

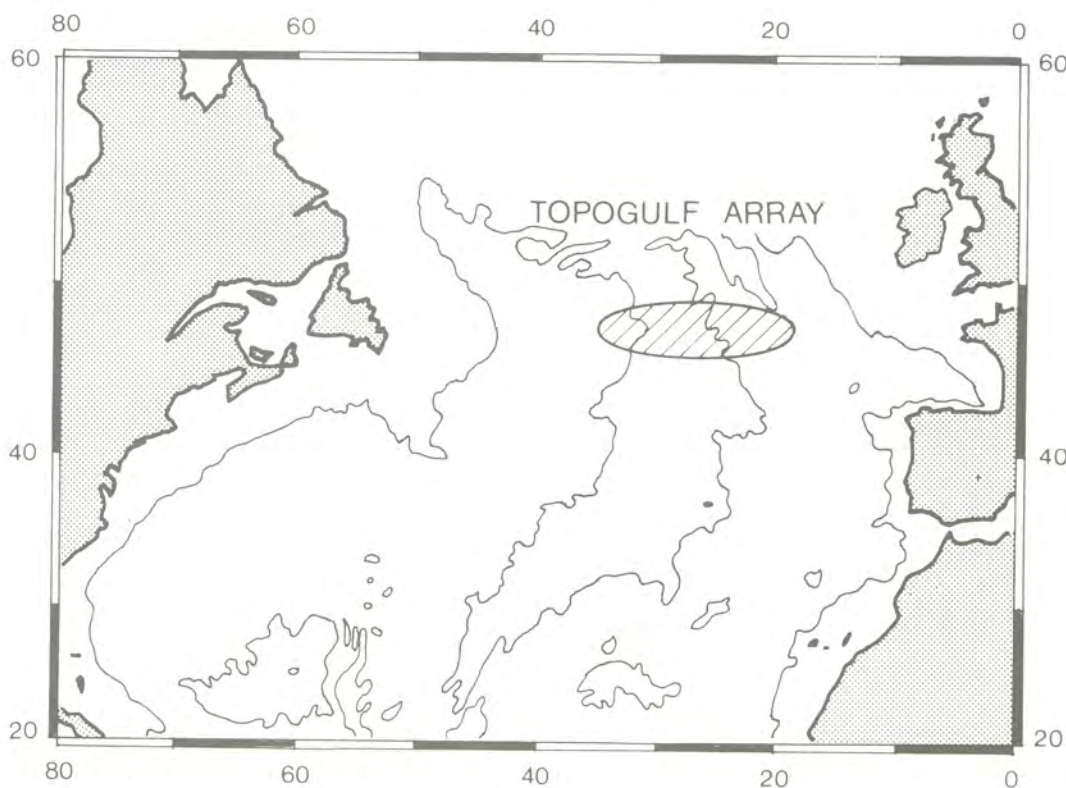


Campagnes Océanographiques Françaises  
N° 5 - 1987

# LONG TERM CURRENT MEASUREMENTS ALONG 48° N IN THE CENTRAL NORTH ATLANTIC

## TOPOGULF

A joint programme initiated by  
**IFREMER, Brest (France)**  
**IFM, Kiel (West Germany)**



Volume 2 : CURRENTMETER MEASUREMENTS

- Data Report -

by The TOPOGULF Group



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**LE PROJET TOPOGULF**  
a été mené en collaboration par

L'INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER  
Centre de Brest (France)

L'INSTITUT FÜR MEERESKUNDE (IFM)  
Kiel (RFA)

Il a mis en oeuvre divers types d'instrumentation en trois phases :

- . sections d'hydrologie réalisées en 1983,
- . mesures eulériennes d'une durée de 2 ans (1983-1985),
- . mesures lagrangiennes d'une durée de 4 ans (1983-1987).

La publication de ces résultats donne lieu à trois recueils

- . **VOLUME 1 : CTDO AND NUTRIENTS**  
disponible à l'adresse suivante :

Institut für Meereskunde an der Universität Kiel  
Abt. Theoretische Ozeanographie  
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D-2300 KIEL 1, FRG

- . **VOLUME 2 : CURRENTMETER MEASUREMENTS**
- . **VOLUME 3 : MESURES LAGRANGIENNES**

à paraître dans la série IFREMER "Campagnes Océanographiques Françaises".

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TABLE OF CONTENTS

TABLE DES MATIERES

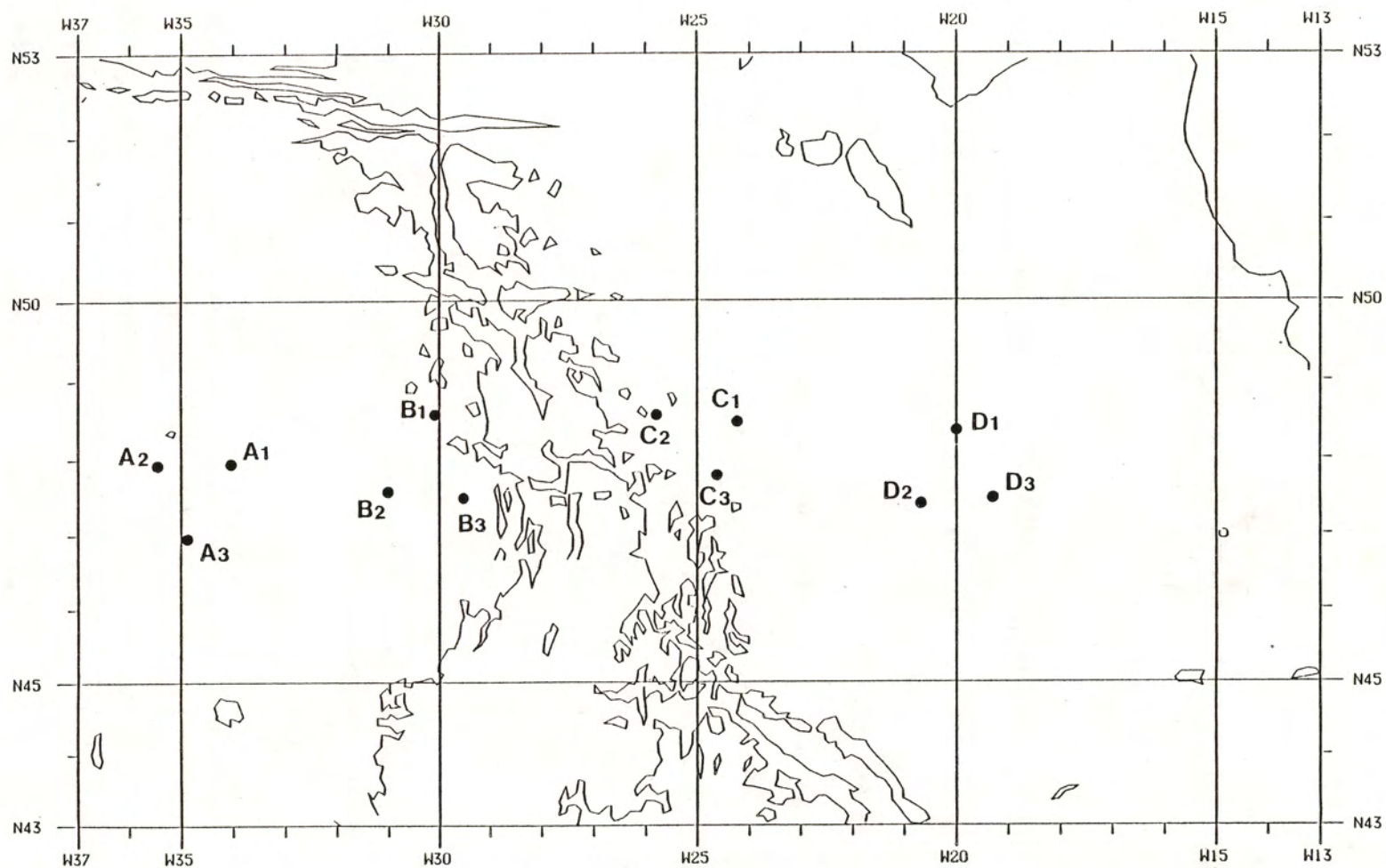
	Pages
1. <u>INTRODUCTION</u> .....	5
2. <u>ORIGINAL DATA SERIALS DESCRIPTION</u> .....	6
2.1. Moorings description.....	6
2.2. Currentmeters preparation and sensors calibration.....	6
2.3. Data description.....	11
2.4. Data return.....	14
3. <u>LOW-PASS FILTERED DATA PRESENTATION</u> .....	21
4. <u>REFERENCES</u> .....	22

SERIALS PRESENTATION

TEMPERATURE, COMPONENTS AND PRESSURE.....	23
cluster A.....	25
cluster B.....	43
cluster C.....	61
cluster D.....	79
STATISTICS.....	97
cluster A.....	99
cluster B.....	123
cluster C.....	149
cluster D.....	175

ABSTRACT - From 1983 to 1985 the TOPOGULF current meter project took place along 48° N from 35° to 20° W. The objective of the investigation was to describe the influence of a large topographic feature such as the Mid Atlantic Ridge on the mean and turbulent motion fields. 72 series of velocity and temperature of yearly nominal length have been obtained. The present data report shows the individual low pass filtered data records and the primary statistics.

RESUME - De 1983 à 1985, la partie courantométrie du projet TOPOGULF s'est déroulée dans l'Atlantique Nord (48° N - 20 à 35° W). L'objectif était de décrire l'influence d'un grand relief sous-marin, la dorsale médio-atlantique, sur les mouvements moyens et turbulents de l'océan. Soixante douze séries de vitesse et de température d'une durée nominale de 1 an ont été obtenues. Ce rapport fournit pour les données recueillies des enregistrements filtrés passe-bas et les statistiques associées.



7

FIGURE 1 : LOCATION OF CURRENTMETER MOORINGS DEPLOYED DURING THE FIRST YEAR OF TOPOGULF EXPERIMENT.

## 1. INTRODUCTION

The TOPOGULF project (an acronym for Gulf Stream over topography) started in 1983 as a joint french-german expedition. It aimed at documenting possible oceanographic processes caused by the great submarine ridge of the North Atlantic.

The objectives of the TOPOGULF currentmeter arrays was to demonstrate, if any, the influence of the Mid Atlantic Ridge on both the mean and turbulent low frequency fluctuations at mid latitudes. Such extreme topographic features are known to have profound influences on the dynamics of linear geostrophic waves and turbulence and one may wonder whether such influences persist in realistic situations. Such ideas were already at the origin of cluster A and B of the Polymode experiment at latitudes around  $27^{\circ}$  N. The present experiment focused on the obtention of a zonal section from  $35^{\circ}$  W to  $20^{\circ}$  W around  $48^{\circ}$  N. At this latitude the atmospheric forcing is far greater than at  $27^{\circ}$  N and we wanted to check whether local forcing was an possible eddy energy source in addition to baroclinic instability. Four clusters of one year moorings were deployed with each cluster composed of 3 moorings. The separation distance between moorings (around 100 km) was large enough to obtain uncorrelated records and thus increase the number of degrees of freedom of cluster averages whereas the separation distance between clusters about 400 km where chosen to delineate an inhomogeneity scale. At each cluster one single mooring was kept for another year to better apprehend the mean. The vertical structure of the motion fields was obtained with 5 currentmeters at each mooring, a number large enough to determine the low mode nature of mesoscale energy.

The TOPOGULF moorings along  $48^{\circ}$  N were carried out in an area void of such Eulerian measurements but for earlier single mooring work by Institut für Meereskunde (IFM), Kiel, along the eastern flank of the Mid Atlantic Ridge. They extend greatly the coverage provided by the NEADS and TOURBILLON program and should indicate the link between the eastern and western basins of the North Atlantic.

This particular part of the project was a joint effort between IFREMER (Brest, France) and the Institut für Meereskunde (IFM) (Kiel, Germany). The scientists involved at the outset in the preparation and execution of the experiments where M. ARHAN and A. COLIN DE VERDIERE for IFREMER and E. FAHRBACH and J. MEINCKE for IFM. A. BILLANT and I. BODEVIN were responsible at IFREMER respectively for data calibration and programming of much of the software used in the following. The present report was put together by A. BILLANT, H. MERCIER and A. COLIN DE VERDIERE.

## 2. ORIGINAL DATA SERIALS DESCRIPTION

Four regions of eulerian current measurements have been chosen during the TOPOGULF experiment. The objective was to have three points of measurements in each cluster for one year (see figure 1) and to increase the data base for one year at only one point of each cluster : points A2, B2, C2 and D2 have been selected for this extra year. In the following, these moorings will be referred to as A2 bis, B2 bis, C2 bis and D2 bis. IFREMER had in charge three clusters (A, B and D) and the Institut für Meereskunde (I.F.M.) of Kiel ensured the cluster C.

The first year, the twelve moorings have been deployed with R.V. "JEAN CHARCOT" (June-July 83). R.V. "METEOR" recovered them on August 84 and deployed the four moorings for the second year. The moorings D2 bis and C2 bis were recovered on September 85 (R.V. "METEOR") and, later, B2 bis and A2 bis on November 85 (R.V. "LE SUROIT").

### 2.1. MOORINGS DESCRIPTION

The measurements were planned to be obtained at four nominal depths : 400, 700, 1 500, 2 500 m. IFREMER added one more level : 3 000 m in cluster B and 4 000 m in clusters A and D. The instruments used were AANDERAA RCM4 and RCM5.

Figure 2 shows IFREMER moorings for a 4 400 meters water depth. The mooring line is made of parafil in the lower part and steel cable in the upper part. The buoyancy was composed of 24 Benthos spheres, 2 SNPE floats and 2 Corning spheres ensure a buoyancy of about. 600 kg of buoyancy, the anchor weighting 1 200 kg. In these conditions the elongation of the parafil is about 1 %. Acoustic releases were OCEANO INSTRUMENT.

Figure 3 shows I.F.M. moorings made of perlon in the lower part and kevlar at the upper part. 17 Benthos spheres and a big syntactic sphere at the top composed the buoyancy. The mooring was anchored with a 1 000 kg weight through OCEANO-INSTRUMENT releases. The elongation of perlon (10 %) was used to determine actual instruments levels.

### 2.2. CURRENTMETERS PREPARATION AND SENSORS CALIBRATION

Each laboratory had in charge the preparation of its own currentmeters and calibration of the sensors. It was decided to sample temperature, pressure (mainly at level 400 of each mooring), current direction and current speed every hour.

#### a) IFREMER calibration process

The instruments are prepared to encode, on the six channels, the measurements whose description follows :

- 1- reference of electronics,
- 2- temperature in the range -2° C to +21° C,
- 3- temperature in the range 0° C to 7° C or 6° C to 13° C (when conductivity cell mounted it was electrically disconnected),
- 4- pressure,
- 5- current direction,

6- current speed (one bit for 4 rotations during the period between two samplings).

According to temperature and pressure ranges each instrument is assigned a particular level.

The pressure sensor is checked against a deadweight tester "Desgranges et Huot" calibrated at the French Laboratoire National d'Essais (L.N.E.). The precision of the reference pressure is  $2 \cdot 10^{-4}$ . The calibration parameters within the range of the sensor are obtained through a linear regression among data points close to the actual level of currentmeters on moorings.

For temperature calibration the recording units are immersed in a temperature-regulated bath. The temperature is measured by a ROSEMOUNT probe calibrated at L.N.E. and periodically referenced to the triple point of water. Measurements at six points (between  $2^{\circ}\text{C}$  and  $7^{\circ}\text{C}$ ) or seven points (between  $6^{\circ}\text{C}$  and  $12^{\circ}\text{C}$ ) give the encoded values for each point on channels 2 and 3. A second order polynomial fit determines the calibration curve for each channel with an error smaller than the temperature resolution, respectively  $0,024^{\circ}\text{C}$  for channel 2 and  $0,008^{\circ}\text{C}$  for channel 3). It was observed that between  $2^{\circ}\text{C}$  and  $12^{\circ}\text{C}$ , such a calibration differs by  $+ 0,25^{\circ}\text{C}$  to  $- 0,10^{\circ}\text{C}$  from the manufacturer's calibration formula.

The deviation curve of the compass was established every ten degrees from 0 to 360 degrees : it was observed that the deviation differ by  $+ 7$  and  $- 5$  degrees from the manufacturer's calibration.

The Savonius rotors are tested in a water flume first to obtain the stall velocity (smaller than  $3\text{ cm/s}$ ) and second to calibrate the rotors rotation. The number of revolutions is counted at different speeds (between 6 and 12 according to serials) from 3 to  $70\text{ cm/s}$ . A linear relation is obtained giving current speed against rotations. The current speed exceeded by 3 to 12 %, the value computed from the standard manufacturer' formula.

The difference between calibration and manufacturer values is presented figure 4 for temperature, direction and speed. For more details see BILLANT (1985) and (1986).

#### b) IFM procedure

The instruments encodes the next measurements on the six channels :

- 1- reference of electronics,
- 2- temperature in the range  $- 2^{\circ}\text{C}$  to  $+ 21^{\circ}\text{C}$ ,
- 3- nothing,
- 4- pressure or short range of temperature or nothing,
- 5- current direction,
- 6- current speed (one bit for 4 revolutions).

Verifications of pressure and temperature sensors are done in the laboratory.

For temperature six to eleven experimental points (between  $- 2^{\circ}\text{C}$  to  $+ 21^{\circ}\text{C}$ ) permit to compute a third order calibration polynomial.

For pressure, current direction and current speed manufacturer's calibration formulae are used.



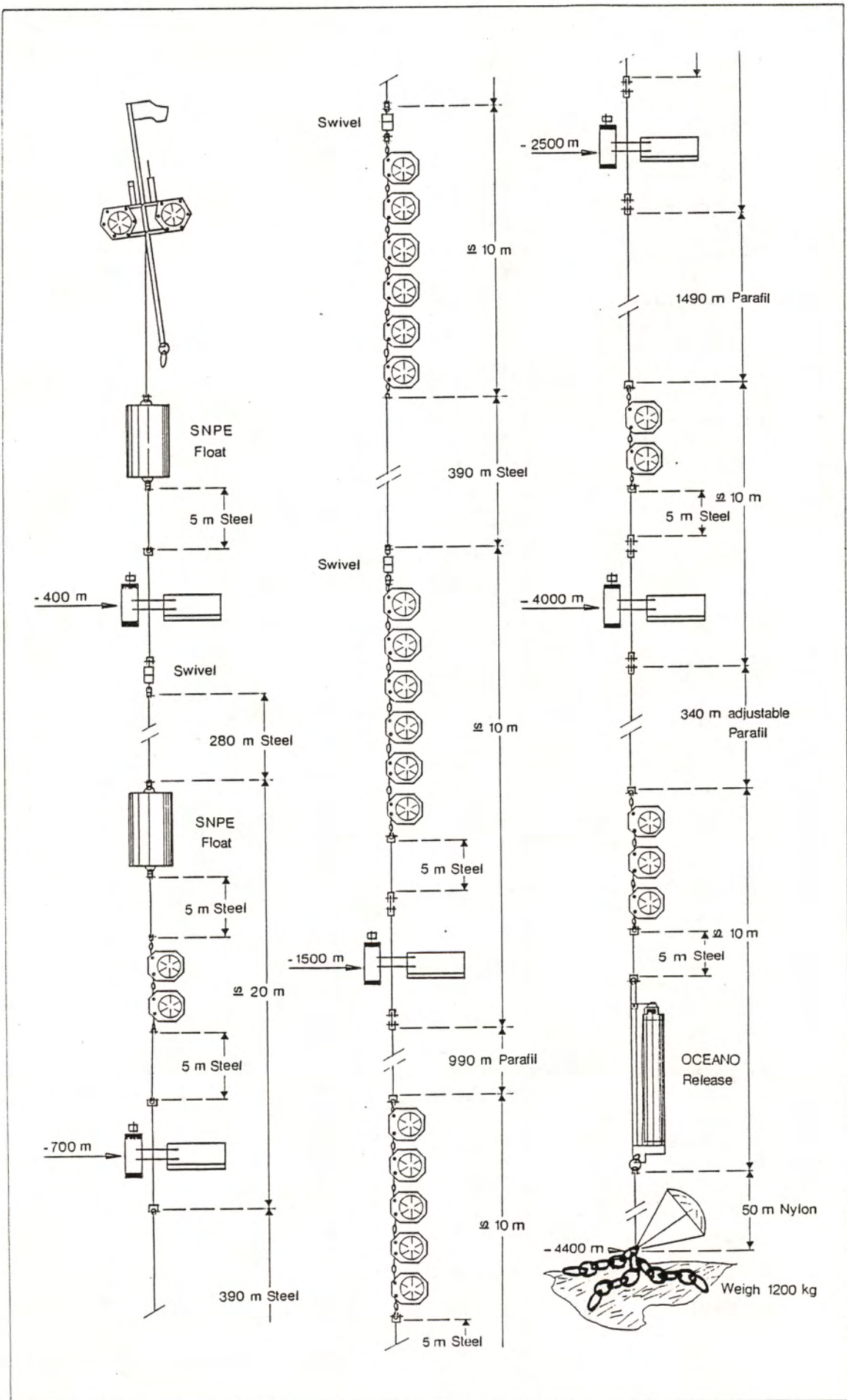


FIGURE 2 : IFREMER MOORING SCHEME

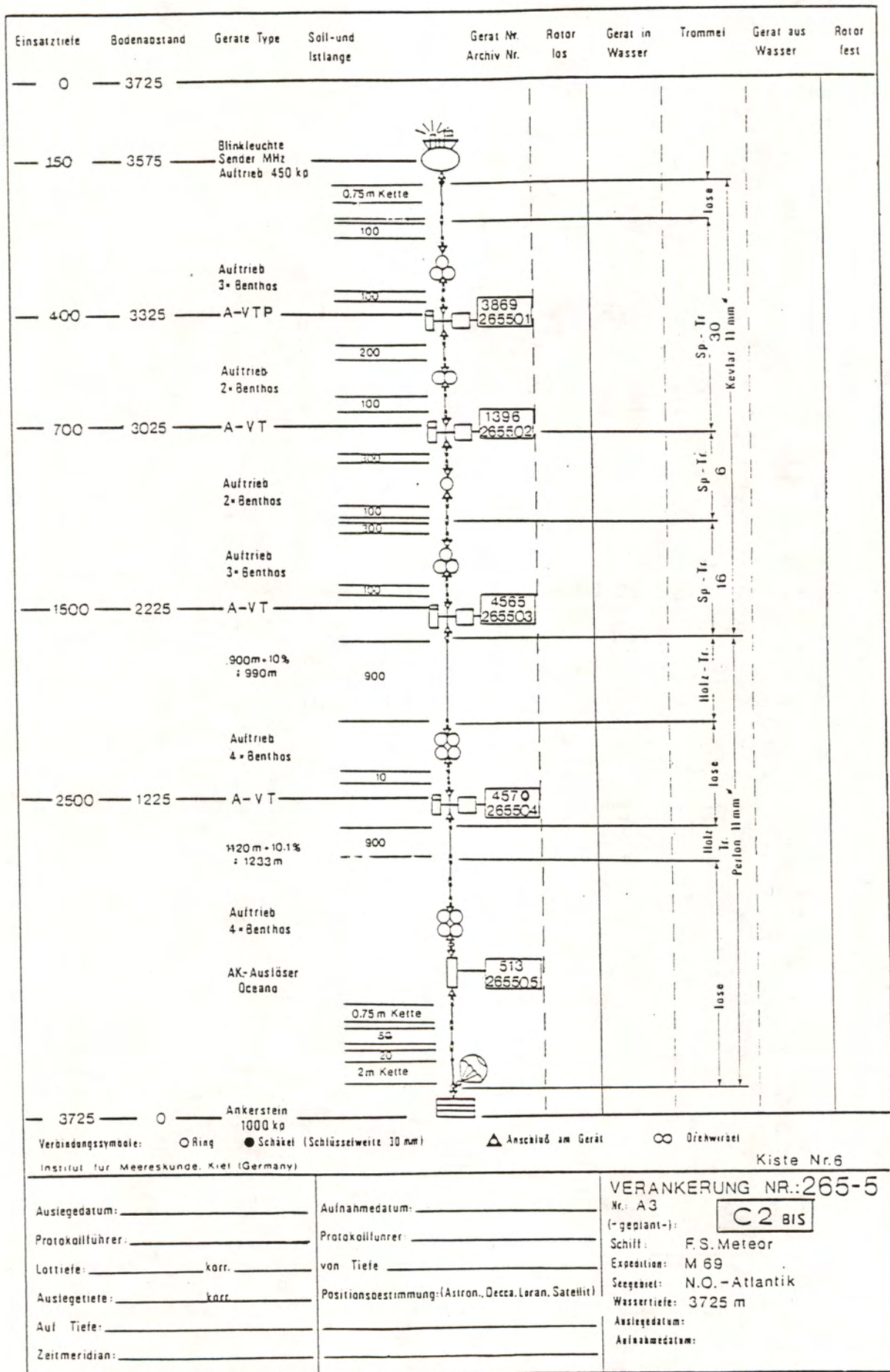


FIGURE 3 : IFM MOORING SCHEME

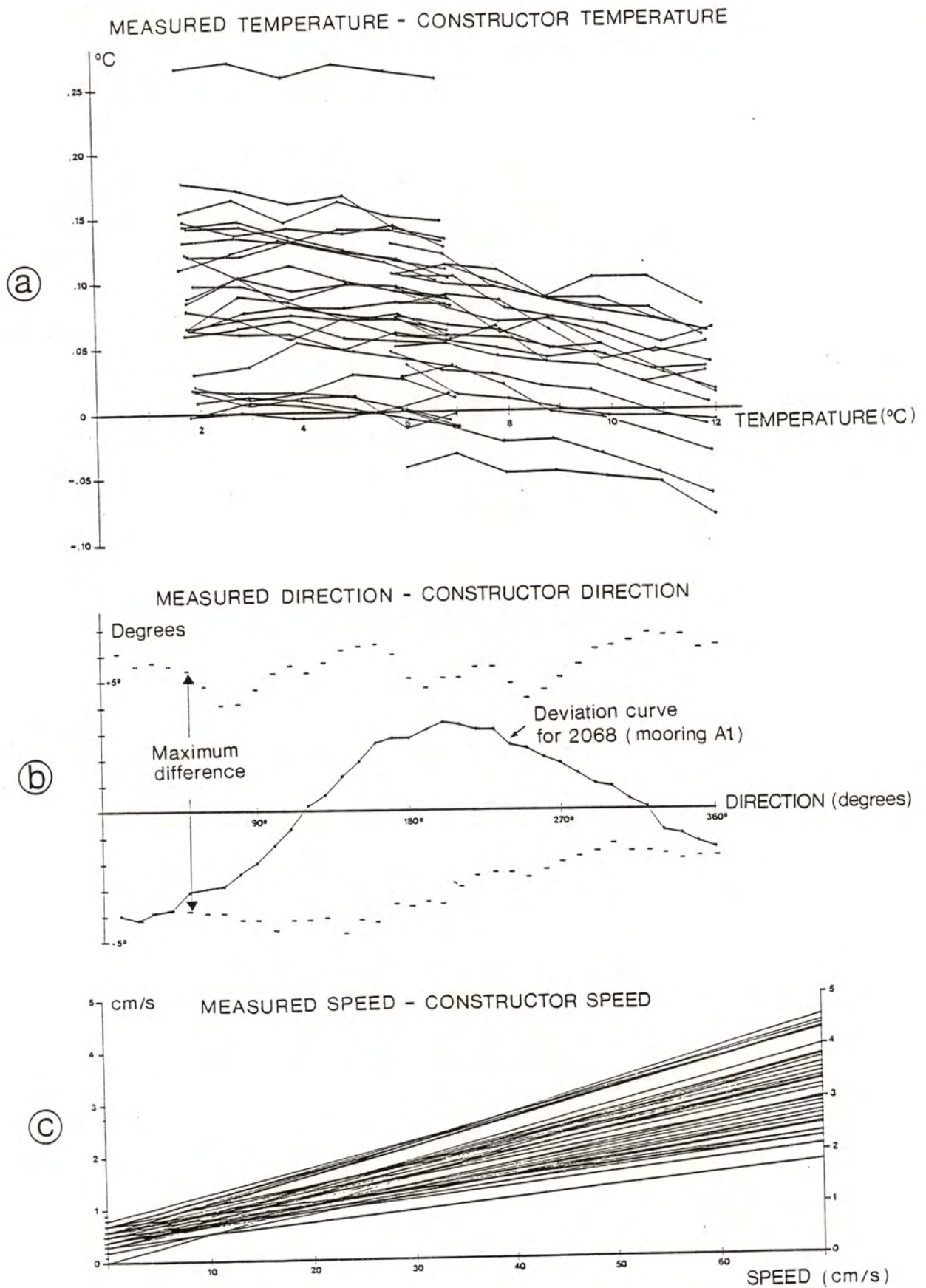


FIGURE 4 : DIFFERENCE BETWEEN CALIBRATION AND CONSTRUCTOR VALUES FOR THE FIRST YEAR CURRENTMETERS.

- a) temperature (one curve per sensor)
- b) direction (the dash lines are for the maximum difference observed and the solid curve is a typical exemple)
- c) speed (one curve per sensor)

c) Next table summarizes resolution and accuracy measurements according to the procedure applied.

		Clusters A, B, D	Cluster C
Pressure	Resolution Accuracy	0,1 % of range (see figures 4 and 5) ± 6 db	± 1 % of range
Temperature	Resolution Accuracy	0,024° C or 0,008° C (see figures 4 and 5) ± 0,03° C	± 0,15° C
Current direction	Resolution Accuracy	0,35 degree ± 3 degrees	± 7,5 degrees
Current speed	Resolution Accuracy	0,05 cm/s ± 1 cm/s	± 1 cm/s or ± 2 % at the actual speed, whichever is greater

For cluster C accuracy is given according to AANDERAA (1978). Note that for current speed IFREMER calibration gave actual speed in excess by 1 (± 0,5) cm/s for 10 cm/s and 3,3 (± 1,3) cm/s for 70 cm/s.

### 2.3. DATA DESCRIPTION

Thanks to the very good quality of OCEANO-INSTRUMENT acoustic releases, the sixteen moorings were recovered along with the 76 currentmeters. Unfortunately a few of the latter leaked increasing data losses. In addition mooring C3 was placed 300 meters deeper than planned causing different measurements levels.

The interruption of the series between the first and second year is 9 hours at points A2, B2, C2 and 22 days at point D2 (rough seas prevented direct substitution of moorings).

Figures 5 (first year) and 6 (second year) summarize the description of the time series :

- position of the mooring,
- water depth,
- record duration (in hours),
- serial number of the currentmeter,
- instrument depth (deduced from pressure measurements computed through a geometrical interpolation in the absence of pressure sensors),
- type of measurements : pressure = P  
temperature = T  
direction speed = D  
current speed = V
- temperature resolution : 0,024° C on channel 2 or 0,008° C for the narrower range (this second one is used in the data analysis whenever possible),

	MOORING N°	POSITION	WATER DEPTH (meters)	DURATION (hours)	INSTRUMENT N°	INSTRUMENT DEPTH (meters)	TYPE OF MEASUREMENT	TEMPERATURE RESOLUTION (°C)	PRESSURE RESOLUTION (db)
CLUSTER A	A1	47°56,9 N 34°00,8 W	4 496	9 692	2 068	348	PTDV	0.024	2
					2 069	634	PTDV	0.024	6
					3 484	1 419	PTDV	0.008	6
					5 481	2 444	PTDV	0.008	6
					5 890	3 978	PTDV	0.008	6
	A2	47°56,4 N 35°26,9 W	4 380	9 707	4 435	294	PTDV	0.024	2
					3 115	584	TDV	0.024	
					3 485	1 378	PTDV	0.008	6
					5 484	2 436	PTDV	0.008	6
				5 891	3 933	PTDV	0.008	6	
A3	46°59,1 N 34°51,1 W	4 314	9 677	4 440	348	PTDV	0.024	2	
				3 116	641	PTDV	0.024	6	
				3 486	1 448	PTDV	0.024	4	
				5 450	No data				
				5 892	No data				
CLUSTER B	B1	48°35,5 N 30°05,0 W	3 515	9 684	4 441	350	PTDV	0.008	2
					4 589	633	PTDV	0.008	6
					4 444	1 442	PTDV	0.008	6
					4 436	2 453	TDV	0.008	
					5 893	2 956	PTDV	0.008	6
	B2	47°36,0 N 30°57,4 W	3 620	9 692	4 442	368	PTDV	0.024	2
					4 591	670	PTDV	0.024	6
					4 445	1 472	PTDV	0.008	6
					5 446	2 483	TDV	0.008	
					5 894	2 985	PTDV	0.008	6
	B3	47°30,6 N 29°28,1 W	3 424	9 701	4 443	339	PTDV	0.024	2
					5 731	616	PTDV	0.024	6
					4 446	1 419	PTDV	0.008	6
					4 587	2 437	PTDV	0.008	6
					5 895	2 943	PTDV	0.008	6
CLUSTER C	C1	48°29,2 N 24°11,45 W	3 755	9 669	6 678	402	PTDV	0.024	1
					6 679	705	TDV	0.024	
					6 680	1 510	TDV	0.024	
					6 681	2 510	TDV	0.024	
	C2	48°34,55 N 25°44,35 W	3 450	9 666	125	283	PTDV	0.024	1
					2 317	586	TDV	0.024	
					6 159	1 392	TDV	0.008	
					6 122	2 407	TDV	0.024	
	C3	47°47,8 N 24°36,1 W	3 680	9 667	124	659	PTDV	0.024	1
				4 563	962	TDV	0.024		
				5 252	1 768	TDV	0.008		
				6 121	2 783	TDV	0.024		
CLUSTER D	D1	48°22,7 N 19°57,4 W	4 441	9 658	5 111	299	PTDV	0.008	2
					5 482	605	PTDV	0.008	2
					4 437	1 394	PTDV	0.008	6
					5 123	No data			
					5 896	No data			
	D2	47°24,6 N 20°38,0 W	4 492	9 653	5 448	307	PTDV	0.008	2
					5 483	594	PTDV	0.008	2
					4 439	1 400	PTDV	0.008	6
					5 445	2 425	TDV	0.008	
					5 897	3 945	PTDV	0.008	6
	D3	47°30,4 N 19°15,5 W	4 582	9 656	5 449	342	PTDV	0.008	2
					5 485	622	PTDV	0.008	2
					5 479	1 436	TDV	0.008	
					5 486	2 462	PTDV	0.008	6
					5 898	3 976	PTDV	0.008	6

FIGURE 5 : OBSERVATION OF MOORED CURRENTMETERS (FIRST YEAR)

	MOORING N°	POSITION	WATER DEPTH (meters)	DURATION (hours)	INSTRUMENT N°	INSTRUMENT DEPTH (meters)	TYPE OF MEASUREMENT	TEMPERATURE RESOLUTION (°C)	PRESSURE RESOLUTION (db)
CLUSTER A	A2 bis	47°59,1 N 35°24,10 W	4 304	9 691	3 634	352	PTDV	0.024	1
					3 636	644	PTDV	0.024	2
					3 635	1 440	TDV	0.008	
					4 588	2 450	PTDV	0.008	6
					4 594	3 950	TDV	0.008	
CLUSTER B	B2 bis	47°30,9 N 30°53,30 W	3 500	9 802	1 443	347	PTDV	0.024	4
					4 596	640	TDV	0.024	
					5 814	1 440	TDV	0.008	
					4 261	2 440	TDV	0.008	
					5 813	2 940	TDV	0.008	
CLUSTER C	C2 bis	48°31,8 N 25°45,50 W	3 450	9 700	3 869	302	PTDV	0.024	1
					1 396	605	TDV	0.024	
					4 565	1 411	TDV	0.024	
					4 570	2 417	TDV	0.024	
CLUSTER D	D2 bis	47°22,3 N 20°40,90 W	4 500	9 598	520	347	PTDV	0.024	4
					618	650	TDV	0.024	
					5 810	1 470	TDV	0.008	
					4 254	2 490	TDV	0.008	
					4 258	4 000	TDV	0.008	

FIGURE 6 : OBSERVATION OF MOORED CURRENTMETERS (SECOND YEAR)

- pressure resolution : it is a function of sensor ranges
- 6 db for 0-8 000 psi range
- 4 db for 0-5 000 psi range
- 2 db for 0-3 000 psi range
- 1 db for 0-1 000 psi range

The actual time series length for each measurement is shown in figures 7 to 11 with a straight line (dashed lines indicate that no sensor was mounted).

#### 2.4. DATA RETURN

The next table indicates the data return from TOPOGULF experiment for each year and globally.

	First year	Second year	Global data return
Temperature	82,20 %	60,81 %	76,84 %
Pressure	82,92 %	65,17 %	80,65 %
Current direction	86,70 %	65,07 %	81,28 %
Current speed	77,73 %	64,84 %	74,50 %
Velocity components	75,90 %	63,26 %	72,73 %

The first year was more successful. 2/3 of the data losses were mainly caused by leaks in currentmeters housings. Leakage often occurred through the holes needed for the conductivity cells on new instruments and through the electrical terminals. The next most important loss was for current speed and caused by rotor breakage and malfunction of rotorcounters.

Pressure records indicated that mooring motion was larger than expected. The largest excursions occurred at cluster A. For instance at A2 bis, a maximal excursion of 881 meters was recorded on March 11 1985. However the rms pressure values (see section on statistics) show that typical excursions were within acceptable bounds. Figure 12 gives useful informations about the different levels of measurements.

DATA RETURN AT CLUSTER (A) (First year)

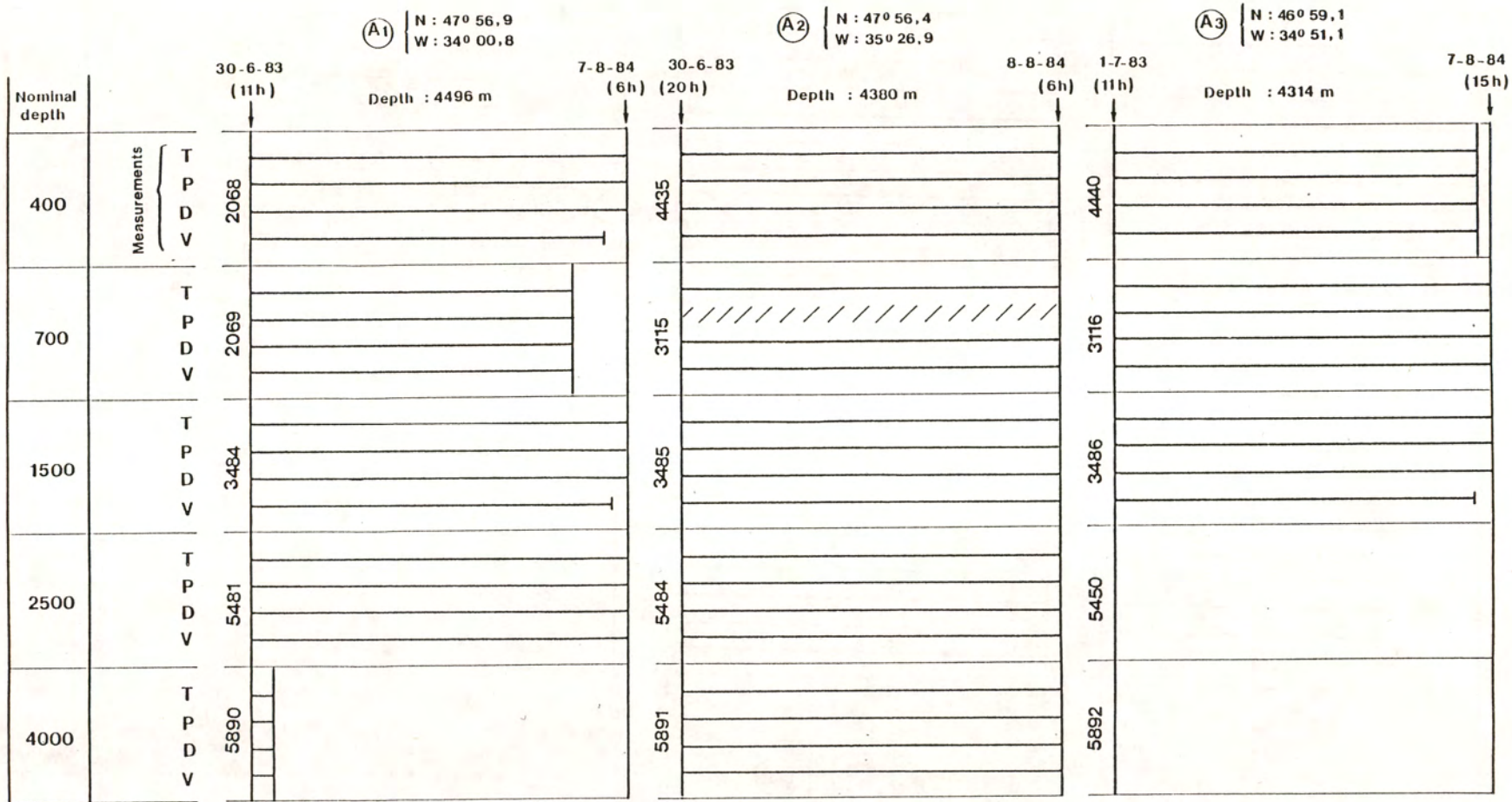


FIGURE 7



DATA RETURN AT CLUSTER (B) (First year)

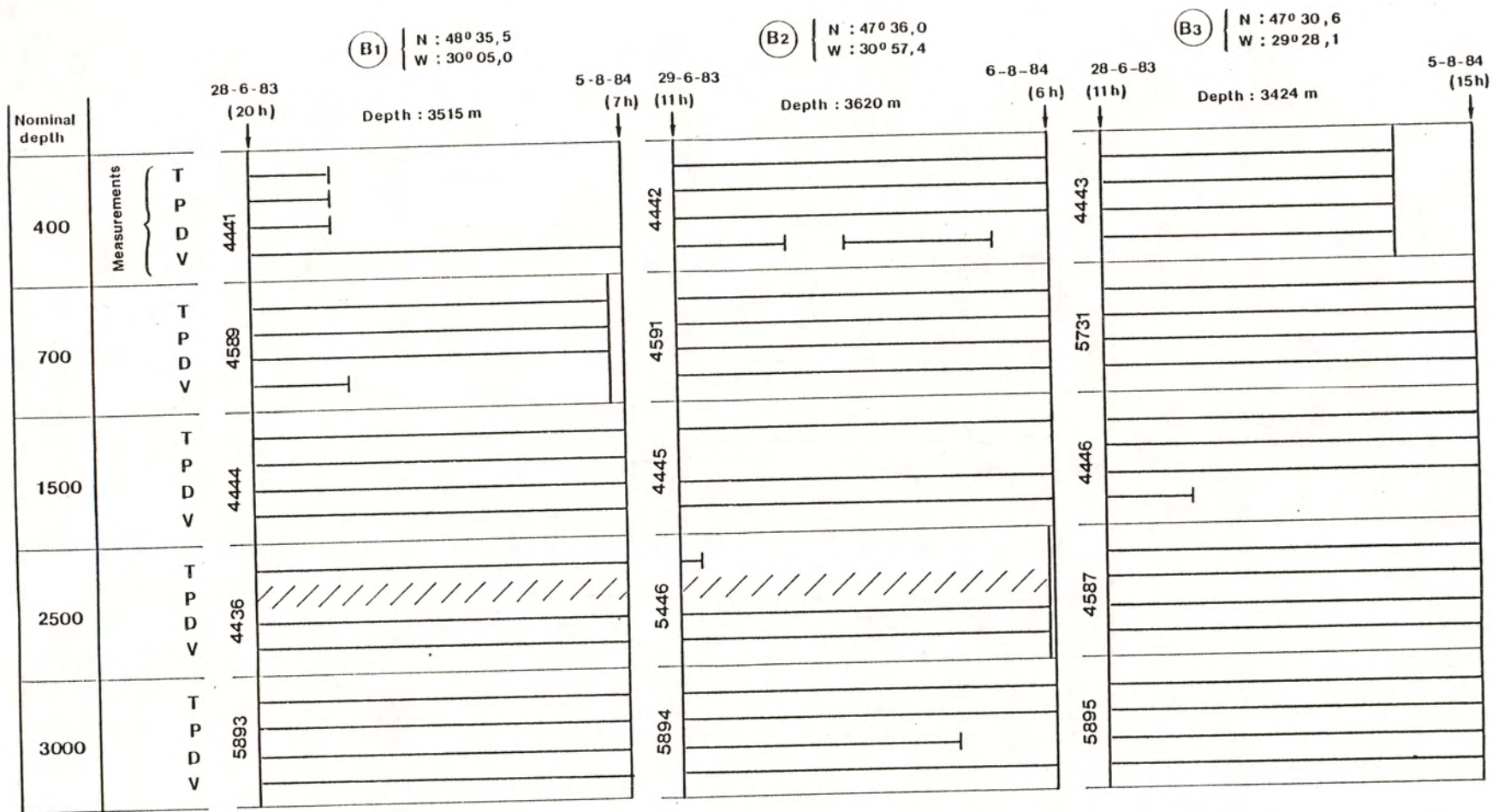


FIGURE 8

DATA RETURN AT CLUSTER C (First year)

MOORING C1

N : 48° 29, 2  
W : 24° 11, 45

MOORING C2

N : 48° 34, 55  
W : 25° 44, 35

MOORING C3

N : 47° 47, 8  
W : 24° 36, 1

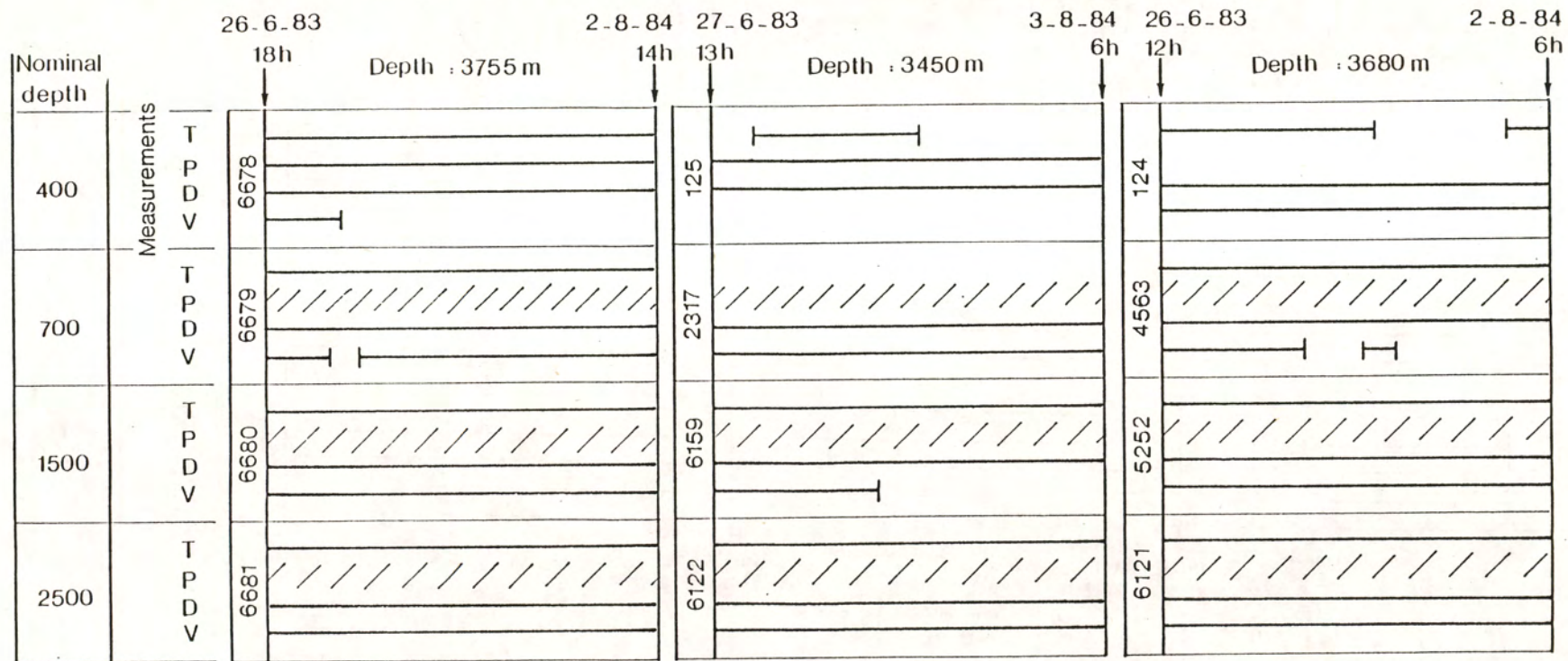


FIGURE 9

## DATA RETURN AT CLUSTER (D) (First year)

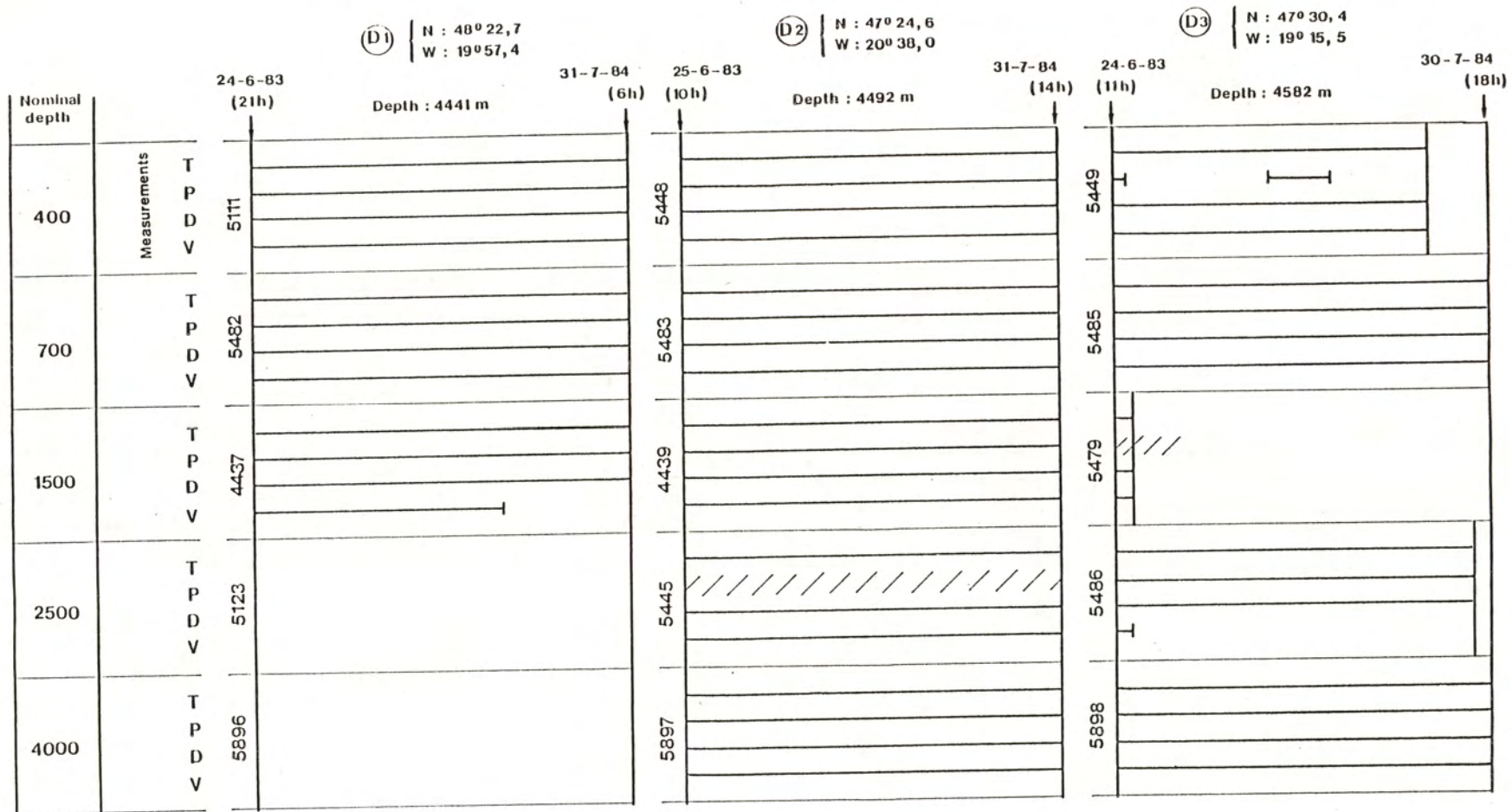


FIGURE 10

# DATA RETURN (Second year)

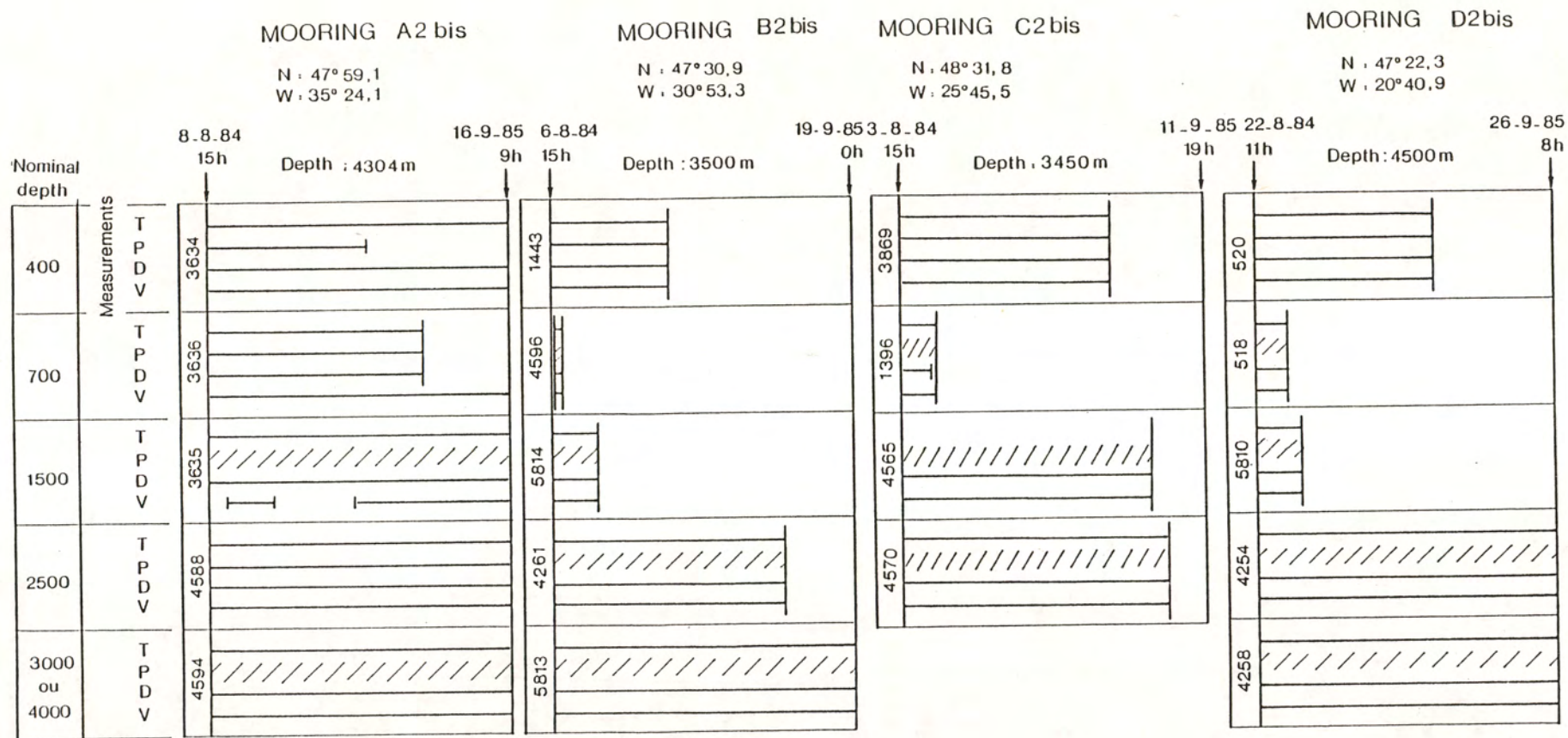


FIGURE 11

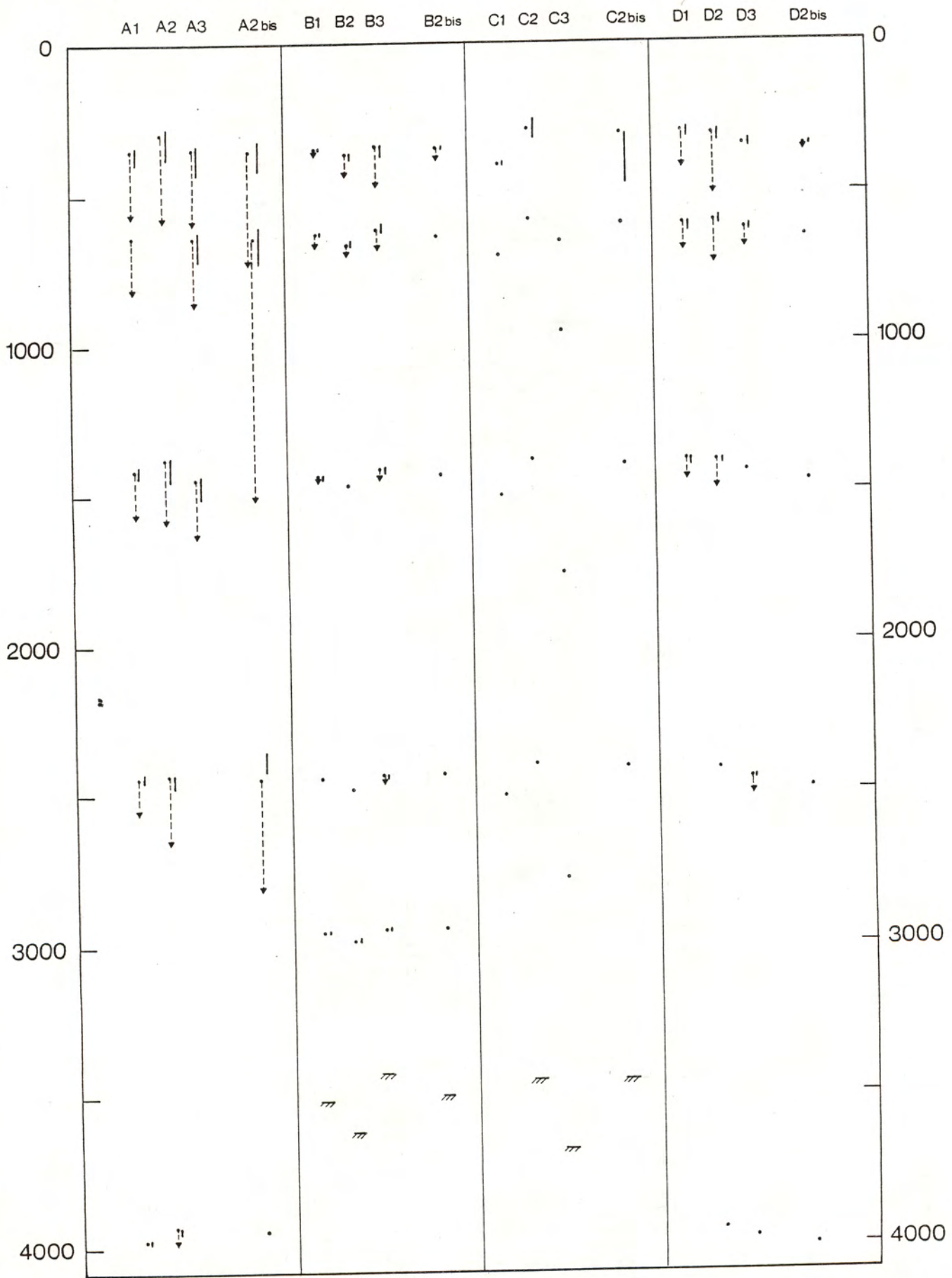


FIGURE 12 : TOPOGULF EXPERIMENT MEASUREMENT LEVELS IN METERS

- The dot (.) is for the nominal depth.
- The arrow indicates the maximum vertical displacement from hourly values.
- The pressure standard deviation is represented as a continuous line.

### 3. FILTERED DATA PRESENTATION

The data are presented in the next pages as plots of time series of temperature, velocity components and pressure.

A Lanczos filter was used to remove high frequency fluctuations (see HAMMING (1977) for a review). The filtered values ( $y_j$ ) are obtained from the original data series ( $x_j$ ) through the following relation :

$$y_j = \sum_{i=-N_w}^{i=+N_w} x_{j-i} w_i \quad \text{for } j = 1, \dots, N \quad (N : \text{length of the series})$$

The weights of the filters  $w_i$  are given by :

$$w_i = \frac{\sin(2\pi(i-1)f_c)}{\pi(i-1)} \times \frac{\sin(\pi(i-1)/N_w)}{\pi(i-1)/N_w}$$

$f_c$  is the cut off frequency of the filter and can be any  $k/N$  with ( $k = 1, \dots, N/2$ ). The total number of points of the filter is  $2N_w + 1$ .  $N_w$  controls the transition width of the filter (the larger  $N_w$ , the sharper the filter). For the plots, the cut off frequency  $f_c$  was chosen to be  $1/120$  (transition period 5 days) with  $N_w = 100$ . For the statistics we used  $f_c = 1/40$  (transition period 1.66 days) and  $N_w = 60$ .

As for the statistics (including the statistical standard errors presented in brackets) they were estimated as suggested by BENDAT and PIERSOL (1971). The needed auto- and cross- correlation functions were acquired from the present data set.

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- TOPOGULF Group (1986) : TOPOGULF a joint programme initiated by IFREMER, Brest (France) IFM, Kiel (W. Germany). Data Report. Volume 1 : CTD, O<sub>2</sub> and nutrients, Berichte aus dem Institut für Meereskunde an der Christian-Albrechts-Universität, Kiel, Nr 154.

**TEMPERATURE**

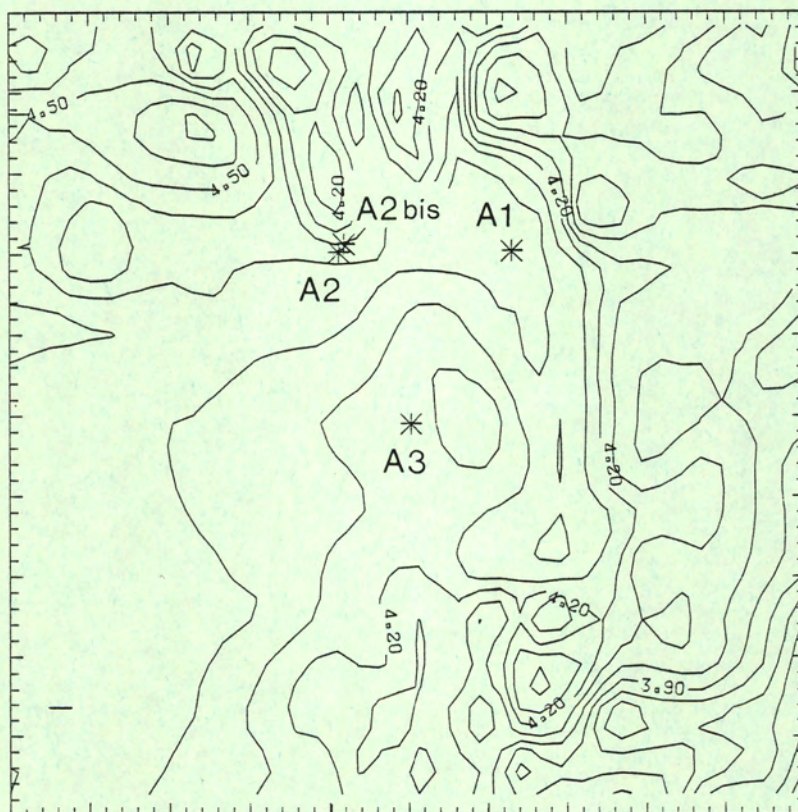
**VELOCITY COMPONENTS**

**PRESSURE**



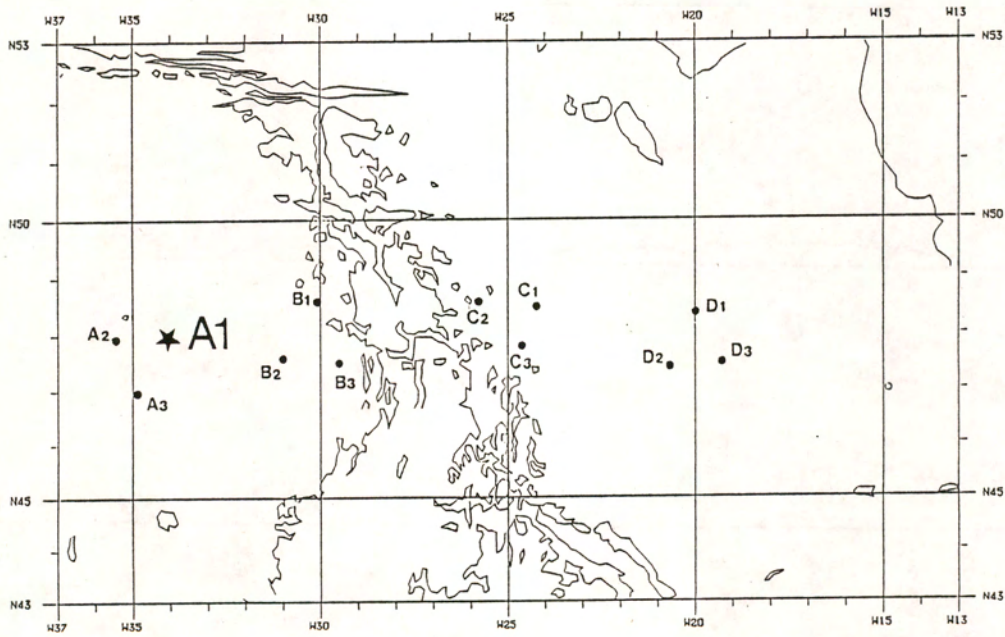
# CLUSTER A

## LOCAL BATHYMETRY

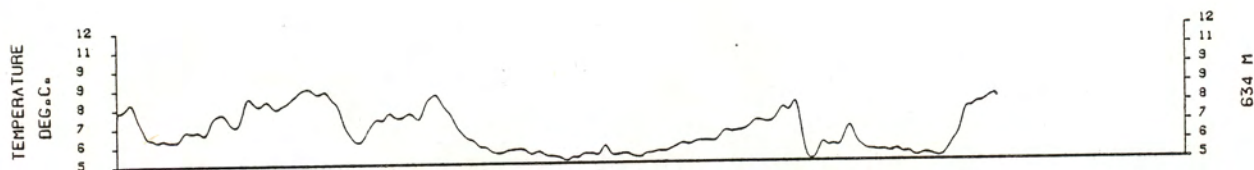
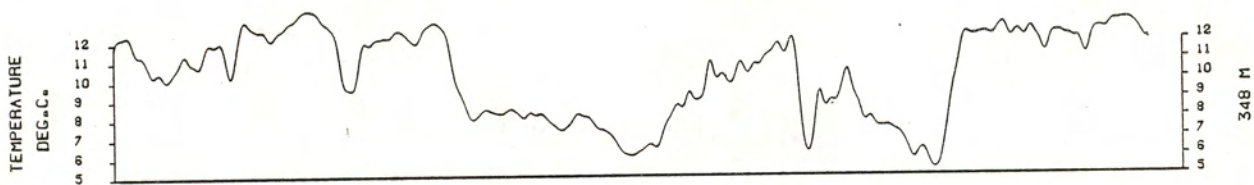


Contour labels are in  $10^3$  m

# MOORING A1

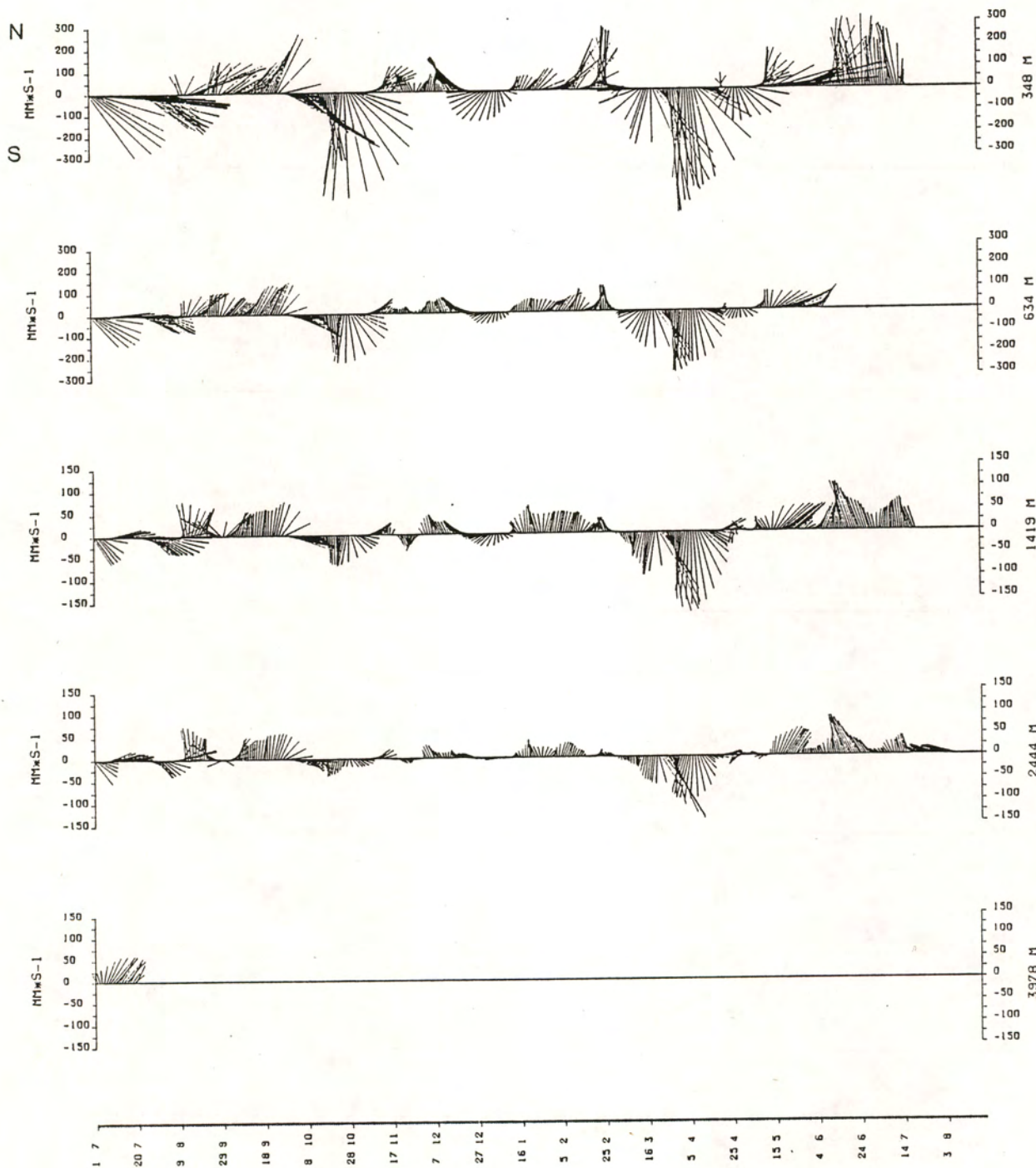


MOORING : A1

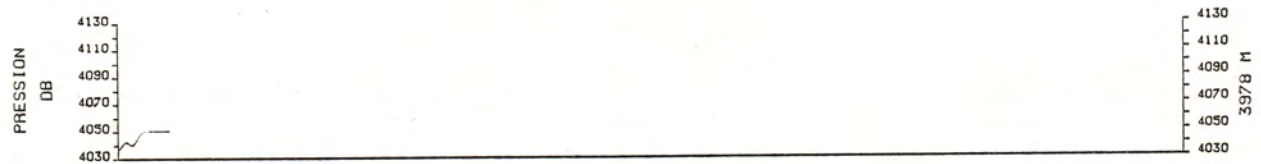
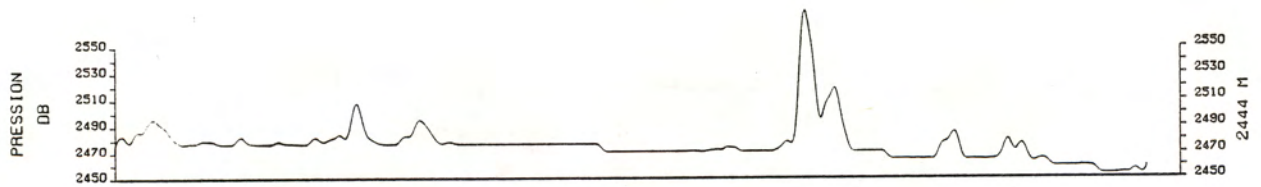
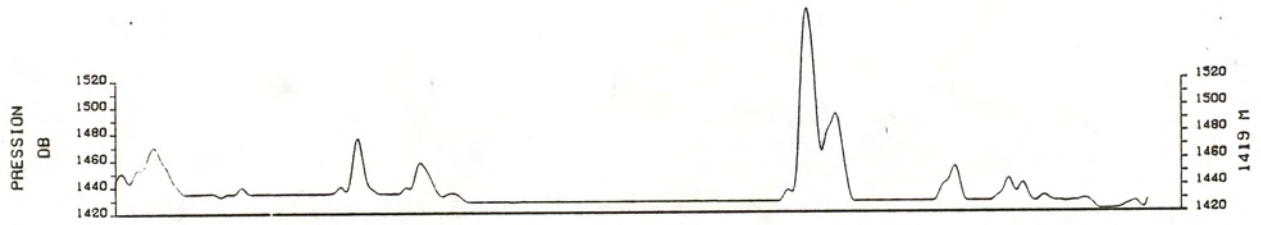
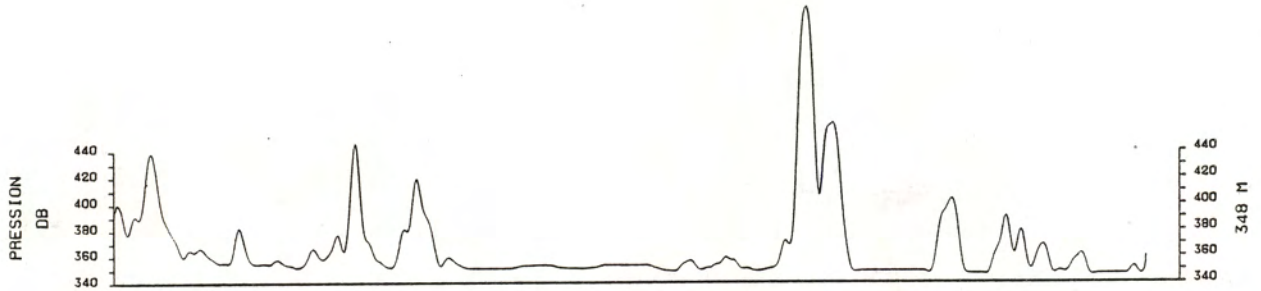


17 20 7 9 8 29 8 18 9 8 10 28 10 17 11 7 12 27 12 16 1 5 2 25 2 16 3 5 4 23 4 15 5 4 6 24 6 14 7 3 8

# MOORING : A1

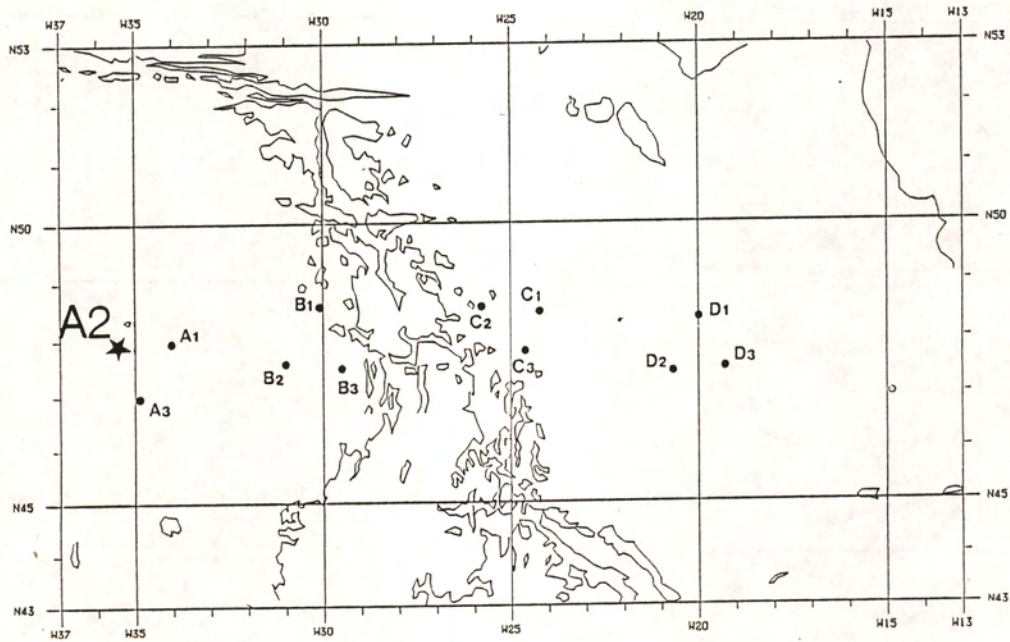


MOORING : A1

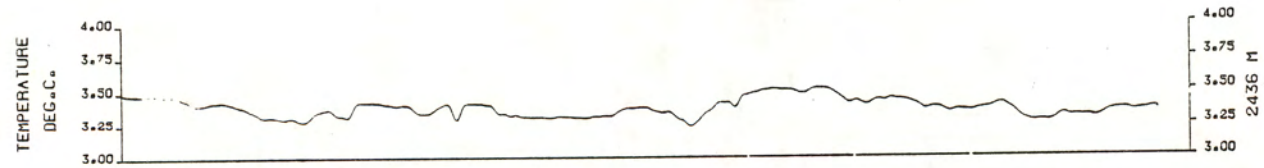
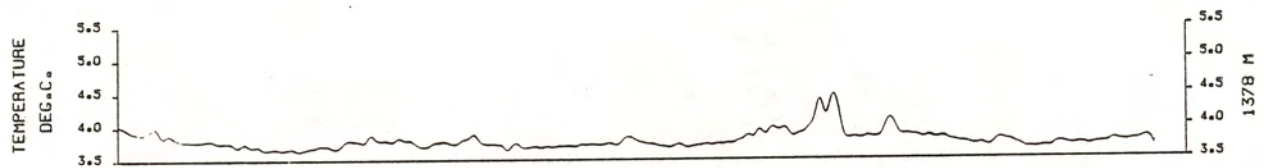
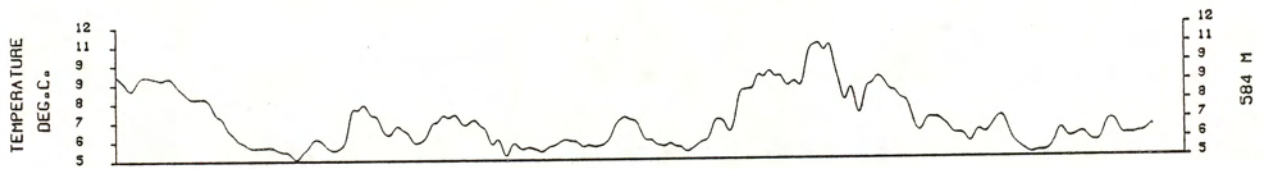
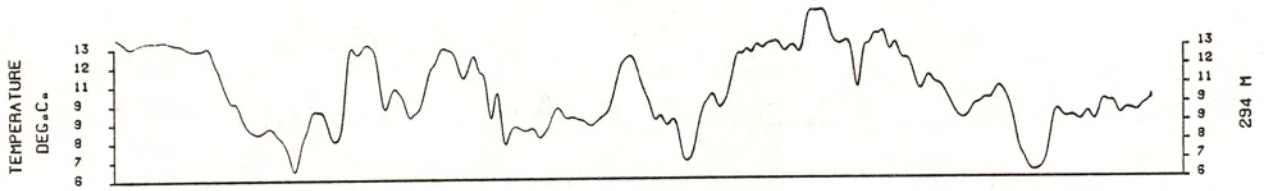


17 20 7 9 8 29 8 18 9 8 10 28 10 17 11 7 12 27 12 16 1 5 2 25 2 16 3 3 4 25 4 15 5 4 6 24 6 14 7 3 8

# MOORING A2

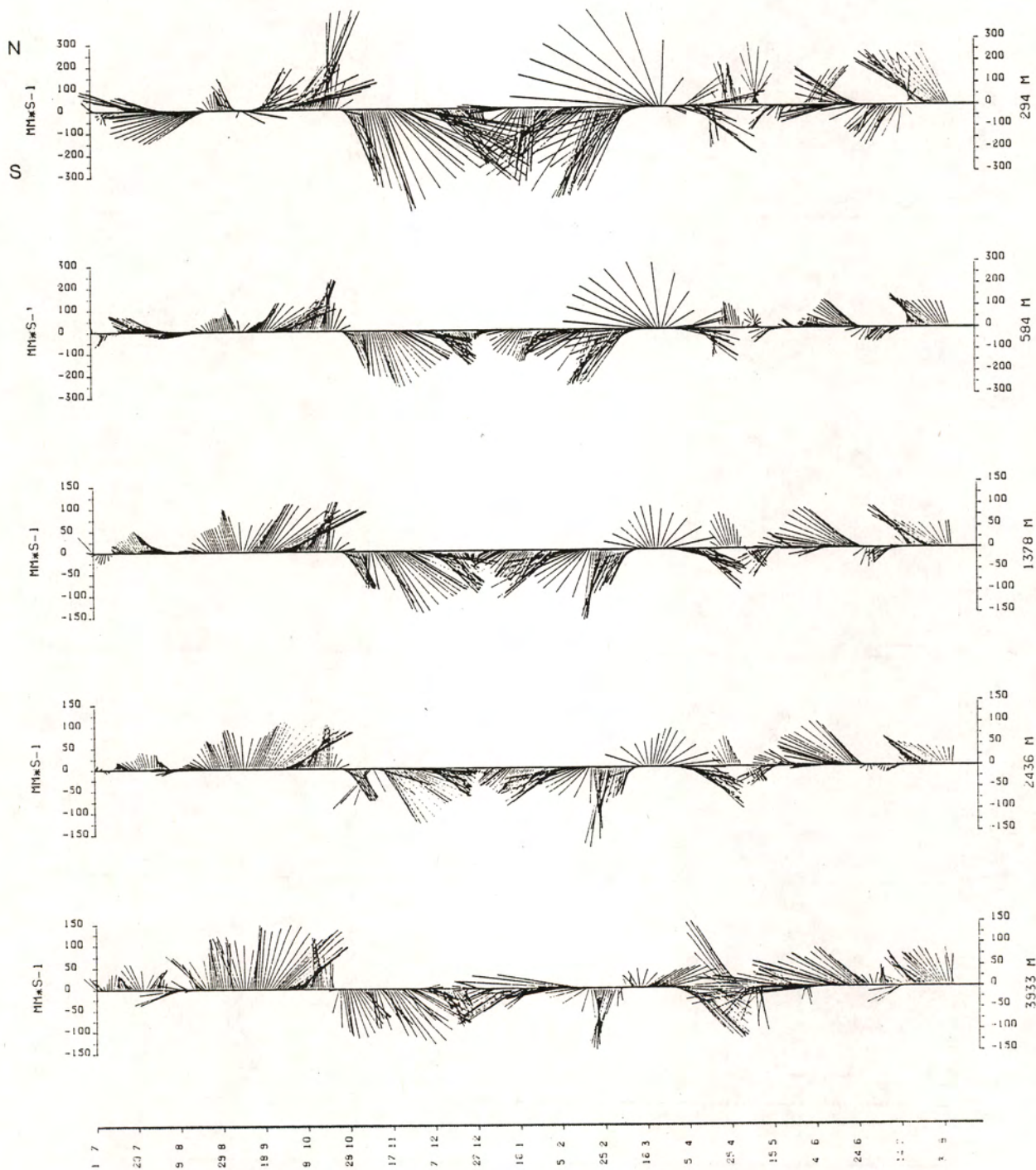


MOORING : A2



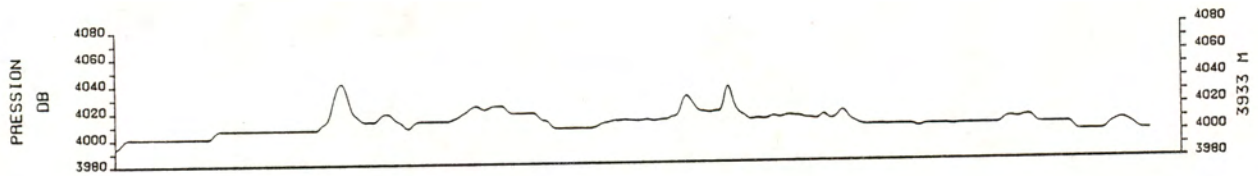
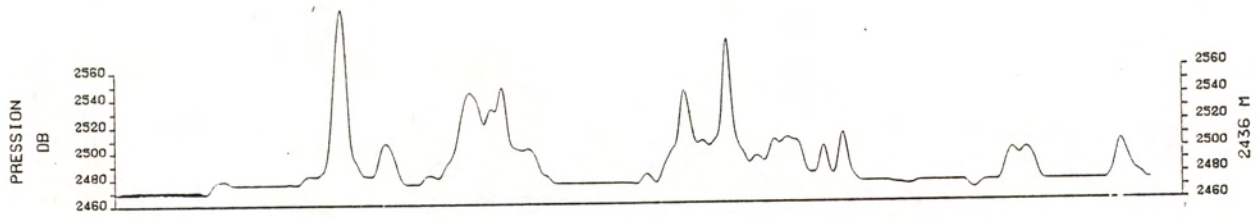
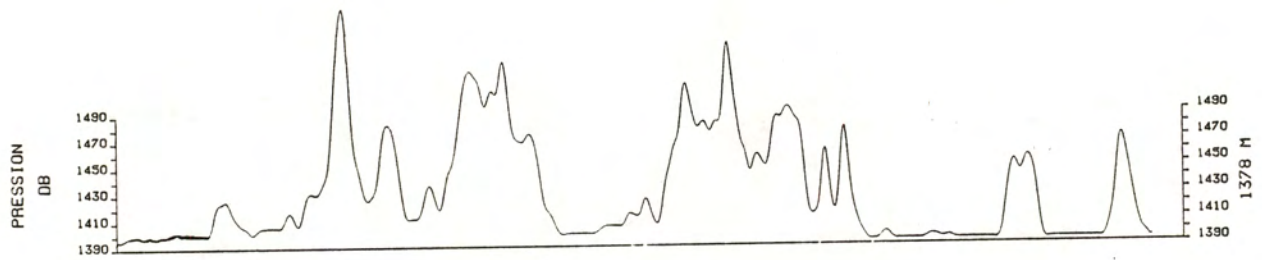
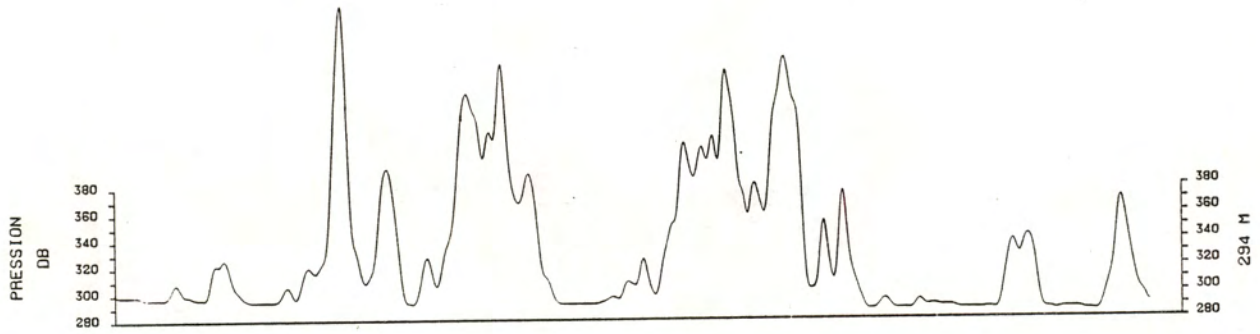
1 7  
20 7  
9 8  
29 8  
18 9  
8 10  
28 10  
17 11  
7 12  
27 12  
16 1  
5 2  
25 2  
16 3  
5 4  
25 4  
15 5  
4 6  
24 6  
14 7  
3 8

MOORING : A2



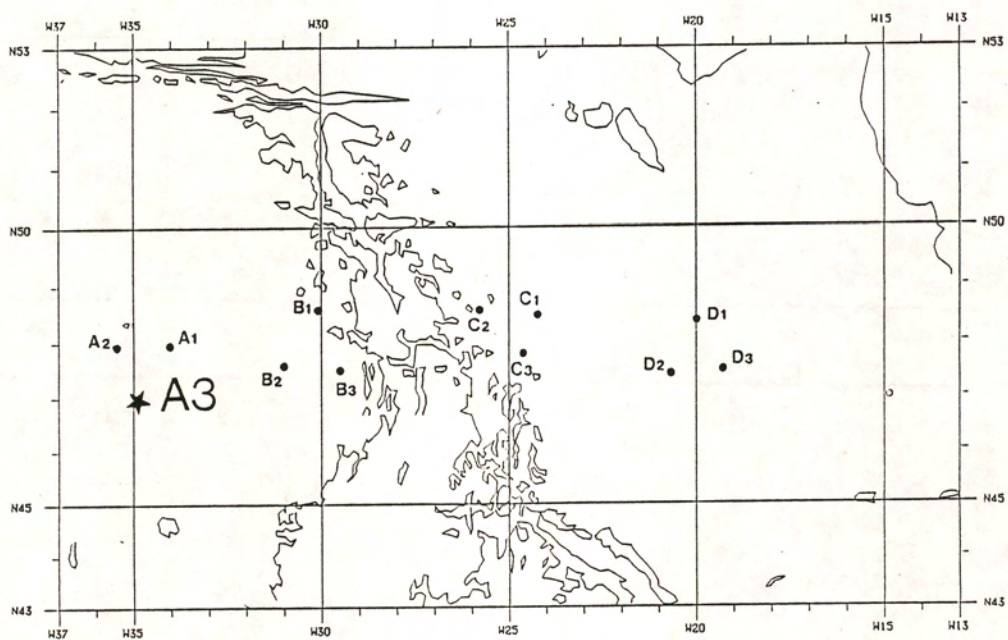


MOORING : A2

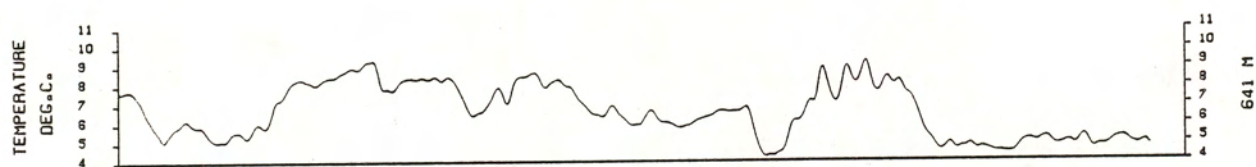
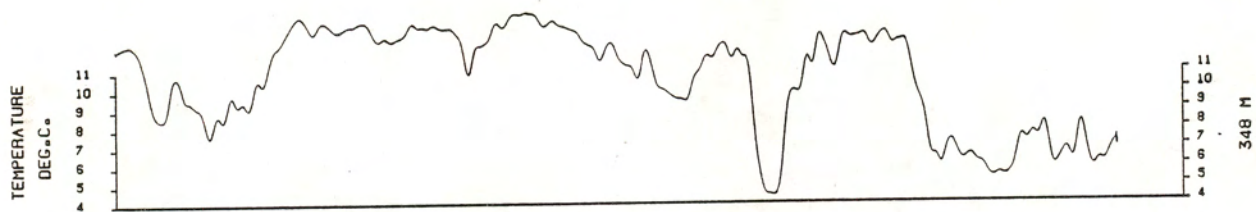


1.7 20.7 9.8 29.8 19.9 8.10 28.10 17.11 7.12 27.12 16.1 5.2 25.2 16.3 5.4 25.4 15.5 4.6 24.6 14.7 3.8

# MOORING A3

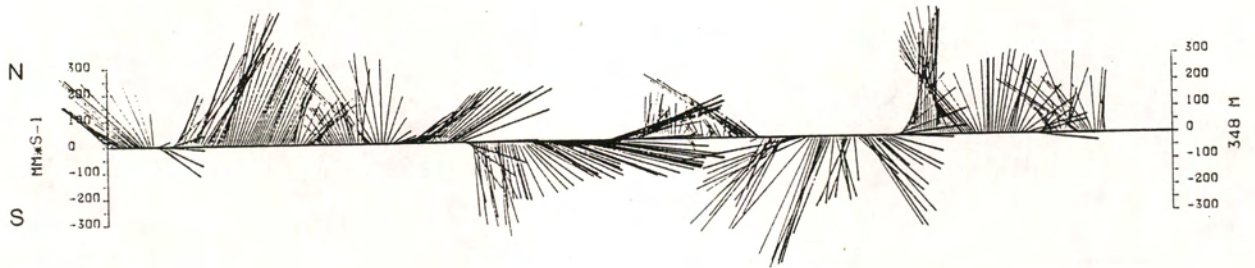


MOORING : A3



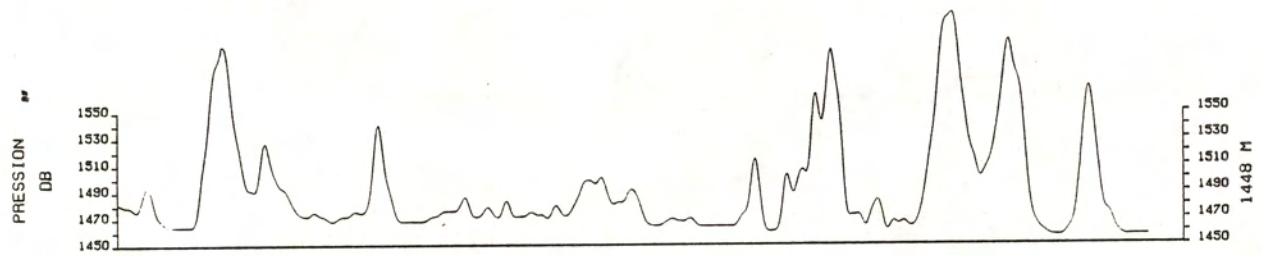
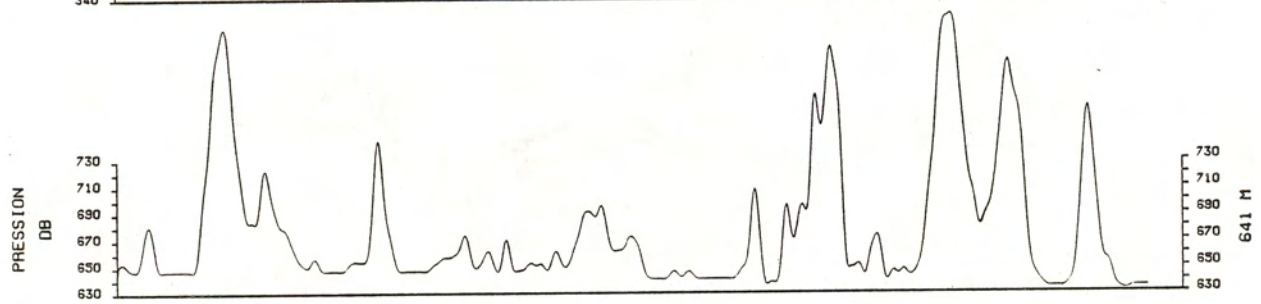
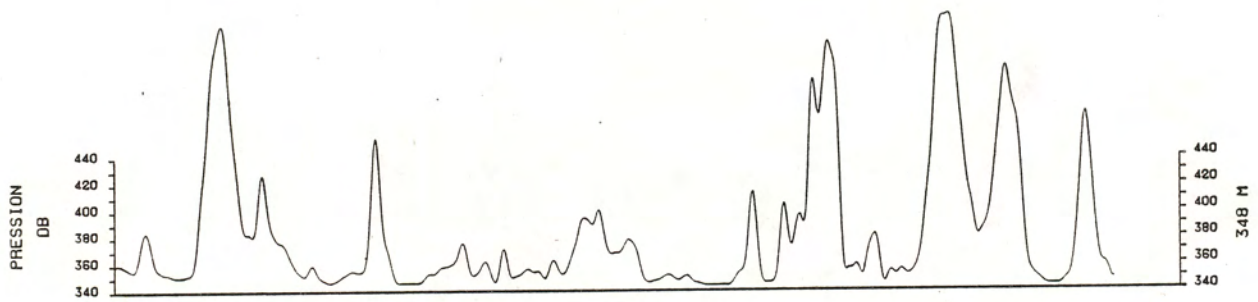
2 7  
21 7  
10 8  
30 8  
19 9  
9 10  
29 10  
18 11  
8 12  
28 12  
17 1  
6 2  
26 2  
17 3  
6 4  
26 4  
16 5  
5 6  
25 6  
15 7  
4 8

MOORING : A3



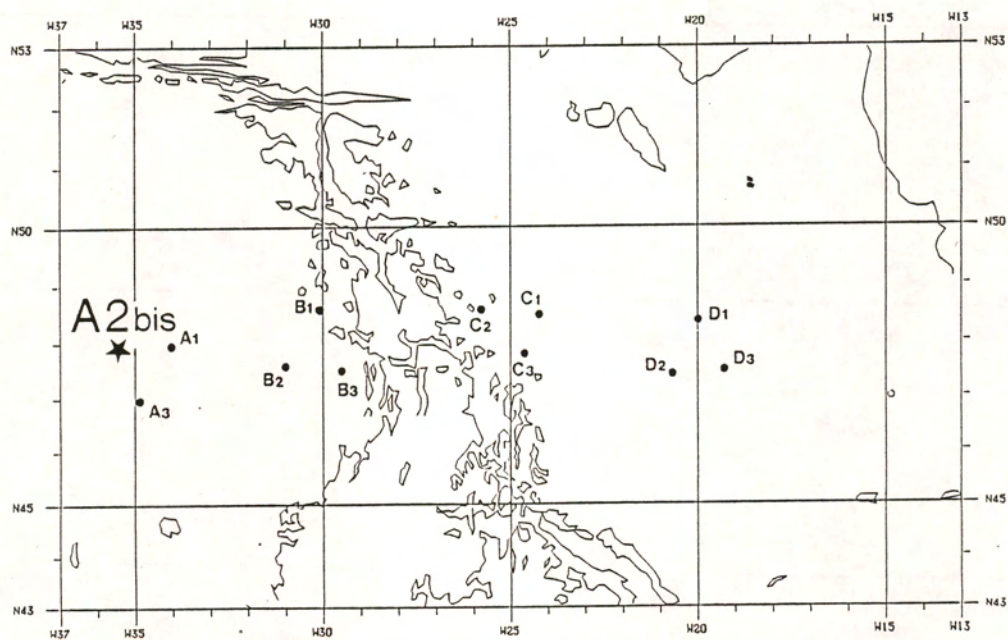
10 3 30 9 19 9 9 10 29 10 19 11 9 12 29 12 17 1 6 2 26 2 17 3 6 4 26 4 16 5 5 6 25 6 15 7 4 7

MOORING : A3

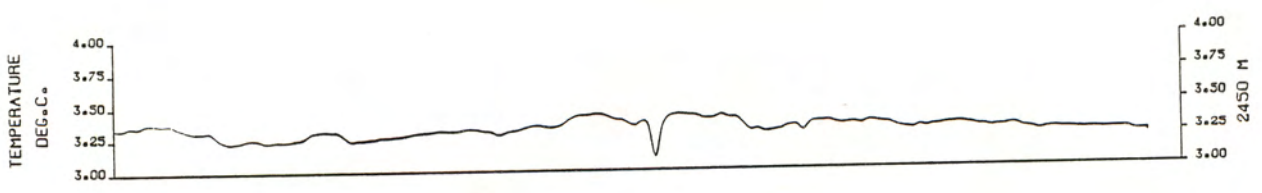
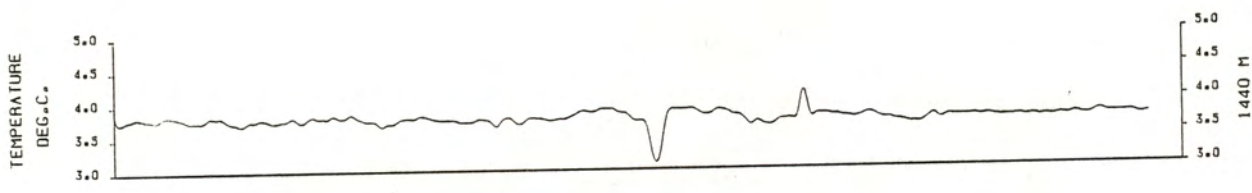
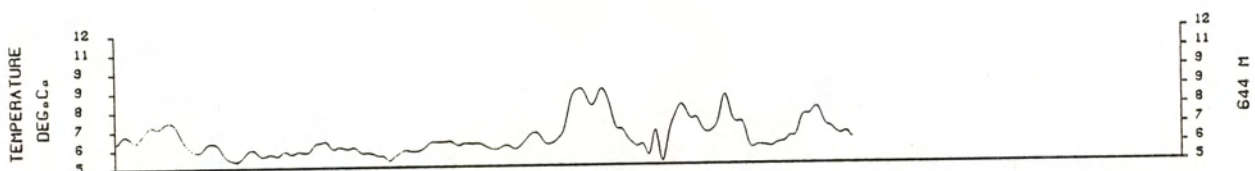
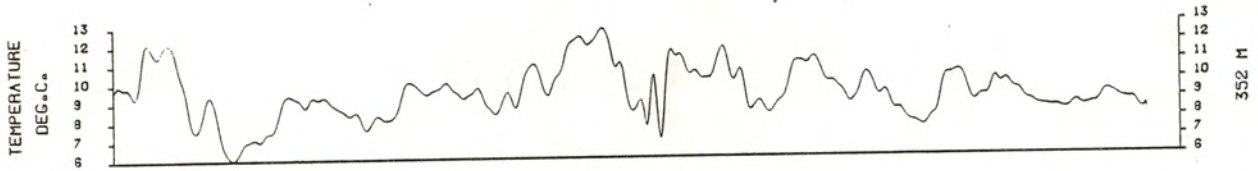


2 7 21 7 10 8 30 8 19 9 9 10 29 10 18 11 8 12 28 12 17 1 6 2 26 2 17 3 6 4 28 4 16 5 5 6 25 6 15 7 4 8

# MOORING A2bis

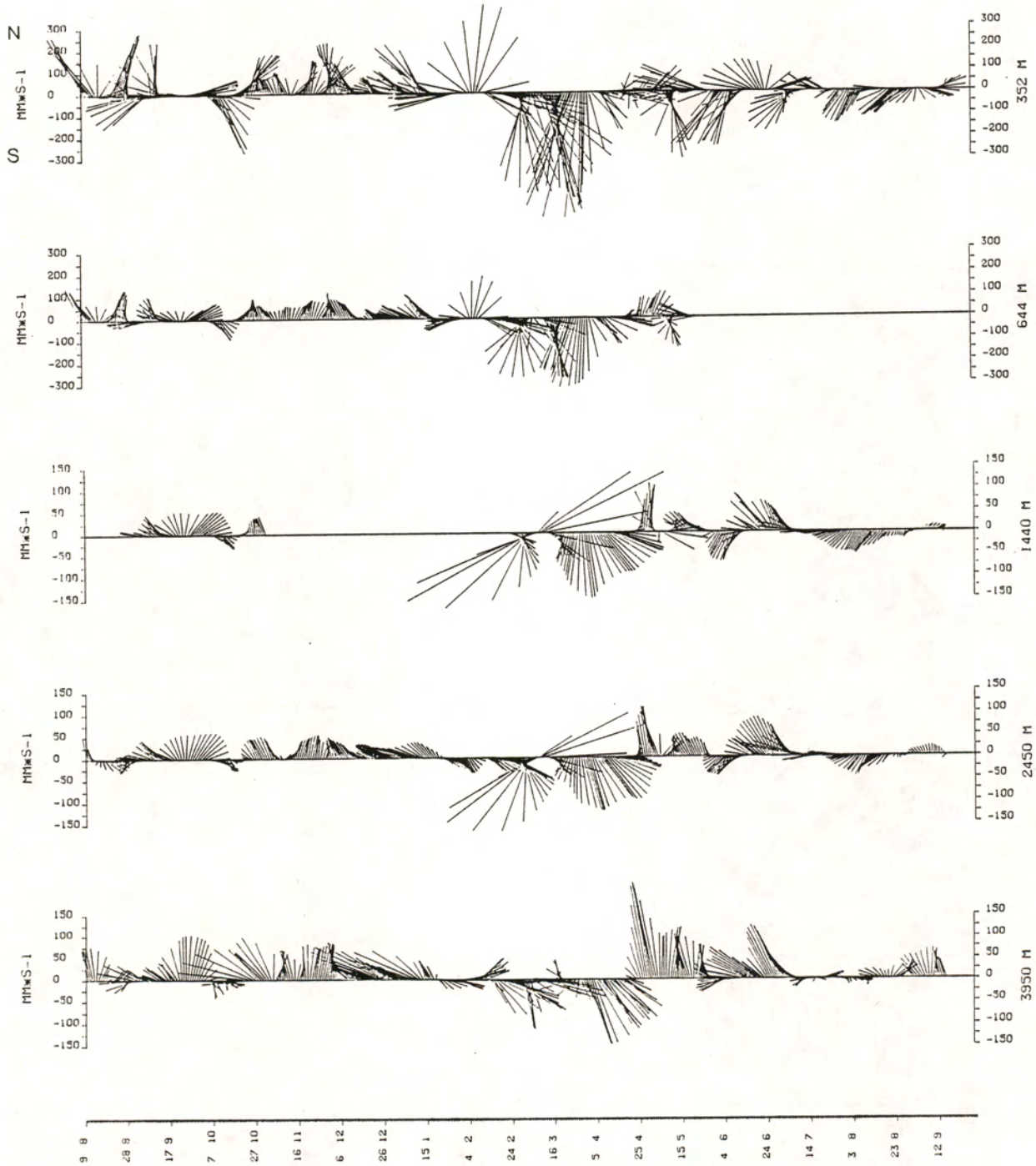


MOORING : A2 bis



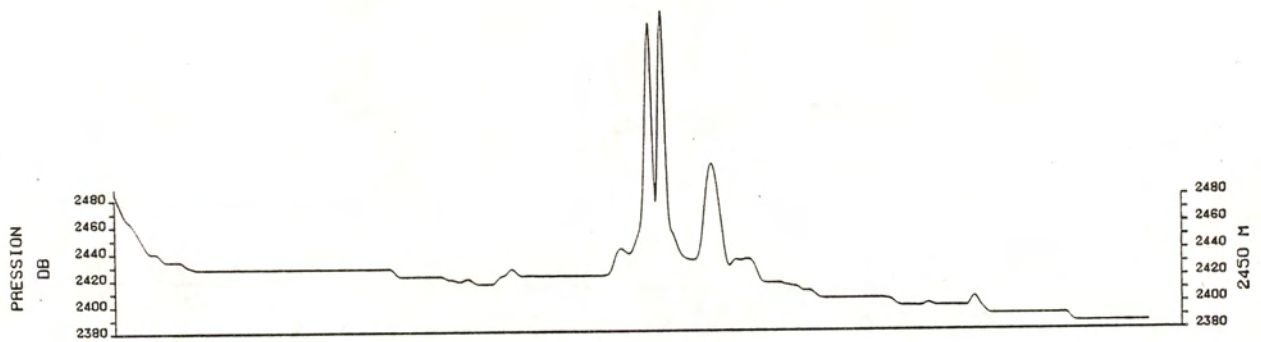
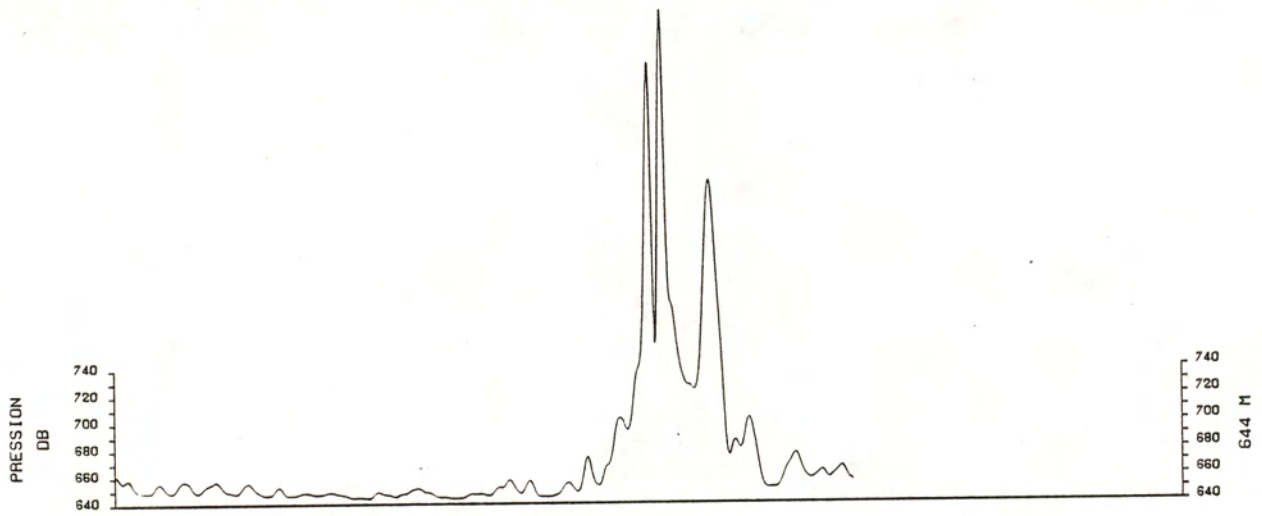
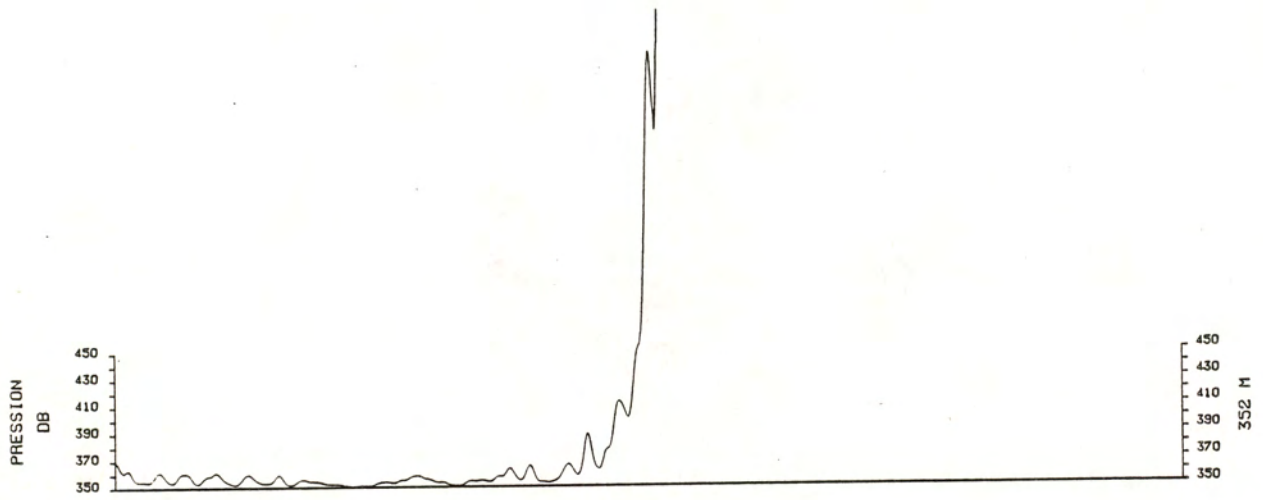
9 8 29 8 17 9 7 10 27 10 16 11 6 12 26 12 15 1 4 2 24 2 16 3 5 4 25 4 15 5 4 6 24 6 14 7 3 8 23 8 12 9

MOORING : A2 bis





MOORING : A2 bis



9 8  
28 8  
17 9  
7 10  
27 10  
16 11  
6 12  
26 12  
15 1  
4 2  
24 2  
16 3  
5 4  
25 4  
15 5  
4 6  
24 6  
14 7  
3 8  
23 8  
12 9

# CLUSTER B

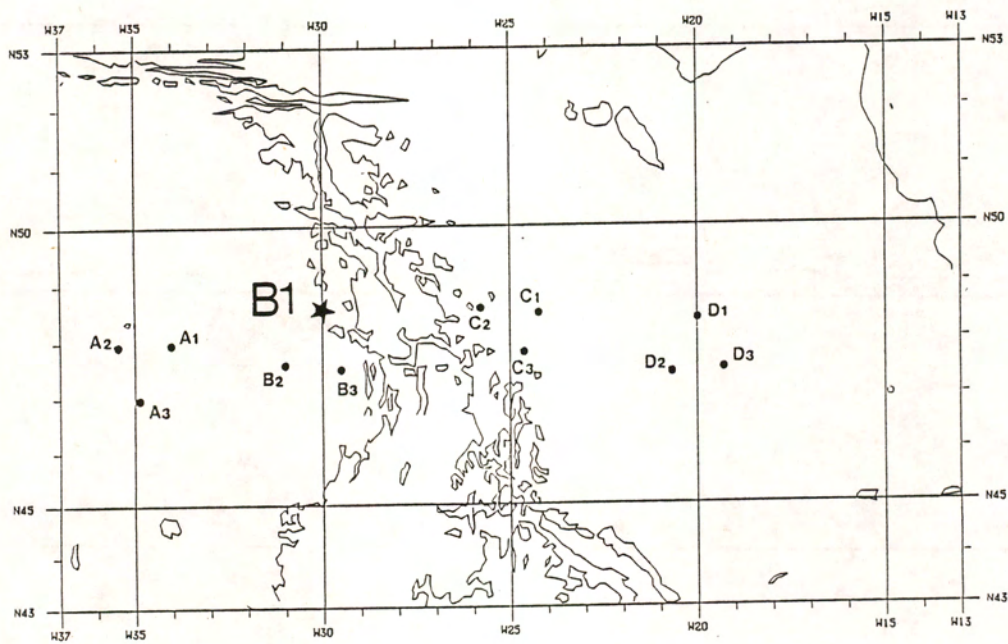
## LOCAL BATHYMETRY



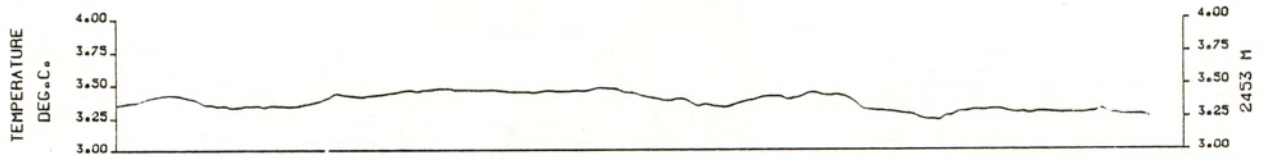
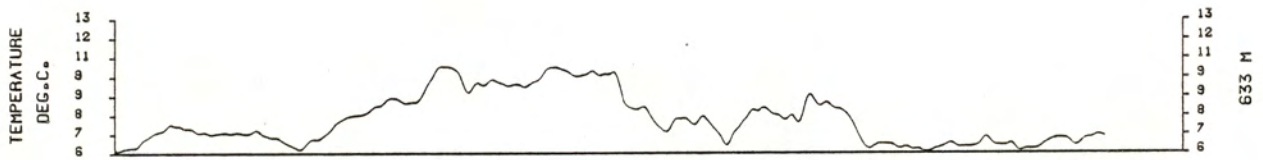
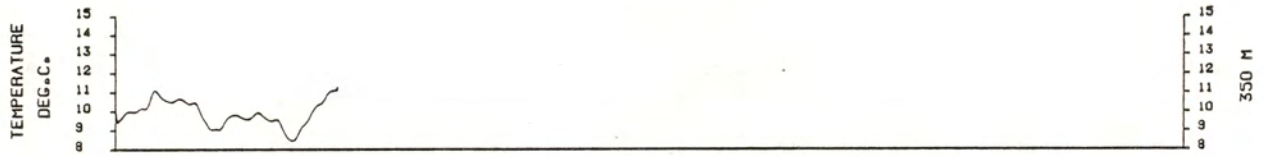
100 km

Contour labels are in  $10^3$  m

# MOORING B1

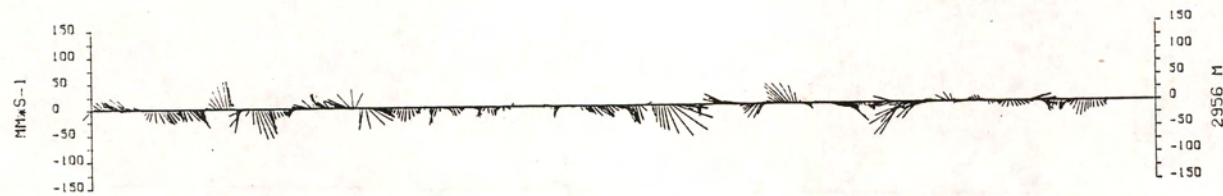
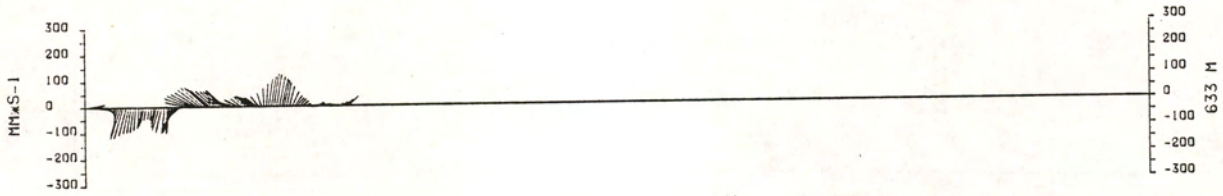
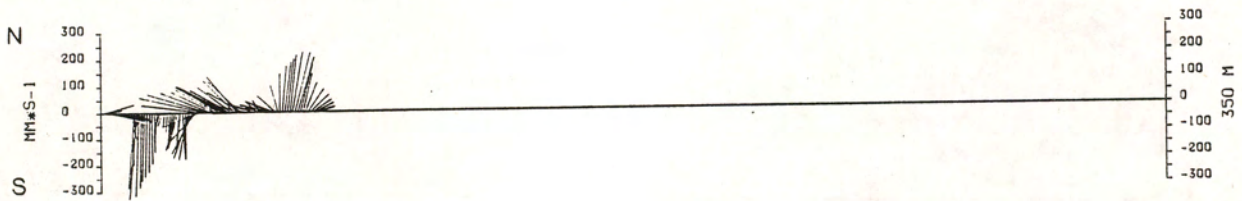


MOORING : B1



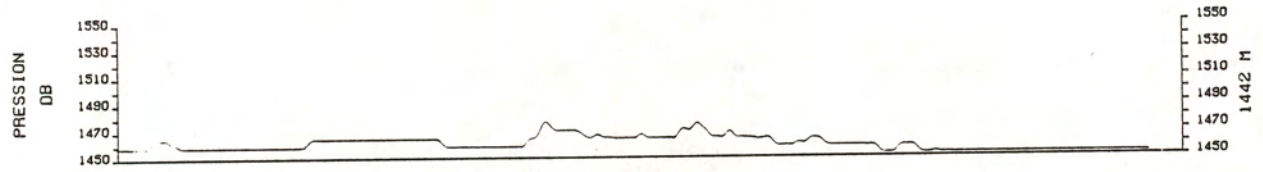
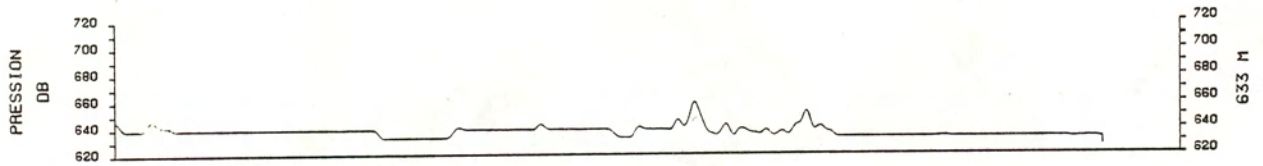
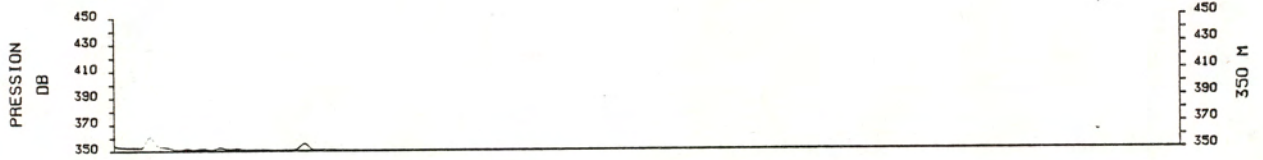
29 6 18 7 7 8 27 8 16 9 6 10 26 10 15 11 5 12 25 12 14 1 3 2 23 2 14 3 3 4 23 4 13 5 2 6 22 6 12 7 1 8

MOORING : B1



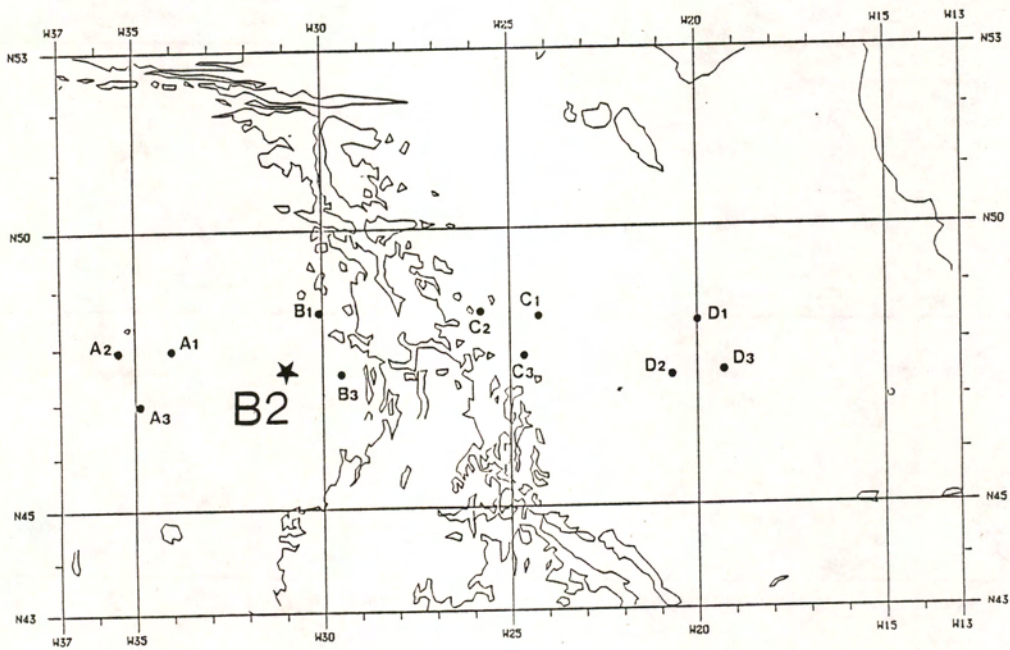
29 6 19 / 7 8 27 9 16 9 6 10 26 10 15 11 5 12 25 12 14 1 3 2 23 2 14 3 3 4 23 4 13 5 2 6 22 6 12 7 1 8

MOORING : B1

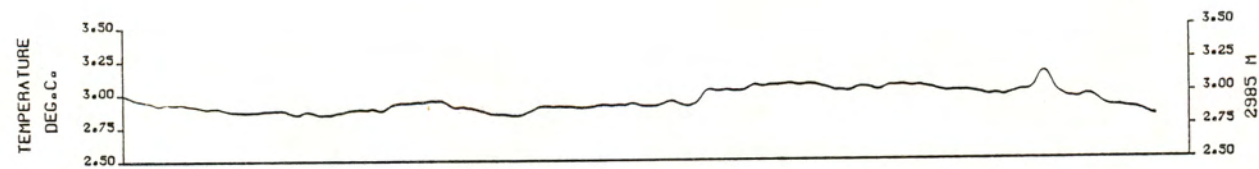
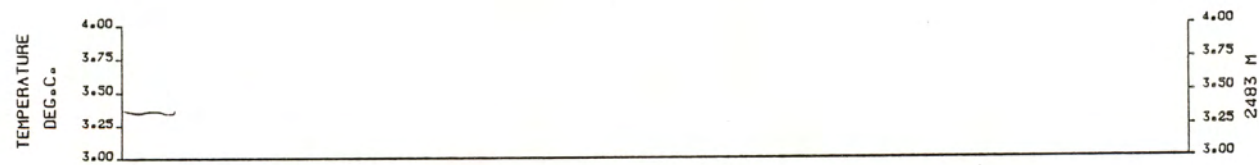
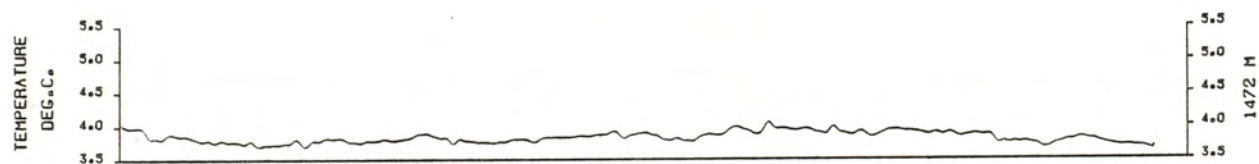
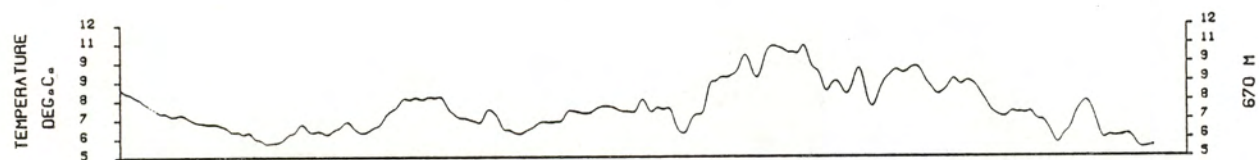
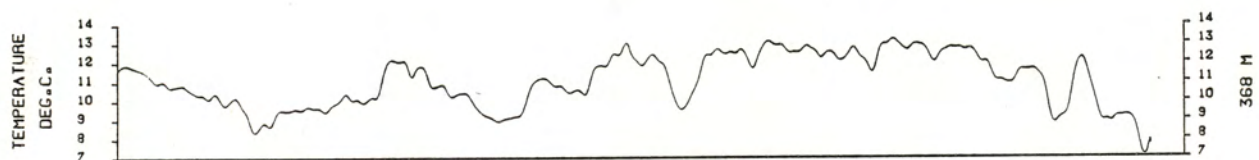


29 6 18 7 7 8 27 8 16 9 6 10 26 10 15 11 5 12 25 12 14 1 3 2 23 2 14 3 3 4 23 4 13 5 2 6 22 6 12 7 1 8

# MOORING B2



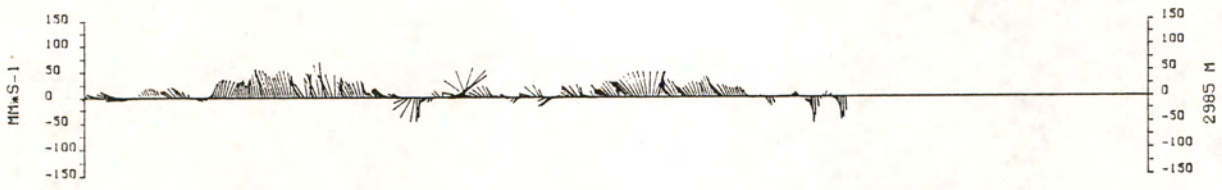
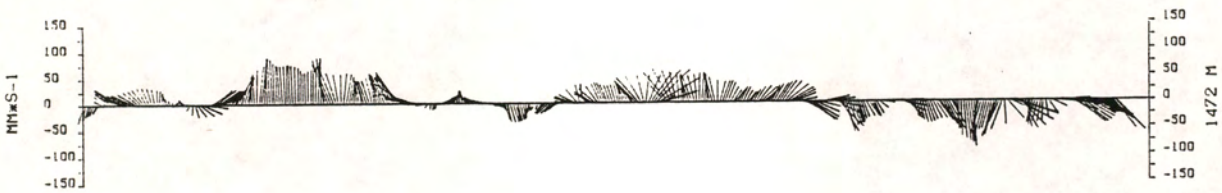
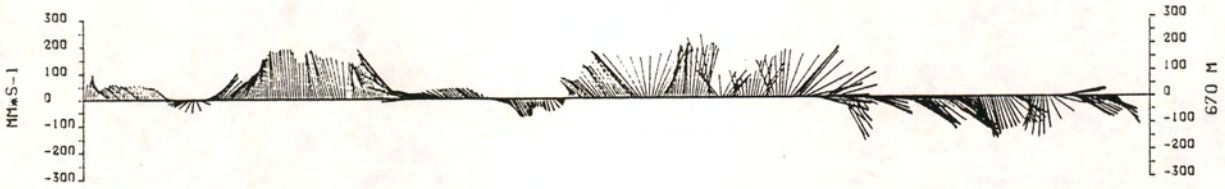
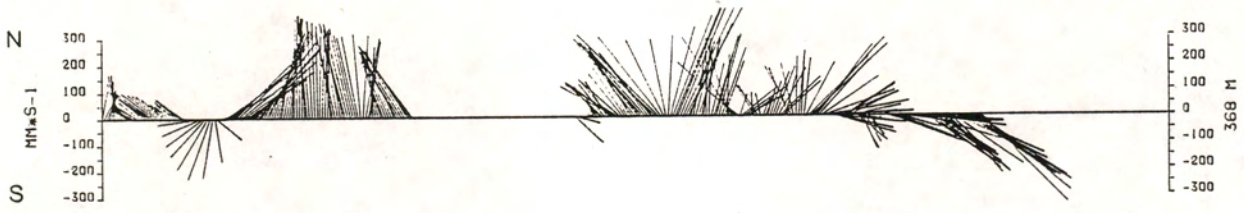
MOORING : B2



30.6 19.7 8.8 28.8 17.9 7.10 27.10 16.11 6.12 25.12 15.1 4.2 24.2 15.3 4.4 24.4 14.5 3.6 23.6 13.7

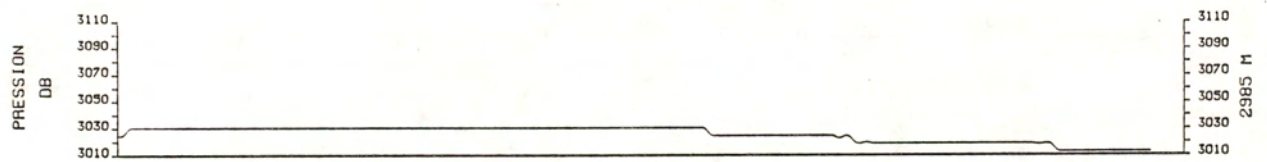
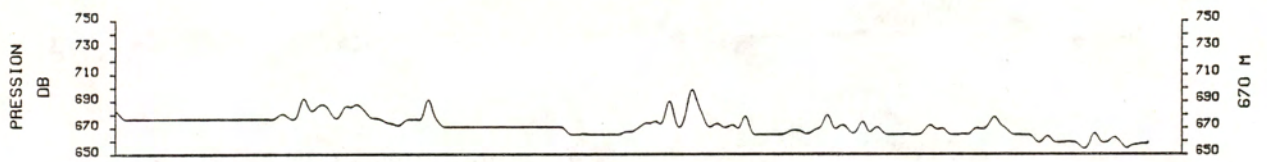
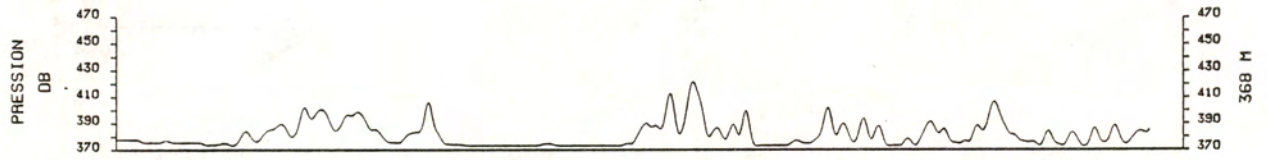


MOORING : B2



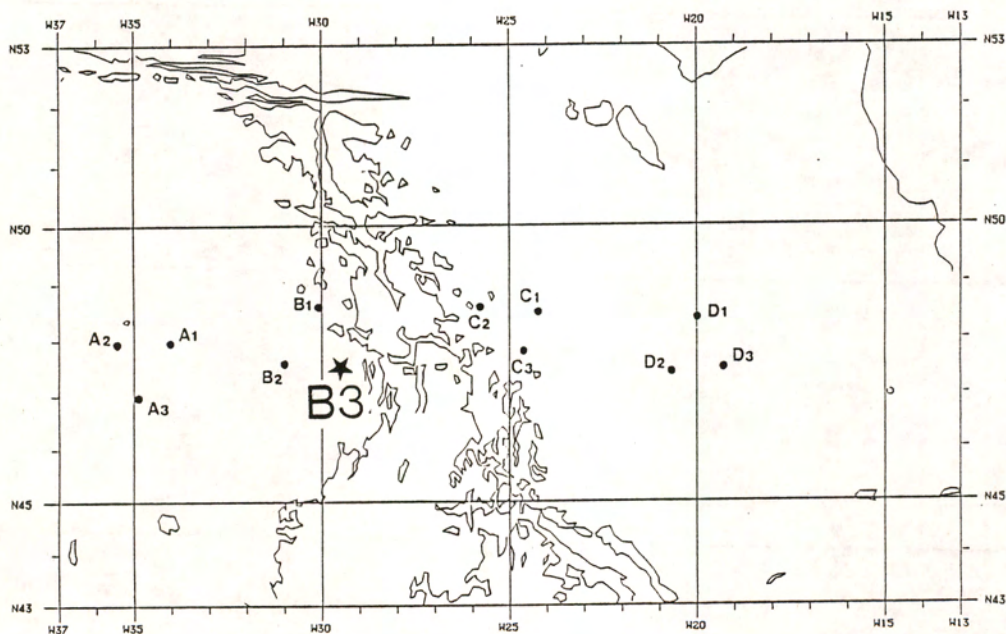
30 6  
19 7  
8 8  
28 8  
17 9  
7 10  
27 10  
16 11  
6 12  
26 12  
15 1  
4 2  
24 2  
15 3  
4 4  
24 4  
14 5  
3 6  
23 6  
13 7  
2 8

MOORING : B2

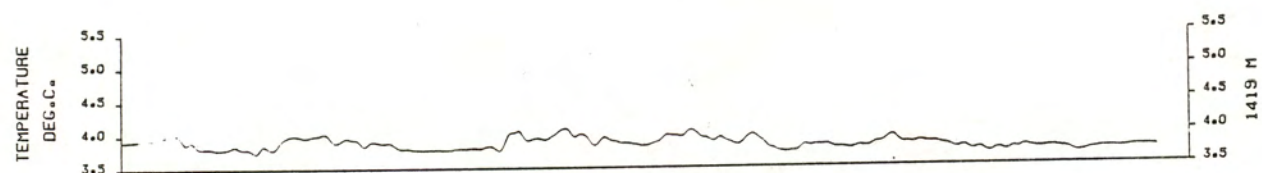
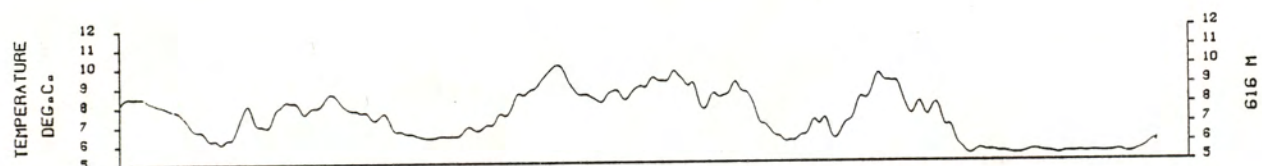
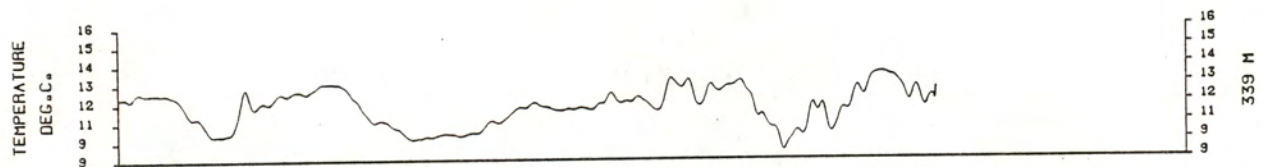


30 6 19 7 8 8 28 9 17 9 7 10 27 10 16 11 6 12 25 12 15 1 4 2 24 2 15 3 4 4 24 4 14 5 3 6 23 6 13 7 2 8

# MOORING B3

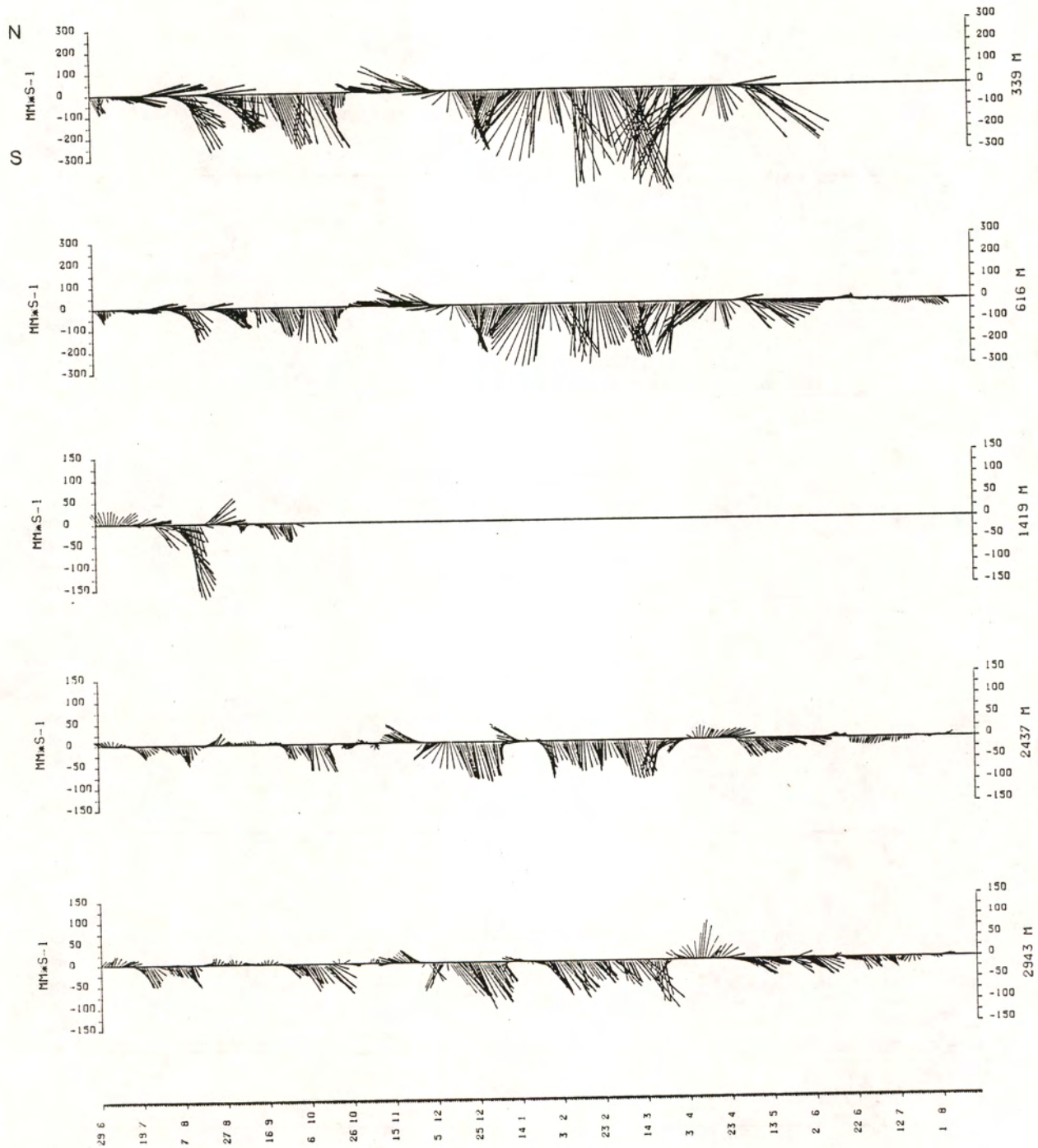


MOORING : B3

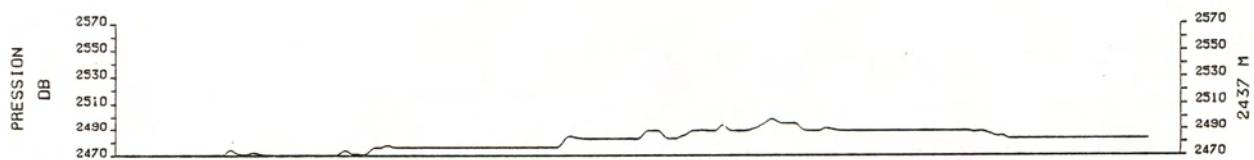
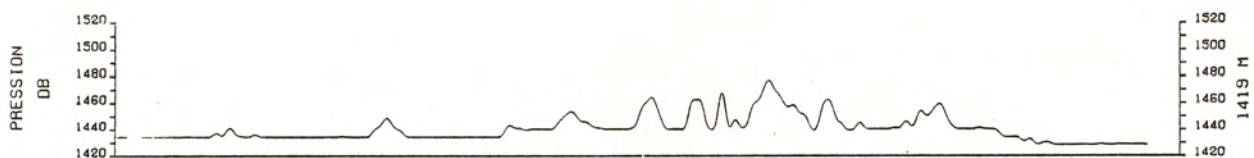
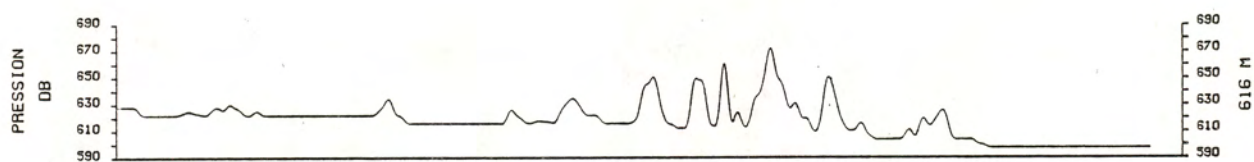
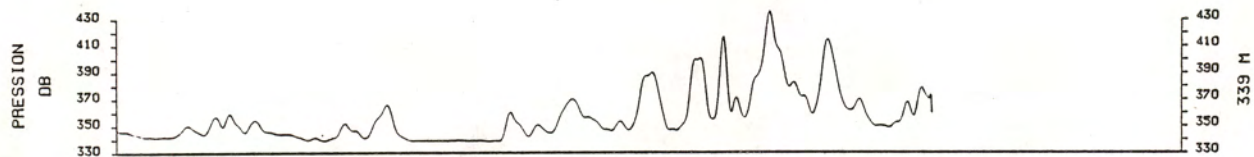


29.6 18.7 7.8 27.8 16.9 6.10 26.10 15.11 5.12 25.12 14.1 3.2 23.2 14.3 3.4 23.4 13.5 2.6 22.6 12.7 1.8

MOORING : B3

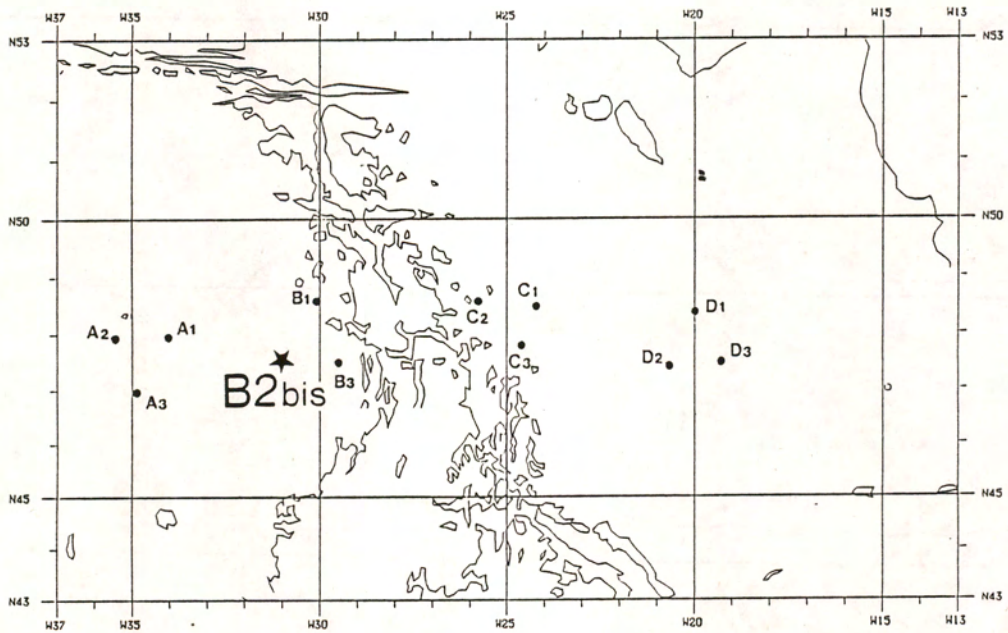


# MOORING : B3

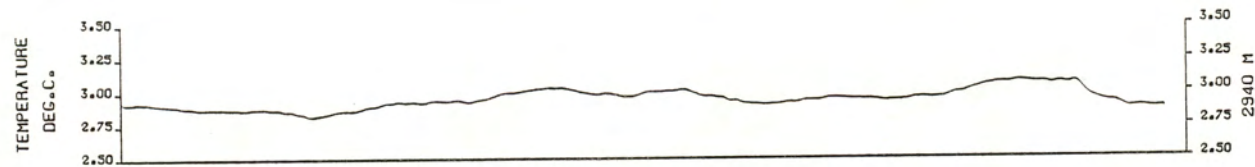
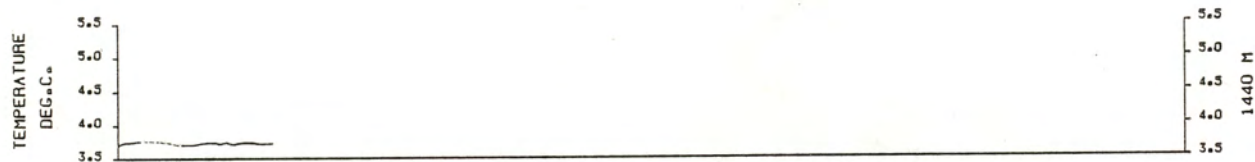
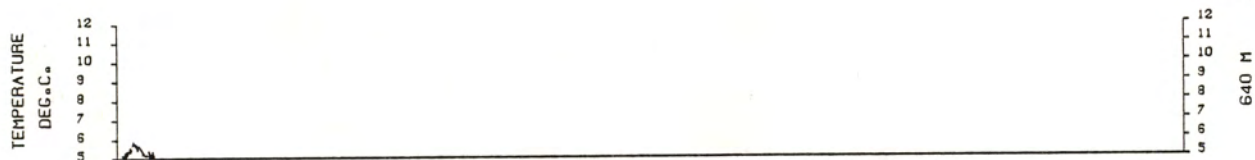
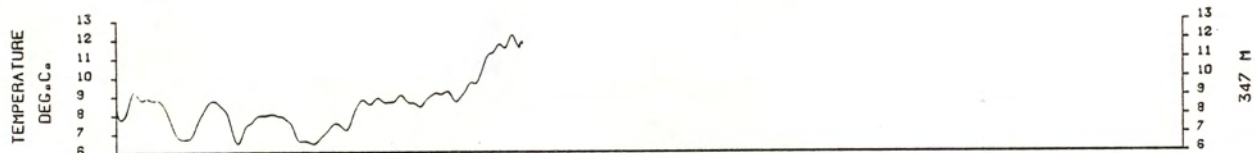


29 6  
18 7  
7 8  
27 8  
16 9  
6 10  
26 10  
15 11  
5 12  
25 12  
14 1  
3 2  
23 2  
14 3  
3 4  
23 4  
13 5  
2 6  
22 6  
12 7  
1 8

# MOORING B2 bis



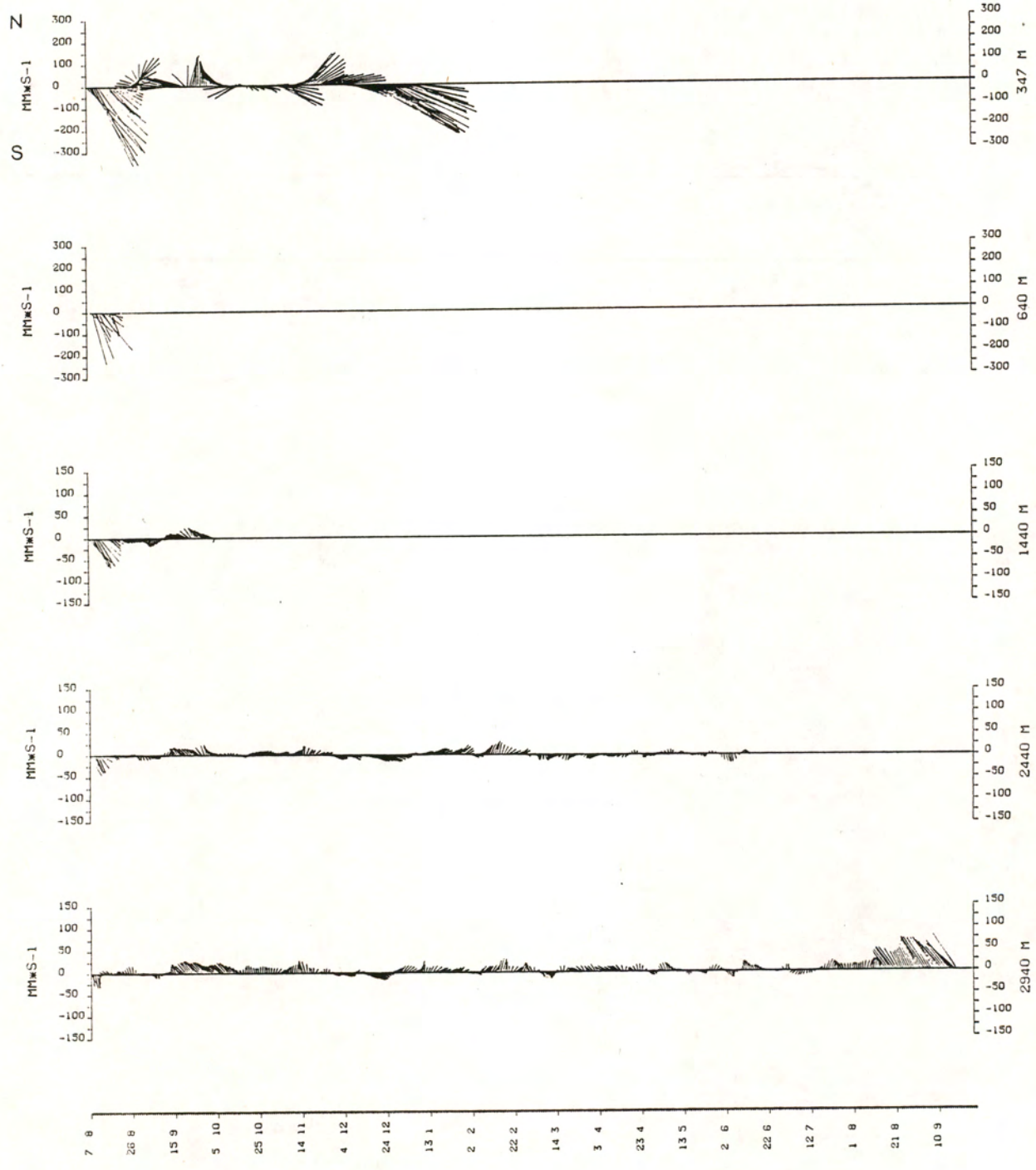
MOORING : B2 bis



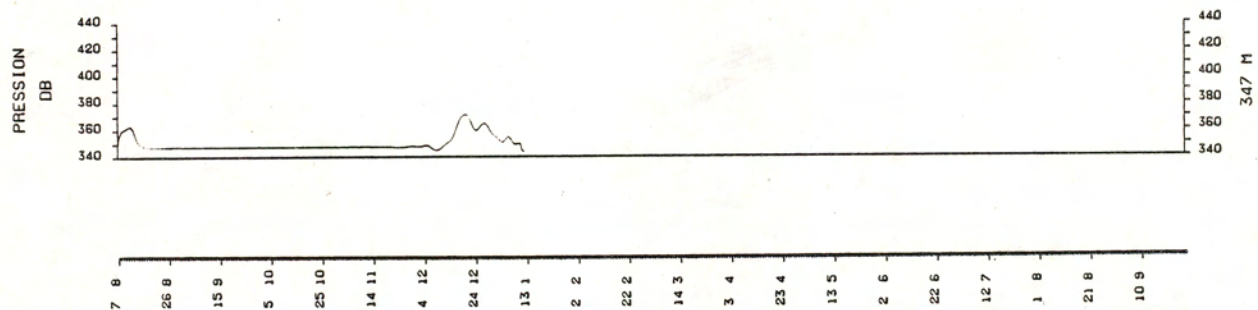
7 8 26 8 15 9 5 10 25 10 14 11 4 12 24 12 13 1 2 2 22 2 14 3 3 4 23 4 13 5 2 6 22 6 12 7 1 8 21 8 10 9



MOORING : B2 bis

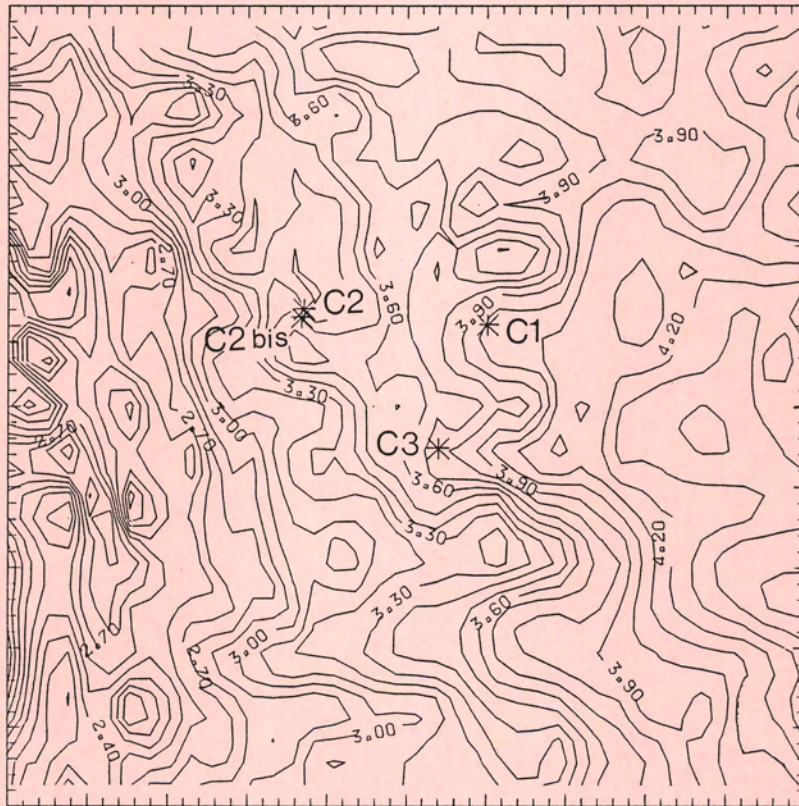


MOORING : B2 bis



# CLUSTER C

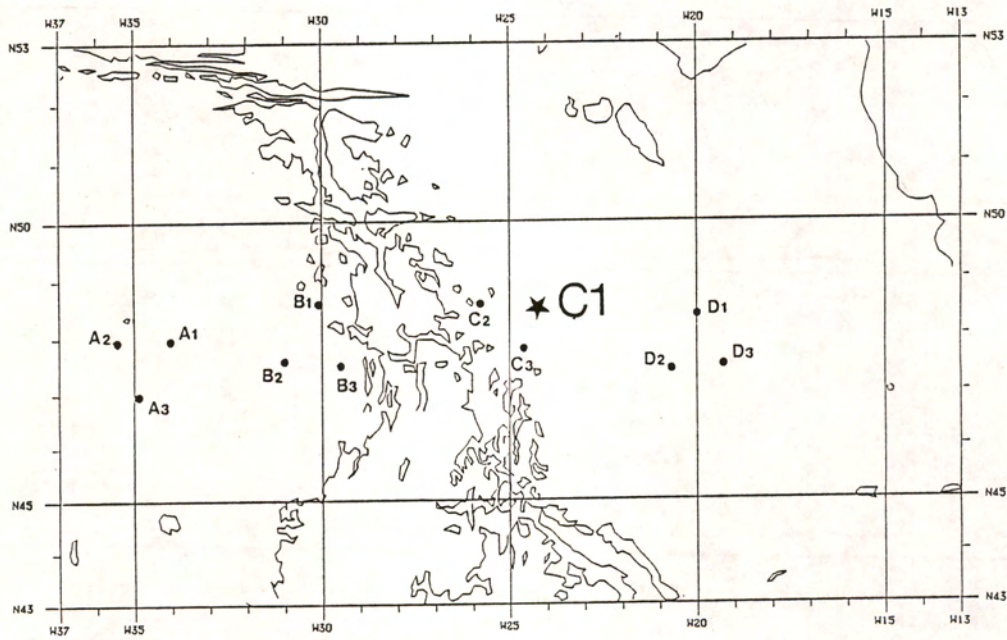
## LOCAL BATHYMETRY



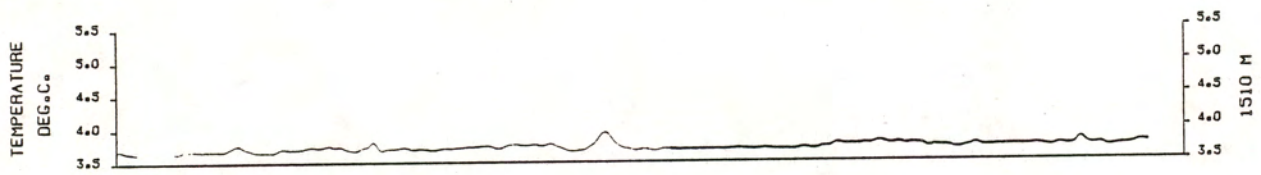
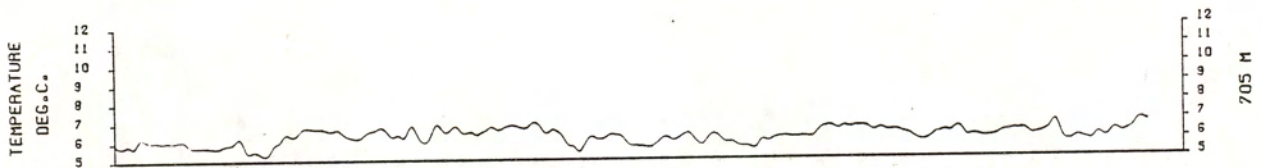
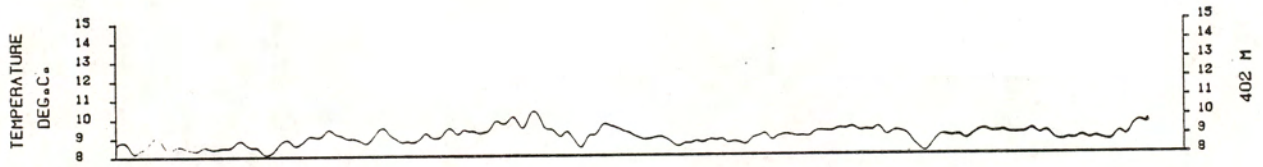
100km

Contour labels are in  $10^3$  m

# MOORING C1

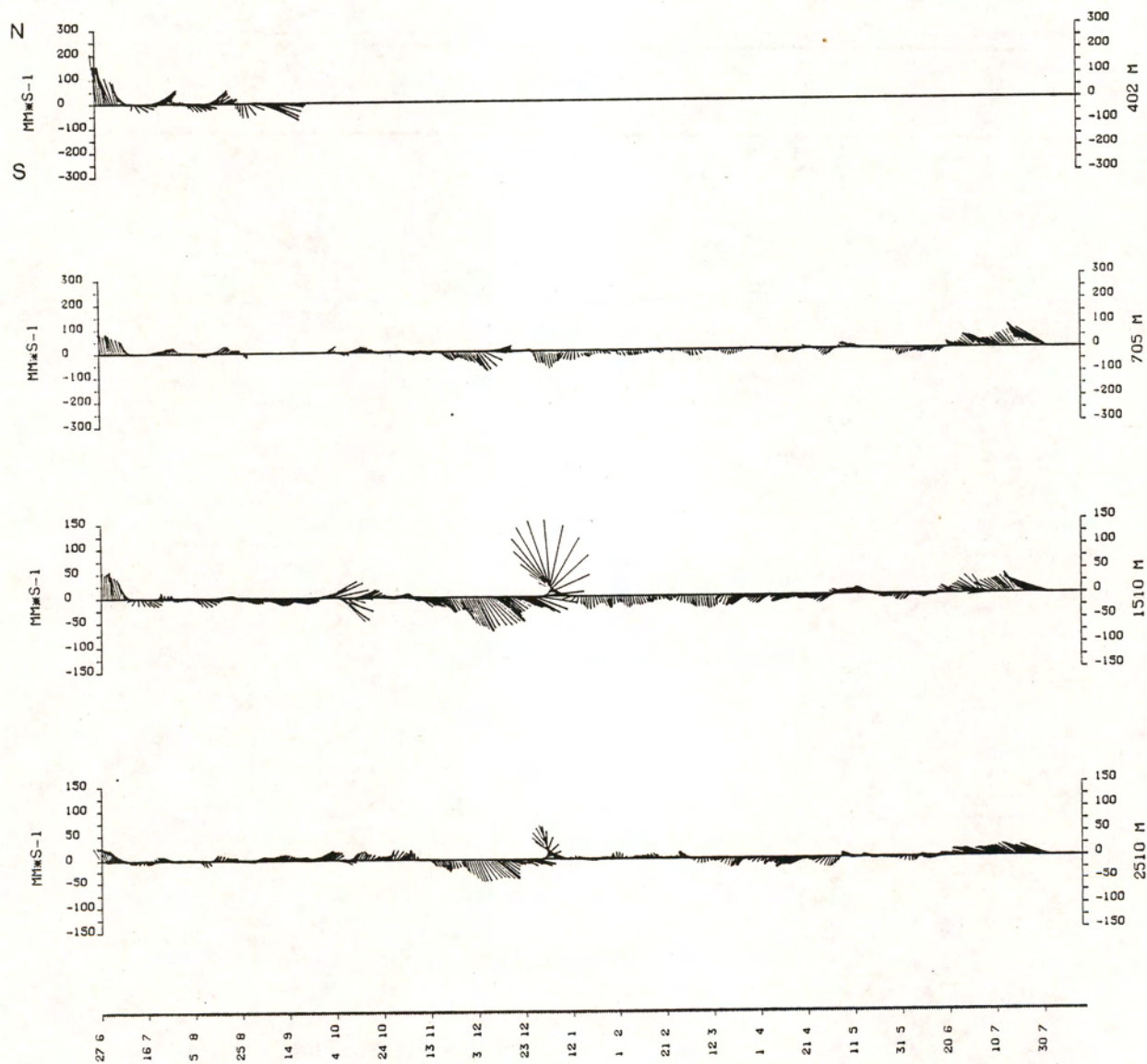


MOORING : C1

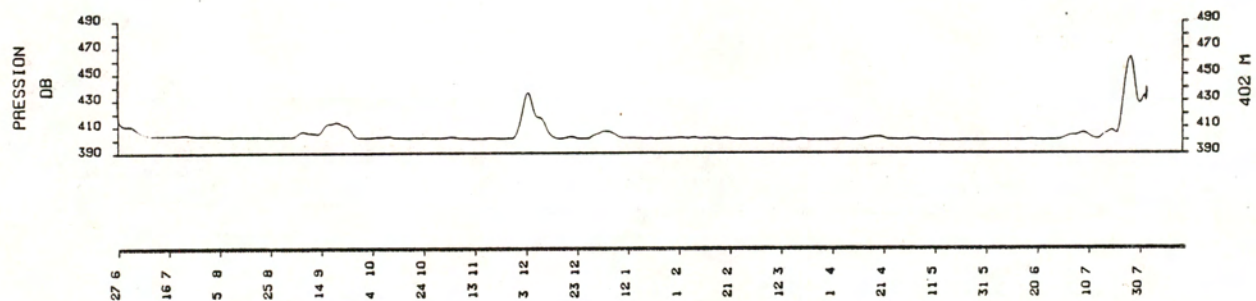


27 6  
16 7  
5 8  
25 8  
14 9  
4 10  
24 10  
13 11  
3 12  
23 12  
12 1  
1 2  
21 2  
12 3  
1 4  
21 4  
11 5  
31 5  
20 6  
10 7  
30 7

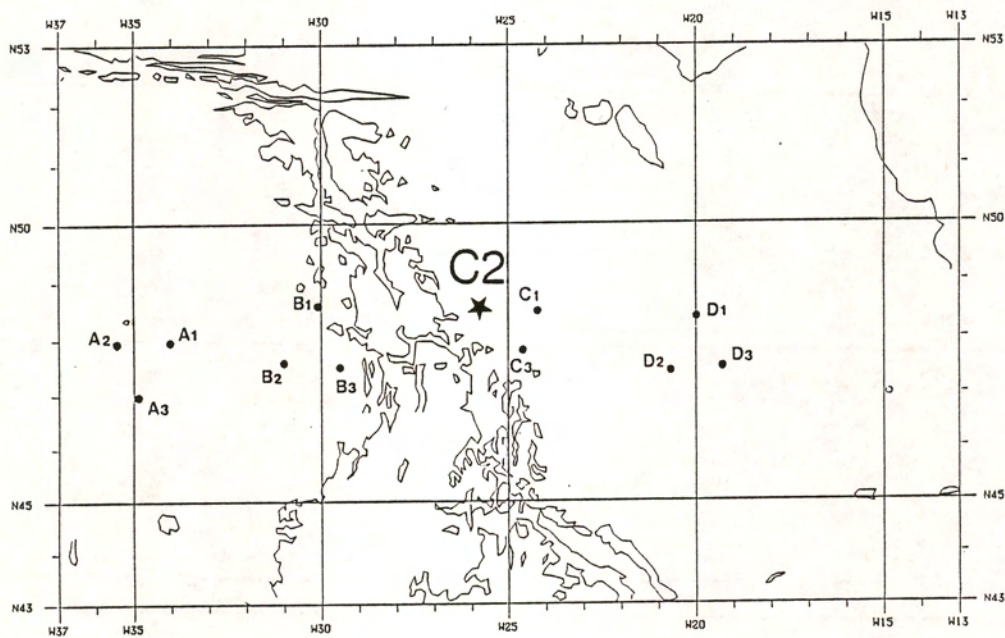
MOORING : C1



MOORING : C1

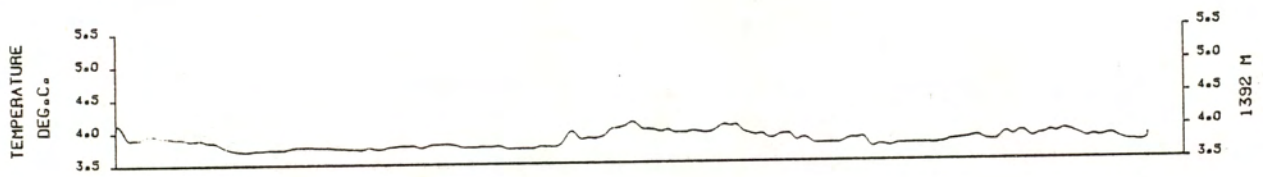
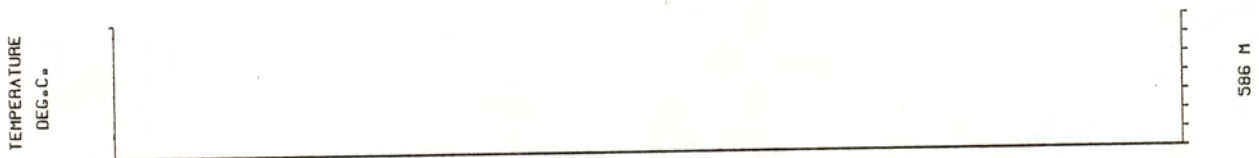


# MOORING C2



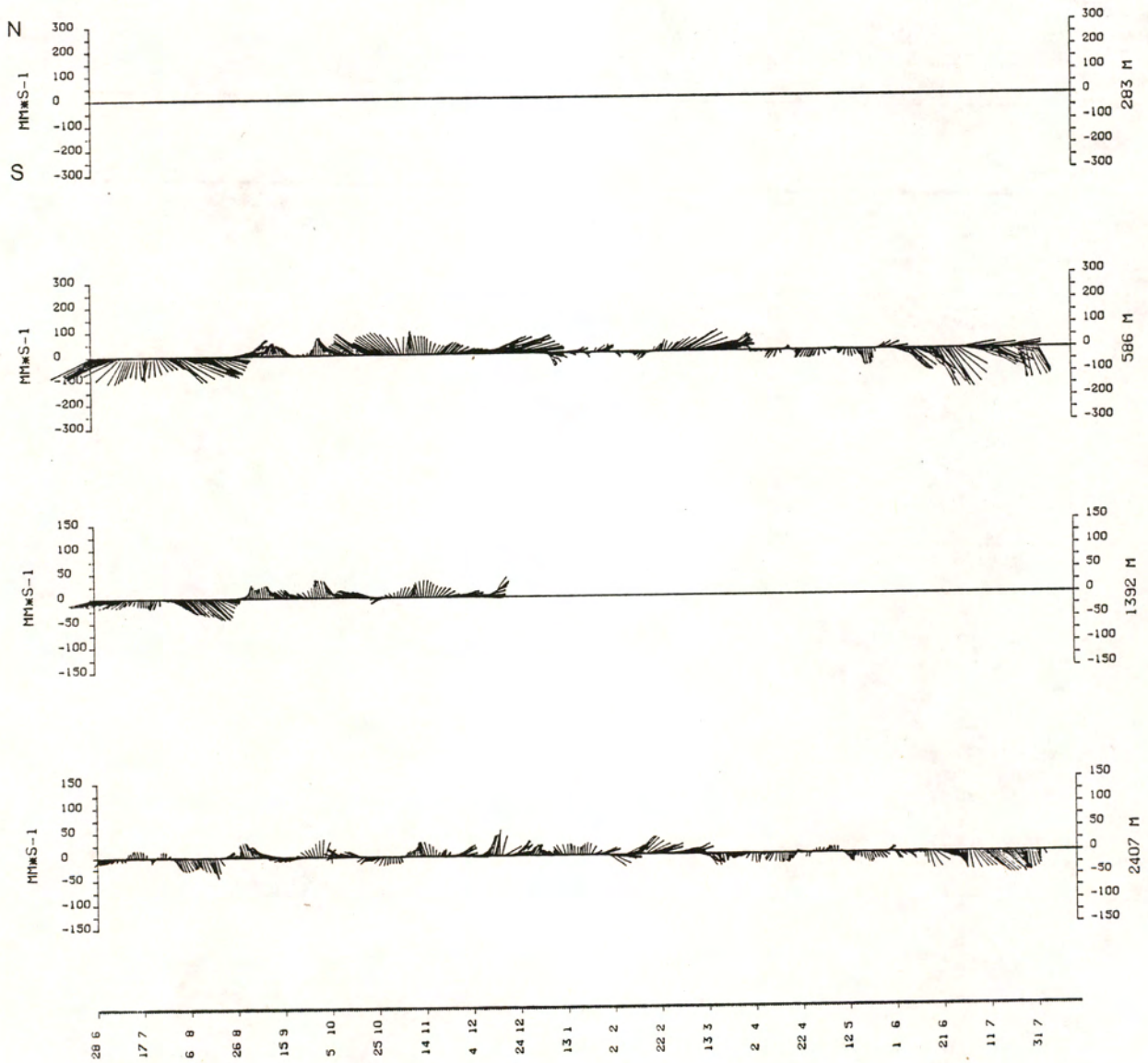


MOORING : C2

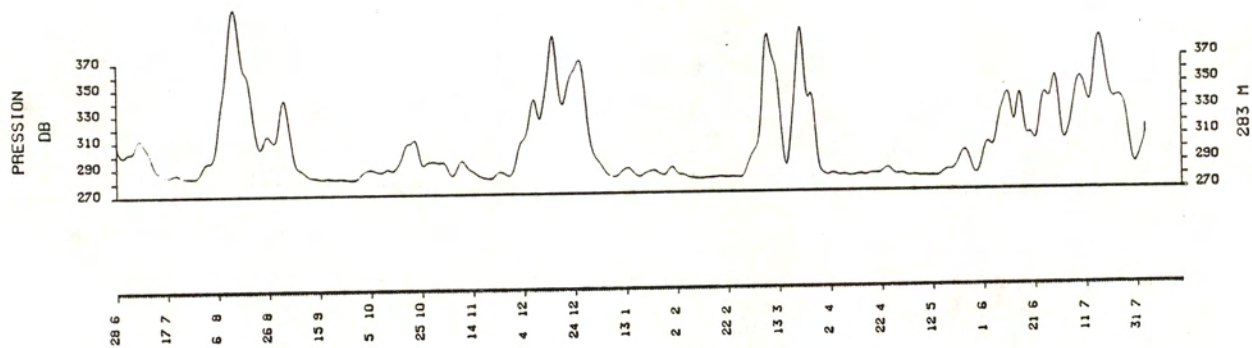


28 6  
17 7  
6 8  
26 8  
15 9  
5 10  
25 10  
14 11  
4 12  
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2 2  
22 2  
13 3  
2 4  
22 4  
12 5  
1 6  
21 6  
11 7  
31 7

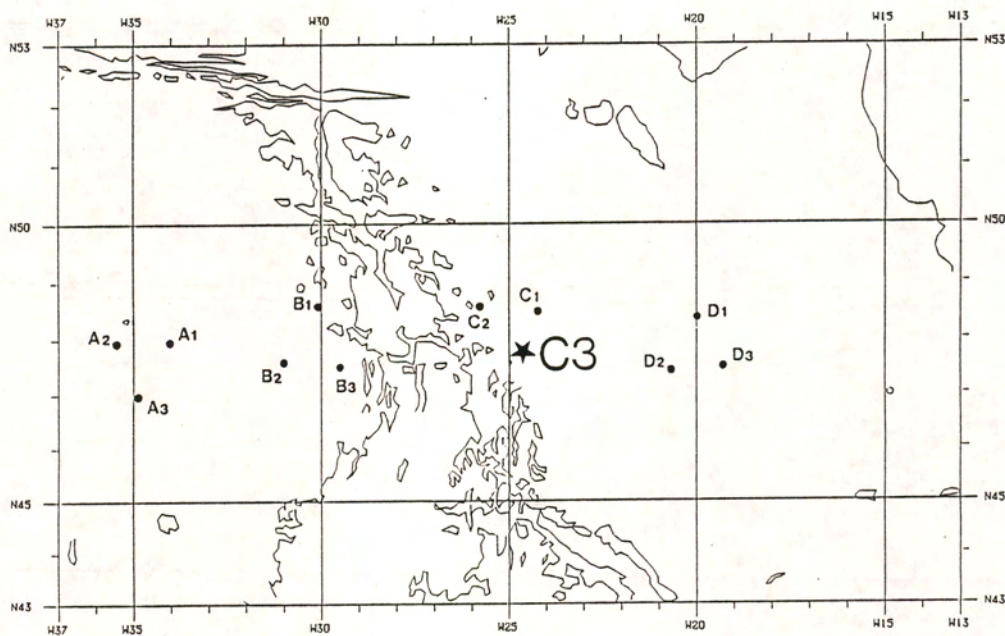
MOORING : C2



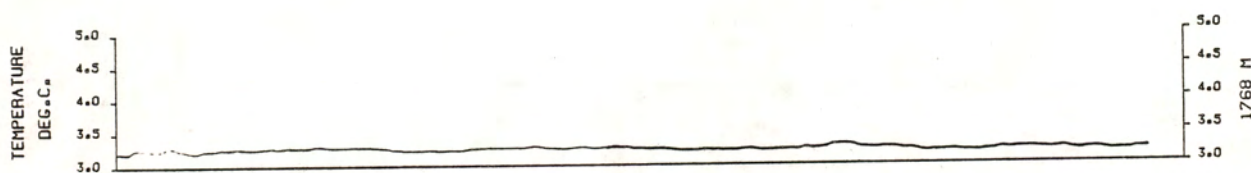
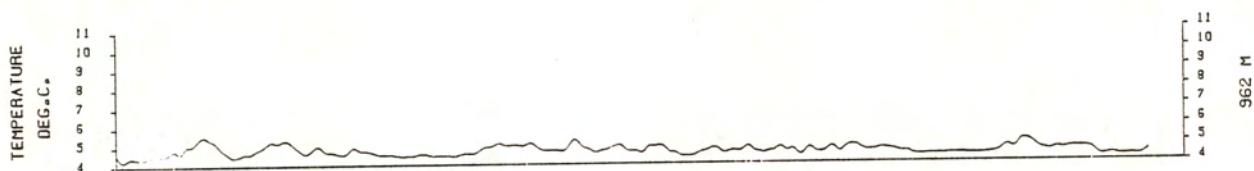
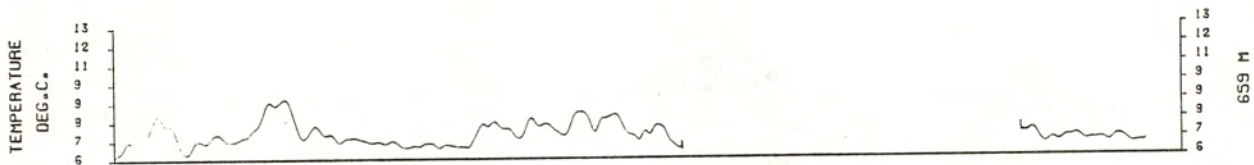
MOORING : C2



# MOORING C3

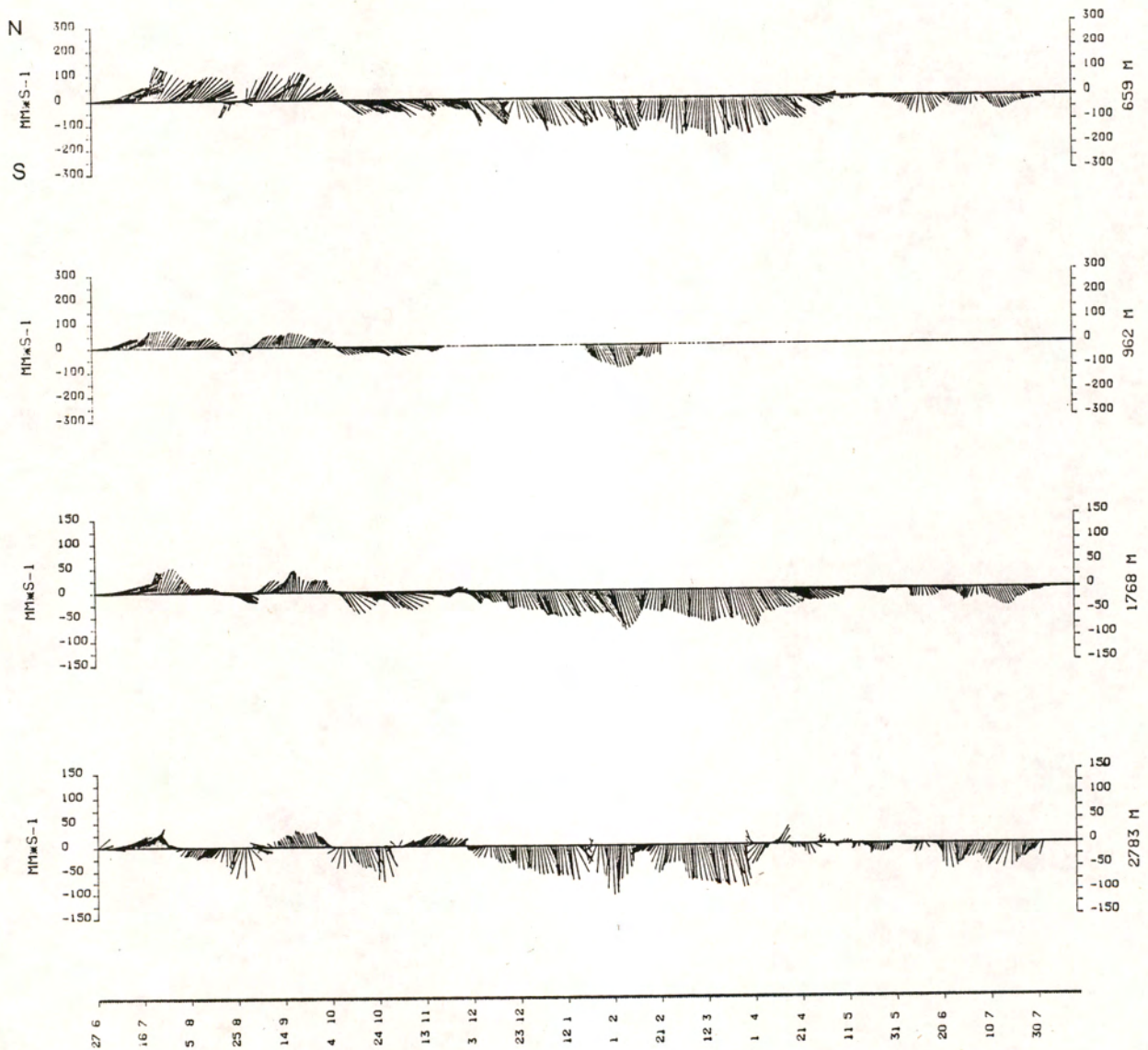


MOORING : C3

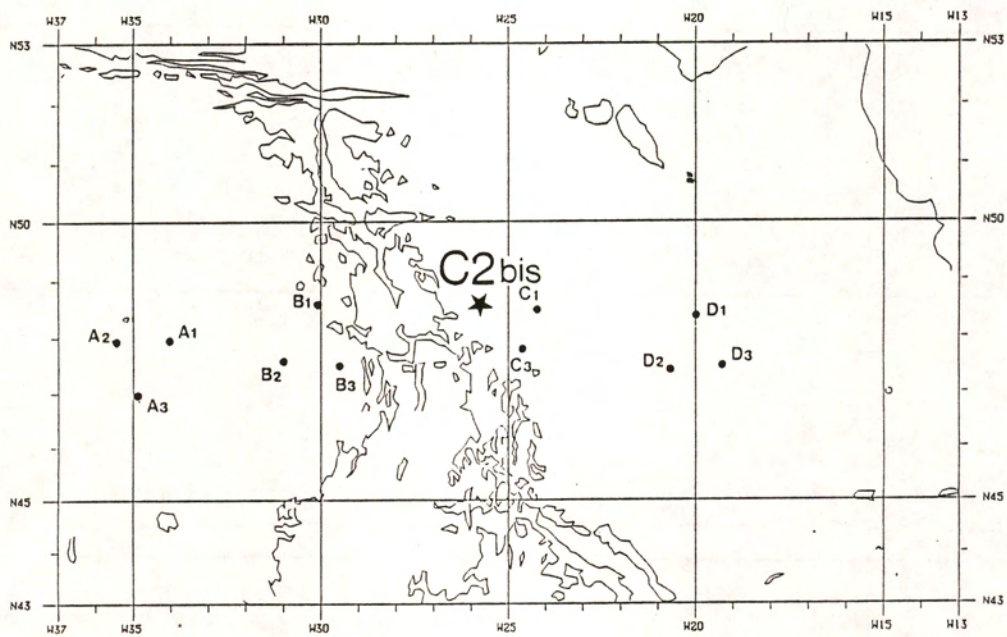


27 6 16 7 5 8 25 8 14 9 4 10 24 10 13 11 3 12 23 12 12 1 2 21 2 12 3 1 4 21 4 11 5 31 5 20 6 10 7 30 7

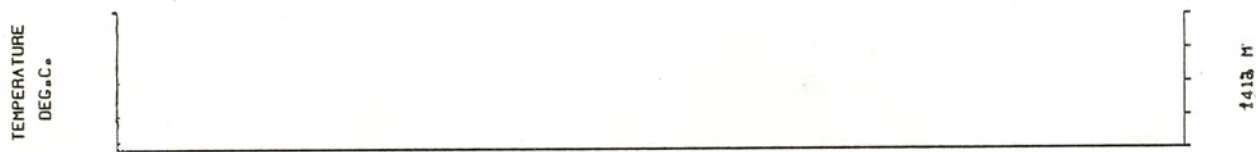
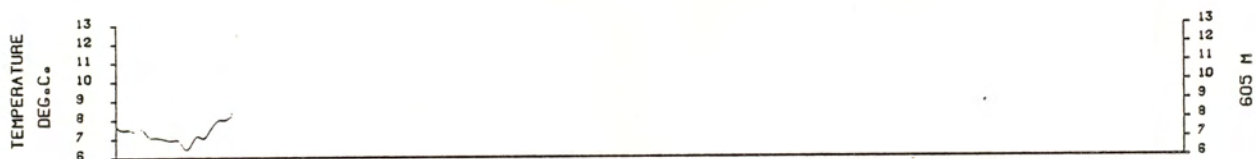
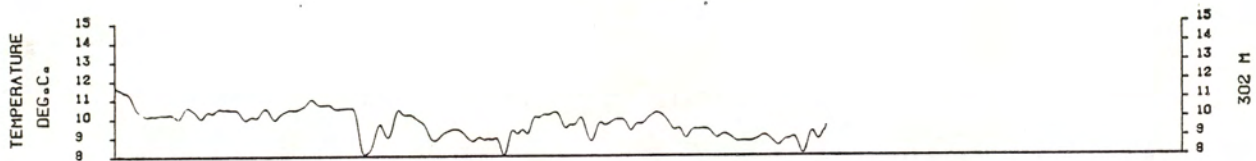
MOORING : C3



# MOORING C2bis



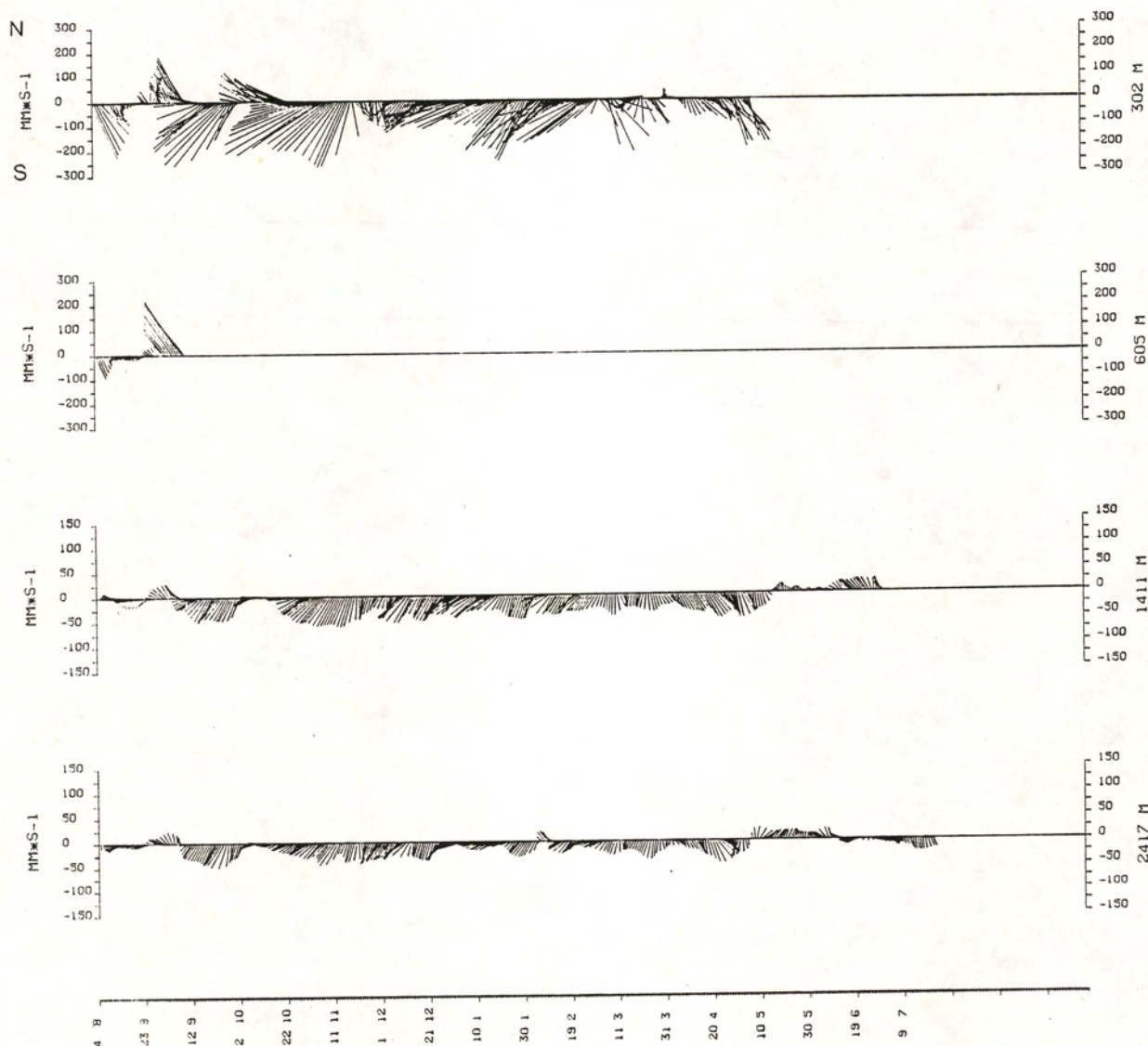
MOORING : C2 bis



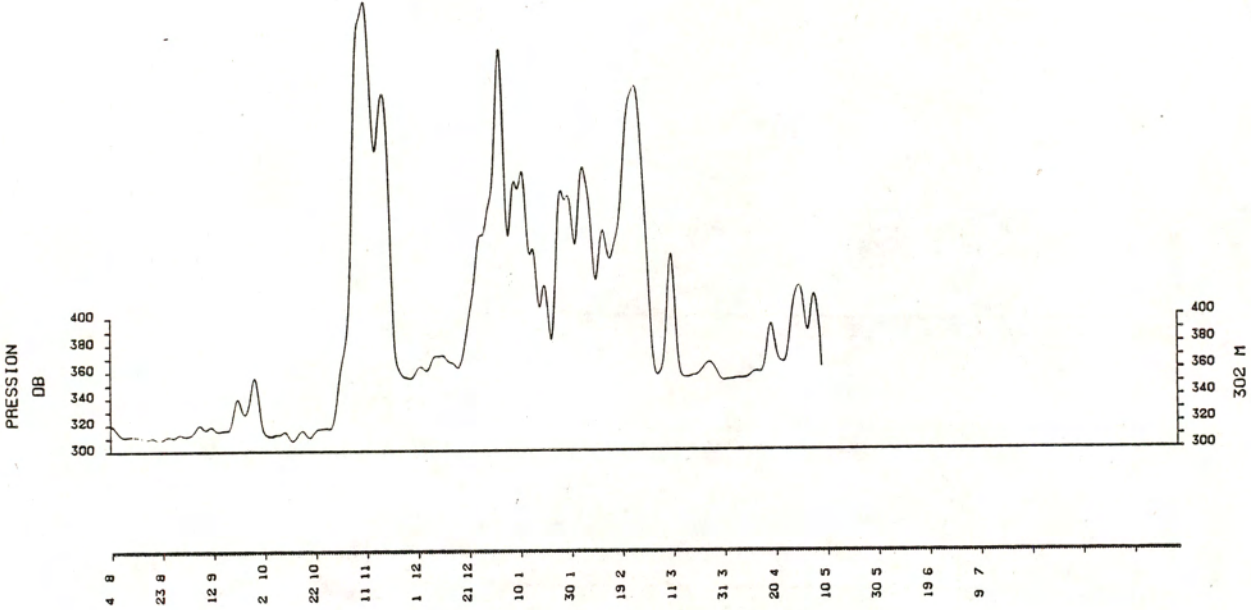
4 8  
25 8  
12 9  
2 10  
22 10  
11 11  
1 12  
21 12  
10 1  
30 1  
19 2  
11 3  
31 3  
20 4  
10 5  
30 5  
19 6  
9 7



MOORING : C2 bis

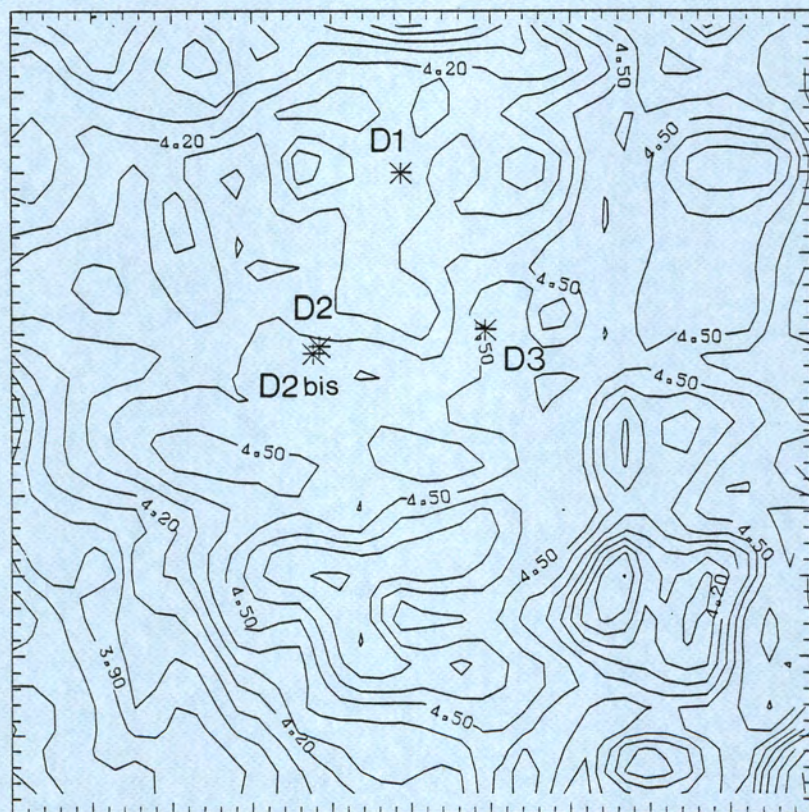


MOORING : C2 bis



# CLUSTER D

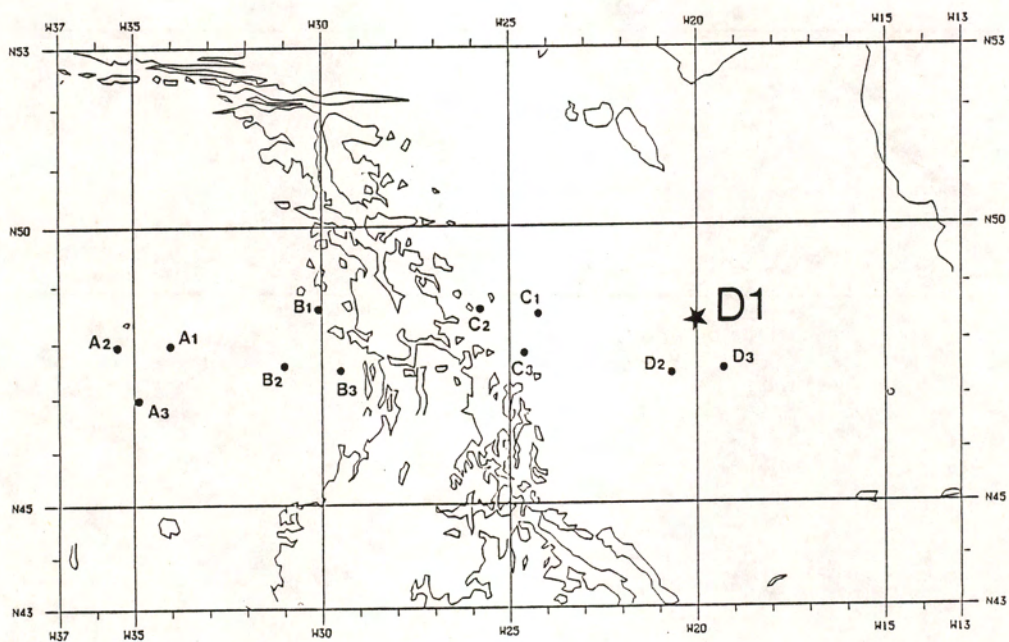
## LOCAL BATHYMETRY



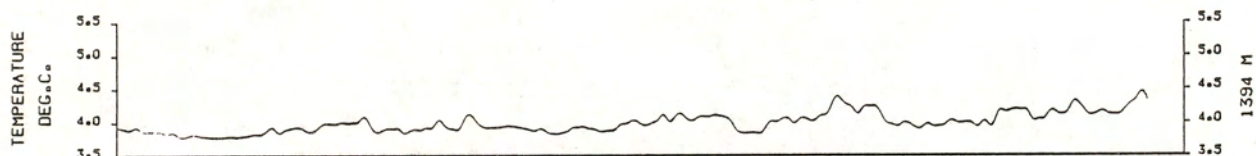
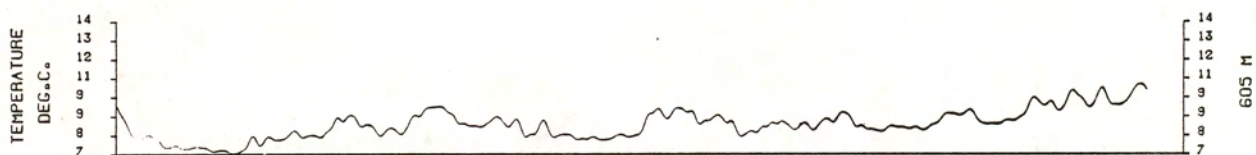
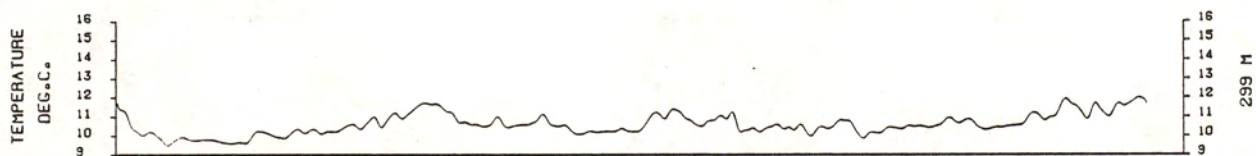
100 km

Contour labels are in  $10^3$  m

# MOORING D1

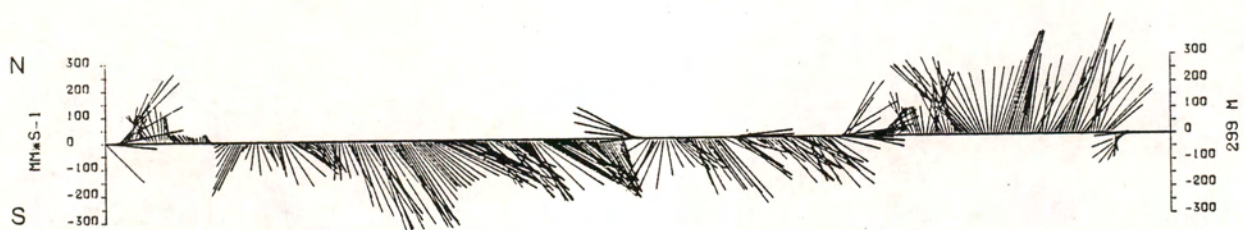


MOORING: D1



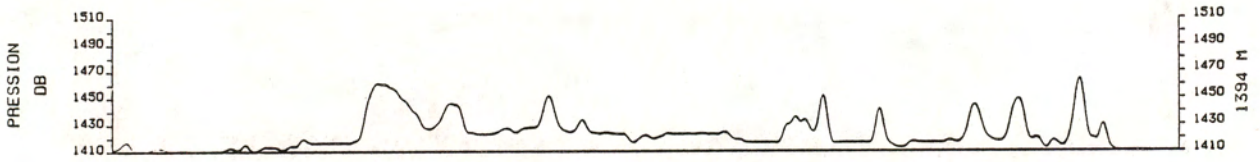
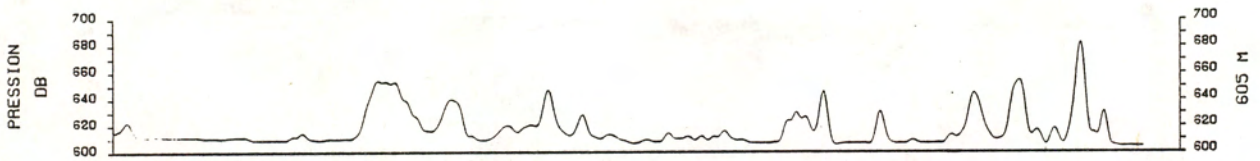
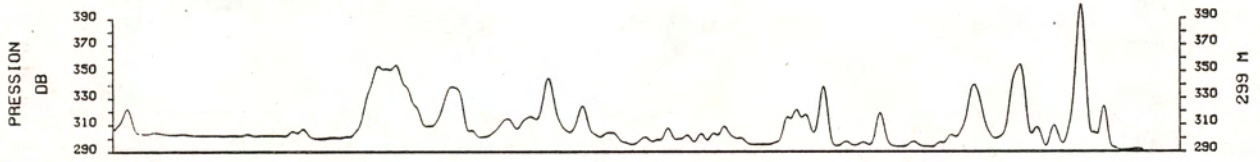
25 6  
14 7  
3 8  
23 8  
12 9  
2 10  
22 10  
11 11  
1 12  
21 12  
10 1  
30 1  
19 2  
10 3  
30 3  
19 4  
9 5  
29 5  
18 6  
8 7  
28 7

MOORING: D1



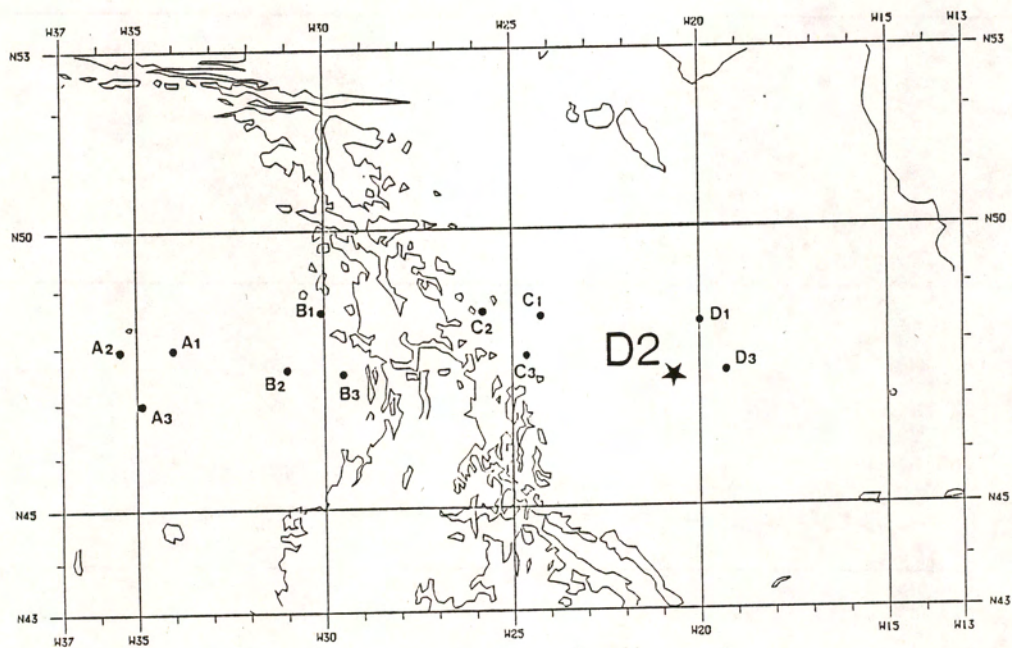
26 6  
15 7  
4 8  
24 8  
13 9  
3 10  
23 10  
12 11  
2 12  
22 12  
11 1  
31 1  
20 2  
11 3  
31 3  
20 4  
10 5  
30 5  
19 6  
9 7  
29 7

MOORING : D1



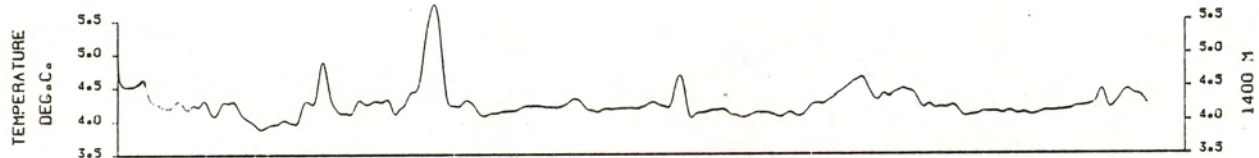
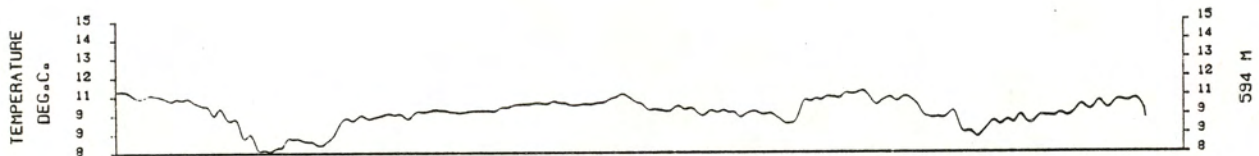
25 6  
14 7  
3 8  
23 8  
12 9  
2 10  
22 10  
11 11  
1 12  
21 12  
10 1  
30 1  
19 2  
10 3  
30 3  
19 4  
9 5  
29 5  
18 6  
8 7  
28 7

# MOORING D2



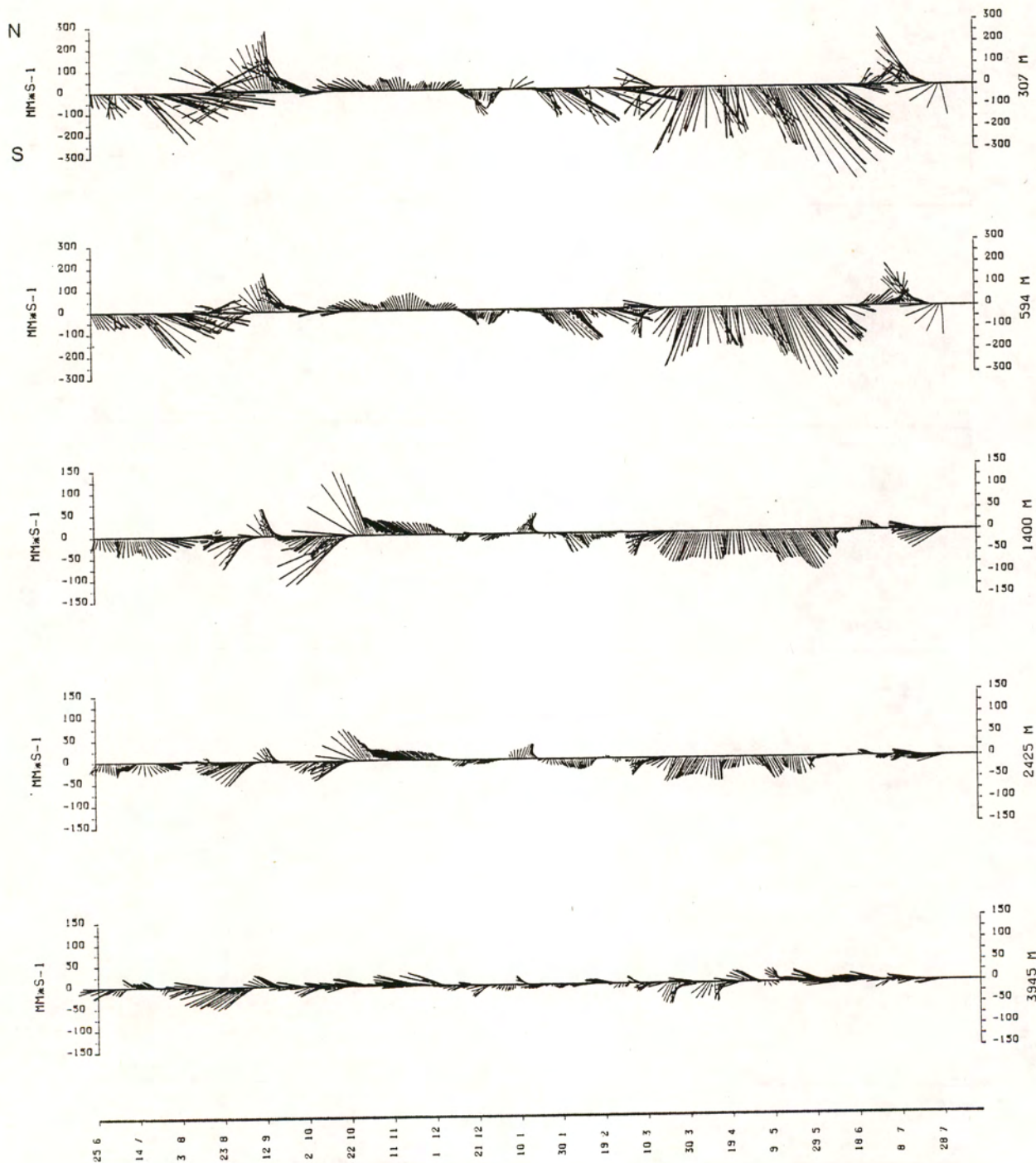


MOORING: D2

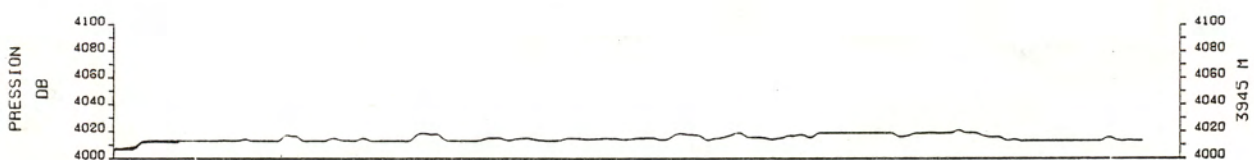
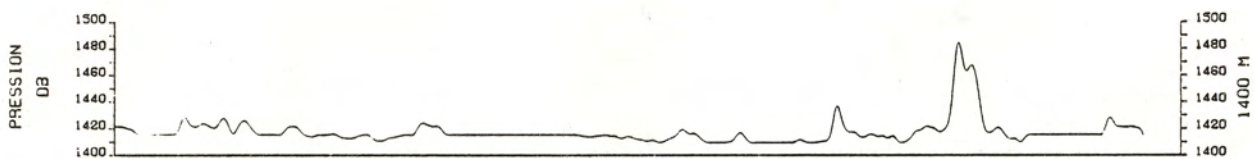
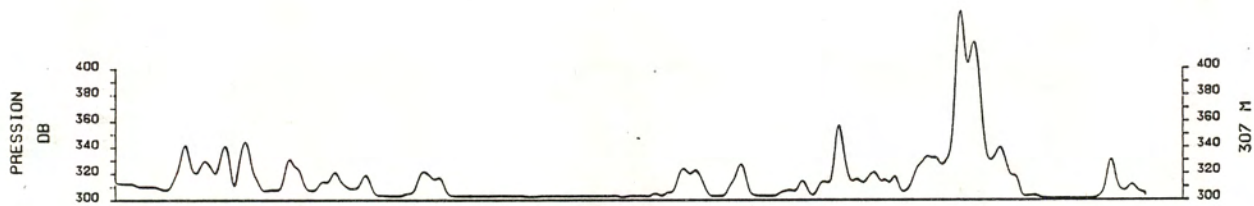


26 6 15 7 4 8 24 8 13 9 3 10 23 10 12 11 2 12 22 12 11 1 31 1 20 2 11 3 31 3 20 4 10 5 30 5 19 6 9 7 29 7

MOORING : D2

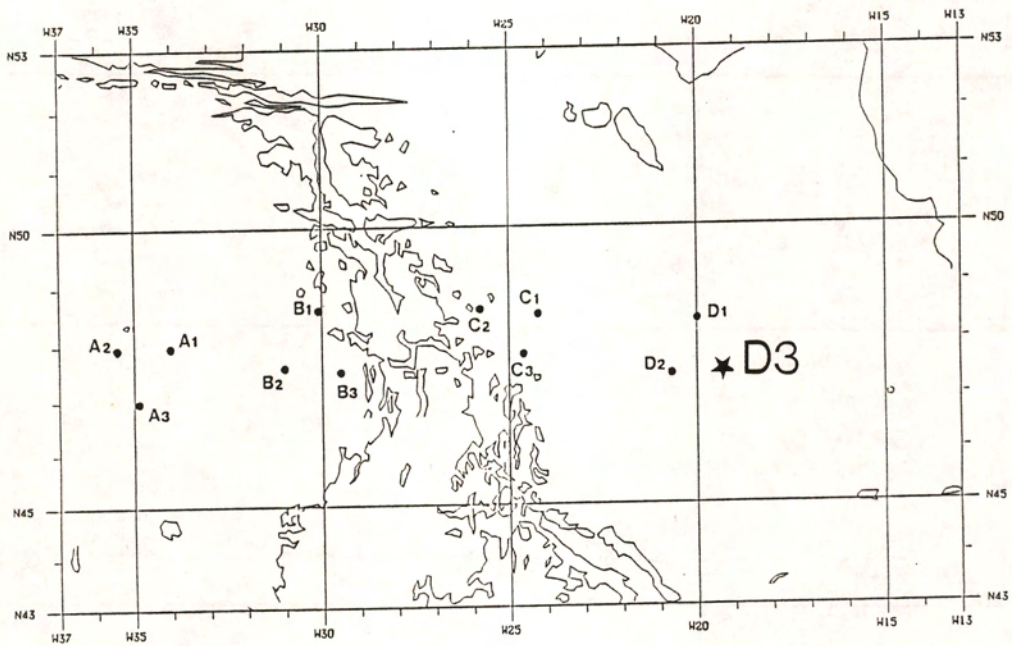


MOORING : D2

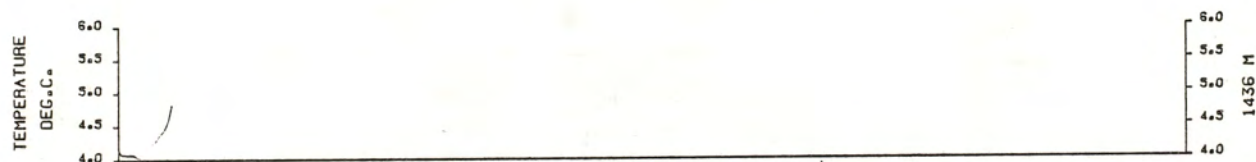
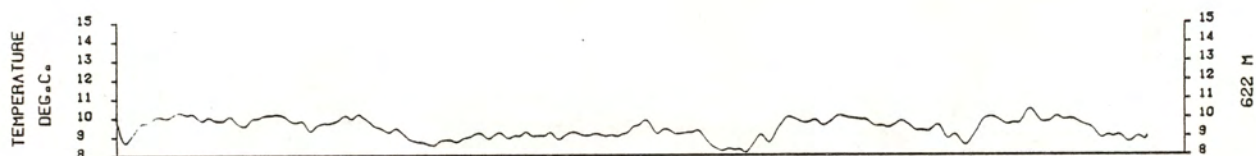


26.6 15.7 4.8 24.8 13.9 3.10 23.10 12.11 2.12 22.12 11.1 31.1 20.2 11.3 31.3 20.4 10.5 30.5 19.6 9.7 29.7

# MOORING D3

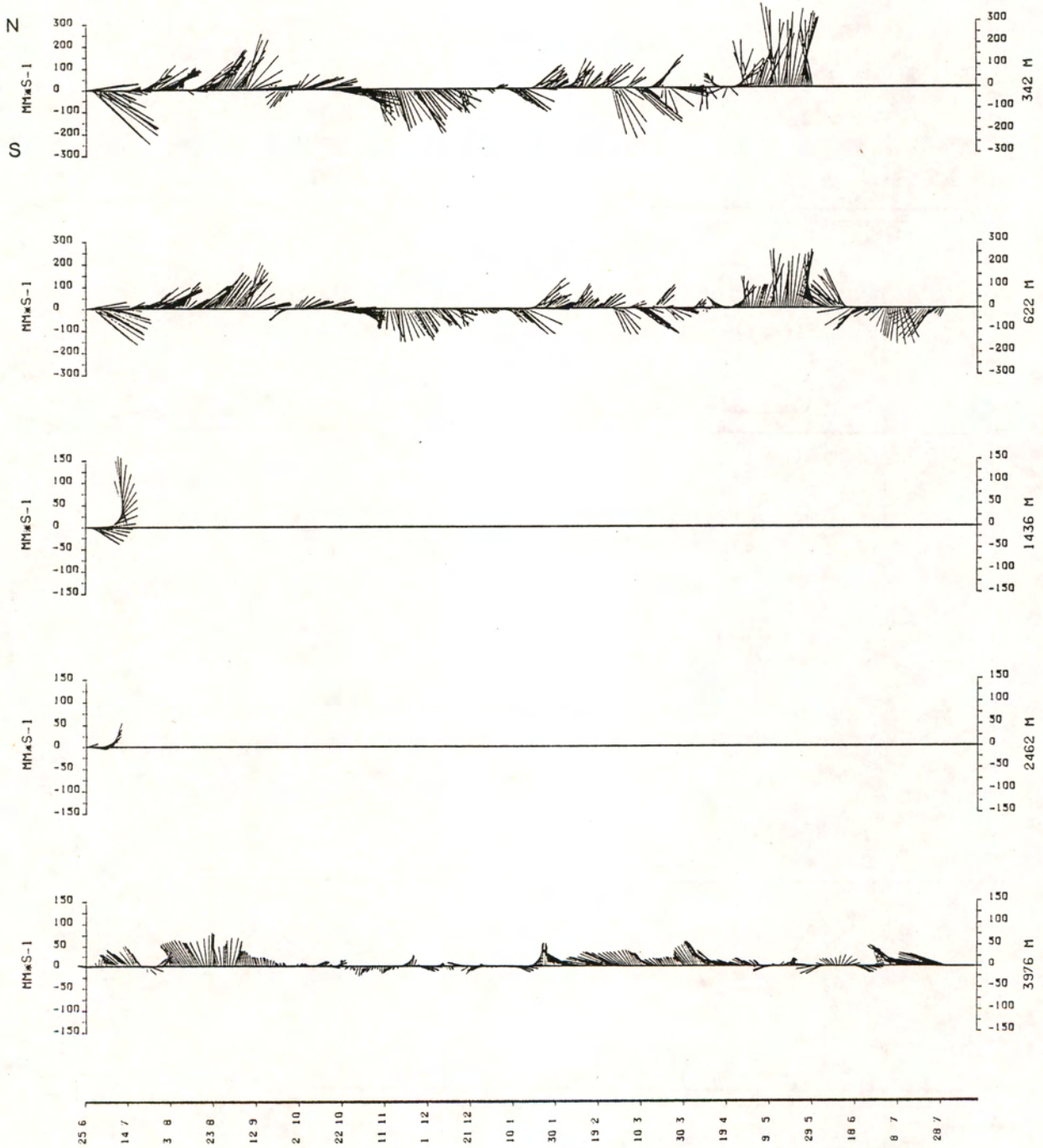


MOORING : D3

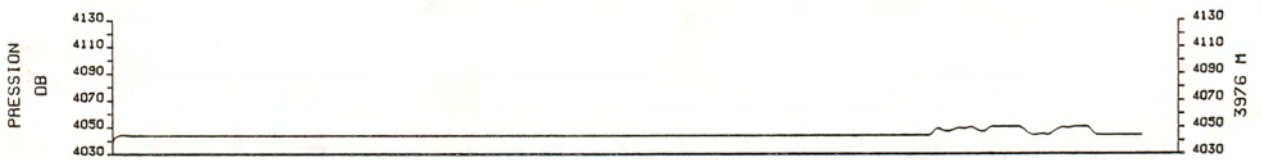
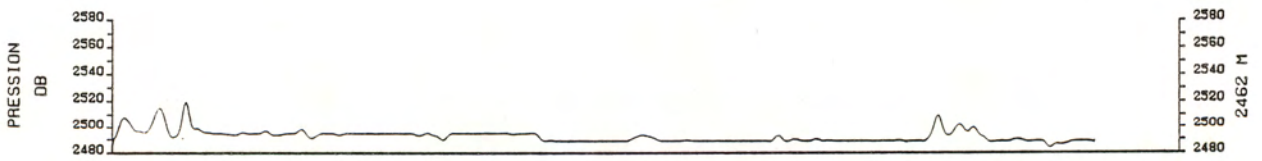
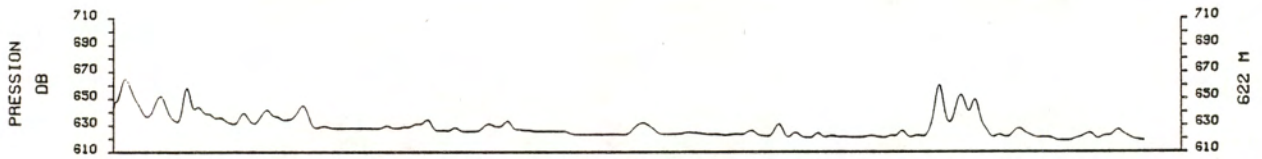


25.6 14.7 3.8 23.8 12.9 2.10 22.10 11.11 1.12 21.12 10.1 30.1 19.2 10.3 30.3 19.4 9.5 29.5 18.6 8.7 28.7

MOORING : D3

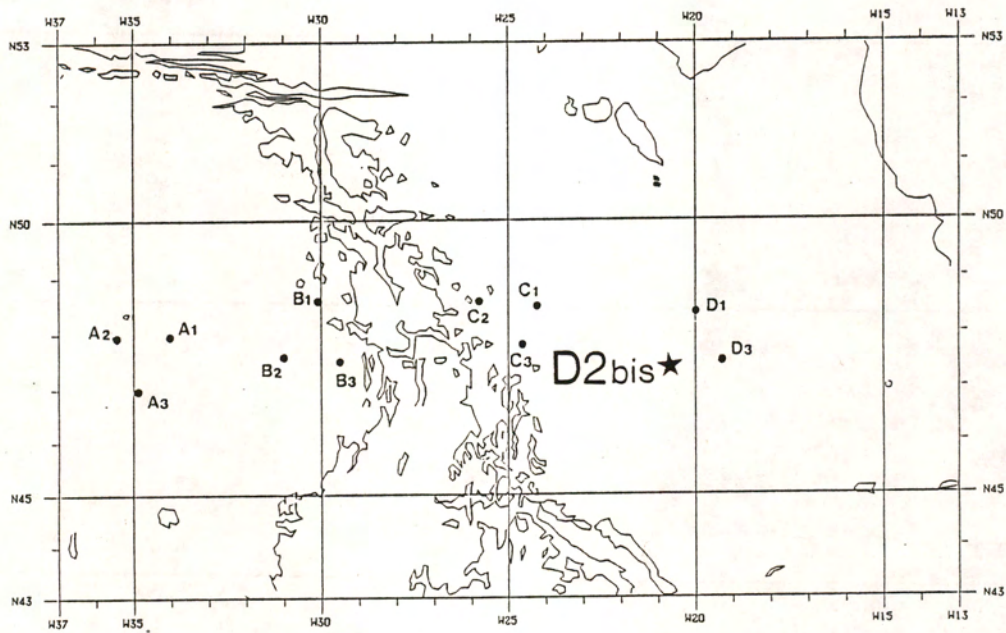


MOORING : D3



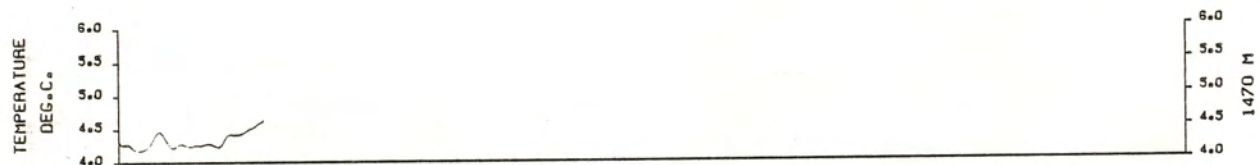
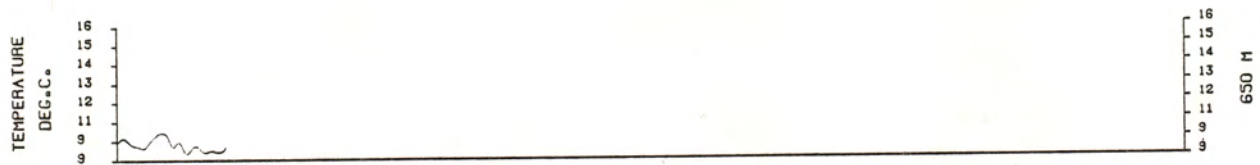
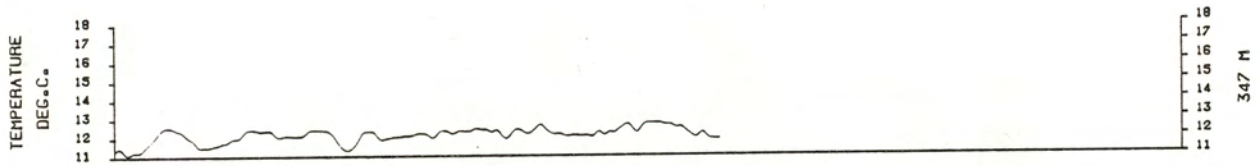
25 6 14 7 3 8 23 8 12 9 2 10 22 10 11 11 1 12 21 12 10 1 30 1 19 2 10 3 30 3 19 4 9 5 29 5 18 6 8 7 28 7

# MOORING D2bis



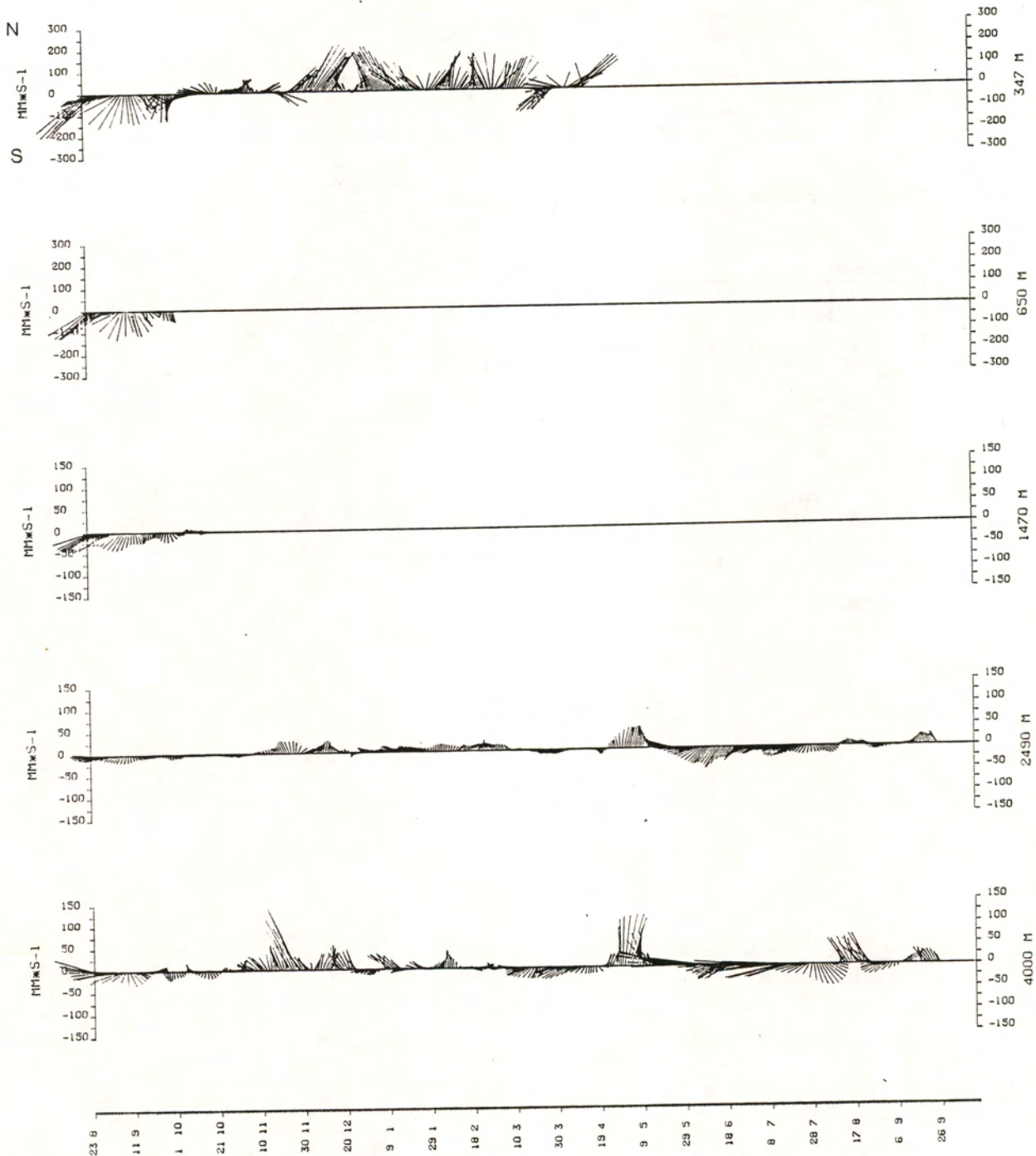


MOORING: D2 bis

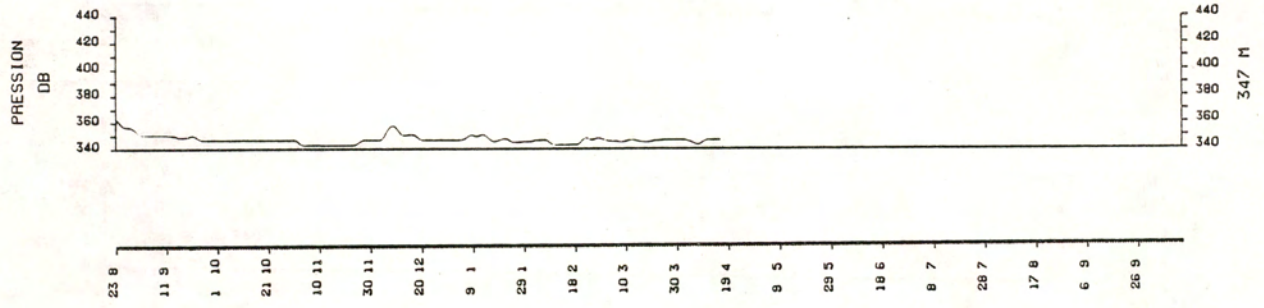


23.9 11.9 1 10 21 10 10 11 30 11 20 12 9 1 29 1 18 2 10 3 30 3 19 4 9 5 29 5 18 6 8 7 28 7 17 8 6 9 26 9

# MOORING: D2 bis



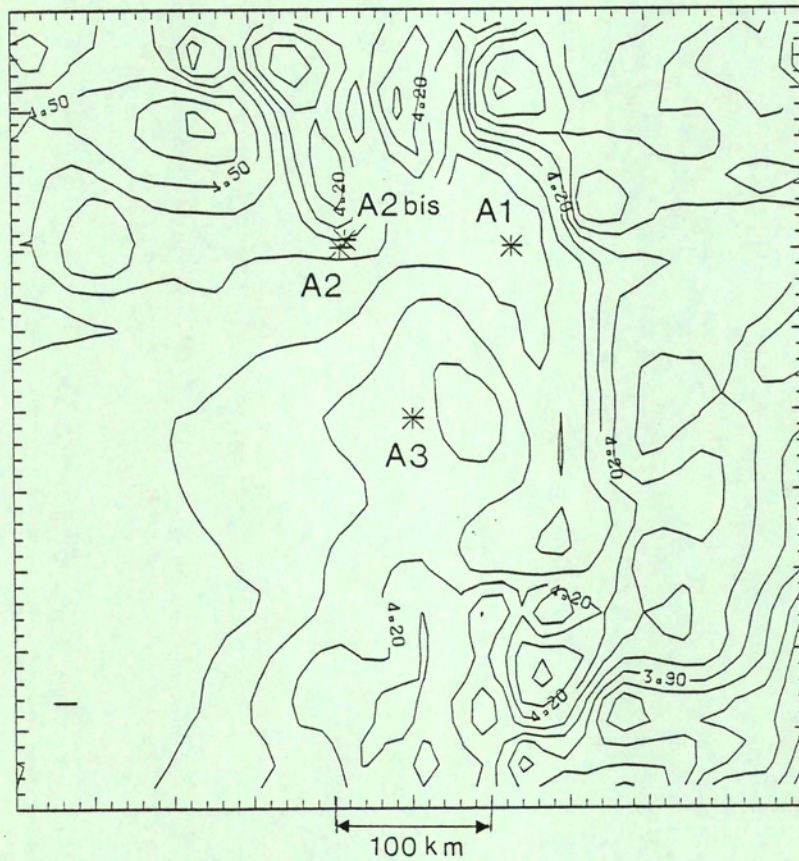
MOORING: D2 bis



# STATISTICS

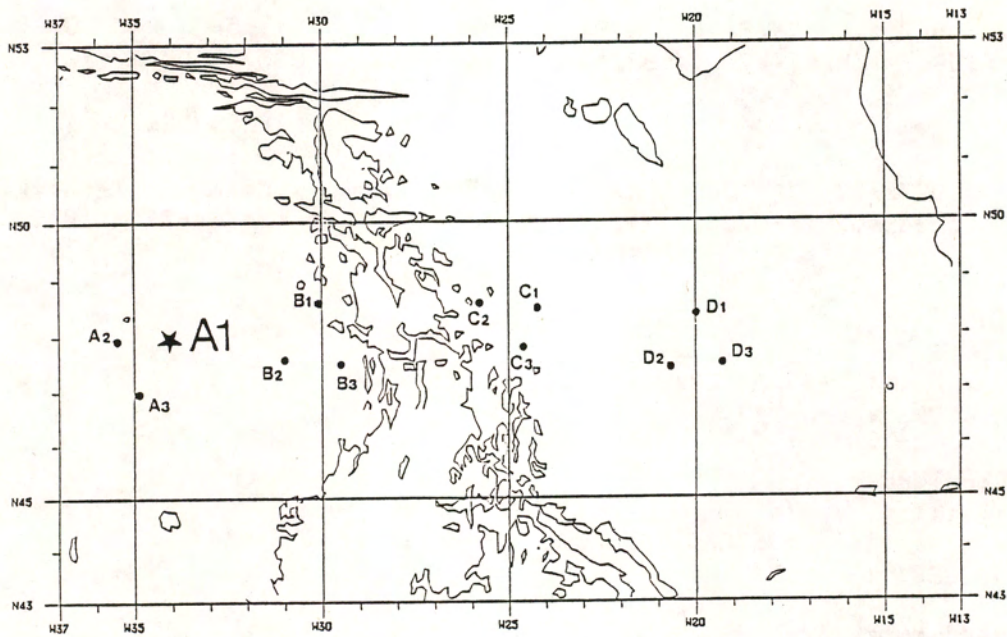
# CLUSTER A

## LOCAL BATHYMETRY



Contour labels are in  $10^3$  m

# MOORING A1



INSTITUTION : I. F. R. E. MER  
 SITE : A1  
 LATITUDE : 47 N 56.90  
 LONGITUDE : 34 W 0.80  
 WATER DEPTH : 4496 METERS  
 INSTRUMENT NUMBER : 2068 AANDERAA  
 NOMINAL DEPTH : 348 METERS  
 START TIME : 30- 6-1983 11H  
 STOP TIME : 7- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9692 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9216  
 NUMBER OF CYCLES FOR TEMPERATURE : 9692

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	9.2 CM/S [ 4.9]	MEAN :	.5 CM/S [ 5.7]
VARIANCE :	199.7 (CM/S)**2 [ 93.4]	VARIANCE :	335.7 (CM/S)**2 [ 117.5]

TEMPERATURE		PRESSURE	
:::::::::::		:::::::::::	
MEAN :	.1027E+02 DEG.CEL. [ .6998E+00]	MEAN :	366.1 DB
VARIANCE :	.5064E+01 (DEG.CEL.)**2 [ .1582E+01]	VARIANCE :	956.8 DB**2

EAST - NORTH  
 :::::::::::::::  
 COVARIANCE : -42.8 (CM/S)\*\*2 [ 71.2]  
 CORRELATION COEF. : -.17

EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .5367E+01 DEG.CEL. CM/S [ .8667E+01]  
 CORRELATION COEF. : .17

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .2114E+01 DEG.CEL. CM/S [ .9630E+01]  
 CORRELATION COEF. : .05

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.3880E+01 DEG.CEL. DB  
 CORRELATION COEF. : -.06

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 42.4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 267.7 (CM/S)\*\*2 [ 105.5]  
 MKE/EKE : .16

INSTITUTION : I. F. R. E. MER  
 SITE : A1  
 LATITUDE : 47 N 56.90  
 LONGITUDE : 34 W 0.80  
 WATER DEPTH : 4496 METERS  
 INSTRUMENT NUMBER : 2069 AANDERAA  
 NOMINAL DEPTH : 634 METERS  
 START TIME : 30- 6-1983 11H  
 STOP TIME : 8- 6-1984 0H

NUMBER OF CYCLES FOR PRESSURE : 8246 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 8246  
 NUMBER OF CYCLES FOR TEMPERATURE : 8246

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 5.1 CM/S [ 3.2]	MEAN	: -.3 CM/S [ 3.6]
VARIANCE	: 54.8 (CM/S)**2 [ 34.6]	VARIANCE	: 93.8 (CM/S)**2 [ 44.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .6142E+01 DEG. CEL. [ .4646E+00]	MEAN	: 653.3 DB
VARIANCE	: .1234E+01 (DEG. CEL.)**2 [ .6267E+00]	VARIANCE	: 934.6 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -1.2 (CM/S)\*\*2 [ 26.8]  
 CORRELATION COEF. : -.02

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2456E+01 DEG. CEL. CM/S [ .3346E+01]  
 CORRELATION COEF. : .30

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .3586E+00 DEG. CEL. CM/S [ .3747E+01]  
 CORRELATION COEF. : .03

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.5814E+00 DEG. CEL. DB  
 CORRELATION COEF. : -.02

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 12.8 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 74.3 (CM/S)\*\*2 [ 39.5]  
 MKE/EKE : .17



INSTITUTION : I. F. R. E. MER  
 SITE : A1  
 LATITUDE : 47 N 56.90  
 LONGITUDE : 34 W 0.80  
 WATER DEPTH : 4496 METERS  
 INSTRUMENT NUMBER : 3484 AANDERAA  
 NOMINAL DEPTH : 1419 METERS  
 START TIME : 30- 6-1983 11H  
 STOP TIME : 7- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9692 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9301  
 NUMBER OF CYCLES FOR TEMPERATURE : 9692

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	1.4 CM/S [ 1.7]	MEAN :	.8 CM/S [ 2.0]
VARIANCE :	11.9 (CM/S)**2 [ 10.4]	VARIANCE :	30.1 (CM/S)**2 [ 14.7]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.3768E+01 DEG.CEL. [ .3107E-01]	MEAN :	1437.0 DB
VARIANCE :	.7823E-02 (DEG.CEL.)**2 [ .3607E-02]	VARIANCE :	369.0 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -3.3 (CM/S)\*\*2 [ 8.6]  
 CORRELATION COEF. : -.18

EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .8444E-02 DEG.CEL. CM/S [ .1406E+00]  
 CORRELATION COEF. : .03

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .7857E-01 DEG.CEL. CM/S [ .1697E+00]  
 CORRELATION COEF. : .16

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.2604E+00 DEG.CEL. DB  
 CORRELATION COEF. : -.15

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 1.3 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 21.0 (CM/S)\*\*2 [ 12.6]  
 MKE/EKE : .06

INSTITUTION : I.F.R.E.MER  
 SITE : A1  
 LATITUDE : 47 N 56.90  
 LONGITUDE : 34 W 0.80  
 WATER DEPTH : 4496 METERS  
 INSTRUMENT NUMBER : 5481 AANDERAA  
 NOMINAL DEPTH : 2444 METERS  
 START TIME : 30- 6-1983 11H  
 STOP TIME : 7- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9692 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9692  
 NUMBER OF CYCLES FOR TEMPERATURE : 9692

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN :	.6	CM/S [	MEAN :	.7	CM/S [
VARIANCE :	8.8 (CM/S)**2 [	1.4]	VARIANCE :	13.7 (CM/S)**2 [	1.5]
		7.6]			7.5]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN :	.3359E+01	DEG.CEL. [	MEAN :	2476.6	DB
VARIANCE :	.6206E-02 (DEG.CEL.)**2 [	.2353E-01]	VARIANCE :	232.7	DB**2
		.1762E-02]			

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -2.2 (CM/S)\*\*2 [ 5.4]  
 CORRELATION COEF. : -.20

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.8474E-02 DEG.CEL. CM/S [ .8142E-01]  
 CORRELATION COEF. : -.04

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1982E-01 DEG.CEL. CM/S [ .8188E-01]  
 CORRELATION COEF. : .07

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .8436E-02 DEG.CEL. DB  
 CORRELATION COEF. : .01

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : .4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 11.2 (CM/S)\*\*2 [ 7.6]  
 MKE/EKE : .04

INSTITUTION : I. F. R. E. MER  
 SITE : A1  
 LATITUDE : 47 N 56.90  
 LONGITUDE : 34 W 0.80  
 WATER DEPTH : 4496 METERS  
 INSTRUMENT NUMBER : 5890 AANDERAA  
 NOMINAL DEPTH : 3978 METERS  
 START TIME : 30- 6-1983 11H  
 STOP TIME : 20- 7-1983 16H

NUMBER OF CYCLES FOR PRESSURE : 486 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 486  
 NUMBER OF CYCLES FOR TEMPERATURE : 486

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	2.4	CM/S	[	6.8]
VARIANCE	:	5.3	(CM/S)**2	[	47.7]
			MEAN	:	4.3
			CM/S	[	6.8]
			VARIANCE	:	3.3
			(CM/S)**2	[	41.1]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.2313E+01	DEG. CEL.	[	.2898E-01]
VARIANCE	:	.9952E-04	(DEG. CEL.)**2	[	.9086E-03]
			MEAN	:	4046.7
			DB		
			VARIANCE	:	24.0
			DB**2		

EAST - NORTH  
 :::::::::::::::  
 COVARIANCE : 1.9 (CM/S)\*\*2 [ 32.0]  
 CORRELATION COEF. : .46

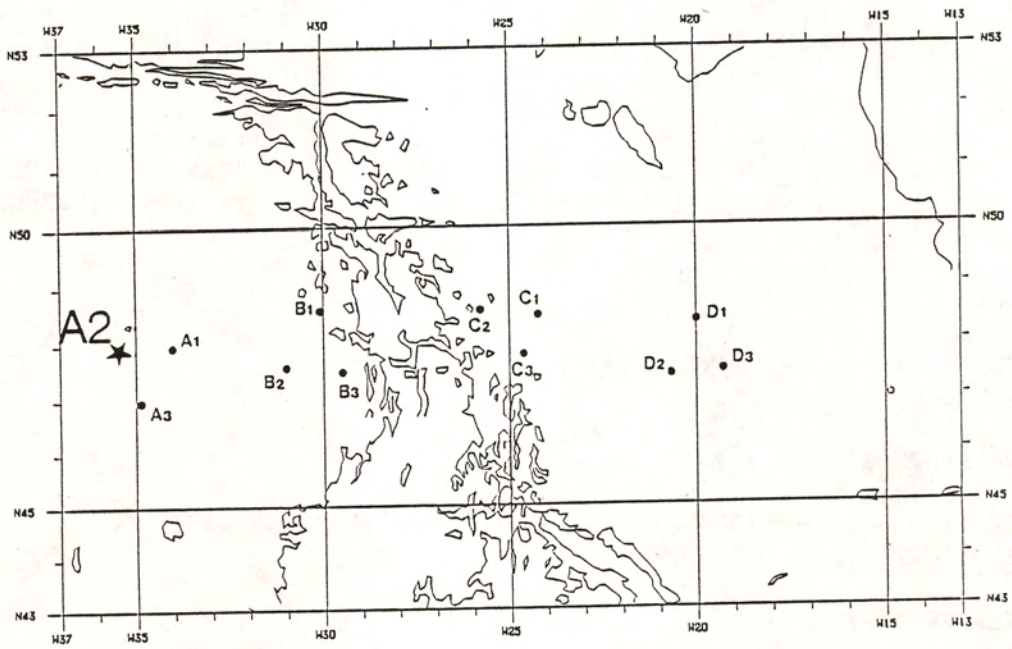
EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.1407E-01 DEG. CEL. CM/S [ .1467E+00]  
 CORRELATION COEF. : -.61

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.8265E-02 DEG. CEL. CM/S [ .1381E+00]  
 CORRELATION COEF. : -.45

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.2121E-01 DEG. CEL. DB  
 CORRELATION COEF. : -.43

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 12.1 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 4.3 (CM/S)\*\*2 [ 44.4]  
 MKE/EKE : 2.80

# MOORING A2



INSTITUTION : I.F.R.E.MER  
 SITE : A2  
 LATITUDE : 47 N 56.40  
 LONGITUDE : 35 W 26.90  
 WATER DEPTH : 4380 METERS  
 INSTRUMENT NUMBER : 4435 AANDERAA  
 NOMINAL DEPTH : 294 METERS  
 START TIME : 30- 6-1983 20H  
 STOP TIME : 8- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9707 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9707  
 NUMBER OF CYCLES FOR TEMPERATURE : 9707

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	-3.0	CM/S	[	4.8]
VARIANCE	:	454.5	(CM/S)**2	[	91.2]
			MEAN	:	-3.9
			CM/S	[	5.6]
			VARIANCE	:	391.9
			(CM/S)**2	[	114.7]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.1017E+02	DEG.CEL.	[	.6992E+00]
VARIANCE	:	.4129E+01	(DEG.CEL.)**2	[	.1581E+01]
			MEAN	:	331.4
			DB		
			VARIANCE	:	2780.7
			DB**2		

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -4.2 (CM/S)\*\*2 [ 69.4]  
 CORRELATION COEF. : -.01

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.1790E+01 DEG.CEL. CM/S [ .8454E+01]  
 CORRELATION COEF. : -.04

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.9550E-01 DEG.CEL. CM/S [ .9394E+01]  
 CORRELATION COEF. : -.00

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.4506E+00 DEG.CEL. DB  
 CORRELATION COEF. : -.00

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 12.4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 423.2 (CM/S)\*\*2 [ 102.9]  
 MKE/EKE : .03

INSTITUTION : I. F. R. E. MER  
 SITE : A2  
 LATITUDE : 47 N 56.40  
 LONGITUDE : 35 W 26.90  
 WATER DEPTH : 4380 METERS  
 INSTRUMENT NUMBER : 3115 AANDERAA  
 NOMINAL DEPTH : 584 METERS  
 START TIME : 30- 6-1983 20H  
 STOP TIME : 8- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9707  
 NUMBER OF CYCLES FOR TEMPERATURE : 9707

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	-2.3 CM/S [ 2.9]	MEAN :	-1.0 CM/S [ 3.3]
VARIANCE :	159.2 (CM/S)**2 [ 32.1]	VARIANCE :	133.5 (CM/S)**2 [ 41.0]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .6471E+01 DEG.CEL. [ .4235E+00]  
 VARIANCE : .1984E+01 (DEG.CEL.)\*\*2 [ .5809E+00]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : .2 (CM/S)\*\*2 [ 24.7]  
 CORRELATION COEF. : .00

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1369E+01 DEG.CEL. CM/S [ .3104E+01]  
 CORRELATION COEF. : -.08

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1734E+00 DEG.CEL. CM/S [ .3471E+01]  
 CORRELATION COEF. : .01

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 3.0 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 146.3 (CM/S)\*\*2 [ 36.5]  
 MKE/EKE : .02

INSTITUTION : I. F. R. E. MER  
 SITE : A2  
 LATITUDE : 47 N 56.40  
 LONGITUDE : 35 W 26.90  
 WATER DEPTH : 4380 METERS  
 INSTRUMENT NUMBER : 3485 AANDERAA  
 NOMINAL DEPTH : 1378 METERS  
 START TIME : 30- 6-1983 20H  
 STOP TIME : 8- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9707 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9707  
 NUMBER OF CYCLES FOR TEMPERATURE : 9707

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	- .7 CM/S [ 1.6]	MEAN :	- .8 CM/S [ 2.0]
VARIANCE :	55.9 (CM/S)**2 [ 10.2]	VARIANCE :	43.4 (CM/S)**2 [ 14.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.3792E+01 DEG.CEL. [ .3104E-01]	MEAN :	1431.6 DB
VARIANCE :	.1632E-01 (DEG.CEL.)**2 [ .3604E-02]	VARIANCE :	1648.7 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -3.4 (CM/S)\*\*2 [ 8.5]  
 CORRELATION COEF. : -.07

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1913E+00 DEG.CEL. CM/S [ .1379E+00]  
 CORRELATION COEF. : .20

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.3789E-01 DEG.CEL. CM/S [ .1663E+00]  
 CORRELATION COEF. : -.04

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.2249E+00 DEG.CEL. DB  
 CORRELATION COEF. : -.04

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .6 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 49.7 (CM/S)\*\*2 [ 12.3]  
 MKE/EKE : .01

INSTITUTION : I.F.R.E.MER  
 SITE : A2  
 LATITUDE : 47 N 56.40  
 LONGITUDE : 35 W 26.90  
 WATER DEPTH : 4380 METERS  
 INSTRUMENT NUMBER : 5484 AANDERAA  
 NOMINAL DEPTH : 2436 METERS  
 START TIME : 30- 6-1983 20H  
 STOP TIME : 8- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9707 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9707  
 NUMBER OF CYCLES FOR TEMPERATURE : 9707

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	-0.4 CM/S [ 1.4]	MEAN :	-0.3 CM/S [ 1.5]
VARIANCE :	44.5 (CM/S)**2 [ 7.6]	VARIANCE :	34.8 (CM/S)**2 [ 7.5]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.3381E+01 DEG.CEL. [ .2351E-01]	MEAN :	2488.7 DB
VARIANCE :	.4284E-02 (DEG.CEL. )**2 [ .1760E-02]	VARIANCE :	537.7 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -2.2 (CM/S)\*\*2 [ 5.4]  
 CORRELATION COEF. : -.05

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .9765E-01 DEG.CEL. CM/S [ .8136E-01]  
 CORRELATION COEF. : .22

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.3209E-01 DEG.CEL. CM/S [ .8182E-01]  
 CORRELATION COEF. : -.08

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.1193E+00 DEG.CEL. DB  
 CORRELATION COEF. : -.08

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : .1 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 39.7 (CM/S)\*\*2 [ 7.5]  
 MKE/EKE : .00



INSTITUTION : I.F.R.E.MER  
 SITE : A2  
 LATITUDE : 47 N 56.40  
 LONGITUDE : 35 W 26.90  
 WATER DEPTH : 4380 METERS  
 INSTRUMENT NUMBER : 5891 AANDERAA  
 NOMINAL DEPTH : 3933 METERS  
 START TIME : 30- 6-1983 20H  
 STOP TIME : 8- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9707 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9707  
 NUMBER OF CYCLES FOR TEMPERATURE : 9707

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	-1.8 CM/S [ 1.8]	MEAN :	.5 CM/S [ 1.9]
VARIANCE :	63.6 (CM/S)**2 [ 14.9]	VARIANCE :	50.0 (CM/S)**2 [ 11.8]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.2302E+01 DEG.CEL. [ .8557E-02]	MEAN :	4010.6 DB
VARIANCE :	.1320E-02 (DEG.CEL. )**2 [ .2815E-03]	VARIANCE :	54.8 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -6.1 (CM/S)\*\*2 [ 9.9]  
 CORRELATION COEF. : -.11

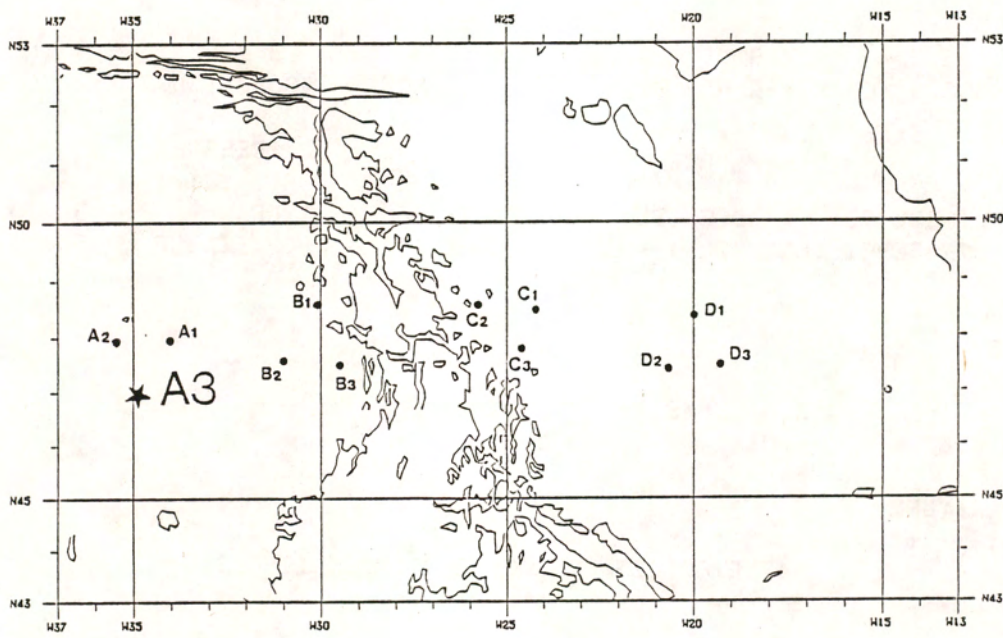
EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.6971E-02 DEG.CEL. CM/S [ .3685E-01]  
 CORRELATION COEF. : -.02

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.9949E-02 DEG.CEL. CM/S [ .4070E-01]  
 CORRELATION COEF. : -.04

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.3836E-02 DEG.CEL. DB  
 CORRELATION COEF. : -.01

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 1.8 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 56.8 (CM/S)\*\*2 [ 13.4]  
 MKE/EKE : .03

# MOORING A3



INSTITUTION : I. F. R. E. MER  
 SITE : A3  
 LATITUDE : 46 N 59.10  
 LONGITUDE : 34 W 51.10  
 WATER DEPTH : 4314 METERS  
 INSTRUMENT NUMBER : 4440 AANDERAA  
 NOMINAL DEPTH : 348 METERS  
 START TIME : 1- 7-1983 11H  
 STOP TIME : 26- 7-1984 13H

NUMBER OF CYCLES FOR PRESSURE : 9387 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9387  
 NUMBER OF CYCLES FOR TEMPERATURE : 9387

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 5.0 CM/S [ 4.9]	MEAN	: 9.1 CM/S [ 5.7]
VARIANCE	: 368.4 (CM/S)**2 [ 92.6]	VARIANCE	: 490.0 (CM/S)**2 [ 116.5]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .1063E+02 DEG.CEL. [ .7117E+00]	MEAN	: 382.5 DB
VARIANCE	: .7296E+01 (DEG.CEL.)**2 [ .1606E+01]	VARIANCE	: 2557.9 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : 2.6 (CM/S)\*\*2 [ 70.6]  
 CORRELATION COEF. : .01

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1475E+02 DEG.CEL. CM/S [ .8591E+01]  
 CORRELATION COEF. : .28

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.2445E+02 DEG.CEL. CM/S [ .9546E+01]  
 CORRELATION COEF. : -.41

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.5339E+02 DEG.CEL. DB  
 CORRELATION COEF. : -.39

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 54.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 429.2 (CM/S)\*\*2 [ 104.6]  
 MKE/EKE : .13

INSTITUTION : I. F. R. E. MER  
 SITE : A3  
 LATITUDE : 46 N 59.10  
 LONGITUDE : 34 W 51.10  
 WATER DEPTH : 4314 METERS  
 INSTRUMENT NUMBER : 3116 AANDERAA  
 NOMINAL DEPTH : 641 METERS  
 START TIME : 1- 7-1983 11H  
 STOP TIME : 7- 8-1984 15H

NUMBER OF CYCLES FOR PRESSURE : 9677 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9677  
 NUMBER OF CYCLES FOR TEMPERATURE : 9677

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: .7 CM/S [ 2.9]	MEAN	: 5.7 CM/S [ 3.3]
VARIANCE	: 112.9 (CM/S)**2 [ 32.1]	VARIANCE	: 160.8 (CM/S)**2 [ 41.1]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .6611E+01 DEG. CEL. [ .4242E+00]	MEAN	: 677.2 DB
VARIANCE	: .2040E+01 (DEG. CEL.)**2 [ .5818E+00]	VARIANCE	: 2406.2 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -27.6 (CM/S)\*\*2 [ 24.8]  
 CORRELATION COEF. : -.21

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .4712E+01 DEG. CEL. CM/S [ .3108E+01]  
 CORRELATION COEF. : .31

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.6914E+01 DEG. CEL. CM/S [ .3476E+01]  
 CORRELATION COEF. : -.38

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.2191E+02 DEG. CEL. DB  
 CORRELATION COEF. : -.31

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 16.5 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 136.8 (CM/S)\*\*2 [ 36.6]  
 MKE/EKE : .12

INSTITUTION : I. F. R. E. MER  
 SITE : A3  
 LATITUDE : 46 N 59.10  
 LONGITUDE : 34 W 51.10  
 WATER DEPTH : 4314 METERS  
 INSTRUMENT NUMBER : 3486 AANDERAA  
 NOMINAL DEPTH : 1448 METERS  
 START TIME : 1- 7-1983 11H  
 STOP TIME : 7- 8-1984 15H

NUMBER OF CYCLES FOR PRESSURE : 9677 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9235  
 NUMBER OF CYCLES FOR TEMPERATURE : 9677

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: -.2 CM/S [ 1.7]	MEAN	: 5.1 CM/S [ 2.1]
VARIANCE	: 30.4 (CM/S)**2 [ 10.4]	VARIANCE	: 64.9 (CM/S)**2 [ 14.8]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .3817E+01 DEG.CEL. [ .3110E-01]	MEAN	: 1491.8 DB
VARIANCE	: .1998E-01 (DEG.CEL.)**2 [ .3609E-02]	VARIANCE	: 1432.5 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : 1.7 (CM/S)\*\*2 [ 8.7]  
 CORRELATION COEF. : .04

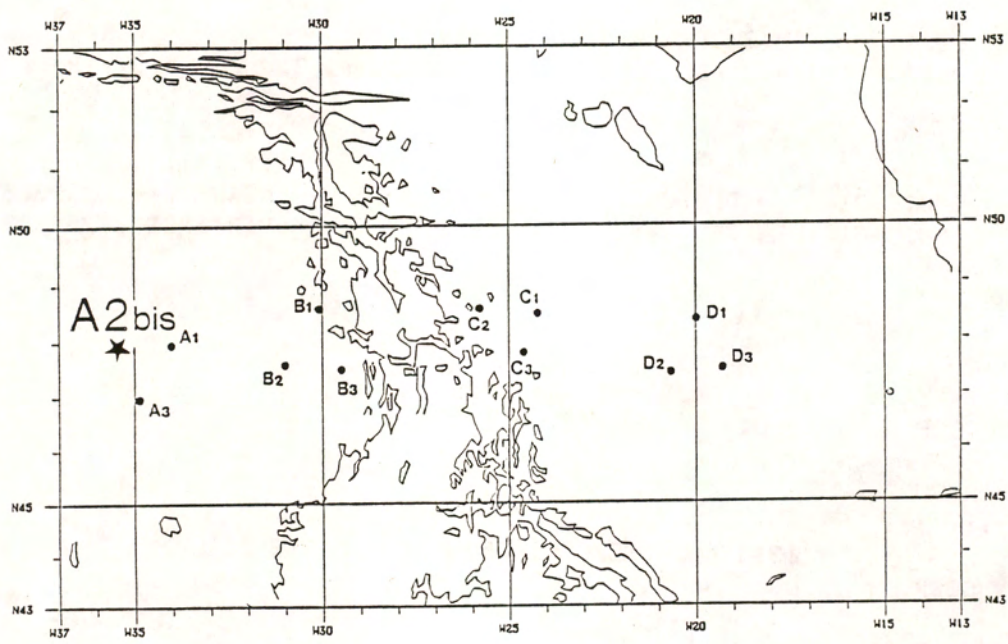
EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2150E-01 DEG.CEL. CM/S [ .1411E+00]  
 CORRELATION COEF. : .03

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.5594E+00 DEG.CEL. CM/S [ .1702E+00]  
 CORRELATION COEF. : -.49

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1818E+01 DEG.CEL. DB  
 CORRELATION COEF. : -.34

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 12.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 47.7 (CM/S)\*\*2 [ 12.6]  
 MKE/EKE : .27

# MOORING A2bis



INSTITUTION : I.F.R.E.MER  
 SITE : A2 bis  
 LATITUDE : 47 N 59.10  
 LONGITUDE : 35 W 24.10  
 WATER DEPTH : 4304 METERS  
 INSTRUMENT NUMBER : 3634 AANDERAA  
 NOMINAL DEPTH : 352 METERS  
 START TIME : 8- 8-1984 15H  
 STOP TIME : 16- 9-1985 9H

NUMBER OF CYCLES FOR PRESSURE : 5121 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9691  
 NUMBER OF CYCLES FOR TEMPERATURE : 9691

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	-2.4 CM/S [ 4.8]	MEAN :	-2.4 CM/S [ 5.6]
VARIANCE :	226.7 (CM/S)**2 [ 91.2]	VARIANCE :	318.2 (CM/S)**2 [ 114.8]

TEMPERATURE		PRESSURE	
:::::::::::		:::::::::::	
MEAN :	.9402E+01 DEG.CEL. [ .6998E+00]	MEAN :	368.8 DB
VARIANCE :	.1841E+01 (DEG.CEL.)**2 [ .1582E+01]	VARIANCE :	2527.3 DB**2

EAST - NORTH  
 :::::::::::  
 COVARIANCE : -11.3 (CM/S)\*\*2 [ 69.5]  
 CORRELATION COEF. : -.04

EAST - TEMPERATURE  
 :::::::::::  
 COVARIANCE : .1314E+01 DEG.CEL. CM/S [ .8461E+01]  
 CORRELATION COEF. : .06

NORTH - TEMPERATURE  
 :::::::::::  
 COVARIANCE : -.1343E+01 DEG.CEL. CM/S [ .9401E+01]  
 CORRELATION COEF. : -.06

PRESSURE - TEMPERATURE  
 :::::::::::  
 COVARIANCE : .6163E+00 DEG.CEL. DB  
 CORRELATION COEF. : .01

OTHER STATISTICS  
 :::::::::::  
 MEAN KINETIC ENERGY (MKE) : 5.6 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 272.5 (CM/S)\*\*2 [ 103.0]  
 MKE/EKE : .02

INSTITUTION : I.F.R.E.MER  
 SITE : A2 bis  
 LATITUDE : 47 N 59.10  
 LONGITUDE : 35 W 24.10  
 WATER DEPTH : 4304 METERS  
 INSTRUMENT NUMBER : 3636 AANDERAA  
 NOMINAL DEPTH : 644 METERS  
 START TIME : 8- 8-1984 15H  
 STOP TIME : 16- 9-1985 9H

NUMBER OF CYCLES FOR PRESSURE : 6925 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 6925  
 NUMBER OF CYCLES FOR TEMPERATURE : 6925

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	.0 CM/S [ 3.5]	MEAN :	-.1 CM/S [ 4.0]
VARIANCE :	83.2 (CM/S)**2 [ 37.5]	VARIANCE :	121.0 (CM/S)**2 [ 48.1]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.6021E+01 DEG.CEL. [ .5140E+00]	MEAN :	673.9 DB
VARIANCE :	.7487E+00 (DEG.CEL.)**2 [ .6789E+00]	VARIANCE :	4138.2 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -8.7 (CM/S)\*\*2 [ 29.1]  
 CORRELATION COEF. : -.09

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .6894E+00 DEG.CEL. CM/S [ .3620E+01]  
 CORRELATION COEF. : .09

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.2601E+01 DEG.CEL. CM/S [ .4063E+01]  
 CORRELATION COEF. : -.27

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.9263E+00 DEG.CEL. DB  
 CORRELATION COEF. : -.02

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .0 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 102.1 (CM/S)\*\*2 [ 42.8]  
 MKE/EKE : .00



INSTITUTION : I.F.R.E.MER  
 SITE : A2 bis  
 LATITUDE : 47 N 59.10  
 LONGITUDE : 35 W 24.10  
 WATER DEPTH : 4304 METERS  
 INSTRUMENT NUMBER : 3635 AANDERAA  
 NOMINAL DEPTH : 1440 METERS  
 START TIME : 8- 8-1984 15H  
 STOP TIME : 16- 9-1985 9H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 6358  
 NUMBER OF CYCLES FOR TEMPERATURE : 9691

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	- .7 CM/S [ 2.1]	MEAN :	- .8 CM/S [ 2.5]
VARIANCE :	39.1 (CM/S)**2 [ 12.4]	VARIANCE :	31.2 (CM/S)**2 [ 17.6]

TEMPERATURE  
 ::::::::::  
 MEAN : .3762E+01 DEG.CEL. [ .3107E-01]  
 VARIANCE : .9188E-02 (DEG.CEL.)\*\*2 [ .3607E-02]

EAST - NORTH  
 ::::::::::  
 COVARIANCE : 4.1 (CM/S)\*\*2 [ 10.3]  
 CORRELATION COEF. : .12

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .6685E-01 DEG.CEL. CM/S [ .1671E+00]  
 CORRELATION COEF. : .11

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.1048E+00 DEG.CEL. CM/S [ .2019E+00]  
 CORRELATION COEF. : -.20

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : .6 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 35.2 (CM/S)\*\*2 [ 15.0]  
 MKE/EKE : .02

INSTITUTION : I.F.R.E.MER  
 SITE : A2 bis  
 LATITUDE : 47 N 59.10  
 LONGITUDE : 35 W 24.10  
 WATER DEPTH : 4304 METERS  
 INSTRUMENT NUMBER : 4588 AANDERAA  
 NOMINAL DEPTH : 2450 METERS  
 START TIME : 8- 8-1984 15H  
 STOP TIME : 16- 9-1985 9H

NUMBER OF CYCLES FOR PRESSURE : 9691 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9691  
 NUMBER OF CYCLES FOR TEMPERATURE : 9691

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	- .8	CM/S	[	1.4]
VARIANCE	:	24.4	(CM/S)**2	[	7.6]
			MEAN	:	.3
			CM/S	[	1.5]
			VARIANCE	:	21.9
			(CM/S)**2	[	7.5]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.3315E+01	DEG.CEL.	[	.2353E-01]
VARIANCE	:	.3133E-02	(DEG.CEL. )**2	[	.1762E-02]
			MEAN	:	2422.0
			DB		
			VARIANCE	:	1121.0
			DB**2		

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -3.1 (CM/S)\*\*2 [ 5.4]  
 CORRELATION COEF. : -.13

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .4389E-01 DEG.CEL. CM/S [ .8142E-01]  
 CORRELATION COEF. : .16

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.9841E-01 DEG.CEL. CM/S [ .8188E-01]  
 CORRELATION COEF. : -.38

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .3827E+00 DEG.CEL. DB  
 CORRELATION COEF. : .20

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 23.2 (CM/S)\*\*2 [ 7.6]  
 MKE/EKE : .02

INSTITUTION : I.F.R.E.MER  
 SITE : A2 bis  
 LATITUDE : 47 N 59.10  
 LONGITUDE : 35 W 24.10  
 WATER DEPTH : 4304 METERS  
 INSTRUMENT NUMBER : 4594 AANDERAA  
 NOMINAL DEPTH : 3950 METERS  
 START TIME : 8- 8-1984 15H  
 STOP TIME : 16- 9-1985 9H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9691  
 NUMBER OF CYCLES FOR TEMPERATURE : 9691

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	- .8 CM/S [ 1.8]	MEAN :	2.4 CM/S [ 1.9]
VARIANCE :	32.0 (CM/S)**2 [ 14.9]	VARIANCE :	32.9 (CM/S)**2 [ 11.9]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .2277E+01 DEG.CEL. [ .8566E-02]  
 VARIANCE : .6905E-03 (DEG.CEL.)\*\*2 [ .2817E-03]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -12.9 (CM/S)\*\*2 [ 9.9]  
 CORRELATION COEF. : -.40

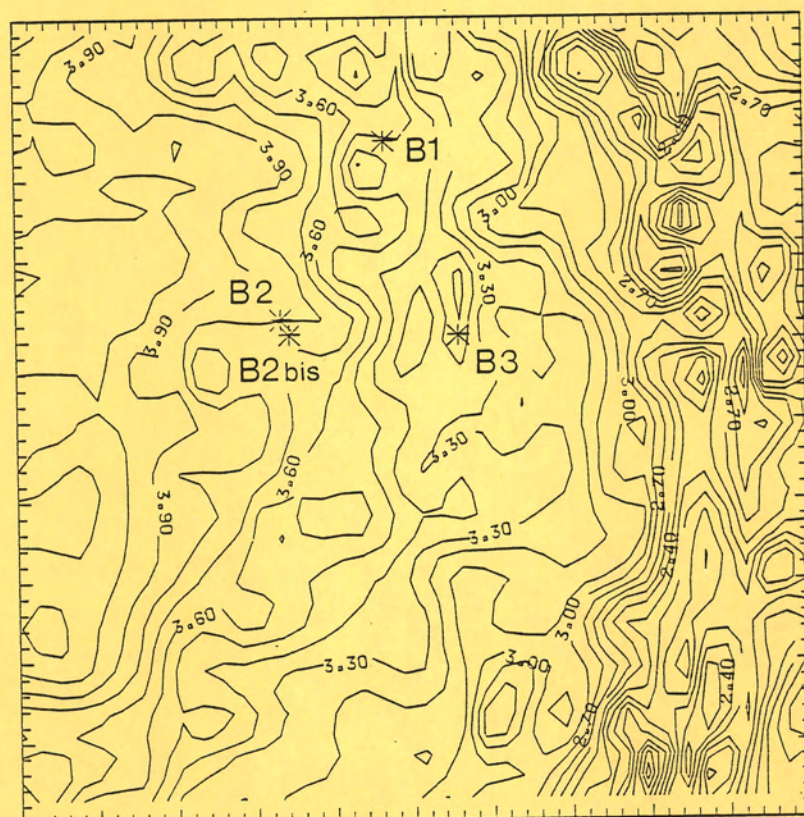
EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.5728E-02 DEG.CEL. CM/S [ .3688E-01]  
 CORRELATION COEF. : -.04

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.2639E-01 DEG.CEL. CM/S [ .4073E-01]  
 CORRELATION COEF. : -.18

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 3.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 32.5 (CM/S)\*\*2 [ 13.4]  
 MKE/EKE : .10

# CLUSTER B

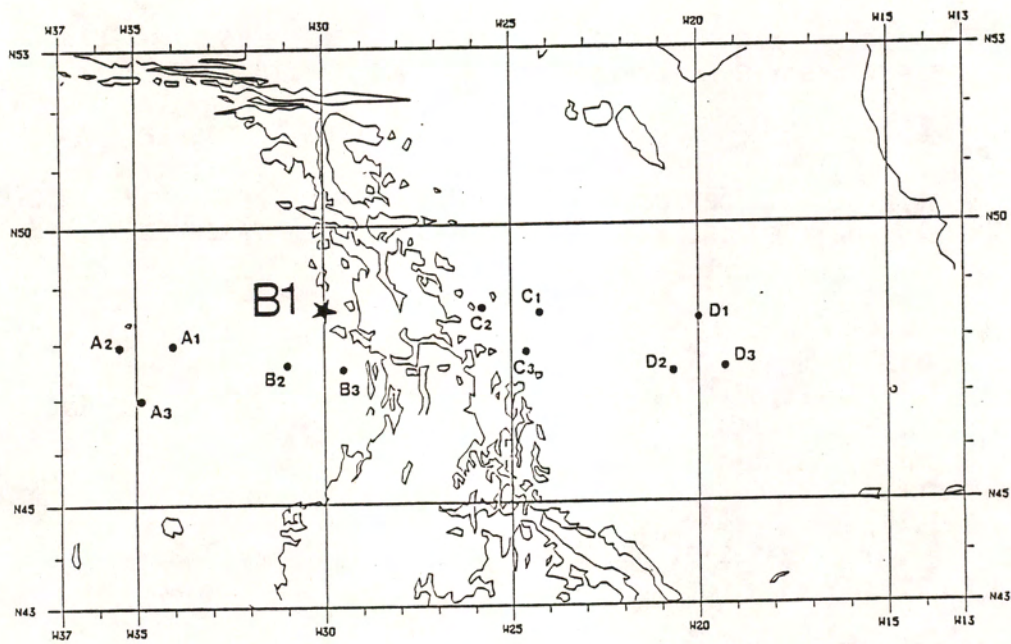
## LOCAL BATHYMETRY



100 km

Contour labels are in  $10^3$  m

# MOORING B1



INSTITUTION : I. F. R. E. MER  
 SITE : B1  
 LATITUDE : 48 N 35.50  
 LONGITUDE : 30 W 5. 0  
 WATER DEPTH : 3515 METERS  
 INSTRUMENT NUMBER : 4441 AANDERAA  
 NOMINAL DEPTH : 350 METERS  
 START TIME : 28- 6-1983 20H  
 STOP TIME : 5- 8-1984 7H

NUMBER OF CYCLES FOR PRESSURE : 2088 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 2088  
 NUMBER OF CYCLES FOR TEMPERATURE : 2088

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	-3.2 CM/S [ 8.2]	MEAN :	-0.8 CM/S [ 10.2]
VARIANCE :	95.9 (CM/S)**2 [ 124.5]	VARIANCE :	178.3 (CM/S)**2 [ 139.7]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.9891E+01 DEG.CEL. [ .6960E+00]	MEAN :	352.0 DB
VARIANCE :	.4649E+00 (DEG.CEL.)**2 [ .9034E+00]	VARIANCE :	5.4 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -14.5 (CM/S)\*\*2 [ 98.1]  
 CORRELATION COEF. : -.11

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2458E+01 DEG.CEL. CM/S [ .8216E+01]  
 CORRELATION COEF. : .37

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.4339E+01 DEG.CEL. CM/S [ .8579E+01]  
 CORRELATION COEF. : -.48

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .3970E+00 DEG.CEL. DB  
 CORRELATION COEF. : .25

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 5.4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 137.1 (CM/S)\*\*2 [ 132.1]  
 MKE/EKE : .04

INSTITUTION : I.F.R.E.MER  
 SITE : B1  
 LATITUDE : 48 N 35.50  
 LONGITUDE : 30 W 5.0  
 WATER DEPTH : 3515 METERS  
 INSTRUMENT NUMBER : 4589 AANDERAA  
 NOMINAL DEPTH : 633 METERS  
 START TIME : 28-6-1983 20H  
 STOP TIME : 19-7-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 9282 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 2491  
 NUMBER OF CYCLES FOR TEMPERATURE : 9282

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	-1.5 CM/S [ 4.7]	MEAN :	.5 CM/S [ 7.3]
VARIANCE :	19.2 (CM/S)**2 [ 39.5]	VARIANCE :	39.6 (CM/S)**2 [ 66.1]

TEMPERATURE		PRESSURE	
:::::::::::		:::::::::::	
MEAN :	.7288E+01 DEG.CEL. [ .5529E+00]	MEAN :	637.3 DB
VARIANCE :	.1786E+01 (DEG.CEL.)**2 [ .7925E+00]	VARIANCE :	20.6 DB**2

EAST - NORTH  
 :::::::::::::::  
 COVARIANCE : -1.3 (CM/S)\*\*2 [ 35.8]  
 CORRELATION COEF. : -.05

EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.1264E+00 DEG.CEL. CM/S [ .5033E+01]  
 CORRELATION COEF. : -.02

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.6860E+00 DEG.CEL. CM/S [ .6669E+01]  
 CORRELATION COEF. : -.08

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .1179E+01 DEG.CEL. DB  
 CORRELATION COEF. : .19

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 1.3 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 29.4 (CM/S)\*\*2 [ 52.8]  
 MKE/EKE : .04

INSTITUTION : I.F.R.E.MER  
 SITE : B1  
 LATITUDE : 48 N 35.50  
 LONGITUDE : 30 W 5.0  
 WATER DEPTH : 3515 METERS  
 INSTRUMENT NUMBER : 4444 AANDERAA  
 NOMINAL DEPTH : 1442 METERS  
 START TIME : 28-6-1983 20H  
 STOP TIME : 5-8-1984 7H

NUMBER OF CYCLES FOR PRESSURE : 9684 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9684  
 NUMBER OF CYCLES FOR TEMPERATURE : 9684

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	-2 CM/S [ .8]	MEAN :	-1.0 CM/S [ 1.1]
VARIANCE :	7.1 (CM/S)**2 [ 2.1]	VARIANCE :	5.5 (CM/S)**2 [ 3.8]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.3832E+01 DEG.CEL. [ .3312E-01]	MEAN :	1460.0 DB
VARIANCE :	.8131E-02 (DEG.CEL.)**2 [ .2948E-02]	VARIANCE :	32.0 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -1.5 (CM/S)\*\*2 [ 2.2]  
 CORRELATION COEF. : -.23

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .5347E-01 DEG.CEL. CM/S [ .5616E-01]  
 CORRELATION COEF. : .22

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2449E-01 DEG.CEL. CM/S [ .7171E-01]  
 CORRELATION COEF. : .12

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2532E+00 DEG.CEL. DB  
 CORRELATION COEF. : .50

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .5 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 6.3 (CM/S)\*\*2 [ 3.0]  
 MKE/EKE : .08



INSTITUTION : I.F.R.E.MER  
 SITE : B1  
 LATITUDE : 48 N 35.50  
 LONGITUDE : 30 W 5.0  
 WATER DEPTH : 3515 METERS  
 INSTRUMENT NUMBER : 4436 AANDERAA  
 NOMINAL DEPTH : 2453 METERS  
 START TIME : 28-6-1983 20H  
 STOP TIME : 5-8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9683  
 NUMBER OF CYCLES FOR TEMPERATURE : 9683

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	-0.6 CM/S [ .5]	MEAN :	-1.0 CM/S [ .6]
VARIANCE :	4.8 (CM/S)**2 [ 1.2]	VARIANCE :	3.4 (CM/S)**2 [ 1.5]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .3374E+01 DEG.CEL. [ .2796E-01]  
 VARIANCE : .4622E-02 (DEG.CEL.)\*\*2 [ .1952E-02]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -1.4 (CM/S)\*\*2 [ 1.0]  
 CORRELATION COEF. : -.34

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .4242E-01 DEG.CEL. CM/S [ .3072E-01]  
 CORRELATION COEF. : .28

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .8668E-02 DEG.CEL. CM/S [ .3808E-01]  
 CORRELATION COEF. : .07

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .7 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 4.1 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .17

INSTITUTION : I. F. R. E. MER  
 SITE : B1  
 LATITUDE : 48 N 35.50  
 LONGITUDE : 30 W 5. 0  
 WATER DEPTH : 3515 METERS  
 INSTRUMENT NUMBER : 5893 AANDERAA  
 NOMINAL DEPTH : 2956 METERS  
 START TIME : 28- 6-1983 20H  
 STOP TIME : 5- 8-1984 7H

NUMBER OF CYCLES FOR PRESSURE : 9684 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9684  
 NUMBER OF CYCLES FOR TEMPERATURE : 9684

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	- .4 CM/S [ .4]	MEAN :	- .8 CM/S [ .5]
VARIANCE :	5.0 (CM/S)**2 [ 1.1]	VARIANCE :	4.0 (CM/S)**2 [ 1.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.3042E+01 DEG.CEL. [ .3408E-01]	MEAN :	3002.0 DB
VARIANCE :	.6465E-02 (DEG.CEL.)**2 [ .2953E-02]	VARIANCE :	3.8 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -1.3 (CM/S)\*\*2 [ 1.0]  
 CORRELATION COEF. : -.30

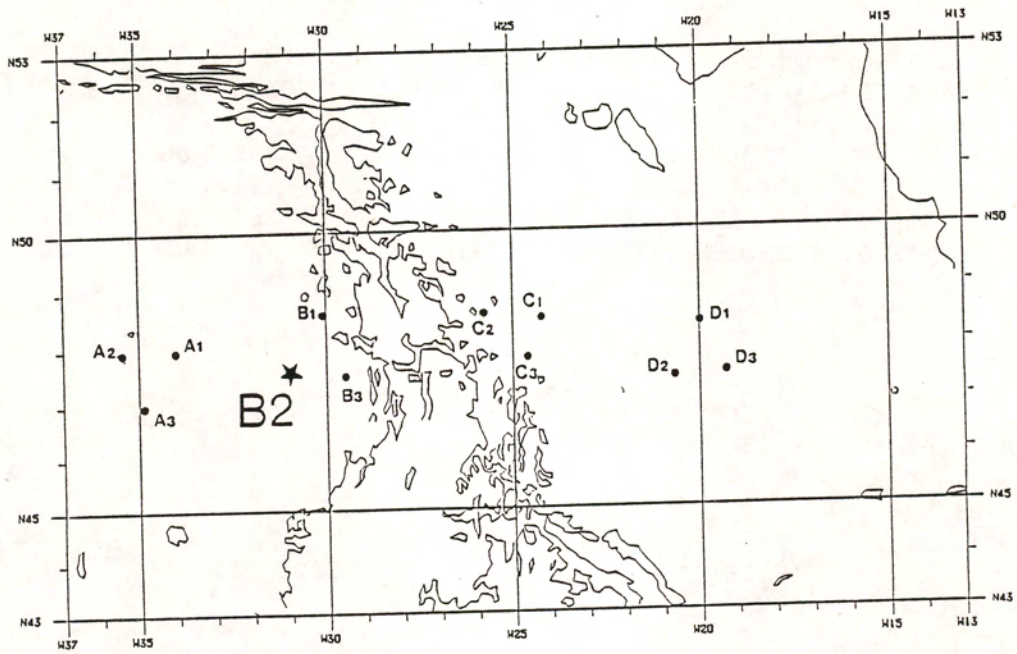
EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2466E-01 DEG.CEL. CM/S [ .3089E-01]  
 CORRELATION COEF. : .14

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1648E-01 DEG.CEL. CM/S [ .3791E-01]  
 CORRELATION COEF. : .10

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1177E-02 DEG.CEL. DB  
 CORRELATION COEF. : .01

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 4.5 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .09

# MOORING B2



INSTITUTION : I. F. R. E. MER  
 SITE : B2  
 LATITUDE : 47 N 36. 0  
 LONGITUDE : 30 W 57.40  
 WATER DEPTH : 3620 METERS  
 INSTRUMENT NUMBER : 4442 AANDERAA  
 NOMINAL DEPTH : 368 METERS  
 START TIME : 29- 6-1983 11H  
 STOP TIME : 6- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9692 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 6742  
 NUMBER OF CYCLES FOR TEMPERATURE : 9692

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	4.3	CM/S	[	5.4]
VARIANCE	:	254.8	(CM/S)**2	[	80.9]
			MEAN	:	13.1
			CM/S	[	5.4]
			VARIANCE	:	303.8
			(CM/S)**2	[	94.9]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.1105E+02	DEG.CEL.	[	.3794E+00]
VARIANCE	:	.1875E+01	(DEG.CEL.)**2	[	.4743E+00]
			MEAN	:	381.4
			DB		
			VARIANCE	:	96.6
			DB**2		

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -97.7 (CM/S)\*\*2 [ 65.9]  
 CORRELATION COEF. : -.35

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1911E+01 DEG.CEL. CM/S [ .5382E+01]  
 CORRELATION COEF. : .09

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.8395E+01 DEG.CEL. CM/S [ .5078E+01]  
 CORRELATION COEF. : -.35

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.1064E+01 DEG.CEL. DB  
 CORRELATION COEF. : -.08

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 95.0 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 279.3 (CM/S)\*\*2 [ 87.9]  
 MKE/EKE : .34

INSTITUTION : I.F.R.E.MER  
 SITE : B2  
 LATITUDE : 47 N 36.0  
 LONGITUDE : 30 W 57.40  
 WATER DEPTH : 3620 METERS  
 INSTRUMENT NUMBER : 4591 AANDERAA  
 NOMINAL DEPTH : 670 METERS  
 START TIME : 29- 6-1983 11H  
 STOP TIME : 6- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9692 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9692  
 NUMBER OF CYCLES FOR TEMPERATURE : 9692

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	2.2	CM/S	[	2.8]
VARIANCE	:	73.4	(CM/S)**2	[	21.8]
			MEAN	:	4.1
			CM/S	[	3.7]
			VARIANCE	:	111.3
			(CM/S)**2	[	40.1]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.7099E+01	DEG.CEL.	[	.5399E+00]
VARIANCE	:	.1619E+01	(DEG.CEL.)**2	[	.7773E+00]
			MEAN	:	671.3
			DB		
			VARIANCE	:	63.5
			DB**2		

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -38.5 (CM/S)\*\*2 [ 19.3]  
 CORRELATION COEF. : -.43

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1146E+01 DEG.CEL. CM/S [ .2819E+01]  
 CORRELATION COEF. : .11

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1623E+01 DEG.CEL. CM/S [ .3924E+01]  
 CORRELATION COEF. : .12

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.1850E+01 DEG.CEL. DB  
 CORRELATION COEF. : -.18

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 10.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 92.4 (CM/S)\*\*2 [ 30.9]  
 MKE/EKE : .12

INSTITUTION : I. F. R. E. MER  
 SITE : B2  
 LATITUDE : 47 N 36. 0  
 LONGITUDE : 30 W 57.40  
 WATER DEPTH : 3620 METERS  
 INSTRUMENT NUMBER : 4445 AANDERAA  
 NOMINAL DEPTH : 1472 METERS  
 START TIME : 29- 6-1983 11H  
 STOP TIME : 6- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9692  
 NUMBER OF CYCLES FOR TEMPERATURE : 9692

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	.6	CM/S	[	.8]
VARIANCE	:	8.0	(CM/S)**2	[	2.1]
			MEAN	:	.9
			CM/S	[	1.1]
			VARIANCE	:	16.4
			(CM/S)**2	[	3.8]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .3835E+01 DEG. CEL. [ .3310E-01]  
 VARIANCE : .6322E-02 (DEG. CEL.)\*\*2 [ .2947E-02]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -3.4 (CM/S)\*\*2 [ 2.2]  
 CORRELATION COEF. : -.29

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.2541E-01 DEG. CEL. CM/S [ .5614E-01]  
 CORRELATION COEF. : -.11

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2823E-01 DEG. CEL. CM/S [ .7168E-01]  
 CORRELATION COEF. : .09

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .5 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 12.2 (CM/S)\*\*2 [ 3.0]  
 MKE/EKE : .04

INSTITUTION : I. F. R. E. MER  
 SITE : B2  
 LATITUDE : 47 N 36. 0  
 LONGITUDE : 30 W 57.40  
 WATER DEPTH : 3620 METERS  
 INSTRUMENT NUMBER : 5446 AANDERAA  
 NOMINAL DEPTH : 2483 METERS  
 START TIME : 29- 6-1983 11H  
 STOP TIME : 1- 8-1984 19H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9585  
 NUMBER OF CYCLES FOR TEMPERATURE : 497

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
: : : :		: : : :	
MEAN	: -1.0 CM/S [ .6]	MEAN	: 1.4 CM/S [ .6]
VARIANCE	: 3.8 (CM/S)**2 [ 1.2]	VARIANCE	: 6.7 (CM/S)**2 [ 1.5]

TEMPERATURE  
 : : : : : : : :  
 MEAN : .3358E+01 DEG. CEL. [ .1084E+00]  
 VARIANCE : .6947E-04 (DEG. CEL.)\*\*2 [ .5135E-02]

EAST - NORTH  
 : : : : : : : :  
 COVARIANCE : 1.0 (CM/S)\*\*2 [ 1.0]  
 CORRELATION COEF. : .19

EAST - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : .2170E-02 DEG. CEL. CM/S [ .1018E+00]  
 CORRELATION COEF. : .13

NORTH - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : .9129E-03 DEG. CEL. CM/S [ .1166E+00]  
 CORRELATION COEF. : .04

OTHER STATISTICS  
 : : : : : : : :  
 MEAN KINETIC ENERGY (MKE) : 1.4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 5.3 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .27

INSTITUTION : I. F. R. E. MER  
 SITE : B2  
 LATITUDE : 47 N 36. 0  
 LONGITUDE : 30 W 57.40  
 WATER DEPTH : 3620 METERS  
 INSTRUMENT NUMBER : 5894 AANDERAA  
 NOMINAL DEPTH : 2985 METERS  
 START TIME : 29- 6-1983 11H  
 STOP TIME : 6- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9692 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 7189  
 NUMBER OF CYCLES FOR TEMPERATURE : 9692

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	- .9 CM/S [ .5]	MEAN :	1.6 CM/S [ .6]
VARIANCE :	2.7 (CM/S)**2 [ 1.3]	VARIANCE :	5.6 (CM/S)**2 [ 1.7]

TEMPERATURE		PRESSURE	
:::::::::::		:::::::::::	
MEAN :	.2949E+01 DEG.CEL. [ .3406E-01]	MEAN :	3025.6 DB
VARIANCE :	.5218E-02 (DEG.CEL.)**2 [ .2952E-02]	VARIANCE :	38.0 DB**2

EAST - NORTH  
 :::::::::::::::  
 COVARIANCE : -.0 (CM/S)\*\*2 [ 1.2]  
 CORRELATION COEF. : -.00

EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .9149E-02 DEG.CEL. CM/S [ .3577E-01]  
 CORRELATION COEF. : .08

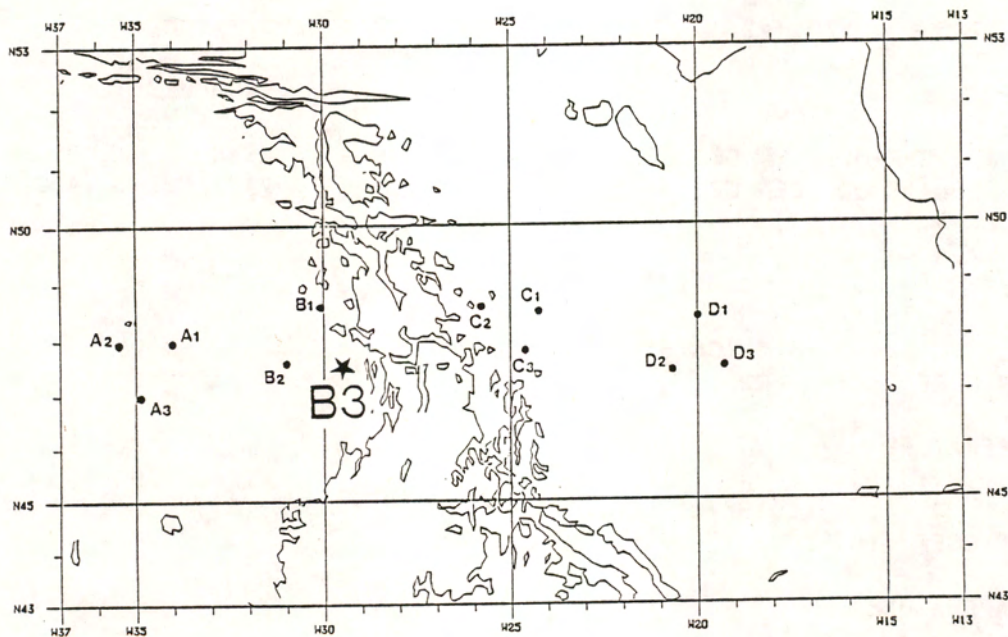
NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.5055E-01 DEG.CEL. CM/S [ .4384E-01]  
 CORRELATION COEF. : -.30

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.2134E+00 DEG.CEL. DB  
 CORRELATION COEF. : -.48

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 1.7 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 4.1 (CM/S)\*\*2 [ 1.5]  
 MKE/EKE : .40



# MOORING B3



INSTITUTION : I. F. R. E. MER  
SITE : B3  
LATITUDE : 47 N 30.60  
LONGITUDE : 29 W 28.10  
WATER DEPTH : 3424 METERS  
INSTRUMENT NUMBER : 4443 AANDERAA  
NOMINAL DEPTH : 339 METERS  
START TIME : 28- 6-1983 11H  
STOP TIME : 12- 5-1984 19H

NUMBER OF CYCLES FOR PRESSURE : 7665 (ONE CYCLE IS ONE HOUR)  
NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 7665  
NUMBER OF CYCLES FOR TEMPERATURE : 7665

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
(40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
MEAN	: 2.3 CM/S [ 5.0]	MEAN	: -15.4 CM/S [ 5.0]
VARIANCE	: 205.0 (CM/S)**2 [ 76.6]	VARIANCE	: 193.7 (CM/S)**2 [ 90.1]

TEMPERATURE		PRESSURE	
MEAN	: .1128E+02 DEG. CEL. [ .4350E+00]	MEAN	: 356.8 DB
VARIANCE	: .9441E+00 (DEG. CEL.)**2 [ .5272E+00]	VARIANCE	: 400.6 DB**2

EAST - NORTH  
COVARIANCE : -6.5 (CM/S)\*\*2 [ 62.4]  
CORRELATION COEF. : -.03

EAST - TEMPERATURE  
COVARIANCE : .1019E+01 DEG. CEL. CM/S [ .5099E+01]  
CORRELATION COEF. : .07

NORTH - TEMPERATURE  
COVARIANCE : -.1425E+00 DEG. CEL. CM/S [ .4773E+01]  
CORRELATION COEF. : -.01

PRESSURE - TEMPERATURE  
COVARIANCE : -.2813E+01 DEG. CEL. DB  
CORRELATION COEF. : -.14

OTHER STATISTICS  
MEAN KINETIC ENERGY (MKE) : 121.6 (CM/S)\*\*2  
EDDY KINETIC ENERGY (EKE) : 199.4 (CM/S)\*\*2 [ 83.4]  
MKE/EKE : .61

INSTITUTION : I. F. R. E. MER  
 SITE : B3  
 LATITUDE : 47 N 30.60  
 LONGITUDE : 29 W 28.10  
 WATER DEPTH : 3424 METERS  
 INSTRUMENT NUMBER : 5731 AANDERAA  
 NOMINAL DEPTH : 616 METERS  
 START TIME : 28- 6-1983 11H  
 STOP TIME : 5- 8-1984 15H

NUMBER OF CYCLES FOR PRESSURE : 9701 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9701  
 NUMBER OF CYCLES FOR TEMPERATURE : 9701

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN	: 1.5 CM/S [ 2.8]	MEAN	: -8.1 CM/S [ 3.7]
VARIANCE	: 74.4 (CM/S)**2 [ 21.8]	VARIANCE	: 74.7 (CM/S)**2 [ 40.0]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .7370E+01 DEG. CEL. [ .5396E+00]	MEAN	: 617.9 DB
VARIANCE	: .1672E+01 (DEG. CEL.)**2 [ .7770E+00]	VARIANCE	: 203.6 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : 2.7 (CM/S)\*\*2 [ 19.3]  
 CORRELATION COEF. : .04

EAST - TEMPERATURE  
 ( ::::::::::::::  
 COVARIANCE : -.1869E+01 DEG. CEL. CM/S [ .2818E+01]  
 CORRELATION COEF. : -.17

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.3947E+01 DEG. CEL. CM/S [ .3923E+01]  
 CORRELATION COEF. : -.35

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .6674E+01 DEG. CEL. DB  
 CORRELATION COEF. : .36

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 33.6 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 74.6 (CM/S)\*\*2 [ 30.9]  
 MKE/EKE : .45

INSTITUTION : I. F. R. E. MER  
 SITE : B3  
 LATITUDE : 47 N 30.60  
 LONGITUDE : 29 W 28.10  
 WATER DEPTH : 3424 METERS  
 INSTRUMENT NUMBER : 4446 AANDERAA  
 NOMINAL DEPTH : 1419 METERS  
 START TIME : 28- 6-1983 11H  
 STOP TIME : 5- 8-1984 15H

NUMBER OF CYCLES FOR PRESSURE : 9701 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 2277  
 NUMBER OF CYCLES FOR TEMPERATURE : 9701

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	2.8 CM/S [ 1.6]	MEAN :	-2.1 CM/S [ 2.2]
VARIANCE :	8.2 (CM/S)**2 [ 4.1]	VARIANCE :	28.1 (CM/S)**2 [ 7.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.3851E+01 DEG.CEL. [ .3308E-01]	MEAN :	1440.6 DB
VARIANCE :	.9342E-02 (DEG.CEL.)**2 [ .2945E-02]	VARIANCE :	97.9 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -4.4 (CM/S)\*\*2 [ 4.3]  
 CORRELATION COEF. : -.29

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1354E+00 DEG.CEL. CM/S [ .1051E+00]  
 CORRELATION COEF. : -.49

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1575E+00 DEG.CEL. CM/S [ .1397E+00]  
 CORRELATION COEF. : .31

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .9318E-01 DEG.CEL. DB  
 CORRELATION COEF. : .10

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 6.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 18.2 (CM/S)\*\*2 [ 5.8]  
 MKE/EKE : .34

INSTITUTION : I. F. R. E. MER  
 SITE : B3  
 LATITUDE : 47 N 30.60  
 LONGITUDE : 29 W 28.10  
 WATER DEPTH : 3424 METERS  
 INSTRUMENT NUMBER : 4587 AANDERAA  
 NOMINAL DEPTH : 2437 METERS  
 START TIME : 28- 6-1983 11H  
 STOP TIME : 5- 8-1984 15H

NUMBER OF CYCLES FOR PRESSURE : 9701 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9701  
 NUMBER OF CYCLES FOR TEMPERATURE : 9701

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	.6 CM/S [ .5]	MEAN :	-2.3 CM/S [ .6]
VARIANCE :	6.7 (CM/S)**2 [ 1.2]	VARIANCE :	10.8 (CM/S)**2 [ 1.5]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.3360E+01 DEG.CEL. [ .2794E-01]	MEAN :	2480.9 DB
VARIANCE :	.4489E-02 (DEG.CEL. )**2 [ .1950E-02]	VARIANCE :	56.3 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -2.3 (CM/S)\*\*2 [ 1.0]  
 CORRELATION COEF. : -.27

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .6644E-02 DEG.CEL. CM/S [ .3070E-01]  
 CORRELATION COEF. : .04

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.5769E-01 DEG.CEL. CM/S [ .3804E-01]  
 CORRELATION COEF. : -.26

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.2971E-01 DEG.CEL. DB  
 CORRELATION COEF. : -.06

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 2.8 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 8.7 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .32

INSTITUTION : I.F.R.E.MER  
 SITE : B3  
 LATITUDE : 47 N 30.60  
 LONGITUDE : 29 W 28.10  
 WATER DEPTH : 3424 METERS  
 INSTRUMENT NUMBER : 5895 AANDERAA  
 NOMINAL DEPTH : 2943 METERS  
 START TIME : 28- 6-1983 11H  
 STOP TIME : 5- 8-1984 15H

NUMBER OF CYCLES FOR PRESSURE : 9701 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9701  
 NUMBER OF CYCLES FOR TEMPERATURE : 9701

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 2.0 CM/S [ .4]	MEAN	: -2.1 CM/S [ .5]
VARIANCE	: 8.9 (CM/S)**2 [ 1.1]	VARIANCE	: 11.9 (CM/S)**2 [ 1.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .3006E+01 DEG.CEL. [ .3405E-01]	MEAN	: 2989.3 DB
VARIANCE	: .9931E-02 (DEG.CEL.)**2 [ .2950E-02]	VARIANCE	: 6.5 DB**2 :

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -5.1 (CM/S)\*\*2 [ 1.0]  
 CORRELATION COEF. : -.50

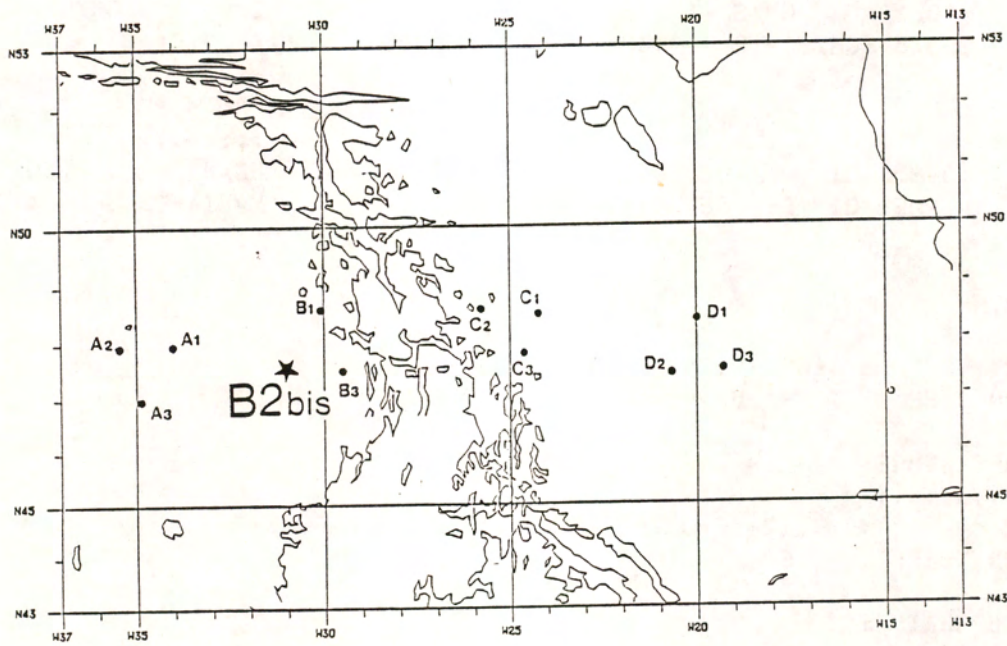
EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1415E-01 DEG.CEL. CM/S [ .3087E-01]  
 CORRELATION COEF. : .05

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.2867E-01 DEG.CEL. CM/S [ .3788E-01]  
 CORRELATION COEF. : -.08

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1579E-01 DEG.CEL. DB  
 CORRELATION COEF. : .06

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 4.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 10.4 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .40

# MOORING B2bis



INSTITUTION : I. F. R. E. MER  
 SITE : B2 bis  
 LATITUDE : 47 N 30.90  
 LONGITUDE : 30 W 53.30  
 WATER DEPTH : 3500 METERS  
 INSTRUMENT NUMBER : 1443 AANDERAA  
 NOMINAL DEPTH : 347 METERS  
 START TIME : 6- 8-1984 15H  
 STOP TIME : 12- 1-1985 16H

NUMBER OF CYCLES FOR PRESSURE : 3818 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 3818  
 NUMBER OF CYCLES FOR TEMPERATURE : 3818

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 10.1 CM/S [ 8.0]	MEAN	: -2.6 CM/S [ 7.4]
VARIANCE	: 235.5 (CM/S)**2 [ 100.3]	VARIANCE	: 127.6 (CM/S)**2 [ 116.0]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .8485E+01 DEG.CEL. [ .6704E+00]	MEAN	: 350.3 DB
VARIANCE	: .1803E+01 (DEG.CEL.)**2 [ .7039E+00]	VARIANCE	: 34.3 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -95.7 (CM/S)\*\*2 [ 81.8]  
 CORRELATION COEF. : -.55

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1245E+02 DEG.CEL. CM/S [ .6665E+01]  
 CORRELATION COEF. : .60

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.5501E+01 DEG.CEL. CM/S [ .6656E+01]  
 CORRELATION COEF. : -.36

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2846E+01 DEG.CEL. DB  
 CORRELATION COEF. : .36

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 54.1 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 181.5 (CM/S)\*\*2 [ 108.2]  
 MKE/EKE : .30



INSTITUTION : I.F.R.E.MER  
 SITE : B2 bis  
 LATITUDE : 47 N 30.90  
 LONGITUDE : 30 W 53.30  
 WATER DEPTH : 3500 METERS  
 INSTRUMENT NUMBER : 4596 AANDERAA  
 NOMINAL DEPTH : 640 METERS  
 START TIME : 6- 8-1984 15H  
 STOP TIME : 21- 8-1984 8H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 309  
 NUMBER OF CYCLES FOR TEMPERATURE : 309

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	6.8 CM/S [ 14.4]	MEAN :	-8.0 CM/S [ 17.6]
VARIANCE :	4.1 (CM/S)**2 [ 81.0]	VARIANCE :	23.3 (CM/S)**2 [ 110.0]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .5366E+01 DEG.CEL. [ .2665E+01]  
 VARIANCE : .5070E-01 (DEG.CEL.)\*\*2 [ .2263E+01]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -7.1 (CM/S)\*\*2 [ 68.7]  
 CORRELATION COEF. : -.73

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1683E+00 DEG.CEL. CM/S [ .9561E+01]  
 CORRELATION COEF. : .37

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.2953E+00 DEG.CEL. CM/S [ .1123E+02]  
 CORRELATION COEF. : -.27

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 54.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 13.7 (CM/S)\*\*2 [ 95.5]  
 MKE/EKE : 4.01

INSTITUTION : I.F.R.E.MER  
 SITE : B2 bis  
 LATITUDE : 47 N 30.90  
 LONGITUDE : 30 W 53.30  
 WATER DEPTH : 3500 METERS  
 INSTRUMENT NUMBER : 5814 AANDERAA  
 NOMINAL DEPTH : 1440 METERS  
 START TIME : 6- 8-1984 15H  
 STOP TIME : 14-10-1984 19H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 1452  
 NUMBER OF CYCLES FOR TEMPERATURE : 1452

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
: : : :		: : : :	
MEAN :	.2 CM/S [ 1.8]	MEAN :	-.8 CM/S [ 2.3]
VARIANCE :	4.7 (CM/S)**2 [ 5.0]	VARIANCE :	5.3 (CM/S)**2 [ 9.0]

TEMPERATURE  
 : : : : : : : :  
 MEAN : .3736E+01 DEG.CEL. [ .6870E-01]  
 VARIANCE : .3310E-03 (DEG.CEL.)\*\*2 [ .6217E-02]

EAST - NORTH  
 : : : : : : : :  
 COVARIANCE : -4.1 (CM/S)\*\*2 [ 5.1]  
 CORRELATION COEF. : -.82

EAST - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : .1497E-01 DEG.CEL. CM/S [ .1265E+00]  
 CORRELATION COEF. : .38

NORTH - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : -.1015E-01 DEG.CEL. CM/S [ .1686E+00]  
 CORRELATION COEF. : -.24

OTHER STATISTICS  
 : : : : : : : :  
 MEAN KINETIC ENERGY (MKE) : .3 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 5.0 (CM/S)\*\*2 [ 7.0]  
 MKE/EKE : .06

INSTITUTION : I.F.R.E.MER  
 SITE : B2 bis  
 LATITUDE : 47 N 30.90  
 LONGITUDE : 30 W 53.30  
 WATER DEPTH : 3500 METERS  
 INSTRUMENT NUMBER : 4261 AANDERAA  
 NOMINAL DEPTH : 2440 METERS  
 START TIME : 6- 8-1984 15H  
 STOP TIME : 14- 6-1985 22H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 7496  
 NUMBER OF CYCLES FOR TEMPERATURE : 7496

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	.7	CM/S	[	.6]
VARIANCE	:	2.8	(CM/S)**2	[	1.3]
			MEAN	:	.1
			CM/S	[	.7]
			VARIANCE	:	1.4
			(CM/S)**2	[	1.7]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .3291E+01 DEG.CEL. [ .3199E-01]  
 VARIANCE : .2199E-02 (DEG.CEL.)\*\*2 [ .2187E-02]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -.1 (CM/S)\*\*2 [ 1.1]  
 CORRELATION COEF. : -.06

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1693E-01 DEG.CEL. CM/S [ .3457E-01]  
 CORRELATION COEF. : .22

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .9211E-03 DEG.CEL. CM/S [ .4261E-01]  
 CORRELATION COEF. : .02

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 2.1 (CM/S)\*\*2 [ 1.5]  
 MKE/EKE : .11

INSTITUTION : I.F.R.E.MER  
 SITE : B2 bis  
 LATITUDE : 47 N 30.90  
 LONGITUDE : 30 W 53.30  
 WATER DEPTH : 3500 METERS  
 INSTRUMENT NUMBER : 5813 AANDERAA  
 NOMINAL DEPTH : 2940 METERS  
 START TIME : 6- 8-1984 15H  
 STOP TIME : 19- 9-1985 0H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9802  
 NUMBER OF CYCLES FOR TEMPERATURE : 9802

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	- .3 CM/S [ .4]	MEAN :	1.1 CM/S [ .5]
VARIANCE :	2.6 (CM/S)**2 [ 1.1]	VARIANCE :	3.5 (CM/S)**2 [ 1.4]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .2951E+01 DEG.CEL. [ .3388E-01]  
 VARIANCE : .3818E-02 (DEG.CEL. )\*\*2 [ .2936E-02]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -2.0 (CM/S)\*\*2 [ 1.0]  
 CORRELATION COEF. : -.68

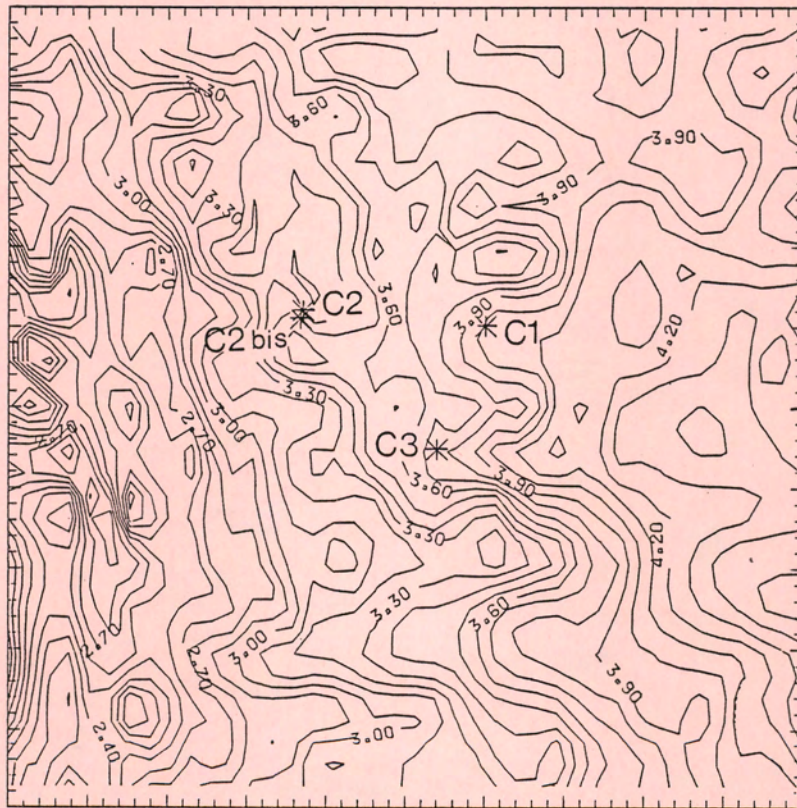
EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .3318E-01 DEG.CEL. CM/S [ .3071E-01]  
 CORRELATION COEF. : .33

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1984E-01 DEG.CEL. CM/S [ .3769E-01]  
 CORRELATION COEF. : -.17

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .7 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 3.0 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .23

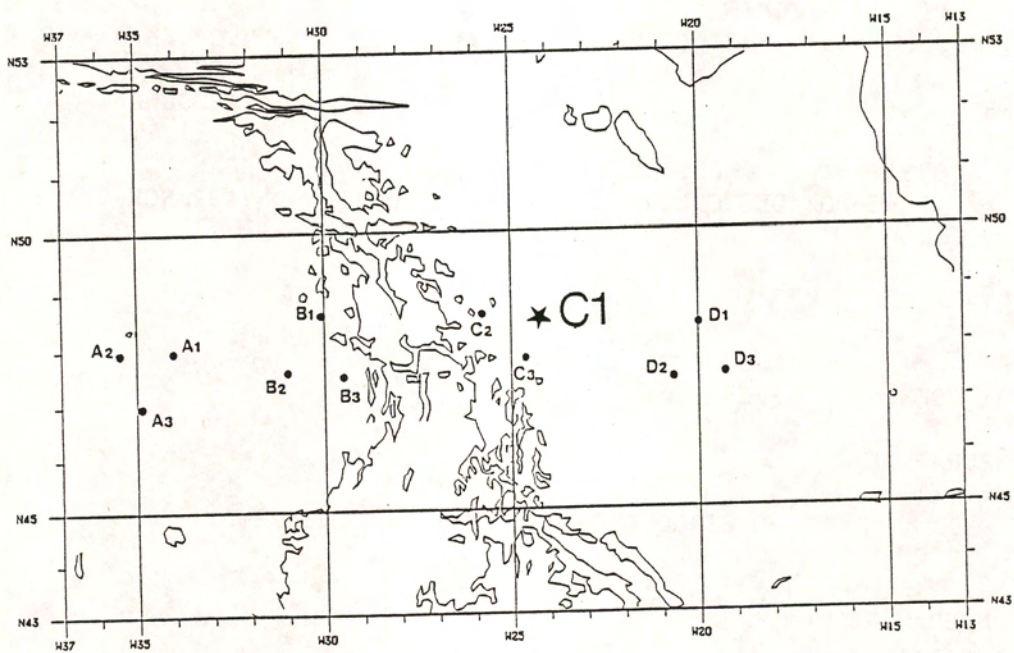
# CLUSTER C

## LOCAL BATHYMETRY



Contour labels are in  $10^3$  m

# MOORING C1



INSTITUTION : I.F.M. KIEL  
 SITE : C1  
 LATITUDE : 48 N 29.20  
 LONGITUDE : 24 W 11.45  
 WATER DEPTH : 3755 METERS  
 INSTRUMENT NUMBER : 6678 AANDERAA  
 NOMINAL DEPTH : 402 METERS  
 START TIME : 26- 6-1983 18H  
 STOP TIME : 2- 8-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 9669 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 1897  
 NUMBER OF CYCLES FOR TEMPERATURE : 9669

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 3.6 CM/S [ 7.6]	MEAN	: 1.9 CM/S [ 4.3]
VARIANCE	: 25.0 (CM/S)**2 [ 75.4]	VARIANCE	: 35.0 (CM/S)**2 [ 41.1]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .8992E+01 DEG.CEL. [ .2598E+00]	MEAN	: 403.9 DB
VARIANCE	: .1586E+00 (DEG.CEL. )**2 [ .2063E+00]	VARIANCE	: 64.8 DB**2

EAST - NORTH  
 :::::::::::::::  
 COVARIANCE : -16.0 (CM/S)\*\*2 [ 37.5]  
 CORRELATION COEF. : -.54

EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .4036E+00 DEG.CEL. CM/S [ .3943E+01]  
 CORRELATION COEF. : .20

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.2009E+00 DEG.CEL. CM/S [ .2646E+01]  
 CORRELATION COEF. : -.09

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .7869E+00 DEG.CEL. DB  
 CORRELATION COEF. : .25

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 8.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 30.0 (CM/S)\*\*2 [ 58.3]  
 MKE/EKE : .27

INSTITUTION : I.F.M. KIEL  
 SITE : C1  
 LATITUDE : 48 N 29.20  
 LONGITUDE : 24 W 11.45  
 WATER DEPTH : 3755 METERS  
 INSTRUMENT NUMBER : 6679 AANDERAA  
 NOMINAL DEPTH : 705 METERS  
 START TIME : 26- 6-1983 18H  
 STOP TIME : 2- 8-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 8901  
 NUMBER OF CYCLES FOR TEMPERATURE : 9669

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	.1 CM/S [ 1.6]	MEAN :	-.0 CM/S [ 2.5]
VARIANCE :	13.7 (CM/S)**2 [ 12.5]	VARIANCE :	10.4 (CM/S)**2 [ 15.3]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .6215E+01 DEG.CEL. [ .1073E+00]  
 VARIANCE : .1437E+00 (DEG.CEL.)\*\*2 [ .6327E-01]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -5.2 (CM/S)\*\*2 [ 7.8]  
 CORRELATION COEF. : -.44

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.5919E-01 DEG.CEL. CM/S [ .6018E+00]  
 CORRELATION COEF. : -.04

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1078E+00 DEG.CEL. CM/S [ .4605E+00]  
 CORRELATION COEF. : -.09

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .0 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 12.1 (CM/S)\*\*2 [ 13.9]  
 MKE/EKE : .00



INSTITUTION : I.F.M. KIEL  
 SITE : C1  
 LATITUDE : 48 N 29.20  
 LONGITUDE : 24 W 11.45  
 WATER DEPTH : 3755 METERS  
 INSTRUMENT NUMBER : 6680 AANDERAA  
 NOMINAL DEPTH : 1510 METERS  
 START TIME : 26- 6-1983 18H  
 STOP TIME : 2- 8-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9669  
 NUMBER OF CYCLES FOR TEMPERATURE : 9669

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	.2 CM/S [ .9]	MEAN :	-.3 CM/S [ .9]
VARIANCE :	10.2 (CM/S)**2 [ 2.2]	VARIANCE :	8.2 (CM/S)**2 [ 2.2]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .3720E+01 DEG.CEL. [ .2286E-01]  
 VARIANCE : .1955E-02 (DEG.CEL.)\*\*2 [ .1664E-02]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -3.2 (CM/S)\*\*2 [ 1.5]  
 CORRELATION COEF. : -.34

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1576E-01 DEG.CEL. CM/S [ .3642E-01]  
 CORRELATION COEF. : -.11

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .3431E-01 DEG.CEL. CM/S [ .3965E-01]  
 CORRELATION COEF. : .27

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .1 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 9.2 (CM/S)\*\*2 [ 2.2]  
 MKE/EKE : .01

INSTITUTION : I.F.M. KIEL  
SITE : C1  
LATITUDE : 48 N 29.20  
LONGITUDE : 24 W 11.45  
WATER DEPTH : 3755 METERS  
INSTRUMENT NUMBER : 6681 AANDERAA  
NOMINAL DEPTH : 2510 METERS  
START TIME : 26- 6-1983 18H  
STOP TIME : 2- 8-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9669  
NUMBER OF CYCLES FOR TEMPERATURE : 9669

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
(40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	-0.5 CM/S [ .6]	MEAN :	.1 CM/S [ .6]
VARIANCE :	4.7 (CM/S)**2 [ 1.1]	VARIANCE :	2.7 (CM/S)**2 [ 1.4]

TEMPERATURE  
:::::::::::  
MEAN : .3157E+01 DEG. CEL. [ .1768E-01]  
VARIANCE : .5808E-03 (DEG. CEL.)\*\*2 [ .8511E-03]

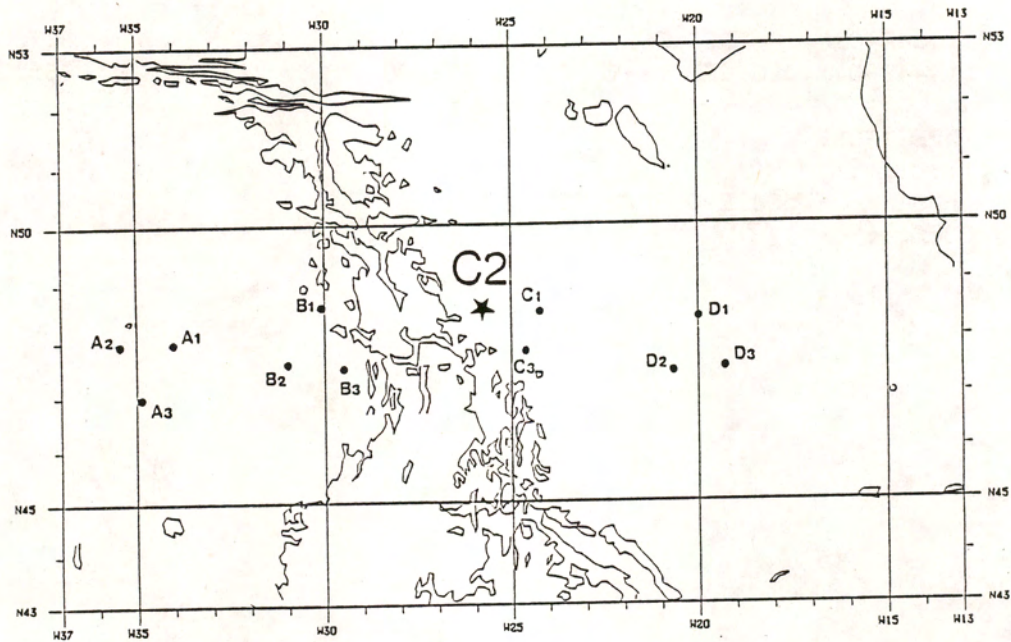
EAST - NORTH  
:::::::::::  
COVARIANCE : -1.1 (CM/S)\*\*2 [ .9]  
CORRELATION COEF. : -.32

EAST - TEMPERATURE  
:::::::::::  
COVARIANCE : .2528E-01 DEG. CEL. CM/S [ .2232E-01]  
CORRELATION COEF. : .48

NORTH - TEMPERATURE  
:::::::::::  
COVARIANCE : -.2098E-01 DEG. CEL. CM/S [ .2419E-01]  
CORRELATION COEF. : -.53

OTHER STATISTICS  
:::::::::::  
MEAN KINETIC ENERGY (MKE) : .1 (CM/S)\*\*2  
EDDY KINETIC ENERGY (EKE) : 3.7 (CM/S)\*\*2 [ 1.3]  
MKE/EKE : .03

# MOORING C2





INSTITUTION : I.F.M. KIEL  
SITE : C2  
LATITUDE : 48 N 34.55  
LONGITUDE : 25 W 44.35  
WATER DEPTH : 3450 METERS  
INSTRUMENT NUMBER : 2317 AANDERAA  
NOMINAL DEPTH : 586 METERS  
START TIME : 27- 6-1983 13H  
STOP TIME : 3- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9666  
NUMBER OF CYCLES FOR TEMPERATURE : 0

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
(40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 4.0 CM/S [ 1.5]	MEAN	: -.7 CM/S [ 2.4]
VARIANCE	: 64.9 (CM/S)**2 [ 12.1]	VARIANCE	: 36.8 (CM/S)**2 [ 14.7]

EAST - NORTH  
:::::  
COVARIANCE : -3.9 (CM/S)\*\*2 [ 7.5]  
CORRELATION COEF. : -.08

OTHER STATISTICS  
:::::  
MEAN KINETIC ENERGY (MKE) : 8.2 (CM/S)\*\*2  
EDDY KINETIC ENERGY (EKE) : 50.9 (CM/S)\*\*2 [ 13.4]  
MKE/EKE : .16

INSTITUTION : I.F.M. KIEL  
 SITE : C2  
 LATITUDE : 48 N 34.55  
 LONGITUDE : 25 W 44.35  
 WATER DEPTH : 3450 METERS  
 INSTRUMENT NUMBER : 6159 AANDERAA  
 NOMINAL DEPTH : 1392 METERS  
 START TIME : 27- 6-1983 13H  
 STOP TIME : 3- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 4078  
 NUMBER OF CYCLES FOR TEMPERATURE : 9666

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	.2 CM/S [ 1.4]	MEAN :	.3 CM/S [ 1.4]
VARIANCE :	8.2 (CM/S)**2 [ 3.3]	VARIANCE :	4.4 (CM/S)**2 [ 3.2]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .3840E+01 DEG.CEL. [ .2286E-01]  
 VARIANCE : .9511E-02 (DEG.CEL.)\*\*2 [ .1664E-02]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -1.1 (CM/S)\*\*2 [ 2.3]  
 CORRELATION COEF. : -.18

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1001E+00 DEG.CEL. CM/S [ .5479E-01]  
 CORRELATION COEF. : -.36

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.6519E-01 DEG.CEL. CM/S [ .5678E-01]  
 CORRELATION COEF. : -.32

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : .1 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 6.3 (CM/S)\*\*2 [ 3.2]  
 MKE/EKE : .01

INSTITUTION : I.F.M. KIEL  
 SITE : C2  
 LATITUDE : 48 N 34.55  
 LONGITUDE : 25 W 44.35  
 WATER DEPTH : 3450 METERS  
 INSTRUMENT NUMBER : 6122 AANDERAA  
 NOMINAL DEPTH : 2407 METERS  
 START TIME : 27- 6-1983 13H  
 STOP TIME : 3- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9666  
 NUMBER OF CYCLES FOR TEMPERATURE : 9666

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
: : : :		: : : :	
MEAN	: .8 CM/S [ .6]	MEAN	: -.2 CM/S [ .6]
VARIANCE	: 4.7 (CM/S)**2 [ 1.1]	VARIANCE	: 4.7 (CM/S)**2 [ 1.4]

TEMPERATURE  
 : : : : : : : :  
 MEAN : .3293E+01 DEG.CEL. [ .1769E-01]  
 VARIANCE : .1991E-02 (DEG.CEL.)\*\*2 [ .8513E-03]

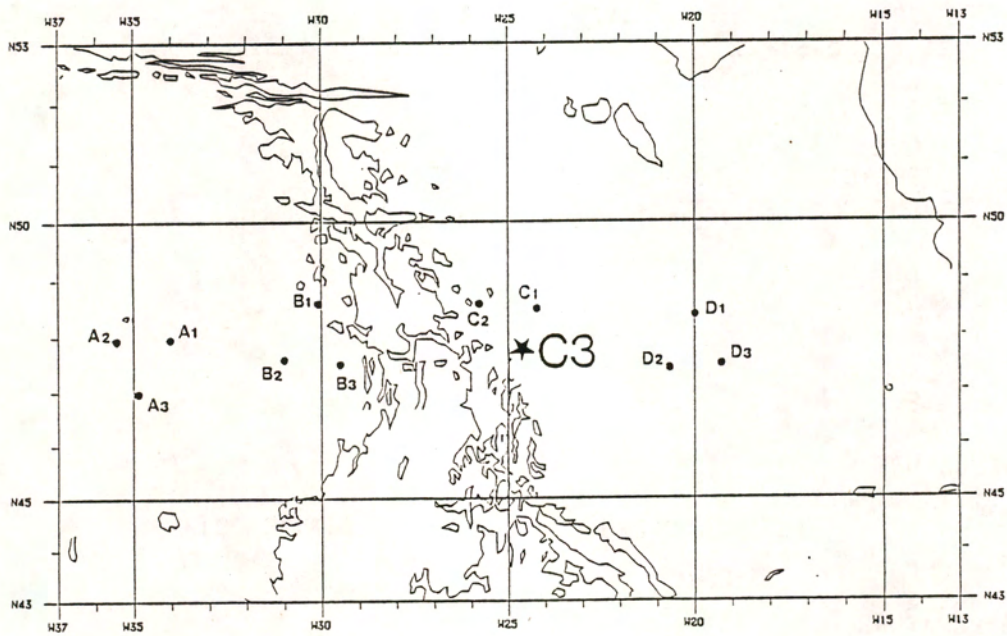
EAST - NORTH  
 : : : : : : : :  
 COVARIANCE : -.7 (CM/S)\*\*2 [ .9]  
 CORRELATION COEF. : -.15

EAST - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : .2948E-01 DEG.CEL. CM/S [ .2232E-01]  
 CORRELATION COEF. : .30

NORTH - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : .2460E-01 DEG.CEL. CM/S [ .2419E-01]  
 CORRELATION COEF. : .26

OTHER STATISTICS  
 : : : : : : : :  
 MEAN KINETIC ENERGY (MKE) : .3 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 4.7 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .07

# MOORING C3





INSTITUTION : I.F.M. KIEL  
SITE : C3  
LATITUDE : 47 N 47.80  
LONGITUDE : 24 W 36.10  
WATER DEPTH : 3680 METERS  
INSTRUMENT NUMBER : 0124 AANDERAA  
NOMINAL DEPTH : 659 METERS  
START TIME : 26- 6-1983 12H  
STOP TIME : 2- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9667  
NUMBER OF CYCLES FOR TEMPERATURE : 6510

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
(40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
MEAN	: 4.8 CM/S [ 1.5]	MEAN	: -3.4 CM/S [ 2.4]
VARIANCE	: 24.1 (CM/S)**2 [ 12.1]	VARIANCE	: 51.6 (CM/S)**2 [ 14.7]

TEMPERATURE

MEAN	: .6796E+01 DEG.CEL. [ .1337E+00]
VARIANCE	: .3865E+00 (DEG.CEL.)**2 [ .7545E-01]

EAST - NORTH

COVARIANCE	: 12.3 (CM/S)**2 [ 7.5]
CORRELATION COEF.	: .35

EAST - TEMPERATURE

COVARIANCE	: -.6254E+00 DEG.CEL. CM/S [ .6947E+00]
CORRELATION COEF.	: -.20

NORTH - TEMPERATURE

COVARIANCE	: -.1773E+00 DEG.CEL. CM/S [ .5449E+00]
CORRELATION COEF.	: -.04

OTHER STATISTICS

MEAN KINETIC ENERGY (MKE)	: 17.1 (CM/S)**2
EDDY KINETIC ENERGY (EKE)	: 37.9 (CM/S)**2 [ 13.4]
MKE/EKE	: .45

INSTITUTION : I.F.M. KIEL  
 SITE : C3  
 LATITUDE : 47 N 47.80  
 LONGITUDE : 24 W 36.10  
 WATER DEPTH : 3680 METERS  
 INSTRUMENT NUMBER : 4563 AANDERAA  
 NOMINAL DEPTH : 962 METERS  
 START TIME : 26- 6-1983 11H  
 STOP TIME : 2- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 4382  
 NUMBER OF CYCLES FOR TEMPERATURE : 9667

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
: : : :		: : : :	
MEAN :	3.9 CM/S [ 2.2]	MEAN :	.1 CM/S [ 2.7]
VARIANCE :	6.4 (CM/S)**2 [ 18.2]	VARIANCE :	21.3 (CM/S)**2 [ 12.2]

TEMPERATURE  
 : : : : : : : :  
 MEAN : .4689E+01 DEG.CEL. [ .7877E-01]  
 VARIANCE : .6343E-01 (DEG.CEL.)\*\*2 [ .2755E-01]

EAST - NORTH  
 : : : : : : : :  
 COVARIANCE : 1.8(CM/S)\*\*2 [ 9.2]  
 CORRELATION COEF. : .16

EAST - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : -.2662E+00 DEG.CEL. CM/S [ .4953E+00]  
 CORRELATION COEF. : -.42

NORTH - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : .2851E+00 DEG.CEL. CM/S [ .4436E+00]  
 CORRELATION COEF. : .25

OTHER STATISTICS  
 : : : : : : : :  
 MEAN KINETIC ENERGY (MKE) : 7.7 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 13.9 (CM/S)\*\*2 [ 15.2]  
 MKE/EKE : .55

INSTITUTION : I.F.M. KIEL  
 SITE : C3  
 LATITUDE : 47 N 47.80  
 LONGITUDE : 24 W 36.10  
 WATER DEPTH : 3680 METERS  
 INSTRUMENT NUMBER : 5252 AANDERAA  
 NOMINAL DEPTH : 1768 METERS  
 START TIME : 26- 6-1983 12H  
 STOP TIME : 2- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9667  
 NUMBER OF CYCLES FOR TEMPERATURE : 9667

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	2.2 CM/S [ .91	MEAN :	-1.7 CM/S [ .91
VARIANCE :	3.3 (CM/S)**2 [ 2.21	VARIANCE :	8.2 (CM/S)**2 [ 2.21

TEMPERATURE  
 ::::::::::::::  
 MEAN : .3244E+01 DEG.CEL. [ .2286E-011  
 VARIANCE : .7632E-03 (DEG.CEL.)\*\*2 [ .1664E-021

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : .6 (CM/S)\*\*2 [ 1.51  
 CORRELATION COEF. : .11

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .4379E-02 DEG.CEL. CM/S [ .3642E-011  
 CORRELATION COEF. : .09

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1108E-01 DEG.CEL. CM/S [ .3965E-011  
 CORRELATION COEF. : .14

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 3.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 5.7 (CM/S)\*\*2 [ 2.21  
 MKE/EKE : .67

INSTITUTION : I.F.M. KIEL  
 SITE : C3  
 LATITUDE : 47 N 47.80  
 LONGITUDE : 24 W 36.10  
 WATER DEPTH : 3680 METERS  
 INSTRUMENT NUMBER : 6121 AANDERAA  
 NOMINAL DEPTH : 2783 METERS  
 START TIME : 26- 6-1983 12H  
 STOP TIME : 2- 8-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9667  
 NUMBER OF CYCLES FOR TEMPERATURE : 9667

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	.3 CM/S [ .6]	MEAN :	-1.9 CM/S [ .6]
VARIANCE :	4.0 (CM/S)**2 [ 1.1]	VARIANCE :	10.9 (CM/S)**2 [ 1.4]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .3022E+01 DEG.CEL. [ .1769E-01]  
 VARIANCE : .4261E-02 (DEG.CEL.)\*\*2 [ .8512E-03]

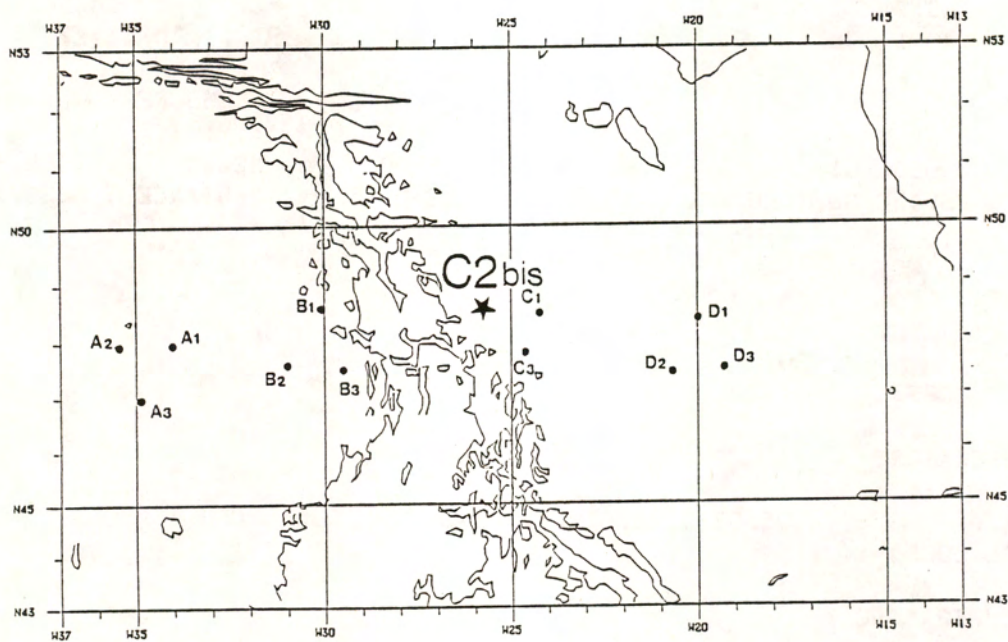
EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : .8 (CM/S)\*\*2 [ .9]  
 CORRELATION COEF. : .12

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2515E-01 DEG.CEL. CM/S [ .2232E-01]  
 CORRELATION COEF. : .19

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .7994E-01 DEG.CEL. CM/S [ .2419E-01]  
 CORRELATION COEF. : .37

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 1.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 7.5 (CM/S)\*\*2 [ 1.3]  
 MKE/EKE : .25

# MOORING C2 bis



INSTITUTION : I.F.M. KIEL  
 SITE : C2 bis  
 LATITUDE : 48 N 31.80  
 LONGITUDE : 25 W 45.50  
 WATER DEPTH : 3450 METERS  
 INSTRUMENT NUMBER : 3869 AANDERAA  
 NOMINAL DEPTH : 302 METERS  
 START TIME : 3- 8-1984 15H  
 STOP TIME : 8- 5-1985 18H

NUMBER OF CYCLES FOR PRESSURE : 6676 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 6676  
 NUMBER OF CYCLES FOR TEMPERATURE : 6676

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN	: -8.7 CM/S [ 4.2]	MEAN	: -7.5 CM/S [ 2.6]
VARIANCE	: 149.1 (CM/S)**2 [ 51.9]	VARIANCE	: 91.1 (CM/S)**2 [ 27.0]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .9698E+01 DEG.CEL. [ .3252E+00]	MEAN	: 392.8 DB
VARIANCE	: .5715E+00 (DEG.CEL.)**2 [ .2420E+00]	VARIANCE	: 6839.7 DB**2

EAST - NORTH  
 :::::::::::  
 COVARIANCE : 20.5 (CM/S)\*\*2 [ 23.9]  
 CORRELATION COEF. : .18

EAST - TEMPERATURE  
 :::::::::::  
 COVARIANCE : -.3580E+00 DEG.CEL. CM/S [ .2657E+01]  
 CORRELATION COEF. : -.04

NORTH - TEMPERATURE  
 :::::::::::  
 COVARIANCE : .1901E+01 DEG.CEL. CM/S [ .1743E+01]  
 CORRELATION COEF. : .26

PRESSURE - TEMPERATURE  
 :::::::::::  
 COVARIANCE : -.3446E+02 DEG.CEL. DB  
 CORRELATION COEF. : -.55

OTHER STATISTICS  
 :::::::::::  
 MEAN KINETIC ENERGY (MKE) : 66.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 120.1 (CM/S)\*\*2 [ 39.4]  
 MKE/EKE : .55

INSTITUTION : I.F.M. KIEL  
 SITE : C2 bis  
 LATITUDE : 48 N 31.80  
 LONGITUDE : 25 W 45.50  
 WATER DEPTH : 3450 METERS  
 INSTRUMENT NUMBER : 1396 AANDERAA  
 NOMINAL DEPTH : 605 METERS  
 START TIME : 3- 8-1984 15H  
 STOP TIME : 17- 9-1984 18H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 945  
 NUMBER OF CYCLES FOR TEMPERATURE : 1084

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: -3.8 CM/S [ 4.5]	MEAN	: 3.3 CM/S [ 6.5]
VARIANCE	: 30.9 (CM/S)**2 [ 30.6]	VARIANCE	: 80.9 (CM/S)**2 [ 34.3]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .7283E+01 DEG.CEL. [ .2943E+00]  
 VARIANCE : .1881E+00 (DEG.CEL.)\*\*2 [ .1474E+00]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -48.0 (CM/S)\*\*2 [ 22.5]  
 CORRELATION COEF. : -.96

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1195E+00 DEG.CEL. CM/S [ .1521E+01]  
 CORRELATION COEF. : -.05

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .9643E-02 DEG.CEL. CM/S [ .1557E+01]  
 CORRELATION COEF. : .00

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 12.5 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 55.9 (CM/S)\*\*2 [ 32.5]  
 MKE/EKE : .22

INSTITUTION : I.F.M. KIEL  
SITE : C2 bis  
LATITUDE : 48 N 31.80  
LONGITUDE : 25 W 45.50  
WATER DEPTH : 3450 METERS  
INSTRUMENT NUMBER : 4565 AANDERAA  
NOMINAL DEPTH : 1411 METERS  
START TIME : 3- 8-1984 15H  
STOP TIME : 2- 7-1985 12H

NUMBER OF CYCLES FOR PRESSURE : 0. (ONE CYCLE IS ONE HOUR)  
NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 7990  
NUMBER OF CYCLES FOR TEMPERATURE : 0

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
(40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
MEAN	: -1.7 CM/S [ 1.0]	MEAN	: -2.2 CM/S [ 1.0]
VARIANCE	: 4.6 (CM/S)**2 [ 2.4]	VARIANCE	: 5.4 (CM/S)**2 [ 2.4]

EAST - NORTH  
COVARIANCE : .2 (CM/S)\*\*2 [ 1.7]  
CORRELATION COEF. : .04

OTHER STATISTICS  
MEAN KINETIC ENERGY (MKE) : 4.0 (CM/S)\*\*2  
EDDY KINETIC ENERGY (EKE) : 5.0 (CM/S)\*\*2 [ 2.4]  
MKE/EKE : .79



INSTITUTION : I.F.M. KIEL  
 SITE : C2 bis  
 LATITUDE : 48 N 31.80  
 LONGITUDE : 25 W 45.50  
 WATER DEPTH : 3450 METERS  
 INSTRUMENT NUMBER : 4570 AANDERAA  
 NOMINAL DEPTH : 2417 METERS  
 START TIME : 3- 8-1984 15H  
 STOP TIME : 22- 7-1985 17H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 8475  
 NUMBER OF CYCLES FOR TEMPERATURE : 8475

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: -1.2 CM/S [ .7]	MEAN	: -1.5 CM/S [ .7]
VARIANCE	: 2.6 (CM/S)**2 [ 1.2]	VARIANCE	: 3.0 (CM/S)**2 [ 1.5]

TEMPERATURE  
 ::::::::::  
 MEAN : .3256E+01 DEG.CEL. [ .1880E-01]  
 VARIANCE : .5963E-03 (DEG.CEL.)\*\*2 [ .9063E-03]

EAST - NORTH  
 ::::::::::  
 COVARIANCE : .4 (CM/S)\*\*2 [ .9]  
 CORRELATION COEF. : .15

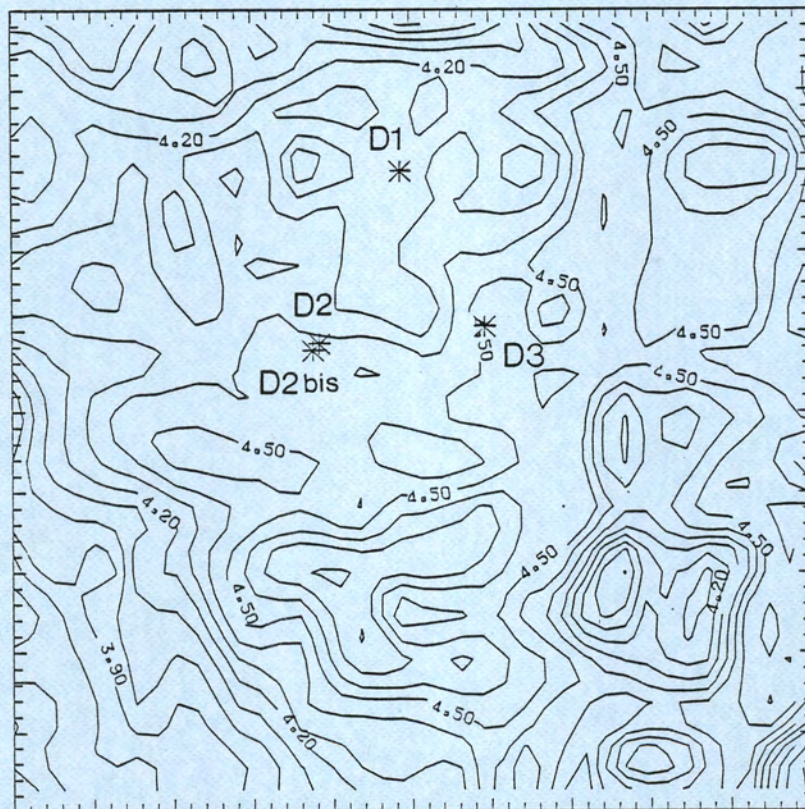
EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.1342E-01 DEG.CEL. CM/S [ .2377E-01]  
 CORRELATION COEF. : -.34

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .5561E-03 DEG.CEL. CM/S [ .2577E-01]  
 CORRELATION COEF. : .01

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 1.8 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 2.8 (CM/S)\*\*2 [ 1.4]  
 MKE/EKE : .62

# CLUSTER D

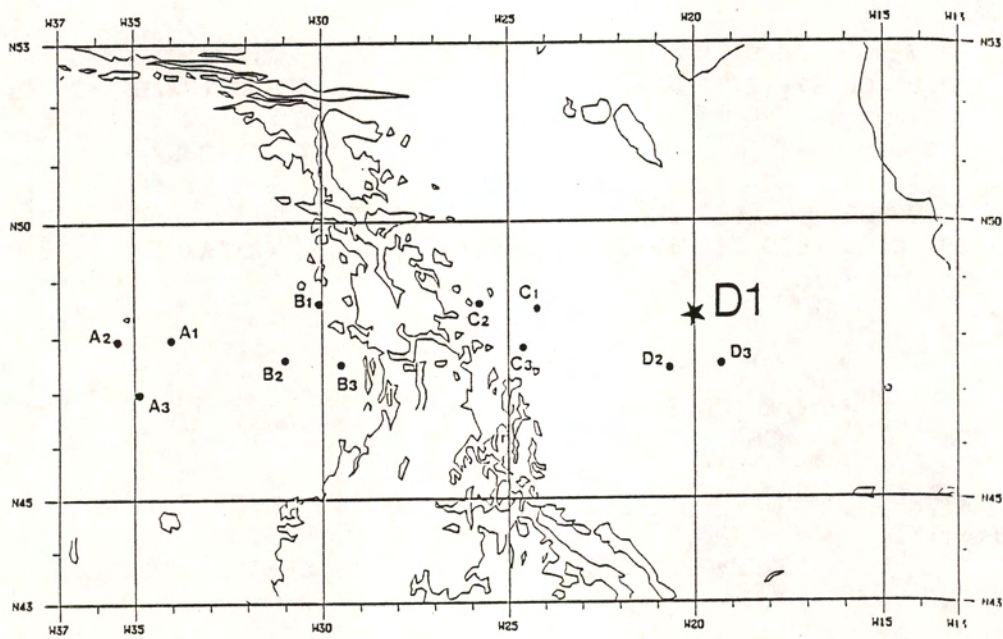
## LOCAL BATHYMETRY



100 km

Contour labels are in  $10^3$  m

# MOORING D1



INSTITUTION : I. F. R. E. MER  
 SITE : D1  
 LATITUDE : 48 N 22.70  
 LONGITUDE : 19 W 57.40  
 WATER DEPTH : 4441 METERS  
 INSTRUMENT NUMBER : 5111 AANDERAA  
 NOMINAL DEPTH : 299 METERS  
 START TIME : 24- 6-1983 21H  
 STOP TIME : 31- 7-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9658 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9658  
 NUMBER OF CYCLES FOR TEMPERATURE : 9658

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	8.7 CM/S [ 3.0]	MEAN :	-2.5 CM/S [ 5.4]
VARIANCE :	158.5 (CM/S)**2 [ 39.6]	VARIANCE :	336.0 (CM/S)**2 [ 79.9]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.1059E+02 DEG. CEL. [ .1396E+00]	MEAN :	309.1 DB
VARIANCE :	.2979E+00 (DEG. CEL.)**2 [ .6877E-01]	VARIANCE :	296.0 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -84.2 (CM/S)\*\*2 [ 37.8]  
 CORRELATION COEF. : -.36

EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .1327E+01 DEG. CEL. CM/S [ .1155E+01]  
 CORRELATION COEF. : .19

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .3175E+00 DEG. CEL. CM/S [ .1554E+01]  
 CORRELATION COEF. : .03

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .1340E+01 DEG. CEL. DB  
 CORRELATION COEF. : .14

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 41.3 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 247.3 (CM/S)\*\*2 [ 59.8]  
 MKE/EKE : .17

INSTITUTION : I. F. R. E. MER  
 SITE : D1  
 LATITUDE : 48 N 22.70  
 LONGITUDE : 19 W 57.40  
 WATER DEPTH : 4441 METERS  
 INSTRUMENT NUMBER : 5482 AANDERAA  
 NOMINAL DEPTH : 605 METERS  
 START TIME : 24- 6-1983 21H  
 STOP TIME : 31- 7-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9658 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9658  
 NUMBER OF CYCLES FOR TEMPERATURE : 9658

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 7.0 CM/S [ 2.6]	MEAN	: -0.9 CM/S [ 3.4]
VARIANCE	: 75.6 (CM/S)**2 [ 25.2]	VARIANCE	: 86.0 (CM/S)**2 [ 34.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .8063E+01 DEG.CEL. [ .2022E+00]	MEAN	: 616.9 DB
VARIANCE	: .5761E+00 (DEG.CEL.)**2 [ .1466E+00]	VARIANCE	: 185.3 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -23.7 (CM/S)\*\*2 [ 21.9]  
 CORRELATION COEF. : -.29

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .7951E+00 DEG.CEL. CM/S [ .1406E+01]  
 CORRELATION COEF. : .12

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2017E+01 DEG.CEL. CM/S [ .1594E+01]  
 CORRELATION COEF. : .29

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .9420E+00 DEG.CEL. DB  
 CORRELATION COEF. : .09

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 24.7 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 80.8 (CM/S)\*\*2 [ 29.8]  
 MKE/EKE : .31

INSTITUTION : I. F. R. E. MER  
 SITE : D1  
 LATITUDE : 48 N 22.70  
 LONGITUDE : 19 W 57.40  
 WATER DEPTH : 4441 METERS  
 INSTRUMENT NUMBER : 4437 AANDERAA  
 NOMINAL DEPTH : 1394 METERS  
 START TIME : 24- 6-1983 21H  
 STOP TIME : 31- 7-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9658 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 6451  
 NUMBER OF CYCLES FOR TEMPERATURE : 9658

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	3.1	CM/S	[	1.5]
VARIANCE	:	12.5	(CM/S)**2	[	5.8]
			MEAN	:	-3.3
			CM/S	[	1.5]
			VARIANCE	:	11.9
			(CM/S)**2	[	5.0]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.3991E+01	DEG.CEL.	[	.3714E-01]
VARIANCE	:	.1948E-01	(DEG.CEL.)**2	[	.8539E-02]
			MEAN	:	1423.3
			DB		
			VARIANCE	:	153.4
			DB**2		

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -3.3 (CM/S)\*\*2 [ 4.2]  
 CORRELATION COEF. : -.27

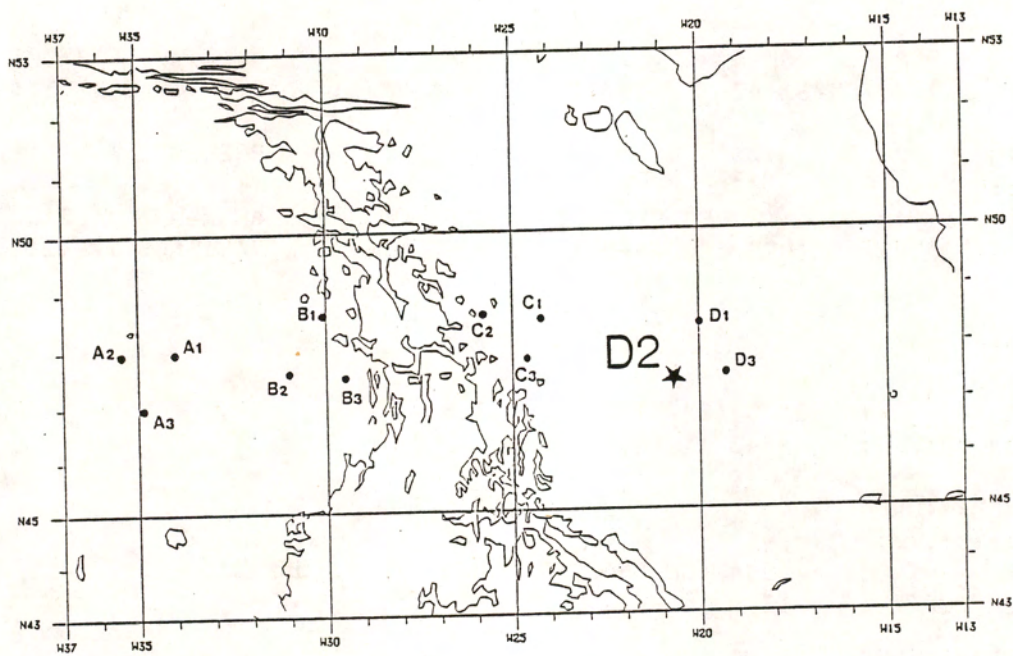
EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1073E+00 DEG.CEL. CM/S [ .1618E+00]  
 CORRELATION COEF. : .22

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.6802E-01 DEG.CEL. CM/S [ .1526E+00]  
 CORRELATION COEF. : -.14

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .4236E-01 DEG.CEL. DB  
 CORRELATION COEF. : .02

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 10.4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 12.2 (CM/S)\*\*2 [ 5.4]  
 MKE/EKE : .85

# MOORING D2



INSTITUTION : I. F. R. E. MER  
 SITE : D2  
 LATITUDE : 47 N 24.60  
 LONGITUDE : 20 W 38. 0  
 WATER DEPTH : 4492 METERS  
 INSTRUMENT NUMBER : 5448 AANDERAA  
 NOMINAL DEPTH : 307 METERS  
 START TIME : 25- 6-1983 10H  
 STOP TIME : 31- 7-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 9653 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9653  
 NUMBER OF CYCLES FOR TEMPERATURE : 9653

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	3.8 CM/S [ 3.0]	MEAN :	-5.1 CM/S [ 5.4]
VARIANCE :	217.4 (CM/S)**2 [ 39.6]	VARIANCE :	172.9 (CM/S)**2 [ 80.0]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.1171E+02 DEG.CEL. [ .1396E+00]	MEAN :	315.2 DB
VARIANCE :	.3276E+00 (DEG.CEL.)**2 [ .6879E-01]	VARIANCE :	428.8 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -84.0 (CM/S)\*\*2 [ 37.8]  
 CORRELATION COEF. : -.43

EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.9944E+00 DEG.CEL. CM/S [ .1155E+01]  
 CORRELATION COEF. : -.12

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .1313E-01 DEG.CEL. CM/S [ .1555E+01]  
 CORRELATION COEF. : .00

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.4711E+01 DEG.CEL. DB  
 CORRELATION COEF. : -.40

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 20.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 195.2 (CM/S)\*\*2 [ 59.8]  
 MKE/EKE : .10



INSTITUTION : I. F. R. E. MER  
 SITE : D2  
 LATITUDE : 47 N 24.60  
 LONGITUDE : 20 W 38. 0  
 WATER DEPTH : 4492 METERS  
 INSTRUMENT NUMBER : 5483 AANDERAA  
 NOMINAL DEPTH : 594 METERS  
 START TIME : 25- 6-1983 10H  
 STOP TIME : 31- 7-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 9653 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9653  
 NUMBER OF CYCLES FOR TEMPERATURE : 9653

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 2.7 CM/S [ 2.6]	MEAN	: -4.6 CM/S [ 3.4]
VARIANCE	: 108.0 (CM/S)**2 [ 25.2]	VARIANCE	: 102.2 (CM/S)**2 [ 34.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .9659E+01 DEG. CEL. [ .2023E+00]	MEAN	: 603.8 DB
VARIANCE	: .4993E+00 (DEG. CEL.)**2 [ .1466E+00]	VARIANCE	: 262.3 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -44.6 (CM/S)\*\*2 [ 21.9]  
 CORRELATION COEF. : -.42

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.7217E-01 DEG. CEL. CM/S [ .1406E+01]  
 CORRELATION COEF. : -.01

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.8680E+00 DEG. CEL. CM/S [ .1594E+01]  
 CORRELATION COEF. : -.12

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.3208E+01 DEG. CEL. DB  
 CORRELATION COEF. : -.28

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 14.3 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 105.1 (CM/S)\*\*2 [ 29.8]  
 MKE/EKE : .14

INSTITUTION : I. F. R. E. MER  
 SITE : D2  
 LATITUDE : 47 N 24.60  
 LONGITUDE : 20 W 38. 0  
 WATER DEPTH : 4492 METERS  
 INSTRUMENT NUMBER : 4439 AANDERAA  
 NOMINAL DEPTH : 1400 METERS  
 START TIME : 25- 6-1983 10H  
 STOP TIME : 31- 7-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 9653 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9653  
 NUMBER OF CYCLES FOR TEMPERATURE : 9653

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	-1.2 CM/S [ 1.1]	MEAN :	-1.6 CM/S [ 1.1]
VARIANCE :	16.7 (CM/S)**2 [ 4.8]	VARIANCE :	14.6 (CM/S)**2 [ 4.2]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.4260E+01 DEG. CEL. [ .3715E-01]	MEAN :	1417.6 DB
VARIANCE :	.5730E-01 (DEG. CEL.)**2 [ .8541E-02]	VARIANCE :	97.0 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -2.3 (CM/S)\*\*2 [ 3.6]  
 CORRELATION COEF. : -.15

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.3517E+00 DEG. CEL. CM/S [ .1331E+00]  
 CORRELATION COEF. : -.36

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.1764E-01 DEG. CEL. CM/S [ .1266E+00]  
 CORRELATION COEF. : -.02

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .2079E-01 DEG. CEL. DB  
 CORRELATION COEF. : .01

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 1.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 15.6 (CM/S)\*\*2 [ 4.5]  
 MKE/EKE : .12

INSTITUTION : I.F.R.E.MER  
 SITE : D2  
 LATITUDE : 47 N 24.60  
 LONGITUDE : 20 W 38. 0  
 WATER DEPTH : 4492 METERS  
 INSTRUMENT NUMBER : 5445 AANDERAA  
 NOMINAL DEPTH : 2425 METERS  
 START TIME : 25- 6-1983 10H  
 STOP TIME : 31- 7-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9653  
 NUMBER OF CYCLES FOR TEMPERATURE : 9653

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN	: -1.9 CM/S [ .6]	MEAN	: -1.0 CM/S [ .7]
VARIANCE	: 7.2 (CM/S)**2 [ 1.6]	VARIANCE	: 5.6 (CM/S)**2 [ 1.4]

TEMPERATURE  
 :::::::::::  
 MEAN : .3383E+01 DEG.CEL. [ .2161E-01]  
 VARIANCE : .2546E-02 (DEG.CEL.)\*\*2 [ .1337E-02]

EAST - NORTH  
 :::::::::::  
 COVARIANCE : -1.0 (CM/S)\*\*2 [ 1.0]  
 CORRELATION COEF. : -.16

EAST - TEMPERATURE  
 :::::::::::  
 COVARIANCE : .5108E-01 DEG.CEL. CM/S [ .3243E-01]  
 CORRELATION COEF. : .38

NORTH - TEMPERATURE  
 :::::::::::  
 COVARIANCE : -.2259E-01 DEG.CEL. CM/S [ .2976E-01]  
 CORRELATION COEF. : -.19

OTHER STATISTICS  
 :::::::::::  
 MEAN KINETIC ENERGY (MKE) : 2.4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 6.4 (CM/S)\*\*2 [ 1.5]  
 MKE/EKE : .38

INSTITUTION : I.F.R.E.MER  
 SITE : D2  
 LATITUDE : 47 N 24.60  
 LONGITUDE : 20 W 38.0  
 WATER DEPTH : 4492 METERS  
 INSTRUMENT NUMBER : 5897 AANDERAA  
 NOMINAL DEPTH : 3945 METERS  
 START TIME : 25- 6-1983 10H  
 STOP TIME : 31- 7-1984 14H

NUMBER OF CYCLES FOR PRESSURE : 9653 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9653  
 NUMBER OF CYCLES FOR TEMPERATURE : 9653

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST			NORTH						
::::			::::						
MEAN	:	-4.5	CM/S [	.9]	MEAN	:	-.3	CM/S [	.6]
VARIANCE	:	7.7	(CM/S)**2 [	3.2]	VARIANCE	:	3.3	(CM/S)**2 [	1.7]

TEMPERATURE			PRESSURE					
::::::::::			::::::::::					
MEAN	:	.2571E+01	DEG.CEL. [	.4632E-02]	MEAN	:	4015.0	DB
VARIANCE	:	.1756E-03	(DEG.CEL.)**2 [	.7002E-04]	VARIANCE	:	6.7	DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -1.0 (CM/S)\*\*2 [ 1.6]  
 CORRELATION COEF. : -.19

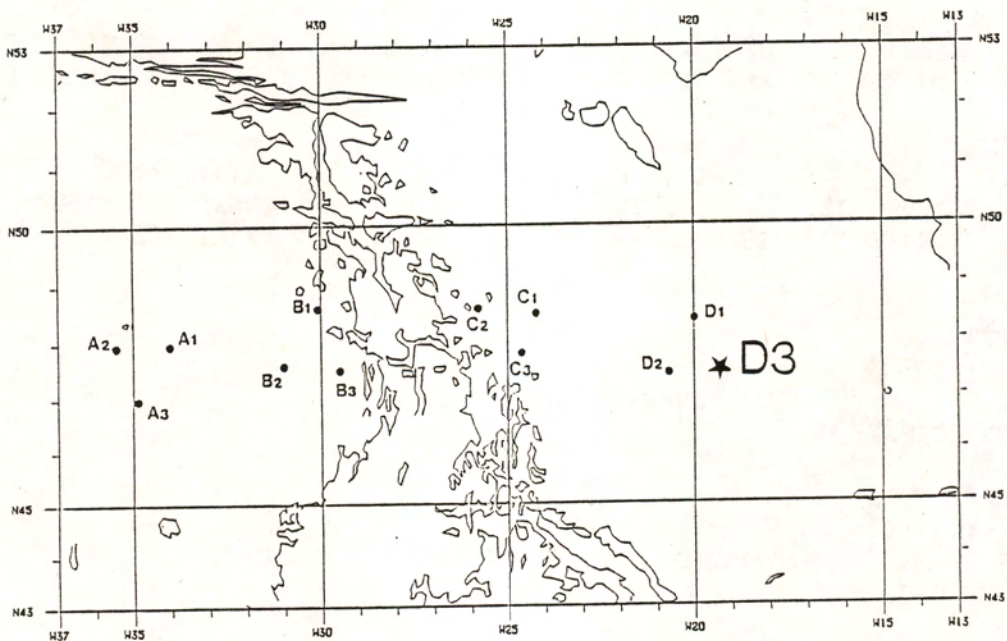
EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1443E-01 DEG.CEL. CM/S [ .1065E-01]  
 CORRELATION COEF. : .39

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.4095E-02 DEG.CEL. CM/S [ .7922E-02]  
 CORRELATION COEF. : -.17

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .9023E-02 DEG.CEL. DB  
 CORRELATION COEF. : .26

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 10.0 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 5.5 (CM/S)\*\*2 [ 2.4]  
 MKE/EKE : 1.83

# MOORING D3



INSTITUTION : I. F. R. E. MER  
 SITE : D3  
 LATITUDE : 47 N 30.40  
 LONGITUDE : 19 W 15.50  
 WATER DEPTH : 4582 METERS  
 INSTRUMENT NUMBER : 5449 AANDERAA  
 NOMINAL DEPTH : 342 METERS  
 START TIME : 24- 6-1983 11H  
 STOP TIME : 30- 5-1984 1H

NUMBER OF CYCLES FOR PRESSURE : 1965 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 8175  
 NUMBER OF CYCLES FOR TEMPERATURE : 8175

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN	: 8.5 CM/S [ 3.3]	MEAN	: 2.0 CM/S [ 5.9]
VARIANCE	: 53.7 (CM/S)**2 [ 42.8]	VARIANCE	: 160.9 (CM/S)**2 [ 86.4]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN	: .1159E+02 DEG. CEL. [ .1540E+00]	MEAN	: 344.1 DB
VARIANCE	: .1241E+00 (DEG. CEL.)**2 [ .7433E-01]	VARIANCE	: 197.9 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -15.6 (CM/S)\*\*2 [ 41.0]  
 CORRELATION COEF. : -.17

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.5276E-01 DEG. CEL. CM/S [ .1250E+01]  
 CORRELATION COEF. : -.02

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.4704E+00 DEG. CEL. CM/S [ .1681E+01]  
 CORRELATION COEF. : -.11

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.1091E+01 DEG. CEL. DB  
 CORRELATION COEF. : -.22

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 38.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 107.3 (CM/S)\*\*2 [ 64.6]  
 MKE/EKE : .36

INSTITUTION : I.F.R.E.MER  
 SITE : D3  
 LATITUDE : 47 N 30.40  
 LONGITUDE : 19 W 15.50  
 WATER DEPTH : 4582 METERS  
 INSTRUMENT NUMBER : 5485 AANDERAA  
 NOMINAL DEPTH : 622 METERS  
 START TIME : 24- 6-1983 11H  
 STOP TIME : 30- 7-1984 18H

NUMBER OF CYCLES FOR PRESSURE : 9656 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9656  
 NUMBER OF CYCLES FOR TEMPERATURE : 9656

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	5.2	CM/S	[	2.6]
VARIANCE	:	60.1	(CM/S)**2	[	25.2]
			MEAN	:	1.3
			CM/S	[	3.4]
			VARIANCE	:	92.9
			(CM/S)**2	[	34.4]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.9427E+01	DEG. CEL.	[	.2023E+00]
VARIANCE	:	.2631E+00	(DEG. CEL.)**2	[	.1466E+00]
			MEAN	:	629.0
			DB		
			VARIANCE	:	84.8
			DB**2		

EAST - NORTH  
 ::::::::::  
 COVARIANCE : 3.4 (CM/S)\*\*2 [ 21.9]  
 CORRELATION COEF. : .05

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.2300E+00 DEG. CEL. CM/S [ .1406E+01]  
 CORRELATION COEF. : -.06

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1220E+01 DEG. CEL. CM/S [ .1594E+01]  
 CORRELATION COEF. : .25

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .4955E+00 DEG. CEL. DB  
 CORRELATION COEF. : .10

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 14.3 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 76.5 (CM/S)\*\*2 [ 29.8]  
 MKE/EKE : .19

INSTITUTION : I.F.R.E.MER  
 SITE : D3  
 LATITUDE : 47 N 30.40  
 LONGITUDE : 19 W 15.50  
 WATER DEPTH : 4582 METERS  
 INSTRUMENT NUMBER : 5479 AANDERAA  
 NOMINAL DEPTH : 1436 METERS  
 START TIME : 24- 6-1983 11H  
 STOP TIME : 15- 7-1983 4H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 498  
 NUMBER OF CYCLES FOR TEMPERATURE : 498

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	4.3 CM/S [ 3.8]	MEAN :	4.8 CM/S [ 4.0]
VARIANCE :	9.3 (CM/S)**2 [ 15.8]	VARIANCE :	50.6 (CM/S)**2 [ 13.3]

TEMPERATURE  
 ::::::::::::::  
 MEAN : .4220E+01 DEG.CEL. [ .1455E+00]  
 VARIANCE : .3606E-01 (DEG.CEL.)\*\*2 [ .3134E-01]

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : -17.9 (CM/S)\*\*2 [ 10.7]  
 CORRELATION COEF. : -.82

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.5163E+00 DEG.CEL. CM/S [ .4994E+00]  
 CORRELATION COEF. : -.89

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1174E+01 DEG.CEL. CM/S [ .4568E+00]  
 CORRELATION COEF. : .87

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 20.7 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 29.9 (CM/S)\*\*2 [ 14.6]  
 MKE/EKE : .69



INSTITUTION : I. F. R. E. MER  
 SITE : D3  
 LATITUDE : 47 N 30.40  
 LONGITUDE : 19 W 15.50  
 WATER DEPTH : 4582 METERS  
 INSTRUMENT NUMBER : 5486 AANDERAA  
 NOMINAL DEPTH : 2462 METERS  
 START TIME : 24- 6-1983 11H  
 STOP TIME : 12- 7-1984 6H

NUMBER OF CYCLES FOR PRESSURE : 9212 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 318  
 NUMBER OF CYCLES FOR TEMPERATURE : 9212

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST			NORTH		
::::			::::		
MEAN	:	2.9	CM/S	[	2.6]
VARIANCE	:	.4	(CM/S)**2	[	6.2]
			MEAN	:	1.5
			CM/S	[	2.9]
			VARIANCE	:	3.7
			(CM/S)**2	[	4.8]

TEMPERATURE			PRESSURE		
::::::::::			::::::::::		
MEAN	:	.3351E+01	DEG. CEL.	[	.2219E-01]
VARIANCE	:	.1493E-02	(DEG. CEL.)**2	[	.1366E-02]
			MEAN	:	2492.6
			DB		
			VARIANCE	:	29.4
			DB**2		

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -.3 (CM/S)\*\*2 [ 3.9]  
 CORRELATION COEF. : -.25

EAST - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .2178E-03 DEG. CEL. CM/S [ .1140E+00]  
 CORRELATION COEF. : .01

NORTH - TEMPERATURE  
 ::::::::::  
 COVARIANCE : .1807E-01 DEG. CEL. CM/S [ .9979E-01]  
 CORRELATION COEF. : .24

PRESSURE - TEMPERATURE  
 ::::::::::  
 COVARIANCE : -.7028E-01 DEG. CEL. DB  
 CORRELATION COEF. : -.34

OTHER STATISTICS  
 ::::::::::  
 MEAN KINETIC ENERGY (MKE) : 5.4 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 2.1 (CM/S)\*\*2 [ 5.5]  
 MKE/EKE : 2.61

INSTITUTION : I.F.R.E.MER  
 SITE : D3  
 LATITUDE : 47 N 30.40  
 LONGITUDE : 19 W 15.50  
 WATER DEPTH : 4582 METERS  
 INSTRUMENT NUMBER : 5898 AANDERAA  
 NOMINAL DEPTH : 3976 METERS  
 START TIME : 24- 6-1983 11H  
 STOP TIME : 30- 7-1984 18H

NUMBER OF CYCLES FOR PRESSURE : 9656 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9656  
 NUMBER OF CYCLES FOR TEMPERATURE : 9656

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		:::::	
MEAN :	-1.6 CM/S [ .9]	MEAN :	1.8 CM/S [ .6]
VARIANCE :	8.4 (CM/S)**2 [ 3.2]	VARIANCE :	5.1 (CM/S)**2 [ 1.7]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.2572E+01 DEG.CEL. [ .4631E-02]	MEAN :	4044.8 DB
VARIANCE :	.7412E-04 (DEG.CEL. )**2 [ .7001E-04]	VARIANCE :	3.2 DB**2

EAST - NORTH  
 ::::::::::  
 COVARIANCE : -1.6 (CM/S)\*\*2 [ 1.6]  
 CORRELATION COEF. : -.24

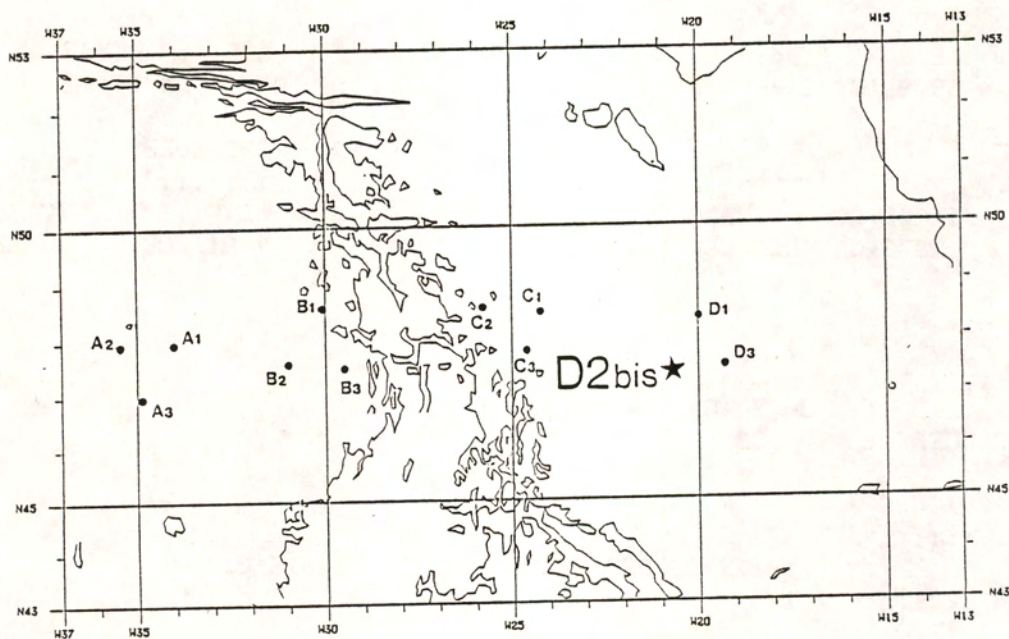
EAST - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.6971E-03 DEG.CEL. CM/S [ .1065E-01]  
 CORRELATION COEF. : -.03

NORTH - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : .2292E-02 DEG.CEL. CM/S [ .7921E-02]  
 CORRELATION COEF. : .12

PRESSURE - TEMPERATURE  
 :::::::::::::::  
 COVARIANCE : -.2912E-02 DEG.CEL. DB  
 CORRELATION COEF. : -.19

OTHER STATISTICS  
 :::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 2.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 6.8 (CM/S)\*\*2 [ 2.4]  
 MKE/EKE : .43

# MOORING D2bis



INSTITUTION : I. F. R. E. MER  
 SITE : D2 bis  
 LATITUDE : 47 N 22.30  
 LONGITUDE : 20 W 40.90  
 WATER DEPTH : 4500 METERS  
 INSTRUMENT NUMBER : 0520 AANDERAA  
 NOMINAL DEPTH : 347 METERS  
 START TIME : 22- 8-1984 11H  
 STOP TIME : 16- 4-1985 0H

NUMBER OF CYCLES FOR PRESSURE : 5678 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 5678  
 NUMBER OF CYCLES FOR TEMPERATURE : 5678

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN :	- .8 CM/S [ 4.0]	MEAN :	3.9 CM/S [ 7.2]
VARIANCE :	89.9 (CM/S)**2 [ 50.5]	VARIANCE :	103.1 (CM/S)**2 [ 101.8]

TEMPERATURE		PRESSURE	
::::::::::		::::::::::	
MEAN :	.1164E+02 DEG. CEL. [ .1922E+00]	MEAN :	347.2 DB
VARIANCE :	.1287E+00 (DEG. CEL.)**2 [ .8772E-01]	VARIANCE :	11.2 DB**2

EAST - NORTH  
 ::::::::::::::  
 COVARIANCE : 36.7 (CM/S)\*\*2 [ 48.9]  
 CORRELATION COEF. : .38

EAST - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .4812E+00 DEG. CEL. CM/S [ .1481E+01]  
 CORRELATION COEF. : .14

NORTH - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : .1062E+01 DEG. CEL. CM/S [ .1987E+01]  
 CORRELATION COEF. : .29

PRESSURE - TEMPERATURE  
 ::::::::::::::  
 COVARIANCE : -.3560E+00 DEG. CEL. DB  
 CORRELATION COEF. : -.30

OTHER STATISTICS  
 ::::::::::::::  
 MEAN KINETIC ENERGY (MKE) : 7.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 96.5 (CM/S)\*\*2 [ 76.2]  
 MKE/EKE : .08

INSTITUTION : I.F.R.E.MER  
 SITE : D2 bis  
 LATITUDE : 47 N 22.30  
 LONGITUDE : 20 W 40.90  
 WATER DEPTH : 4500 METERS  
 INSTRUMENT NUMBER : 0518 AANDERAA  
 NOMINAL DEPTH : 650 METERS  
 START TIME : 22- 8-1984 11H  
 STOP TIME : 17-11-1984 9H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 1018  
 NUMBER OF CYCLES FOR TEMPERATURE : 1018

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
: : : :		: : : :	
MEAN	: -4.0 CM/S [ 6.5]	MEAN	: -6.3 CM/S [ 8.1]
VARIANCE	: 53.3 (CM/S)**2 [ 67.2]	VARIANCE	: 17.6 (CM/S)**2 [ 87.5]

TEMPERATURE  
 : : : : : : : :  
 MEAN : .9297E+01 DEG.CEL. [ .5106E+00]  
 VARIANCE : .1232E+00 (DEG.CEL.)\*\*2 [ .3969E+00]

EAST - NORTH  
 : : : : : : : :  
 COVARIANCE : 8.8 (CM/S)\*\*2 [ 57.6]  
 CORRELATION COEF. : .29

EAST - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : -.1090E+01 DEG.CEL. CM/S [ .3661E+01]  
 CORRELATION COEF. : -.43

NORTH - TEMPERATURE  
 : : : : : : : :  
 COVARIANCE : -.8289E+00 DEG.CEL. CM/S [ .4222E+01]  
 CORRELATION COEF. : -.56

OTHER STATISTICS  
 : : : : : : : :  
 MEAN KINETIC ENERGY (MKE) : 28.2 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 35.5 (CM/S)\*\*2 [ 77.4]  
 MKE/EKE : .79

INSTITUTION : I.F.R.E.MER  
SITE : D2 bis  
LATITUDE : 47 N 22.30  
LONGITUDE : 20 W 40.90  
WATER DEPTH : 4500 METERS  
INSTRUMENT NUMBER : 5810 AANDERAA  
NOMINAL DEPTH : 1470 METERS  
START TIME : 22- 8-1984 11H  
STOP TIME : 18-10-1984 0H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 1358  
NUMBER OF CYCLES FOR TEMPERATURE : 1358

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
(40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
::::		::::	
MEAN : -1.8	CM/S [ 2.6]	MEAN : -1.9	CM/S [ 2.3]
VARIANCE : 8.3	(CM/S)**2 [ 10.9]	VARIANCE : 2.6	(CM/S)**2 [ 9.0]

TEMPERATURE  
:::::::::::  
MEAN : .4330E+01 DEG.CEL. [ .1021E+00]  
VARIANCE : .1336E-01 (DEG.CEL.)\*\*2 [ .2011E-01]

EAST - NORTH  
:::::::::::  
COVARIANCE : 3.1 (CM/S)\*\*2 [ 7.7]  
CORRELATION COEF. : .67

EAST - TEMPERATURE  
:::::::::::  
COVARIANCE : .1016E+00 DEG.CEL. CM/S [ .3296E+00]  
CORRELATION COEF. : .30

NORTH - TEMPERATURE  
:::::::::::  
COVARIANCE : .1149E+00 DEG.CEL. CM/S [ .2992E+00]  
CORRELATION COEF. : .62

OTHER STATISTICS  
:::::::::::  
MEAN KINETIC ENERGY (MKE) : 3.4 (CM/S)\*\*2  
EDDY KINETIC ENERGY (EKE) : 5.4 (CM/S)\*\*2 [ 10.0]  
MKE/EKE : .63



INSTITUTION : I. F. R. E. MER  
SITE : D2 bis  
LATITUDE : 47 N 22.30  
LONGITUDE : 20 W 40.90  
WATER DEPTH : 4500 METERS  
INSTRUMENT NUMBER : 4254 AANDERAA  
NOMINAL DEPTH : 2490 METERS  
START TIME : 22- 8-1984 11H  
STOP TIME : 26- 9-1985 8H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9598  
NUMBER OF CYCLES FOR TEMPERATURE : 9598

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
(40 HOUR CUT-OFF, LANZOS FILTERING)

EAST		NORTH	
MEAN	: -1.0 CM/S [ .6]	MEAN	: .1 CM/S [ .7]
VARIANCE	: 3.1 (CM/S)**2 [ 1.6]	VARIANCE	: 2.7 (CM/S)**2 [ 1.4]

TEMPERATURE  
MEAN : .3340E+01 DEG. CEL. [ .2168E-01]  
VARIANCE : .5225E-02 (DEG. CEL.)\*\*2 [ .1341E-02]

EAST - NORTH  
COVARIANCE : 1.1 (CM/S)\*\*2 [ 1.0]  
CORRELATION COEF. : .39

EAST - TEMPERATURE  
COVARIANCE : -.1069E-01 DEG. CEL. CM/S [ .3252E-01]  
CORRELATION COEF. : -.08

NORTH - TEMPERATURE  
COVARIANCE : .2728E-01 DEG. CEL. CM/S [ .2983E-01]  
CORRELATION COEF. : .23

OTHER STATISTICS  
MEAN KINETIC ENERGY (MKE) : .5 (CM/S)\*\*2  
EDDY KINETIC ENERGY (EKE) : 2.9 (CM/S)\*\*2 [ 1.5]  
MKE/EKE : .19

INSTITUTION : I. F. R. E. MER  
 SITE : D2 bis  
 LATITUDE : 47 N 22.30  
 LONGITUDE : 20 W 40.90  
 WATER DEPTH : 4500 METERS  
 INSTRUMENT NUMBER : 4258 AANDERAA  
 NOMINAL DEPTH : 4000 METERS  
 START TIME : 22- 8-1984 11H  
 STOP TIME : 26- 9-1985 8H

NUMBER OF CYCLES FOR PRESSURE : 0 (ONE CYCLE IS ONE HOUR)  
 NUMBER OF CYCLES FOR VELOCITY COMPONENTS : 9598  
 NUMBER OF CYCLES FOR TEMPERATURE : 9598

THE STATISTICS ARE COMPUTED FROM LOW-PASSED SERIES.  
 (40 HOUR CUT-OFF, LANCZOS FILTERING)

EAST		NORTH	
:::		::::	
MEAN	: -2.6 CM/S [ .9]	MEAN	: 1.0 CM/S [ .6]
VARIANCE	: 19.0 (CM/S)**2 [ 3.2]	VARIANCE	: 10.7 (CM/S)**2 [ 1.7]

TEMPERATURE  
 :::::::::::  
 MEAN : .2574E+01 DEG. CEL. [ .4647E-02]  
 VARIANCE : .3504E-03 (DEG. CEL.)\*\*2 [ .7021E-04]

EAST - NORTH  
 :::::::::::  
 COVARIANCE : 1.2 (CM/S)\*\*2 [ 1.6]  
 CORRELATION COEF. : .09

EAST - TEMPERATURE  
 :::::::::::  
 COVARIANCE : .5167E-02 DEG. CEL. CM/S [ .1068E-01]  
 CORRELATION COEF. : .06

NORTH - TEMPERATURE  
 :::::::::::  
 COVARIANCE : .2977E-01 DEG. CEL. CM/S [ .7943E-02]  
 CORRELATION COEF. : .49

OTHER STATISTICS  
 :::::::::::  
 MEAN KINETIC ENERGY (MKE) : 3.9 (CM/S)\*\*2  
 EDDY KINETIC ENERGY (EKE) : 14.9 (CM/S)\*\*2 [ 2.5]  
 MKE/EKE : .26



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