

00000129

INSTITUT SENEGALAIS DE  
RECHERCHES. AGRICOLES

---

Croisière CAPRICORNE 74.07 et 74.08  
Résultats d'Observations - bathythermogrammes

par

J.P. REBERT et M. PRIVE

Centre de Recherches Océanographiques  
de DAKAR-THIAROYE  
(Sénégal)

Archive

N° 16

JUIN 1975

## Croisière CAPRICORNE~ 74.07 et 74.08

### Résultats d'observations - bathythermogrammes

---

- Les campagnes 74.07 et 74.08, missions d'echoprospection, ont eu lieu du 19 au 28 octobre 1974 et du 1er au 29 novembre 1974. Elles ont couvert l'ensemble du plateau continental ouest-africain compris entre les parallèles 11° et 30° nord.

- Au cours de ces deux missions, 313 bathythermogrammes (B.T.) espacés de 5 à 10 miles, ont été réalisés. L'appareil utilisé était le B.T. N° 2232 T.S.K. 0 - 2.50 m appartenant au CRO d'Abidjan.

- Les deux séries de tableaux (partie nord et partie sud) représentent :

- Les numéros et les positions des différents B.T.
  - Les températures de surface et températures de l'air relevées sur le thermographe du Capricorne.
  - Les profondeurs relevées sur le sondeur du Capricorne (y ajouter 4 m pour la profondeur réelle)
- La figure 1 représente la répartition des B.T.
- La première série de planches (fig. 2A à 2D) représente la position des B.T.
- La deuxième série de planches (fig. 3A à 3D) représente les isothermes de surface dressés à partir des enregistrements du thermographe
- La troisième série de planches représente tous les B.T. des N° 1 à 313 (plaques B.T. agrandis 3 fois et demie)

- La figure 4 représente la définition caractéristique d'un B.T. • L'épaisseur de la couche homogène est une donnée spécialement intéressante dans certaines techniques de pêche, mais son estimation à partir d'un B.T. étant assez subjective, il convient de préciser la méthode utilisée par WYRTKI (1971)

On distingue généralement, à partir de la surface :

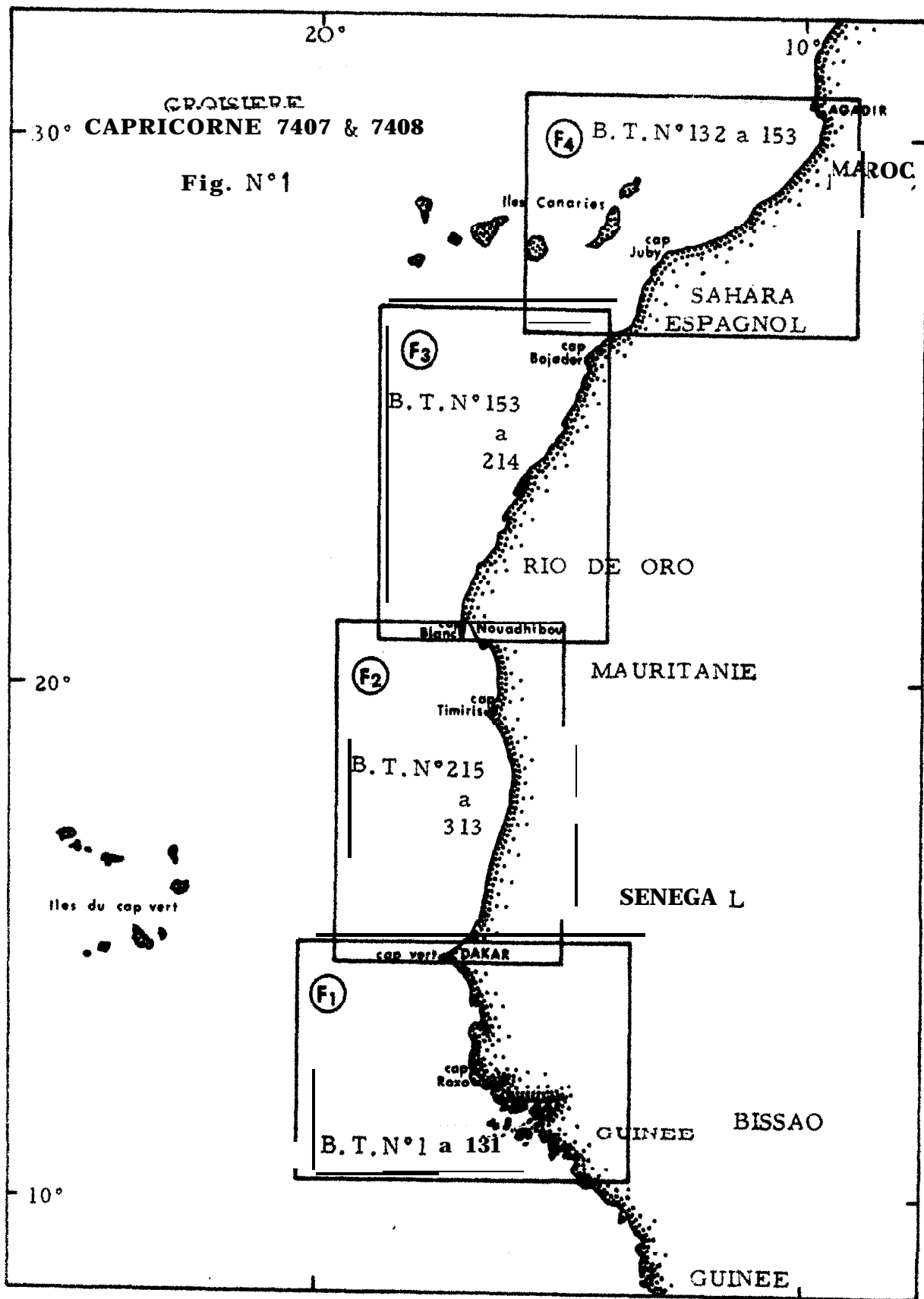
- Une couche supérieure quasi-homogène
- La thermocline où la température varie rapidement
- Une couche profonde où la température décroît lentement

La profondeur "P" de la couche homogène est estimée par deux méthodes :

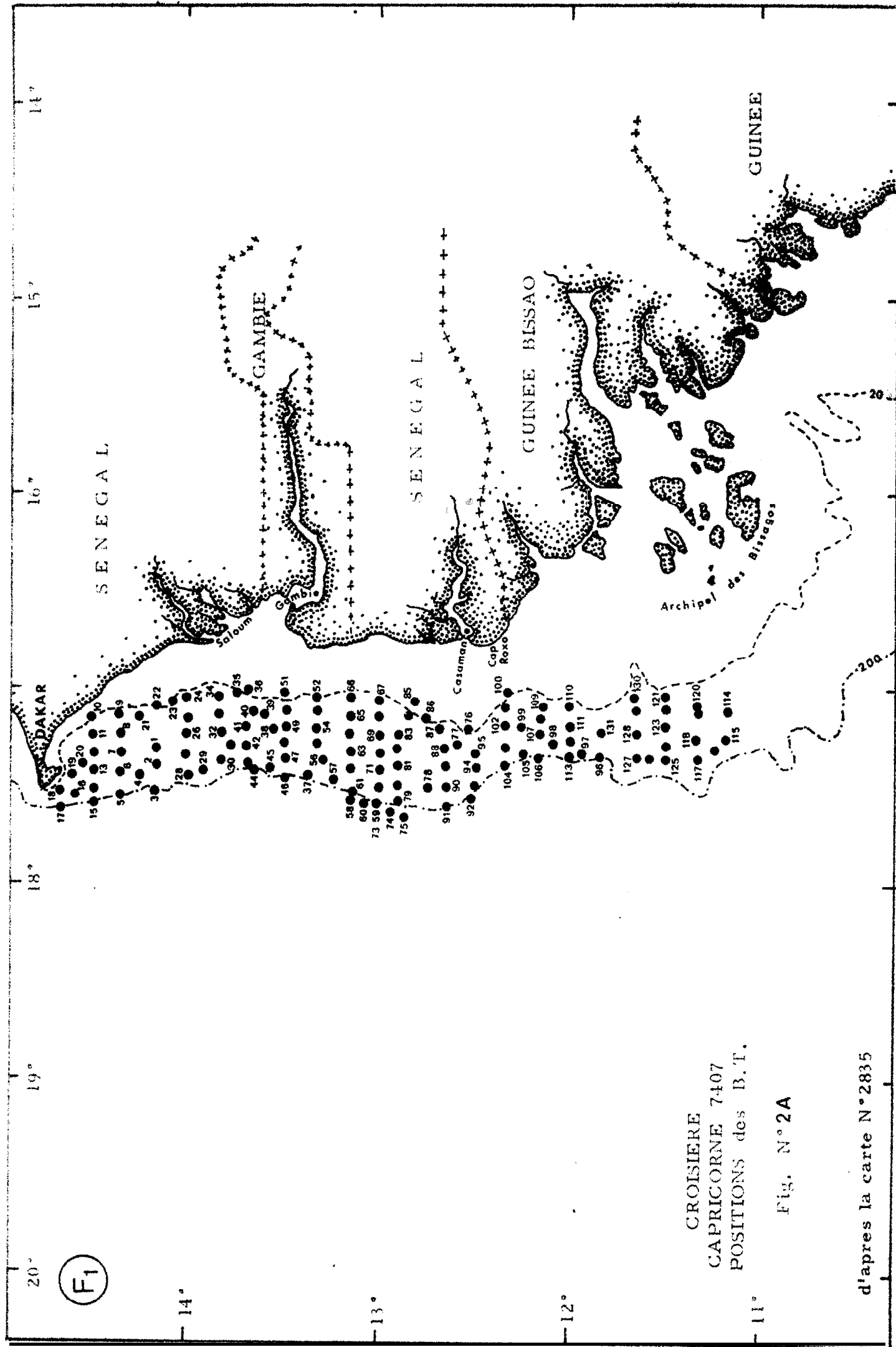
Par la première méthode : On note le premier intervalle où la température varie de plus de 0,5 degré en 5 mètres ; "P" est alors l'immersion où la droite (qui joint les points représentant cet intervalle sur la courbe bathythermique) coupe la verticale correspondant à la température de surface.

Par la deuxième méthode : On prend "P" égal à l'immersion où l'on observe 1 degré de moins qu'à la surface.

- Lorsque ces deux méthodes sont applicables on adopte pour "P" la moyenne des deux valeurs obtenues.



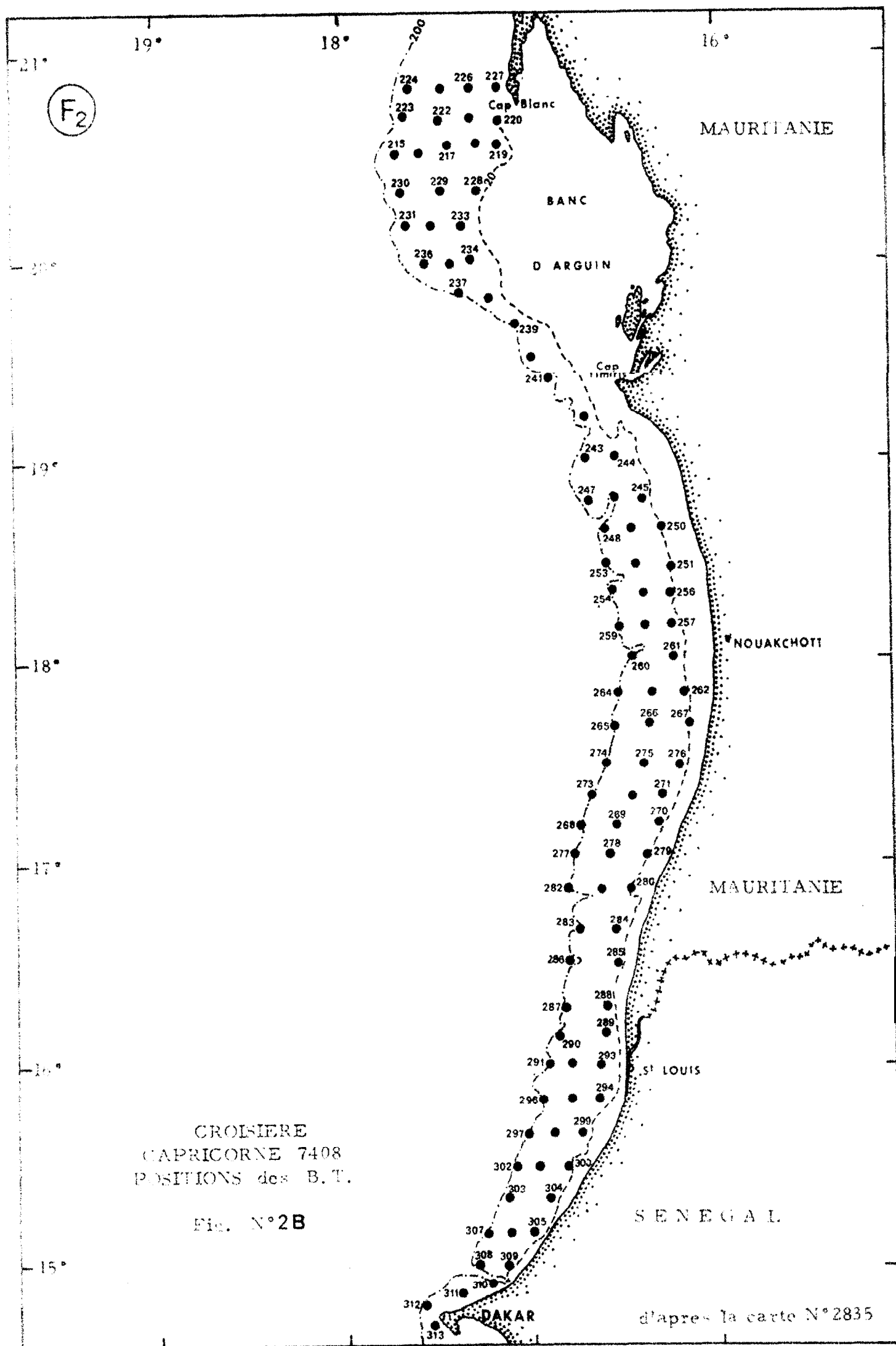
d'apres la carte N° 5279

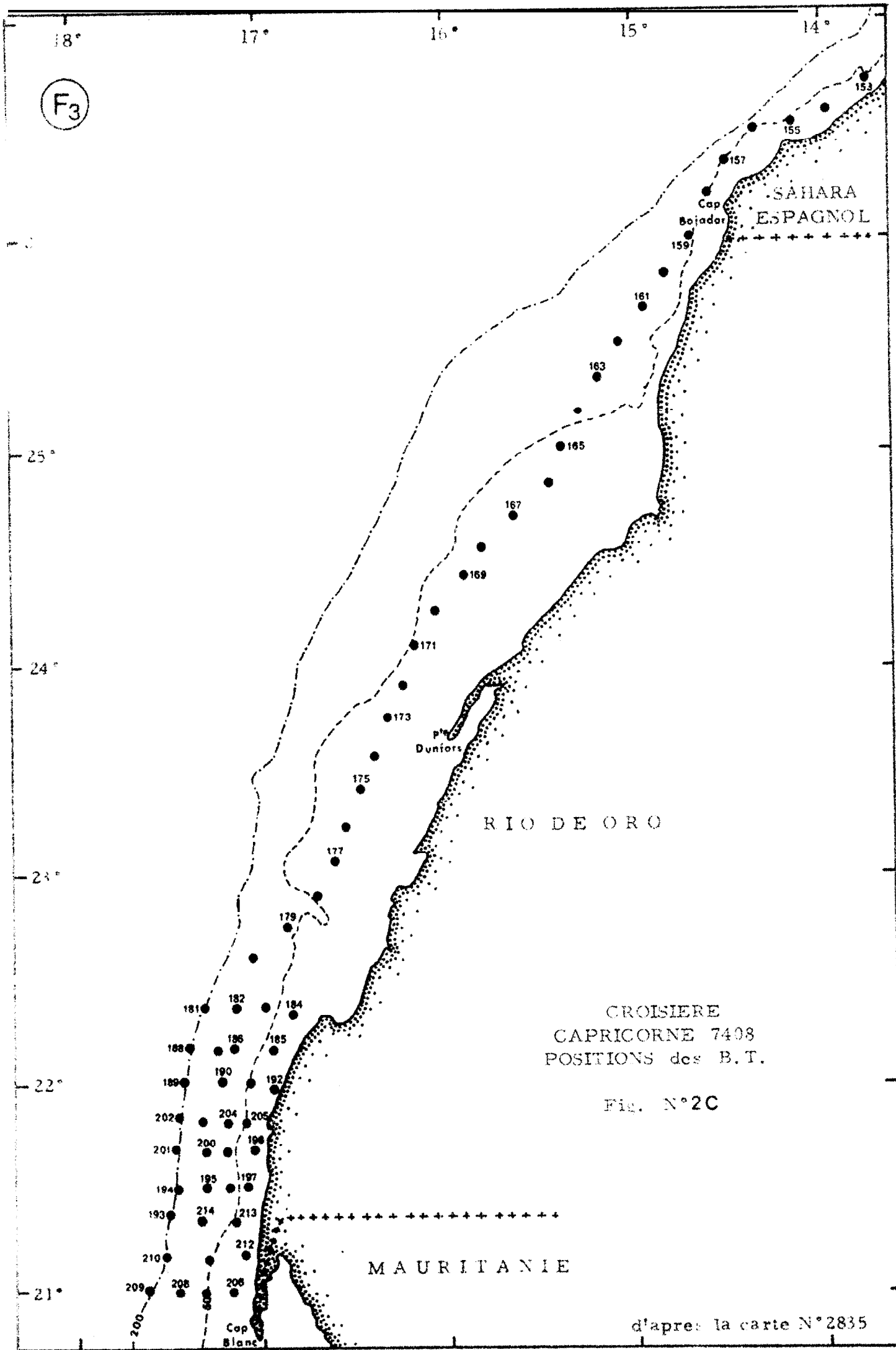


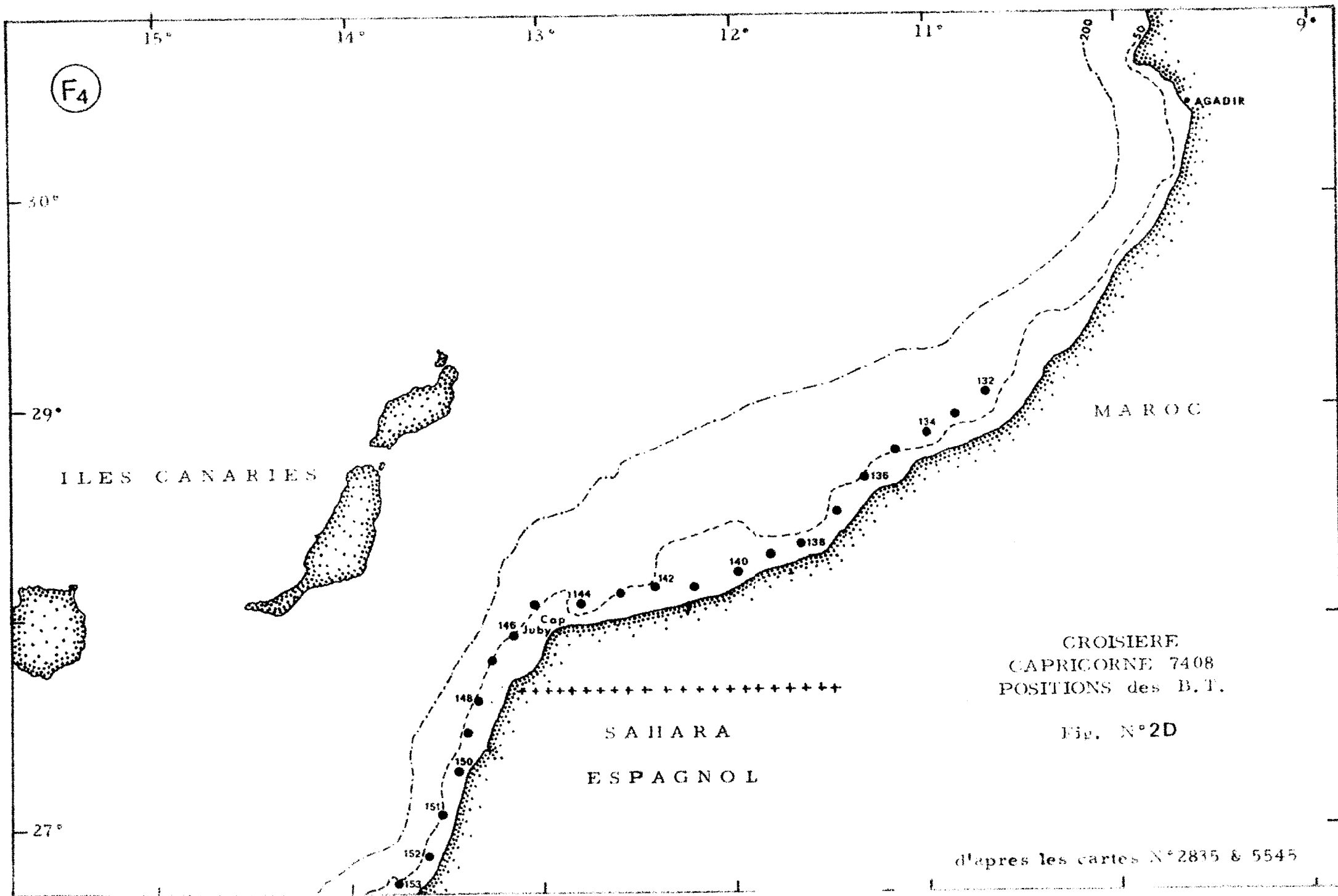
CROISIÈRE  
CAPRICORNE 7407  
POSITIONS des B.T.

Fig. N° 2A

d'après la carte N° 2835







CROISIÈRE  
CAPRICORNE 7408  
POSITIONS des B.T.

Fig. N°2D

d'après les cartes N°2835 & 5545



"CAPRICORNE"  
Campagne 7-07  
Bathythermic grammes

le Partie (Sud)

Date	Heure	Position		Fond Sondeur (m)	Plaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
22/07/74	07H40	14°09	17°19'5	66	1	26°3	-	1
"	08H15	14°09	17°24'5	85	2	27°2	-	1
"	08H50	14°10	17°31'5	100	3	27°6	-	1
"	09H45	14°14	17°26	91	4	26°2	-	1
"	10H42	14°20	17°33	130	5	27°4	25°8	1
"	11H15	14°20'5	17°26	94	6	26°4	25°9	1
"	11H45	14°20'5	17°20'5	46	7	26°2	26°2	1
"	12H20	14°20'5	17°14'5	30	8	26°4	26°2	1
"	12H48	14°21'5	17°08'5	21	9	24°0	26°1	1
"	13H35	14°30	17°10	22	10	23°3	26°0	1
"	14H05	14°30	17°15	32	11	24°4	26°9	1
"	14H35	14°30	17°20'5	53	12	25°4	27°6	1
"	15H00	14°30	17°25'5	70	13	26°3	27°6	1
"	15H30	14°30	17°30'5	86	14	26°5	27°2	1
"	16H05	14°30	17°35'5	200	15	27°0	27°1	1
"	16H42	14°35'5	17°33	78	16	26°6	26°6	1
"	17H20	14°40	17°37	160	17	26°4	26°7	1
"	17H50	14°40	17°31'5	47	18	25°9	26°2	1
"	18H17	14°37	17°27'5	33	19	25°0	25°8	1
"	18H45	14°32'5	17°23'5	60	20	26°0	26°0	1
"	20H42	14°15	17°09'5	24	21	25°1	26°1	1
"	21H10	14°09'5	17°06	17	22	25°8	25°8	1
21/07/74	08H50	14°04'5	17°04	17	23	26°3	25°8	1
"	09H20	14°00'5	17°03	18	24	26°7	25°8	1
"	09H52	14°00'5	17°09	31	25	24°6	25°2	1
"	10H22	13°59'5	17°14	42	26	26°3	26°0	1
"	10H50	13°59'5	17°20'5	58	27	27°4	26°8	1
"	11H20	13°59	17°27	81	28	27°7	26°9	1
"	11H50	13°55	17°25'5	91	29	27°8	27°1	1

"CAPRICORNE"  
Campagne 7407  
Bathythermogrammes

1e Partie (Sud)

Date	Heure	Position		Fond Sondeur (m)	Plaque BT N°	T° surface	T° air sec	Fig N°
		Lat.	Long.					
21/10/74	14H50	13°50'15"	17°22'15"	90	30	27°8	27°1	1
"	15H20	13°47'	17°18'	65	31	27°6	27°0	1
"	15H50	13°49'15"	17°13'15"	40	32	26°6	27°4	1
"	16H20	13°50'15"	17°08'15"	33	33	26°8	27°5	1
"	16H52	13°51'	17°03'	25	34	27°8	28°0	1
"	17H28	13°46'15"	17°01'15"	20	35	27°9	28°0	1
21/10/74	17H59	13°41'15"	17°00'15"	18	36	28°2	27°7	1
22/10/74	07H45	13°23'	17°26'	90	37	26°8	27°1	1
"	09H15	13°33'	17°13'	47	38	27°5	26°8	1
"	09H45	13°36'	17°08'15"	35	39	27°5	27°2	1
"	10H45	13°40'15"	17°07'	25	40	27°7	27°5	1
"	11H45	13°41'15"	17°12'15"	37	41	27°2	27°1	1
"	12H15	13°41'	17°18'	61	42	26°1	26°8	1
"	12H45	13°40'15"	17°23'	82	43	26°8	26°4	1
"	13H08	13°39'	17°25'15"	225	44	27°2	27°1	1
"	13H45	13°34'	17°25'	89	45	26°9	26°9	1
"	14H15	13°30'	17°28'	95	46	27°0	26°9	1
"	14H45	13°30'	17°22'15"	78	47	26°5	26°8	1
"	15H15	13°30'	17°18'	57	48	27°8	26°7	1
"	15H45	13°28'15"	17°12'	43	49	28°1	27°7	1
"	16H15	13°28'15"	17°07'	32	50	28°5	28°0	1
"	16H45	13°29'15"	17°01'	18	51	28°6	28°3	1
"	18H00	13°20'	17°03'	20	52	28°5	27°8	1
"	18H30	13°20'15"	17°08'	33	53	28°3	27°0	1
"	21H00	13°20'	17°13'	41	54	27°6	27°2	1
"	21H30	13°20'15"	17°17'15"	50	55	27°6	26°7	1
"	23H00	13°18'	17°22'15"	62	56	27°3	26°6	1
"	23H35	13°14'	17°28'15"	83	57	26°5	26°7	1
23/10/74	00H10	13°10'	17°35'	110	58	26°4	26°7	1

"CAPRICORNE"  
Campagne 7407  
Bathythermogrammes

1e Partie (Sud)

Date	Heure	Position		Fond Sondeur (m)	Plaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
23/10/74	07H35	13°00'5	17°36	180	59	27°3	26°0	1
"	08H05	13°05	17°36	250	60	26°5	25°8	1
"	08H40	13°10'5	17°33	102	61	26°0	25°7	1
"	13H45	13°10	17°25'5	55	62	27°8	27°0	1
"	14H15	13°10	17°20	47	63	28°0	26°8	1
"	14H45	13°10'5	17°15	35	64	27°9	26°7	1
"	15H15	13°10'5	17°10	25	65	27°9	26°8	1
"	15H45	13°10	17°03	19	66	28°0	27°8	1
"	16H37	13°00	17°04	18	67	28°1	27°4	1
"	17H04	13°00	17°08'5	25	68	28°0	27°5	1
"	17H33	13°00	17°14'5	35	69	27°8	27°4	1
"	18H00	13°00	17°19'5	40	70	27°9	27°0	1
"	18H30	13°00	17°25	49	71	27°95	26°6	1
"	19H00	13°00	17°30'5	62	72	27°8	26°8	1
"	19H30	13°00	17°36	170	73	27°55	26°5	1
"	20H00	12°56	17°38	250	74	27°7	26°6	1
"	20H35	12°52	17°40	600	75	27°8	26°6	1
24/10/74	06H22	12°32	17°13	16	76	27°4	26°6	1
"	07H05	12°36	17°19	24	77	27°3	26°6	1
"	08H35	12°42	17°31	45	78	27°7	26°4	1
"	10H00	12°54'5	17°35'5	80	79	27°8	26°0	1
"	10H30	12°55	17°30	50	80	27°7	26°3	1
"	11H00	12°55'5	17°25	43	81	27°4	26°1	1
"	11H30	12°55'5	17°19'5	36	82	26°7	26°4	1
"	12H00	12°55'5	17°14	28	83	26°6	26°4	1
"	12H25	12°52'5	17°09'5	20	84	26°8	26°8	1
"	12H58	12°49'5	17°05	16	85	27°3	26°9	1
"	13H28	12°46	17°09	16	86	27°2	26°5	1

"CAPRI CORNE"  
Campagne 7407  
Bathythermogrammes

1e Partie (Sud)

Date	Heure	Position		Fond Sondour (m)	Plaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
24/10/74	14H00	12°41'5	17°12'5	19	87	26°9	26°6	1
"	14H30	12°40	17°19	24	88	27°2	26°6	1
"	15H00	12°40	17°24'5	33	89	27°5	26°5	1
"	15H30	12°40	17°30'5	37	90	27°7	26°5	1
"	16H00	12°40	17°36'5	160	91	28°0	26°6	1
"	16H35	12°34	17°33'5	100	92	28°0	27°8	1
"	17H05	12°30	17°30	50	93	27°9	26°8	1
"	17H30	12°30	17°25	40	94	27°8	26°7	1
"	18H02	12°30	17°20	24	95	27°4	26°7	1
25/10/74	06H10	11°51	17°21'5	200	96	27°5	26°8	1
"	06H43	11°56'5	17°19'5	105	97	27°7	26°6	1
"	07H35	12°05'5	17°16'5	102	98	27°5	26°4	1
"	08H35	12°15'5	17°11'5	43	99	27°1	26°2	1
"	10H18	12°20	17°01	20	100	26°9	26°9	1
"	11H02	12°20	17°06	24	101	27°1	26°2	1
"	11H30	12°20	17°12	30	102	26°9	26°3	1
"	12H03	12°20	17°18	70	103	27°1	26°4	1
"	12H35	12°19'5	17°23	500	104	27°8	27°6	1
"	13H00	12°15	17°20	200	105	27°8	26°8	1
"	13H30	12°10	17°21	200	106	27°7	26°7	1
"	14H00	12°10	17°15	90	107	27°7	26°6	1
"	14H30	12°10	17°10	45	108	27°5	26°6	1
"	15H00	12°08	17°05'5	18	109	27°2	27°2	1
"	15H48	12°00	17°05'5	22	110	26°6	26°6	1
"	16H15	12°00	17°11	53	111	26°8	26°7	1
"	16H45	12°00	17°16'5	102	112	27°7	26°8	1
"	17H15	11°59'5	17°22	200	113	27°85	27°3	1
26/10/74	07H10	11°11	17°06	35	114	27°5	26°3	1

"CAPRICORNE"  
Campagne 7407  
Bathythermogrammes

le Partie (Sud)

Date	Heure	Position		Fond Sondeur (m)	Plaque BT NO	T° surface	T°Air sec	Fig. N°
		Lat.	Long.					
26/10/74	07H55	11°11'5	17°16	87	115	27°6	26°5	1
"	08H25	11°15'5	17°19	80	116	27°75	26°6	1
"	09H00	11°20'5	17°21'5	100	117	28°1	27°0	1
"	09H30	11°21	17°14	54	118	27°5	27°3	1
"	10H00	11°20	17°07	38	119	27°4	27°3	1
"	10H30	11°20	17°04'5	22	120	27°4	27°1	1
"	11H45	11°31	17°01'5	19	121	27°8	27°0	1
"	12H15	11°31	17°06	35	122	27°95	27°0	1
"	12H45	11°31	17°11	48	123	27°95	27°1	1
"	13H10	11°31	17°16'5	90	124	27°95	27°3	1
"	13H35	11°31'5	17°21	200	125	28°00	27°4	1
"	14H05	11°36	17°20	108	126	28°2	27°5	1
"	14H34	11°40	17°20	107	127	28°2	27°9	1
"	15H04	11°40	17°13'5	68	128	28°2	28°1	1
"	15H32	11°40	17°07	34	129	28°1	28°0	1
"	16H03	<u>11°41</u>	17°02	15	130	28°0	27°4	1
"	17H30	11°50	17°13	90	131	27°7	27°2	1

"CAPRICORNE"  
Campagne 7408  
Bathythermogrammes

2c Partie (Nord)

Date	Heure	Position		Fond Sondeur (m)	Flaque BT	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
11/11/74	08H00	29°03	10°41'5	56	132	17°2	16°0	4
"	09H00	28°57	10°50	64	133	17°1	15°5	4
"	10H00	28°52	10°59'5	69	134	16°75	14°4	4
"	11H00	28°47	11°10	53	135	16°4	14°6	4
"	12H00	28°39	11°19	36	136	16°9	14°6	4
"	13H00	28°30	11°28	25	137	16°7	15°3	4
"	15H00	28°21	11°39	38	138	17°0	16°3	4
"	16H00	28°17'5	11°48'5	35	139	17°4	17°2	4
"	17°00	28°13	11°59	38	140	17°7	17°8	4
"	18H00	28°08	12°12	34	141	17°8	17°7	4
12/11/74	01H00	28°08'5	12°25	42	142	17°4	17°5	4
"	02H00	28°07	12°36'5	49	143	17°6	17°5	4
"	03H00	28°04'5	12°48	53	144	17°5	17°6	4
"	04H05	28°03	13°02'5	52	145	17°7	17°7	4
"	05H00	27°55	13°09	55	146	17°5	17°7	4
"	06H00	27°47	13°16	52	147	17°15	17°6	4
"	11H30	27°36	13°20	43	148	16°7	18°4	4
"	12H30	27°26'5	13°23	37	149	15°8	18°6	4
"	13H30	27°16	13°27	28	150	17°2	17°6	4
"	14H30	27°04'5	13°32	57	151	17°1	17°7	4
"	15H30	26°52'	13°36'5	62	152	17°2	17°9	4
"	16H30	26°44	13°45	53	153	16°8	18°0	4
"	17H30	26°37	13°58	46	154	17°1	17°9	3
"	18H30	26°33	14°08'5	26	155	17°5	17°9	3
"	19H30	26°31	14°21'5	73	156	19°5	18°7	3
"	20H30	26°21'5	14°30	72	157	19°2	18°5	3
"	21H35	26°11'5	14°35'5	32	158	17°9	17°8	3
"	22H30	26°00	14°41	63	159	17°1	17°4	3
"	23H30	25°49'5	14°49'5	85	160	17°9	17°6	3

"CAPRI CORNE"  
Campagne 7408  
Bathythermogrammes

2e Partie (Nord)

Date	Heure	Position		Fond Sondcur (m)	Flaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
13/11/74	00H30	25°40'5	14°56'5	89	161	17°5	17°4	3
"	01H30	25°30'5	15°04	82	162	17°5	17°1	3
"	02H30	25°21	15°11	71	163	17°2	17°1	3
"	03H30	25°10'5	15°17	62	164	17°9	17°2	3
"	04H30	25°00'5	15°24	47	165	18°0	17°4	3
"	05H35	24°50	15°27'5	40	166	16°6	17°0	3
"	06H30	24°42	15°38	37	167	16°2	16°9	3
"	07H30	24°32'5	15°48	35	168	16°4	16°7	3
"	08H30	24°25	15°55	40	169	16°1	17°0	3
"	09H30	24°16	16°03'5	40	170	16°6	17°1	3
"	10H30	24°06'5	16°10	46	171	16°7	17°0	3
"	11H30	23°55'5	16°14	47	172	17°0	16°9	3
"	12H30	23°44'5	16°19	42	173	17°05	17°05	3
"	13H30	23°34	16°24	37	174	16°85	17°5	3
"	14H30	23°23'5	16°28'5	34	175	16°9	17°6	3
"	15H30	23°13	16°33	32	176	17°3	17°5	3
"	16H30	23°04	16°37	45	177	17°3	17°8	3
"	17H45	22°54	16°41'5	54	178	17°1	17°6	3
"	18H45	22°45	16°52	55	179	17°3	17°3	3
"	19H45	22°36	17°02'5	62	180	17°6	17°6	3
14/11/74	10H15	22°22	17°19'5	100	181	18°3	17°8	3
"	11H05	22°22	17°09	75	182	17°7	17°5	3
"	11H55	22°22	16°59	55	183	17°2	17°4	3
"	13H05	22°19'5	16°50	40	184	17°4	17°6	3
"	14H05	22°10	16°56'5	40	185	17°6	17°4	3
"	14H50	22°10	17°06'5	55	186	17°4	17°4	3
"	15H35	22°10	17°14	68	187	17°85	17°7	3
"	16H17	22°10	17°24	200	188	17°8	18°0	3

"CAPRI CORNE"  
Campagne 7408  
Bathythermogrammes

2e Partie (Nord)

Date	Heure	Position		Fond Sondeur (m)	Plaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
14/11/74	17H10	22°00	17°25	84	189	17°8	17°8	3
"	17H55	22°00	17°13	55	190	17°7	17°5	3
"	18H40	21°59'5	17°04'5	56	191	17°1	17°1	3
"	19H20	20°58	16°57'5	22	192	17°5	17°2	3
15/11/74	09H30	21°21	17°30'5	200	193	17°3	17°4	3
"	10H30	21°30	17°28	95	194	17°5	17°6	3
"	11H10	21°29'5	17°18'5	75	195	17°4	17°4	3
"	11H50	21°29	17°11	60	196	16°45	17°0	3
"	12H25	21°29	17°05	38	197	16°5	16°9	3
"	13H25	21°40	17°02'5	32	198	16°6	16°7	3
"	14H00	21°40	17°11'5	58	199	16°8	16°8	3
"	14H35	21°40	17°18'5	68	200	17°6	17°4	3
"	15H30	21°41	17°26	240	201	17°2	17°6	3
"	16H27	21°50	17°27	180	202	17°15	17°3	3
"	17H05	21°49	17°19'5	68	203	17°85	17°6	3
"	17H40	21°48	17°11'5	59	204	17°1	17°4	3
"	18H15	21°48	17°06'5	38	205	17°4	17°3	3
16/11/74	07H30	20°59	17°10'5	37	206	15°7	16°5	3
"	08H15	20°58'5	17°19'5	60	207	16°0	17°0	3
"	09H00	20°59	17°28	76	208	16°8	17°4	3
"	09H45	21°00	17°37'5	225	209	16°8	17°4	3
"	10H48	21°10	17°31'5	180	210	16°85	17°8	3
"	11H45	21°10	17°19	62	211	16°9	17°7	3
"	12H55	21°11'5	17°07	40	212	15°95	17°3	3
"	13H55	21°20	17°09	48	213	16°8	17°4	3
"	14H55	21°20	17°20'5	65	214	17°4	18°1	3
17/11/74	05H55	20°30'5	17°42	250	215	16°6	17°3	2
"	09H05	20°31'5	17°34	67	216	16°45	17°05	2



"CARI CONNE"  
Campagne 7408  
Bathythermogrammes

2e Partie (Nord)

Date	Heure	Position		Fond Sondeur (m)	Plaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
17/11/74	09H50	20°33	17°25	50	217	15°05	15°6	2
"	10H30	20°33'5	17°16	38	218	15°8	15°7	2
"	11H00	20°33'5	17°10	32	219	15°9	15°6	2
"	11H40	20°40'5	17°09	20	220	15°15	15°7	2
"	12H30	20°41'	17°18	43	221	15°3	15°8	2
"	13H20	20°40'5	17°28	60	222	15°9	17°3	2
"	14H20	20°41	17°40	225	223	17°4	17°8	2
"	15H25	20°50	17°37'5	100	224	18°25	18°5	2
"	16H12	20°50	17°27	73	225	17°4	17°7	2
"	17H02	20°50'5	17°18'5	47	226	16°85	17°4	2
"	17H52	20°50'5	17°09	30	227	16°5	17°4	2
19/11/74	12H30	20°20	17°16	28	228	16°0	16°9	2
"	13H30	20°20	17°28	46	229	16°0	15°6	2
"	14H35	20°19'5	17°40	250	230	16°35	17°3	2
"	15H40	20°10	17°38'5	120	231	16°1	17°3	2
"	16H17	20°10	17°30'5	46	232	16°3	17°3	2
"	17H03	20°09'5	17°21	25	233	16°55	17°5	2
"	18H10	20°00	17°19	37	234	16°6	17°4	2
20/11/74	05H30	19°58	17°25	50	235	16°55	16°4	2
"	06H20	19°57'5	17°33	250	236	16°4	15°2	2
"	07H20	19°51	17°22	240	237	16°6	16°2	2
"	08H20	19°48'5	17°12	115	238	16°6	16°4	2
"	09H20	19°41	17°05'5	105	239	15°3	17°5	2
"	10H20	19°31'4	16°59'5	104	240	15°7	17°9	2
"	11H20	19°23	16°53	85	241	16°8	18°0	2
"	12H20	19°12	16°42'5	105	242	16°9	17°35	2
"	13H35	19°00	16°43	154	243	17°5	18°5	2
"	14H30	19°00	16°32	66	244	16°9	18°0	2

"CAFRI CORNE"  
Campagne 7408  
Bathythermogrammes

2e Partie (Nord)

Date	Heure	Position --		Fond Sondeur (m)	Flaque BT N°	T° surface	T° Air sec	Fig. N°
		La-t.	Long.					
		- - - - -	- - - - -					
20/11/74	17H00	18°48'5	16°23'5	31	245	15°8	17°4	2
"	18H30	18°47'5	16°32'5	125	246	16°4	17°4	2
"	19H20	18°47	16°40	175	247	16°9	17°5	2
"	20H20	18°39'5	16°35'5	190	248	16°1	17°8	2
"	21H00	18°39	16°27'5	85	249	16°5	17°4	2
"	21H50	18°40	16°18	29	250	15°9	17°1	2
21/11/74	13H30	18°27'5	16°15'5	22	251	16°3	19°4	2
"	14H20	18°28'5	16°26	56	252	17°4	19°1	2
"	15H15	18°29'5	16°35'5	192	253	19°7	20°6	2
"	16H25	18°20	16°34	200	254	19°9	21°0	2
"	17H15	18°20'5	16°23	76	255	17°2	19°0	2
"	18H00	18°19'5	16°16	24	256	16°5	18°3	2
22/11/74	09H15	18°10	16°15	33	257	16°2	19°8	2
"	10H00	18°10	16°23'5	70	258	16°5	18°2	2
"	10H50	18°10	16°31'5	250	259	19°0	20°5	2
"	11H58	18°00	16°27	112	260	18°7	21°5	2
"	13H00	18°01	16°15	30	261	16°95	23°5	2
"	15H02	17°50	16°11	31	262	17°9	27°0	2
"	15H50	17°50	16°21	82	263	17°9	27°0	2
"	16H45	17°50	16°32	200	264	19°6	23°5	2
23/11/74	08H00	17°40	16°32'5	210	265	18°5	19°7	2
"	09H00	17°41	16°22	89	266	17°25	19°7	2
"	10H10	17°41'5	16°09	17	267	17°4	22°1	2
24/11/74	06H30	17°10	16°44	200	268	18°2	20°3	2
"	08H25	17°11'5	16°32'5	98	269	18°0	19°2	2
"	09H30	17°12	16°19'5	29	270	17°6	19°7	2
"	10H30	17°20	16°19	43	271	17°3	19°1	2
"	11H20	17°20	16°28	102	272	17°6	19°9	2

"CAPRI CORNE"  
Campagne 7408  
Bathythermogrammes

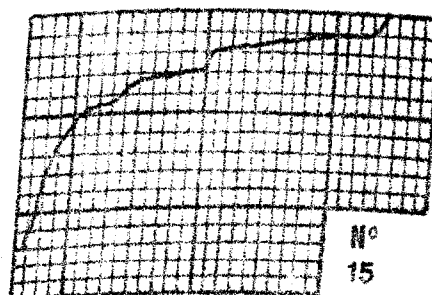
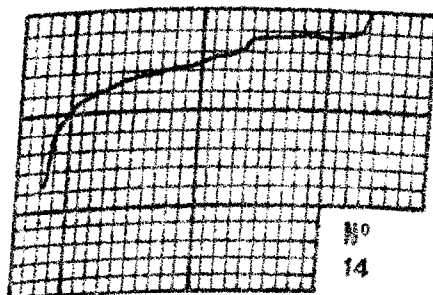
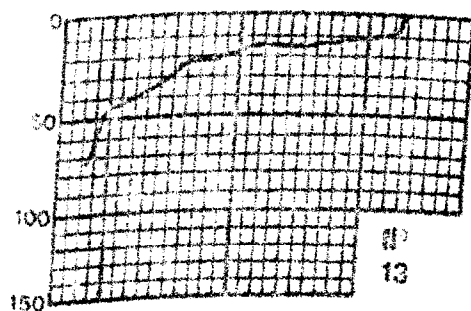
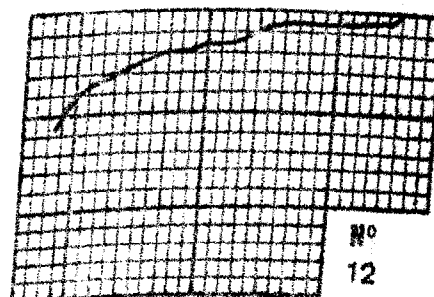
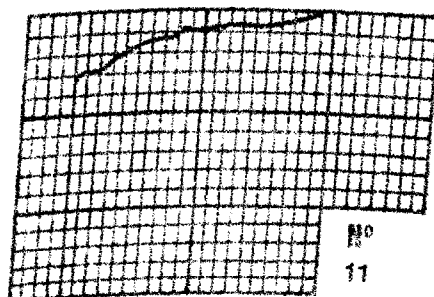
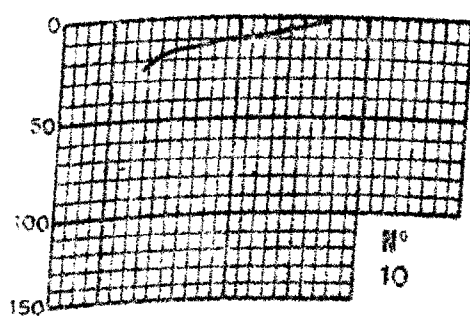
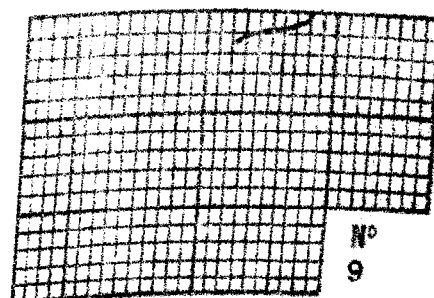
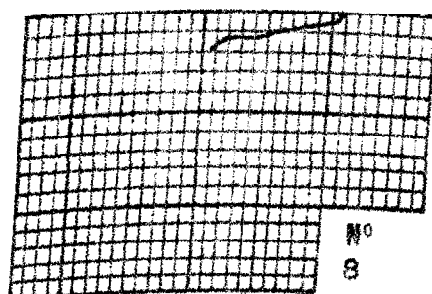
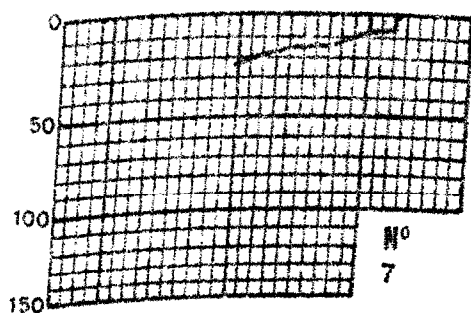
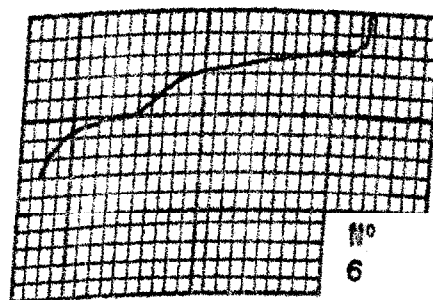
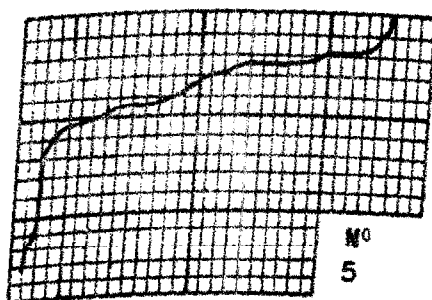
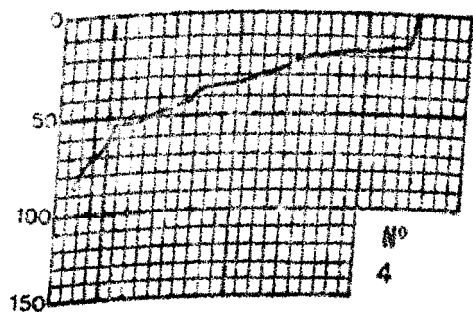
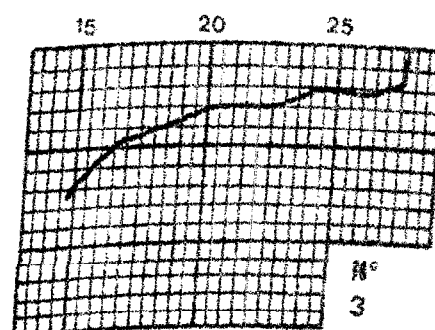
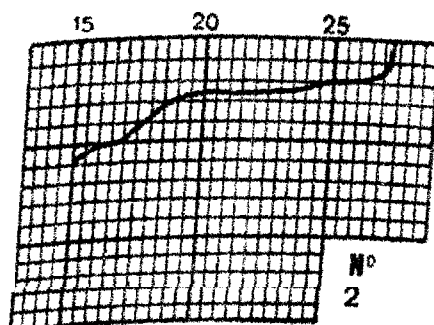
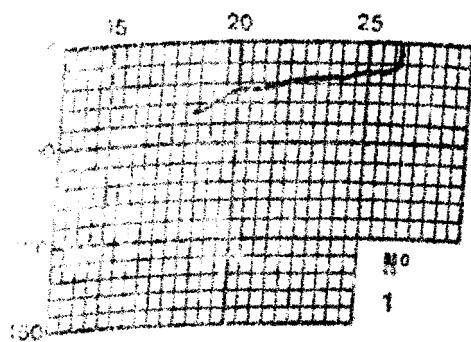
2e Partie (Nord)

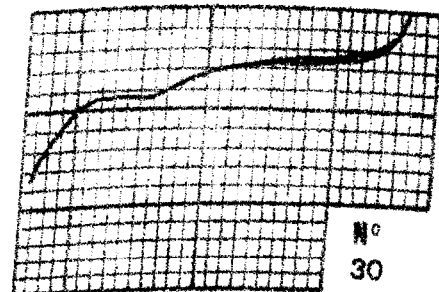
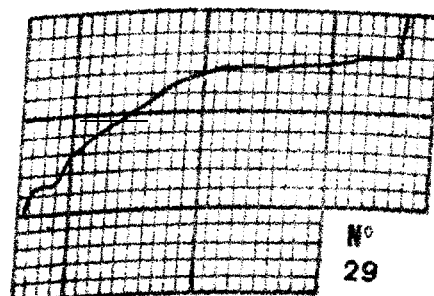
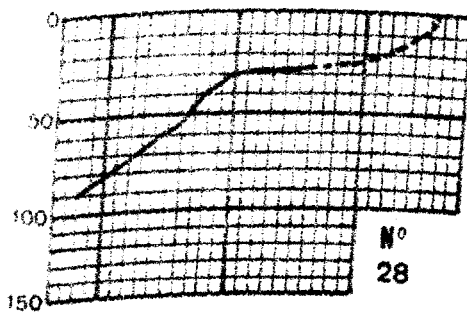
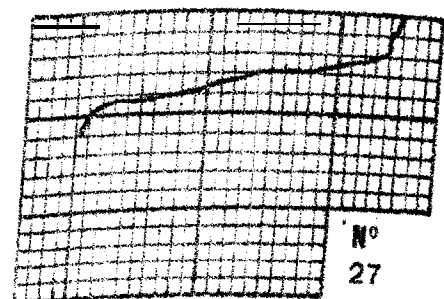
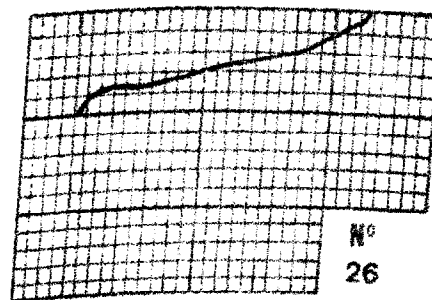
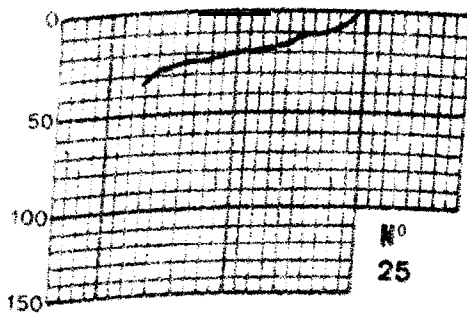
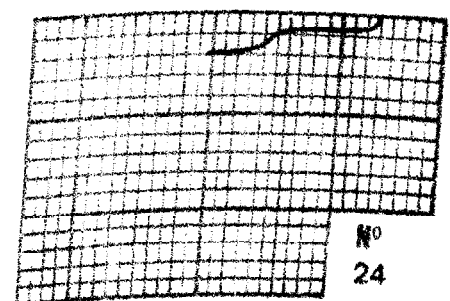
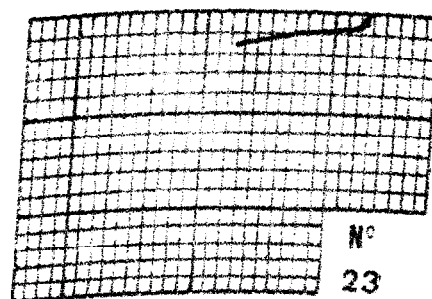
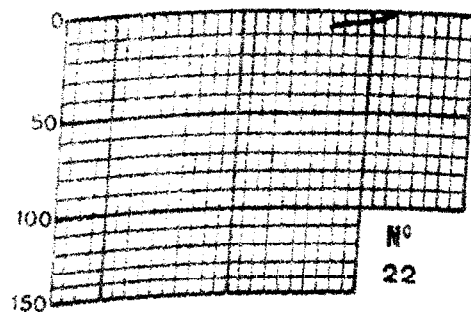
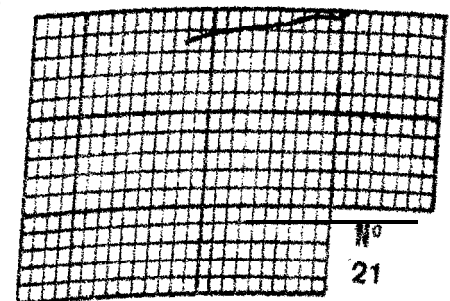
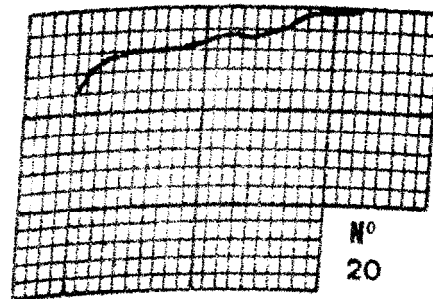
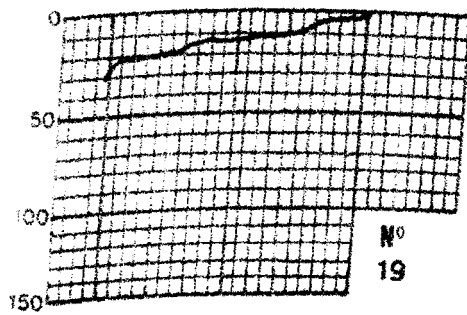
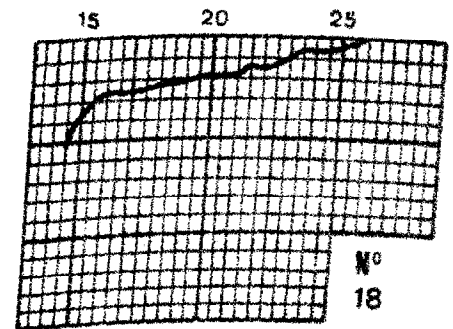
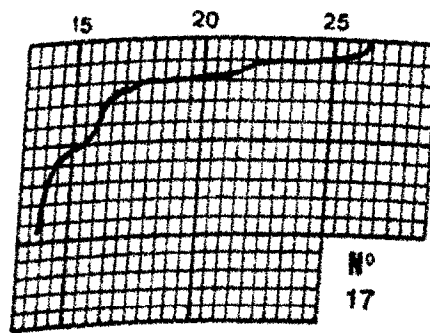
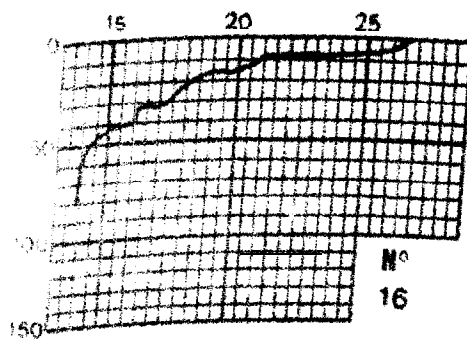
Date	Heure	Position		Fond Sondeur (m)	Plaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
24/11/74	12H20	17°20	16°40'5	214	273	18°0	19°9	2
"	13H15	17°30	16°35'5	195	274	18°6	19°9	2
"	14H15	17°30	16°21	79	275	18°4	20°4	2
"	15H10	17°30	16°13	35	276	17°75	23°3	2
25/11/74	10H02	17°02'5	16°46	150	277	23°5	21°5	2
"	11H00	17°02'5	16°34'5	84	278	18°0	19°1	2
"	11H58	17°02'5	16°23'5	24	279	18°1	19°3	2
"	13H30	16°51'5	16°28'5	21	280	18°4	19°7	2
"	14H20	16°51'5	16°37'5	75	281	24°7	21°3	2
"	15H15	16°51'5	16°48'5	250	282	23°95	22°0	2
"	16H25	16°40	16°45	250	283	24°0	23°3	2
"	17H30	16°39'5	16°33	30	284	21°1	21°8	2
26/11/74	09H25	16°31	16°32'5	25	285	19°6	17°8	2
"	10H50	16°30	16°48	250	286	23°55	22°5	2
"	11H40	16°20	16°49'5	210	287	23°6	22°9	2
"	12H45	16°20	16°36	30	288	19°5	21°1	2
"	13H40	16°10	16°37	42	289	18°1	20°6	2
"	14H58	16°08'5	16°52	250	290	23°3	23°3	2
"	15H40	16°00'5	16°55	200	291	22°6	23°6	2
"	16H25	16°00	16°47'5	81	292	20°2	22°4	2
"	19H27	15°59	16°38	37	293	18°7	20°2	2
27/11/74	09H25	15°50	16°39	31	294	18°5	21°1	2
"	10H10	15°50	16°47'5	70	295	19°5	20°7	2
"	11H05	15°49'5	16°58	140	296	19°2	20°9	2
"	12H20	15°40	17°01	185	297	19°5	21°2	2
"	13H00	15°40	16°53	85	298	20°35	22°8	2
"	13H50	15°40	16°44	31	299	20°1	23°8	2
"	15H00	15°30	16°49	26	300	20°6	23°2	2

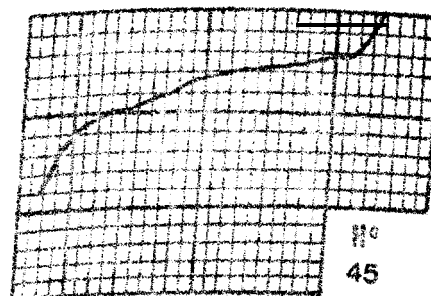
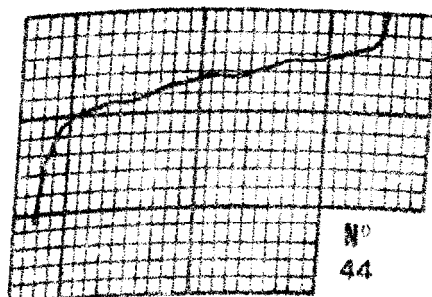
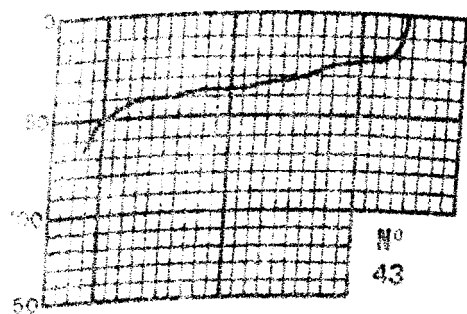
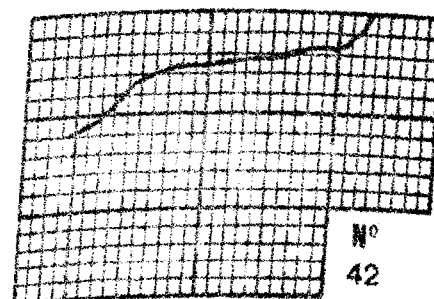
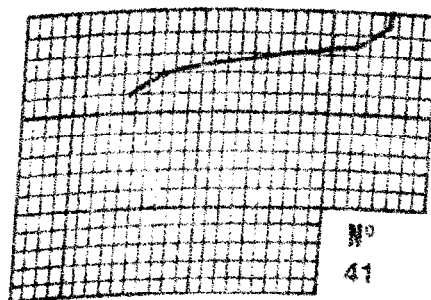
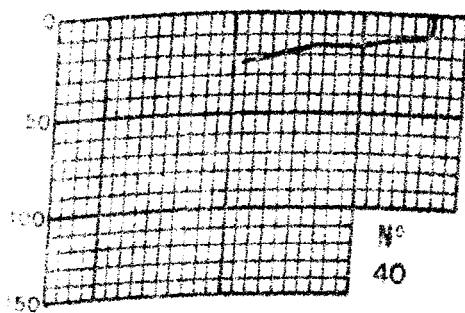
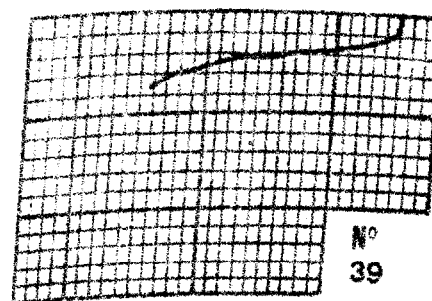
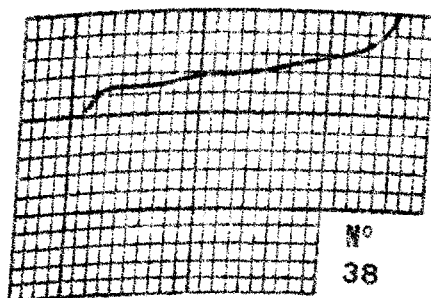
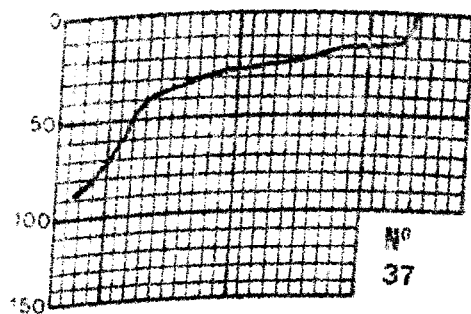
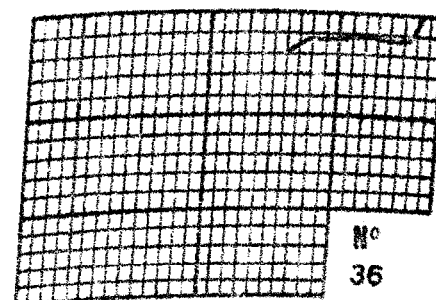
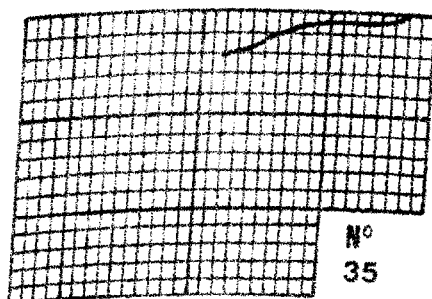
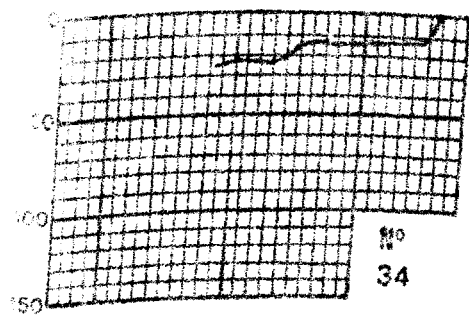
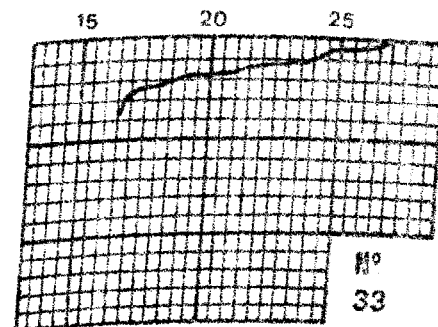
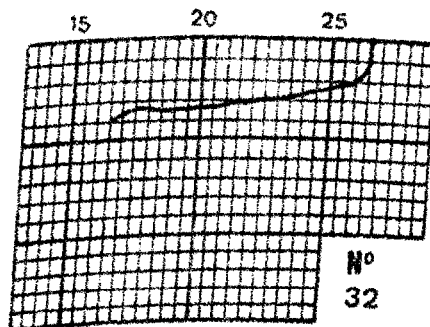
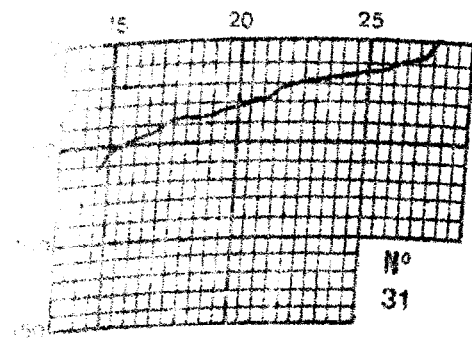
"CAPRICORNE"  
Campagne 7408  
Bathythermogrammes

2e Partie (Nord)

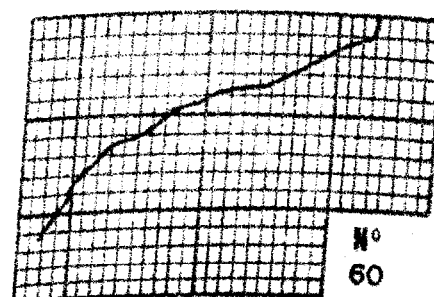
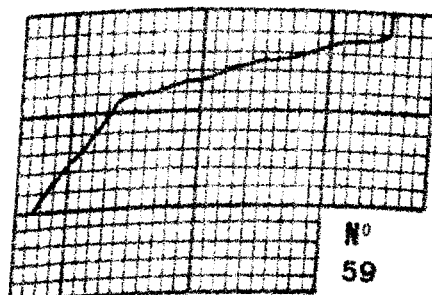
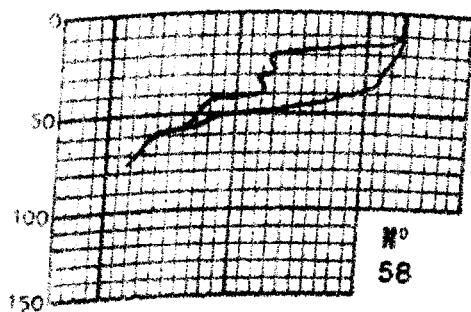
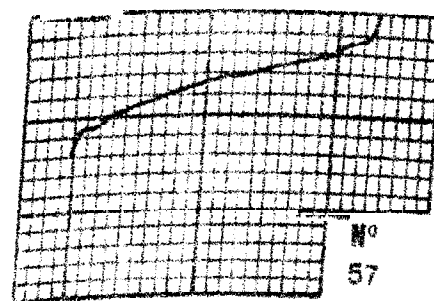
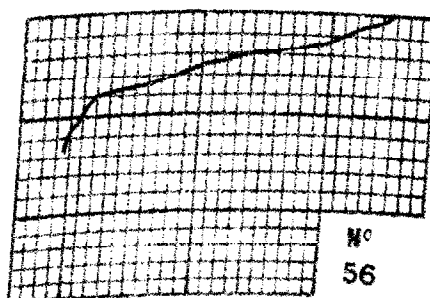
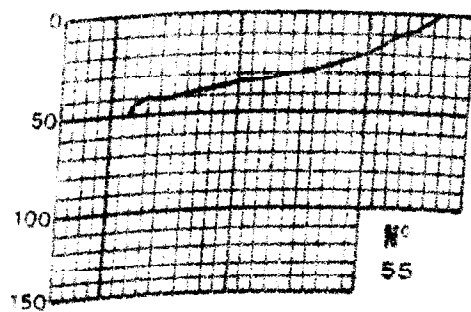
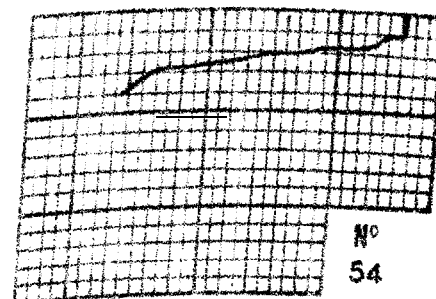
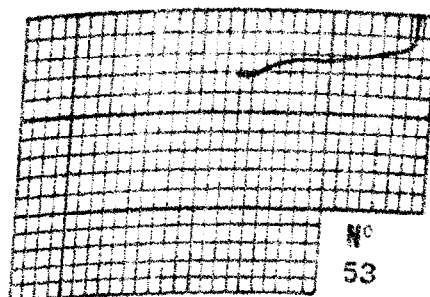
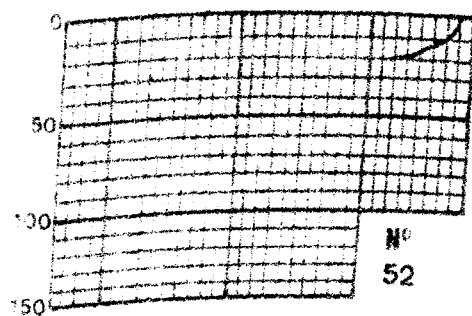
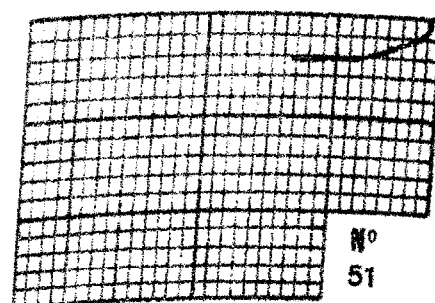
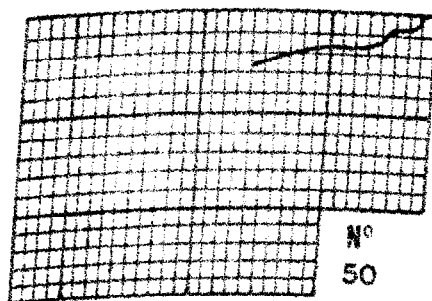
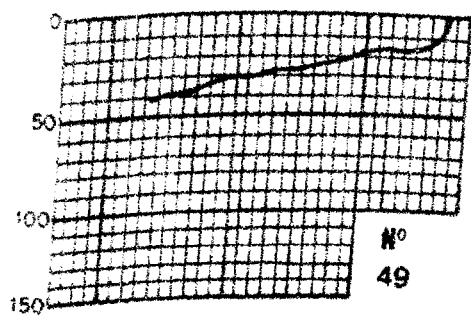
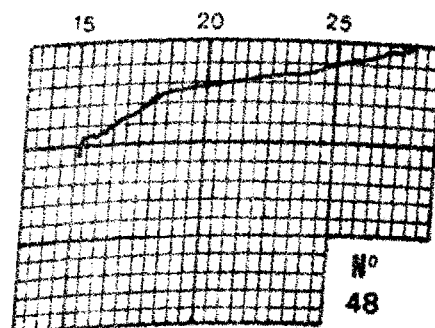
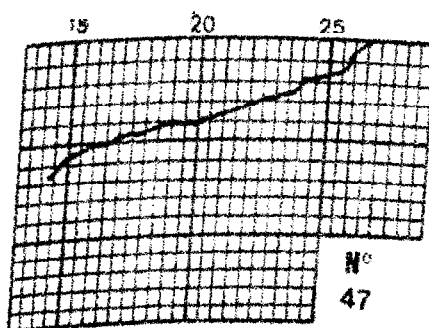
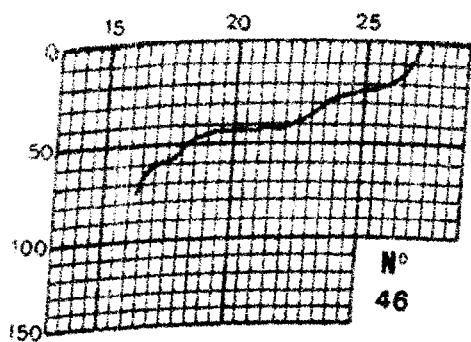
Date	Heure	Position		Fond Sondeur (m)	Flaque BT N°	T° surface	T° Air sec	Fig. N°
		Lat.	Long.					
27/11/74	15H50	15°30	16°58	93	301	20°6	22°3	2
"	16H32	15°29'5	17°05	206	302	22°0	23°0	2
"	17H35	15°20	17°00	162	303	22°3	24°2	2
"	18H40	15°20	16°55'5	57	304	21°3	23°1	2
28/11/74	12H35	15°10	17°00	46	305	20°9	23°9	2
"	13H15	15°10	17°07'5	96	306	20°7	22°2	2
"	13H55	15°09'5	17°15	200	307	22°2	22°5	2
"	14H45	15°00	17°17'5	200	308	21°4	23°1	2
"	15H45	15°00	17°08	65	309	21°25	22°0	2
"	16H35	14°53'5	17°13	83	310	21°3	22°2	2
"	17H30	14°50	17°23	83	311	21°5	22°4	2
"	18H40	14°48	17°35	150	312	21°5	22°7	2
"	19H15	14°43'5	17°33	40	313	21°1	22°2	2



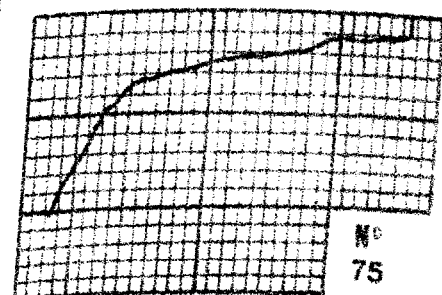
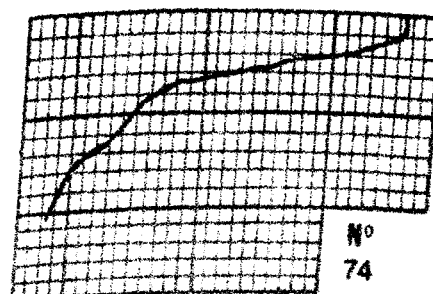
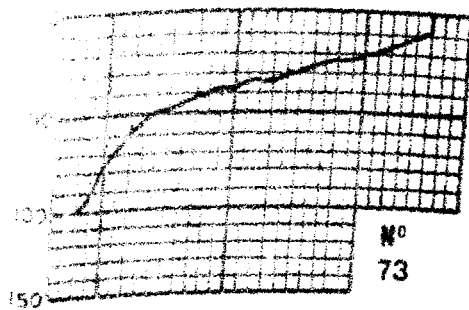
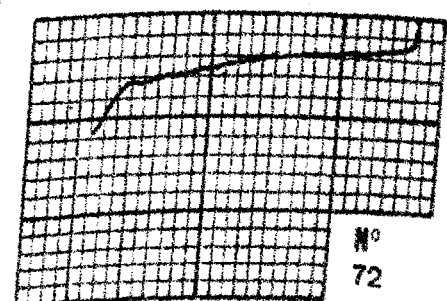
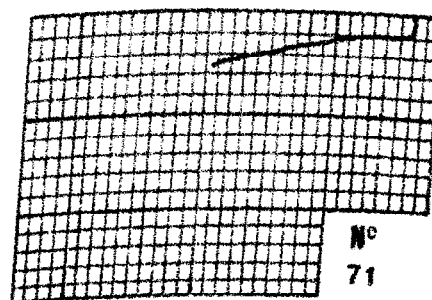
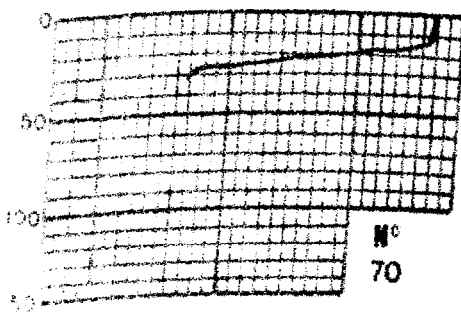
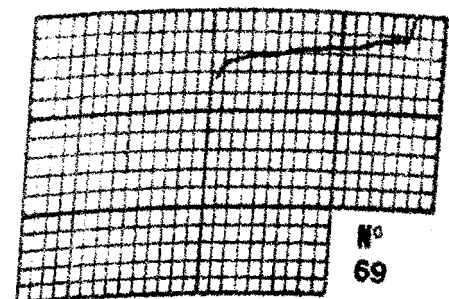
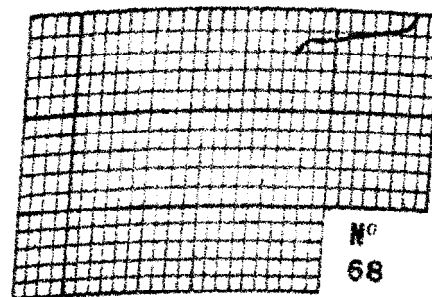
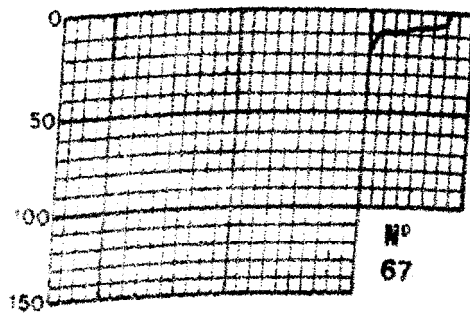
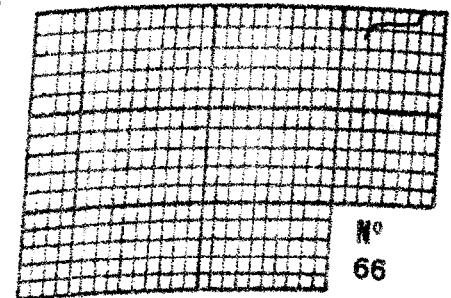
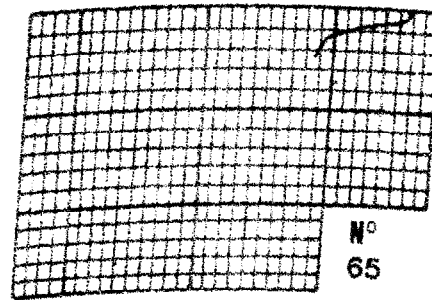
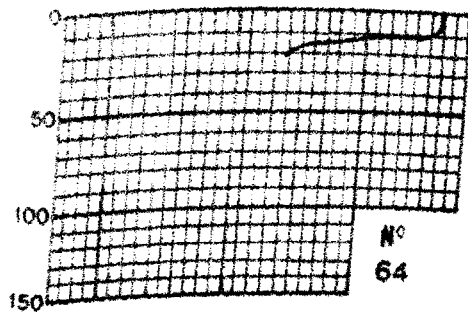
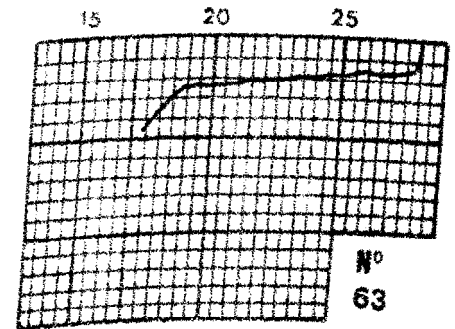
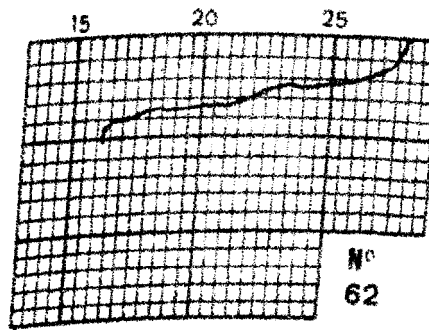
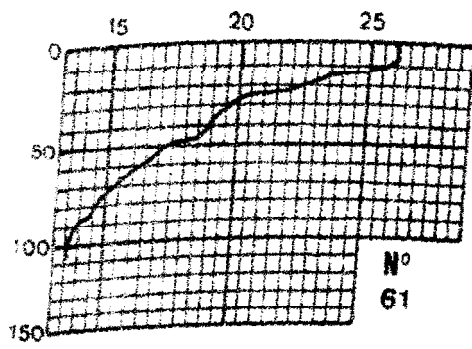


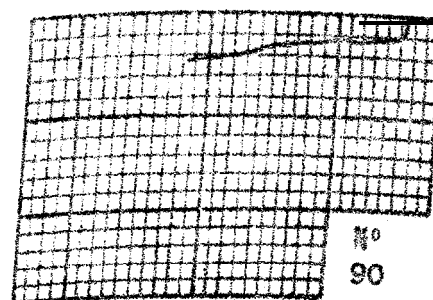
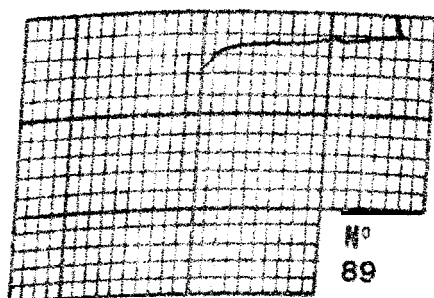
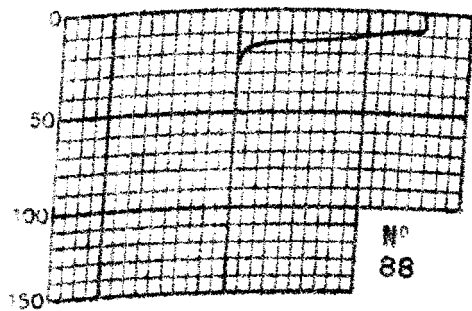
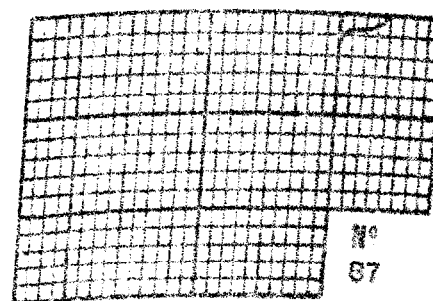
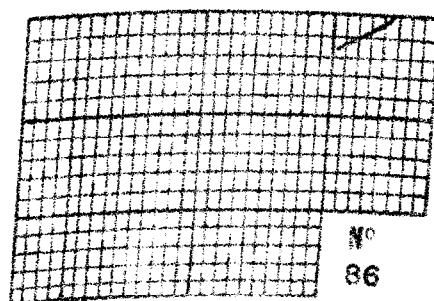
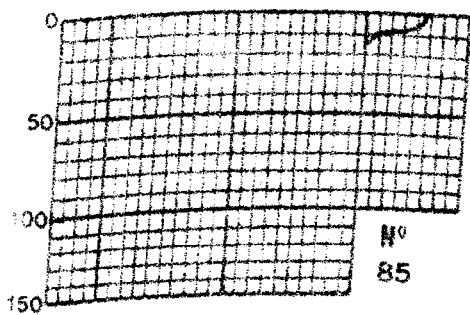
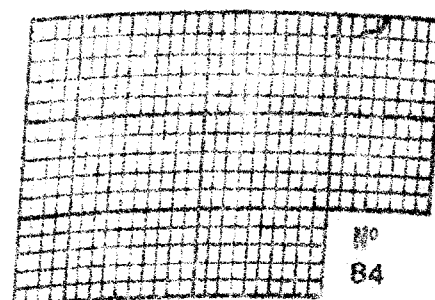
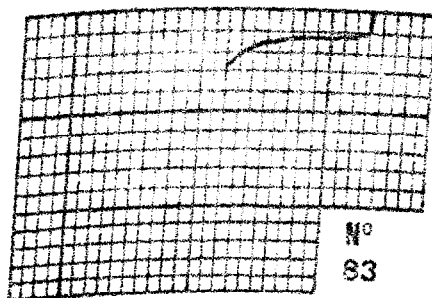
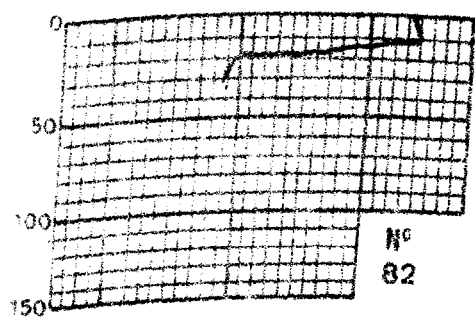
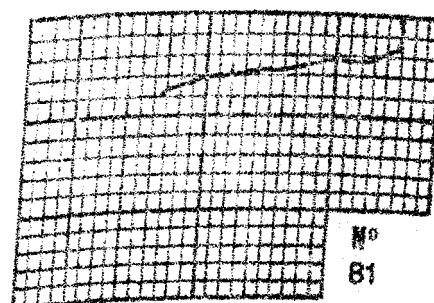
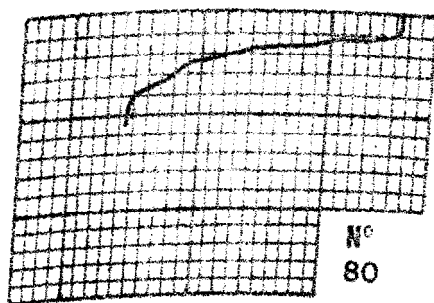
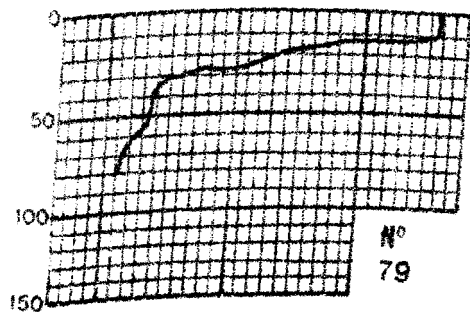
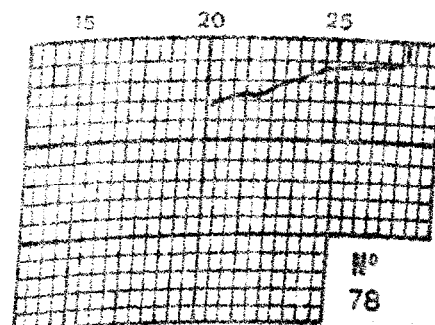
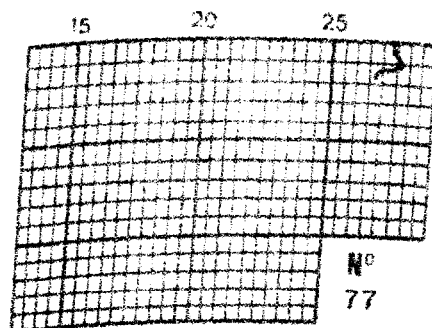
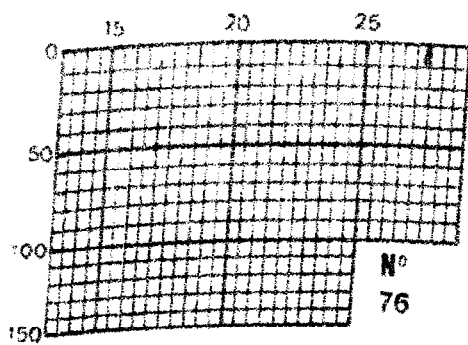


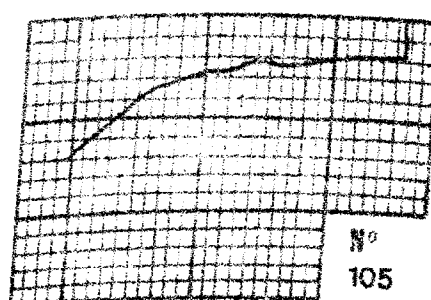
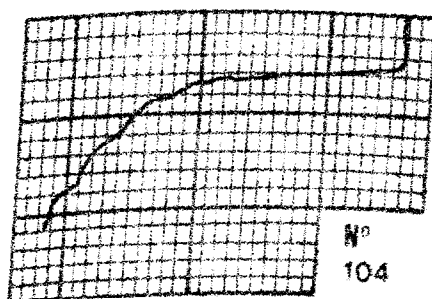
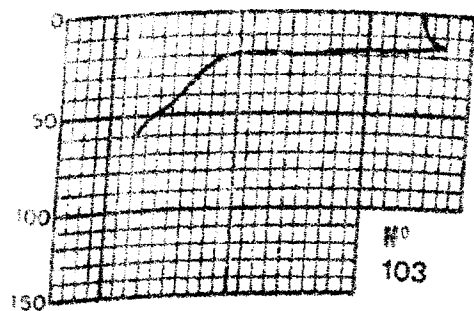
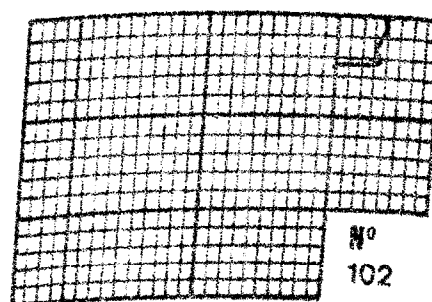
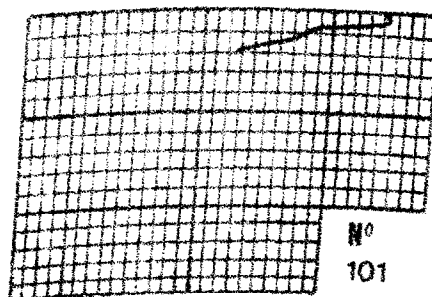
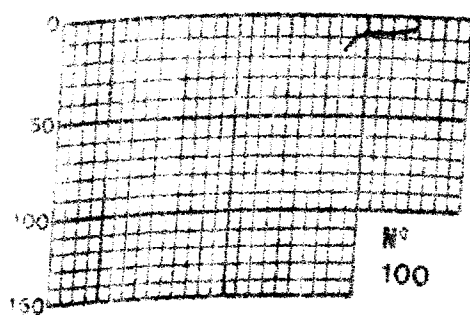
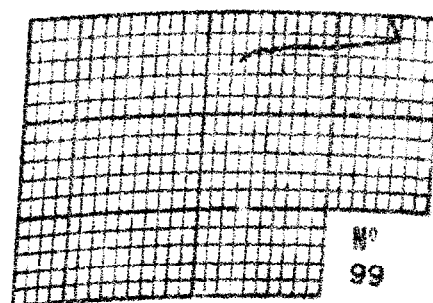
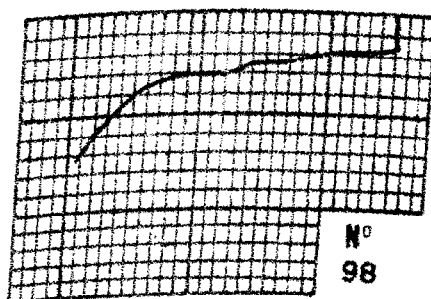
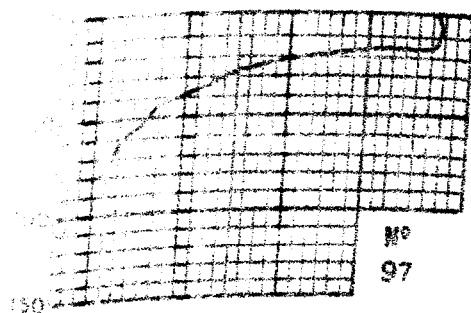
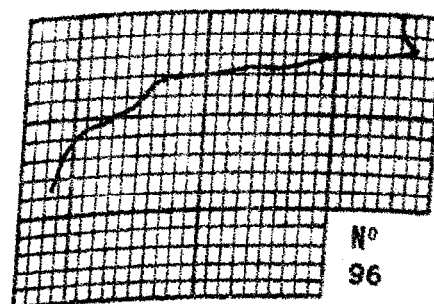
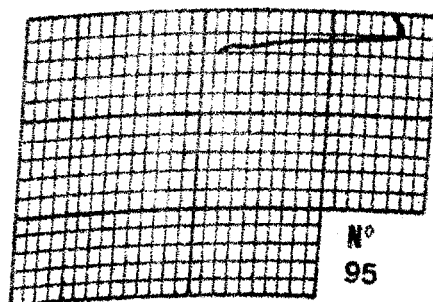
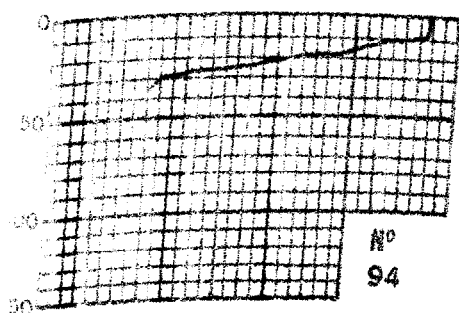
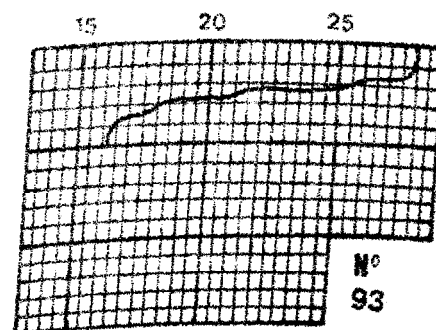
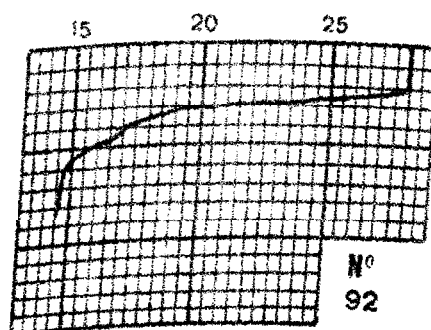
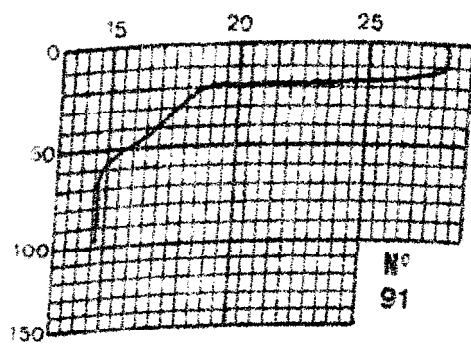


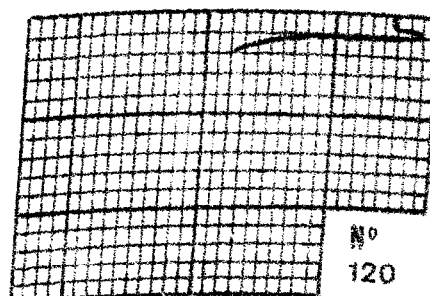
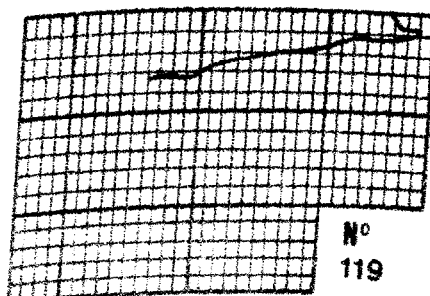
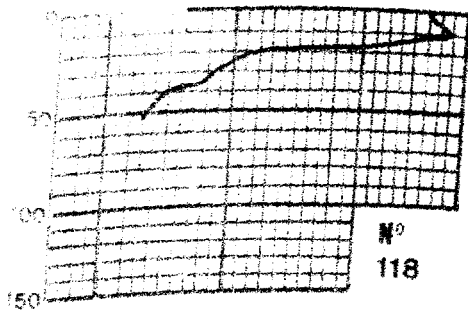
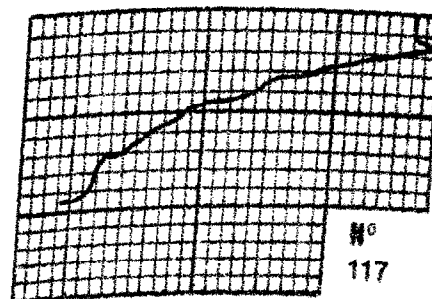
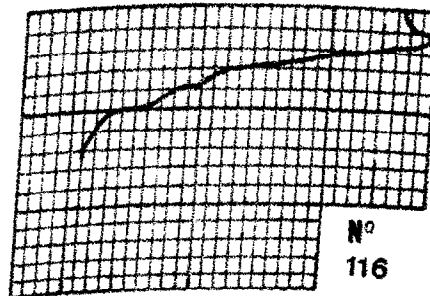
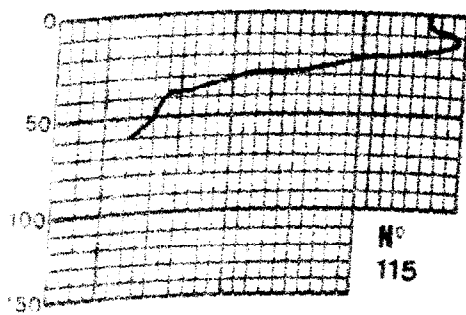
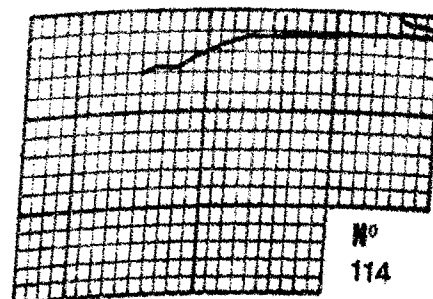
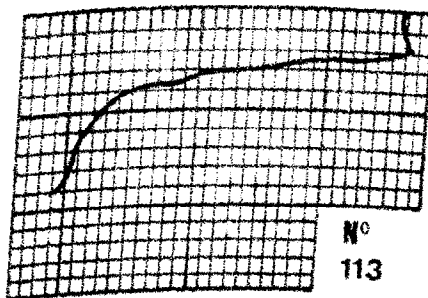
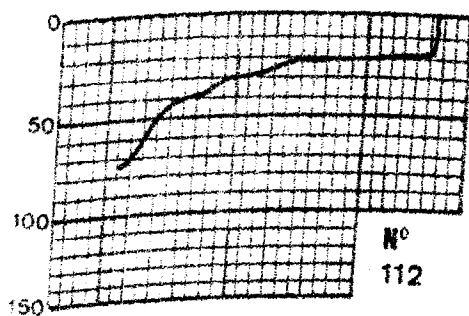
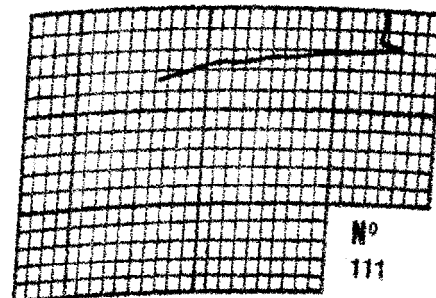
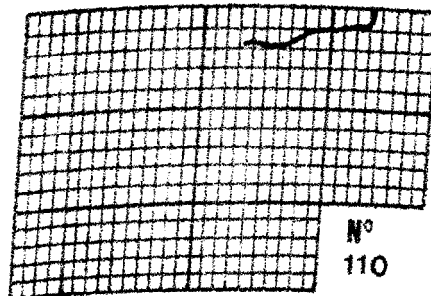
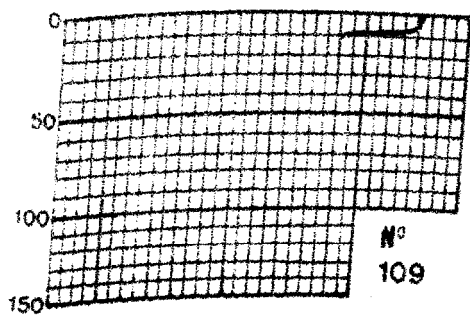
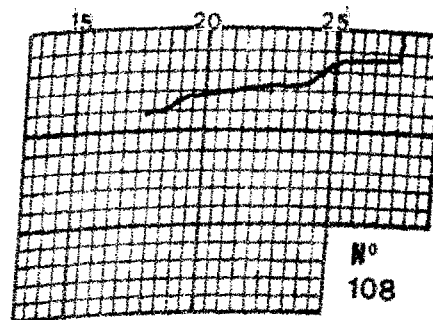
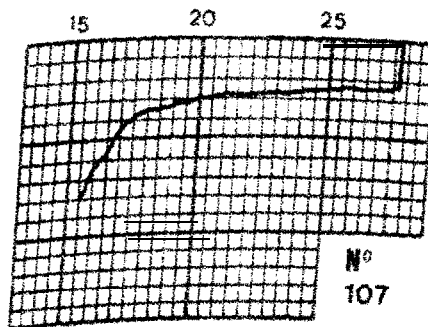
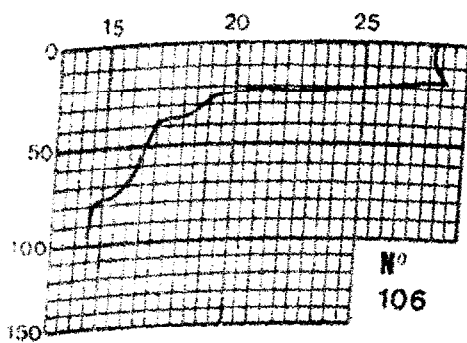


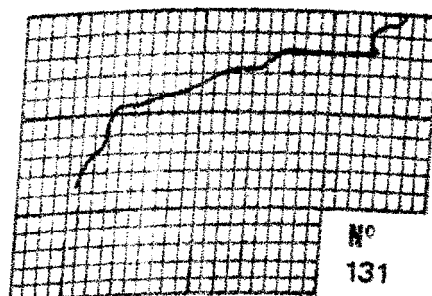
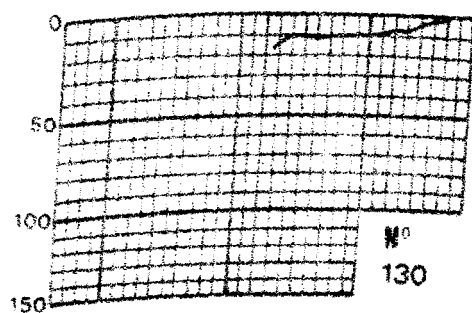
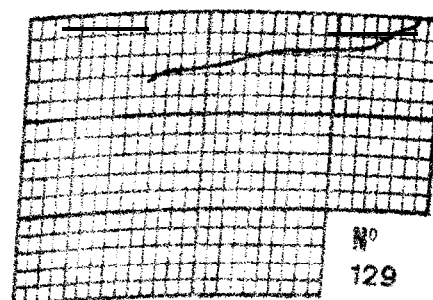
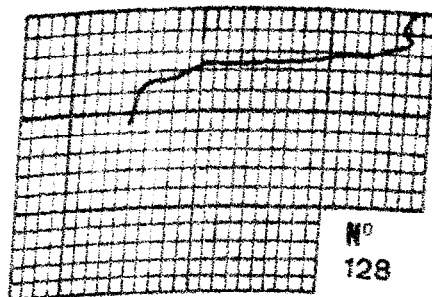
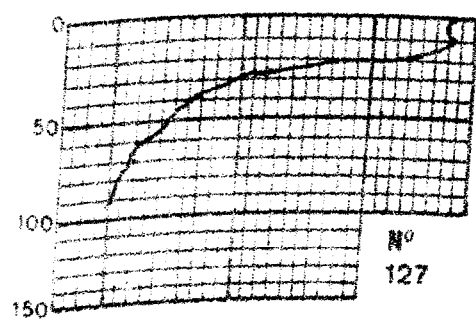
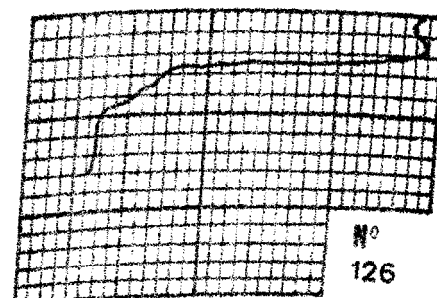
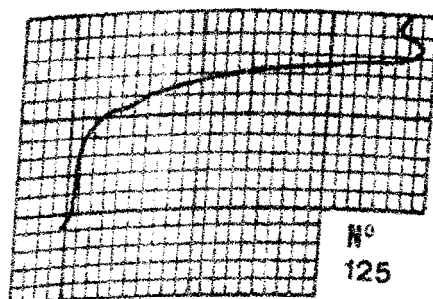
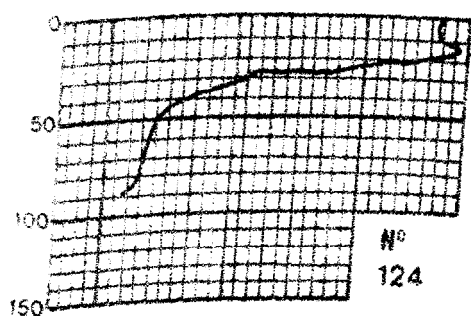
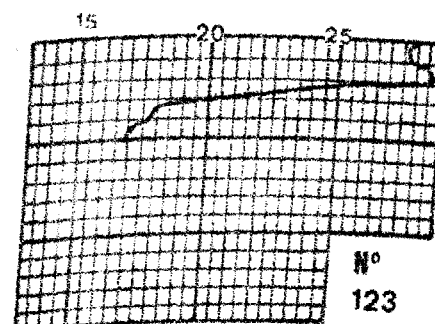
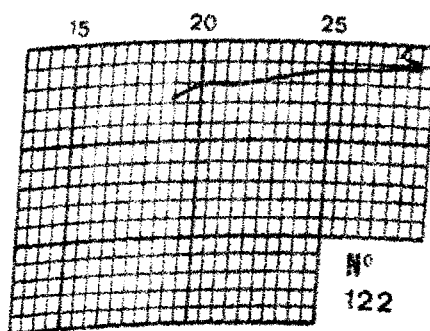
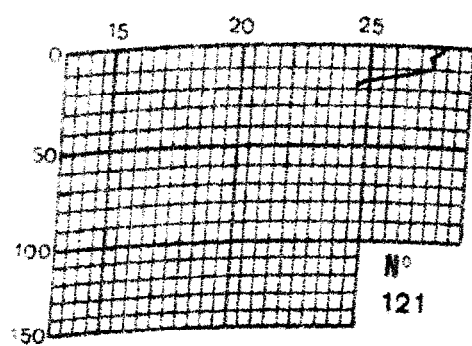




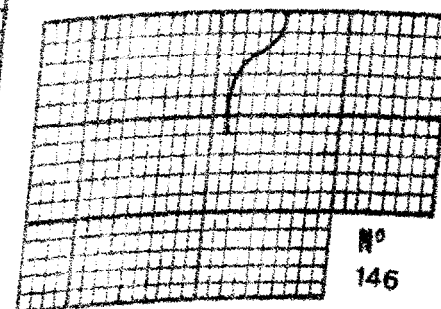
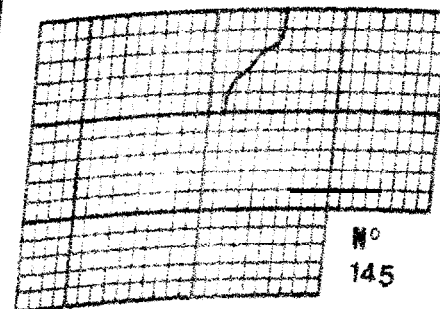
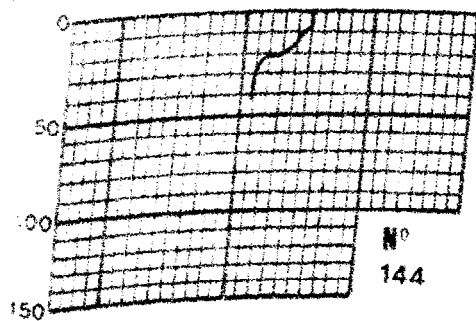
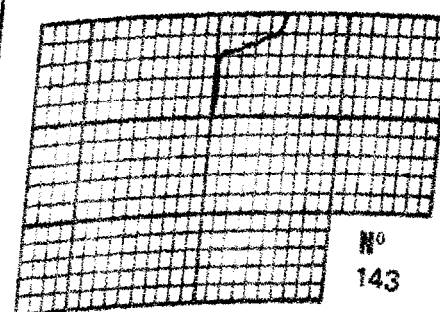
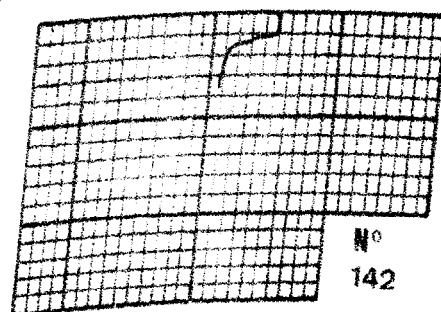
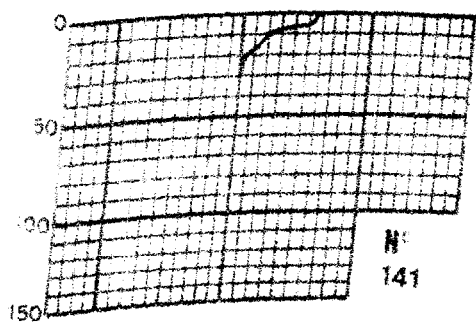
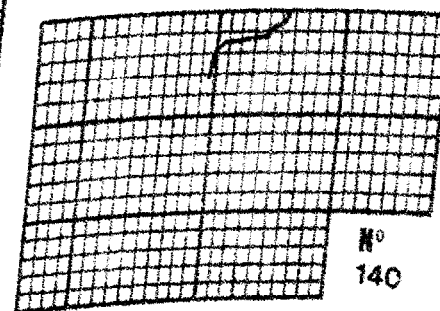
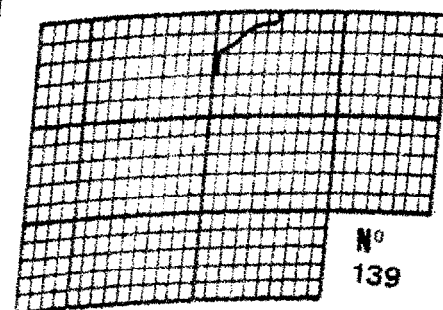
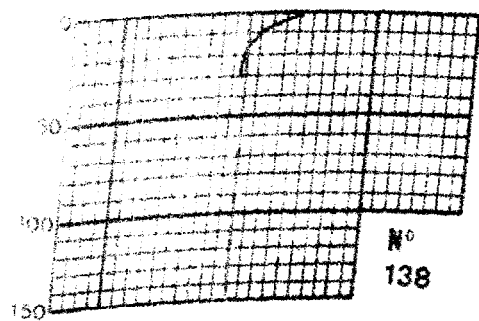
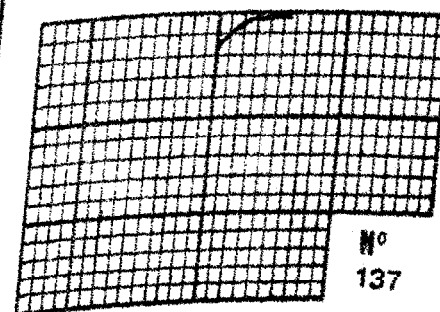
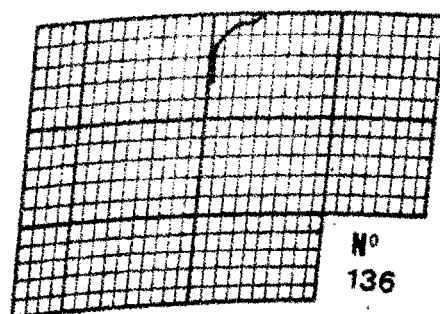
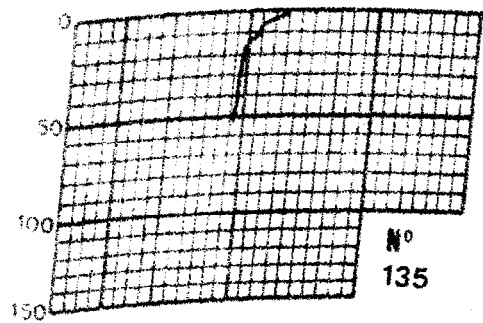
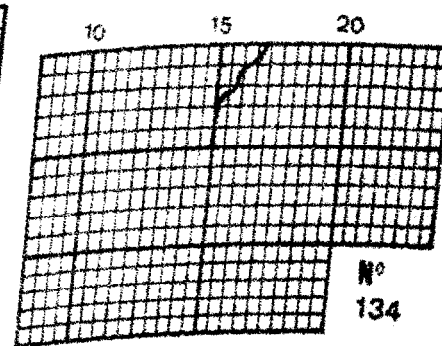
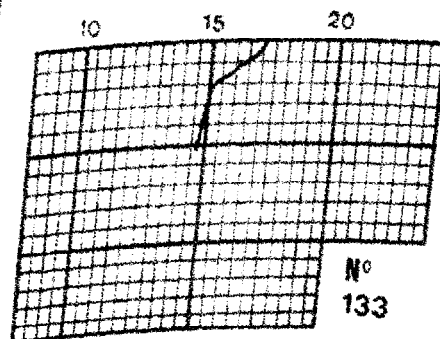
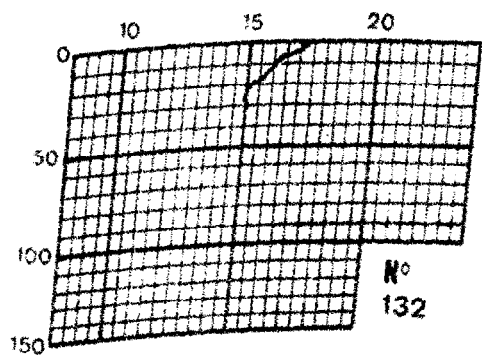


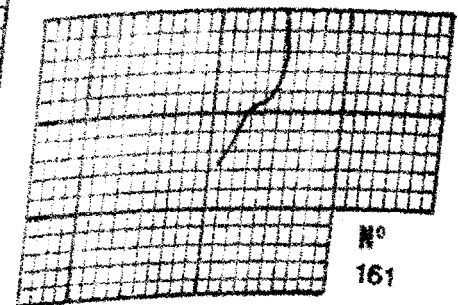
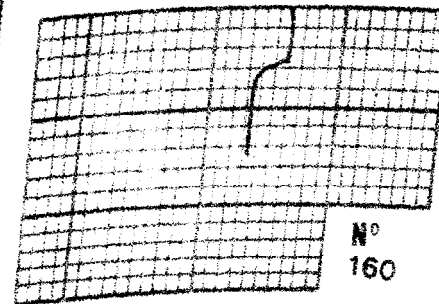
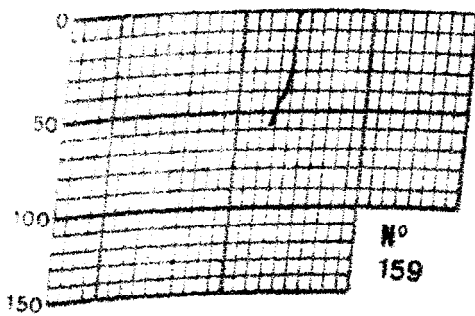
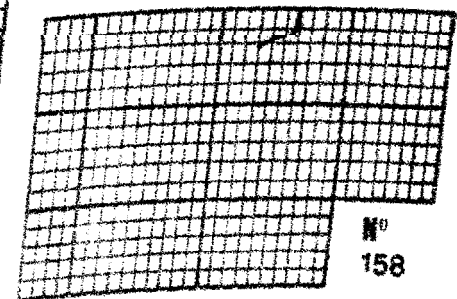
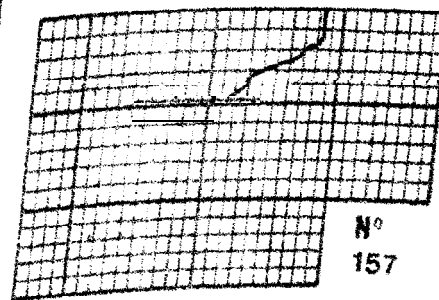
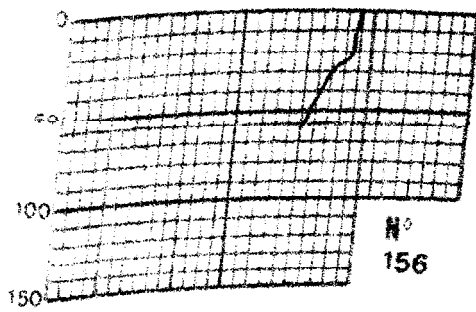
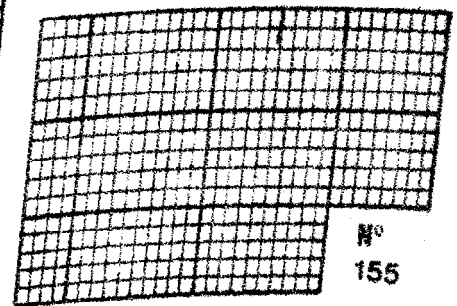
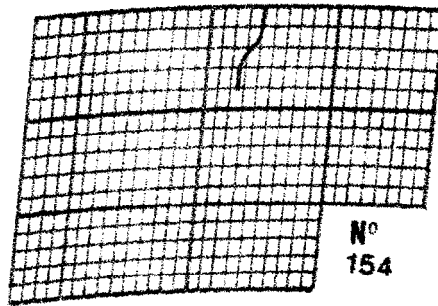
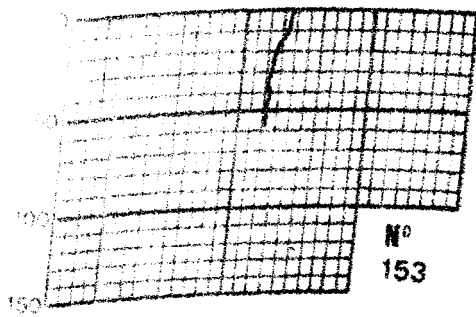
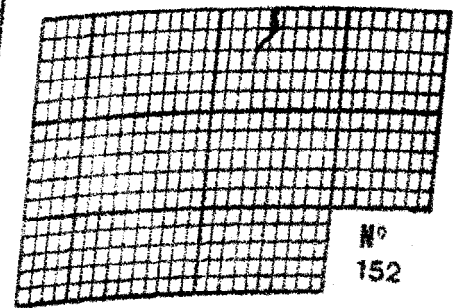
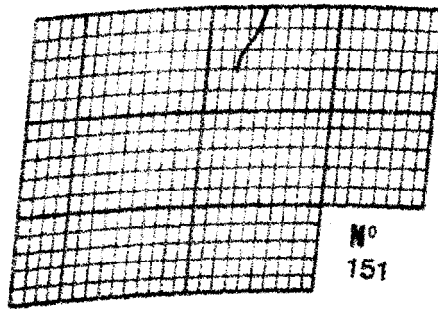
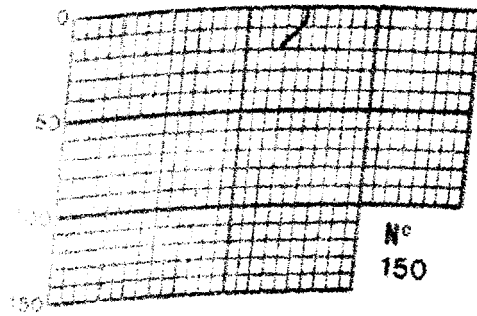
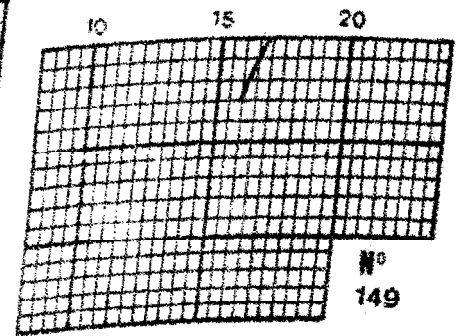
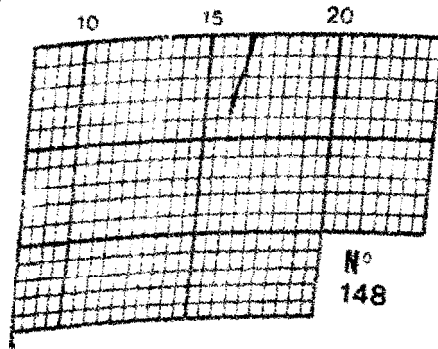
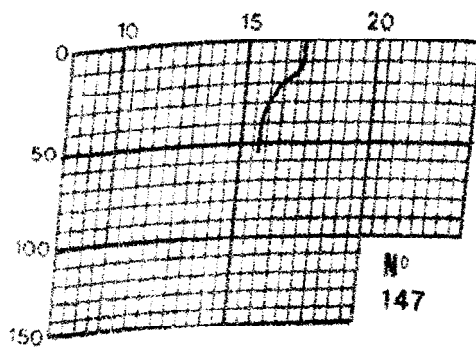


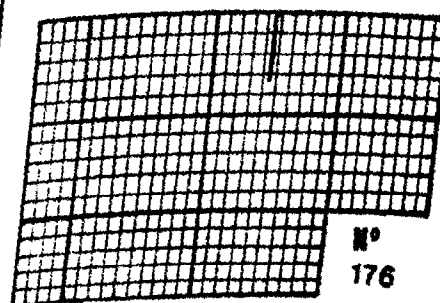
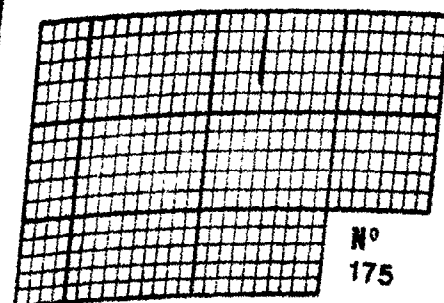
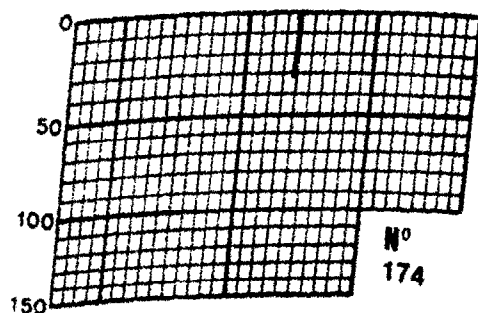
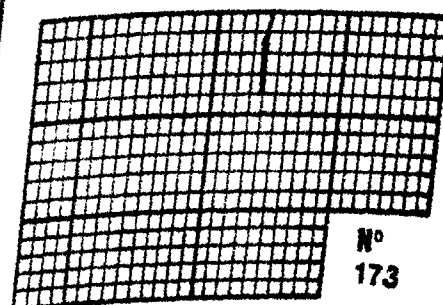
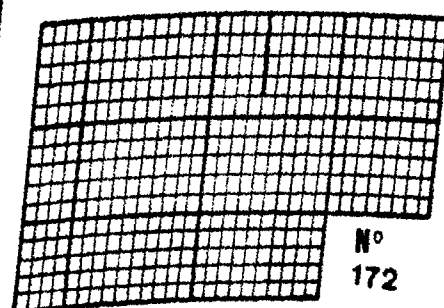
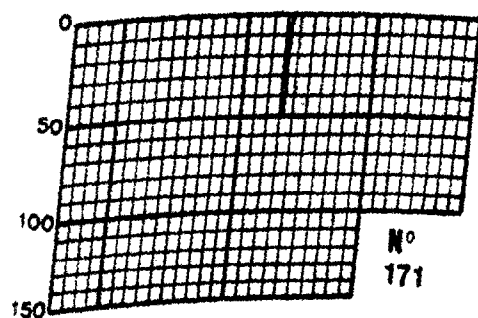
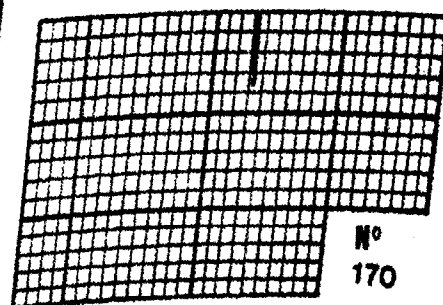
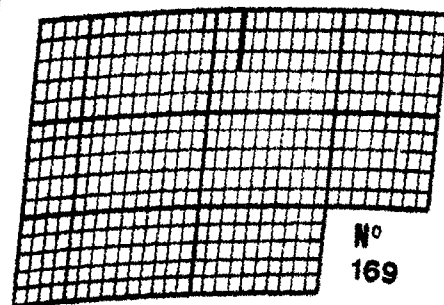
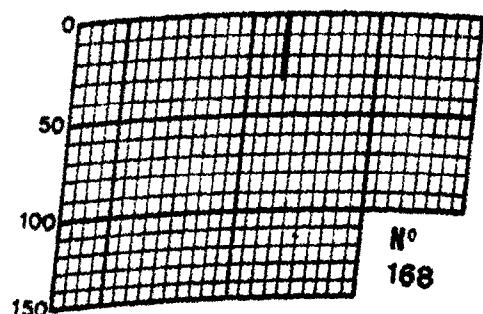
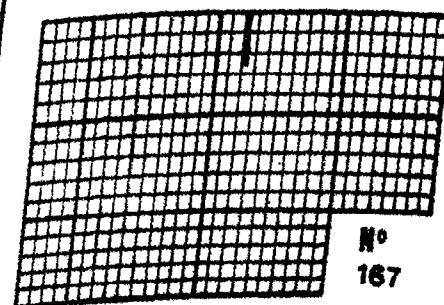
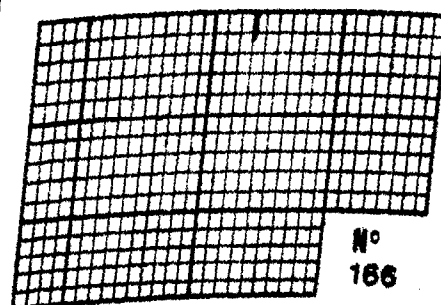
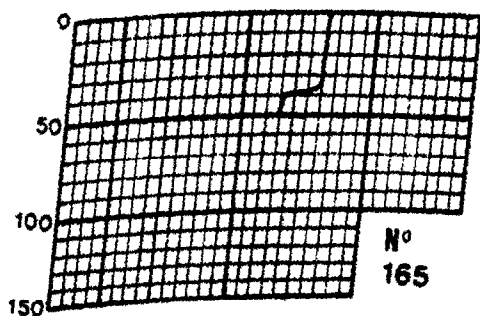
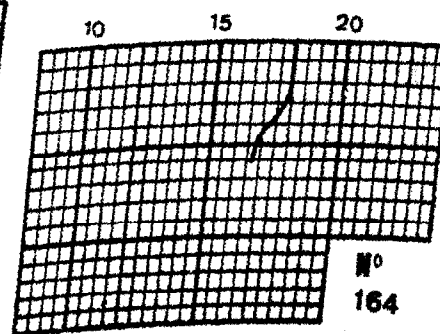
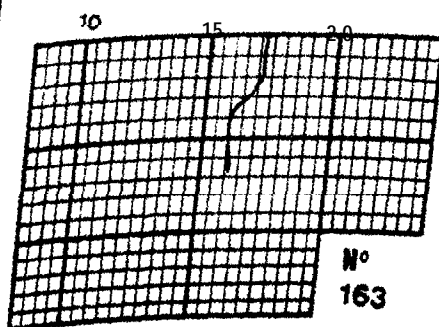






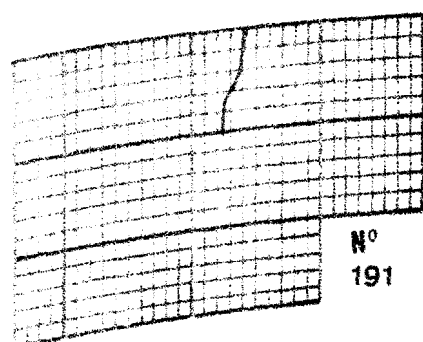
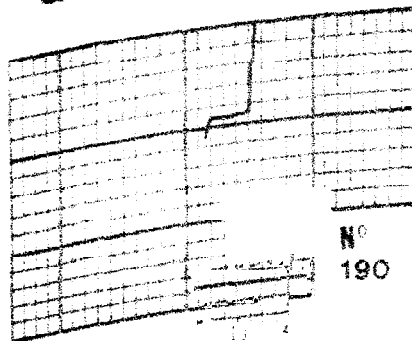
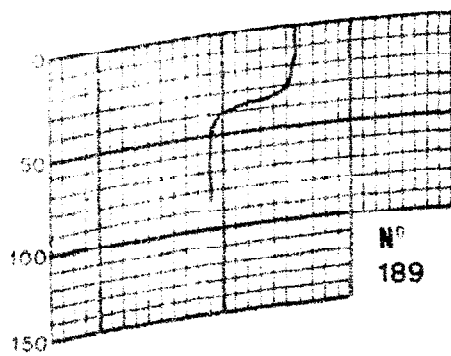
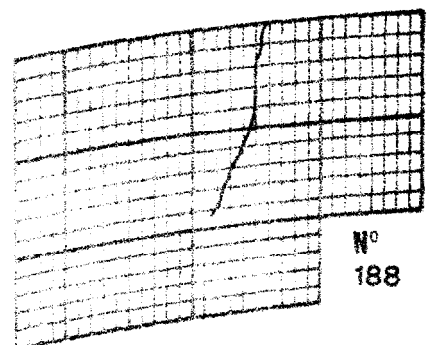
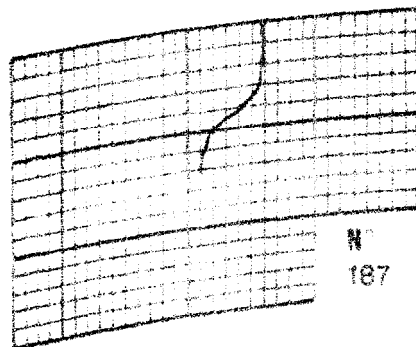
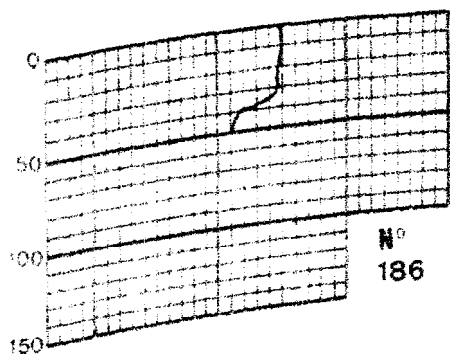
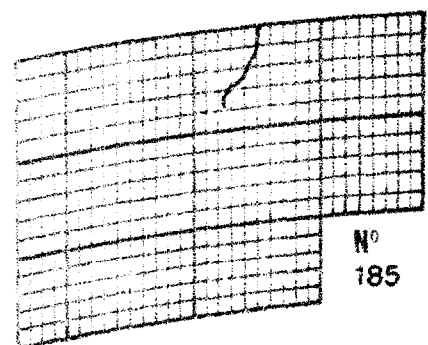
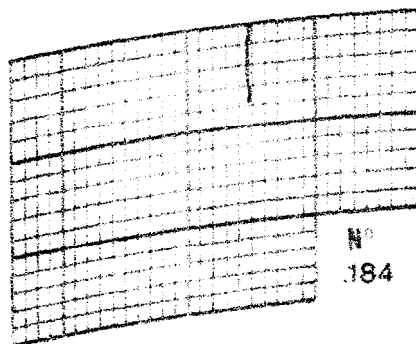
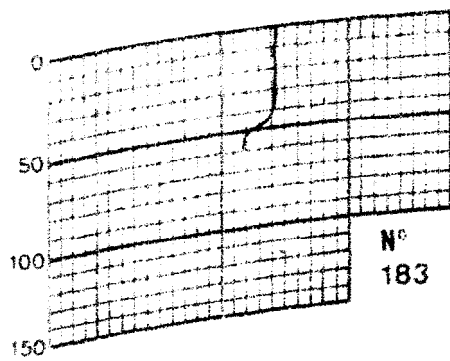
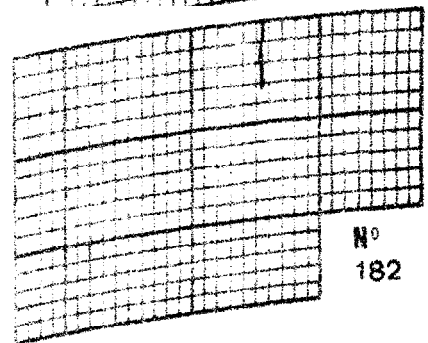
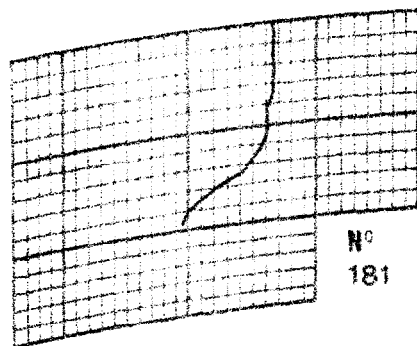
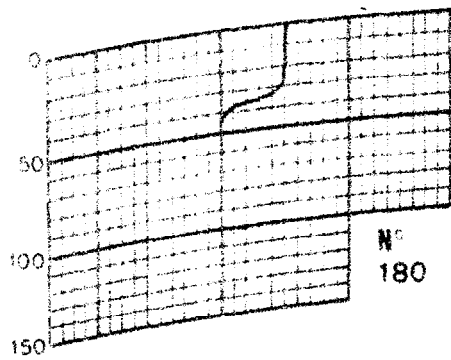
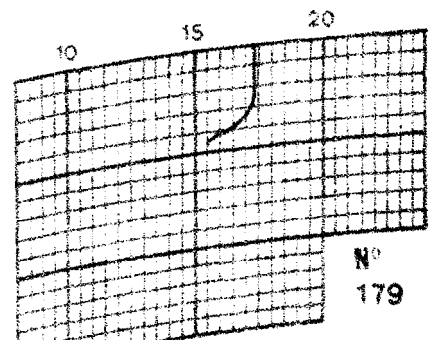
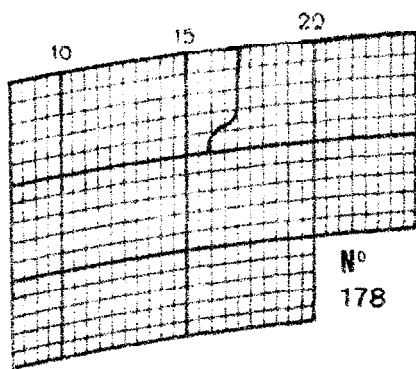
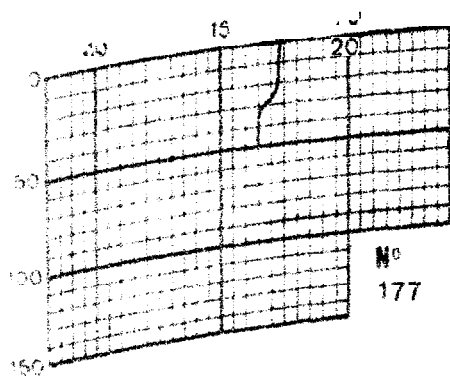


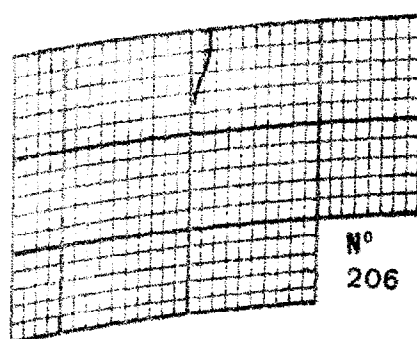
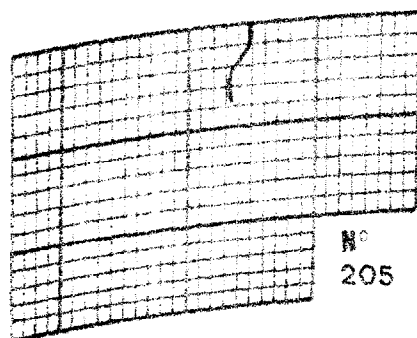
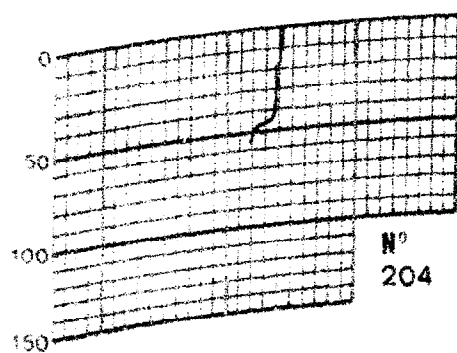
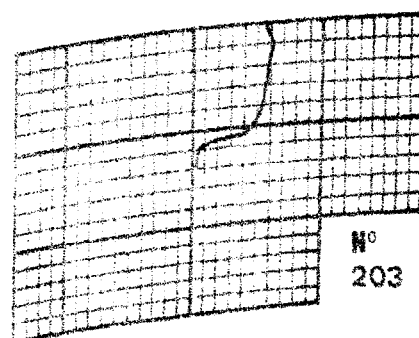
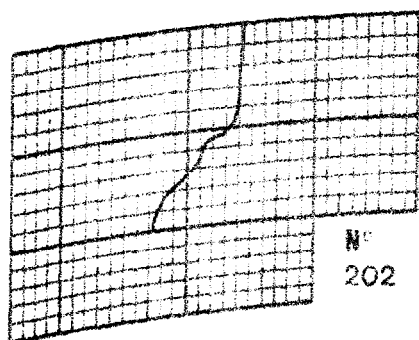
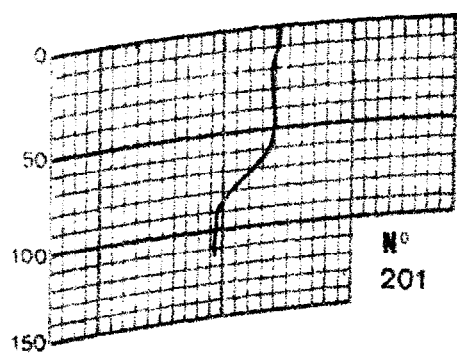
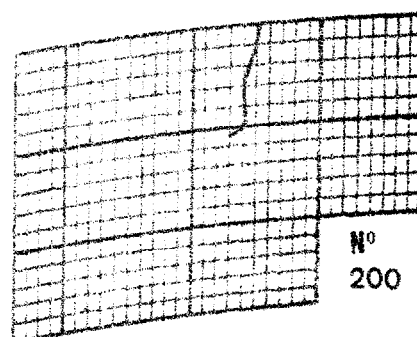
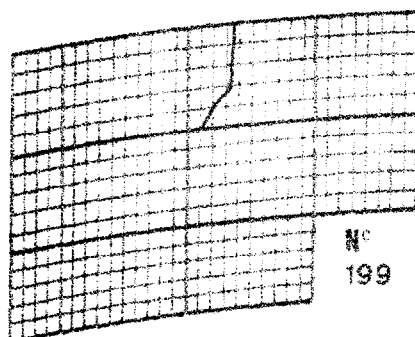
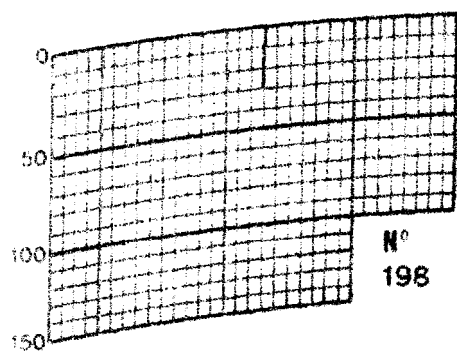
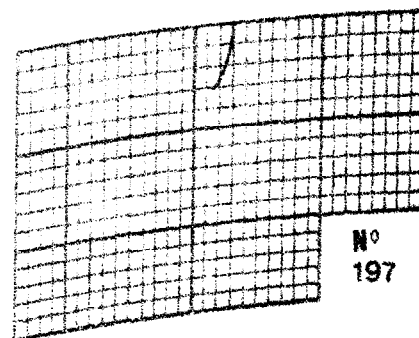
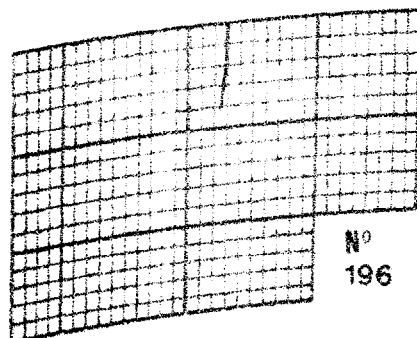
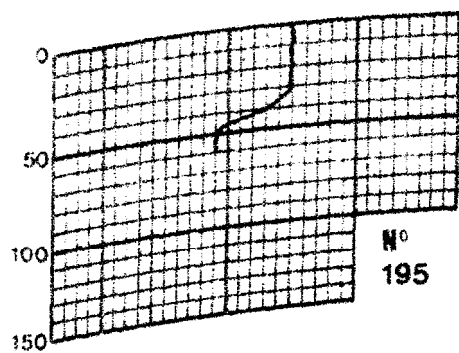
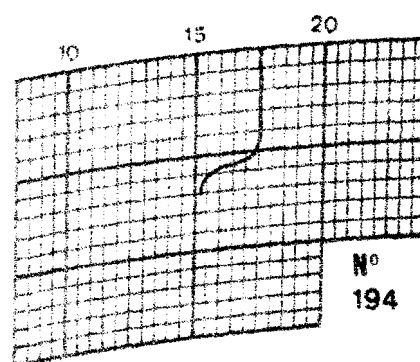
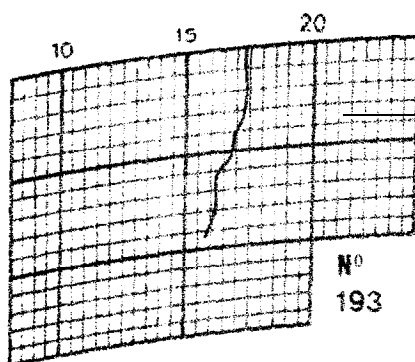
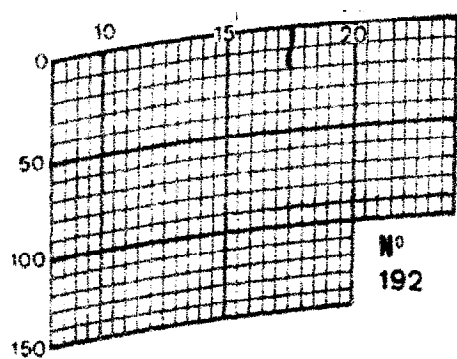


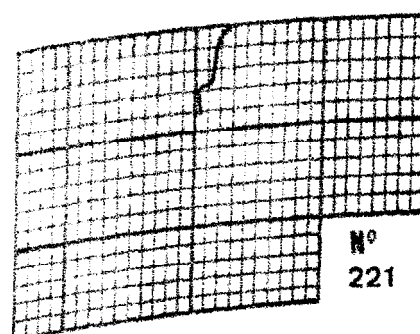
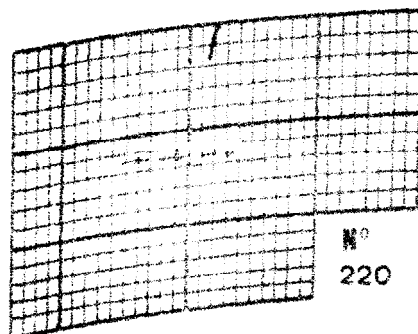
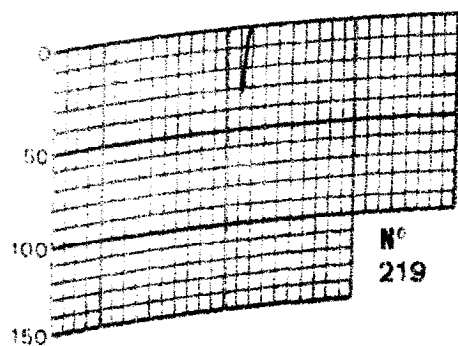
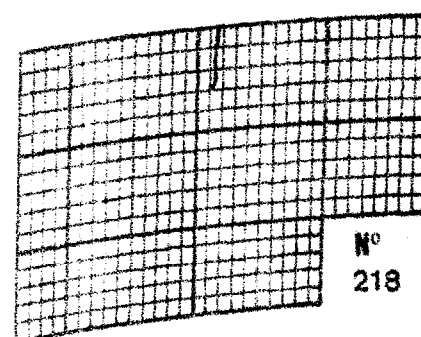
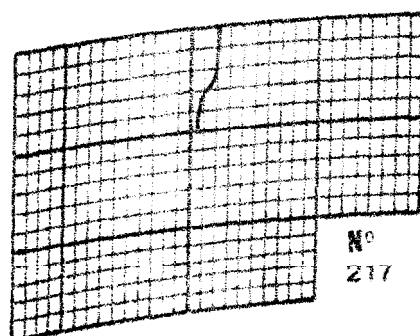
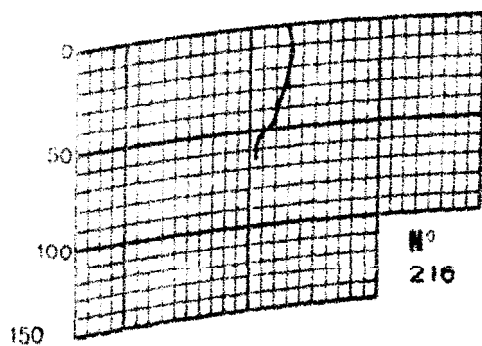
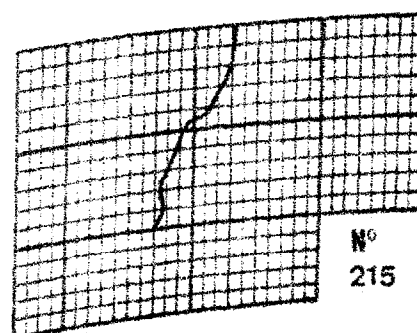
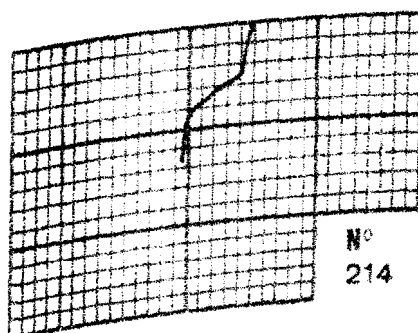
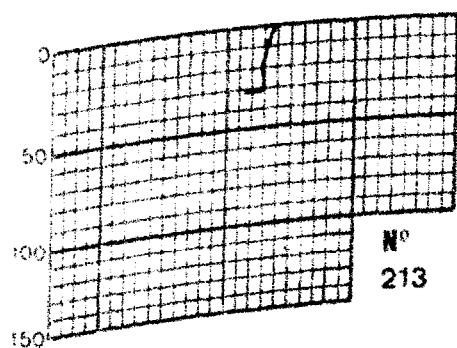
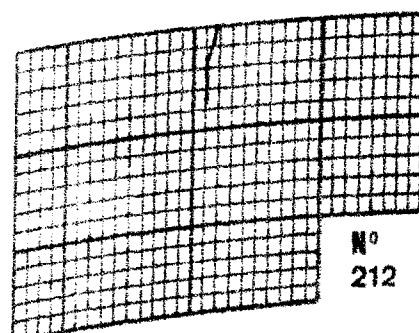
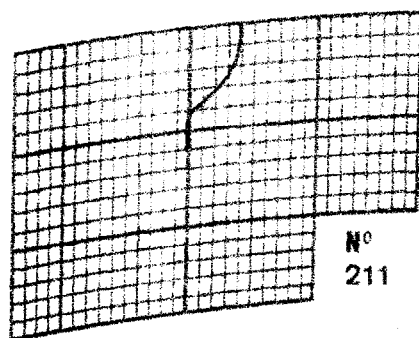
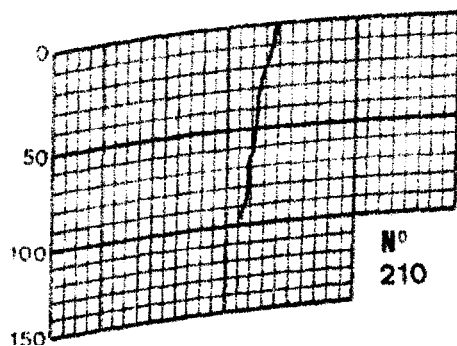
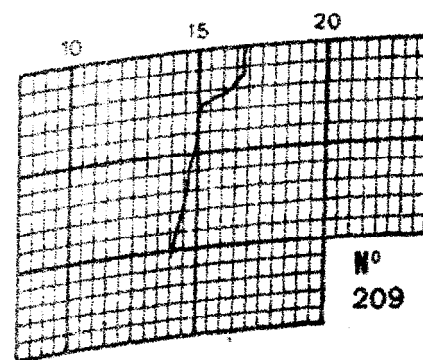
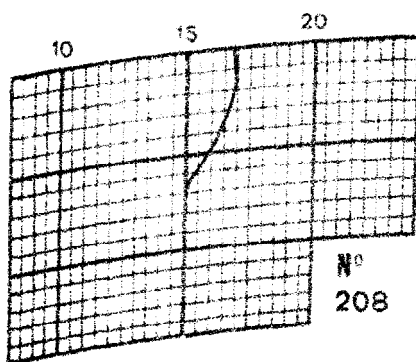
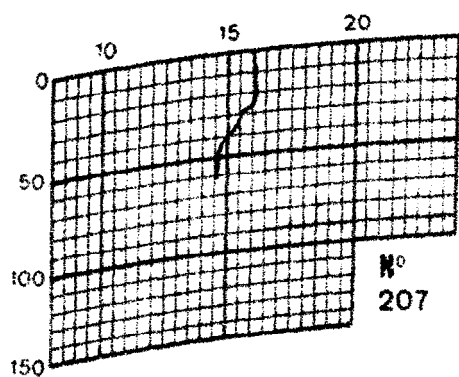


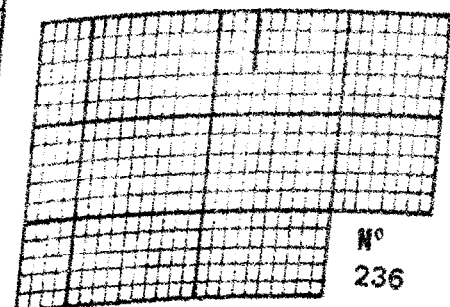
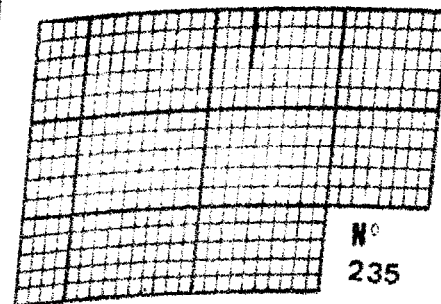
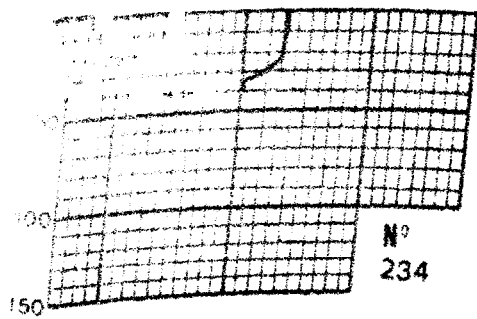
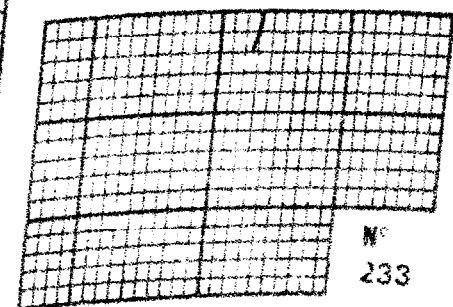
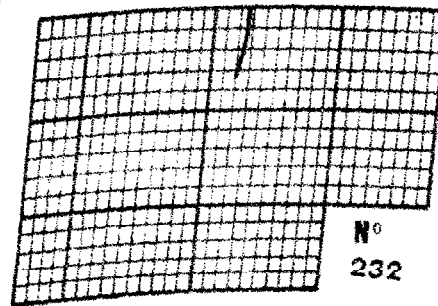
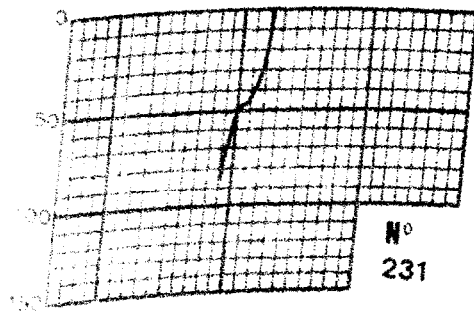
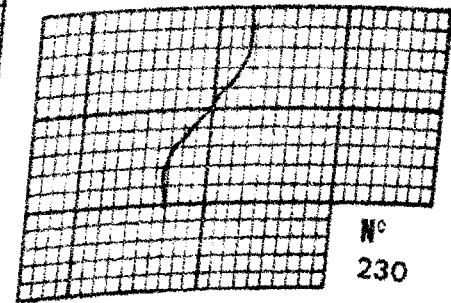
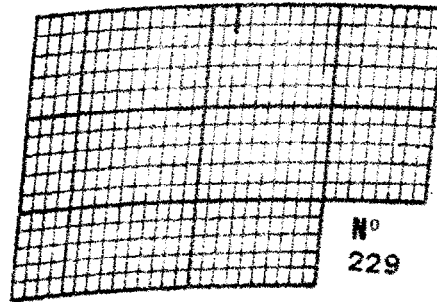
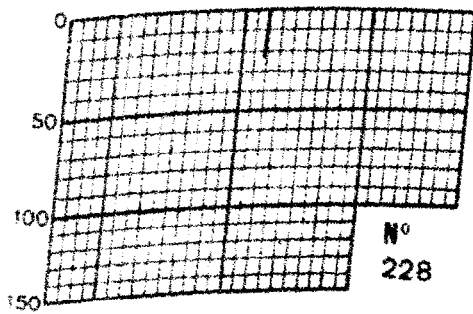
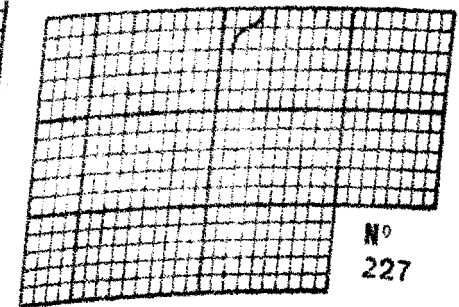
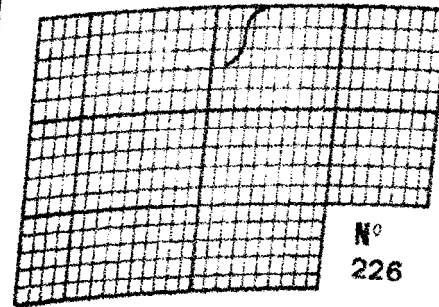
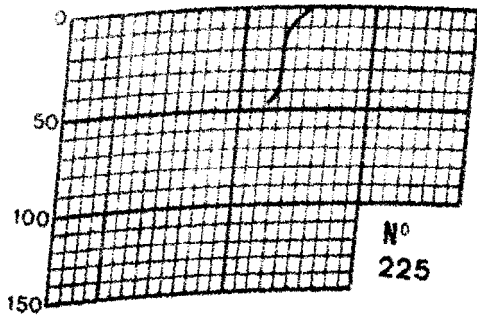
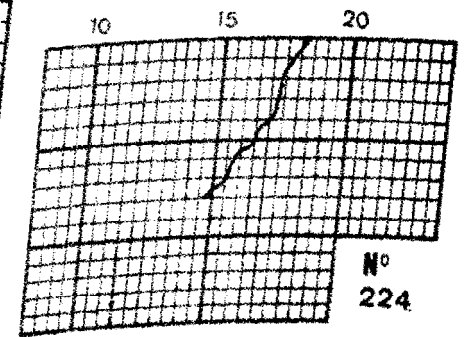
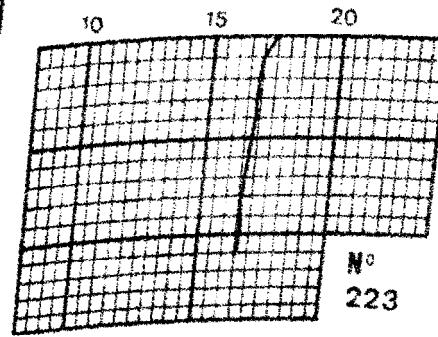
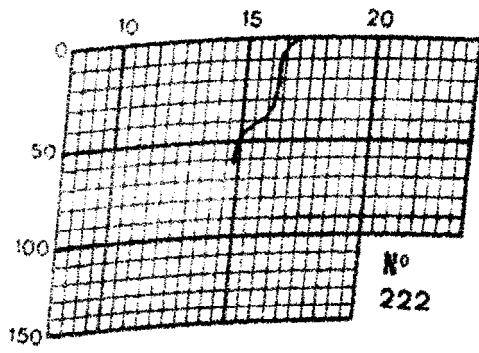
CROISIERE CAPRICORNE 7408

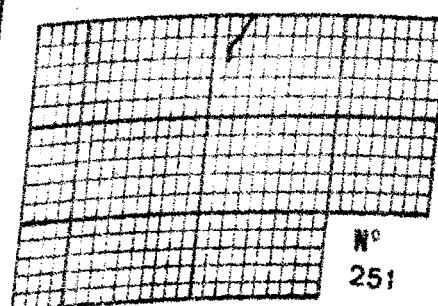
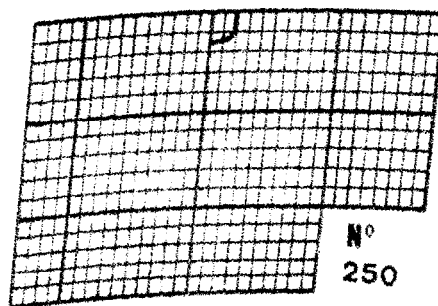
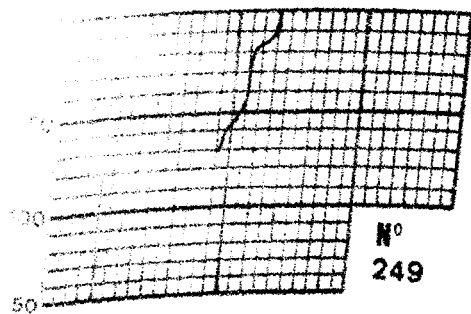
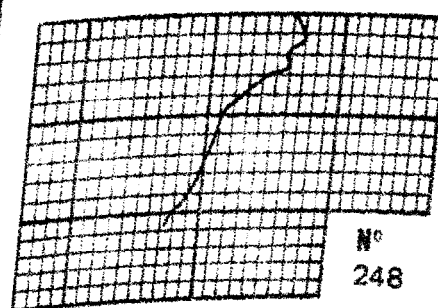
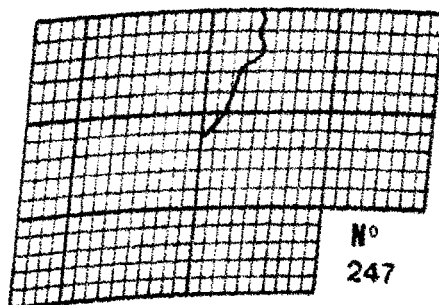
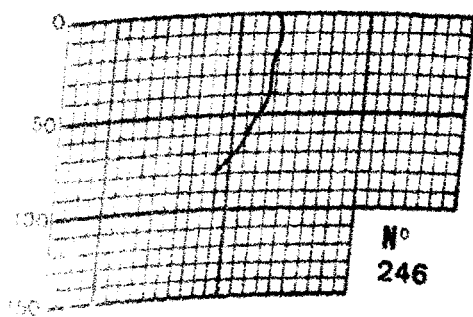
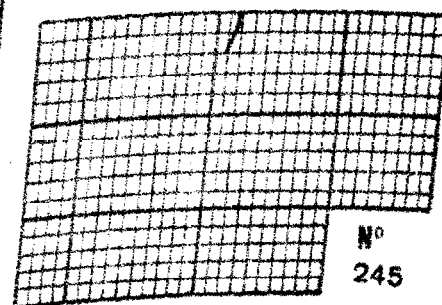
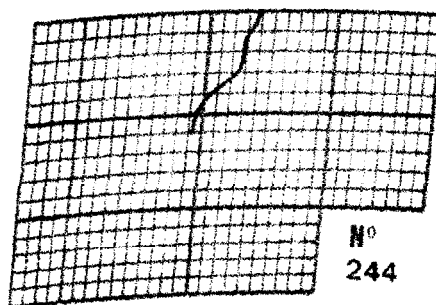
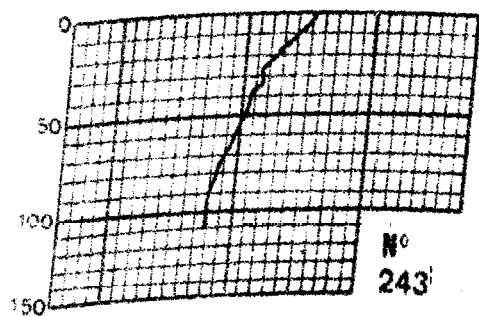
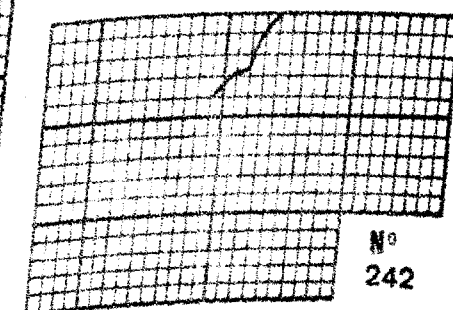
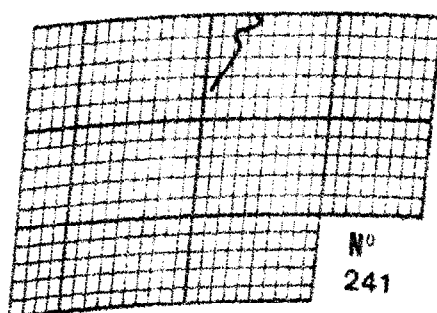
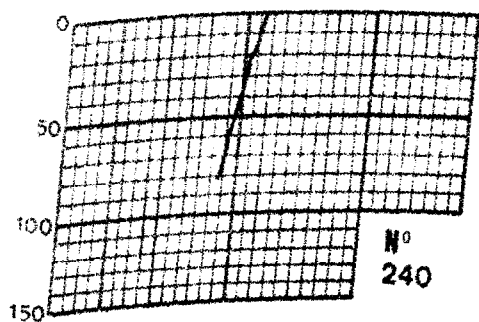
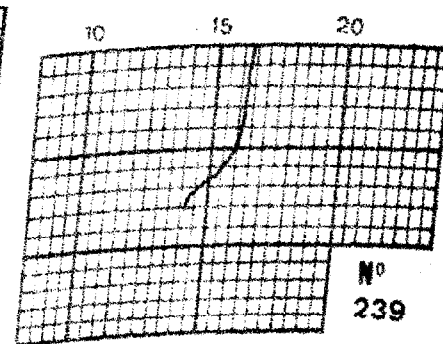
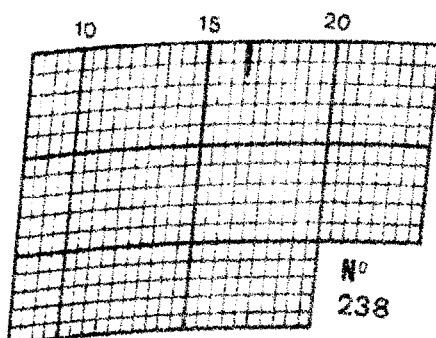
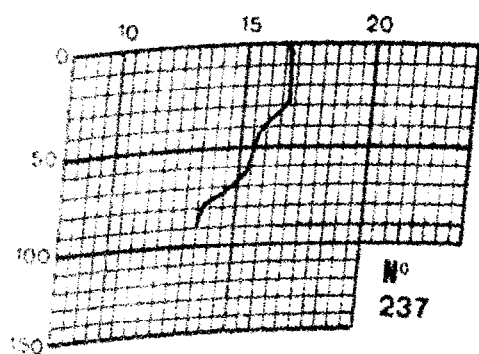




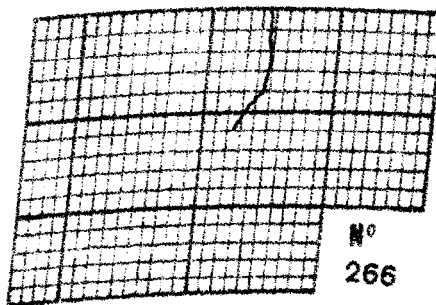
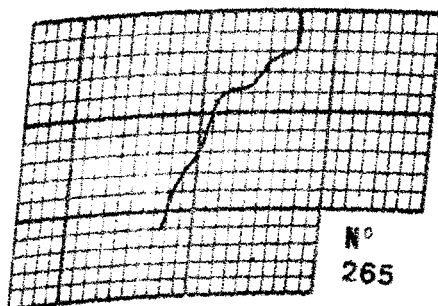
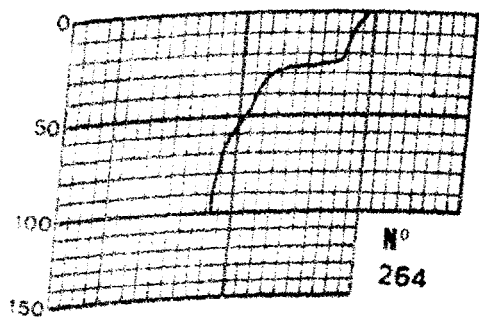
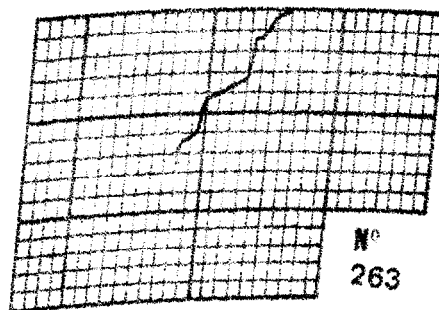
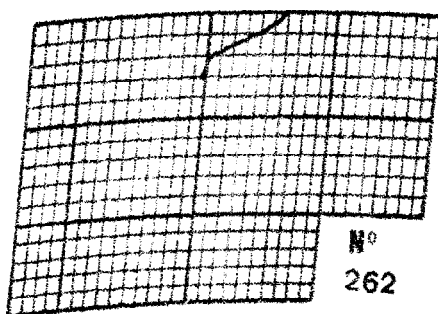
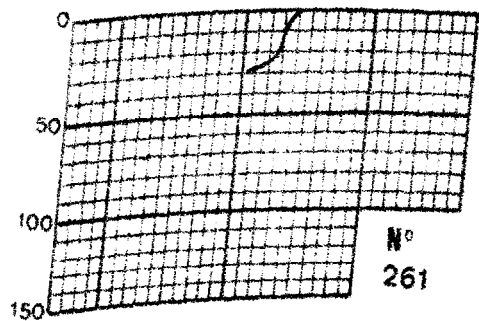
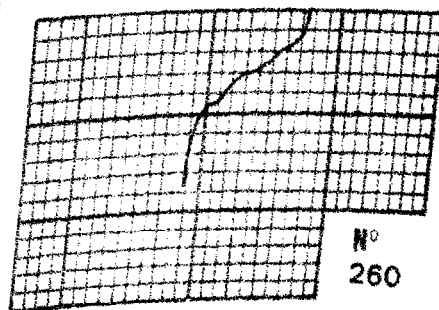
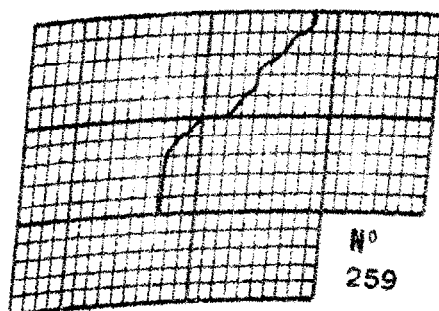
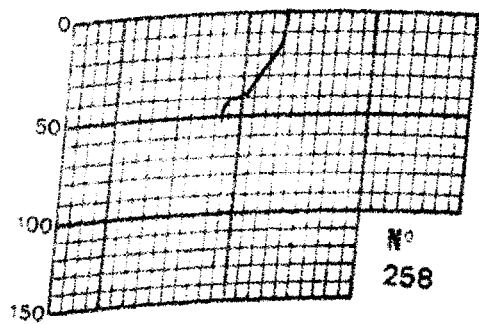
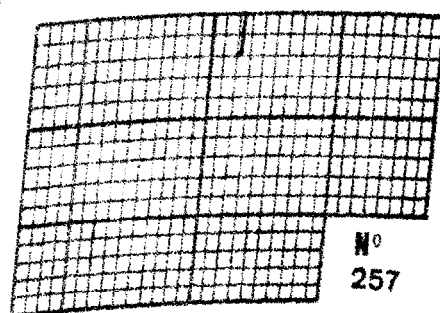
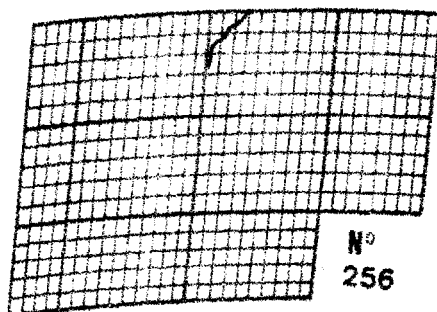
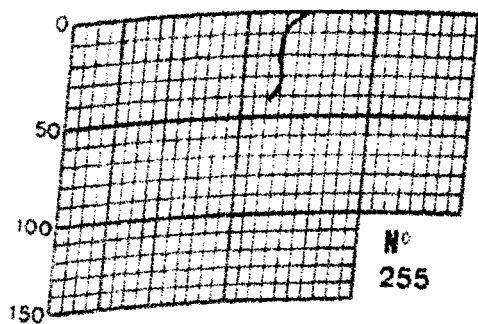
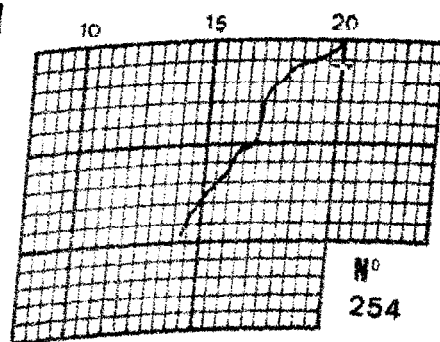
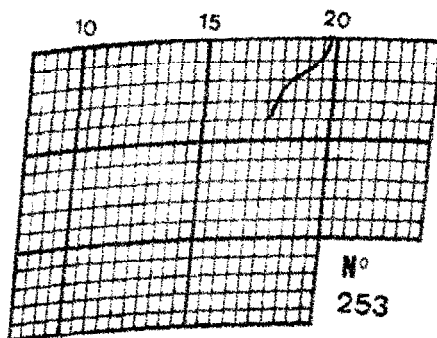
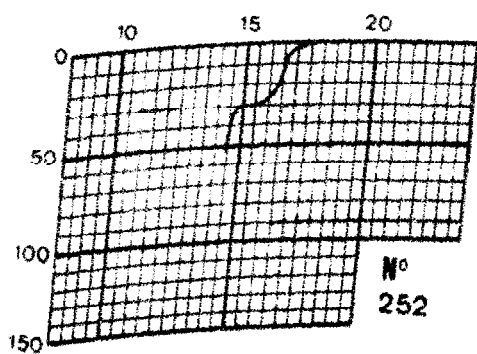


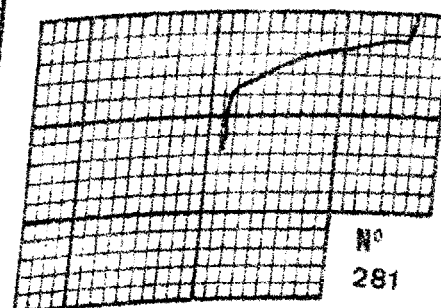
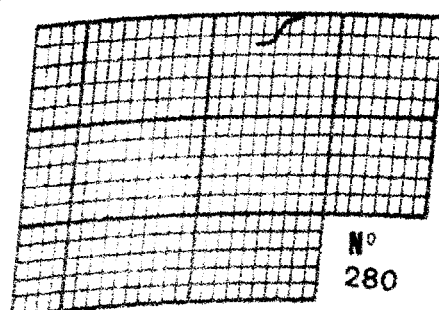
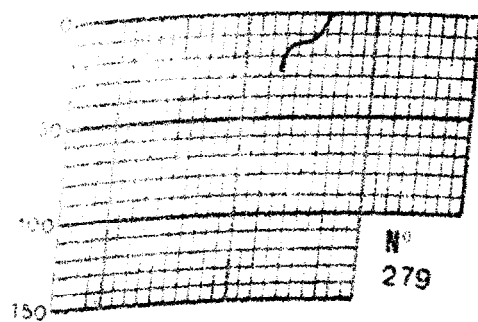
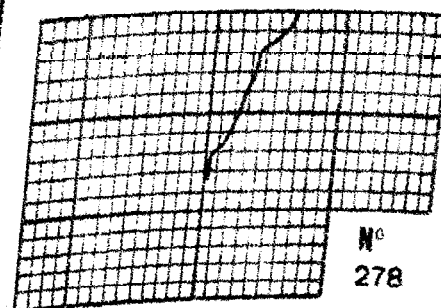
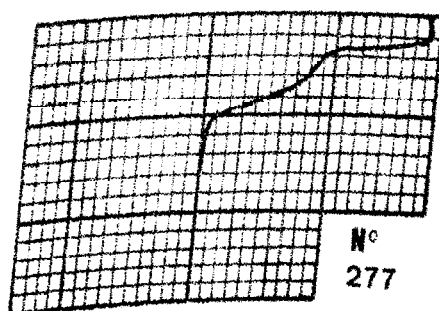
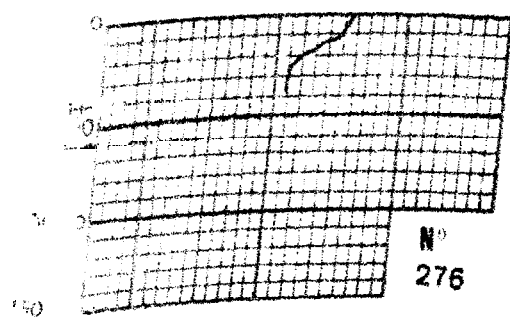
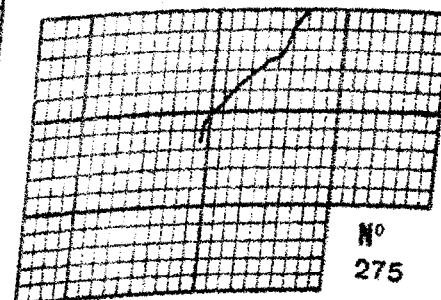
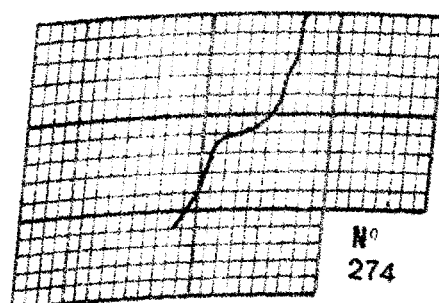
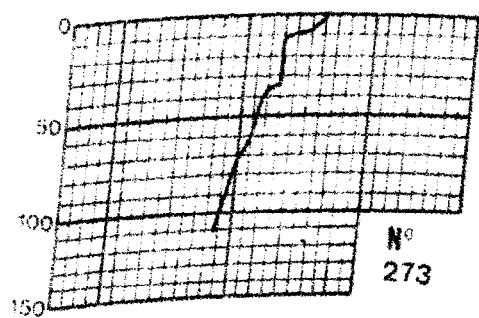
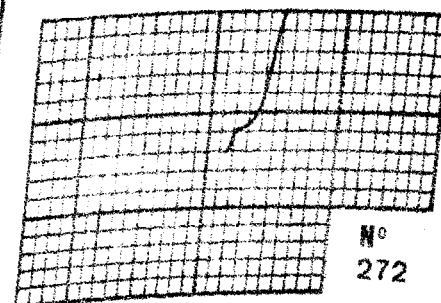
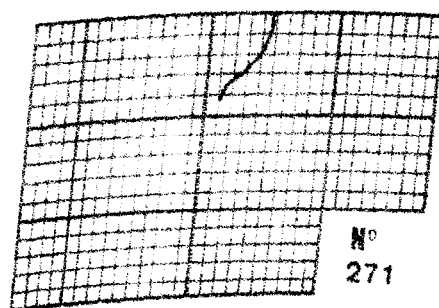
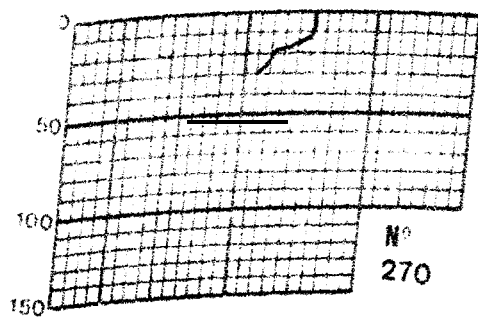
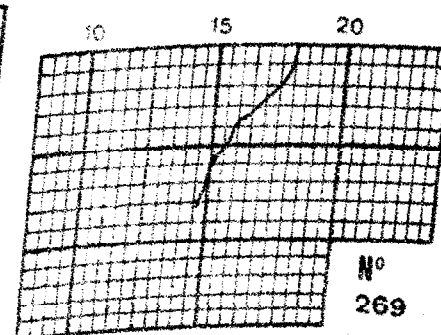
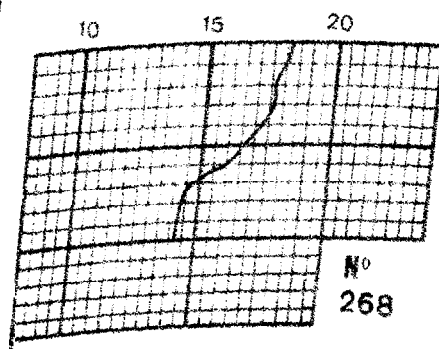
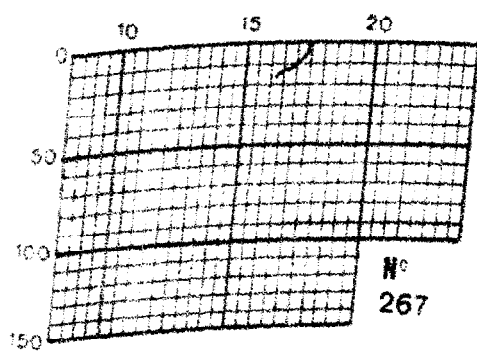


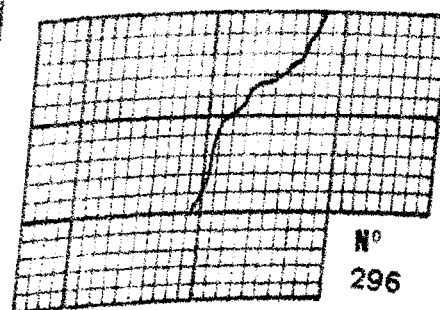
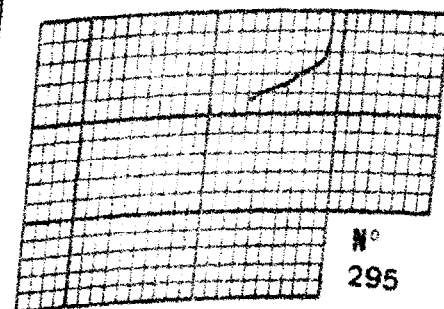
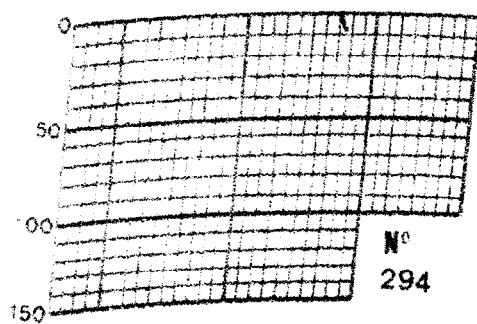
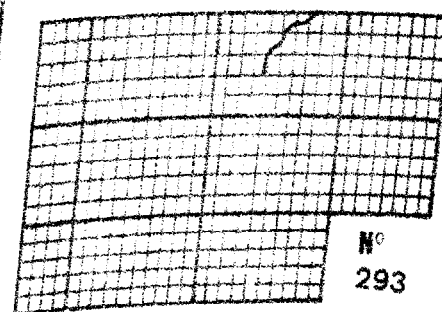
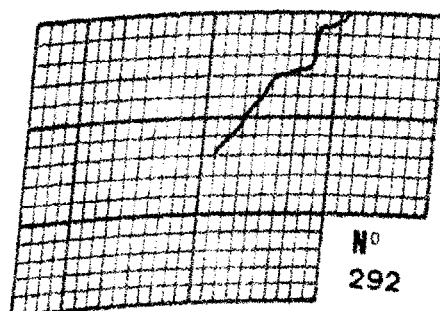
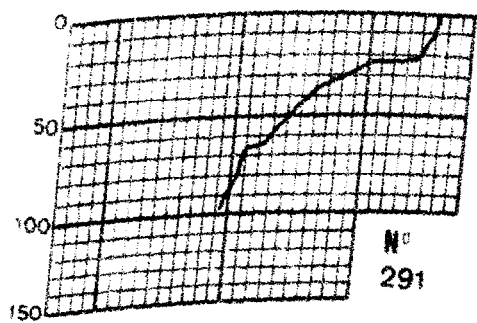
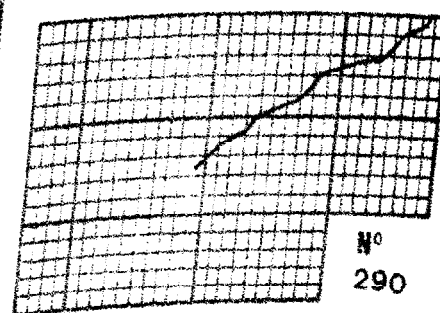
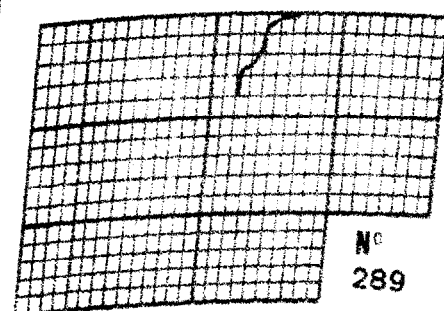
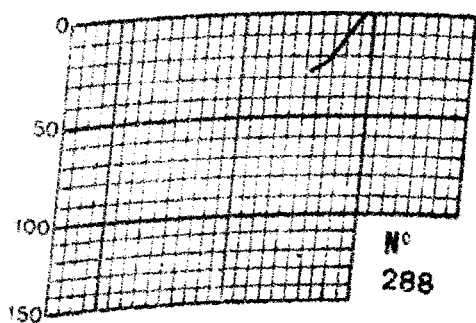
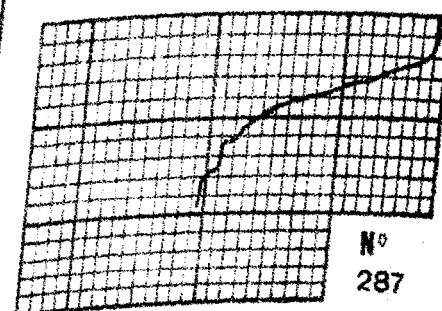
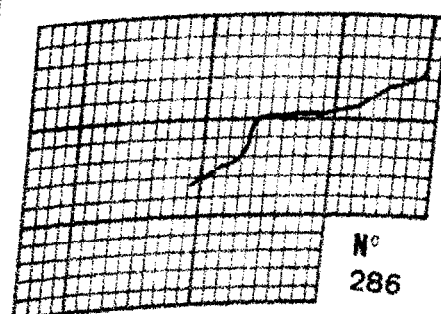
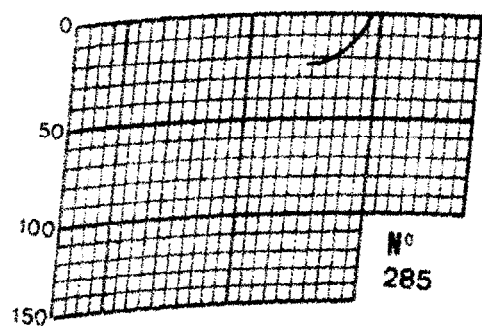
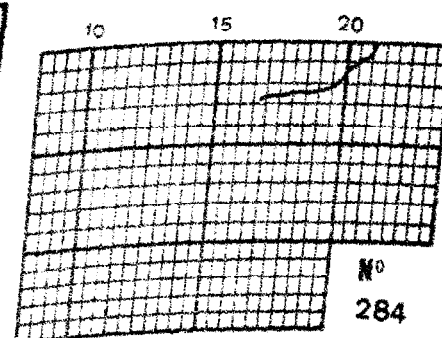
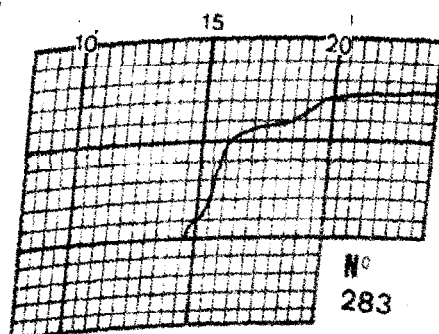
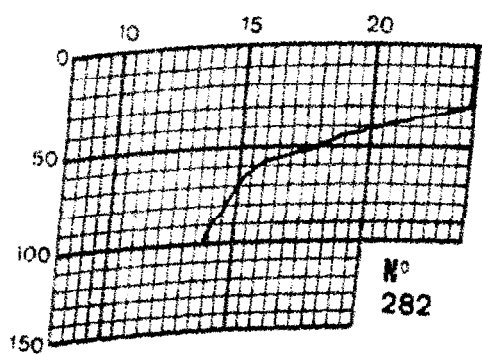














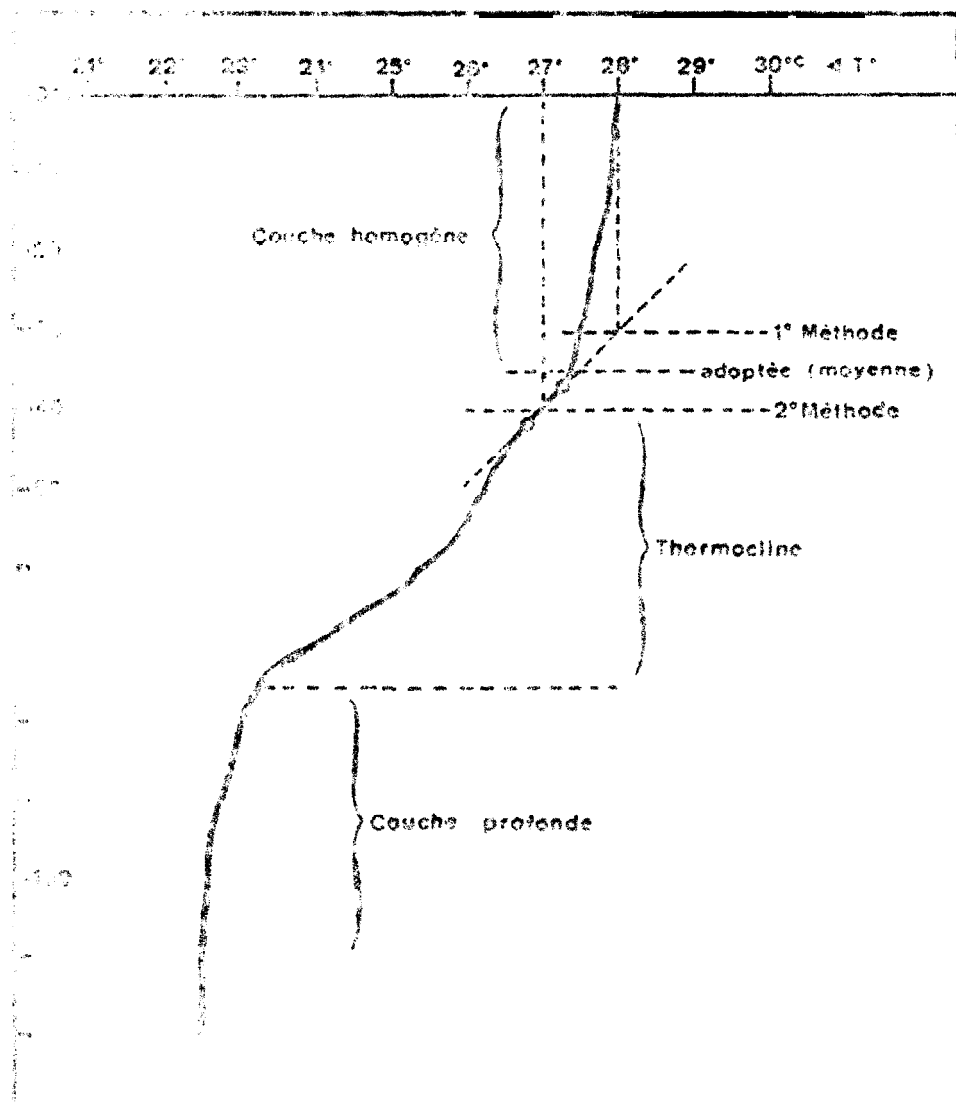
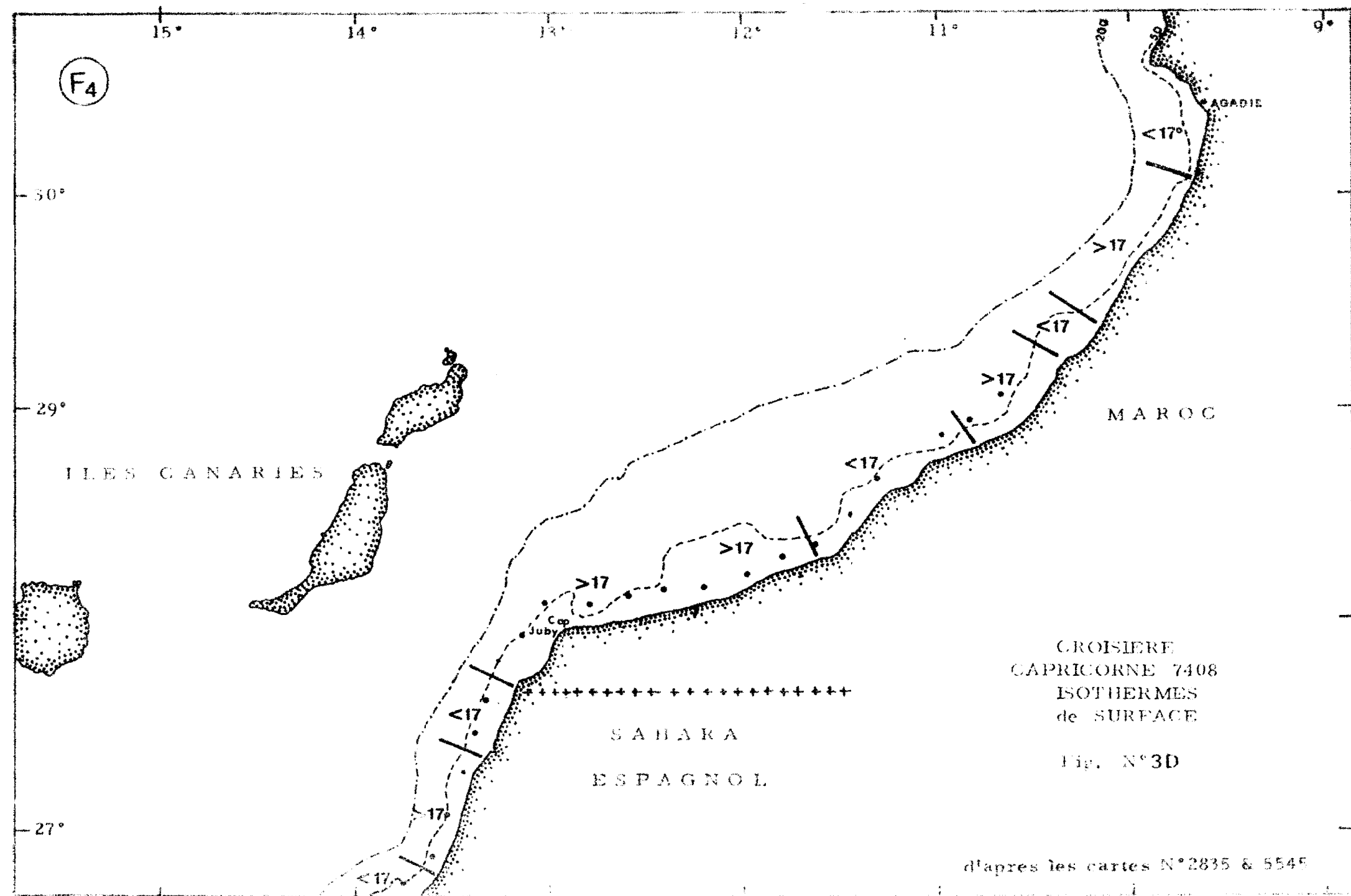
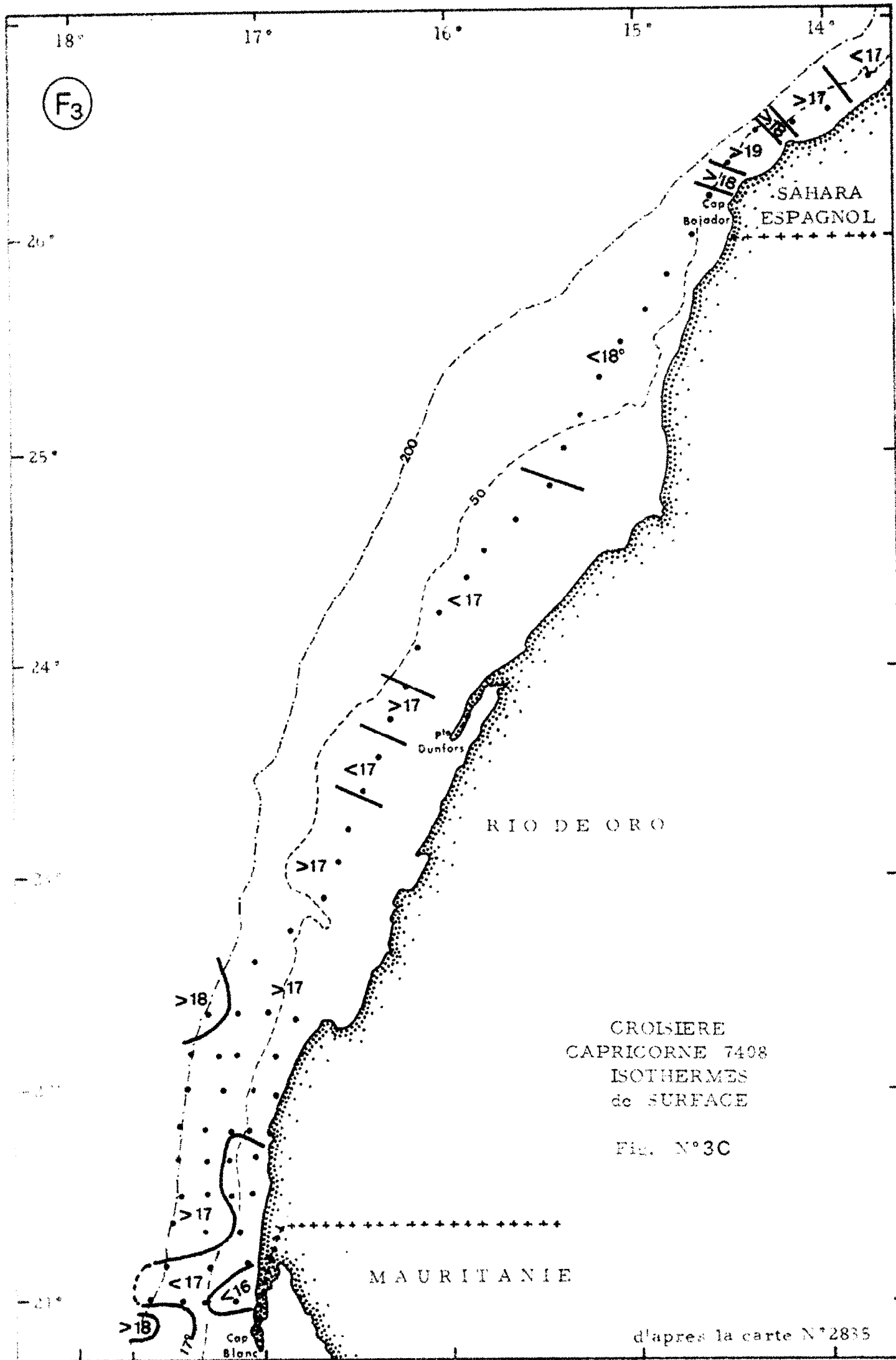
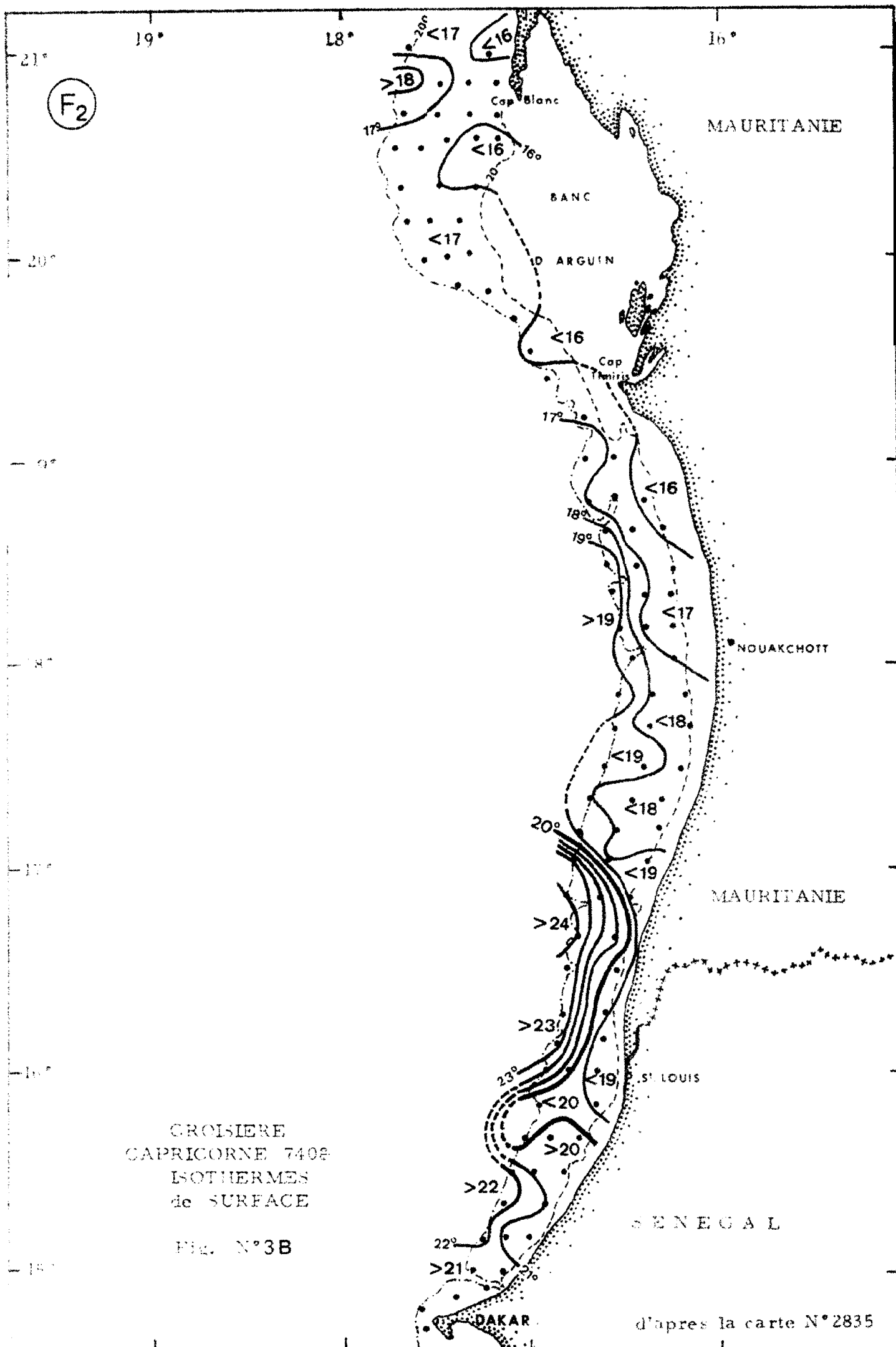


Fig. 4 - Définition des caractéristiques d'un bathythermogramme.





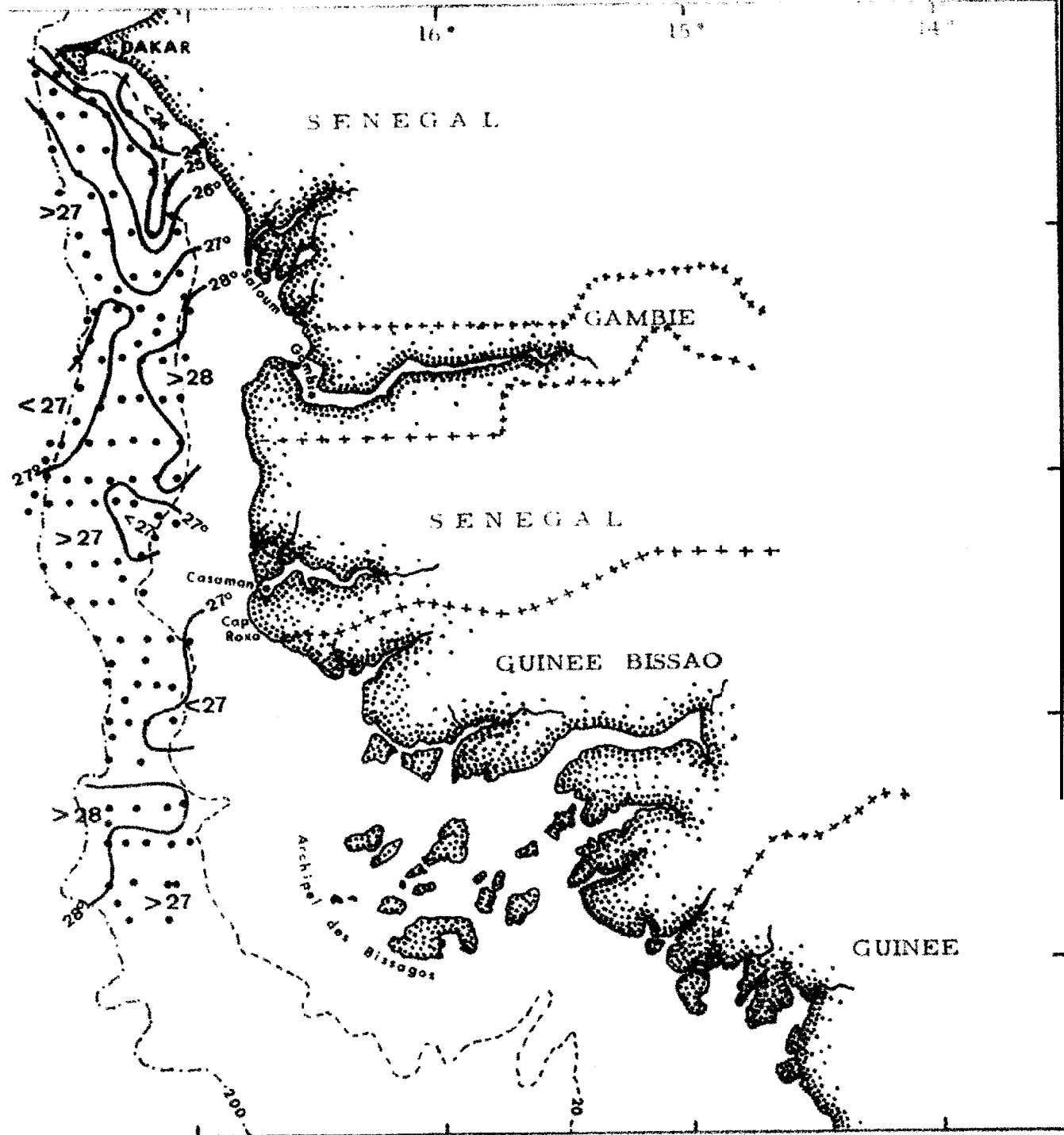


(F<sub>1</sub>)

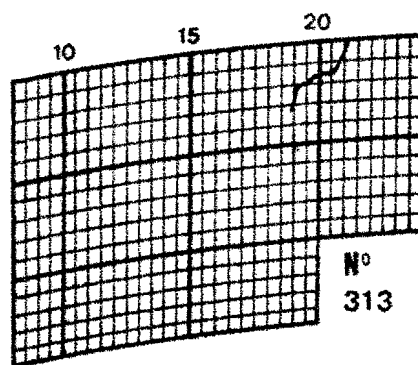
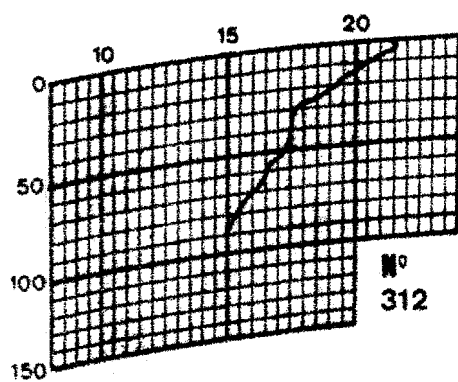
CROISIERE  
CAPRICORNE 7407  
ISOTHERMES  
de SURFACE

Fig. N°3A

d'apres la carte N°2835



2232



CROISIÈRE CAPRICORNE 7408

