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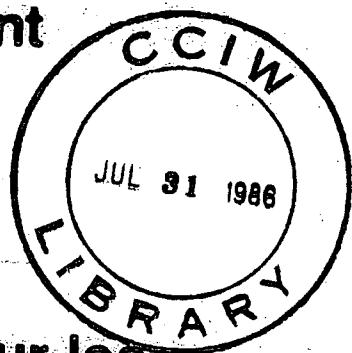


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Coastal Current Climatology Summary,  
Pickering Generating Station  
Dec. 6, 1979 to Mar. 31 1980

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1980b

**Coastal Current Climatology Summary,**

**Pickering Generating Station**

**Dec. 6, 1979 to Mar. 31 1980**

**Prepared for the Interagency (Ontario Hydro/MOE/NWRI) Working  
Group of the Pickering Winter Plume Study by:**

**J. Bull, M. Kerman and O. Lilly**

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Canada Centre for Inland Waters  
Burlington, Ontario, Canada  
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## ACKNOWLEDGEMENTS

The collection and presentation of a large data set requires the support of many individuals far too numerous to list here. Much of the effort involved is within individual daily routine and we acknowledge here that such a project would be an unthinkable monumental task without their assistance.

The project under which this data set was collected was a joint effort by staff of the Ministry of the Environment, Ontario Hydro and NWRI. The Ontario Hydro data set was provided by R. Farooqui and his colleagues of the Hydraulics Studies Department; the MOE data set by R. Weiler and his colleagues of the Lakes System Unit, Water Resources Branch; and, finally, the NWRI data set by the Basin Investigation and Modelling Section of the Aquatic Physics and Systems Division.

This report was prepared at NWRI with project support through the IJC - Limited Use Zone funding under the Great Lakes Water Quality Agreement, code 1106, Project leader, Dr. C.R. Murthy

## INTRODUCTION

Beginning in August 1979, at the invitation of the Ministry of the Environment, Water Resources Branch, representatives from Ontario Hydro, M.O.E. and N.W.R.I. planned a field measurement program designed to provide a comprehensive data base for the investigation of the behavior of the winter thermal plume from the Pickering generating plant.

As planned, the study was divided into Water Intake and Thermal Plume measurement sub-studies with contingency plans for a-typical events such as a tritium spill.

Under the thermal plume measurement sub-study, a series of thermal mapping surveys were planned, along with PRT overflights and the recording of time-series of temperature and current data from designated stations over the entire project period.

M.O.E. was assigned as the lead agency for planning and co-ordination of the study since that agency had the urgent need of access to all data for certain policy decisions. Data processing responsibilities were subsequently assigned to each of the participating agencies and under these agreements N.W.R.I. has assumed reporting responsibility of the current meter data set.

In this context, two N.W.R.I. reports were subsequently produced. The first, entitled "Structure of coastal currents in Lake Ontario During The Winter Period" discusses the measurements made and summarizes the winter current regime as recorded during the December 1979 through March 1980 measurement period. This present document, as the second of this set, is intended to serve as a reference source

to the current measurement data set available. As such, data here are given in the form of displays of current vectors, "rose" histogram and tabular summaries.

### EXPERIMENTAL PROGRAM

From early December 1979 until the end of March 1980 an extensive field observational program was undertaken offshore and in the vicinity of the Pickering generating station on the north shore of Lake Ontario east of Toronto (Figure 1). The current measurement portion of this study was designed to collect a long time-series of current data in the very near and nearshore zone of the designated study area. Such current data are necessary to understand the hydrodynamic processes and the behavior of the condenser water outfall plume during the winter months. Analysis of these data allows the quantitative reproduction of the current regime occurring in the area for that period and, through this, an understanding of the onshore-offshore exchange mechanisms. In addition, data obtained during this program add immensely to the historic data base for Great Lakes coastal areas. Subsequent analysis of this particular data set, and others will aid in the understanding of the complex physical processes within the coastal zone.

The basic layout of the experiment is shown in Figure 2. The current meter moorings were established on a line running  $160^{\circ}\text{T}$ ; approximately perpendicular to the local shoreline, from Moore Point, south, to a distance 12 km from shore. Additional current meters

were placed several kilometres to the east of this line as shown. Figure 3 shows the bottom profile and the location and depth of the current sensors along the Moore Point line and illustrates the concentration of instruments in the nearshore zone. These moorings, with the exception of the two Ontario Hydro meters, were established by the CSS Limnos on December 6, 1979. In addition, the Limnos deployed two current and temperature staff systems (CATS) as shown in Figure 2. The Ontario Hydro moorings were established and maintained by that agency.

The CATS systems, as deployed, are designed to sit on the bottom of shallow areas and collect current data by way of an electromagnetic current sensor. Nine temperature sensors, at roughly one metre spacing, bottom to surface, are recorded simultaneously with the current measurement.

The Limnos retrieved the moorings on April 1, 1980.

Summaries of the instrument type, period and data return are given in Appendix A as tabular summaries and bar charts. Engineering specifications of the instrumentation deployed are beyond the scope of this report; suffice here to say that the equipment are of standard types used by each of the agencies and are reported elsewhere (e.g., Bull, Farooqui et al., 1976).

#### DATA PRESENTATION

The methods used to display the data reported here are consistent with previous N.W.R.I. Limnological Summaries (i.e., Bull, Farooqui

et al., 1976; Jordan and Bull, 1977; Kerman, Hyde and Bull, 1978). In keeping with the format of this series, the data have been organized by calendar month; in fact, an artificially convenient time scale. The presentation is a standard time-series set of scalar or vector plots and "rose" histograms summarizing mooring data on a month by month basis. Certain changes have been adopted. The current speed and direction (S&D) display previously employed (e.g., Appendix C, Jordan and Bull, 1978) has not been found particularly useful and is not included here. Secondly, temperature data recorded by the current meters is presented as a time-series plot accompanying the vector summary in Appendix B here.

The data reported are time-series collections of meteorological, current and temperature measurements. A digital low pass filter (Graham, 1963) and "Boxcar" averaging techniques are employed to facilitate data handling and presentation. The response characteristic of the filter applied to the data is shown in Figure 4. The cut-off period for the filter was chosen from a lakes physics perspective to remove periods, in the case of the vector plots, of less than 18 hours, roughly the inertial period. For computer economy only 46 filter weights were chosen for the 18-hour filter. The corresponding number of points are then deleted from the beginning and end of the data between significant gaps. Filters were applied before averaging.

The data displays and tabular summaries are given in the appendices. Appendix B summarizes the currents in a plotted form; while Appendix C tabulates the current, giving certain summary information on the flow in each of eight compass sectors. By the way of an addendum here, for completeness and reference purposes, Appendix D shows the temperatures as measured by the CATS system.

The contents and data handling procedures for each of the above displays are now outlined briefly.

### I. "Rose" and Temperature, Current Time-Series

Appendix B contains monthly wind and current "rose" summaries displayed opposite to the corresponding time-series summaries of wind speed-squared vectors, current vectors and current meter temperature for a station-month. These complementary pairs are repeated in a mooring by mooring fashion, month by month. Details are as follows:

- (a) Wind "rose" histogram: hourly values of wind data for one month were classified and tabulated by speed and direction. Speed classes were defined as 0 to 3, 3 to 7, and greater than  $7 \text{ m-sec}^{-1}$ . The geographical axes of direction have been rotated so that alongshore flow ( $160^{\circ}\text{T}$ ) is directed towards the right-hand side of the page. The direction is classified into eight equal sectors.
- (b) Current "rose" histogram: hourly averaged values of current data for one month were classified and tabulated by speed and direction. Speed classes were defined as 0 to 5, 5 to 15, and greater than  $15 \text{ cm-sec}^{-1}$ . Direction classes were defined as above for wind. If less than 25 percent of the possible wind or current data were available for the month, no summary was produced.
- (c) Time series of wind stress vectors computed as wind speed squared and averaged over six hours. Consistent with oceanographic convention, direction is "towards" for both wind and current.

et al., 1976; Jordan and Bull, 1977; Kerman, Hyde and Bull, 1978).

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- (c) Time series of wind stress vectors computed as wind speed squared and averaged over six hours. Consistent with oceanographic convention, direction is "towards" for both wind and current.

## II. Current Tabular Summaries

Appendix C summarizes the current for each month and for each mooring in the form of a table. Hourly values of current data for a given month were divided into three speed classes, defined as 0 to 5, 5 to 15, and greater than  $15 \text{ cm-sec}^{-1}$ , and into eight compass sectors, orientated such that the first sector is shore parallel  $\pm 22.5$  degrees. For the purposes of this summary, all currents whose directions fall into the boundary of a sector are treated as a scalar quantity in that sector. The mean duration is defined as the average time a current direction remained in a sector and the mean excursion is the product of this mean duration and the mean current.

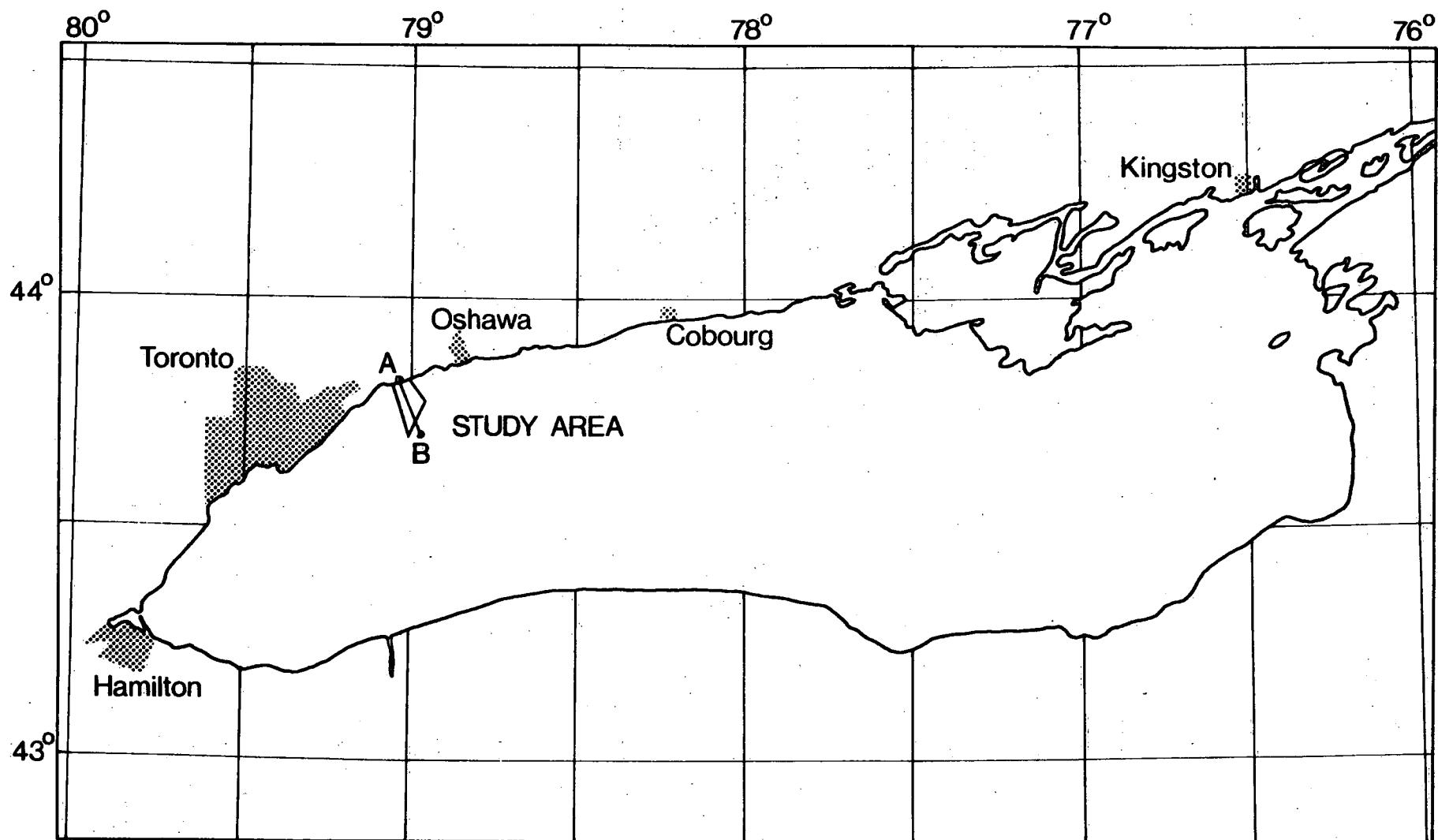
The mean scalar speed, mean square speed, variance, and the mean current vector are summarized below the table. The mean temperature, as measured by the current meter, is also given.

## III CATS Temperatures

Appendix D shows the temperature data from the CATS moorings, stations number 23 and 24. Each system recorded temperature at 9 depths, located from the bottom to the surface at approximately 1 metre intervals. These measurements are plotted as time-series temperature of the 9 depths for each month and each mooring.

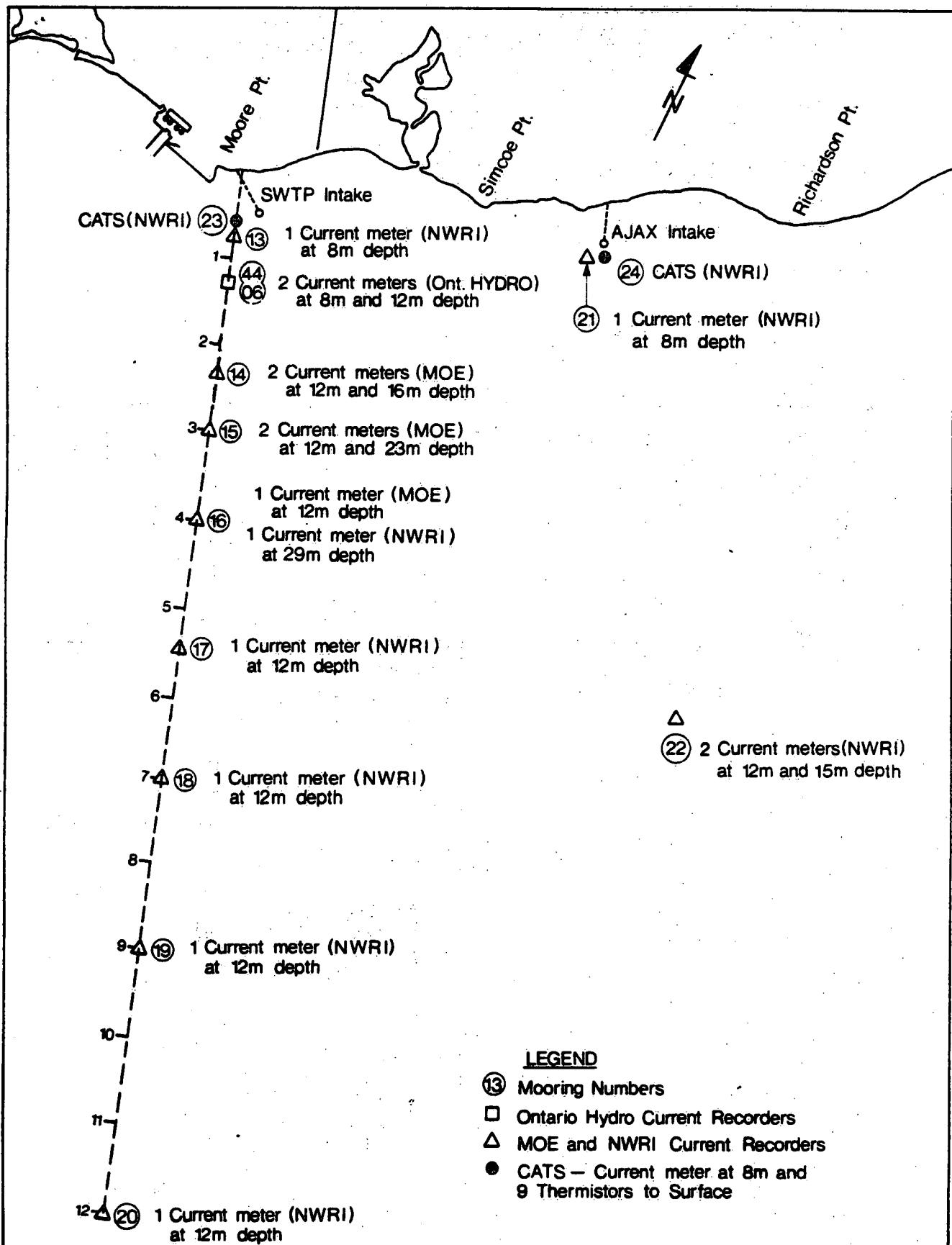
REFERENCES

- BULL, Farooqui et al, 1976. Coastal Zone Limnological Observations in Lake Huron at Bruce Nuclear Power Development, May - November 1974, Joint CCIW Ontario Hydro Report, CCIW Paper No. 17, 1976.
- JORDAN, D.E. and J.A. Bull, 1977. Coastal Zone Limnological Observations in Lake Ontario at Bronte, June 1973 - March 1974. Climatology Report, CCIW Paper No. 18, 1977.
- GRAHAM, R.J., 1963. Determination and Analysis of Numerical Smoothing Weights, NASA T&R 179, 28 pp.
- KERMAN, Hyde and Bull, 1978. Limnological Observations from the Eastern and Central Basins of Lake Erie, May - November 1977. Climatology Report, CCIW BIMS - ARD, 1978.



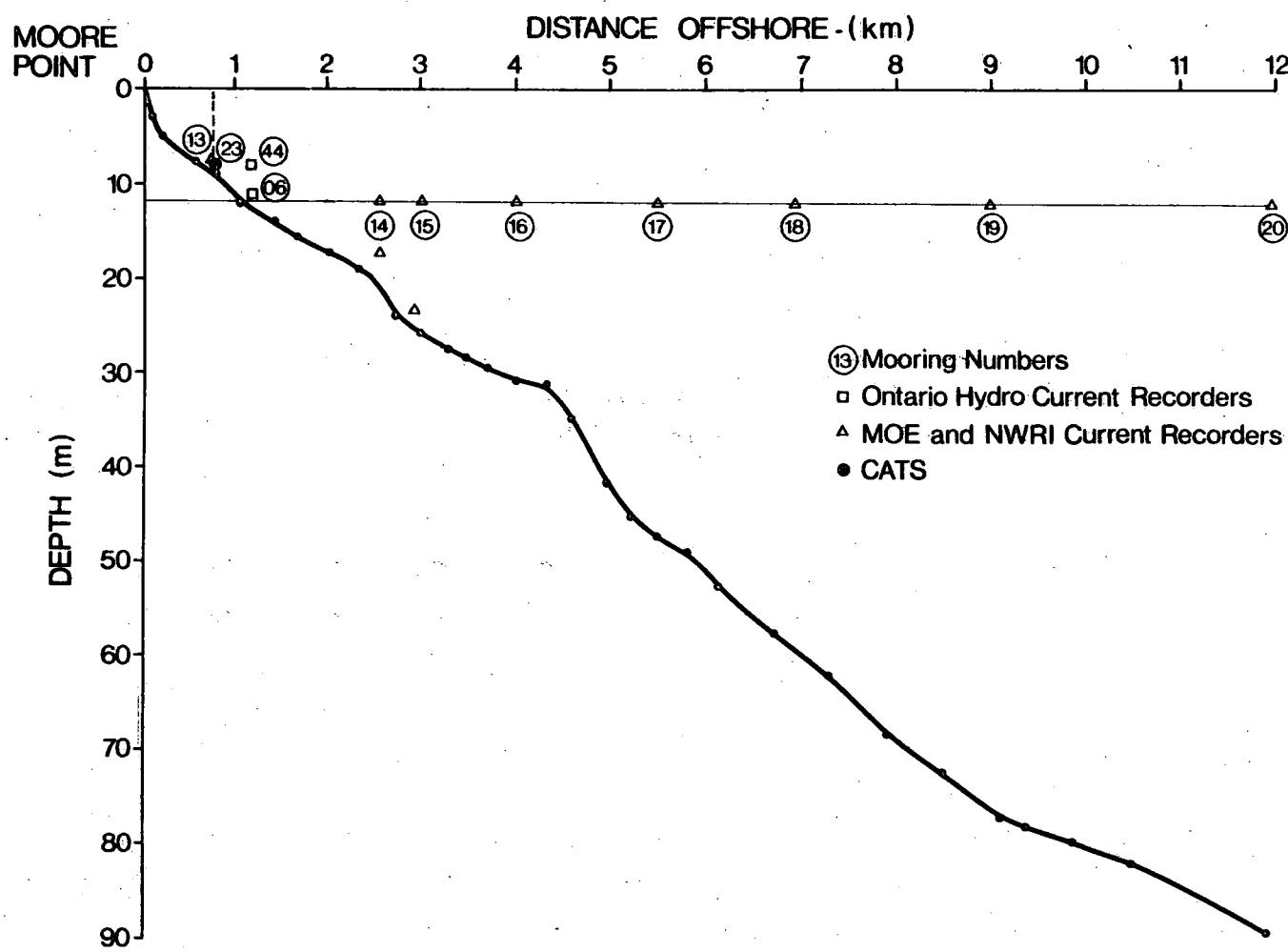
Lake Ontario Outline Showing the Study Area for the Pickering Winter Plume Study 1979/80

Figure 1



Mooring Layout Schematic for the Pickering Winter Plume Study 1979/80

Figure 2

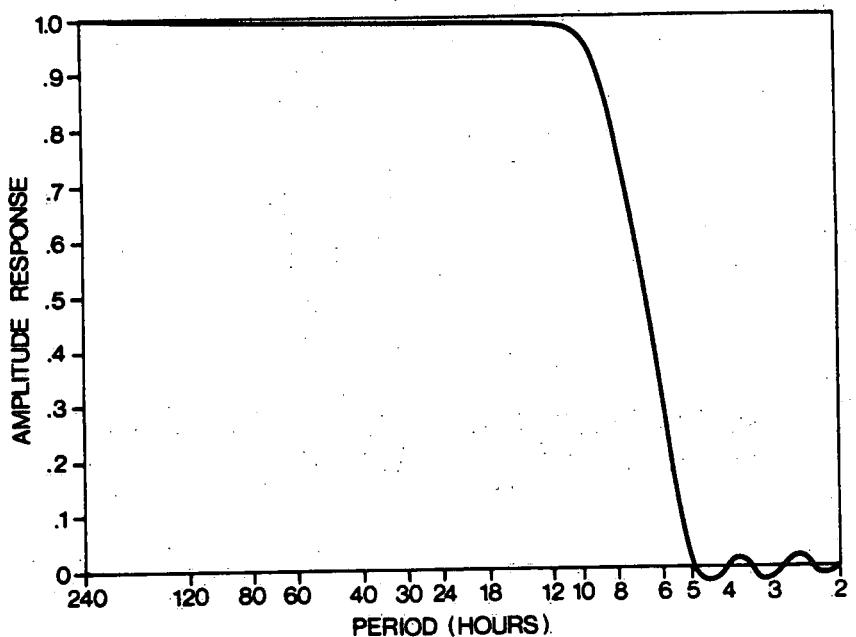


Bottom Profile Showing Instrument Depths Along Mooring Line 160° Off Moore Point

Figure 3

AMPLITUDE RESPONSE OF FILTERS APPLIED  
TO CURRENT AND WIND DATA

5 HOUR FILTER (0.0-0.2 cph.)



18 HOUR FILTER (0.0 - 0.05 cph)

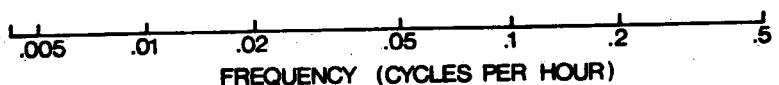
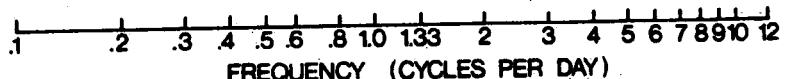
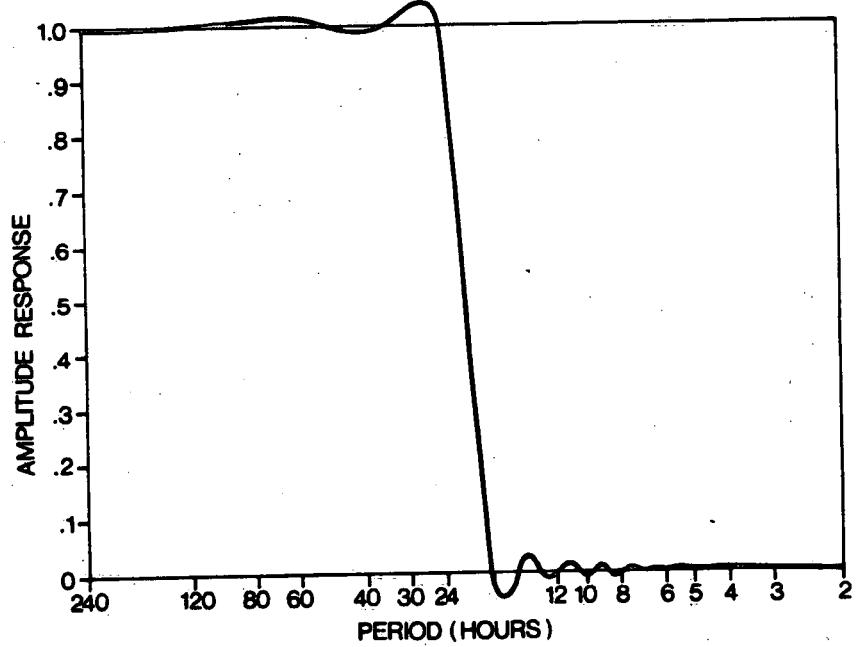


Figure 4

APPENDIX A

**Summary of Mooring Logistics and Current Meter Data Base**

PICKERING STUDY DATA RETURN - WINTER 1979-1980

AG ST	DEPTH DIST	PARA	DECEMBER	JANUARY	FEBRUARY	MARCH
			T	S	D	
NI 13	8M .7KM	TSD				
NI 23	8M .7KM	TSD				
CATS1						
OH 44	8M 1.3KM	TSD				
OH 06	12M 1.3KM	TSD				
ME 14	12M 2.5KM	TSD				
ME 14	16M 2.5KM	TSD				
ME 15	12M 3KM	TSD				
ME 15	23M 3KM	TSD				
NI 16	12M 4KM	TSD				
NI 16	29M 4KM	TSD				
NI 17	12M 5.5KM	TSD				
NI 18	12M 7KM	TSD				
NI 19	12M 9KM	TSD				
NI 20	12M 12KM	TSD				
NI 21	8M .75KM	TSD				
NI 24	8M .75KM	TSD				
CATS2						
NI 22	12M 5.7KM	TSD				
NI 22	15M 5.7KM	TSD				

ME = MINISTRY OF ENVIRONMENT, OH = ONTARIO HYDRO, NI = NWRI

## TIME SERIES DATA COLLECTION: PICKERING G.S., LAKE ONTARIO 1979/80

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Mooring Number	Variables Measured	Instruments	Water Depth m	Instrument Depths m	Useful Data Period	Sampling Rate Min.	Latitude	Longitude
79-00C-13	CS/CD/WT	GEO	8.2	8.0	DEC 6, 79/MAR 31, 80	20	N43°48'13"	W79°02'52"
79-00C-23	CS/CD/WT	CATS	8.2	8.2	DEC 6, 79/MAR 31, 80	20	N43°48'09"	W79°02'58"
79-00C-44	CS/CD/WT	HY. PR.	13.0	8.0	DEC 9, 79/JAN 4, 80 JAN 11, 80/JAN 23, 80 FEB 9, 80/APR 1, 80	60	N43°47'54"	W79°02'50"
79-00C-06	CS/CD/WT	HY. PR.	13.0	12.0	DEC 9, 79/APR 1, 80	60	N43°47'54"	W79°02'50"
79-00C-14	CS/CD/WT	PLESSEY	17.8	12.0	DEC 6, 79/JAN 12, 80	30	N43°47'16"	W79°02'44"
79-00C-15	CS/CD/WT	GEO	25.1	23.0	DEC 6, 79/APR 2, 80	20	N42°47'00"	W79°02'35"
79-00C-16	CS/CD/WT	PLESSEY	29.8	12.0	DEC 6, 79/MAR 31, 80	30	N43°46'38"	W79°02'36"
	CS/CD/WT	GEO	29.8	29.0	DEC 6, 79/APR 2, 80	20	N43°46'38"	W79°02'36"
79-00C-17	CS/CD/WT	PLESSEY	47.5	12.0	DEC 6, 79/APR 1, 80	30	N43°45'48"	W79°01'44"
79-00C-18	CS/CD/WT	PLESSEY	62.0	12.0	DEC 6, 79/MAR 3, 80 MAR 15, 80/MAR 22, 80	30	N43°44'59"	W79°01'30"
79-00C-19	CS/CD/WT	PLESSEY	72.0	12.0	DEC 6, 79/MAR 4, 80	30	N43°43'57"	W79°00'58"
79-00C-20	CS/CD/WT	PLESSEY	92.0	12.0	DEC 6, 79/APR 1, 80	30	N43°42'31"	W79°00'19"
79-00C-21	CS/CD/WT	GEO	8.2	8.0	DEC 7, 79/APR 1, 80	20	N43°48'54"	W79°00'13"
79-00C-24	CS/CD/WT	CATS	8.2	8.2	DEC 6, 79/APR 1, 80	20	N43°48'54"	W79°00'29"
79-00C-22	CS/CD/WT	PLESSEY	51.7	12.0	DEC 6, 79/APR 2, 80	30	N43°46'43"	W78°57'31"
	CS/CD/WT	PLESSEY	51.7	15.0	DEC 6, 79/APR 2, 80	30	N43°46'43"	W78°57'31"

WT - Water Temperature

GEO - Geodyne Current Meter Type 920

PLESSEY - Plessey Current Meter Type M021

HY. PR. - Hydro Products Type 505

CS - Current Speed

CD - Current Direction

CATS - Current and Temperature Staff System

APPENDIX B

Monthly Summaries of Wind and Currents in the Form of  
"Rose" Histograms and Vector Plots

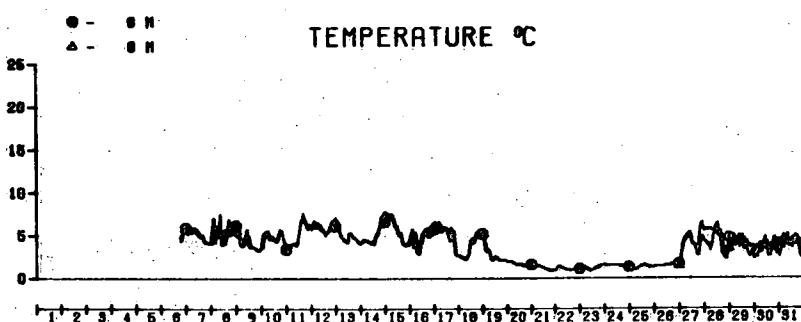
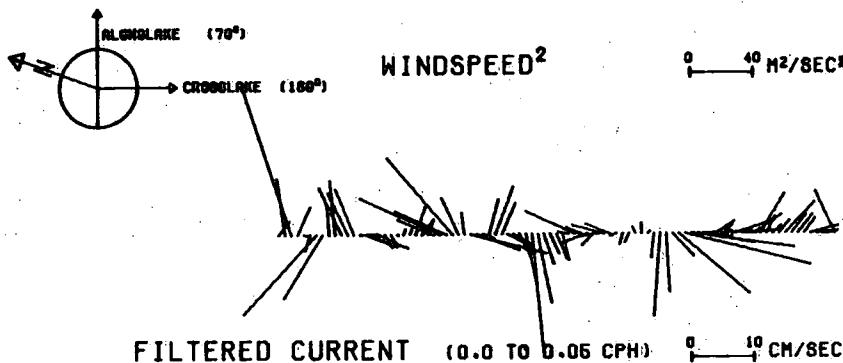
Format Details:

- (a) Rose Histograms
  - 3 Speed Ranges
  - 8 Compass Sectors
  
- (b) Vectors
  - 6 Hour Averages
  - 18 Hour Filter
  - Applied

Data is December through March Inclusive

PICKERING

DATE: DEC 1979

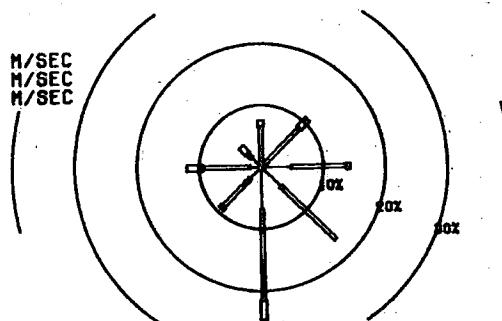


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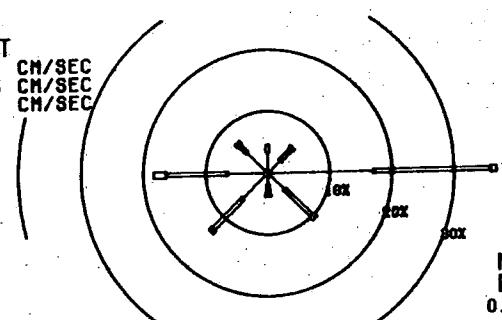
DATE: DEC 1979

MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



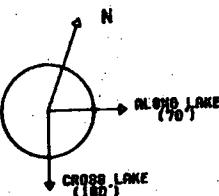
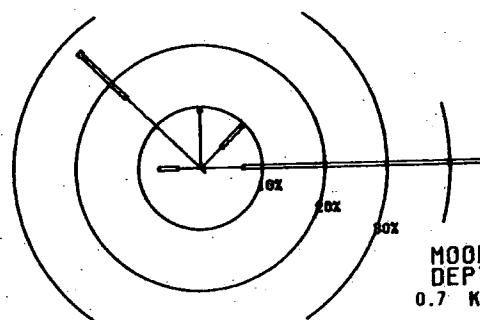
CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



MOORING: 13  
DEPTH: 8 M  
0.7 KM FROM SHORE

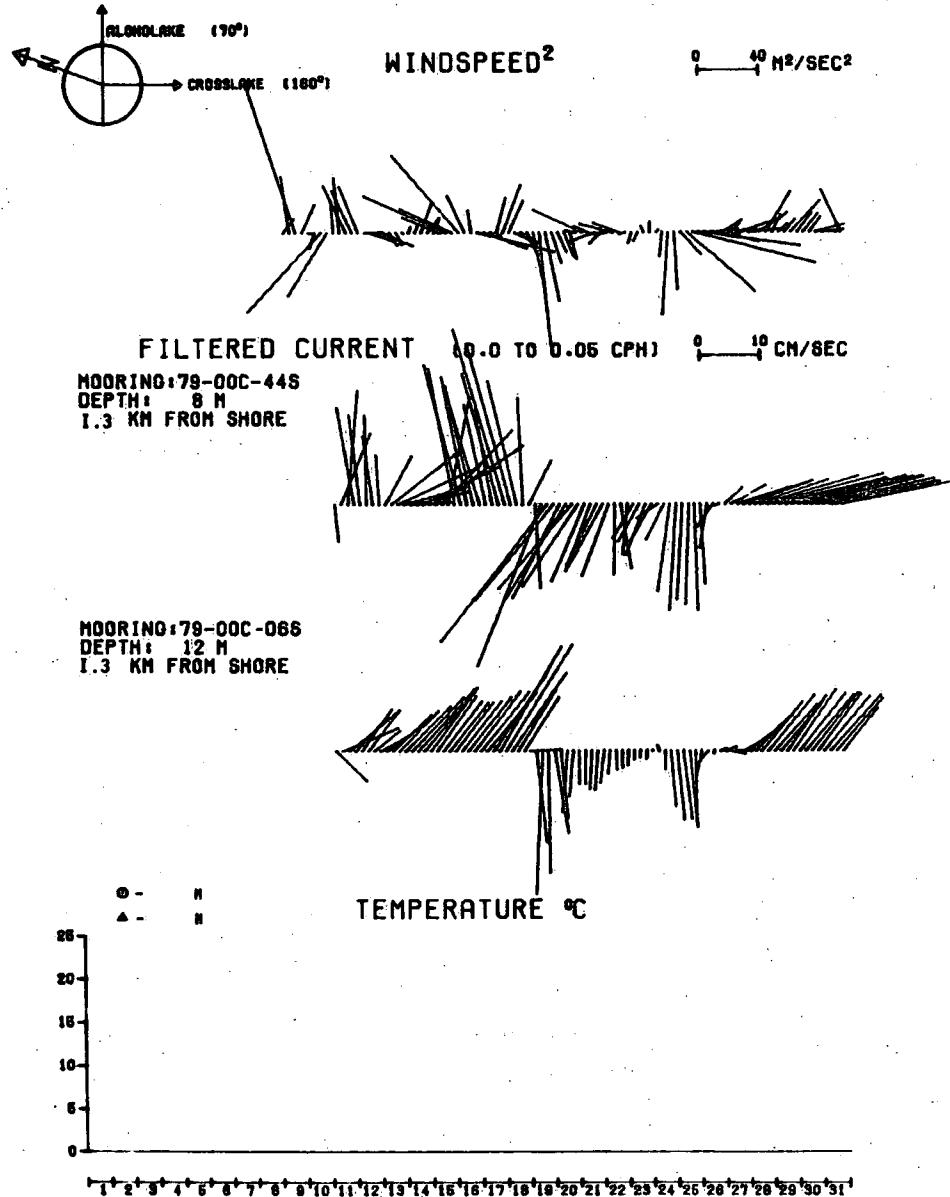
\* DIRECTION TOWARDS

MOORING: 23  
DEPTH: 8 M  
0.7 KM FROM SHORE



PICKERING

DATE: DEC 1979



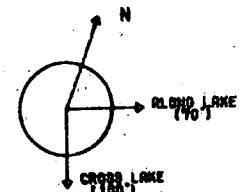
PICKERING

DATE: DEC 1979  
MONTHLY SUMMARY: WIND AND CURRENT<sup>a</sup>

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC

CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC

■ DIRECTION TOWARDS

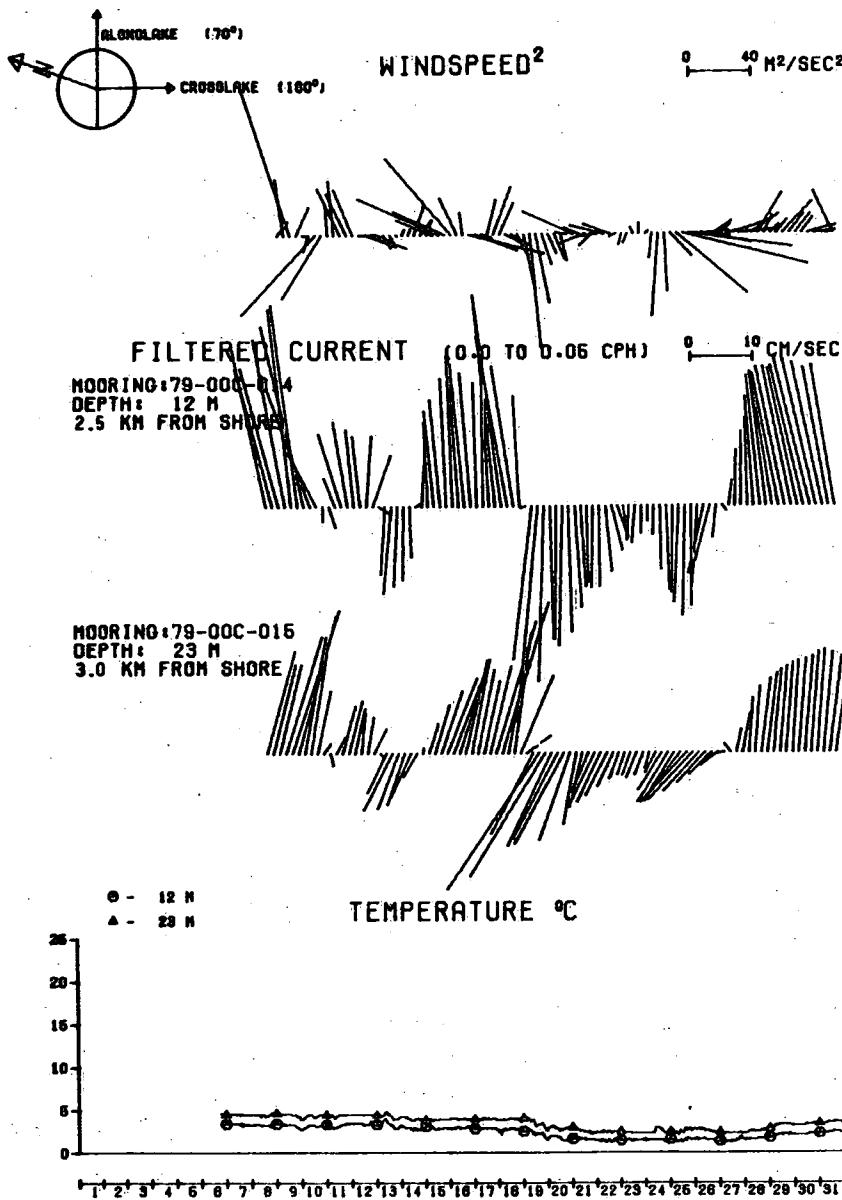


MOORING: 44  
DEPTH: 8 M  
1.3 KM FROM SHORE

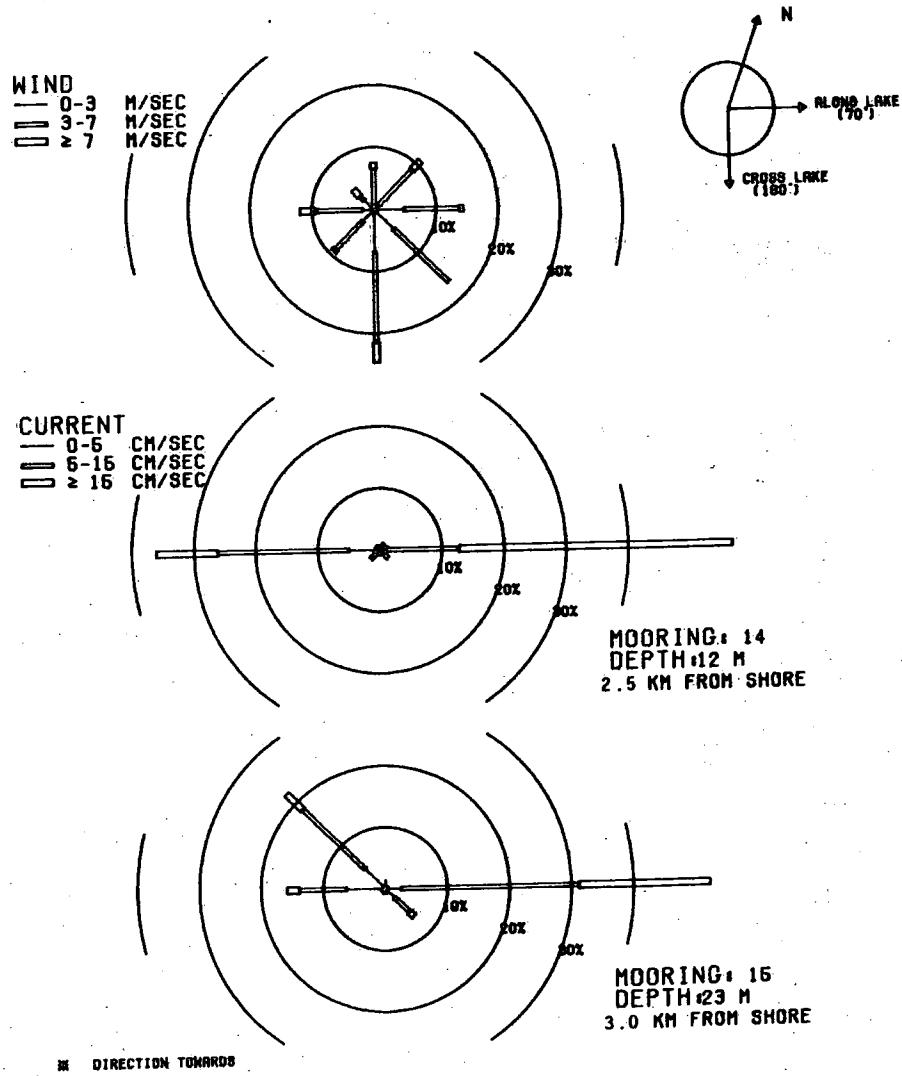
MOORING: 6  
DEPTH: 12 M  
1.3 KM FROM SHORE

PICKERING

DATE: DEC 1979

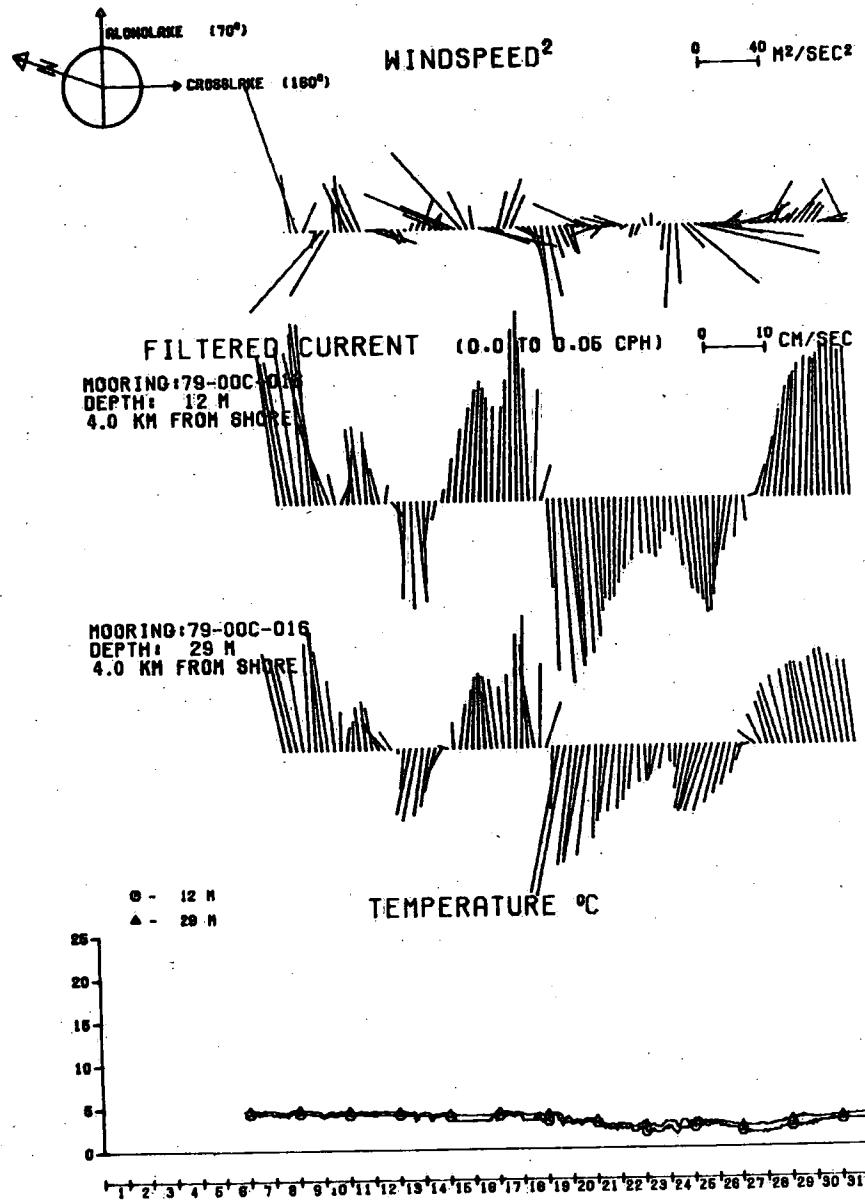


PICKERING DATE: DEC 1979  
MONTHLY SUMMARY: WIND AND CURRENT



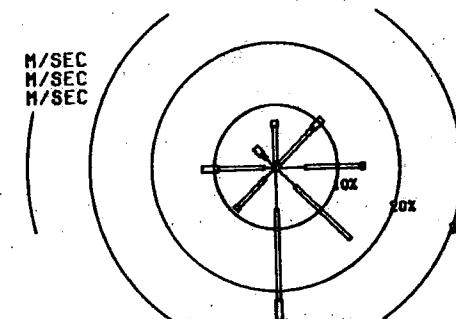
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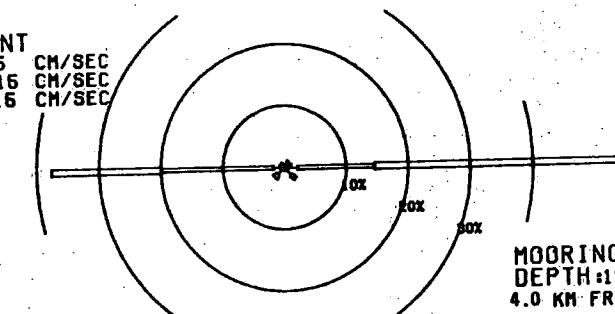


PICKERING DATE: DEC 1979  
MONTHLY SUMMARY: WIND AND CURRENT

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



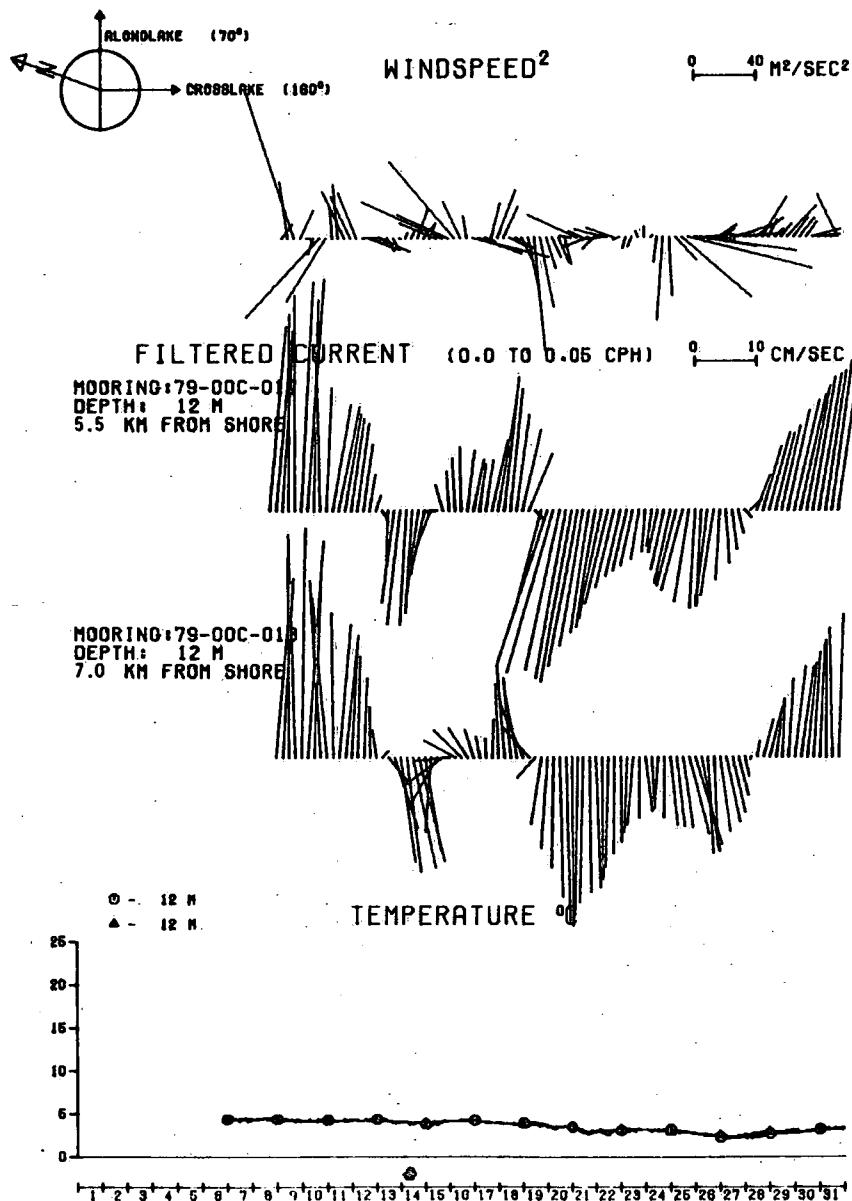
MOORING: 16  
DEPTH: 12 M  
4.0 KM FROM SHORE

■ DIRECTION TOWARDS

MOORING: 16  
DEPTH: 29 M  
4.0 KM FROM SHORE

PICKERING

DATE: DEC 1979

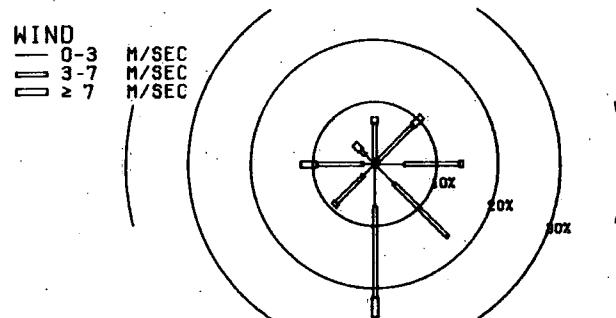


PICKERING

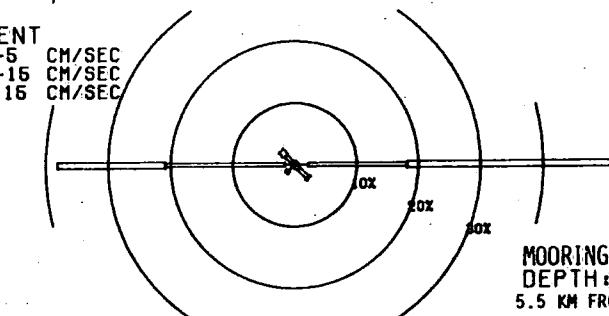
DATE: DEC 1979

MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 16 CM/SEC



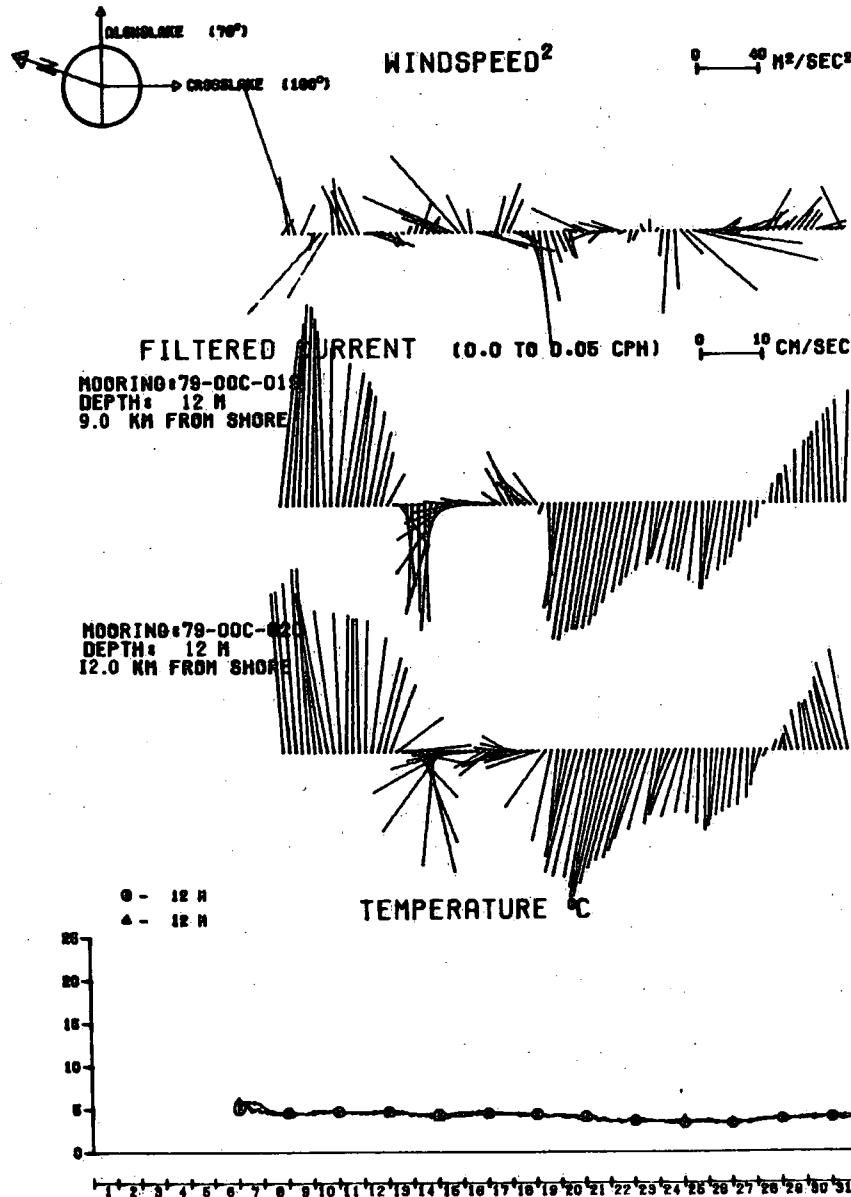
MOORING: 17  
DEPTH: 12 M  
5.5 KM FROM SHORE

■ DIRECTION TOWARDS

MOORING: 18  
DEPTH: 12 M  
7.0 KM FROM SHORE

PICKERING

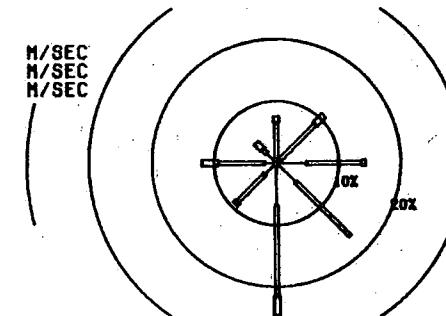
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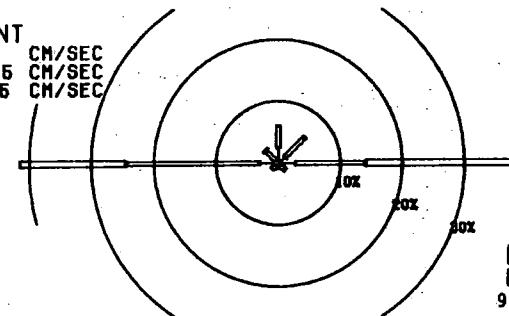
PICKERING

DATE: DEC 1979  
MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 6-15 CM/SEC  
— ≥ 16 CM/SEC



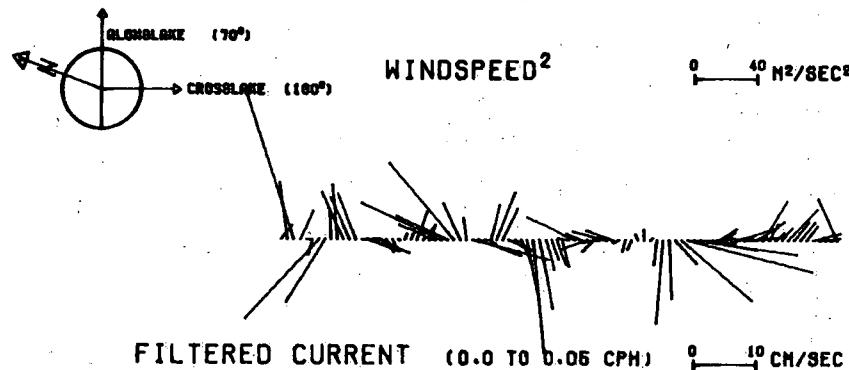
MOORING: 19  
DEPTH: 12 M  
9.0 KM FROM SHORE

■ DIRECTION TOWARDS

MOORING: 20  
DEPTH: 12 M  
12.0 KM FROM SHORE

PICKERING

DATE: DEC 1979

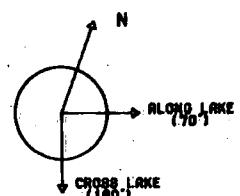


PICKERING

DATE: DEC 1979  
MONTHLY SUMMARY: WIND AND CURRENT<sup>\*</sup>

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC

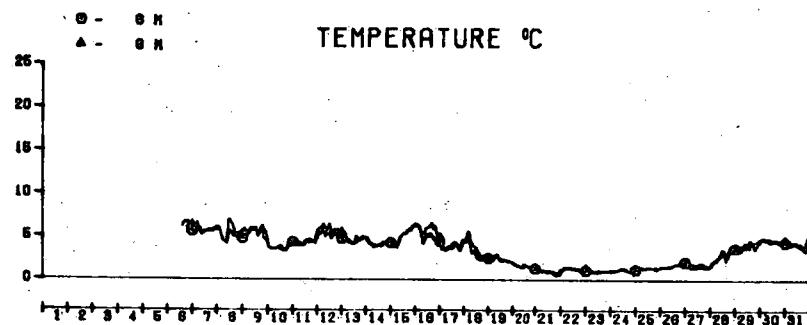
CURRENT  
— 0-6 CM/SEC  
— 6-15 CM/SEC  
— ≥ 15 CM/SEC



MOORING: 21  
DEPTH: 8 M  
0.75 KM FROM SHORE

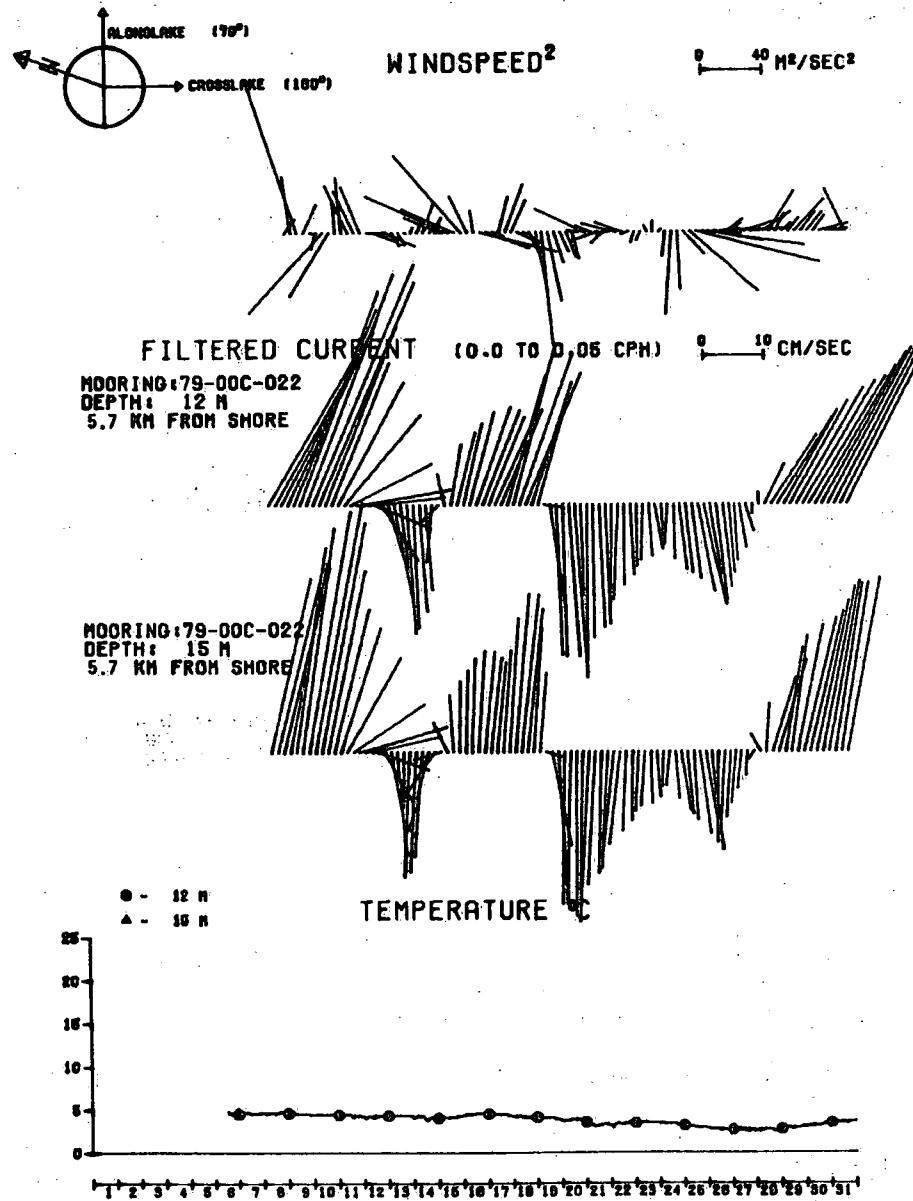
MOORING: 24  
DEPTH: 8 M  
0.75 KM FROM SHORE

\* DIRECTION TOWARDS



PICKERING

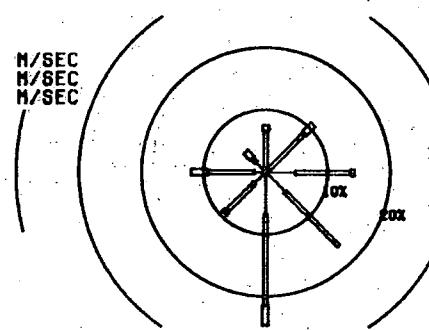
DATE: DEC 1979



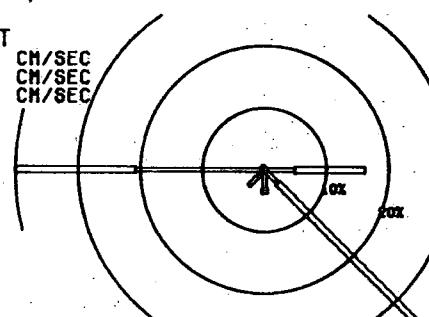
PICKERING

DATE: DEC 1979  
MONTHLY SUMMARY: WIND AND CURRENT

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— > 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— > 15 CM/SEC



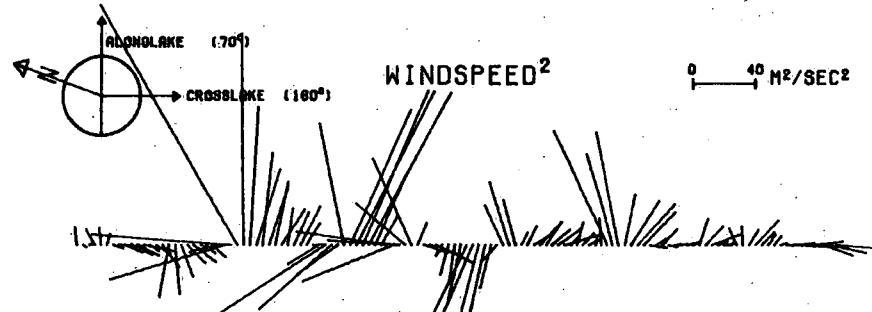
MOORING: 22  
DEPTH: 12 M  
5.7 KM FROM SHORE

■ DIRECTION TOWARDS

MOORING: 22  
DEPTH: 15 M  
5.7 KM FROM SHORE

PICKERING

DATE : JAN 1980



## FILTERED CURRENT

MOORING #: 79-00C-013  
DEPTH: 8 M  
0.7 KM FROM SHORE

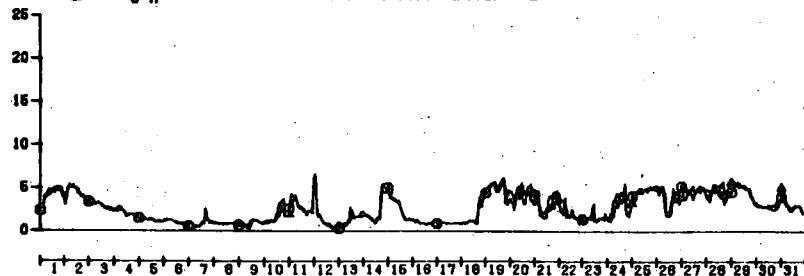


MOORING: 79-DOC-023  
DEPTH: 8 M  
0.7 KM FROM SHORE



• - 8 M

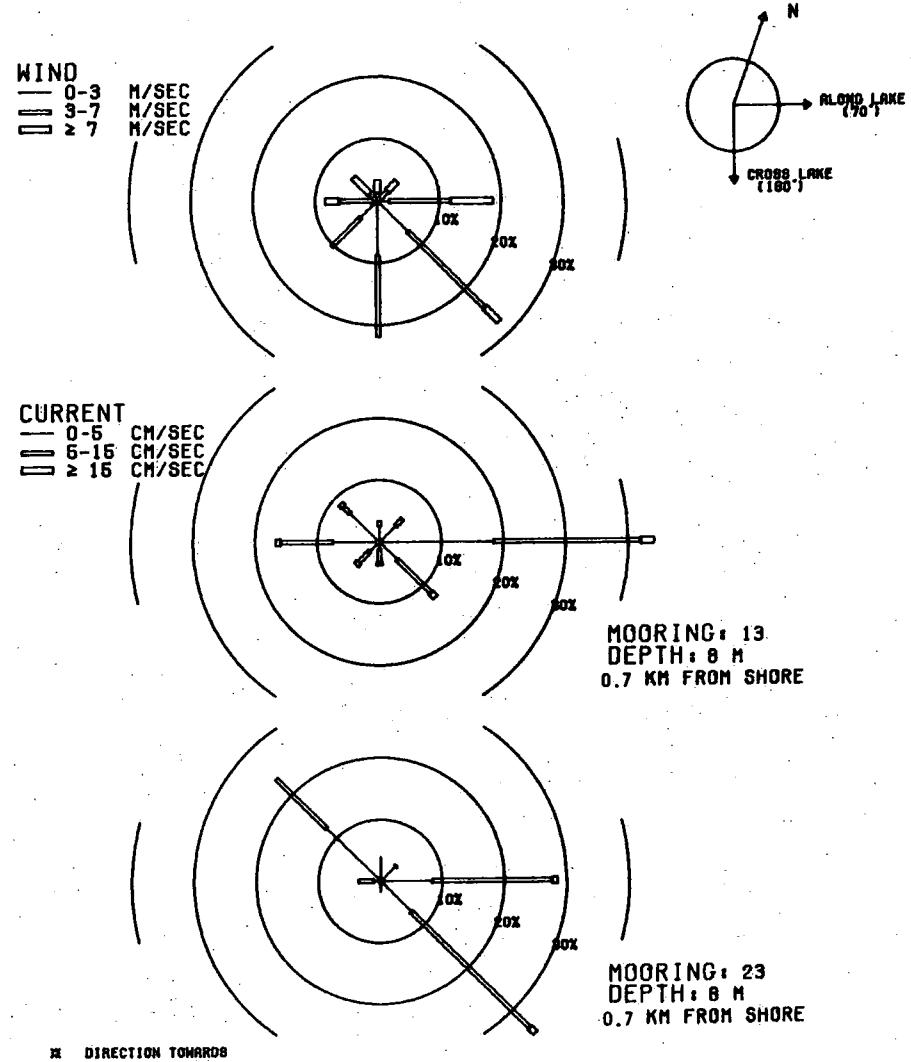
**TEMPERATURE °C**



PICKERING

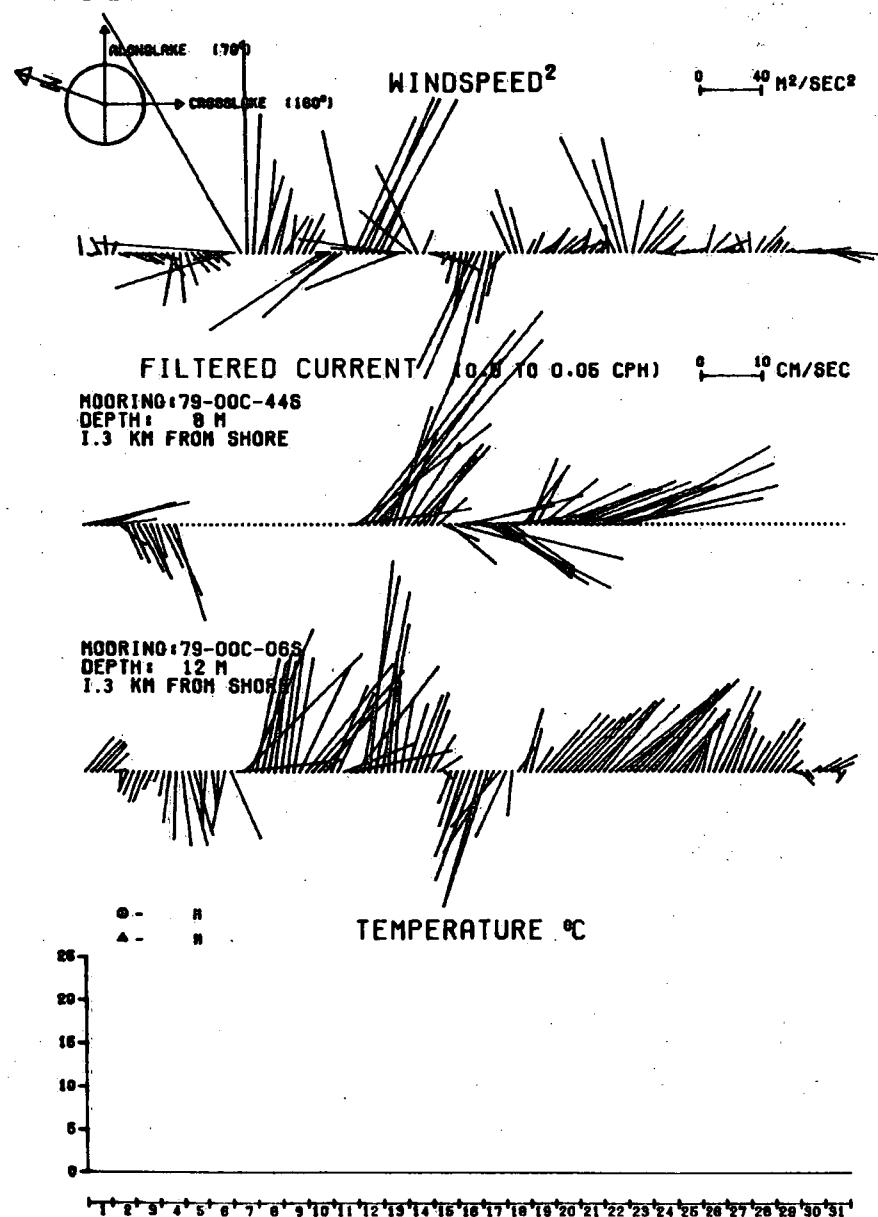
## MONTHLY SUMMARY: WIND AND CURRENT\*

PICKERING : DATE: JAN 1980

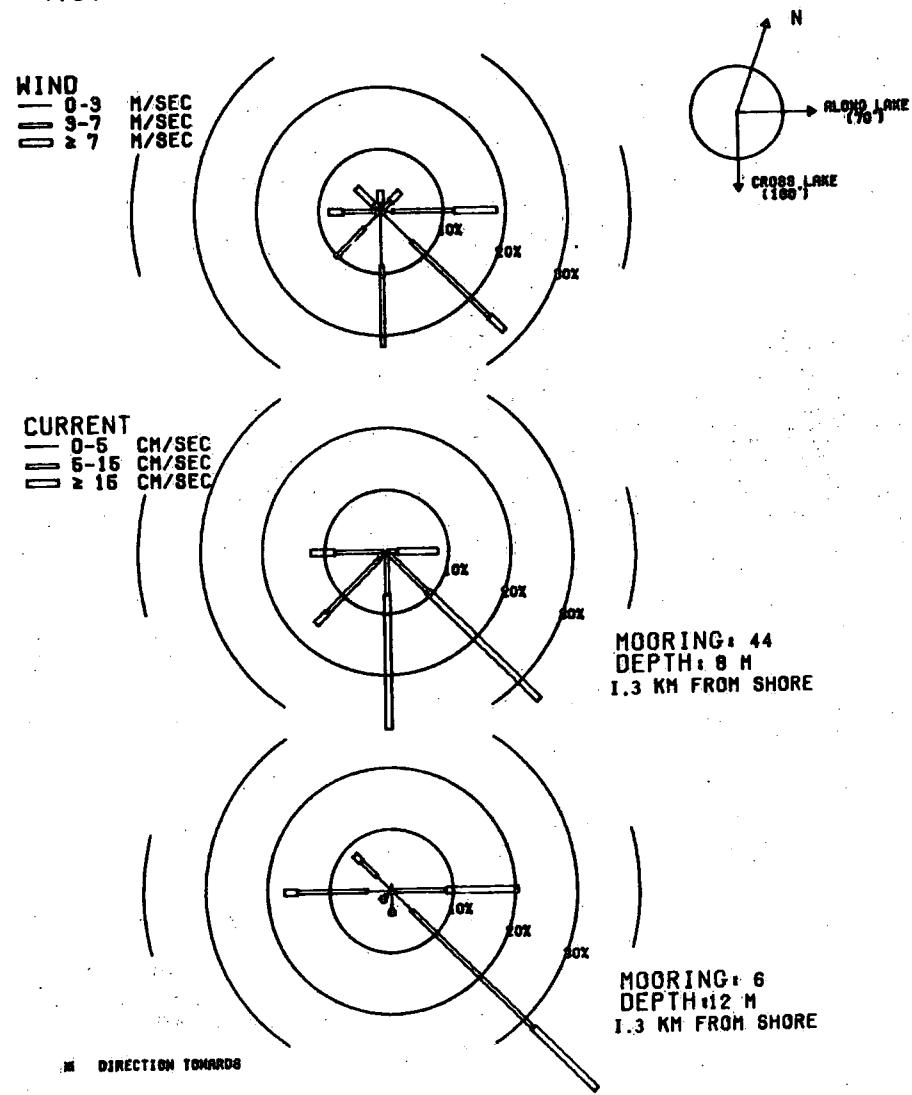


PICKERING

DATE: JAN 1980

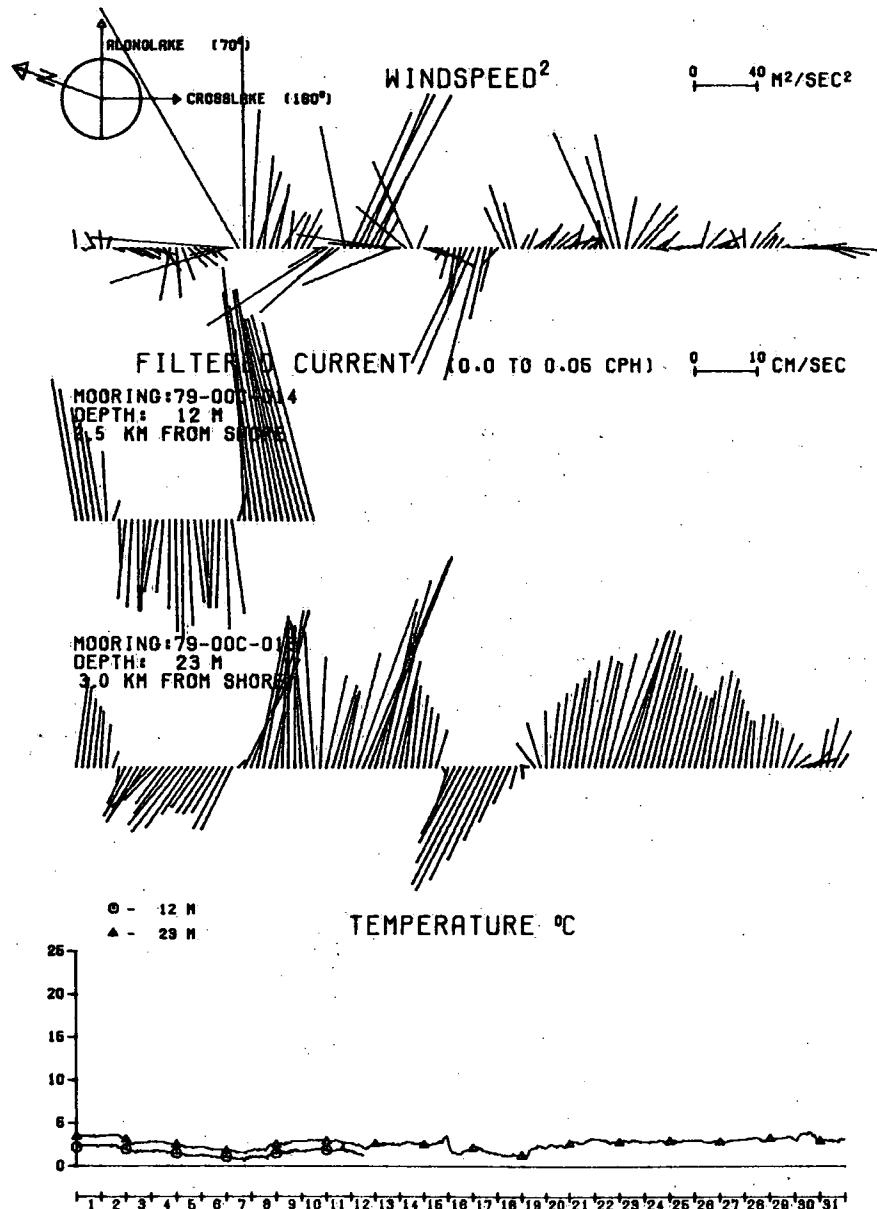


PICKERING DATE: JAN 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*



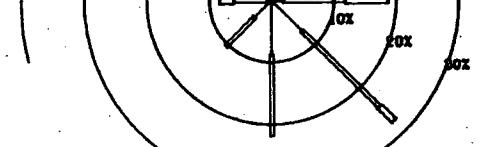
PICKERING

DATE: JAN 1980

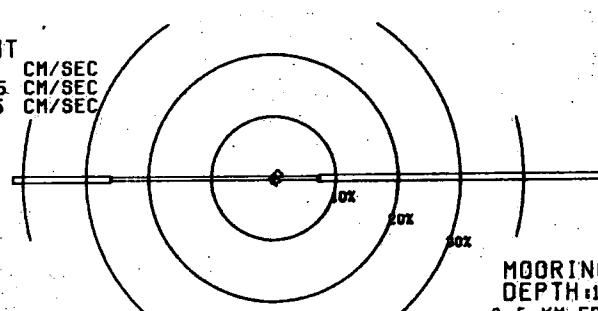


PICKERING DATE: JAN 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



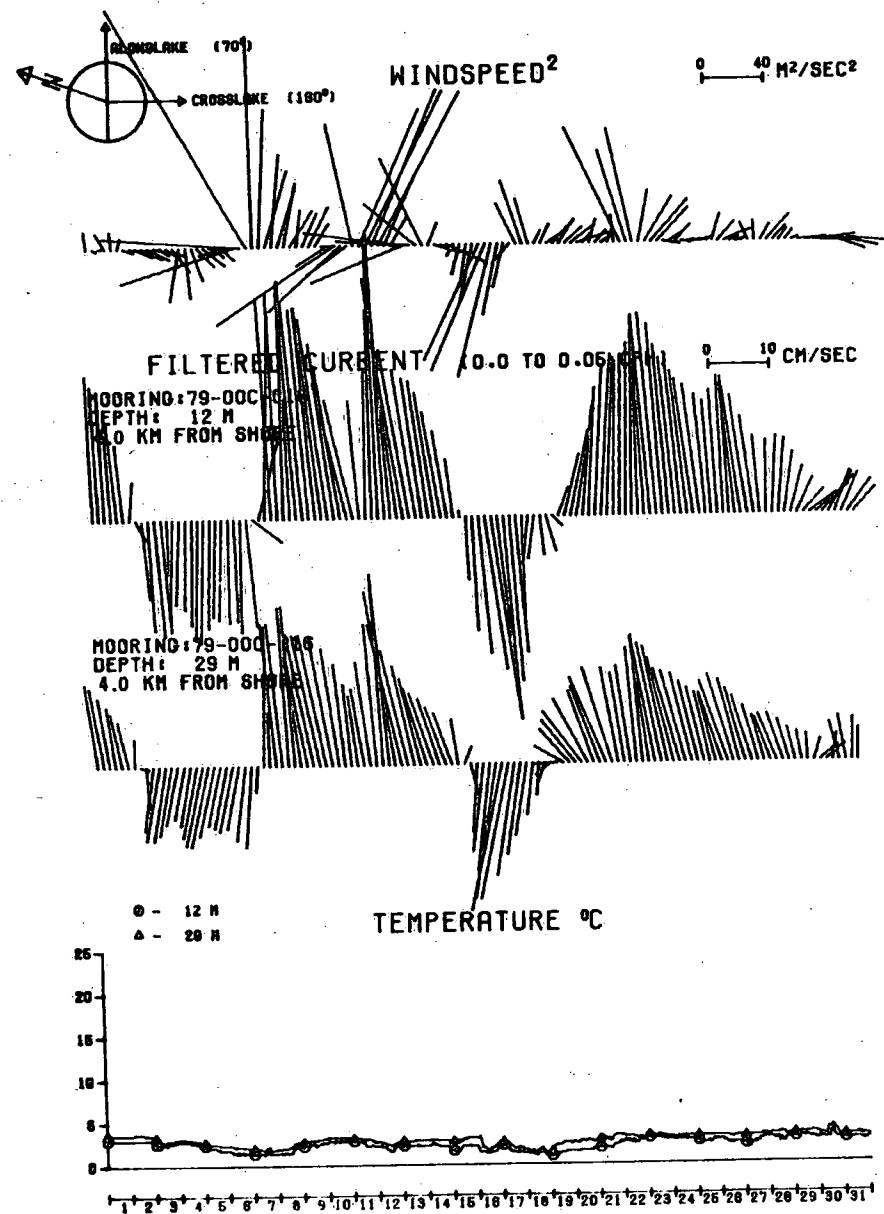
MOORING: 14  
DEPTH: 12 M  
2.5 KM FROM SHORE

■ DIRECTION TOWARDS

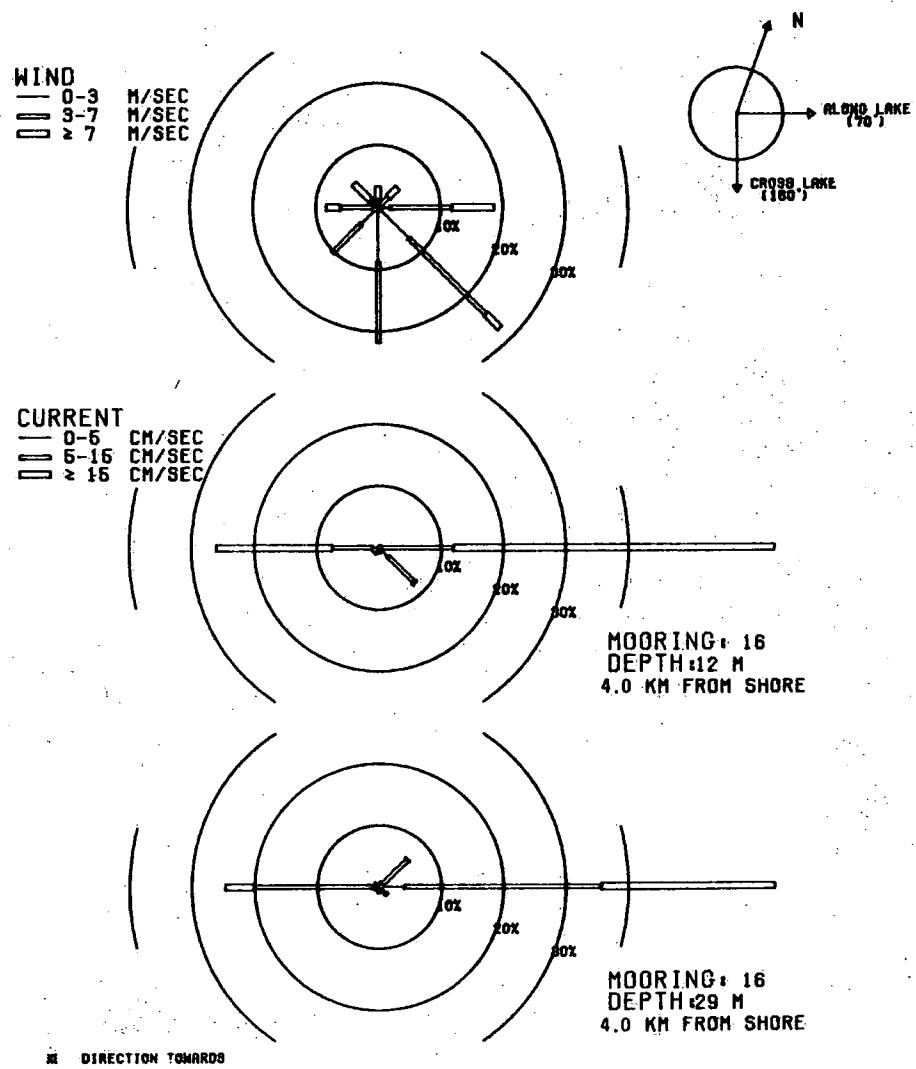
MOORING: 15  
DEPTH: 23 M  
3.0 KM FROM SHORE

PICKERING

DATE: JAN 1980

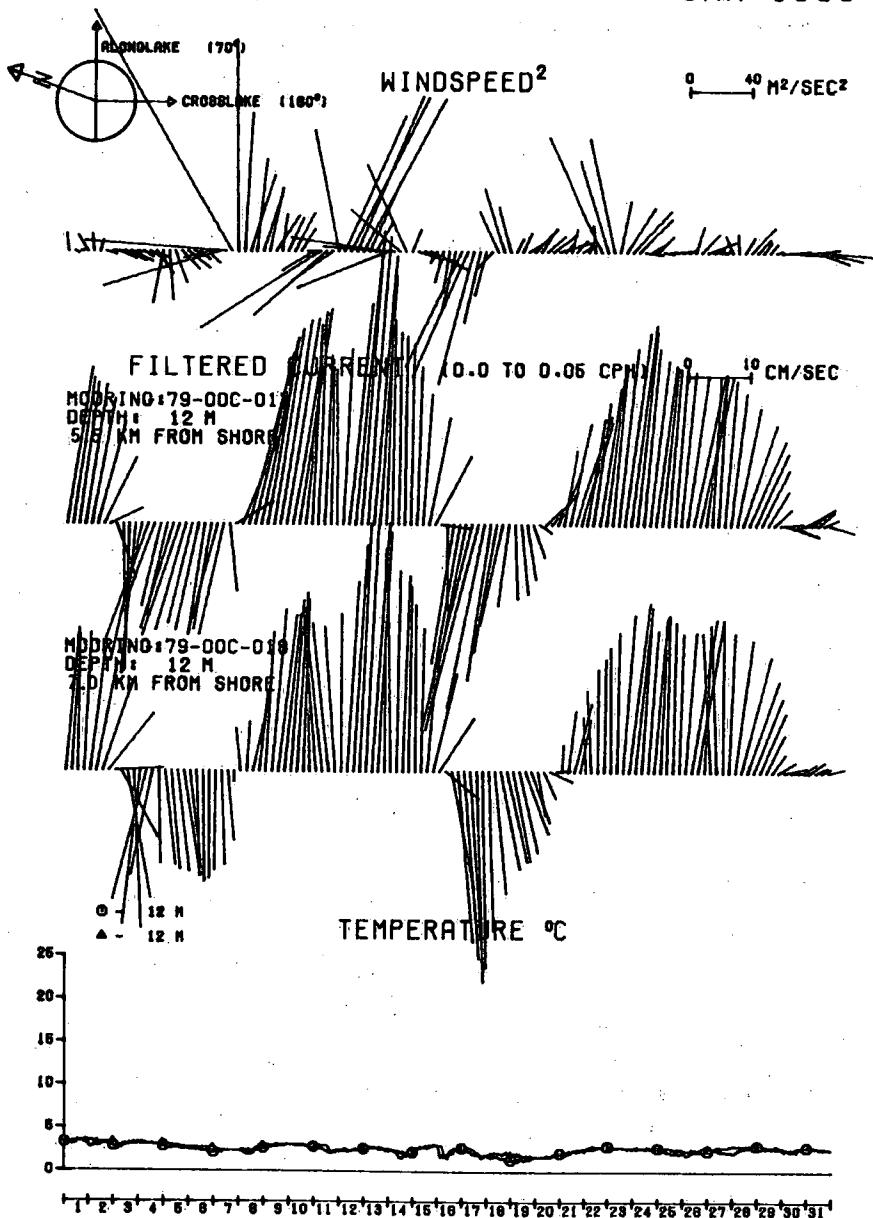


PICKERING DATE: JAN 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

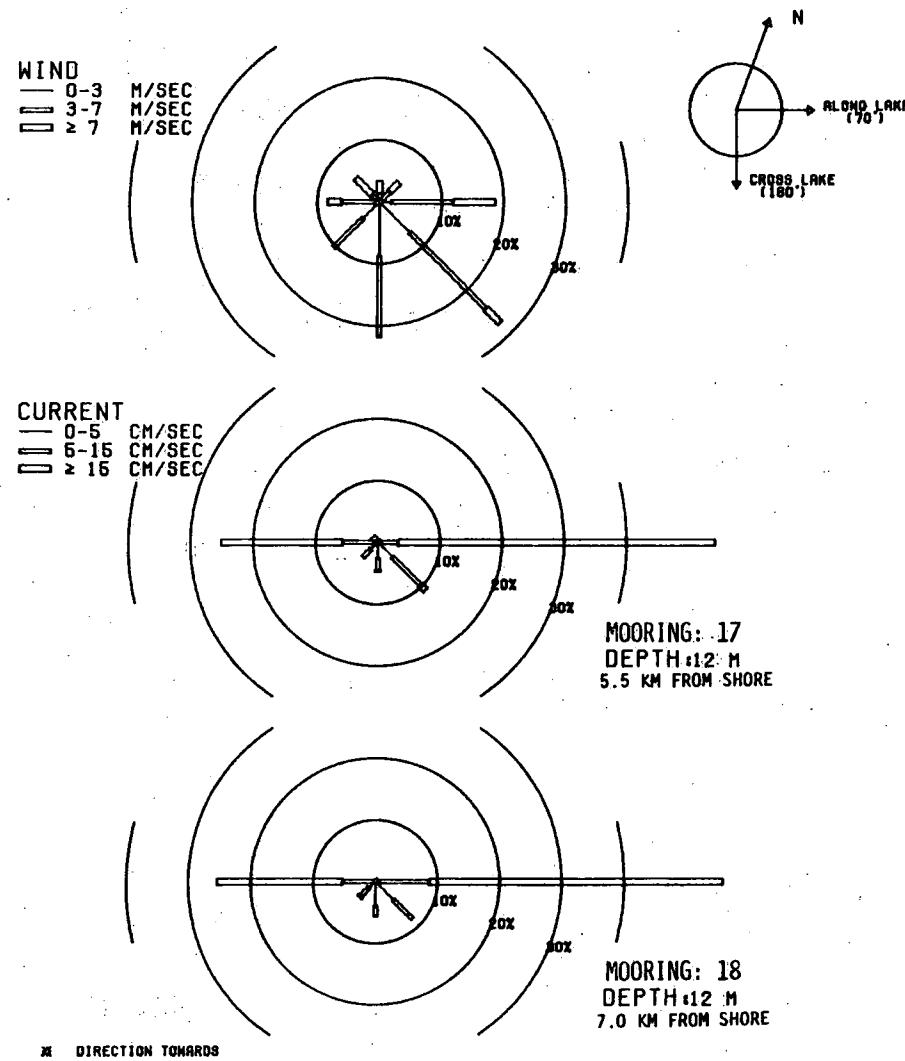


PICKERING

DATE: JAN 1980

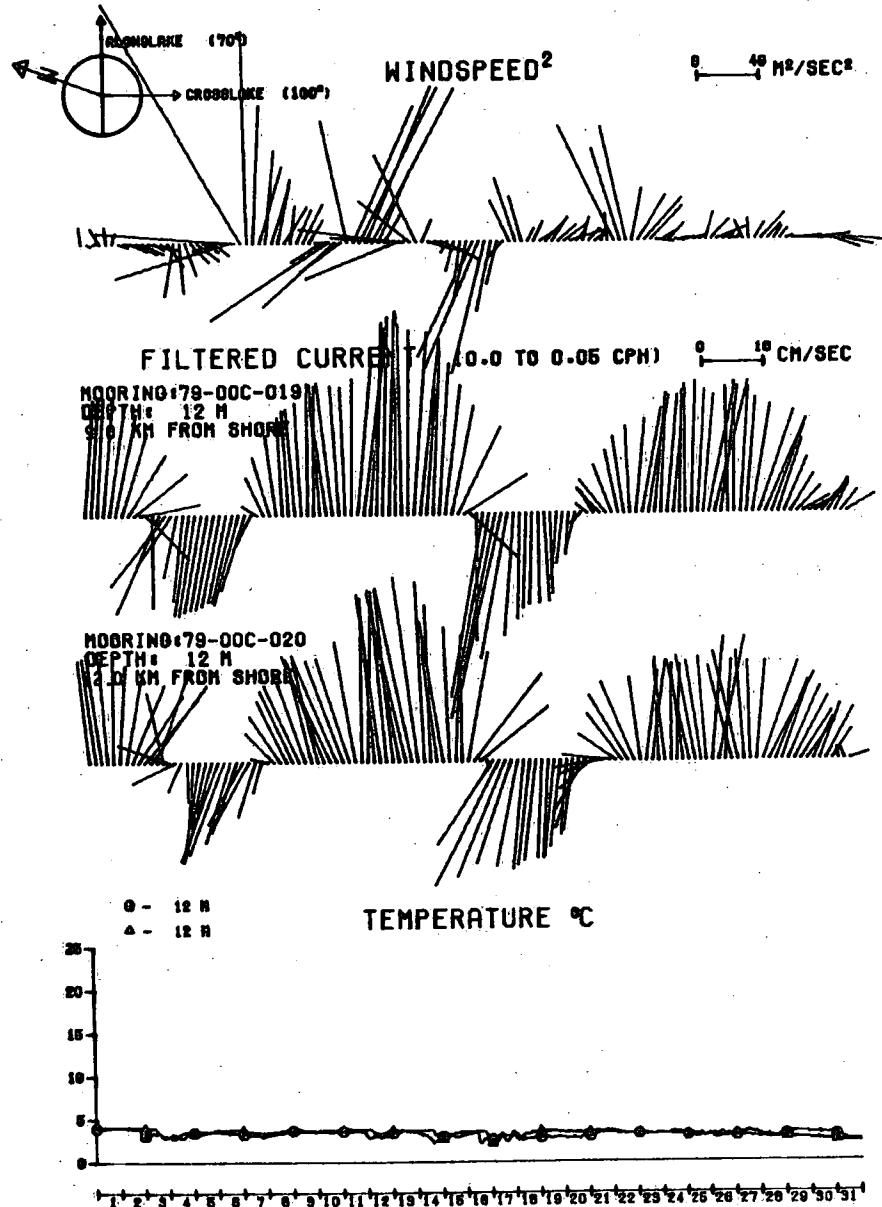


PICKERING DATE: JAN 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

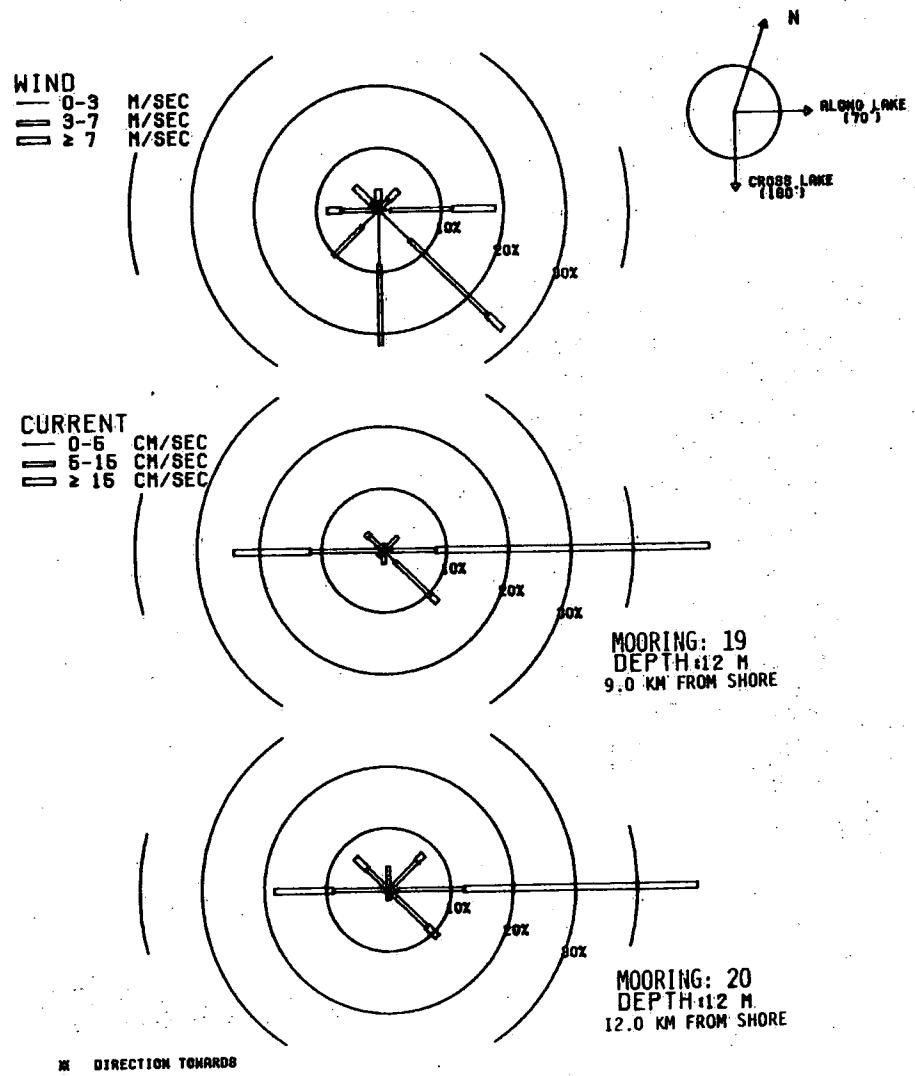


PICKERING

DATE: JAN 1980

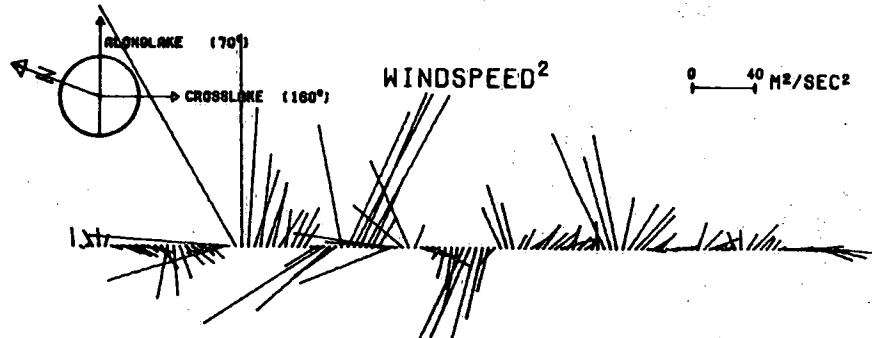


PICKERING DATE: JAN 1980  
MONTHLY SUMMARY: WIND AND CURRENT



PICKERING

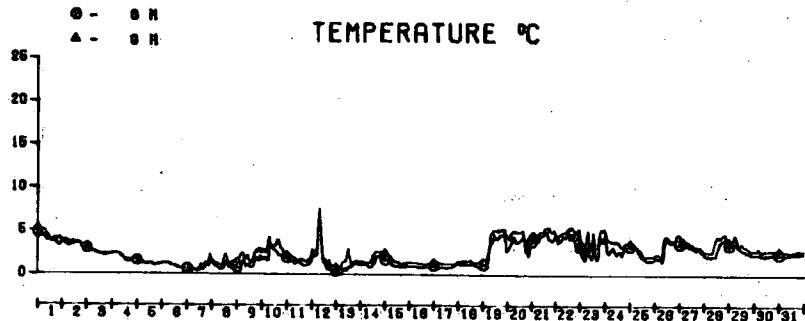
DATE: JAN 1980



MOORING: 79-00C-021  
DEPTH: 8 M  
0.75 KM FROM SHORE



MOORING: 79-00C-024  
DEPTH: 8 M  
0.75 KM FROM SHORE

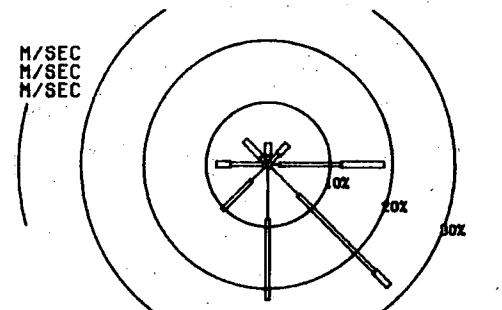


PICKERING

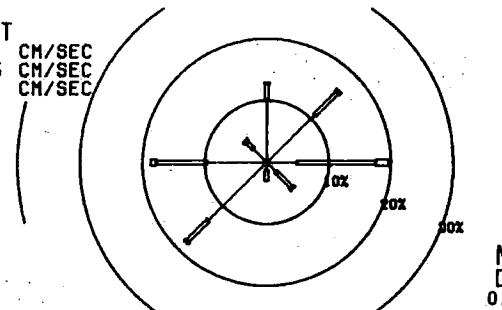
DATE: JAN 1980

MONTHLY SUMMARY: WIND AND CURRENT\*

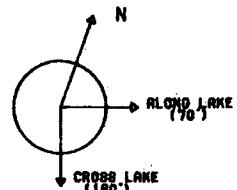
WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— > 7 M/SEC



CURRENT  
— 0-6 CM/SEC  
— 6-15 CM/SEC  
— > 15 CM/SEC

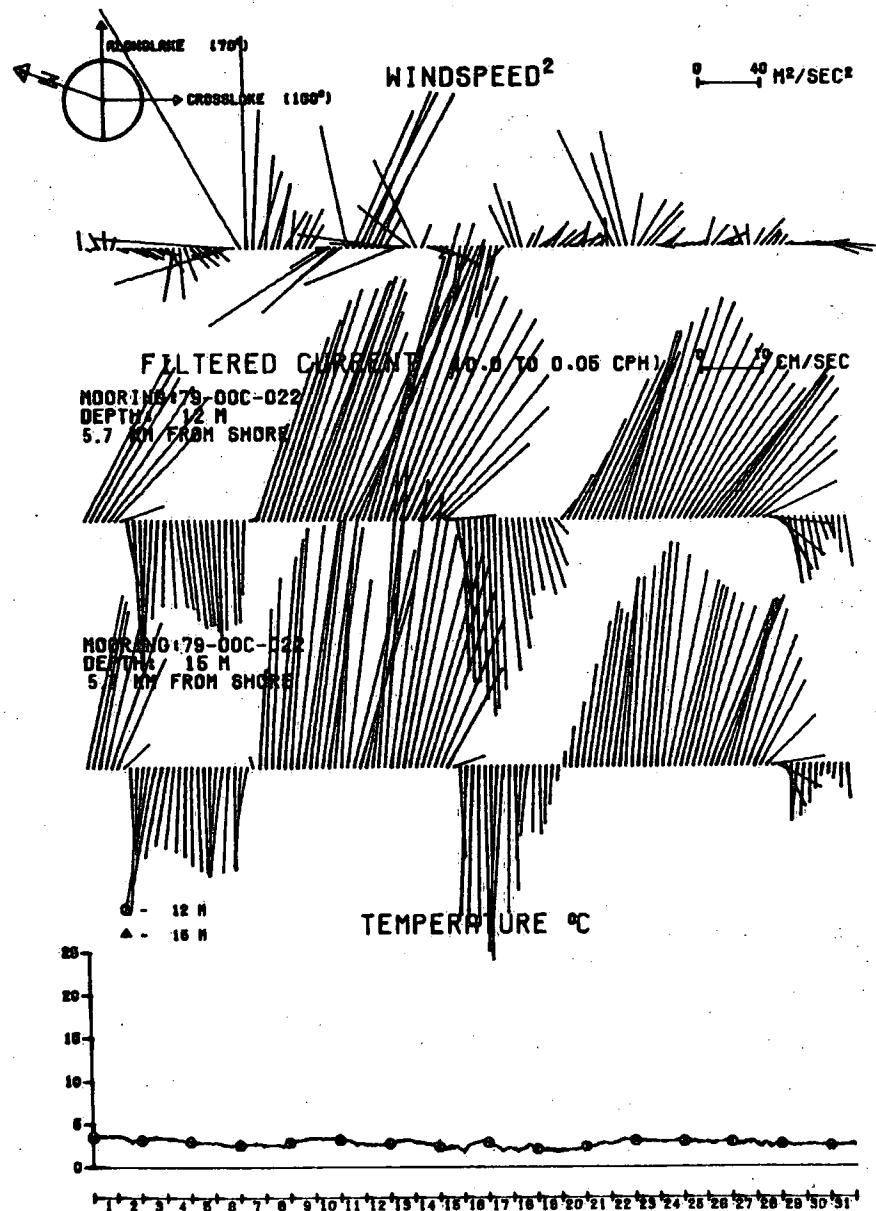


\* DIRECTION TOWARDS



PICKERING

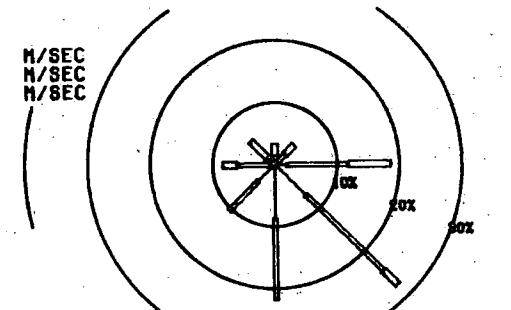
DATE: JAN 1980



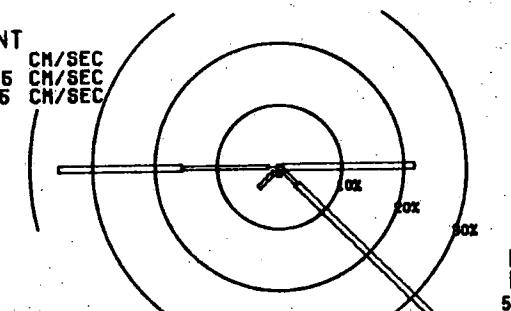
PICKERING

DATE: JAN 1980  
MONTHLY SUMMARY: WIND AND CURRENT<sup>a</sup>

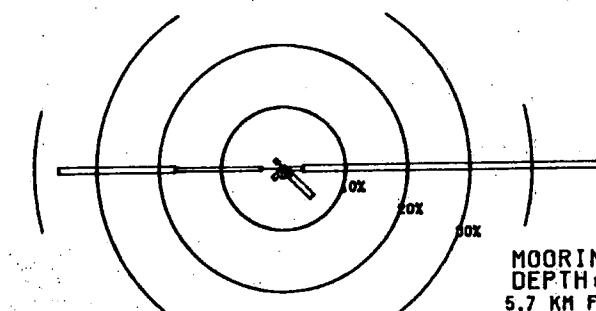
WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



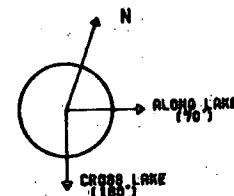
CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



MOORING: 22  
DEPTH: 12 M  
5.7 KM FROM SHORE

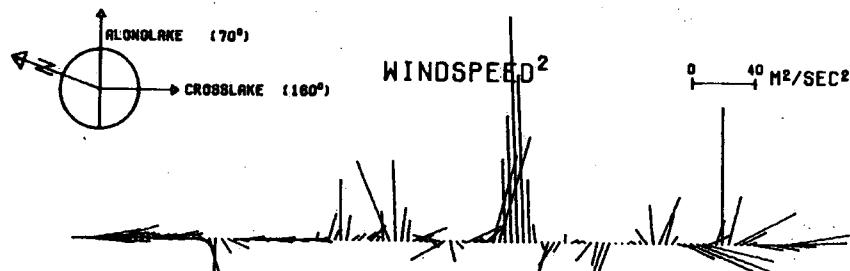


MOORING: 22  
DEPTH: 15 M  
5.7 KM FROM SHORE



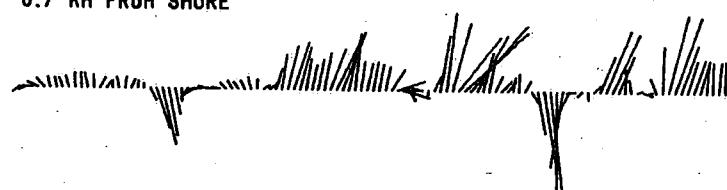
PICKERING

DATE: FEB 1980

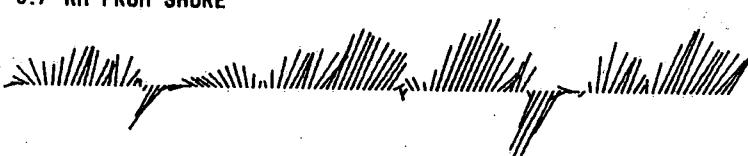


FILTERED CURRENT (0.0 TO 0.06 CPH) 0 10 CM/SEC

MOORING: 79-00C-013  
DEPTH: 8 M  
0.7 KM FROM SHORE

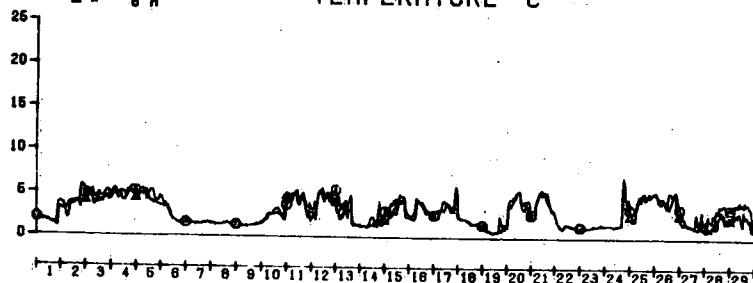


MOORING: 79-00C-023  
DEPTH: 8 M  
0.7 KM FROM SHORE



○ - 8 M  
△ - 6 M

TEMPERATURE °C



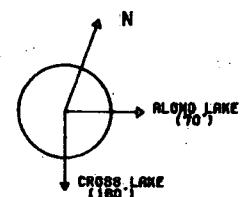
PICKERING

DATE: FEB 1980

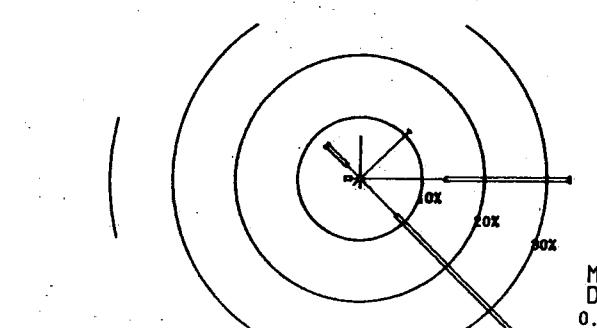
MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC

CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



MOORING: 13  
DEPTH: 8 M  
0.7 KM FROM SHORE

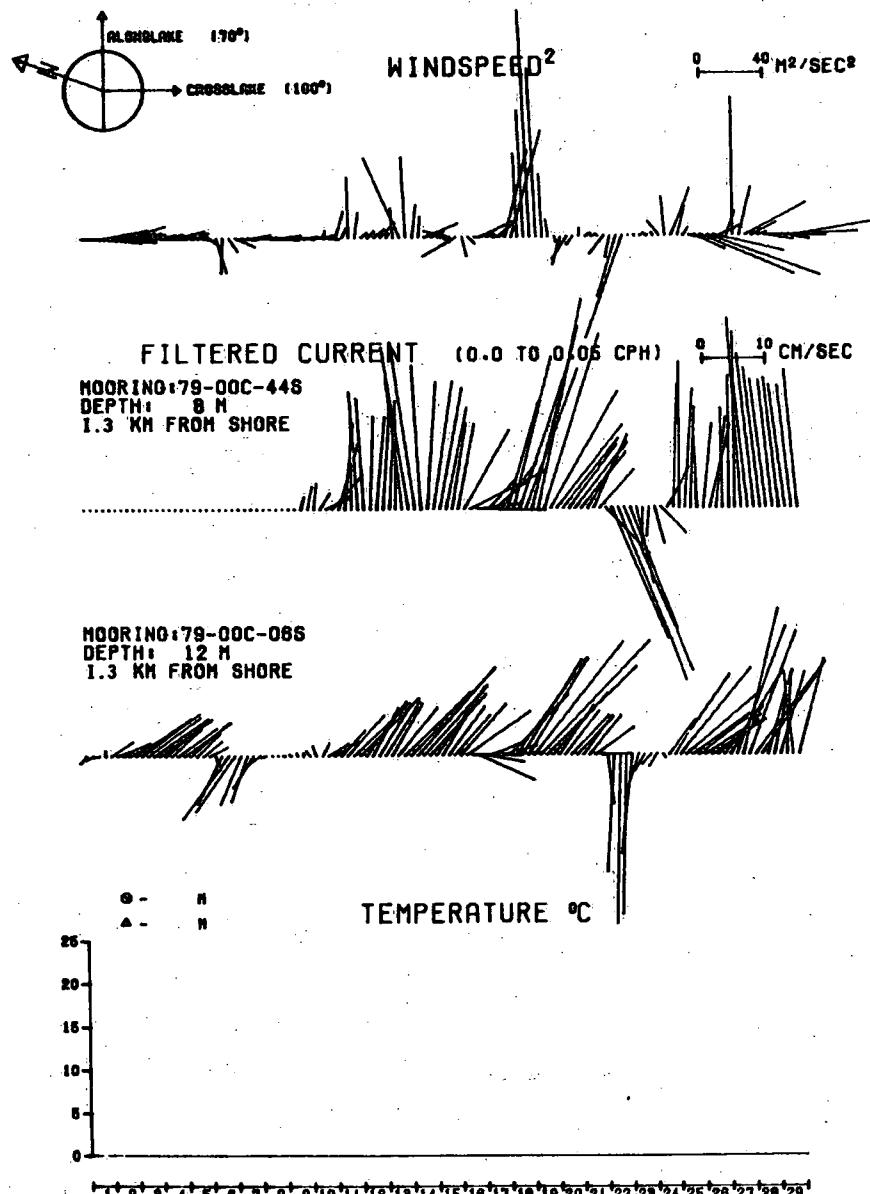


MOORING: 23  
DEPTH: 8 M  
0.7 KM FROM SHORE

\* DIRECTION TOWARDS

PICKERING

DATE: FEB 1980

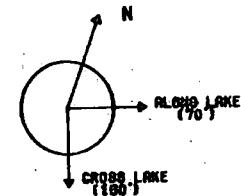


PICKERING

DATE: FEB 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— > 7 M/SEC

CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— > 15 CM/SEC

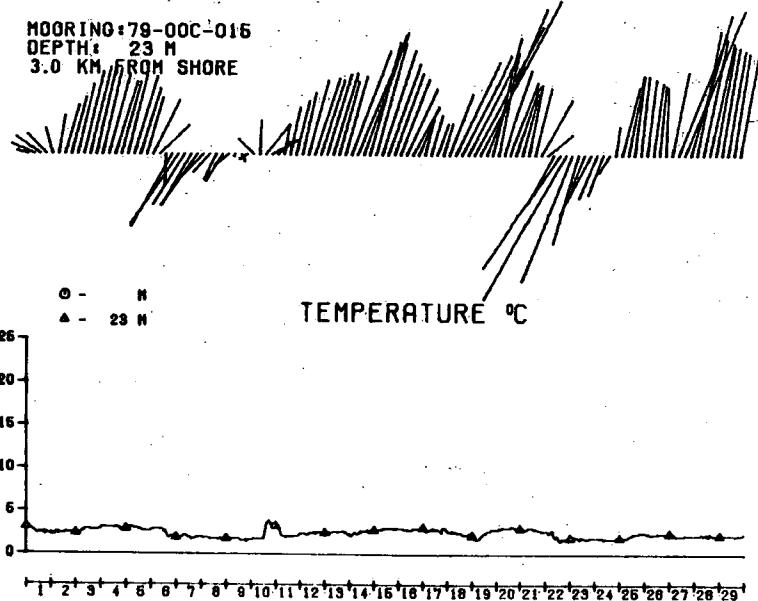
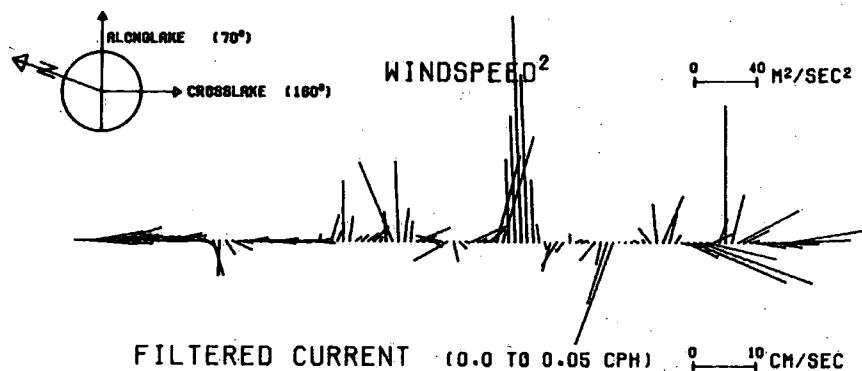


MOORING: 44  
DEPTH: 8 M  
1.3 KM FROM SHORE

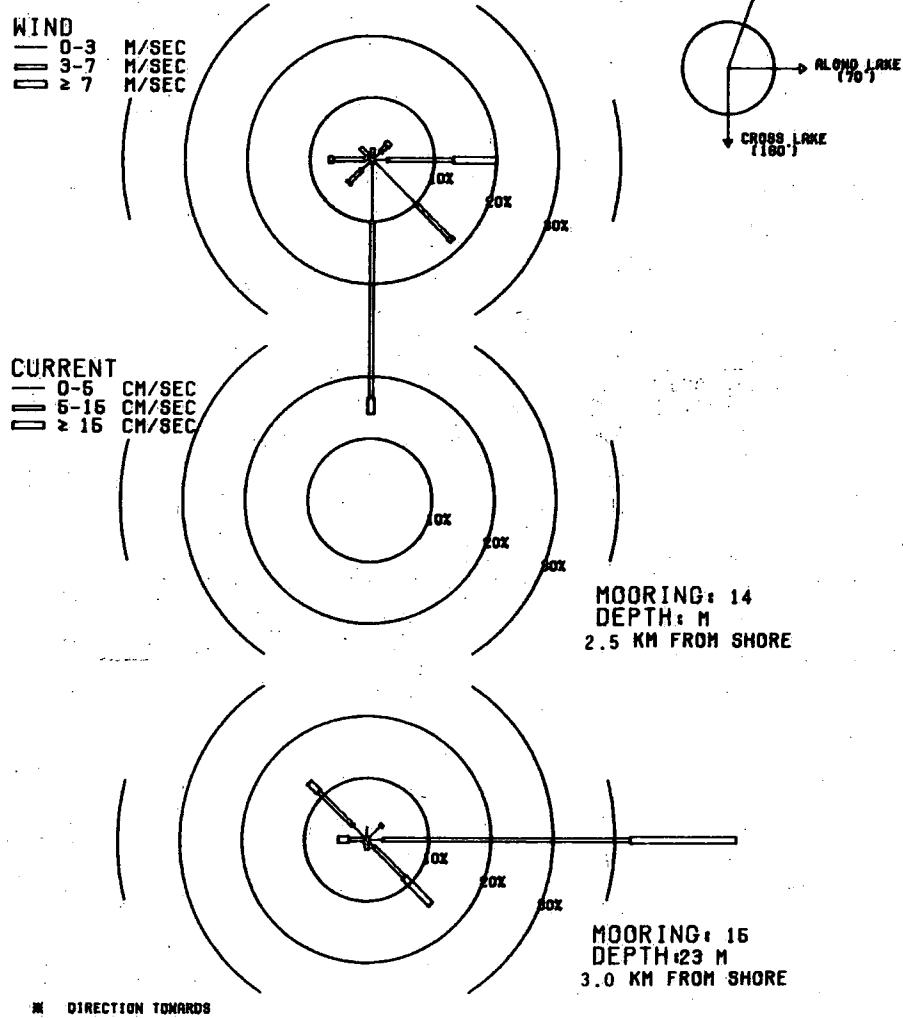
MOORING: 6  
DEPTH: 12 M  
1.3 KM FROM SHORE

PICKERING

DATE: FEB 1980

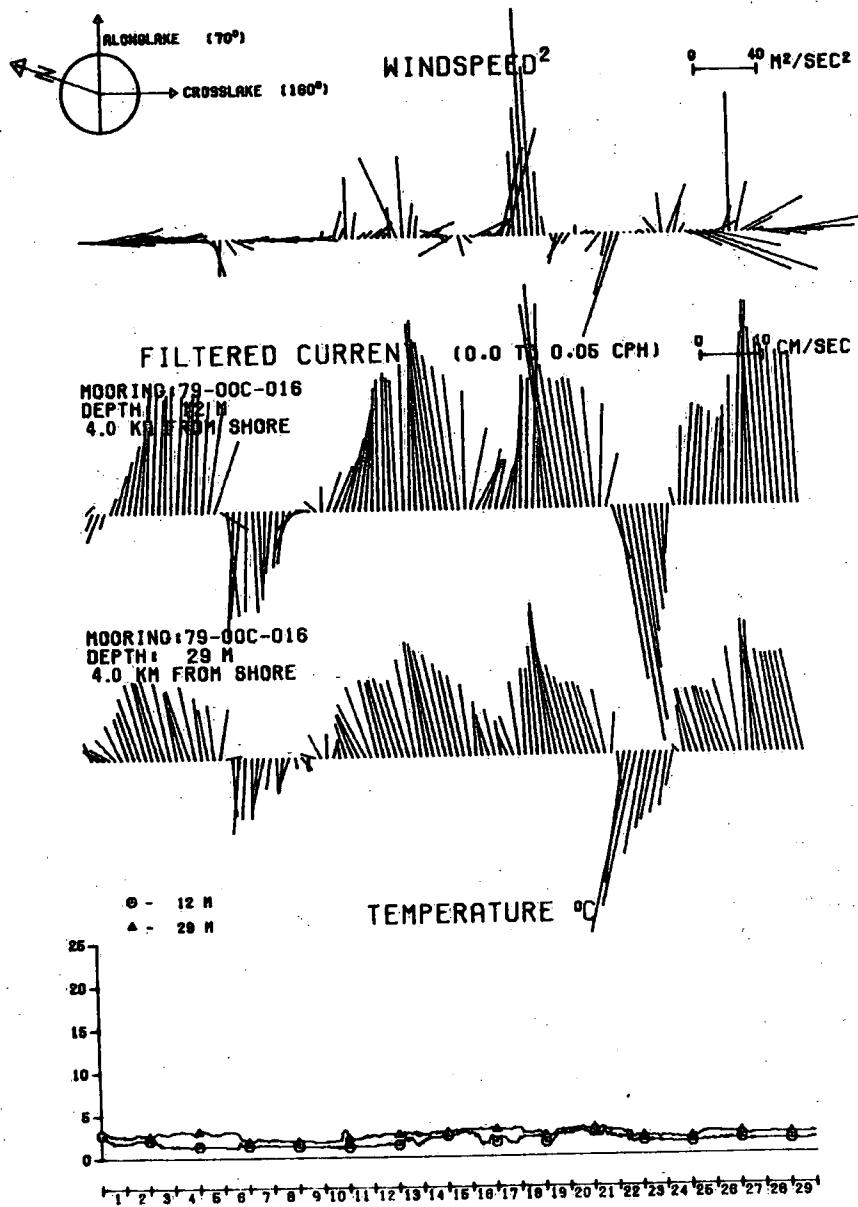


PICKERING      DATE: FEB 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

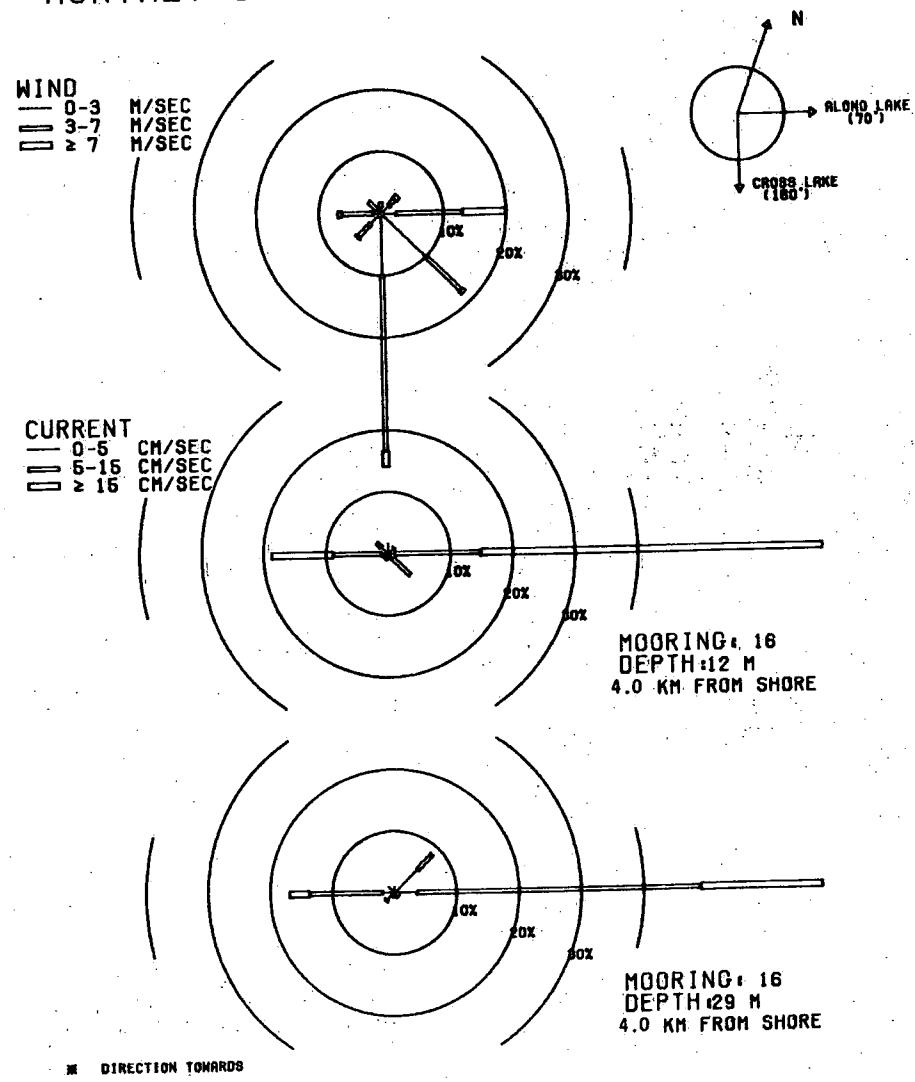


PICKERING

DATE : FEB 1980

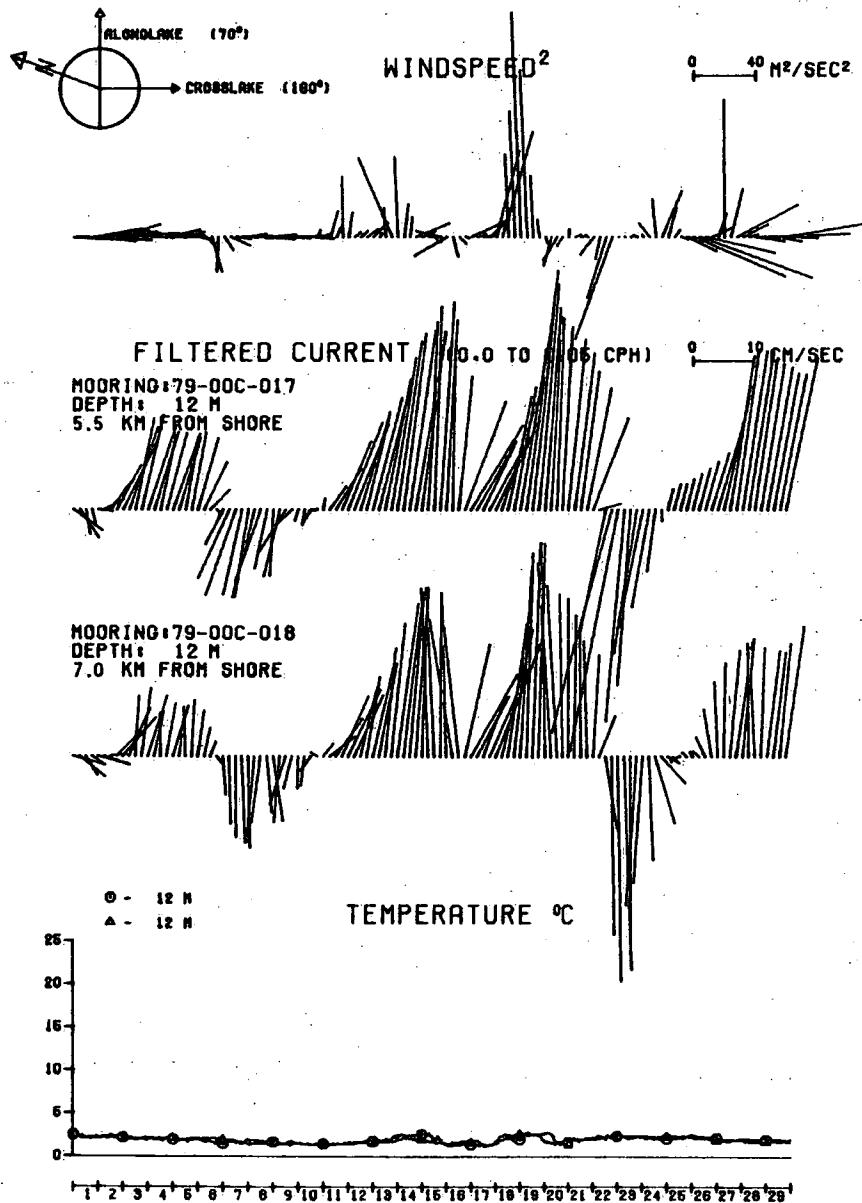


PICKERING DATE: FEB 1980  
MONTHLY SUMMARY: WIND AND CURRENT



PICKERING

DATE: FEB 1980

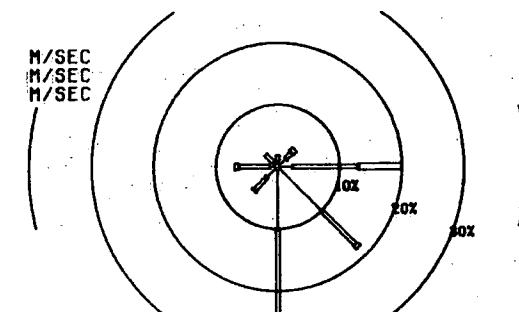


PICKERING

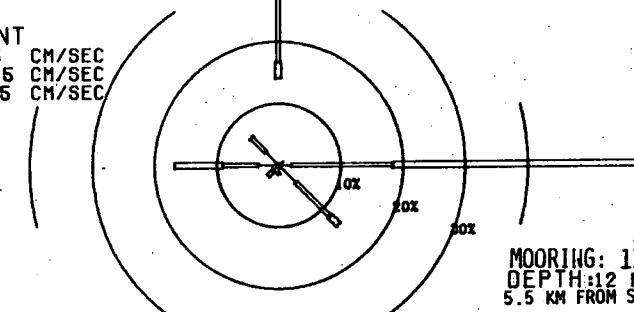
DATE: FEB 1980

MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC

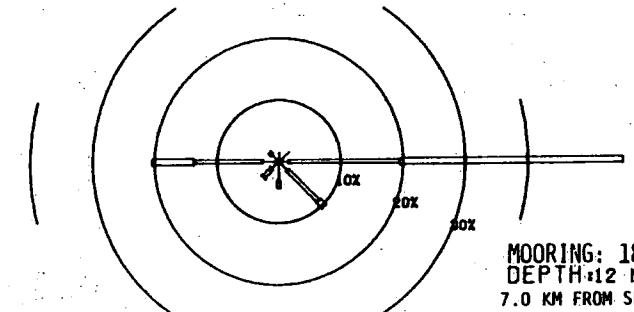


CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



MOORING: 17  
DEPTH: 12 M  
5.5 KM FROM SHORE

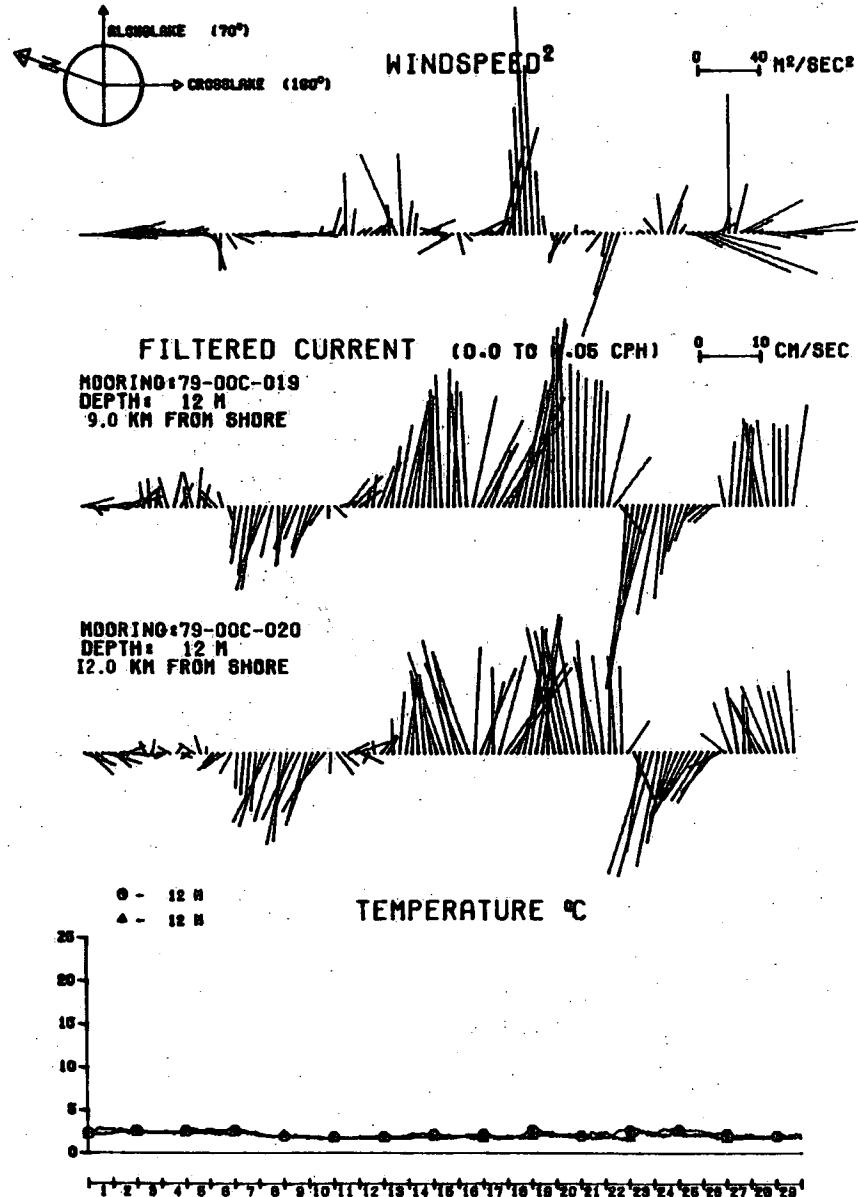
WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



MOORING: 18  
DEPTH: 12 M  
7.0 KM FROM SHORE

PICKERING

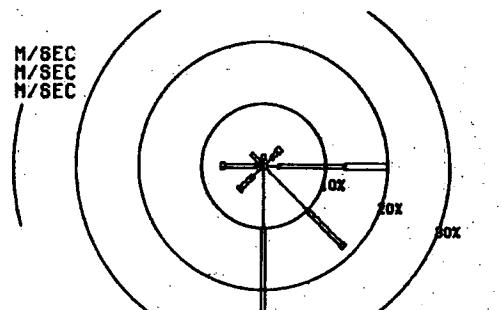
DATE: FEB 1980



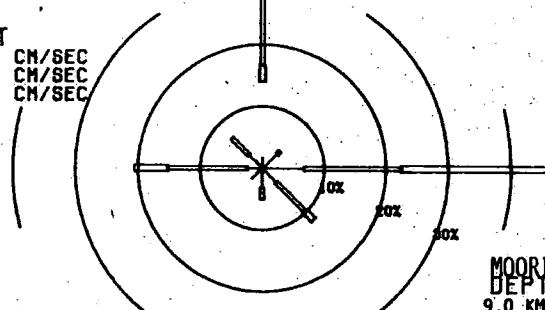
PICKERING

DATE: FEB 1980  
MONTHLY SUMMARY: WIND AND CURRENT

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



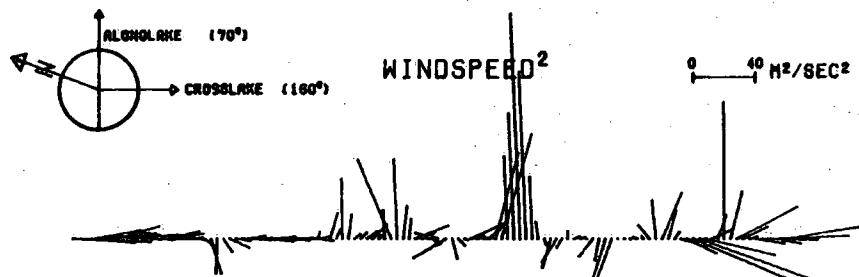
MOORING: 19  
DEPTH: 12 M  
9.0 KM FROM SHORE

■ DIRECTION TOWARDS

MOORING: 20  
DEPTH: 12 M  
12.0 KM FROM SHORE

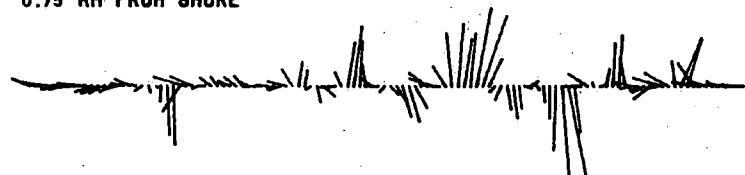
PICKERING

DATE: FEB 1980

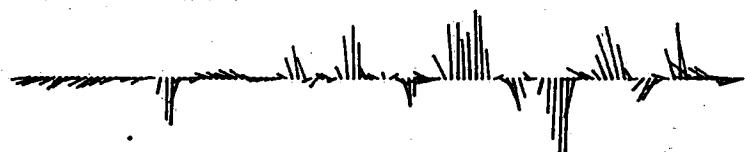


FILTERED CURRENT (0.0 TO 0.06 CPM) 0 10 CM/SEC

MOORING: 79-00C-021  
DEPTH: 8 M  
0.75 KM FROM SHORE

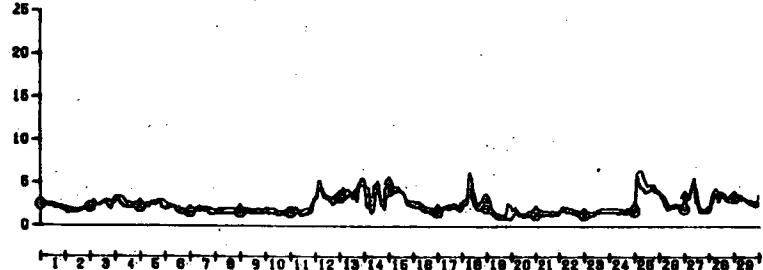


MOORING: 79-00C-024  
DEPTH: 8 M  
0.75 KM FROM SHORE



○ - 8 M  
△ - 0 M

TEMPERATURE °C

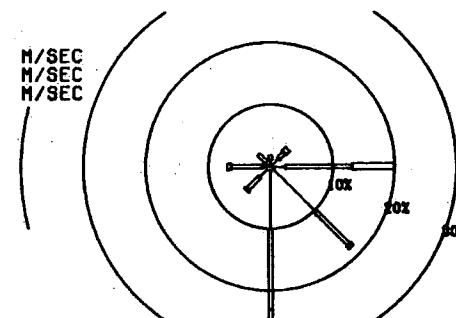


PICKERING

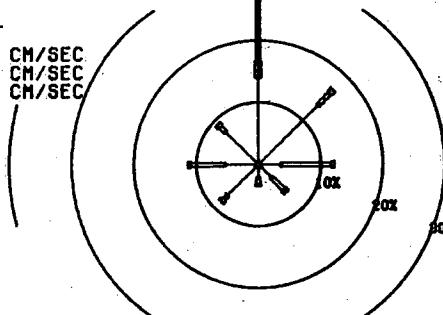
DATE: FEB 1980

MONTHLY SUMMARY: WIND AND CURRENT\*

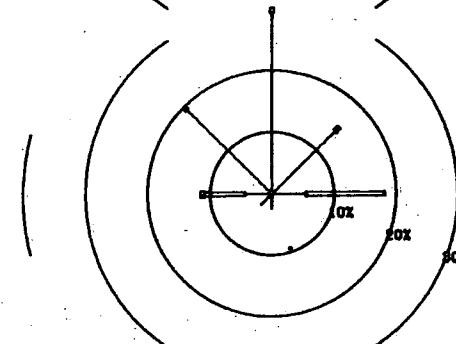
WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



MOORING: 21  
DEPTH: 8 M  
0.75 KM FROM SHORE

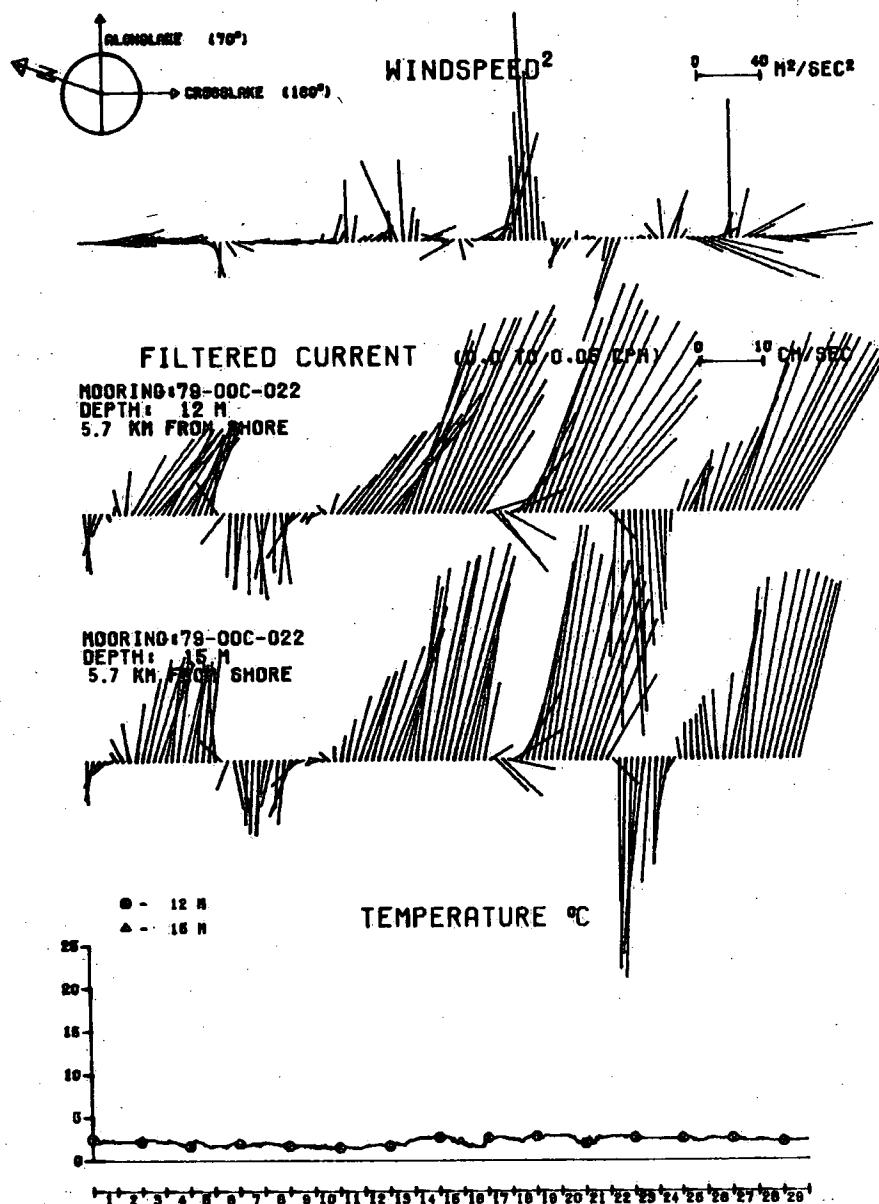


MOORING: 24  
DEPTH: 8 M  
0.75 KM FROM SHORE

\* DIRECTION TOWARDS

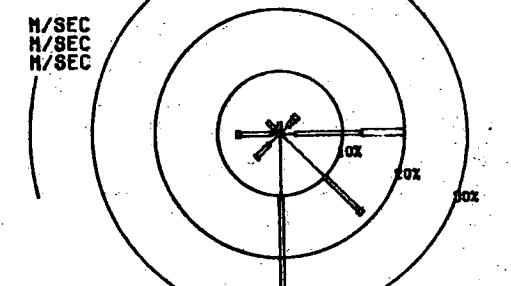
PICKERING

DATE: FEB 1980

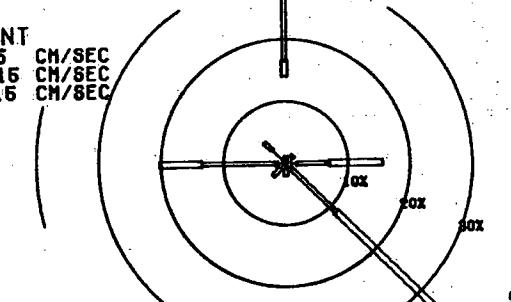


PICKERING DATE: FEB 1980  
MONTHLY SUMMARY: WIND AND CURRENT<sup>a</sup>

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 6-16 CM/SEC  
— ≥ 16 CM/SEC



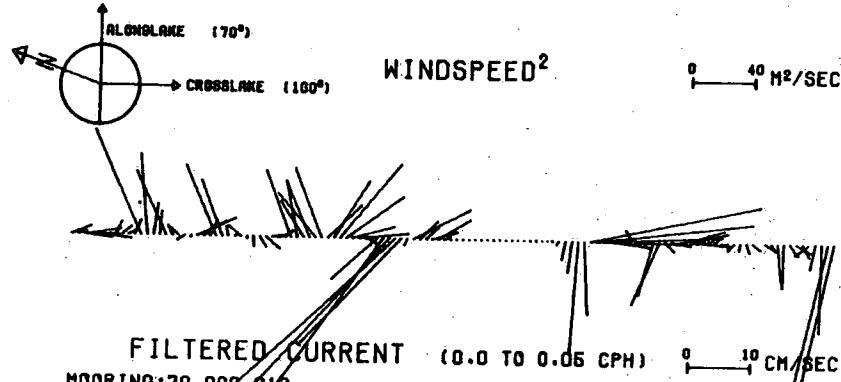
MOORING: 22  
DEPTH: 12 M  
5.7 KM FROM SHORE

N DIRECTION TOWARDS

MOORING: 22  
DEPTH: 16 M  
5.7 KM FROM SHORE

PICKERING

DATE: MAR 1980

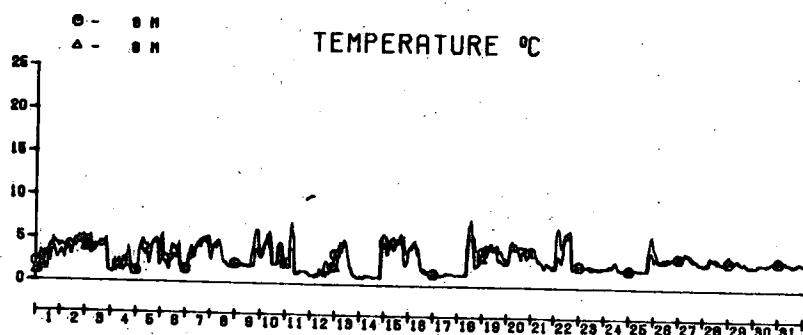


FILTERED CURRENT (0.0 TO 0.06 CPH)

MOORING: 79-002-013  
DEPTH: 8 M  
0.7 KM FROM SHORE



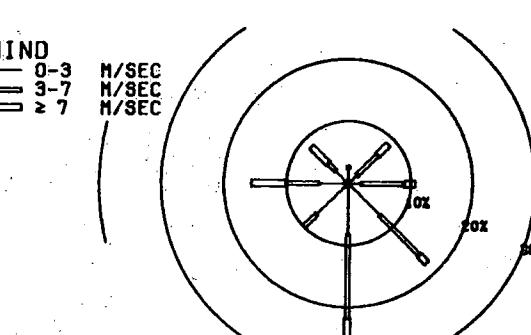
MOORING: 79-002-023  
DEPTH: 8 M  
0.7 KM FROM SHORE



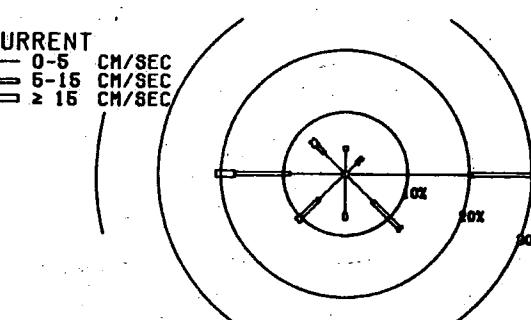
PICKERING

DATE: MAR 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC



CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 15 CM/SEC



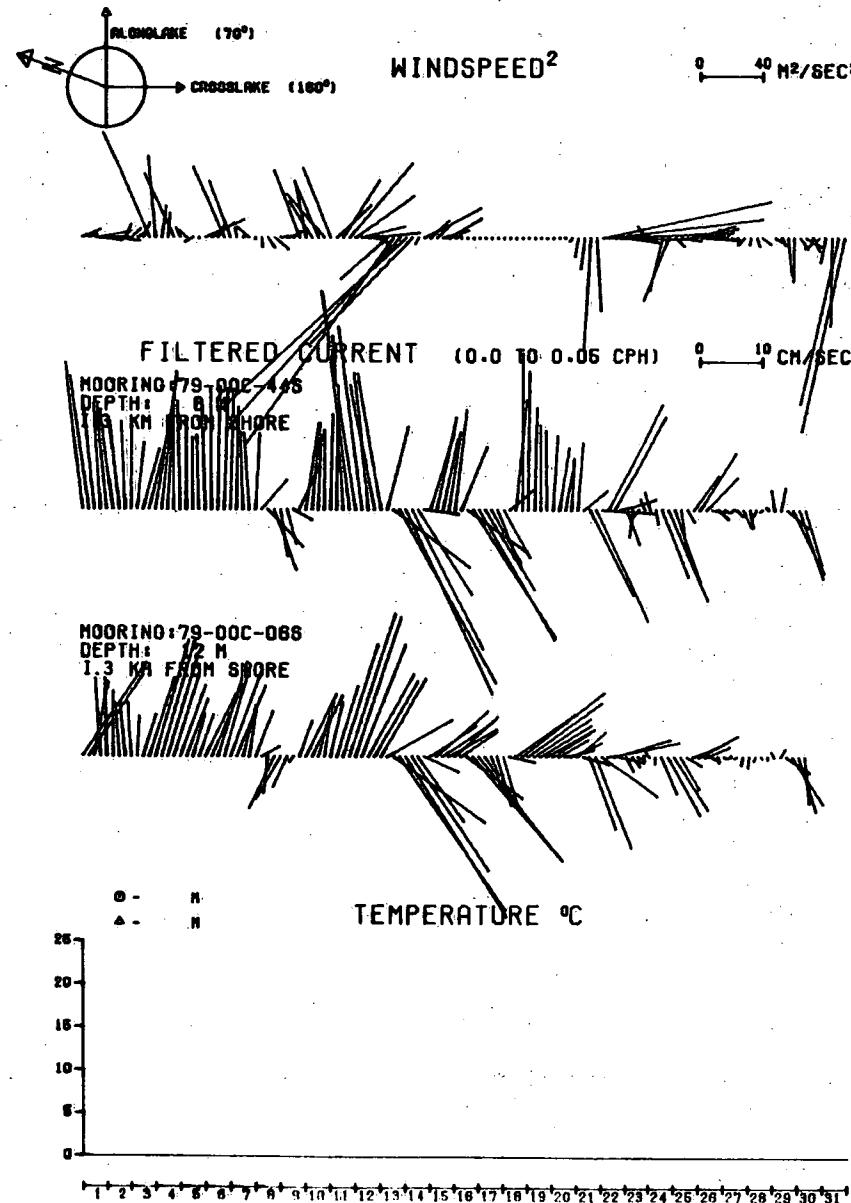
MOORING: 13  
DEPTH: 8 M  
0.7 KM FROM SHORE

\* DIRECTION TOWARDS

MOORING: 23  
DEPTH: 8 M  
0.7 KM FROM SHORE

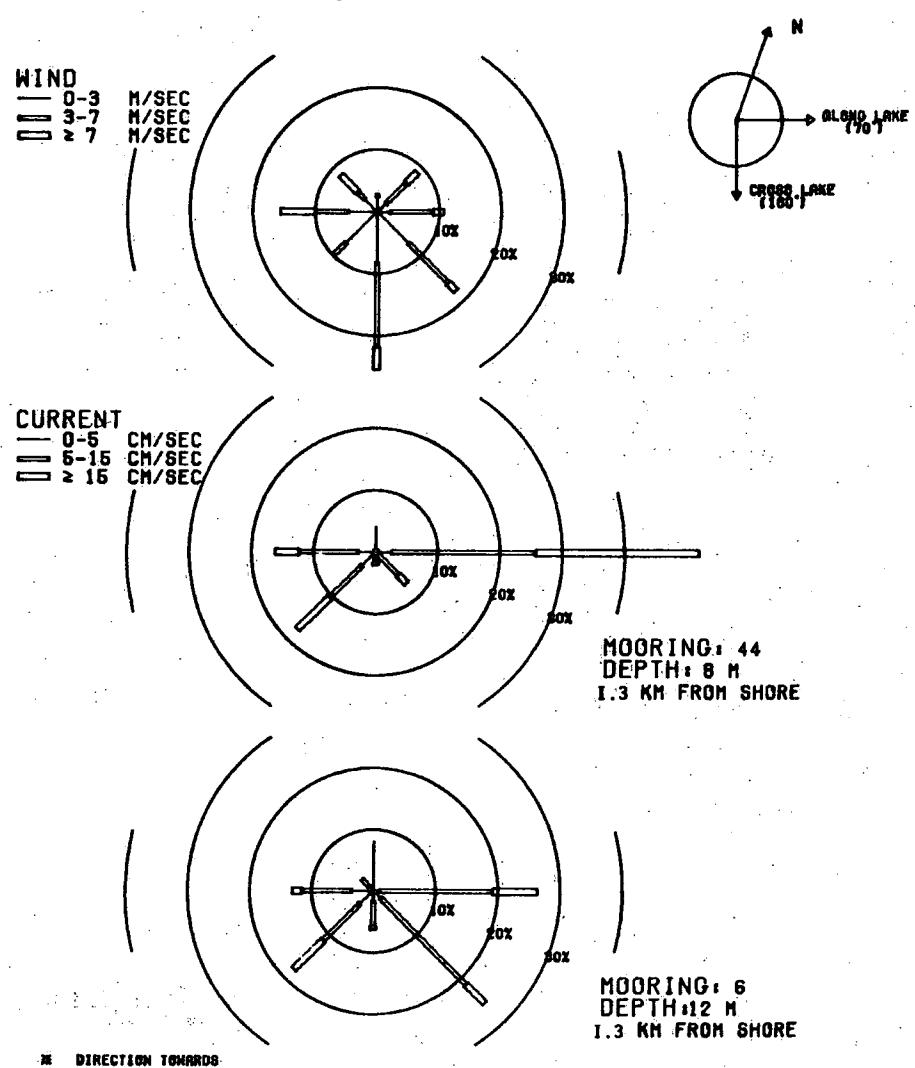
PICKERING

DATE: MAR 1980



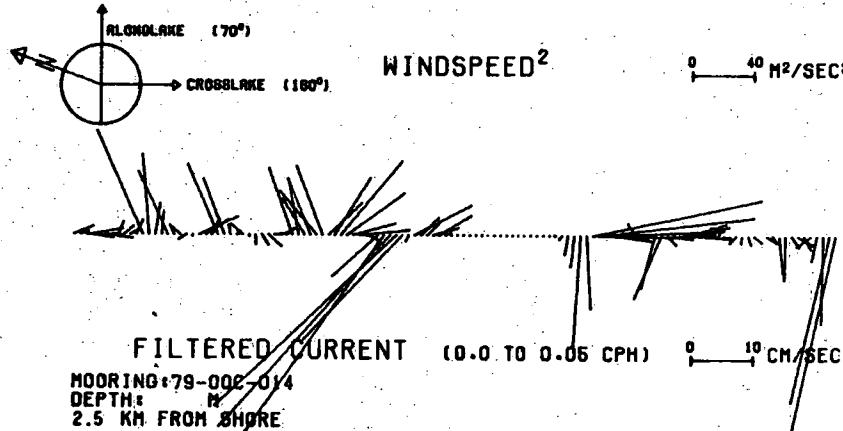
PICKERING

DATE: MAR 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

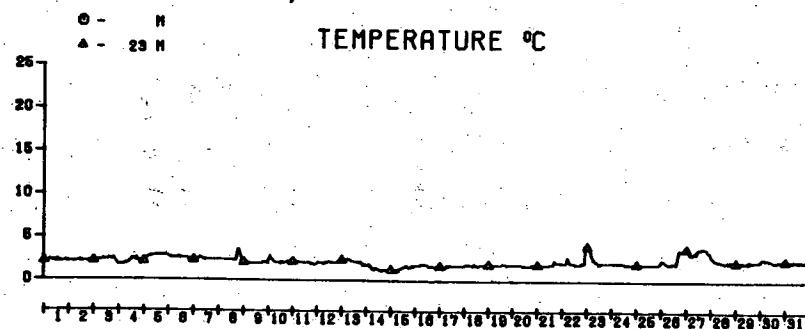


PICKERING

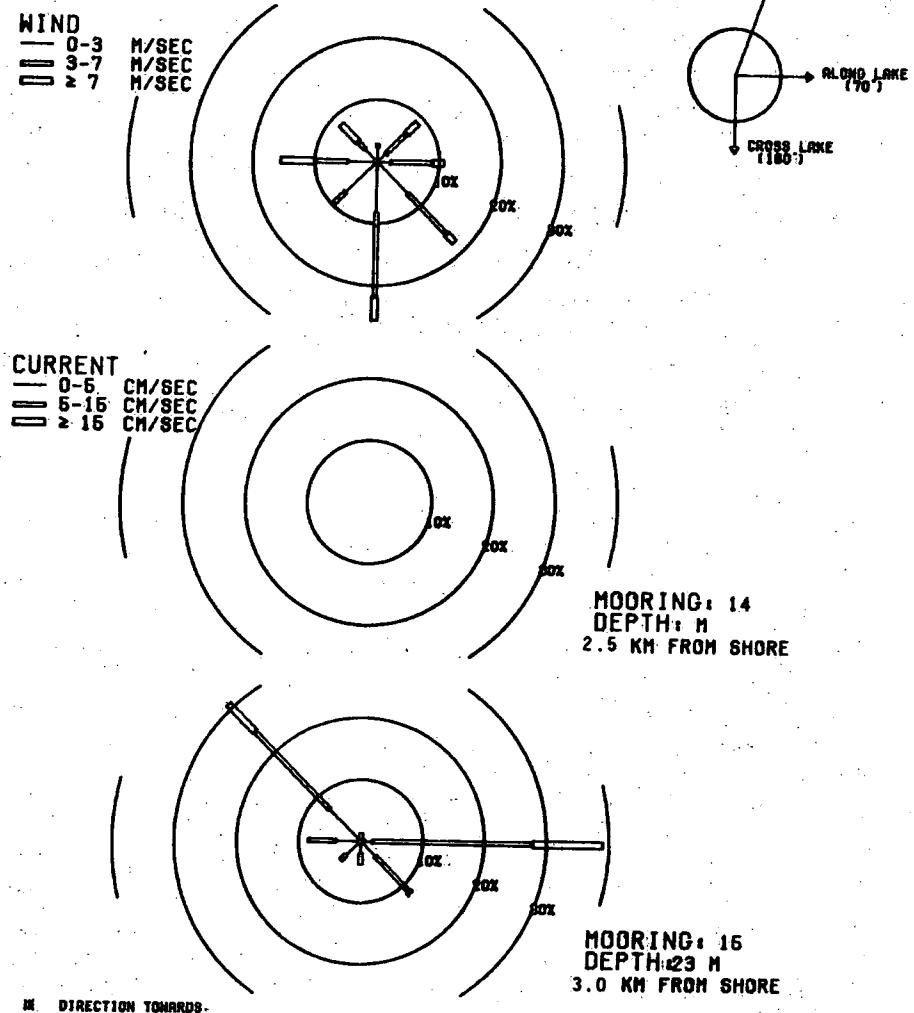
DATE: MAR 1980



MOORING: 79-002-015  
DEPTH: 23 M  
3.0 KM FROM SHORE

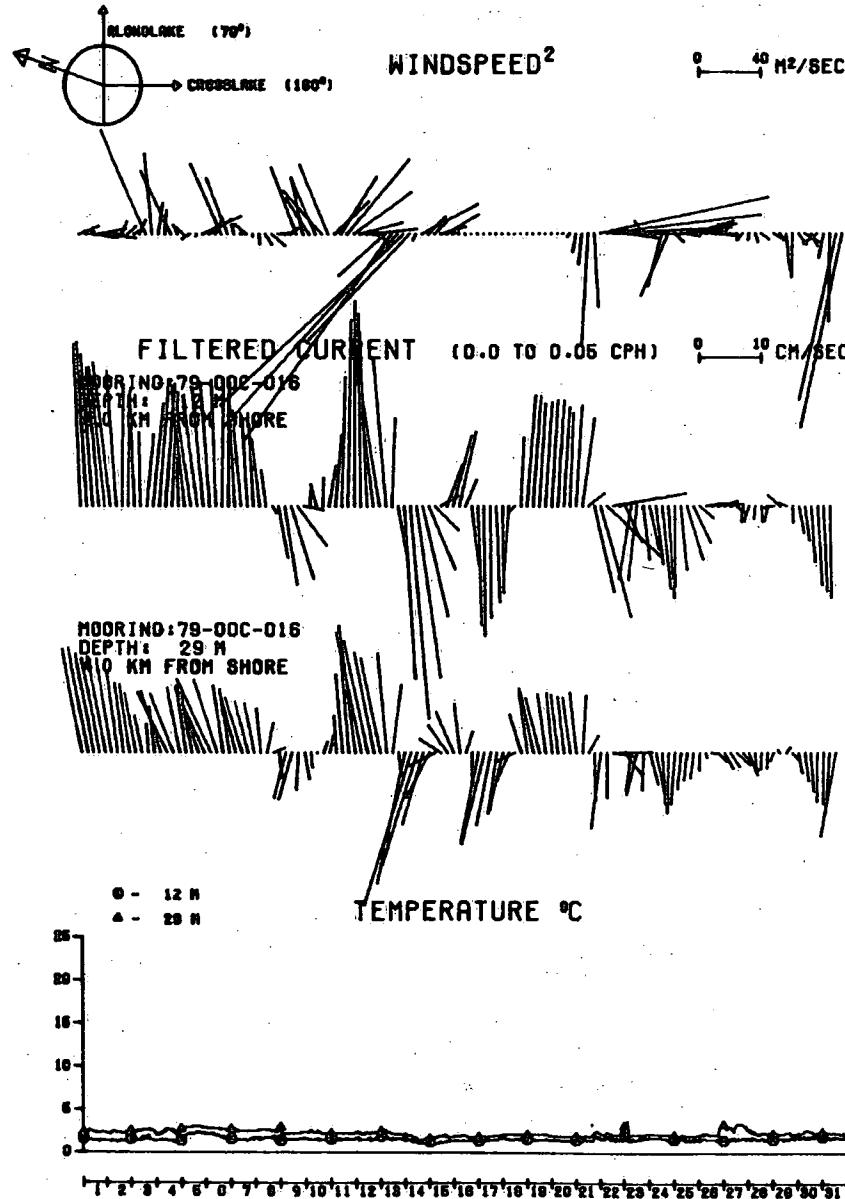


PICKERING DATE: MAR 1980  
MONTHLY SUMMARY: WIND AND CURRENT



PICKERING

DATE: MAR 1980



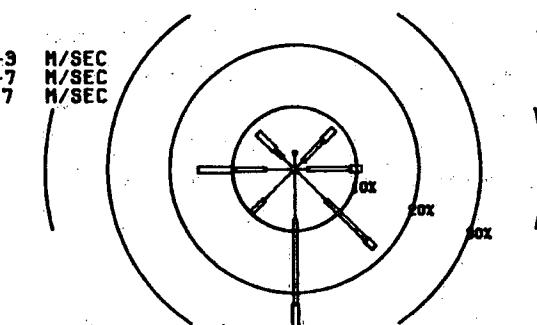
PICKERING

DATE: MAR 1980

MONTHLY SUMMARY: WIND AND CURRENT<sup>a</sup>

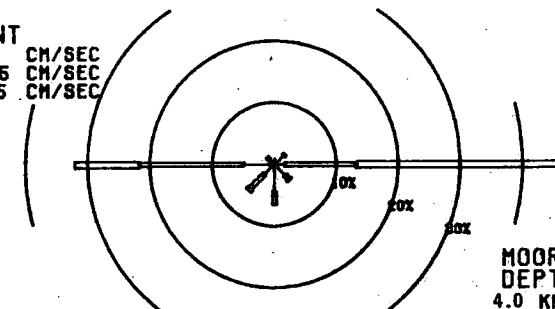
WIND

0-3 M/SEC  
3-7 M/SEC  
≥ 7 M/SEC



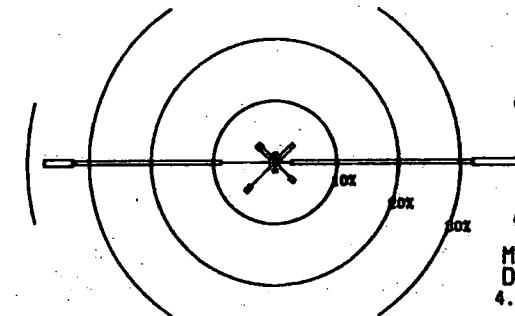
CURRENT

0-5 CM/SEC  
5-15 CM/SEC  
≥ 15 CM/SEC



MOORING: 16  
DEPTH: 12 M  
4.0 KM FROM SHORE

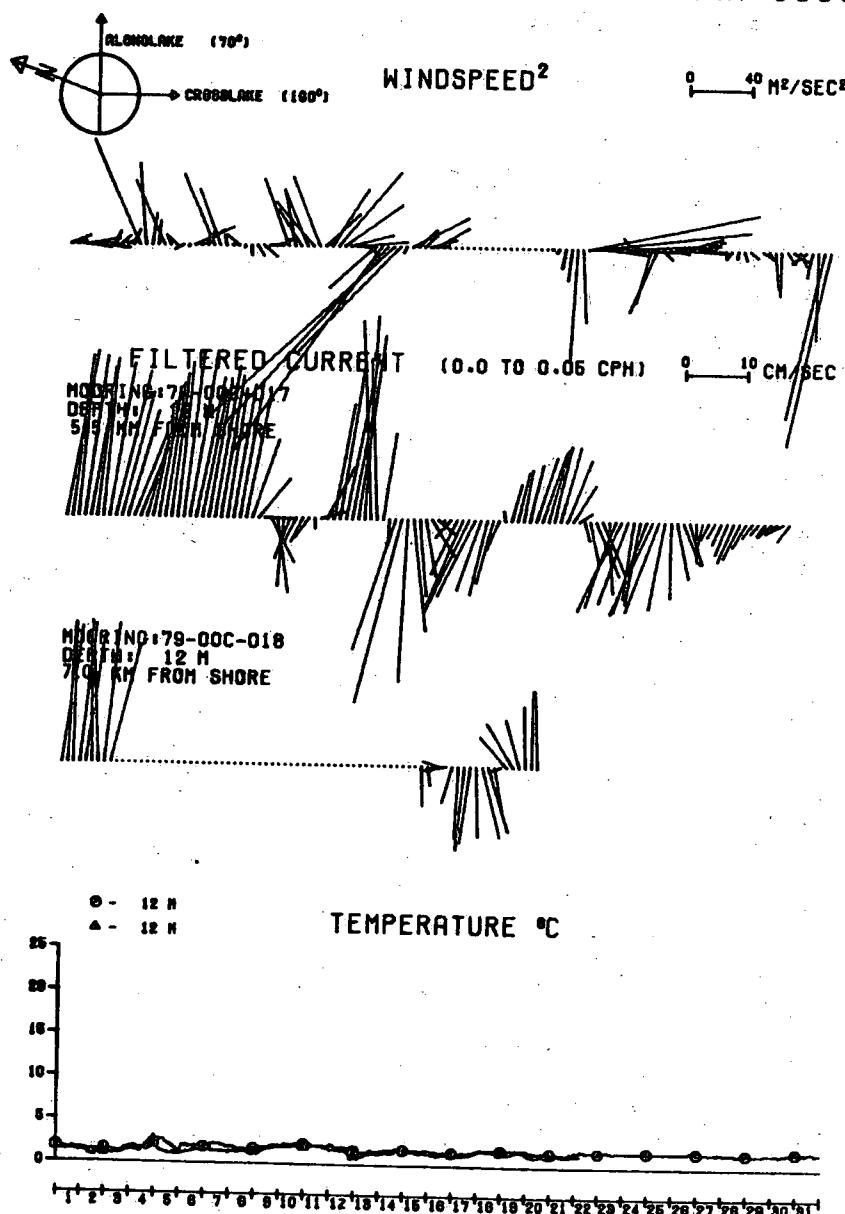
■ DIRECTION TOWARDS



MOORING: 16  
DEPTH: 29 M  
4.0 KM FROM SHORE

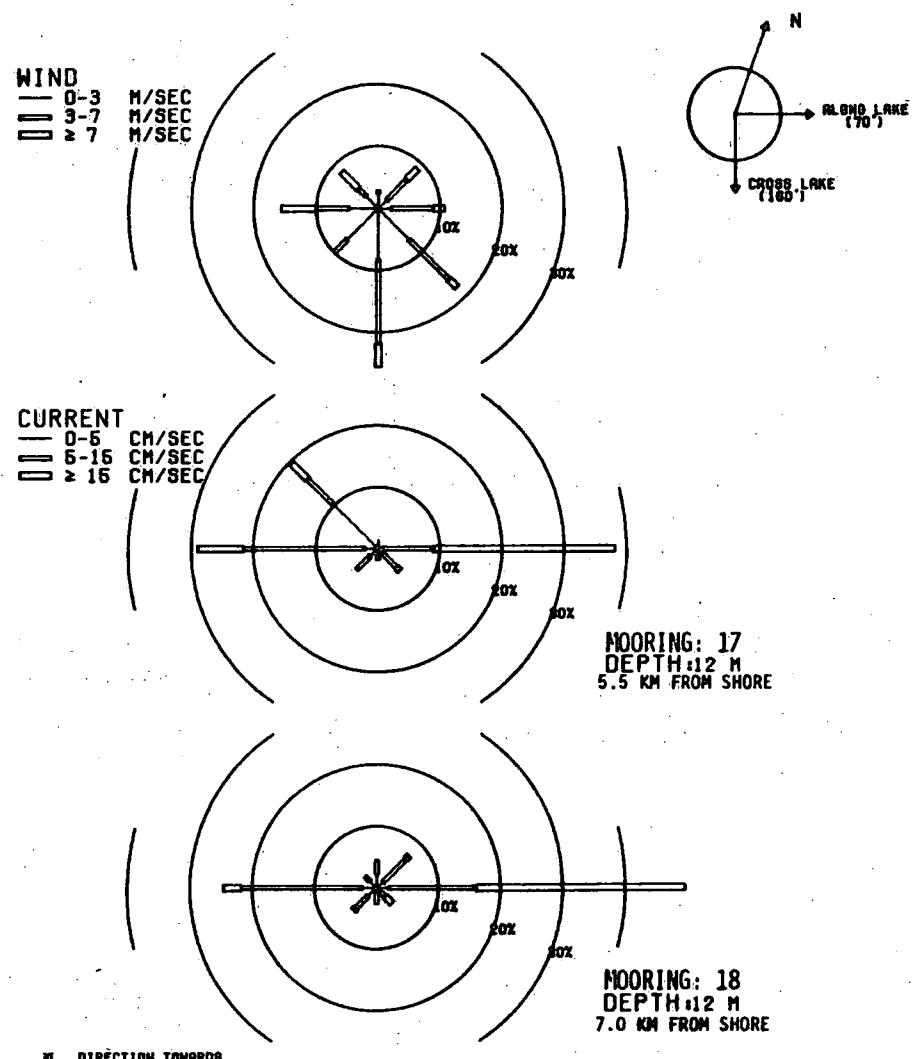
PICKERING

DATE: MAR 1980



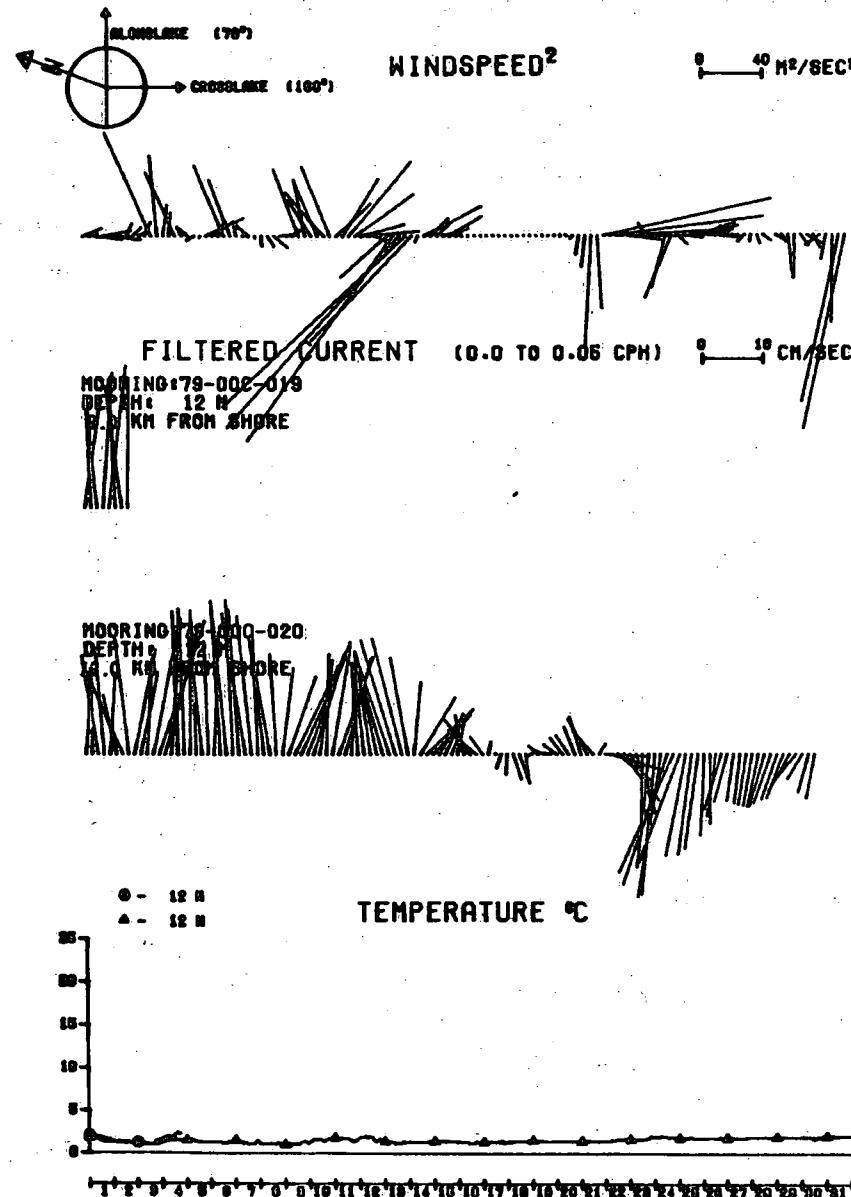
PICKERING DATE: MAR 1980

MONTHLY SUMMARY: WIND AND CURRENT



PICKERING

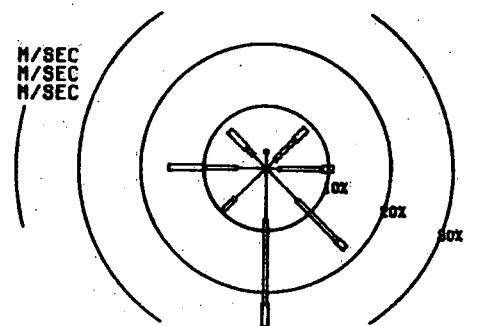
DATE: MAR 1980



PICKERING DATE: MAR 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*

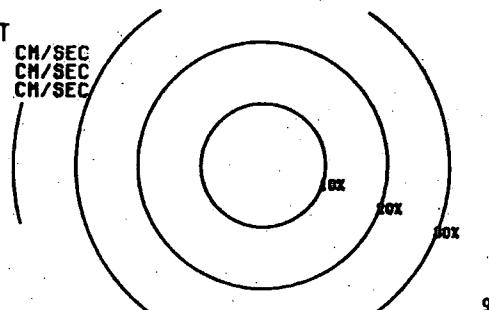
WIND  
— 0-3  
— 3-7  
— ≥ 7

M/SEC  
M/SEC  
M/SEC

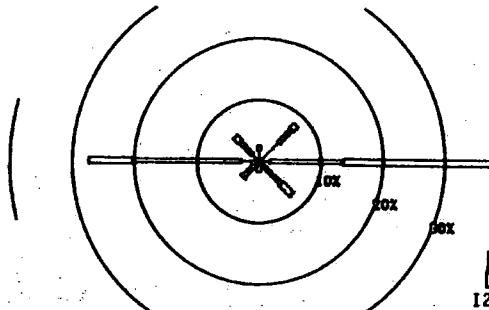


CURRENT  
— 0-5  
— 5-15  
— ≥ 15

CM/SEC  
CM/SEC  
CM/SEC



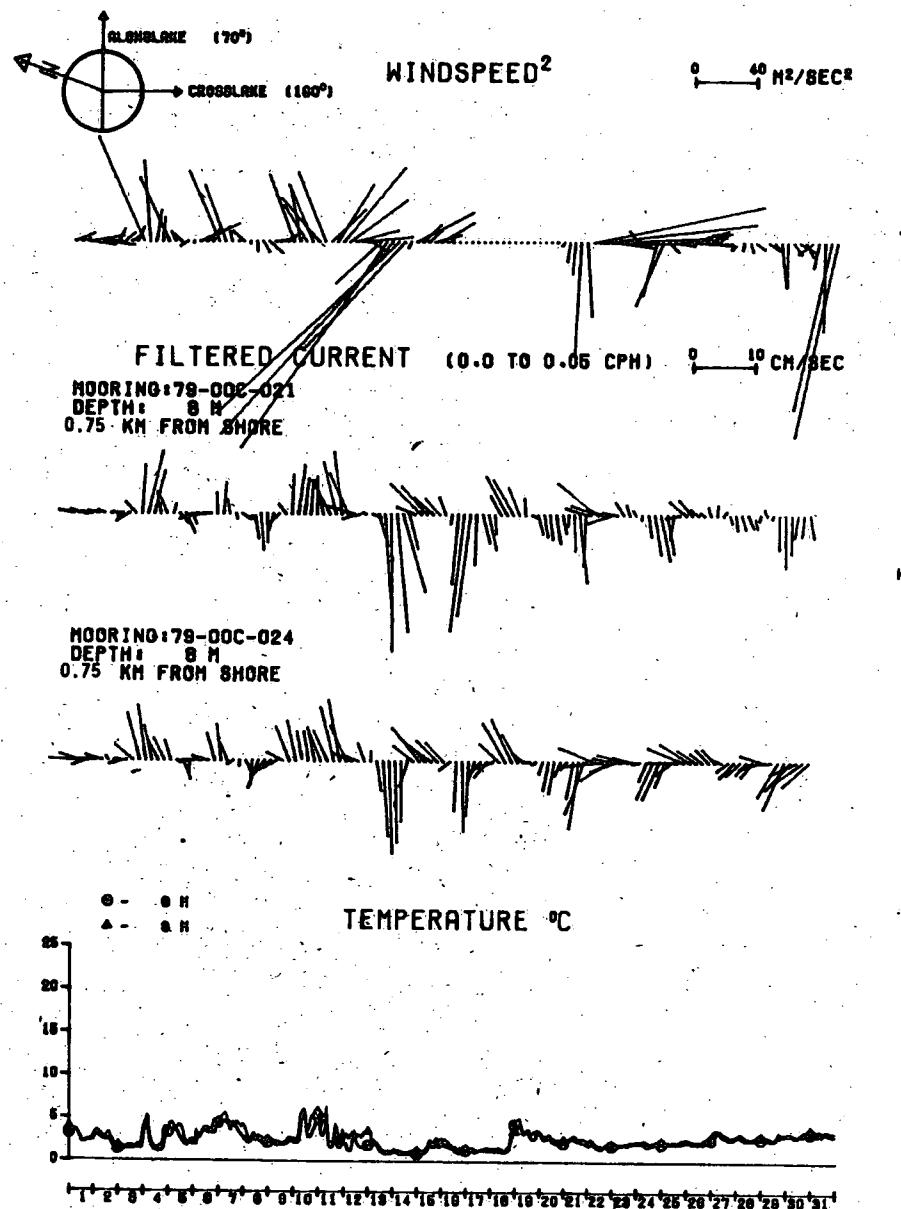
MOORING: 19  
DEPTH: 12 M  
9.0 KM FROM SHORE



MOORING: 20  
DEPTH: 12 M  
12.0 KM FROM SHORE

PICKERING

DATE: MAR 1980

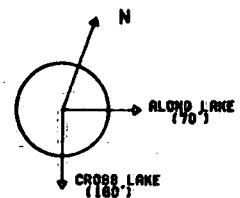


PICKERING DATE: MAR 1980  
MONTHLY SUMMARY: WIND AND CURRENT<sup>a</sup>

WIND  
— 0-3 M/SEC  
— 3-7 M/SEC  
— ≥ 7 M/SEC

CURRENT  
— 0-5 CM/SEC  
— 5-15 CM/SEC  
— ≥ 16 CM/SEC

■ DIRECTION TOWARDS

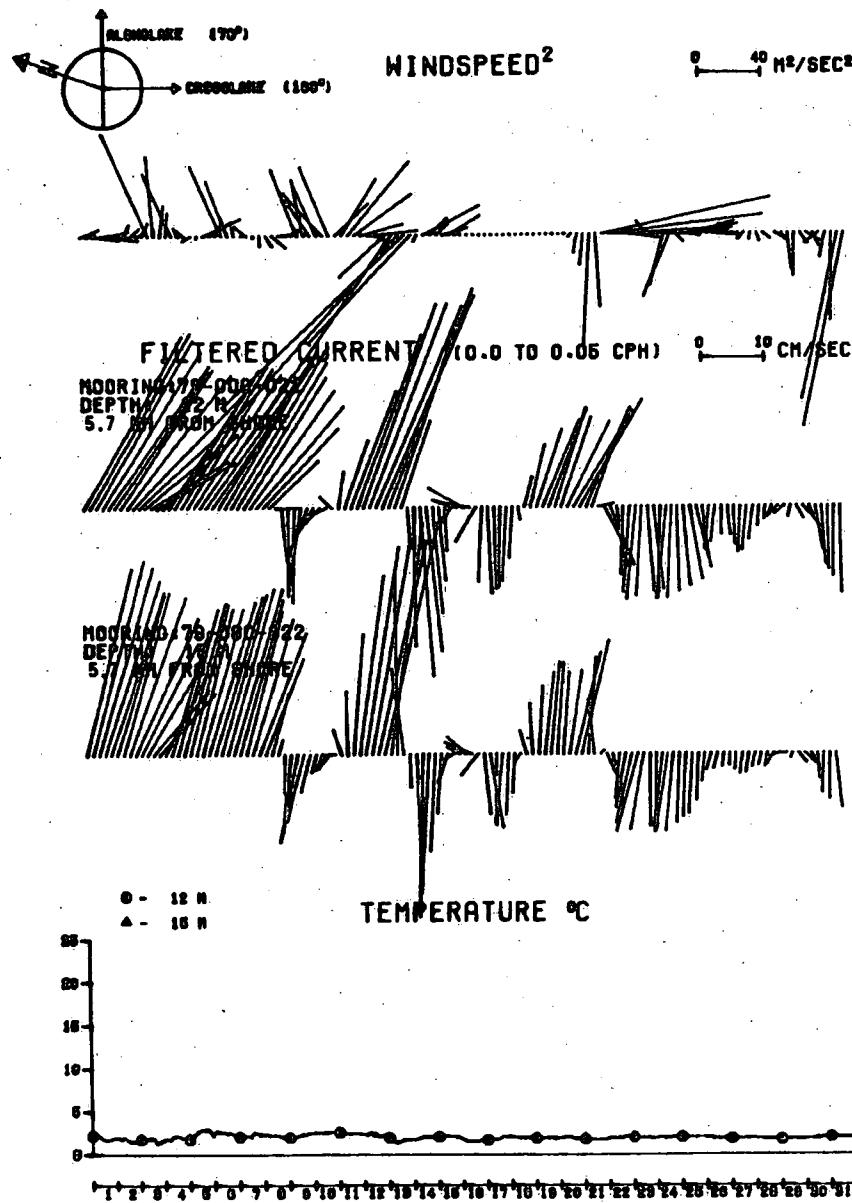


MOORING: 21  
DEPTH: 8 M  
0.75 KM FROM SHORE

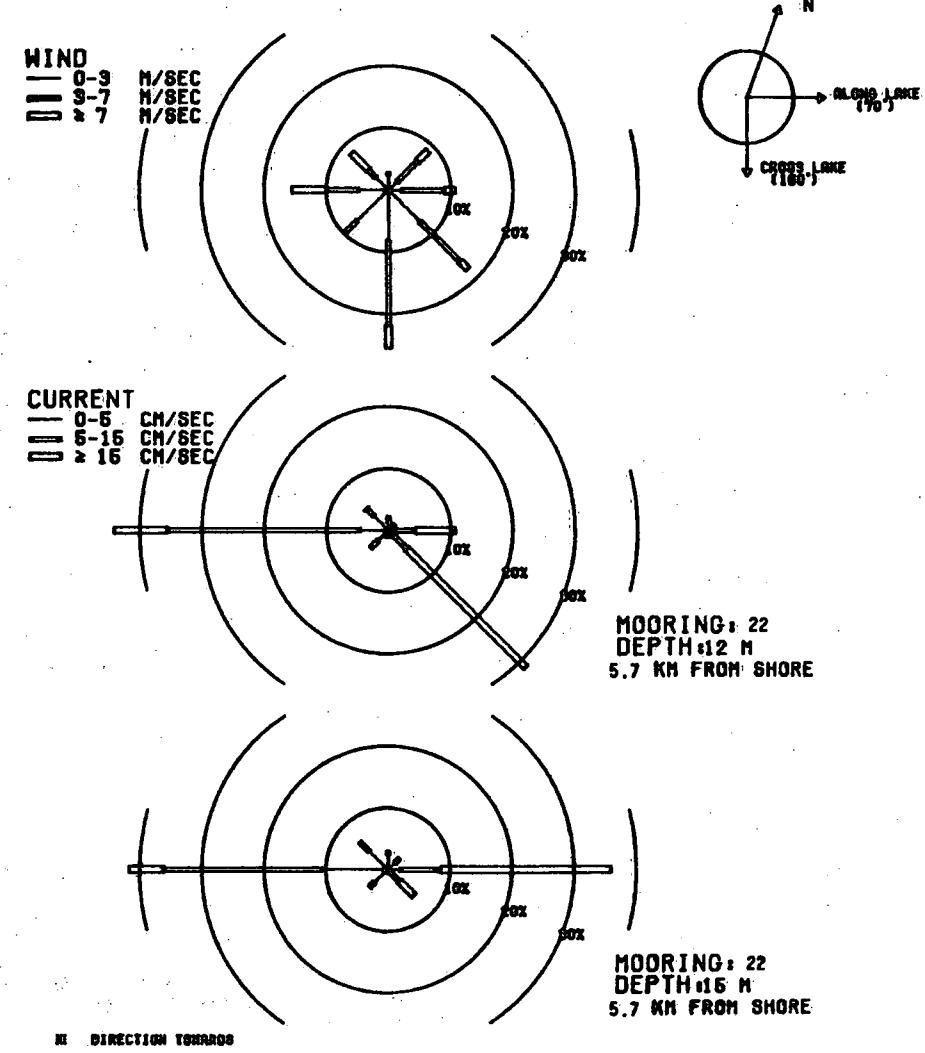
MOORING: 24  
DEPTH: 8 M  
0.75 KM FROM SHORE

PICKERING

DATE: MAR 1980



PICKERING DATE: MAR 1980  
MONTHLY SUMMARY: WIND AND CURRENT\*



**APPENDIX C**

**Monthly Frequency Distribution of Wind and Current  
with Summary Statistics**

**Format Detail:**

- 3 Speed Ranges
- 8 Compass Sectors
- Ordered by Month, then Increasing  
Distance Offshore
- Data is December through March Inclusive

79-00C-99A

## WIND DATA

PICKERING

FIRST DAY 9/12  
FINAL DAY 31/12

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED				MAXIMUM WIND VEL	MEAN DURATION	MEAN WIND VEL	MEAN TEMP	
		TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	M/S	HOURS	M/S
70.0	14.3	4.8	9.0	.6	8.9	3.0	4.1	-1.0	PARALLEL
25.0	10.8	.6	8.3	2.0	13.1	3.9	6.0	3.7	
340.0	7.5	.7	5.9	.9	8.1	5.1	4.8	2.2	OFFSHORE
295.0	4.6	2.2	.9	1.5	9.7	3.1	4.6	.8	
250.0	11.9	1.8	7.5	2.6	9.1	5.0	5.3	-6.8	ANTIPARA
205.0	9.4	2.6	6.3	.6	11.3	3.9	3.8	-7.2	
160.0	24.6	6.8	14.7	3.1	9.7	8.4	4.2	-3.1	ONSHORE
115.0	16.7	4.4	12.3	0.0	6.7	3.8	3.7	1.2	

MEAN SCALAR SPEED = 4.5 M/S MEAN SQUARE SPEED = 23.9 M<sup>2</sup>/S<sup>2</sup> VARIANCE = 23.0 M<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.0 M/S, 136 DEG TRUE MEAN TEMPERATURE = -1.2 C TOTAL HOURS = 544

PERCENT OBSERVED  
LIGHT 0.0 - 3.0 MEDIUM 3.0 - 7.0 HIGH GE 7.0

79-DC-13

OCB M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	TOWARD	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	36.8	17.0	18.8	1.0	27.2	4.4	1.0	6.1	4.7	PARALLEL	
25.0	5.8	2.8	2.6	.3	21.8	1.2	.3	5.9	4.6		
340.0	4.6	3.5	1.2	0.0	14.8	1.3	.2	3.3	4.6	OFFSHORE	
295.0	6.9	4.8	1.7	.5	23.5	1.4	.3	5.3	3.1		
250.0	18.3	6.4	9.9	2.0	26.3	2.1	.6	8.0	2.5	ANTIPARA	
205.0	13.2	5.8	6.8	.7	18.4	1.7	.4	6.1	2.2		
160.0	3.8	2.0	1.7	.2	15.4	1.1	.2	6.0	3.1	ONSHORE	
115.0	10.6	3.8	6.6	.2	16.3	1.3	.3	6.5	4.3		

MEAN SCALAR SPEED = 6.3 CM/S MEAN SQUARE SPEED = 59.8 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 58.9 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.0 CM/S, 118 DEG TRUE MEAN TEMPERATURE = 3.8 C TOTAL HOURS = 606

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-23

008 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	TOWARD	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	45.9	6.8	38.9	.2	15.1	12.1	3.0	7.0	4.3	PARALLEL	
25.0	9.6	4.8	4.8	0.0	8.2	2.2	.4	4.7	5.4		
340.0	9.6	9.2	.3	0.0	5.1	2.9	.3	2.9	3.0	OFFSHORE	
295.0	27.2	16.7	10.1	.5	17.5	5.9	1.1	5.0	2.1		
250.0	6.8	3.6	3.1	0.0	11.8	2.7	.5	5.2	3.1	ANTIPARA	
205.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ONSHORE	
115.0	1.0	1.0	0.0	0.0	4.7	1.2	.1	2.7	5.0		

MEAN SCALAR SPEED = 5.7 CM/S MEAN SQUARE SPEED = 39.7 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 33.4 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.5 CM/S, 36 DEG TRUE MEAN TEMPERATURE = 3.6 C TOTAL HOURS = 606

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-44S

008 N. CURRENT METER

PICKERING

FIRST DAY 9/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	28.9	.5	5.9	22.5	35.5	31.6	22.0	19.4	0.0	PARALLEL	
25.0	.4	0.0	0.0	.4	34.4	2.0	2.4	33.9	0.0		
340.0	1.3	1.3	0.0	0.0	.1	3.5	.0	.1	0.0	OFFSHORE	
295.0	18.3	1.3	9.7	7.3	34.6	5.3	2.6	13.5	0.0		
250.0	15.5	.5	8.2	6.3	31.2	4.0	2.0	13.8	0.0	ANTIPARA	
205.0	1.6	0.0	.9	.7	19.5	1.5	.8	14.9	0.0		
160.0	25.0	.2	7.7	17.2	21.3	11.4	6.4	15.5	0.0	ONSHORE	
115.0	9.0	0.0	4.2	4.8	19.3	3.5	1.7	13.3	0.0		

MEAN SCALAR SPEED = 15.6 CM/S MEAN SQUARE SPEED = 286.1 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 271.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 4.0 CM/S, 111 DEG TRUE MEAN TEMPERATURE = 6.0 C TOTAL HOURS = 547

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-065

012 N CURRENT METER

PICKERING

FIRST DAY 9/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0 PARALLEL
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
340.0	2.5	2.5	0.0	0.0	0.0	0.1	5.0	0.0	0.1	0.0	OFFSHORE
295.0	.5	.3	.3	0.0	0.0	5.4	1.0	0.2	4.6	0.0	
250.0	28.8	2.0	22.3	4.5	26.1		12.8	5.0	10.8	0.0	ANTIPARA
205.0	2.5	1.5	1.0	0.0	13.9		1.7	0.4	6.6	0.0	
160.0	3.3	1.8	1.5	0.0	11.7		2.6	0.6	6.1	0.0	ONSHORE
115.0	62.4	1.5	51.4	9.5	24.5		41.5	16.6	11.1	0.0	

MEAN SCALAR SPEED = 13.4 CM/S MEAN SQUARE SPEED = 130.5 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 104.7 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 5.1 CM/S, 135 DEG TRUE MEAN TEMPERATURE = 6.0 C TOTAL HOURS = 399

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-14

012 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	56.9	.8	11.9	44.2	37.9	11.9	57.5	42.5	20.6	2.7	PARALLEL
25.0	1.2	.2	.7	.3	17.8	.3	1.8	.7	11.1	3.2	
340.0	.3	0.0	.3	0.0	6.3	.3	2.0	.4	6.0	3.3	OFFSHORE
295.0	.8	.7	.2	0.0	13.3	.2	1.3	.2	3.8	2.4	
250.0	36.1	5.0	21.3	9.9	38.3	13.3	21.9	10.4	13.2	1.8	ANTIPARA
205.0	2.0	1.0	1.0	0.0	8.4	.4	1.3	.2	4.9	2.3	
160.0	.8	.8	0.0	0.0	3.8	.4	1.3	.1	2.7	2.4	ONSHORE
115.0	1.8	.7	1.2	0.0	7.3	.7	2.2	.4	4.8	2.8	

MEAN SCALAR SPEED = 16.9 CM/S MEAN SQUARE SPEED = 352.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 302.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 7.1 CM/S, 56 DEG TRUE MEAN TEMPERATURE = 2.4 C TOTAL HOURS = 606

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-15

023 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	52.5	2.5	28.7	21.3	30.7	21.3	30.7	19.9	9.9	13.8	3.8 PARALLEL
25.0	.5	.5	0.0	0.0	0.0	0.0	2.9	1.5	.1	2.4	2.9
340.0	1.3	1.3	0.0	0.0	0.0	0.0	2.5	4.0	.3	1.9	2.6 OFFSHORE
295.0	22.1	4.6	13.9	3.6	29.7	3.6	29.7	4.1	1.4	9.8	2.8
250.0	15.8	6.3	7.6	2.0	28.1	2.0	28.1	2.7	.8	8.5	2.9 ANTIPARA
205.0	.7	.5	.2	0.0	9.3	0.0	9.3	1.3	.2	4.2	4.0
160.0	.7	.3	.3	0.0	8.8	0.0	8.8	1.0	.2	5.0	4.0 ONSHORE
115.0	6.4	2.1	3.3	1.0	28.3	1.0	28.3	2.1	.7	8.8	4.0

MEAN SCALAR SPEED = 11.4 CM/S MEAN SQUARE SPEED = 165.9 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 145.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 4.5 CM/S, 70 DEG TRUE MEAN TEMPERATURE = 3.4 C TOTAL HOURS = 606

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-0C-16A

012 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MEAN CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
70.0	55.0	2.1	12.4	40.5	33.3	23.8			15.9	18.6	3.5	PARALLEL
25.0	1.2	.5	.5	.2	15.7	1.4			.4	7.1	4.1	
340.0	.2	.2	.0.0	.0.0	2.9	1.0			.1	2.9	3.0	OFFSHORE
295.0	.8	.5	.3	0.0	5.6	1.3			.2	4.3	3.8	
250.0	37.7	1.7	18.2	17.9	31.9	32.6			17.6	15.0	2.5	ANTIPARA
205.0	2.1	1.5	.5	.2	15.3	1.9			.3	5.2	3.5	
160.0	.5	.5	0.0	1.0	3.5	1.0			.1	2.5	3.2	ONSHORE
115.0	2.5	1.7	.8	0.0	9.9	1.4			.2	4.3	3.4	

MEAN SCALAR SPEED = 16.2 CM/S MEAN SQUARE SPEED = 321.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 301.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 4.6 CM/S, 69 DEG TRUE MEAN TEMPERATURE = 3.1 C TOTAL HOURS = 605

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-16B

0.29 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	54.0	3.1	39.4	11.4	25.6	23.4	10.1	12.0	4.0	PARALLEL	
25.0	4.8	3.1	1.7	0.0	11.3	2.9	.5	4.4	3.6		
340.0	.8	.8	0.0	0.0	2.6	2.5	.2	2.1	3.0	OFFSHORE	
295.0	2.6	2.3	.3	0.0	13.0	1.8	.3	4.0	3.3		
250.0	35.3	4.6	24.1	6.6	28.2	16.5	6.3	10.7	3.0	ANTIPARA	
205.0	1.3	1.2	.2	0.0	3.9	1.3	.2	4.1	3.3		
160.0	.2	.2	0.0	0.0	.9	1.0	.0	.9	4.4	ONSHORE	
115.0	1.0	.3	.7	0.0	7.7	1.5	.3	5.3	4.2		

MEAN SCALAR SPEED = 10.7 CM/S MEAN SQUARE SPEED = 140.7 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 130.8 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 3.2 CM/S, 41 DEG TRUE MEAN TEMPERATURE = 3.6 C TOTAL HOURS = 606

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-06-17

012 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 72

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT	MEAN DURATION	MEAN EXCURSION	MEAN CURRENT	MEAN TEMP		
TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	CM/S	HOURS	KM	CM/S	DEG C
70.0	52.2	2.1	16.0	34.0	39.2	21.1	14.7	19.5	3.9 PARALLEL
25.0	.5	.2	.3	0.0	8.9	1.0	.2	6.6	4.2
340.0	.3	.3	0.0	0.0	3.6	2.0	.3	3.6	4.0 OFFSHORE
295.0	3.1	.7	1.3	1.2	25.5	1.4	.6	12.4	3.5
250.0	38.2	1.5	19.3	17.4	30.5	12.8	6.8	14.8	3.2 ANTIPARA
205.0	1.8	1.5	.3	0.0	14.9	1.8	.3	4.3	3.1
160.0	.7	.7	0.0	0.0	2.7	1.3	.1	2.5	2.7 ONSHORE
115.0	3.1	.8	2.1	.2	16.7	1.6	.4	7.0	3.5

MEAN SCALAR SPEED = 16.6 CM/S MEAN SQUARE SPEED = 351.0 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 332.9 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 4.3 CM/S, 72 DEG TRUE MEAN TEMPERATURE = 3.6 C TOTAL HOURS = 605

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-0C-18

012 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	TOWARD	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C.
70.0	46.0	3.5	13.1	29.5	39.4	29.5	14.6	10.4	19.9	3.8	PARALLEL
25.0	5.0	1.2	3.8	0.0	12.7	0.0	2.1	.5	6.4	4.0	
340.0	2.2	.7	1.5	0.0	7.8	0.0	1.4	.3	5.0	4.0	OFFSHORE
295.0	2.6	.5	2.2	0.0	14.1	0.0	2.0	.6	8.7	3.8	
250.0	39.4	1.2	20.5	17.7	28.6	17.7	21.6	11.7	15.0	3.2	ANTIPARA
205.0	2.6	.7	2.0	0.0	14.2	0.0	2.7	.7	7.8	3.4	
160.0	.7	.7	0.0	0.0	2.8	0.0	1.3	.1	2.0	3.7	ONSHORE
115.0	1.5	.8	.7	0.0	9.8	0.0	1.3	.2	5.1	3.5	

MEAN SCALAR SPEED = 16.0 CM/S MEAN SQUARE SPEED = 335.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 325.5 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 3.2 CM/S, 77 DEG TRUE MEAN TEMPERATURE = 3.6 C TOTAL HOURS = 604

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-19

612 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MEAN CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	39.7	2.5	11.4	25.7	34.9	21.8	15.5	19.7	4.4	PARALLEL	
25.0	6.8	1.3	4.6	0.0	11.8	5.1	1.2	6.3	4.4		
340.0	6.1	2.5	3.6	0.0	10.2	4.6	1.0	5.8	4.5	OFFSHORE	
295.0	3.0	.3	2.5	.2	15.7	2.6	.9	10.2	4.4		
250.0	41.6	3.0	21.5	17.1	23.9	35.9	17.9	13.9	3.7	ANTIPARA	
205.0	1.3	0.0	1.3	0.0	11.8	2.7	.8	8.4	4.4		
160.0	.8	.5	.3	0.0	6.3	2.5	.4	4.6	4.4	ONSHORE	
115.0	1.5	1.0	.5	0.0	10.8	1.5	.3	5.0	4.4		

MEAN SCALAR SPEED = 14.8 CM/S MEAN SQUARE SPEED = 289.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 284.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.3 CM/S, 47 DEG TRUE MEAN TEMPERATURE = 6.1 C TOTAL HOURS = 604

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-20

G12 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	36.2	2.2	9.3	24.7	36.0	15.6	11.3	20.2	4.5	PARALLEL	
25.0	2.8	1.2	1.7	0.0	8.2	1.4	.3	5.2	4.2		
340.0	10.4	.8	9.6	0.0	11.5	3.9	1.1	7.7	4.3	OFFSHORE	
295.0	9.3	1.5	6.5	1.3	18.1	2.2	.8	9.7	4.1		
250.0	35.5	1.3	17.9	16.3	25.3	12.6	6.7	14.8	3.7	ANTIPARA	
205.0	1.2	.2	.8	.2	15.4	1.8	.6	8.8	4.1		
160.0	2.7	.3	2.3	0.0	11.5	8.0	2.8	9.6	4.4	ONSHORE	
115.0	2.0	.3	1.7	0.0	14.0	2.0	.7	9.5	4.3		

MEAN SCALAR SPEED = 14.9 CM/S MEAN SQUARE SPEED = 285.6 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 279.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.6 CM/S, 16 DEG TRUE MEAN TEMPERATURE = 4.1 C TOTAL HOURS = 603

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-21

008 M CURRENT METER

PICKERING

FIRST DAY 7/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	12.8	4.0	8.3	.5	21.5	2.1	.5	6.9	4.6	PARALLEL	
25.0	17.0	10.3	6.0	.7	16.6	2.3	.4	4.9	3.4		
340.0	20.2	14.0	6.2	0.0	11.1	2.5	.4	4.0	3.8	OFFSHORE	
295.0	11.2	7.5	3.3	.3	30.3	1.6	.3	4.8	3.7		
250.0	20.5	8.3	10.0	2.2	26.2	2.6	.7	7.7	2.5	ANTIPARA	
205.0	11.7	7.0	4.5	.2	15.6	2.1	.4	5.3	2.4		
160.0	2.5	1.3	1.0	.2	15.4	1.2	.3	6.0	2.8	ONSHORE	
115.0	4.2	1.5	2.7	0.0	13.1	1.1	.3	6.8	4.4		

MEAN SCALAR SPEED = 5.7 CM/S MEAN SQUARE SPEED = 50.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 48.9 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.2 CM/S, 301 DEG TRUE MEAN TEMPERATURE = 3.4 C TOTAL HOURS = 600

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-24

608 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 73

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT	MEAN DURATION	MEAN EXCURSION	MEAN CURRENT	MEAN TEMP		
TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	CM/S	HOURS	KM	CM/S	DEG C
70.0	24.9	13.1	11.6	.2	16.2	6.9	1.3	5.1	5.0
25.0	10.2	9.8	.3	0.0	6.7	2.1	.2	2.1	3.6
340.0	11.6	11.6	0.0	0.0	4.8	2.4	.2	1.9	3.4
295.0	12.6	12.1	.5	0.3	5.6	3.5	.3	2.6	4.4
250.0	27.7	16.4	10.2	1.1	19.3	10.6	2.1	5.6	2.4
205.0	5.7	5.7	0.0	0.0	4.3	1.9	.1	1.7	2.5
160.0	4.3	4.3	0.0	0.0	2.4	1.9	.1	1.9	2.3
115.0	3.0	3.0	0.0	0.0	3.3	2.0	.1	1.6	3.0

MEAN SCALAR SPEED = 3.8 CM/S MEAN SQUARE SPEED = 24.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 24.1 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = .5 CM/S, 290 DEG TRUE MEAN TEMPERATURE = 3.6 C TOTAL HOURS = 610

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

012 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	16.2	.2	4.7	11.3	42.3		4.0		2.9	20.1	4.2 PARALLEL
25.0	.5	.5	0.0	0.0	2.2		1.5		.1	2.1	3.5
340.0	.7	.7	0.0	0.0	3.0		2.0		.2	2.2	3.3 OFFSHORE
295.0	.8	.5	.3	0.0	6.2		2.5		.3	3.8	3.5
250.0	40.1	.5	20.3	19.3	29.1		81.7		44.4	15.1	3.4 ANTIPARA
205.0	3.6	1.1	2.5	0.0	11.0		7.3		2.0	7.5	3.7
160.0	3.8	0.0	3.1	.7	16.0		11.5		5.7	13.7	4.2 ONSHORE
115.0	34.4	0.0	2.9	31.4	42.3		9.4		7.9	26.1	3.9

MEAN SCALAR SPEED = 19.1 CM/S      MEAN SQUARE SPEED = 448.9 CM<sup>2</sup>/S<sup>2</sup>      VARIANCE = 386.8 CM<sup>2</sup>/S<sup>2</sup>  
 MEAN VELOCITY = 7.9 CM/S, 122 DEG TRUE      MEAN TEMPERATURE = 3.7 C      TOTAL HOURS = 611

PERCENT OBSERVED  
 LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

015 M CURRENT METER

PICKERING

FIRST DAY 6/12/79  
FINAL DAY 31/12/79

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	47.5	0.0	6.4	41.2	42.3	42.3	36.4	31.8	24.3	4.0	PARALLEL
25.0	1.6	1.0	.7	0.0	10.2	10.2	2.5	.4	4.6	3.5	
340.0	.7	.5	.2	0.0	6.6	6.6	1.3	.2	4.1	3.7	OFFSHORE
295.0	2.3	.5	1.8	0.0	11.1	11.1	2.3	.6	7.1	3.6	
250.0	39.1	1.8	19.0	18.3	28.9	28.9	39.8	21.1	14.8	3.4	ANTIPARA
205.0	2.3	.7	1.6	0.0	10.5	10.5	2.8	.7	6.9	4.0	
160.0	3.4	.2	3.1	.2	15.1	15.1	1.9	.8	12.3	4.2	ONSHORE
115.0	3.1	0.0	2.1	1.0	23.1	23.1	1.6	.8	14.5	4.0	

MEAN SCALAR SPEED = 18.6 CM/S MEAN SQUARE SPEED = 428.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 388.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 6.4 CM/S, 95 DEG TRUE MEAN TEMPERATURE = 3.8 C TOTAL HOURS = 612

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-00C-99A

## WIND DATA

PICKERING

FIRST DAY 1/ 1  
FINAL DAY 31/ 1

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	MAXIMUM			MEAN WIND VEL DURATION	MEAN WIND VEL	MEAN TEMP			
		TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	M/S	HOURS	M/S	DEG C
70.0	18.7	1.9	10.0	6.9	18.2	5.0			6.3	-1.0 PARALLEL
25.0	4.4	0.0	2.3	2.2	16.4	2.8			7.7	1.4
340.0	3.4	0.0	1.3	2.0	10.7	2.8			7.5	-1.1 OFFSHORE
295.0	5.4	.7	.9	3.8	10.5	3.6			7.4	1.0
250.0	8.3	.5	5.5	2.3	10.0	5.6			5.8	-1.7 ANTIPARA
205.0	10.4	3.8	6.6	0.0	6.0	3.3			3.4	-6.7
160.0	21.8	8.7	13.1	0.0	6.5	4.2			3.5	-7.1 ONSHORE
115.0	27.6	7.0	17.4	3.2	11.4	5.1			4.5	-4.0

MEAN SCALAR SPEED = 5.0 M/S MEAN SQUARE SPEED = 31.9 M<sup>2</sup>/S<sup>2</sup> VARIANCE = 29.2 M<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.7 M/S , 105 DEG TRUE MEAN TEMPERATURE = -3.6 C TOTAL HOURS = 743

PERCENT OBSERVED  
LIGHT 0.0 - 3.0 MEDIUM 3.0 - 7.0 HIGH GE 7.0

79-CC-13

LQB M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	44.2	18.4	23.7	2.2	25.0	2.2	25.0	4.3	1.0	6.5	3.3 PARALLEL
25.0	5.2	3.6	1.6	0.0	14.6	0.0	14.6	1.4	.2	3.8	3.1
340.0	3.4	2.6	.8	0.0	10.4	0.0	10.4	1.4	.2	3.3	3.6 OFFSHORE
295.0	8.7	6.6	1.6	.5	21.9	0.0	21.9	1.8	.3	4.2	3.0
250.0	16.7	7.4	8.5	.8	18.6	0.0	18.6	3.1	.7	6.7	1.8 ANTIPARA
205.0	5.2	2.2	2.6	.5	21.4	0.0	21.4	1.6	.4	7.4	1.9
160.0	3.8	1.2	2.2	.4	23.2	0.0	23.2	1.1	.3	8.5	2.2 ONSHORE
115.0	12.8	4.0	7.7	1.1	22.9	0.0	22.9	1.4	.4	8.0	2.5

MEAN SCALAR SPEED = 5.4 CM/S MEAN SQUARE SPEED = 63.0 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 57.8 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.3 CM/S, 95 DEG TRUE MEAN TEMPERATURE = 2.8 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0+

79-CC-23

108 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
70.0	28.5	8.3	19.4	.8	19.0		3.1		.8	7.6	2.9	PARALLEL
25.0	3.5	3.4	.1	0.0	0.0	5.8	2.9		.3	2.5	3.6	
340.0	3.8	3.8	0.0	0.0	0.0	3.3	3.1		.2	2.1	3.8	OFFSHORE
295.0	23.7	12.2	11.4	0.0	0.0	13.5	8.8		1.6	5.1	1.8	
250.0	3.5	1.1	2.4	0.0	0.0	11.2	1.7		.4	5.7	1.6	ANTIPARA
205.0	.3	.3	0.0	0.0	0.0	2.4	1.0		.1	1.9	2.9	
160.0	1.6	1.6	0.0	0.0	0.0	3.4	1.5		.1	2.0	3.5	ONSHORE
115.0	35.2	7.0	27.0	1.2	19.7		3.7		1.1	8.0	2.7	

MEAN SCALAR SPEED = 6.6 CM/S MEAN SQUARE SPEED = 56.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 43.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 3.6 CM/S, 87 DEG TRUE MEAN TEMPERATURE = 2.6 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-44S

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	MAXIMUM CURRENT			MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
		TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	CM/S	DEG C
70.0	8.3	0.0	1.7	6.6	31.2	3.9	20.3	0.0 PARALLEL
25.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
340.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 OFFSHORE
295.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
250.0	12.2	.6	7.8	3.9	20.9	12.6	12.4	0.0 ANTIPARA
205.0	16.3	1.6	12.2	2.5	24.7	10.5	4.2	0.0
160.0	28.7	.4	6.6	21.7	29.9	9.9	6.5	0.0 ONSHORE
115.0	34.4	0.0	9.3	25.0	45.7	8.4	21.2	0.0

MEAN SCALAR SPEED = 17.5 CM/S MEAN SQUARE SPEED = 370.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 199.1 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 13.1 CM/S, 138 DEG TRUE MEAN TEMPERATURE = 0.0 C TOTAL HOURS = 515

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-06S

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MEAN CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	20.6	.5	8.3	11.7	36.9		6.7		4.0	16.6	0.0 PARALLEL
25.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
340.0	1.1	1.1	0.0	0.0	.1		1.6		.0	.1	0.0 OFFSHORE
295.0	8.3	3.4	3.5	1.5	23.4		3.9		1.2	8.7	0.0
250.0	17.3	3.9	11.3	2.2	25.6		6.5		2.1	9.2	0.0 ANTIPARA
205.0	2.4	1.2	.5	.7	22.7		1.6		.5	8.1	0.0
160.0	3.9	3.0	.4	.5	24.7		1.8		.4	5.9	0.0 ONSHORE
115.0	46.4	4.6	27.4	14.4	33.0		10.1		4.6	12.7	0.0

MEAN SCALAR SPEED = 12.0 CM/S MEAN SQUARE SPEED = 197.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 149.4 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 6.9 CM/S, 108 DEG TRUE MEAN TEMPERATURE = 0.0 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-14

C12 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 12/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
70.0	54.3	.4	6.9	47.1	47.6	25.0	25.1	25.1	27.9	1.8	PARALLEL	
25.0	1.4	0.0	.4	1.1	18.1	1.0	.6	16.3	1.8			
340.0	.4	0.0	.4	0.0	5.1	1.0	.2	5.1	.8	OFFSHORE		
295.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
250.0	41.7	.4	25.7	15.6	22.9	115.0	58.7	14.2	1.4	ANTIPARA		
205.0	.4	.4	0.0	0.0	3.5	1.0	.1	3.5	2.2			
160.0	.7	.4	.4	0.0	8.6	1.0	.2	5.8	1.6	ONSHORE		
115.0	1.1	.4	.4	.4	16.5	1.0	.4	10.4	1.7			

MEAN SCALAR SPEED = 21.5 CM/S MEAN SQUARE SPEED = 574.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 483.2 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 9.5 CM/S, 55 DEG TRUE MEAN TEMPERATURE = 1.6 C TOTAL HOURS = 276

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-15

023 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	62.5	.8	33.3	28.4	42.4	24.5	13.7	15.5	2.8	PARALLEL	
25.0	1.5	.7	.8	0.0	6.9	5.5	1.0	5.1	2.2		
340.0	.1	.1	0.0	0.0	1.3	1.0	.0	1.3	3.1	OFFSHORE	
295.0	20.7	1.1	16.1	3.5	26.2	6.4	2.6	11.1	2.1		
250.0	6.2	1.6	3.9	.7	23.2	1.9	.6	8.3	2.1	ANTIPARA	
205.0	.5	.5	0.0	0.0	3.3	1.0	.1	2.6	2.3		
160.0	1.7	1.3	.4	0.0	8.0	1.9	.2	3.5	3.5	ONSHORE	
115.0	6.7	3.1	1.1	2.6	41.8	2.2	1.1	13.9	2.8		

MEAN SCALAR SPEED = 13.6 CM/S MEAN SQUARE SPEED = 241.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 178.4 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 8.0 CM/S, 76 DEG TRUE MEAN TEMPERATURE = 2.6 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-16A

0.12 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION LEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	63.4	.3	11.6	51.6	49.2		52.4		44.8	23.8	2.4 PARALLEL
25.0	.1	.1	0.0	0.0		3.3		1.0	.1	3.3	2.1
340.0	.1	.1	0.0	0.0		.9		1.0	.0	.9	1.0 OFFSHORE
295.0	.3	.1	.1	0.0		8.7		1.0	.2	6.0	1.3
250.0	26.1	1.1	6.5	18.5	35.2		32.3		20.5	17.7	1.8 ANTIPARA
205.0	1.1	.4	.7	0.0		10.7		2.0	.4	5.8	1.9
160.0	.8	.5	.3	0.0		7.2		1.5	.2	4.0	2.1 ONSHORE
115.0	8.1	2.0	5.8	.3		15.8		6.7	1.5	6.1	2.6

MEAN SCALAR SPEED = 20.3 CM/S MEAN SQUARE SPEED = 512.1 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 398.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 10.7 CM/S, 63 DEG TRUE MEAN TEMPERATURE = 2.2 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-16B

629 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	63.6	3.9	31.7	28.0	37.0	29.6	15.4	14.5	3.0	PARALLEL	
25.0	6.3	.4	5.8	.1	17.0	3.9	1.3	9.1	2.7		
340.0	.8	.8	0.0	0.0	4.4	6.0	.8	3.7	2.5	OFFSHORE	
295.0	1.1	1.1	0.0	0.0	4.5	8.0	.9	3.3	2.2		
250.0	24.7	1.1	19.1	4.6	27.7	46.0	20.4	12.3	2.3	ANTIPARA	
205.0	.8	.4	.4	0.0	8.4	1.2	.2	4.9	3.1		
160.0	.9	.7	.3	0.0	8.5	1.8	.2	3.6	3.7	ONSHORE	
115.0	1.7	1.5	.3	0.0	7.6	1.9	.2	3.7	3.4		

MEAN SCALAR SPEED = 13.0 CM/S MEAN SQUARE SPEED = 211.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 163.9 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 6.9 CM/S, 50 DEG TRUE MEAN TEMPERATURE = 2.8 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-17

612 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	54.4	0.0	3.2	51.2	50.0	50.0	45.0	43.5	26.8	2.8	PARALLEL
25.0	.3	0.0	.1	.1	21.8	21.8	1.0	.6	17.2	2.4	
340.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	OFFSHORE
295.0	1.2	0.0	.1	1.1	21.1	21.1	1.3	.8	17.0	2.8	
250.0	25.1	0.0	5.6	19.5	35.3	35.3	15.6	11.1	19.7	2.4	ANTIPARA
205.0	3.4	1.6	1.7	0.0	13.0	13.0	1.8	.3	4.9	2.2	
160.0	4.7	2.6	2.0	.1	16.0	16.0	2.7	.5	5.1	2.7	ONSHORE
115.0	10.9	3.4	6.3	1.2	22.0	22.0	5.4	1.6	8.2	2.7	

MEAN SCALAR SPEED = 21.1 CM/S MEAN SQUARE SPEED = 550.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 447.1 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 10.2 CM/S, 79 DEG TRUE MEAN TEMPERATURE = 2.6 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-18

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	56.0	.7	7.9	47.4	42.6	34.8	29.0	23.2	2.7	PARALLEL	
25.0	.5	.3	.3	0.0	10.2	1.3	.3	5.2	2.3		
340.0	.4	0.0	.4	0.0	10.0	1.5	.5	8.9	2.4	OFFSHORE	
295.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
250.0	25.4	.1	5.1	20.2	37.1	17.2	12.0	19.4	2.5	ANTIPARA	
205.0	3.5	1.3	2.0	.1	16.5	1.6	.4	7.5	2.1		
160.0	5.6	3.9	1.7	0.0	12.8	3.0	.5	4.4	2.5	ONSHORE	
115.0	8.5	4.2	4.3	0.0	14.7	3.2	.7	6.1	2.8		

MEAN SCALAR SPEED = 19.0 CM/S MEAN SQUARE SPEED = 452.6 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 382.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 8.4 CM/S, 81 DEG TRUE MEAN TEMPERATURE = 2.6 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-19

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MEAN CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	52.4	1.2	7.1	44.1	34.1	34.1	21.7	15.6	20.0	3.3	PARALLEL
25.0	3.1	.5	2.6	0.0	10.9	10.9	2.9	.7	6.5	3.4	
340.0	1.1	.7	.4	0.0	8.0	8.0	1.1	.1	3.5	3.2	OFFSHORE
295.0	3.9	.5	2.7	.7	18.1	18.1	3.2	1.3	11.0	3.1	
250.0	24.2	0.0	11.8	12.4	34.9	34.9	25.7	15.5	16.8	3.1	ANTIPARA
205.0	1.2	0.0	1.2	0.0	11.4	11.4	4.5	1.6	9.8	2.9	
160.0	2.2	.5	1.6	0.0	12.6	12.6	2.3	.7	8.7	3.1	ONSHORE
115.0	12.0	2.6	7.8	1.6	17.6	17.6	5.6	1.7	8.5	3.1	

MEAN SCALAR SPEED = 16.5 CM/S MEAN SQUARE SPEED = 330.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 282.4 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 7.0 CM/S, 75 DEG TRUE MEAN TEMPERATURE = 3.2 C TOTAL HOURS = 746

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-20

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT	MEAN DURATION	MEAN EXCURSION	MEAN CURRENT	MEAN TEMP
TOWARD	TOTAL	LIGHT MEDIUM HIGH	CM/S	HOURS	KM	CM/S	DEG C
70.0	49.9	1.5 10.6 37.8	31.0	12.0	7.8	18.1	3.3 PARALLEL
25.0	7.9	.5 5.9 1.5	27.2	3.0	1.3	12.0	3.4
340.0	3.8	.3 3.5 0.0	11.5	2.5	.7	7.8	3.3 OFFSHORE
295.0	7.4	0.0 4.8 2.6	21.5	2.5	1.2	12.8	3.3
250.0	18.4	.3 8.6 9.5	23.4	6.5	3.3	14.2	3.4 ANTIPARA
205.0	.1	.1 0.0 0.0	2.7	1.0	.1	2.7	3.5
160.0	1.6	.7 .9 0.0	14.9	1.3	.3	6.7	2.6 ONSHORE
115.0	10.9	.5 8.1 2.3	18.3	4.5	2.0	12.3	3.1

MEAN SCALAR SPEED = 15.3 CM/S MEAN SQUARE SPEED = 269.0 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 212.5 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 7.5 CM/S, 59 DEG TRUE MEAN TEMPERATURE = 3.3 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-AC-21

DC8 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
TOWARD	TOTAL	LIGHT MEDIUM HIGH					
70.0	19.8	4.8	12.8	2.2	35.8	2.7	.8
25.0	16.4	10.9	5.1	.4	27.7	2.1	.4
340.0	12.9	10.2	2.6	.1	21.5	2.4	.3
295.0	5.0	3.1	1.5	.4	21.6	1.3	.3
250.0	18.7	9.5	8.3	.8	21.4	2.5	.6
205.0	18.3	13.3	4.7	.3	17.1	2.8	.4
160.0	3.0	1.2	1.7	0.0	14.0	1.1	.2
115.0	6.0	2.2	3.5	.4	18.6	1.3	.4
MEAN SCALAR SPEED = 5.8 CM/S				MEAN SQUARE SPEED = 54.2 CM <sup>2</sup> /S <sup>2</sup>		VARIANCE = 53.9 CM <sup>2</sup> /S <sup>2</sup>	
MEAN VELOCITY = .6 CM/S, 44 DEG TRUE				MEAN TEMPERATURE = 2.3 C		TOTAL HOURS = 744	

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-24

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MEAN CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	31.2	10.9	19.1	1.2	21.4		7.5		1.8	6.7	2.9
25.0	13.2	13.2	0.0	0.0	4.4		2.6		.2	2.4	3.5
340.0	8.2	8.2	0.0	0.0	3.5		2.1		.1	1.9	3.2
295.0	5.9	5.9	0.0	0.0	3.9		2.3		.2	2.0	3.0
250.0	26.3	15.2	11.2	0.0	12.5		8.5		1.5	5.0	1.8
205.0	7.5	7.4	.1	0.0	5.3		2.4		.2	2.7	2.7
160.0	4.4	4.3	.1	0.0	5.1		2.8		.3	2.6	2.7
115.0	3.2	2.8	.4	0.0	5.4		1.7		.1	2.1	2.9

MEAN SCALAR SPEED = 4.4 CM/S MEAN SQUARE SPEED = 30.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 29.5 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = .8 CM/S, 56 DEG TRUE MEAN TEMPERATURE = 2.7 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

012M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHOPELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	21.8	.4	.1	21.2	51.4		5.6		7.3	36.5	3.0
25.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0
340.0	.3	0.0	.3	0.0	12.7		1.0		.4	11.9	2.7
295.0	.4	.4	0.0	0.0	4.1		3.0		.3	3.1	2.4
250.0	35.5	1.7	13.8	19.9	34.1		14.7		8.8	16.7	2.7
205.0	4.6	1.2	3.4	0.0	12.1		2.3		.6	7.5	2.3
160.0	1.5	.4	1.1	0.0	14.8		2.2		.8	9.9	2.4
115.0	36.0	.1	3.8	32.1	52.0		8.4		8.1	26.8	2.8

MEAN SCALAR SPEED = 24.0 CM/S MEAN SQUARE SPEED = 708.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 551.5 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 12.6 CM/S, 112 DEG TRUE MEAN TEMPERATURE = 2.8 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

015 M CURRENT METER

PICKERING

FIRST DAY 1/ 1/80  
FINAL DAY 31/ 1/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 73

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MEAN CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	50.9	.9	2.2	47.9	51.3	27.1	30.4	31.2	3.0	PARALLEL	
25.0	.4	.3	.1	0.0	9.0	1.5	.2	4.5	2.2		
340.0	.3	.3	0.0	0.0	2.7	1.0	.1	1.9	2.4	OFFSHORE	
295.0	2.0	1.3	.7	0.0	13.8	1.4	.3	5.5	2.5		
250.0	36.2	3.5	13.8	18.8	33.8	22.4	12.5	15.6	2.7	ANTIPARA	
205.0	2.3	.8	1.5	0.0	8.4	2.4	.5	5.6	2.6		
160.0	1.5	.1	1.3	0.9	13.2	2.8	.9	9.3	2.5	ONSHORE	
115.0	6.5	.1	1.5	4.8	32.1	3.7	2.6	19.7	2.7		

MEAN SCALAR SPEED = 23.2 CM/S MEAN SQUARE SPEED = 674.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 544.5 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 11.4 CM/S, 86 DEG TRUE MEAN TEMPERATURE = 2.8 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-GOC-99A

## WIND DATA

PICKERING

FIRST DAY 1/ 2  
FINAL DAY 29/ 2

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	MAXIMUM WIND VEL DURATION			MEAN WIND VEL M/S	MEAN TEMP DEG C				
		TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	HOURS			
70.0	20.0	2.4	10.7	5.9	14.7	7.0		6.0	-3.1	PARALLEL
25.0	3.9	1.8	1.4	.8	9.4	2.9		3.7	-1.4	
340.0	1.8	1.1	.8	0.0	5.0	2.0		2.8	-2.6	OFFSHORE
295.0	2.7	.5	2.1	0.0	6.4	2.3		4.0	-1.9	
250.0	6.9	1.2	5.1	.6	11.7	5.8		4.5	-3.8	ANTIPARA
205.0	5.4	2.4	2.9	.2	7.5	2.8		3.0	-6.5	
160.0	40.9	9.9	28.4	2.6	9.7	8.5		4.2	-9.6	ONSHORE
115.0	18.3	10.1	7.7	.5	7.5	3.6		3.2	-5.7	

MEAN SCALAR SPEED = 4.3 M/S MEAN SQUARE SPEED = 23.3 M<sup>2</sup>/S<sup>2</sup> VARIANCE = 17.4 M<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.4 M/S , 134 DEG TRUE MEAN TEMPERATURE = -6.3 C TOTAL HOURS = 665

PERCENT OBSERVED  
LIGHT 0.0 - 3.0 MEDIUM 3.0 - 7.0 HIGH GE 7.0

79-DC-13

008.M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	MAXIMUM CURRENT			MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
		TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	CM/S	
70.0	45.4	29.3	14.5	1.5	26.2	4.2	.8	5.0
25.0	7.2	6.8	.3	.1	26.4	2.4	.2	2.3
340.0	7.2	6.9	.3	0.0	7.7	3.1	.2	1.9
295.0	4.5	3.6	.7	.1	28.9	1.9	.3	3.8
250.0	8.2	2.3	4.3	1.6	23.4	2.3	.7	8.9
205.0	4.3	2.6	1.7	0.0	13.8	1.3	.2	4.9
160.0	6.2	3.9	1.9	.4	30.0	1.5	.3	5.3
115.0	17.1	7.2	9.6	.3	16.9	1.8	.4	6.2

MEAN SCALAR SPEED = 5.1 CM/S MEAN SQUARE SPEED = 47.5 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 41.7 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.4 CM/S, 93 DEG TRUE MEAN TEMPERATURE = 3.0 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-CG-23

0.3 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	33.8	13.6	20.0	.1	15.4		3.0		.6	5.9	3.4
25.0	11.1	10.9	.1	0.0	5.1		3.5		.3	2.5	2.2
340.0	6.9	6.9	0.0	0.0	3.5		3.0		.2	2.0	1.6
295.0	7.8	3.0	4.5	.3	17.6		4.2		1.1	7.2	1.6
250.0	2.4	1.4	1.0	0.0	14.5		1.7		.3	4.9	2.9
205.0	1.4	1.4	0.0	0.0	3.2		2.5		.1	1.3	3.5
160.0	1.4	1.4	0.0	0.0	2.8		1.1		.0	1.1	3.7
115.0	35.2	8.3	26.7	.1	15.7		3.4		.8	6.9	2.9

MEAN SCALAR SPEED = 5.5 CM/S MEAN SQUARE SPEED = 41.7 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 27.9 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 3.7 CM/S, 87 DEG TRUE MEAN TEMPERATURE = 2.8 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-44S

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MEAN CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	58.2	3.2	9.7	45.3	37.8	23.9	16.6	19.3	0.0	PARALLEL	
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
340.0	7.3	6.6	.7	0.0	9.0	39.0	3.3	2.3	0.0	OFFSHORE	
295.0	.6	0.0	.6	0.3	9.0	3.0	.9	8.5	0.0	0.0	
250.0	7.3	1.3	3.7	2.2	32.6	3.9	1.8	12.7	0.0	ANTIPARA	
205.0	4.1	.6	.9	2.5	32.6	2.0	1.4	19.0	0.0		
160.0	3.4	.4	2.8	.2	15.0	2.6	.9	9.7	0.0	ONSHORE	
115.0	19.1	2.1	13.1	3.9	28.1	6.0	2.6	12.0	0.0		

MEAN SCALAR SPEED = 15.8 CM/S MEAN SQUARE SPEED = 319.6 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 185.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 11.5 CM/S, 82 DEG TRUE MEAN TEMPERATURE = 0.0 C TOTAL HOURS = 534

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-06S

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	MAXIMUM			MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
		TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	CM/S	
70.0	7.2	1.3	3.4	2.4	28.5	3.8	1.9	13.4
25.0	1.1	1.1	0.0	0.0	2.4	2.7	.2	1.9
340.0	8.6	8.6	0.0	0.0	2.2	5.0	.0	.3
295.0	8.3	4.2	4.0	.1	16.4	9.7	2.1	6.0
250.0	6.6	.9	2.6	3.2	31.2	7.7	4.1	15.0
205.0	1.7	.4	1.3	0.0	14.1	2.0	.6	8.7
160.0	7.0	3.4	3.6	0.0	14.1	2.0	.4	6.1
115.0	59.3	3.6	42.0	13.8	30.1	13.3	5.7	11.9

MEAN SCALAR SPEED = 10.1 CM/S MEAN SQUARE SPEED = 146.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 100.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 6.8 CM/S, 115 DEG TRUE MEAN TEMPERATURE = 0.0 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-15

023 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	59.8	2.6	39.9	17.2	30.9	16.6	7.9	13.2	2.6	PARALLEL	
25.0	3.4	3.0	.4	0.0	5.9	3.0	.4	4.0	2.4		
340.0	2.0	2.0	0.0	0.0	4.7	2.0	.2	3.2	2.1	OFFSHORE	
295.0	13.1	3.2	7.8	2.2	32.4	7.0	2.5	10.1	1.9		
250.0	4.6	.3	2.6	1.7	30.9	2.5	1.1	12.5	1.9	ANTIPARA	
205.0	.7	.7	0.0	0.0	3.7	2.5	.3	3.0	1.9		
160.0	1.6	.6	1.0	0.0	8.1	2.8	.5	4.9	2.7	ONSHORE	
115.0	14.8	1.6	7.0	6.2	33.2	4.3	2.1	13.6	2.6		

MEAN SCALAR SPEED = 12.1 CM/S MEAN SQUARE SPEED = 184.0 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 119.2 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 8.1 CM/S, 33 DEG TRUE MEAN TEMPERATURE = 2.4 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-16A

012 N

CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT	MEAN DURATION	MEAN EXCURSION	MEAN CURRENT	MEAN TEMP
TOWARD	TOTAL	LIGHT MEDIUM HIGH	CM/S	HOURS	KM	CM/S	DEG C
70.0	69.9	1.0 13.8 55.1	37.3	32.1	23.3	20.2	1.8 PARALLEL
25.0	1.3	1.2 .1 0.0	5.0	3.0	.3	2.9	1.3
340.0	1.6	1.6 0.0 0.0	4.3	2.8	.3	2.6	1.4 OFFSHORE
295.0	2.5	1.6 .9 0.0	7.9	2.8	.4	4.0	1.5
250.0	18.7	1.0 7.8 9.9	40.7	18.4	11.0	16.5	1.5 ANTIPARA
205.0	.9	.1 .6 .1	23.5	1.5	.5	9.2	1.7
160.0	.3	.3 0.0 0.0	2.1	1.0	.1	1.9	2.0 ONSHORE
115.0	4.9	.9 4.1 0.0	12.6	2.6	.7	7.1	1.6

MEAN SCALAR SPEED = 17.8 CM/S MEAN SQUARE SPEED = 387.6 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 264.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 11.1 CM/S, 72 DEG TRUE MEAN TEMPERATURE = 1.7 C TOTAL HOURS = 690

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-168

429 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 2/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	TOWARD	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0		40.4	2.6	29.4	8.5	22.7	18.5		7.3	11.0	2.3 PARALLEL
25.0		4.1	.9	3.2	0.0	13.0	4.0		1.2	8.7	2.4
340.0		1.5	1.4	.1	0.0	5.0	2.4		.2	2.9	2.1 OFFSHORE
295.0		4.0	.9	2.3	.8	24.3	2.8		.9	8.6	1.9
250.0		37.4	8.7	24.0	4.6	29.5	12.1		3.8	8.6	2.2 ANTIPARA
205.0		6.7	5.5	1.2	0.0	10.3	2.9		.4	3.7	2.0
160.0		1.5	1.3	.3	0.0	6.5	1.5		.2	3.5	2.1 ONSHORE
115.0		4.4	3.6	.8	0.0	9.8	2.4		.3	3.1	2.2

MEAN SCALAR SPEED = 8.8 CM/S MEAN SQUARE SPEED = 105.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 103.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.6 CM/S, 26 DEG TRUE MEAN TEMPERATURE = 2.3 C TOTAL HOURS = 779

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-17

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	58.3	2.0	16.2	40.1	40.6		13.5		10.1	20.7	2.1 PARALLEL
25.0	.9	.9	0.0	0.0	0.0	3.7	3.0		.3	2.4	1.6
340.0	.1	.1	0.0	0.0	0.0	2.0	1.0		.1	2.0	1.4 OFFSHORE
295.0	6.3	3.0	3.2	.1	.1	21.7	2.9		.7	7.0	1.6
250.0	16.8	3.3	5.7	7.8	41.3		5.3		3.2	16.8	2.0 ANTIPARA
205.0	2.4	1.0	1.4	0.0	0.0	11.9	1.7		.3	5.3	2.2
160.0	1.4	1.3	.1	0.0	0.0	7.7	1.7		.2	3.7	2.2 ONSHORE
115.0	13.6	3.9	7.8	2.0	18.9		3.1		1.0	9.5	1.9

MEAN SCALAR SPEED = 16.8 CM/S MEAN SQUARE SPEED = 383.6 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 285.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 10.0 CM/S, 81 DEG TRUE MEAN TEMPERATURE = 2.0 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-18

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	55.6	1.6	18.0	36.1	38.2	18.0	18.4	12.3	18.6	1.9	PARALLEL
25.0	2.2	2.2	0.0	0.0	4.5	3.0	3.0	.3	2.7	2.2	
340.0	1.4	1.4	0.0	0.0	2.9	1.4	1.4	.1	1.9	2.1	OFFSHORE
295.0	2.2	1.6	.6	0.0	11.2	1.3	1.3	.2	4.2	1.7	
250.0	20.4	2.6	11.1	6.8	39.1	7.1	7.1	3.7	14.6	1.9	ANTIPARA
205.0	3.6	1.6	1.9	.1	15.9	2.1	2.1	.5	6.2	2.3	
160.0	4.3	3.2	1.1	0.0	9.9	1.9	1.9	.3	4.2	2.2	ONSHORE
115.0	10.3	2.0	7.0	1.3	20.1	3.1	3.1	1.0	9.0	1.7	

MEAN SCALAR SPEED = 14.8 CM/S MEAN SQUARE SPEED = 305.8 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 243.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 7.9 CM/S, 83 DEG TRUE MEAN TEMPERATURE = 1.9 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-19

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	47.8	6.8	15.7	25.4	31.4	12.8	7.0	15.2	2.2	PARALLEL
25.0	3.9	3.3	.6	0.0	6.6	2.7	.3	3.6	2.5	
340.0	1.7	1.7	0.0	0.0	4.5	1.3	.1	2.6	2.5	OFFSHORE
295.0	6.9	3.0	3.9	0.0	12.1	3.4	.7	5.8	2.1	
250.0	20.5	2.3	12.9	5.3	30.8	8.9	4.0	12.4	2.4	ANTIPARA
205.0	2.3	2.3	0.0	0.0	3.2	1.2	.1	2.4	2.4	
160.0	5.0	3.2	1.9	0.0	11.2	1.8	.3	4.5	2.5	ONSHORE
115.0	11.8	3.2	6.6	2.0	21.9	3.0	1.0	8.9	2.2	

MEAN SCALAR SPEED = 11.7 CM/S MEAN SQUARE SPEED = 197.8 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 170.4 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 5.3 CM/S, 75 DEG TRUE MEAN TEMPERATURE = 2.3 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-0C-20

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	38.9	3.9	15.2	18.8	24.8		7.7		3.9	14.1	1.9 PARALLEL
25.0	7.0	2.4	4.3	.3	17.5		2.2		.6	7.8	1.9
340.0	4.6	3.4	1.1	0.0	6.8		2.3		.3	3.5	2.1 OFFSHORE
295.0	12.4	2.3	9.8	.3	15.4		4.1		1.3	8.9	2.1
250.0	17.4	2.0	11.2	4.2	22.6		5.3		2.2	11.6	2.1 ANTIPARA
205.0	5.3	2.3	3.0	0.0	10.7		2.5		.5	5.6	2.1
160.0	5.6	2.9	2.7	0.0	8.2		1.6		.3	4.7	2.2 ONSHORE
115.0	8.8	3.9	2.4	2.4	19.1		2.3		.7	8.6	2.0

MEAN SCALAR SPEED = 10.6 CM/S MEAN SQUARE SPEED = 148.0 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 136.2 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 3.5 CM/S, 55 DEG TRUE MEAN TEMPERATURE = 2.0 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-21

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	12.2	3.6	8.2	.4	22.6		2.5		.7	7.6	2.3 PARALLEL
25.0	17.0	13.5	2.9	.6	26.3		2.4		.3	4.0	2.1
340.0	32.0	28.7	3.3	0.0	10.2		4.1		.4	3.1	2.3 OFFSHORE
295.0	9.2	7.5	1.3	.4	23.9		1.6		.2	3.9	2.3
250.0	11.4	5.3	5.6	.4	22.9		2.5		.6	6.1	1.9 ANTIPARA
205.0	8.5	7.0	1.6	.4	21.1		2.5		.3	3.9	2.3
160.0	3.4	2.2	1.1	.1	16.8		1.3		.3	5.9	2.4 ONSHORE
115.0	6.3	3.0	2.9	.4	18.8		1.4		.3	6.2	2.2

MEAN SCALAR SPEED = 4.6 CM/S MEAN SQUARE SPEED = 37.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 36.1 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.1 CM/S, 5 DEG TRUE MEAN TEMPERATURE = 2.2 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 6.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-24

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT	MEAN DURATION	MEAN EXCURSION	MEAN CURRENT	MEAN TEMP		
TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	CM/S	HOURS	KM	CM/S	DEG C
70.0	18.2	5.5	12.8	0.0	14.1	8.5	2.0	6.6	3.2 PARALLEL
25.0	15.2	14.4	.9	0.0	7.9	3.0	.3	2.5	2.8
340.0	30.2	29.5	.7	0.0	5.8	4.4	.4	2.6	2.6 OFFSHORE
295.0	20.0	19.4	.6	0.0	5.5	3.5	.3	2.5	2.6
250.0	11.5	4.3	6.6	.6	16.7	7.3	1.7	6.6	2.1 ANTIPARA
205.0	2.4	2.4	0.0	0.0	4.2	2.8	.2	2.1	2.4
160.0	2.3	2.3	0.0	0.0	4.2	2.7	.2	2.3	2.2 ONSHORE
115.0	.1	.1	0.0	0.0	1.5	1.0	.1	1.5	3.7

MEAN SCALAR SPEED = 3.7 CM/S MEAN SQUARE SPEED = 22.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 20.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.5 CM/S, 353 DEG TRUE MEAN TEMPERATURE = 2.7 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	15.7	1.7	5.3	3.6	9.6	40.2		3.2	2.4	20.4	2.3 PARALLEL
25.0	1.7	.9	.9	.9	0.0	7.4		2.4	.4	4.6	1.8
340.0	1.1	.7	.4	.4	0.0	6.6		1.3	.2	3.7	1.8 OFFSHORE
295.0	4.7	3.0	1.7	0.0	0.0	10.5		2.5	.4	4.6	1.8
250.0	20.3	1.3	12.1	6.9	6.9	37.4		14.1	7.9	15.7	2.2 ANTIPARA
205.0	2.9	.6	2.3	0.0	0.0	12.4		4.0	1.3	9.2	2.5
160.0	2.0	.3	1.7	0.0	0.0	12.1		2.0	.6	8.2	2.4 ONSHORE
115.0	51.6	1.0	10.2	40.4	40.4	42.0		10.6	8.5	22.5	2.1

MEAN SCALAR SPEED = 18.7 CM/S MEAN SQUARE SPEED = 466.8 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 329.2 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 11.8 CM/S, 107 DEG TRUE MEAN TEMPERATURE = 2.2 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

015 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	60.9	3.0	14.1	43.8	40.1		17.0		13.3	21.7	2.3 PARALLEL
25.0	3.2	2.0	1.1	0.0		9.9	2.8		.4	4.0	2.0
340.0	2.7	2.4	.3	0.0		5.7	2.1		.2	2.5	1.8 OFFSHORE
295.0	3.9	2.4	1.4	0.0		9.6	1.9		.3	4.6	2.1
250.0	19.3	1.9	10.9	6.5		37.7	10.3		5.4	14.5	2.2 ANTIPARA
205.0	2.9	.5	2.3	0.0		12.4	3.3		.8	7.1	2.6
160.0	1.7	.4	1.3	0.0		10.6	2.0		.5	6.9	2.5 ONSHORE
115.0	5.5	.4	2.2	2.9		26.1	2.1		1.2	15.3	2.3

MEAN SCALAR SPEED = 17.5 CM/S MEAN SQUARE SPEED = 427.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 305.4 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 11.1 CM/S, 86 DEG TRUE MEAN TEMPERATURE = 2.3 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-00C-99A

## WIND DATA

PICKERING

FIRST DAY 1/3  
FINAL DAY 31/3

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	MAXIMUM WIND VEL DURATION			MEAN WIND VEL M/S	MEAN TEMP DEG C				
		TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	Hours			
70.0	10.8	2.1	6.9	1.3	9.4	3.0		4.6	2.8	PARALLEL
25.0	9.0	1.9	4.7	2.4	10.8	2.8		5.3	2.3	
340.0	2.9	2.4	.5	0.0	4.1	1.4		1.9	2.9	OFFSHORE
295.0	8.3	2.9	1.6	3.9	13.7	3.3		7.1	.1	
250.0	15.6	4.7	5.3	5.5	13.6	4.9		5.7	2.9	ANTIPARA
205.0	10.0	7.1	2.9	0.0	4.7	3.4		2.7	1.4	
160.0	25.5	8.2	13.6	3.7	11.8	6.1		4.5	-2.3	ONSHORE
115.0	18.0	7.2	9.0	1.8	8.5	4.5		4.0	-2.8	

MEAN SCALAR SPEED = 4.6 M/S MEAN SQUARE SPEED = 29.6 M<sup>2</sup>/S<sup>2</sup> VARIANCE = 28.6 M<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.0 M/S , 163 DEG TRUE MEAN TEMPERATURE = .1 C TOTAL HOURS = 623

PERCENT OBSERVED  
LIGHT 0.0 - 3.0 MEDIUM 3.0 - 7.0 HIGH GE 7.0

79-OC-13

608 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 31/ 3/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	TOWARD	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0		32.5	20.4	11.6	.5	19.0	3.7	.7	4.9	3.5	PARALLEL
25.0		3.8	2.6	1.2	0.0	8.1	1.3	.2	3.7	3.5	
340.0		4.4	3.8	.7	0.0	7.6	1.4	.1	2.9	3.6	OFFSHORE
295.0		7.7	4.8	1.6	1.2	27.9	1.6	.4	6.7	2.6	
250.0		20.8	8.9	8.9	3.1	33.2	2.7	.8	7.8	2.5	ANTIPARA
205.0		10.8	5.9	3.9	.9	22.4	1.4	.3	5.8	2.8	
160.0		7.4	6.5	.9	0.0	14.4	1.8	.2	2.7	3.6	ONSHORE
115.0		12.6	6.3	6.2	.1	16.2	1.7	.3	5.2	3.6	

MEAN SCALAR SPEED = 5.5 CM/S MEAN SQUARE SPEED = 54.7 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 54.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = .7 CM/S, 183 DEG TRUE MEAN TEMPERATURE = 3.2 C TOTAL HOURS = 744

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-23

008 M. CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 31/ 3/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	24.9	11.4	13.4	0.0	13.6		3.0		.6	5.3	3.3 PARALLEL
25.0	4.3	3.9	.4	0.0	7.2		1.9		.2	2.5	3.1
340.0	6.6	6.3	.3	0.0	6.0		2.6		.2	2.6	3.5 OFFSHORE
295.0	24.5	12.0	12.1	.4	17.2		4.7		1.0	6.2	2.5
250.0	7.1	4.4	2.7	0.0	13.5		1.7		.3	4.5	2.8 ANTIPARA
205.0	1.6	1.5	.1	0.0	6.1		1.3		.1	1.3	3.4
160.0	.9	.9	0.0	0.0	4.2		1.2		.1	1.4	3.8 ONSHORE
115.0	30.1	7.8	22.2	.1	15.2		3.9		.9	6.3	3.1

MEAN SCALAR SPEED = 5.3 CM/S MEAN SQUARE SPEED = 39.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 37.7 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.3 CM/S, 79 DEG TRUE MEAN TEMPERATURE = 3.0 C TOTAL HOURS = 744

PERCENT CBSE FVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-46S

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 1/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
70.0	52.0	2.5	23.2	26.3	43.0	24.4	13.8	15.7	0.0	PARALLEL		
25.0	.5	.5	0.0	0.0	4.2	1.3	.1	2.9	0.0			
340.0	4.0	4.0	0.0	0.0	2.0	3.3	.0	.2	0.0	OFFSHORE		
295.0	.5	.5	0.0	0.0	3.1	2.0	.1	2.0	0.0			
250.0	16.1	2.8	9.5	3.9	31.7	6.1	2.4	11.1	0.0	ANTIPARA		
205.0	17.7	3.1	7.3	7.3	36.4	4.9	2.6	14.7	0.0			
160.0	2.0	1.1	.7	.3	19.5	1.3	.3	6.9	0.0	ONSHORE		
115.0	7.1	.4	4.8	1.9	20.9	2.5	1.0	11.6	0.0			

MEAN SCALAR SPEED = 13.6 CM/S MEAN SQUARE SPEED = 245.7 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 216.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 5.4 CM/S, 97 DEG TRUE MEAN TEMPERATURE = 0.0 C TOTAL HOURS = 750

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-06S

012 N CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 1/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
TOWARD	TOTAL	LIGHT MEDIUM HIGH	CM/S	HOURS	KM	CM/S	DEG C
70.0	26.4	.9 18.3 7.2	29.2	8.6	3.7	12.1	0.0 PARALLEL
25.0	0.0	0.0 0.0 0.0	0.0	0.0	0.0	0.0	0.0
340.0	8.0	8.0 0.0 0.0	.1	6.0	.0	.1	0.0 OFFSHORE
295.0	2.7	.9 1.7 0.0	10.5	2.5	.5	6.0	0.0
250.0	13.1	3.5 8.0 1.5	27.2	2.7	.8	8.0	0.0 ANTIPARA
205.0	18.0	3.1 8.3 6.7	31.2	4.2	2.0	13.4	0.0
160.0	6.3	1.6 4.1 .5	25.2	2.6	.8	8.5	0.0 ONSHORE
115.0	25.6	1.6 19.7 4.3	21.1	6.0	2.3	10.5	0.0

MEAN SCALAR SPEED = 10.0 CM/S MEAN SQUARE SPEED = 144.6 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 121.2 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 4.9 CM/S, 135 DEG TRUE MEAN TEMPERATURE = 0.0 C TOTAL HOURS = 750

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-15

023 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 2/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	39.1	1.8	26.0	11.3	30.2	12.2	5.5	12.7	2.2	PARALLEL	
25.0	.5	.4	.1	0.0	6.0	1.3	.2	3.2	2.1		
340.0	1.3	1.0	.3	0.0	5.5	2.5	.3	3.2	2.1	OFFSHORE	
295.0	30.8	7.2	17.5	6.2	26.9	10.9	3.7	9.5	2.1		
250.0	8.5	4.0	4.5	0.0	12.8	2.6	.5	5.2	2.5	ANTIPARA	
205.0	4.4	3.3	1.0	0.0	9.1	2.4	.3	3.6	3.2		
160.0	3.7	2.1	1.7	0.0	10.9	2.6	.4	4.7	2.3	ONSHORE	
115.0	11.7	3.5	7.8	.4	20.8	3.1	.8	7.0	2.0		

MEAN SCALAR SPEED = 9.5 CM/S MEAN SQUARE SPEED = 122.8 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 116.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.6 CM/S, 70 DEG TRUE MEAN TEMPERATURE = 2.2 C TOTAL HOURS = 778

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-16A

412 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 31/ 3/80

SHOELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	47.2	1.6	11.5	34.0	34.6		43.5		27.8	17.7	1.6 PARALLEL
25.0	2.3	2.0	.3	0.0	8.1		4.3		.5	3.0	1.6
340.0	.9	.9	0.0	0.0	2.8		2.3		.2	2.0	1.6 OFFSHORE
295.0	1.6	1.2	.4	0.0	13.5		1.3		.2	4.1	1.6
250.0	32.1	4.9	16.8	10.4	35.4		10.3		5.0	13.4	1.6 ANTIPARA
205.0	5.8	2.2	3.4	.3	17.0		1.9		.5	7.3	1.5
160.0	6.5	4.3	2.2	0.0	13.2		3.2		.6	5.1	1.6 ONSHORE
115.0	3.5	2.4	.9	.1	15.8		1.6		.3	4.9	1.5

MEAN SCALAR SPEED = 13.7 CM/S MEAN SQUARE SPEED = 254.9 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 239.6 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 3.9 CM/S, 82 DEG TRUE MEAN TEMPERATURE = 1.6 C TOTAL HOURS = 738

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-16B

029 M CURRENT METER

PICKERING

FIRST DAY 1/ 2/80  
FINAL DAY 29/ 2/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	TOWARD	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0		69.0	3.6	45.7	19.7	28.3	30.0	13.5	12.5	2.7	PARALLEL
25.0		8.6	5.3	3.3	0.0	10.1	3.8	.7	5.0	2.5	
340.0		.9	.9	0.0	0.1	2.5	1.5	.1	1.9	2.2	OFFSHORE
295.0		1.3	1.3	0.0	0.0	4.2	3.0	.3	3.0	1.9	
250.0		16.8	1.9	11.8	3.2	32.2	39.0	16.1	11.5	2.1	ANTIPARA
205.0		1.9	1.7	.1	0.0	7.4	4.3	.5	3.0	2.1	
160.0		.7	.6	.1	0.0	5.6	2.5	.2	2.6	3.1	ONSHORE
115.0		.9	.3	.6	0.0	5.9	1.5	.3	5.0	2.9	

MEAN SCALAR SPEED = 11.2 CM/S MEAN SQUARE SPEED = 156.7 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 105.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 7.2 CM/S, 53 DEG TRUE MEAN TEMPERATURE = 2.5 C TOTAL HOURS = 696

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-17

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 1/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED		MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
TOWARD	TOTAL	LIGHT MEDIUM HIGH	CM/S	HOURS	KM	CM/S	DEG C
70.0	38.2	.7 8.3	29.2	34.3	19.3	14.3	20.6 1.8 PARALLEL
25.0	.3	.1 0.0	.1	18.7	1.0	.4	10.0 1.8
340.0	1.3	1.3 0.0	0.0	3.8	1.7	.2	3.3 1.8 OFFSHORE
295.0	19.7	10.2 5.8	3.7	25.7	4.0	1.1	7.5 1.8
250.0	29.0	2.0 19.6	7.4	32.2	5.3	2.4	12.6 1.8 ANTIPARA
205.0	4.8	1.7 3.0	0.0	13.2	2.0	.5	6.7 1.8
160.0	1.7	1.1 .7	0.0	6.0	1.3	.2	4.1 1.8 ONSHORE
115.0	5.0	.9 3.4	.7	21.1	2.4	.8	9.3 1.8

MEAN SCALAR SPEED = 14.0 CM/S MEAN SQUARE SPEED = 266.0 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 256.8 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 3.1 CM/S, 78 DEG TRUE MEAN TEMPERATURE = 1.8 C TOTAL HOURS = 756

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-18

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 22/ 3/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
70.0	49.7	1.9	14.1	33.7	.6	31.6	31.6	12.9	8.1	17.4	1.4	PARALLEL
25.0	7.4	1.3	5.4	5.4	.6	28.6	28.6	2.3	.7	8.4	1.4	
340.0	4.5	2.2	2.2	2.2	0.0	14.6	14.6	2.3	.5	5.5	1.5	OFFSHORE
295.0	2.6	1.6	1.0	1.0	0.0	11.0	11.0	1.0	.2	5.1	1.4	
250.0	24.7	2.2	19.6	19.6	2.9	18.5	18.5	4.8	1.9	11.1	1.5	ANTIPARA
205.0	5.1	1.9	2.9	2.9	.3	15.4	15.4	1.2	.3	6.9	1.6	
160.0	2.6	.6	1.9	1.9	0.0	11.0	11.0	2.0	.6	7.8	1.4	ONSHORE
115.0	3.5	.3	1.6	1.6	1.6	23.0	23.0	1.4	.6	12.7	1.4	

MEAN SCALAR SPEED = 13.3 CM/S MEAN SQUARE SPEED = 228.5 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 188.4 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 6.4 CM/S, 78 DEG TRUE MEAN TEMPERATURE = 1.4 C TOTAL HOURS = 312

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-DC-19

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 4/ 3/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
TOWARD						CM/S	hours	KM	CM/S	DEG C	
70.0	96.6	0.0	3.4	93.3	26.7	21.5		15.9	20.5	1.5	PARALLEL
25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
340.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	OFFSHORE
295.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
250.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ANTIPARA
205.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ONSHORE
115.0	3.4	0.0	0.0	3.4	21.2	1.0		.7	20.5	1.7	

MEAN SCALAR SPEED = 20.5 CM/S MEAN SQUARE SPEED = 428.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 19.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 20.2 CM/S, 77 DEG TRUE MEAN TEMPERATURE = 1.5 C TOTAL HOURS = 89

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-20

012 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 1/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	43.3	1.7	11.8	29.8	28.1		8.2		5.0	17.0	1.4
25.0	8.3	4.4	2.9	1.1	21.2		2.6		.7	7.0	1.3
340.0	2.5	1.9	.7	0.0	8.4		1.4		.2	3.5	1.4
295.0	5.6	1.6	2.8	1.2	22.6		2.3		.8	9.4	1.8
250.0	27.4	2.9	17.4	7.2	24.3		7.4		3.0	11.1	1.8
205.0	3.6	.4	3.0	.1	15.1		2.5		.7	7.8	1.5
160.0	1.7	.7	1.1	0.0	12.6		1.4		.4	7.4	1.5
115.0	7.5	1.2	3.8	2.5	23.9		2.1		.9	11.2	1.4

MEAN SCALAR SPEED = 12.8 CM/S MEAN SQUARE SPEED = 209.4 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 187.1 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 4.7 CM/S, 65 DEG TRUE MEAN TEMPERATURE = 1.5 C TOTAL HOURS = 755

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-21

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 1/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
70.0	13.9	5.4	8.3	.3	19.3		2.7		.6	6.0	2.8	PARALLEL
25.0	17.3	10.8	6.6	0.0	12.9		3.1		.5	4.2	2.1	
340.0	10.2	8.5	1.7	0.0	9.7		1.9		.2	3.0	2.3	OFFSHORE
295.0	6.6	4.2	1.6	.8	28.8		1.4		.3	6.2	2.2	
250.0	31.5	17.3	10.8	3.4	33.1		4.0		1.0	6.6	2.4	ANTIPARA
205.0	14.4	10.9	2.9	.7	30.2		2.2		.4	4.5	2.5	
160.0	2.1	1.7	.4	0.0	7.6		1.6		.2	2.7	2.8	ONSHORE
115.0	3.9	1.8	2.1	0.0	11.3		1.4		.3	5.1	3.0	

MEAN SCALAR SPEED = 5.3 CM/S MEAN SQUARE SPEED = 51.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 49.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 1.5 CM/S, 272 DEG TRUE MEAN TEMPERATURE = 2.4 C TOTAL HOURS = 762

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-24

008 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 1/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C	
70.0	14.2	5.2	8.8	.1	16.1		4.3		.9	6.0	3.6	PARALLEL
25.0	18.8	11.2	7.6	0.0	9.9		3.3		.5	4.4	2.6	
340.0	22.6	18.0	4.6	0.0	8.4		3.8		.5	3.7	2.7	OFFSHORE
295.0	20.6	15.2	5.2	.1	15.7		4.0		.6	4.2	2.7	
250.0	20.5	8.4	11.0	1.0	18.5		6.2		1.7	7.4	2.4	ANTIPARA
205.0	2.5	2.5	0.0	0.0	2.4		6.3		.3	1.5	3.8	
160.0	.4	.4	0.0	0.0	2.1		1.5		.1	1.6	3.3	ONSHORE
115.0	.5	.5	0.0	0.0	1.2		1.3		.0	1.0	3.3	

MEAN SCALAR SPEED = 4.9 CM/S MEAN SQUARE SPEED = 34.5 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 29.0 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 2.3 CM/S, 323 DEG TRUE MEAN TEMPERATURE = 2.8 C TOTAL HOURS = 762

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

612 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 2/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	10.8	.6	3.7	6.4	40.8	3.7	2.6	19.6	2.0	PARALLEL
25.0	1.4	.8	.6	3.0	8.5	1.6	.3	4.8	1.9	
340.0	2.3	1.2	1.2	0.0	8.8	1.8	.3	5.3	1.8	OFFSHORE
295.0	5.0	3.3	1.5	.1	15.4	2.3	.4	4.5	2.1	
250.0	44.2	4.5	31.1	8.6	27.8	14.3	6.0	11.6	1.9	ANTIPARA
205.0	4.0	2.3	1.7	0.0	12.5	2.4	.5	5.9	1.8	
160.0	1.0	.8	.1	.1	15.4	1.0	.2	6.4	1.7	ONSHORE
115.0	31.3	.6	3.5	27.2	38.5	10.6	9.0	23.6	2.1	

MEAN SCALAR SPEED = 15.3 CM/S MEAN SQUARE SPEED = 322.2 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 293.3 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 5.4 CM/S, 130 DEG TRUE MEAN TEMPERATURE = 2.0 C TOTAL HOURS = 779

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

79-OC-22

015 M CURRENT METER

PICKERING

FIRST DAY 1/ 3/80  
FINAL DAY 2/ 4/80

SHORELINE ORIENTATION IN DEGREES TRUE SPECIFIED AS 70

DIRECTION DEG TRUE	PERCENT OBSERVED	TOWARD	TOTAL	LIGHT	MEDIUM	HIGH	MAXIMUM CURRENT CM/S	MEAN DURATION HOURS	MEAN EXCURSION KM	MEAN CURRENT CM/S	MEAN TEMP DEG C
70.0	36.0	1.9	6.6	27.5	42.9	42.9	17.5	14.0	22.3	2.1	PARALLEL
25.0	2.6	1.5	1.0	0.0	13.6	13.6	1.3	.2	5.0	1.9	
340.0	3.1	2.4	.6	0.0	11.8	11.8	1.6	.2	3.7	1.9	OFFSHORE
295.0	6.3	4.2	2.1	0.0	13.2	13.2	2.1	.3	4.6	2.1	
250.0	41.8	10.5	25.6	5.7	27.2	27.2	11.6	4.1	9.7	2.0	ANTIPARA
205.0	4.0	3.0	1.0	0.0	12.1	12.1	2.2	.3	4.4	1.9	
160.0	.4	.1	.3	0.0	11.3	11.3	1.0	.2	6.9	1.9	ONSHORE
115.0	5.9	.4	2.2	3.3	31.3	31.3	5.1	3.1	16.9	1.9	

MEAN SCALAR SPEED = 13.8 CM/S MEAN SQUARE SPEED = 286.3 CM<sup>2</sup>/S<sup>2</sup> VARIANCE = 264.7 CM<sup>2</sup>/S<sup>2</sup>

MEAN VELOCITY = 4.7 CM/S, 93 DEG TRUE MEAN TEMPERATURE = 2.0 C TOTAL HOURS = 778

PERCENT OBSERVED  
LIGHT 0.0 - 5.0 MEDIUM 5.0 - 15.0 HIGH GE 15.0

APPENDIX D

Time-Series CATS Temperature Data

Format Detail:

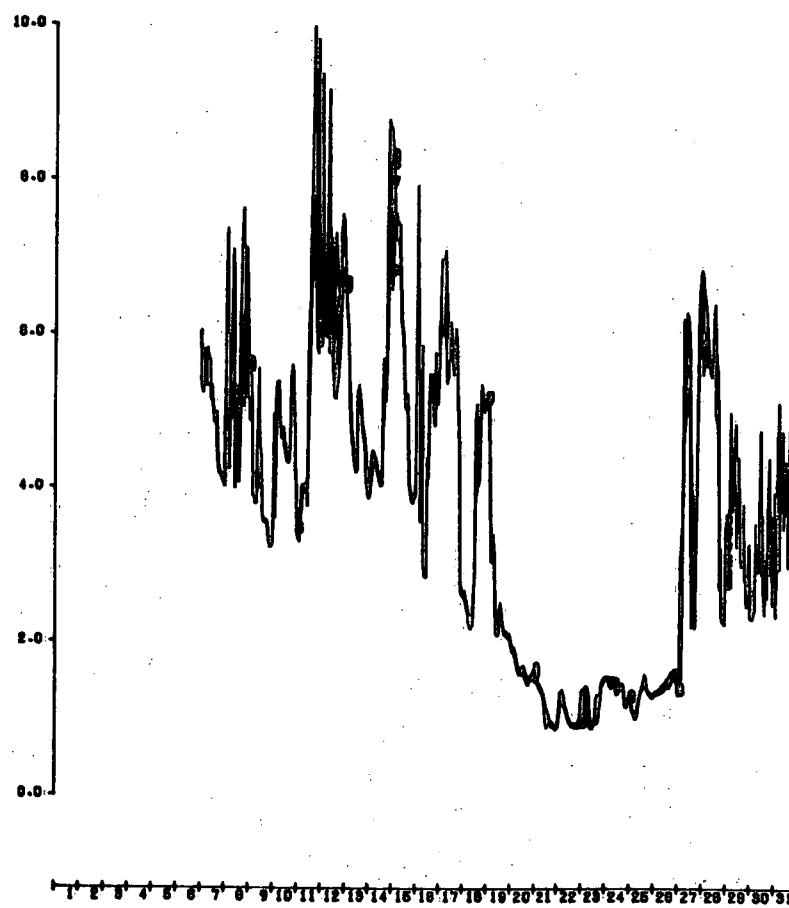
- All 9 Depths are Plotted
- Ordered by Month

MOORING: 79-OC-23 DATE: DEC 1979

WATER TEMPERATURE °C

CONSTANT DEPTHS

1	0.6 m	6	6.0 m
2	1.0 m	7	6.0 m
3	2.0 m	8	7.0 m
4	3.0 m	9	7.0 m
5	4.0 m	10	m

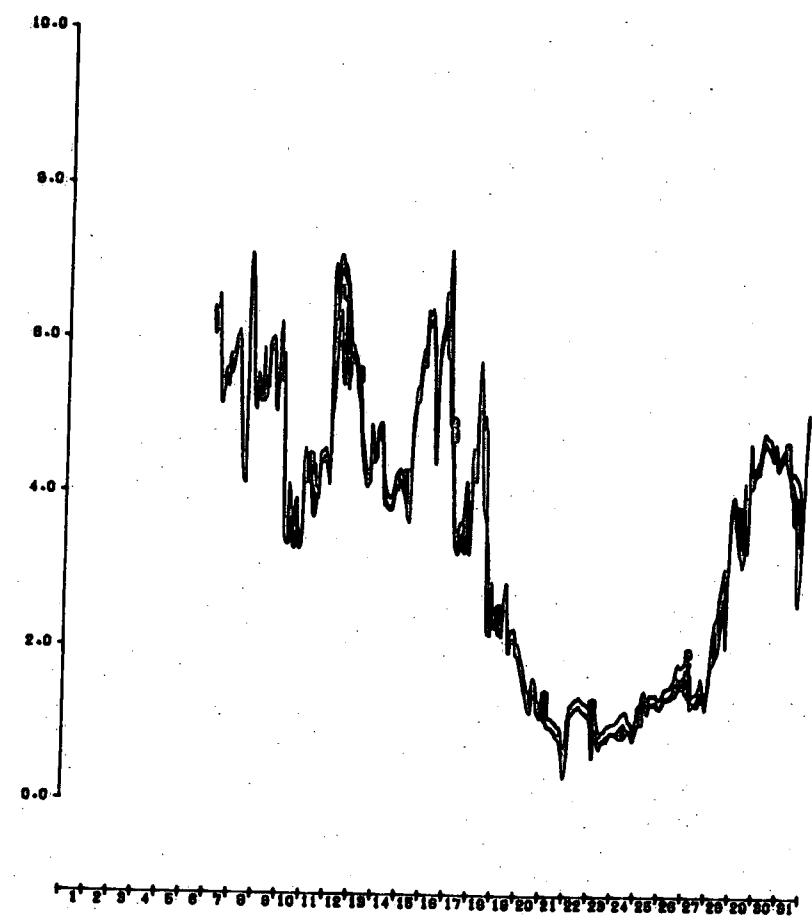


MOORING: 79-OC-24 DATE: DEC 1979

WATER TEMPERATURE °C

CONSTANT DEPTHS

1	0.6 m	6	6.0 m
2	1.0 m	7	6.0 m
3	2.0 m	8	7.0 m
4	3.0 m	9	7.0 m
5	4.0 m	10	m

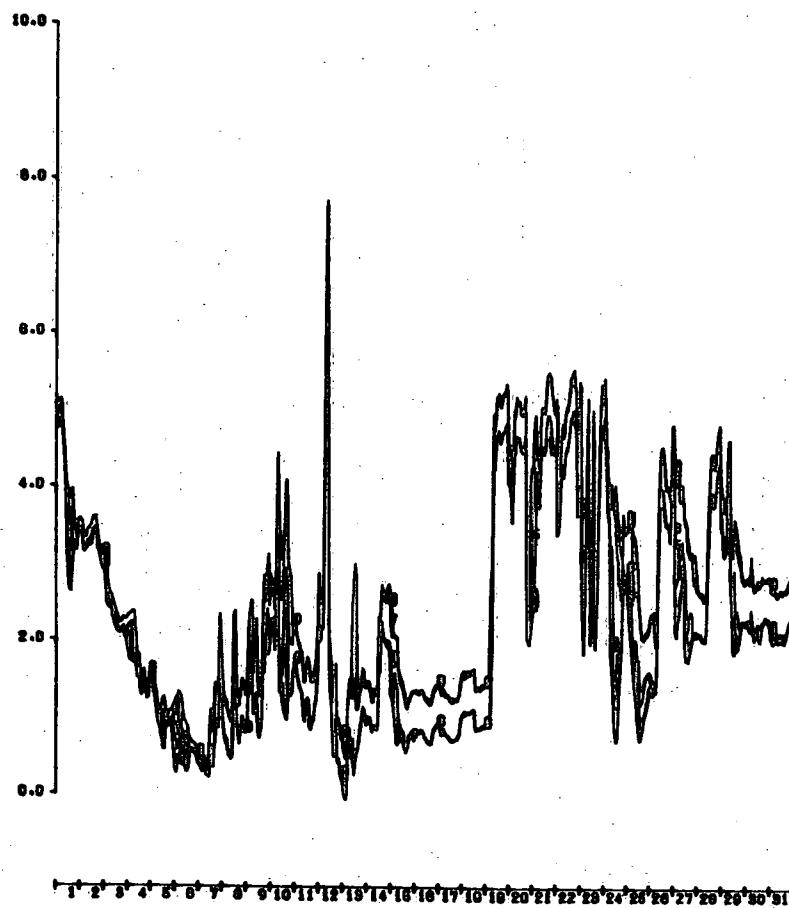


MOORING: 79-OC-24 DATE: JAN 1980

WATER TEMPERATURE °C

CONSTANT DEPTHS

1	0.5 m	6	5.0 m
2	1.0 m	7	6.0 m
3	2.0 m	8	7.0 m
4	3.0 m	9	7.0 m
5	4.0 m	10	m

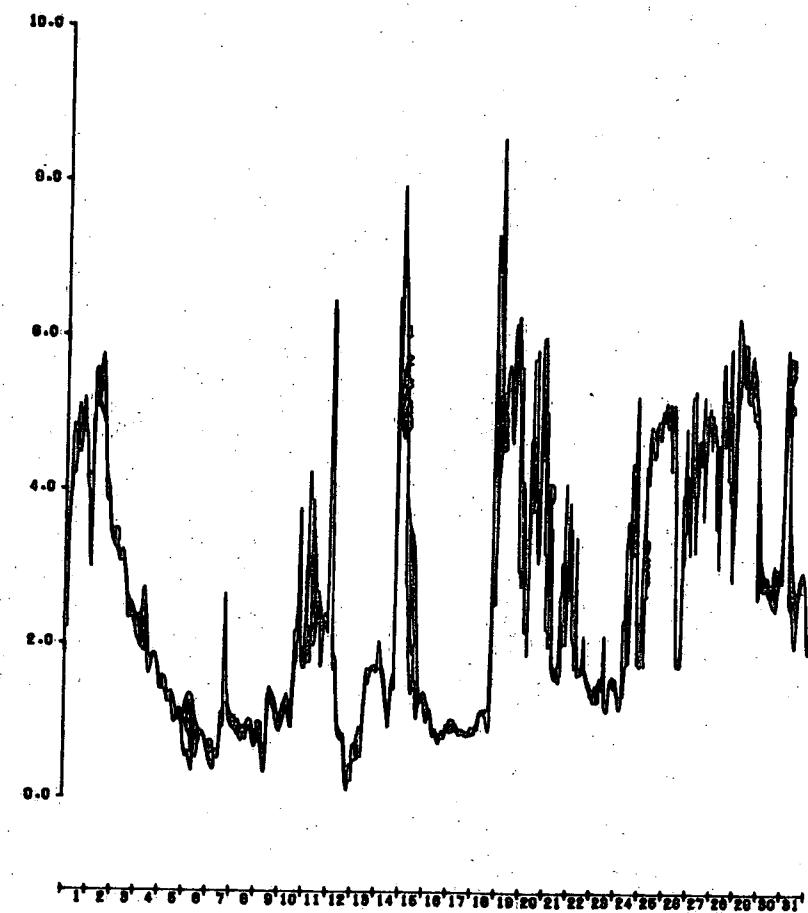


MOORING: 79-OC-23 DATE: JAN 1980

WATER TEMPERATURE °C

CONSTANT DEPTHS

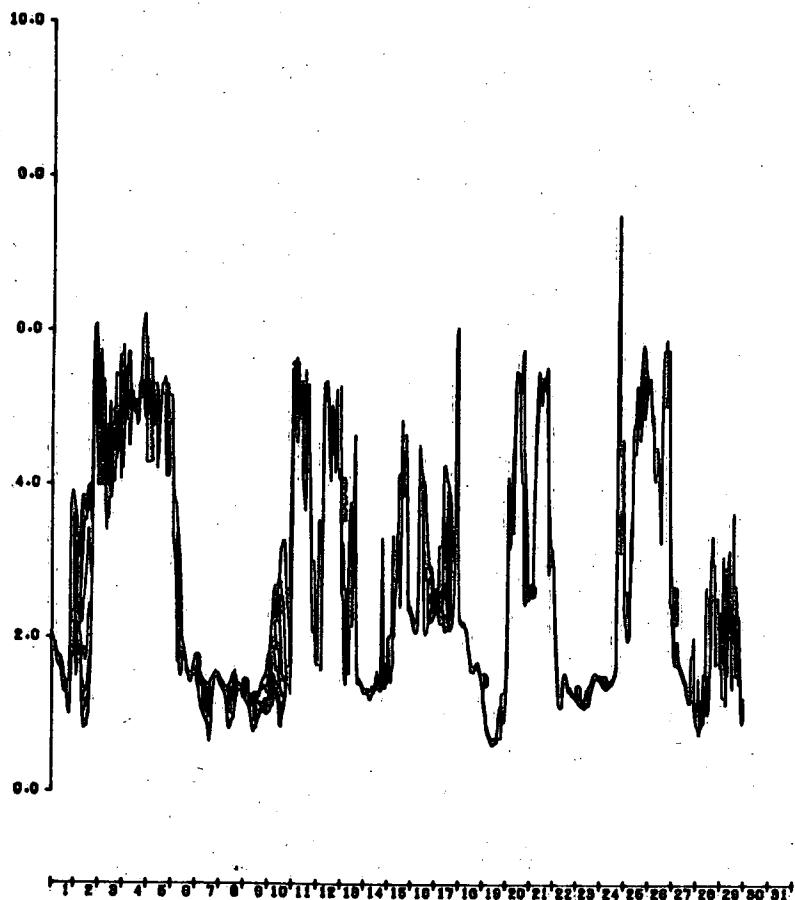
1	0.5 m	6	6.0 m
2	1.0 m	7	6.0 m
3	2.0 m	8	7.0 m
4	3.0 m	9	7.0 m
5	4.0 m	10	m



MOORING: 79-OC-23 DATE: FEB 1980

WATER TEMPERATURE °C

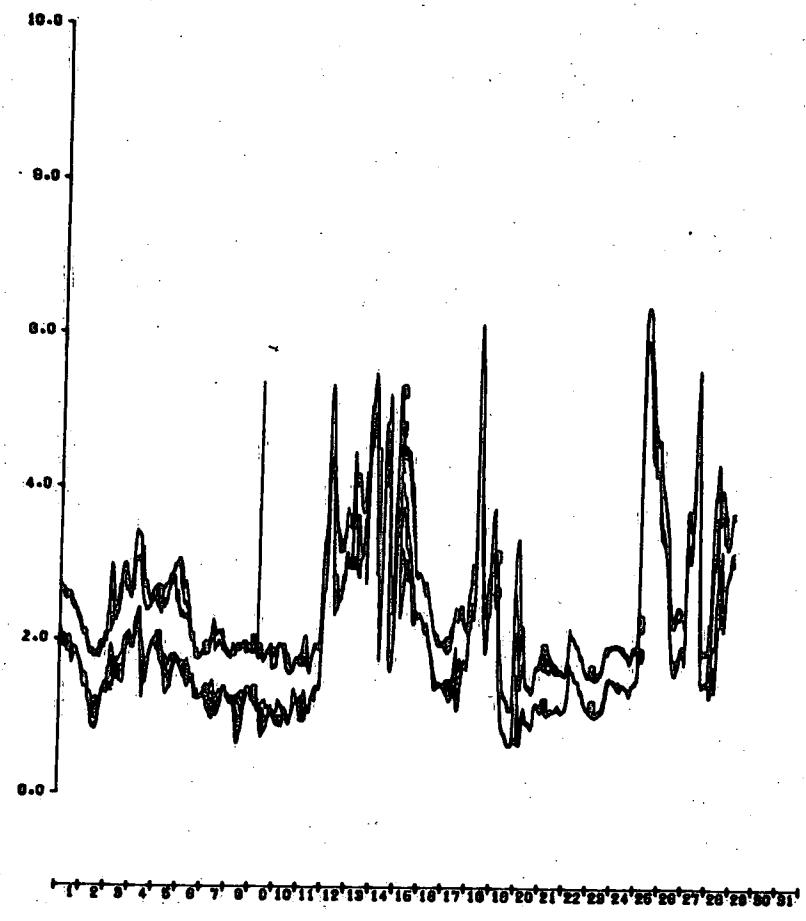
CONSTANT DEPTHS	1	0.5 m	6	5.0 m
2	1.0 m		7	6.0 m
3	2.0 m		8	7.0 m
4	3.0 m		9	7.0 m
5	4.0 m		10	m



MOORING: 79-OC-24 DATE: FEB 1980

WATER TEMPERATURE °C

CONSTANT DEPTHS	1	0.5 m	6	5.0 m
2	1.0 m		7	6.0 m
3	2.0 m		8	7.0 m
4	3.0 m		9	7.0 m
5	4.0 m		10	m

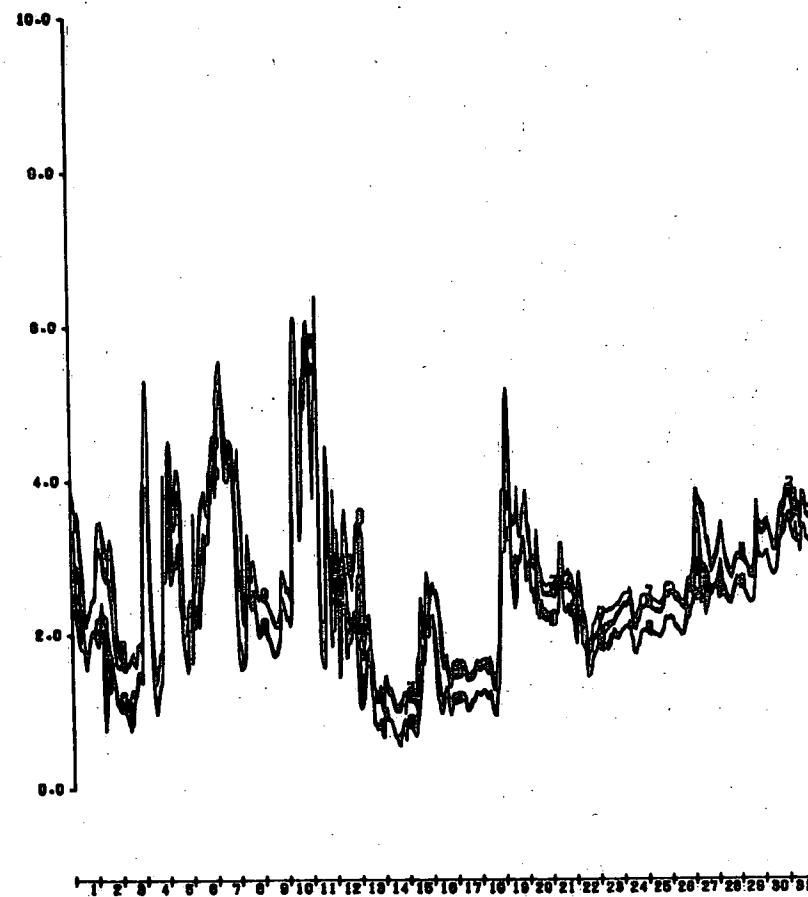


MOORING: 79-OC-23 DATE: MAR 1980

WATER TEMPERATURE °C

CONSTANT DEPTHS

1	0.5 M	6	6.0 M
2	1.0 M	7	8.0 M
3	2.0 M	8	7.0 M
4	3.0 M	9	7.0 M
5	4.0 M	10	M

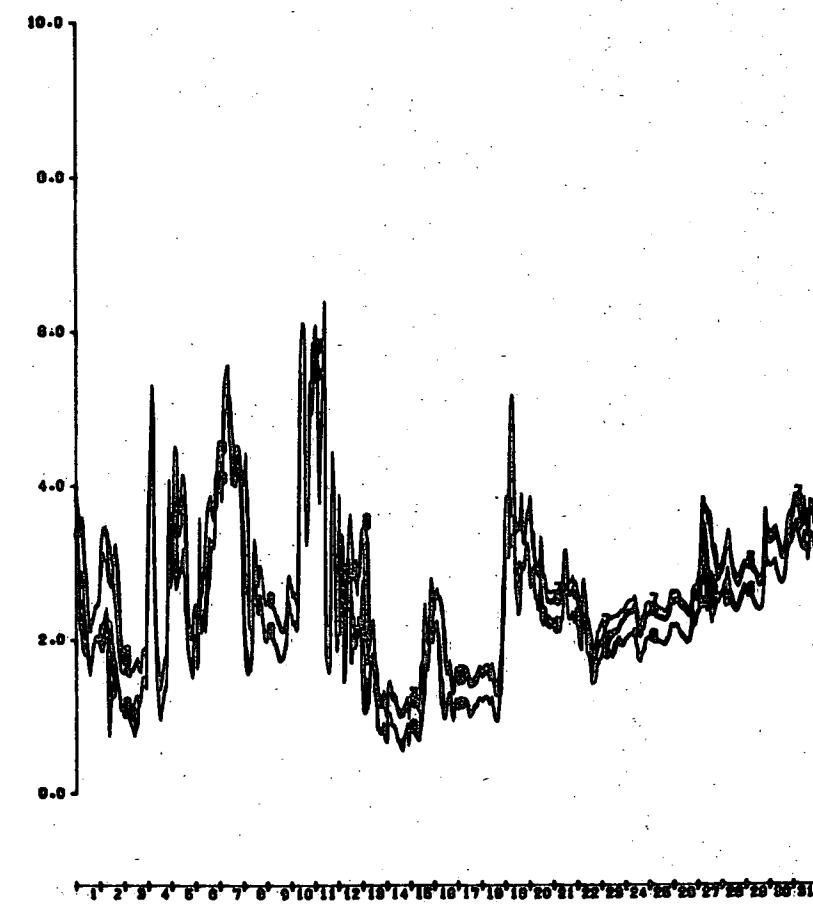


MOORING: 79-OC-24 DATE: MAR 1980

WATER TEMPERATURE °C

CONSTANT DEPTHS

1	0.5 M	6	6.0 M
2	1.0 M	7	8.0 M
3	2.0 M	8	7.0 M
4	3.0 M	9	7.0 M
5	4.0 M	10	M



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