



Publications du
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(C N E X O)
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RESULTATS DE LA CAMPAGNE CINECA - CHARCOT II

(15 mars - 29 avril 1971)

Groupe MEDIPROD

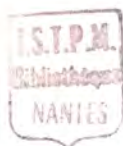
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PUBLICATIONS DU
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RESULTATS DE LA CAMPAGNE CINECA-CHARCOT II

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GROUPE MEDIPROD *

1 - OBJECTIFS ET OPERATIONS

La campagne CINECA-CHARCOT II avait pour but l'étude - dans le cadre du programme international CINECA (Cooperative Investigations of the Northern part of the Eastern Central Atlantic) - de la production pélagique dans les régions de remontée d'eaux (upwelling) le long des côtes nord-ouest africaines.

Les travaux réalisés visaient deux objectifs :

- la description des structures verticales et horizontales des divers paramètres hydrobiologiques de la production,
- une meilleure connaissance des mécanismes intervenant dans les processus chimiques et physiologiques de l'assimilation photosynthétique et de la régénération du carbone, de l'azote et du phosphore.

Pour atteindre ces objectifs, différents types de travaux ont été mis en oeuvre : stations hydrologiques classiques (voir §3); stations de longue durée pour permettre une expérimentation poussée (voir §3), bouées dérivantes, mesures en continu de paramètres physiques et chimiques le long du trajet du navire (voir §4), stockage de grands volumes d'eau (500 litres) pour expérimenter sur la poussée planctonique qui s'y développe naturellement, mesures de courants (voir §5), prises de zooplancton et micronecton, expérimentation sur du matériel zooplanctonique vivant maintenu en culture, mesures des propriétés optiques des eaux.

* Le groupe Médiprod rassemble des participants de plusieurs laboratoires français dans le but d'étudier en commun les problèmes liés à la dynamique de la production pélagique dans les régions d'apport nutritif direct. Cette action commune est concrétisée par la RCP-247 du CNRS. (Responsable : H.J. Minas, Département d'Océanographie, Centre Universitaire de Luminy, 70 route Léon Lachamp 13288 Marseille Cedex 2. Participants : B. Coste, J. Gostan, A. Ivanoff, G. Jacques, P. Nival, A. Thiriot).

La mission CINECA-CHARCOT II a été divisée en trois périodes :

1ère période (15-28 mars) Bordeaux-Agadir
(cartes N° 1 et 2) :

- des trajets de prospection de surface près du littoral marocain avec des mesures en continu de la température et de la salinité,
- deux sections de stations hydrologiques (stations 1 à 7 et 9 à 14),
- deux opérations de bouée dérivante avec des stations de mesures au cours du déplacement (stations 15 à 19).

2ème période (31 mars - 14 avril) Agadir-Port-Etienne
(cartes N° 1, 3 et 4) :

- une série de stations côtières hydrologiques (stations 25 à 34),
- une opération de prospection (T, S, sels nutritifs, chlorophylle, production ^{14}C) avec une partie nord-sud du Cap Corveiro jusqu'à la latitude de Nouakchott et une partie est-ouest jusqu'à 120 milles au large. Cette opération a permis de localiser 2 centres de remontée d'eaux : le premier devant le Cap Corveiro, le second à proximité immédiate d'un canyon sous-marin par 18°50' Nord et 16°30' Ouest,
- une radiale de stations hydrologiques au large de Nouakchott (stations 36 à 43),
- une opération "zooplancton profond et micronecton" (chalut pélagique Isaacs Kidd à la station 44);
- une prospection autour de l'extrémité du canyon sous-marin,
- une prospection de la région du canyon jusqu'au Cap Corveiro,
- une étude détaillée de l'upwelling du Cap Corveiro com-
prenant des prospections suivies de stations (N° 52 et 62), d'expériences de bouée-dérivante et de prélèvements spéciaux zooplancton (stations 53 à 61 et 63).

3ème période (16-29 avril) Port-Etienne-Dakar
(cartes N° 1, 3 et 4) :

- une prospection des eaux de surface de Port-Etienne jusqu'au canyon (18°50' N et 16°30' W) avec des pêches de zooplancton aux abords du Banc d'Arguin (stations 64 à 71),
- une série de mesures de courants sur 4 stations (C1 à C4) placées à l'intérieur et à l'extérieur du canyon,
- plusieurs prospections dans la région du canyon,
- des stations de répétition pour étudier l'influence des marées sur l'intensité des remontées d'eaux (stations 72 à 82, 83 à 88, 93 à 793 et 94 à 394) (carte N° 4),

- une prospection de surface entre Nouakchott et Dakar (carte N° 3).

2 - LISTE DES PARTICIPANTS

Chef de mission :

Minas (8)

Hydrologie et mesure des courants :

Géronimi (5) Gostan (9) Guibout (5) Maigret (6) Romaña (8)

Optique :

Bethoux (4) Boutler (4) Morel (4)

Sels nutritifs et dépouillement des données :

Coste (8) David (8) Laurec (8)

Phytoplancton :

Cahet (1) Castellvi (3) Dugdale (10) Fiala (1) Jacques (1) Mc Isaac (10)

Minas (Mme) (8) Packard (10) Panouse (1) Slawyk (8)

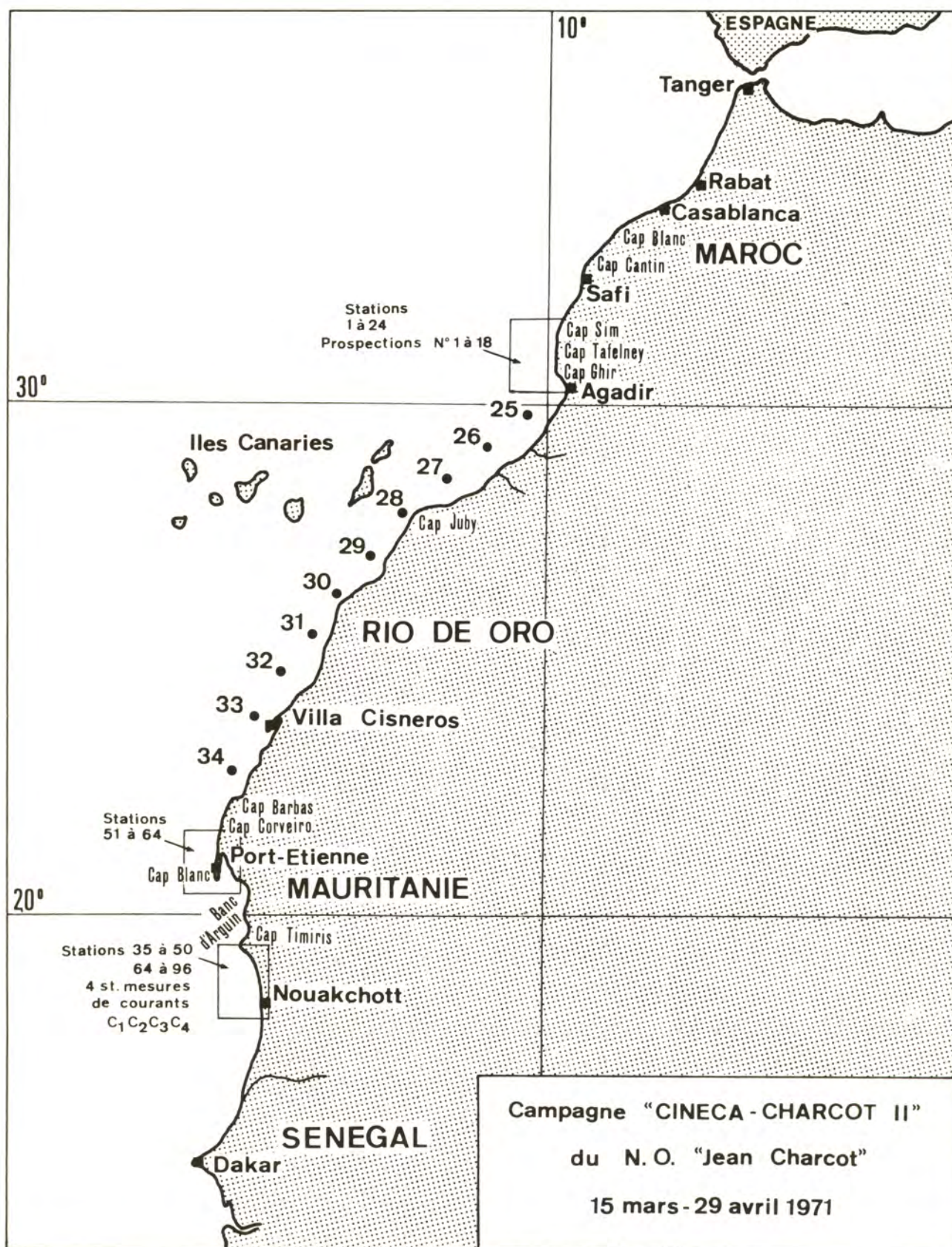
Zooplancton :

Aboussouan (8) Boucher (2) Goy (7) Thiriot (2)

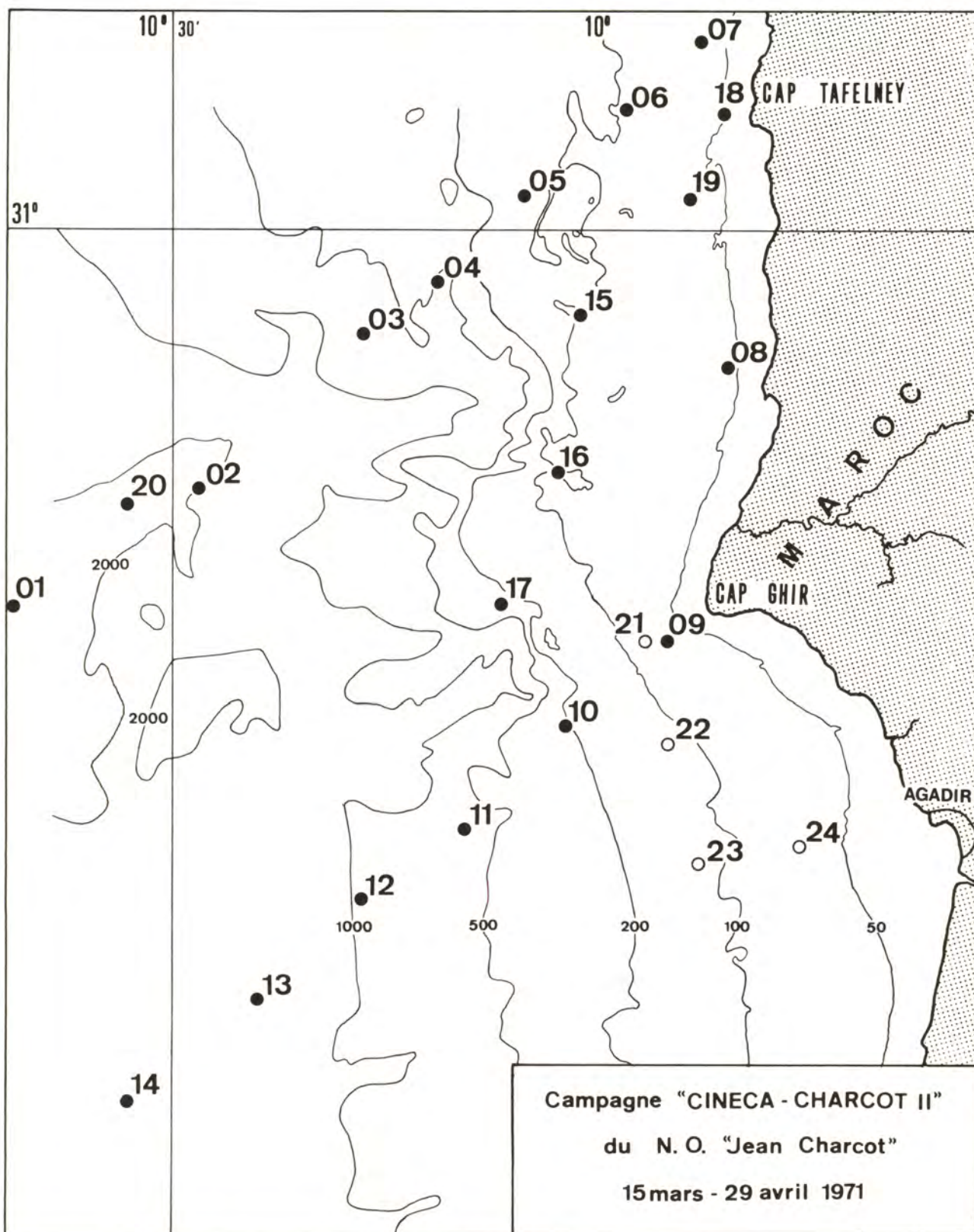
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- (1) Laboratoire Arago - Banyuls/Mer
 - (2) Centre Océanologique de Bretagne - Brest
 - (3) Instituto de Investigaciones Pesqueras - Barcelone - Espagne
 - (4) Laboratoire d'Océanographie Physique (Faculté des Sciences de Paris)
 - (5) Laboratoire d'Océanographie Physique (Muséum National d'Histoire Naturelle)
 - (6) Laboratoire des Pêches maritimes de Mauritanie
 - (7) Laboratoire des Pêches d'Outre-Mer (Muséum National d'Histoire Naturelle)
 - (8) Station Marine d'Endoume - Marseille
 - (9) Station Zoologique - Villefranche/Mer
 - (10) Department of Oceanography-University of Washington - Seattle - U.S.A.

- Les responsables du Groupe MEDIPROD sont heureux de remercier Madame M.C. Bonin qui a assuré la plus grande partie de la cartographie et la mise en page finale de ce fascicule.

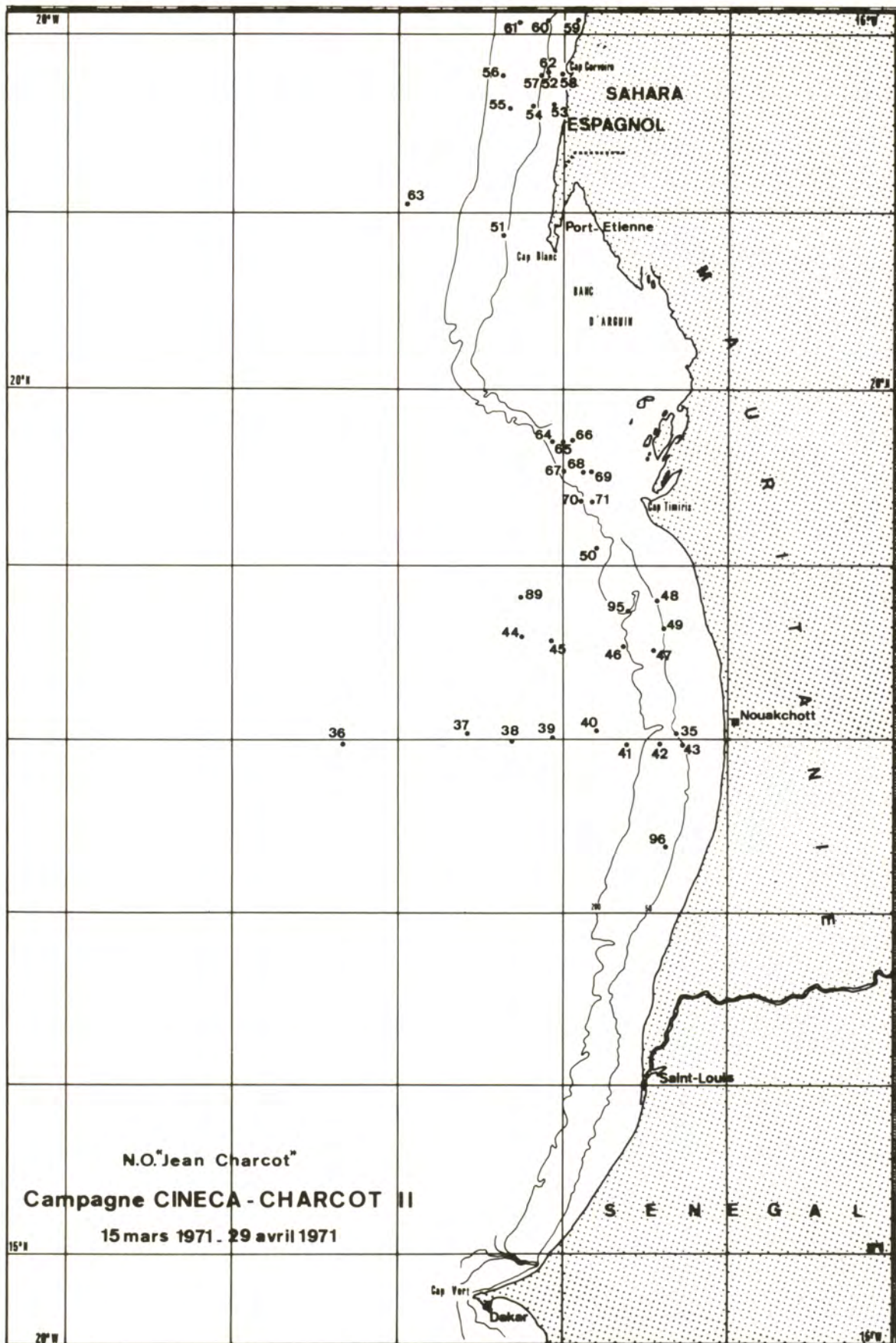
- Les programmes de traitement et d'impression des données par ordinateur ont été mis au point par B. Coste et effectués au centre de calcul du Pharo (Université d'Aix-Marseille).



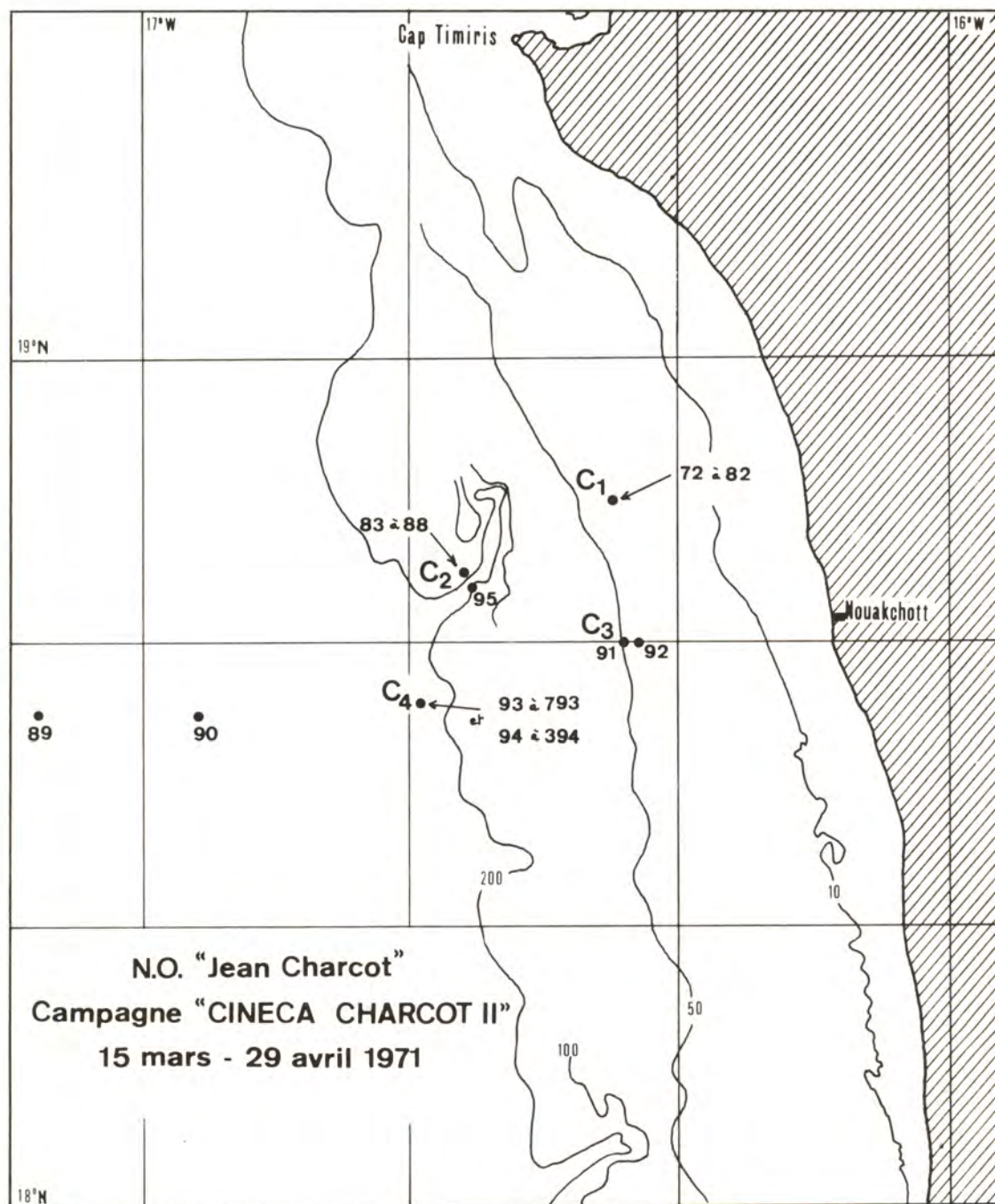
Carte n°1 - Emplacement des zones d'opération du "Jean Charcot" pendant la campagne "CINECA-CHARCOT II"



Carte n°2 - Emplacement des stations effectuées dans le secteur marocain.



Carte n°3 - Emplacement des stations effectuées dans les zones comprises entre le Cap Corveiro et le Cap Blanc, et entre le Cap Timiris et Nouakchott.



Carte n°4 - Stations dans la zone du canyon sous-marin (entre le Cap Timiris et Nouakchott) comprenant en particulier les stations courantologiques (C₁ à C₄)

3 - RESULTATS DES STATIONS HYDROLOGIQUES ET DES PRELEVEMENTS BIOLOGIQUES

Signification des notations utilisées :

- + Les heures d'observations sont en TU
- +Z = immersion vraie en mètres
- +OPT = immersion photométrique (% de pénétration par rapport à la surface)
- +O2 = concentration en oxygène dissous en ml/L
- +O/O = pourcentage de saturation calculé d'après les équations de Green et Carrit
- +PO4, NO3, SiO4, NH4 = concentrations de phosphore, azote, silicium, azote minéraux sous forme de phosphate, nitrate, silicate, ammonium, exprimées en μ -atg/L
- +CHLA = chlorophylle a en mg/m^3
- +ATP = concentration d'adénosine triphosphate exprimée en $\mu\text{g}/\text{L}$
- +VNO3, VNH4 = vitesse d'assimilation de l'azote nitrique et ammoniacal exprimée en h^{-1}
- +RNO3, RNH4 = quantité d'azote nitrique et ammoniacal assimilée exprimée en $\mu\text{-atg}\cdot\text{L}^{-1}\cdot\text{h}^{-1}$
- +NPART= concentration d'azote particulaire en $\mu\text{-atg}/\text{L}$
- +14C = production organique primaire totale exprimée en $\text{mg C}/\text{m}^3/\text{jour}$ (expériences in situ)
- + tout résultat manquant est indiqué par une succession de 9 (9.9, 9.99, 99.99,)
- + lorsque des stations ont été effectuées au même point (stations de répétition) elles sont distinguées par le nombre de centaines. Par exemple : 93, 193, 293,

MISSION CINECA - CHARCOT II STATION NUMERO 1

POSITION 10 41 W PROFONDEUR 2420 METRES
 30 38 N DATE 20 MARS 1971
 HEURES DEBUT 20 H 55
 FIN 22 H 05

METEO HEURE OBSERVATION

MER 5 * 20 H 00 *
 VENT NNE 7 NOEUDS* 20 H 00 *
 NEBULOSITE 3 * 20 H 00 *
 PRESSION ATM. 1015 * 20 H 00 *
 PRECIPITATION NON * 20 H 00 *
 TEMP. AIR-SEC 14,0 * 20 H 00 *
 HUMIDE 16,7 * 20 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,88	36,428	26,656	5,49	99,8	9,99	99,99	99,99	9,99
10	16,85	36,429	26,664	5,34	97,1	9,99	99,99	99,99	9,99
20	16,85	36,451	26,681	5,34	97,1	9,99	99,99	99,99	9,99
30	16,86	36,443	26,672	5,34	97,1	9,99	99,99	99,99	9,99
50	16,85	36,434	26,668	5,42	98,5	9,99	99,99	99,99	9,99
75	16,97	36,435	26,640	5,41	100,6	9,99	99,99	99,99	9,99
100	16,96	36,423	26,633	5,31	96,7	9,99	99,99	99,99	9,99
150	15,88	36,244	26,749	4,65	82,7	9,99	99,99	99,99	9,99
200	14,90	36,089	26,851	4,63	80,7	9,99	99,99	99,99	9,99
250	14,29	35,983	26,902	4,54	78,0	9,99	99,99	99,99	9,99
300	13,48	35,862	26,980	4,44	75,0	9,99	99,99	99,99	9,99
400	12,43	35,692	27,061	4,37	72,1	9,99	99,99	99,99	9,99
500	11,74	35,637	27,152	4,10	66,7	9,99	99,99	99,99	9,99
600	10,99	35,517	27,198	3,70	59,1	9,99	99,99	99,99	9,99
800	9,58	35,414	27,366	3,38	52,3	9,99	99,99	99,99	9,99
1000	8,43	35,370	27,518	3,54	53,4	9,99	99,99	99,99	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 2

POSITION 10 28 W PROFONDEUR 1800 METRES
 30 45 N DATE 21 MARS 1971
 HEURES DEBUT 01 H 53
 FIN 02 H 18

METEO HEURE OBSERVATION

MER 5 * 04 H 00 *
 VENT NNE 5 NOEUDS* 04 H 00 *
 NEBULOSITE 0 * 04 H 00 *
 PRESSION ATM. 1015 * 04 H 00 *
 PRECIPITATION NON * 04 H 00 *
 TEMP. AIR-SEC 14,0 * 04 H 00 *
 HUMIDE 16,0 * 04 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,18	36,289	26,714	5,39	96,6	9,99	99,99	99,99	9,99
10	16,19	36,290	26,713	5,38	96,4	9,99	99,99	99,99	9,99
20	16,19	36,294	26,716	5,45	97,7	9,99	99,99	99,99	9,99
30	16,20	36,294	26,713	5,34	95,7	9,99	99,99	99,99	9,99
50	16,20	36,286	26,707	5,32	95,3	9,99	99,99	99,99	9,99
75	16,15	36,278	26,713	4,94	88,4	9,99	99,99	99,99	9,99
100	15,77	36,204	26,743	4,52	80,3	9,99	99,99	99,99	9,99
150	15,18	36,136	26,825	4,47	78,4	9,99	99,99	99,99	9,99
200	14,68	36,053	26,871	4,47	77,5	9,99	99,99	99,99	9,99
250	14,17	9,999	9,999	4,51	92,9	9,99	99,99	99,99	9,99
300	13,32	35,821	26,981	4,16	70,0	9,99	99,99	99,99	9,99
400	12,06	35,645	27,096	4,09	66,9	9,99	99,99	99,99	9,99
500	11,13	35,540	27,191	3,28	52,6	9,99	99,99	99,99	9,99
600	10,43	35,467	27,260	3,65	57,6	9,99	99,99	99,99	9,99
800	9,09	35,351	27,398	3,75	57,3	9,99	99,99	99,99	9,99
1000	8,37	35,328	27,541	3,53	52,8	9,99	99,99	99,99	9,99

MISSION GINECA - CHARCOT II STATION NUMERO 3

POSITION 10 17 W PROFONDEUR 810 METRES
 30 54 N DATE 21 MARS 1971
 HEURES DEBUT 05 H 43
 FIN 06 H 31

METEO HEURE OBSERVATION

MER 5 * 08 H 00
 VENT NE 6 NOEUDS * 08 H 00
 NEBULOSITE 2 * 08 H 00
 PRESSION ATM, 1016 * 08 H 00
 PRECIPITATION NON * 08 H 00
 TEMP, AIR-SEC 13,0 * 08 H 00
 HUMIDE 16,0 * 08 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.40	36.347	26.707	5.32	95.7	9.99	99.99	99.99	9.99
10	16.39	36.350	26.712	5.37	96.6	9.99	99.99	99.99	9.99
20	16.38	36.352	26.716	5.44	97.8	9.99	99.99	99.99	9.99
30	16.39	36.353	26.714	5.36	96.4	9.99	99.99	99.99	9.99
50	16.40	36.355	26.713	5.34	96.0	9.99	99.99	99.99	9.99
75	16.50	36.344	26.681	5.50	95.5	9.99	99.99	99.99	9.99
100	16.41	36.325	26.688	5.32	95.7	9.99	99.99	99.99	9.99
150	15.33	36.160	26.809	4.59	80.7	9.99	99.99	99.99	9.99
200	14.90	36.087	26.849	4.50	78.4	9.99	99.99	99.99	9.99
250	14.14	35.961	26.917	4.47	76.5	9.99	99.99	99.99	9.99
300	13.04	35.787	27.012	4.31	72.1	9.99	99.99	99.99	9.99
400	12.03	35.633	27.093	4.05	66.2	9.99	99.99	99.99	9.99
500	11.30	35.556	27.172	4.03	64.8	9.99	99.99	99.99	9.99
600	10.29	35.449	27.271	3.54	55.7	9.99	99.99	99.99	9.99

MISSION GINECA - CHARCOT II STATION NUMERO 4

POSITION 10 12 W PROFONDEUR 480 METRES
 30 57 N DATE 21 MARS 1971
 HEURES DEBUT 09 H 27
 FIN 10 H 08

METEO HEURE OBSERVATION

MER 4 * 12 H 00
 VENT N 5 NOEUDS * 12 H 00
 NEBULOSITE 2 * 12 H 00
 PRESSION ATM, 1015 * 12 H 00
 PRECIPITATION NON * 12 H 00
 TEMP, AIR-SEC 14,5 * 12 H 00
 HUMIDE 16,0 * 12 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.99	36.279	26.751	5.42	96.6	9.99	99.99	99.99	9.99
10	16.08	36.285	26.734	5.38	96.2	9.99	99.99	99.99	9.99
20	16.07	36.291	26.741	5.39	96.2	9.99	99.99	99.99	9.99
30	16.07	36.287	26.738	5.42	96.8	9.99	99.99	99.99	9.99
50	16.07	36.288	26.739	5.44	97.1	9.99	99.99	99.99	9.99
75	16.19	36.304	26.723	5.38	96.4	9.99	99.99	99.99	9.99
100	16.22	36.296	26.710	5.46	97.3	9.99	99.99	99.99	9.99
150	15.81	36.305	26.812	5.18	92.2	9.99	99.99	99.99	9.99
200	15.19	36.151	26.834	4.71	82.6	9.99	99.99	99.99	9.99
250	14.17	35.988	26.932	4.33	74.3	9.99	99.99	99.99	9.99
300	13.71	35.912	26.970	4.32	73.3	9.99	99.99	99.99	9.99
400	12.29	35.696	27.091	4.18	68.8	9.99	99.99	99.99	9.99

MISSION CINECA - CHARCOT II STATION NUMERO 5

POSITION 10 06 W PROFONDEUR 110 METRES
 31 02 N DATE 21 MARS 1971
 HEURES DEBUT 14 H 48
 FIN 15 H 02

METEO HEURE OBSERVATION

MER 4 * 16 H 00 *
 VENT N 5 NOEUDS * 16 H 00 *
 NEBULOSITE 2 * 16 H 00 *
 PRESSION ATM. 1015 * 16 H 00 *
 PRECIPITATION NON * 16 H 00 *
 TEMP, AIR-SEC 15.0 * 16 H 00 *
 HUMIDE 17.0 * 16 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.99	36.253	26.731	5.52	98.4	9.99	99.99	99.99	9.99
10	15.98	36.261	26.739	5.49	97.9	9.99	99.99	99.99	9.99
20	15.97	36.268	26.747	5.55	98.9	9.99	99.99	99.99	9.99
30	15.95	36.268	26.751	5.40	96.3	9.99	99.99	99.99	9.99
50	15.91	36.264	26.757	5.28	94.1	9.99	99.99	99.99	9.99
75	15.80	36.259	26.779	5.43	96.4	9.99	99.99	99.99	9.99
90	15.74	36.196	26.744	4.89	86.7	9.99	99.99	99.99	9.99

MISSION CINECA - CHARCOT II STATION NUMERO 6

POSITION 09 59 W PROFONDEUR 86 METRES
 31 07 N DATE 21 MARS 1971
 HEURES DEBUT 17 H 50
 FIN 17 H 50

METEO HEURE OBSERVATION

MER 4 * 20 H 00 *
 VENT NNE 6 NOEUDS * 20 H 00 *
 NEBULOSITE 2 * 20 H 00 *
 PRESSION ATM. 1016 * 20 H 00 *
 PRECIPITATION NON * 20 H 00 *
 TEMP, AIR-SEC 13.0 * 20 H 00 *
 HUMIDE 16.5 * 20 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.99	36.180	26.680	6.06	108.0	9.99	99.99	99.99	9.99
10	16.00	36.200	26.690	6.07	108.2	9.99	99.99	99.99	9.99
20	15.80	36.200	26.730	5.96	105.9	9.99	99.99	99.99	9.99
30	15.78	36.200	26.740	5.85	103.9	9.99	99.99	99.99	9.99
50	15.48	36.190	26.800	5.23	92.2	9.99	99.99	99.99	9.99
70	15.10	36.130	26.840	4.78	83.7	9.99	99.99	99.99	9.99

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MISSION CINECA - CHARCOT II      STATION NUMERO      7
*-----*
* POSITION      09 54 W      PROFONDEUR      60 METRES
*              31 11 N      DATE      21 MARS 1971
*              HEURES DEBUT      20 H 22
*              FIN      20 H 35
*-----*
* METEO              HEURE OBSERVATION
*-----*
* MER 4 *              20 H 00
* VENT NNE 6 NOEUDS * 20 H 00
* NEBULOSITE 2 *      20 H 00
* PRESSION ATM, 1016 * 20 H 00
* PRECIPITATION NON * 20 H 00
* TEMP, AIR-SEC 13.0 * 20 H 00
* HUMIDE 16.5 *      20 H 00
*-----*
* DONNEES DE LA STATION HYDROLOGIE
*-----*
* Z T S SIGMAT O2 O/O P04 NO3 SIO4 NH4
*-----*
* 0 15.58 36.180 26.770 5.48 96.8 9.99 99.99 99.99 9.99
* 10 15.72 36.180 26.740 5.43 96.3 9.99 99.99 99.99 9.99
* 20 15.69 9.999 9.999 5.42 99.9 9.99 99.99 99.99 9.99
* 30 15.11 36.130 26.840 4.89 85.6 9.99 99.99 99.99 9.99
* 50 14.94 36.120 26.860 4.78 83.4 9.99 99.99 99.99 9.99
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MISSION CINECA - CHARCOT II      STATION NUMERO      8
*-----*
* POSITION      09 52 W      PROFONDEUR      54 METRES
*              30 52 N      DATE      22 MARS 1971
*              HEURES DEBUT      08 H 57
*              FIN      09 H 12
*-----*
* METEO              HEURE OBSERVATION
*-----*
* MER 4 *              12 H 00
* VENT N 6 NOEUDS *   12 H 00
* NEBULOSITE 1 *      12 H 00
* PRESSION ATM, 1013 * 12 H 00
* PRECIPITATION NON * 12 H 00
* TEMP, AIR-SEC 16.8 * 12 H 00
* HUMIDE 15.3 *      12 H 00
*-----*
* DONNEES DE LA STATION HYDROLOGIE
*-----*
* Z T S SIGMAT O2 O/O P04 NO3 SIO4 NH4
*-----*
* 0 15.02 36.100 26.833 4.83 84.4 9.99 99.99 99.99 9.99
* 5 15.02 36.113 26.843 4.83 84.4 9.99 99.99 99.99 9.99
* 10 15.01 36.114 26.846 4.84 84.6 9.99 99.99 99.99 9.99
* 15 15.00 36.117 26.850 4.81 83.9 9.99 99.99 99.99 9.99
* 20 15.00 36.117 26.850 4.87 85.0 9.99 99.99 99.99 9.99
* 30 15.02 36.115 26.844 4.85 84.8 9.99 99.99 99.99 9.99
* 40 15.01 36.117 26.848 4.83 84.4 9.99 99.99 99.99 9.99
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MISSION CINEGA - CHARCOT II STATION NUMERO 9

POSITION 09 56 W PROFONDEUR 76 METRES
 30 36 N DATE 22 MARS 1971
 HEURES DEBUT 23 H 15
 FIN 23 H 30

METEO HEURE OBSERVATION

MER 5 * 16 H 00
 VENT NNW 8 NOEUDS* 16 H 00
 NEBULOSITE 0 * 16 H 00
 PRESSION ATM, 1010 * 16 H 00
 PRECIPITATION NON * 16 H 00
 TEMP, AIR-SEC 15.0 * 16 H 00
 HUMIDE 15.3 * 16 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	14.98	36.127	26.862	5.06	88.3	9.99	99.99	99.99	9.99
10	15.00	36.126	26.857	5.04	88.0	9.99	99.99	99.99	9.99
20	15.00	36.129	26.859	5.02	87.6	9.99	99.99	99.99	9.99
30	15.00	36.130	26.860	5.01	87.4	9.99	99.99	99.99	9.99
50	15.01	36.130	26.858	4.96	86.7	9.99	99.99	99.99	9.99

MISSION CINEGA - CHARCOT II STATION NUMERO 10

POSITION 10 03 W PROFONDEUR 255 METRES
 30 31 N DATE 23 MARS 1971
 HEURES DEBUT 01 H 58
 FIN 02 H 30

METEO HEURE OBSERVATION

MER 5 * 24 H 00
 VENT N 6 NOEUDS* 24 H 00
 NEBULOSITE 0 * 24 H 00
 PRESSION ATM, 1012 * 24 H 00
 PRECIPITATION NON * 24 H 00
 TEMP, AIR-SEC 16.0 * 24 H 00
 HUMIDE 15.0 * 24 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.26	36.143	26.812	5.26	92.4	9.99	99.99	99.99	9.99
10	15.28	36.148	26.811	5.22	91.7	9.99	99.99	99.99	9.99
20	15.27	36.152	26.817	5.23	91.9	9.99	99.99	99.99	9.99
30	15.26	36.151	26.818	5.22	91.7	9.99	99.99	99.99	9.99
50	15.24	36.141	26.815	5.18	90.9	9.99	99.99	99.99	9.99
75	15.21	36.137	26.819	5.19	91.1	9.99	99.99	99.99	9.99
100	15.13	36.126	26.828	5.11	89.5	9.99	99.99	99.99	9.99
150	13.75	35.967	27.004	4.37	74.3	9.99	99.99	99.99	9.99
200	12.97	35.744	26.993	4.24	70.8	9.99	99.99	99.99	9.99
240	12.60	35.775	27.091	4.16	68.9	9.99	99.99	99.99	9.99

MISSION CINECA - CHARCOT II STATION NUMERO 11

POSITION 10 10 W PROFONDEUR 725 METRES
 30 25 N DATE 23 MARS 1971
 HEURES DEBUT 04 H 32
 FIN 05 H 26

METEO HEURE OBSERVATION

MER 5 * 04 H 00
 VENT NNE 7 NOEUDS * 04 H 00
 NEBULOSITE 0 * 04 H 00
 PRESSION ATM. 1011 * 04 H 00
 PRECIPITATION NON * 04 H 00
 TEMP, AIR-SEC 14.0 * 04 H 00
 HUMIDE 15.0 * 04 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.73	36.240	26.780	5.44	96.5	9.99	99.99	99.99	9.99
10	15.92	36.250	26.750	5.41	96.4	9.99	99.99	99.99	9.99
20	15.84	36.240	26.740	5.41	96.3	9.99	99.99	99.99	9.99
30	15.78	36.240	26.770	5.44	96.6	9.99	99.99	99.99	9.99
50	15.24	36.240	26.890	5.41	95.1	9.99	99.99	99.99	9.99
75	15.81	36.240	26.760	9.99	177.4	9.99	99.99	99.99	9.99
100	15.80	36.240	26.770	5.44	96.6	9.99	99.99	99.99	9.99
150	15.08	36.140	26.850	4.53	79.2	9.99	99.99	99.99	9.99
200	14.22	35.980	26.920	4.48	77.0	9.99	99.99	99.99	9.99
250	13.93	35.870	26.890	4.32	73.7	9.99	99.99	99.99	9.99
300	12.72	35.780	27.080	4.34	72.1	9.99	99.99	99.99	9.99
400	11.80	35.620	27.130	4.08	66.3	9.99	99.99	99.99	9.99
500	10.88	35.530	27.230	3.74	59.6	9.99	99.99	99.99	9.99
600	10.23	35.460	27.290	3.50	54.9	9.99	99.99	99.99	9.99
690	9.38	35.370	27.360	3.28	50.5	9.99	99.99	99.99	9.99

MISSION CINECA - CHARCOT II STATION NUMERO 12

POSITION 10 17 W PROFONDEUR 987 METRES
 30 21 N DATE 23 MARS 1971
 HEURES DEBUT 07 H 50
 FIN 08 H 50

METEO HEURE OBSERVATION

MER 5 * 08 H 00
 VENT NNE 6 NOEUDS * 08 H 00
 NEBULOSITE 1 * 08 H 00
 PRESSION ATM. 1012 * 08 H 00
 PRECIPITATION NON * 08 H 00
 TEMP, AIR-SEC 14.0 * 08 H 00
 HUMIDE 15.0 * 08 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.86	36.440	26.670	5.37	97.6	9.99	99.99	99.99	9.99
10	16.98	36.450	26.650	5.36	97.6	9.99	99.99	99.99	9.99
20	16.98	36.450	26.650	5.27	96.0	9.99	99.99	99.99	9.99
30	16.86	36.450	26.680	5.37	97.6	9.99	99.99	99.99	9.99
50	16.86	36.450	26.680	5.38	97.8	9.99	99.99	99.99	9.99
75	16.87	36.450	26.680	5.35	97.3	9.99	99.99	99.99	9.99
100	16.84	36.450	26.670	5.36	97.5	9.99	99.99	99.99	9.99
150	15.68	36.230	26.790	4.60	81.6	9.99	99.99	99.99	9.99
200	14.54	36.040	26.890	4.29	74.2	9.99	99.99	99.99	9.99
250	9.99	35.940	9.999	9.99	99.9	9.99	99.99	99.99	9.99
300	13.28	35.820	26.990	4.52	76.0	9.99	99.99	99.99	9.99
400	12.22	35.660	27.080	4.21	69.1	9.99	99.99	99.99	9.99
500	11.11	35.540	27.190	3.79	60.7	9.99	99.99	99.99	9.99
600	10.06	35.430	27.290	3.41	53.4	9.99	99.99	99.99	9.99
800	8.74	35.340	27.450	3.36	51.0	9.99	99.99	99.99	9.99
950	8.25	35.360	27.540	3.77	56.6	9.99	99.99	99.99	9.99


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MISSION CINECA - CHARCOT II      STATION NUMERO 13
*****
POSITION      10 24 W      PROFONDEUR    1280 METRES *
              30 15 N      DATE            23 MARS 1971 *
              HEURES DEBUT  11 H 25 *
              FIN          12 H 24 *
*****
METEO          HEURE OBSERVATION
*****
MER 5          *          12 H 00 *
VENT NNE 6 NOEUDS *      12 H 00 *
NEBULOSITE 4   *          12 H 00 *
PRESSION ATM. 1012 *      12 H 00 *
PRECIPITATION NON *      12 H 00 *
TEMP, AIR-SEC 16,0 *     12 H 00 *
HUMIDE 16,0 *          12 H 00 *
*****
DONNEES DE LA STATION HYDROLOGIE
*****
Z      T      S      SIGMAT  O2      O/O      PO4      NO3      SIO4     NH4 *
*****
0      16,71  36,400  26,670  5,37  97,3  9,99  99,99  99,99  9,99 *
10     16,82  36,150  26,460  5,35  96,9  9,99  99,99  99,99  9,99 *
20     16,80  36,420  26,670  5,36  97,3  9,99  99,99  99,99  9,99 *
30     16,66  36,420  26,710  5,39  97,6  9,99  99,99  99,99  9,99 *
50     16,66  36,420  26,710  5,46  98,9  9,99  99,99  99,99  9,99 *
75     16,73  36,420  26,680  5,33  96,6  9,99  99,99  99,99  9,99 *
100    16,67  36,420  26,700  5,36  97,1  9,99  99,99  99,99  9,99 *
150    15,70  36,230  26,780  4,67  82,8  9,99  99,99  99,99  9,99 *
200    14,81  36,080  26,860  4,50  78,3  9,99  99,99  99,99  9,99 *
250    9,99   35,980  9,999   4,42  99,9  9,99  99,99  99,99  9,99 *
300    13,30  35,850  27,010  4,25  71,5  9,99  99,99  99,99  9,99 *
400    12,19  35,680  27,100  4,13  67,8  9,99  99,99  99,99  9,99 *
500    11,10  35,560  27,210  3,83  61,4  9,99  99,99  99,99  9,99 *
600    10,49  35,480  27,260  3,61  57,0  9,99  99,99  99,99  9,99 *
800    8,66   35,330  27,450  3,25  49,2  9,99  99,99  99,99  9,99 *
1000   7,98   35,860  27,970  4,40  65,7  9,99  99,99  99,99  9,99 *
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MISSION CINECA - CHARCOT II      STATION NUMERO 14
*****
POSITION      10 33 W      PROFONDEUR    1500 METRES *
              30 09 N      DATE            23 MARS 1971 *
              HEURES DEBUT  14 H 53 *
              FIN          15 H 42 *
*****
METEO          HEURE OBSERVATION
*****
MER 5          *          16 H 00 *
VENT NNE 7 NOEUDS *      16 H 00 *
NEBULOSITE 0   *          16 H 00 *
PRESSION ATM. 1010 *      16 H 00 *
PRECIPITATION NON *      16 H 00 *
TEMP, AIR-SEC 16,0 *     16 H 00 *
HUMIDE 15,0 *          16 H 00 *
*****
DONNEES DE LA STATION HYDROLOGIE
*****
Z      T      S      SIGMAT  O2      O/O      PO4      NO3      SIO4     NH4 *
*****
0      16,82  36,440  26,680  5,40  98,0  9,99  99,99  99,99  9,99 *
10     16,99  36,440  26,640  5,39  98,2  9,99  99,99  99,99  9,99 *
20     16,98  36,440  26,640  5,38  98,0  9,99  99,99  99,99  9,99 *
30     16,81  36,430  26,680  5,36  97,3  9,99  99,99  99,99  9,99 *
50     16,81  36,440  26,680  5,39  97,3  9,99  99,99  99,99  9,99 *
75     16,83  36,430  26,670  5,37  97,5  9,99  99,99  99,99  9,99 *
100    16,83  36,430  26,670  5,37  97,5  9,99  99,99  99,99  9,99 *
150    13,37  36,170  26,810  4,56  80,3  9,99  99,99  99,99  9,99 *
200    14,68  36,050  26,870  4,47  77,5  9,99  99,99  99,99  9,99 *
250    9,99   35,920  9,999   4,25  99,9  9,99  99,99  99,99  9,99 *
300    13,12  35,820  27,020  4,26  71,4  9,99  99,99  99,99  9,99 *
400    12,32  35,670  27,060  4,14  68,1  9,99  99,99  99,99  9,99 *
500    11,21  35,540  27,180  3,84  61,6  9,99  99,99  99,99  9,99 *
600    10,39  35,460  27,260  3,58  56,4  9,99  99,99  99,99  9,99 *
800    8,71   35,330  27,440  3,29  49,9  9,99  99,99  99,99  9,99 *
1000   8,07   35,380  27,580  3,69  55,2  9,99  99,99  99,99  9,99 *
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MISSION CINECA - CHARCOT II STATION NUMERO 15

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*.....*
* POSITION 10 02 W PROFONDEUR 96 METRES *
* 30 55 N DATE 24 MARS 1971 *
* HEURES DEBUT 11 H 48 *
* FIN 12 H 05 *
*.....*
METEO HEURE OBSERVATION
*.....*
* MER 3 * 12 H 00 *
* VENT NNE 5 NOEUDS * 12 H 00 *
* NEBULOSITE 5 * 12 H 00 *
* PRESSION ATM, 1010 * 12 H 00 *
* PRECIPITATION NON * 12 H 00 *
* TEMP, AIR-SEC 16,0 * 12 H 00 *
* HUMIDE 16,0 * 12 H 00 *
*.....*
DONNEES DE LA STATION HYDROLOGIE
*.....*
* Z T S SIGMAT O2 O/O P04 NO3 S104 NH4 *
*.....*
* 0 15,29 36,140 26,800 5,39 94,7 .46 4,11 99,99 9,99 *
* 10 15,49 36,140 26,760 5,41 95,4 .41 4,42 99,99 9,99 *
* 20 15,43 36,140 26,770 5,40 95,2 .47 4,66 99,99 9,99 *
* 30 15,30 36,150 26,810 5,36 94,2 .58 99,99 99,99 9,99 *
* 50 15,27 36,140 26,810 5,35 93,7 .58 99,99 99,99 9,99 *
* 75 15,20 36,140 26,830 5,21 91,4 .72 99,99 99,99 9,99 *
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MISSION CINECA - CHARCOT II STATION NUMERO 16

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*.....*
* POSITION 10 03 W PROFONDEUR 66 METRES *
* 30 45 N DATE 24 MARS 1971 *
* HEURES DEBUT 22 H 10 *
* FIN 22 H 30 *
*.....*
METEO HEURE OBSERVATION
*.....*
* MER 4 * 24 H 00 *
* VENT NNE 5 NOEUDS * 24 H 00 *
* NEBULOSITE 0 * 24 H 00 *
* PRESSION ATM, 1011 * 24 H 00 *
* PRECIPITATION NON * 24 H 00 *
* TEMP, AIR-SEC 15,0 * 24 H 00 *
* HUMIDE 16,0 * 24 H 00 *
*.....*
DONNEES DE LA STATION HYDROLOGIE
*.....*
* Z T S SIGMAT O2 O/O P04 NO3 S104 NH4 *
*.....*
* 0 17,33 36,150 26,330 5,34 97,8 .47 4,83 99,99 9,99 *
* 10 15,34 36,140 26,800 5,34 93,8 .49 5,35 99,99 9,99 *
* 20 15,31 36,150 26,800 5,31 93,3 .53 4,83 99,99 9,99 *
* 30 15,28 36,150 26,810 5,31 93,3 .53 4,93 99,99 9,99 *
* 50 15,26 36,150 26,820 5,65 99,3 .52 5,29 99,99 9,99 *
*.....*

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MISSION CINECA - CHARCOT II STATION NUMERO 17
 POSITION 10 07 W PROFONDEUR 880 METRES
 30 38 N DATE 25 MARS 1971
 HEURES DEBUT 13 H 25
 FIN 13 H 52

METEO HEURE OBSERVATION
 MER 3 * 12 H 00
 VENT NNE 3 NOEUDS* 12 H 00
 NEBULOSITE 2 * 12 H 00
 PRESSION ATM. 1013 * 12 H 00
 PRECIPITATION NON * 12 H 00
 TEMP. AIR-SEC 17.0 * 12 H 00
 HUMIDE 15.0 * 12 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.28	36.140	26.810	5.61	98.6	.43	5.33	9.99	9.99
10	15.36	36.150	26.790	5.51	97.0	.55	5.27	9.99	9.99
20	15.30	36.160	26.810	5.41	95.1	.49	4.96	9.99	9.99
30	15.28	36.150	26.810	5.29	93.0	.49	5.11	9.99	9.99
50	15.27	36.150	26.820	5.32	93.5	.49	4.81	9.99	9.99
75	15.27	36.150	26.820	5.28	92.8	.46	4.76	9.99	9.99
100	15.25	36.150	26.820	5.25	92.1	.49	5.01	9.99	9.99
150	14.01	35.970	26.950	4.55	77.8	.68	10.46	9.99	9.99
200	12.76	35.740	27.030	4.17	69.3	.85	99.99	9.99	9.99
250	12.40	35.690	27.060	4.10	67.7	1.01	99.99	9.99	9.99
300	12.11	35.650	27.090	4.04	66.2	1.08	99.99	9.99	9.99
400	11.62	35.590	27.140	3.89	63.0	1.22	99.99	9.99	9.99
500	10.69	35.510	27.250	3.66	58.1	1.38	99.99	9.99	9.99

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 17

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	9.99	99.99	99.99	.16	.69	99.99	99.99	41.7	9.9999	9.9999	9.99999	9.99999	99.99*
12	50	9.99	99.99	99.99	.08	.63	99.99	99.99	57.8	9.9999	9.9999	9.99999	9.99999	99.99*
18	25	9.99	99.99	99.99	.06	.70	99.99	99.99	68.6	9.9999	9.9999	9.99999	9.99999	99.99*
25	10	9.99	99.99	99.99	.10	.30	99.99	99.99	74.1	9.9999	9.9999	9.99999	9.99999	99.99*
50	1	9.99	99.99	99.99	.08	.63	99.99	99.99	30.9	9.9999	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANCTONIQUE 1920 MG/M2
 PRODUCTION INTEGREE 2445 MG/M2/JOUR
 IRRADIATION 2124 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 18
 POSITION 9 52 W PROFONDEUR 48 METRES
 31 07 N DATE 26 MARS 1971
 HEURES DEBUT 15 H 44
 FIN 16 H 00

METEO HEURE OBSERVATION
 MER 2 * 16 H 00
 VENT CALME NOEUDS* 16 H 00
 NEBULOSITE 7 * 16 H 00
 PRESSION ATM. 1011 * 16 H 00
 PRECIPITATION NON * 16 H 00
 TEMP. AIR-SEC 18.0 * 16 H 00
 HUMIDE 16.0 * 16 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.24	36.120	26.570	5.27	94.4	9.99	99.99	99.99	9.99
10	15.24	36.120	26.800	5.11	89.6	9.99	99.99	99.99	9.99
20	15.00	36.130	26.860	4.96	86.6	9.99	99.99	99.99	9.99
30	14.53	36.070	26.920	4.75	82.2	9.99	99.99	99.99	9.99
40	14.39	36.010	26.900	4.60	79.3	9.99	99.99	99.99	.00
46	14.41	36.010	26.900	4.58	79.0	9.99	99.99	99.99	9.99

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 18

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	9.99	99.99	99.99	.11	.27	99.99	99.99	19.4	9.9999	9.9999	9.99999	9.99999	99.99*
2	50	9.99	99.99	99.99	.09	.39	99.99	99.99	21.5	9.9999	9.9999	9.99999	9.99999	99.99*
8	25	9.99	99.99	99.99	.18	.36	99.99	99.99	26.0	9.9999	9.9999	9.99999	9.99999	99.99*
11	10	9.99	99.99	99.99	.23	.27	99.99	99.99	20.2	9.9999	9.9999	9.99999	9.99999	99.99*
19	1	9.99	99.99	99.99	.20	.33	99.99	99.99	9.4	9.9999	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANCTONIQUE 500 MG/M2
 PRODUCTION INTEGREE 371 MG/M2/JOUR
 IRRADIATION 1929 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 19

POSITION 9 54 W PROFONDEUR 56 METRES
 31 03 N DATE 26 MARS 1971
 HEURES DEBUT 06 H 35
 FIN 06 H 45

METEO HEURE OBSERVATION

MER 2 * 24 H 00
 VENT E 1 NOEUDS* 24 H 00
 NEBULOSITE 4 * 24 H 00
 PRESSION ATM. 1012 * 24 H 00
 PRECIPITATION NON * 24 H 00
 TEMP. AIR-SEC 16.8 * 24 H 00
 HUMIDE 16.0 * 24 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.47	36.110	26.740	5.18	91.4	9.99	99.99	1.86	9.99
10	15.32	36.120	26.780	5.17	90.9	9.99	99.99	1.53	9.99
20	15.14	36.110	26.820	5.07	88.8	9.99	99.99	2.11	9.99
30	15.03	36.100	26.830	4.99	87.2	9.99	99.99	1.65	9.99
50	14.44	36.010	26.890	4.60	79.3	9.99	99.99	2.24	9.99

MISSION CINECA - CHARCOT II DONNEES BILOGIQUES DE LA STATION NUMERO 19

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	9.99	9.73	99.99	.11	.18	99.99	99.99	45.4	.0735	9.9999	.07348	9.99999	99.99*
2	50	9.99	8.00	99.99	.25	.63	99.99	99.99	69.7	.0848	9.9999	.09840	9.99999	99.99*
8	25	9.99	8.45	99.99	.13	.51	99.99	99.99	45.8	.0893	9.9999	9.99999	9.99999	99.99*
11	10	9.99	8.58	99.99	.26	.29	99.99	99.99	44.9	.1178	9.9999	9.99999	9.99999	99.99*
19	1	9.99	7.55	99.99	.01	.39	99.99	99.99	11.2	.0450	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANCTONIQUE 500 MG/M2
 PRODUCTION INTEGREE 822 MG/M2/JOUR
 IRRADIATION 1929 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 20

POSITION 10 33 W PROFONDEUR 2440 METRES
 30 44 N DATE 28 MARS 1971
 HEURES DEBUT 05 H 00
 FIN 05 H 00

METEO HEURE OBSERVATION

MER J * 04 H 00
 VENT N 5 NOEUDS* 04 H 00
 NEBULOSITE 3 * 04 H 00
 PRESSION ATM. 1010 * 04 H 00
 PRECIPITATION NON * 04 H 00
 TEMP. AIR-SEC 16.0 * 04 H 00
 HUMIDE 15.0 * 04 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.97	36.438	26.642	5.40	98.4	.00	.75	.31	9.99
10	16.89	36.457	26.676	5.40	98.2	.00	.55	.06	9.99
20	16.88	36.457	26.678	5.38	97.8	.00	1.12	.62	9.99
30	16.84	36.457	26.688	5.36	97.5	.00	.59	.06	9.99
50	16.81	36.456	26.694	5.39	97.8	.04	1.00	.06	9.99
75	16.75	36.439	26.695	5.37	97.5	.02	.96	.15	9.99
100	16.38	36.355	26.718	5.37	96.6	.14	2.03	.21	9.99
150	15.31	36.163	26.816	4.56	80.1	.52	8.18	1.12	9.99
200	14.69	36.056	26.871	4.47	77.5	.63	10.79	1.51	9.99
250	14.02	35.938	26.925	4.25	72.6	.65	12.84	1.76	9.99
300	13.35	35.825	26.978	4.27	71.9	1.09	13.48	2.41	9.99
400	12.18	35.639	27.068	4.13	67.7	9.99	15.96	3.17	9.99
500	11.21	35.538	27.174	3.80	61.0	1.42	21.84	4.74	9.99
600	10.51	35.457	27.238	3.52	55.6	1.80	28.76	5.58	9.99
800	8.84	35.339	27.429	3.29	50.1	1.95	36.72	7.91	9.99
1000	8.10	35.359	27.561	3.61	54.0	1.95	31.45	8.55	9.99
1200	7.95	35.488	27.685	4.02	60.0	1.84	27.82	8.64	9.99
1500	6.78	35.450	27.824	4.67	67.8	1.76	22.35	8.80	9.99
2000	5.01	35.185	27.842	5.19	72.2	1.68	22.94	11.87	9.99
2400	3.52	35.016	27.869	5.50	73.7	1.82	24.93	14.78	9.99

MISSION CINECA - CHARCOT II DONNEES BILOGIQUES DE LA STATION NUMERO 20

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	.08	.80	.59	.03	.15	99.99	99.99	18.3	.0334	.0317	.04144	.03936	1.24*
11	50	.01	.70	.21	.09	.60	99.99	99.99	22.5	.0357	.0316	.04436	.03924	1.24*
19	25	.03	.54	.24	.03	.45	99.99	99.99	22.7	.0325	.0394	.03908	.04728	1.20*
31	10	.03	.80	.15	9.99	.27	99.99	99.99	36.1	.0376	.0201	.02212	.02260	1.12*
66	1	.11	1.60	.31	.04	.39	99.99	99.99	9.4	.0388	.0166	.02328	.00996	.60*

BIOMASSE ZOOPLANCTONIQUE 800 MG/M2
 PRODUCTION INTEGREE 1555 MG/M2/JOUR
 IRRADIATION 1742 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 25

POSITION	10 32 W 29 47 N	PROFONDEUR	975 METRES
DATE		HEURES DEBUT	1 AVRIL 1971 23 H 30
		FIN	00 H 55

METEO	HEURE OBSERVATION
MER 3	24 H 00
VENT NNW 4 NOEUDS*	24 H 00
NEBULOSITE 4	24 H 00
PRESSION ATM. 1013	24 H 00
PRECIPITATION NON	24 H 00
TEMP. AIR-SEC 15.0	24 H 00
HUMIDE 16,5	24 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.79	36.400	26.678	5.44	98.7	.00	1.27	.13	9.99
10	16.81	36.432	26.676	5.49	99.6	.00	1.04	.13	9.99
20	16.81	36.431	26.675	5.52	100.2	.11	1.47	.16	9.99
30	16.79	36.433	26.681	5.44	98.7	.04	1.00	.13	9.99
50	16.83	36.432	26.671	5.54	100.5	.00	.79	.23	9.99
75	16.71	36.418	26.689	5.46	98.9	.11	1.35	.19	9.99
100	9.99	36.365	9.999	6.25	99.9	.17	2.07	.43	9.99
150	15.60	36.202	26.781	5.17	91.5	.34	3.17	.77	9.99
200	14.76	36.061	26.860	4.39	76.2	.57	7.07	1.46	9.99
250	13.96	35.926	26.928	4.46	76.1	.58	6.74	1.69	9.99
300	13.06	35.780	27.003	4.21	70.4	.94	11.18	2.54	9.99
400	12.38	35.683	27.063	4.04	66.6	1.06	12.29	2.98	9.99
500	11.48	35.576	27.153	3.87	62.5	1.22	14.63	3.87	9.99
600	10.65	35.486	27.236	3.59	56.9	1.44	16.95	5.32	9.99
800	8.75	35.302	27.414	3.18	48.3	1.77	9.99	8.31	9.99
950	8.17	35.348	27.542	3.55	53.2	1.76	9.99	8.64	9.99

MISSION CINECA - CHARCOT II STATION NUMERO 26

POSITION	11 26 W 29 12 N	PROFONDEUR	400 METRES
DATE		HEURES DEBUT	1 AVRIL 1971 08 H 50
		FIN	09 H 20

METEO	HEURE OBSERVATION
MER 5	08 H 00
VENT NW 4 NOEUDS*	08 H 00
NEBULOSITE 5	08 H 00
PRESSION ATM. 1013	08 H 00
PRECIPITATION NON	08 H 00
TEMP. AIR-SEC 14.0	08 H 00
HUMIDE 17.0	08 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.99	36.475	26.665	5.47	99.6	.04	.91	.23	9.99
10	16.99	36.475	26.665	5.45	99.3	.08	1.06	.13	9.99
20	17.00	36.473	26.662	5.46	99.6	.18	.87	.13	9.99
30	16.99	36.472	26.663	5.45	99.3	.04	.68	.13	9.99
50	17.01	36.476	26.661	5.45	99.5	.06	.83	.29	9.99
75	16.69	36.419	26.694	5.35	96.9	.16	1.63	.26	9.99
100	16.41	36.363	26.717	5.11	92.1	.21	2.23	.43	9.99
150	15.84	36.248	26.761	4.87	86.7	.37	3.85	1.09	9.99
200	14.88	36.062	26.834	4.54	79.1	.71	5.45	1.73	9.99
250	13.75	35.898	26.951	4.32	73.3	.91	7.99	2.37	9.99
300	12.98	35.771	27.012	4.30	71.8	.92	8.62	2.33	9.99

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 26

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VN03	VNH4	RNO3	RNH4	NPART
0	100	.00	.80	.33	.04	.54	99.99	.08	23.8	.0543	.0272	.05000	.02508	.92*
8	50	.03	.80	.29	.08	.39	99.99	.10	33.9	.0271	.0450	.03480	.04560	1.28*
18	25	.06	1.06	.13	.06	.54	99.99	.22	32.6	.0336	.0387	.04176	.04808	1.24*
25	10	.08	.75	.23	.02	.39	99.99	.25	33.7	.0555	.0147	.05556	.01476	1.00*
54	1	.08	1.35	.29	.08	.39	99.99	.12	14.3	.0051	.0207	.00448	.01820	.88*
75	0	9.99	99.99	99.99	9.99	.15	99.99	.1299999	9.9999	9.9999	9.9999	9.99999	9.99999	99.99*
100	0	9.99	99.99	99.99	9.99	.12	99.99	.0599999	9.9999	9.9999	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANCTONIQUE 780 MG/M2
PRODUCTION INTEGREE 2408 MG/M2/JOUR
IRRADIATION 1950 J/CM2

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MISSION CINECA - CHARCOT II      STATION NUMERO 27
*-----*
* POSITION      12 19 W      PRCFONDEUR      93 METRES *
*              28 34 N      DATE      1 AVRIL 1971 *
*              HEURES DEBUT 17 h 11 *
*              FIN      17 h 25 *
*-----*
METEO              HEURE OBSERVATION
*-----*
* MER 3 * 16 h 00 *
* VENT NW 5 NOEUDS * 16 h 00 *
* NEBULOSITE 3 * 16 h 00 *
* PRESSION ATM, 1014 * 16 h 00 *
* PRECIPITATION NON * 16 h 00 *
* TEMP, AIR-SEC 16.0 * 16 h 00 *
* HUMIDE 16.0 * 16 h 00 *
*-----*
DONNEES DE LA STATION HYDROLOGIE
*-----*
* Z T S SIGMAT O2 O/O P04 NO3 S104 NH4 *
*-----*
* 0 16.84 36.397 26.642 5.62 102.0 .00 .67 .00 .07 *
* 10 16.87 36.395 26.633 5.61 102.0 .02 .63 .00 .12 *
* 30 16.78 36.398 26.657 5.58 101.3 .00 .96 .00 .13 *
* 0 16.84 36.394 26.639 5.69 103.3 .00 1.27 .00 .07 *
* 50 16.79 36.398 26.654 5.51 100.0 .06 1.87 .00 .14 *
* 75 16.61 36.404 26.702 5.25 94.9 .10 2.43 .73 .06 *
* 85 9.99 36.298 9.999 5.69 99.9 .33 3.73 .67 .02 *
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MISSION CINECA - CHARCOT II      STATION NUMERO 28
*-----*
* POSITION      13 12 W      PRCFONDEUR      64 METRES *
*              27 56 N      DATE      2 AVRIL 1971 *
*              HEURES DEBUT 23 h 55 *
*              FIN      00 h 14 *
*-----*
METEO              HEURE OBSERVATION
*-----*
* MER 3 * 24 h 00 *
* VENT NW 3 NOEUDS * 24 h 00 *
* NEBULOSITE 4 * 24 h 00 *
* PRESSION ATM, 1018 * 24 h 00 *
* PRECIPITATION NON * 24 h 00 *
* TEMP, AIR-SEC 16.0 * 24 h 00 *
* HUMIDE 16.0 * 24 h 00 *
*-----*
DONNEES DE LA STATION HYDROLOGIE
*-----*
* Z T S SIGMAT O2 O/O P04 NO3 S104 NH4 *
*-----*
* 0 16.78 36.356 26.624 5.51 100.0 .16 .61 1.61 9.99 *
* 10 16.78 36.370 26.635 5.48 99.5 .16 .69 1.42 9.99 *
* 20 16.80 36.369 26.630 5.63 102.2 .16 .95 1.42 9.99 *
* 30 16.72 36.364 26.645 5.36 97.1 .16 .95 1.55 9.99 *
* 50 16.62 36.343 26.652 5.06 91.5 .20 2.63 2.38 9.99 *
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MISSION CINECA - CHARCOT II STATION NUMERO 29

POSITION 13 53 W PROFONDEUR 1020 METRES
 27 07 N DATE 2 AVRIL 1971
 HEURES DEBUT 06 H 40
 FIN 07 H 28

METEO HEURE OBSERVATION

MER 3 * 04 H 00 *
 VENT NW 4 NOEUDS * 04 H 00 *
 NEBULOSITE 1 * 04 H 00 *
 PRESSION ATM. 1016 * 04 H 00 *
 PRECIPITATION NON * 04 H 00 *
 TEMP. AIR-SEC 15,5 * 04 H 00 *
 HUMIDE 16,0 * 04 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,97	36,401	26,613	5,51	100,4	.02	.61	.40	.44
10	16,98	36,423	26,628	5,54	100,9	.07	.71	.81	.29
20	16,99	36,421	26,624	5,49	100,0	.02	.61	.34	.21
30	16,96	36,418	26,629	5,49	100,0	.02	1,05	.52	.19
50	16,99	36,421	26,624	5,48	99,8	.09	.63	.58	.23
75	17,00	36,432	26,630	5,43	99,3	.35	99,99	.58	.44
100	16,99	36,445	26,642	5,34	97,3	.57	99,99	.75	.50
150	15,96	36,265	26,747	4,59	81,8	.63	99,99	2,18	.15
200	14,91	36,084	26,845	4,46	77,7	.86	99,99	3,26	.14
250	13,90	35,898	26,920	3,99	68,0	1,25	99,99	4,79	.12
300	13,03	35,768	26,999	3,91	65,4	1,42	99,99	5,50	.09
400	11,76	35,574	27,099	9,99	99,9	1,66	21,53	8,38	.17
500	10,71	35,441	27,190	3,26	51,7	1,66	25,24	11,80	.20
600	9,69	35,305	27,261	9,99	99,9	2,18	28,57	14,67	9,99
800	8,24	35,178	27,397	2,88	43,2	2,14	30,67	17,98	9,99
900	9,99	35,159	9,999	2,97	99,9	2,14	29,23	18,34	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 30

POSITION 14 38 W PROFONDEUR 590 METRES
 26 24 N DATE 2 AVRIL 1971
 HEURES DEBUT 17 H 42
 FIN 18 H 20

METEO HEURE OBSERVATION

MER 4 * 16 H 00 *
 VENT WNW 5 NOEUDS * 16 H 00 *
 NEBULOSITE 4 * 16 H 00 *
 PRESSION ATM. 1013 * 16 H 00 *
 PRECIPITATION NON * 16 H 00 *
 TEMP. AIR-SEC 17,0 * 16 H 00 *
 HUMIDE 16,0 * 16 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	17,85	36,572	26,530	5,48	101,7	.00	.53	.23	9,99
10	17,85	36,593	26,546	5,45	101,1	.09	.48	.23	9,99
20	17,75	36,584	26,564	5,49	101,7	.32	.43	.82	9,99
30	17,59	36,569	26,592	5,50	101,5	.32	.34	.32	9,99
50	17,63	36,576	26,587	5,40	99,8	.09	.36	.23	9,99
75	17,56	36,562	26,594	5,41	99,8	.09	.50	.17	9,99
100	17,51	36,566	26,609	5,37	98,9	.16	.50	.17	9,99
150	16,31	36,327	26,713	4,65	83,5	.40	5,47	1,61	9,99
200	15,53	36,198	26,794	5,43	95,9	.68	7,29	2,44	9,99
250	14,69	36,033	26,854	5,15	89,3	.70	10,95	3,19	9,99
300	14,07	35,937	26,914	5,03	86,1	.82	12,56	4,48	9,99
400	12,40	35,650	27,034	3,42	56,3	1,36	19,65	7,63	9,99
500	11,11	35,478	27,146	2,93	47,0	1,56	22,56	10,54	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 31

POSITION 15 11 W PROFONDEUR 80 METRES
 25 32 N DATE 3 AVRIL 1971
 HEURES DEBUT 01 H 00
 FIN 01 H 20

METEO HEURE OBSERVATION

MER 3 * 24 H 00
 VENT WSW 3 NOEUDS* 24 H 00
 NEBULOSITE 8 * 24 H 00
 PRESSION ATM. 1012 * 24 H 00
 PRECIPITATION NON * 24 H 00
 TEMP. AIR-SEC 18,0 * 24 H 00
 HUMIDE 17,0 * 24 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,74	36,210	26,522	6,07	110,0	,07	,65	,81	9,99
10	16,56	36,236	26,584	6,24	112,6	,07	,61	,32	9,99
20	16,39	36,305	26,677	5,17	93,0	,25	,82	2,12	9,99
30	16,26	36,303	26,706	4,70	84,4	,42	2,26	2,55	9,99
50	16,24	36,295	26,705	4,58	82,1	,43	2,75	3,20	9,99
70	16,14	36,283	26,719	4,52	80,9	,49	2,54	2,95	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 32

POSITION 15 51 W PROFONDEUR 46 METRES
 24 44 N DATE 3 AVRIL 1971
 HEURES DEBUT 08 H 35
 FIN 08 H 50

METEO HEURE OBSERVATION

MER 3 * 12 H 00
 VENT W 3 NOEUDS* 12 H 00
 NEBULOSITE 8 * 12 H 00
 PRESSION ATM. 1012 * 12 H 00
 PRECIPITATION NON * 12 H 00
 TEMP. AIR-SEC 19,0 * 12 H 00
 HUMIDE 17,0 * 12 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,95	36,080	26,370	6,75	122,7	,15	,36	,28	9,99
10	16,92	36,100	26,395	6,76	122,7	,00	,16	,93	9,99
20	15,38	36,079	26,736	5,90	103,9	,02	,29	1,30	9,99
30	15,34	36,111	26,769	4,44	78,0	,62	3,47	3,18	9,99
40	15,34	36,107	26,766	4,47	78,6	,64	3,54	2,30	9,99

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 32

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	,01	,01	99,99	9,99	,27	99,99	1,50	34,6	,0170	9,9999	,03268	9,99999	1,92*
10	50	,04	,06	99,99	9,99	,48	99,99	1,22	38,7	,0158	9,9999	,02920	9,99999	1,84*
14	25	,04	,06	99,99	9,99	,69	99,99	2,27	71,5	,0341	9,9999	,11064	9,99999	3,24*
17	10	,04	,08	99,99	9,99	2,22	99,99	5,75	106,7	,0343	9,9999	,19524	9,99999	5,68*
30	1	,50	4,75	99,99	9,99	3,21	99,99	5,85	21,5	,0124	9,9999	,04744	9,99999	3,80*

BIOMASSE ZOOPLANKTONIQUE 9999 MG/M2
 PRODUCTION INTEGREE 1695 MG/M2/JOUR
 IRRADIATION 1984 J/CM2


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MISSION CINECA - CHARCOT II      STATION NUMERO 33
*-----*
* POSITION      16 25 W      PROFONDEUR      44 METRES
*              23 51 N      DATE              3 AVRIL 1971
*              HEURES DEBUT      15 H 54
*              FIN              16 H 05
*-----*
* METEO              HEURE OBSERVATION
*-----*
* MER 3              *      16 H 00
* VENT W 4 NOEUDS*   *      16 H 00
* NEBULOSITE 4      *      16 H 00
* PRESSION ATM, 1010 *      16 H 00
* PRECIPITATION NON *      16 H 00
* TEMP, AIR-SEC 19.0 *      16 H 00
* HUMIDE 17.0 *      16 H 00
*-----*
* DONNEES DE LA STATION HYDROLOGIE
*-----*
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
*-----*
* 0 17.96 36.353 26.335 5.89 109.5 .07 .08 99.99 9.99 *
* 10 17.53 36.366 26.451 5.80 106.8 .12 .14 99.99 9.99 *
* 20 17.39 36.361 26.481 5.67 104.0 .14 .80 99.99 9.99 *
* 30 17.03 36.364 26.571 5.09 92.7 .35 3.73 99.99 9.99 *
* 40 15.90 36.146 26.669 9.99 99.9 .84 10.06 99.99 9.99 *
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MISSION CINECA - CHARCOT II      STATION NUMERO 34
*-----*
* POSITION      16 48 W      PROFONDEUR      49 METRES
*              22 54 N      DATE              3 AVRIL 1971
*              HEURES DEBUT      21 H 53
*              FIN              22 H 05
*-----*
* METEO              HEURE OBSERVATION
*-----*
* MER 3              *      17 H 00
* VENT NW 3 NOEUDS*   *      17 H 00
* NEBULOSITE 2      *      17 H 00
* PRESSION ATM, 0    *      17 H 00
* PRECIPITATION NON *      17 H 00
* TEMP, AIR-SEC 20.0 *      17 H 00
* HUMIDE 17.0 *      17 H 00
*-----*
* DONNEES DE LA STATION HYDROLOGIE
*-----*
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
*-----*
* 0 17.95 36.311 26.306 6.32 117.3 9.99 99.99 99.99 9.99 *
* 10 17.36 36.318 26.456 6.33 116.1 9.99 99.99 99.99 9.99 *
* 20 17.29 36.316 26.471 6.27 114.8 9.99 99.99 99.99 9.99 *
* 30 17.18 36.317 26.499 5.86 107.1 9.99 99.99 99.99 9.99 *
* 40 15.32 36.084 26.753 3.65 63.8 9.99 99.99 99.99 9.99 *
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MISSION CINECA - CHARCOT II STATION NUMERO 35

POSITION 16 19 W PROFONDEUR 65 METRES
 18 02 N DATE 5 AVRIL 1971
 HEURES DEBUT 07 H 23
 FIN 07 H 56

METEO HEURE OBSERVATION
 MER 2 08 H 00
 VENT N 3 NOEUDS* 08 H 00
 NEBULOSITE 1 08 H 00
 PRESSION ATM. 1014 08 H 00
 PRECIPITATION NON 08 H 00
 TEMP. AIR-SEC 17,0 08 H 00
 HUMIDE 14,5 08 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SIO4	NH4
0	14.80	35.550	26.458	3.85	66.7	1.88	24.07	9.75	9.99
10	14.72	35.548	26.473	3.83	62.8	2.14	24.46	9.48	9.99
20	14.38	35.532	26.535	2.78	47.8	2.05	25.15	9.38	9.99
30	14.21	35.523	26.564	2.40	41.1	2.03	26.55	9.59	9.99
50	13.68	35.446	26.617	1.56	26.4	2.15	27.47	9.90	9.99
60	13.46	35.418	26.641	1.57	26.4	2.35	28.77	10.17	9.99

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 35

Z	OPT	PO4	NO3	SIO4	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	1.62	28.09	9.85	.12	2.43	99.99	.87	55.0	.1294	.0194	.47640	.07156	3.68*
5	50	1.63	23.64	10.06	.10	2.22	99.99	1.20	81.2	9.9999	.0145	9.99999	.05472	99.99*
8	25	1.69	23.26	9.64	.13	2.25	99.99	1.45	80.7	.1522	.0154	.62104	.06292	4.08*
12	10	1.71	24.76	9.85	.14	2.10	99.99	1.54	105.4	.0975	.0209	.42520	.09128	4.36*
22	1	1.67	25.97	9.80	.12	2.85	99.99	1.65	26.7	.0000	.0118	.00000	.04040	3.40*
30	0	9.99	99.99	99.99	9.99	2.25	99.99	3.509999.9	9.9999	9.9999	9.9999	9.99999	9.99999	99.99*
50	0	9.99	99.99	99.99	9.99	99.99	99.99	2.609999.9	9.9999	9.9999	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANCTONIQUE 3960 MG/M2
 PRODUCTION INTEGREE 1616 MG/M2/JOUR
 IRRADIATION 2309 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 36

POSITION 18 20 W PROFONDEUR 2980 METRES
 17 58 N DATE 6 AVRIL 1971
 HEURES DEBUT 00 H 12
 FIN 01 H 08

METEO HEURE OBSERVATION
 MER 2 04 H 00
 VENT NNE 2 NOEUDS* 04 H 00
 NEBULOSITE 0 04 H 00
 PRESSION ATM. 1014 04 H 00
 PRECIPITATION NON 04 H 00
 TEMP. AIR-SEC 18,0 04 H 00
 HUMIDE 18,5 04 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SIO4	NH4
0	19.33	35.990	25.707	5.46	104.0	.34	2.32	.93	9.99
10	19.35	36.000	25.713	5.49	104.6	.36	2.32	1.35	9.99
20	19.21	35.980	25.734	5.47	104.0	.42	3.29	.57	9.99
30	17.57	35.790	26.000	5.05	92.8	.92	12.82	2.50	9.99
50	17.38	35.787	26.044	4.76	87.0	1.02	14.60	3.24	9.99
75	15.63	35.769	26.441	1.28	22.6	1.48	26.90	10.49	9.99
100	14.82	35.704	26.572	1.72	29.9	1.48	26.22	8.73	9.99
150	14.20	35.674	26.683	1.80	30.8	1.42	25.57	8.63	9.99
200	13.28	35.579	26.802	1.73	29.0	1.43	26.90	10.06	9.99
250	12.96	35.639	26.914	1.99	33.2	1.39	26.22	8.73	9.99
300	12.29	35.535	26.966	1.86	30.6	1.48	29.07	9.44	9.99
400	10.86	35.333	26.079	1.08	17.2	1.90	32.46	12.47	9.99
500	9.82	35.236	27.186	1.34	20.8	2.05	35.45	14.32	9.99
600	8.80	35.128	27.269	1.50	22.8	2.29	36.59	16.24	9.99
800	7.18	35.074	27.473	1.99	29.1	2.26	35.44	17.73	9.99
1000	6.26	35.017	27.554	2.93	41.9	2.16	32.46	19.76	9.99

MISSION CINECA - CHARCOT II STATION NUMERO 37
 POSITION 17 35 W PROFONDEUR 2600 METRES
 18 02 N DATE 6 AVRIL 1971
 HEURES DEBUT 07 H 41
 FIN 08 H 49

METEO HEURE OBSERVATION
 MER 2 04 H 00
 VENT NNE 2 NOEUDS 04 H 00
 NEBULOSITE 0 04 H 00
 PRESSION ATM. 1014 04 H 00
 PRECIPITATION
 TEMP. AIR-SEC .0
 HUMIDE .0

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	18.32	35.774	25.803	5.34	99.6	.94	11.91	1.66	1.32
10	18.18	35.786	25.847	5.32	98.9	1.02	12.18	2.90	1.42
20	17.77	35.750	25.921	5.17	95.4	1.33	13.77	2.83	1.11
30	9.99	35.783	9.999	5.34	99.3	1.14	11.49	2.43	1.44
50	10.82	35.700	26.112	4.10	74.1	1.33	16.10	3.38	2.12
75	14.90	35.647	26.510	.99	17.2	1.82	27.98	9.03	.10
100	14.02	35.535	26.614	1.33	22.7	1.85	29.74	9.03	.10
150	13.19	35.457	26.726	1.29	21.6	9.99	99.99	99.99	.12
200	12.54	35.398	26.811	1.34	22.1	1.90	27.97	11.63	.18
250	12.07	35.371	26.882	1.25	20.4	2.01	32.86	11.17	.12
300	11.63	35.344	26.945	1.33	21.5	1.98	32.86	11.17	.07
400	10.88	35.319	27.064	1.17	18.6	2.18	35.25	13.11	.12
500	9.87	35.214	27.160	1.53	20.7	2.28	34.01	15.03	.14
600	8.87	35.105	27.241	1.56	23.7	2.43	35.25	16.25	.16
800	9.99	34.959	9.999	2.23	99.9	2.48	34.01	19.56	.20
1000	6.24	34.975	27.523	2.80	40.1	2.40	34.01	19.96	.13

MISSION CINECA - CHARCOT II DONNEES BILOGIQUES DE LA STATION NUMERO 37

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VN03	VNH4	RN03	RNH4	NPART
0	100	1.02	11.35	1.42	1.01	.44	99.99	99.99	6.6	.0322	9.9999	.03992	9.99999	1.24
5	50	1.09	11.22	1.76	1.46	.66	99.99	99.99	11.2	.0318	9.9999	.03568	9.99999	1.12
8	25	1.08	11.78	1.80	1.18	.44	99.99	99.99	16.6	.0273	9.9999	.03832	9.99999	1.40
12	10	1.08	10.66	1.76	1.21	.60	99.99	99.99	13.3	.0195	9.9999	.02736	9.99999	1.40
22	1	1.16	12.16	2.56	1.10	.45	99.99	99.99	4.3	.0245	9.9999	.03728	9.99999	1.32
30	0	9.99	99.99	99.99	9.99	.39	99.99	99.99	.0	9.9999	9.9999	9.99999	9.99999	99.99
50	0	9.99	99.99	99.99	9.99	.41	99.99	99.99	.0	9.9999	9.9999	9.99999	9.99999	99.99

BIOASSE ZOOPLANKTONIQUE 6560 MG/M2
 PRODUCTION INTEGREE 234 MG/M2/JOUR
 IRRADIATION 2307 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 38
 POSITION 17 19 W PROFONDEUR 2300 METRES
 17 59 N DATE 6 AVRIL 1971
 HEURES DEBUT 13 H 24
 FIN 15 H 05

METEO HEURE OBSERVATION
 MER 3 12 H 00
 VENT N 4 NOEUDS 12 H 00
 NEBULOSITE 3 12 H 00
 PRESSION ATM. 1015 12 H 00
 PRECIPITATION NON 12 H 00
 TEMP. AIR-SEC 19.5 12 H 00
 HUMIDE 18.0 12 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	C/O	PO4	NO3	SI04	NH4
0	18.28	35.723	25.774	5.84	108.8	.58	8.51	.23	9.99
10	17.93	35.726	25.863	5.85	108.1	.66	7.53	.23	9.99
20	17.71	35.737	25.925	5.52	101.7	.80	9.54	.35	9.99
30	17.63	35.748	25.953	5.28	97.1	.65	9.54	.70	9.99
50	15.67	35.775	26.436	1.33	23.5	1.41	21.24	7.63	9.99
75	14.90	35.750	26.590	1.52	26.4	9.99	18.67	8.09	9.99
100	13.92	35.567	26.660	1.63	27.7	1.43	21.66	9.17	9.99
150	13.01	35.464	26.768	1.64	27.4	1.63	22.51	10.55	9.99
200	12.33	35.390	26.846	1.61	26.4	1.52	23.89	11.58	9.99
250	11.85	35.344	26.903	1.40	22.8	1.78	23.89	12.54	9.99
300	11.26	35.282	26.966	1.33	21.3	1.90	25.60	13.98	9.99
400	10.46	35.213	27.057	1.22	19.2	1.99	27.15	16.03	9.99
500	9.65	35.143	27.142	1.41	21.8	2.10	27.15	18.19	9.99
600	8.72	9.999	9.999	9.99	99.9	9.99	99.99	99.99	9.99
800	7.18	34.935	27.363	2.35	34.3	2.23	27.15	24.40	9.99
1000	6.09	34.892	27.480	2.74	39.0	2.10	26.36	26.65	9.99
1200	5.66	34.986	27.605	3.46	48.8	1.78	23.41	25.49	9.99
500	9.99	35.004	9.999	4.32	99.9	1.56	21.24	26.03	9.99
2000	4.39	34.962	27.736	5.16	70.6	1.43	18.67	28.23	9.99

MISSION CINECA - CHARCOT II DONNEES BILOGIQUES DE LA STATION NUMERO 38

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VN03	VNH4	RN03	RNH4	NPART
0	1	.84	8.80	.29	1.38	1.38	99.99	1.10	104.5	9.9999	9.9999	9.99999	9.99999	99.99
6	0	9.99	99.99	99.99	9.99	2.85	99.99	1.15	129.1	9.9999	9.9999	9.99999	9.99999	99.99
11	0	9.99	99.99	99.99	9.99	2.88	99.99	99.99	135.6	9.9999	9.9999	9.99999	9.99999	99.99
16	0	9.99	99.99	99.99	9.99	3.45	99.99	2.65	100.8	9.9999	9.9999	9.99999	9.99999	99.99
31	0	9.99	99.99	99.99	9.99	1.56	99.99	1.35	12.2	9.9999	9.9999	9.99999	9.99999	99.99
50	0	9.99	99.99	99.99	9.99	1.32	99.99	.209999.9	9.9999	9.9999	9.9999	9.99999	9.99999	99.99
75	0	9.99	99.99	99.99	9.99	.81	99.99	.089999.9	9.9999	9.9999	9.9999	9.99999	9.99999	99.99
100	0	9.99	99.99	99.99	9.99	.54	99.99	.089999.9	9.9999	9.9999	9.9999	9.99999	9.99999	99.99

BIOASSE ZOOPLANKTONIQUE 1120 MG/M2
 PRODUCTION INTEGREE 2601 MG/M2/JOUR
 IRRADIATION 2307 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 39

POSITION 17 04 W PROFONDEUR 1860 METRES
 18 01 N DATE 6 AVRIL 1971
 HEURES DEBUT 18 H 45
 FIN 19 H 32

METEO HEURE OBSERVATION
 MER 4 16 h 00
 VENT N 5 NOEUDS 16 h 00
 NEBULOSITE U 16 h 00
 PRESSION ATM. 1012 16 h 00
 PRECIPITATION NON 16 h 00
 TEMP. AIR-SEC 18,5 16 h 00
 HUMIDE 18,2 16 h 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SIO4	NH4
0	17,16	35,610	25,959	5,96	108,4	9,99	13,39	,69	,83
10	16,56	35,608	26,103	4,95	89,0	,98	16,70	1,92	2,56
20	16,04	35,601	26,218	4,69	83,5	,96	16,49	,81	1,71
30	15,00	35,557	26,419	1,02	17,7	1,68	31,36	8,10	,11
50	14,29	35,502	26,531	1,21	20,8	1,67	29,64	8,77	,41
75	14,00	35,539	26,621	1,46	24,9	1,61	29,64	8,87	,16
100	13,66	35,522	26,680	1,27	21,5	1,74	29,64	9,69	,17
150	13,30	35,547	26,773	1,60	26,9	1,56	29,64	9,58	,51
200	12,24	35,387	26,861	1,64	26,9	1,69	31,36	10,88	,17
250	11,55	35,295	26,922	1,56	22,0	1,80	35,32	12,06	,22
300	11,14	35,258	26,969	1,27	20,3	1,86	36,49	13,43	,08
400	10,52	35,241	27,068	9,99	99,9	1,96	40,44	15,39	,63
500	9,57	35,158	27,167	1,25	19,3	2,08	40,44	17,98	,20
600	8,66	35,066	27,244	9,99	99,9	2,01	40,44	20,25	,44
800	7,14	34,941	27,373	2,09	30,5	2,17	40,44	23,63	,06
1000	6,27	34,948	27,498	2,81	40,2	2,05	37,75	25,21	,00

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 39

Z	OPT	PO4	NO3	SIO4	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	0	9,99	99,99	99,99	9,99	3,24	99,99	1,25	57,6	9,9999	9,9999	9,9999	9,9999	99,99
6	0	9,99	99,99	99,99	9,99	4,14	99,99	2,05	152,4	9,9999	9,9999	9,9999	9,9999	99,99
9	0	9,99	99,99	99,99	9,99	2,40	99,99	,75	111,0	9,9999	9,9999	9,9999	9,9999	99,99
17	0	9,99	99,99	99,99	9,99	,81	99,99	2,00	55,8	9,9999	9,9999	9,9999	9,9999	99,99
35	0	9,99	99,99	99,99	9,99	1,65	99,99	1,70	15,6	9,9999	9,9999	9,9999	9,9999	99,99
50	0	9,99	99,99	99,99	9,99	1,29	99,99	,25	9999,9	9,9999	9,9999	9,9999	9,9999	99,99
75	0	9,99	99,99	99,99	9,99	1,44	99,99	,35	9999,9	9,9999	9,9999	9,9999	9,9999	99,99

BIOMASSE ZOOPLANCTONIQUE 4050 MG/M2
 PRODUCTION INTEGREE 2556 MG/M2/JOUR
 IRRADIATION 2307 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 40

POSITION 16 48 W PROFONDEUR 1190 METRES
 18 03 N DATE 6 AVRIL 1971
 HEURES DEBUT 22 H 17
 FIN 23 H 10

METEO HEURE OBSERVATION
 MER 3 24 h 00
 VENT N 4 NOEUDS 24 h 00
 NEBULOSITE U 24 h 00
 PRESSION ATM. 1013 24 h 00
 PRECIPITATION NON 24 h 00
 TEMP. AIR-SEC 18,5 24 h 00
 HUMIDE 18,0 24 h 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SIO4	NH4
0	17,87	35,727	25,879	5,23	96,7	,85	8,97	,66	1,11
10	17,87	35,736	25,885	5,26	97,2	,93	9,60	,76	1,24
20	17,71	35,730	25,920	5,17	95,2	,89	9,90	,82	1,26
30	17,06	35,679	26,038	5,00	90,9	1,02	11,40	,88	1,30
50	16,08	35,586	26,197	5,29	94,1	,95	12,01	,17	1,26
75	14,82	35,531	26,438	1,26	21,8	1,77	26,44	,54	,27
100	14,29	35,488	26,520	1,28	22,0	1,85	26,77	,91	,46
150	13,85	35,520	26,638	1,39	23,6	1,82	27,11	,97	,47
200	12,93	35,423	26,753	1,67	27,8	1,86	27,45	9,48	,26
250	12,37	35,374	26,826	1,56	25,7	2,02	29,20	10,22	,20
300	11,80	35,312	26,888	1,39	22,6	2,11	31,57	11,34	,00
400	10,96	35,261	27,005	1,19	19,0	2,31	35,76	13,45	,00
500	10,27	35,211	27,089	1,11	17,4	2,42	40,46	14,40	,00
600	9,06	35,097	27,204	1,38	21,1	2,53	41,79	16,50	,00
800	7,20	34,941	27,365	2,01	29,4	2,70	43,18	20,06	,00
1000	6,25	34,931	27,487	2,67	38,1	2,53	39,22	21,54	,00

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 40

Z	OPT	PO4	NO3	SIO4	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	0	9,99	99,99	99,99	9,99	,54	99,99	1,30	40,9	9,9999	9,9999	9,9999	9,9999	99,99
5	0	9,99	99,99	99,99	9,99	,69	99,99	1,45	2,0	9,9999	9,9999	9,9999	9,9999	99,99
10	0	9,99	99,99	99,99	9,99	,63	99,99	,75	9999,9	9,9999	9,9999	9,9999	9,9999	99,99
20	0	9,99	99,99	99,99	9,99	,59	99,99	1,45	9999,9	9,9999	9,9999	9,9999	9,9999	99,99
30	0	9,99	99,99	99,99	9,99	1,53	99,99	,85	9999,9	9,9999	9,9999	9,9999	9,9999	99,99
50	0	9,99	99,99	99,99	9,99	4,44	99,99	1,30	9999,9	9,9999	9,9999	9,9999	9,9999	99,99
75	0	9,99	99,99	99,99	9,99	1,77	99,99	,70	9999,9	9,9999	9,9999	9,9999	9,9999	99,99

BIOMASSE ZOOPLANCTONIQUE 6900 MG/M2
 PRODUCTION INTEGREE 107 MG/M2/JOUR
 IRRADIATION 2307 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 41

POSITION 16 37 W PROFONDEUR 490 METRES
 17 58 N DATE 7 AVRIL 1971
 HEURES DEBUT 01 H 37
 FIN 02 H 17

METEO HEURE OBSERVATION

MER 4 * 01 H 30 *
 VENT N 5 NOEUDS * 01 H 30 *
 NEBULOSITE U * 01 H 30 *
 PRESSION ATM. 1012 * 01 H 30 *
 PRECIPITATION NON * 01 H 30 *
 TEMP. AIR-SEC .0 * *
 HUMIDE .0 * *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	17.59	35.722	25.943	5.14	94.5	.87	11.45	1.03	1.65
10	17.59	35.729	25.949	5.22	96.0	.90	11.56	.82	1.46
20	16.04	35.602	26.219	3.98	70.8	1.35	16.52	2.54	2.17
30	15.83	35.583	26.252	3.87	68.5	1.41	17.32	3.37	2.27
50	15.56	35.560	26.292	4.01	70.6	1.37	16.52	2.47	2.19
75	15.44	35.542	26.309	3.98	69.9	1.35	15.95	1.75	2.05
100	15.25	35.535	26.351	2.97	51.9	1.57	17.12	3.87	1.80
150	13.61	35.396	26.593	1.45	24.5	1.80	23.83	8.87	.35
200	12.95	35.364	26.703	1.73	28.8	1.98	23.83	9.48	.09
250	12.47	35.378	26.809	1.61	26.5	1.79	24.22	10.22	.05
300	11.61	35.260	26.884	1.54	24.9	2.04	25.61	11.11	.09
400	11.07	35.256	26.981	1.33	21.2	2.18	26.80	13.19	.00
450	10.48	35.226	27.064	1.32	20.8	2.24	26.80	14.40	.08

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 41

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	0	9.99	99.99	99.99	9.99	.45	99.99	.35	20.3	9.9999	9.9999	9.99999	9.99999	99.99*
5	0	9.99	99.99	99.99	9.99	.75	99.99	.409999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
10	0	9.99	99.99	99.99	9.99	.78	99.99	.609999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
20	0	9.99	99.99	99.99	9.99	.48	99.99	.559999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
30	0	9.99	99.99	99.99	9.99	.75	99.99	1.309999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
50	0	9.99	99.99	99.99	9.99	1.05	99.99	.909999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
75	0	9.99	99.99	99.99	9.99	1.14	99.99	.509999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANCTONIQUE 5180 MG/M2
 PRODUCTION INTEGREE 9999 MG/M2/JOUR
 IRRADIATION 2402 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 42

POSITION 16 25 W PROFONDEUR 91 METRES
 17 58 N DATE 7 AVRIL 1971
 HEURES DEBUT 04 H 40
 FIN 04 H 55

METEO HEURE OBSERVATION

MER. 4 * 03 H 00 *
 VENT NNW 5 NOEUDS * 03 H 00 *
 NEBULOSITE U * 03 H 00 *
 PRESSION ATM. 1011 * 03 H 00 *
 PRECIPITATION NON * 03 H 00 *
 TEMP. AIR-SEC 16,0 * 03 H 00 *
 HUMIDE 17,0 * 03 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.47	35.651	26.157	4.37	78.5	1.19	17.32	2.04	.83
10	16.45	35.671	26.177	4.32	77.6	1.29	16.52	2.14	.79
20	16.22	35.689	26.244	3.13	55.9	1.37	20.03	3.94	.85
30	15.54	35.702	26.410	1.53	26.9	1.66	26.19	6.64	.71
50	15.10	35.625	26.449	1.41	24.6	1.83	28.05	99.99	.38
80	13.42	35.375	26.616	1.58	26.6	1.88	30.04	8.97	.12

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 42

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	0	9.99	99.99	99.99	9.99	3.00	99.99	1.20	147.2	9.9999	9.9999	9.99999	9.99999	99.99*
5	0	9.99	99.99	99.99	9.99	3.12	99.99	2.05	160.4	9.9999	9.9999	9.99999	9.99999	99.99*
10	0	9.99	99.99	99.99	9.99	3.33	99.99	.859999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
20	0	9.99	99.99	99.99	9.99	1.80	99.99	1.459999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
30	0	.99	99.99	99.99	9.99	1.38	99.99	1.359999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
50	0	9.99	99.99	99.99	9.99	.78	99.99	.309999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*
75	0	9.99	99.99	99.99	9.99	.63	99.99	.999999	9.9	9.9999	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANCTONIQUE 6870 MG/M2
 PRODUCTION INTEGREE 769 MG/M2/JOUR
 IRRADIATION 2402 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 43

```

*****
* POSITION 16 17 W PROFONDEUR 40 METRES *
* 17 58 N DATE 7 AVRIL 1971 *
* HEURES DEBUT 07 H 30 *
* FIN 07 H 42 *
*****
METEO HEURE OBSERVATION
* MER 3 * 08 H 00 *
* VENT NNW 4 NOEUDS* 08 H 00 *
* NEBULOSITE U * 08 H 00 *
* PRESSION ATM, 1012 * 08 H 00 *
* PRECIPITATION NON * 08 H 00 *
* TEMP, AIR-SEC 17,0 * 08 H 00 *
* HUMIDE 15,0 * 08 H 00 *
*****
DONNEES DE LA STATION HYDROLOGIE
*****
* Z T S SIGMAT O2 O/O P04 NO3 SIO4 NH4 *
* 0 14,80 35,566 26,470 3,61 62,6 1,45 23,83 9,17 ,00 *
* 10 14,79 35,569 26,474 3,57 61,9 1,58 30,79 9,17 ,00 *
* 20 14,35 35,515 26,528 2,66 45,6 1,70 37,80 10,00 ,16 *
* 30 13,79 35,455 26,601 1,63 27,6 1,93 42,31 10,77 ,19 *
*****

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MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 43

```

*****
* Z OPT P04 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
* 0 100 1,77 18,25 9,38 ,08 ,83 99,99 1,20 118,2 ,0992 ,0340 ,20236 ,06952 2,04*
* 5 50 1,80 18,07 9,38 ,00 ,54 99,99 ,80 176,7 ,1724 ,0137 ,33804 ,02684 1,96*
* 10 25 1,85 18,44 9,58 ,00 1,11 99,99 1,00 112,5 ,1359 ,0177 ,35332 ,04600 2,60*
* 16 10 1,95 19,61 9,74 ,09 ,69 99,99 1,20 36,7 ,0455 ,0551 ,04008 ,04848 ,88*
* 32 1 2,08 20,05 9,79 ,00 ,33 99,99 ,65 17,6 ,0086 ,0092 ,00756 ,00816 ,88*
* 40 0 9,99 99,99 99,99 9,99 ,66 99,99 ,7599999,9 9,9999 9,9999 9,99999 9,99999 99,99*
*****
BIOMASSE ZOOPLANCTONIQUE 3200 MG/M2
PRODUCTION INTEGREE 2343 MG/M2/JOUR
IRRADIATION 2402 J/CM2

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MISSION CINECA - CHARCOT II STATION NUMERO 44

```

*****
* POSITION 17 15 W PROFONDEUR 2170 METRES *
* 18 35 N DATE 8 AVRIL 1971 *
* HEURES DEBUT 06 H 50 *
* FIN 07 H 48 *
*****
METEO HEURE OBSERVATION
* MER 4 * 08 H 00 *
* VENT NNE 6 NOEUDS* 08 H 00 *
* NEBULOSITE 2 * 08 H 00 *
* PRESSION ATM, 1013 * 08 H 00 *
* PRECIPITATION NON * 08 H 00 *
* TEMP, AIR-SEC 17,0 * 08 H 00 *
* HUMIDE 17,0 * 08 H 00 *
*****
DONNEES DE LA STATION HYDROLOGIE
*****
* Z T S SIGMAT O2 O/O P04 NO3 SIO4 NH4 *
* 0 17,46 35,730 25,977 5,38 98,5 1,00 11,52 ,29 1,03 *
* 10 17,44 35,726 25,983 5,38 98,5 1,05 11,52 ,35 1,05 *
* 20 17,30 35,724 26,015 5,30 96,7 1,16 12,30 ,88 1,02 *
* 30 16,67 35,686 26,137 5,03 90,6 1,43 13,14 2,01 1,14 *
* 50 15,67 35,659 26,347 2,21 39,0 1,71 18,44 6,47 ,91 *
* 75 14,53 35,586 26,544 1,60 27,6 1,97 27,58 7,63 ,08 *
* 100 15,62 35,474 26,651 1,40 23,6 2,14 20,05 10,11 ,15 *
* 150 12,80 35,389 26,752 1,37 22,9 2,39 20,63 11,58 ,14 *
* 200 12,25 35,356 26,835 1,39 22,8 2,24 20,05 99,99 ,09 *
* 250 11,77 35,336 26,912 1,31 21,3 2,03 20,63 12,80 ,14 *
* 300 11,41 35,304 26,955 1,20 19,3 2,27 21,23 13,32 ,03 *
* 400 10,57 35,239 27,058 1,23 19,4 2,44 21,33 14,69 ,03 *
* 500 9,75 35,164 27,145 1,34 20,8 2,60 21,87 16,98 ,02 *
* 600 8,79 35,084 27,238 1,52 23,1 2,67 21,87 19,48 ,03 *
* 800 7,07 34,939 27,362 2,15 31,3 3,72 21,87 23,89 ,22 *
* 1000 6,25 34,965 27,514 2,90 41,5 2,78 21,23 24,66 ,14 *
* 1200 5,47 34,995 27,636 3,53 49,6 2,46 20,63 25,49 ,41 *
* 1500 4,46 34,995 27,754 4,43 60,7 2,14 19,20 25,49 ,24 *
* 2000 5,63 34,994 27,842 5,20 69,9 2,03 18,44 28,23 ,09 *
*****

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MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 44

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*****
* Z OPT P04 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
* 0 100 1,05 10,53 ,38 ,80 ,63 99,99 99,99 34,0 ,0110 ,0720 ,02124 ,13824 1,92*
* 6 50 1,08 10,66 ,29 ,79 ,78 99,99 99,99 51,0 ,0182 ,0712 ,03860 ,15096 2,13*
* 12 25 1,08 10,47 ,26 ,80 ,75 99,99 99,99 62,4 ,0146 ,0548 ,02464 ,09216 1,68*
* 17 10 1,09 10,95 ,32 ,82 ,81 99,99 99,99 59,7 ,0075 ,0551 ,01364 ,09932 1,80*
* 38 1 1,21 12,63 1,26 ,90 ,90 99,99 99,99 12,4 ,0056 ,0428 ,01060 ,08048 1,88*
* 50 0 9,99 99,99 99,99 9,99 ,90 99,99 99,99999,9 9,9999 9,9999 9,99999 9,99999 99,99*
* 75 0 9,99 99,99 99,99 9,99 ,30 99,99 99,99999,9 9,9999 9,9999 9,99999 9,99999 99,99*
*****
BIOMASSE ZOOPLANCTONIQUE 3740 MG/M2
PRODUCTION INTEGREE 1340 MG/M2/JOUR
IRRADIATION 2228 J/CM2

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MISSION CINECA - CHARCOT II STATION NUMERO 48

```

*.....*
* POSITION 16 25 W PROFONDEUR 38 METRES *
* 18 48 N DATE 9 AVRIL 1971 *
* HEURES DEBUT 08 H 57 *
* FIN 09 H 10 *
*.....*
METEO HEURE OBSERVATION
*.....*
* MER 4 * 08 H 00 *
* VENT N 5 NOEUDS* 08 H 00 *
* NEBULOSITE 0 * 08 H 00 *
* PRESSION ATM. 1012 * 08 H 00 *
* PRECIPITATION NON * 08 H 00 *
* TEMP. AIR-SEC 17.0 * 08 H 00 *
* HUMIDE 15.0 * 08 H 00 *
*.....*
DONNEES DE LA STATION HYDROLOGIE
*.....*
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
* 0 14.01 35.513 26.599 2.92 49.7 1.59 16.02 9.38 9.99 *
* 10 13.99 35.510 26.601 2.87 48.9 2.17 16.02 9.58 .09 *
* 20 13.94 35.507 26.609 2.67 45.4 1.71 16.50 9.79 .21 *
* 30 13.82 35.507 26.634 2.31 39.2 1.76 17.02 10.11 .31 *
* 35 13.82 35.504 26.632 2.25 38.2 1.74 16.50 10.22 .00 *
*.....*

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MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 48

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*.....*
* Z OPT PO4 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
* 0 100 1.66 17.02 8.67 .16 2.76 99.99 1.20 41.2 9.9999 9.9999 9.99999 9.99999 99.99*
* 5 50 1.63 17.02 8.67 .19 2.55 99.99 99.99 279.4 9.9999 9.9999 9.99999 9.99999 99.99*
* 10 25 1.66 17.60 8.72 .13 1.86 99.99 1.20 203.2 9.9999 9.9999 9.99999 9.99999 99.99*
* 15 10 1.79 17.60 8.82 .21 2.13 99.99 1.20 198.1 9.9999 9.9999 9.99999 9.99999 99.99*
* 29 1 1.67 17.60 8.97 .16 2.85 99.99 .90 .0 9.9999 9.9999 9.99999 9.99999 99.99*
*.....*
BIOMASSE ZOOPLANCTONIQUE 4210 MG/M2
PRODUCTION INTEGREE 4398 MG/M2/JOUR
IRRADIATION 2242 J/CM2

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MISSION CINECA - CHARCOT II STATION NUMERO 49

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*.....*
* POSITION 16 23 W PROFONDEUR 40 METRES *
* 18 38 N DATE 10 AVRIL 1971 *
* HEURES DEBUT 11 H 17 *
* FIN 11 H 23 *
*.....*
METEO HEURE OBSERVATION
*.....*
* MER 3 * 12 H 00 *
* VENT NW 2 NOEUDS* 12 H 00 *
* NEBULOSITE 0 * 12 H 00 *
* PRESSION ATM. 1012 * 12 H 00 *
* PRECIPITATION NON * 12 H 00 *
* TEMP. AIR-SEC 18.6 * 12 H 00 *
* HUMIDE 14.0 * 12 H 00 *
*.....*
DONNEES DE LA STATION HYDROLOGIE
*.....*
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
* 0 15.19 35.607 26.415 4.32 75.5 1.23 14.15 7.26 .07 *
* 10 14.90 35.606 26.479 4.10 71.2 1.30 14.43 7.09 .44 *
* 20 14.22 35.545 26.579 2.40 41.1 1.69 15.03 9.27 .63 *
* 30 13.63 35.462 26.639 1.50 25.3 1.92 15.39 11.00 .10 *
* 37 13.52 35.437 26.643 1.39 23.4 1.90 15.39 12.17 .45 *
*.....*

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MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 49

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*.....*
* Z OPT PO4 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
* 0 100 1.49 14.72 7.30 .16 3.42 99.99 99.99 106.6 9.9999 9.9999 9.99999 9.99999 99.99*
* 8 50 1.52 14.72 7.35 .18 3.63 99.99 99.99 203.1 .1932 .0284 .68780 .10140 3.56*
* 12 25 1.56 14.57 7.30 .22 4.02 99.99 99.99 241.0 9.9999 9.9999 9.99999 9.99999 99.99*
* 18 10 1.65 15.03 8.19 .47 2.85 99.99 99.99 87.5 9.9999 9.9999 9.99999 9.99999 99.99*
* 35 1 1.98 15.62 11.46 .13 1.19 99.99 99.99 9.9 9.9999 9.9999 9.99999 9.99999 99.99*
*.....*
BIOMASSE ZOOPLANCTONIQUE 40 MG/M2
PRODUCTION INTEGREE 3721 MG/M2/JOUR
IRRADIATION 2086 J/CM2

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MISSION CINECA - CHARCOT II STATION NUMERO 51
 * POSITION 17 22 W PROFONDEUR 58 METRES *
 * 20 52 N DATE 11 AVRIL 1971 *
 * HEURES DEBUT 12 H 28 *
 * FIN 12 H 41 *

METEO HEURE OBSERVATION
 * MER 2 * 12 h 00 *
 * VENT NW 2 NOEUDS* 12 h 00 *
 * NEBULOSITE 8 * 12 h 00 *
 * PRESSION ATM. 1014 * 12 h 00 *
 * PRECIPITATION NON * 12 h 00 *
 * TEMP. AIR-SEC 18,8 * 12 h 00 *
 * HUMIDE 16,5 * 12 h 00 *

DONNEES DE LA STATION HYDROLOGIE
 * Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
 * 0 17,25 36,070 26,289 6,15 112,4 ,26 ,91 99,99 ,29 *
 * 10 17,05 36,097 26,361 5,55 101,1 ,29 2,79 99,99 1,62 *
 * 20 15,87 35,961 26,534 3,83 68,0 ,89 10,39 99,99 1,63 *
 * 30 15,84 35,907 26,499 3,31 58,8 1,01 13,97 99,99 1,60 *
 * 50 14,65 35,798 26,681 2,35 40,7 2,22 15,01 99,99 1,24 *

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 51
 * Z OPT PO4 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
 * 0 100 ,26 1,12 ,23 ,04 2,04 99,99 1,45 298,5 9,9999 9,9999 9,99999 9,99999 99,99*
 * 3 50 ,24 ,66 ,06 ,04 4,65 99,99 2,40 108,7 9,9999 9,9999 9,99999 9,99999 99,99*
 * 6 25 ,17 ,68 ,14 ,12 2,91 99,99 1,60 269,9 9,9999 9,9999 9,99999 9,99999 99,99*
 * 11 10 ,28 1,62 ,26 ,00 3,90 99,99 3,00 256,3 9,9999 9,9999 9,99999 9,99999 99,99*
 * 20 1 ,25 6,28 1,04 ,23 4,11 99,99 99,99 19,6 9,9999 9,9999 9,99999 9,99999 99,99*
 * 30 0 9,99 99,99 99,99 9,99 2,13 99,99 1,609999,9 9,9999 9,9999 9,99999 9,99999 99,99*
 * 45 0 9,99 99,99 99,99 9,99 1,14 99,99 55,999999,9 9,9999 9,9999 9,99999 9,99999 99,99*

BIOMASSE ZOOPLANCTONIQUE 3840 MG/M2
 PRODUCTION INTEGREE 3755 MG/M2/JOUR
 IRRADIATION 1124 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 52
 * POSITION 17 05 W PROFONDEUR 35 METRES *
 * 21 47 N DATE 12 AVRIL 1971 *
 * HEURES DEBUT 08 H 52 *
 * FIN 09 H 02 *

METEO HEURE OBSERVATION
 * MER 2 * 08 h 00 *
 * VENT NE 3 NOEUDS* 08 h 00 *
 * NEBULOSITE U * 08 h 00 *
 * PRESSION ATM. 1014 * 08 h 00 *
 * PRECIPITATION NON * 08 h 00 *
 * TEMP. AIR-SEC 16,0 * 08 h 00 *
 * HUMIDE 16,0 * 08 h 00 *

DONNEES DE LA STATION HYDROLOGIE
 * Z T S SIGMAT O2 C/O PO4 NO3 SIO4 NH4 *
 * 0 16,23 35,934 26,430 5,63 100,7 ,34 2,87 ,23 ,32 *
 * 10 16,15 35,956 26,465 5,40 96,4 ,36 3,61 2,34 ,35 *
 * 20 15,90 35,943 26,513 4,15 73,7 ,66 5,83 10,77 1,37 *
 * 30 14,97 35,852 26,653 2,54 44,3 1,27 11,76 99,99 1,50 *

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 52
 * Z OPT PO4 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
 * 0 100 ,35 1,16 ,14 ,17 16,80 99,99 4,90 319,7 9,9999 9,9999 9,99999 9,99999 99,99*
 * 2 50 ,28 1,52 ,18 ,20 9,00 99,99 5,001111,8 ,3607 1,2204 1,57276 5,32116 4,36*
 * 7 25 ,35 1,87 99,99 ,16 11,40 99,99 7,60 279,6 9,9999 9,9999 9,99999 9,99999 99,99*
 * 9 10 ,40 2,35 99,99 ,32 11,49 99,99 5,80 675,4 9,9999 9,9999 9,99999 9,99999 99,99*
 * 13 1 ,39 3,84 1,06 1,07 16,62 99,99 4,70 36,6 9,9999 9,9999 9,99999 9,99999 99,99*
 * 20 0 9,99 99,99 99,99 9,99 12,30 99,99 3,85 36,2 9,9999 9,9999 9,99999 9,99999 99,99*
 * 30 0 9,99 99,99 99,99 9,99 7,47 99,99 2,759999,9 9,9999 9,9999 9,99999 9,99999 99,99*

BIOMASSE ZOOPLANCTONIQUE 9999 MG/M2
 PRODUCTION INTEGREE 7561 MG/M2/JOUR
 IRRADIATION 2350 J/CM2

MISSION CINECA - CHAR COT II STATION NUMERO 62

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* .....
* POSITION 17 05 W PROFONDEUR 40 METRES *
* 21 47 N DATE 13 AVRIL 1971 *
* HEURES DEBUT 07 H 23 *
* FIN 07 H 35 *
* .....
METEO HEURE OBSERVATION
* .....
* MER 3 * 08 h 00 *
* VENT NNE 4 NOEUDS* 08 h 00 *
* NEBULOSITE 0 * 08 h 00 *
* PRESSION ATM. 1015 * 08 h 00 *
* PRECIPITATION NON * 08 h 00 *
* TEMP. AIR-SEC 17.0 * 08 h 00 *
* HUMIDE 17.0 * 08 h 00 *
* .....
DONNEES DE LA STATION HYDROLOGIE
* .....
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
* .....
* 0 19.27 36.010 25.739 5.39 102.5 .36 3.41 .58 .19 *
* 10 10.26 36.021 26.490 5.34 95.7 .42 3.54 .55 .31 *
* 20 15.54 36.006 26.644 3.23 57.0 .83 12.89 6.39 2.23 *
* 30 14.97 35.959 26.735 2.35 40.9 1.26 19.76 10.43 1.52 *
* 35 14.98 35.959 26.733 2.32 40.5 1.39 19.47 10.27 1.52 *
* .....

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MISSION CINECA - CHAR COT II DONNEES BILOGIQUES DE LA STATION NUMERO 62

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* .....
* Z OPT PO4 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
* .....
* 0 100 .45 3.38 .67 .63 7.23 99.99 9.20 755.6 9.9999 9.9999 9.99999 9.99999 99.99*
* 2 50 .41 3.34 .82 .63 8.52 99.99 10.00 906.5 9.9999 9.9999 9.99999 9.99999 99.99*
* 4 25 .44 3.77 .88 .94 8.70 99.99 7.40 822.4 9.9999 9.9999 9.99999 9.99999 99.99*
* 8 10 .48 4.65 1.22 2.00 8.73 99.99 7.20 438.1 9.9999 9.9999 9.99999 9.99999 99.99*
* 11 1 .42 4.70 1.19 2.51 9.51 99.99 10.00 20.0 9.9999 9.9999 9.99999 9.99999 99.99*
* 20 0 9.99 99.99 99.99 9.99 3.18 99.99 3.559999.9 9.9999 9.9999 9.99999 9.99999 99.99*
* 30 0 9.99 99.99 99.99 9.99 3.45 99.99 4.459999.9 9.9999 9.9999 9.99999 9.99999 99.99*
* .....
BIOMASSE ZOOPLANCTONIQUE 9999 MG/M2
PRODUCTION INTEGREE 6599 MG/M2/JOUR
IRRADIATION 2498 J/CM2

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MISSION CINECA - CHARCOT II STATION NUMERO 63

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* .....
* POSITION 17 57 W PROFONDEUR 1725 METRES *
* 21 03 N DATE 13 AVRIL 1971 *
* HEURES DEBUT 18 H 24 *
* FIN 19 H 05 *
* .....
METEO HEURE OBSERVATION
* .....
* MER 3 * 20 h 00 *
* VENT NNE 4 NOEUDS* 20 h 00 *
* NEBULOSITE 3 * 20 h 00 *
* PRESSION ATM. 1015 * 20 h 00 *
* PRECIPITATION NON * 20 h 00 *
* TEMP. AIR-SEC 17.0 * 20 h 00 *
* HUMIDE 18.5 * 20 h 00 *
* .....
DONNEES DE LA STATION HYDROLOGIE
* .....
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
* .....
* 0 18.90 36.311 26.066 6.02 113.8 .13 .09 .00 .19 *
* 10 18.85 36.332 26.095 6.02 113.8 .08 .13 .00 .13 *
* 20 18.29 36.301 26.213 5.76 107.7 .22 .95 .00 .68 *
* 30 17.88 36.315 26.326 5.18 96.1 .32 3.65 1.07 .96 *
* 50 16.96 36.165 26.435 3.78 68.7 .76 13.22 4.01 .10 *
* 75 16.51 36.136 26.519 3.20 57.7 1.01 15.88 5.32 .08 *
* 100 15.39 35.951 26.635 2.33 40.9 1.32 20.44 6.64 .91 *
* 150 14.31 35.784 26.744 2.23 38.3 1.62 22.68 7.35 .08 *
* 200 15.03 35.528 26.814 1.47 24.5 2.00 28.12 12.17 .44 *
* 250 12.81 35.551 26.876 1.75 29.1 1.76 25.49 9.90 .34 *
* 300 9.99 35.475 9.999 1.53 99.9 2.00 28.12 11.00 .15 *
* 400 10.94 35.367 27.091 1.28 20.4 2.47 31.26 12.93 .15 *
* 500 10.14 35.255 27.146 1.50 23.5 2.28 31.26 14.69 .05 *
* 600 9.10 35.137 27.229 1.62 24.8 2.43 31.26 16.66 .08 *
* 800 7.20 34.973 27.391 2.37 34.6 2.39 32.45 19.29 .05 *
* 1000 6.45 34.997 27.513 3.09 44.4 2.47 30.12 19.87 .06 *
* .....

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MISSION CINECA - CHARCOT II STATION NUMERO 72
*****
* POSITION 16 27 W PROFONDEUR 52 METRES *
* 18 50 N DATE 17 AVRIL 1971 *
* HEURES DEBUT 12 H 30 *
* FIN 12 H 42 *
*****
METEO HEURE OBSERVATION
*****
* MER 4 * 12 H 00 *
* VENT NNW 6 NOEUDS * 12 H 00 *
* NEBULOSITE 6 * 12 H 00 *
* PRESSION ATM, 1008 * 12 H 00 *
* PRECIPITATION NON * 12 H 00 *
* TEMP, AIR-SEC 19,4 * 12 H 00 *
* HUMIDE 15,3 * 12 H 00 *
*****
DONNEES DE LA STATION HYDROLOGIE
*****
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
* 0 15,19 35,635 26,437 2,97 51,9 ,04 25,84 6,47 ,94 *
* 10 15,14 35,633 26,446 2,86 49,9 ,02 31,00 6,73 ,81 *
* 20 15,06 35,634 26,465 2,69 46,9 ,07 23,62 6,73 ,75 *
* 30 14,96 35,633 26,486 2,65 46,1 ,12 22,21 6,91 ,71 *
* 40 14,63 35,596 26,530 2,12 36,6 ,34 22,63 8,00 1,32 *
* 50 13,82 35,505 26,633 1,56 26,5 ,02 22,21 11,11 ,59 *
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MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 72
*****
* Z OPT PO4 NO3 SIO4 NH4 CHLA PHAEO ATP 14C VNO3 VNH4 RNO3 RNH4 NPART*
* 0 100 1,32 25,23 6,11 ,46 1,01 99,99 1,35 127,8 ,0975 ,0332 ,20296 ,06912 2,08*
* 4 50 1,40 23,98 6,18 ,48 ,75 99,99 1,65 129,3 ,0769 ,0334 ,22760 ,09888 2,96*
* 12 25 1,37 23,06 6,38 ,55 1,38 99,99 1,15 29,5 ,1190 ,0316 ,30004 ,07972 2,52*
* 21 10 1,42 23,28 6,46 ,80 ,96 99,99 1,80 22,8 ,0524 ,0322 ,10060 ,06184 1,92*
* 24 7 9,99 99,99 6,50 ,90 1,65 99,99 1,15 20,7 ,0083 ,0362 ,01004 ,04352 1,20*
* 34 3 9,99 99,99 6,81 ,87 1,95 99,99 99,999999,9 ,0063 ,0474 ,00756 ,05696 1,20*
* 44 1 1,55 24,21 8,08 ,82 1,05 99,99 ,70 3,3 ,0014 ,0163 ,00088 ,01048 ,64*
*****
BIOMASSE ZOOPLANCTONIQUE 9999 MG/M2
PRODUCTION INTEGREE 1889 MG/M2/JOUR
IRRADIATION 1645 J/CM2

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MISSION CINECA - CHARCOT II      STATION NUMERO 73
*.....*
* POSITION      16 27 W      PROFONDEUR      50 METRES *
*              18 50 N      DATE              17 AVRIL 1971 *
*              HEURES DEBUT 15 H 37 *
*              FIN        15 H 55 *
*.....*
* METEO              HEURE OBSERVATION
*.....*
* MER 3              * 16 H 00 *
* VENT NW 4 NOEUDS * 16 H 00 *
* NEBULOSITE /      * 16 H 00 *
* PRESSION ATM. 1005 * 16 H 00 *
* PRECIPITATION NON * 16 H 00 *
* TEMP. AIR-SEC 20.0 * 16 H 00 *
* HUMIDE 16.0 * 16 H 00 *
*.....*
* DONNEES DE LA STATION HYDROLOGIE
*.....*
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
*.....*
* 0 15.65 35.624 26.325 3.57 63.0 .03 25.08 5.95 .18 *
* 10 15.22 35.630 26.426 3.17 55.4 .24 26.33 5.95 .43 *
* 20 14.53 35.579 26.539 2.02 34.8 .07 21.88 7.06 .74 *
* 30 14.35 35.572 26.572 1.93 33.2 .22 20.83 7.39 1.35 *
* 40 13.83 35.501 26.628 1.59 27.0 .12 24.05 9.58 .49 *
* 48 13.76 35.490 26.634 1.52 25.8 .06 23.74 10.81 1.12 *
*.....*

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MISSION CINECA - CHARCOT II      STATION NUMERO 74
*.....*
* POSITION      16 27 W      PROFONDEUR      50 METRES *
*              18 50 N      DATE              17 AVRIL 1971 *
*              HEURES DEBUT 18 H 35 *
*              FIN        18 H 50 *
*.....*
* METEO              HEURE OBSERVATION
*.....*
* MER 3              * 16 H 00 *
* VENT NW 4 NOEUDS * 16 H 00 *
* NEBULOSITE /      * 16 H 00 *
* PRESSION ATM. 1005 * 16 H 00 *
* PRECIPITATION NON * 16 H 00 *
* TEMP. AIR-SEC 20.0 * 16 H 00 *
* HUMIDE 16.0 * 16 H 00 *
*.....*
* DONNEES DE LA STATION HYDROLOGIE
*.....*
* Z T S SIGMAT O2 O/O PO4 NO3 SIO4 NH4 *
*.....*
* 0 15.46 35.612 26.359 3.57 62.7 .04 25.35 5.50 .20 *
* 10 15.00 35.611 26.460 2.83 49.3 .11 27.95 5.65 .52 *
* 20 14.34 35.562 26.567 1.88 32.3 .11 30.96 6.85 1.48 *
* 30 14.21 35.560 26.593 1.88 32.2 .05 31.44 7.06 1.86 *
* 40 13.88 35.505 26.620 1.61 27.4 .23 32.43 8.49 .98 *
* 50 13.72 35.476 26.632 1.36 23.1 .10 28.77 12.23 1.06 *
*.....*

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MISSION CINECA - CHARCOT II STATION NUMERO 75

POSITION 16 27 W PROFONDEUR 50 METRES
 18 50 N DATE 17 AVRIL 1971
 HEURES DEBUT 21 H 39
 FIN 21 H 58

METEO HEURE OBSERVATION

MER 4 * 20 H 00 *
 VENT NW 5 NOEUDS * 20 H 00 *
 NEBULOSITE / * 20 H 00 *
 PRESSION ATM, 1006 * 20 H 00 *
 PRECIPITATION NON * 20 H 00 *
 TEMP, AIR-SEC 19.0 * 20 H 00 *
 HUMIDE 15.5 * 20 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.34	35.609	26.383	3.65	64.0	.12	28.77	7.91	.13
10	15.07	35.609	26.443	3.29	57.3	.03	31.44	8.17	.39
20	14.33	35.554	26.562	1.87	32.1	.00	30.47	9.78	1.10
30	14.05	35.524	26.599	1.74	29.7	.05	30.47	10.92	.82
40	13.99	35.525	26.613	1.84	31.3	.14	30.03	10.60	.93
48	13.72	35.483	26.637	1.60	27.1	.06	99.99	13.95	.57

MISSION CINECA - CHARCOT II STATION NUMERO 76

POSITION 16 27 W PROFONDEUR 45 METRES
 18 50 N DATE 18 AVRIL 1971
 HEURES DEBUT 01 H 00
 FIN 01 H 20

METEO HEURE OBSERVATION

MER 4 * 24 H 00 *
 VENT N 6 NOEUDS * 24 H 00 *
 NEBULOSITE 6 * 24 H 00 *
 PRESSION ATM, 1007 * 24 H 00 *
 PRECIPITATION NON * 24 H 00 *
 TEMP, AIR-SEC 19.0 * 24 H 00 *
 HUMIDE 15.5 * 24 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.24	35.605	26.403	3.59	62.8	1.64	24.76	7.52	.50
10	15.26	35.615	26.406	3.54	62.0	1.70	24.50	10.08	.41
20	15.27	35.627	26.413	3.42	59.9	1.96	24.28	7.56	1.06
30	14.82	35.603	26.494	2.58	44.7	1.90	26.43	8.53	.70
40	14.26	35.543	26.569	1.95	33.4	1.56	27.95	9.98	1.50

MISSION GINECA - CHARCOT II STATION NUMERO 77

```

*.....*
* POSITION 16 28 W PROFONDEUR 52 METRES *
* 18 50 N DATE 18 AVRIL 1971 *
* HEURES DEBUT 04 H 20 *
* FIN 04 H 35 *
*.....*
* METEO HEURE OBSERVATION *
*.....*
* MER 3 * 04 H 00 *
* VENT NNE 5 NOEUDS * 04 H 00 *
* NEBULOSITE / * 04 H 00 *
* PRESSION ATM. 1007 * 04 H 00 *
* PRECIPITATION NON * 04 H 00 *
* TEMP, AIR-SEC 20.0 * 04 H 00 *
* HUMIDE 17.0 * 04 H 00 *
*.....*
* DONNEES DE LA STATION HYDROLOGIE *
*.....*
* Z T S SIGMAT O2 O/O P04 NO3 S104 NH4 *
*.....*
* 0 15.26 35.607 26.400 3.65 63.9 1.47 22.30 7.31 .18 *
* 10 15.27 35.609 26.399 3.57 62.5 1.58 21.35 7.31 .25 *
* 20 14.92 35.611 26.478 2.68 46.6 1.96 22.94 8.08 .85 *
* 30 14.19 35.554 26.592 1.88 32.2 1.86 24.76 10.08 1.28 *
* 40 13.91 35.501 26.611 1.67 28.4 2.03 26.06 11.48 1.16 *
* 50 13.71 35.470 26.629 1.35 22.8 1.57 25.71 16.79 .89 *
*.....*

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MISSION GINECA - CHARCOT II STATION NUMERO 78

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*.....*
* POSITION 16 27 W PROFONDEUR 52 METRES *
* 18 50 N DATE 18 AVRIL 1971 *
* HEURES DEBUT 06 H 57 *
* FIN 07 H 15 *
*.....*
* METEO HEURE OBSERVATION *
*.....*
* MER 3 * 04 H 00 *
* VENT NNE 5 NOEUDS * 04 H 00 *
* NEBULOSITE / * 04 H 00 *
* PRESSION ATM. 1007 * 04 H 00 *
* PRECIPITATION NON * 04 H 00 *
* TEMP, AIR-SEC 20.0 * 04 H 00 *
* HUMIDE 17.0 * 04 H 00 *
*.....*
* DONNEES DE LA STATION HYDROLOGIE *
*.....*
* Z T S SIGMAT O2 O/O P04 NO3 S104 NH4 *
*.....*
* 0 15.14 35.614 26.432 3.45 60.2 .92 23.25 7.74 .59 *
* 10 15.00 35.610 26.460 2.81 49.0 1.46 25.46 8.17 .78 *
* 20 14.12 35.529 26.588 1.75 29.9 1.68 31.01 12.66 1.10 *
* 30 14.02 35.521 26.603 1.74 29.6 1.79 31.01 11.37 1.12 *
* 40 13.86 35.498 26.619 1.62 27.5 1.85 33.01 11.82 .74 *
* 50 13.72 35.482 26.636 1.34 22.7 1.94 31.50 17.48 1.20 *
*.....*

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MISSION CINECA - CHARCOT II STATION NUMERO 79

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*****
* POSITION 16 27 W PROFONDEUR 50 METRES *
* 18 50 N DATE 18 AVRIL 1971 *
* HEURES DEBUT 10 H 09 *
* FIN 10 H 29 *
*****
METEO HEURE OBSERVATION
* MER 3 * 12 H 00 *
* VENT NW 4 NOEUDS * 12 H 00 *
* NEBULOSITE 8 * 12 H 00 *
* PRESSION ATM. 1009 * 12 H 00 *
* PRECIPITATION NON * 12 H 00 *
* TEMP. AIR-SEC 19.0 * 12 H 00 *
* HUMIDE 15.7 * 12 H 00 *
*****
DONNEES DE LA STATION HYDROLOGIE
*****
* Z T S SIGMAT O2 O/D P04 NO3 SIO4 NH4 *
* 0 15.31 35.616 26.395 3.95 69.2 1.14 24.35 5.95 .16 *
* 10 15.14 35.615 26.433 3.57 62.3 1.26 24.93 6.42 .32 *
* 20 14.42 35.562 26.549 2.17 37.3 1.54 34.61 9.00 1.08 *
* 30 13.92 35.504 26.611 1.67 28.4 1.63 36.65 10.49 .68 *
* 40 13.94 35.510 26.612 1.68 28.6 1.69 36.12 10.60 1.22 *
* 48 13.85 35.508 26.633 1.75 29.4 1.95 36.65 12.29 .61 *
*****

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MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 79

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*****
* Z OPT P04 NO3 SIO4 NH4 CHLA PHAEO ATP 14C YNO3 VNH4 RNO3 RNH4 NPART*
* 0 100 1.36 22.65 6.18 .15 1.95 99.99 99.99 370.2 9.9999 9.9999 9.99999 9.99999 99.99*
* 3 50 1.32 22.26 6.26 .18 3.03 99.99 99.99 302.7 9.9999 9.9999 9.99999 9.99999 99.99*
* 5 25 1.32 22.10 6.34 .11 3.42 99.99 99.99 280.7 9.9999 9.9999 9.99999 9.99999 99.99*
* 13 10 1.55 21.92 6.26 .13 5.31 99.99 99.99 189.3 9.9999 9.9999 9.99999 9.99999 99.99*
* 34 1 1.70 27.96 8.17 .52 4.80 99.99 99.99 27.7 9.9999 9.9999 9.99999 9.99999 99.99*
*****
BIOMASSE ZOOPLANCTONIQUE 9999 MG/M2
PRODUCTION INTEGREE 5752 MG/M2/JOUR
IRRADIATION 2029 J/CM2

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MISSION CINECA - CHARCOT II STATION NUMERO 80

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*****
* POSITION 16 27 W PROFONDEUR 50 METRES *
* 18 50 N DATE 18 AVRIL 1971 *
* HEURES DEBUT 13 H 46 *
* FIN 14 H 03 *
*****
METEO HEURE OBSERVATION
* MER 3 * 12 H 00 *
* VENT NW 4 NOEUDS * 12 H 00 *
* NEBULOSITE 8 * 12 H 00 *
* PRESSION ATM. 1009 * 12 H 00 *
* PRECIPITATION NON * 12 H 00 *
* TEMP. AIR-SEC 19.0 * 12 H 00 *
* HUMIDE 15.7 * 12 H 00 *
*****
DONNEES DE LA STATION HYDROLOGIE
*****
* Z T S SIGMAT O2 O/D P04 NO3 SIO4 NH4 *
* 0 15.60 35.621 26.334 4.64 81.8 1.15 16.36 5.36 .56 *
* 10 15.14 35.614 26.452 3.72 64.9 1.41 21.92 6.50 .69 *
* 20 14.93 35.633 26.493 2.76 48.0 1.59 25.99 7.91 .87 *
* 30 13.92 35.622 26.702 2.62 44.6 1.67 26.62 8.44 .61 *
* 40 14.51 35.585 26.548 1.99 34.3 1.82 28.94 8.81 1.45 *
* 48 14.00 35.510 26.599 2.01 34.2 1.91 31.19 10.59 .51 *
*****

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MISSION GINECA - CHARCOT II STATION NUMERO 81

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*.....*
* POSITION      16 28 W      PROFONDEUR      51 METRES
*              18 50 N      DATE              18 AVRIL 1971
*              HEURES DEBUT  16 H 24
*              FIN          16 H 38
*.....*
METEO              HEURE OBSERVATION
*.....*
MER 3              * 16 H 00
VENT NNW 5 NOEUDS * 16 H 00
NEBULOSITE /      * 16 H 00
PRESSION ATM, 1007 * 16 H 00
PRECIPITATION NON * 16 H 00
TEMP, AIR-SEC 20,0 * 16 H 00
HUMIDE 15,0 * 16 H 00
*.....*
DONNEES DE LA STATION HYDROLOGIE
*.....*
Z      T      S      SIGMAT  O2      O/O      P04      N03      S104      NH4
*.....*
0  15.68  35.630  26.320  4.86  85.9  1.25  3.31  5.36  .35
*
10 15.34  35.621  26.393  4.44  77.9  1.53  3.98  5.00  .27
*
20 15.11  35.624  26.446  3.44  60.0  1.71  4.49  6.90  .91
*
30 14.85  35.627  26.506  2.72  47.2  1.78  5.72  8.17  1.28
*
40 14.32  35.558  26.568  1.90  32.6  1.84  6.53  9.38  .94
*
50 13.93  35.444  26.563  1.78  30.3  2.21  7.46  10.70 .63
*.....*

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MISSION GINECA - CHARCOT II STATION NUMERO 82

```

*.....*
* POSITION      16 28 W      PROFONDEUR      51 METRES
*              18 50 N      DATE              18 AVRIL 1971
*              HEURES DEBUT  19 H 03
*              FIN          19 H 17
*.....*
METEO              HEURE OBSERVATION
*.....*
MER 3              * 16 H 00
VENT NNW 5 NOEUDS * 16 H 00
NEBULOSITE /      * 16 H 00
PRESSION ATM, 1007 * 16 H 00
PRECIPITATION NON * 16 H 00
TEMP, AIR-SEC 20,0 * 16 H 00
HUMIDE 15,0 * 16 H 00
*.....*
DONNEES DE LA STATION HYDROLOGIE
*.....*
Z      T      S      SIGMAT  O2      O/O      P04      N03      S104      NH4
*.....*
0  15.56  35.615  26.338  4.75  83.6  1.63  4.85  5.43  .20
*
10 15.34  35.620  26.392  4.01  70.4  1.65  4.74  6.26  .42
*
20 14.78  35.623  26.518  2.25  39.0  2.00  6.56  8.62  1.09
*
30 14.29  35.553  26.570  1.75  30.0  2.64  7.38  9.48  .80
*
40 14.18  35.532  26.578  1.72  29.4  2.39  7.34  10.08 .87
*
50 13.95  35.517  26.615  1.65  28.1  2.27  8.09  10.92 .56
*.....*

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MISSION CINECA -CHARCOT II STATION NUMERO 83
 * POSITION 16 35 W PROFONDEUR 370 METRES *
 * 18 44 N DATE 19 AVRIL 1971 *
 * HEURES DEBUT 06 H 42 *
 * FIN 07 H 10 *

METEO HEURE OBSERVATION
 * MER 0 *
 * VENT NOEUDS *
 * NEBULOSITE U *
 * PRESSION ATM, 0 *
 * PRECIPITATION *
 * TEMP, AIR-SEC ,0 *
 * HUMIDE ,0 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.03	35.042	26.252	4.27	76.0	1.65	5.06	2.82	1.00
10	15.59	35.615	26.332	3.50	61.7	1.60	5.09	4.37	1.37
20	15.12	35.587	26.415	2.80	48.9	1.42	6.00	6.04	1.72
30	15.02	35.589	26.439	2.69	46.9	1.72	5.86	6.19	1.41
50	15.02	35.584	26.435	2.65	46.2	1.72	5.86	6.43	1.43
75	14.07	35.494	26.572	.42	7.2	1.84	7.79	9.62	.45
100	13.71	35.459	26.620	1.57	26.6	1.98	7.87	10.75	.31
150	13.58	35.424	26.620	1.47	24.8	2.06	8.57	11.19	.37
200	13.39	35.415	26.653	1.48	24.9	2.08	10.05	11.30	.08
250	13.17	35.428	26.708	1.46	24.4	2.14	9.81	13.48	.02
300	12.82	35.394	26.752	1.45	24.1	2.10	10.97	14.15	.00
350	11.76	35.324	26.905	1.47	23.9	2.22	12.05	15.90	.06

MISSION CINECA -CHARLOT II DONNEES BILOGIQUES DE LA STATION NUMERO 83

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAE0	ATP	14C	VN03	VNH4	RNO3	RNH4	NPART
0	0	9.99	99.99	99.99	9.99	2.40	99.99	3.40	101.3	9.9999	9.9999	9.99999	9.99999	99.99*
4	0	9.99	99.99	99.99	9.99	3.15	99.99	2.00	159.2	9.9999	9.9999	9.99999	9.99999	99.99*
10	0	9.99	99.99	99.99	9.99	2.10	99.99	1.50	29.4	9.9999	9.9999	9.99999	9.99999	99.99*
17	0	9.99	99.99	99.99	9.99	1.95	99.99	.90	17.8	9.9999	9.9999	9.99999	9.99999	99.99*
34	0	9.99	99.99	99.99	9.99	1.11	99.99	.75	10.4	9.9999	9.9999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANKTONIQUE 23890 MG/M2
 PRODUCTION INTEGREE 1577 MG/M2/JOUR
 IRRADIATION 1906 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 84
 * POSITION 16 35 W PROFONDEUR 430 METRES *
 * 18 44 N DATE 19 AVRIL 1971 *
 * HEURES DEBUT 17 H 08 *
 * FIN 17 H 35 *

METEO HEURE OBSERVATION
 * MER 3 * 16 H 00 *
 * VENT NNW 5 NOEUDS * 16 H 00 *
 * NEBULOSITE 8 * 16 H 00 *
 * PRESSION ATM, 1008 * 16 H 00 *
 * PRECIPITATION NON * 16 H 00 *
 * TEMP, AIR-SEC 20.0 * 16 H 00 *
 * HUMIDE 16.0 * 16 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16.13	35.664	26.246	4.18	74.5	1.39	8.27	99.99	.56
10	15.68	35.639	26.330	3.57	63.1	1.77	11.90	99.99	.79
20	15.40	35.620	26.378	3.14	55.1	1.94	11.89	99.99	.92
30	13.33	35.609	26.386	3.03	53.2	2.03	13.80	99.99	.88
50	15.01	35.580	26.434	2.69	46.9	2.30	13.64	99.99	.92
75	14.55	35.537	26.502	2.11	36.4	2.03	26.21	99.99	.98
100	13.88	35.473	26.596	1.60	27.2	1.97	28.90	99.99	.35
150	13.62	35.441	26.625	1.49	25.2	2.25	31.13	99.99	.15
200	13.47	35.419	26.639	1.45	24.4	2.28	29.28	8.90	.19
250	12.62	35.383	26.784	1.45	24.0	2.32	29.89	10.92	.10
300	12.14	35.341	26.845	1.44	23.6	2.35	30.05	11.37	.08
400	10.31	35.209	27.080	1.59	25.0	2.30	32.51	13.29	.12

MISSION CINECA - CHARLOT II STATION NUMERO 85

POSITION 16 35 W PROFONDEUR 500 METRES
 18 44 N DATE 19 AVRIL 1971
 HEURES DEBUT 23 H 30
 FIN 00 H 25

METEO HEURE OBSERVATION

MER 3 * 24 H 00
 VENT NNW 5 NOEUDS * 24 H 00
 NEBULOSITE 8 * 24 H 00
 PRESSION ATM. 1009 * 24 H 00
 PRECIPITATION NON * 24 H 00
 TEMP. AIR-SEC 19.0 * 24 H 00
 HUMIDE 15.7 * 24 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.65	35.630	26.330	3.59	63.3	1.78	21.78	4.86	1.02
10	15.52	35.624	26.354	3.40	59.9	1.75	22.05	5.07	1.00
20	15.14	35.609	26.428	3.00	52.4	1.86	23.44	5.58	1.31
30	14.82	35.569	26.468	2.61	45.2	2.35	24.28	6.57	1.18
50	14.54	35.545	26.510	2.26	39.0	2.37	27.34	7.73	1.02
75	13.83	35.472	26.605	1.78	30.2	2.41	28.72	10.70	.03
100	13.68	35.458	26.626	1.56	26.4	2.43	28.72	10.39	.18
150	13.59	35.445	26.635	1.60	27.0	2.47	28.79	11.82	.21
200	13.51	35.439	26.647	1.49	25.1	2.52	29.28	12.17	.15
250	13.37	35.434	26.672	1.55	26.1	2.68	29.09	12.54	.01
300	12.67	35.394	26.782	1.53	25.3	2.56	29.85	14.22	.13
400	12.28	35.356	26.830	1.50	24.6	2.81	30.90	15.52	.09

MISSION CINECA - CHARCOT II STATION NUMERO 86

POSITION 16 35 W PROFONDEUR 490 METRES
 18 44 N DATE 20 AVRIL 1971
 HEURES DEBUT 05 H 36
 FIN 06 H 10

METEO HEURE OBSERVATION

MER 4 * 04 H 00
 VENT NNW 5 NOEUDS * 04 H 00
 NEBULOSITE 5 * 04 H 00
 PRESSION ATM. 1007 * 04 H 00
 PRECIPITATION NON * 04 H 00
 TEMP. AIR-SEC 18.0 * 04 H 00
 HUMIDE 15.0 * 04 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.85	35.658	26.306	4.05	71.8	1.14	21.35	3.49	1.03
10	15.86	35.660	26.305	4.03	71.5	1.10	20.43	3.46	.63
20	15.83	35.655	26.308	3.96	70.2	1.14	20.54	3.65	1.20
30	15.63	35.642	26.343	3.71	65.4	1.48	21.86	4.04	.58
50	15.29	35.602	26.389	3.14	55.0	1.79	24.69	5.14	1.00
75	14.26	35.544	26.570	2.53	43.3	2.00	28.69	7.73	.55
100	9.99	35.469	9.999	1.43	99.9	2.23	31.75	11.14	.00
150	13.64	35.454	26.631	1.45	24.5	1.91	32.42	12.05	.00
200	13.52	35.442	26.647	1.42	23.9	2.22	33.33	11.82	.00
250	12.90	35.406	26.746	1.40	23.3	2.15	33.79	13.68	.04
300	12.26	35.356	26.833	1.42	23.3	2.11	33.56	14.36	.25
400	10.46	35.223	27.065	1.53	24.1	2.35	36.03	17.65	.33

MISSION CINECA - CHARCOT II STATION NUMERO 87

POSITION 16 35 W PROFONDEUR 420 METRES
 18 45 N DATE 20 AVRIL 1971
 HEURES DEBUT 13 H 15
 FIN 13 H 52

METEO HEURE OBSERVATION
 MER 4 * 12 H 00
 VENT NNW 5 NOEUDS* 12 H 00
 NEBULOSITE 8 * 12 H 00
 PRESSION ATM, 1009 * 12 H 00
 PRECIPITATION NON * 12 H 00
 TEMP, AIR-SEC 19,0 * 12 H 00
 HUMIDE 15,8 * 12 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,69	35,681	26,360	3,53	62,4	1,61	23,74	5,88	9,99
10	15,56	35,689	26,395	3,50	61,7	1,69	23,87	5,95	9,99
20	15,22	35,639	26,433	2,95	51,6	1,75	25,70	6,11	9,99
30	14,79	35,583	26,465	2,48	43,0	1,86	27,21	6,65	9,99
50	14,67	35,557	26,491	2,25	38,9	2,18	28,70	7,31	9,99
75	13,93	35,488	26,597	1,58	26,9	2,05	29,92	10,39	9,99
100	13,72	35,468	26,625	1,41	23,9	1,94	30,50	11,48	9,99
150	13,63	35,458	26,636	1,43	24,2	1,82	30,50	11,82	9,99
200	13,49	35,449	26,658	1,37	23,1	2,06	31,65	12,66	9,99
250	12,99	35,393	26,717	1,35	22,5	2,21	30,54	12,29	9,99
300	12,03	35,342	26,867	1,44	23,5	2,26	33,10	15,37	9,99
400	10,71	35,240	27,034	1,50	23,8	2,46	34,76	17,30	9,99

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 87

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	.81	99,99	3,91	.74	1,53	99,99	99,99	21,3	9,9999	9,9999	9,99999	9,99999	99,99*
4	50	.88	20,65	4,21	.70	1,53	99,99	99,99	121,0	.0944	.1811	.14360	.27536	1,52*
10	25	.83	21,09	4,51	.80	1,50	99,99	99,99	137,2	9,9999	9,9999	9,99999	9,99999	99,99*
17	10	.86	21,09	5,00	.88	2,22	99,99	99,99	76,4	9,9999	9,9999	9,99999	9,99999	99,99*
32	1	.85	23,34	5,14	.90	1,86	99,99	99,99	14,1	9,9999	9,9999	9,99999	9,99999	99,99*
50	0	9,99	99,99	99,99	9,99	1,98	99,99	99,999999,9	9,9999	9,9999	9,99999	9,99999	9,99999	99,99*
75	0	9,99	99,99	99,99	9,99	1,65	99,99	99,999999,9	9,9999	9,9999	9,99999	9,99999	9,99999	99,99*

BIOMASSE ZOOPLANCTONIQUE 9999 MG/M2
 PRODUCTION INTEGREE 2486 MG/M2/JOUR
 IRRADIATION 2029 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 88

POSITION 16 35 W PROFONDEUR 460 METRES
 18 45 N DATE 20 AVRIL 1971
 HEURES DEBUT 18 H 13
 FIN 18 H 44

METEO HEURE OBSERVATION
 MER 4 * 20 H 00
 VENT NW 5 NOEUDS* 20 H 00
 NEBULOSITE 0 * 20 H 00
 PRESSION ATM, 1007 * 20 H 00
 PRECIPITATION NON * 20 H 00
 TEMP, AIR-SEC 17,5 * 20 H 00
 HUMIDE 16,0 * 20 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,84	35,669	26,316	3,85	68,3	.79	20,21	4,76	.24
10	15,81	35,669	26,323	3,75	66,4	.81	20,32	4,65	.44
20	15,30	35,624	26,404	3,09	54,1	.86	21,73	4,65	.68
30	15,23	35,619	26,416	3,04	53,1	.87	21,47	4,65	.77
50	15,25	35,668	26,449	3,14	55,0	.87	21,09	5,43	.53
75	14,56	35,552	26,511	2,10	36,2	.95	25,11	6,18	.62
100	13,99	35,500	26,593	1,45	24,7	.98	28,01	8,44	.63
150	13,71	35,463	26,624	1,39	23,5	1,05	28,86	9,48	.33
200	13,59	35,460	26,646	1,35	22,8	1,04	29,21	9,88	.07
250	13,11	35,412	26,708	1,38	23,1	1,06	29,56	9,58	.04
300	12,22	35,360	26,844	1,39	22,8	1,10	29,74	11,25	.07
400	10,76	35,250	27,032	1,47	23,3	1,13	32,20	12,54	.09

MISSION CINECA - CHARCOT II				STATION NUMERO 89					
POSITION		17 08 W	PROFONDEUR		2200 METRES				
		18 50 N	DATE		21 AVRIL 1971				
			HEURES	DEBUT	06 H 10				
				FIN	08 H 00				
METEO			HEURE OBSERVATION						
MER	5	*	08 H 00						
VENT	N 8	NOEUDS*	08 H 00						
NEBULOSITE	U	*	08 H 00						
PRESSION ATM.	1011	*	08 H 00						
PRECIPITATION	NON	*	08 H 00						
TEMP, AIR-SEC	18,0	*	08 H 00						
	HUMIDE	17,0 *	08 H 00						
DONNEES DE LA STATION HYDROLOGIE									
Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	17,25	35,627	25,953	5,10	92,9	,62	13,73	1,02	,47
10	17,25	35,634	25,958	5,07	92,5	,66	14,63	,87	,38
20	17,22	35,631	25,963	5,05	92,0	,67	14,63	,92	,63
30	16,98	35,622	26,014	4,95	89,7	,69	15,33	1,02	,82
50	16,08	35,579	26,192	4,42	78,6	,80	17,60	1,62	2,28
75	14,68	35,533	26,471	1,06	18,3	1,02	31,98	7,64	,09
100	13,82	35,435	26,579	1,30	22,1	1,03	31,54	8,26	,09
150	13,04	35,354	26,677	1,47	24,5	1,05	30,71	9,38	,17
200	12,46	35,303	26,753	1,61	26,5	1,06	31,75	9,78	,24
250	12,18	35,332	26,830	1,38	22,6	1,05	33,79	10,81	,19
300	11,68	35,298	26,900	1,27	20,6	1,06	35,26	11,71	,13
400	10,97	35,262	27,004	1,21	19,3	1,14	36,57	12,29	,26
500	10,17	35,211	27,106	1,15	18,0	1,21	39,14	14,36	,13
600	9,06	35,108	27,213	1,45	22,1	1,19	39,75	16,79	,06
800	7,35	34,952	27,352	1,98	29,0	1,32	40,89	19,75	,04
1000	6,44	34,951	27,477	2,67	38,4	1,25	40,70	20,81	,20
1200	5,78	34,979	27,586	3,30	46,7	1,12	35,00	21,04	,09
1500	4,66	34,986	27,725	4,24	58,4	1,04	30,10	21,26	,26
2000	3,80	34,959	27,796	5,05	68,2	1,06	27,21	22,22	,11

MISSION CINECA - CHARCOT II				STATION NUMERO 90					
POSITION		16 56 W	PROFONDEUR		1550 METRES				
		18 35 N	DATE		21 AVRIL 1971				
			HEURES	DEBUT	19 H 00				
				FIN	19 H 52				
METEO			HEURE OBSERVATION						
MER	5	*	20 H 00						
VENT	NNW 5	NOEUDS*	20 H 00						
NEBULOSITE	U	*	20 H 00						
PRESSION ATM.	1010	*	20 H 00						
PRECIPITATION	NON	*	20 H 00						
TEMP, AIR-SEC	18,0	*	20 H 00						
	HUMIDE	18,0 *	20 H 00						
DONNEES DE LA STATION HYDROLOGIE									
Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,35	35,621	26,713	5,28	94,5	,53	11,24	,00	1,60
10	16,22	35,616	26,740	4,98	88,9	,60	12,30	,00	1,52
20	16,08	35,611	26,768	4,69	83,5	,65	13,71	,00	2,42
30	15,12	35,526	26,919	3,74	65,3	,81	16,91	,55	2,57
50	14,96	36,164	27,466	3,47	60,6	,86	18,09	1,46	2,24
75	14,62	35,501	27,009	2,91	50,3	,95	22,70	3,84	1,67
100	14,40	35,473	27,034	2,53	43,5	1,02	23,81	5,43	1,19
150	13,72	35,399	27,120	1,95	33,0	1,10	26,59	8,53	,09
200	13,28	35,360	27,180	1,78	29,9	1,07	25,99	9,58	,00
250	12,69	35,351	27,293	1,66	27,5	1,10	26,59	10,18	,00
300	12,71	35,405	27,332	1,67	27,6	1,12	26,59	9,88	,38
400	11,56	35,322	27,490	1,35	21,8	1,26	29,98	11,82	,03
500	10,54	35,247	27,617	1,25	19,7	1,26	31,28	14,64	,38
600	9,68	35,179	27,713	1,55	23,7	1,29	32,08	16,14	,16
800	7,64	34,922	27,829	2,24	33,1	1,38	32,72	19,34	,06
1000	6,38	34,978	28,052	2,82	40,5	1,37	31,08	21,73	,09

MISSION CINECA - CHARCOT II STATION NUMERO 91

POSITION 16 24 W PROFONDEUR 52 METRES
 18 40 N DATE 22 AVRIL 1971
 HEURES DEBUT 09 H 22
 FIN 09 H 40

METEO HEURE OBSERVATION

MER 5 * 08 H 00
 VENT NNE 5 NOEUDS* 08 H 00
 NEBULOSITE 2 * 08 H 00
 PRESSION ATM, 1015 * 08 H 00
 PRECIPITATION NON * 08 H 00
 TEMP, AIR-SEC 17,0 * 08 H 00
 HUMIDE 14,5 * 08 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SiO4	NH4
0	14,45	35,462	27,031	1,59	27,4	1,85	33,79	9,58	,17
10	14,47	35,508	27,047	1,49	25,6	1,93	35,74	9,48	,23
20	14,40	35,511	27,065	1,71	29,4	1,91	31,18	9,48	,53
30	13,72	35,438	27,151	2,57	43,5	1,76	26,18	10,18	,53
40	13,56	35,411	27,163	2,82	47,6	1,71	27,71	11,46	,69
45	13,52	35,410	27,171	2,69	45,4	1,75	29,32	11,59	,32

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 91

Z	OPT	PO4	NO3	SiO4	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	1,84	35,42	9,28	,58	,66	99,99	,35	43,3	,0185	,0375	,03644	,07352	1,96*
5	50	1,84	99,99	9,19	,56	,51	99,99	,25	1,1	,0417	,0600	,07676	,11048	1,84*
12	25	1,85	34,93	9,48	,51	1,20	99,99	,27	53,6	,0370	,0906	,06524	,15948	1,76*
18	10	1,82	36,41	9,48	,56	1,05	99,99	1,05	46,5	,0118	,0821	,02648	,15116	1,84*
21	7	1,85	8,27	9,38	,68	,60	99,99	99,99	33,4	,0011	,0664	,00132	,14876	2,24*
29	3	1,92	37,46	9,48	,76	99,99	99,99	99,99	12,8	,0022	,0447	,00216	,05184	1,16*
40	1	1,96	36,94	10,60	,24	,00	99,99	1,00	8,5	9,9999	,0084	9,99999	,00812	,96*

BIOMASSE ZOOPLANKTONIQUE 11990 MG/M2
 PRODUCTION INTEGREE 1024 MG/M2/JOUR
 IRRADIATION 2357 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 92

POSITION 16 23 W PROFONDEUR 43 METRES
 18 40 N DATE 23 AVRIL 1971
 HEURES DEBUT 10 H 55
 FIN 11 H 15

METEO HEURE OBSERVATION

MER 5 * 12 H 00
 VENT NNE 4 NOEUDS* 12 H 00
 NEBULOSITE 0 * 12 H 00
 PRESSION ATM, 1015 * 12 H 00
 PRECIPITATION NON * 12 H 00
 TEMP, AIR-SEC 19,0 * 12 H 00
 HUMIDE 14,7 * 12 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/C	PO4	NO3	SiO4	NH4
0	14,67	35,502	26,999	3,12	53,9	1,66	25,60	10,18	,37
10	14,53	35,505	27,032	2,90	50,0	1,75	25,98	10,18	,44
20	14,41	35,509	27,061	2,79	47,9	1,68	24,65	10,18	,40
30	14,37	35,515	27,075	2,56	44,0	1,74	26,75	10,18	,50
40	13,65	35,435	27,164	,65	11,0	1,88	29,74	11,59	,61

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 92

Z	OPT	PO4	NO3	SiO4	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	9,99	99,99	99,99	9,99	,75	99,99	99,99	63,8	9,9999	9,9999	9,99999	9,99999	99,99*
6	50	1,56	31,33	10,13	,36	,39	99,99	99,99	68,4	9,9999	,2266	9,99999	,34448	1,52*
14	0	9,99	99,99	99,99	9,99	,75	99,99	99,99	75,4	9,9999	9,9999	9,99999	9,99999	99,99*
18	0	9,99	99,99	99,99	9,99	,54	99,99	99,99	58,6	9,9999	9,9999	9,99999	9,99999	99,99*
37	0	9,99	99,99	99,99	9,99	,87	99,99	99,99	16,2	9,9999	9,9999	9,99999	9,99999	99,99*

BIOMASSE ZOOPLANKTONIQUE 9999 MG/M2
 PRODUCTION INTEGREE 2009 MG/M2/JOUR
 IRRADIATION 2352 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 93

POSITION 16 40 W PROFONDEUR 380 METRES
 18 37 N DATE 24 AVRIL 1971
 HEURES DEBUT 12 H 10
 FIN 12 H 37

METEO HEURE OBSERVATION

MER 3 16 H 00
 VENT NNW 3 NOEUDS 16 H 00
 NEBULOSITE 0 16 H 00
 PRESSION ATM. 1015 16 H 00
 PRECIPITATION NON 16 H 00
 TEMP. AIR-SEC 20.0 16 H 00
 HUMIDE 16.0 16 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SiO4	NH4
0	15.87	35.624	26.275	4.16	73.8	1.48	23.51	8.89	1.21
10	15.75	35.630	26.307	4.19	74.2	1.54	23.33	8.76	1.07
20	15.68	35.630	26.323	4.07	71.9	1.55	23.51	8.62	1.70
30	15.64	35.630	26.332	4.12	72.7	1.57	24.57	8.49	1.61
50	15.64	35.627	26.330	4.00	70.5	1.59	23.84	8.09	1.89
75	15.02	35.599	26.447	3.49	60.8	1.59	25.22	9.16	2.38
100	14.14	35.476	26.543	2.01	34.4	1.86	36.07	17.43	1.64
150	13.51	35.410	26.624	1.34	22.6	1.98	38.41	22.73	.49
200	13.40	35.412	26.648	1.41	23.7	1.90	40.24	22.07	.40
250	12.98	35.390	26.717	1.32	22.0	1.97	39.41	23.64	.43
300	12.76	35.378	26.752	1.57	26.0	1.91	39.41	24.11	.46
350	11.66	35.326	26.925	1.61	26.1	1.87	40.24	28.17	.46

MISSION CINECA - CHARCOT II DONNEES BILOGIQUES DE LA STATION NUMERO 93

Z	OPT	PO4	NO3	SiO4	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	1.46	21.12	9.44	.96	2.19	99.99	.80	103.8	9.9999	.2071	9.99999	.58832	2.84*
8	50	1.41	21.12	9.30	1.05	2.19	99.99	.50	113.8	.1630	.1017	.48260	.30128	2.96*
13	25	1.44	20.80	9.44	1.08	2.16	99.99	1.00	112.7	9.9999	.1396	9.99999	.37972	2.72*
16	10	1.51	20.80	10.29	1.21	2.25	99.99	.75	100.6	9.9999	.1939	9.99999	.45760	2.36*
19	7	1.45	21.12	9.03	1.05	1.32	99.99	99.999999.9	9.9999	9.9999	.0730	9.99999	.17232	2.36*
24	3	1.52	20.18	8.89	1.33	99.99	99.99	99.999999.9	9.9999	9.9999	.0797	9.99999	.16596	2.08*
32	1	1.49	19.90	7.82	1.76	2.07	99.99	.55	10.0	9.9999	.0431	9.99999	.08808	2.04*
50	0	9.99	99.99	99.99	9.99	1.56	99.99	.3099999.9	9.9999	9.9999	9.99999	9.99999	9.99999	99.99*
75	0	9.99	99.99	99.99	9.99	.90	99.99	.2599999.9	9.9999	9.9999	9.99999	9.99999	9.99999	99.99*

BIOMASSE ZOOPLANKTONIQUE 9999 MG/M2
 PRODUCTION INTEGREE 2641 MG/M2/JOUR
 IRRADIATION 2541 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 193

POSITION 16 40 W PROFONDEUR 380 METRES
 18 37 N DATE 24 AVRIL 1971
 HEURES DEBUT 14 H 05
 FIN 14 H 39

METEO HEURE OBSERVATION

MER 3 16 H 00
 VENT NNW 3 NOEUDS 16 H 00
 NEBULOSITE 0 16 H 00
 PRESSION ATM. 1015 16 H 00
 PRECIPITATION NON 16 H 00
 TEMP. AIR-SEC 20.0 16 H 00
 HUMIDE 16.0 16 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SiO4	NH4
0	16.11	35.602	26.203	4.22	75.2	9.99	99.99	99.99	.78
10	15.72	35.605	26.294	4.11	72.6	9.99	99.99	99.99	.99
20	15.64	35.601	26.310	3.97	70.0	9.99	99.99	99.99	1.70
30	15.34	35.547	26.336	3.58	62.7	9.99	99.99	99.99	3.19
50	14.63	35.477	26.438	2.37	40.9	9.99	99.99	99.99	2.31
75	13.66	35.392	26.579	1.36	23.0	9.99	99.99	99.99	.09
100	13.48	35.380	26.607	1.33	22.4	9.99	99.99	99.99	.20
150	13.40	35.372	26.618	1.33	22.4	9.99	99.99	99.99	.06
200	13.36	35.372	26.620	1.33	22.4	9.99	99.99	99.99	.09
250	12.87	35.349	26.707	1.32	21.9	9.99	99.99	99.99	.29
300	12.47	35.332	26.774	1.37	22.6	9.99	99.99	99.99	.00
350	12.07	35.305	26.831	1.41	23.0	9.99	99.99	99.99	.00

MISSION CINECA - CHARCOT II STATION NUMERO 293

POSITION 16 40 W PROFONDEUR 380 METRES
 18 37 N DATE 24 AVRIL 1971
 HEURES DEBUT 16 H 05
 FIN 16 H 37

METEO HEURE OBSERVATION

MER 3 * 16 H 00 *
 VENT NNW 3 NOEUDS * 16 H 00 *
 NEBULOSITE 0 * 16 H 00 *
 PRESSION ATM. 1015 * 16 H 00 *
 PRECIPITATION NON * 16 H 00 *
 TEMP. AIR-SEC 20,0 * 16 H 00 *
 HUMIDE 16,0 * 16 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,45	35,616	26,135	4,28	76,8	9,99	99,99	99,99	,90
10	15,66	35,599	26,303	4,10	72,3	9,99	99,99	99,99	,90
20	15,60	35,586	26,307	4,03	71,1	9,99	99,99	99,99	1,39
30	15,42	35,565	26,331	3,82	67,0	9,99	99,99	99,99	2,38
50	14,71	35,492	26,432	2,49	43,1	9,99	99,99	99,99	1,99
75	13,75	35,398	26,569	1,59	23,5	9,99	99,99	99,99	,11
100	13,58	35,384	26,590	1,53	22,4	9,99	99,99	99,99	,00
150	13,43	35,373	26,612	1,55	22,7	9,99	99,99	99,99	,03
200	13,31	35,370	26,634	1,58	23,2	9,99	99,99	99,99	,09
250	12,28	35,340	26,817	1,54	22,0	9,99	99,99	99,99	,03
300	11,82	35,310	26,883	1,56	22,1	9,99	99,99	99,99	,26
350	11,36	35,278	26,944	1,55	21,7	9,99	99,99	99,99	,00

MISSION CINECA - CHARCOT II STATION NUMERO 393

POSITION 16 40 W PROFONDEUR 350 METRES
 18 37 N DATE 24 AVRIL 1971
 HEURES DEBUT 19 H 13
 FIN 19 H 40

METEO HEURE OBSERVATION

MER 3 * 16 H 00 *
 VENT NNW 3 NOEUDS * 16 H 00 *
 NEBULOSITE 0 * 16 H 00 *
 PRESSION ATM. 1015 * 16 H 00 *
 PRECIPITATION NON * 16 H 00 *
 TEMP. AIR-SEC 20,0 * 16 H 00 *
 HUMIDE 16,0 * 16 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,21	35,607	26,184	4,33	77,3	9,99	99,99	99,99	,72
10	15,62	35,596	26,310	4,07	71,8	9,99	99,99	99,99	,93
20	15,55	35,586	26,318	3,99	70,2	9,99	99,99	99,99	1,80
30	15,49	35,578	26,326	3,99	70,1	9,99	99,99	99,99	2,08
50	15,44	35,569	26,330	3,98	69,9	9,99	99,99	99,99	2,91
75	14,31	35,457	26,492	2,01	34,5	9,99	99,99	99,99	1,39
100	13,90	35,415	26,547	1,63	27,7	9,99	99,99	99,99	,46
150	13,54	35,384	26,598	,40	6,7	9,99	99,99	99,99	,00
200	13,40	35,374	26,619	1,43	24,0	9,99	99,99	99,99	,06
250	13,17	35,364	26,658	1,56	22,7	9,99	99,99	99,99	,09
300	12,65	35,340	26,744	1,33	22,0	9,99	99,99	99,99	,09
350	11,85	35,314	26,880	1,55	22,0	9,99	99,99	99,99	,00

MISSION CINECA - CHARCOT II STATION NUMERO 493

POSITION 16 40 W PROFONDEUR 350 METRES
 18 37 N DATE 24 AVRIL 1971
 HEURES DEBUT 21 H 07
 FIN 21 H 40

METEO HEURE OBSERVATION

MER 3 * 24 H 00 *
 VENT NNW 4 NOEUDS * 24 H 00 *
 NEBULOSITE 0 * 24 H 00 *
 PRESSION ATM. 1012 * 24 H 00 *
 PRECIPITATION NON * 24 H 00 *
 TEMP. AIR-SEC 19.0 * 24 H 00 *
 HUMIDE 16.3 * 24 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.82	35.584	26.256	4.15	73.5	9.99	99.99	99.99	1.48
10	15.60	35.578	26.301	3.97	70.0	9.99	99.99	99.99	1.80
20	15.55	35.577	26.311	3.96	69.7	9.99	99.99	99.99	2.08
30	15.54	35.578	26.314	3.91	68.8	9.99	99.99	99.99	1.89
50	15.25	35.532	26.344	3.53	61.7	9.99	99.99	99.99	3.22
75	14.63	35.473	26.435	2.69	46.5	9.99	99.99	99.99	2.15
100	9.99	35.443	9.999	2.33	99.9	9.99	99.99	99.99	1.18
150	13.51	35.371	26.594	1.61	27.2	9.99	99.99	99.99	.11
200	13.42	35.364	26.607	1.56	26.2	9.99	99.99	99.99	.09
250	13.29	35.363	26.633	1.46	24.5	9.99	99.99	99.99	.17
300	12.49	35.332	26.770	1.75	28.8	9.99	99.99	99.99	.23
350	11.62	35.288	26.903	1.56	25.2	9.99	99.99	99.99	.11

MISSION CINECA - CHARCOT II STATION NUMERO 593

POSITION 16 40 W PROFONDEUR 350 METRES
 18 37 N DATE 24 AVRIL 1971
 HEURES DEBUT 23 H 32
 FIN 0 H 12

METEO HEURE OBSERVATION

MER 3 * 24 H 00 *
 VENT NNW 4 NOEUDS * 24 H 00 *
 NEBULOSITE 0 * 24 H 00 *
 PRESSION ATM. 1012 * 24 H 00 *
 PRECIPITATION NON * 24 H 00 *
 TEMP. AIR-SEC 19.0 * 24 H 00 *
 HUMIDE 16.3 * 24 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15.92	35.597	26.243	4.27	75.7	9.99	99.99	99.99	.99
10	15.84	35.601	26.264	4.26	75.4	9.99	99.99	99.99	1.18
20	15.52	35.579	26.320	4.01	70.6	9.99	99.99	99.99	1.64
30	15.13	35.529	26.369	3.42	59.7	9.99	99.99	99.99	2.48
40	14.87	9.999	9.999	9.99	99.9	9.99	99.99	99.99	2.31
50	14.73	35.485	26.423	2.87	49.7	9.99	99.99	99.99	1.89
60	14.24	9.999	9.999	9.99	99.9	9.99	99.99	99.99	1.08
75	13.72	35.385	26.561	1.52	25.7	9.99	99.99	99.99	.23
100	13.52	35.385	26.603	1.50	25.3	9.99	99.99	99.99	.20
150	13.42	35.369	26.611	1.46	24.5	9.99	99.99	99.99	.20
200	13.37	35.371	26.623	1.45	24.4	9.99	99.99	99.99	9.99
250	13.10	35.360	26.670	1.45	24.2	9.99	99.99	99.99	9.99
300	12.49	35.339	26.775	1.90	31.3	9.99	99.99	99.99	9.99
350	11.97	35.310	26.854	1.52	24.8	9.99	99.99	99.99	9.99

MISSION CINECA - CHARCOT II STATION NUMERO 693

POSITION 16 40 W PROFONDEUR 350 METRES
 18 37 N DATE 25 AVRIL 1971
 HEURES DEBUT 2 H 00
 FIN 2 H 32

METEO HEURE OBSERVATION

MER 3 4 H 00
 VENT NNW 4 NOEUDS 4 H 00
 NEBULOSITE U 4 H 00
 PRESSION ATM. 1011 4 H 00
 PRECIPITATION NON 04 H 00
 TEMP. AIR-SEC 18,6 04 H 00
 HUMIDE 16,0 04 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,85	35,597	26,259	4,19	74,3	9,99	99,99	99,99	1,76
10	15,83	35,597	26,263	4,26	75,4	9,99	99,99	99,99	1,76
20	15,77	35,593	26,274	4,10	73,6	9,99	99,99	99,99	1,42
30	15,47	35,574	26,327	1,95	34,3	9,99	99,99	99,99	1,92
40	15,24	9,999	9,999	9,99	99,9	9,99	99,99	99,99	2,88
50	14,94	35,523	26,406	3,18	55,3	9,99	99,99	99,99	1,89
60	14,41	9,999	9,999	9,99	99,9	9,99	99,99	99,99	1,21
75	13,73	35,463	26,619	1,01	17,1	9,99	99,99	99,99	,81
100	13,48	35,365	26,596	1,45	24,4	9,99	99,99	99,99	,09
150	13,44	35,390	26,623	1,49	25,1	9,99	99,99	99,99	,14
200	13,30	35,362	26,630	1,41	23,7	9,99	99,99	99,99	9,99
250	12,98	35,350	26,686	1,49	24,8	9,99	99,99	99,99	9,99
300	12,19	35,316	26,816	1,82	29,8	9,99	99,99	99,99	9,99
350	11,75	35,289	26,880	1,40	22,7	9,99	99,99	99,99	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 793

POSITION 16 40 W PROFONDEUR 350 METRES
 18 37 N DATE 25 AVRIL 1971
 HEURES DEBUT 6 H 33
 FIN 7 H 05

METEO HEURE OBSERVATION

MER 4 8 H 00
 VENT NNW 5 NOEUDS 8 H 00
 NEBULOSITE U 8 H 00
 PRESSION ATM. 1012 8 H 00
 PRECIPITATION NON 08 H 00
 TEMP. AIR-SEC 18,0 08 H 00
 HUMIDE 16,0 08 H 00

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,71	35,588	26,284	4,14	73,1	9,99	99,99	99,99	1,24
10	15,73	35,591	26,281	4,12	72,8	9,99	99,99	99,99	1,39
20	15,71	35,592	26,287	4,10	72,4	9,99	99,99	99,99	1,27
30	15,54	35,573	26,311	3,95	69,5	9,99	99,99	99,99	2,25
40	15,27	9,999	9,999	9,99	99,9	9,99	99,99	99,99	3,54
50	15,13	35,522	26,363	3,43	59,9	9,99	99,99	99,99	2,71
60	14,87	9,999	9,999	9,99	99,9	9,99	99,99	99,99	2,54
75	13,91	35,463	26,582	1,83	31,1	9,99	99,99	99,99	,93
100	13,71	35,373	26,554	1,37	23,2	9,99	99,99	99,99	,06
150	13,51	35,368	26,592	1,39	23,4	9,99	99,99	99,99	,00
200	13,41	35,369	26,613	1,31	22,0	9,99	99,99	99,99	9,99
250	13,16	35,352	26,651	1,28	21,4	9,99	99,99	99,99	9,99
300	12,09	35,318	26,837	1,39	22,7	9,99	99,99	99,99	9,99
350	11,38	35,273	26,937	1,33	21,4	9,99	99,99	99,99	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 94

POSITION 16 40 W PROFONDEUR 370 METRES
 18 37 N DATE 25 AVRIL 1971
 HEURES DEBUT 12 H 05
 FIN 12 H 45

METEO HEURE OBSERVATION

MER 4 * 12 H 00 *
 VENT NNW 5 NOEUDS * 12 H 00 *
 NEBULOSITE 0 * 12 H 00 *
 PRESSION ATM, 1012 * 12 H 00 *
 PRECIPITATION NON * 12 H 00 *
 TEMP, AIR-SEC 18,4 * 12 H 00 *
 HUMIDE 15,9 * 12 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,75	35,597	26,281	4,17	73,7	1,35	15,54	8,22	,84
10	15,71	35,610	26,301	4,12	72,8	1,37	15,54	9,44	,93
20	15,72	35,606	26,295	4,14	73,1	1,34	15,54	8,22	,96
30	15,66	35,605	26,308	4,08	72,0	1,37	15,54	8,09	1,18
40	15,66	9,999	9,999	9,99	99,9	9,99	99,99	99,99	1,24
50	15,65	35,603	26,313	4,20	74,1	1,31	15,54	7,43	1,30
60	15,37	9,999	9,999	9,99	99,9	9,99	99,99	99,99	2,41
75	15,22	35,573	26,352	3,82	66,8	1,24	15,25	7,05	2,61
100	15,00	35,533	26,400	3,23	56,2	1,38	15,34	10,14	1,89
150	13,71	35,395	26,571	1,47	24,9	1,56	17,16	22,07	,14
200	13,60	35,387	26,588	1,58	26,7	1,63	17,16	23,64	9,99
250	13,41	35,383	26,624	1,39	23,4	1,70	17,35	24,11	9,99
300	12,44	35,346	26,791	1,46	24,1	1,78	17,54	25,08	9,99
350	11,07	35,275	26,996	1,38	22,0	2,00	17,54	29,56	9,99

MISSION CINECA - CHARCOT II DONNEES BILOGIQUES DE LA STATION NUMERO 94

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAE0	ATP	14C	VN03	VNH4	RNO3	RNH4	NPART
0	100	1,36	15,25	9,16	,76	3,15	99,99	99,99	153,2	9,9999	9,9999	9,99999	9,99999	99,99*
2	50	1,34	15,25	8,22	,92	1,98	99,99	99,99	145,3	9,9999	,3247	9,99999	,26308	,81*
8	25	1,39	15,25	8,22	,78	1,98	99,99	99,99	107,3	9,9999	9,9999	9,99999	9,99999	99,99*
24	10	1,36	15,25	8,89	,78	2,20	99,99	99,99	82,9	9,9999	9,9999	9,99999	9,99999	99,99*
37	1	1,36	15,25	10,57	1,02	2,94	99,99	99,99	,3	9,9999	9,9999	9,99999	9,99999	99,99*
50	0	9,99	99,99	99,99	9,99	2,76	99,99	99,99999,9	9,9999	9,9999	9,99999	9,99999	9,99999	99,99*
75	0	9,99	99,99	99,99	9,99	,87	99,99	99,999999,9	9,9999	9,9999	9,99999	9,99999	9,99999	99,99*

BIOMASSE ZOOPLANCTONIQUE 9999 MG/M2
 PRODUCTION INTEGREE 25/5 MG/M2/JOUR
 IRRADIATION 2147 J/CM2

MISSION CINECA - CHARCOT II STATION NUMERO 194

POSITION 16 40 W PROFONDEUR 370 METRES
 18 37 N DATE 25 AVRIL 1971
 HEURES DEBUT 12 H 05
 FIN 12 H 45

METEO HEURE OBSERVATION

MER 4 * 12 H 00 *
 VENT NNW 5 NOEUDS * 12 H 00 *
 NEBULOSITE 0 * 12 H 00 *
 PRESSION ATM, 1012 * 12 H 00 *
 PRECIPITATION NON * 12 H 00 *
 TEMP, AIR-SEC 18,4 * 12 H 00 *
 HUMIDE 15,9 * 12 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,83	35,590	26,258	4,25	75,2	9,99	99,99	99,99	,64
10	15,79	35,600	26,275	4,23	74,9	9,99	99,99	99,99	,67
20	15,75	35,600	26,288	4,19	74,0	9,99	99,99	99,99	,75
30	15,54	35,592	26,325	4,12	72,5	9,99	99,99	99,99	1,05
40	15,48	9,999	9,999	9,99	99,9	9,99	99,99	99,99	1,61
50	15,01	35,519	26,387	3,15	54,8	9,99	99,99	99,99	1,73
70	13,79	9,999	9,999	9,99	99,9	9,99	99,99	99,99	,00
75	13,71	35,390	26,567	1,37	23,2	9,99	99,99	99,99	,00
100	13,65	35,382	26,574	1,39	23,5	9,99	99,99	99,99	,20
150	13,58	35,377	26,584	1,33	22,4	9,99	99,99	99,99	,00
200	13,19	35,362	26,653	1,28	21,4	9,99	99,99	99,99	,29
250	12,75	35,340	26,724	1,34	22,2	9,99	99,99	99,99	9,99
300	12,57	35,336	26,757	1,37	22,6	9,99	99,99	99,99	9,99
350	11,67	35,126	26,768	1,33	21,5	9,99	99,99	99,99	9,99

MISSION CINELA - CHARCOT II STATION NUMERO 294

* POSITION 16 40 W PROFONDEUR 370 METRES *

* 18 37 N DATE 25 AVRIL 1971 *

* HEURES DEBUT 14 H 55 *

* FIN 15 H 28 *

METEO HEURE OBSERVATION

* MER 4 * 16 H 00 *

* VENT NNW 5 NOEUDS * 16 H 00 *

* NEBULOSITE U * 16 H 00 *

* PRESSION ATM, 1010 * 16 H 00 *

* PRECIPITATION NON * 16 H 00 *

* TEMP, AIR-SEC 19,0 * 16 H 00 *

* HUMIDE 16,0 * 16 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,86	35,597	26,256	4,33	76,8	9,99	99,99	99,99	,87
10	15,85	35,604	26,264	4,33	76,8	9,99	99,99	99,99	,72
20	15,65	35,613	26,316	4,11	72,5	9,99	99,99	99,99	1,33
30	15,18	35,574	26,392	3,52	61,5	9,99	99,99	99,99	2,48
40	15,88	9,999	9,999	9,99	99,9	9,99	99,99	99,99	,14
50	13,83	35,397	26,547	1,40	23,2	9,99	99,99	99,99	,03
60	13,71	9,999	9,999	9,99	99,9	9,99	99,99	99,99	,00
75	13,63	35,384	26,579	1,41	23,8	9,99	99,99	99,99	,00
100	13,60	35,380	26,582	1,89	31,9	9,99	99,99	99,99	,11
150	13,52	35,378	26,597	1,57	26,5	9,99	99,99	99,99	,26
200	13,21	35,364	26,650	1,44	24,1	9,99	99,99	99,99	9,99
250	12,84	35,347	26,712	1,37	22,8	9,99	99,99	99,99	9,99
300	12,27	35,329	26,811	1,44	23,6	9,99	99,99	99,99	9,99
350	11,91	35,312	26,867	1,42	23,1	9,99	99,99	99,99	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 394

* POSITION 16 40 W PROFONDEUR 370 METRES *

* 18 37 N DATE 25 AVRIL 1971 *

* HEURES DEBUT 18 H 00 *

* FIN 18 H 32 *

METEO HEURE OBSERVATION

* MER 4 * 20 H 00 *

* VENT NNW 4 NOEUDS * 20 H 00 *

* NEBULOSITE U * 20 H 00 *

* PRESSION ATM, 1010 * 20 H 00 *

* PRECIPITATION NON * 20 H 00 *

* TEMP, AIR-SEC 18,0 * 20 H 00 *

* HUMIDE 16,0 * 20 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	15,94	35,597	26,238	4,41	78,3	9,99	99,99	99,99	,61
10	15,93	35,603	26,245	4,36	77,4	9,99	99,99	99,99	,58
20	15,92	35,607	26,250	4,35	77,1	9,99	99,99	99,99	,61
30	15,86	35,610	26,266	4,32	76,6	9,99	99,99	99,99	,52
40	15,78	9,999	9,999	9,99	99,9	9,99	99,99	99,99	,75
50	15,65	35,599	26,306	4,10	72,3	9,99	99,99	99,99	1,30
60	15,37	9,999	9,999	9,99	99,9	9,99	99,99	99,99	1,96
75	14,06	35,431	26,525	1,56	26,6	9,99	99,99	99,99	,67
100	13,75	35,404	26,570	1,39	23,6	9,99	99,99	99,99	,00
150	13,63	9,999	9,999	1,38	99,9	9,99	99,99	99,99	,00
200	13,31	35,362	26,628	1,28	21,5	9,99	99,99	99,99	9,99
250	12,57	35,344	26,763	1,36	22,4	9,99	99,99	99,99	9,99
300	12,20	35,335	26,829	1,39	22,8	9,99	99,99	99,99	9,99
350	11,20	35,282	26,977	1,31	21,0	9,99	99,99	99,99	9,99

MISSION CINECA - CHARCOT II STATION NUMERO 96

POSITION 16 22 W PROFONDEUR 62 METRES
 17 22 N DATE 26 AVRIL 1971
 HEURES DEBUT 11 H 03
 FIN 11 H 21

METEO HEURE OBSERVATION

MER 4 * 12 H 00 *
 VENT NNW 6 NOEUDS* 12 H 00 *
 NEBULOSITE U * 12 H 00 *
 PRESSION ATM, 1012 * 12 H 00 *
 PRECIPITATION NON * 12 H 00 *
 TEMP, AIR-SEC 19,0 * 12 H 00 *
 HUMIDE 16,0 * 12 H 00 *

DONNEES DE LA STATION HYDROLOGIE

Z	T	S	SIGMAT	O2	O/O	PO4	NO3	SI04	NH4
0	16,15	35,545	26,150	9,99	99,9	9,99	99,99	,00	,50
10	16,05	35,544	26,172	5,12	91,1	9,99	99,99	,31	1,04
20	15,48	35,533	26,293	3,65	64,1	9,99	99,99	5,13	2,38
30	15,13	35,532	26,371	2,51	43,8	9,99	99,99	5,40	2,13
50	14,55	35,485	26,462	1,11	19,1	9,99	99,99	11,90	,44
55	14,53	35,481	26,463	1,23	21,2	9,99	99,99	12,01	,43

MISSION CINECA - CHARCOT II DONNEES BIOLOGIQUES DE LA STATION NUMERO 96

Z	OPT	PO4	NO3	SI04	NH4	CHLA	PHAEO	ATP	14C	VNO3	VNH4	RNO3	RNH4	NPART
0	100	9,99	9,23	,00	,50	9,30	99,99	4,40	376,2	9,9999	9,9999	9,99999	9,99999	99,99*
2	150	9,99	9,09	,00	,54	12,54	99,99	2,70	459,4	,3904	,0738	3,13900	,59364	8,04*
3	25	9,99	9,23	,00	,46	9,96	99,99	2,70	363,0	9,9999	9,9999	9,99999	9,99999	99,99*
4	10	9,99	6,20	,00	,51	12,60	99,99	4,90	383,6	9,9999	9,9999	9,99999	9,99999	99,99*
8	1	9,99	6,70	,00	,44	12,30	99,99	5,00	24,9	9,9999	9,9999	9,99999	9,99999	99,99*
20	0	9,99	99,99	99,99	9,99	7,02	99,99	2,00	,0	9,9999	9,9999	9,99999	9,99999	99,99*
30	0	9,99	99,99	99,99	9,99	1,55	99,99	,40	,0	9,9999	9,9999	9,99999	9,99999	99,99*
50	0	9,99	99,99	99,99	9,99	1,44	99,99	99,99	,0	9,9999	9,9999	9,99999	9,99999	99,99*

BIOMASSE ZOOPLANCTONIQUE 9999 MG/M2
 PRODUCTION INTEGREE 2437 MG/M2/JOUR
 IRRADIATION 2152 J/CM2

4- CARTOGRAPHIE DES DONNEES RECUEILLIES AU COURS DES PERIODES DE PROSPECTION DE SURFACE.

- Températures et salinités
- Sels nutritifs
- Chlorophylle a
- ¹⁴C

<u>Prospections n°</u>	<u>Date et lieu</u>	<u>figures n°</u>
1	19-20 mars 1971 le long du littoral marocain (Cap Blanc-Cap Ghir)	1
1 bis	19-20 mars 1971 même prospection que la précédente avec détail des isolignes devant le Cap Ghir	2
2	21-22 mars 1971 entre le Cap Tafelney et le Cap Ghir	3
3	23-24 mars 1971 entre le Cap Tafelney et le Cap Ghir	4 et 5
3 bis	23-24 mars 1971 trajet de la bouée dérivante	6
4	25-26 mars 1971 entre le Cap Tafelney et Agadir	7 et 8
5	4-5 avril 1971 du nord du Cap Barbas à Nouakchott le long de l'isobathe 50 m et de Nouakchott jusqu'à 120 milles au large	9 à 14
6	7 avril 1971 de Nouakchott vers le large	15 à 18
6 bis	7 avril 1971 au nord de Nouakchott	19
7	9 avril 1971 à la sortie du canyon sous-marin par 18°50' au sud du Cap Timiris (1ère prospection)	20 et 21
7 bis	à la sortie du canyon sous-marin par 18°50' au sud du Cap Timiris (2ème prospection)	22
8	10-11 avril 1971 le long du Banc d'Arguin (isobathe 50 m)	23 à 25
8 bis	11-12 avril 1971 suite de la précédente entre le Cap Corveiro et le Cap Blanc	26 à 28
9	12-13 avril 1971 au voisinage du Cap Corveiro	29 à 32

10	16-17 avril 1971 au voisinage de la tête du canyon sous-marin par 18°50' au sud du Cap Timiris	33 à 37
11	18-19 avril 1971 au voisinage de la tête du canyon sous-marin par 18°50' au sud du Cap Timiris	38
12	19-20 avril 1971 au voisinage de la tête du canyon sous-marin par 18°50' au sud du Cap Timiris deux trajets successifs 1 et 2 ont été parcourus au cours de la nuit	39 à 42
13	21-22 avril 1971 au sud-est de la tête du canyon sous-marin entre le Cap Timiris au nord et Nouakchott au sud	43 à 50
14	23-24 avril 1971 devant la côte au nord de Nouakchott	51 à 58
15	25-26 avril 1971 devant la côte dans la région de Nouakchott	59 à 66
16	26-27 avril 1971 au large du Sénégal, entre 16° et 17° N	67 à 69
17	27-28 avril 1971 au nord de l'embouchure du Sénégal	70 et 71
18	28-29 avril 1971 devant la côte du Sénégal au nord de la presqu'île du Cap Vert	72 et 73

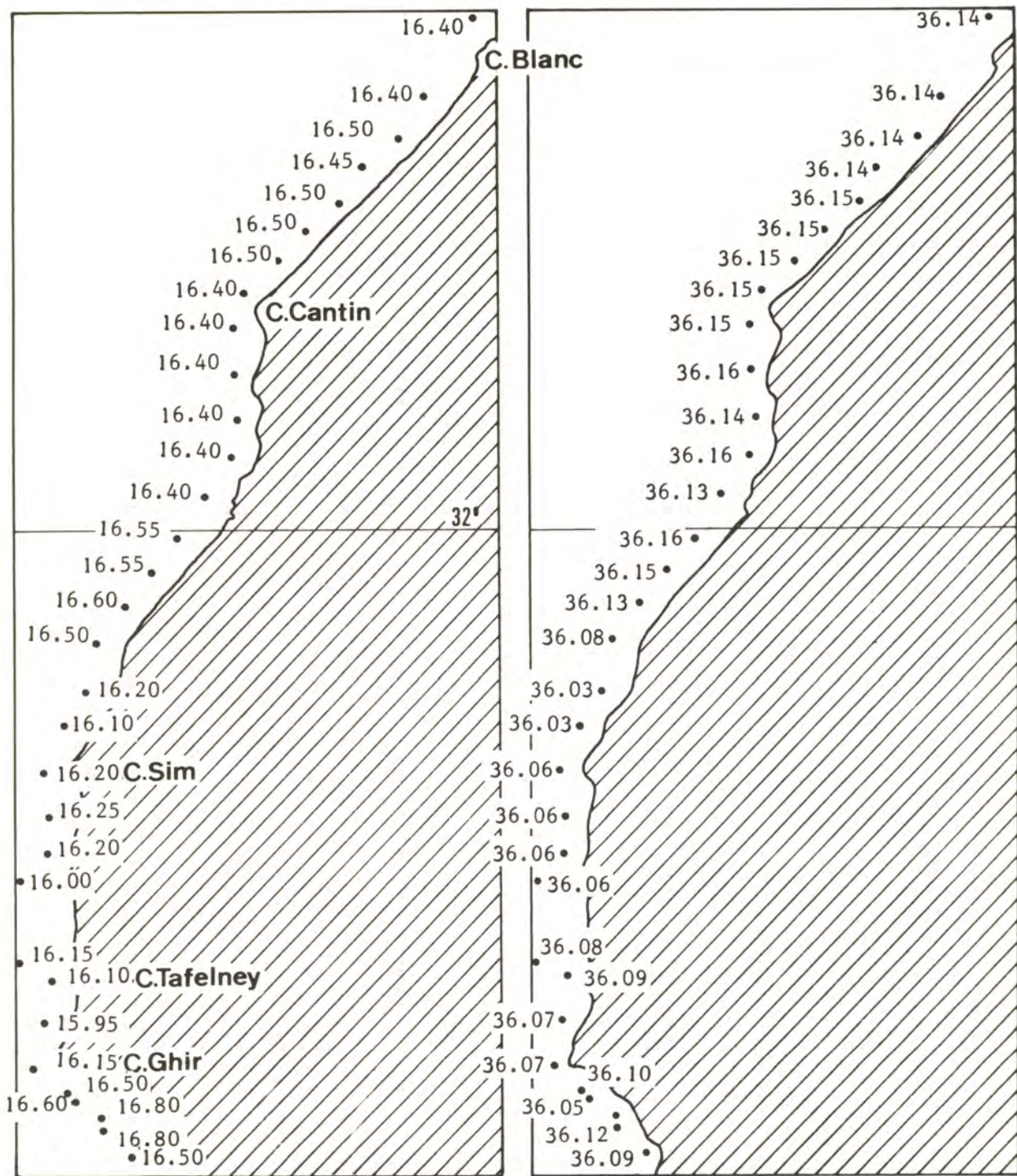


Fig. 1 - Prospection 1 - Températures et salinités -

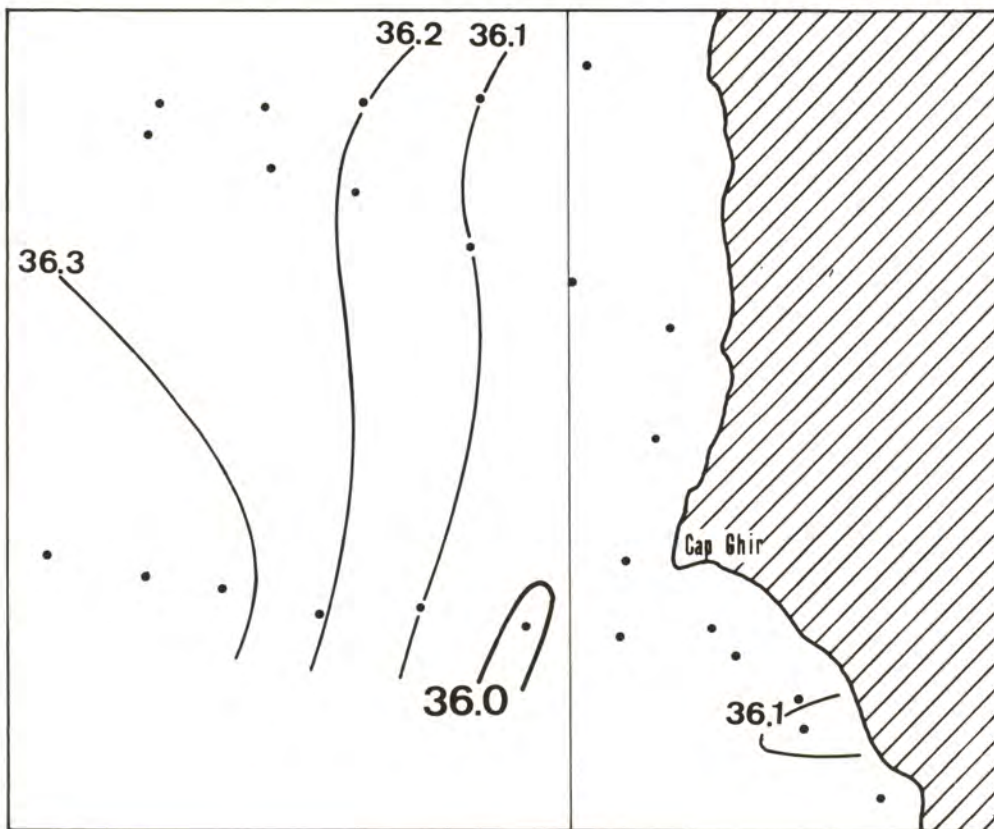
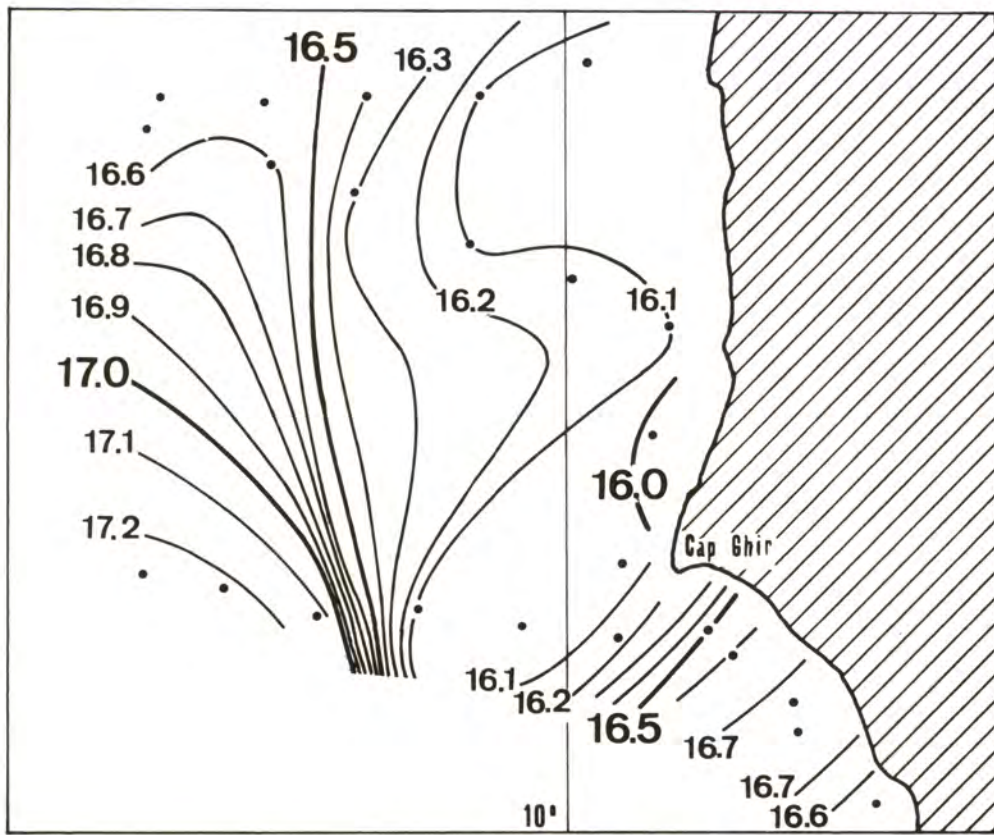


Fig. 2 - Prospection 1 bis - Structures thermique et haline -

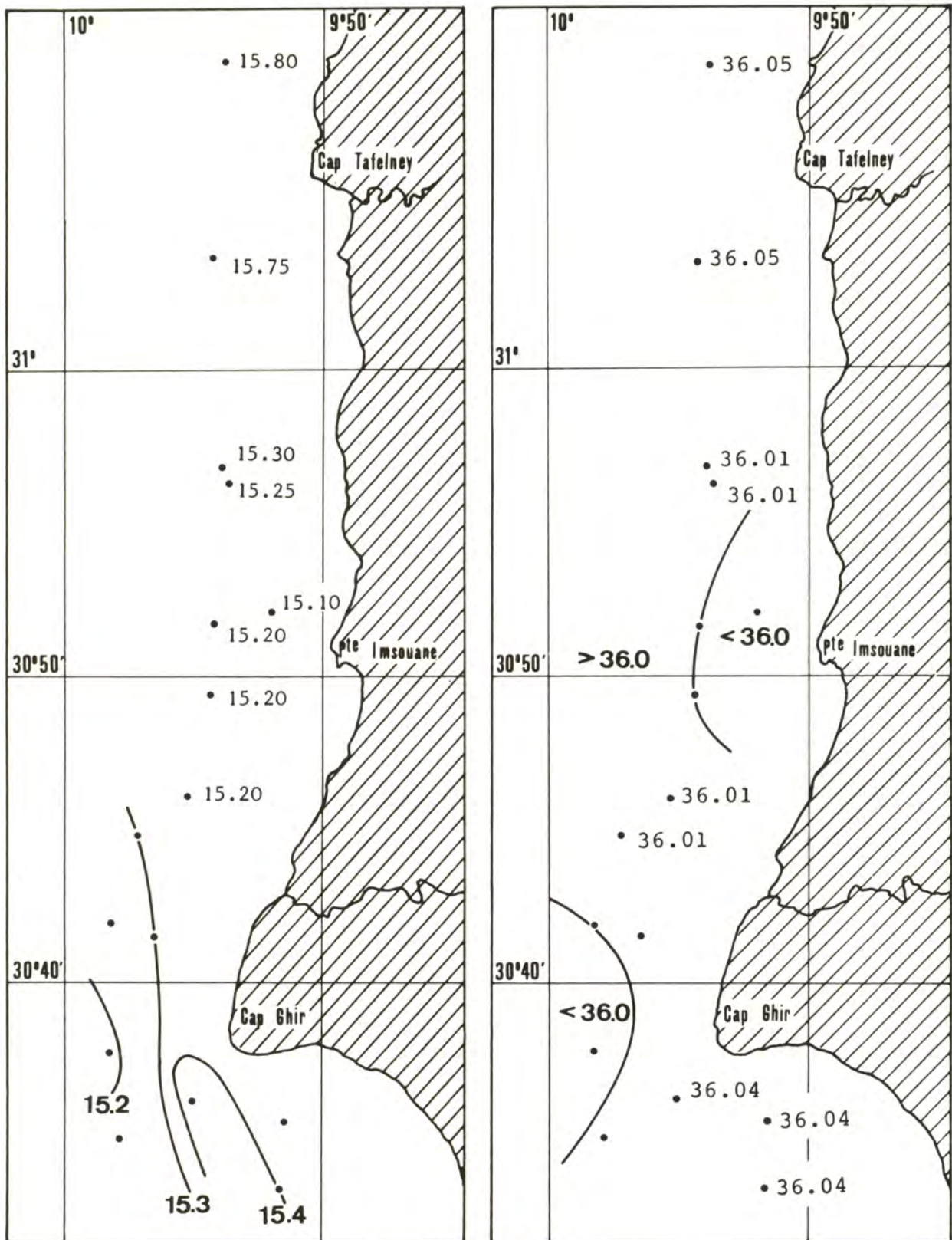


Fig. 3 - Prospection 2 - Températures et salinités -

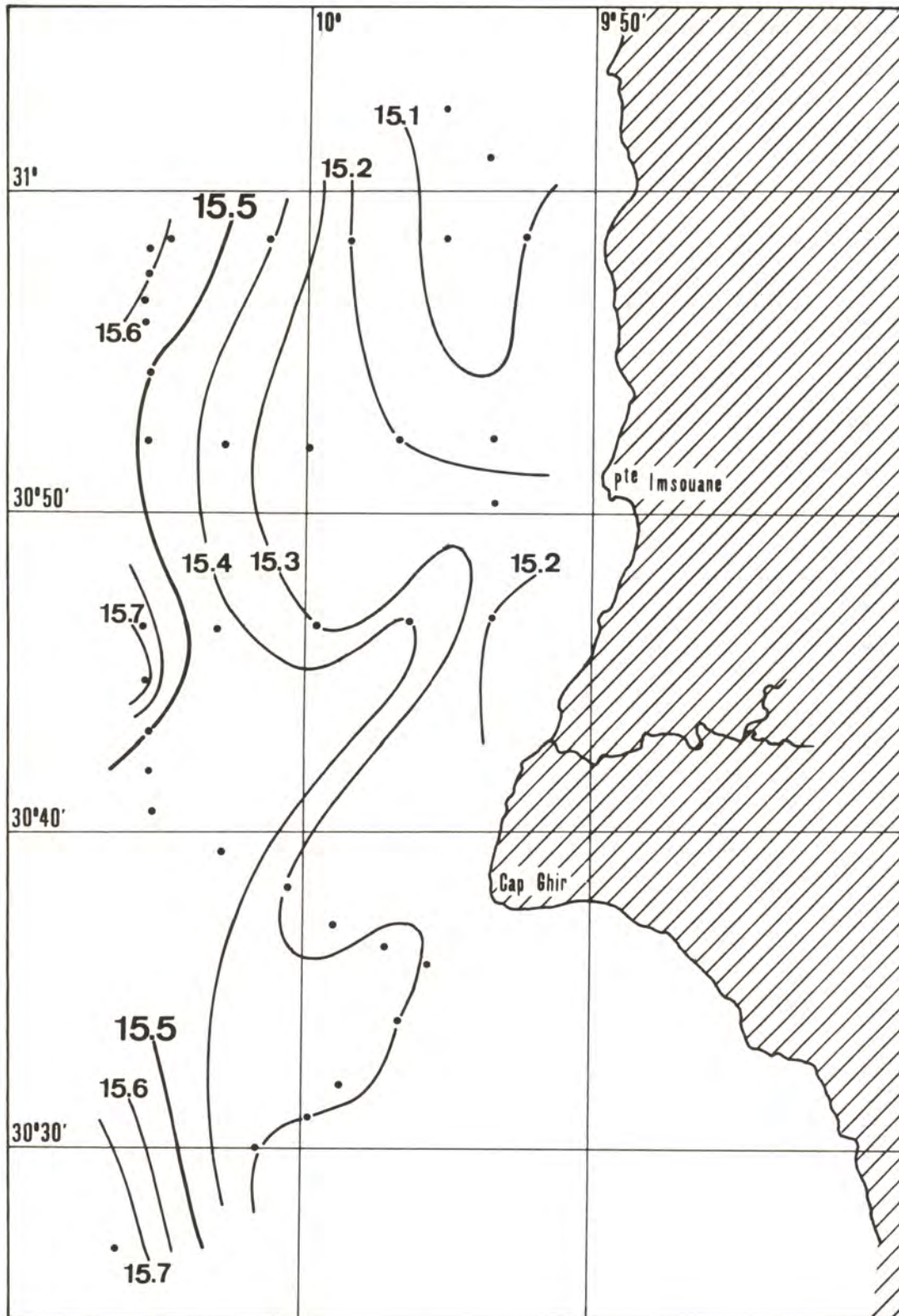


Fig. 4 - Prospection 3 - Structure thermique -

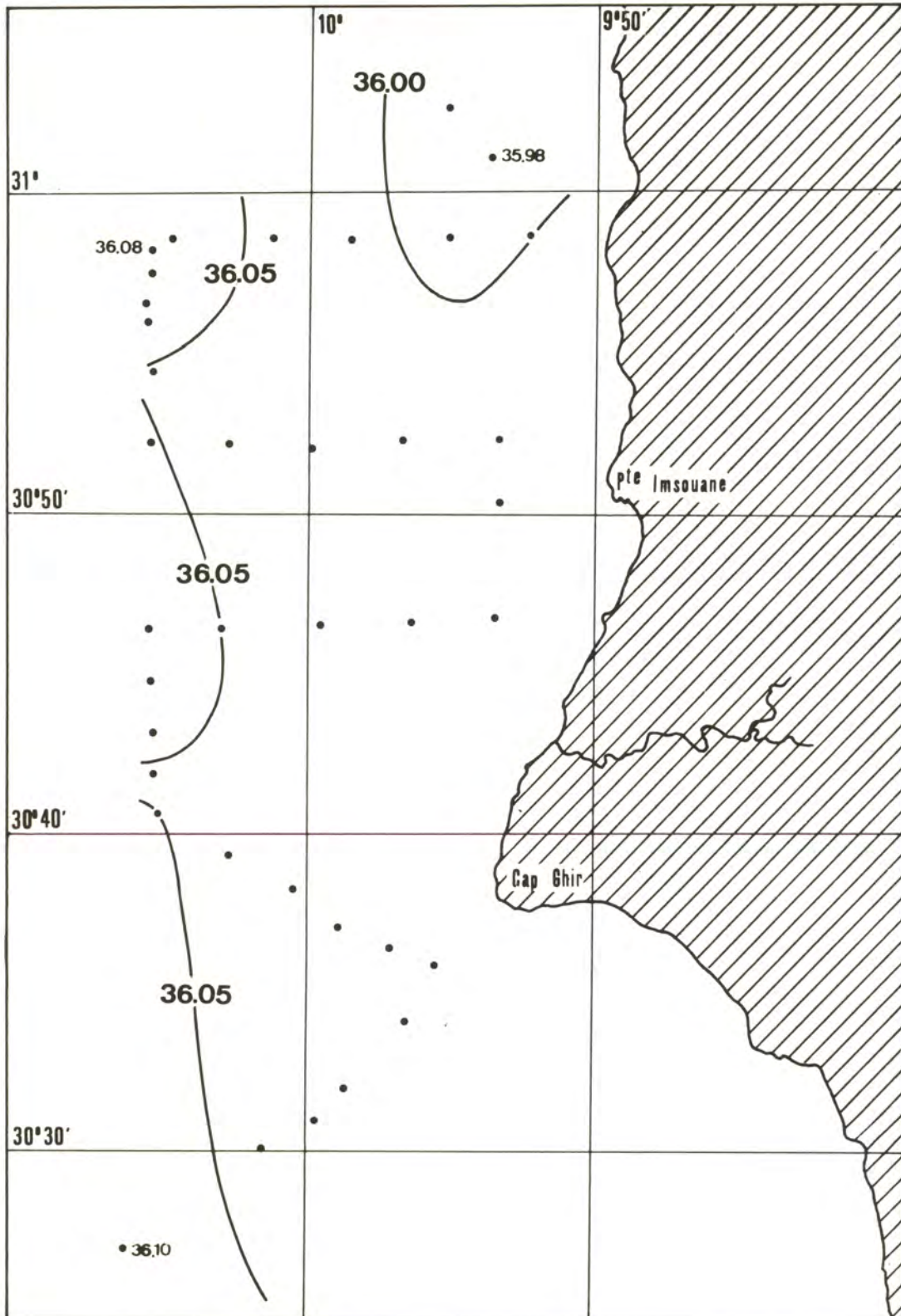


Fig. 5 - Prospection 3 - Structure haline -

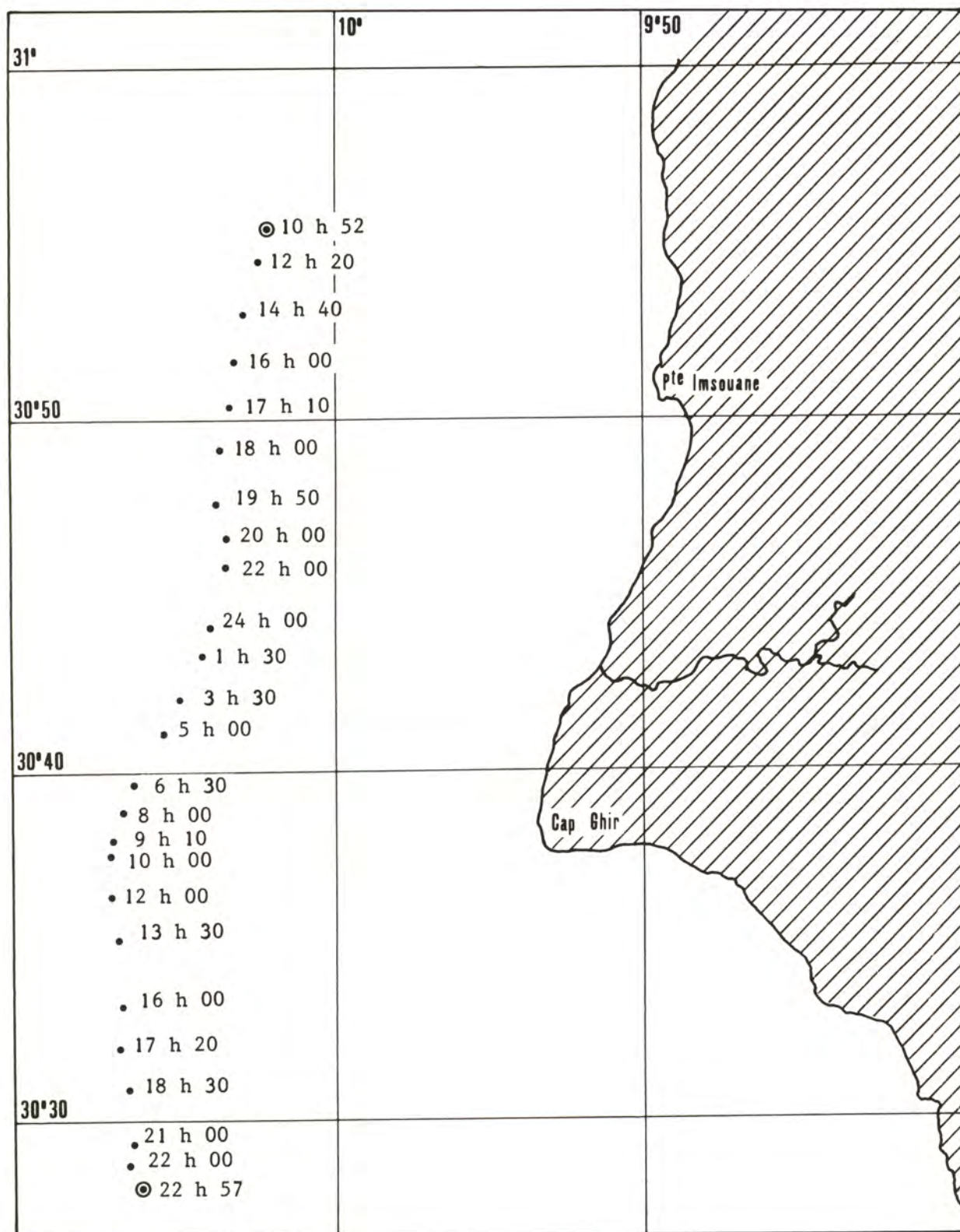


Fig. 6 - Prospection 3 bis - Positions de la bouée dérivante -

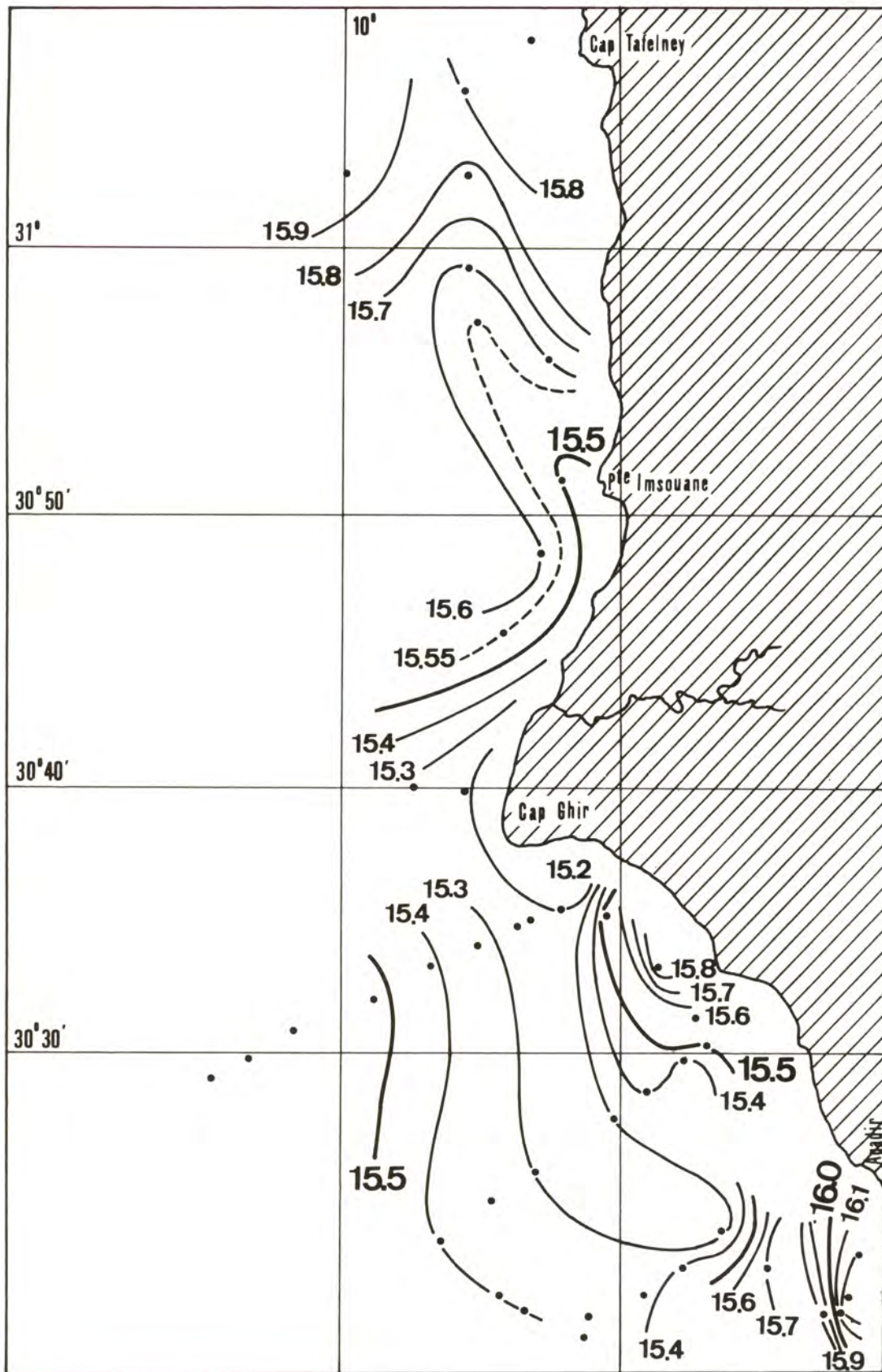


Fig. 7 - Prospection 4 - Structure thermique -

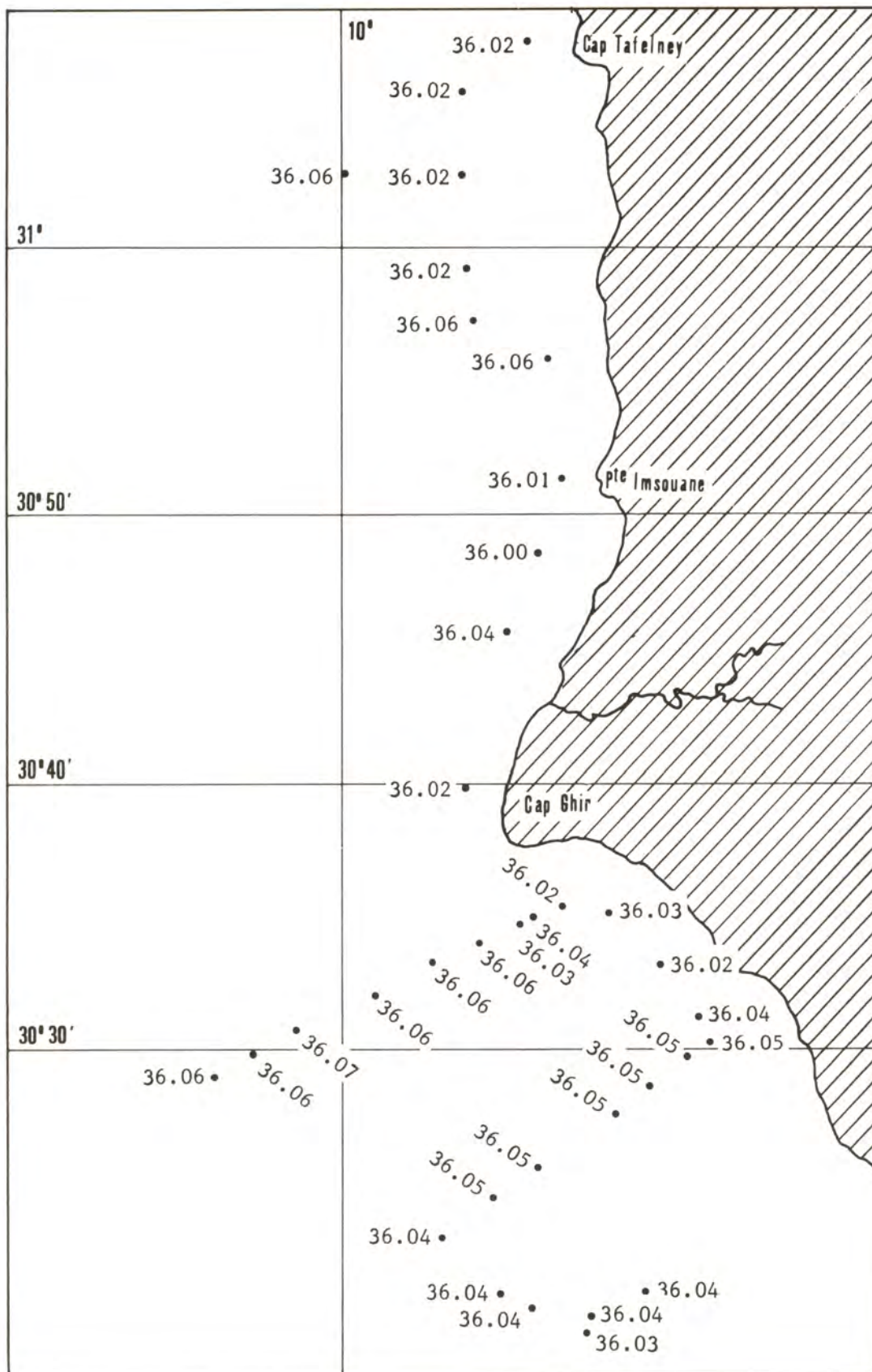


Fig. 8 - Prospection 4 - Structure haline -

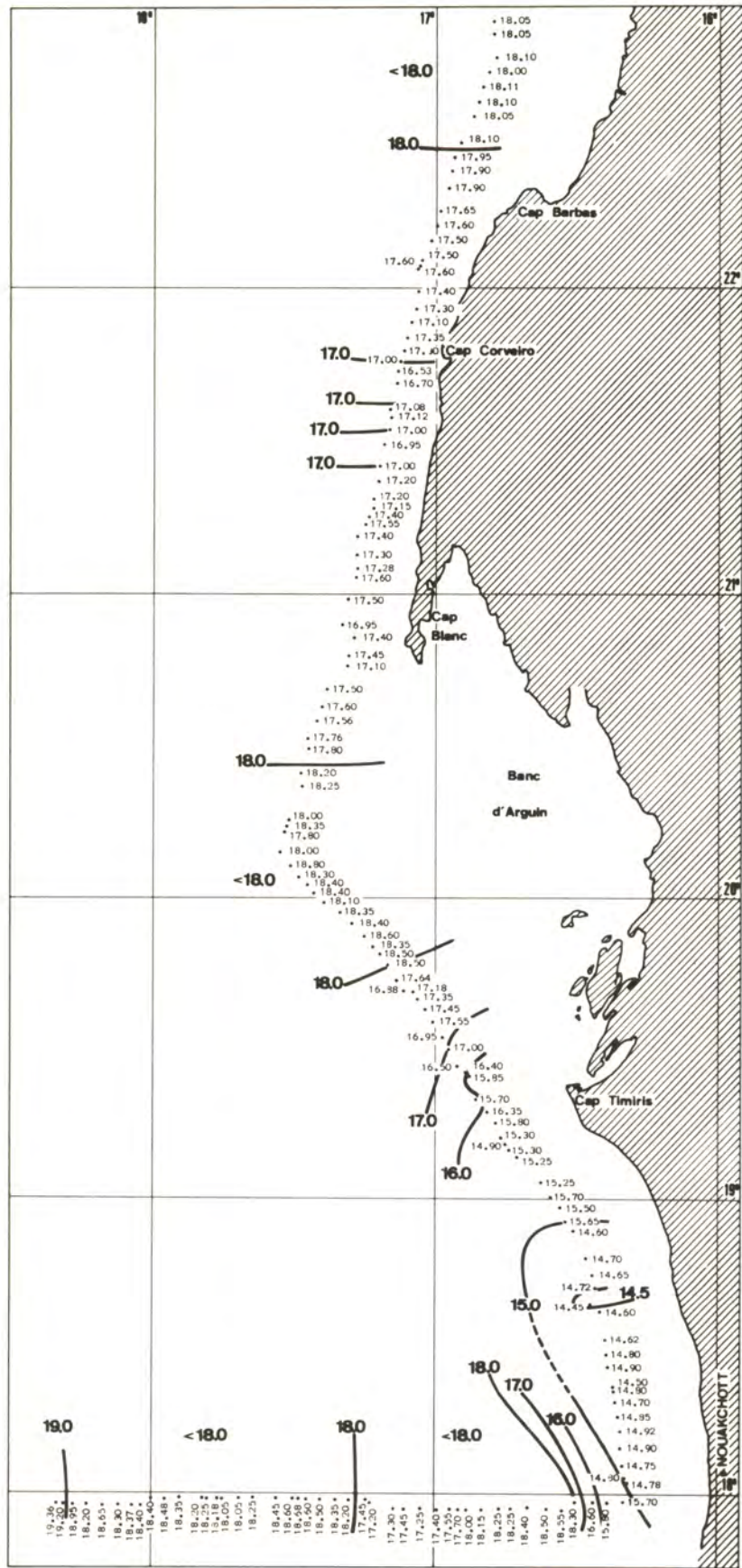


Fig. 9 - Prospection 5 - Structure thermique -

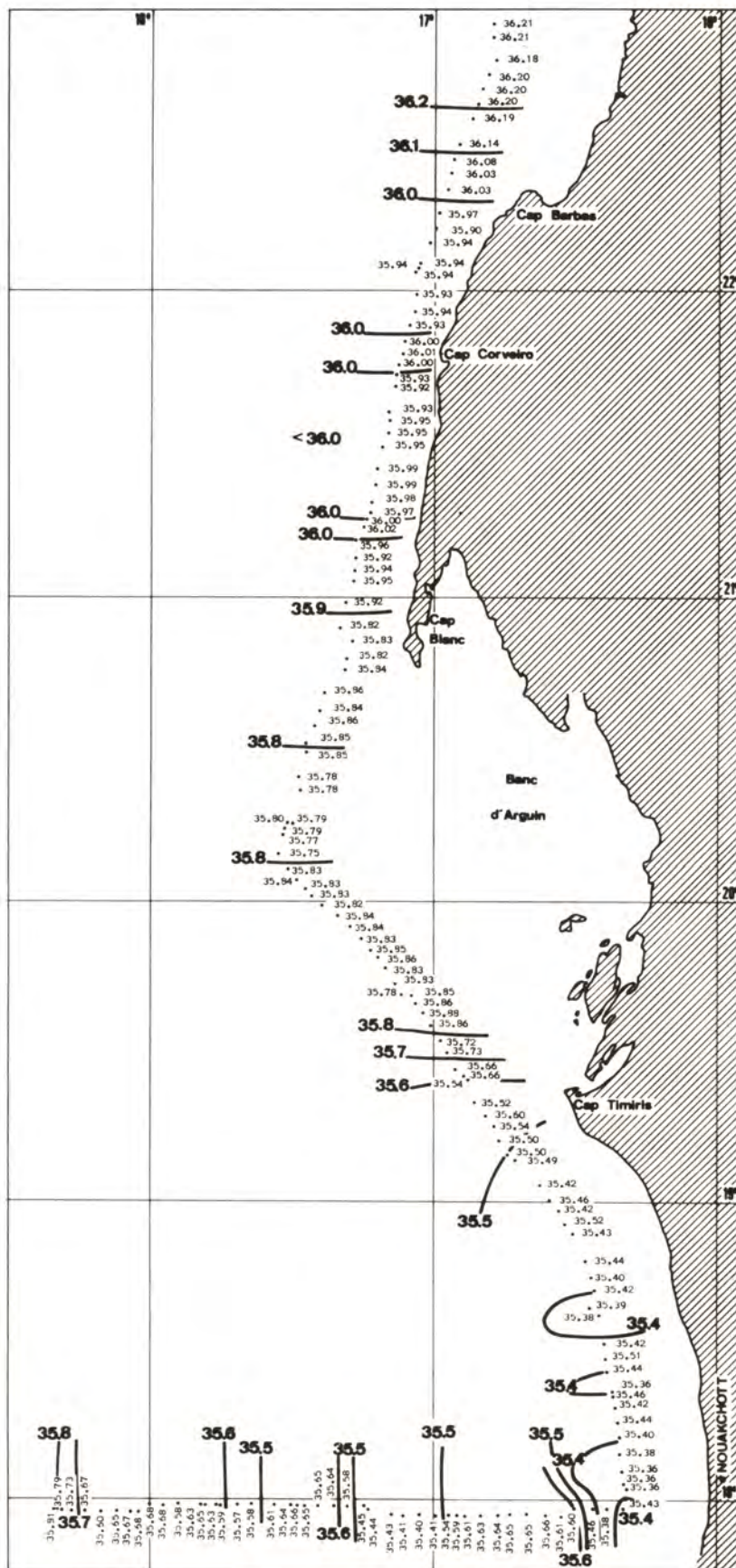


Fig. 10 - Prospection 5 - Structure haline -

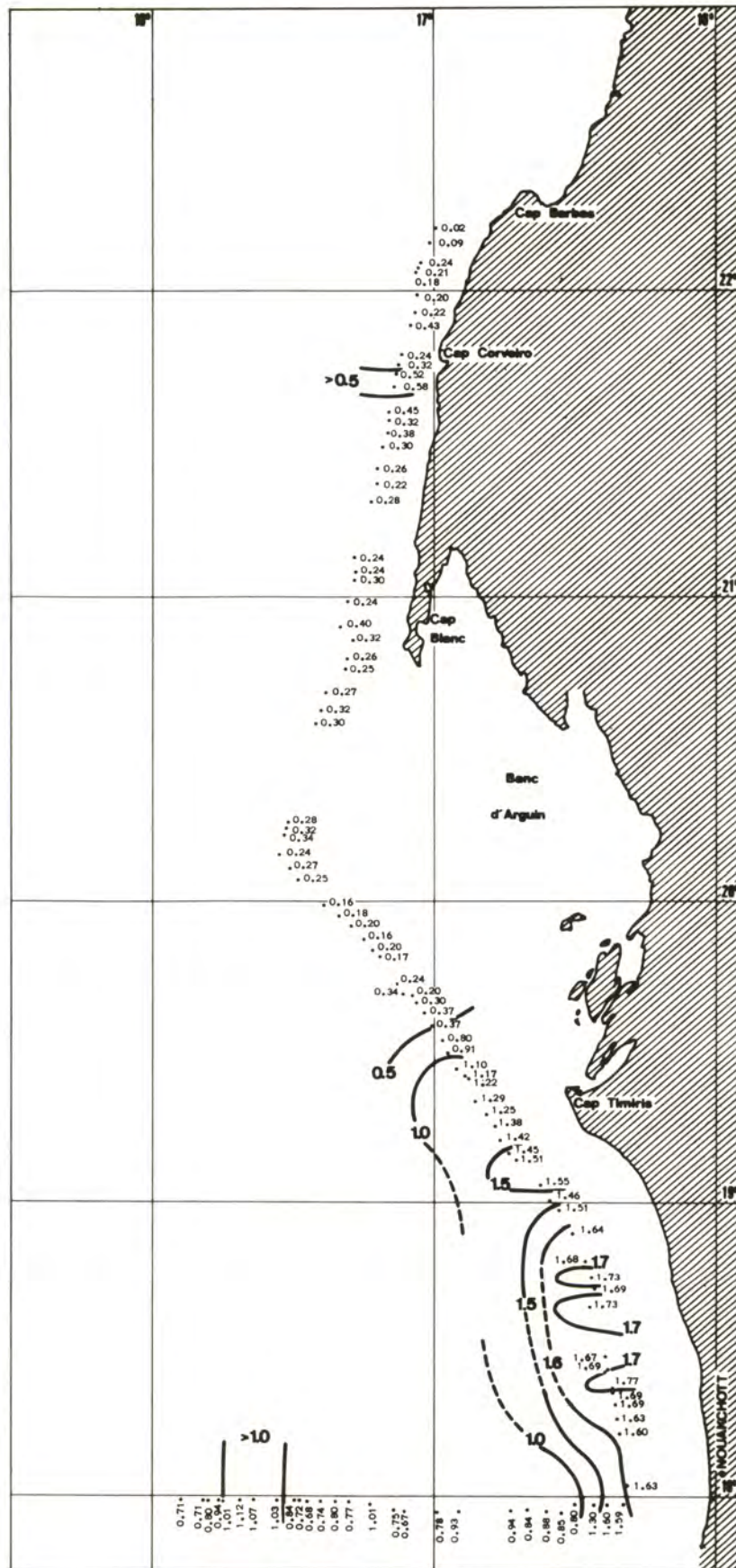


Fig. 11 - Prospection 5 - Distribution des phosphates ($\mu\text{atg/l}$) -

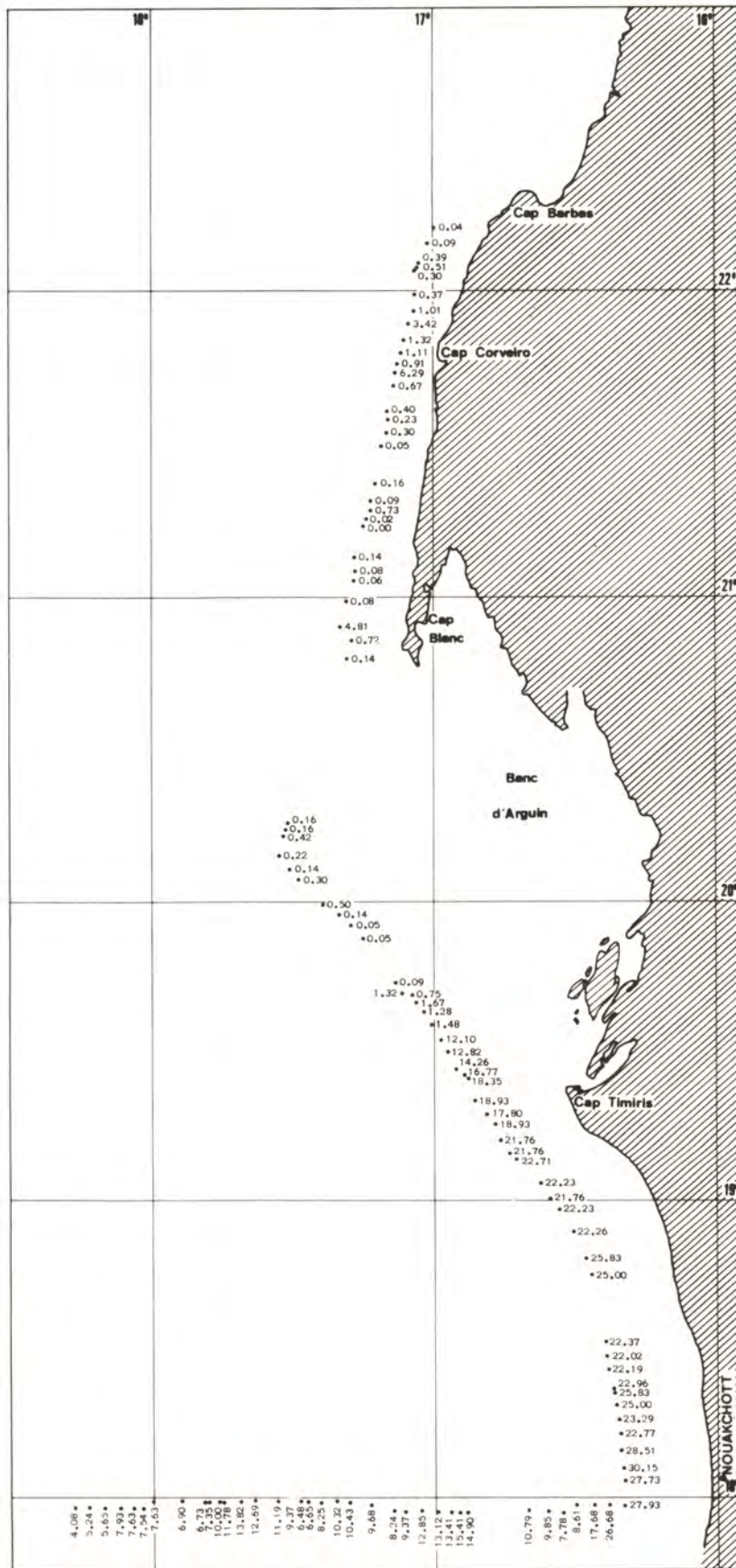


Fig. 12 - Prospecion 5 - Distribution des nitrates ($\mu\text{atg/l}$) -

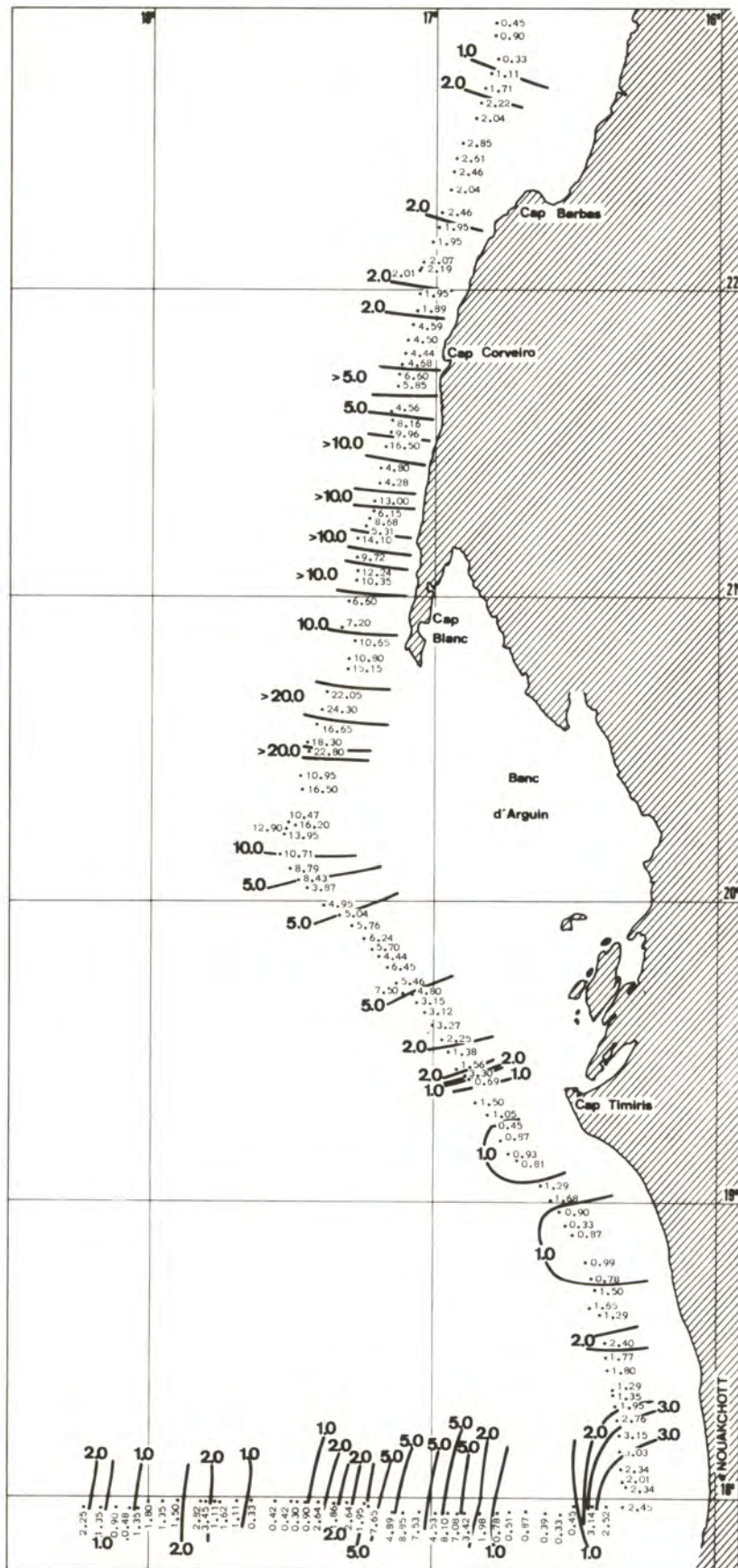


Fig. 13 - Prospecion 5 - Distribution de la chlorophylle a (mg/m³) -

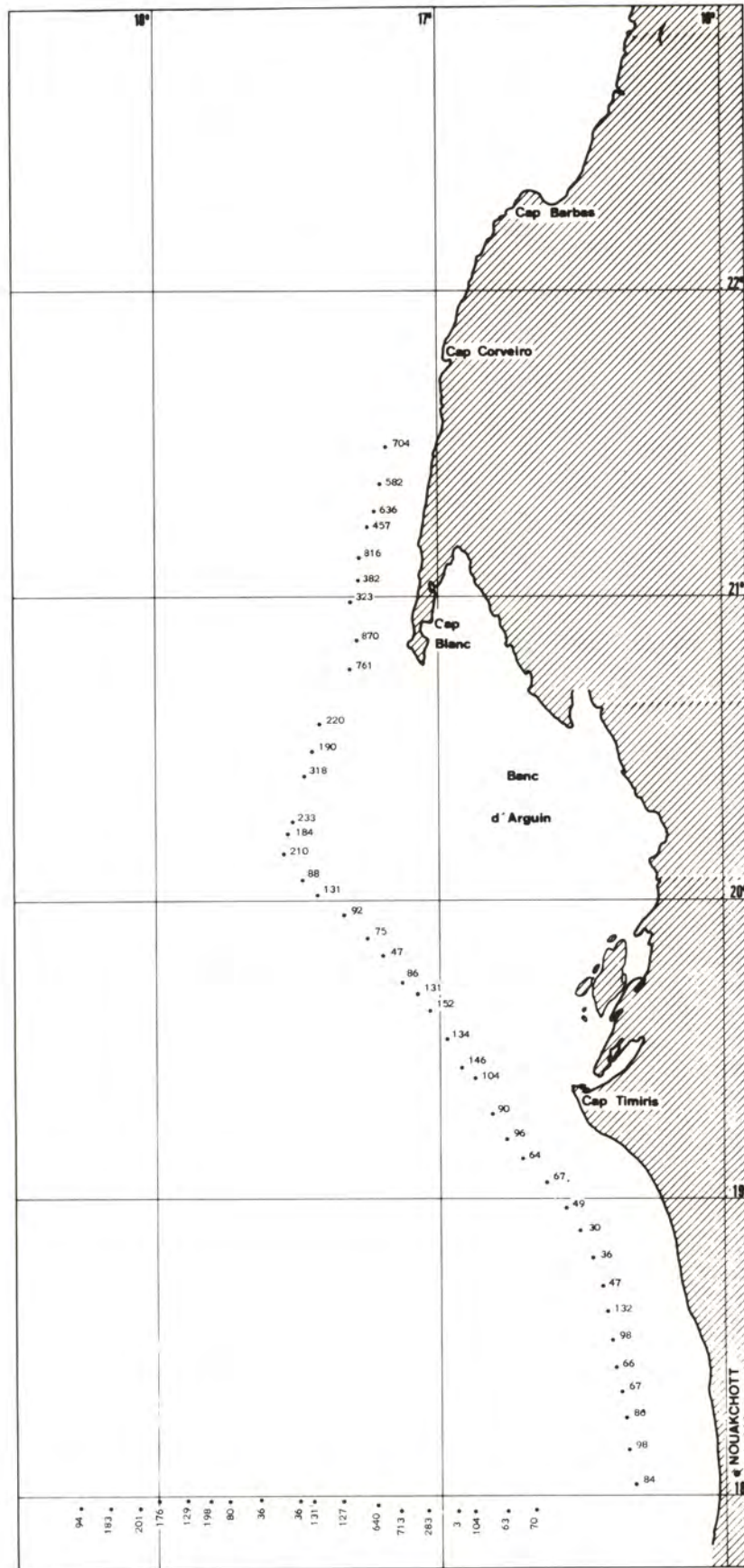


Fig. 14 - Prospection 5 - Taux de production primaire (mgC/m³/j) -

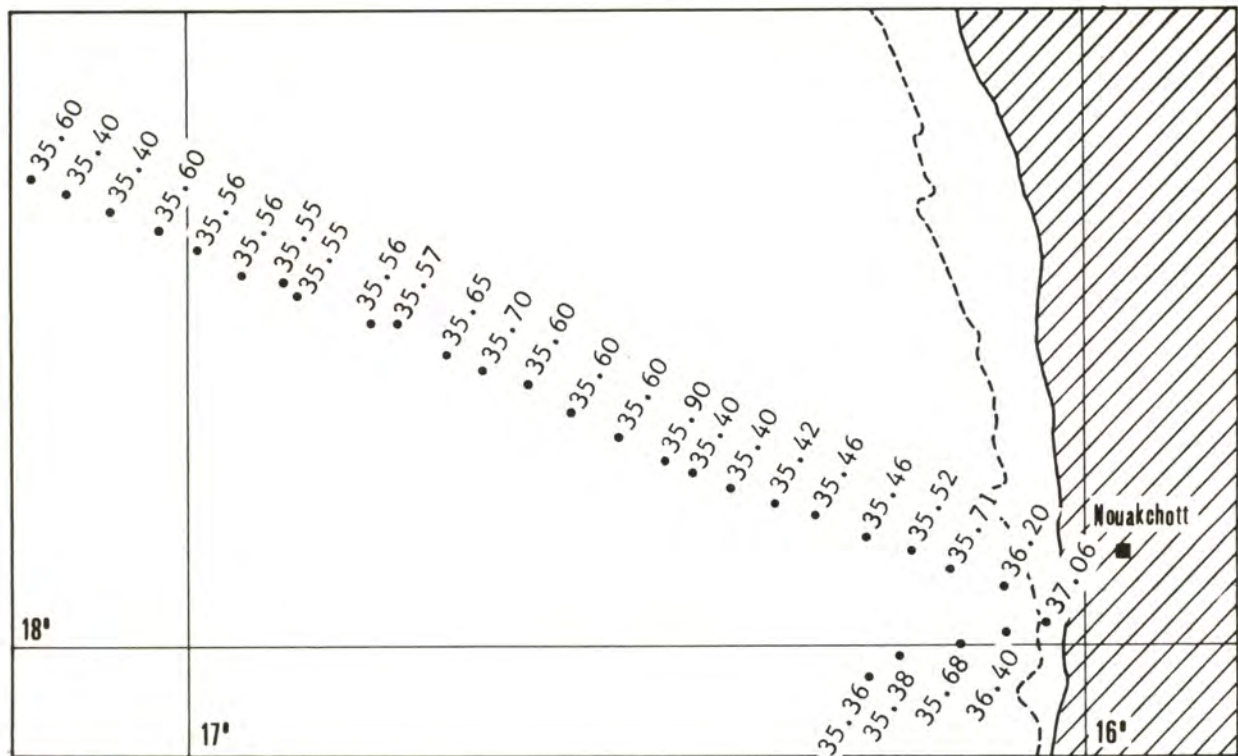
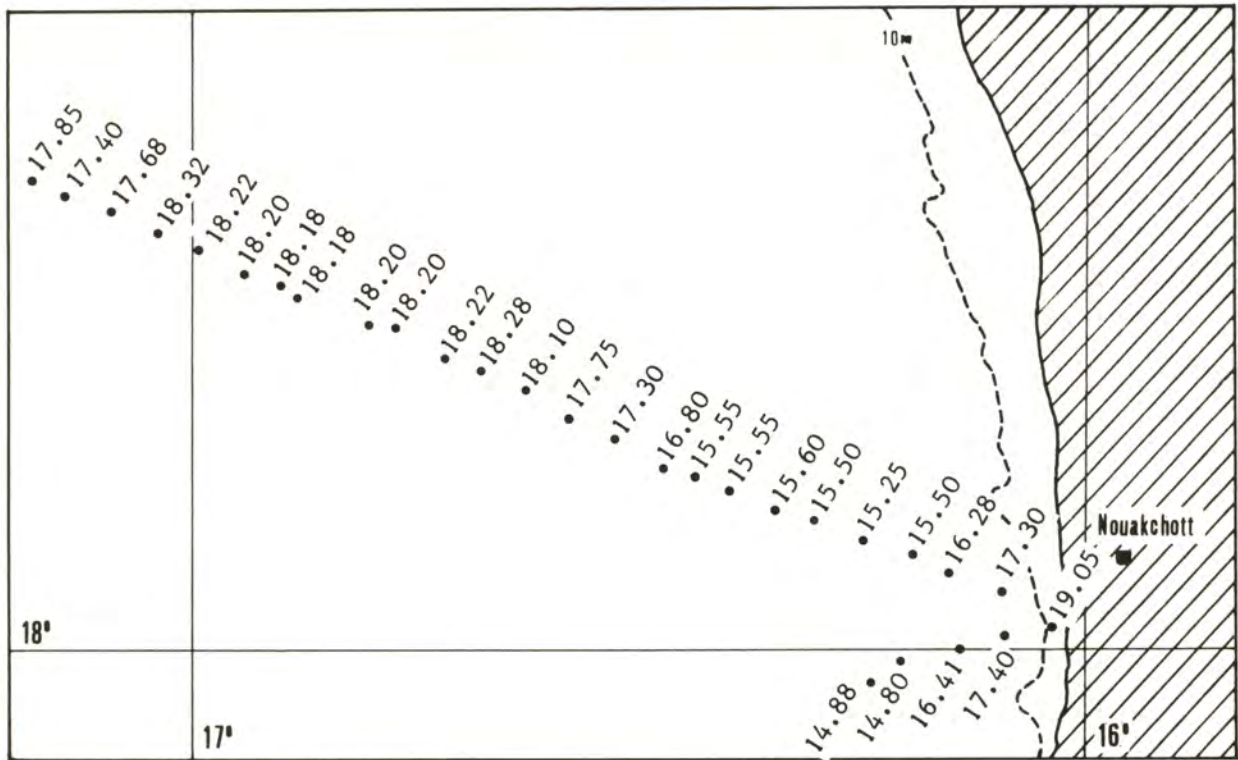


Fig. 15 - Prospection 6 - Températures et salinités -

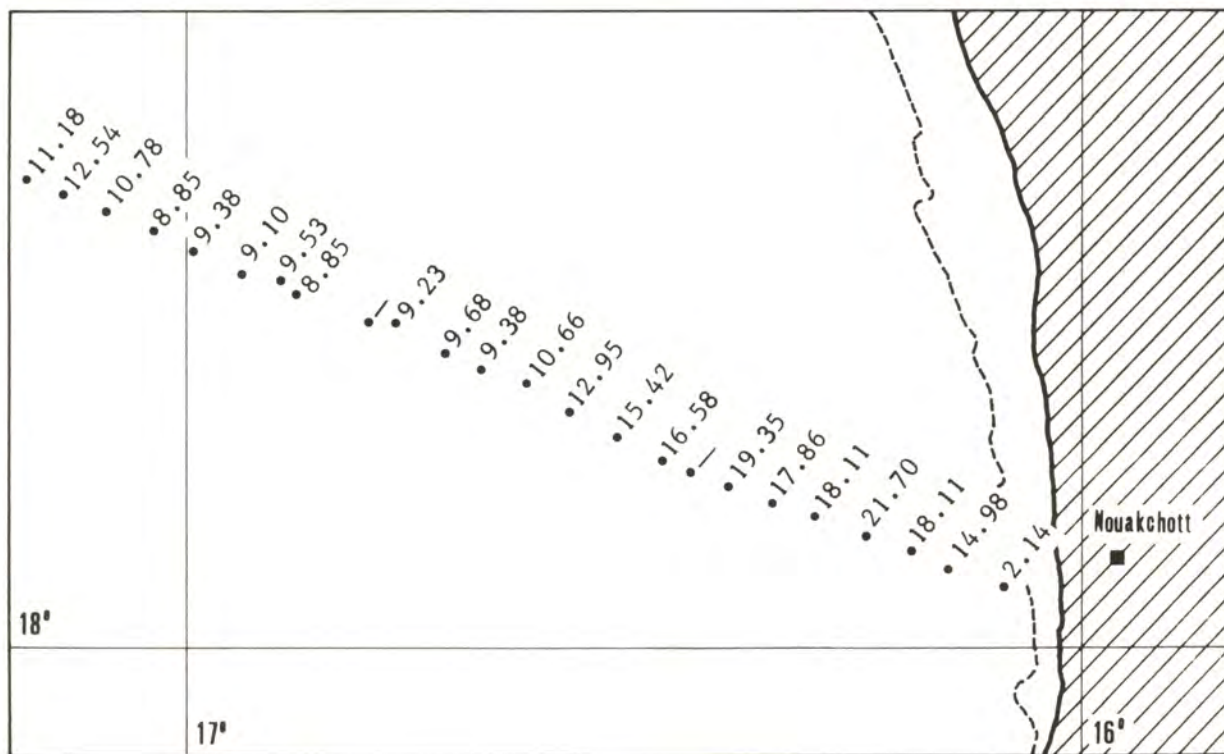
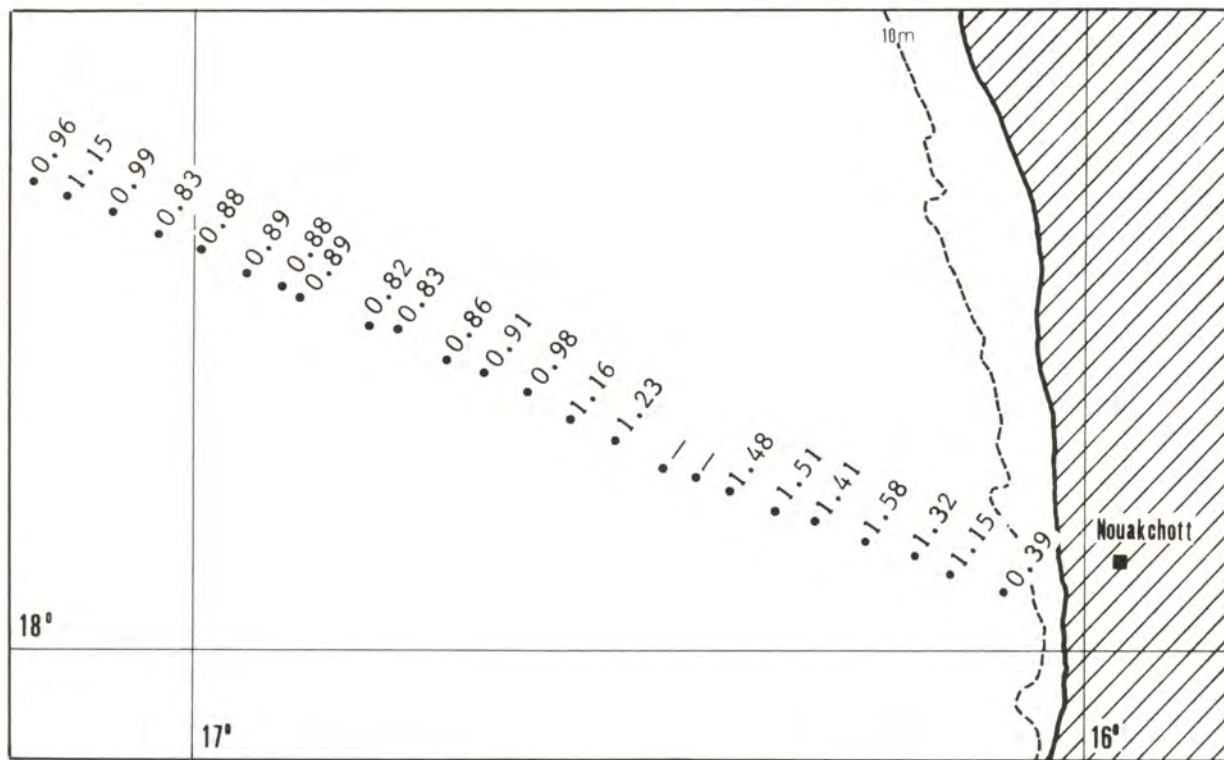


Fig. 16 - Prospection 6 - Distribution des phosphates et nitrates (µatg/l) -

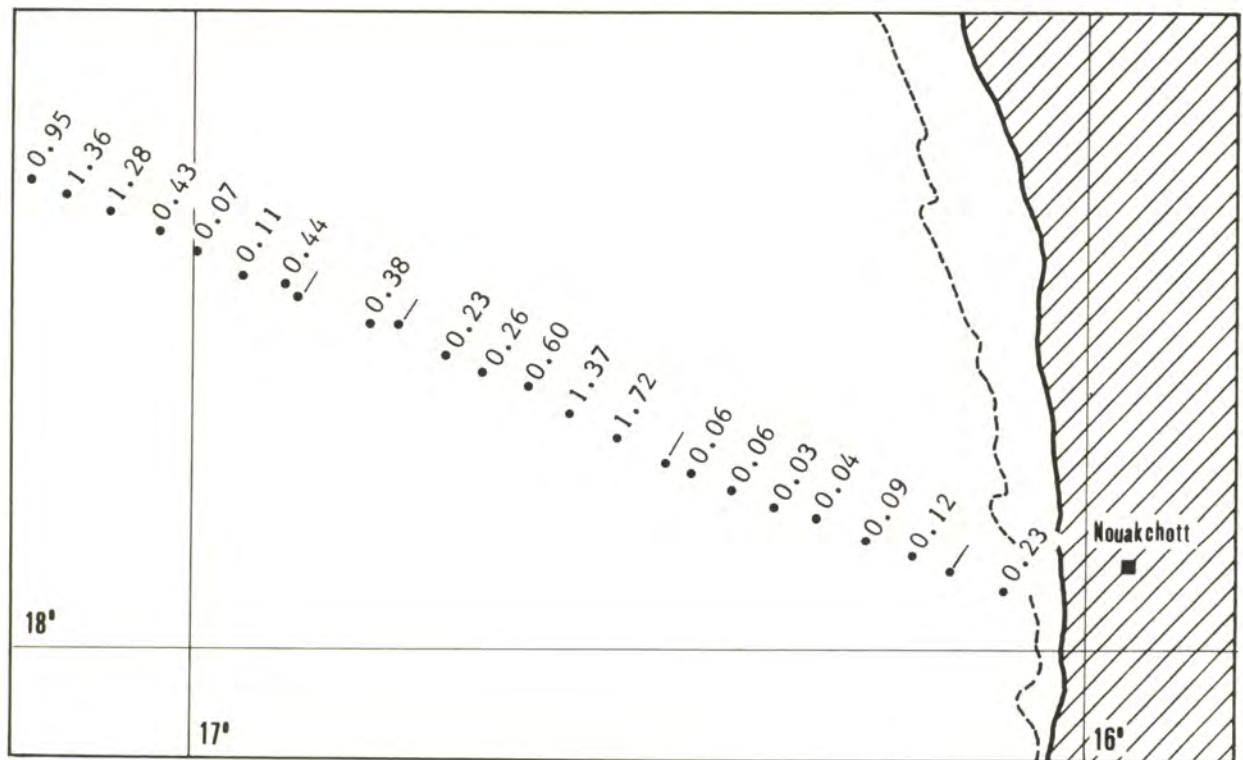
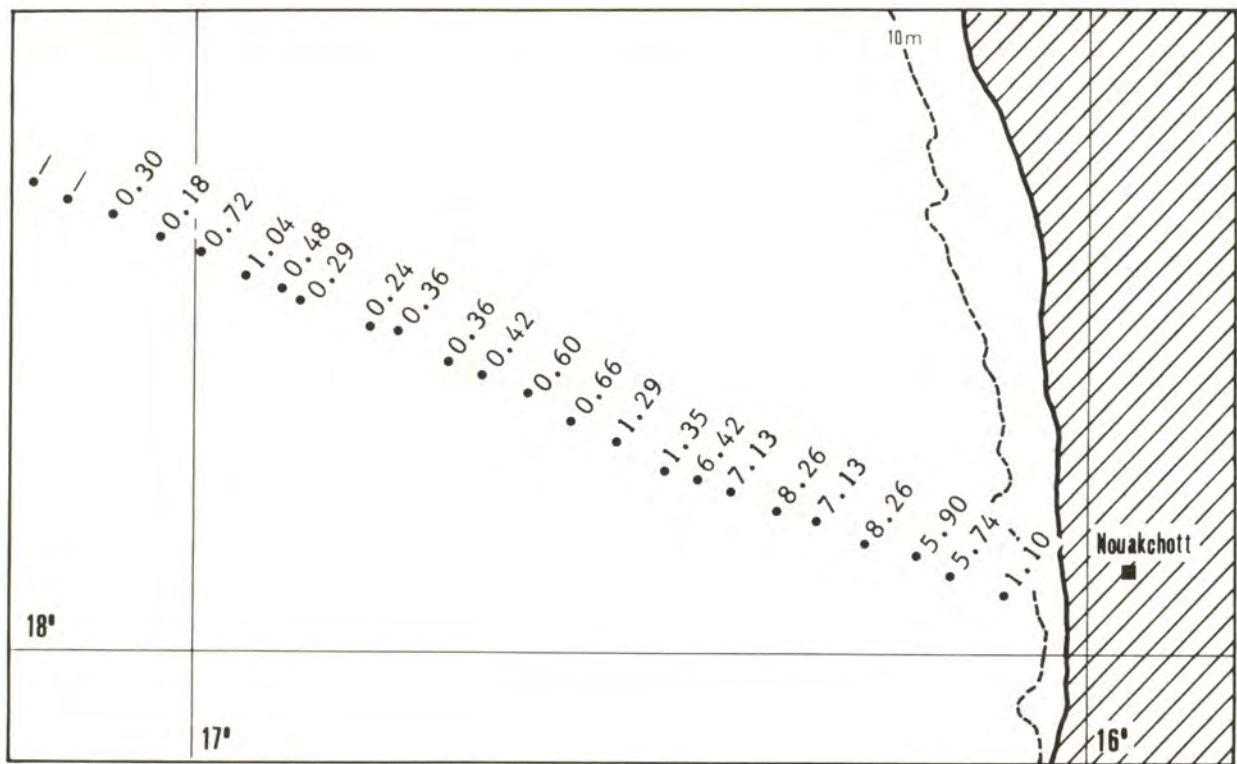


Fig. 17 - Prospection 6 - Silicates et ammonium (µatg/l) -

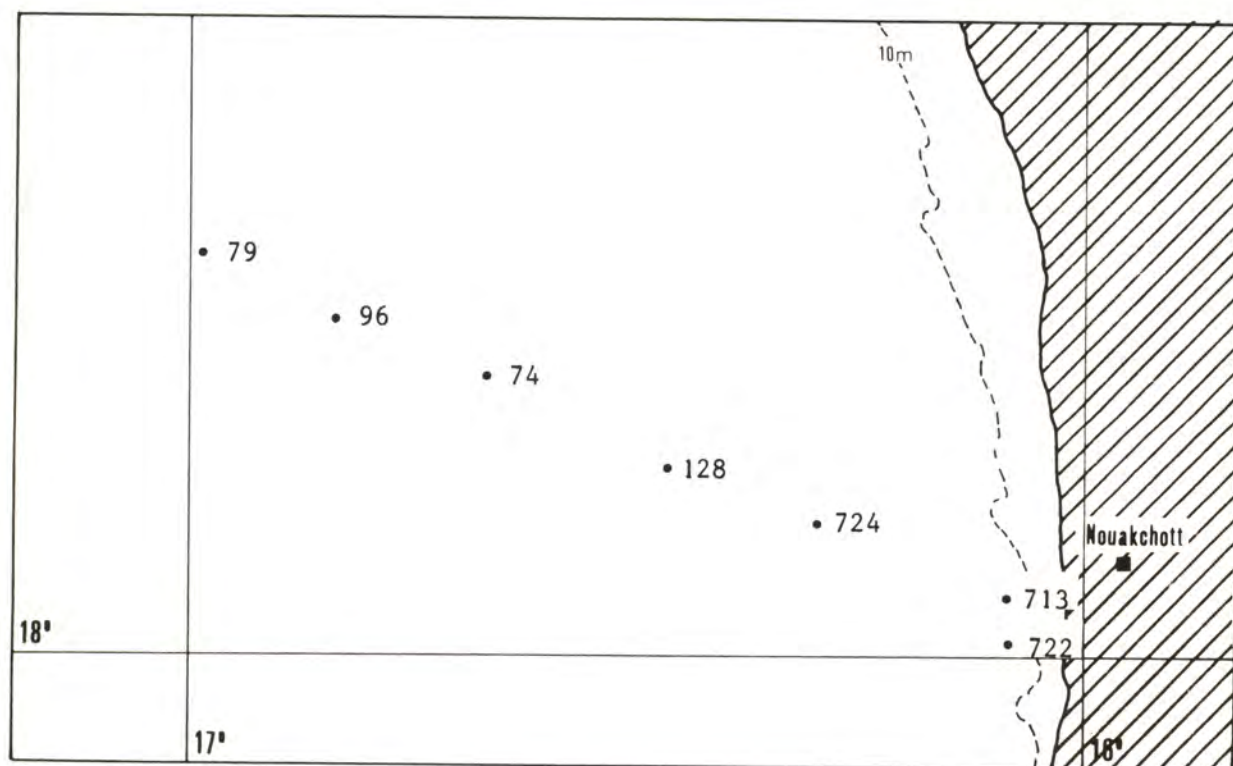
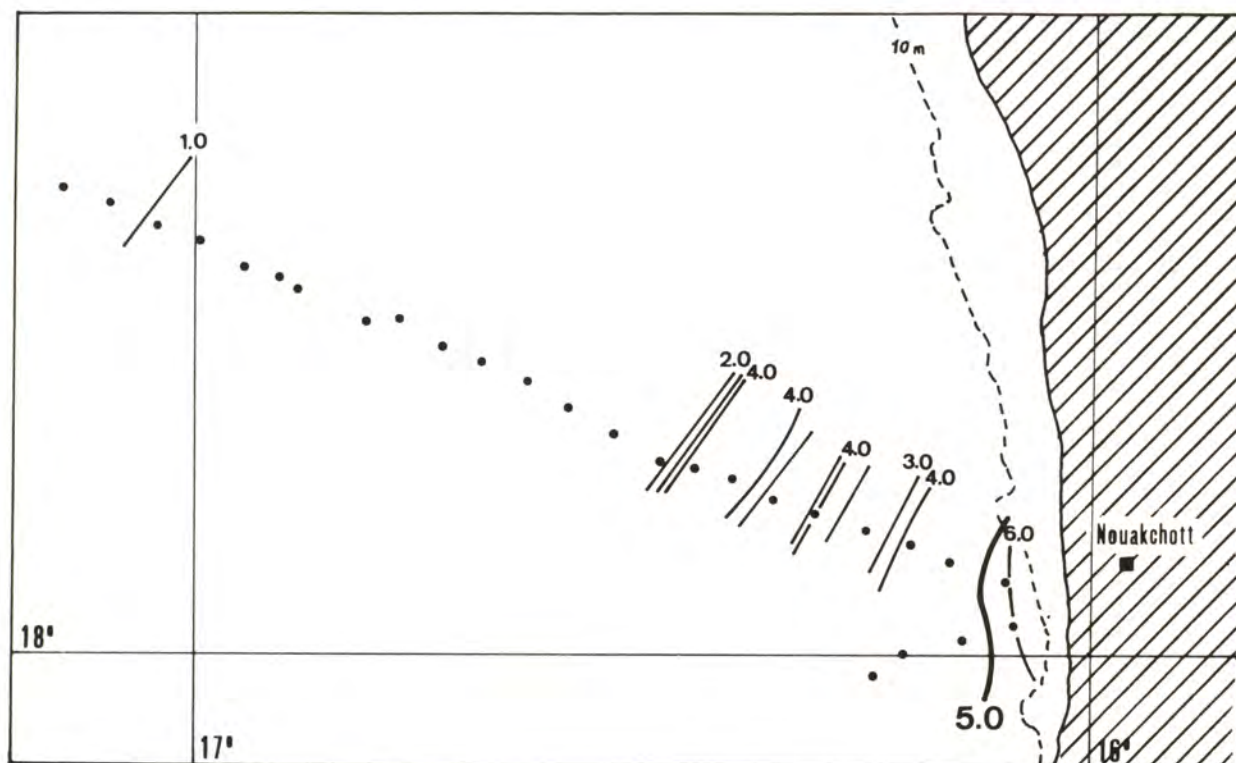


Fig. 18 - Prospection 6 - Chlorophylle a (mg/m^3) et taux de production primaire ($\text{mgC}/\text{m}^3/\text{j}$) -

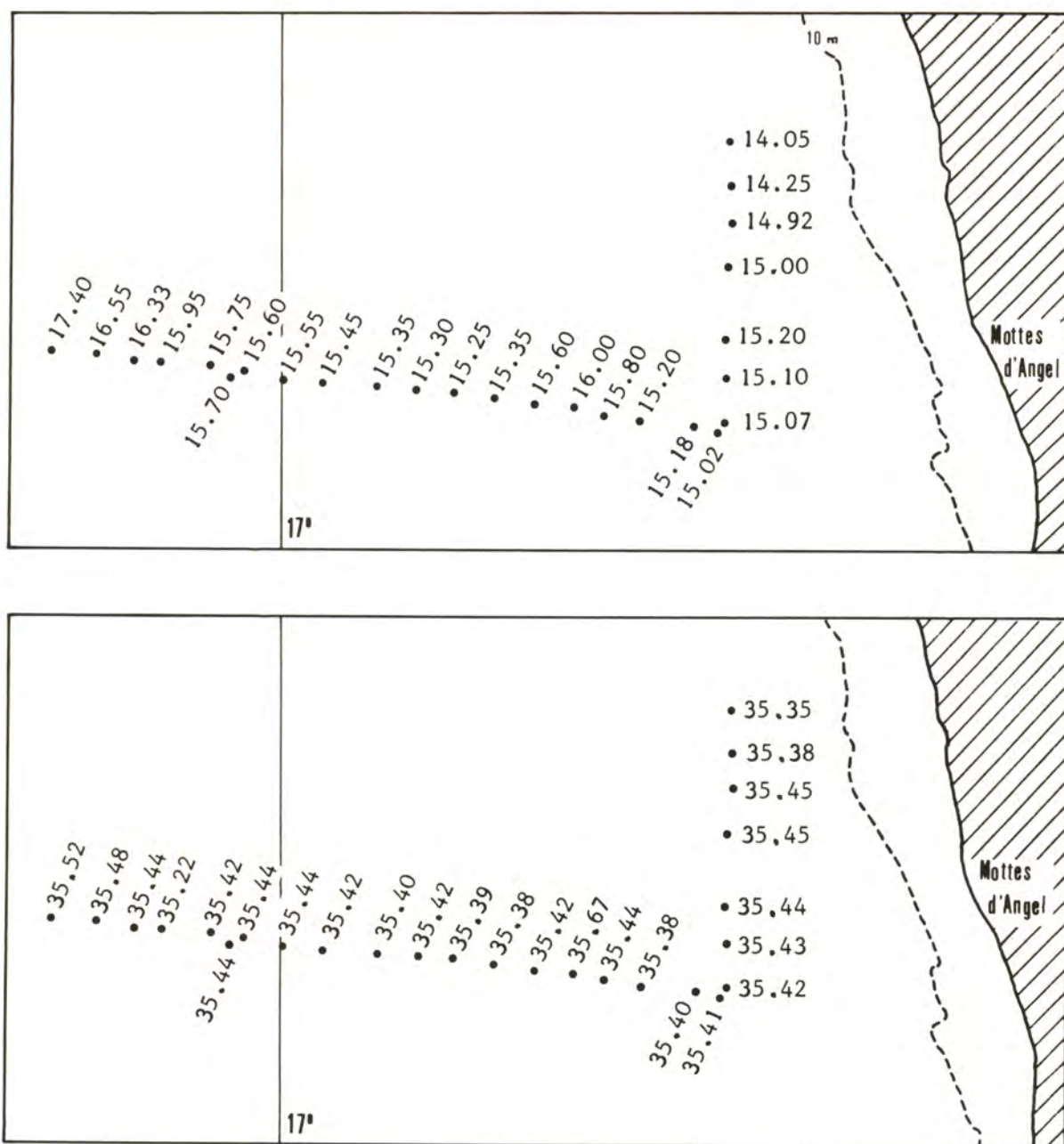


Fig. 19 - Prospection 6 bis - Températures et salinités -

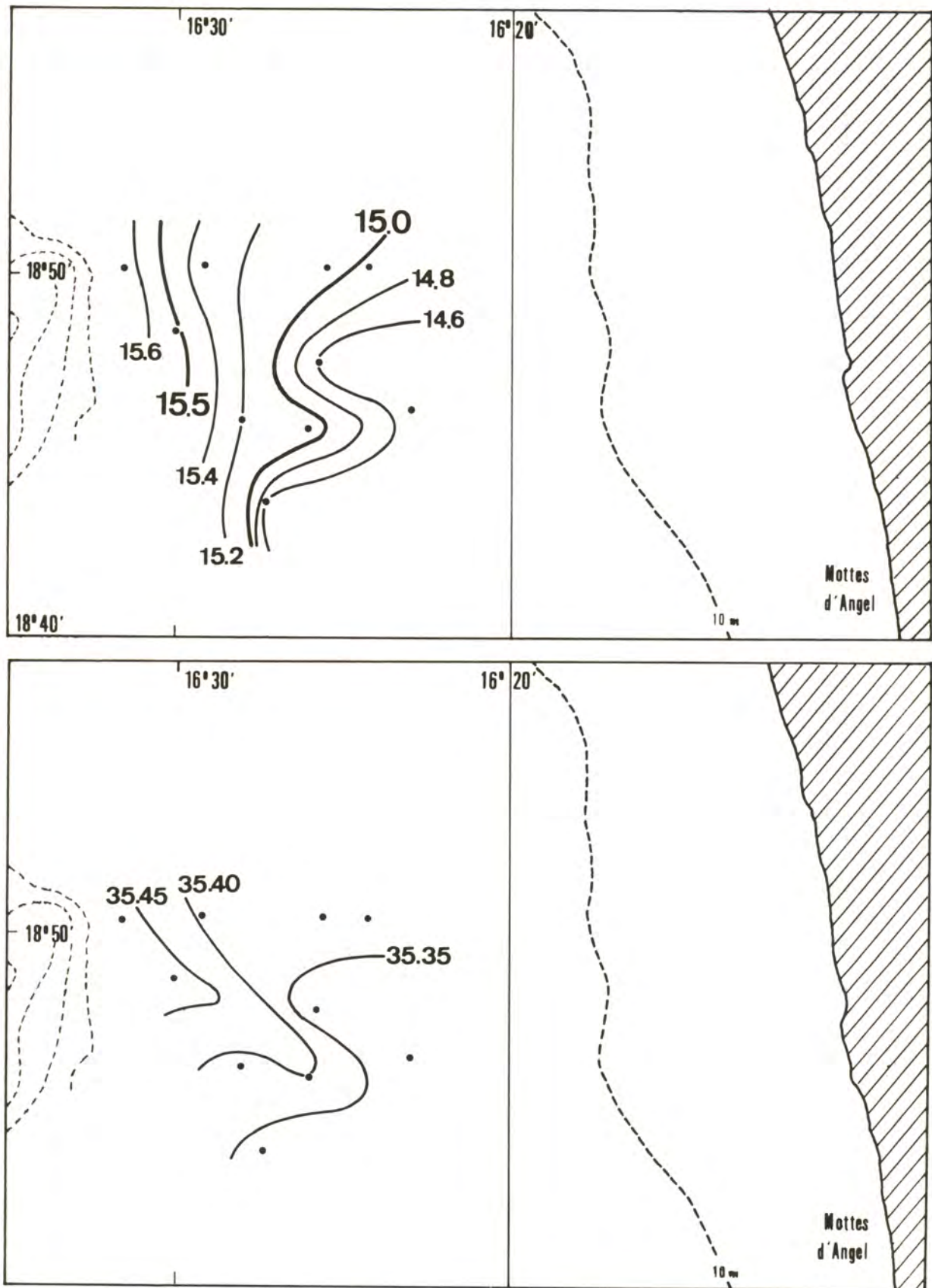


Fig. 20 - Prospection 7 - Structures thermique et haline -

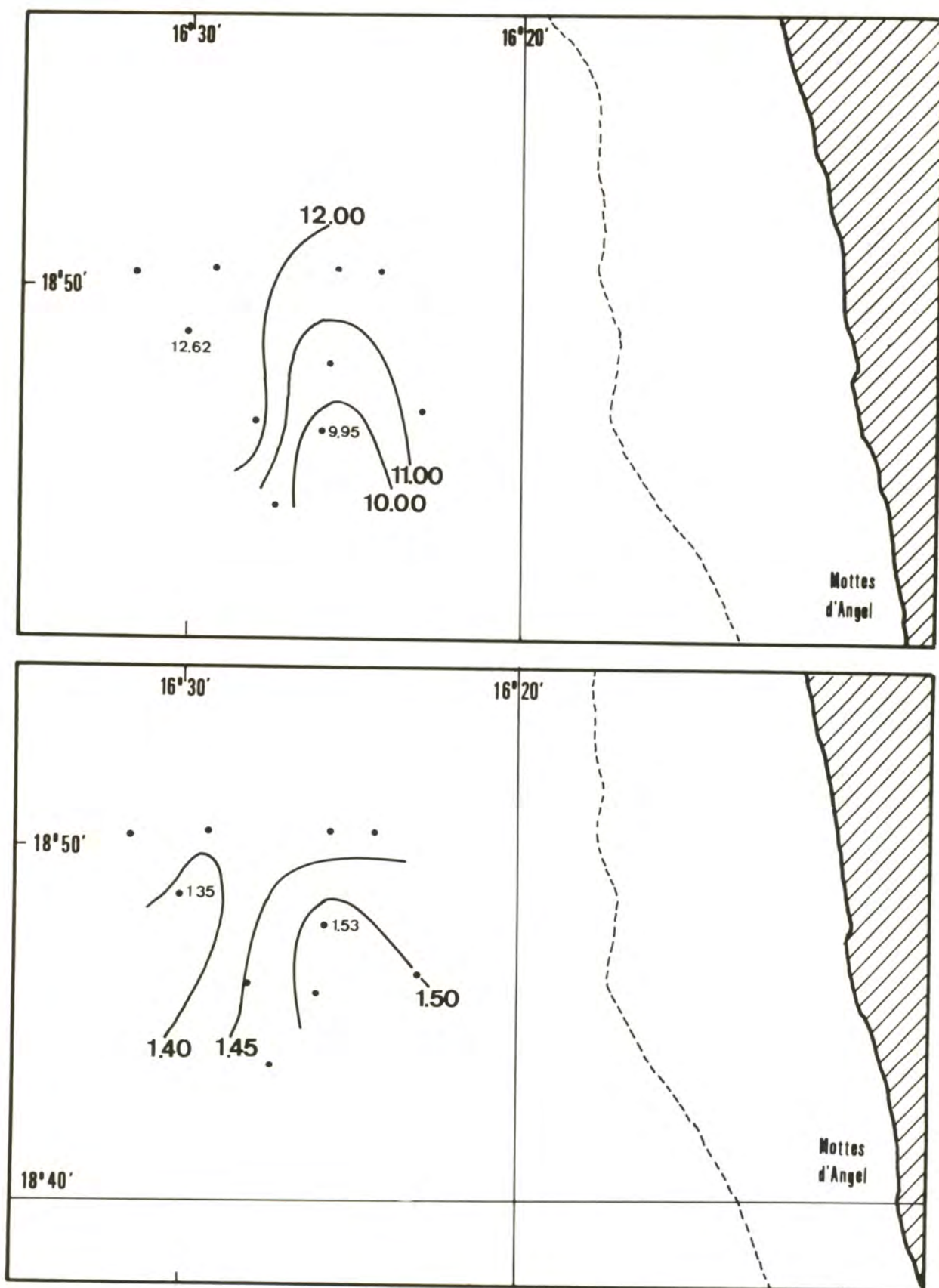


Fig. 21 - Prospection 7 - Distribution des phosphates et des nitrates ($\mu\text{atg/l}$) -

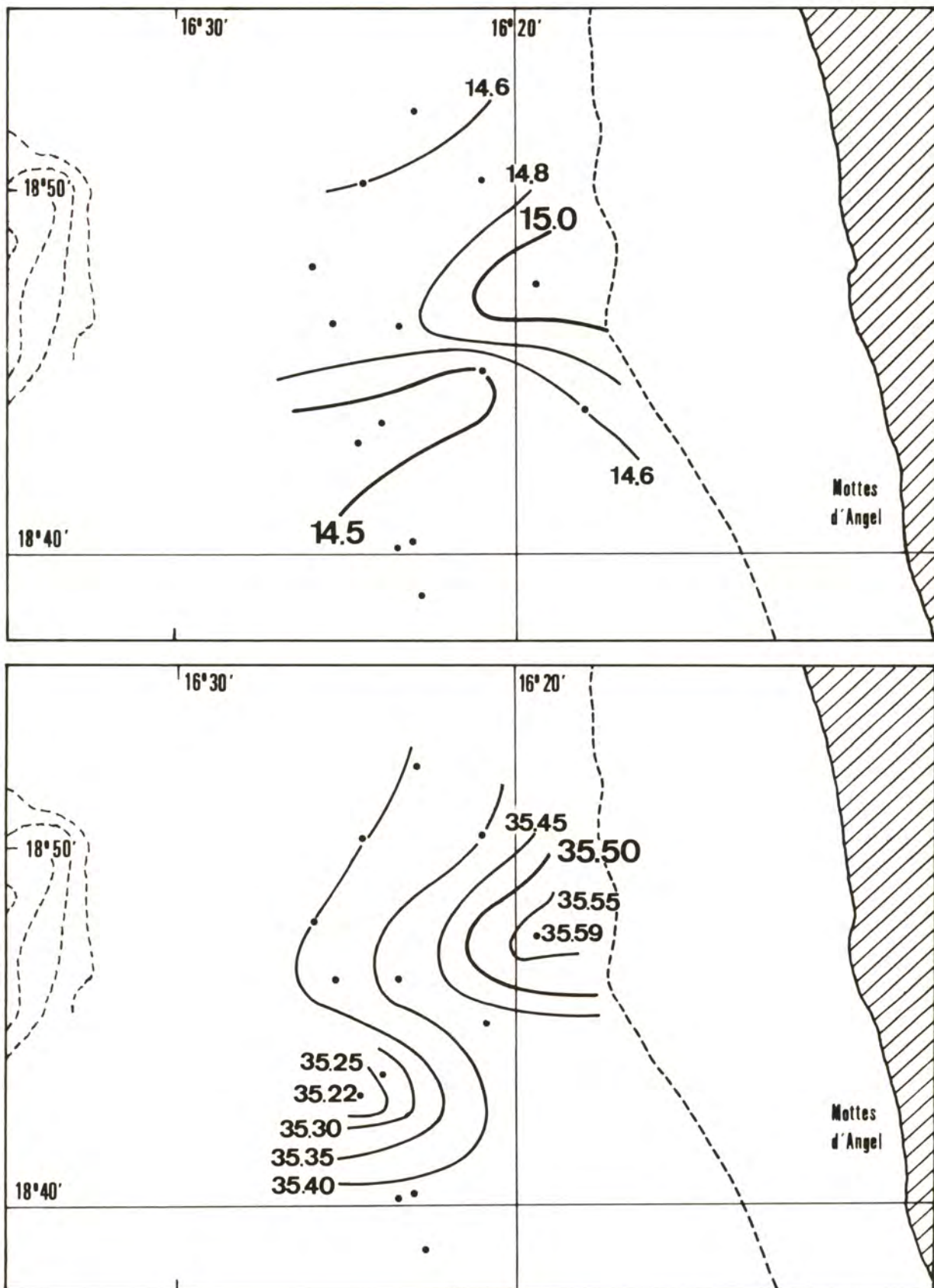


Fig. 22 - Prospection 7 bis - Structures thermique et haline -

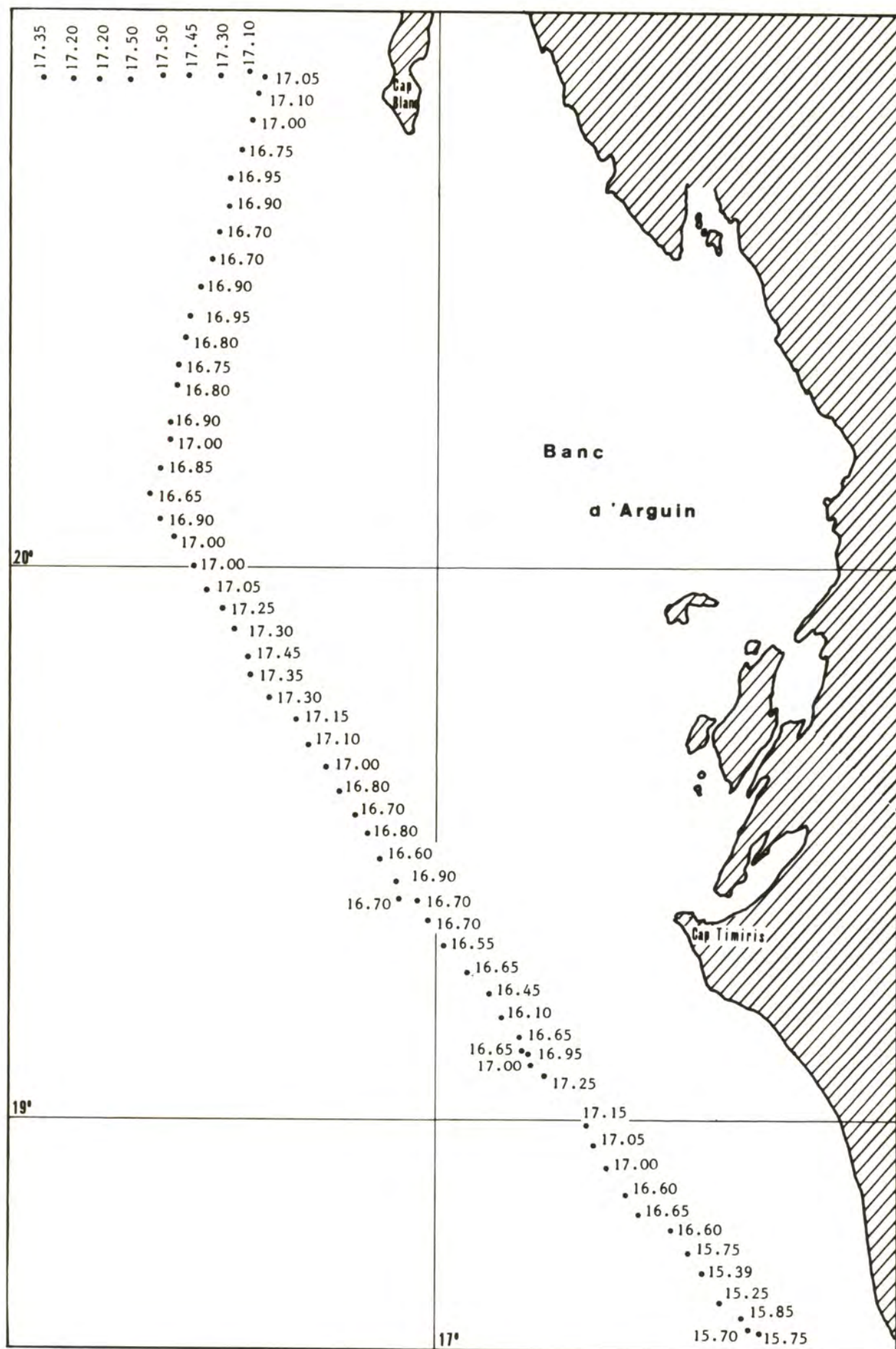


Fig. 23 - Prospection 8 - Températures -

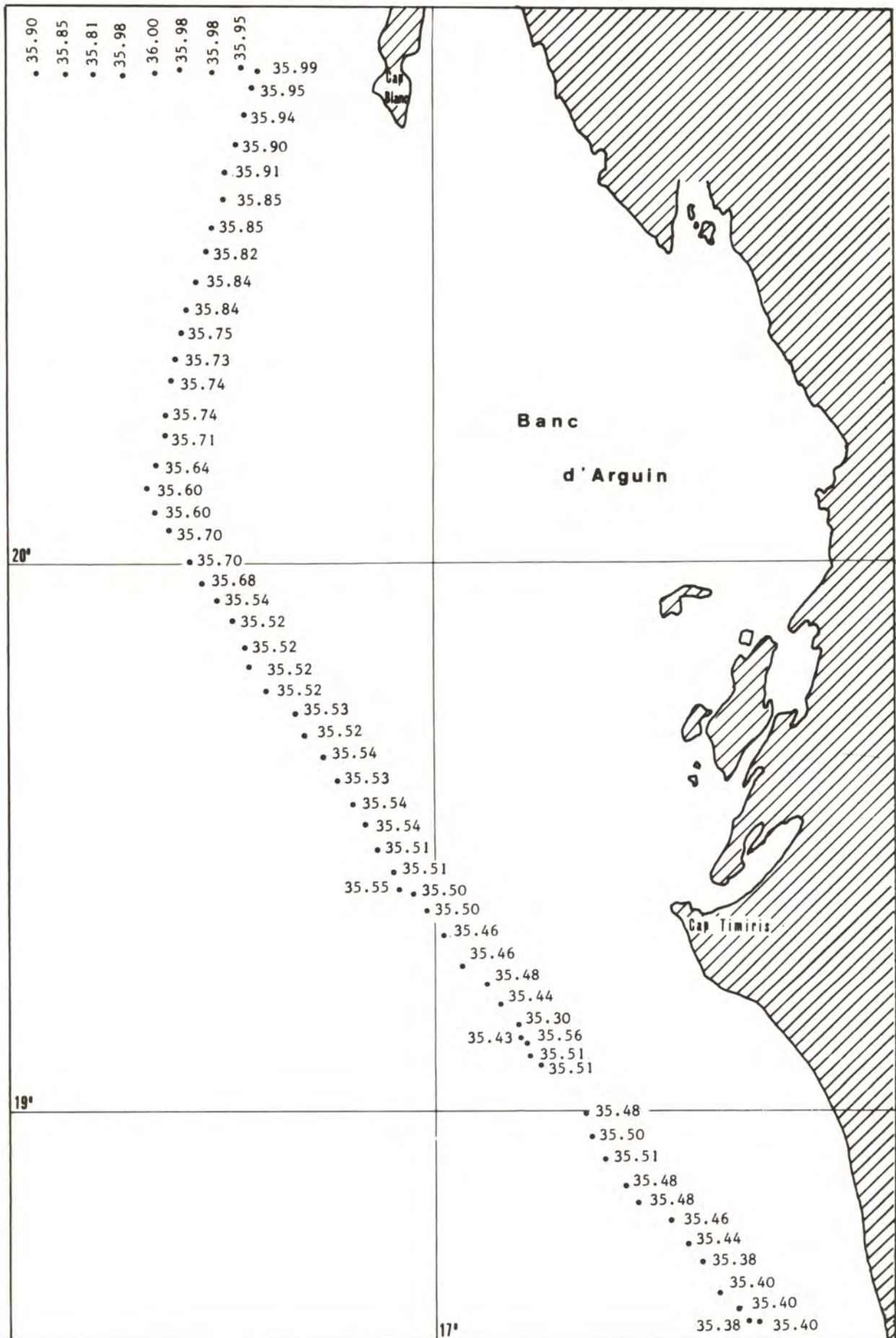


Fig. 24 - Prospection 8 - Salinités -

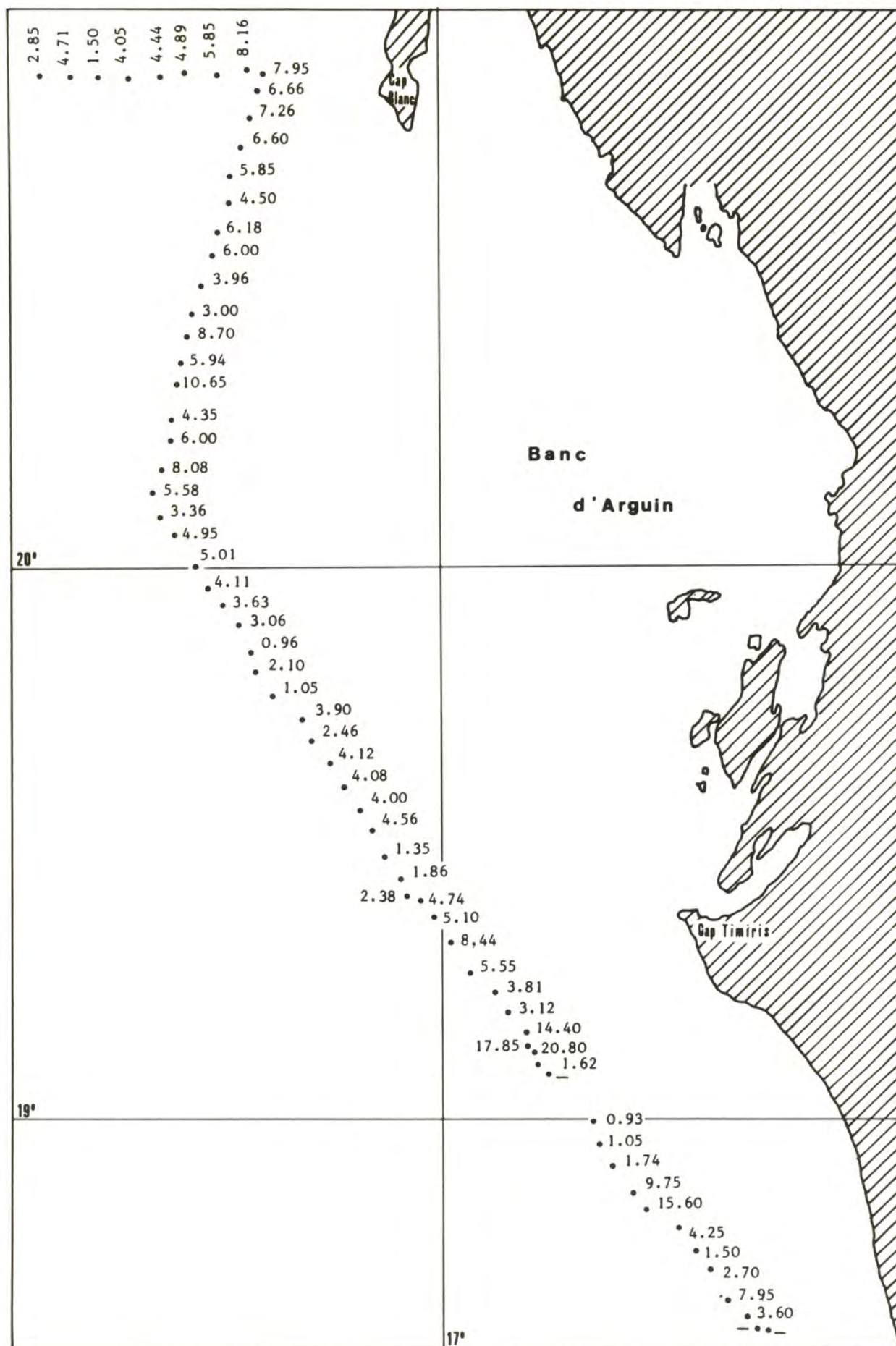


Fig. 25 - Prospection 8 - Chlorophyll a (mg/m³) -

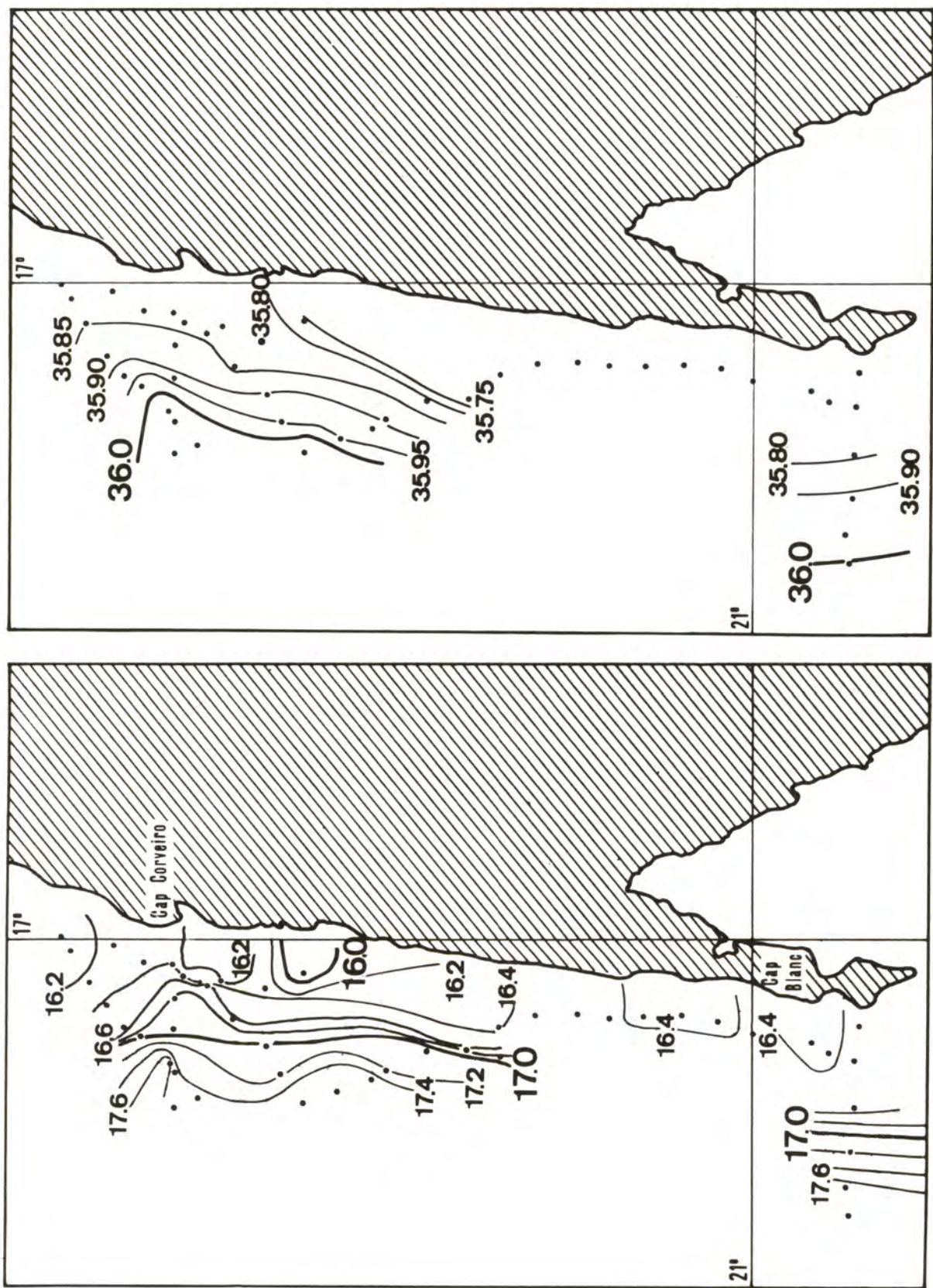


Fig. 26 - Prospection 8 bis - Structures thermique et haline -

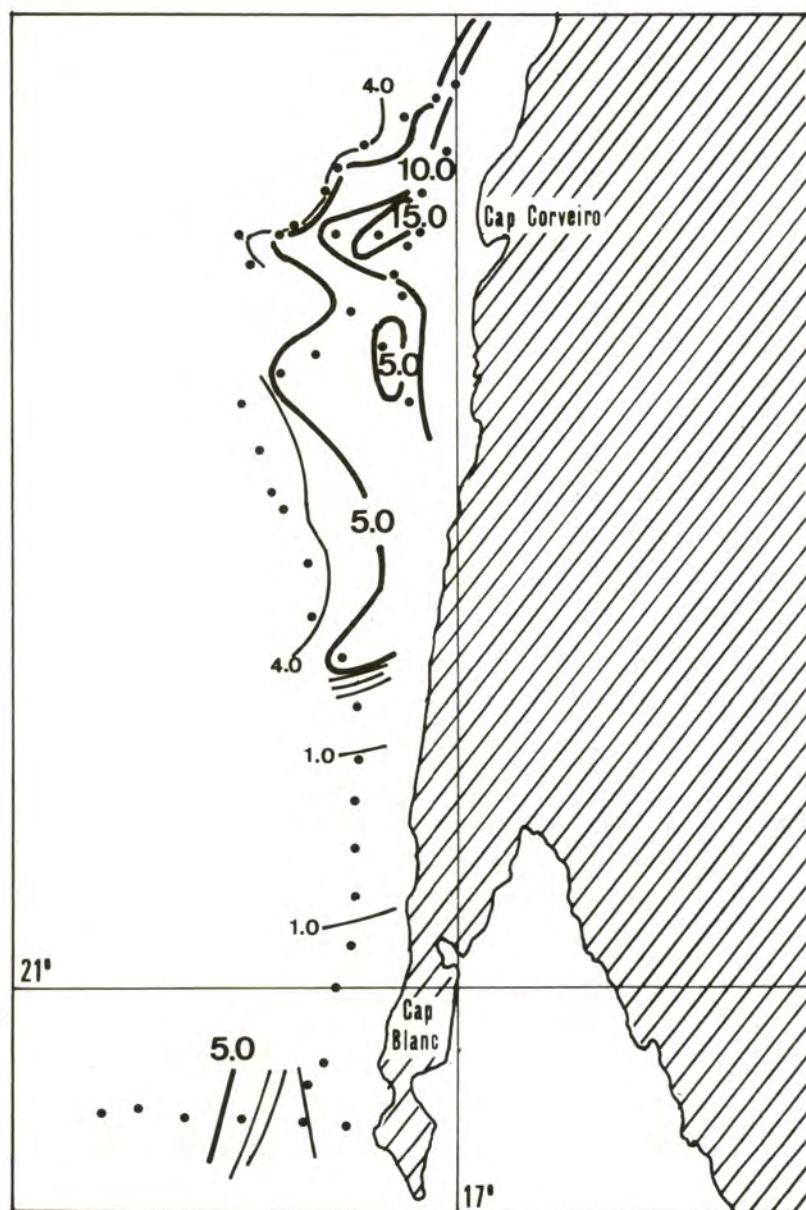


Fig. 27 - Prospection 8 bis - Distribution de la chlorophylle a (mg/m^3) -

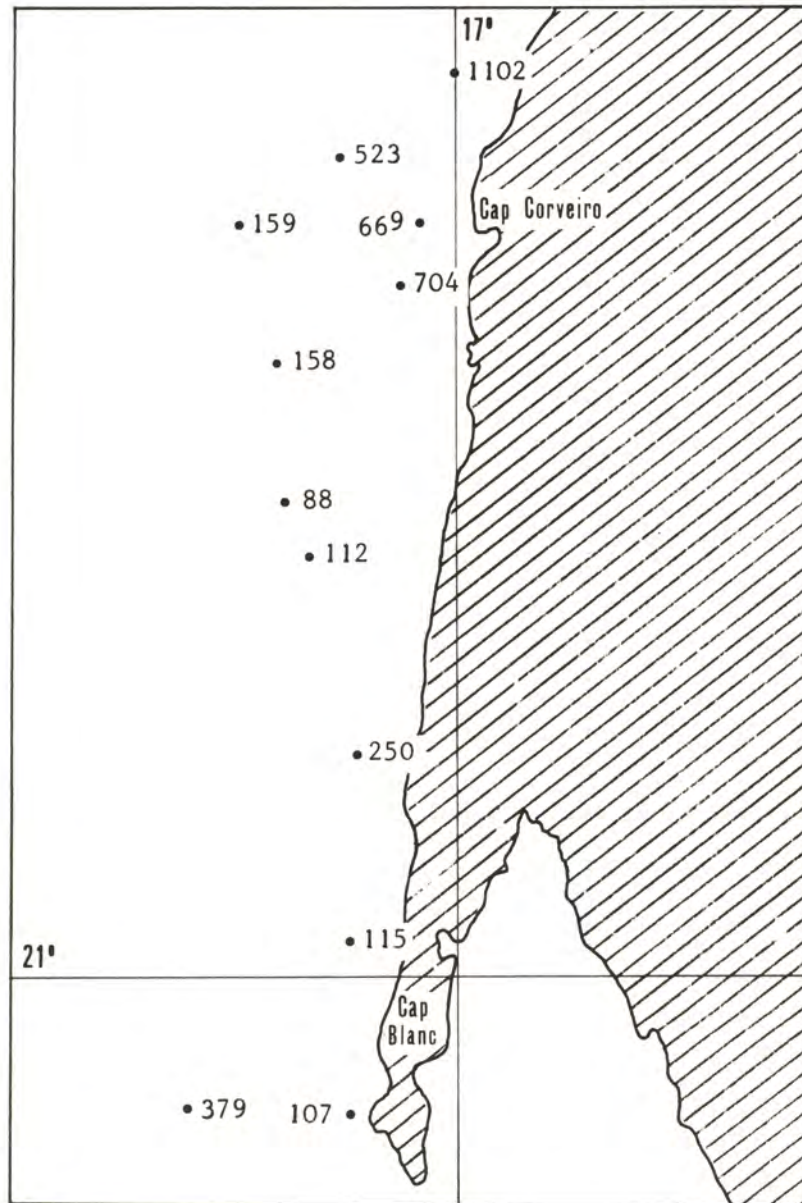


Fig. 28 - Prospection 8 bis - Taux de production primaire (mgC/m³/j) -

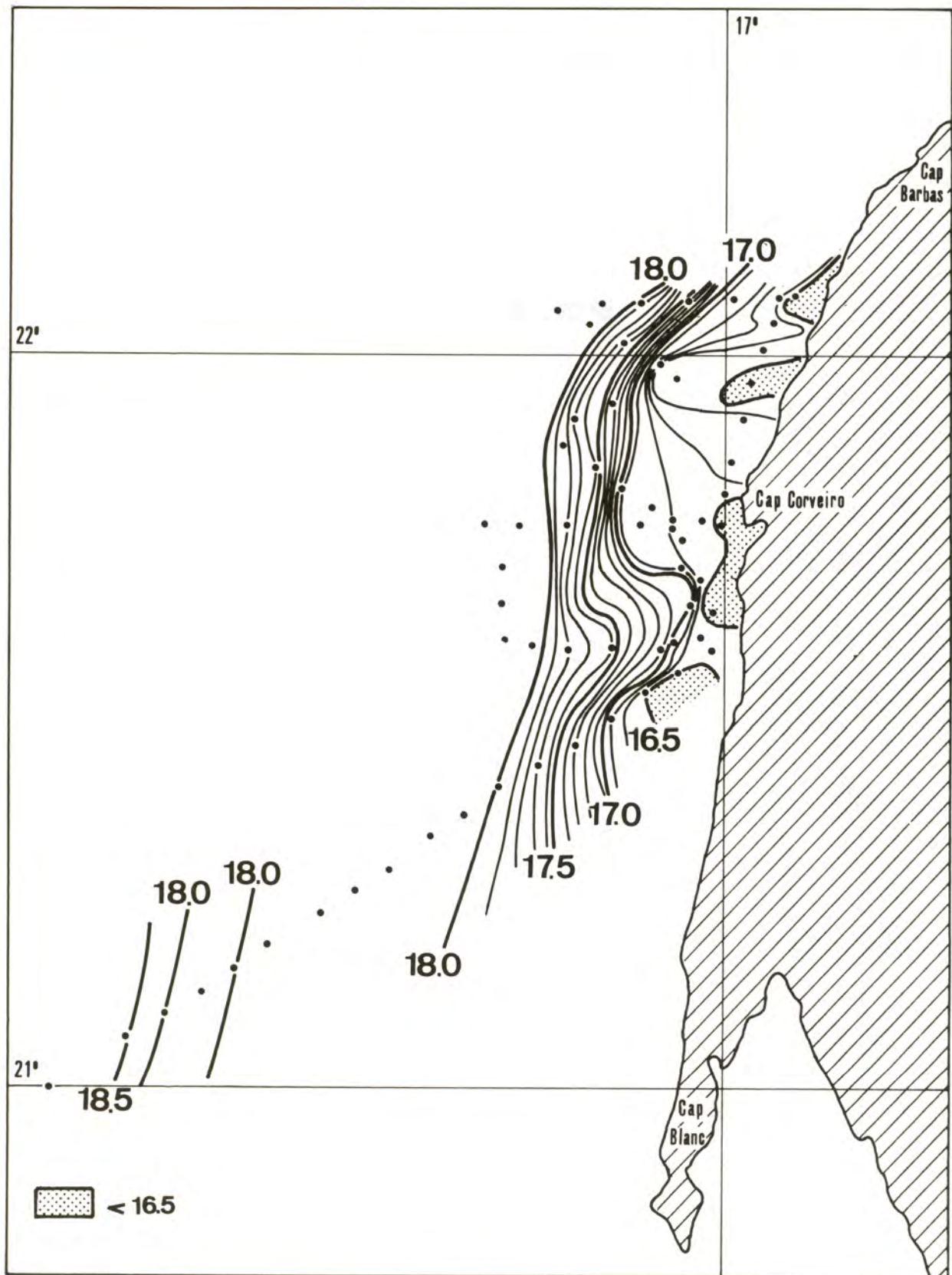


Fig. 29 - Prospection 9 - Structure thermique -

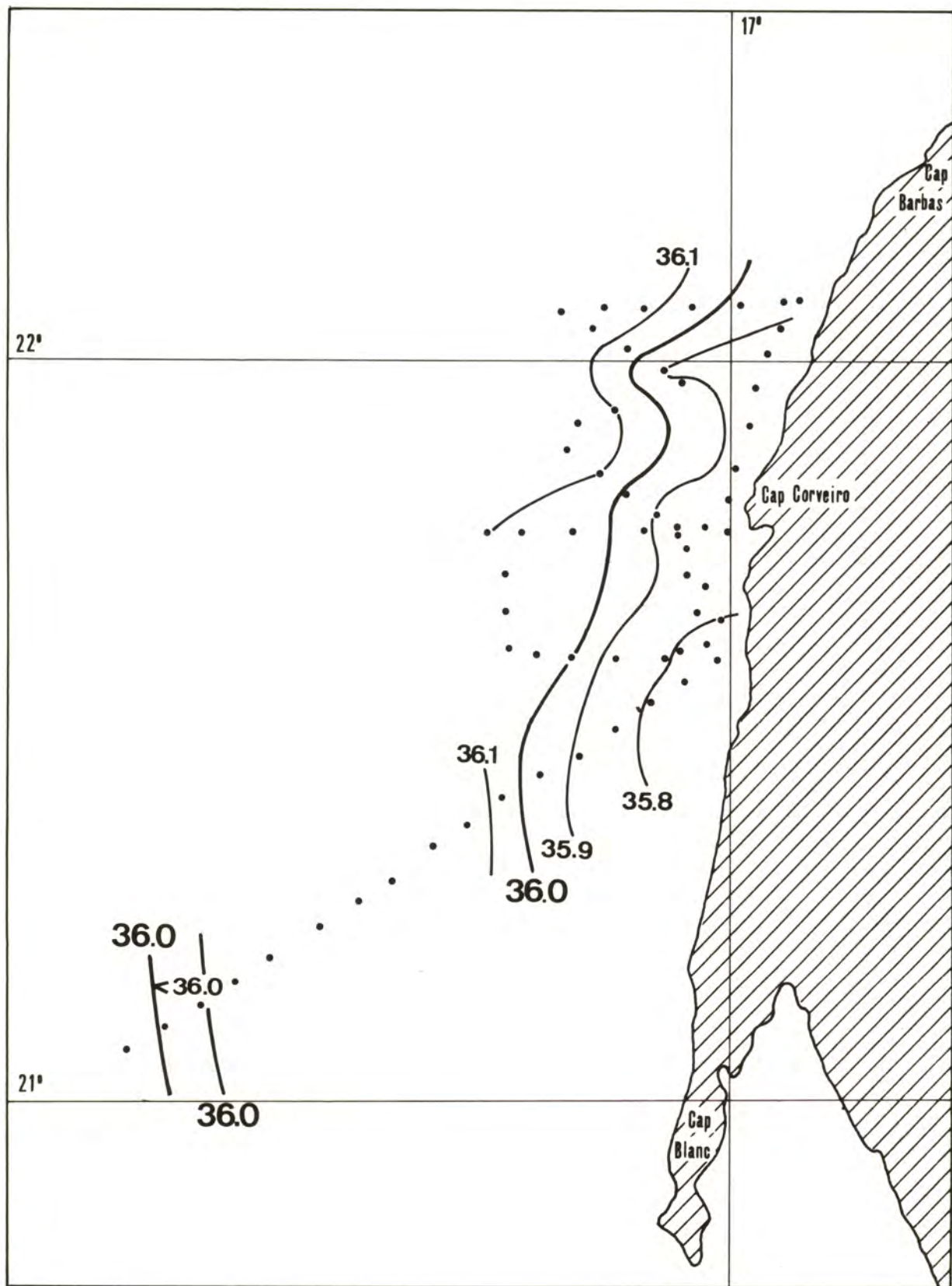


Fig. 30 - Prospecção 9 - Structure haline -

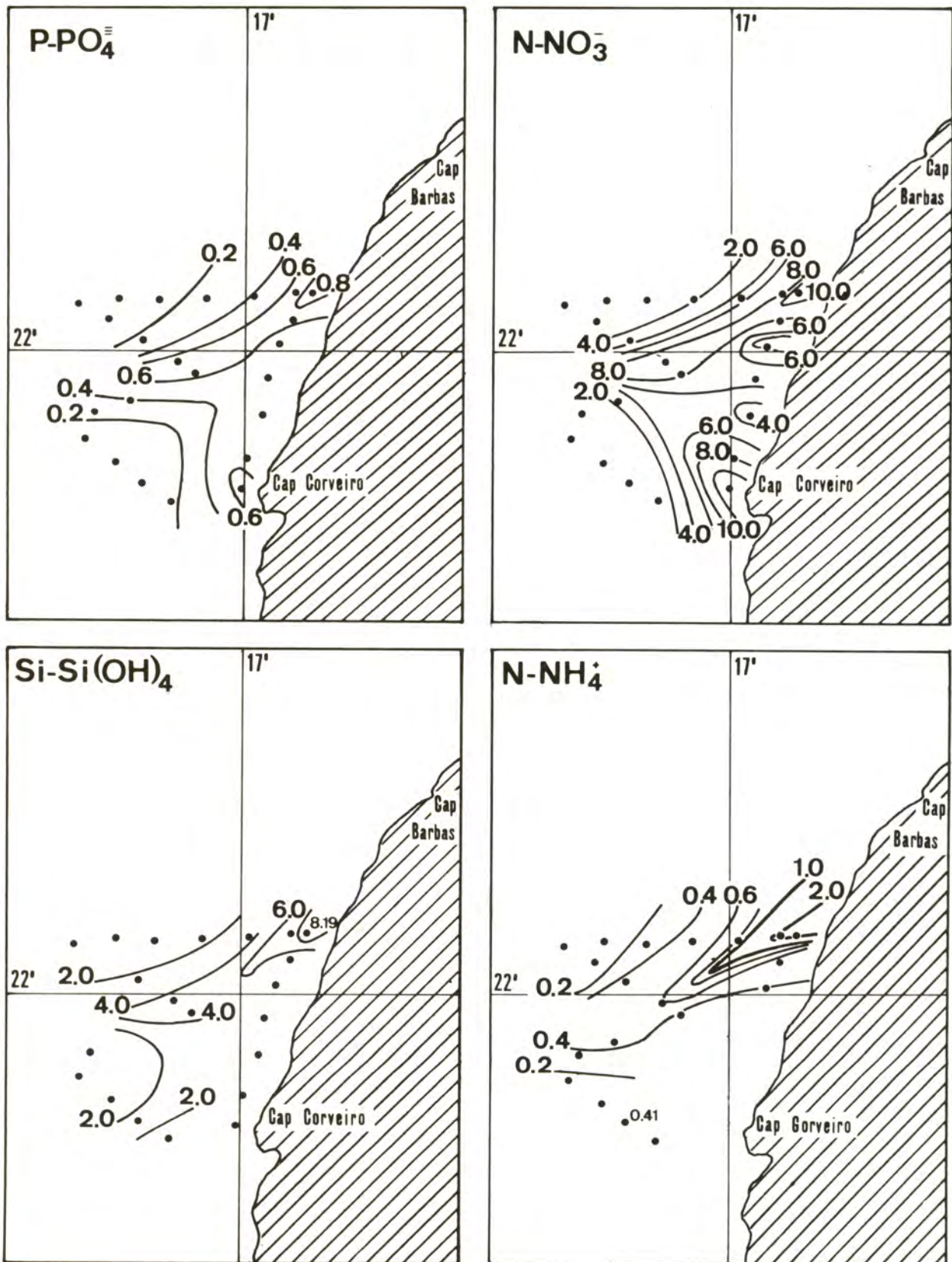


Fig. 31 - Prospection 9 - Distribution des sels nutritifs ($\mu\text{atg/l}$) -

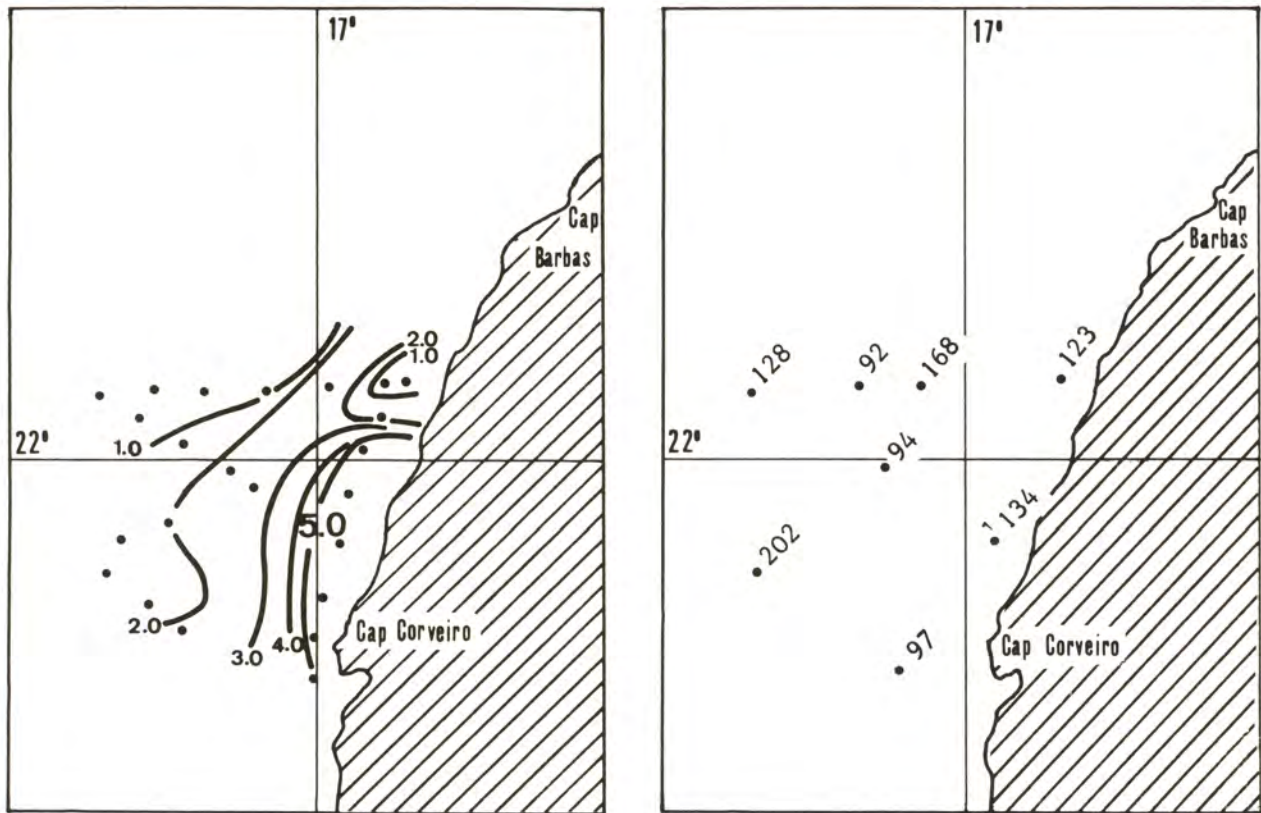


Fig. 32 - Prospection 9 - Distribution de la chlorophylle a (mg/m³) et taux de production primaire (mgC/m³/j) -

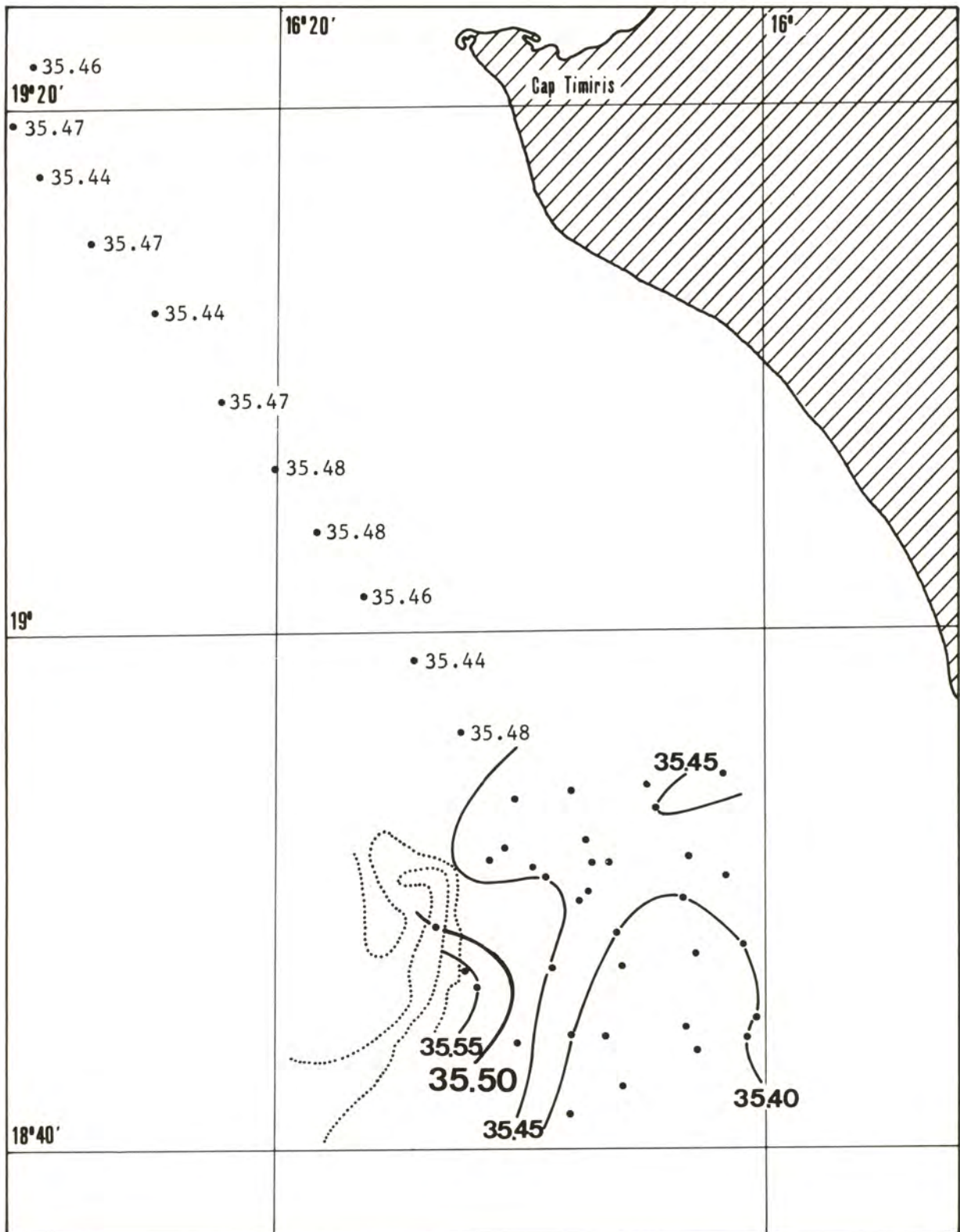


Fig. 34 - Prospection 10 - Structure haline -

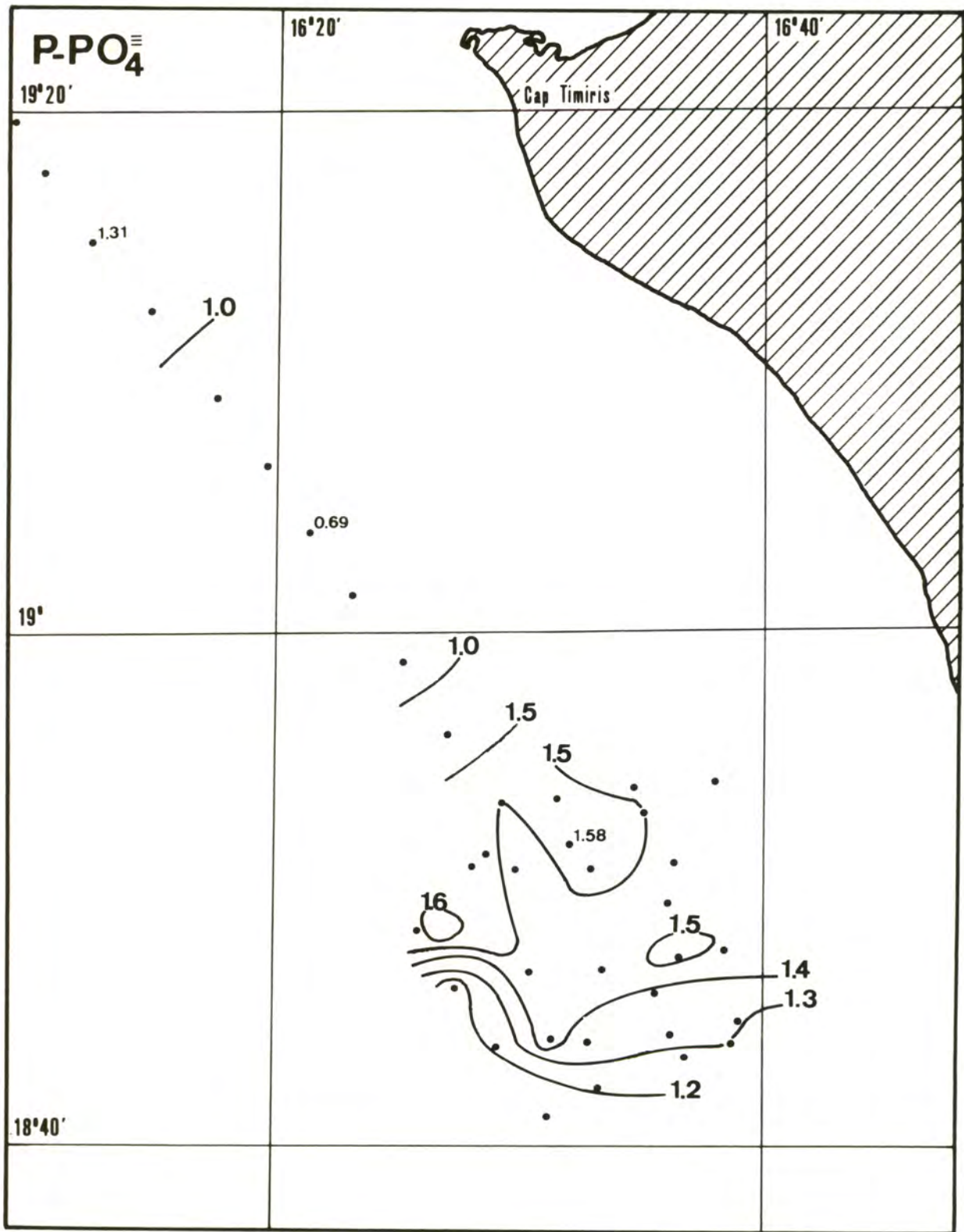


Fig. 35 - Prospection 10 - Distribution des phosphates ($\mu\text{atg/l}$) -

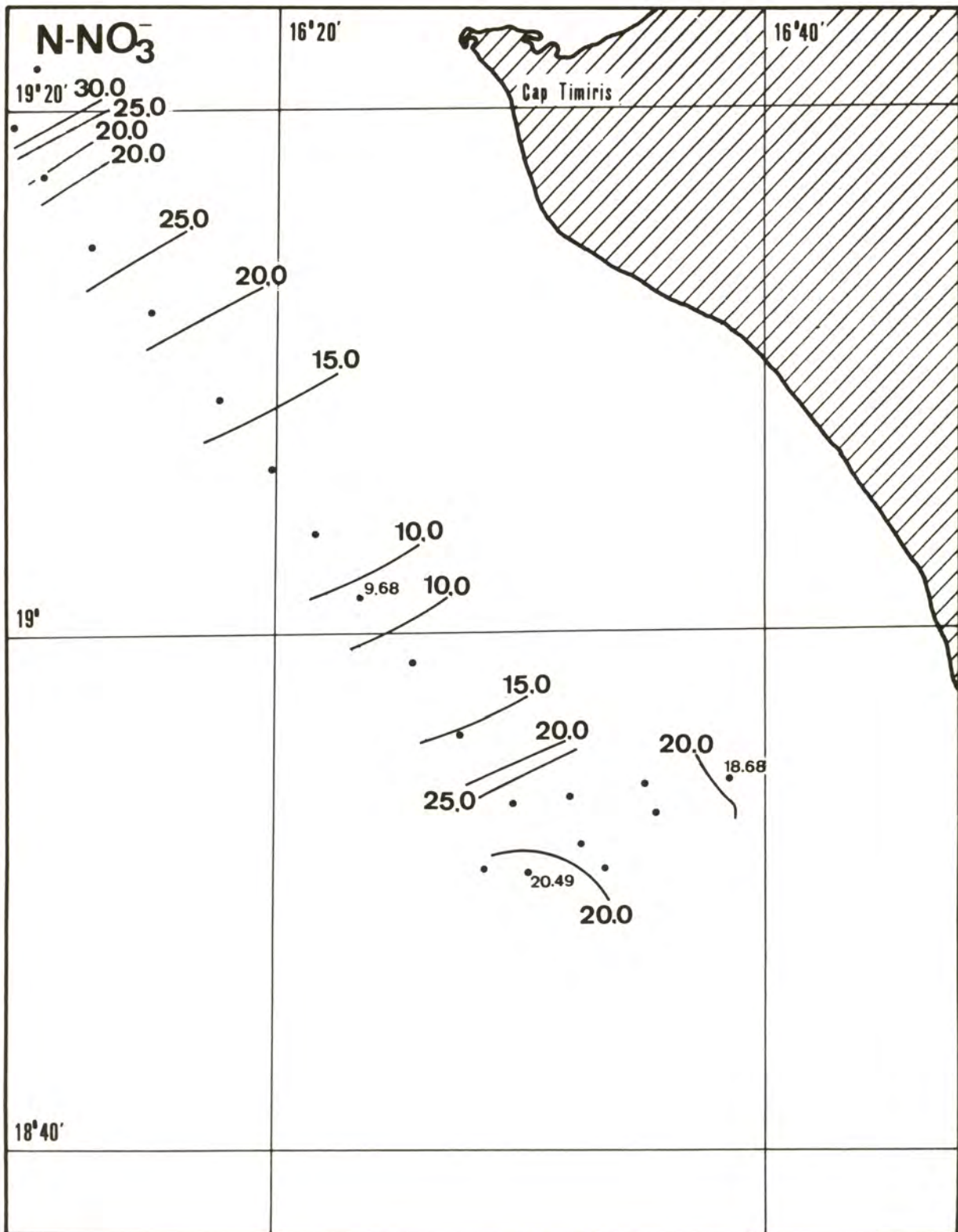


Fig. 36 - Prospection 10 - Distribution des nitrates ($\mu\text{atg/l}$) -

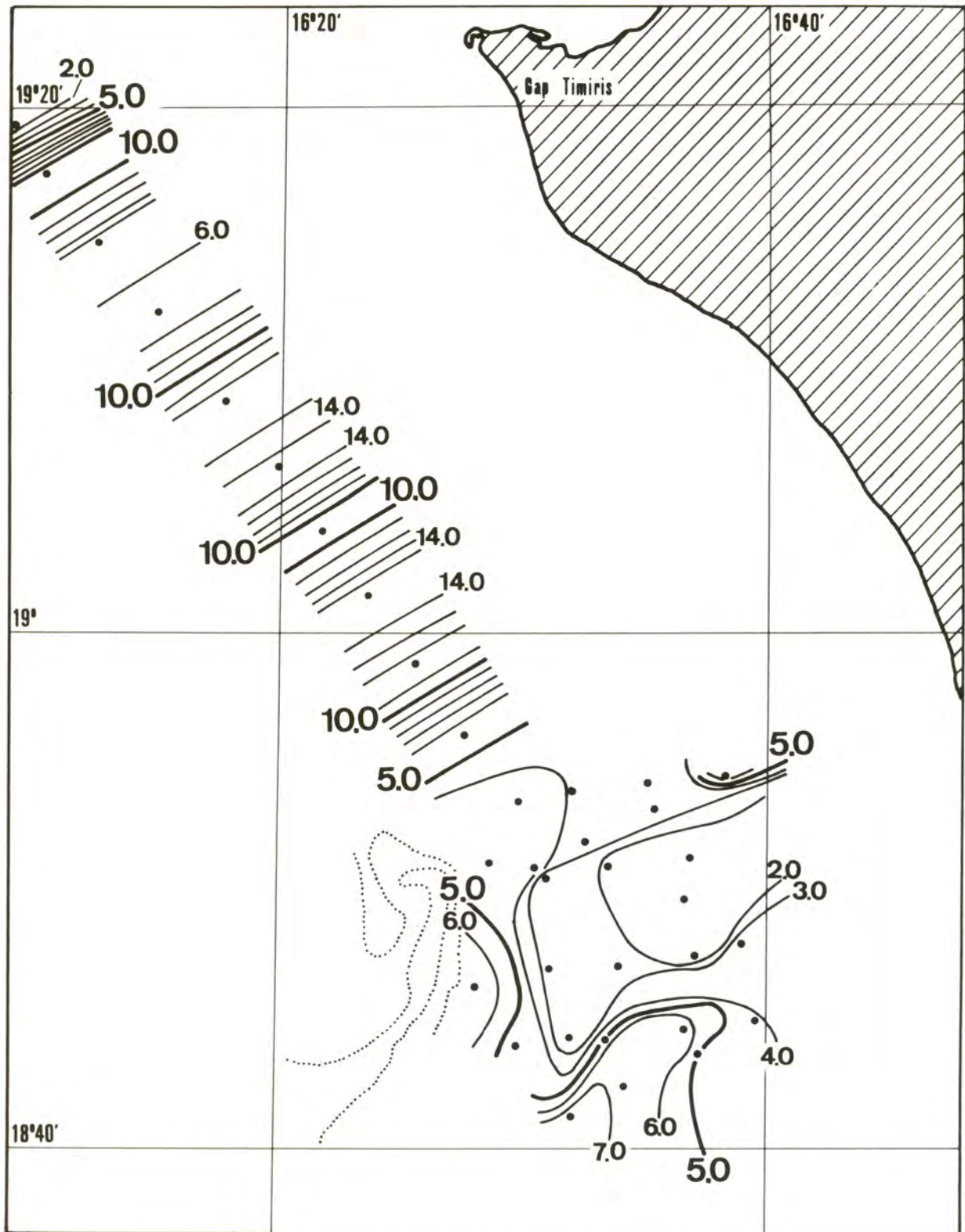


Fig. 37 - Prospection 10 - Distribution de la chlorophylle a (mg/m^3) -

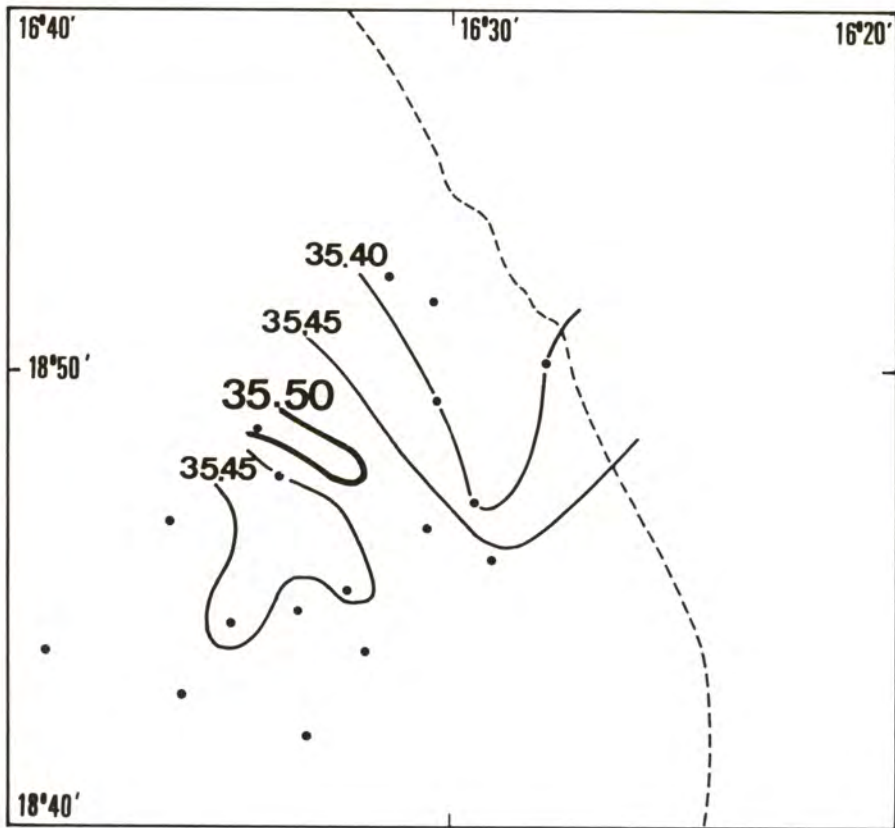
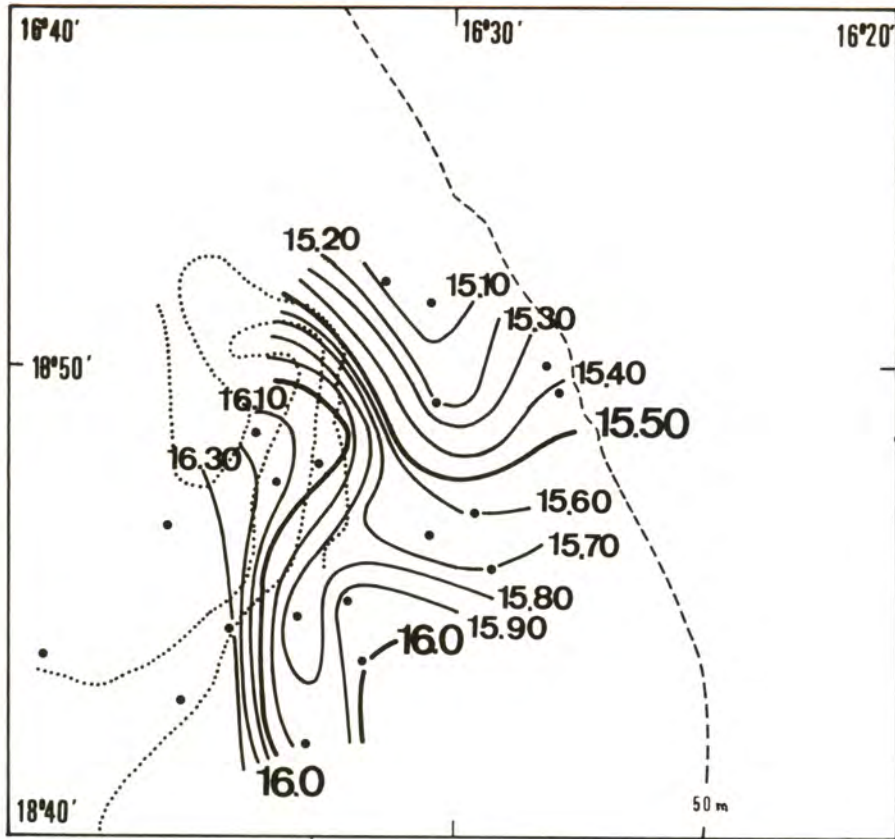


Fig. 38 - Prospection 11 - Structures thermique et haline -

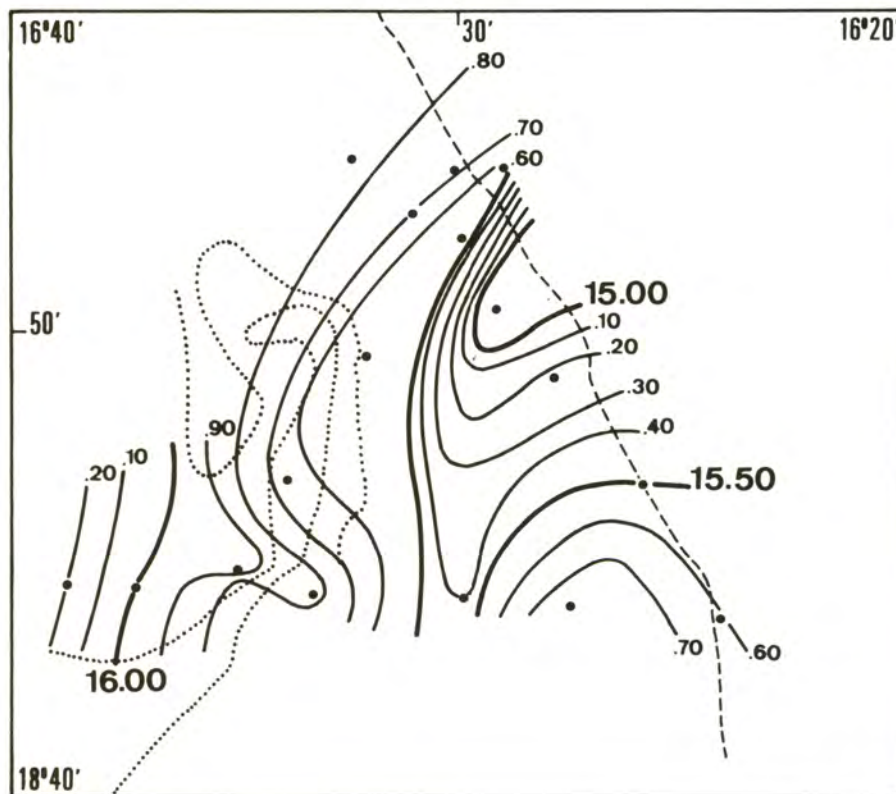
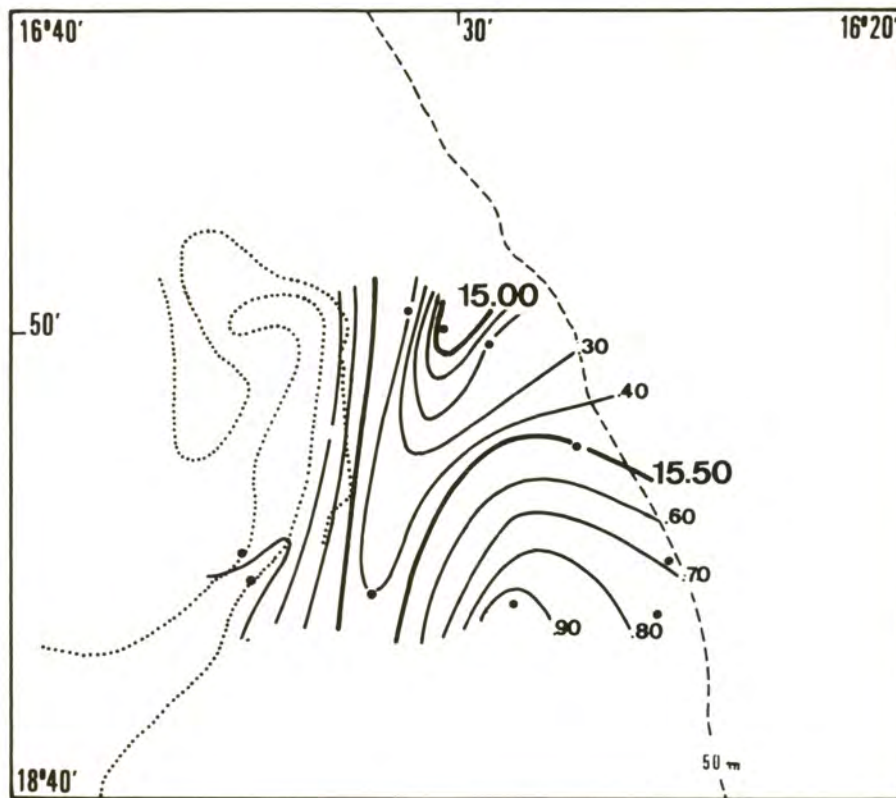


Fig. 39 - Prospection 12 - Structures thermiques -

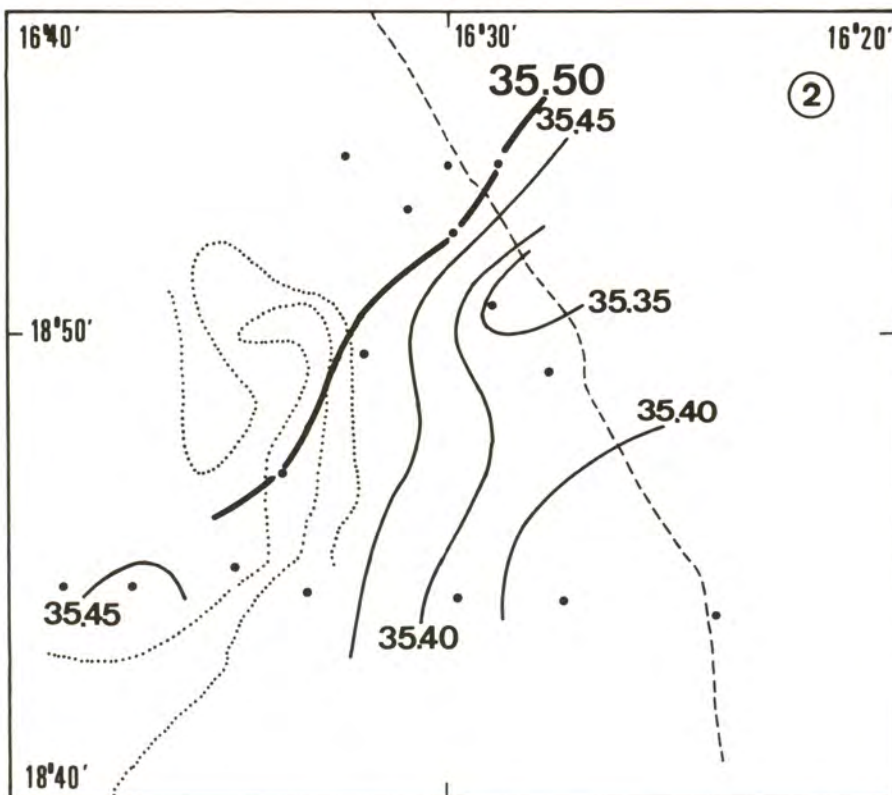
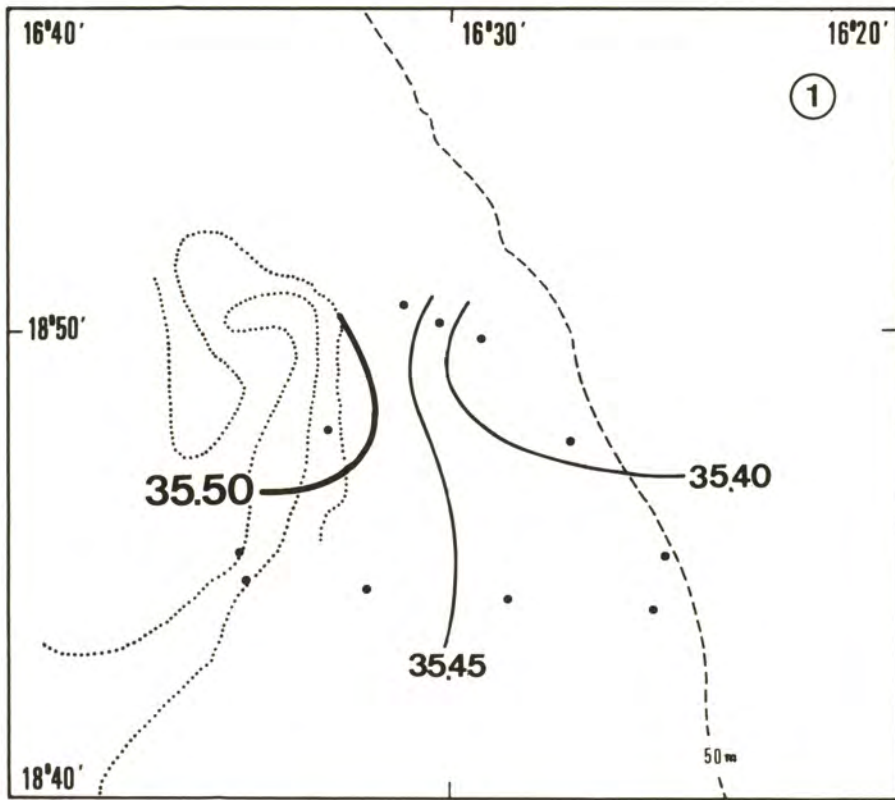


Fig. 40 - Prospection 12 - Structures halines -

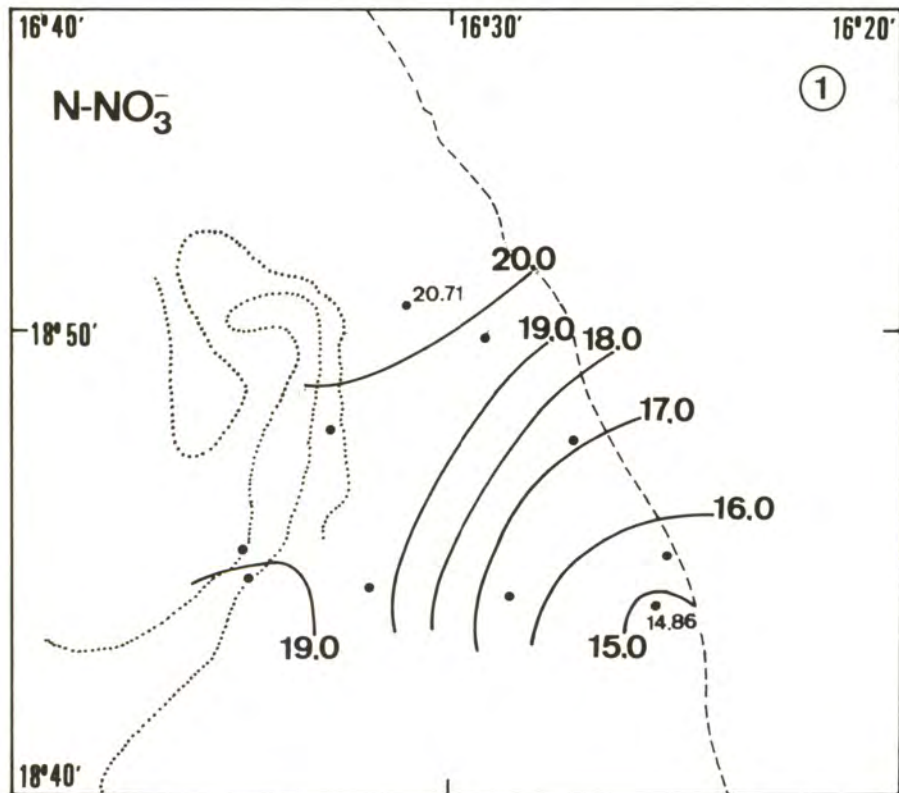
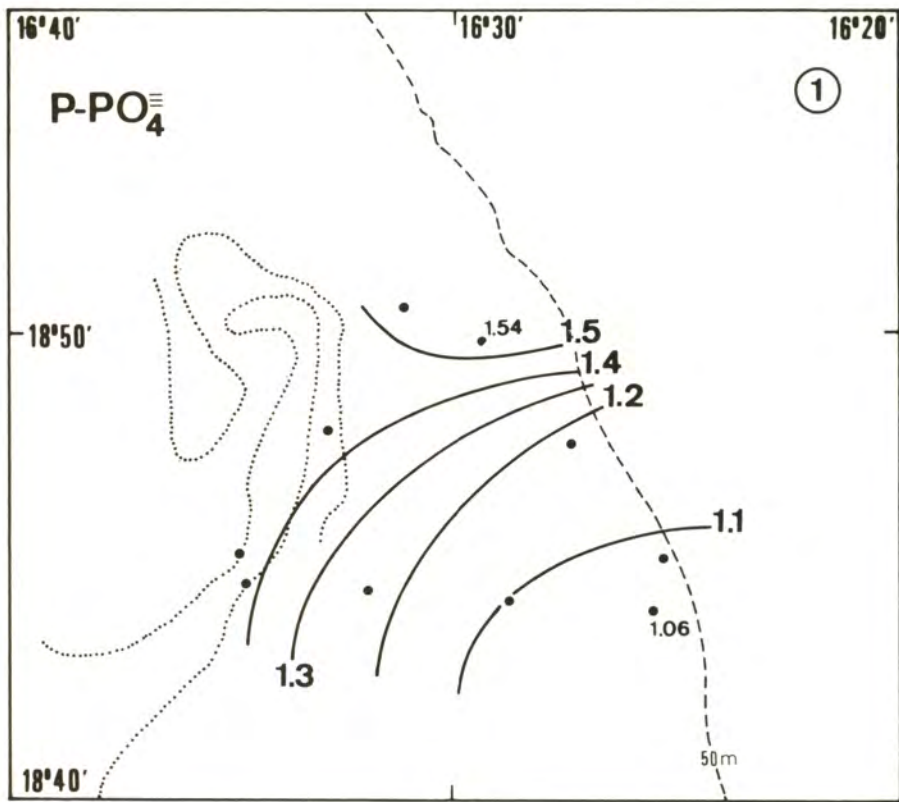


Fig. 41 - Prospection 12 - Distribution des phosphates et des nitrates ($\mu\text{atg/l}$) -

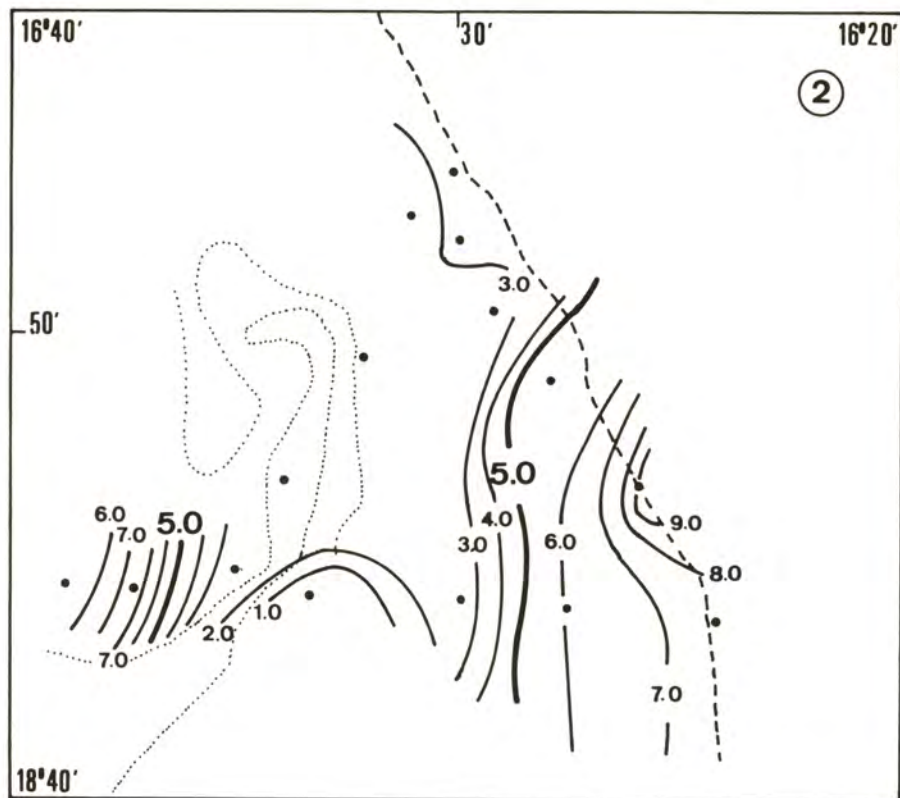
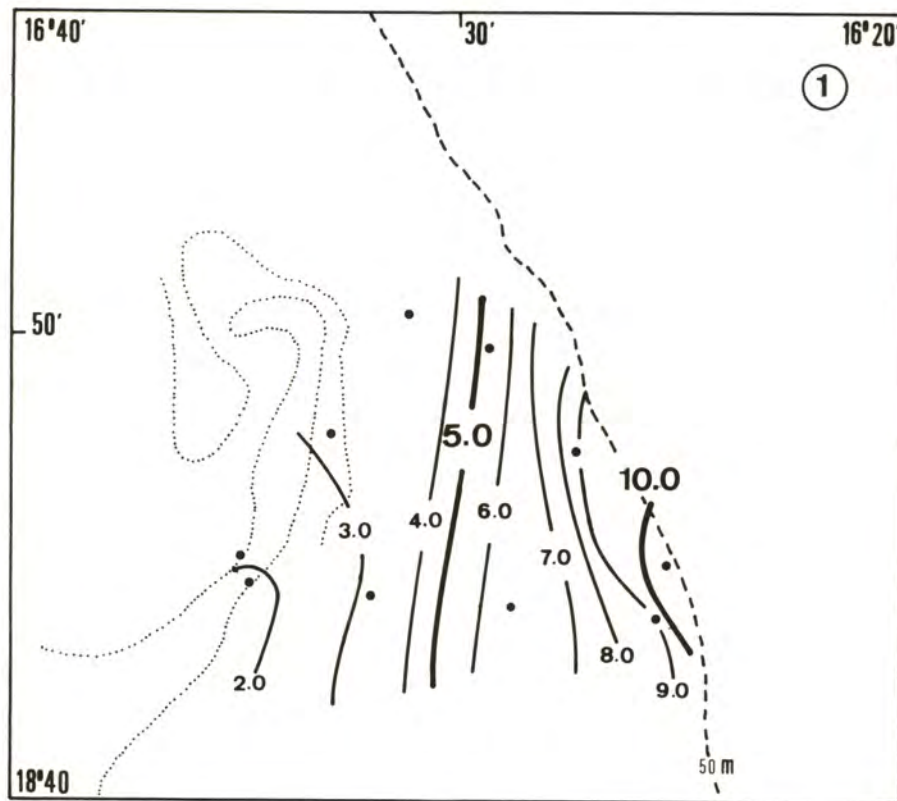


Fig. 42 - Prospection 12 - Distribution de la chlorophylle a (mg/m³) -

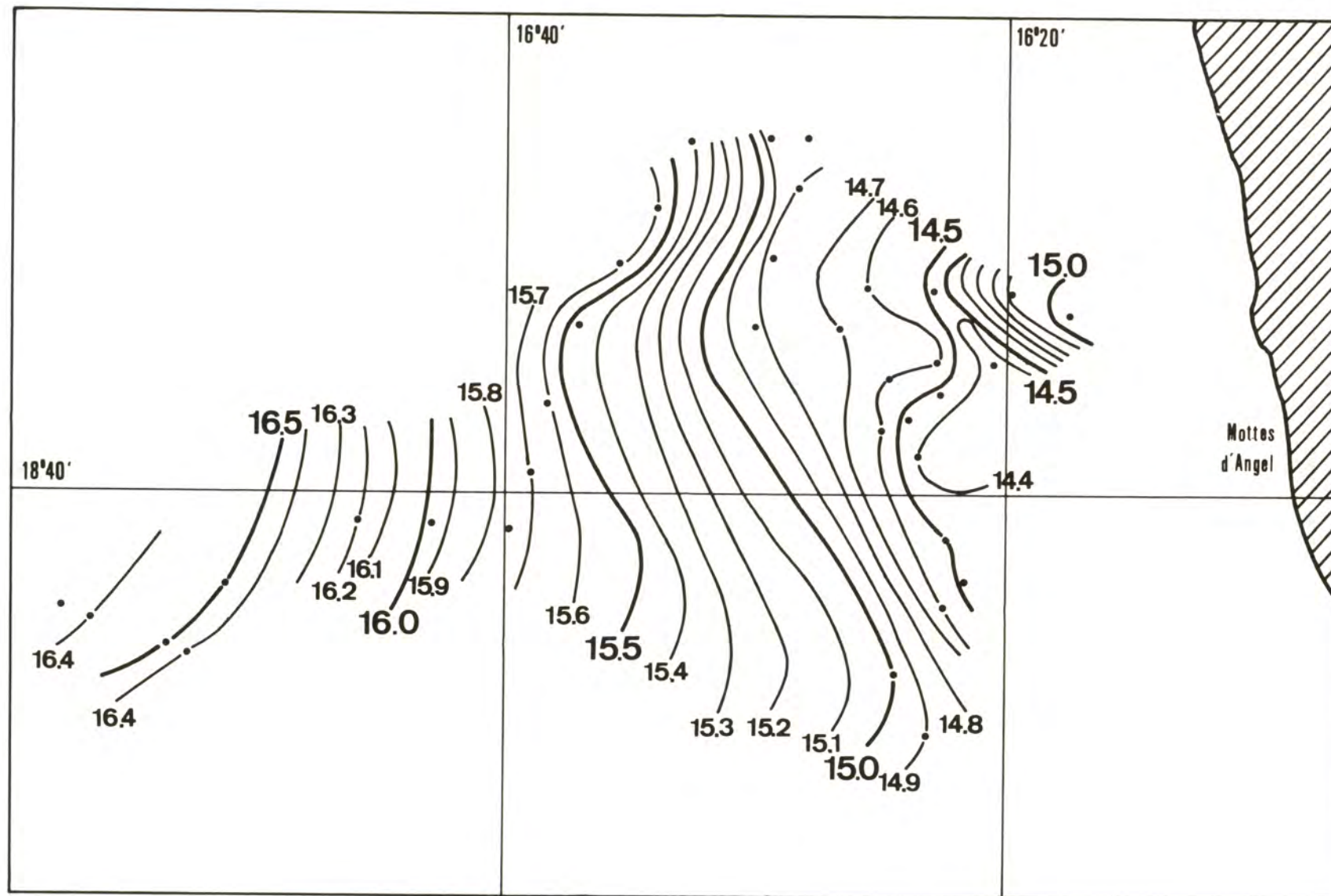


Fig. 43 - Prospection 13 - Structure thermique -

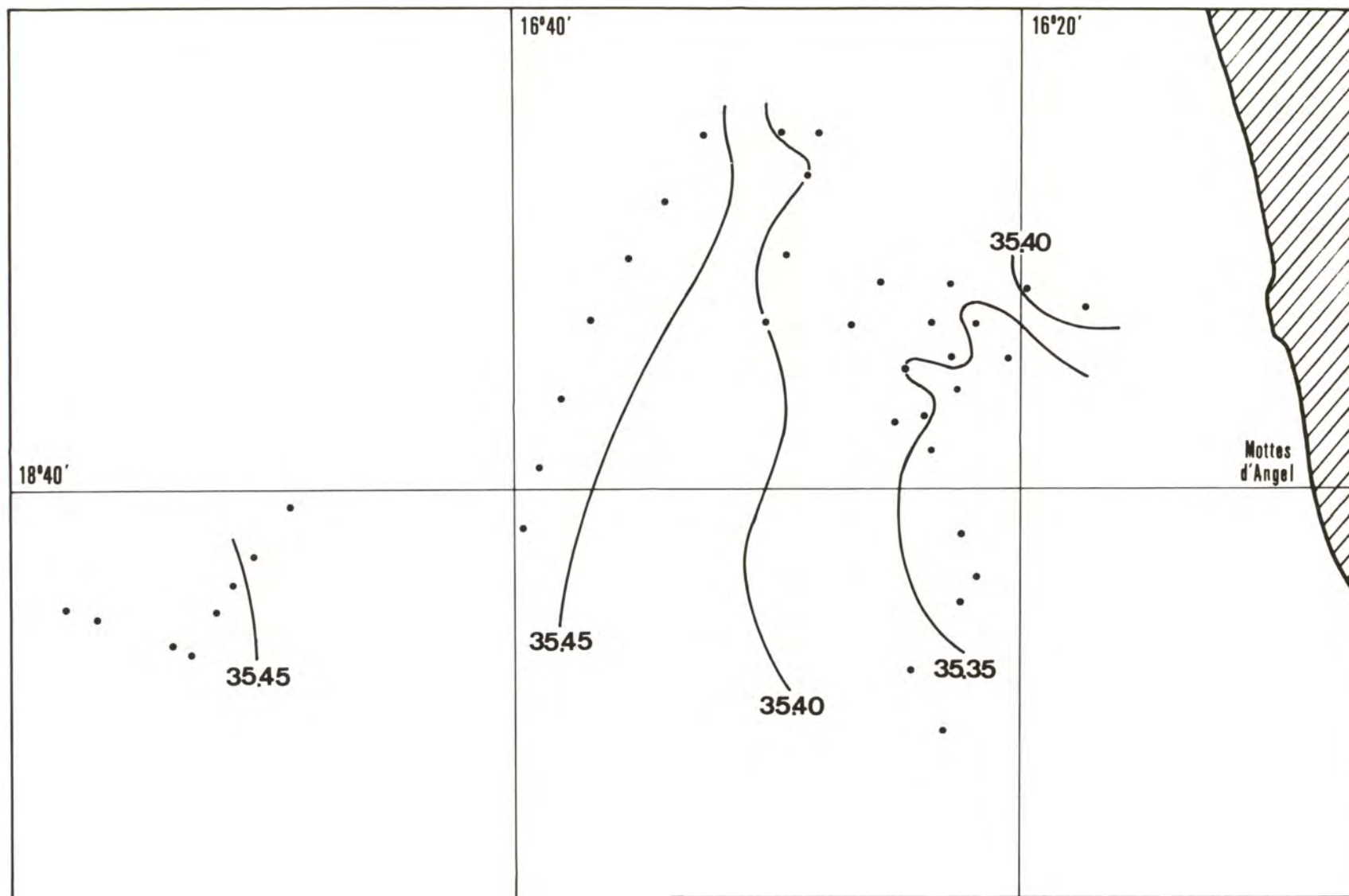


Fig. 44 - Prospection 13 - Structure haline -

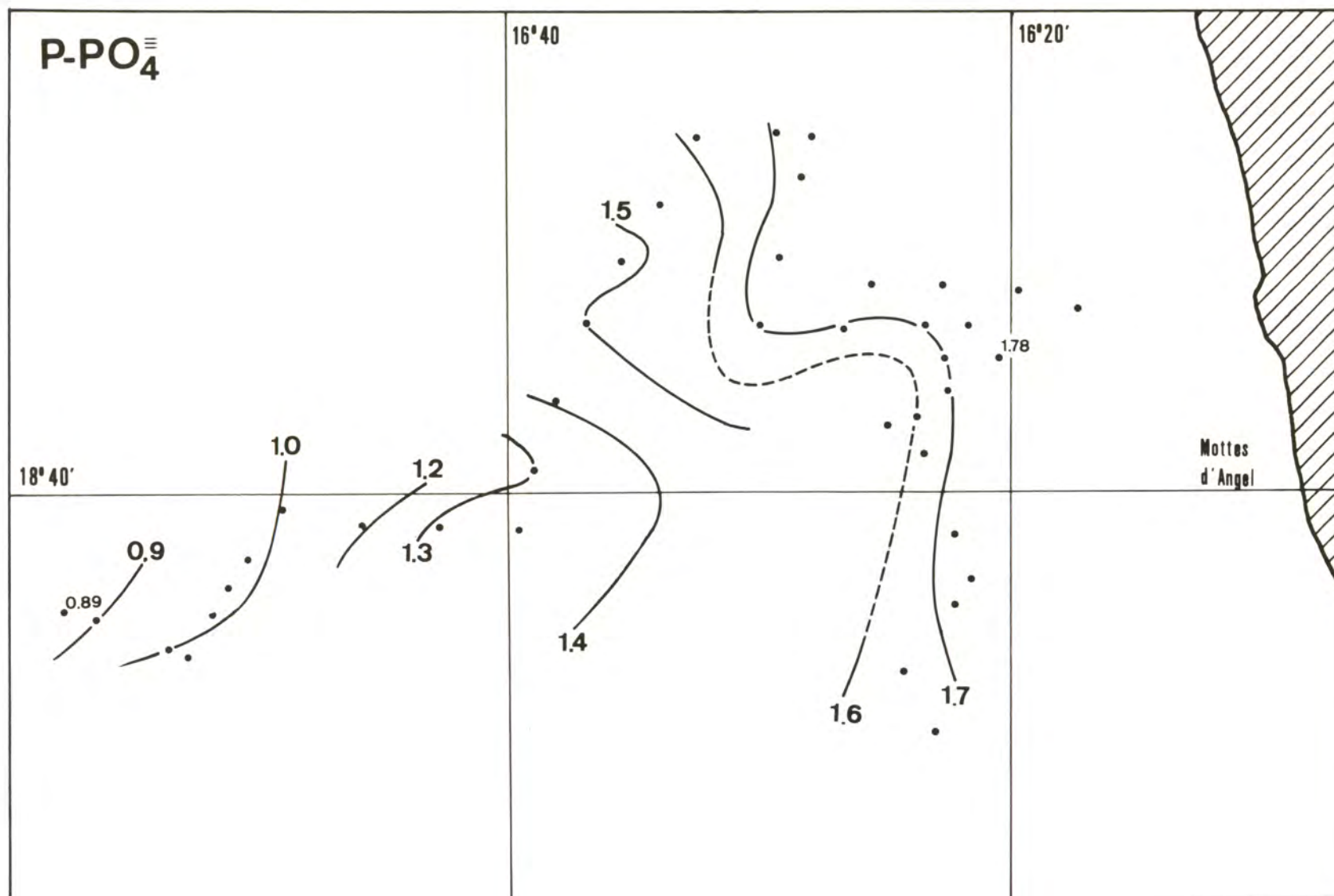


Fig. 45 - Prospection 13 - Distribution des phosphates ($\mu\text{atg/l}$) -

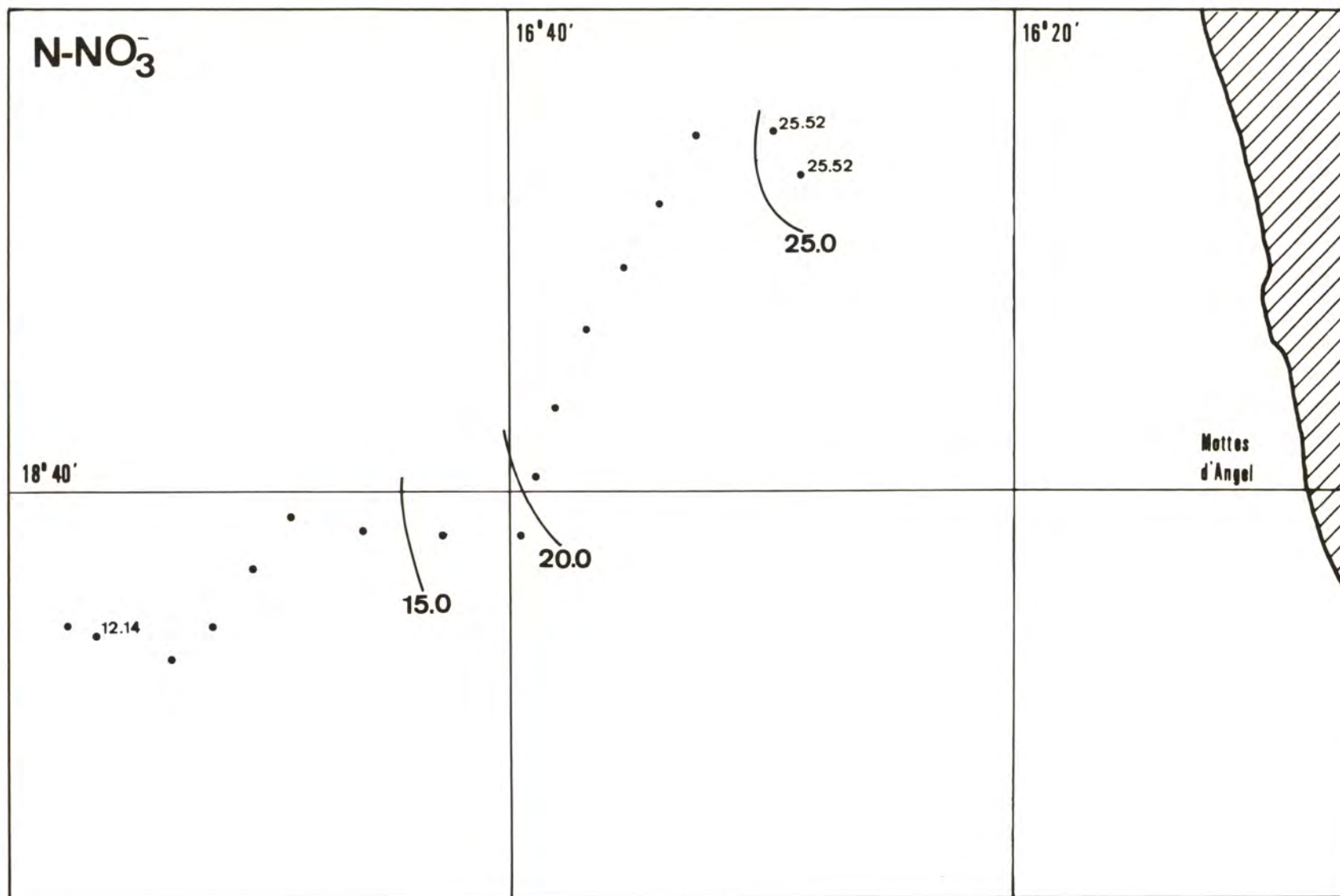


Fig. 46 - Prospection 13 - Distribution des nitrates -

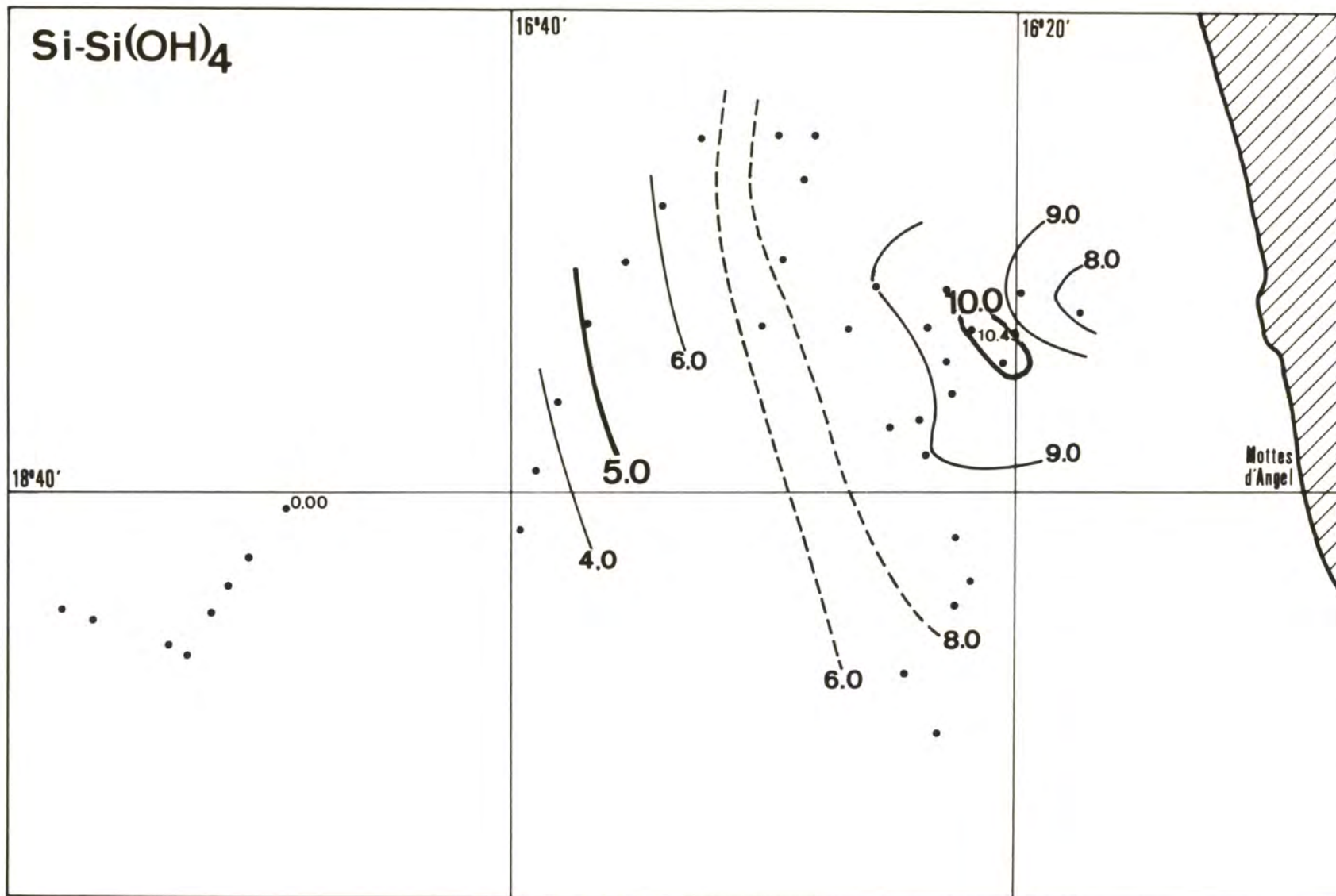


Fig. 47 - Prospection 13 - Distributions des silicates -

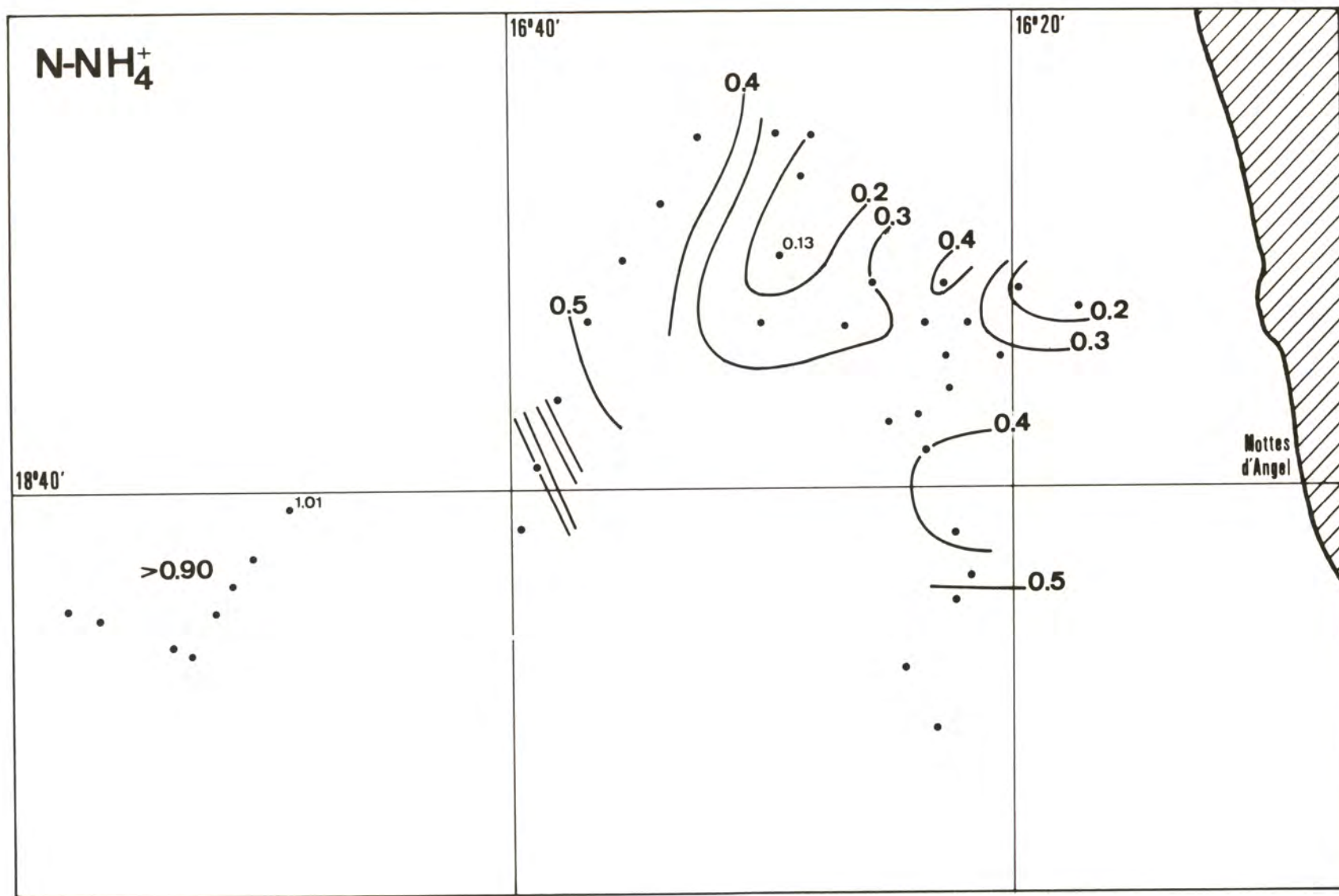


Fig. 48 - Prospection 13 - Distribution de l'ammonium -

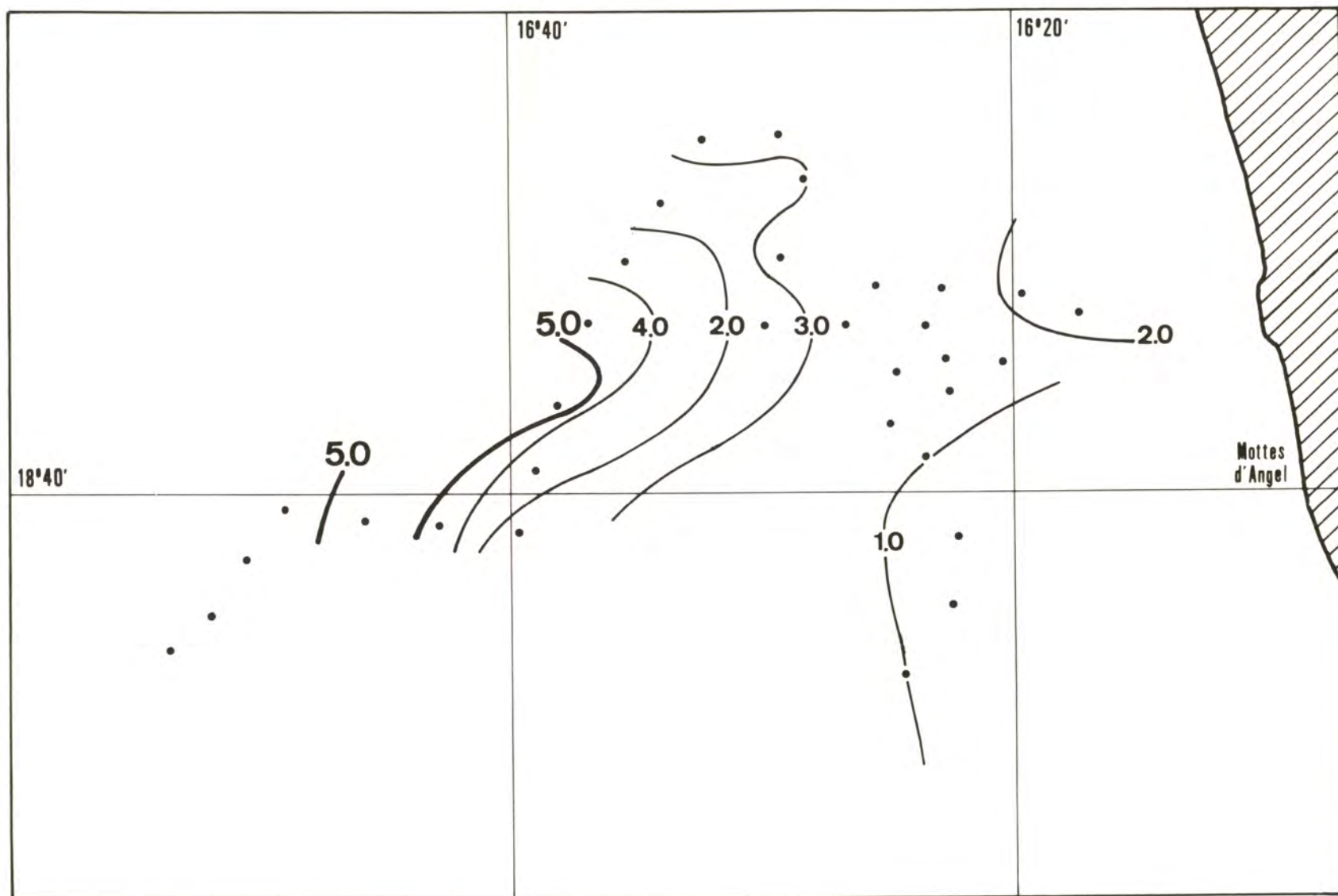


Fig. 49 - Prospection 13 - Distribution de la chlorophylle a (mg/m³) -

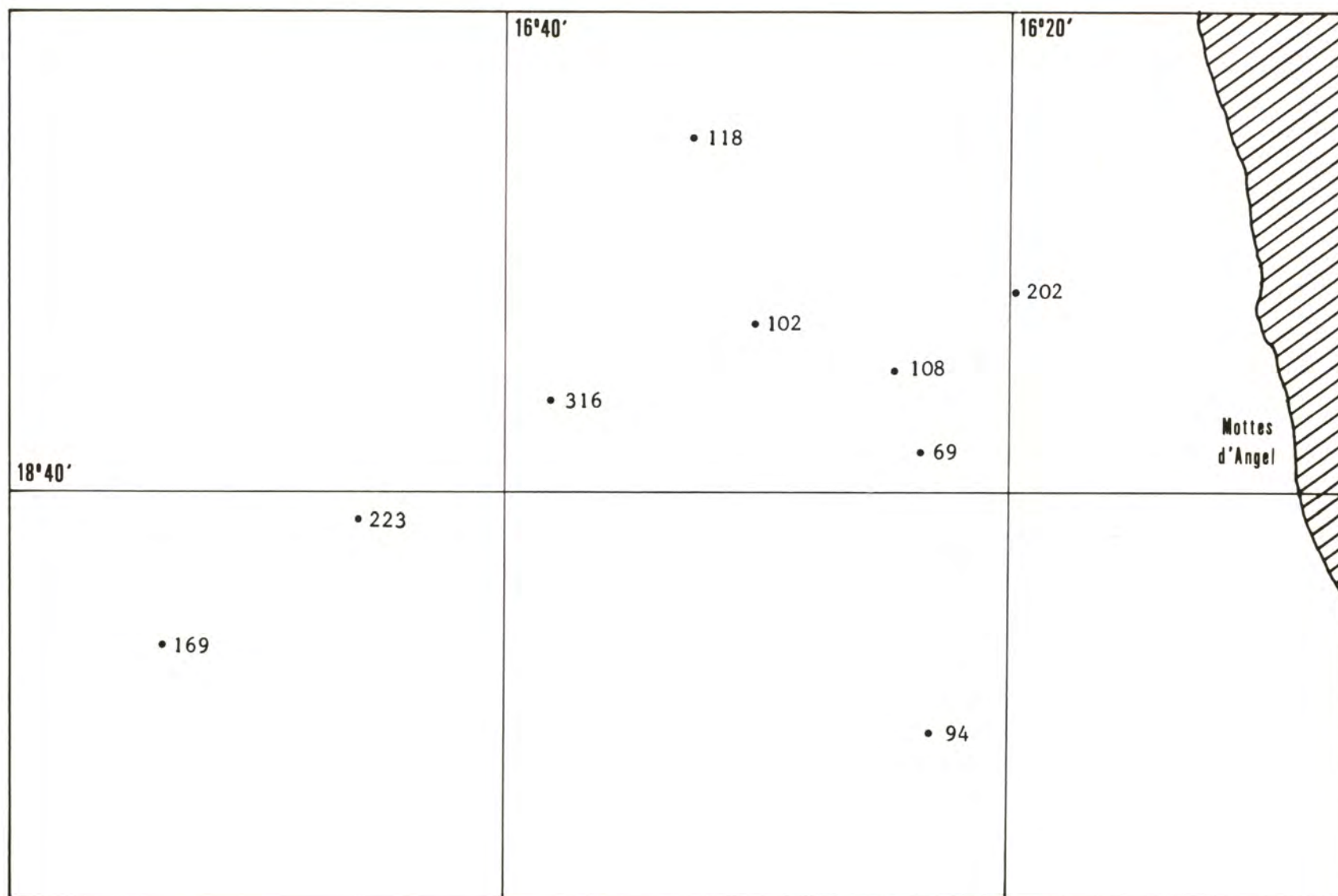


Fig. 50 - Prospection 13 - Taux de production primaire ($\text{mgC}/\text{m}^3/\text{j}$) -

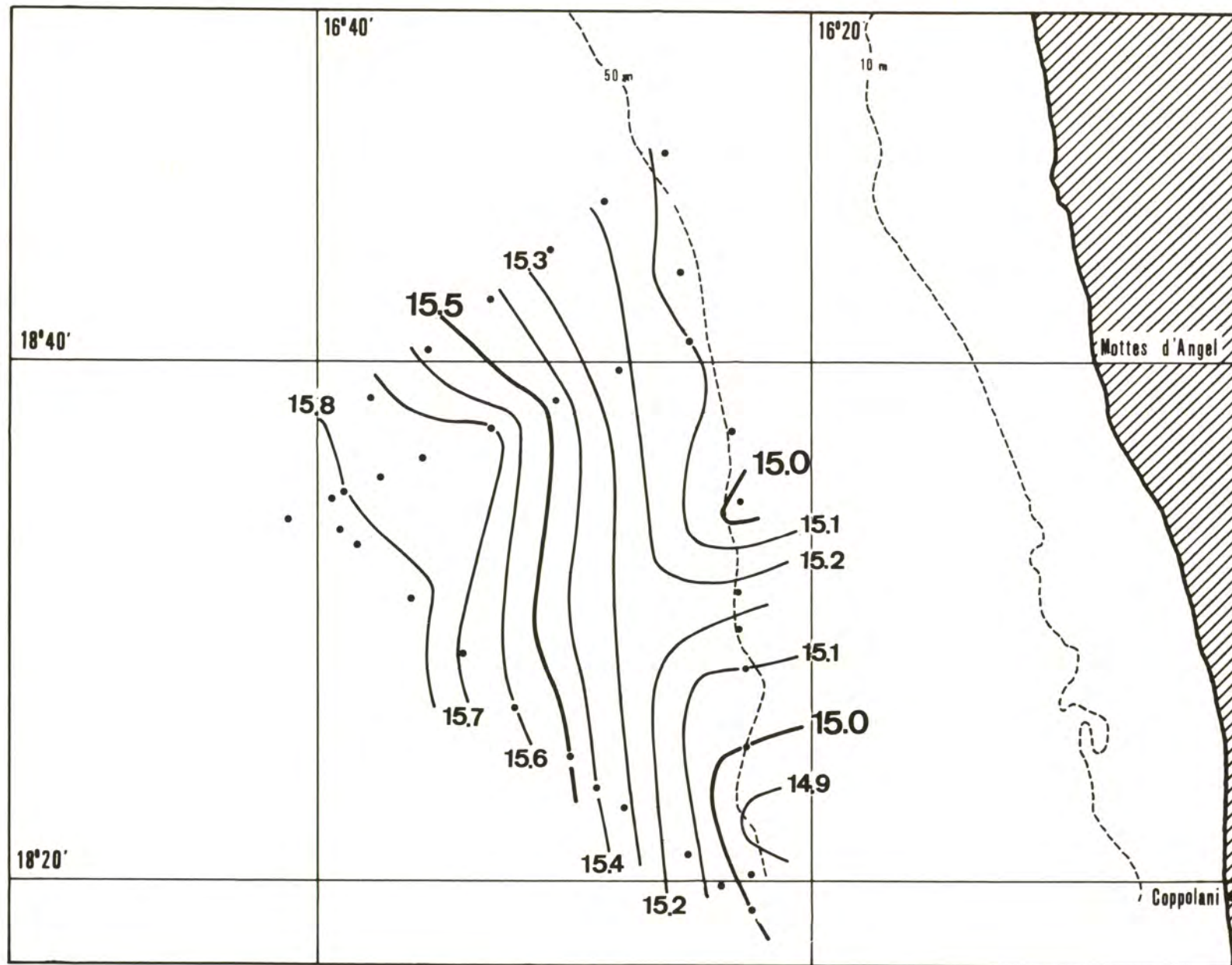


Fig. 51 - Prospection 14 - Structure thermique -

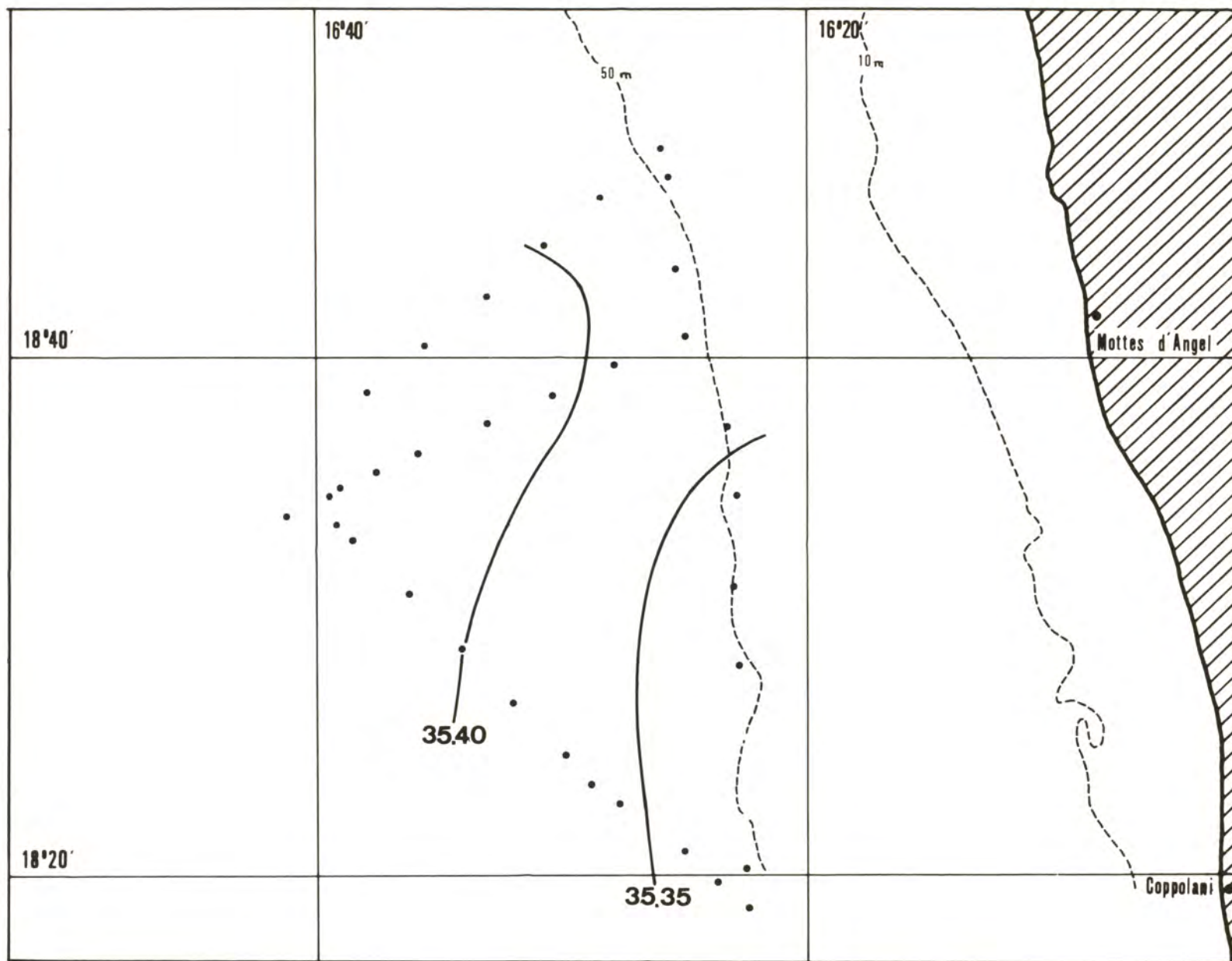


Fig. 52 - Prospection 14 - Structure haline -

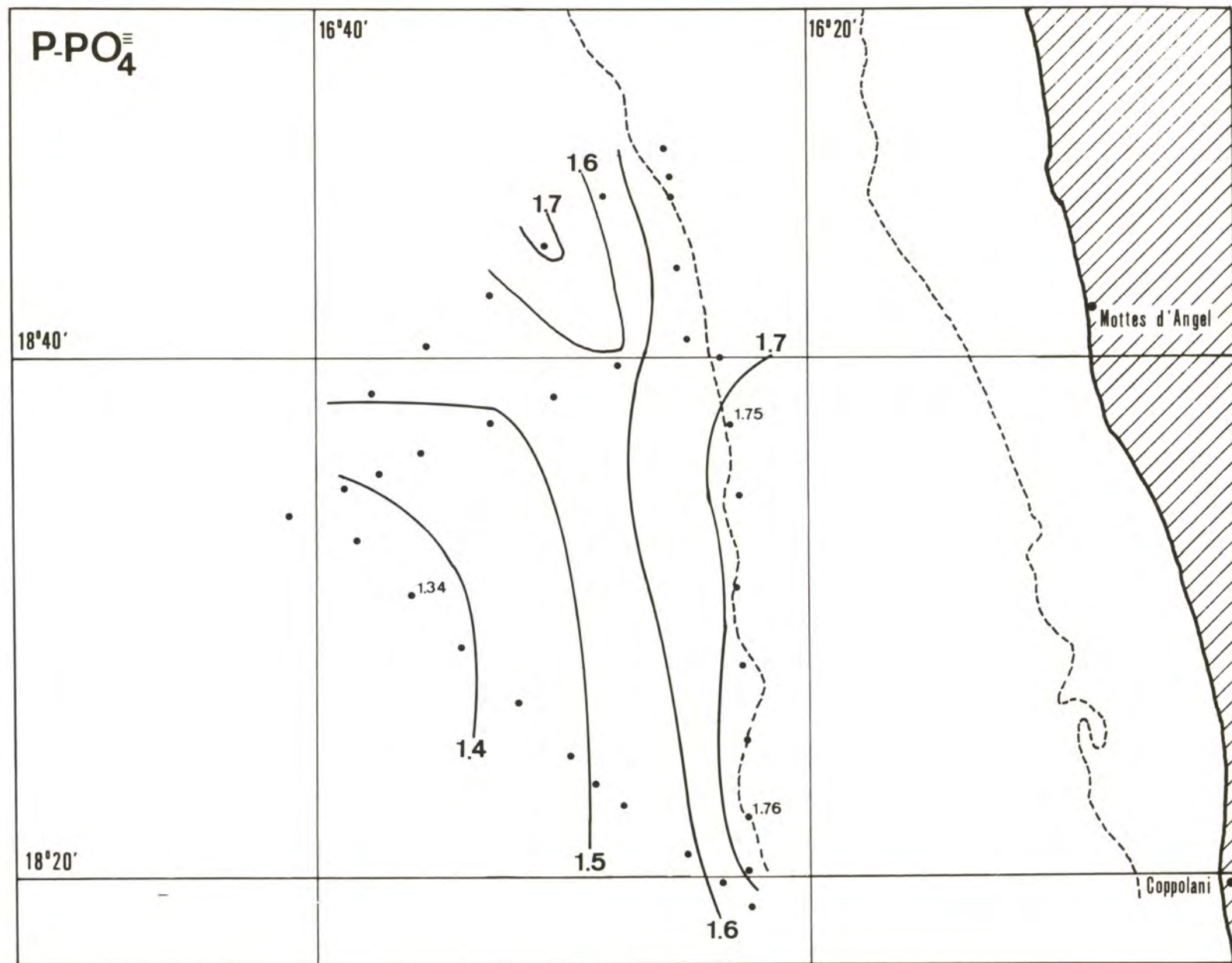


Fig. 53 - Prospection 14 - Distribution des phosphates ($\mu\text{atg/l}$) -

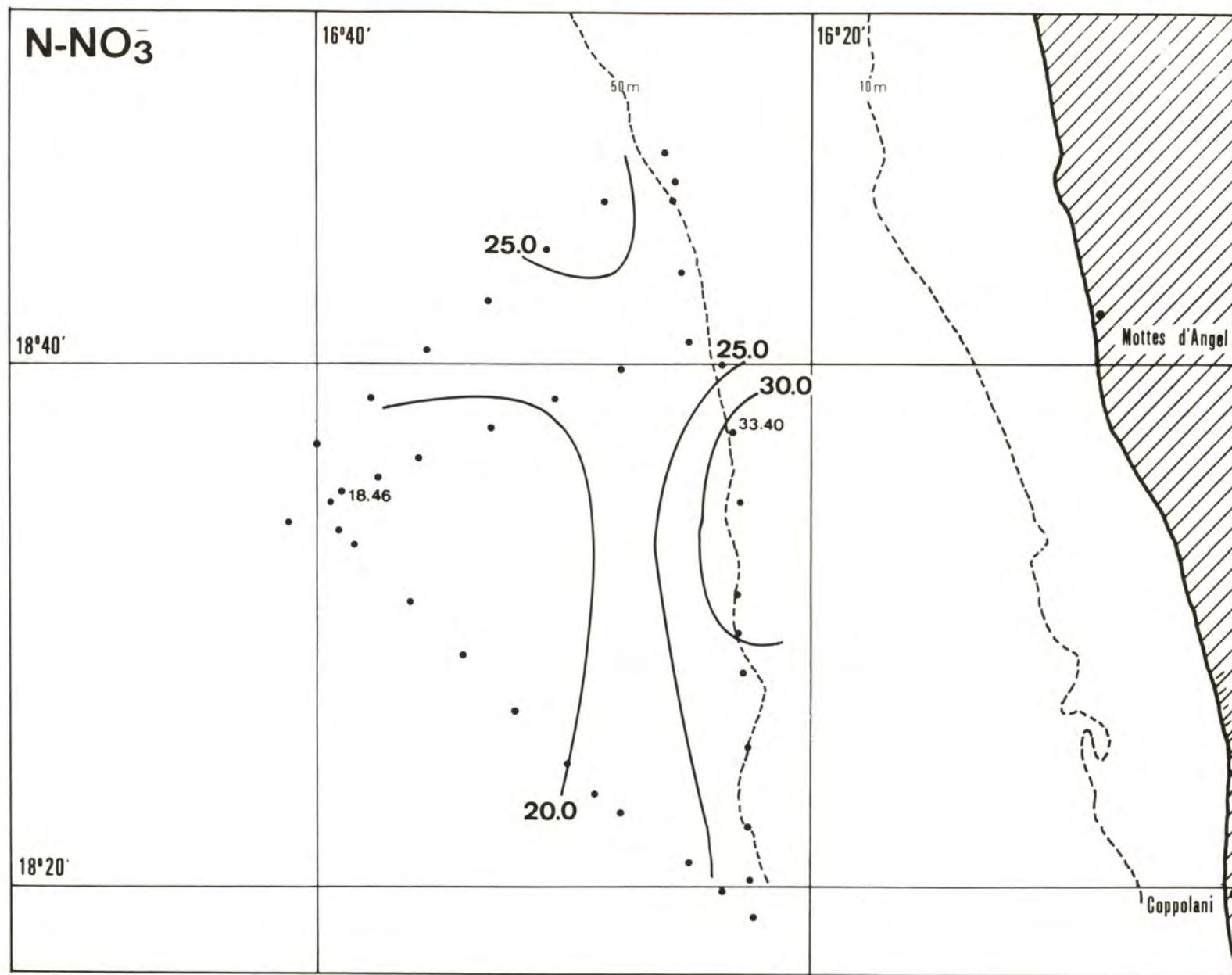


Fig. 54 - Prospection 14 - Distribution des nitrates -

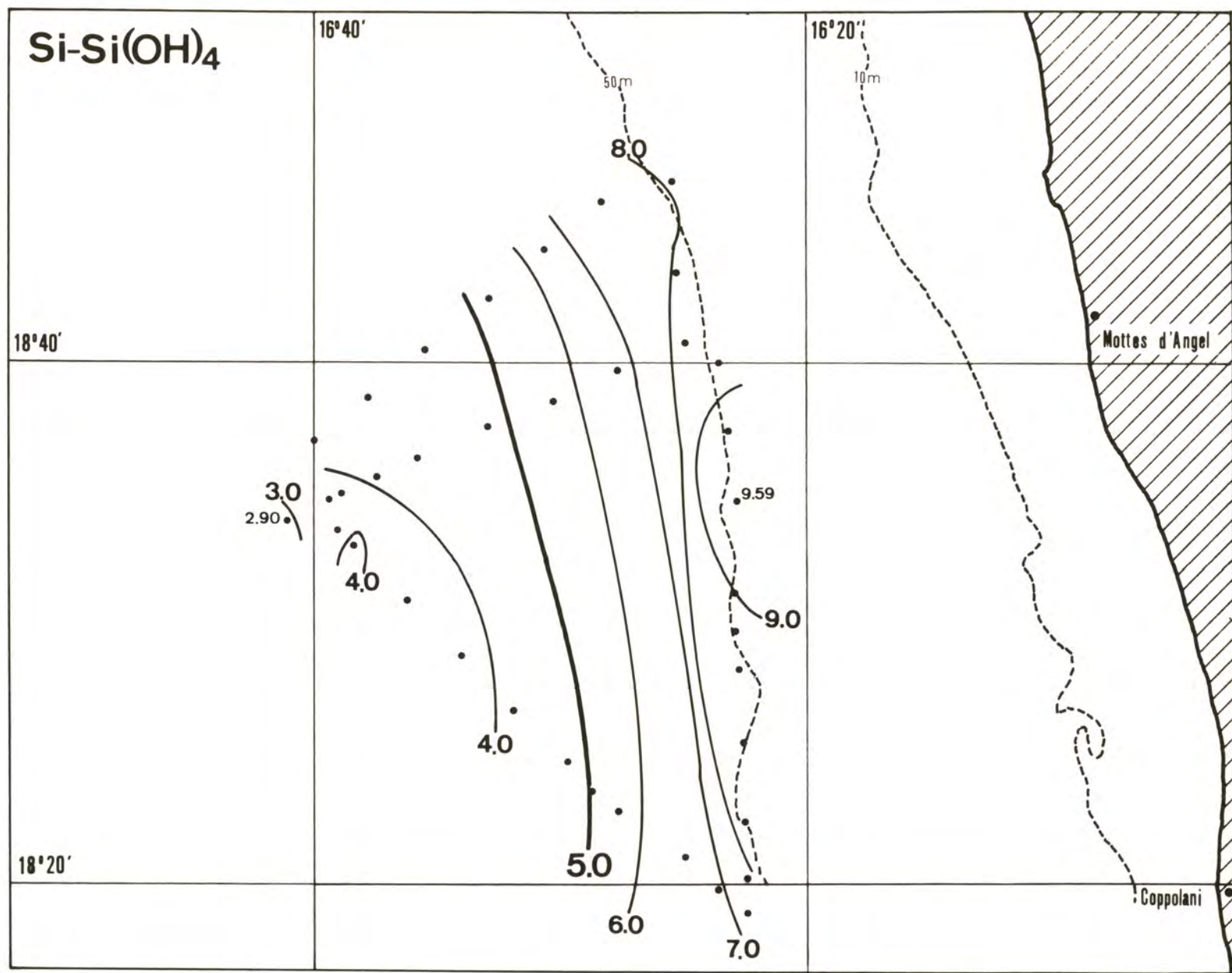


Fig. 55 - Prospection 14 - Distribution des silicates -

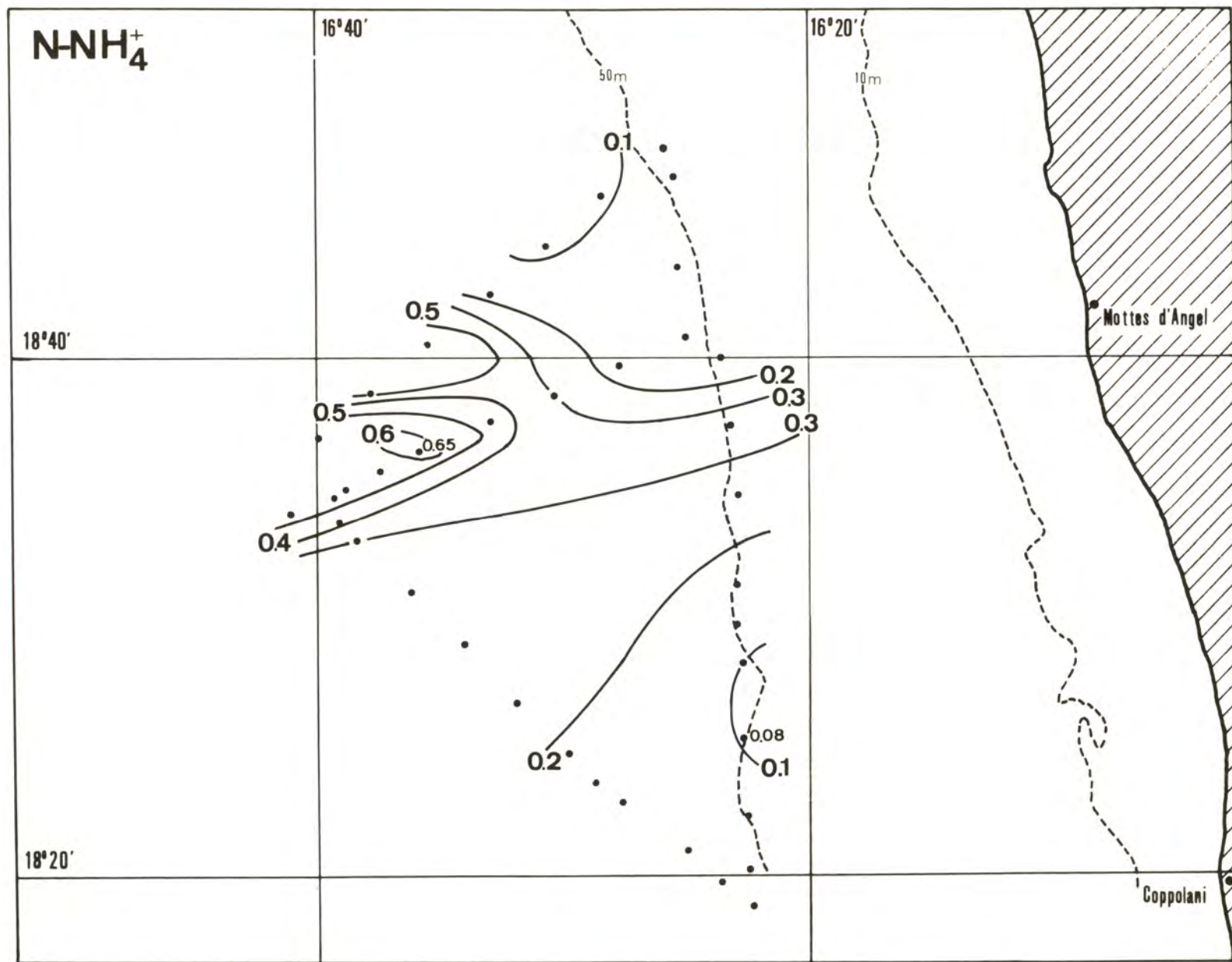


Fig. 56 - Prospection 14 - Distribution de l'ammonium -

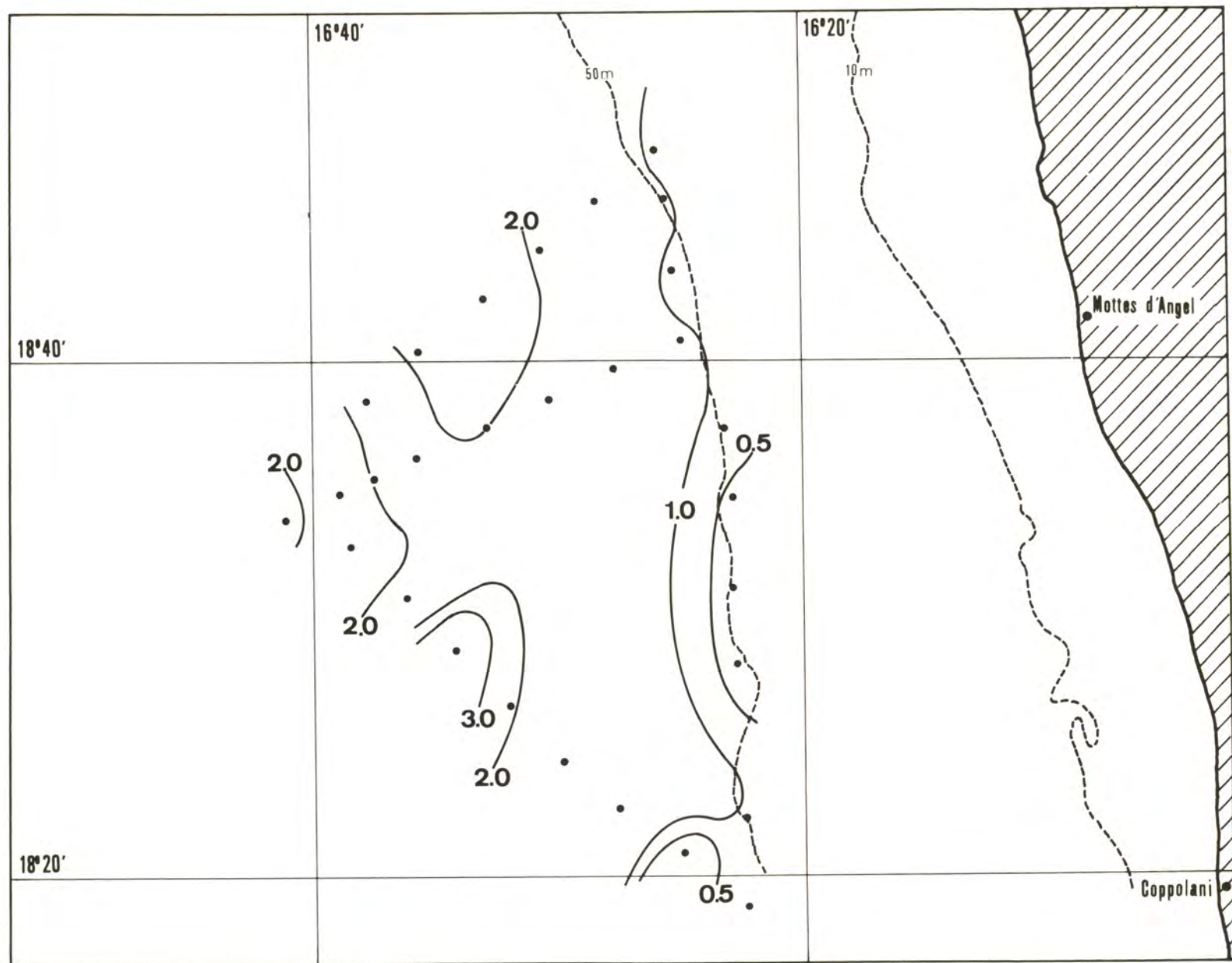


Fig. 57 - Prospection 14 - Distribution de la chlorophylle a (mg/m³) -

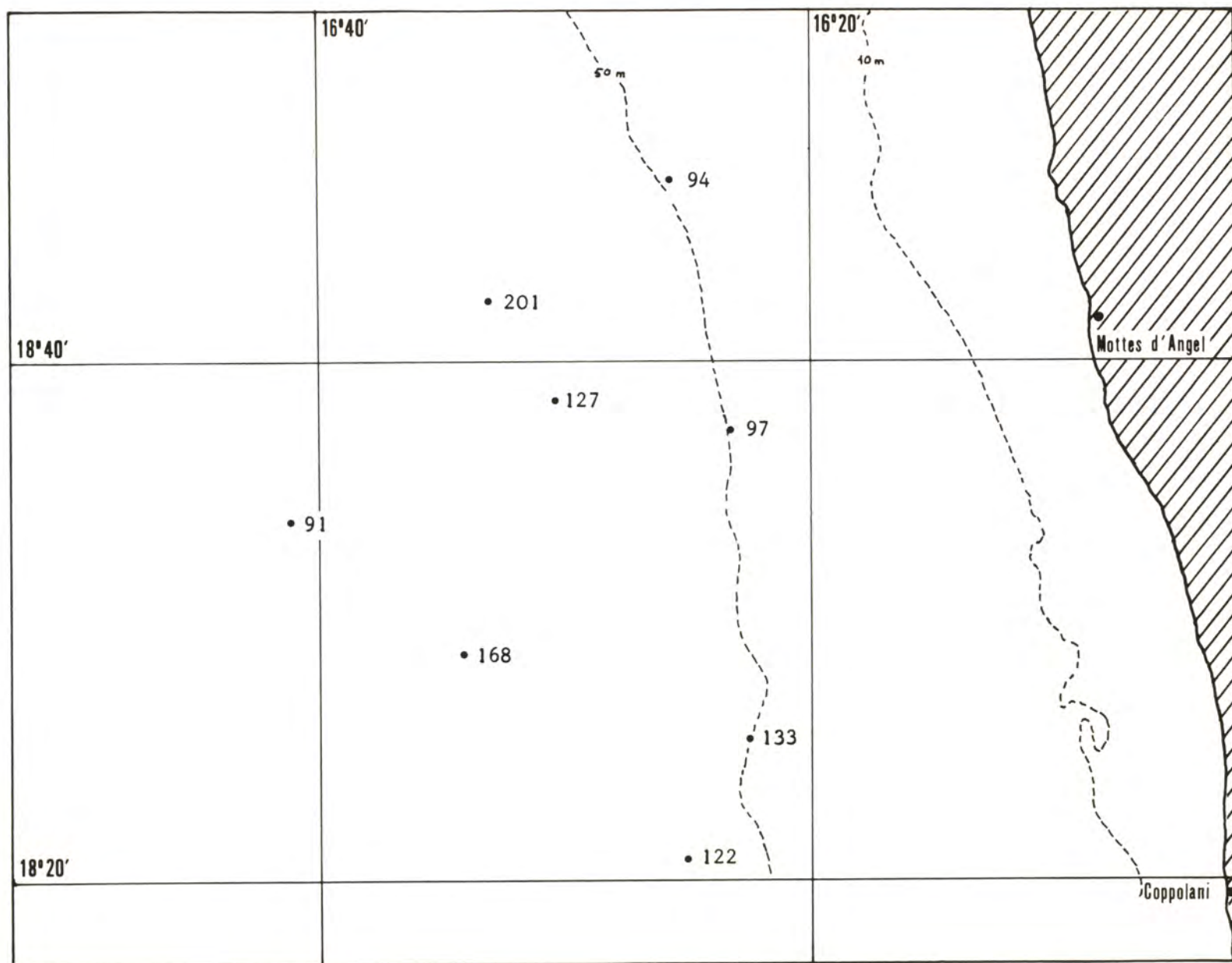


Fig. 58 - Prospection 14 - Taux de production primaire ($\text{mgC}/\text{m}^3/\text{j}$) -

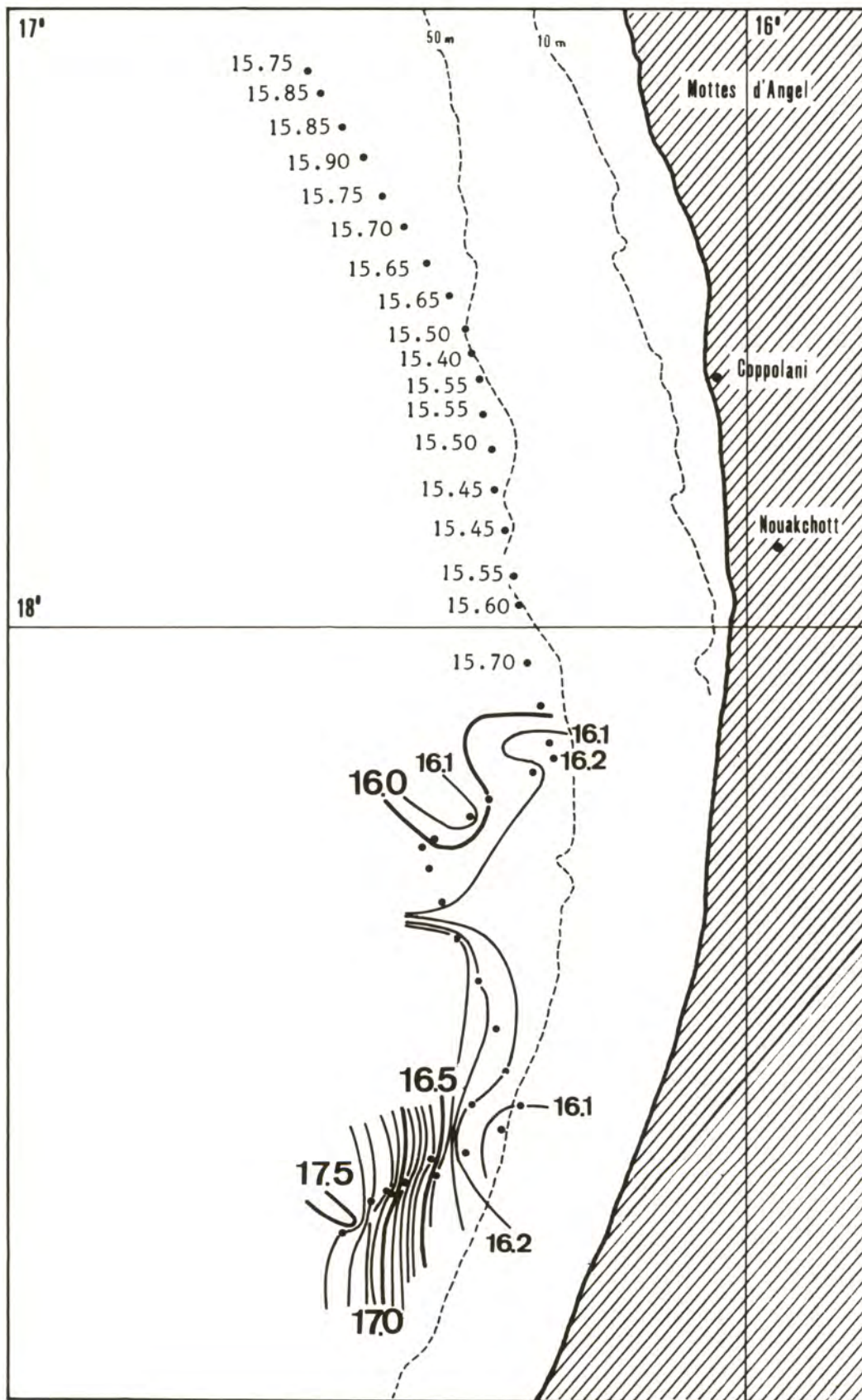


Fig. 59 - Prospection 15 - Températures au nord et structure thermique au sud -

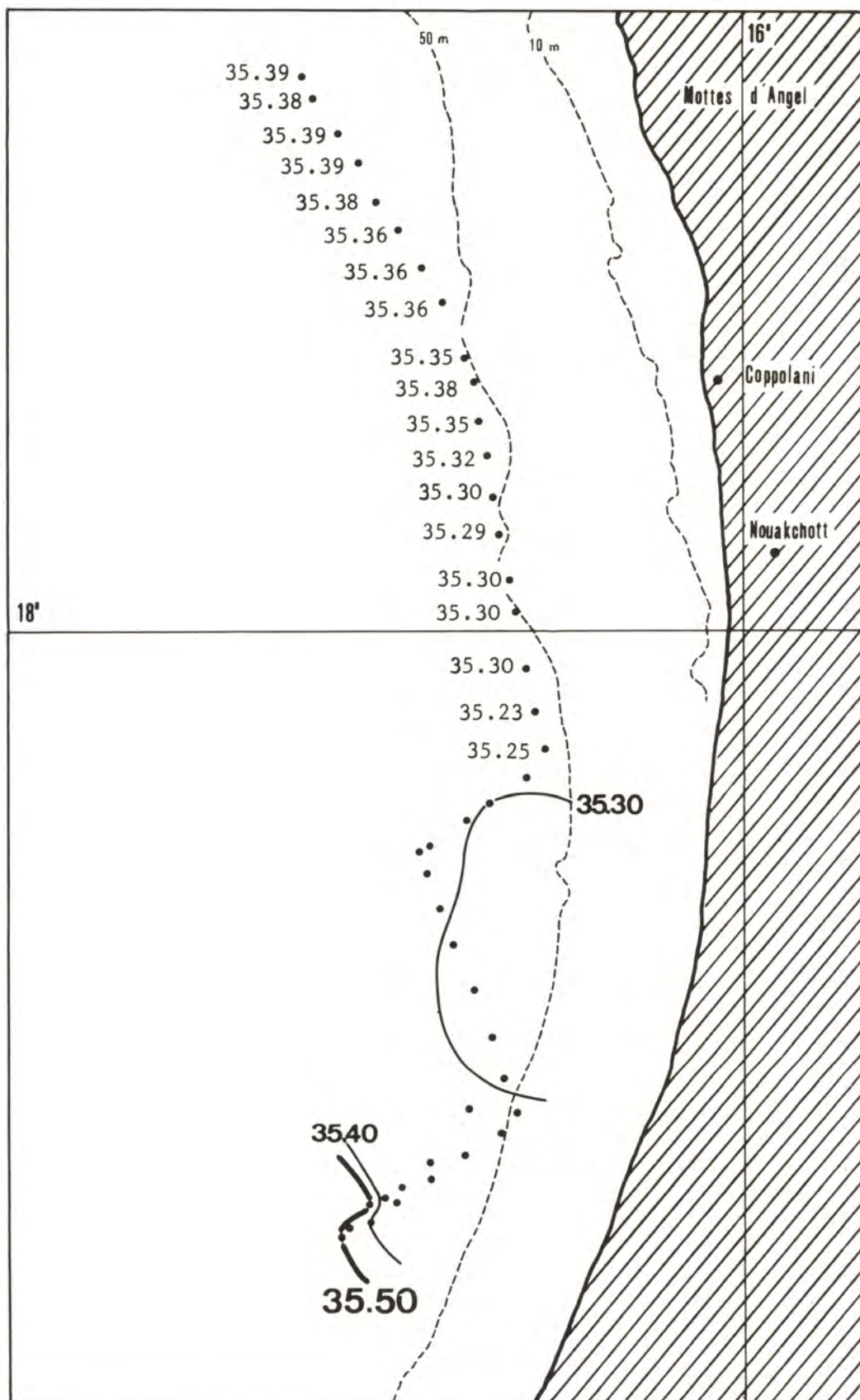


Fig. 60 - Prospection 15 - Salinités au nord et structure haline au sud -

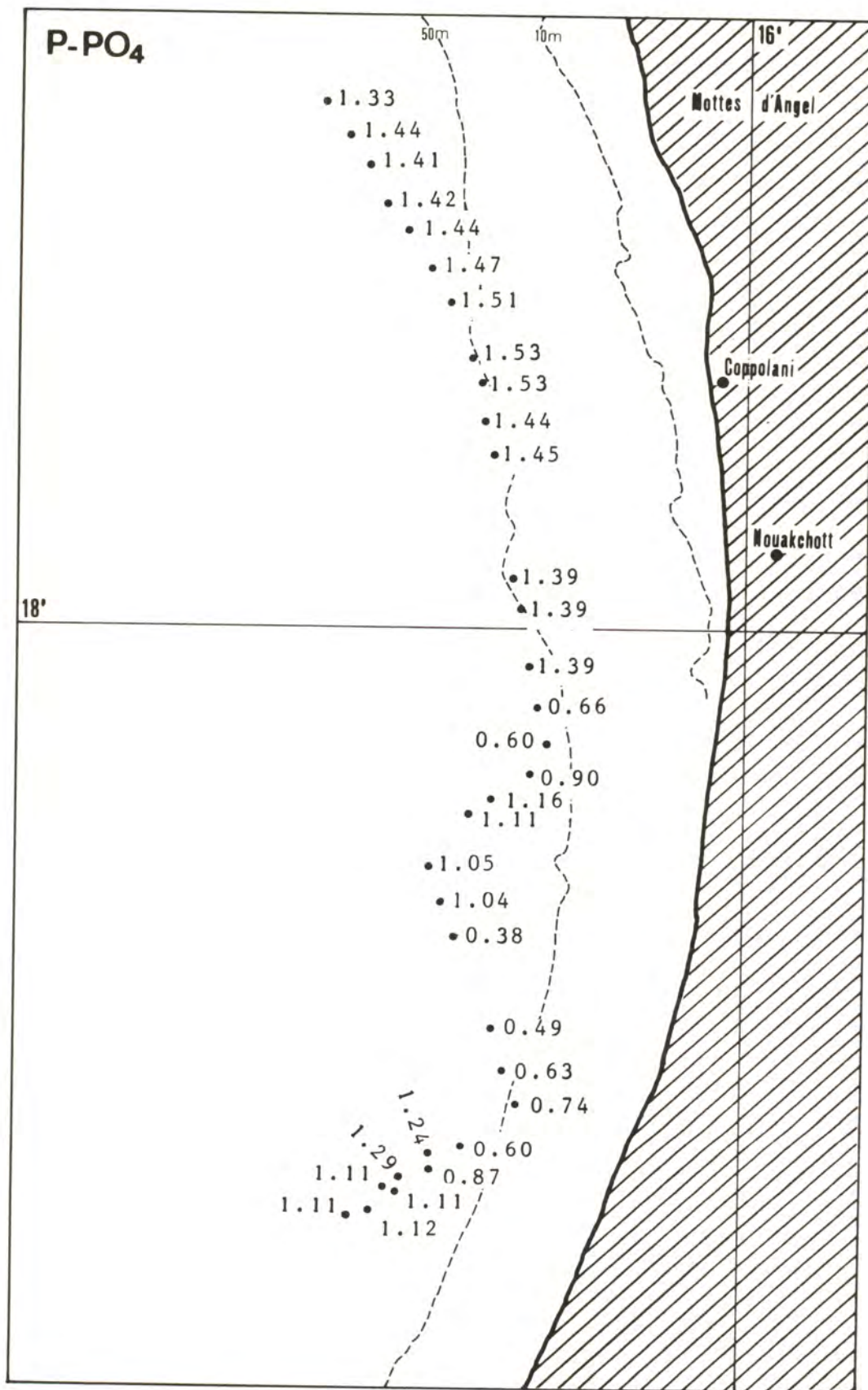


Fig. 61 - Prospection 15 - Distribution des phosphates ($\mu\text{atg/l}$) -

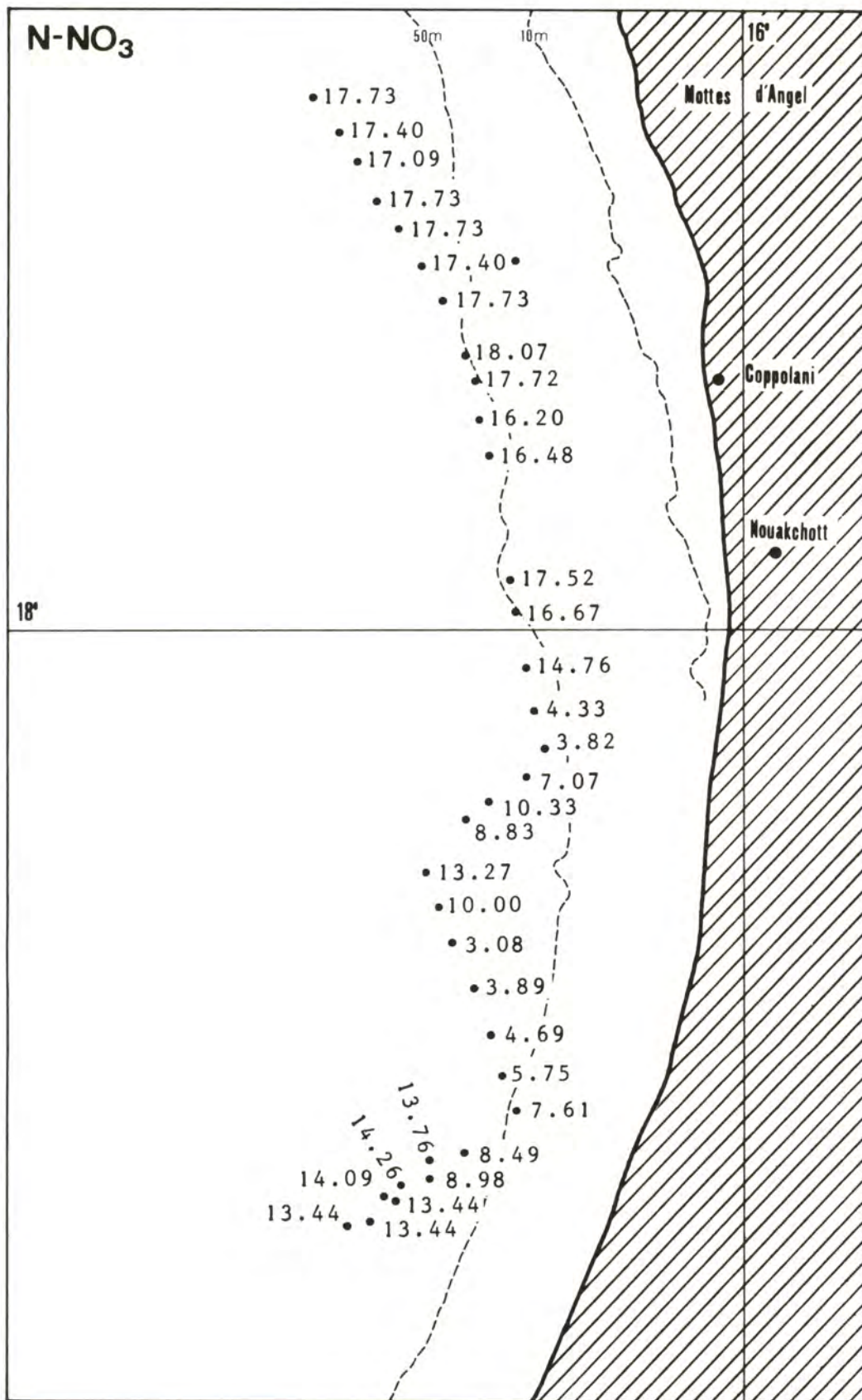


Fig. 62 - Prospection 15 - Distribution des nitrates ($\mu\text{atg/l}$) -

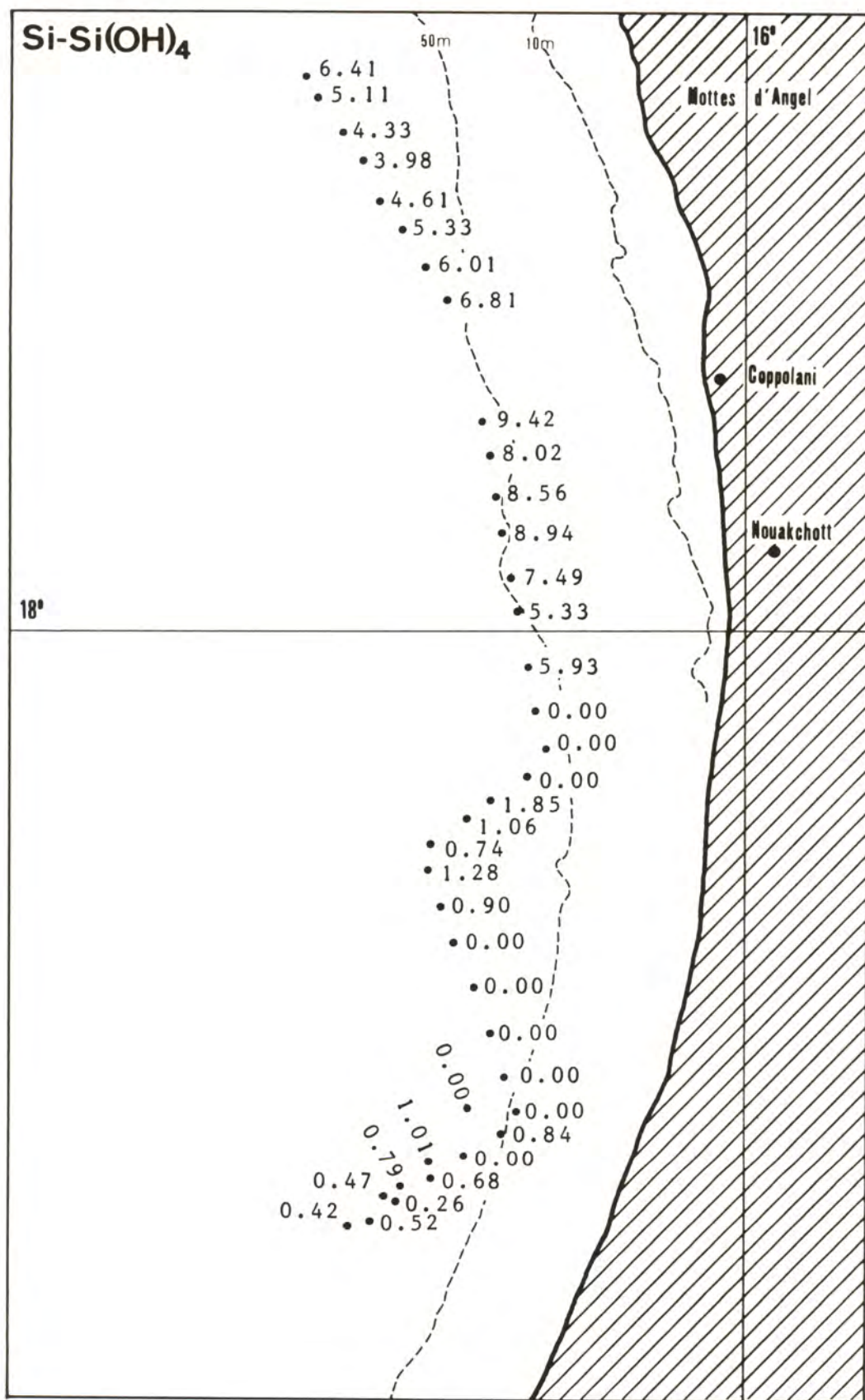


Fig. 63 - Prospection 15 - Distribution des silicates (µatg/l) -

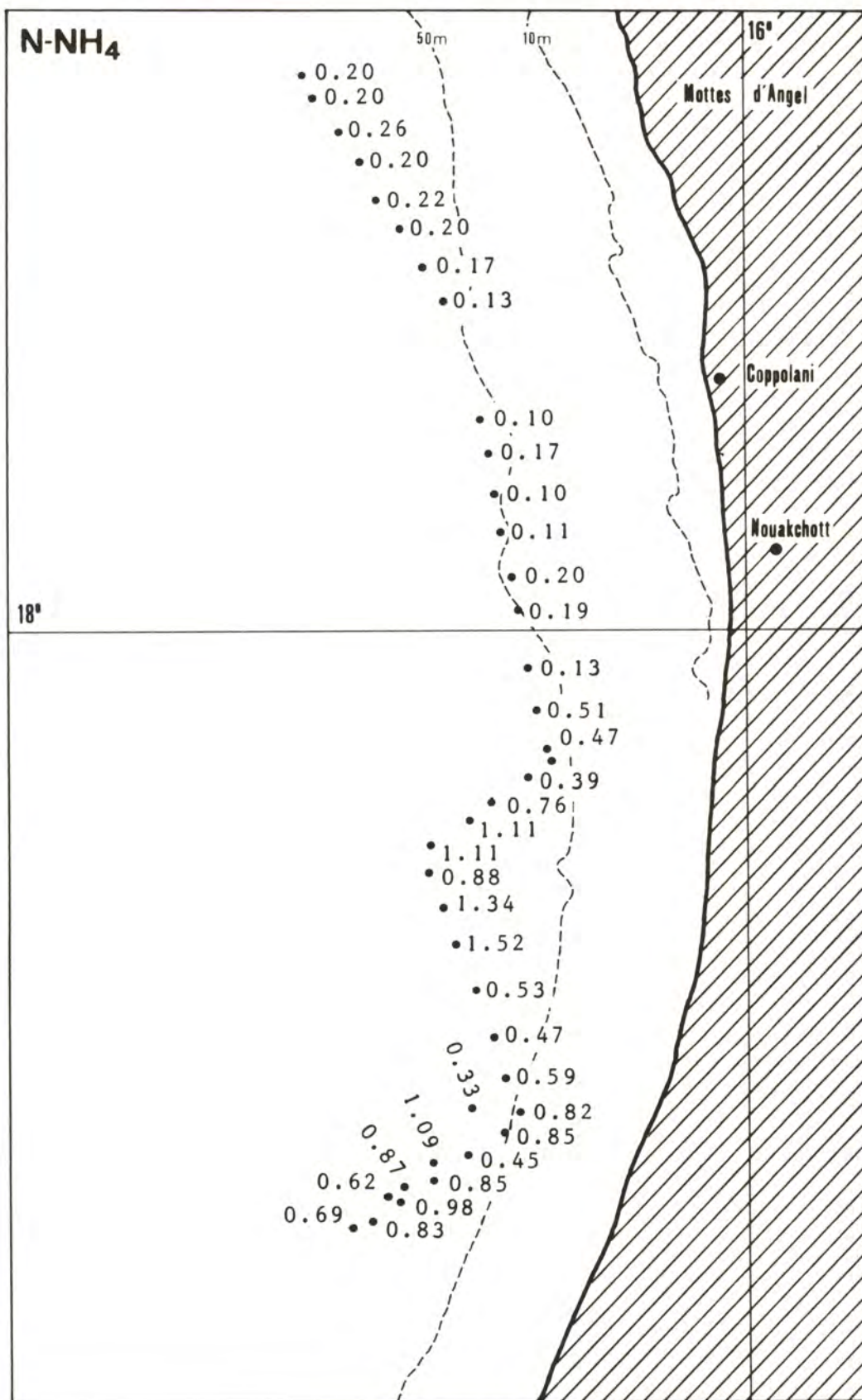


Fig. 64 - Prospection 15 - Distribution de l'ammonium ($\mu\text{atg/l}$) -

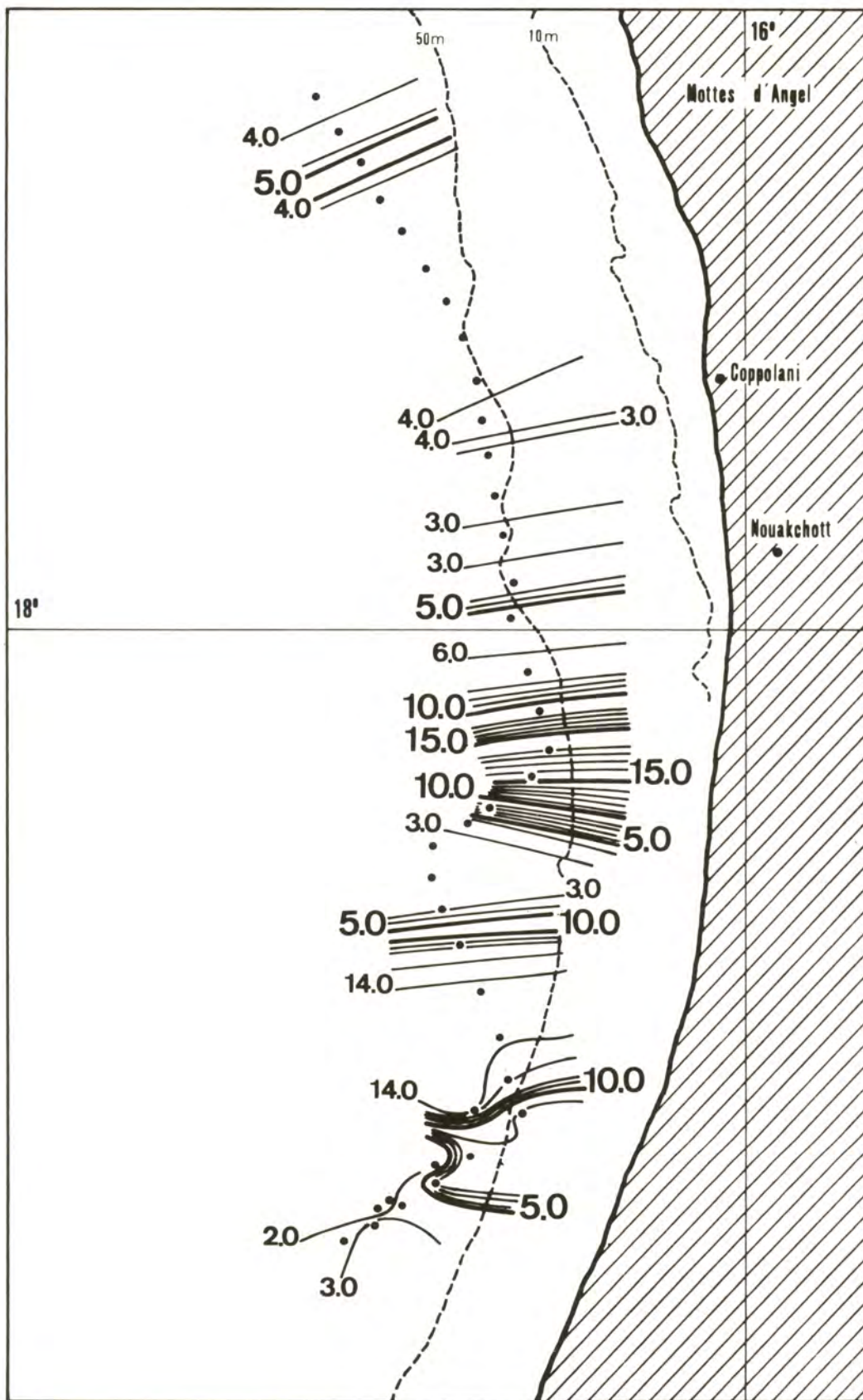


Fig. 65 - Prospection 15 - Distribution de la chlorophylle a (mg/m³) -

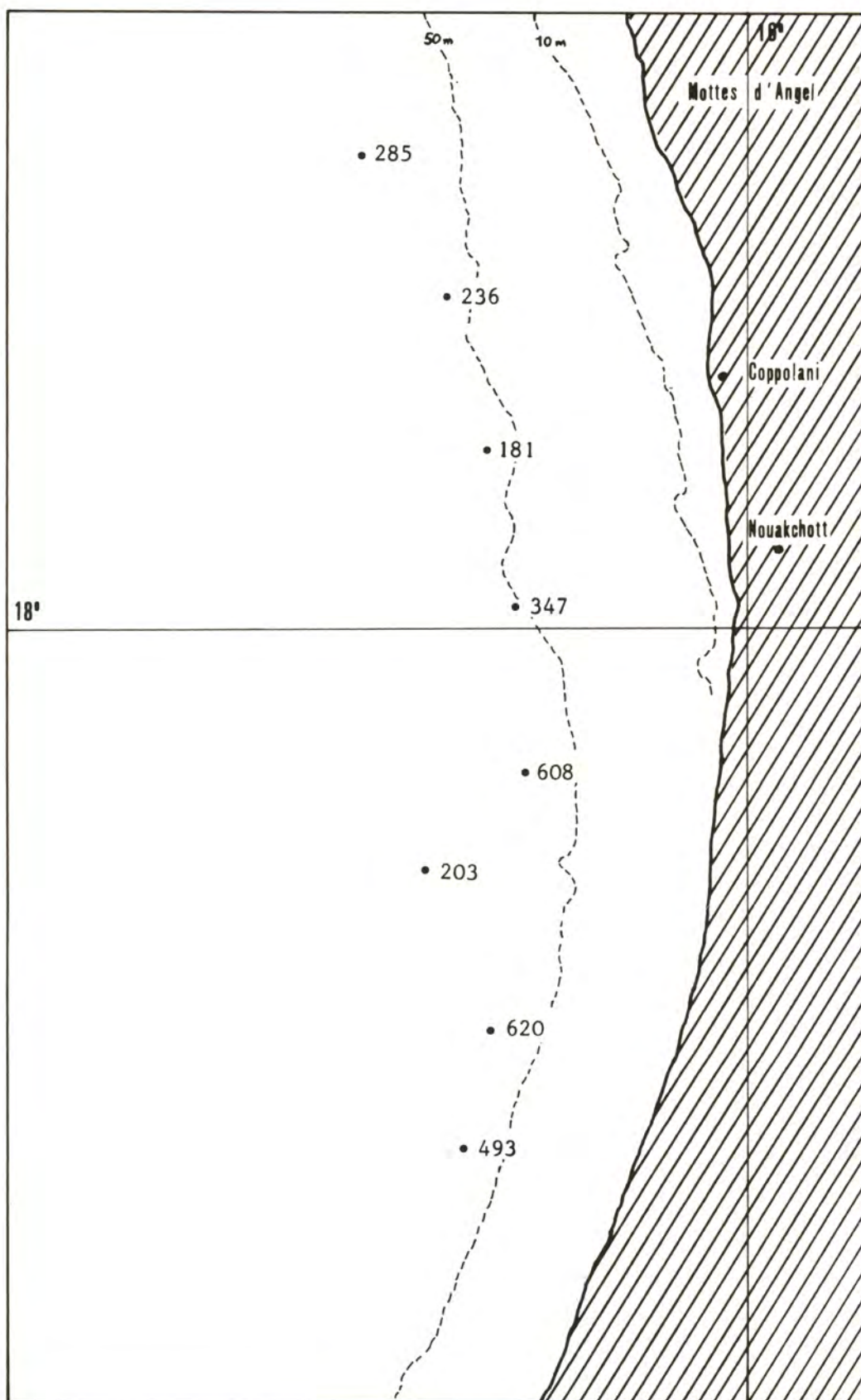
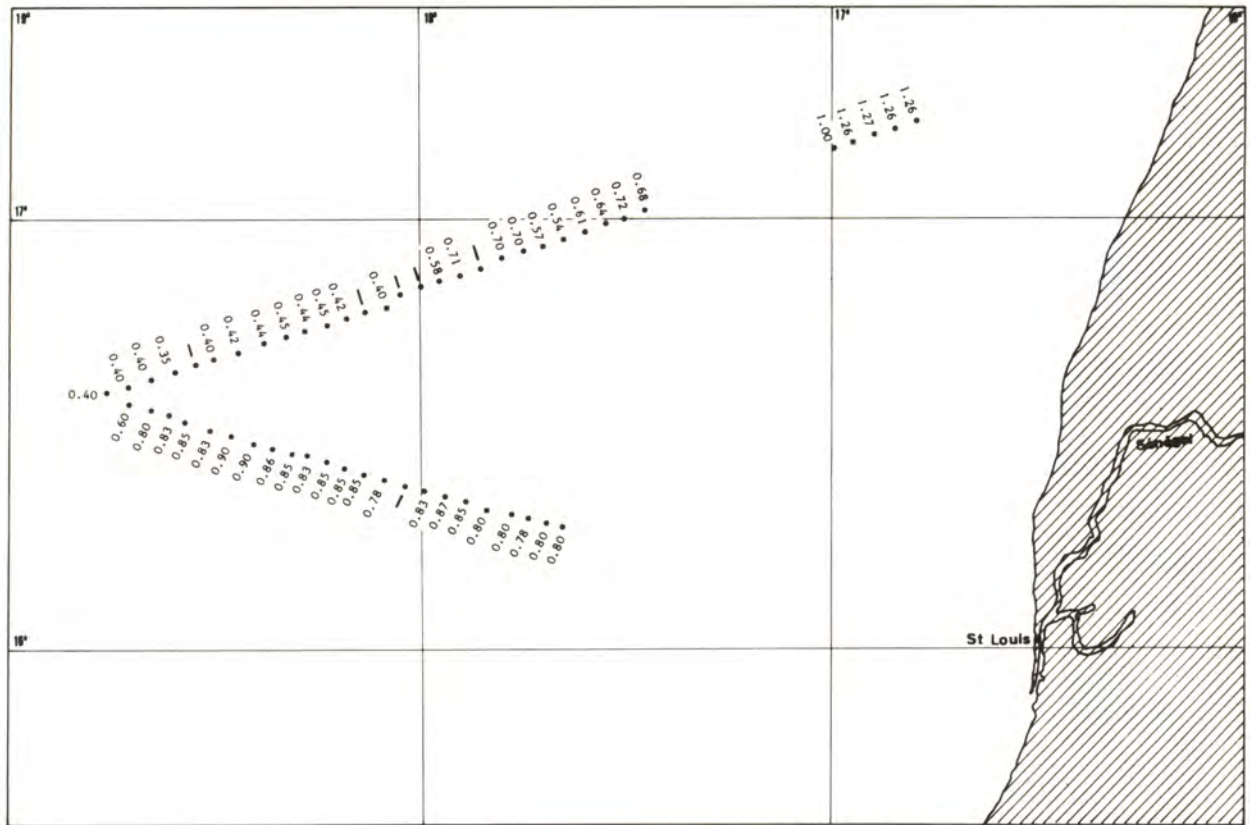


Fig. 66 - Prospection 15 - Taux de production primaire (mgC/m³/j) -



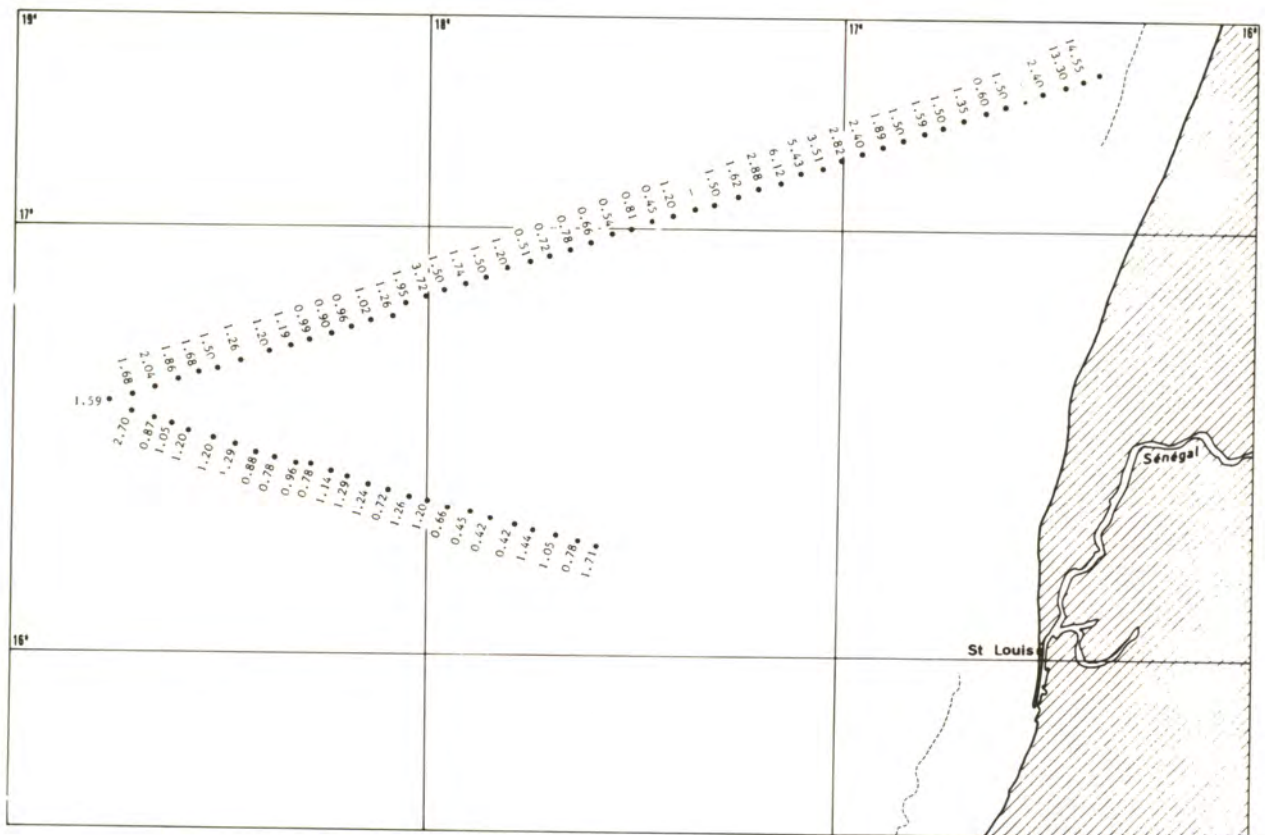
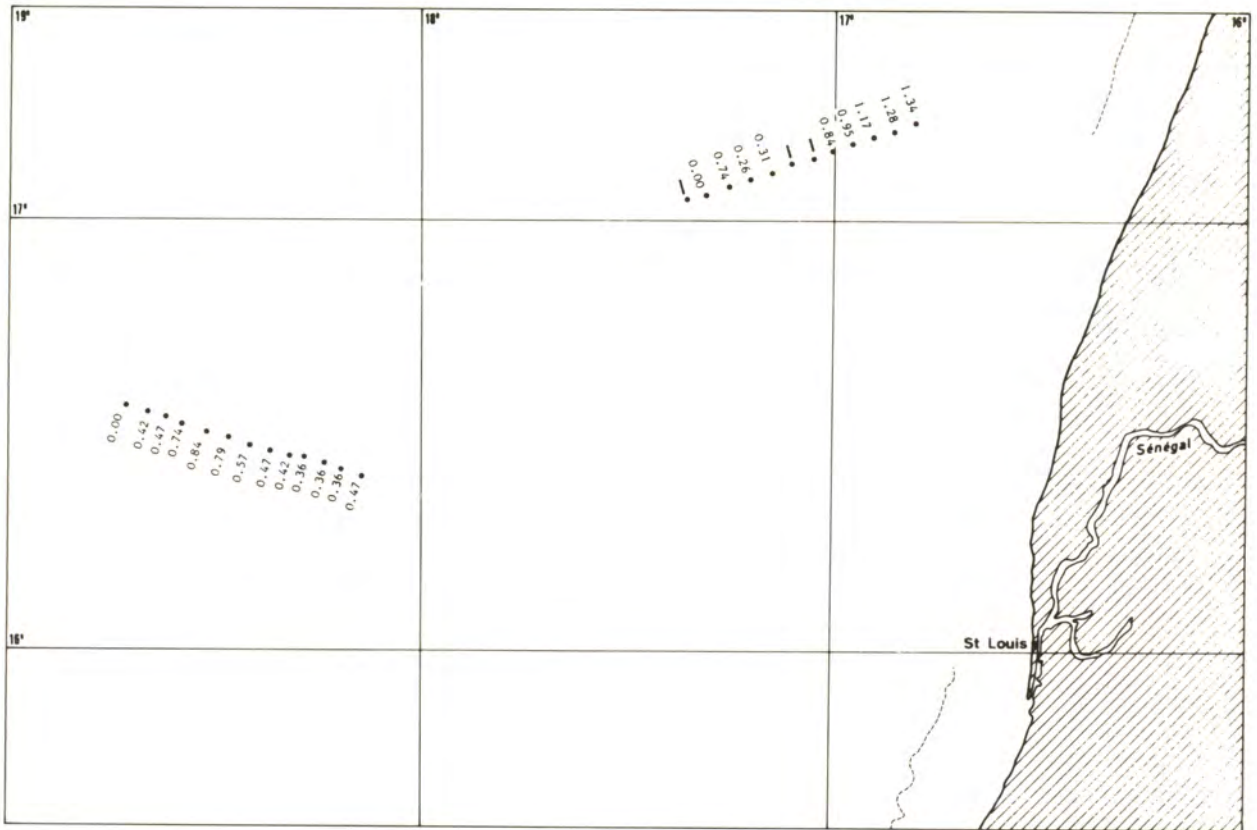


Fig. 69 - Prospection 16 - Distribution de l'ammonium ($\mu\text{atg/l}$) et de la chlorophylle *a* (mg/m^3) -

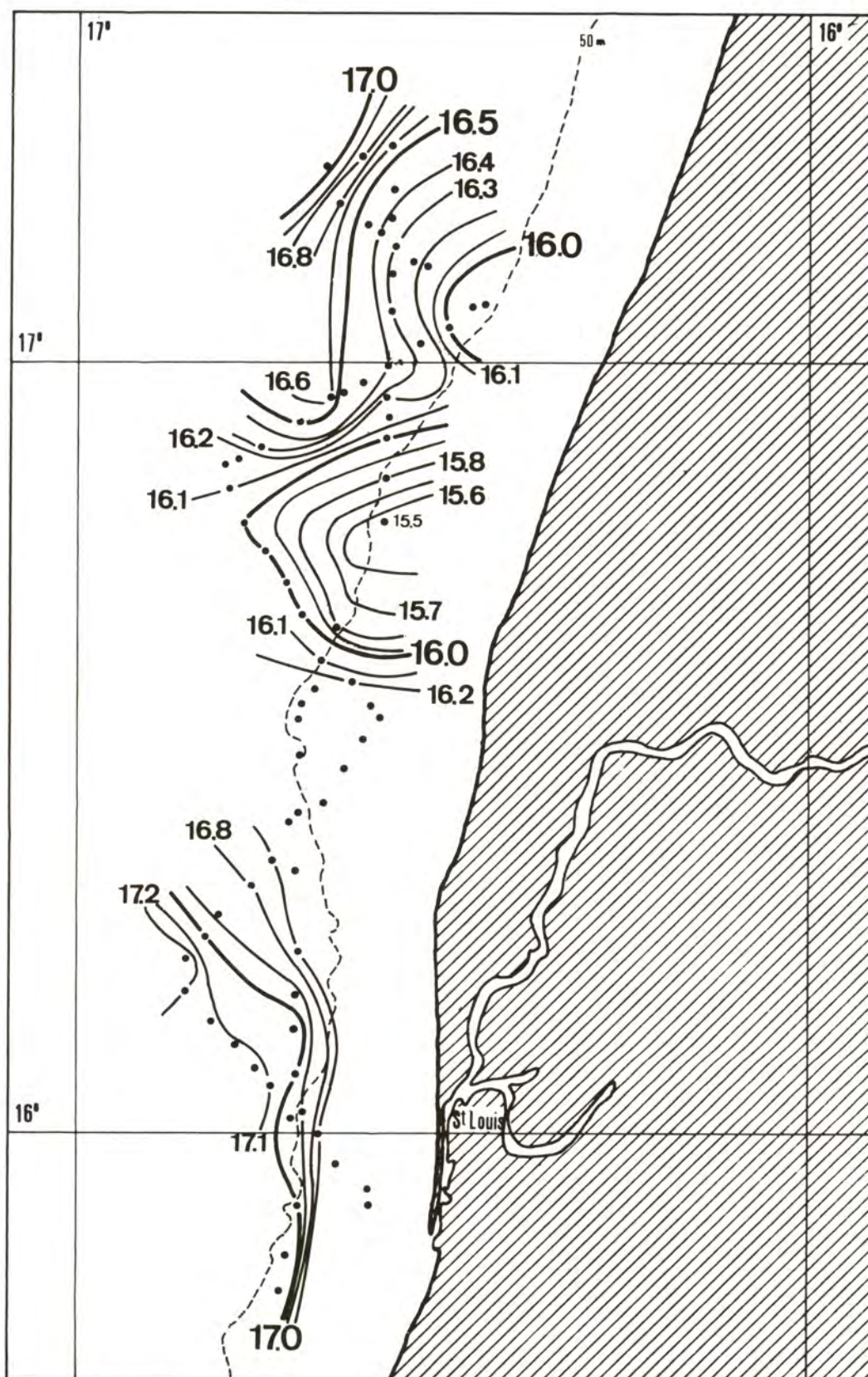


Fig. 70 - Prospection 17 - Structure thermique -

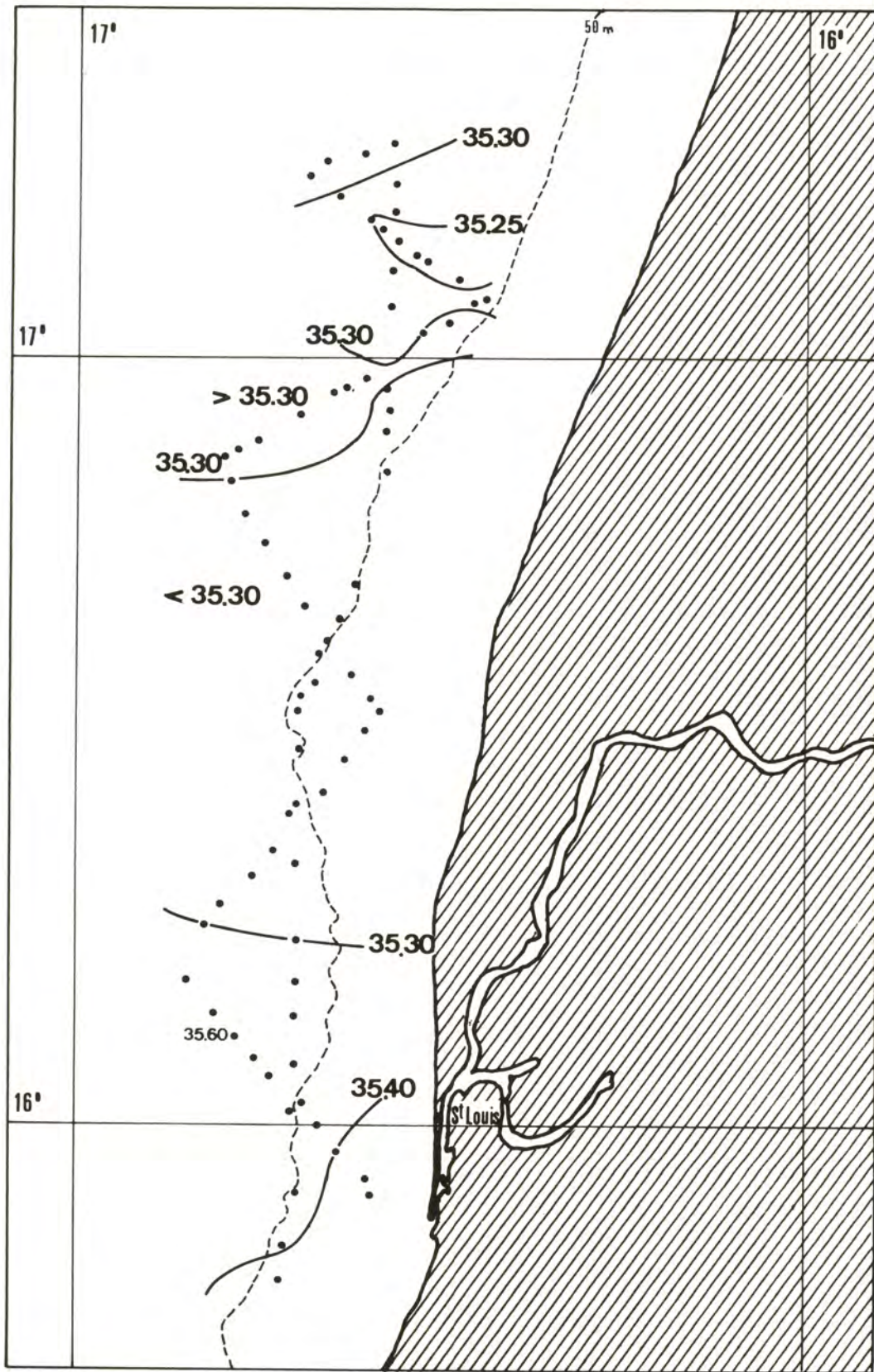


Fig. 71 - Prospection 17 - Structure haline -

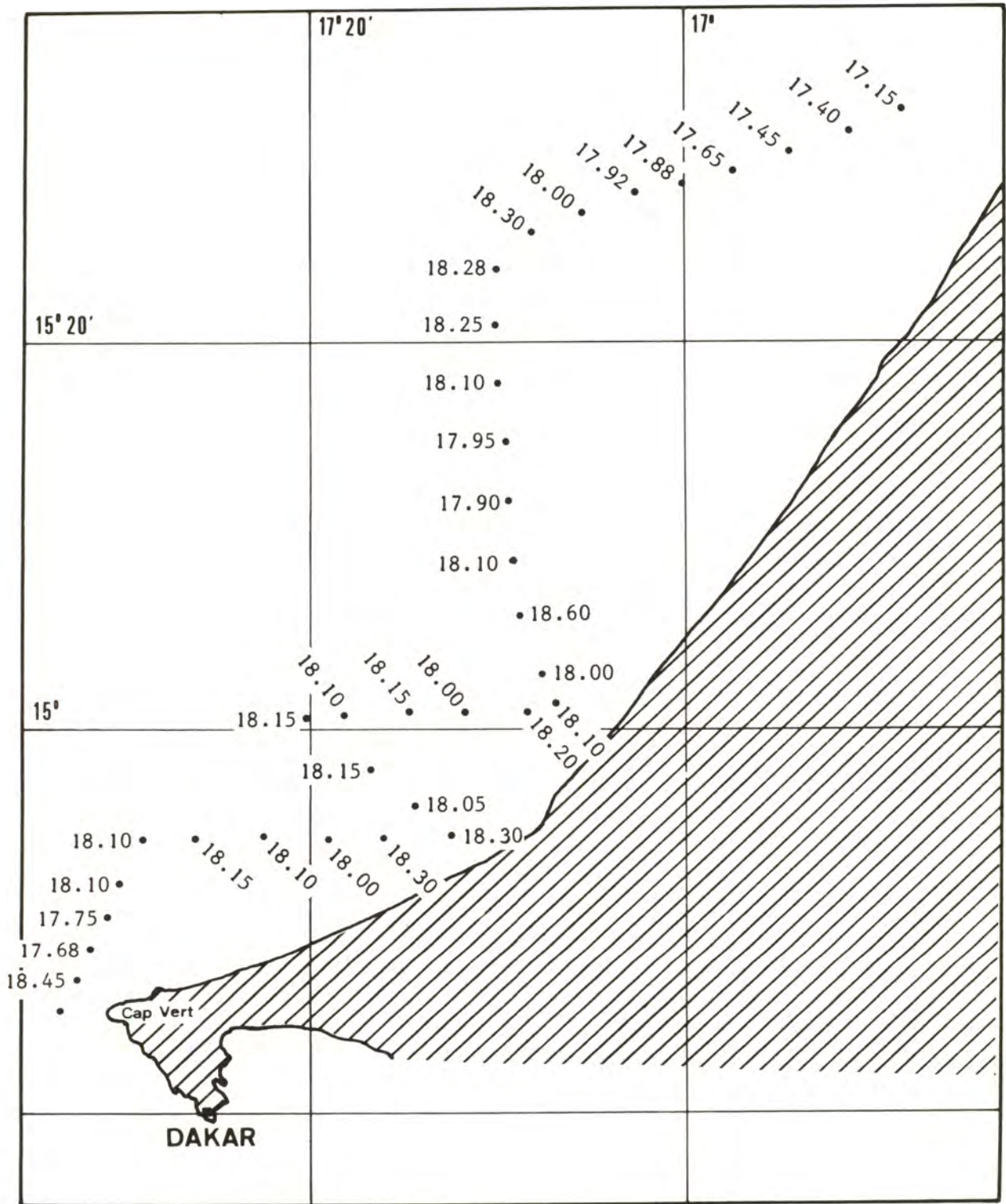


Fig. 72 - Prospection 18 - Températures -

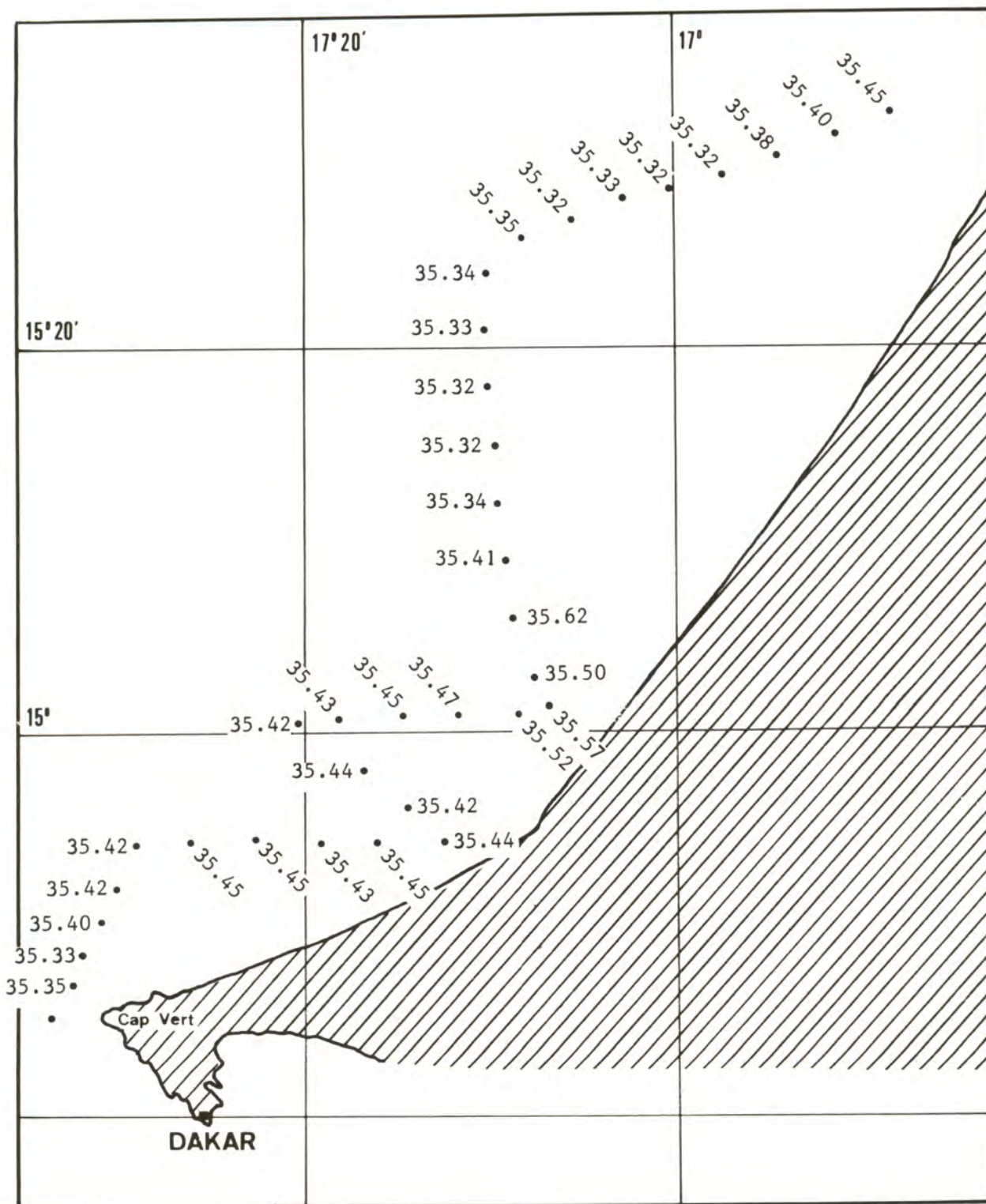
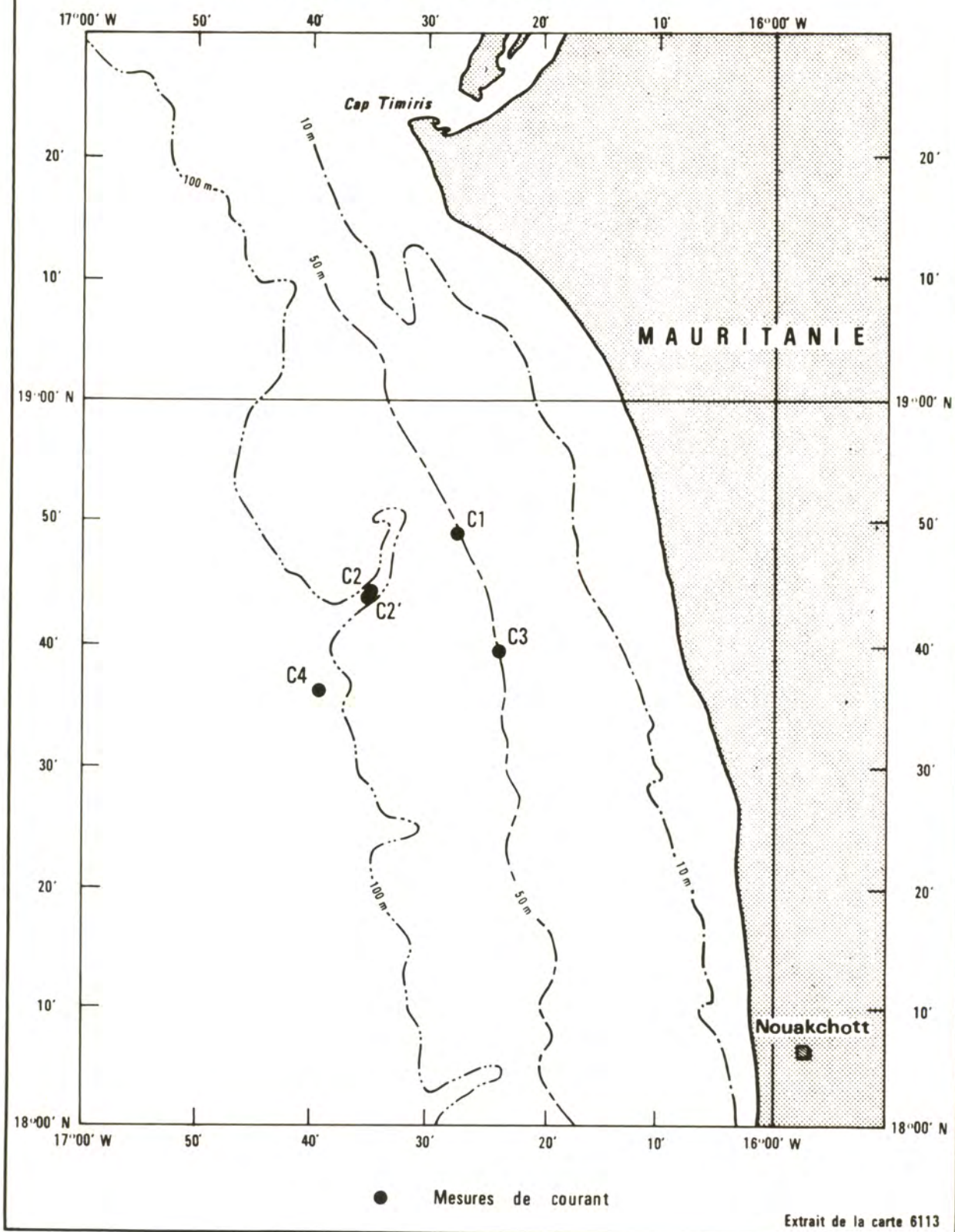
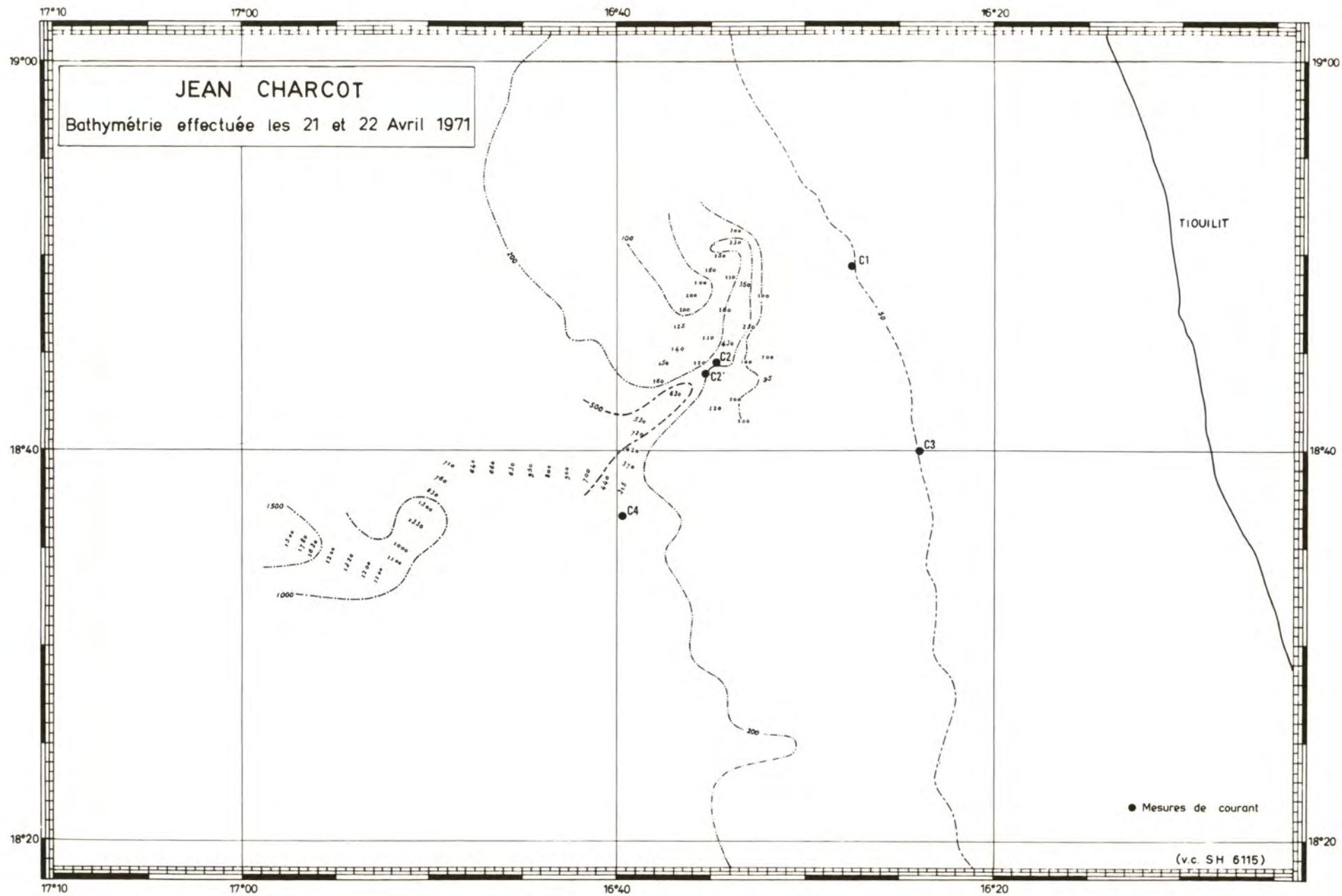


Fig. 73 - Prospection 18 - Salinités -

5 - RESULTATS DES MESURES DE COURANTS

Mesures effectuées à bord du navire océanographique "Jeân Charcot" Avril 1971





Hodographe intégré ("Progressive Vector Diagram")

Mesures effectuées à bord du navire océanographique "Jean Charcot" Avril 1971 le 17 et 18

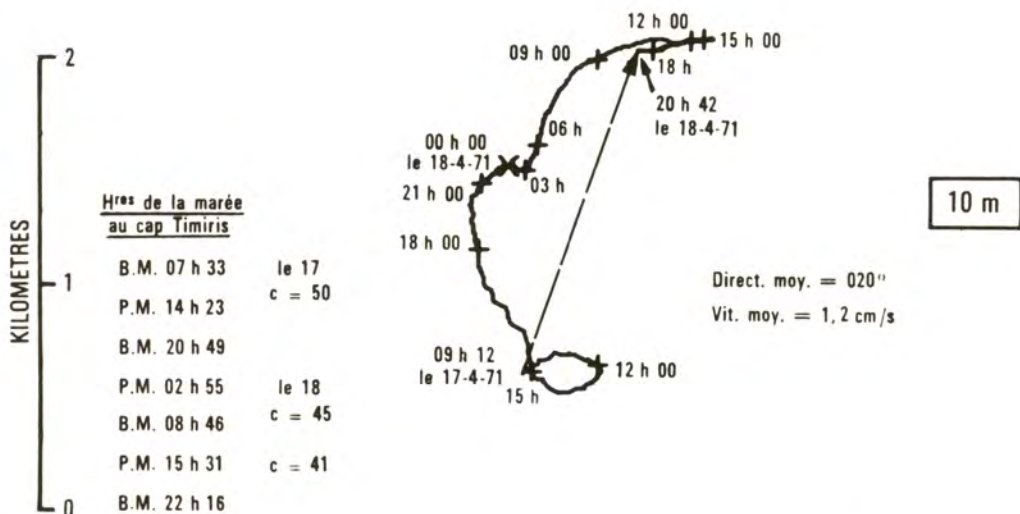
Station C1-71

$\varphi = 18^{\circ}49',4 \text{ N}$

$G = 16^{\circ}27',5 \text{ W}$

Sonde 50 m

Heure T U



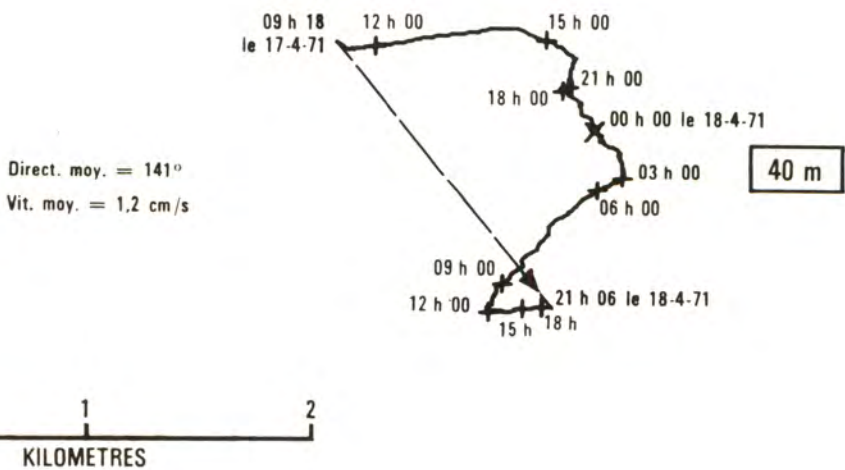
Météo :

Vent NNW F 4 à 6

Houle NNW Mer : peu agitée à agitée

+ Position toutes les 3 heures

x Changement de jour



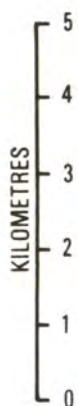
Hodographe intégré ("Progressive Vector Diagram")

Mesures effectuées
à bord du navire océanographique "Jean Charcot"
Avril 1971 le 19 et 20

Station C2'-71

$\varphi = 18^{\circ}43'.7$ N Sonde 400 m
G = $16^{\circ}35'.2$ W Heure T U

- + Position toutes les 3 heures
- x Changement de jour



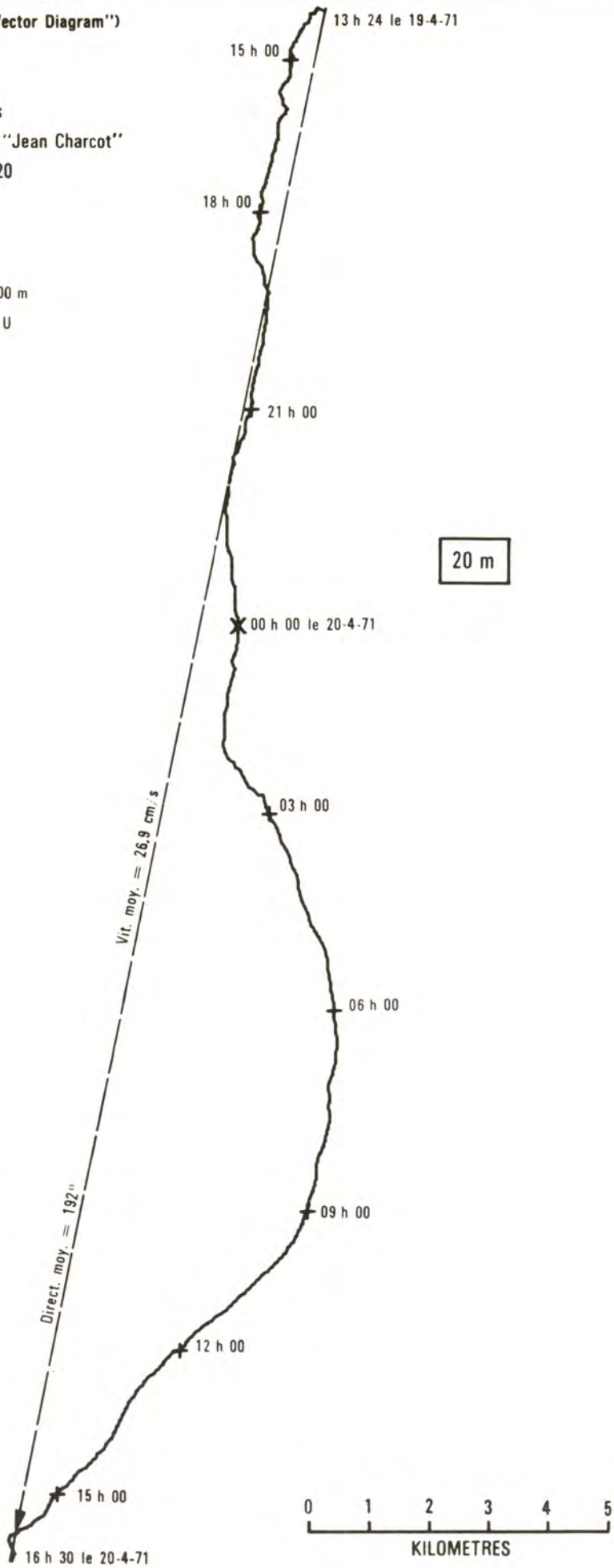
20 m

Hrs de la marée au cap Timiris

B.M. 09 h 15	le 19
P.M. 15 h 43	c = 40
B.M. 22 h 32	
P.M. 04 h 31	le 20
B.M. 10 h 35	c = 43
P.M. 16 h 56	c = 49

Météo :

Vent NNW F5
Houle NNW Mer : Agitée



Hodographe intégré ("Progressive Vector Diagram")

Mesures effectuées à bord du navire océanographique "Jean Charcot" Avril 1971 le 19 et 20

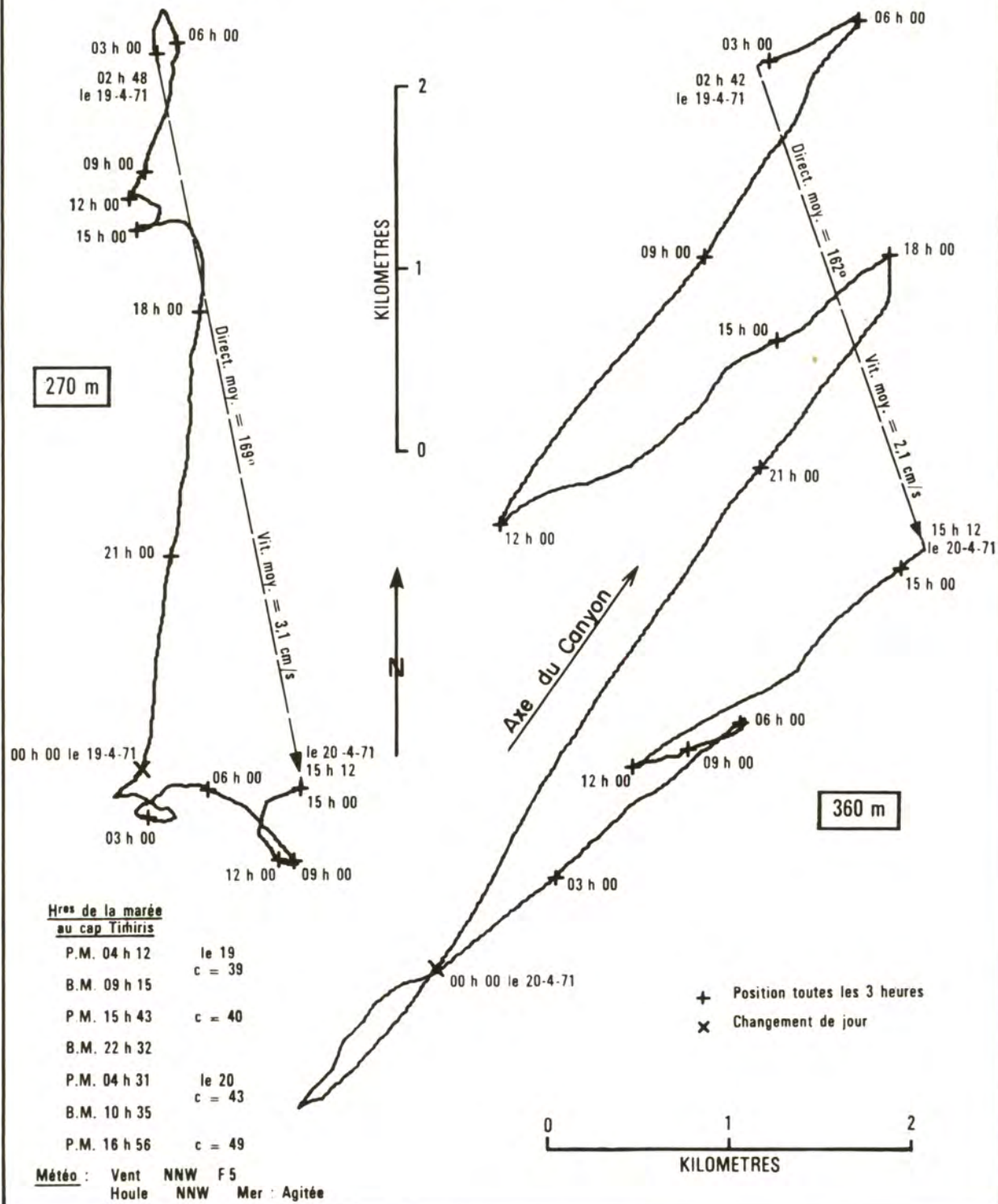
Station C2-71

$\varphi = 18^{\circ}44'.4 \text{ N}$

$G = 16^{\circ}34'.9 \text{ W}$

Sonde 370 m

Heure T U



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