35.290	4.264	0.410	2.832	96.800	0.097	0.139	59.080
140	27.680	35.280	4.172	0.520	10.430	92.800	0.060	0.123	67.230
1000	4.420	34.540	2.691	4.250	36.780	37.100			

Station No : 21
 Date : 18/03/91 Heure (GMT) : 09h 05'
 Latitude : 1° 30' S Longitude : 165° 0' E
 air sec/hum. : 29° 2 / 26° 3 vent dir./vit. : 260° / 17 kts fond 4440 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.620	34.900	4.450	0.200	0.021	102.200	0.257	0.166	39.340
20	29.640	34.900	4.498	0.190	0.035	103.300	0.247	0.176	41.540
40	29.640	34.900	4.459	0.200	0.022	102.400	0.268	0.164	38.010
50	29.640	34.920	4.555	0.190	0.026	104.600	0.282	0.171	37.660
60	29.630	34.960	4.517	0.190	0.030	103.800	0.305	0.192	38.580
70	29.620	35.010	4.531	0.210	0.083	104.100	0.301	0.186	38.160
80	29.500	35.110	4.500	0.230	0.201	103.200	0.261	0.195	42.770
90	29.230	35.210	4.457	0.310	1.076	101.800	0.251	0.225	47.250
100	29.200	35.220	4.417	0.340	1.131	101.000	0.227	0.224	49.640
120	29.060	35.240	4.404	0.350	1.520	100.300	0.162	0.196	54.790
140	28.820	35.230	4.361	0.390	2.190	98.900	0.136	0.159	53.910
1000	4.550	34.540	2.609	4.070	37.200	36.100			

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Station No : 22
 Date : 18/03/91 Heure (GMT) : 15h 00'
 Latitude : 1° 0' S Longitude : 165° 0' E
 air sec/hum. : 28° 9 / 26° 5 vent dir./vit. : 250° / 21 kts fond m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.770	34.880	4.398	0.170	0.017	101.200	0.199	0.151	43.250
20	29.770	34.880	4.458	0.190	0.016	102.600	0.186	0.164	46.730
40	29.770	34.900	4.403	0.180	0.012	101.400	0.188	0.162	46.320
50	29.750	34.920	4.397	0.210	0.015	101.200	0.209	0.166	44.220
60	29.730	34.930	4.412	0.200	0.020	101.500	0.191	0.206	51.950
70	29.680	34.990	4.458	0.200	0.032	103.100	0.264	0.186	41.260
80	29.570	35.050	4.372	0.220	0.247	100.400	0.202	0.201	49.890
90	29.410	35.130	4.402	0.270	0.622	100.800	0.204	0.211	50.840
100	29.210	35.200	4.376	0.320	1.162	99.900	0.215	0.236	52.340
120	28.860	35.220	4.328	0.360	1.809	98.200	0.121	0.130	51.920
140	25.510	35.340	3.578	0.680	7.700	76.500	0.082	0.139	62.740
1000	4.500	34.540	2.485	4.090	38.060	34.300			

Station No : 23
 Date : 18/03/91 Heure (GMT) : 19h 40'
 Latitude : 0° 30' S Longitude : 165° 0' E
 air sec/hum. : 25° 9 / 24° 5 vent dir./vit. : 250° / 30 kts fond m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.720	34.610	4.473	0.140	0.012	102.700	0.173	0.128	42.390
20	29.760	34.620	4.461	0.140	0.008	102.500	0.166	0.128	43.540
40	29.790	34.680	4.427	0.160	0.035	101.800	0.183	0.154	45.720
50	29.800	34.710	4.472	0.160	0.024	102.900	0.206	0.152	42.390
60	29.750	34.850	4.281	0.180	0.082	98.500	0.270	0.181	40.110
70	29.720	34.970	4.383	0.210	0.237	100.900	0.272	0.208	43.320
80	29.400	35.120	4.293	0.250	0.739	98.300	0.257	0.217	45.780
90	29.150	35.200	4.321	0.270	0.727	98.600	0.187	0.197	51.350
100	29.130	35.200	4.360	0.320	1.219	99.400	0.205	0.206	50.100
120	28.880	35.200	4.453	0.350	1.591	101.100	0.117	0.134	53.370
140	24.020	35.280	3.284	0.770	9.600	68.300	0.091	0.155	62.960
1000	4.550	34.550	2.218	4.160	38.270	30.700			

Station No : 24
 Date : 19/03/91 Heure (GMT) : 01h 30'
 Latitude : 0° 0' N Longitude : 165° 0' E
 air sec/hum. : 28° 3 / 26° 8 vent dir./vit. : 240° / 14 kts fond m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.660	34.560	4.504	0.140	0.023	103.300	0.173	0.160	48.120
20	29.680	34.560	4.439	0.130	0.022	101.800	0.168	0.155	48.020
40	29.720	34.650	4.436	0.160	0.057	101.900	0.196	0.175	47.190
50	29.690	34.750	4.477	0.170	0.124	102.800	0.220	0.213	49.220
60	29.620	34.880	4.444	0.220	0.272	102.000			
70	29.570	34.940	4.475	0.230	0.398	102.700	0.178	0.251	58.450
80	29.410	35.090	4.392	0.260	0.644	100.600	0.188	0.260	58.030
90	29.180	35.180	4.480	0.300	1.002	102.200	0.078	0.240	75.390
100	29.050	35.180	4.450	0.340	1.184	101.300	0.118	0.137	53.630
120	27.350	35.280	4.127	0.530	5.130	91.200	0.081	0.137	62.820
140	24.630	35.310	3.369	0.740	8.880	70.900	0.068	0.158	69.940
1000	4.550	34.550	2.384	4.190	38.170	33.000	0.000	0.027	99.560

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Station No : 25
 Date : 19/03/91 Heure (GMT) : 07h 10'
 Latitude : 0° 30' N Longitude : 165° 0' E
 air sec/hum. : 29° 0 / 26° 3 vent dir./vit. : 210° / 17 kts fond 2865 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.640	34.740					0.169	0.190	52.910
20	29.670	34.750							
40	29.680	34.760							
50	29.680	34.770							
60	29.680	34.830							
70	29.580	34.970							
80	29.510	35.030							
90	29.330	35.140							
100	29.230	35.170	4.410	0.300	1.009	100.700	0.169	0.190	52.910
120	27.520	35.270	4.135	0.450	4.218	91.700	0.112	0.137	55.100
140	24.740	35.290	4.189	0.470	4.480	88.300	0.130	0.130	50.070
1000	4.520	34.550	2.304	4.050	38.740	31.800			

Station No : 26
 Date : 19/03/91 Heure (GMT) : 12h 30'
 Latitude : 1° 0' N Longitude : 165° 0' E
 air sec/hum. : 26° 6 / 25° 8 vent dir./vit. : 200° / 23 kts fond 5160 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.610	34.740					0.226	0.180	44.410
20	29.650	34.750	4.436	0.150	0.023	101.800	0.226	0.180	44.410
40	29.680	34.790	4.459	0.160	0.028	102.400	0.226	0.175	43.580
50	29.680	34.890	4.472	0.180	0.148	102.800	0.270	0.211	43.840
60	29.640	34.940	4.401	0.200	0.241	101.100	0.285	0.238	45.530
70	29.580	35.030	4.408	0.220	0.357	101.200	0.304	0.260	46.090
80	29.540	35.090	4.352	0.240	0.508	99.900	0.281	0.260	48.080
90	29.530	35.120	4.406	0.250	0.551	101.100	0.261	0.246	48.490
100	29.400	35.140	4.347	0.290	0.707	99.600	0.190	0.243	56.170
120	28.520	35.220	4.407	0.370	1.933	99.400	0.135	0.158	53.860
140	25.510	35.300	3.658	0.620	7.380	78.200	0.100	0.151	60.280
1000	4.480	34.550	2.344	3.900	37.840	32.400			

Station No : 27
 Date : 19/03/91 Heure (GMT) : 17h 30'
 Latitude : 1° 30' N Longitude : 165° 0' E
 air sec/hum. : 27° 3 / 25° 8 vent dir./vit. : 190° / 17 kts fond 3240 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.380	34.600	4.443	0.160	0.007	101.400	0.221	0.180	44.830
20	29.480	34.700	4.422	0.200	0.023	101.200	0.217	0.175	44.610
40	29.560	34.830	4.437	0.170	0.039	101.700	0.221	0.186	45.770
50	29.580	34.870	4.437	0.200	0.061	101.800	0.228	0.179	44.010
60	29.550	35.050	4.463	0.200	0.131	102.400	0.251	0.245	49.440
70	29.430	35.080	4.344	0.240	0.419	99.500	0.224	0.263	54.060
80	29.240	35.140	4.334	0.360	0.869	99.000	0.244	0.237	49.200
90	29.170	35.170	4.269	0.330	1.209	97.400	0.152	0.198	56.570
100	29.160	35.170	4.357	0.340	1.230	99.400	0.153	0.181	54.280
120		35.170	4.312	0.330	1.310	99.300	0.121	0.143	54.040
140	26.370	35.280	3.764	0.560	6.000	81.700	0.081	0.172	68.090
1000	4.450	34.550	2.373	4.010	37.390	32.700			

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Station No : 28
 Date : 19/03/91 Heure (GMT) : 23h 00'
 Latitude : 2° 0' N Longitude : 165° 0' E
 air sec/hum. : 26° 6 / 26° 0 vent dir./vit. : 220° / 36 kts fond 4150 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.160	34.770	4.461	0.190	0.048	101.500	0.328	0.194	37.170
20	29.180	34.770	4.486	0.200	0.060	102.100	0.314	0.209	39.910
40	29.190	34.770	4.439	0.180	0.060	101.100	0.295	0.203	40.740
50	29.190	34.780	4.445	0.190	0.083	101.200	0.292	0.197	40.270
60	29.230	34.800	4.491	0.190	0.123	102.400	0.320	0.213	40.000
70	29.360	35.020	4.464	0.210	0.191	102.100	0.284	0.194	40.550
80	29.370	35.130	4.377	0.280	0.653	100.200	0.304	0.250	45.180
90	29.340	35.170	4.391	0.280	0.770	100.500	0.315	0.260	45.270
100	29.250	35.200	4.329	0.320	1.080	98.900	0.253	0.261	50.780
120	29.110	35.190	4.309	0.320	1.314	98.200	0.171	0.219	56.180
140	26.060	35.270	3.833	0.610	6.580	82.800	0.120	0.188	61.090
1000	4.420	34.560	2.308	4.070	37.650	31.800			

Station No : 29
 Date : 20/03/91 Heure (GMT) : 03h 25'
 Latitude : 2° 30' N Longitude : 165° 0' E
 air sec/hum. : 28° 0 / 26° 0 vent dir./vit. : 240° / 18 kts fond m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.350	34.800	4.333	0.170	0.105	99.000	0.313	0.169	35.050
20	29.350	34.800							
40	29.370	34.810	4.410	0.190	0.093	100.800	0.330	0.188	36.300
50	29.390	34.850	4.385	0.180	0.171	100.800	0.354	0.211	37.290
60	29.340	35.160	4.330	0.320	0.534	99.100	0.375	0.244	39.380
70	29.150	35.220	4.334	0.310	1.192	98.900	0.397	0.320	44.640
80	29.060	35.230	4.369	0.340	1.450	99.500	0.254	0.228	47.220
90	29.040	35.230	4.307	0.330	1.560	98.100	0.216	0.211	49.450
100	29.030	35.220	4.274	0.340	1.564	97.300	0.183	0.193	51.220
120	27.180	35.230	4.111	0.440	3.790	90.600	0.103	0.139	57.400
140	26.690	35.240	3.616	0.620	7.240	79.000	0.092	0.157	63.130
1000	4.540	34.550	2.225	4.090	37.200	30.800			

Station No : 30
 Date : 20/03/91 Heure (GMT) : 09h 00'
 Latitude : 3° 0' N Longitude : 165° 0' E
 air sec/hum. : 28° 6 / 26° 7 vent dir./vit. : 170° / 19 kts fond 5865 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.380	34.880	4.403	0.210	0.090	100.700	0.343	0.200	36.800
20	29.380	34.870	4.428	0.190	0.119	101.200	0.340	0.208	37.950
40	29.390	34.870	4.352	0.190	0.109	99.500	0.353	0.199	36.040
50	29.400	34.900	4.456	0.210	0.235	101.900	0.325	0.228	41.240
60	29.360	35.000	4.397	0.230	0.734	100.600	0.349	0.272	43.770
70	29.160	35.190	4.195	0.370	2.273	95.700	0.365	0.323	46.920
80	29.000	35.220	4.164	0.390	2.608	94.700	0.296	0.311	51.250
90	28.890	35.230	4.092	0.380	3.217	92.900	0.244	0.253	50.830
100	28.710	35.260	4.239	0.410	3.246	96.000	0.133	0.163	55.120
120	28.690	35.270	4.200	0.450	3.350	95.100	0.132	0.166	55.780
140	27.410	35.270	3.910	0.540	5.540	86.500	0.071	0.122	63.030
1000	4.520	34.550	2.107	4.400	39.650	29.100	0.007	0.021	75.450

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Station No : 31
 Date : 20/03/91 Heure (GMT) : 18h 30'
 Latitude : 4° 0' N Longitude : 165° 0' E
 air sec/hum. : 28° 4 / 26° 9 vent dir./vit. : 160° / 15 kts fond 2985 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.360	34.650					0.290	0.200	40.820
20	29.360	34.660	4.361	0.170	0.024	99.500	0.290	0.200	40.820
40	29.370	34.660	4.361	0.140	0.027	99.600	0.264	0.192	42.140
50	29.410	34.730	4.189	0.160	0.176	96.300	0.289	0.219	43.080
60	29.170	35.030	4.162	0.260	1.253	94.900	0.378	0.369	49.380
70	29.250	35.150	3.925	0.330	2.058	89.700	0.363	0.392	51.910
80	29.210	35.170	4.092	0.330	1.947	93.400	0.316	0.361	53.280
90	29.110	35.190	4.037	0.350	2.581	92.000	0.259	0.274	51.430
100	28.830	35.220	4.036	0.380	3.028	91.000	0.197	0.256	56.490
120	28.350	35.160	3.900	0.440	4.150	87.200	0.175	0.262	59.990
140	26.090	35.160	3.295	0.670	8.230	70.700	0.078	0.161	67.300
1000	4.750	34.550	1.937	4.380	39.870	26.900			

Station No : 32
 Date : 21/03/91 Heure (GMT) : 03h 05'
 Latitude : 5° 0' N Longitude : 165° 0' E
 air sec/hum. : 29° 5 / 27° 2 vent dir./vit. : 130° / 16 kts fond 3280 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.070	34.210	4.355	0.130	0.007	98.700	0.123	0.091	42.710
20	29.070		4.385	0.130	0.007	99.700	0.139	0.089	39.020
40	29.080	34.230	4.300	0.140	0.000	97.400	0.158	0.116	42.360
50	29.080	34.230	4.381	0.140	0.007	99.300	0.161	0.124	43.440
60	29.140	34.270	4.375	0.140	0.004	99.300	0.171	0.134	44.040
70	29.160	34.300	4.279	0.140	0.012	97.100	0.312	0.218	41.170
80	28.020	34.670	4.224	0.200	0.488	94.200	0.475	0.400	45.730
90	26.880	34.730	4.005	0.290	2.134	87.500	0.292	0.369	55.810
100	26.050	34.830	3.712	0.420	4.450	79.900	0.176	0.267	60.260
120	24.460	35.080	3.214	0.680	8.690	67.300	0.079	0.166	67.740
140	23.100	35.130	3.136	0.730	9.180	64.100	0.060	0.123	66.990
1000	4.490	34.550	2.009	4.410	40.330	27.700			

Station No : 33
 Date : 21/03/91 Heure (GMT) : 12h 00'
 Latitude : 6° 0' N Longitude : 165° 0' E
 air sec/hum. : 27° 6 / 26° 4 vent dir./vit. : 130° / 19 kts fond m

Z	T	S	O ₂ (ml)	PO ₄	NO ₂₃	O ₂ satu	Ch m	Ph m	%PHA
0	28.900	33.970	4.414	0.080	0.009	99.600	0.094	0.078	45.330
30	28.990	34.010	4.385	0.090	0.023	99.100	0.103	0.084	44.810
60	28.490	34.330	4.361	0.070	0.015	97.800	0.224	0.157	41.230
80	27.790	34.410	4.344	0.080	0.011	96.300	0.310	0.263	45.880
90	27.400	34.440	4.293	0.100	0.008	94.500	0.408	0.360	46.880
100	25.820	34.590	4.124	0.160	0.729	88.300	0.312	0.410	56.760
110	25.130	34.640	4.179	0.190	1.108	88.400	0.316	0.414	56.680
120	23.240	34.730	4.001	0.250	2.210	81.800	0.246	0.341	58.130
140	21.160	34.900	3.422	0.630	8.160	67.300	0.102	0.185	64.390
160	19.880	34.920	3.277	0.770	10.280	62.900	0.026	0.067	71.870
180	18.230	34.840	3.293	0.880	11.650	61.200	0.016	0.051	75.740
1000	4.430	34.560	1.749	3.820	41.170	24.100			

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Station No : 34
 Date : 21/03/91 Heure (GMT) : 21h 50'
 Latitude : 7° 0' N Longitude : 165° 0' E
 air sec/hum. : 28° 5 / 26° 8 vent dir./vit. : 60° / 15 kts fond m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	28.550	33.940	4.379	0.060	0.005	98.700	0.079	0.063	44.380
30	28.420	34.000	4.293	0.060	0.005	96.000	0.114	0.066	36.870
60	28.380	34.100	4.389	0.060	0.005	98.200	0.156	0.118	43.210
80	28.150	34.270	4.296	0.060	0.016	95.800	0.237	0.166	41.180
90	26.720	34.470	4.232	0.100	0.022	92.100	0.310	0.246	44.240
100	25.150	34.580	4.215	0.160	0.247	89.200	0.372	0.382	50.690
110	23.280	34.760	3.845	0.320	2.766	78.700	0.262	0.299	53.360
120	22.900	34.780	3.811	0.360	3.710	77.400	0.265	0.326	55.120
140	20.030	34.790	3.165	0.730	9.570	60.900	0.121	0.217	64.130
160	17.480	34.700	3.011	0.920	12.470	55.100	0.049	0.118	70.640
180	15.380	34.630	2.875	1.220	15.970	50.400	0.033	0.062	65.280
1000	4.470	34.550	1.933	4.650	39.820	26.700			

Station No : 35
 Date : 22/03/91 Heure (GMT) : 09h 30'
 Latitude : 8° 0' N Longitude : 166° 13' E
 air sec/hum. : 28° 1 / 25° 6 vent dir./vit. : 70° / 16 kts fond 5130 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	28.320	34.130	4.364	0.050	0.001	97.500	0.102	0.074	41.960
30	28.310	34.130							
60	28.230	34.160	4.436	0.050	0.005	99.000	0.116	0.077	39.810
80	26.260	34.490	4.419	0.060	0.008	95.300	0.180	0.131	42.050
90	24.260	34.700	4.460	0.080	0.016	92.900	0.330	0.302	47.790
100	21.920	34.850	4.215	0.200	0.499	84.100	0.301	0.402	57.160
110	20.920	34.890	4.082	0.280	1.377	79.900	0.235	0.303	56.330
120	19.670	34.810	3.897	0.420	3.582	74.500	0.173	0.271	61.060
140	16.500	34.660	3.645	0.580	6.610	65.400	0.146	0.250	63.240
160	14.300	34.570	3.319	0.910	11.970	56.900	0.089	0.170	65.670
180	12.630	34.450	2.771	1.370	18.690	45.800	0.044	0.114	71.940
1000	4.660	34.550	1.785	4.180	41.000	24.800			

Station No : 37
 Date : 27/03/91 Heure (GMT) : 06h 00'
 Latitude : 5° 0' N Longitude : 165° 0' E
 air sec/hum. : 29° 8 / 25° 3 vent dir./vit. : 110° / 6 kts fond 4755 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch m	Ph m	%PHA
0	29.640	34.190	4.446	0.070	0.003	101.700	0.053	0.062	53.850
30	29.110	34.170	4.463	0.080	0.002	101.100	0.054	0.067	55.430
60	28.930	34.200	4.487	0.070	0.015	101.400	0.093	0.080	46.200
80	28.270	34.340	4.449	0.040	0.000	99.400	0.165	0.136	45.250
90	27.940	34.350	4.375	0.040	0.000	97.200	0.197	0.174	46.930
100	26.710	34.550	4.293	0.080	0.330	93.400	0.462	0.508	52.360
110	25.720	34.660							
120	24.660	34.740	3.835	0.240	3.068	80.500	0.244	0.315	56.410
140	21.830	34.890	3.591	0.480	7.290	71.500	0.053	0.134	71.550
160	20.450	34.940	3.376	0.660	9.450	65.500	0.018	0.045	72.110
180	18.750	34.780	3.320	0.770	11.420	62.300	0.004	0.036	90.920
1000	4.530	34.550	1.901	2.470	41.660	26.300	0.003	0.026	88.490

surtropac 14

Station No : 38
 Date : 28/03/91 Heure (GMT) : 04h 10'
 Latitude : 2° 0' N Longitude : 165° 0' E
 air sec/hum. : 29° 1 / 25° 5 vent dir./vit. : 80° / 11 kts fond 4080 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA
0	29.680	34.610	4.465	0.150	0.004	102.500	0.076	0.074	49.470
20	29.350	34.700	4.502	0.180	0.004	102.800	0.118	0.089	42.960
40	29.230	34.790	4.494	0.200	0.018	102.400	0.268	0.195	42.150
50	29.260	34.820	4.482	0.200	0.056	102.200	0.419	0.296	41.440
60	29.300	34.850	4.458	0.200	0.155	101.800	0.505	0.359	41.580
70	29.360	34.900	4.424	0.200	0.212	101.100	0.477	0.489	50.590
80	29.320	34.990	4.444	0.240	0.264	101.600	0.508	0.502	49.720
90	29.210	35.080	4.378	0.270	0.531	99.900	0.477	0.489	50.590
100	29.070	35.190	4.301	0.340	0.905	98.000	0.460	0.408	47.010
120	28.720	35.220	4.077	0.410	1.501	92.300	0.127	0.179	58.510
140	26.620	35.270	3.798	0.580	6.580	82.800	0.076	0.124	61.850
1000	4.720	34.550	2.336	4.100	39.440	32.400	0.007	0.025	77.910

Station No : 39
 Date : 28/03/91 Heure (GMT) : 17h 40'
 Latitude : 0° 0' N Longitude : 165° 0' E
 air sec/hum. : 28° 8 / 25° 9 vent dir./vit. : 50° / 14 kts fond 4385 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA
0	29.760	34.470	4.329	0.120	0.019	99.400	0.108	0.092	46.150
20	29.780	34.490	4.290	0.110	0.016	98.600	0.114	0.078	40.480
40	29.780	34.670	4.280	0.150	0.020	98.400	0.168	0.150	47.180
50	29.770	34.680	4.339	0.180	0.017	99.800	0.181	0.162	47.240
60	29.690	34.820	4.310	0.160	0.019	99.000	0.229	0.185	44.680
70	29.540	34.900	4.341	0.180	0.090	99.500	0.311	0.234	42.920
80	29.450	34.950	4.231	0.220	0.220	96.900	0.320	0.271	45.780
90	29.360	34.990	4.251	0.250	0.453	97.200	0.233	0.208	47.160
100	29.170	35.120	4.303	0.300	1.022	98.200	0.124	0.140	52.980
120	24.860	35.280	3.677	0.680	7.830	77.700	0.064	0.128	66.510
140	23.080	35.280	3.089	0.850	10.840	63.100	0.070	0.159	69.450
1000	4.590	34.550	2.265	4.320	39.760	31.400	0.005	0.031	86.710

Station No : 43
 Date : 31/03/91 Heure (GMT) : 04h 00'
 Latitude : 1° 58' S Longitude : 164° 53' E
 air sec/hum. : 29° 1 / 26° 7 vent dir./vit. : 110° / 7 kts fond 4455 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA
0	30.550	35.290	4.449	0.250	0.778	104.100	0.146	0.102	41.170
20	29.740	35.250	4.440	0.250	0.484	102.400	0.218	0.149	40.590
40	29.460	35.260	4.602	0.270	0.667	105.600	0.395	0.250	38.740
50	29.370	35.320	4.555	0.280	1.001	104.400	0.485	0.262	35.120
60	29.340	35.390	4.280	0.310	1.384	98.000	0.477	0.377	44.160
70	29.230	35.430	4.170	0.370	2.010	95.400	0.480	0.462	49.020
80	29.220	35.440	4.260	0.390	2.105	97.400	0.389	0.382	49.560
90	29.210	35.440	4.246	0.400	2.134	97.100	0.340	0.314	48.000
100	29.190	35.440	4.306	0.400	2.185	98.400	0.277	0.279	50.130
120	29.150	35.450	4.235	0.420	2.311	96.700	0.217	0.229	51.360
140	27.250	35.330	3.923	0.620	6.180	86.600	0.051	0.094	64.880
1000	4.560	34.550	2.153	4.510	43.740	29.800	0.003	0.021	86.050

surtropac 14

Station No : 44

Date : 03/04/91 Heure (GMT) : 06h 00'

Latitude : 5° 0' S Longitude : 165° 0' E

air sec/hum. : 27° 2 / 25° 1 vent dir./vit. : 270° / 19 kts fond 2400 m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch _m	Ph _m	%PHA
0	29.970	34.850	4.437	0.180	0.020	102.500	0.118	0.097	45.000
20	29.950	34.850	4.469	0.220	0.020	103.200	0.123	0.101	45.250
40	29.870	34.840	4.240	0.210	0.010	97.800	0.148	0.125	45.900
50	29.750	34.800	4.482	0.200	0.000	103.100	0.149	0.134	47.370
60	29.710	34.810	4.461	0.190	0.030	102.500	0.186	0.150	44.660
70	29.670	34.810	4.474	0.180	0.080	102.800	0.218	0.180	45.210
80	29.620	34.860	4.412	0.220	0.120	101.300	0.318	0.235	42.530
90	29.620	35.310	4.297	0.360	1.820	98.900	0.366	0.321	46.660
100	29.630	34.490	4.287	0.420	2.470	98.200	0.340	0.332	49.410
120	29.210	35.520	4.217	0.500	3.700	96.500	0.241	0.298	55.270
140	28.660	35.470	4.092	0.580	5.640	92.700	0.183	0.228	55.440
1000	4.490	35.530	2.690	4.030	37.940	37.200	0.002	0.026	93.080

Surtropac 14

Caractéristiques des traits : WP 2
vertical
200 microns

No_sta	Position (degré, minutes)		date		h. loc. (=TU+11)	Notrait	angle (degré)	long. filée (m)	Z max / min (m)		vol. filtré (m ³)	pds_sec (mg)	%pssc	
11	-10.00	165.00	15	3	1991	12.0	WPv 1	20	532	500	0	223.5	307.5	84.4
12	-9.00	165.00	15	3	1991	21.5	WPv 2	10	508	500	0	192.6	332.8	82.8
14	-7.00	165.00	16	3	1991	16.1	WPv 3	0	500	500	0	214.2	238.0	77.0
15	-6.00	165.00	17	3	1991	1.1	WPv 4	30	577	500	0	257.5	311.2	80.0
16	-5.00	165.00	17	3	1991	9.9	WPv 5	30	577	500	0	224.1	200.1	75.3
17	-4.00	165.00	17	3	1991	18.9	WPv 6	0	500	500	0	183.2	129.3	81.0
18	-3.00	165.00	18	3	1991	3.6	WPv 7	0	500	500	0	175.5	178.1	78.3
20	-2.00	165.00	18	3	1991	14.9	WPv 8	0	500	500	0	196.0	216.6	86.3
22	-1.00	165.00	19	3	1991	1.1	WPv 9	0	500	500	0	183.9	291.8	81.8
24	0.00	165.00	19	3	1991	12.1	WPv 10	0	500	500	0	215.5	249.9	84.0
26	1.00	165.00	19	3	1991	23.1	WPv 11	0	500	500	0	215.5	786.5	79.8
30	3.00	165.00	20	3	1991	19.5	WPv 12	10	508	500	0	228.2	161.1	80.7
31	4.00	165.00	21	3	1991	5.0	WPv 13	20	532	500	0	176.5	304.8	80.0
32	5.00	165.00	21	3	1991	14.1	WPv 14	0	500	500	0	170.4	237.9	79.0
33	6.00	165.00	21	3	1991	21.7	WPv 15	20	532	500	0	292.9	387.8	85.7
34	7.00	165.00	22	3	1991	8.3	WPv 16	30	577	500	0	262.2	333.7	82.3

Surtropac 14 :

Valeurs des biomasses par mètre carré : WP 2
vertical
200 microns

No_sta	Position (degrés, minutes)		date		No trait	Zmax (m)	pds_sec (mg/m ³)	pssc (mg/m ³)	pds_sec (mg/m ²)	pssc (mg/m ²)	
11	-10.00	165.00	15	3	1991	WPv 1	500	1.38	1.16	688	581
12	-9.00	165.00	15	3	1991	WPv 2	500	1.73	1.43	864	715
14	-7.00	165.00	16	3	1991	WPv 3	500	1.11	0.86	556	428
15	-6.00	165.00	17	3	1991	WPv 4	500	1.21	0.97	604	483
16	-5.00	165.00	17	3	1991	WPv 5	500	0.89	0.67	446	336
17	-4.00	165.00	17	3	1991	WPv 6	500	0.71	0.57	353	286
18	-3.00	165.00	18	3	1991	WPv 7	500	1.01	0.79	507	397
20	-2.00	165.00	18	3	1991	WPv 8	500	1.11	0.95	553	477
22	-1.00	165.00	19	3	1991	WPv 9	500	1.59	1.30	793	649
24	0.00	165.00	19	3	1991	WPv 10	500	1.16	0.97	580	487
26	1.00	165.00	19	3	1991	WPv 11	500	3.65	2.91	1825	1456
30	3.00	165.00	20	3	1991	WPv 12	500	0.71	0.57	353	285
31	4.00	165.00	21	3	1991	WPv 13	500	1.73	1.38	863	691
32	5.00	165.00	21	3	1991	WPv 14	500	1.40	1.10	698	551
33	6.00	165.00	21	3	1991	WPv 15	500	1.32	1.13	662	567
34	7.00	165.00	22	3	1991	WPv 16	500	1.27	1.05	636	524

Surtropac 15 : 18 juillet - 15 août 1991



2.1 - Illustrations : radiale aller

Coupes verticales de température et salinité: (0-200m); (0-400m)

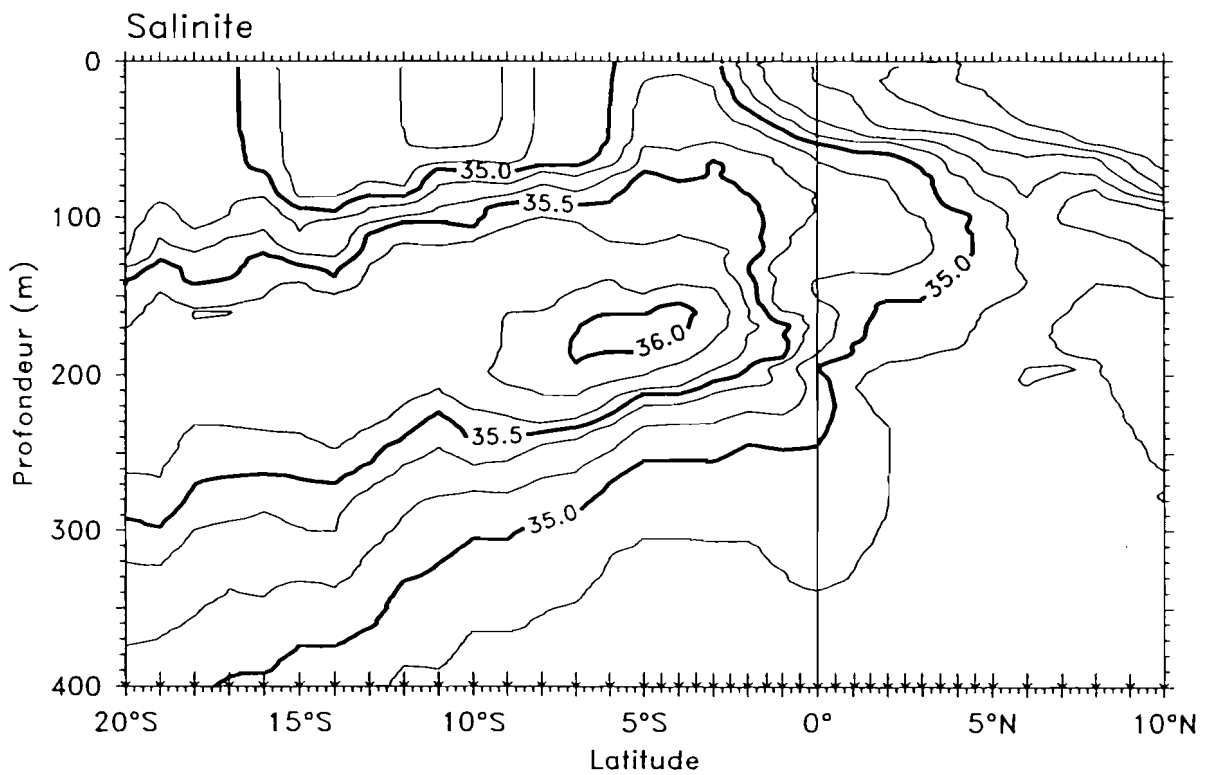
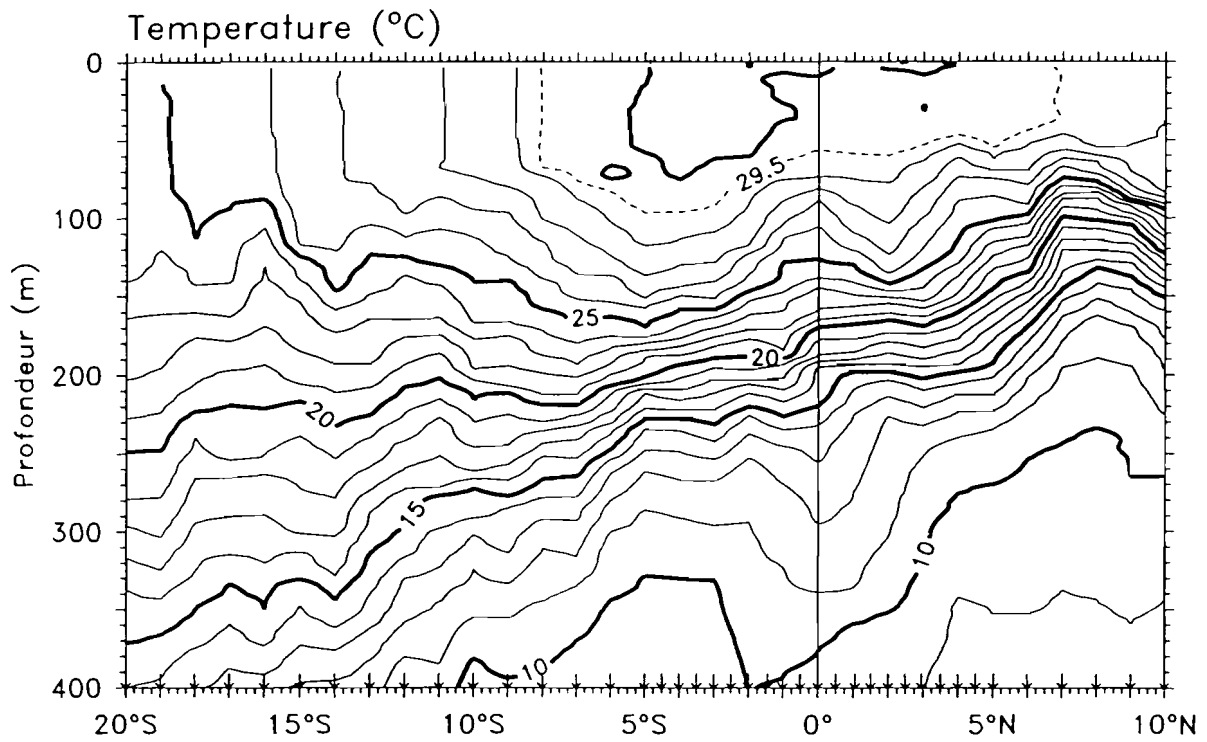
Coupes verticales de sels nutritifs: NO_{23} , PO_4 (0-200m)

Coupes verticales d'oxygène et chlorophylle: (0-200m)

radiale retour

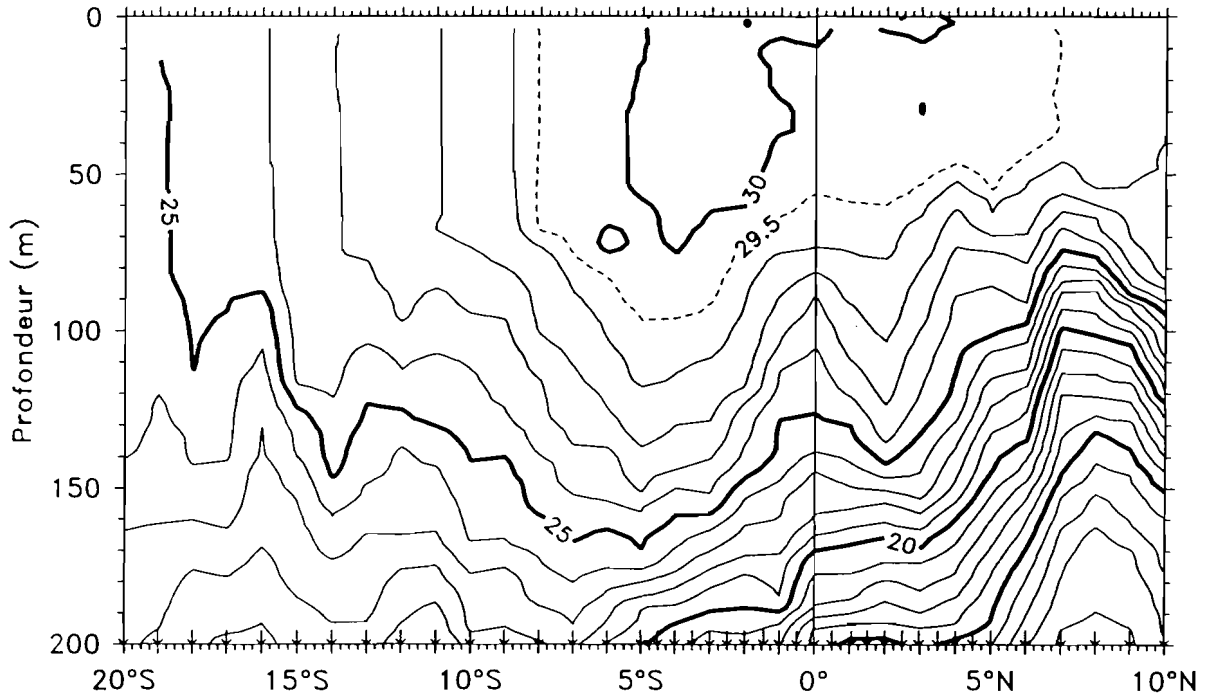
Coupes verticales de température et salinité: (0-200m); (0-400m)

SURTROPAC15 18-28/07/91 St 1-41 Aller

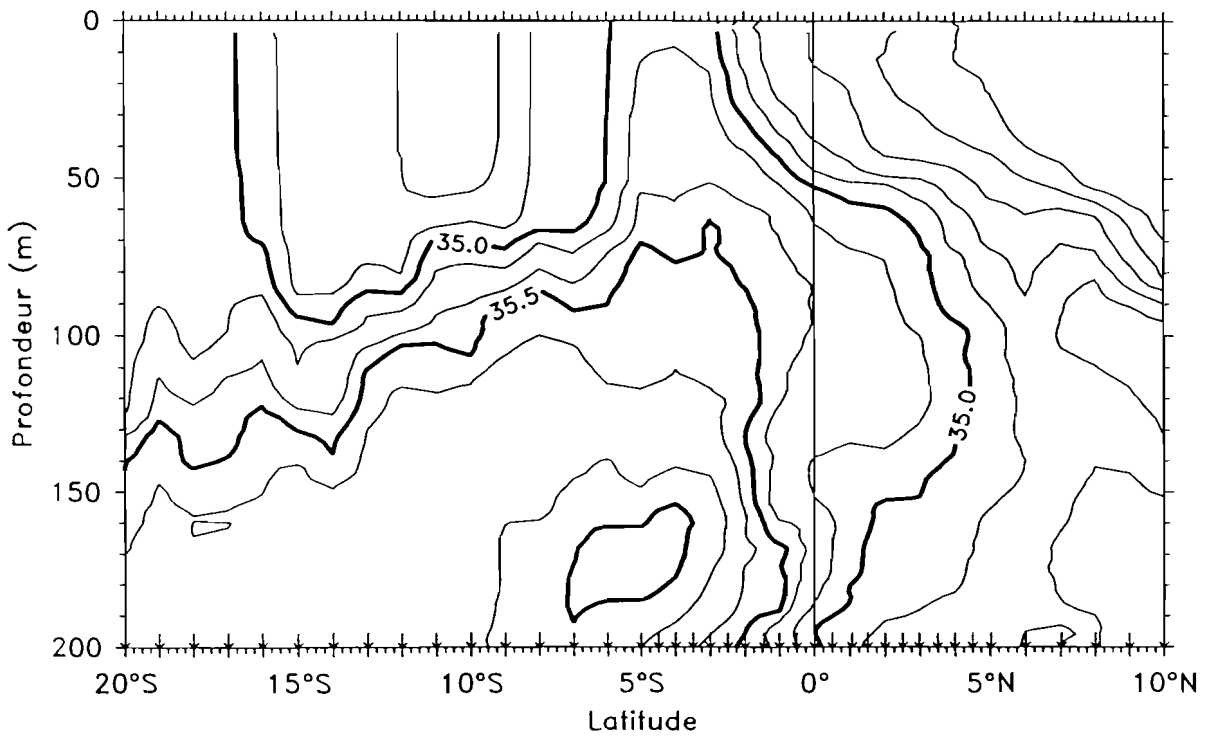


SURTROPAC15 18-28/07/91 St 1-41 Aller

Temperature (°C)

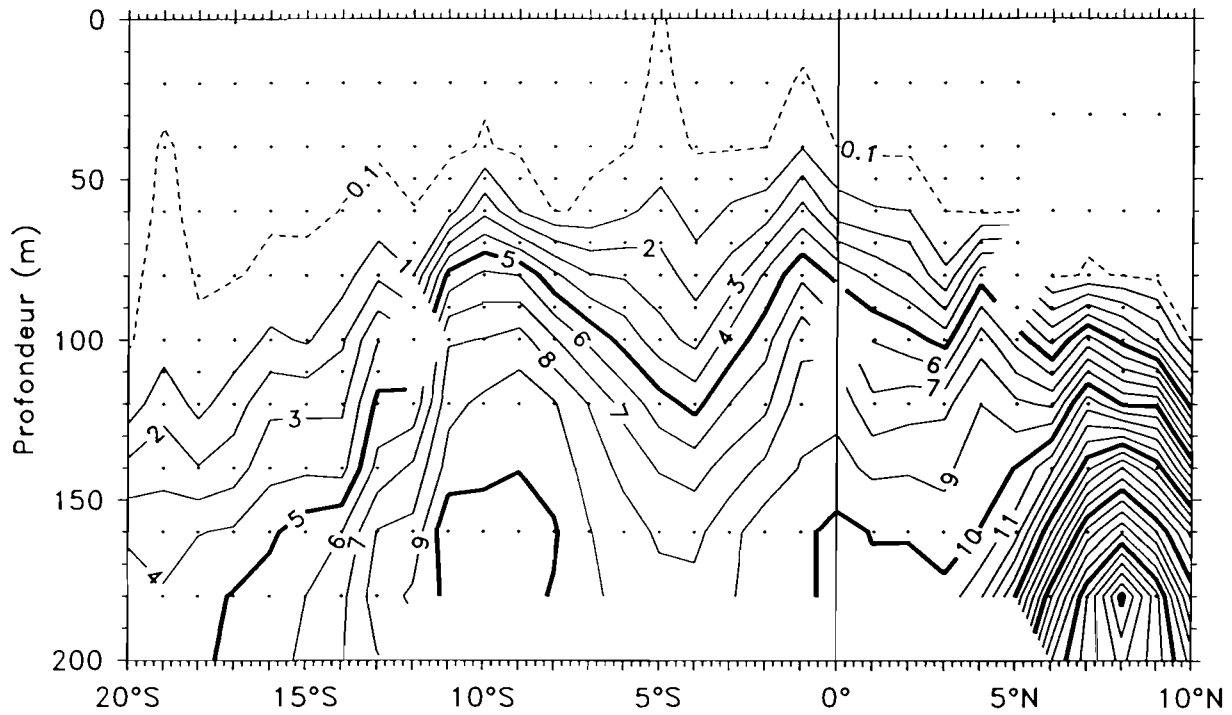


Salinite

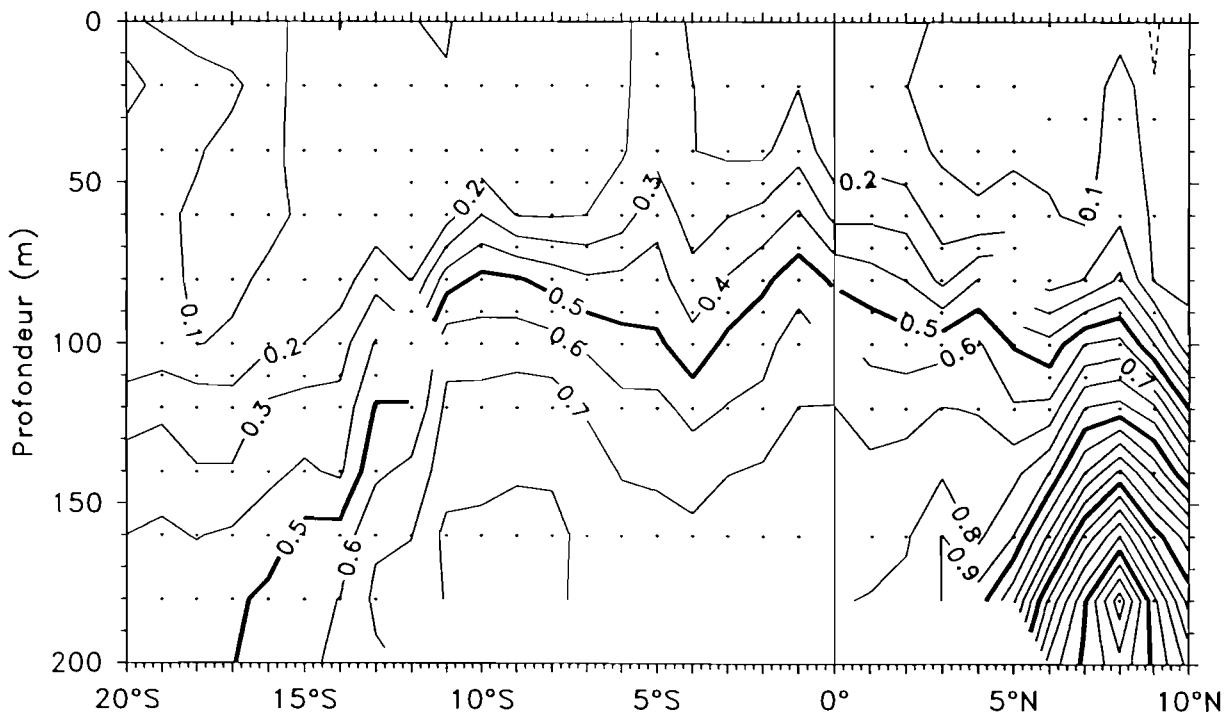


SURTROPAC15 18-28/07/91 St 1-41 Aller

Nitrate+Nitrite (μM)

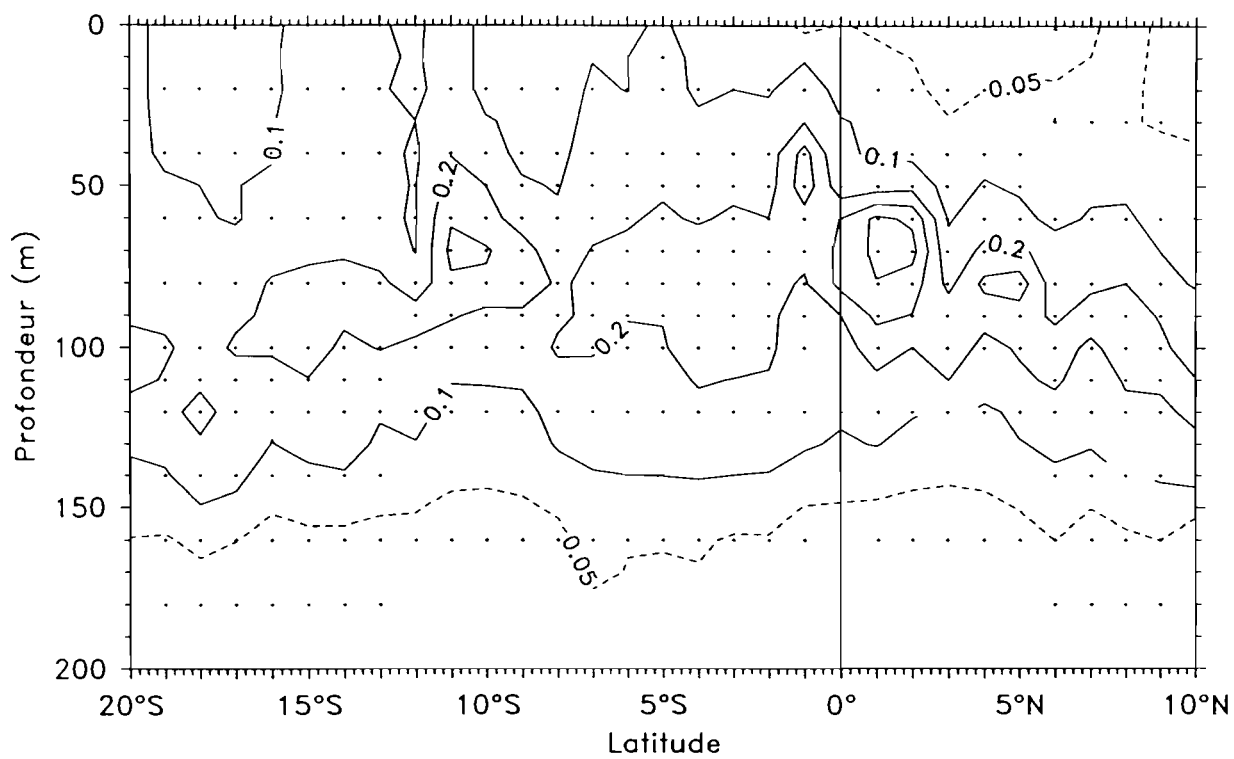


Phosphate (μM)



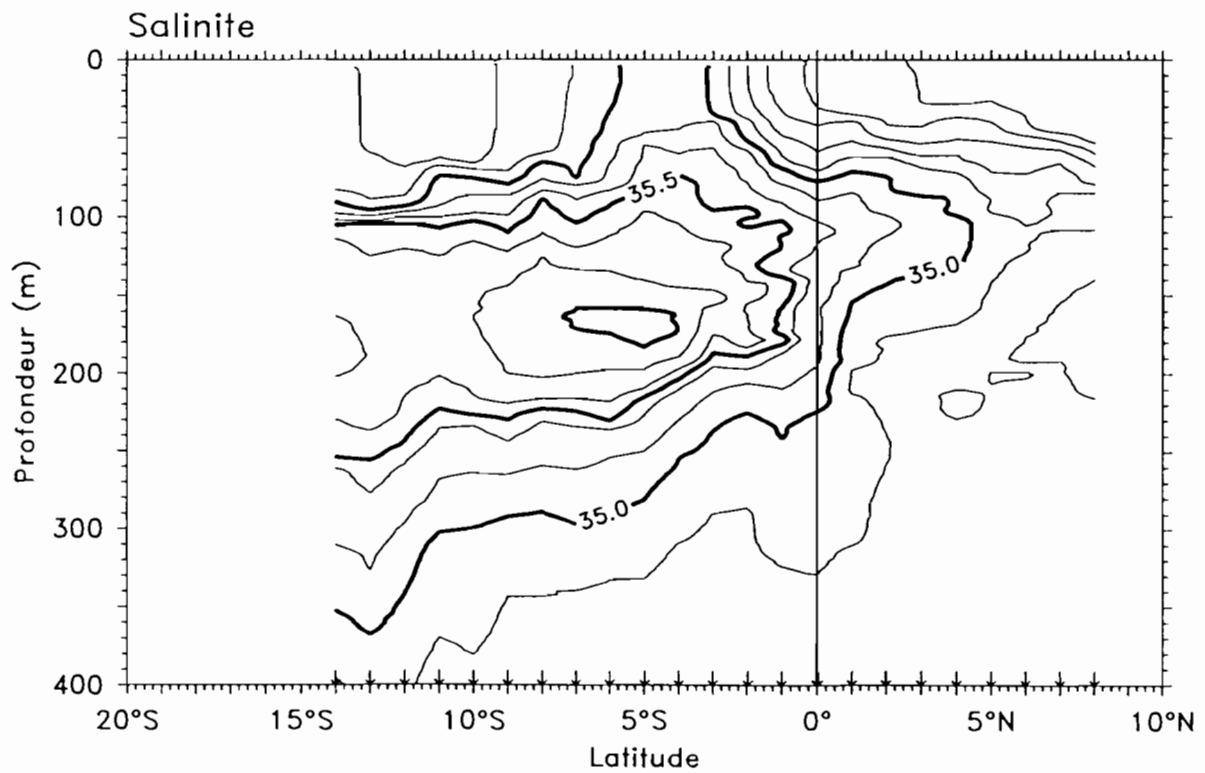
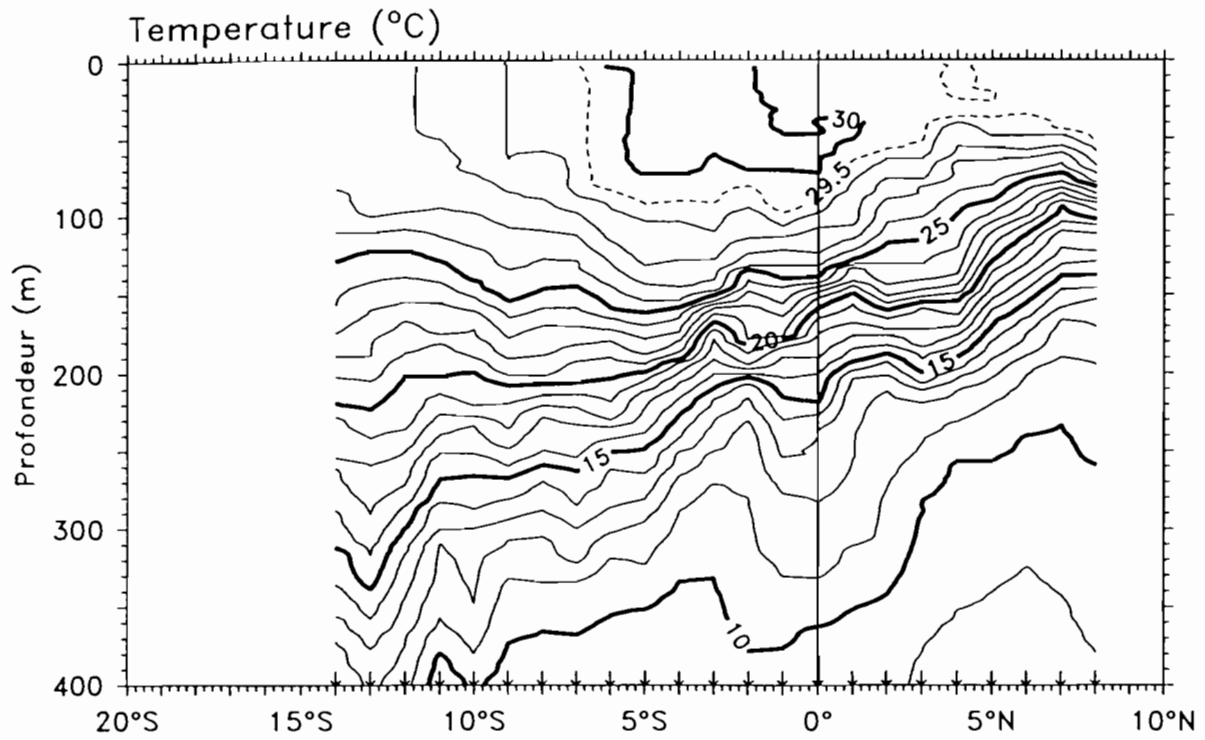
SURTROPAC15 18-28/07/91 St 1-41 Aller

Chlorophylle ($\mu\text{g/l}$)

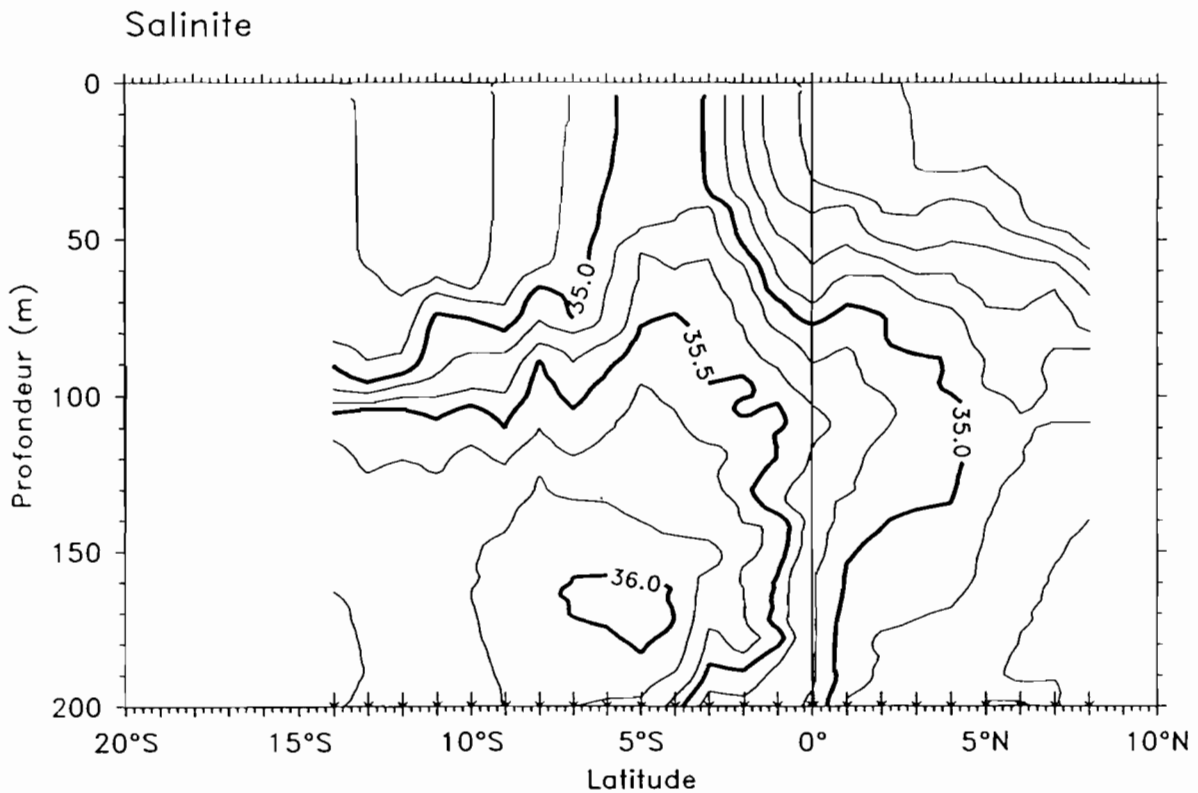
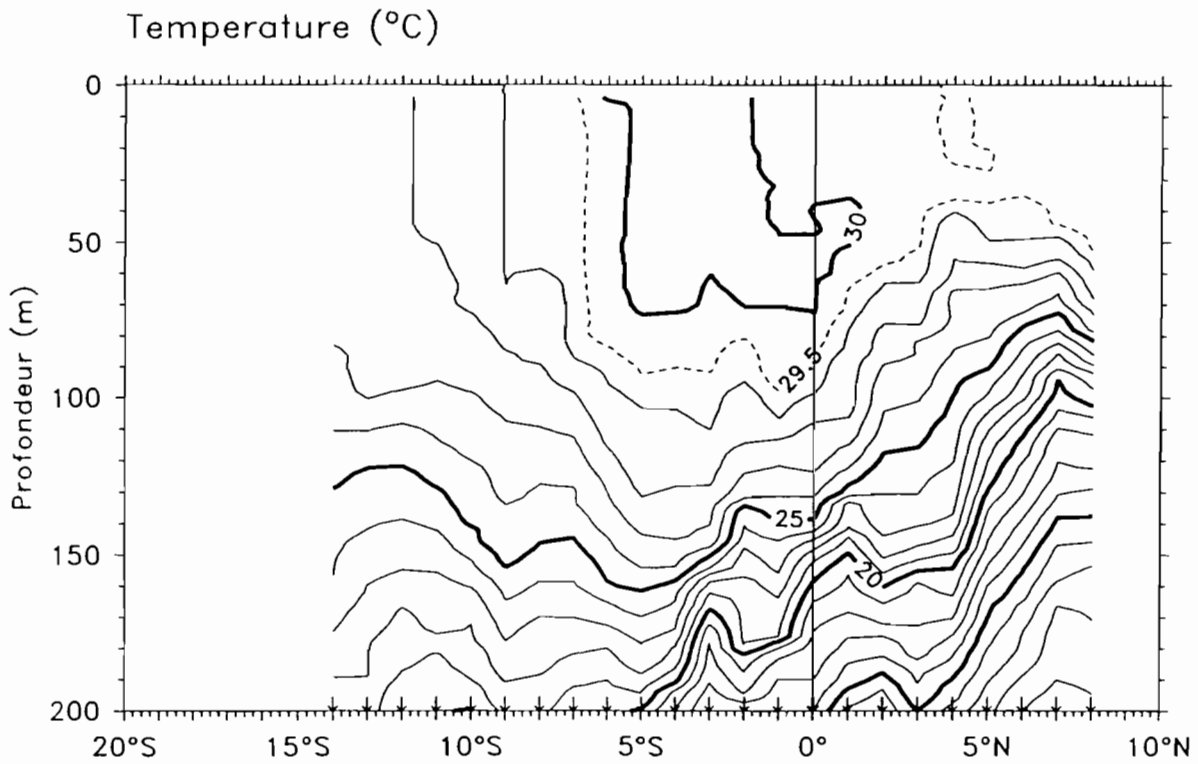


SURTROPAC15 01-07/08/91 St 42-64/451-504

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SURTROPAC15 01-07/08/91 St 42-64/451-504



2.2 - Tableaux de données

Hydrologie
Sels nutritifs
Oxygène
Chlorophylle

surtropac 15

Station No : 1
 Date : 19/07/91 Heure (GMT) : 10h 45'
 Latitude : 20° 0' S Longitude : 165° 0' E
 air sec/hum. : 21°4 / 17°0 vent dir./vit. : 140° / 18 kts fond 3050 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch_m	Ph_m	%PHA
0	24.900	35.130		0.110	0.012		0.139	0.079	36.350
20	24.900	35.130		0.310	0.004		0.131	0.082	38.490
40	24.900	35.130		0.100	0.000		0.130	0.080	38.080
60	24.910	35.130		0.130	0.008		0.114	0.082	41.980
80	24.910	35.130		0.110	0.016		0.126	0.083	39.530
100	24.810	35.130		0.110	0.023		0.241	0.170	41.340
110	24.800	35.140		0.120	0.031		0.243	0.168	40.960
120	24.780	35.150		0.270	0.228		0.141	0.106	42.970
140	24.070	35.480		0.340	2.354		0.077	0.117	60.420
160	23.230	35.550		0.400	3.873		0.048	0.112	69.850
180	22.840	35.610		0.470	4.771		0.038	0.099	72.080

Station No : 2
 Date : 19/07/91 Heure (GMT) : 18h 32'
 Latitude : 19° 0' S Longitude : 165° 0' E
 air sec/hum. : 21°6 / 17°1 vent dir./vit. : 150° / 15 kts fond 2770 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch_m	Ph_m	%PHA
0	24.920	35.070		0.090	0.026		0.059	0.049	45.500
20	24.930	35.130		0.120	0.038		0.066	0.055	45.430
40	24.950	35.160		0.240	0.178		0.080	0.065	44.950
60	24.930	35.170		0.090	0.172		0.146	0.078	34.750
80	24.910	35.170		0.120	0.294		0.155	0.114	42.370
100	24.680	35.290		0.140	0.534		0.221	0.224	50.350
110	24.500	35.400		0.200	1.027		0.191	0.254	57.110
120	23.980	35.530		0.280	2.177		0.133	0.203	60.350
140	23.470	35.610		0.400	2.824		0.084	0.132	61.170
160	23.050	35.660		0.420	3.611		0.042	0.092	68.610
180	22.640	35.650		0.420	3.868		0.029	0.048	62.010

Station No : 3
 Date : 20/07/91 Heure (GMT) : 01h 32'
 Latitude : 18° 0' S Longitude : 165° 0' E
 air sec/hum. : 22°9 / 17°0 vent dir./vit. : 150° / 20 kts fond 4230 m

Z	T	S	O ₂	PO ₄	NO _{2,3}	%satur.O ₂	Ch_m	Ph_m	%PHA
0				0.070	0.026		0.080	0.055	40.830
20	25.130	35.050		0.140	0.032		0.078	0.054	41.000
40	25.110	35.060		0.090	0.017		0.084	0.058	40.750
60	25.110	35.070		0.090	0.032		0.108	0.065	37.530
80	25.130	35.090		0.090	0.038		0.128	0.067	34.300
100	25.090	35.120		0.090	0.038		0.153	0.107	41.160
110	25.080	35.120		0.090	0.015		0.157	0.152	49.210
120	25.050	35.170		0.290	0.168		0.293	0.223	43.190
140	24.280	35.400		0.280	1.776		0.163	0.227	58.240
160	23.000	35.550		0.400	4.219		0.063	0.120	65.450
180	22.140	35.590		0.440	4.765		0.029	0.039	57.480

surtropac 15

Station No : 4
 Date : 20/07/91 Heure (GMT) : 08h 13'
 Latitude : 17° 0' S Longitude : 165° 0' E
 air sec/hum. : 23°1 / 18°7 vent dir./vit. : 150° / 21 kts fond 5000 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch_m	Ph_m	%PHA
1	25.200	35.090		0.050	0.013		0.092	0.057	38.090
20	25.220	35.090		0.140	0.009		0.096	0.056	36.710
40	25.230	35.090		0.070	0.009		0.089	0.060	40.070
60	25.230	35.090		0.070	0.003		0.083	0.058	40.800
80	25.010	35.150		0.070	0.026		0.148	0.070	32.180
100	24.930	35.180		0.070	0.062		0.221	0.177	44.520
110	24.750	35.330		0.160	0.812		0.164	0.191	53.680
120	24.380	35.430		0.240	1.554		0.118	0.185	61.110
140	24.190	35.510		0.290	2.256		0.124	0.180	59.170
160	23.040	35.590		0.420	4.149		0.051	0.122	70.430
180	21.850	35.590		0.490	5.228		0.020	0.034	63.520

Station No : 5
 Date : 20/07/91 Heure (GMT) : 15h 25'
 Latitude : 16° 0' S Longitude : 165° 0' E
 air sec/hum. : 23°5 / 19°1 vent dir./vit. : 120° / 18 kts fond 3075 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch_m	Ph_m	%PHA
0				0.050	0.028		0.076	0.051	40.120
20	25.810	34.900		0.090	0.033		0.078	0.054	41.000
40	25.820	34.900		0.070	0.028		0.086	0.060	41.260
60	25.600	34.960		0.060	0.041		0.137	0.091	39.810
80	25.400	35.140		0.120	0.050		0.215	0.216	50.130
100	24.460	35.380		0.160	1.099		0.218	0.259	54.240
110	23.860	35.450		0.270	2.353		0.148	0.221	59.910
120	23.420	35.490		0.340	3.090		0.098	0.177	64.520
140	22.760	35.550		0.380	3.860		0.053	0.114	68.280
160	22.070	35.590		0.440	4.840		0.024	0.036	59.490
180	21.320	35.600		0.530	5.428		0.009	0.029	76.090

Station No : 6
 Date : 20/07/91 Heure (GMT) : 22h 33'
 Latitude : 15° 0' S Longitude : 165° 0' E
 air sec/hum. : 24°9 / 22°2 vent dir./vit. : 130° / 17 kts fond 4000 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch_m	Ph_m	%PHA
0	26.890	34.650		0.150	0.058		0.142	0.070	33.100
20	26.880	34.650		0.140	0.050		0.140	0.100	41.750
40	26.880	34.650		0.150	0.039		0.145	0.113	43.760
60	26.890	34.650		0.120	0.043		0.151	0.105	41.200
80	26.840	34.750		0.120	0.054		0.225	0.176	43.860
100	26.510	35.090		0.170	0.574		0.277	0.267	49.060
110	24.770	35.250		0.260	1.099		0.200	0.252	55.810
120	24.790	35.450		0.370	2.986		0.147	0.224	60.390
140	24.110	35.540		0.420	3.725		0.093	0.147	61.360
160	22.920	35.650		0.560	5.871		0.040	0.090	68.980
180	22.420	35.720		0.590	6.006		0.026	0.038	59.370

surtropac 15

Station No : 7
 Date : 21/07/91 Heure (GMT) : 05h 35'
 Latitude : 14° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°2 / 24°0 vent dir./vit. : 110° / 13 kts fond 2200 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0				0.090	0.042		0.130	0.071	35.230
20	26.980	34.610		0.100	0.042		0.128	0.069	35.150
40	26.980	34.610		0.100	0.054		0.135	0.092	40.700
60	26.960	34.610		0.110	0.050		0.154	0.098	38.980
80	26.960	34.690		0.120	0.218		0.250	0.167	40.030
100	26.500	35.210		0.240	1.689		0.163	0.219	57.340
110	26.340	35.230		0.290	2.234		0.147	0.201	57.700
120	26.030	35.300		0.300	2.405		0.146	0.196	57.320
140	25.330	35.470		0.320	2.814		0.101	0.138	57.790
160	23.790	35.660		0.530	5.967		0.038	0.083	68.800
180	22.630	35.740		0.590	6.555		0.023	0.039	63.010

Station No : 8
 Date : 21/07/91 Heure (GMT) : 12h 24'
 Latitude : 13° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°1 / 25°8 vent dir./vit. : 110° / 17 kts fond 2500 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.090	34.620		0.120	0.019		0.109	0.080	42.500
20	27.100	34.620		0.120	0.016		0.110	0.077	41.160
40	27.110	34.620		0.120	0.025		0.140	0.085	37.660
60	27.110	34.620		0.120	0.054		0.119	0.076	39.050
80	26.590	35.210		0.310	2.236		0.241	0.270	52.900
100	26.320	35.310		0.370	3.407		0.214	0.270	55.840
110	25.490	35.490		0.510	5.428		0.137	0.229	62.650
120	24.990	35.550		0.550	5.837		0.094	0.195	67.560
140	24.450	35.610		0.600	6.547		0.075	0.126	62.580
160	23.120	35.680		0.720	8.636		0.031	0.054	63.450
180	22.340	35.720		0.750	8.938		0.012	0.036	75.820

Station No : 9
 Date : 21/07/91 Heure (GMT) : 19h 30'
 Latitude : 12° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°2 / 26°0 vent dir./vit. : 130° / 20 kts fond 3030 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.360	34.590		0.100	0.027		0.073	0.058	44.510
20	27.370	34.590		0.110	0.012		0.066	0.060	47.660
40	27.380	34.590		0.110	0.023		0.069	0.062	47.260
50	27.380	34.590		0.120	0.035		0.084	0.057	40.430
60	27.380	34.590		0.120	0.031		0.070	0.061	46.590
70	27.380	34.590		0.110	0.031		0.071	0.064	47.550
80	27.370	34.610		0.110	0.031		0.104	0.077	42.450
90	27.290	34.920		0.180	0.262		0.277	0.222	44.420
100	26.900	35.380					0.169	0.151	47.250
120	25.360	35.620		0.470	4.700		0.149	0.211	58.620
160	23.330	35.740		0.670	7.818		0.043	0.080	64.820

surtropac 15

Station No : 10
 Date : 22/07/91 Heure (GMT) : 02h 00'
 Latitude : 11° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°2 / 26°0 vent dir./vit. : 110° / 20 kts fond 3150 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.960	34.580		0.090	0.031		0.164	0.085	34.140
20	27.960	34.580		0.100	0.048		0.160	0.085	34.660
40	27.950	34.580		0.110	0.035		0.212	0.099	31.850
50	27.960	34.590		0.110	0.050		0.248	0.121	32.780
60	27.970	34.600		0.110	0.050		0.314	0.129	29.220
70	28.020	34.820		0.200	1.188		0.346	0.216	38.380
80	27.470	35.270		0.510	7.148		0.299	0.348	53.810
90	26.990	35.370		0.610	7.189		0.214	0.286	57.210
100	26.380	35.450		0.680	8.050		0.120	0.211	63.780
120	25.330	35.600		0.770	9.321		0.052	0.074	58.830
160	22.690	35.730		0.870	11.768		0.011	0.023	66.780

Station No : 11
 Date : 22/07/91 Heure (GMT) : 09h 00'
 Latitude : 10° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°8 / 25°6 vent dir./vit. : 100° / 16 kts fond 3330 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.400	34.450		0.130	0.039		0.064	0.075	54.010
20	28.400	34.450		0.130	0.046		0.067	0.079	54.020
40	28.330	34.470		0.100	0.037		0.124	0.096	43.610
50	28.280	34.700		0.180	0.847		0.208	0.214	50.700
60	28.130	35.020		0.310	2.841		0.232	0.267	53.460
70	27.650	35.240		0.490	5.540		0.324	0.402	55.390
80	27.340	35.310		0.530	6.203		0.291	0.396	57.650
90	27.000	35.420		0.620	7.648		0.160	0.298	65.050
100	26.630	35.430		0.650	7.982		0.135	0.233	63.300
120	25.820	35.570		0.740	9.281		0.072	0.132	64.870
160	24.330	35.680		0.820	10.355		0.018	0.045	71.580

Station No : 12
 Date : 22/07/91 Heure (GMT) : 15h 41'
 Latitude : 9° 0' S Longitude : 165° 0' E
 air sec/hum. : 28°1 / 26°0 vent dir./vit. : 120° / 17 kts fond 2400 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.820	34.580		0.110	0.046		0.081	0.064	44.100
20	28.830	34.580		0.110	0.023		0.074	0.074	49.990
40	28.840	34.580		0.130	0.027		0.077	0.076	49.650
50	28.780	34.580		0.110	0.037		0.100	0.088	46.750
60	28.690	34.610		0.140	0.147		0.156	0.151	49.130
70	28.320	34.980		0.270	2.364		0.246	0.286	53.840
80	27.650	35.340		0.520	6.341		0.269	0.316	54.030
90	27.320	35.550		0.660	8.423		0.182	0.252	58.040
100	26.580	35.540		0.670	8.930		0.126	0.193	60.490
120	26.010	35.760		0.760	9.894		0.057	0.108	65.420
160	24.100	35.790		0.840	10.697		0.010	0.039	78.890

surtropac 15

Station No : 13
 Date : 22/07/91 Heure (GMT) : 22h 35'
 Latitude : 8° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°7 / 25°8 vent dir./vit. : 110° / 23 kts fond 3900 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.570	34.910		0.200	0.037		0.081	0.067	45.300
20	29.580	34.920		0.200	0.027		0.074	0.080	51.740
40	29.590	34.920		0.220	0.039		0.083	0.062	42.880
50	29.600	34.920		0.200	0.020		0.090	0.073	44.940
60	29.650	34.950		0.200	0.043		0.100	0.080	44.570
70	29.660	34.970		0.200	0.081		0.132	0.101	43.410
80	29.060	35.560		0.450	3.765		0.184	0.199	52.010
90	28.440	35.490		0.600	6.239		0.175	0.255	59.210
100	28.220	35.570		0.650	7.161		0.228	0.244	51.650
120	27.080	35.660		0.780	9.438		0.145	0.239	62.240
160	24.820	35.740		0.850	10.376		0.030	0.043	59.030

Station No : 14
 Date : 23/07/91 Heure (GMT) : 05h 18'
 Latitude : 7° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°8 / 25°6 vent dir./vit. : 70° / 6 kts fond 3700 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.580	34.750		0.200	0.035		0.102	0.055	34.950
20	29.540	34.760		0.190	0.041		0.110	0.055	33.350
40	29.520	34.760		0.180	0.020		0.126	0.061	32.630
50	29.530	34.770		0.180	0.033		0.146	0.062	29.640
60	29.580	34.810		0.180	0.073		0.173	0.103	37.160
70	29.570	35.010		0.240	0.671		0.210	0.139	39.860
80	29.280	35.290		0.400	2.548		0.223	0.168	42.910
90	28.870	35.450		0.510	4.471		0.227	0.193	46.030
100	28.500	35.540		0.590	5.797		0.210	0.210	49.990
120	27.420	35.670		0.700	8.223		0.164	0.212	56.440
160	25.810	35.890		0.770	8.981		0.085	0.142	62.630

Station No : 15
 Date : 23/07/91 Heure (GMT) : 12h 00'
 Latitude : 6° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°7 / 25°2 vent dir./vit. : 180° / 4 kts fond 3600 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.860	34.970		0.150	0.040		0.086	0.065	42.780
20	29.830	34.970		0.170	0.040		0.095	0.063	40.080
40	29.820	34.970		0.170	0.085		0.120	0.067	35.680
50	29.850	34.990		0.200	0.040		0.140	0.079	36.190
60	30.130	35.160		0.190	0.349		0.185	0.117	38.770
70	29.980	35.410		0.330	1.679		0.232	0.169	42.120
80	29.450	35.470		0.450	3.092		0.212	0.184	46.490
90	29.200	35.490		0.480	3.736		0.203	0.203	50.020
100	28.960	35.510		0.530	4.603		0.182	0.215	54.120
120	28.150	35.610		0.620	6.822		0.166	0.191	53.450
160	24.920	36.010		0.730	8.558		0.047	0.085	64.630

surtropac 15

Station No : 16
 Date : 23/07/91 Heure (GMT) : 18h 48'
 Latitude : 5° 0' S Longitude : 165° 0' E
 air sec/hum. : 28°0 / 25°2 vent dir./vit. : 190° / 11 kts fond 2350 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.940	35.220		0.310	0.132		0.113	0.075	39.650
20	30.080	35.300		0.270	0.143		0.124	0.078	38.410
40	30.150	35.360		0.270	0.194		0.146	0.090	38.280
50	30.140	35.500		0.330	0.938		0.189	0.136	41.940
60	29.930	35.550		0.480	1.720		0.228	0.172	42.990
70	29.780	35.560		0.420	2.233		0.202	0.196	49.230
80	29.700	35.550		0.430	2.398		0.214	0.203	48.670
90	29.470	35.570		0.450	2.894		0.200	0.222	52.670
100	29.380	35.570		0.530	3.108		0.185	0.227	55.130
120	28.580	35.610		0.660	5.551		0.132	0.174	56.820
160	25.440	35.970		0.740	7.858		0.049	0.098	66.560

Station No : 18
 Date : 24/07/91 Heure (GMT) : 03h 41'
 Latitude : 4° 0' S Longitude : 165° 0' E
 air sec/hum. : 29°8 / 25°5 vent dir./vit. : 40° / 4 kts fond 3350 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.600	35.120		0.170	0.023		0.069	0.038	35.230
20	30.320	35.290		0.200	0.029		0.088	0.053	37.880
40	30.250	35.290		0.190	0.018		0.102	0.051	33.480
50	30.230	35.290		0.200	0.023		0.135	0.073	34.860
60	30.220	35.340		0.200	0.104		0.178	0.122	40.670
70	30.160	35.430		0.240	0.582		0.272	0.171	38.620
80	30.040	35.480		0.300	1.227		0.283	0.189	40.040
90	29.900	35.510		0.360	1.713		0.269	0.197	42.200
100	29.680	35.560		0.390	2.150		0.266	0.197	42.460
120	28.640	35.620		0.550	4.297		0.189	0.221	53.910
160	25.950	36.050		0.710	7.587		0.056	0.109	66.130

Station No : 20
 Date : 24/07/91 Heure (GMT) : 11h 51'
 Latitude : 3° 0' S Longitude : 165° 0' E
 air sec/hum. : 29°0 / 25°2 vent dir./vit. : 80° / 4 kts fond 2650 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.130	35.190		0.140	0.017		0.077	0.057	42.610
20	30.150	35.230		0.180	0.040		0.102	0.085	45.250
40	30.140	35.290		0.180	0.054		0.116	0.098	45.660
50	30.140	35.330		0.200	0.169		0.173	0.144	45.420
60	30.170	35.500		0.310	1.213		0.227	0.196	46.380
70	29.910	35.500		0.360	1.956		0.257	0.221	46.250
80	29.590	35.470		0.430	2.426		0.260	0.258	49.810
90	29.550	35.510		0.440	2.647		0.234	0.269	53.520
100	29.140	35.560		0.550	4.583		0.241	0.260	51.960
120	28.630	35.570		0.610	6.242		0.148	0.216	59.220
160	24.630	35.940		0.800	8.818		0.042	0.082	66.350

surtropac 15

Station No : 22
 Date : 24/07/91 Heure (GMT) : 20h 24'
 Latitude : 2° 0' S Longitude : 164°57' E
 air sec/hum. : 29°4 / 26°0 vent dir./vit. : 60° / 6 kts fond 3000 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.050	34.730		0.140	0.023		0.077	0.045	36.740
20	30.070	34.760		0.140	0.028		0.079	0.061	43.510
40	30.280	35.160		0.160	0.026		0.130	0.066	33.750
50	30.230	35.300		0.190	0.030		0.139	0.094	40.300
60	30.010	35.490		0.300	0.266		0.198	0.165	45.360
70	29.390	35.510		0.420	2.750		0.239	0.225	48.410
80	28.950	35.490		0.490	4.449		0.237	0.253	51.660
90	28.710	35.500		0.530	5.360		0.212	0.266	55.630
100	28.640	35.540		0.560	5.494		0.219	0.280	56.100
120	27.980	35.470		0.610	6.433		0.213	0.300	58.480
160	24.300	35.550		0.830	10.011		0.050	0.083	62.510

Station No : 24
 Date : 25/07/91 Heure (GMT) : 06h 03'
 Latitude : 1° 0' S Longitude : 165° 0' E
 air sec/hum. : 29°7 / 26°0 vent dir./vit. : 70° / 2 kts fond m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.700			0.130	0.017		0.035	0.024	40.650
20	29.990			0.220	0.032		0.179	0.143	44.460
40	29.600			0.260	0.481		0.386	0.323	45.550
50	29.510			0.400	2.826		0.399	0.374	48.390
60	29.060			0.450	3.929		0.248	0.318	56.160
70	28.890			0.530	5.431		0.218	0.304	58.270
80	28.140			0.600	6.667		0.170	0.278	62.100
90	27.310			0.610	6.667		0.165	0.291	63.840
100	26.530			0.660	7.753		0.144	0.273	65.450
120	24.990			0.720	9.060		0.110	0.204	65.000
160	22.680			0.730	9.727		0.000	0.024	100.000

Station No : 26
 Date : 25/07/91 Heure (GMT) : 14h 08'
 Latitude : 0° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°4 / 26°3 vent dir./vit. : 0° / 2 kts fond 4400 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.020	34.400		0.110	0.008		0.054	0.014	20.540
20	29.930			0.100	0.018		0.055	0.042	43.610
40	29.920			0.110	0.010		0.080	0.063	44.010
50	29.870			0.110	0.012		0.116	0.077	39.850
60	29.270			0.240	0.751		0.306	0.280	47.790
70	28.990			0.340	2.578		0.321	0.363	53.110
80	28.580			0.460	4.130		0.344	0.349	50.330
90	27.110			0.620	7.136		0.180	0.279	60.810
100	26.420						0.151	0.203	57.370
120	25.300			0.710	8.944		0.099	0.155	61.160
160	21.840			0.820	10.688		0.020	0.026	56.380

surtropac 15

Station No : 28
 Date : 25/07/91 Heure (GMT) : 23h 28'
 Latitude : 1° 3' N Longitude : 165° 0' E
 air sec/hum. : 28°9 / 25°9 vent dir./vit. : 360° / 6 kts fond 4300 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.900	35.250		0.140	0.026		0.044	0.015	25.720
20	29.860	35.600		0.140	0.010		0.071	0.048	40.380
40	29.850	35.700		0.180	0.024		0.096	0.064	40.030
50	29.710	35.850		0.180	0.024		0.135	0.084	38.430
60	29.280	35.190		0.270	0.538		0.460	0.309	40.200
70	28.980	35.190		0.360	2.323		0.431	0.410	48.730
80	28.720	35.290		0.440	3.790		0.408	0.413	50.310
90	28.340	35.320		0.520	4.937		0.333	0.379	53.240
100	28.010	35.330		0.580	6.087		0.256	0.282	52.450
120	27.390	35.390		0.640	6.733		0.160	0.253	61.200
160	22.060	34.960		0.780	10.020		0.022	0.032	59.460

Station No : 30
 Date : 26/07/91 Heure (GMT) : 07h 30'
 Latitude : 2° 0' N Longitude : 165° 1' E
 air sec/hum. : 28°7 / 25°9 vent dir./vit. : 360° / 2 kts fond 4200 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.990	34.090		0.130	0.010		0.042	0.012	22.670
20	29.750	34.120		0.090	0.010		0.056	0.012	18.020
40	30.030	34.410		0.090	0.024		0.071	0.051	41.880
50	29.540	35.000		0.200	0.000		0.173	0.121	41.040
60	29.240	35.160		0.280	0.643		0.418	0.299	41.700
70	28.900	35.180		0.360	2.406		0.474	0.523	52.460
80	28.760	35.230		0.410	3.190		0.354	0.421	54.330
90	28.500	35.300		0.470	4.269		0.299	0.359	54.570
100	26.980	35.350		0.540	5.561		0.180	0.260	59.030
120	26.690	35.320		0.670	7.798		0.101	0.195	66.010
160	19.340	34.820		0.760	10.263		0.006	0.018	74.840

Station No : 32
 Date : 26/07/91 Heure (GMT) : 15h 51'
 Latitude : 2°58' N Longitude : 165° 0' E
 air sec/hum. : 27°9 / 25°6 vent dir./vit. : 160° / 4 kts fond 4200 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.050	33.940		0.080	0.046		0.037	0.024	39.120
20	29.850	33.980		0.080	0.020		0.038	0.021	35.290
40	29.940	34.160		0.080	0.054		0.046	0.017	27.380
50	29.970	34.320		0.100	0.028		0.049	0.056	53.050
60	29.390	34.730		0.130	0.046		0.065	0.061	48.280
70	29.020	34.860		0.160	0.032		0.093	0.076	45.080
80	28.640	34.930		0.210	0.048		0.147	0.140	48.730
90	27.760	34.870		0.310	0.698		0.267	0.299	52.850
100	27.270	34.930		0.580	3.830		0.299	0.398	57.120
120	26.020	35.220		0.720	7.906				
160	21.950	34.890		0.980	8.934		0.003	0.013	82.840

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Station No : 34
 Date : 27/07/91 Heure (GMT) : 00h 24'
 Latitude : 4° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°8 / 26°4 vent dir./vit. : 300° / 10 kts fond 4500 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.000	34.000		0.070	0.032		0.048	0.012	20.090
20	29.790	34.000		0.050	0.020		0.050	0.017	25.670
40	29.790	34.360		0.070	0.022		0.075	0.060	44.350
50	29.030	34.510		0.070	0.022		0.112	0.072	39.060
60	27.890	34.600		0.120	0.028		0.151	0.133	46.850
70	26.520	34.490		0.140	0.024		0.234	0.214	47.720
80	26.290	34.800		0.380	4.040		0.345	0.438	55.940
90	25.740	34.920		0.580	7.393		0.235	0.322	57.810
100	25.270	35.000		0.670	8.841		0.144	0.266	64.840
120	24.440	34.790		0.710	9.448		0.076	0.142	65.070
160	18.780	34.750		0.710	9.802		0.002	0.019	90.630

Station No : 36
 Date : 27/07/91 Heure (GMT) : 09h 22'
 Latitude : 5° 1' N Longitude : 165° 2' E
 air sec/hum. : 28°6 / 26°4 vent dir./vit. : 350° / 2 kts fond 4750 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.920	33.940		0.090	0.051		0.036	0.019	34.310
20	29.760	34.060		0.090	0.037		0.054	0.017	23.550
40	29.810	34.240		0.090	0.022		0.058	0.039	40.180
50	28.730	34.440		0.100	0.037		0.087	0.068	43.630
60	28.040	34.520		0.120	0.049		0.122	0.089	42.150
70	27.730	34.580		0.190	0.130		0.228	0.230	50.220
80	25.480	34.700		0.420	4.209		0.389	0.428	52.380
90	25.110	34.870					0.252	0.314	55.470
100	23.560	34.800		0.480	5.635		0.212	0.296	58.240
120	21.790	34.740		0.590	8.265		0.118	0.183	60.870
160	17.150	34.730		0.850	10.679		0.032	0.032	50.490

Station No : 37
 Date : 27/07/91 Heure (GMT) : 16h 00'
 Latitude : 6° 0' N Longitude : 165° 0' E
 air sec/hum. : 27°4 / 24°9 vent dir./vit. : 280° / 8 kts fond 4985 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
1	29.610	33.850		0.070	0.048		0.043	0.037	46.440
30	29.590	33.870		0.060	0.064		0.047	0.044	48.490
60	28.820	34.280		0.110	0.044		0.066	0.057	46.260
80	27.140	34.460		0.180	0.092		0.126	0.085	40.410
90	26.450	34.490		0.180	0.134		0.167	0.152	47.680
100	24.390	34.570		0.450	2.350		0.268	0.314	53.980
110	22.780	34.670		0.450	4.836		0.232	0.306	56.830
120	21.060	34.730		0.570	7.013		0.159	0.262	62.290
140	18.290	34.730		0.870	11.419		0.094	0.168	64.180
160	15.620	34.640		1.200	15.689		0.055	0.129	70.310
180	13.320	34.570		1.670	21.385		0.020	0.024	54.330

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Station No : 38
 Date : 27/07/91 Heure (GMT) : 23h 08'
 Latitude : 7° 1' N Longitude : 165° 0' E
 air sec/hum. : 25°1 / 24°8 vent dir./vit. : 110° / 11 kts fond 3650 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.380	33.450		0.060	0.054		0.045	0.021	31.470
30	29.480	33.700		0.040	0.032		0.066	0.075	53.510
60	28.240	34.230		0.040	0.028		0.110	0.082	42.620
80	24.710	34.620		0.170	0.048		0.175	0.163	48.170
90	23.110	34.710		0.320	1.164		0.268	0.262	49.490
100	20.780	34.760		0.620	7.185		0.157	0.217	58.080
110	18.750	34.750		0.830	10.590		0.123	0.210	62.940
120	17.130	34.710		0.960	12.991		0.099	0.172	63.450
140	15.660	34.650		1.180	15.468		0.065	0.140	68.250
160	13.080	34.550		1.660	22.042		0.019	0.037	66.100
180	11.810	34.560		2.020	26.585		0.003	0.086	96.380

Station No : 39
 Date : 28/07/91 Heure (GMT) : 06h 26'
 Latitude : 8° 0' N Longitude : 164°58' E
 air sec/hum. : 27°7 / 25°2 vent dir./vit. : 140° / 10 kts fond 5185 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.490	33.740		0.070	0.000		0.065	0.046	41.510
30	29.370	33.740		0.180	0.004		0.051	0.046	47.530
60	27.310	34.410		0.200	0.014		0.120	0.094	43.980
80	23.850	34.790		0.290	0.028		0.209	0.200	48.890
90	21.330	34.840		0.570	0.716		0.282	0.357	55.810
100	19.870	34.790		0.650	3.223		0.268	0.372	58.150
110	18.160	34.720		0.820	7.676		0.214	0.322	60.050
120	17.870	34.700		0.910	8.680		0.182	0.278	60.510
140	13.680	34.530		1.510	19.474			0.663	
160	12.140	34.500		2.000	24.246		0.048	0.106	68.720
180	11.160	34.530		2.620	33.337		0.015	0.038	71.530

Station No : 40
 Date : 28/07/91 Heure (GMT) : 13h 00'
 Latitude : 9° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°0 / 24°6 vent dir./vit. : 70° / 10 kts fond 3700 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.210	33.730		0.040	0.012		0.043	0.019	30.550
30	29.070	33.760		0.040	0.008		0.046	0.015	24.190
60	28.680	34.020		0.070	0.016		0.061	0.054	47.180
80	27.320	34.360		0.040	0.020		0.113	0.090	44.340
90	24.140	34.740		0.110	0.040		0.188	0.181	48.990
100	20.560	34.800		0.380	2.677		0.245	0.267	52.170
110	18.880	34.760		0.610	5.148		0.228	0.254	52.710
120	16.600	34.650		0.880	11.158		0.163	0.227	58.240
140	14.760	34.570		1.170	15.916		0.108	0.193	64.090
160	13.210	34.520		1.510	20.961		0.054	0.123	69.650
180	11.350	34.530		1.970	27.520		0.011	0.034	76.120

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Station No : 41

Date : 28/07/91 Heure (GMT) : 20h 00'

Latitude : 10° 0' N Longitude : 165° 0' E

air sec/hum. : 28°0 / 24°9 vent dir./vit. : 60° / 11 kts fond 5385 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA
0	29.110	33.880		0.070	0.055		0.042	0.021	32.890
30	29.070	33.870		0.060	0.036		0.046	0.019	29.080
60	28.950	33.890		0.090	0.040		0.047	0.042	46.920
80	27.580	34.170		0.070	0.055		0.092	0.066	41.850
90	26.700	34.480		0.110	0.044		0.136	0.088	39.220
100	24.180	34.800		0.110	0.059		0.118	0.144	55.050
110	22.080	34.930		0.180	0.126		0.209	0.240	53.380
120	19.620	34.770		0.500	4.172		0.239	0.294	55.220
140	16.350	34.620		0.880	10.853		0.119	0.192	61.680
160	13.350	34.470		1.390	18.186		0.012	0.045	78.600
180	12.210	34.410		1.560	20.709		0.000	0.022	100.000



**Surtropac 16 : 19 janvier - 17 février
1992**



3.1 - Illustrations : radiale aller

Coupes verticales de température et salinité: (0-200m); (0-400m)

Coupes verticales de sels nutritifs: NO_{23} , PO_4 (0-200m)

Coupes verticales d'oxygène et chlorophylle: (0-200m)

Profils des poids secs de zooplancton

radiale retour

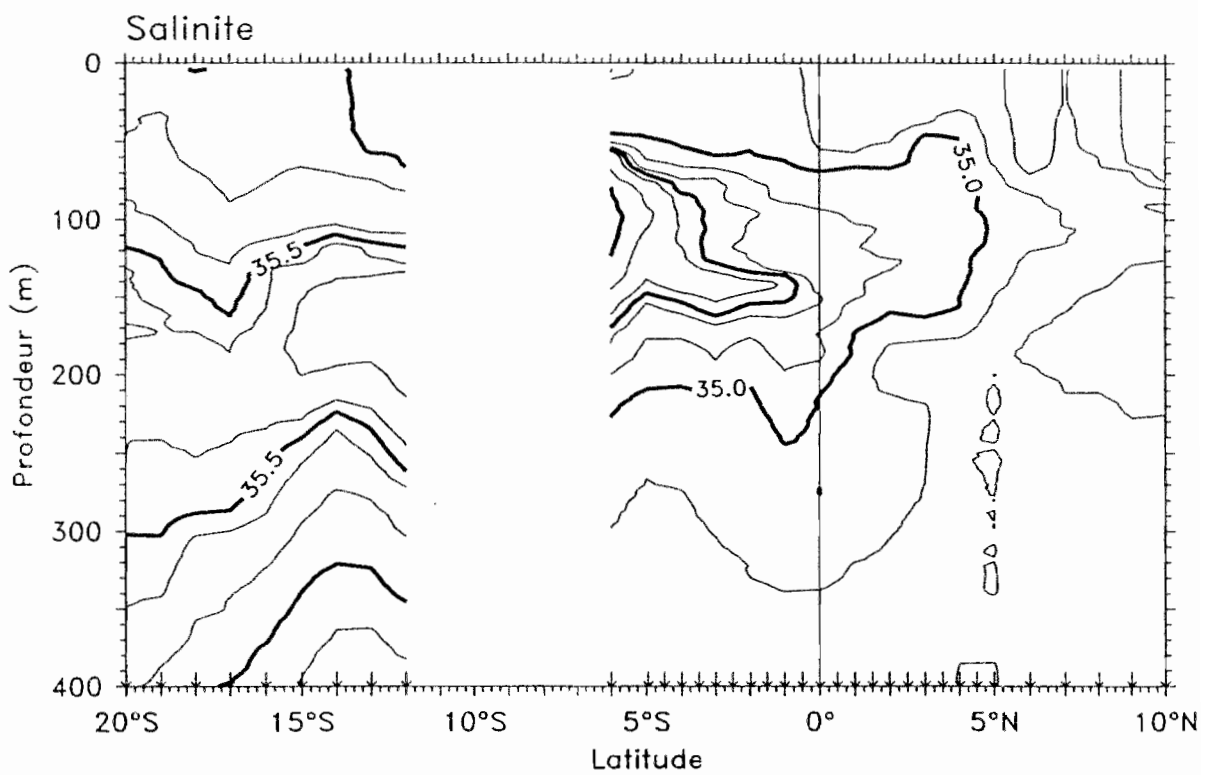
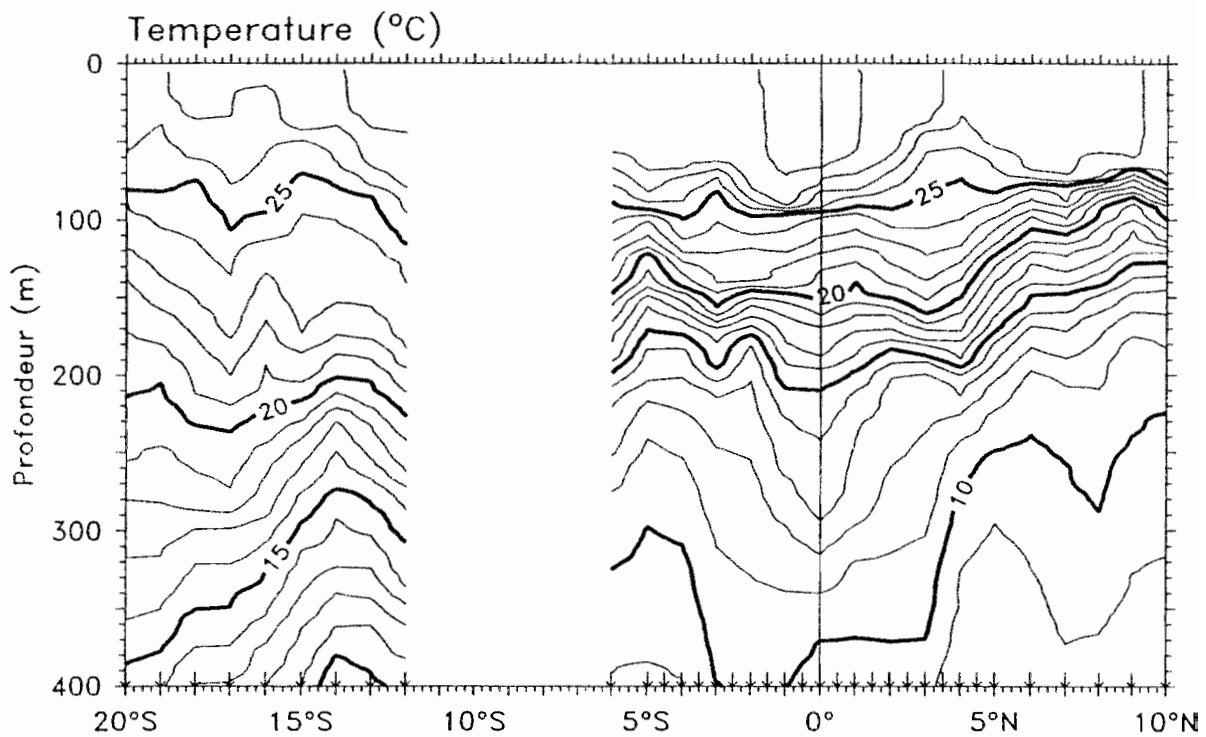
Coupes verticales de température et salinité: (0-200m); (0-400m)

Coupes verticales de sels nutritifs: NO_{23} , PO_4 (0-200m)

Coupes verticales d'oxygène et chlorophylle: (0-200m)

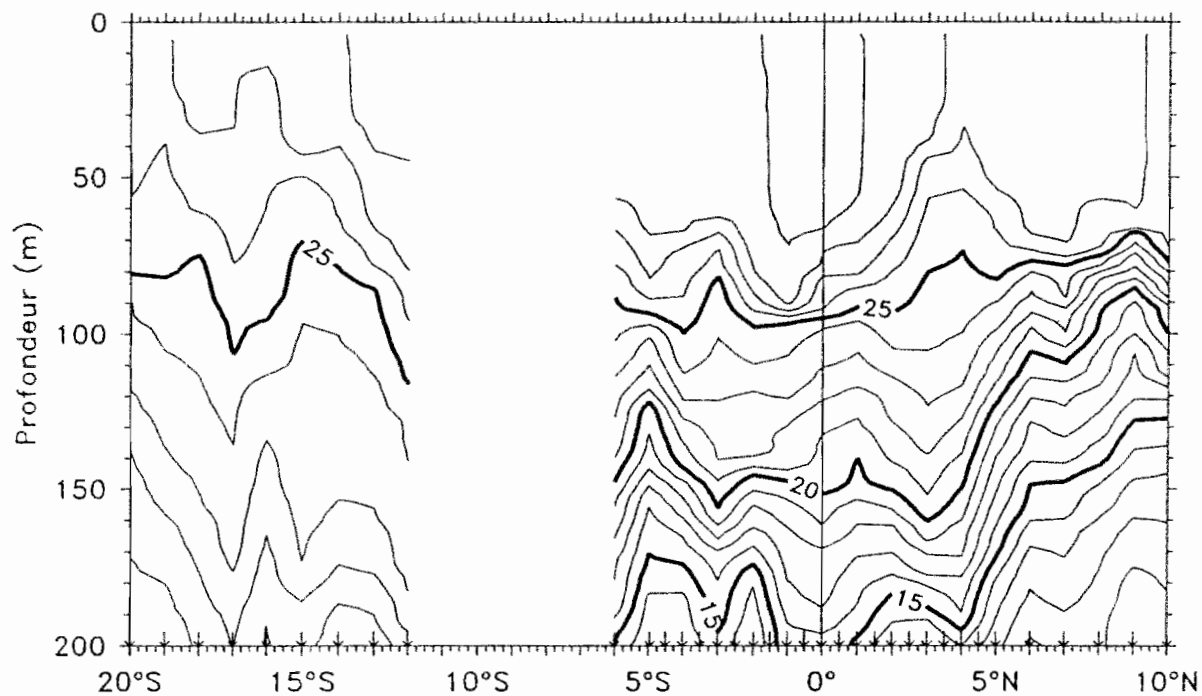


SURTROPAC16 19-30/01/92 St 1-36 Aller

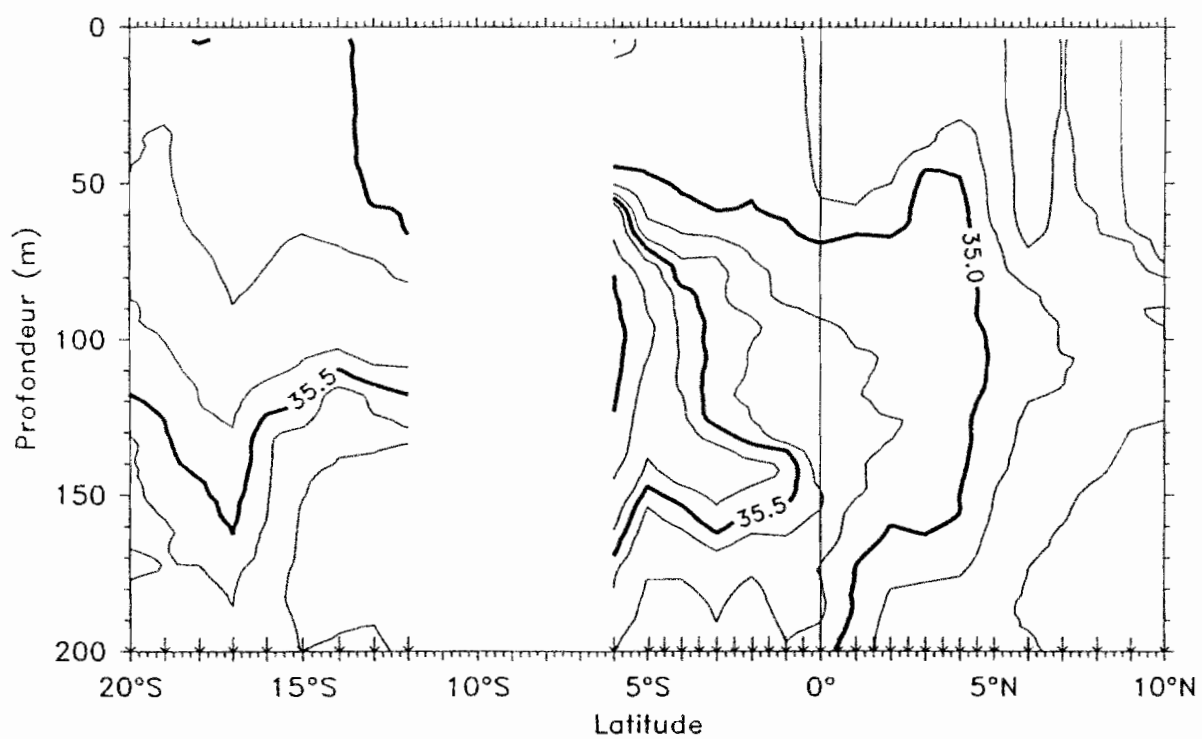


SURTROPAC16 19-30/01/92 St 1-36 Aller

Temperature (°C)

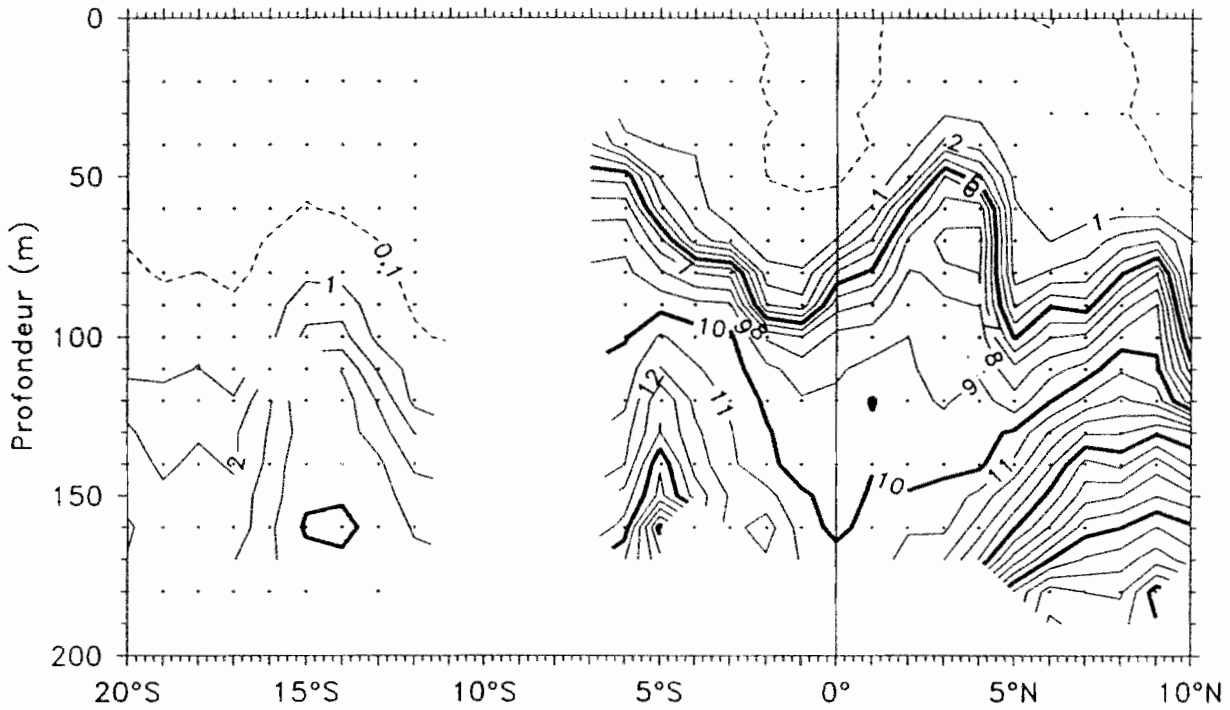


Salinite

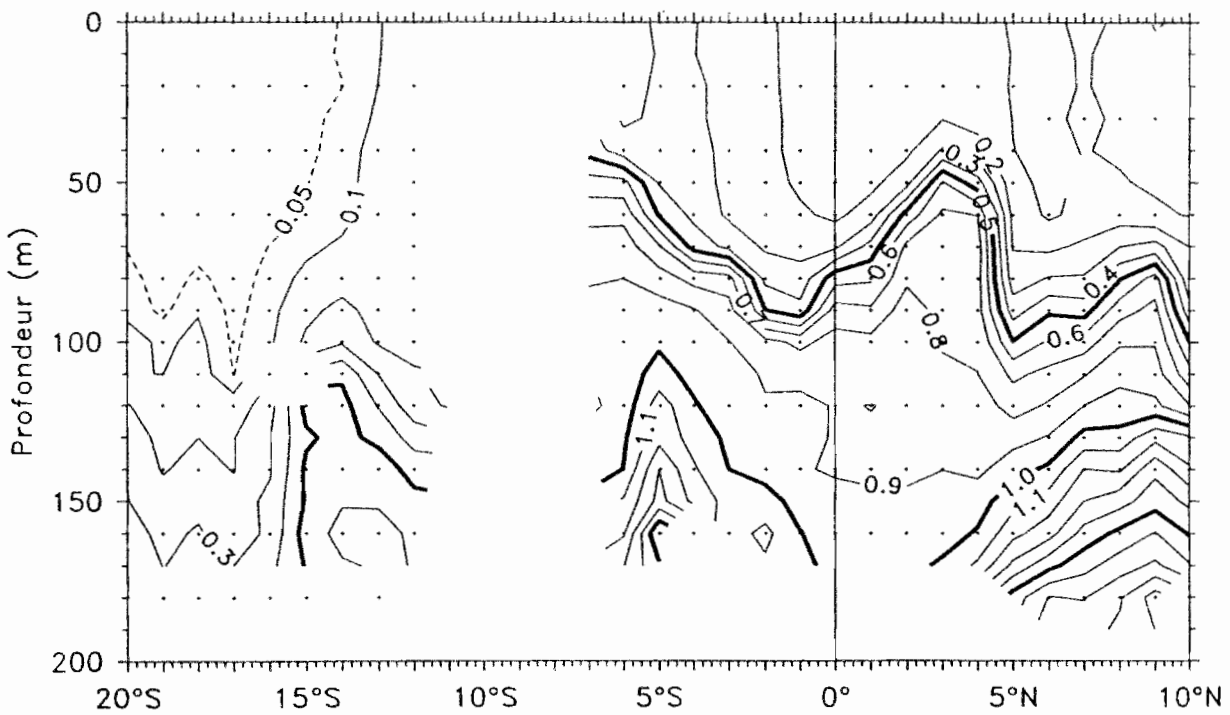


SURTROPAC16 19-30/01/92 St 1-36 Aller

Nitrate+Nitrite (μM)

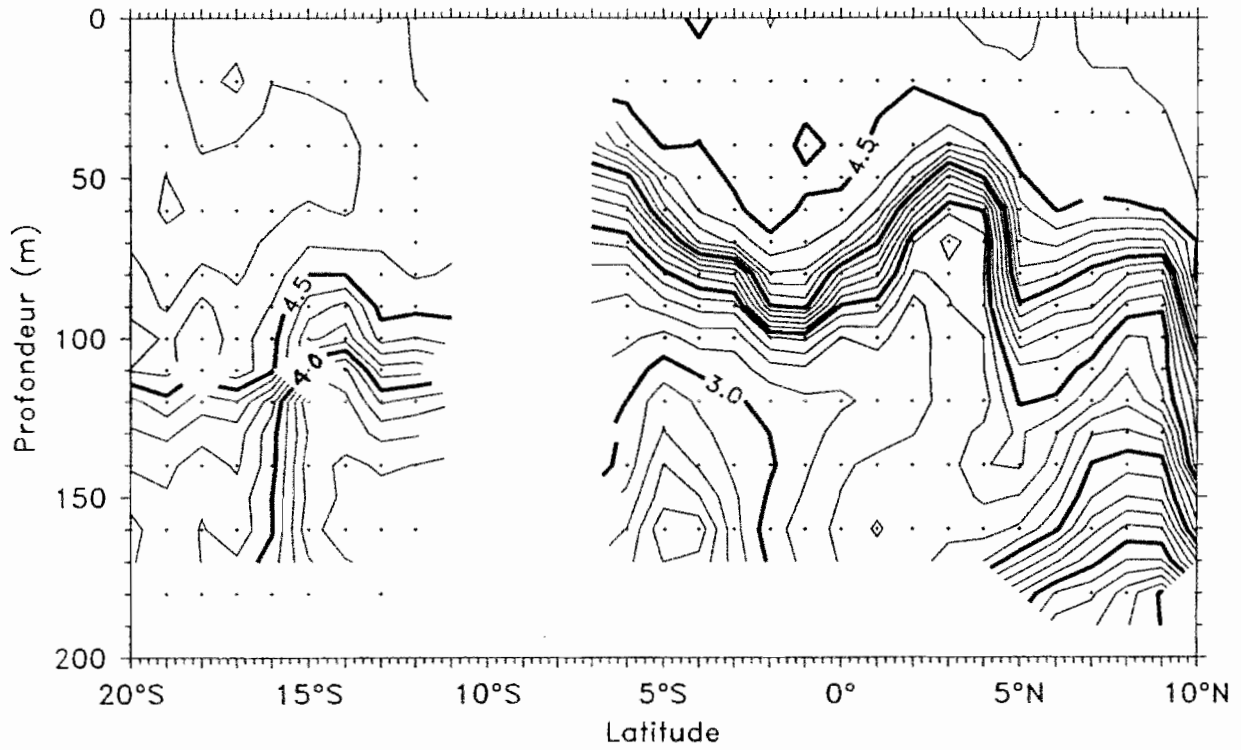


Phosphate (μM)

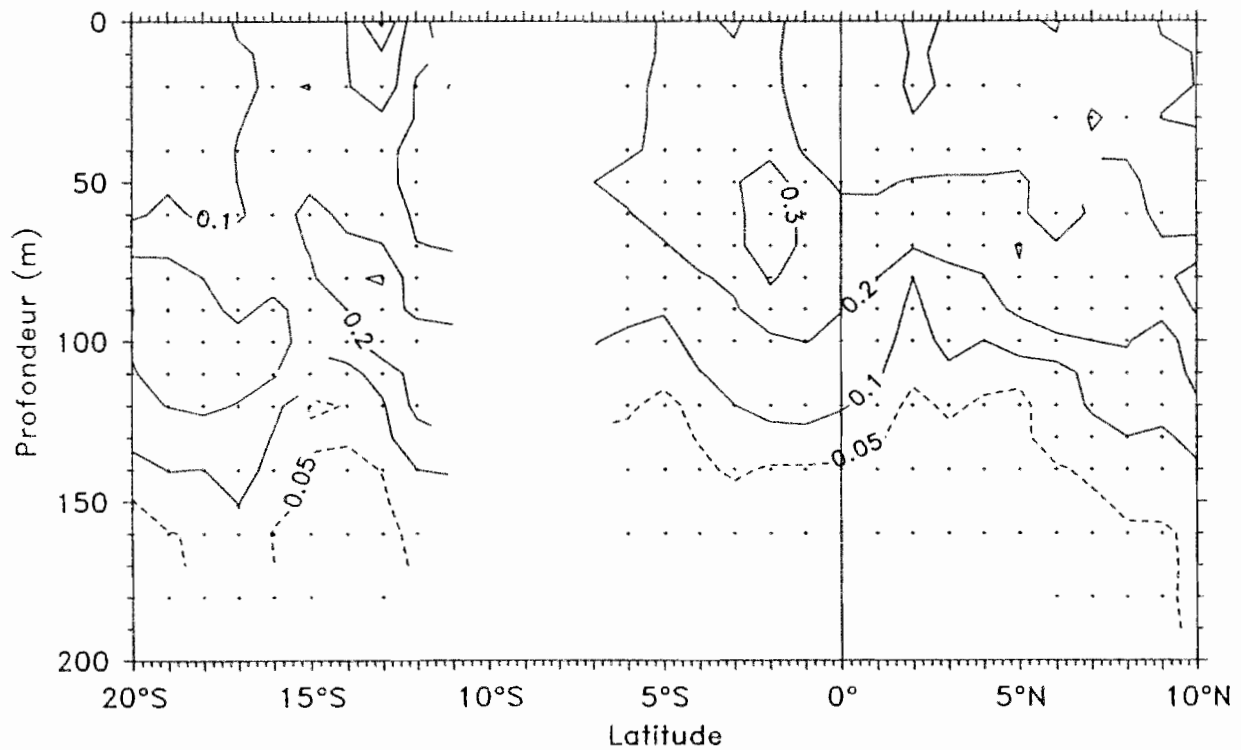


SURTROPAC16 19-30/01/92 St 1-36 Aller

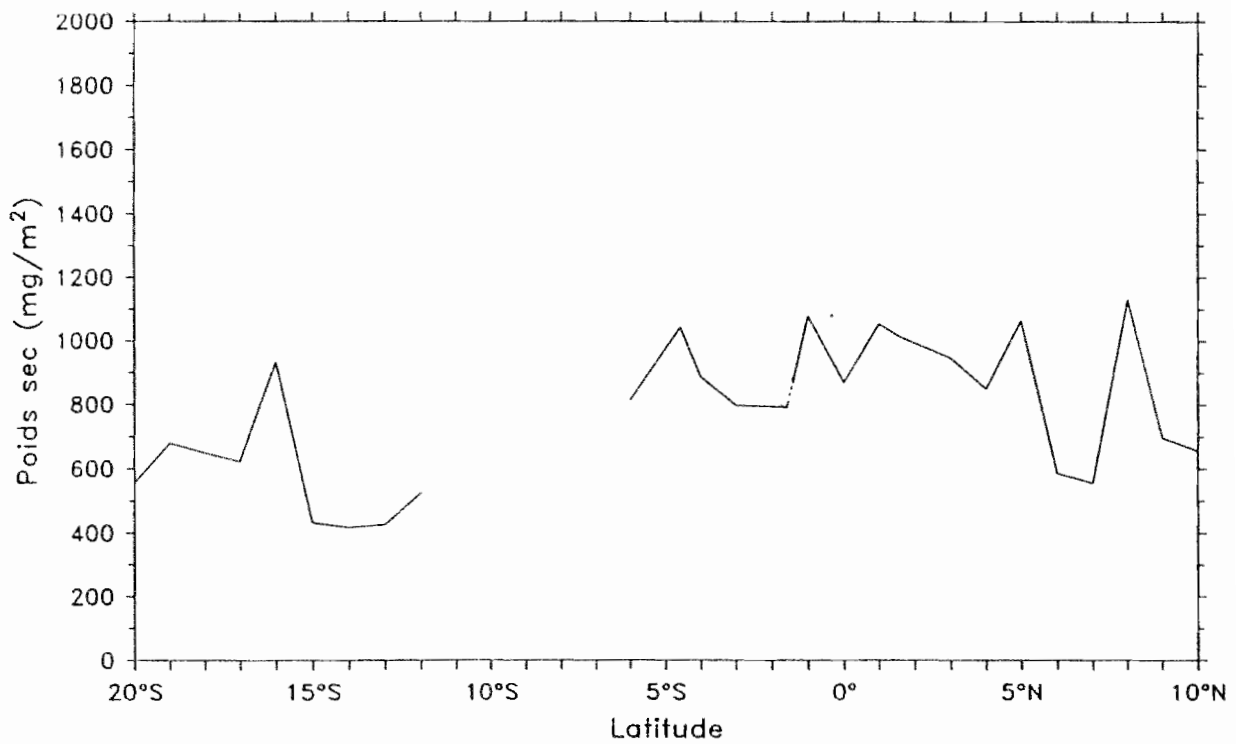
Oxygene (ml/l)



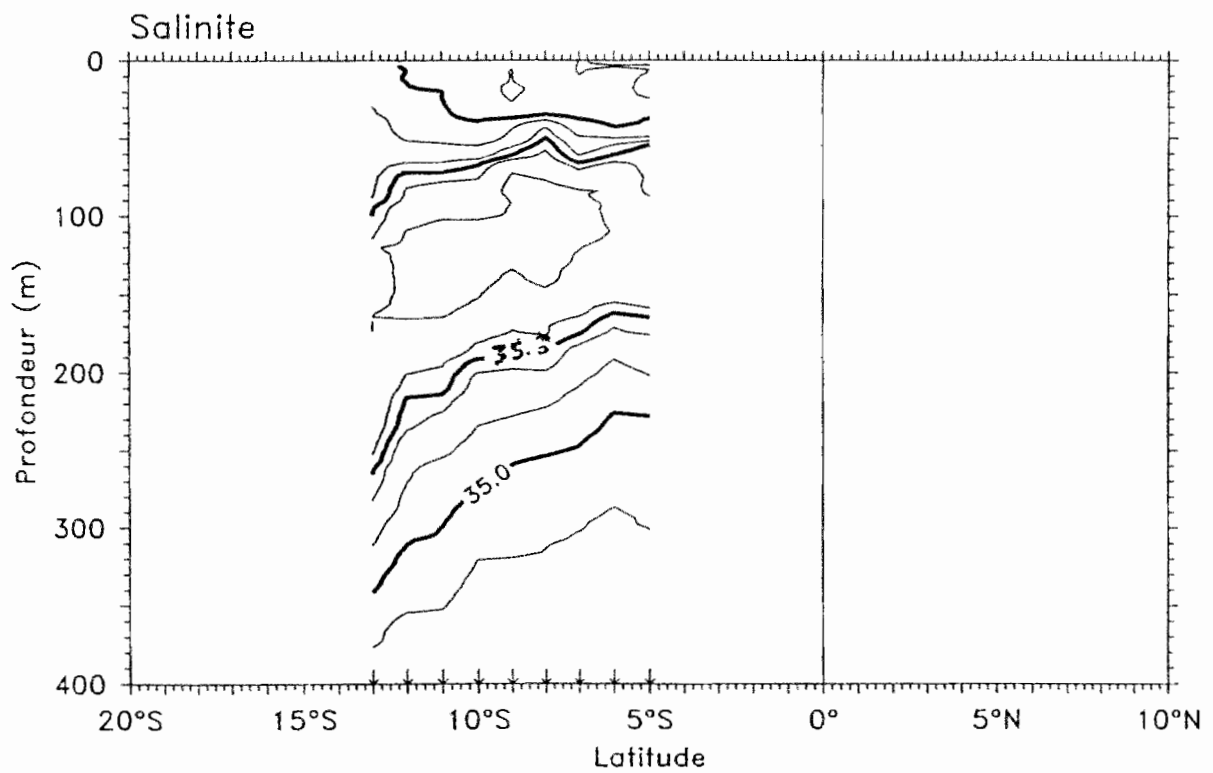
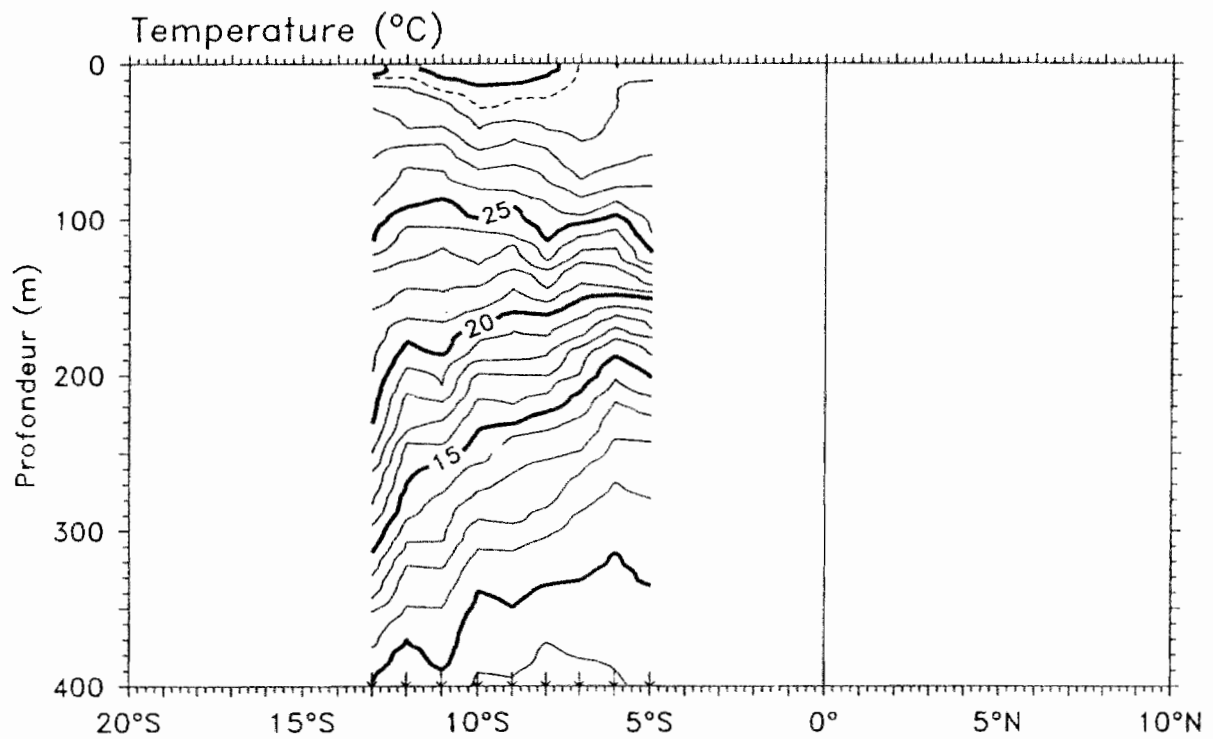
Chlorophylle ($\mu\text{g/l}$)



SURTROPAC16 : ZOOPLANCTON (0-500m) Aller

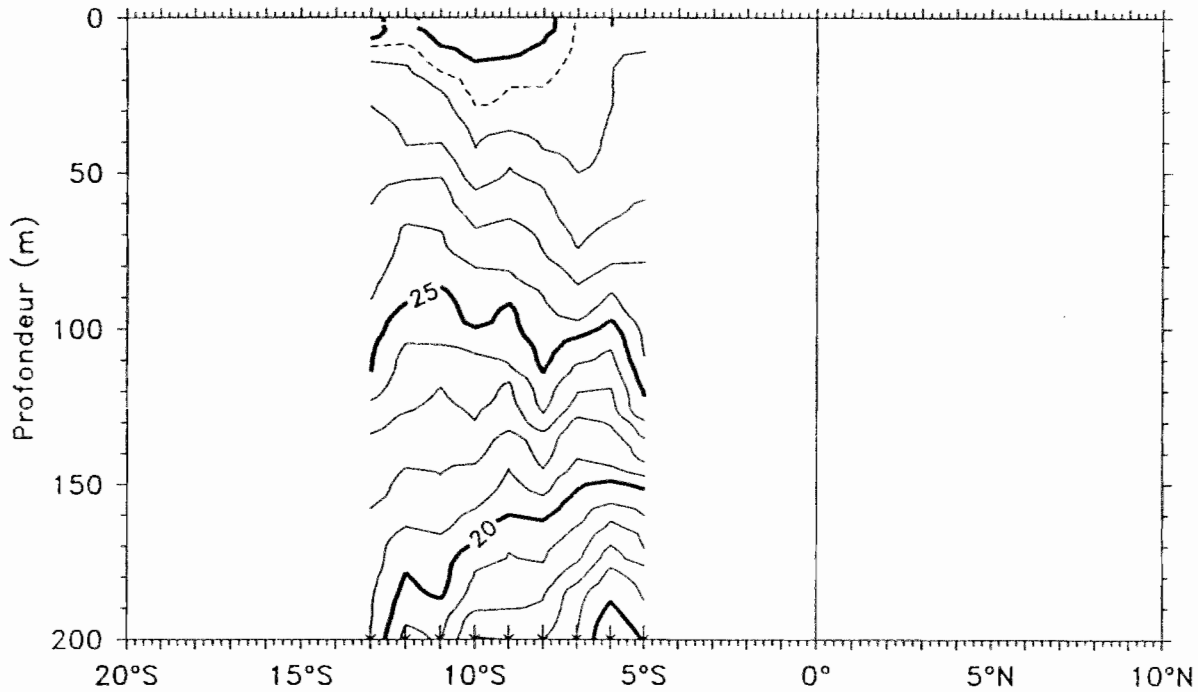


SURTROPAC16 04-12/02/92 St 42-50 Retour

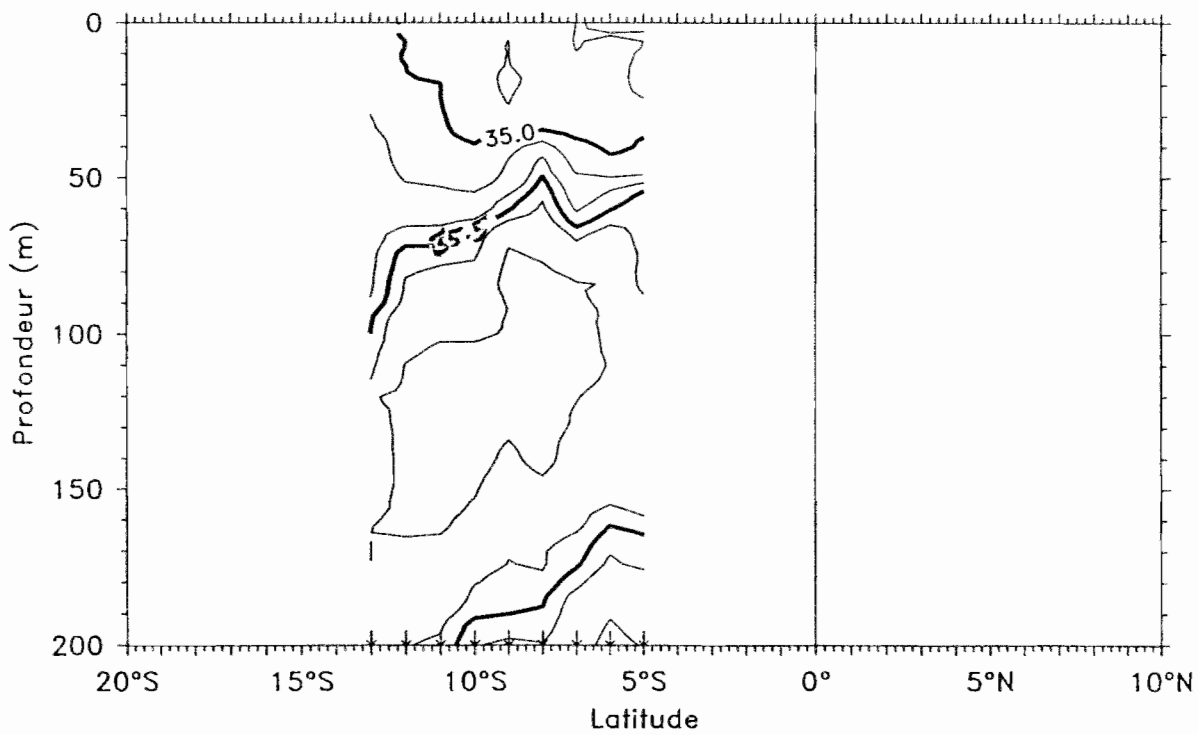


SURTROPAC16 04-12/02/92 St 42-50 Retour

Temperature (°C)

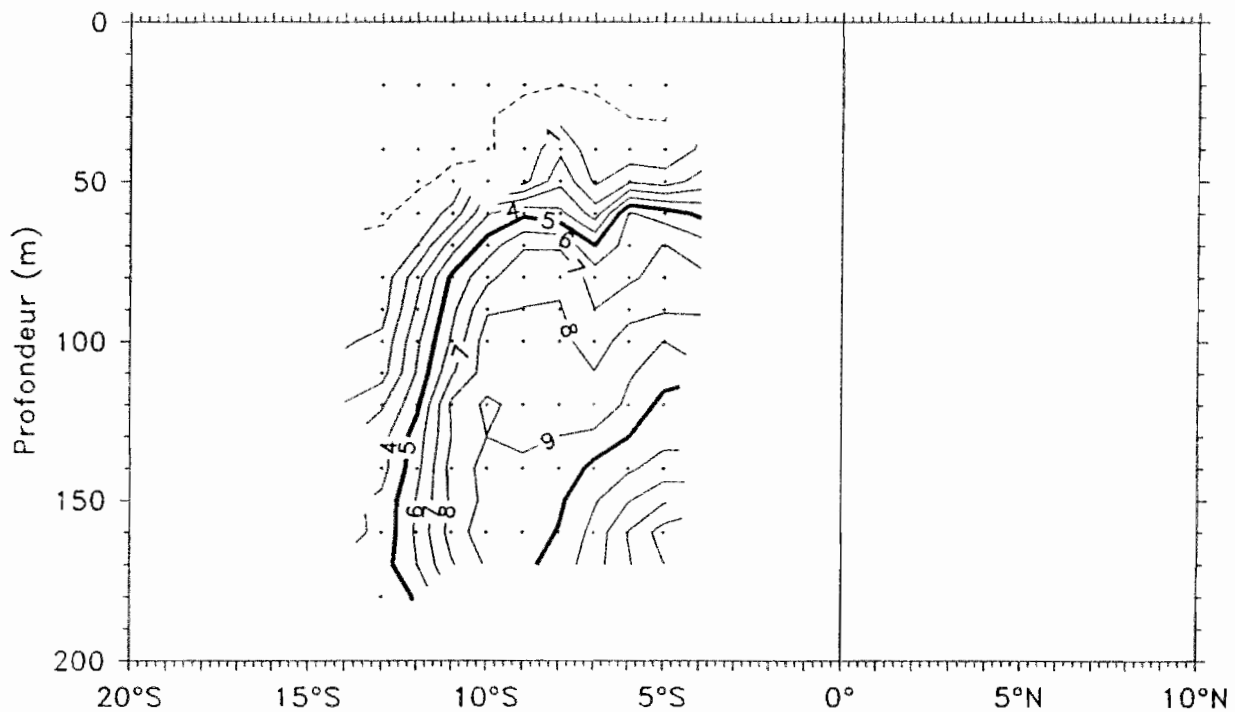


Salinite

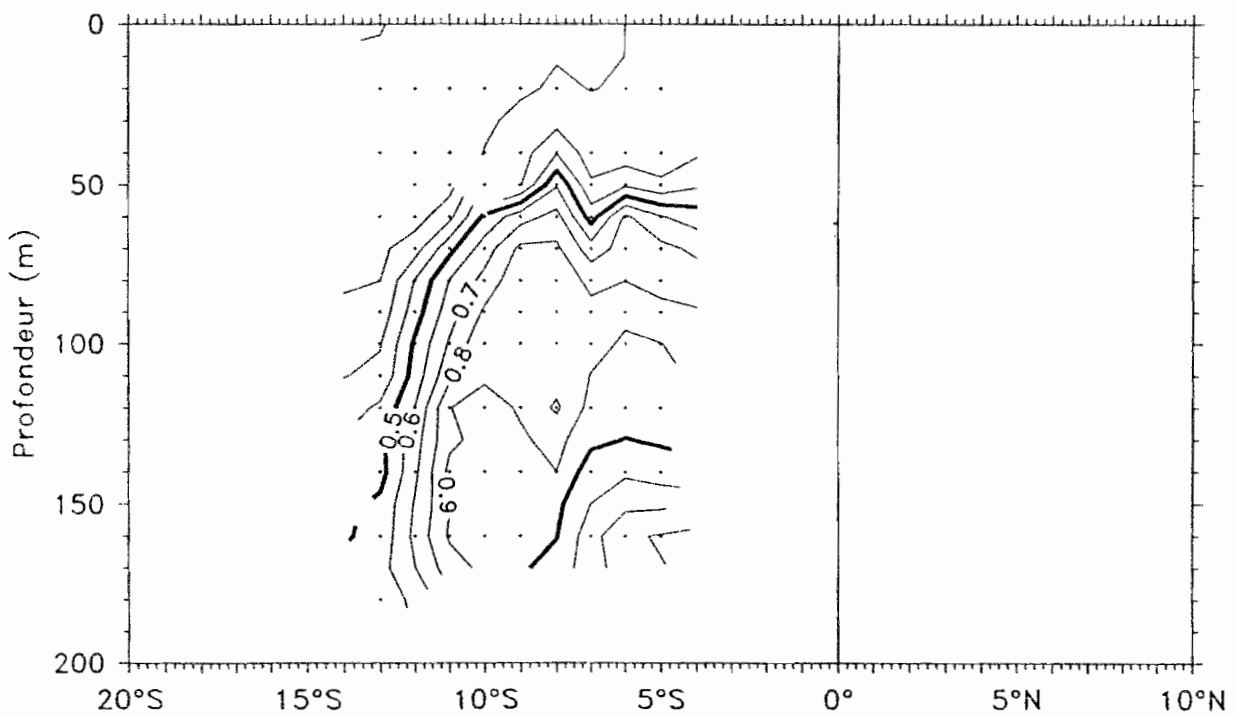


SURTROPAC16 04-12/02/92 St 37-50 Retour

Nitrate+Nitrite (μM)

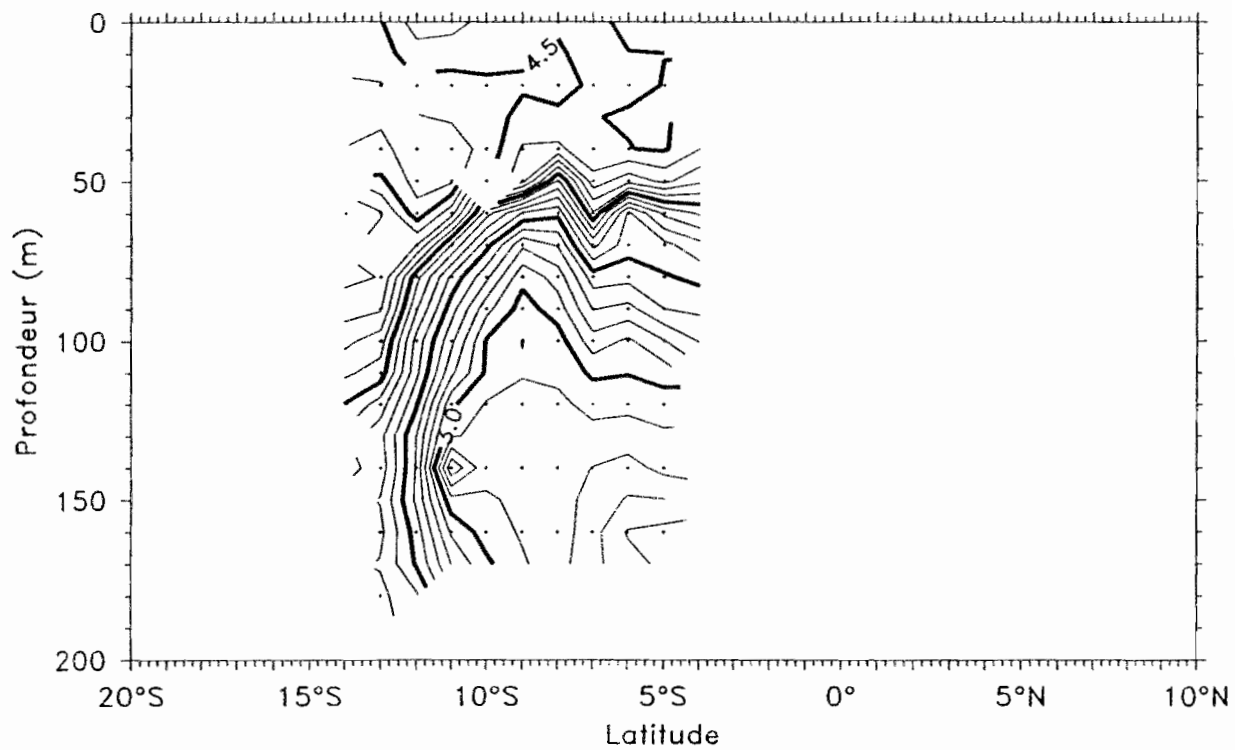


Phosphate (μM)

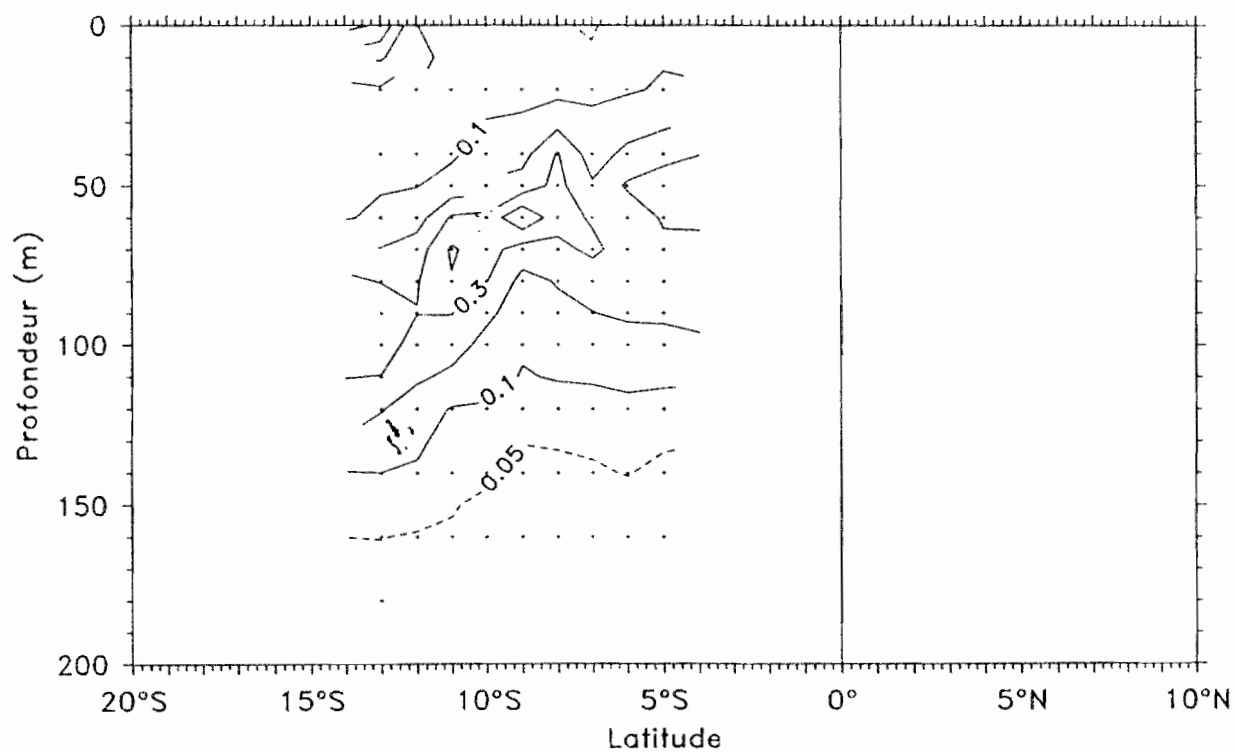


SURTROPAC16 04-12/02/92 St 37-50 Retour

Oxygene (ml/l)

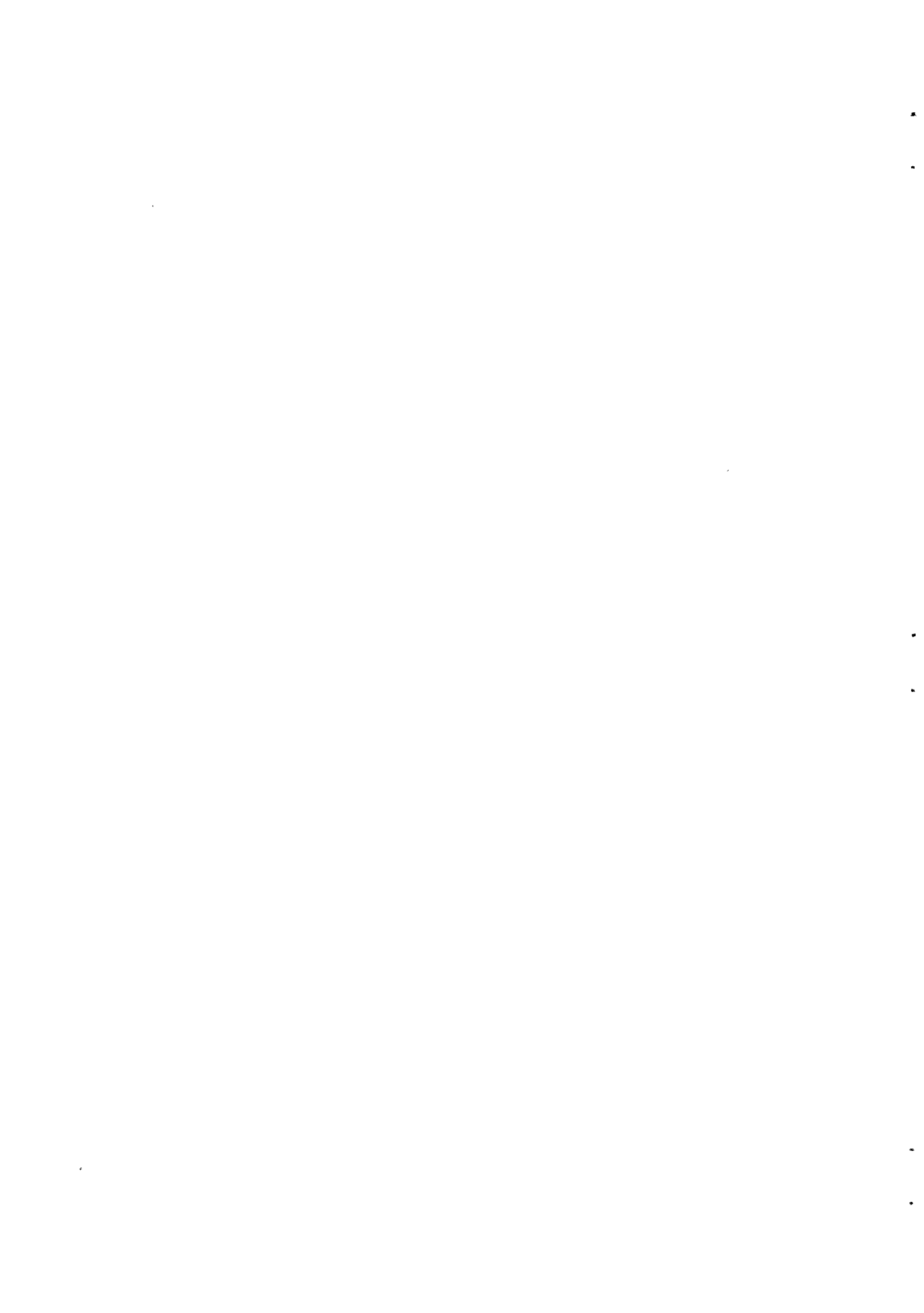


Chlorophylle ($\mu\text{g/l}$)



3.2 - Tableaux de données

Hydrologie
Sels nutritifs
Oxygène
Chlorophylle
Zooplancton



surtropac 16

Station No : 1
 Date : 19/01/92 Heure (GMT) : 20h 34'
 Latitude : 20° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°0 / 20°1 vent dir./vit. : 140° / 19 kts fond 3150 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	26.750	35.150	4.776	0.030	0.000	104.360	0.078	0.120	60.740
20	26.760	35.140	4.710	0.030	0.003	102.930	0.048	0.089	64.970
40	26.180	35.180	4.798	0.030	0.000	103.790	0.052	0.084	61.710
60	25.980	35.200	4.749	0.040	0.000	102.370	0.074	0.080	51.910
80	25.110	35.280	4.638	0.070	0.162	98.450	0.276	0.276	50.010
90	24.080	35.400	4.678	0.080	0.490	97.500	0.179	0.457	71.810
100	23.840	35.420	4.468	0.140	1.012	92.720	0.224	0.412	64.770
110	23.280	35.470	4.694	0.080	0.455	96.430	0.186	0.366	66.260
120	22.870	35.550	4.320	0.220	1.855	88.110	0.191	0.353	64.860
140	21.810	35.600	4.210	0.300	2.759	84.200	0.052	0.142	73.290
160	21.340	35.630	4.029	0.350	3.188	79.880	0.028	0.086	75.640
180									

Station No : 2
 Date : 20/01/92 Heure (GMT) : 05h 34'
 Latitude : 19° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°6 / 21°6 vent dir./vit. : 130° / 18 kts fond 2775 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	26.760	35.260	4.705	0.010	0.003	102.890	0.070	0.075	51.880
20	26.760	35.260	4.774	0.020	0.000	104.400	0.074	0.037	33.460
40	25.950	35.250	4.854	0.000	0.000	104.600	0.080	0.039	32.840
60	25.620	35.270	4.857	0.000	0.000	104.050	0.131	0.083	38.800
80	25.230	35.290	4.825	0.010	0.000	102.650	0.253	0.140	35.570
90	24.570	35.330	4.806	0.010	0.047	101.040	0.344	0.262	43.210
100	24.160	35.390	4.645	0.080	0.644	96.950	0.305	0.301	49.690
110	23.880	35.420	4.659	0.090	0.786	96.760	0.271	0.254	48.420
120	23.500	35.470	4.551	0.120	1.107	93.880	0.199	0.241	54.740
140	22.830	35.530	4.260	0.150	1.318	86.810	0.110	0.180	62.040
160	21.120	35.590	4.296	0.250	2.284	84.800	0.048	0.108	69.150
180									

Station No : 3
 Date : 20/01/92 Heure (GMT) : 12h 48'
 Latitude : 18° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°2 / 22°7 vent dir./vit. : 120° / 22 kts fond 4275 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.690	34.970	4.664	0.030	0.007	103.540	0.040	0.023	36.000
20	27.720	34.970	4.616	0.030	0.007	102.530	0.042	0.027	38.620
40	26.390	35.090	4.618	0.020	0.014	100.220	0.048	0.029	37.790
60	26.280	35.130	4.817	0.020	0.014	104.360	0.066	0.027	29.430
80	24.640	35.290	4.650	0.070	0.042	97.860	0.207	0.247	54.370
90	24.320	35.320	4.446	0.120	0.761	93.030	0.254	0.351	58.020
100	24.160	35.350	4.477	0.140	0.993	93.420	0.265	0.353	57.100
110	24.050	35.370		0.150	1.195		0.267	0.310	53.730
120	23.920	35.390	4.281	0.170	1.417	88.960	0.230	0.394	63.170
140	23.180	35.490	4.038	0.270	2.643	82.810	0.081	0.143	63.720
160		35.580	3.995	0.350	3.339		0.041	0.078	65.720
180									

surtropac 16

Station No : 4
 Date : 20/01/92 Heure (GMT) : 21h 14'
 Latitude : 17° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°7 / 23°5 vent dir./vit. : 140° / 19 kts fond 4980 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA
0	27.040	35.090					0.109	0.036	24.800
20	27.040	35.090	4.467	0.000	0.003	98.090	0.092	0.047	33.720
40	26.980	35.080	4.723	0.000	0.003	103.590	0.107	0.023	17.560
60	26.370	35.060	4.716	0.010	0.003	102.290	0.086	0.051	37.240
80	25.960	35.100	4.740	0.020	0.000	102.080	0.117	0.051	30.430
90	25.660	35.150	4.735	0.020	0.007	101.440	0.123	0.083	40.480
100	25.220	35.210	4.676	0.020	0.021	99.410	0.256	0.141	35.480
110	24.880	35.250	4.735	0.040	0.117	100.070	0.249	0.225	47.470
120	24.180	35.350	4.453	0.110	0.790	92.960	0.202	0.279	58.010
140	23.900	35.390	4.302	0.160	1.348	89.310	0.166	0.229	58.020
160	23.730	35.420	4.270	0.190	1.651	88.430	0.117	0.176	60.020
180									

Station No : 5
 Date : 21/01/92 Heure (GMT) : 04h 25'
 Latitude : 16° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°6 / 24°0 vent dir./vit. : 140° / 21 kts fond 3600 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA
0	27.040	35.170							
20	26.410	35.150	4.764	0.020	0.008	103.460	0.112	0.047	29.490
40	26.150	35.160	4.750	0.030	0.008	102.680	0.153	0.054	26.130
60	25.920	35.160	4.737	0.030	0.010	101.970	0.095	0.065	40.490
80	25.600	35.200	4.705	0.060	0.046	100.720	0.133	0.106	44.320
90	25.210	35.240	4.630	0.060	0.446	98.430	0.282	0.299	51.450
100	24.690	35.300	4.602	0.070	0.645	96.940	0.314	0.152	32.590
110	24.260	35.360	4.606			96.300	0.215	0.247	53.480
120	23.390	35.490	4.145	0.240	2.841	85.340	0.105	0.168	61.570
140	22.480	35.540	4.143	0.250	3.184	83.880	0.059	0.124	67.780
160	21.890	35.580	4.123	0.290	3.903	82.570	0.033	0.076	69.550
180									

Station No : 6
 Date : 21/01/92 Heure (GMT) : 11h 33'
 Latitude : 15° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°6 / 23°8 vent dir./vit. : 130° / 21 kts fond 3960 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA
0	28.000	35.030							
20	27.990	35.020	4.664	0.020	0.010	104.130	0.069	0.052	43.120
40	25.970	35.120	4.834	0.030	0.007	104.130	0.131	0.074	36.110
60	24.610	35.320	4.656	0.050	0.120	97.950	0.308	0.344	52.710
80	23.910	35.390	4.449	0.120	0.881	92.430	0.168	0.261	60.810
90	23.740	35.450	4.321	0.180	1.720	89.520	0.113	0.183	61.830
100	23.650	35.520	4.169	0.230	2.474	86.260	0.103	0.160	60.920
110	23.820	35.700							
120	23.480	35.850	3.463	0.570	5.344	71.560	0.036	0.091	71.390
140	23.330	35.850	3.511	0.560	5.414	72.350	0.037	0.075	67.040
160	23.200	35.860	3.479	0.590	5.520	71.520	0.044	0.072	62.020
180									

surtropac 16

Station No : 7
 Date : 21/01/92 Heure (GMT) : 19h 05'
 Latitude : 14° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°8 / 25°0 vent dir./vit. : 90° / 12 kts fond 2825 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.690	35.050		0.050	0.021		0.169	0.051	23.100
20	27.700	35.050	4.660	0.040	0.021	103.500	0.190	0.042	18.090
40	26.230	35.100	4.753	0.070	0.024	102.860	0.125	0.078	38.280
60	25.200	35.210	4.773	0.060	0.021	101.440	0.149	0.089	37.310
80	24.680	35.300	4.547	0.150	0.446	95.770	0.331	0.319	49.130
90	24.000	35.390	4.097	0.260	1.922	85.260	0.187	0.298	61.420
100	23.720	35.440	4.100	0.290	2.499	84.900	0.156	0.241	60.670
110	23.630	35.750	3.725	0.500	4.026	77.150	0.058	0.138	70.420
120	23.340	35.780	3.598	0.570	4.876	74.130	0.045	0.107	70.570
140	22.910	35.890	3.538	0.610	4.997	72.360	0.036	0.081	69.440
160	21.910	35.880	3.524	0.660	5.391	70.730	0.012	0.041	77.040
180									

Station No : 8
 Date : 22/01/92 Heure (GMT) : 02h 42'
 Latitude : 13° 0' S Longitude : 165° 0' E
 air sec/hum. : 28°7 / 25°9 vent dir./vit. : 130° / 13 kts fond 2475 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.830	34.940	4.705	0.090	0.021	106.570	0.505	0.041	7.560
20	28.580	34.940	4.696	0.100	0.024	105.900	0.359	0.077	17.690
40	27.860	34.930	4.630	0.130	0.021	103.080	0.108	0.042	28.030
60	27.170	35.060	4.640	0.150	0.021	102.110	0.148	0.074	33.410
80	25.530	35.290	4.532	0.190	0.124	96.940	0.378	0.275	42.110
90	24.560	35.290	4.666	0.140	0.106	98.050	0.271	0.195	41.820
100	24.440	35.320	4.603	0.160	0.340	96.530	0.323	0.223	40.770
110	23.820	35.510	4.256	0.280	1.669	88.330	0.117	0.169	58.940
120	23.560	35.580	3.991	0.400	3.058	82.470	0.059	0.097	62.040
140	23.180	35.800	3.609	0.590	4.452	74.140	0.041	0.099	70.600
160	22.730	35.860	3.531	0.650	4.846	71.960	0.023	0.054	69.860
180									

Station No : 9
 Date : 22/01/92 Heure (GMT) : 09h 48'
 Latitude : 12° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°4 / 24°9 vent dir./vit. : 100° / 11 kts fond 4650 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.510	34.920	4.547	0.160	0.014	102.400	0.072	0.026	26.250
20	28.420	34.970	4.574	0.160	0.010	102.870	0.046	0.026	36.500
40	27.790	34.960	4.621	0.160	0.007	102.770	0.076	0.033	30.350
50	27.690	34.980	4.630	0.160	0.010	102.790	0.070	0.045	39.290
60	27.590	35.000	4.621	0.150	0.010	102.420	0.079	0.057	42.040
70	27.520	35.010	4.638	0.150	0.010	102.680	0.085	0.065	43.320
80	27.270	35.090	4.654	0.140	0.010	102.620	0.090	0.060	39.850
90	26.100	35.320	4.531	0.150	0.007	97.950	0.136	0.076	35.890
100	25.380	35.370	4.378	0.170	0.053	93.440	0.312	0.282	47.490
120	24.590	35.530	3.819	0.190	0.170	80.410	0.269	0.322	54.430
140	24.000	35.840	3.571	0.440	2.553	74.500	0.104	0.187	64.200
160	23.580	35.910	3.595	0.580	3.756	74.450	0.074	0.148	66.650

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Station No : 10
 Date : 23/01/92 Heure (GMT) : 23h 40'
 Latitude : 6° 0' S Longitude : 165°13' E
 air sec/hum. : 27°3 / 26°9 vent dir./vit. : 270° / 12 kts fond 3500 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.690	34.720	4.526	0.260	0.250	102.140	0.141	0.066	31.910
20	28.820	34.930	4.508	0.260	0.271	102.090	0.169	0.121	41.690
40	28.810	34.980	4.486	0.270	0.343	101.600	0.178	0.129	42.070
50	28.140	35.590	3.782	0.710	6.760	84.940	0.234	0.174	42.760
60	27.260	35.760	3.537	0.830	8.526	78.270	0.188	0.207	52.460
70	26.530	35.830	3.348	0.880	9.232	73.150	0.164	0.222	57.600
80	25.340	35.990	3.134	0.910	9.454	67.070	0.109	0.173	61.320
90	24.950	36.030	3.157	0.940	9.564	67.100	0.124	0.167	57.370
100	24.270	36.060	3.144	0.950	9.617	66.010	0.088	0.133	60.370
120	23.270	36.040	3.051	0.880	10.007	62.870	0.060	0.101	62.470
140	21.870	35.950	3.060	0.930	11.016	61.390	0.030	0.048	61.270
160	19.650	35.710	2.880	1.110	13.213	55.300	0.018	0.029	61.480

Station No : 11
 Date : 24/01/92 Heure (GMT) : 08h 49'
 Latitude : 4°58' S Longitude : 165° 1' E
 air sec/hum. : 27°0 / 26°2 vent dir./vit. : 300° / 16 kts fond 3840 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0			4.534	0.320	0.904		0.222	0.107	32.540
20	28.610	35.000	4.551	0.320	0.895	102.720	0.228	0.106	31.640
40	28.570	35.000	4.587	0.340	0.885	103.460	0.212	0.104	32.990
50	28.510	35.010	4.488	0.340	1.105	101.120	0.262	0.187	41.730
60	28.390	35.110	4.308	0.430	2.329	96.920	0.249	0.225	47.470
70	27.730	35.510	3.715	0.750	6.772	82.790	0.185	0.213	53.590
80	27.020	35.770	3.493	0.850	8.089	76.970	0.169	0.200	54.220
90	25.150	35.780	3.238	0.960	9.701	68.980	0.097	0.165	62.900
100	22.600	35.810	2.994	1.000	11.615	60.850	0.046	0.100	68.310
120	19.760	35.570	2.690	1.250	15.403	51.720	0.027	0.038	58.590
140	17.650	35.430	2.542	1.420	17.627	46.860	0.014	0.039	73.580
160	15.330	35.220	2.384	1.670	21.354	41.890	0.007	0.042	86.010

Station No : 13
 Date : 24/01/92 Heure (GMT) : 17h 36'
 Latitude : 4° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°0 / 25°9 vent dir./vit. : 250° / 20 kts fond 3330 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.610	35.010	4.467	0.320	1.038	100.830	0.224	0.112	33.340
20	28.610	35.010	4.477	0.350	1.097	101.050	0.224	0.116	34.180
40	28.620	35.010	4.469	0.370	1.109	100.890	0.221	0.116	34.510
50	28.620	35.010	4.473	0.360	1.120	100.980	0.243	0.126	34.170
60	28.620	35.020	4.468	0.370	1.132	100.880	0.216	0.131	37.800
70	28.530	35.030	4.444	0.390	1.221	100.180	0.257	0.121	31.960
80	26.710	35.320	3.568	0.780	7.201	77.980	0.186	0.192	50.750
90	26.510	35.640	3.367	0.930	9.336	73.460	0.154	0.221	58.960
100	25.370	35.580	3.166	0.910	10.401	67.640	0.150	0.210	58.330
120	23.310	35.700	2.932	0.990	11.368	60.350	0.058	0.102	63.900
140	21.850	35.750	2.854	1.090	12.004	57.170	0.044	0.078	63.800
160	16.230	35.300	2.353			42.130	0.011	0.027	71.960

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Station No : 15

Date : 25/01/92 Heure (GMT) : 02h 34'

Latitude : 3° 0' S Longitude : 164°58' E

air sec/hum. : 25°9 / 24°9 vent dir./vit. : 270° / 17 kts fond 4075 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.690	34.850	4.515	0.220	0.103	101.960	0.168	0.102	37.810
20	28.710	34.850	4.570	0.240	0.106	103.240	0.235	0.095	28.710
40	28.710	34.870	4.562	0.250	0.177	103.070	0.286	0.159	35.780
50	28.710	34.870	4.495	0.260	0.230	101.560	0.290	0.172	37.310
60	28.700	34.890	4.504	0.260	0.290	101.760	0.277	0.143	34.020
70	28.630	34.900	4.439	0.320	0.712	100.170	0.284	0.158	35.670
80	25.930	35.410	3.445	0.860	8.158	74.280	0.203	0.191	48.400
90	24.100	35.430	3.098	0.900	10.520	64.600	0.177	0.266	60.100
100	23.790	35.410	3.045	0.910	10.629	63.130	0.149	0.248	62.480
120	22.640	35.320	2.982	0.930	10.963	60.480	0.103	0.185	64.210
140	22.330	35.650	2.944	0.980	11.073	59.470	0.063	0.106	62.590
160	20.800	35.640	2.923	1.050	11.578	57.360	0.030	0.057	65.550

Station No : 17

Date : 25/01/92 Heure (GMT) : 12h 55'

Latitude : 1°59' S Longitude : 164°53' E

air sec/hum. : 28°4 / 27°2 vent dir./vit. : 360° / 7 kts fond 4450 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.030	35.070	4.641	0.240	0.035	105.570	0.291	0.069	19.210
20	29.000	35.070	4.625	0.240	0.035	105.150	0.252	0.156	38.160
40	28.990	35.060	4.632	0.240	0.046	105.290	0.286	0.150	34.410
50	28.980	35.060	4.618	0.250	0.064	104.950	0.387	0.185	32.360
60	28.980	35.060	4.587	0.260	0.096	104.250	0.361	0.189	34.370
70	28.980	35.060	4.554	0.270	0.146	103.500	0.378	0.230	37.840
80	28.960	35.070	4.496	0.300	0.329	102.150	0.325	0.221	40.430
90	28.880	35.190	4.260	0.420	1.451	96.720	0.310	0.232	42.780
100	25.680	35.400	3.328	0.890	8.242	71.430	0.161	0.227	58.490
120	23.580	35.350	3.016	0.890	9.782	62.260	0.126	0.233	65.000
140	22.190	35.700	2.954	0.960	10.117	59.540	0.039	0.069	64.090
160	17.190	35.350	3.115	1.190	13.426	56.880	0.010	0.031	74.750

Station No : 19

Date : 26/01/92 Heure (GMT) : 00h 45'

Latitude : 1° 0' S Longitude : 165° 0' E

air sec/hum. : 26°0 / 26°0 vent dir./vit. : 360° / 7 kts fond 4425 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.250	34.740	4.543	0.130	0.024	103.550	0.093	0.041	30.540
20	29.180	34.780	4.558	0.140	0.028	103.790	0.114	0.070	38.020
40	29.160	34.800	4.359	0.150	0.035	99.240	0.163	0.083	33.640
50	29.150	34.870	4.542	0.170	0.046	103.420	0.258	0.159	38.200
60	29.140	34.950	4.456	0.220	0.135	101.490	0.290	0.178	38.050
70	29.110	35.030	4.421	0.260	0.257	100.690	0.275	0.204	42.620
80	29.070	35.070	4.406	0.300	0.536	100.300	0.282	0.172	37.920
90	28.940	35.070	4.360	0.310	0.924	99.020	0.262	0.199	43.140
100	24.570	35.330	3.360	0.800	7.234	70.640	0.211	0.335	61.310
120	23.950	35.310	3.068	0.940	8.964	63.760	0.135	0.252	65.120
140	21.520	35.370	3.072	0.890	9.329	61.020	0.042	0.094	69.380
160	19.050	35.470	3.158	0.990	10.282	59.850	0.015	0.038	72.000

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Station No : 21
 Date : 26/01/92 Heure (GMT) : 10h 45'
 Latitude : 0° 0' N Longitude : 165° 1' E
 air sec/hum. : 27°1 / 27°1 vent dir./vit. : 350° / 9 kts fond 4425 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.140	34.740	4.551	0.160	0.021	103.530	0.163	0.102	38.590
20	29.150	34.740	4.537	0.150	0.021	103.230	0.171	0.074	30.240
40	29.150	34.740	4.578	0.150	0.024	104.170	0.168	0.109	39.310
50	29.160	34.730	4.529	0.140	0.024	103.060	0.159	0.091	36.290
60	29.160	34.760	4.517	0.150	0.042	102.810	0.230	0.125	35.250
70	28.980	34.880	4.469	0.220	0.375	101.460	0.260	0.204	44.000
80	26.700	35.180	3.735	0.620	4.752	81.550	0.196	0.229	53.800
90	23.750	35.150	3.276	0.830	7.521	67.760	0.200	0.275	57.910
100	22.930	35.250	3.070	0.860	8.740	62.580	0.188	0.216	53.450
120	21.690	35.300	3.060	0.890	8.964	60.950	0.106	0.160	60.320
140	20.320	35.190	3.222	0.880	8.780	62.480	0.043	0.081	65.500
160	19.440	35.370	3.221	0.950	9.326	61.480	0.029	0.047	61.770

Station No : 23
 Date : 27/01/92 Heure (GMT) : 14h 06'
 Latitude : 1° 0' N Longitude : 165° 1' E
 air sec/hum. : 27°6 / 27°4 vent dir./vit. : 80° / 13 kts fond 4425 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.970	34.750	4.492	0.160	0.049	101.890	0.185	0.104	36.040
20	28.980	34.740	4.510	0.160	0.035	102.310	0.169	0.126	42.630
40	28.980	34.740	4.481	0.150	0.049	101.650	0.149	0.127	46.010
50	28.980	34.750	4.491	0.160	0.059	101.890	0.172	0.108	38.620
60	28.520	34.830	4.465	0.190	0.298	100.520	0.226	0.150	39.960
70	28.180	35.040	4.102	0.420	2.880	91.900	0.250	0.305	54.890
80	26.960	35.000	3.820	0.550	4.925	84.190	0.224	0.271	54.750
90	25.440	34.940	3.526	0.680	6.945	75.580	0.181	0.245	57.580
100	23.750	35.020	3.248	0.830	8.612	67.130	0.145	0.235	61.870
120	21.620	35.220	3.103	0.910	10.626	61.700	0.085	0.137	61.760
140	20.180	35.150	3.227	0.890	10.290	62.400	0.036	0.074	66.900
160	18.370	34.910	3.407	0.900	10.419	63.510	0.019	0.041	67.810

Station No : 25
 Date : 28/01/92 Heure (GMT) : 00h 30'
 Latitude : 1°59' N Longitude : 165° 1' E
 air sec/hum. : 27°1 / 26°1 vent dir./vit. : 290° / 1 kts fond 4330 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.720	34.660	4.488	0.150	0.208	101.300	0.048	0.021	30.240
20	28.680	34.660	4.481	0.150	0.212	101.070	0.053	0.023	30.200
40	28.680	34.660	4.487	0.150	0.232	101.210	0.066	0.030	31.230
50	28.020	34.670	4.430	0.170	0.537	98.760	0.230	0.167	42.070
60	26.390	35.050	3.674	0.580	5.558	79.720	0.290	0.290	50.010
70	25.690	35.150	3.201	0.790	8.021	68.610	0.211	0.292	58.020
80	25.290	35.140	3.164	0.820	8.596	67.330	0.051	0.061	54.510
90	24.620	35.210	2.997	0.900	9.365	63.020	0.042	0.056	56.960
100	24.130	35.200	3.060	0.900	9.201	63.760	0.030	0.057	65.630
120	23.180	35.210	3.101	0.910	9.251	63.490	0.016	0.018	52.020
140	21.710	35.080	3.259	0.870	8.872	64.860	0.009	0.017	65.920
160	19.140	35.010	3.202	0.950	11.216	60.630	0.006	0.009	57.690

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Station No : 27
 Date : 28/01/92 Heure (GMT) : 09h 40'
 Latitude : 3° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°6 / 27°4 vent dir./vit. : 40° / 17 kts fond 4180 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.030	34.760	4.601	0.140	0.208	102.640	0.118	0.081	40.700
20	28.030	34.760	4.593	0.140	0.208	102.460	0.118	0.097	45.190
40	27.140	35.050	4.325	0.310	2.211	95.120	0.181	0.131	42.080
50	26.230	35.200	3.461	0.750	7.761	74.940	0.205	0.147	41.700
60	25.700	35.130	3.325	0.740	7.758	71.280	0.264	0.290	52.380
70	25.240	35.130	3.198	0.790	8.555	67.980	0.247	0.320	56.440
80	24.770	35.070	3.395	0.710	7.483	71.530	0.174	0.305	63.700
90	24.690	35.150	3.332	0.750	7.836	70.130	0.183	0.241	56.860
100	24.580	35.170	3.328	0.770	8.144	69.910	0.148	0.221	59.900
120	23.550	35.160	3.299	0.810	8.585	67.990	0.070	0.102	59.170
140	21.350	35.120	3.207	0.910	9.782	63.400	0.017	0.062	78.470
160	20.580	35.060	3.200	0.950	10.260	62.320	0.013	0.040	74.830

Station No : 29
 Date : 28/01/92 Heure (GMT) : 19h 12'
 Latitude : 4° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°1 / 27°5 vent dir./vit. : 50° / 16 kts fond 4260 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.700	34.760	4.642	0.160	0.582	102.950	0.122	0.081	39.880
20	27.710	34.750	4.557	0.160	0.569	101.080	0.104	0.093	47.250
40	27.510	34.800	4.458	0.220	1.372	98.560	0.142	0.102	41.760
50	26.210	34.970	4.011	0.440	4.152	86.710	0.215	0.188	46.590
60	25.440	35.180	3.154	0.830	9.260	67.310	0.247	0.325	56.870
70	25.260	35.190	3.064	0.860	9.736	65.180	0.222	0.322	59.120
80	24.660	35.180	3.194	0.830	9.195	67.200	0.181	0.359	66.450
90	24.500	35.170	3.233	0.800	8.815	67.820	0.153	0.264	63.310
100	23.870	35.180	3.117	0.850	9.505	64.630	0.081	0.139	63.320
120	22.710	35.140	3.113	0.890	9.982	63.150	0.037	0.075	66.620
140	20.270	34.980	3.480	0.840	9.227	67.340	0.026	0.060	69.970
160	18.420	34.930	3.283	0.980	12.324	61.270	0.010	0.028	73.660

Station No : 31
 Date : 29/01/92 Heure (GMT) : 04h 47'
 Latitude : 5° 0' N Longitude : 164°59' E
 air sec/hum. : 27°7 / 27°1 vent dir./vit. : 40° / 20 kts fond 4480 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.690	34.560	4.629	0.080	0.063	102.530	0.121	0.064	34.770
20	27.670	34.560	4.606	0.080	0.063	101.980	0.127	0.072	36.030
40	27.610	34.570	4.619	0.080	0.118	102.160	0.157	0.090	36.540
50	27.590	34.580	4.598	0.090	0.149	101.670	0.248	0.134	35.060
60	27.440	34.580	4.578	0.090	0.174	100.960	0.222	0.186	45.490
70	26.870	34.520	4.555	0.090	0.049	99.390	0.357	0.299	45.570
80	24.850	34.600	4.447	0.140	0.049	93.580	0.333	0.344	50.810
90	23.620	34.680	4.218	0.250	1.388	86.810	0.226	0.338	59.940
100	22.100	34.760	3.928	0.430	3.735	78.610	0.132	0.160	54.860
120	19.410	34.800	3.620	0.720	7.598	68.820	0.022	0.056	71.750
140	17.480	34.760	3.496	0.970	10.928	63.980	0.023	0.073	76.090
160	15.290	34.660	3.250	1.180	14.814	56.880	0.011	0.034	74.730

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Station No : 32
 Date : 29/01/92 Heure (GMT) : 13h 10'
 Latitude : 6° 0' N Longitude : 164°34' E

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.440	34.400	4.563	0.050	0.024	100.520	0.066	0.046	41.140
30	27.460	34.390	4.576	0.050	0.024	100.840	0.068	0.034	33.540
60	27.460	34.380	4.572	0.050	0.024	100.740	0.060	0.053	46.880
80	23.000	34.750	4.143	0.320	2.000	84.320	0.164	0.203	55.310
90	21.910	34.810	3.726	0.530	5.689	74.320	0.314	0.288	47.830
100	20.300	34.800	3.629	0.640	7.401	70.190	0.189	0.359	65.540
110	19.360	34.790	3.581	0.730	8.800	68.010	0.016	0.397	96.190
120	18.390	34.780	3.543	0.810	9.858	66.020	0.092	0.143	61.000
130	17.520	34.740	3.294	0.890	12.238	60.320	0.077	0.136	63.900
140	16.540	34.700	3.299	0.990	13.738	59.230	0.046	0.100	68.210
160	14.670	34.630	3.121	1.220	16.847	53.920	0.019	0.045	69.960
180	12.180	34.570	2.275	1.770	24.719	37.300	0.006	0.026	82.310

Station No : 33
 Date : 30/01/92 Heure (GMT) : 21h 05'
 Latitude : 7° 0' N Longitude : 164°59' E
 air sec/hum. : 28°6 / 25°2 vent dir./vit. : 50° / 18 kts fond 4750 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.200	34.680	4.632	0.130	0.463	101.770	0.221	0.095	30.160
30	27.190	34.710	4.593	0.160	0.744	100.910	0.251	0.113	31.070
60	27.120	34.740							
80	24.500	34.700	3.867	0.270	1.992	80.900	0.307	0.284	48.100
90	22.320	34.760	3.956	0.400	3.482	79.490	0.232	0.266	53.410
100	20.420	34.750	3.610	0.640	7.158	69.960	0.207	0.202	49.390
110	18.800	34.770	3.454	0.790	9.337	64.880	0.131	0.154	54.040
120	17.630	34.740	3.366	0.910	11.178	61.770	0.101	0.153	60.190
130	16.300	34.690	3.019	1.050	14.208	53.940	0.089	0.135	60.210
140	14.550	34.620	2.923	1.260	17.234	50.370	0.051	0.136	72.670
160	13.200	34.570	2.718	1.460	20.023	45.530	0.041	0.065	61.400
180	12.340	34.550	2.341	1.680	23.081	38.510	0.020	0.050	71.600

Station No : 34
 Date : 30/01/92 Heure (GMT) : 06h 20'
 Latitude : 8° 0' N Longitude : 165° 0' E
 air sec/hum. : 27°2 / 26°4 vent dir./vit. : 60° / 19 kts fond 3485 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.340	34.530	4.587	0.070	0.013	100.940	0.159	0.062	28.220
30	27.370	34.530	4.578	0.070	0.028	100.800	0.187	0.090	32.460
60	26.610	34.640	4.542	0.140	0.334	98.710	0.357	0.222	38.390
80	21.530	34.740	3.813	0.490	4.695	75.480	0.232	0.243	51.220
90	20.170	34.750	3.509	0.690	7.910	67.680	0.219	0.245	52.870
100	19.270	34.790	3.333	0.810	9.778	63.190	0.219	0.264	54.690
110	18.610	34.770	3.250	0.910	11.178	60.820	0.198	0.277	58.300
120	17.520	34.740	3.152	0.920	12.477	57.720	0.148	0.256	63.410
130	16.710	34.700	3.101	1.010	13.640	55.860	0.100	0.175	63.670
140	15.600	34.650	2.957	1.130	15.072	52.070	0.077	0.147	65.610
160	13.160	34.510	2.529	1.530	19.905	42.310	0.047	0.090	65.850
180	11.860	34.500	2.097	1.790	22.254	34.130	0.036	0.059	62.110

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Station No : 35

Date : 04/02/92 Heure (GMT) : 14h 15'

Latitude : 9° 0' N Longitude : 165° 0' E

air sec/hum. : 27°4 / 25°3 vent dir./vit. : 60° / 21 kts fond 5130 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	27.100	34.330	4.620	0.040	0.010	101.120	0.082	0.053	39.140
30	27.120	34.330	4.589	0.050	0.006	100.480	0.075	0.048	38.940
60	26.160	34.300	4.561	0.080	0.024	98.130	0.096	0.059	37.780
80	18.740	34.750	3.416	0.790	8.804	64.080	0.277	0.333	54.600
90	17.760	34.720	3.261	0.810	10.796	59.990	0.217	0.277	56.090
100	16.560	34.680	3.176	0.840	10.570	57.030	0.128	0.184	58.860
110	16.010	34.650	3.379	0.870	10.895	60.000	0.115	0.183	61.470
120	15.570	34.610	3.415	0.910	11.474	60.090	0.110	0.181	62.100
130	14.160	34.540	2.988	1.210	15.195	51.050	0.083	0.121	59.390
140	13.180	34.490	2.705	1.470	18.555	45.270	0.060	0.095	61.080
160	12.010		2.408	1.650	21.490	39.430	0.044	0.073	62.280
180	10.660	34.470	1.883	1.990	26.130	29.870	0.007	0.031	80.920

Station No : 36

Date : 05/02/92 Heure (GMT) : 22h 30'

Latitude : 10° 0' N Longitude : 165° 0' E

air sec/hum. : 27°3 / 24°9 vent dir./vit. : 60° / 17 kts fond 5300 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	26.730	34.200	4.702	0.060	0.017	102.150	0.089	0.051	36.320
30	26.720	34.200	4.632	0.060	0.017	100.610	0.091	0.057	38.480
60	26.680	34.190	4.623	0.080	0.017	100.340	0.106	0.070	39.890
80	23.180	34.690	4.604	0.210	0.522	93.980	0.374	0.234	38.460
90	21.280	34.780	4.387	0.330	1.621	86.450	0.314	0.269	46.160
100	20.120	34.760	4.127	0.510	3.629	79.530	0.241	0.262	52.070
110	19.120	34.730	3.869	0.630	5.388	73.110	0.232	0.258	52.700
120	17.480	34.660	3.731	0.780	7.941	68.240	0.193	0.257	57.110
130	14.140	34.510	3.721	1.150	14.969	63.540	0.112	0.156	58.200
140	13.920	34.490	3.740	1.200	15.659	63.570	0.092	0.145	61.070
160	12.510	34.460	3.221	1.490	20.355	53.150	0.053	0.096	64.270
180	11.240	34.480					0.092	0.103	52.850

Station No : 42

Date : 11/02/92 Heure (GMT) : 06h 07'

Latitude : 5° 0' S Longitude : 165° 0' E

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.060	34.780							
20	28.870	34.780	4.502	0.200	0.032	101.960	0.105	0.059	35.780
40	28.830	34.970	4.561	0.200	0.059	103.330	0.266	0.101	27.450
50	28.720	35.010	4.414	0.270	0.652	99.830	0.383	0.228	37.310
60	28.330	35.460	3.829	0.620	5.948	86.220	0.325	0.347	51.650
70	27.330	35.570	3.528	0.750	7.439	78.080	0.282	0.344	54.920
80	27.140	35.580	3.494	0.760	7.395	77.070	0.254	0.294	53.600
90	26.860	35.560	3.446	0.810	7.777	75.620	0.228	0.258	53.110
100	26.030	35.730	3.188	0.920	9.294	68.990	0.150	0.231	60.590
120	23.210	35.690	2.941	0.930	10.519	60.410	0.072	0.117	61.730
140	20.450	35.770	2.855	1.030	11.409	55.690	0.034	0.052	60.570
160	18.220	35.480	2.544	1.330	14.984	47.440	0.018	0.039	67.990

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Station No : 43
 Date : 11/02/92 Heure (GMT) : 13h 50'
 Latitude : 6° 0' S Longitude : 164°59' E

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.980	34.820	4.525	0.200	0.025	102.700	0.092	0.042	31.100
20	29.010	34.850	4.478	0.210	0.021	101.700	0.080	0.051	38.960
40	28.910	34.990	4.533	0.230	0.040	102.850	0.228	0.126	35.560
50	28.810	35.190	4.278	0.370	1.672	97.000	0.363	0.226	38.420
60	28.250	35.540	3.299	0.860	7.696	74.210	0.187	0.292	60.970
70	27.540	35.750	3.539	0.750	6.584	78.700	0.239	0.325	57.620
80	27.010	35.830	3.430	0.800	6.710	75.590	0.221	0.279	55.830
90	25.770	35.740	3.237	0.930	7.691	69.720	0.228	0.310	57.650
100	24.430	35.670	3.021	0.910	8.677	63.470	0.159	0.252	61.350
120	23.150	35.740	2.919	0.960	9.240	59.910	0.085	0.149	63.610
140	21.390	35.630	2.737	1.090	10.772	54.310	0.058	0.092	61.280
160	18.070	35.430	2.545	1.330	13.292	47.310	0.018	0.041	69.940

Station No : 44
 Date : 11/02/92 Heure (GMT) : 20h 52'
 Latitude : 7° 0' S Longitude : 165° 0' E
 air sec/hum. : 28°6 / 25°6 vent dir./vit. : 320° / 10 kts fond 2520 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.420	34.790	4.463	0.180	0.021	102.060	0.030	0.056	65.330
20	29.340	34.830	4.476	0.190	0.021	102.240	0.068	0.049	41.780
40	29.160	35.040	4.520	0.210	0.021	103.040	0.096	0.059	37.960
50	29.110	35.120	4.495	0.240	0.055	102.430	0.163	0.082	33.520
60	28.940	35.260	4.331	0.330	1.304	98.470	0.301	0.200	39.960
70	28.310	35.520	3.812	0.610	4.538	85.830	0.372	0.317	46.050
80	27.240	35.740	3.483	0.770	6.627	77.040	0.232	0.275	54.270
90	26.460	35.850	3.361	0.800	6.662	73.350	0.200	0.271	57.580
100	24.730	35.940	3.214	0.880	7.107	68.000	0.143	0.261	64.540
120	22.630	35.770	2.951	0.960	7.534	59.990	0.068	0.146	68.210
140	20.240	35.680	2.790	1.090	10.472	54.180	0.044	0.091	67.560
160	18.720	35.590	2.744	1.180	11.237	51.710	0.000	0.096	100.000

Station No : 45
 Date : 12/02/92 Heure (GMT) : 04h 00'
 Latitude : 8° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°0 / 24°7 vent dir./vit. : 290° / 3 kts fond 3605 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.620	34.890	4.506	0.200	0.017	105.300	0.061	0.040	39.570
20	29.480	34.910	4.548	0.210	0.017	104.780	0.054	0.054	49.760
40	28.660	35.600	4.444	0.430	2.373	100.740	0.393	0.166	29.780
50	27.760	35.700	3.664	0.710	3.468	81.780	0.372	0.291	43.930
60	27.200	35.760	3.394	0.810	4.204	75.020	0.323	0.333	50.700
70	26.820	35.800	3.258	0.850	7.534	71.540	0.265	0.251	48.580
80	26.190	35.850	3.109	0.880	8.047	67.520	0.206	0.242	54.020
90	25.880	35.870	3.023	0.900	8.303	65.290	0.181	0.252	58.290
100	25.500	35.860	2.913	0.920	8.539	62.480	0.161	0.253	61.120
120	23.900	35.930	2.855	0.860	8.796	59.490	0.063	0.142	69.190
140	22.360	35.840	2.851	0.880	9.052	57.690	0.042	0.092	68.330
160	20.750	35.700	2.880	0.960	9.874	56.480	0.024	0.057	70.090

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Station No : 46
 Date : 12/02/92 Heure (GMT) : 11h 30'
 Latitude : 9° 0' S Longitude : 165° 0' E
 air sec/hum. : 28°1 / 25°3 vent dir./vit. : 320° / 5 kts fond 3730 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.470	34.780	4.444	0.180	0.017	103.510	0.056	0.037	40.050
20	29.450	34.760	4.520	0.180	0.017	103.400	0.050	0.046	47.600
40	28.100	35.140	4.332	0.240	0.021	96.970	0.128	0.069	35.080
50	27.500	35.300	4.445	0.240	0.113	98.530	0.207	0.120	36.740
60	26.810	35.670	3.497	0.700	5.408	76.720	0.650	0.436	40.120
70	25.850	35.890	3.129	0.870	7.257	67.550	0.198	0.273	57.970
80	25.040	35.820	2.935	0.910	7.937	62.410	0.130	0.230	63.970
90	24.860	35.800	2.920	0.910	7.998	61.880	0.124	0.220	63.920
100	24.010	35.830	2.867	0.860	8.097	59.820	0.089	0.175	66.250
120	22.470	35.790	2.852	0.900	8.607	57.810	0.048	0.134	73.560
140	20.890	35.720	2.883	0.960	8.963	56.700	0.030	0.063	67.630
160	20.160	35.660	2.877	0.990	9.524	55.770	0.017	0.048	74.130

Station No : 47
 Date : 12/02/92 Heure (GMT) : 18h 18'
 Latitude : 10° 0' S Longitude : 165° 0' E
 air sec/hum. : 28°8 / 25°1 vent dir./vit. : 350° / 9 kts fond m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.110	34.800	4.440	0.190	0.021	102.780	0.102	0.042	28.960
20	29.650	34.860	4.511	0.190	0.021	103.620	0.076	0.061	44.420
40	28.830	35.000	4.590	0.210	0.043	104.000	0.144	0.077	34.940
50	27.900	35.220							
60	27.350	35.380	3.806	0.540	4.152	84.180	0.297	0.251	45.750
70	26.740	35.480	3.525	0.650	5.578	77.160	0.350	0.355	50.370
80	25.760	35.630	3.346	0.720	6.766	72.010	0.320	0.355	52.620
90	25.510	35.670	3.105	0.830	8.274	66.540	0.224	0.374	62.500
100	24.340	35.790	2.925	0.930	9.183	61.390	0.154	0.244	61.390
120	23.220	35.850	2.863	0.970	9.584	58.880	0.097	0.149	60.430
140	22.440	35.850	2.927	0.980	9.578	59.320	0.062	0.111	64.130
160	21.090	35.760	2.945	0.940	9.928	58.150	0.027	0.060	68.420

Station No : 48
 Date : 13/02/92 Heure (GMT) : 01h 25'
 Latitude : 11° 0' S Longitude : 165°59' E
 air sec/hum. : 28°9 / 25°6 vent dir./vit. : 350° / 4 kts fond 3875 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.650	34.920	4.356		0.021	101.860	0.065	0.032	32.770
20	28.830	35.010	4.548	0.100	0.021	103.060	0.053	0.046	46.380
40	27.570	35.040	4.672	0.100	0.021	103.540	0.074	0.054	42.290
50	26.630	35.220	4.651	0.150	0.043	101.450	0.107	0.076	41.630
60	26.300	35.290	4.416	0.230	0.885	95.790	0.357	0.312	46.630
70	25.690	35.530	3.846	0.490	3.832	82.620	0.477	0.392	45.110
80	25.480	35.620	3.528	0.630	5.620	75.540	0.436	0.355	44.880
90	24.490	35.660							
100	24.310	35.770	3.332	0.710	6.056	69.890	0.269	0.325	54.720
120	22.900	35.850	2.939	0.970	8.994	60.080	0.076	0.124	61.870
140	22.090	35.840	2.298	0.980	8.837	46.260	0.048	0.115	70.490
160	21.560	35.820	3.048	0.960	8.731	60.750	0.050	0.108	68.390

surtropac 16

Station No : 49

Date : 13/02/92 Heure (GMT) : 08h 11'

Latitude : 12° 0' S Longitude : 165° 0' E

air sec/hum. : 28°8 / 25°5 vent dir./vit. : 360° / 8 kts fond m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.570	34.980	4.317	0.130	0.016	99.090	0.060	0.025	29.630
20									
40	28.070	35.050	4.618	0.120	0.019	103.270	0.076	0.044	36.860
50	27.370	35.140	4.686	0.130	0.029	103.540	0.088	0.047	34.470
60	26.440	35.270	4.681	0.120	0.029	101.790	0.125	0.072	36.340
70	25.700	35.520	4.387	0.220	0.503	94.260	0.237	0.130	35.330
80	25.490	35.600	3.859	0.430	2.853	82.630	0.279	0.245	46.810
90	24.980	35.680	3.789	0.450	3.205	80.420	0.297	0.349	54.040
100	24.380	35.780	3.602	0.530	3.983	75.650	0.258	0.327	55.910
120	23.210	35.880	3.546	0.580	4.409	72.920	0.122	0.169	58.120
140	21.990	35.860	3.479	0.670	5.513	69.920	0.101	0.139	57.850
160	21.030	35.810	3.479	0.740	6.196	68.640	0.043	0.074	63.520

Station No : 50

Date : 13/02/92 Heure (GMT) : 15h 10'

Latitude : 13° 0' S Longitude : 164° 0' E

air sec/hum. : 30°9 / 25°4 vent dir./vit. : 30° / 5 kts fond 5500 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.000	35.100	4.532	0.090	0.017	104.890	0.430	0.034	7.340
20	28.190	35.170	4.619	0.120	0.017	103.580	0.069	0.042	37.510
40	27.330	35.300	4.599	0.150	0.017	101.630	0.098	0.055	35.920
60	26.860	35.330	4.196	0.160	0.024	91.960	0.095	0.066	40.870
80	26.040	35.400	4.500	0.160	0.032	97.220	0.293	0.247	45.690
90	25.620	35.470	4.407	0.200	0.121	94.520	0.400	0.327	44.960
100	25.130	35.520	4.198	0.270	0.964	89.260	0.350	0.329	48.470
110	24.960	35.570	4.146	0.270	1.020	87.910	0.321	0.338	51.260
120	23.070	35.720	3.870	0.410	2.803	79.310	0.206	0.249	54.780
140	22.750	35.670	3.834	0.410	3.180	78.080	0.098	0.175	64.130
160	21.960	35.750	3.786	0.490	3.757	76.000	0.050	0.115	69.660
180	21.340	35.770	3.749	0.540	4.209	74.390	0.032	0.066	67.260

Surtropac 16

Caractéristiques des traits : WP 2
vertical
200 microns

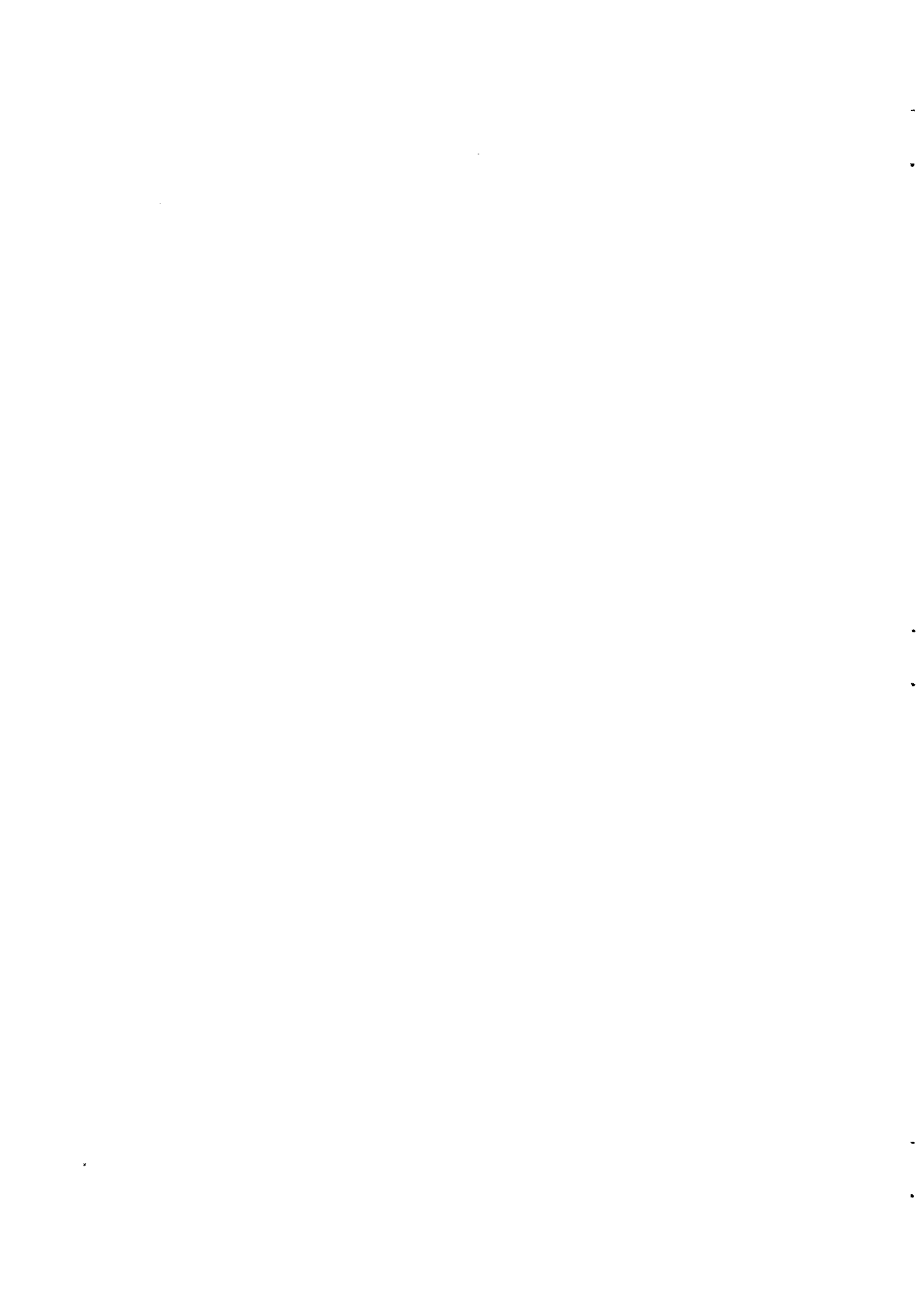
No_sta	Position		date		h. loc.	Notrait	angle	long. filée	Z		vol. filtré	pds_sec	%pssc	
	(degrés, minutes)				(=TU+11)		(degré)	(m)	max / min	(m)	(m ³)	(mg)		
1	-20.00	165.00	19	1	1992	10.5	WPv 1	0	500	500	0	123.5	137.6	77.5
2	-19.00	165.00	20	1	1992	17.7	WPv 2	20	532	500	0	129.1	175.5	77.8
3	-18.00	165.00	20	1	1992	1.3	WPv 3	20	532	500	0	133.9	174.0	78.6
4	-17.00	165.00	20	1	1992	9.4	WPv 4	0	500	500	0	122.1	152.1	70.1
5	-16.00	165.00	21	1	1992	16.6	WPv 5	10	508	500	0	128.2	239.4	74.5
6	-15.00	165.00	21	1	1992	23.8	WPv 6	20	532	500	0	177.0	153.2	75.4
7	-14.00	165.00	21	1	1992	7.3	WPv 7	20	532	500	0	134.1	111.9	74.3
8	-13.00	165.00	22	1	1992	14.8	WPv 8	10	508	500	0	125.1	106.5	83.8
9	-12.00	165.00	22	1	1992	21.2	WPv 9	10	508	500	0	138.7	145.7	76.7
10	-6.00	165.13	23	1	1992	12.2	WPv 10	0	500	500	0	121.6	198.0	74.3
11	-4.58	165.01	24	1	1992	21.2	WPv 11	20	532	500	0	145.0	302.4	81.5
13	-4.00	165.00	24	1	1992	5.8	WPv 12	10	508	500	0	124.8	221.5	79.4
15	-3.00	164.58	25	1	1992	14.4	WPv 13	10	508	500	0	138.0	220.2	78.5
17	-1.59	164.53	25	1	1992	1.3	WPv 14	20	532	500	0	138.7	219.6	79.2
19	-1.00	164.58	26	1	1992	12.9	WPv 15	10	508	500	0	129.6	279.5	77.9
21	0.00	165.00	26	1	1992	23.8	WPv 16	20	532	500	0	131.7	268.3	81.2
21	0.00	165.00	26	1	1992	1.6	WPv 17	25	109	100	0	29.5	182.3	81.2
21	0.00	165.00	26	1	1992	1.8	WPv 18	20	213	200	0	72.2	240.9	78.9
21	0.00	165.00	26	1	1992	2.5	WPv 19	0	300	300	0	82.2	255.2	91.8
21	0.00	165.00	26	1	1992	3.0	WPv 20	20	532	500	0	148.4	229.7	82.7
21	0.00	165.00	26	1	1992	3.4	WPv 21	20	106	100	0	37.2	241.5	78.0
21	0.00	165.00	26	1	1992	3.7	WPv 22	10	203	200	0	74.5	252.6	75.9
21	0.00	165.00	26	1	1992	4.0	WPv 23	10	305	300	0	84.0	270.9	78.3
21	0.00	165.00	26	1	1992	4.5	WPv 24	20	532	500	0	134.4	258.6	78.4
21	0.00	165.00	26	1	1992	4.9	WPv 25	20	106	100	0	35.2	228.3	77.4
21	0.00	165.00	26	1	1992	5.2	WPv 26	10	203	200	0	79.2	253.7	76.1
21	0.00	165.00	26	1	1992	5.6	WPv 27	10	305	300	0	90.8	221.3	78.5
21	0.00	165.00	26	1	1992	6.2	WPv 28	20	532	500	0	149.1	250.6	81.3
21	0.00	165.00	26	1	1992	11.1	WPv 29	10	102	100	0	31.8	161.0	70.5
21	0.00	165.00	26	1	1992	11.4	WPv 30	20	213	200	0	82.0	192.1	64.6
21	0.00	165.00	26	1	1992	11.8	WPv 31	10	305	300	0	94.2	223.5	72.7
21	0.00	165.00	26	1	1992	12.3	WPv 32	0	500	500	0	137.8	219.0	76.8
21	0.00	165.00	26	1	1992	12.6	WPv 33	25	109	100	0	38.6	169.0	72.9
21	0.00	165.00	26	1	1992	12.9	WPv 34	20	213	200	0	88.8	239.4	73.3
21	0.00	165.00	26	1	1992	13.2	WPv 35	20	319	300	0	98.0	206.5	71.8
21	0.00	165.00	26	1	1992	13.6	WPv 36	0	500	500	0	133.2	225.1	76.4
21	0.00	165.00	26	1	1992	13.9	WPv 37	25	109	100	0	36.1	235.1	71.0
21	0.00	165.00	26	1	1992	14.1	WPv 38	20	213	200	0	72.9	184.1	72.9
21	0.00	165.00	26	1	1992	14.5	WPv 39	30	346	300	0	92.1	249.3	75.3
21	0.00	165.00	26	1	1992	15.0	WPv 40	20	532	500	0	154.6	264.4	78.6
23	1.00	165.01	27	1	1992	2.0	WPv 41	0	500	500	0	129.1	272.3	74.0
25	1.59	165.01	28	1	1992	12.7	WPv 42	20	532	500	0	128.7	261.0	76.5
27	3.00	165.01	28	1	1992	21.9	WPv 43	20	532	500	0	137.8	260.8	81.0
29	4.00	165.00	28	1	1992	7.6	WPv 44	20	532	500	0	135.9	231.2	80.8
31	5.00	165.00	29	1	1992	17.7	WPv 45	10	508	500	0	121.7	259.1	72.9
32	6.00	165.00	29	1	1992	1.5	WPv 46	20	532	500	0	167.7	196.7	80.1
33	7.00	164.59	29	1	1992	9.3	WPv 47	20	532	500	0	158.0	175.6	71.9
34	8.01	164.34	30	1	1992	19.4	WPv 48	20	532	500	0	142.5	322.5	81.5
35	9.00	164.59	30	1	1992	2.7	WPv 49	30	577	500	0	183.4	255.5	76.0
36	10.00	165.00	30	1	1992	10.9	WPv 50	20	532	500	0	150.3	197.2	80.6

Surtropac 16

Valeurs des biomasses par mètre carré : WP 2
vertical
200 microns

No_sta	Position (degrés, minutes)		date		No trait	Zmax (m)	pds_sec (mg/m ³)	pssc (mg/m ³)	pds_sec (mg/m ²)	pssc (mg/m ²)	
1	-20.00	165.00	19	1	1992	WPV 1	500	1.11	0.86	557	432
2	-19.00	165.00	20	1	1992	WPV 2	500	1.36	1.06	680	529
3	-18.00	165.00	20	1	1992	WPV 3	500	1.30	1.02	650	511
4	-17.00	165.00	20	1	1992	WPV 4	500	1.25	0.87	623	437
5	-16.00	165.00	21	1	1992	WPV 5	500	1.87	1.39	934	696
6	-15.00	165.00	21	1	1992	WPV 6	500	0.87	0.65	433	326
7	-14.00	165.00	21	1	1992	WPV 7	500	0.83	0.62	417	310
8	-13.00	165.00	22	1	1992	WPV 8	500	0.85	0.71	426	357
9	-12.00	165.00	22	1	1992	WPV 9	500	1.05	0.81	525	403
10	-6.00	165.13	23	1	1992	WPV 10	500	1.63	1.21	814	605
11	-4.58	165.01	24	1	1992	WPV 11	500	2.09	1.70	1043	850
13	-4.00	165.00	24	1	1992	WPV 12	500	1.77	1.41	887	705
15	-3.00	164.58	25	1	1992	WPV 13	500	1.60	1.25	798	626
17	-1.59	164.53	25	1	1992	WPV 14	500	1.58	1.25	792	627
19	-1.00	164.58	26	1	1992	WPV 15	500	2.16	1.68	1078	840
21	0.00	165.00	26	1	1992	WPV 16	500	2.04	1.65	1019	827
21	0.00	165.00	26	1	1992	WPV 17	100	6.18	5.02	618	502
21	0.00	165.00	26	1	1992	WPV 18	200	3.34	2.63	667	527
21	0.00	165.00	26	1	1992	WPV 19	300	3.10	2.85	931	855
21	0.00	165.00	26	1	1992	WPV 20	500	1.55	1.28	774	640
21	0.00	165.00	26	1	1992	WPV 21	100	6.49	5.06	649	506
21	0.00	165.00	26	1	1992	WPV 22	200	3.39	2.57	678	515
21	0.00	165.00	26	1	1992	WPV 23	300	3.22	2.53	967	758
21	0.00	165.00	26	1	1992	WPV 24	500	1.92	1.51	962	754
21	0.00	165.00	26	1	1992	WPV 25	100	6.49	5.02	649	502
21	0.00	165.00	26	1	1992	WPV 26	200	3.20	2.44	641	488
21	0.00	165.00	26	1	1992	WPV 27	300	2.44	1.91	731	574
21	0.00	165.00	26	1	1992	WPV 28	500	1.68	1.37	840	683
21	0.00	165.00	26	1	1992	WPV 29	100	5.06	3.57	506	357
21	0.00	165.00	26	1	1992	WPV 30	200	2.34	1.51	469	303
21	0.00	165.00	26	1	1992	WPV 31	300	2.37	1.72	712	517
21	0.00	165.00	26	1	1992	WPV 32	500	1.59	1.22	795	610
21	0.00	165.00	26	1	1992	WPV 33	100	4.38	3.19	438	319
21	0.00	165.00	26	1	1992	WPV 34	200	2.70	1.98	539	395
21	0.00	165.00	26	1	1992	WPV 35	300	2.11	1.51	632	454
21	0.00	165.00	26	1	1992	WPV 36	500	1.69	1.29	845	646
21	0.00	165.00	26	1	1992	WPV 37	100	6.51	4.62	651	462
21	0.00	165.00	26	1	1992	WPV 38	200	2.53	1.84	505	368
21	0.00	165.00	26	1	1992	WPV 39	300	2.71	2.04	812	611
21	0.00	165.00	26	1	1992	WPV 40	500	1.71	1.34	855	672
23	1.00	165.01	27	1	1992	WPV 41	500	2.11	1.56	1055	780
25	1.59	165.01	28	1	1992	WPV 42	500	2.03	1.55	1014	776
27	3.00	165.01	28	1	1992	WPV 43	500	1.89	1.53	946	766
29	4.00	165.00	28	1	1992	WPV 44	500	1.70	1.37	851	687
31	5.00	165.00	29	1	1992	WPV 45	500	2.13	1.55	1064	776
32	6.00	165.00	29	1	1992	WPV 46	500	1.17	0.94	586	470
33	7.00	164.59	29	1	1992	WPV 47	500	1.11	0.80	556	399
34	8.01	164.34	30	1	1992	WPV 48	500	2.26	1.84	1132	922
35	9.00	164.59	30	1	1992	WPV 49	500	1.39	1.06	697	529
36	10.00	165.00	30	1	1992	WPV 50	500	1.31	1.06	656	529

Surtropac 17 : 5 août - 2 septembre 1992



4.1 - Illustrations : radiale aller

Coupes verticales de température et salinité: (0-200m); (0-400m)

Coupes verticales de sels nutritifs: NO_{23} , PO_4 (0-200m)

Coupes verticales d'oxygène et chlorophylle: (0-200m)

Coupes verticales d'abondance de phytoplancton : (0-200m)

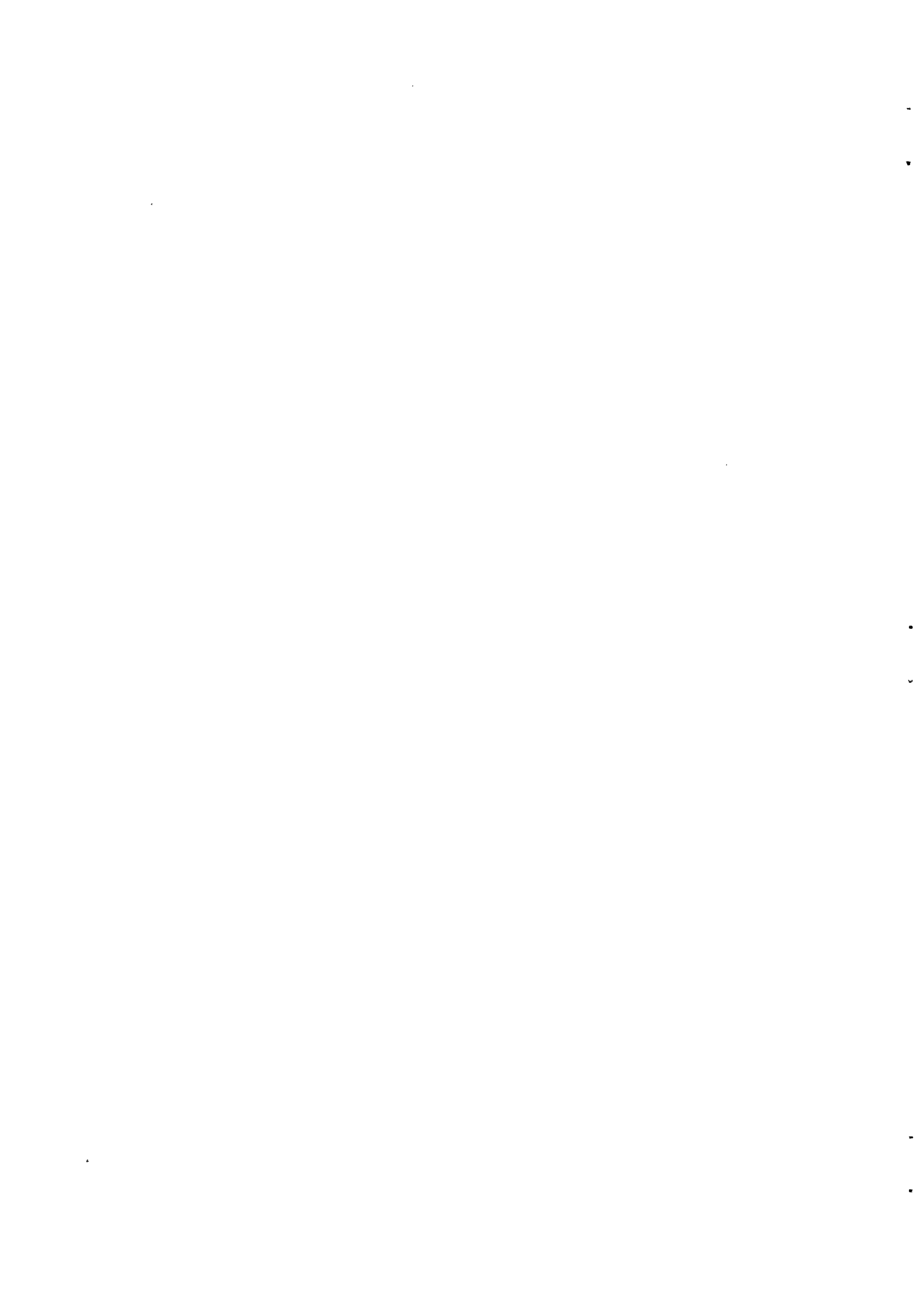
Profils des poids secs de zooplancton

radiale retour

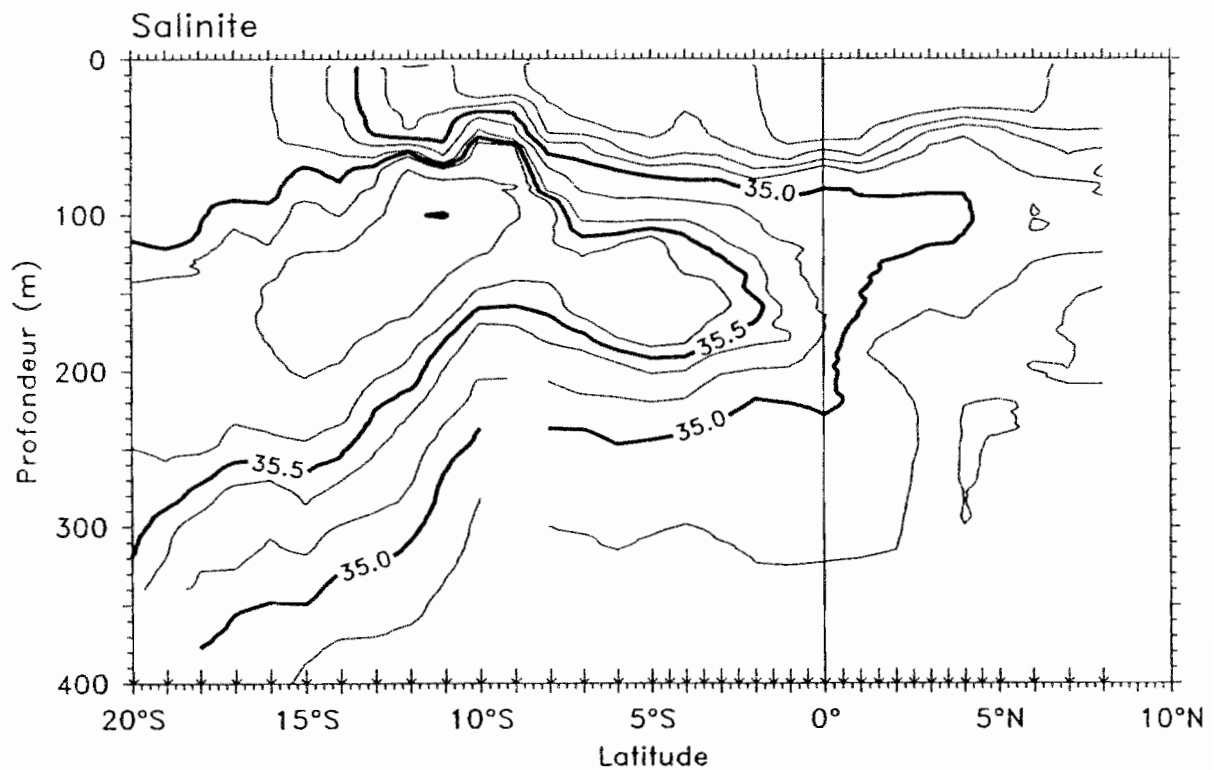
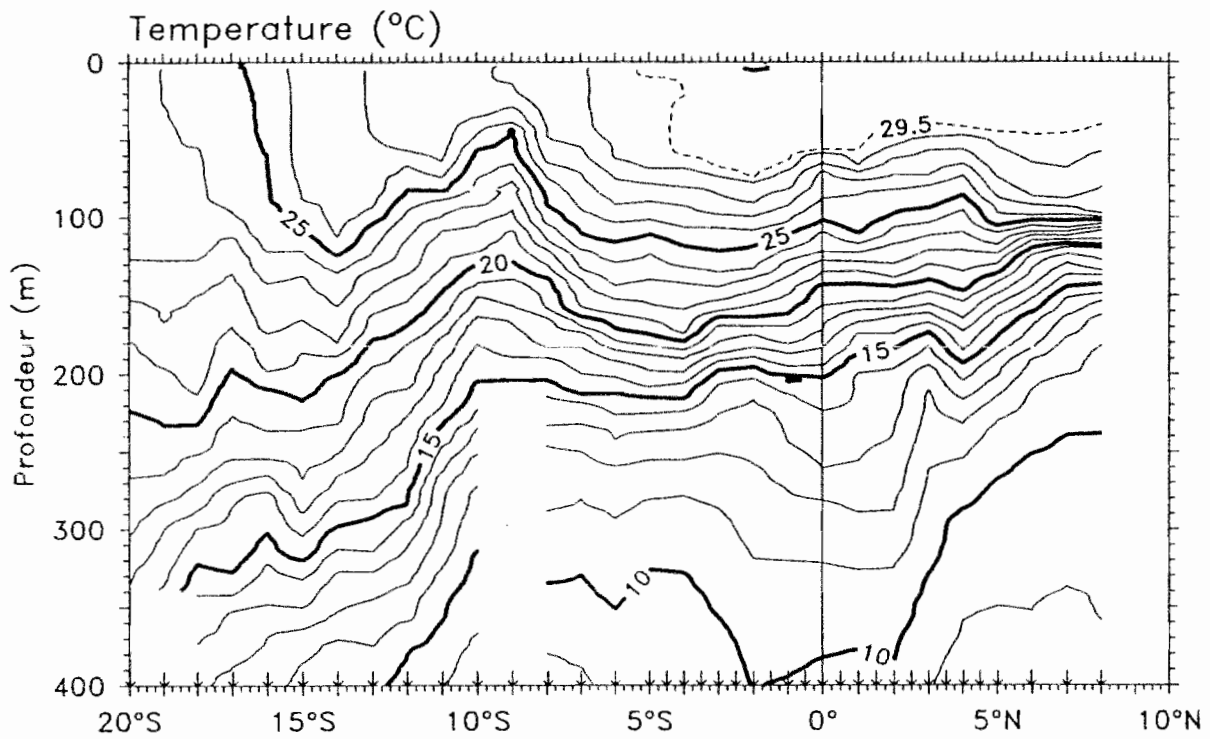
Coupes verticales de température et salinité: (0-200m); (0-400m)

Coupes verticales de sels nutritifs: NO_{23} , PO_4 (0-200m)

Coupes verticales d'oxygène et chlorophylle: (0-200m)

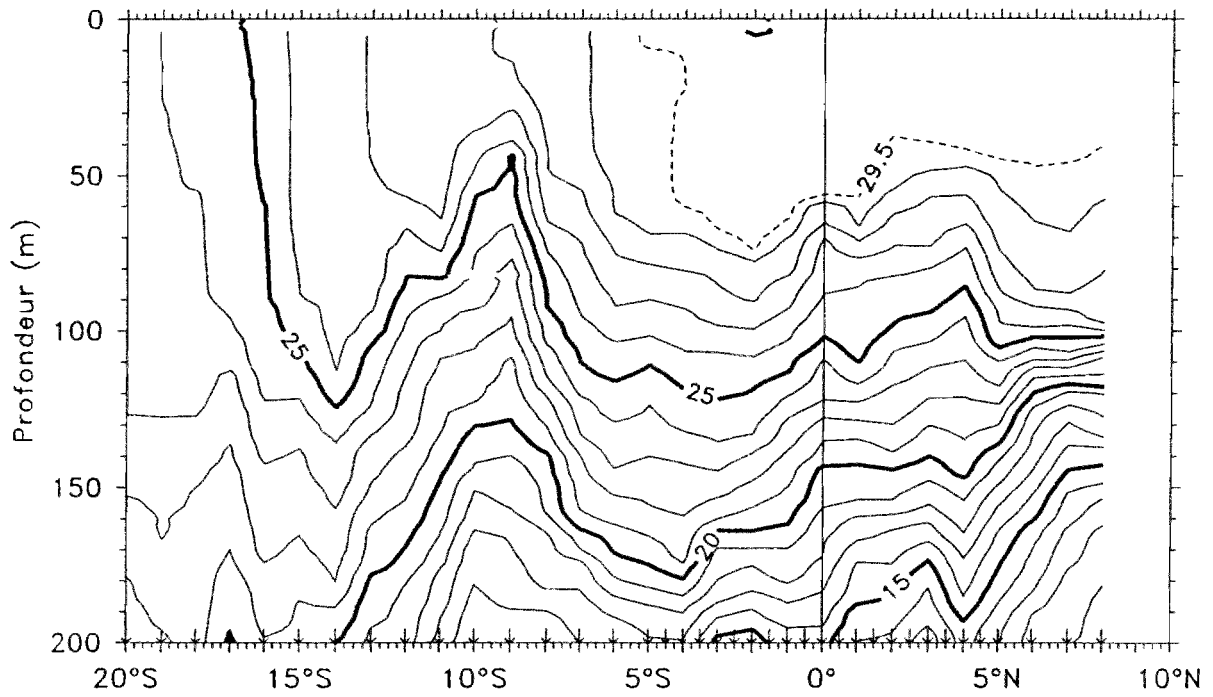


SURTROPAC17 06-16/08/92 St 1-39 Aller

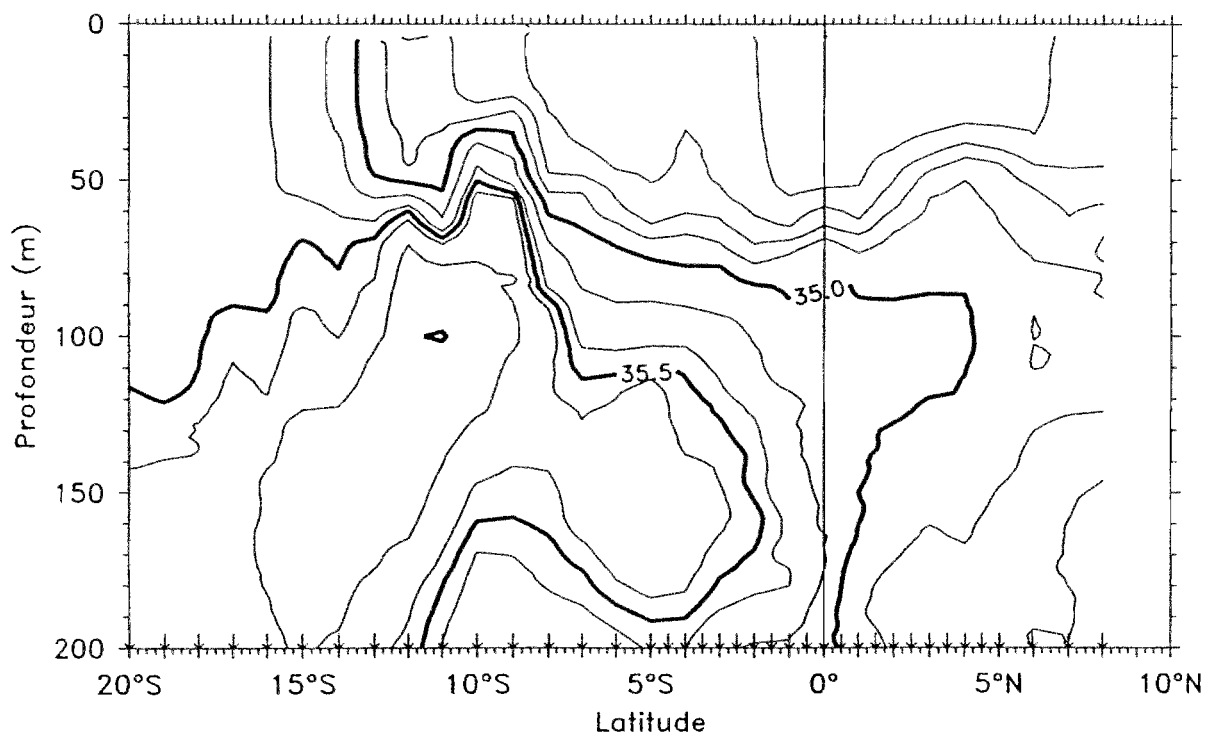


SURTROPAC17 06-16/08/92 St 1-39 Aller

Temperature (°C)

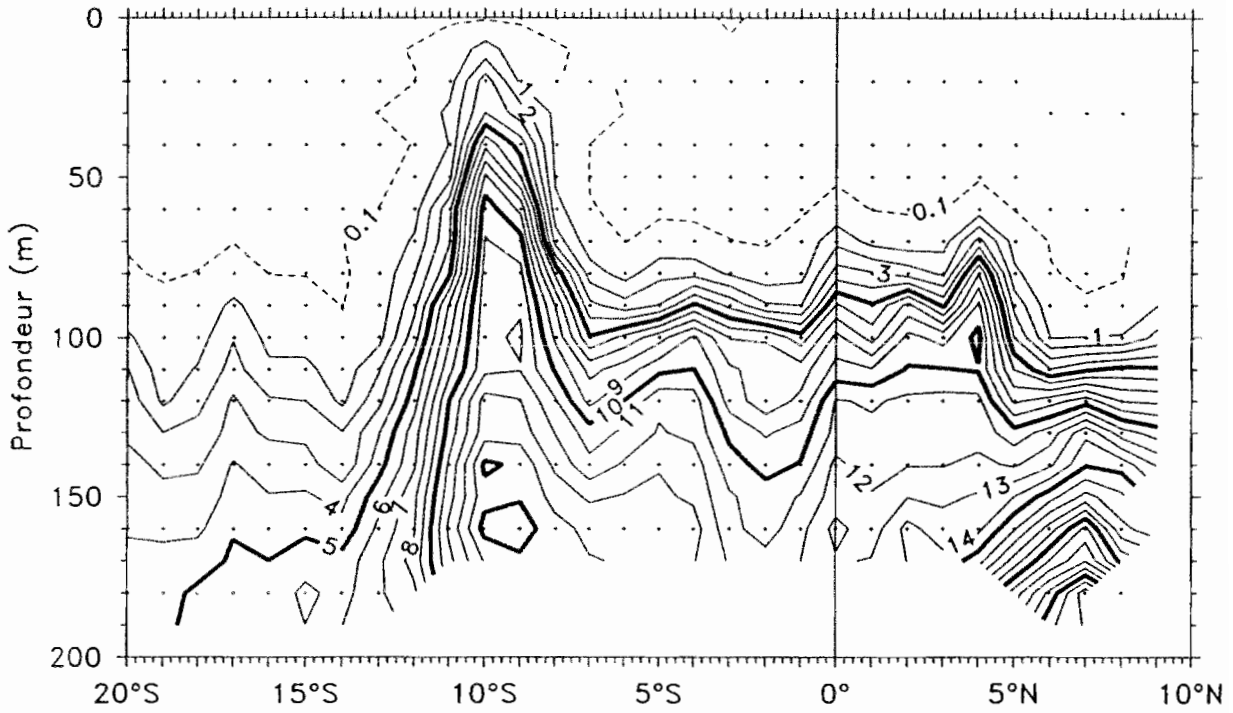


Salinite

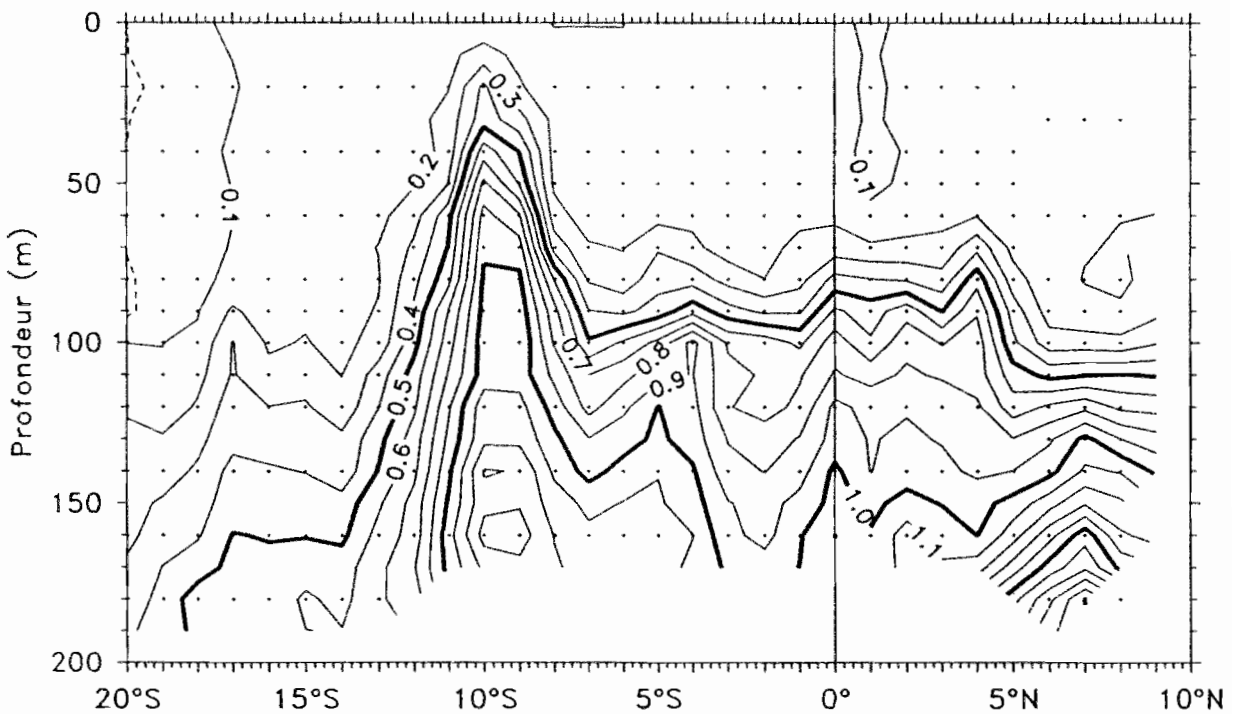


SURTROPAC17 06-16/08/92 St 1-39 Aller

Nitrate+Nitrite (μM)

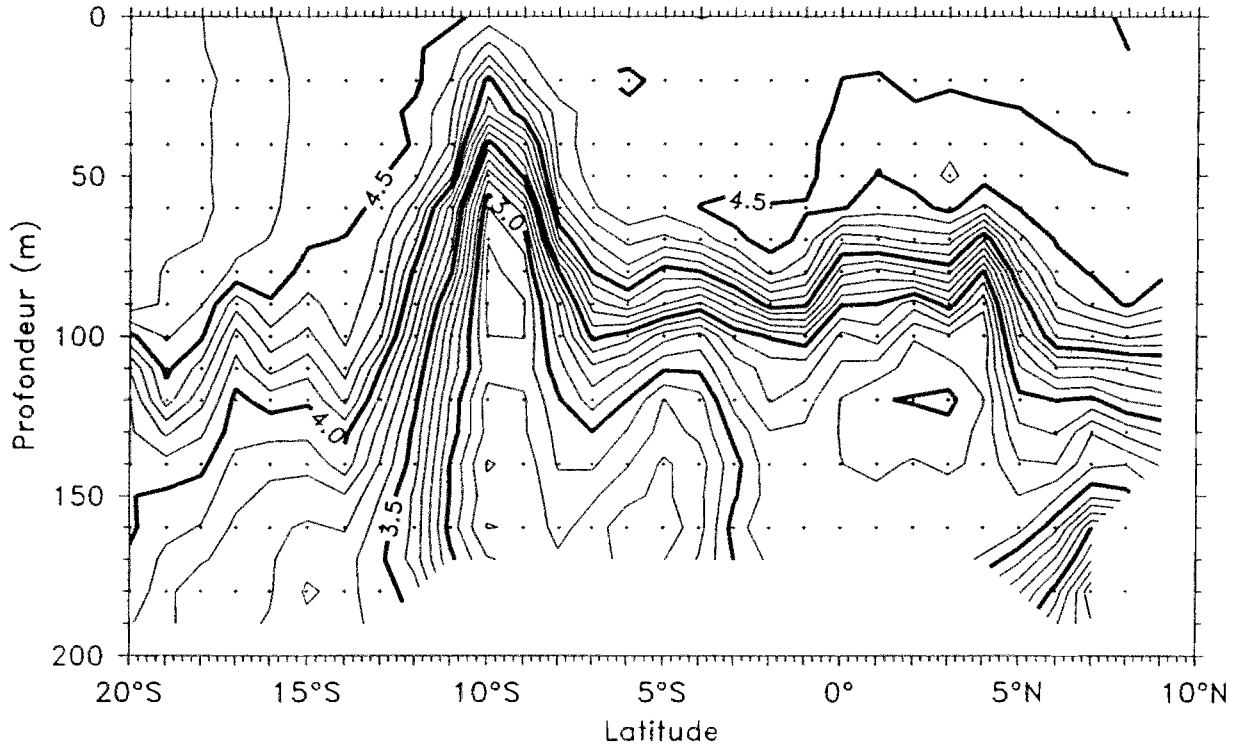


Phosphate (μM)

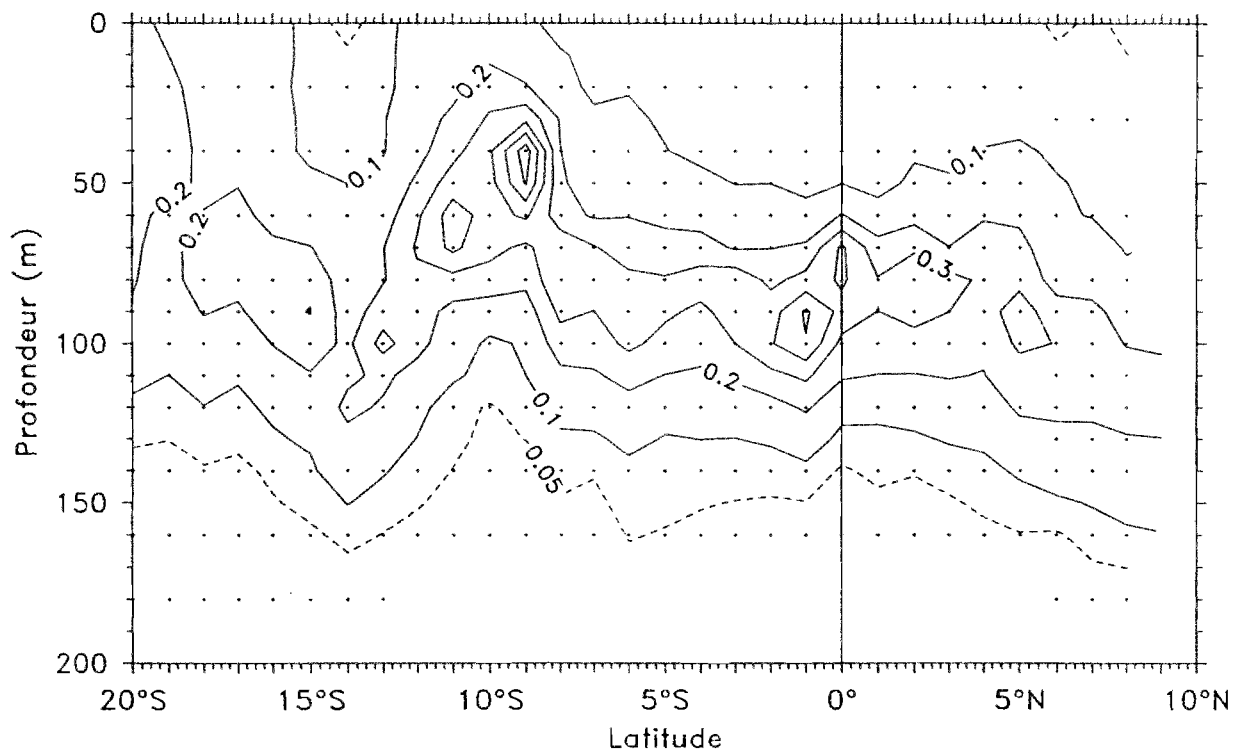


SURTROPAC17 06-16/08/92 St 1-39 Aller

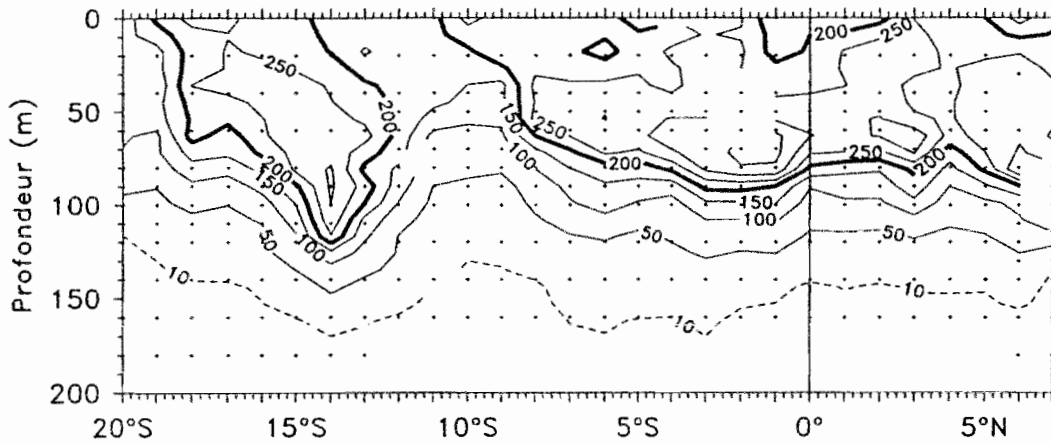
Oxygene (ml/l)



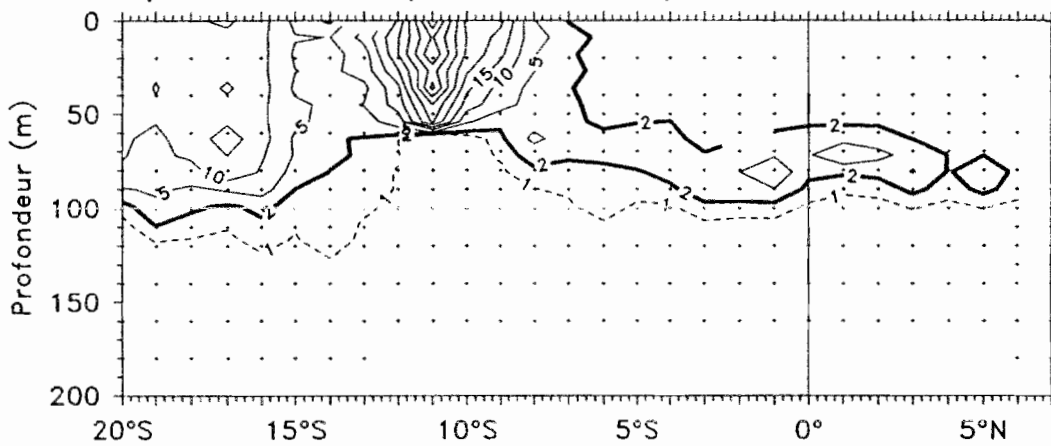
Chlorophylle ($\mu\text{g/l}$)



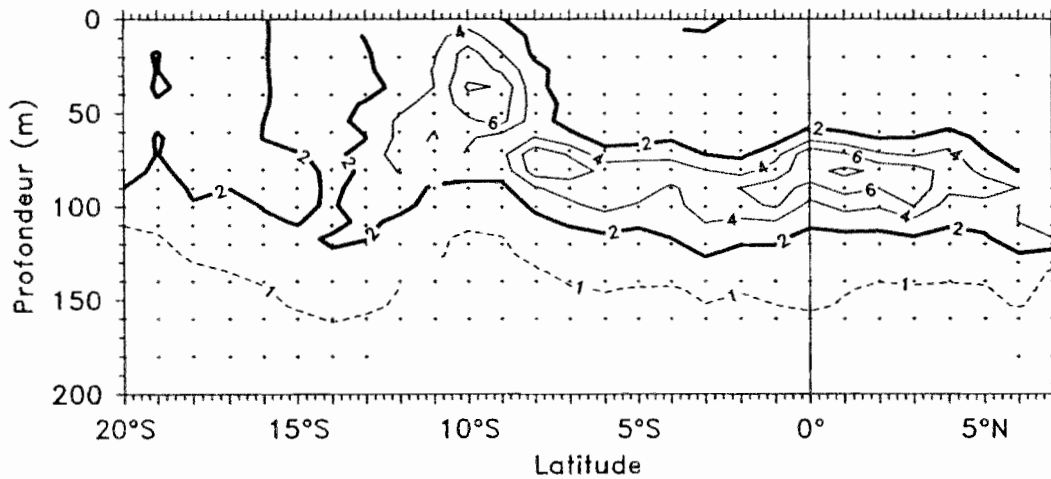
SURTROPAC17 06-16/08/92 St 1-39 Aller
 Prochlorophytes ($10^3 \text{ cells ml}^{-1}$)



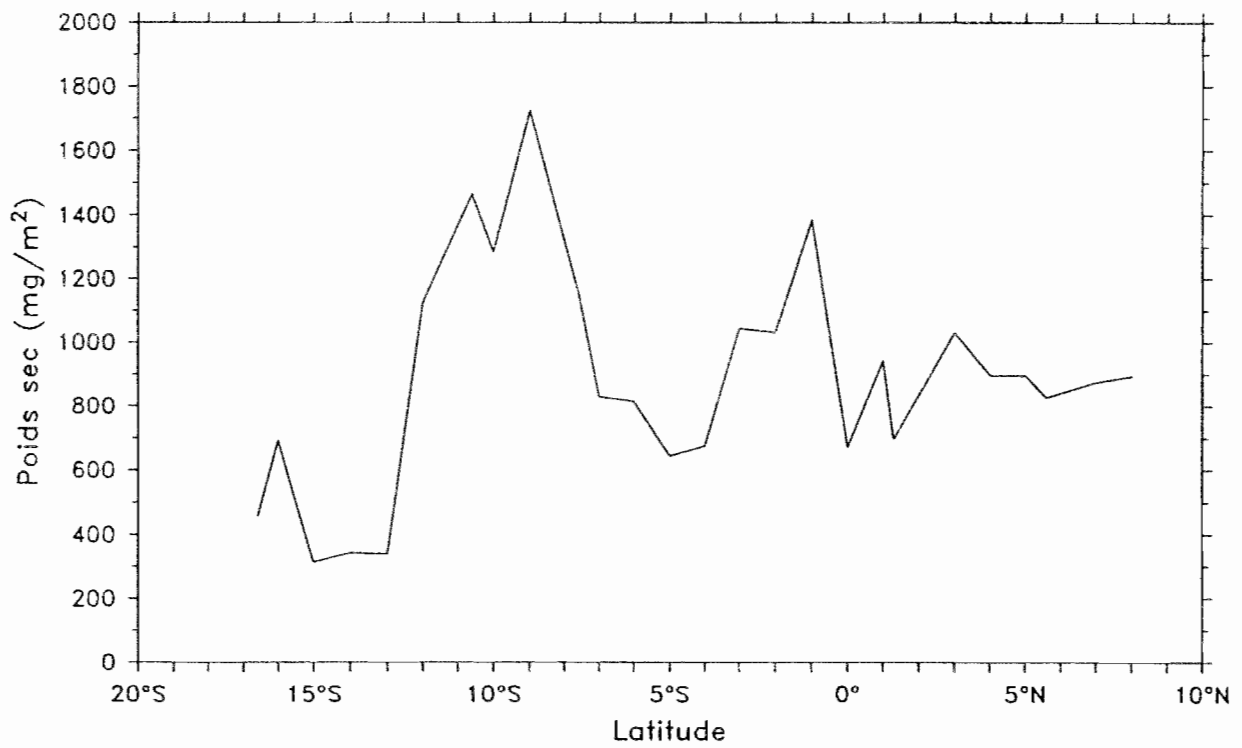
Cyanobacteries ($10^3 \text{ cells ml}^{-1}$)



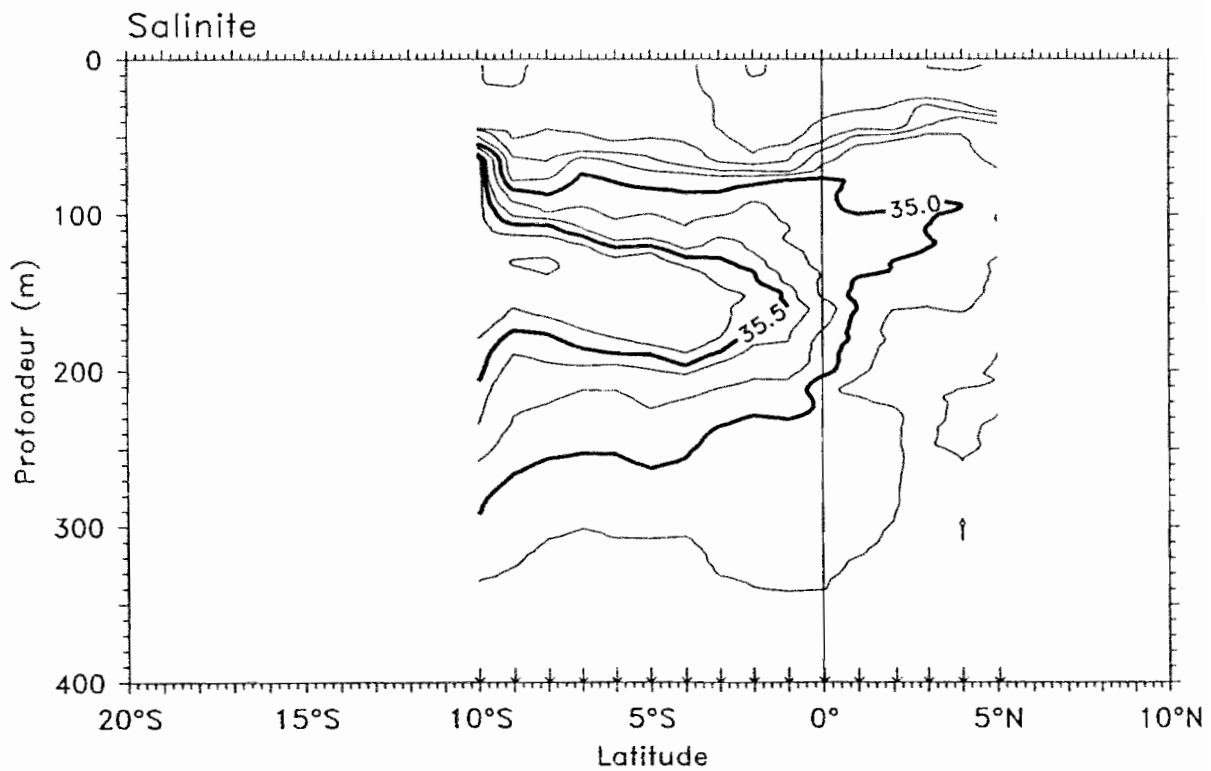
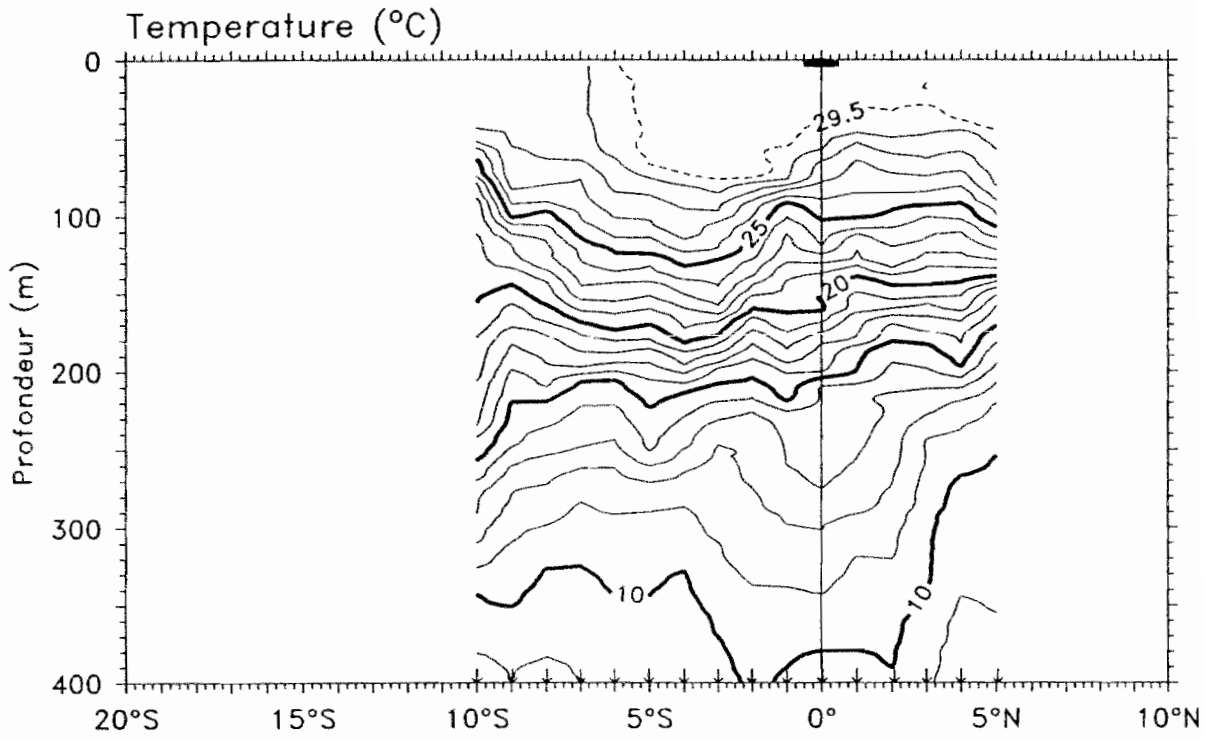
Microalgues ($10^3 \text{ cells ml}^{-1}$)



SURTROPAC17 : ZOOPLANCTON (0-500m)

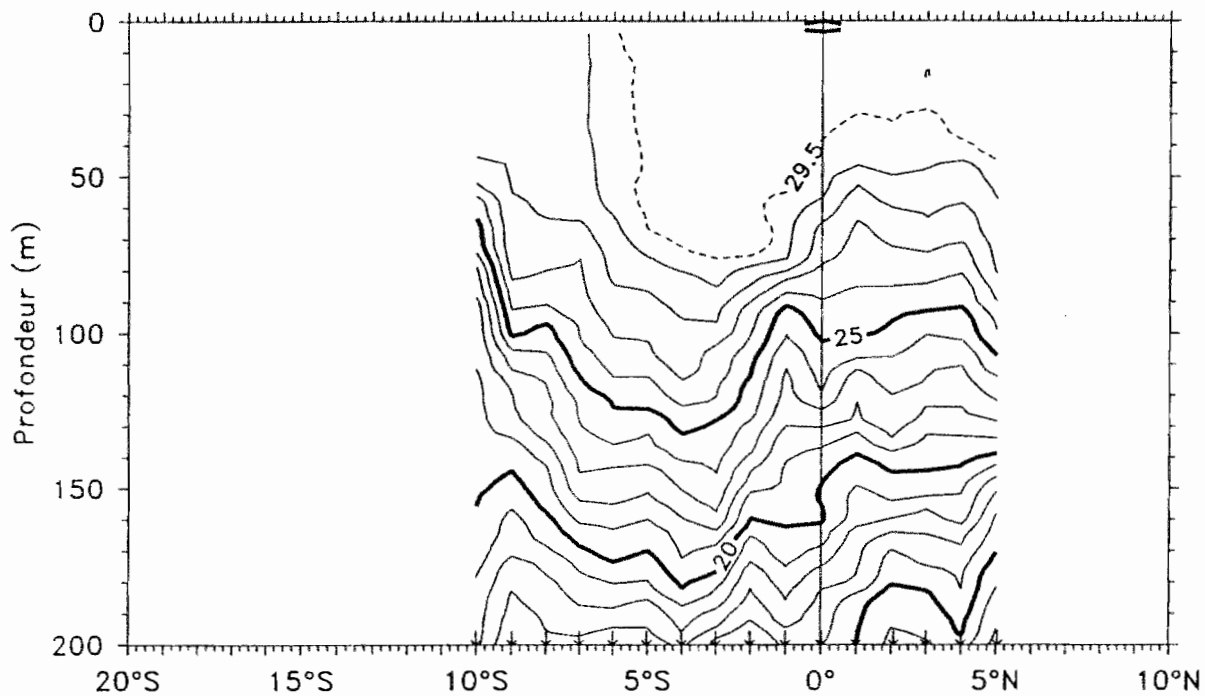


SURTROPAC17 20-29/08/92 St 40-55 Retour

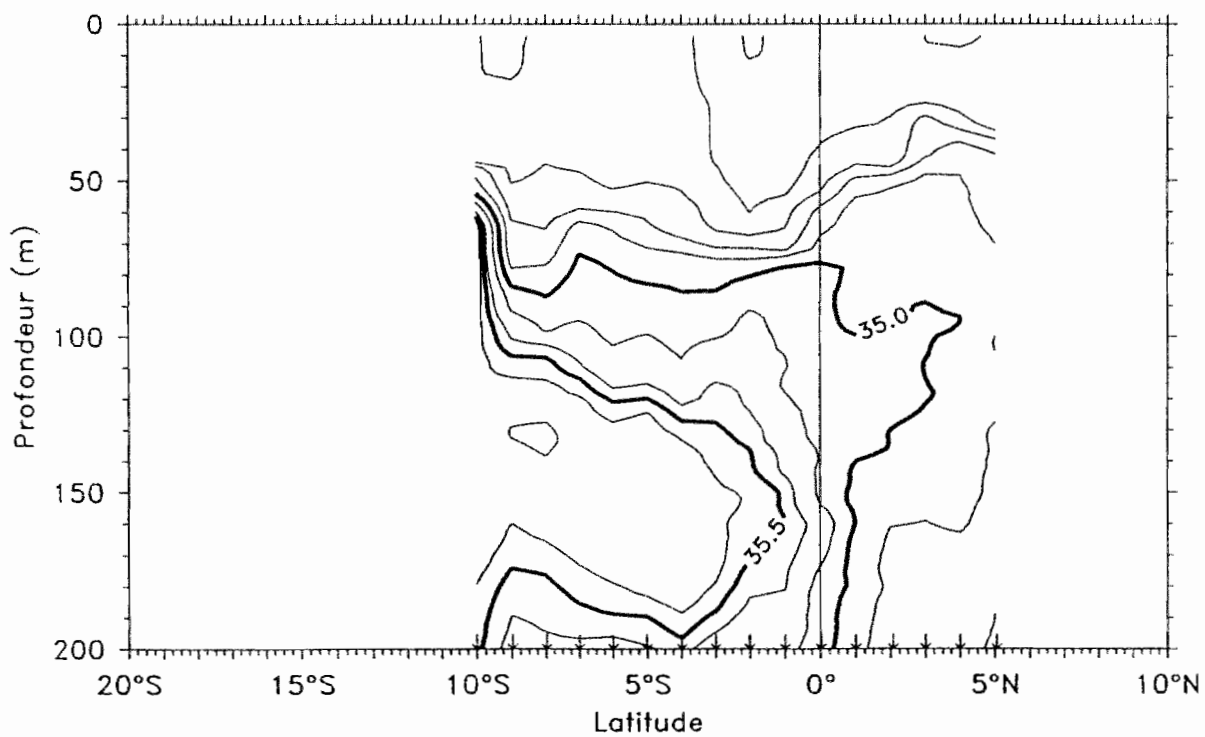


SURTROPAC17 20-29/08/92 St 40-55 Retour

Temperature (°C)

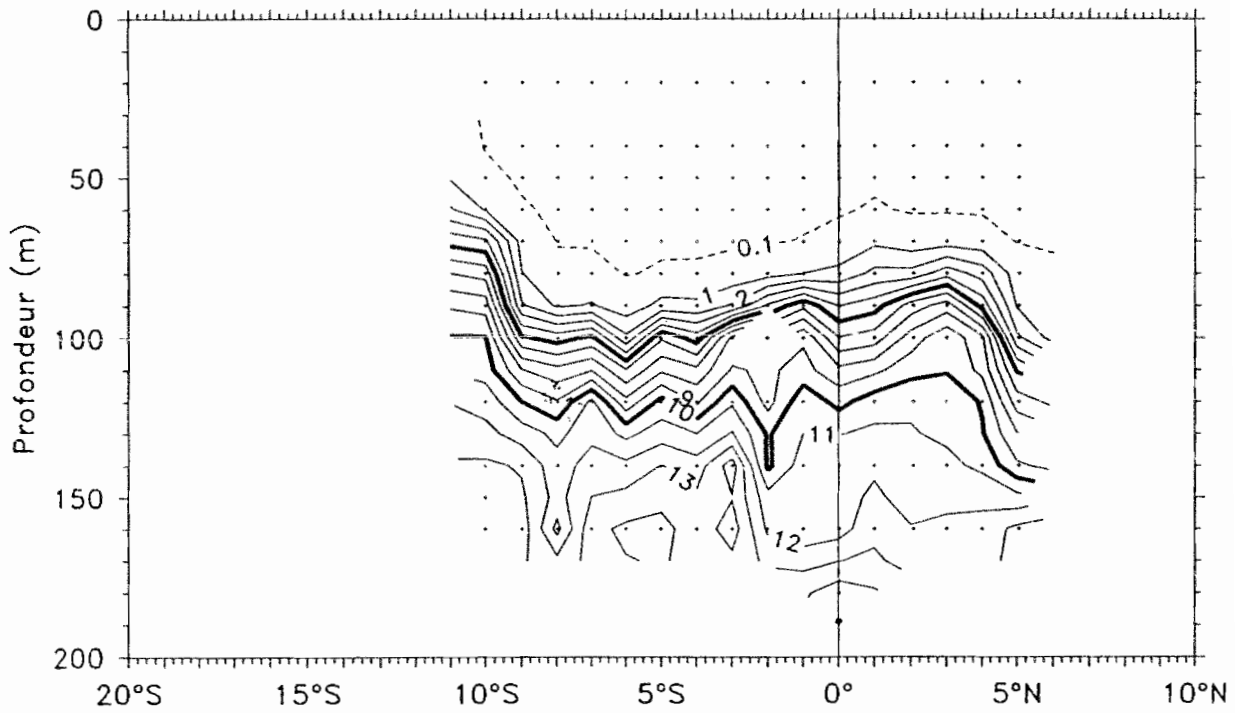


Salinite

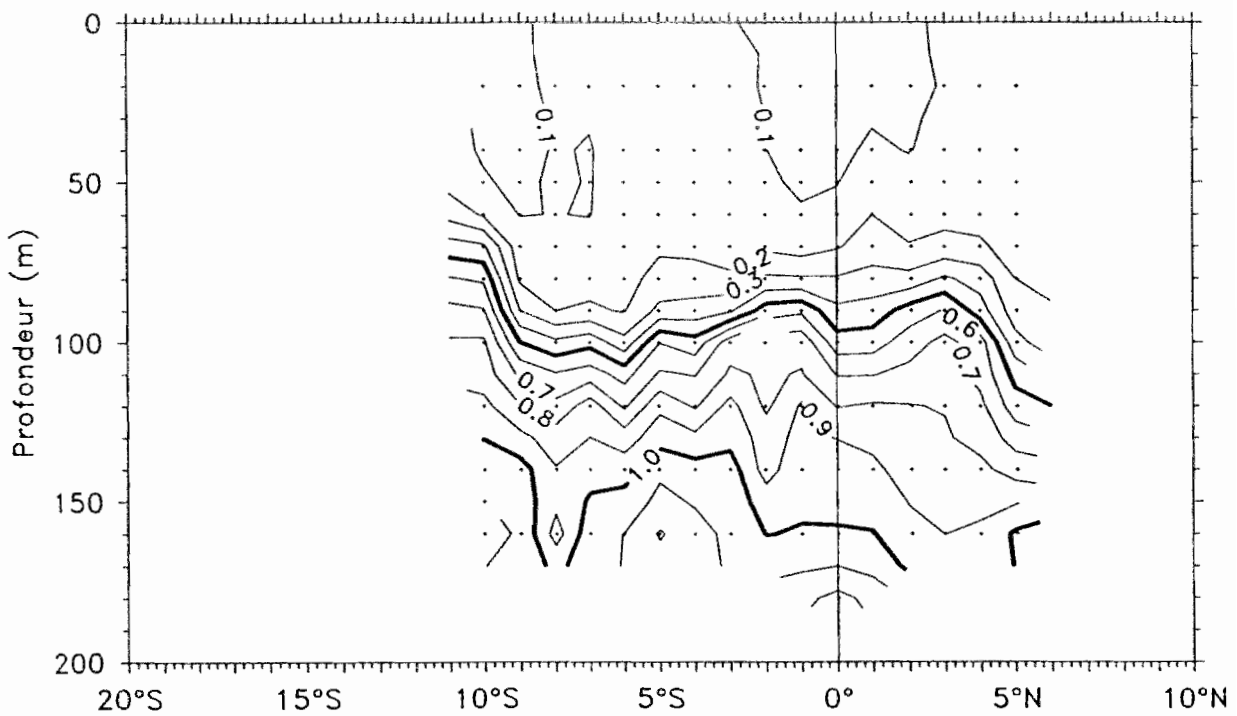


SURTROPAC17 20-29/08/92 St 40-55 Retour

Nitrate+Nitrite (μM)

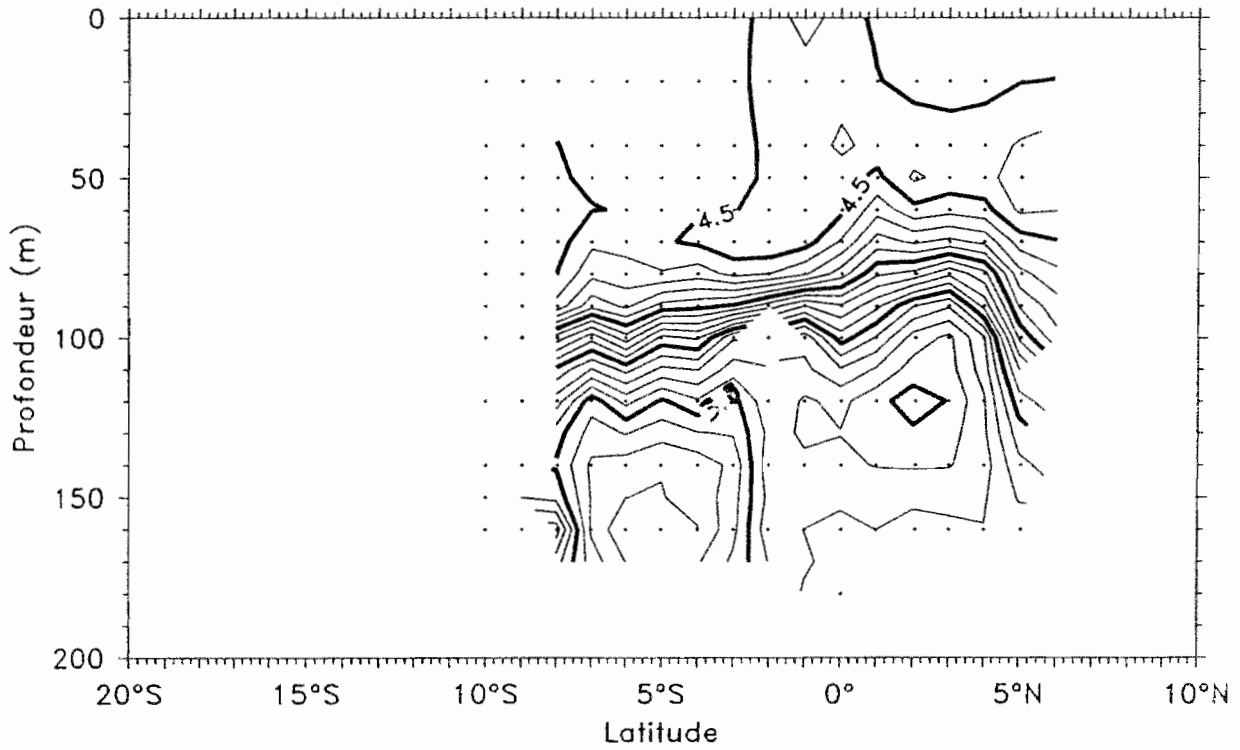


Phosphate (μM)

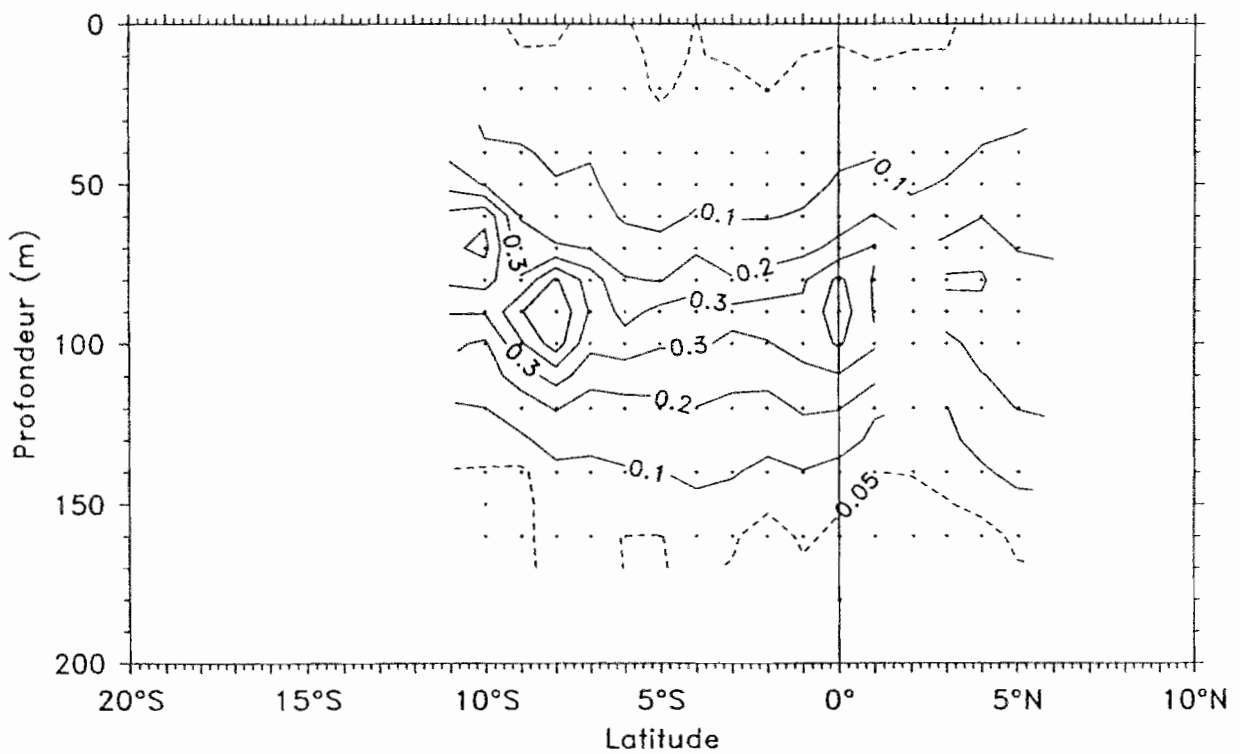


SURTROPAC17 20-29/08/92 St 40-55 Retour

Oxygene (ml/l)

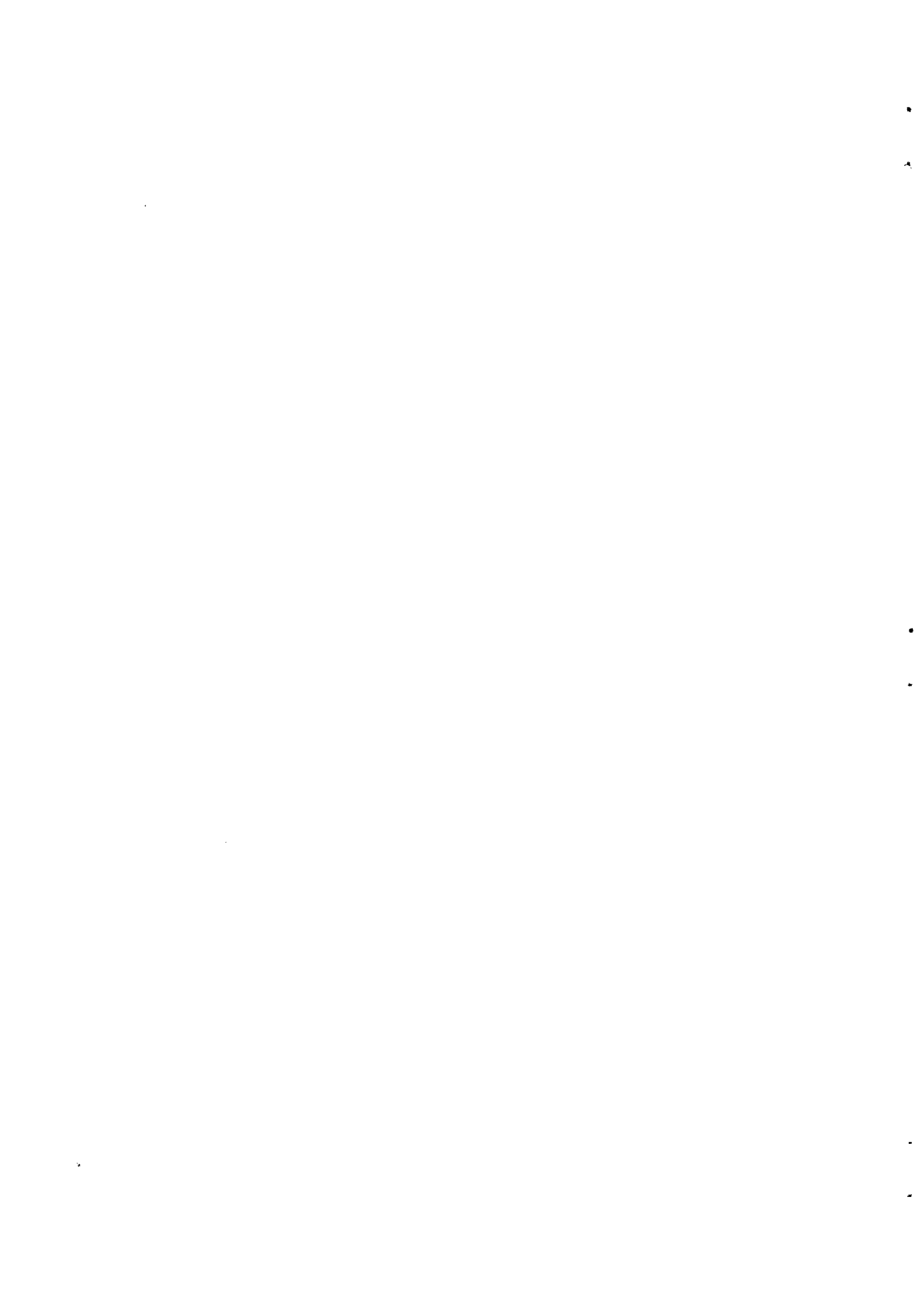


Chlorophylle ($\mu\text{g/l}$)



4.2 - Tableaux de données

Hydrologie
Sels nutritifs
Oxygène
Chlorophylle
Phytoplancton
Zooplancton



surtropac 17

Station No : 1
 Date : 06/08/92 Heure (GMT) : 18h 59'
 Latitude : 19°59' S Longitude : 165° 0' E
 air sec/hum. : 20°7 / 18°4 vent dir./vit. : 110° / 21 kts fond 3060 m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0			4.731	0.050	0.081		0.253	0.159	38.650	10673	3824	117484
20	23.440	35.450	4.757	0.030	0.070	98.010	0.241	0.162	40.120	14119	2096	129268
40	23.450	35.450	4.756	0.050	0.081	98.010	0.225	0.174	43.620	12718	3713	130157
60	23.450	35.450	4.789	0.050	0.079	98.690	0.224	0.171	43.250	10723	3291	106635
80	23.450	35.460	4.724	0.040	0.100	97.350	0.209	0.190	47.700	10939	3224	97184
90	23.450	35.460	4.835	0.030	0.217	99.640	0.196	0.171	46.570	4069	1934	56274
100	23.320	35.490	4.470	0.100	1.134	91.910	0.146	0.182	55.590	289	711	35374
110	22.930	35.540	4.178	0.150	2.070	85.310	0.118	0.232	66.220	0	489	24746
120	22.630	35.560	4.080	0.190	2.630	82.850	0.086	0.173	66.890	0	289	4469
140	22.120	35.620	3.990	0.250	3.490	80.280	0.031	0.063	66.600	0	289	4469
160	21.190	35.600	4.030	0.270	3.920	79.660	0.015	0.033	69.000	0	67	578
180	20.650		4.008	0.300	4.450	77.870	0.010	0.038	78.410	0	67	
1000	4.280	34.450	3.975	2.360	32.340	54.620						

Station No : 2
 Date : 07/08/92 Heure (GMT) : 02h 30'
 Latitude : 18°59' S Longitude : 165° 0' E
 air sec/hum. : 23°6 / 20°1 vent dir./vit. : 100° / 21 kts fond 3800 m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	24.060	35.450	4.711	0.080	0.030	98.180	0.146	0.092	38.800	12008	2107	220053
20	24.040	35.450		0.070	0.027	98.270	0.260	0.130	33.250	7565	1627	85749
40	23.960	35.440	4.717	0.070	0.028	98.270	0.302	0.161	34.750	8013	993	47435
60	23.900	35.450	4.724	0.090	0.067	97.060	0.158	0.104	39.660	6987	1244	25523
80	23.820	35.440	4.671	0.090	0.071	97.020	0.123	0.089	41.890	6997	677	38721
90	23.800	35.440	4.676	0.090	0.104	96.800	0.111	0.096	46.520	6768	786	40020
100		35.430	4.667	0.100	0.074	96.500	0.116	0.090	43.760	5196	699	30883
110	23.310	35.420	4.658	0.090	0.078	95.950	0.095	0.092	49.300	2445	589	19115
120	23.630	35.420	4.669	0.100	0.174	83.890	0.048	0.088	64.630	22	229	8286
140	22.610	35.570	4.058	0.250	2.600	79.290	0.027	0.050	65.530	33	22	1474
160	22.270	35.690	3.906	0.360	3.770	76.560	0.018	0.045	71.720			
180	21.930	35.770	3.793	0.470	4.630	94.990						

Station No : 3
 Date : 07/08/92 Heure (GMT) : 08h 30'
 Latitude : 18° 0' S Longitude : 165° 0' E
 air sec/hum. : 24°1 / 21°0 vent dir./vit. : 80° / 19 kts fond 4270 m

Z	T	S	O ₂	PO ₄	NO ₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	24.460	35.470	4.713	0.100	0.018	98.970	0.175	0.061	25.790	14563	2500	283308
20	24.220	35.470	4.750	0.080	0.020	99.300	0.110	0.071	39.240	13755	2227	240862
40	23.970	35.460	4.742	0.100	0.016	98.670	0.142	0.091	39.120	11517	2391	304331
60	23.750	35.460	4.756	0.050	0.012	98.560	0.198	0.150	43.110	12194	2478	307562
80	23.660	35.460	4.724	0.060	0.056	97.740	0.308	0.185	37.550	5895	3155	163126
90	23.580	35.470	4.681	0.070	0.186	96.710	0.223	0.182	44.920	3209	2402	98434
100	23.550	35.470	4.636	0.080	0.317	98.720	0.164	0.164	50.040	2140	2533	74549
110	23.430	35.550	4.378	0.150	0.997	90.240	0.127	0.178	58.270	819	1157	35413
120	23.210	35.580	4.229	0.200	1.518	86.830	0.112	0.156	58.110	218	786	26909
140	21.990	35.620	4.081	0.300	2.540	81.910	0.050	0.098	66.510	0	371	11244
160	21.780	35.650	3.937	0.360	3.430	78.720	0.041	0.079	66.030	0	87	4039
180	21.740	35.830	3.674	0.570	5.320	73.480	0.024	0.051	67.880	0	87	1517
1000	4.020	34.480	3.842	2.490	34.650	52.480						0

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Station No : 4
 Date : 07/08/92 Heure (GMT) : 16h 57'
 Latitude : 16°59' S Longitude : 165° 0' E
 air sec/hum. : 24°5 / 21°7 vent dir./vit. : 70° / 17 kts fond 3510 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	25.190	35.440	4.635	0.100	0.028	98.620	0.210	0.118	35.980	16899	3766	264453
20	24.960	35.440	4.623	0.090	0.049	97.950	0.194	0.127	39.510	14213	3690	264464
40	24.960	35.430	4.633	0.100	0.027	98.160	0.198	0.113	36.200	18178	3177	261734
60	24.830	35.450	4.634	0.100	0.034	97.960	0.255	0.167	39.570	21342	3504	129546
80	24.640	35.460	4.607	0.120	0.182	97.050	0.232	0.156	40.200	21309	3144	103685
90	24.070	35.550	4.170	0.250	1.612	86.980	0.162	0.205	55.840	2893	1615	48393
100	23.330	35.620	3.953	0.380	2.490	81.360	0.110	0.197	64.080	229	1026	39158
110	23.180	35.640	3.912	0.340	2.700	80.300	0.101	0.182	64.410	76	841	35883
120	22.540	35.660	3.855	0.400	3.760	78.200	0.066	0.126	65.440	22	764	19475
140	21.730	35.680	3.808	0.470	4.600	76.080	0.024	0.048	67.240	33	142	4650
160	20.980	35.690	3.744	0.540	5.360	73.750	0.009	0.033	77.670	0	76	1135
180	20.370	35.670	3.758	0.570	5.780	73.160	0.008	0.022	74.790	0	0	469
1000	4.130	34.480	3.747	2.820	35.180	51.310						0

Station No : 5
 Date : 08/08/92 Heure (GMT) : 00h 00'
 Latitude : 16° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°0 / 22°6 vent dir./vit. : 120° / 12 kts fond 3615 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	25.420	35.420	4.618	0.120	0.026	98.660	0.146	0.076	34.260	13416	2117	228985
20	24.970	35.420	4.642	0.120	0.023	98.360	0.133	0.086	39.330	13493	2172	252859
40	24.950	35.420	4.648	0.130	0.021	98.450	0.127	0.070	35.600	13678	2467	280445
60	24.940	35.420	4.647	0.120	0.021	98.410	0.149	0.095	39.050	13285	1659	264966
80	24.840	35.440	4.613	0.120	0.049	97.530	0.292	0.190	39.420	9727	2533	147406
90	24.770	35.450	4.598	0.130	0.113	97.090	0.280	0.197	41.290	9115	2696	118073
100	24.650	35.480	4.480	0.160	0.440	94.410	0.202	0.179	46.920	2172	1919	61493
110	24.450	35.510	4.358	0.190	0.881	91.510	0.156	0.174	52.720	2173	1867	39660
120	23.960	35.670	4.071	0.290	1.920	84.800	0.121	0.142	53.860	862	873	27452
140	23.200	35.780	3.811	0.410	3.290	78.320	0.063	0.114	64.340	0	502	15349
160	22.520	35.840	3.716	0.490	4.370	75.430	0.026	0.058	69.540	0	76	1234
180	21.500	35.790	3.764	0.520	4.830	74.930	0.009	0.031	77.950	0	109	961
1000	4.120	34.490	3.689	2.800	35.490	50.510						0

Station No : 6
 Date : 08/08/92 Heure (GMT) : 07h 54'
 Latitude : 15° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°2 / 23°2 vent dir./vit. : 70° / 8 kts fond 3330 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	26.850	35.350	4.530	0.200	0.083	99.280	0.061	0.038	38.210	1779	972	199641
20	26.490	35.350	4.550	0.150	0.024	99.080	0.061	0.047	43.500	1856	775	214226
40	26.500	35.380	4.539	0.140	0.021	98.870	0.070	0.066	48.370	1910	797	289331
60	26.440	35.500	4.511	0.150	0.040	98.220	0.150	0.106	41.460	2151	1135	296012
80	26.080	35.600	4.420	0.160	0.032	95.670	0.310	0.229	42.520	1637	3712	297410
90	25.320	35.710	4.284	0.200	0.402	91.510	0.355	0.363	50.520	469	3733	155047
100	24.980	35.740	4.201	0.210	0.543	89.200	0.276	0.337	54.940	196	3153	121075
110	24.290	35.780	4.017	0.270	1.460	84.240	0.202	0.271	57.250	55	2194	76623
120	23.800	35.820	3.907	0.340	2.270	81.210	0.107	0.268	71.440	11	1288	52442
140	22.690	35.850	3.751	0.410	3.910	76.390	0.066	0.119	64.390	0	589	17314
160	22.010	35.880	3.649	0.500	5.010	73.380	0.036	0.059	62.290	0	196	6167
180	21.090	35.870	3.487	0.660	6.880	68.900	0.021	0.033	61.720	0	98	2958
1000	4.260	34.480	3.636	2.690	35.450	49.940						0

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Station No : 7
 Date : 08/08/92 Heure (GMT) : 15h 20'
 Latitude : 14° 0' S Longitude : 164°59' E
 air sec/hum. : 26°2 / 23°6 vent dir./vit. : 20° / 9 kts fond 2025 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	26.680	35.150	4.530	0.150	0.020	98.870	0.025	0.057	69.540	1659	1105	194751
20	26.700	35.160	4.624	0.160	0.029	100.960	0.037	0.057	60.600	1768	972	215274
40	26.680	35.310	4.561	0.160	0.030	99.630	0.068	0.057	45.720	2052	906	253875
60	26.670	35.370	4.546	0.160	0.037	99.320	0.078	0.082	51.230	1648	797	298327
80	26.650	35.470	4.547	0.160	0.031	99.360	0.100	0.077	43.710	1724	742	364022
90	26.650	35.480	4.531	0.160	0.021	99.020	0.099	0.081	44.910	2074	742	356905
100	26.630	35.490	4.534	0.160	0.024	99.060	0.132	0.083	38.670	1747	611	371227
110	26.490	35.540	4.510	0.160	0.025	98.310	0.169	0.152	47.290	1616	982	381532
120	26.110	35.650	4.433	0.170	0.031	96.030	0.261	0.228	46.580	1430	2904	313632
140	24.500	35.790	4.128	0.270	1.009	86.900	0.213	0.292	57.840	76	2915	87321
160	22.950	35.870	3.772	0.430	3.690	77.200	0.071	0.151	67.930	0	600	22903
180	21.510	35.840	3.683	0.530	5.140	73.350	0.021	0.051	70.310	0	142	4017
1000	3.980	34.490	3.639	2.660	35.940	49.660						0

Station No : 8
 Date : 08/08/92 Heure (GMT) : 22h 14'
 Latitude : 13° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°8 / 24°2 vent dir./vit. : 100° / 22 kts fond 2495 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NEMA	NBPRO
0	27.080	34.850	4.523	0.150	0.035	99.820	0.068	0.057	45.720			
20	27.070	34.850	4.519	0.140	0.018	99.150	0.066	0.056	45.870	2009	1528	95345
40	27.000	34.930	4.529	0.160	0.020	99.860	0.078	0.057	42.490	1470	1235	211060
60	26.710	35.370	4.528	0.160	0.035	99.000	0.134	0.073	35.230	2009	1168	302868
80	26.510	35.580	4.448	0.160	0.024	97.020	0.176	0.148	45.710	1845	1703	119874
90	26.260	35.620	4.392	0.180	0.033	95.390	0.261	0.237	47.620	1550	3055	270086
100	25.780	35.670	4.301	0.190	0.145	92.630	0.433	0.364	45.650	600	5415	191541
110	24.500	35.830	3.960	0.360	1.809	83.390	0.211	0.295	48.280	55	2249	81448
120	24.090	35.890	3.827	0.400	2.590	80.010	0.198	0.306	60.690	22	2303	74986
140	22.540	35.900	3.659	0.510	4.740	74.320	0.095	0.208	68.510	0	710	36407
160	21.450	35.880	3.521	0.660	6.430	70.060	0.045	0.097	68.030	11	295	9563
180	20.280	35.760	3.548	0.710	7.060	68.990	0.017	0.049	73.670	0	109	3133
1000	4.080	34.510	3.460	2.690	35.140	47.340						0

Station No : 9
 Date : 09/08/92 Heure (GMT) : 05h 11'
 Latitude : 12° 0' S Longitude : 165° 0' E
 air sec/hum. : 25°2 / 23°2 vent dir./vit. : 80° / 15 kts fond 4125 m

Z	T	S	O ₂	PO ₄	NO ₂	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	27.590	34.550	4.532	0.130	0.004	100.200	0.143	0.090	38.550	20523	3559	188714
20	27.540	34.620	4.549	0.120	0.007	100.520	0.153	0.096	38.450	23383	3285	197098
40	27.360	34.720	4.534	0.140	0.008	99.930	0.157	0.107	40.660	3985	2271	186148
50	27.170	35.190	4.461	0.180	0.018	98.250	0.203	0.135	40.010	2041	4465	186181
60	26.400	35.760	4.330	0.240	0.171	94.350	0.277	0.233	45.620	2063	4367	191978
70	25.750	35.910	4.150	0.310	0.858	89.450	0.319	0.327	50.620	1026	5469	175592
80	25.010	35.990	3.918	0.380	1.882	83.350	0.297	0.355	54.430	284	4236	143279
90	24.810	35.990	3.871	0.400	2.370	82.050	0.260	0.362	48.170	119	3253	111567
100	24.090	36.020	3.747	0.450	3.320	78.390	0.223	0.322	59.150	33	2467	84482
120	22.880	36.010	3.579	0.550	5.240	73.210	0.115	0.232	66.790	0	113	37760
140	21.850	35.950	3.529	0.640	6.280	70.780	0.070	0.145	67.530	0	535	20217
160	20.740	35.850	3.473	0.690	7.210	68.160	0.034	0.094	73.260	11	317	8045
1000	4.300	34.520	3.300	2.680	36.940	45.380						0

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Station No : 10
 Date : 09/08/92 Heure (GMT) : 12h 10'
 Latitude : 10°59' S Longitude : 165° 0' E
 air sec/hum. : 26°3 / 24°9 vent dir./vit. : 150° / 14 kts fond 3800 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch_m	Ph_m	%PHA	NBCY	NBMA	NBPRO
0	27.640	34.680	4.548	0.150	0.001	100.720	0.161	0.119	42.620	63272	3373	156215
20	27.680	34.710	4.546	0.150	0.002	100.760	0.152	0.108	41.480	61100	2489	177492
40	27.610	34.770	4.542	0.150	0.003	100.580	0.255	0.173	40.350	59823	2969	176531
50	27.410	34.880	4.432	0.200	0.308	97.850	0.376	0.262	41.100	50860	5600	141965
60	26.370	35.500	3.752	0.440	3.490	81.590	0.518	0.492	48.710	1168	6746	79833
70	25.610	35.870	3.773	0.450	2.990	81.100	0.486	0.564	53.700			
80	24.730	35.970	3.673	0.500	3.850	77.730	0.244	0.341	58.250			
90	23.780	35.970	3.277	0.720	7.450	68.150	0.146	0.268	64.740	382	1485	34922
100	23.140	36.040	3.138	0.750	7.920	64.140	0.146	0.254	63.450	164	1157	29617
120	21.250	35.870	3.043	0.900	10.310	60.310	0.051	0.145	74.030	0	589	11779
140	20.640	35.810	2.928	0.970	11.270	57.340	0.051	0.122	70.570			
160	19.210	35.660	2.880	1.080	12.650	54.820	0.018	0.064	78.150	0	0	502
1000	4.100	34.530	3.314	2.660	37.450	45.370						0

Station No : 11
 Date : 09/08/92 Heure (GMT) : 18h 26'
 Latitude : 10° 0' S Longitude : 165° 0' E
 air sec/hum. : 26°6 / 24°9 vent dir./vit. : 130° / 13 kts fond 3670 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch_m	Ph_m	%PHA	NBCY	NBMA	NBPRO
0			4.423	0.120	0.000		0.128	0.164	56.230	15338	3253	309156
20			3.603	0.540	5.000		0.287	0.227	44.160	18001	9999	167983
40			3.105	0.760	8.130		0.358	0.320	47.200	7729	9998	145965
50			2.697	0.970	11.330		0.297	0.417	58.390	677	5644	115661
60			2.607	1.040	12.130		0.338	0.402	54.350	284	4476	91262
70			2.555	1.070	12.340		0.323	0.441	57.680	33	3963	86284
80			2.536	1.090	12.660		0.286	0.308	51.880	65	2980	68632
90			2.652	1.070	12.200		0.132	0.225	62.930	0	1190	34103
100	22.610	35.910	2.705	1.100	12.240	55.020	0.064	0.151	70.300	0	579	15698
120	21.350	35.860	2.606	1.240	14.340	51.750	0.036	0.080	69.050	0	196	5109
140	19.410	35.630	2.551	1.400	16.410	48.740	0.008	0.047	85.810	0	22	360
160	17.380	35.440	2.573	1.420	16.190	47.190	0.013	0.039	74.550	0	44	207
1000	4.230	34.530	3.142	2.930	37.950	43.140						0

Station No : 12
 Date : 10/08/92 Heure (GMT) : 03h 05'
 Latitude : 9° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°6 / 24°7 vent dir./vit. : 120° / 9 kts fond 3500 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch_m	Ph_m	%PHA	NBCY	NBMA	NBPRO
0	28.060	34.470	4.517	0.140	0.001	100.660	0.121	0.066	35.390	26080	2074	199969
20	27.530	34.770	4.493	0.170	0.007	99.350	0.187	0.127	40.510	18296	3810	262848
40	24.780	35.310	3.654	0.540	4.850	77.110	0.860	0.679	44.130	63862	9999	68130
50	24.450	35.440	3.525	0.590	5.850	73.990	0.750	0.600	44.450	2707	9999	64844
60		35.820	2.903	0.900	9.860	60.980	0.449	0.418	48.210	655	2216	65947
70	23.150	35.870	2.674	1.050	11.740	54.930	0.236	0.305	56.390	65	2216	65947
80	22.410	35.850	2.729	1.090	12.060	55.280	0.189	0.284	60.070	33	1288	40369
90	21.830	35.830	2.693	1.120	12.460	53.950	0.115	0.220	65.550	22	1004	26134
100	21.130	35.770	2.696	1.170	12.960	7.000	0.082	0.148	64.410	0	469	16091
120	20.280	35.710	2.730	1.160	13.370	53.070	0.054	0.116	68.410	76	251	8679
140	18.350	35.530	2.689	1.350	15.240	50.290	0.018	0.068	78.760	0	87	1092
160	17.420	35.440	2.658	1.400	16.100	48.780	0.012		83.380	0	87	338

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Station No : 13
 Date : 10/08/92 Heure (GMT) : 10h 22'
 Latitude : 7°58' S Longitude : 165° 0' E
 air sec/hum. : 28°2 / 24°8 vent dir./vit. : 50° / 10 kts fond 3895 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	28.530	34.290	4.455	0.090	0.010	100.010	0.068	0.063	48.340	1430	920	269935
20	28.530	34.290	4.481	0.100	0.020	100.600	0.129	0.098	43.190	1758	1048	251015
40	28.230	34.330	4.534	0.110	0.009	101.270	0.121	0.096	44.370	2228	1190	314832
50	28.190	34.420	4.493	0.110	0.007	100.330	0.156	0.090	36.520	3209	1485	333653
60	27.250	34.820	4.401	0.140	0.010	96.860	0.199	0.140	41.270	9083	3155	244058
70	26.370	35.160	4.153	0.250	1.042	90.140	0.420	0.327	43.740	4672	9999	143541
80	25.060	35.460	3.484	0.590	5.720	73.960	0.441	0.375	45.950	1637	9345	102735
90	24.290	35.710	3.128	0.750	8.300	65.570	0.365	0.347	48.730	393	3308	63250
100	23.650	35.690	3.141	0.770	8.730	65.060	0.286	0.409	58.850	196	2336	59899
120	21.410	35.600	2.986	0.960	11.260	59.270	0.141	0.235	62.480	11	873	30643
140	19.560	35.550	2.982	1.050	12.580	57.110	0.074	0.157	68.020	44	164	4792
160	18.440	35.480	2.922	1.180	14.250	54.730	0.050	0.128	71.760	11	186	2369
1000	4.290	34.540	2.912	3.060	39.710	40.040						0

Station No : 14
 Date : 10/08/92 Heure (GMT) : 17h 21'
 Latitude : 7° 0' S Longitude : 165° 0' E
 air sec/hum. : 27°8 / 24°2 vent dir./vit. : 100° / 10 kts fond 3725 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	28.940	34.340	4.422	0.100	0.011	100.020	0.067	0.062	48.240	1659	1105	194751
20	28.960	34.340				93.810	0.060	0.063	51.080	1768	972	215274
40	28.910	34.440	4.455	0.110	0.011	100.770	0.097	0.073	43.010	2052	906	253875
50	28.590	34.660	4.477	0.120	0.010	100.820	0.115	0.086	42.820	1867	873	286471
60	27.700	34.940	4.416	0.140	0.009	98.040	0.168	0.149	46.950	2838	1277	277389
70	26.890	35.080	4.222	0.200	0.023	92.460	0.315	0.276	46.780	2041	5982	179555
80	26.620	35.140	4.089	0.240	0.813	89.140	0.387	0.388	50.090	1299	8187	167416
90	26.110	35.190	3.854	0.360	2.690	83.270	0.266	0.289	52.070	371	4727	108587
100	25.650	35.290	3.686	0.430	4.040	79.020	0.226	0.309	57.720	175	3330	93314
120	23.540	35.550	3.260	0.690	7.810	67.330	0.112	0.207	64.930	0	1059	42815
140	21.940	35.670	2.953	0.920	10.660	59.230	0.038	0.084	68.960	0	568	21724
160	20.920	35.640	2.745	1.100	13.730	53.990	0.012	0.091	88.060	0	404	12412
1000	4.520	34.530	3.150	2.780	35.860	43.550						0

Station No : 15
 Date : 11/08/92 Heure (GMT) : 00h 21'
 Latitude : 6° 0' S Longitude : 165°12' E
 air sec/hum. : 29°9 / 25°0 vent dir./vit. : 20° / 5 kts fond 3570 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	29.400	34.260	4.429	0.090	0.013	100.950	0.070	0.072	50.760	720	742	264638
20	29.150	34.270	4.544	0.110	0.020	103.120	0.104	0.093	47.170	753	589	126129
40	29.240	34.330	4.476	0.110	0.033	101.780	0.130	0.091	41.110	720	611	274376
50	29.190	34.510	4.478	0.110	0.021	101.840	0.146	0.120	44.980	1234	720	208380
60	29.010	34.730	4.585	0.090	0.026	104.070	0.203	0.152	42.790	2074	786	291722
70	28.300	34.980	4.353	0.180	0.016	97.700	0.251	0.170	40.450	2729	742	321731
80	27.980	35.050	4.330	0.190	0.017	96.670	0.309	0.257	45.450	1146	5371	154261
90	27.400	35.100	3.976	0.350	1.827	87.880	0.428	0.410	48.920	1365	5884	155943
100	26.530	35.270	3.411	0.640	6.720	74.290	0.354	0.434	55.090	1463	5677	155167
120	25.590	35.460	3.001	0.880	10.040	64.330	0.188	0.310	62.240	11	1463	52716
140	23.910	35.630	2.824	1.040	12.200	58.750	0.096	0.232	70.700	0	600	28339
160	21.570	35.660	2.579	1.200	14.160	51.370	0.059	0.142	70.610	11	306	11746
1000	4.570	34.540	2.596	3.110	40.080	35.930						0

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Station No : 16
 Date : 11/08/92 Heure (GMT) : 07h 25'
 Latitude : 5° 0' S Longitude : 165°27' E
 air sec/hum. : 28°0 / 25°0 vent dir./vit. : 130° / 14 kts fond 3765 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	29.590	34.330	4.428	0.150	0.017	101.310	0.077	0.072	48.150	1616	917	150190
20	29.340	34.340	4.455	0.150	0.017	101.480	0.085	0.074	46.570	1616	830	260435
40	29.320	34.340	4.418	0.150	0.017	100.610	0.099	0.089	47.410	1655	753	269944
50	29.330	34.350	4.406	0.150	0.023	100.360	0.123	0.092	42.800	1867	961	294342
60	29.340	34.380	4.438	0.150	0.026	101.120	0.168	0.126	42.940	1790	939	299145
70	29.250	34.550	4.296	0.330	0.026	97.820	0.236	0.202	47.070	5273	1889	231736
80	28.110	34.990	3.806	0.390	2.100	85.140	0.309	0.402	56.520	927	6713	150855
90	27.250	35.160	3.805	0.390	2.080	83.900	0.322	0.394	55.020	851	6833	153388
100	26.140	35.330	3.138	0.730	8.000	67.890	0.269	0.325	54.700	33	3111	78577
120	24.190	35.660	2.665	1.060	12.460	55.740	0.095	0.213	69.100	0	579	23449
140	23.150	35.750	2.604	1.130	13.180	53.460	0.066	0.148	69.070	0	524	18187
160	21.760	35.770	2.567	1.180	13.830	51.340	0.047	0.116	71.290	0	240	8559
1000	4.740	34.530	2.711	3.100	38.840	37.670						0

Station No : 18
 Date : 11/08/92 Heure (GMT) : 15h 27'
 Latitude : 4° 0' S Longitude : 165°40' E
 air sec/hum. : 25°5 / 23°6 vent dir./vit. : 350° / 17 kts fond 3460 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	29.560	34.380	4.384	0.160	0.025	100.280	0.060	0.049	44.800			
20	29.580	34.380	4.524	0.160	0.015	103.520	0.067	0.043	39.130	1659	1539	265402
40	29.660	34.470	4.488	0.170	0.017	102.890	0.076	0.052	40.770	1430	710	210396
50	29.660	34.520	4.486	0.160	0.024	102.870	0.120	0.075	38.380	2041	1266	293933
60	29.250	34.830	4.562	0.180	0.019	104.040	0.160	0.117	42.290	2653	1714	340563
70	28.610	34.930	4.373	0.210	0.023	99.230	0.238	0.177	42.690	4268	2358	336895
80	27.770	35.040	3.993	0.360	1.350	88.810	0.382	0.339	47.060	4236	8220	200788
90	27.120	35.210	3.484	0.570	5.840	76.670	0.255	0.385	74.000	153	851	71547
100	26.290	35.430	2.976	1.100	10.460	64.600	0.198	0.319	61.720	0	2511	56569
120	24.850	35.480	2.764	0.970	12.250	58.460	0.144	0.271	65.270	0	1430	44769
140	22.980	35.560	2.696	1.040	13.020	55.110	0.066	0.148	69.100	0	360	16462
160	21.230	35.700	2.678	1.140	14.080	53.010	0.039	0.088	69.380	0	196	5567
1000	4.650	34.540	2.507	3.060	41.150	34.770						0

Station No : 20
 Date : 12/08/92 Heure (GMT) : 00h 05'
 Latitude : 3° 0' S Longitude : 165°50' E
 air sec/hum. : 29°7 / 25°6 vent dir./vit. : 90° / 5 kts fond 4155 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0	29.660	34.210	4.404	0.130	0.170	100.810	0.090	0.088	49.250	775	3024	262215
20	29.770	34.390	4.490	0.130	0.018	103.090	0.070	0.070	50.600	972	982	248722
40	29.770	34.390	4.461	0.140	0.025	102.420	0.071	0.069	49.360	1092	939	286864
50	29.760	34.390	4.416	0.130	0.011	101.370	0.091	0.080	46.940	1081	1015	297737
60	29.750	34.430	4.592	0.130	0.013	105.420	0.136	0.081	37.400	1059	1157	305160
70	29.590	34.720	4.551	0.120	0.018	104.350	0.152	0.107	41.330	1386	1157	308523
80	28.280	35.070	4.190	0.250	0.421	94.060	0.432	0.323	42.780	2030	3646	354776
90	27.760	35.160	3.748	0.420	3.700	83.400	0.355	0.415	53.860	6113	6899	241179
100	27.080	35.230	3.460	0.660	6.700	76.090	0.304	0.391	56.320	830	6266	146172
120	25.210	35.320	3.184	0.650	8.070	67.730	0.113	0.239	67.880	65	4290	96251
140	23.670	35.520	2.927	0.800	10.140	60.590	0.069	0.157	69.450	11	873	41013
160	20.370	35.560	3.121	0.900	11.030	60.720	0.026	0.067	72.460	0	434	18242
1000			2.210	3.150	42.490							0

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Station No : 22
 Date : 12/08/92 Heure (GMT) : 08h 36'
 Latitude : 2° 0' S Longitude : 166° 0' E
 air sec/hum. : 27°5 / 24°8 vent dir./vit. : 50° / 8 kts fond 4400 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch _m	Ph _m	%PHA	NBCY	NBMA	NBPRO
0	30.110	34.150	4.531	0.110	0.014	104.510	0.063	0.060	48.790	1299	950	284310
20	29.750	34.160	4.457	0.110	0.032	102.160	0.076	0.068	47.030	1146	950	298676
40	29.710	34.160	4.463	0.120	0.013	102.230	0.078	0.065	45.350			
50	29.720	34.170	4.447	0.110	0.013	101.880	0.101	0.083	45.040			
60	29.790	34.270	4.488	0.120	0.015	103.010	0.140	0.093	39.930			
70	29.440	34.530	4.599	0.140	0.024	105.060	0.200	0.170	45.990	1812	972	371238
80	29.120	34.670	4.590	0.160	0.029	104.350	0.246	0.166	40.310	5098	1987	382864
90	27.530	35.130	4.202	0.350	1.321	93.110	0.322	0.440	57.750	4498	6812	206366
100	26.340	35.260	3.365	0.720	8.080	73.040	0.412	0.342	47.300	55	4650	125616
120	24.300	35.390	3.408	0.620	6.720		0.141	0.242	63.140	22	1266	41406
140	22.170	35.330	3.206	0.780	9.460	64.460	0.060	0.112	65.320	33	480	11288
160	20.760	35.490	3.272	0.820	9.960	64.110	0.023	0.067	74.710	0	153	3330
1000	4.440	34.550	2.400	3.090	41.710	33.120						0

Station No : 24
 Date : 12/08/92 Heure (GMT) : 19h 39'
 Latitude : 1° 0' S Longitude : 166°15' E
 air sec/hum. : 26°7 / 24°8 vent dir./vit. : 180° / 11 kts fond 3740 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch _m	Ph _m	%PHA	NBCY	NBMA	NBPRO
0			4.420	0.110	0.024		0.076	0.056	42.720	1124	710	109504
20	29.730	33.990	4.430	0.110	0.015	101.410	0.073	0.063	46.060	1026	951	127068
40	29.650	34.040	4.483	0.120	0.038	102.510	0.067	0.060	47.240	1430	841	239465
50	29.630	34.050	4.442	0.120	0.016	101.540	0.074	0.067	47.500	1605	993	269813
60	29.730	34.110	4.504	0.160	0.010	103.170	0.093	0.076	45.000	1506	687	350796
70	28.610	34.790	4.602	0.270	0.020	103.750	0.172	0.129	43.000	3941	1899	394408
80	27.470	34.910	4.449	0.230	0.030	98.350	0.311	0.242	43.790	11419	4312	435449
90	26.700	35.030	4.233	0.330	0.872	92.350	0.615	0.599	49.360	6397	8569	188189
100	25.980	35.060	3.625	0.540	4.810	78.080	0.577	0.621	51.810	295	8100	178725
120	24.740	35.040	3.251	0.690	7.790	68.450	0.242	0.424	63.670	65	2205	95028
140	22.960	35.230	3.191	0.830	9.620	65.080	0.101	0.196	66.040	11	786	25010
160	20.530	35.310	3.123	1.000	11.630	60.860	0.020	0.081	80.310	22	65	1081
1000	4.510	34.460	2.251	3.440	42.140	31.120						0

Station No : 26
 Date : 13/08/92 Heure (GMT) : 06h 40'
 Latitude : 0° 0' N Longitude : 165°50' E
 air sec/hum. : 30°3 / 26°0 vent dir./vit. : 140° / 10 kts fond 4360 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch _m	Ph _m	%PHA	NBCY	NBMA	NBPRO
0			4.505	0.130	0.030		0.058	0.047	44.950	884	589	218418
20	29.630	34.030	4.515	0.140	0.027	103.200	0.055	0.060	51.770	884	622	204052
40	29.550	34.060	4.542	0.130	0.023	103.680	0.061	0.065	51.690	1037	557	241604
50	29.530	34.210	4.608	0.140	0.030	105.240	0.094	0.070	42.440	1408	622	283480
60	28.000	34.850	4.636	0.200	0.078	102.950	0.214	0.154	41.880	2402	2096	308828
70	26.270	34.980	3.959	0.220	2.217	85.680	0.536	0.616	43.460	4126	9998	240917
80	26.040	35.010	3.761	0.470	3.800	81.070	0.458	0.592	56.390	1322	8264	157263
90	25.240	35.000	3.311	0.680	7.250	70.340	0.353	0.480	57.630	196	3930	51963
100	23.470	35.030	3.089	0.840	9.530	63.530	0.218	0.327	60.020	0	1528	51963
120	23.230	35.070	3.061	1.000	11.980	62.680	0.088	0.174	66.280	0	546	19366
140	19.430	34.990	3.086	1.100	13.080	58.760	0.022	0.068	75.610	11	1987	164
160	18.350	35.180	3.139	1.170	14.100	58.590	0.004	0.050	81.780	0	44	218
1000	4.560	34.560	2.231	3.490	43.530	30.880						

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Station No : 28
 Date : '13/08/92 Heure (GMT) : 15h 47'
 Latitude : 1° 0' N Longitude : 165°25' E
 air sec/hum. : 27°8 / 24°8 vent dir./vit. : 120° / 4 kts fond m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch_m	Ph_m	%PHA	NBCY	NBMA	NBPRO
0	29.660	34.040	4.401	0.090	0.024	100.650						
20	29.720	34.060	4.542	0.090	0.024	104.000	0.066	0.058	46.520	1332	950	275730
40	29.620	34.070	4.509	0.090	0.025	103.060	0.072	0.054		1092	720	236823
50	29.600	34.140	4.453	0.070	0.023	101.790	0.055	0.097	42.590	982	862	281952
60	28.980	34.250	4.510	0.080	0.024	102.030	0.105	0.076	65.880	1277	1019	286955
70	26.820	34.890	4.214	0.200	0.119	92.070	0.192	0.191	41.950	13329	5709	286144
80	26.060	35.000	3.665	0.410	3.340	79.030	0.282	0.399	49.890	1103	9901	150561
90	25.900	34.970	3.566	0.530	4.430	76.660	0.283	0.412	58.620	415	7609	140670
100	25.780	34.980	3.507	0.530	5.470	75.230	0.283	0.389	59.620	273	5338	95640
120	23.920	35.000	2.926	0.860	10.940	60.670	0.104	0.273	57.930	11	1157	41526
140	20.930	34.950	3.052	0.840	10.960	59.800	0.073	0.153	68.690	0	428	17073
160	18.650	34.900	3.140	0.950	11.690	58.860	0.014	0.060	67.740	11	131	720

Station No : 30
 Date : 14/08/92 Heure (GMT) : 02h 31'
 Latitude : 2° 0' N Longitude : 165° 1' E
 air sec/hum. : 28°5 / 25°5 vent dir./vit. : 40° / 2 kts fond 4350 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch_m	Ph_m	%PHA	NBCY	NBMA	NBPRO
0	30.100	34.040	4.429	0.120	0.019	102.070	0.059	0.052	46.790	819	1179	171608
20	29.620	34.060	4.436	0.120	0.014	101.390	0.072	0.058	44.580	1343	1299	304418
40	29.510	34.140	4.575	0.100	0.013	104.410	0.092	0.064	40.920	1004	742	304418
50	29.150	34.400	4.552	0.100	0.013	103.380	0.122	0.081	40.070	1441	1015	324854
60	28.590	34.720	4.447	0.160	0.029	100.180	0.167	0.127	43.190	1812	1244	317867
70	27.120	34.910	4.292	0.210	0.019	94.290	0.312	0.245	43.920	7696	2740	225754
80	26.320	34.930	3.891	0.370	2.101	84.260	0.436	0.516	54.180	1332	8757	126872
90		35.010	3.101	0.750	8.930	65.710	0.356	0.448	55.700	131	4945	104777
100	25.500	35.040	2.961	0.830	10.150	62.070	0.255	0.338	56.990	22	3068	67333
120	22.130	34.970	2.982	0.910	11.410	59.780	0.121	0.193	61.440	0	841	28307
140	19.600	34.870	3.149	0.970	11.960	60.120	0.044	0.107	70.770	0	338	5939
160	16.450	34.700	3.218	1.230	15.280	57.670	0.011	0.061	84.460	11	109	425
1000	4.590	34.560	2.335	3.300	42.020	32.340						0

Station No : 32
 Date : 14/08/92 Heure (GMT) : 11h 31'
 Latitude : 3° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°3 / 25°0 vent dir./vit. : 0° / 7 kts fond 4250 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch_m	Ph_m	%PHA	NBCY	NBMA	NBPRO
0	29.960	34.090	4.457	0.130	0.024	102.500	0.071	0.052	42.390	884	1179	269507
20	29.740	34.170	4.507	0.130	0.026	103.290	0.083	0.062	42.720	1365	982	338128
40	29.700	34.210	4.561	0.140	0.022	104.480	0.087	0.073	45.610	938	1113	206006
50	29.410	34.700	4.700	0.160	0.026	107.420	0.093	0.083	47.110	1288	1386	202327
60	28.570	34.810	4.659	0.160	0.029	104.970	0.128	0.090	41.300	1168	1485	377832
70	27.830	34.850	4.386	0.200	0.025	97.550	0.157	0.141	47.400	2172	1768	402154
80	26.840	34.900	4.142	0.270	0.379	90.530	0.359	0.327	51.390	8973	8111	241463
90	26.390		3.795	0.410	3.090	82.110	0.298	0.361	54.760	3209	9301	224291
100	25.330	35.020	3.177	0.680	8.560	67.610	0.284	0.408	58.990	229	7958	174544
120	22.930	35.010	2.888	0.890	11.520	58.790	0.158	0.288	64.530	0	1550	51177
140	20.890	34.920	3.053	0.920	11.780	59.770	0.067	0.160	70.570	0	524	15480
160	18.730	34.840	3.196	1.060	13.140	59.980	0.014	0.058	81.100	0	338	76
1000	4.610	34.560	2.298	3.290	42.630	31.840						0

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Station No : 34
 Date : 14/08/92 Heure (GMT) : 20h 16'
 Latitude : 4° 1' N Longitude : 165° 0' E
 air sec/hum. : 28°5 / 24°7 vent dir./vit. : 0° / 8 kts fond 3755 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NEMA	NBPRO
0	29.770	34.120	4.420	0.100	0.027	101.330	0.073	0.062	46.030	1430	1124	227195
20	29.770	34.120	4.424	0.100	0.024	101.420	0.065	0.059	47.780	862	1430	197960
40	29.270	34.780	4.653	0.150	0.029	106.130	0.101	0.075	42.780	382	956	222501
50	28.520	34.830	4.525	0.180	0.027	101.880	0.137	0.096	41.060	469	884	242161
60	27.750	34.850	4.400	0.180	0.034	97.720	0.192	0.149	43.720	1987	2260	220656
70	26.170	34.980	3.636	0.430	4.240	78.550	0.288	0.327	53.190	1823	6102	105072
80	24.880	35.030	3.094	0.680	9.310	65.310	0.281	0.329	53.910	65	5207	97899
90	23.960	35.040	2.899	0.790	11.460	60.170	0.237	0.319	57.400	0	3330	60925
100	23.070	35.030	2.855	0.840	12.080	58.280	0.192	0.389	66.890	0	1758	47454
120	21.920	34.990	2.975	0.850	12.230	59.420	0.109	0.240	68.800	0	808	25796
140	20.690	34.930	3.068	0.860	12.410	59.830	0.078	0.171	68.630	0	404	14552
160	18.500	34.810	3.217	0.940	13.260	60.090	0.038	0.109	74.210	0	251	2838
1000	4.620	34.560	2.017	3.150	45.350	27.960						0

Station No : 36
 Date : 15/08/92 Heure (GMT) : 05h 44'
 Latitude : 5° 1' N Longitude : 165° 0' E
 air sec/hum. : 29°8 / 25°4 vent dir./vit. : 360° / 8 kts fond 4760 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NEMA	NBPRO
0	30.060	34.060	4.426	0.140	0.020	101.950	0.065	0.041	39.080	524	720	215362
20	29.790	34.070	4.465	0.130	0.021	102.360	0.072	0.053	42.340	611	764	227937
40	29.190	34.660	4.589	0.150	0.022	104.450	0.113	0.079	41.020	2155	1059	292694
50	28.910	34.760	4.601	0.110	0.028	104.260	0.149	0.104	41.080	1452	982	291002
60	28.620	34.800	4.542	0.130	0.025	102.420	0.198	0.139	41.150	1594	1397	273437
70	28.480	34.800	4.528	0.130	0.020	101.850	0.228	0.159	41.160	1473	1103	278830
80	27.850	34.840	4.289	0.190	0.026	95.420	0.292	0.233	44.310	4639	3013	204073
90	27.130	34.860	3.951	0.340	1.891	86.790	0.398	0.372	48.280	4137	6626	140856
100	25.740	34.750	3.871	0.380	3.180	82.870	0.346	0.420	54.830	0	2827	78916
120	21.940	34.720	3.603	0.580	6.740	71.870	0.238	0.318	57.270	0	961	33143
140	18.750	34.730	3.337	0.890	11.490	62.610	0.109	0.235	68.360	0	262	6048
160	16.260	34.690	3.223	1.140	15.700	57.540	0.048	0.100	67.570			0
1000	4.410	34.560										0

Station No : 37
 Date : 15/08/92 Heure (GMT) : 12h 45'
 Latitude : 5°59' N Longitude : 165° 0' E
 air sec/hum. : 28°1 / 25°1 vent dir./vit. : 360° / 3 kts fond 4990 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NEMA	NBPRO
0	29.770	34.140	4.393	0.160	0.030	100.720	0.037	0.033	47.130	480	688	90629
30	29.680	34.140	4.442	0.130	0.019	101.680	0.062	0.049	43.970	1616	917	349656
60	29.310	34.620	4.568	0.130	0.024	104.170	0.086	0.061	41.820	1026	764	312267
80	28.670	34.770	4.527	0.120	0.029	102.160	0.119	0.093	43.920	1812	1441	399272
90	27.830	34.760	4.412	0.120	0.030	98.080	0.233	0.182	43.890	1135	4509	175953
100	26.120	34.730	4.233	0.190	0.160	91.240	0.311	0.322	50.820	22	3832	93271
110	23.340	34.700	3.837	0.450	3.290	78.570	0.267	0.319	54.400	11	4116	89963
120	20.150	34.730	3.435	0.740	8.910	66.220	0.244	0.358	59.460	44	3657	80095
130	18.200	34.750	3.527	0.880	11.400	65.470	0.149	0.279	65.080	22	1616	52181
140	17.630	34.740	3.363	0.930	12.330	61.720	0.144	0.257	64.010	11	1397	46461
160	15.050	34.680	3.024	1.360	18.380	52.670	0.032	0.066	67.330	22	131	950
180	13.080	34.580	2.512	1.790	24.430	41.980	0.018	0.054	74.700	11	153	993
1000	4.350	34.560	1.987		44.010	27.370						0

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Station No : 38
 Date : 15/08/92 Heure (GMT) : 20h 02'
 Latitude : 7° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°9 / 24°9 vent dir./vit. : 30° / 7 kts fond 5150 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0			4.427	0.120	0.015		0.061	0.041	40.560	491	873	189161
30	29.580	34.320	4.413	0.120	0.019	100.940	0.071	0.052	42.270	644	622	225972
60	29.200	34.520	4.511	0.110	0.030	102.610	0.099	0.073	42.640	797	731	231146
80	28.410	34.850	4.519	0.090	0.019	101.550	0.167	0.101	37.650			
90	26.530	34.790	4.461	0.100	0.023	96.900	0.234	0.184	43.970			
100	24.970	34.760	4.155	0.240	0.611	87.710	0.289	0.339	53.980			
110	22.480	34.730	3.757	0.490	4.770	75.720	0.274	0.311	53.140	153	5196	126097
120	18.310	34.750	3.433	0.800	10.050	63.860	0.222	0.291	56.750	11	3373	68458
130	16.760	34.700	3.020	1.110	15.190	54.460	0.162	0.272	62.640	0	76	1877
140	15.580	34.620	3.144	1.130	14.950	55.340	0.141	0.232	62.190	11	87	1113
160	13.340	34.550	2.443	1.680	23.130	41.040	0.072	0.132	64.540	11	458	44
180	12.080	34.560	1.918	2.060	28.450	31.380	0.025	0.061	71.020	11	76	22
1000	4.520	34.560	1.845	3.200	43.360	25.510						0

Station No : 39
 Date : 16/08/92 Heure (GMT) : 11h 50'
 Latitude : 8° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°5 / 25°1 vent dir./vit. : 70° / 10 kts fond 5250 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA	NBCY	NBMA	NBPRO
0			4.564	0.120	0.019		0.040	0.035	46.730			0
30			4.472	0.120	0.016		0.054	0.049	47.810			0
60			4.508	0.100	0.022		0.068	0.062	47.610			0
80			4.595	0.080	0.022		0.098	0.084	46.090			0
90			4.633	0.080	0.017		0.155	0.123	44.090			0
100			4.299	0.190	0.231		0.170	0.229	45.840			0
110			3.719	0.540	5.910		0.277	0.344	55.400			0
120			3.682	0.650	7.450		0.264	0.284	51.800			0
130			3.357	0.890	11.180		0.190	0.276	59.170			0
140			3.020	1.120	15.190		0.147	0.251	63.000			0
160				1.260	16.330		0.097	0.155	61.600			0
180							0.008	0.054	87.510			0
1000			1.511	2.290	32.350							0

Station No : 40
 Date : 20/08/92 Heure (GMT) : 11h 21'
 Latitude : 5° 3' N Longitude : 164°59' E
 air sec/hum. : 27°7 / 25°1 vent dir./vit. : 70° / 10 kts fond 4775 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.720	34.030	4.447	0.120	0.019	101.800	0.064	0.054	45.500
20	29.730	34.030	4.503	0.130	0.019	103.100	0.065	0.063	49.130
40	29.710	34.610	4.626	0.130	0.021	106.230	0.117	0.078	40.050
50	29.380	34.690	4.689	0.170	0.049	107.100	0.139	0.133	48.870
60	29.020	34.700	4.716	0.120	0.024	107.040	0.163	0.128	43.960
70	28.690	34.750	4.496	0.140	0.022	101.480	0.179	0.144	44.630
80	28.180	34.800	4.364	0.170	0.025	97.640	0.218	0.189	46.450
90	27.220	34.800	4.215	0.210	0.204	92.700	0.281	0.278	49.760
100	26.260	34.800	4.082	0.270	0.863	88.240	0.263	0.318	54.790
120	24.080	34.790	3.666	0.500	5.750	76.140	0.216	0.320	59.720
140	18.900	34.690	3.445	0.730	8.660	64.810	0.122	0.246	66.820
160	16.030	34.660	3.269	1.060	13.690	58.080	0.061	0.113	65.090
1000	4.480	34.560	2.072	3.120	40.040	28.620			

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Station No : 41
 Date : 21/08/92 Heure (GMT) : 05h 03'
 Latitude : 4° 0' N Longitude : 165° 0' E
 air sec/hum. : 31°3 / 25°0 vent dir./vit. : 0° / 0 kts fond 4490 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.780	33.920	4.413	0.110	0.019	101.070	0.068	0.033	32.970
20	29.740	34.070	4.451	0.120	0.019	101.950	0.066	0.045	40.440
40	29.690	34.420	4.549	0.120	0.023	104.310	0.110	0.059	34.650
50	29.210	34.760	4.580	0.140	0.020	104.340	0.113	0.069	37.830
60	28.180	34.850	4.452	0.160	0.021	99.640	0.209	0.149	41.600
70	27.250	34.880	4.220	0.210	0.023	92.910	0.297	0.212	41.630
80	26.140	34.920	3.736	0.390	2.850	80.640	0.335	0.356	51.520
90	25.110	34.830	3.674	0.420	4.260	77.790	0.282	0.340	54.690
100	24.270	35.010	3.050	0.730	9.710	63.650	0.263	0.295	52.900
120	22.690	34.950	3.106	0.750	10.620	62.930	0.150	0.248	62.260
140	21.150	34.930	3.070	0.840	11.020	60.400	0.092	0.160	63.590
160	19.070	34.860	3.175	0.900	12.460	59.990	0.024	0.048	66.420
500	7.620	34.590	1.598	2.850	37.480	23.730			

Station No : 42
 Date : 21/08/92 Heure (GMT) : 12h 34'
 Latitude : 3° 0' N Longitude : 165° 0' E
 air sec/hum. : 28°9 / 24°5 vent dir./vit. : 270° / 4 kts fond 4190 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.740	33.980	4.419	0.110	0.018	101.170	0.041	0.038	47.890
20	29.490	33.990	4.421	0.100	0.015	100.780	0.049	0.033	40.320
40	29.110	34.650	4.571	0.110	0.013	103.890	0.073	0.068	47.950
50	28.760	34.860	4.568	0.180	0.013	103.300	0.103	0.074	41.890
60	28.150	34.850	4.451	0.170	0.015	99.560	0.157	0.131	45.450
70	27.170	34.870	4.203	0.210	0.048	92.390	0.216	0.230	51.600
80	26.060	34.970	3.637	0.440	3.830	78.410	0.340	0.416	55.010
90	24.670	34.990	3.147	0.660	8.460	66.160	0.268	0.353	56.840
100	23.530	34.980	2.969	0.770	10.480	61.110	0.155	0.307	66.430
120	22.510	34.960	2.957	0.810	10.850	59.710	0.092	0.202	68.580
140	20.800	34.920	3.075	0.840	11.280	60.090	0.058	0.131	69.220
160	19.910	34.790	3.238	0.890	12.300	62.160	0.030	0.072	70.460
500	8.040	34.600	1.991	2.600	35.120	29.840			

Station No : 43
 Date : 22/08/92 Heure (GMT) : 07h 13'
 Latitude : 2° 4' N Longitude : 165° 0' E
 air sec/hum. : 28°6 / 24°3 vent dir./vit. : 270° / 11 kts fond m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.560	34.150	4.489	0.090	0.024	102.540	0.047	0.034	42.160
20	29.570	34.140	4.478	0.090	0.024	102.310	0.058	0.049	46.000
40	29.530	34.130	4.502	0.090	0.024	102.780	0.059	0.061	50.880
50	29.120	34.580	4.764	0.100	0.029	108.250	0.075	0.085	52.930
60	28.110	34.840	4.552	0.150	0.022	101.750	0.102	0.116	53.360
70	27.120	34.900	4.279	0.180	0.031	94.000			
80	26.440	34.940	3.950	0.300	1.627	85.730			
90	25.370	34.960	3.299	0.570	7.070	70.230			
100	24.850	34.990	3.080	0.670	8.860	64.960			
120	23.530	35.040	2.850	0.810	11.100	58.680			
140	20.950	34.930	3.088	0.830	11.100	60.530	0.049	0.256	83.860
160	18.330	34.740	3.299	0.910	11.770	61.390	0.027	0.060	68.580
1000	4.530	34.560	2.314	3.000	39.480	32.000			

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Station No : 44
 Date : 22/08/92 Heure (GMT) : 01h 15'
 Latitude : 1° 0' N Longitude : 164°56' E
 air sec/hum. : 28°4 / 24°9 vent dir./vit. : 250° / 10 kts fond 4330 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.610	34.130	4.459	0.090	0.021	101.940	0.038	0.048	55.660
20	29.610	34.130	4.484	0.090	0.023	102.510	0.053	0.062	54.060
40	29.030	34.440	4.564	0.110	0.016	103.460	0.096	0.079	45.120
50	27.720	34.810	4.412	0.170	0.020	97.920	0.132	0.084	38.900
60	26.890	34.930	4.240	0.220	0.076	92.770	0.226	0.212	48.440
70	26.540	34.950	4.078	0.260	0.842	88.680	0.331	0.312	48.510
80	26.150	34.930	3.876	0.340	2.410	83.680	0.285	0.339	44.370
90	25.730	34.920	3.643	0.430	4.390	78.050	0.289	0.349	54.710
100	25.380	34.970	3.395	0.530	6.150	72.290	0.330	0.375	53.200
120	21.780	35.010	2.995	0.830	10.890	59.660	0.092	0.175	65.550
140	20.000	34.950	3.083	0.930	12.050	59.340	0.041	0.074	64.180
160	18.240	34.920	3.166	1.020	13.190	58.870	0.011	0.036	77.450
1000	4.470	34.560	2.313	3.000	39.030	31.950			

Station No : 45
 Date : 24/08/92 Heure (GMT) : 02h 51'
 Latitude : 0° 1' N Longitude : 164°59' E
 air sec/hum. : 30°3 / 24°8 vent dir./vit. : 270° / 9 kts fond 4400 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0			4.539	0.080	0.029		0.046	0.024	34.560
20	29.740	34.110	4.563	0.080	0.030	104.540	0.065	0.033	33.320
40	29.560	34.170	4.725	0.080	0.030	107.950	0.088	0.055	38.390
50	29.390	34.260	4.543	0.080	0.029	103.530	0.110	0.063	36.570
60	29.270	34.440	4.612	0.120	0.040	104.990	0.148	0.074	33.450
70	27.570	34.890	4.432	0.180	0.025	98.140	0.196	0.130	39.910
80	26.800	35.060	4.189	0.310	0.910	91.580	0.502	0.507	50.260
90	26.080	35.000	3.823	0.390	3.620	82.470	0.530	0.705	57.060
100	25.390	35.010	3.728	0.490	5.410	79.420	0.452	0.697	60.670
120	24.260	35.020	3.138	0.760	9.210	65.480	0.220	0.346	61.070
140	20.780	35.170	3.130	1.010	12.230	61.230	0.070	0.122	63.570
160	20.370	35.430	3.287	0.990	11.050	63.900	0.040	0.091	69.150
180	17.100	35.040	3.225	1.270	15.070	58.670			
250	13.490	34.960							
500	8.530	34.640							
850	5.160	34.550							
1000	4.540	34.560							

Station No : 46
 Date : 24/08/92 Heure (GMT) : 11h 13'
 Latitude : 1° 0' S Longitude : 164°50' E
 air sec/hum. : 28°3 / 25°2 vent dir./vit. : 60° / 5 kts fond m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.600	34.020	4.701	0.100	0.031	107.380	0.045	0.034	42.560
20	29.600	34.020	4.622	0.090	0.025	105.580	0.061	0.039	39.090
40	29.660	34.070	4.492	0.090	0.024	102.750	0.059	0.055	48.400
50	29.590	34.090	4.479	0.100	0.025	102.340	0.064	0.051	44.140
60	29.400	34.270	4.566	0.090	0.025	104.080	0.102	0.074	42.240
70	29.300	34.390	4.618	0.120	0.029	105.150	0.152	0.116	43.170
80	28.170	35.080	4.461	0.290	0.320	99.950	0.283	0.278	49.540
90	25.450	35.110	3.545	0.630	6.720	75.650	0.283	0.278	49.540
100	24.020	35.090	3.155	0.790	9.170	65.570	0.344	0.444	56.350
120	22.450	35.100	2.995	0.990	11.660	60.450	0.229	0.362	61.290
140	21.330	35.220	3.068	1.020	12.010	60.670	0.102	0.183	64.100
160	20.530	35.500	3.198	1.000	10.890	62.390	0.066	0.122	64.940
1000	4.460	34.560	2.323	3.680	43.160	32.080	0.028	0.059	67.690

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Station No : 47
 Date : 26/08/92 Heure (GMT) : 05h 35'
 Latitude : 2° 1' S Longitude : 164°24' E
 air sec/hum. : 29°4 / 26°0 vent dir./vit. : 10° / 9 kts fond 4400 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.980	34.030	4.523	0.090	0.036	104.020	0.029	0.034	53.770
20	29.610	34.030	4.540	0.090	0.031	103.730	0.045	0.035	43.800
40	29.500	34.070	4.531	0.100	0.028	103.350	0.060	0.045	44.030
50	29.500	34.110	4.505	0.100	0.017	102.780	0.063	0.061	49.050
60	29.610	34.180	4.504	0.100	0.033	103.000	0.085	0.071	45.790
70	29.800	34.690	4.679	0.180	0.036	107.670	0.160	0.117	42.290
80	28.160	35.100	4.490	0.320	0.028	100.600	0.220	0.205	48.300
90	27.100	35.170	3.862	0.570	4.220	84.940	0.390	0.438	52.900
100	25.880	35.350				65.900	0.287	0.447	60.800
120	23.910	35.400	3.321	0.700	7.400	69.000	0.138	0.233	62.790
140	22.900	35.550	3.332	0.770	8.080	68.000	0.065	0.130	66.770
160	19.410	35.490	3.295	0.980	11.300	62.900	0.013	0.031	70.650
2000	2.240	34.640	2.851	3.350	41.370	37.370			

Station No : 48
 Date : 26/08/92 Heure (GMT) : 14h 35'
 Latitude : 3° 0' S Longitude : 164°40' E
 air sec/hum. : 28°2 / 26°0 vent dir./vit. : 40° / 1 kts fond 3950 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch_m	Ph_m	%PHA
0	29.790	34.030	4.454	0.100	0.033	102.090	0.035	0.041	53.900
20	29.760	34.160	4.467	0.120	0.030	102.410	0.060	0.050	45.500
40	29.750	34.180	4.465	0.110	0.040	102.350	0.060	0.056	48.420
50	29.820	34.320	4.498	0.120	0.030	103.320	0.071	0.059	45.600
60	29.870	34.380	4.456	0.130	0.030	102.480	0.092	0.080	46.590
70	29.560	34.830	4.646	0.140	0.032	106.540	0.124	0.091	42.270
80	29.120	34.950	4.543	0.180	0.037	103.440	0.183	0.159	46.530
90	28.170	35.070	4.086	0.320	1.072	91.550	0.352	0.382	52.040
100	26.680	35.360	3.178	0.810	9.140	69.440	0.270	0.368	57.680
120	25.020	35.490	2.787	1.020	11.930	59.130	0.166	0.287	63.420
140	24.110	35.570	2.694	1.110	16.580	56.240	0.110	0.237	68.280
160	21.880	35.590	2.797	1.080	15.580	56.010	0.056	0.118	67.790
1000	4.540	34.550	2.274	3.490	42.450	31.460			

Station No : 49
 Date : 26/08/92 Heure (GMT) : 20h 55'
 Latitude : 4° 0' S Longitude : 164°55' E
 air sec/hum. : 29°1 / 26°7 vent dir./vit. : 0° / 0 kts fond 3070 m

Z	T	S	O ₂	PO ₄	NO ₂₁	%satur.O ₂	Ch_m	Ph_m	%PHA
0			4.423	0.130	0.014		0.055	0.055	49.610
20	29.780	34.340	4.427	0.150	0.021	101.630	0.057	0.043	42.780
40	29.730	34.390	4.423	0.140	0.032	101.480	0.066	0.070	51.450
50	29.720	34.420	4.472	0.140	0.024	102.600	0.078	0.067	46.240
60	29.700	34.540	4.490	0.150	0.028	103.050	0.105	0.082	43.780
70	29.450	34.830	4.569	0.170	0.032	104.570	0.206		
80	28.320	34.980	4.310	0.240	0.020	96.770	0.283	0.204	41.970
90	27.890	35.040	4.059	0.330	0.817	90.470	0.366	0.355	49.190
100	27.520	35.130	3.735	0.480	3.520	83.750	0.329	0.385	53.920
120	25.670	35.400	3.192	0.720	7.870	68.500	0.207	0.321	60.810
140	24.470	35.640	2.691	1.030	11.930	56.570	0.123	0.235	65.720
160	22.750	35.740	2.666	1.140	12.770	54.320	0.067	0.122	64.580
1000	4.850	34.540	2.503	3.220	39.500	34.870			

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Station No : 50
 Date : 27/08/92 Heure (GMT) : 04h 00'
 Latitude : 5° 1' S Longitude : 165°10' E
 air sec/hum. : 29°7 / 27°2 vent dir./vit. : 160° / 6 kts fond 2500 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	30.340	34.330	4.415	0.170	0.021	102.350	0.036	0.034	48.000
20	29.660	34.310	4.410	0.190	0.019	101.010	0.042	0.034	44.630
40	29.580	34.350	4.417	0.160	0.018	101.050	0.050	0.051	40.070
50	29.590	34.380	4.456	0.180	0.019	101.980	0.053	0.045	45.960
60	29.640	34.540	4.494	0.170	0.017	103.030	0.069	0.056	45.040
70	29.460	34.720	4.508	0.190	0.025	103.130	0.105	0.092	46.750
80	28.840	34.920	4.488	0.230	0.026	101.670	0.163	0.132	44.700
90	27.780	35.070	4.073	0.310	0.770	90.620	0.373	0.370	49.780
100	26.980	35.280	3.359	0.700	7.550	73.760	0.301	0.309	57.600
120	25.460	35.510	2.828	0.960	11.420	60.490	0.165	0.318	65.850
140	23.580	35.700	2.650	1.130	13.510	54.820	0.093	0.187	66.840
160	20.900	35.710		1.270	14.880		0.041	0.088	68.070
1000	4.650	34.540	2.623	3.230	41.850	36.370			

Station No : 51
 Date : 27/08/92 Heure (GMT) : 10h 05'
 Latitude : 6° 0' S Longitude : 165° 7' E
 air sec/hum. : 28°2 / 26°5 vent dir./vit. : 180° / 10 kts fond 3600 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.400	34.220	4.420	0.130	0.023	100.720	0.052	0.053	50.820
20	29.330	34.260	4.436	0.120	0.021	100.990	0.056	0.044	43.800
40	29.290	34.290	4.466	0.120	0.020	101.620	0.064	0.053	45.390
50	29.300	34.360	4.476	0.120	0.023	101.900	0.069	0.064	47.960
60	29.030	34.750	4.525	0.120	0.019	102.750	0.079	0.073	37.890
70	28.580	34.930	4.412	0.160	0.021	99.490	0.125	0.099	44.180
80	28.060	35.030	4.374	0.160	0.021	97.790	0.193	0.159	45.210
90	27.530	35.050	4.353	0.150	0.021	96.410	0.215	0.183	47.310
100	26.760	35.150	4.086	0.230	0.350	89.310	0.398	0.399	50.060
120	25.070	35.450	3.276	0.590	7.070	69.560	0.152	0.284	65.100
140	23.220	35.650	2.734	0.920	12.080	56.160	0.094	0.173	64.900
160	21.540	35.650	2.579	1.090	14.360	51.330	0.047	0.119	71.620
1000	4.750	34.540	2.651	2.800	39.580	36.850			

Station No : 52
 Date : 27/08/92 Heure (GMT) : 16h 26'
 Latitude : 7° 0' S Longitude : 165° 4' E
 air sec/hum. : 27°7 / 26°4 vent dir./vit. : 160° / 11 kts fond 3730 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.840	34.270	4.443	0.110	0.023	100.280	0.071	0.049	40.890
20	28.890	34.320	4.479	0.090	0.026	101.210	0.076	0.046	37.530
40	28.840	34.370	4.466	0.090	0.022	100.860	0.102	0.077	43.130
50	28.790	34.440	4.494	0.090	0.021	101.440	0.114	0.077	40.270
60	28.550	34.630	4.526	0.090	0.030	101.840	0.144	0.090	38.420
70	27.440	35.020	4.381	0.110	0.028	96.860	0.189	0.160	45.810
80	26.820	35.100	4.295	0.160	0.242	93.950	0.369	0.340	47.900
90	26.650	35.140	4.133	0.190	0.632	90.150	0.394	0.362	47.880
100	26.030	35.310	3.415	0.530	6.440	73.730	0.261	0.297	53.170
120	24.070	35.650	2.675	0.950	12.880	55.830	0.100	0.192	65.730
140	23.380	35.680	2.706	0.990	12.980	55.760	0.087	0.157	64.360
160	20.960	35.670	2.614	1.120	14.540	51.470	0.040	0.100	71.500
1000	4.600	34.540	2.781	2.850	40.120	38.520			

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Station No : 53
 Date : 28/08/92 Heure (GMT) : 02h 53'
 Latitude : 7°59' S Longitude : 164°59' E
 air sec/hum. : 29°2 / 27°1 vent dir./vit. : 150° / 6 kts fond 3885 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	29.340	34.340	4.454	0.130	0.033	101.460	0.038	0.040	50.650
20	28.610	34.340		0.120	0.029		0.061	0.047	43.720
40	28.370	34.410	4.504	0.110	0.031	100.890	0.091	0.069	43.070
50	28.200	34.440	4.500	0.120	0.031	100.520	0.094	0.072	43.430
60	28.060	34.470	4.529	0.100	0.029	100.930	0.121	0.074	38.030
70	27.740	34.610	4.555	0.110	0.033	101.010	0.167	0.121	42.050
80	26.990	34.820	4.504	0.160	0.054	98.660	0.634	0.445	41.270
90	26.690	34.910	4.457	0.150	0.091	97.160	0.649	0.520	44.460
100	25.010	35.060	3.811	0.410	4.520	80.650	0.671	0.703	51.150
120	23.050	35.600	3.251	0.680	8.430	66.550	0.230	0.297	56.310
140	21.810	35.830	2.953	0.870	10.860	59.140	0.086	0.173	66.800
160	20.170	35.690	3.472	0.730	8.960	67.340	0.116	0.153	56.830
1000	4.340	34.540	2.885	2.780	39.850	39.720			

Station No : 54
 Date : 28/08/92 Heure (GMT) : 19h 45'
 Latitude : 8°59' S Longitude : 165° 2' E
 air sec/hum. : 27°5 / 25°9 vent dir./vit. : 170° / 11 kts fond 3800 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.500	34.110		0.080	0.025		0.021	0.049	69.590
20	28.370	34.230		0.080	0.025		0.081	0.044	35.290
40	28.190	34.240		0.070	0.028		0.107	0.072	40.360
50	28.180	34.260		0.080	0.035		0.113	0.088	43.790
60	28.100	34.310		0.080	0.029		0.158	0.114	41.870
70	28.020	34.370		0.090	0.025		0.171	0.152	46.990
80	27.790	34.560		0.100	0.029		0.215	0.178	45.230
90	26.710	35.010		0.230	0.857		0.571	0.475	45.420
100	25.840	35.310		0.460	4.340		0.383	0.358	48.350
120	21.980	35.640		0.800	9.950		0.118	0.291	71.210
140	19.880	35.680		1.080	13.360		0.024	0.068	63.920
160	18.190	35.510		1.140	14.390		0.012	0.041	76.930

Station No : 55
 Date : 29/08/92 Heure (GMT) : 03h 40'
 Latitude : 10° 0' S Longitude : 165° 5' E
 air sec/hum. : 26°1 / 24°6 vent dir./vit. : 160° / 15 kts fond 3230 m

Z	T	S	O ₂	PO ₄	NO ₂₃	%satur.O ₂	Ch m	Ph m	%PHA
0	28.250	34.230		0.090	0.035		0.080	0.055	40.680
20	28.180	34.220		0.090	0.040		0.077	0.061	44.240
40	28.140	34.220		0.090	0.021		0.092	0.076	45.260
50	28.110	34.280		0.090	0.040		0.144	0.106	42.540
60	27.180	34.800		0.160	0.307		0.593	0.355	37.430
70	25.310	35.370		0.480	5.000		0.612	0.615	50.130
80	24.610	35.640		0.660	7.580		0.477	0.454	48.800
90	23.030	35.670		0.780	9.760		0.269	0.328	54.970
100	21.460	35.630		0.890	11.190		0.127	0.210	62.230
120	20.730	35.630		0.950	11.960		0.090	0.150	62.640
140	20.150	35.710		1.090	13.200		0.047	0.088	65.230
150	19.890	35.670	3.126			60.300			
160	19.310	35.630		1.140	13.730		0.026	0.050	65.600
280	13.160	35.010	3.102			52.070			
500	7.170	34.570	2.854			41.940			
700	5.680	34.520	2.632			37.380			
1000	4.380	34.530	2.827			38.950			

Surtropac 17

Caractéristiques des traits : WP 2
vertical
200 microns

No_sta	Position		date		h. loc. (=TU+11)	Notrait	angle (degré)	long. filée (m)	Z		vol. filtré (m ³)	pds_sec (mg)	%pssc	
	(degrés,	minutes)							max	min				
4	-16.59	165.00	8	8	1992	3.3	WPv 1	20	532	500	0	265.4	243.1	74.9
5	-16.00	165.00	8	8	1992	10.9	WPv 2	20	532	500	0	153.7	212.9	76.9
6	-15.00	165.00	8	8	1992	18.5	WPv 3	0	500	500	0	143.0	90.0	79.0
7	-14.00	164.59	9	8	1992	1.9	WPv 4	30	577	500	0	190.0	130.2	84.5
8	-13.00	165.00	9	8	1992	9.0	WPv 5	20	532	500	0	165.7	112.3	92.4
9	-12.00	165.00	9	8	1992	15.7	WPv 6	20	532	500	0	166.7	375.1	78.7
10	-10.59	165.00	9	8	1992	22.7	WPv 7	40	653	500	0	228.3	669.3	71.8
11	-10.00	165.00	10	8	1992	6.6	WPv 8	10	508	500	0	137.4	352.9	77.7
12	-9.00	165.00	10	8	1992	12.4	WPv 9	25	547	500	0	150.9	520.3	80.9
13	-7.58	165.00	10	8	1992	21.0	WPv 10	15	515	500	0	149.5	343.2	81.3
14	-7.00	165.00	11	8	1992	4.0	WPv 11	45	700	500	0	183.5	304.4	82.2
15	-6.00	165.12	11	8	1992	11.1	WPv 12	15	515	500	0	156.9	255.4	82.1
16	-5.00	165.27	11	8	1992	18.1	WPv 13	15	515	500	0	126.4	162.8	83.6
18	-4.00	165.40	12	8	1992	2.1	WPv 14	20	532	500	0	144.8	195.5	84.7
20	-3.00	165.50	12	8	1992	9.8	WPv 15	0	500	500	0	128.7	269.1	84.5
22	-2.00	166.00	12	8	1992	19.0	WPv 16	20	532	500	0	139.1	287.4	78.1
24	-1.00	166.15	13	8	1992	5.9	WPv 17	20	532	500	0	141.6	392.4	77.4
26	0.00	165.50	13	8	1992	17.4	WPv 18	10	508	500	0	122.1	164.0	76.2
28	1.00	165.25	14	8	1992	2.8	WPv 19	20	532	500	0	138.5	261.4	79.2
29	1.30	165.13	14	8	1992	13.1	WPv 20	15	515	500	0	131.0	182.5	78.4
32	3.00	165.00	14	8	1992	22.1	WPv 21	20	532	500	0	185.8	383.8	80.9
34	4.01	165.00	15	8	1992	6.7	WPv 22	15	515	500	0	136.0	244.2	81.0
36	5.01	165.00	15	8	1992	16.4	WPv 23	0	500	500	0	125.2	224.5	71.1
37	5.59	165.00	15	8	1992	23.4	WPv 24	0	500	500	0	149.7	247.7	79.0
38	7.00	165.00	16	8	1992	6.6	WPv 25	10	508	500	0	118.0	206.5	80.9
39	8.00	165.00	16	8	1992	13.7	WPv 26	20	532	500	0	133.0	237.9	80.2

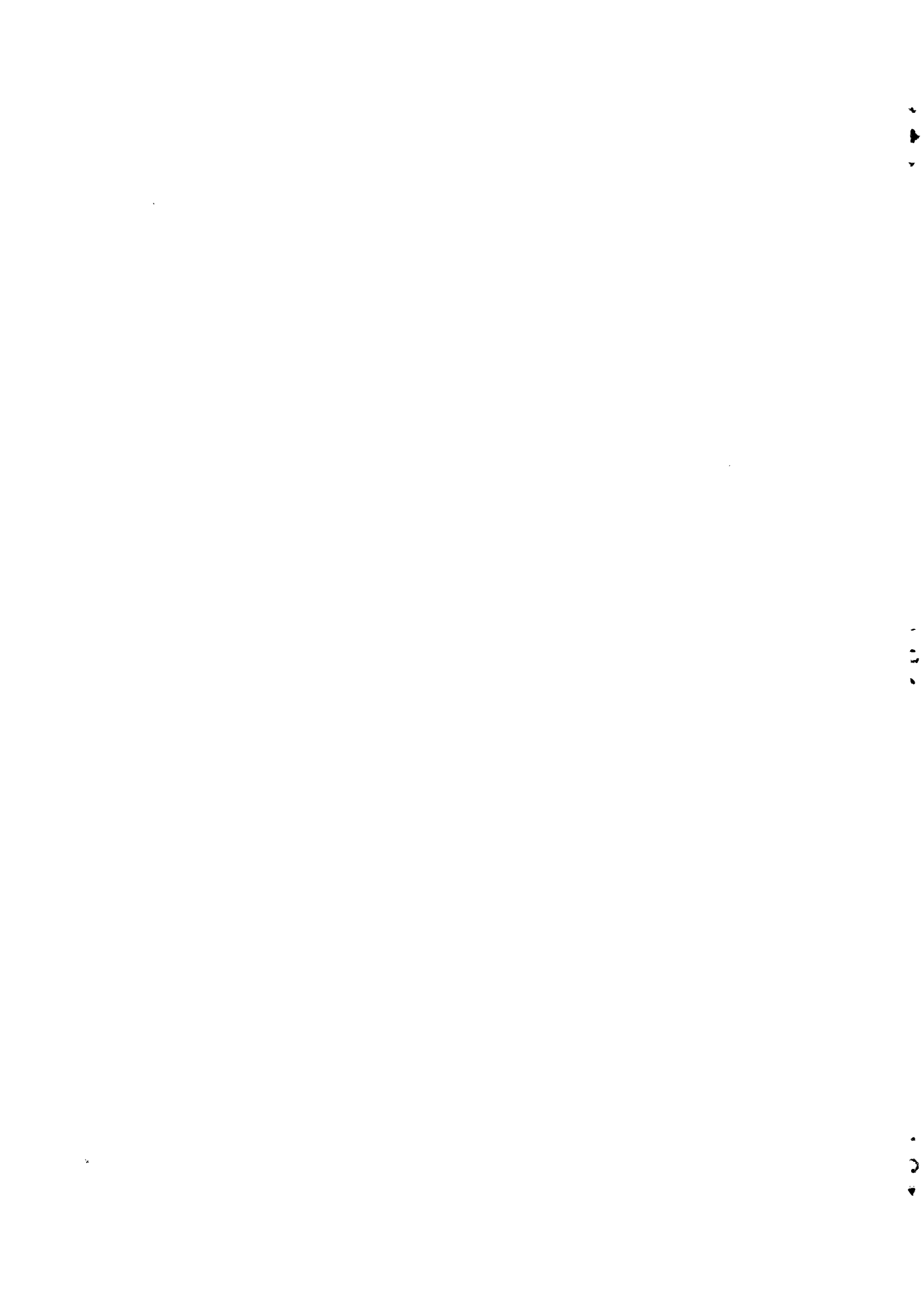
Surtropac 17 :

Valeurs des biomasses par mètre carré : WP 2
vertical
200 microns

No_sta	Position (degrés,minutes)		date		No trait	Zmax (m)	pds_sec (mg/m ³)	pssc (mg/m ³)	pds_sec (mg/m ²)	pssc (mg/m ²)	
4	-16.59	165.00	8	8	1992	WPv 1	500	0.92	0.69	458	343
5	-16.00	165.00	8	8	1992	WPv 2	500	1.39	1.07	693	533
6	-15.00	165.00	8	8	1992	WPv 3	500	0.63	0.50	315	249
7	-14.00	164.59	9	8	1992	WPv 4	500	0.69	0.58	343	290
8	-13.00	165.00	9	8	1992	WPv 5	500	0.68	0.63	339	313
9	-12.00	165.00	9	8	1992	WPv 6	500	2.25	1.77	1125	885
10	-10.59	165.00	9	8	1992	WPv 7	500	2.93	2.10	1466	1052
11	-10.00	165.00	10	8	1992	WPv 8	500	2.57	2.00	1284	998
12	-9.00	165.00	10	8	1992	WPv 9	500	3.45	2.79	1724	1395
13	-7.58	165.00	10	8	1992	WPv 10	500	2.30	1.87	1148	933
14	-7.00	165.00	11	8	1992	WPv 11	500	1.66	1.36	829	682
15	-6.00	165.12	11	8	1992	WPv 12	500	1.63	1.34	814	668
16	-5.00	165.27	11	8	1992	WPv 13	500	1.29	1.08	644	538
18	-4.00	165.40	12	8	1992	WPv 14	500	1.35	1.14	675	572
20	-3.00	165.50	12	8	1992	WPv 15	500	2.09	1.77	1045	883
22	-2.00	166.00	12	8	1992	WPv 16	500	2.07	1.61	1033	807
24	-1.00	166.15	13	8	1992	WPv 17	500	2.77	2.14	1386	1072
26	0.00	165.50	13	8	1992	WPv 18	500	1.34	1.02	672	512
28	1.00	165.25	14	8	1992	WPv 19	500	1.89	1.49	944	747
29	1.30	165.13	14	8	1992	WPv 20	500	1.39	1.09	697	546
32	3.00	165.00	14	8	1992	WPv 21	500	2.07	1.67	1033	836
34	4.01	165.00	15	8	1992	WPv 22	500	1.80	1.45	898	727
36	5.01	165.00	15	8	1992	WPv 23	500	1.79	1.27	897	637
37	5.59	165.00	15	8	1992	WPv 24	500	1.65	1.31	827	654
38	7.00	165.00	16	8	1992	WPv 25	500	1.75	1.42	875	708
39	8.00	165.00	16	8	1992	WPv 26	500	1.79	1.43	894	717



V - ANNEXES



A1 - Références

- BONNET, S., P. GERARD, R. LE BORGNE, M. RODIER, 1990. Programme PROPPAC : Hydrologie, nutriments, chlorophylle et zooplancton des campagnes SURTROPAC 07 à 13 (1987 - 1989). Nouméa ORSTOM. *Archives : Sci. Mer: Océanogr. phys.*, **3**, 183p.
- DELCROIX, T., F. GALLOIS, F. MASIA, P. WAIGNA, 1991. Rapport de la campagne SURTROPAC 14 à bord du N.O. "LE NOROIT" (11 mars au 8 avril 1991). Nouméa ORSTOM. *Rapp. Missions : Sci. Mer: Océanogr. phys.*, **4**, 117p.
- DU PENHOAT, Y., J. GRELET, P. WAIGNA, J. BLANCHOT, M. RODIER, B. BUISSON, 1993. Rapport de la campagne SURTROPAC 17 à bord du N.O. "LE NOROIT" (5 août au 2 septembre 1992). Nouméa: ORSTOM. *Rapp. Missions : Sci. Mer : Océanogr. phys.*, **9**, 102p.
- GERARD, P., 1986. Programme PROPPAC : Hydrologie, nutriments, chlorophylle et zooplancton des radiales 1 à 6 SURTROPAC. Centre ORSTOM de Nouméa. *Doc. Multigr.*, 125p.
- HERBLAND, A., A. LE BOUTEILLER, P. RAIMBAULT, 1985. Size distribution of phytoplankton biomass in the Equatorial Atlantic Ocean. *Deep Sea Res.* . **32** : 819-836.
- LE BORGNE, R. 1975. Méthodes de mesures des biovolumes, poids secs, poids secs sans cendre et des éléments C, N, et P du zooplancton, utilisés au C.R.O. d'Abidjan. Abidjan: ORSTOM. *Doc. Sci. C.R.O. Abidjan*, VI (2): 165-176.
- OUDOT, C., Y. MONTEL, 1988. A high sensitivity method for the determination of nanomolar concentrations of nitrate and nitrite in sea-water with a Technicon-Autoanalyzer II. *Mar. Chem.*, **24** : 239-252.
- PICAUT, J., P. BOULANGER, F. GALLOIS, F. MASIA, 1993. Rapport de la campagne SURTROPAC 16 à bord du N.O. "LE NOROIT" (19 janvier au 17 février 1992). Nouméa: ORSTOM. *Rapp. Missions : Sci. Mer : Océanogr. phys.*, **8**, 115p.
- RUAL, P., J. GRELET, M. J. LANGLADE, H. WALICO, S. BONNET, 1991. Rapport de la campagne SURTROPAC 15 à bord du N.O. "LE NOROIT" (18 juillet au 15 août 1991). Nouméa: ORSTOM. *Rapp. Missions : Sci. Mer : Océanogr. phys.*, **5**, 134p.
- STRICKLAND, J., T. PARSONS, 1972. A practical handbook of sea-water analysis. *Fish. Res. Bd. Canada Bull.*, **167**, 310p.
- UNESCO, 1968. Zooplankton sampling. *Monographs on oceanographic methodology*, **2**, 174p.

A2 - Liste des participants

<i>Personnel embarqué</i>	<i>spécialité</i>	<i>qualité</i>	<i>laboratoire</i>	Campagnes SURTROPAC			
				14	15	16	17
BLANCHOT Jean	Biologie	Chercheur	ORSTOM, Nouméa				A/R
BONNET Sylvain	Chimie	IT	ORSTOM Nouméa		A/R		
BOULANGER J-Ph.	Physique	Étudiant	ORSTOM-Nouméa			A/R	
BUISSON Bruno	Informatique	IT	ORSTOM, Nouméa				A/R
DELCROIX* Thierry	Physique	Chercheur	ORSTOM Nouméa	A/R			
DEVAUX Gilles	Chimie	Étudiant	ORSTOM, Nouméa				A/R
DU PENHOAT* Yves	Physique	Chercheur	ORSTOM, Nouméa				A/R*
FENTON Doug	Mouillage	IT	PMEL, Seattle				R
FREITAG Paul	Informatique	IT	PMEL Seattle	R			
GALLOIS Francis	Electronique	IT	ORSTOM, Nouméa	A/R		A/R	
GANACHAUD Alex.	Electronique	Stagiaire	ORSTOM, Nouméa		A/R		
GERARD Philippe	Chimie	IT	ORSTOM, Nouméa			A/R	
GRELET Jacques	Electronique	IT	ORSTOM Nouméa		A/R		A/R
KENSY Kevin	Mouillage	IT	PMEL-NOAA Seattle		R		
LANGLADE Marie-Jo	Informatique	IT	ORSTOM Nouméa		A/R		
LAPETITE Alain	Biologie	IT	ORSTOM Nouméa	A/R		A/R	
LOCONTE John	Mouillage	IT	PMEL, Seattle				R
MASIA François	Informatique	IT	ORSTOM Nouméa	A/R		A/R	
McPHADEN Michael	Physique	Chercheur	PMEL Seattle	R		R	
MILLER Rick	Mouillage	IT	PMEL Seattle	R			
MOORE Ben	Mouillage	IT	PMEL-NOAA Seattle		R		
MOORE Dennis	Physique	Chercheur	JIMAR-Honolulu			R	
PICAUT* Joël	Physique	Chercheur	ORSTOM Nouméa			A/R	
RODIER Martine	Chimie	Chercheur	ORSTOM Nouméa	A/R			A/R
RUAL* Pierre	Physique	Chercheur	ORSTOM Nouméa		A/R		
SHANLEY John	Physique	IT	PMEL-NOAA Seattle			R	
SHEPARD Andy	Physique	IT	PMEL-NOAA Seattle		R	R	
STERN Marcella	Mouillage	IT	LDGO, New York				R
WAGNA Pierre	Physique	IT	ORSTOM Nouméa	A/R			A/R
WALICO Henri	Physique	IT	ORSTOM Nouméa		A/R		
ZIMMEMAN David	Physique	IT	PMEL-NOAA Seattle			A	R

A = aller R = retour IT = Ingénieur / Technicien * = chef de mission

* : chef de mission

A3 - Tableau récapitulatif des abréviations et unités

Paramètre	Abréviation	Unités
Positions/Heures		
Latitude, Longitude		Degrés, minutes
Temps Universel (GMT)	GMT	Heures, minutes
Heure locale	h. loc.	Heures, dizaines
Météorologie		
Température de l'air sec	air sec	°C
Température de l'air humide	air hum.	°C
Vent: direction	vent dir.	degré
Vent: intensité	vent vit.	kt (noeud)
Hydrologie-courantologie		
Profondeur	Z	m
Température	T	°C
Salinité	S	usp
Chimie		
Oxygène dissous	O ₂	ml.l ⁻¹ (millilitre/litre)
Sels nutritifs (NO ₂ + NO ₃ , PO ₄)	NO ₂₃ , PO ₄	µM (micromole)
Pourcentage de saturation en oxygène	%satur. O ₂	%
Phytoplancton		
Chlorophylle <i>a</i> extraite au méthanol	Ch_m	µg .l ⁻¹
Phéophytine <i>a</i> extraite au méthanol	Ph_m	µg .l ⁻¹
Abondance de <i>Prochlorophytes</i>	NBPRO	nb .ml ⁻¹ (nombre cellules/millilitre)
Abondance de <i>Cyanobactéries</i>	NBCY	nb .ml ⁻¹
Abondance de microalgues	NBMA	nb .ml ⁻¹
Zooplancton		
Longueur de câble filée	long. filée	m
Profondeur maximum atteinte	Zmax	m
Profondeur minimum	Zmin	m
Volume filtré par le filet	vol. filtré	m ³
Poids sec	pds_sec	mg
Poids sec sans cendre	pssc	mg
Pourcentage de poids sec en pssc	%pssc	%
Pourcentage de phéophytine <i>a</i>	%PHA	%

