

Northeastern **E**nvironmental **D**ata System **(NEEDS)**

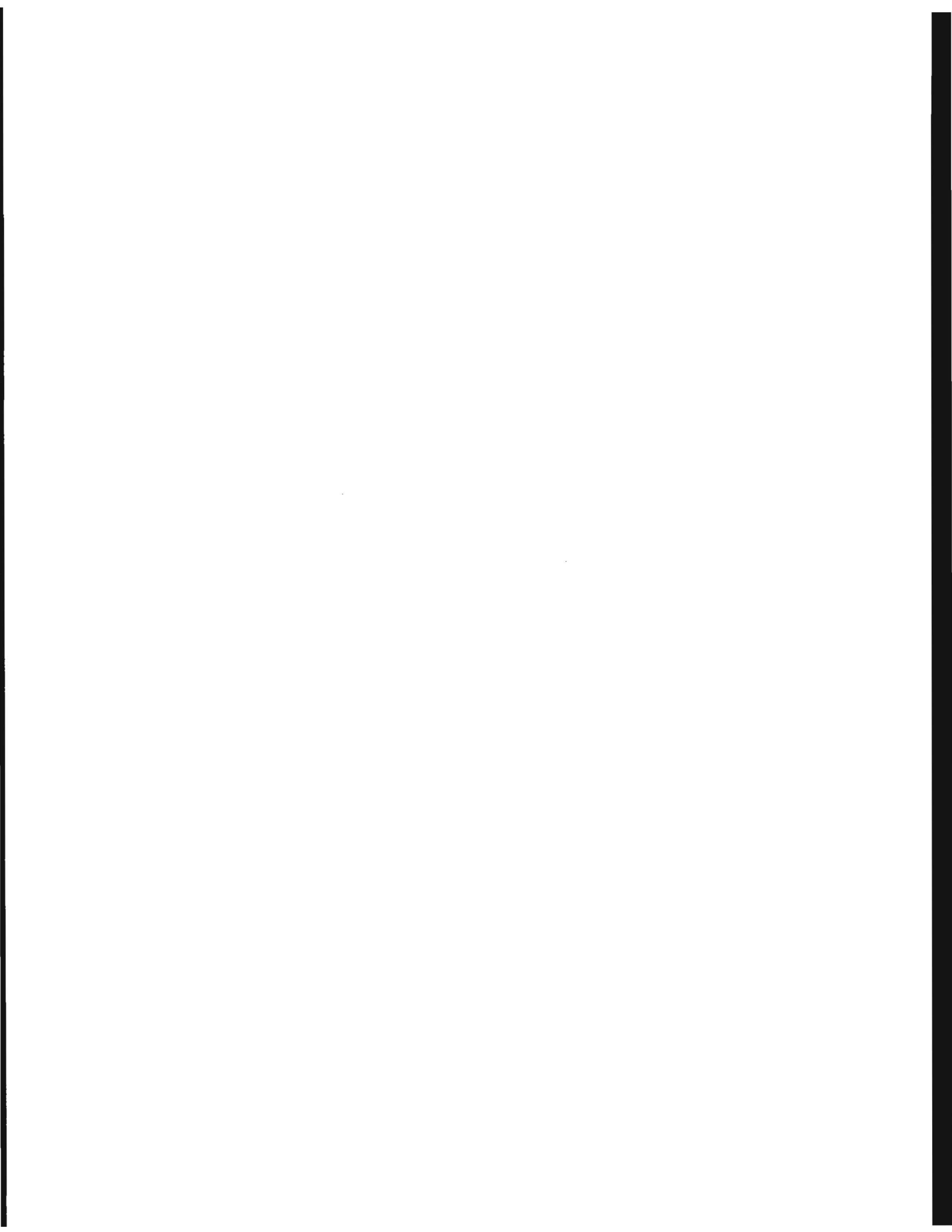


OBSERVATIONS OF
CURRENTS, TEMPERATURE
AND SALINITY IN
LONG ISLAND SOUND, 1988.
A DATA REPORT.

Marine Sciences Research Center



6.2.8



MARINE SCIENCES RESEARCH CENTER
STATE UNIVERSITY OF NEW YORK
STONY BROOK, NEW YORK 11794-5000

OBSERVATIONS OF CURRENTS, TEMPERATURE AND SALINITY
IN LONG ISLAND SOUND, 1988. A DATA REPORT.

by

Mário E. C. Vieira

August 1990

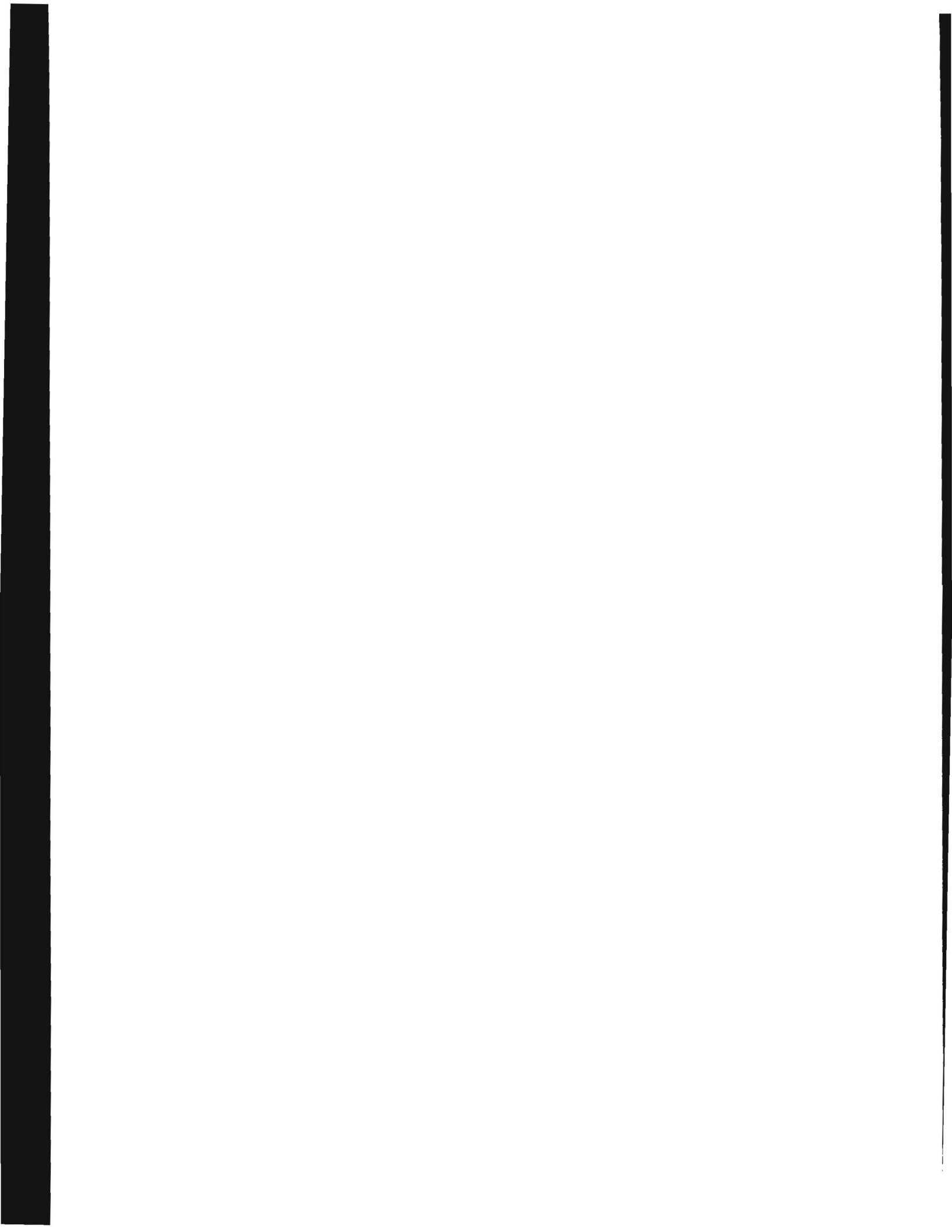
This work is a result of research sponsored by the U.S.
Environmental Protection Agency as part of the National Estuary
Program's Long Island Sound Study.

Special Data Report #6
Reference #90-13

Approved for Distribution



J.R. Schubel, Director



DEDICATION

This report is dedicated to all those who ply the Sound's waters, be it for trade or recreation. May their needs never hamper a careful use of this bountiful resource.

Bluefish

The young fisherman
yanking back at the pull of his pole
does not realize
that Pomotomous saltatrix
smells the bunker
with pouches on the sides of its face
spies the silver jig
with cones in its eyes
feels the commotion
with lateral lines on its flanks
navigates from Florida to Maine

from "Limulus - Poems of the great waters"
by Maxwell Corydon Wheat, Jr., 1988

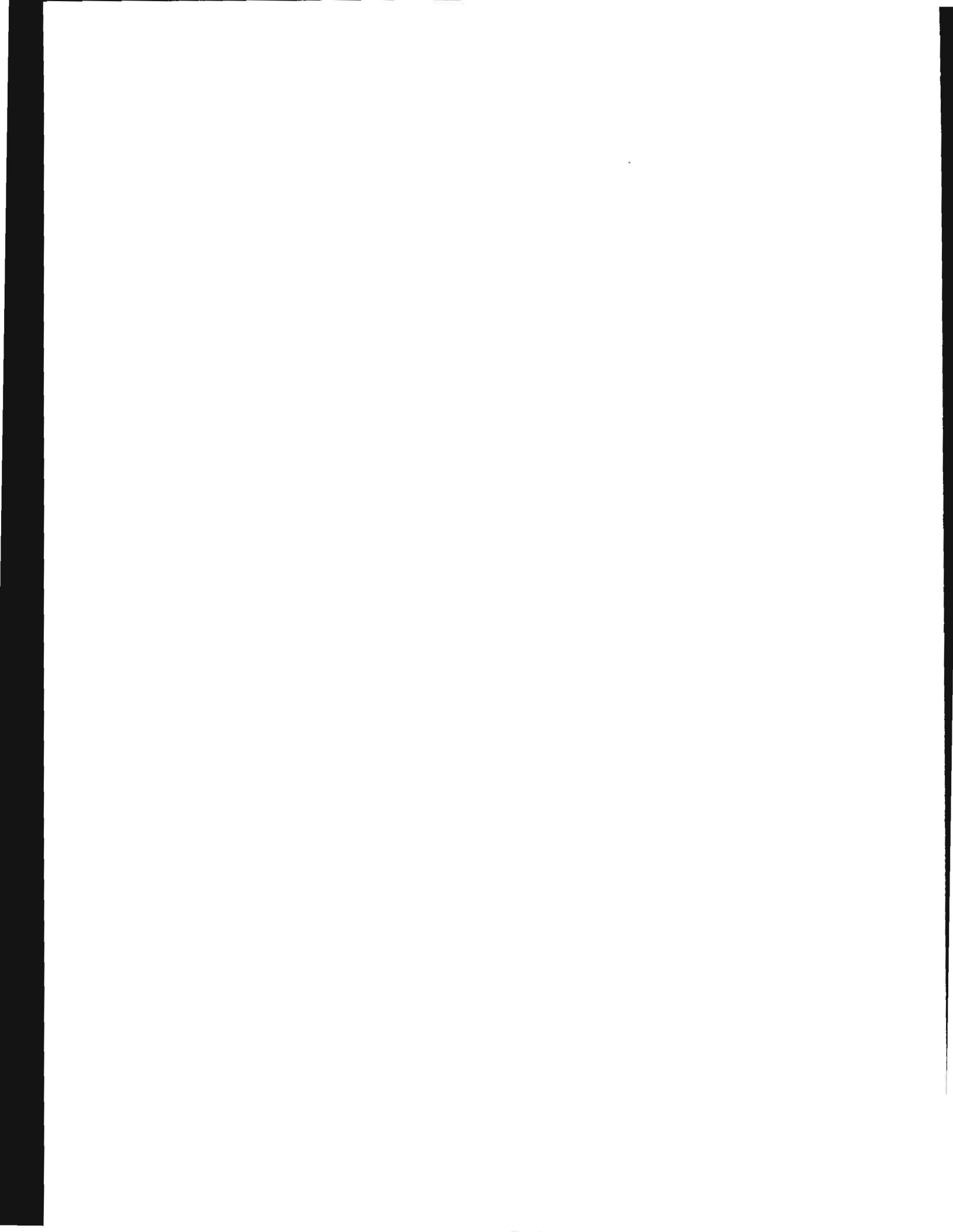
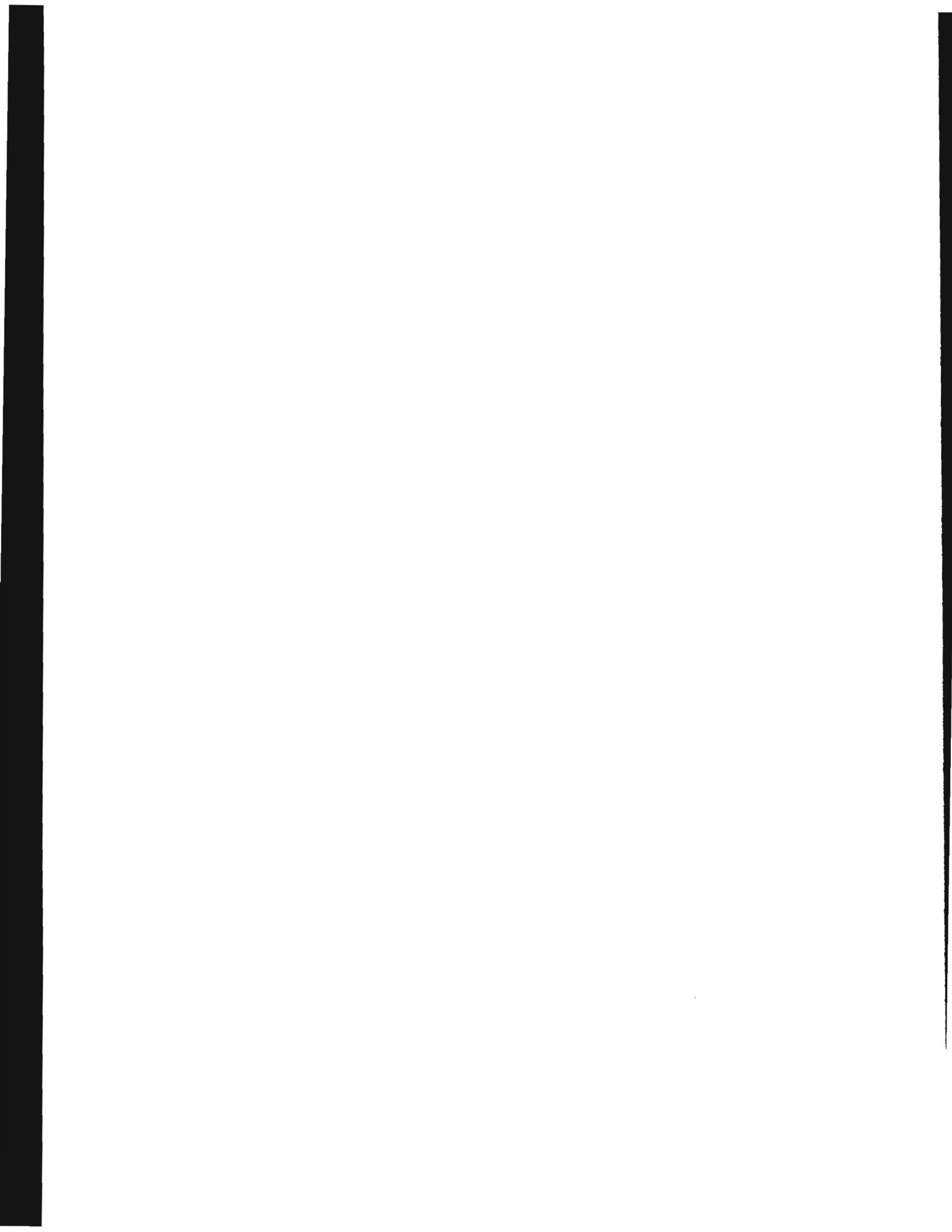


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ABSTRACT

This data report presents summaries of measurements made with current meters in Long Island Sound by researchers from the Marine Sciences Research Center during 1988. This effort is part of the Long Island Sound Study, a National Estuary Program conducted by the U.S. Environmental Protection Agency.

The objective of these observations was to determine spatial and temporal scales of the circulation and field of density in the Sound and to provide calibration data for numerical modelling studies.

The report includes a description of the instruments, discusses the data reduction and presents the time series as well as some basic statistics.

1. Introduction

The measurements presented in this data report were made during 1988 and are part of the data collection program of the Long Island Sound Study, sponsored by the U.S. Environmental Protection Agency under the National Estuary Program.

Confined between the Connecticut and Long Island coasts and having New York City as its western boundary, the 110 mile long Sound is surrounded by 15 million people (Fig.1). This "urban sea" (Koppelman et al., 1976) has been under tremendous environmental stress as its water quality deteriorates and its fishing grounds are increasingly threatened. The Long Island Sound Study was conceived to protect and improve the health of the Sound's resources and the water quality upon which they depend. It is the most extensive and comprehensive effort to collect data in the Sound ever undertaken. Along with historical information, these data will allow a thorough study of different aspects of the Sound's behavior. One fundamental aspect needing attention was the circulation and physical structure of the Sound's waters. Most current measurements in the Sound have been obtained in the past for the purpose of either investigating the characteristics of the oscillatory tidal currents in the surface layers of the Sound or determining the near bottom tidal and residual currents out of an interest for sediment transport. Lacking was a data base containing systematic current measurements capable of revealing the three dimensional distribution of the residual field of motion and of mass and which would also be suitable to support a numerical modelling effort (Bohlen et al., 1986).

Researchers from the Marine Sciences Research Center of the State University of New York at Stony Brook designed and executed a field program to collect such a data base.

2. Data acquisition and processing

Figure 1 shows the location of the moored arrays of current meters. These locations were designed to complement the deployment of RADS (Remote Acoustic Doppler System) instruments by the National Ocean Service of NOAA. A total of 96 instruments were deployed in 6 transects across the Sound between 28 March and 14 October 1988. The transects were occupied for about one month each, and then the array of instruments was moved and redeployed at the next section. The transects are numbered from 1 to 6 from West to East. The easternmost transects 5 and 6 were occupied simultaneously twice: in June and in September. Within each transect the moorings have designations N (North), NC (North Center), SC (South Center), C (Center) and S (South).

Based on previous information (Wilson and Vieira, 1981) it is reasonable to expect that the data obtained from such successive (i.e., non-synoptic) one month long deployments can be fitted together to provide a basis for understanding the three dimensional circulation pattern of the Sound.

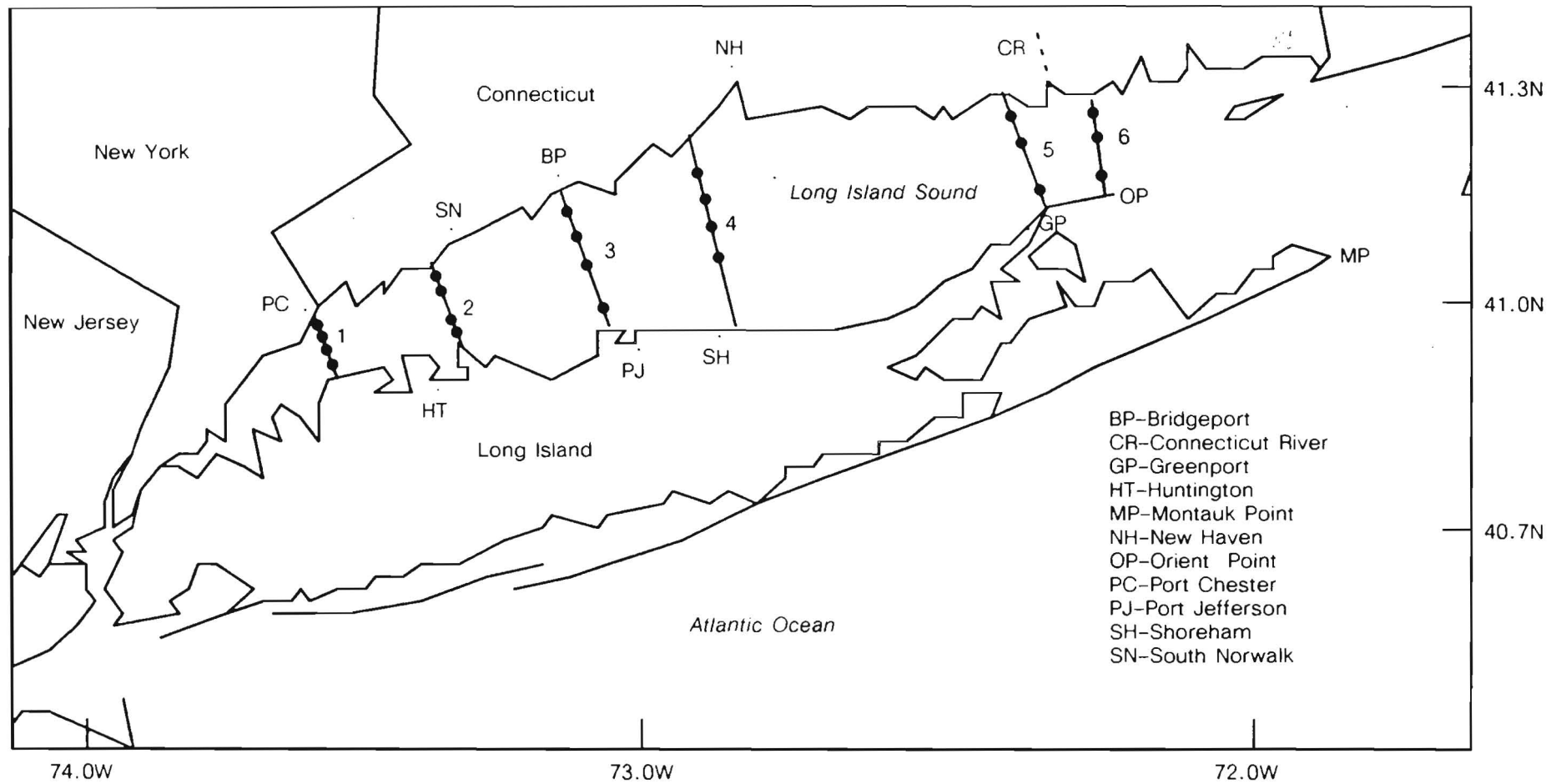


Fig. 1- Diagram of Long Island Sound showing the transects and positions of the moorings.

The instruments were deployed on taught wire vertical moorings. Railroad wheels were used as bottom weights along with a Danforth anchor. Tension was kept on the line by the use of submerged buoys (function of the number of instruments on the line), the topmost of which was kept at least 2 meters below the lowest water level. A marker buoy on a slack line served as an aid in locating moorings in shallow water where barge traffic was not likely. For the deeper moorings, where the probability of damage was higher, there was no marker buoy. Instead, an MSRC designed and built time release was installed above the upper subsurface buoy; at the programmed release moment a small float, connected to the mooring, was released to the surface, allowing recovery of the array. The recovery rate in this heavily navigated waterway was excellent: 2 instruments were lost and 15 gave unusable records.

Even though the instruments had been treated with antifouling paint, biofouling of the speed and conductivity sensors was a source of difficulty, especially during the summer deployments.

The machines utilized were of two types. The Endeco 174 can move freely tethered to the wire; it recorded current speed and direction, temperature and conductivity, every two minutes on magnetic tape. The speed sensor is a horizontally mounted ducted impeller, giving an accuracy of ± 7.7 cm/s. The direction is sensed by a magnetic compass with an accuracy of $\pm 7.2^\circ$. The temperature sensor is a thermilinear thermistor with an accuracy of $\pm 0.2^\circ\text{C}$, while an inductive cell allows conductivity measurements accurate to within ± 0.055 s/m (0.55 mmho/cm). A detailed description of the instrument is given in Endeco(1978).

The Aanderaa RCM-4 records current speed and direction, temperature, conductivity and pressure every 5 minutes on magnetic tape. The speed sensor is a vertically mounted Savonius rotor with an accuracy of ± 1 cm/s. A magnetic compass determines the direction of the instrument which aligns itself with the current by means of a large vertical fin; accuracy $\pm 7.5^\circ$. A thermistor measures temperature to a $\pm 0.05^\circ\text{C}$ accuracy. Conductivity is determined by an inductive cell to an accuracy of ± 0.0025 s/m (0.025 mmho/cm). The pressure readings were not reliable, even after calibration; the pressure signals were useful only from a qualitative point of view, and as such are not included in this report. The instrument is described in Aanderaa (1981).

All current meter sensors were calibrated prior to the first deployment in March 1988. Calibration of the speed sensors and related electronics was done in a flume with variable flow. The magnetic compasses were calibrated by comparison with azimuths determined by theodolite. Temperature and conductivity calibrations were performed in the MSRC calibration tank whose temperature was allowed to vary over a wide range, but accurately stabilized and measured with a standard bridge at each stop point. The conductivity was made to vary as the tank temperature changed, while the salinity of the bath at each stop point was

determined from samples taken from the tank and analyzed in a Guildline Autosol bench salinometer. A regression analysis was performed between sensor readings and reference standard; polynomial fit coefficients were thus determined for application to the data when running calibration programs. Calibration curves for both types of instrument had typical standard errors on the order of 0.03°C for temperature and 0.006 s/m (0.06mmho/cm) for conductivity.

The magnetic tapes retrieved from the instruments were read and the data transferred to computer tapes. The records were then submitted to the MSRC data processing routines, consisting of calibration and quality control programs. All time series were plotted before and after calibration and the data edited to remove bad points, which were replaced by linearly interpolated values. Timing was checked against the field log and gaps and sensor malfunctions were identified. Salinities were computed from the simultaneous temperature and conductivity data according to the PSS78 algorithm.

3. Data presentation

The data is presented for each transect, from West to East. Within each transect it is grouped by mooring, from North to South. Within each mooring it is arranged from top to bottom.

There is a one page summary for each instrument, containing the following information. The type of instrument and its serial number are listed. The station numbers correspond to the moorings shown in Figure 1; the geographical coordinates are also indicated. A sketch of the location of the current meters in each transect is also provided (Figs. 2-9); the unlabeled positions correspond to instruments which did not yield usable records.

The depth of the instrument and that of the water at that station are given in meters below Mean Low Water (MLW). The start and stop times of the time series are in local time for the 75°W meridian (i.e., Eastern Standard Time), as are all times throughout this report. The duration of the time series is the difference between the start and stop times. The sampling interval is the time elapsed between adjacent recordings of the instrument.

Other peculiarities of the record or comments on the perceived quality of the time series are noted under "Comments". The last section of this first page is a summary of various statistics.

The following pages contain computer generated scatter plots, progressive vector diagrams, time plots of the temperature and salinity time series and also of the along transect and cross transect velocity components.

4. Statistics

The following statistical parameters are calculated for the respective number of data points stated, in the units indicated.

If there are N values in a record of the variable x, define

$$\text{Mean } \bar{x} = \frac{1}{N} \sum_{i=1}^N x_i$$

$$\text{Variance } \sigma^2 = \frac{1}{N-1} \sum_{i=1}^N (x_i - \bar{x})^2$$

Standard deviation σ

These parameters are presented for the along-transect and the cross-transect components of the current velocity (positive directions indicated under "current component towards"), as well as for the temperature, salinity, the scalar Speed and the velocity Vector where

$$\text{vector mean } \bar{v} = \sqrt{(\text{East})^2 + (\text{North})^2}$$

$$\text{vector variance } \sigma_v^2 = \frac{1}{2} (\sigma_{\text{East}}^2 + \sigma_{\text{North}}^2)$$

standard deviation σ_v

The maximum and minimum values of the variables are also presented.

5. Scatter plots

The tip of the velocity vector at each point in time is plotted on cartesian coordinates oriented to true North at the top of the picture. For the purpose of generating these plots the time series were decimated to intervals of 10 minutes.

These diagrams are useful in interpreting certain features of the flow, such as non-parallelism of flood and ebb and asymmetry of their respective velocity variabilities, as well as in detecting instrument idiosyncrasies and malfunctions.

6. Progressive vector diagrams

Spatial displacements are computed from the speed and direction values of the velocity vector during each sampling interval and are plotted in sequence. The plot begins with a \diamond ; each 24 hour period from then on is indicated by a +. True North is at the top of the picture.

These diagrams accentuate the low frequency circulation events

related to the density structure and meteorological forcing, while still depicting higher frequency, intratidal flow features.

7. Time plots

These are representations of the velocity components, temperature and salinity as a function of time. The along transect component of the velocity is positive towards the Connecticut shore, while the cross transect component is positive towards the Race. These directions are indicated in the summary page under "current component towards".

This type of plot complements the progressive vector diagram in that it emphasizes higher frequency events, particularly at tidal frequencies. The apparent "steppiness" of some of these time series results from the scale of the plot being large in relation to the resolution of the instrument.

It also appears that the instruments (particularly the Aanderaas) were adversely affected by biofouling of both the speed and conductivity sensors, especially during the summer deployments. Even though the machines had been properly coated with antifouling paint, this is not surprising given the high productivity of these estuarine waters at that time. Typically the velocity components will show a progressive decay in the amplitude, while the salinity starts plunging rather abruptly.

No effort was made to remove the "spikiness" present in several time series, particularly temperature and salinity. This is in great part due to noise and may be removed by appropriately designed high pass filters.

For the purpose of generating these plots the Endeco 174 records were decimated to intervals of 6 minutes.

Note: the currents at transects 5 and 6 can be very large, with the result that moorings 5C, 5S, 6C and 6S suffered large angular displacements from the vertical due to the drag on the hardware. This effect was quite severe at times, leading to large vertical displacements of the instruments (a maximum of about 9 meters was deduced from the pressure signal). Such fact should be kept in mind whenever the instrument depth may be important for the interpretation of the data.

8. Acknowledgements

The principal investigators in this project were Donald W. Pritchard and Mário E. C. Vieira.

The project owes its success to the collaboration of several people. We want to show our appreciation to Tom Wilson and Henry Harrison for dispensing copious amounts of tender, loving care to the instrumentation. We thank Captain Helmut Stuebe and mate Bret Zielenski for their safe and efficient conduction of the mooring operations onboard the R/V Onrust, as well as Mark

Wiggins for his expert assistance with the preparation and deployment of the arrays. The participation of Eugenio Gomez-Reyes, Richard Muller and Jonathan Salerno is gratefully acknowledged. Our thanks also to George E. Carroll for his thorough and patient handling of the data reduction.

This project was supported by the U.S. Environmental Protection Agency as part of the National Estuary Program's Long Island Sound Study.

9. References

Aanderaa Instruments. 1981. Operating manual for recording current meter models 4 & 5. Aanderaa Instruments, Bergen, Norway.

Pritchard, D.W., W.F. Bohlen and H.H. Carter. 1986. Report of the Long Island Sound Modeling Workshop, 27-28 January 1986. Working Paper #26 of the Marine Sciences Research Center, State University of New York, Stony Brook, New York.

Endeco. 1978. Service manual for Endeco Type 174. Environmental Devices Corporation, Marion, Massachusetts.

Koppelman, L.E., P.E. Weyl, M.G. Gross and D.S. Davies. 1976. The Urban Sea: Long Island Sound. Praeger Publishers, New York, New York.

Wilson, R.E. and M.E.C. Vieira. 1981. A survey of currents in Long Island Sound between Northport, NY and Norwalk, Ct. Working Paper #2 of the Marine Sciences Research Center, State University of New York, Stony Brook, New York.

TRANSECT 1

28 March - 2 May 1988

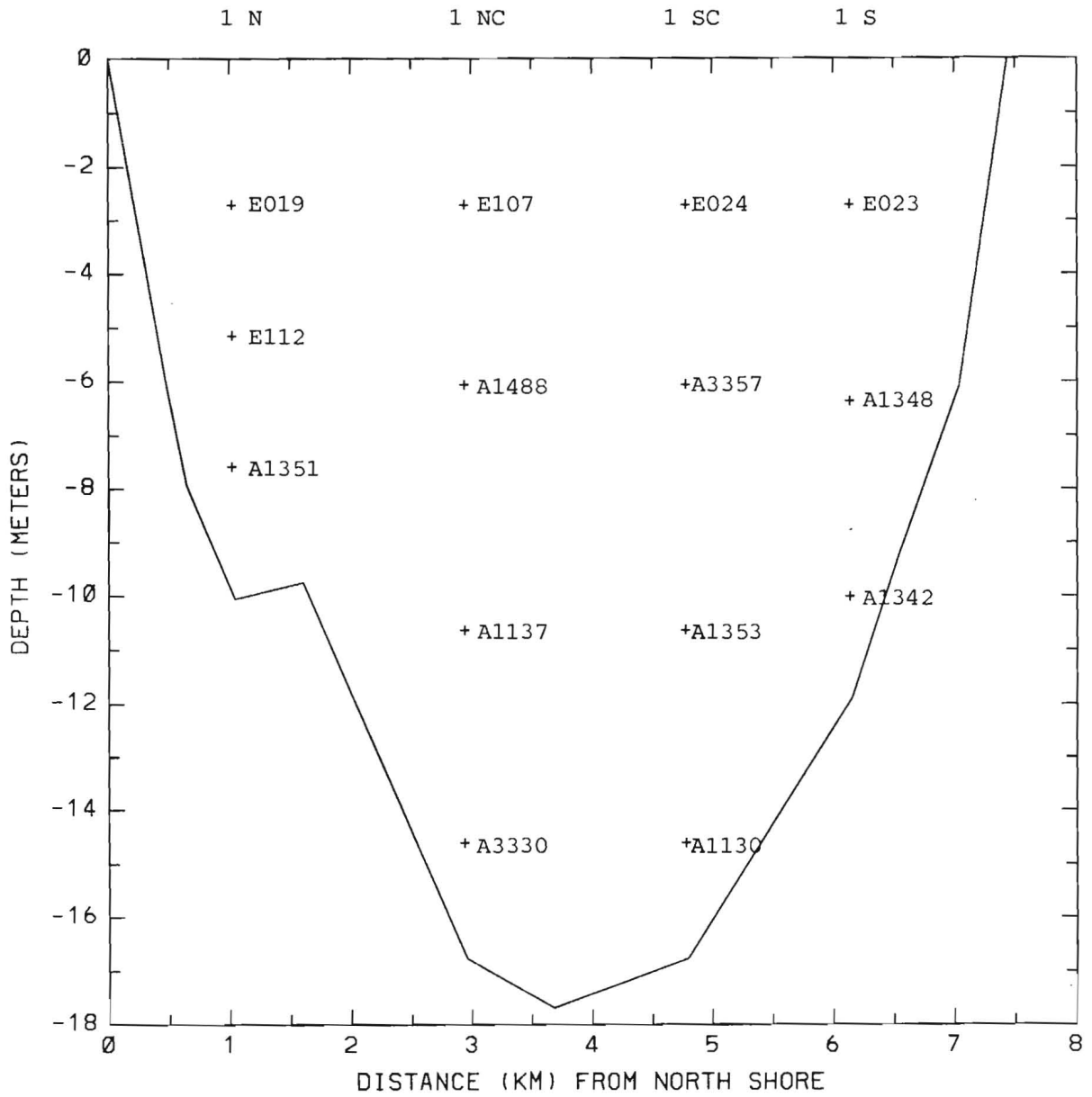


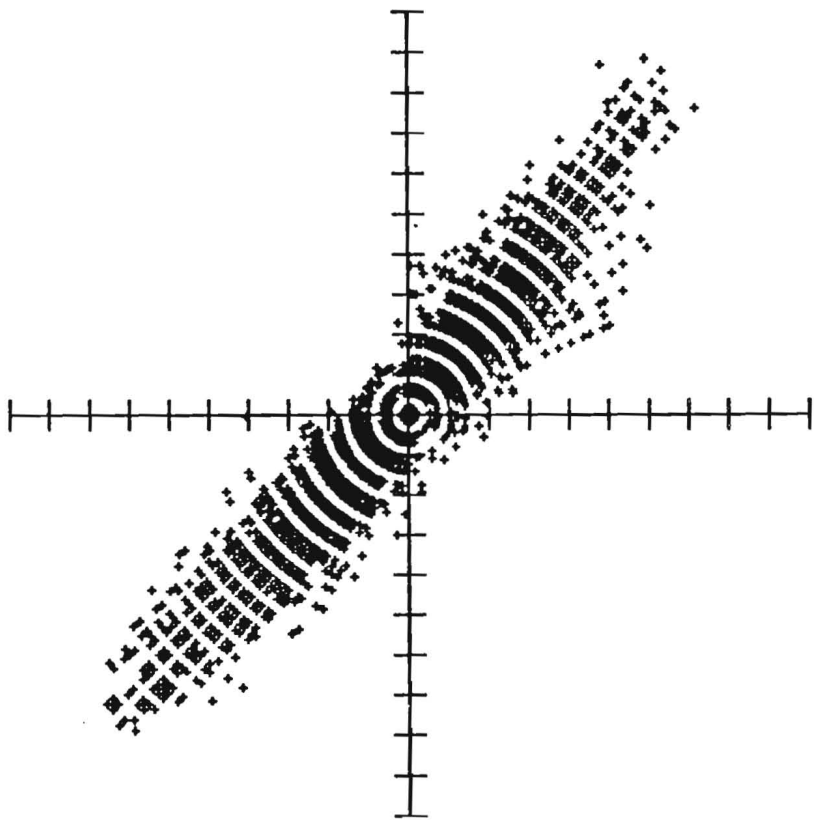
Fig. 2. Transect 1 showing the locations of the current meters

Current meter : ENDECO #1740019
 Station # and location : 1N , 40 57.1N 73 40.3W
 Instrument depth (MLW) : 2.7m
 Water depth (MLW) : 10.1m
 Start time : 03/28/88 10:12 EST
 Stop time : 05/02/88 10:52 EST
 Duration : 35 days 0 hours 40 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 25220
 NUMBER OF TEMPERATURE POINTS = 25220
 NUMBER OF SALINITY POINTS = 25220

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	0.71	-0.27	12.72	0.76	6.52	26.19
VARIANCE	=	21.51	205.82	66.10	113.67	1.03	0.03
STD. DEV.	=	4.64	14.35	8.13	10.66	1.02	0.16
MAX.	=	16.86	36.00	37.22		8.58	27.14
MIN.	=	-13.03	-36.46	0.00		3.57	25.74



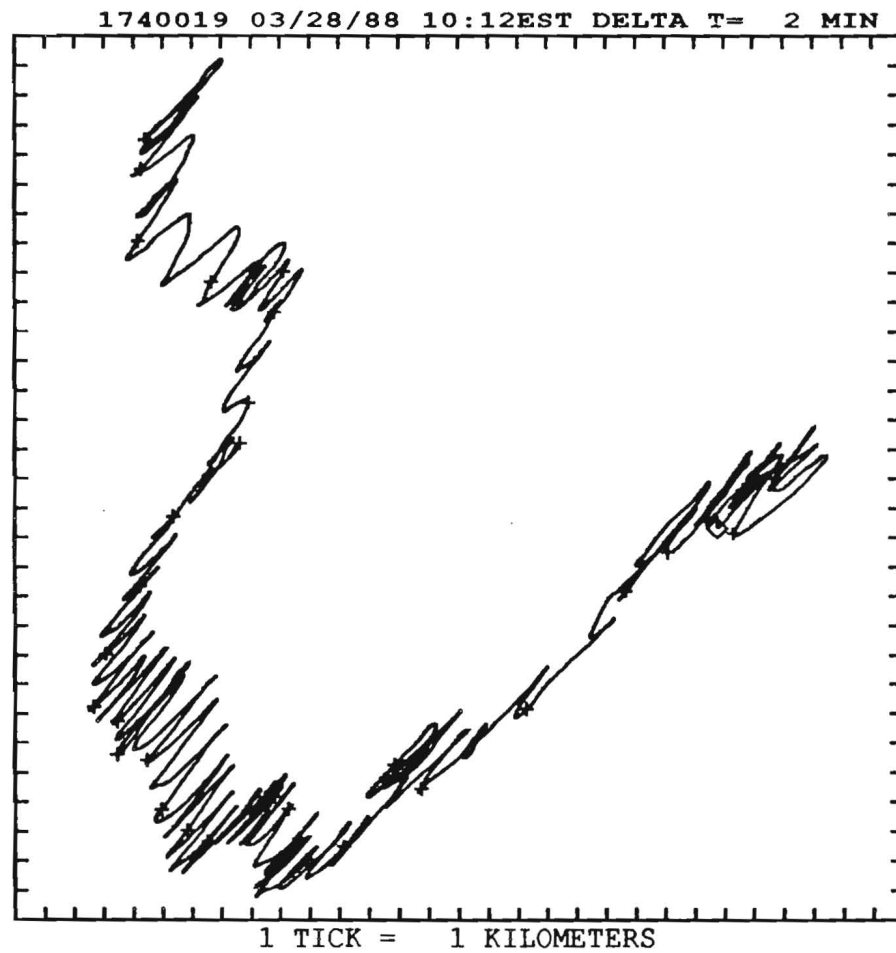
1740019 03/28/88

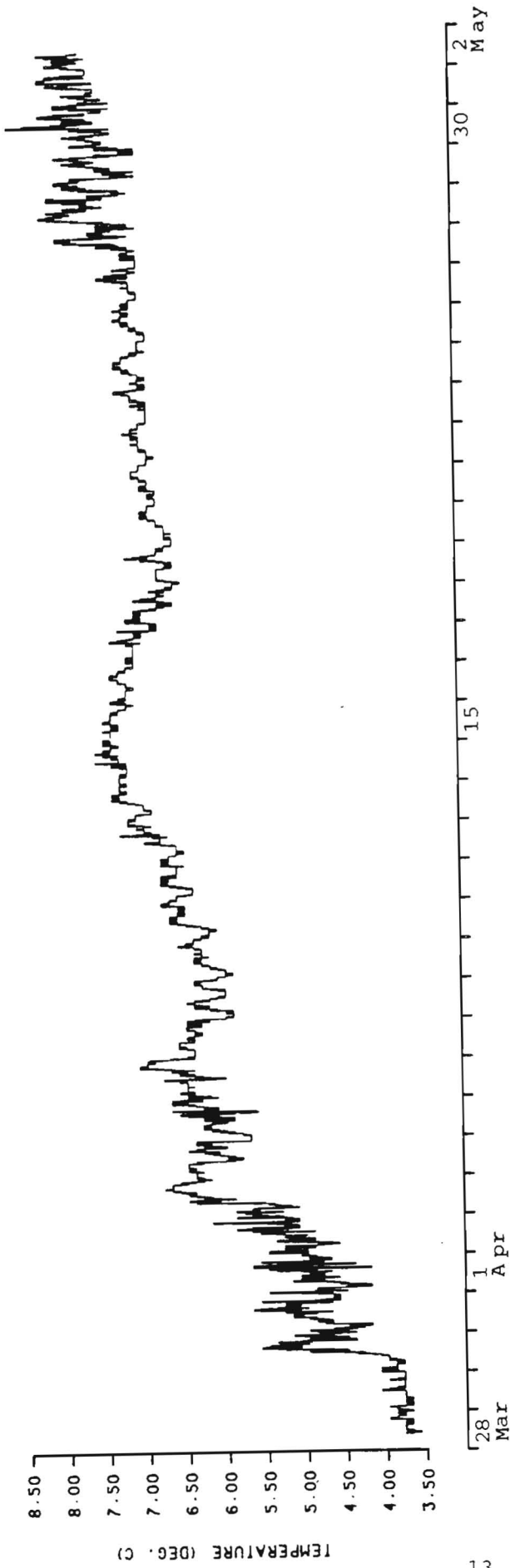
Station 1N , 40 57.1N 73 40.3W

Instrument depth(below MLW) = 2.7 m

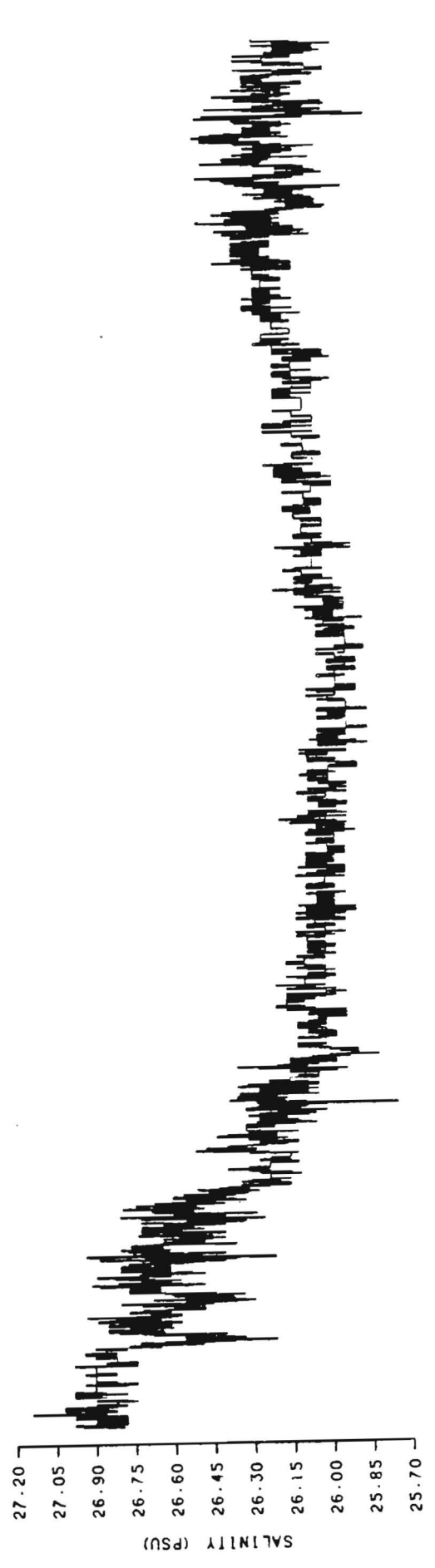
Water depth(relative to MLW) = 10.1 m

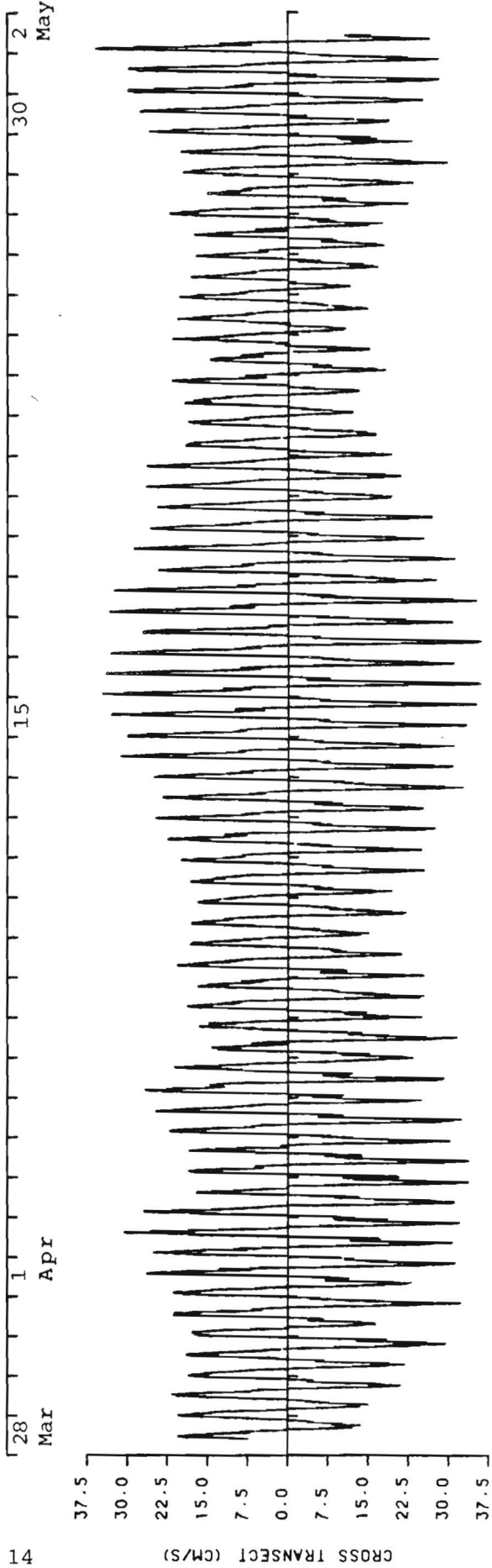
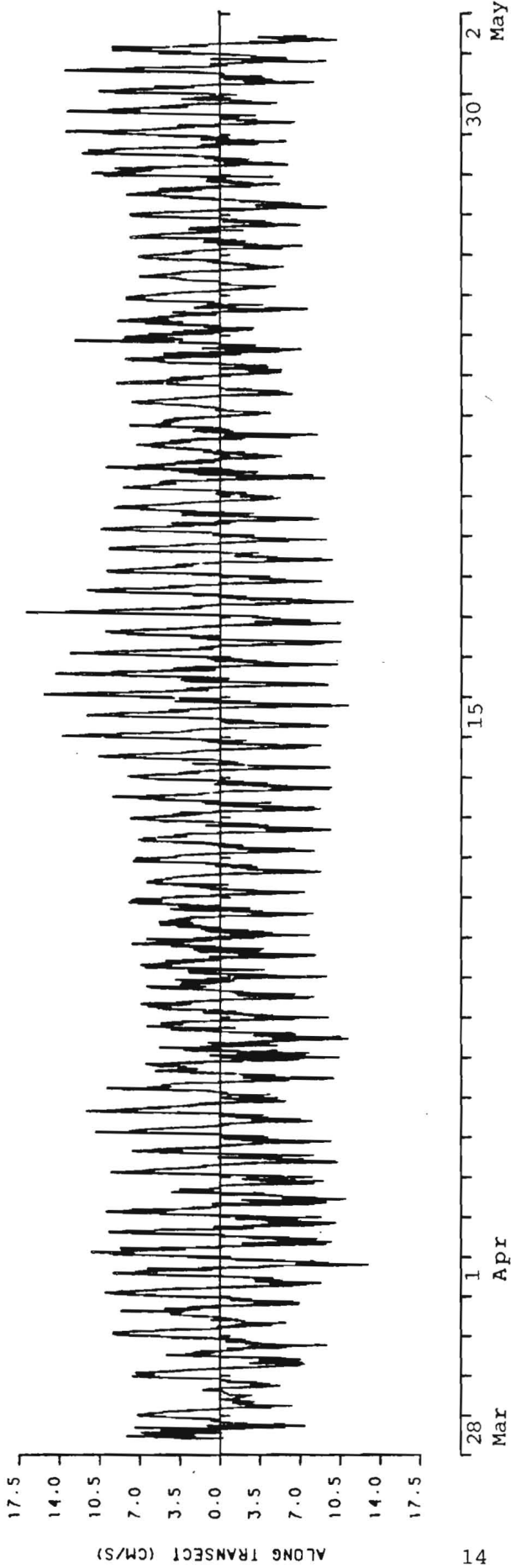
SCALE = 3.5 CM/S PER TICK





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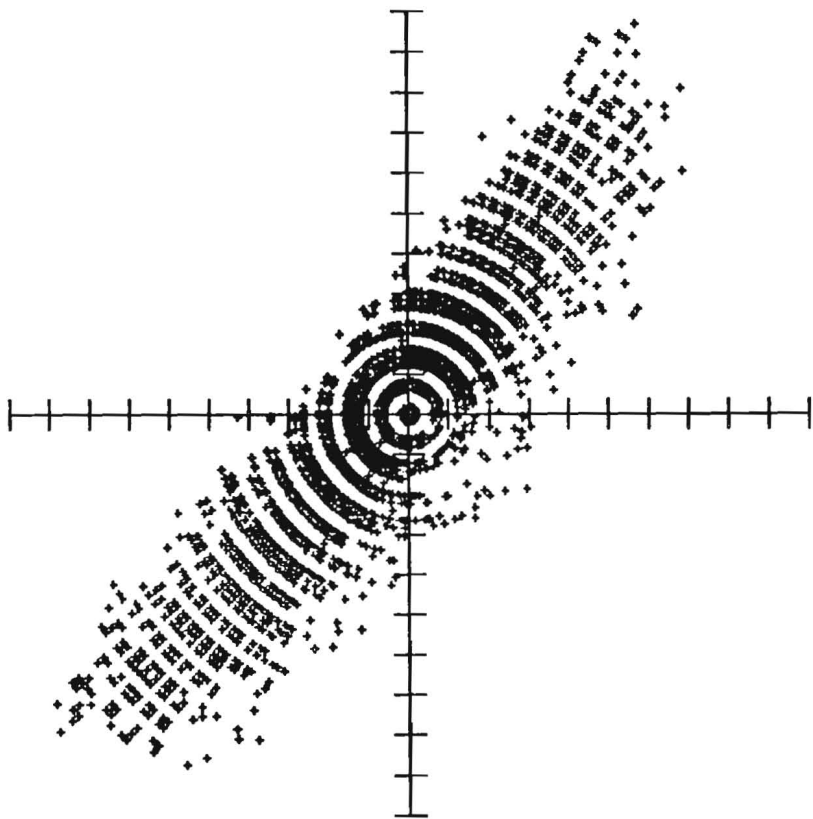
Current meter : ENDECO #1740112
 Station # and location : 1N , 40 57.1N 73 40.3W
 Instrument depth (MLW) : 5.2m
 Water depth (MLW) : 10.1m
 Start time : 03/28/88 10:12 EST
 Stop time : 05/02/88 10:52 EST
 Duration : 35 days 0 hours 40 minutes
 Sampling interval : 2 minutes
 Comments:

Conductivity sensor malfunctioned

NUMBER OF CURRENT DATA POINTS = 25220
 NUMBER OF TEMPERATURE POINTS = 25220
 NUMBER OF SALINITY POINTS = 0

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS)

		CURRENT		SPEED	VECTOR	TEMP
		COMPONENT TOWARDS				
		328	58			
MEAN	=	1.57	-0.67	13.77	1.70	6.51
VARIANCE	=	34.51	228.22	76.05	131.36	1.04
STD. DEV.	=	5.87	15.11	8.72	11.46	1.02
MAX.	=	20.90	36.09	42.78		8.46
MIN.	=	-17.03	-41.85	0.00		3.65



1740112 03/28/88

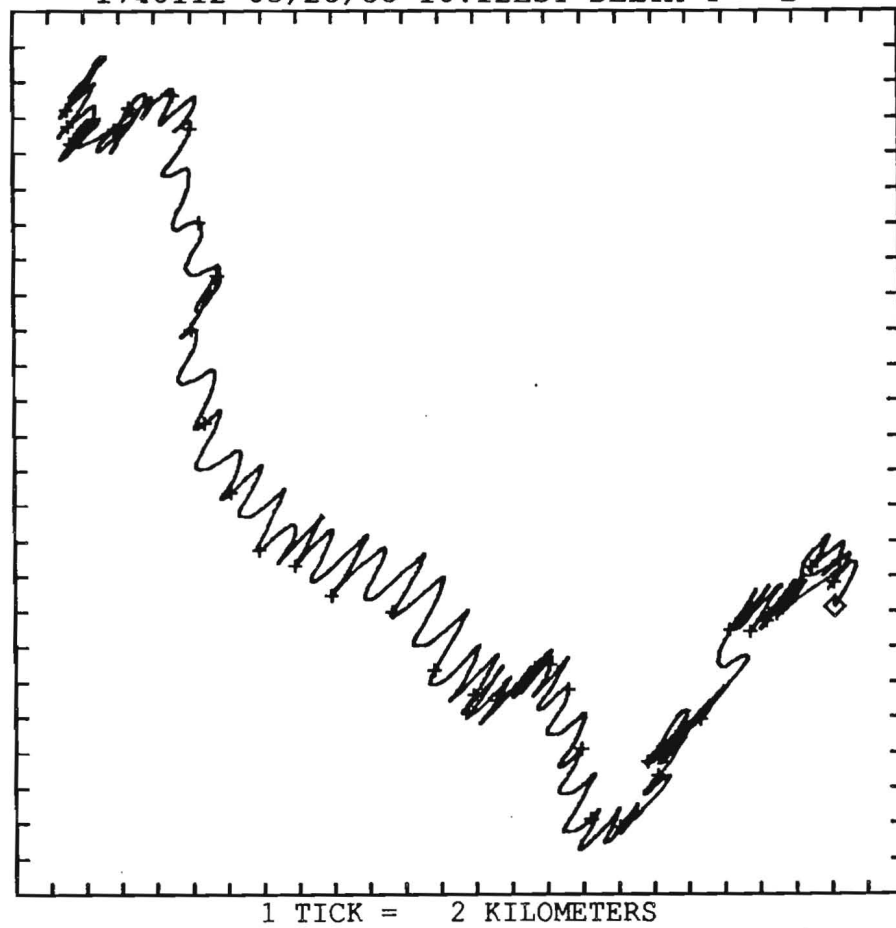
Station 1N , 40 57.1N 73 40.3W

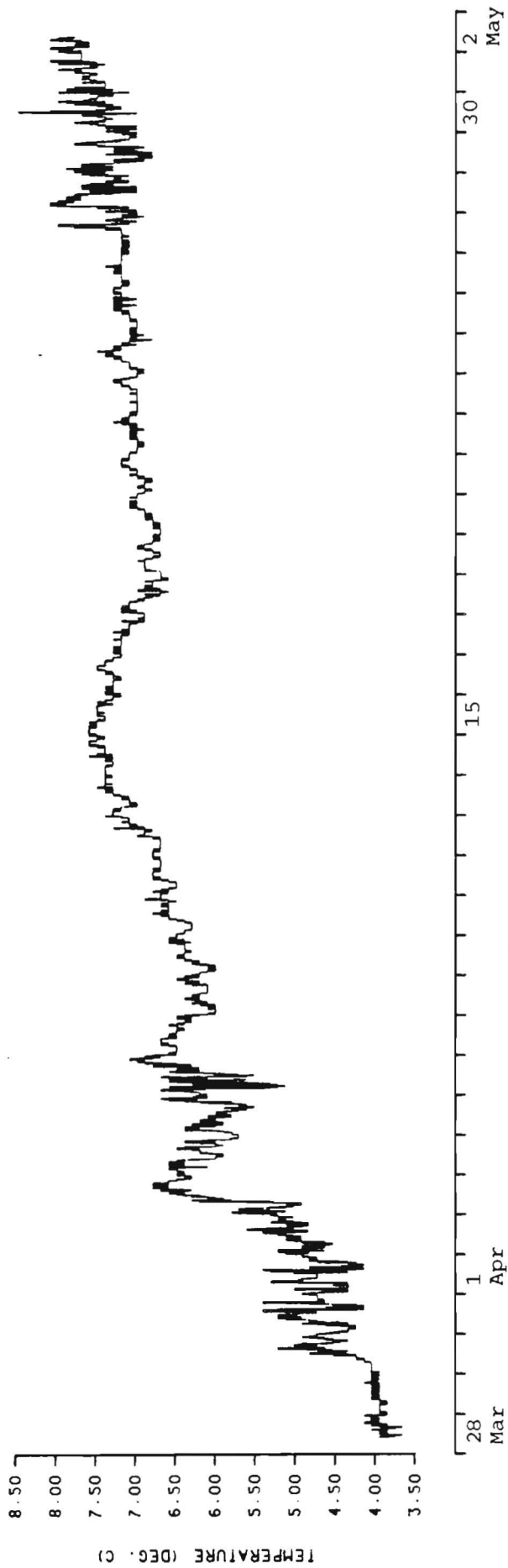
Instrument depth(below MLW) = 5.2 m

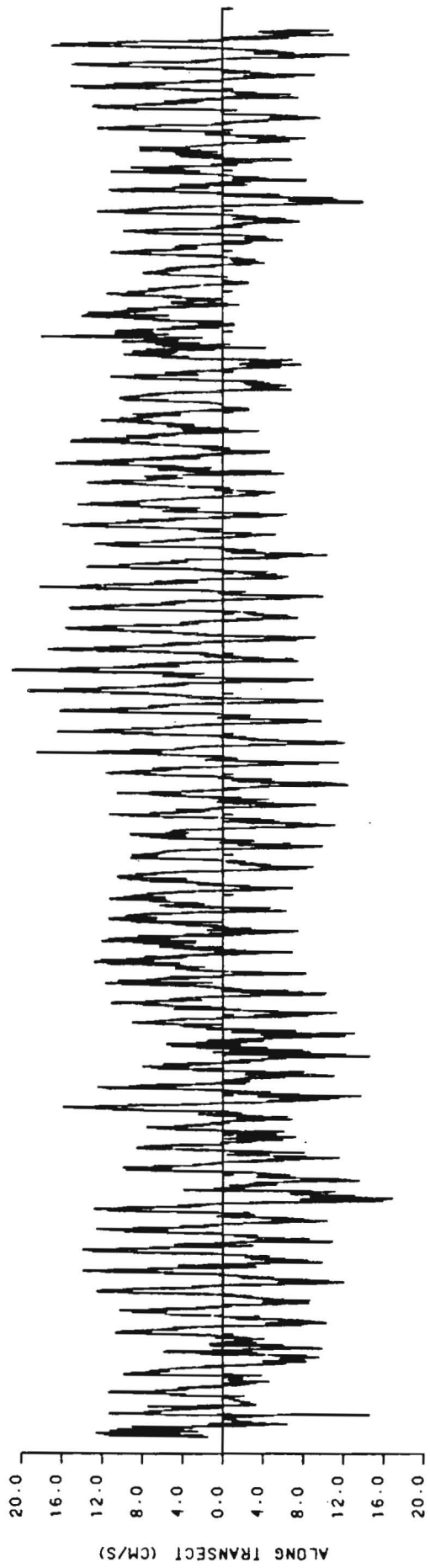
Water depth(relative to MLW) = 10.1 m

SCALE = 3.5 CM/S PER TICK

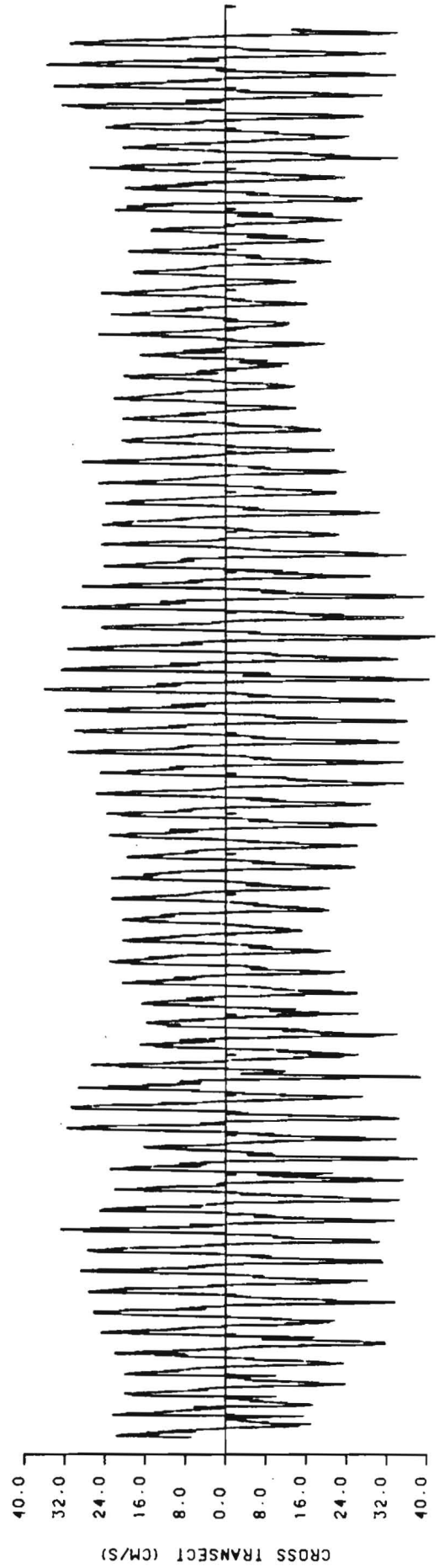
1740112 03/28/88 10:12EST DELTA T= 2







81



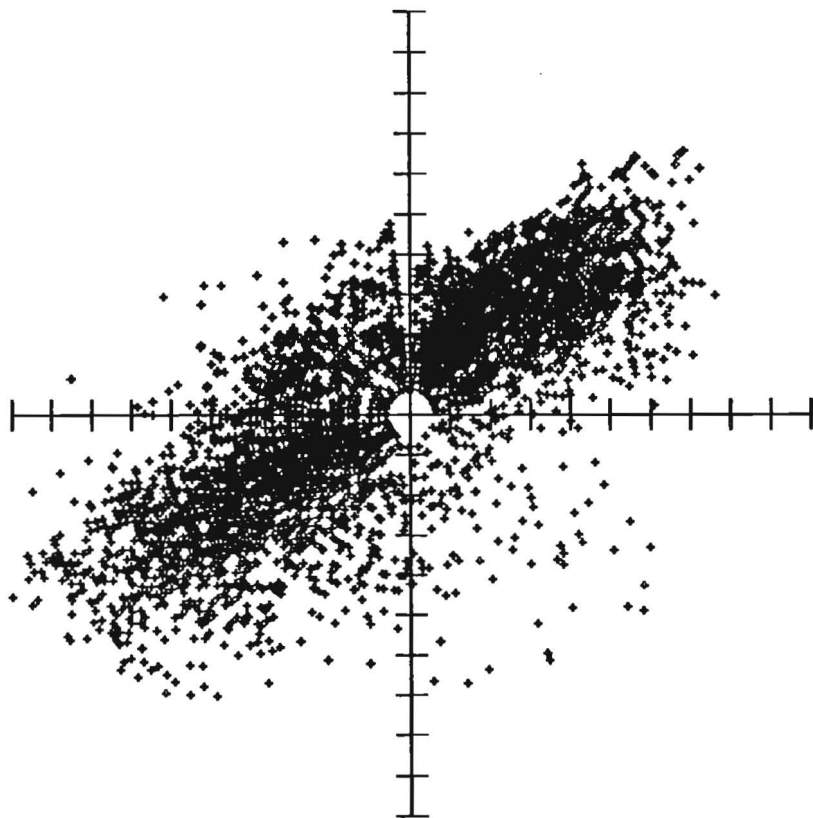
Current meter : AANDERAA #A1351
 Station # and location : 1N , 40 57.1N 73 40.3W
 Instrument depth (MLW) : 7.6m
 Water depth (MLW) : 10.1m
 Start time : 03/28/88 10:15 EST
 Stop time : 05/02/88 10:50 EST
 Duration : 35 days 0 hours 35 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 10087
 NUMBER OF TEMPERATURE POINTS = 10087
 NUMBER OF SALINITY POINTS = 10087

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	2.07	-0.66	12.23	2.17	5.88	27.09
VARIANCE	=	16.41	162.49	34.14	89.45	0.86	0.06
STD. DEV.	=	4.05	12.75	5.84	9.46	0.93	0.25
MAX.	=	17.31	28.31	32.96		7.15	27.57
MIN.	=	-23.21	-32.86	1.91		3.23	26.70

20



A1351 03/28/88

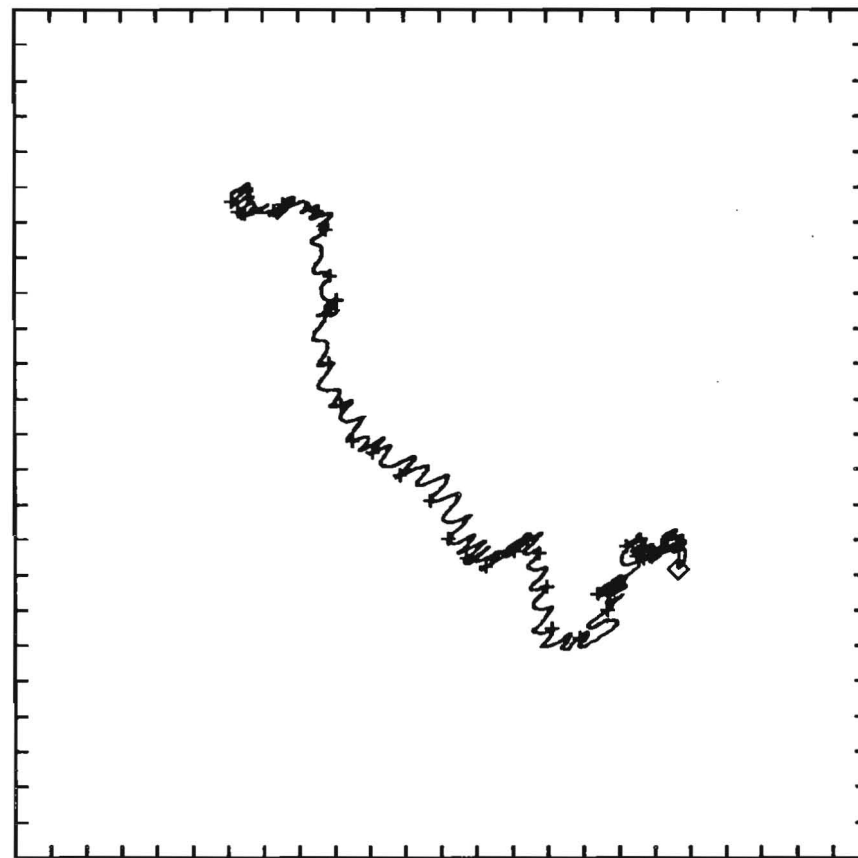
Station 1N , 40 57.1N 73 40.3W

Instrument depth(below MLW) = 7.6 m

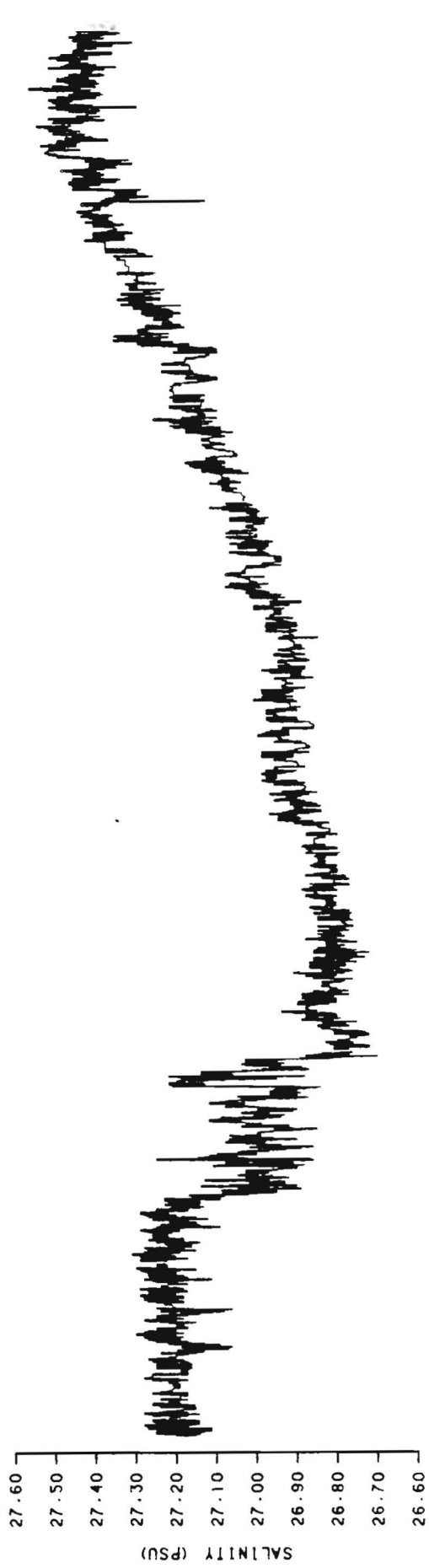
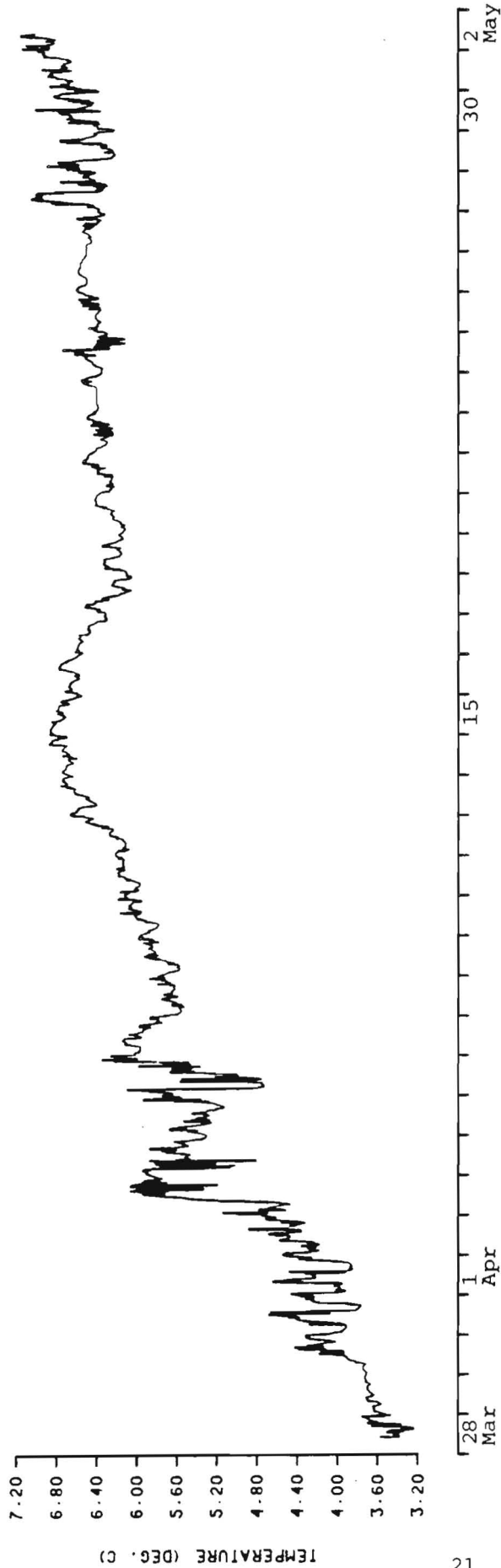
Water depth(relative to MLW) = 10.1 m

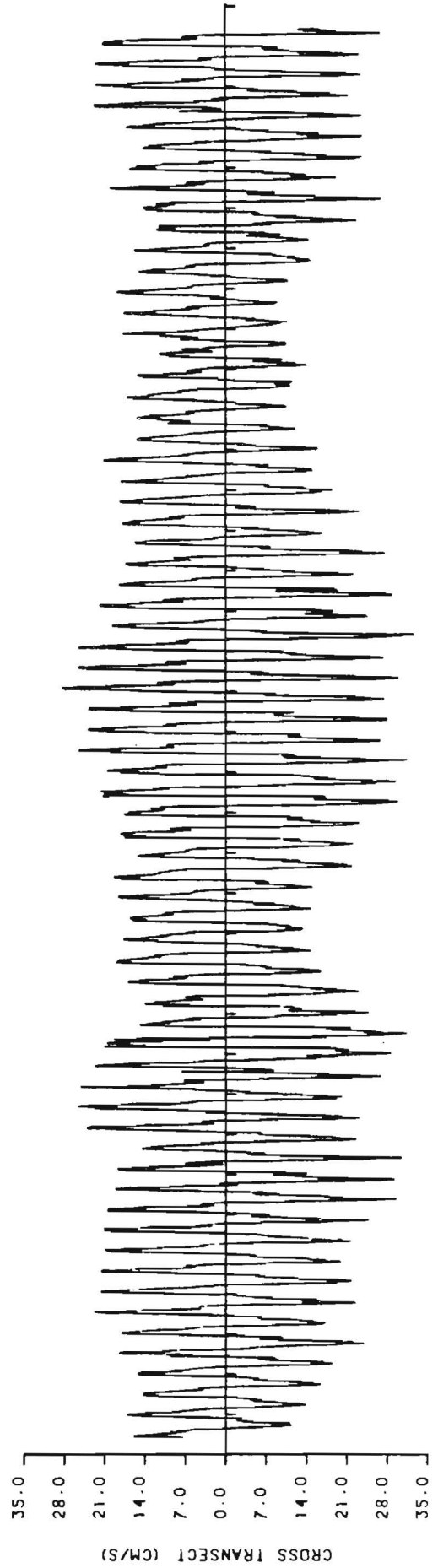
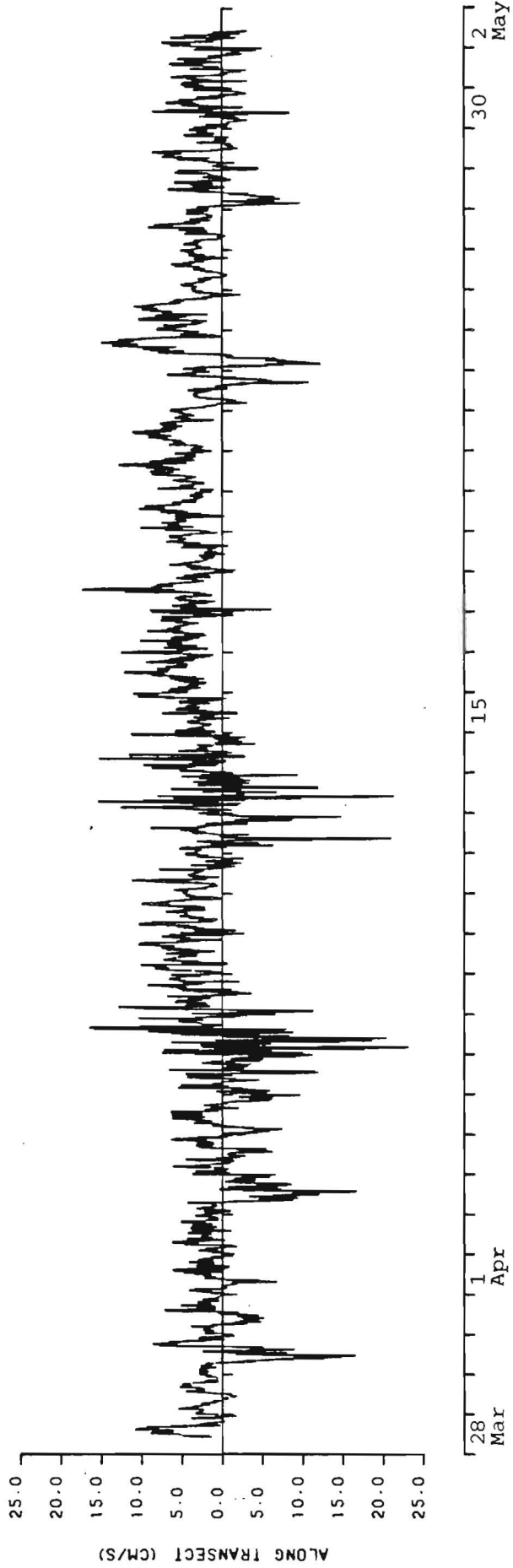
SCALE = 3.0 CM/S PER TICK

A1351 /28/88 10:15EST DELTA T= 5 MIN



1 TICK = 4 KILOMETERS





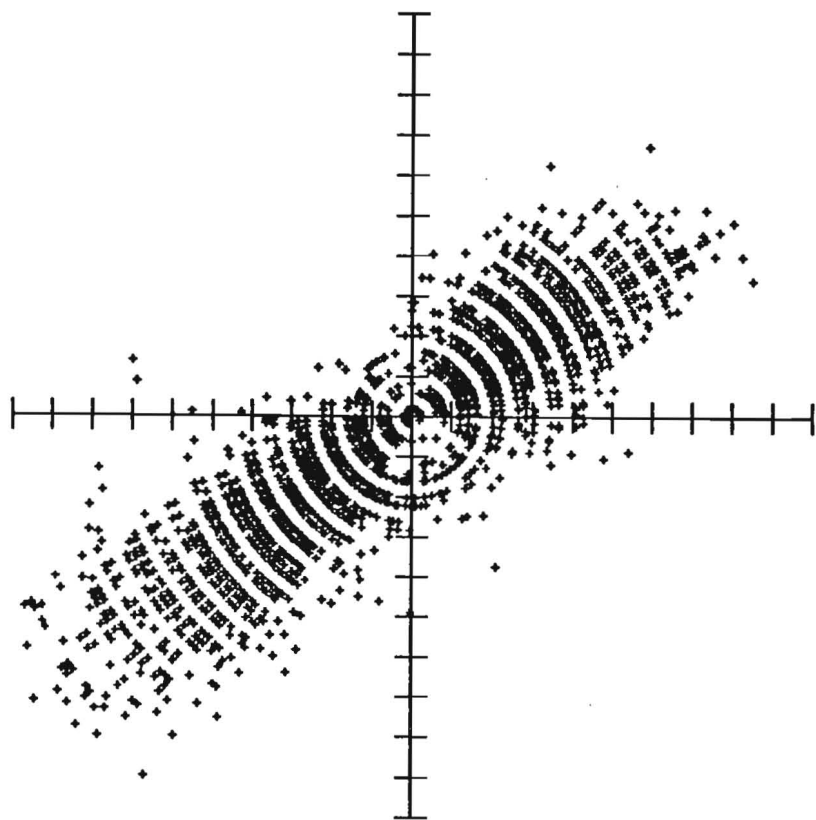
Current meter : ENDECO #1740107
 Station # and location : 1NC, 40 56.2N 73 39.5W
 Instrument depth (MLW) : 2.7m
 Water depth (MLW) : 17.1m
 Start time : 03/28/88 11:20 EST
 Stop time : 04/22/88 00:00 EST
 Duration : 24 days 12 hours 40 minutes
 Sampling interval : 2 minutes
 Comments:

Instrument malfunctioned after 21 April.
 Retrieved with dead batteries.

NUMBER OF CURRENT DATA POINTS = 17660
 NUMBER OF TEMPERATURE POINTS = 17660
 NUMBER OF SALINITY POINTS = 17660

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

	CURRENT		SPEED	VECTOR	TEMP	SAL
	COMPONENT TOWARDS					
	328	58				
MEAN	= -0.71	-1.77	14.25	1.91	5.82	26.82
VARIANCE	= 11.86	250.09	62.52	130.97	1.01	0.15
STD. DEV.	= 3.44	15.81	7.91	11.44	1.01	0.38
MAX.	= 17.10	32.80	41.35		7.26	27.80
MIN.	= -17.32	-41.20	0.00		3.37	26.09



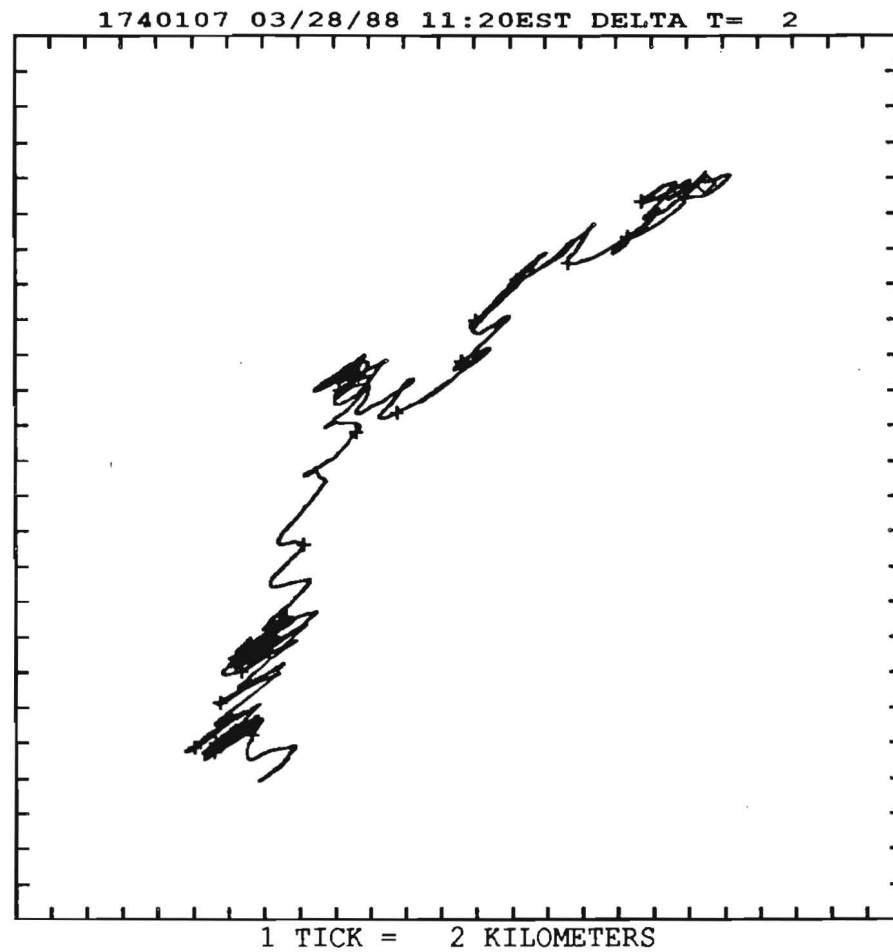
1740107 03/28/88

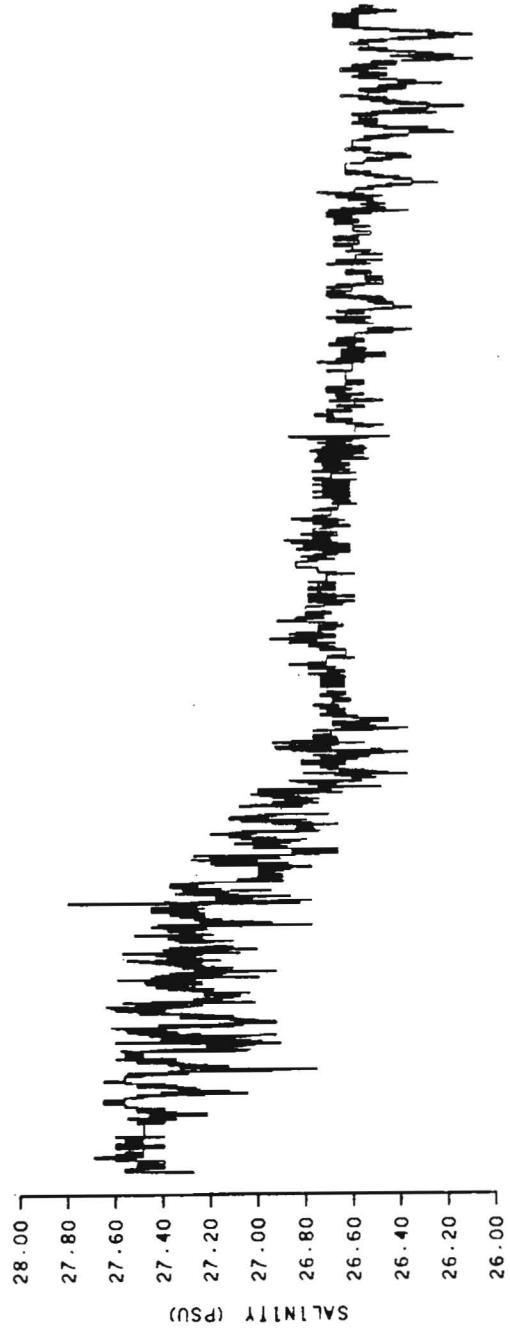
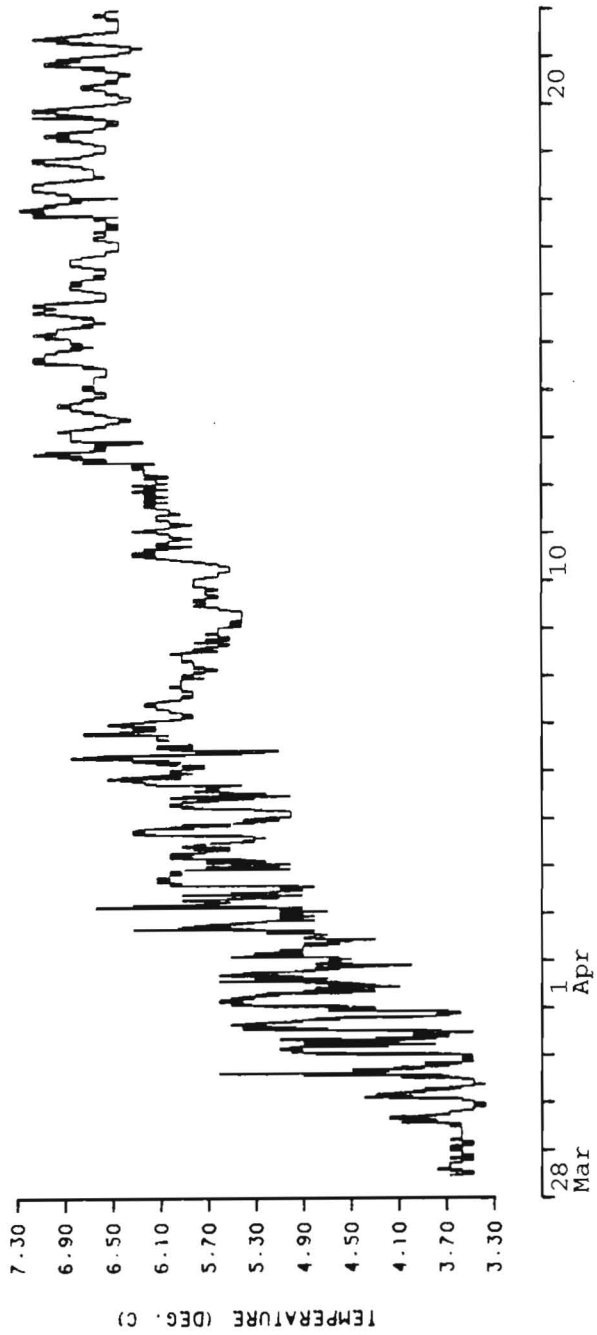
Station 1NC, 40 56.2N 73 39.5W

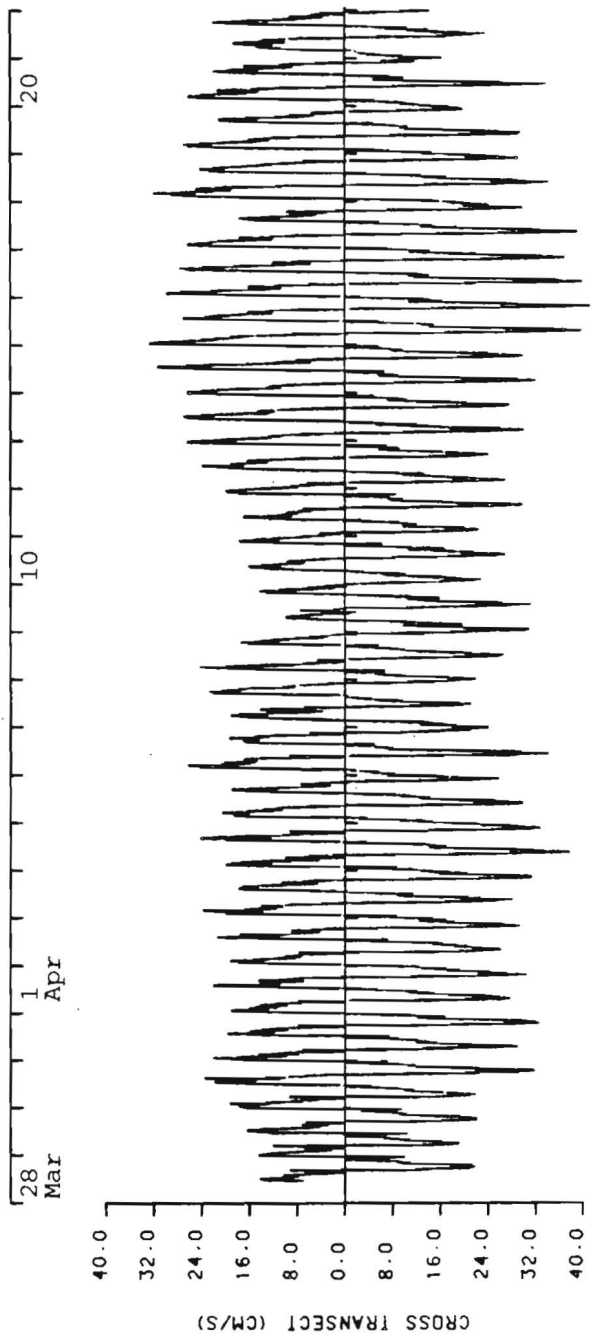
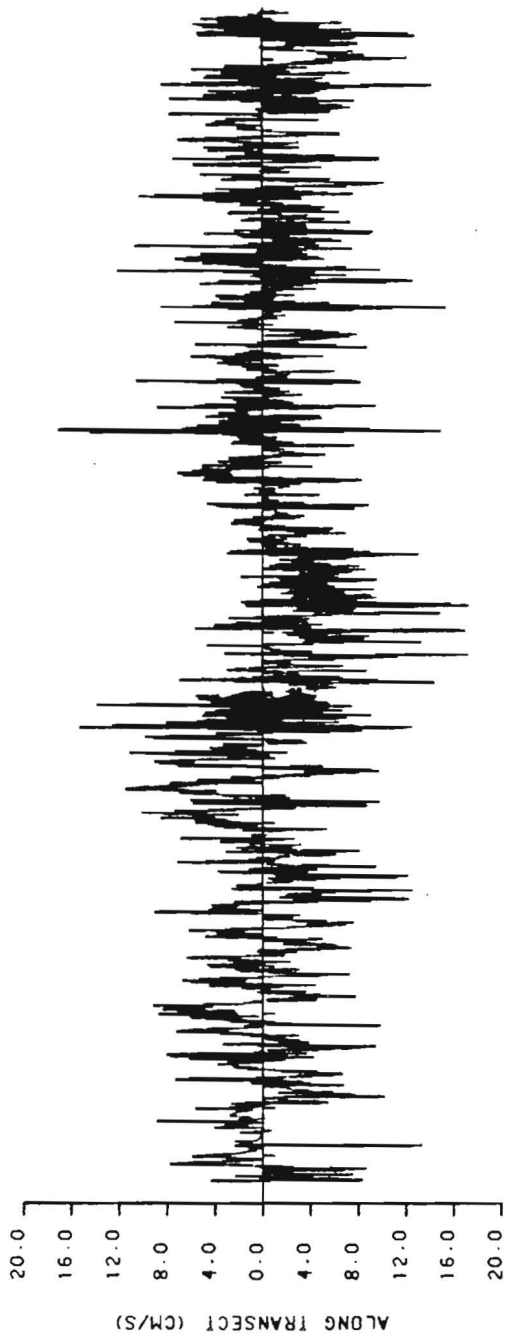
Instrument depth(below MLW) = 2.7 m

Water depth(relative to MLW) = 17.1 m

SCALE = 3.5 CM/S PER TICK







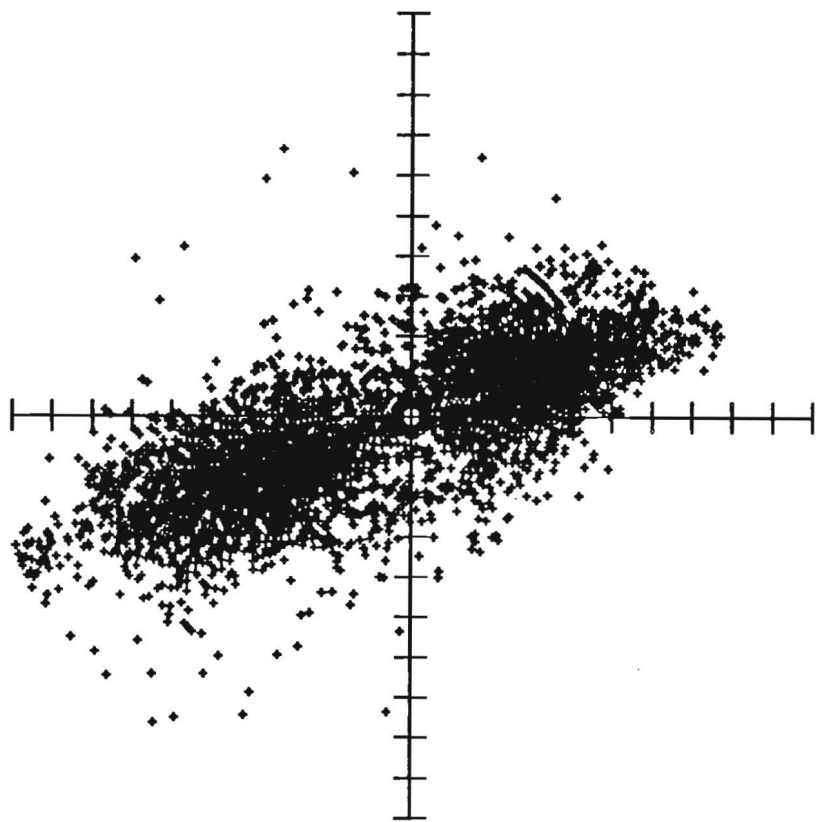
Current meter : AANDERAA #A1488
 Station # and location : 1NC, 40 56.2N 73 39.5W
 Instrument depth (MLW) : 6.1m
 Water depth (MLW) : 17.1m
 Start time : 03/28/88 11:30 EST
 Stop time : 05/02/88 09:20 EST
 Duration : 34 days 21 hours 50 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 10054
 NUMBER OF TEMPERATURE POINTS = 10054
 NUMBER OF SALINITY POINTS = 10054

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	0.47	-3.14	15.38	3.17	6.68	26.41
VARIANCE	=	27.60	256.35	57.42	141.97	1.33	0.04
STD. DEV.	=	5.25	16.01	7.58	11.92	1.15	0.20
MAX.	=	29.38	31.33	42.85		8.98	27.03
MIN.	=	-25.70	-42.41	1.23		3.90	25.91

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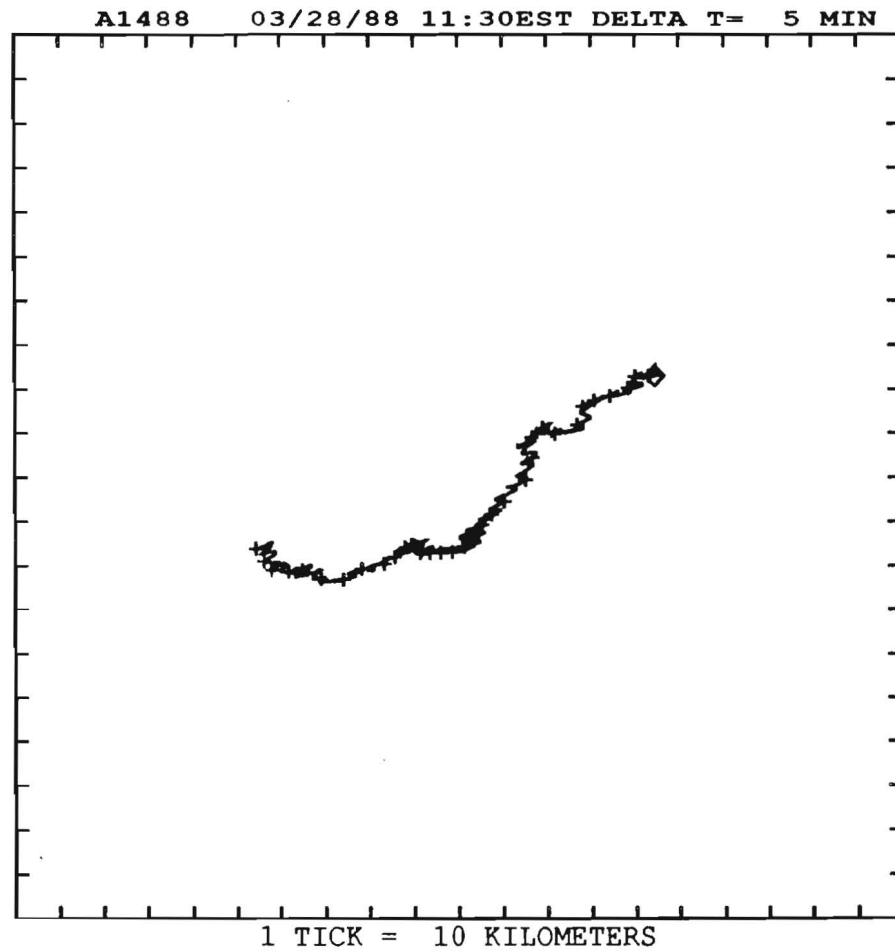
A1488 03/28/88

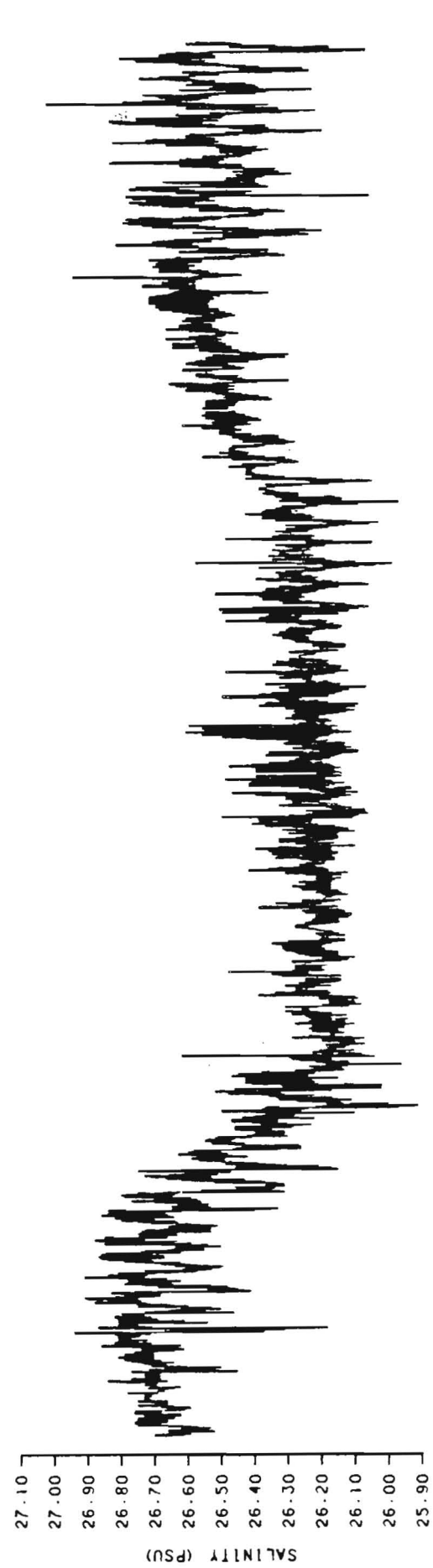
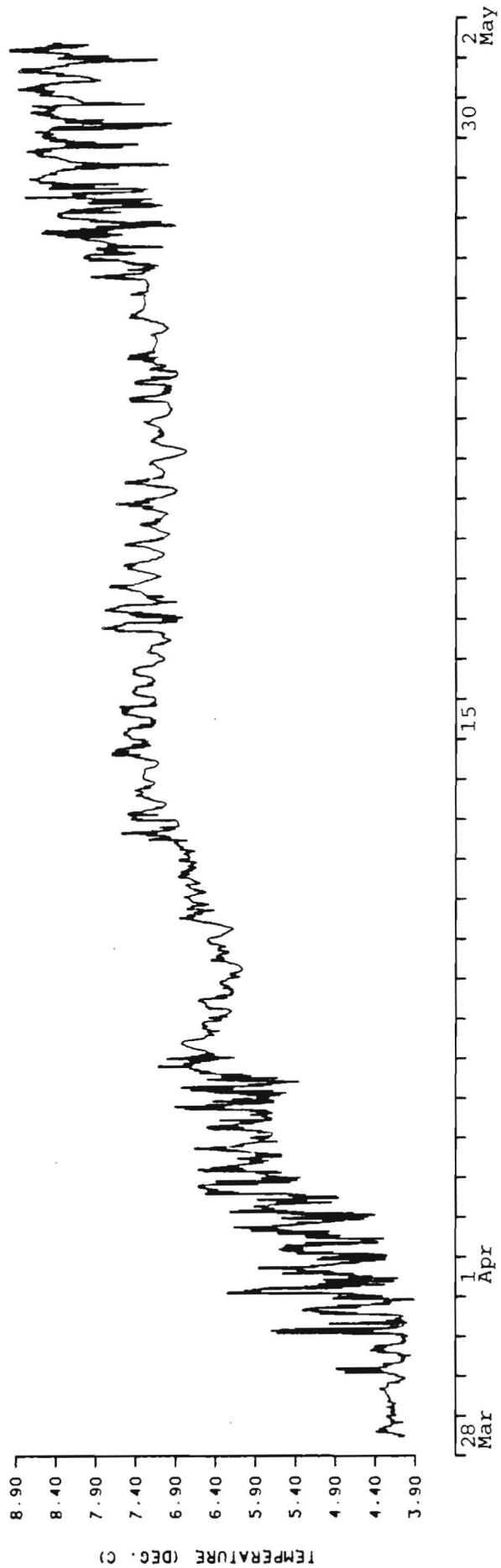
Station 1NC, 40 56.2N 73 39.5W

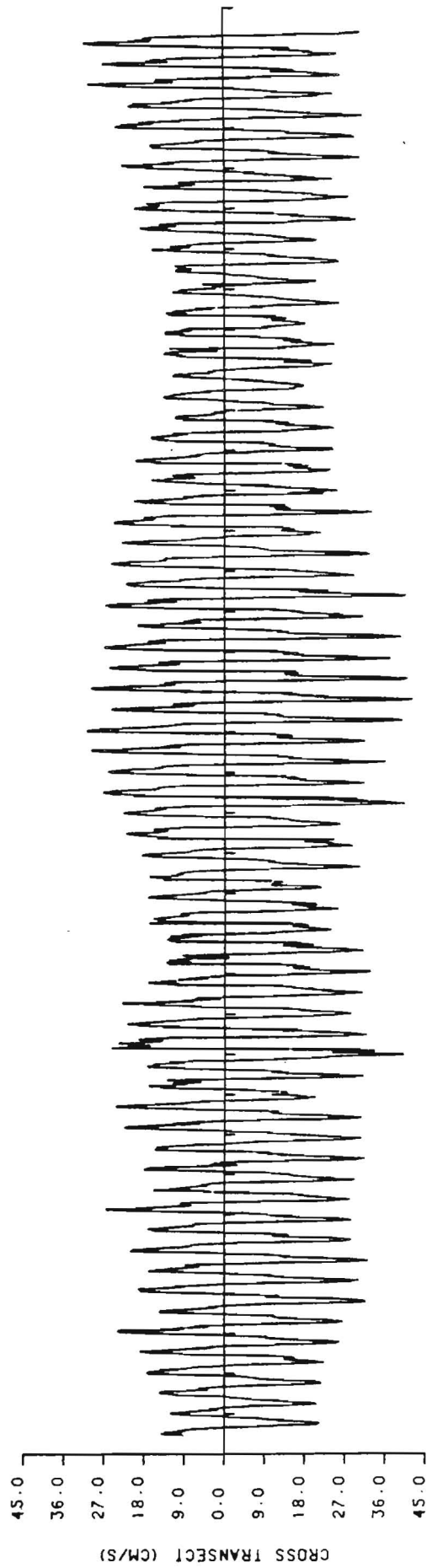
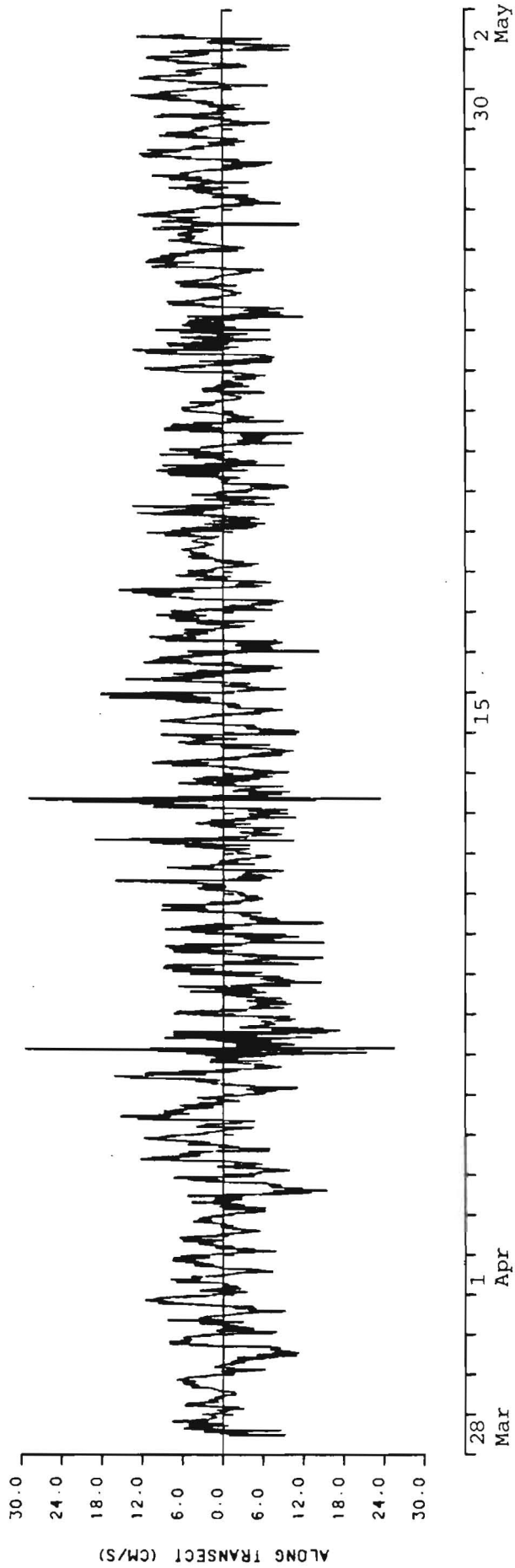
Instrument depth(below MLW) = 6.1 m

Water depth(relative to MLW) = 17.1 m

SCALE = 4.0 CM/S PER TICK







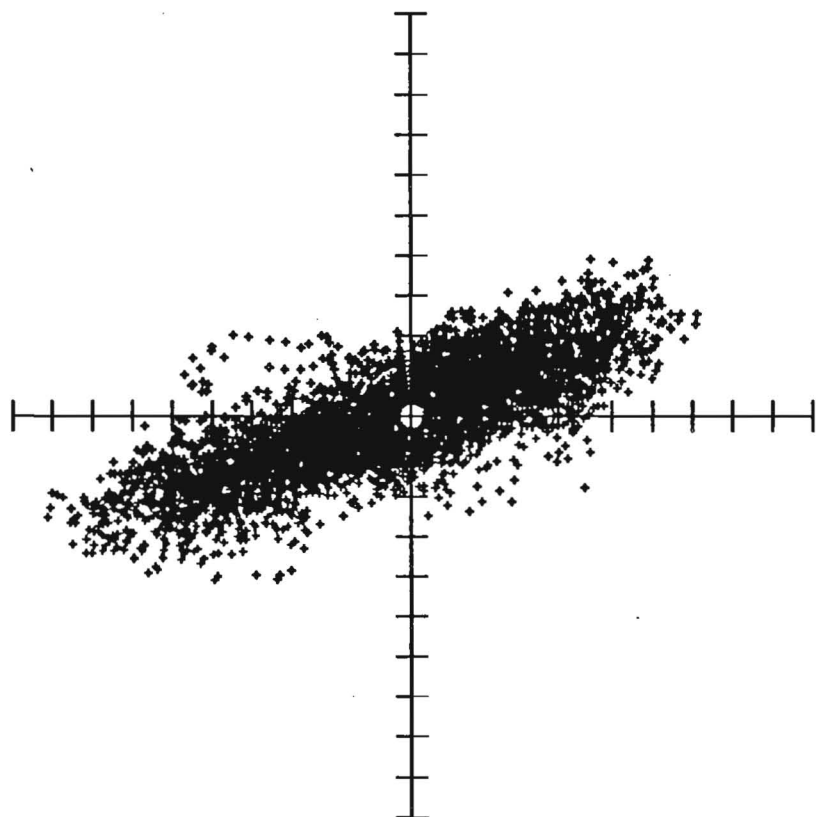
Current meter : AANDERAA #A1137
 Station # and location : 1NC, 40 56.2N 73 39.5W
 Instrument depth (MLW) : 10.7m
 Water depth (MLW) : 17.1m
 Start time : 03/28/88 12:15 EST
 Stop time : 05/02/88 08:50 EST
 Duration : 34 days 20 hours 35 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 10039
 NUMBER OF TEMPERATURE POINTS = 10039
 NUMBER OF SALINITY POINTS = 10039

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

	CURRENT		SPEED	VECTOR	TEMP	SAL
	COMPONENT TOWARDS					
	328	58				
MEAN	= 1.10	-2.09	13.62	2.36	6.30	26.68
VARIANCE	= 20.67	226.21	66.85	123.44	1.42	0.08
STD. DEV.	= 4.55	15.04	8.18	11.11	1.19	0.28
MAX.	= 18.78	33.49	42.58		8.60	27.21
MIN.	= -17.11	-40.84	1.70		3.58	26.24

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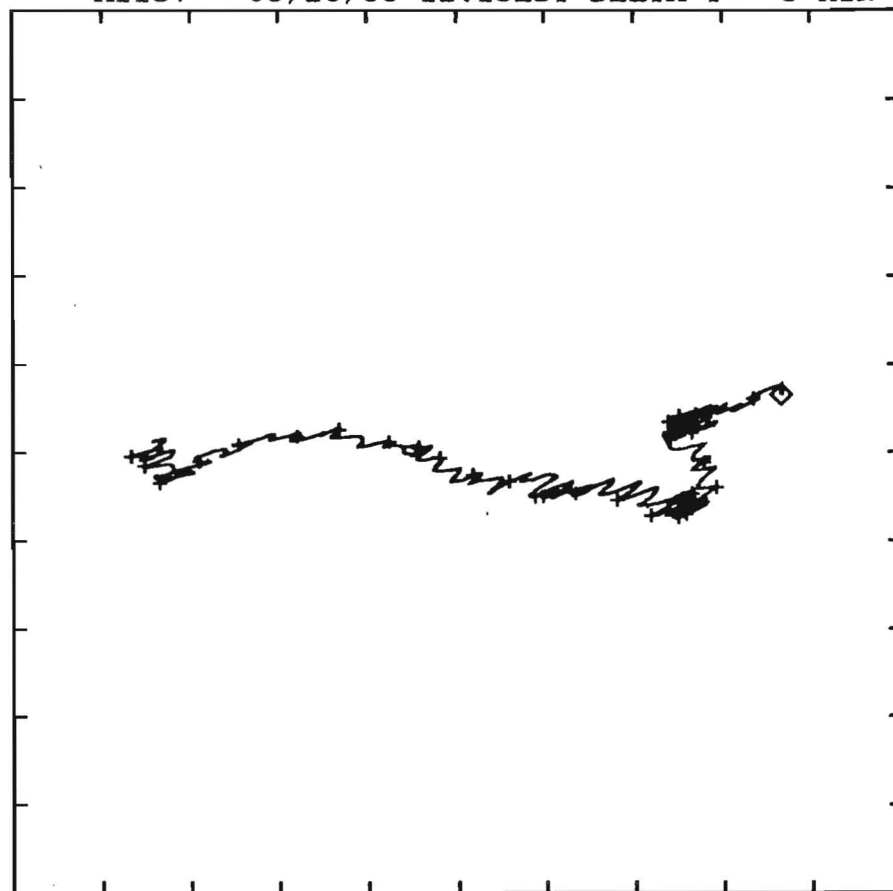
Station 1NC, 40 56.2N 73 39.5W

Instrument depth(below MLW) = 10.7 m

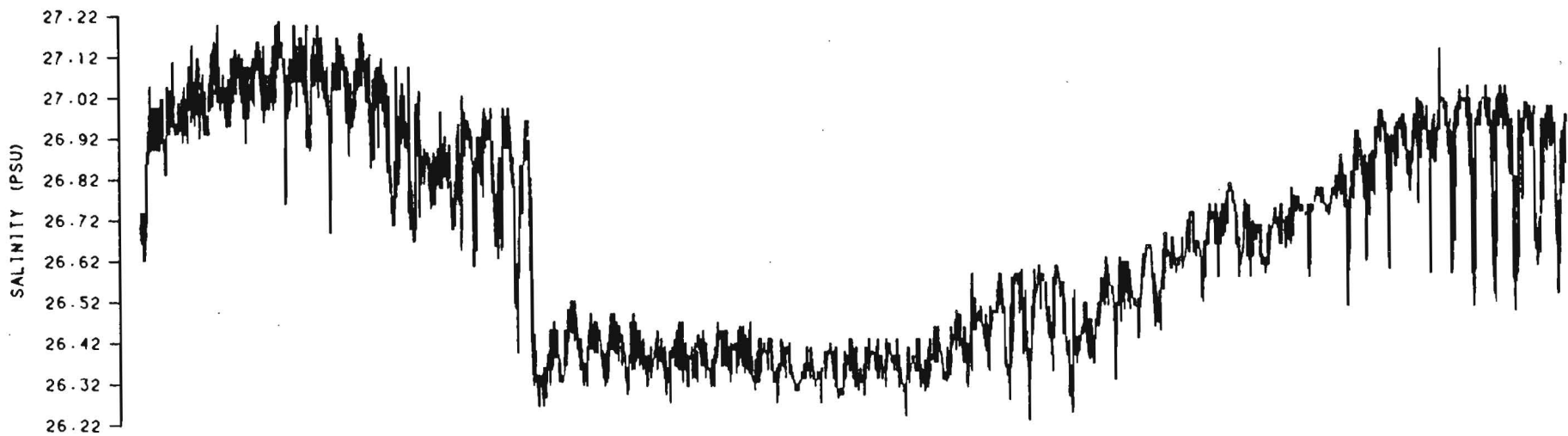
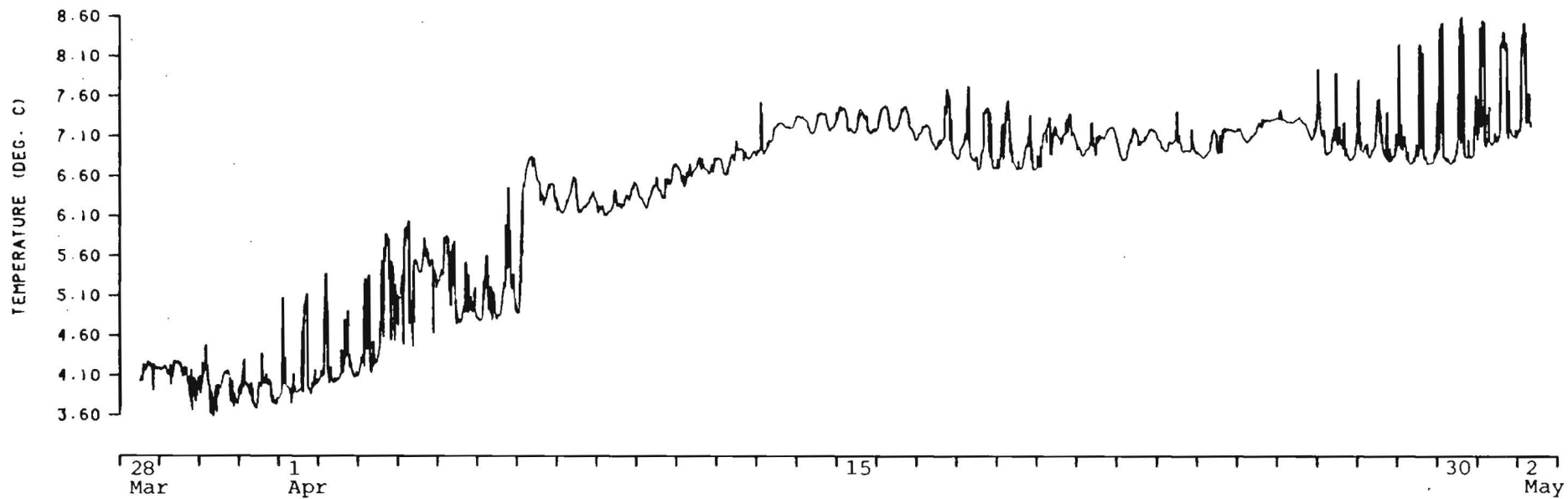
Water depth(relative to MLW) = 17.1 m

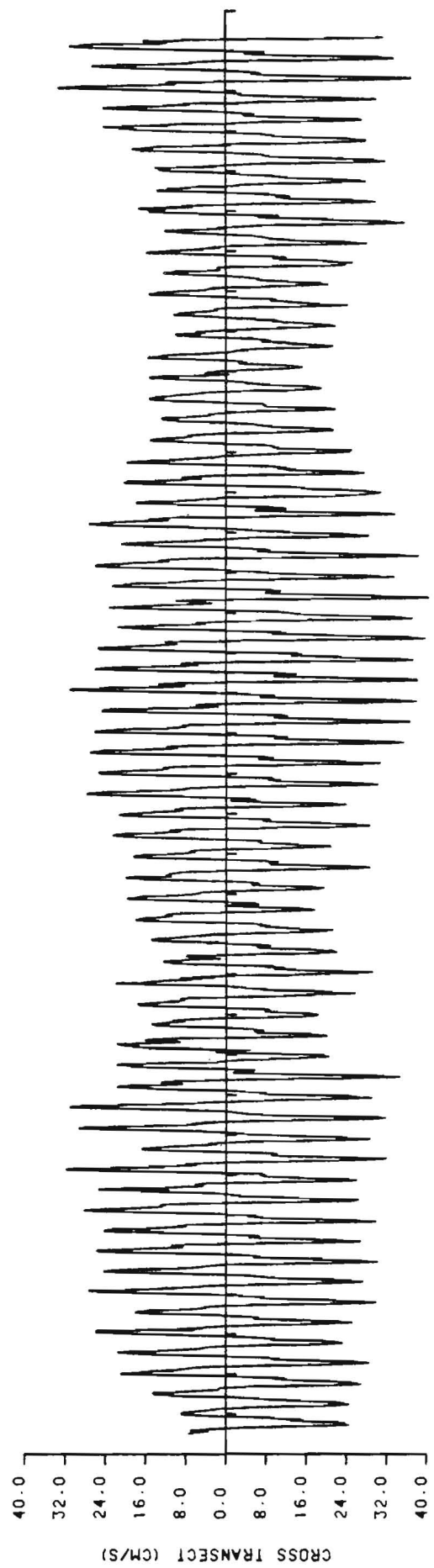
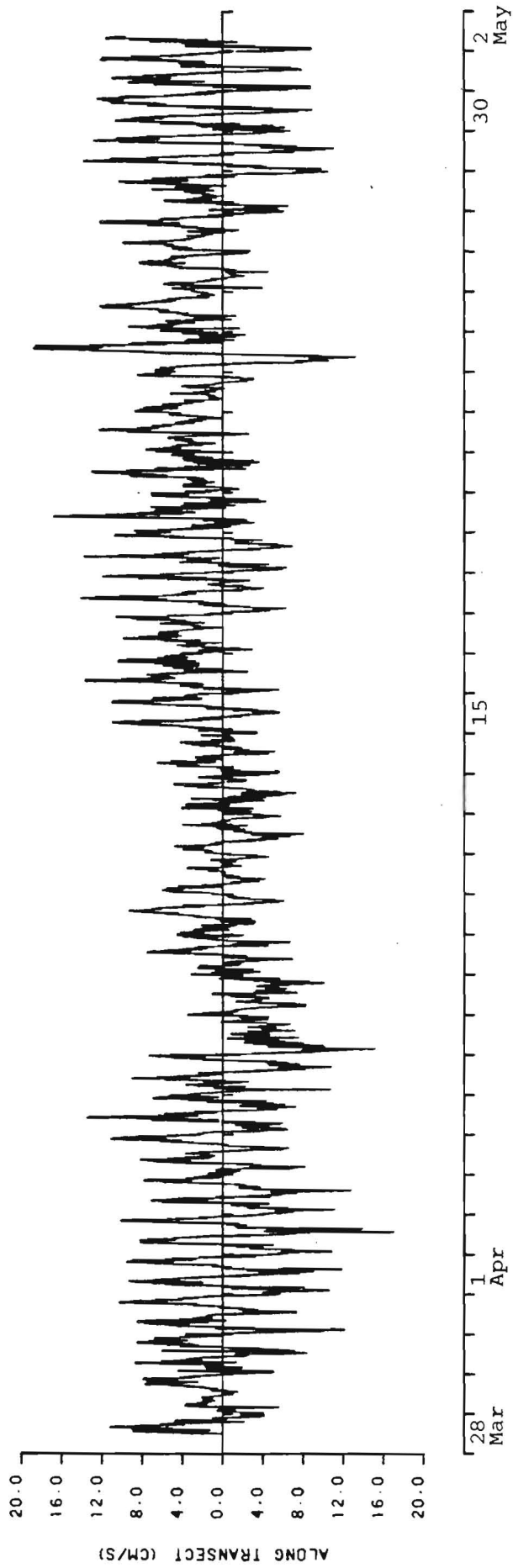
SCALE = 4.5 CM/S PER TICK

A1137 03/28/88 12:15EST DELTA T= 5 MIN



1 TICK = 10 KILOMETERS





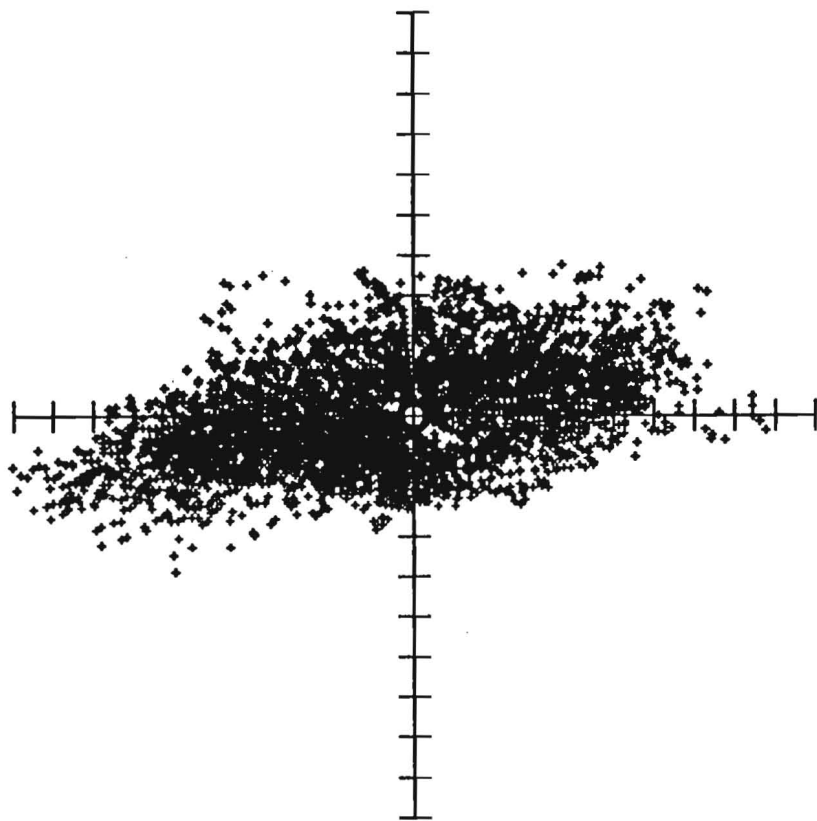
Current meter : AANDERAA #A3330
 Station # and location : 1NC, 40 56.2N 73 39.5W
 Instrument depth (MLW) : 14.6m
 Water depth (MLW) : 17.1m
 Start time : 03/28/88 12:15 EST
 Stop time : 05/02/88 08:40 EST
 Duration : 34 days 20 hours 25 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 10037
 NUMBER OF TEMPERATURE POINTS = 10037
 NUMBER OF SALINITY POINTS = 10037

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	1.36	-1.77	10.70	2.23	6.06	26.60
VARIANCE	=	31.09	122.79	44.37	76.94	1.59	0.06
STD. DEV.	=	5.58	11.08	6.66	8.77	1.26	0.24
MAX.	=	18.66	27.68	35.32		7.45	27.10
MIN.	=	-17.29	-32.86	1.18		3.39	26.01

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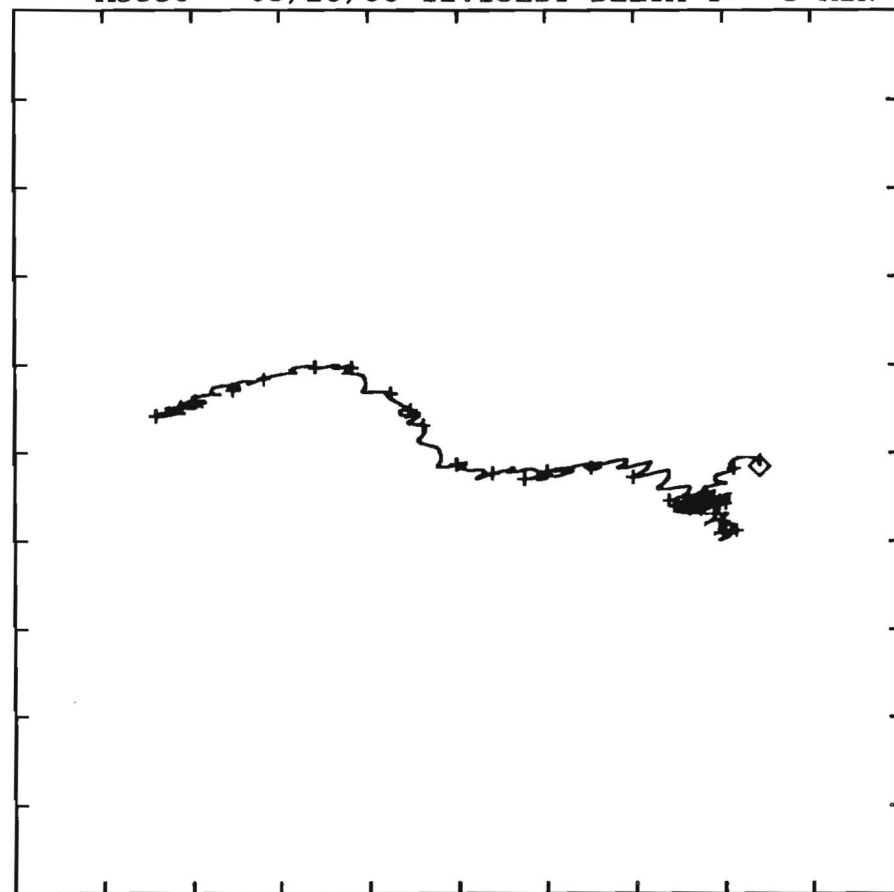
Station 1NC, 40 56.2N 73 39.5W

Instrument depth(below MLW) = 14.6 m

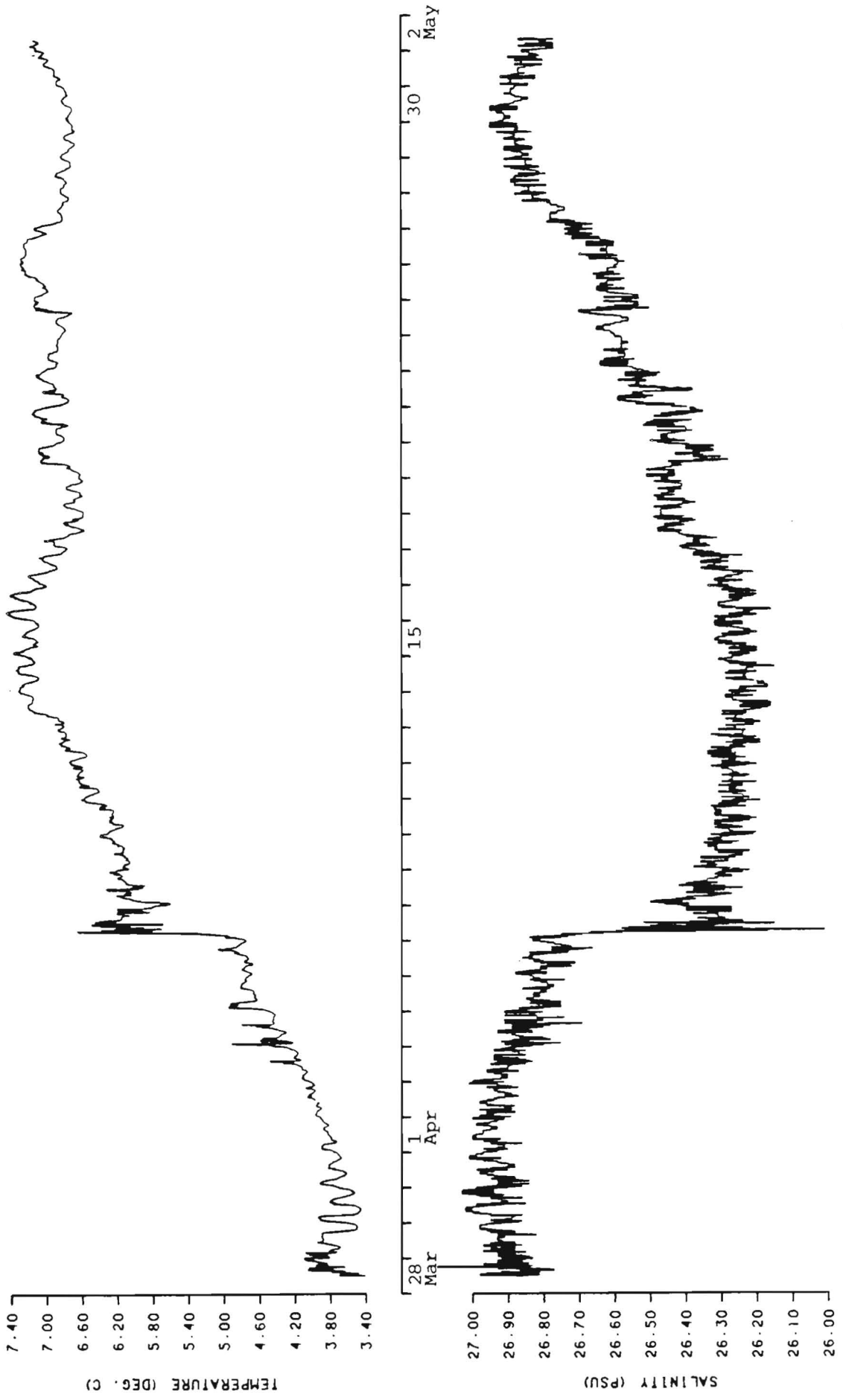
Water depth(relative to MLW) = 17.1 m

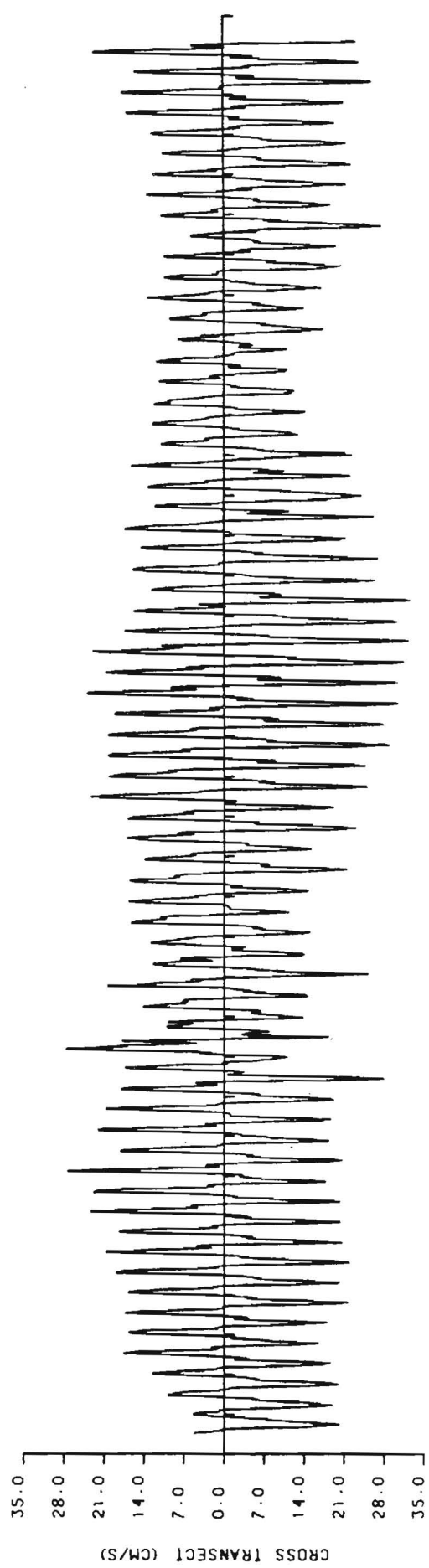
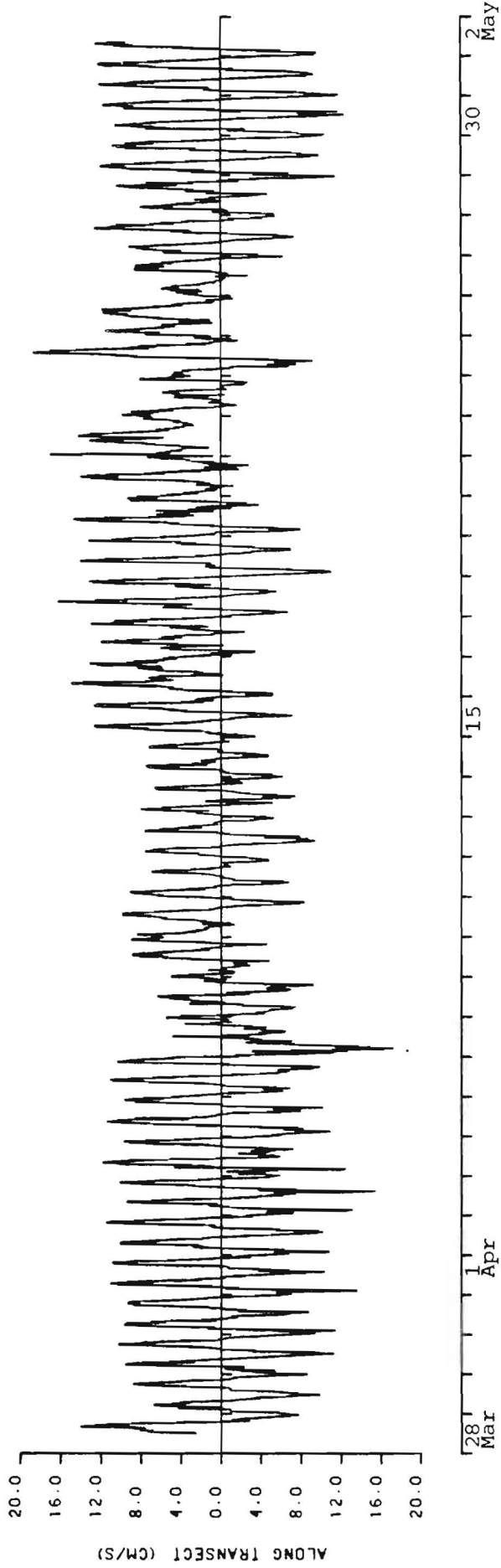
SCALE = 3.5 CM/S PER TICK

A3330 03/28/88 12:15EST DELTA T= 5 MIN



1 TICK = 10 KILOMETERS





Current meter : ENDECO #1740024
 Station # and location : 1SC, 40 55.3N 73 39.0W
 Instrument depth (MLW) : 2.7m
 Water depth (MLW) : 16.8m
 Start time : 03/28/88 13:02 EST
 Stop time : 04/19/88 00:00 EST
 Duration : 21 days 10 hours 58 minutes
 Sampling interval : 2 minutes
 Comments:

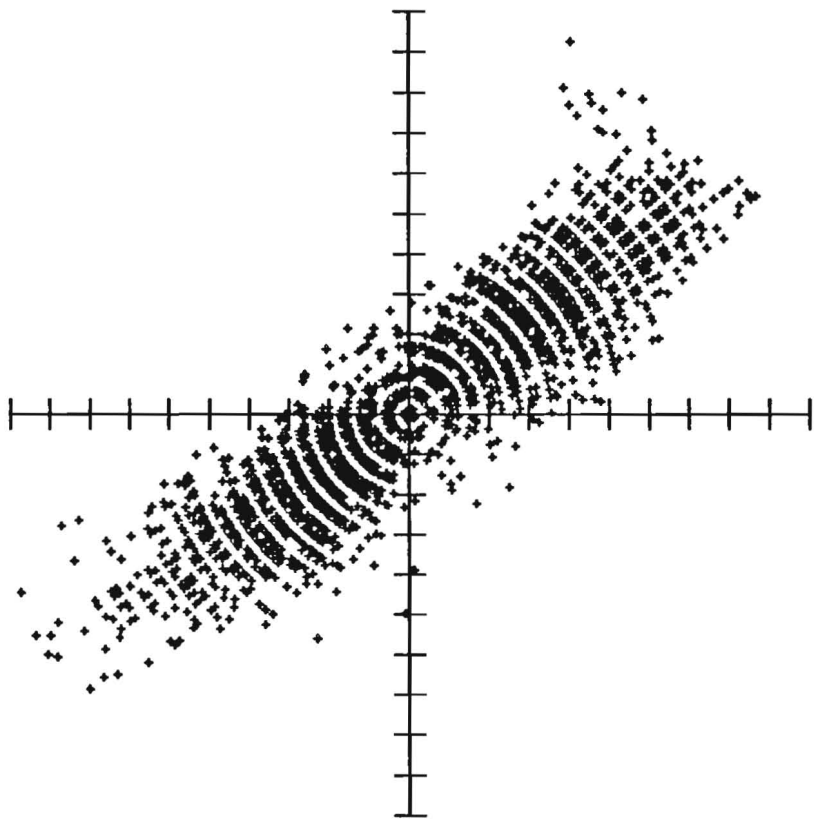
Mooring was damaged.
 Instrument retrieved by fishing boat on 19 April.
 Records reliable through 18 April.

NUMBER OF CURRENT DATA POINTS = 15449
 NUMBER OF TEMPERATURE POINTS = 15449
 NUMBER OF SALINITY POINTS = 15449

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	0.63	2.04	16.23	2.14	6.12	26.34
VARIANCE	=	14.91	322.80	78.95	168.86	0.98	0.04
STD. DEV.	=	3.86	17.97	8.89	12.99	0.99	0.19
MAX.	=	22.81	42.56	44.67		7.99	27.10
MIN.	=	-25.10	-44.53	0.00		4.06	25.66

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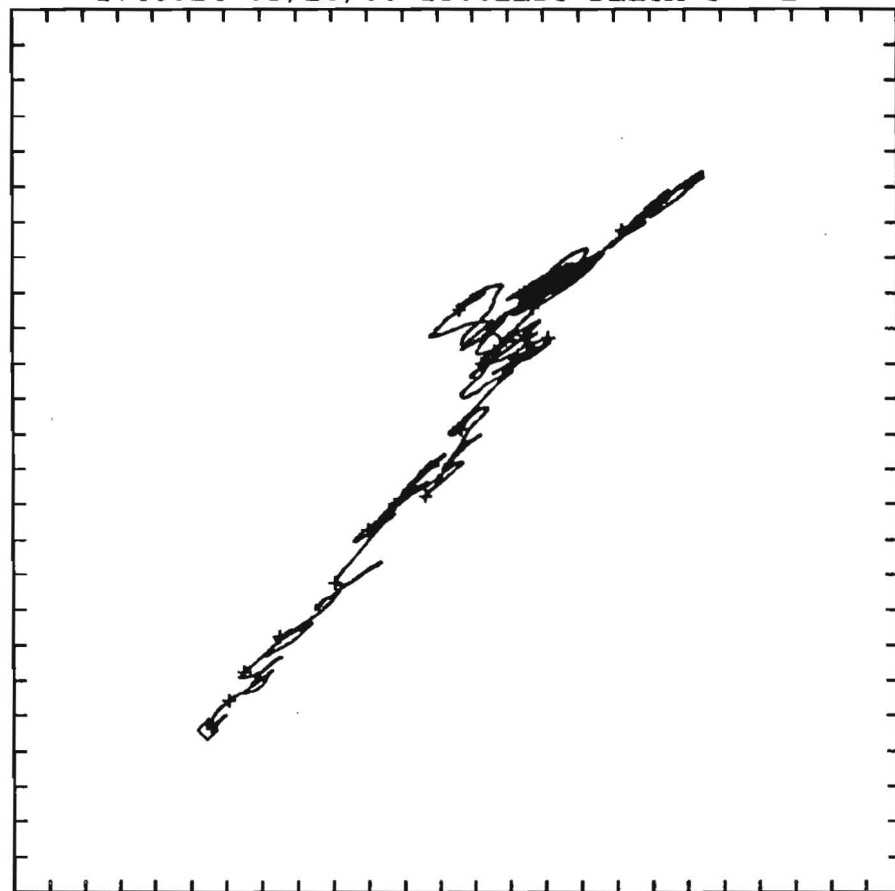
Station 1SC, 40 55.3N 73 39.0W

Instrument depth(below MLW) = 2.7 m

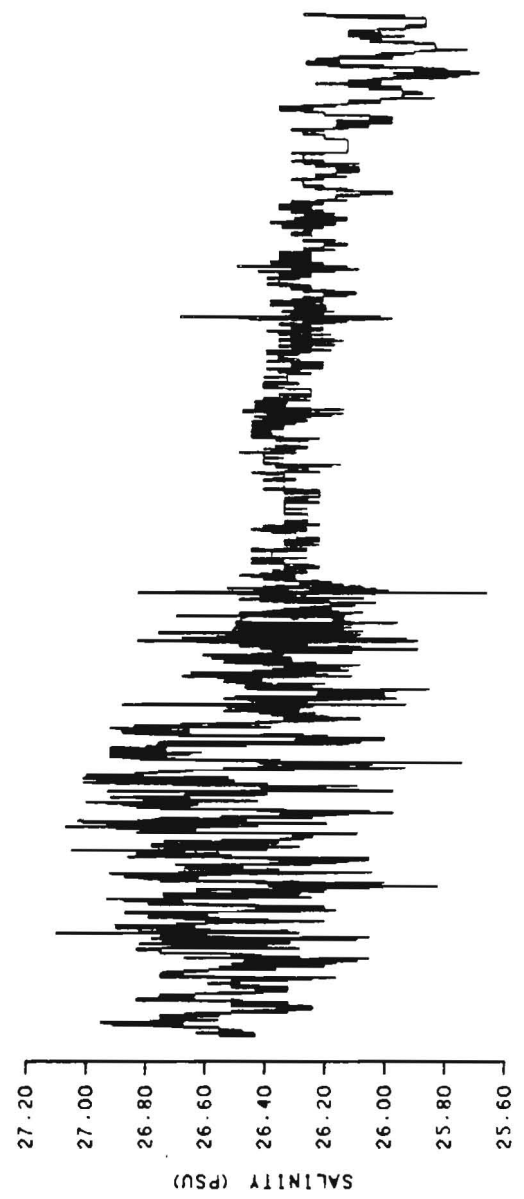
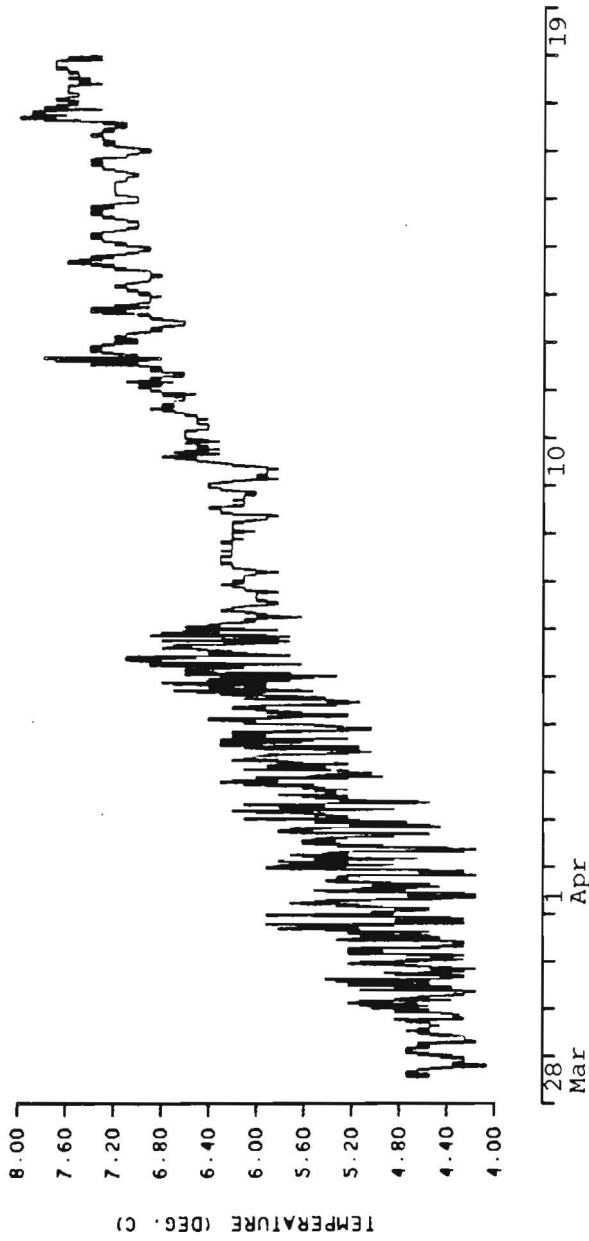
Water depth(relative to MLW) = 16.8 m

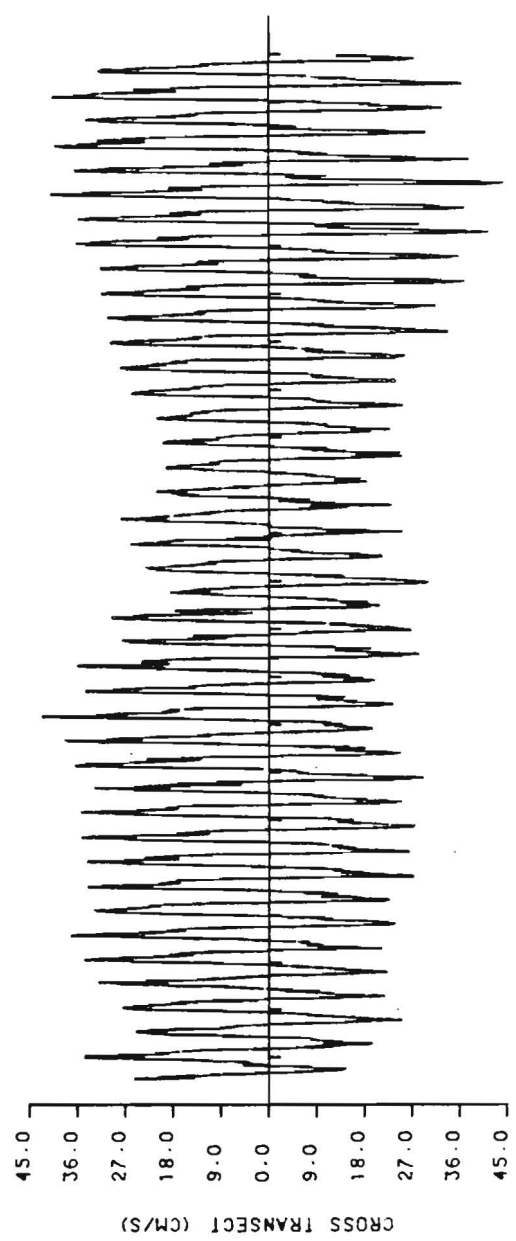
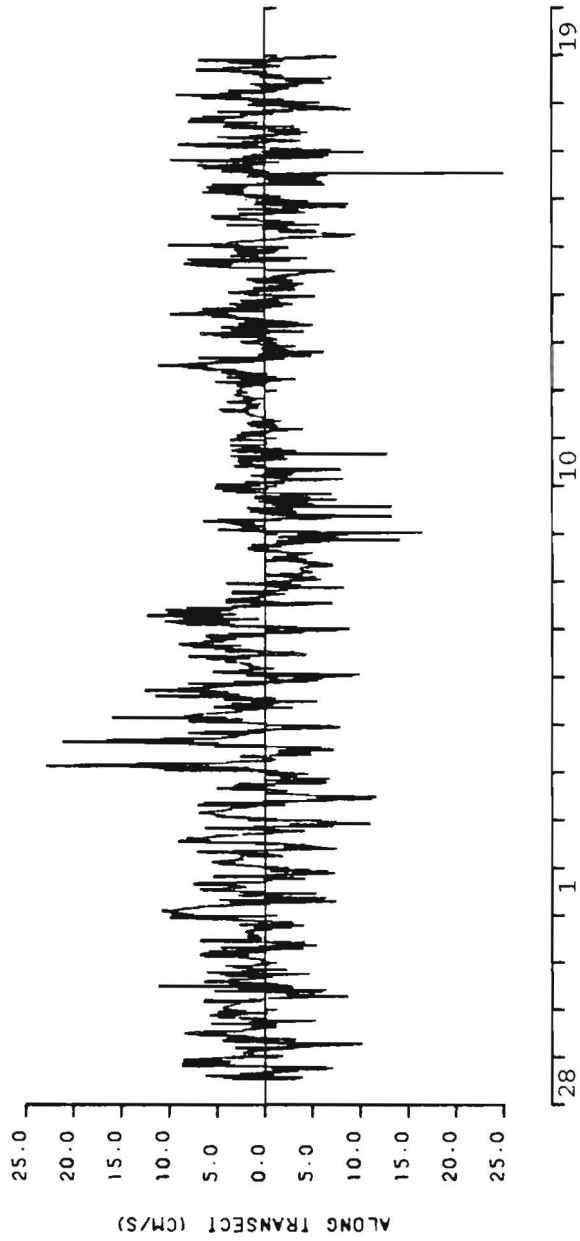
SCALE = 4.0 CM/S PER TICK

1740024 03/28/88 13:02EST DELTA T= 2



1 TICK = 2 KILOMETERS





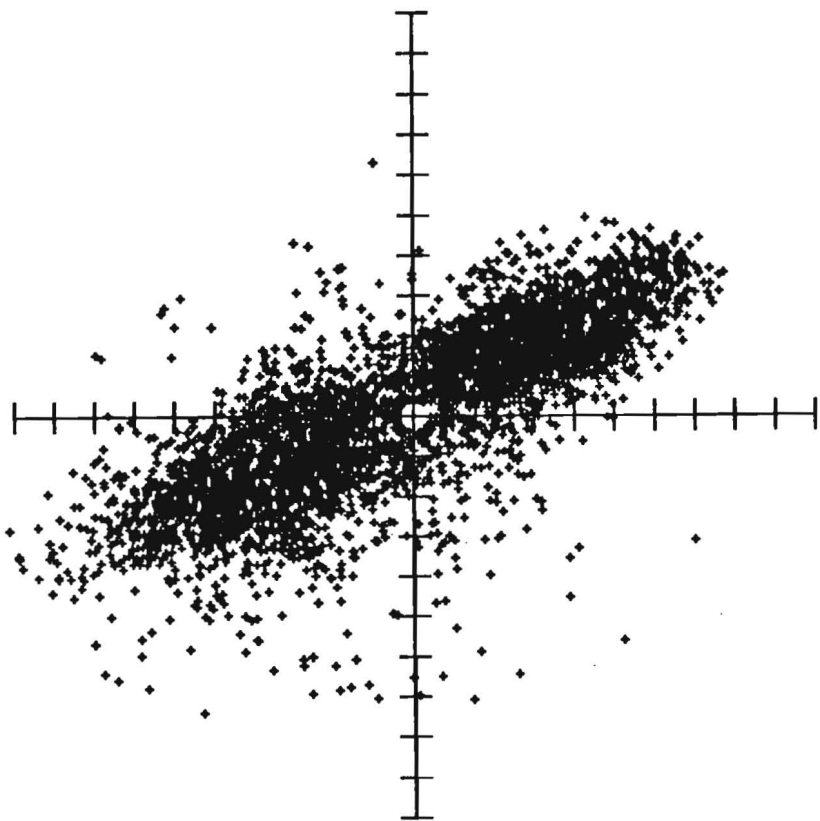
Current meter : AANDERAA #A3357
 Station # and location : 1SC, 40 55.3N 73 39.0W
 Instrument depth (MLW) : 6.1m
 Water depth (MLW) : 16.8m
 Start time : 03/28/88 13:15 EST
 Stop time : 04/30/88 10:35 EST
 Duration : 32 days 21 hours 20 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9472
 NUMBER OF TEMPERATURE POINTS = 9472
 NUMBER OF SALINITY POINTS = 9472

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	1.06	-0.50	15.37	1.17	6.72	25.93
VARIANCE	=	22.04	268.66	55.70	145.35	1.54	0.05
STD. DEV.	=	4.70	16.39	7.46	12.06	1.24	0.22
MAX.	=	30.21	39.60	42.58		9.41	26.55
MIN.	=	-30.08	-42.55	1.70		4.01	25.23

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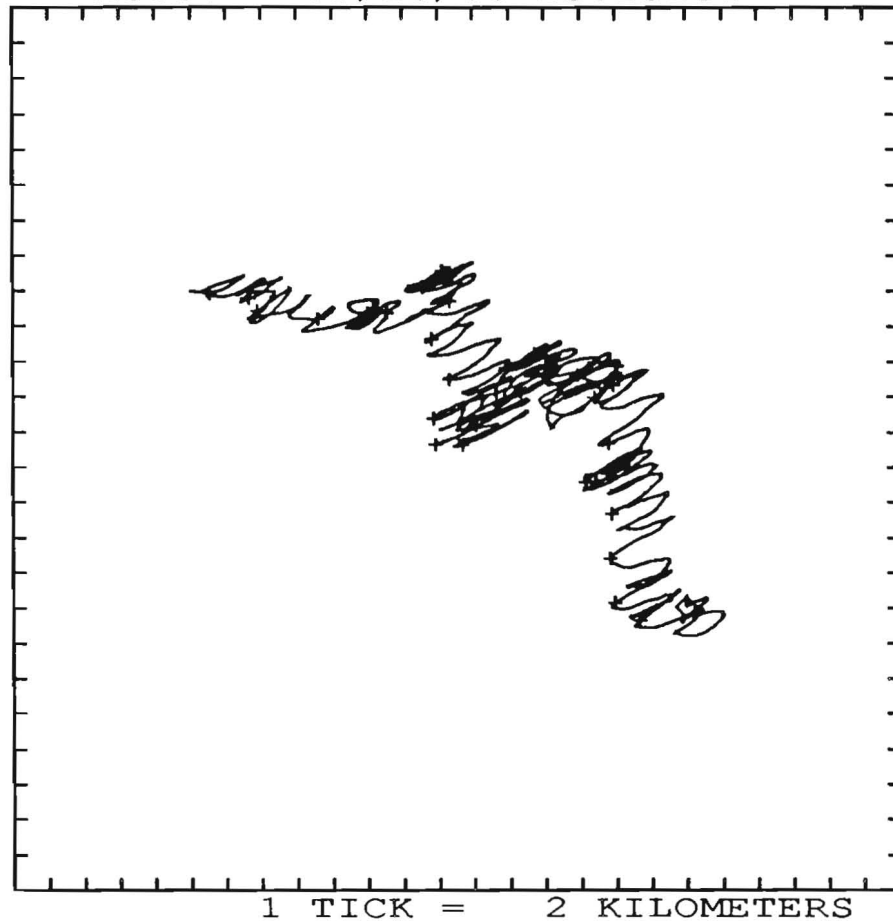
Station ISC, 40 55.3N 73 39.0W

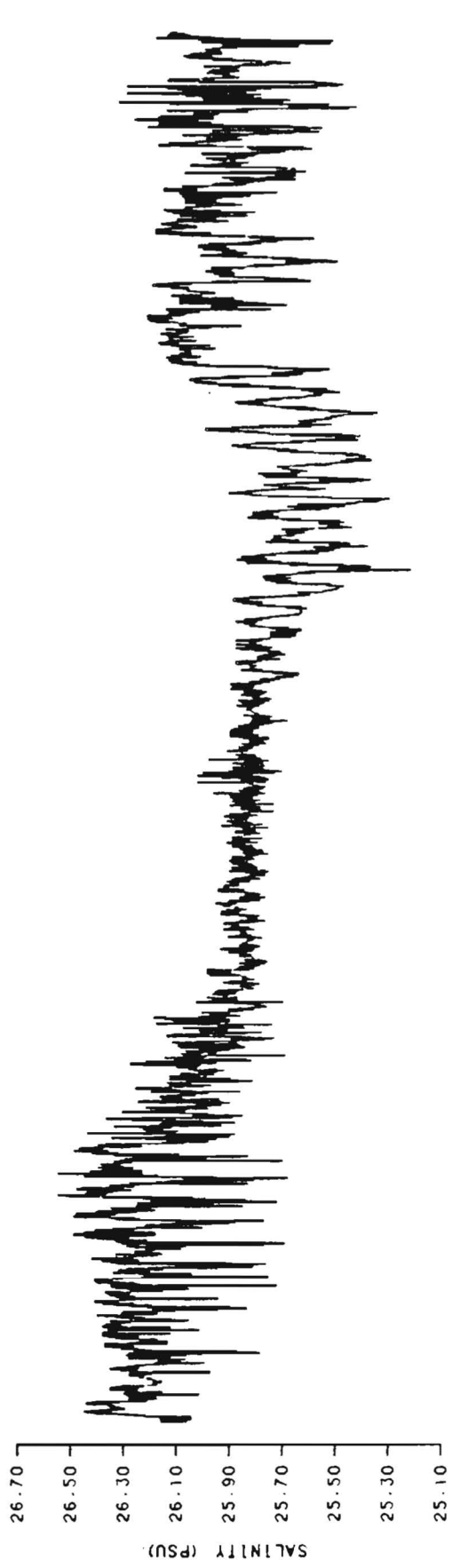
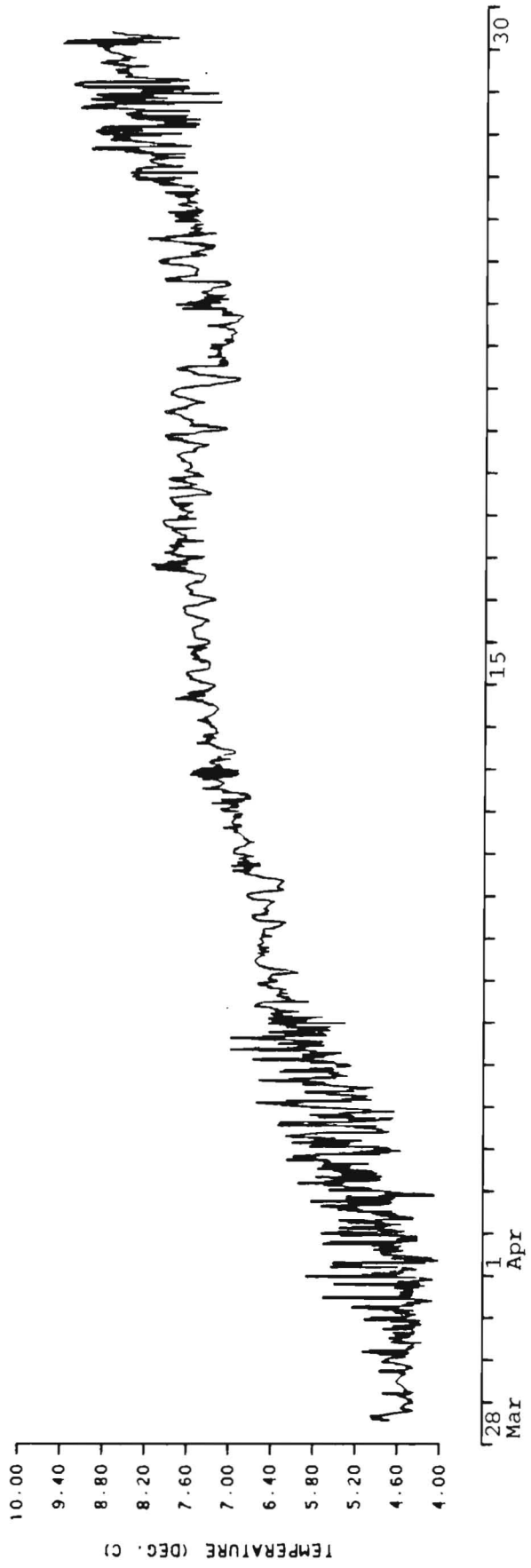
Instrument depth(below MLW) = 6.1 m

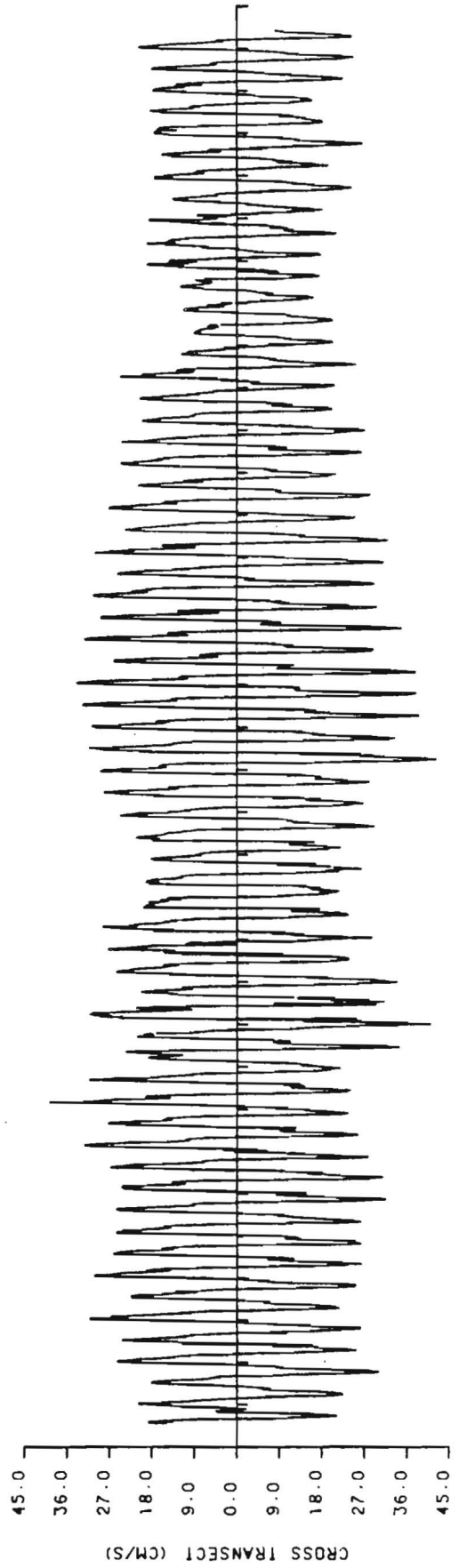
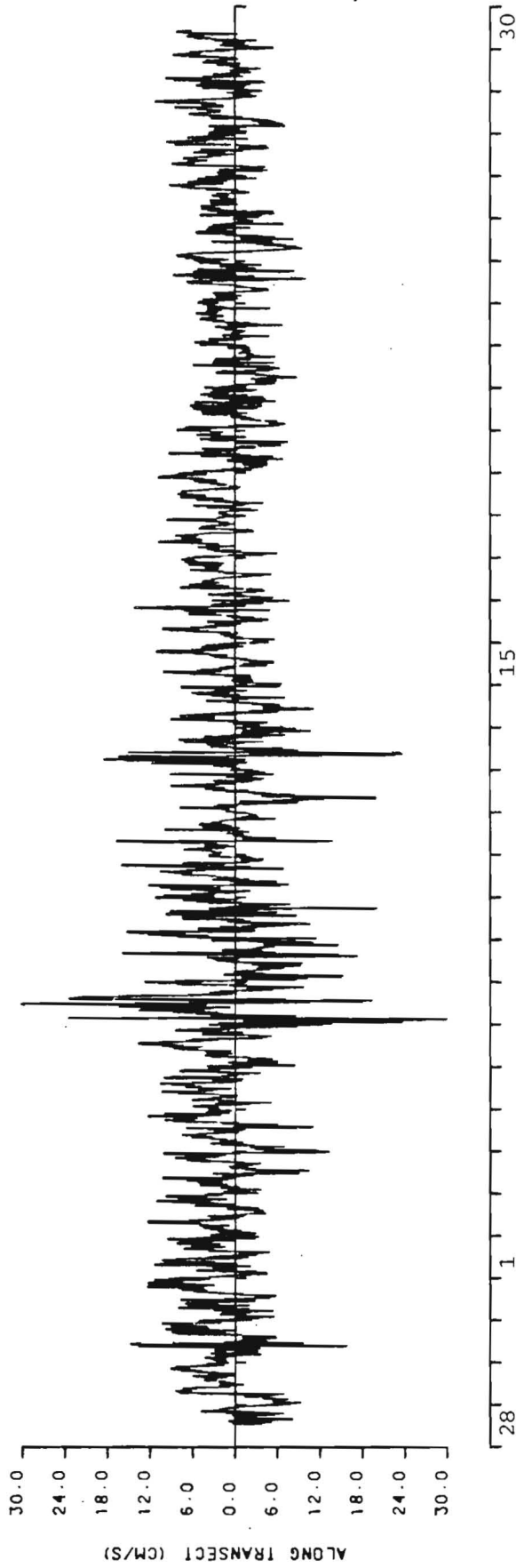
Water depth(relative to MLW) = 16.8 m

SCALE = 4.0 CM/S PER TICK

A3357 03/28/88 13:15EST







Current meter : AANDERAA #A1353
 Station # and location : 1SC, 40 55.3N 73 39.0W
 Instrument depth (MLW) : 10.7m
 Water depth (MLW) : 16.8m
 Start time : 03/28/88 14:30 EST
 Stop time : 05/08/88 11:15 EST
 Duration : 40 days 20 hours 45 minutes
 Sampling interval : 5 minutes
 Comments:

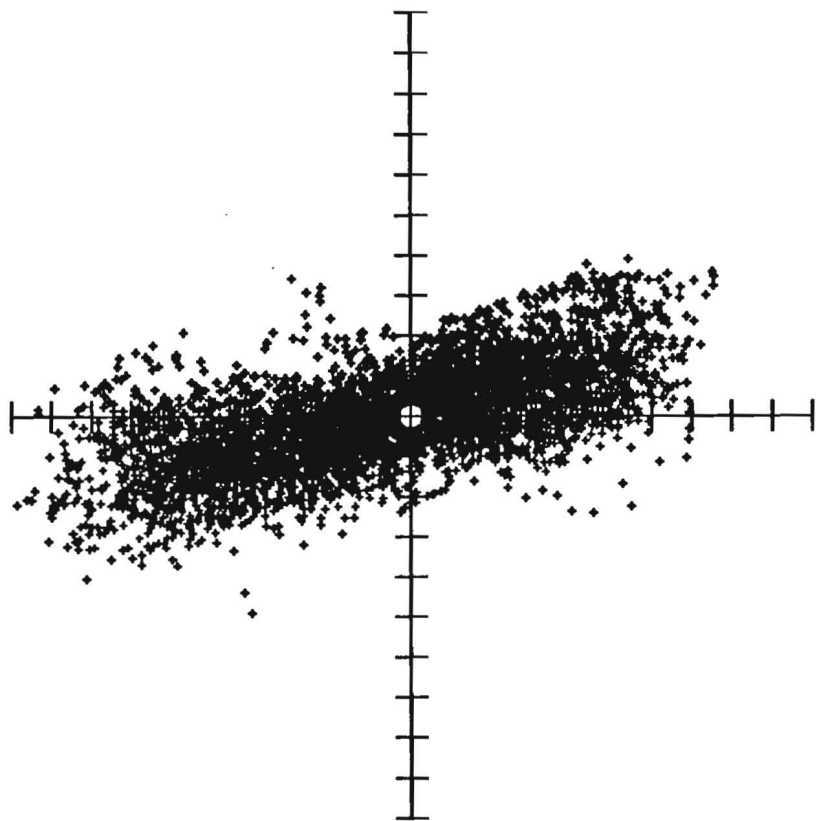
Velocity records show signs of mild damping toward the end, possibly due to rotor fouling.

NUMBER OF CURRENT DATA POINTS = 11769
 NUMBER OF TEMPERATURE POINTS = 11769
 NUMBER OF SALINITY POINTS = 11769

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		328	58				
MEAN	=	1.01	-1.87	12.94	2.13	6.65	26.41
VARIANCE	=	36.20	214.14	87.40	125.17	1.90	0.06
STD. DEV.	=	6.02	14.63	9.35	11.19	1.38	0.24
MAX.	=	24.69	37.23	45.42		9.70	26.91
MIN.	=	-21.64	-43.24	1.70		3.69	25.65

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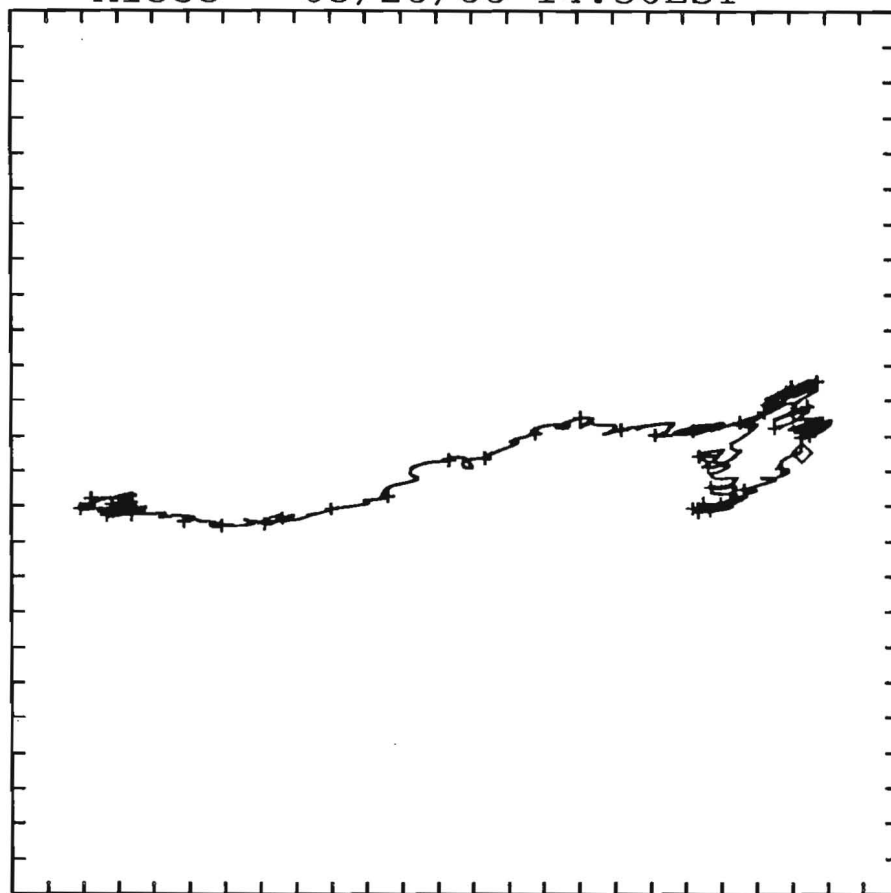
Station 1SC, 40°55.3N 73°39.0W

Instrument depth(below MLW) = 10.7 m

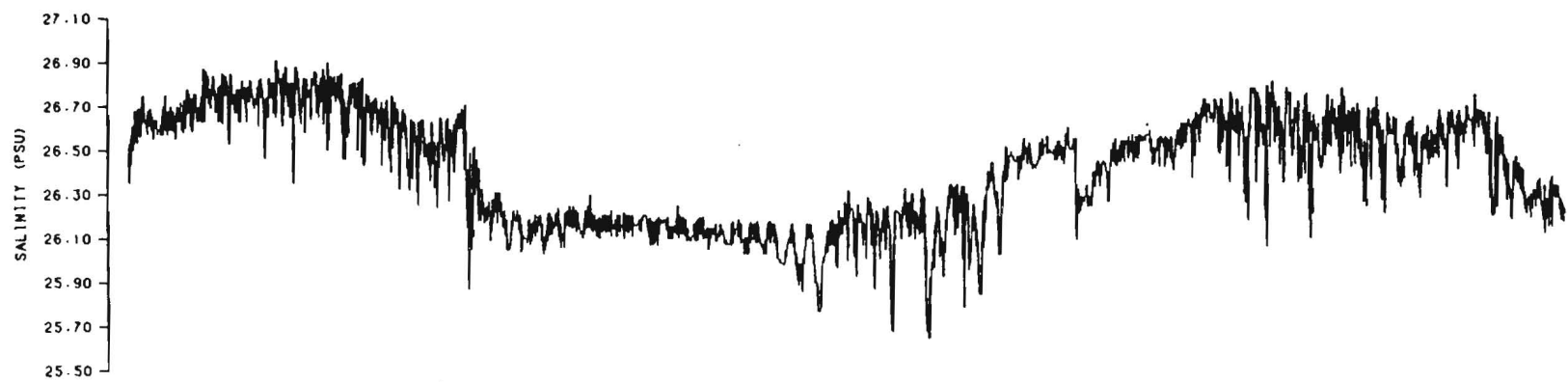
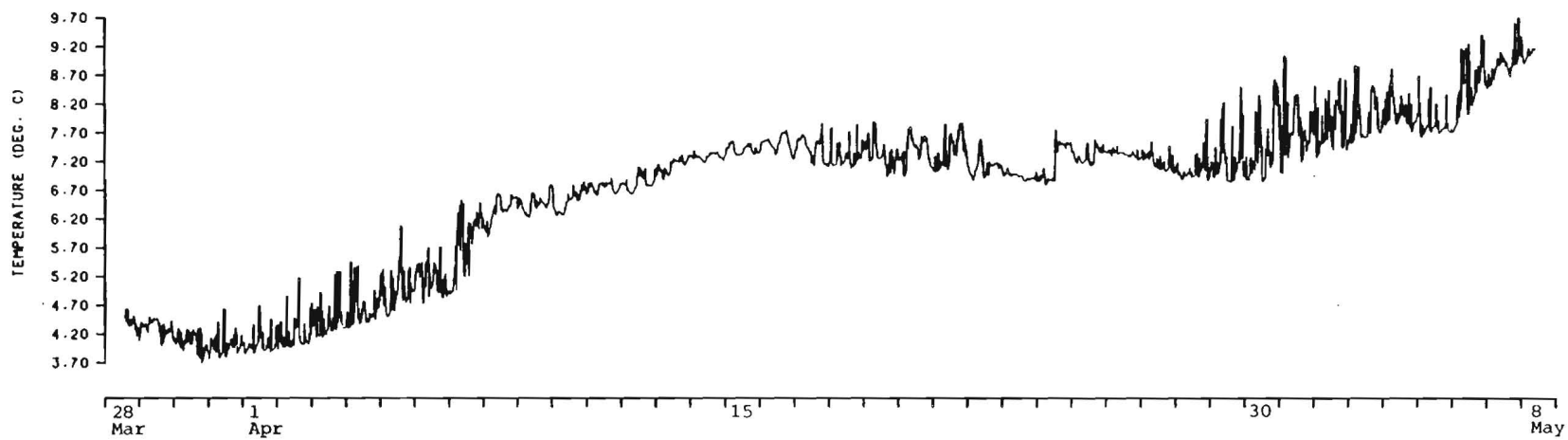
Water depth(relative to MLW) = 16.8 m

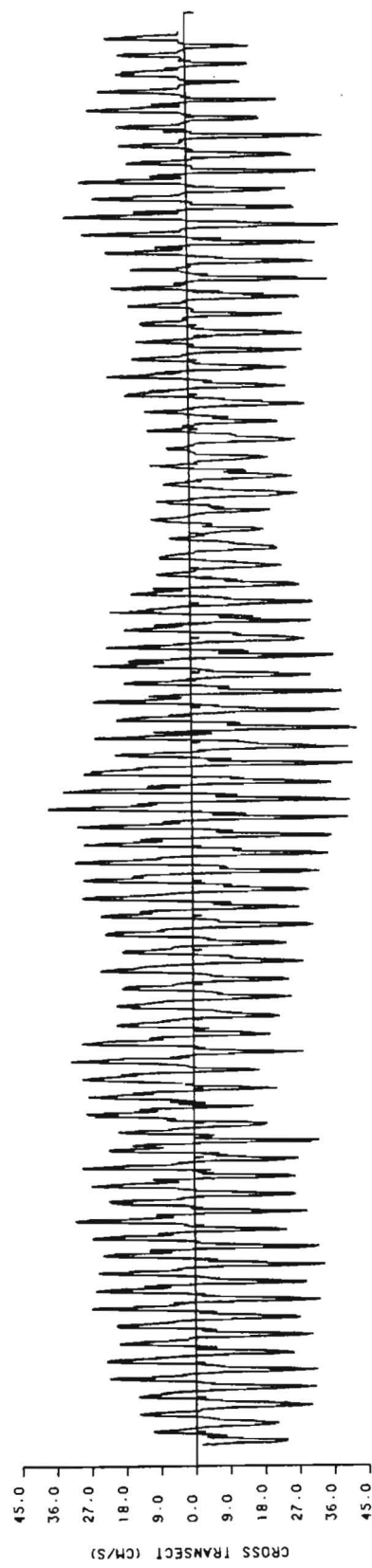
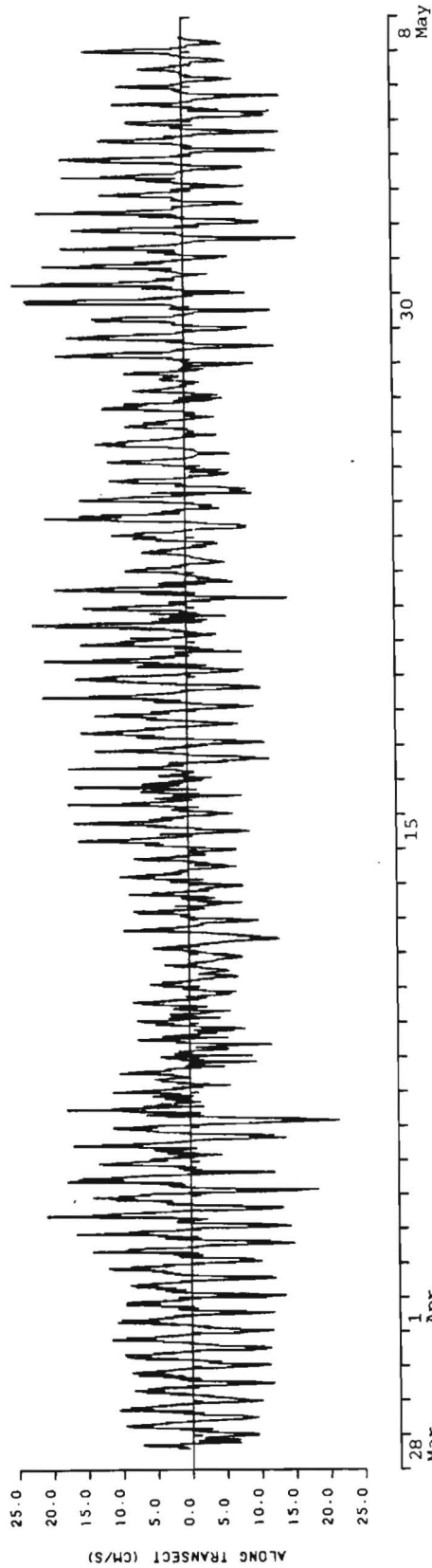
SCALE = 4.5 CM/S PER TICK

A1353 03/28/88 14:30EST



1 TICK = 4 KILOMETERS





Current meter : AANDERAA #A1130
 Station # and location : 1SC, 40 55.3N 73 39.0W
 Instrument depth (MLW) : 14.6m
 Water depth (MLW) : 16.8m
 Start time : 03/28/88 14:20 EST
 Stop time : 04/16/88 19:35 EST
 Duration : 19 days 5 hours 15 minutes
 Sampling interval : 5 minutes
 Comments:

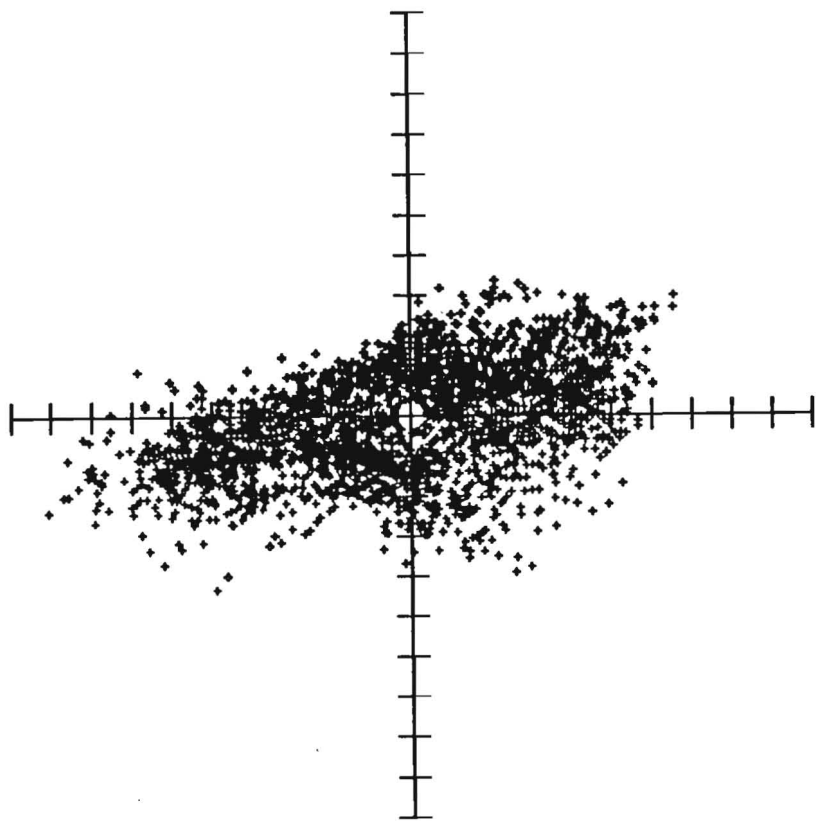
Instrument malfunctioned after 16 April.

NUMBER OF CURRENT DATA POINTS = 5535
 NUMBER OF TEMPERATURE POINTS = 5535
 NUMBER OF SALINITY POINTS = 5535

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	0.00	-0.85	11.96	0.85	5.41	26.65
VARIANCE	=	36.40	150.06	44.14	93.23	1.82	0.08
STD. DEV.	=	6.03	12.25	6.64	9.66	1.35	0.28
MAX.	=	18.31	28.69	37.46		7.73	27.06
MIN.	=	-19.17	-35.77	1.68		3.59	26.11

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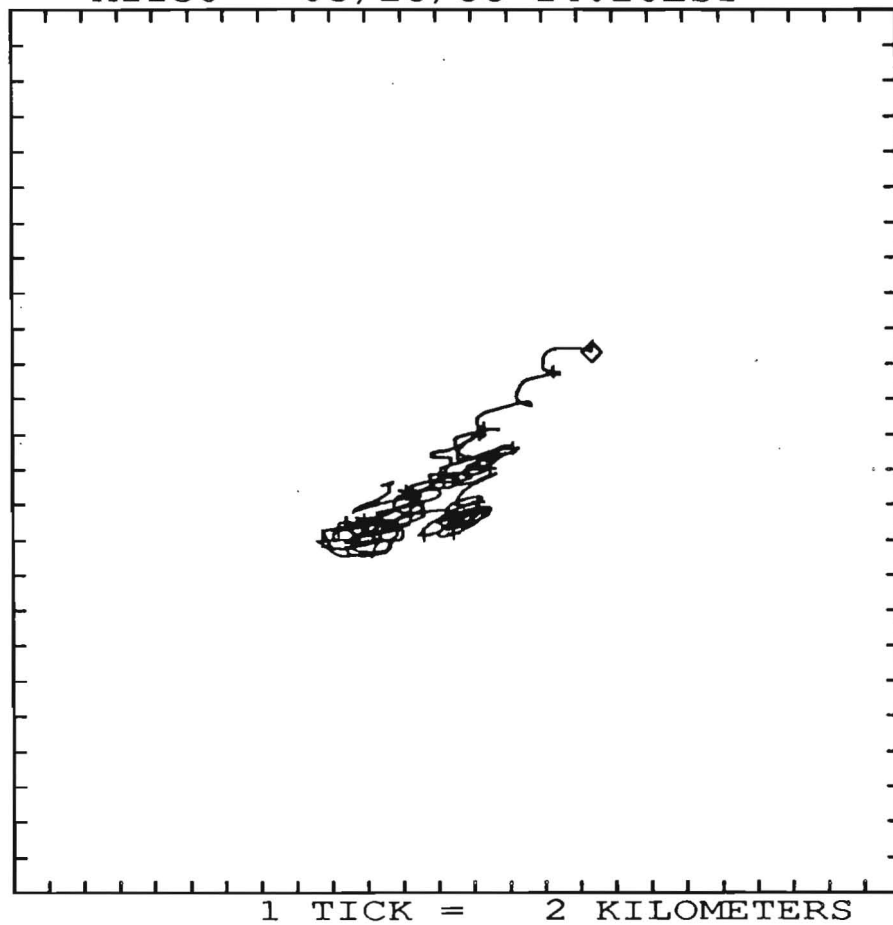
Station 1SC, 40 55.3N 73 39.0W

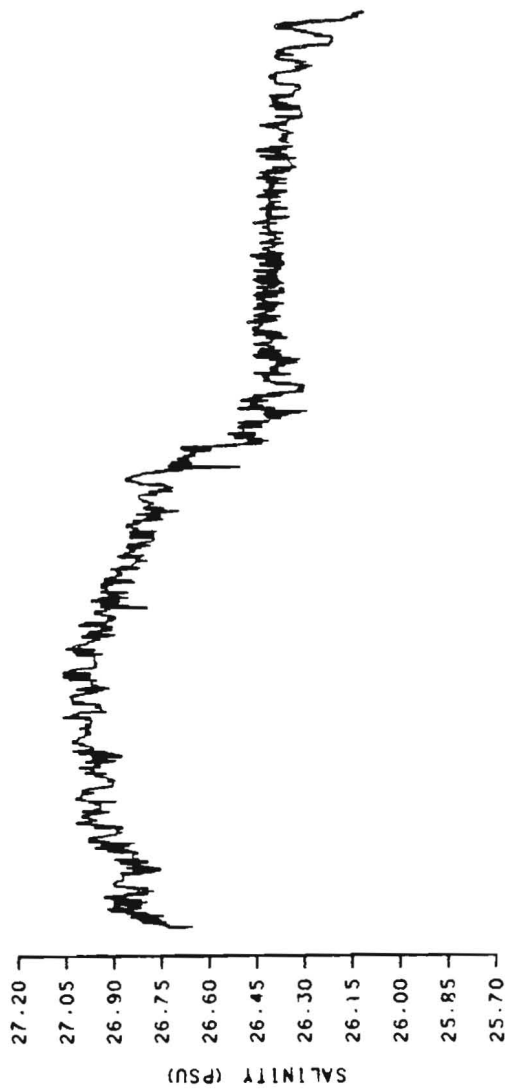
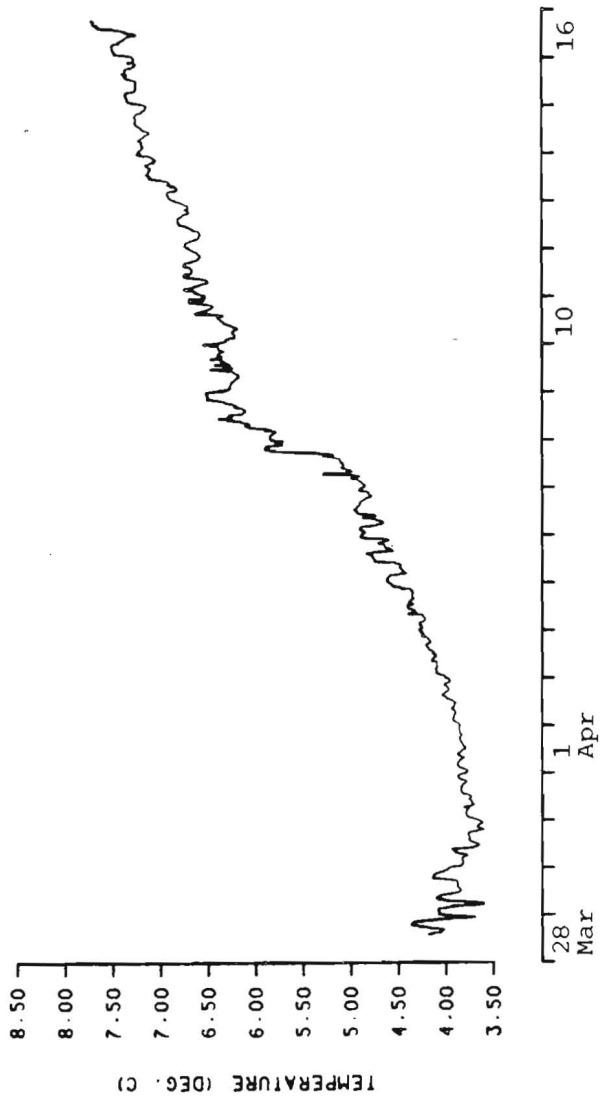
Instrument depth(below MLW) = 14.6 m

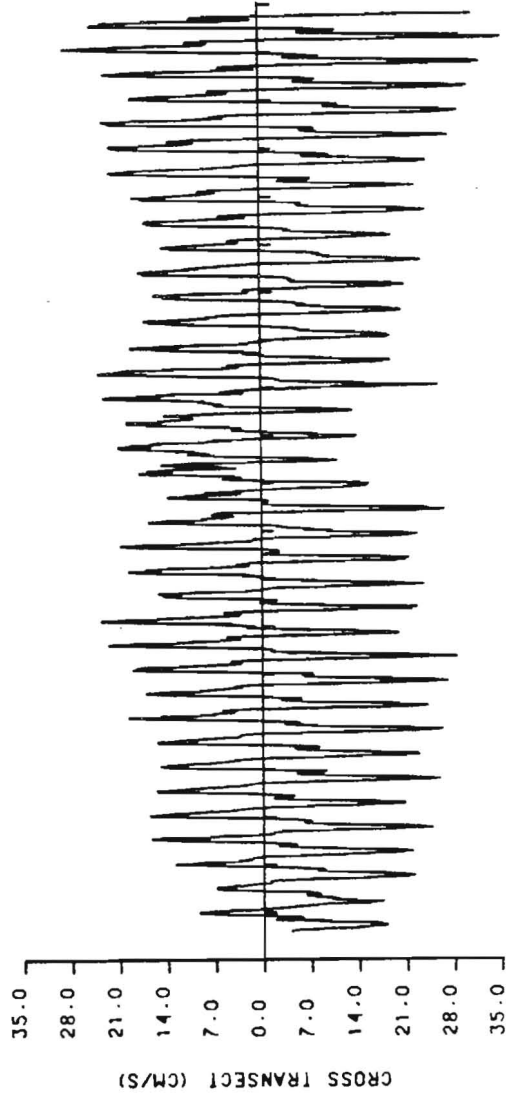
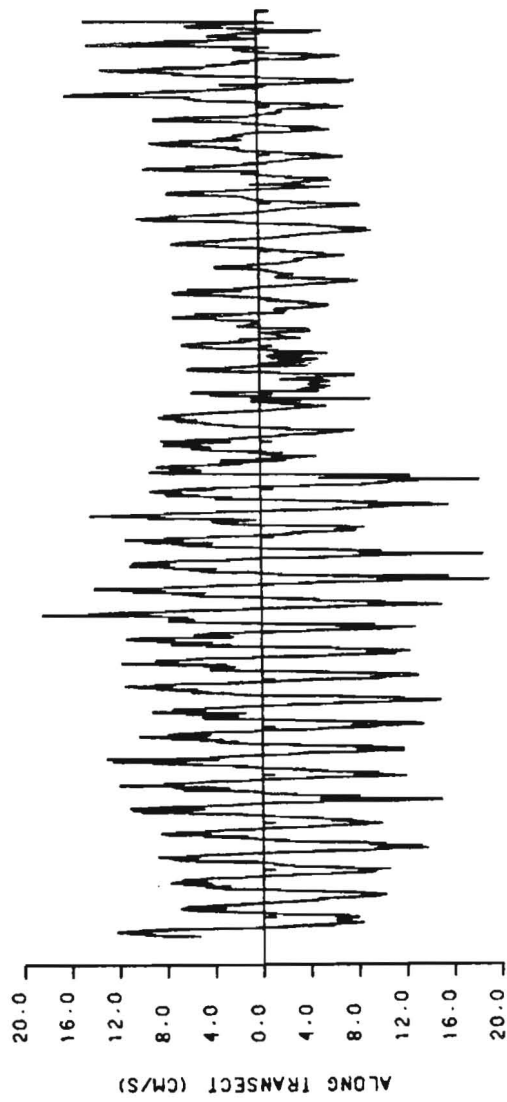
Water depth(relative to MLW) = 16.8 m

SCALE = 4.0 CM/S PER TICK

A1130 03/28/88 14:20EST







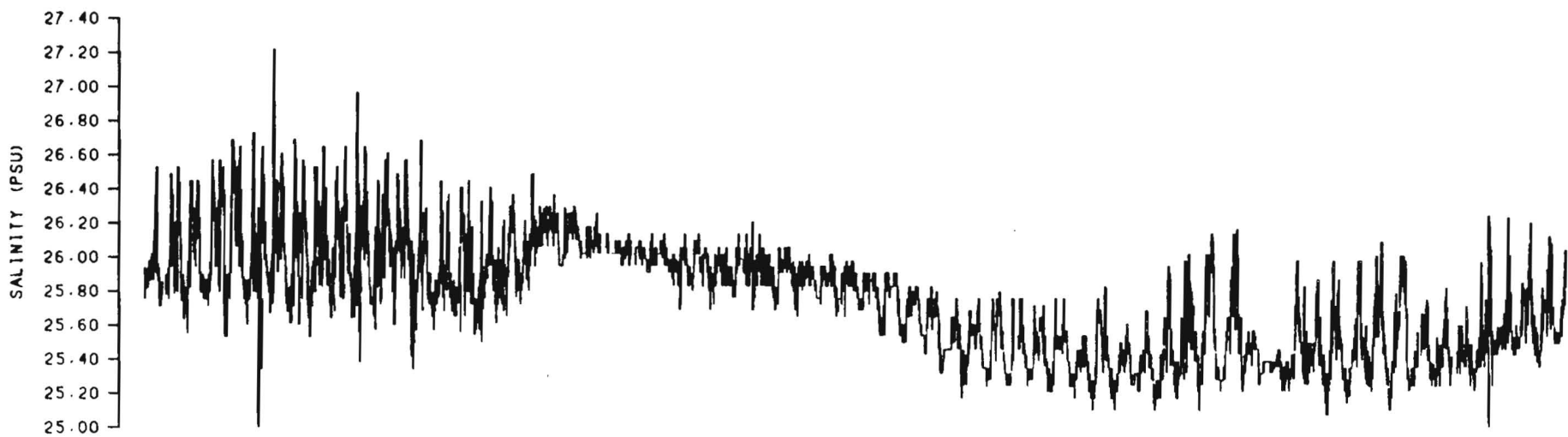
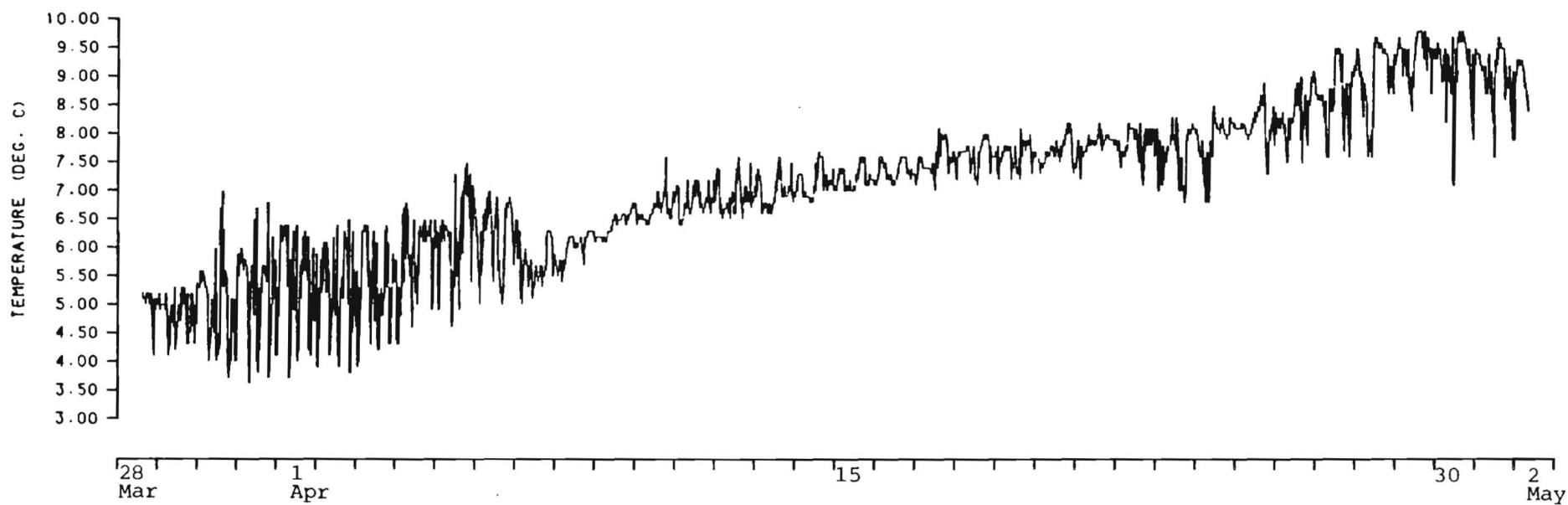
Current meter : ENDECO #1740023
 Station # and location : 1S , 40 54.8N 73 38.3W
 Instrument depth (MLW) : 2.7m
 Water depth (MLW) : 11.9m
 Start time : 03/28/88 15:10 EST
 Stop time : 05/02/88 10:06 EST
 Duration : 34 days 18 hours 56 minutes
 Sampling interval : 2 minutes
 Comments:

Compass did not work; hence no velocity components.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 25048
 NUMBER OF SALINITY POINTS = 25048

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		SPEED	TEMP	SAL
MEAN	=	22.99	7.04	25.75
VARIANCE	=	162.15	1.82	0.14
STD. DEV.	=	12.73	1.35	0.38
MAX.	=	68.86	9.79	27.22
MIN.	=	0.00	3.60	25.00



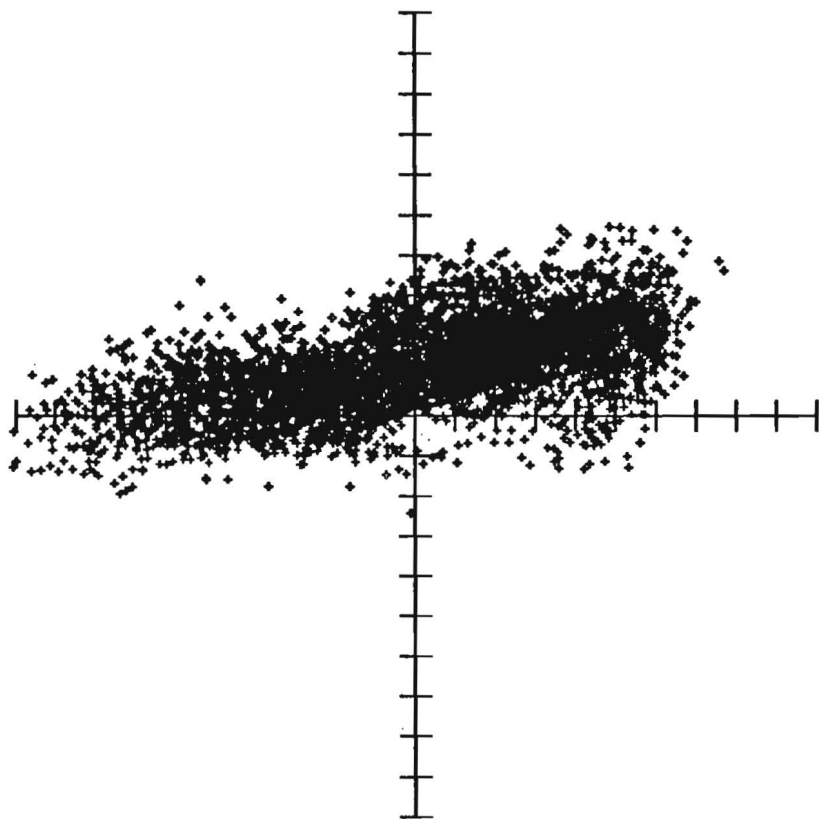
Current meter : AANDERAA #A1348
 Station # and location : 1S , 40 54.8N 73 38.3W
 Instrument depth (MLW) : 6.4m
 Water depth (MLW) : 11.9m
 Start time : 03/28/88 14:45 EST
 Stop time : 05/02/88 10:05 EST
 Duration : 34 days 19 hours 20 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 10024
 NUMBER OF TEMPERATURE POINTS = 10024
 NUMBER OF SALINITY POINTS = 10024

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		328	58				
MEAN	=	6.25	5.02	22.60	8.02	6.91	26.42
VARIANCE	=	98.84	484.61	137.01	291.72	1.99	0.12
STD. DEV.	=	9.94	22.01	11.71	17.08	1.41	0.34
MAX.	=	40.12	55.09	66.03		10.05	27.27
MIN.	=	-25.40	-61.45	1.69		3.79	25.71

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A1348 03/28/88

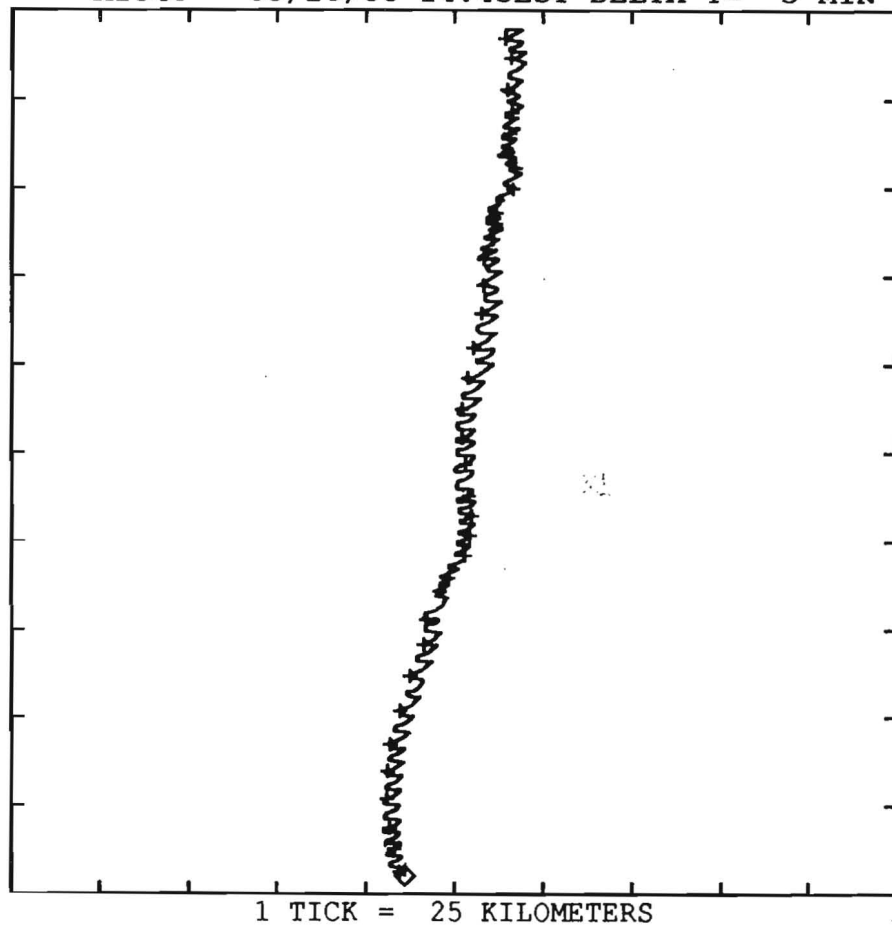
Station 1S , 40 54.8N 73 38.3W

Instrument depth (below MLW) = 6.4 m

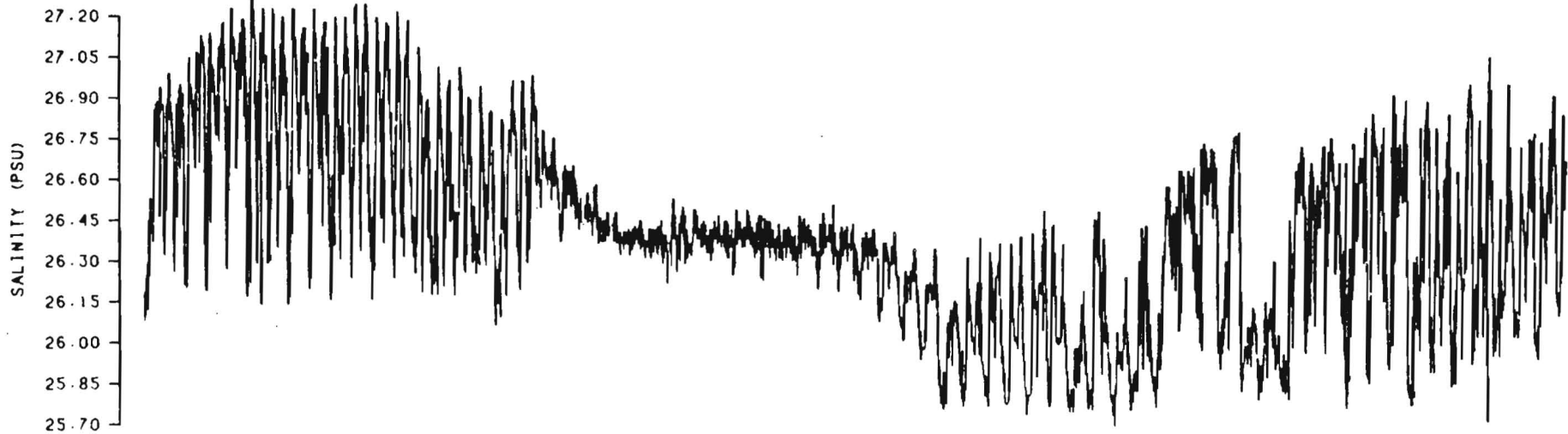
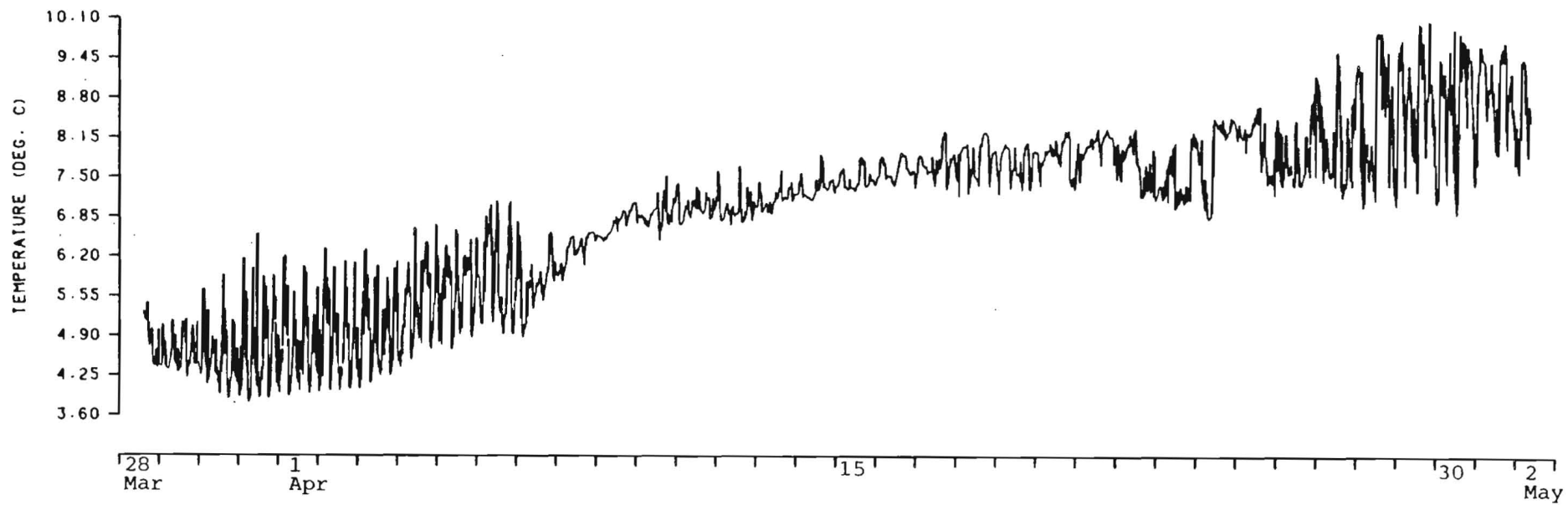
Water depth (relative to MLW) = 11.9 m

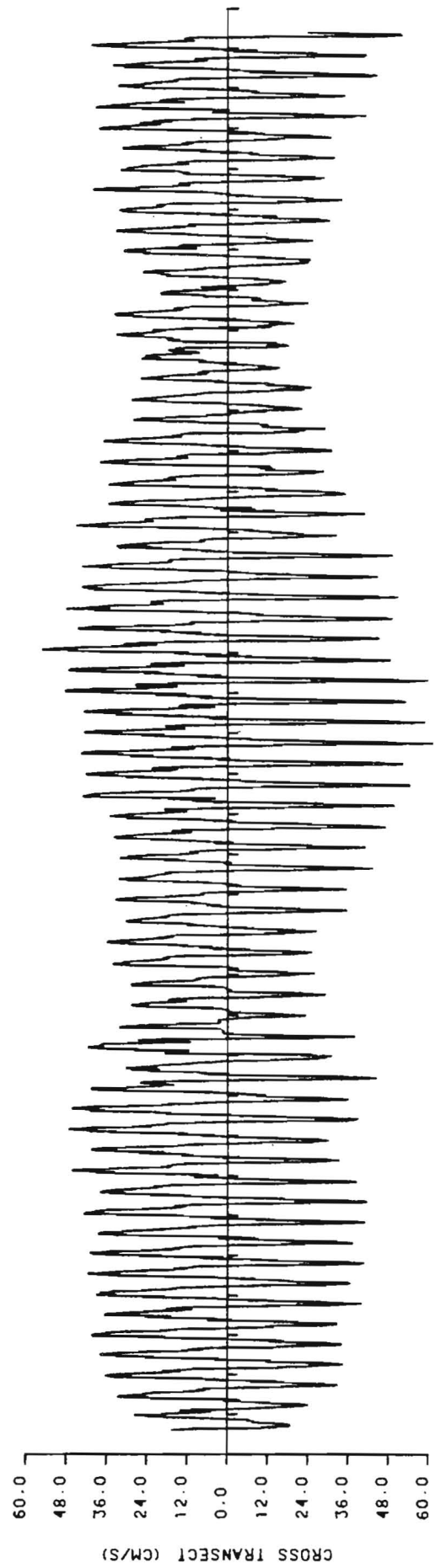
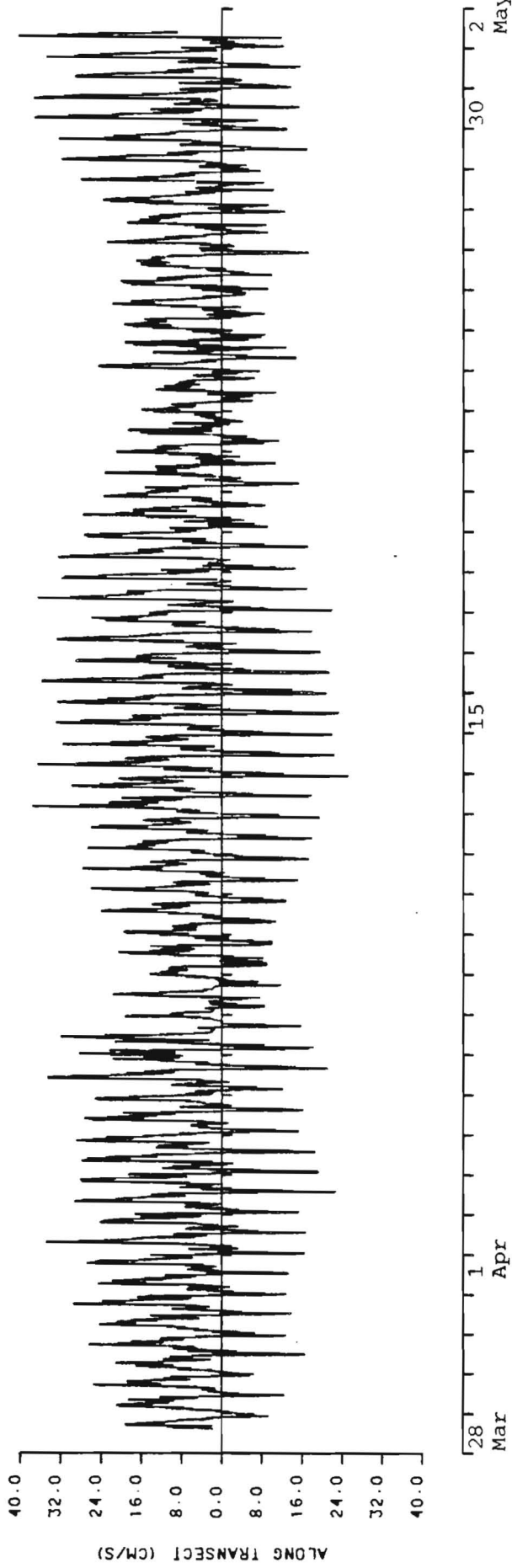
SCALE = 6.5 CM/S PER TICK

A1348 03/28/88 14:45EST DELTA T= 5 MIN



65





Current meter : AANDERAA #A1342
 Station # and location : 1S , 40 54.8N 73 38.3W
 Instrument depth (MLW) : 10.1m
 Water depth (MLW) : 11.9m
 Start time : 03/28/88 15:15 EST
 Stop time : 05/02/88 10:00 EST
 Duration : 34 days 18 hours 45 minutes
 Sampling interval : 5 minutes
 Comments:

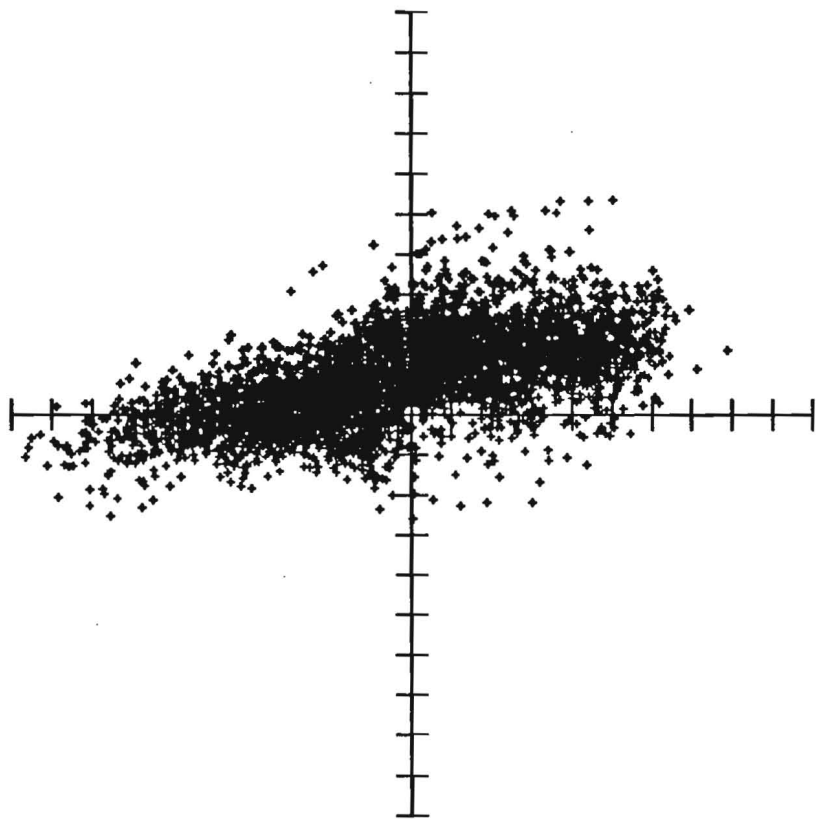
Speed sensor gave bad data during most of 20 April.

NUMBER OF CURRENT DATA POINTS = 10017
 NUMBER OF TEMPERATURE POINTS = 10017
 NUMBER OF SALINITY POINTS = 10017

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT	TOWARDS				
		328	58				
MEAN	=	5.03	1.13	16.56	5.15	6.51	26.34
VARIANCE	=	51.73	281.38	85.33	166.56	1.83	0.09
STD. DEV.	=	7.19	16.77	9.24	12.91	1.35	0.30
MAX.	=	29.68	41.48	53.37		9.32	26.94
MIN.	=	-19.20	-48.45	1.70		3.67	25.52

62



A1342 03/28/88

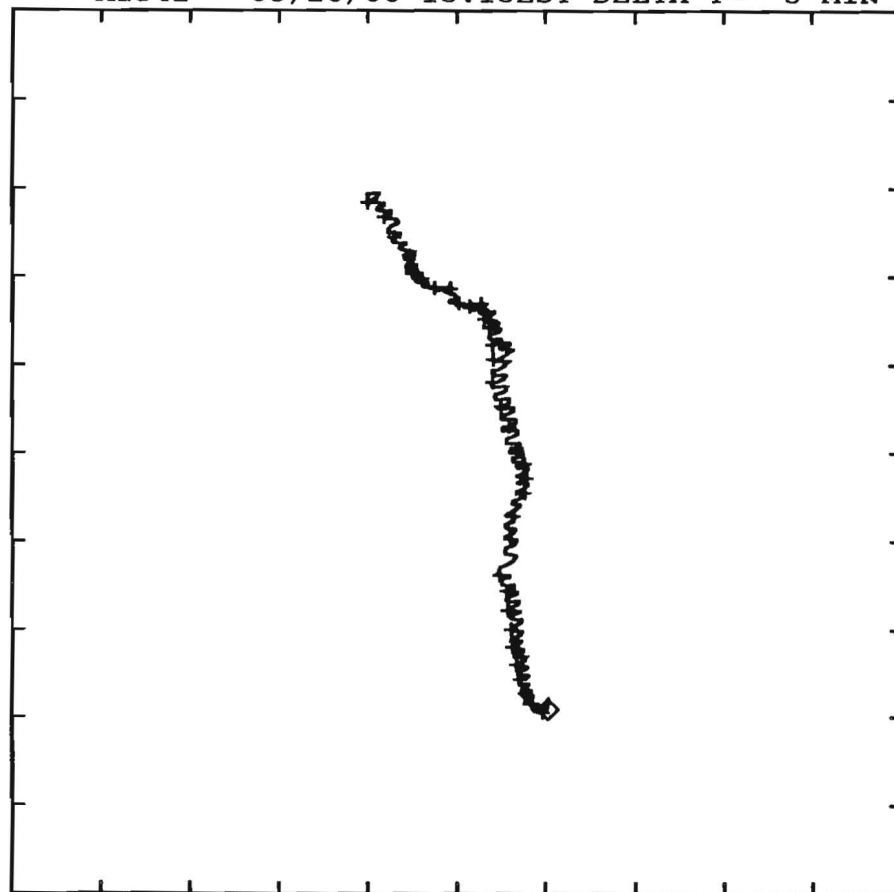
Station 1S , 40 54.8N 73 38.3W

Instrument depth(below MLW) = 10.1 m

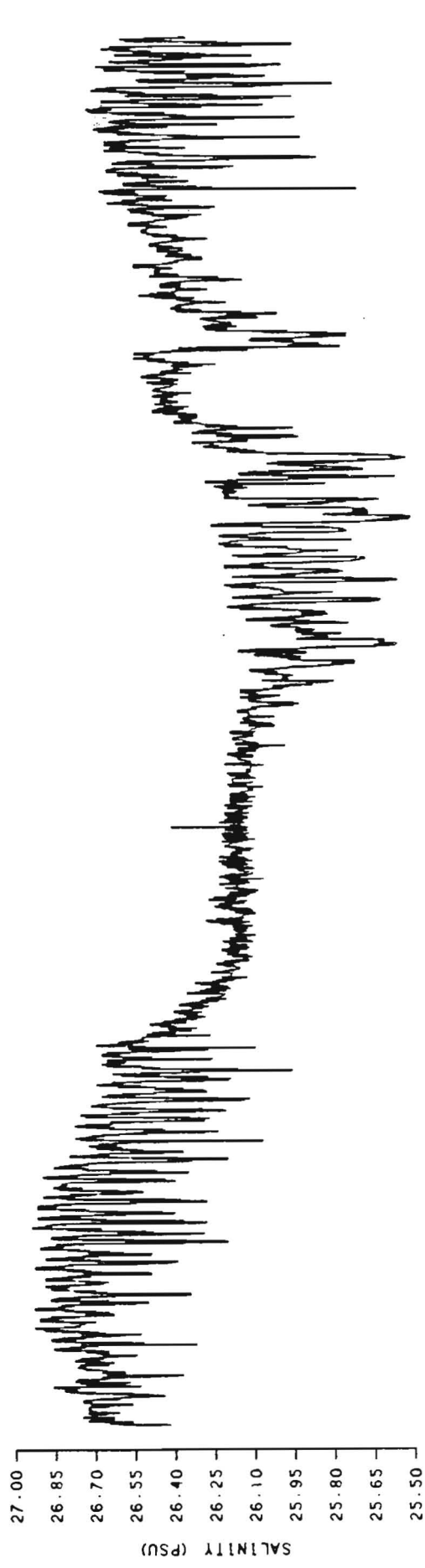
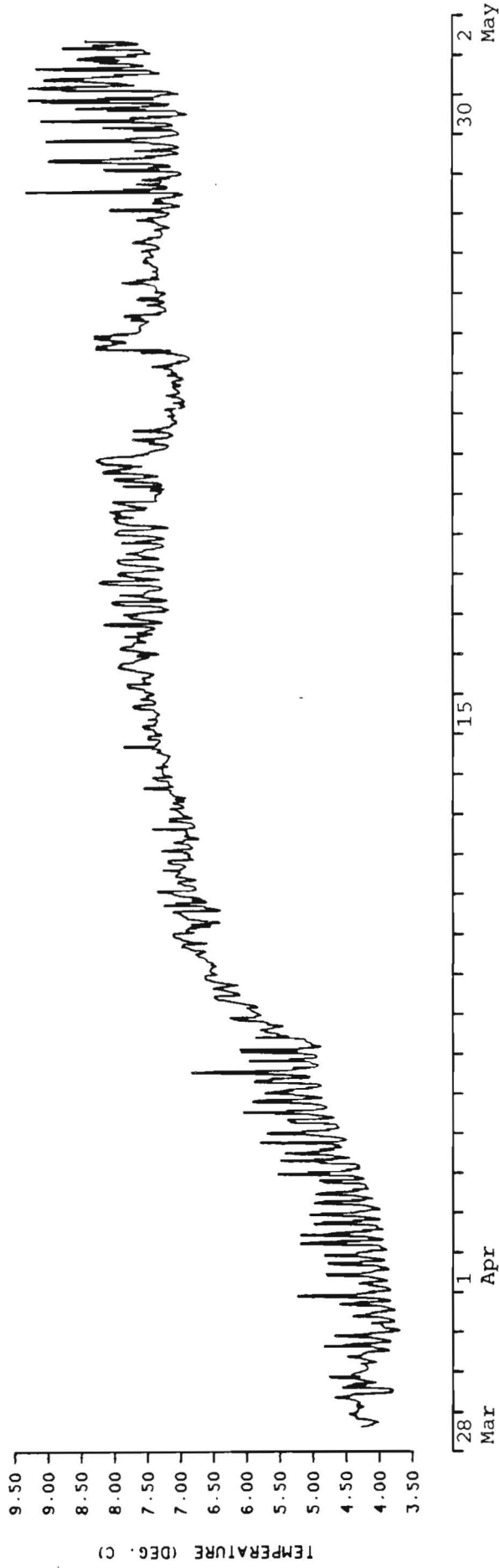
Water depth(relative to MLW) = 11.9 m

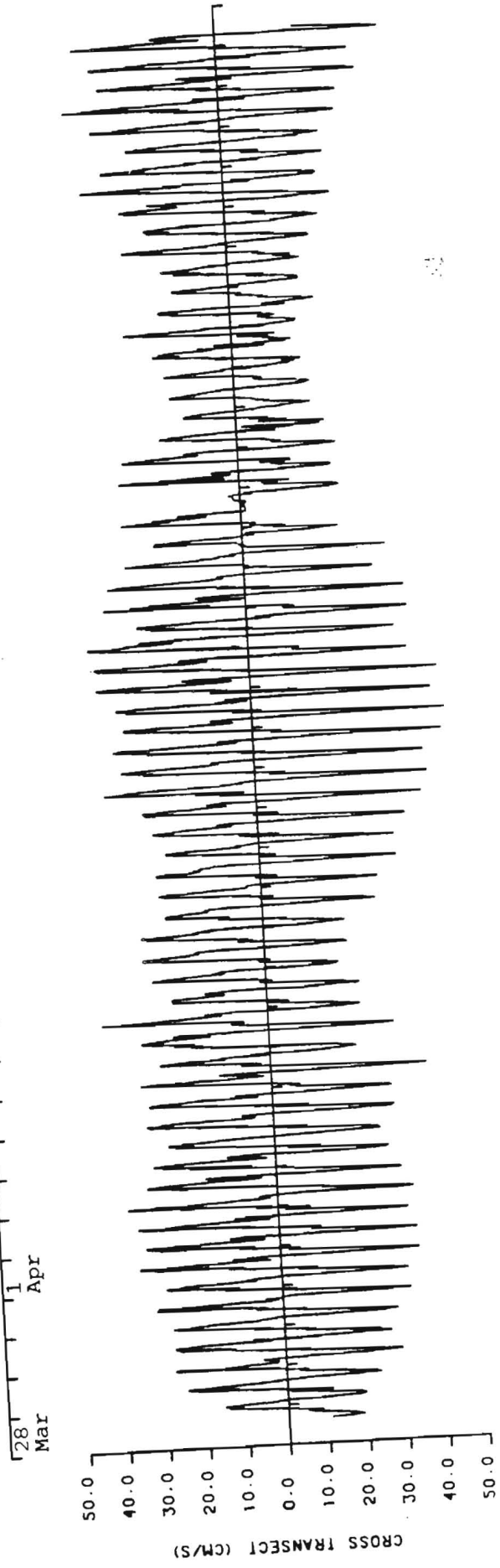
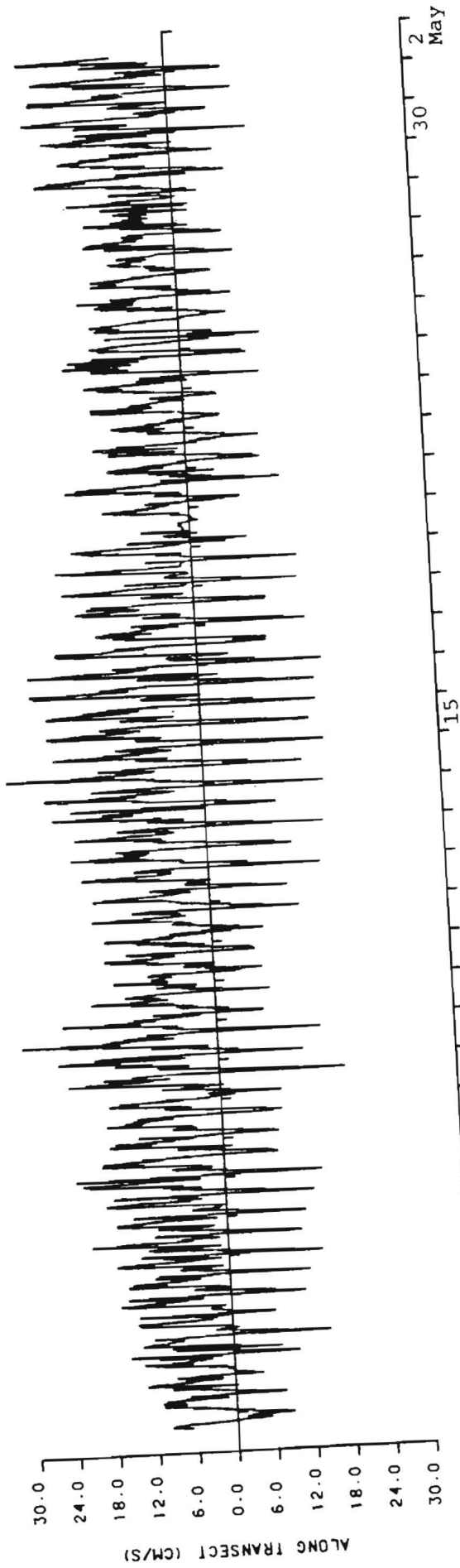
SCALE = 5.5 CM/S PER TICK

A1342 03/28/88 15:15EST DELTA T= 5 MIN



1 TICK = 25 KILOMETERS





TRANSECT 2

2 May - 1 June 1988

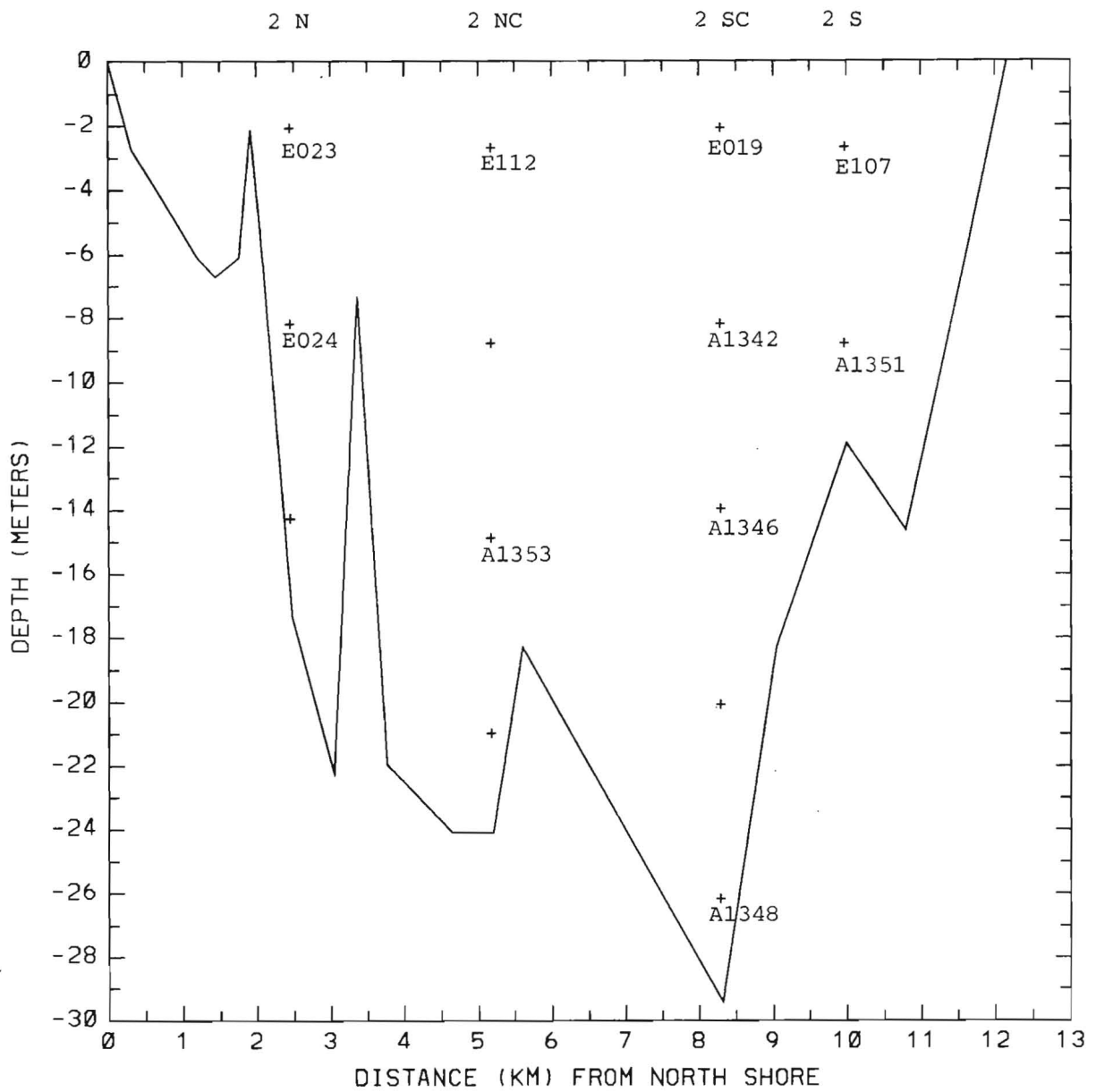


Fig. 3. Transect 2 showing the locations of the current meters

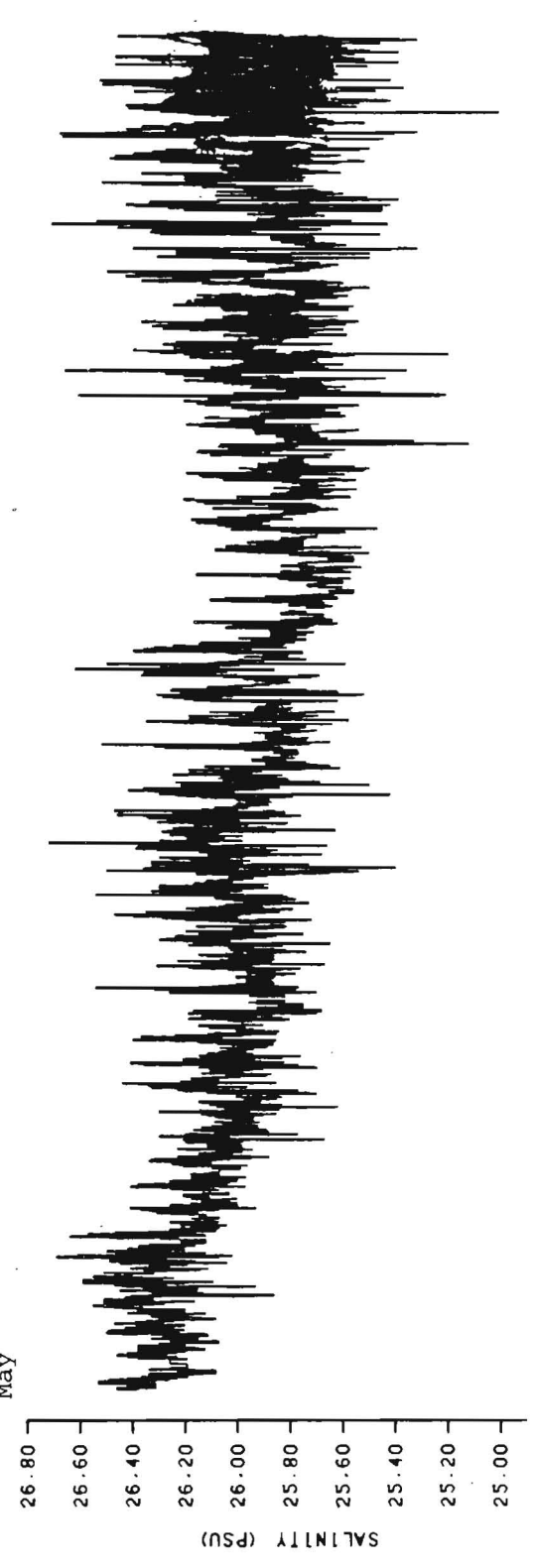
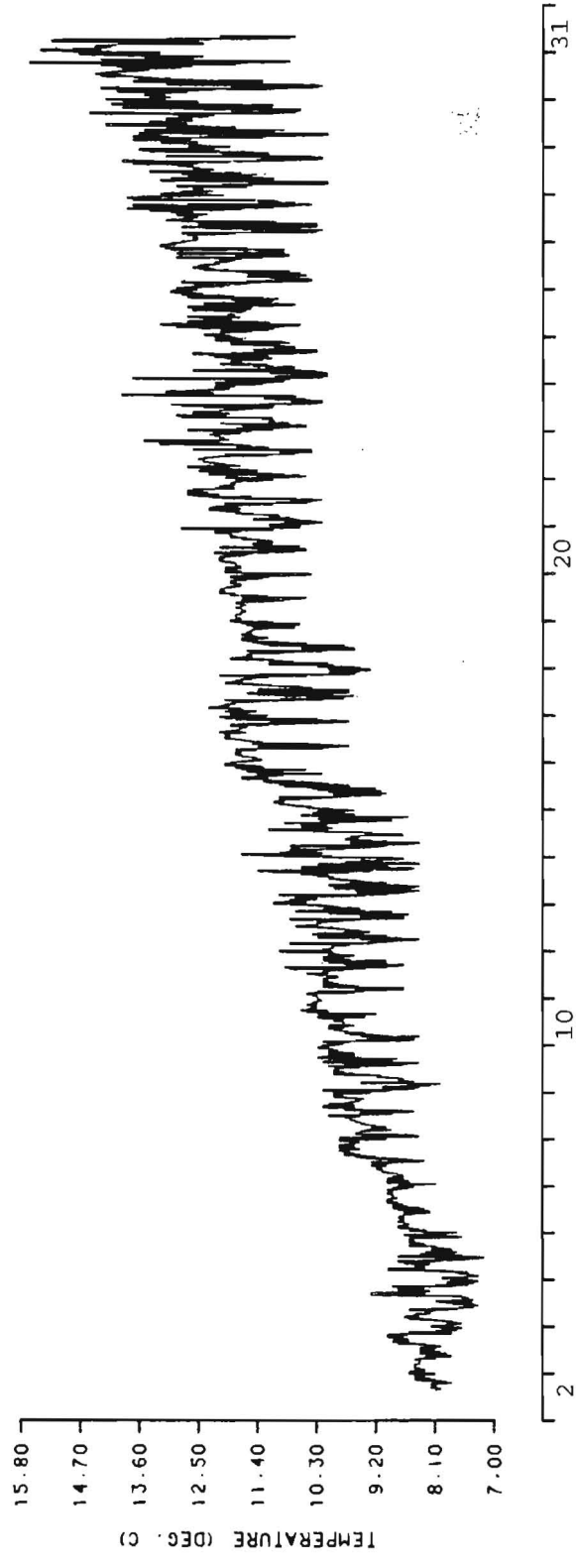
Current meter : ENDECO #1740023
 Station # and location : 2N , 41 02.1N 73 26.6W
 Instrument depth (MLW) : 2.1m
 Water depth (MLW) : 17.4m
 Start time : 05/02/88 15:36 EST
 Stop time : 05/31/88 09:00 EST
 Duration : 28 days 17 hours 24 minutes
 Sampling interval : 2 minutes
 Comments:

Compass did not work; hence no velocity components.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 20682
 NUMBER OF SALINITY POINTS = 20682

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		SPEED	VECTOR	TEMP	SAL
MEAN	=	17.33		10.64	26.09
VARIANCE	=	165.04		2.49	0.06
STD. DEV.	=	12.85		1.58	0.25
MAX.	=	58.32		15.65	26.82
MIN.	=	0.00		7.18	25.11



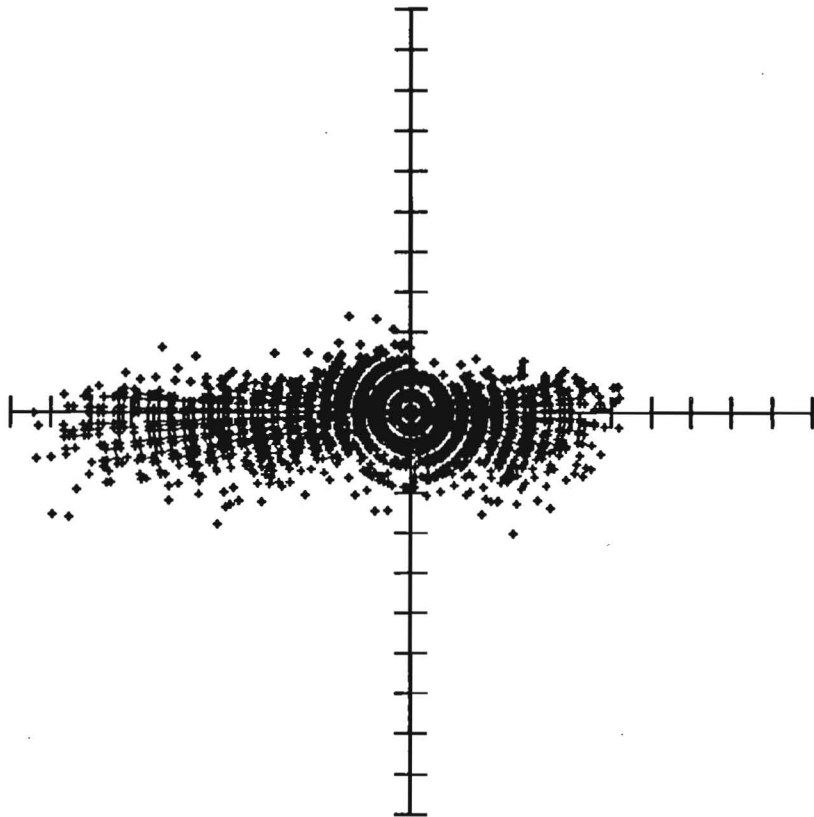
Current meter : ENDECO #1740024
 Station # and location : 2N , 41 02.1N 73 26.6W
 Instrument depth (MLW) : 8.2m
 Water depth (MLW) : 17.4m
 Start time : 05/02/88 15:44 EST
 Stop time : 05/31/88 09:12 EST
 Duration : 28 days 17 hours 28 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 20684
 NUMBER OF TEMPERATURE POINTS = 20684
 NUMBER OF SALINITY POINTS = 20684

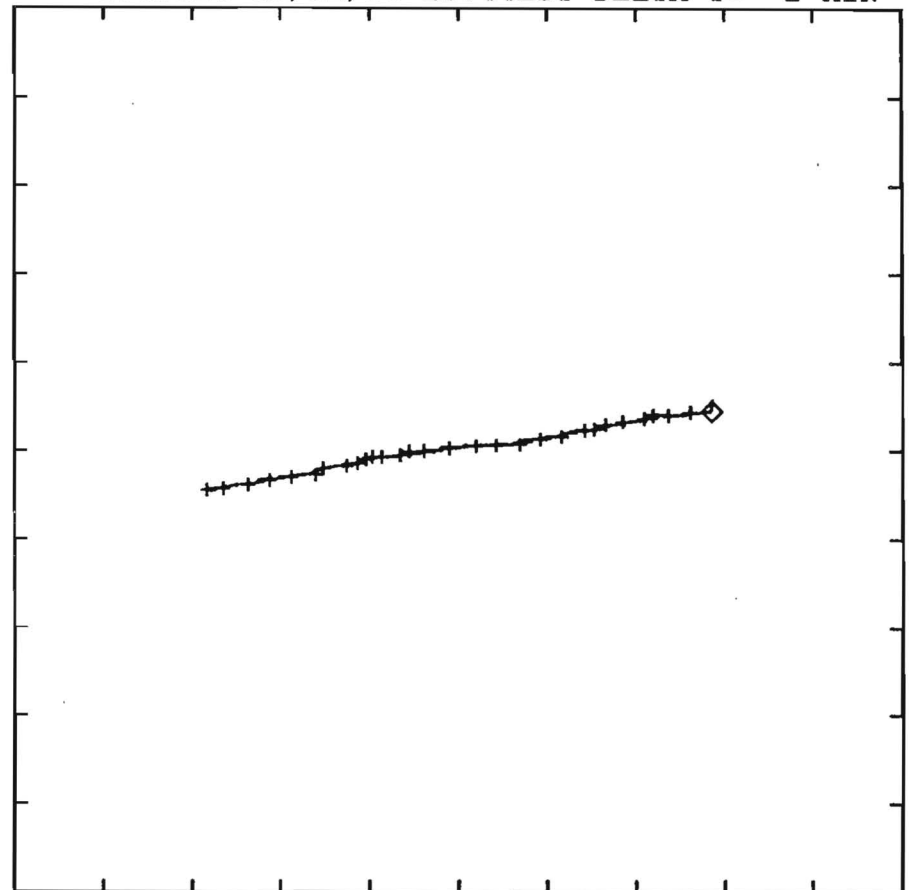
UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		338	68				
MEAN	=	1.06	-4.53	11.75	4.65	9.78	26.48
VARIANCE	=	34.44	175.56	93.43	105.00	1.72	0.02
STD. DEV.	=	5.87	13.25	9.67	10.25	1.31	0.15
MAX.	=	22.49	26.10	49.63		13.50	27.06
MIN.	=	-19.91	-46.88	0.00		7.00	25.85

70



1740024 05/02/88 15:44EST DELTA T= 2 MIN



1 TICK = 20 KILOMETERS

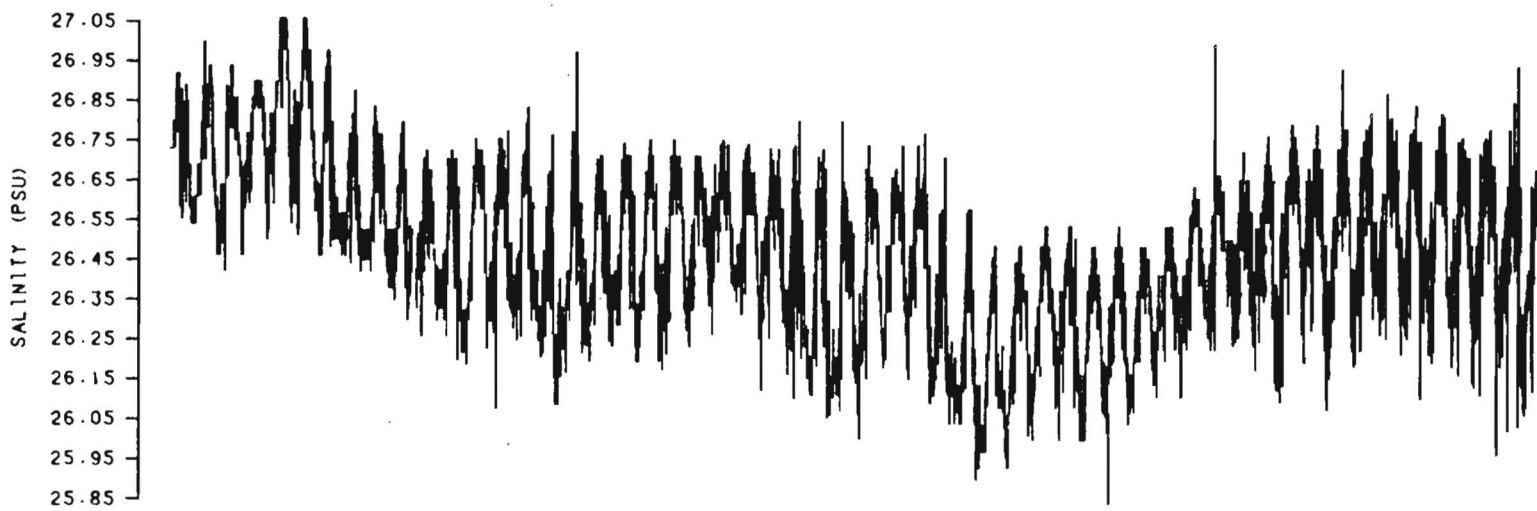
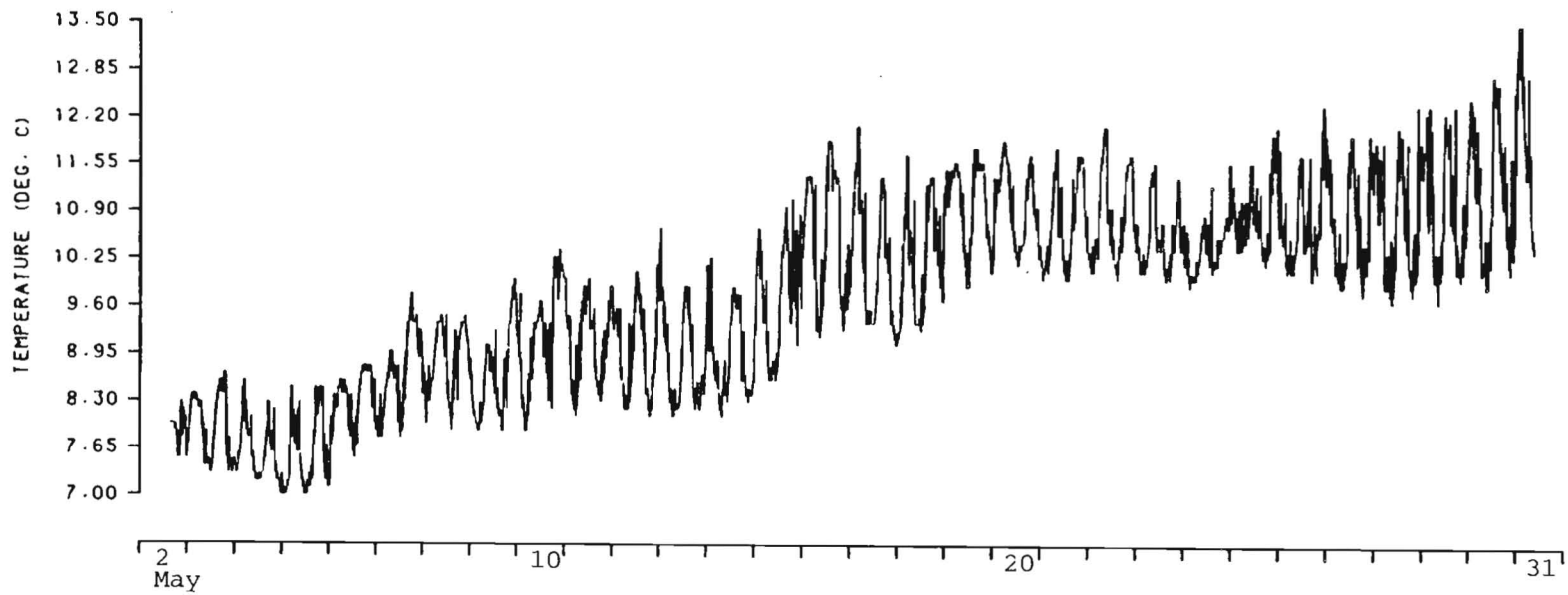
1740024 05/02/88 15:44EST

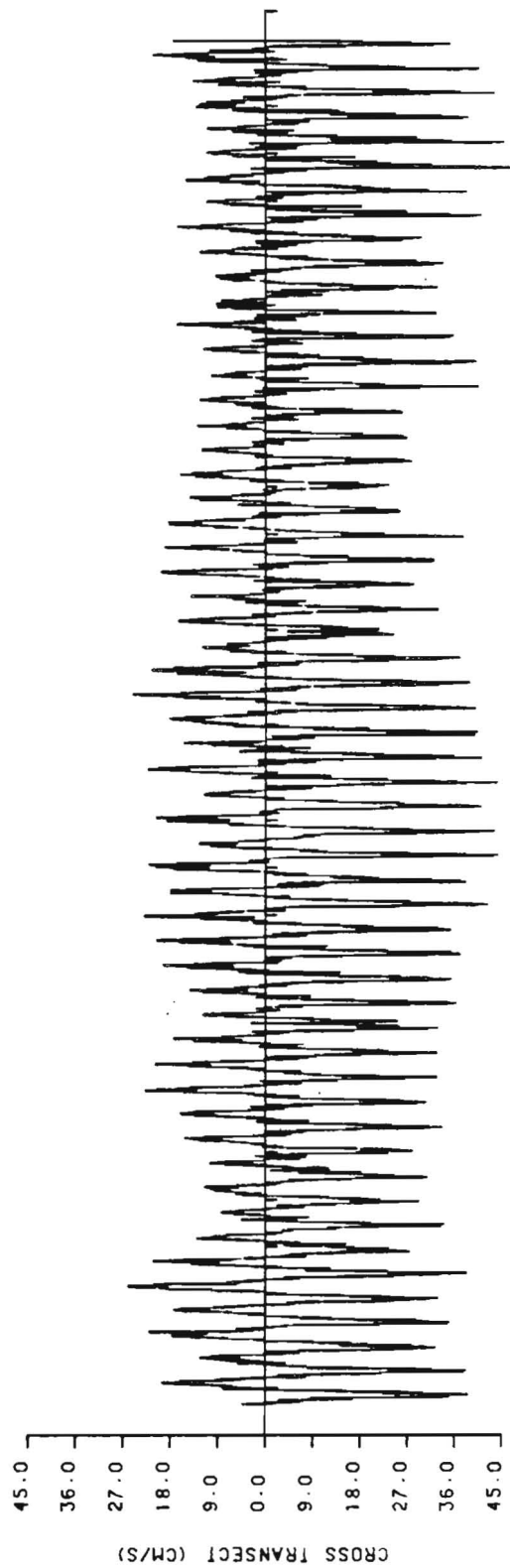
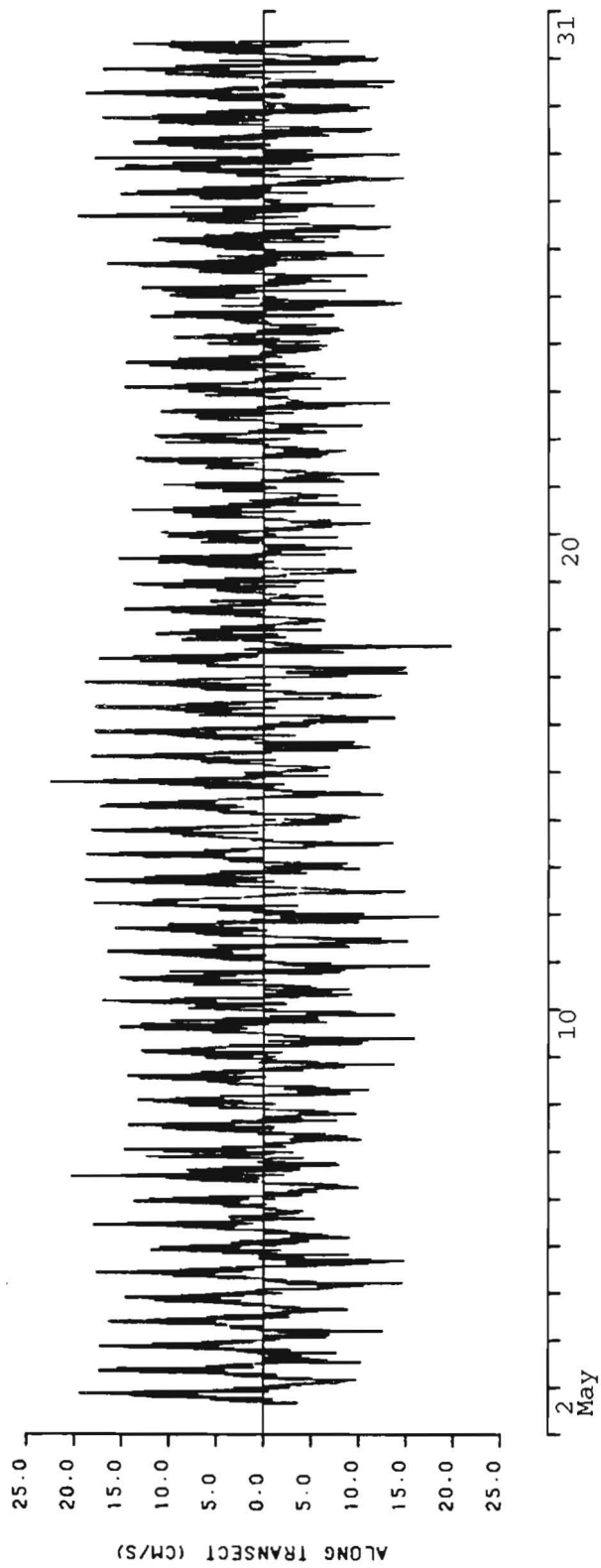
Station 2N , 41 02.1N 73 26.6W

Instrument depth(below MLW) = 8.2 m

Water depth(relative to MLW) = 17.4 m

SCALE = 5.0 CM/S PER TICK





Current meter : ENDECO #1740112
 Station # and location : 2NC, 41 00.9N 73 25.5W
 Instrument depth (MLW) : 2.7m
 Water depth (MLW) : 24.1m
 Start time : 05/03/88 12:58 EST
 Stop time : 05/31/88 10:06 EST
 Duration : 27 days 21 hours 8 minutes
 Sampling interval : 2 minutes
 Comments:

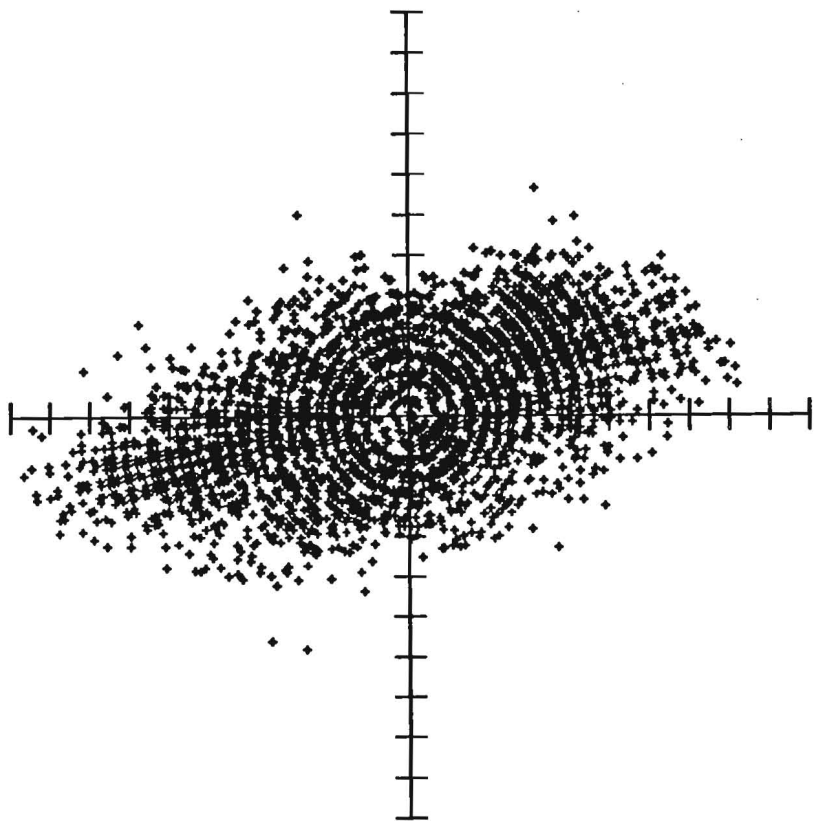
Conductivity sensor malfunctioned.

NUMBER OF CURRENT DATA POINTS = 20074
 NUMBER OF TEMPERATURE POINTS = 20074
 NUMBER OF SALINITY POINTS = 0

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS)

		CURRENT		SPEED	VECTOR	TEMP
		COMPONENT TOWARDS				
		338	68			
MEAN	=	2.50	-0.66	23.97	2.58	11.33
VARIANCE	=	87.17	619.50	138.99	353.33	3.97
STD. DEV.	=	9.34	24.89	11.79	18.80	1.99
MAX.	=	38.84	55.67	64.17		17.50
MIN.	=	-33.30	-62.91	0.00		7.37

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1740112 05/03/88 12:58EST

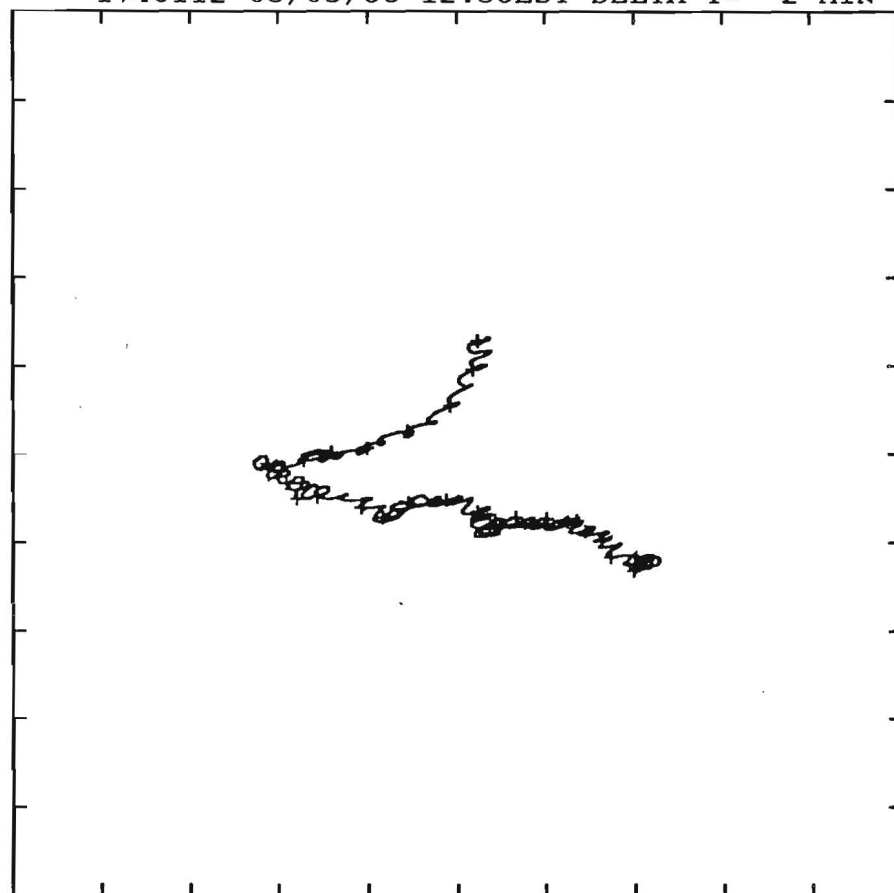
Station 2NC, 41 00.9N 73 25.5W

Instrument depth(below MLW) = 2.7 m

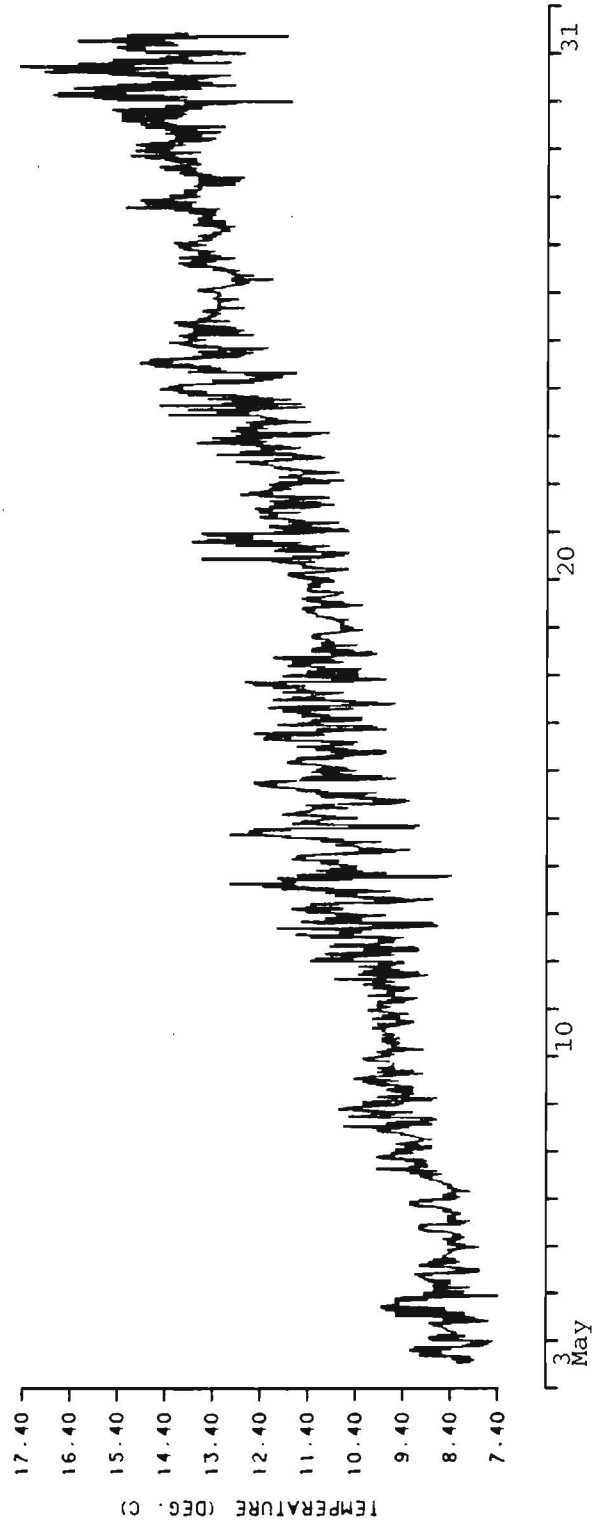
Water depth(relative to MLW) = 24.1 m

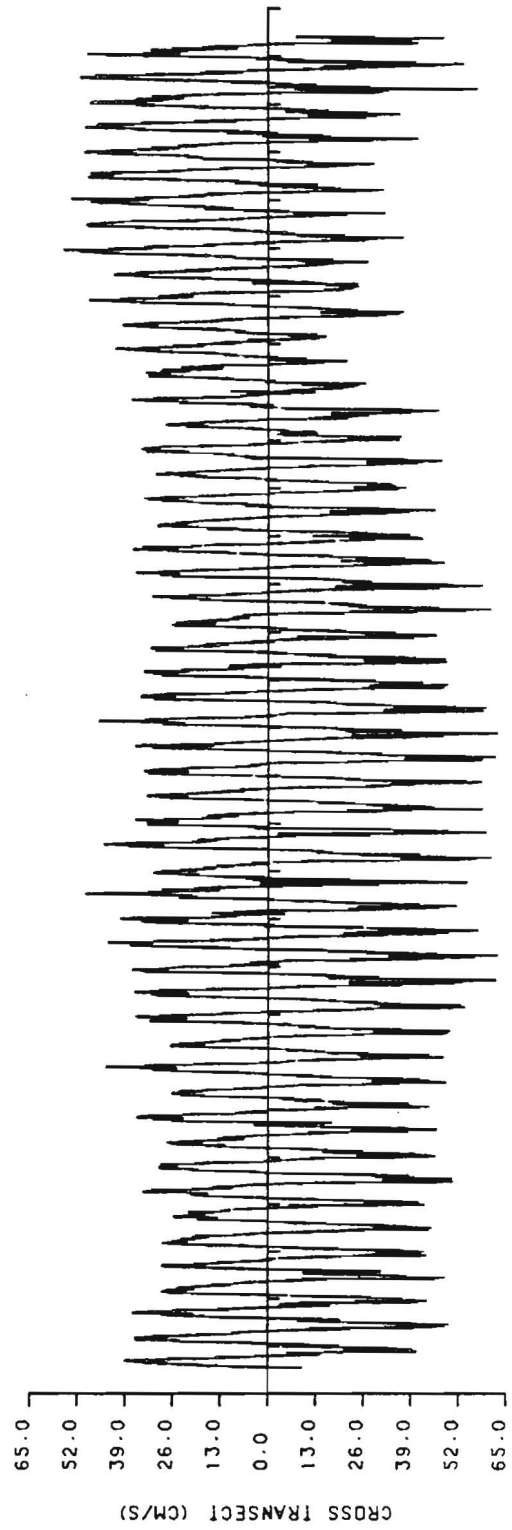
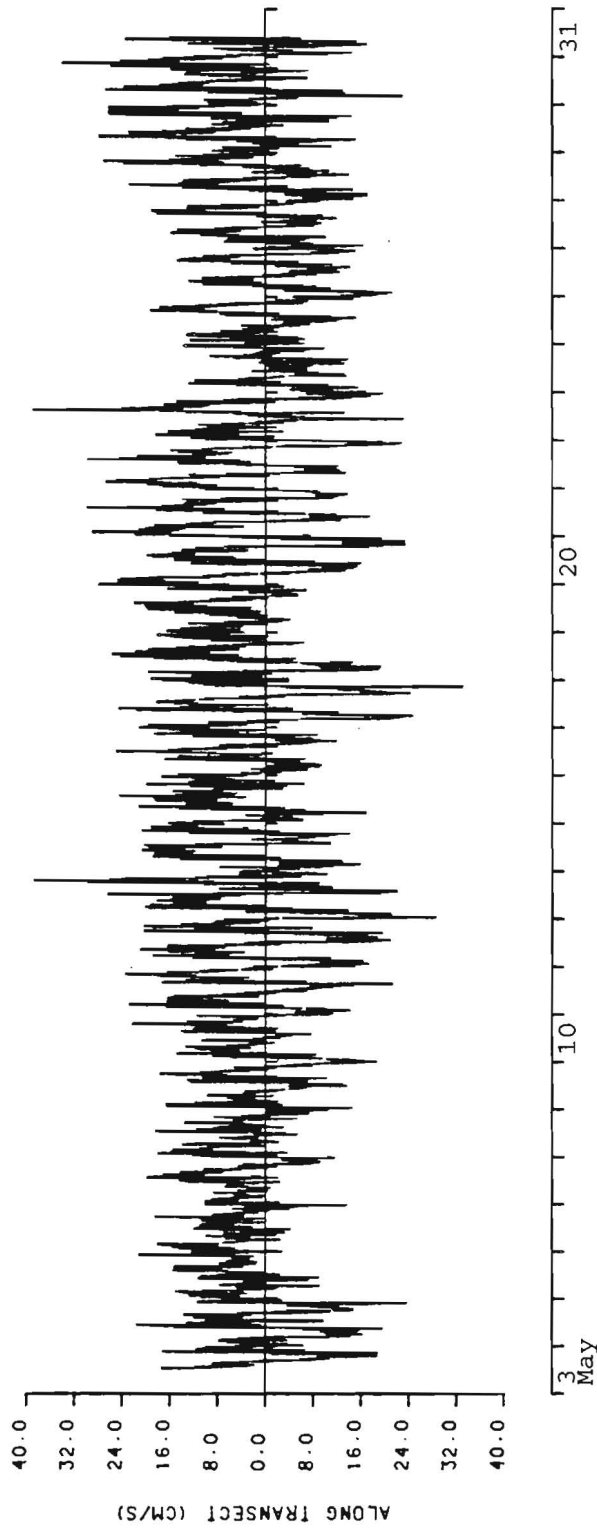
SCALE = 6.5 CM/S PER TICK

1740112 05/03/88 12:58EST DELTA T= 2 MIN



1 TICK = 20 KILOMETERS





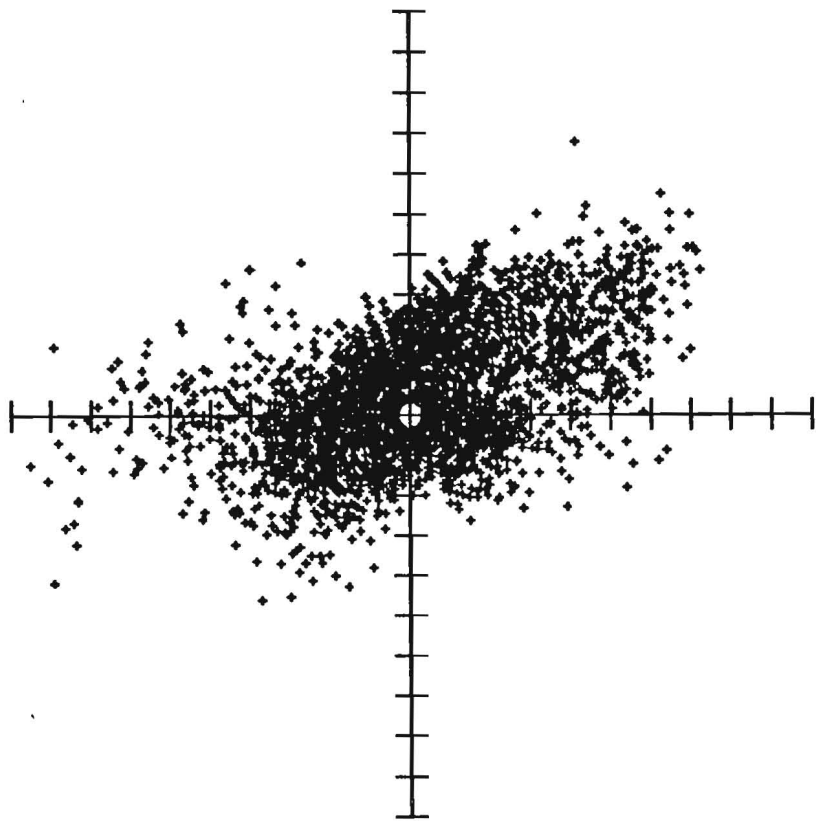
Current meter : AANDERAA #A1353
 Station # and location : 2NC, 41 00.9N 73 25.5W
 Instrument depth (MLW) : 14.9m
 Water depth (MLW) : 24.1m
 Start time : 05/10/88 09:40 EST
 Stop time : 06/01/88 08:05 EST
 Duration : 21 days 22 hours 25 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 6317
 NUMBER OF TEMPERATURE POINTS = 6317
 NUMBER OF SALINITY POINTS = 6317

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		338	68				
MEAN	=	2.04	1.98	11.96	2.85	10.27	26.56
VARIANCE	=	33.40	155.16	53.51	94.28	0.80	0.02
STD. DEV.	=	5.78	12.46	7.31	9.71	0.89	0.14
MAX.	=	28.25	38.39	47.69		14.20	27.46
MIN.	=	-16.74	-46.37	1.70		7.94	25.50

78



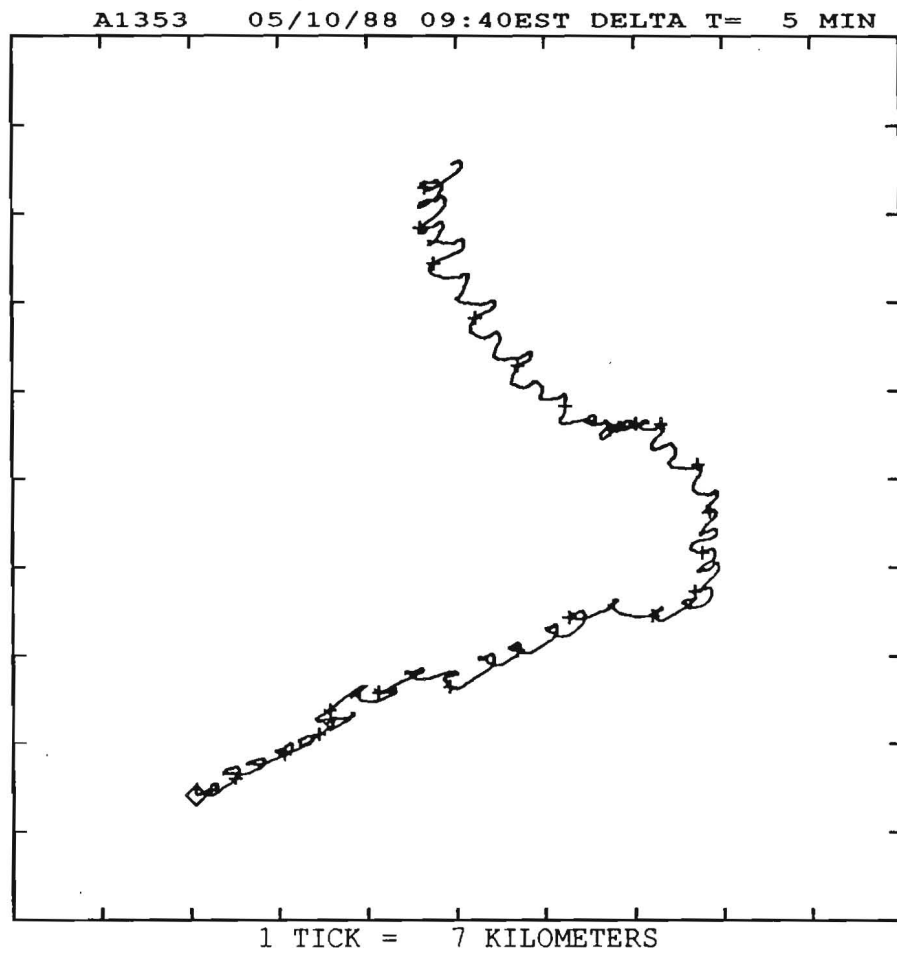
A1353 05/10/88 9:40EST

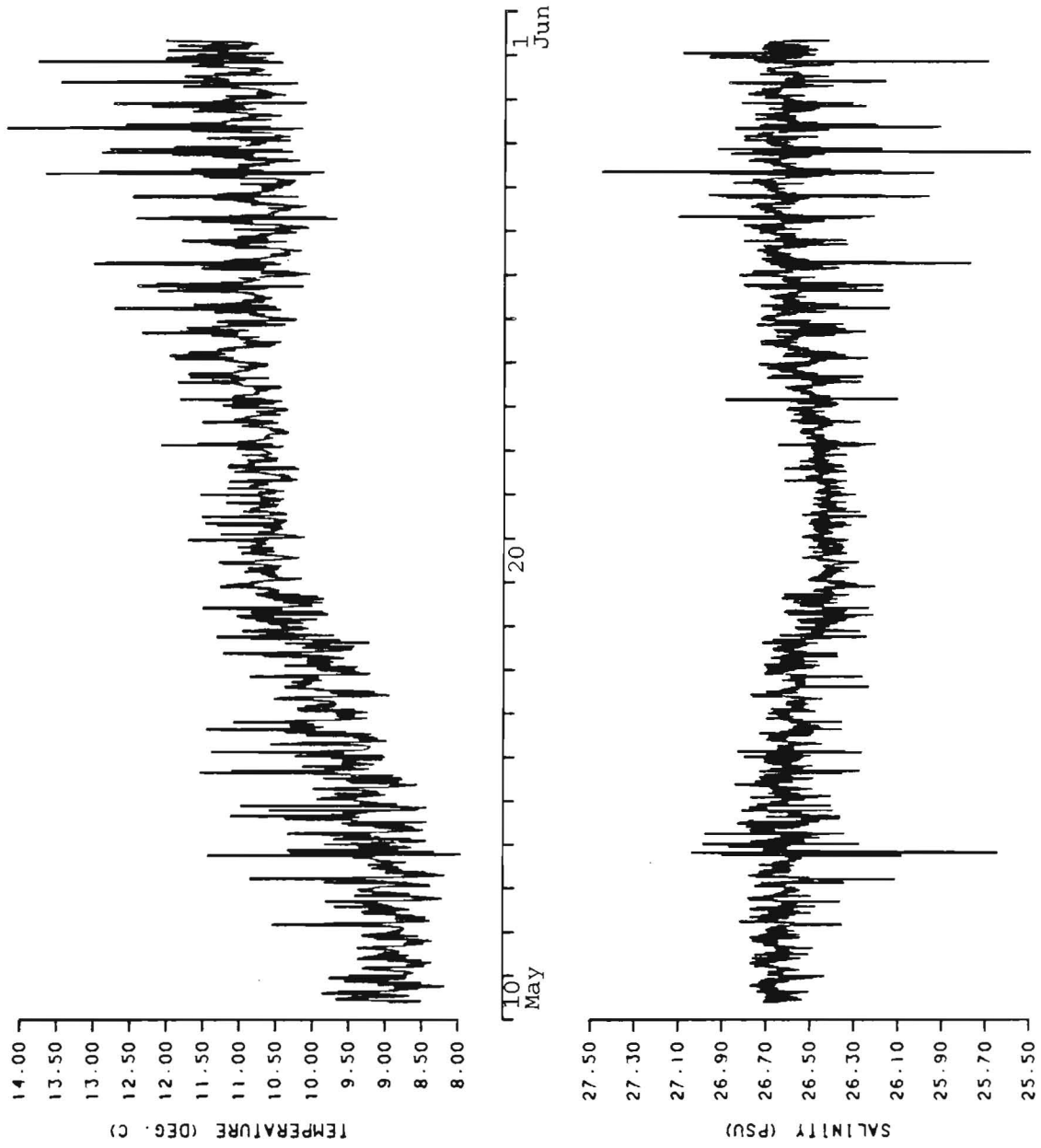
Station 2NC, 41 00.9N 73 25.5W

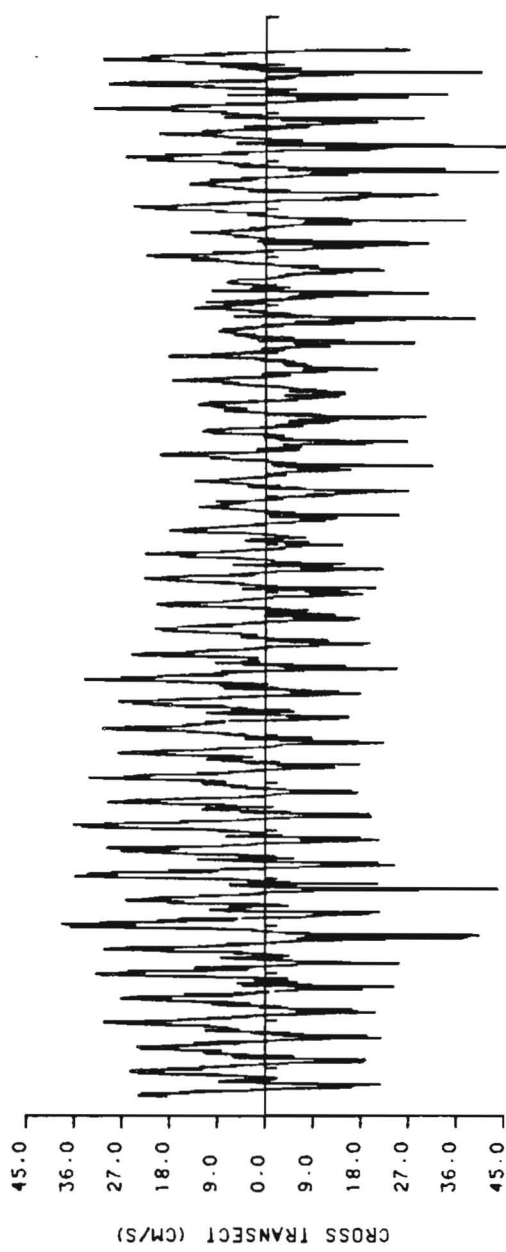
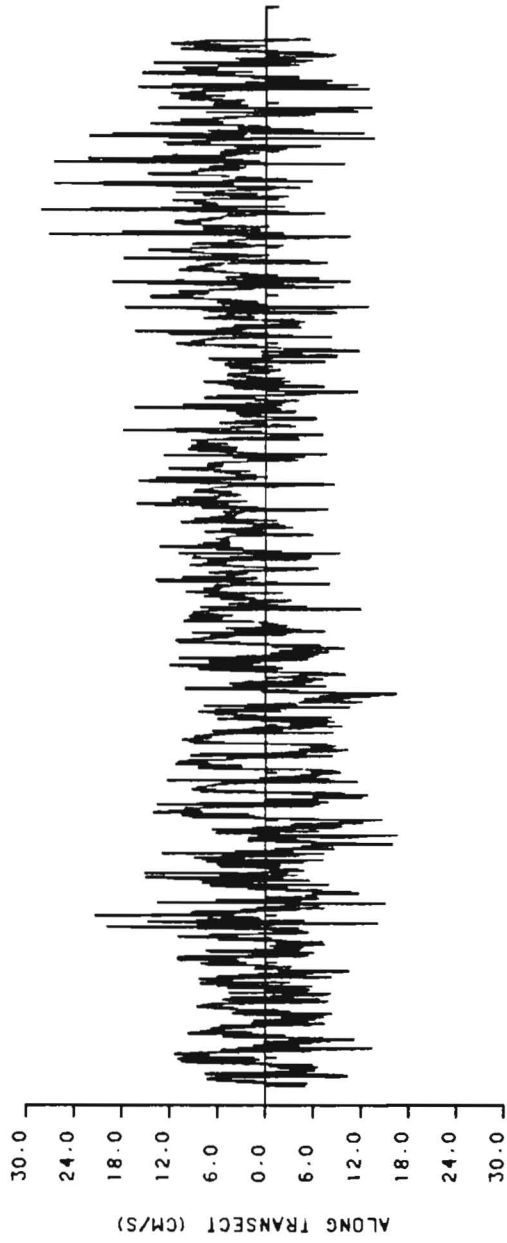
Instrument depth(below MLW) = 14.9 m

Water depth(relative to MLW) = 24.1 m

SCALE = 4.5 CM/S PER TICK





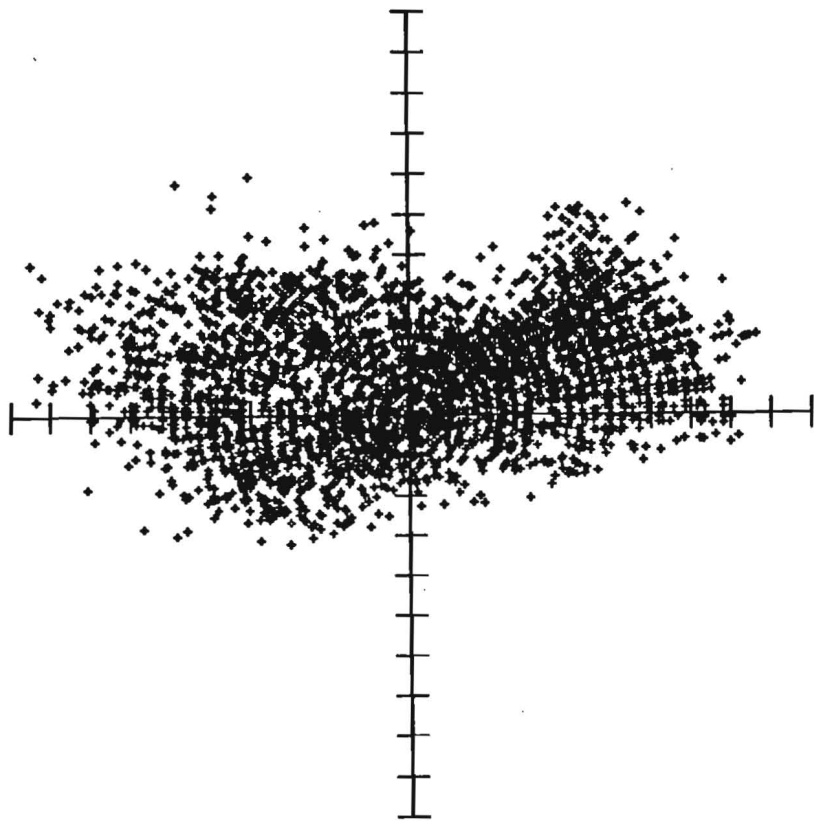


Current meter : ENDECO #1740019
 Station # and location : 2SC, 40 59.2N 73 24.8W
 Instrument depth (MLW) : 2.1m
 Water depth (MLW) : 29.6m
 Start time : 05/03/88 10:42 EST
 Stop time : 05/31/88 10:44 EST
 Duration : 28 days 0 hours 2 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 20161
 NUMBER OF TEMPERATURE POINTS = 20161
 NUMBER OF SALINITY POINTS = 20161

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

CURRENT							
		COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		338	68				
MEAN	=	5.22	4.24	25.21	6.73	11.32	25.71
VARIANCE	=	134.33	615.63	159.62	374.98	4.73	0.14
STD. DEV.	=	11.59	24.81	12.63	19.36	2.18	0.38
MAX.	=	61.29	56.96	67.00		17.34	26.74
MIN.	=	-24.50	-56.64	0.00		7.57	24.38



1740019 05/03/88 10:42EST

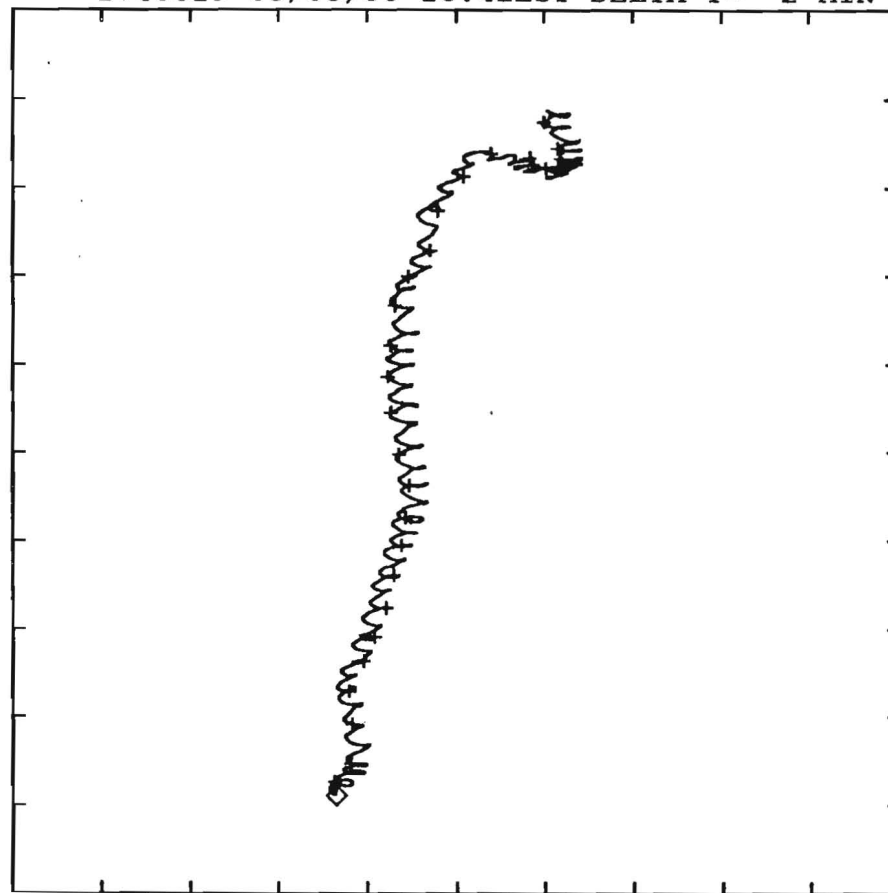
Station 2SC, 40 59.2N 73 24.8W

Instrument depth(below MLW) = 2.1 m

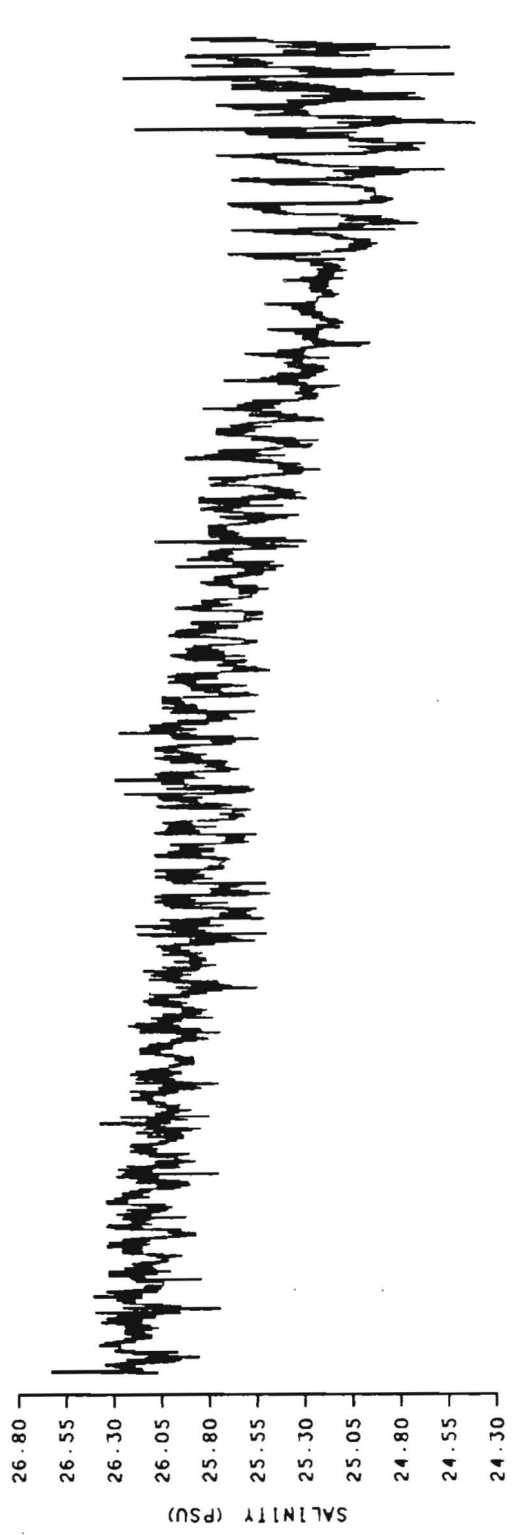
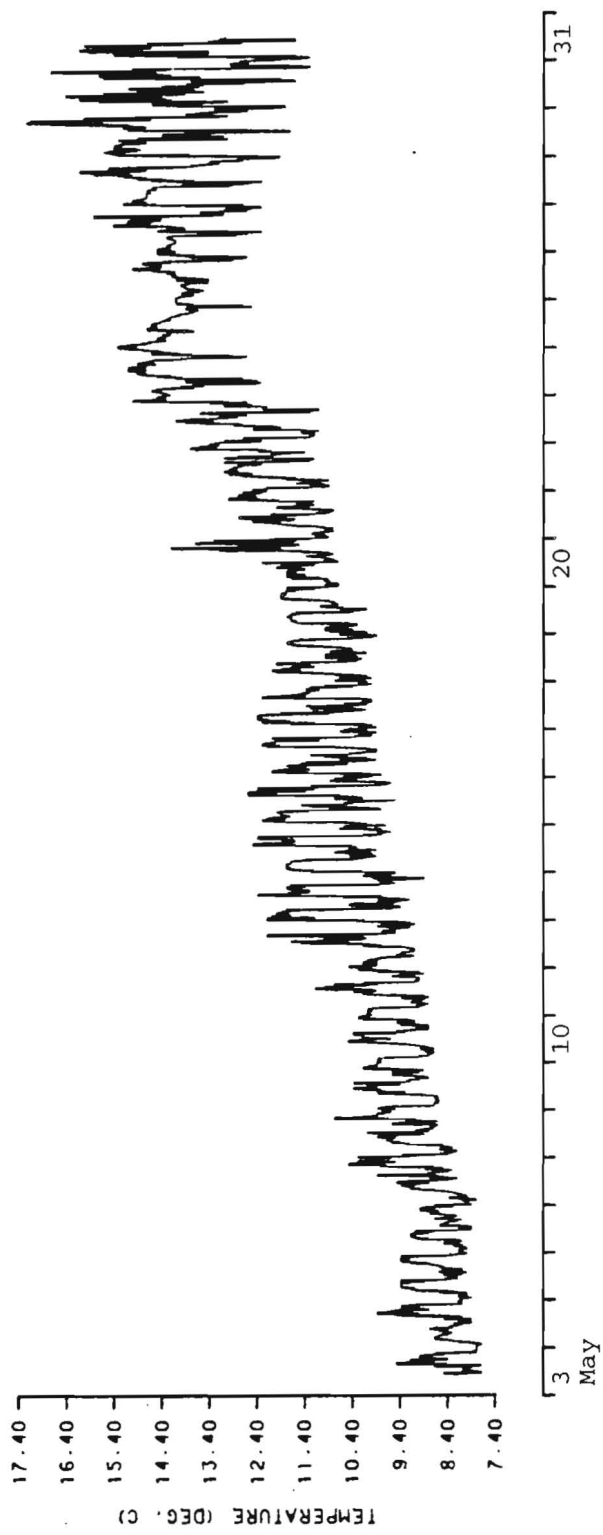
Water depth(relative to MLW) = 29.6 m

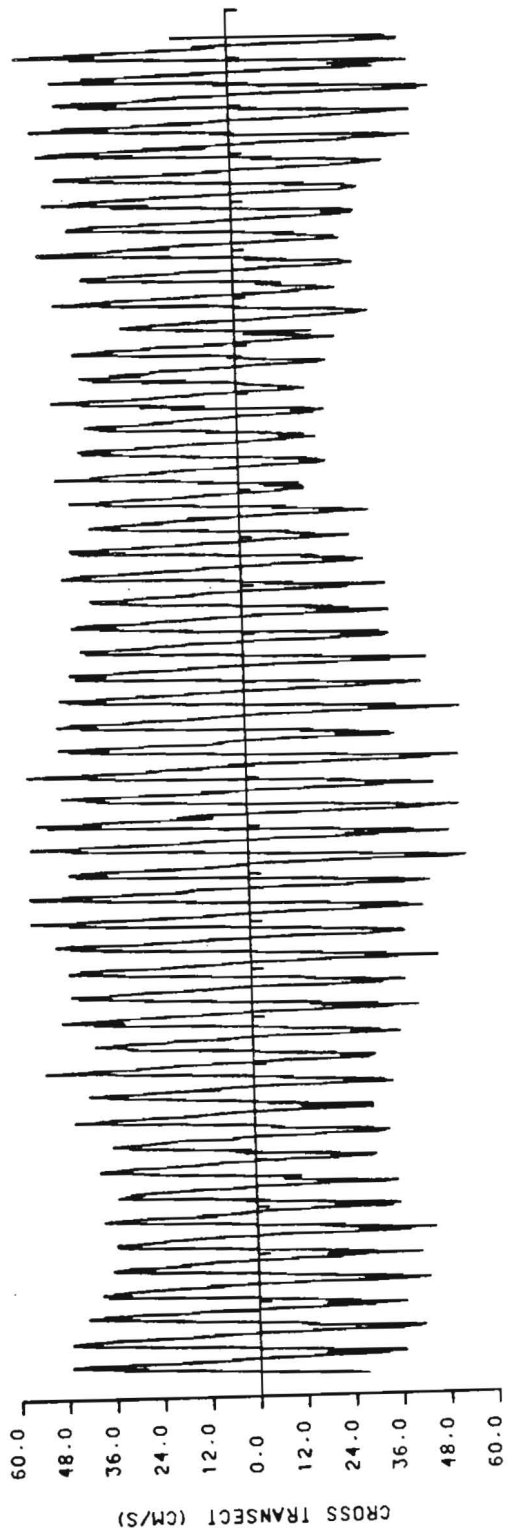
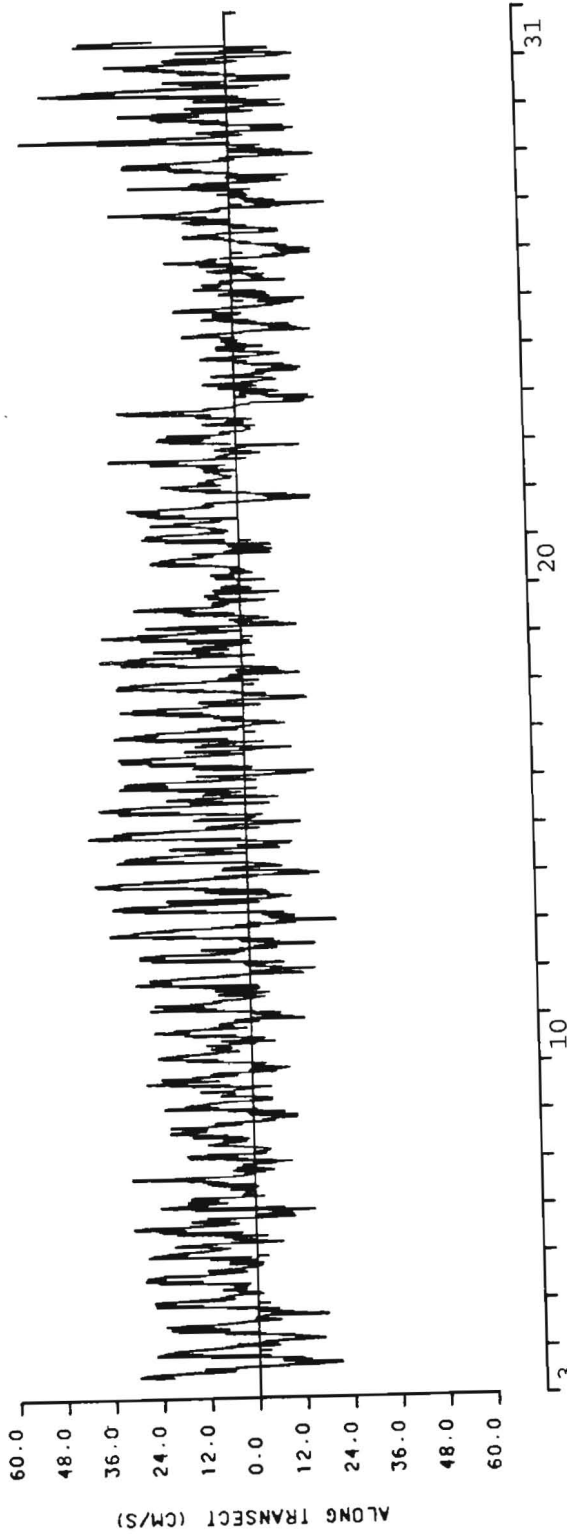
SCALE = 6.5 CM/S PER TICK

1740019 05/03/88 10:42EST DELTA T= 2 MIN



1 TICK = 20 KILOMETERS





Current meter : AANDERAA #A1342
 Station # and location : 2SC, 40 59.2N 73 24.8W
 Instrument depth (MLW) : 8.2m
 Water depth (MLW) : 29.6m
 Start time : 05/03/88 11:20 EST
 Stop time : 05/31/88 10:40 EST
 Duration : 27 days 23 hours 20 minutes
 Sampling interval : 5 minutes
 Comments:

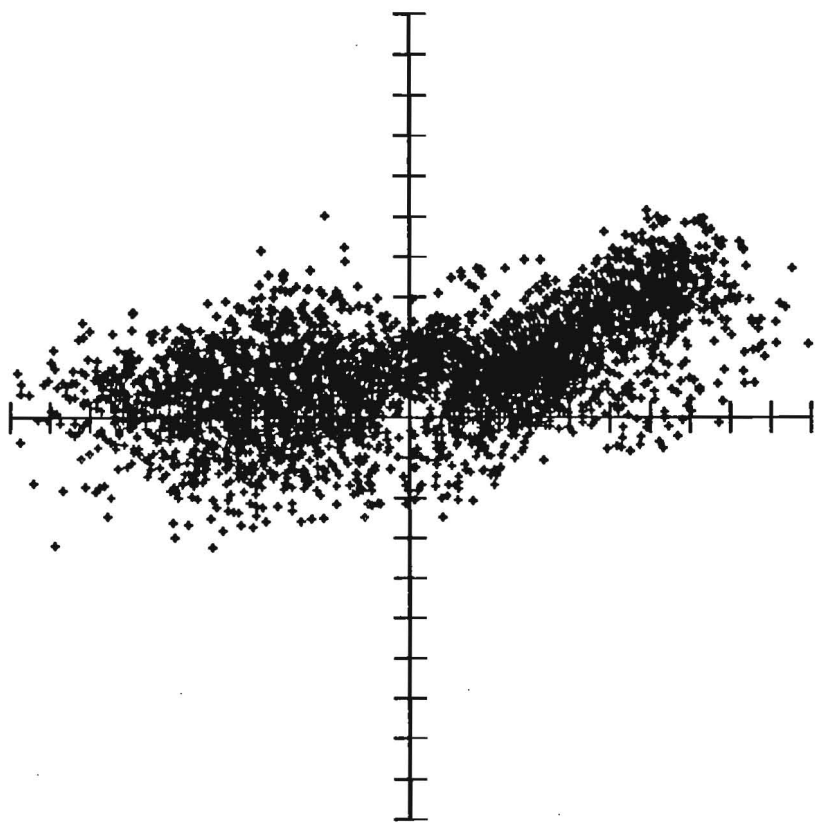
Conductivity signal very noisy yielded the salinity record shown, of dubious quality.

NUMBER OF CURRENT DATA POINTS = 8056
 NUMBER OF TEMPERATURE POINTS = 8056
 NUMBER OF SALINITY POINTS = 8056

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		338	68				
MEAN	=	4.78	3.20	20.13	5.75	10.67	26.55
VARIANCE	=	45.29	431.53	104.74	238.41	2.90	0.35
STD. DEV.	=	6.73	20.77	10.23	15.44	1.70	0.59
MAX.	=	27.25	51.75	52.23		15.08	34.13
MIN.	=	-15.31	-50.42	1.70		7.69	25.06

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A1342 05/03/88 11:20EST

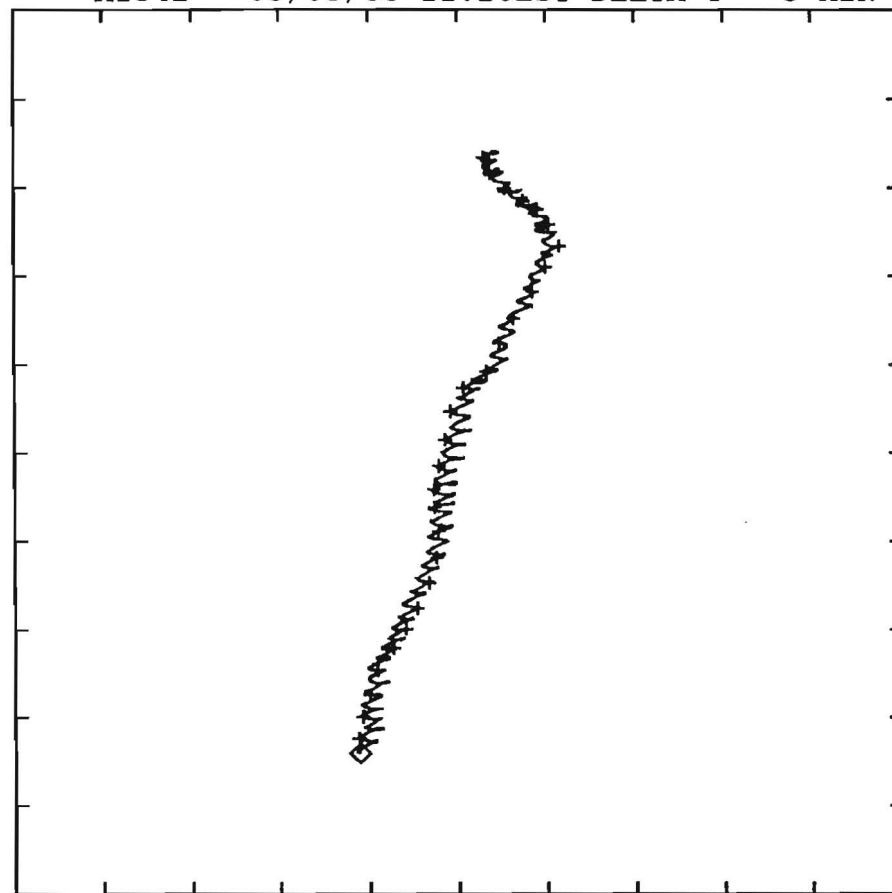
Station 2SC, 40 59.2N 73 24.8W

Instrument depth(below MLW) = 8.2 m

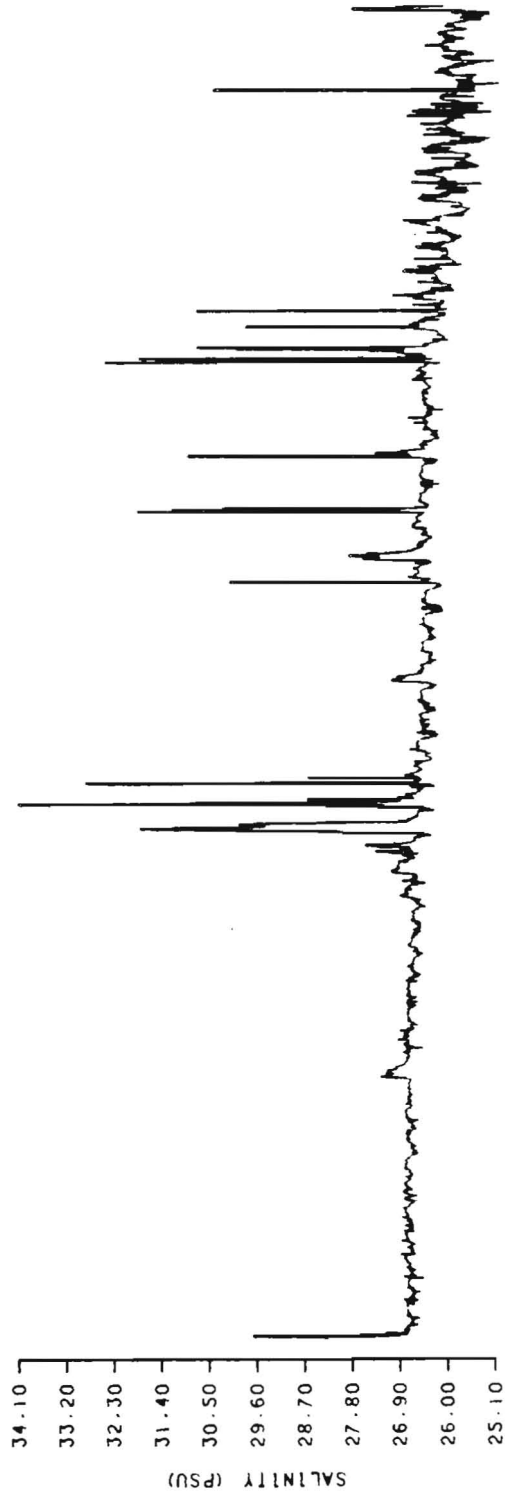
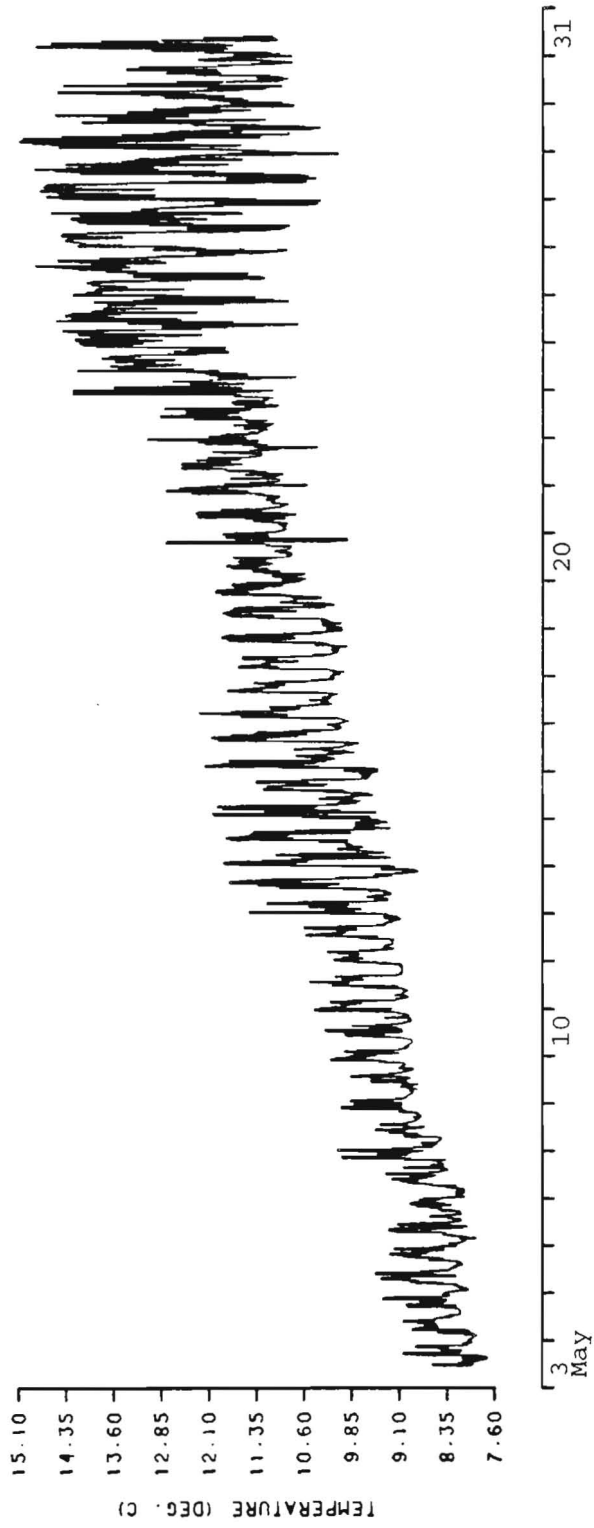
Water depth(relative to MLW) = 29.6 m

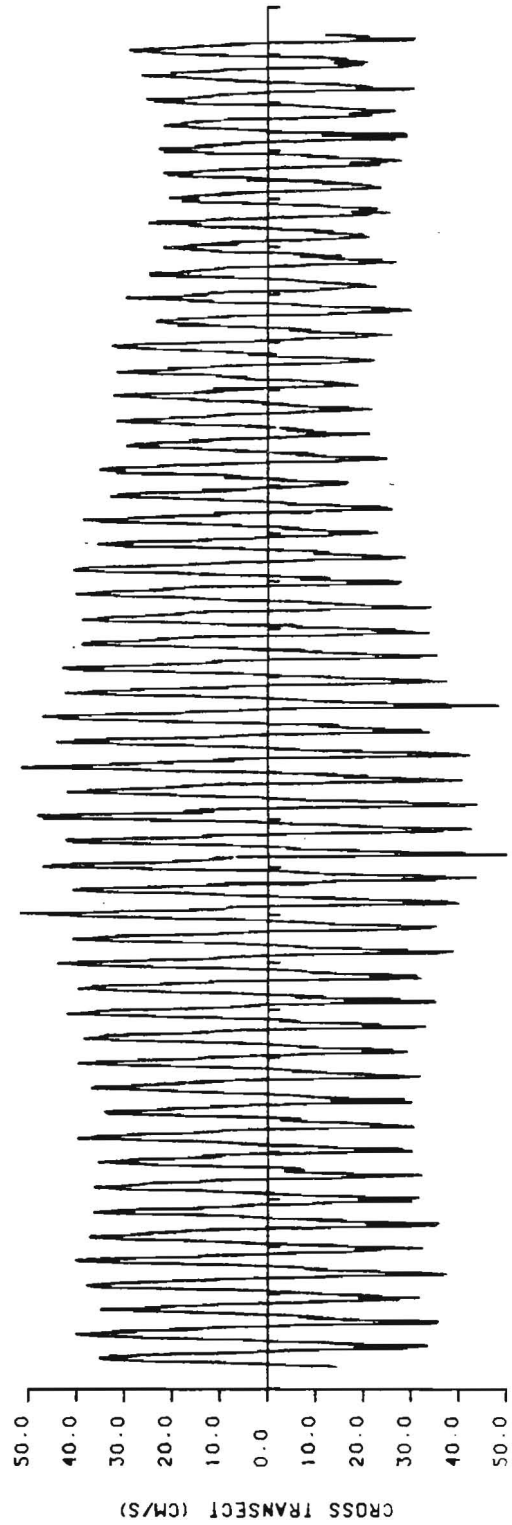
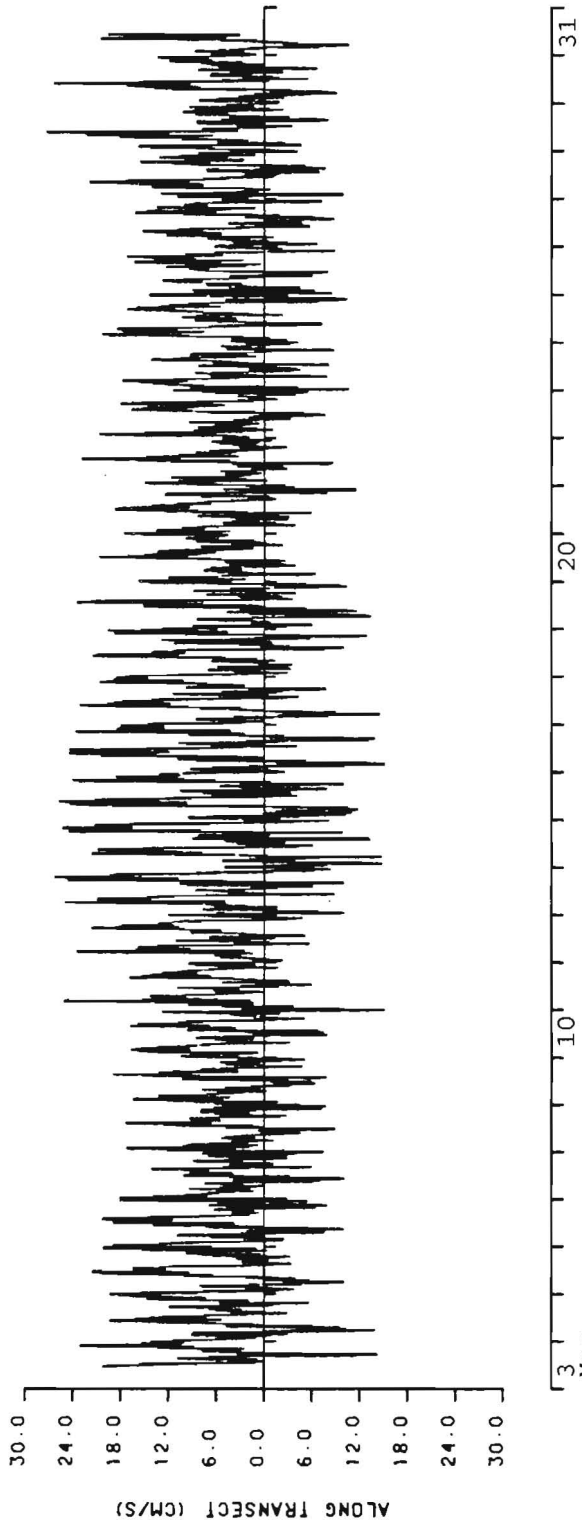
SCALE = 5.0 CM/S PER TICK

A1342 05/03/88 11:20EST DELTA T= 5 MIN



1 TICK = 20 KILOMETERS





Current meter : AANDERAA #A1346
 Station # and location : 2SC, 40 59.2N 73 24.8W
 Instrument depth (MLW) : 14.0m
 Water depth (MLW) : 29.3m
 Start time : 05/03/88 11:40 EST
 Stop time : 06/01/88 08:35 EST
 Duration : 28 days 20 hours 55 minutes
 Sampling interval : 5 minutes
 Comments:

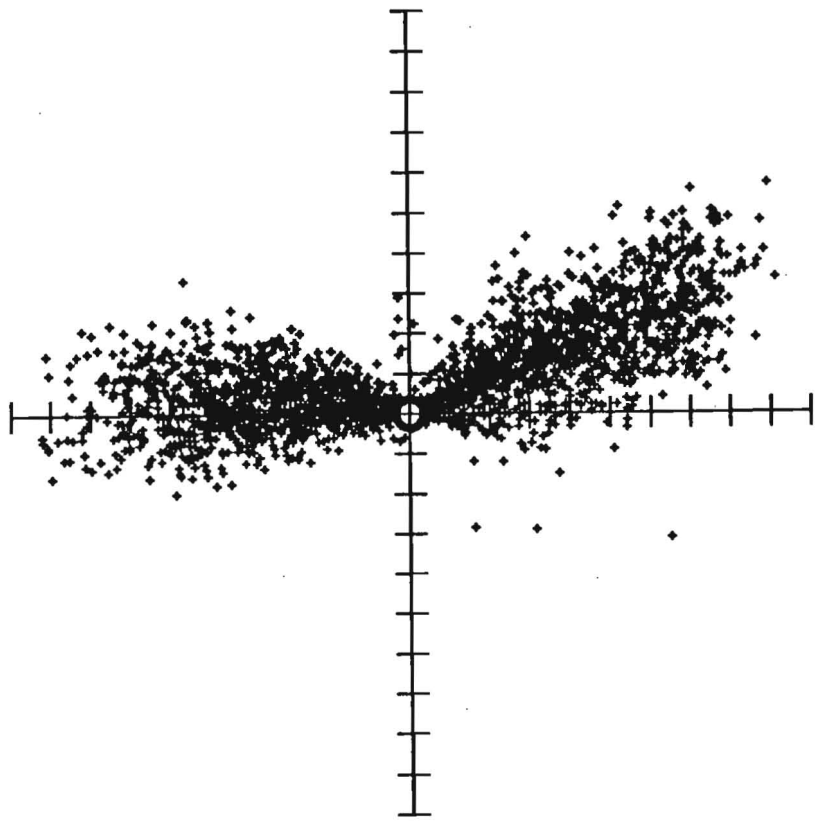
The velocity records show signs of damping between 21 and 25 May. Because of fouling, the rotor was a little tight when the instrument was retrieved.

NUMBER OF CURRENT DATA POINTS = 8315
 NUMBER OF TEMPERATURE POINTS = 8315
 NUMBER OF SALINITY POINTS = 8315

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT	TOWARDS				
		338	68				
MEAN	=	2.23	2.06	11.51	3.03	12.79	24.57
VARIANCE	=	20.68	226.48	123.87	123.58	2.39	0.07
STD. DEV.	=	4.55	15.05	11.13	11.12	1.55	0.26
MAX.	=	24.29	46.95	47.75		17.91	25.35
MIN.	=	-26.26	-42.22	1.62		9.30	23.32

06



A1346 05/03/88 11:40EST

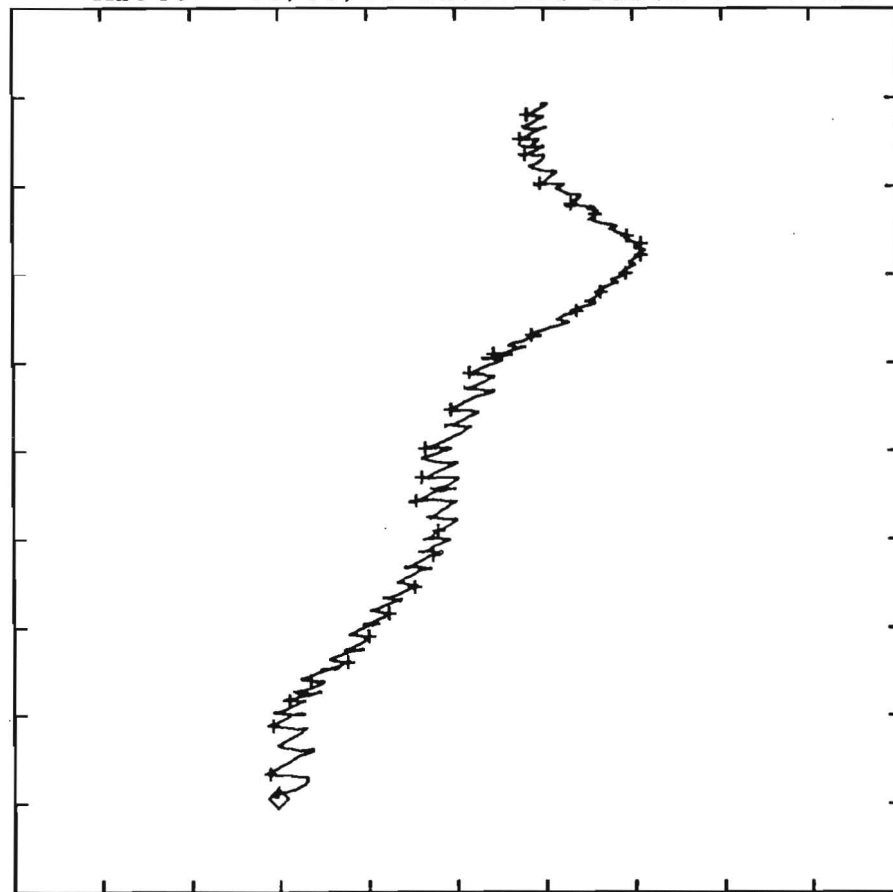
Station 2SC, 40 59.2N 73 24.8W

Instrument depth(below MLW) = 14.0 m

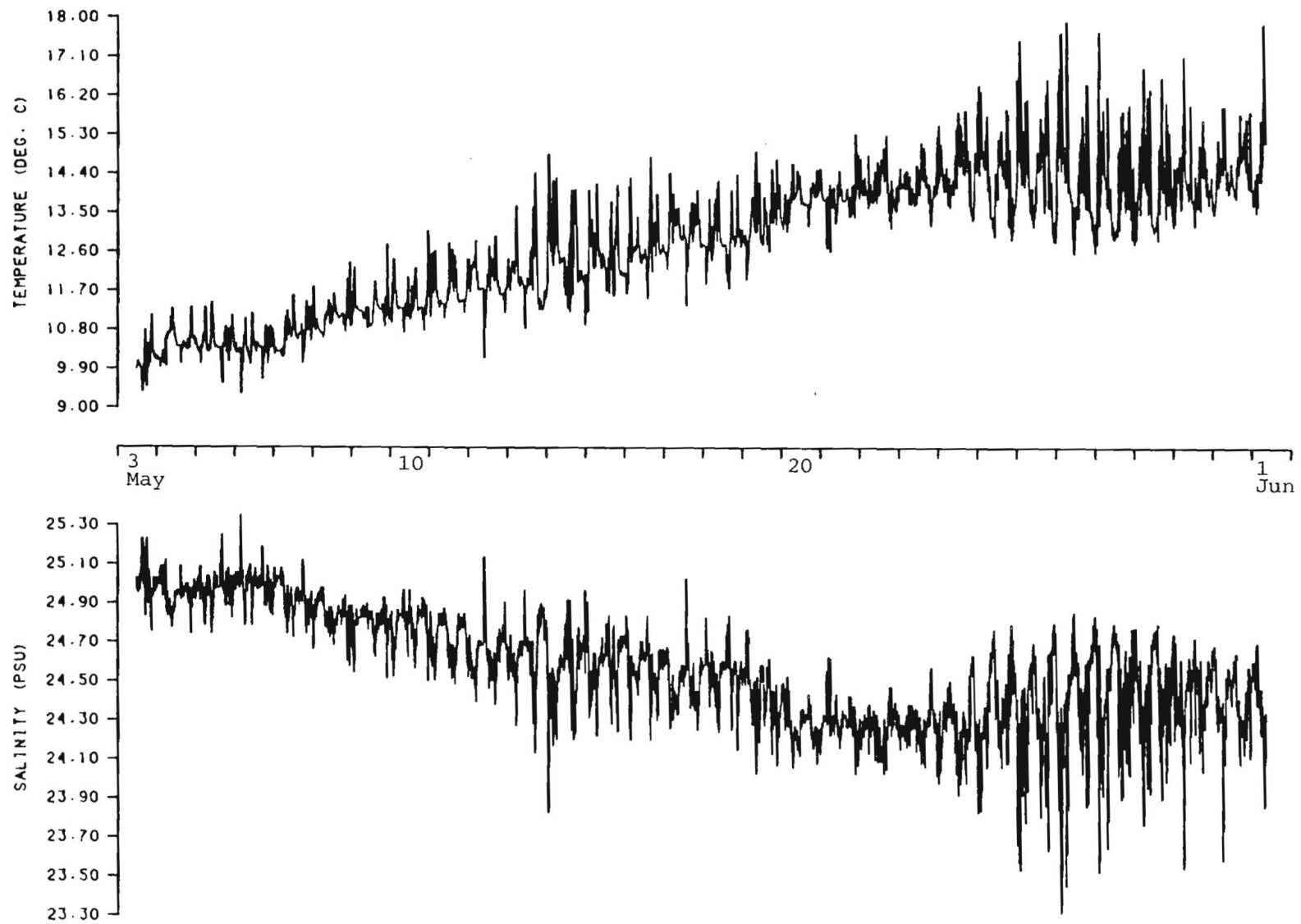
Water depth(relative to MLW) = 29.3 m

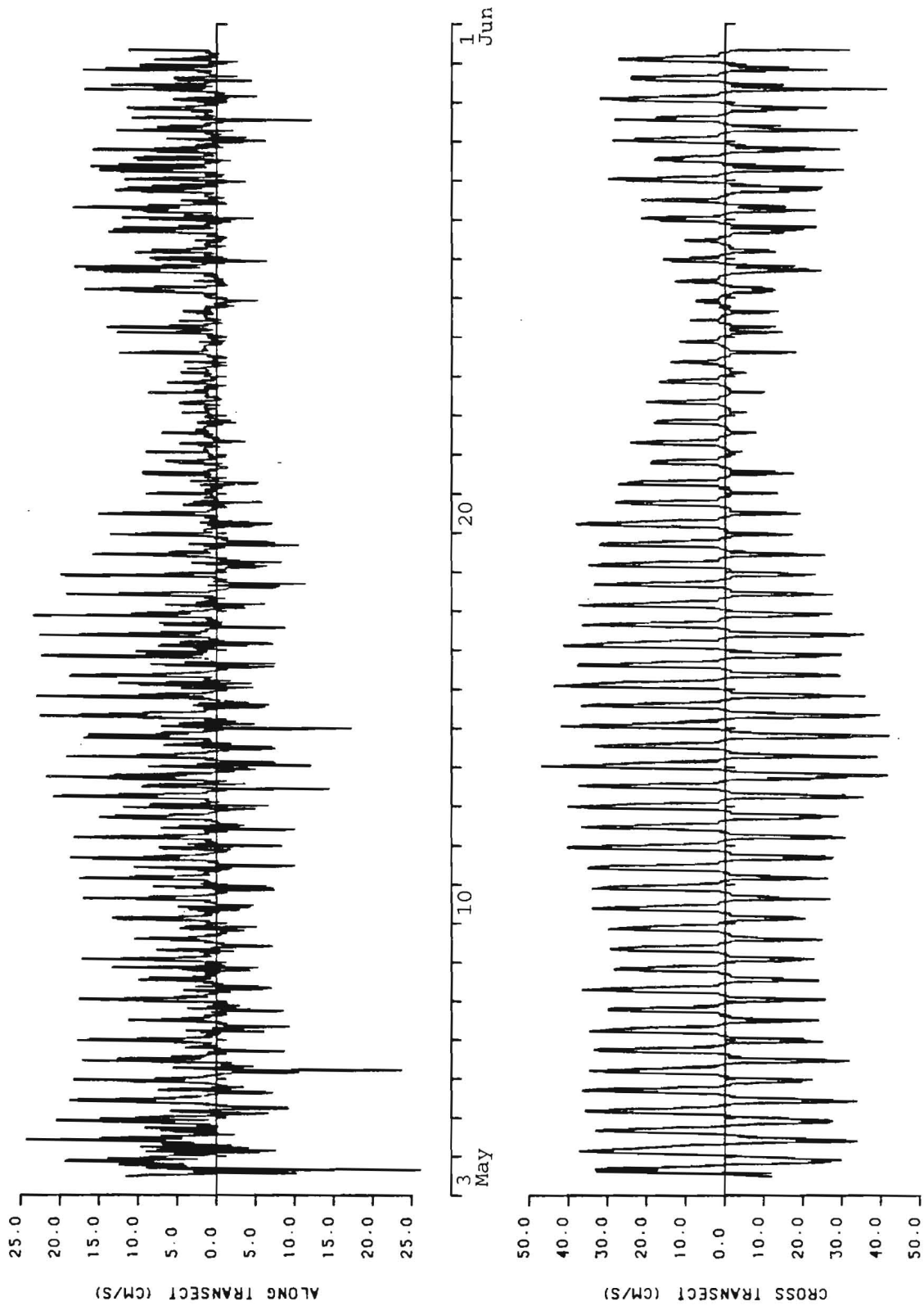
SCALE = 4.5 CM/S PER TICK

A1346 05/03/88 11:40EST DELTA T= 5 MIN



1 TICK = 9 KILOMETERS





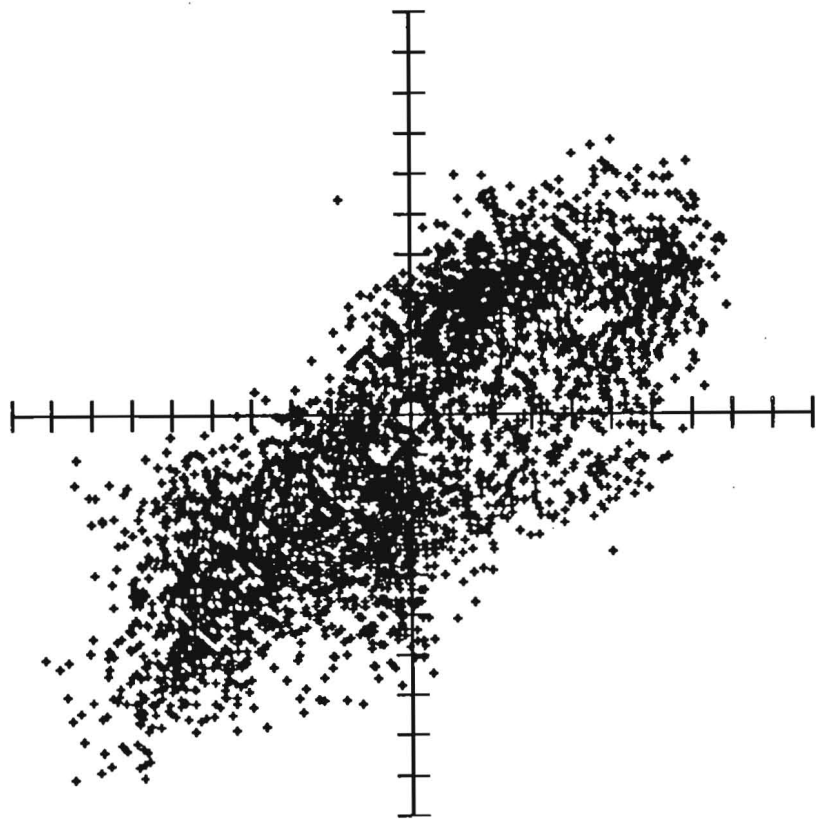
Current meter : AANDERAA #A1348
 Station # and location : 2SC, 40 59.2N 73 24.8W
 Instrument depth (MLW) : 26.2m
 Water depth (MLW) : 29.3m
 Start time : 05/03/88 11:40 EST
 Stop time : 05/31/88 20:50 EST
 Duration : 28 days 9 hours 10 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 8174
 NUMBER OF TEMPERATURE POINTS = 8174
 NUMBER OF SALINITY POINTS = 8174

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		338	68				
MEAN	=	-2.36	-1.72	18.07	2.92	9.10	26.97
VARIANCE	=	74.73	319.84	76.69	197.28	1.10	0.01
STD. DEV.	=	8.64	17.88	8.76	14.05	1.05	0.12
MAX.	=	22.53	36.43	49.66		11.33	27.43
MIN.	=	-26.72	-45.22	1.69		6.73	26.39

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A1348 05/03/88 11:40EST

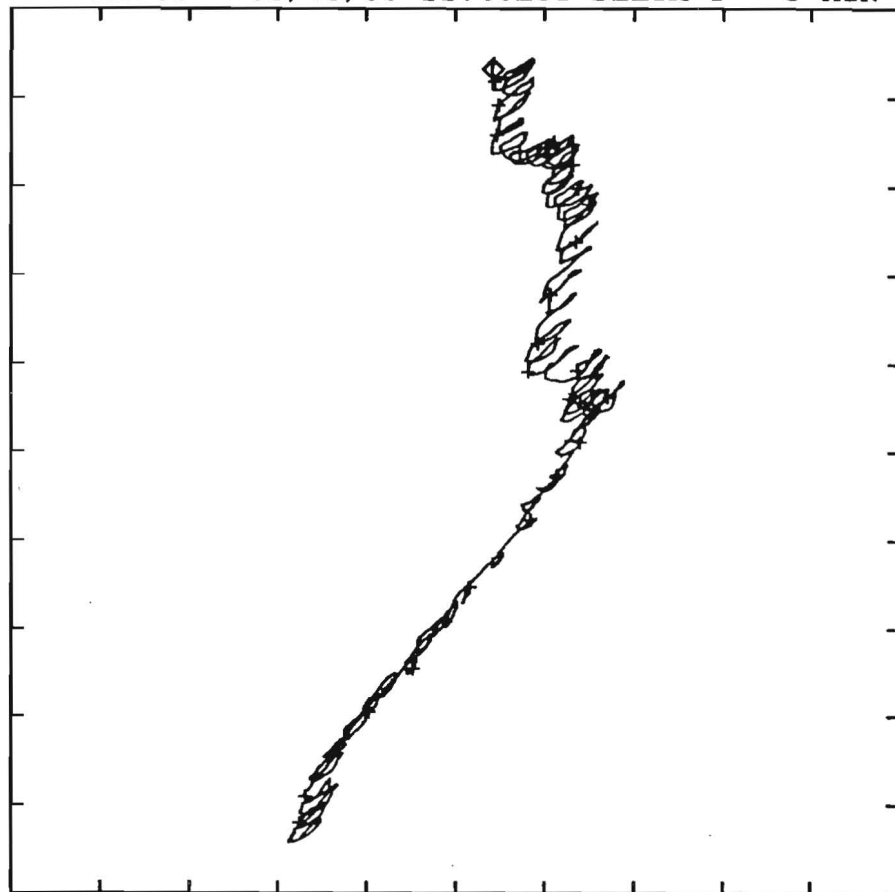
Station 2SC, 40 59.2N 73 24.8W

Instrument depth(below MLW) = 26.2 m

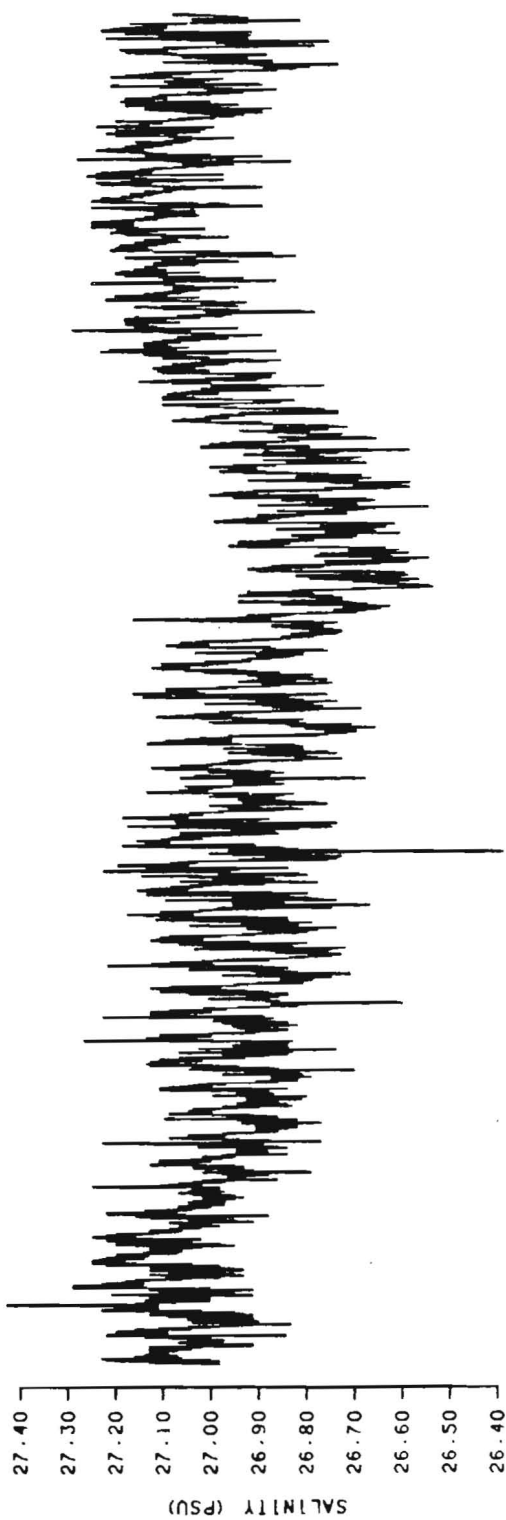
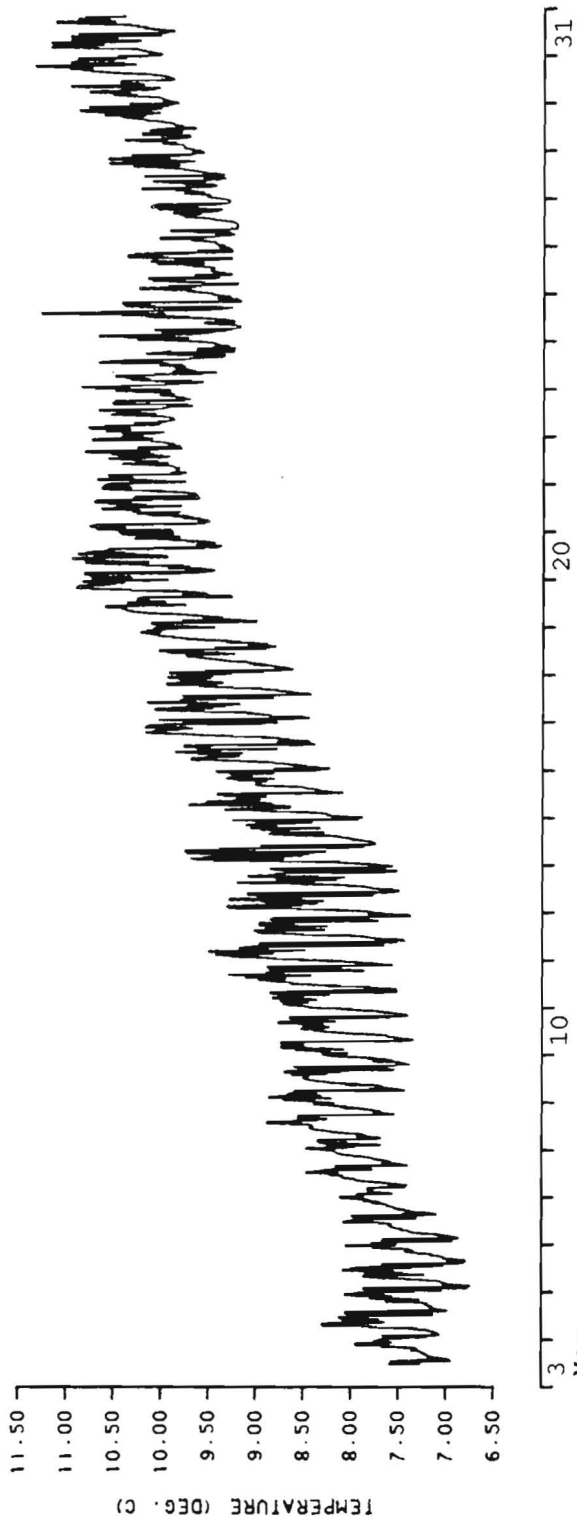
Water depth(relative to MLW) = 29.3 m

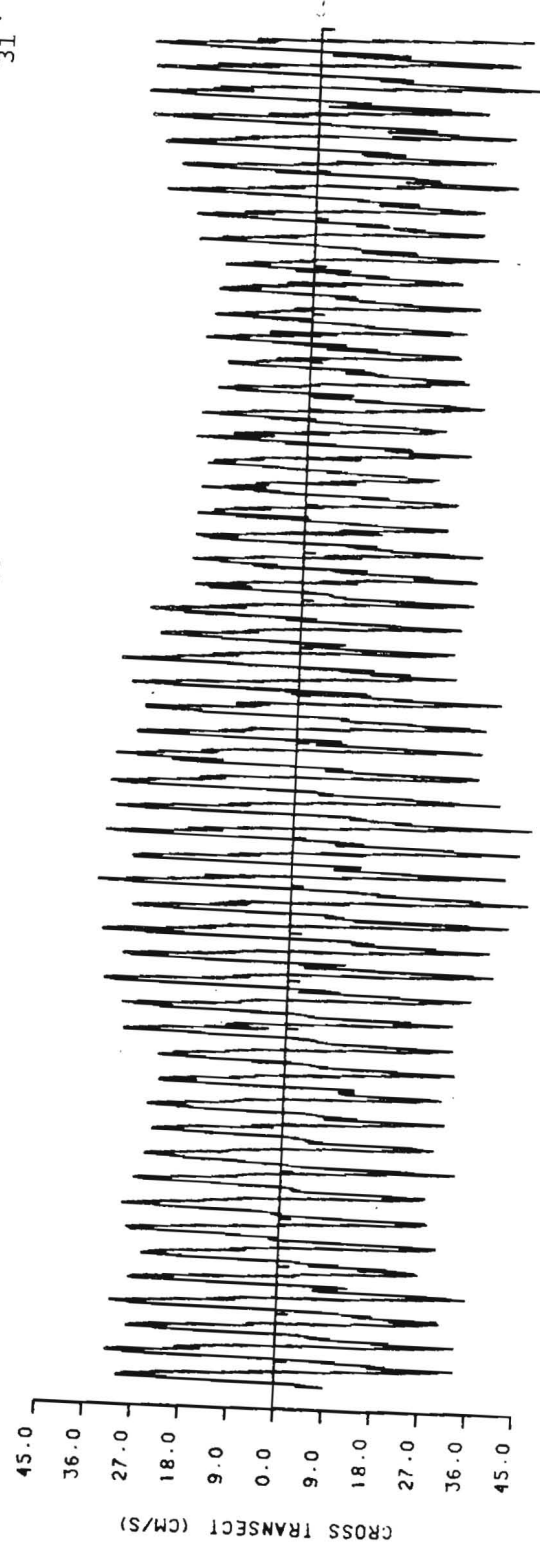
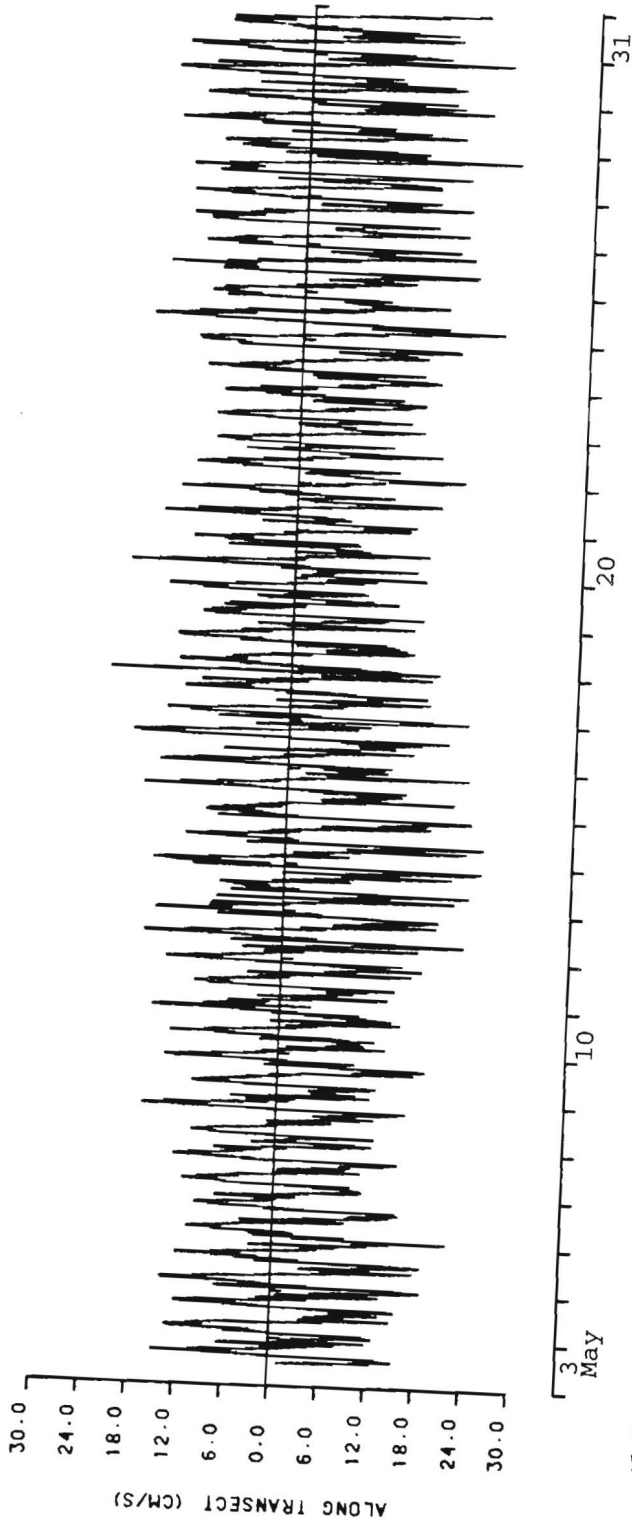
SCALE = 4.0 CM/S PER TICK

A1348 05/03/88 11:40EST DELTA T= 5 MIN



1 TICK = 8 KILOMETERS





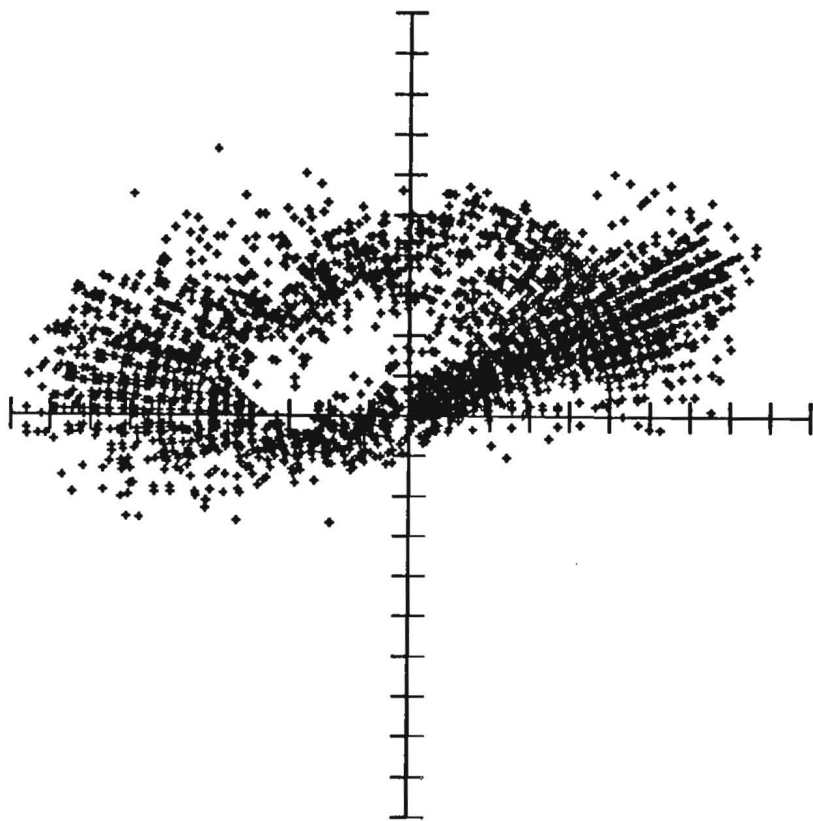
Current meter : ENDECO #1740107
 Station # and location : 2S , 40 58.4N 73 24.3W
 Instrument depth (MLW) : 2.7m
 Water depth (MLW) : 11.9m
 Start time : 05/03/88 10:08 EST
 Stop time : 05/31/88 11:16 EST
 Duration : 28 days 1 hours 8 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 20194
 NUMBER OF TEMPERATURE POINTS = 20194
 NUMBER OF SALINITY POINTS = 20194

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		338	68				
MEAN	=	10.89	10.12	36.35	14.87	10.61	26.61
VARIANCE	=	169.30	1185.89	255.55	677.60	3.90	0.20
STD. DEV.	=	13.01	34.44	15.99	26.03	1.98	0.44
MAX.	=	59.50	73.02	73.44		16.66	27.69
MIN.	=	-25.46	-70.53	0.00		6.95	25.19

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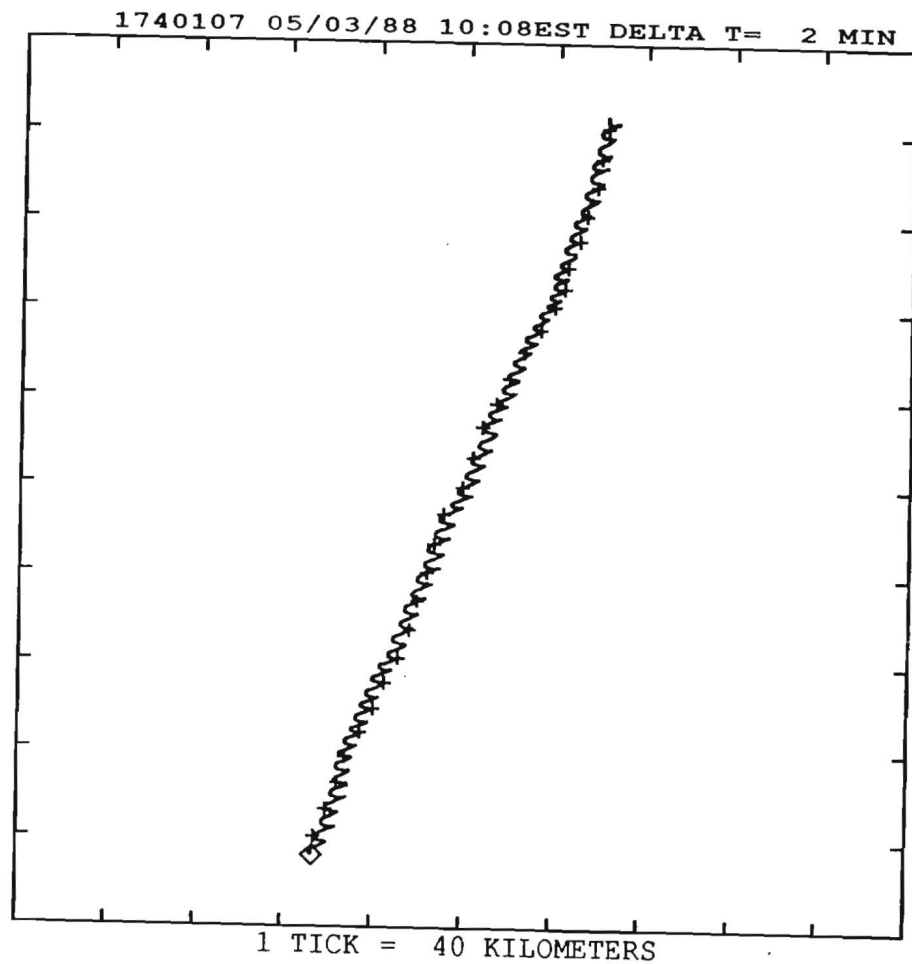
.1740107 05/03/88 10: 8EST

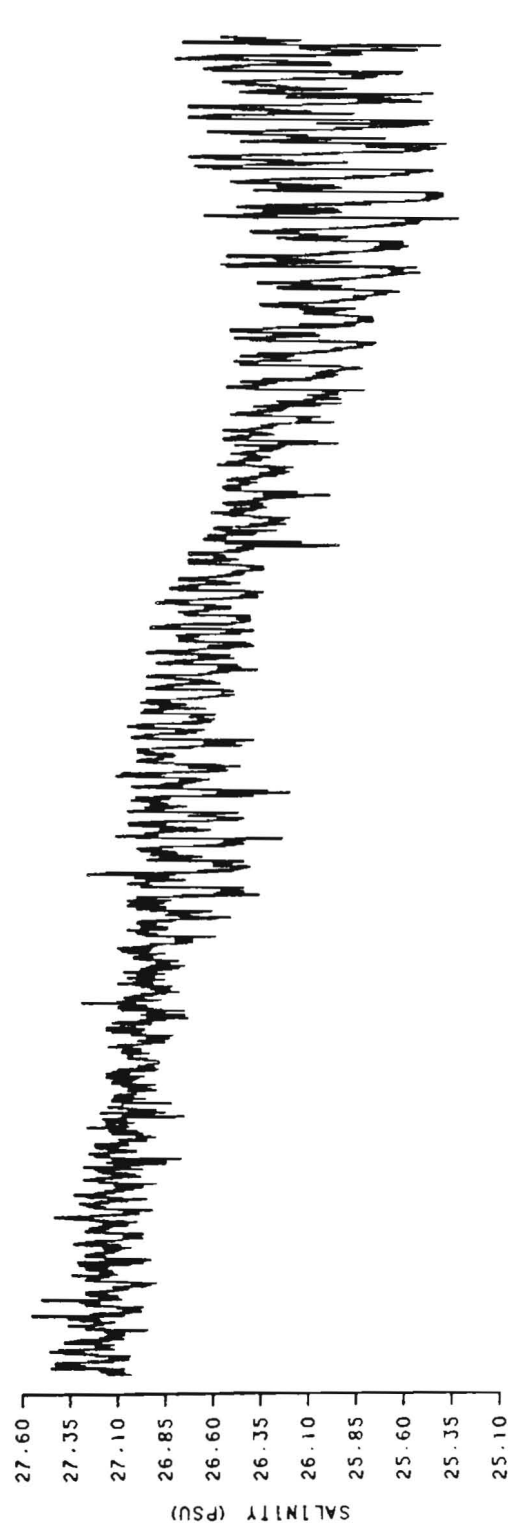
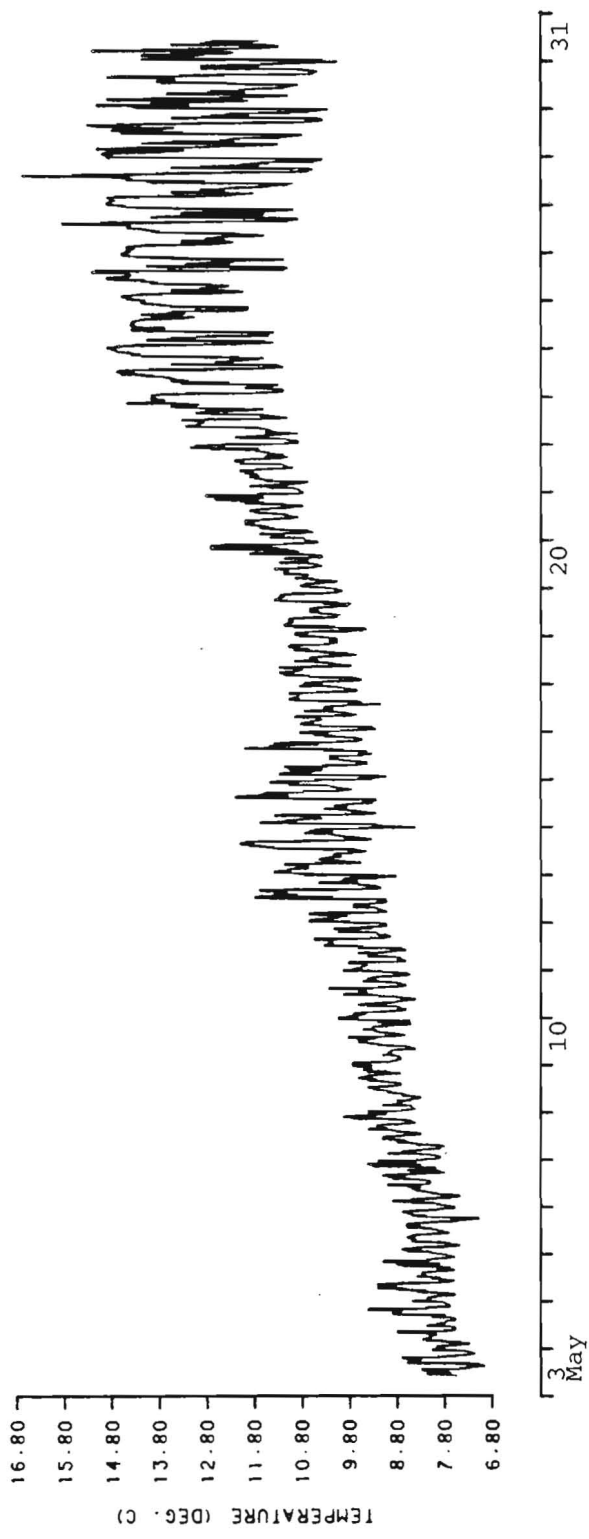
Station 25 , 40 58.4N 73 24.3W

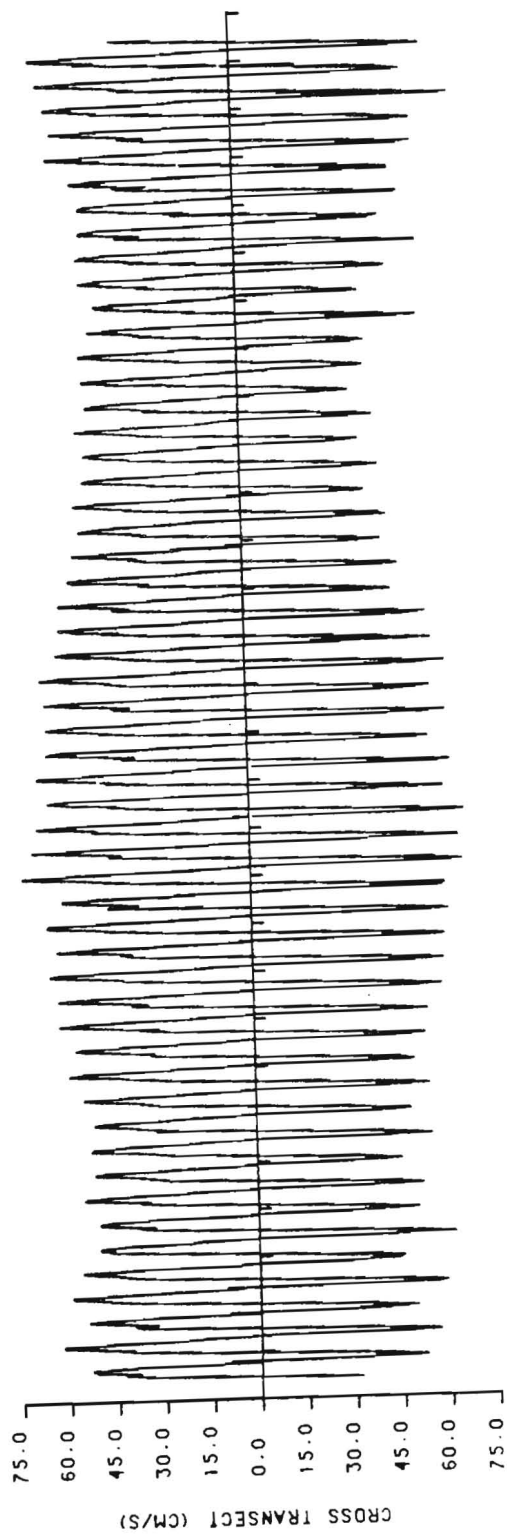
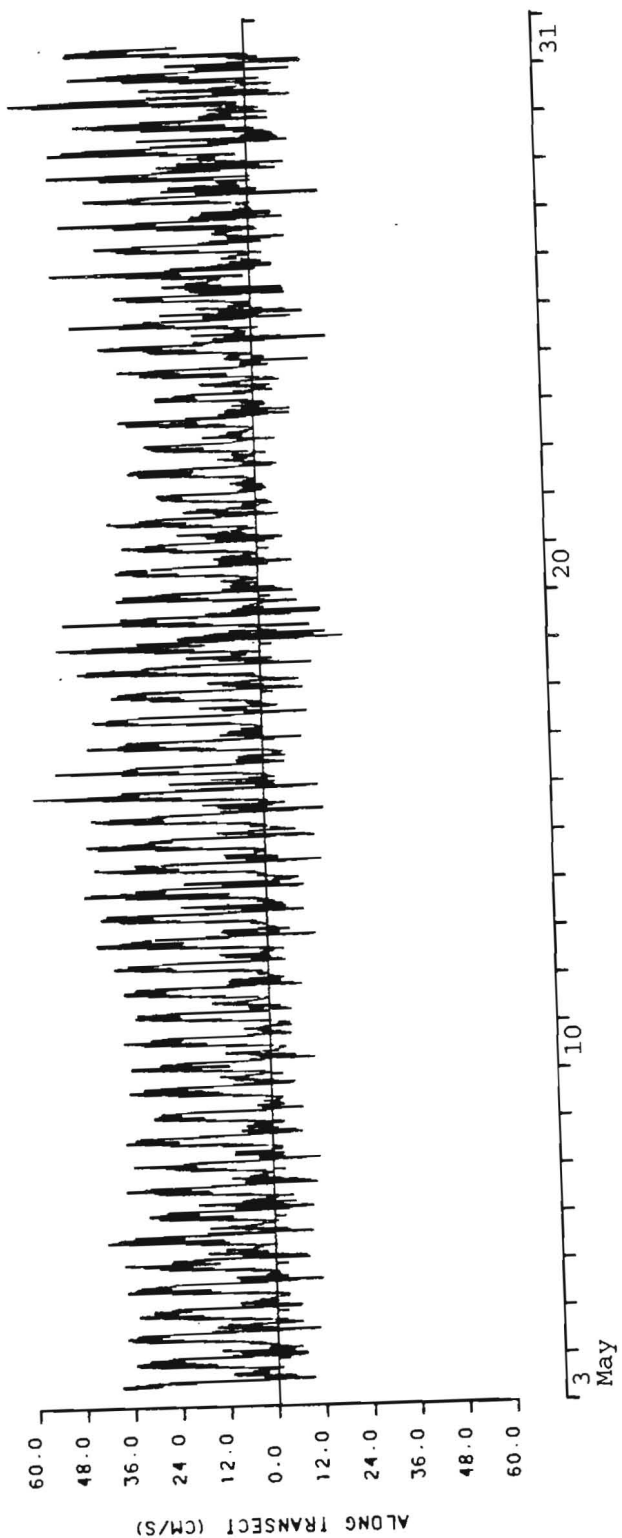
Instrument depth(below MLW) = 2.7 m

Water depth(relative to MLW) = 11.9 m

SCALE = 7.5 CM/S PER TICK







Current meter : AANDERAA #A1351
 Station # and location : 2S , 40 58.4N 73 24.3W
 Instrument depth (MLW) : 8.8m
 Water depth (MLW) : 11.9m
 Start time : 05/03/88 10:20 EST
 Stop time : 05/23/88 16:30 EST
 Duration : 20 days 6 hours 10 minutes
 Sampling interval : 5 minutes
 Comments:

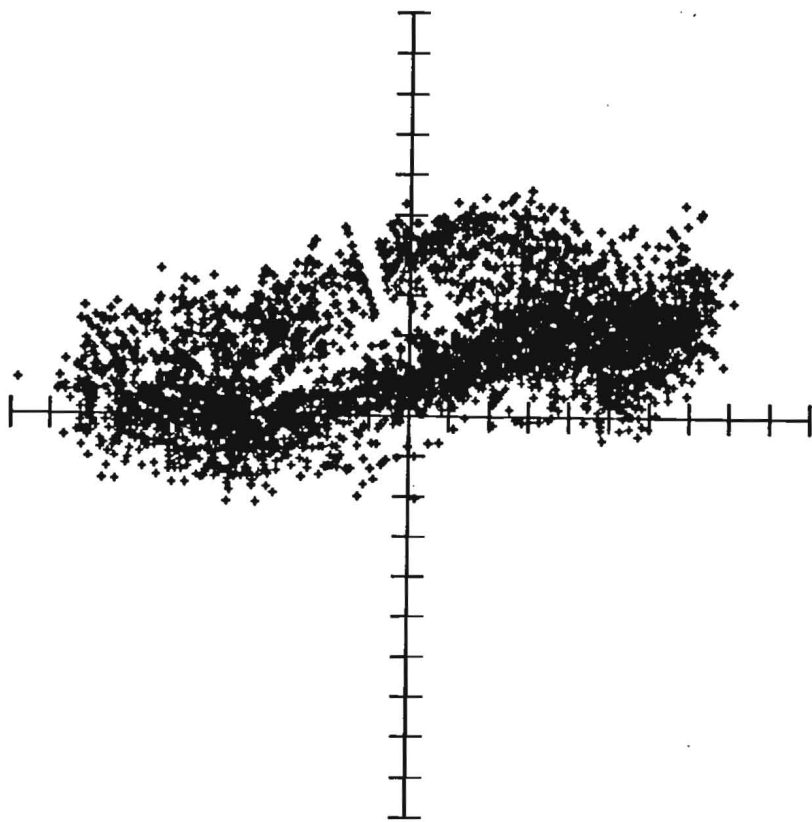
Data unreliable beyond 23 May.

NUMBER OF CURRENT DATA POINTS = 5834
 NUMBER OF TEMPERATURE POINTS = 5834
 NUMBER OF SALINITY POINTS = 5834

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		338	68				
MEAN	=	9.77	7.84	33.91	12.53	8.50	27.58
VARIANCE	=	129.98	1039.81	176.76	584.90	1.05	0.01
STD. DEV.	=	11.40	32.25	13.30	24.18	1.03	0.10
MAX.	=	41.57	62.10	69.08		11.20	27.97
MIN.	=	-20.31	-61.43	1.91		6.26	27.16

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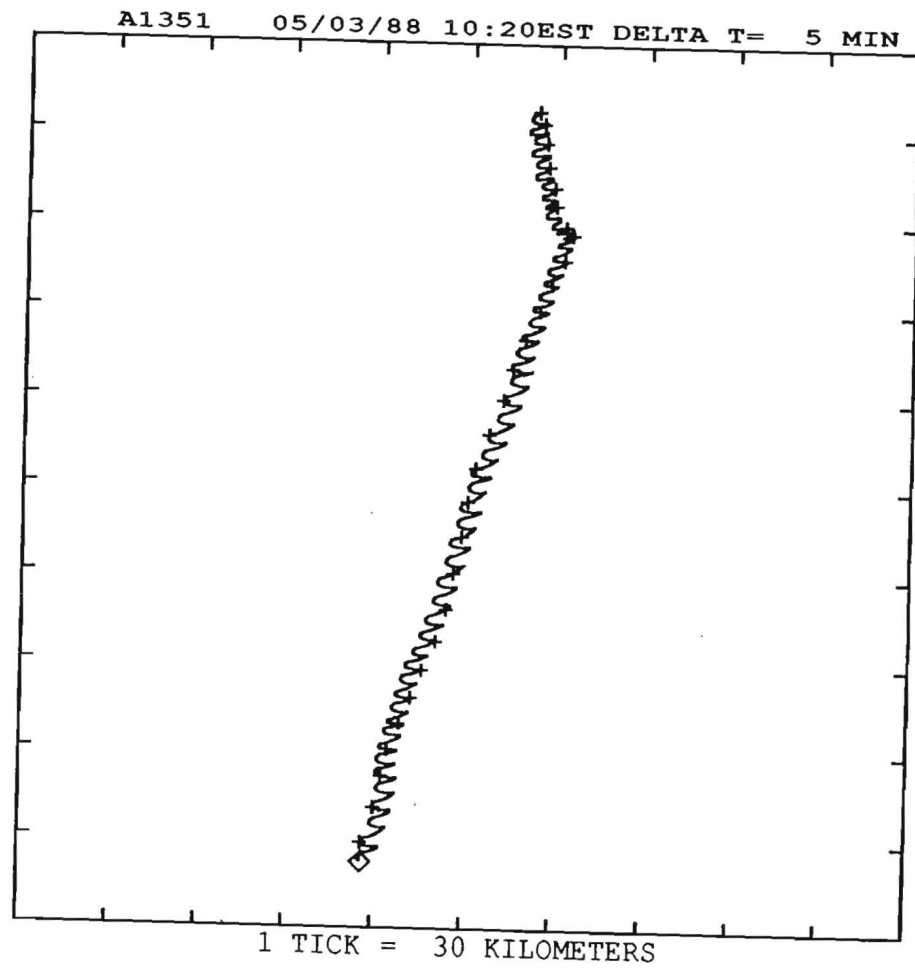
A1351 05/03/88 10:20EST

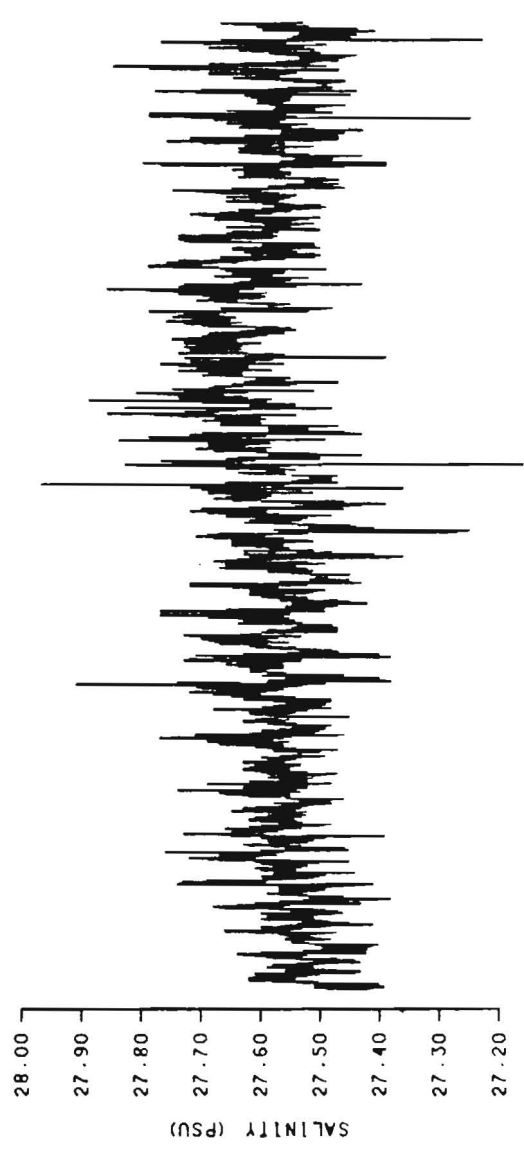
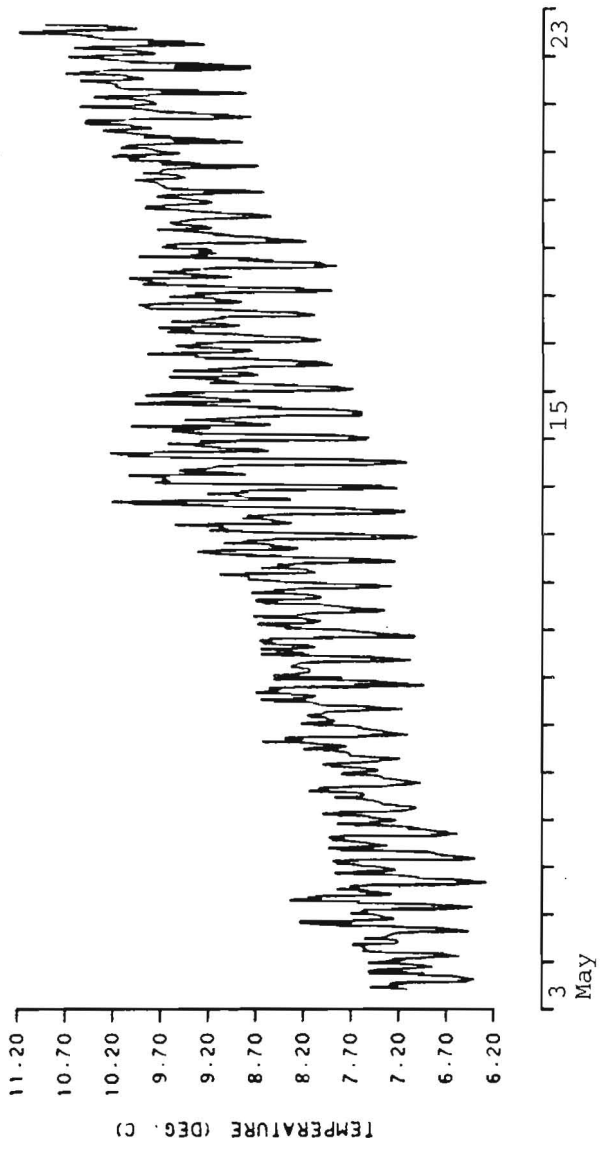
Station 2S , 40 58.4N 73 24.3W

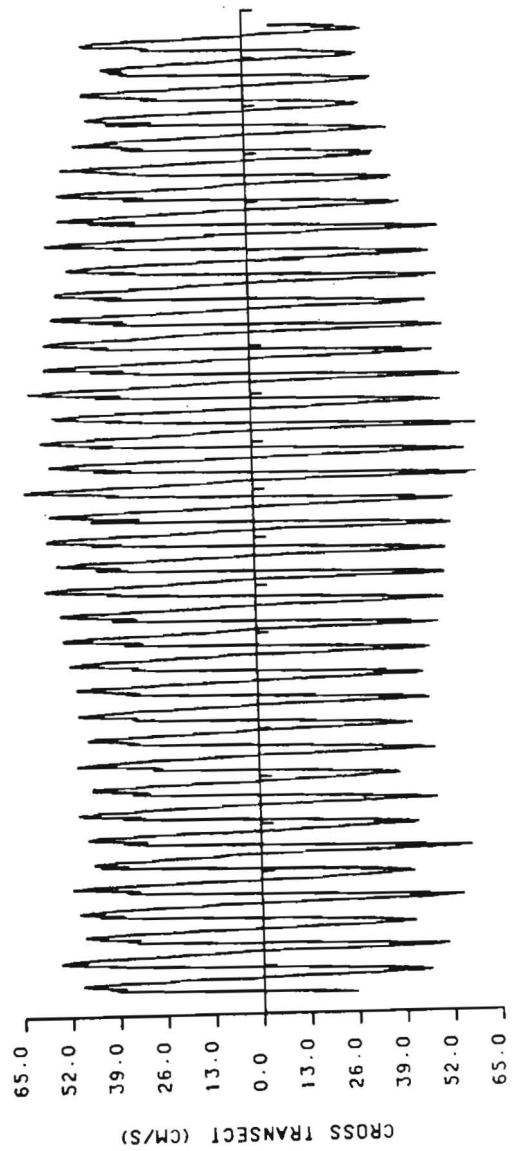
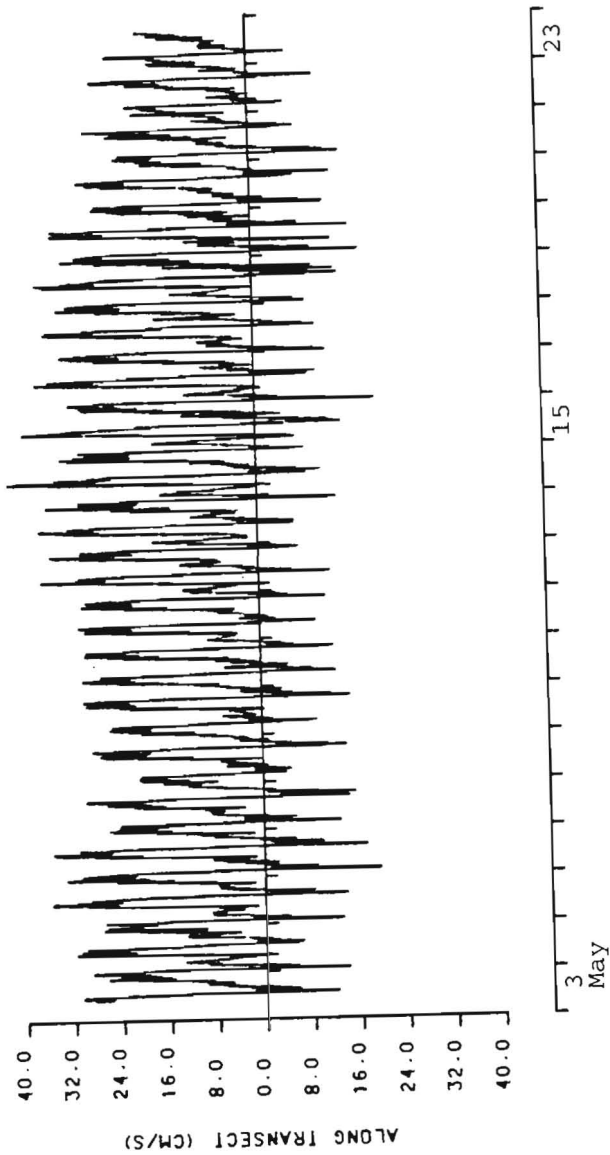
Instrument depth(below MLW) = 8.8 m

Water depth(relative to MLW) = 11.9 m

SCALE = 7.0 CM/S PER TICK







TRANSECT 3

14 July - 9 August 1988

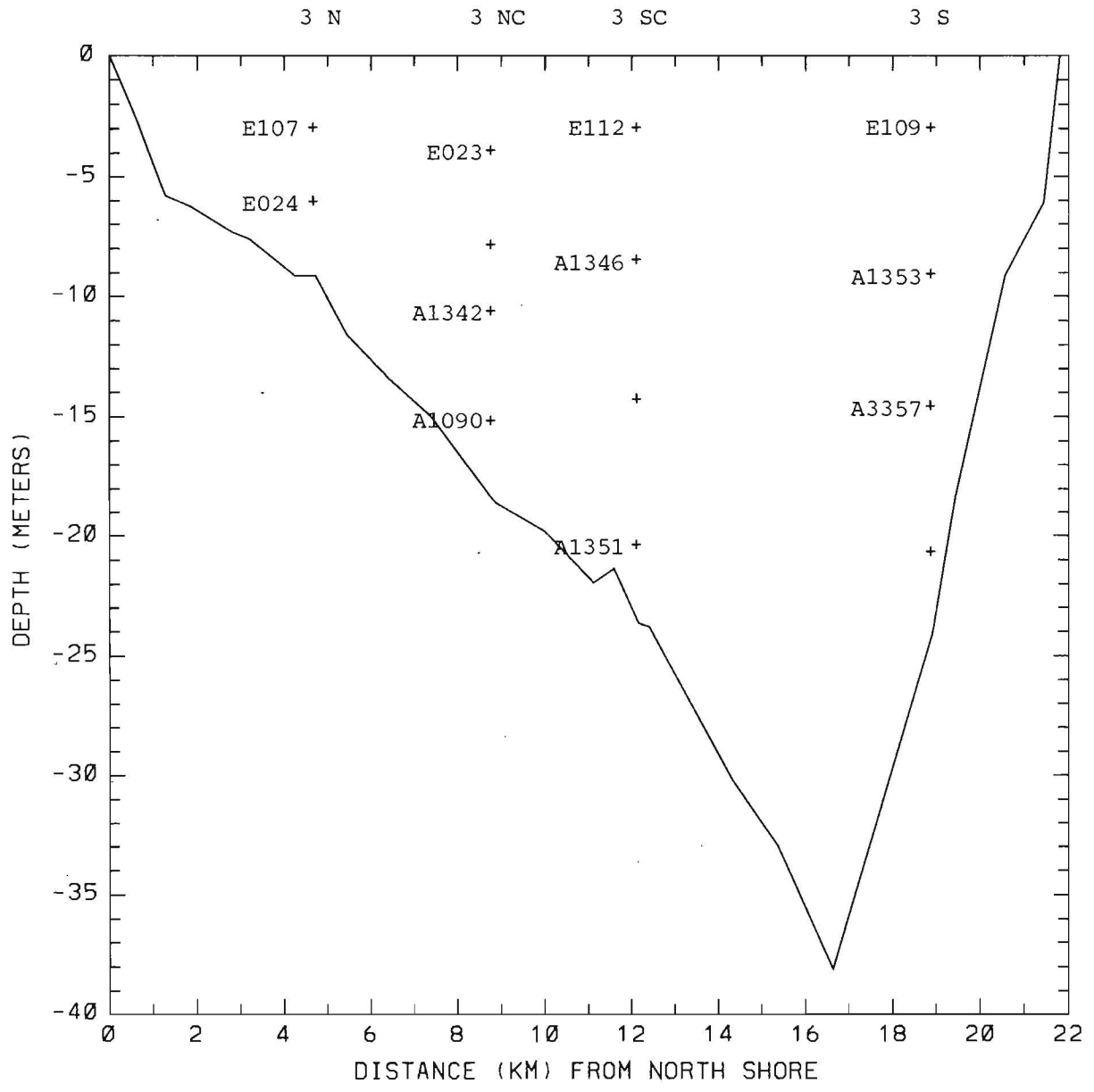


Fig. 4. Transect 3 showing the locations of the current meters

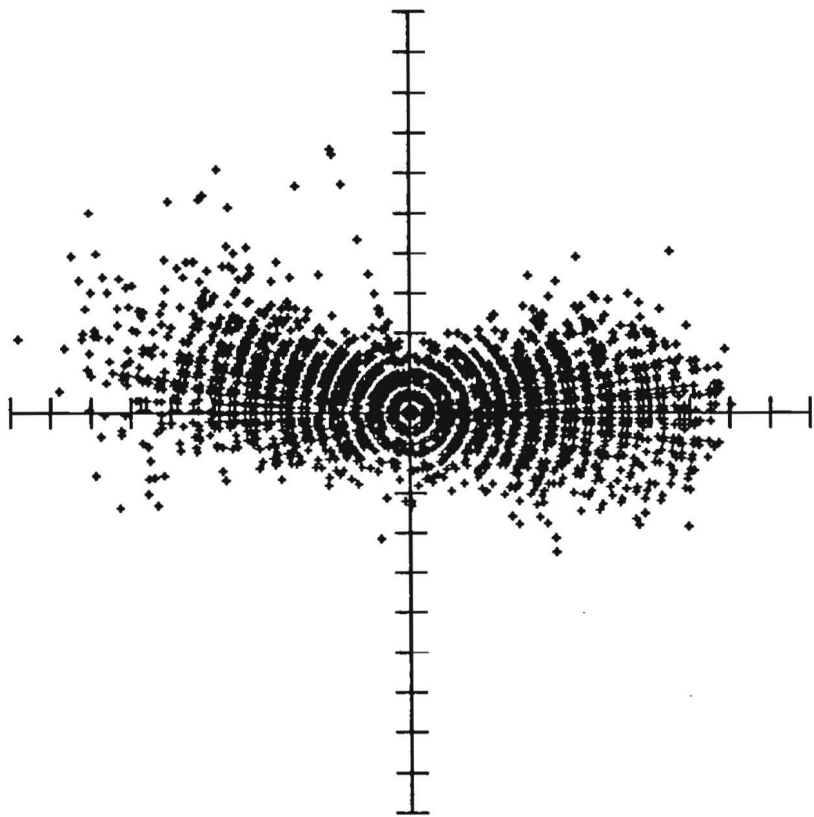
Current meter : ENDECO #1740107
 Station # and location : 3N , 41 07.3N 73 10.2W
 Instrument depth (MLW) : 3.0m
 Water depth (MLW) : 9.1m
 Start time : 07/14/88 11:58 EST
 Stop time : 08/08/88 07:52 EST
 Duration : 24 days 19 hours 54 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 17877
 NUMBER OF TEMPERATURE POINTS = 17877
 NUMBER OF SALINITY POINTS = 17877

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT	TOWARDS				
		345	75				
MEAN	=	1.44	2.53	18.43	2.91	19.73	27.45
VARIANCE	=	74.07	365.68	108.46	219.88	1.19	0.36
STD. DEV.	=	8.61	19.12	10.41	14.83	1.09	0.60
MAX.	=	42.86	44.63	62.03		23.93	28.69
MIN.	=	-25.91	-49.54	0.00		17.29	25.57

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1740107 07/14/88

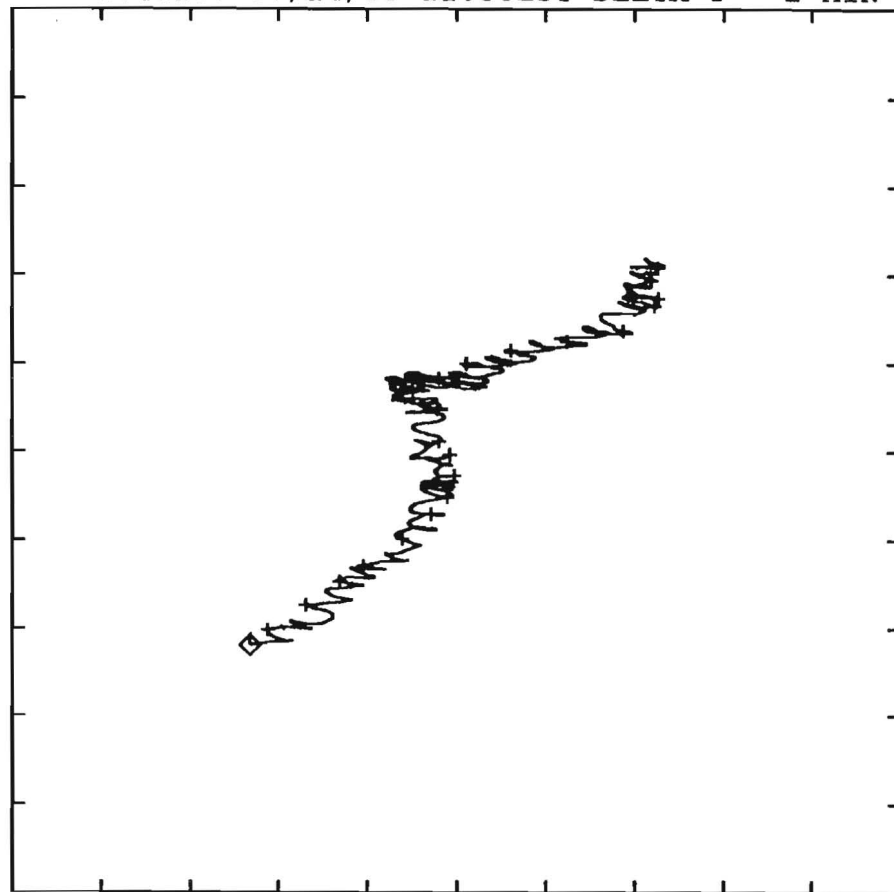
Station 3N , 41 07.3N 73 10.2W

Instrument depth(below MLW) = 3.0 m

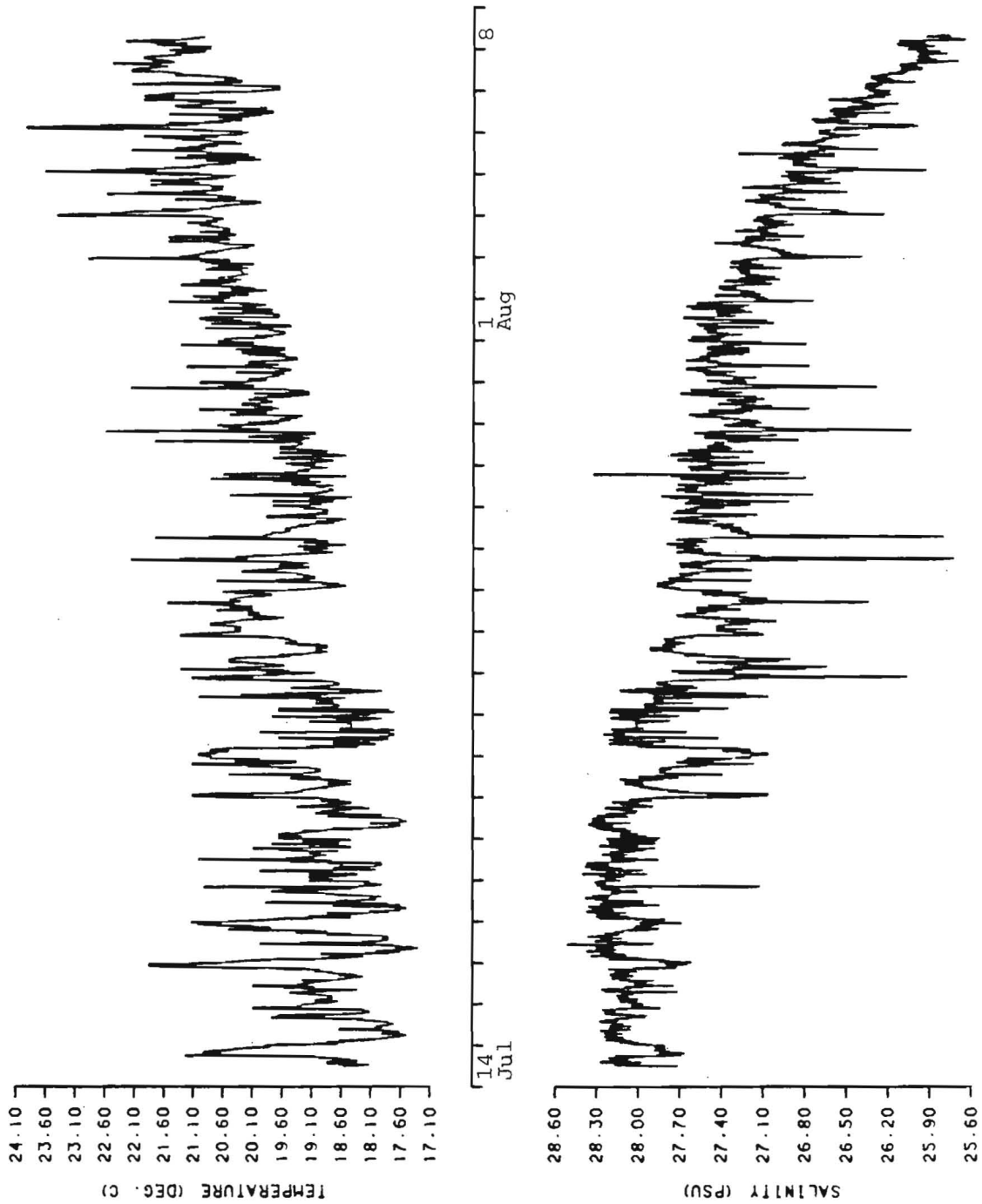
Water depth(relative to MLW) = 9.1 m

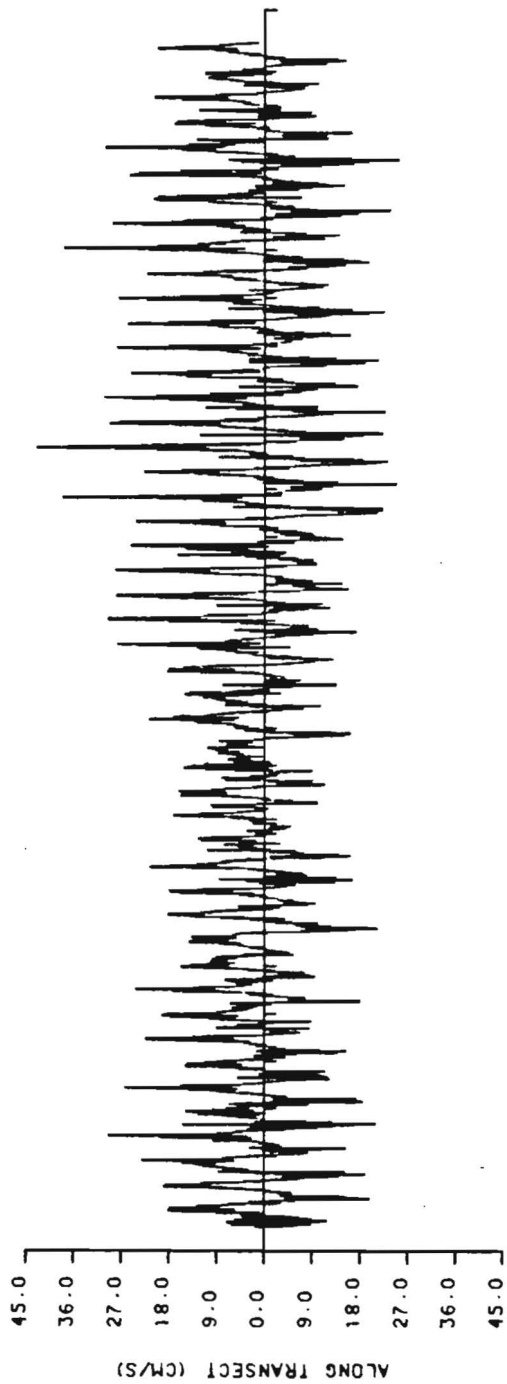
SCALE = 5.5 CM/S PER TICK

1740107 07/14/88 11:58EST DELTA T= 2 MIN

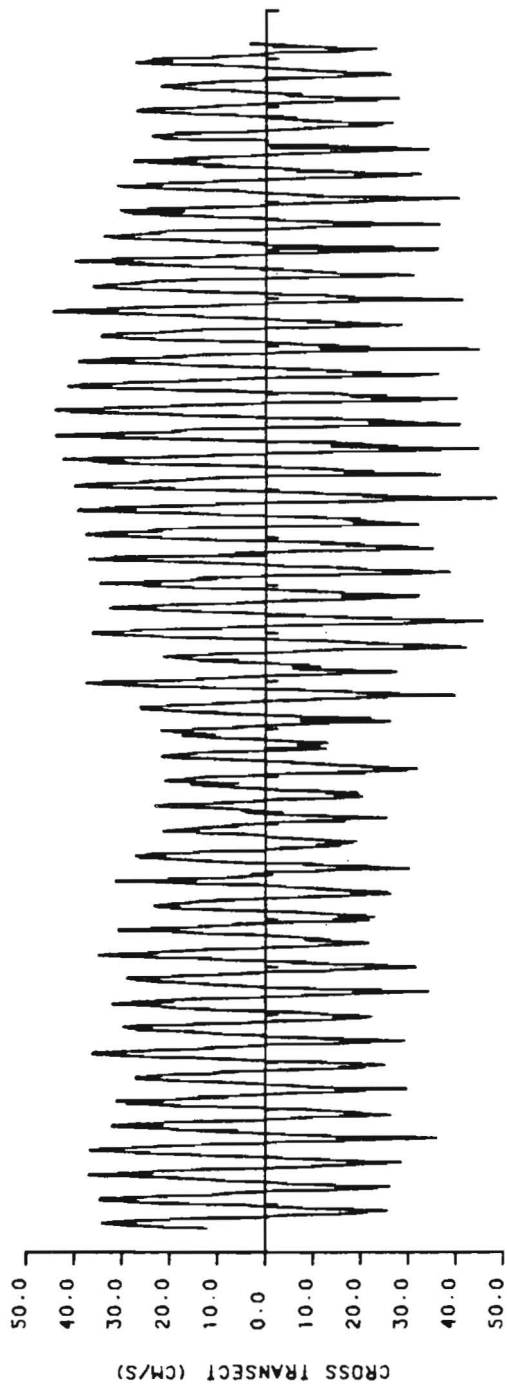


1 TICK = 10 KILOMETERS





14 Jul 1 Aug 8



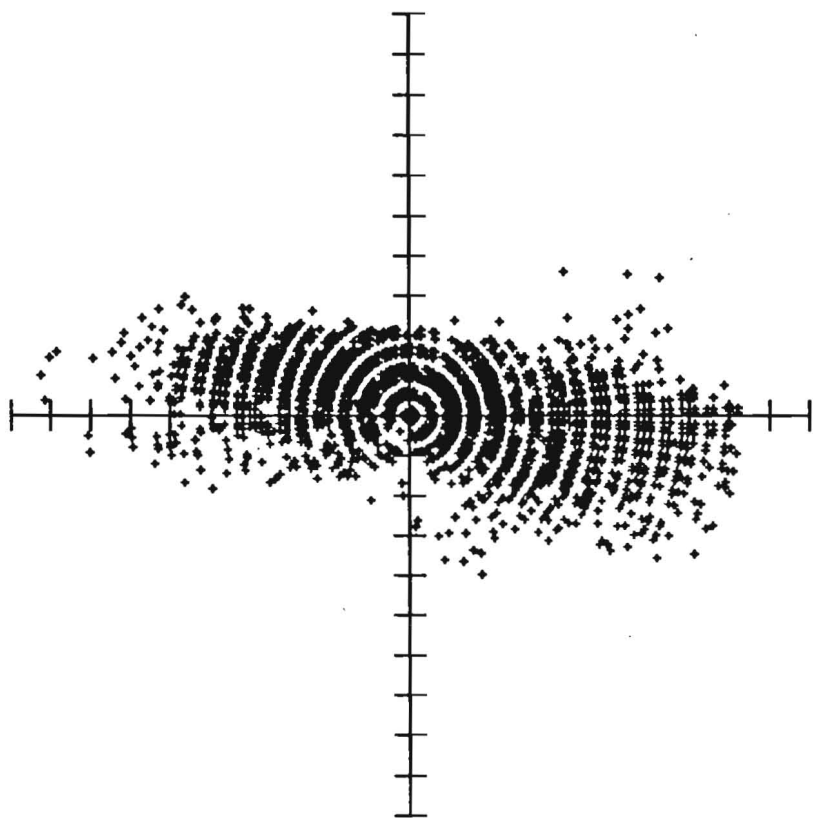
Current meter : ENDECO #1740024
 Station # and location : 3N , 41 07.3N 73 10.2W
 Instrument depth (MLW) : 6.1m
 Water depth (MLW) : 9.1m
 Start time : 07/14/88 11:58 EST
 Stop time : 08/08/88 07:50 EST
 Duration : 24 days 19 hours 52 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 17876
 NUMBER OF TEMPERATURE POINTS = 17876
 NUMBER OF SALINITY POINTS = 17876

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		345	75				
MEAN	=	-0.31	3.16	12.94	3.18	19.03	27.70
VARIANCE	=	44.67	177.47	64.89	111.07	1.01	0.01
STD. DEV.	=	6.68	13.32	8.06	10.54	1.00	0.09
MAX.	=	17.37	33.29	38.46		21.86	28.15
MIN.	=	-20.73	-35.60	0.00		17.26	26.82

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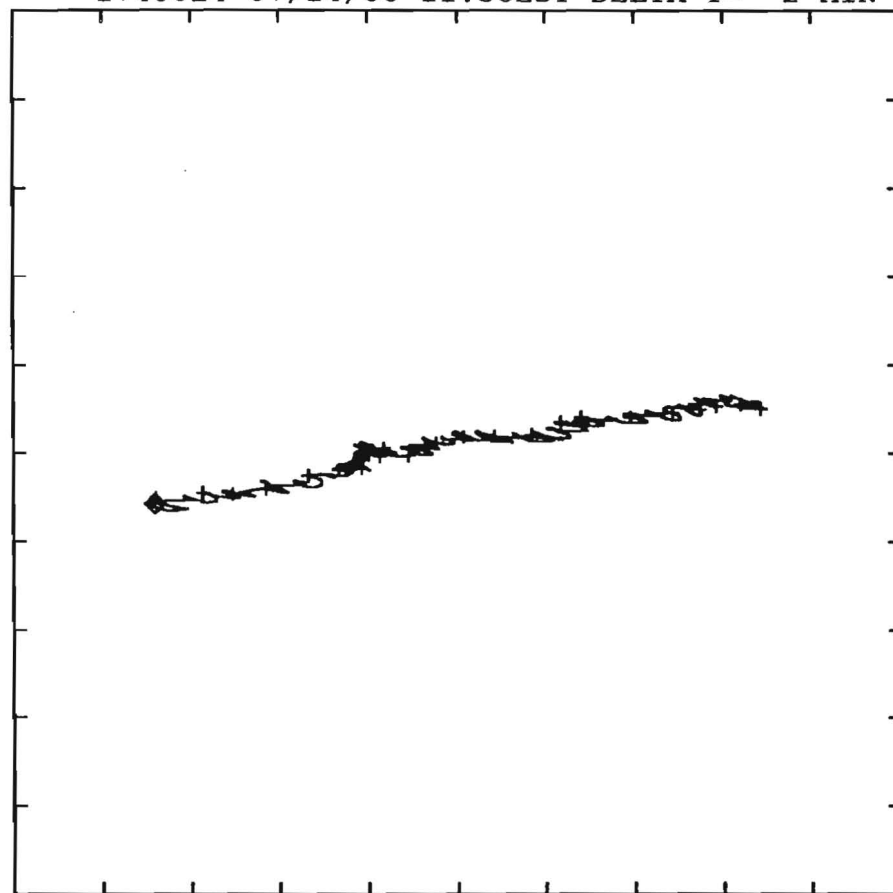
Station 3N , 41 07.3N 73 10.2W

Instrument depth(below MLW) = 6.1 m

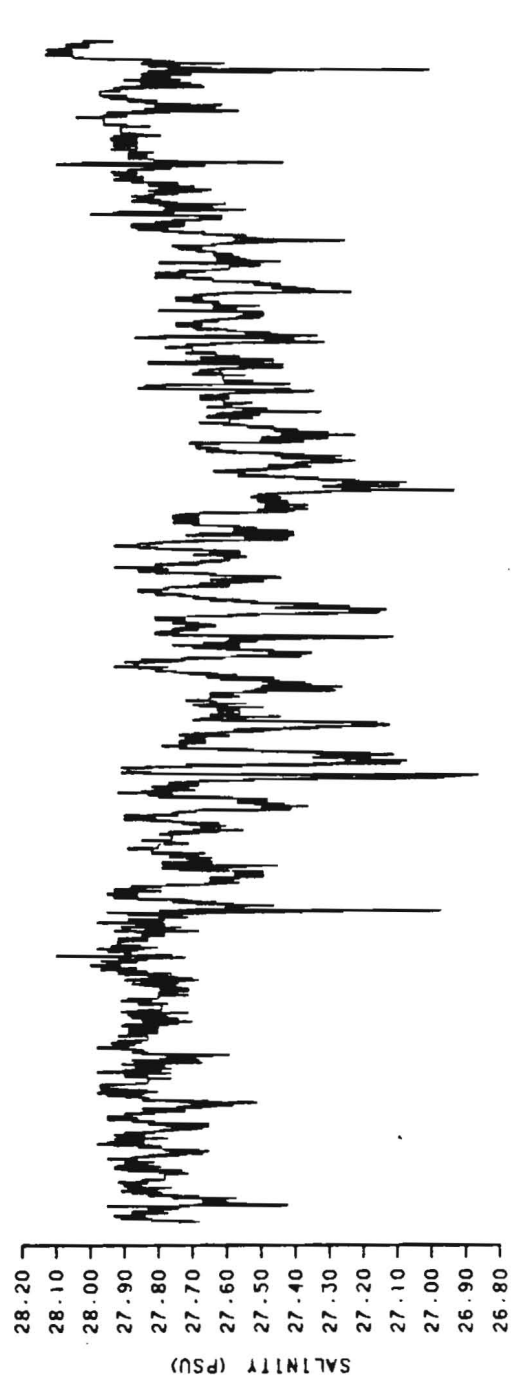
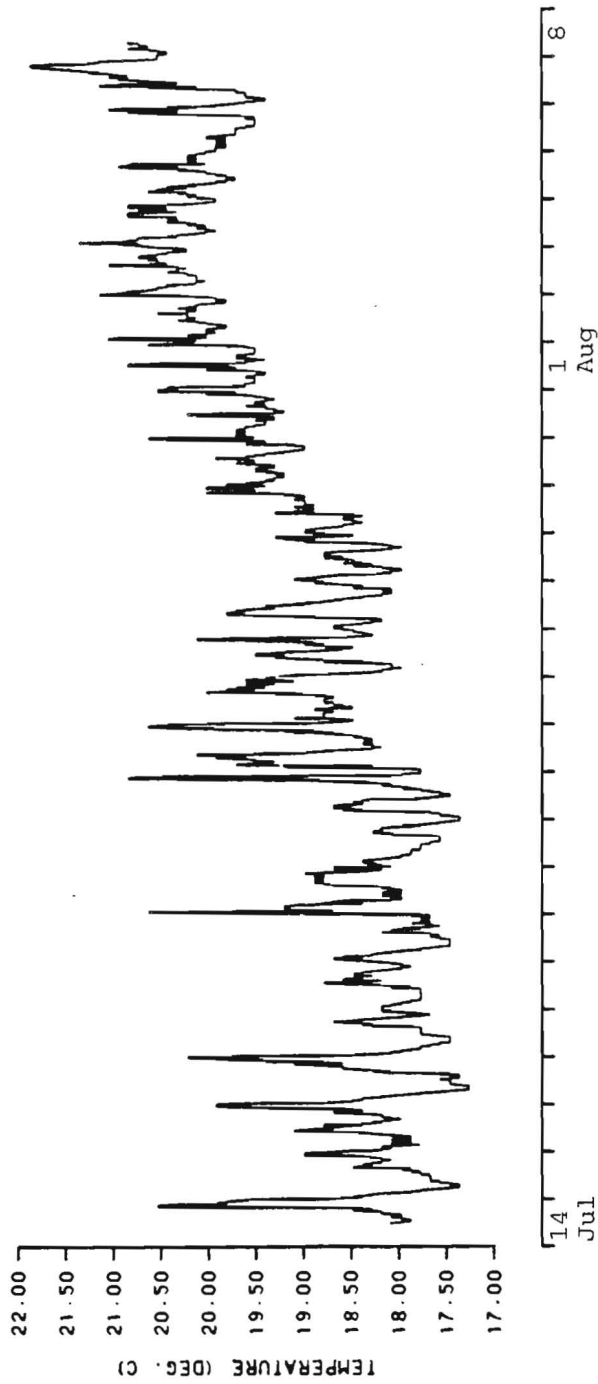
Water depth(relative to MLW) = 9.1 m

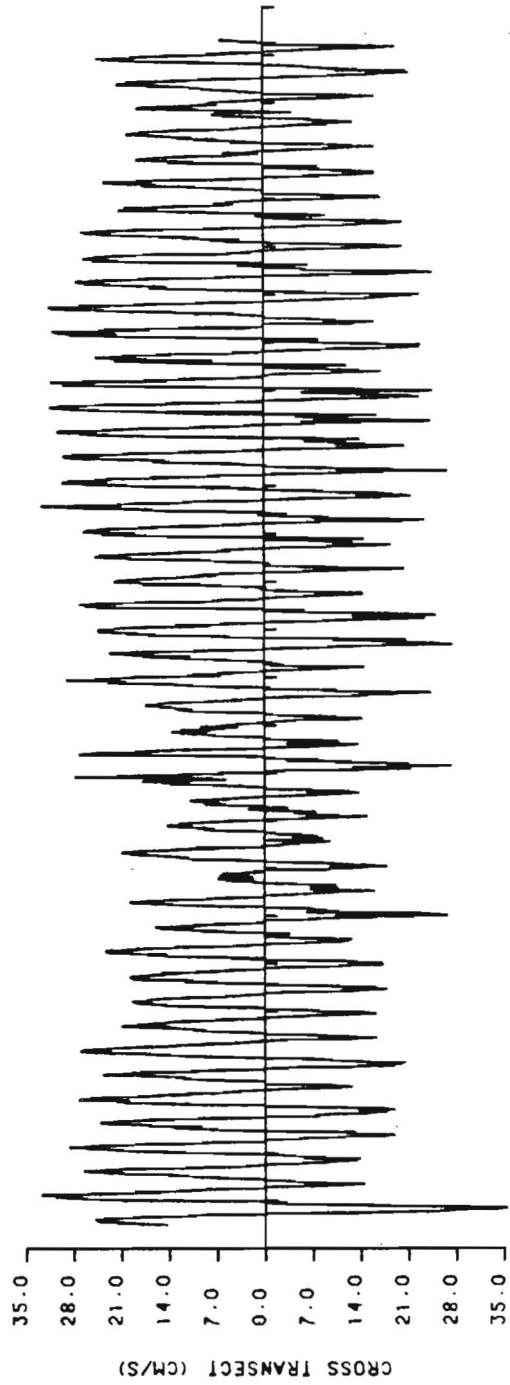
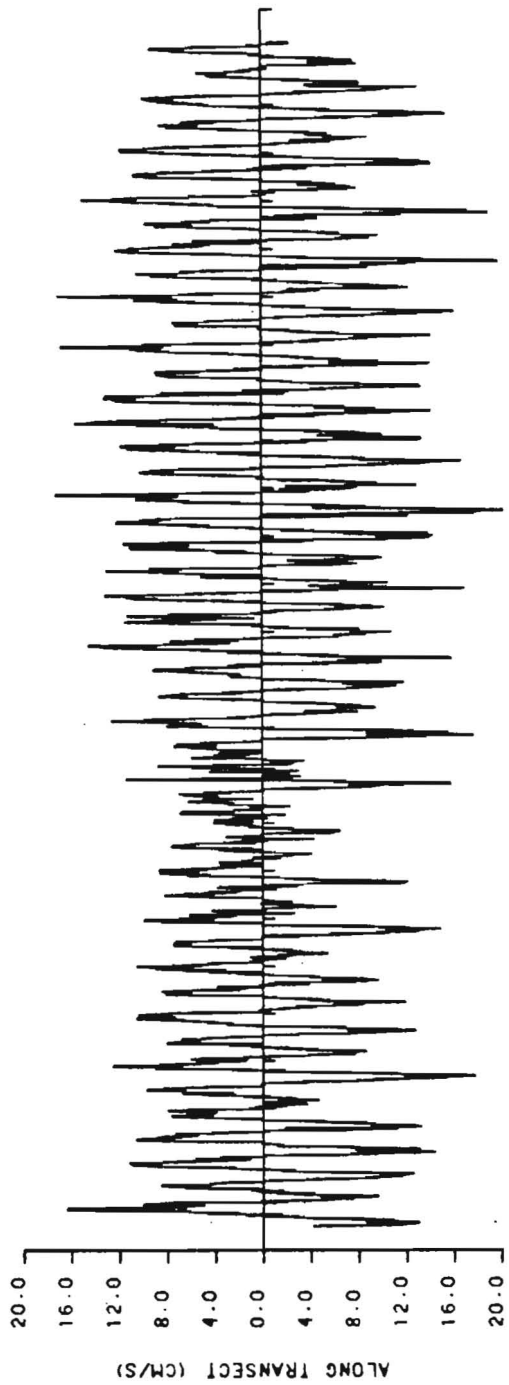
SCALE = 4.0 CM/S PER TICK

1740024 07/14/88 11:58EST DELTA T= 2 MIN



1 TICK = 10 KILOMETERS





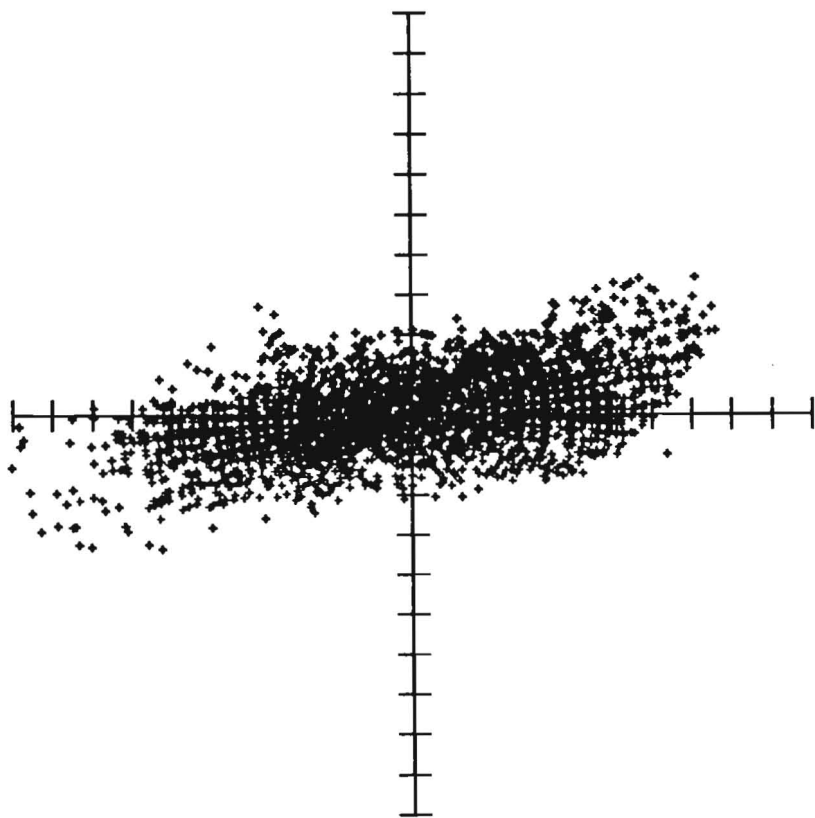
Current meter : ENDECO #1740023
 Station # and location : 3NC, 41 05.0N 73 10.2W
 Instrument depth (MLW) : 4.0m
 Water depth (MLW) : 18.3m
 Start time : 07/14/88 10:38 EST
 Stop time : 08/09/88 08:40 EST
 Duration : 25 days 22 hours 2 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 18661
 NUMBER OF TEMPERATURE POINTS = 18661
 NUMBER OF SALINITY POINTS = 18661

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		345	75				
MEAN	=	0.47	1.24	22.18	1.33	20.29	27.33
VARIANCE	=	38.43	608.36	156.48	323.40	1.77	0.13
STD. DEV.	=	6.20	24.67	12.51	17.98	1.33	0.36
MAX.	=	25.20	56.44	72.59		25.08	28.79
MIN.	=	-19.21	-71.96	0.00		16.66	25.40

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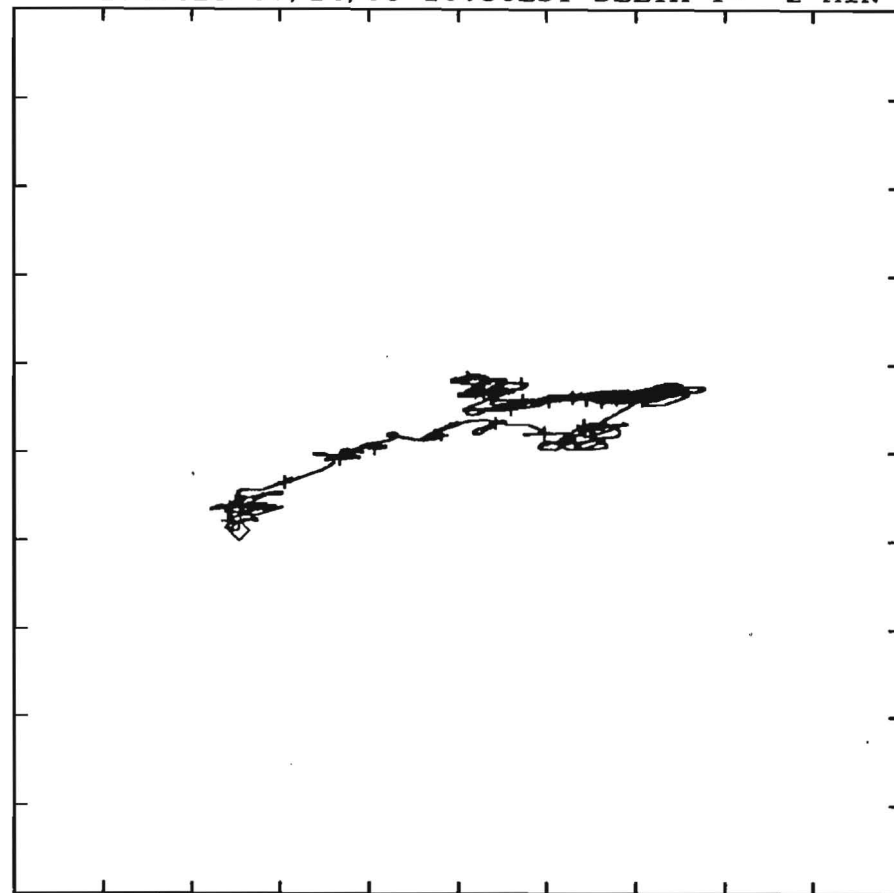
Station 3NC, 41 05.0N 73 10.2W

Instrument depth(below MLW) = 4.0 m

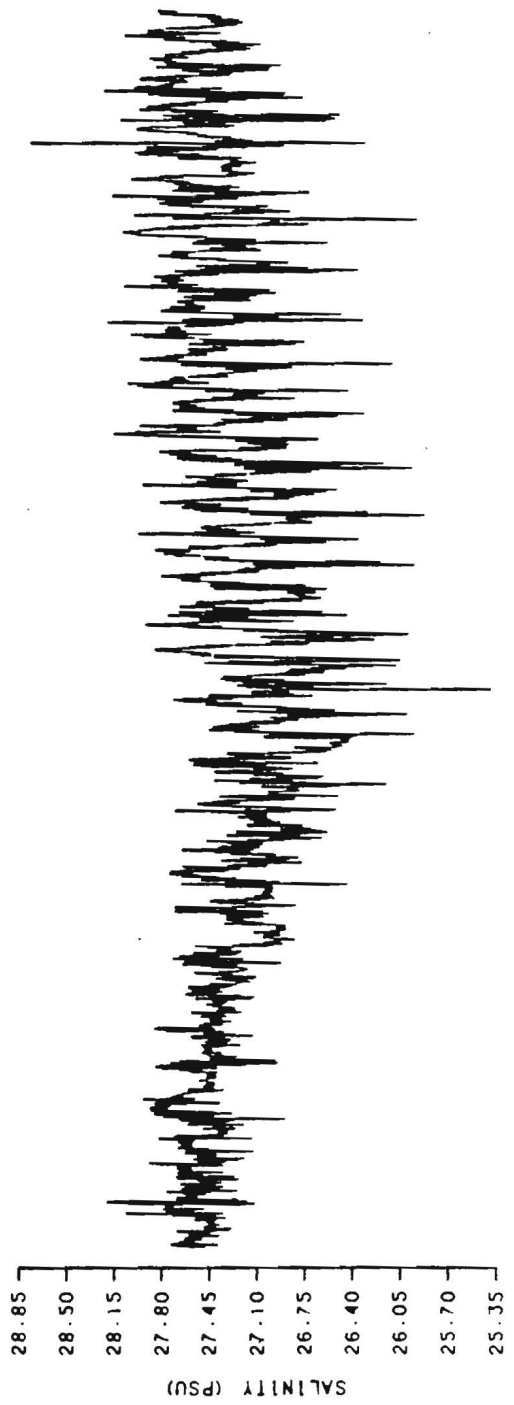
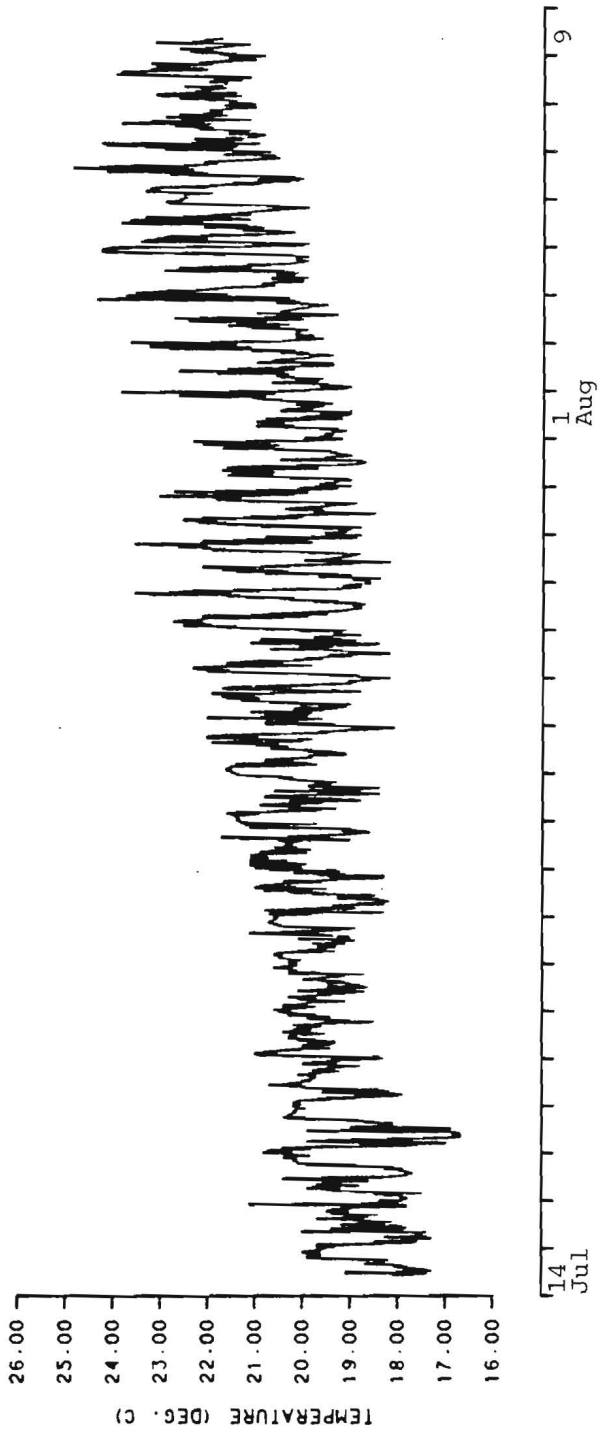
Water depth(relative to MLW) = 18.3 m

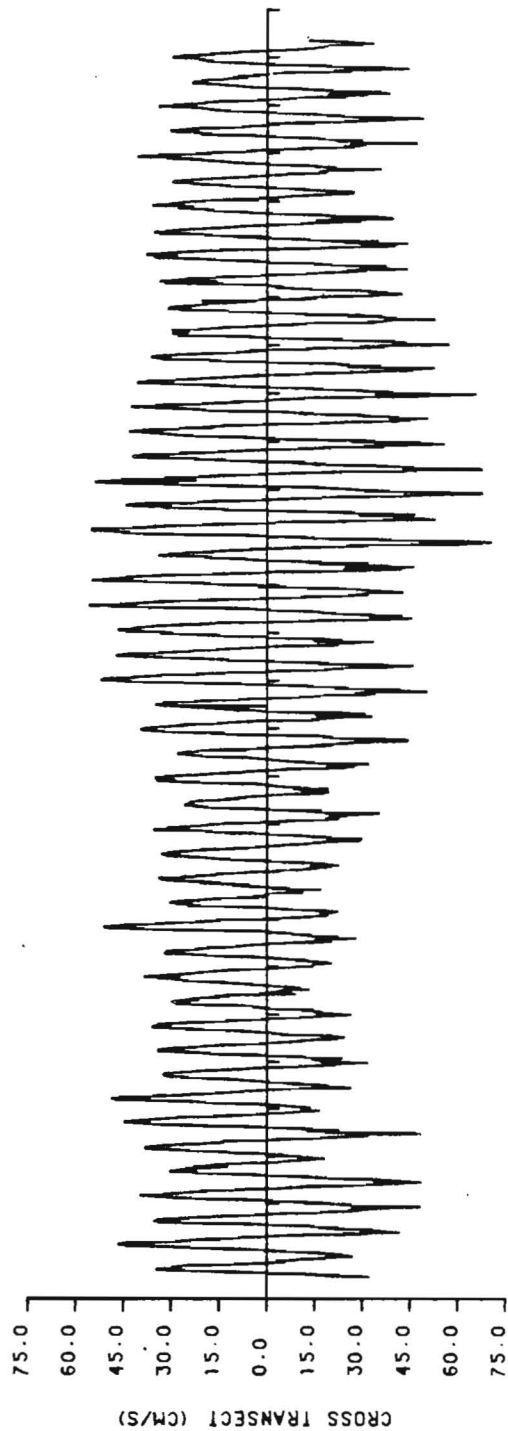
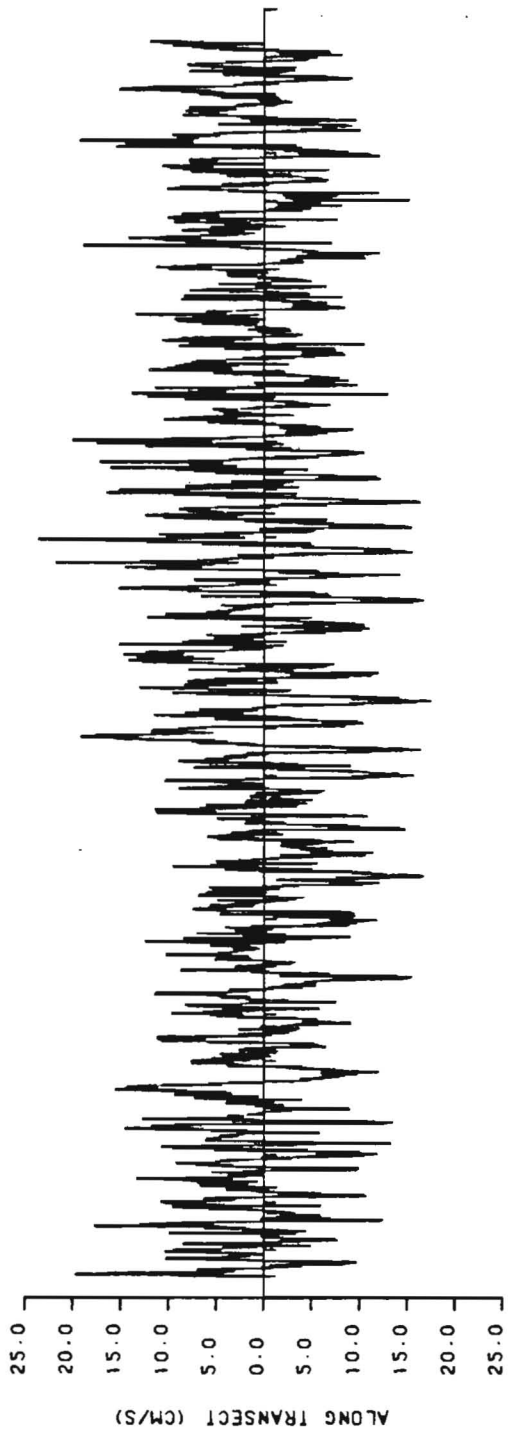
SCALE = 7.0 CM/S PER TICK

1740023 07/14/88 10:38EST DELTA T= 2 MIN



1 TICK = 10 KILOMETERS





Current meter : AANDERAA #A1342
 Station # and location : 3NC, 41 05.0N 73 10.2W
 Instrument depth (MLW) : 10.7m
 Water depth (MLW) : 18.3m
 Start time : 07/14/88 11:20 EST
 Stop time : 08/09/88 11:35 EST
 Duration : 26 days 0 hours 15 minutes
 Sampling interval : 5 minutes

Comments:

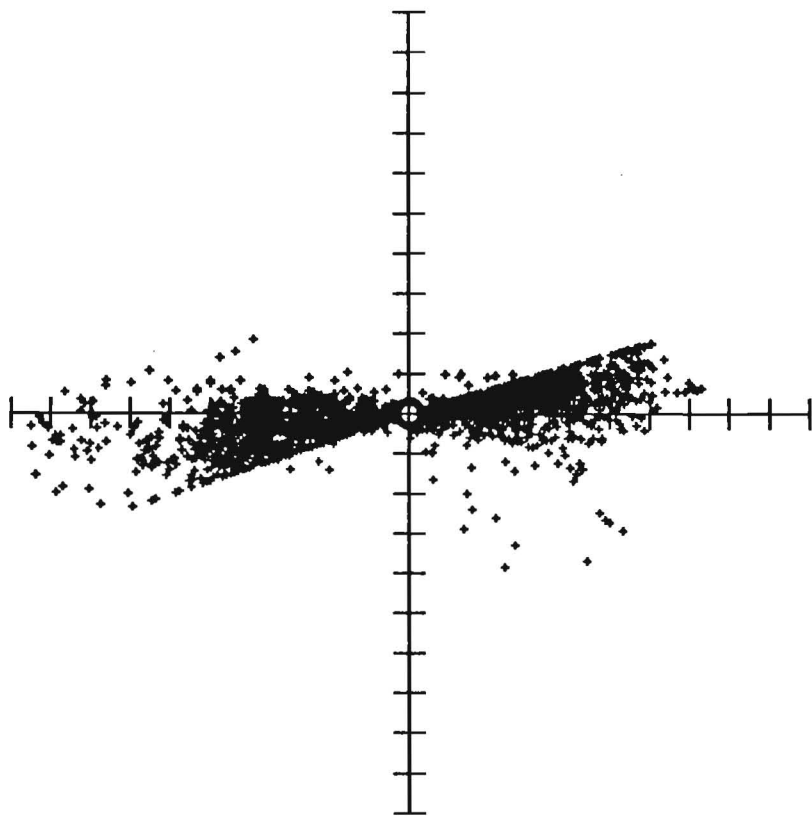
The scatter plot indicates a bias in the direction sensor.
 Velocity records exhibit severe damping due to biofouling
 of rotor.

NUMBER OF CURRENT DATA POINTS = 7491
 NUMBER OF TEMPERATURE POINTS = 7491
 NUMBER OF SALINITY POINTS = 7491

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

	CURRENT		SPEED	VECTOR	TEMP	SAL
	COMPONENT TOWARDS 345	75				
MEAN	= -0.02	-0.68	10.11	0.68	17.83	28.36
VARIANCE	= 8.59	202.67	109.42	105.63	1.39	1.02
STD. DEV.	= 2.93	14.24	10.46	10.28	1.18	1.01
MAX.	= 15.44	39.69	52.80		22.35	29.69
MIN.	= -25.98	-52.45	1.70		16.20	25.39

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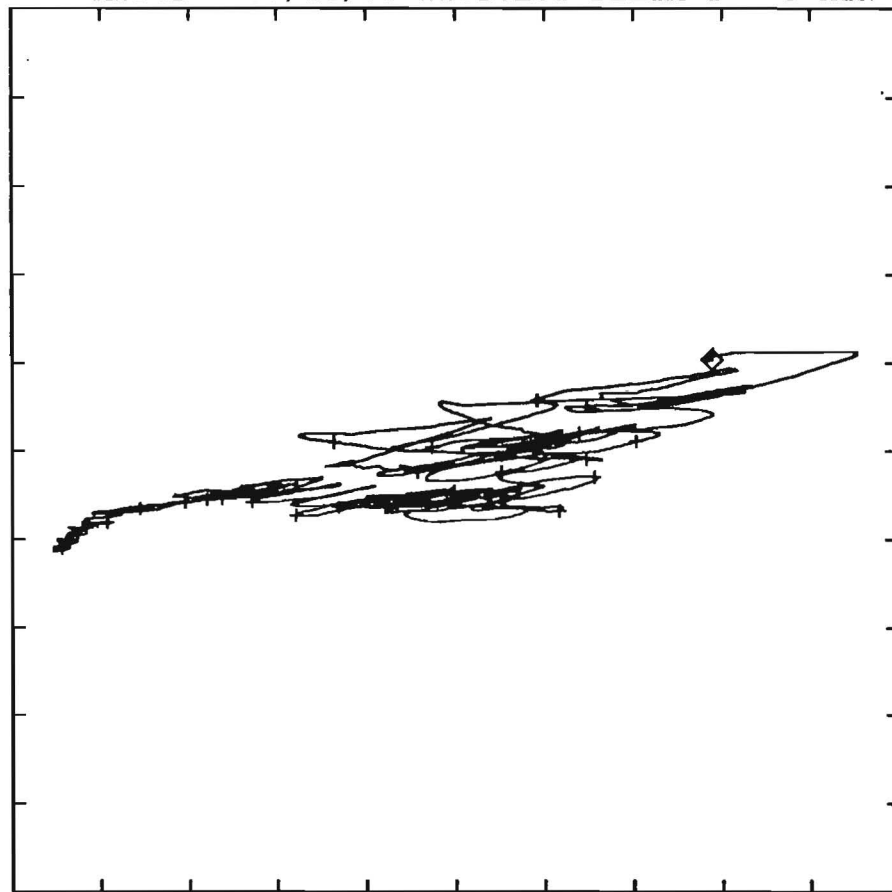
Station 3NC, 41 05.0N 73 10.2W

Instrument depth(below MLW) = 10.7 m

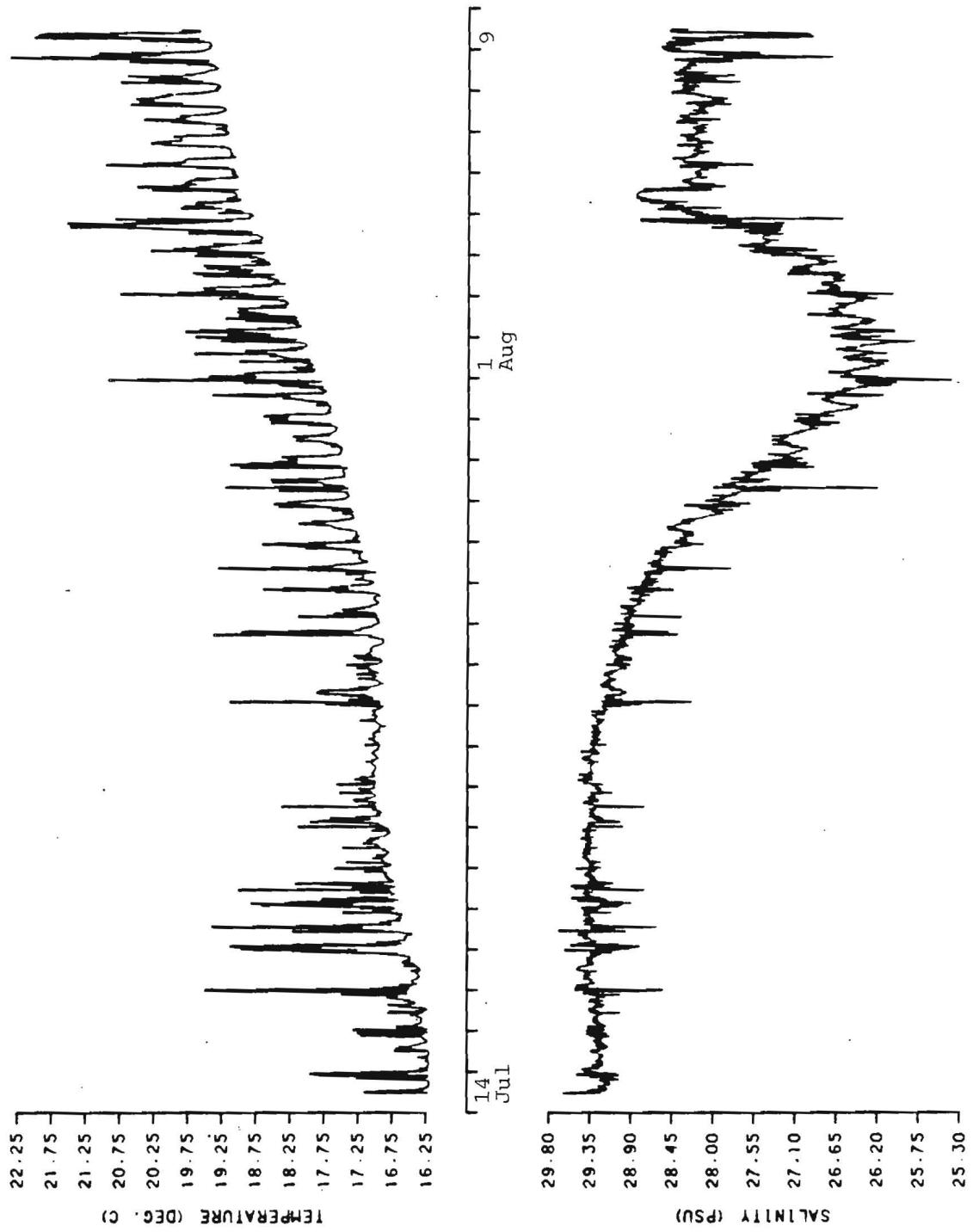
Water depth(relative to MLW) = 18.3 m

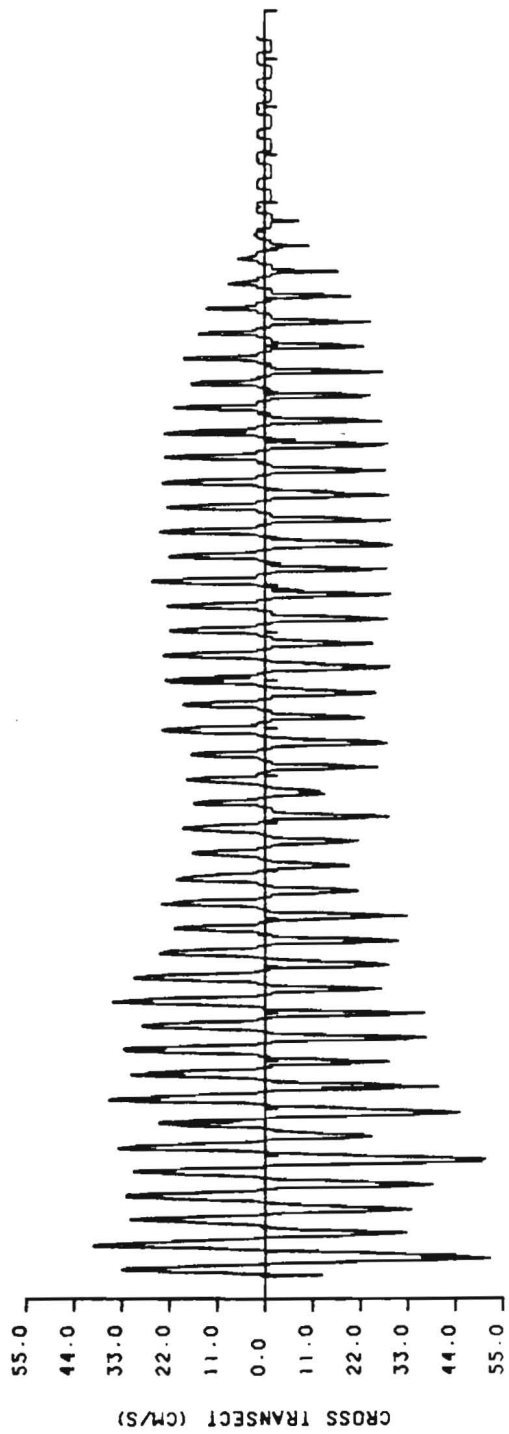
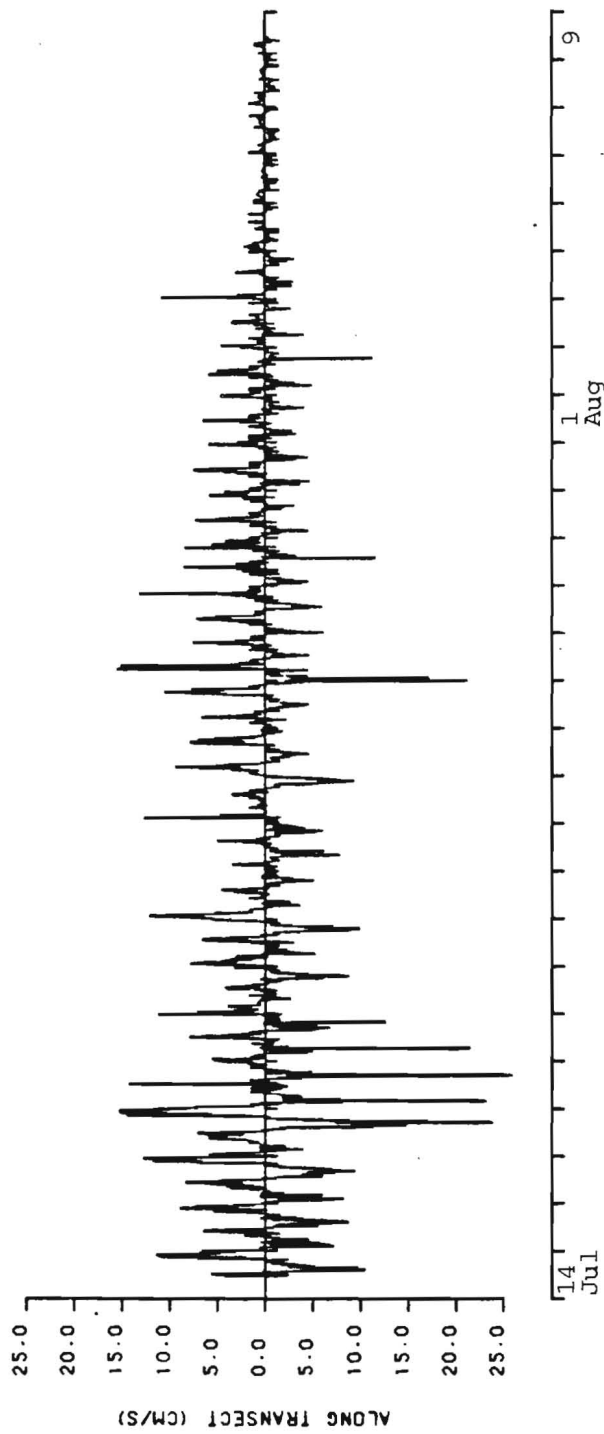
SCALE = 5.5 CM/S PER TICK

A1342 07/14/88 11:20EST DELTA T= 5 MIN



1 TICK = 2 KILOMETERS





Current meter : AANDERAA #A1090
 Station # and location : 3NC, 41 05.0N 73 10.2W
 Instrument depth (MLW) : 15.2m
 Water depth (MLW) : 18.3m
 Start time : 07/14/88 11:20 EST
 Stop time : 08/09/88 11:45 EST
 Duration : 26 days 0 hours 25 minutes
 Sampling interval : 5 minutes
 Comments:

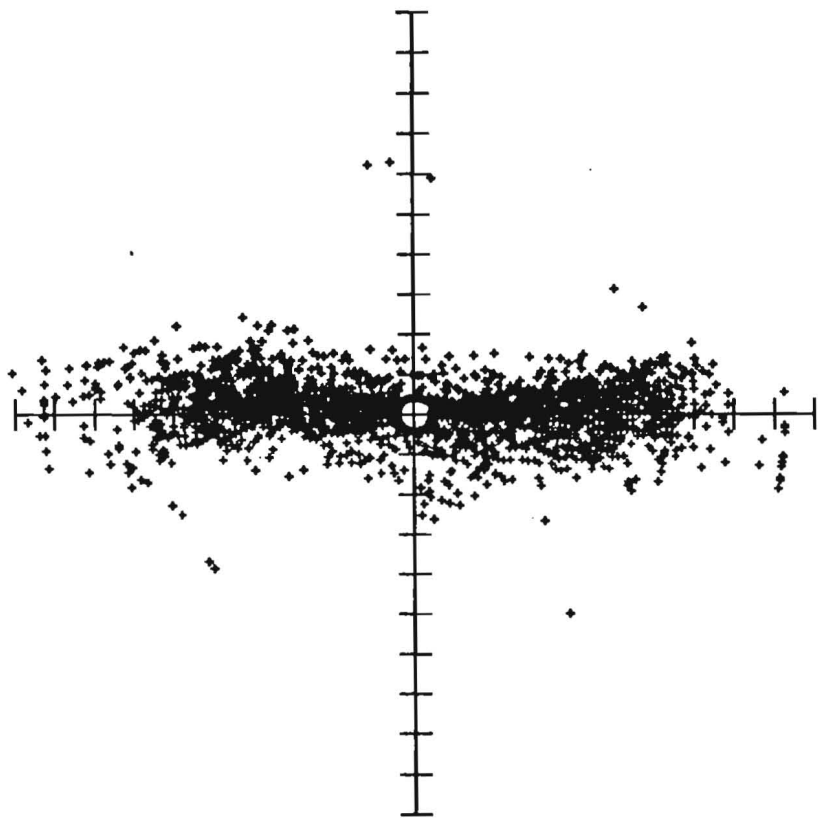
Velocity records exhibit severe damping due to biofouling of rotor.

NUMBER OF CURRENT DATA POINTS = 7493
 NUMBER OF TEMPERATURE POINTS = 7493
 NUMBER OF SALINITY POINTS = 7493

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

CURRENT							
		COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		345	75				
MEAN	=	0.16	0.37	9.70	0.41	18.10	26.95
VARIANCE	=	18.10	152.69	76.93	85.40	0.84	1.07
STD. DEV.	=	4.25	12.36	8.77	9.24	0.92	1.03
MAX.	=	25.19	36.32	40.99		20.04	28.46
MIN.	=	-23.29	-39.44	1.71		16.69	24.89

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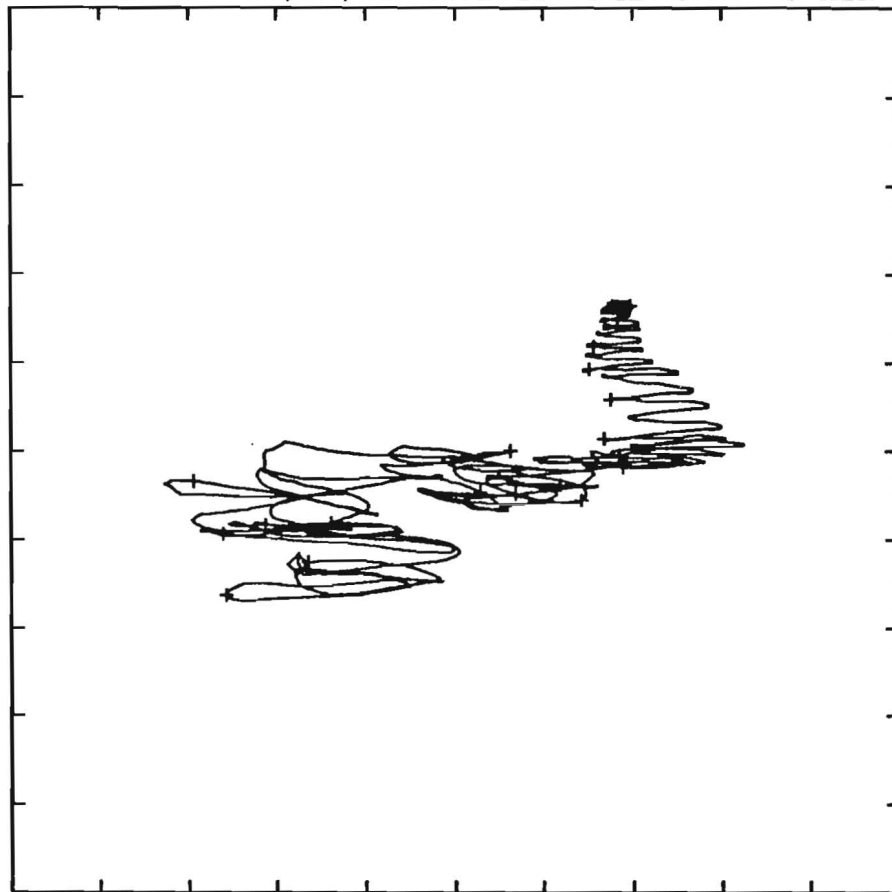
Station 3NC, 41 05.0N 73 10.2W

Instrument depth(below MLW) = 15.2 m

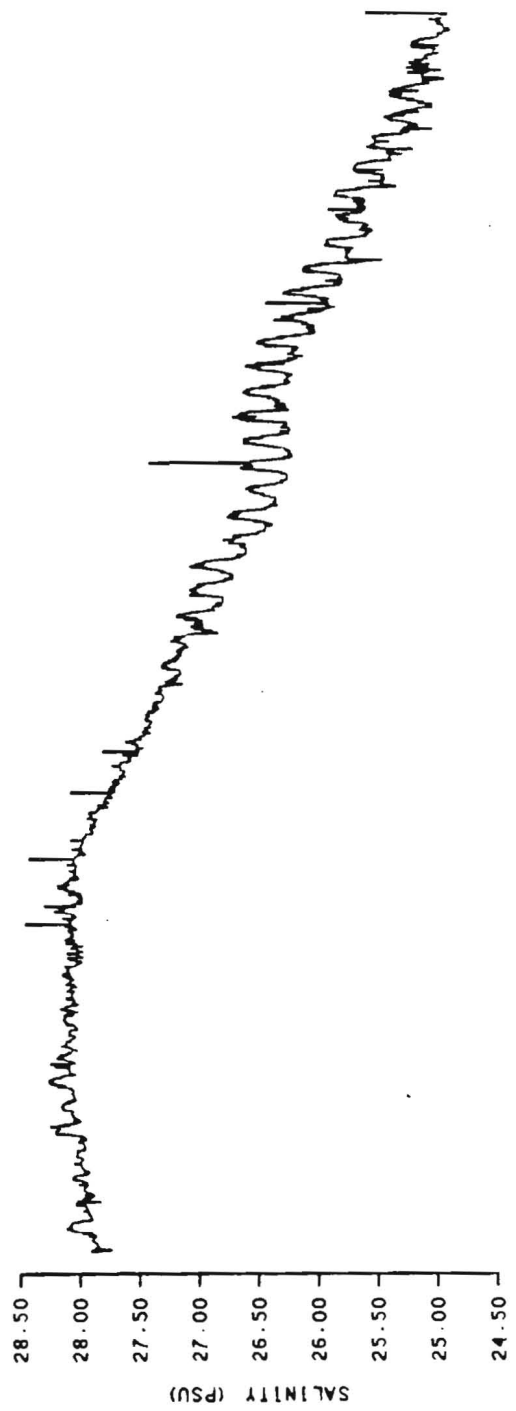
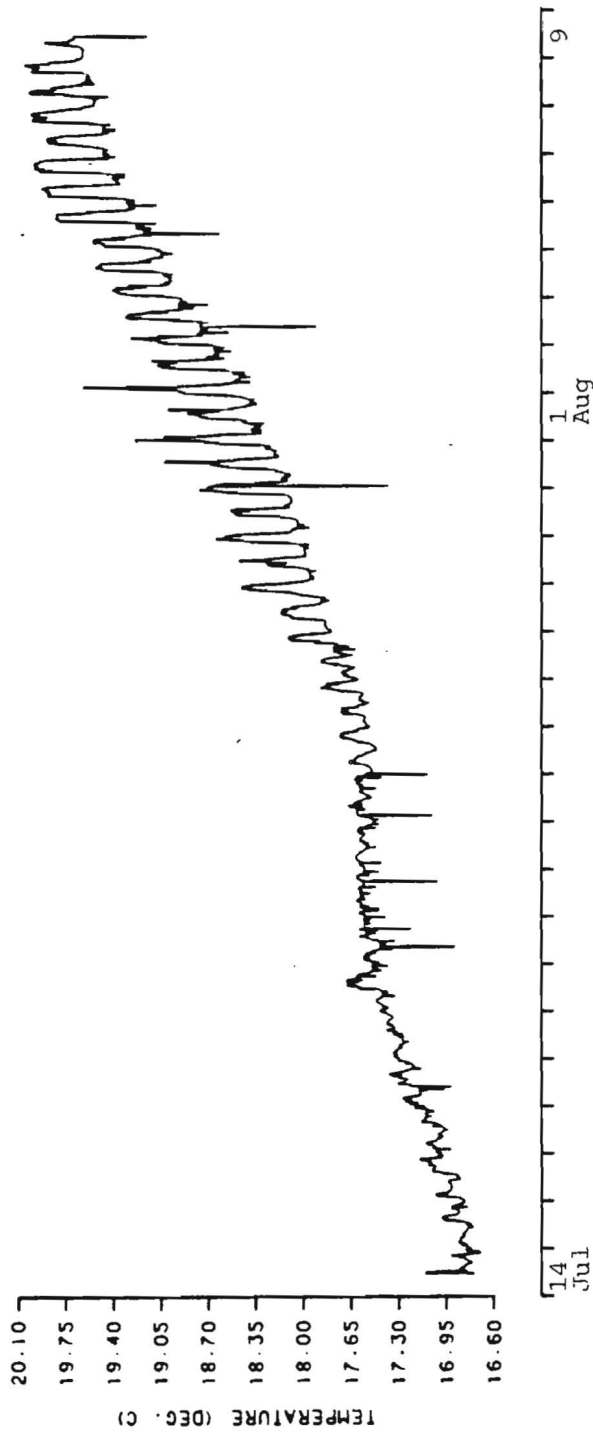
Water depth(relative to MLW) = 18.3 m

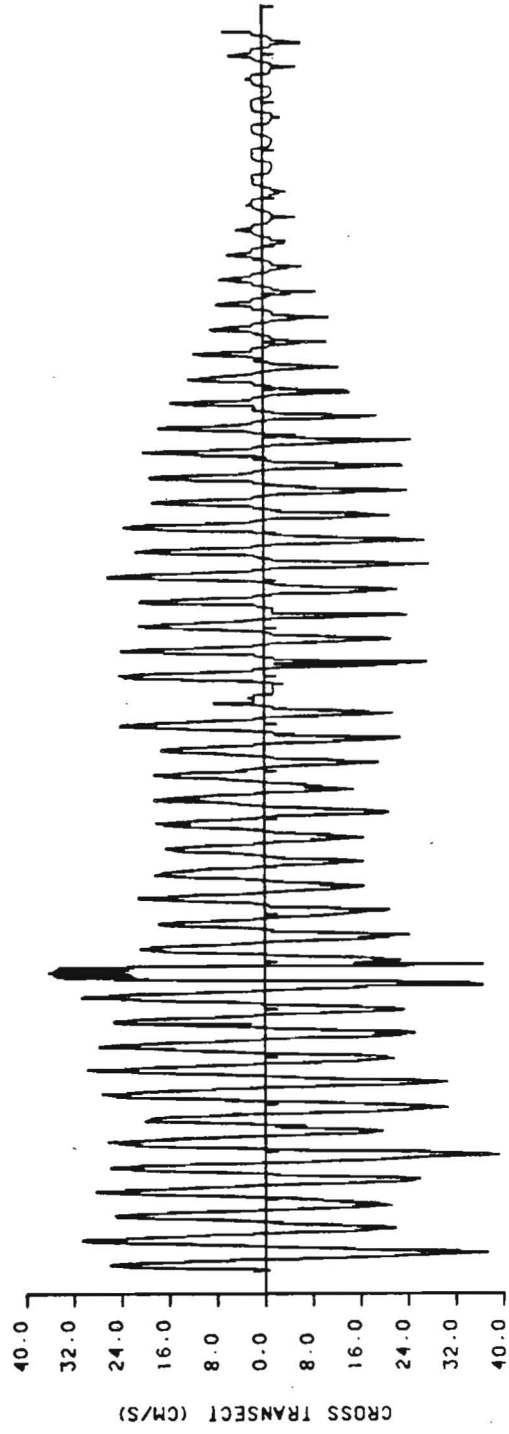
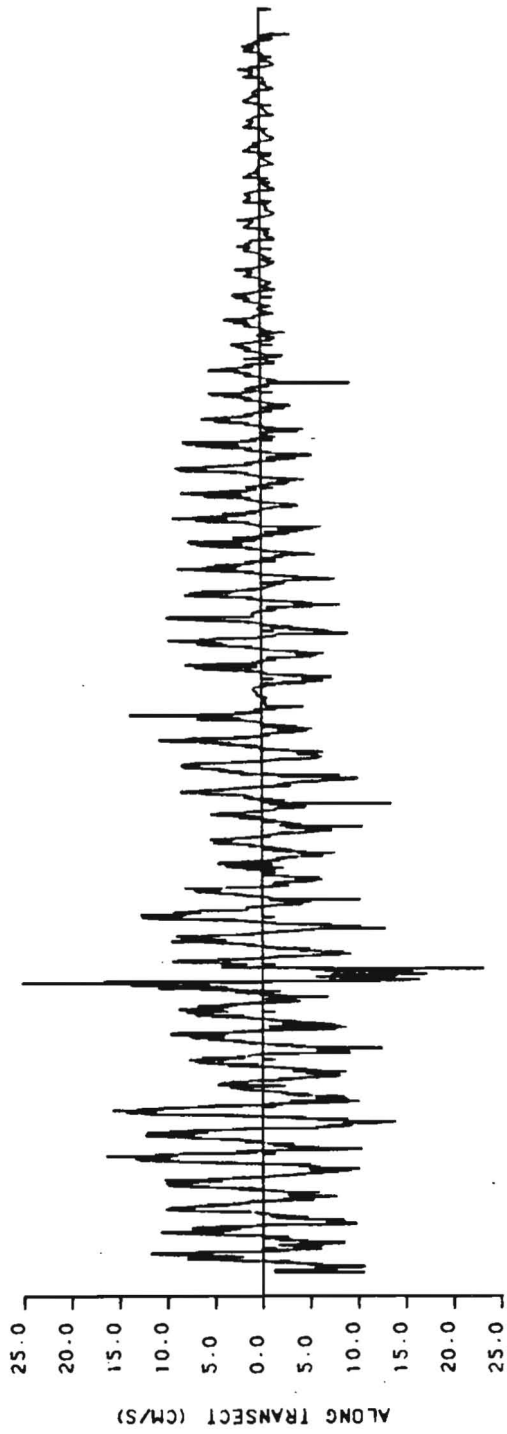
SCALE = 4.0 CM/S PER TICK

A1090 07/14/88 11:20EST DELTA T= 5 MIN



1 TICK = 2 KILOMETERS





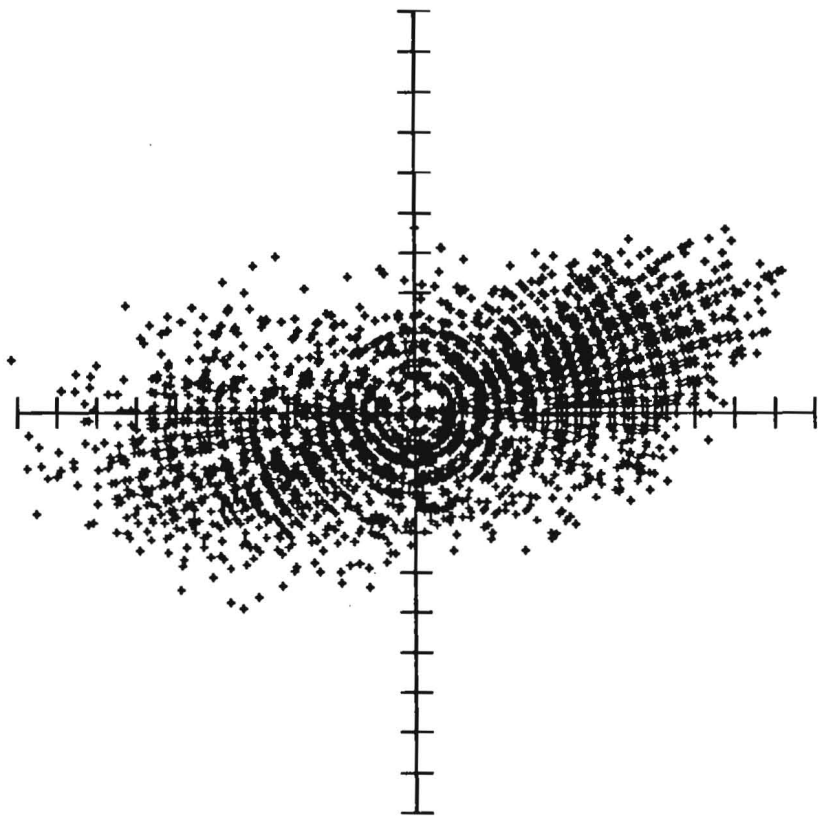
Current meter : ENDECO #1740112
 Station # and location : 3SC, 41 03.3N 73 09.3W
 Instrument depth (MLW) : 3.0m
 Water depth (MLW) : 23.8m
 Start time : 07/14/88 08:56 EST
 Stop time : 08/08/88 09:26 EST
 Duration : 25 days 0 hours 30 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 18015
 NUMBER OF TEMPERATURE POINTS = 18015
 NUMBER OF SALINITY POINTS = 18015

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		345	75				
MEAN	=	-0.57	4.75	23.90	4.78	20.97	26.92
VARIANCE	=	64.64	629.04	145.10	346.84	1.68	0.47
STD. DEV.	=	8.04	25.08	12.05	18.62	1.30	0.69
MAX.	=	29.08	59.65	63.46		25.24	28.98
MIN.	=	-25.34	-60.20	0.00		17.50	24.97

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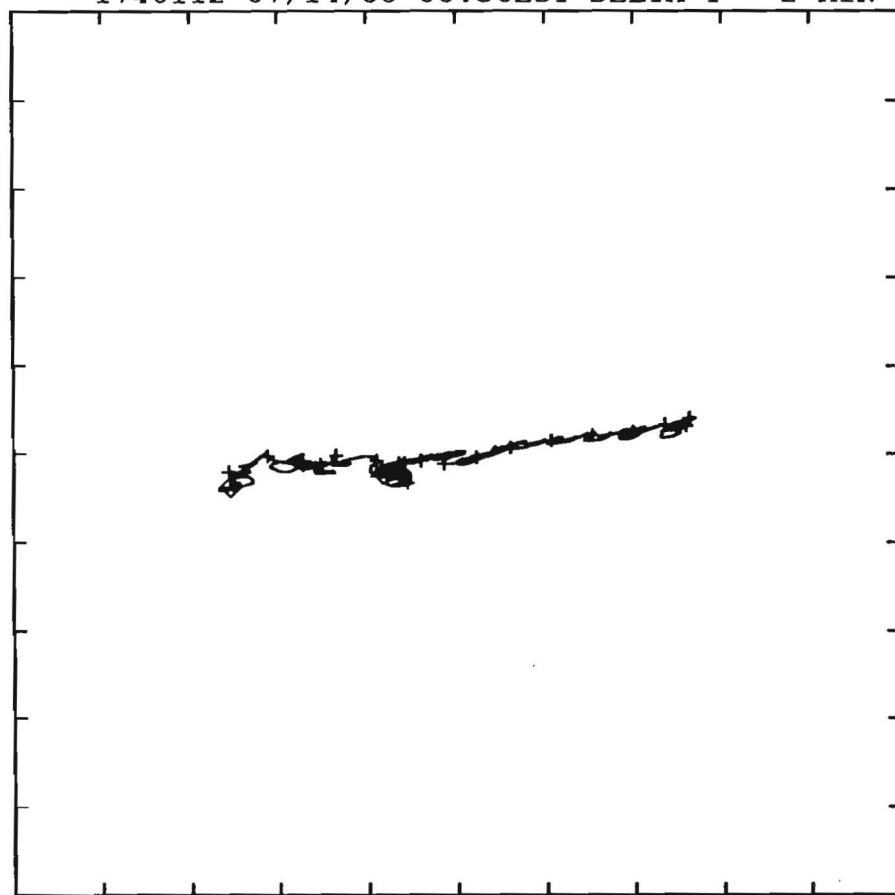
Station 35C, 41 03.3N 73 09.3W

Instrument depth(below MLW) = 3.0 m

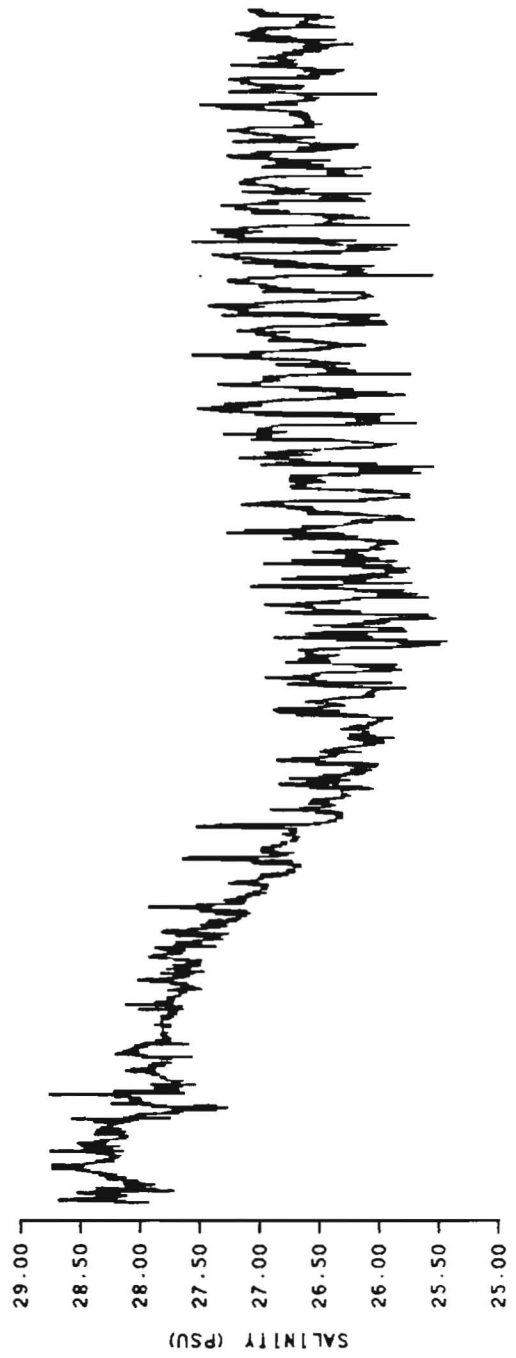
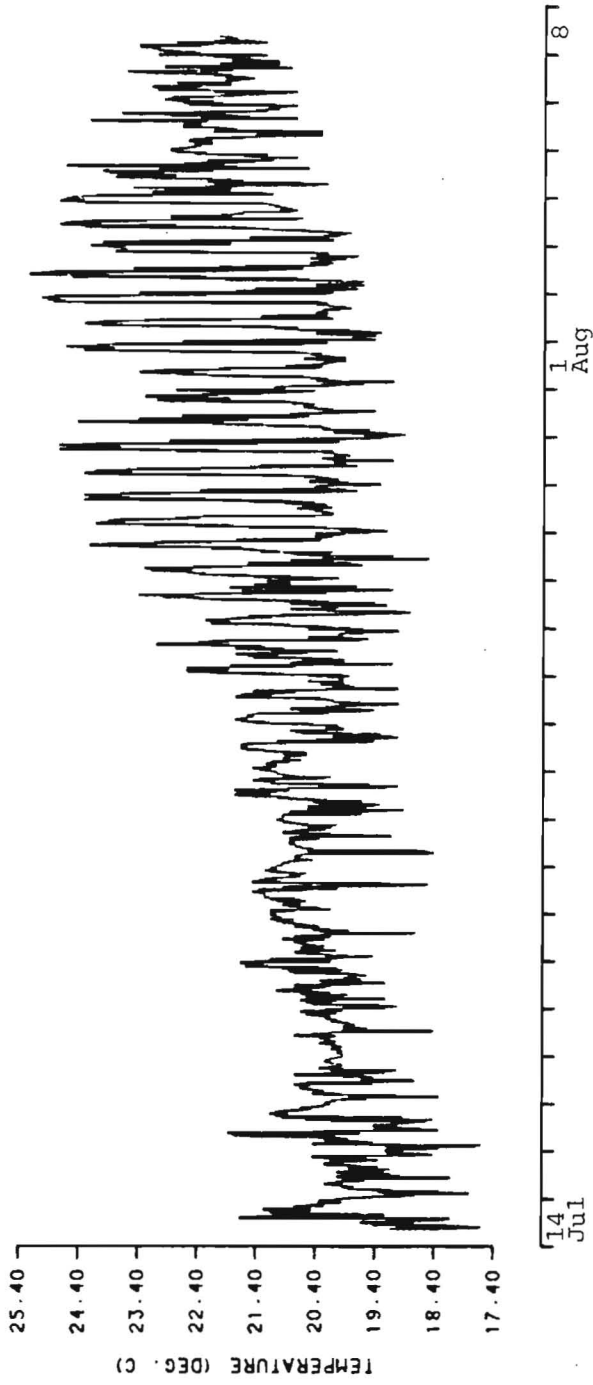
Water depth(relative to MLW) = 23.8 m

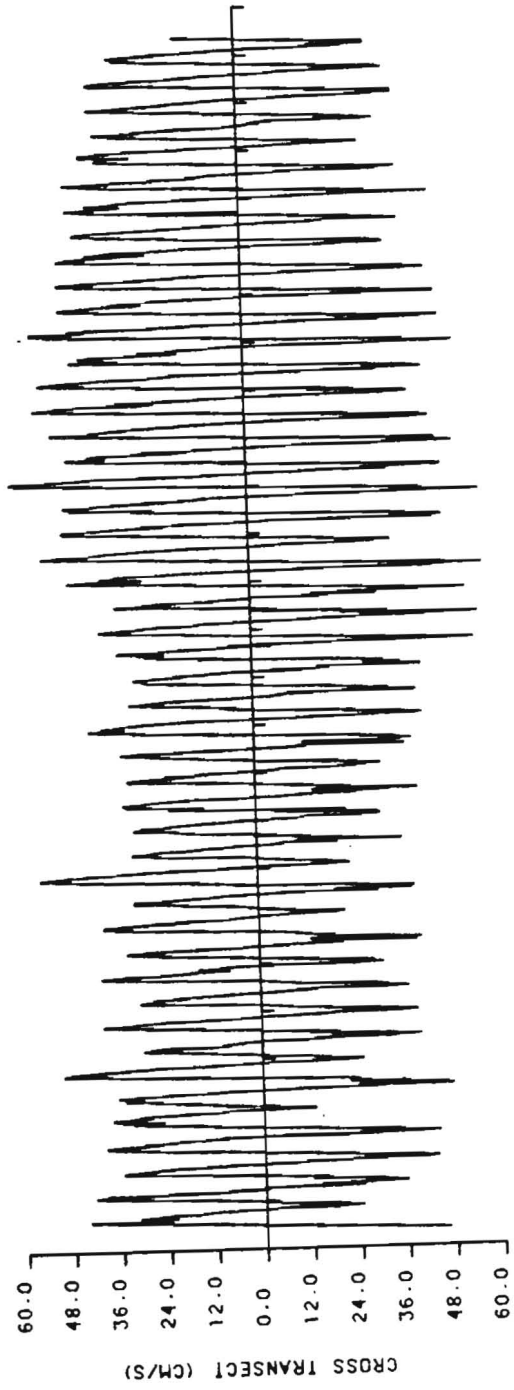
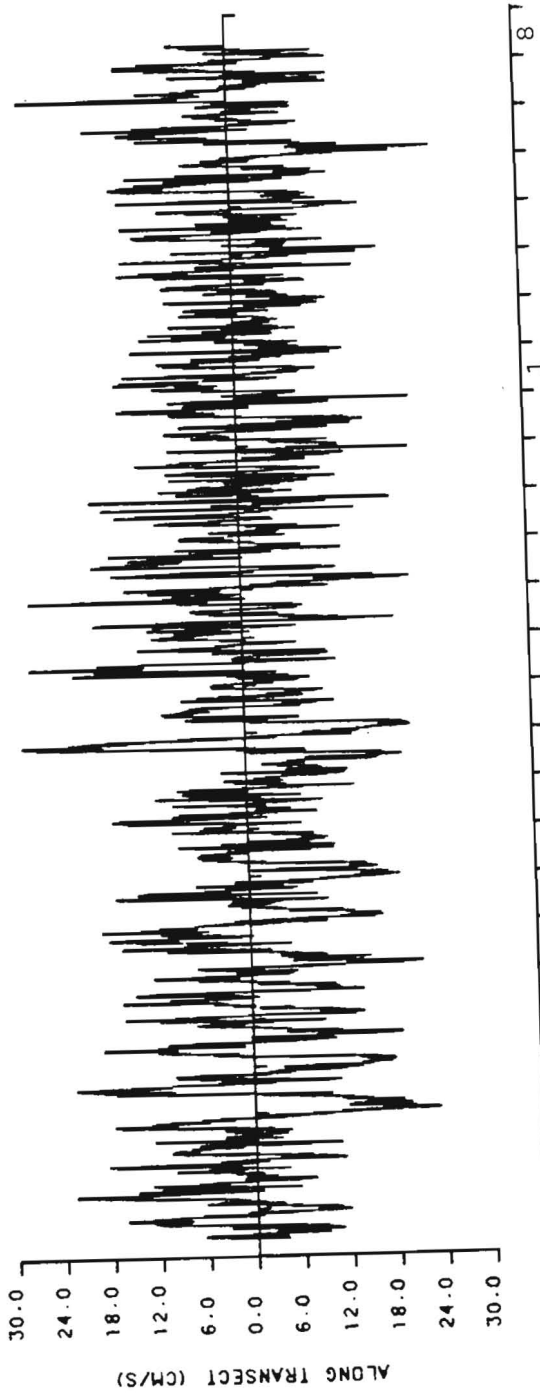
SCALE = 6.0 CM/S PER TICK

1740112 07/14/88 08:56EST DELTA T= 2 MIN



1 TICK = 20 KILOMETERS





Current meter : AANDERAA #A1346
 Station # and location : 3SC, 41 03.3N 73 09.3W
 Instrument depth (MLW) : 8.5m
 Water depth (MLW) : 23.8m
 Start time : 07/14/88 09:15 EST
 Stop time : 08/08/88 09:05 EST
 Duration : 24 days 23 hours 50 minutes
 Sampling interval : 5 minutes
 Comments:

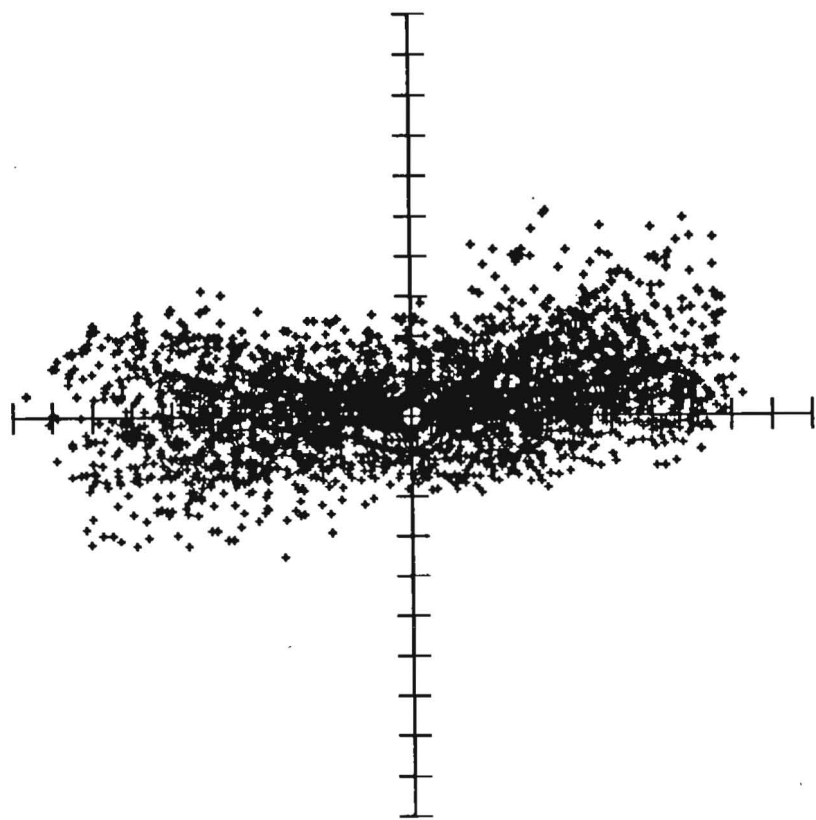
Velocity records show signs of damping toward the end due to rotor fouling.

NUMBER OF CURRENT DATA POINTS = 7198
 NUMBER OF TEMPERATURE POINTS = 7198
 NUMBER OF SALINITY POINTS = 7198

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		345	75				
MEAN	=	1.48	1.84	16.96	2.36	18.76	26.90
VARIANCE	=	35.68	357.54	111.12	196.61	1.00	0.99
STD. DEV.	=	5.97	18.91	10.54	14.02	1.00	0.99
MAX.	=	22.61	43.20	48.32		21.42	28.33
MIN.	=	-16.20	-45.91	1.62		16.41	24.14

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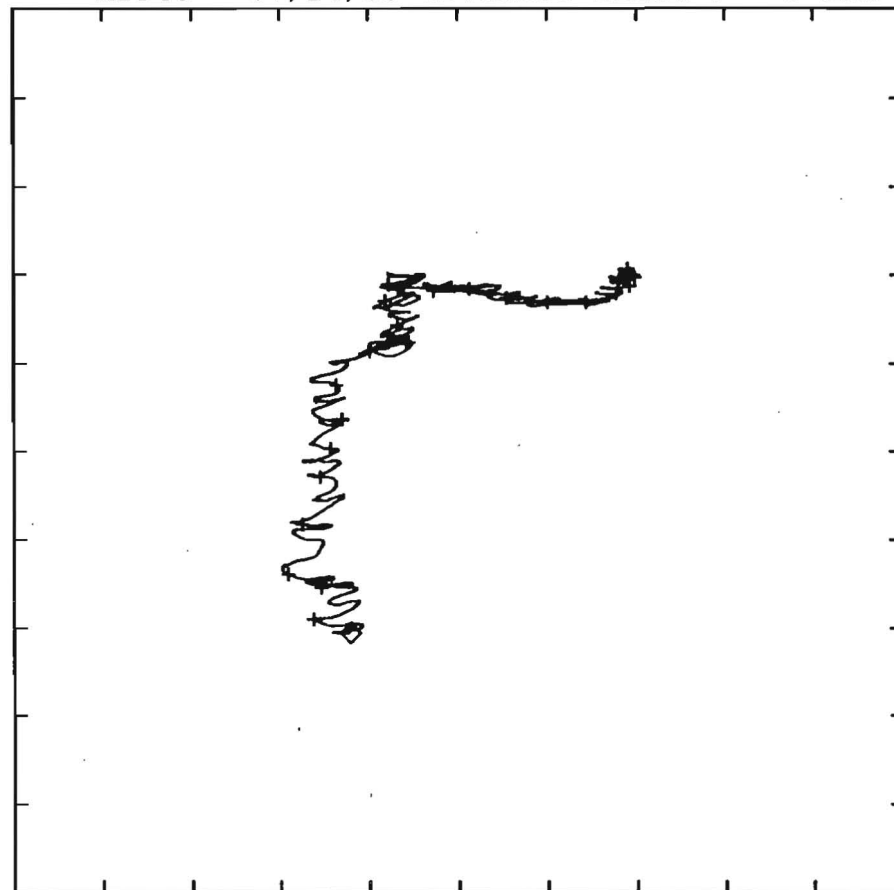
Station 3SC, 41 03.3N 73 09.3W

Instrument depth(below MLW) = 8.5 m

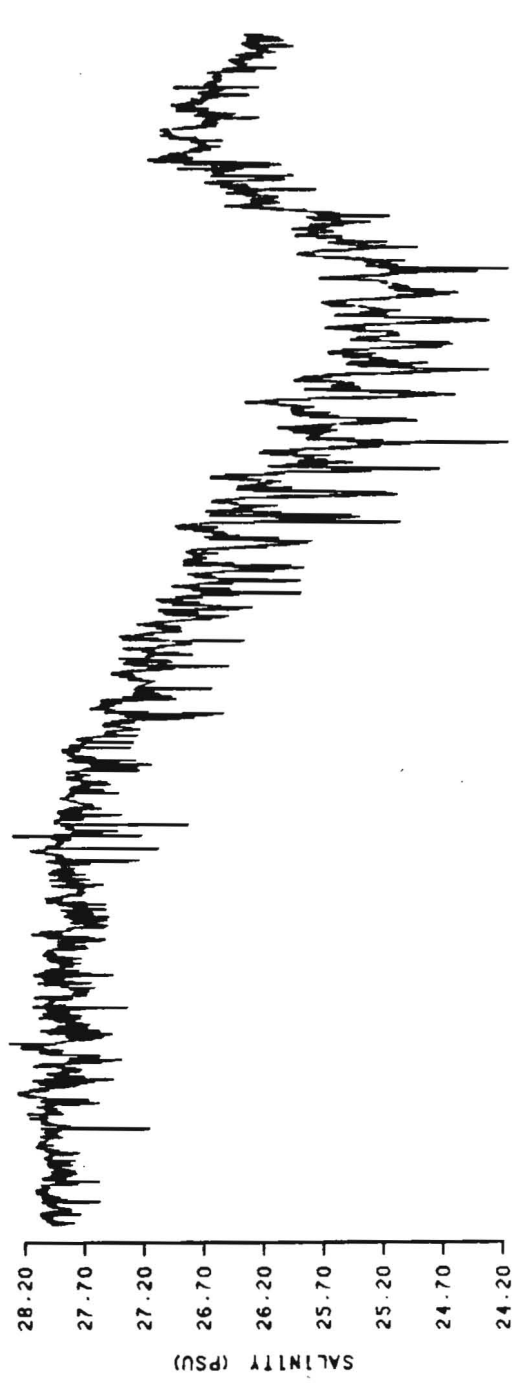
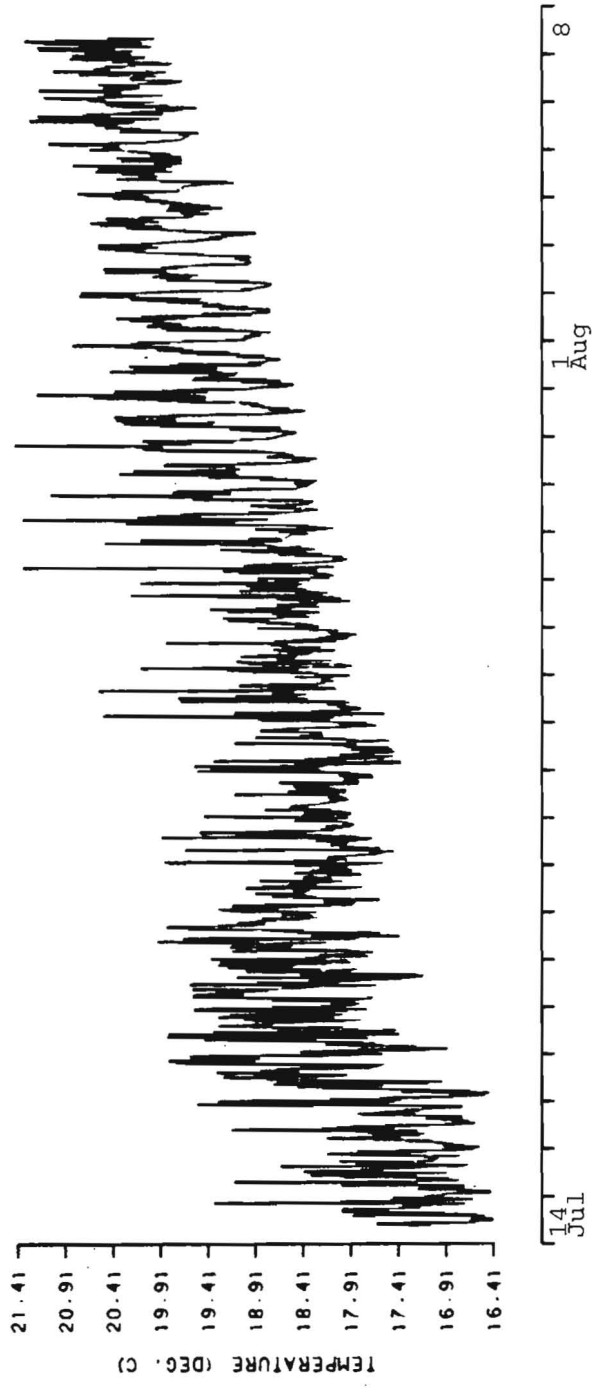
Water depth(relative to MLW) = 23.8 m

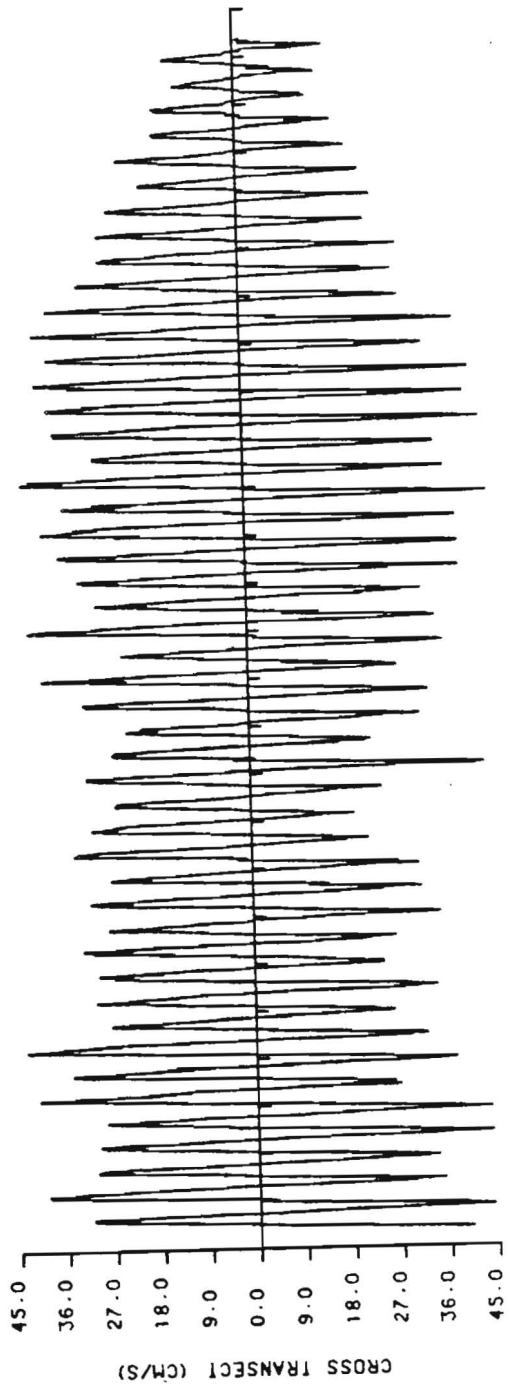
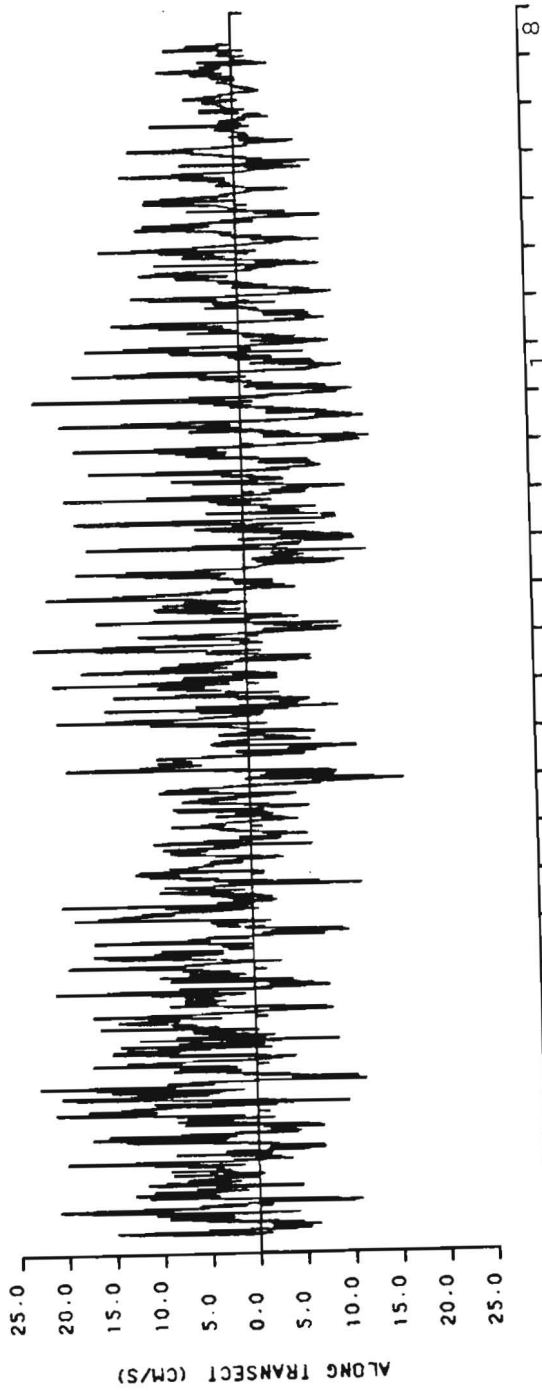
SCALE = 5.0 CM/S PER TICK

A1346 07/14/88 09:15EST DELTA T= 5 MIN



1 TICK = 10 KILOMETERS





Current meter : AANDERAA #A1351
 Station # and location : 3SC, 41 03.3N 73 09.3W
 Instrument depth (MLW) : 20.4m
 Water depth (MLW) : 23.8m
 Start time : 07/14/88 09:55 EST
 Stop time : 08/08/88 08:50 EST
 Duration : 24 days 22 hours 55 minutes
 Sampling interval : 5 minutes
 Comments:

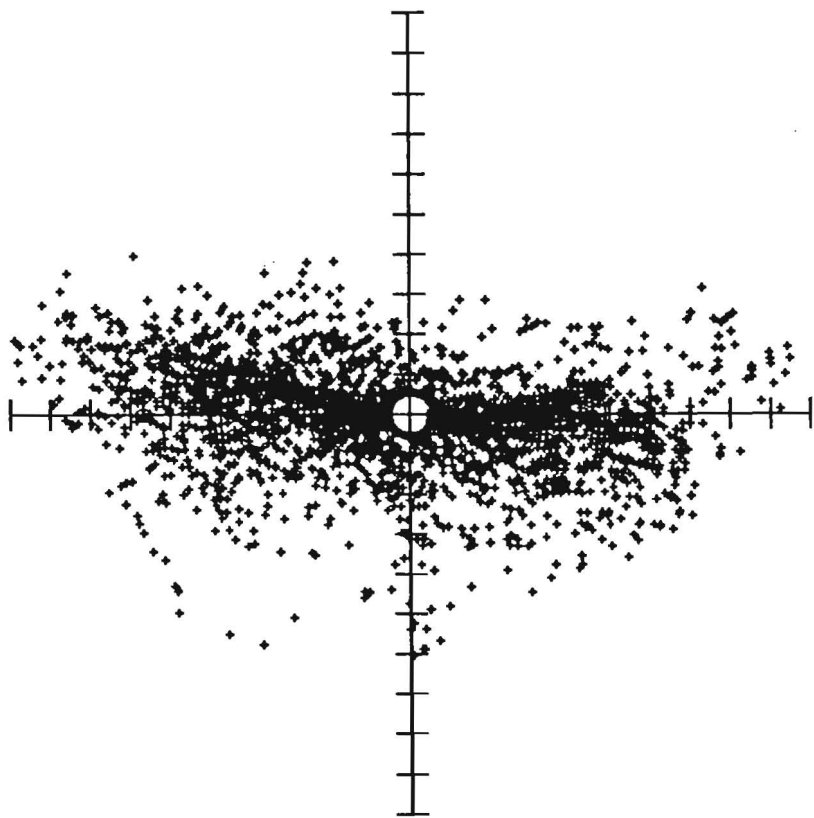
Velocity records exhibit severe damping due to
 biofouling of rotor.

NUMBER OF CURRENT DATA POINTS = 7187
 NUMBER OF TEMPERATURE POINTS = 7187
 NUMBER OF SALINITY POINTS = 7187

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		345	75				
MEAN	=	-0.10	-1.03	9.87	1.04	17.95	27.64
VARIANCE	=	29.49	125.29	58.43	77.39	1.01	0.38
STD. DEV.	=	5.43	11.19	7.64	8.80	1.00	0.62
MAX.	=	21.77	33.40	35.21		19.82	28.69
MIN.	=	-20.76	-32.34	1.91		16.35	26.44

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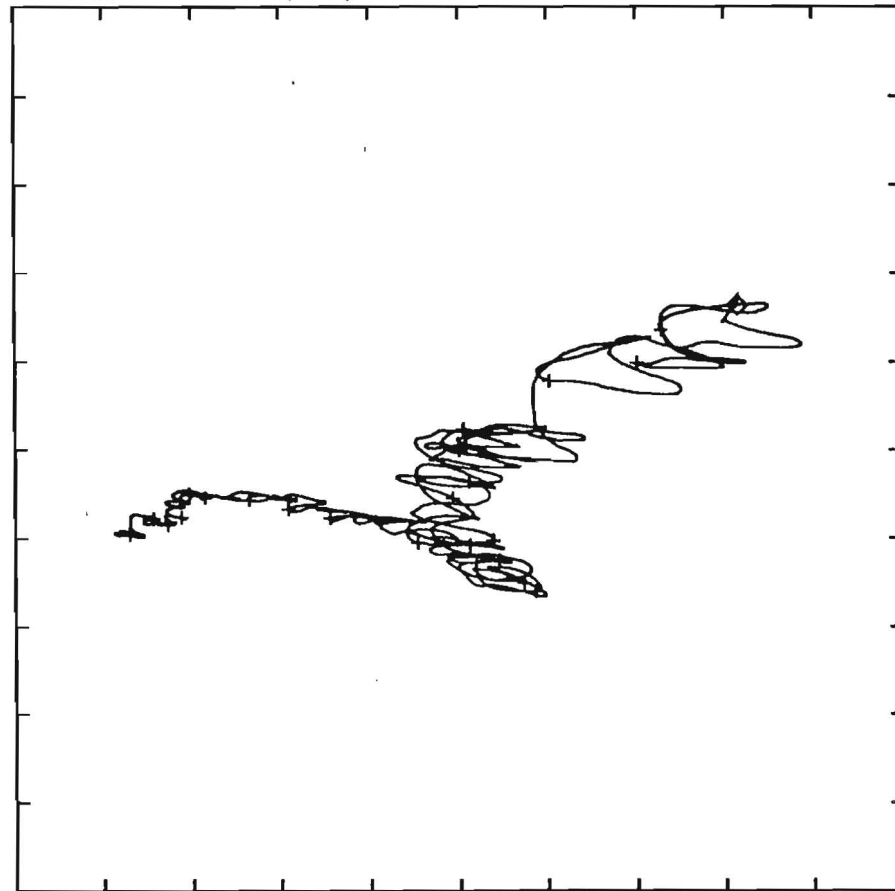
Station 3SC, 41 03.3N 73 09.3W

Instrument depth(below MLW) = 20.4 m

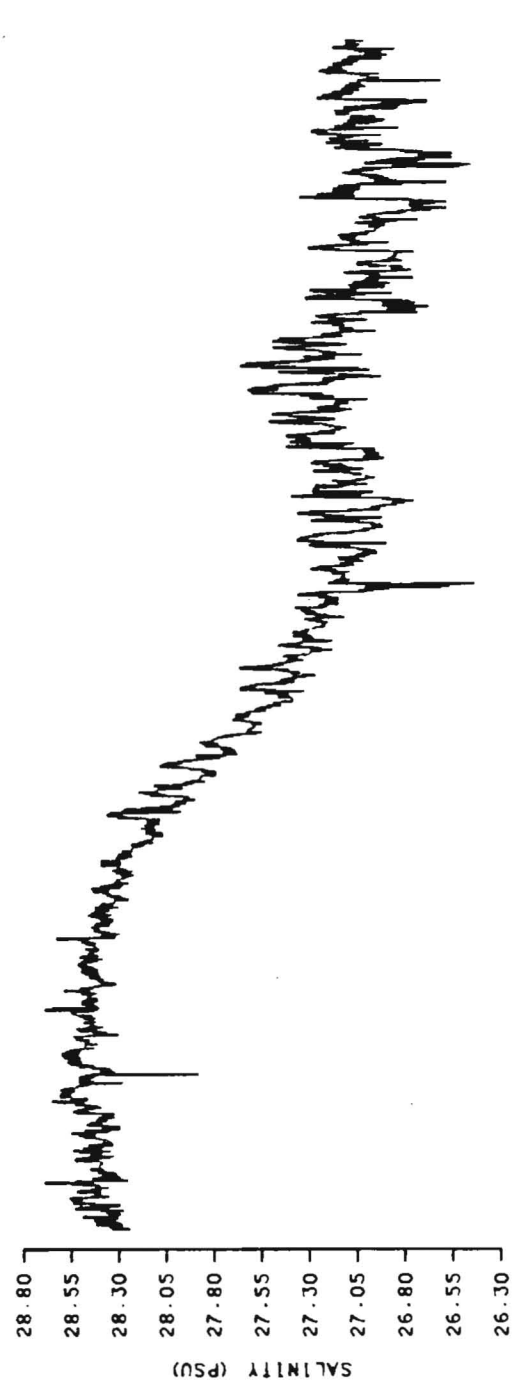
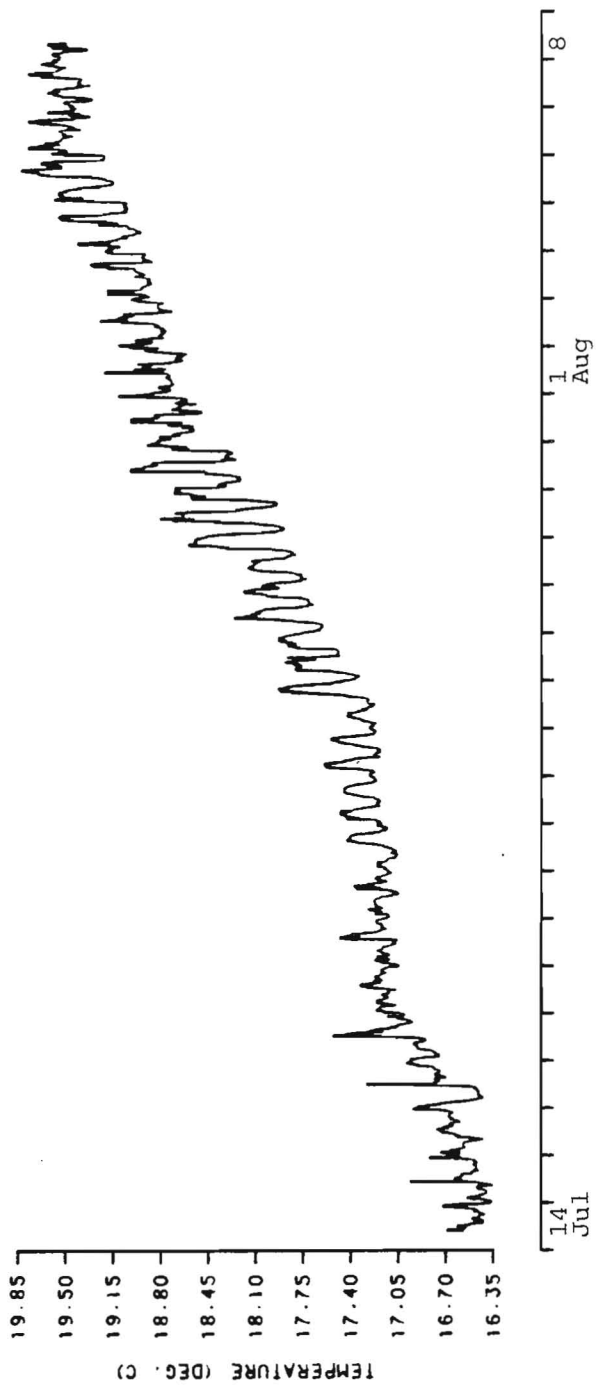
Water depth(relative to MLW) = 23.8 m

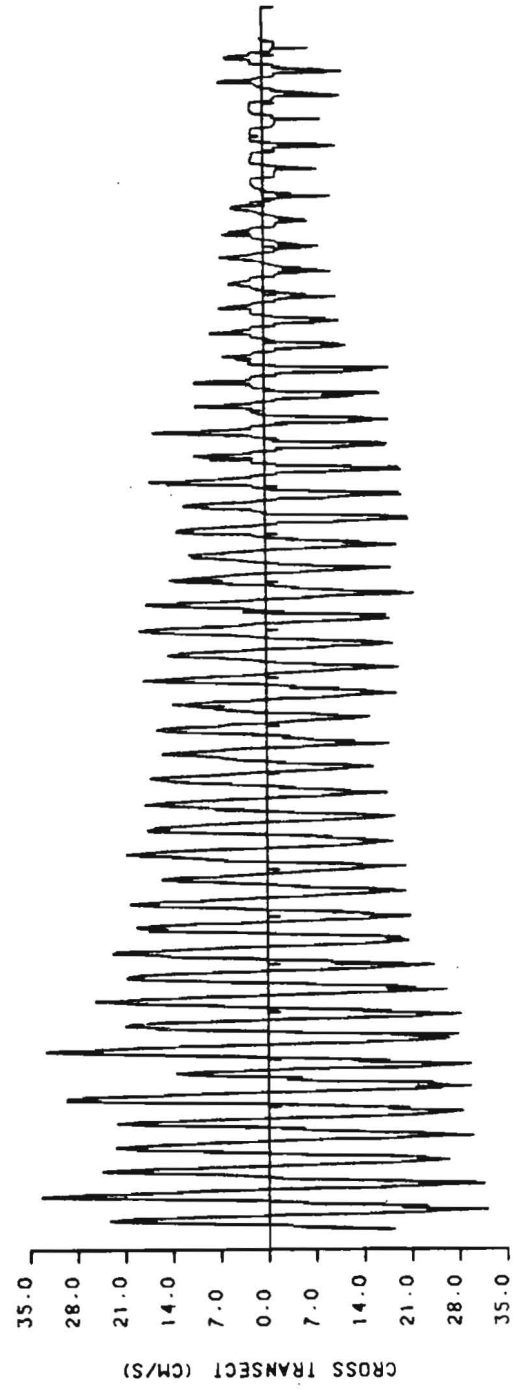
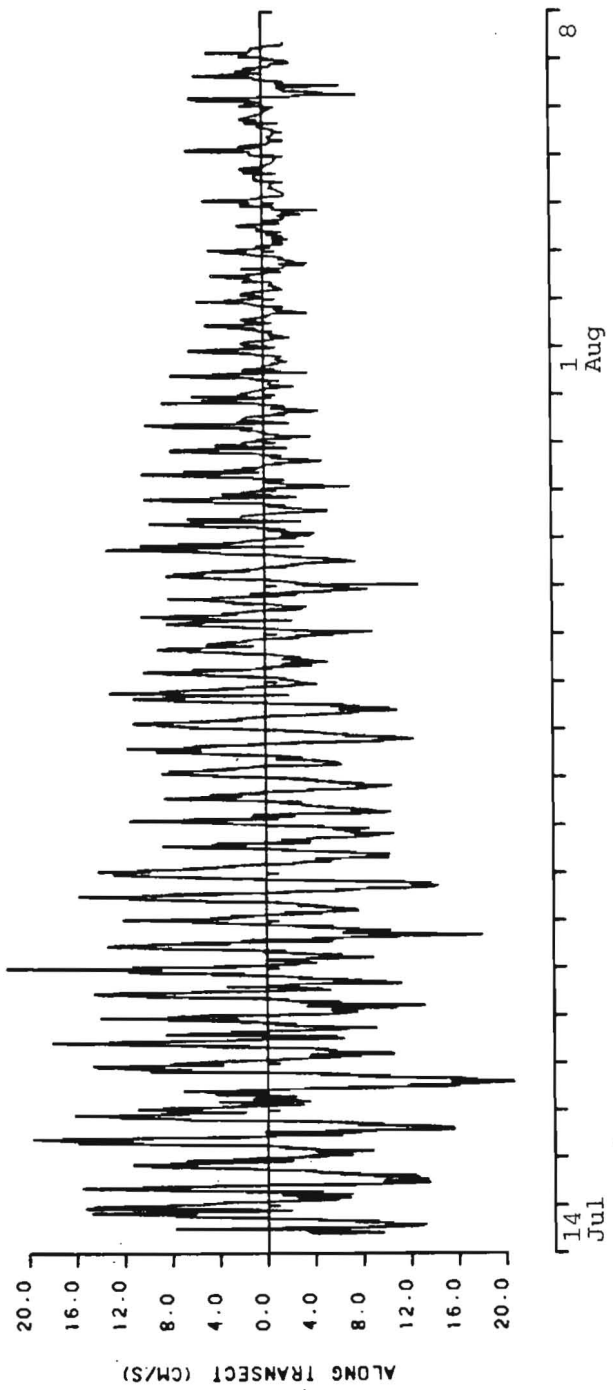
SCALE = 3.5 CM/S PER TICK

A1351 07/14/88 09:55EST DELTA T= 5 MIN



1 TICK = 3 KILOMETERS





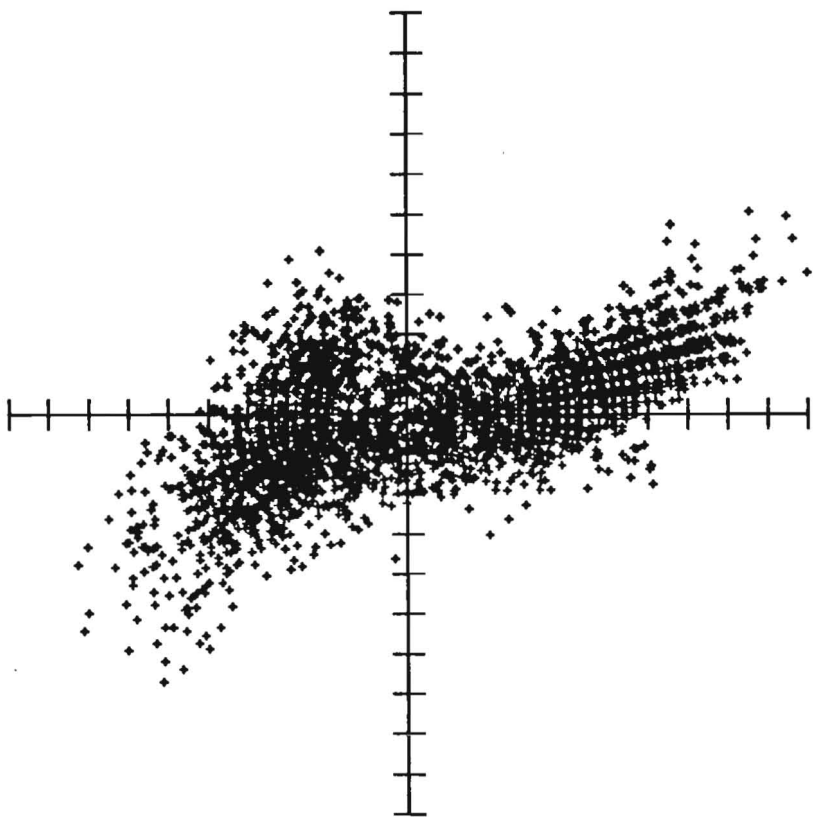
Current meter : ENDECO #1740019
 Station # and location : 3S , 40 59.8N 73 08.1W
 Instrument depth (MLW) : 3.0m
 Water depth (MLW) : 24.4m
 Start time : 07/14/88 07:24 EST
 Stop time : 08/08/88 10:12 EST
 Duration : 25 days 2 hours 48 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 18084
 NUMBER OF TEMPERATURE POINTS = 18084
 NUMBER OF SALINITY POINTS = 18084

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		345	75				
MEAN	=	-1.74	4.35	28.11	4.68	21.02	26.85
VARIANCE	=	73.36	902.38	207.56	487.87	1.41	0.09
STD. DEV.	=	8.56	30.04	14.41	22.09	1.19	0.30
MAX.	=	36.30	80.75	81.89		24.21	28.55
MIN.	=	-38.76	-71.18	0.00		17.14	25.71

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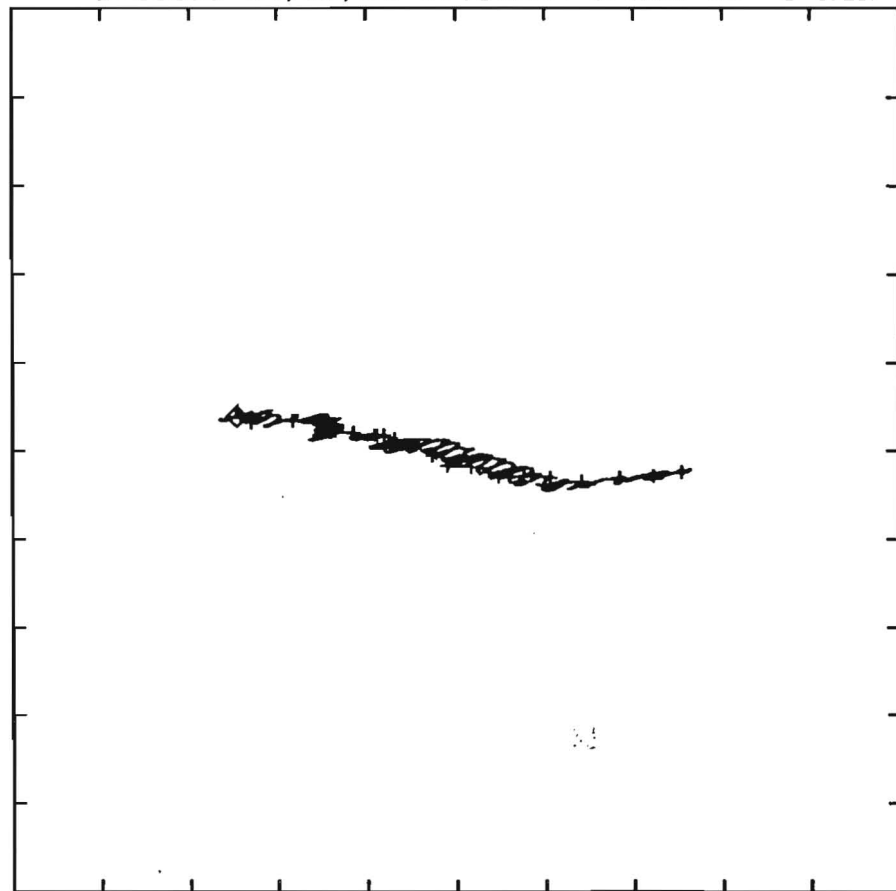
Station 3S , 40 59.8N 73 08.1W

Instrument depth(below MLW) = 3.0 m

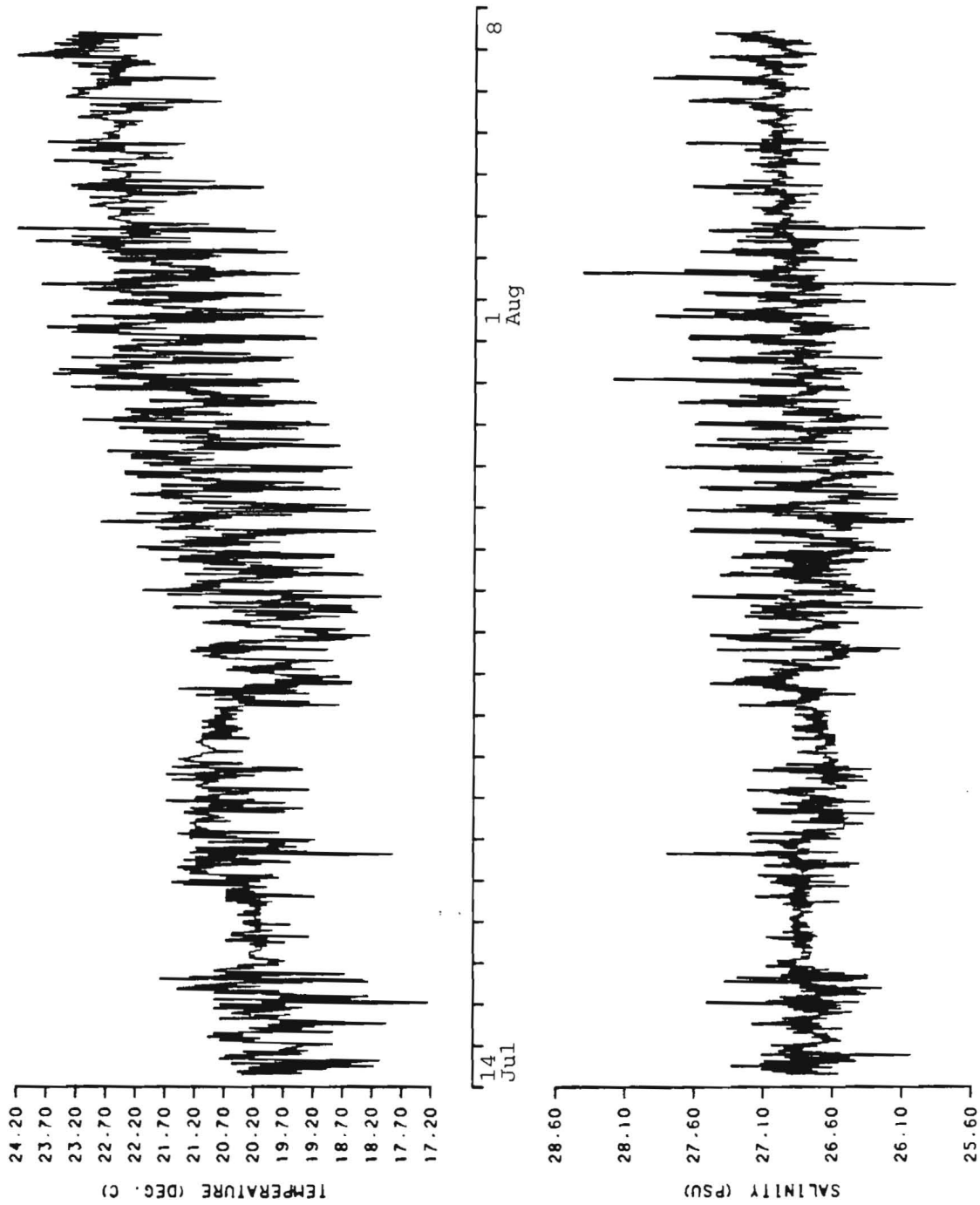
Water depth(relative to MLW) = 24.4 m

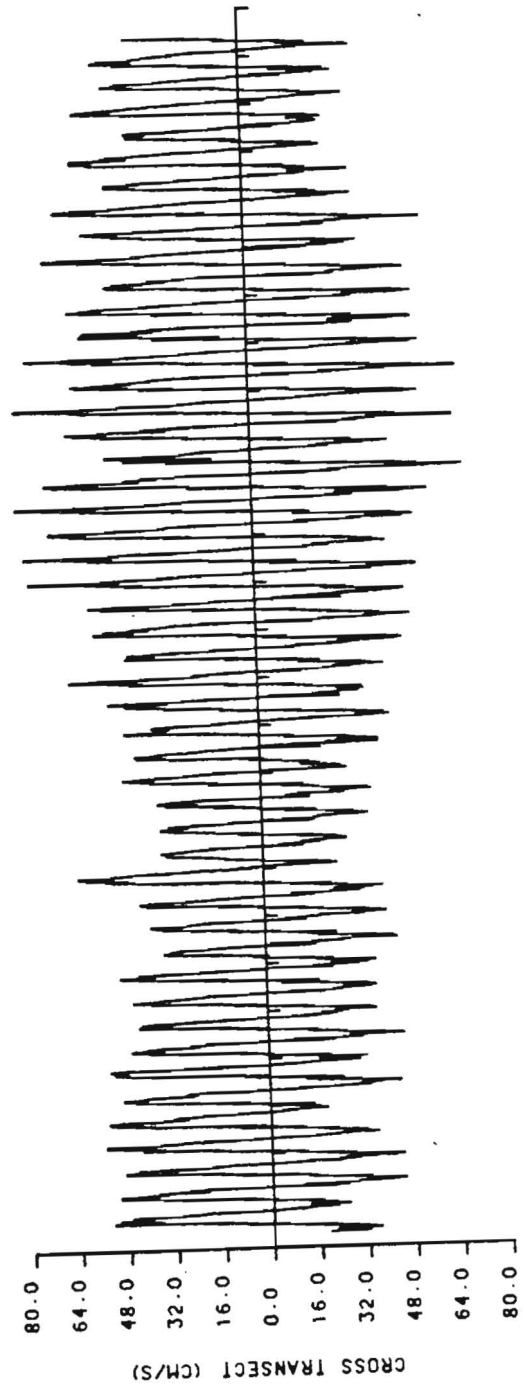
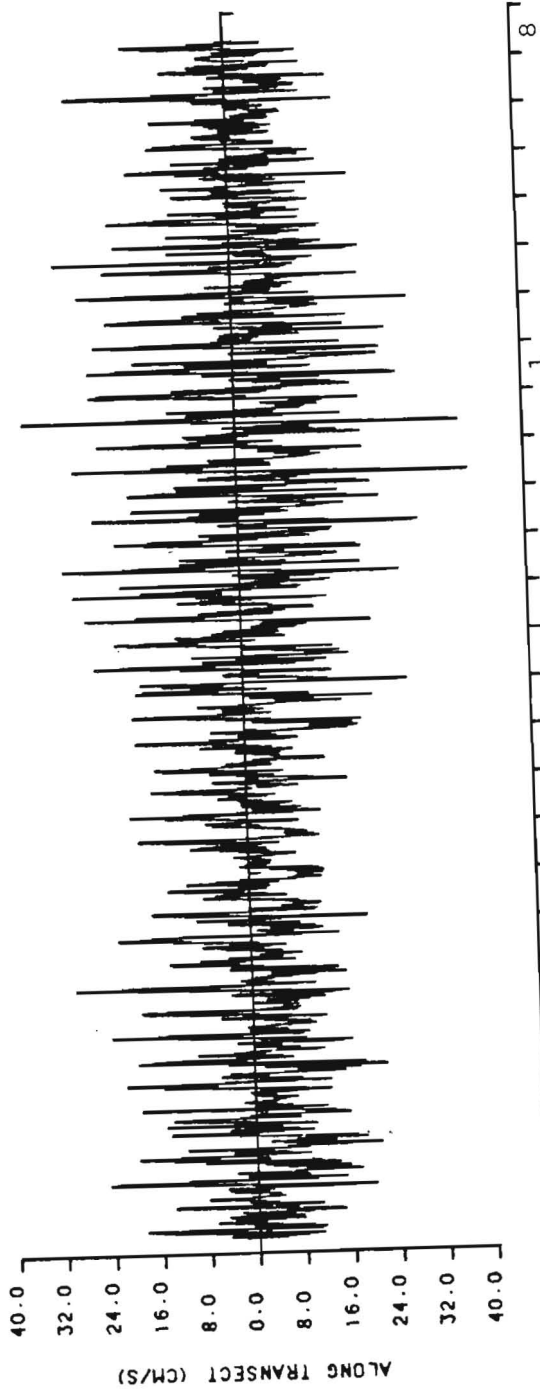
SCALE = 7.5 CM/S PER TICK

1740019 07/14/88 07:24EST DELTA T= 2 MIN



1 TICK = 20 KILOMETERS





Current meter : AANDERAA #A1353
 Station # and location : 3S , 40 59.8N 73 08.1W
 Instrument depth (MLW) : 9.1m
 Water depth (MLW) : 24.4m
 Start time : 07/14/88 07:30 EST
 Stop time : 08/08/88 10:10 EST
 Duration : 25 days 2 hours 40 minutes
 Sampling interval : 5 minutes

Comments:

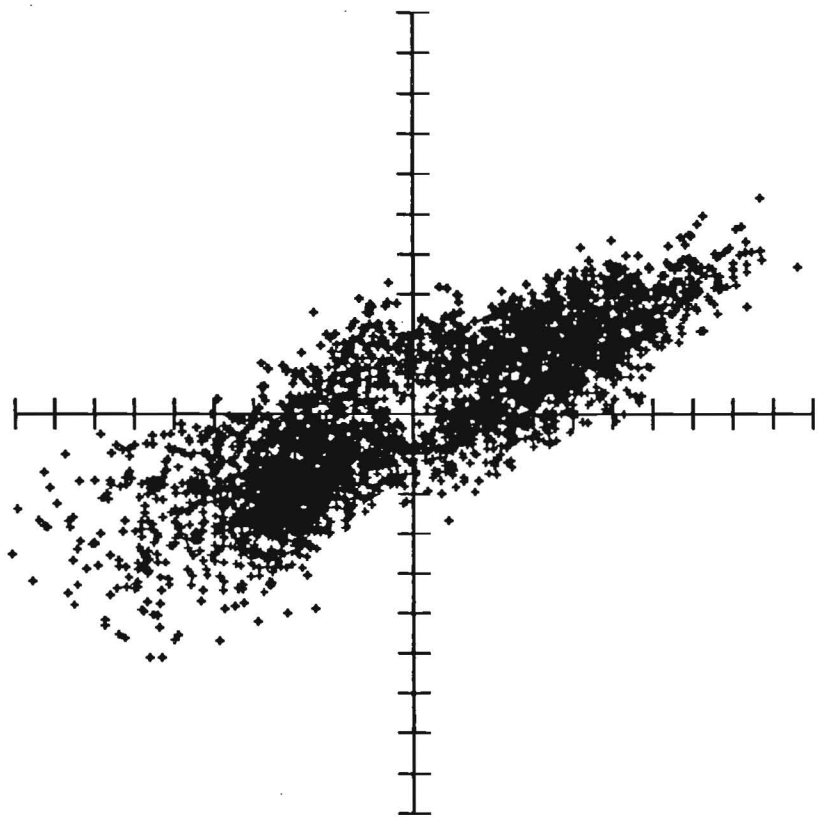
Velocity records show signs of damping toward the end due to rotor biofouling.

NUMBER OF CURRENT DATA POINTS = 7232
 NUMBER OF TEMPERATURE POINTS = 7232
 NUMBER OF SALINITY POINTS = 7232

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		345	75				
MEAN	=	-0.16	0.67	28.43	0.69	19.11	27.77
VARIANCE	=	84.99	915.66	192.85	500.32	1.63	0.49
STD. DEV.	=	9.22	30.26	13.89	22.37	1.28	0.70
MAX.	=	29.85	76.79	80.05		22.83	29.40
MIN.	=	-31.89	-79.83	1.70		16.00	25.28

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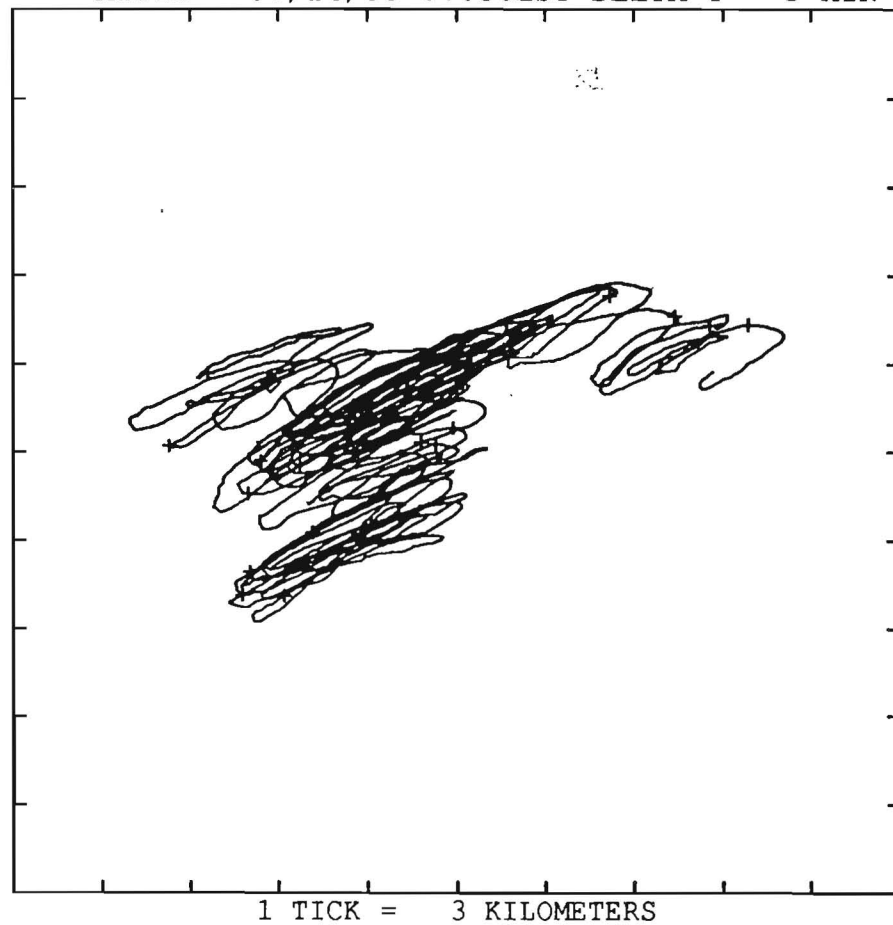
Station 3S , 40 59.8N 73 08.1W

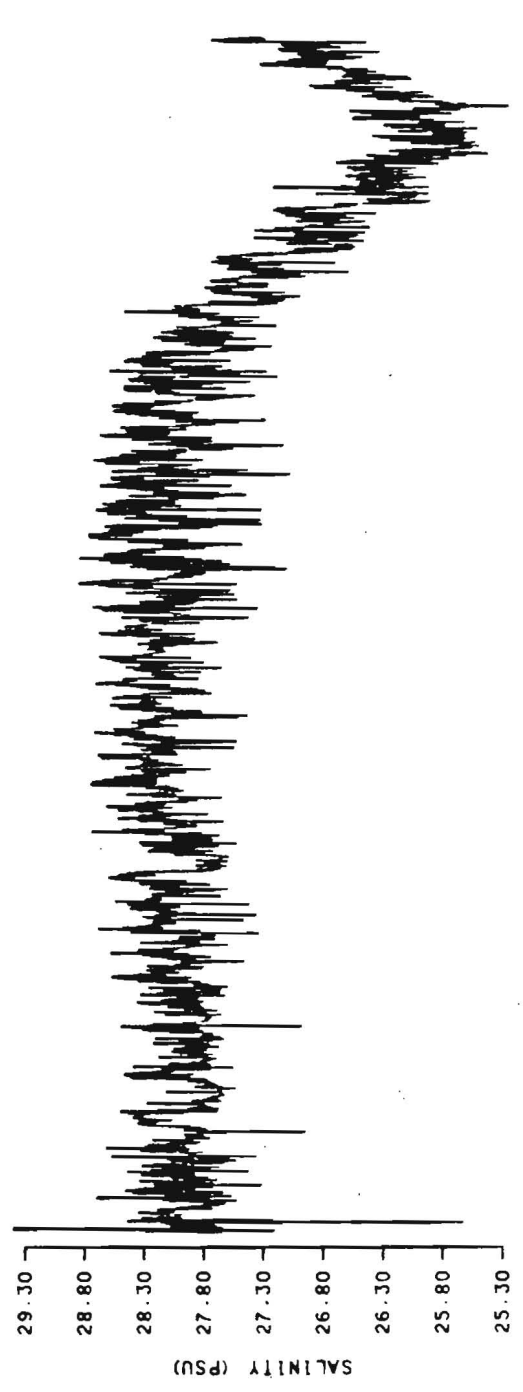
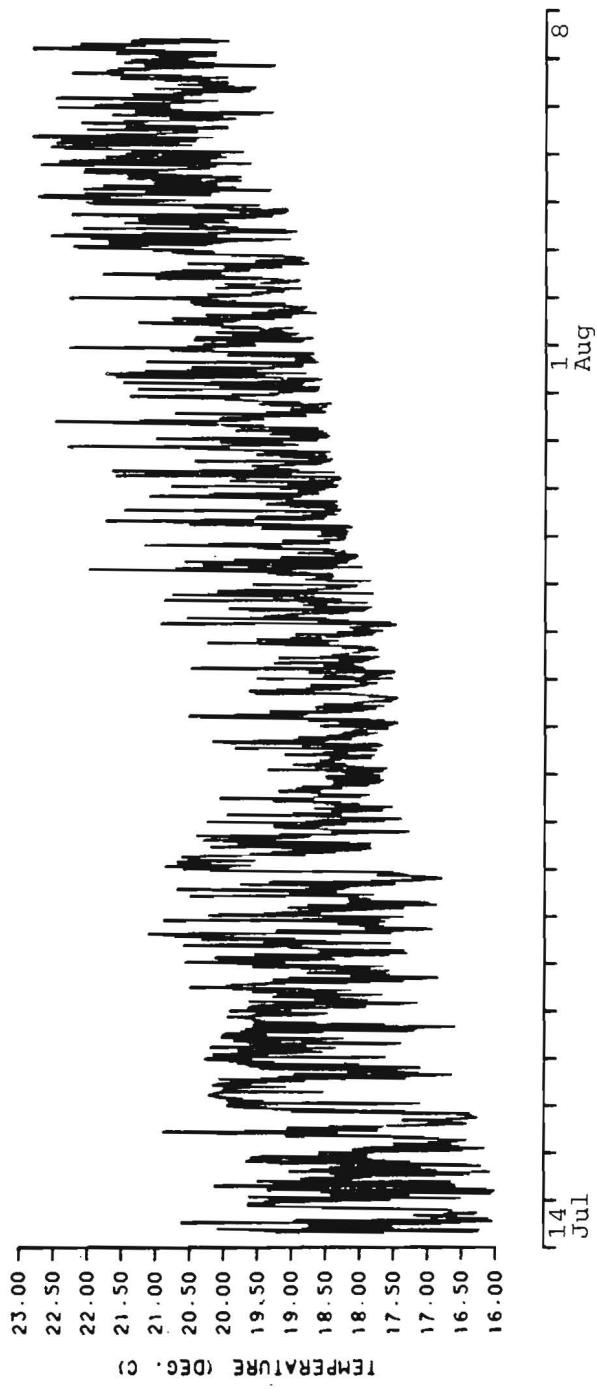
Instrument depth(below MLW) = 9.1 m

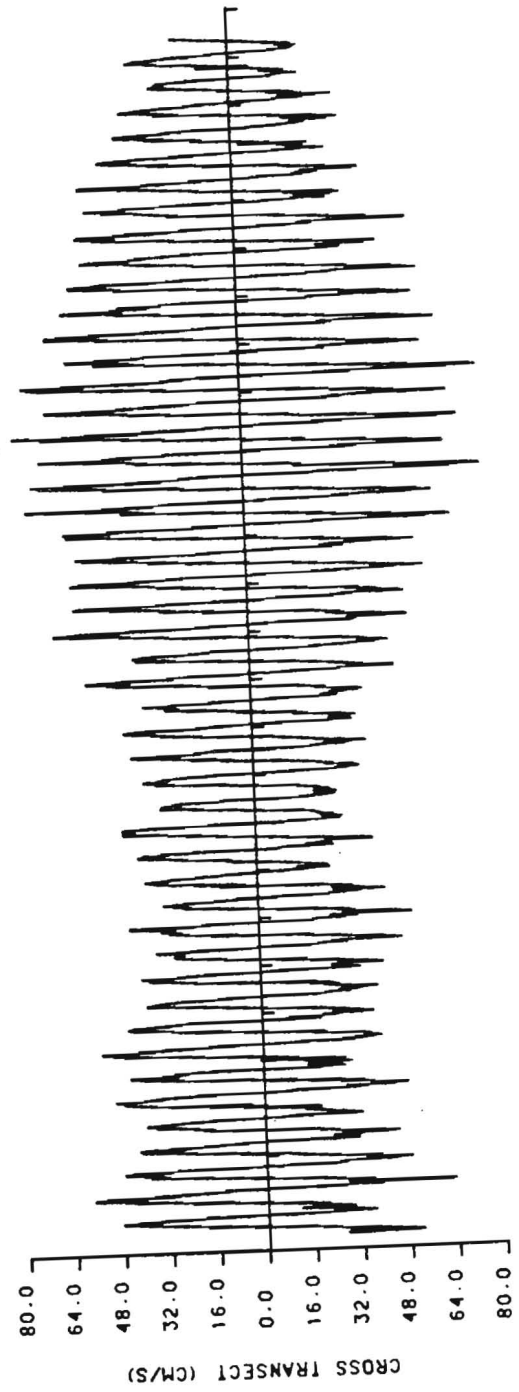
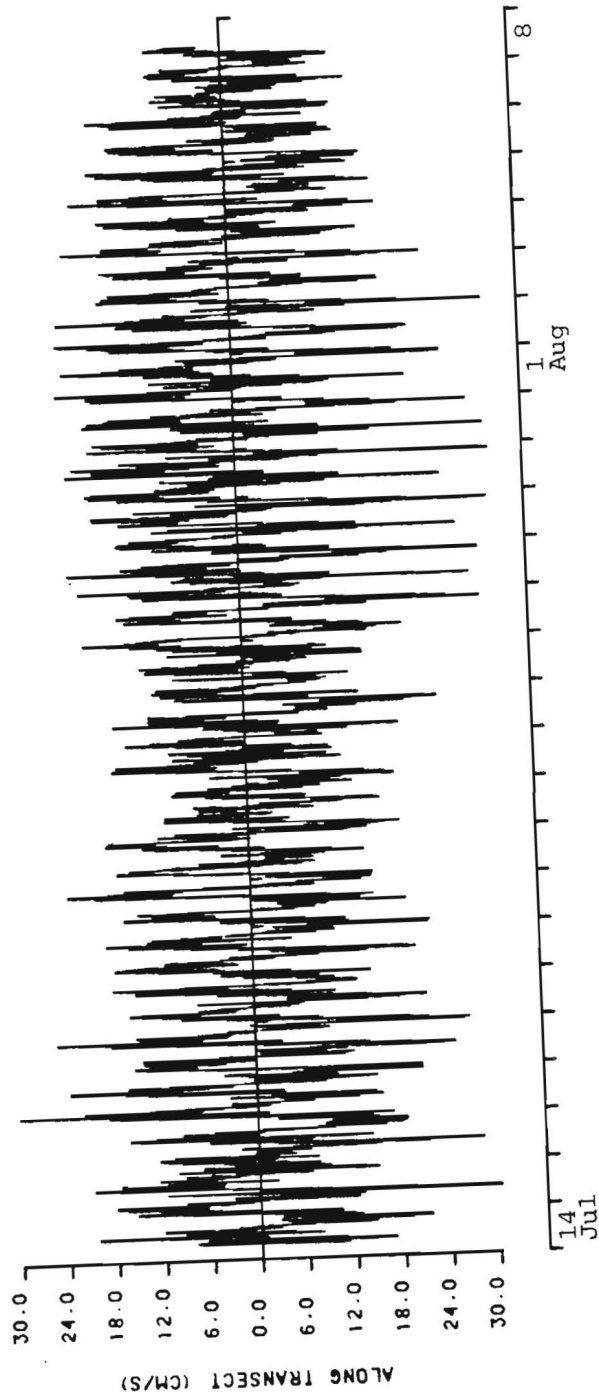
Water depth(relative to MLW) = 24.4 m

SCALE = 7.5 CM/S PER TICK

A1353 07/14/88 07:30EST DELTA T= 5 MIN







Current meter : AANDERAA #A3357
 Station # and location : 3S , 40 59.8N 73 08.1W
 Instrument depth (MLW) : 14.6m
 Water depth (MLW) : 24.4m
 Start time : 07/14/88 08:05 EST
 Stop time : 08/08/88 10:45 EST
 Duration : 25 days 2 hours 40 minutes
 Sampling interval : 5 minutes

Comments:

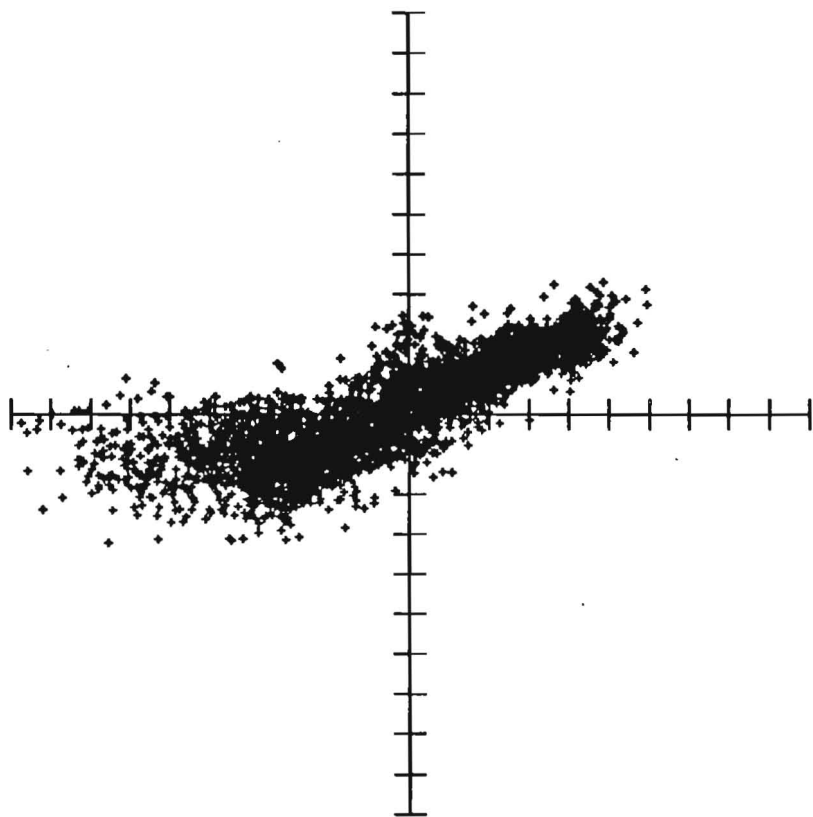
Velocity records show signs of very mild damping during the last two days.

NUMBER OF CURRENT DATA POINTS = 7232
 NUMBER OF TEMPERATURE POINTS = 7232
 NUMBER OF SALINITY POINTS = 7232

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

CURRENT							
		COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		345	75				
MEAN	=	2.01	-3.03	23.97	3.64	18.27	27.73
VARIANCE	=	35.76	742.06	216.45	388.91	1.48	0.29
STD. DEV.	=	5.98	27.24	14.71	19.72	1.22	0.54
MAX.	=	24.01	56.57	85.16		22.57	28.73
MIN.	=	-21.48	-85.05	1.70		15.84	25.91

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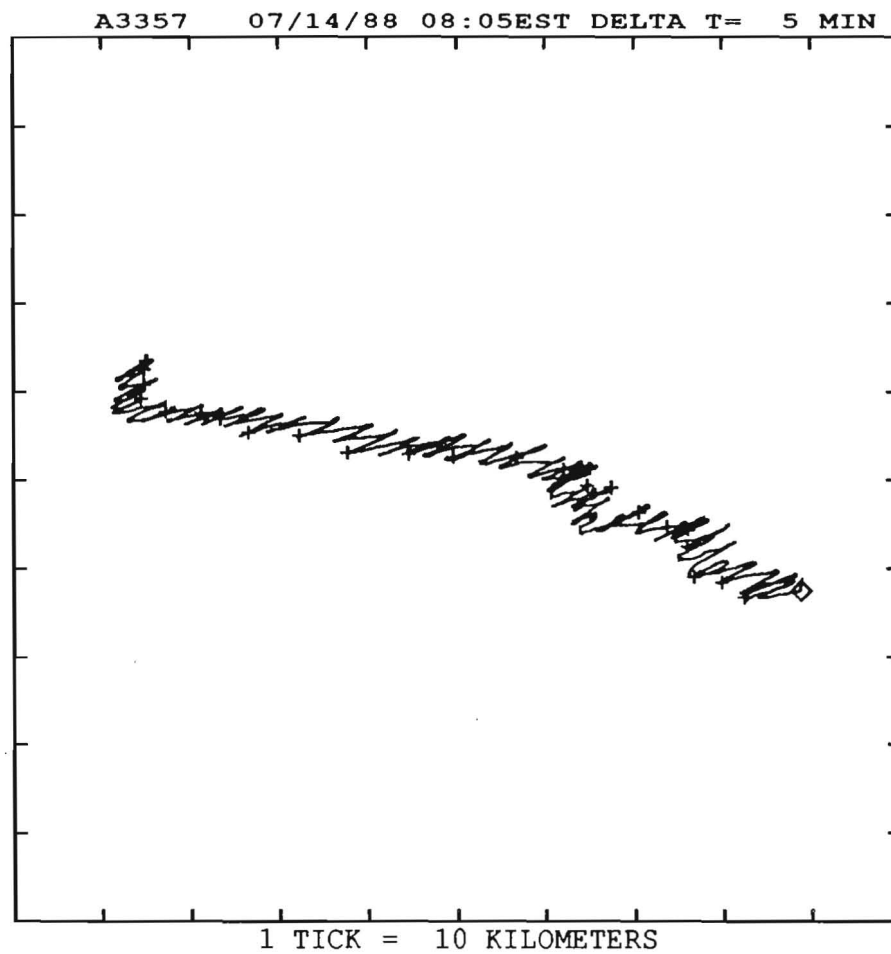
A3357 07/14/88

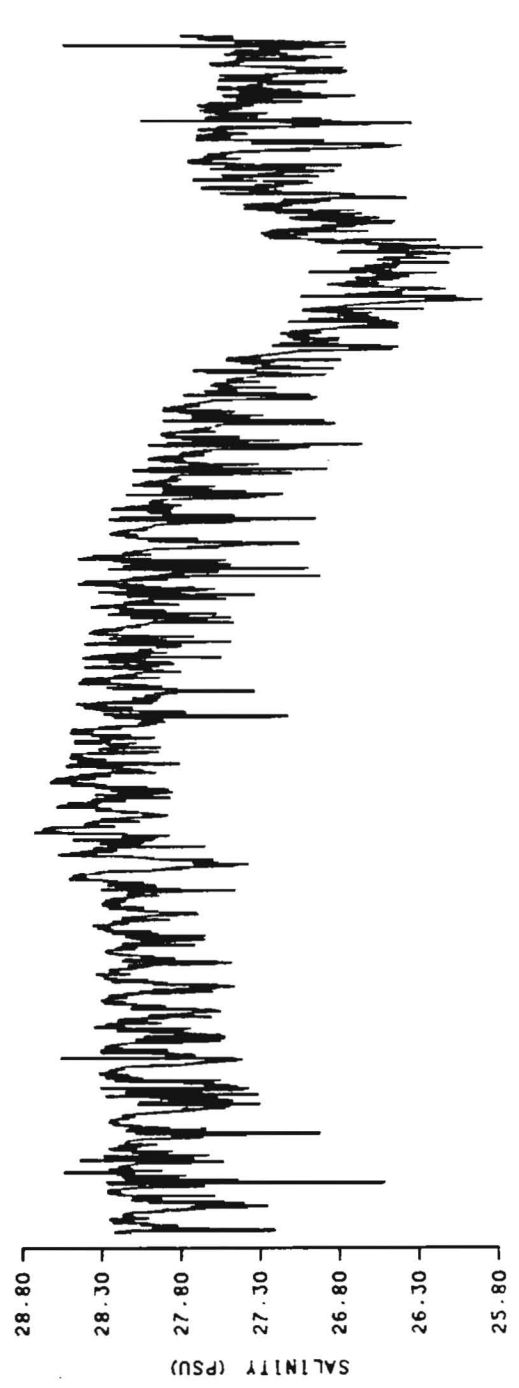
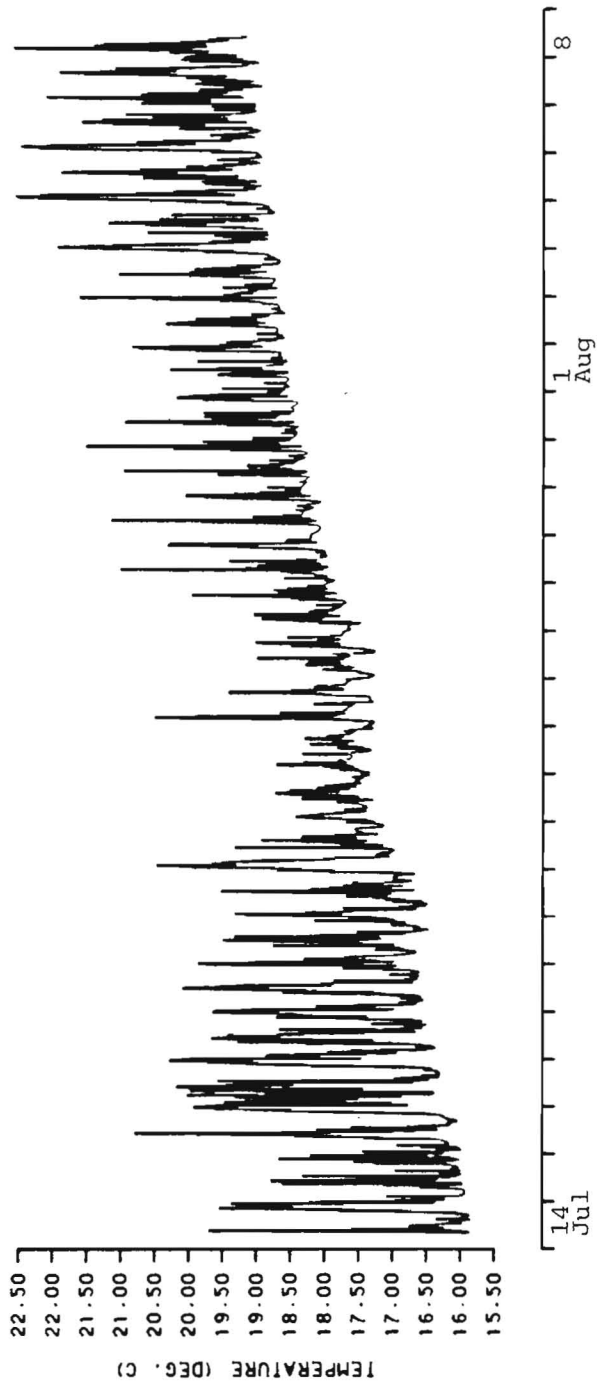
Station 3S , 40 59.8N 73 08.1W

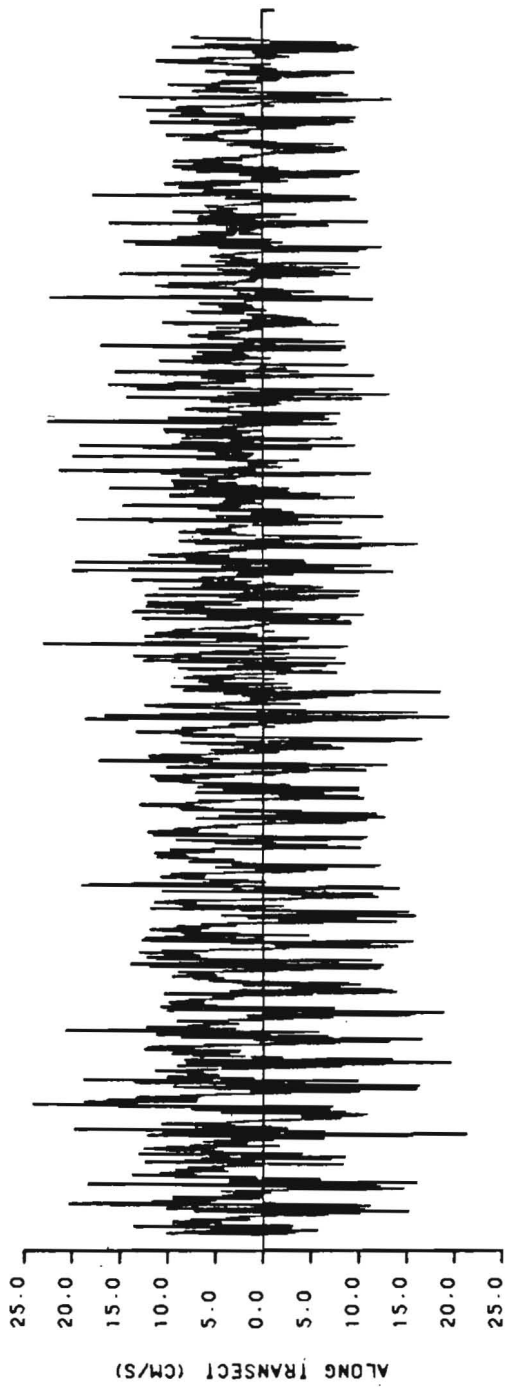
Instrument depth(below MLW) = 14.6 m

Water depth(relative to MLW) = 24.4 m

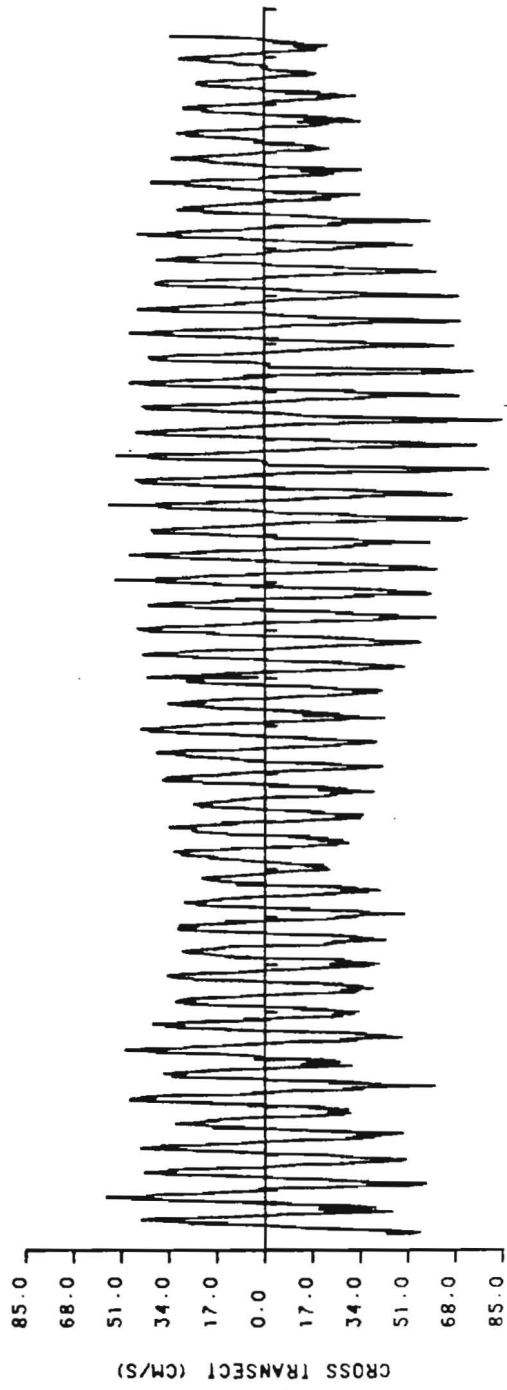
SCALE = 8.5 CM/S PER TICK







14 Jul 8 Aug



TRANSECT 4

10 August - 7 September 1988

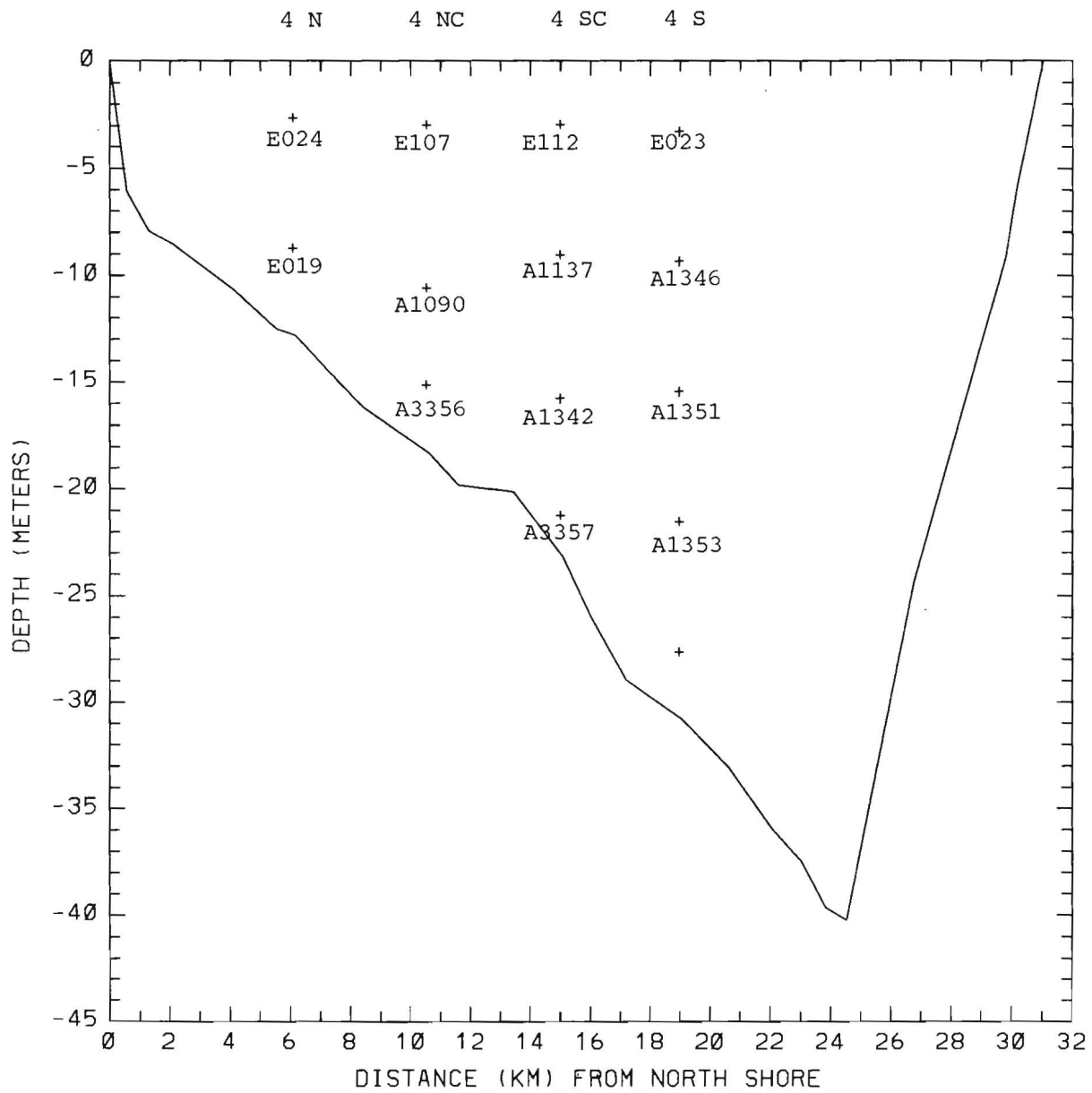


Fig. 5. Transect 4 showing the locations of the current meters

Current meter : ENDECO #1740024
 Station # and location : 4N , 41 10.8N 72 57.8W
 Instrument depth (MLW) : 2.7m
 Water depth (MLW) : 12.8m
 Start time : 08/10/88 08:16 EST
 Stop time : 09/07/88 10:28 EST
 Duration : 28 days 2 hours 12 minutes
 Sampling interval : 2 minutes

Comments:

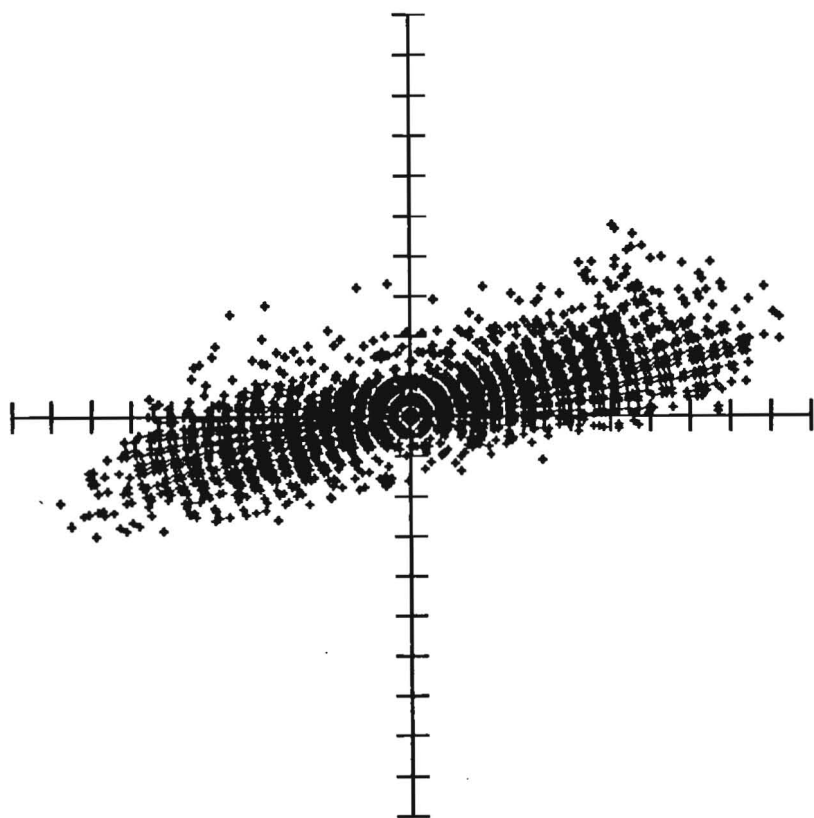
The abrupt salinity drop-off is suspicious and possibly due to conductivity cell biofouling.

NUMBER OF CURRENT DATA POINTS = 20226
 NUMBER OF TEMPERATURE POINTS = 20226
 NUMBER OF SALINITY POINTS = 20226

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		346	76				
MEAN	=	0.71	2.49	17.53	2.59	21.57	27.76
VARIANCE	=	11.44	395.26	106.12	203.35	0.46	1.35
STD. DEV.	=	3.38	19.88	10.30	14.26	0.68	1.16
MAX.	=	20.57	47.76	47.77		25.04	29.09
MIN.	=	-10.83	-45.29	0.00		20.32	24.42

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1740024 08/10/88

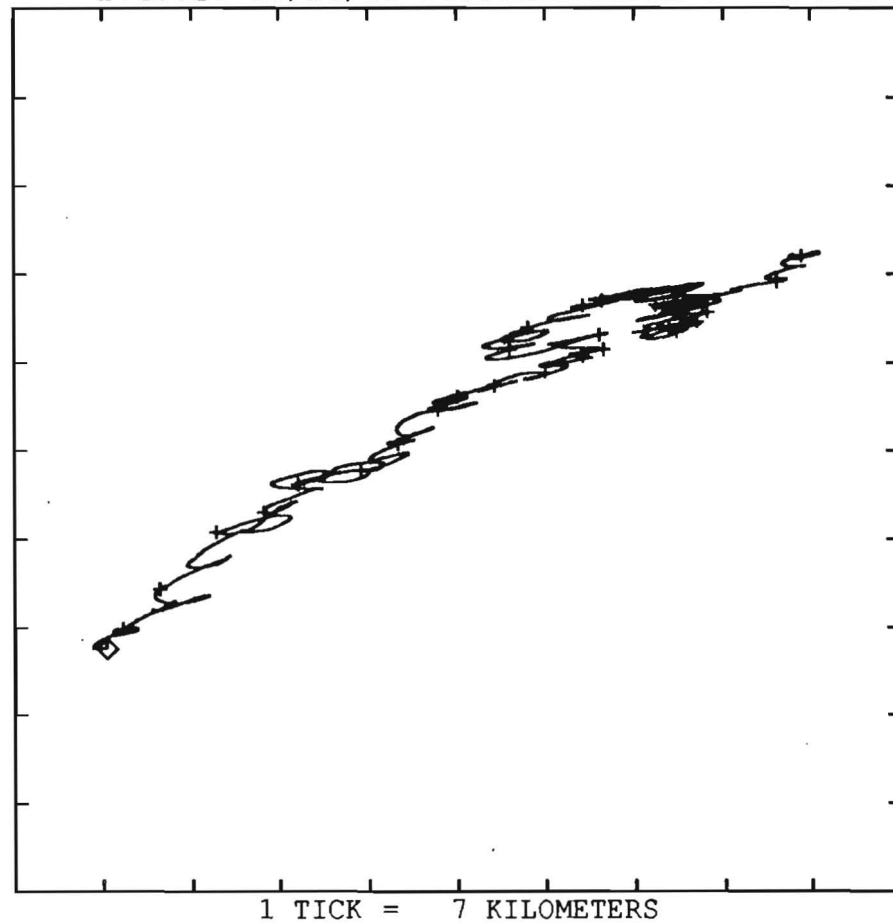
Station 4N , 41 10.8N 72 57.8W

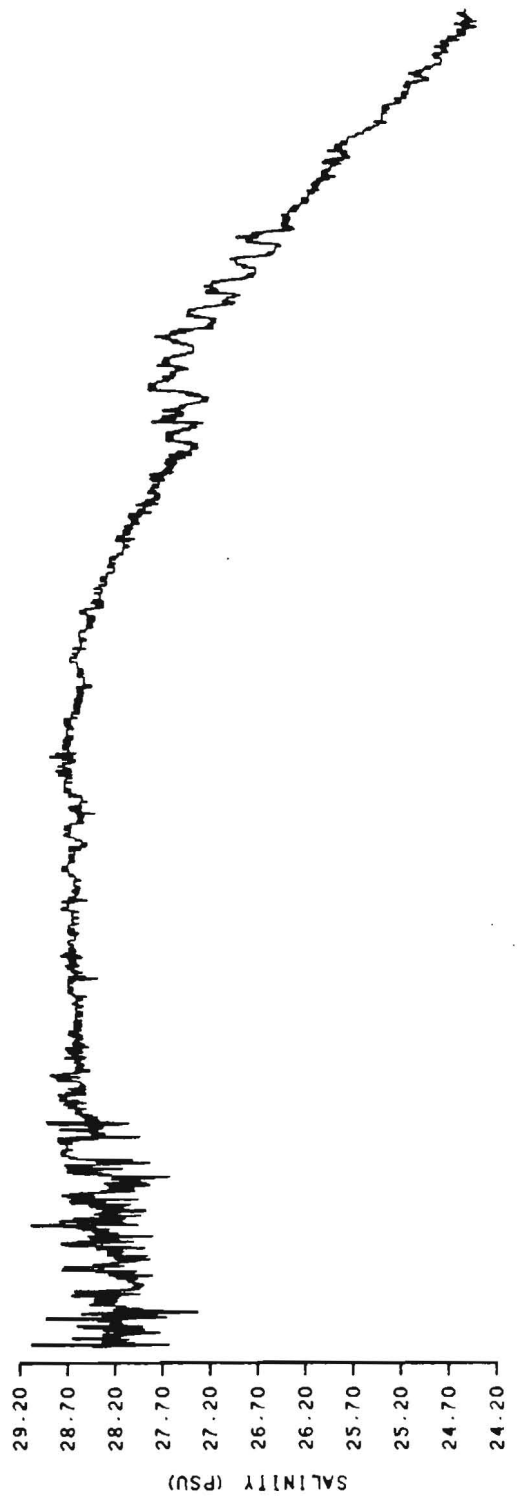
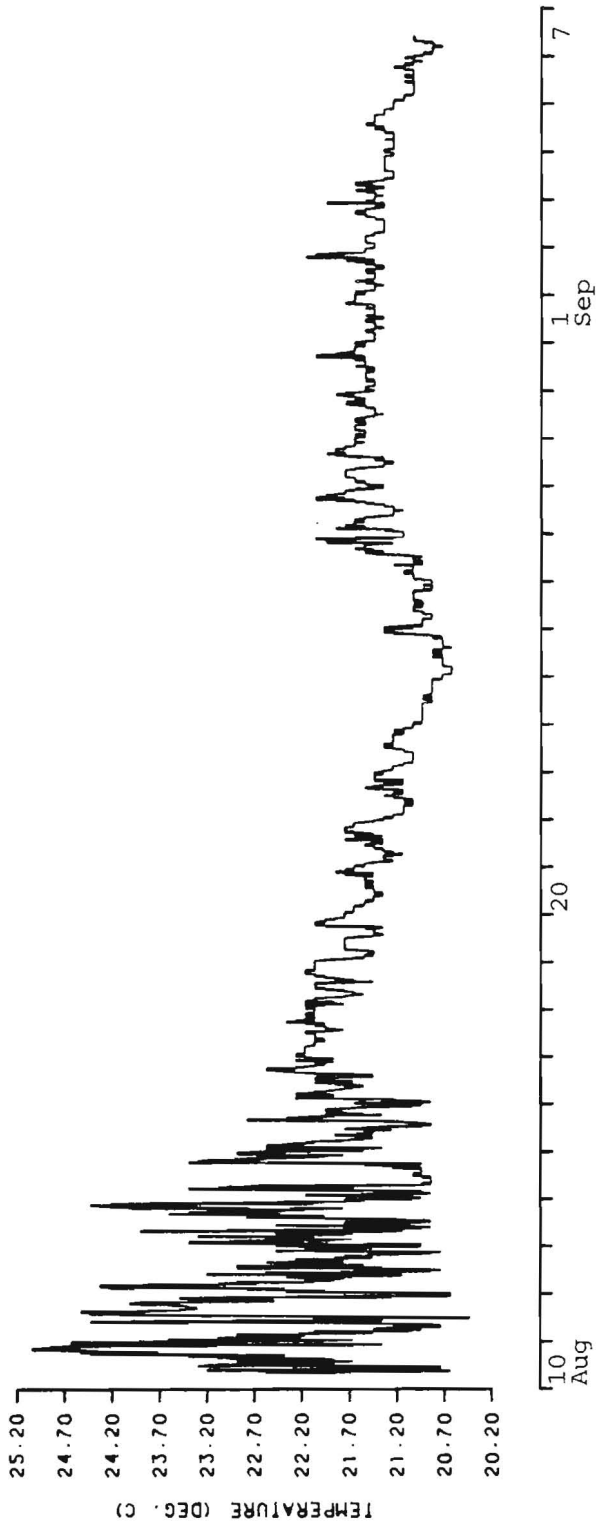
Instrument depth(below MLW) = 2.7 m

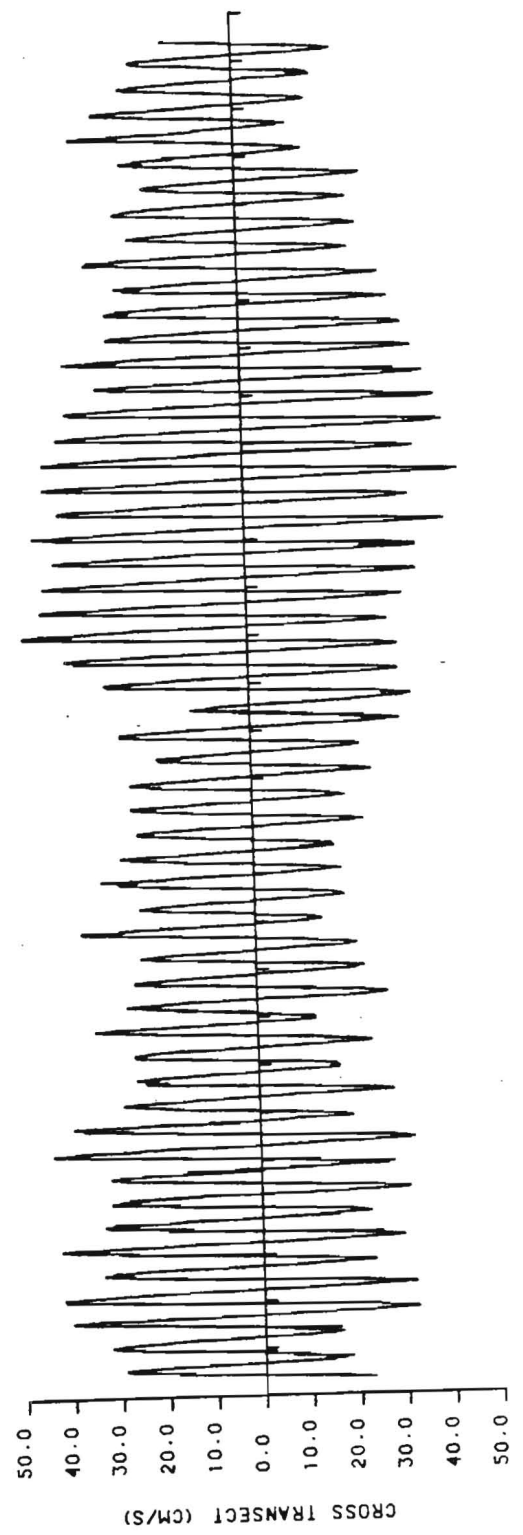
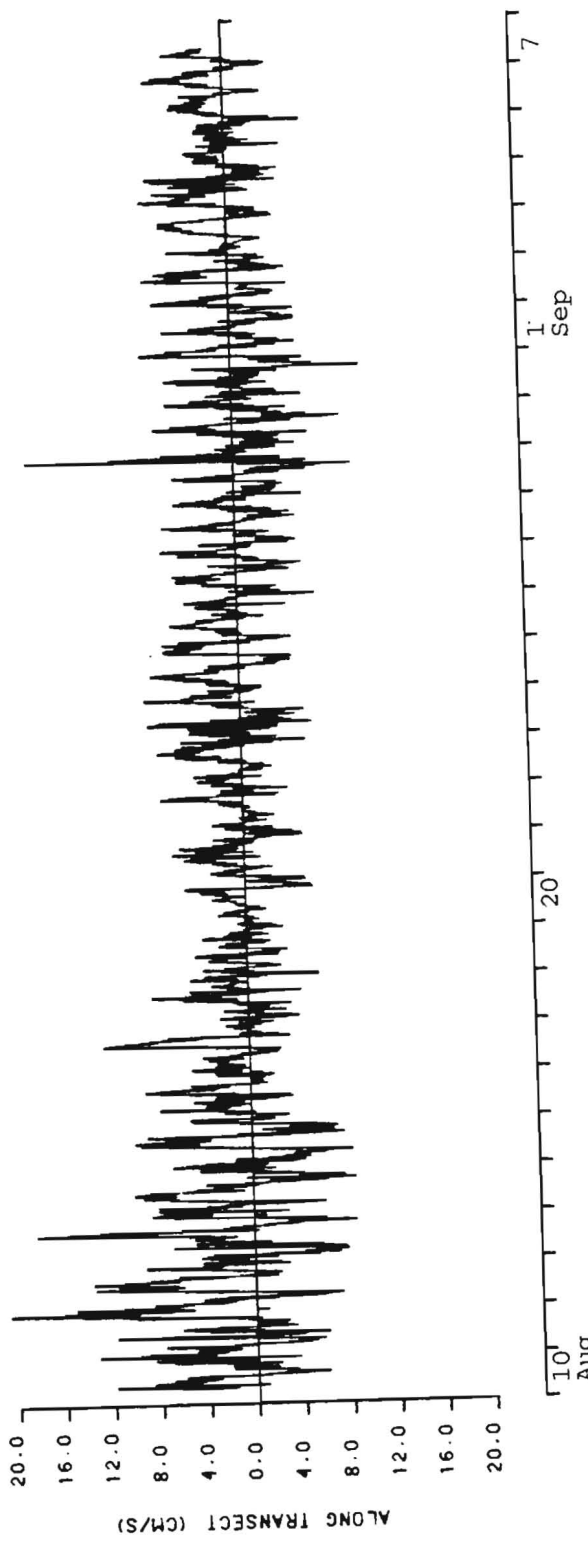
Water depth(relative to MLW) = 12.8 m

SCALE = 5.0 CM/S PER TICK

1740024 08/10/88 08:16EST DELTA T= 2 MIN







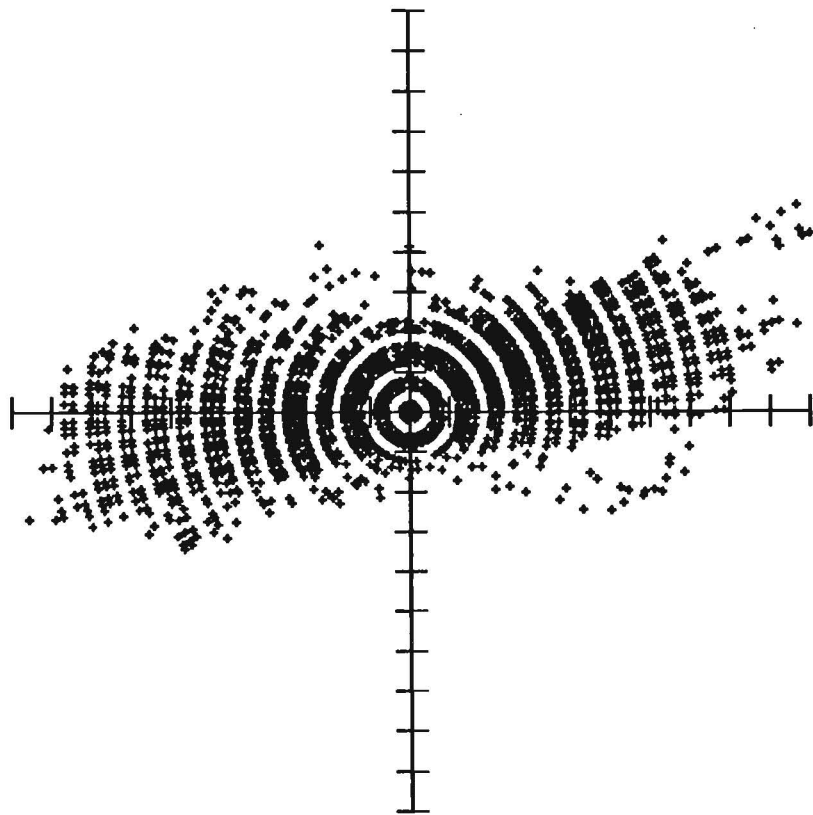
Current meter : ENDECO #1740019
 Station # and location : 4N , 41 10.8N 72 57.8W
 Instrument depth (MLW) : 8.8m
 Water depth (MLW) : 12.8m
 Start time : 08/10/88 08:14 EST
 Stop time : 09/07/88 10:28 EST
 Duration : 28 days 2 hours 14 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 20227
 NUMBER OF TEMPERATURE POINTS = 20227
 NUMBER OF SALINITY POINTS = 20227

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	1.45	0.97	12.33	1.75	21.17	27.35
VARIANCE	=	9.92	184.17	45.07	97.05	0.08	0.09
STD. DEV.	=	3.15	13.57	6.71	9.85	0.28	0.29
MAX.	=	13.82	33.49	34.12		21.88	27.75
MIN.	=	-11.22	-30.39	0.00		20.17	26.68

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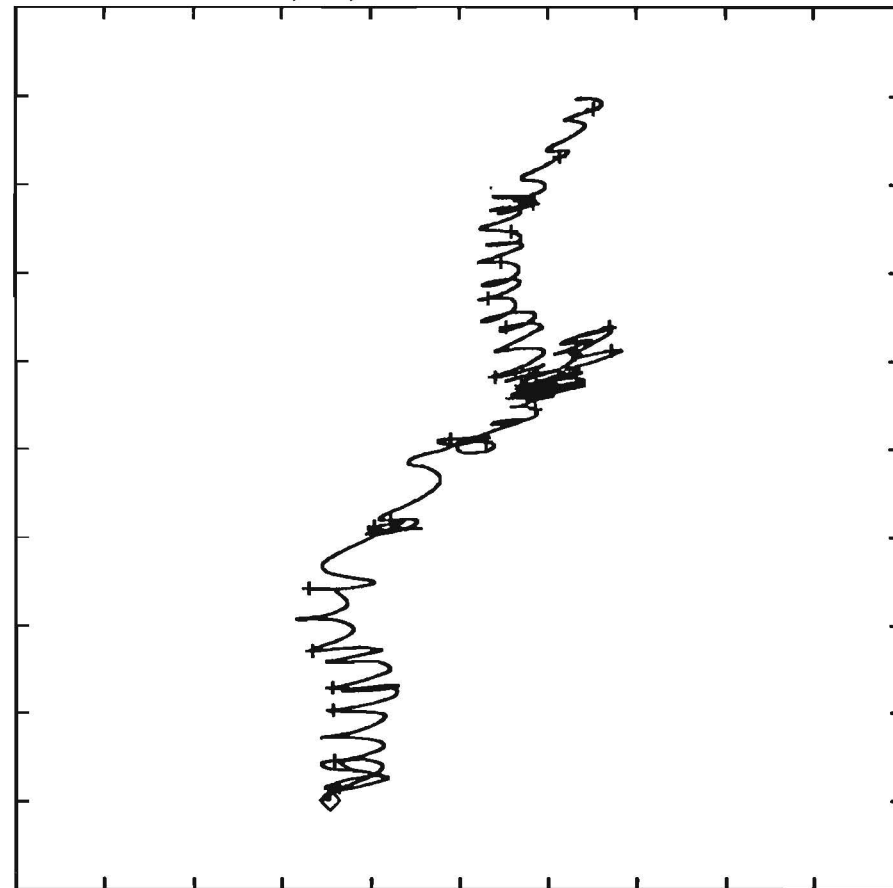
Station 4N , 41 10.8N 72 57.8W

Instrument depth(below MLW) = 8.8 m

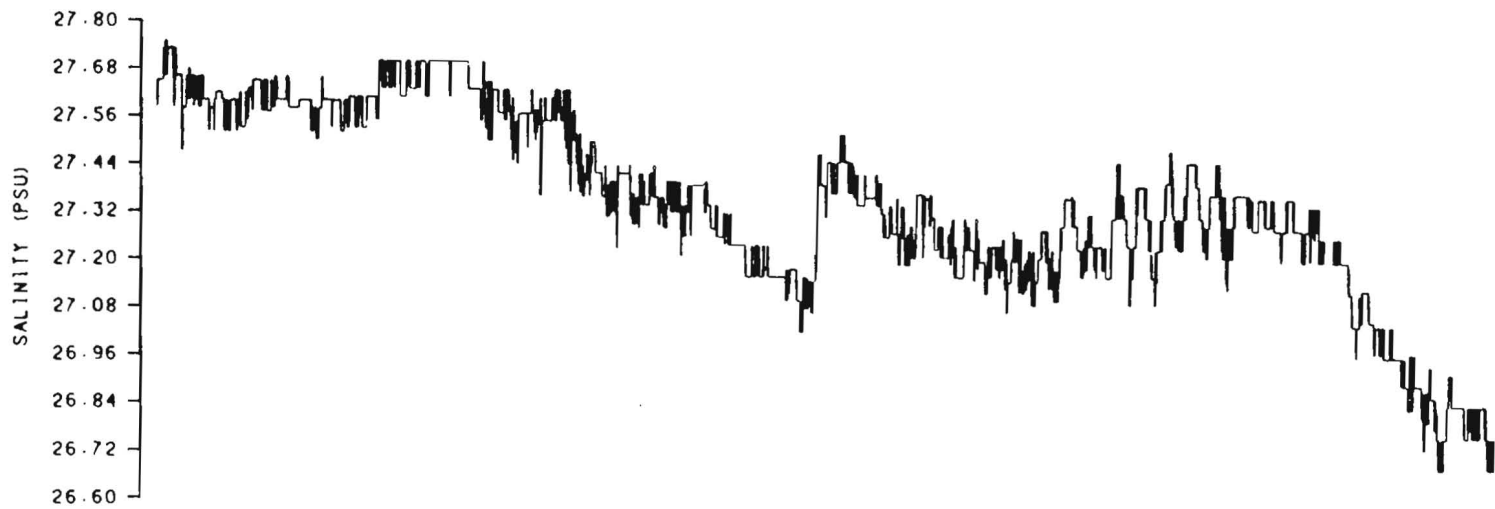
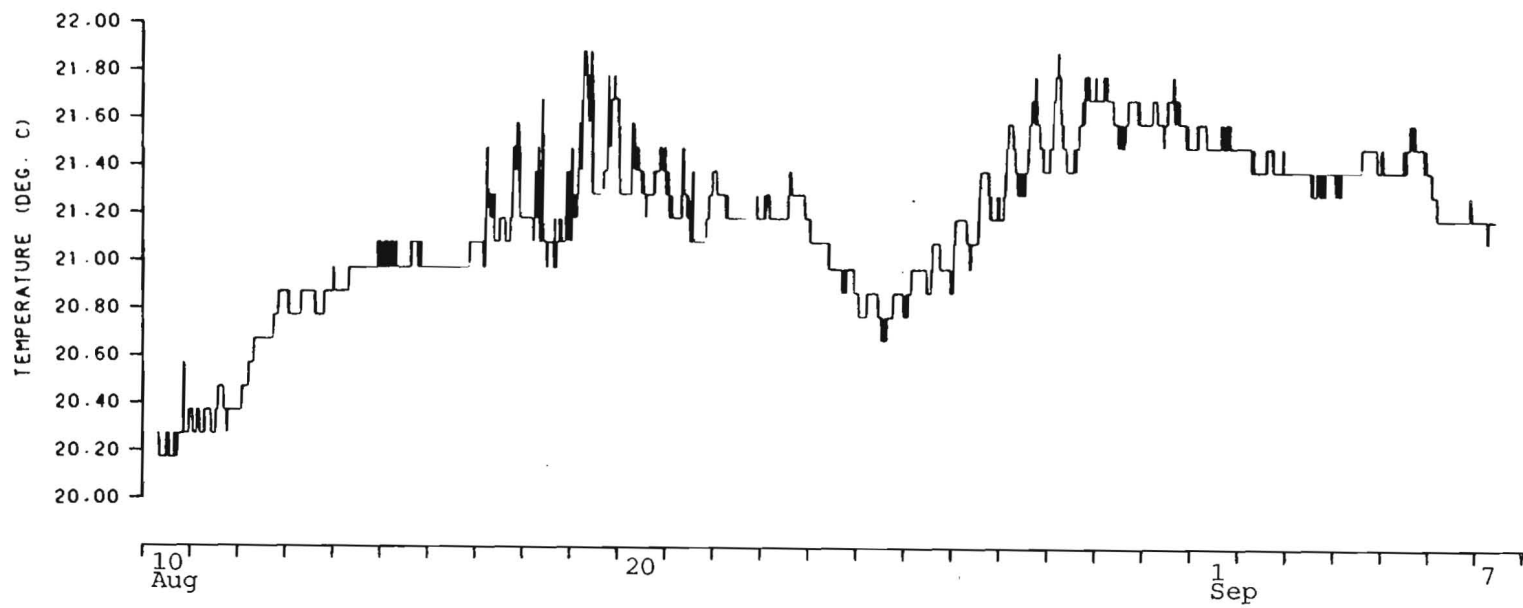
Water depth(relative to MLW) = 12.8 m

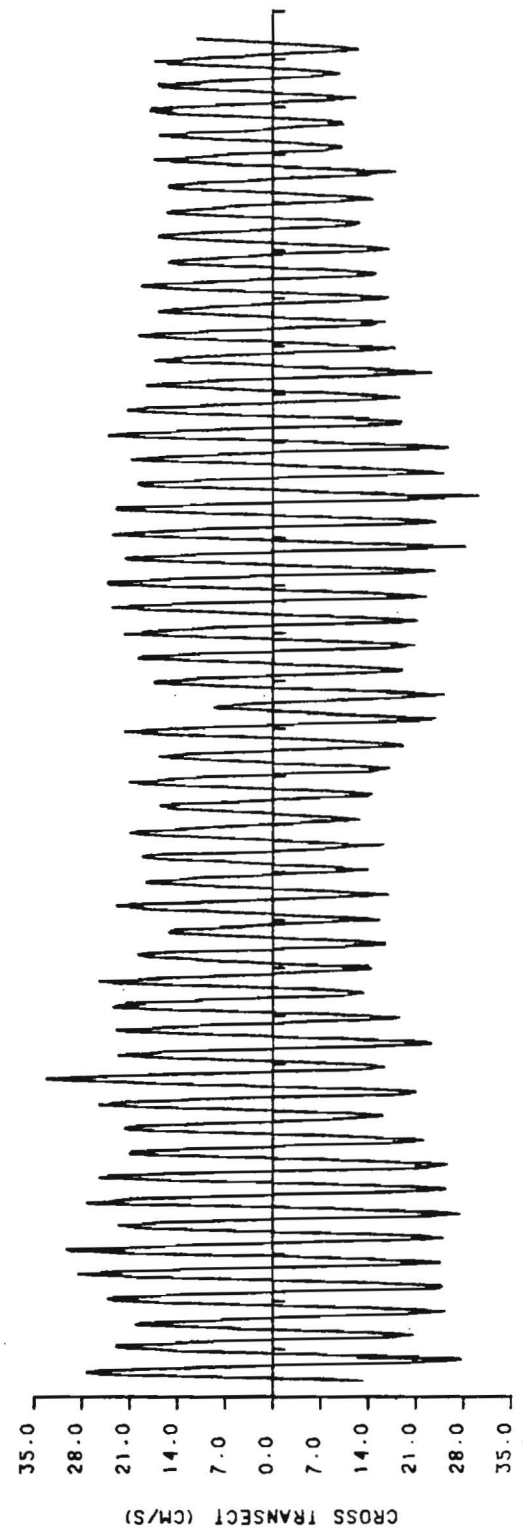
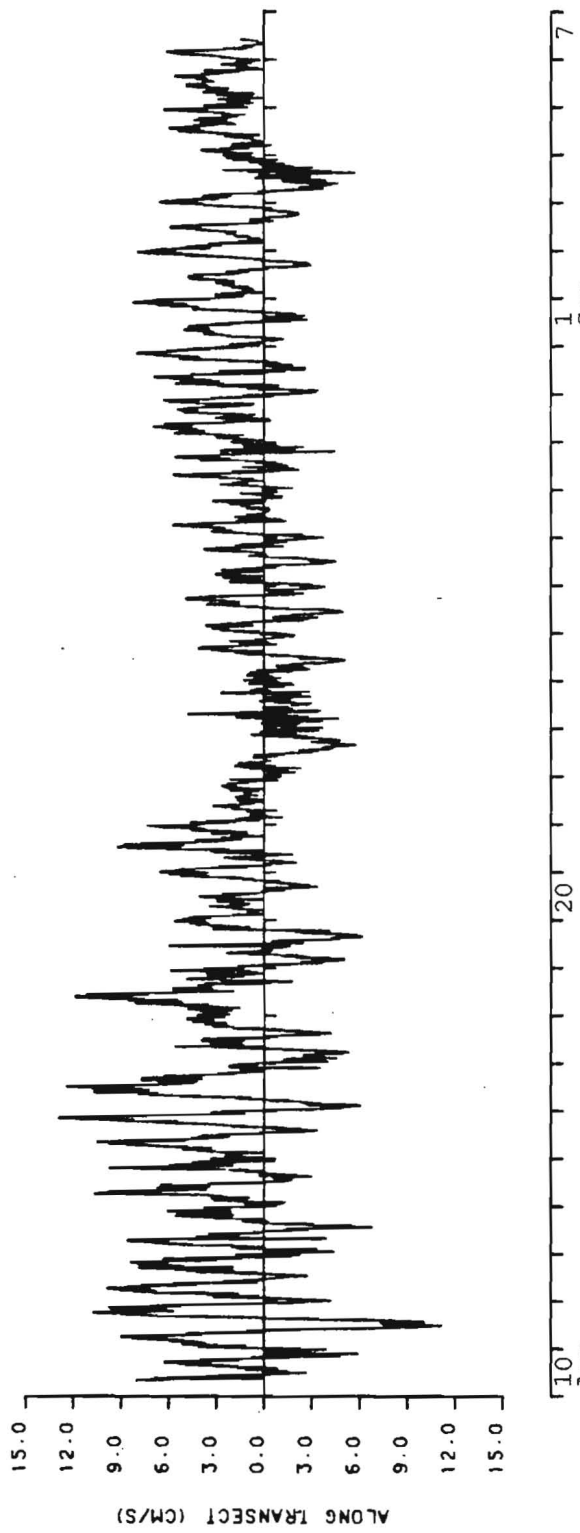
SCALE = 3.0 CM/S PER TICK

1740019 08/10/88 08:14EST DELTA T= 2 MIN



1 TICK = 5 KILOMETERS





Current meter : ENDECO #1740107
 Station # and location : 4NC, 41 08.5N 72 56.9W
 Instrument depth (MLW) : 3.0m
 Water depth (MLW) : 18.3m
 Start time : 08/10/88 09:20 EST
 Stop time : 09/06/88 10:14 EST
 Duration : 27 days 0 hours 54 minutes
 Sampling interval : 2 minutes

Comments:

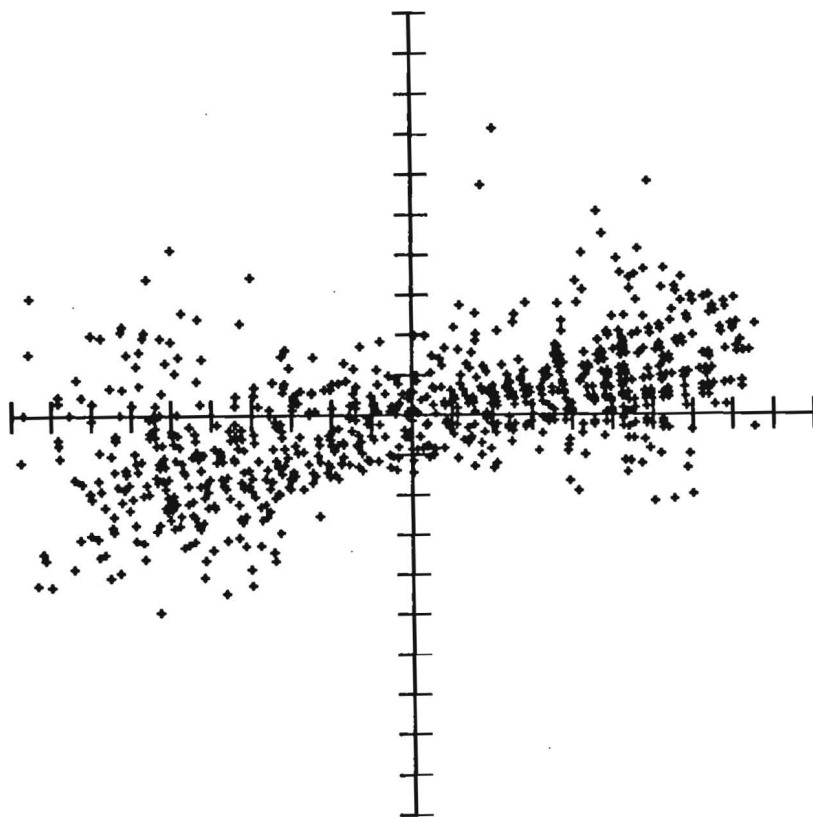
Malfunction of the direction channel resulted in loss of velocity information, except for the portions shown. The abrupt salinity drop-off may be due to conductivity cell biofouling.

No progressive vector diagram executed.

NUMBER OF CURRENT DATA POINTS = 4478
 NUMBER OF TEMPERATURE POINTS = 19467
 NUMBER OF SALINITY POINTS = 19467

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	-0.38	1.33	19.02	1.39	21.83	26.70
VARIANCE	=	39.51	613.99	112.97	326.75	0.52	0.27
STD. DEV.	=	6.29	24.78	10.63	18.08	0.72	0.52
MAX.	=	32.17	44.20	54.19		25.38	28.38
MIN.	=	-24.38	-51.04	0.00		20.71	24.70



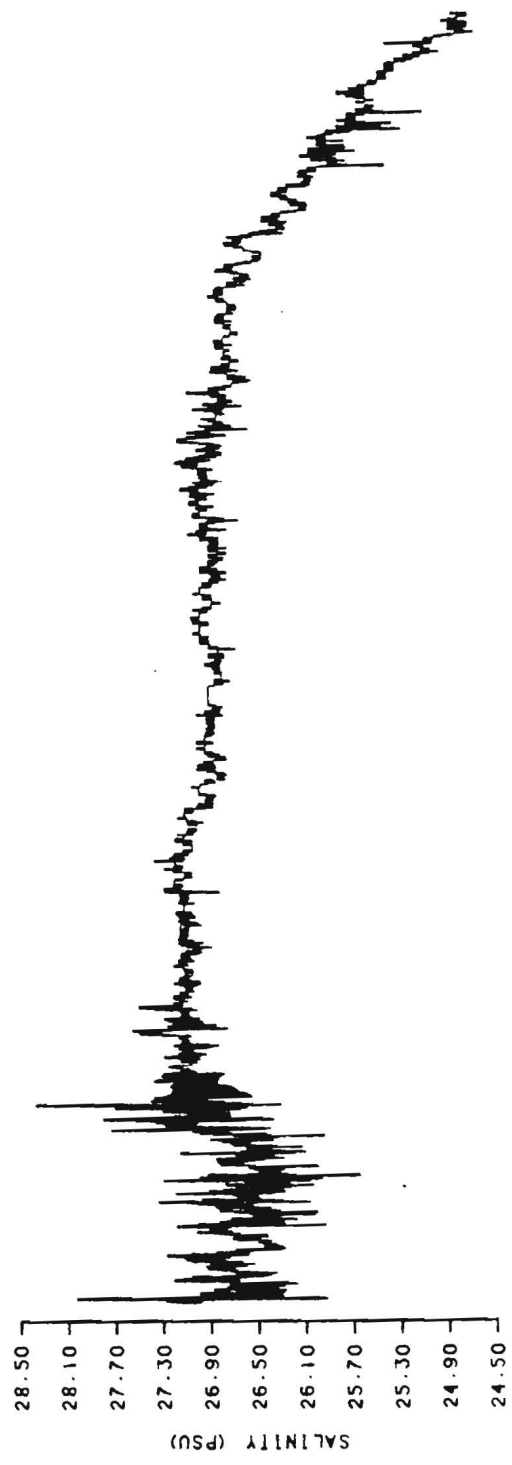
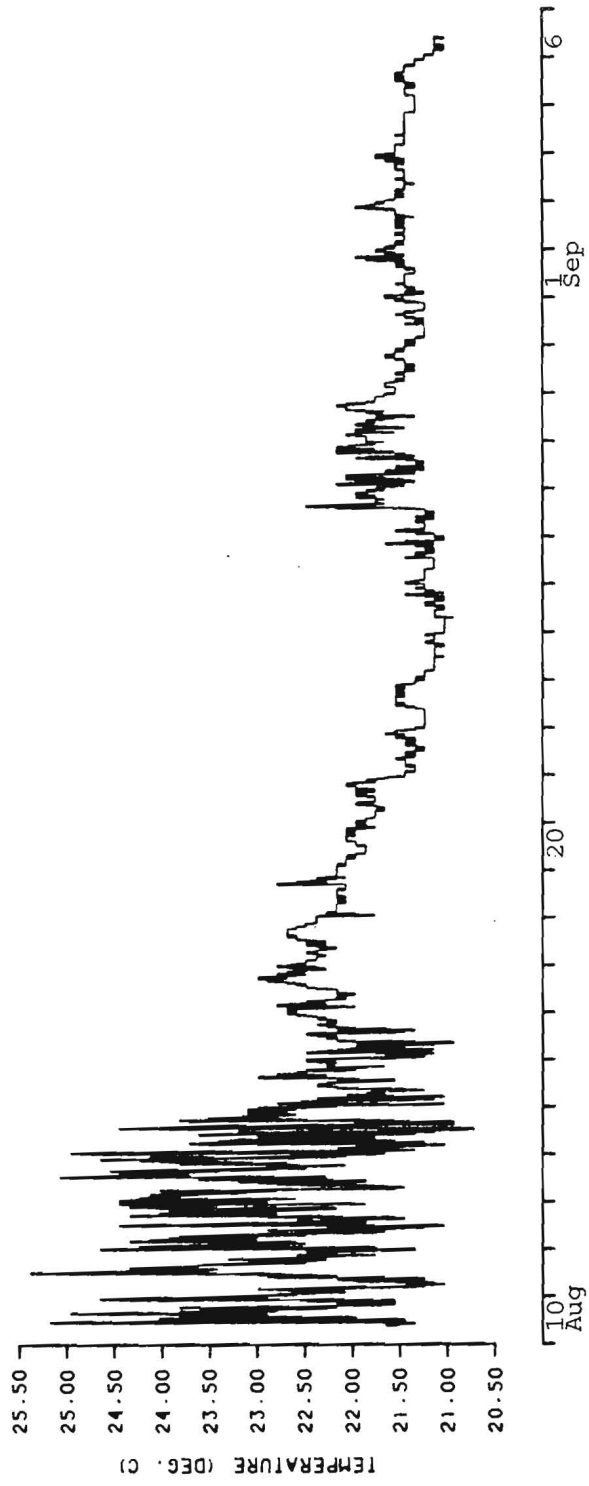
1740107 08/10/88

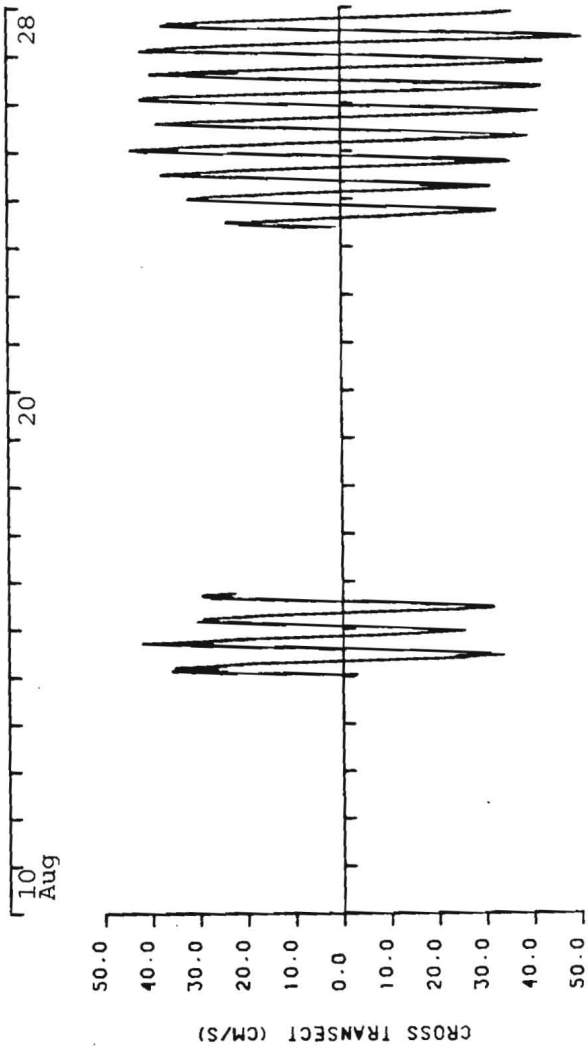
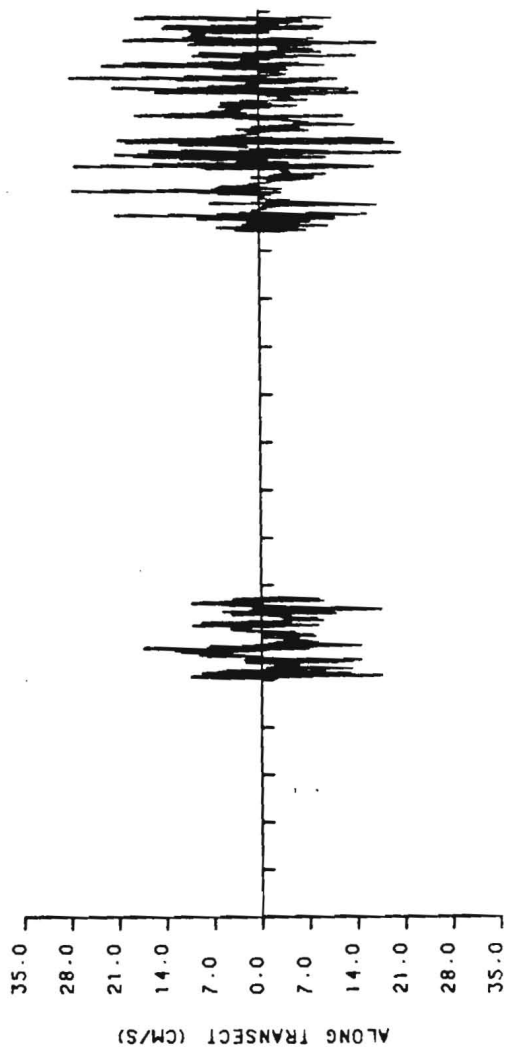
Station 4NC, 41 08.5N 72 56.9W

Instrument depth(below MLW) = 3.0 m

Water depth(relative to MLW) = 18.3 m

SCALE = 5.0 CM/S PER TICK





Current meter : ENDECO #A1090
 Station # and location : 4NC, 41 08.5N 72 56.9W
 Instrument depth (MLW) : 10.7m
 Water depth (MLW) : 18.3m
 Start time : 08/10/88 09:58 EST
 Stop time : 08/13/88 18:33 EST
 Duration : 3 days 8 hours 35 minutes
 Sampling interval : 30 seconds

Comments:

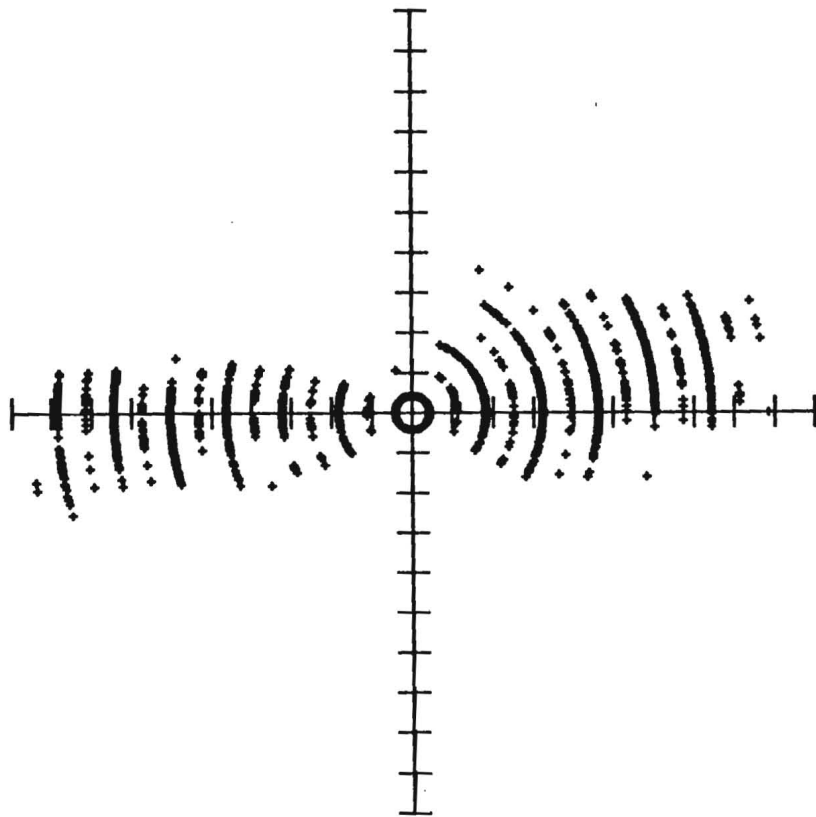
Very short record. Sampling interval of 30 seconds resulted in filling magnetic tape in 4 days.

No progressive vector diagram executed.

NUMBER OF CURRENT DATA POINTS = 4835
 NUMBER OF TEMPERATURE POINTS = 4835
 NUMBER OF SALINITY POINTS = 4835

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	0.90	0.01	14.60	0.90	21.10	28.64
VARIANCE	=	12.94	316.18	116.78	164.56	0.01	0.00
STD. DEV.	=	3.60	17.78	10.81	12.83	0.09	0.05
MAX.	=	13.15	35.38	38.19		21.59	28.92
MIN.	=	-11.86	-38.16	1.71		20.81	28.51



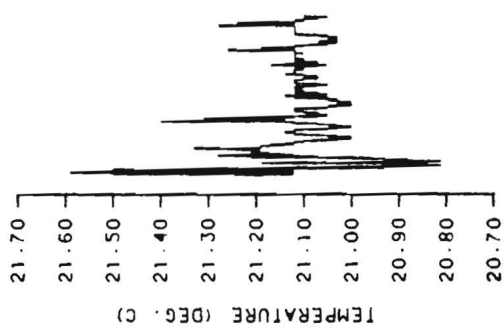
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Station 4NC, 41 08.5N 72 56.9W

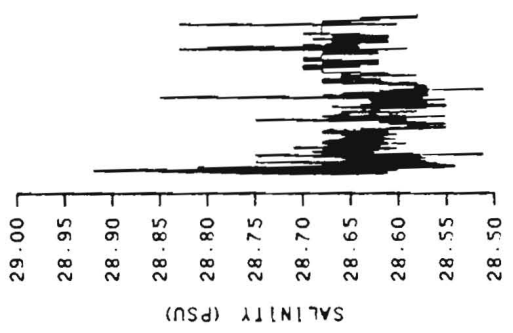
Instrument depth(below MLW) = 10.7 m

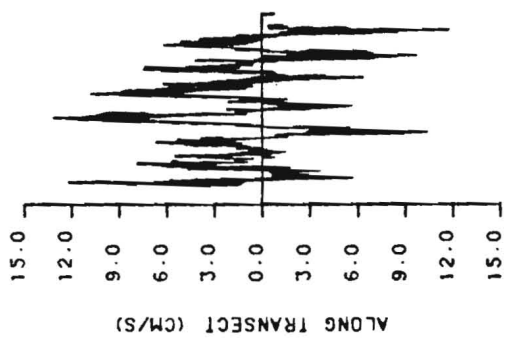
Water depth(relative to MLW) = 18.3 m

SCALE = 4.0 CM/S PER TICK

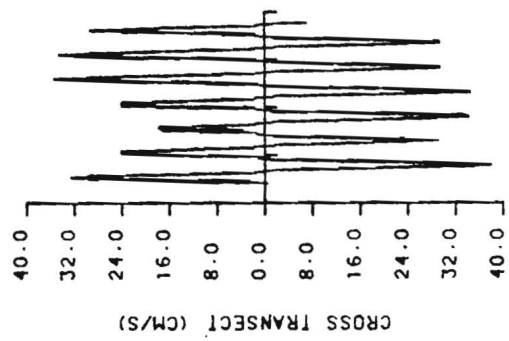


10
Aug





10
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Current meter : AANDERAA #A3356
 Station # and location : 4NC, 41 08.5N 72 56.9W
 Instrument depth (MLW) : 15.2m
 Water depth (MLW) : 18.3m
 Start time : 08/10/88 09:55 EST
 Stop time : 09/06/88 09:05 EST
 Duration : 26 days 23 hours 10 minutes
 Sampling interval : 5 minutes

Comments:

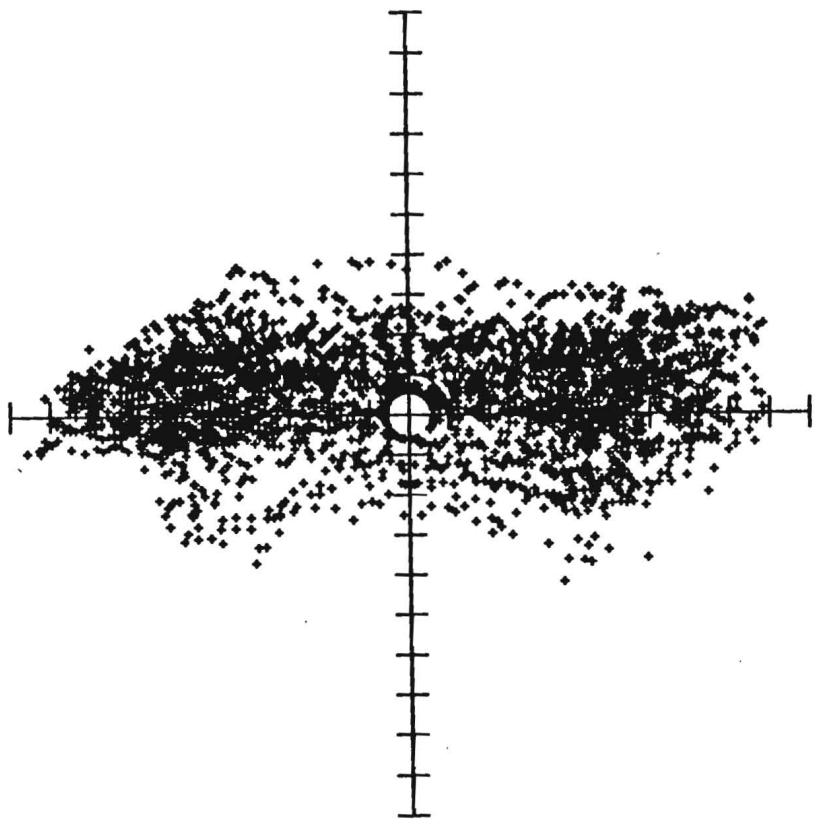
The speed sensor failed from 10-11 August and from 28 August to 2 September.

NUMBER OF CURRENT DATA POINTS = 6096
 NUMBER OF TEMPERATURE POINTS = 7766
 NUMBER OF SALINITY POINTS = 7766

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	1.51	0.70	15.51	1.66	21.13	28.33
VARIANCE	=	32.50	255.38	50.05	143.94	0.03	0.23
STD. DEV.	=	5.70	15.98	7.07	12.00	0.17	0.48
MAX.	=	16.72	31.98	34.74		21.51	29.24
MIN.	=	-17.42	-33.45	2.17		20.50	27.44

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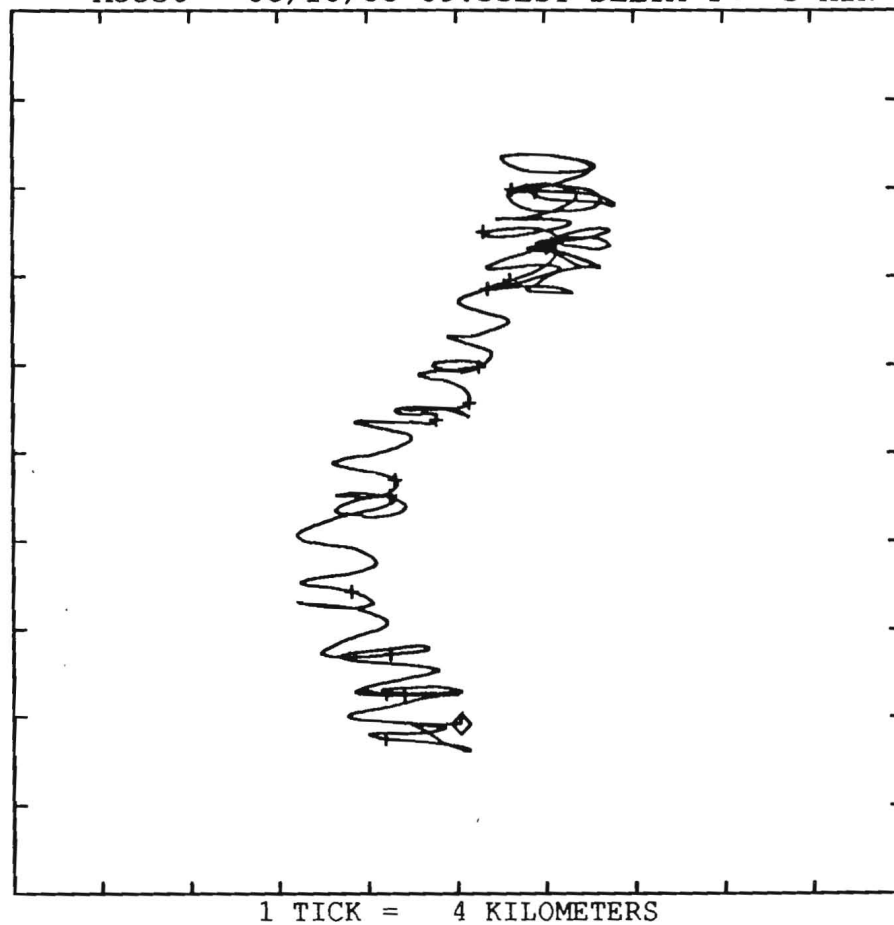
Station 4NC, 41 08.5N 72 56.9W

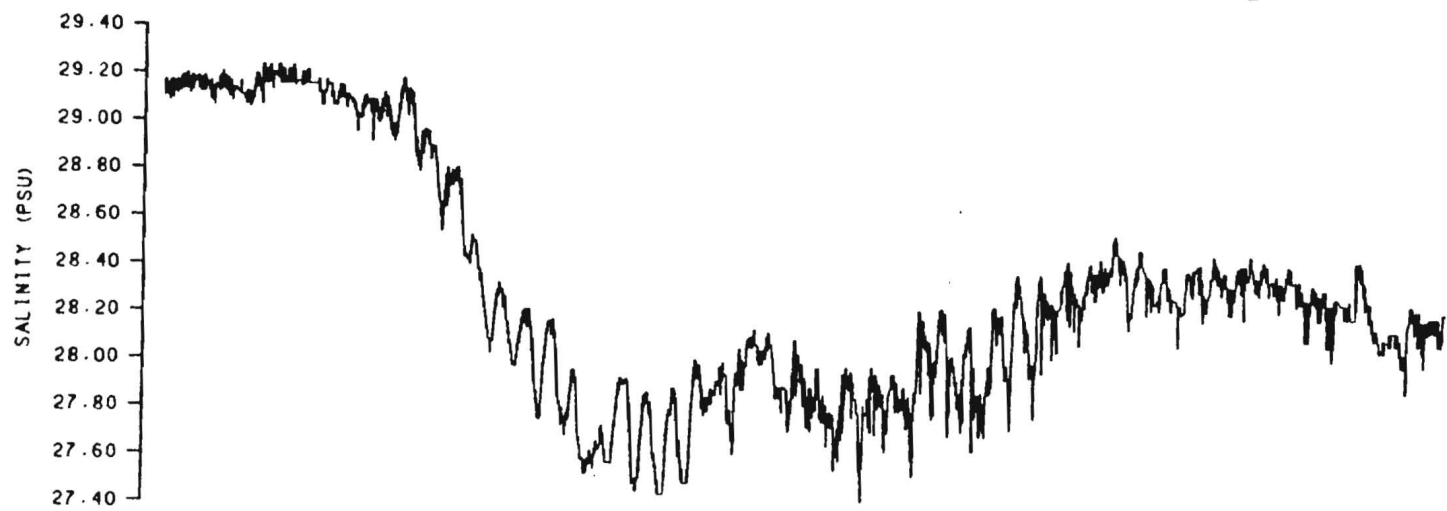
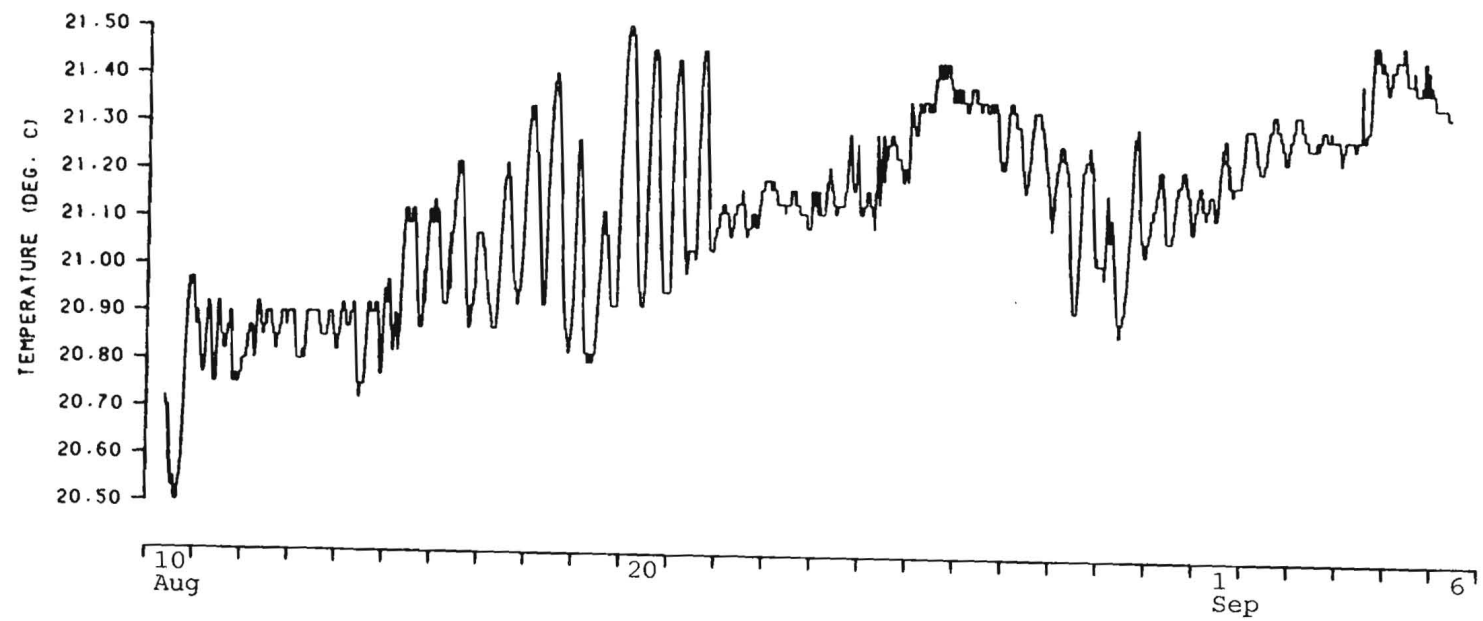
Instrument depth(below MLW) = 15.2 m

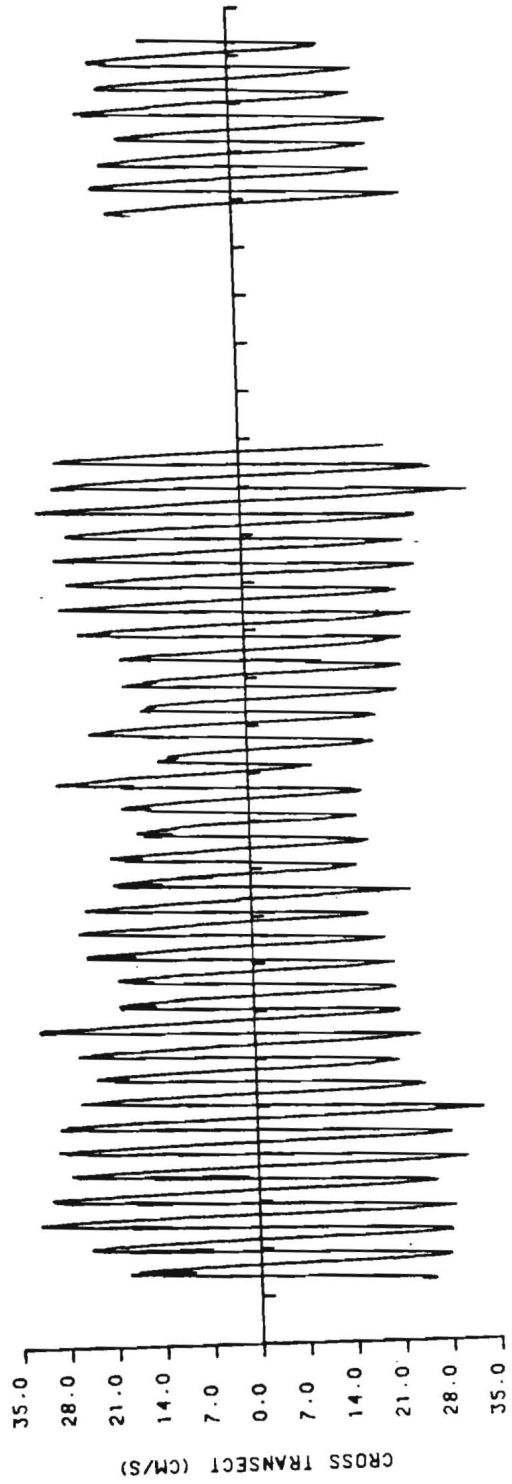
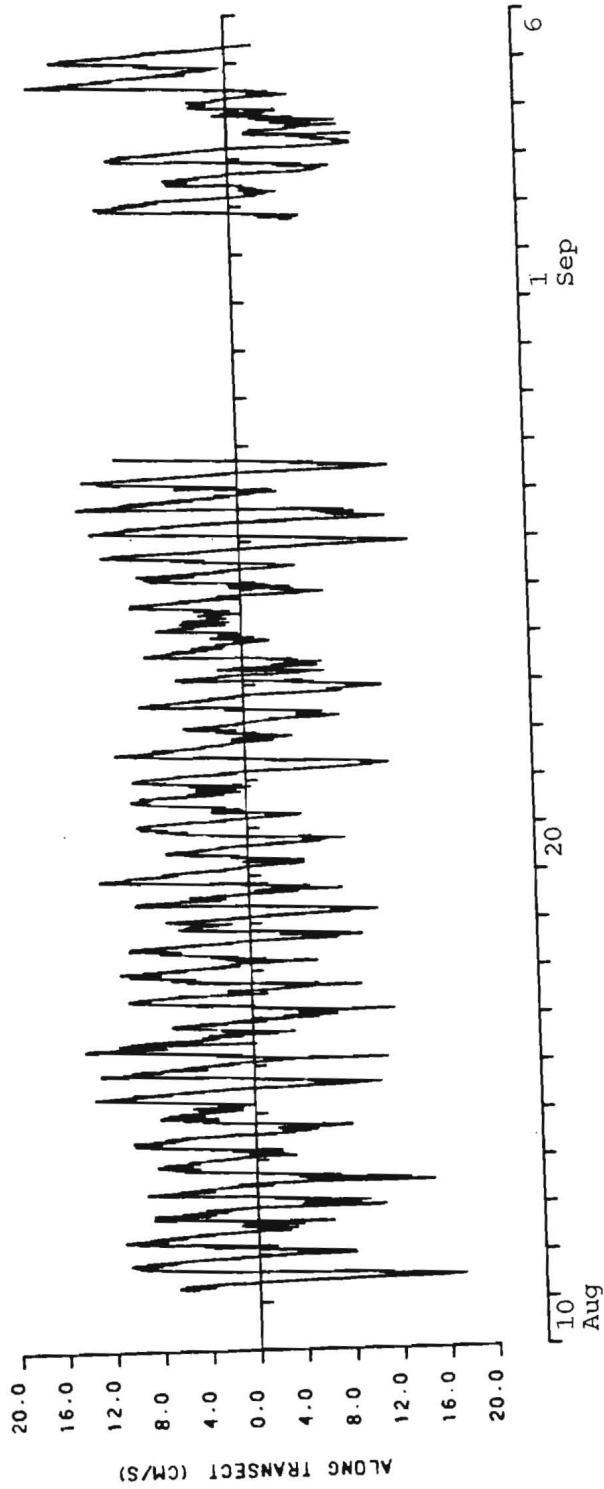
Water depth(relative to MLW) = 18.3 m

SCALE = 3.5 CM/S PER TICK

A3356 08/10/88 09:55EST DELTA T= 5 MIN







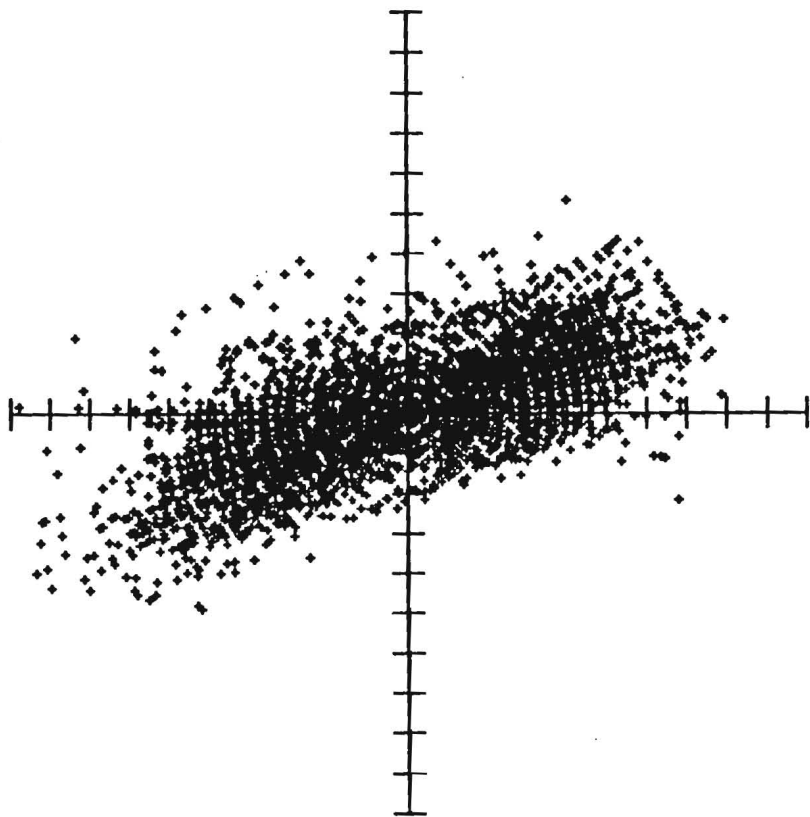
Current meter : ENDECO #1740112
 Station # and location : 4SC, 41 06.2N 72 56.2N
 Instrument depth (MLW) : 3.0m
 Water depth (MLW) : 23.2m
 Start time : 08/10/88 10:32 EST
 Stop time : 09/06/88 11:24 EST
 Duration : 27 days 0 hours 52 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 19466
 NUMBER OF TEMPERATURE POINTS = 19466
 NUMBER OF SALINITY POINTS = 19466

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	0.85	0.63	25.61	1.06	22.59	27.56
VARIANCE	=	62.83	770.81	178.85	416.82	1.23	0.10
STD. DEV.	=	7.93	27.76	13.37	20.42	1.11	0.32
MAX.	=	43.27	62.03	76.29		25.75	28.10
MIN.	=	-35.95	-76.27	0.00		21.16	26.56

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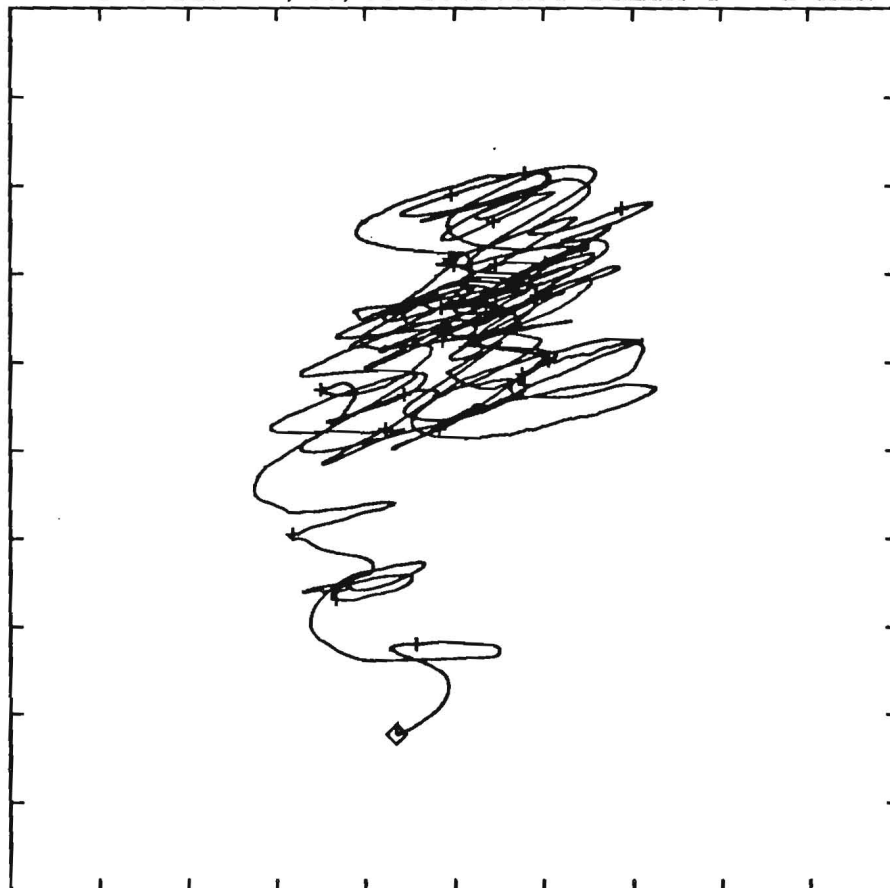
Station 4SC, 41 06.2N 72 56.2N

Instrument depth(below MLW) = 3.0 m

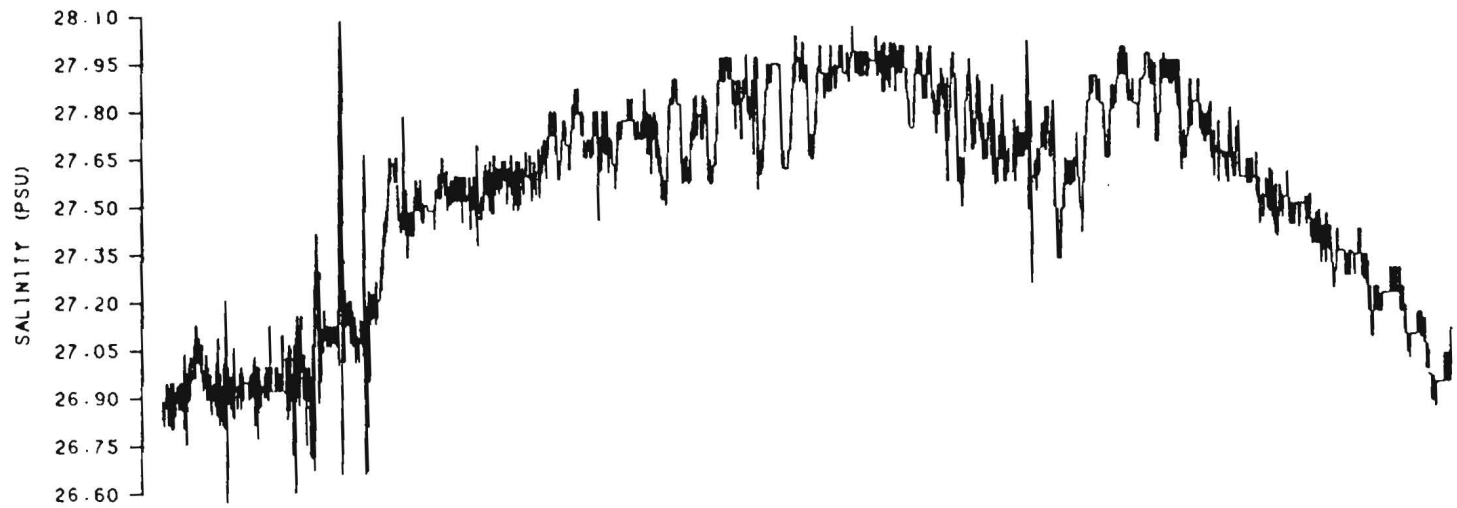
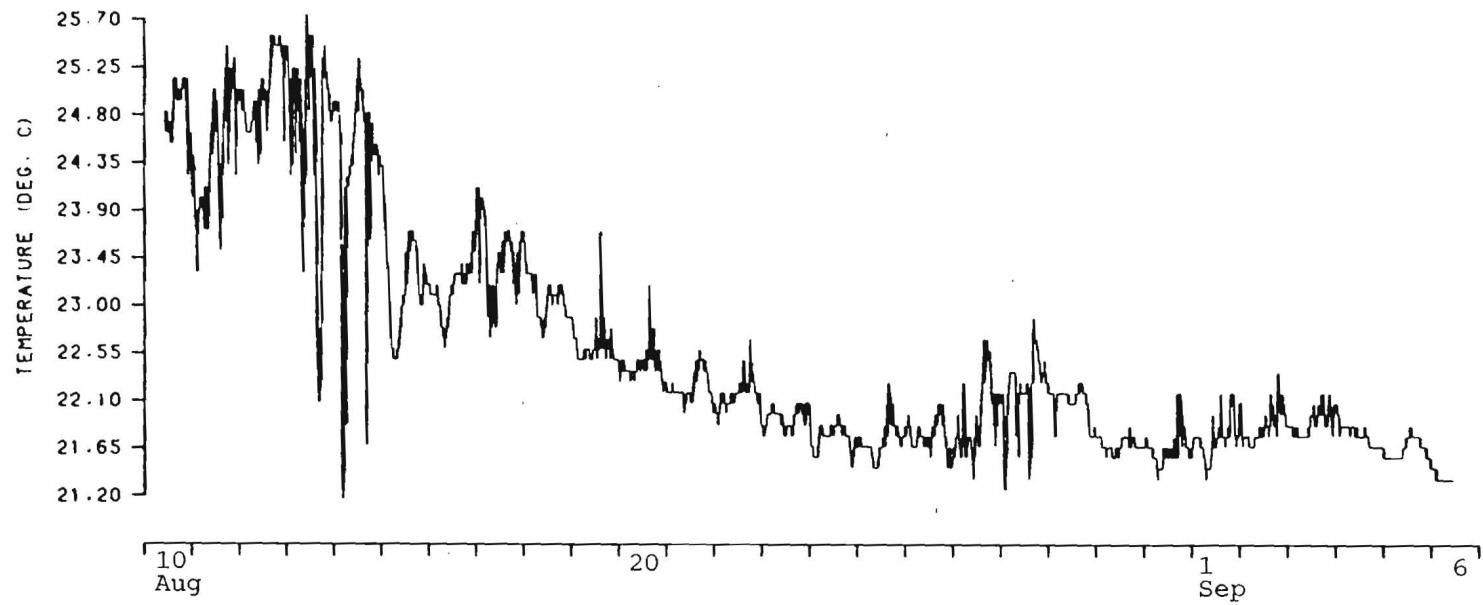
Water depth(relative to MLW) = 23.2 m

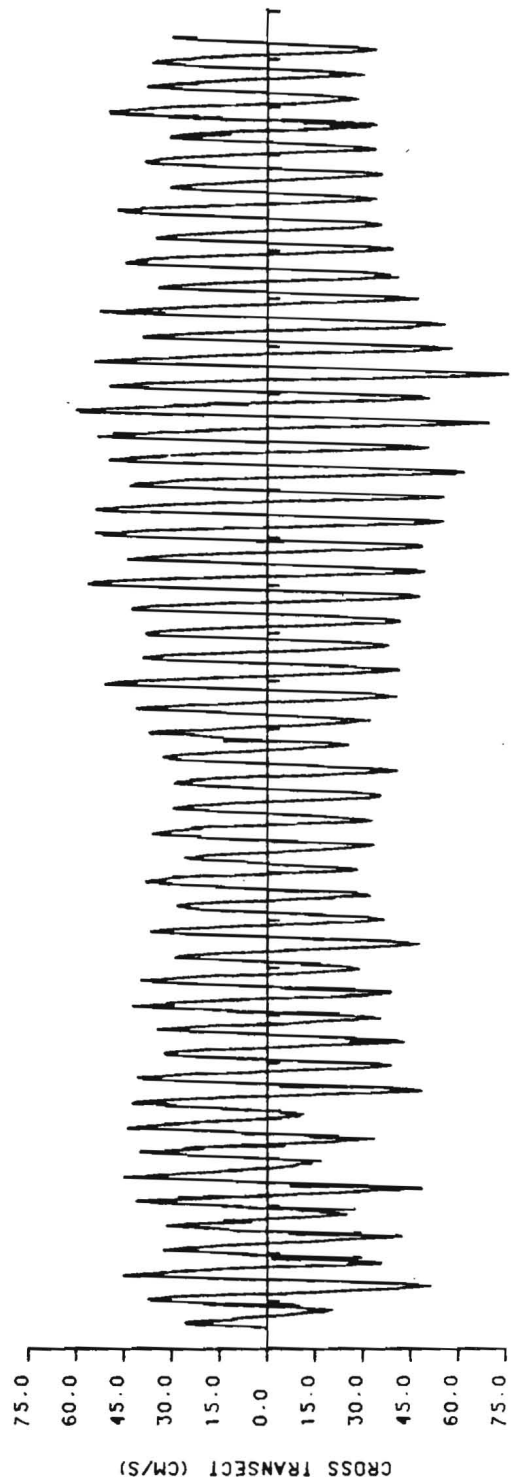
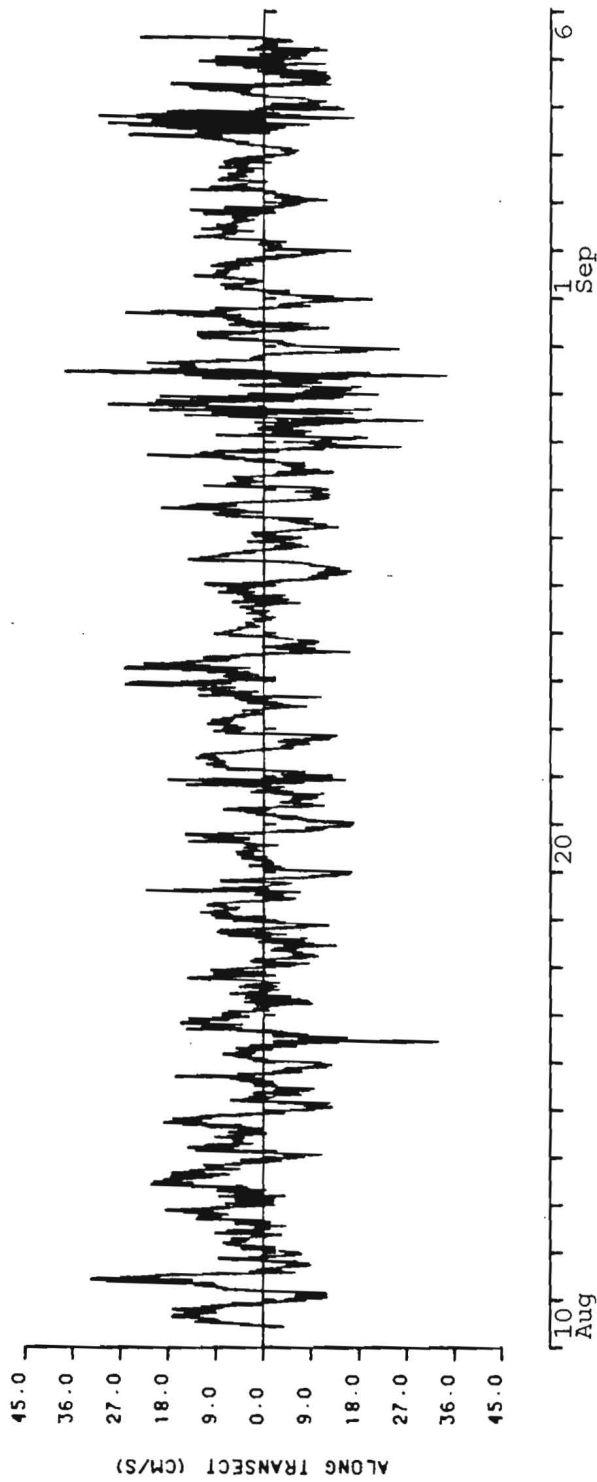
SCALE = 7.5 CM/S PER TICK

1740112 08/10/88 10:32EST DELTA T= 2 MIN



1 TICK = 4 KILOMETERS





Current meter : AANDERAA #A1137
 Station # and location : 4SC, 41 06.2N 72 56.2W
 Instrument depth (MLW) : 9.1m
 Water depth (MLW) : 23.2m
 Start time : 08/10/88 10:20 EST
 Stop time : 09/06/88 11:05 EST
 Duration : 27 days 0 hours 45 minutes
 Sampling interval : 5 minutes

Comments:

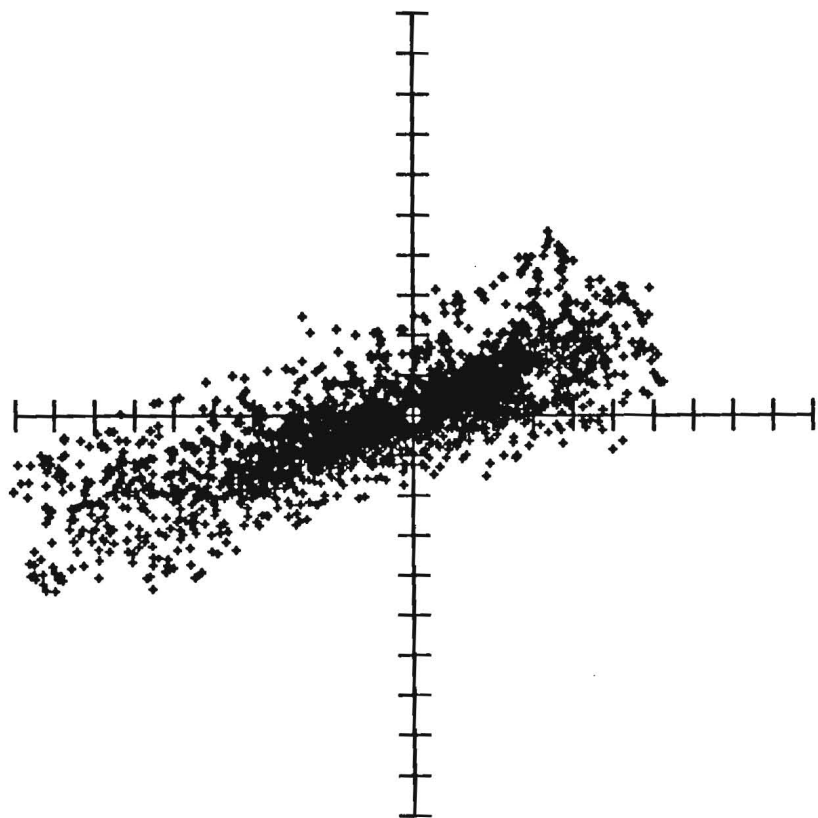
Velocity dampened after 10 days due to biofouling of rotor.

NUMBER OF CURRENT DATA POINTS = 7785
 NUMBER OF TEMPERATURE POINTS = 7785
 NUMBER OF SALINITY POINTS = 7785

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	0.50	-2.47	11.65	2.52	21.49	28.34
VARIANCE	=	13.16	248.37	132.10	130.76	0.28	0.38
STD. DEV.	=	3.63	15.76	11.49	11.44	0.52	0.61
MAX.	=	19.88	36.26	57.34		23.34	29.40
MIN.	=	-14.47	-57.07	1.70		19.87	26.42

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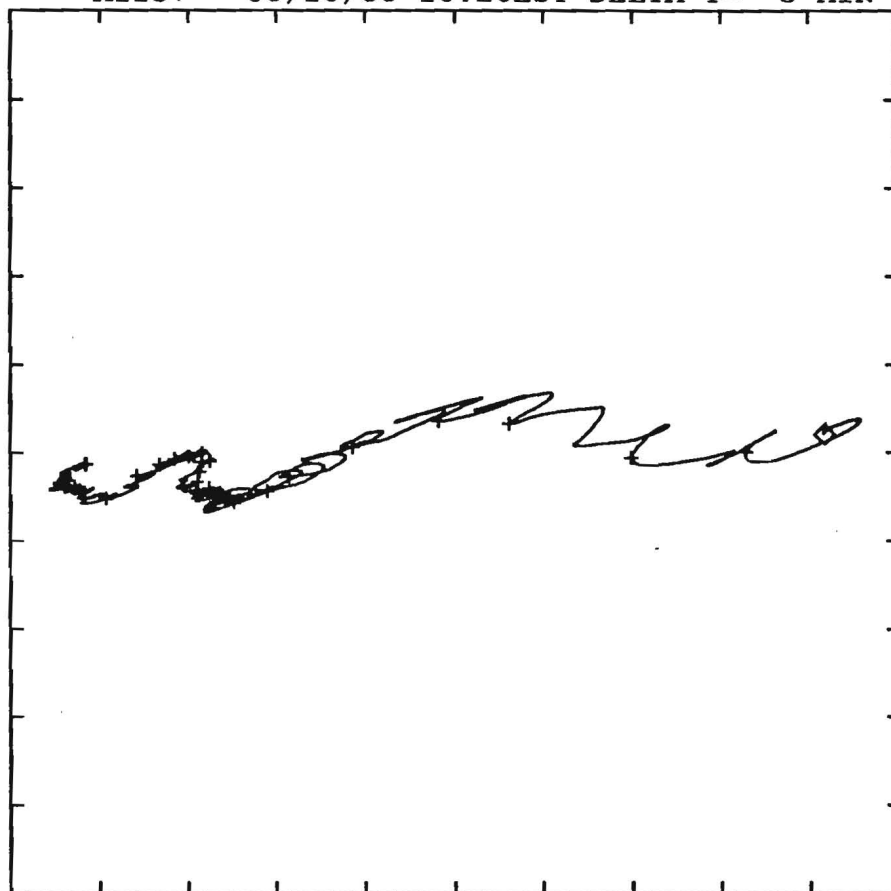
Station 4SC, 41 06.2N 72 56.2W

Instrument depth(below MLW) = 9.1 m

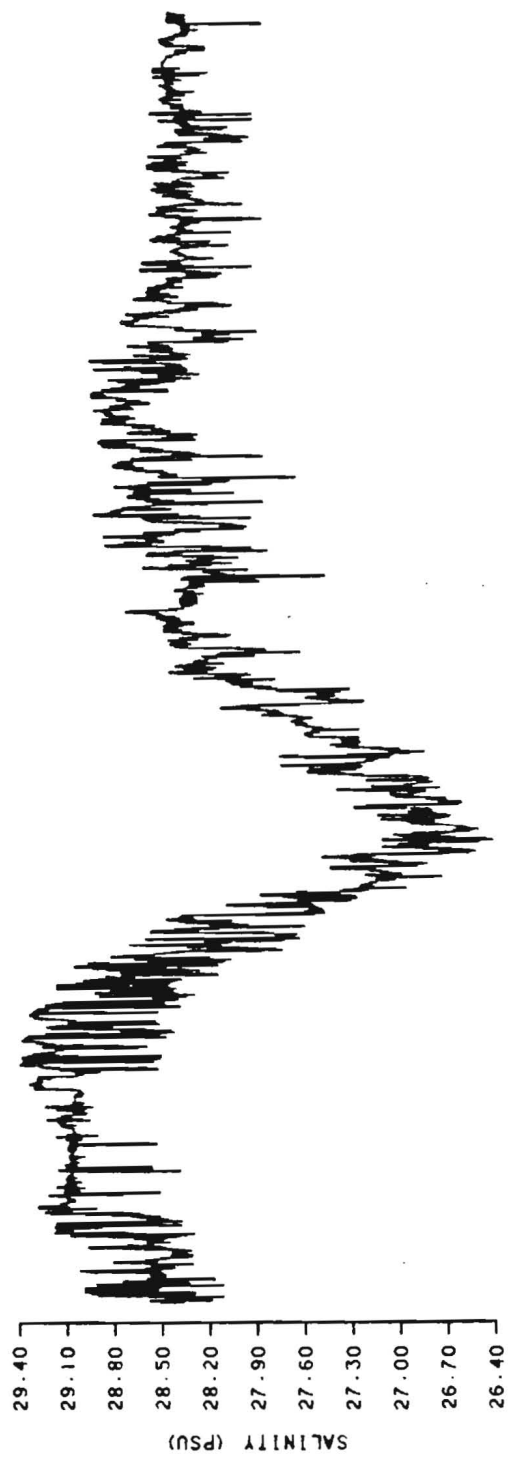
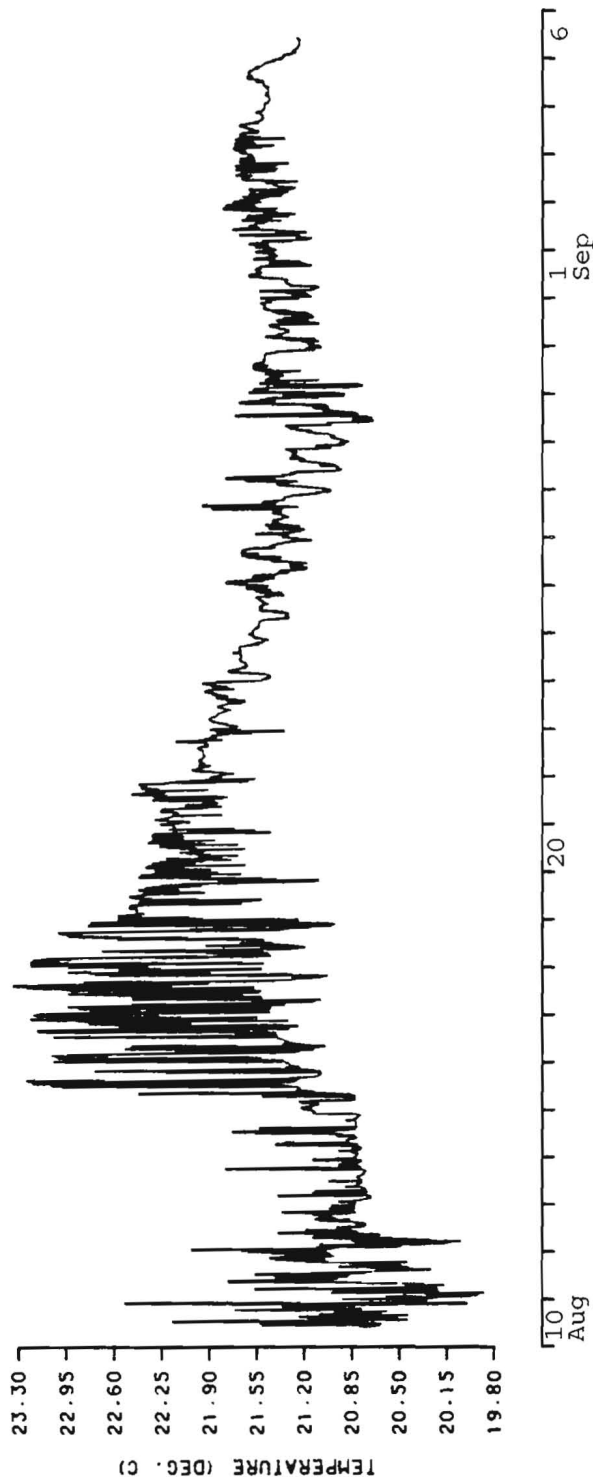
Water depth(relative to MLW) = 23.2 m

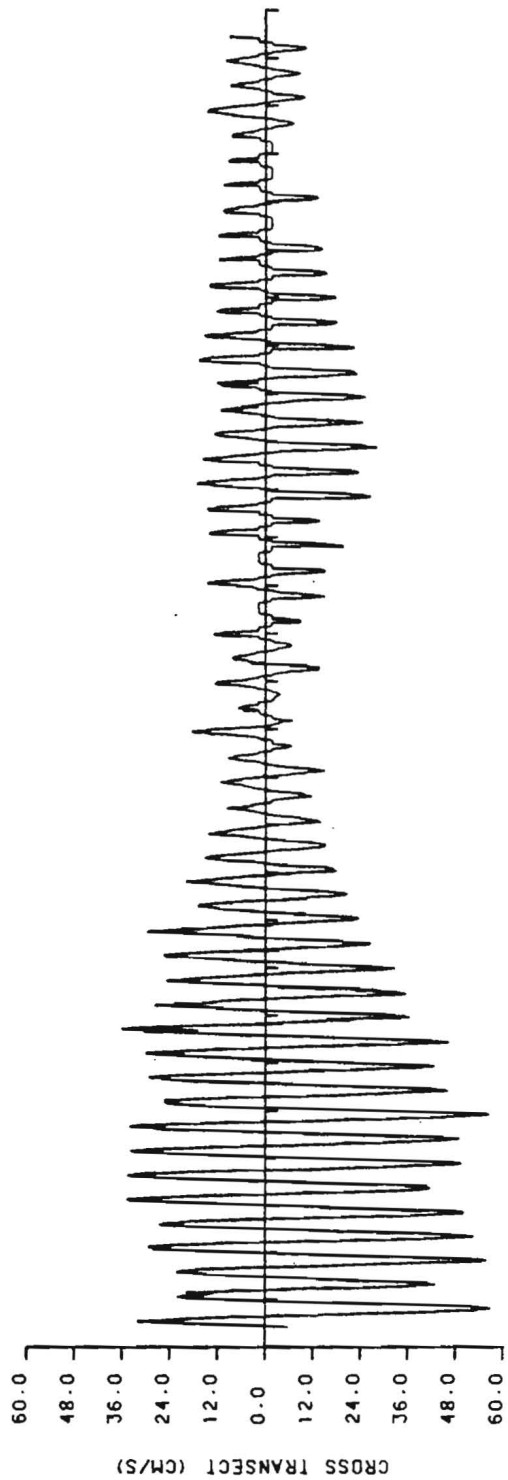
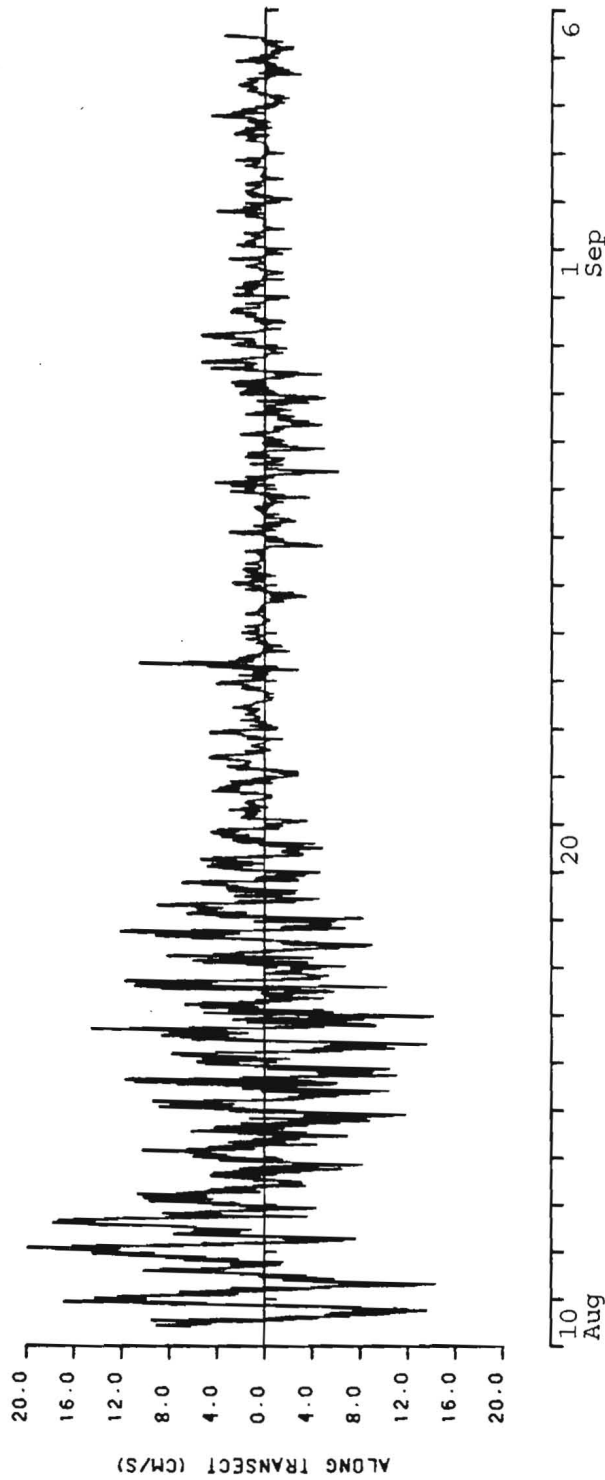
SCALE = 5.5 CM/S PER TICK

A1137 08/10/88 10:20EST DELTA T= 5 MIN



1 TICK = 7 KILOMETERS





Current meter : AANDERAA #A1342
 Station # and location : 4SC, 41 06.2N 72 56.2W
 Instrument depth (MLW) : 15.8m
 Water depth (MLW) : 23.2m
 Start time : 08/10/88 10:55 EST
 Stop time : 09/06/88 10:50 EST
 Duration : 26 days 23 hours 55 minutes
 Sampling interval : 5 minutes

Comments:

The scatter plot indicates a bias in the direction sensor.

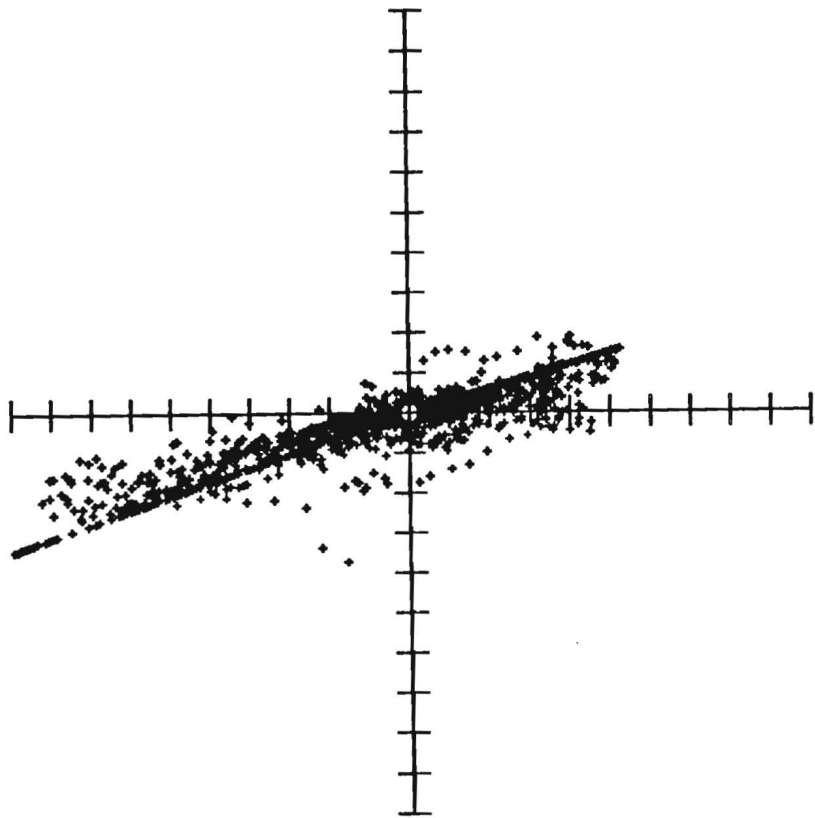
Velocity dampened after only 5 days due to biofouling of rotor.

NUMBER OF CURRENT DATA POINTS = 7775
 NUMBER OF TEMPERATURE POINTS = 7775
 NUMBER OF SALINITY POINTS = 7775

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		346	76				
MEAN	=	-0.36	-1.79	6.80	1.82	21.29	27.94
VARIANCE	=	2.03	138.65	97.75	70.34	0.18	0.12
STD. DEV.	=	1.43	11.77	9.89	8.39	0.42	0.35
MAX.	=	7.23	30.06	57.91		22.47	28.73
MIN.	=	-17.72	-57.68	1.70		19.22	26.68

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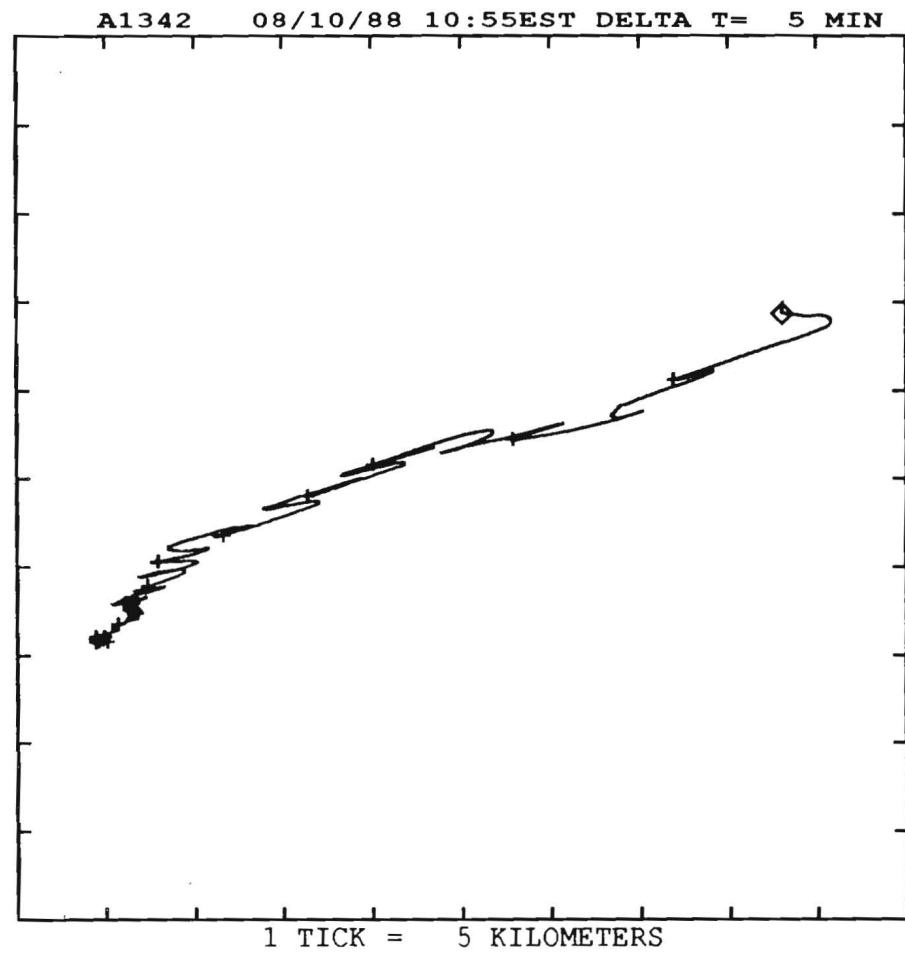
A1342 08/10/88

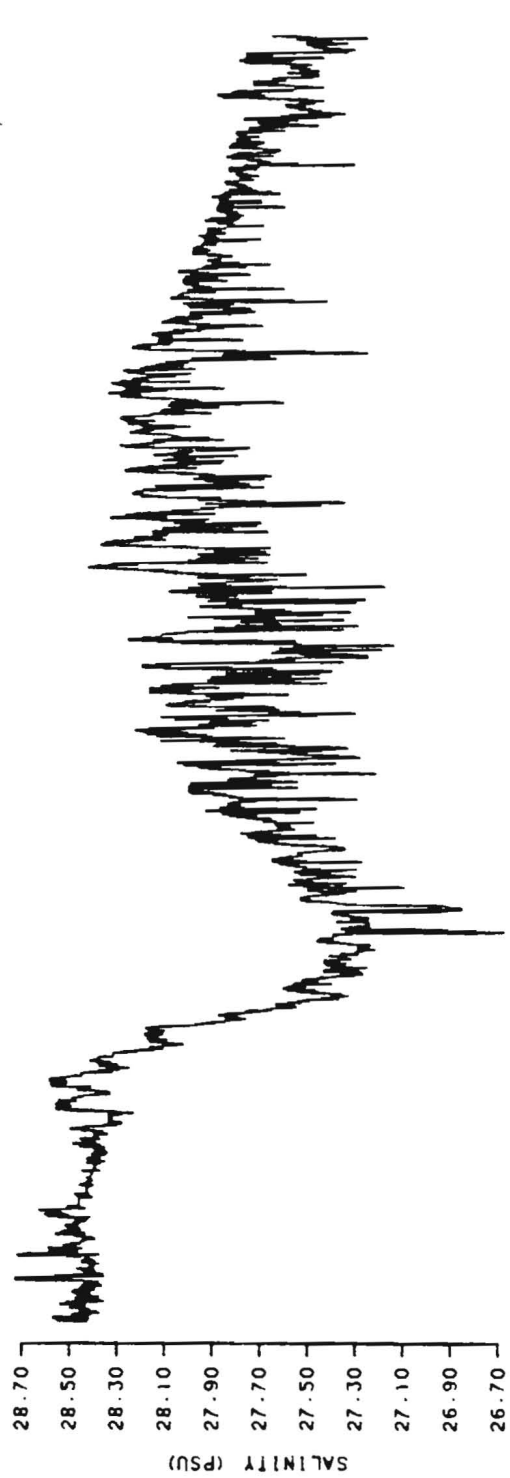
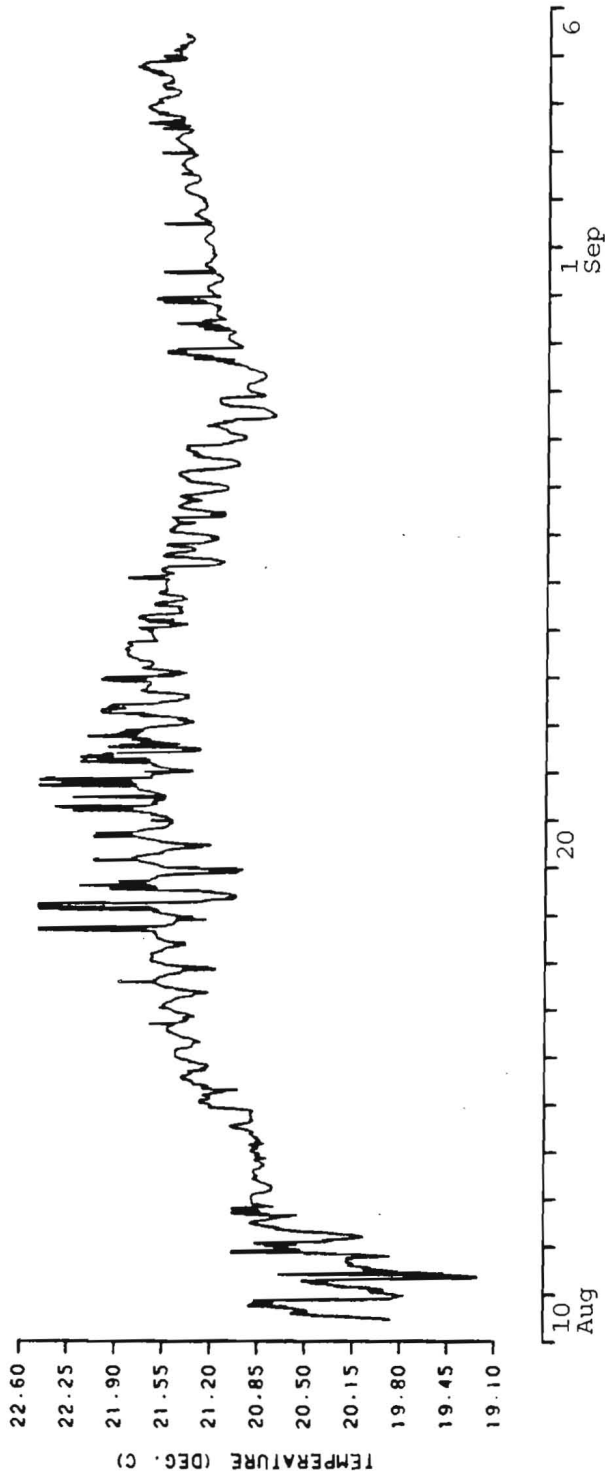
Station 4SC, 41 06.2N 72 56.2W

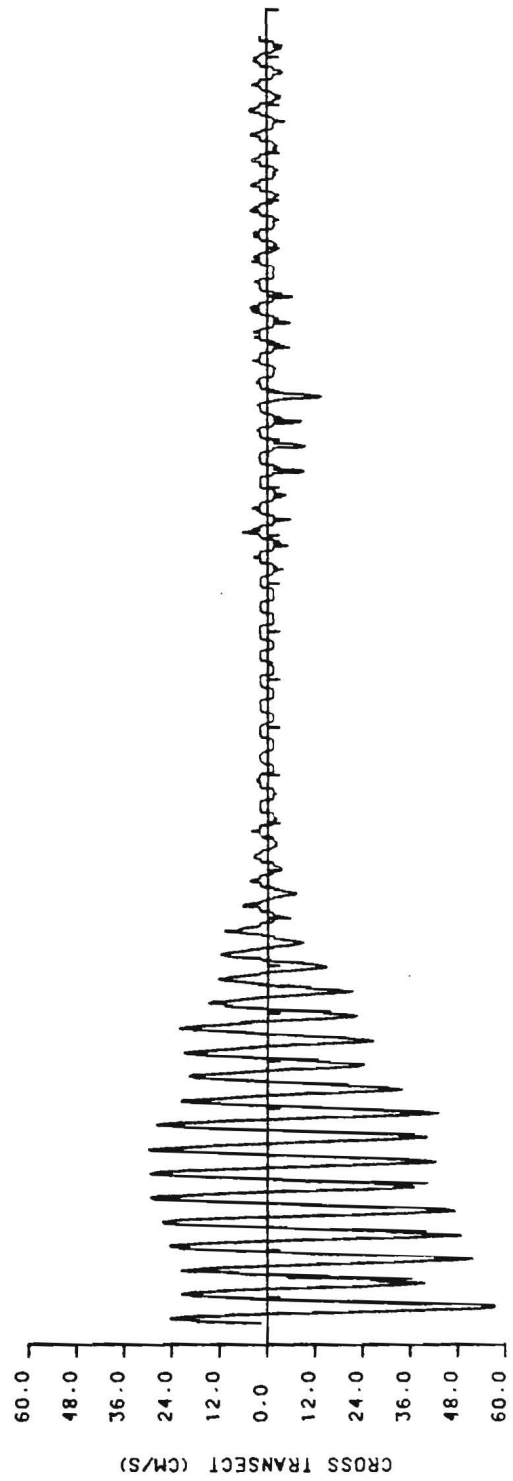
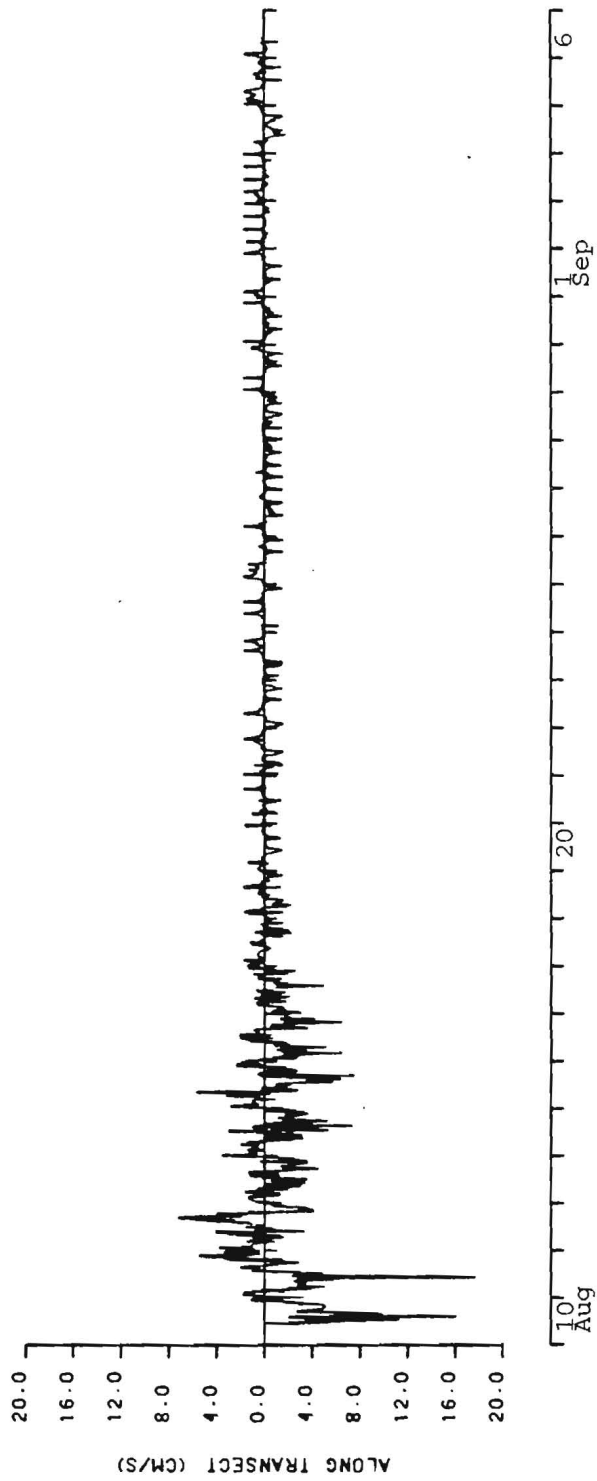
Instrument depth(below MLW) = 15.8 m

Water depth(relative to MLW) = 23.2 m

SCALE = 5.5 CM/S PER TICK







Current meter : AANDERAA #A3357
 Station # and location : 4SC, 41 06.2N 72 56.2W
 Instrument depth (MLW) : 21.3m
 Water depth (MLW) : 23.2m
 Start time : 08/10/88 10:50 EST
 Stop time : 09/06/88 10:50 EST
 Duration : 27 days 0 hours 0 minutes
 Sampling interval : 5 minutes

Comments:

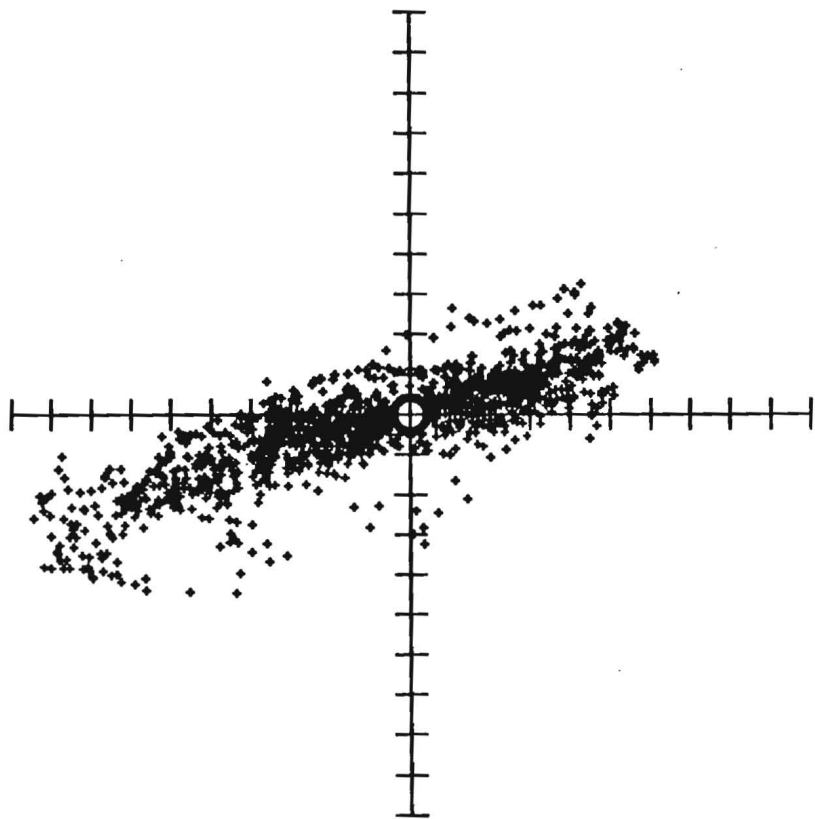
Velocity dampened after only 5 days due to biofouling of rotor.

NUMBER OF CURRENT DATA POINTS = 7776
 NUMBER OF TEMPERATURE POINTS = 7776
 NUMBER OF SALINITY POINTS = 7776

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	-0.06	-1.38	5.80	1.38	21.11	28.22
VARIANCE	=	3.07	83.32	54.62	43.20	0.20	0.09
STD. DEV.	=	1.75	9.13	7.39	6.57	0.45	0.30
MAX.	=	9.21	25.51	39.74		21.63	28.76
MIN.	=	-15.60	-39.74	1.70		19.17	27.37

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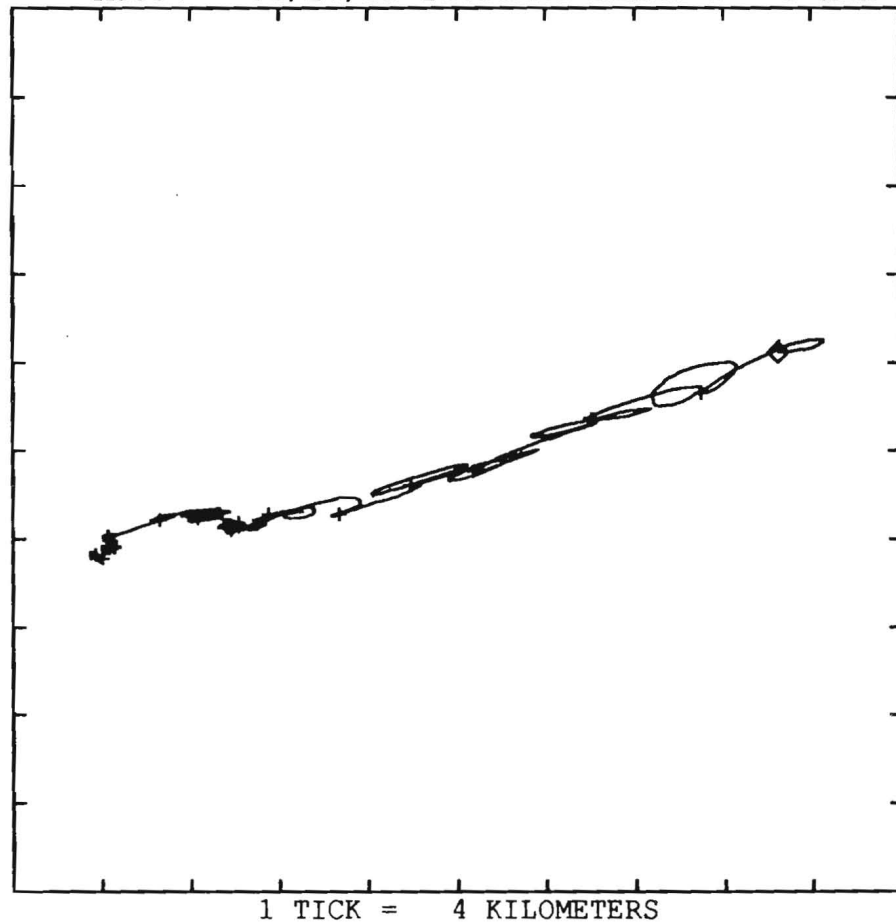
Station 4SC, 41 06.2N 72 56.2W

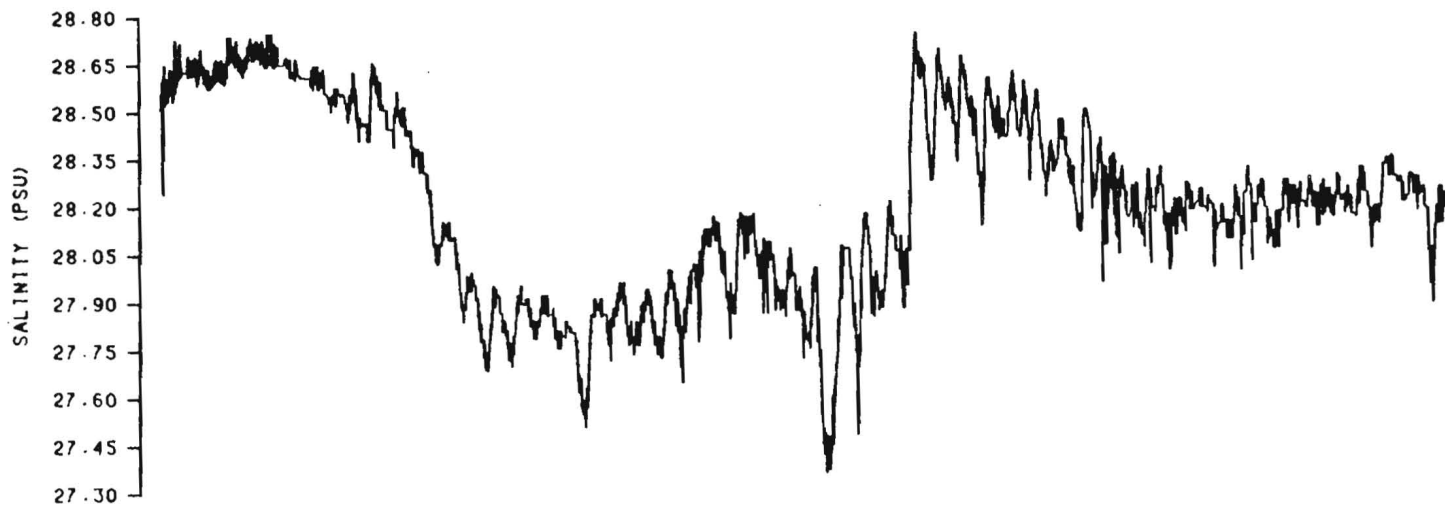
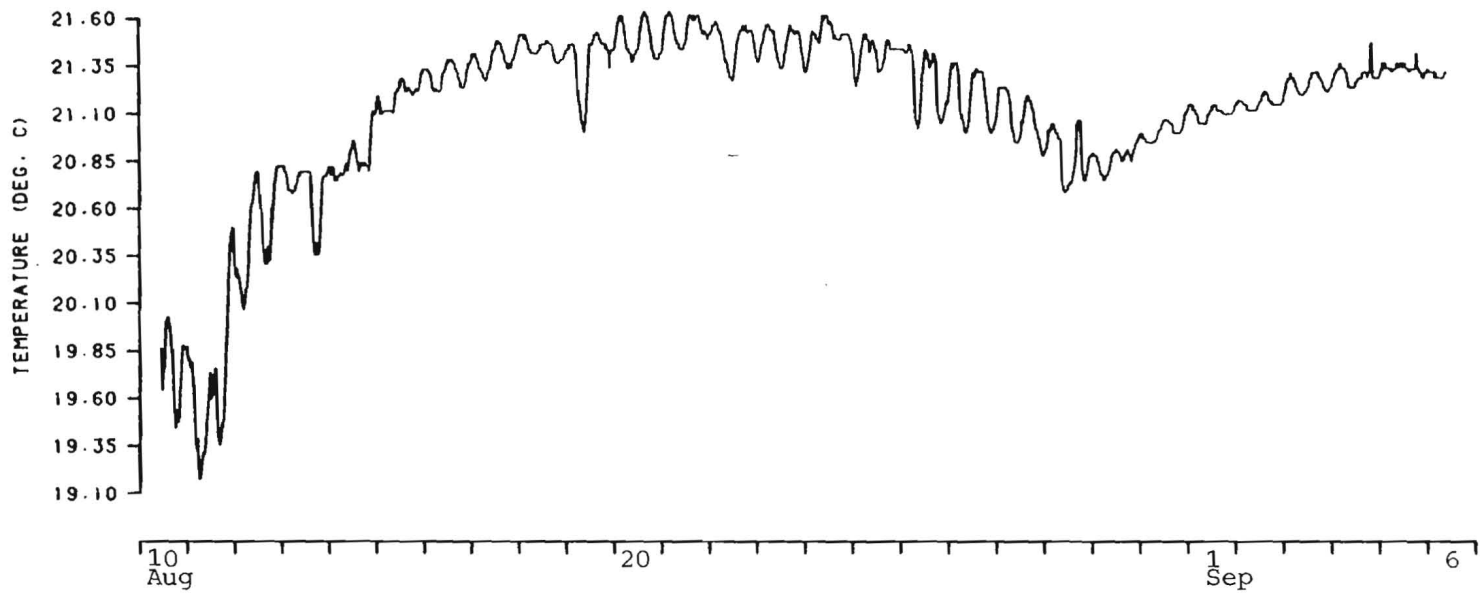
Instrument depth(below MLW) = 21.3 m

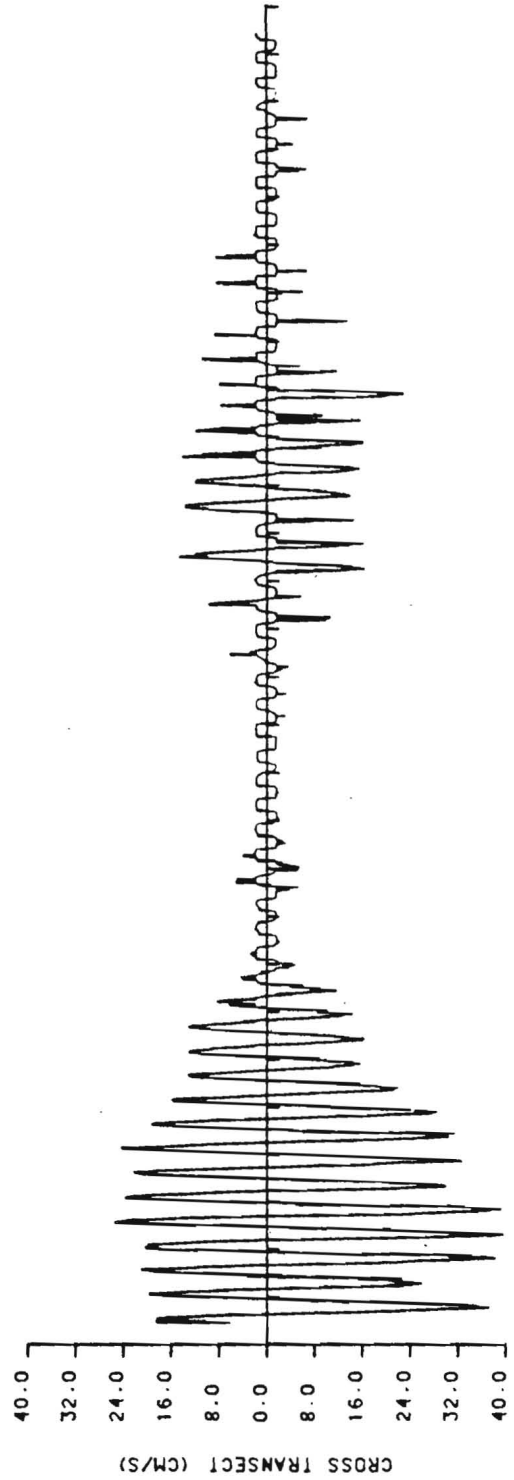
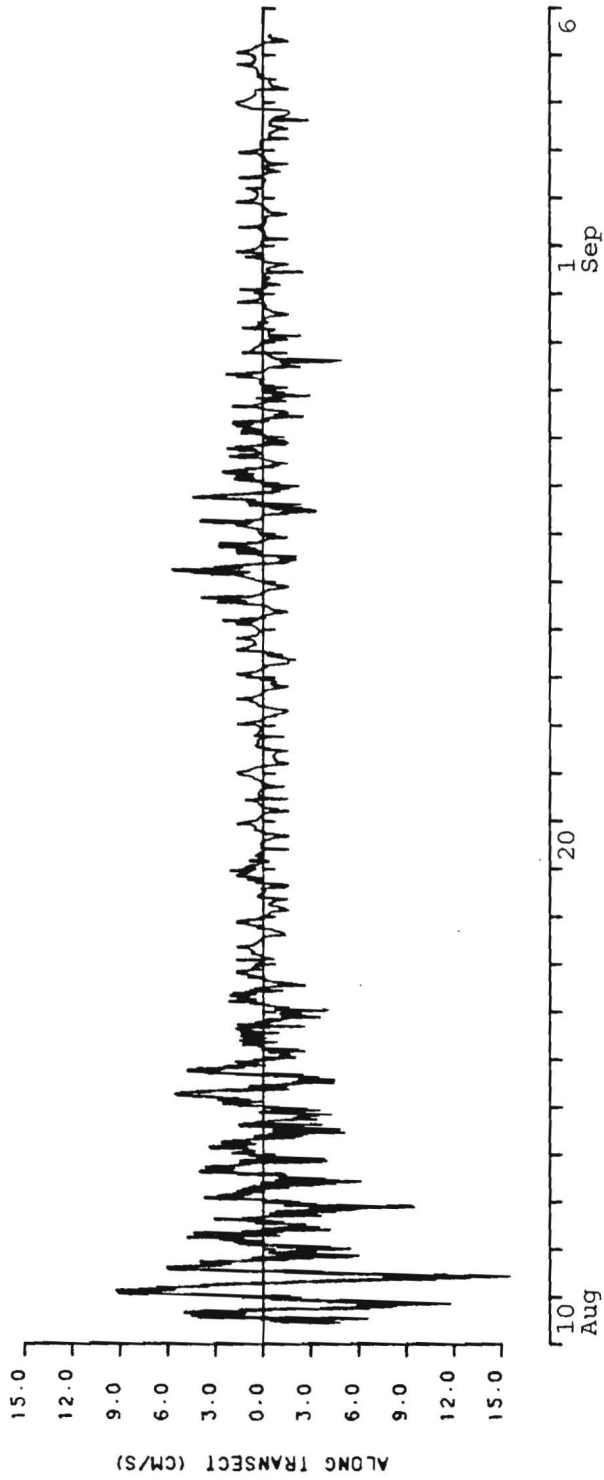
Water depth(relative to MLW) = 23.2 m

SCALE = 4.0 CM/S PER TICK

A3357 08/10/88 10:50EST DELTA T= 5 MIN







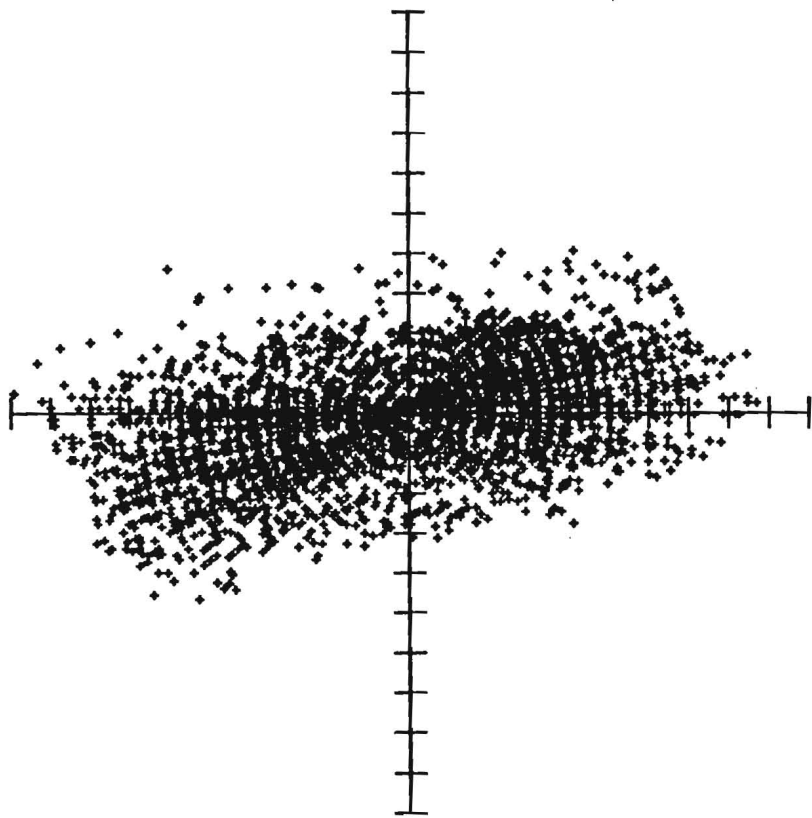
Current meter : ENDECO #1740023
 Station # and location : 4S , 41 04.1N 72 55.5W
 Instrument depth (MLW) : 3.4m
 Water depth (MLW) : 30.8m
 Start time : 08/10/88 11:42 EST
 Stop time : 09/06/88 12:52 EST
 Duration : 27 days 1 hours 10 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 19475
 NUMBER OF TEMPERATURE POINTS = 19475
 NUMBER OF SALINITY POINTS = 19475

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		346	76				
MEAN	=	-0.55	-1.87	21.13	1.95	22.60	28.29
VARIANCE	=	51.52	525.73	134.67	288.62	1.34	0.09
STD. DEV.	=	7.18	22.93	11.60	16.99	1.16	0.30
MAX.	=	29.72	55.12	59.56		25.79	28.82
MIN.	=	-26.01	-57.01	0.00		21.13	26.74

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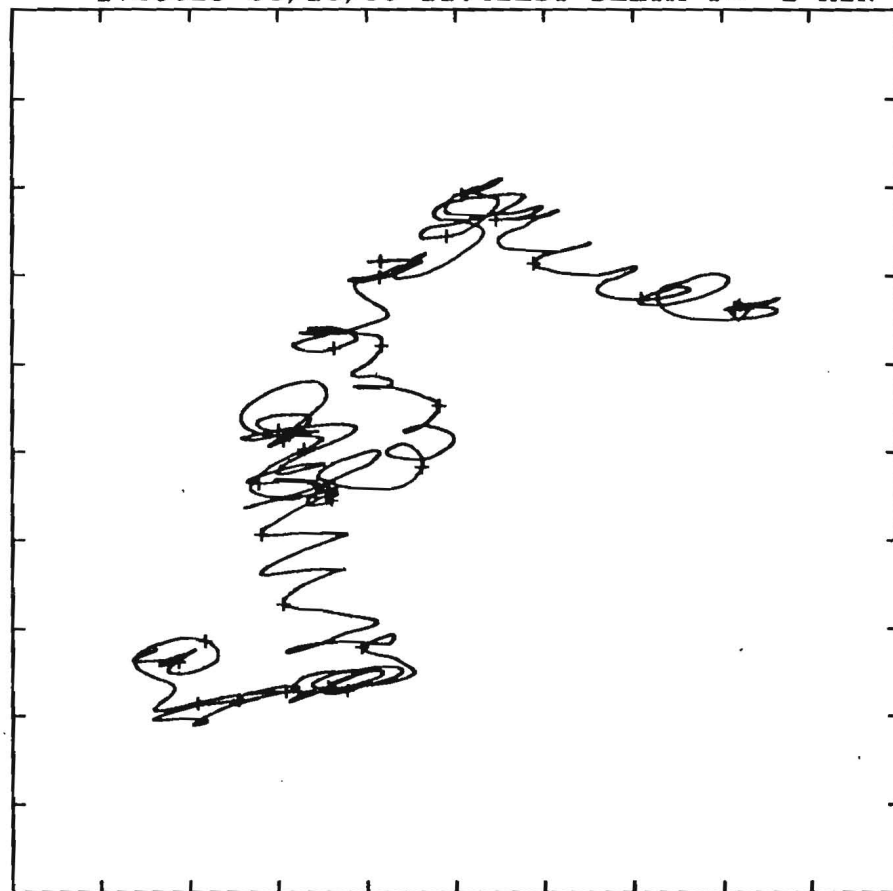
Station 4S , 41 04.1N 72 55.5W

Instrument depth(below MLW) = 3.4 m

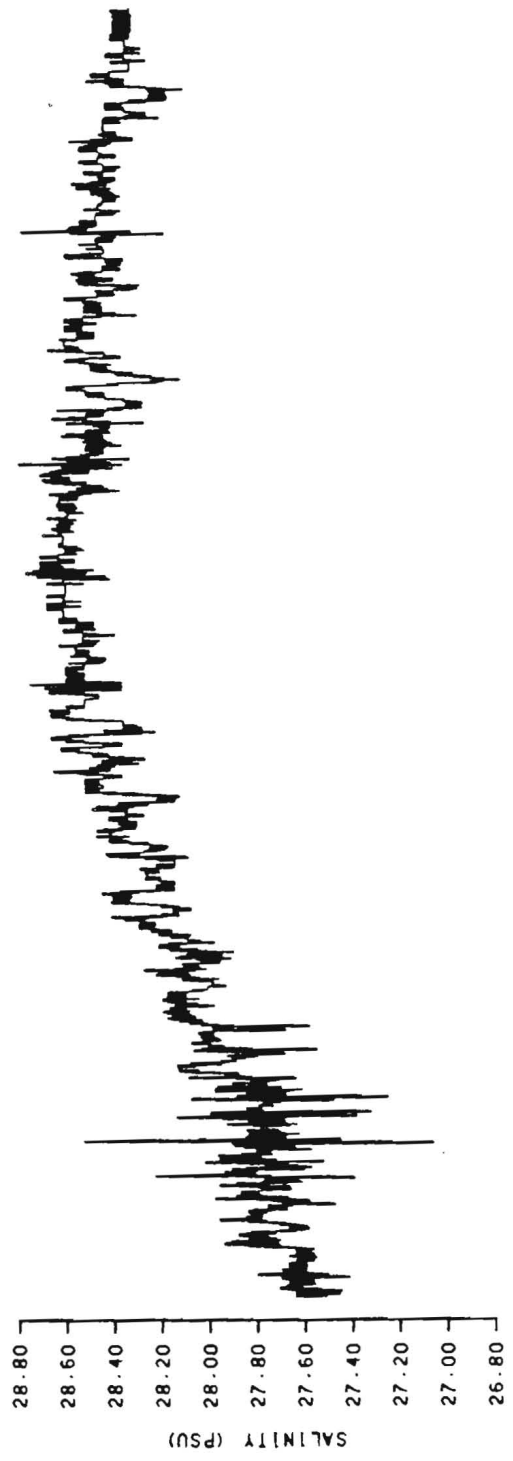
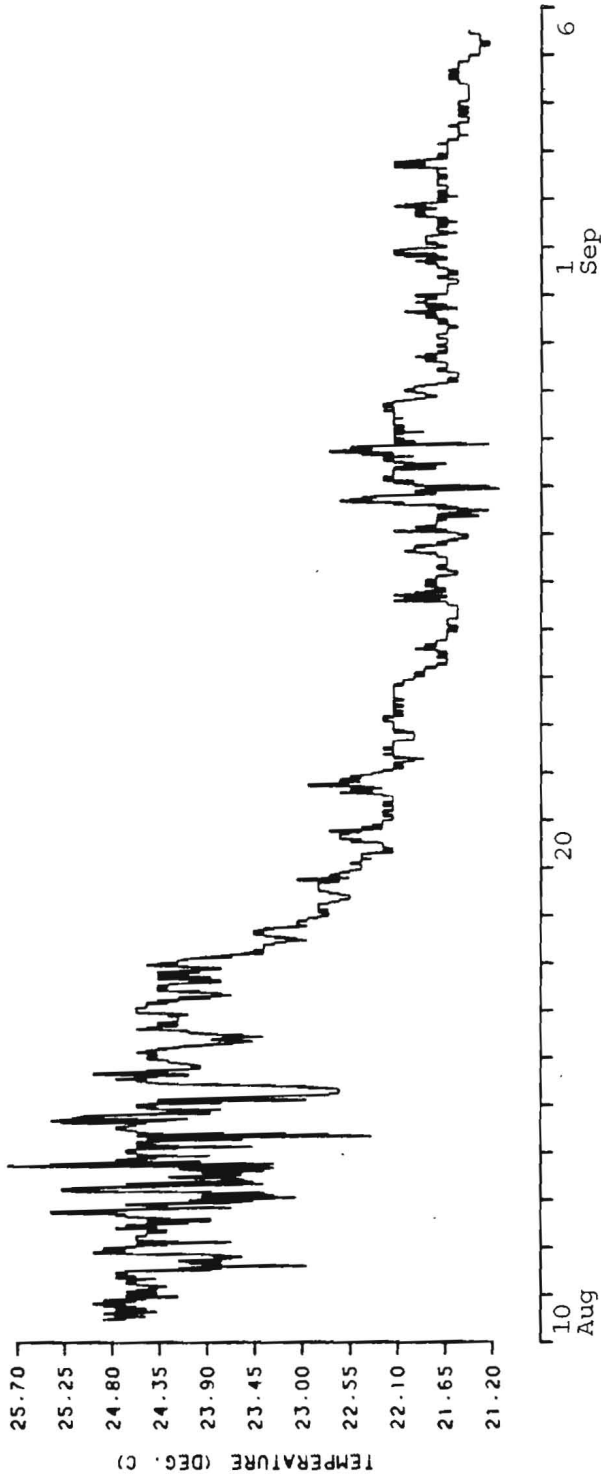
Water depth(relative to MLW) = 30.8 m

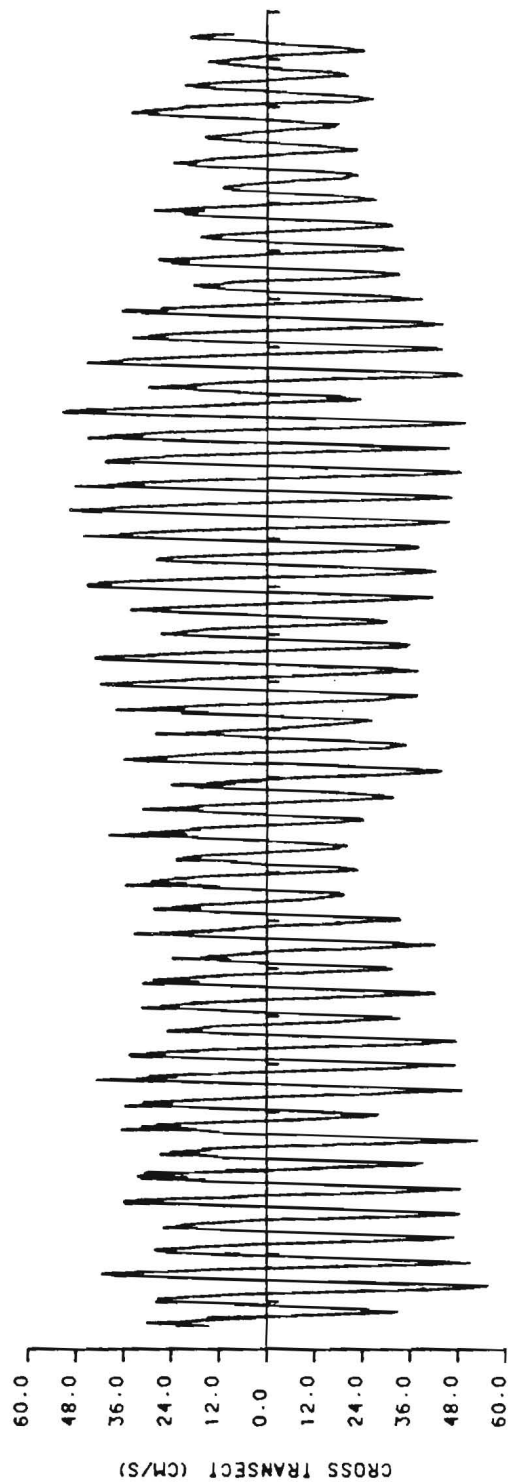
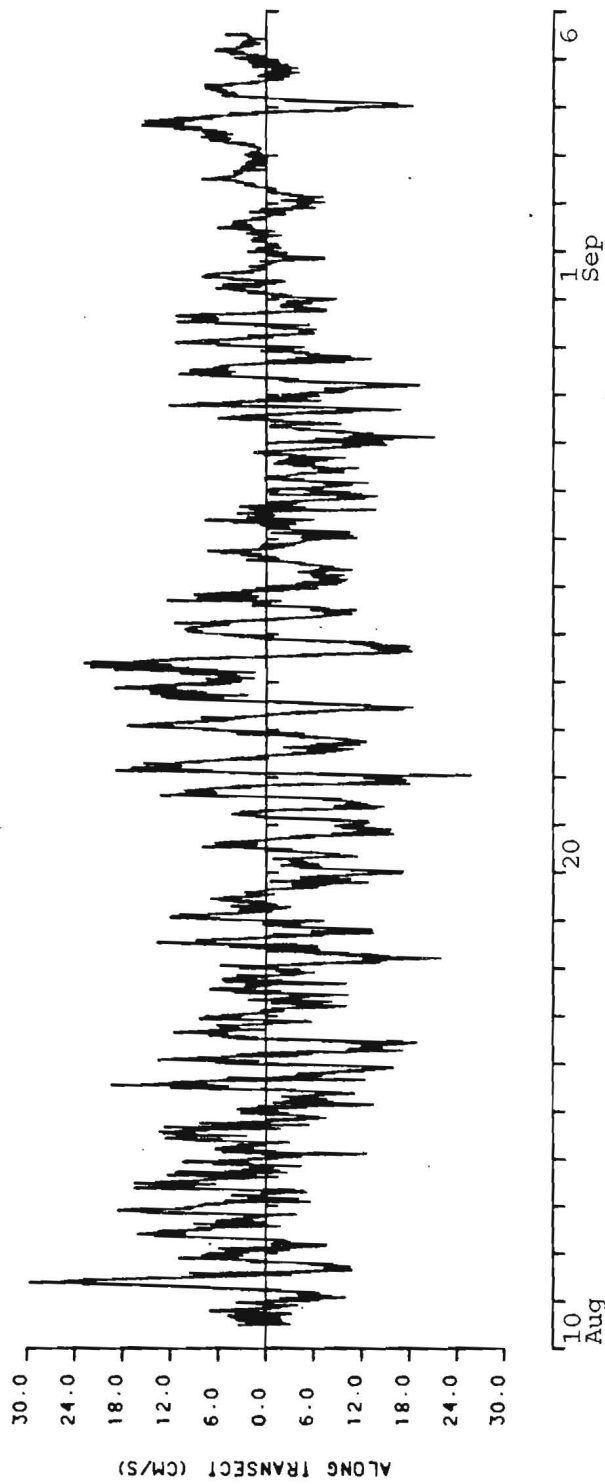
SCALE = 6.0 CM/S PER TICK

1740023 08/10/88 11:42EST DELTA T= 2 MIN



1 TICK = 6 KILOMETERS





Current meter : AANDERAA #A1346
 Station # and location : 4S , 41 04.1N 72 55.5W
 Instrument depth (MLW) : 9.4m
 Water depth (MLW) : 30.8m
 Start time : 08/10/88 12:10 EST
 Stop time : 09/06/88 12:30 EST
 Duration : 27 days 0 hours 20 minutes
 Sampling interval : 5 minutes
 Comments:

The temperature and conductivity sensors malfunctioned after 18 August.

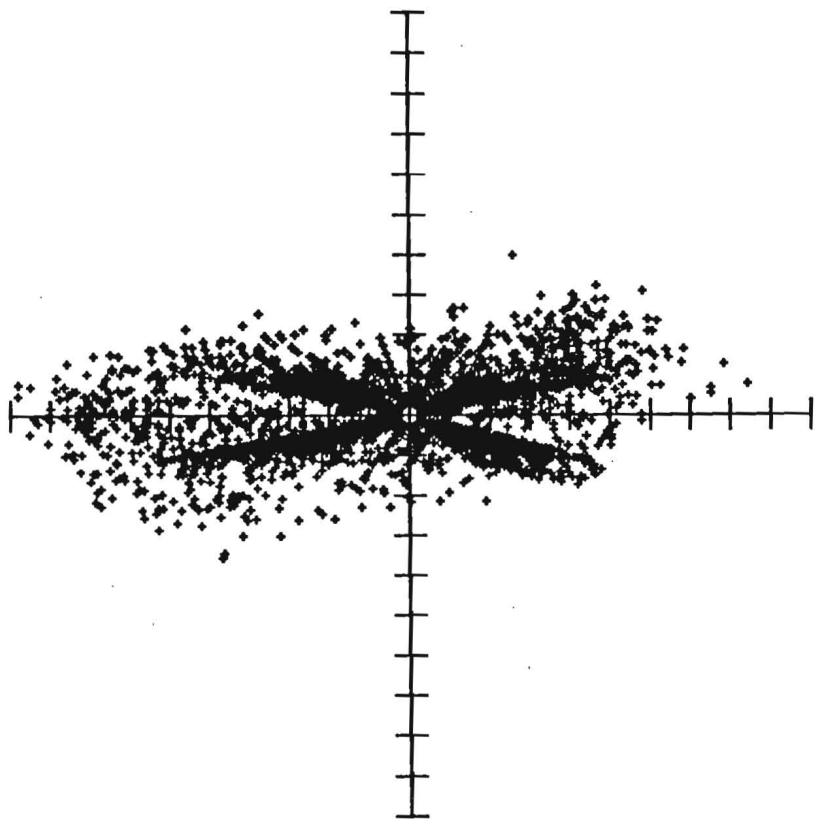
The scatter plot suggests a possible direction bias.

NUMBER OF CURRENT DATA POINTS = 7780
 NUMBER OF TEMPERATURE POINTS = 2362
 NUMBER OF SALINITY POINTS = 2362

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	0.84	-2.70	14.37	2.83	21.22	28.43
VARIANCE	=	27.56	275.68	104.78	151.62	0.50	0.18
STD. DEV.	=	5.25	16.60	10.24	12.31	0.70	0.43
MAX.	=	18.91	46.06	54.59		23.68	29.20
MIN.	=	-15.22	-52.00	1.62		19.52	26.88

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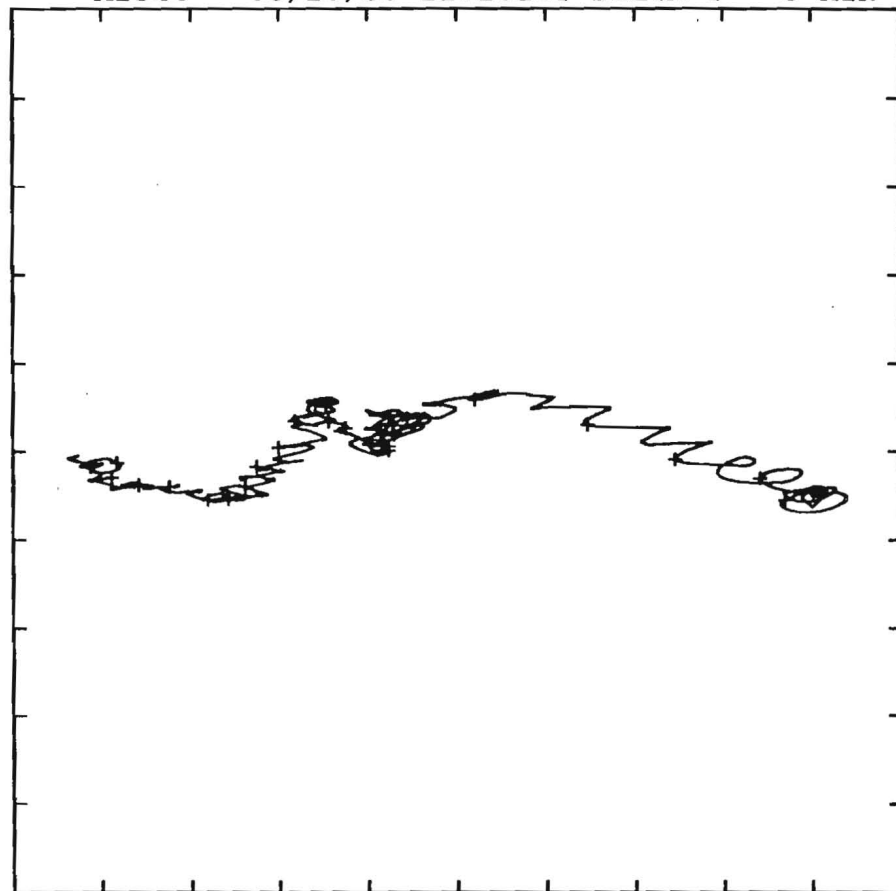
Station 4S, 41 04.1N 72 55.5W

Instrument depth(below MLW) = 9.4 m

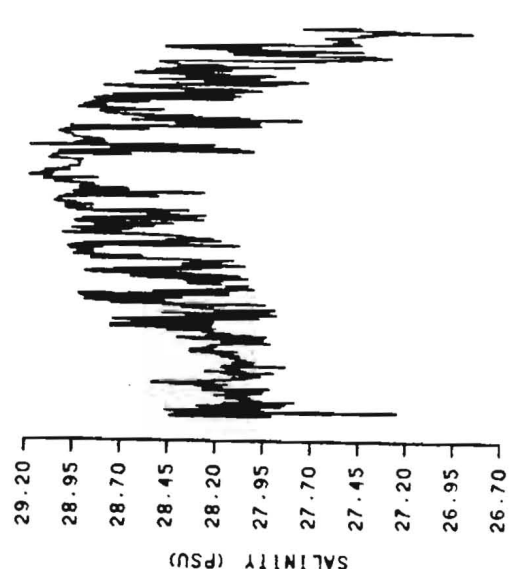
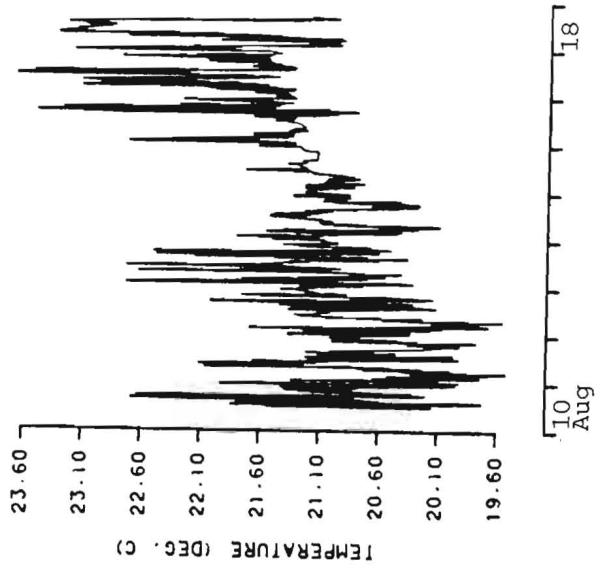
Water depth(relative to MLW) = 30.8 m

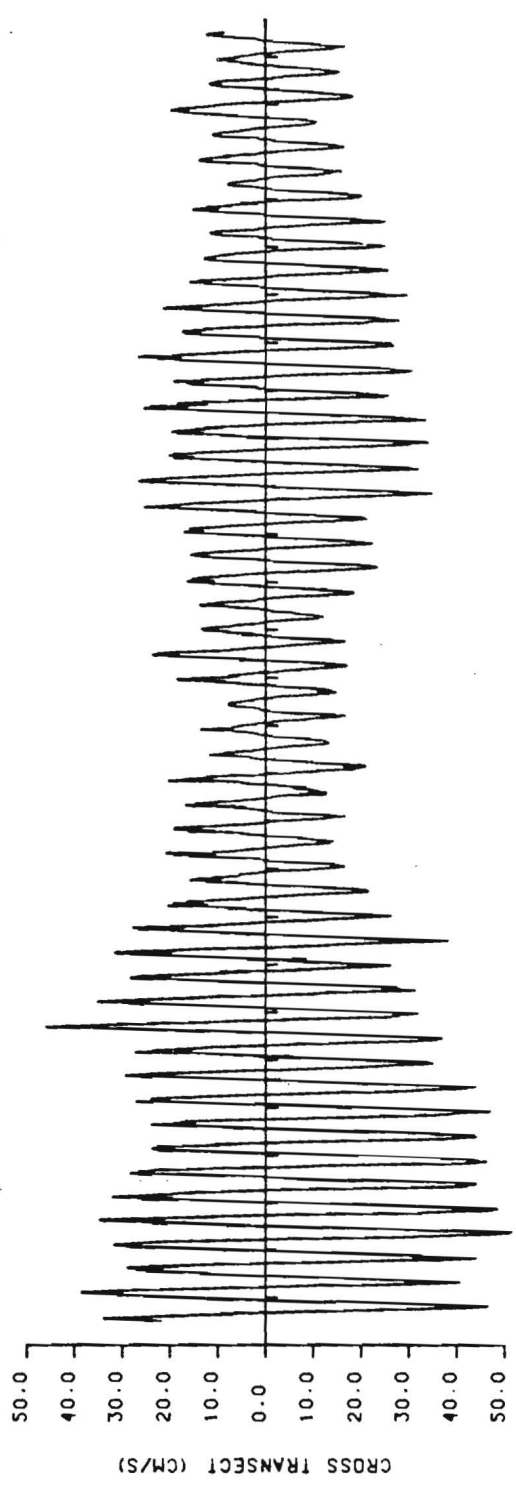
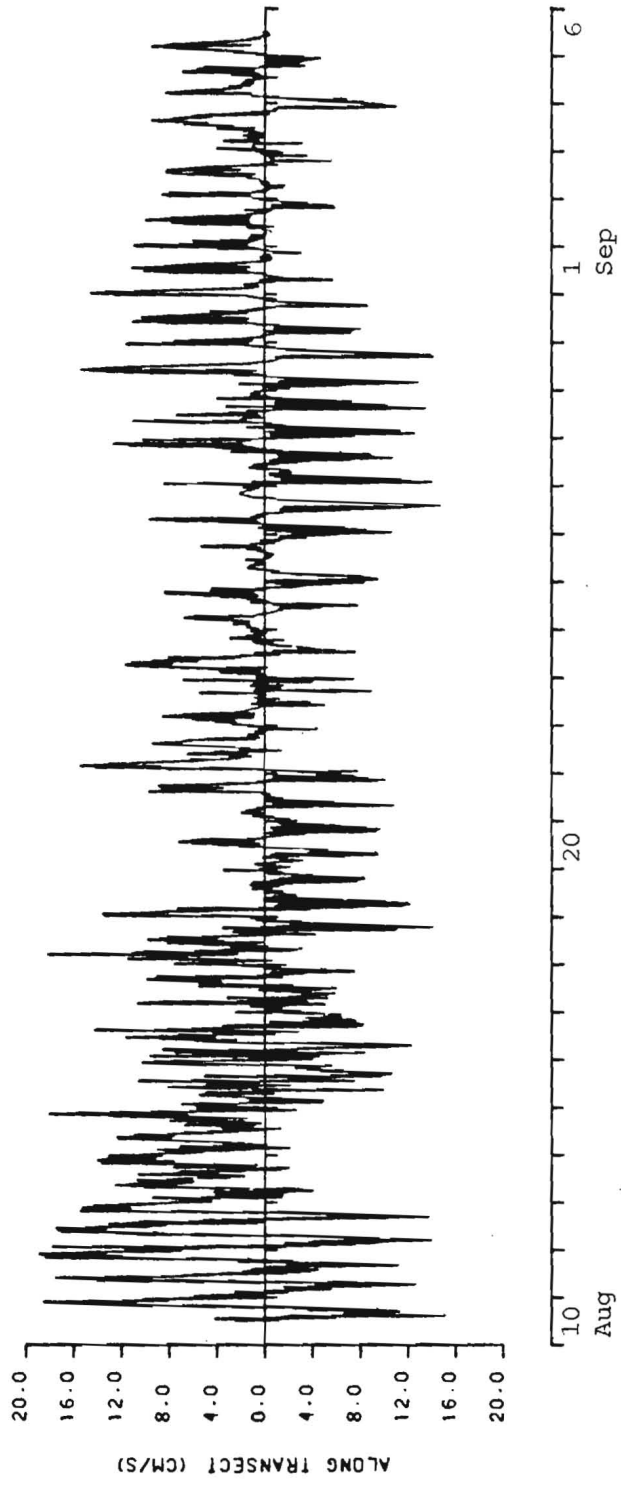
SCALE = 5.5 CM/S PER TICK

A1346 08/10/88 12:10EST DELTA T= 5 MIN



1 TICK = 8 KILOMETERS





Current meter : AANDERAA #A1351
 Station # and location : 4S , 41 04.1N 72 55.5W
 Instrument depth (MLW) : 15.5m
 Water depth (MLW) : 30.8m
 Start time : 08/10/88 12:35 EST
 Stop time : 09/06/88 12:00 EST
 Duration : 26 days 23 hours 25 minutes
 Sampling interval : 5 minutes
 Comments:

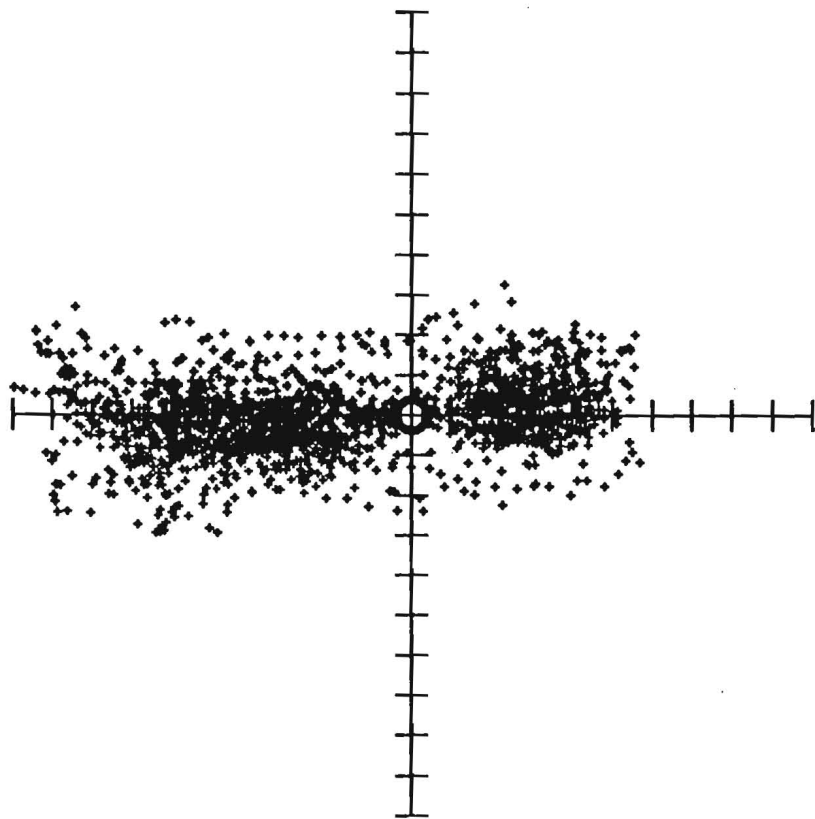
Velocity records exhibit severe damping throughout due to rotor biofouling.

NUMBER OF CURRENT DATA POINTS = 7769
 NUMBER OF TEMPERATURE POINTS = 7769
 NUMBER OF SALINITY POINTS = 7769

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		346	76				
MEAN	=	0.79	-3.83	10.04	3.91	20.69	29.00
VARIANCE	=	15.04	190.44	119.94	102.74	0.43	0.16
STD. DEV.	=	3.88	13.80	10.95	10.14	0.65	0.40
MAX.	=	23.26	29.42	49.89		21.80	29.93
MIN.	=	-14.43	-47.47	1.91		17.92	27.76

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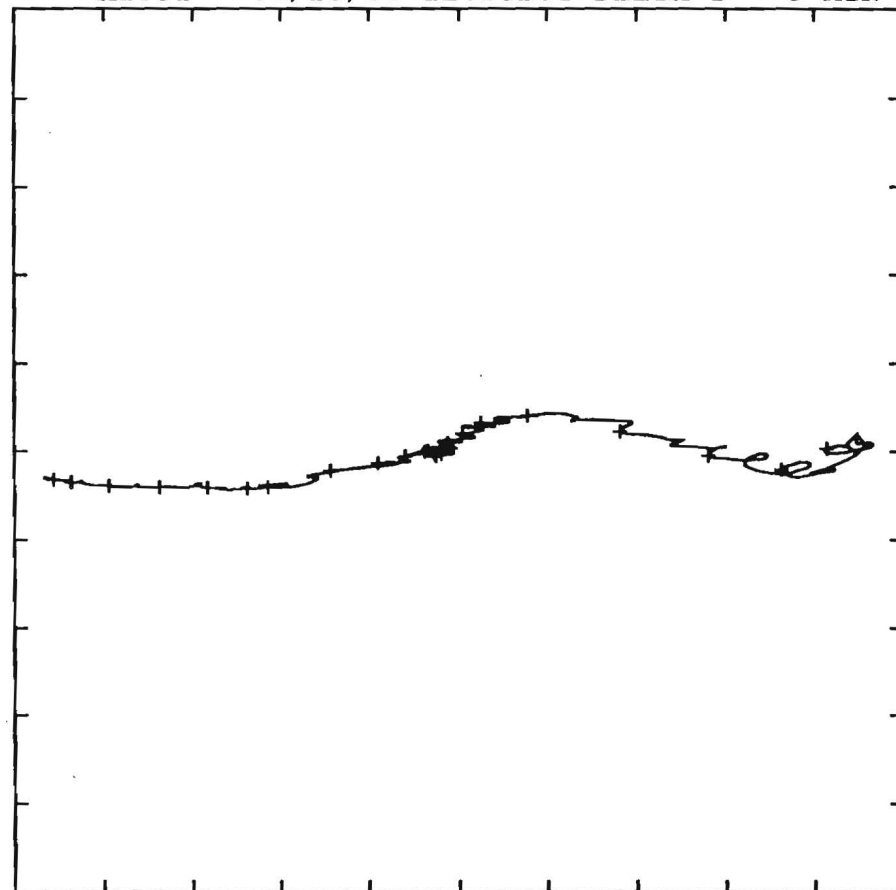
Station 4S , 41 04.1N 72 55.5W

Instrument depth(below MLW) = 15.5 m

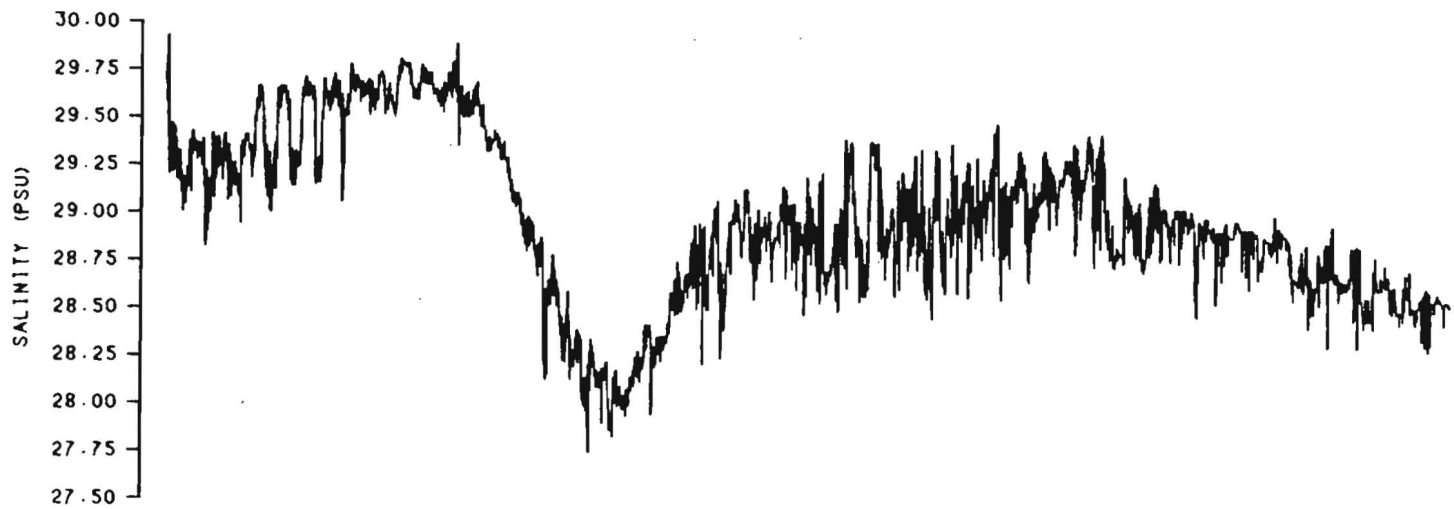
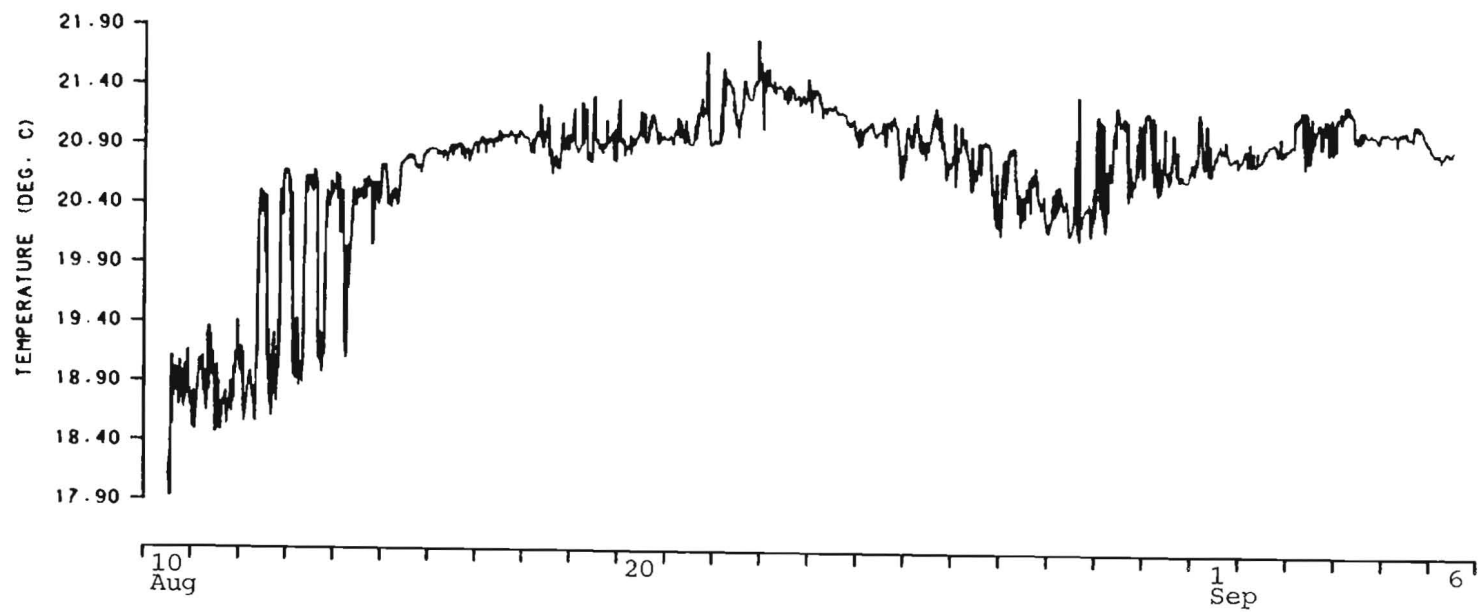
Water depth(relative to MLW) = 30.8 m

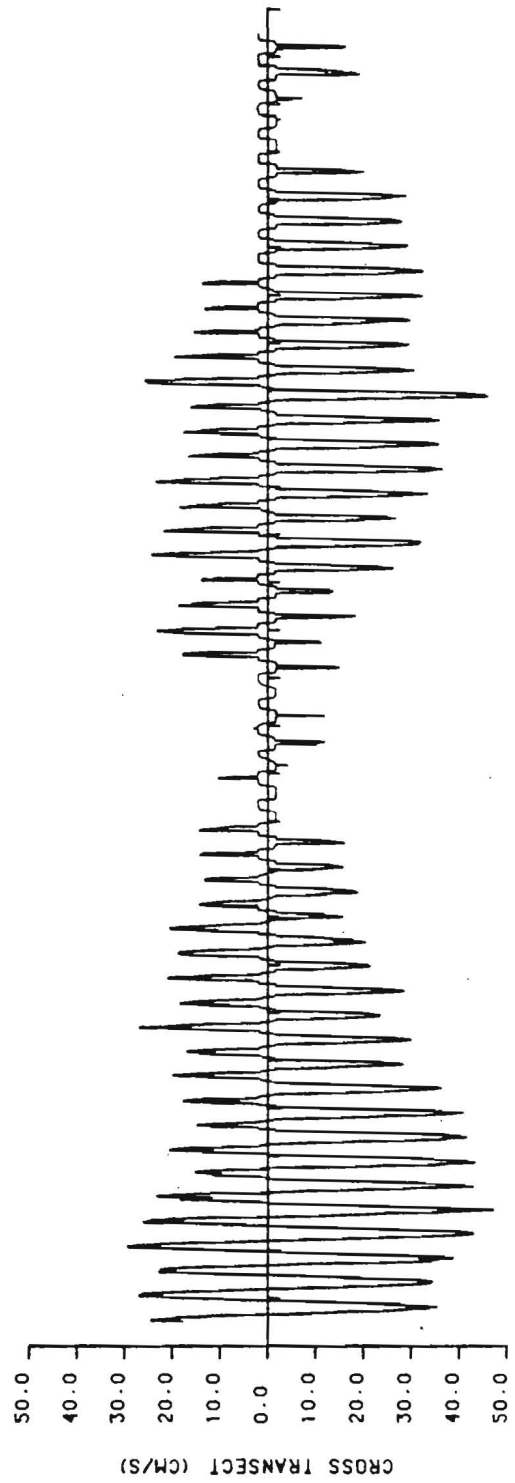
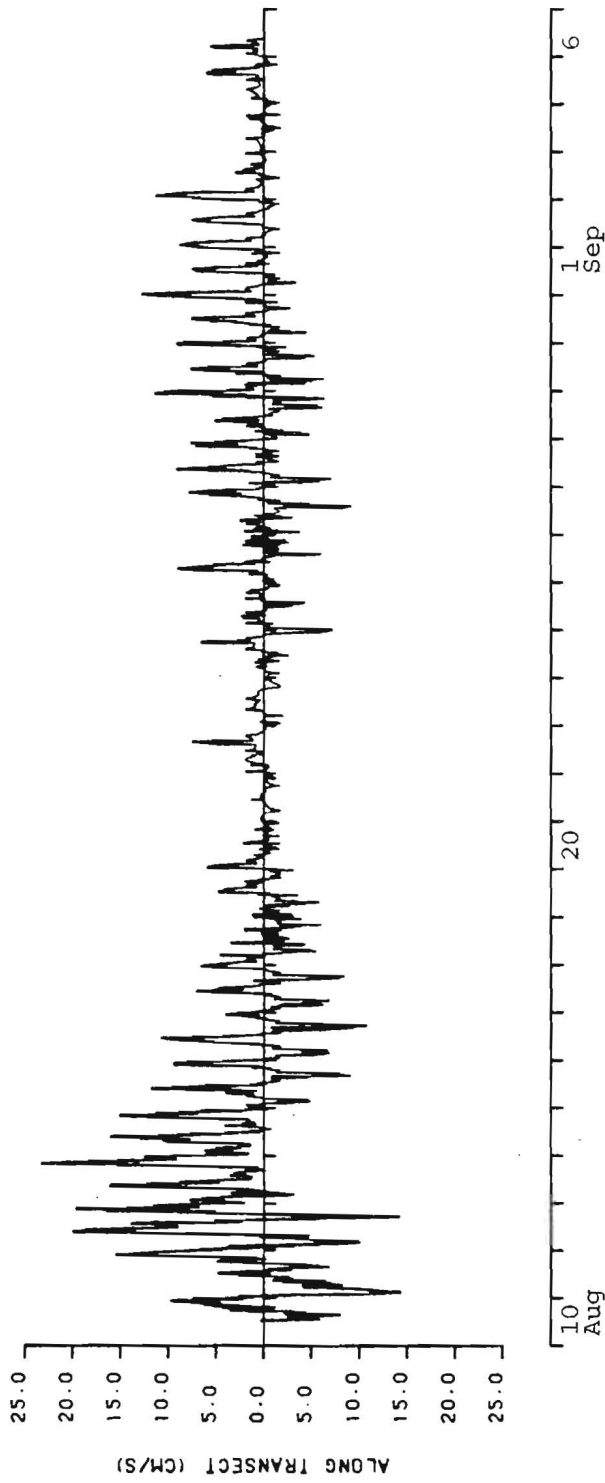
SCALE = 5.0 CM/S PER TICK

A1351 08/10/88 12:35EST DELTA T= 5 MIN



1 TICK = 10 KILOMETERS





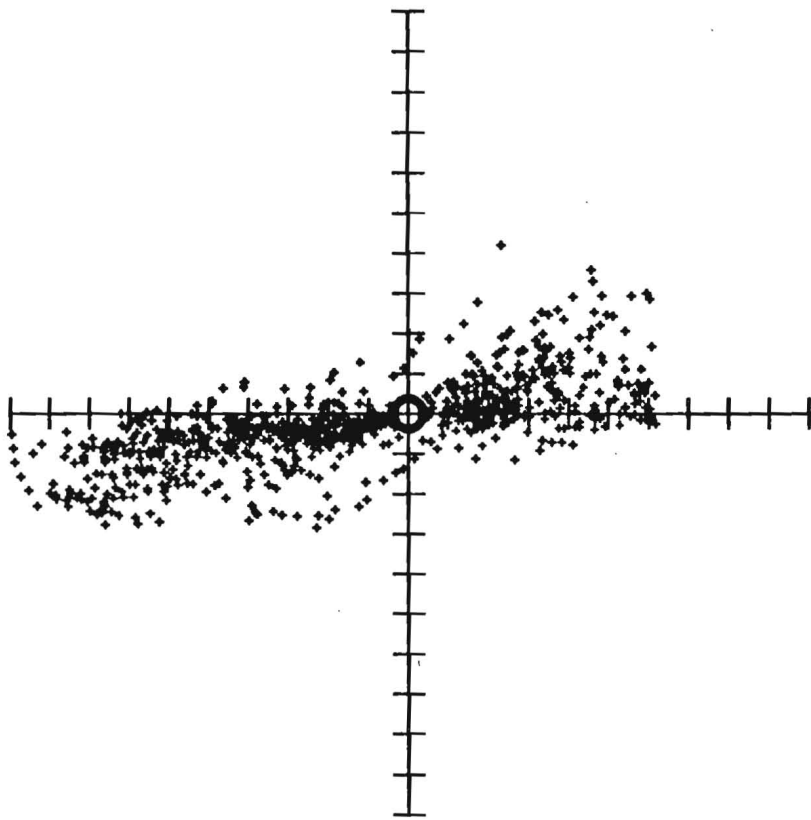
Current meter : AANDERAA #A1353
 Station # and location : 4S , 41 04.1N 72 55.5W
 Instrument depth (MLW) : 21.6m
 Water depth (MLW) : 30.8m
 Start time : 08/10/88 12:30 EST
 Stop time : 09/06/88 12:05 EST
 Duration : 26 days 23 hours 35 minutes
 Sampling interval : 5 minutes
 Comments:

Velocity dampened after 4 days due to rotor biofouling.

NUMBER OF CURRENT DATA POINTS = 7771
 NUMBER OF TEMPERATURE POINTS = 7771
 NUMBER OF SALINITY POINTS = 7771

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		346	76				
MEAN	=	-0.13	-1.39	4.96	1.39	20.92	28.98
VARIANCE	=	2.84	79.94	60.08	41.39	0.61	0.04
STD. DEV.	=	1.69	8.94	7.75	6.43	0.78	0.19
MAX.	=	15.79	29.54	45.42		21.92	29.47
MIN.	=	-9.87	-45.18	1.70		18.62	28.33



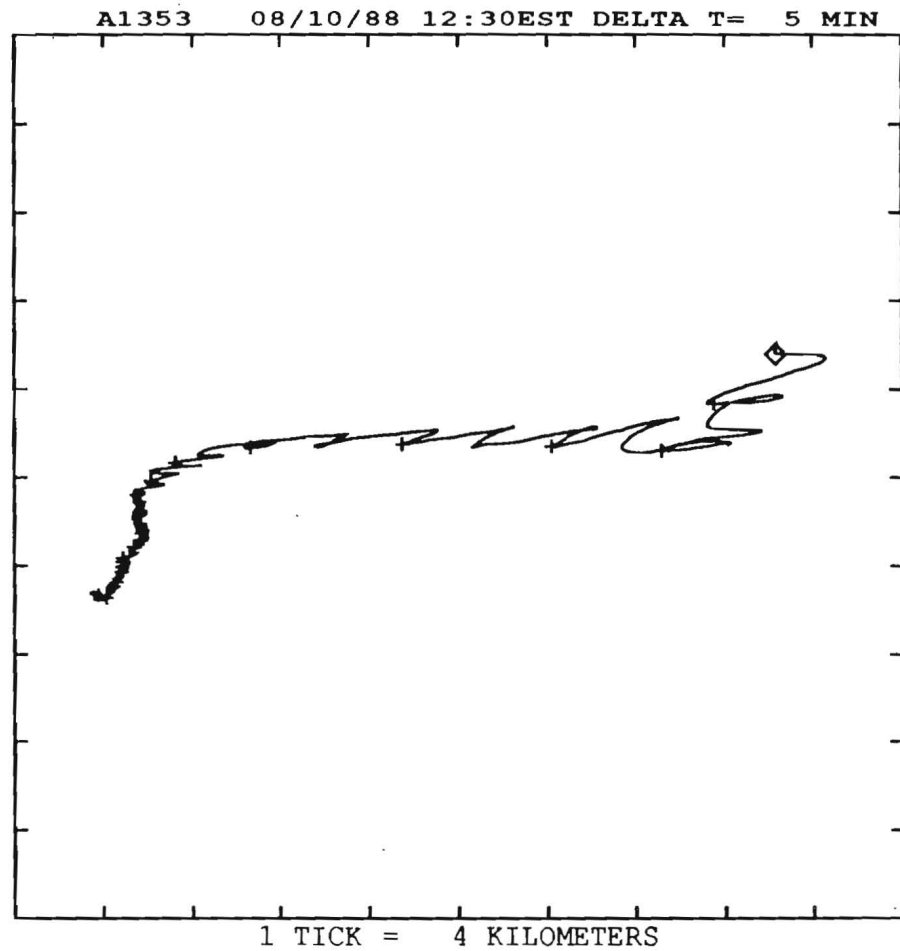
A1353 08/10/88

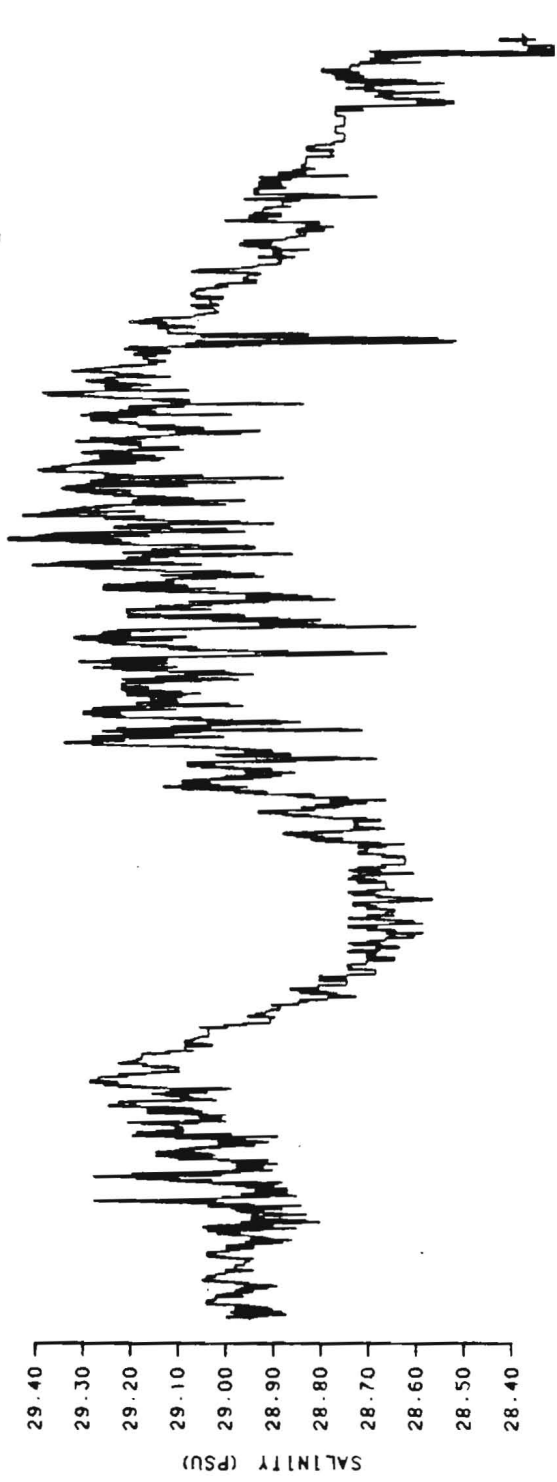
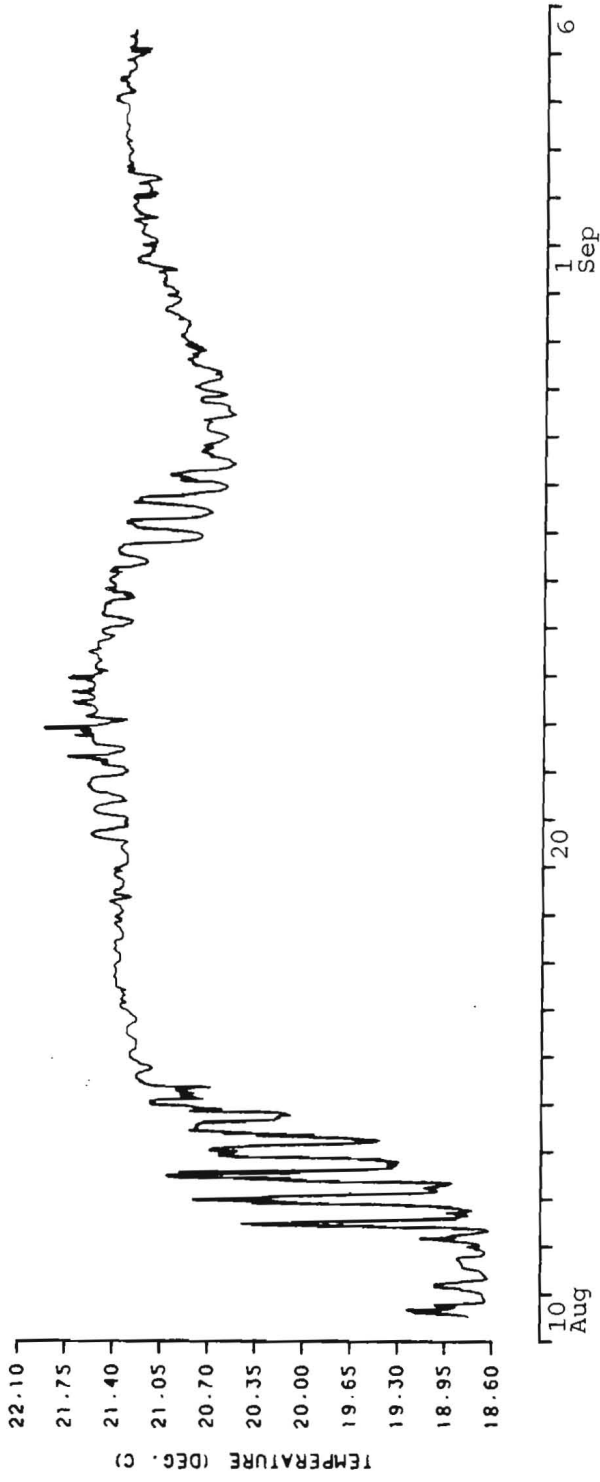
Station 4S , 41 04.1N 72 55.5W

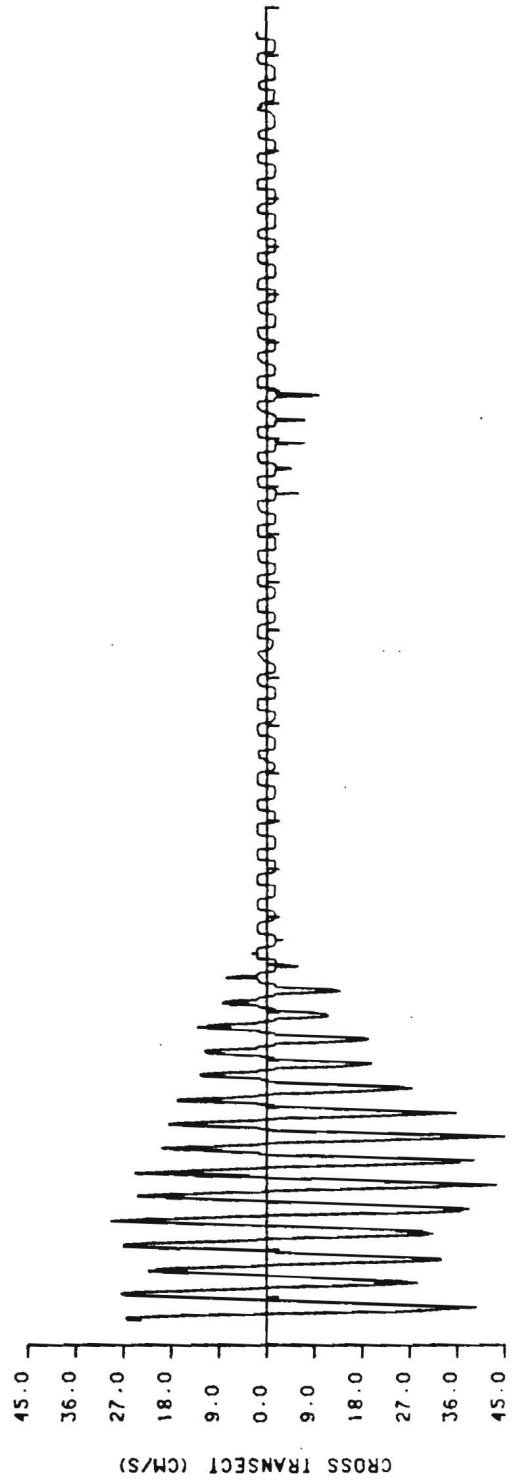
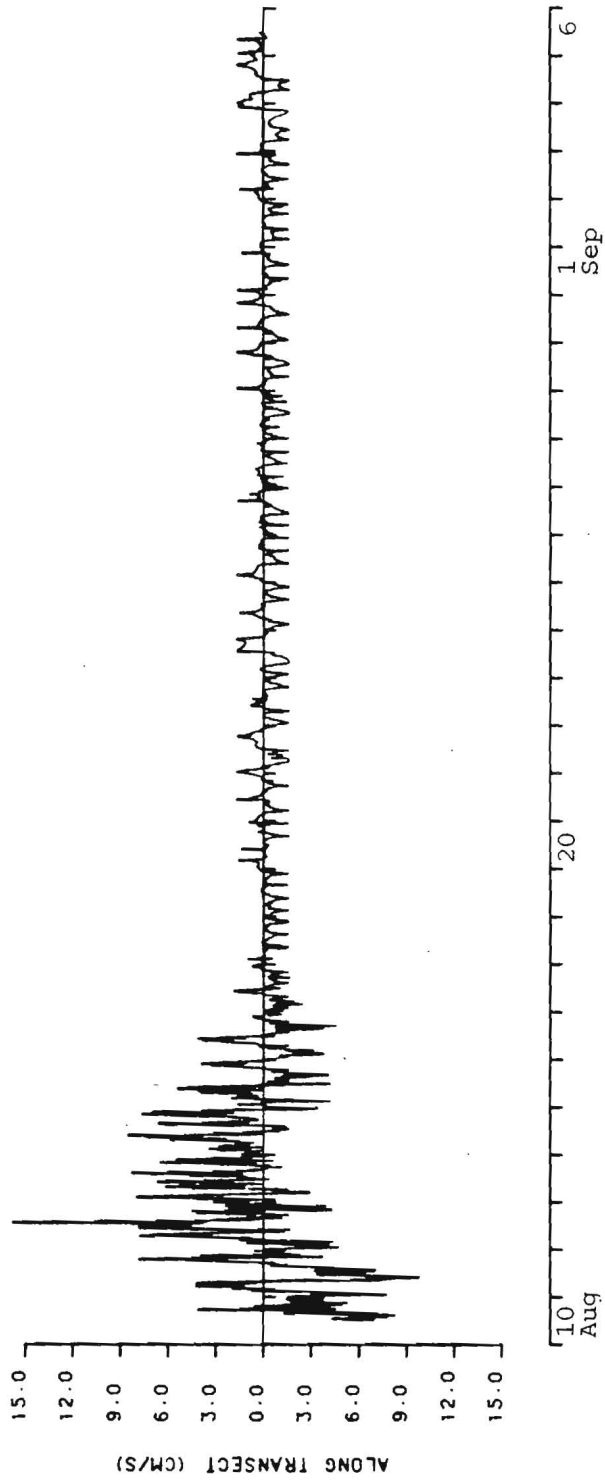
Instrument depth(below MLW) = 21.6 m

Water depth(relative to MLW) = 30.8 m

SCALE = 4.5 CM/S PER TICK







TRANSECTS 5 AND 6

1 June - 5 July 1988

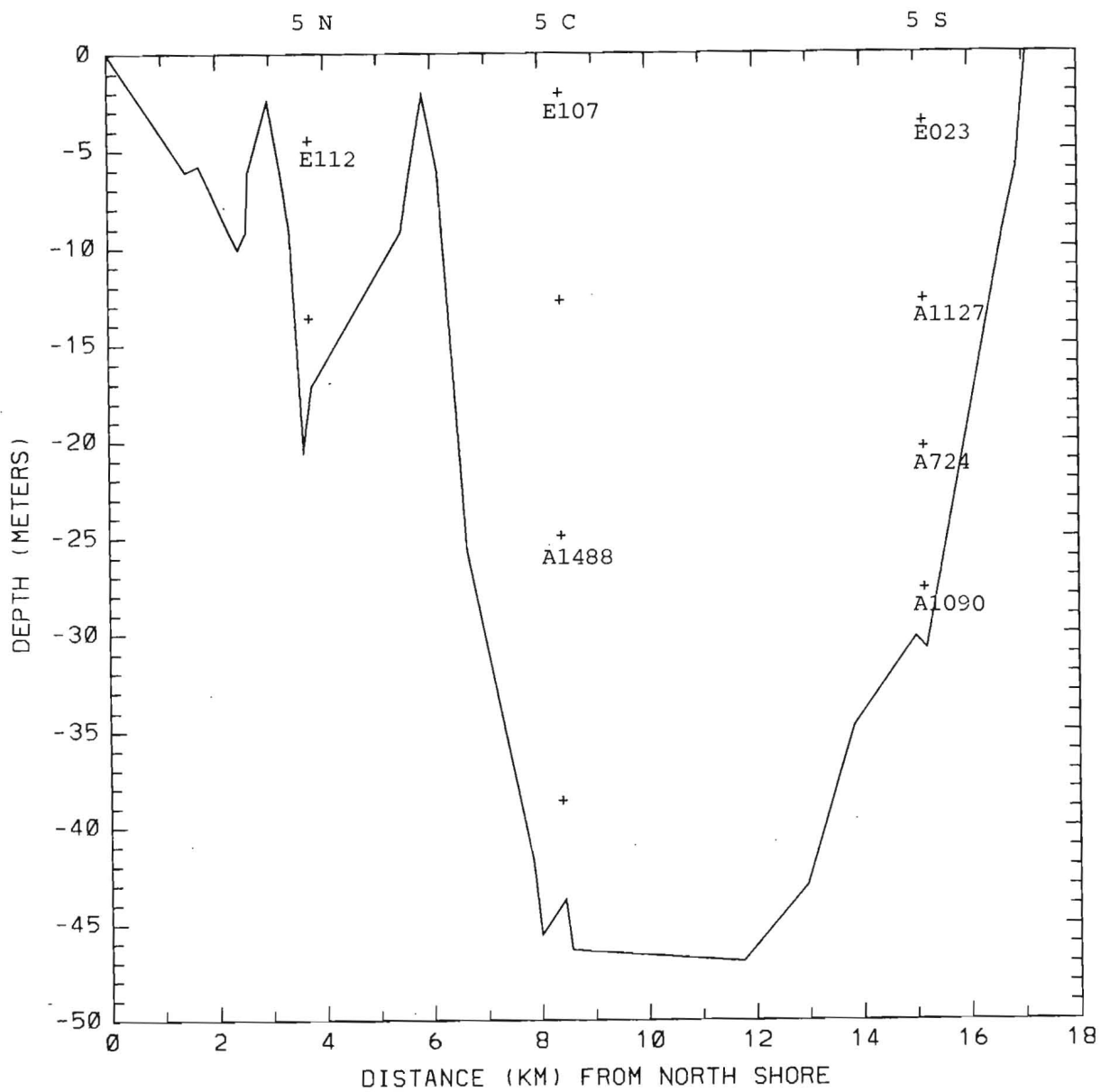


Fig. 6. Transect 5 showing the locations of the current meters

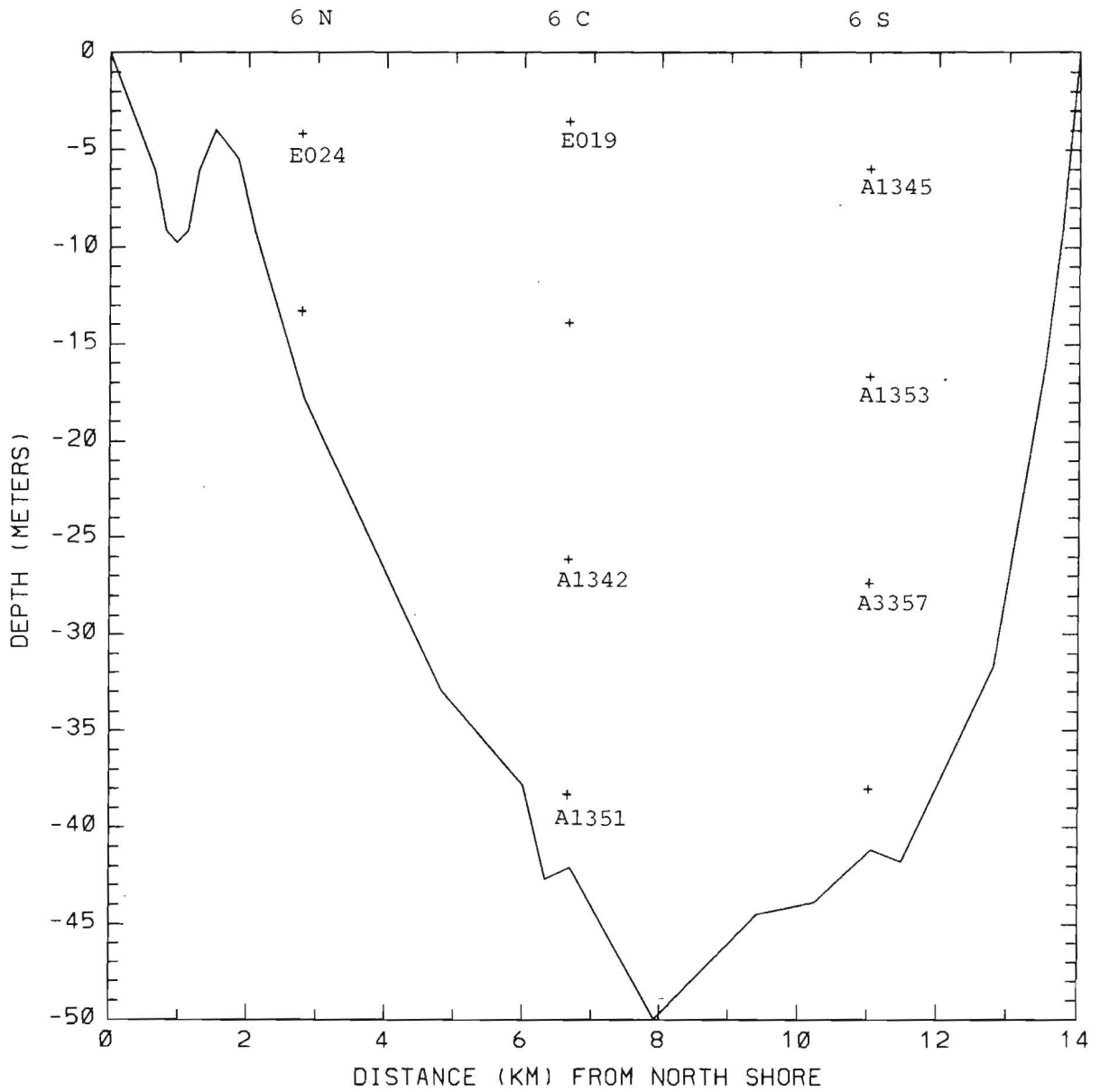


Fig. 7. Transect 6 showing the locations of the current meters

Current meter : ENDECO #1740112
 Station # and location : 5N , 41 14.7N 72 25.0W
 Instrument depth (MLW) : 4.6m
 Water depth (MLW) : 17.1m
 Start time : 06/02/88 09:00 EST
 Stop time : 06/30/88 08:24 EST
 Duration : 27 days 23 hours 24 minutes
 Sampling interval : 2 minutes
 Comments:

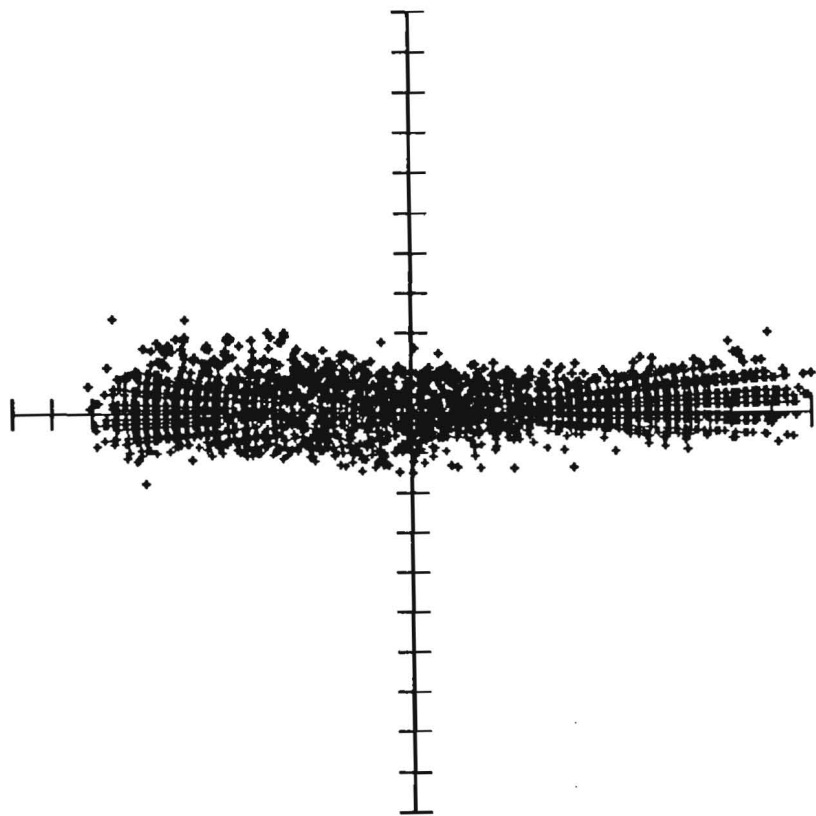
Unreliable conductivity data.

NUMBER OF CURRENT DATA POINTS = 20142
 NUMBER OF TEMPERATURE POINTS = 20142
 NUMBER OF SALINITY POINTS = 0

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS)

	CURRENT		SPEED	VECTOR	TEMP
	COMPONENT TOWARDS				
	337	67			
MEAN	= -2.16	9.41	48.46	9.66	14.04
VARIANCE	= 420.71	2404.98	570.21	1412.85	1.95
STD. DEV.	= 20.51	49.04	23.88	37.59	1.40
MAX.	= 54.46	96.86	103.39		17.70
MIN.	= -46.08	-76.30	0.00		11.85

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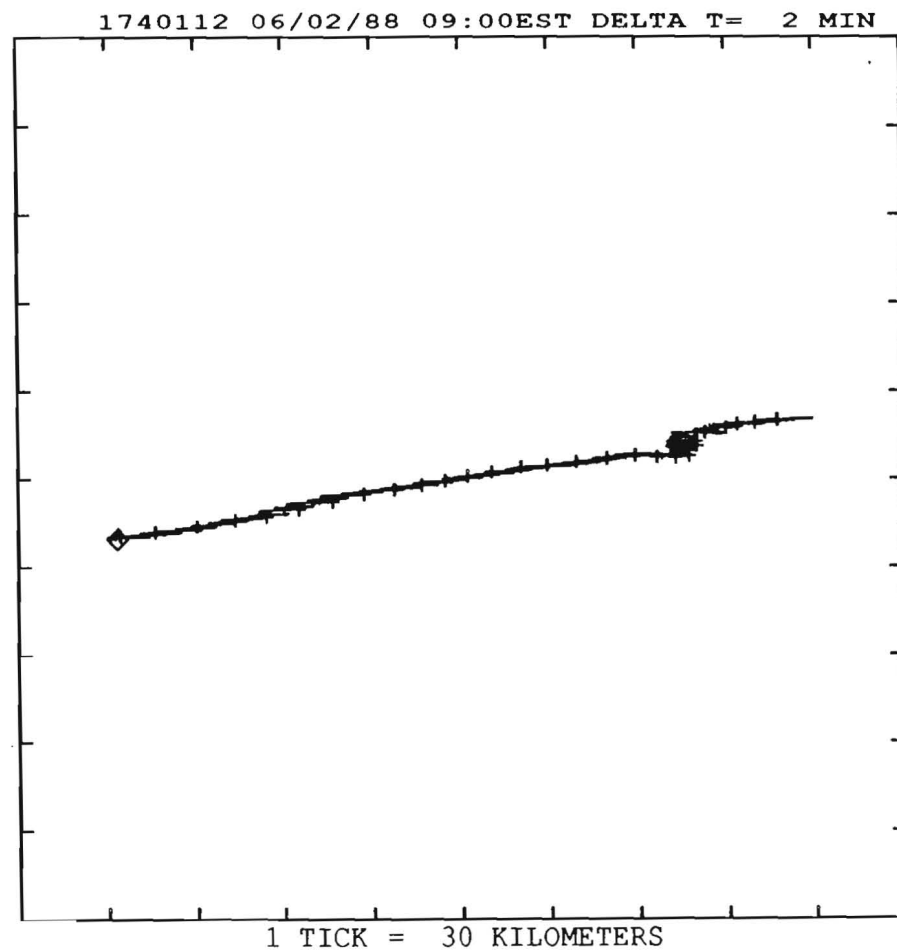
1740112 06/02/88

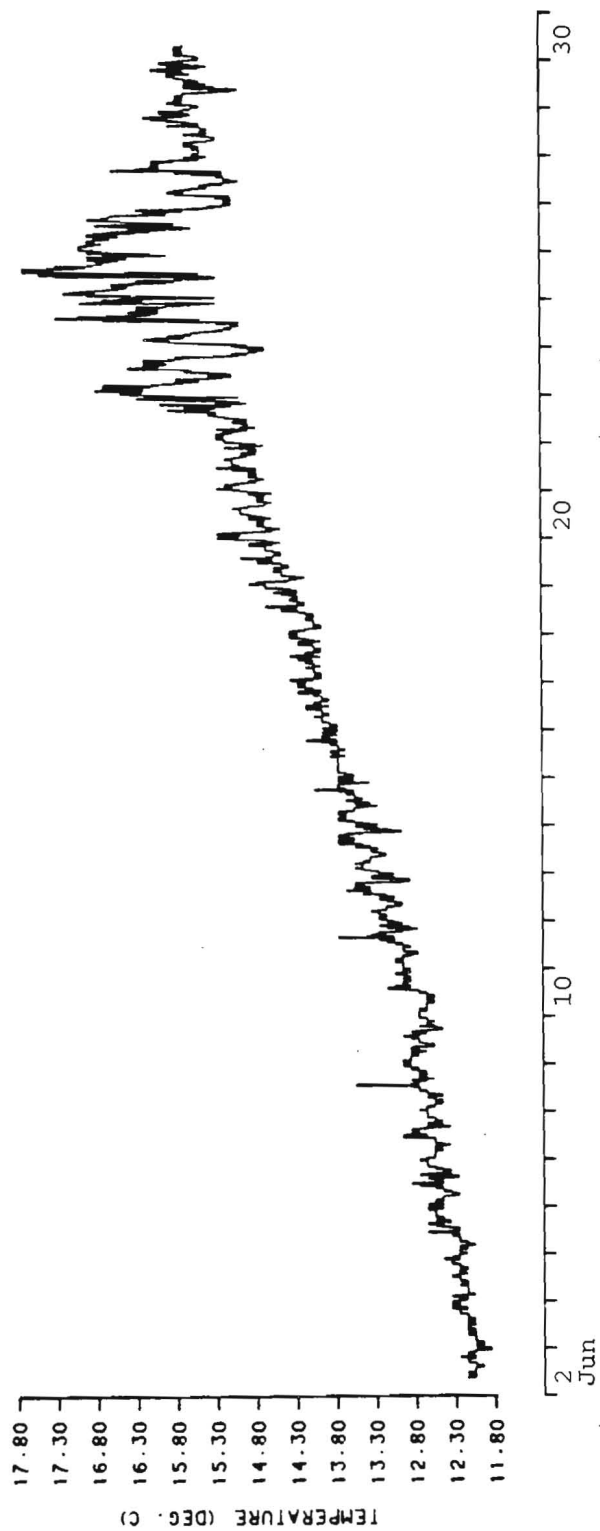
Station 5N , 41 14.7N 72 25.0W

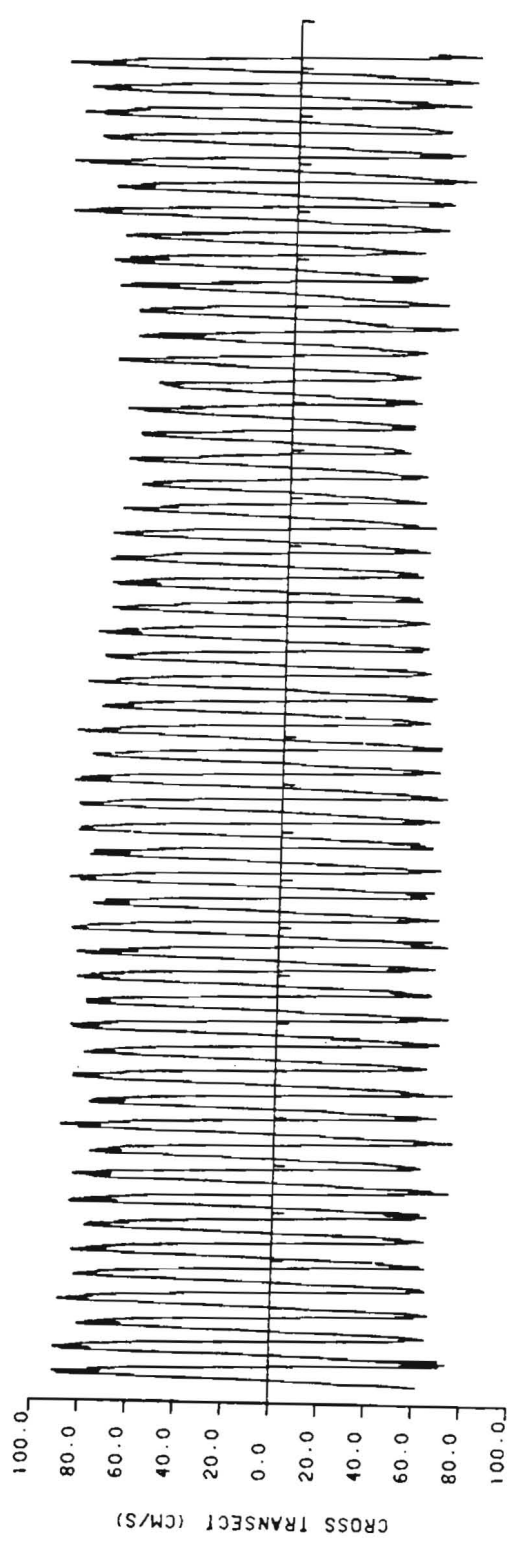
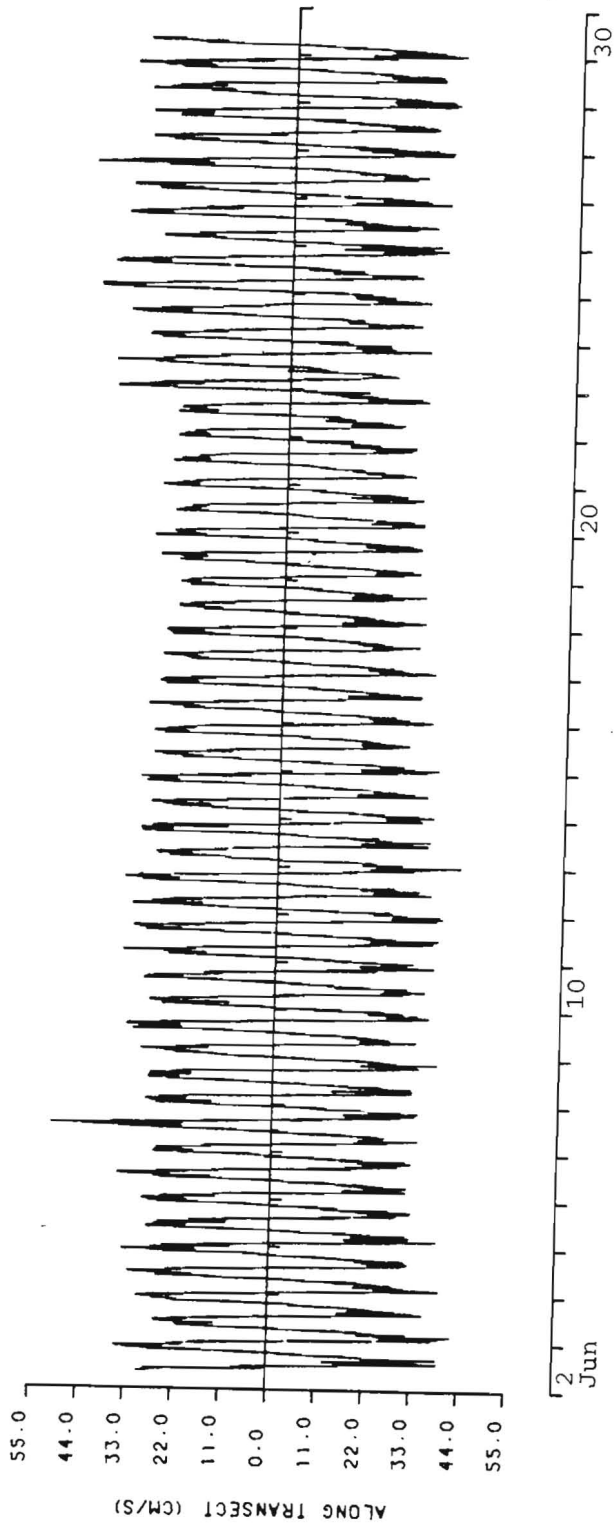
Instrument depth(below MLW) = 4.6 m

Water depth(relative to MLW) = 17.1 m

SCALE = 10.0 CM/S PER TICK







Current meter : ENDECO #1740107
 Station # and location : 5C , 41 12.2N 72 24.5W
 Instrument depth (MLW) : 2.1m
 Water depth (MLW) : 43.3m
 Start time : 06/02/88 10:28 EST
 Stop time : 06/30/88 10:42 EST
 Duration : 28 days 0 hours 14 minutes
 Sampling interval : 2 minutes
 Comments:

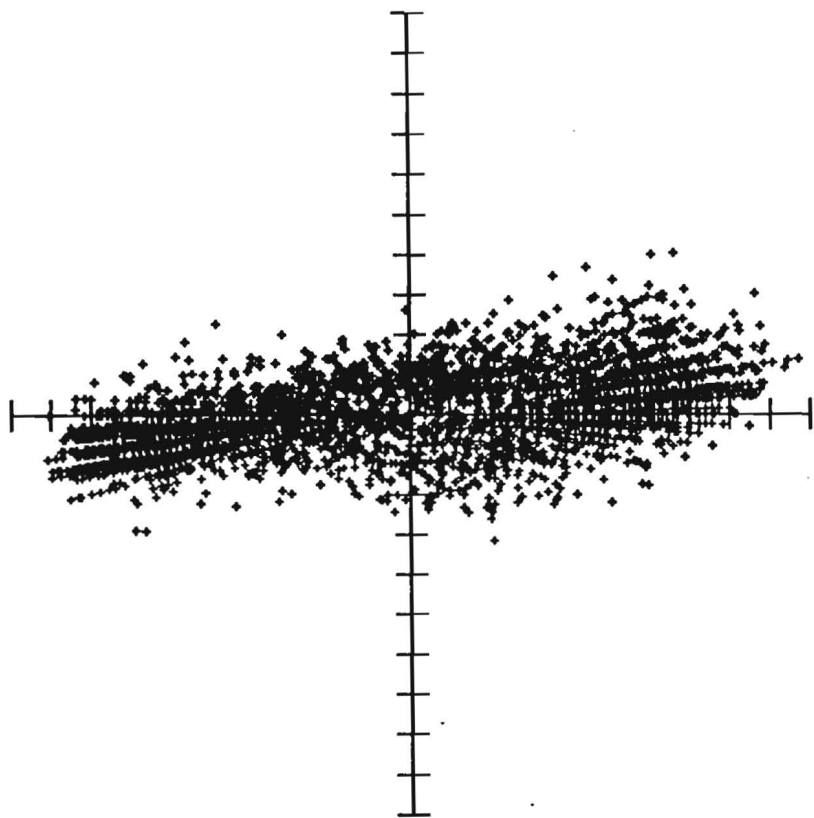
Unreliable conductivity data after 27 June.

NUMBER OF CURRENT DATA POINTS = 20167
 NUMBER OF TEMPERATURE POINTS = 20167
 NUMBER OF SALINITY POINTS = 18407

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		337	67				
MEAN	=	1.30	-2.96	61.72	3.23	13.63	29.31
VARIANCE	=	492.82	4119.66	813.08	2306.24	2.96	0.46
STD. DEV.	=	22.20	64.18	28.51	48.02	1.72	0.68
MAX.	=	69.64	127.68	128.34		18.32	30.58
MIN.	=	-62.65	-116.92	0.00		11.17	26.87

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1740107 06/02/88

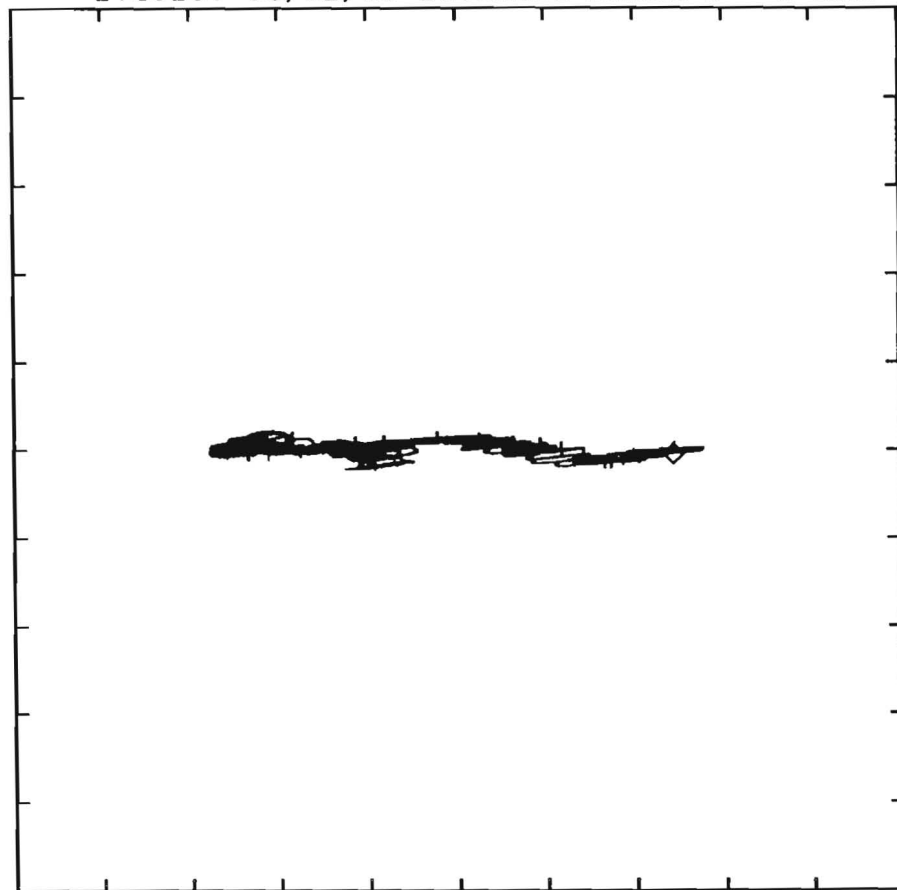
Station 5C , 41 12.2N 72 24.5W

Instrument depth(below MLW) = 2.1 m

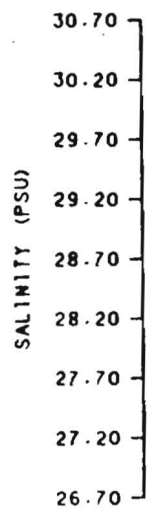
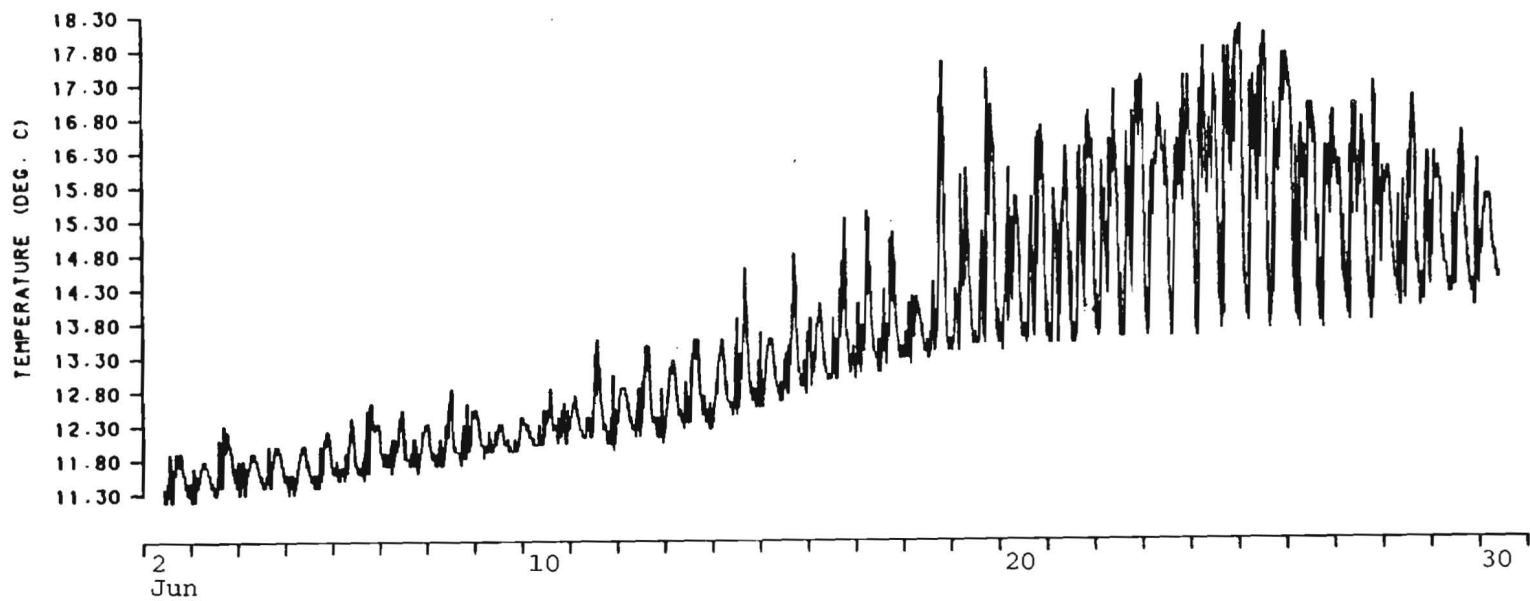
Water depth(relative to MLW) = 43.3 m

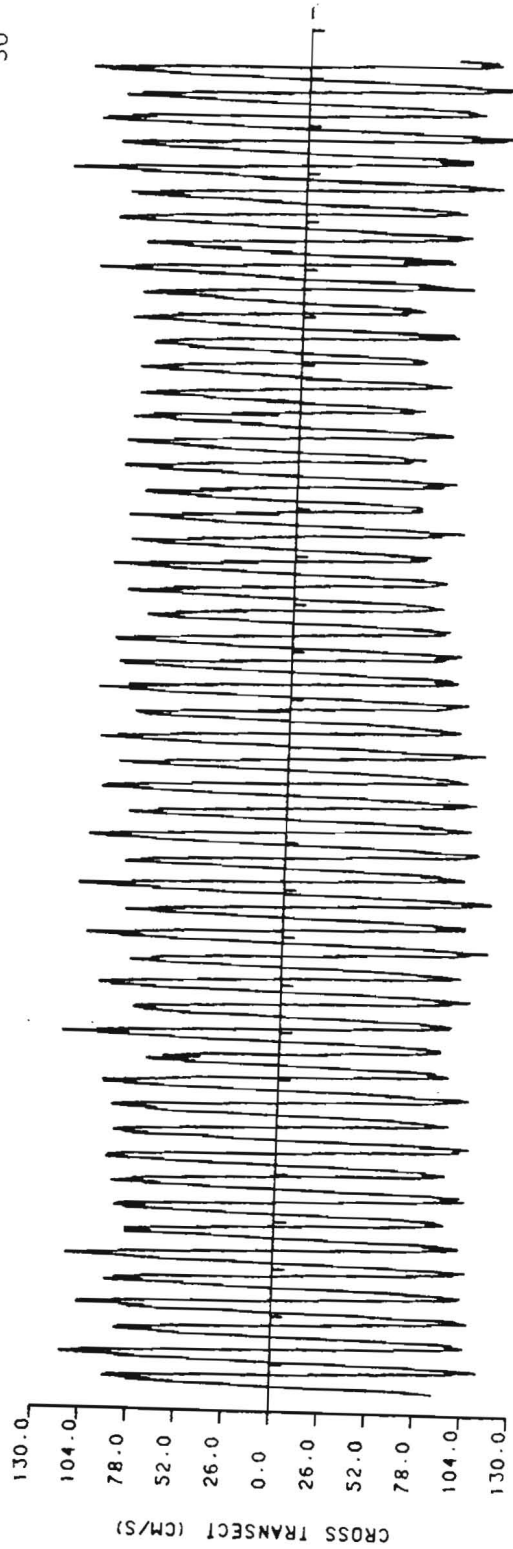
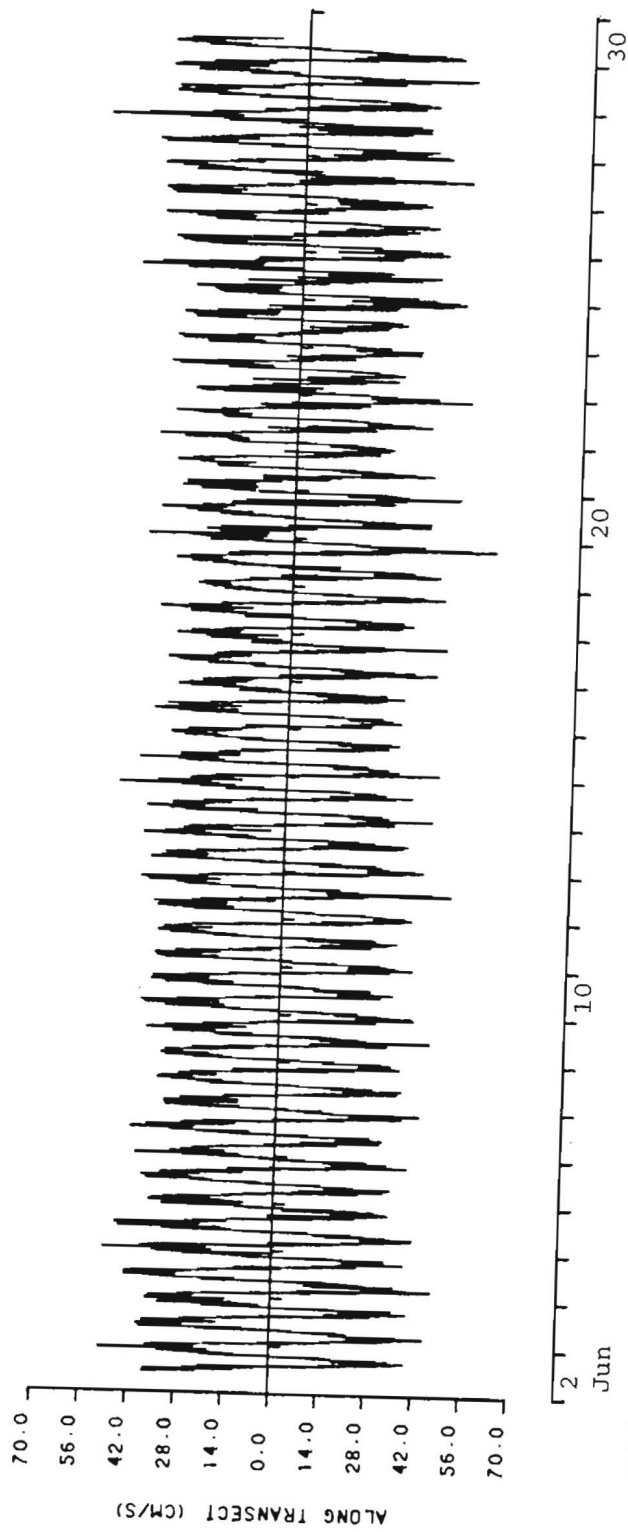
SCALE = 13.0 CM/S PER TICK

1740107 06/02/88 10:28EST DELTA T= 2 MIN



1 TICK = 20 KILOMETERS





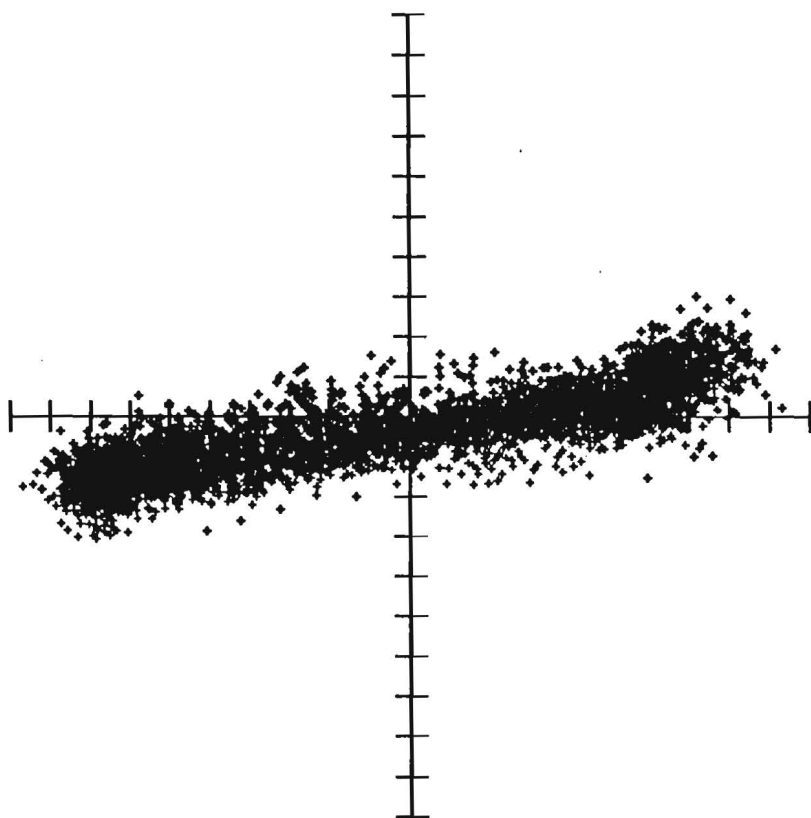
Current meter : AANDERAA #A1488
 Station # and location : 5C , 41 12.2N 72 24.5W
 Instrument depth (MLW) : 27.4m
 Water depth (MLW) : 45.7m
 Start time : 06/02/88 12:20 EST
 Stop time : 06/30/88 11:25 EST
 Duration : 27 days 23 hours 5 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 8053
 NUMBER OF TEMPERATURE POINTS = 8053
 NUMBER OF SALINITY POINTS = 8053

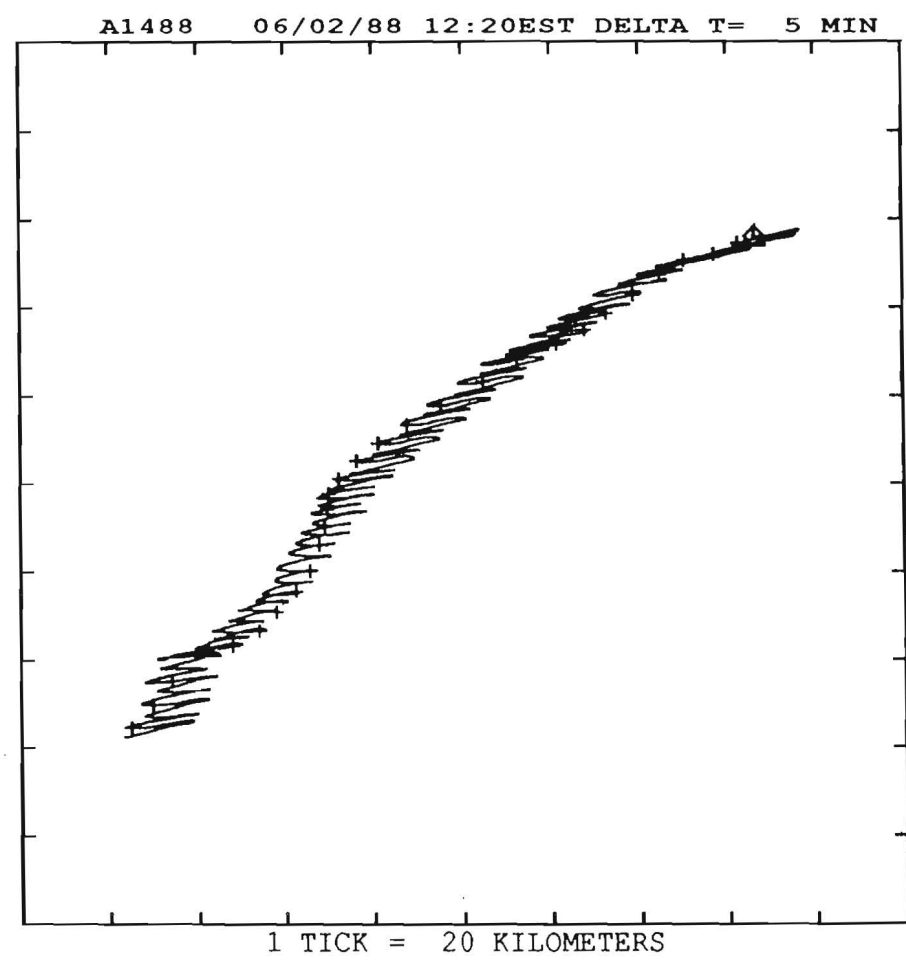
UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

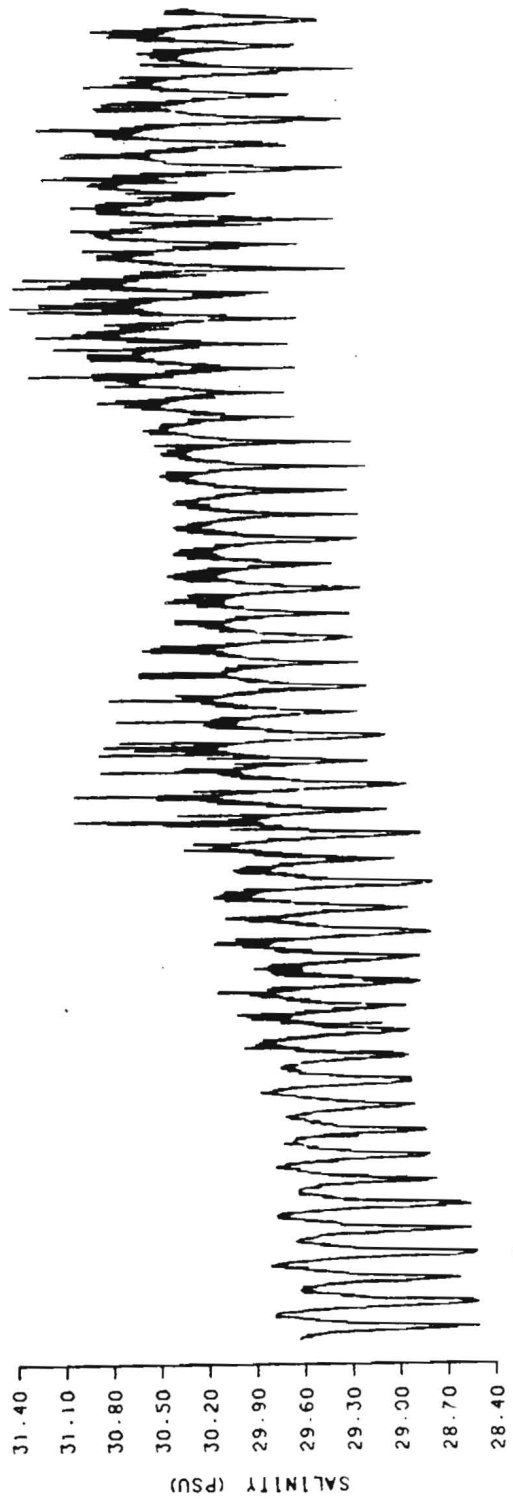
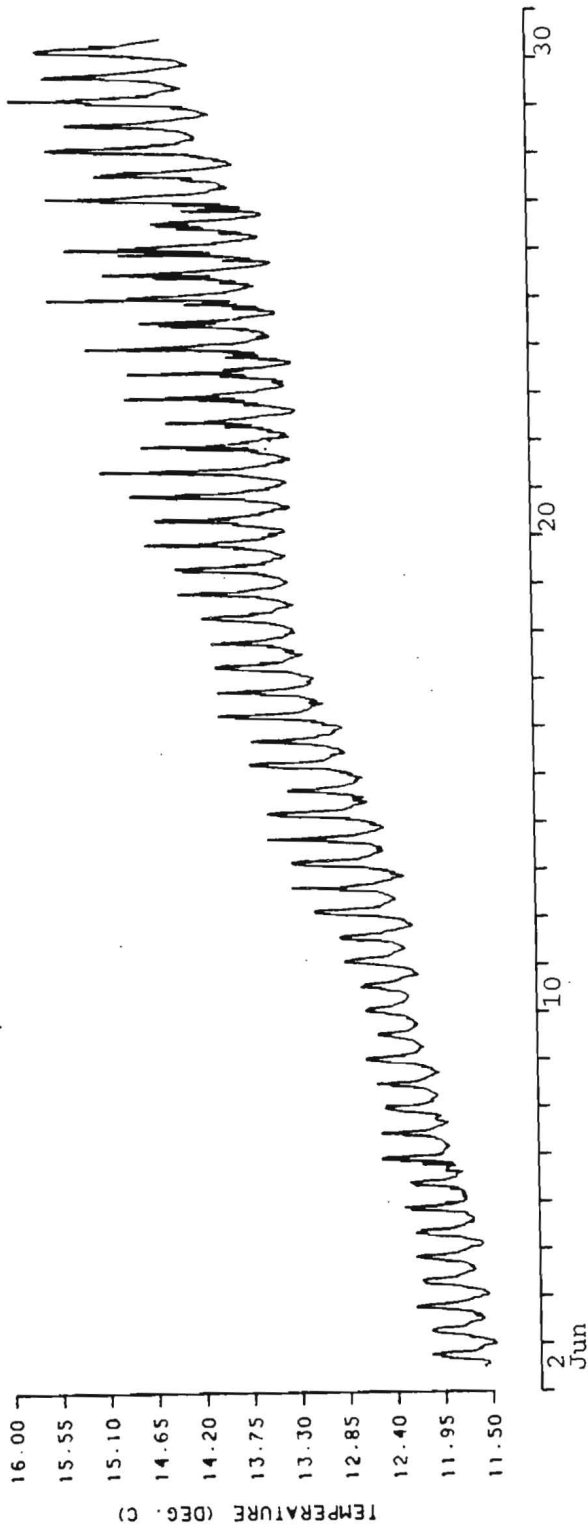
		CURRENT COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		337	67				
MEAN	=	-2.02	-7.30	56.79	7.58	13.12	29.83
VARIANCE	=	258.08	3637.09	727.62	1947.58	0.90	0.25
STD. DEV.	=	16.06	60.31	26.97	44.13	0.95	0.50
MAX.	=	40.93	104.46	113.94		15.92	31.37
MIN.	=	-46.94	-111.25	1.23		11.45	28.50

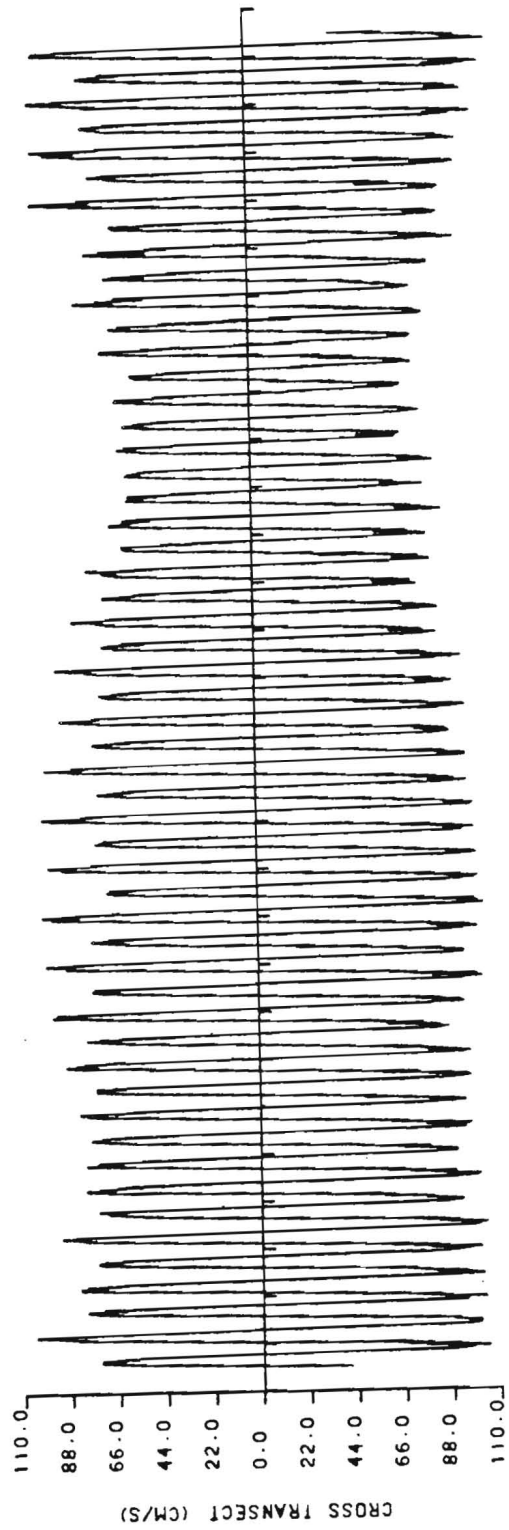
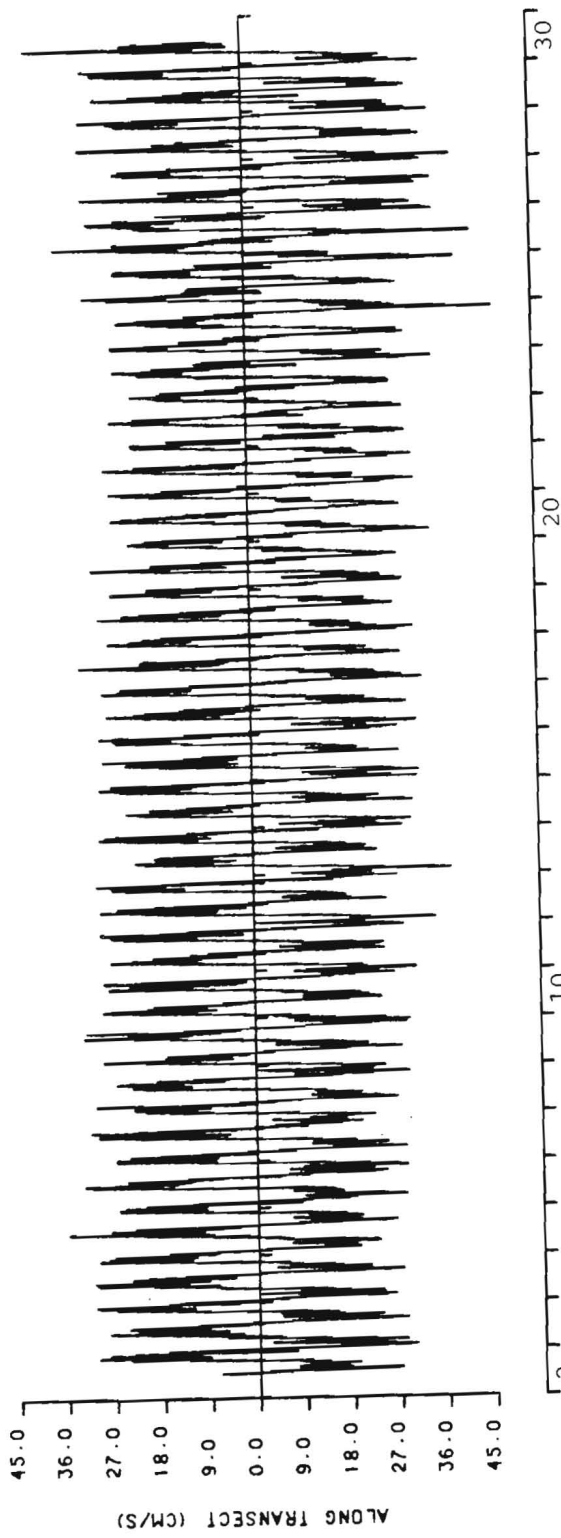
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A1488 06/02/88
Station 5C , 41 12.2N 72 24.5W
Instrument depth(below MLW) = 27.4 m
Water depth(relative to MLW) = 45.7 m
SCALE = 11.5 CM/S PER TICK







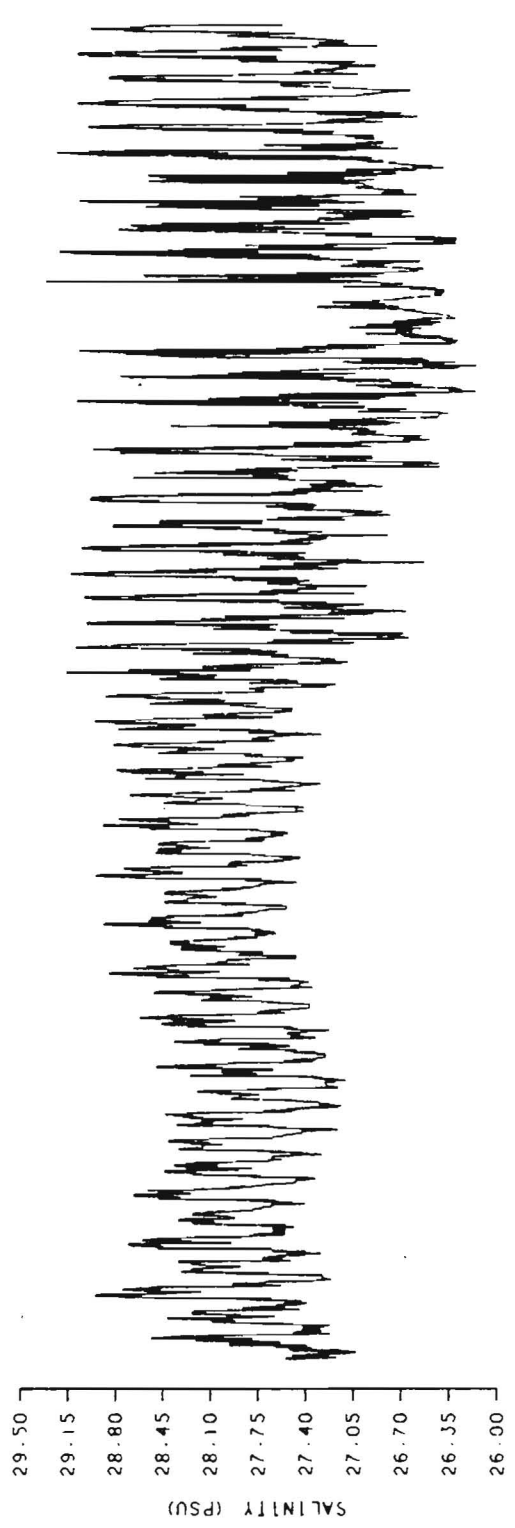
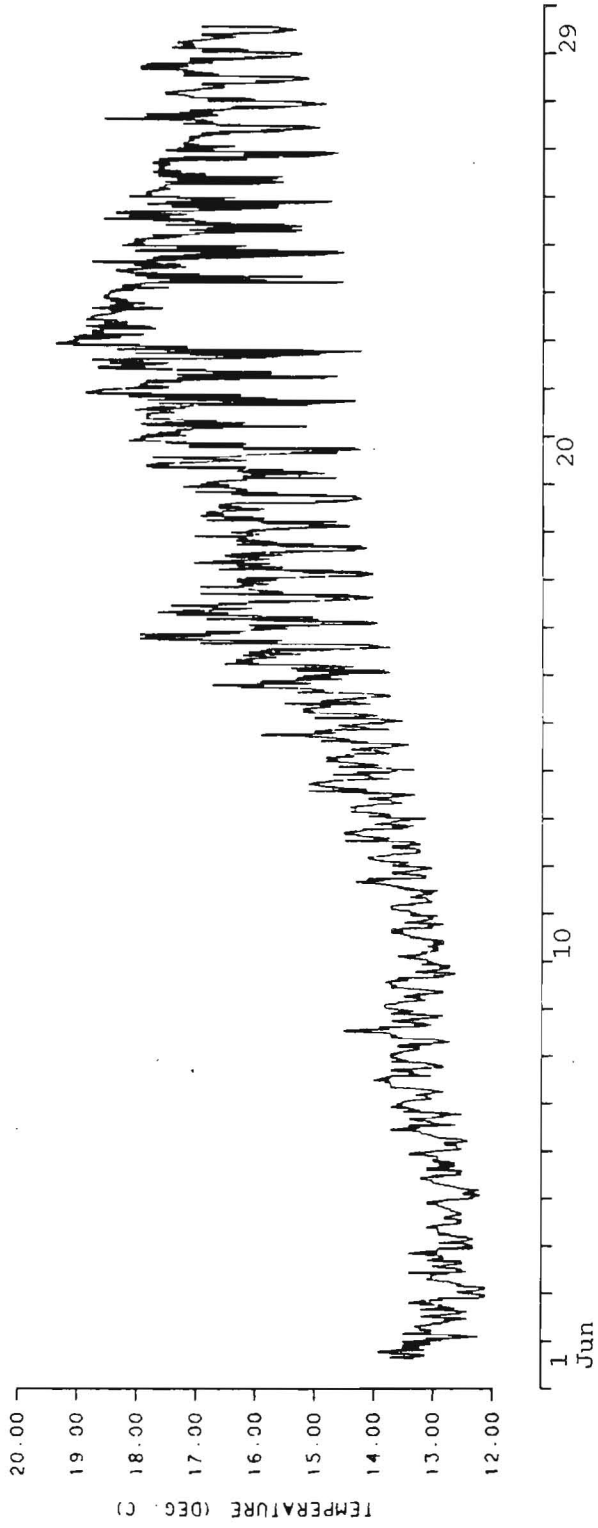
Current meter : ENDECO #1740023
 Station # and location : 5S , 41 09.0N 72 22.0W
 Instrument depth (MLW) : 3.7m
 Water depth (MLW) : 31.1m
 Start time : 06/01/88 15:04 EST
 Stop time : 06/29/88 14:22 EST
 Duration : 27 days 23 hours 18 minutes
 Sampling interval : 2 minutes
 Comments:

Compass did not work; hence no velocity components.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 20139
 NUMBER OF SALINITY POINTS = 20139

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU).

		SPEED	TEMP	SAL
MEAN	=	53.08	15.02	27.70
VARIANCE	=	768.51	3.65	0.41
STD. DEV.	=	27.72	1.91	0.64
MAX.	=	140.21	19.40	29.41
MIN.	=	0.00	12.01	26.11



Current meter : AANDERAA #A1127
 Station # and location : 5S , 41 09.0N 72 22.0W
 Instrument depth (MLW) : 12.8m
 Water depth (MLW) : 31.1m
 Start time : 06/01/88 17:00 EST
 Stop time : 06/29/88 00:30 EST
 Duration : 27 days 7 hours 30 minutes
 Sampling interval : 5 minutes
 Comments:

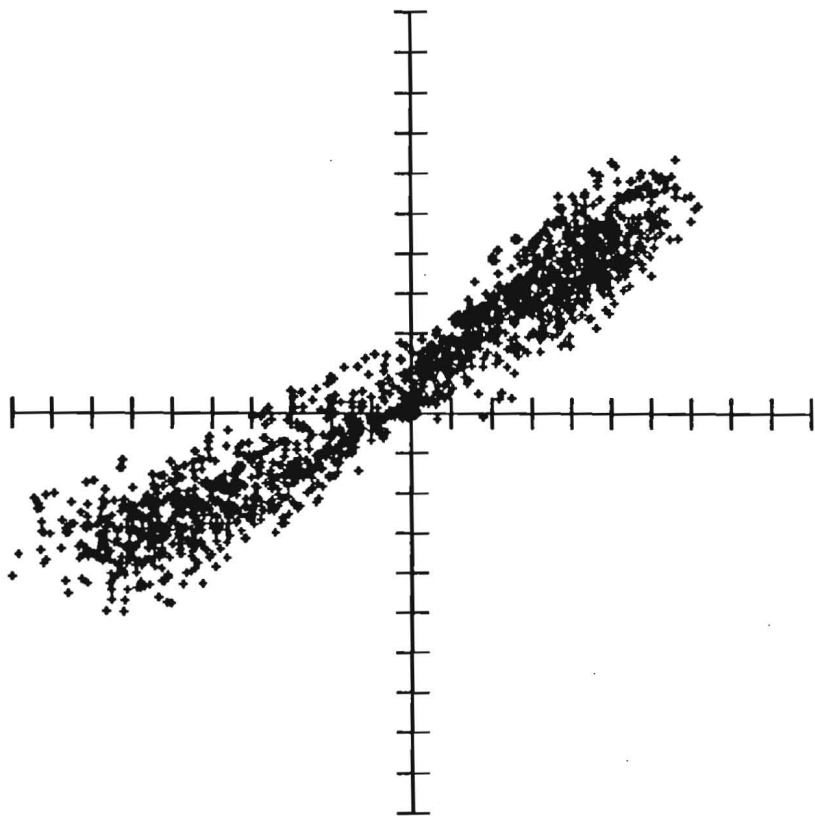
Bad speed data (suspected fouling of rotor) resulted in
 loss of velocity information, except for the portions shown.

NUMBER OF CURRENT DATA POINTS = 3481
 NUMBER OF TEMPERATURE POINTS = 7866
 NUMBER OF SALINITY POINTS = 7866

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

	CURRENT COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
	337	67				
MEAN	= 10.64	-0.09	60.20	10.64	14.53	28.18
VARIANCE	= 191.64	4317.23	997.41	2254.43	2.36	0.56
STD. DEV.	= 13.84	65.71	31.58	47.48	1.54	0.75
MAX.	= 49.62	112.39	140.81		18.71	29.79
MIN.	= -29.70	-140.80	1.70		12.12	25.83

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A1127 06/01/88

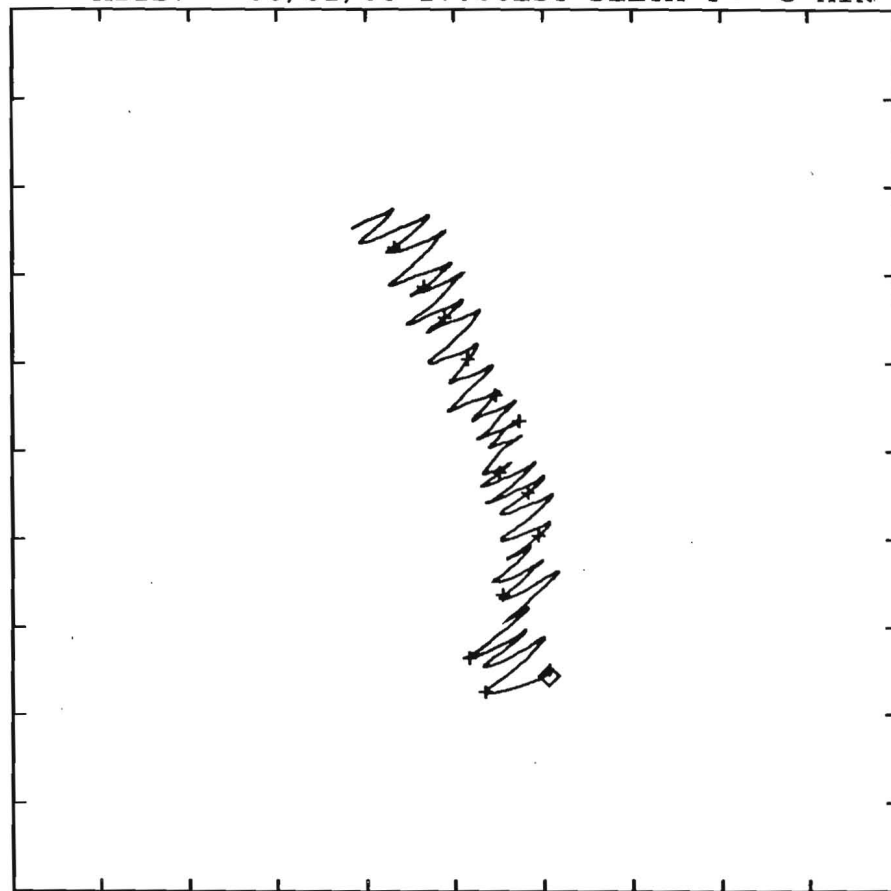
Station 5S , 41 09.0N 72 22.0W

Instrument depth(below MLW) = 12.8 m

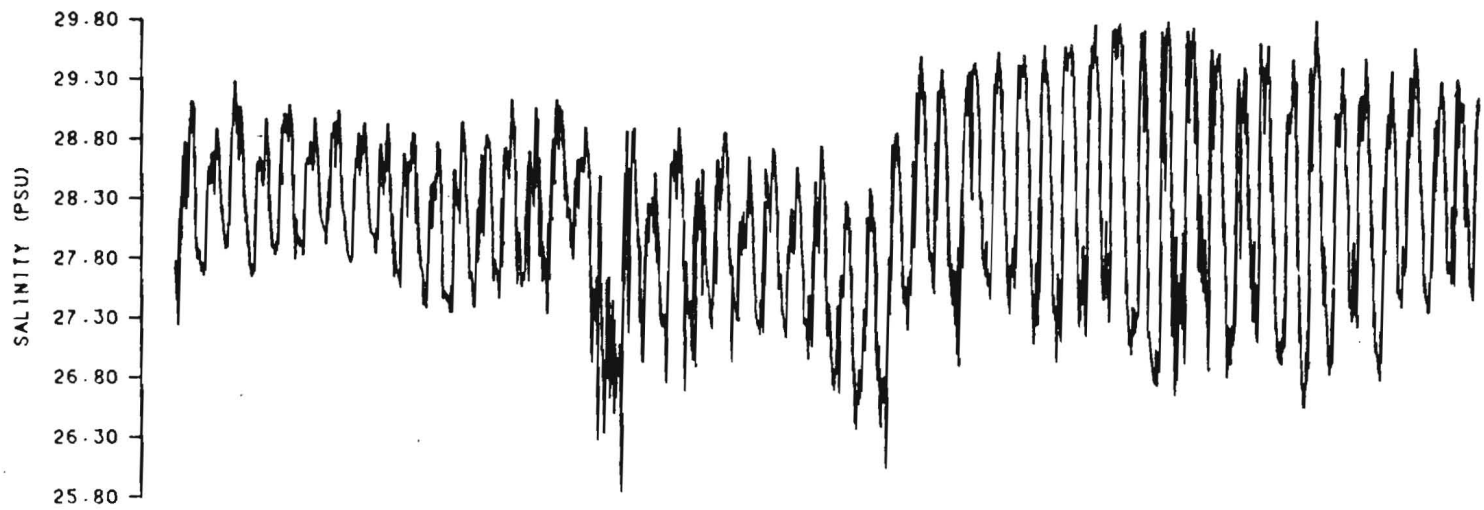
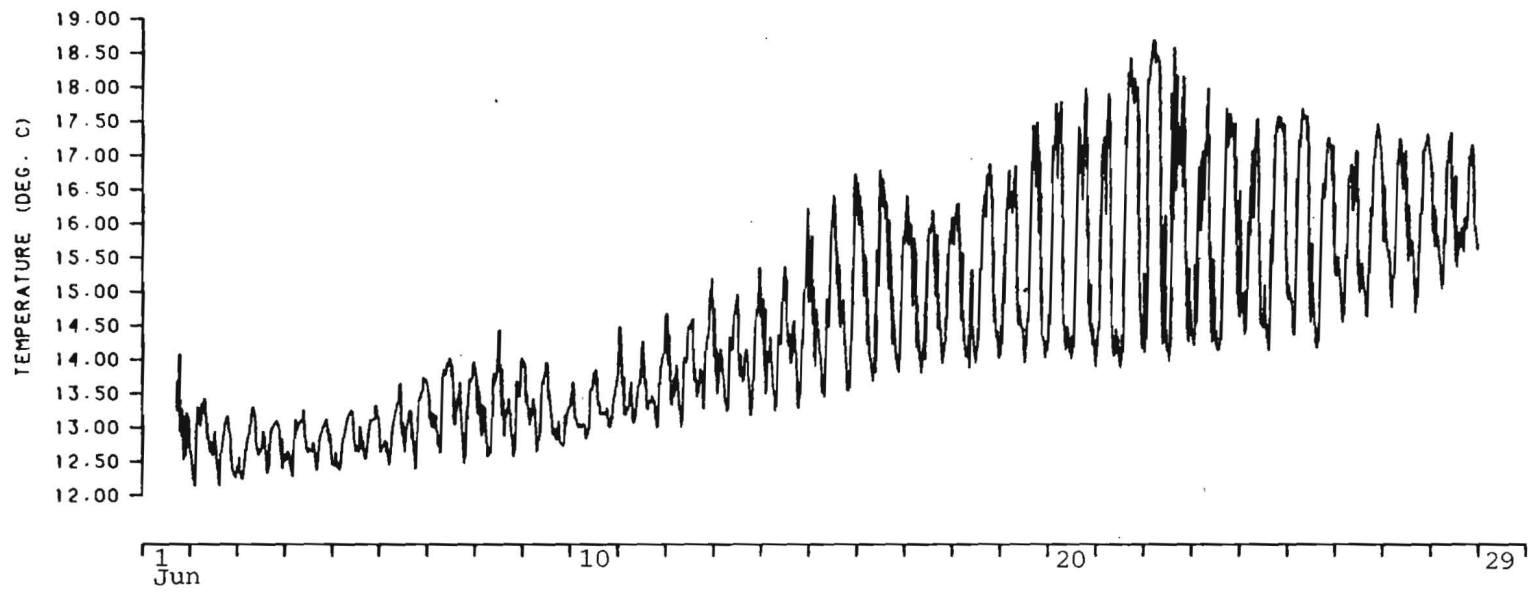
Water depth(relative to MLW) = 31.1 m

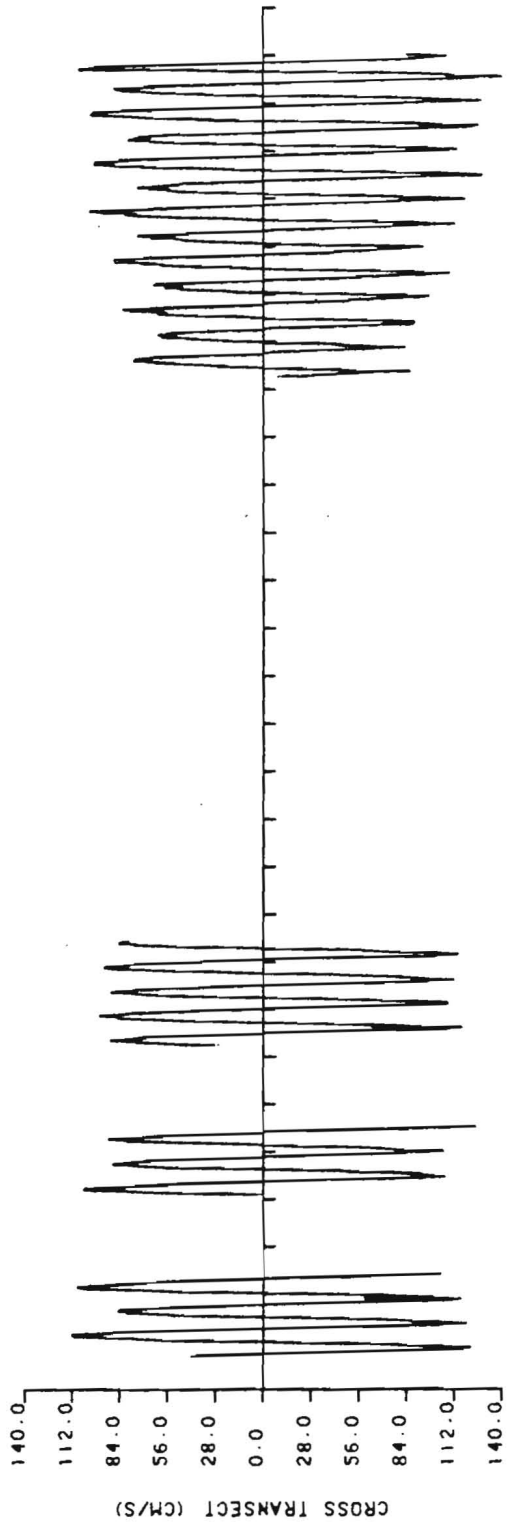
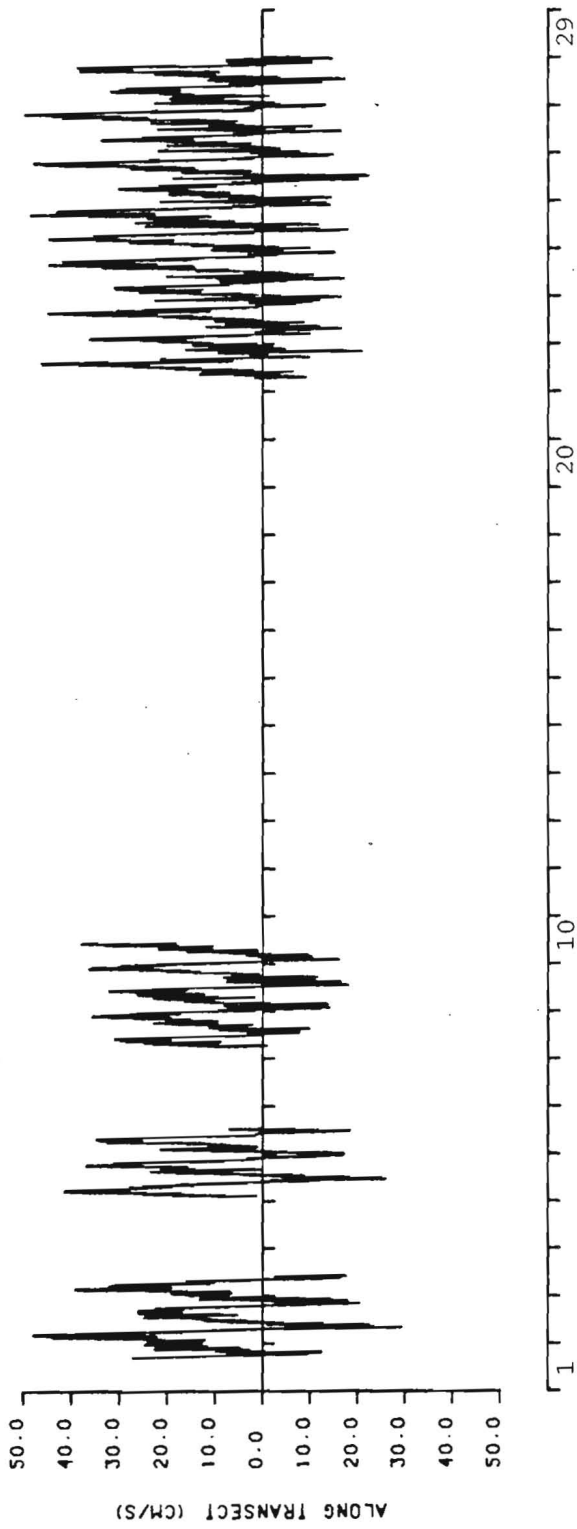
SCALE = 13.0 CM/S PER TICK

A1127 06/01/88 17:00EST DELTA T= 5 MIN



1 TICK = 20 KILOMETERS





Current meter : AANDERAA #A0724
 Station # and location : 5S , 41 09.0N 72 22.0W
 Instrument depth (MLW) : 20.4m
 Water depth (MLW) : 31.1m
 Start time : 06/01/88 18:40 EST
 Stop time : 06/14/88 06:30 EST
 Duration : 12 days 11 hours 50 minutes
 Sampling interval : 5 minutes

Comments:

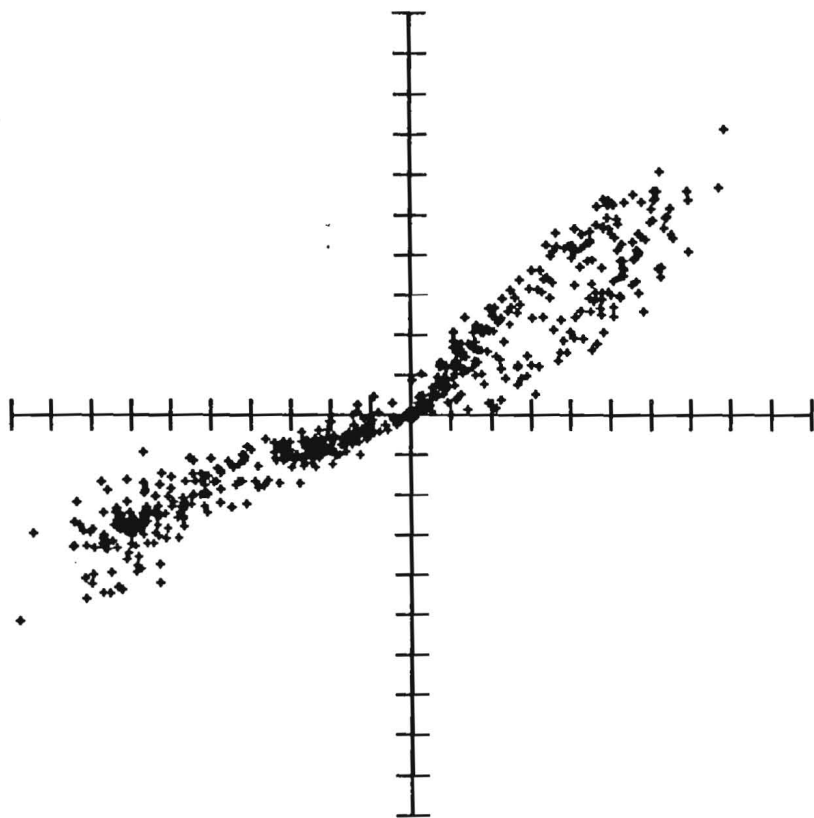
Speed data was bad beyond the third day.
 Polar plot refers only to first three days.
 No progressive vector diagram; no velocity components.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 3598
 NUMBER OF SALINITY POINTS = 3598

UNITS: TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		TEMP	SAL
MEAN	=	13.04	27.22
VARIANCE	=	0.18	0.20
STD. DEV.	=	0.42	0.44
MAX.	=	14.57	28.22
MIN.	=	12.09	25.85

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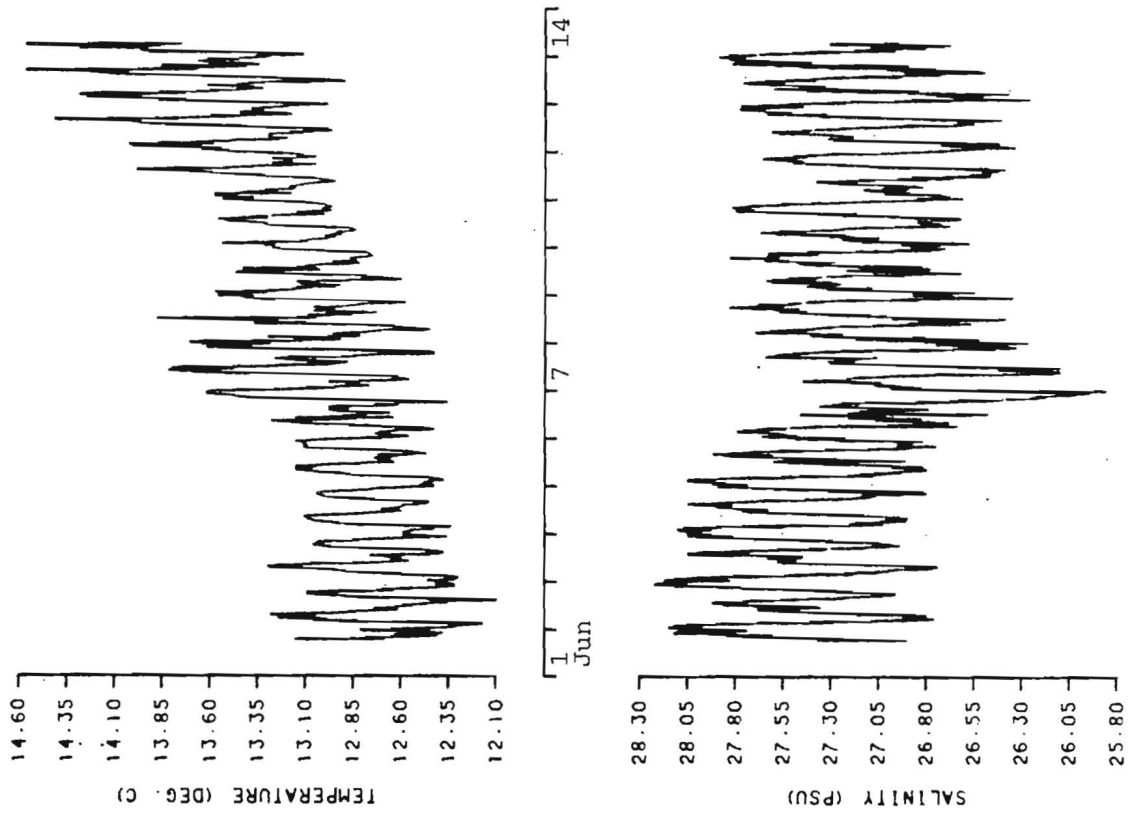
A0724 06/01/88

Station 5S , 41 09.0N 72 22.0W

Instrument depth(below MLW) = 20.4 m

Water depth(relative to MLW) = 31.1 m

SCALE = 12.0 CM/S PER TICK



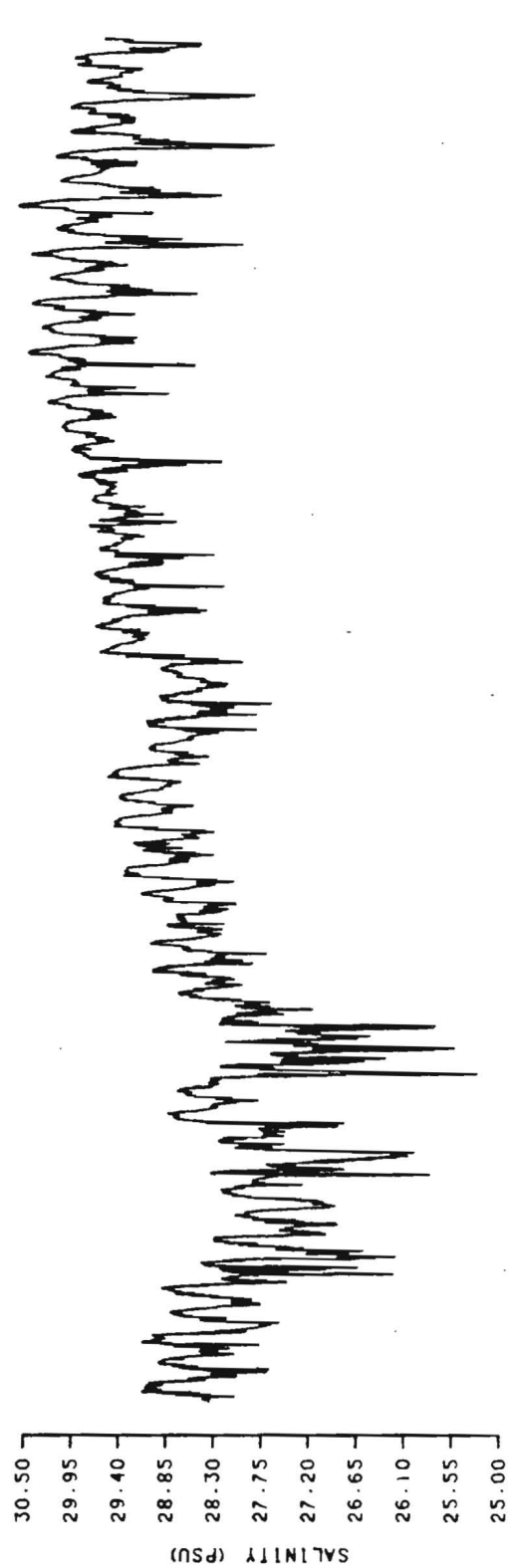
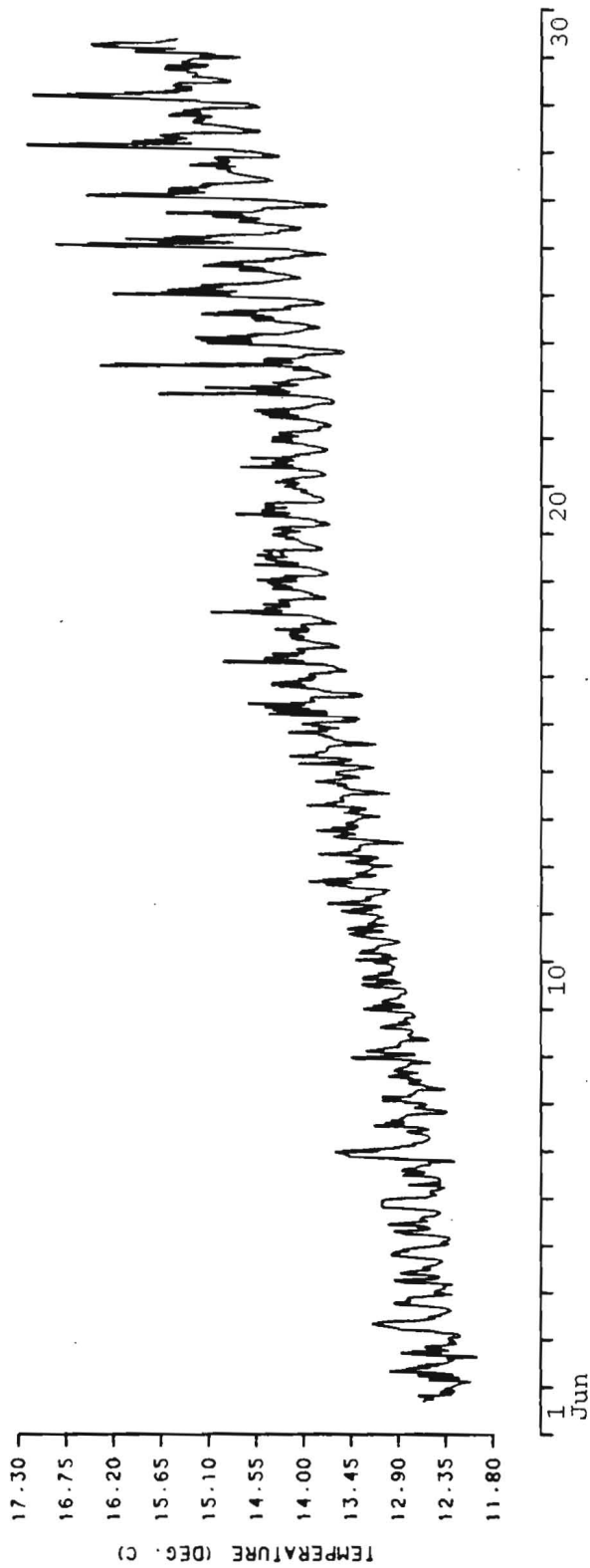
Current meter : AANDERAA #A1090
 Station # and location : 5S , 41 09.0N 72 22.0W
 Instrument depth (MLW) : 28.0m
 Water depth (MLW) : 31.1m
 Start time : 06/01/88 17:00 EST
 Stop time : 06/30/88 09:55 EST
 Duration : 28 days 16 hours 55 minutes
 Sampling interval : 5 minutes
 Comments:

No speed data due to fouled rotor.
 No velocity components.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 8267
 NUMBER OF SALINITY POINTS = 8267

UNITS: TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		TEMP	SAL
MEAN	=	13.69	28.84
VARIANCE	=	0.87	0.78
STD. DEV.	=	0.93	0.89
MAX.	=	17.22	30.55
MIN.	=	11.97	25.23



Current meter : ENDECO #1740024
 Station # and location : 6N , 41 15.4N 72 16.7W
 Instrument depth (MLW) : 4.3m
 Water depth (MLW) : 18.0m
 Start time : 06/02/88 07:48 EST
 Stop time : 06/30/88 07:34 EST
 Duration : 27 days 23 hours 46 minutes
 Sampling interval : 2 minutes
 Comments:

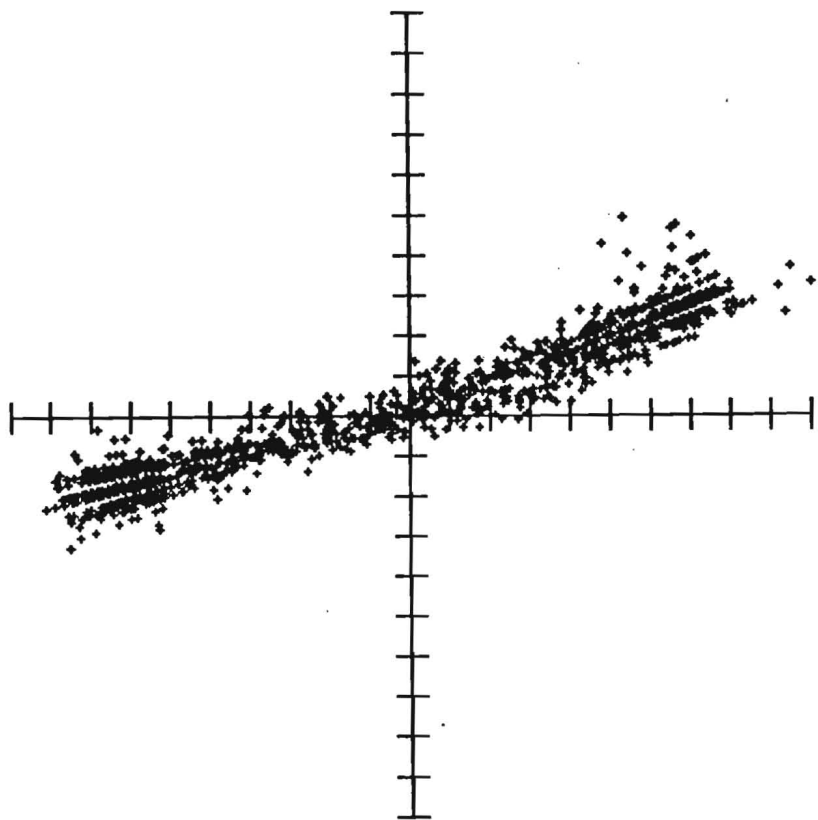
Unreliable speed after 11 June.
 Upon retrieval: rotor was immobilized by kelp.

NUMBER OF CURRENT DATA POINTS = 6424
 NUMBER OF TEMPERATURE POINTS = 20153
 NUMBER OF SALINITY POINTS = 20153

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	4.03	-5.09	56.92	6.49	13.33	29.72
VARIANCE	=	36.83	3951.36	789.47	1994.10	1.68	0.17
STD. DEV.	=	6.07	62.86	28.10	44.66	1.29	0.41
MAX.	=	50.15	115.96	116.01		17.57	30.69
MIN.	=	-12.84	-104.61	0.00		11.29	27.24

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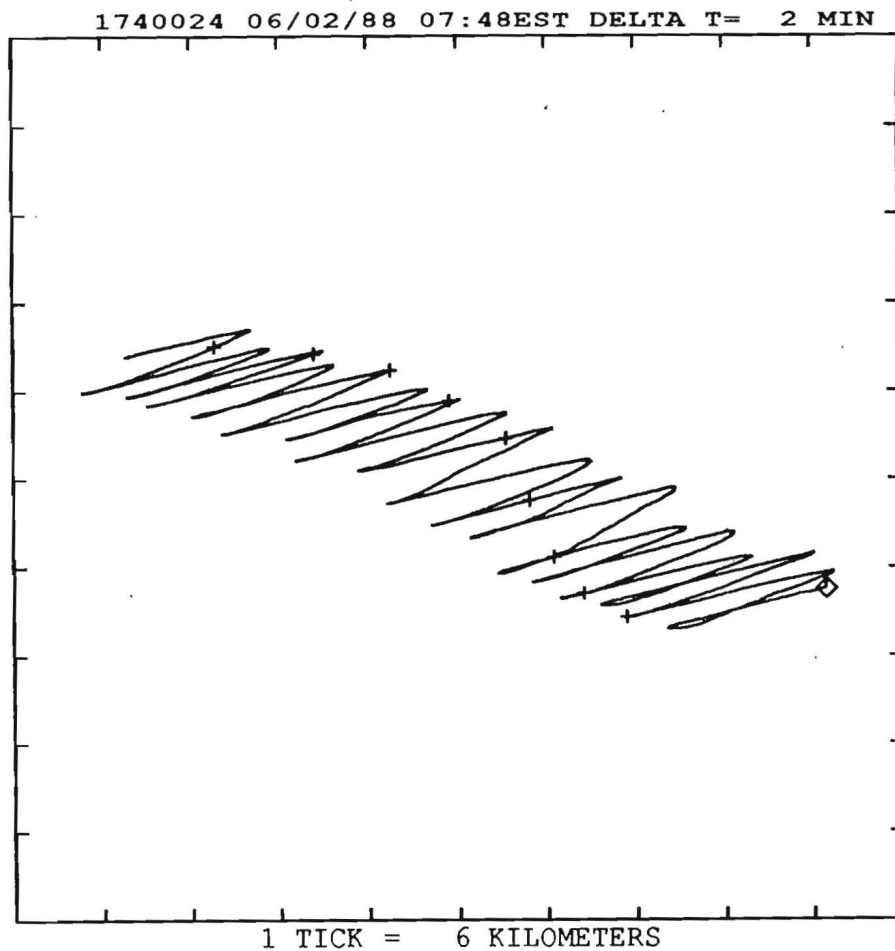
1740024 06/02/88

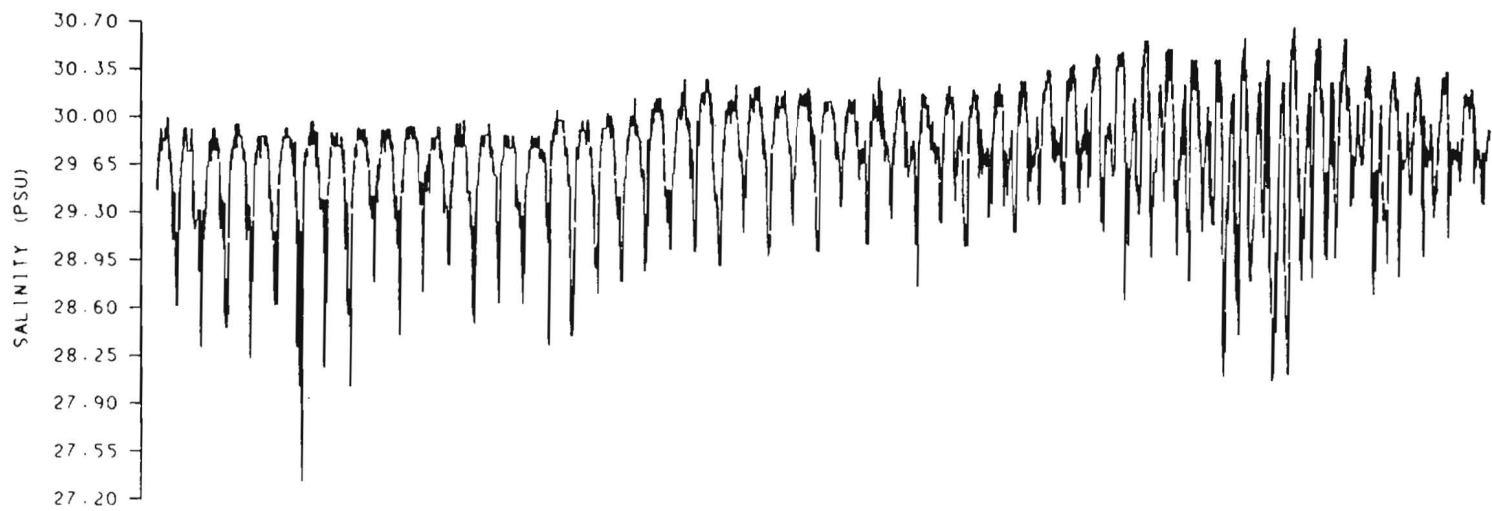
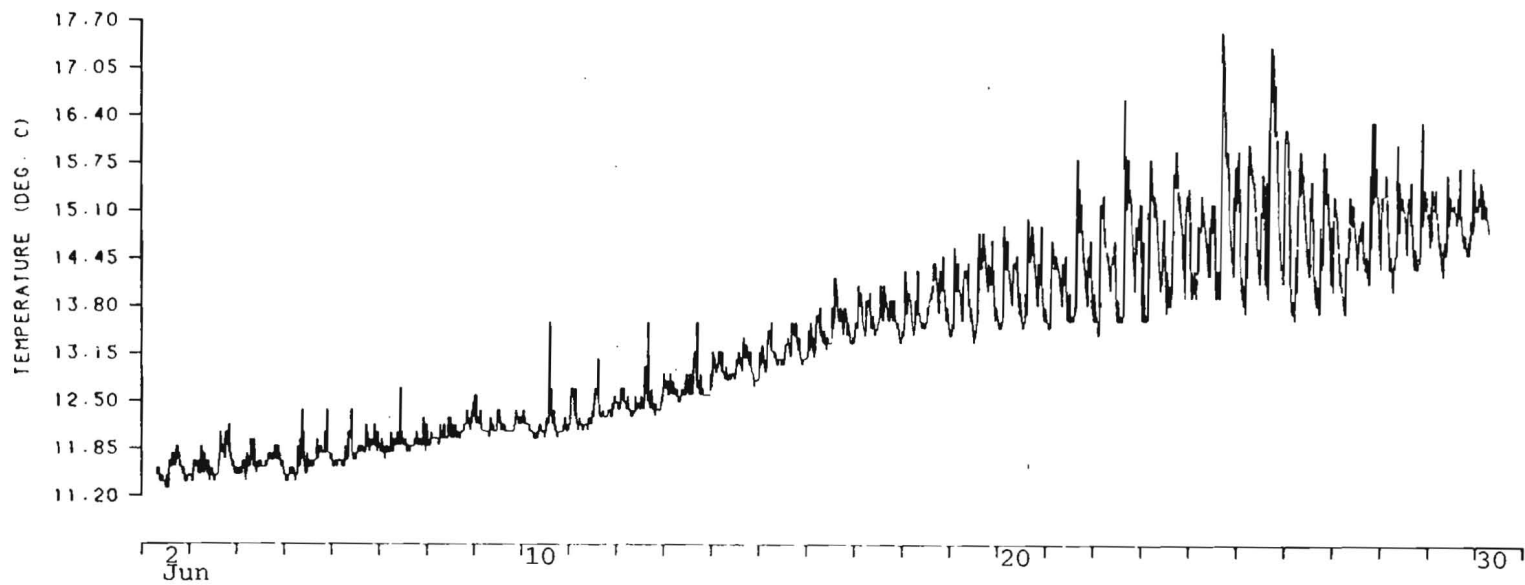
Station 6N , 41 15.4N 72 16.7W

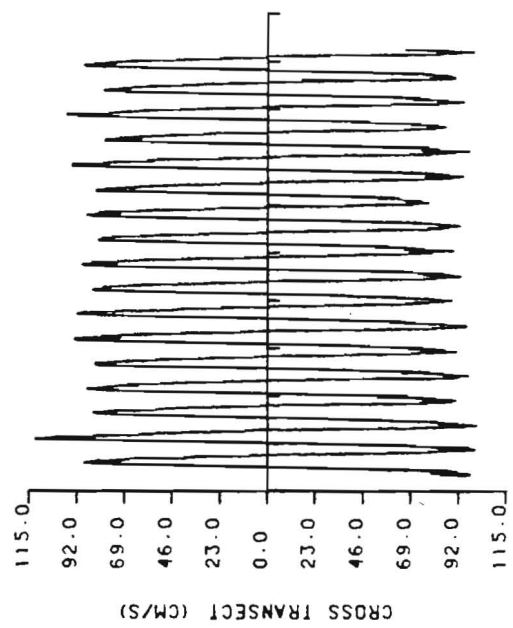
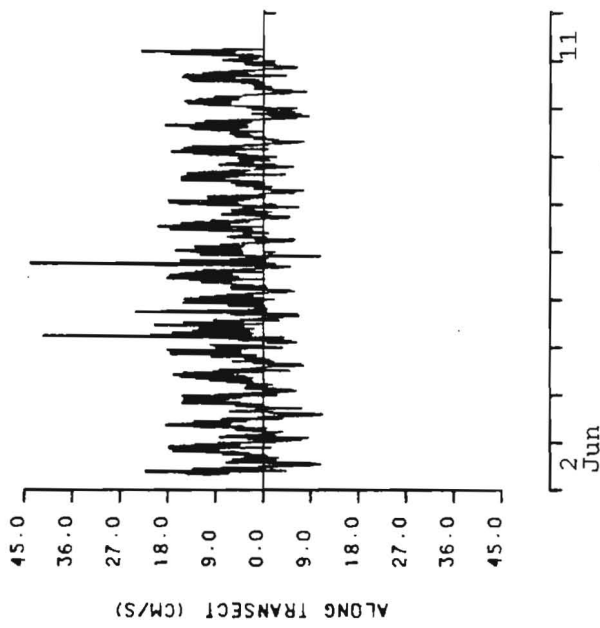
Instrument depth(below MLW) = 4.3 m

Water depth(relative to MLW) = 18.0 m

SCALE = 11.0 CM/S PER TICK







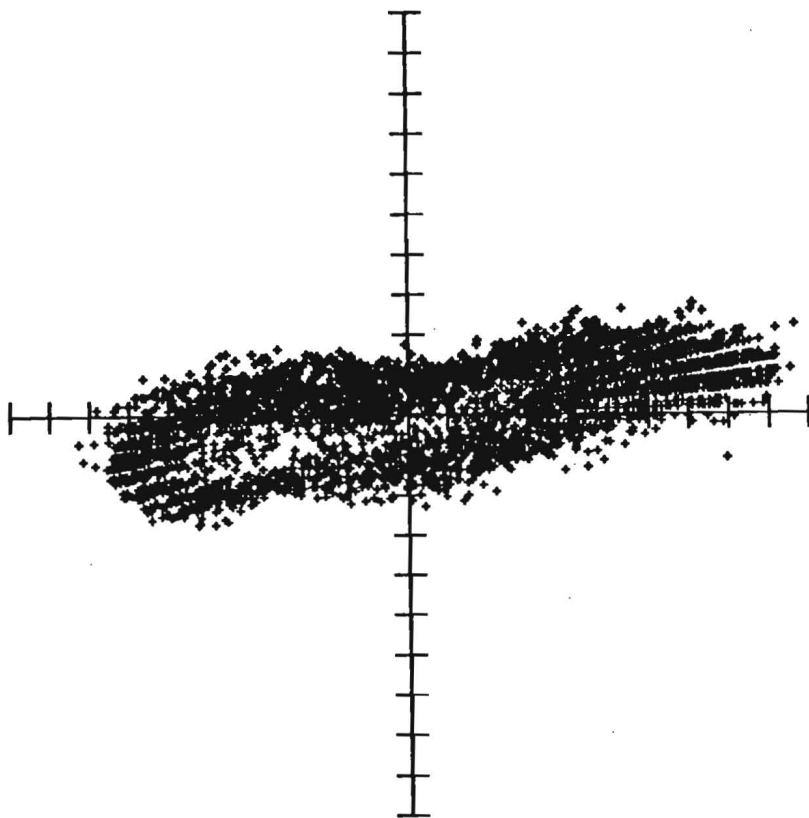
Current meter : ENDECO #1740019
 Station # and location : 6C , 41 13.4N 72 15.8W
 Instrument depth (MLW) : 3.7m
 Water depth (MLW) : 41.5m
 Start time : 06/02/88 13:14 EST
 Stop time : 06/30/88 13:20 EST
 Duration : 28 days 0 hours 6 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 20163
 NUMBER OF TEMPERATURE POINTS = 20163
 NUMBER OF SALINITY POINTS = 20163

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	-1.90	12.96	70.46	13.10	13.89	28.55
VARIANCE	=	416.92	5639.99	1264.09	3028.46	2.65	0.25
STD. DEV.	=	20.42	75.10	35.55	55.03	1.63	0.50
MAX.	=	54.38	164.02	165.65		18.25	29.60
MIN.	=	-60.05	-132.87	0.00		11.39	26.63

236



1740019 06/02/88

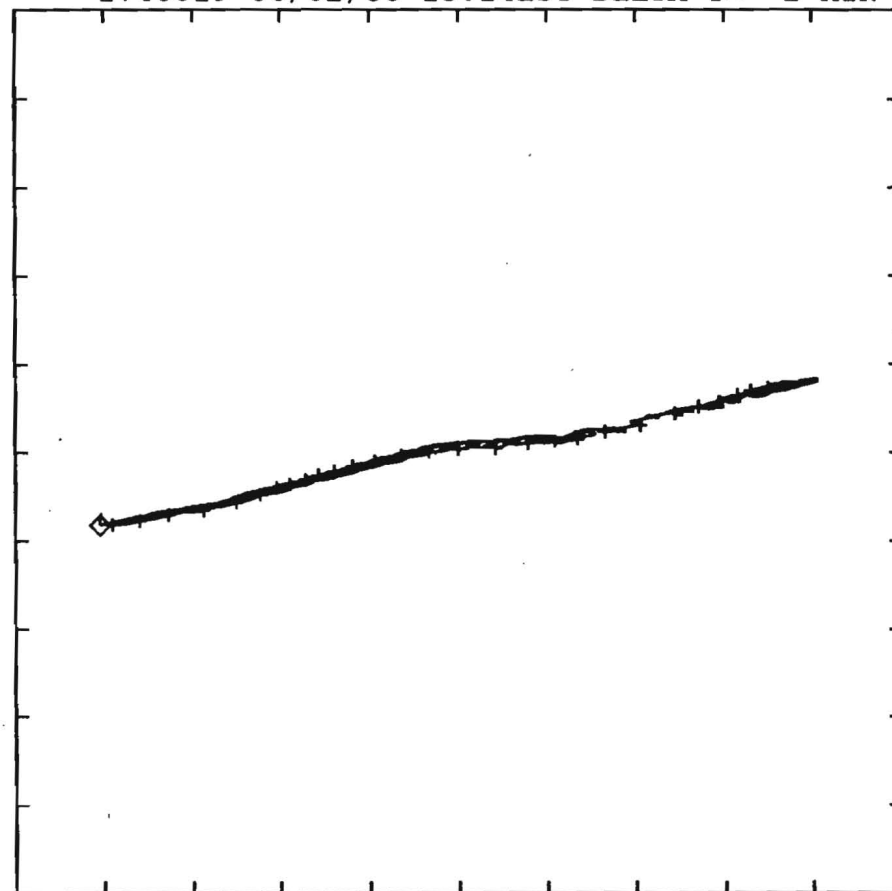
Station 6C , 41 13.4N 72 15.8W

Instrument depth(below MLW) = 3.7 m

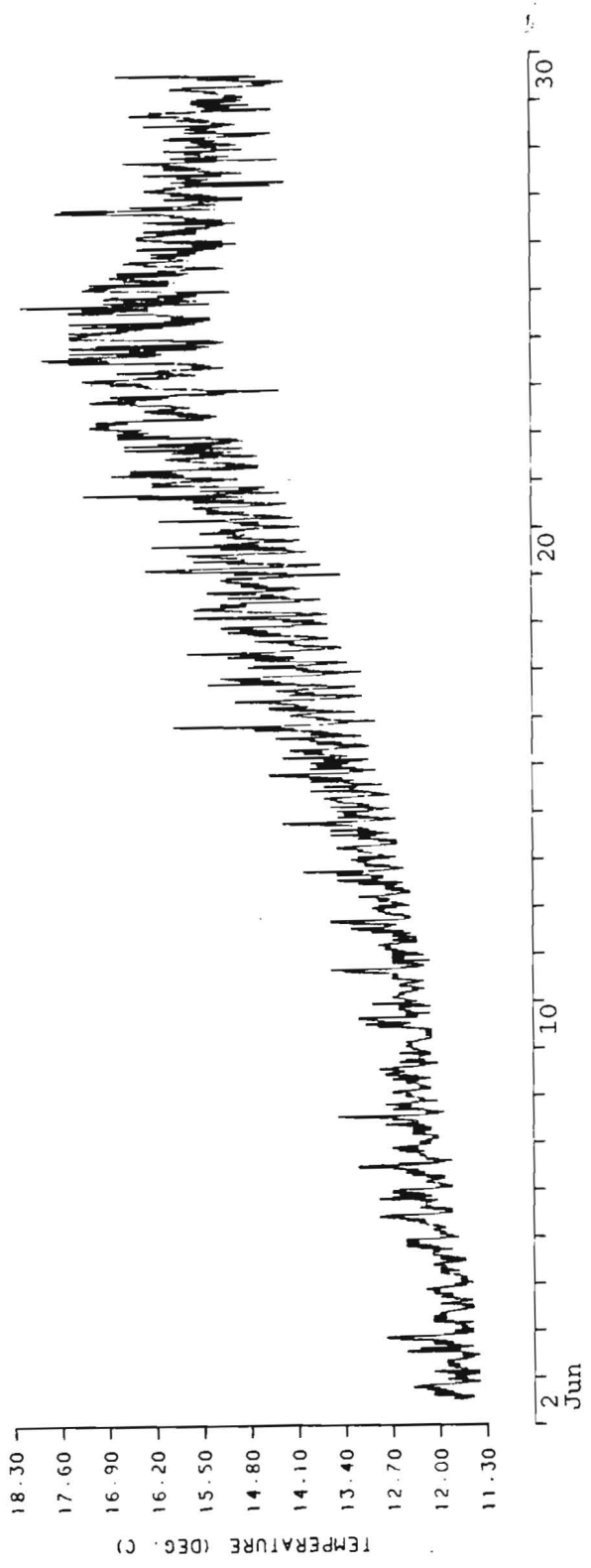
Water depth(relative to MLW) = 41.5 m

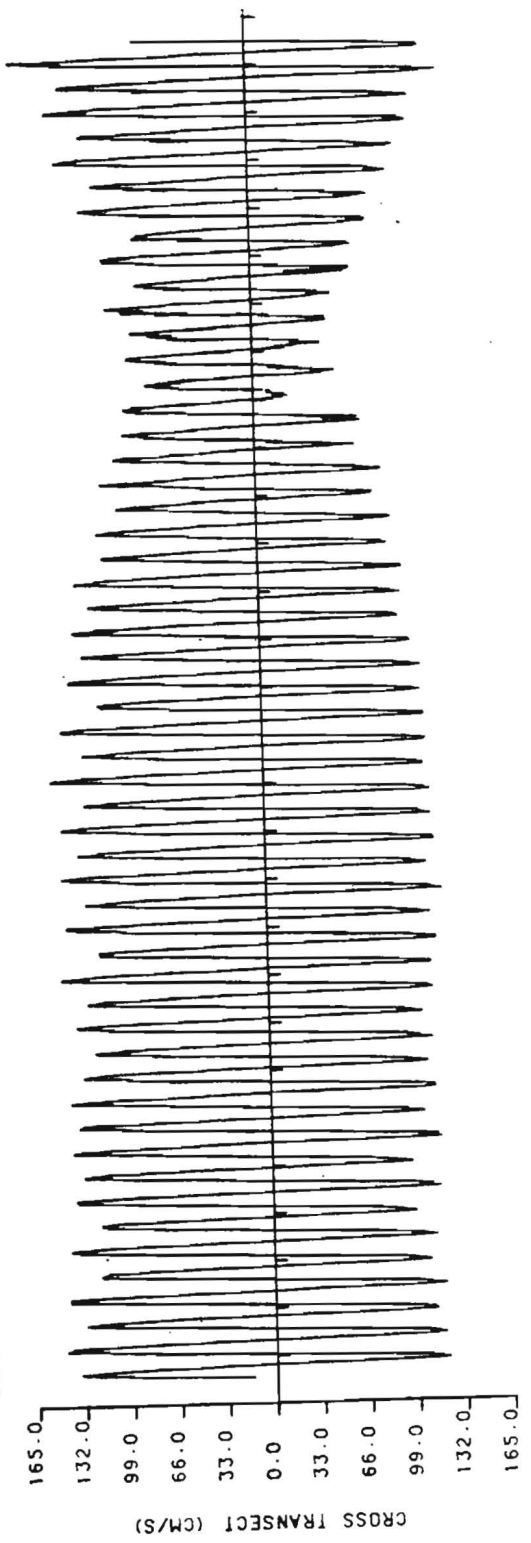
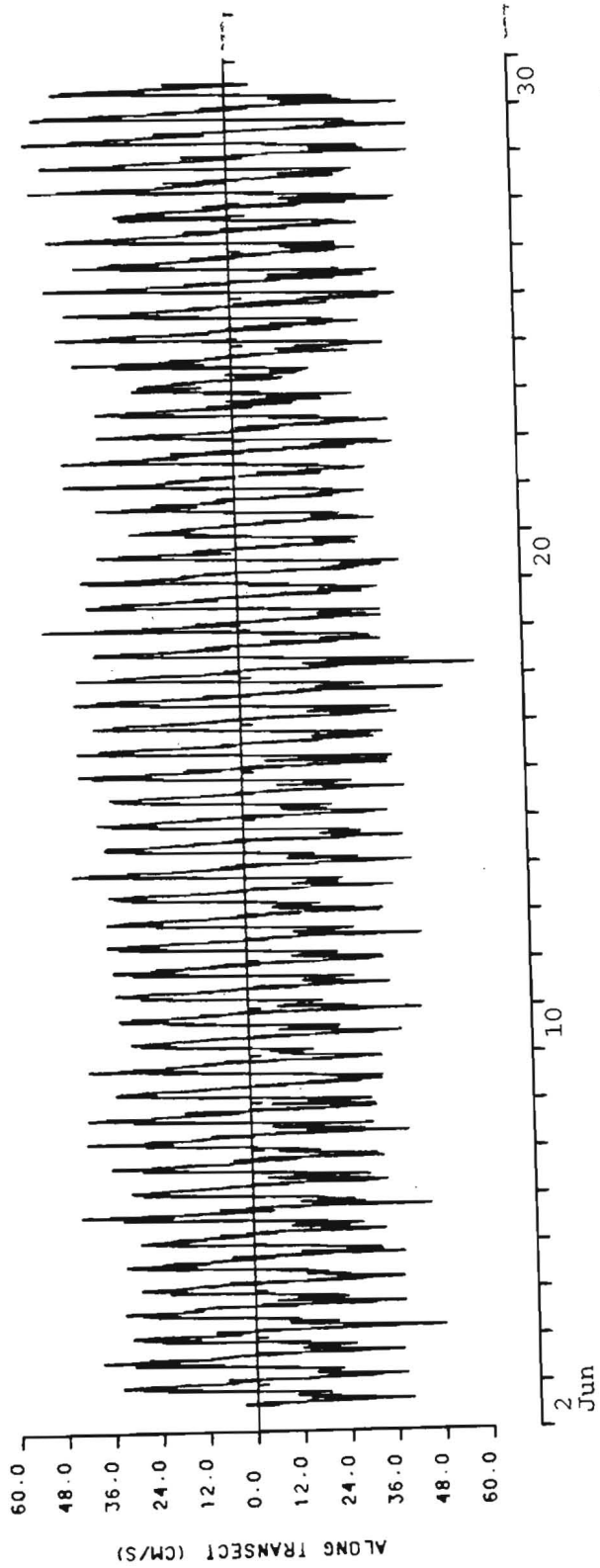
SCALE = 16.0 CM/S PER TICK

1740019 06/02/88 13:14EST DELTA T= 2 MIN



1 TICK = 40 KILOMETERS





Current meter : AANDERAA #A1342
 Station # and location : 6C , 41 13.4N 72 15.8W
 Instrument depth (MLW) : 26.2m
 Water depth (MLW) : 41.5m
 Start time : 06/02/88 14:05 EST
 Stop time : 06/30/88 12:40 EST
 Duration : 27 days 22 hours 35 minutes
 Sampling interval : 5 minutes
 Comments:

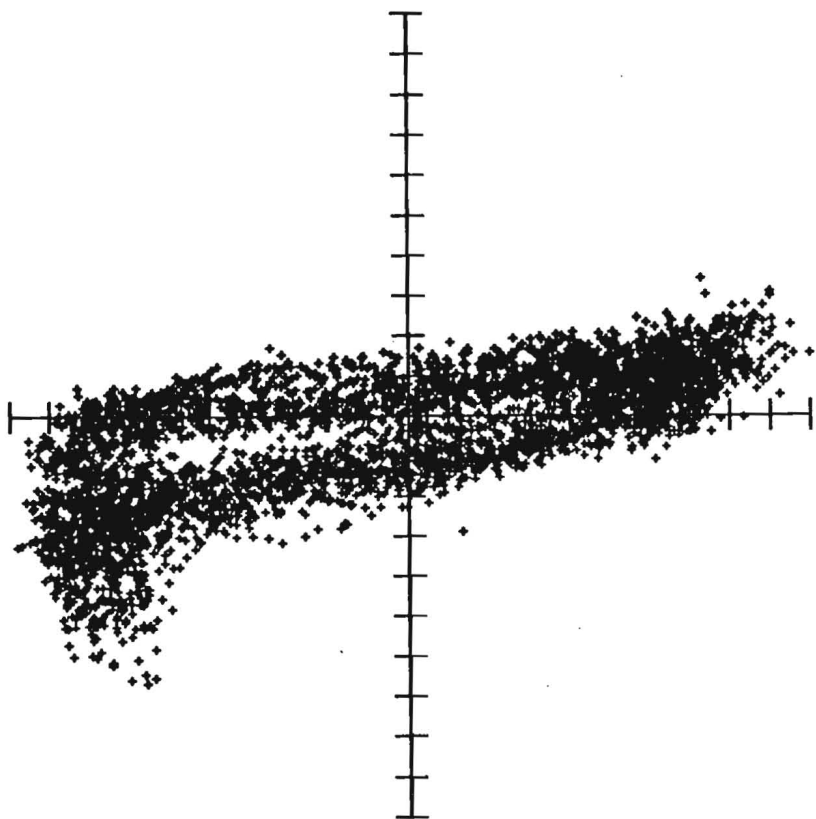
Salinity peak on 15-16 June is questionable.

NUMBER OF CURRENT DATA POINTS = 8047
 NUMBER OF TEMPERATURE POINTS = 8047
 NUMBER OF SALINITY POINTS = 8047

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	-2.33	-10.13	53.88	10.40	12.78	30.40
VARIANCE	=	180.33	3256.85	641.62	1718.59	0.61	0.28
STD. DEV.	=	13.43	57.07	25.33	41.46	0.78	0.53
MAX.	=	35.14	99.15	103.33		15.01	32.49
MIN.	=	-40.24	-103.29	1.70		11.23	29.23

240



A1342 06/02/88

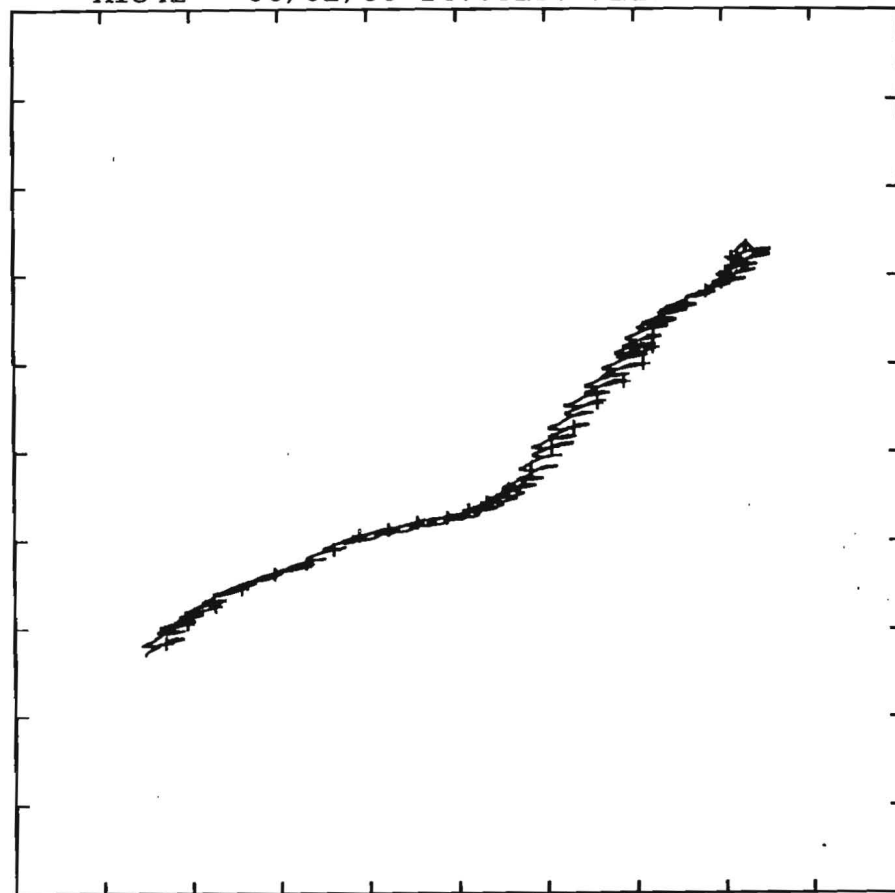
Station 6C , 41 13.4N 72 15.8W

Instrument depth(below MLW) = 26.2 m

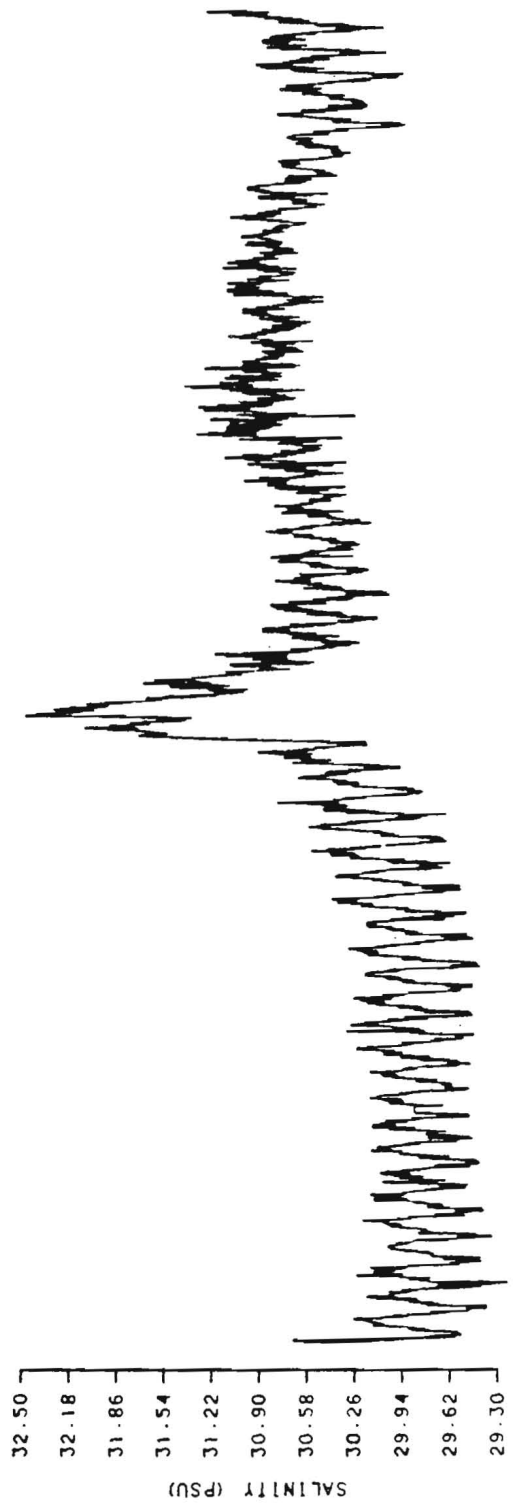
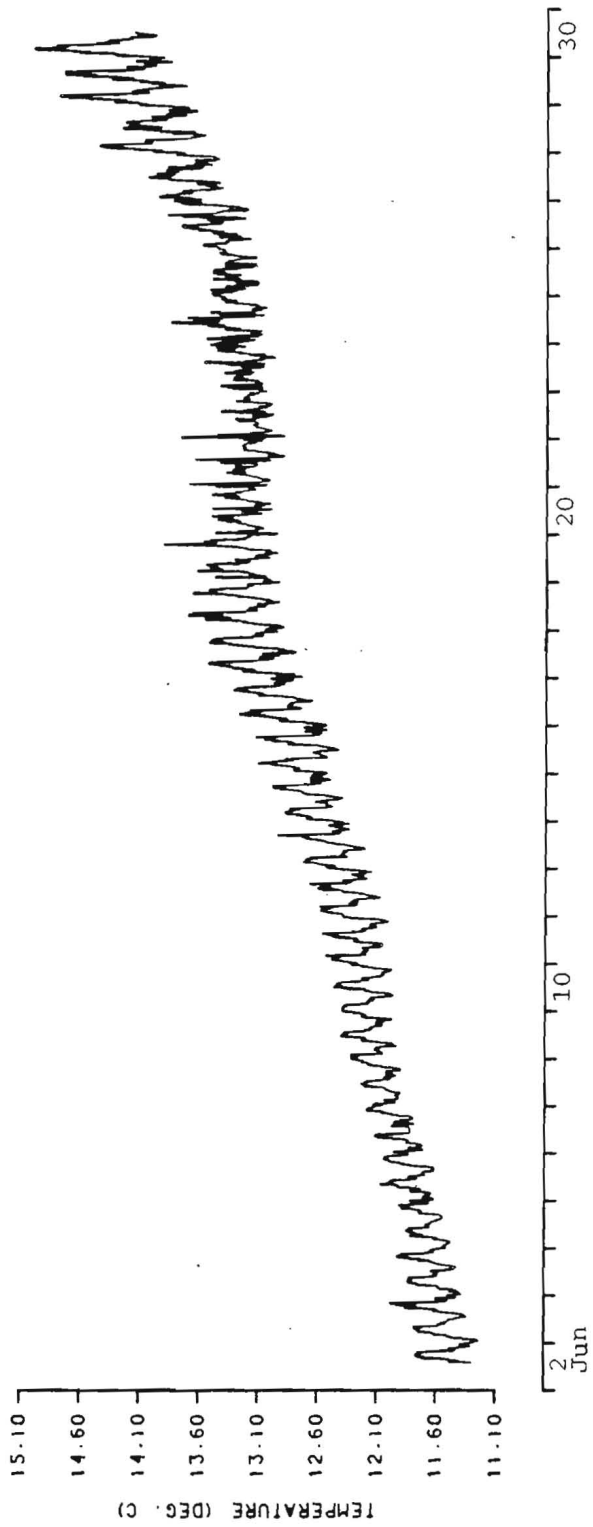
Water depth(relative to MLW) = 41.5 m

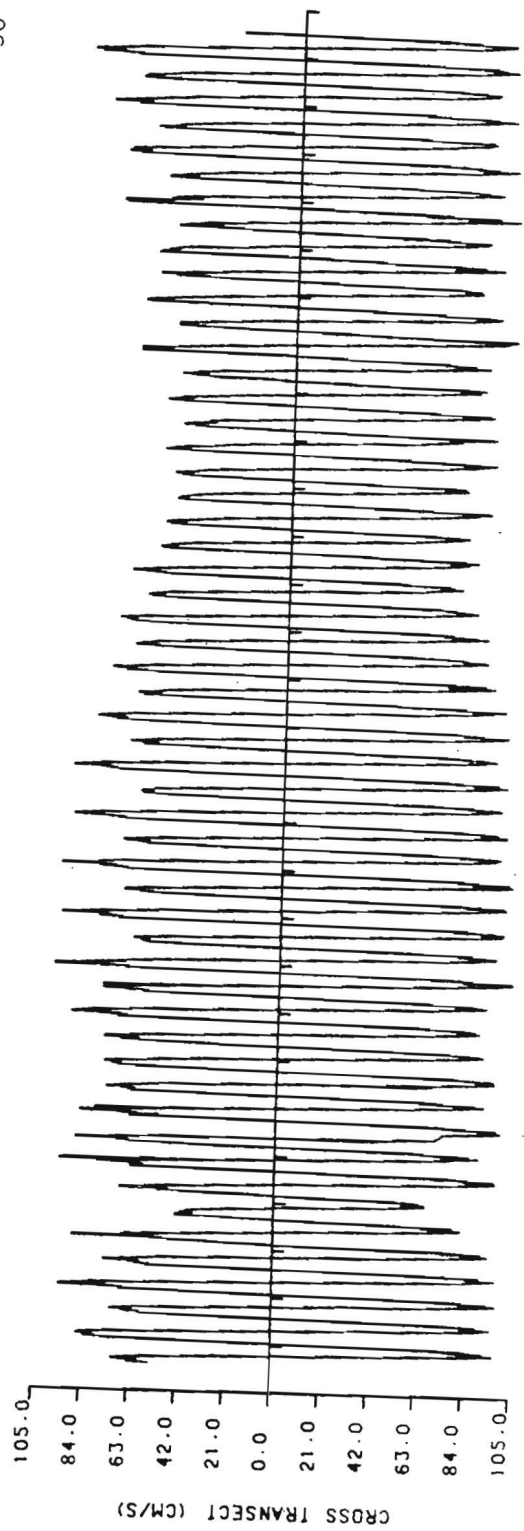
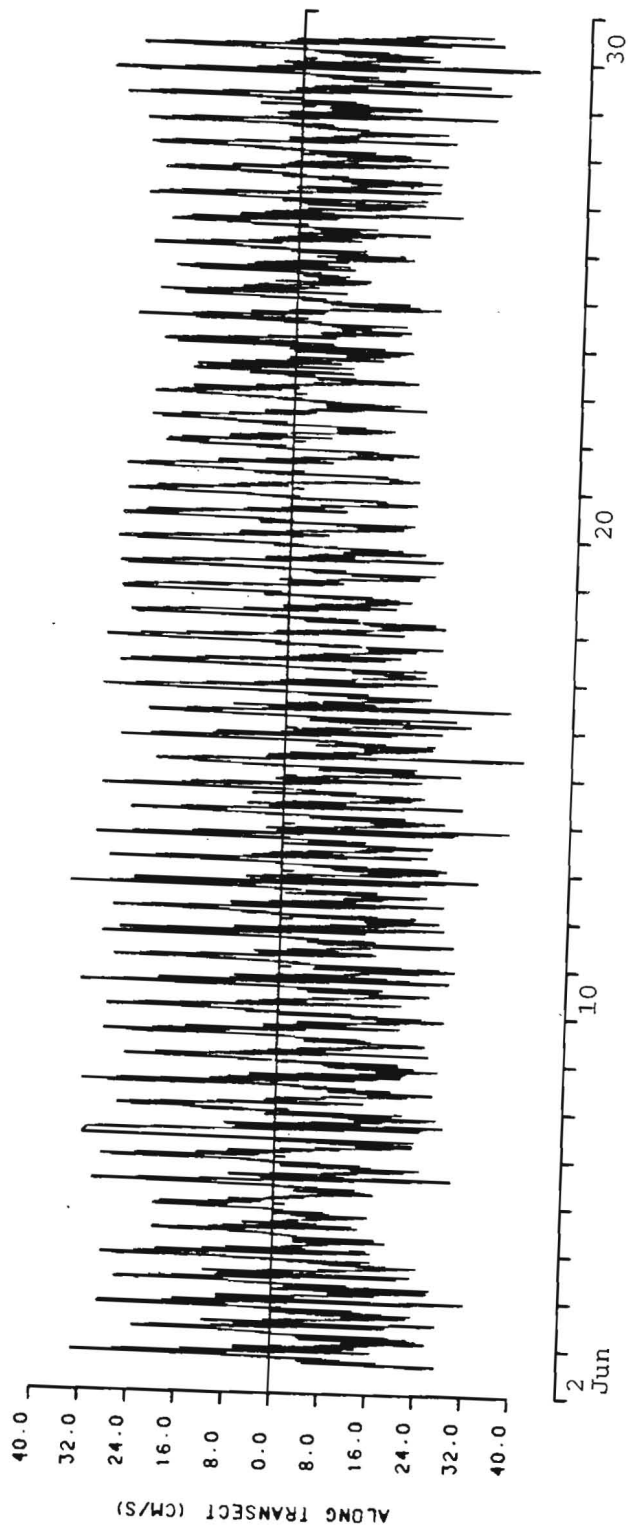
SCALE = 10.0 CM/S PER TICK

A1342 06/02/88 14:05EST DELTA T= 5 MIN



1 TICK = 30 KILOMETERS





Current meter : AANDERAA #A1351
 Station # and location : 6C , 41 13.4N 72 15.8W
 Instrument depth (MLW) : 38.4m
 Water depth (MLW) : 41.5m
 Start time : 06/02/88 13:50 EST
 Stop time : 06/29/88 23:55 EST
 Duration : 27 days 10 hours 5 minutes
 Sampling interval : 5 minutes

Comments:

These records are presented subjected to certain constraints.
 There is a discrepancy of 12 hours 45 minutes between the
 record length and the start and stop times from the log.
 Being so close to a tidal period, it was not possible to
 identify the exact location of the missing data points.

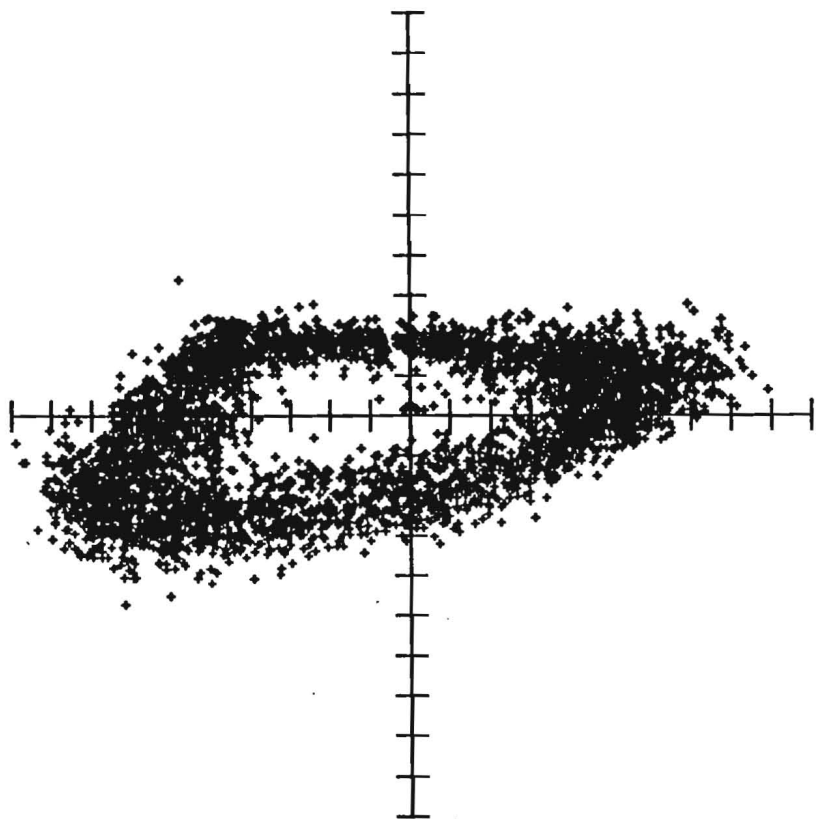
The use of these time series is not recommended in applications
 where timing or phase considerations may be important.

NUMBER OF CURRENT DATA POINTS = 7897
 NUMBER OF TEMPERATURE POINTS = 7897
 NUMBER OF SALINITY POINTS = 7897

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		340	70				
MEAN	=	0.90	-9.21	41.53	9.25	10.88	31.90
VARIANCE	=	204.91	1707.70	273.66	956.30	0.36	0.20
STD. DEV.	=	14.31	41.32	16.54	30.92	0.60	0.45
MAX.	=	44.11	73.55	84.32		12.55	33.61
MIN.	=	-32.73	-83.89	1.91		9.70	30.97

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A1351 06/02/88

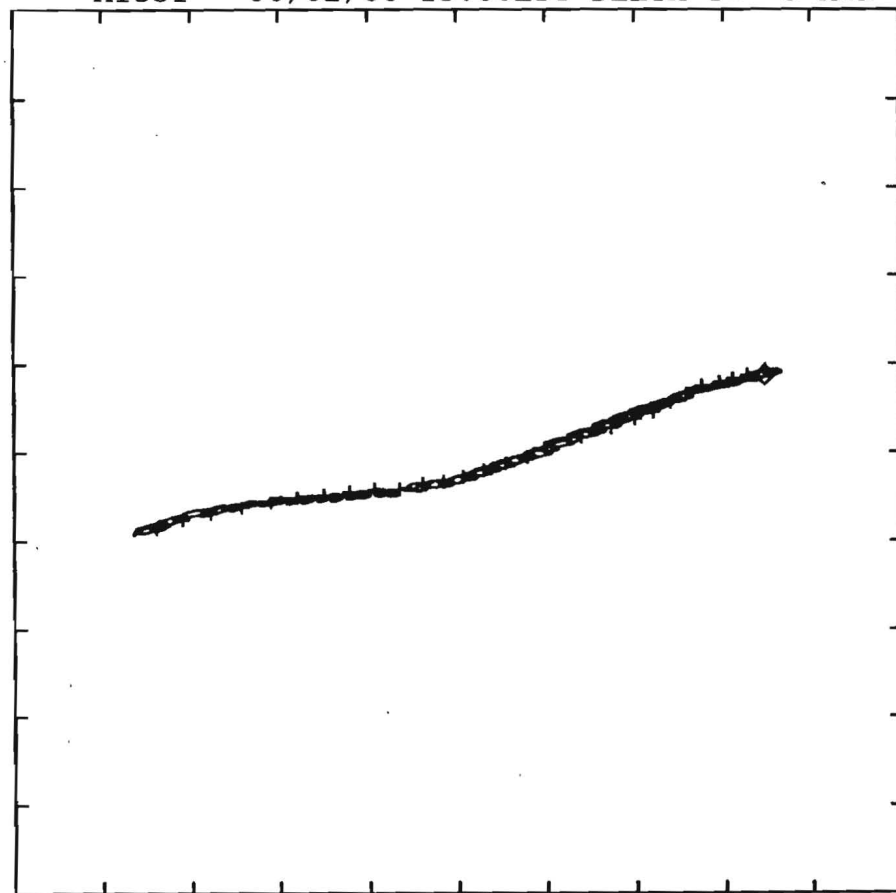
Station 6C , 41 13.4N 72 15.8W

Instrument depth(below MLW) = 38.4 m

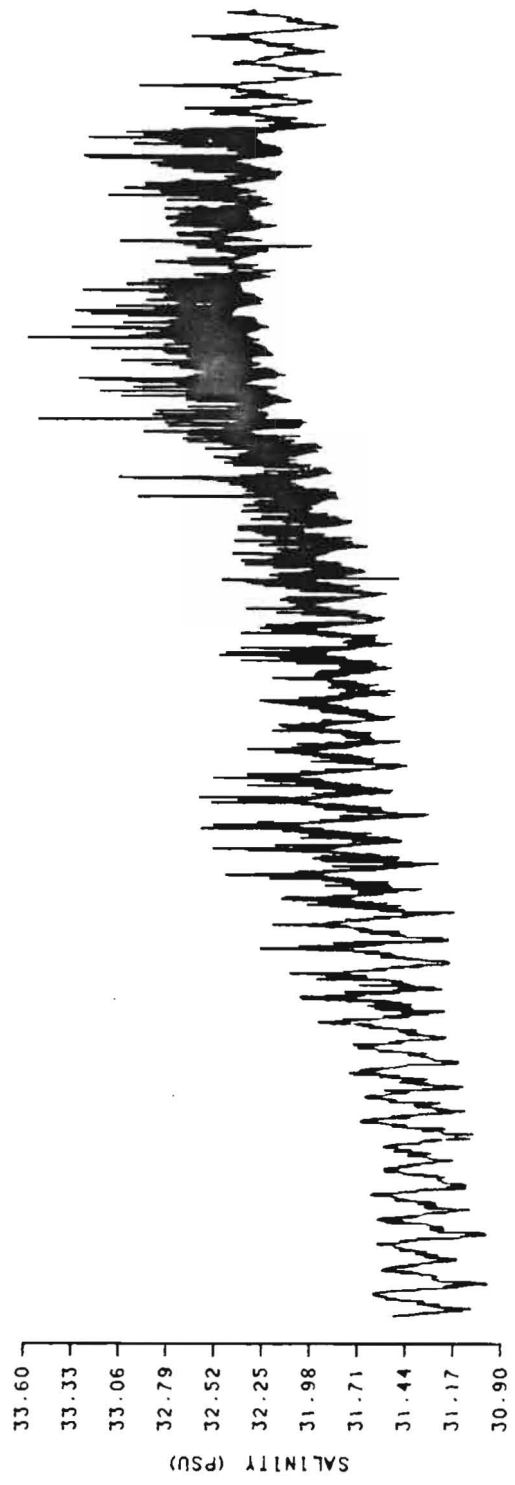
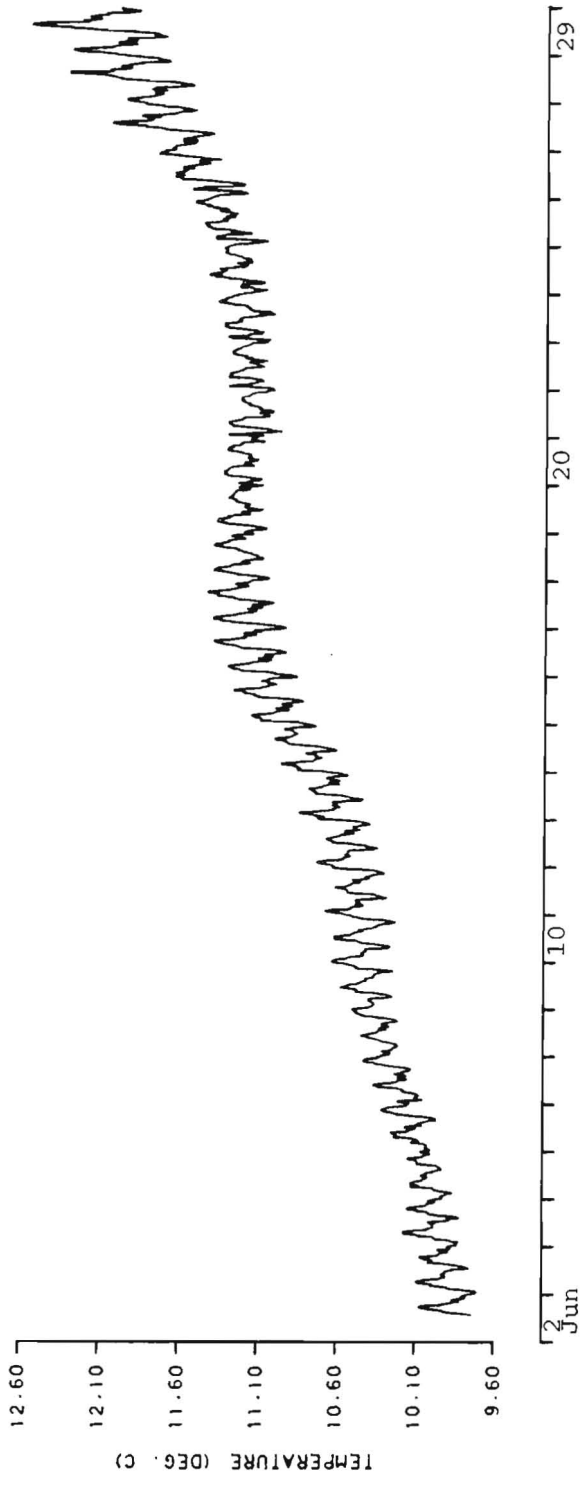
Water depth(relative to MLW) = 41.5 m

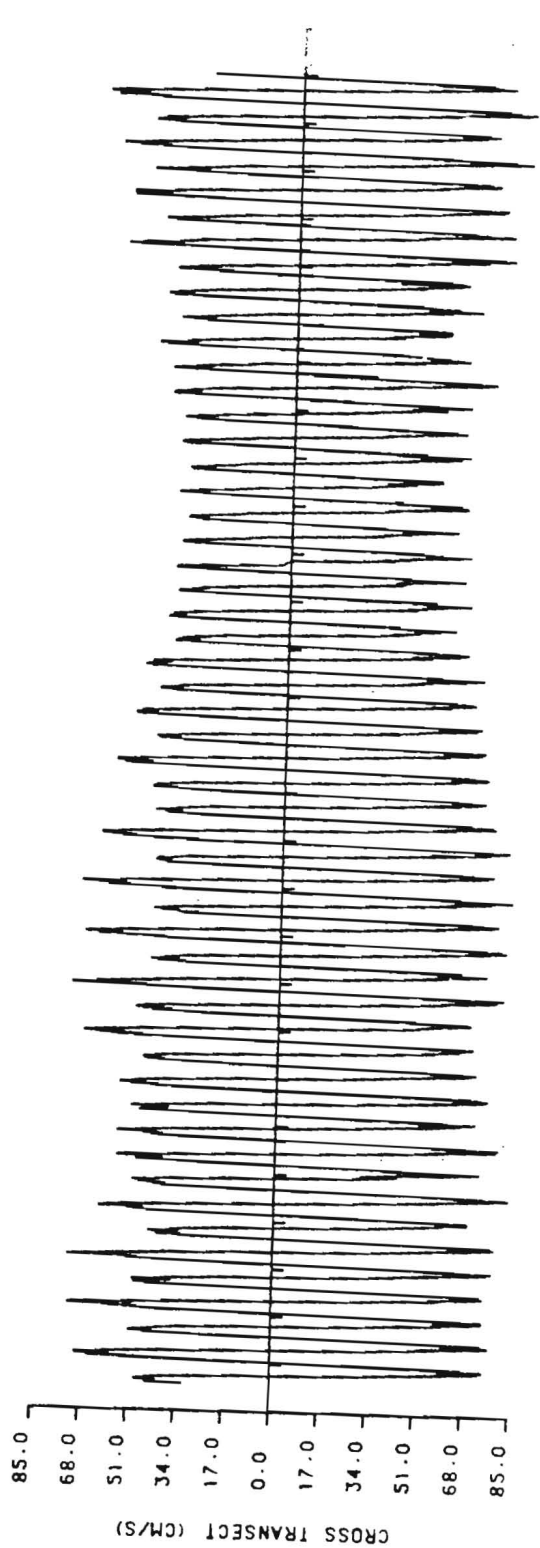
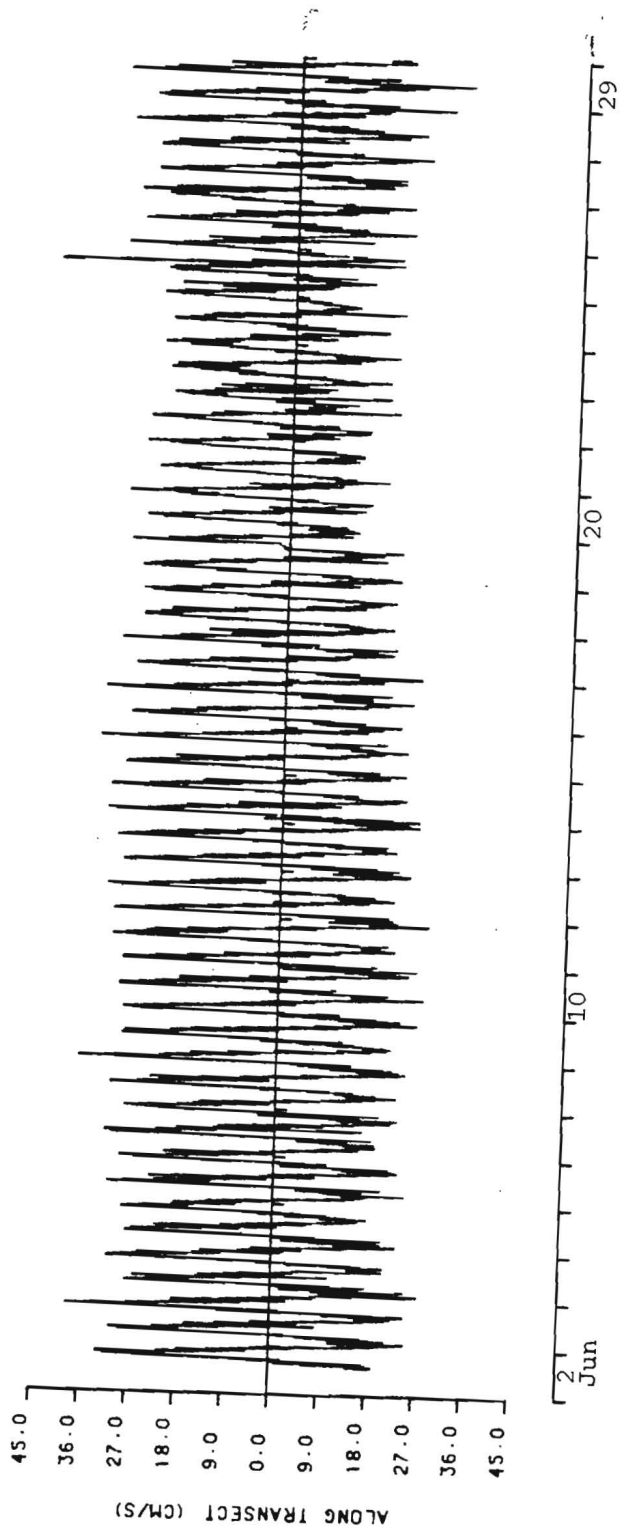
SCALE = 8.5 CM/S PER TICK

A1351 06/02/88 13:50EST DELTA T= 5 MIN



1 TICK = 30 KILOMETERS





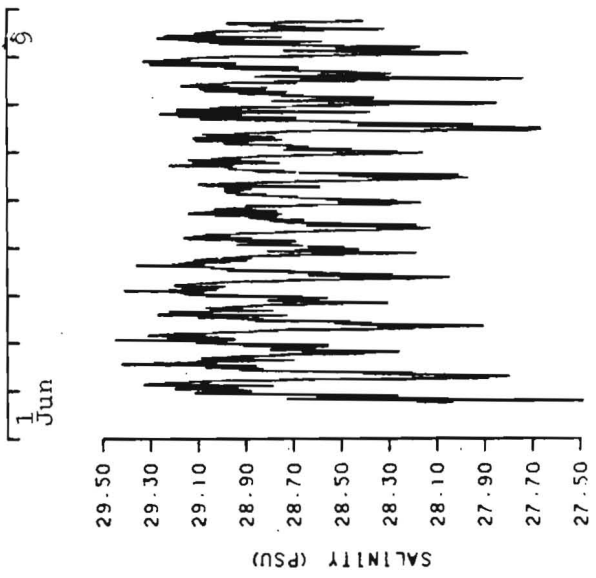
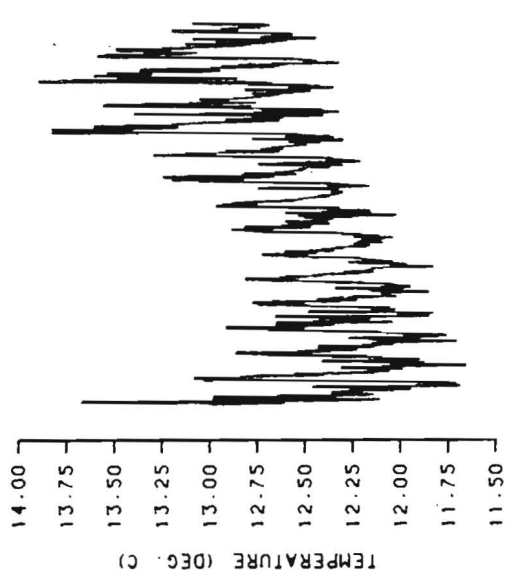
Current meter : AANDERAA #A1345
 Station # and location : 6S , 41 11.2N 72 14.4W
 Instrument depth (MLW) : 6.1m
 Water depth (MLW) : 39.6m
 Start time : 06/01/88 18:05 EST
 Stop time : 06/09/88 17:35 EST
 Duration : 7 days 23 hours 30 minutes
 Sampling interval : 5 minutes
 Comments:

The compass did not work; no velocity components.
 Unreliable data beyond 9 June.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 2298
 NUMBER OF SALINITY POINTS = 2298

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		SPEED	TEMP	SAL
MEAN	=	63.60	12.53	28.75
VARIANCE	=	1171.03	0.17	0.12
STD. DEV.	=	34.22	0.41	0.34
MAX.	=	131.16	13.89	29.45
MIN.	=	5.16	11.65	27.48



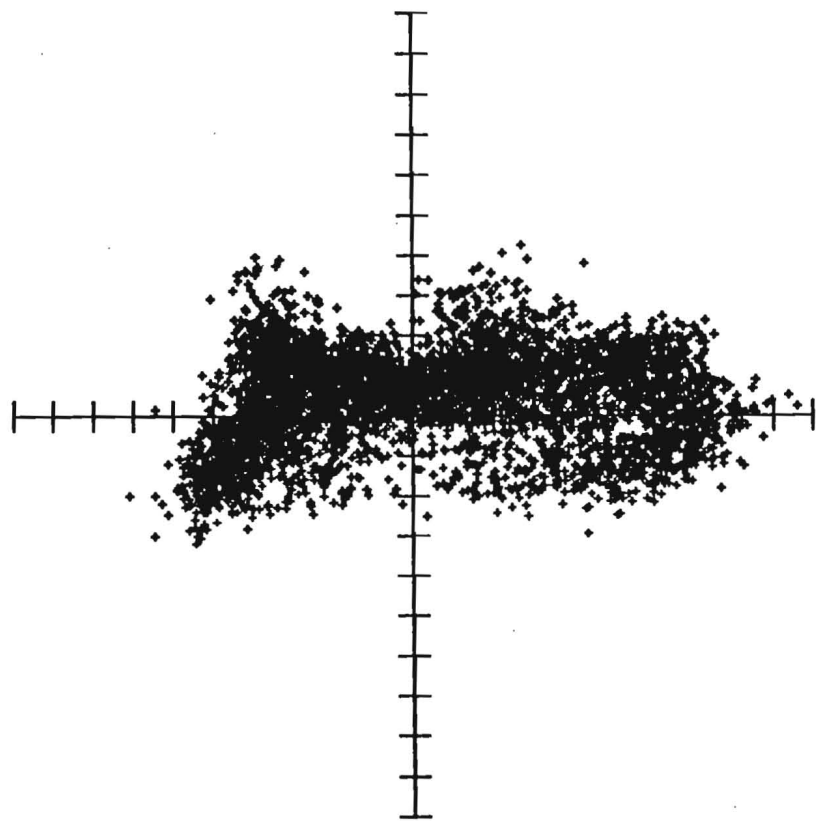
Current meter : AANDERAA #A1353
 Station # and location : 6S , 41 11.2N 72 14.4W
 Instrument depth (MLW) : 16.8m
 Water depth (MLW) : 42.7m
 Start time : 06/02/88 14:50 EST
 Stop time : 07/05/88 10:25 EST
 Duration : 32 days 19 hours 35 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9451
 NUMBER OF TEMPERATURE POINTS = 9451
 NUMBER OF SALINITY POINTS = 9451

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		340	70				
MEAN	=	2.38	6.98	39.55	7.38	14.02	29.40
VARIANCE	=	319.78	1577.17	386.82	948.48	1.83	0.20
STD. DEV.	=	17.88	39.71	19.67	30.80	1.35	0.45
MAX.	=	56.22	100.09	105.60		17.19	30.73
MIN.	=	-48.31	-80.98	1.70		11.44	27.79

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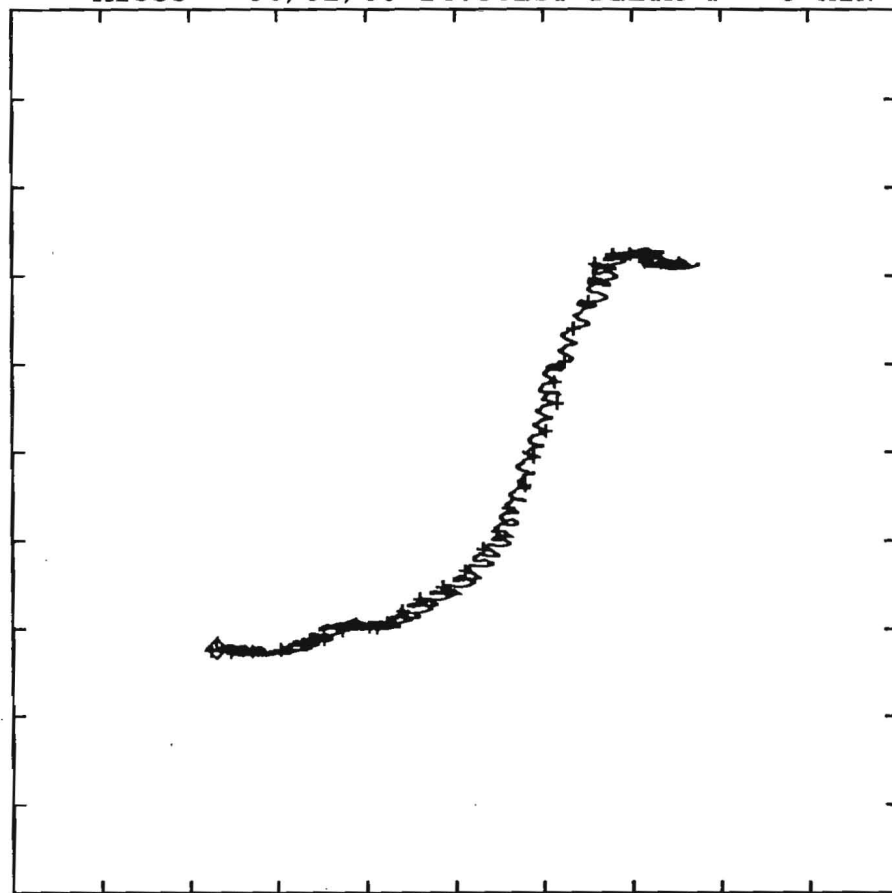
Station 6S , 41 11.2N 72 14.4W

Instrument depth(below MLW) = 16.8 m

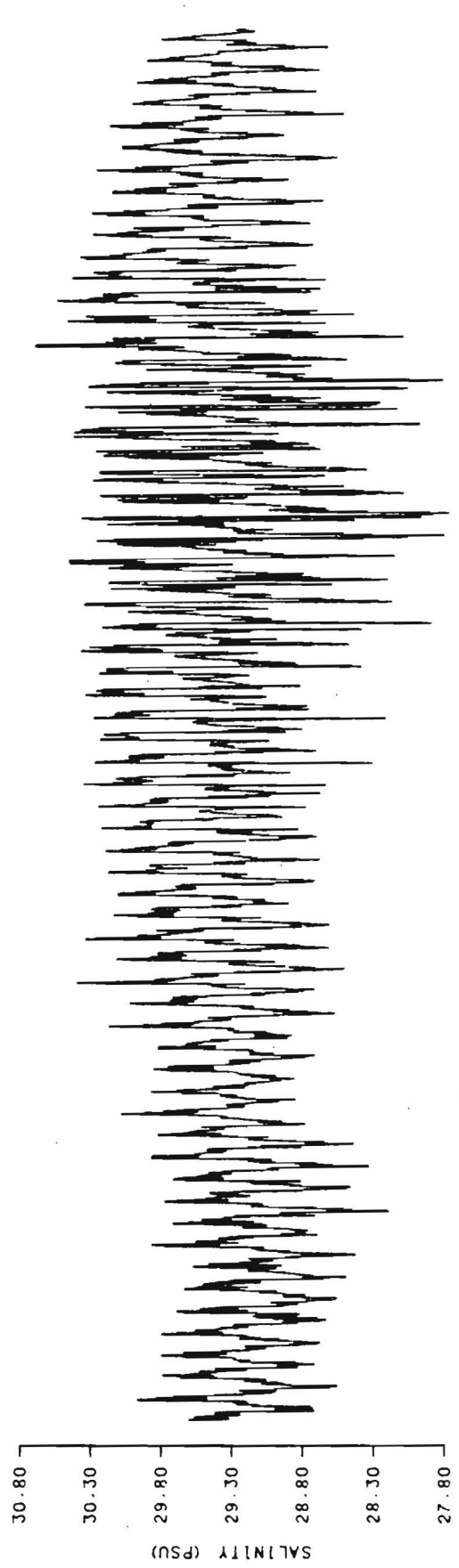
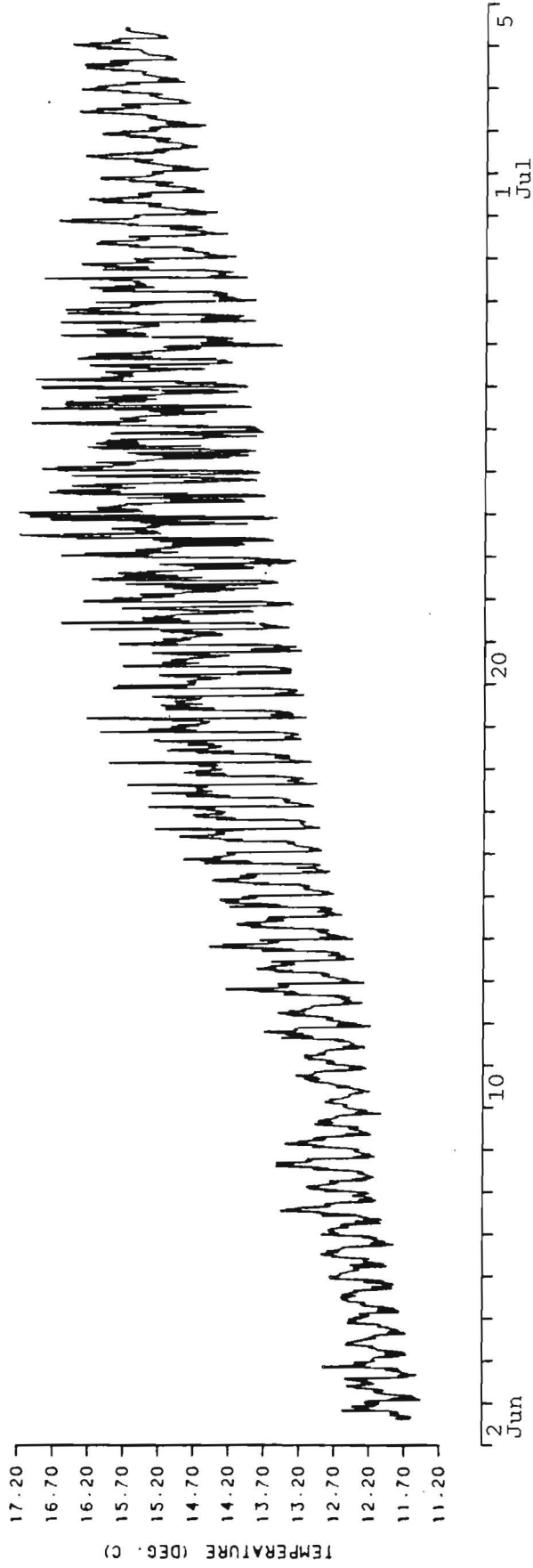
Water depth(relative to MLW) = 42.7 m

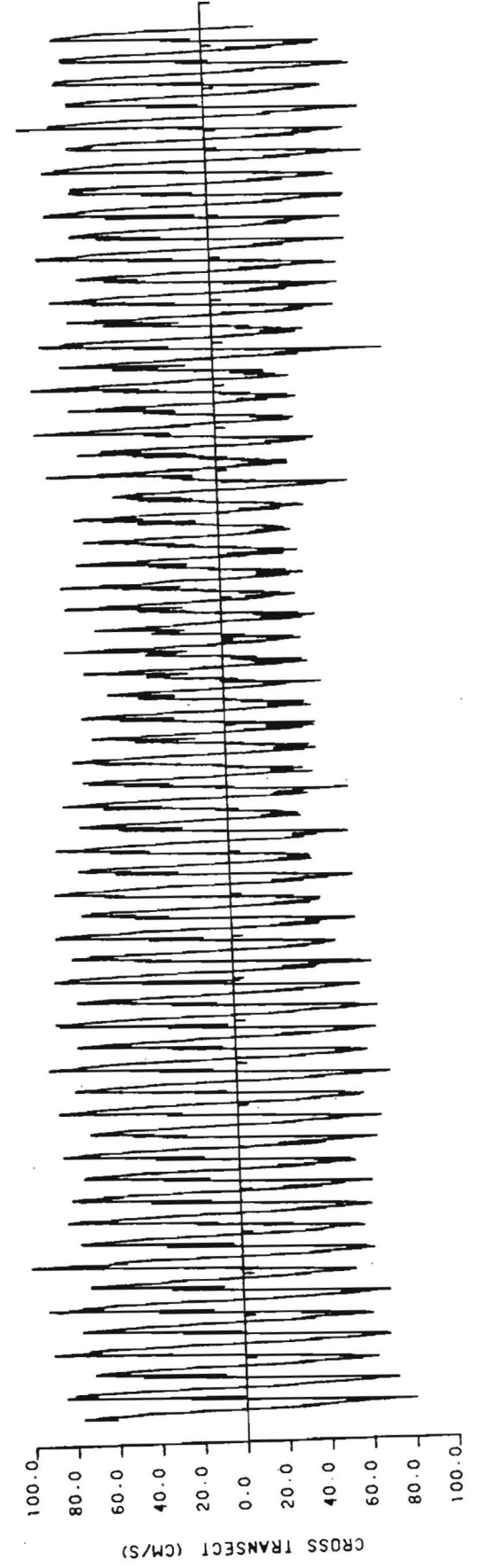
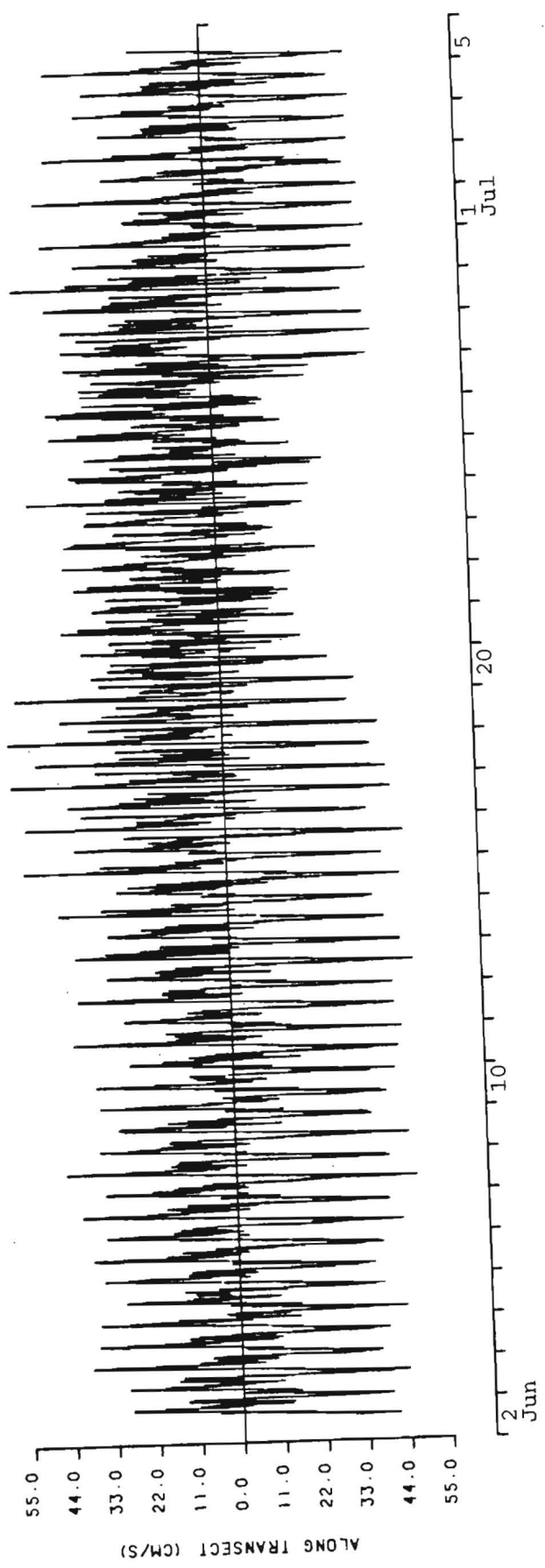
SCALE = 11.0 CM/S PER TICK

A1353 06/02/88 14:50EST DELTA T= 5 MIN



1 TICK = 30 KILOMETERS





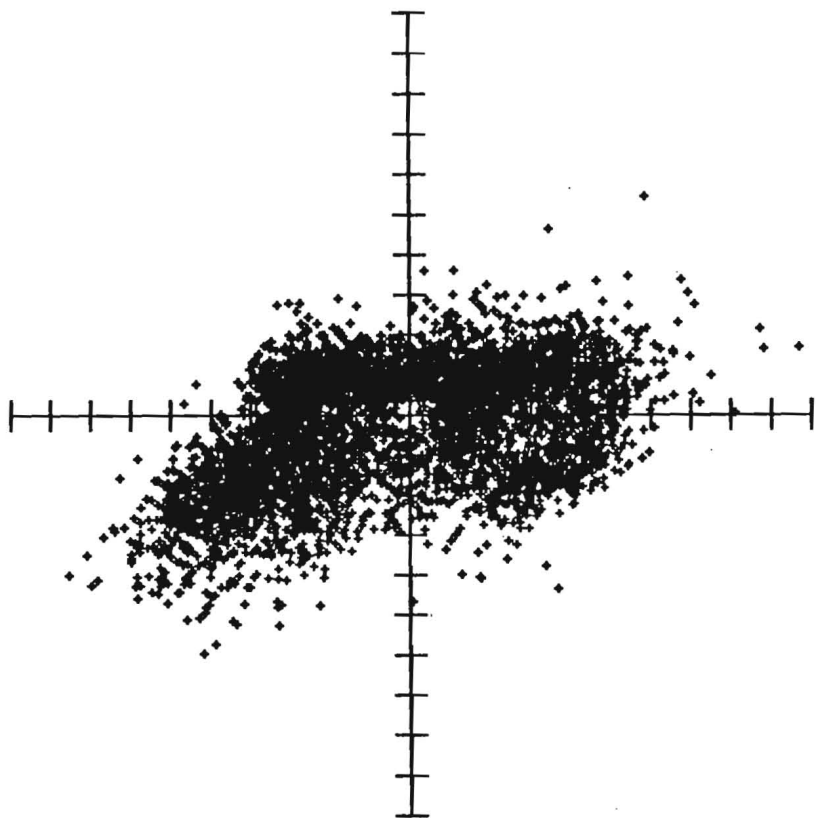
Current meter : AANDERAA #A3357
 Station # and location : 6S , 41 11.2N 72 14.4W
 Instrument depth (MLW) : 27.4m
 Water depth (MLW) : 42.7m
 Start time : 06/02/88 14:45 EST
 Stop time : 07/05/88 10:25 EST
 Duration : 32 days 19 hours 40 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9452
 NUMBER OF TEMPERATURE POINTS = 9452
 NUMBER OF SALINITY POINTS = 9452

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		340	70				
MEAN	=	-1.47	-5.88	34.85	6.06	13.65	29.66
VARIANCE	=	228.93	1238.94	289.94	733.93	1.56	0.22
STD. DEV.	=	15.13	35.20	17.03	27.09	1.25	0.47
MAX.	=	43.63	106.77	108.44		16.76	30.92
MIN.	=	-60.75	-103.49	2.83		11.24	28.23

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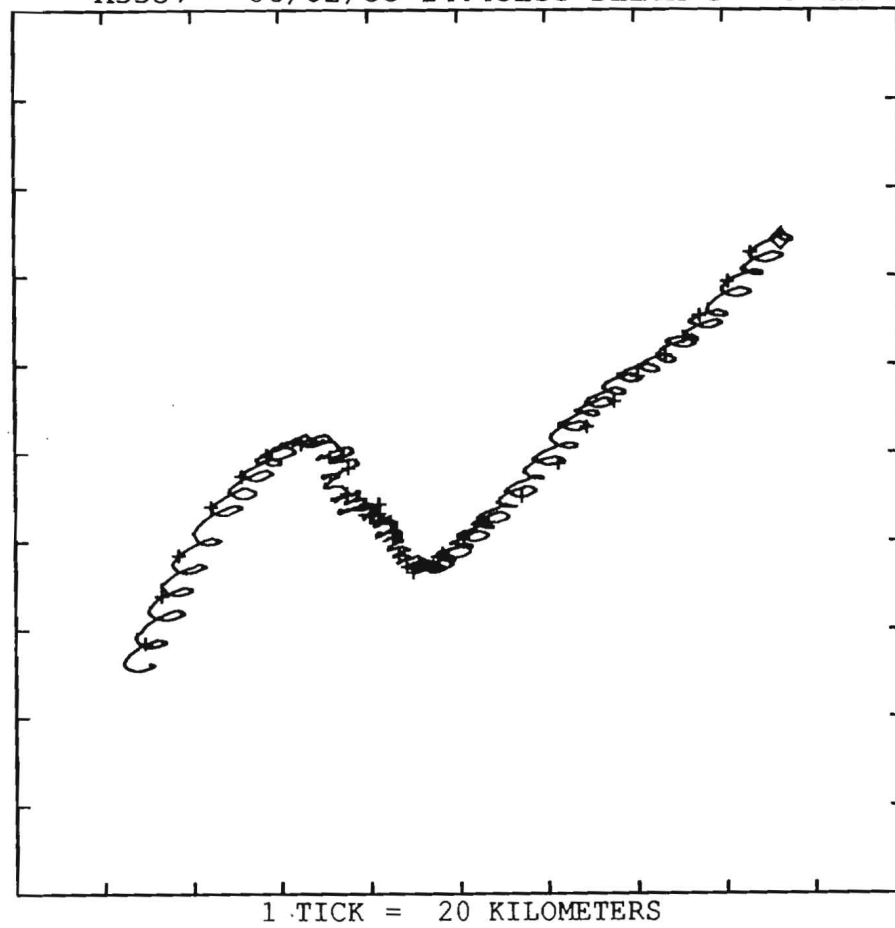
Station 6S , 41 11.2N 72 14.4W

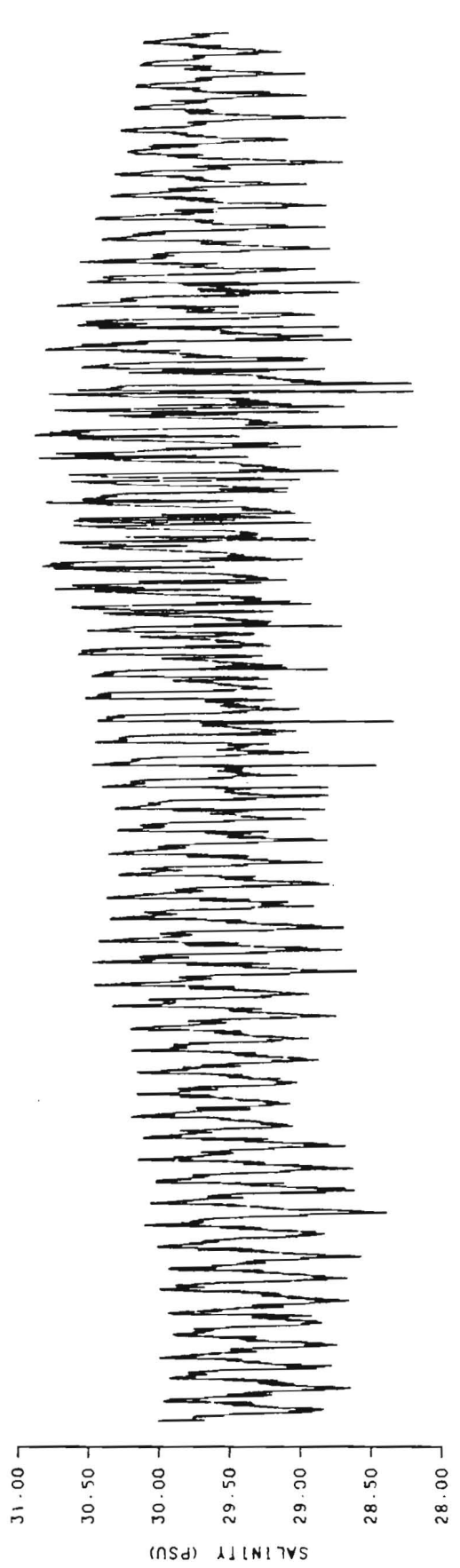
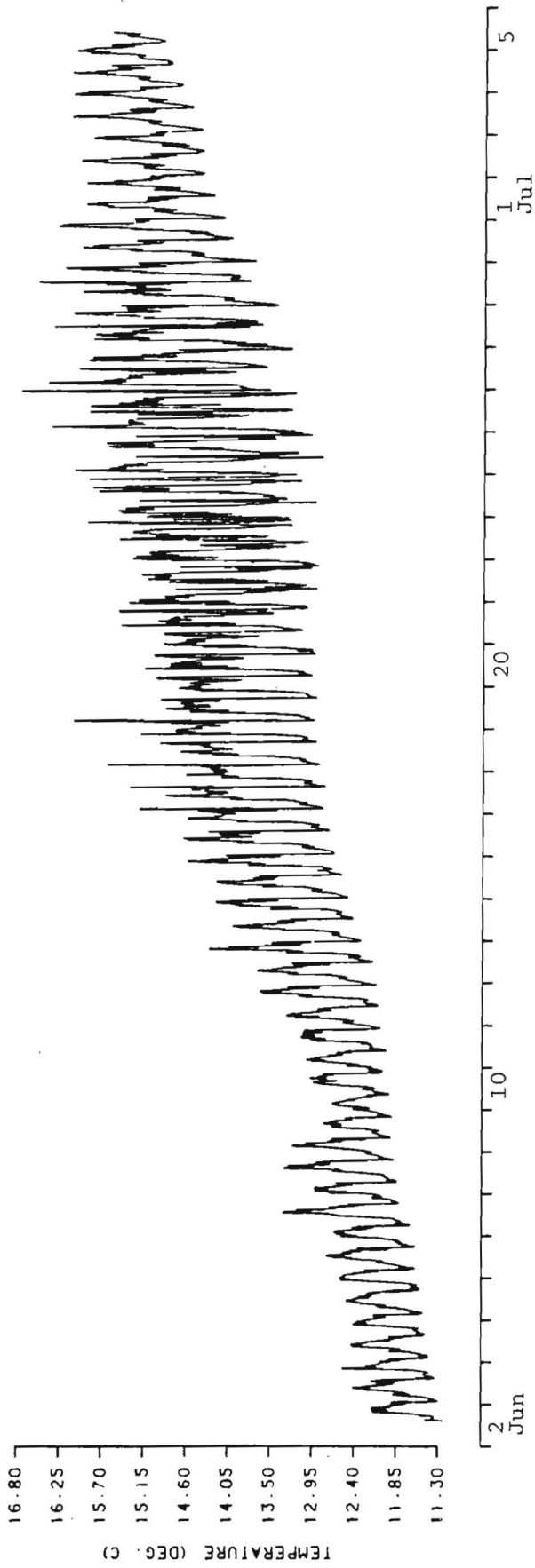
Instrument depth(below MLW) = 27.4 m

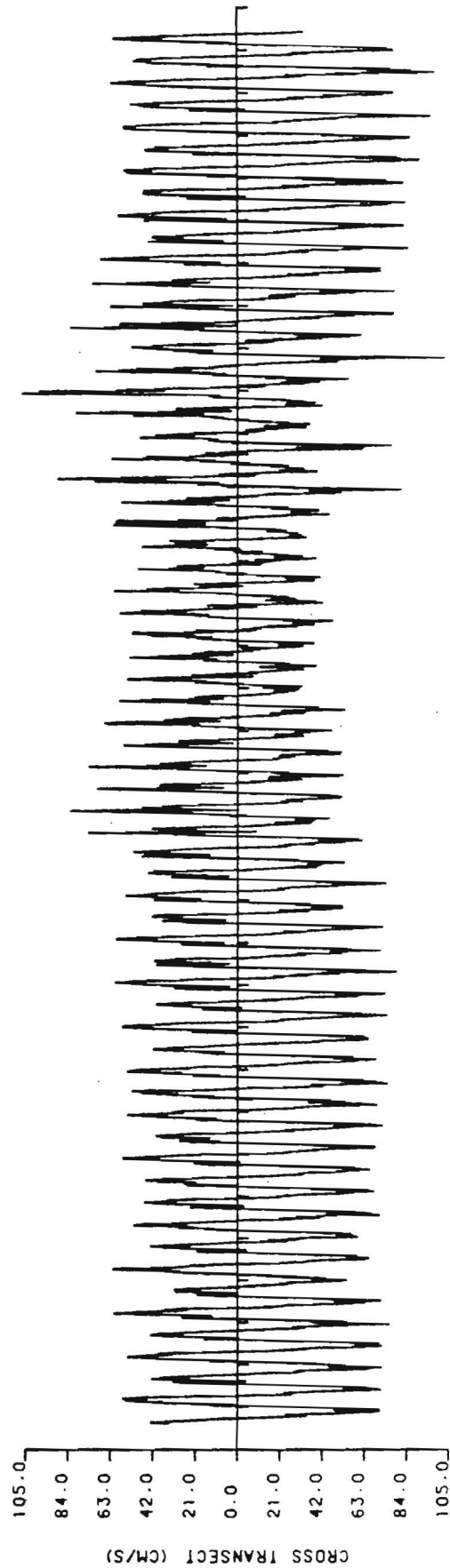
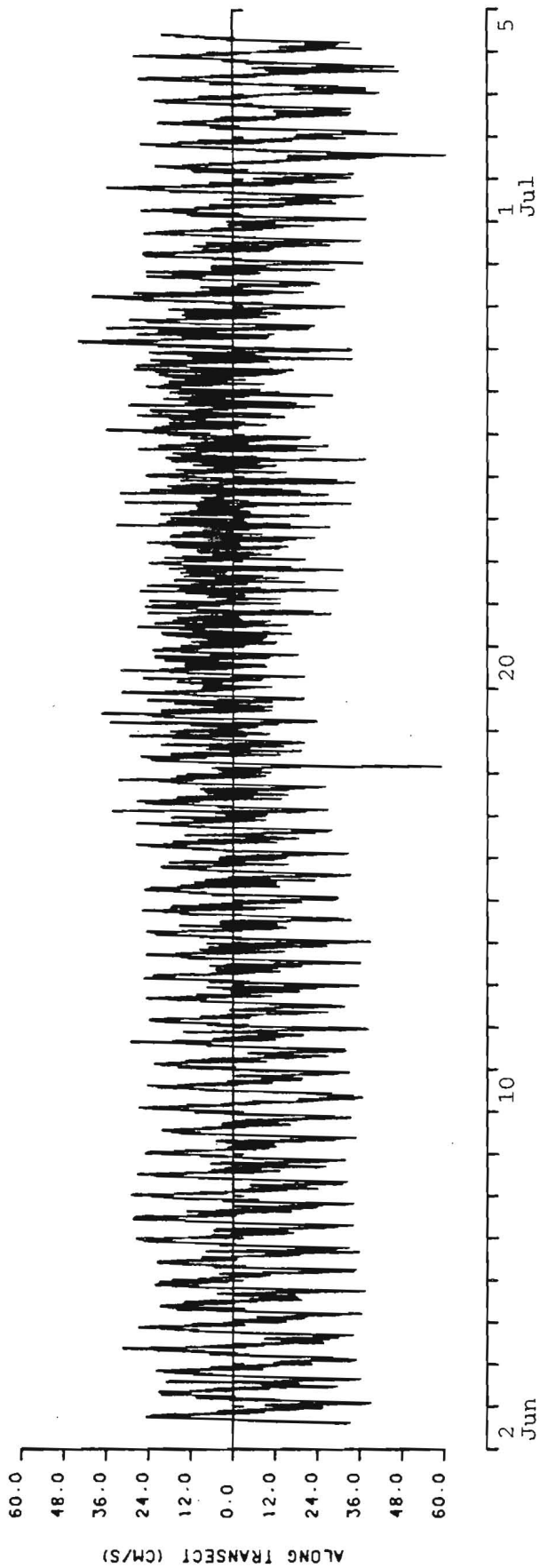
Water depth(relative to MLW) = 42.7 m

SCALE = 11.0 CM/S PER TICK

A3357 06/02/88 14:45EST DELTA T= 5 MIN







TRANSECTS 5 AND 6

8 SEPTEMBER - 14 OCTOBER 1988

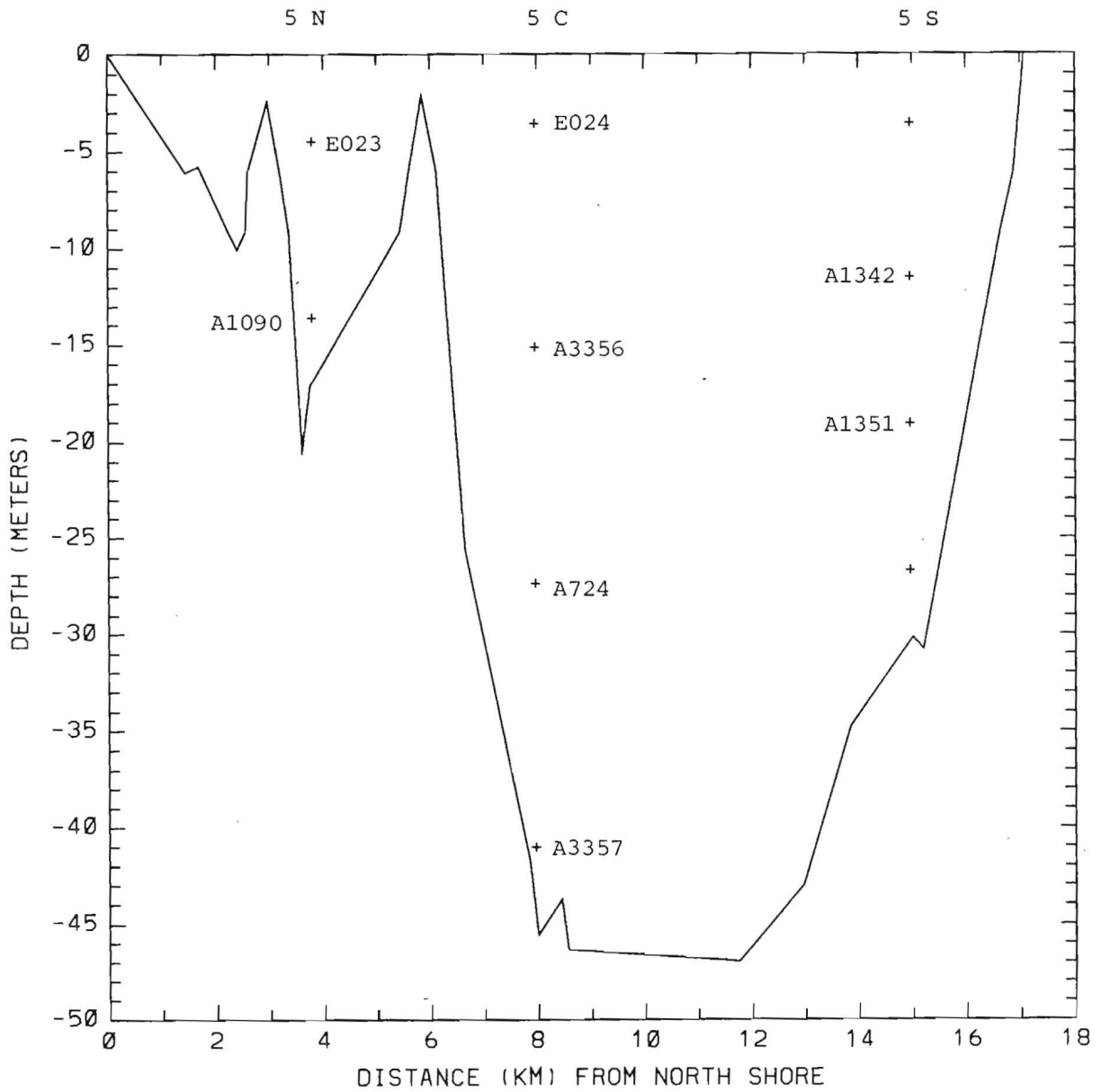


Fig. 8. Transect 5 showing the locations of the current meters

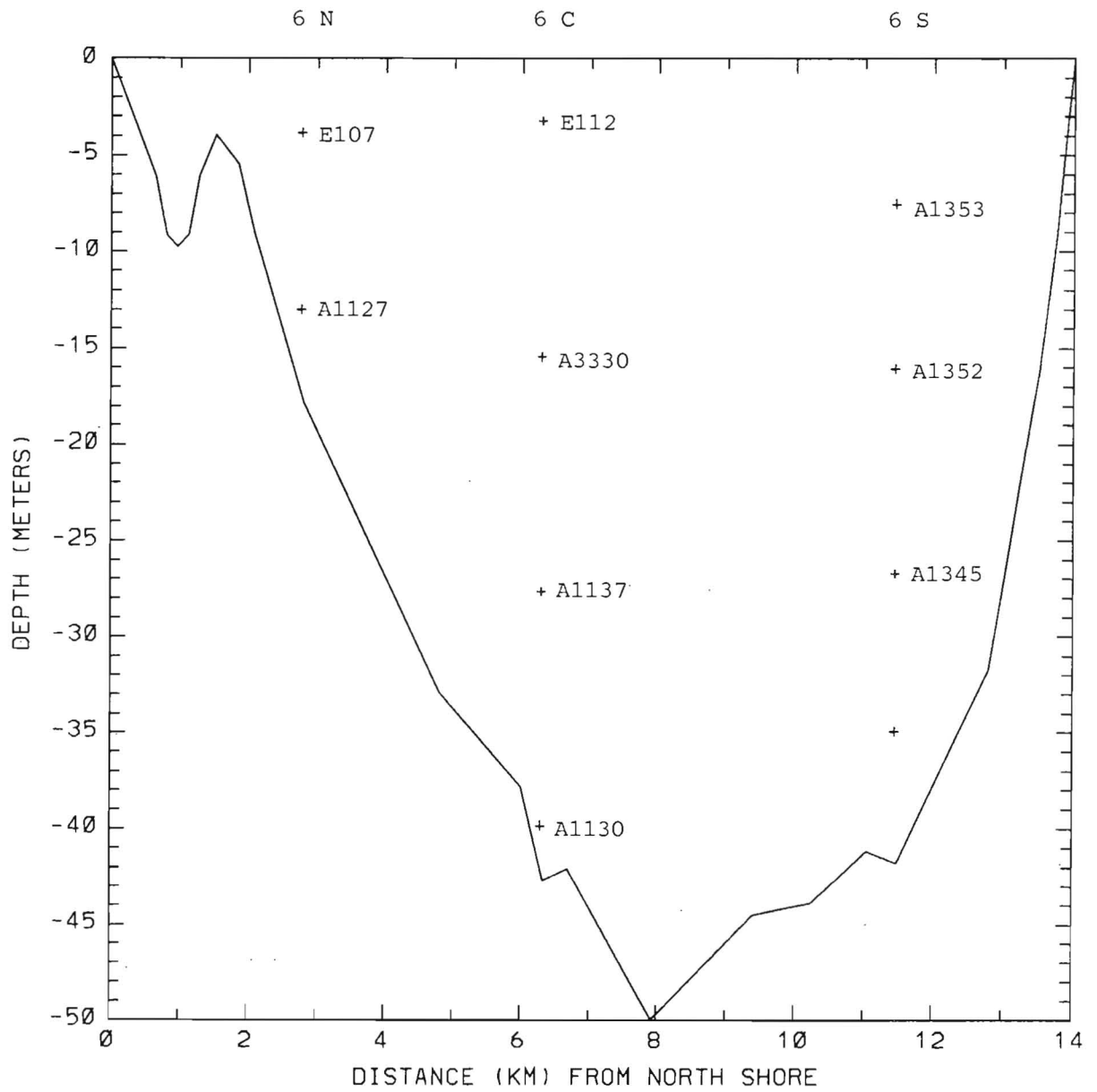


Fig. 9. Transect 6 showing the locations of the current meters

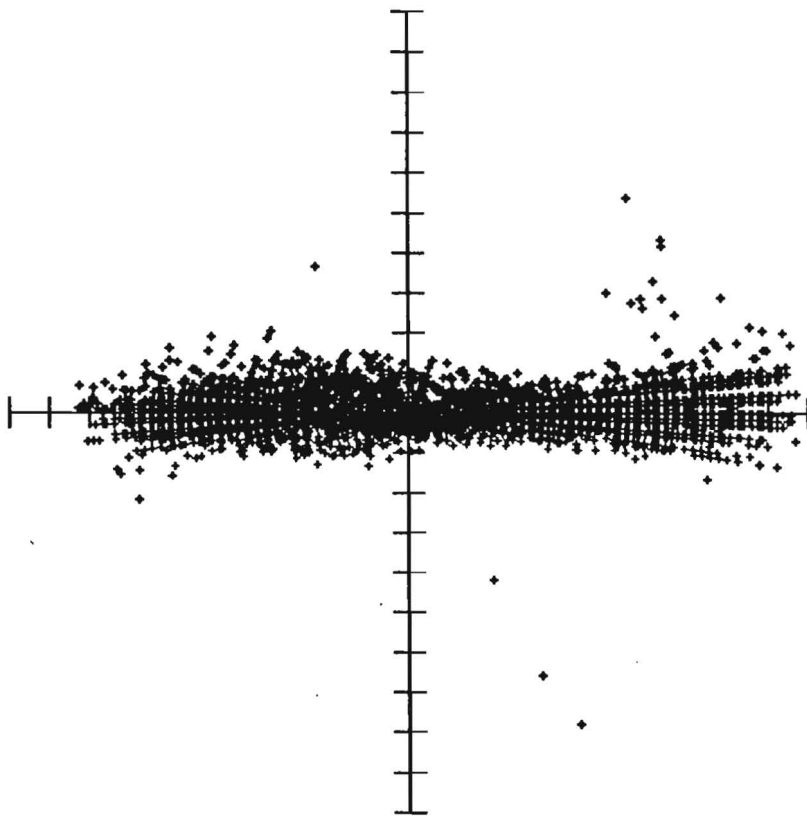
Current meter : ENDECO #1740023
 Station # and location : 5N , 41 14.7N 72 25.0W
 Instrument depth (MLW) : 4.6m
 Water depth (MLW) : 16.8m
 Start time : 09/08/88 13:32 EST
 Stop time : 10/12/88 10:34 EST
 Duration : 33 days 21 hours 2 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 24391
 NUMBER OF TEMPERATURE POINTS = 24391
 NUMBER OF SALINITY POINTS = 24391

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		337	67				
MEAN	=	-3.65	9.07	40.81	9.78	18.02	29.75
VARIANCE	=	313.51	1687.76	431.75	1000.64	0.92	0.01
STD. DEV.	=	17.71	41.08	20.78	31.63	0.96	0.12
MAX.	=	64.50	86.42	88.10		19.50	30.50
MIN.	=	-79.62	-71.22	0.00		15.45	28.75

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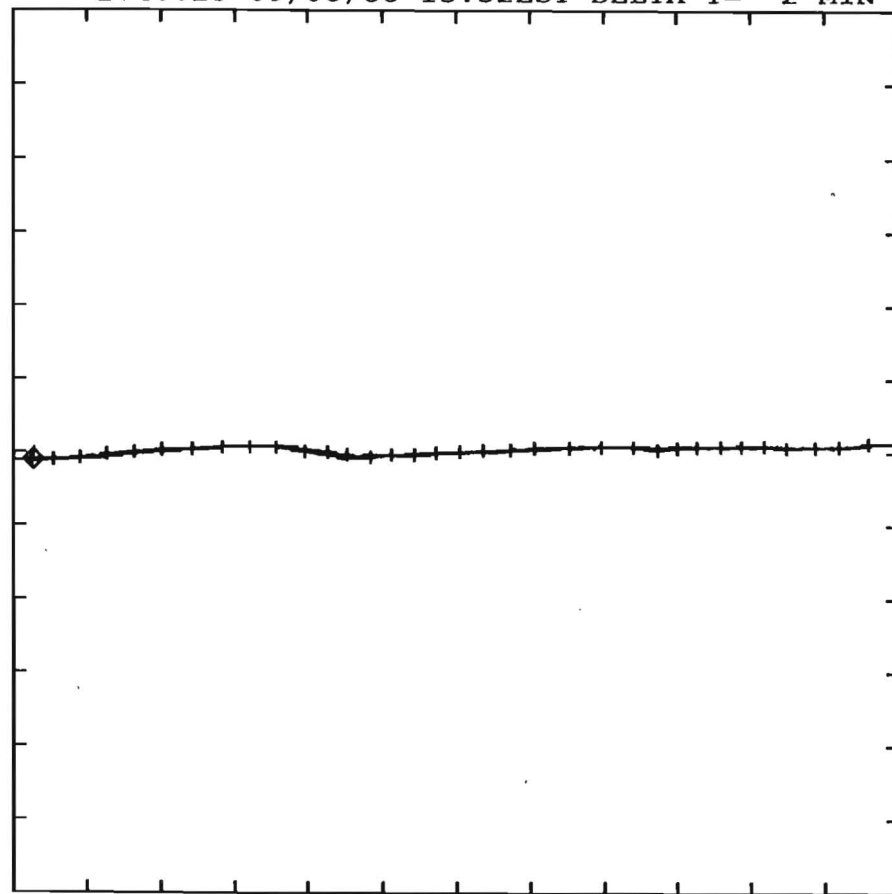
Station 5N , 41 14.7N 72 25.0W

Instrument depth(below MLW) = 4.6 m

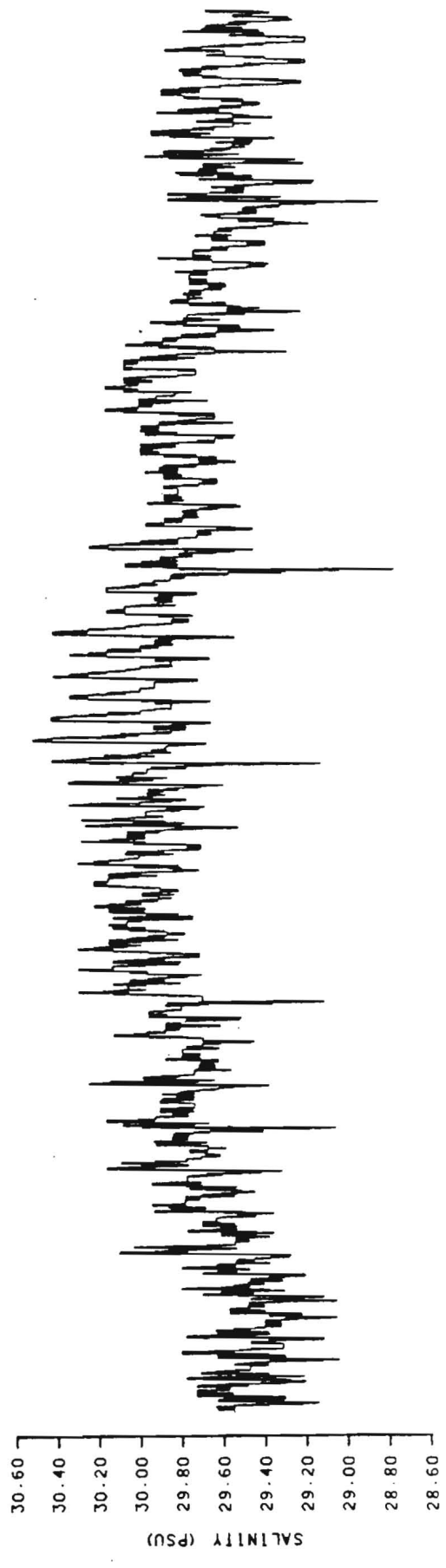
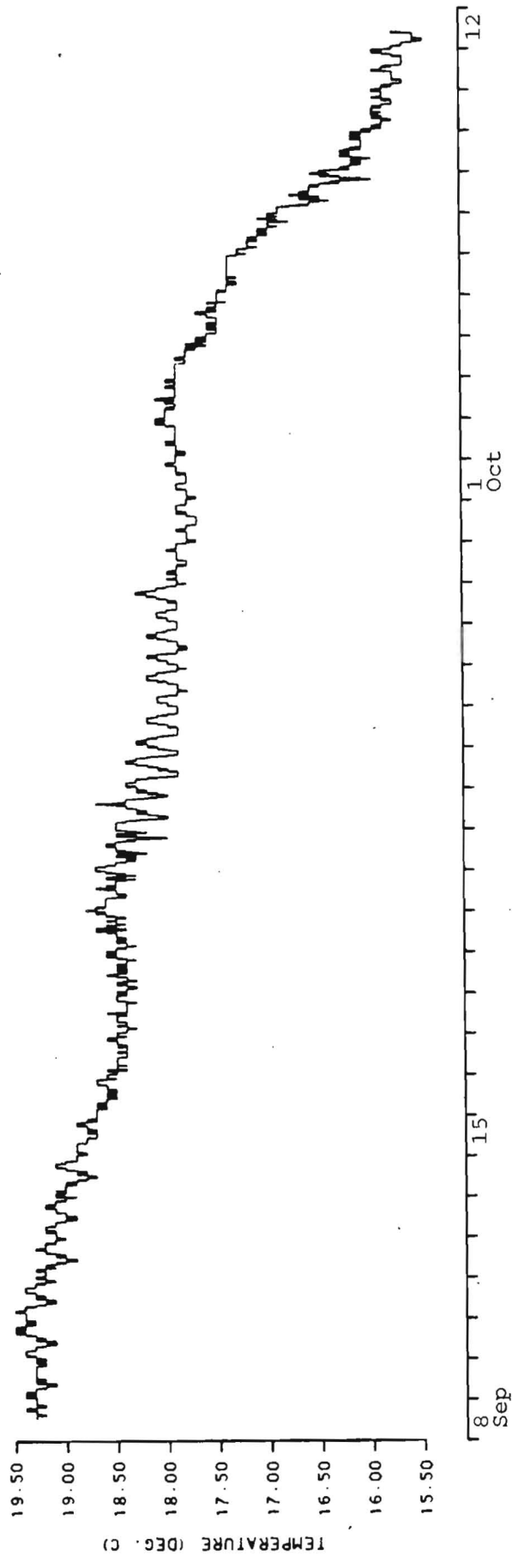
Water depth(relative to MLW) = 16.8 m

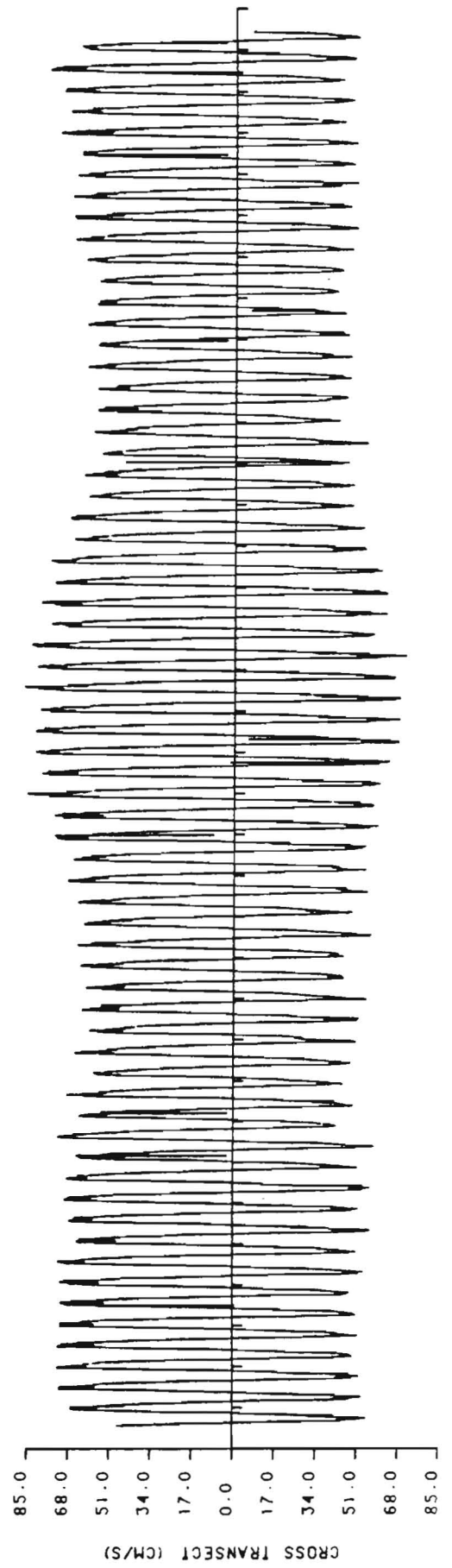
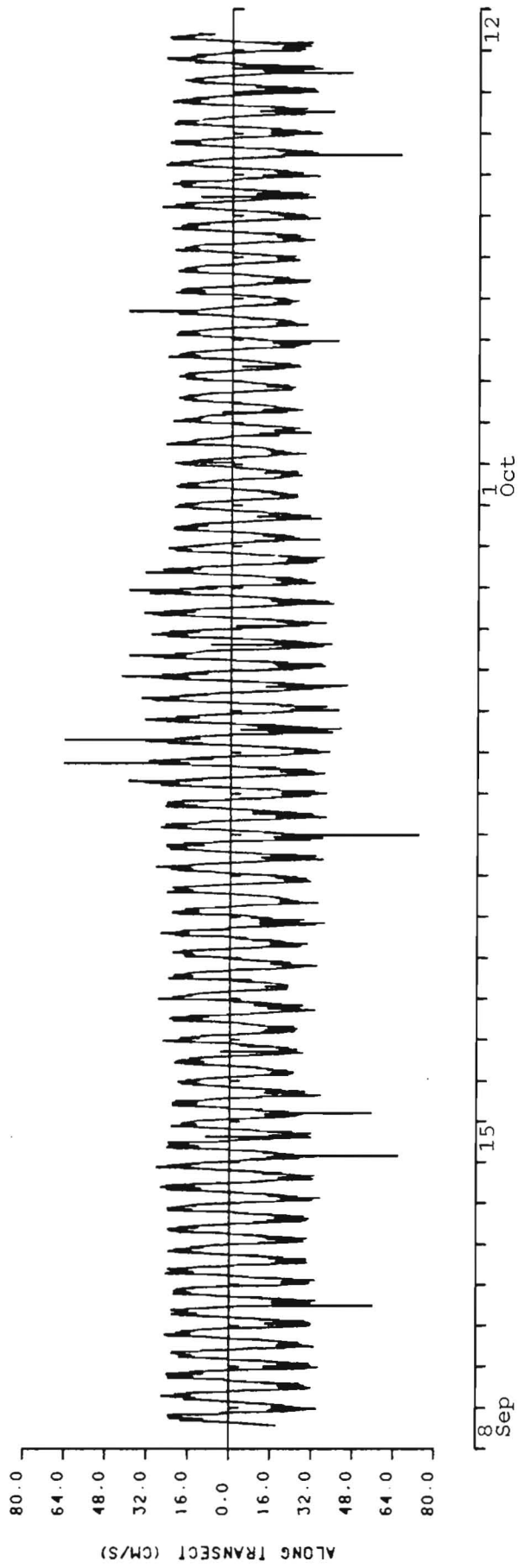
SCALE = 9.0 CM/S PER TICK

1740023 09/08/88 13:32EST DELTA T= 2 MIN



1 TICK = 25 KILOMETERS





Current meter : AANDERAA #A1090
 Station # and location : 5N , 41 14.7N 72 25.0W
 Instrument depth (MLW) : 13.7m
 Water depth (MLW) : 16.8m
 Start time : 09/08/88 13:40 EST
 Stop time : 09/17/88 21:45 EST
 Duration : 9 days 8 hours 5 minutes
 Sampling interval : 5 minutes

Comments:

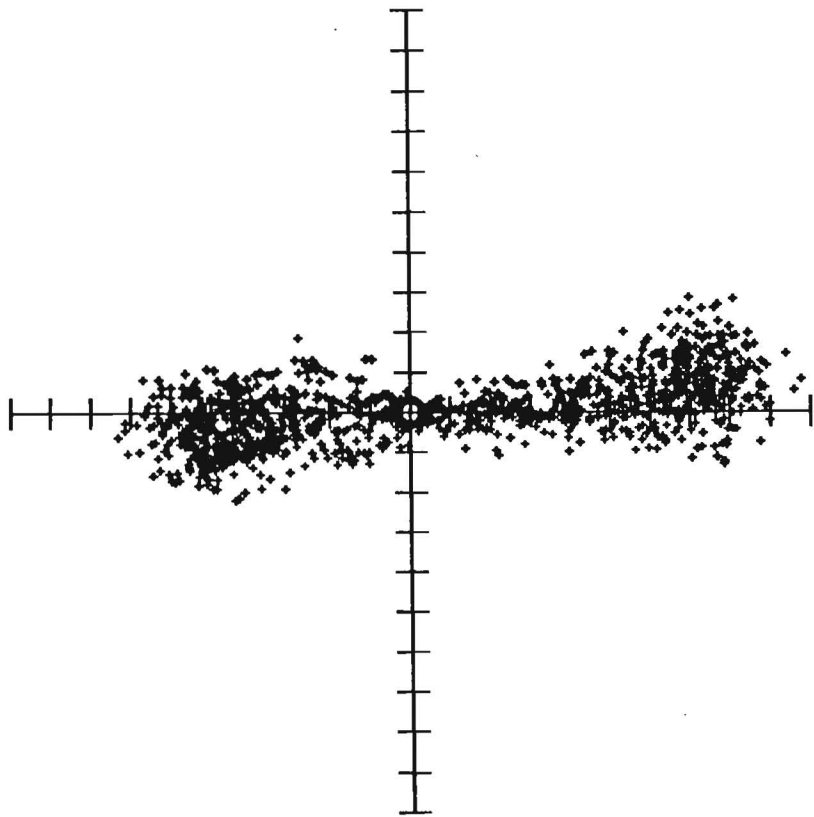
Instrument stopped prematurely.

NUMBER OF CURRENT DATA POINTS = 2689
 NUMBER OF TEMPERATURE POINTS = 2689
 NUMBER OF SALINITY POINTS = 2689

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		337	67				
MEAN	=	-1.65	4.71	22.92	4.99	19.36	29.64
VARIANCE	=	71.19	614.58	185.02	342.89	0.08	0.05
STD. DEV.	=	8.44	24.79	13.60	18.52	0.28	0.22
MAX.	=	21.14	52.56	55.03		19.80	30.36
MIN.	=	-23.42	-39.81	1.71		18.71	28.99

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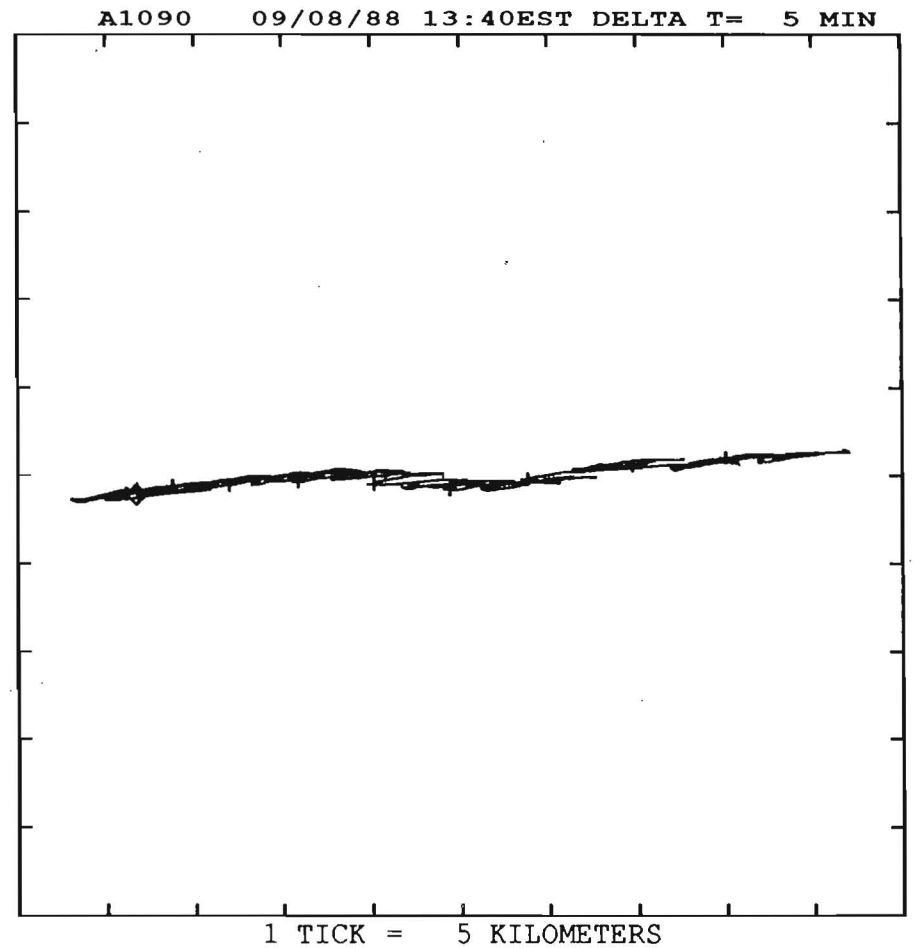
A1090 09/08/88

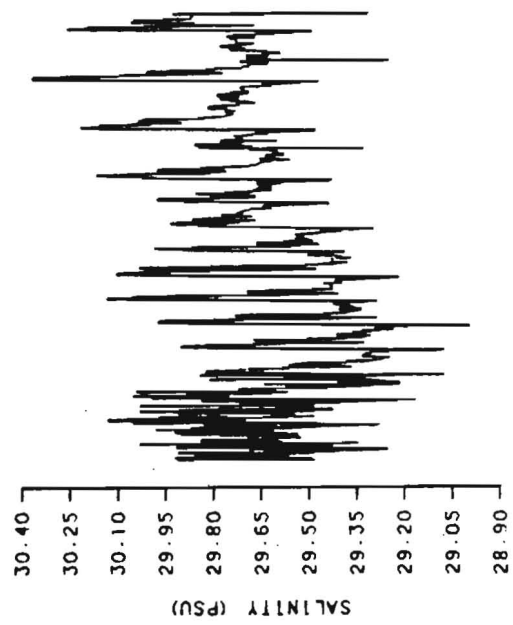
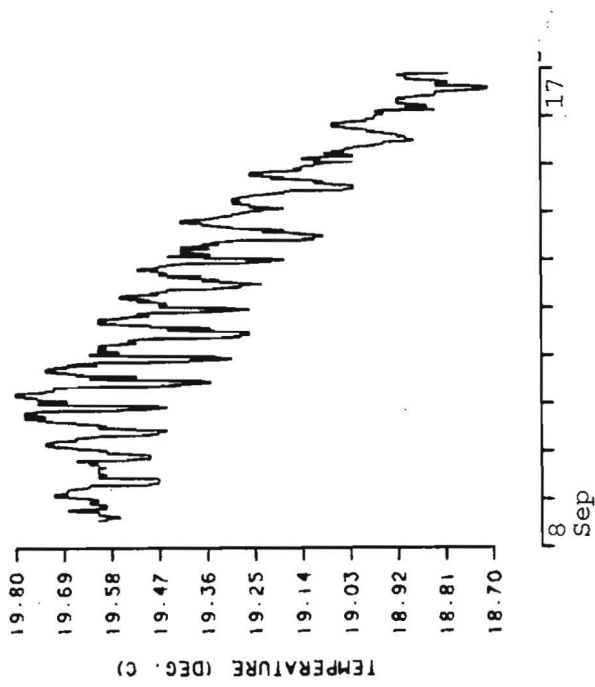
Station 5N , 41 14.7N 72 25.0W

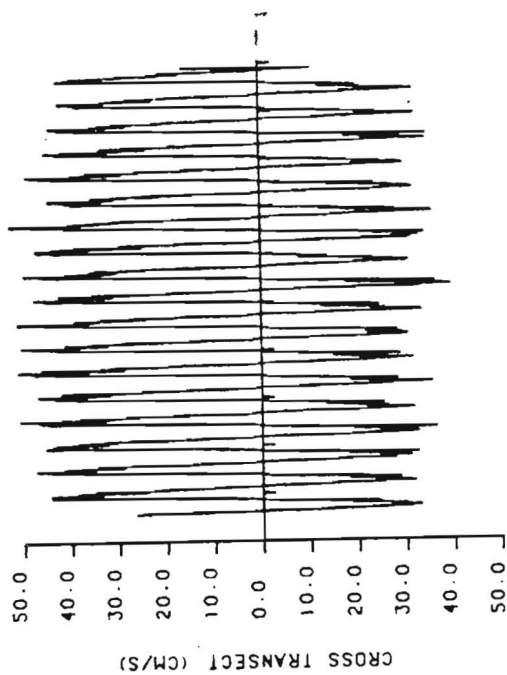
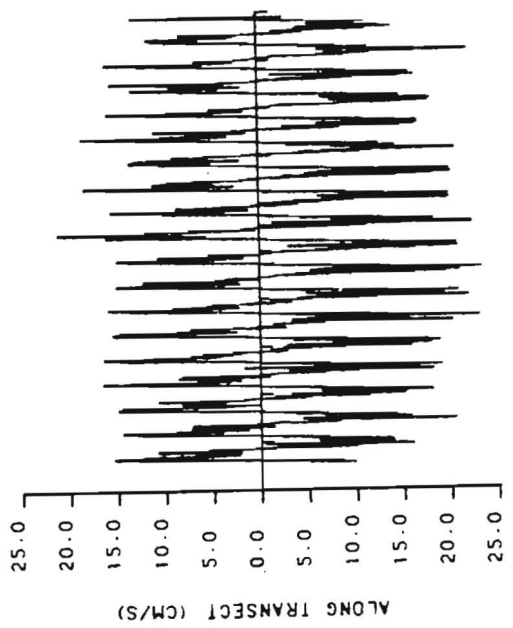
Instrument depth(below MLW) = 13.7 m

Water depth(relative to MLW) = 16.8 m

SCALE = 5.5 CM/S PER TICK







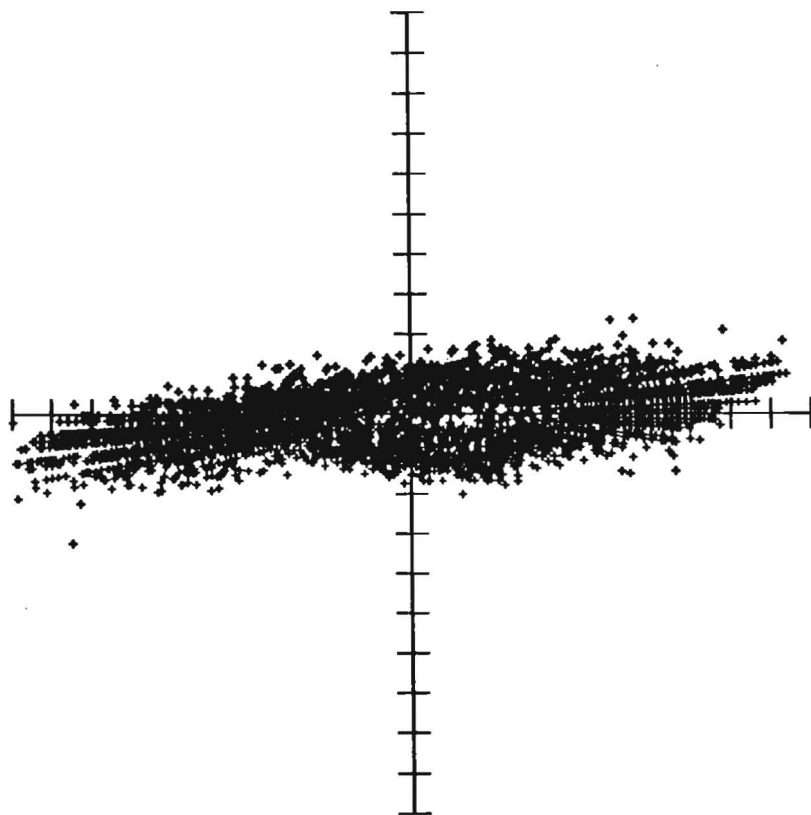
Current meter : ENDECO #1740024
 Station # and location : 5C , 41 12.5N 72 24.3W
 Instrument depth (MLW) : 3.7m
 Water depth (MLW) : 45.7m
 Start time : 09/08/88 11:38 EST
 Stop time : 10/14/88 09:26 EST
 Duration : 35 days 21 hours 48 minutes
 Sampling interval : 2 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 25854
 NUMBER OF TEMPERATURE POINTS = 25854
 NUMBER OF SALINITY POINTS = 25854

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		337	67				
MEAN	=	1.95	-8.74	55.10	8.95	17.81	30.22
VARIANCE	=	437.60	3259.13	740.63	1848.37	0.90	0.12
STD. DEV.	=	20.92	57.09	27.21	42.99	0.95	0.35
MAX.	=	49.67	115.94	126.56		19.71	31.02
MIN.	=	-52.26	-123.64	0.00		14.92	29.00

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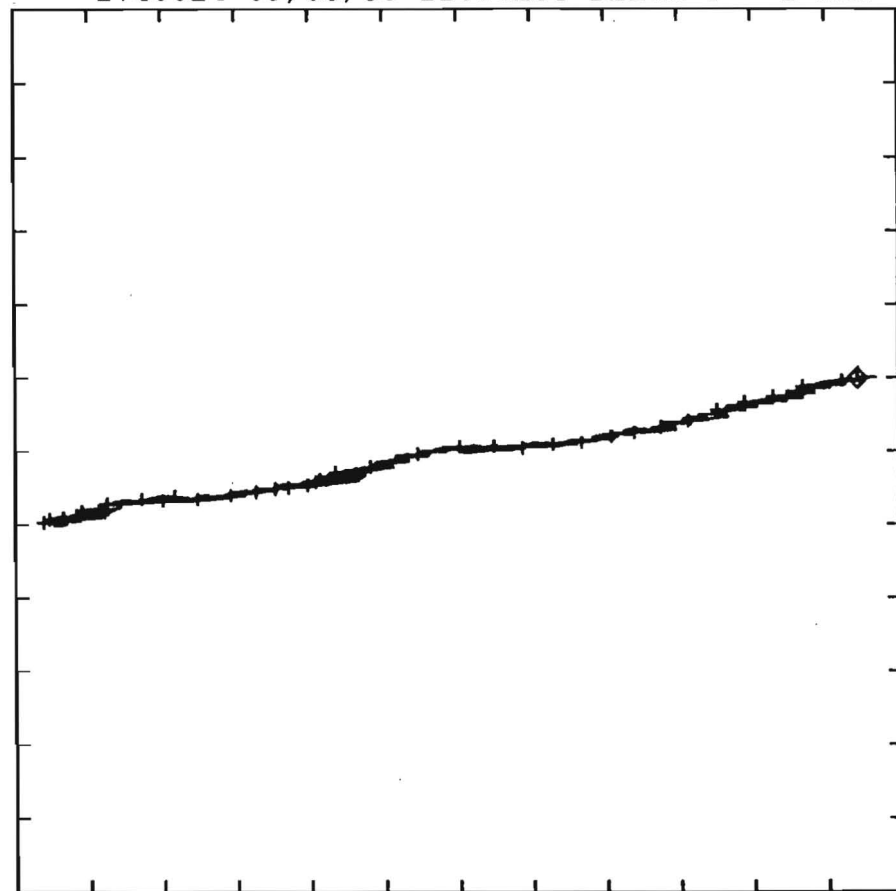
Station 5C , 41 12.5N 72 24.3W

Instrument depth(below MLW) = 3.7 m

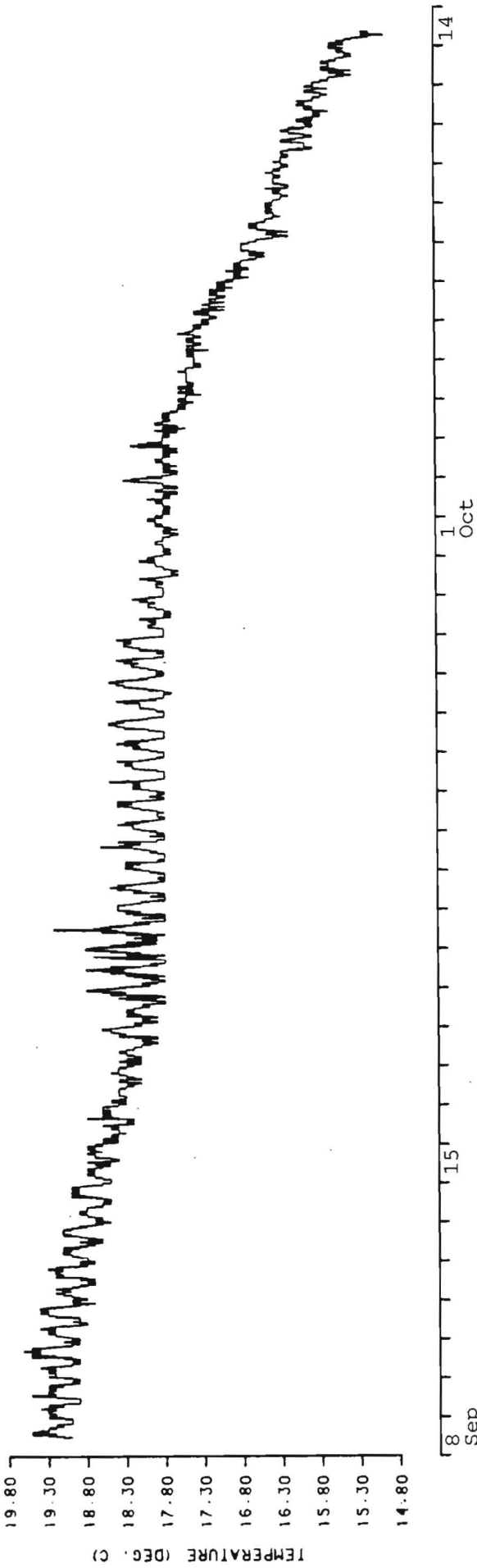
Water depth(relative to MLW) = 45.7 m

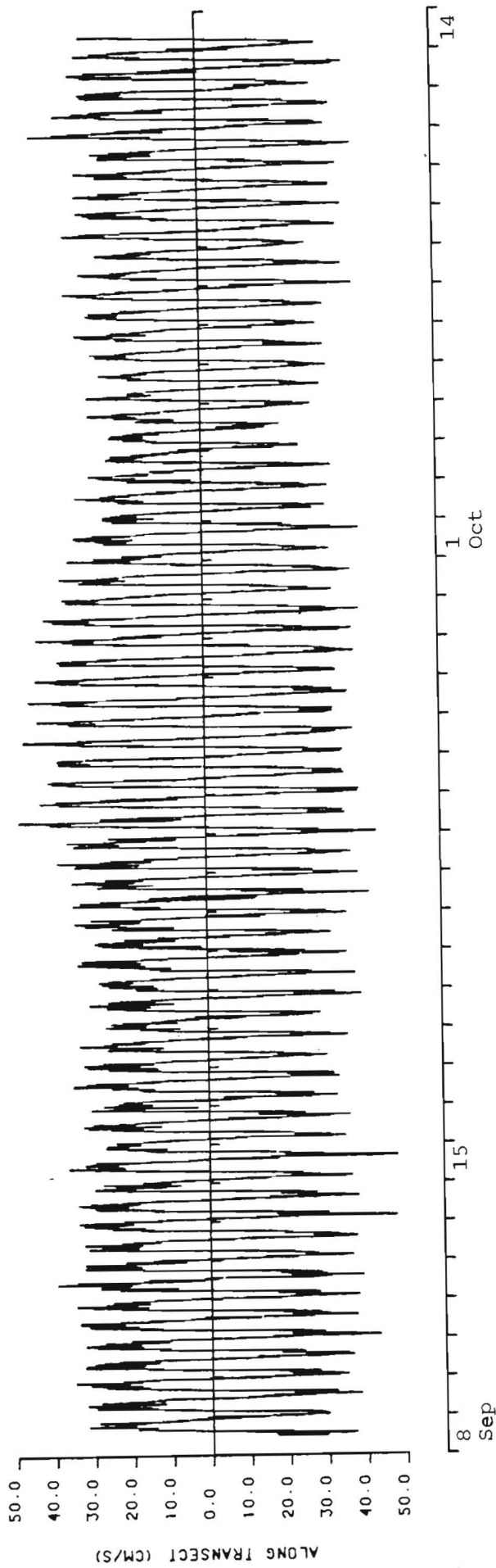
SCALE = 12.5 CM/S PER TICK

1740024 09/08/88 11:38EST DELTA T= 2 MIN

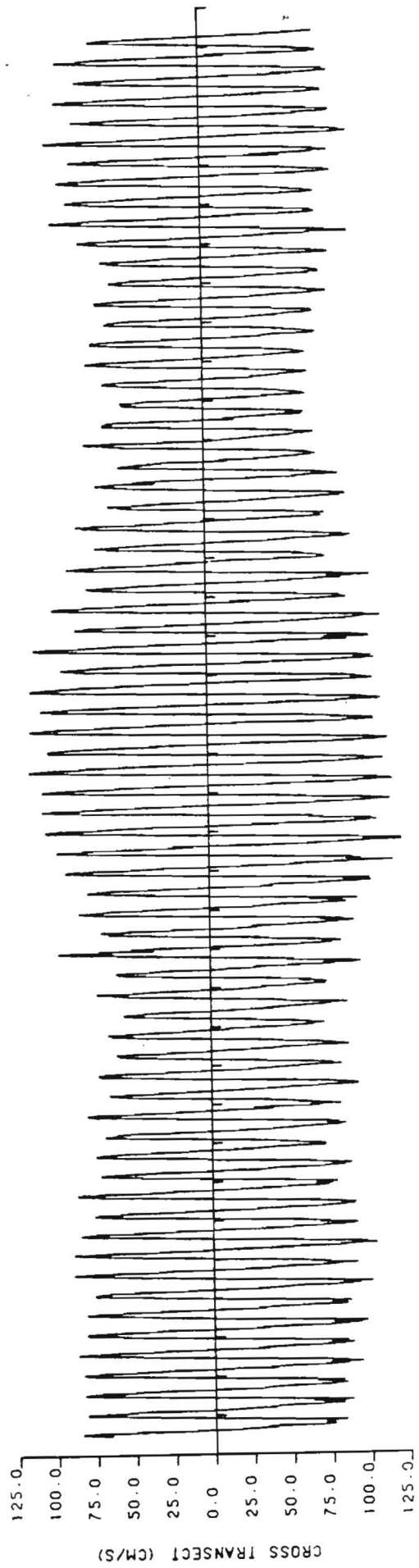


1 TICK = 25 KILOMETERS





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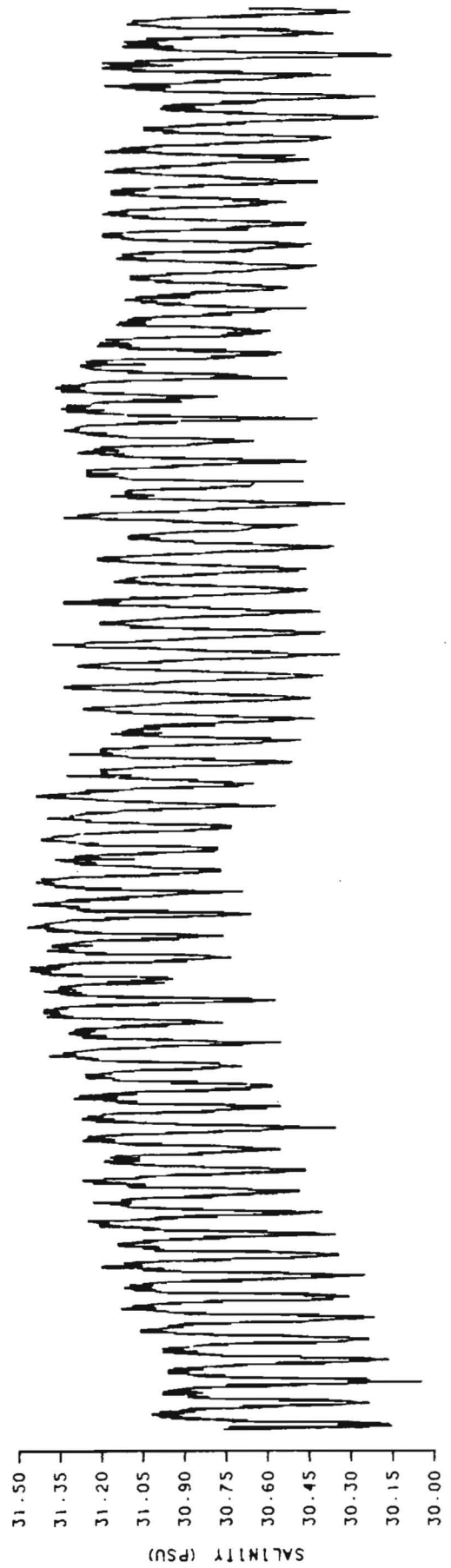
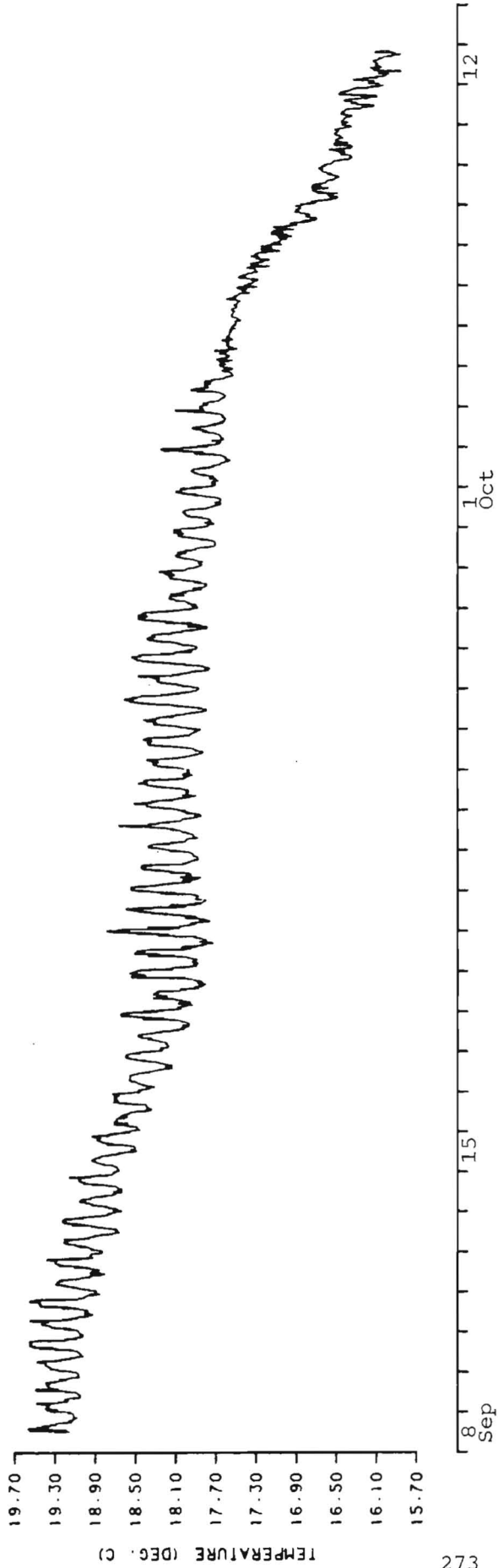
Current meter : AANDERAA #A3356
 Station # and location : 5C , 41 12.5N 72 24.3W
 Instrument depth (MLW) : 15.2m
 Water depth (MLW) : 45.7m
 Start time : 09/08/88 12:35 EST
 Stop time : 10/12/88 20:45 EST
 Duration : 34 days 8 hours 10 minutes
 Sampling interval : 5 minutes
 Comments:

Speed data was bad throughout.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 9890
 NUMBER OF SALINITY POINTS = 9890

UNITS: TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		TEMP	SAL
MEAN	=	18.01	30.93
VARIANCE	=	0.64	0.09
STD. DEV.	=	0.80	0.30
MAX.	=	19.57	31.47
MIN.	=	15.85	30.04



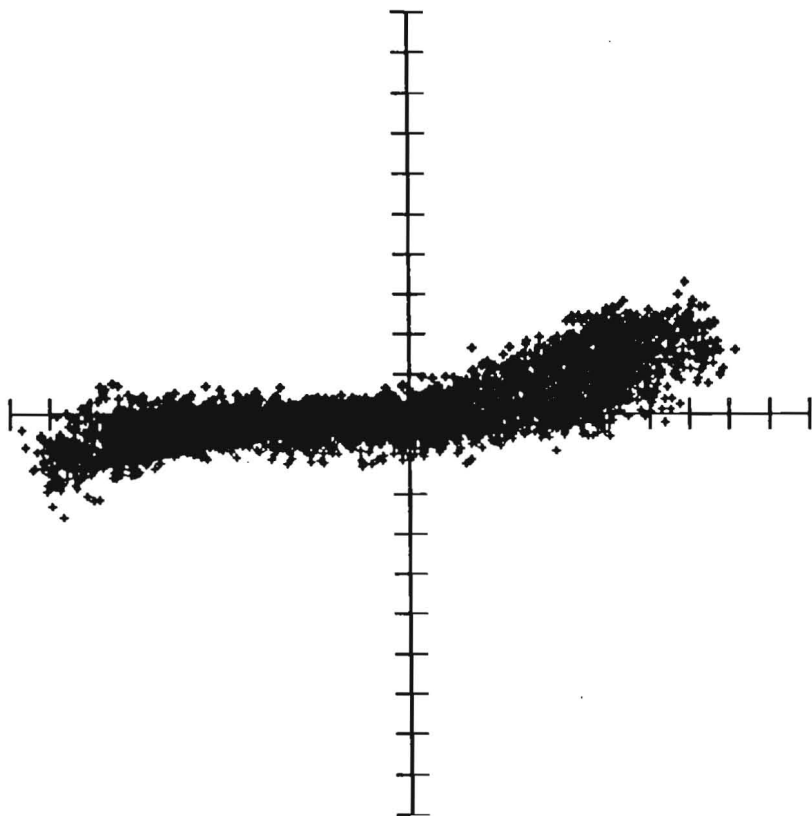
Current meter : AANDERAA #A0724
 Station # and location : 5C , 41 12.5N 72 24.3W
 Instrument depth (MLW) : 27.4m
 Water depth (MLW) : 45.7m
 Start time : 09/10/88 05:00 EST
 Stop time : 10/12/88 19:05 EST
 Duration : 32 days 14 hours 5 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9385
 NUMBER OF TEMPERATURE POINTS = 9385
 NUMBER OF SALINITY POINTS = 9385

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		337	67				
MEAN	=	5.18	-6.63	53.73	8.41	17.89	29.50
VARIANCE	=	257.61	3307.40	748.92	1782.50	0.51	0.05
STD. DEV.	=	16.05	57.51	27.37	42.22	0.72	0.22
MAX.	=	50.08	103.13	121.91		19.36	29.93
MIN.	=	-36.14	-116.93	1.16		15.90	28.75

275



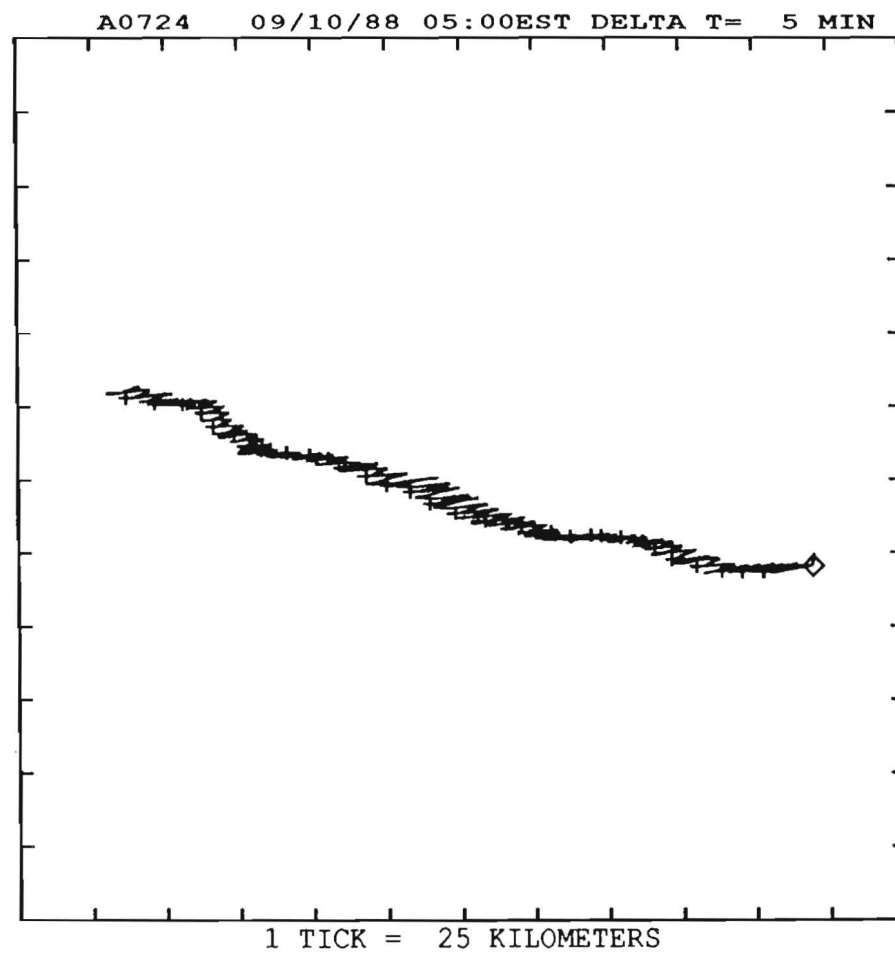
A0724 09/10/88

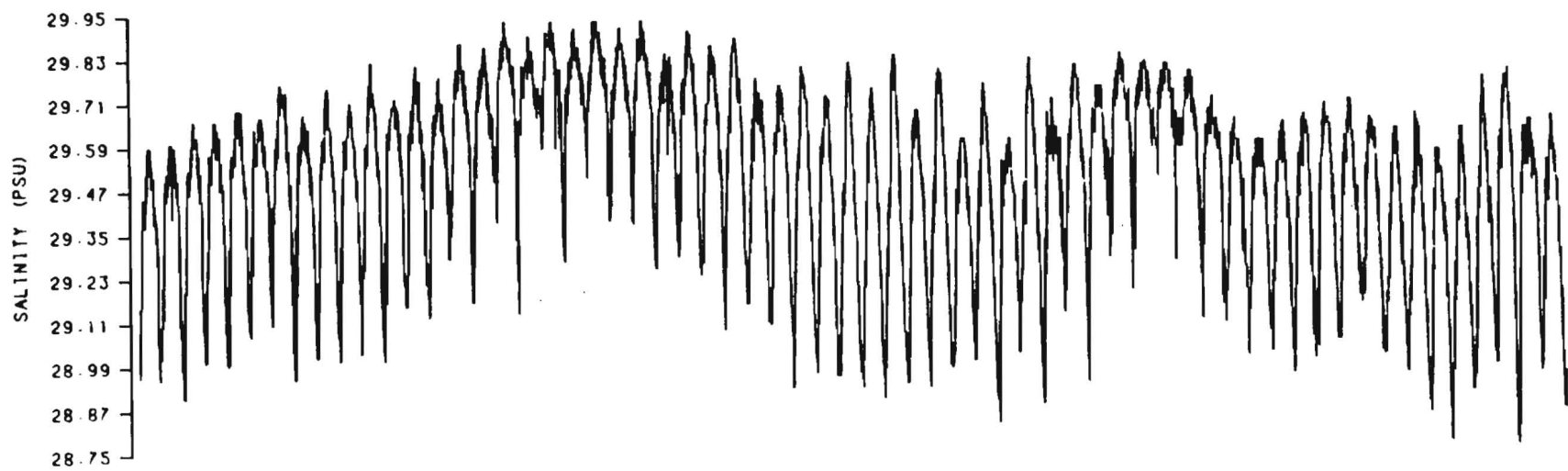
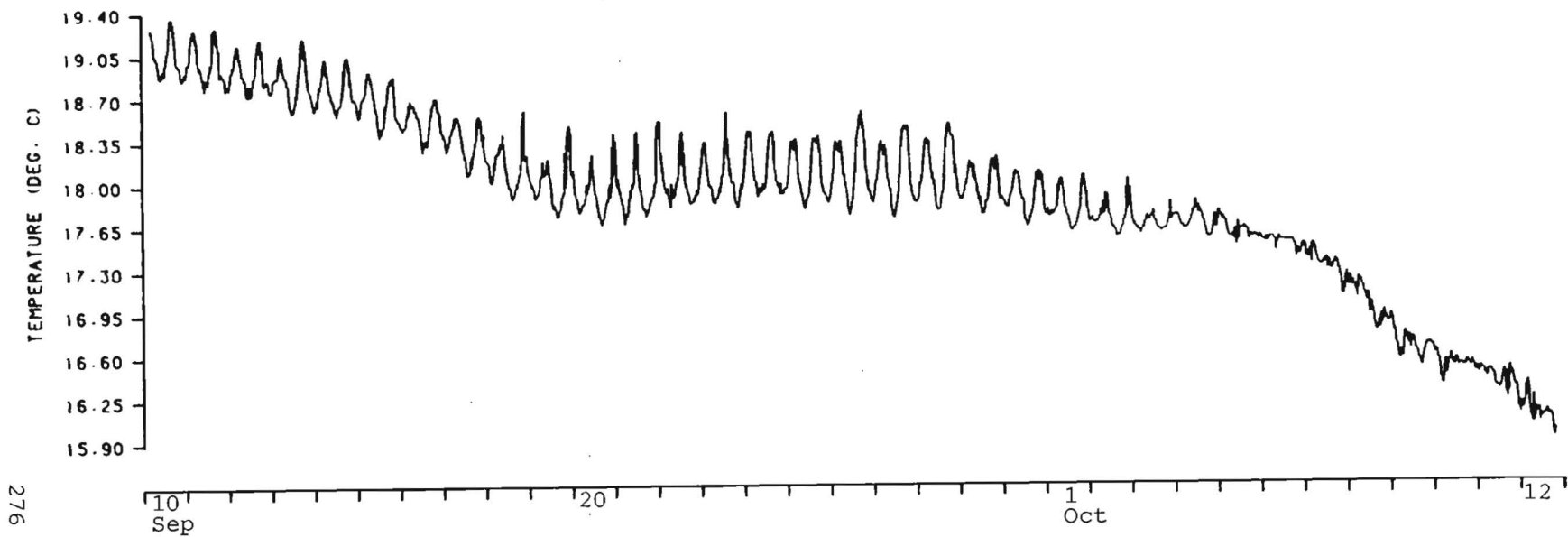
Station 5C , 41 12.5N 72 24.3W

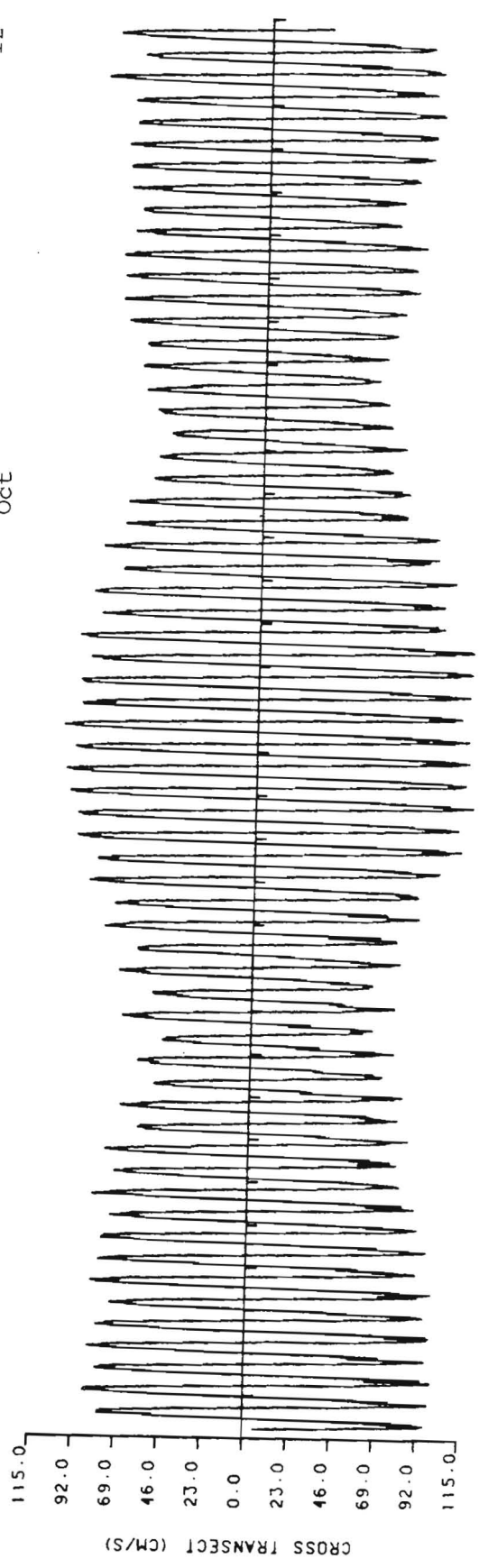
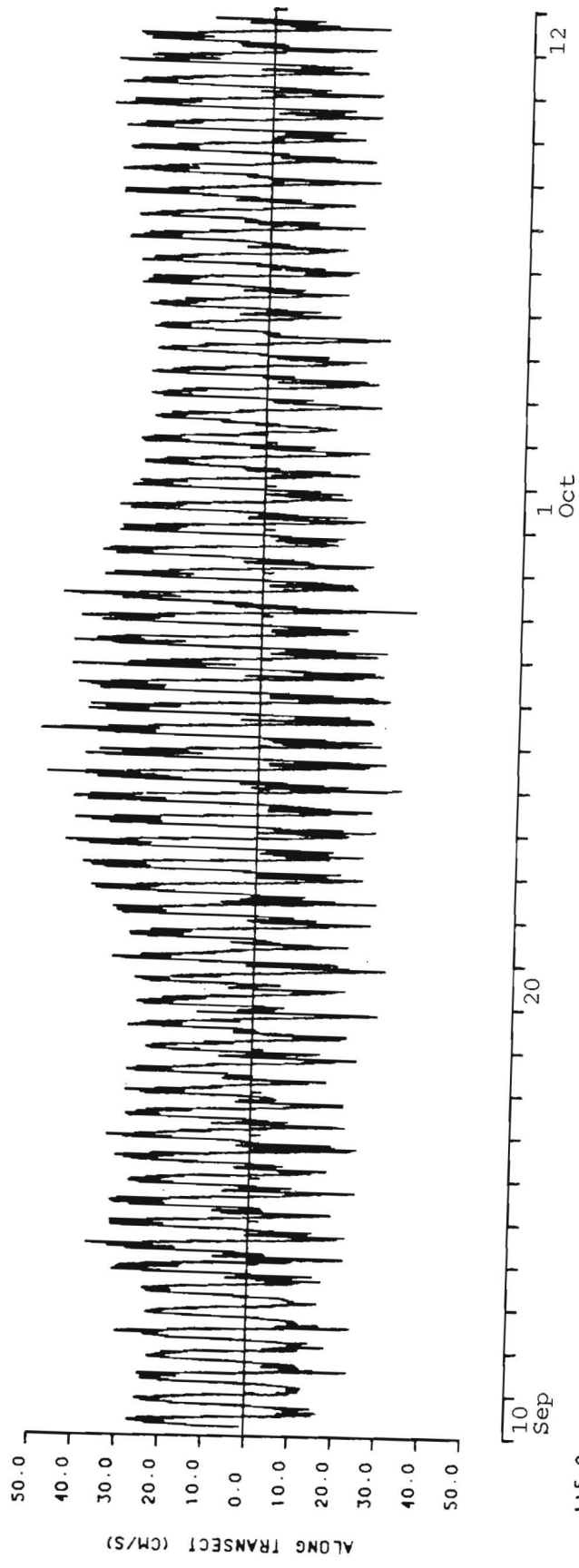
Instrument depth(below MLW) = 27.4 m

Water depth(relative to MLW) = 45.7 m

SCALE = 12.5 CM/S PER TICK







Current meter : AANDERAA #A3357
 Station # and location : 5C , 41 12.5N 72 24.3W
 Instrument depth (MLW) : 41.1m
 Water depth (MLW) : 45.7m
 Start time : 09/08/88 12:30 EST
 Stop time : 10/13/88 01:55 EST
 Duration : 34 days 13 hours 25 minutes
 Sampling interval : 5 minutes

Comments:

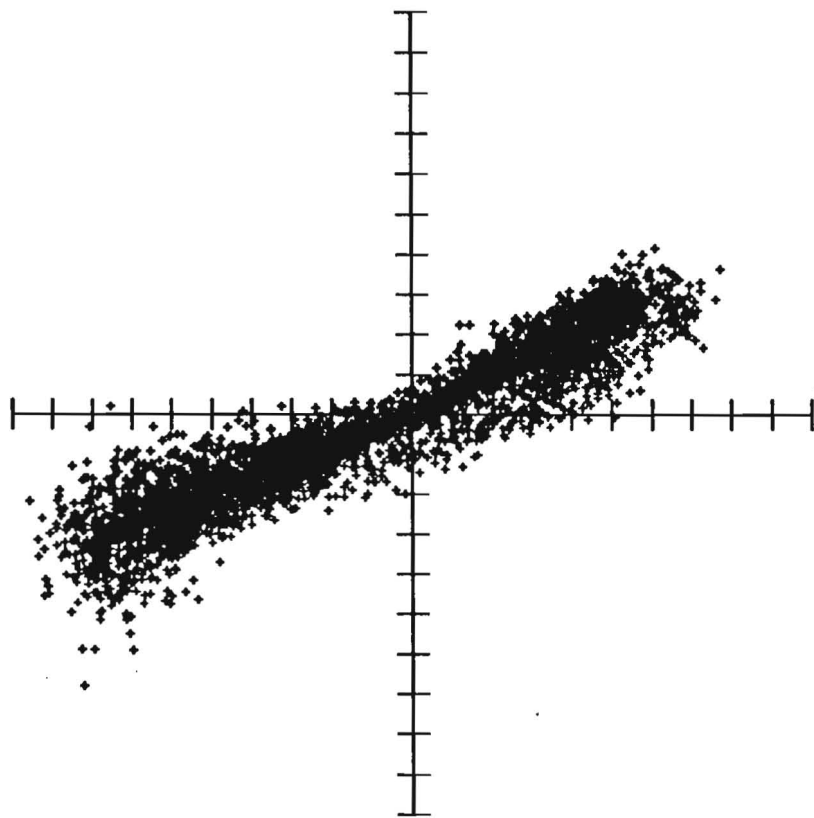
Speed dampened beyond 1 October due to biofouling of rotor.

NUMBER OF CURRENT DATA POINTS = 9953
 NUMBER OF TEMPERATURE POINTS = 9953
 NUMBER OF SALINITY POINTS = 9953

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		337	67				
MEAN	=	0.34	-7.66	28.78	7.67	17.95	30.07
VARIANCE	=	20.31	1255.07	506.00	637.69	0.60	0.18
STD. DEV.	=	4.51	35.43	22.49	25.25	0.78	0.42
MAX.	=	26.64	72.61	94.25		19.39	30.80
MIN.	=	-31.88	-94.23	1.70		16.01	28.98

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A3357 09/08/88

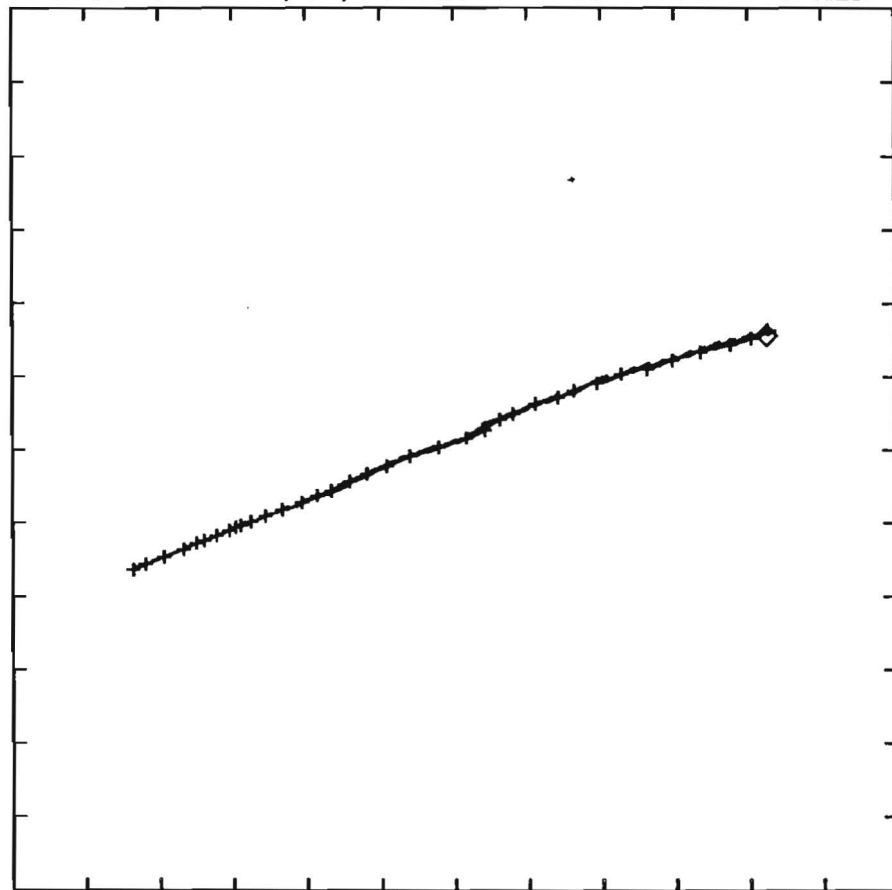
Station 5C , 41 12.5N 72 24.3W

Instrument depth(below MLW) = 41.1 m

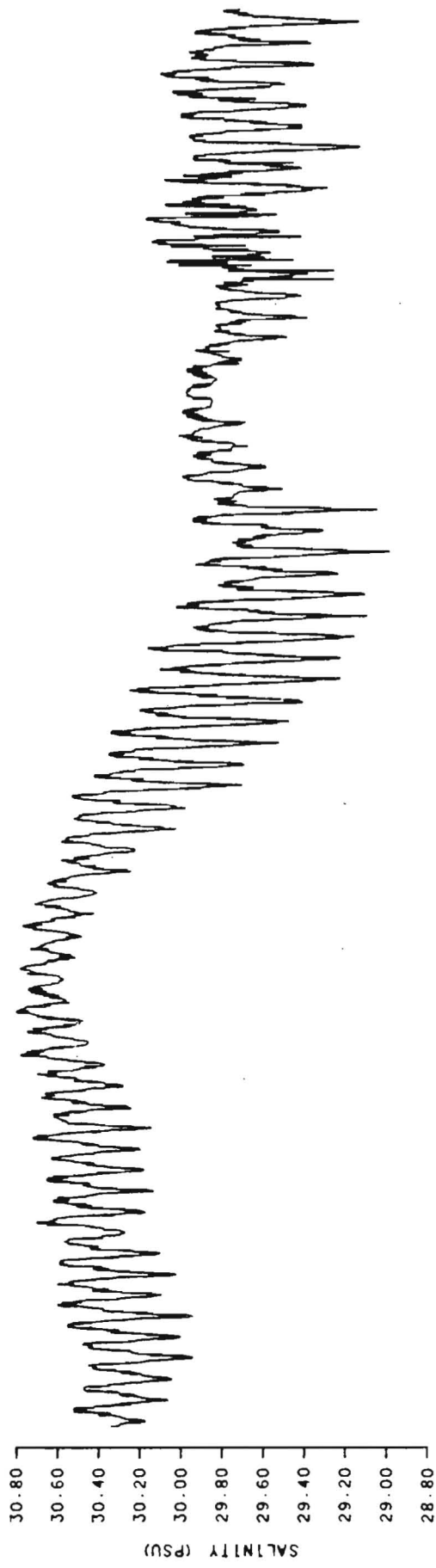
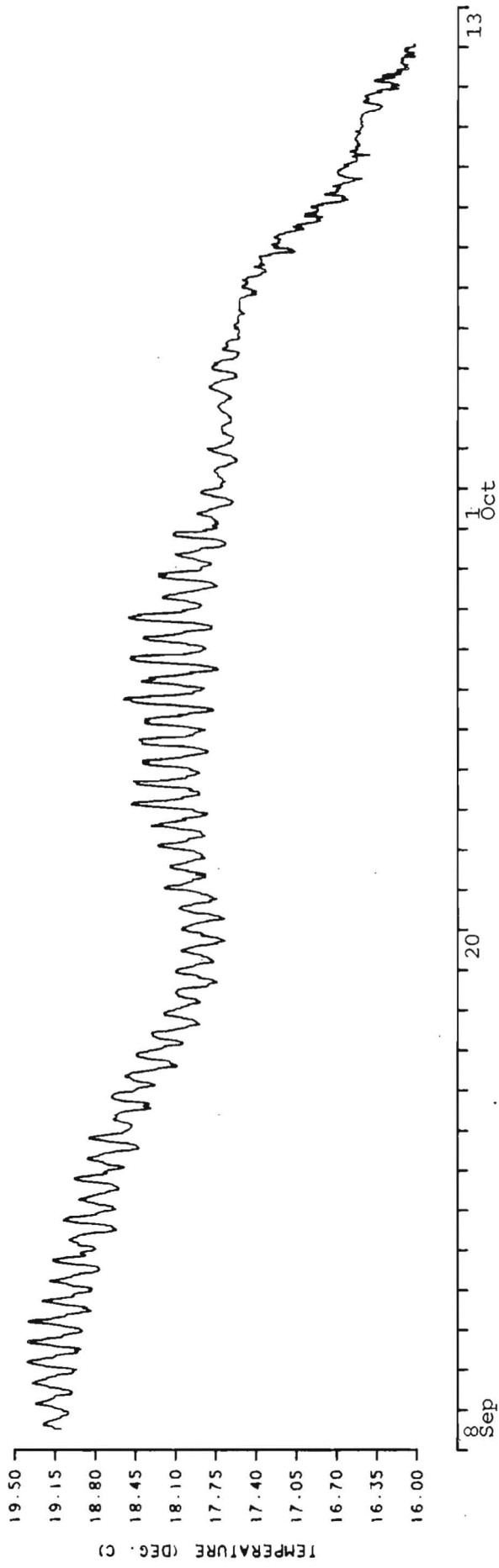
Water depth(relative to MLW) = 45.7 m

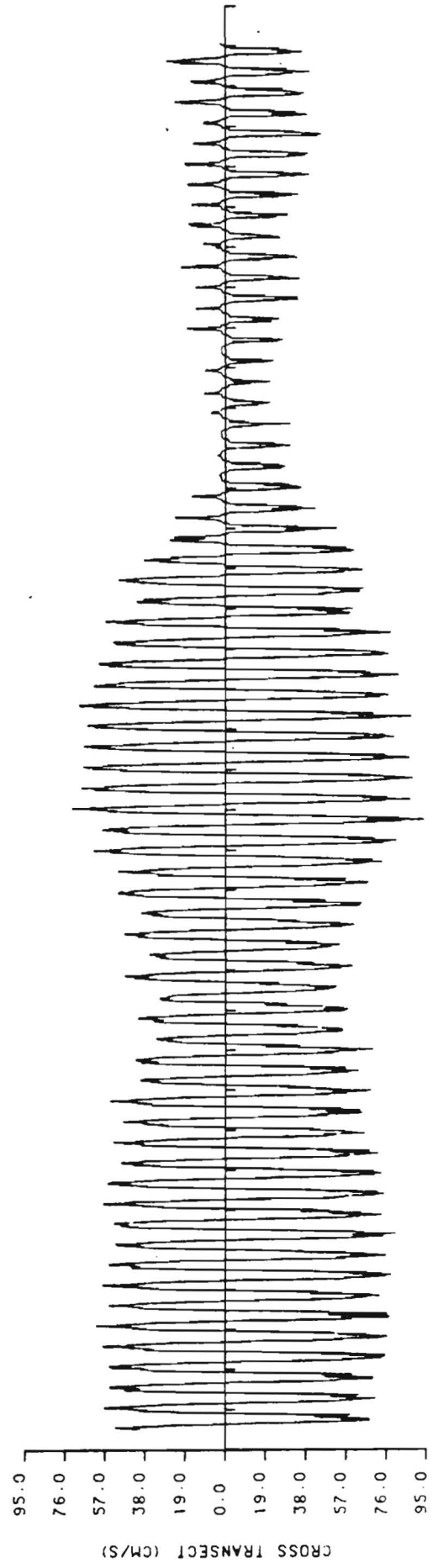
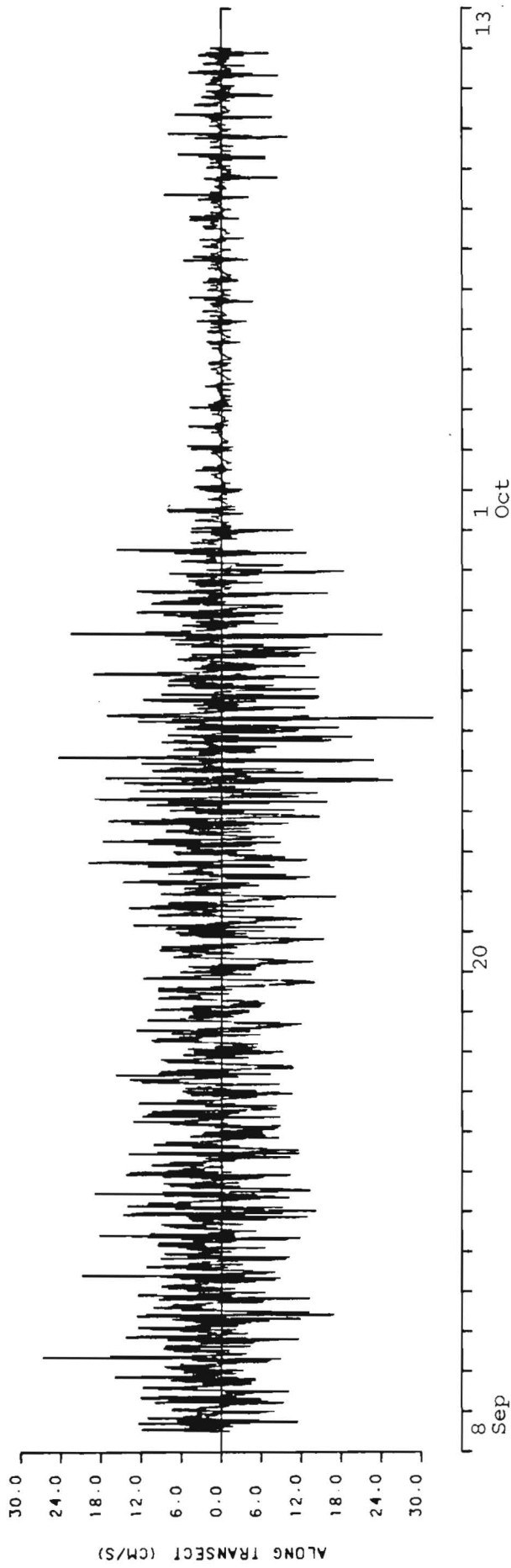
SCALE = 8.5 CM/S PER TICK

A3357 09/08/88 12:30EST DELTA T= 5 MIN



1 TICK = 25 KILOMETERS





Current meter : AANDERAA #A1342
 Station # and location : 5S , 40 09.2N 72 21.8W
 Instrument depth (MLW) : 11.6m
 Water depth (MLW) : 29.9m
 Start time : 09/08/88 12:55 EST
 Stop time : 10/05/88 00:00 EST
 Duration : 26 days 11 hours 5 minutes
 Sampling interval : 5 minutes

Comments:

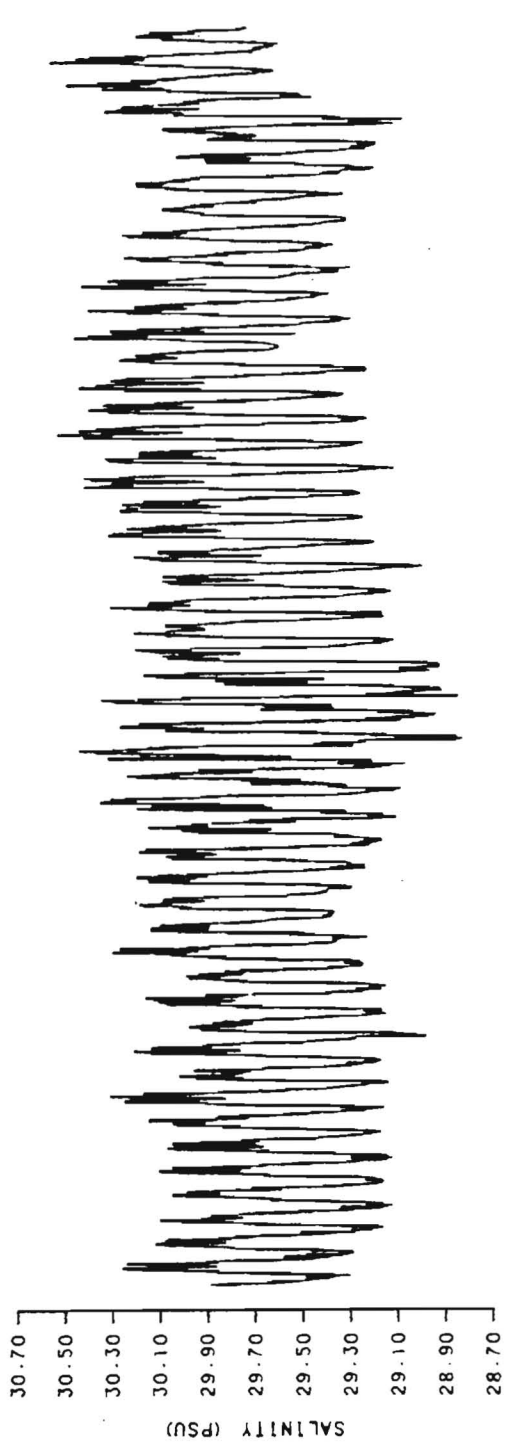
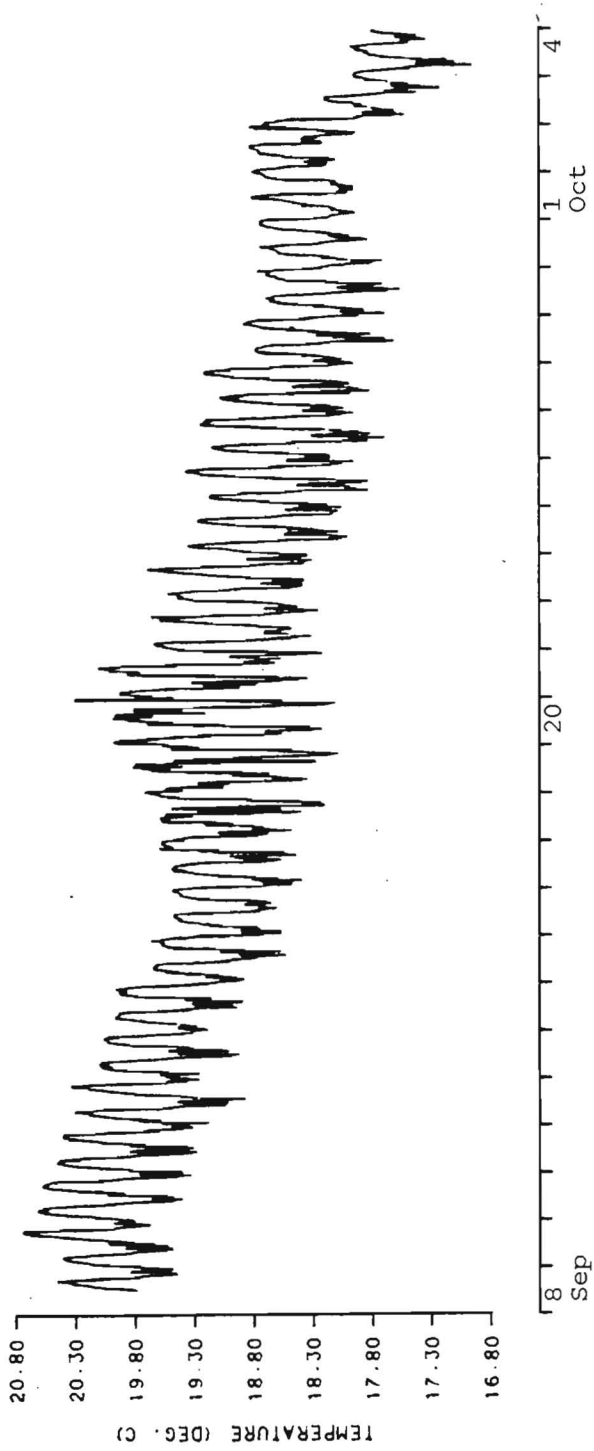
No speed recorded. Rotor was broken upon retrieval.

Temperature and conductivity unreliable beyond 4 October.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 7621
 NUMBER OF SALINITY POINTS = 7621

UNITS: TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		TEMP	SAL
MEAN	=	18.96	29.71
VARIANCE	=	0.56	0.13
STD. DEV.	=	0.75	0.35
MAX.	=	20.74	30.56
MIN.	=	16.95	28.83



Current meter : AANDERAA #A1351
 Station # and location : 5S , 41 09.2N 72 21.8W
 Instrument depth (MLW) : 19.2m
 Water depth (MLW) : 29.9m
 Start time : 09/09/88 12:25 EST
 Stop time : 10/13/88 21:20 EST
 Duration : 34 days 8 hours 55 minutes
 Sampling interval : 5 minutes

Comments:

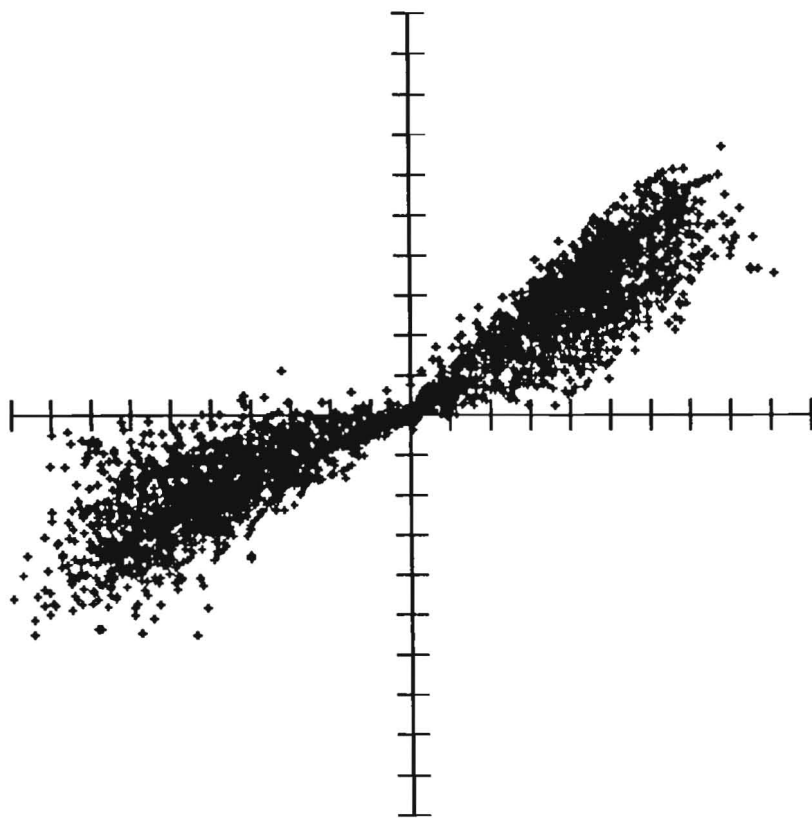
Speed shows signs of damping beyond 25 September caused by biofouling.

NUMBER OF CURRENT DATA POINTS = 9899
 NUMBER OF TEMPERATURE POINTS = 9899
 NUMBER OF SALINITY POINTS = 9899

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		337	67				
MEAN	=	4.26	-1.26	36.24	4.44	18.42	30.19
VARIANCE	=	57.25	2062.34	825.84	1059.79	1.30	0.21
STD. DEV.	=	7.57	45.41	28.74	32.55	1.14	0.46
MAX.	=	36.47	104.11	113.11		20.60	31.17
MIN.	=	-29.72	-112.31	1.91		15.49	28.91

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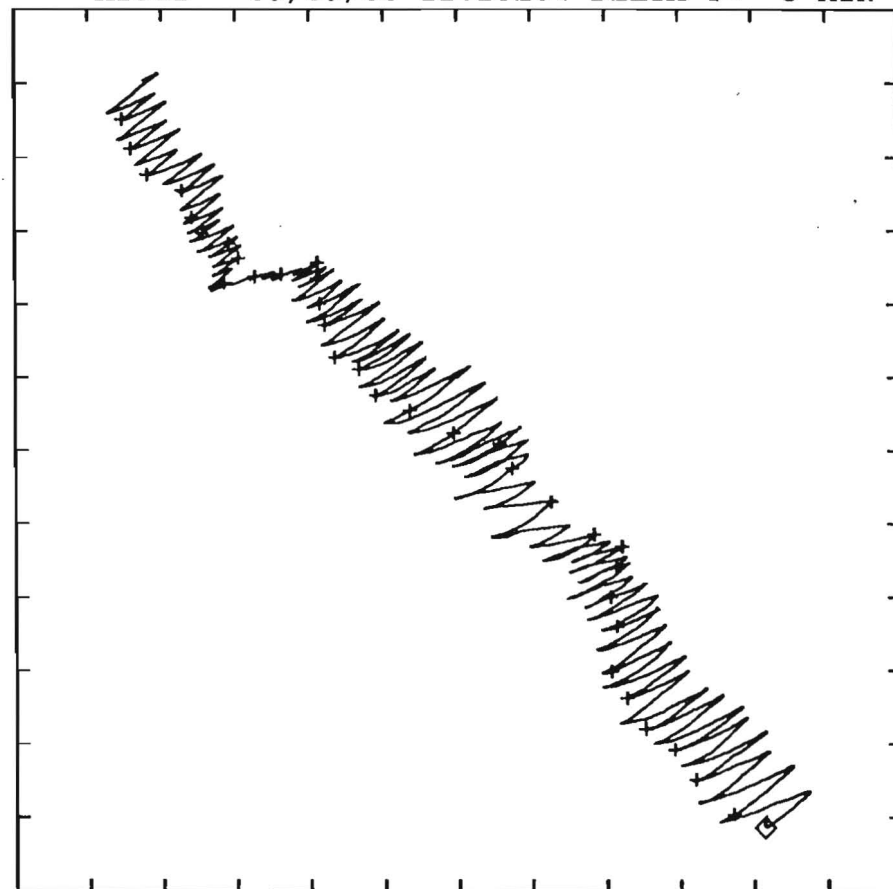
Station 5S , 41 09.2N 72 21.8W

Instrument depth(below MLW) = 19.2 m

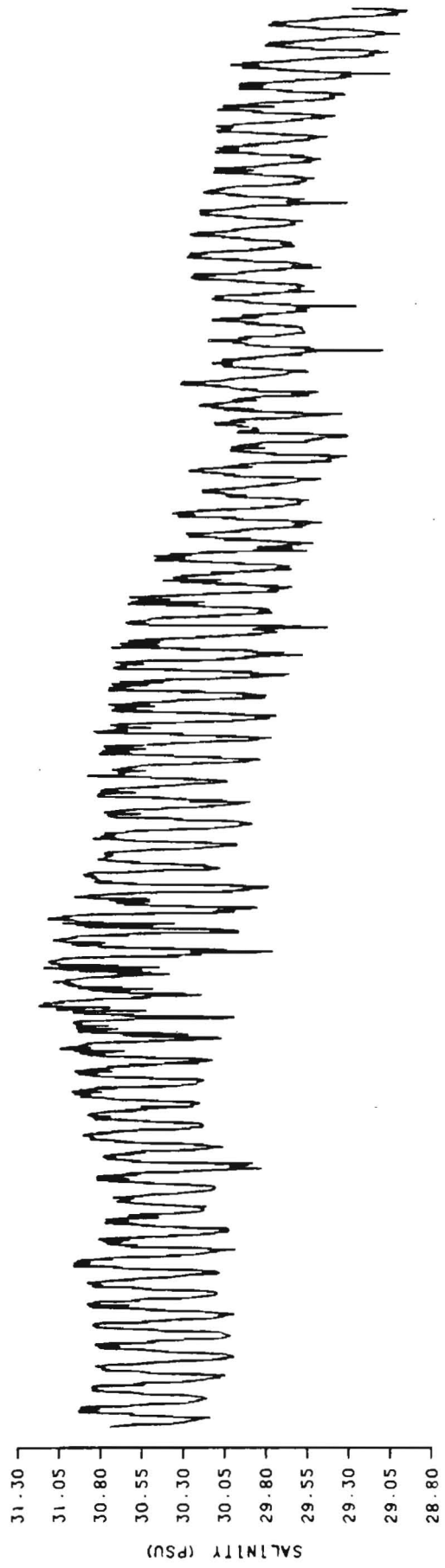
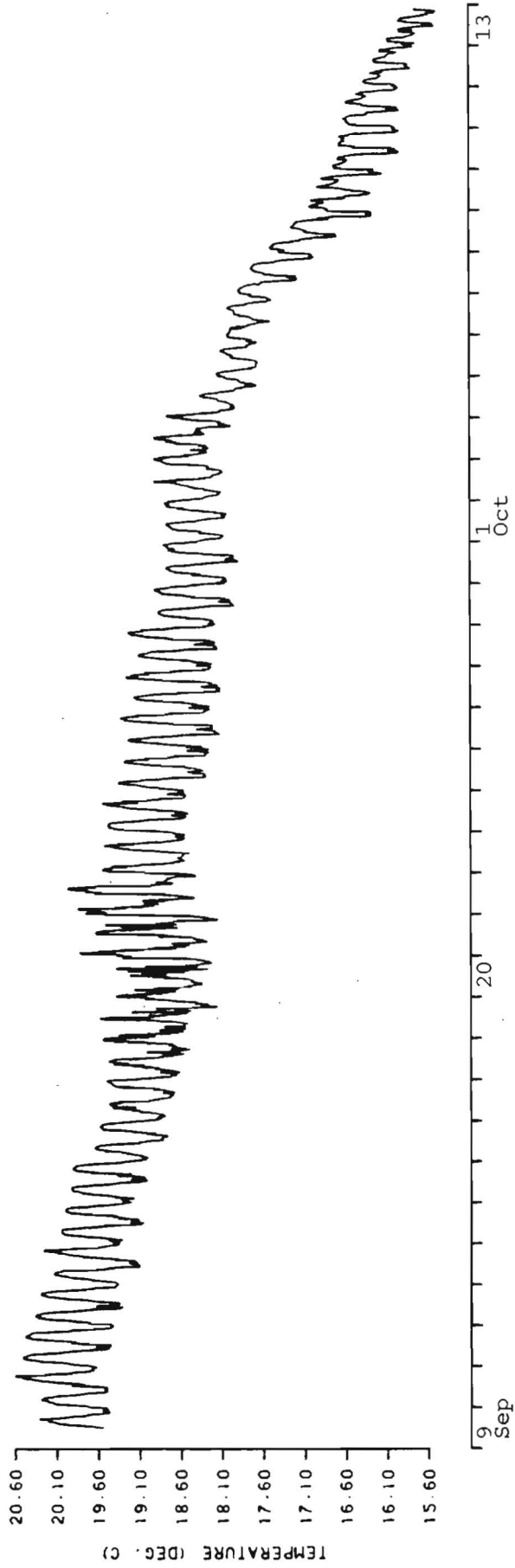
Water depth(relative to MLW) = 29.9 m

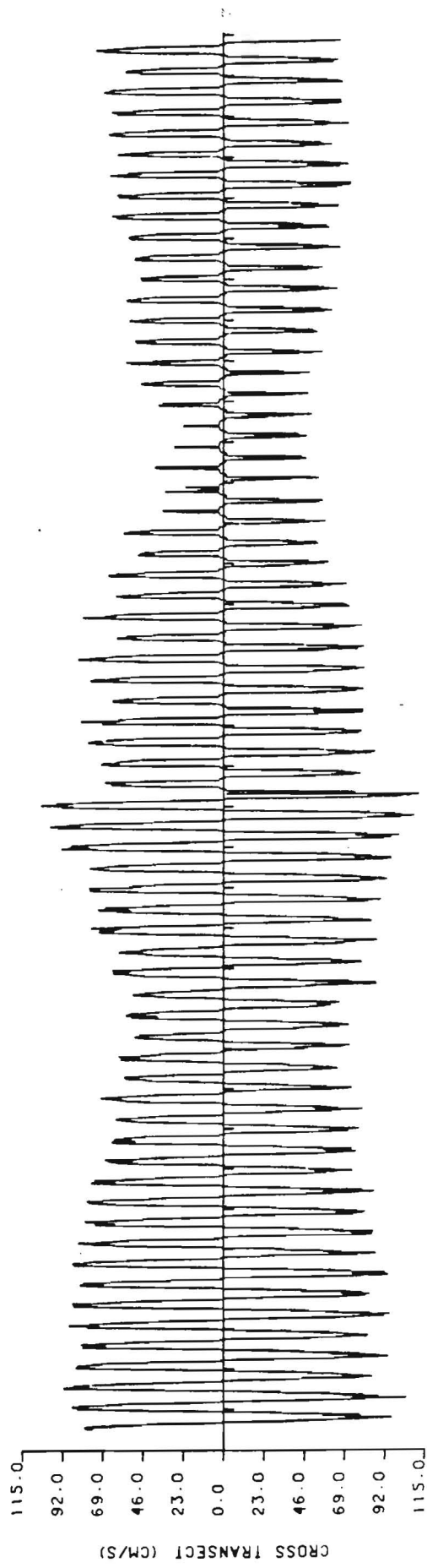
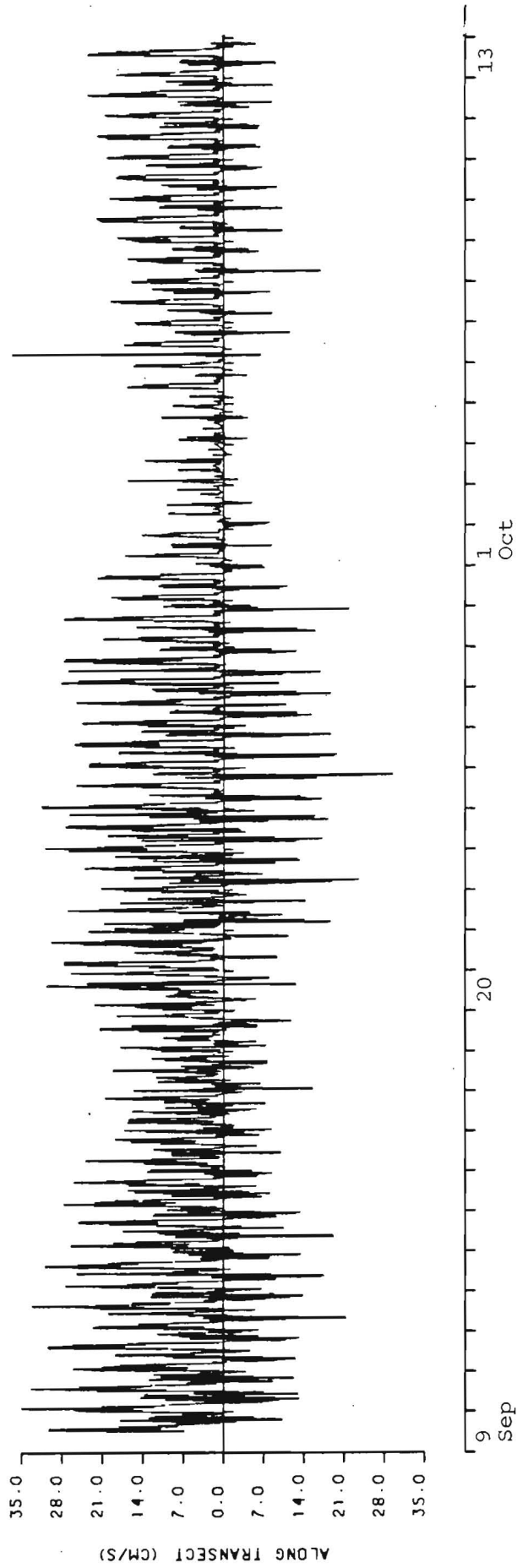
SCALE = 10.0 CM/S PER TICK

A1351 09/09/88 12:25EST DELTA T= 5 MIN



1 TICK = 10 KILOMETERS





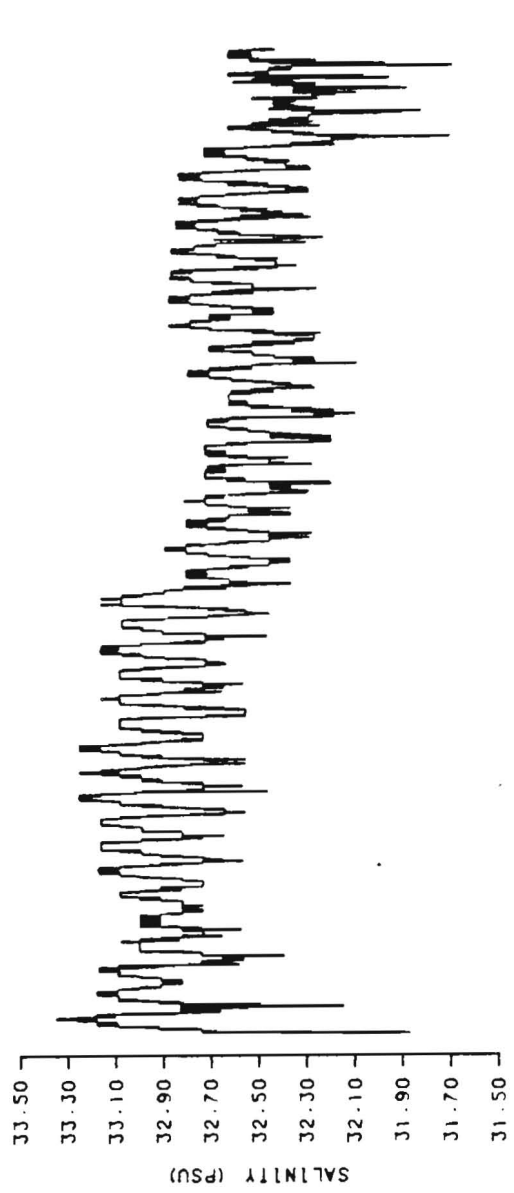
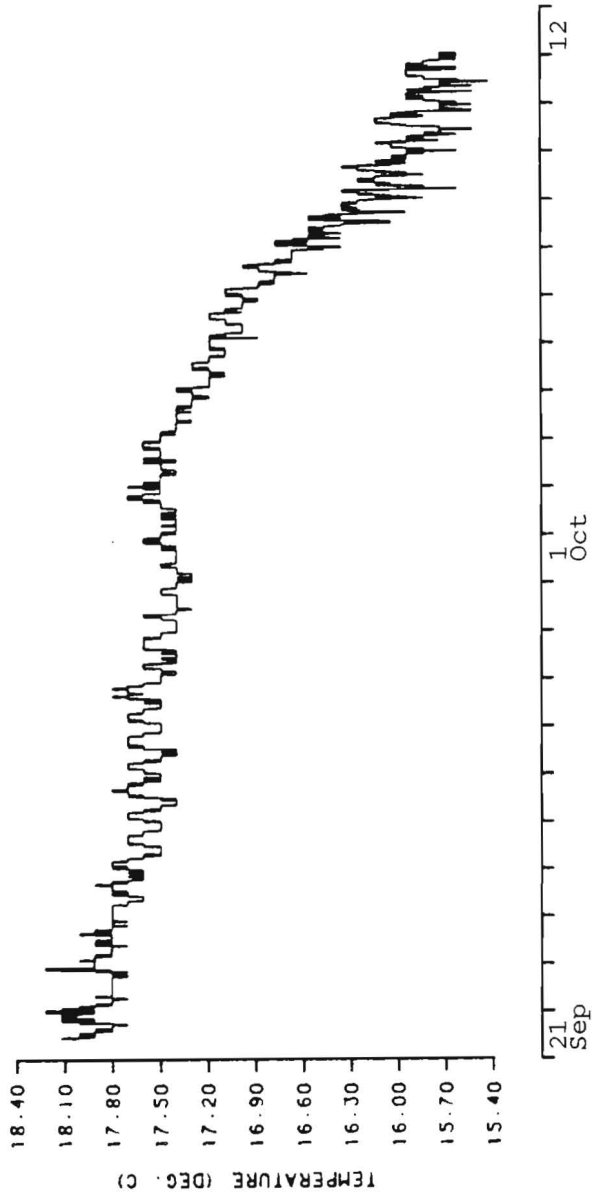
Current meter : ENDECO #1740107
 Station # and location : 6N , 41 15.4N 72 16.6W
 Instrument depth (MLW) : 4.0m
 Water depth (MLW) : 17.7m
 Start time : 09/21/88 11:04 EST
 Stop time : 10/12/88 01:18 EST
 Duration : 20 days 14 hours 14 minutes
 Sampling interval : 2 minutes
 Comments:

Speed discarded for being unreliable.

NUMBER OF CURRENT DATA POINTS = 0
 NUMBER OF TEMPERATURE POINTS = 14827
 NUMBER OF SALINITY POINTS = 14827

UNITS: TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		TEMP	SAL
MEAN	=	17.20	32.71
VARIANCE	=	0.41	0.13
STD. DEV.	=	0.64	0.36
MAX.	=	18.22	33.35
MIN.	=	15.42	31.68



Current meter : AANDERAA #A1127
 Station # and location : 6N , 41 15.4N 72 16.6W
 Instrument depth (MLW) : 13.1m
 Water depth (MLW) : 17.7m
 Start time : 09/09/88 07:35 EST
 Stop time : 10/12/88 09:30 EST
 Duration : 33 days 1 hours 55 minutes
 Sampling interval : 5 minutes
 Comments:

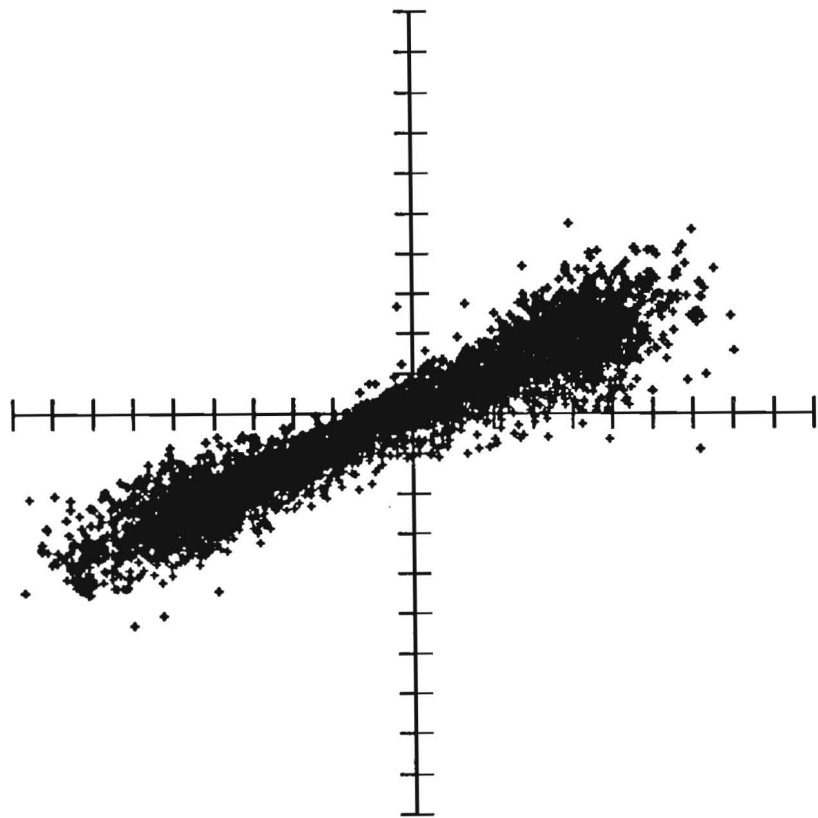
Speed abnormalities on 28 and 29 September gave rise to corresponding deformations in the velocity components. Possibly caused by temporary rotor fouling.

NUMBER OF CURRENT DATA POINTS = 9527
 NUMBER OF TEMPERATURE POINTS = 9527
 NUMBER OF SALINITY POINTS = 9527

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	-0.11	-8.89	38.95	8.89	17.74	30.84
VARIANCE	=	34.58	1825.86	422.46	930.22	0.56	0.04
STD. DEV.	=	5.88	42.73	20.55	30.50	0.75	0.20
MAX.	=	29.68	79.10	101.63		19.21	31.52
MIN.	=	-45.02	-101.28	1.70		15.80	30.12

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A1127 09/09/88

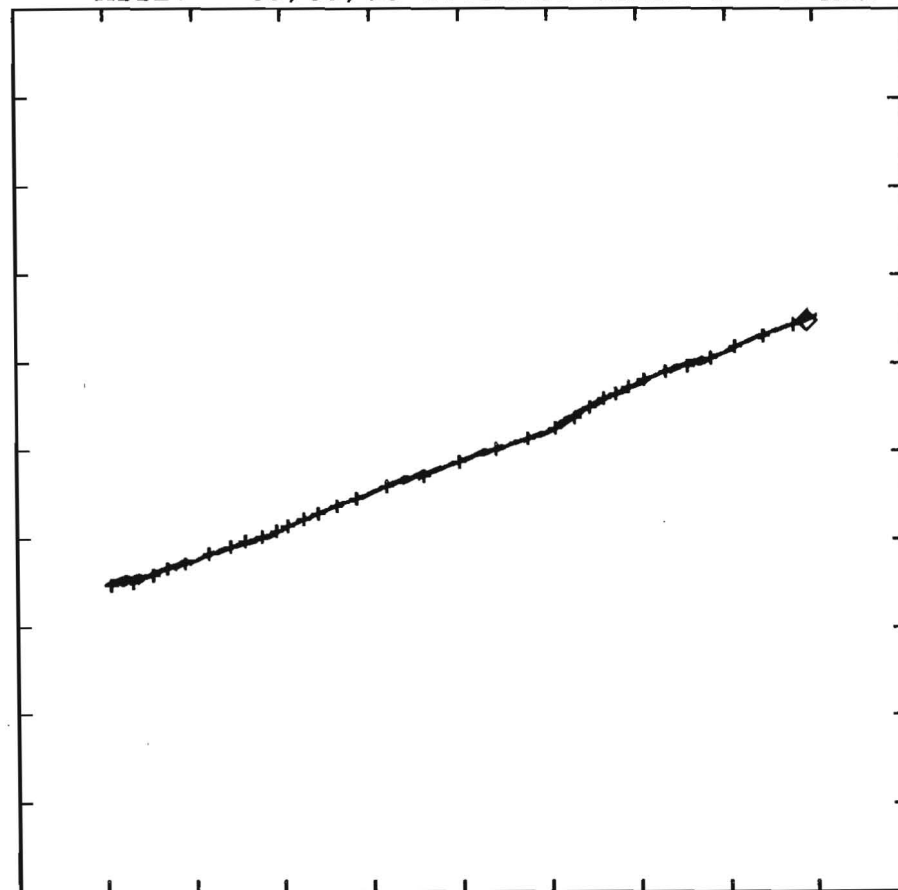
Station 6N , 41 15.4N 72 16.6W

Instrument depth(below MLW) = 13.1 m

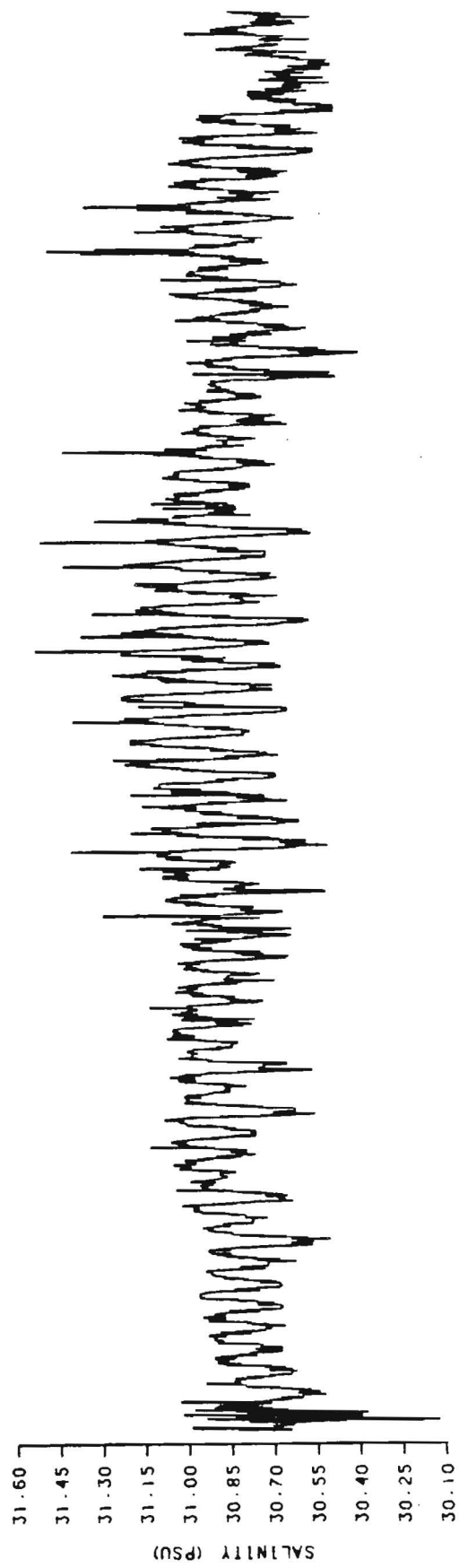
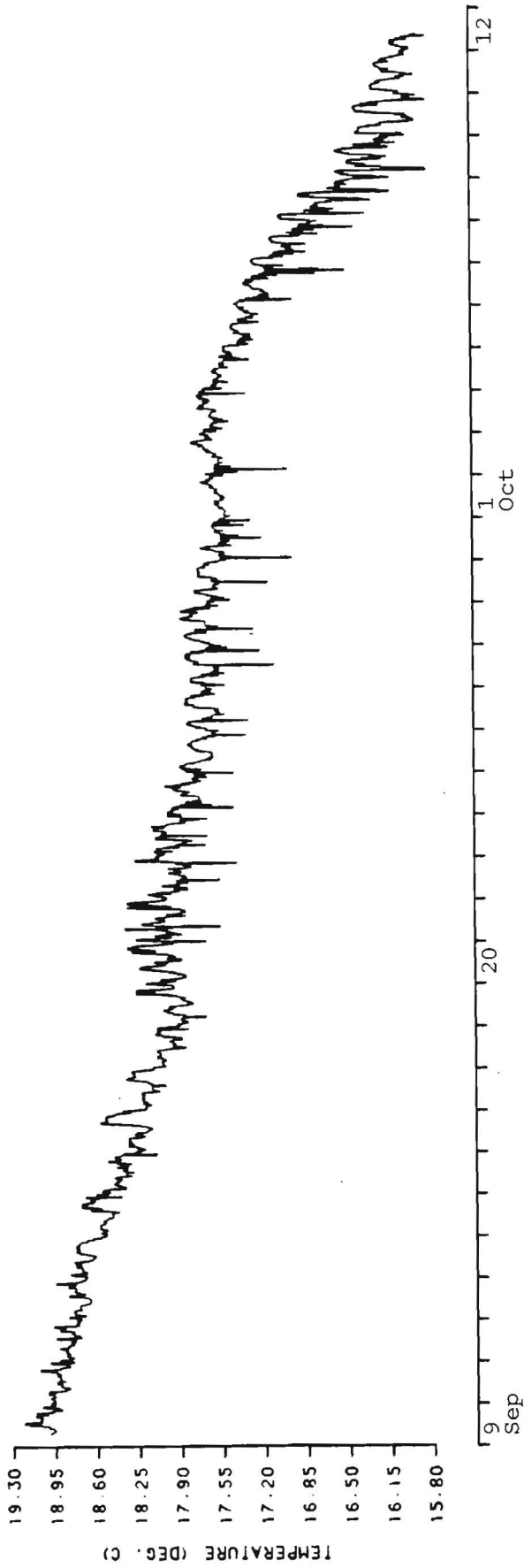
Water depth(relative to MLW) = 17.7 m

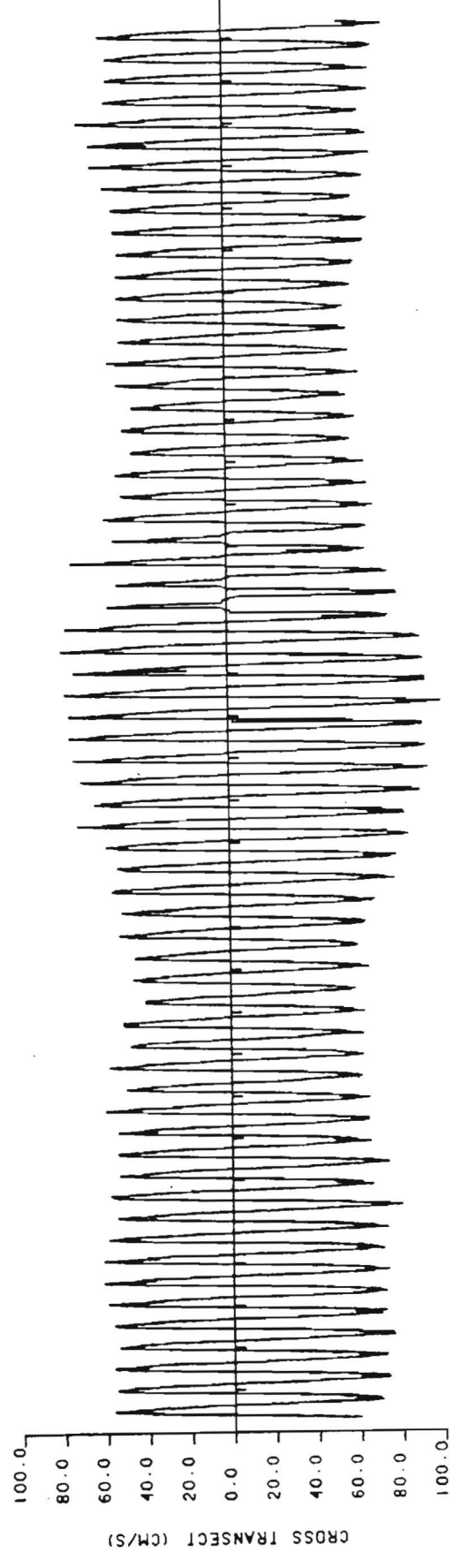
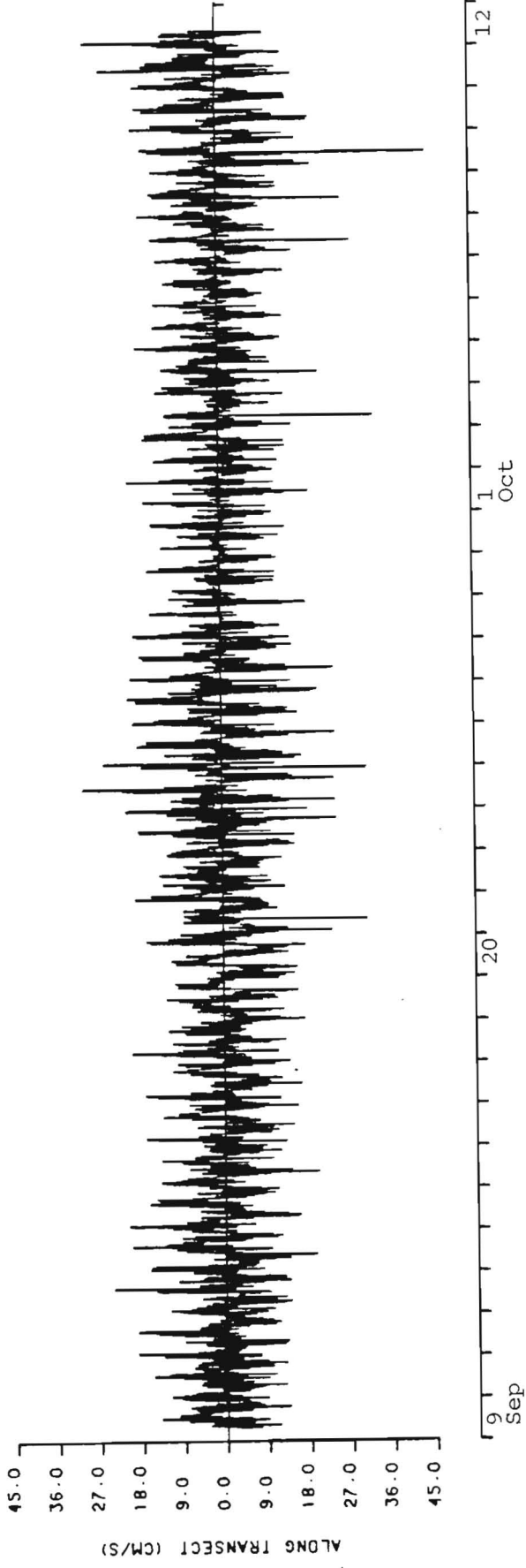
SCALE = 9.5 CM/S PER TICK

A1127 09/09/88 07:35EST DELTA T= 5 MIN



1 TICK = 30 KILOMETERS





Current meter : ENDECO #1740112
 Station # and location : 6C , 41 13.5N 72 15.9W
 Instrument depth (MLW) : 3.4m
 Water depth (MLW) : 42.7m
 Start time : 09/08/88 15:14 EST
 Stop time : 10/11/88 11:50 EST
 Duration : 32 days 20 hours 36 minutes
 Sampling interval : 2 minutes
 Comments:

Conductivity malfunctioned.

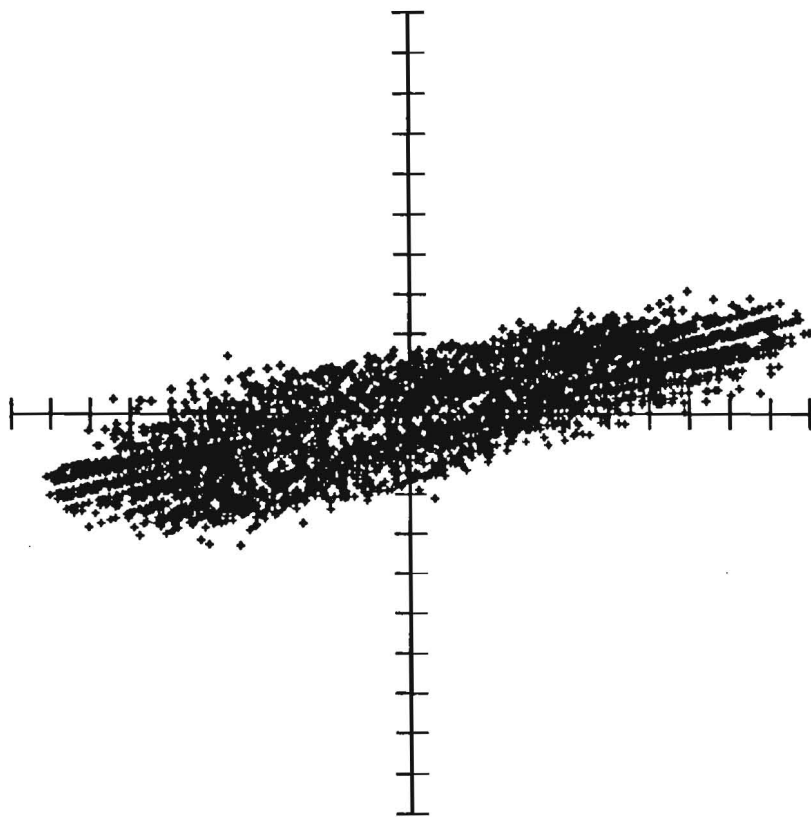
Speed gap from 30 September to 2 October; low reliability of velocities beyond 2 October.

NUMBER OF CURRENT DATA POINTS = 22026
 NUMBER OF TEMPERATURE POINTS = 23658
 NUMBER OF SALINITY POINTS = 0

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS)

		CURRENT		SPEED	VECTOR	TEMP
		COMPONENT TOWARDS				
		340	70			
MEAN	=	-2.33	9.14	76.08	9.43	18.11
VARIANCE	=	237.21	6971.40	1509.56	3604.31	0.75
STD. DEV.	=	15.40	83.49	38.85	60.04	0.86
MAX.	=	71.30	173.57	174.68		20.45
MIN.	=	-43.82	-154.55	0.00		16.08

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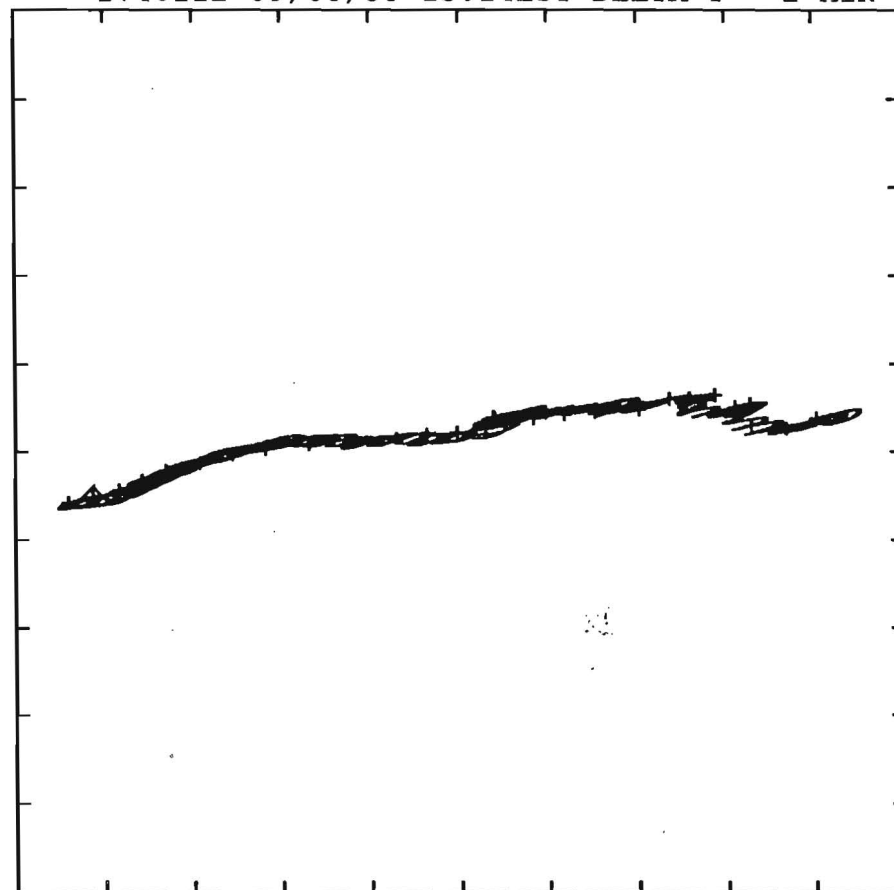
Station 6C , 41 13.5N 72 15.9W

Instrument depth(below MLW) = 3.4 m

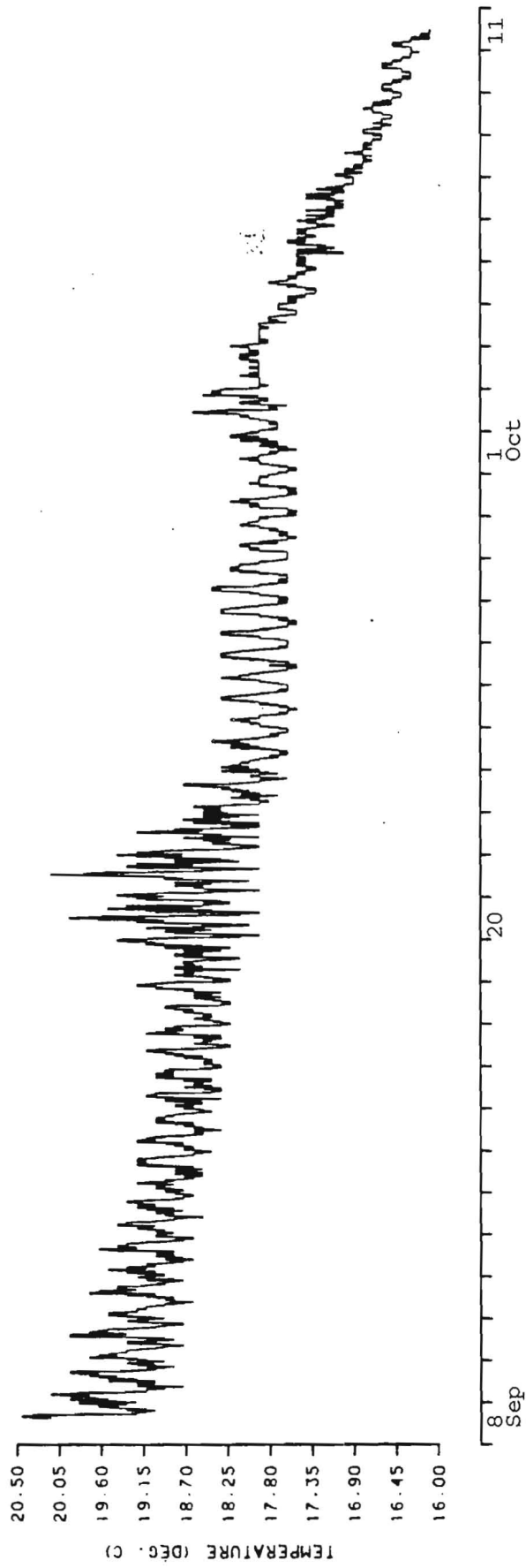
Water depth(relative to MLW) = 42.7 m

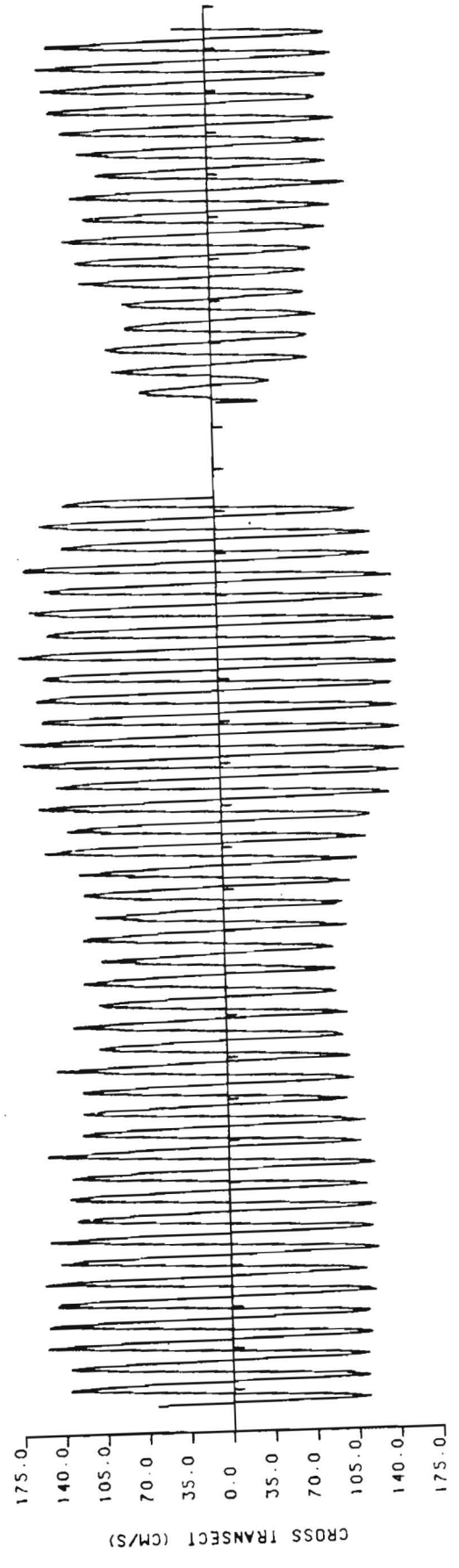
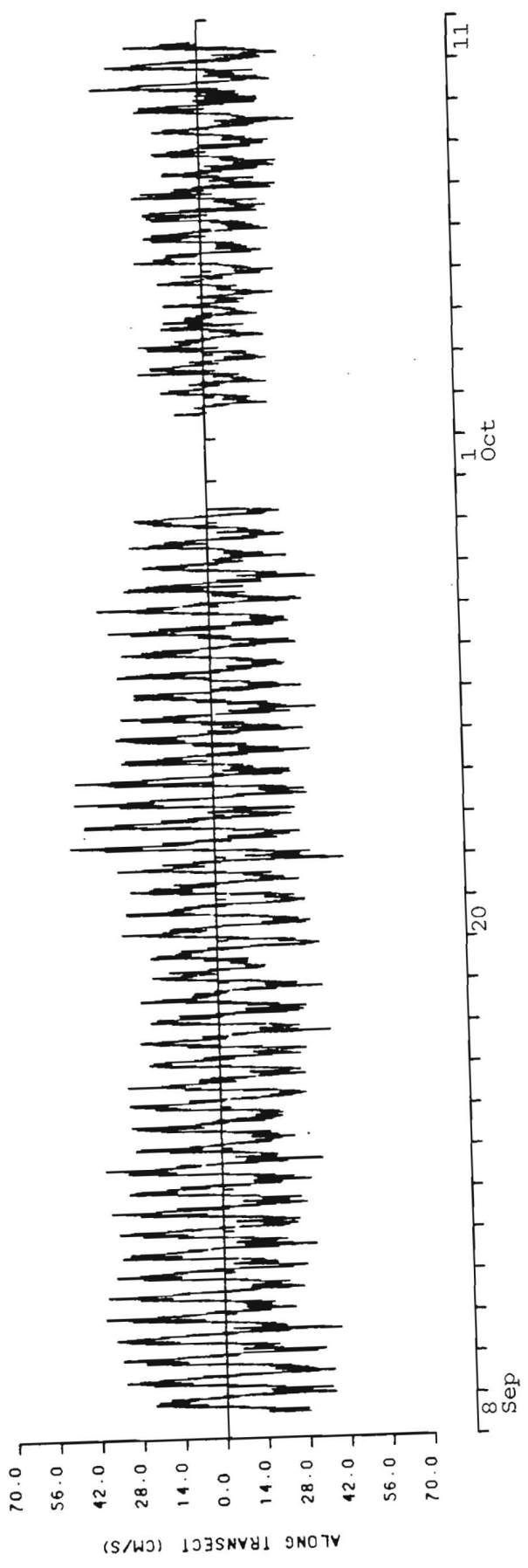
SCALE = 16.5 CM/S PER TICK

1740112 09/08/88 15:14EST DELTA T= 2 MIN



1 TICK = 30 KILOMETERS





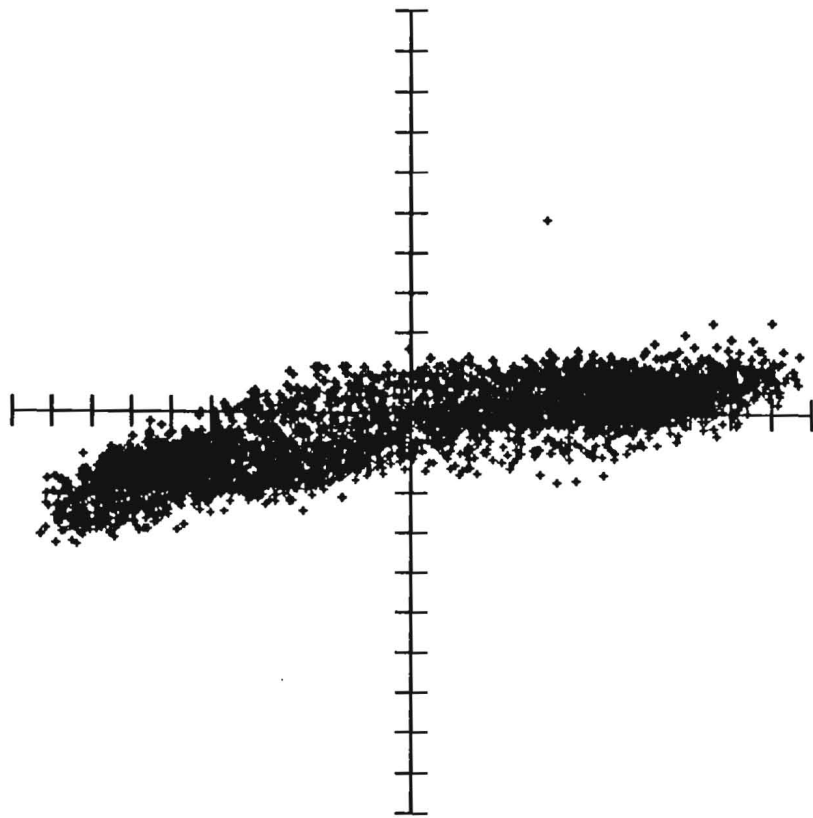
Current meter : AANDERAA #A3330
 Station # and location : 6C , 41 13.5N 72 15.9W
 Instrument depth (MLW) : 15.5m
 Water depth (MLW) : 42.7m
 Start time : 09/09/88 09:00 EST
 Stop time : 10/09/88 15:35 EST
 Duration : 30 days 6 hours 35 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 8719
 NUMBER OF TEMPERATURE POINTS = 8719
 NUMBER OF SALINITY POINTS = 8719

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT COMPONENT TOWARDS		SPEED	VECTOR	TEMP	SAL
		340	70				
MEAN	=	-5.89	-0.45	62.28	5.90	17.97	31.01
VARIANCE	=	203.86	4631.76	990.80	2417.81	0.34	0.05
STD. DEV.	=	14.28	68.06	31.48	49.17	0.58	0.22
MAX.	=	45.65	129.89	135.42		19.55	31.60
MIN.	=	-49.69	-135.42	1.18		16.35	30.28

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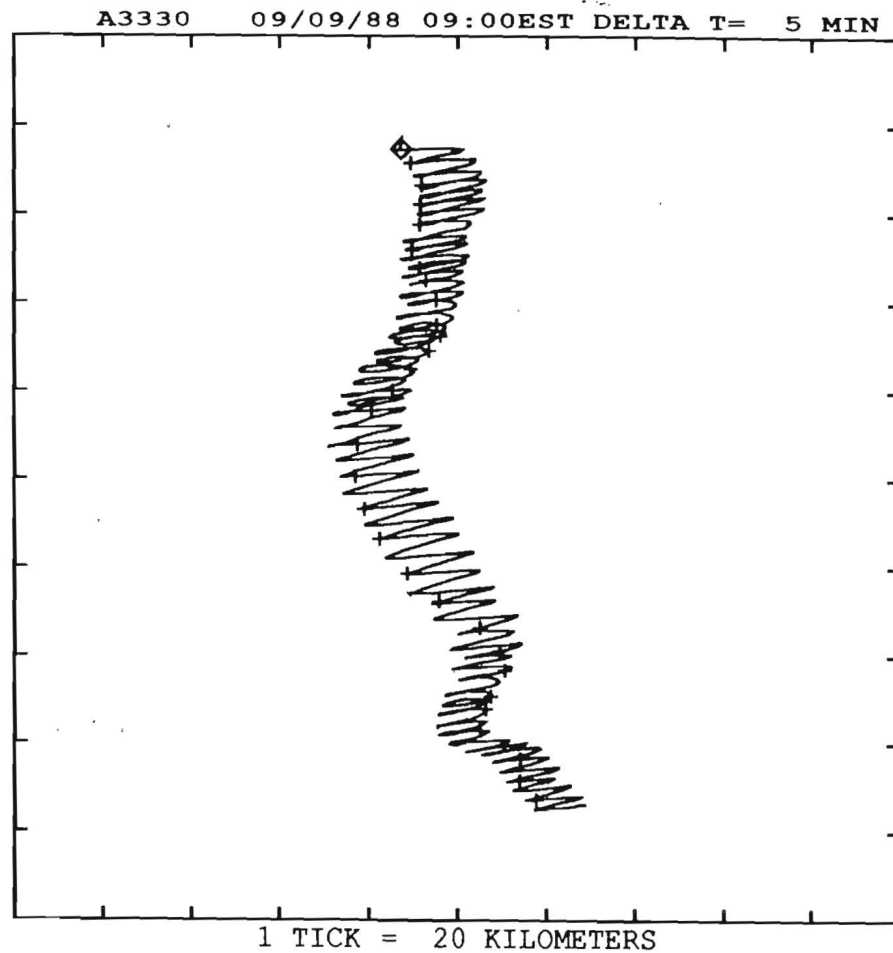
A3330 09/09/88

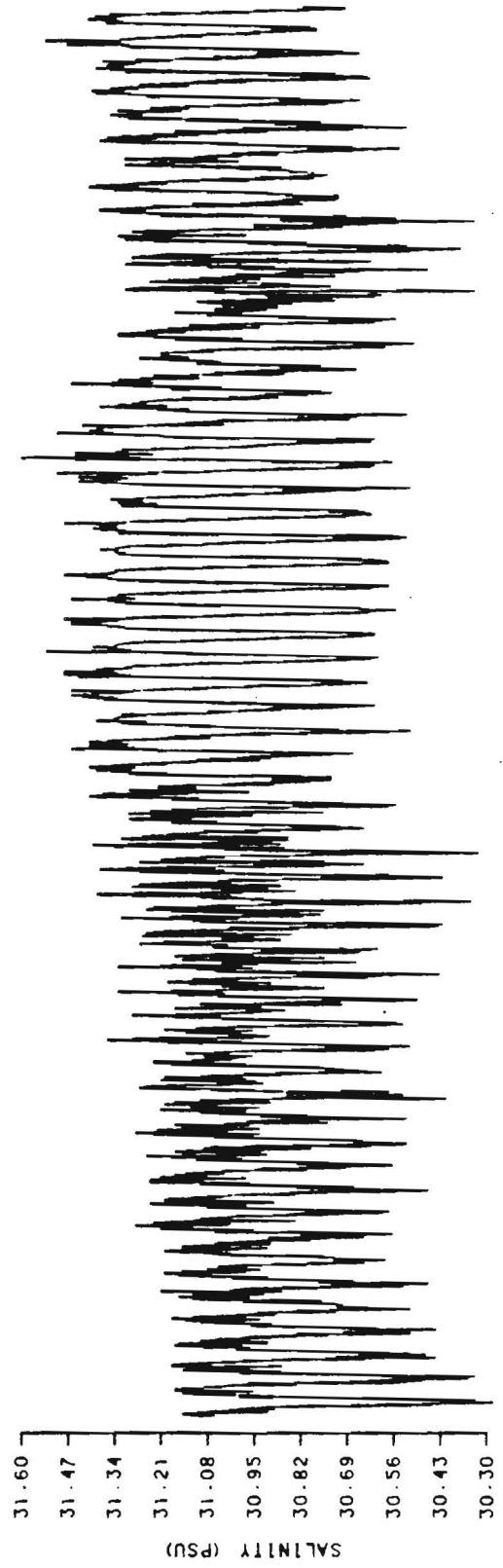
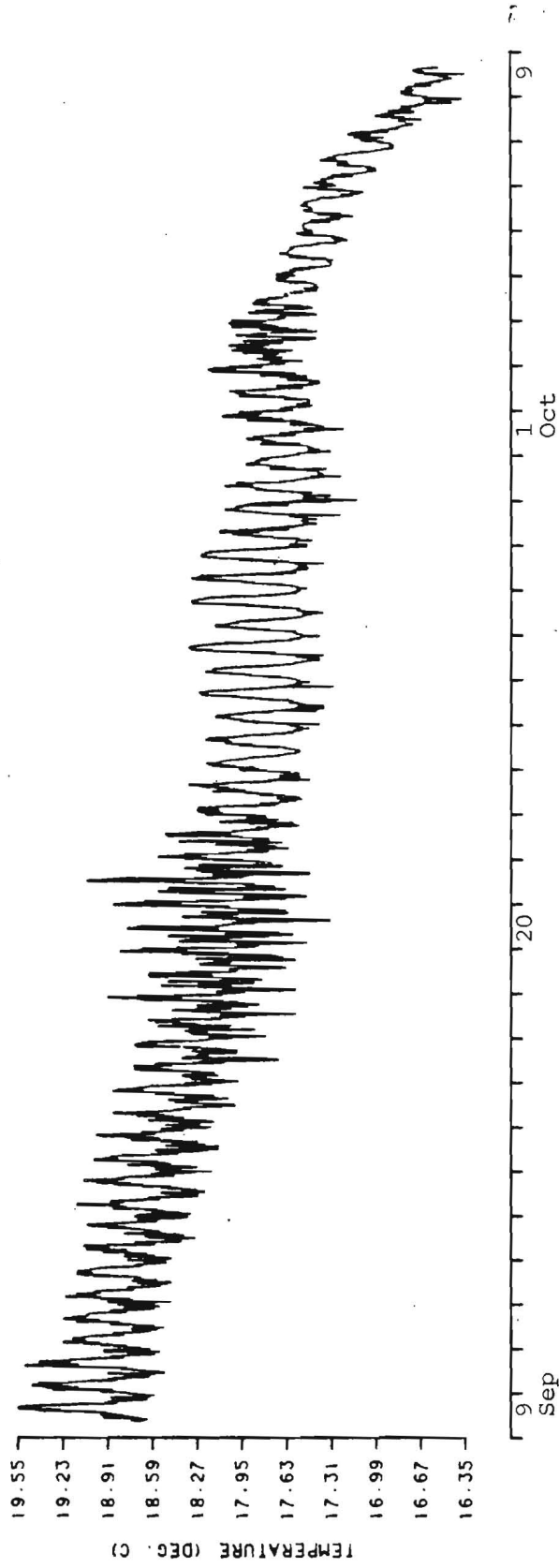
Station 6C , 41 13.5N 72 15.9W

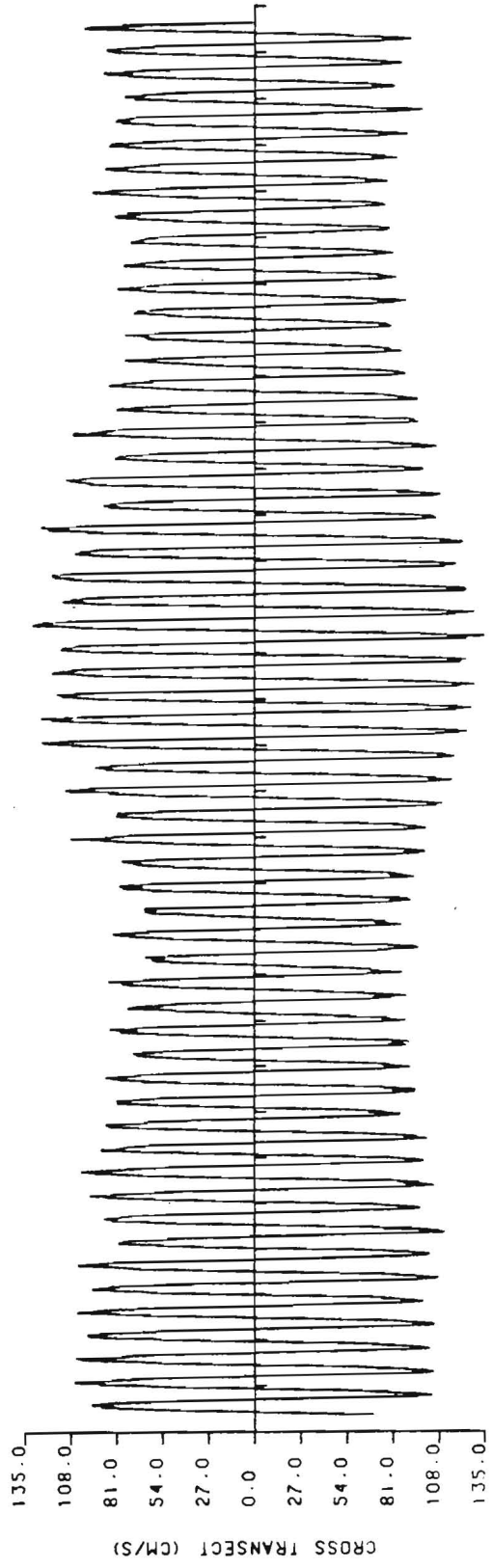
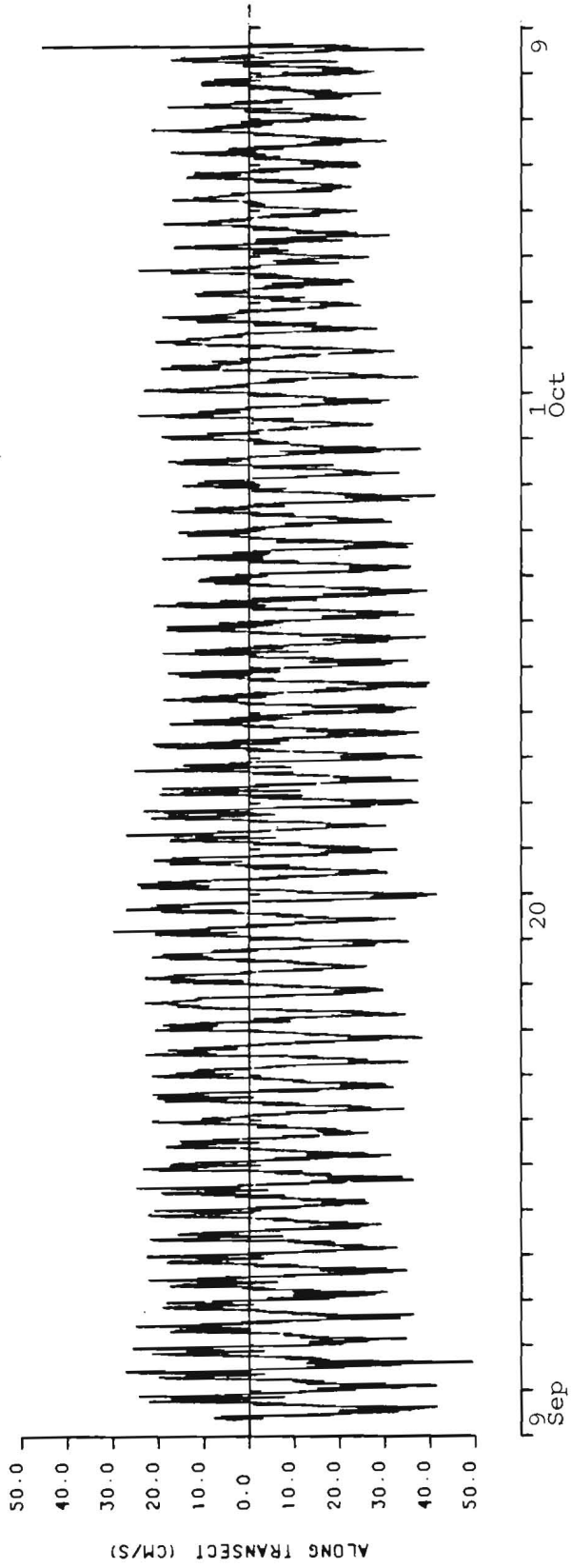
Instrument depth(below MLW) = 15.5 m

Water depth(relative to MLW) = 42.7 m

SCALE = 13.5 CM/S PER TICK







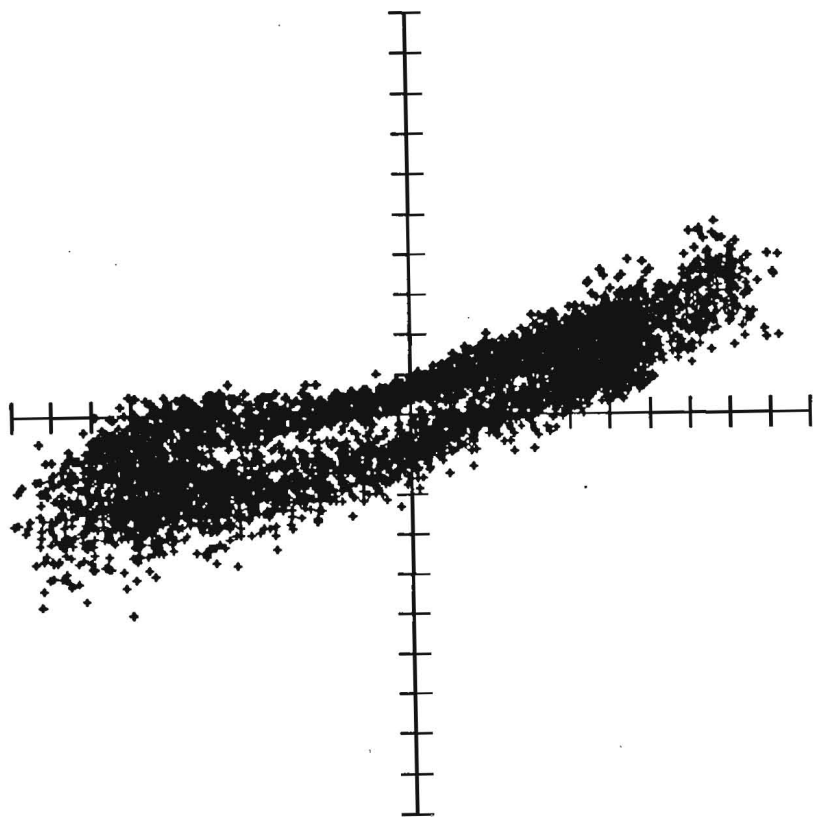
Current meter : AANDERAA #A1137
 Station # and location : 6C , 41 13.5N 72 15.9W
 Instrument depth (MLW) : 27.7m
 Water depth (MLW) : 42.7m
 Start time : 09/09/88 09:10 EST
 Stop time : 10/12/88 11:50 EST
 Duration : 33 days 2 hours 40 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9536
 NUMBER OF TEMPERATURE POINTS = 9536
 NUMBER OF SALINITY POINTS = 9536

UNITS: SPEED (CM/S), TEMPERATURE (DEG. CELSIUS), SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	2.24	-6.12	51.38	6.51	17.67	31.15
VARIANCE	=	88.89	3142.58	633.82	1615.74	0.43	0.03
STD. DEV.	=	9.43	56.06	25.18	40.20	0.66	0.17
MAX.	=	32.41	112.97	121.50		19.26	31.53
MIN.	=	-40.98	-121.50	1.70		15.88	30.57

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A1137 09/09/88

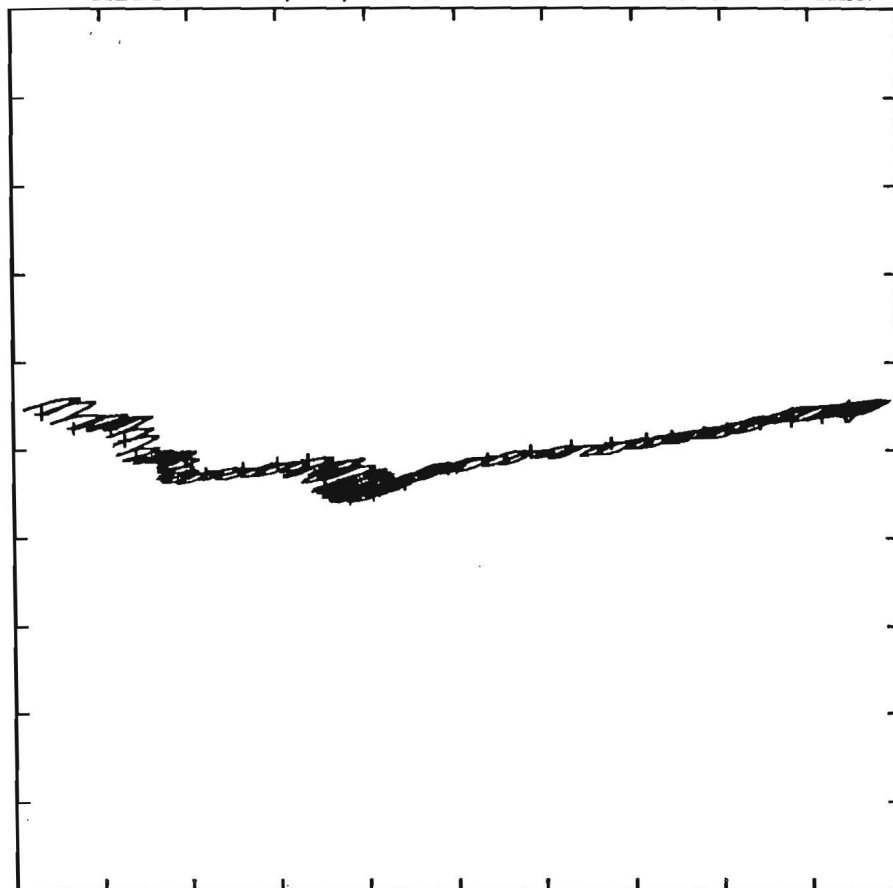
Station 6C , 41 13.5N 72 15.9W

Instrument depth(below MLW) = 27.7 m

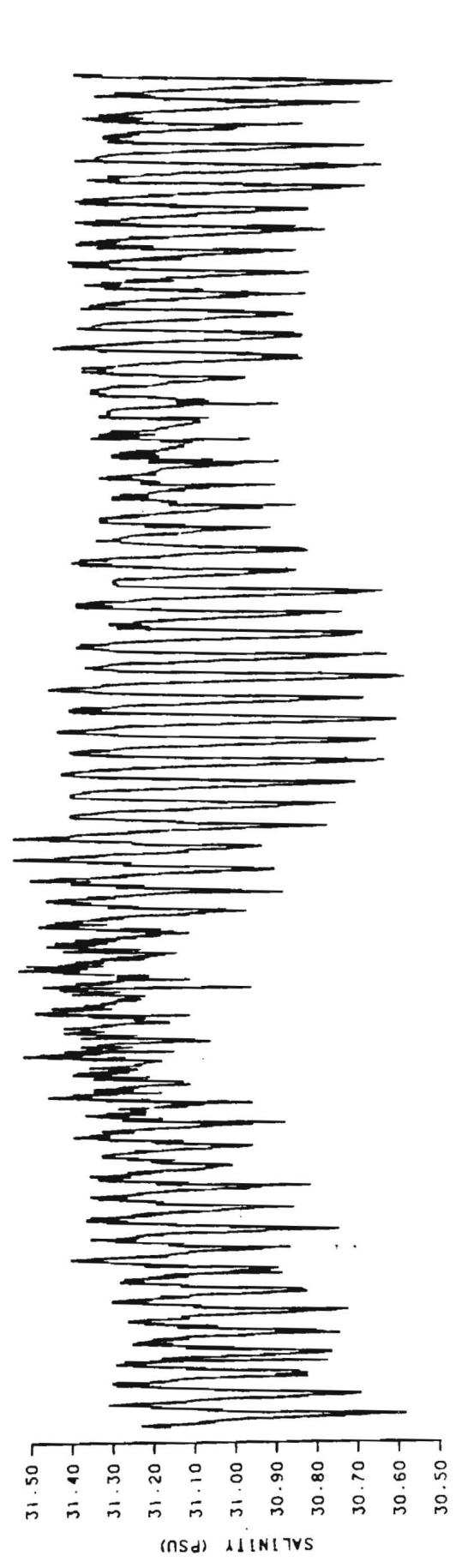
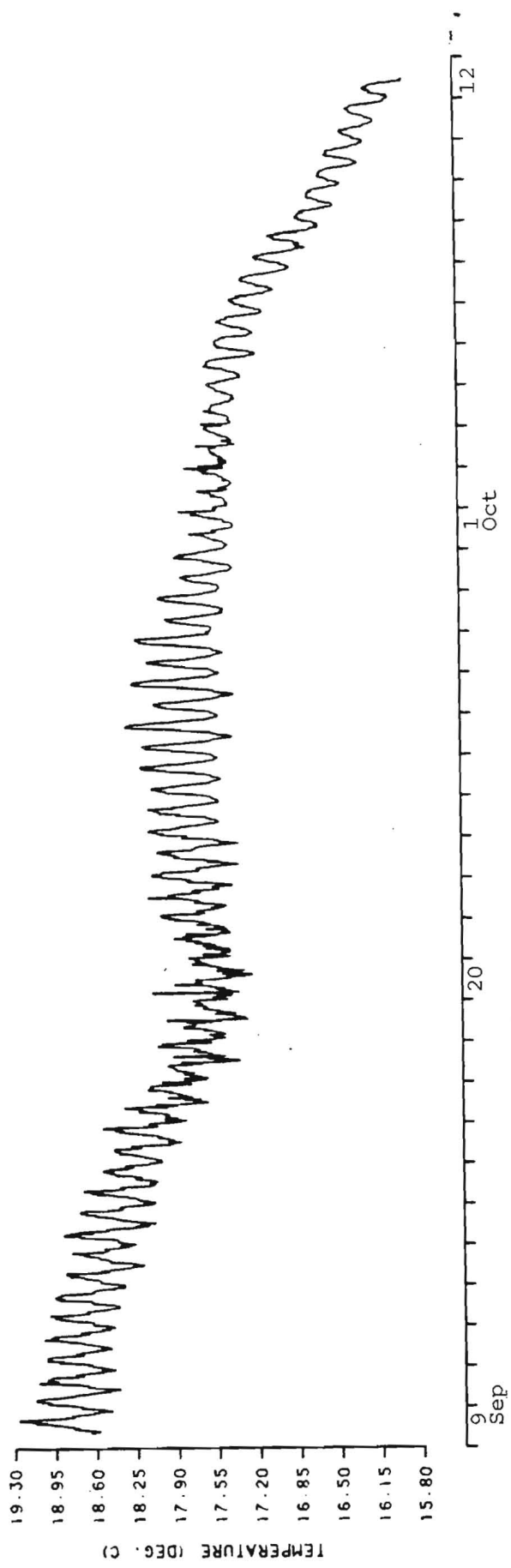
Water depth(relative to MLW) = 42.7 m

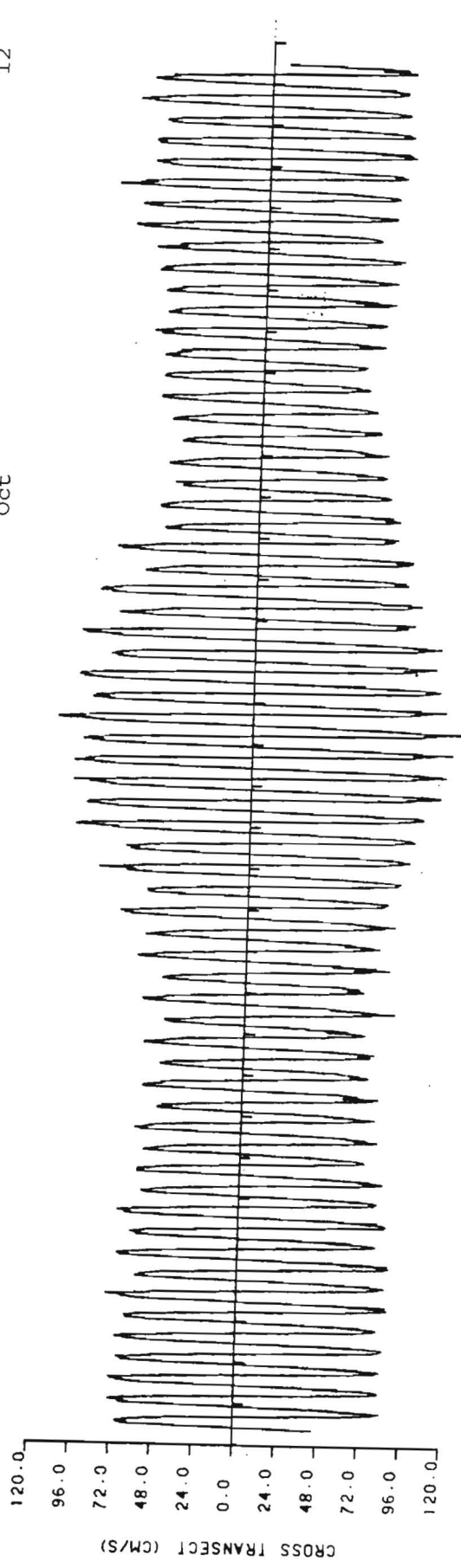
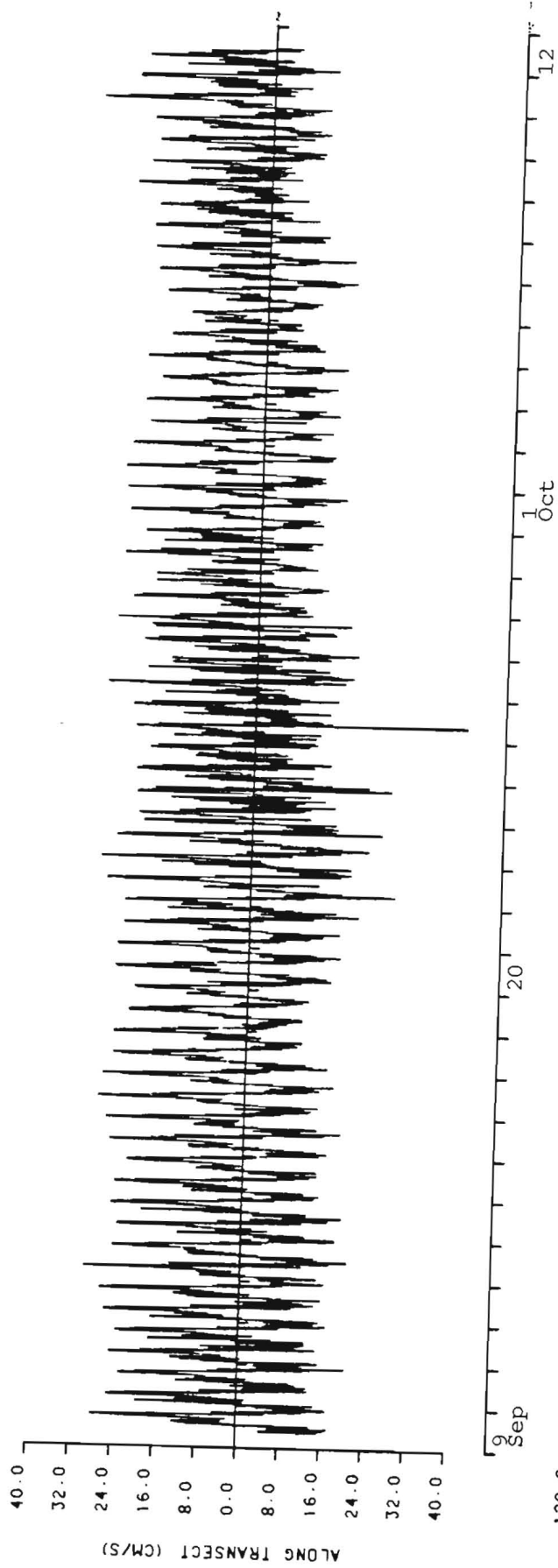
SCALE = .11.0 CM/S PER TICK

A1137 09/09/88 09:10EST DELTA T= 5 MIN



1 TICK = 20 KILOMETERS





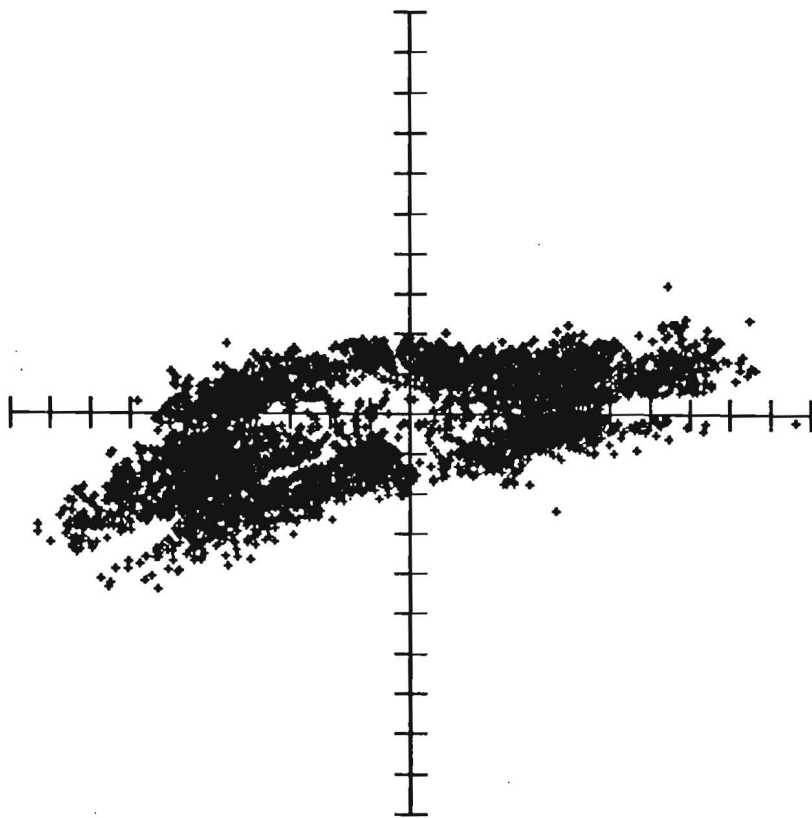
Current meter : AANDERAA #A1130
 Station # and location : 6C , 41 13.5N 72 15.9W
 Instrument depth (MLW) : 39.9m
 Water depth (MLW) : 42.7m
 Start time : 09/09/88 08:45 EST
 Stop time : 10/12/88 11:50 EST
 Duration : 33 days 3 hours 5 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9541
 NUMBER OF TEMPERATURE POINTS = 9541
 NUMBER OF SALINITY POINTS = 9541

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	-1.18	-7.96	41.01	8.05	17.69	30.52
VARIANCE	=	143.50	1805.75	332.02	974.63	0.40	0.70
STD. DEV.	=	11.98	42.49	18.22	31.22	0.64	0.84
MAX.	=	33.82	94.24	102.78		19.12	31.75
MIN.	=	-37.08	-102.69	2.25		15.89	28.74

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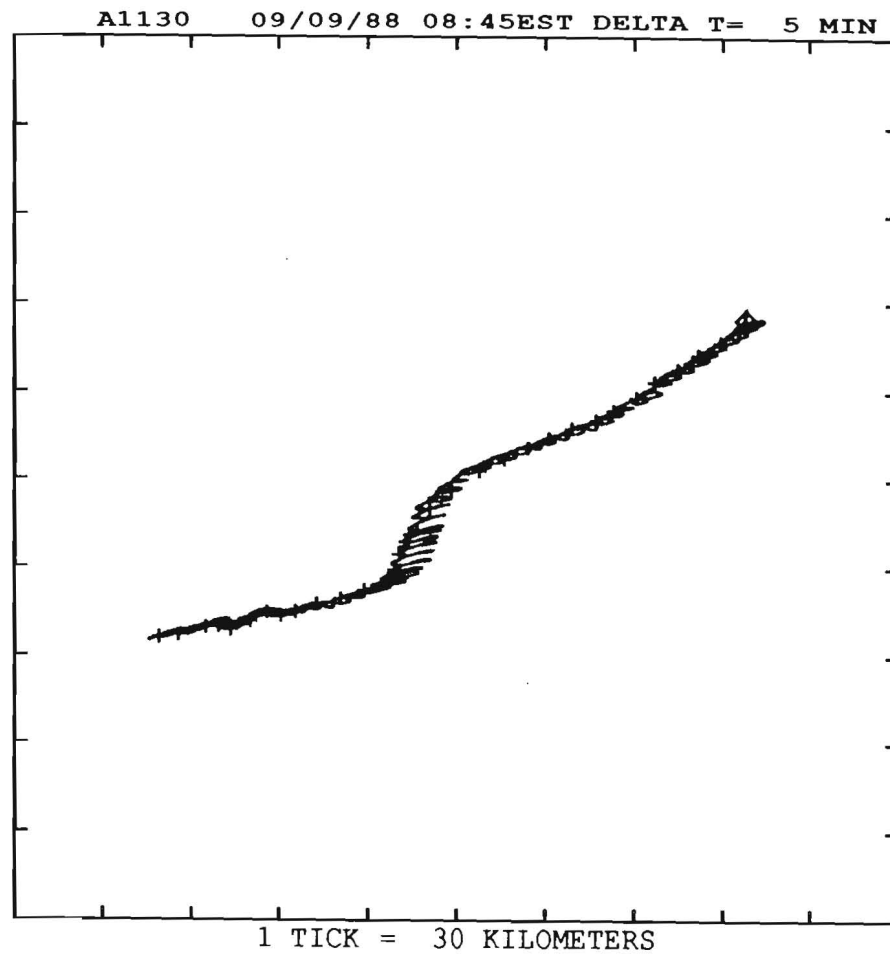
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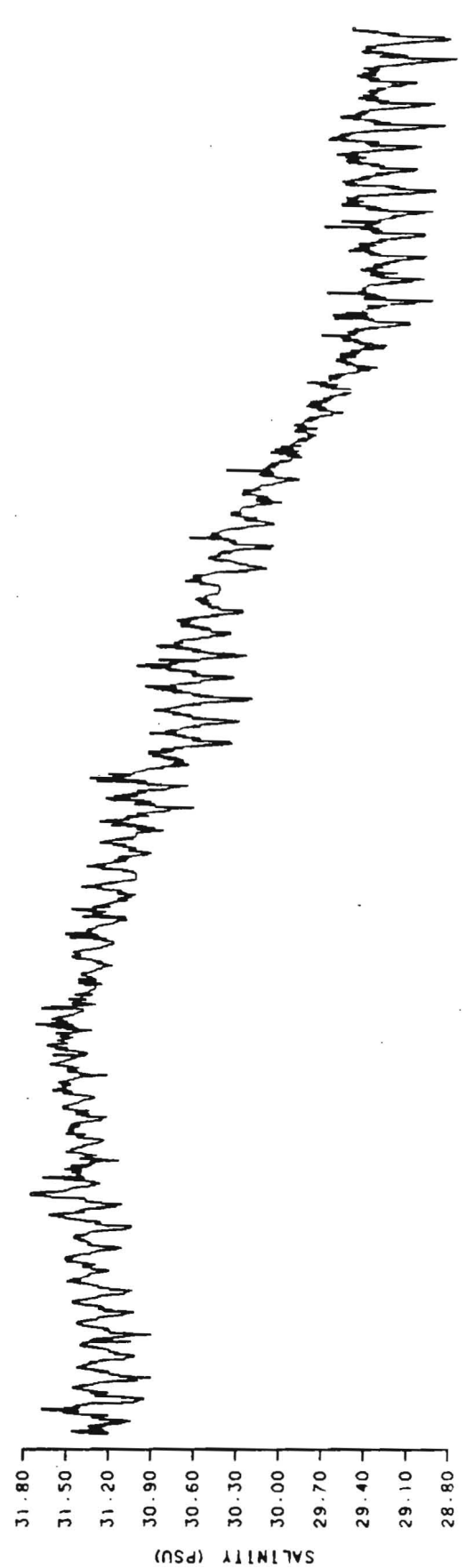
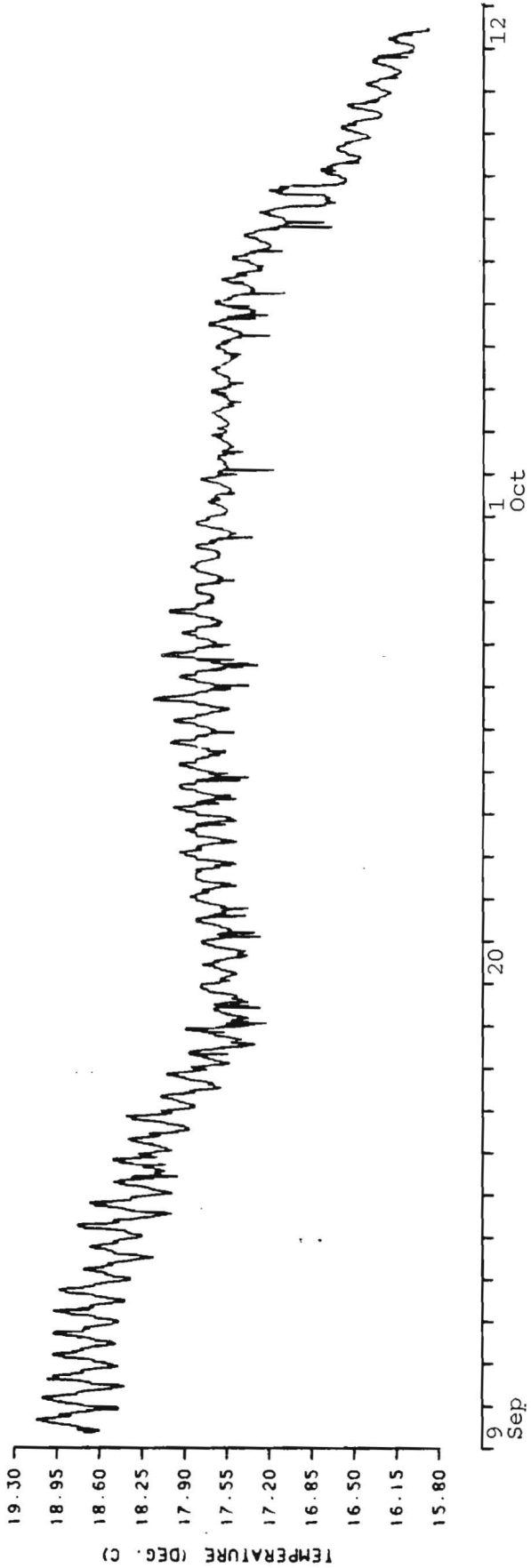
Station 6C , 41 13.5N 72 15.9W

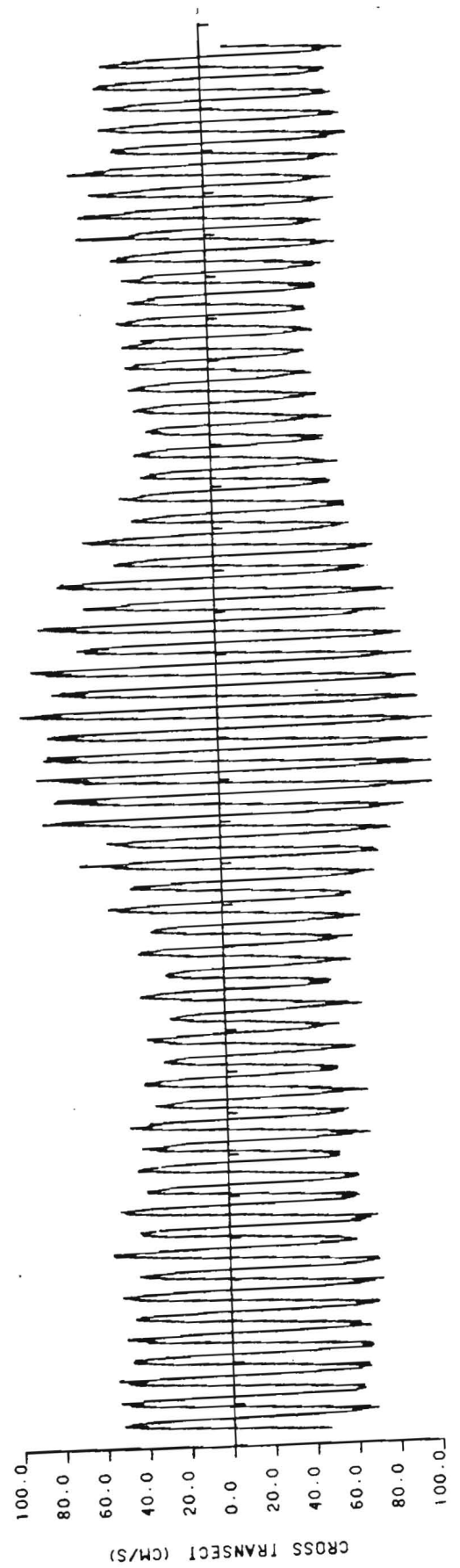
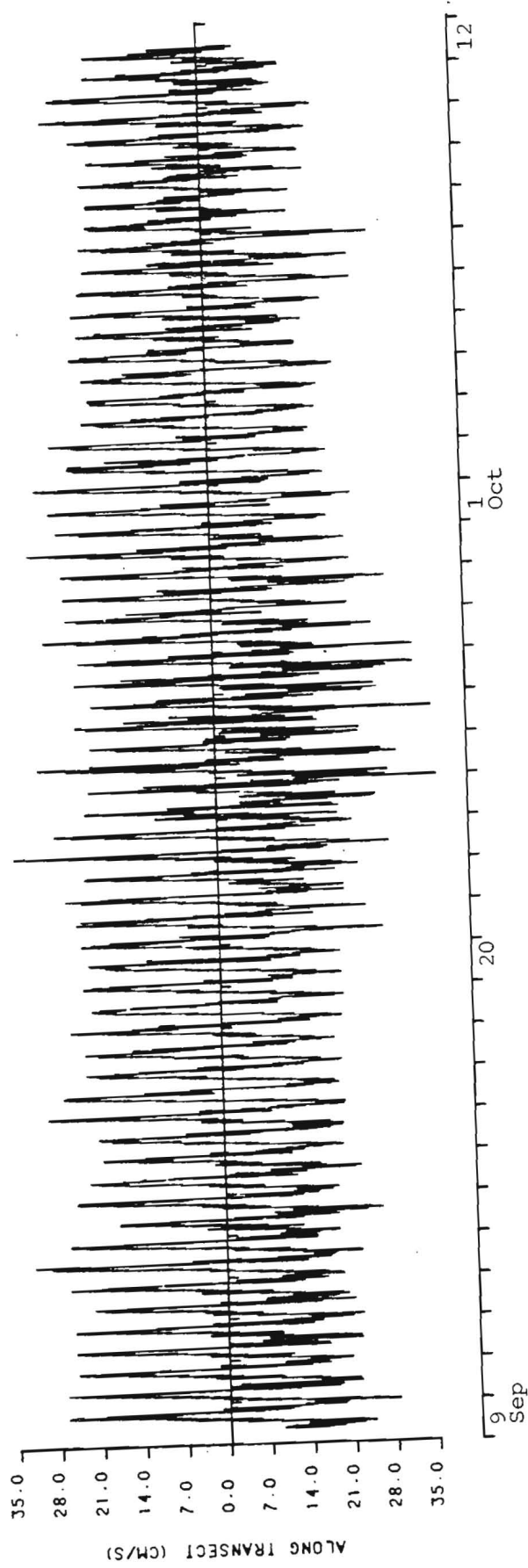
Instrument depth(below MLW) = 39.9 m

Water depth(relative to MLW) = 42.7 m

SCALE = 10.5 CM/S PER TICK







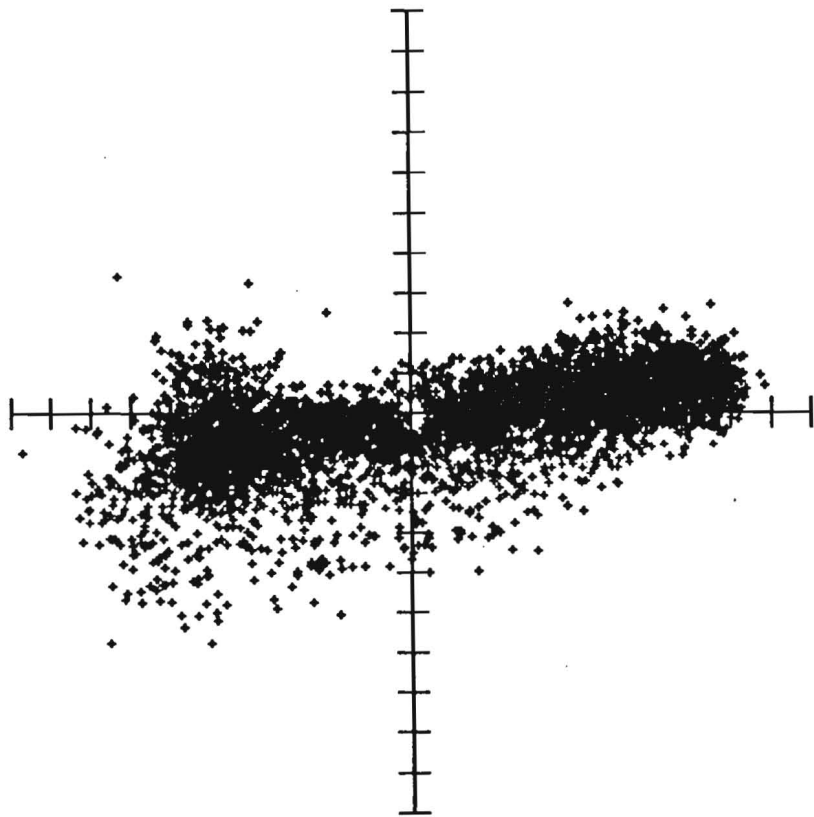
Current meter : AANDERAA #A1353
 Station # and location : 6S , 41 11.0N 72 14.5W
 Instrument depth (MLW) : 7.6m
 Water depth (MLW) : 41.1m
 Start time : 09/09/88 09:55 EST
 Stop time : 10/13/88 14:20 EST
 Duration : 34 days 4 hours 25 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9845
 NUMBER OF TEMPERATURE POINTS = 9845
 NUMBER OF SALINITY POINTS = 9845

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	-6.85	9.87	55.52	12.02	18.18	30.65
VARIANCE	=	267.99	3307.39	636.68	1787.69	1.01	0.04
STD. DEV.	=	16.37	57.51	25.23	42.28	1.00	0.19
MAX.	=	74.33	111.34	127.18		19.98	31.26
MIN.	=	-92.85	-123.32	1.70		15.49	29.86

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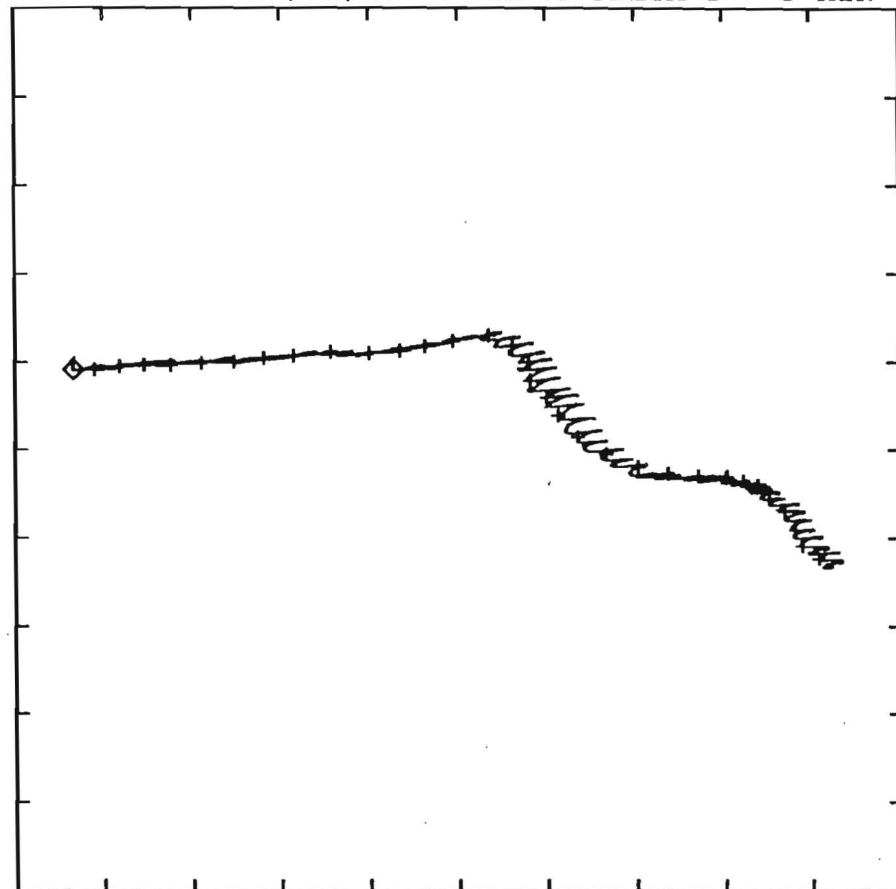
Station 6S , 41 11.0N 72 14.5W

Instrument depth(below MLW) = 7.6 m

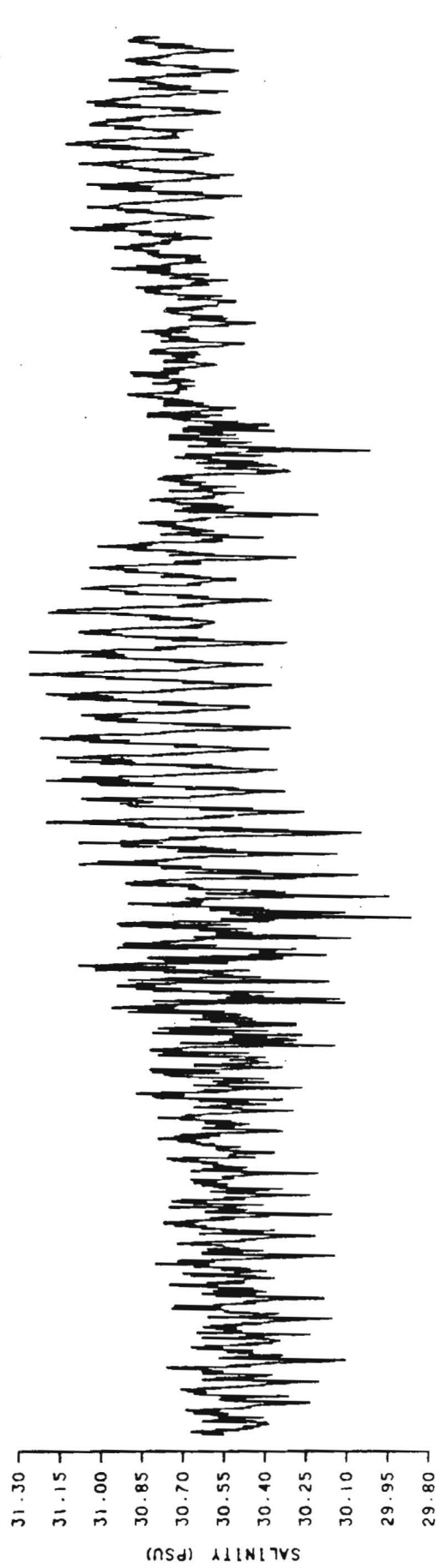
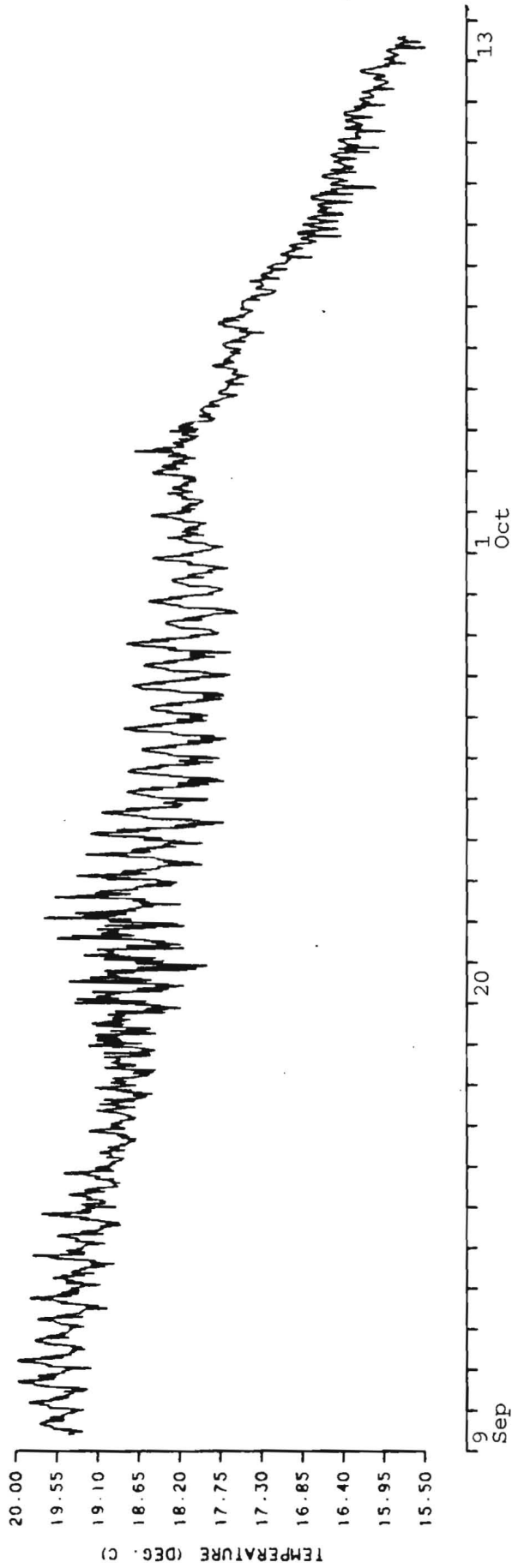
Water depth(relative to MLW) = 41.1 m

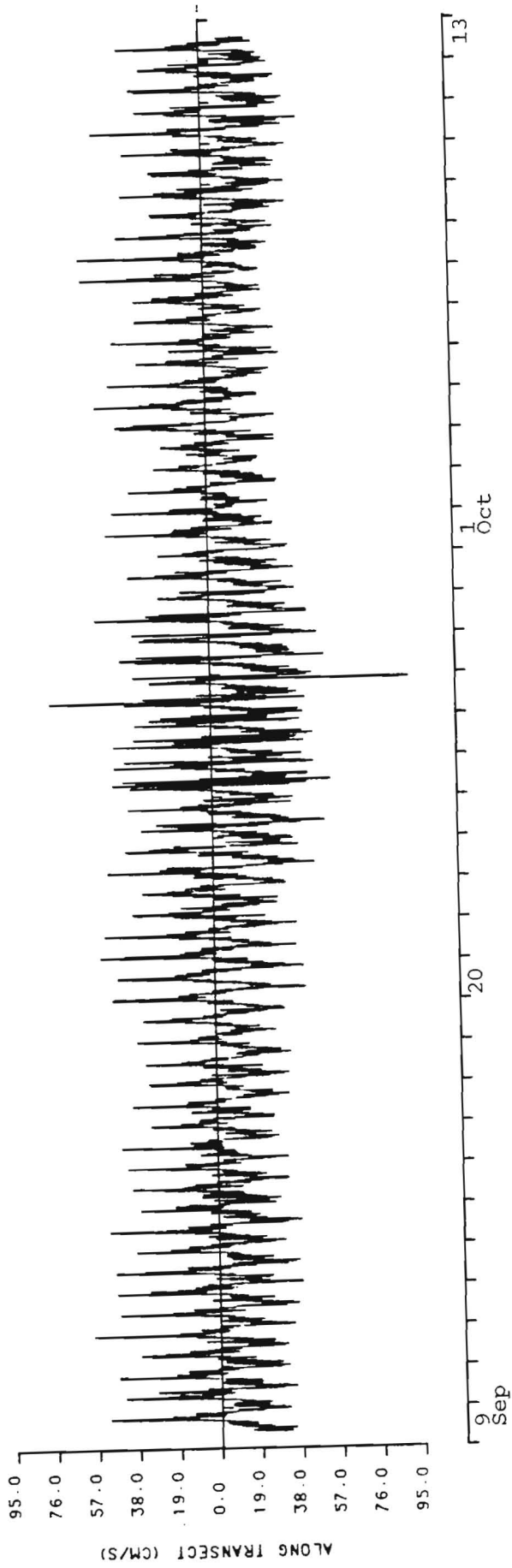
SCALE = 13.0 CM/S PER TICK

A1353 09/09/88 09:55EST DELTA T= 5 MIN

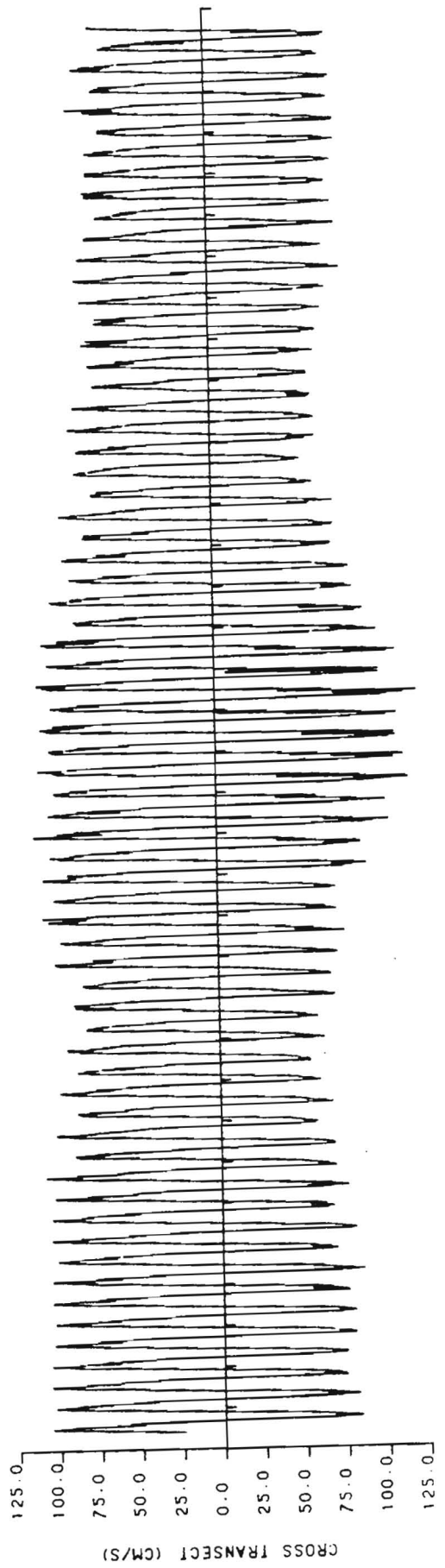


1 TICK = 40 KILOMETERS





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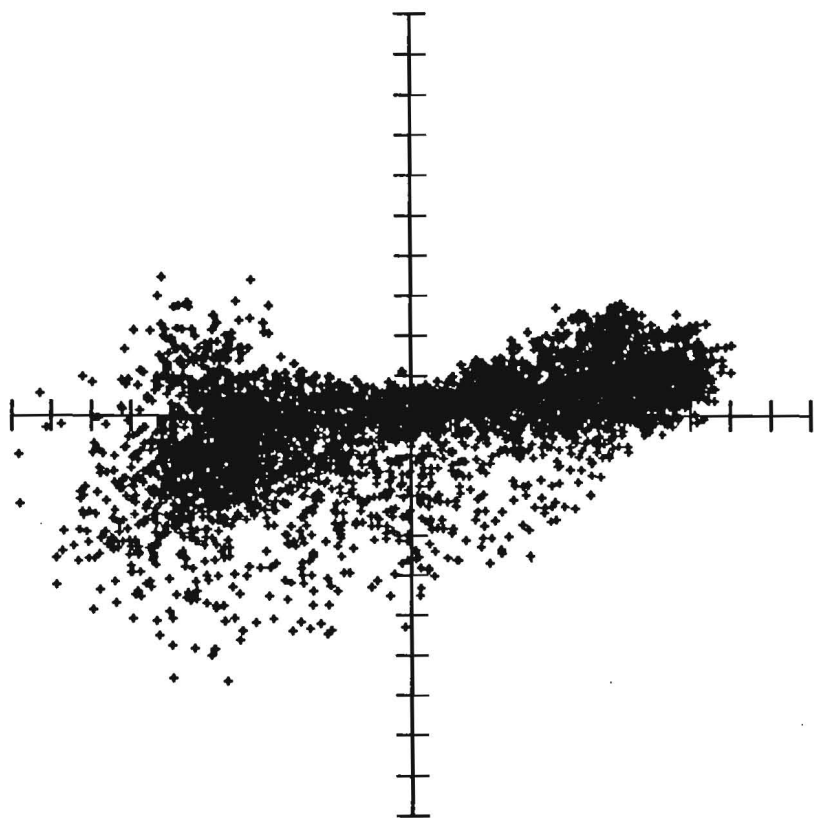
Current meter : AANDERAA #A1352
 Station # and location : 6S , 41 11.0N 72 14.5W
 Instrument depth (MLW) : 16.2m
 Water depth (MLW) : 42.1m
 Start time : 09/09/88 10:50 EST
 Stop time : 10/13/88 21:50 EST
 Duration : 34 days 11 hours
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9924
 NUMBER OF TEMPERATURE POINTS = 9924
 NUMBER OF SALINITY POINTS = 9924

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

		CURRENT		SPEED	VECTOR	TEMP	SAL
		COMPONENT TOWARDS					
		340	70				
MEAN	=	-2.73	4.28	53.05	5.07	18.06	30.57
VARIANCE	=	276.38	3183.81	671.83	1730.10	1.02	0.05
STD. DEV.	=	16.62	56.43	25.92	41.59	1.01	0.21
MAX.	=	70.16	105.92	130.69		19.84	31.95
MIN.	=	-64.56	-129.60	1.68		15.39	29.95

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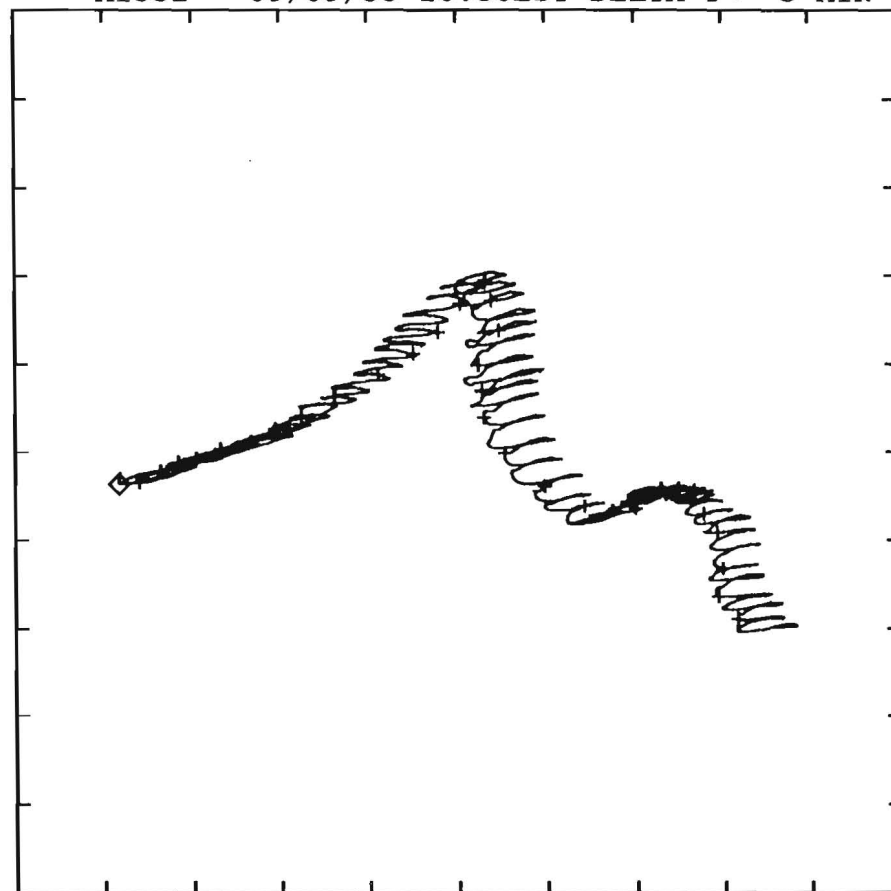
Station 6S , 41 11.0N 72 14.5W

Instrument depth(below MLW) = 16.2 m

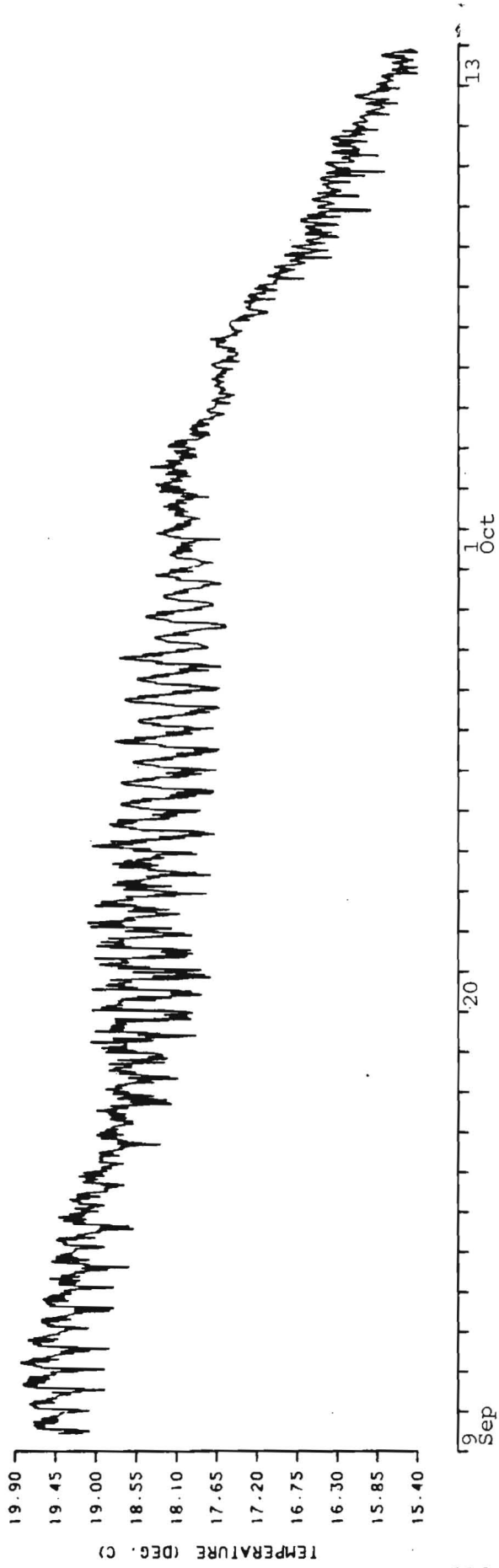
Water depth(relative to MLW) = 42.1 m

SCALE = 13.0 CM/S PER TICK

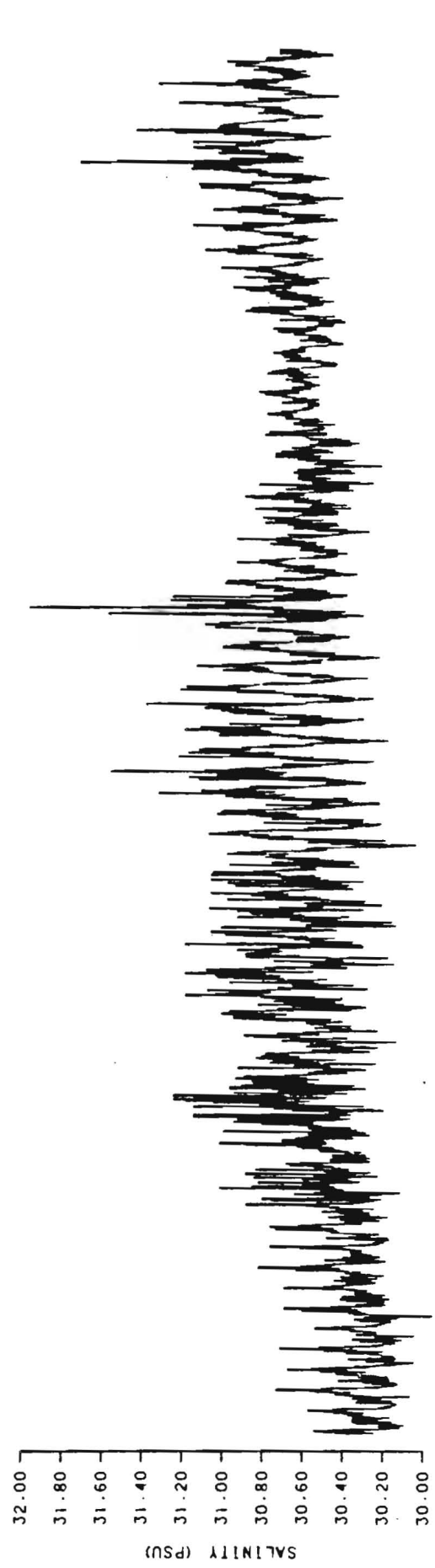
A1352 09/09/88 10:50EST DELTA T= 5 MIN

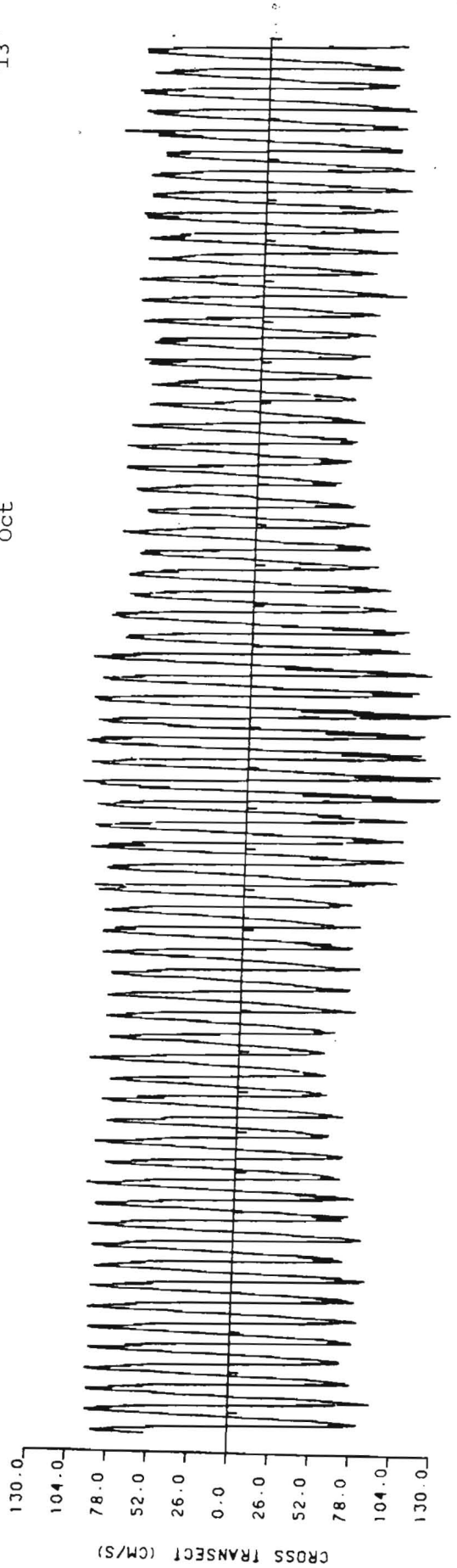
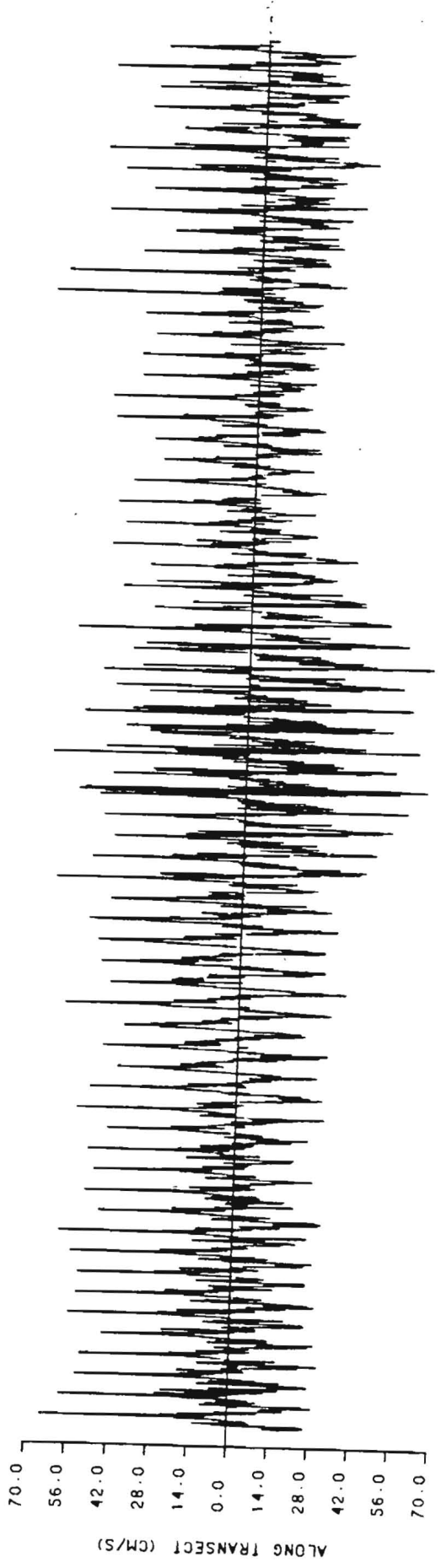


1 TICK = 20 KILOMETERS



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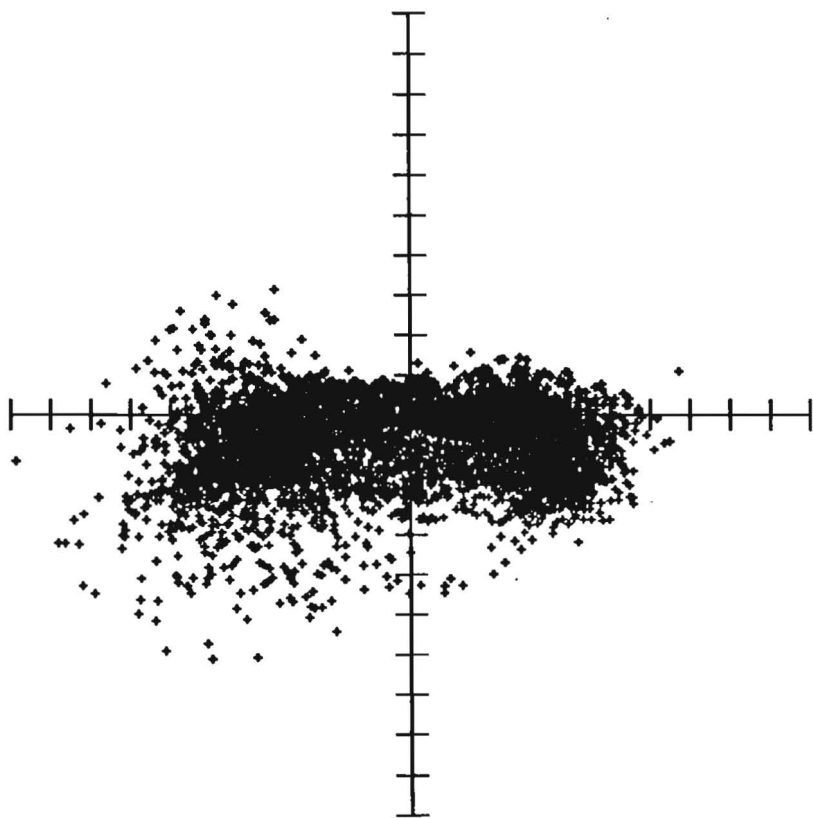
Current meter : AANDERAA #A1345
 Station # and location : 6S , 41 11.0N 72 14.5W
 Instrument depth (MLW) : 26.8m
 Water depth (MLW) : 42.1m
 Start time : 09/09/88 11:10 EST
 Stop time : 10/13/88 19:35 EST
 Duration : 34 days 8 hours 25 minutes
 Sampling interval : 5 minutes
 Comments:

NUMBER OF CURRENT DATA POINTS = 9893
 NUMBER OF TEMPERATURE POINTS = 9893
 NUMBER OF SALINITY POINTS = 9893

UNITS: SPEED (CM/S) , TEMPERATURE (DEG. CELSIUS) , SALINITY (PSU)

	CURRENT		SPEED	VECTOR	TEMP	SAL
	COMPONENT	TOWARDS				
	340	70				
MEAN	= -7.57	-7.15	40.91	10.41	17.91	30.38
VARIANCE	= 323.84	1637.77	395.89	980.80	0.90	0.13
STD. DEV.	= 18.00	40.47	19.90	31.32	0.95	0.37
MAX.	= 61.39	89.02	129.47		19.74	31.22
MIN.	= -58.07	-125.99	1.77		15.45	29.17

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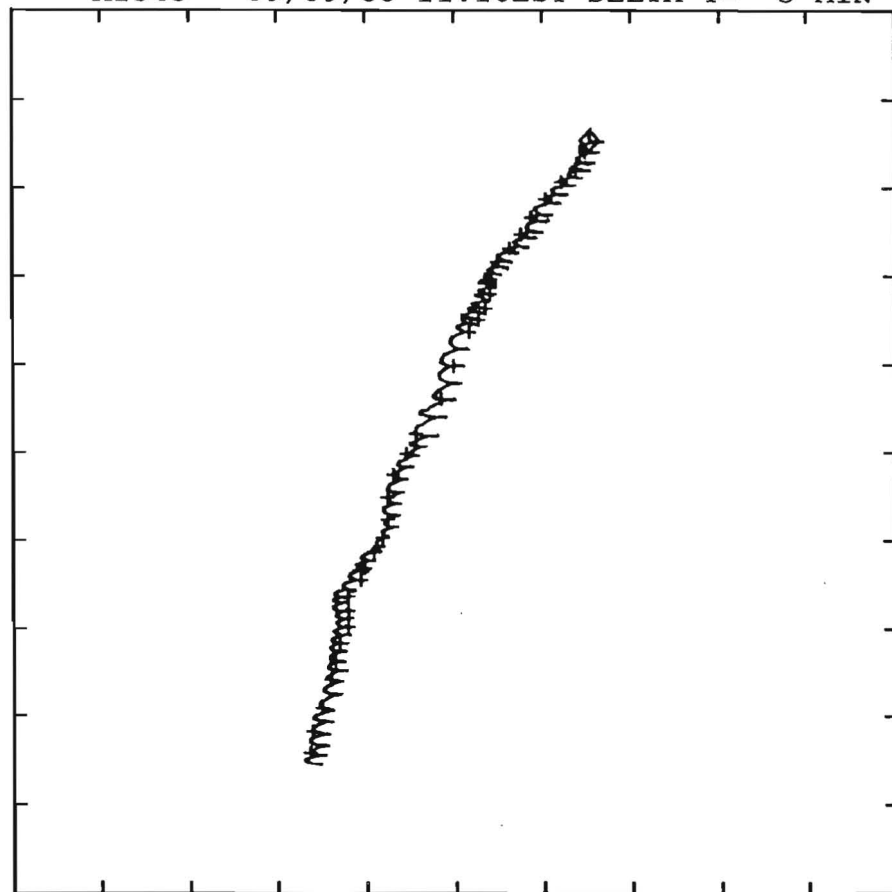
Station 6S , 41 11.0N 72 14.5W

Instrument depth(below MLW) = 26.8 m

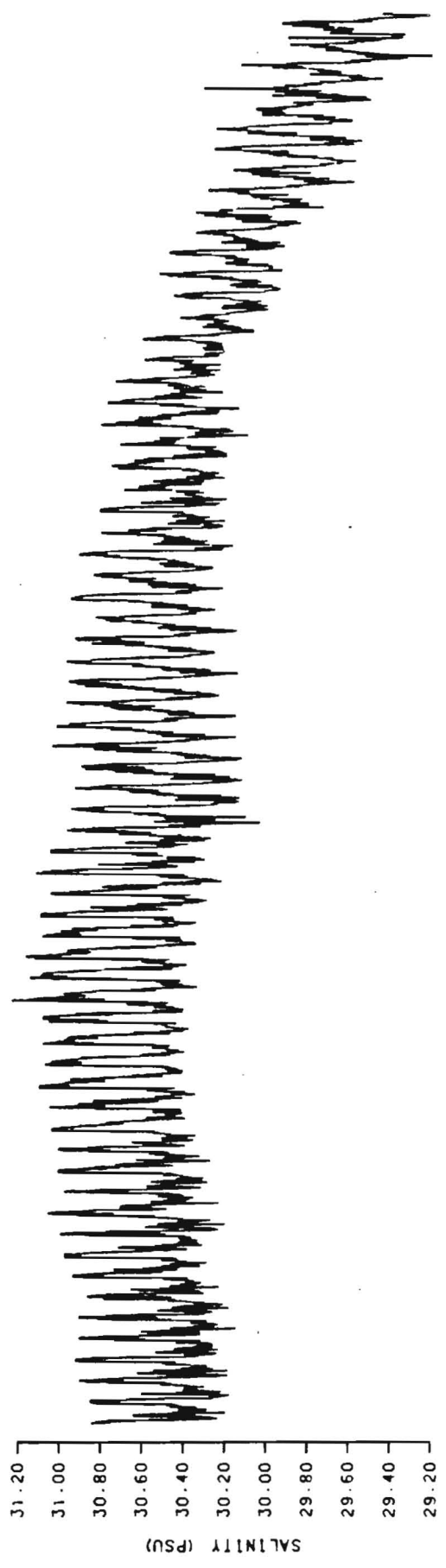
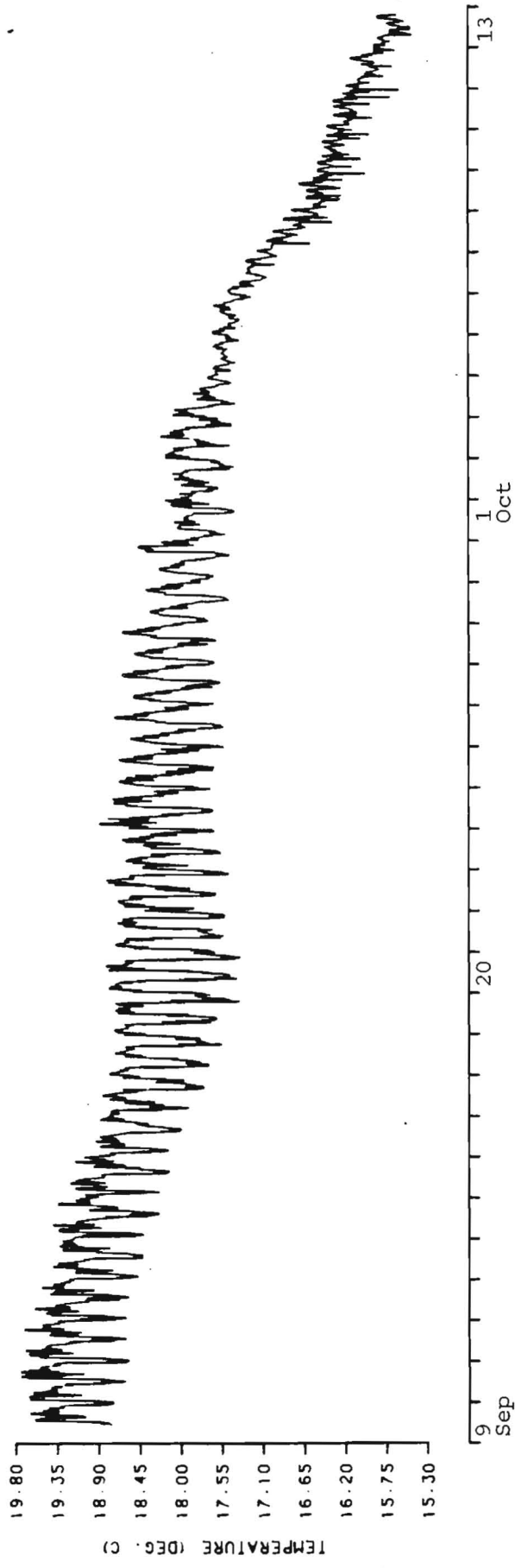
Water depth(relative to MLW) = 42.1 m

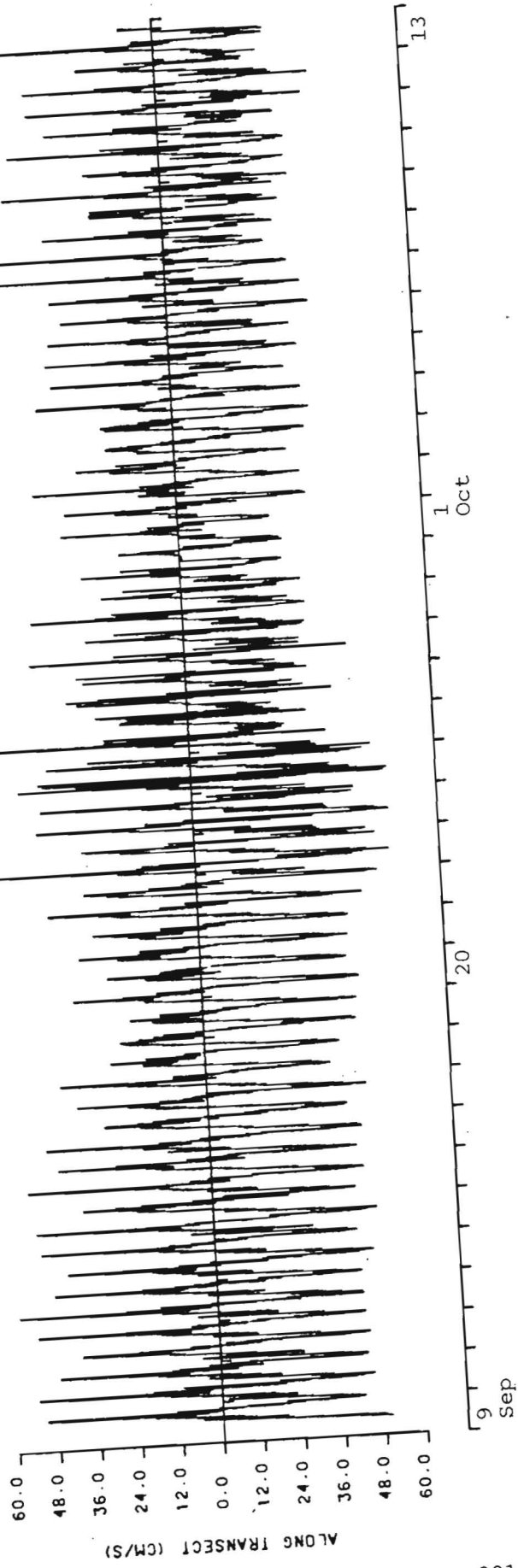
SCALE = 13.0 CM/S PER TICK

A1345 09/09/88 11:10EST DELTA T= 5 MIN

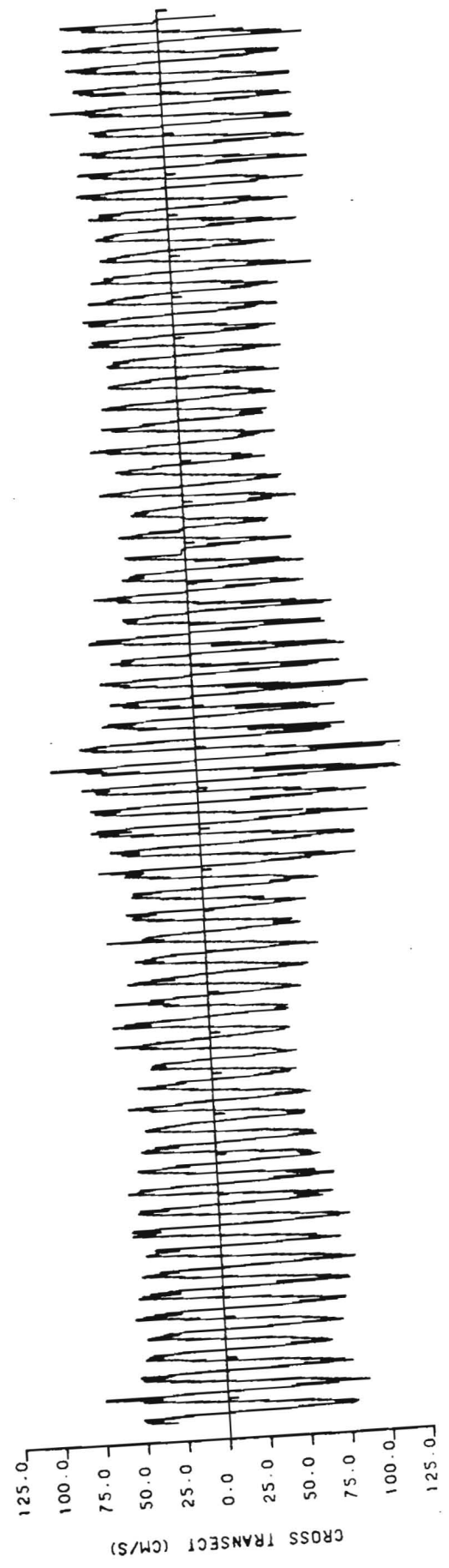


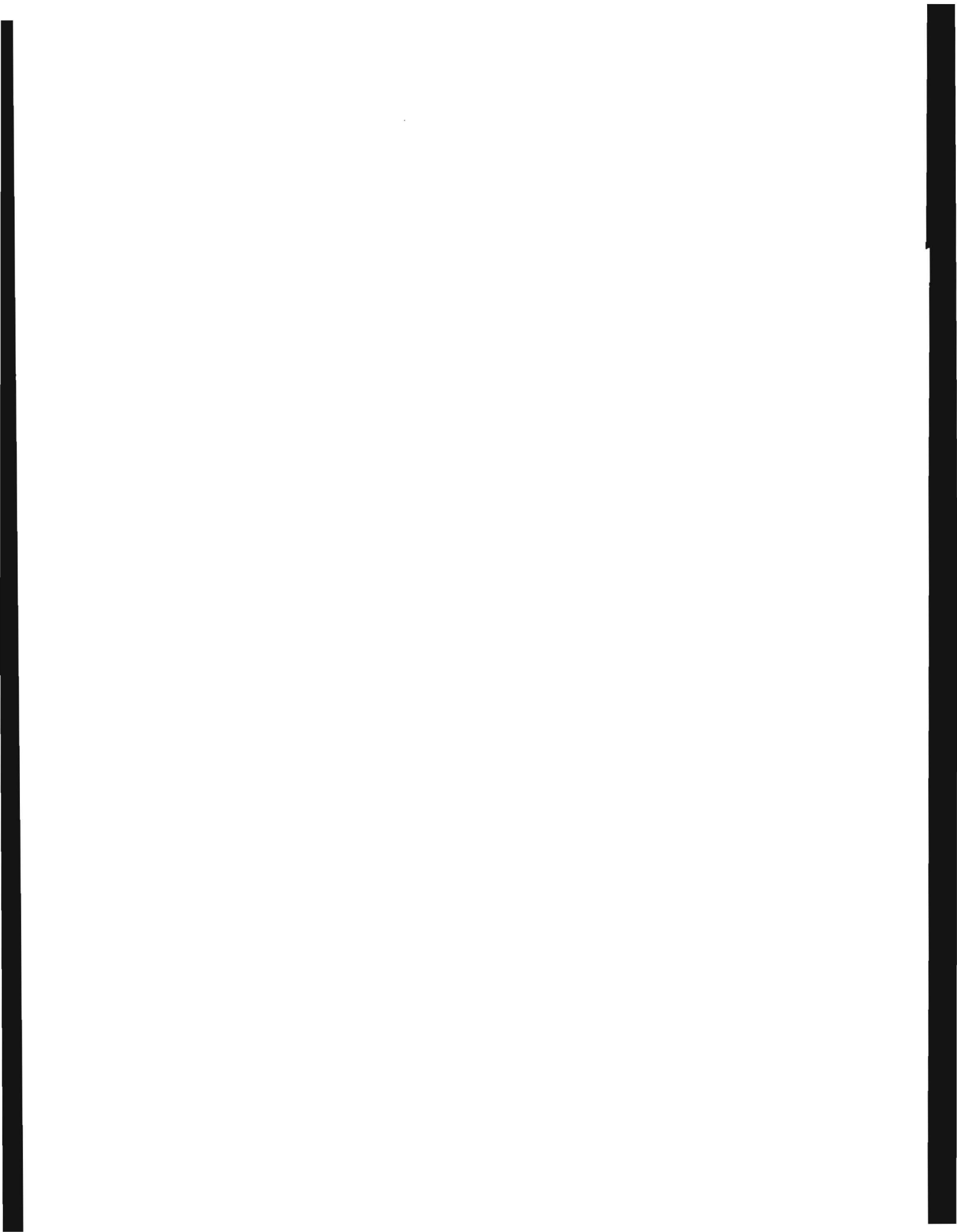
1 TICK = 40 KILOMETERS

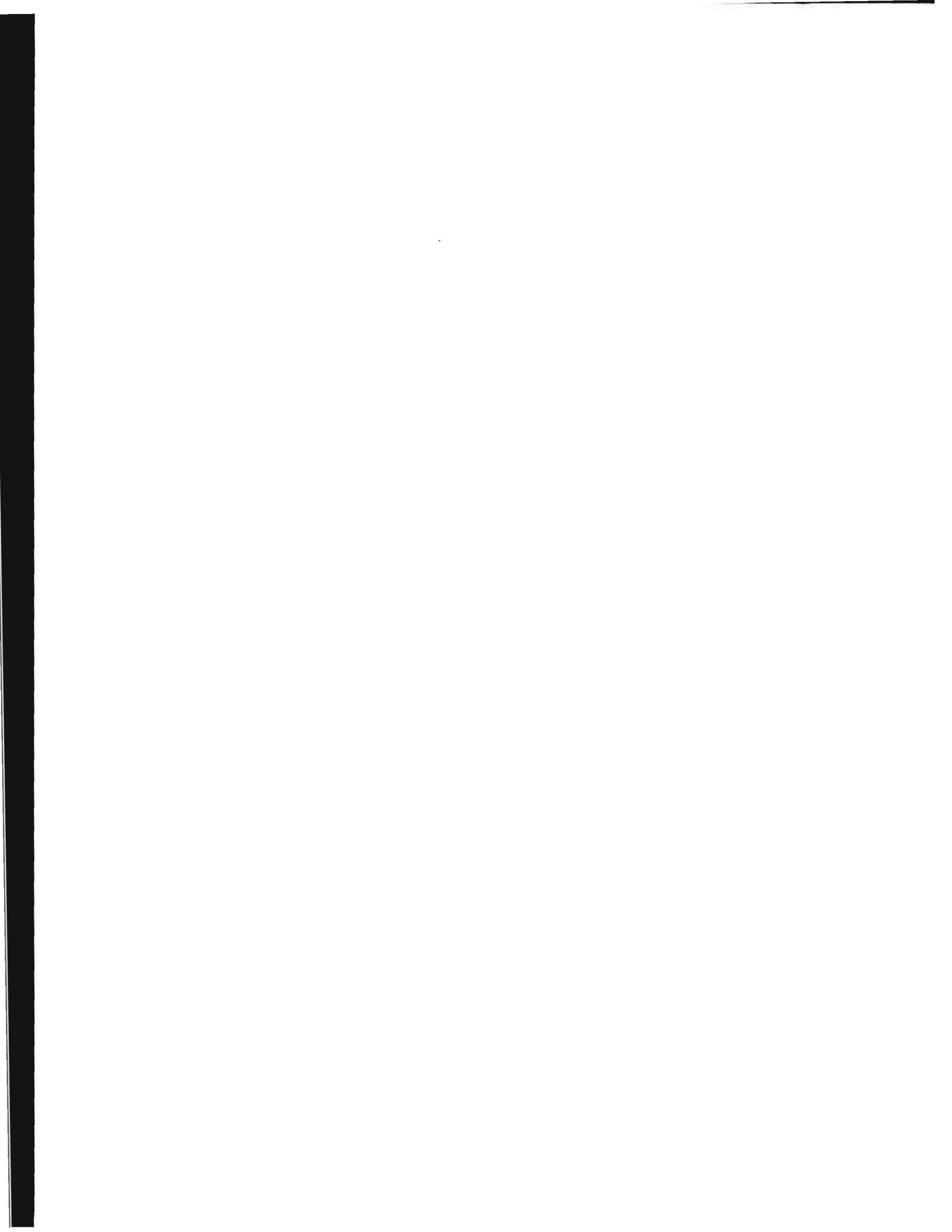




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The University at Stony Brook