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Hydrographic Observations in the Georgia Bight (April 1979)

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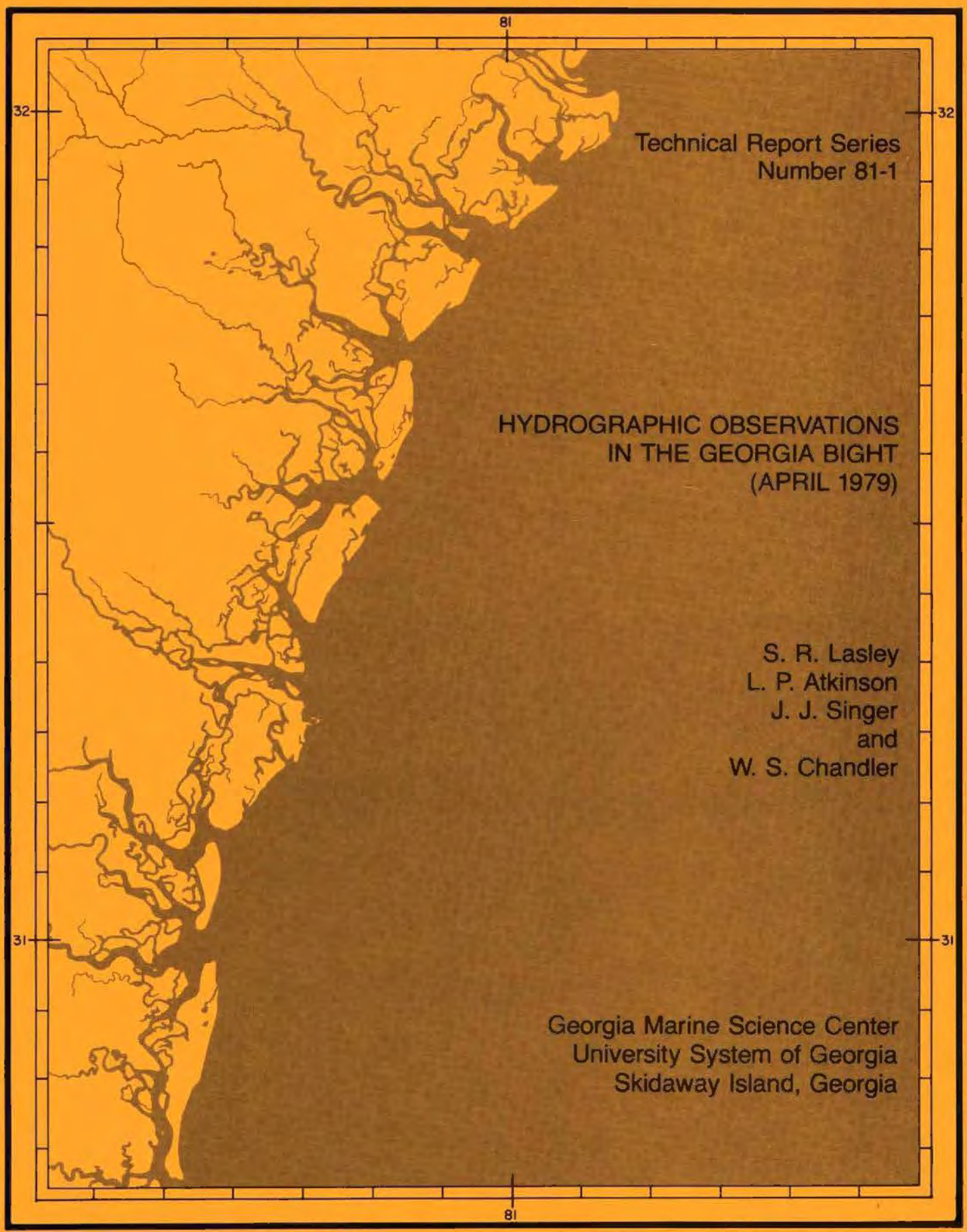

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by

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October 1980

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ACKNOWLEDGEMENTS

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ABSTRACT

During a cruise in the Georgia Bight in April 1979, an onshore-offshore hydrographic section of thirteen stations was repeated thirteen times. Four additional onshore-offshore hydrographic sections were completed north and south of the main section. Temperature, salinity, dissolved oxygen, and nutrient (NO_3, PO_4, and SiO_2) data were collected.

Two spin-off eddies were observed at the Gulf Stream front at the shelfbreak. These eddies resulted in the upwelling of nutrient-enriched North Atlantic Central water. A period of downwelling was observed between the two upwelling events. The cycling between upwelling and downwelling was relatively rapid. The immediate effects of the upwelling and downwelling events were confined to the narrow area of the shelfbreak.

INTRODUCTION

This report contains chemical and physical data obtained during the Georgia Bight Cruise GI-02-79 (20-30 April, 1979) aboard the R/V Gilliss. The investigation was part of a larger multi-institutional Department of Energy (DOE) program to understand event scale, physical, chemical and biological processes of the South Atlantic Bight, the continental shelf region from Cape Hatteras to Cape Canaveral. The study reported here was concentrated at the continental shelf break off Jacksonville, Florida. Specifically, the objectives were to collect physical and chemical data so as to locate and track Gulf Stream upwelling events and determine their effect on the shelf waters. In addition, the hydrographic data were used to compare with those of moored instruments deployed by the University of Miami and to provide background hydrographic data for the study of biological processes related to Shelf-Gulf Stream water interactions.

METHODS

Seventeen onshore-offshore hydrographic sections (Figure 1) were completed as part of the April 79 sampling grid. Five XBT stations were completed off St. Augustine on 20 April (Table 1) and eight stations (4CTD/4XBT) were occupied off Jacksonville from 20-21 April. Ten stations (5CTD/5XBT) were completed off Amelia Island on 21 April and an XBT section, consisting of nine stations was completed off St. Simons Island on 22 April. The remaining thirteen onshore-offshore sections were completed on an established time series grid (Figure 2) from 21-30 April. The thirteen stations making up the time series section

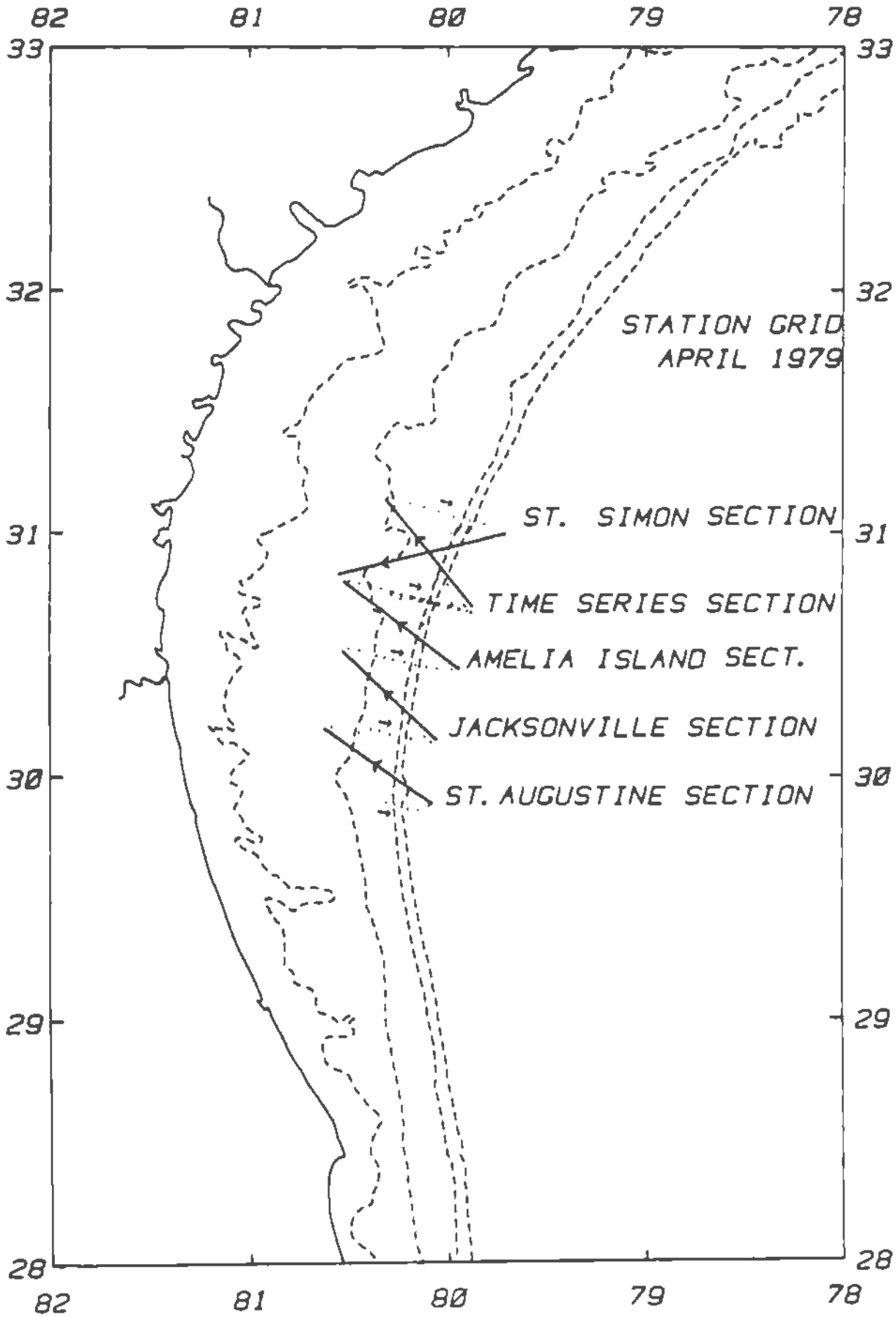


Figure 1. Station Grid, April 1979

Table 1. Summary Station Listing - April 1979

Stn. Nos.	Section	Date
1-40	Horizontal Mapping	20 April, 79
41X-45X 46-49 50X	St. Augustine Section Horizontal Mapping	20 April, 79
51C, 52X, 53C 54X, 55C, 56X 57C, 58X	Jax. Beach Section	20-21 April, 79
59-63	Horizontal Mapping	21 April, 79
64C, 65X, 66C 67X, 68C, 69X 70C, 71X, 72C 73X	Amelia Island Section	21 April, 79
74-77	Horizontal Mapping	21 April, 79
78C-87X	Time Series #1	21 April, 79
88-92	Horizontal Mapping	21-22 April, 79
93X-101X	St. Simon Section	22 April, 79
102-110	Horizontal Mapping	22 April, 79
111C-119C 120C, 121*	Time Series #2 Productivity Stn. 9	22 April, 79
122X-134X 135C, 135 YOO 136C	Time Series #3 Productivity Stn. 9	23 April, 79
137C-147C 148*	Time Series #4	23 April, 79
149X-153C 153C, 153 YOO 154C	Time Series #5 Productivity Stn. 9	24 April, 79
155X-160X	Time Series #6	24 April, 79 (Note: Storm Starts)
161-165	Horizontal Mapping	26 April, 79
166X-169X	Alongshore Section	26 April, 79
170C, 170 YOO	Productivity Stn. 9	26 April, 79
171-173	Horizontal Mapping (Alongshore)	26 April, 79
174X, 175*, 176C- 180C, 180 YOO 181*, 182*	Time Series #7 Productivity Stn. 9	26-27 April, 79
183C	Special Cast West of Prod. 9	27 April, 79
184X, 185*, 186C- 188C, 189*-191* 192C, 192 YOO	Time Series #8 Productivity Stn. 9	27 April, 79
193X-197C 198C, 199C	Time Series #9 Productivity Stn. 9	28 April, 79
200-209	Horizontal Mapping (for U-2)	28 April, 79
209C	Special U-2 Stn.	28 April, 79
210X-216X 217C	Time Series #10 Productivity Stn. 9	28 April, 79
218X-224X 225C, 226C	Time Series #11 Productivity Stn. 9	29 April, 79
227C 228-236, 237C 238C	Time Series #12 Horizontal Mapping Productivity Stn. 8	29 April, 79
239X-244X 245C	Time Series #13 Productivity Stn. 8	30 April, 79

*Assigned station numbers with no data collected.

SUMMARY:

No. of CTD Stations:	77	Station Nos. with no data: 9 (121,148, 175, 181, 182, 189, 190, 191)
No. of XBT Stations:	69	
No. of Hor. Map. Stations	93	
Total No. of Stations:	239	

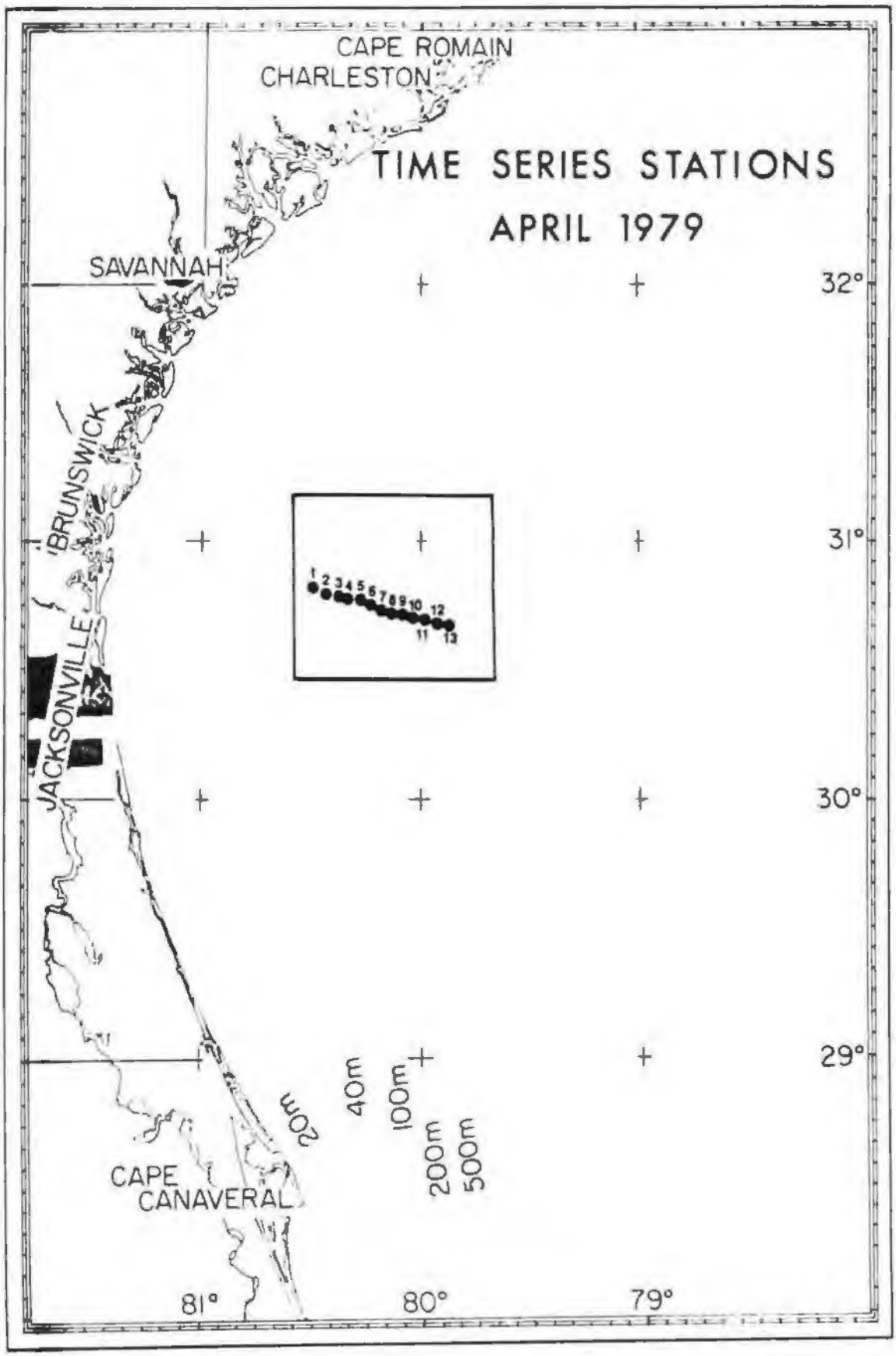


Figure 2. Time Series Station, April 1979

(Table 2) were sampled repeatedly over the nine day period. Grid station 9 and later station 8, were subject to intensive hydrographic and biological sampling. Additional surface mapping of temperature and salinity (Tom Lee, Univ. of Miami) and fluorescence (Jim Yoder, Skidaway Institute of Oceanography) was completed between the hydrographic sections. Two additional stations (183C, 209C) were sampled to complement airborne remote sensing flyovers.

CTD Data Acquisition and Processing

The CTD Data Acquisitions System (Figure 3) consists of a Plessey Model 9400 CTD sensor system, a Model 8400 Digital Logger, and a Hewlett-Packard 9825A Calculator. Data were stored on flexible disks and redundant plots were produced for each cast on a Hewlett-Packard XYY´ Plotter and Model 9862A Plotter.

Digitized data were collected as the CTD sensor unit was lowered at 15 m/min. on a four conductor cable. All three parameters (C,T, and D) were sampled once each 405 milliseconds or every 10 cm at the 15 m/min. lowering rate. For primary calibration of temperature and salinity, a Niskin Bottle equipped with paired protected deep-sea reversing thermometers was tripped after a four-minute equilibration period at the maximum sample depth in mixed layers. Other water samples were collected during ascent at depths selected after examination of the downcast temperature structure.

All data recorded on HP flexible disks were processed according to the methods described by Chandler, et al. (1978) in the sequence shown in Table 3. Salinity was calculated from conductivity according to the

Table 2. Summary Listong of Time Series Stations

Grid. Stn. #	Time Series No. 1 21/4	2 22/4	3 23/4	4 23/4	5 24/4	6 24/4	7 26/4	8 27/4	9 28/4	10 28/4	11 29/4	12 29/4	13 30/4
1	-	-	122X	137X	-	-	-	-	-	-	-	-	-
2	-	-	123X	138X	-	-	-	-	-	-	-	227C	-
3	-	-	124X	139C	149X	155X	174X	184X	193X	-	-	Hor. Map.	-
4	78C	-	125X	140X	-	-	-	-	-	-	-	"	-
5	79X	111C	126X	141X	150C	156C	176C	186C	194C	216X	218X	"	-
6	80C	112X	127X	142X	-	-	-		-	215X	219X	"	239X
7	81X	113C	128X	143C	151C	157C	177C	187C	195C	214X	220X	"	240X
8	82C	114X	129X	144X	-	-	-	-	-	213X	221X	"	241X
9	83X	115C	130X	147C*	153C*	160X	180C*	192C*	196X	212X	222X	"	242X
10	84C	116X	131X	145X	-	-	-		-	211X	223X	"	243X
11	85X	117C	132X	146X	152C	158C	178C	188C	197C	210X	224X	237C	244X
12	86X	118X	133X		-	-	-	-	-	-	-	-	-
13	87X	119C	134X	-	-	-	179X	-	-	-	-	-	-
Productivity Stations	-	120C(9)	135C(9) 135Y0U(9) 136C(9)	147C(9)	153C(9) 153Y0D(9) 154C	-	180C(9) 180Y3O(9)	192C(9) 192Y0D(9)	198C(9) 199C(9)	217C(9)	225C(9) 226C(9)	238C(8)	245C(8)

*Time Series Grid Stations done out of order.

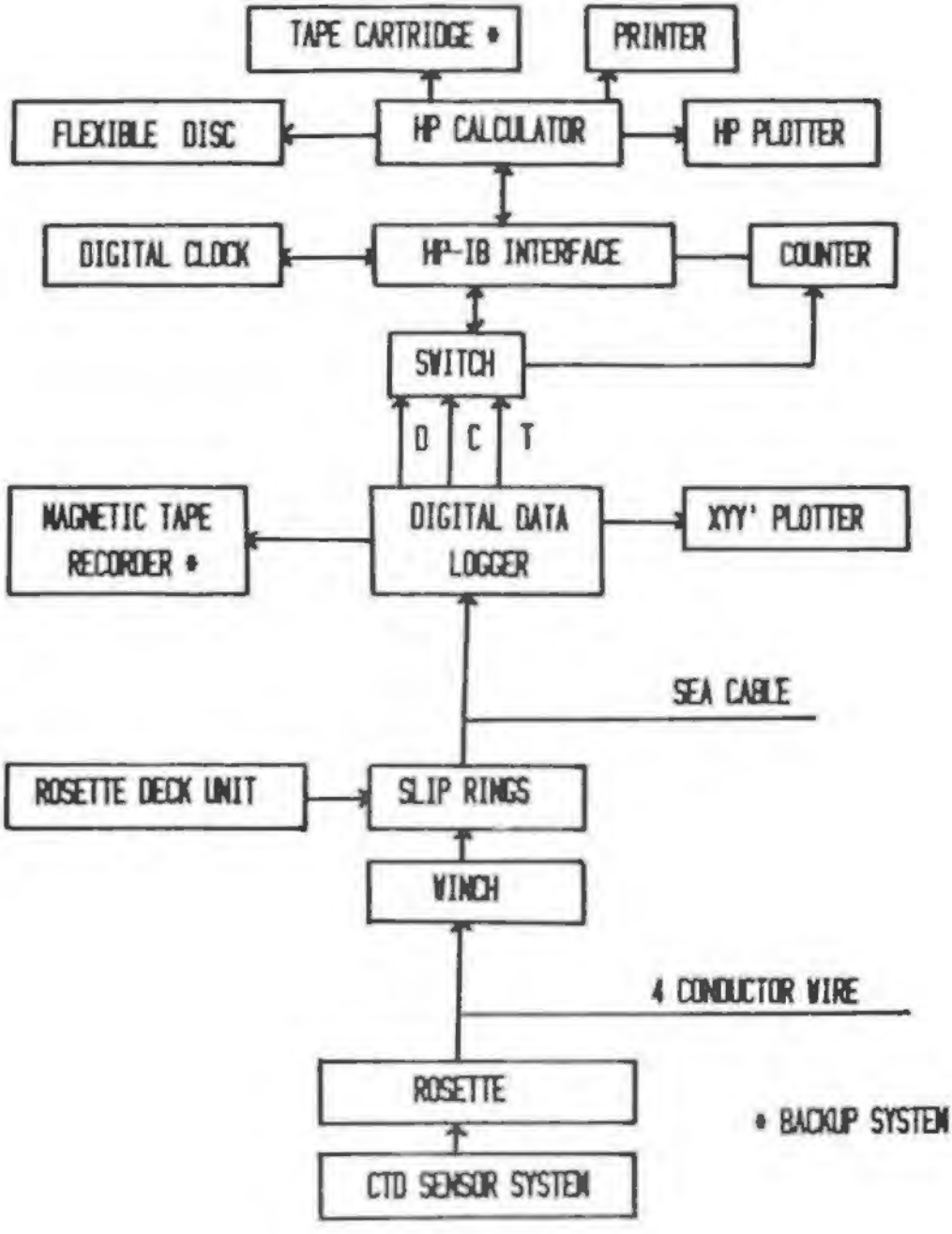


Figure 3. CTD Data Acquisition System

Table 3. CTD/Data Flow. Shipboard Acquisition to NODC Submission.

Data Source/Disposition	Program	Data File
HP Disk	MASTER (CTD and XBT controller and data acquisition)	
		001, 002, ETC. (Consecutive Station #)
Bridge Log	STALOG (Enter bridge log data)	
		LOG
	CREATE (Convert bridge log data to NODC headers)	
		HEAD
Calibration from bottle cast data	REDUCE (Combine headers with data in NODC format, depth latch and average CTDs, interpolate depth for .5°C on XBTs, add salinity and temperature offsets)	
		001, 002, ETC.
Nutrient analysis	TEK-ED (Add nutrient data and edit all station data)	
		001, 002, ETC.
	CEMLST (Calculates sigma-t, specific volume anomally, oxygen utilization and prints technical report pages)	
	STALST (Prints station list for technical report)	
Submit to NODC	HPCYB (Data transfer to Cyber to create a tape to send to NODC)	
		GIL002
		TECHNICAL REPORT

equations of Broenkow, et al. (1977). Broenkow's equation and a flow diagram showing its use is presented in Figure 4.

The CTD system was calibrated only against bottle samples in mixed layers to insure that the sensors and the bottles were sampling in the same water. However, since a mixed layer was not always observed, comparisons could not be made at every station. Salinity and temperature calibration data are included in Appendix I.

XBT Data Acquisition and Processing

A Sippican Model LM3A handheld launcher and a MK2A-1 recorder were used for XBT casts. The temperature/depth plots were manually digitized, and these data were placed in NODC format and merged with processed CTD data. Depths at which temperature is a whole or half degree are reported as are depths at which a significant mixed layer begins and ends.

During this cruise, the XBT system was not calibrated against CTD casts. Previous comparisons yielded a 0.1^{o}C difference which is in the range of accuracy of the system.

Physical and Chemical Procedures

Salinity samples collected for calibrating the CTD system were analyzed ashore using a Plessey Model 6230N induction salinometer.

Dissolved oxygen samples were analyzed during the cruise by the modified Winkler method outlined by Strickland and Parsons (1972).

The nutrient analysis was performed using Technicon Autoanalyzer procedures as outlined by Glibert and Loder (1977). The procedures are based on the manual method of Murphy and Riley (1962) for reactive phosphate and Armstrong, Stearns and Strickland (1967) for dissolved silicate and nitrate.

$$R_Z = 1 + .01[(1.551 - .0453T + 59 \times 10^{-5}T^2) + 4(35-S)(.43 - .0017T + 23 \times 10^{-6}T^2)][1.037 \times 10^{-3}Z - 32 \times 10^{-9}Z^2]$$

$$A_T = (678547 + 20131.5T + 99.89T^2 - .1943T^3 - .00672T^4)\,10^{-6}$$

$$R_T = \frac{C(S,T,Z)}{R_Z A_T 42.896}$$

$$\Delta_{15} = R_T(R_T-1)(T-15)\,[96.7 - 72R_T + 37.3R_T^2 + (.63 + .21R_T^2)(T - 15)]10^{-5}$$

$$R_{15} = R_T + \Delta_{15}$$

$$S^o/oo = .08996 + 28.2972R_{15} + 12.80832R_{15}^2 - 10.67869R_{15}^3 + 5.98624R_{15}^4 - 1.32311R_{15}^5$$

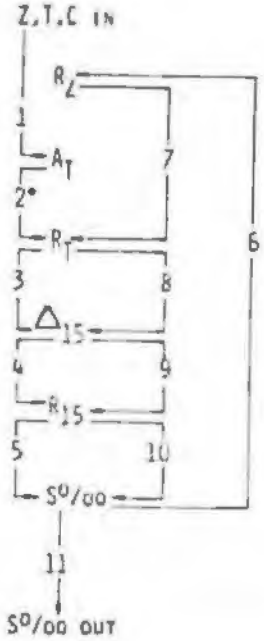
where: R = conductivity ratio

Z = depth (meters)

T = temperature (°C)

C = measured conductivity (mmhos/cm)

S = salinity (°/oo)



*without the R_Z term

R_Z = pressure effect on conductivity

A_T = temperature effect

R_T = R(S,t,0) conductivity ratio

Δ_{15} = t_{15} correction (International Oceanographic Tables, 1966)

R_{15} = R(S, 15°C,0)

Figure 4. Broenkow's salinity equation and flow diagram

RESULTS AND DISCUSSION

Upwelling at the shelfbreak has been related to easterly movements of the Gulf Stream front (Atkinson, 1977). Thus, any observed offshore meander should coincide with the lowering of temperature at the shelfbreak. Conversely, the onshore movement of the Gulf Stream would result in downwelling and a rise in temperature at the shelfbreak.

During the April 1979 cruise, the meandering of the Gulf Stream resulted in two spin-off eddies (Lee and Mayer, 1977) along the Gulf Stream front at the shelfbreak. The first eddy was observed on 22 April. Observations through the eddy core indicated considerable upwelling, reaching inshore as far as time series station 7 (40 m isobath) (Figures 19-31). A second eddy was observed between 27-30 April. Upwelling was observed, but was less intense than the first upwelling event. The upwelled water did not reach inshore as far as station 7 (Figures 52-72).

The four day period between the occurrence of the spin-off eddies was dominated by downwelling conditions shown by the downward movement of the sigma-t gradients (Figures 32-51).

Upwelling and downwelling events were confined to a relatively narrow zone at the shelfbreak. Observations at shelf stations 3 and 5 showed no evidence of the shelfbreak upwelling events (Figures 73-79). Upwelling was observed at station 7 (40 m isobath) during the first eddy (upwelling) event but not during the later period (27-30 April) (Figures 80-85). Shelf-break stations 9 and 11 clearly show both of the upwelling events as well as the intervening downwelling period (Figures 86-97).

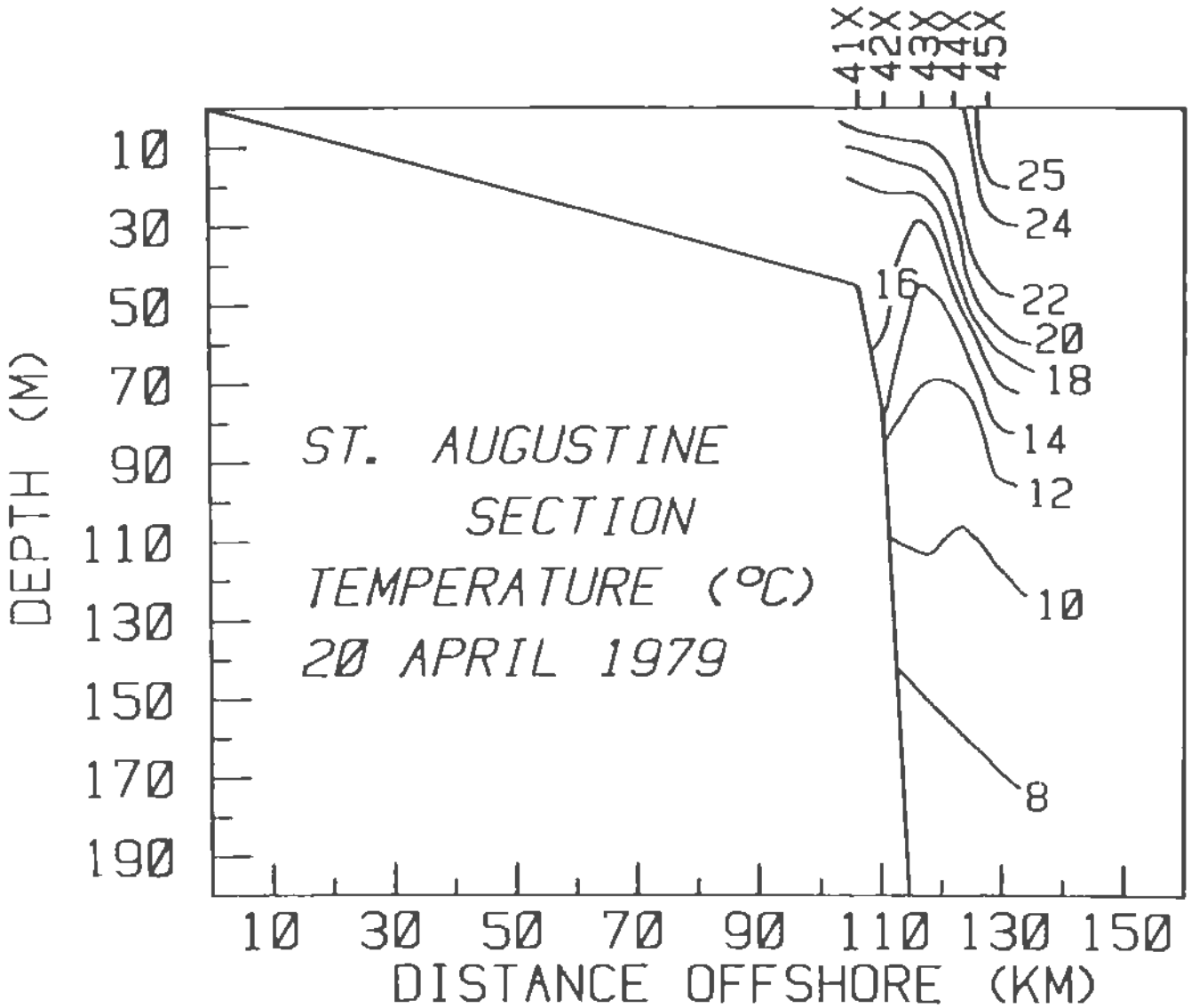


Figure 5. St. Augustine Section Temperature, 20 April

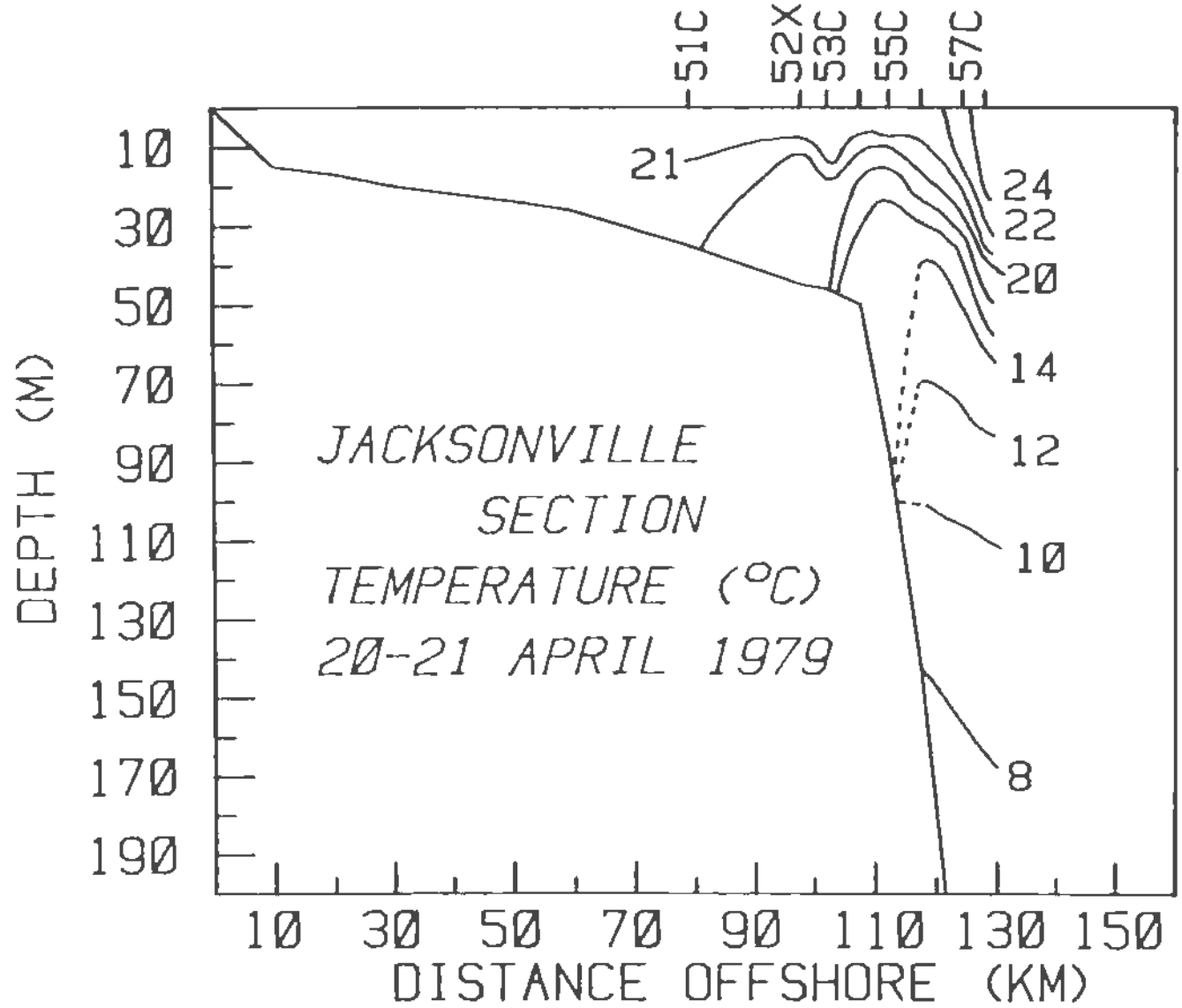


Figure 6. Jacksonville Section Temperature, 20-21 April

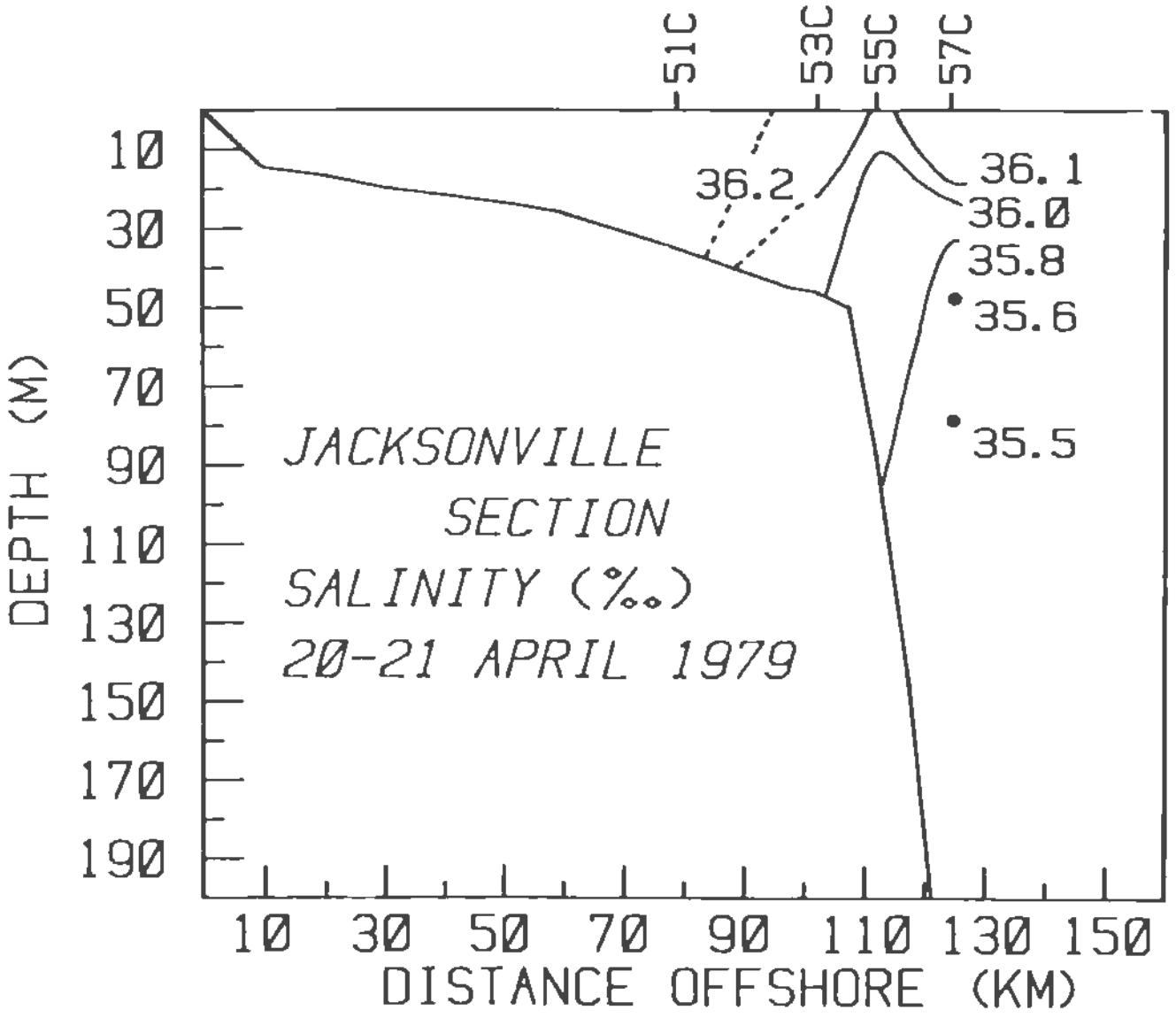


Figure 7. Jacksonville Section Salinity, 20-21 April

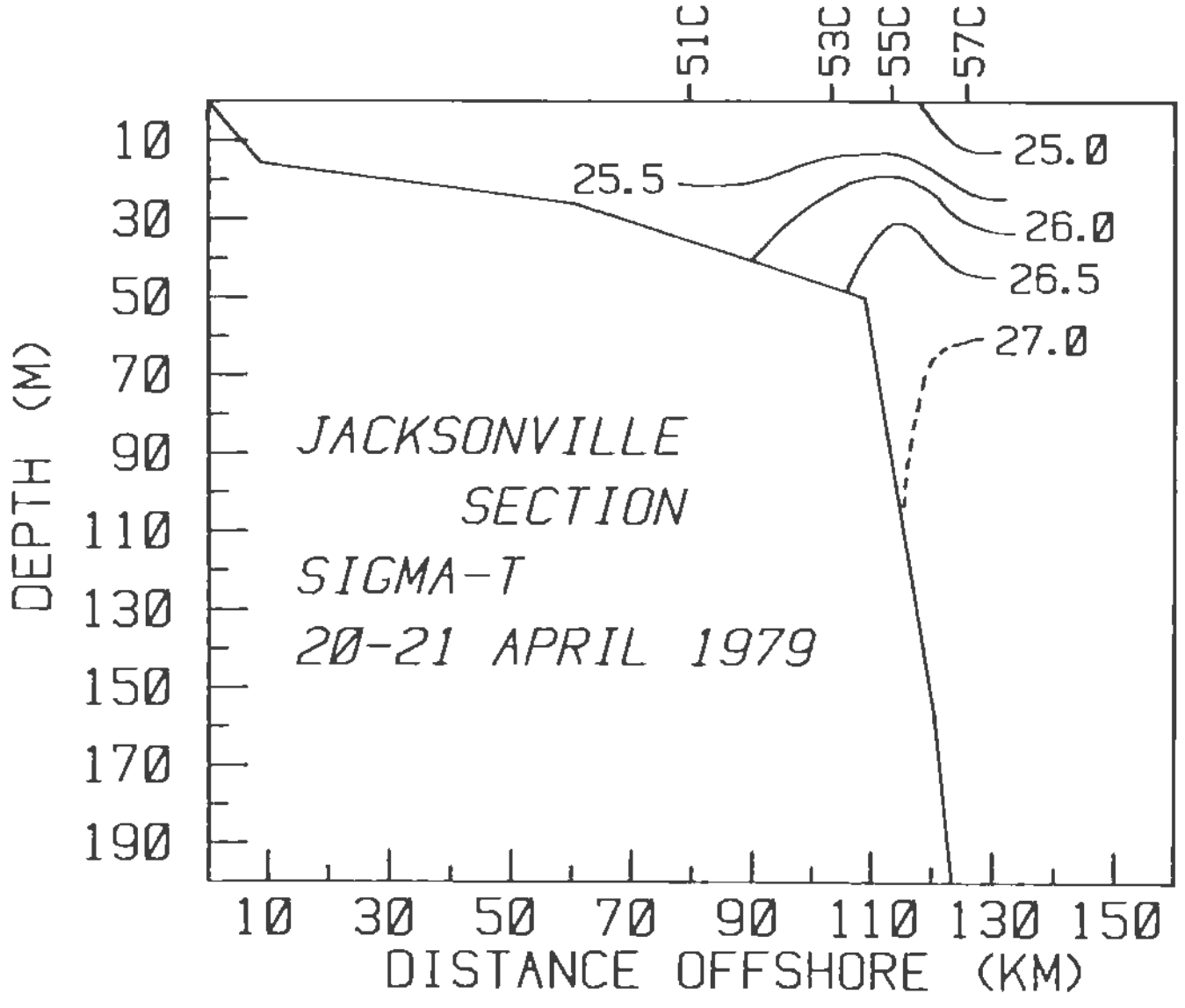


Figure 8. Jacksonville Section Sigma-T, 20-21 April

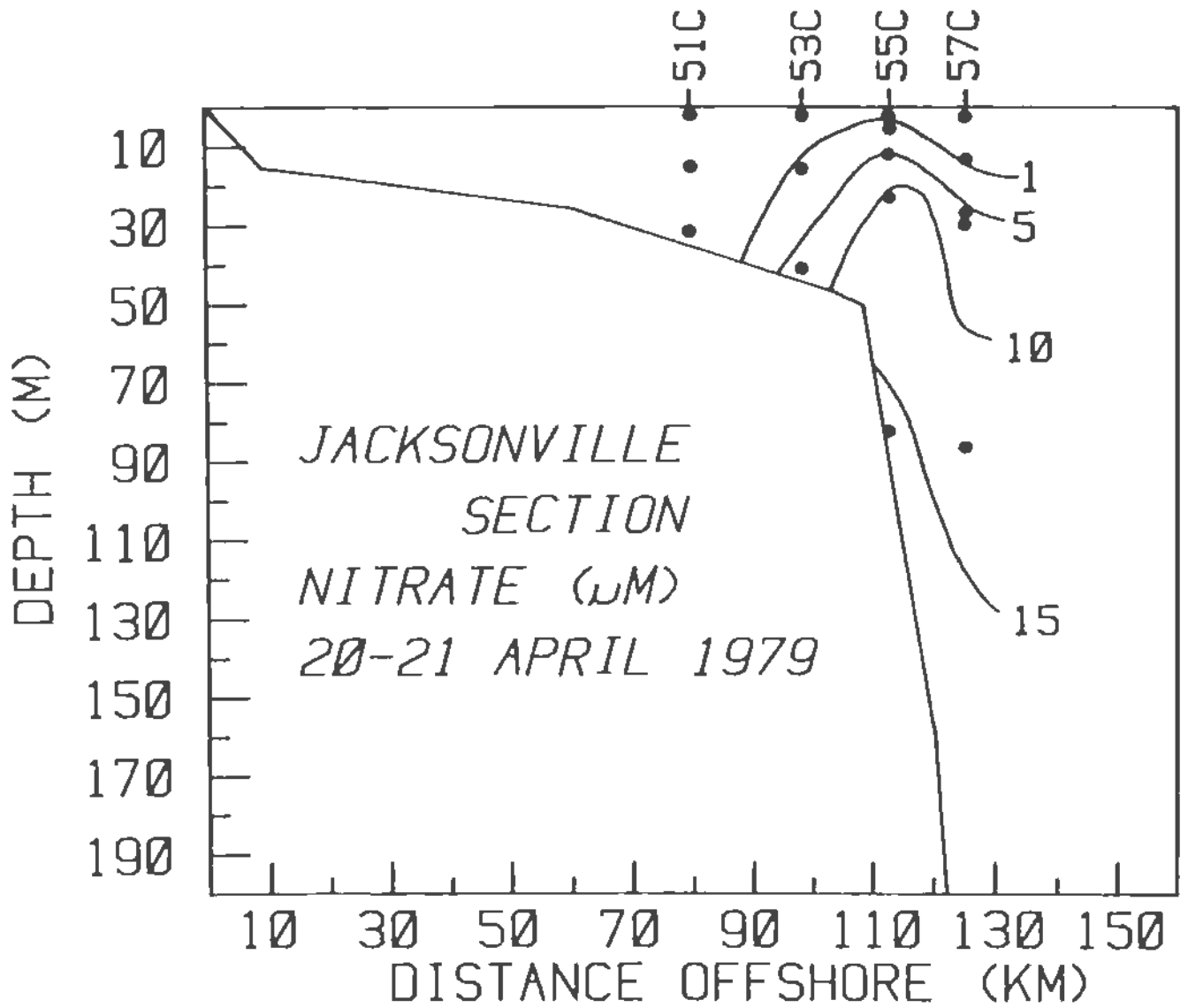


Figure 9. Jacksonville Section Nitrate, 20-21 April

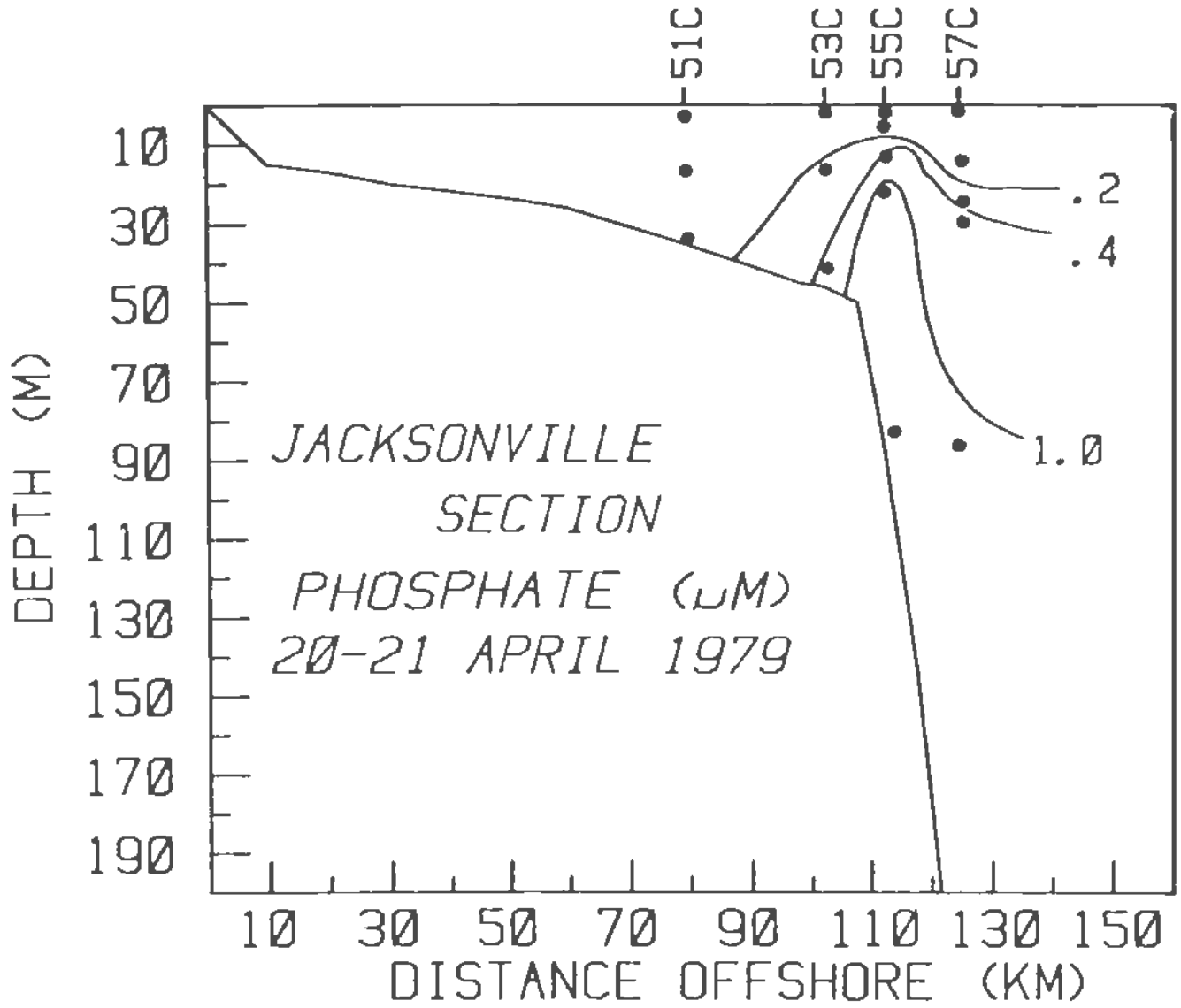


Figure 10. Jacksonville Section Phosphate, 20-21 April

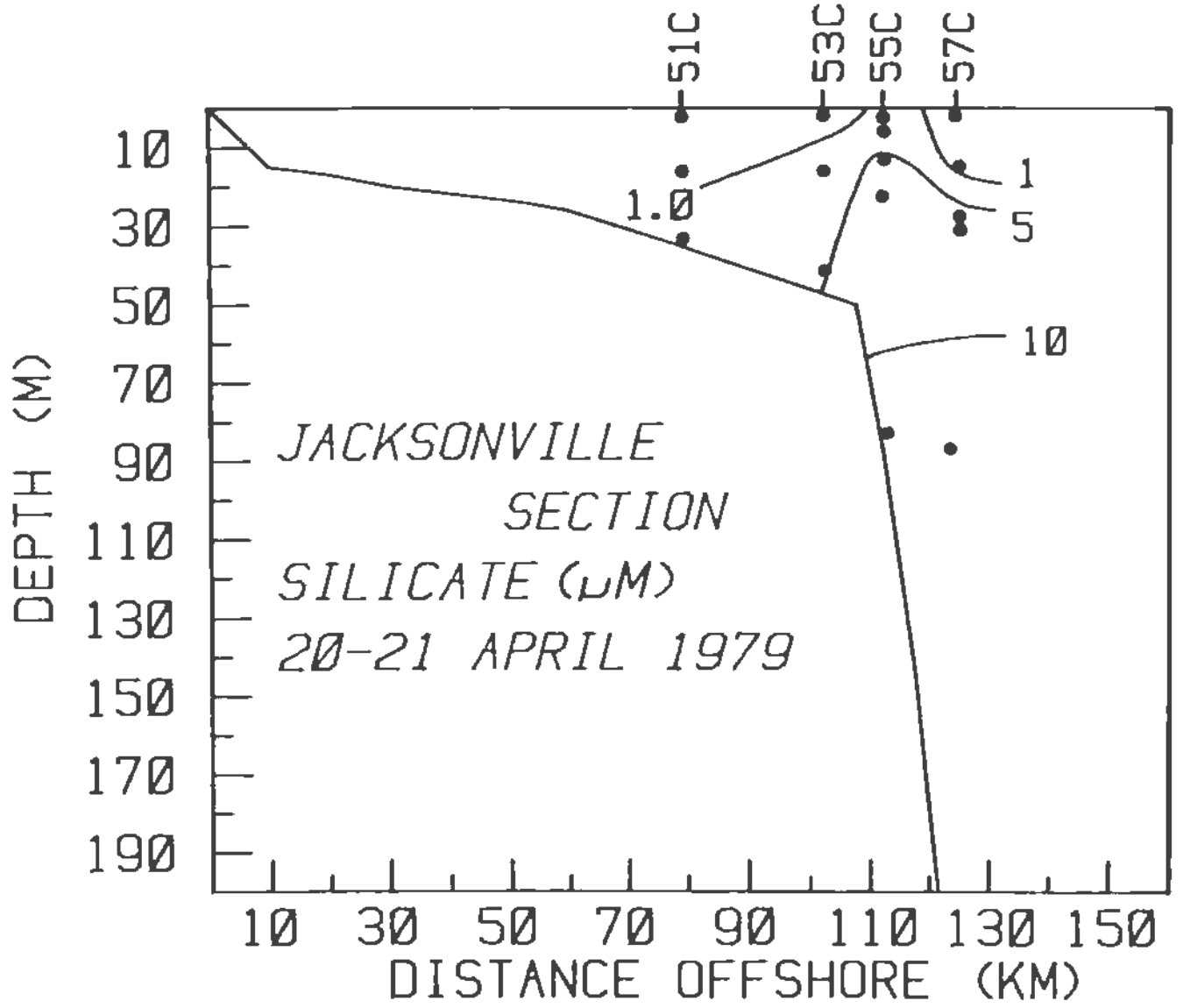


Figure 11. Jacksonville Section Silicate, 20-21 April

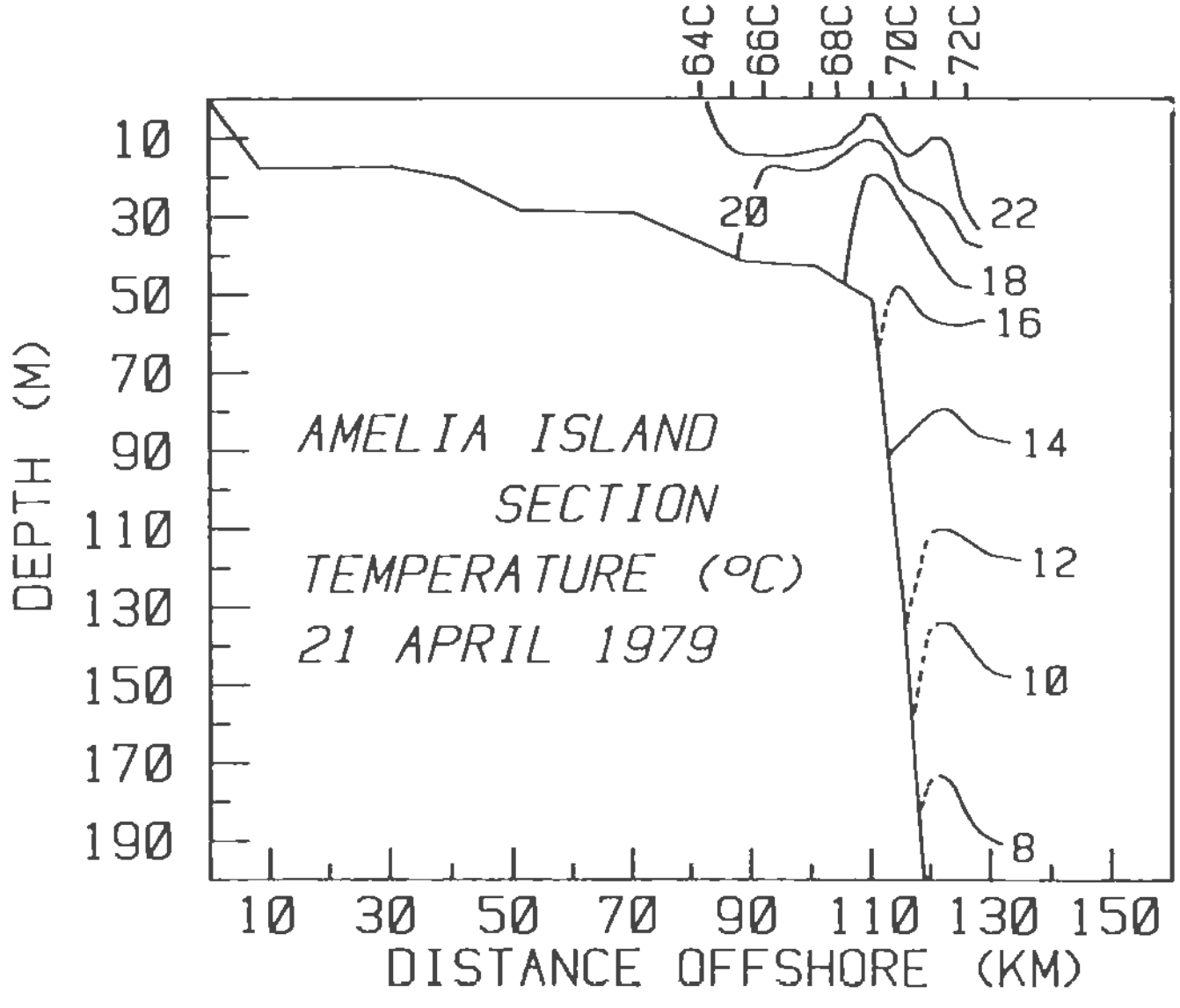


Figure 12. Amelia Island Section Temperature, 21 April

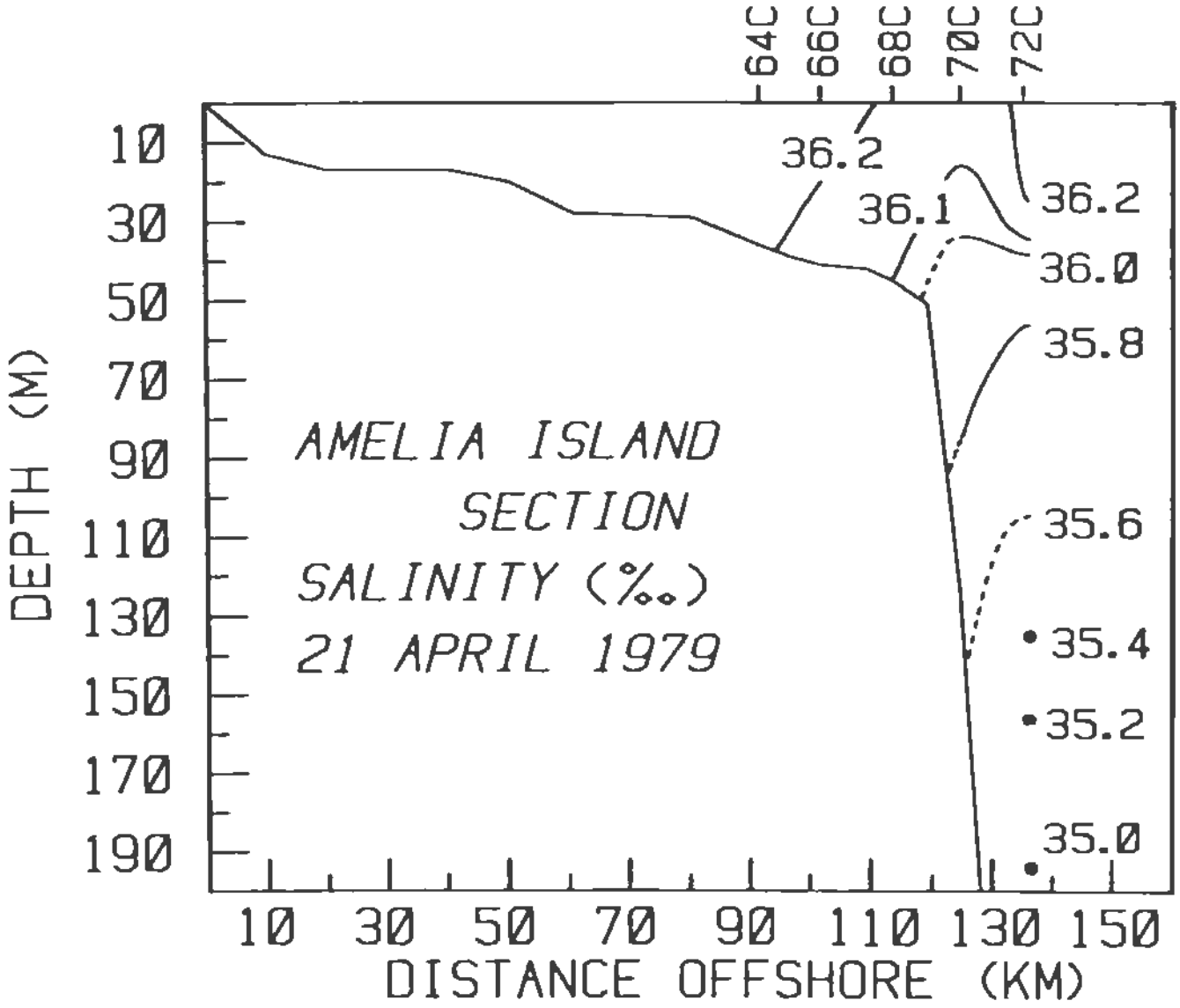


Figure 13. Amelia Island Section Salinity, 21 April

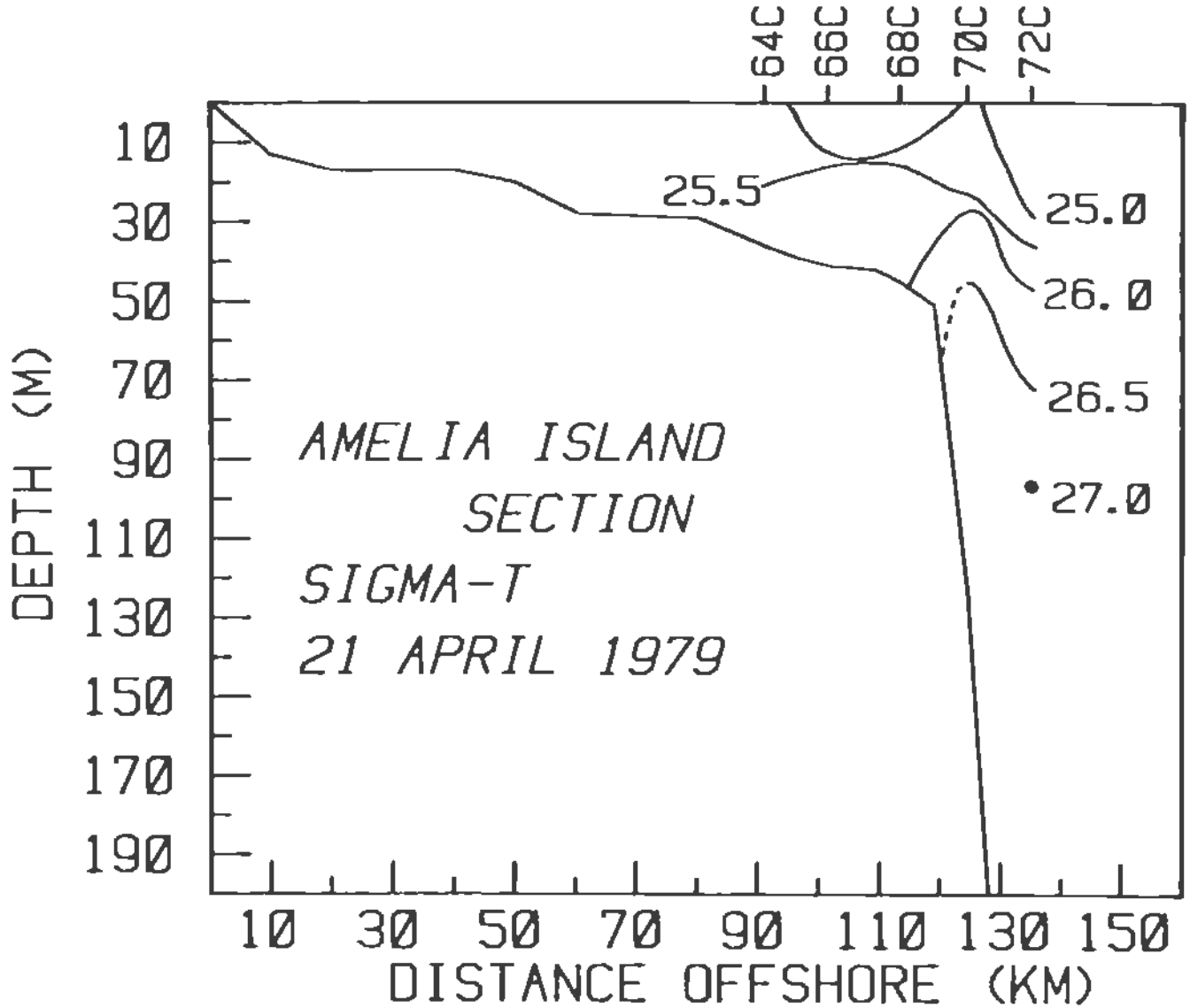


Figure 14. Amelia Island Section Sigma-T, 21 April

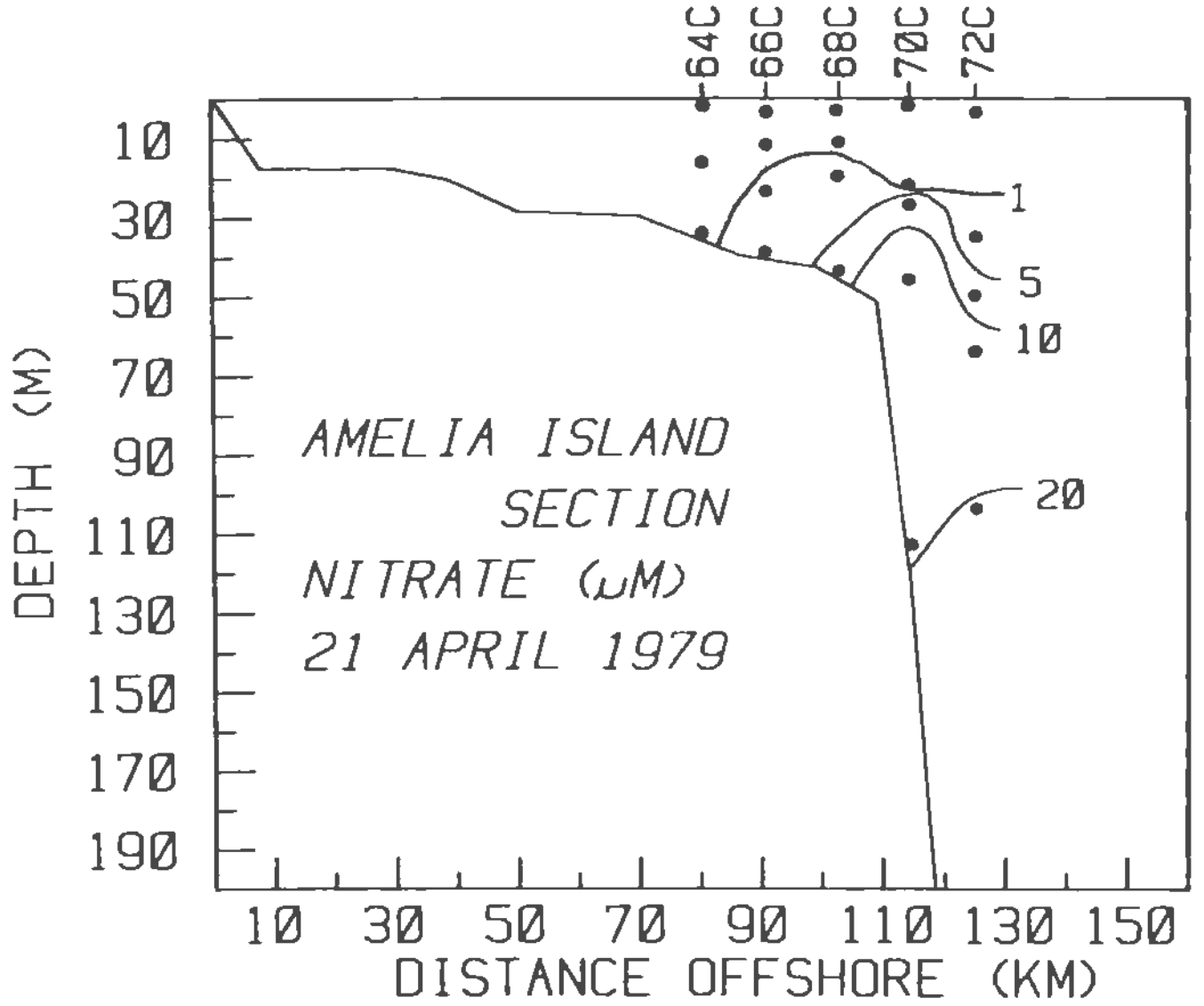


Figure 15. Amelia Island Section Nitrate, 21 April

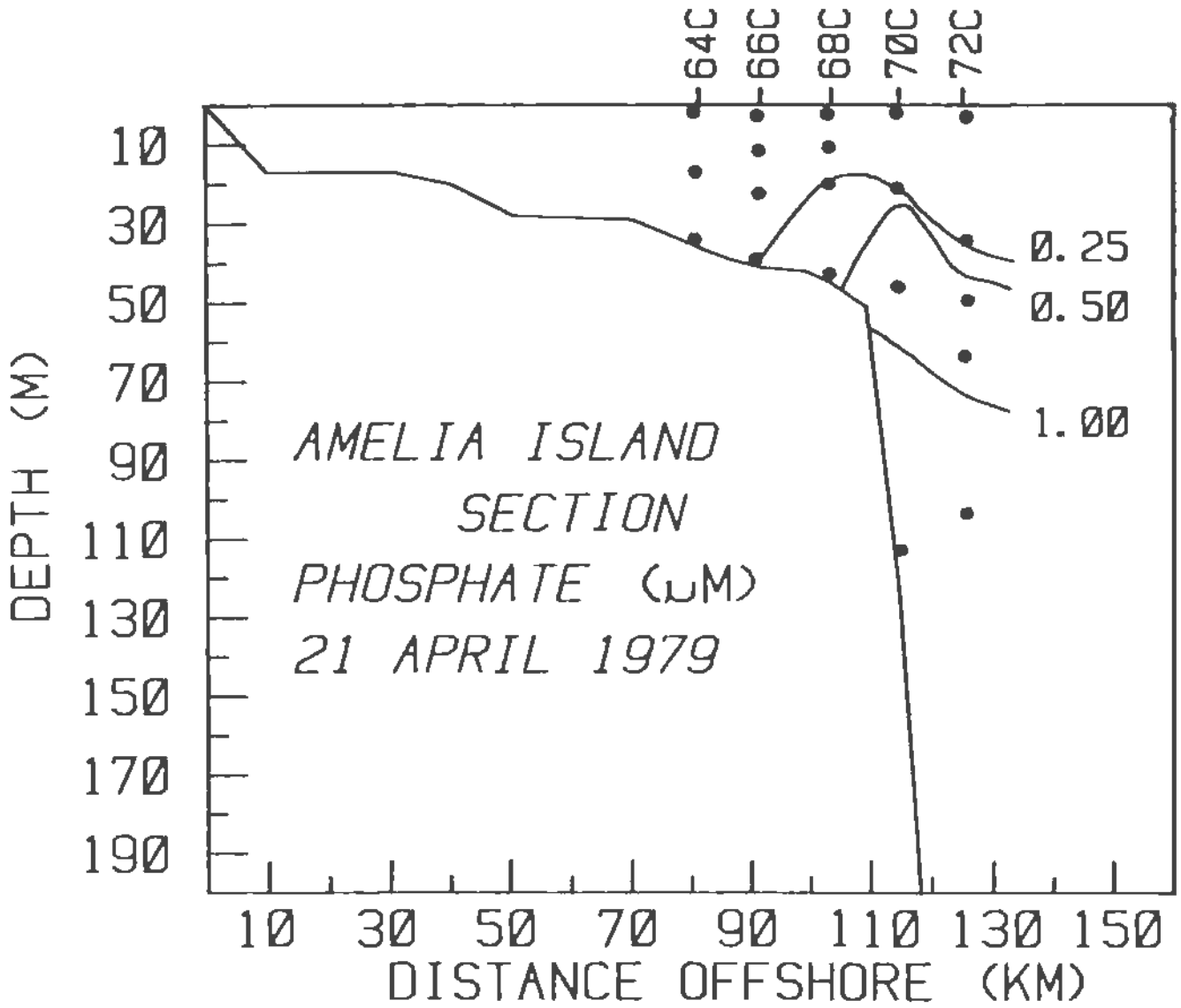


Figure 16. Amelia Island Section Phosphate, 21 April

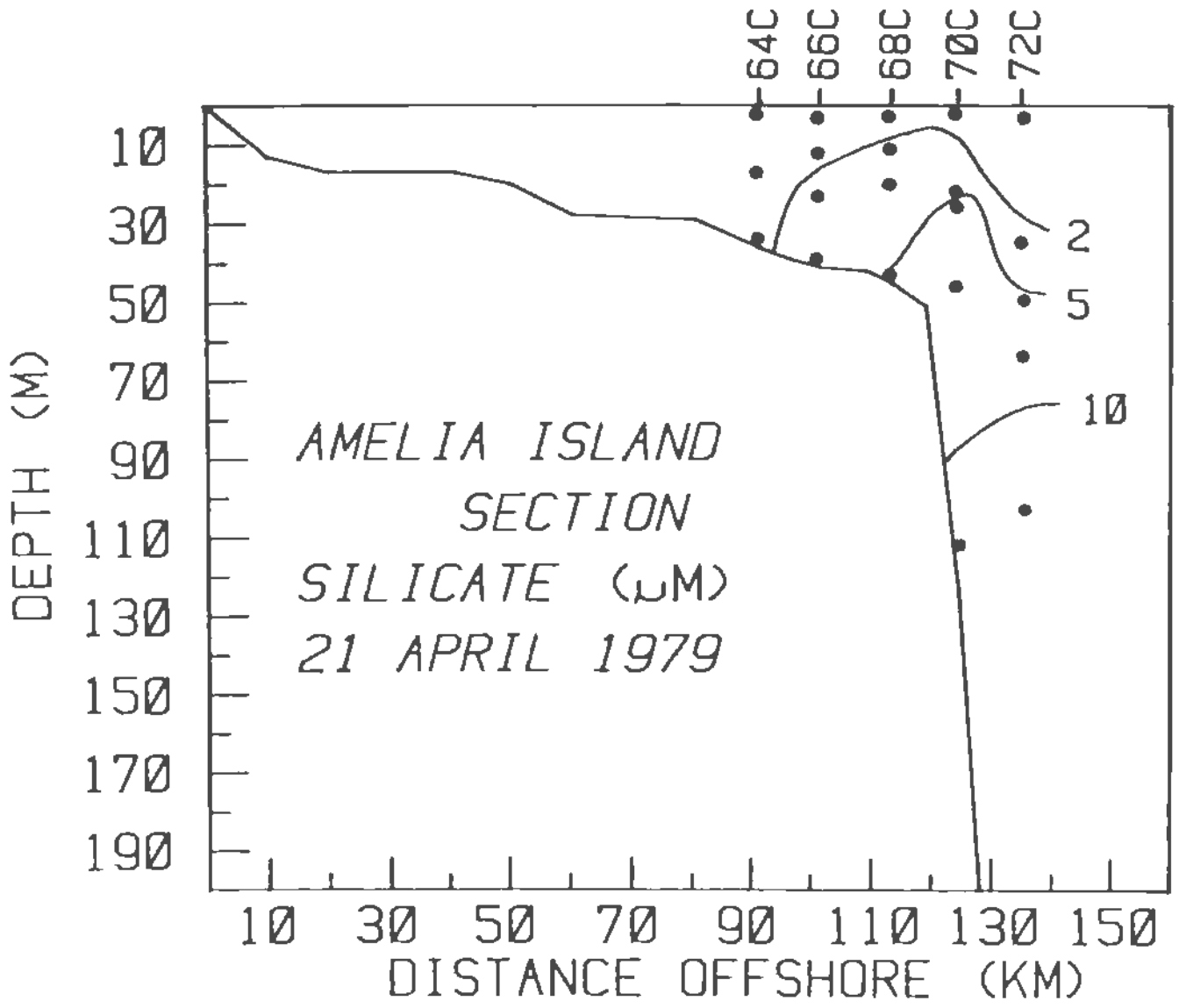


Figure 17. Amelia Island Section Silicate, 21 April

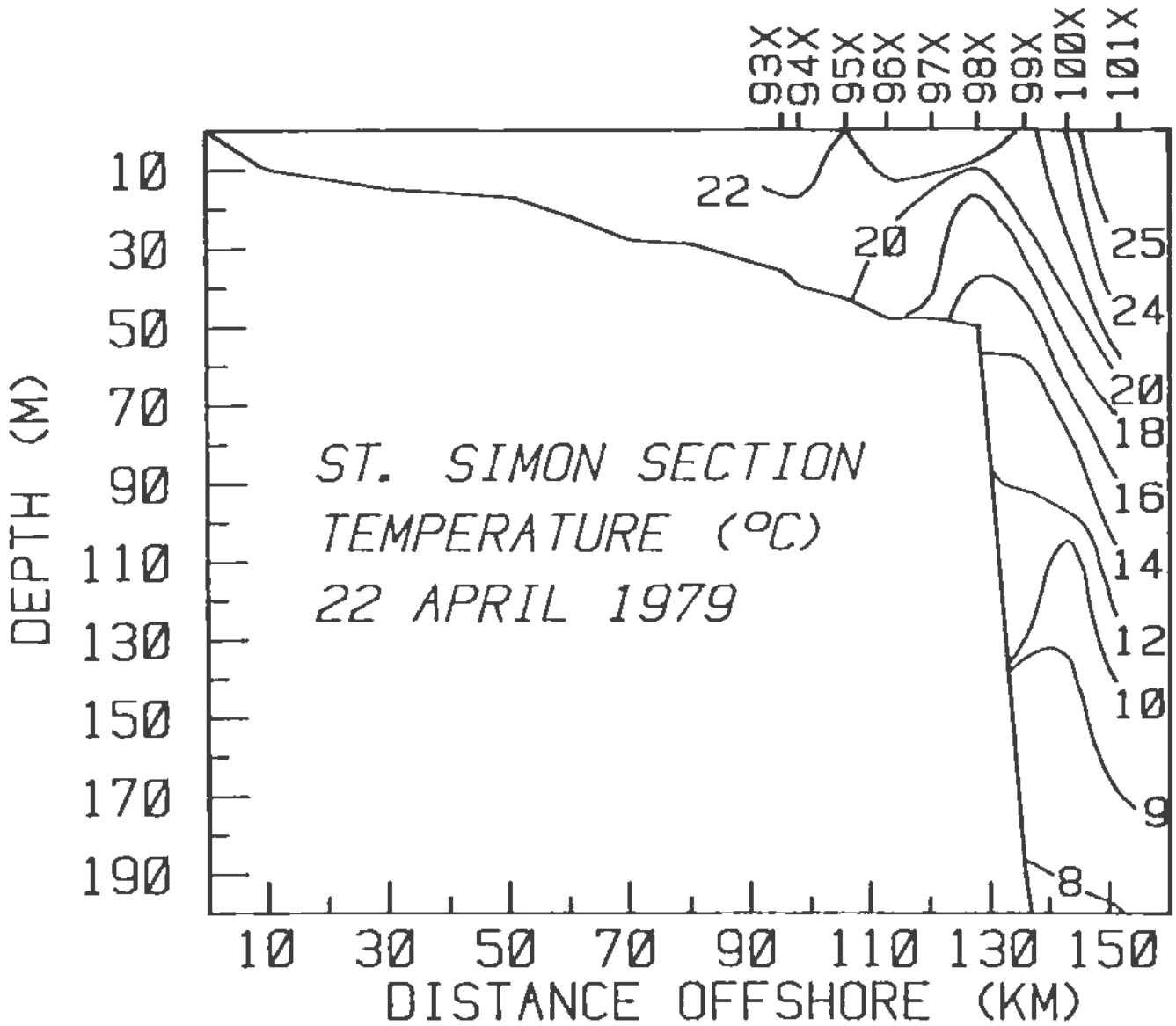


Figure 18. St. Simon Section Temperature , 22 April

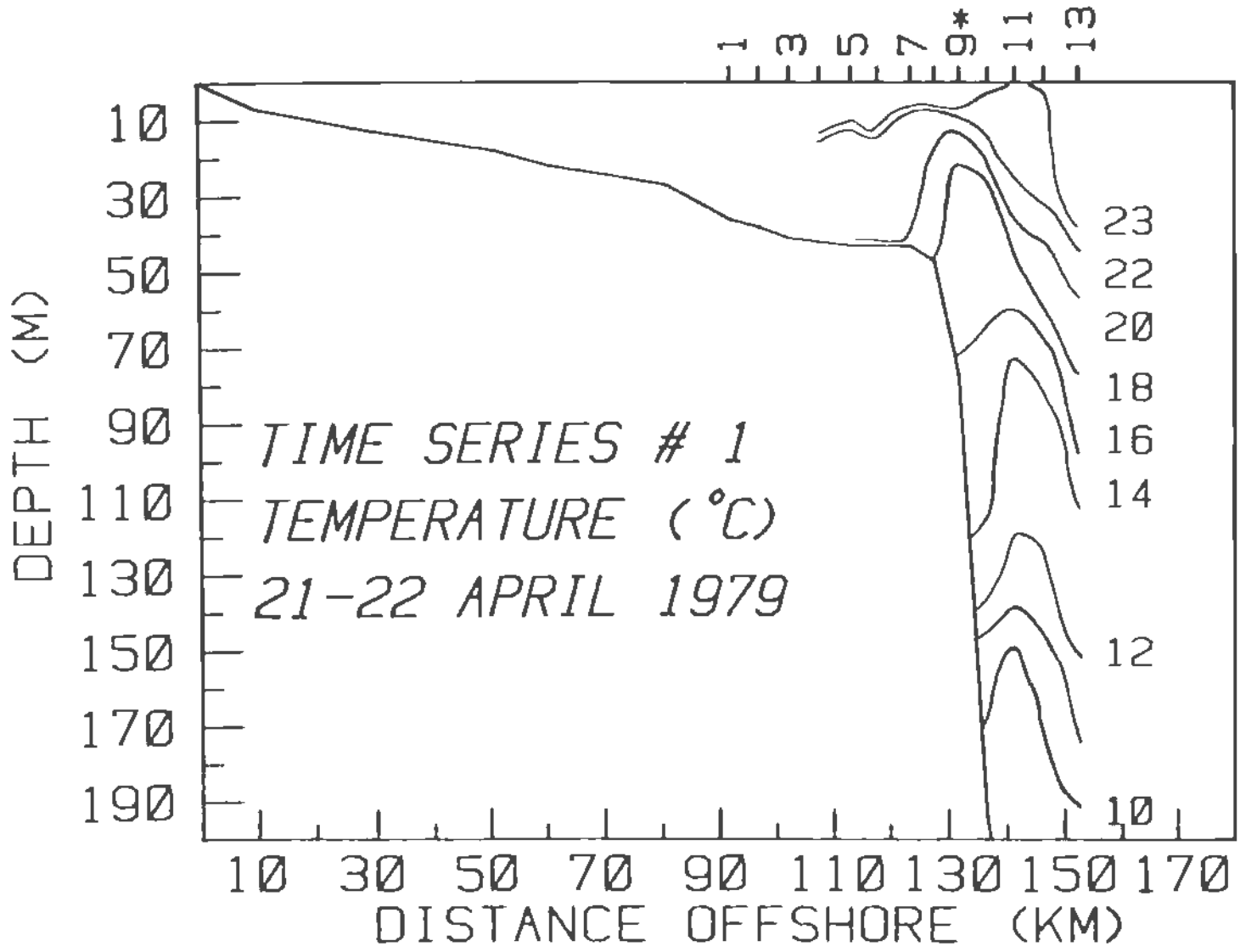


Figure 19. Time Series #1 Temperature, 21-22 April

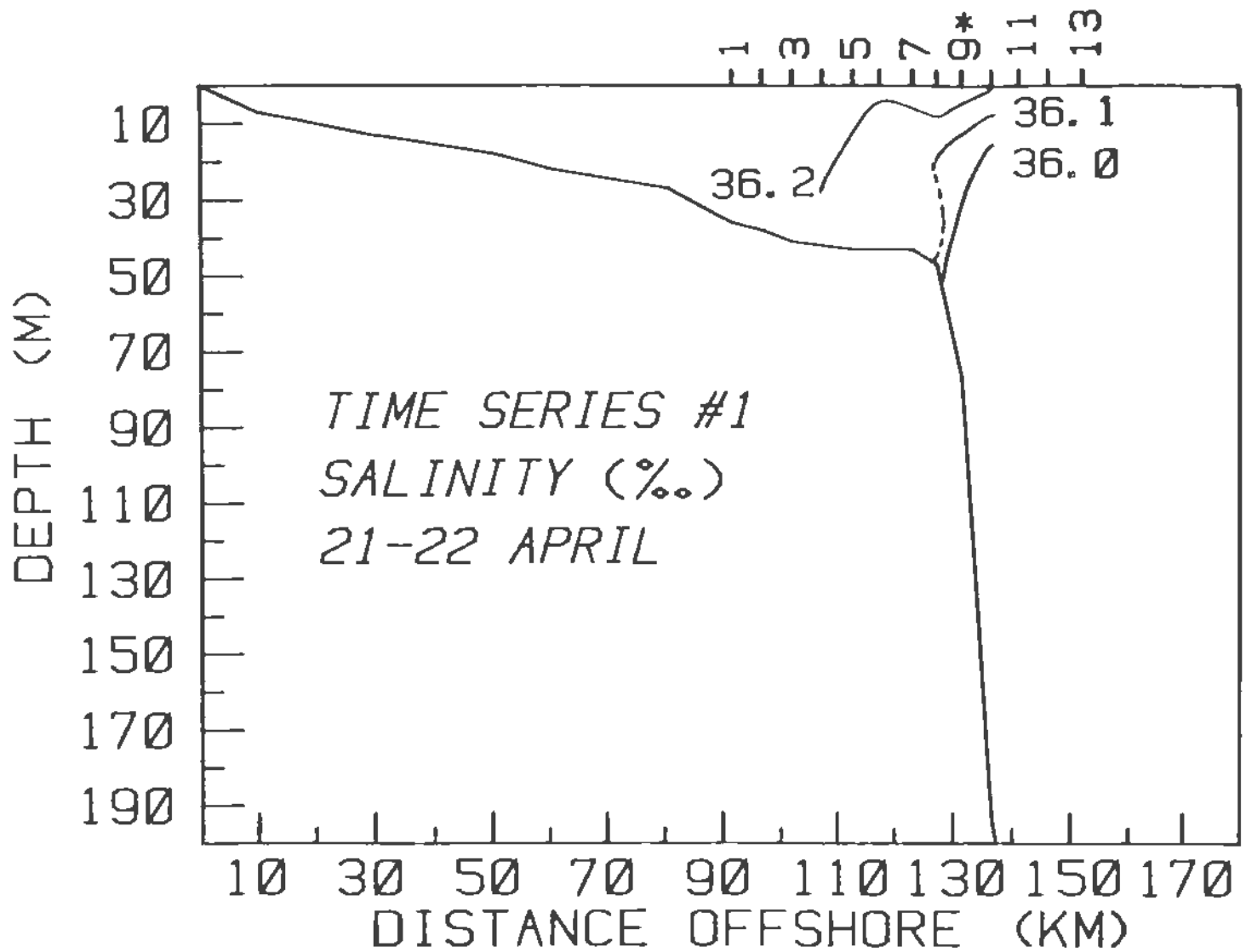


Figure 20. Time Series #1 Salinity, 21-22 April

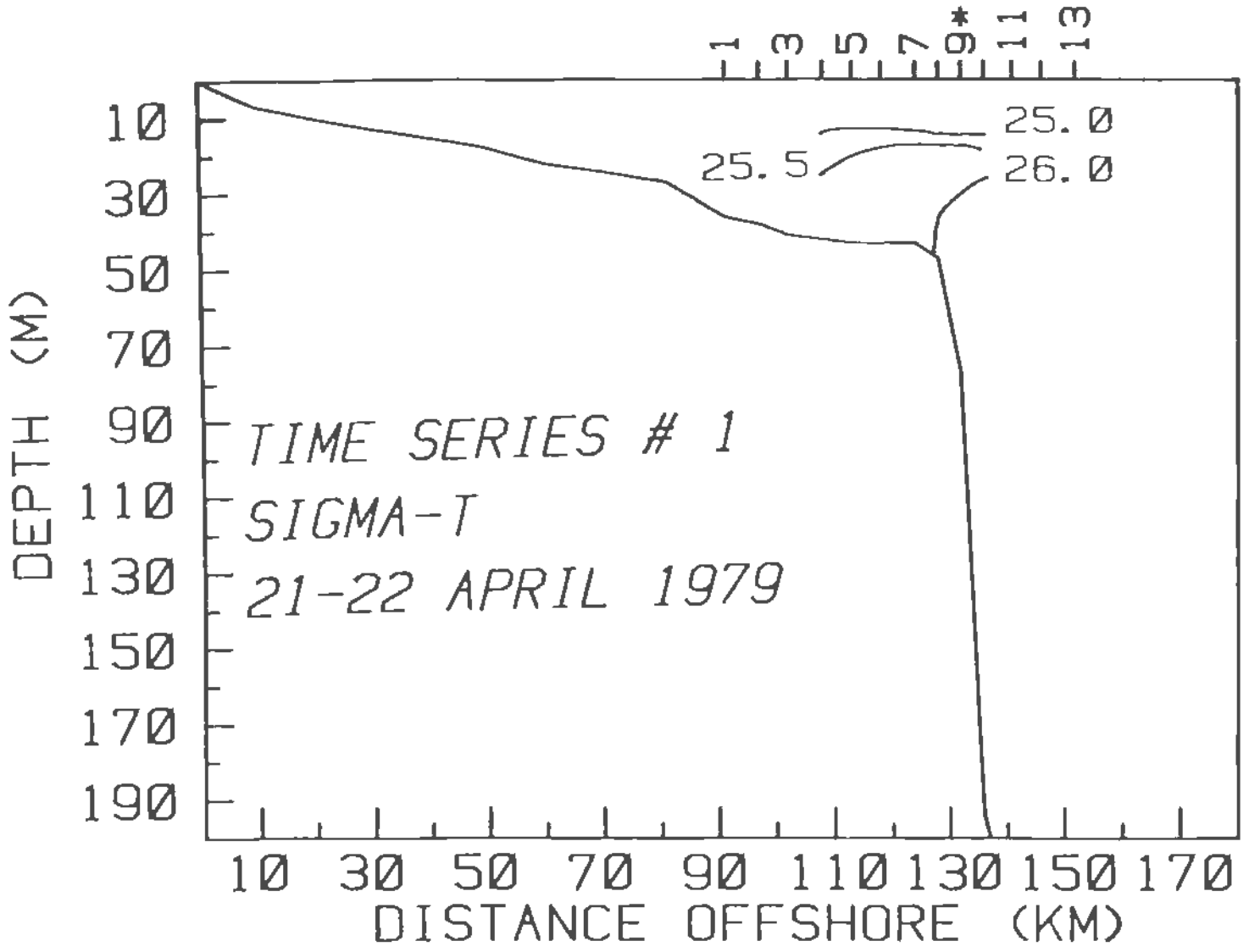


Figure 21. Time Series #1 Sigma-T, 21-22 April

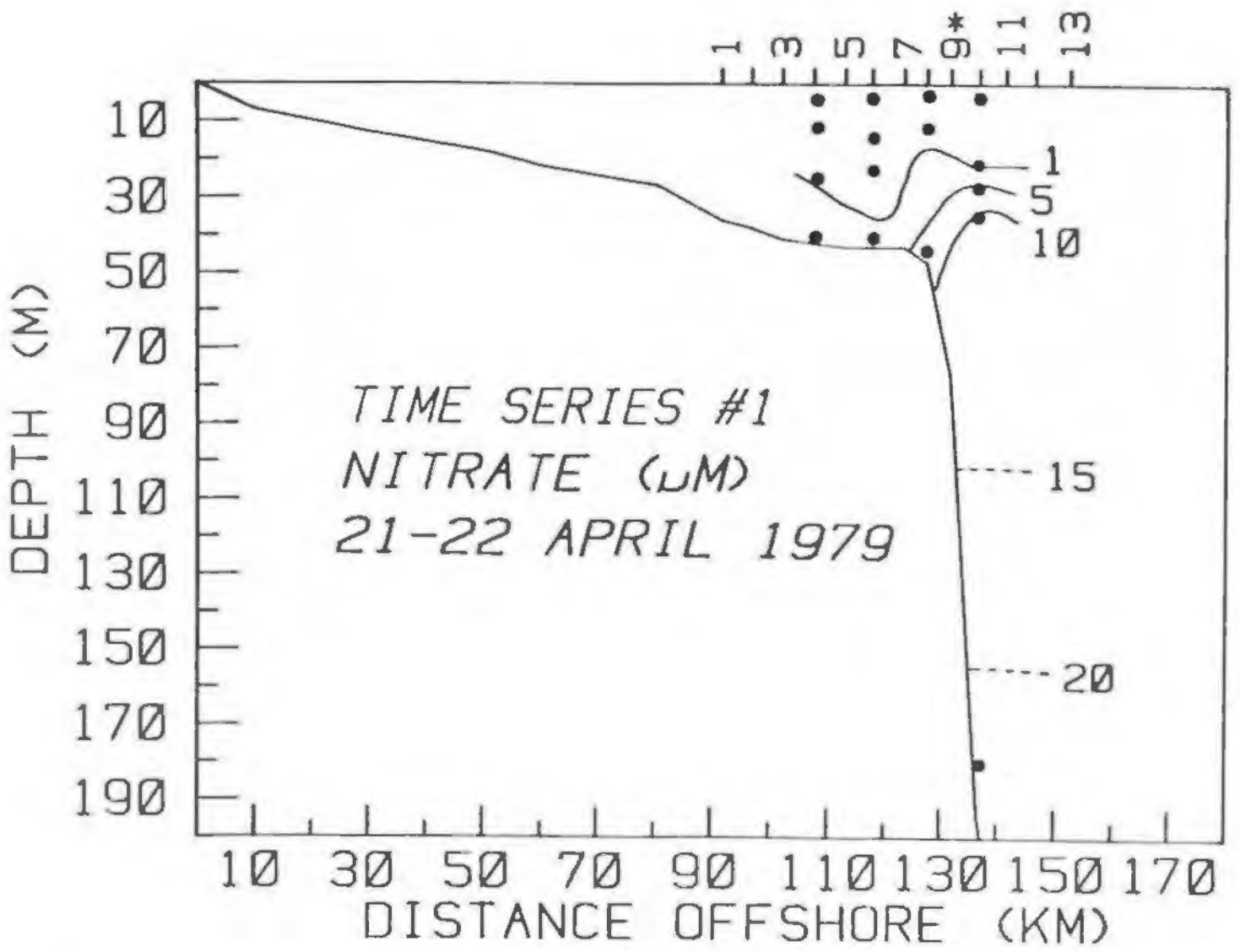


Figure 22. Time Series #1 Nitrate, 21-22 April

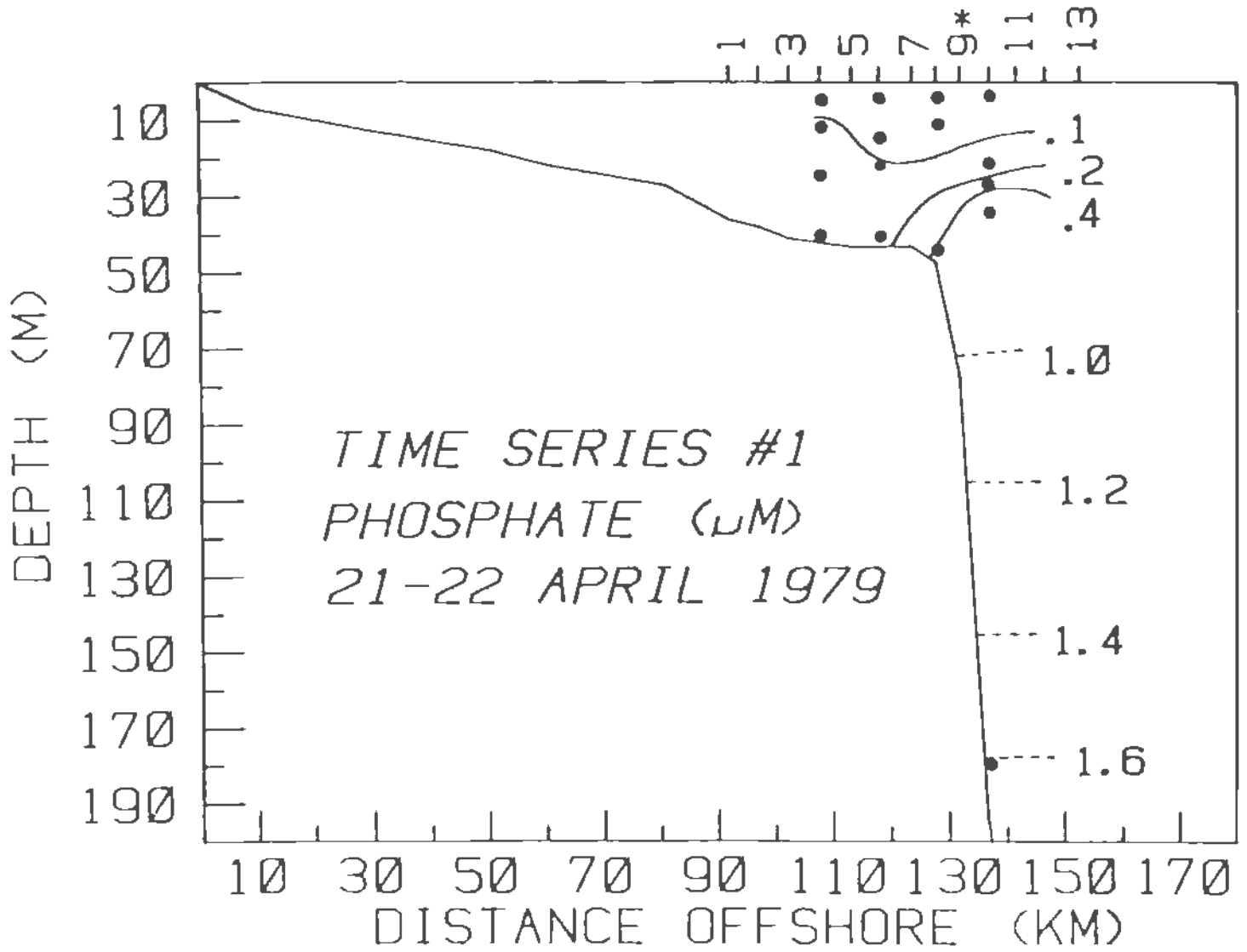


Figure 23. Time Series #1 Phosphate, 21-22 April

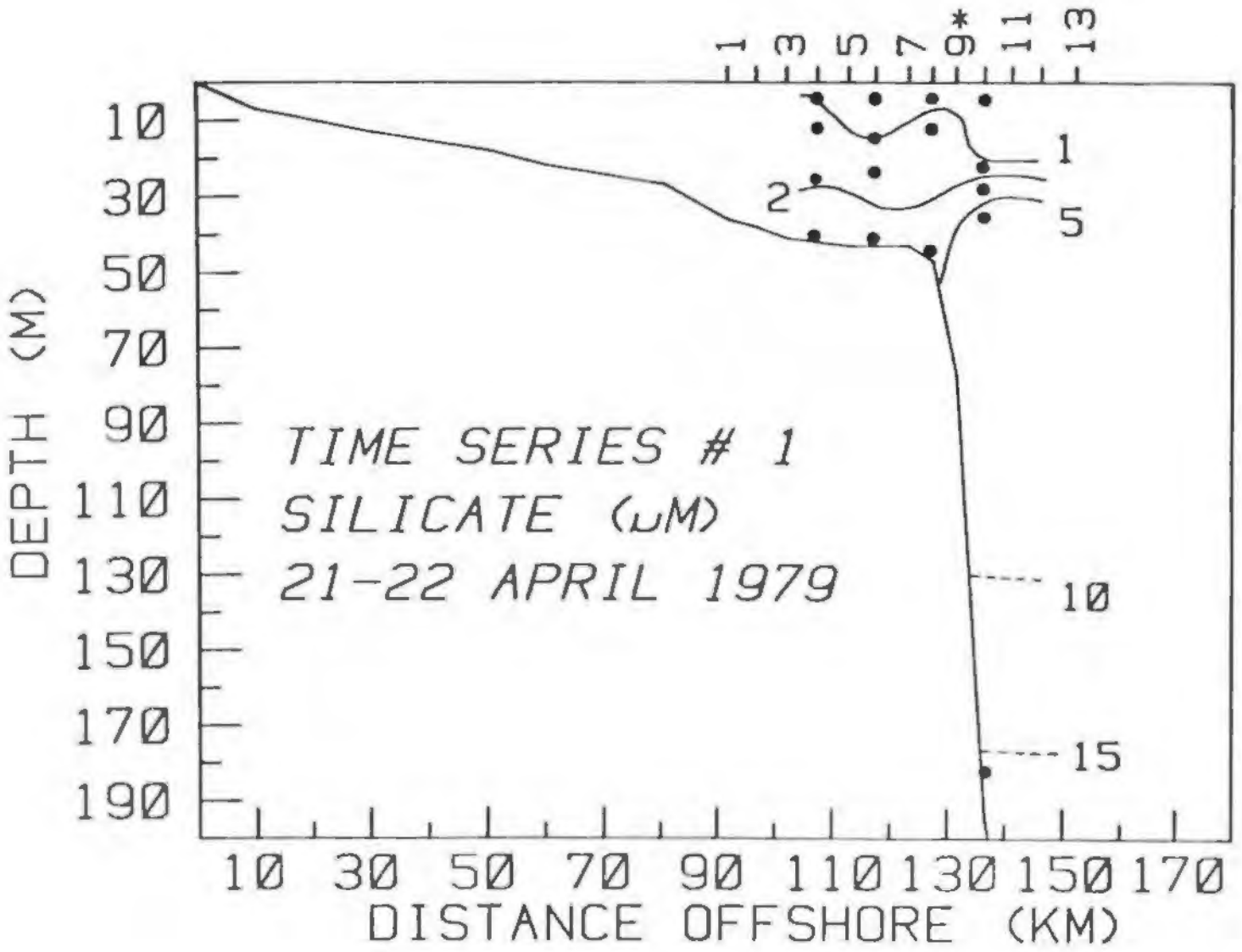


Figure 24. Time Series #1 Silicate, 21-22 April

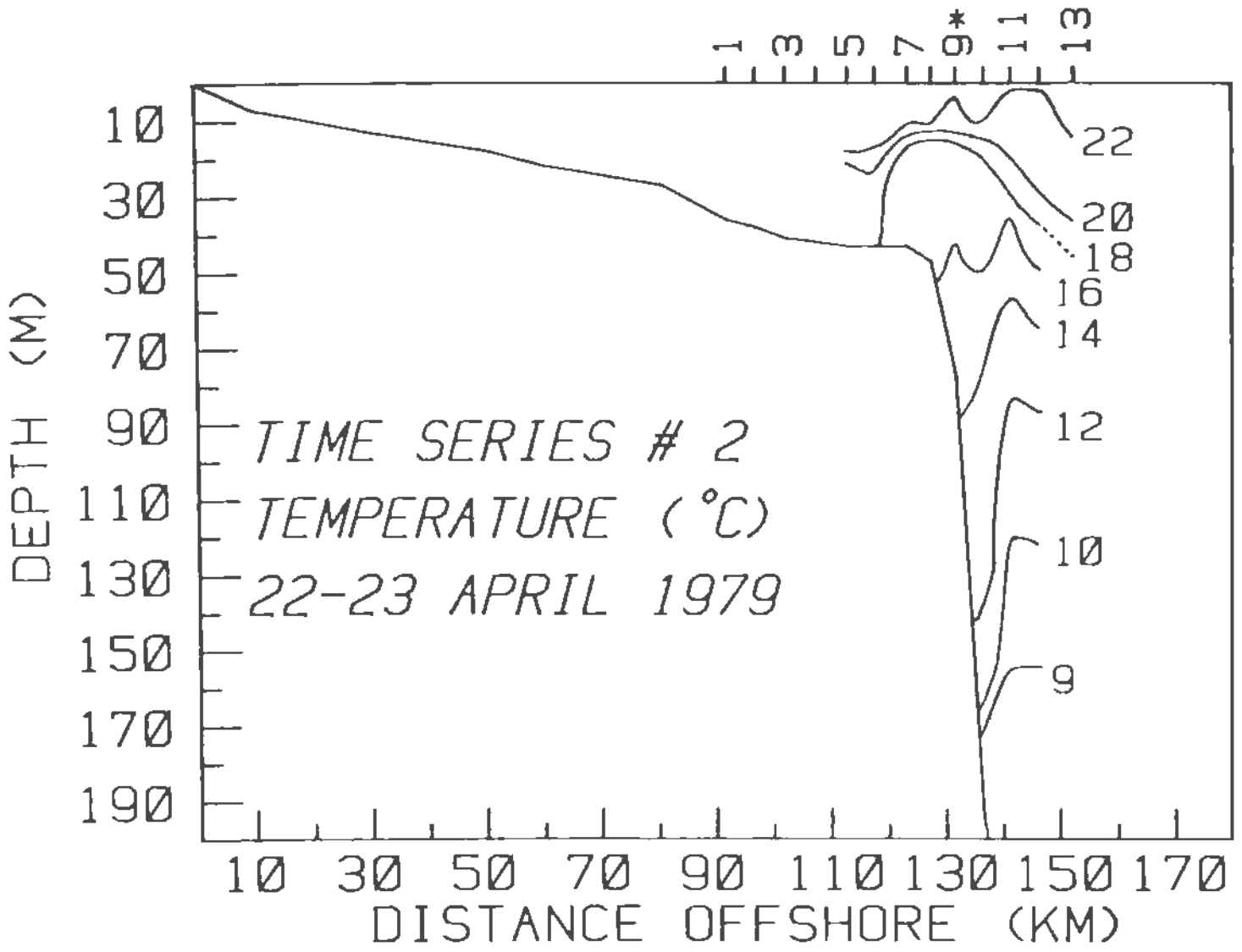


Figure 25. Time Series #2 Temperature, 22-23 April

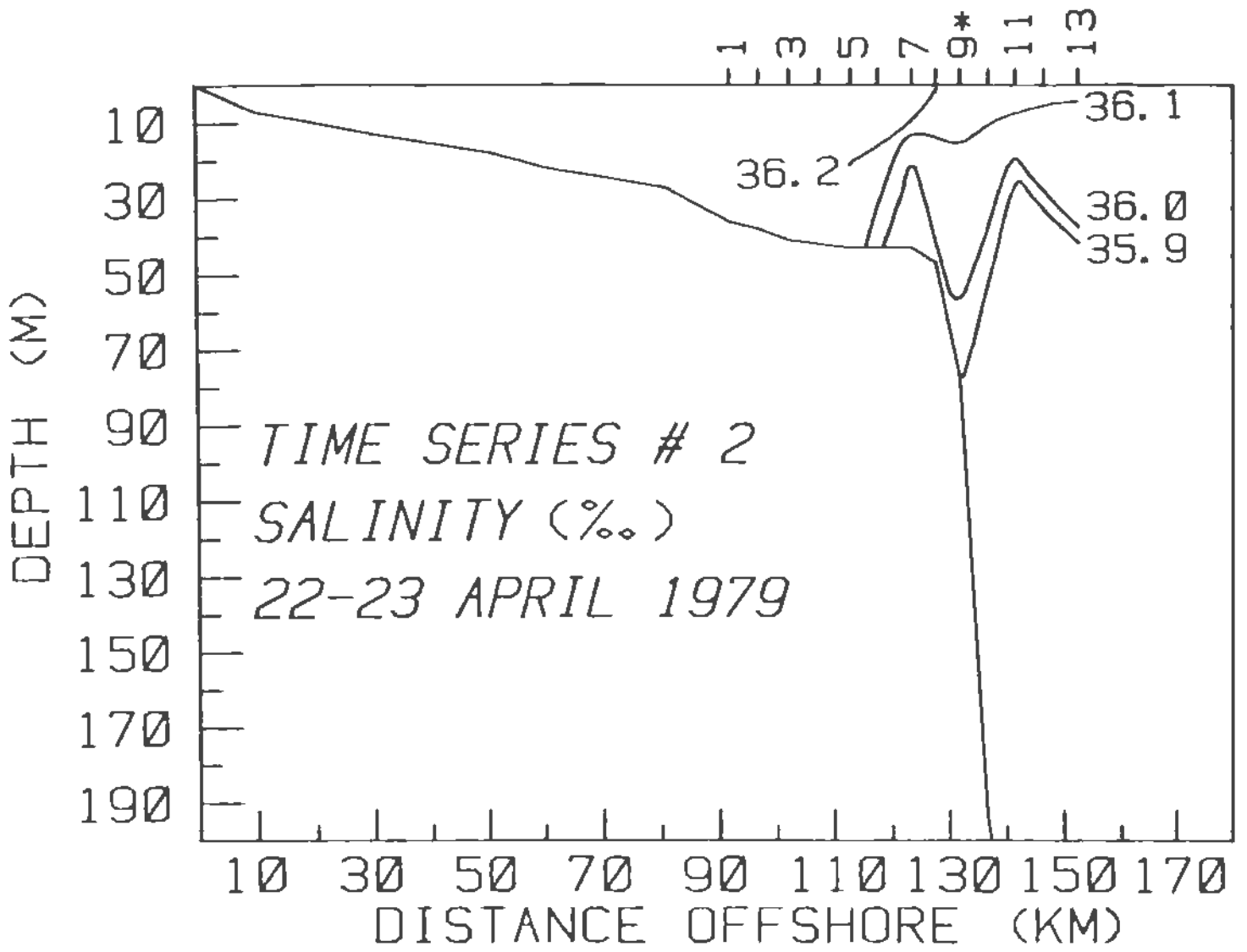


Figure 26. Time Series #2 Salinity, 22-23 April

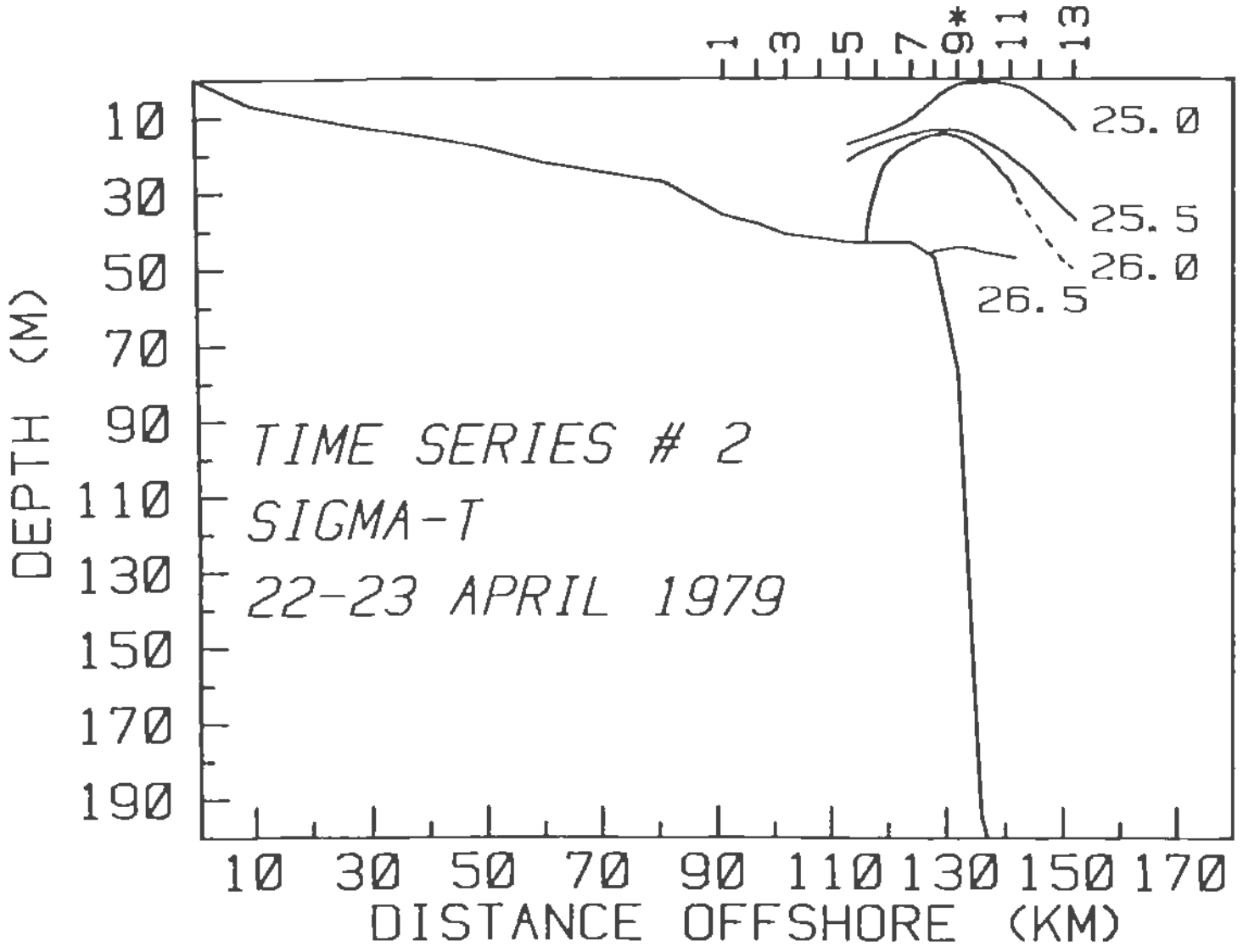


Figure 27. Time Series #2 Sigma-T, 22-23 April

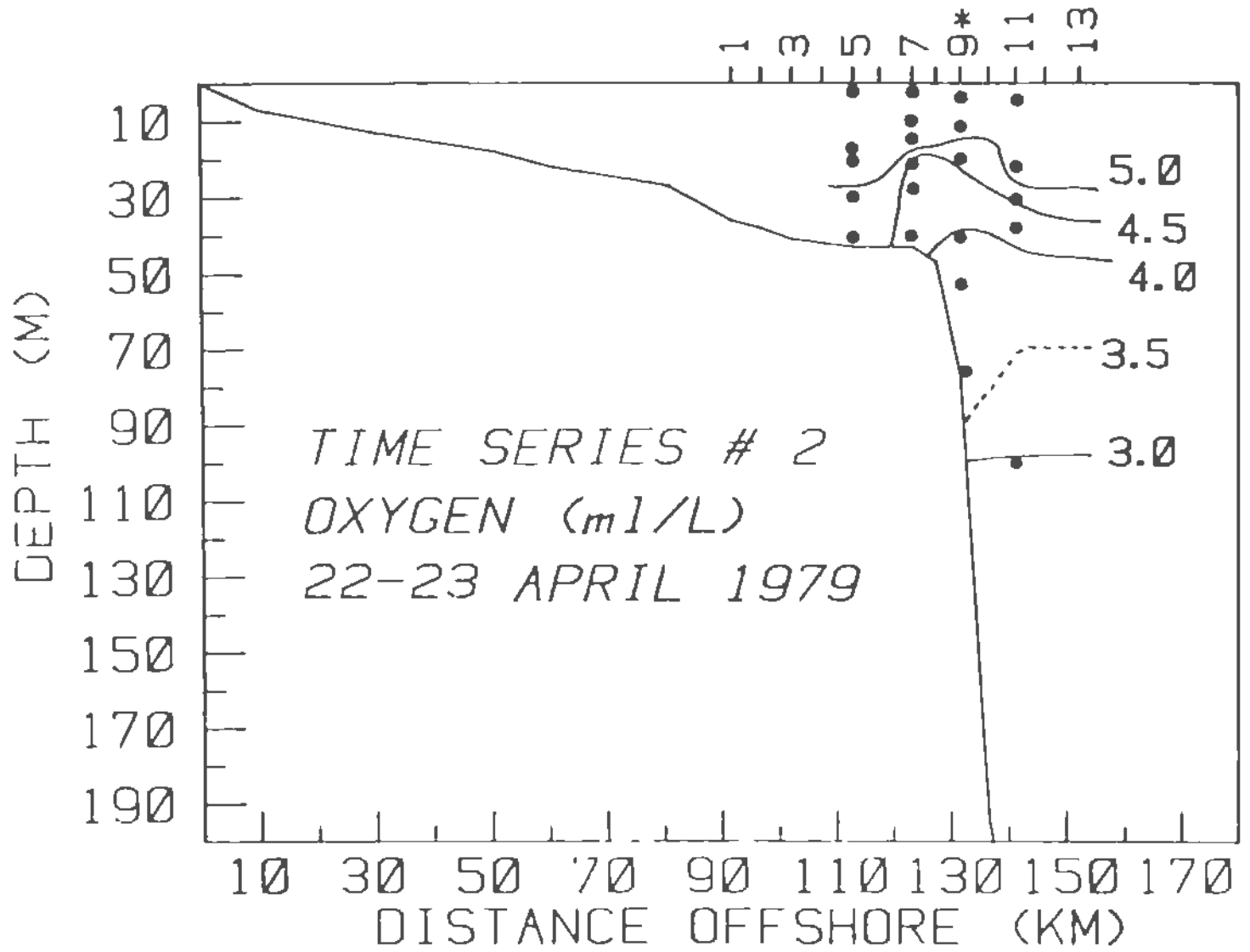


Figure 28. Time Series #2 Oxygen, 22-23 April

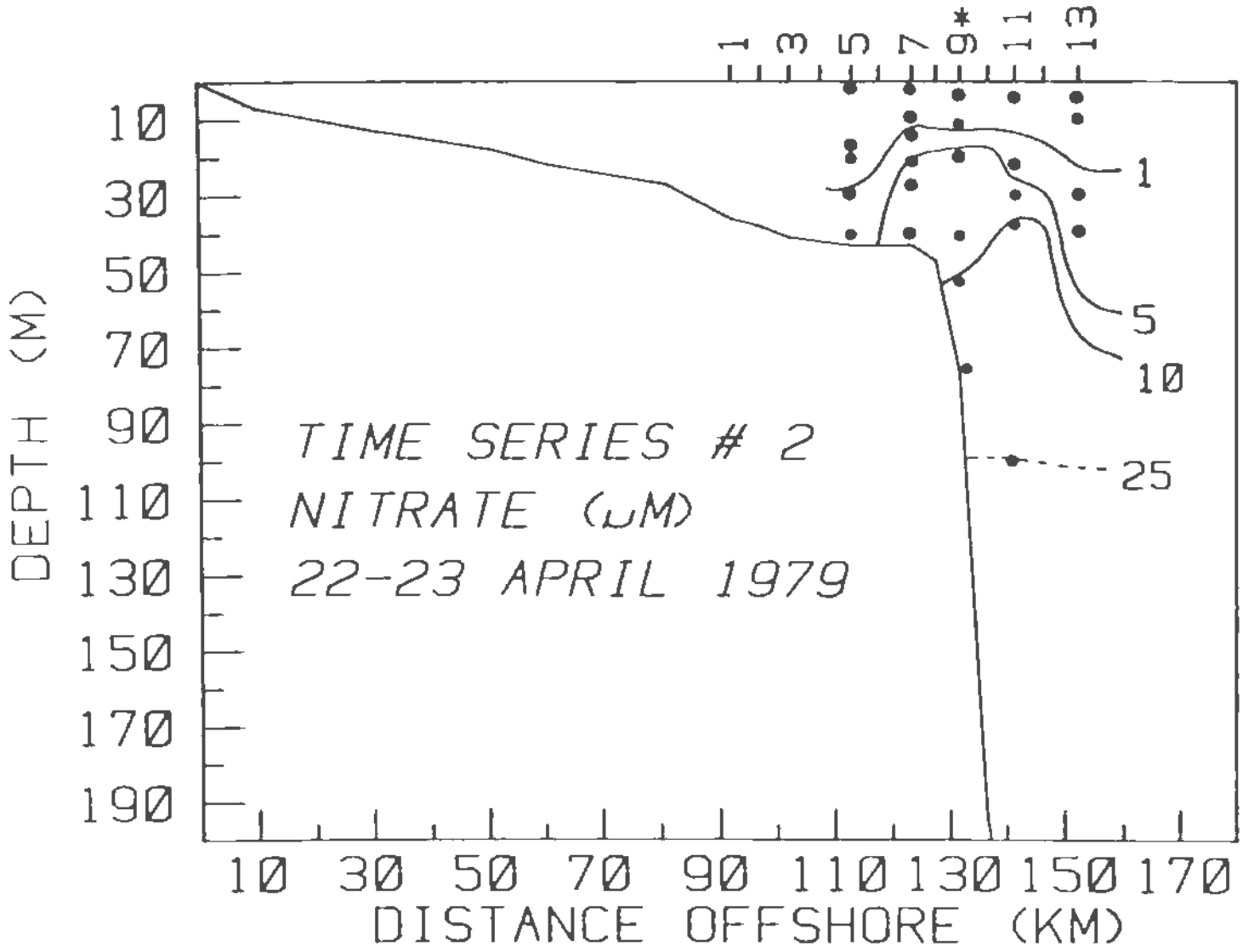


Figure 29. Time Series #2 Nitrate, 22-23 April

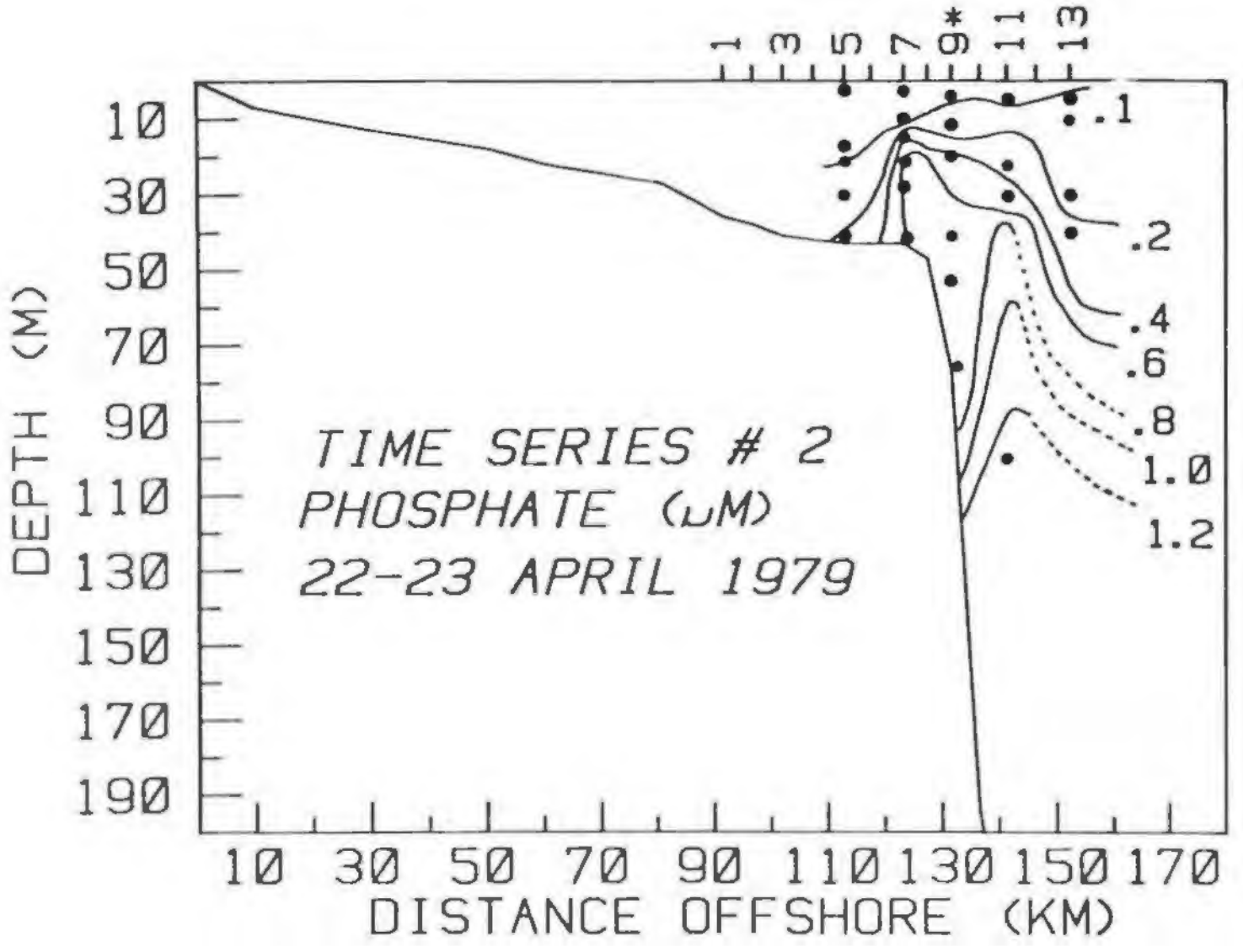


Figure 30. Time Series #2 Phosphate, 22-23 April

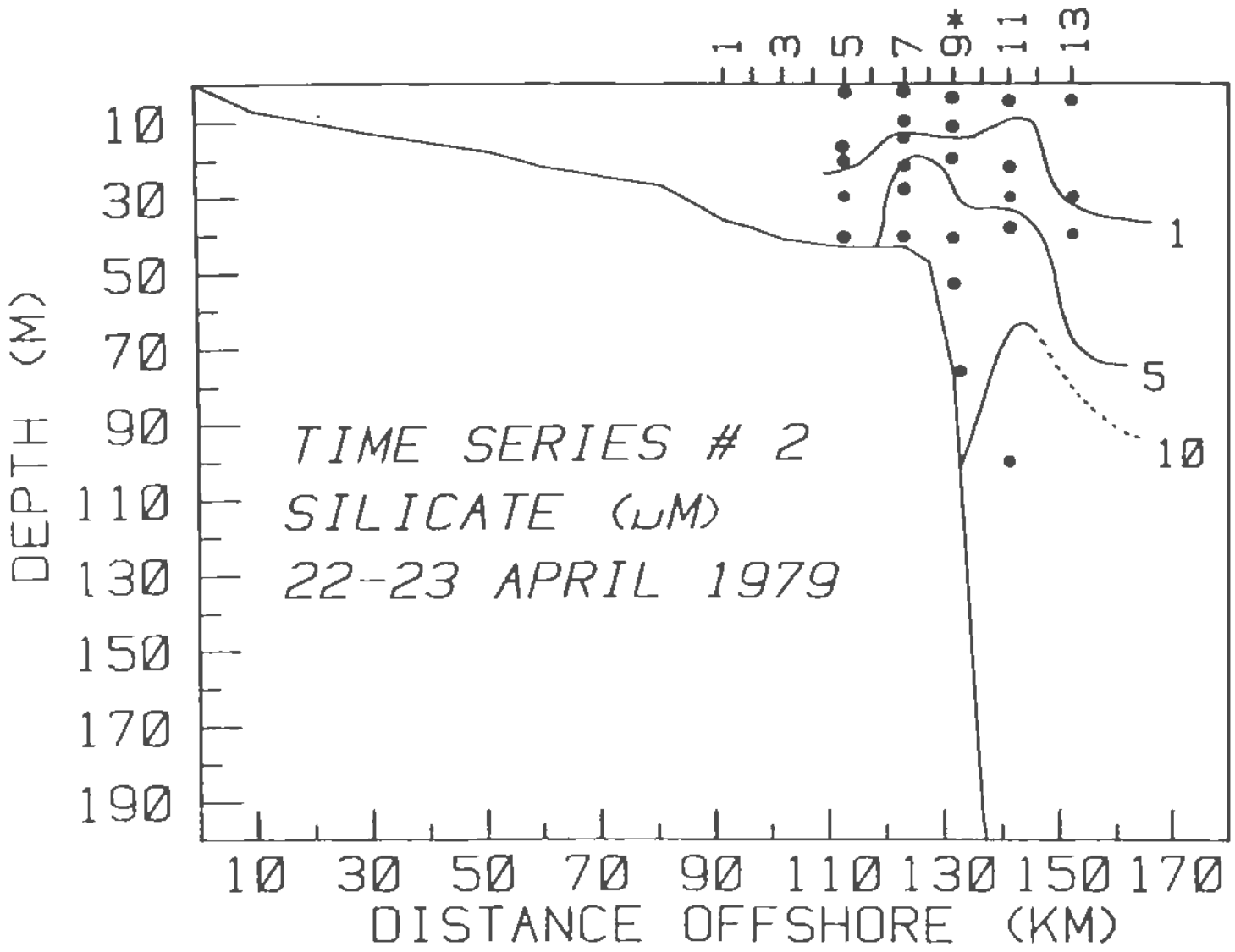


Figure 31. Time Series #2 Silicate, 22-23 April

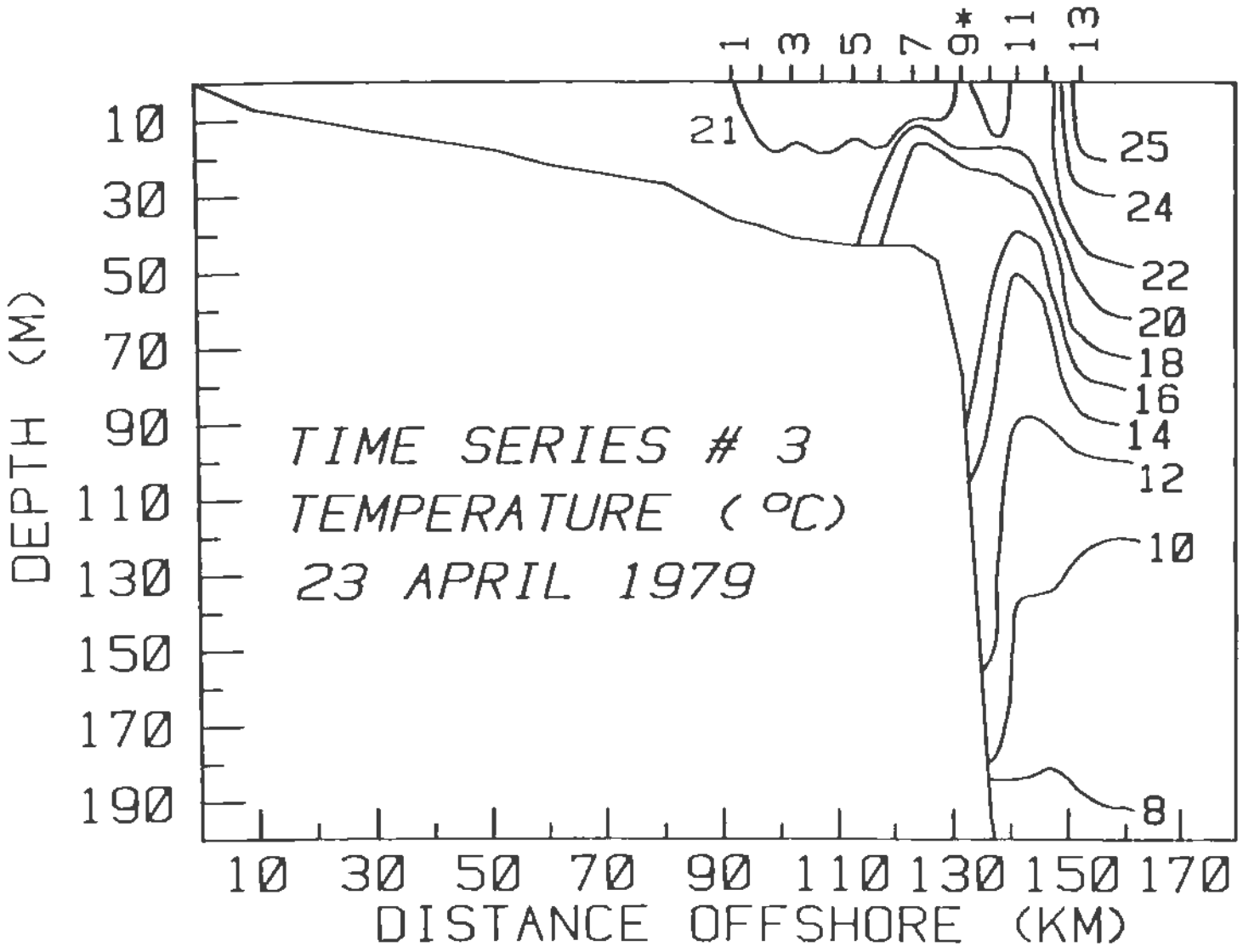


Figure 32. Time Series #3 Temperature, 23 April

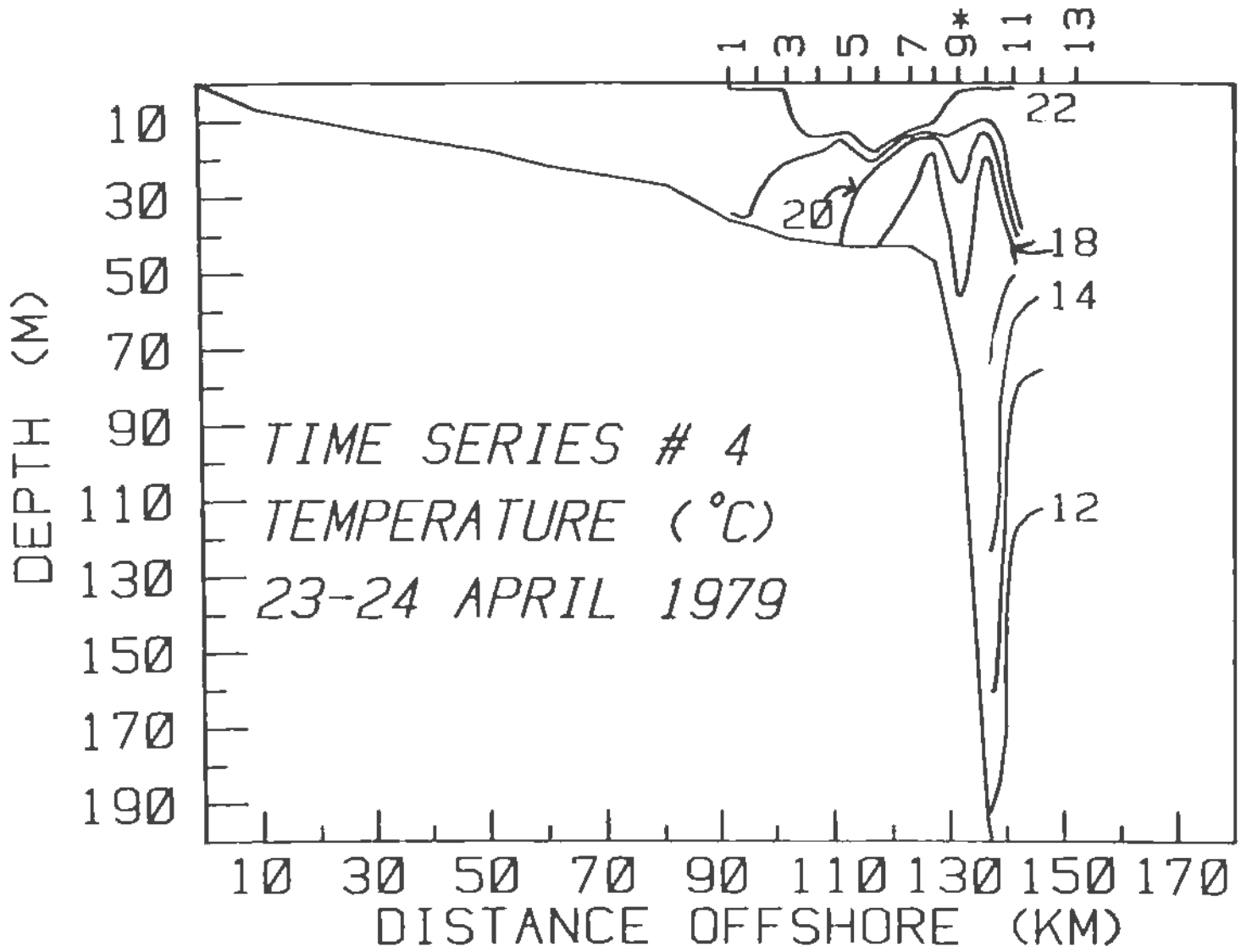


Figure 33. Time Series #4 Temperature, 23-24 April

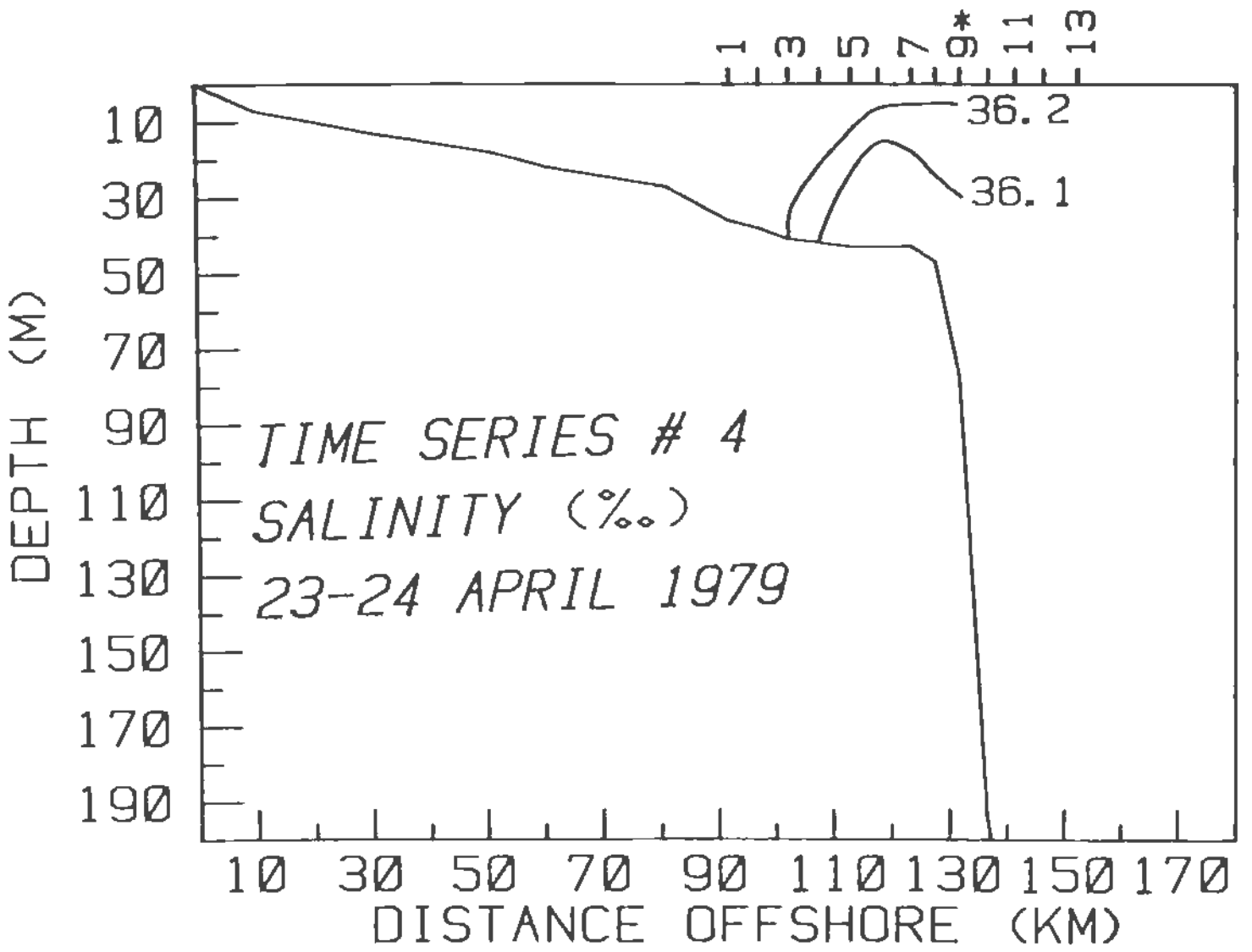


Figure 34. Time Series #4 Salinity, 23-24 April

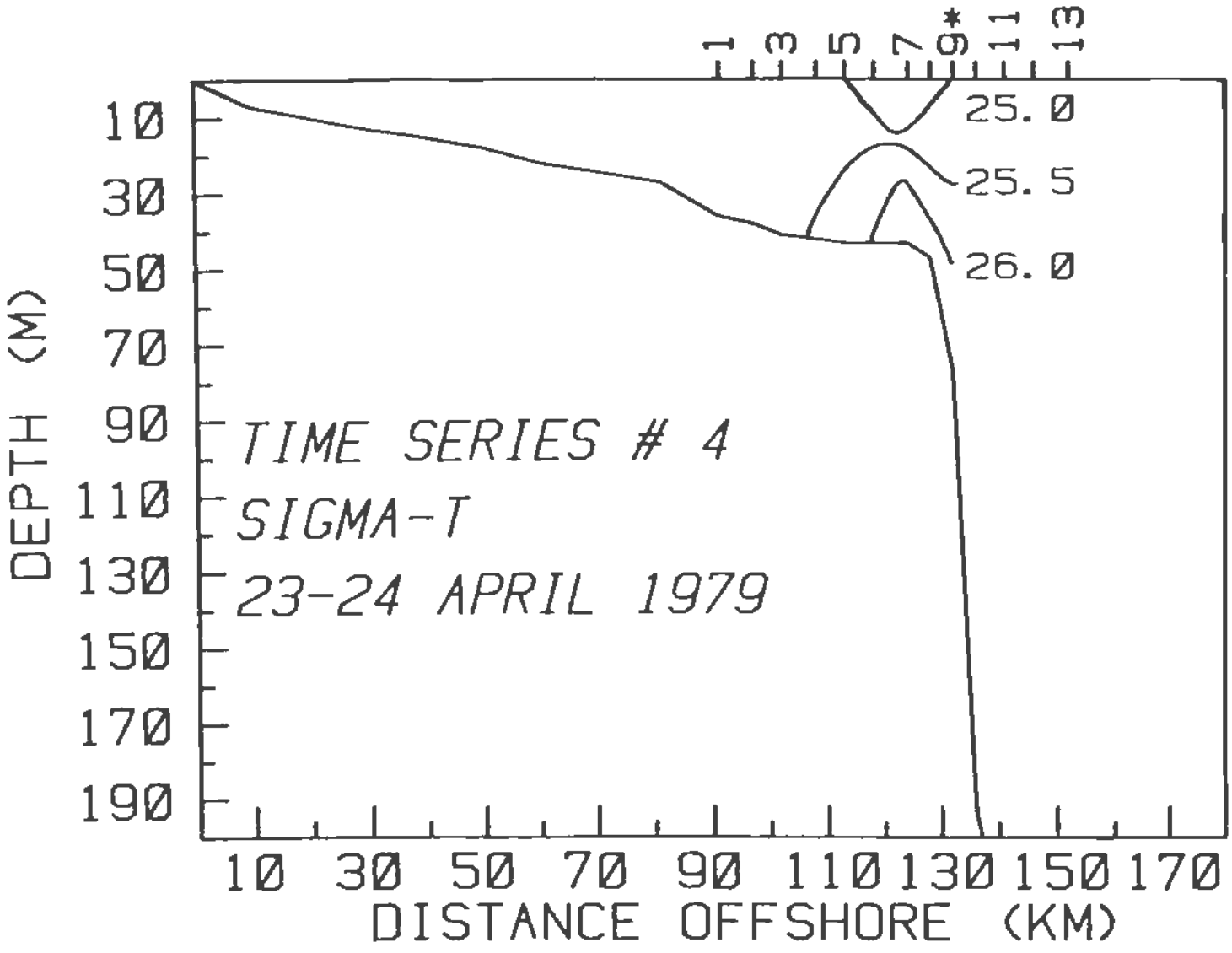


Figure 35. Time Series #4 Sigma-T, 23-24 April

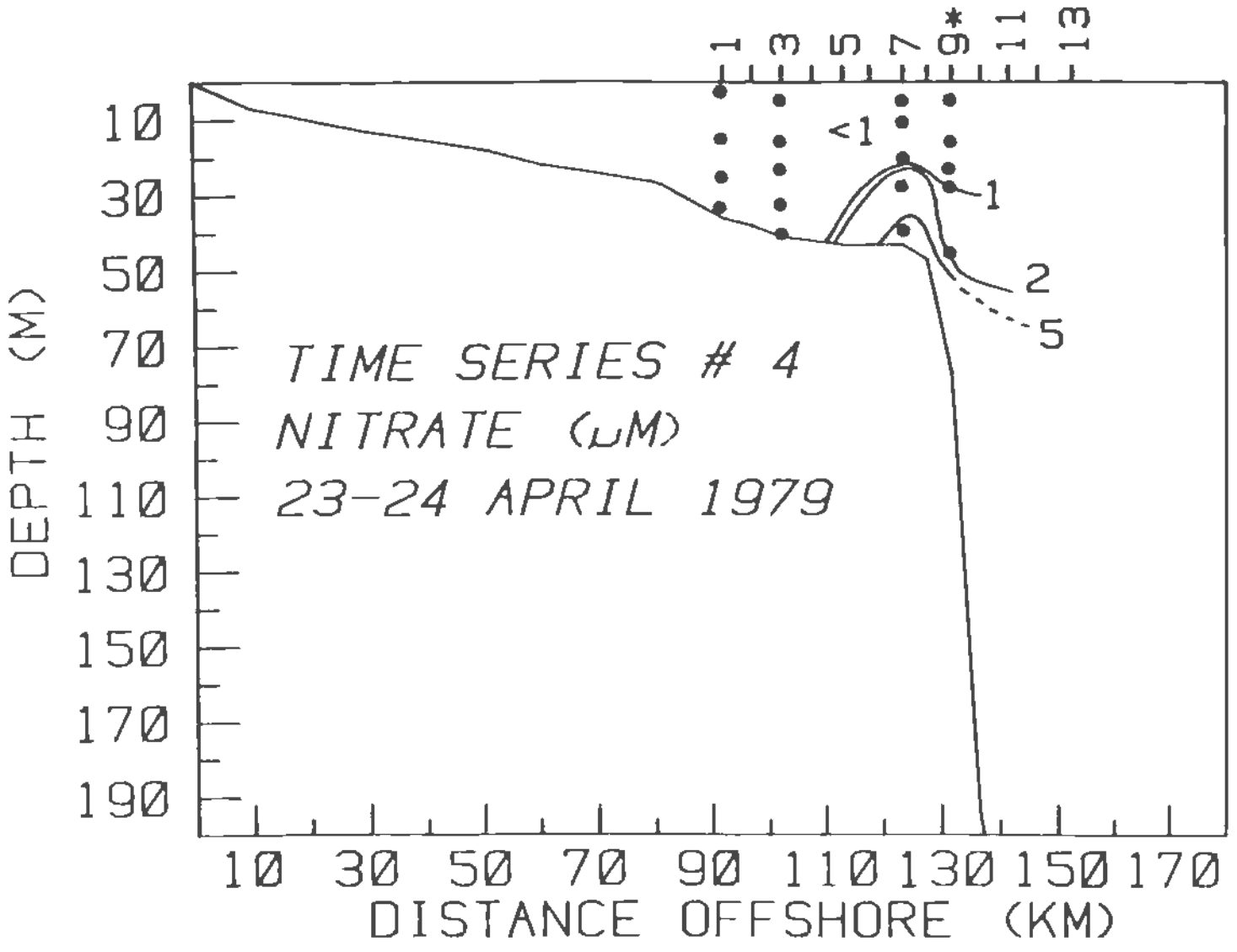


Figure 36. Time Series #4 Nitrate, 23-24 April

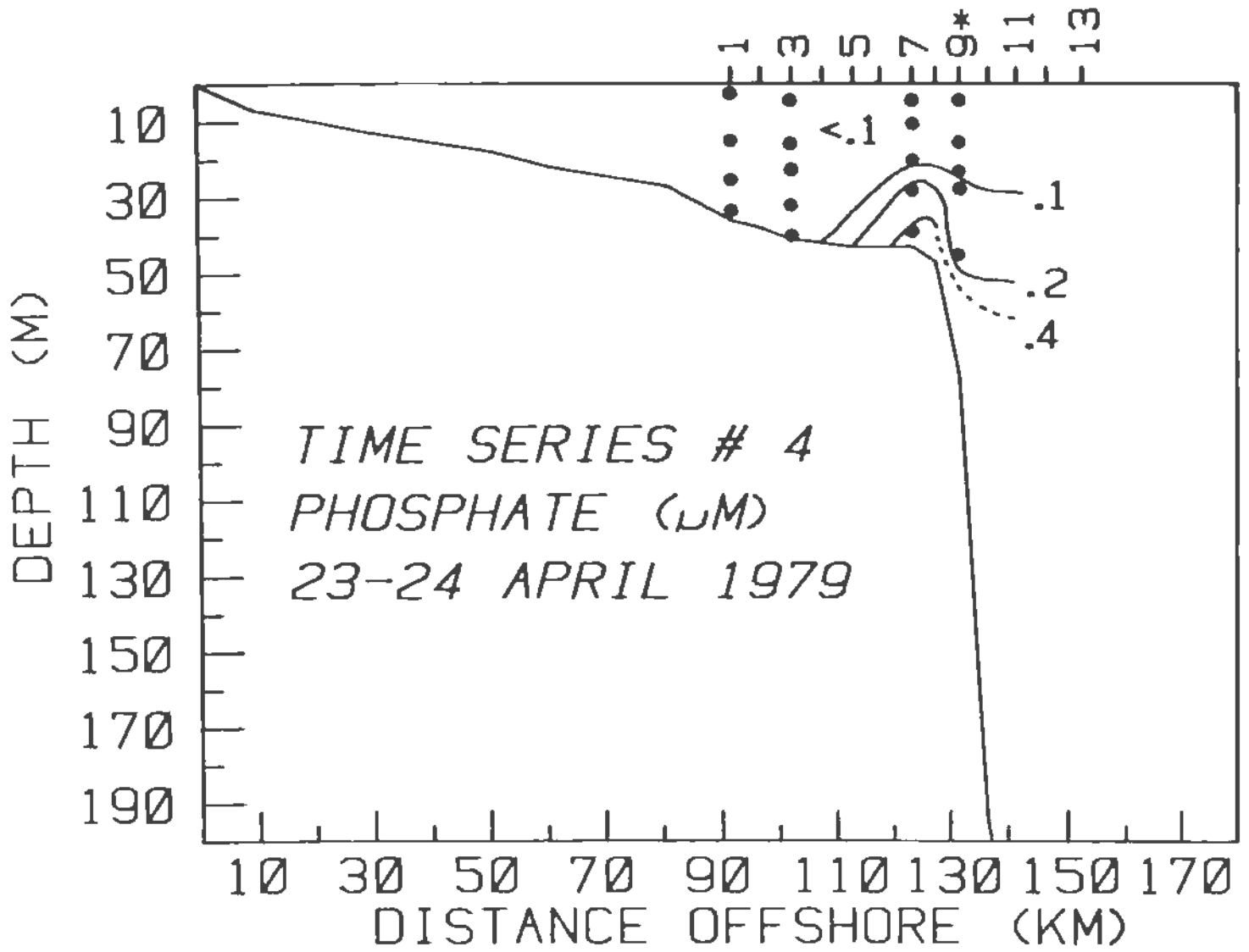


Figure 37. Time Series #4 Phosphate, 23-24 April

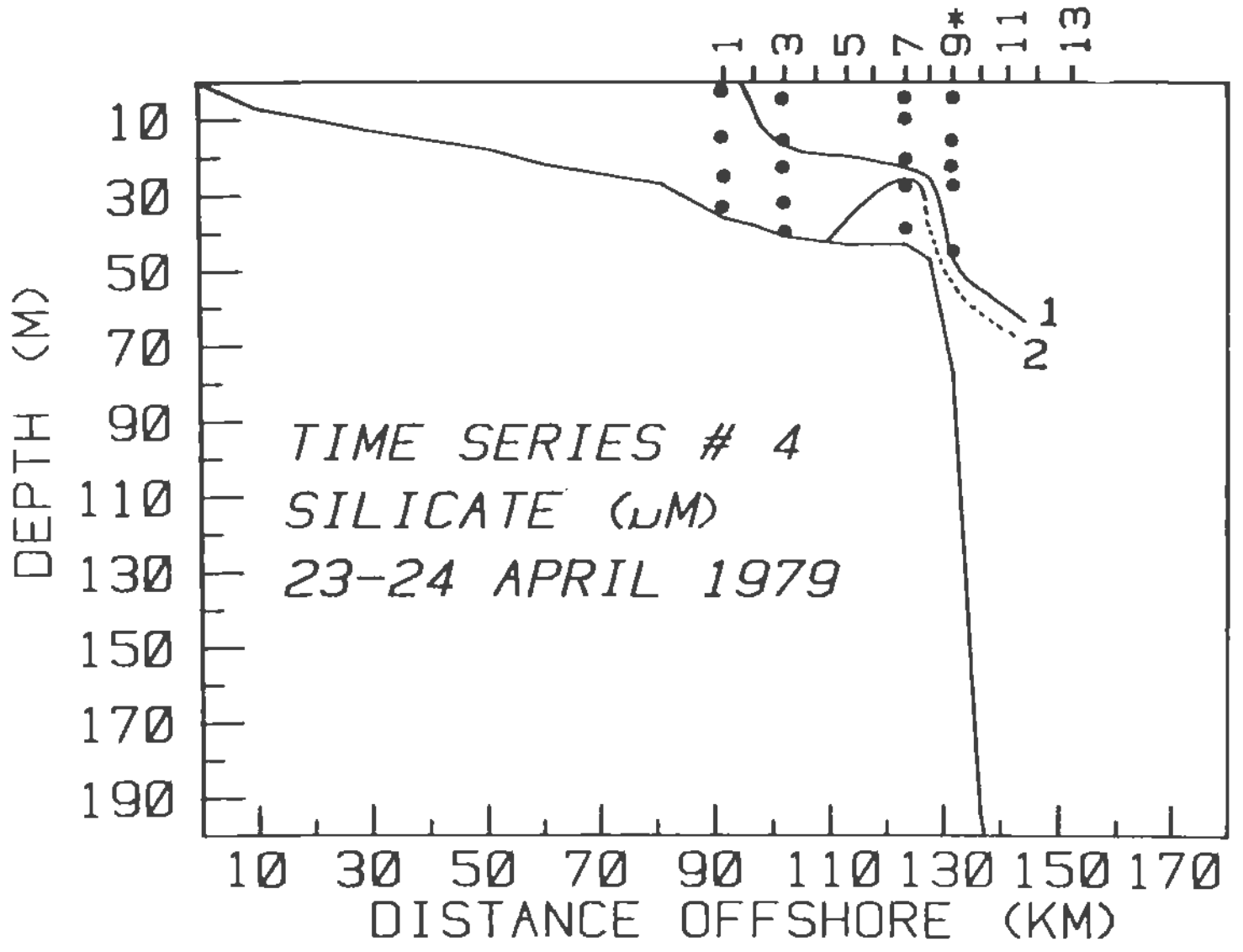


Figure 38. Time Series #4 Silicate, 23-24 April

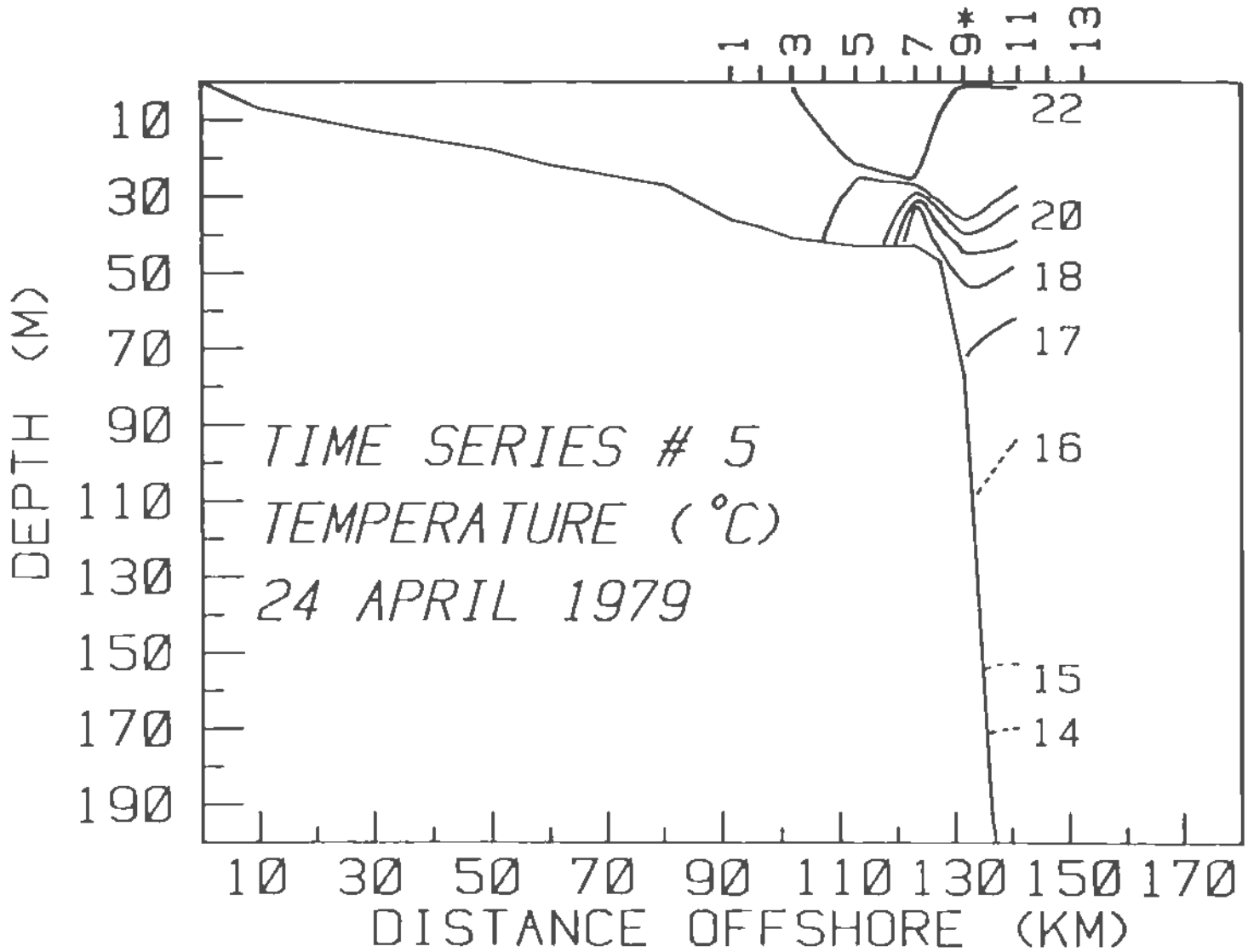


Figure 39. Time Series #5 Temperature, 24 April

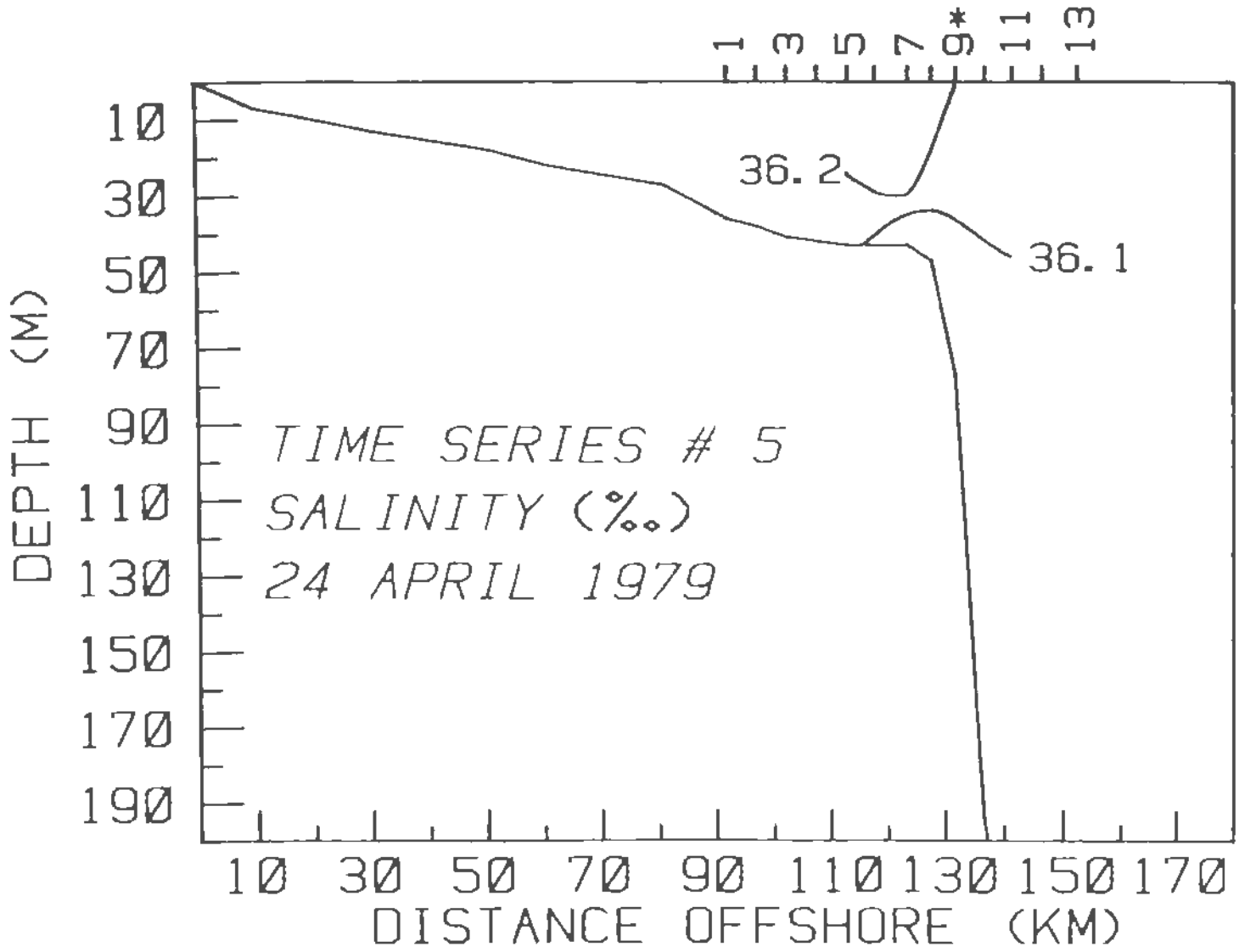


Figure 40. Time Series #5 Salinity, 24 April

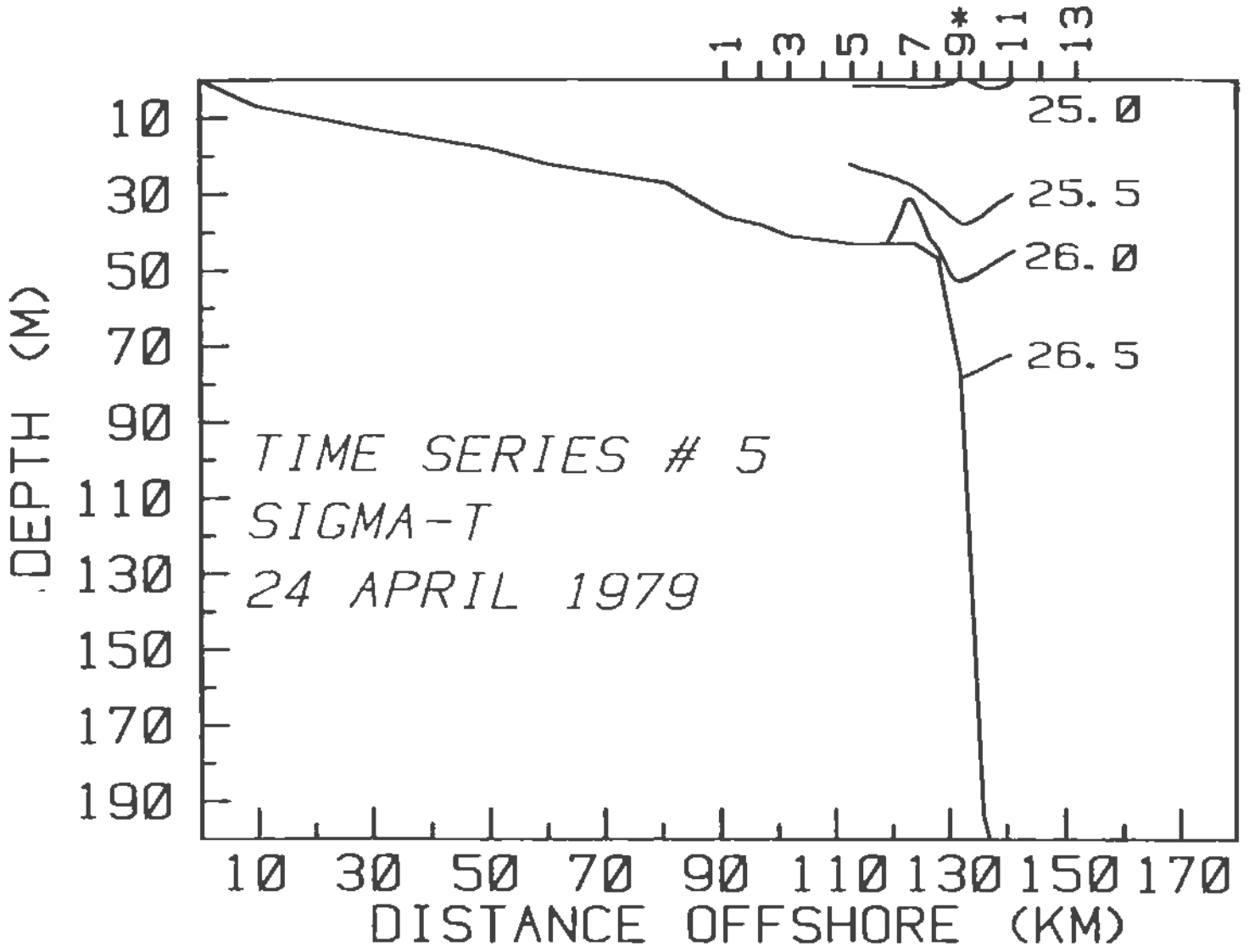


Figure 41. Time Series #5 Sigma-T, 24 April

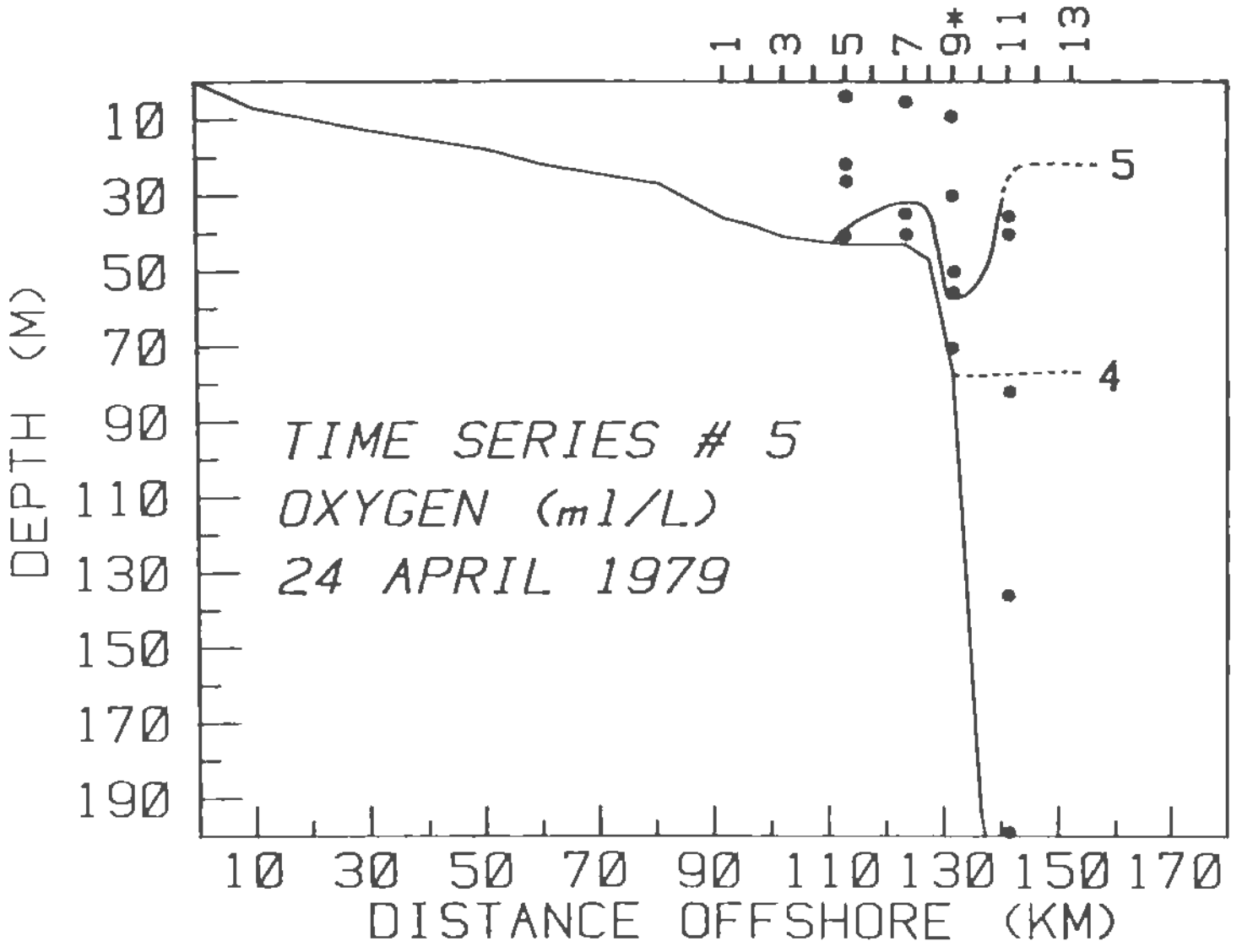


Figure 42. Time Series #5 Oxygen, 24 April

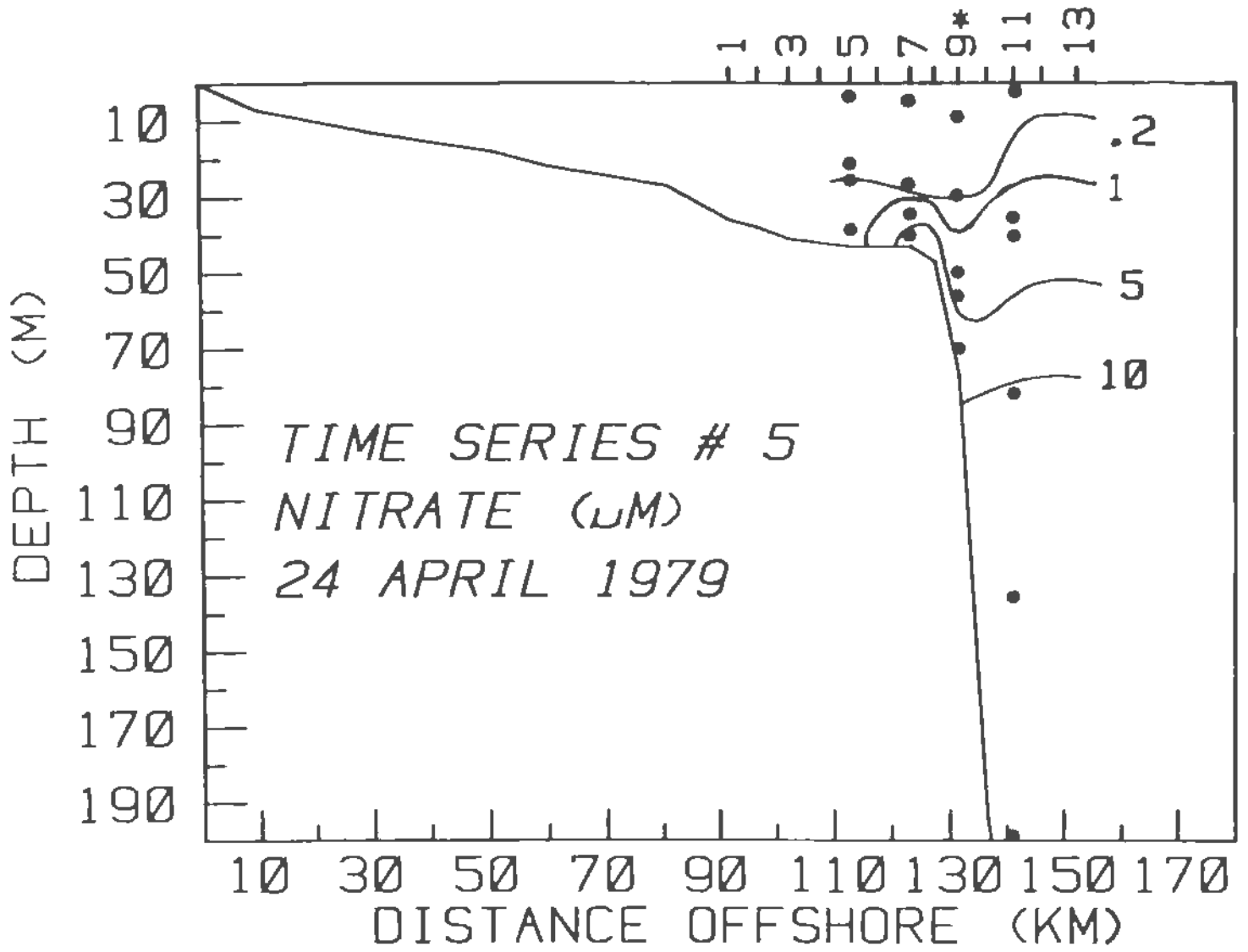


Figure 43. Time Series #5 Nitrate, 24 April

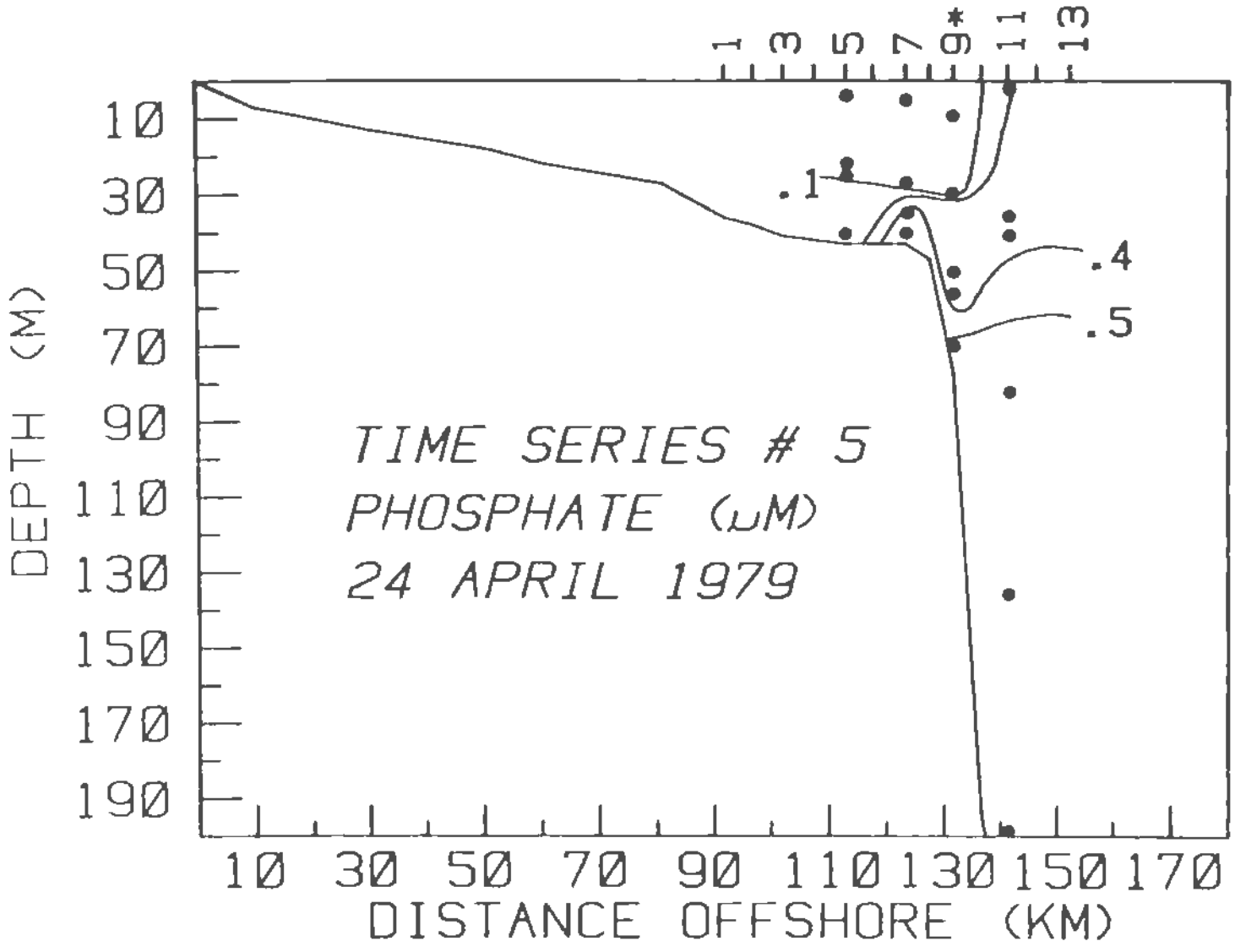


Figure 44. Time Series #5 Phosphate, 24 April

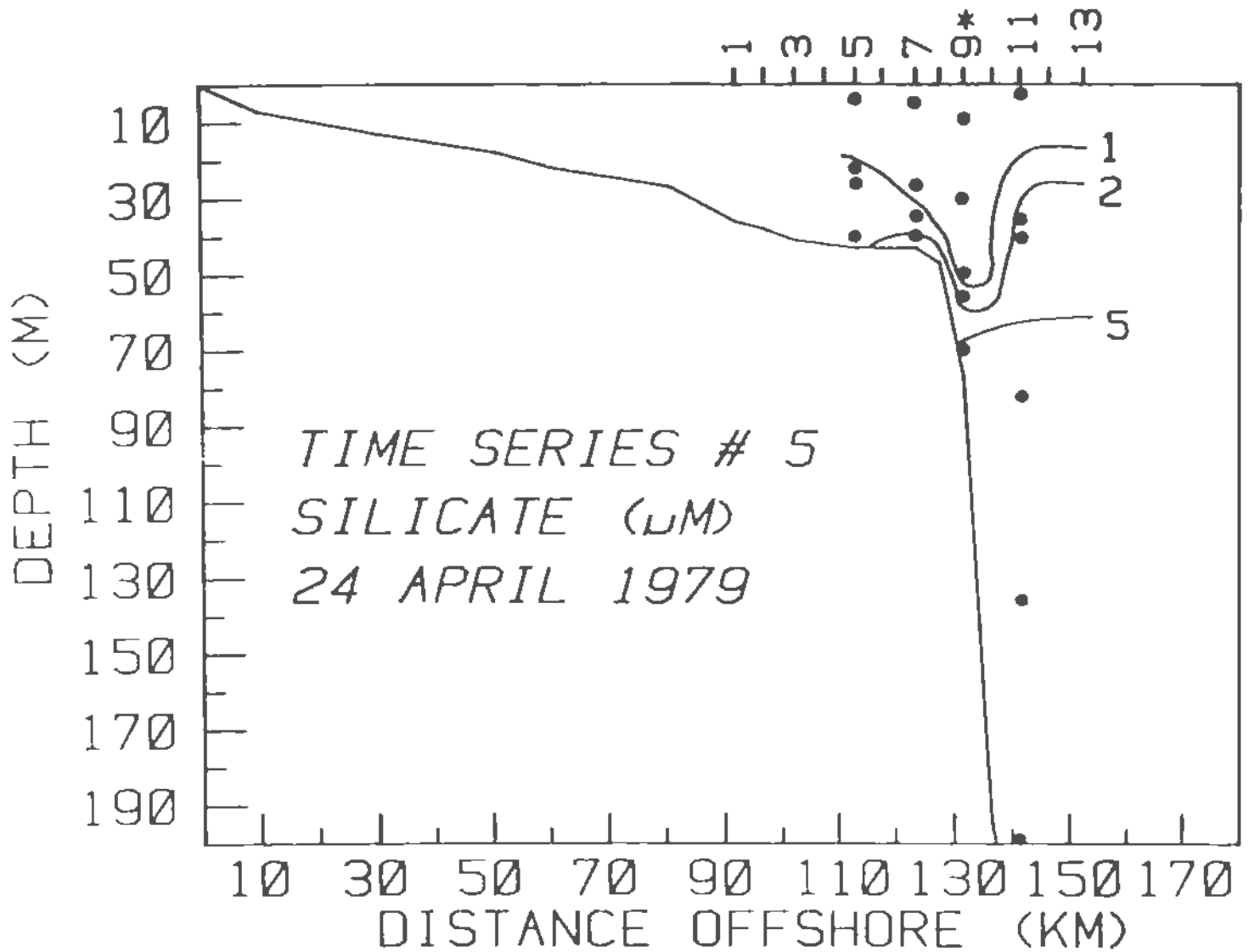


Figure 45. Time Series #5 Silicate, 24 April

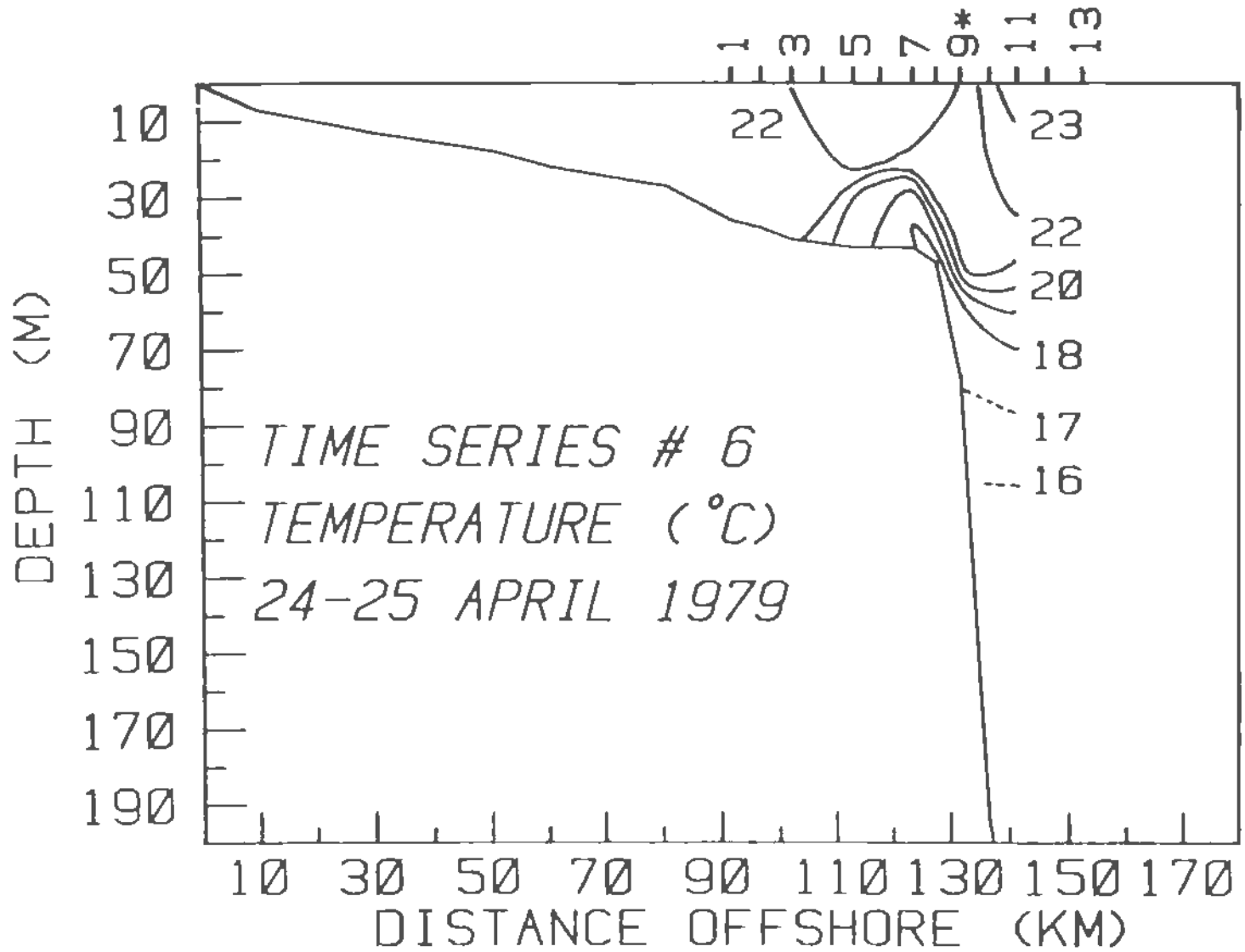


Figure 46. Time Series #6 Temperature, 24-25 April

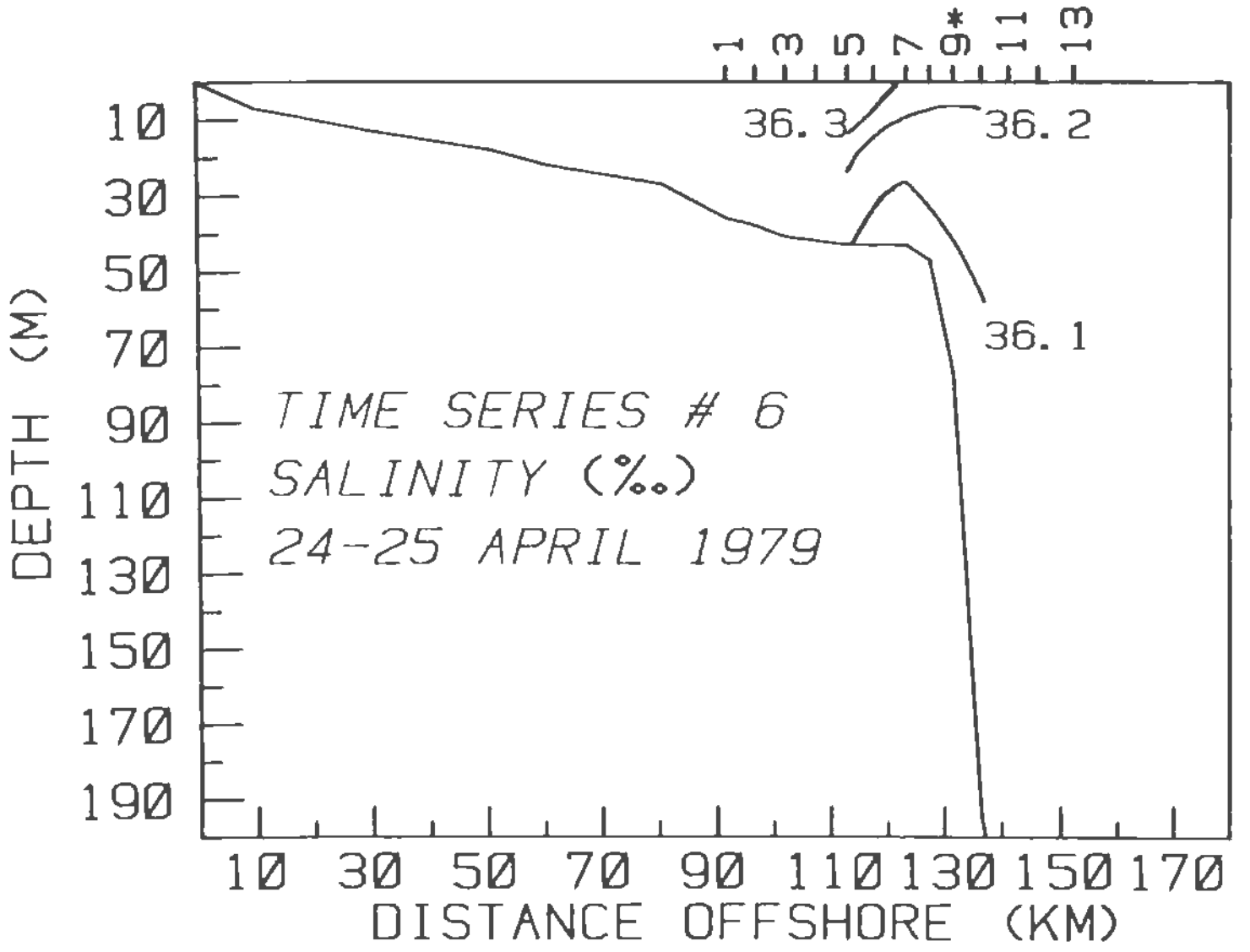


Figure 47. Time Series #6 Salinity, 24-25 April

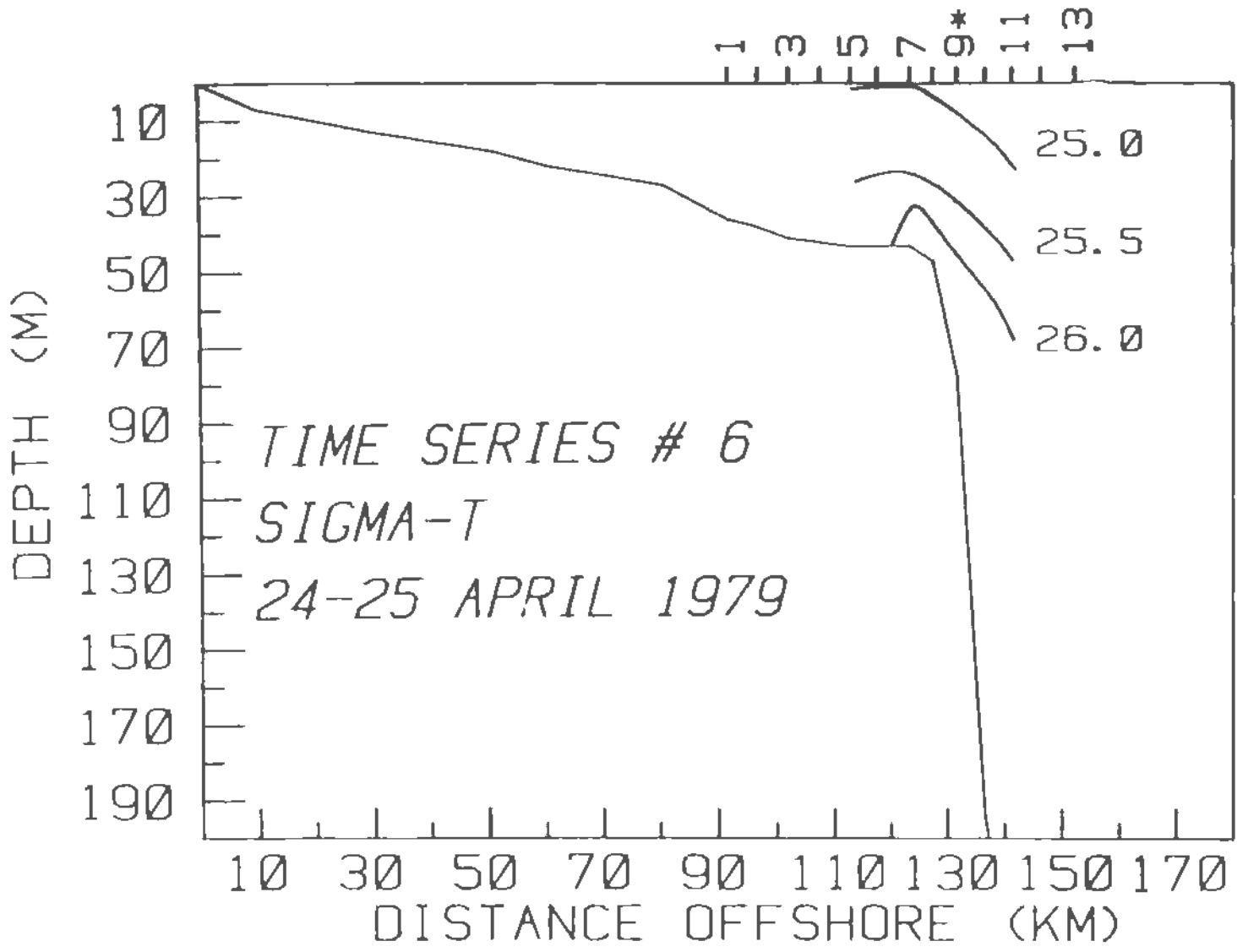


Figure 48. Time Series #6 Sigma-T, 24-25 April

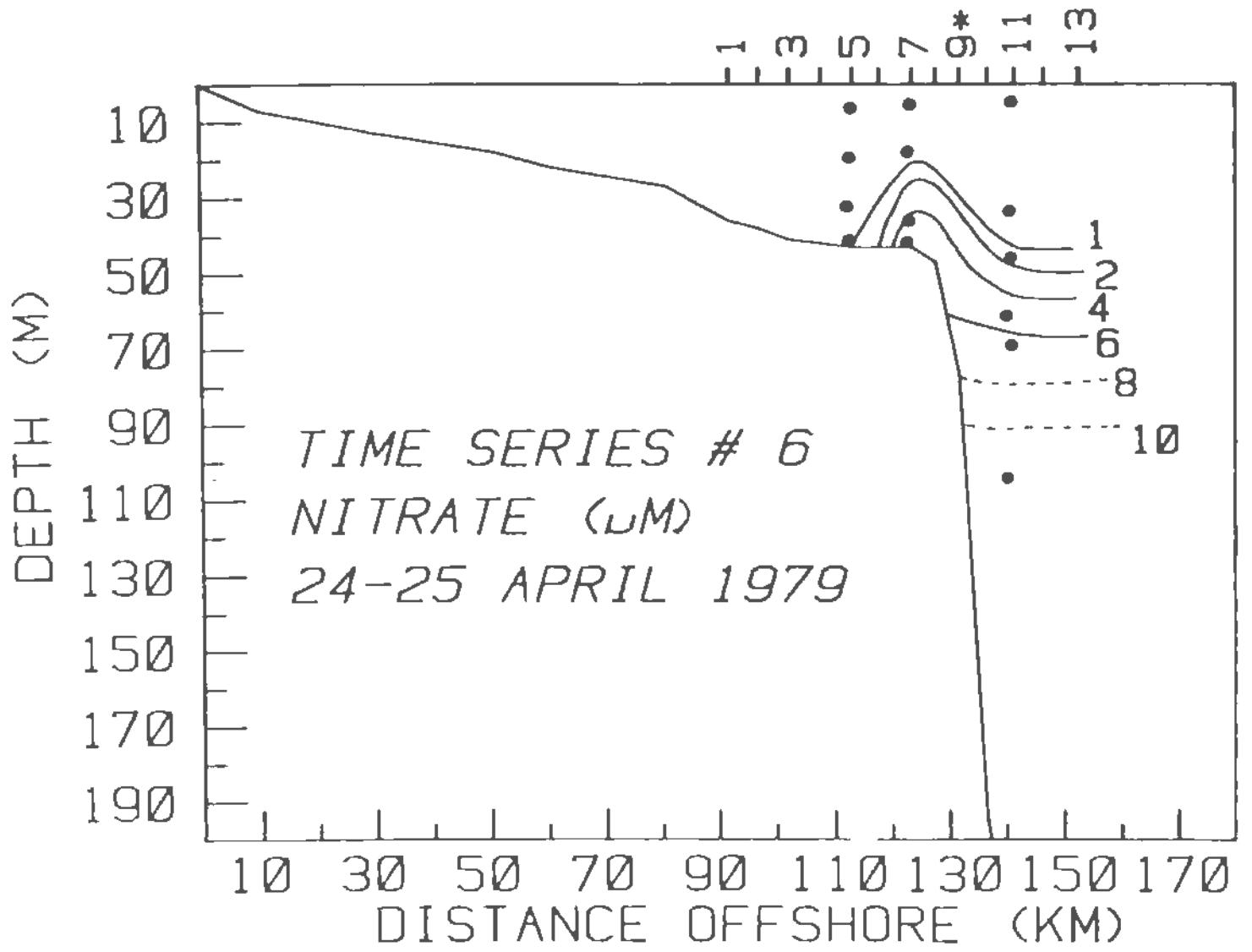


Figure 49. Time Series #6 Nitrate, 24-25 April

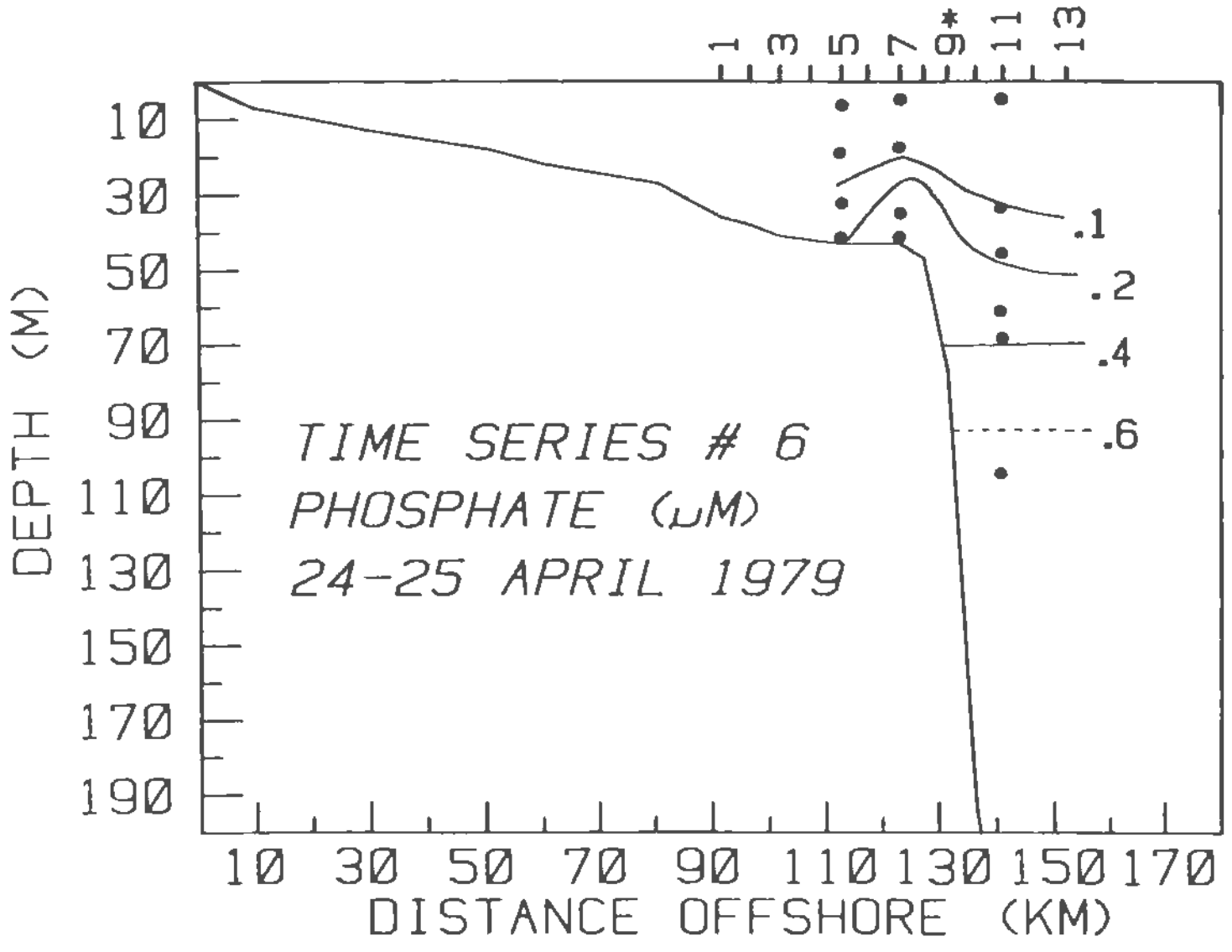


Figure 50. Time Series #6 Phosphate, 24-25 April

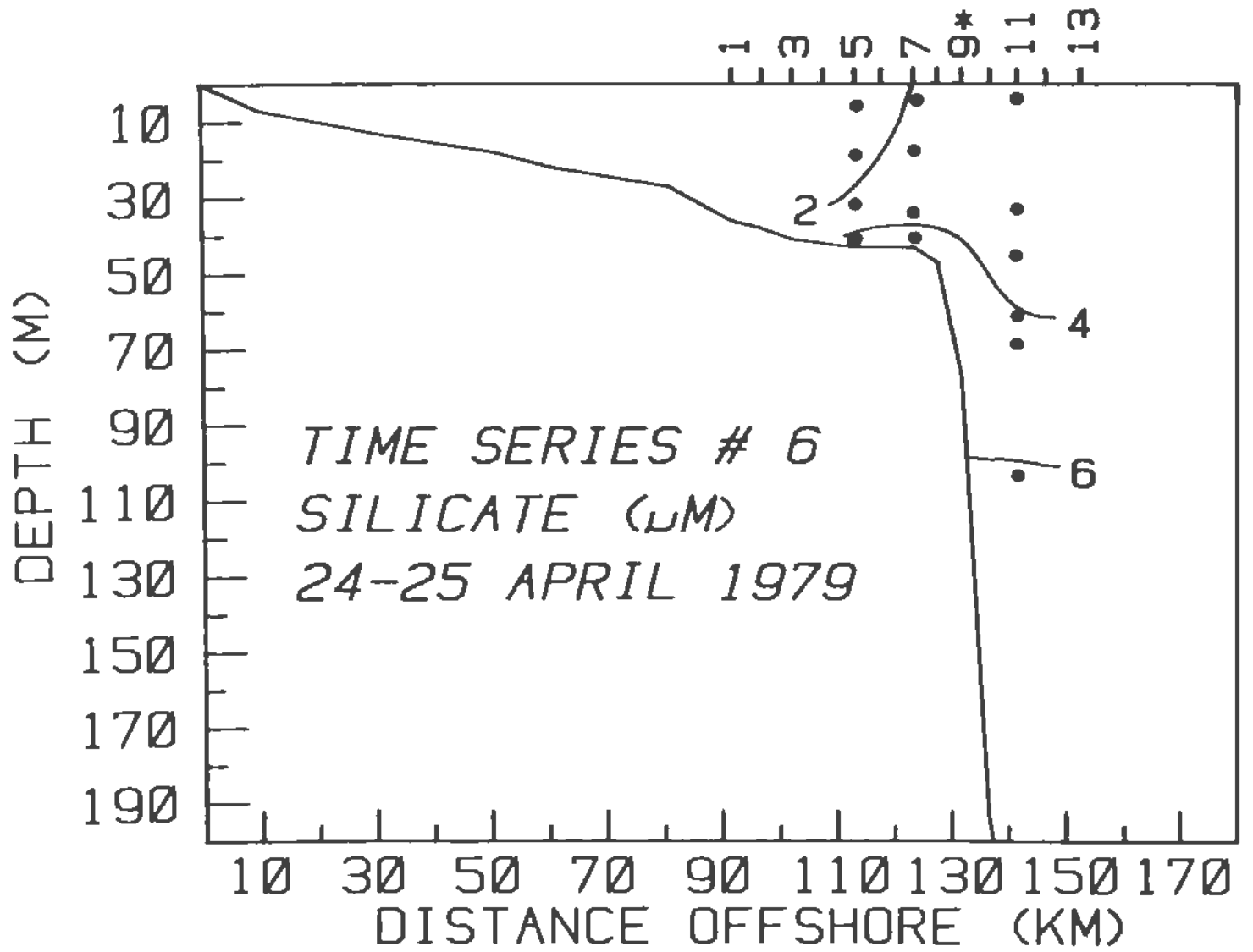


Figure 51. Time Series #6 Silicate, 24-25 April

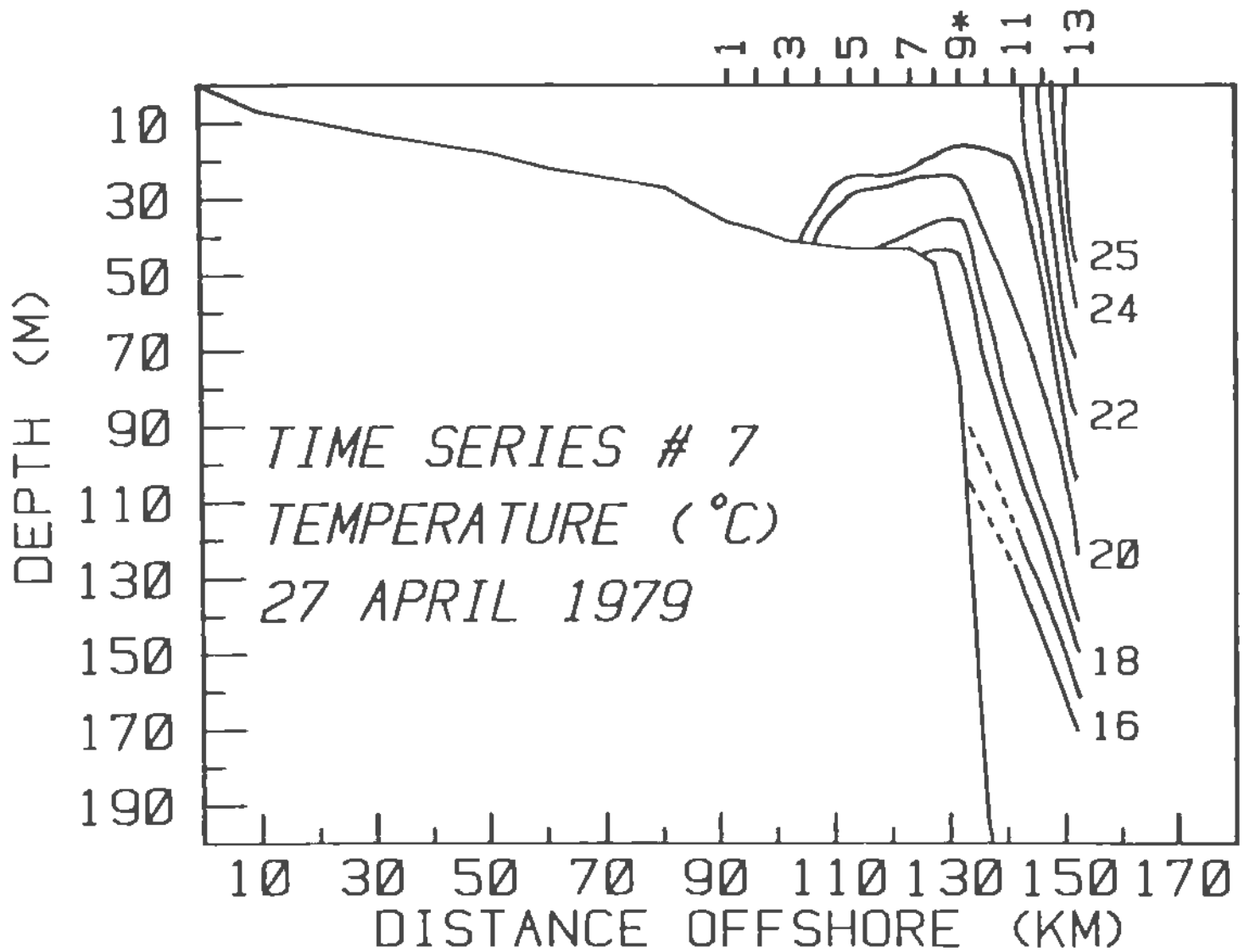


Figure 52. Time Series #7 Temperature, 27 April

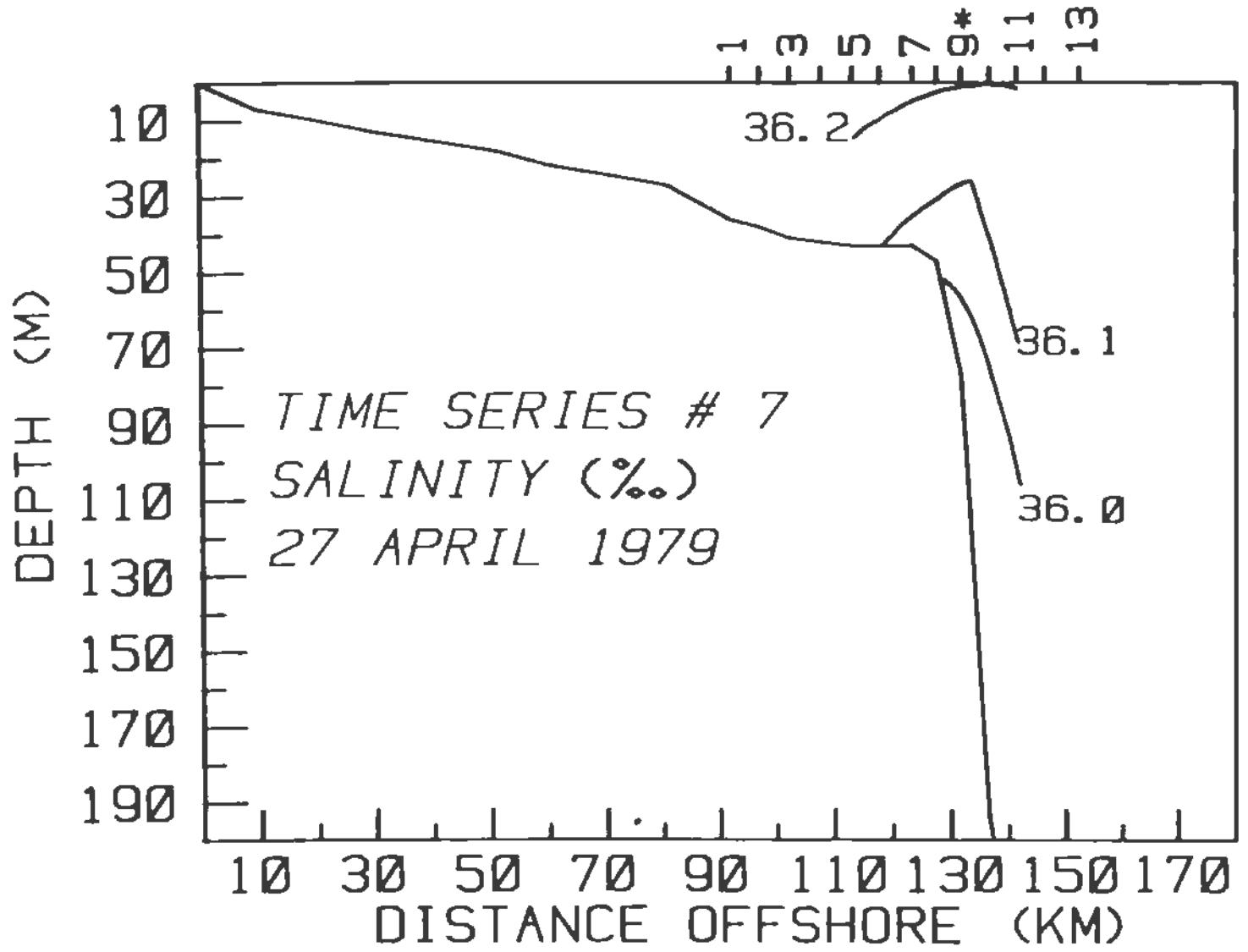


Figure 53. Time Series #7 Salinity, 27 April

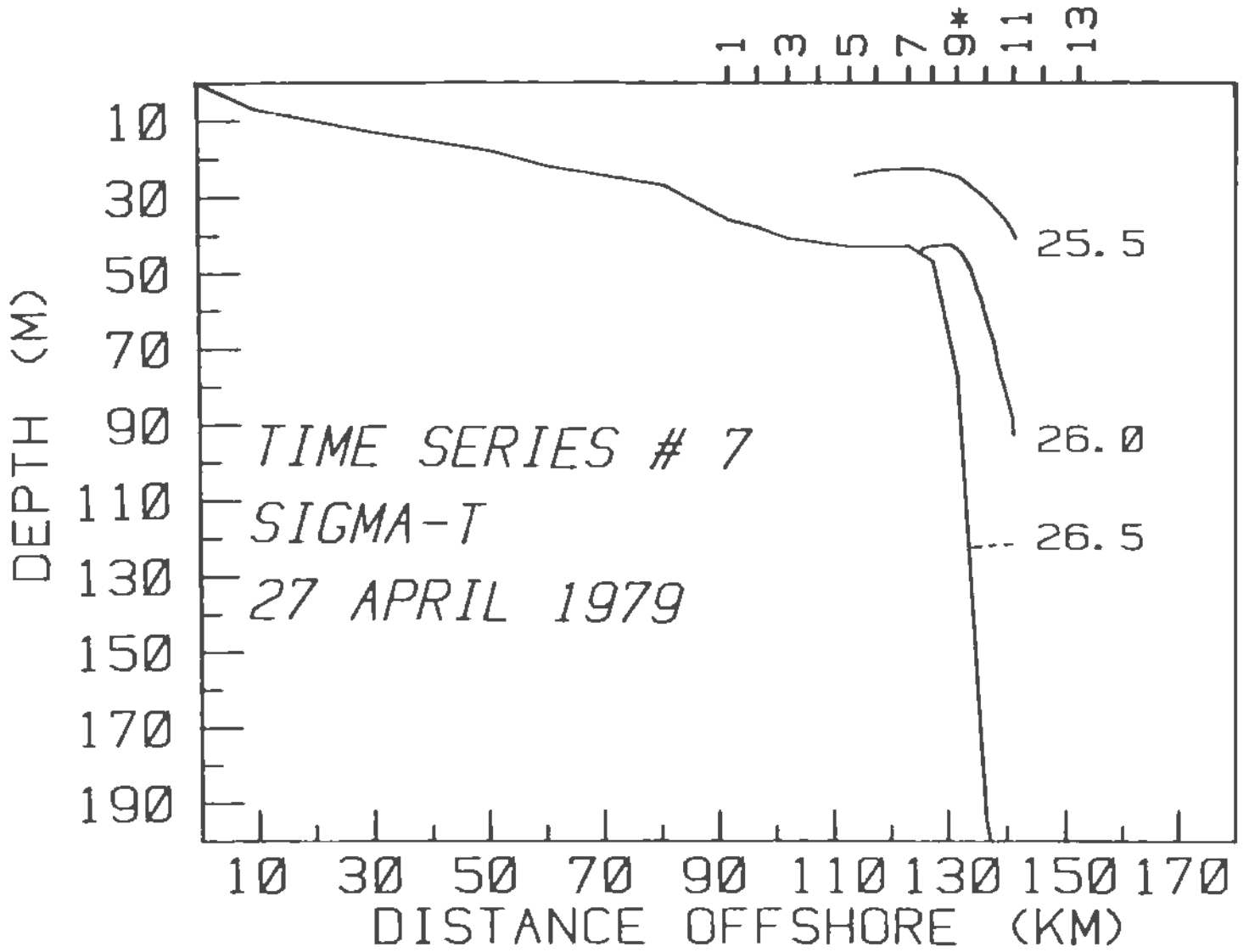


Figure 54. Time Series #7 Sigma-T, 27 April

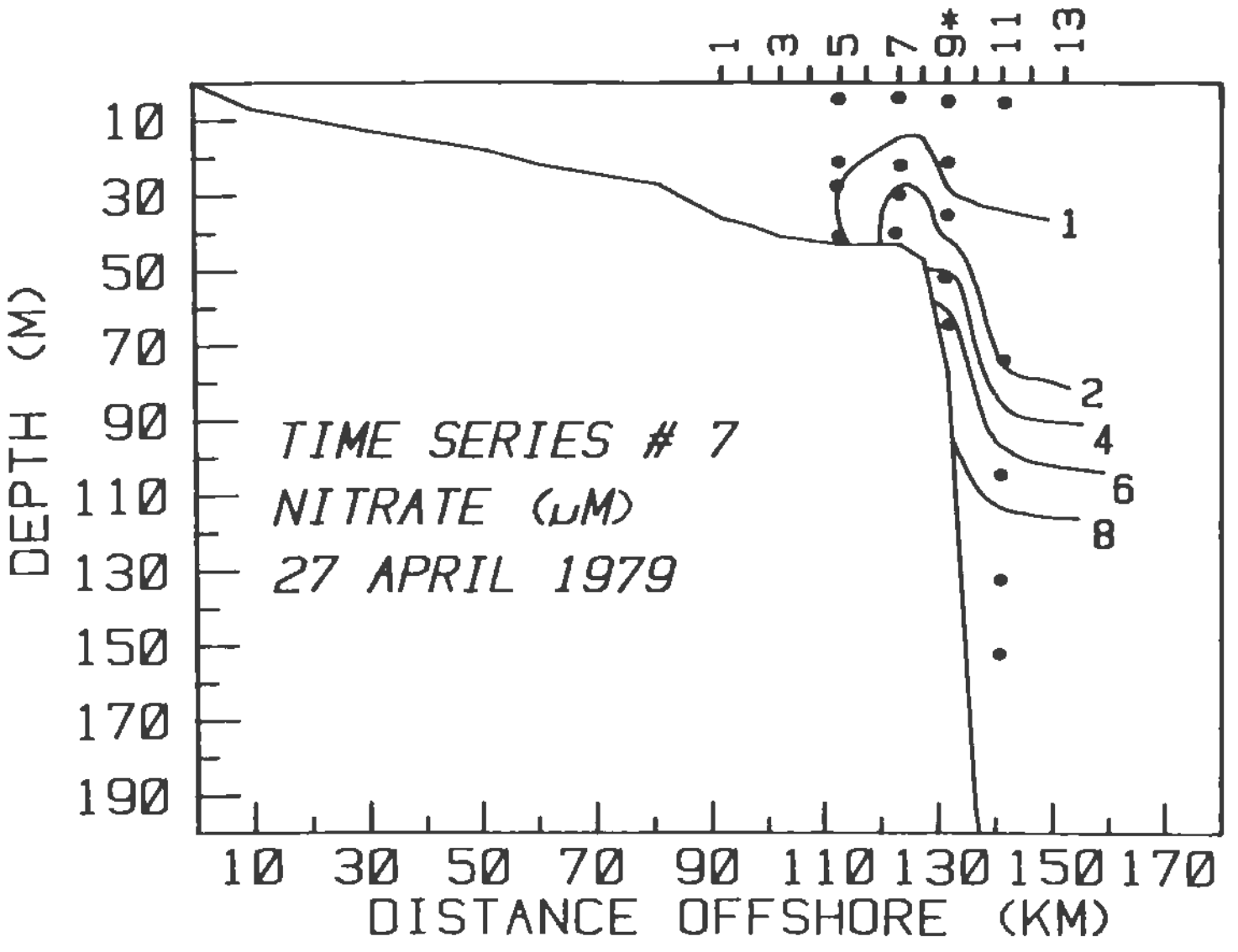


Figure 55. Time Series #7 Nitrate, 27 April

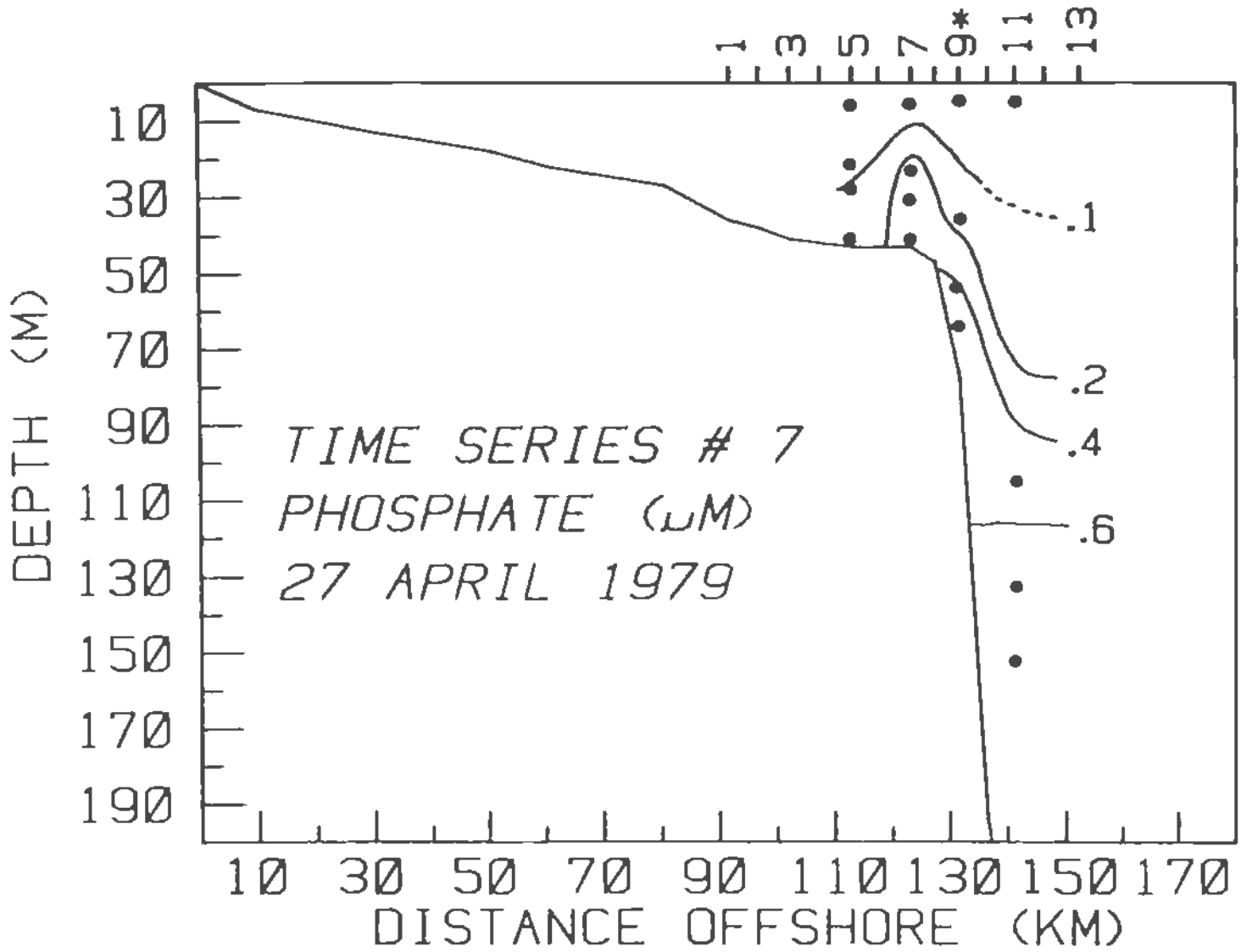


Figure 56. Time Series #7 Phosphate, 27 April

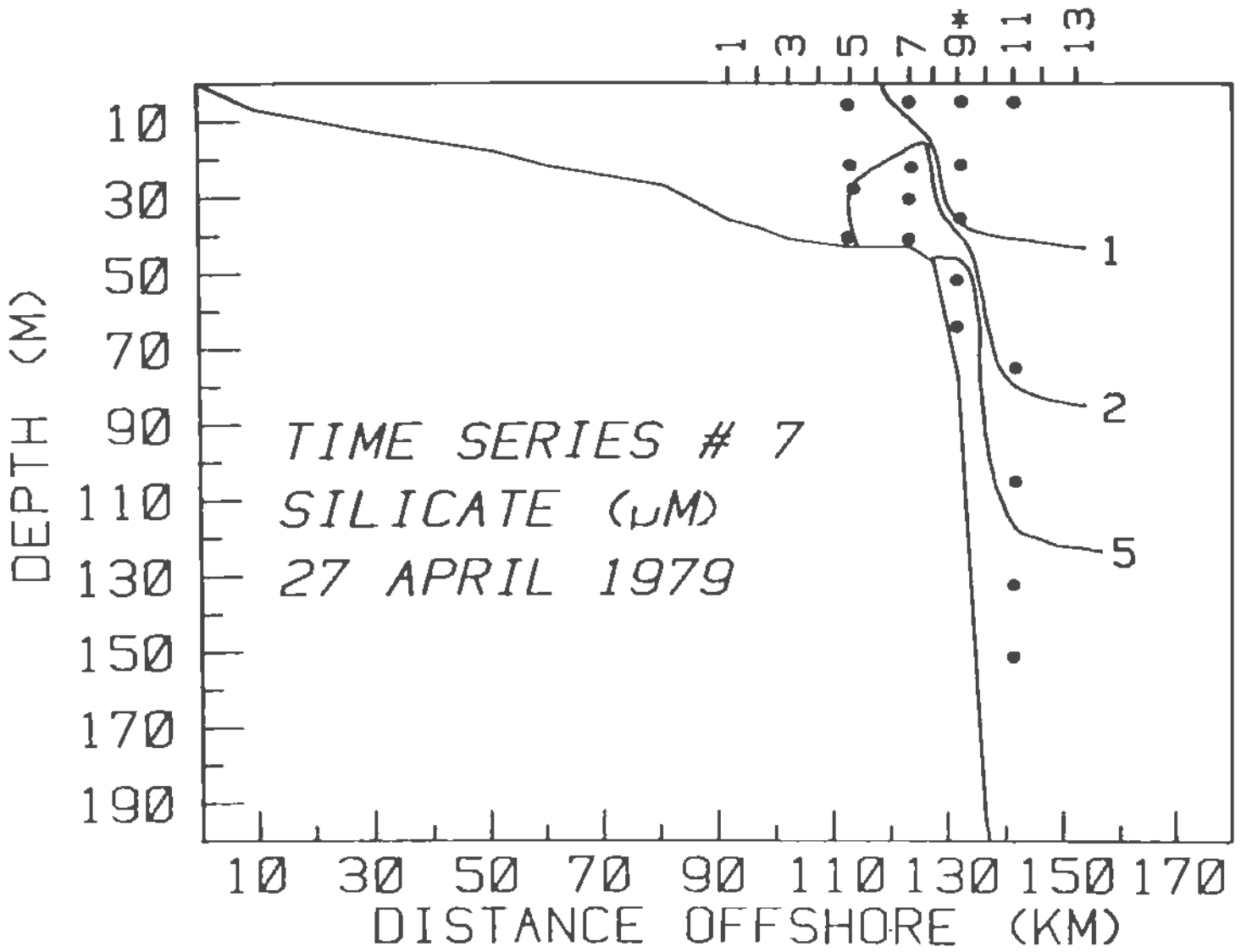


Figure 57. Time Series #7 Silicate, 27 April

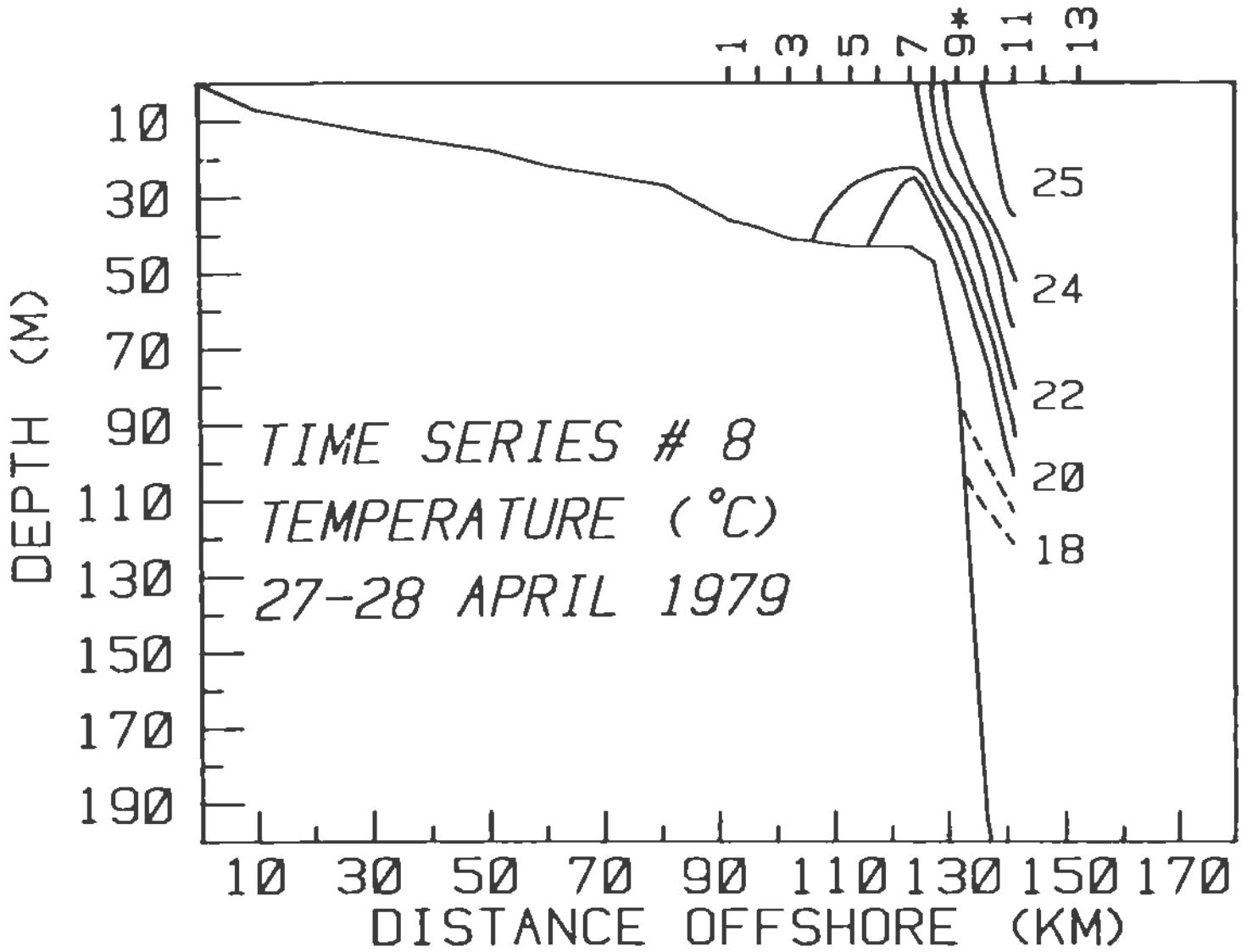


Figure 58. Time Series #8 Temperature, 27-28 April

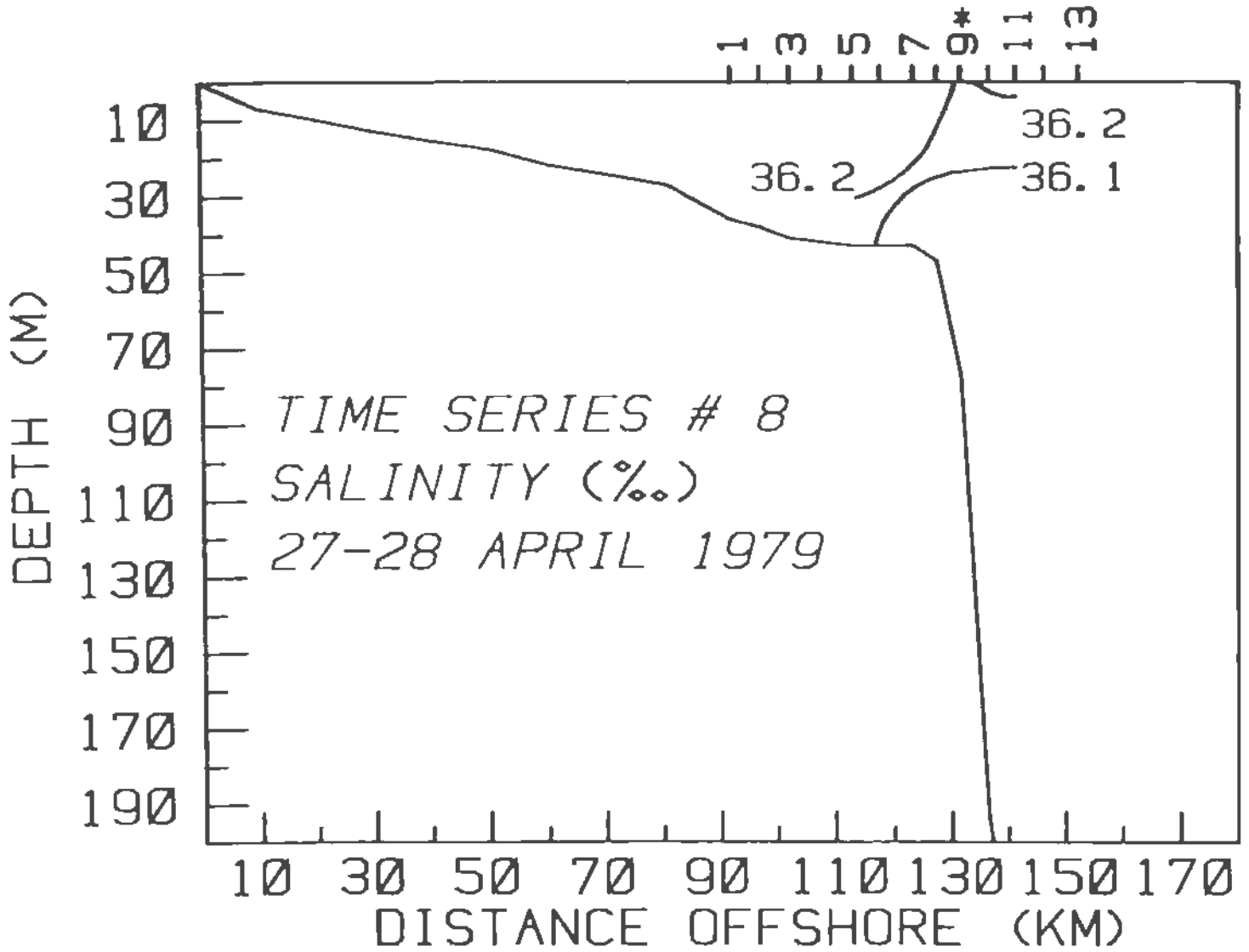


Figure 59. Time Series #8 Salinity, 27-28 April

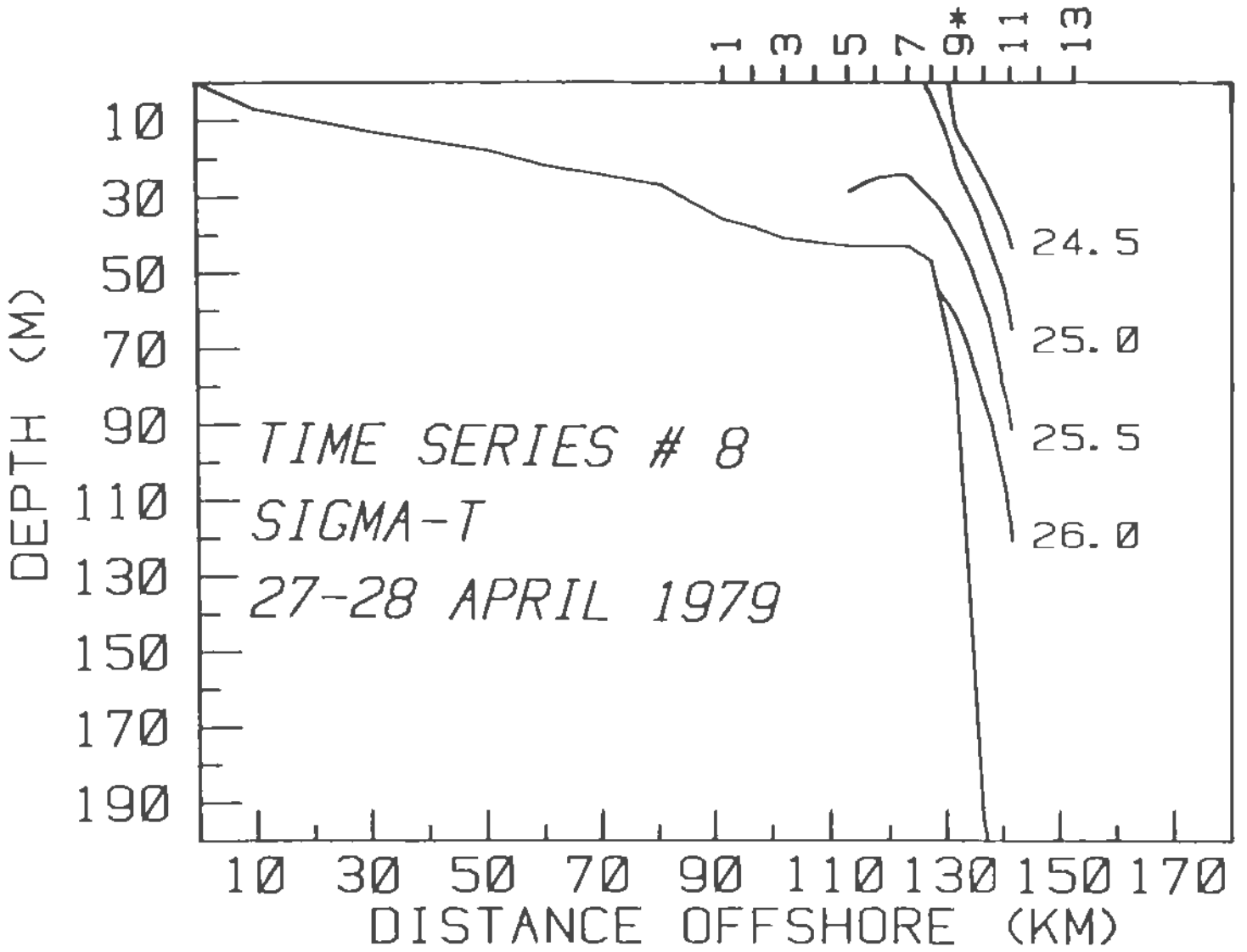


Figure 60. Time Series #8 Sigma-T, 27-28 April

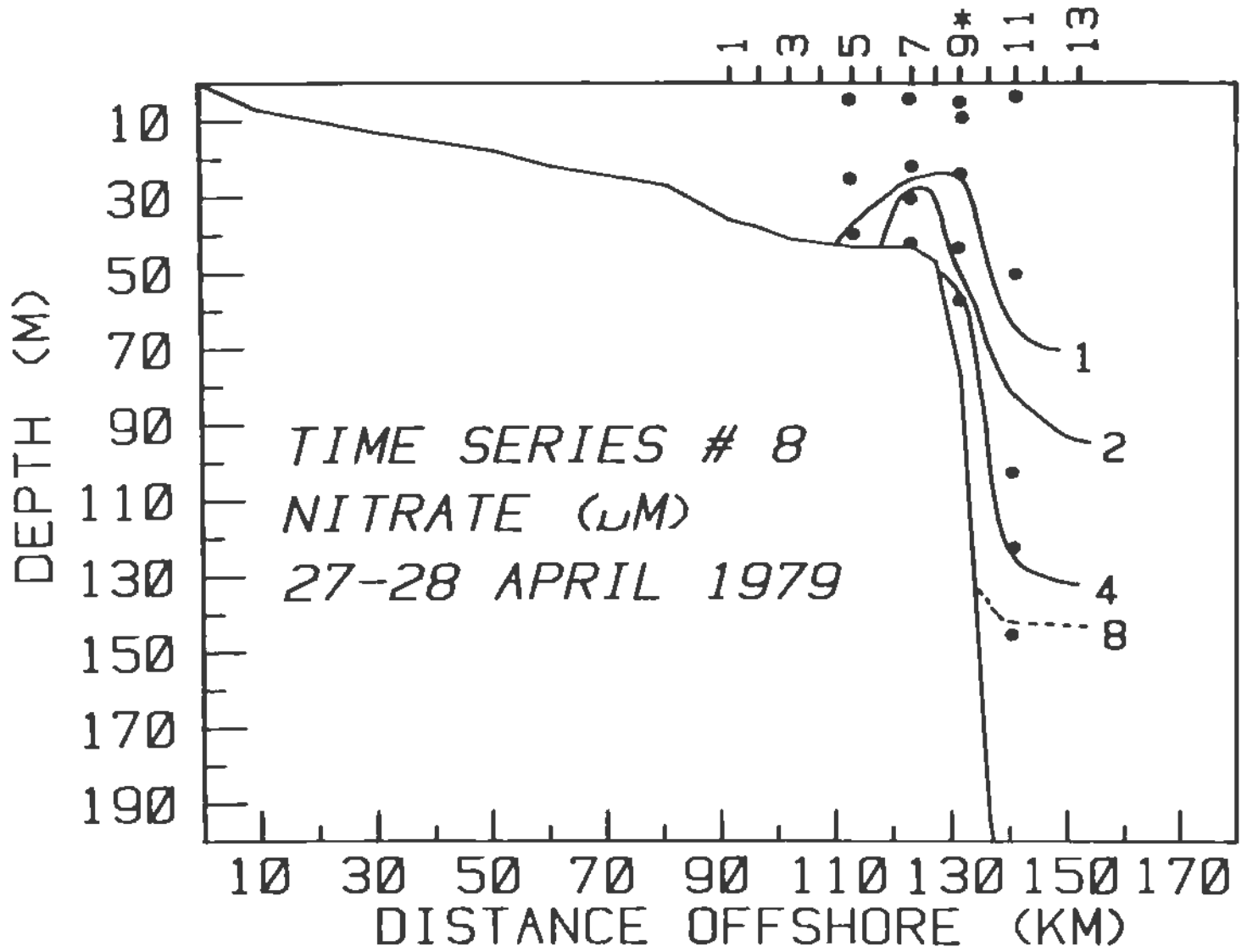


Figure 61. Time Series #8 Nitrate, 27-28 April

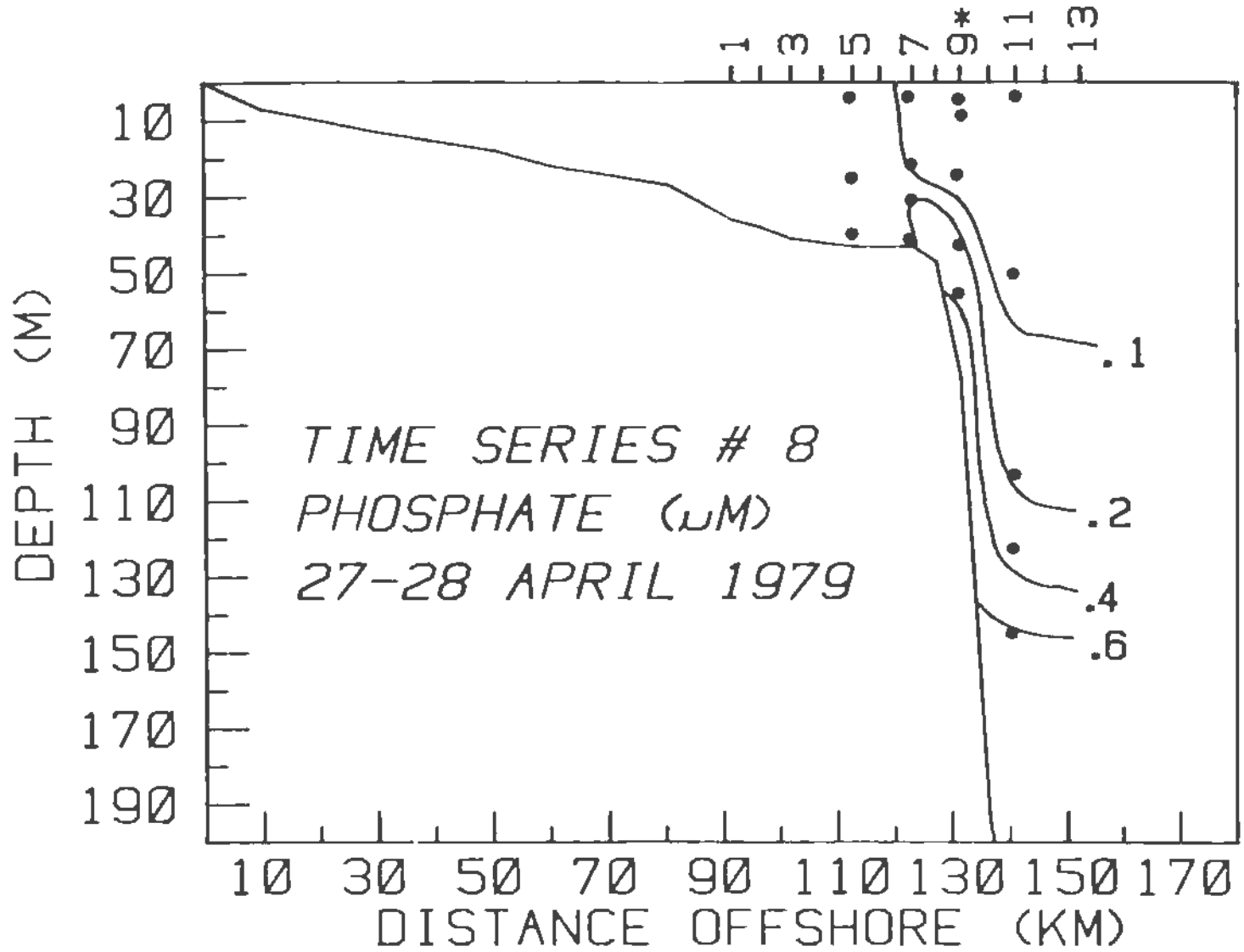


Figure 62. Time Series #8 Phosphate, 27-28 April

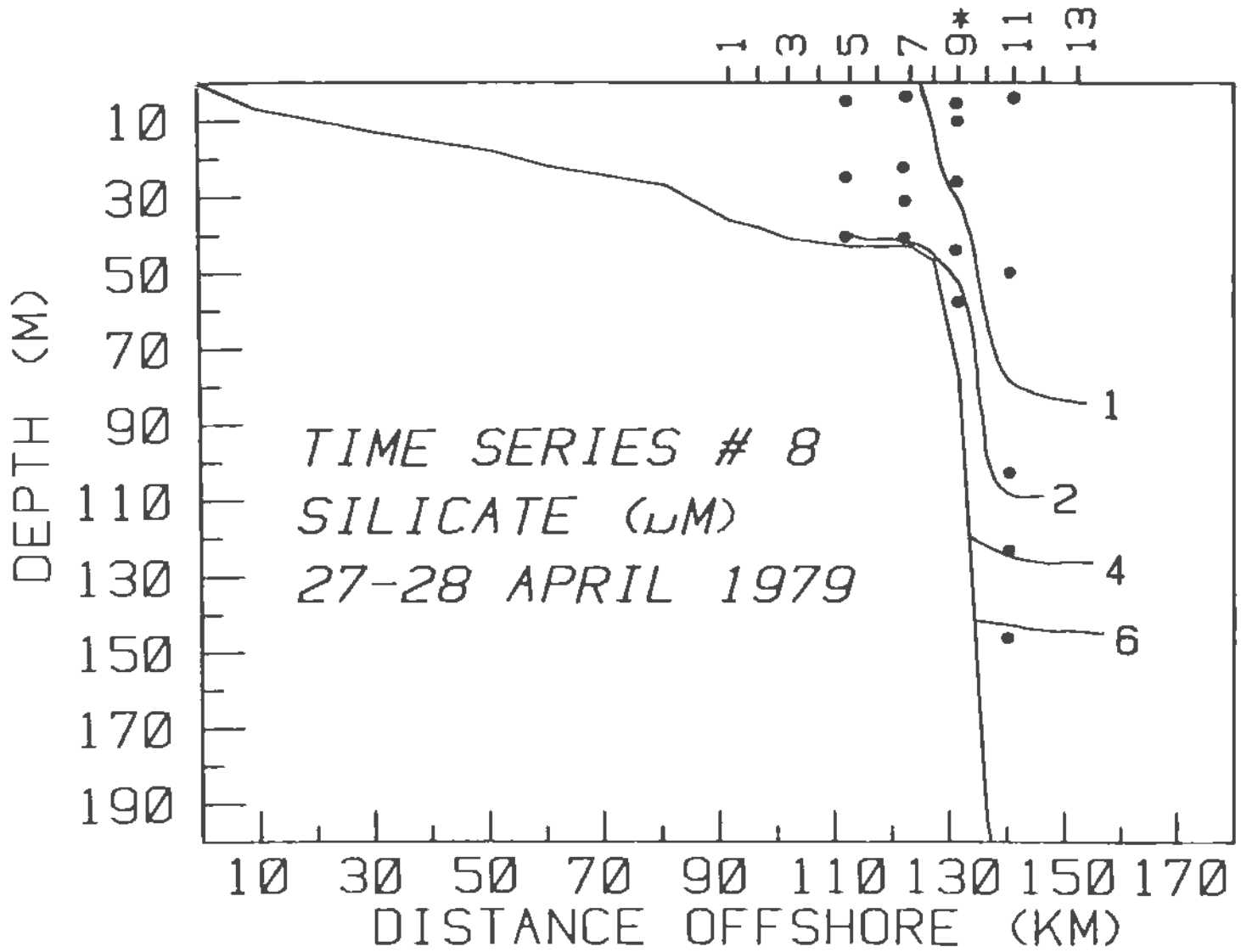


Figure 63. Time Series #8 Silicate, 27-28 April

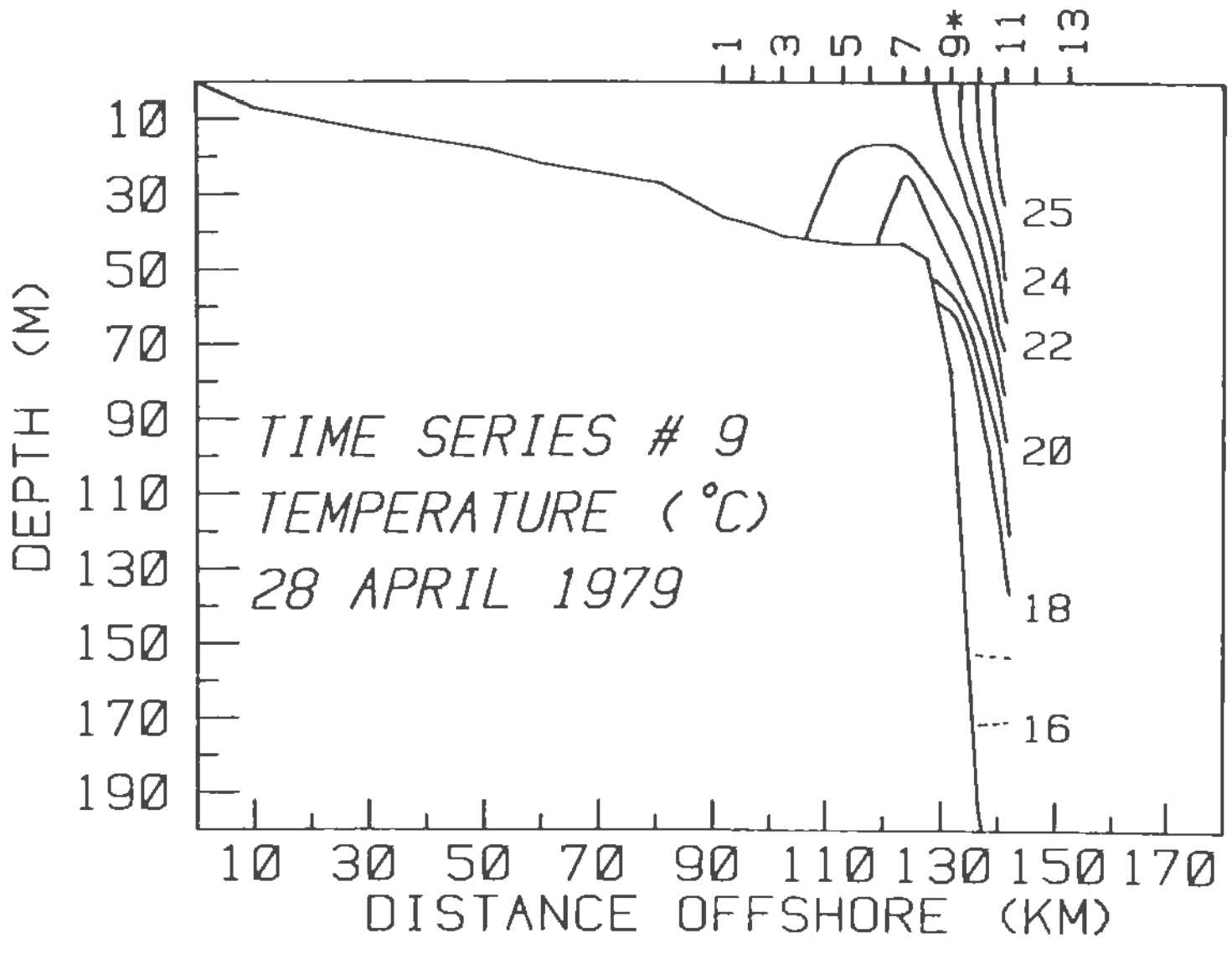


Figure 64. Time Series #9 Temperature, 28 April

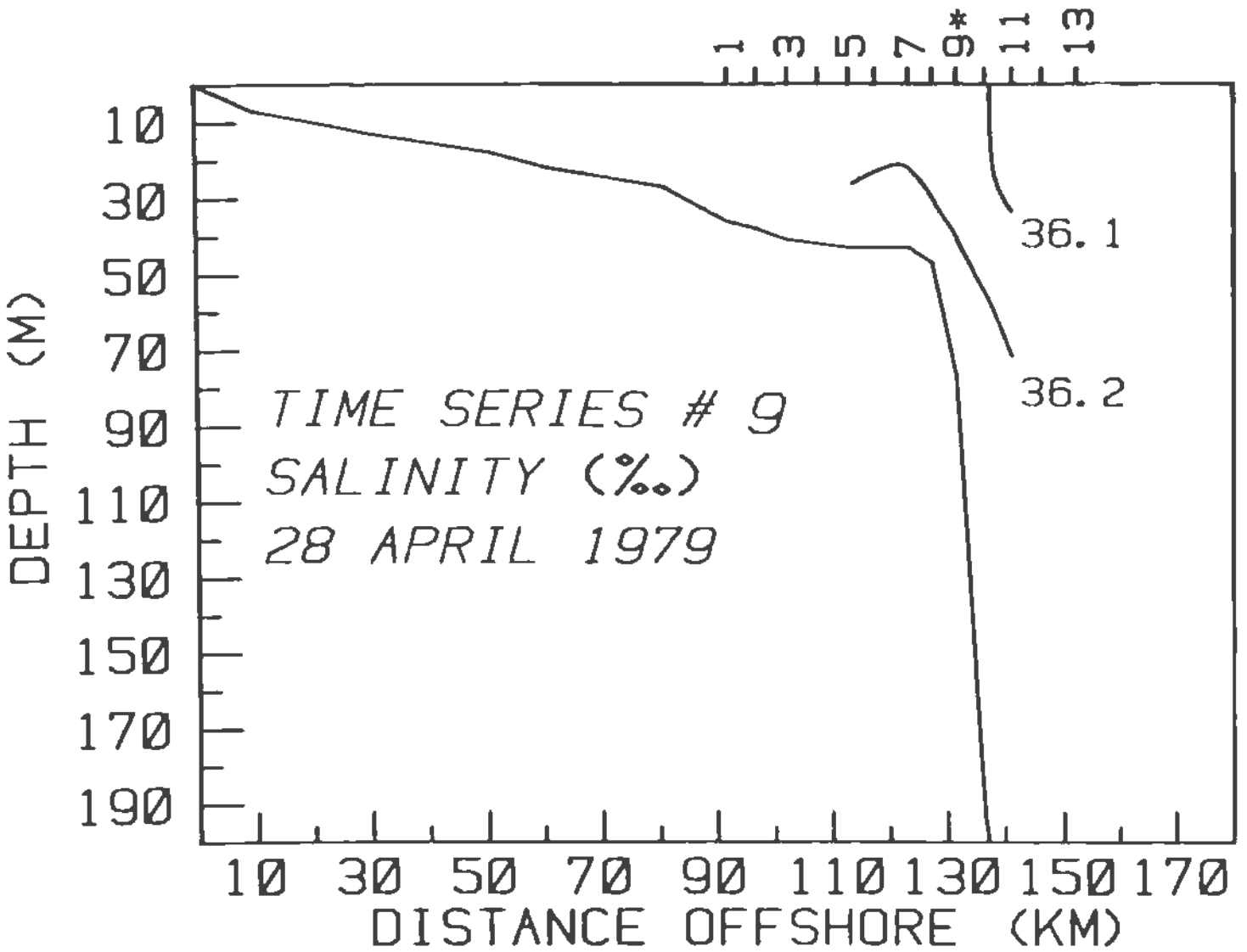


Figure 65. Time Series #9 Salinity, 28 April

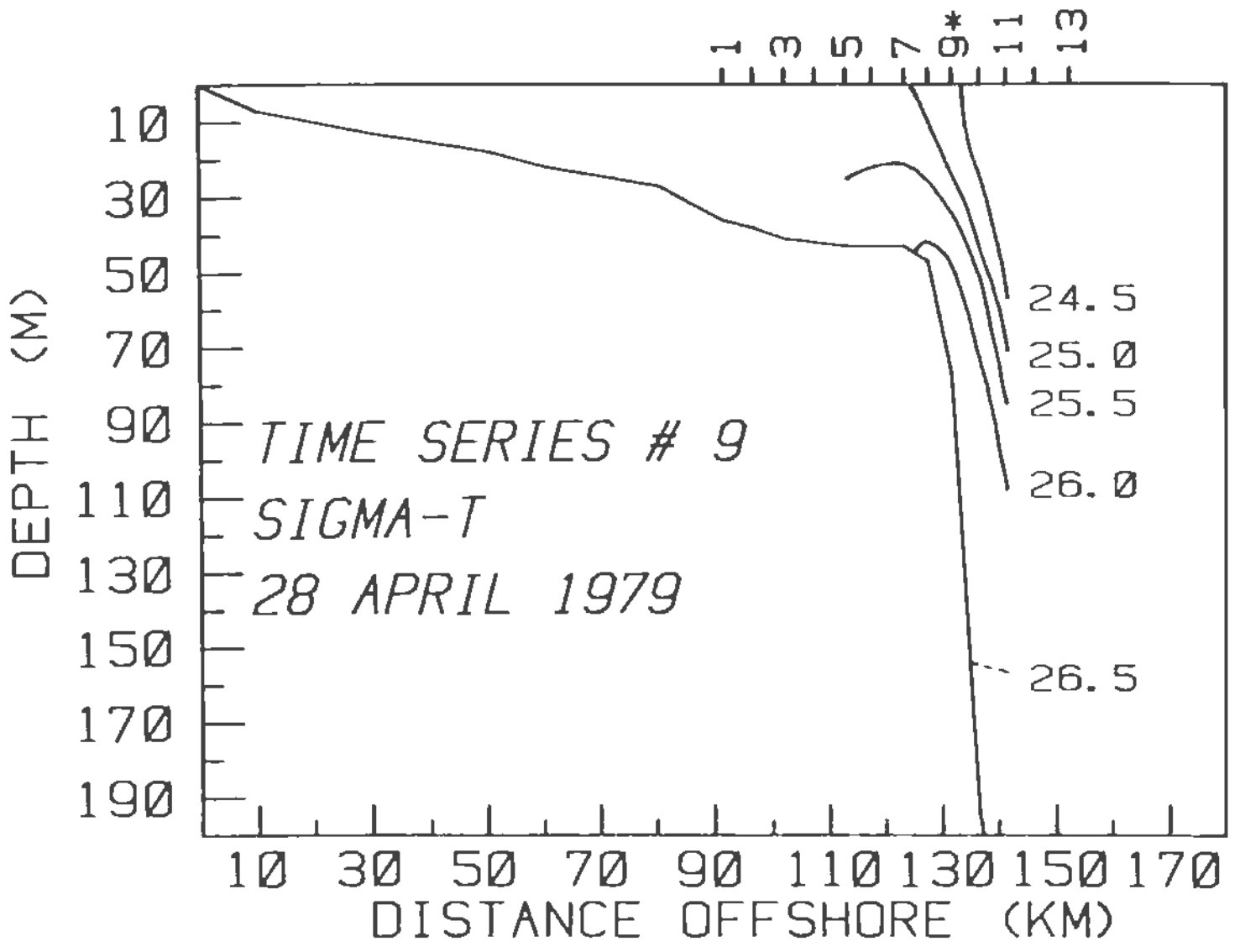


Figure 66. Time Series #9 Sigma-T, 28 April

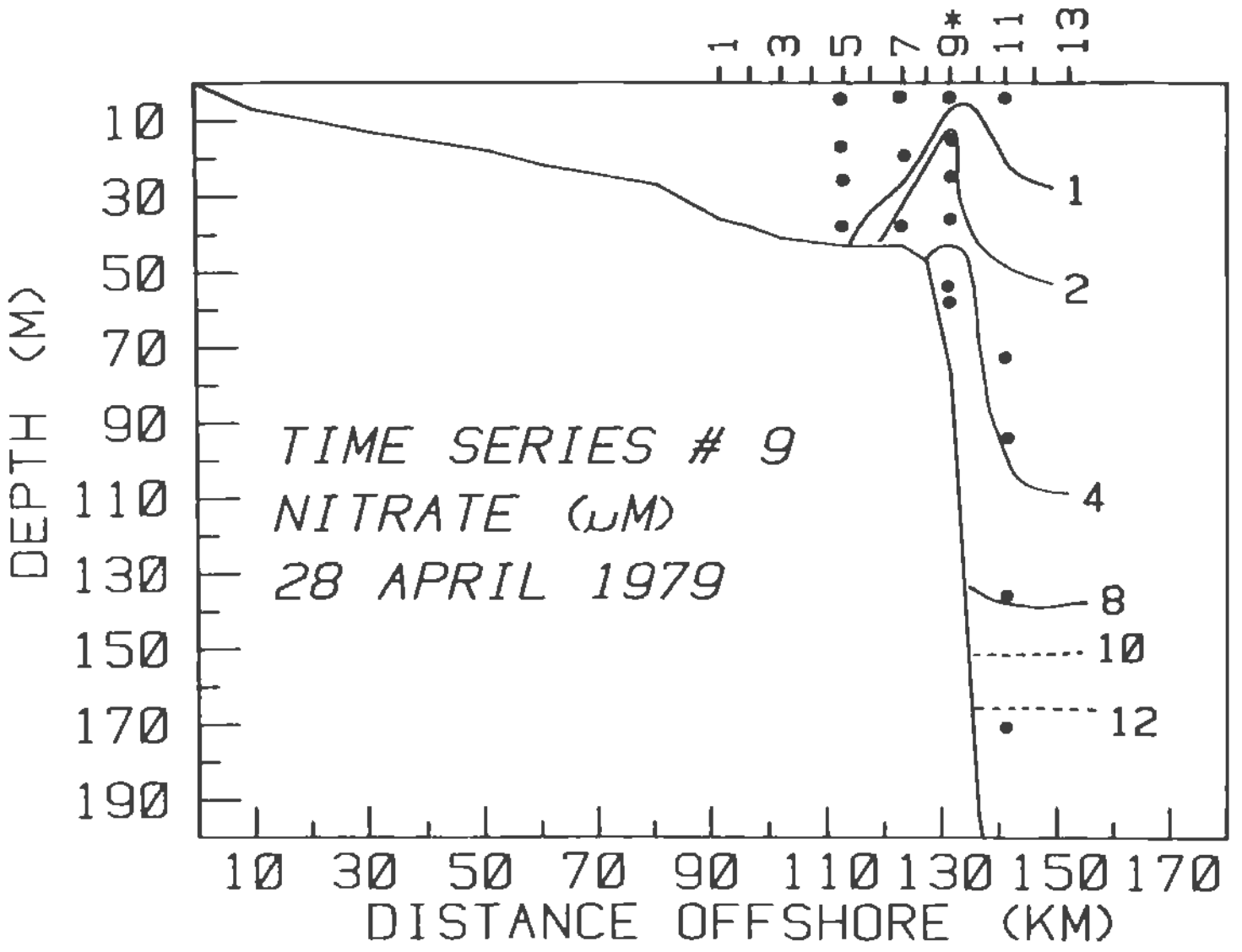


Figure 67. Time Series #9 Nitrate, 28 April

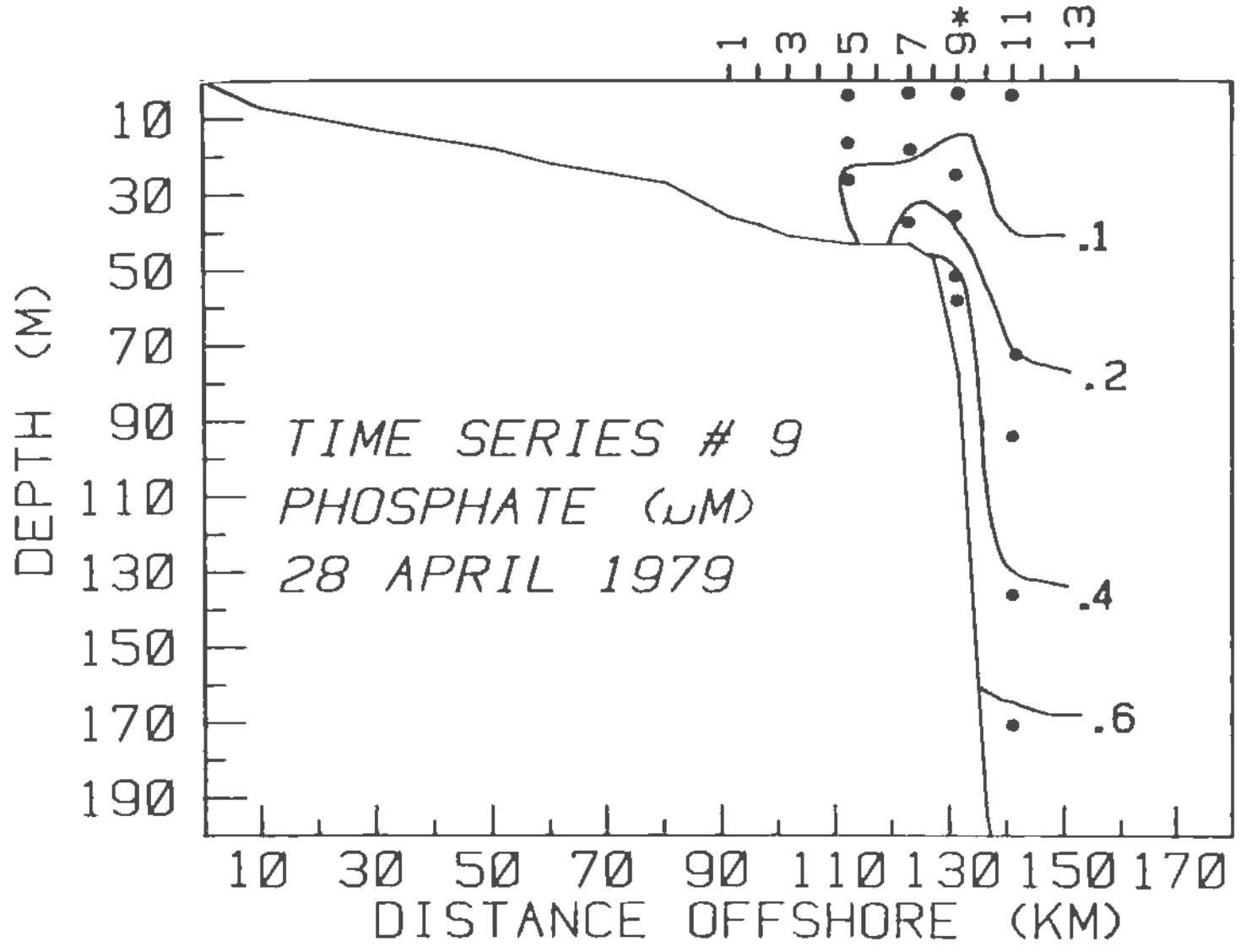


Figure 68. Time Series #9 Phosphate, 28 April

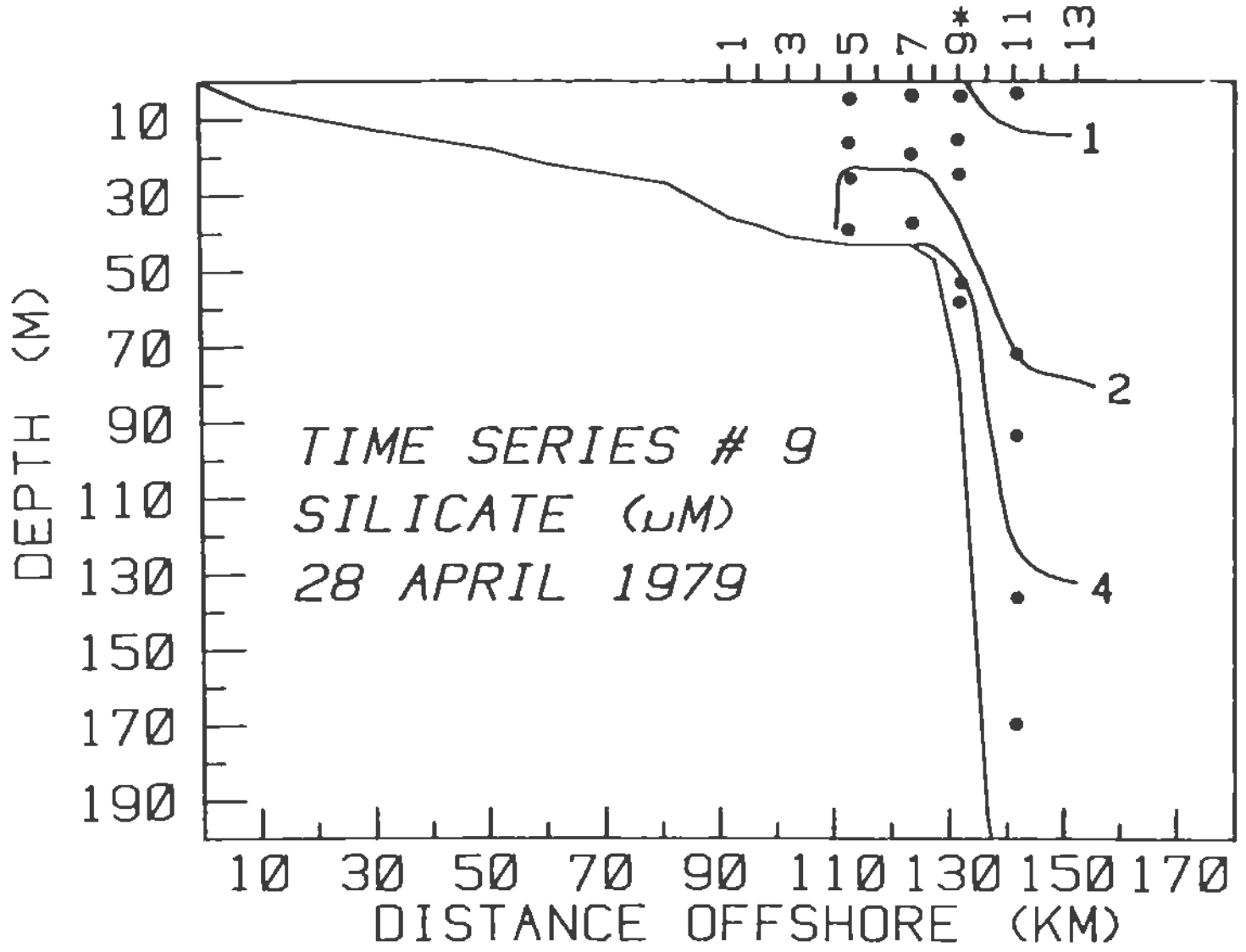


Figure 69. Time Series #9 Silicate, 28 April

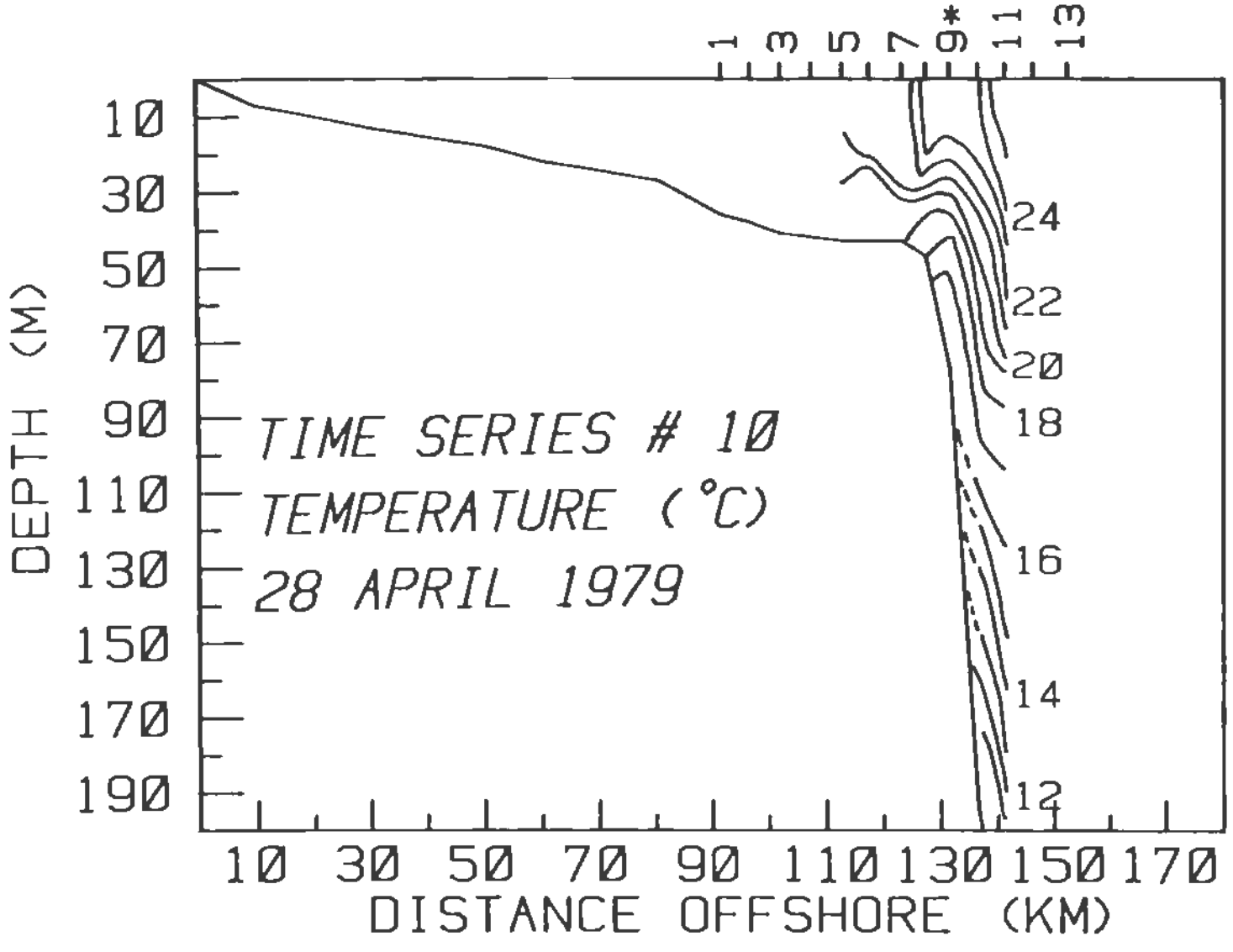


Figure 70. Time Series #10 Temperature, 28 April

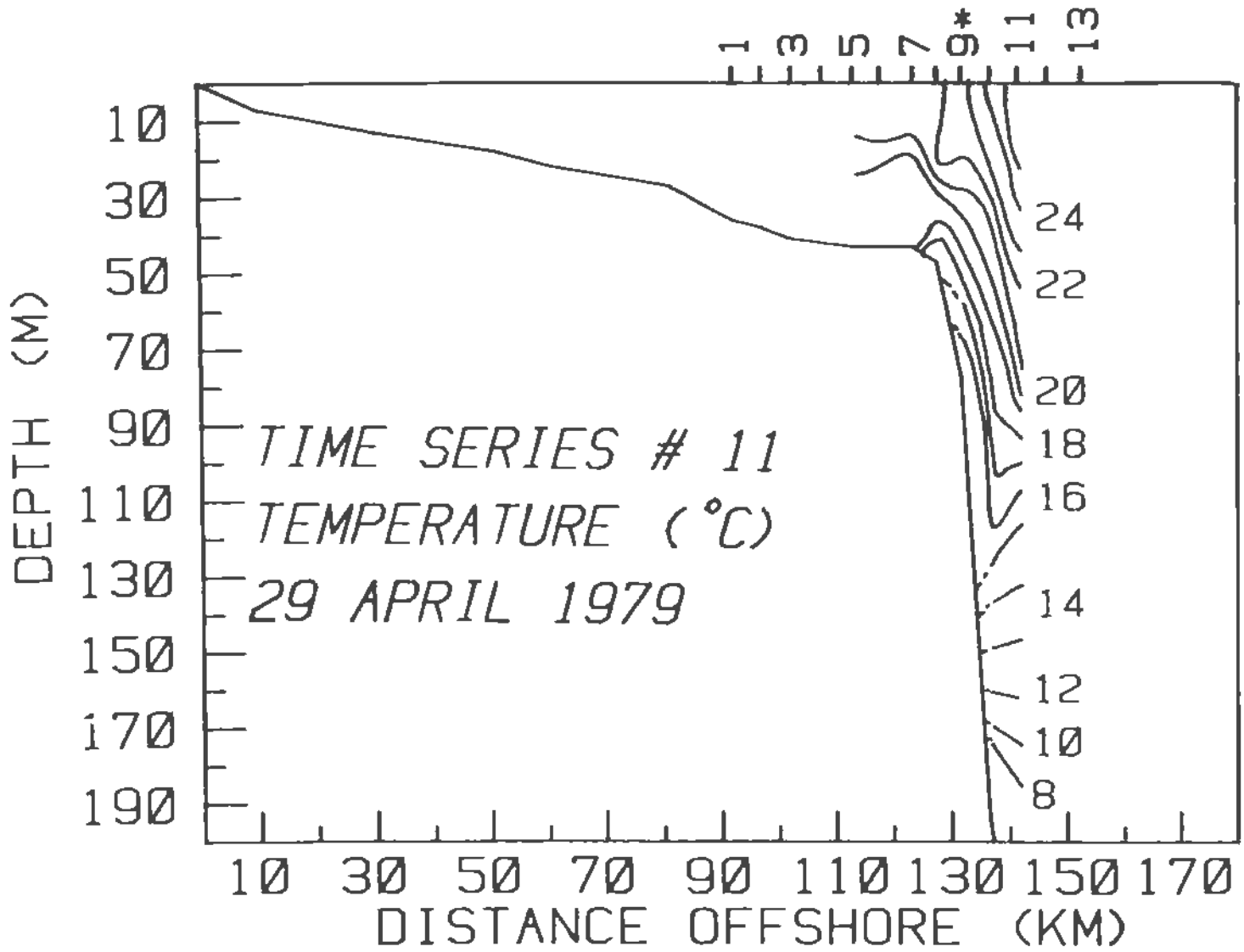


Figure 71. Time Series #11 Temperature, 29 April

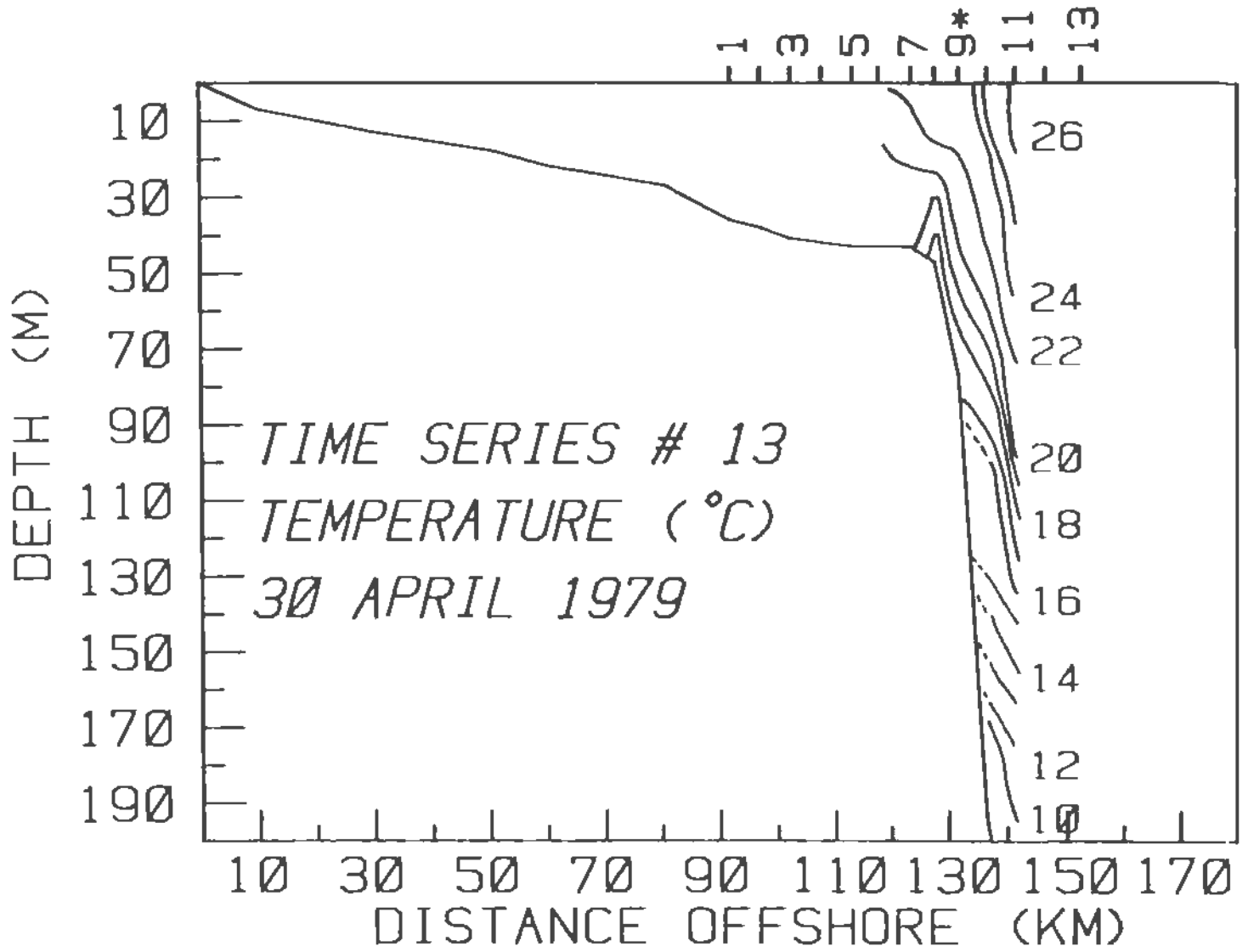


Figure 72. Time Series #13 Temperature, 30 April

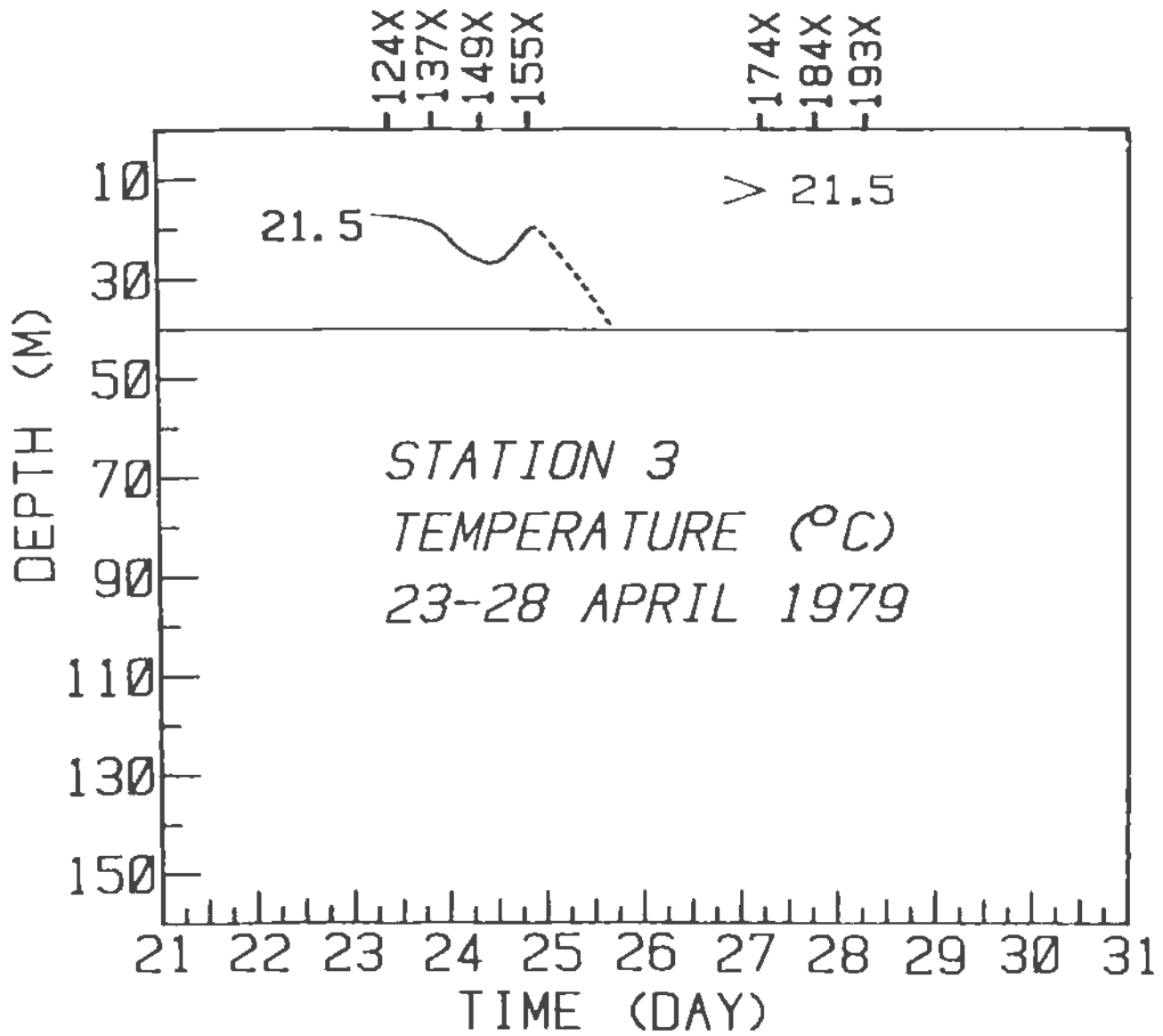


Figure 73. Station 3 Time Series Temperature, 23-28 April

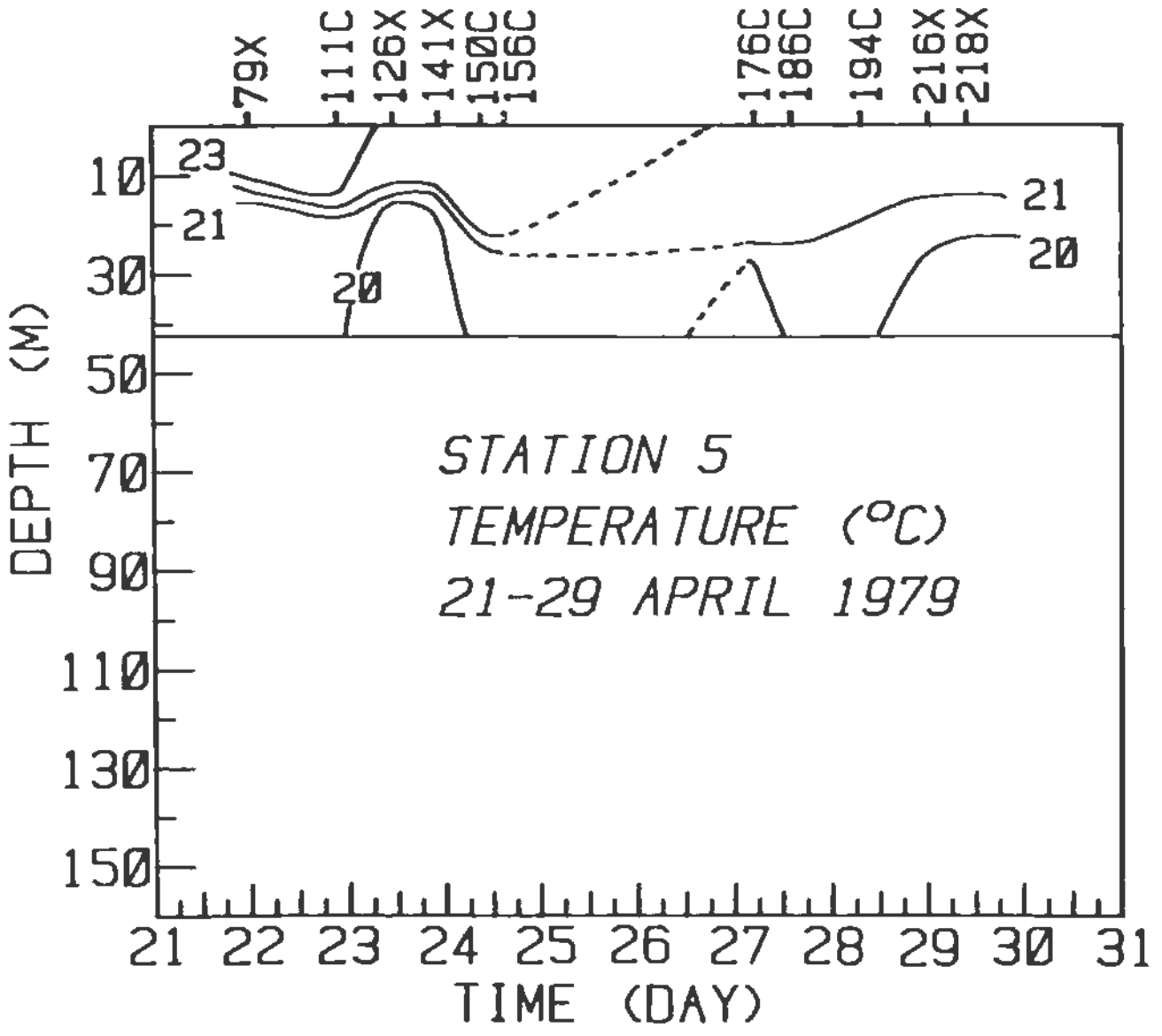


Figure 74. Station 5 Time Series Temperature, 21-29 April

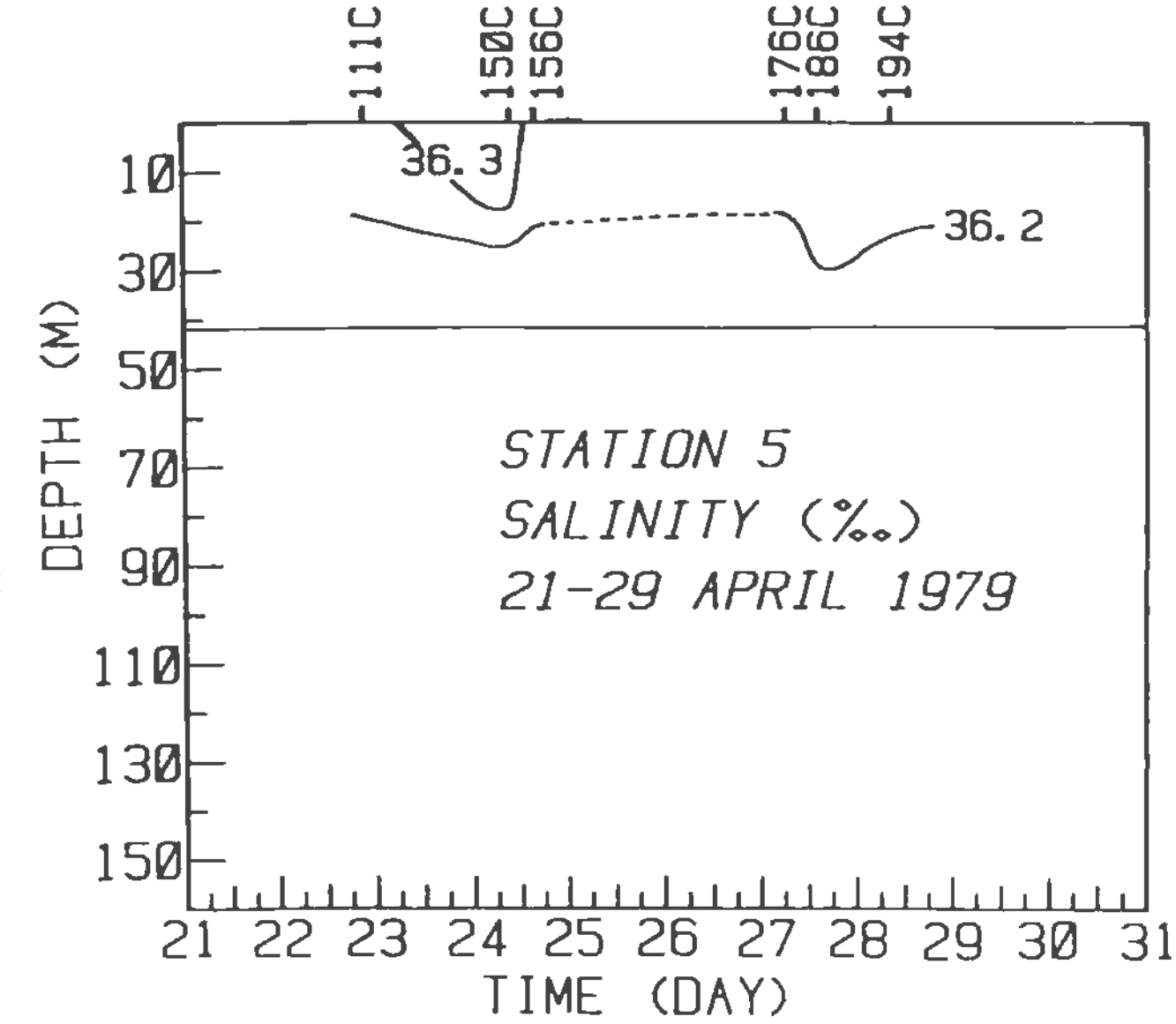


Figure 75. Station 5 Time Series Salinity, 21-29 April

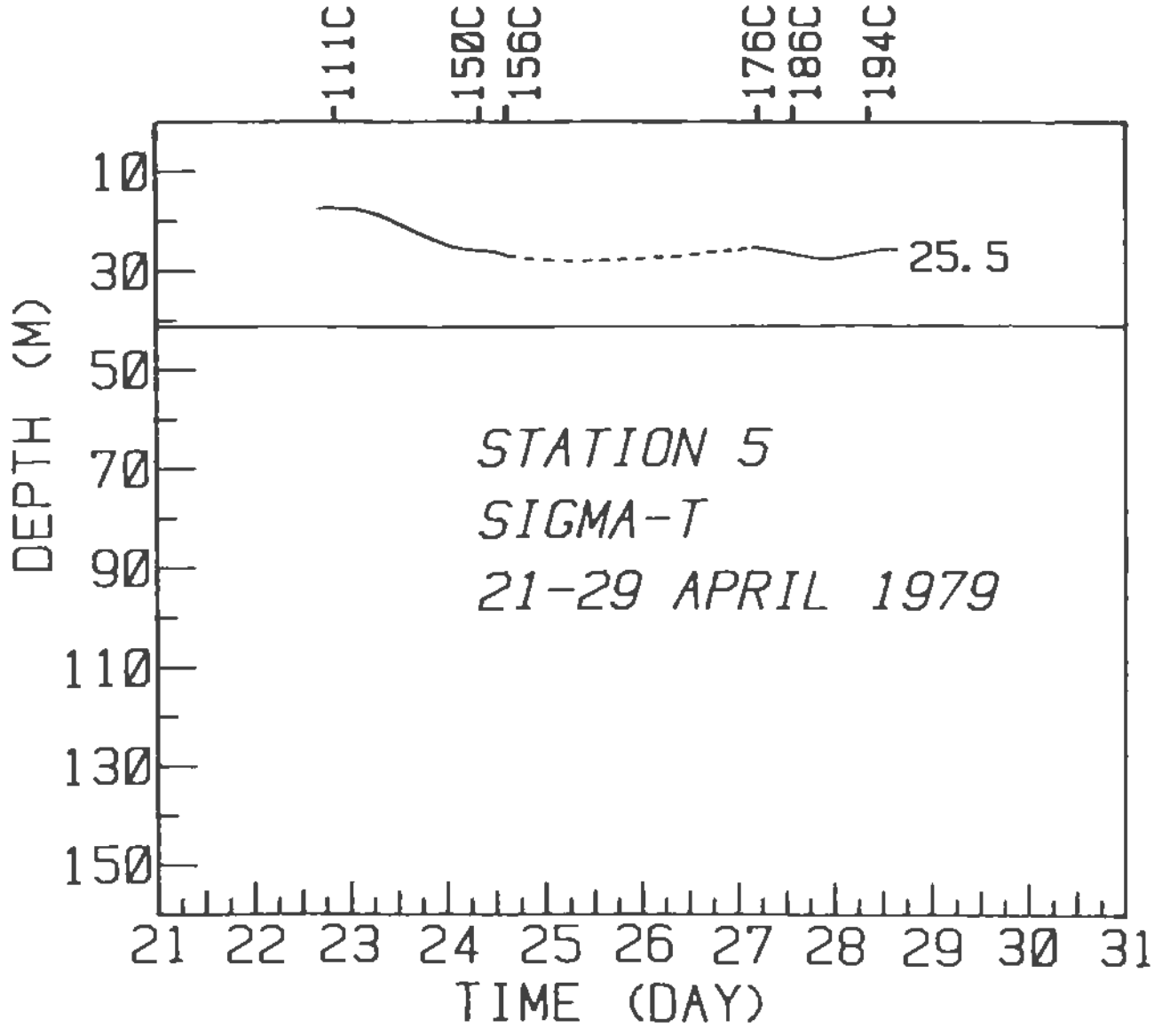


Figure 76. Station 5 Time Series Sigma-T, 21-29 April

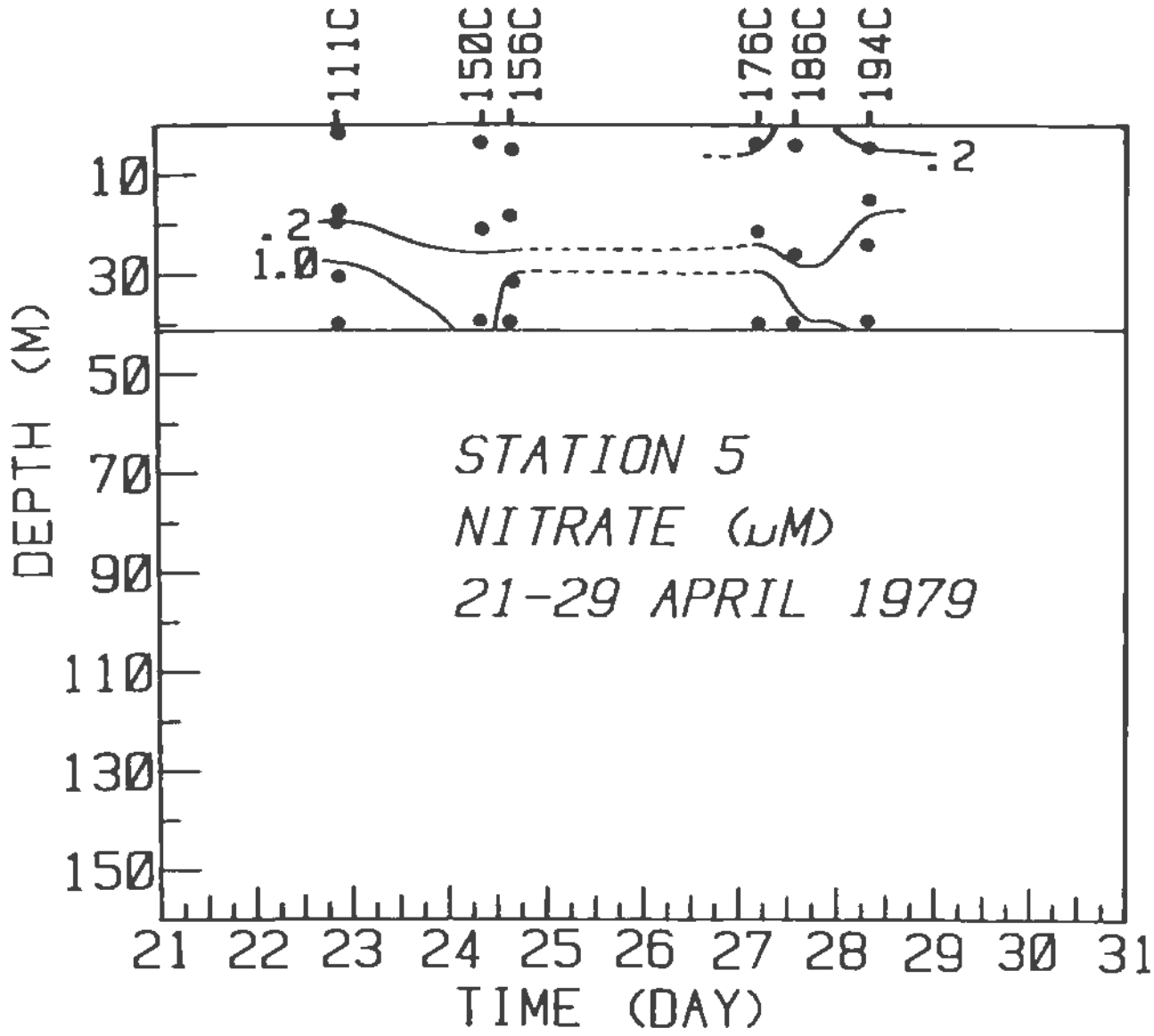


Figure 77. Station 5 Time Series Nitrate, 21-29 April

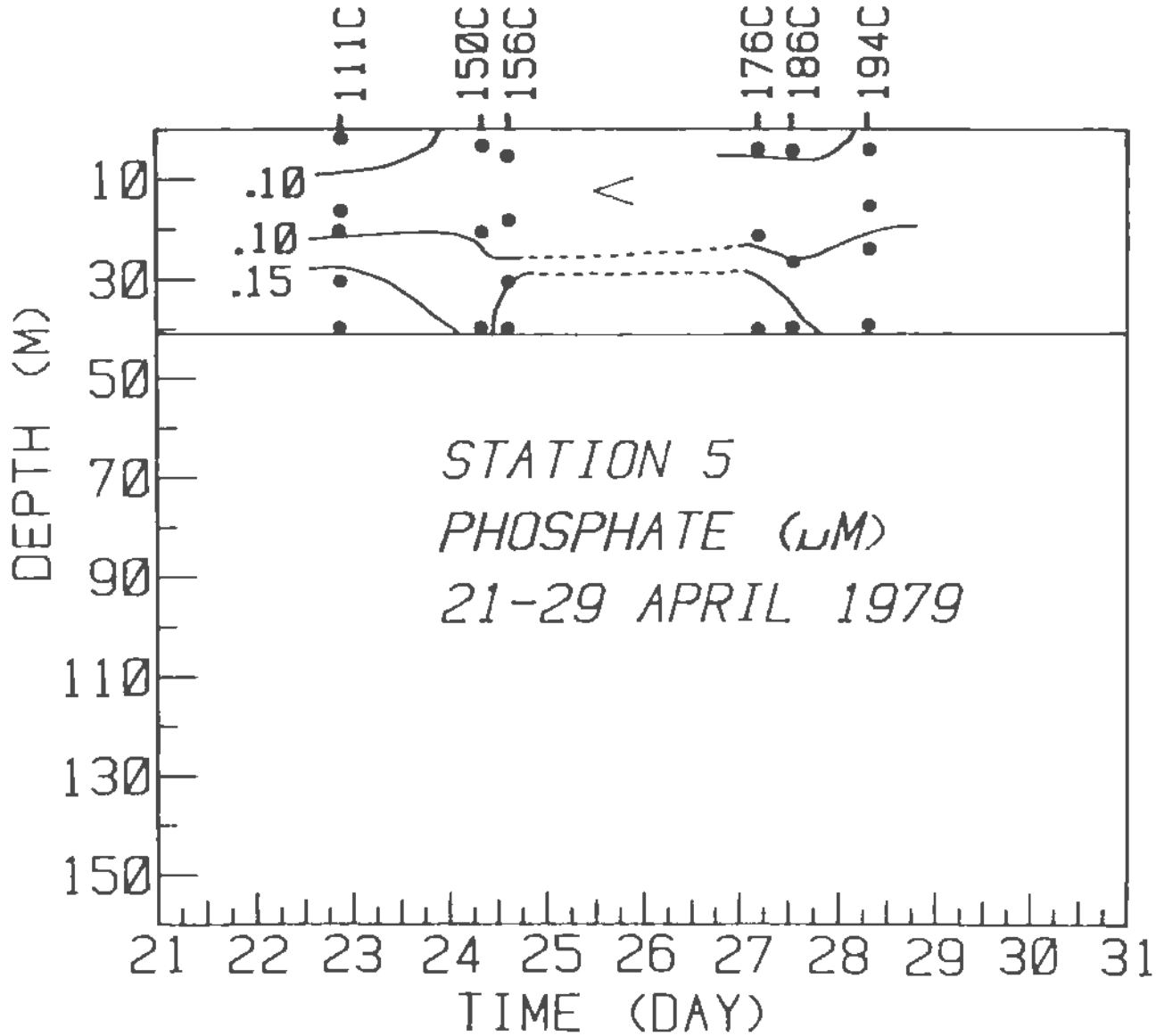


Figure 18. Station 5 Time Series Phosphate, 21-29 April

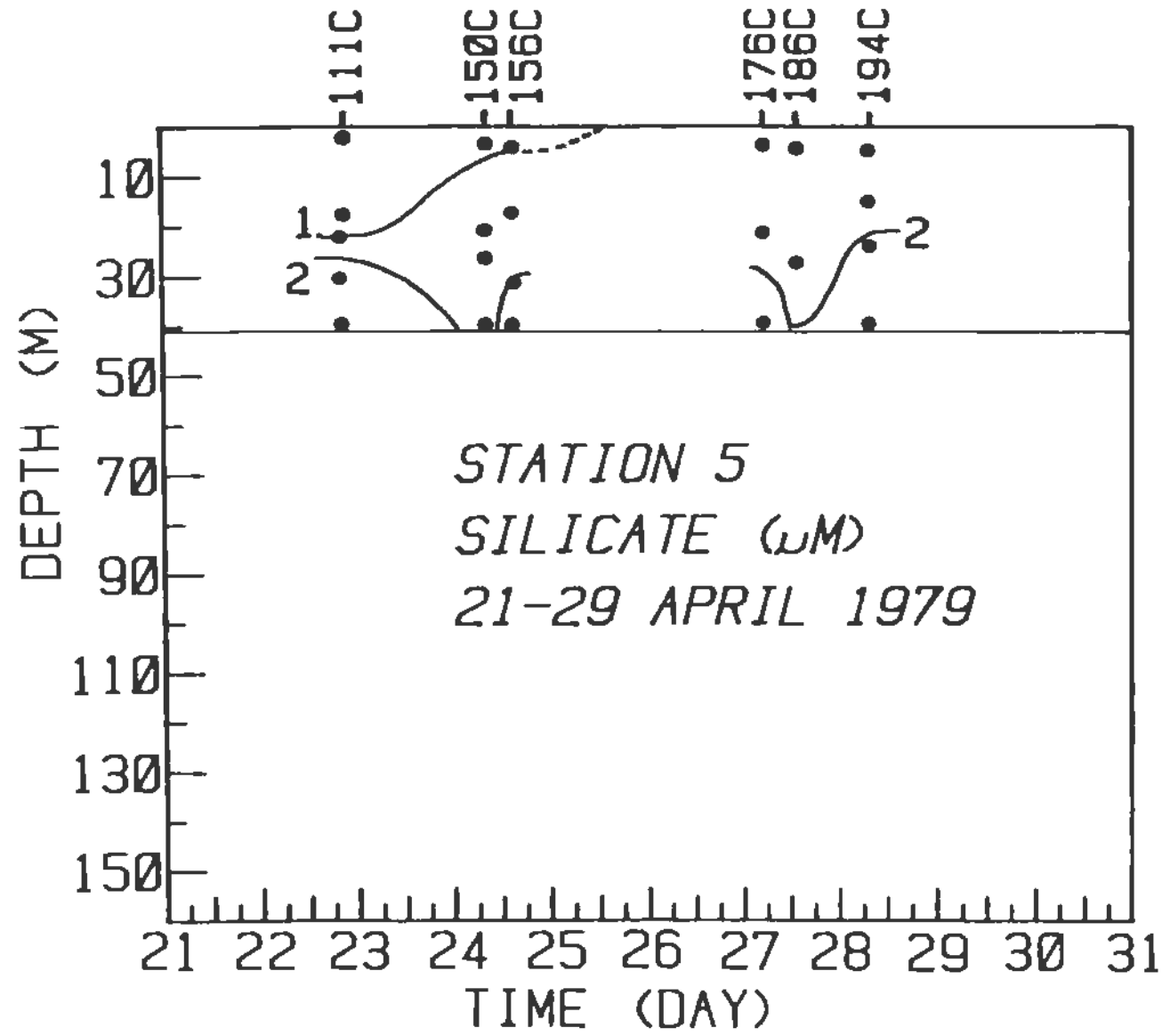


Figure 79. Station 5 Time Series Silicate, 21-29 April

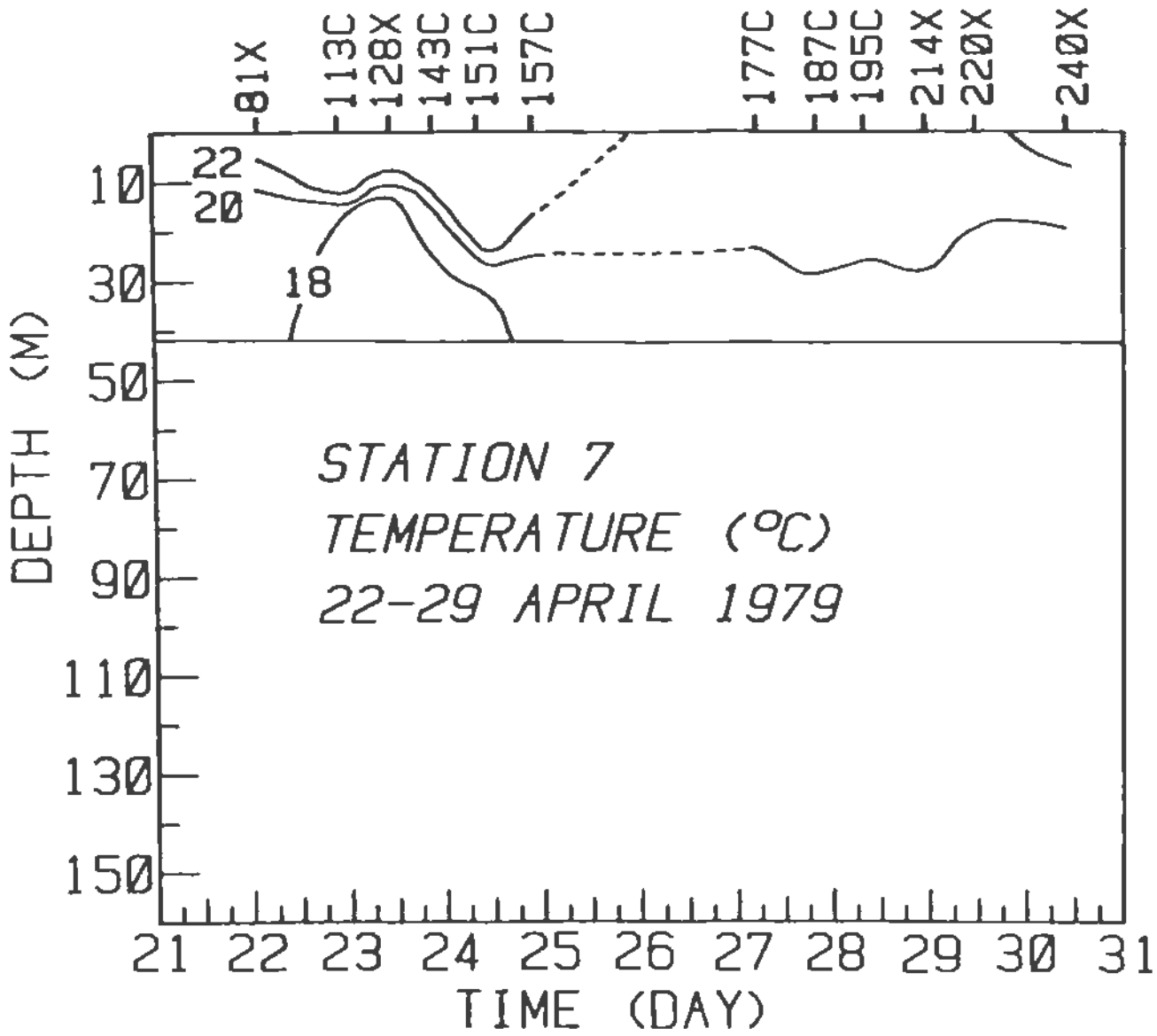


Figure 80. Station 7 Time Series Temperature, 22-29 April

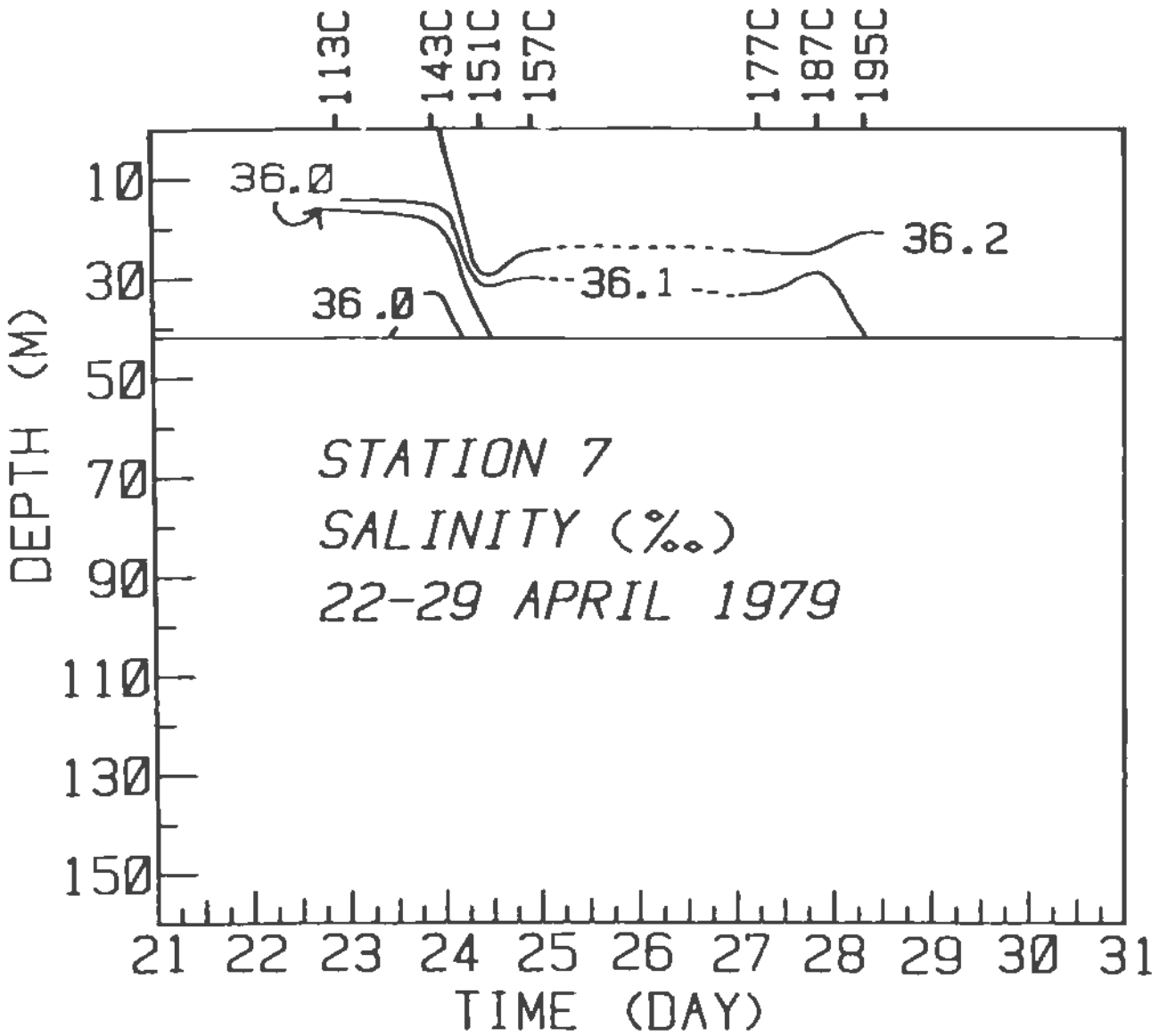


Figure 81. Station 7 Time Series Salinity, 22-29 April

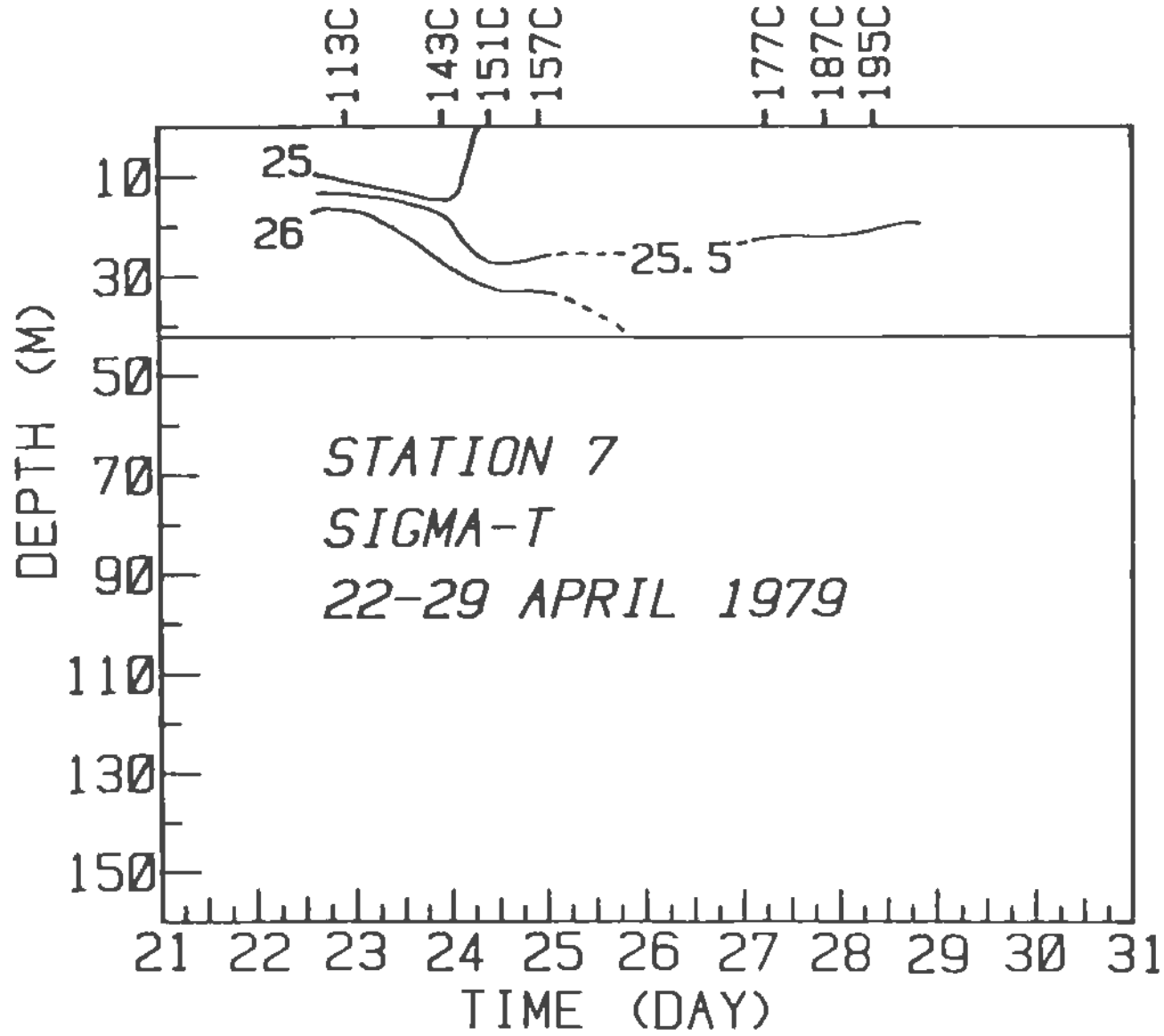


Figure 82. Station 7 Time Series Sigma-T, 22-29 April

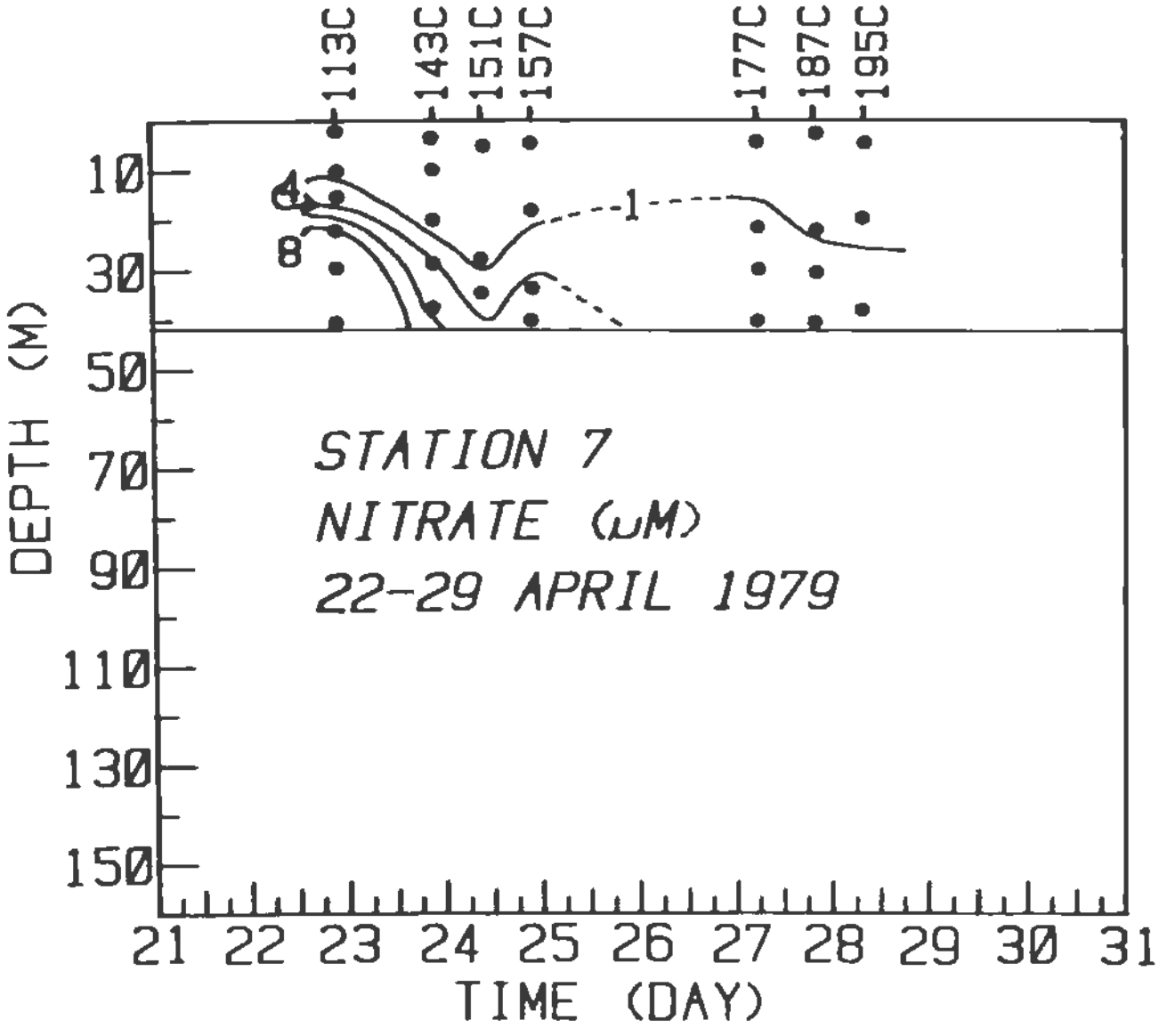


Figure 83. Station 7 Time Series Nitrate, 22-29 April

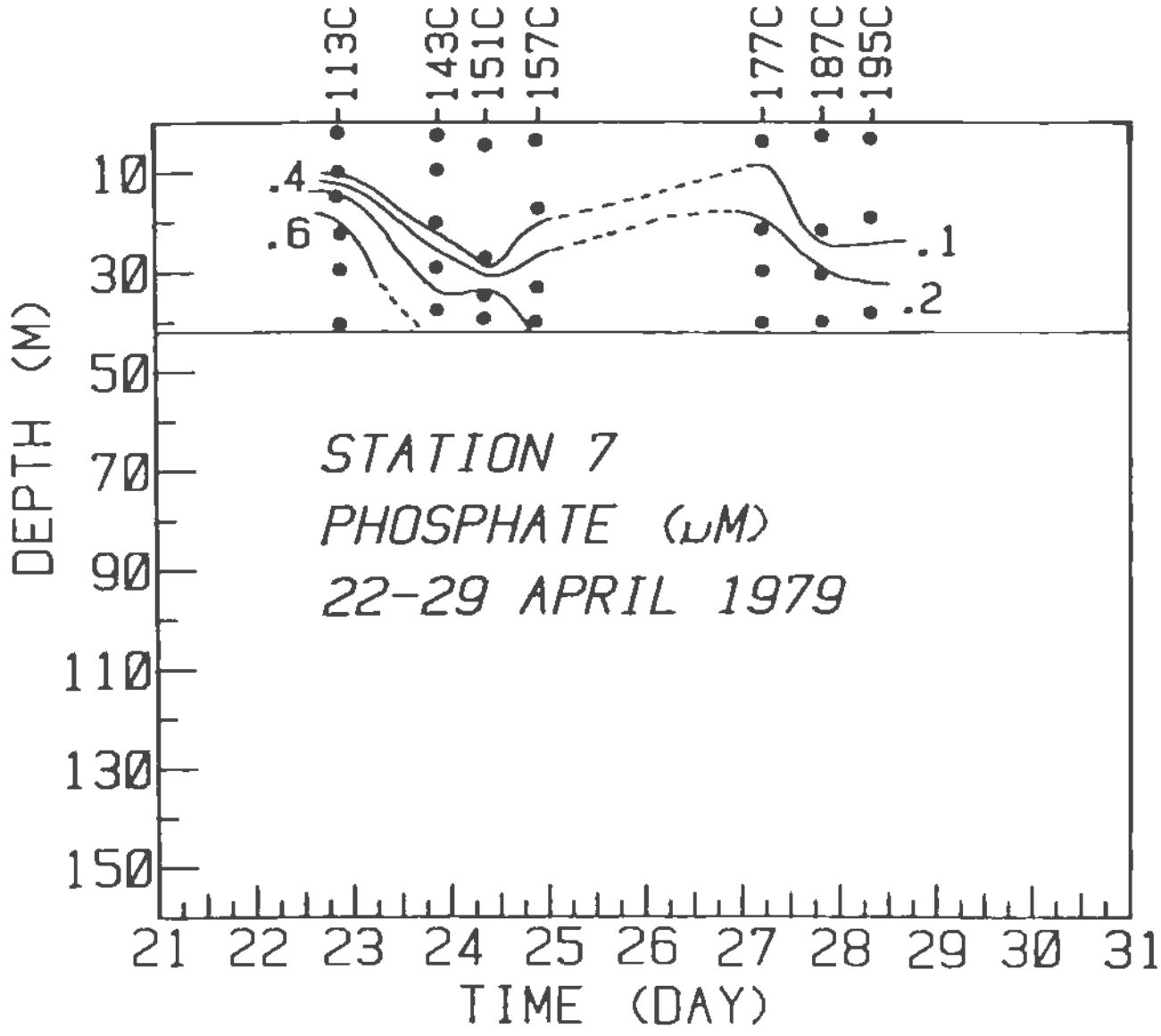


Figure 84. Station 7 Time Series Phosphate, 22-29 April

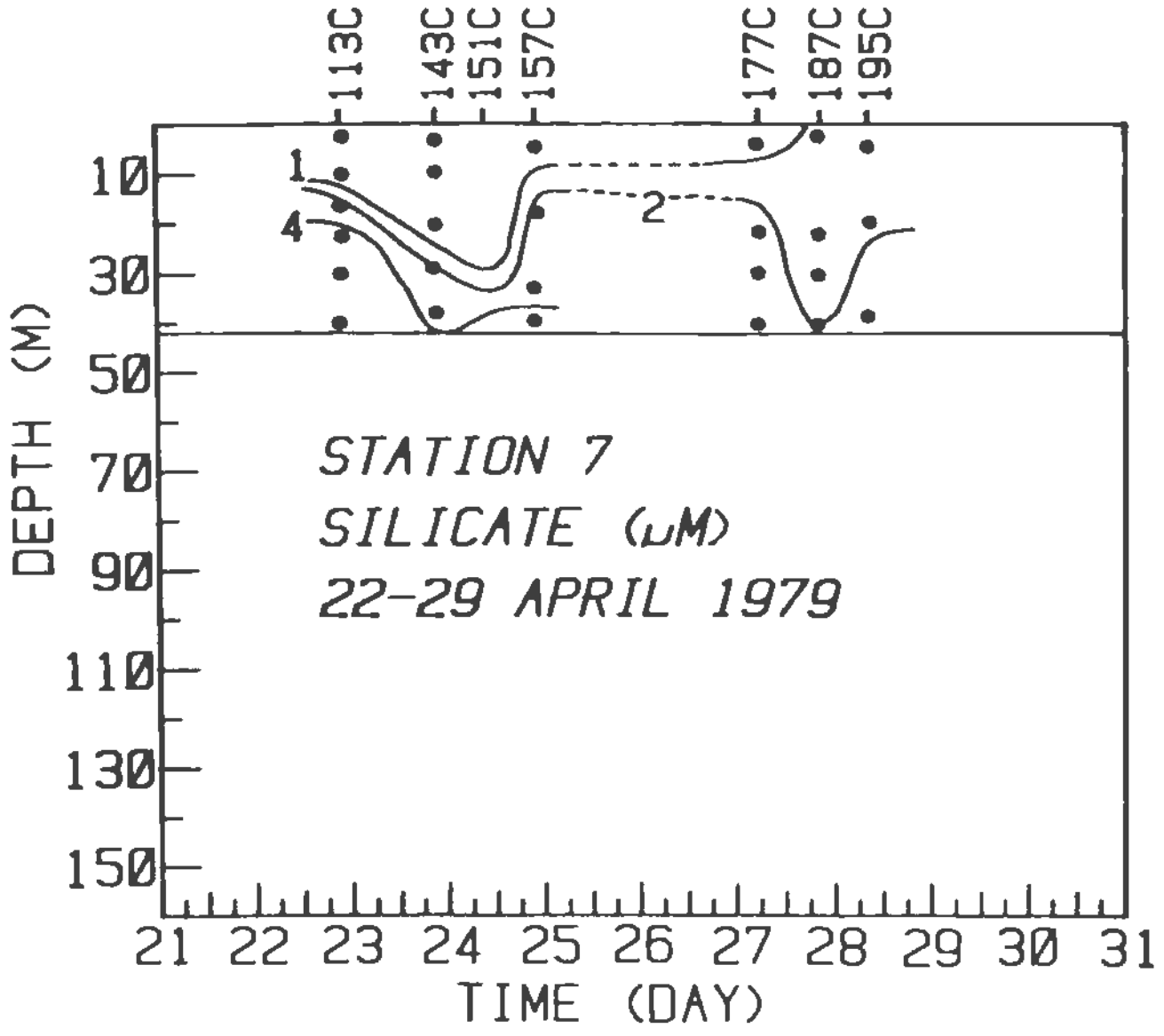


Figure 85. Station 7 Time Series Silicate, 22-29 April

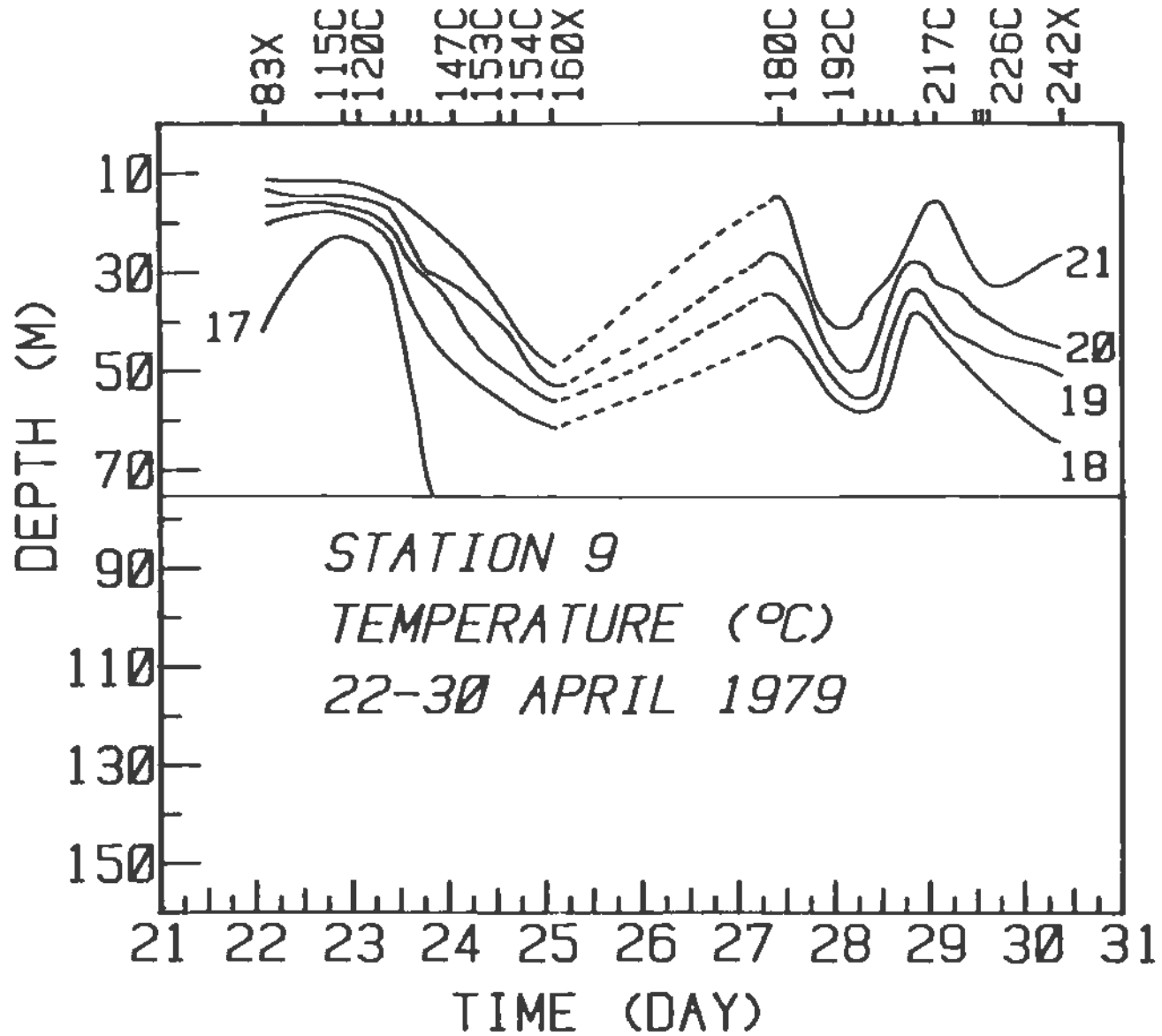


Figure 86. Station 9 Time Series Temperature, 22-30 April

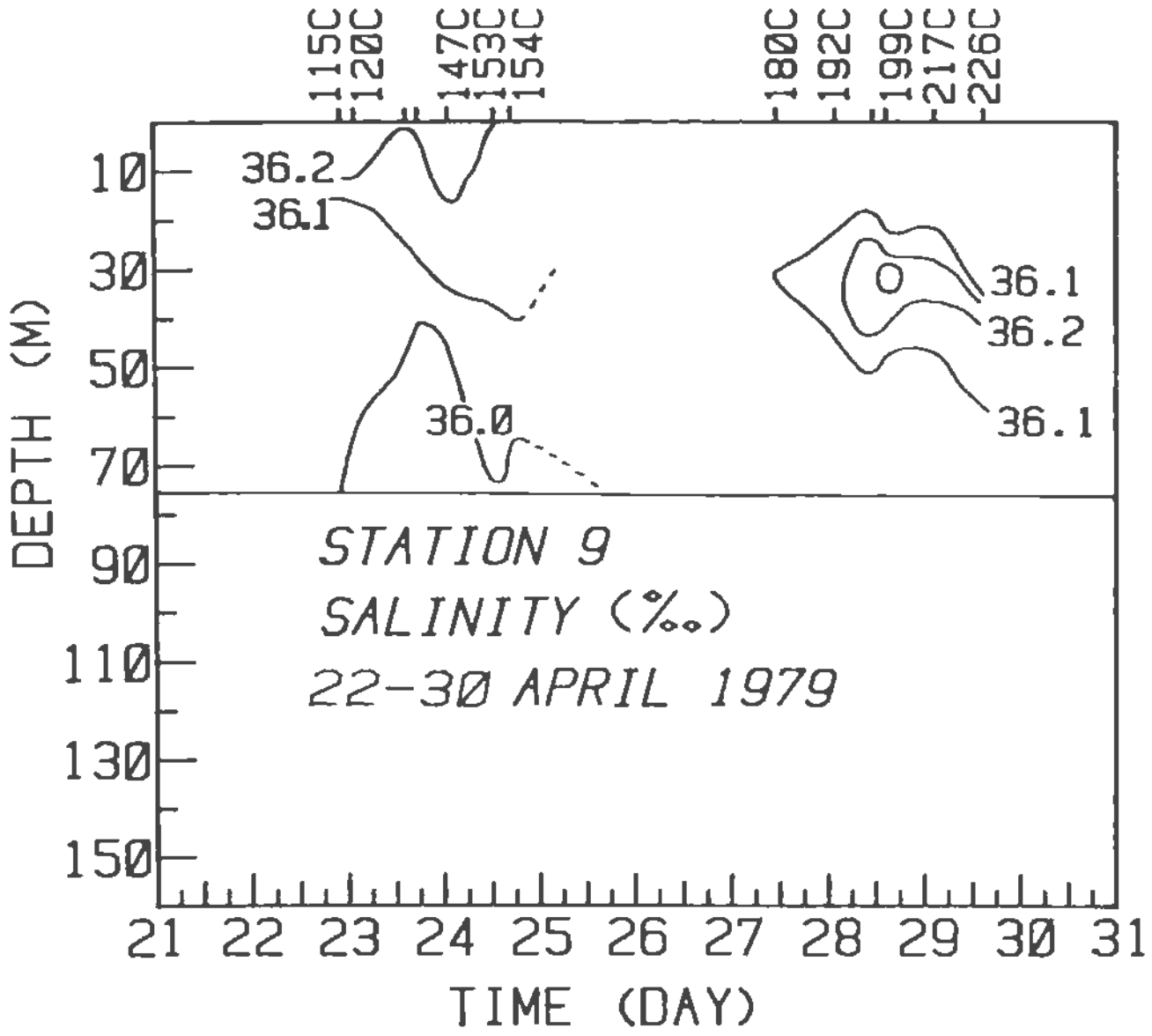


Figure 87. Station 9 Time Series Salinity, 22-30 April

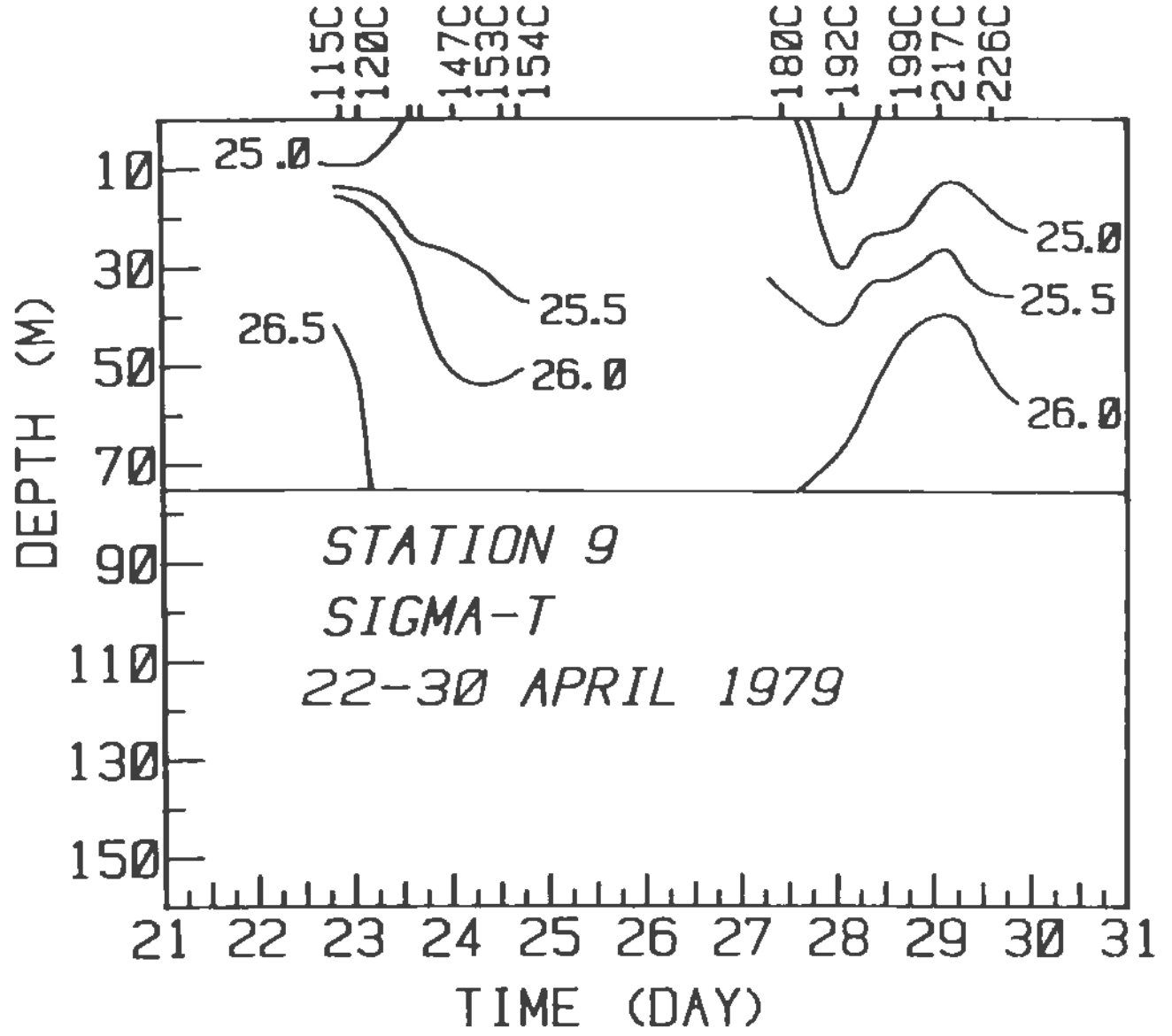


Figure 88. Station 9 Time Series Sigma-T, 22-30 April

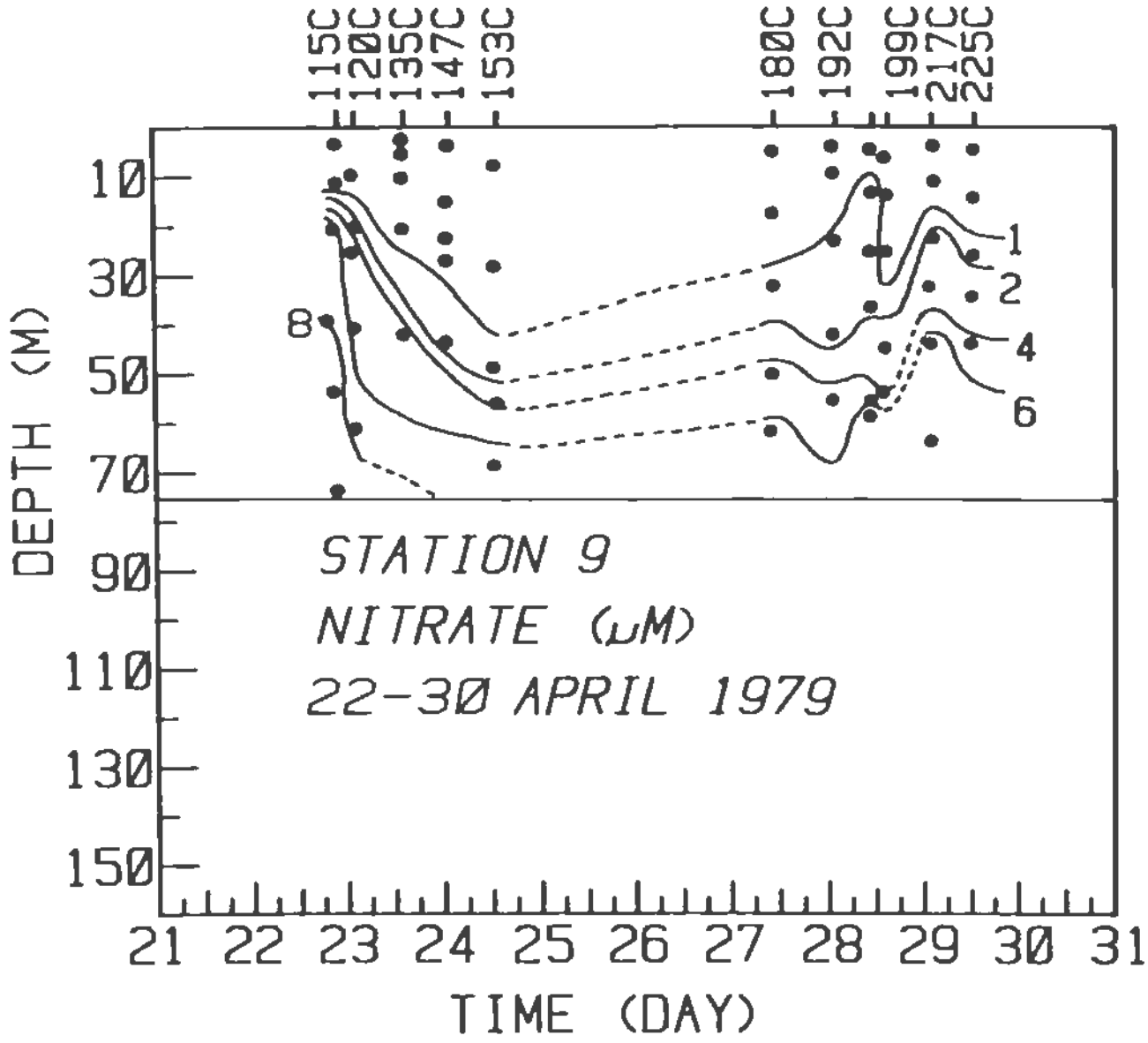


Figure 89. Station 9 Time Series Nitrate, 22-30 April

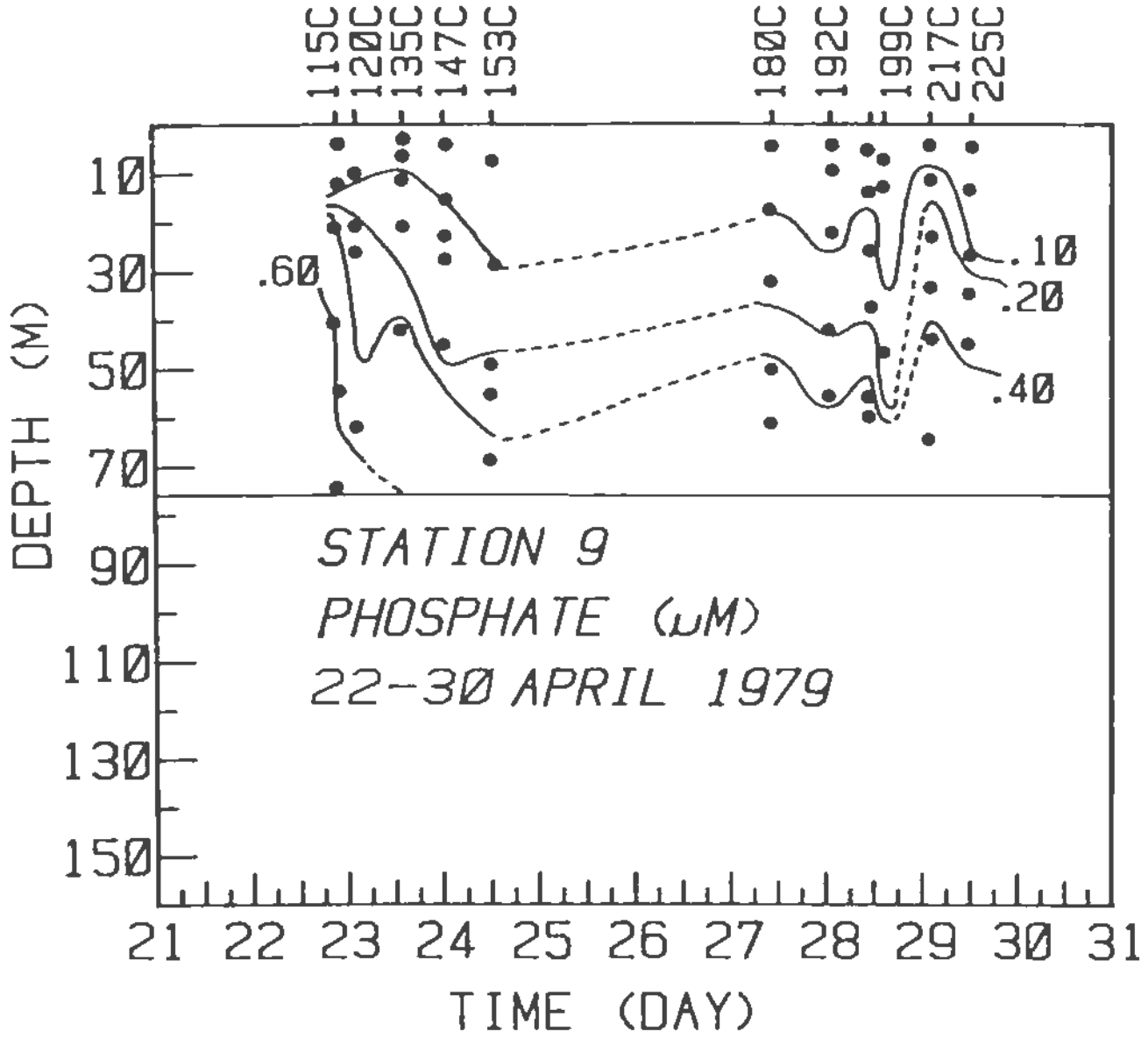


Figure 90. Station 9 Time Series Phosphate, 22-30 April

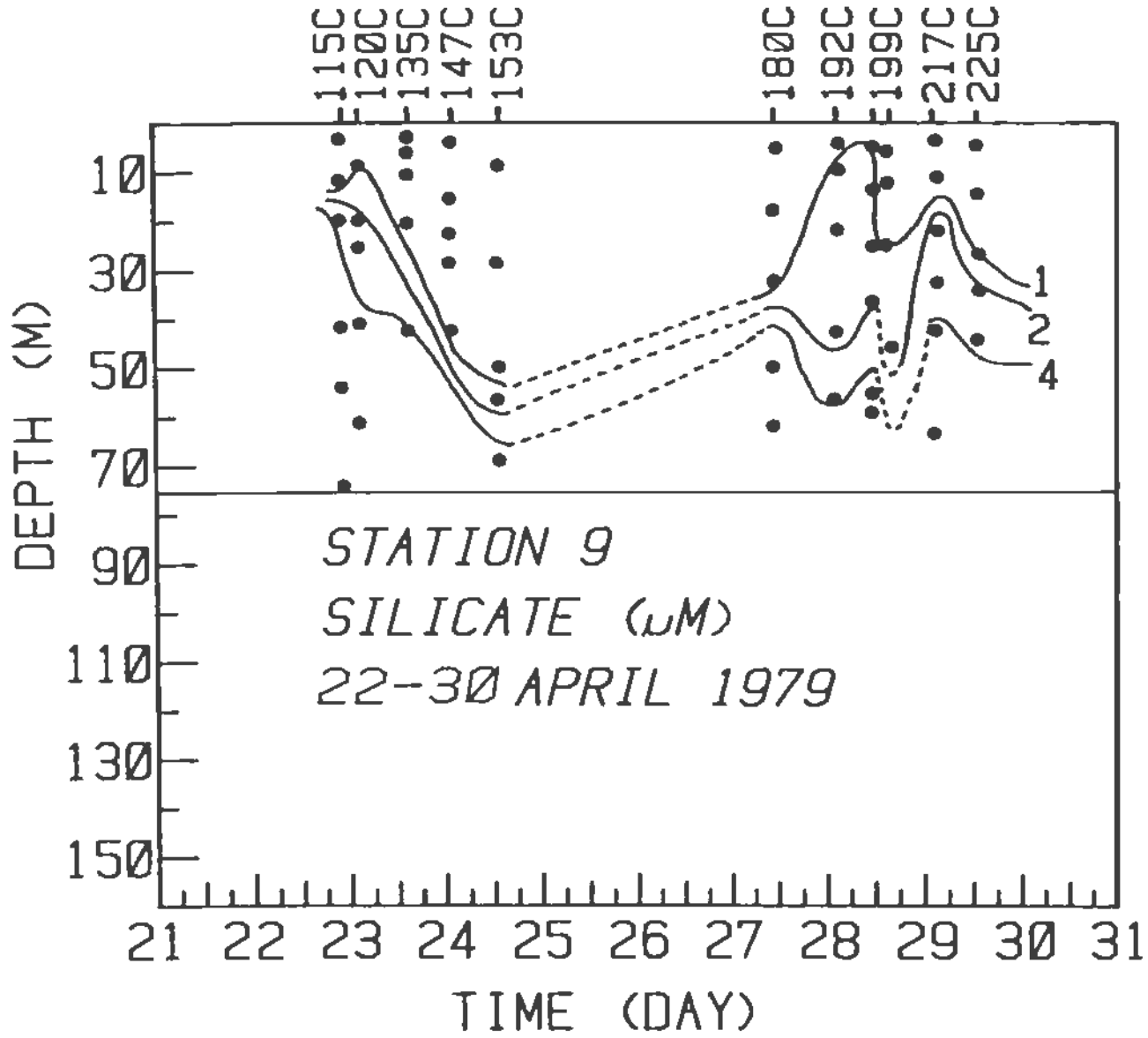


Figure 91. Station 9 Time Series Silicate, 22-30 April

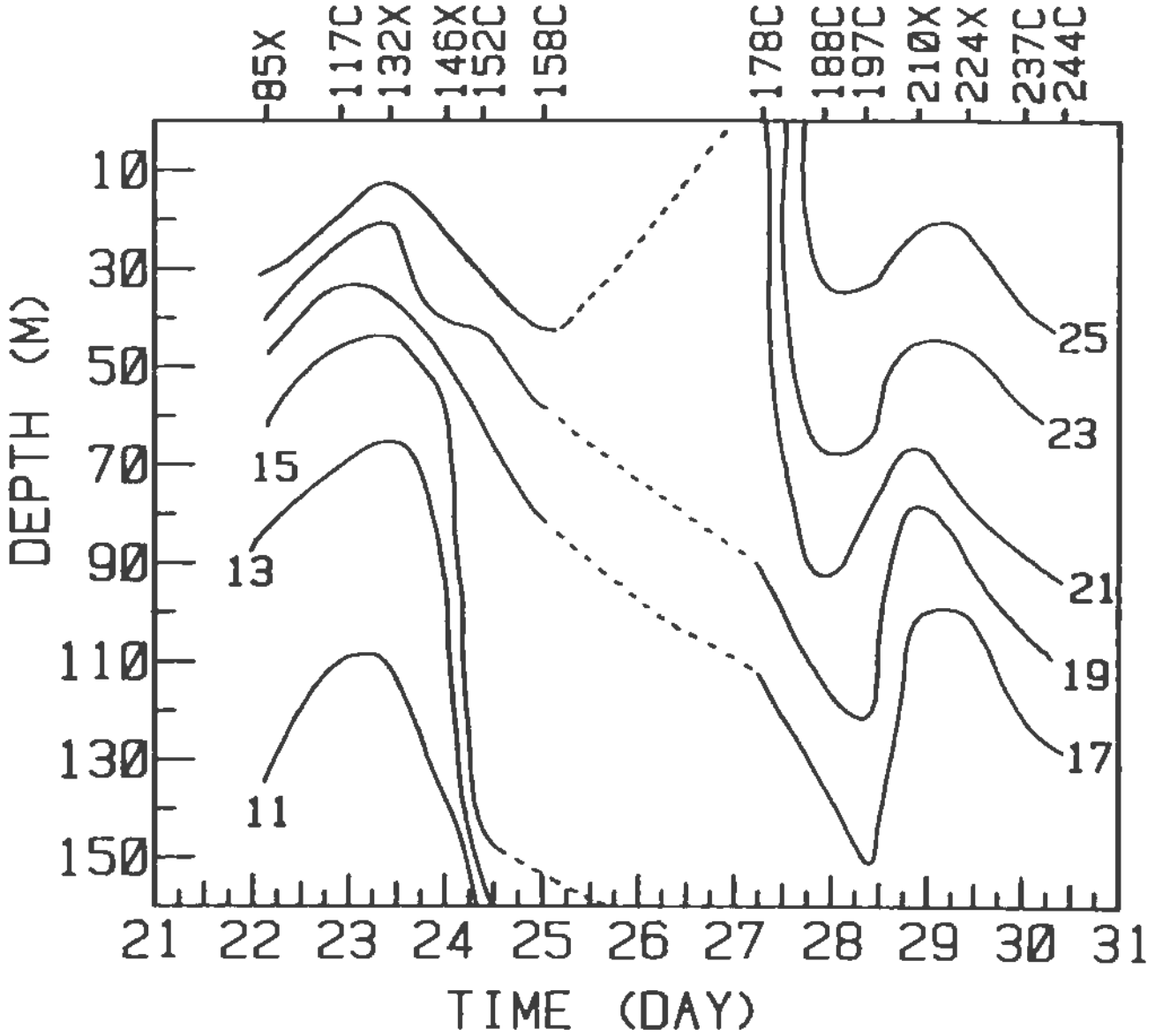


Figure 92. Station 11 Time Series Temperature, 22-30 April

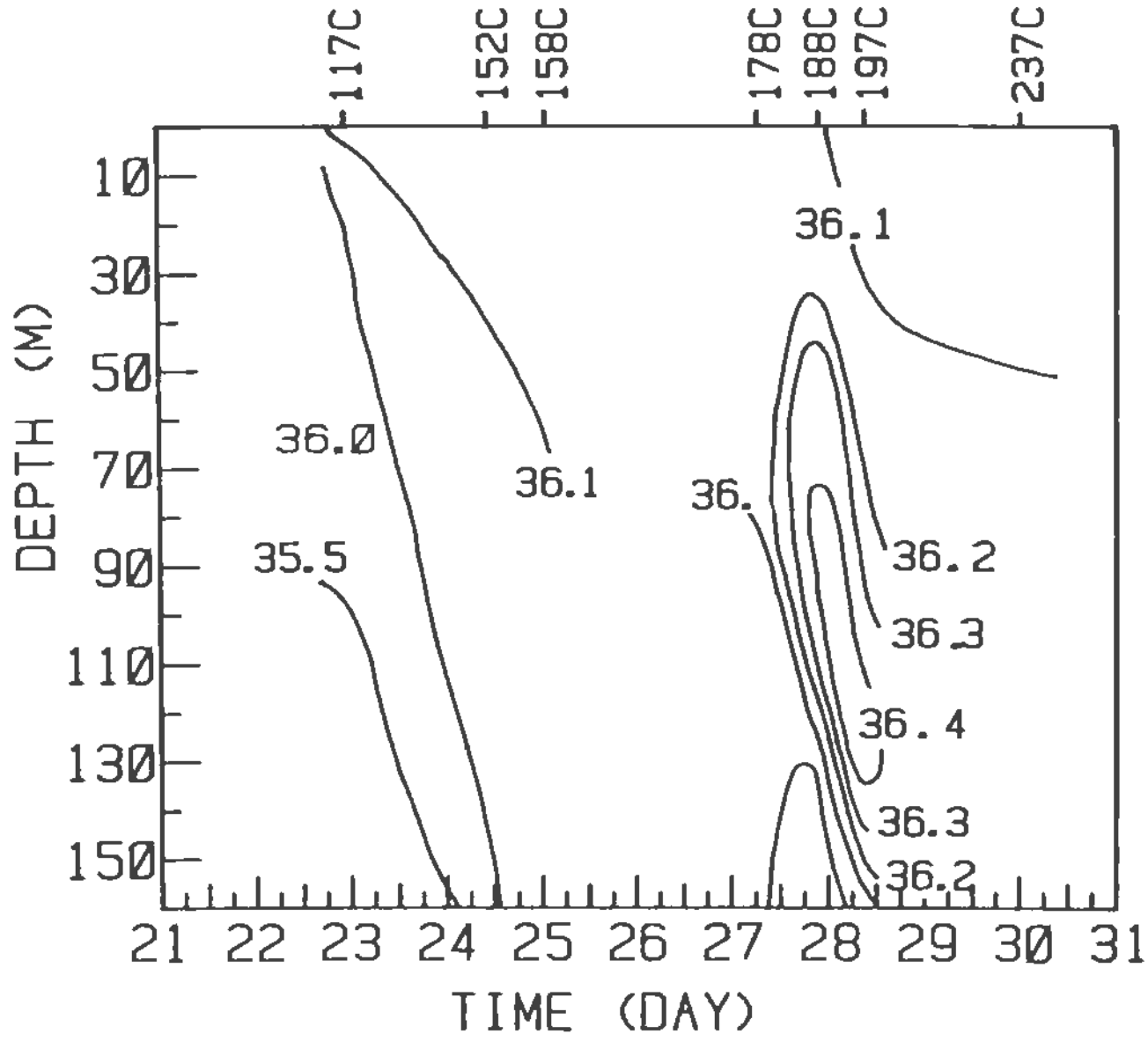


Figure 93. Station 11 Time Series Salinity, 22-30 April

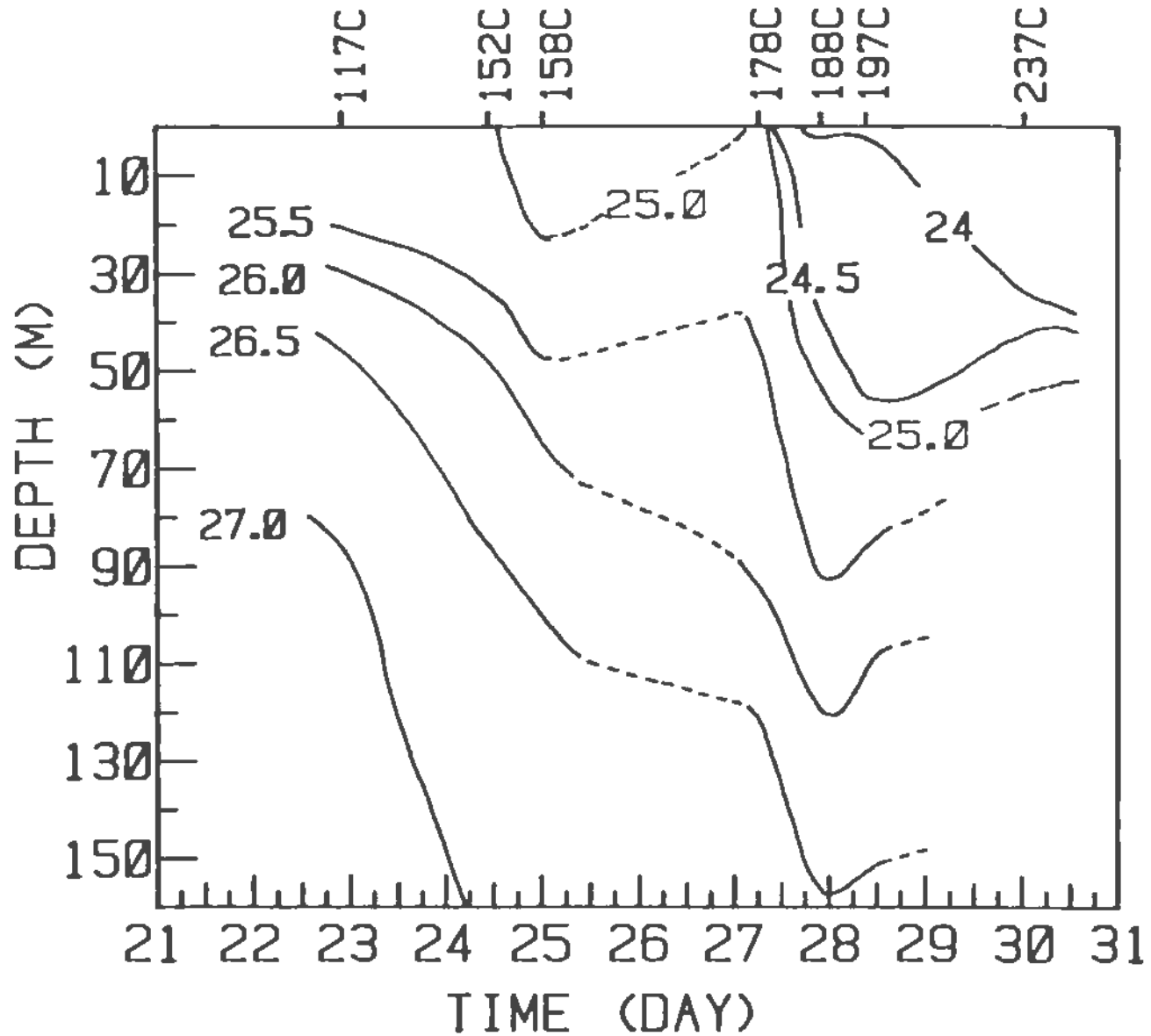


Figure 94. Station 11 Time Series Sigma-T, 22-30 April

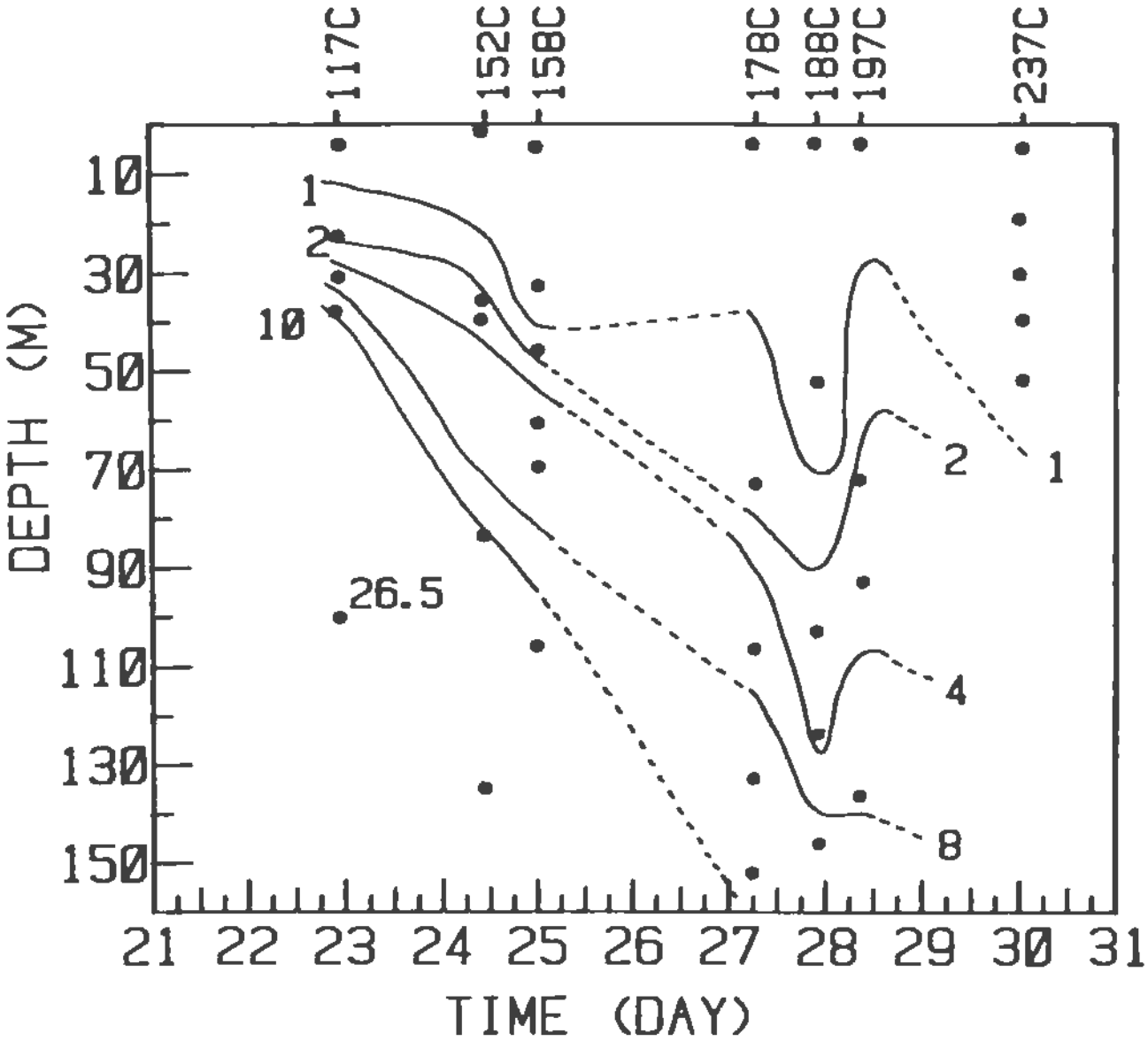


Figure 95. Station 11 Time Series Nitrate, 22-30 April

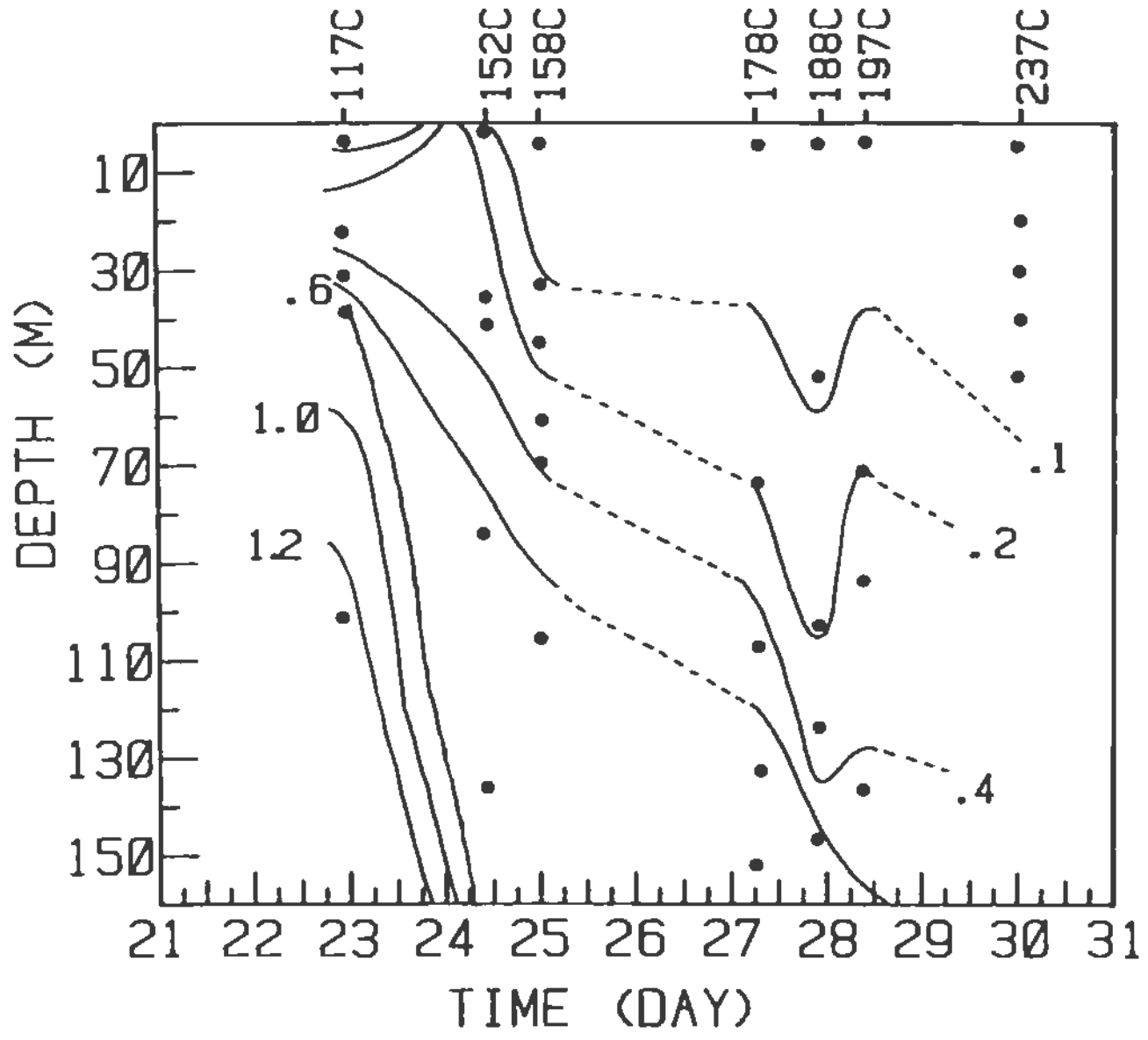


Figure 96. Station 11 Time Series Phosphate, 22-30 April

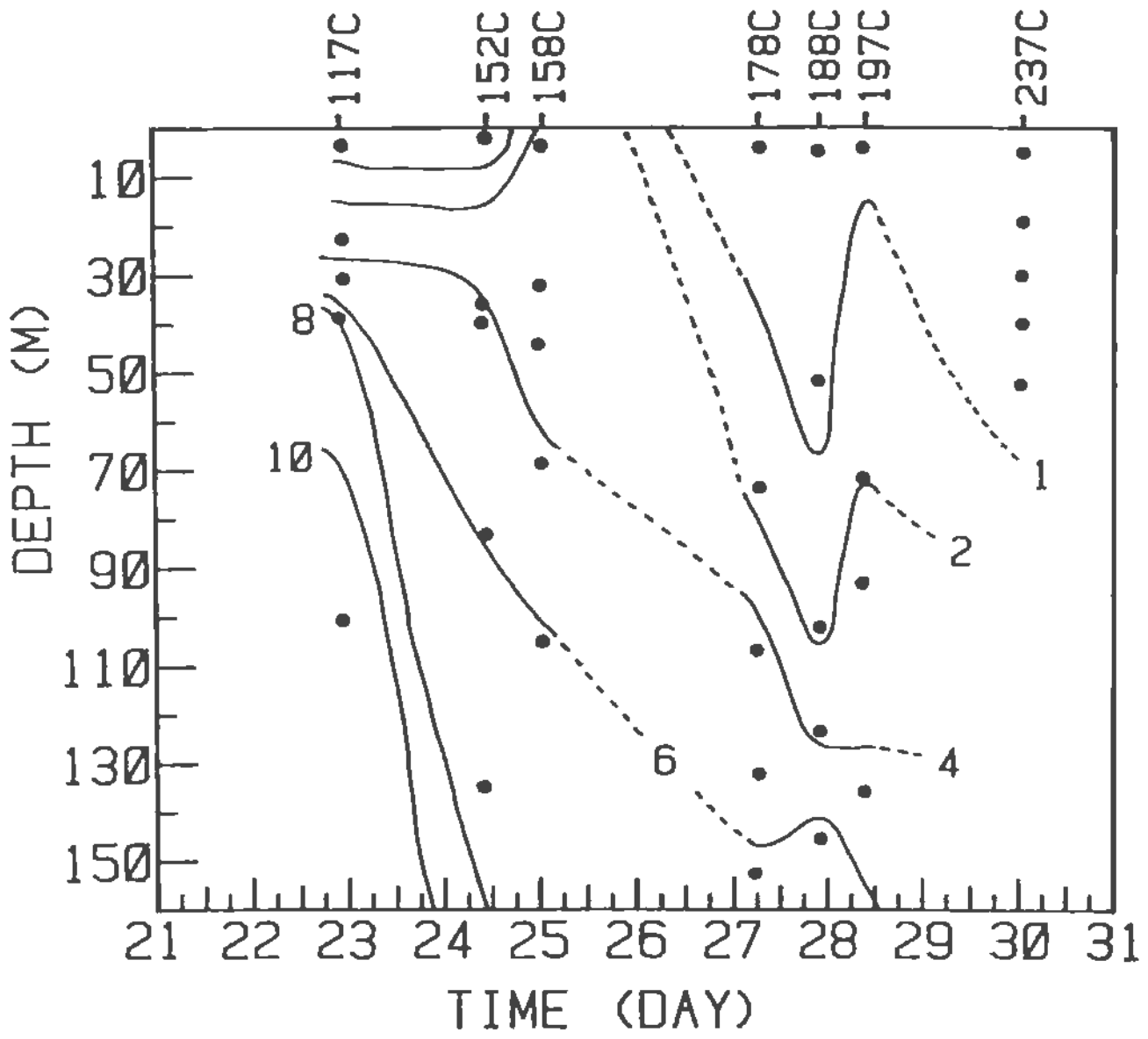


Figure 97. Station 11 Time Series Silicate, 22-30 April

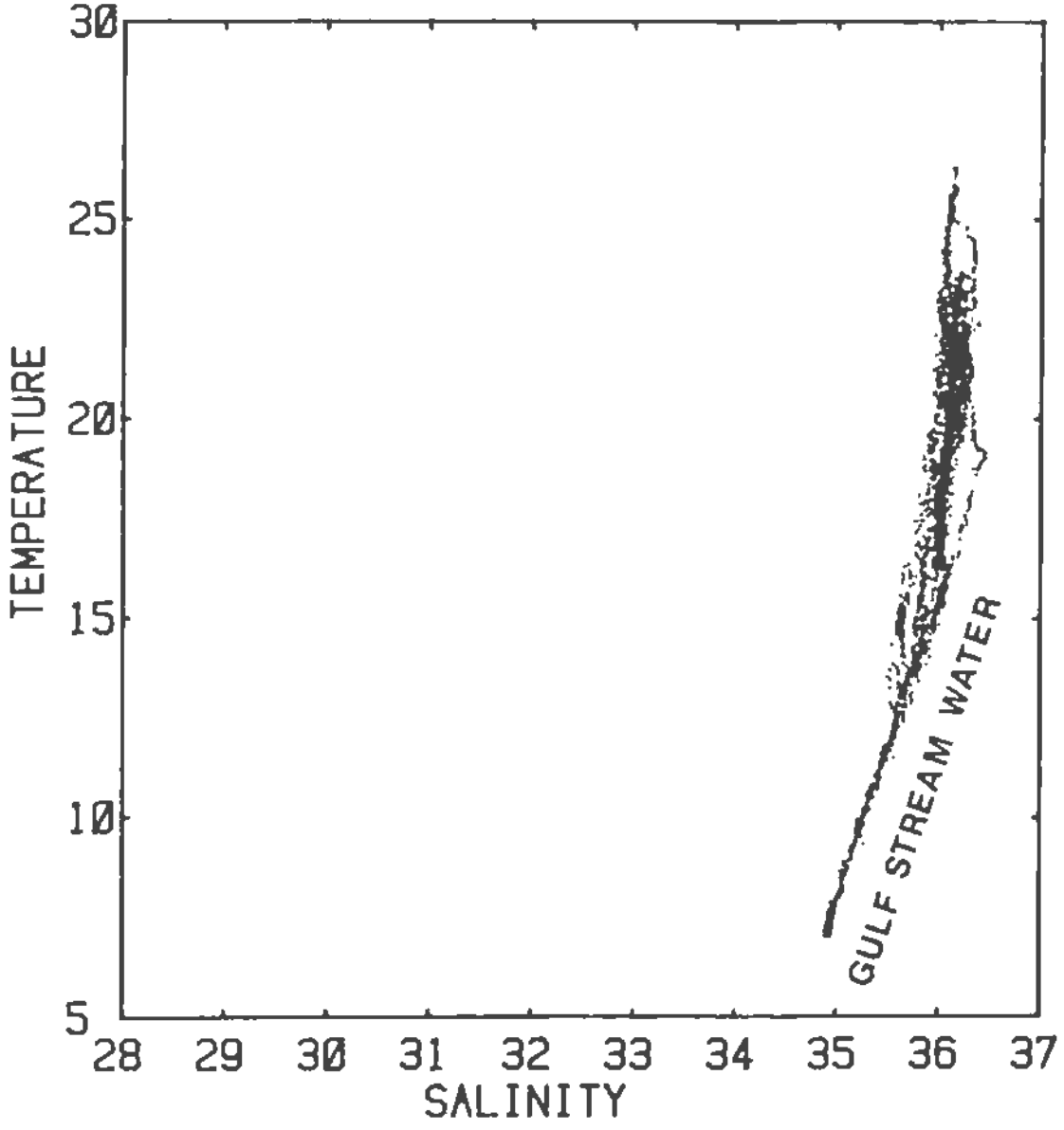


Figure 98. Temperature-Salinity Diagram of All Stations (42C-254C), April 1979

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APPENDIX I

Calibration Data

SALINITY CALIBRATION DATA:

Station	Depth	Bottle Salinity	CTD Salinity	Difference
51C	32	36.276	36.138	+ .138
53C	41	36.087	35.933	+ .154
64C	35	36.261	36.129	+ .132
66C	39	36.155	36.041	+ .114
68C	43	36.092	35.963	+ .129
70C	2	36.204	36.050	+ .154
72C	3	36.236	36.119	+ .117
78C	41	36.196	36.070	+ .126
82C	45	36.091	35.975	+ .116
111C	40	36.182	36.056	+ .126
113C	41	35.996	35.839	+ .157
115C	3	36.204	36.084	+ .120
113C	2	36.198	36.038	+ .160
117C	218	34.967	34.859	+ .108
120C	61	35.996	35.902	+ .094
135C	72	36.025	35.900	+ .125
137C	32	36.266	36.134	+ .132
139C	40	36.221	36.096	+ .125
143C	38	36.012	35.862	+ .150
147C	3	36.198	36.070	+ .128
151C	40	36.005	35.881	+ .124
152C	135	36.113	35.983	+ .130
153C	9	36.161	36.039	+ .122
156C	40	36.135	36.018	+ .117
157C	40	36.017	35.923	+ .094
170C	60	35.993	35.883	+ .110
176C	3	36.198	36.093	+ .105
177C	40	36.084	35.973	+ .111
178C	151	36.051	35.945	+ .106
180C	64	36.009	35.897	+ .112
187C	41	36.075	35.960	+ .115
188C	217	35.896	35.801	+ .095
188C	4	36.186	36.073	+ .113
195C	38	36.138	36.013	+ .125
197C	170	36.118	36.008	+ .110
217C	66	35.908	35.800	+ .108
225C	3	36.038	35.909	+ .129
237C	3	36.170	36.035	+ .135

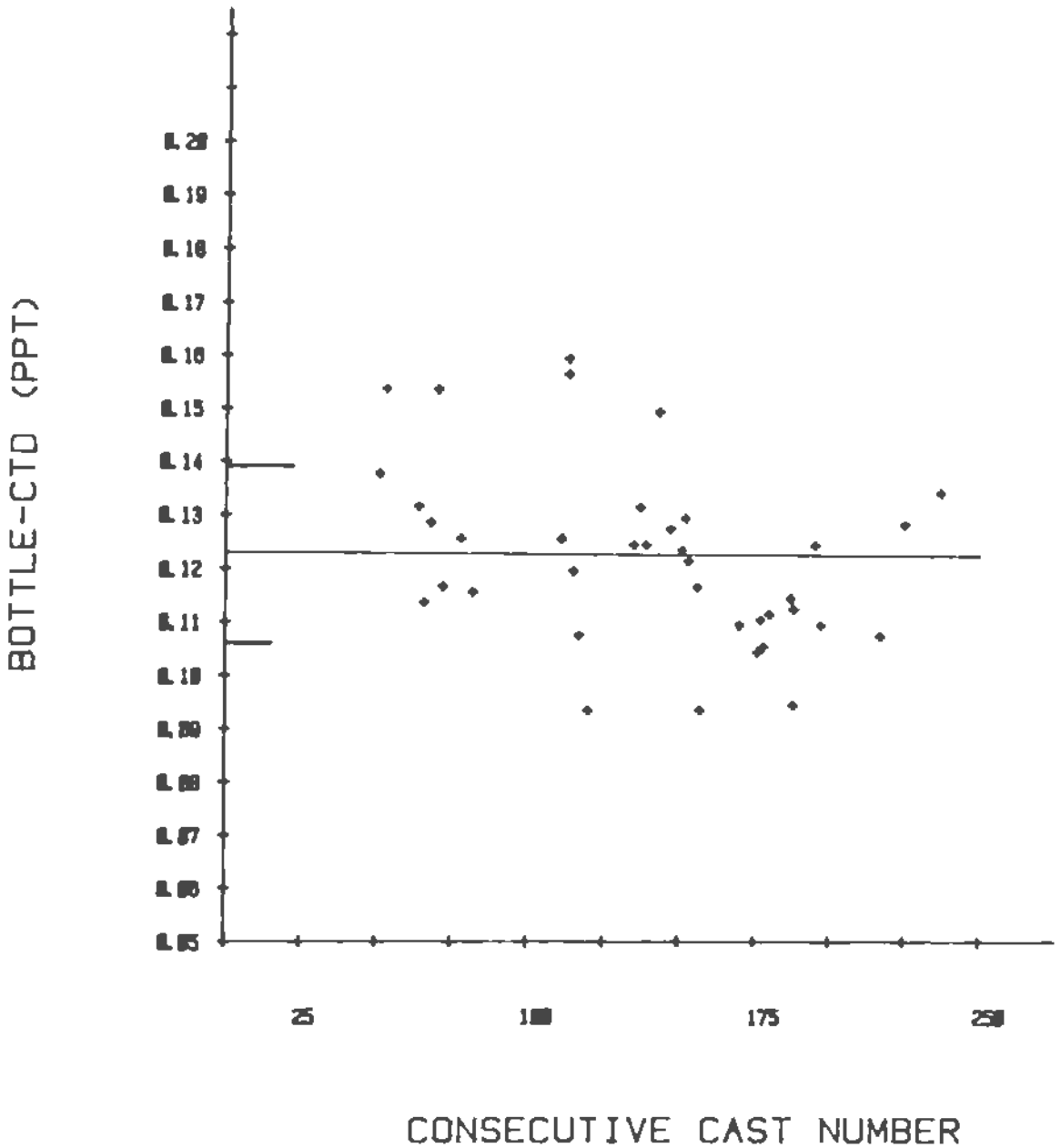


Figure 99. Time-dependent Plot of Bottle-CTD Salinity

TEMPERATURE CALIBRATION DATA:

Station	Depth	Reversing Thermometer Temperature			CTD Temperature	Difference
		1	2	Ave		
51C	32	20.83	20.81	20.820	20.79	+ .030
64C	35	20.81	20.82	20.815	20.79	+ .025
66C	39	19.62	19.60	19.610	19.56	+ .050
111C	40	23.32		23.320	20.30	+ .020
137C	32	21.40	21.39	21.395	21.38	+ .015
157C	40	18.13	18.15	18.140	18.11	+ .030
170C	60	16.93	16.94	16.935	16.90	+ .035
187C	41	19.20	19.16	19.180	19.14	+ .040

APPENDIX II

Hydrographic Data

HYDROGRAPHIC DATA

Vertical profiles of salinity, temperature, sigma-t, DO, and nutrients

The symbols used in the following listings are defined as follows:

Header Data: Times are GMT (EST + 5 or EDT + 4)
Latitude and Longitude are from Loran C

Weather Data: These data are taken from the ship's log.

Wind speed (knots)
Wind direction (degrees)
Air temperature (^{o}C)
Weather (WMO code 4501)
Barometric pressure (mb)
Sea State (WMO 3700)
Wave direction (degrees)
Cloud type (not given)
Cloud amount (not given)
Visibility code (not given)

Observations:
Z = Depth in meters
T = Temperature in ^{o}C
S = Salinity in o/oo
D = Density in sigma-t units
SVA = Specific volume anomaly X 10^{5}
O_2 = Dissolved oxygen in ml/liter
O_2 = Oxygen saturation in ml/liter
AOU = Apparent oxygen utilization in ml/liter
PO_4 = Phosphate concentration in µmole/liter
NO_3 = Nitrate concentration in µmole/liter
Si = Silicate concentration in µmole/liter

STATION SUMMARY FOR GILLISS CRUISE 002 APRIL 1979

CRUISE	STATION	LATITUDE	LONGITUDE	YR	MN	DY	HOUR GMT	DEPTH M	CONSEC NUMBER
002	041X	29 53.5N	80 18.5W	79	04	21	0.5	61	41
002	042X	29 53.0N	80 16.0W	79	04	21	0.8	77	42
002	043X	29 51.9N	80 12.1W	79	04	21	1.1	255	43
002	044X	29 51.7N	80 08.9W	79	04	21	1.3	350	44
002	045X	29 52.8N	80 05.6W	79	04	21	1.6	425	45
002	050X	30 10.5N	80 26.7W	79	04	21	3.9	39	50
002	051C	30 12.0N	80 34.9W	79	04	21	4.8	35	51
002	052X	30 11.3N	80 23.1W	79	04	21	6.5	42	52
002	053C	30 10.9N	80 20.5W	79	04	21	7.1	46	53
002	054X	30 10.0N	80 17.2W	79	04	21	7.9	50	54
002	055C	30 09.5N	80 14.4W	79	04	21	8.3	87	55
002	056X	30 09.0N	80 11.0W	79	04	21	9.1	213	56
002	057C	30 09.5N	80 06.8W	79	04	21	9.4	240	57
002	058X	30 08.2N	80 05.0W	79	04	21	10.7	305	58
002	064C	30 31.1N	80 29.8W	79	04	21	14.0	36	64
002	065X	30 30.6N	80 26.5W	79	04	21	14.7	35	65
002	066C	30 29.3N	80 21.4W	79	04	21	15.2	41	66
002	067X	30 28.9N	80 18.8W	79	04	21	15.8	43	67
002	068C	30 28.3N	80 16.3W	79	04	21	16.1	45	68
002	069X	30 27.7N	80 12.8W	79	04	21	16.7	49	69
002	070X	30 27.5N	80 10.8W	79	04	21	17.1	123	70
002	070C	30 27.0N	80 09.5W	79	04	21	17.6	123	71
002	071X	30 26.5N	80 06.2W	79	04	21	18.6	233	72
002	072C	30 26.2N	80 03.0W	79	04	21	19.0	305	73
002	073X	30 25.8N	79 58.5W	79	04	21	20.3	299	74
002	078C	30 46.1N	80 20.0W	79	04	21	23.4	43	79
002	079X	30 45.2N	80 17.0W	79	04	21	23.9	41	80
002	080C	30 44.7N	80 14.0W	79	04	22	0.4	43	81
002	081X	30 44.1N	80 11.0W	79	04	22	1.0	40	82
002	082C	30 43.5N	80 08.1W	79	04	22	1.4	45	83
002	083X	30 43.0N	80 05.4W	79	04	22	1.9	70	84
002	084C	30 42.3N	80 02.5W	79	04	22	2.2	185	85
002	085X	30 41.6N	79 59.5W	79	04	22	3.1	232	86
002	086X	30 41.1N	79 56.5W	79	04	22	3.4	291	87
002	087X	30 40.4N	79 54.0W	79	04	22	3.6	300	88
002	093X	31 08.6N	80 17.8W	79	04	22	6.8	35	94
002	094X	31 08.5N	80 16.0W	79	04	22	7.0	39	95
002	095X	31 07.3N	80 11.2W	79	04	22	7.4	44	96
002	096X	31 06.3N	80 07.0W	79	04	22	7.8	48	97
002	097X	31 05.1N	80 02.5W	79	04	22	8.1	48	98
002	098X	31 03.9N	79 58.0W	79	04	22	8.6	48	99
002	099X	31 02.8N	79 53.2W	79	04	22	9.1	190	100
002	100X	31 02.0N	79 48.8W	79	04	22	9.3	260	101
002	101X	31 00.7N	79 43.6W	79	04	22	9.7	305	102
002	106C	30 47.1N	79 59.9W	79	04	22	13.3	75	107
002	111C	30 45.4N	80 16.7W	79	04	22	19.6	43	112
002	112X	30 44.5N	80 13.5W	79	04	22	20.5	42	113
002	113C	30 43.9N	80 10.9W	79	04	22	20.8	43	114
002	114X	30 43.5N	80 08.0W	79	04	22	21.4	47	115
002	115C	30 42.9N	80 05.0W	79	04	22	21.9	79	116
002	116X	30 42.4N	80 02.5W	79	04	22	22.6	190	117
002	117C	30 41.5N	79 59.5W	79	04	22	23.0	245	118
002	117X	30 41.5N	79 59.5W	79	04	22	23.2	245	119
002	118X	30 40.8N	79 56.1W	79	04	23	0.2	310	120
002	119C	30 41.5N	79 54.5W	79	04	23	0.4	330	121
002	120C	30 42.8N	80 05.2W	79	04	23	1.9	73	122
002	122X	30 48.1N	80 29.6W	79	04	23	8.6	36	124
002	123X	30 47.4N	80 26.5W	79	04	23	8.9	38	125
002	124X	30 47.0N	80 23.2W	79	04	23	9.2	41	126
002	125X	30 46.1N	80 20.0W	79	04	23	9.5	42	127
002	126X	30 45.1N	80 16.8W	79	04	23	9.8	42	128
002	127X	30 44.6N	80 13.9W	79	04	23	10.1	45	129
002	128X	30 43.6N	80 10.5W	79	04	23	10.3	41	130

STATION SUMMARY (CONTINUED)

CRUISE	STATION	LATITUDE	LONGITUDE	YR	MN	DY	HOUR GMT	DEPTH M	CONSEC NUMBER
002	129X	30 43.0N	80 08.0W	79	04	23	10.6	46	131
002	130X	30 42.7N	80 05.4W	79	04	23	10.8	77	132
002	131X	30 42.0N	80 02.4W	79	04	23	11.0	194	133
002	132X	30 41.5N	79 59.5W	79	04	23	11.3	235	134
002	133X	30 40.6N	79 56.5W	79	04	23	11.6	300	135
002	134X	30 40.0N	79 52.8W	79	04	23	11.9	380	136
002	135C	30 42.7N	80 05.3W	79	04	23	13.4	75	137
002	135C	30 42.7N	80 05.3W	79	04	23	14.0	75	138
002	136C	30 42.6N	80 05.5W	79	04	23	16.0	75	139
002	137C	30 48.5N	80 03.0W	79	04	23	19.4	37	140
002	138X	30 47.4N	80 26.5W	79	04	23	20.4	38	141
002	139C	30 47.2N	80 23.3W	79	04	23	20.8	42	142
002	140X	30 46.1N	80 19.9W	79	04	23	21.7	42	143
002	141X	30 45.3N	80 17.0W	79	04	23	22.1	42	144
002	142X	30 44.6N	80 13.9W	79	04	23	22.4	46	145
002	143CU	30 43.7N	80 10.8W	79	04	23	22.7	43	146
002	144X	30 42.8N	80 08.3W	79	04	23	23.6	47	147
002	145X	30 42.4N	80 02.5W	79	04	24	0.1	191	148
002	146X	30 41.1N	79 59.8W	79	04	24	0.4	233	149
002	147C	30 42.9N	80 05.2W	79	04	24	1.3	75	150
002	149X	30 46.9N	80 23.5W	79	04	24	7.1	41	152
002	150C	30 45.3N	80 16.5W	79	04	24	8.0	47	153
002	151C	30 44.1N	80 10.6W	79	04	24	9.3	43	154
002	152C	30 41.7N	79 59.5W	79	04	24	11.1	232	155
002	153C	30 42.8N	80 05.0W	79	04	24	12.9	80	156
002	153C	30 42.8N	80 05.0W	79	04	24	13.5	79	157
002	154C	30 42.5N	80 03.0W	79	04	24	17.0	75	158
002	155X	30 47.0N	80 23.3W	79	04	24	19.5	40	159
002	156C	30 45.3N	80 16.8W	79	04	24	20.6	43	160
002	157C	30 43.8N	80 10.6W	79	04	24	21.8	44	161
002	158C	30 42.4N	79 58.5W	79	04	25	0.1	235	162
002	159X	30 42.0N	79 54.9W	79	04	25	1.8	320	163
002	160X	. N	. W	79	04	25	3.9	73	164
002	166X	30 59.8N	79 58.8W	79	04	26	21.7	51	170
002	167X	30 55.5N	80 01.3W	79	04	26	22.2	49	171
002	168X	30 52.0N	80 02.5W	79	04	26	22.6	51	172
002	169X	30 47.5N	80 03.7W	79	04	26	23.0	65	173
002	170C	30 42.7N	80 06.0W	79	04	26	23.8	70	174
002	170C	30 42.5N	80 05.8W	79	04	27	1.6	65	175
002	174X	30 46.9N	80 23.4W	79	04	27	4.2	55	179
002	176C	30 45.2N	80 16.4W	79	04	27	5.1	43	181
002	177C	30 43.8N	80 11.0W	79	04	27	5.9	41	182
002	178C	30 41.6N	79 59.2W	79	04	27	7.3	242	183
002	179X	30 40.0N	79 52.9W	79	04	27	8.6	370	184
002	180C	30 42.4N	80 05.3W	79	04	27	11.2	70	185
002	180C	30 42.4N	80 05.3W	79	04	27	13.4	72	186
002	183C	30 43.5N	80 06.8W	79	04	27	15.8	49	189
002	184X	30 46.7N	80 23.6W	79	04	27	18.0	41	190
002	186C	30 45.2N	80 16.4W	79	04	27	18.9	41	192
002	187C	30 44.0N	80 10.9W	79	04	27	19.7	43	193
002	188C	30 41.9N	79 58.5W	79	04	27	22.1	247	194
002	192C	30 43.2N	80 05.1W	79	04	28	1.2	73	198
002	192C	30 43.2N	80 05.1W	79	04	28	2.2	70	199
002	193X	30 47.0N	80 23.2W	79	04	28	5.9	39	200
002	194C	30 44.6N	80 16.8W	79	04	28	6.5	41	201
002	195C	30 43.7N	80 11.0W	79	04	28	7.6	42	202
002	196X	30 42.6N	80 05.5W	79	04	28	8.4	72	203
002	197C	30 42.5N	79 58.5W	79	04	28	9.4	232	204
002	198C	30 42.4N	80 05.3W	79	04	28	10.9	71	205
002	199C	30 42.9N	80 05.3W	79	04	28	13.7	71	206
002	209C	30 37.0N	80 07.2W	79	04	28	20.3	65	216
002	210X	30 41.5N	79 59.0W	79	04	28	22.0	250	217
002	211X	30 42.0N	80 02.9W	79	04	28	22.5	185	218

STATION SUMMARY (CONTINUED)

CRUISE	STATION	LATITUDE	LONGITUDE	YR	MN	DY	HOUR GMT	DEPTH M	CONSEC NUMBER
002	212X	30 42.8N	80 05.0W	79	04	28	22.9	64	219
002	213X	30 42.8N	80 07.8W	79	04	28	23.1	45	220
002	214X	30 44.1N	80 11.0W	79	04	28	23.3	43	221
002	215X	30 43.5N	80 14.0W	79	04	28	23.6	41	222
002	216X	30 45.0N	80 16.5W	79	04	28	23.8	45	223
002	217C	30 42.9N	80 05.4W	79	04	29	1.1	72	224
002	218X	30 44.8N	80 16.9W	79	04	29	8.5	41	225
002	219X	30 44.3N	80 13.7W	79	04	29	8.8	43	226
002	220X	30 43.9N	80 10.8W	79	04	29	9.1	40	227
002	221X	30 43.5N	80 07.5W	79	04	29	9.3	44	228
002	222X	30 42.7N	80 04.9W	79	04	29	9.7	74	229
002	223X	30 42.1N	80 03.0W	79	04	29	9.9	195	230
002	224X	30 41.6N	79 59.2W	79	04	29	10.5	240	231
002	225C	30 42.6N	80 04.2W	79	04	29	12.2	52	232
002	226C	30 42.9N	80 05.4W	79	04	29	13.0	67	233
002	227C	30 47.8N	80 30.0W	79	04	29	18.1	36	234
002	237C	30 41.5N	79 58.5W	79	04	30	0.1	219	244
002	238C	30 43.8N	80 09.8W	79	04	30	4.5	47	245
002	239X	30 44.6N	80 13.8W	79	04	30	8.5	40	246
002	240X	30 43.6N	80 11.0W	79	04	30	8.8	44	247
002	241X	30 43.2N	80 07.5W	79	04	30	9.1	42	248
002	242X	30 43.2N	80 05.1W	79	04	30	9.4	91	249
002	243X	30 42.2N	80 02.5W	79	04	30	9.6	193	250
002	244X	30 41.5N	79 59.5W	79	04	30	10.0	238	251
002	245C	30 43.0N	80 08.1W	79	04	30	12.5	43	252

GILLISS CRUISE STA 041X 21/04/79 08.5 GMT CONSEC STA 41

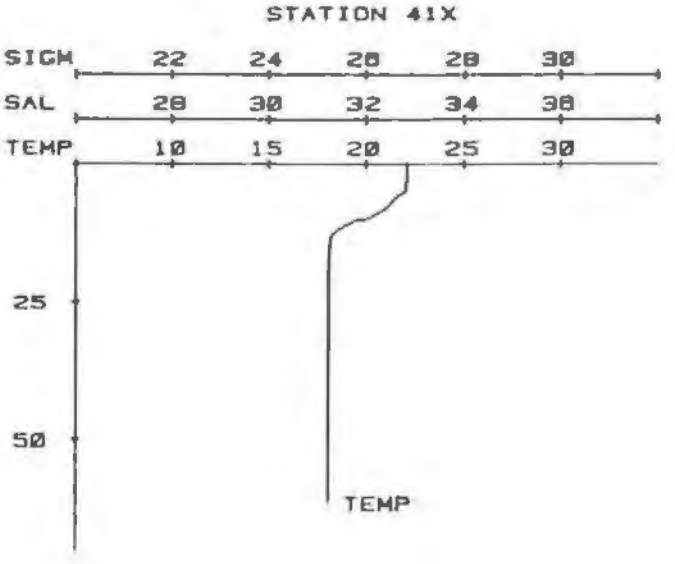
LAT 29 53.5N LONG 88 10.5W DEPTH = 61M DIST LAST STA = 8.0KM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 180	WAVE DIRECTION	= 180
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES=	1019.3	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.1	.	.	.	.	.	.	.	.	.
2.0	22.1	.	.	.	.	.	.	.	.	.
5.0	22.0	.	.	.	.	.	.	.	.	.
6.0	21.5	.	.	.	.	.	.	.	.	.
8.0	21.0	.	.	.	.	.	.	.	.	.
9.0	20.5	.	.	.	.	.	.	.	.	.
10.0	20.0	.	.	.	.	.	.	.	.	.
10.0	19.5	.	.	.	.	.	.	.	.	.
11.0	19.0	.	.	.	.	.	.	.	.	.
12.0	18.5	.	.	.	.	.	.	.	.	.
13.0	18.2	.	.	.	.	.	.	.	.	.
57.0	18.1	.	.	.	.	.	.	.	.	.
61.0	18.1	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 042X 21/04/79 08.8 GMT CONSEC STA 42

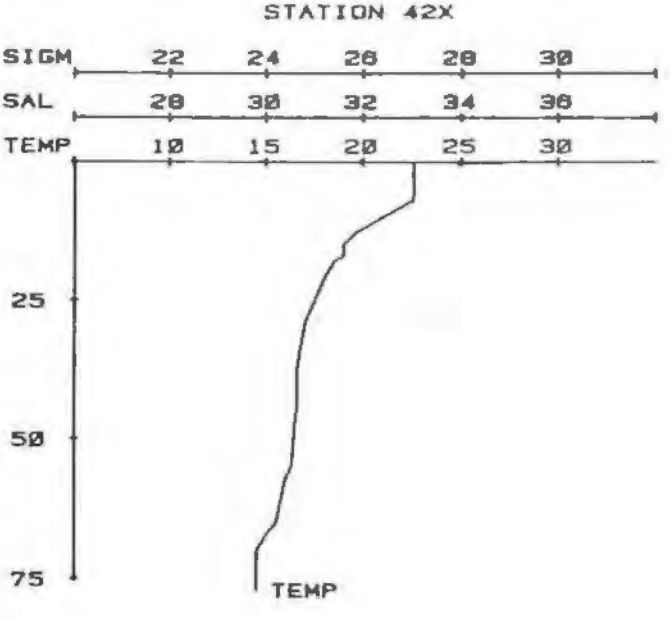
LAT 29 53.8N LONG 88 16.8W DEPTH = 77M DIST LAST STA = 4.1KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 3
WIND DIRECTION	= 180	WAVE DIRECTION	= 180
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES=	1019.3	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.6	.	.	.	.	.	.	.	.	.
6.0	22.6	.	.	.	.	.	.	.	.	.
7.0	22.5	.	.	.	.	.	.	.	.	.
8.0	22.0	.	.	.	.	.	.	.	.	.
9.0	21.5	.	.	.	.	.	.	.	.	.
10.0	21.0	.	.	.	.	.	.	.	.	.
11.0	20.5	.	.	.	.	.	.	.	.	.
12.0	20.0	.	.	.	.	.	.	.	.	.
13.0	19.5	.	.	.	.	.	.	.	.	.
15.0	19.0	.	.	.	.	.	.	.	.	.
17.0	19.0	.	.	.	.	.	.	.	.	.
18.0	18.5	.	.	.	.	.	.	.	.	.
21.0	18.0	.	.	.	.	.	.	.	.	.
25.0	17.5	.	.	.	.	.	.	.	.	.
29.0	17.0	.	.	.	.	.	.	.	.	.
37.0	16.6	.	.	.	.	.	.	.	.	.
45.0	16.6	.	.	.	.	.	.	.	.	.
46.0	16.5	.	.	.	.	.	.	.	.	.
55.0	16.3	.	.	.	.	.	.	.	.	.
57.0	16.0	.	.	.	.	.	.	.	.	.
65.0	15.5	.	.	.	.	.	.	.	.	.
67.0	15.0	.	.	.	.	.	.	.	.	.
70.0	14.5	.	.	.	.	.	.	.	.	.
77.0	14.5	.	.	.	.	.	.	.	.	.



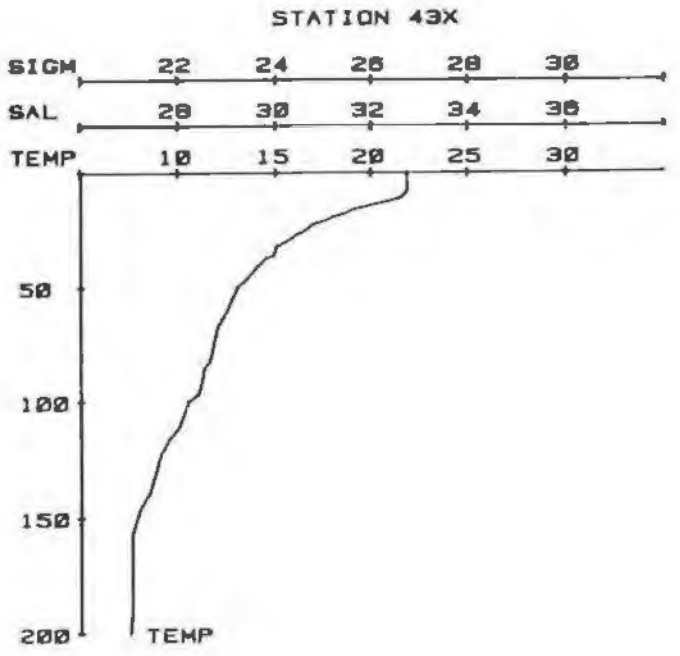
GILLISS CRUISE STA 043X 21/04/79 01.6 GMT CONSEC STA 43

LAT 29 51.9N LONG 88 12.1W DEPTH = 255M DIST LAST STA = 6.6KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 180
AIR TEMP = 22.2C
WEATHER CODE = X1
BAROMETRIC PRES= 1019.3
SEA STATE = 3
WAVE DIRECTION = 180
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2*	AOU	PO4	NO3	SI
0.0	24.9	.	.	.	.	.	.	.	.	.
8.0	24.9	.	.	.	.	.	.	.	.	.
11.0	24.5	.	.	.	.	.	.	.	.	.
12.0	21.0	.	.	.	.	.	.	.	.	.
13.0	20.5	.	.	.	.	.	.	.	.	.
14.0	20.0	.	.	.	.	.	.	.	.	.
15.0	19.5	.	.	.	.	.	.	.	.	.
16.0	19.0	.	.	.	.	.	.	.	.	.
18.0	18.5	.	.	.	.	.	.	.	.	.
19.0	18.0	.	.	.	.	.	.	.	.	.
21.0	17.5	.	.	.	.	.	.	.	.	.
22.0	17.0	.	.	.	.	.	.	.	.	.
25.0	16.5	.	.	.	.	.	.	.	.	.
27.0	16.0	.	.	.	.	.	.	.	.	.
30.0	15.5	.	.	.	.	.	.	.	.	.
32.0	15.0	.	.	.	.	.	.	.	.	.
36.0	14.9	.	.	.	.	.	.	.	.	.
37.0	14.5	.	.	.	.	.	.	.	.	.
41.0	14.0	.	.	.	.	.	.	.	.	.
46.0	13.5	.	.	.	.	.	.	.	.	.
50.0	13.0	.	.	.	.	.	.	.	.	.
58.0	12.5	.	.	.	.	.	.	.	.	.
68.0	12.0	.	.	.	.	.	.	.	.	.
83.0	11.6	.	.	.	.	.	.	.	.	.
84.0	11.5	.	.	.	.	.	.	.	.	.
86.0	11.3	.	.	.	.	.	.	.	.	.
91.0	11.2	.	.	.	.	.	.	.	.	.
97.0	11.0	.	.	.	.	.	.	.	.	.
108.0	10.5	.	.	.	.	.	.	.	.	.
111.0	10.0	.	.	.	.	.	.	.	.	.
116.0	9.5	.	.	.	.	.	.	.	.	.
124.0	9.0	.	.	.	.	.	.	.	.	.
139.0	8.5	.	.	.	.	.	.	.	.	.
146.0	8.0	.	.	.	.	.	.	.	.	.
157.0	7.6	.	.	.	.	.	.	.	.	.
198.0	7.6	.	.	.	.	.	.	.	.	.
200.0	7.5	.	.	.	.	.	.	.	.	.



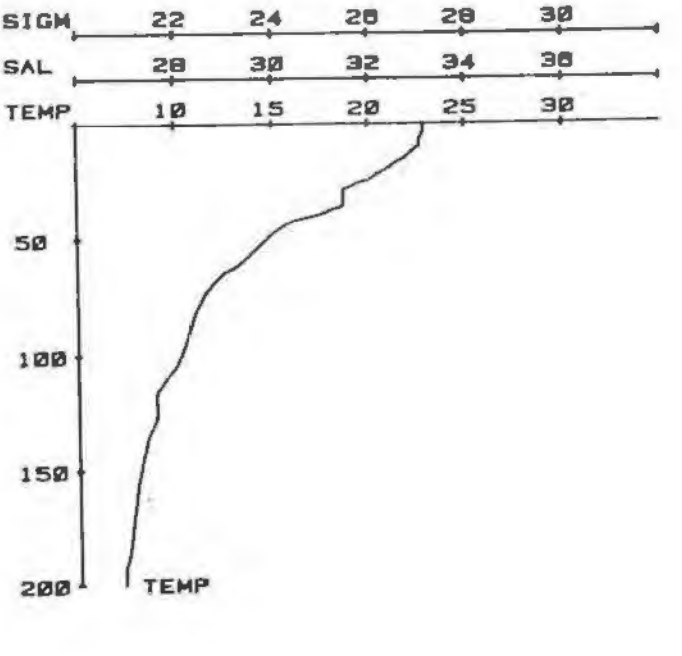
GILLISS CRUISE STA 044X 21/04/79 01.3 GMT CONSEC STA 44

LAT 29 51.7N LONG 88 08.9W DEPTH = 358M DIST LAST STA = 5.2KM

WEATHER DATA
WIND SPEED = 17KTS
WIND DIRECTION = 180
AIR TEMP = 22.2C
WEATHER CODE = X1
BAROMETRIC PRES= 1019.3
SEA STATE = 3
WAVE DIRECTION = 180
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2*	AOU	PO4	NO3	SI
0.0	22.9	.	.	.	.	.	.	.	.	.
4.0	22.9	.	.	.	.	.	.	.	.	.
7.0	22.7	.	.	.	.	.	.	.	.	.
10.0	22.7	.	.	.	.	.	.	.	.	.
11.0	22.5	.	.	.	.	.	.	.	.	.
15.0	22.0	.	.	.	.	.	.	.	.	.
17.0	21.5	.	.	.	.	.	.	.	.	.
20.0	21.0	.	.	.	.	.	.	.	.	.
22.0	20.5	.	.	.	.	.	.	.	.	.
25.0	20.0	.	.	.	.	.	.	.	.	.
26.0	19.5	.	.	.	.	.	.	.	.	.
28.0	19.0	.	.	.	.	.	.	.	.	.
29.0	18.7	.	.	.	.	.	.	.	.	.
36.0	18.7	.	.	.	.	.	.	.	.	.
37.0	18.5	.	.	.	.	.	.	.	.	.
38.0	18.0	.	.	.	.	.	.	.	.	.
40.0	17.5	.	.	.	.	.	.	.	.	.
41.0	17.0	.	.	.	.	.	.	.	.	.
42.0	16.5	.	.	.	.	.	.	.	.	.
43.0	16.0	.	.	.	.	.	.	.	.	.
45.0	15.5	.	.	.	.	.	.	.	.	.
48.0	15.0	.	.	.	.	.	.	.	.	.
52.0	14.5	.	.	.	.	.	.	.	.	.
56.0	14.0	.	.	.	.	.	.	.	.	.
60.0	13.5	.	.	.	.	.	.	.	.	.
63.0	13.0	.	.	.	.	.	.	.	.	.
65.0	12.5	.	.	.	.	.	.	.	.	.
69.0	12.0	.	.	.	.	.	.	.	.	.
74.0	11.5	.	.	.	.	.	.	.	.	.
82.0	11.0	.	.	.	.	.	.	.	.	.
95.0	10.5	.	.	.	.	.	.	.	.	.
105.0	10.0	.	.	.	.	.	.	.	.	.
118.0	9.5	.	.	.	.	.	.	.	.	.
116.0	9.0	.	.	.	.	.	.	.	.	.
127.0	9.0	.	.	.	.	.	.	.	.	.
136.0	8.5	.	.	.	.	.	.	.	.	.
155.0	8.0	.	.	.	.	.	.	.	.	.
187.0	7.5	.	.	.	.	.	.	.	.	.
193.0	7.3	.	.	.	.	.	.	.	.	.
208.0	7.3	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 0451 21/04/79 01.6 GMT CONSEC STA 45

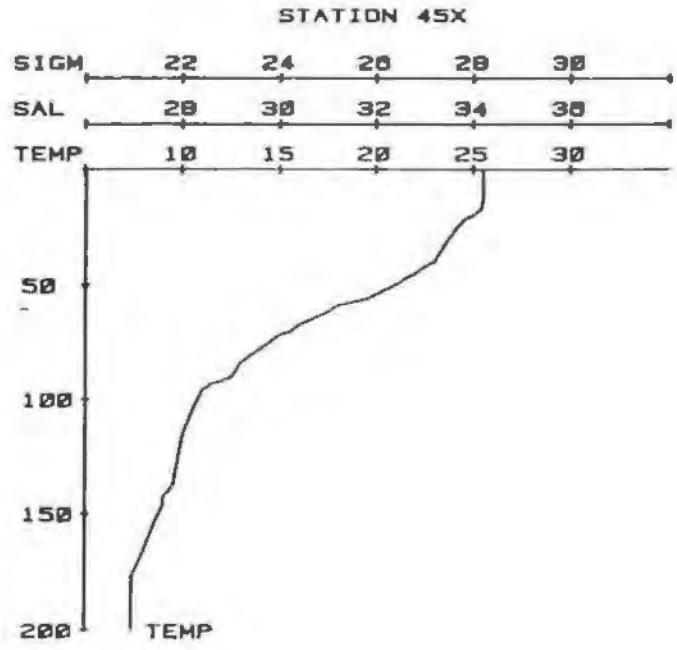
LAT 29 52.0N LONG 88 05.6W DEPTH = 425M DIST LAST STA = 5.2KM

WEATHER DATA

WIND SPEED	= 16KTS	SEA STATE	= 3
WIND DIRECTION	= 100	WAVE DIRECTION	= 100
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 81	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	25.5	.	.	.	.	.	.	.	.	.
13.0	25.5	.	.	.	.	.	.	.	.	.
17.0	25.4	.	.	.	.	.	.	.	.	.
20.0	25.0	.	.	.	.	.	.	.	.	.
22.0	24.5	.	.	.	.	.	.	.	.	.
27.0	24.0	.	.	.	.	.	.	.	.	.
33.0	23.5	.	.	.	.	.	.	.	.	.
40.0	23.0	.	.	.	.	.	.	.	.	.
42.0	22.5	.	.	.	.	.	.	.	.	.
45.0	22.0	.	.	.	.	.	.	.	.	.
47.0	21.5	.	.	.	.	.	.	.	.	.
50.0	21.0	.	.	.	.	.	.	.	.	.
52.0	20.5	.	.	.	.	.	.	.	.	.
54.0	20.0	.	.	.	.	.	.	.	.	.
56.0	19.5	.	.	.	.	.	.	.	.	.
57.0	19.0	.	.	.	.	.	.	.	.	.
58.0	18.5	.	.	.	.	.	.	.	.	.
59.0	18.0	.	.	.	.	.	.	.	.	.
62.0	17.5	.	.	.	.	.	.	.	.	.
64.0	17.0	.	.	.	.	.	.	.	.	.
66.0	16.5	.	.	.	.	.	.	.	.	.
68.0	16.0	.	.	.	.	.	.	.	.	.
71.0	15.5	.	.	.	.	.	.	.	.	.
72.0	15.0	.	.	.	.	.	.	.	.	.
75.0	14.5	.	.	.	.	.	.	.	.	.
78.0	14.0	.	.	.	.	.	.	.	.	.
81.0	13.5	.	.	.	.	.	.	.	.	.
84.0	13.0	.	.	.	.	.	.	.	.	.
90.0	12.5	.	.	.	.	.	.	.	.	.
92.0	12.0	.	.	.	.	.	.	.	.	.
93.0	11.5	.	.	.	.	.	.	.	.	.
96.0	11.0	.	.	.	.	.	.	.	.	.
105.0	10.5	.	.	.	.	.	.	.	.	.
116.0	10.0	.	.	.	.	.	.	.	.	.
130.0	9.5	.	.	.	.	.	.	.	.	.
143.0	9.0	.	.	.	.	.	.	.	.	.
146.0	9.0	.	.	.	.	.	.	.	.	.
155.0	8.5	.	.	.	.	.	.	.	.	.
166.0	8.0	.	.	.	.	.	.	.	.	.
175.0	7.5	.	.	.	.	.	.	.	.	.
176.0	7.4	.	.	.	.	.	.	.	.	.
200.0	7.4	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 0503 21/04/79 03.9 GMT CONSEC STA 50

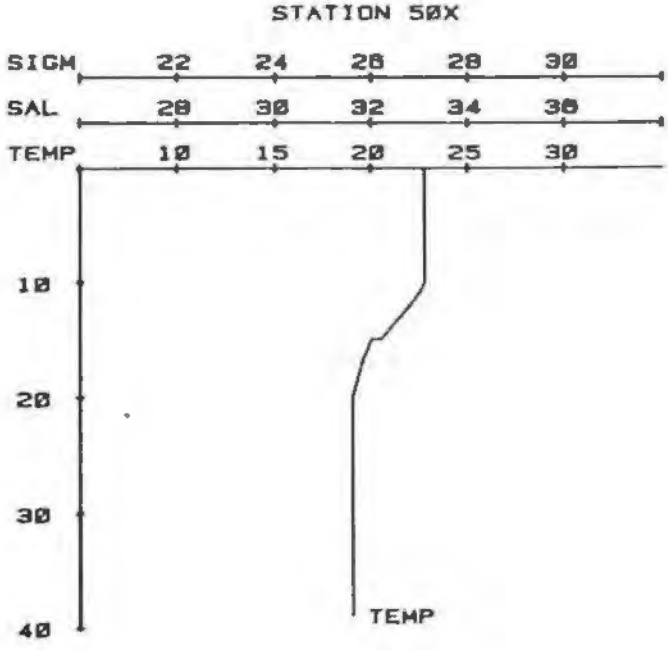
LAT 30 10.5N LONG 88 26.7W DEPTH = 39M DIST LAST STA = 47.1KM

WEATHER DATA

WIND SPEED	= 16KTS	SEA STATE	= 4
WIND DIRECTION	= 130	WAVE DIRECTION	= 110
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= 80	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.0	.	.	.	.	.	.	.	.	.
10.0	22.0	.	.	.	.	.	.	.	.	.
11.0	22.5	.	.	.	.	.	.	.	.	.
12.0	22.0	.	.	.	.	.	.	.	.	.
13.0	21.5	.	.	.	.	.	.	.	.	.
14.0	21.0	.	.	.	.	.	.	.	.	.
15.0	20.5	.	.	.	.	.	.	.	.	.
15.0	20.0	.	.	.	.	.	.	.	.	.
17.0	19.5	.	.	.	.	.	.	.	.	.
20.0	19.0	.	.	.	.	.	.	.	.	.
39.0	19.0	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 51C 21/04/29 04.8 GMT CONSEC STA 51

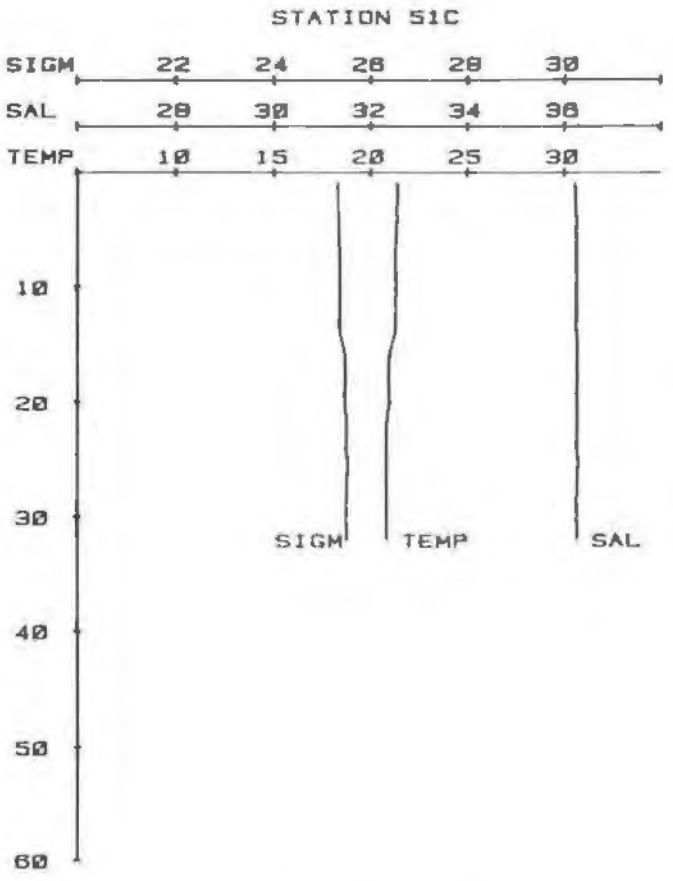
LAT 38 12.0N LONG 00 34.9W DEPTH = 35M DIST LAST STA = 13 NKM

WEATHER DATA

WIND SPEED	= 14KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 120
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= 30	CLOUD AMOUNT	=
BAROMETRIC PRES=	1019.6	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.41	36.22	25.32	267	.	.	.	0.00	0.0	1.0
2.0	21.41	36.22	25.32	267	.	.	.	0.00	0.0	1.0
3.0	21.38	36.23	25.31	265	.	.	.	.	.	.
4.0	21.40	36.25	25.34	264	.	.	.	.	.	.
5.0	21.34	36.24	25.35	263	.	.	.	.	.	.
6.0	21.33	36.25	25.37	262	.	.	.	.	.	.
7.0	21.31	36.25	25.37	262	.	.	.	.	.	.
8.0	21.31	36.25	25.37	262	.	.	.	.	.	.
9.0	21.31	36.25	25.37	262	.	.	.	.	.	.
10.0	21.31	36.25	25.37	262	.	.	.	.	.	.
11.0	21.31	36.25	25.37	262	.	.	.	.	.	.
12.0	21.31	36.25	25.37	262	.	.	.	.	.	.
13.0	21.31	36.24	25.36	263	.	.	.	.	.	.
14.0	21.28	36.25	25.38	261	.	.	.	.	.	.
15.0	21.12	36.27	25.44	256	.	.	.	.	.	.
16.0	20.96	36.27	25.48	252	.	.	.	0.00	0.0	0.0
17.0	20.93	36.26	25.48	252	.	.	.	.	.	.
18.0	20.92	36.27	25.49	251	.	.	.	.	.	.
19.0	20.96	36.25	25.46	253	.	.	.	.	.	.
20.0	20.99	36.26	25.46	253	.	.	.	.	.	.
21.0	20.84	36.27	25.51	249	.	.	.	.	.	.
22.0	20.82	36.26	25.51	249	.	.	.	.	.	.
23.0	20.82	36.25	25.50	250	.	.	.	.	.	.
24.0	20.82	36.25	25.50	250	.	.	.	.	.	.
25.0	20.81	36.08	25.53	247	.	.	.	.	.	.
26.0	20.81	36.23	25.52	246	.	.	.	.	.	.
27.0	20.82	36.26	25.51	249	.	.	.	.	.	.
28.0	20.82	36.26	25.51	249	.	.	.	.	.	.
29.0	20.83	36.24	25.49	251	.	.	.	.	.	.
30.0	20.83	36.25	25.50	250	.	.	.	.	.	.
31.0	20.82	36.26	25.51	249	.	.	.	.	.	.
32.0	20.82	36.26	25.51	249	.	.	.	0.13	0.4	4.5



GILLISS CRUISE STA 52X 21/04/29 06.5 GMT CONSEC STA 52

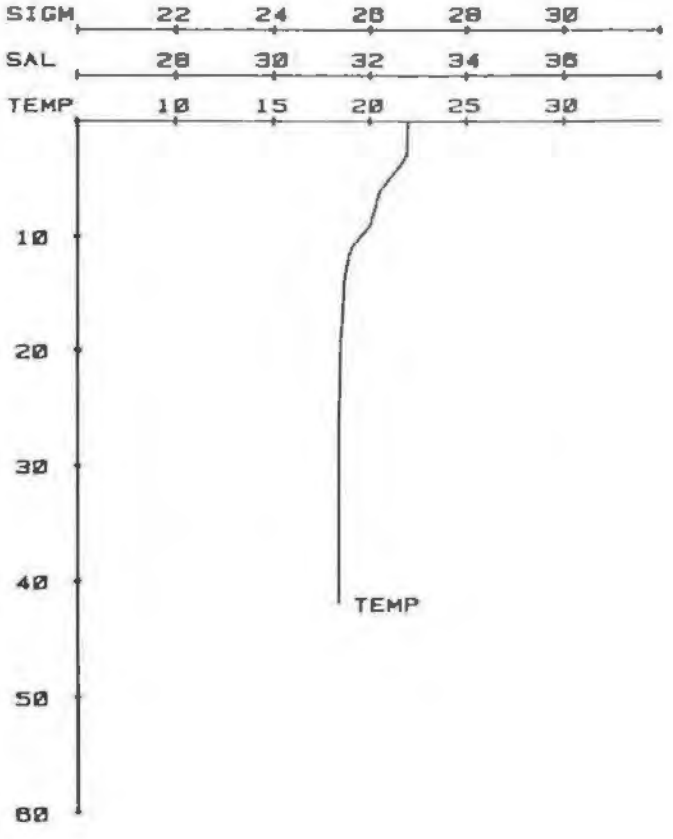
LAT 38 11.3N LONG 00 23.1W DEPTH = 42M DIST LAST STA = 18 NKM

WEATHER DATA

WIND SPEED	= 14KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 120
AIR TEMP	= 21.9C	CLOUD TYPE	=
WEATHER CODE	= 00	CLOUD AMOUNT	=
BAROMETRIC PRES=	1018.6	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.0	.	.	.	.	.	.	.	.	.
3.0	21.9	.	.	.	.	.	.	.	.	.
4.0	21.5	.	.	.	.	.	.	.	.	.
5.0	21.0	.	.	.	.	.	.	.	.	.
6.0	20.5	.	.	.	.	.	.	.	.	.
9.0	20.0	.	.	.	.	.	.	.	.	.
10.0	19.5	.	.	.	.	.	.	.	.	.
11.0	19.0	.	.	.	.	.	.	.	.	.
12.0	18.8	.	.	.	.	.	.	.	.	.
14.0	18.6	.	.	.	.	.	.	.	.	.
17.0	18.5	.	.	.	.	.	.	.	.	.
19.0	18.4	.	.	.	.	.	.	.	.	.
26.0	18.3	.	.	.	.	.	.	.	.	.
42.0	18.1	.	.	.	.	.	.	.	.	.



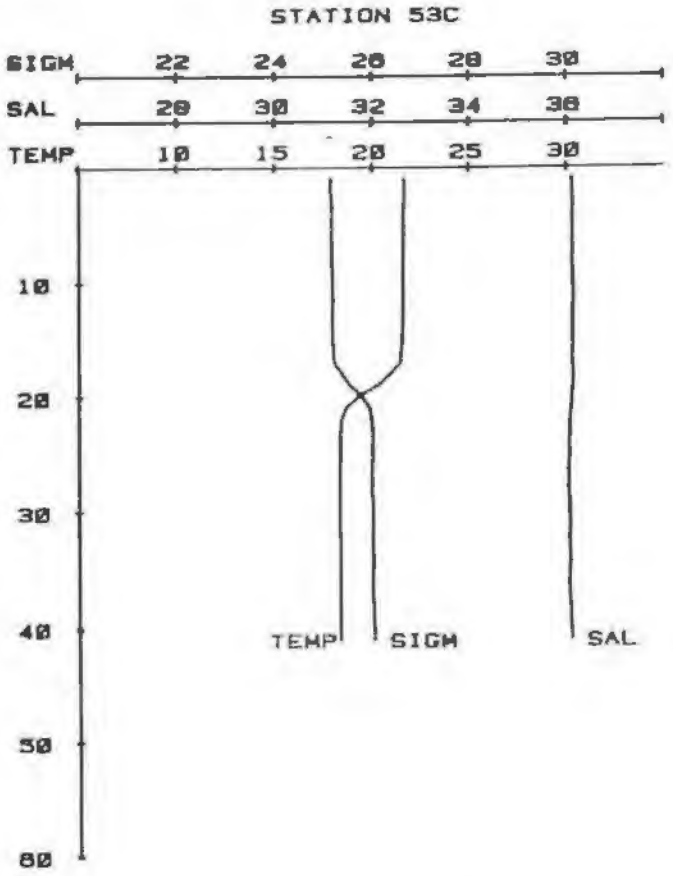
GILLISS CRUISE STA 053C 21/04/79 07.1 GMT CONSEC STA 53

LAT 38 10.9N LONG 08 20.5W DEPTH = 46M DIST LAST STA = 4.2KM

WEATHER DATA
WIND SPEED = 14KTS
WIND DIRECTION = 140
AIR TEMP = 21.9C
WEATHER CODE = 20
BAROMETRIC PRES= 1018.6

SEA STATE = 3
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	D	OBSERVATIONS SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.60	36.11	25.16	282	.	.	.	.	.	.
2.0	21.60	36.11	25.16	282	.	.	.	0.05	0.1	0.3
3.0	21.65	36.13	25.18	279	.	.	.	.	.	.
4.0	21.61	36.11	25.18	280	.	.	.	.	.	.
5.0	21.63	36.12	25.18	280	.	.	.	.	.	.
6.0	21.62	36.12	25.18	279	.	.	.	.	.	.
7.0	21.61	36.12	25.19	279	.	.	.	.	.	.
8.0	21.61	36.11	25.18	280	.	.	.	.	.	.
9.0	21.59	36.13	25.20	278	.	.	.	.	.	.
10.0	21.60	36.13	25.20	278	.	.	.	.	.	.
11.0	21.60	36.14	25.20	278	.	.	.	.	.	.
12.0	21.60	36.13	25.20	278	.	.	.	.	.	.
13.0	21.58	36.12	25.19	279	.	.	.	.	.	.
14.0	21.54	36.13	25.21	277	.	.	.	.	.	.
15.0	21.54	36.13	25.21	277	.	.	.	.	.	.
16.0	21.47	36.12	25.22	276	.	.	.	0.27	2.9	2.2
17.0	21.44	36.12	25.23	275	.	.	.	.	.	.
18.0	20.94	36.14	25.39	261	.	.	.	.	.	.
19.0	20.29	36.12	25.55	245	.	.	.	.	.	.
20.0	19.24	36.10	25.81	221	.	.	.	.	.	.
21.0	18.59	36.09	25.97	205	.	.	.	.	.	.
22.0	18.34	36.06	26.00	202	.	.	.	.	.	.
23.0	18.31	36.07	26.02	200	.	.	.	.	.	.
24.0	18.30	36.05	26.01	202	.	.	.	.	.	.
25.0	18.30	36.06	26.02	201	.	.	.	.	.	.
26.0	18.29	36.03	26.00	203	.	.	.	.	.	.
27.0	18.29	36.04	26.00	202	.	.	.	.	.	.
28.0	18.29	36.03	26.00	203	.	.	.	.	.	.
29.0	18.29	36.06	26.02	201	.	.	.	.	.	.
30.0	18.29	36.06	26.02	201	.	.	.	.	.	.
31.0	18.29	36.07	26.03	200	.	.	.	.	.	.
32.0	18.29	36.05	26.01	202	.	.	.	.	.	.
33.0	18.29	36.06	26.02	201	.	.	.	.	.	.
34.0	18.29	36.07	26.03	200	.	.	.	.	.	.
35.0	18.29	36.05	26.01	202	.	.	.	.	.	.
36.0	18.29	36.04	26.00	202	.	.	.	.	.	.
37.0	18.29	36.05	26.01	202	.	.	.	.	.	.
38.0	18.29	36.07	26.03	200	.	.	.	.	.	.
39.0	18.29	36.07	26.03	200	.	.	.	.	.	.
40.0	18.29	36.09	26.04	199	.	.	.	.	.	.
41.0	18.29	36.09	26.04	199	.	.	.	0.41	6.1	4.6



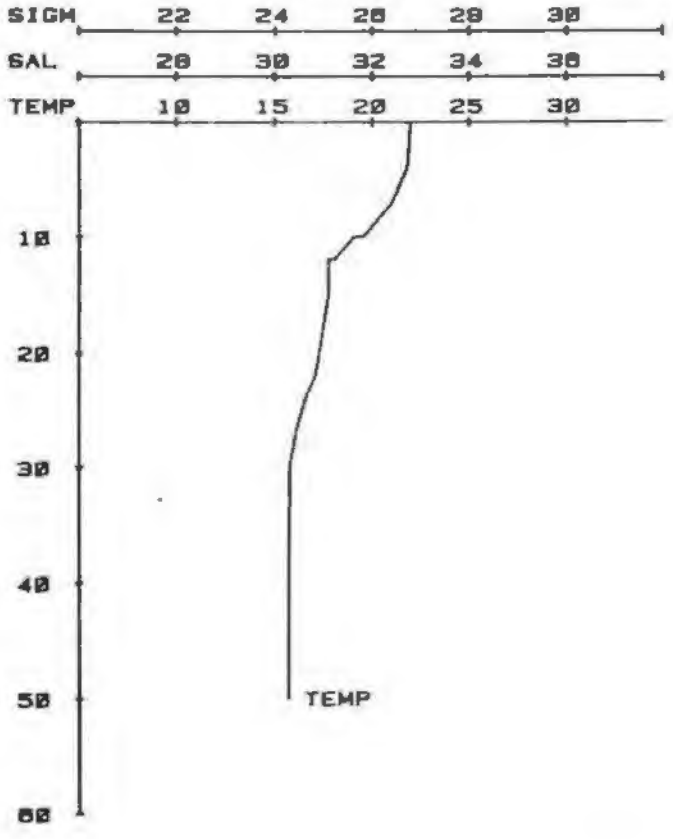
GILLISS CRUISE STA 054X 21/04/79 07.9 GMT CONSEC STA 54

LAT 38 10.0N LONG 08 17.2W DEPTH = 50M DIST LAST STA = 5.5KM

WEATHER DATA
WIND SPEED = 14KTS
WIND DIRECTION = 140
AIR TEMP = 21.9C
WEATHER CODE = 20
BAROMETRIC PRES= 1019.0

SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	D	OBSERVATIONS SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.0	.	.	.	.	.	.	.	.	.
4.0	21.8	.	.	.	.	.	.	.	.	.
5.0	21.5	.	.	.	.	.	.	.	.	.
7.0	21.0	.	.	.	.	.	.	.	.	.
8.0	20.5	.	.	.	.	.	.	.	.	.
9.0	20.0	.	.	.	.	.	.	.	.	.
10.0	19.5	.	.	.	.	.	.	.	.	.
10.0	19.0	.	.	.	.	.	.	.	.	.
11.0	18.5	.	.	.	.	.	.	.	.	.
12.0	18.0	.	.	.	.	.	.	.	.	.
12.0	17.7	.	.	.	.	.	.	.	.	.
15.0	17.7	.	.	.	.	.	.	.	.	.
17.0	17.5	.	.	.	.	.	.	.	.	.
22.0	17.0	.	.	.	.	.	.	.	.	.
24.0	16.5	.	.	.	.	.	.	.	.	.
27.0	16.0	.	.	.	.	.	.	.	.	.
30.0	15.7	.	.	.	.	.	.	.	.	.
50.0	15.6	.	.	.	.	.	.	.	.	.



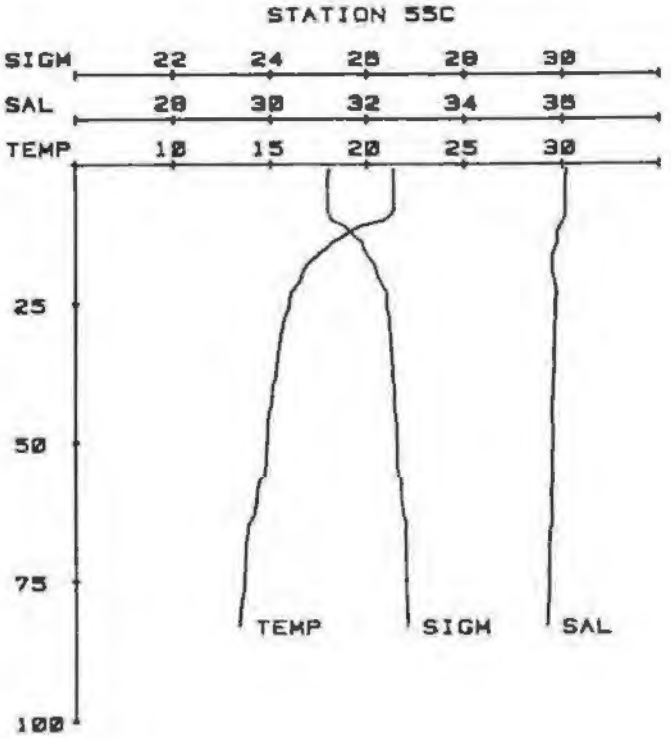
GILLISS CRUISE STA 055C 21/04/79 00.3 CAT CONSEC STA 55

LAT 39 09.5N LONG 80 14.4W DEPTH = 87M DIST LAST STA = 4.6NM

WEATHER DATA

WIND SPEED	= KNOTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 120
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 58	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.0	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	Θ	SVA	O2	O2*	AOU	PO4	NO3	SI
1.0	21.39	36.08	25.22	276	.	.	.	.	.	.
2.0	21.39	36.05	25.19	278	.	.	.	.	.	.
3.0	21.40	36.05	25.19	279	.	.	.	0.07	1.0	1.9
4.0	21.41	36.05	25.19	279	.	.	.	.	.	.
5.0	21.40	36.05	25.19	279	.	.	.	.	.	.
6.0	21.39	36.06	25.20	278	.	.	.	0.09	0.7	1.3
7.0	21.40	36.05	25.19	279	.	.	.	.	.	.
8.0	21.40	36.05	25.19	279	.	.	.	.	.	.
9.0	21.22	36.06	25.25	273	.	.	.	.	.	.
10.0	20.80	36.08	25.38	269	.	.	.	.	.	.
11.0	19.69	35.94	25.57	243	.	.	.	.	.	.
12.0	19.05	35.88	25.69	232	.	.	.	.	.	.
13.0	18.74	35.89	25.78	223	.	.	.	0.52	8.6	7.2
14.0	18.16	35.90	25.93	209	.	.	.	.	.	.
15.0	17.92	35.84	25.94	207	.	.	.	.	.	.
16.0	17.49	35.79	26.01	201	.	.	.	.	.	.
17.0	17.19	35.80	26.09	194	.	.	.	.	.	.
18.0	16.88	35.80	26.17	186	.	.	.	.	.	.
19.0	16.68	35.80	26.21	182	.	.	.	.	.	.
20.0	16.62	35.81	26.23	180	.	.	.	.	.	.
21.0	16.51	35.85	26.29	175	.	.	.	.	.	.
22.0	16.29	35.86	26.35	169	.	.	.	.	.	.
23.0	16.05	35.89	26.43	162	.	.	.	.	.	.
24.0	15.97	35.86	26.42	162	.	.	.	.	.	.
25.0	15.95	35.85	26.42	162	.	.	.	.	.	.
26.0	15.90	35.84	26.44	161	.	.	.	.	.	.
27.0	15.80	35.86	26.46	158	.	.	.	.	.	.
28.0	15.65	35.86	26.50	155	.	.	.	.	.	.
29.0	15.62	35.83	26.48	157	.	.	.	.	.	.
30.0	15.56	35.84	26.50	155	.	.	.	.	.	.
31.0	15.50	35.84	26.52	154	.	.	.	.	.	.
32.0	15.47	35.84	26.52	153	.	.	.	.	.	.
33.0	15.43	35.83	26.52	153	.	.	.	.	.	.
34.0	15.37	35.83	26.54	152	.	.	.	.	.	.
35.0	15.36	35.83	26.54	151	.	.	.	.	.	.
36.0	15.33	35.84	26.55	150	.	.	.	.	.	.
37.0	15.28	35.83	26.56	150	.	.	.	.	.	.
38.0	15.29	35.83	26.56	150	.	.	.	.	.	.
39.0	15.22	35.82	26.56	149	.	.	.	.	.	.
40.0	15.06	35.81	26.59	147	.	.	.	.	.	.
41.0	15.06	35.82	26.60	146	.	.	.	.	.	.
42.0	15.04	35.81	26.59	147	.	.	.	.	.	.
43.0	15.03	35.79	26.58	148	.	.	.	.	.	.
44.0	14.99	35.80	26.60	146	.	.	.	.	.	.
45.0	14.89	35.78	26.61	145	.	.	.	.	.	.
46.0	14.84	35.80	26.63	143	.	.	.	.	.	.
47.0	14.83	35.82	26.65	141	.	.	.	.	.	.
48.0	14.85	35.81	26.64	142	.	.	.	.	.	.
49.0	14.82	35.81	26.64	142	.	.	.	.	.	.
50.0	14.80	35.81	26.65	141	.	.	.	.	.	.
51.0	14.78	35.81	26.65	141	.	.	.	.	.	.
52.0	14.75	35.79	26.64	142	.	.	.	.	.	.
53.0	14.75	35.80	26.65	141	.	.	.	.	.	.
54.0	14.74	35.80	26.65	141	.	.	.	.	.	.
55.0	14.69	35.80	26.67	140	.	.	.	.	.	.
56.0	14.64	35.81	26.68	138	.	.	.	.	.	.
57.0	14.41	35.81	26.73	134	.	.	.	.	.	.
58.0	14.34	35.78	26.73	134	.	.	.	.	.	.
59.0	14.28	35.77	26.73	134	.	.	.	.	.	.
60.0	14.27	35.77	26.73	134	.	.	.	.	.	.
61.0	14.26	35.79	26.75	132	.	.	.	.	.	.
62.0	14.17	35.78	26.76	131	.	.	.	.	.	.
63.0	14.15	35.79	26.77	130	.	.	.	.	.	.
64.0	14.01	35.80	26.81	126	.	.	.	.	.	.
65.0	13.82	35.78	26.84	124	.	.	.	.	.	.
66.0	13.80	35.74	26.81	127	.	.	.	.	.	.
67.0	13.78	35.74	26.81	126	.	.	.	.	.	.
68.0	13.71	35.74	26.83	125	.	.	.	.	.	.
69.0	13.70	35.72	26.82	126	.	.	.	.	.	.
70.0	13.69	35.74	26.83	124	.	.	.	.	.	.
71.0	13.67	35.73	26.83	125	.	.	.	.	.	.
72.0	13.67	35.74	26.84	124	.	.	.	.	.	.
73.0	13.66	35.72	26.82	125	.	.	.	.	.	.
74.0	13.65	35.73	26.83	125	.	.	.	.	.	.
75.0	13.64	35.73	26.84	124	.	.	.	.	.	.
76.0	13.63	35.72	26.83	125	.	.	.	.	.	.
77.0	13.60	35.73	26.84	124	.	.	.	.	.	.
78.0	13.52	35.71	26.85	124	.	.	.	.	.	.
79.0	13.48	35.71	26.85	123	.	.	.	.	.	.
80.0	13.44	35.70	26.85	123	.	.	.	.	.	.
81.0	13.42	35.70	26.86	122	.	.	.	.	.	.
82.0	13.39	35.70	26.87	122	.	.	.	.	.	.
83.0	13.38	35.68	26.85	123	.	.	.	1.09	18.1	11.2



GILLISS CRUISE STA 056X 21/04/79 09.1 GMT CONSEC STA 56

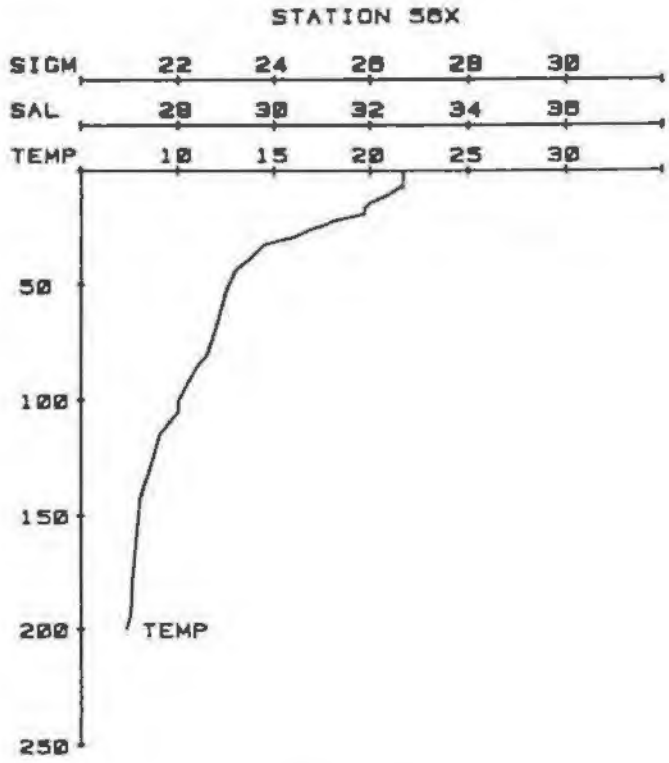
LAT 30 09.0N LONG 88 11.0W DEPTH = 215M DIST LAST STA = 5.5NM

WEATHER DATA

WIND SPEED	= 08KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 120
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.7	.	.	.	.	.	.	.	.	.
2.0	21.7	.	.	.	.	.	.	.	.	.
7.0	21.5	.	.	.	.	.	.	.	.	.
10.0	21.0	.	.	.	.	.	.	.	.	.
12.0	20.5	.	.	.	.	.	.	.	.	.
14.0	20.0	.	.	.	.	.	.	.	.	.
16.0	19.7	.	.	.	.	.	.	.	.	.
17.0	19.7	.	.	.	.	.	.	.	.	.
19.0	19.5	.	.	.	.	.	.	.	.	.
20.0	19.0	.	.	.	.	.	.	.	.	.
21.0	18.5	.	.	.	.	.	.	.	.	.
22.0	18.0	.	.	.	.	.	.	.	.	.
24.0	17.5	.	.	.	.	.	.	.	.	.
25.0	17.0	.	.	.	.	.	.	.	.	.
27.0	16.5	.	.	.	.	.	.	.	.	.
29.0	16.0	.	.	.	.	.	.	.	.	.
30.0	15.5	.	.	.	.	.	.	.	.	.
31.0	15.0	.	.	.	.	.	.	.	.	.
32.0	14.5	.	.	.	.	.	.	.	.	.
36.0	14.0	.	.	.	.	.	.	.	.	.
40.0	13.5	.	.	.	.	.	.	.	.	.
43.0	13.0	.	.	.	.	.	.	.	.	.
52.0	12.5	.	.	.	.	.	.	.	.	.
67.0	12.0	.	.	.	.	.	.	.	.	.
80.0	11.5	.	.	.	.	.	.	.	.	.
85.0	11.0	.	.	.	.	.	.	.	.	.
92.0	10.5	.	.	.	.	.	.	.	.	.
100.0	10.0	.	.	.	.	.	.	.	.	.
105.0	10.0	.	.	.	.	.	.	.	.	.
110.0	9.5	.	.	.	.	.	.	.	.	.
115.0	9.0	.	.	.	.	.	.	.	.	.
130.0	8.5	.	.	.	.	.	.	.	.	.
142.0	8.0	.	.	.	.	.	.	.	.	.
179.0	7.6	.	.	.	.	.	.	.	.	.
194.0	7.5	.	.	.	.	.	.	.	.	.
200.0	7.3	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 057C 21/04/79 09.6 GMT CONSEC STA 57

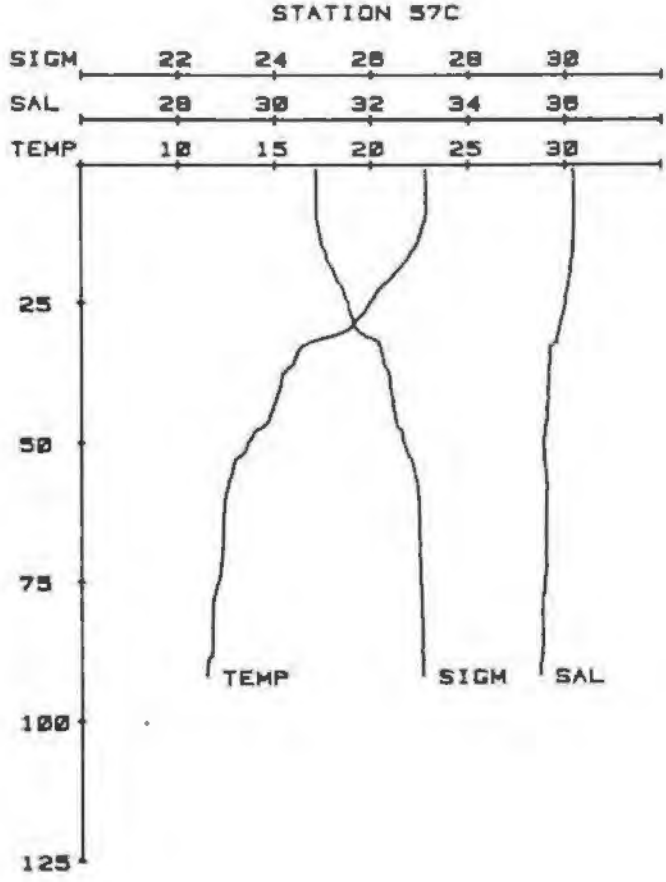
LAT 30 09.5N LONG 88 06.0W DEPTH = 240M DIST LAST STA = 6.0NM

WEATHER DATA

WIND SPEED	= 08KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 120
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.82	36.16	24.87	389	.	.	.	.	.	.
2.0	22.82	36.18	24.89	387	.	.	.	.	.	.
3.0	22.84	36.18	24.89	388	.	.	.	0.82	0.3	0.7
4.0	22.83	36.18	24.89	388	.	.	.	.	.	.
5.0	22.83	36.18	24.89	388	.	.	.	.	.	.
6.0	22.83	36.18	24.89	388	.	.	.	.	.	.
7.0	22.83	36.19	24.89	387	.	.	.	.	.	.
8.0	22.84	36.19	24.88	388	.	.	.	.	.	.
9.0	22.83	36.18	24.89	388	.	.	.	.	.	.
10.0	22.76	36.18	24.91	386	.	.	.	.	.	.
11.0	22.66	36.18	24.93	383	.	.	.	.	.	.
12.0	22.57	36.17	24.95	382	.	.	.	.	.	.
13.0	22.47	36.17	24.98	299	.	.	.	.	.	.
14.0	22.41	36.16	24.99	298	.	.	.	.	.	.
15.0	22.26	36.15	25.03	295	.	.	.	0.87	0.6	0.9
16.0	22.03	36.14	25.10	290	.	.	.	.	.	.
17.0	21.92	36.13	25.11	287	.	.	.	.	.	.
18.0	21.64	36.10	25.16	282	.	.	.	.	.	.
19.0	21.43	36.12	25.24	279	.	.	.	.	.	.
20.0	21.18	36.09	25.28	271	.	.	.	.	.	.
21.0	20.93	36.06	25.33	266	.	.	.	.	.	.
22.0	20.68	36.06	25.42	258	.	.	.	.	.	.
23.0	20.32	36.03	25.47	253	.	.	.	.	.	.
24.0	20.15	35.99	25.48	251	.	.	.	.	.	.
25.0	19.95	36.01	25.55	245	.	.	.	.	.	.
26.0	19.78	35.97	25.57	244	.	.	.	.	.	.
27.0	19.59	35.95	25.60	240	.	.	.	.	.	.
28.0	19.30	35.92	25.65	235	.	.	.	0.35	5.5	6.6
29.0	19.12	35.88	25.67	234	.	.	.	.	.	.
30.0	18.82	35.87	25.74	227	.	.	.	0.51	8.2	6.1
31.0	18.13	35.83	25.88	214	.	.	.	.	.	.
32.0	16.94	35.83	26.17	186	.	.	.	.	.	.
33.0	16.34	35.69	26.21	183	.	.	.	.	.	.
34.0	16.16	35.67	26.23	180	.	.	.	.	.	.
35.0	16.05	35.68	26.27	177	.	.	.	.	.	.
36.0	15.95	35.67	26.28	176	.	.	.	.	.	.
37.0	15.63	35.65	26.34	170	.	.	.	.	.	.
38.0	15.37	35.65	26.40	165	.	.	.	.	.	.
39.0	15.32	35.65	26.41	164	.	.	.	.	.	.
40.0	15.29	35.64	26.41	164	.	.	.	.	.	.
41.0	15.18	35.63	26.43	162	.	.	.	.	.	.
42.0	15.09	35.65	26.46	159	.	.	.	.	.	.
43.0	14.97	35.62	26.47	159	.	.	.	.	.	.
44.0	14.87	35.61	26.48	157	.	.	.	.	.	.
45.0	14.76	35.62	26.51	154	.	.	.	.	.	.
46.0	14.68	35.61	26.52	153	.	.	.	.	.	.
47.0	14.41	35.59	26.55	151	.	.	.	.	.	.
48.0	13.92	35.58	26.66	140	.	.	.	.	.	.
49.0	13.79	35.55	26.67	140	.	.	.	.	.	.
50.0	13.61	35.53	26.69	138	.	.	.	.	.	.
51.0	13.52	35.54	26.71	134	.	.	.	.	.	.
52.0	13.33	35.55	26.76	131	.	.	.	.	.	.
53.0	12.96	35.56	26.84	123	.	.	.	.	.	.
54.0	12.84	35.57	26.86	120	.	.	.	.	.	.
55.0	12.80	35.59	26.91	110	.	.	.	.	.	.



56.0	12.72	35.60	26.92	115	.	.	.	.	.	.
57.0	12.59	35.61	26.96	112	.	.	.	.	.	.
58.0	12.54	35.61	26.96	112	.	.	.	.	.	.
59.0	12.44	35.60	26.98	110	.	.	.	.	.	.
60.0	12.38	35.60	26.99	109	.	.	.	.	.	.
61.0	12.37	35.60	26.99	109	.	.	.	.	.	.
62.0	12.35	35.60	27.00	109	.	.	.	.	.	.
63.0	12.33	35.59	26.99	109	.	.	.	.	.	.
64.0	12.32	35.60	27.00	108	.	.	.	.	.	.
65.0	12.31	35.59	27.00	109	.	.	.	.	.	.
66.0	12.31	35.59	27.00	109	.	.	.	.	.	.
67.0	12.29	35.58	26.99	109	.	.	.	.	.	.
68.0	12.28	35.61	27.02	107	.	.	.	.	.	.
69.0	12.28	35.59	27.00	108	.	.	.	.	.	.
70.0	12.26	35.58	27.00	109	.	.	.	.	.	.
71.0	12.23	35.59	27.01	107	.	.	.	.	.	.
72.0	12.19	35.60	27.03	106	.	.	.	.	.	.
73.0	12.17	35.59	27.02	106	.	.	.	.	.	.
74.0	12.15	35.57	27.01	107	.	.	.	.	.	.
75.0	12.07	35.56	27.02	107	.	.	.	.	.	.
76.0	11.94	35.55	27.04	105	.	.	.	.	.	.
77.0	11.91	35.55	27.04	104	.	.	.	.	.	.
78.0	11.79	35.51	27.04	105	.	.	.	.	.	.
79.0	11.75	35.52	27.05	104	.	.	.	.	.	.
80.0	11.77	35.51	27.04	105	.	.	.	.	.	.
81.0	11.75	35.51	27.04	105	.	.	.	.	.	.
82.0	11.74	35.53	27.06	103	.	.	.	.	.	.
83.0	11.74	35.51	27.05	104	.	.	.	.	.	.
84.0	11.74	35.53	27.06	103	.	.	.	.	.	.
85.0	11.74	35.51	27.05	105	.	.	.	.	.	.
86.0	11.74	35.53	27.06	103	.	.	.	.	.	.
87.0	11.74	35.51	27.05	105	.	.	.	1.78	11.8	13.9
88.0	11.71	35.51	27.05	104	.	.	.	.	.	.
89.0	11.51	35.49	27.07	102	.	.	.	.	.	.
90.0	11.46	35.46	27.06	104	.	.	.	.	.	.
91.0	11.45	35.47	27.07	102	.	.	.	.	.	.
92.0	11.44	35.46	27.06	103	.	.	.	.	.	.

GILLISS CRUISE STA 0580 21/04/29 18.7 GMT CONSEC STA 58

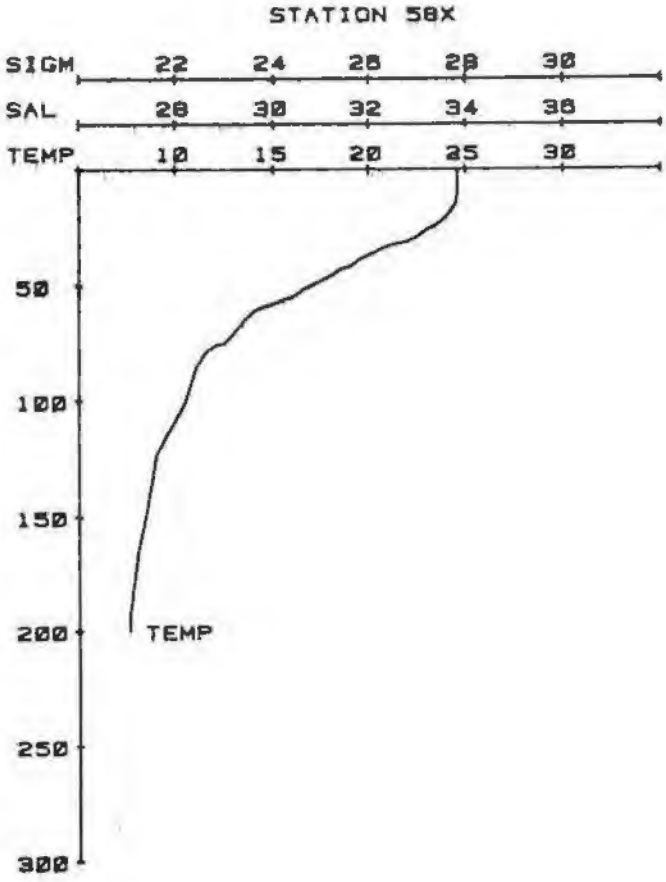
LAT 38 08.2N LONG 80 05.0W DEPTH = 305M DIST LAST STA = 3.0KM

WEATHER DATA

WIND SPEED	= 08KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 120
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	24.6	.	.	.	.	.	.	.	.	.
11.0	24.6	.	.	.	.	.	.	.	.	.
15.0	24.5	.	.	.	.	.	.	.	.	.
21.0	24.0	.	.	.	.	.	.	.	.	.
24.0	23.5	.	.	.	.	.	.	.	.	.
26.0	23.0	.	.	.	.	.	.	.	.	.
29.0	22.5	.	.	.	.	.	.	.	.	.
31.0	22.0	.	.	.	.	.	.	.	.	.
32.0	21.5	.	.	.	.	.	.	.	.	.
33.0	21.0	.	.	.	.	.	.	.	.	.
35.0	20.5	.	.	.	.	.	.	.	.	.
37.0	20.0	.	.	.	.	.	.	.	.	.
39.0	19.5	.	.	.	.	.	.	.	.	.
42.0	19.0	.	.	.	.	.	.	.	.	.
43.0	18.5	.	.	.	.	.	.	.	.	.
46.0	18.0	.	.	.	.	.	.	.	.	.
48.0	17.5	.	.	.	.	.	.	.	.	.
50.0	17.0	.	.	.	.	.	.	.	.	.
52.0	16.5	.	.	.	.	.	.	.	.	.
55.0	16.0	.	.	.	.	.	.	.	.	.
56.0	15.5	.	.	.	.	.	.	.	.	.
58.0	15.0	.	.	.	.	.	.	.	.	.
59.0	14.5	.	.	.	.	.	.	.	.	.
61.0	14.0	.	.	.	.	.	.	.	.	.
65.0	13.5	.	.	.	.	.	.	.	.	.
70.0	13.0	.	.	.	.	.	.	.	.	.
75.0	12.5	.	.	.	.	.	.	.	.	.
76.0	12.0	.	.	.	.	.	.	.	.	.
79.0	11.5	.	.	.	.	.	.	.	.	.
86.0	11.0	.	.	.	.	.	.	.	.	.
100.0	10.5	.	.	.	.	.	.	.	.	.
106.0	10.0	.	.	.	.	.	.	.	.	.
115.0	9.5	.	.	.	.	.	.	.	.	.
123.0	9.0	.	.	.	.	.	.	.	.	.
147.0	8.5	.	.	.	.	.	.	.	.	.
166.0	8.0	.	.	.	.	.	.	.	.	.
193.0	7.6	.	.	.	.	.	.	.	.	.
200.0	7.6	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 84C 21/04/79 14.0 GMT CONSEC STA 84

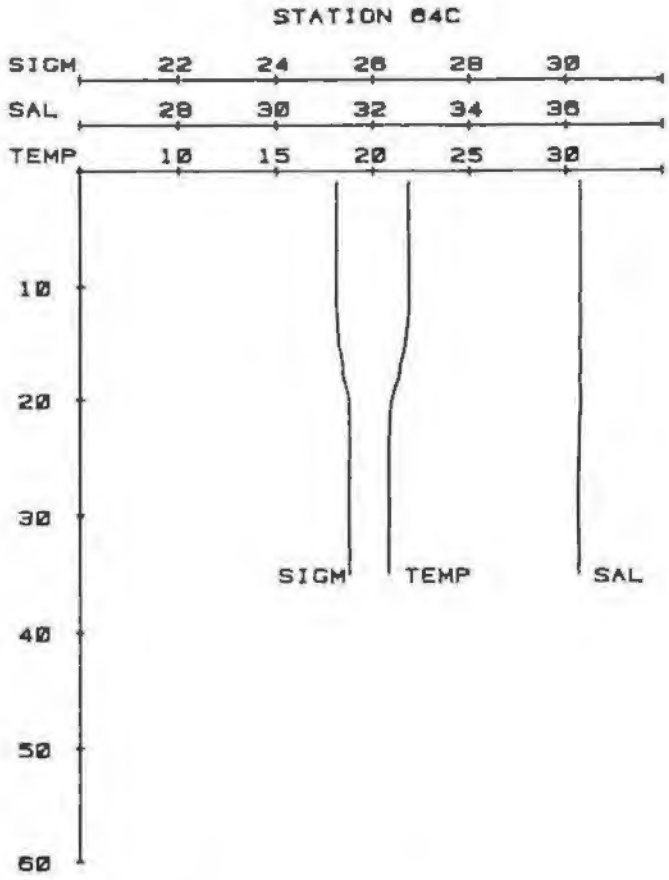
LAT 38 31.1N LONG 68 29.9W DEPTH = 36M DIST LAST STA = 58.1KM

WEATHER DATA

WIND SPEED	= 11KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 110
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.85	36.28	25.24	274	.	.	.	.	.	.
2.0	21.85	36.29	25.25	273	.	.	.	0.01	0.1	0.0
3.0	21.85	36.28	25.24	274	.	.	.	.	.	.
4.0	21.86	36.28	25.24	274	.	.	.	.	.	.
5.0	21.86	36.28	25.24	274	.	.	.	.	.	.
6.0	21.86	36.29	25.25	274	.	.	.	.	.	.
7.0	21.86	36.28	25.24	274	.	.	.	.	.	.
8.0	21.87	36.28	25.23	275	.	.	.	.	.	.
9.0	21.87	36.28	25.23	275	.	.	.	.	.	.
10.0	21.86	36.29	25.25	274	.	.	.	.	.	.
11.0	21.86	36.27	25.23	275	.	.	.	.	.	.
12.0	21.85	36.29	25.25	274	.	.	.	.	.	.
13.0	21.81	36.30	25.27	272	.	.	.	.	.	.
14.0	21.72	36.28	25.28	271	.	.	.	.	.	.
15.0	21.67	36.27	25.29	270	.	.	.	.	.	.
16.0	21.54	36.30	25.34	265	.	.	.	.	.	.
17.0	21.39	36.30	25.38	261	.	.	.	0.14	0.2	1.5
18.0	21.33	36.28	25.39	261	.	.	.	.	.	.
19.0	21.14	36.30	25.45	254	.	.	.	.	.	.
20.0	20.96	36.31	25.51	249	.	.	.	.	.	.
21.0	20.89	36.29	25.51	249	.	.	.	.	.	.
22.0	20.85	36.28	25.52	248	.	.	.	.	.	.
23.0	20.83	36.27	25.51	249	.	.	.	.	.	.
24.0	20.82	36.27	25.52	248	.	.	.	.	.	.
25.0	20.82	36.26	25.51	249	.	.	.	.	.	.
26.0	20.82	36.26	25.51	249	.	.	.	.	.	.
27.0	20.82	36.25	25.50	250	.	.	.	.	.	.
28.0	20.82	36.25	25.50	250	.	.	.	.	.	.
29.0	20.82	36.26	25.51	249	.	.	.	.	.	.
30.0	20.82	36.25	25.50	250	.	.	.	.	.	.
31.0	20.82	36.26	25.51	249	.	.	.	.	.	.
32.0	20.82	36.26	25.51	249	.	.	.	.	.	.
33.0	20.82	36.27	25.52	249	.	.	.	.	.	.
34.0	20.82	36.26	25.51	249	.	.	.	.	.	.
35.0	20.82	36.26	25.51	249	.	.	.	0.03	0.0	1.0



GILLISS CRUISE STA 85X 21/04/79 14.7 GMT CONSEC STA 85

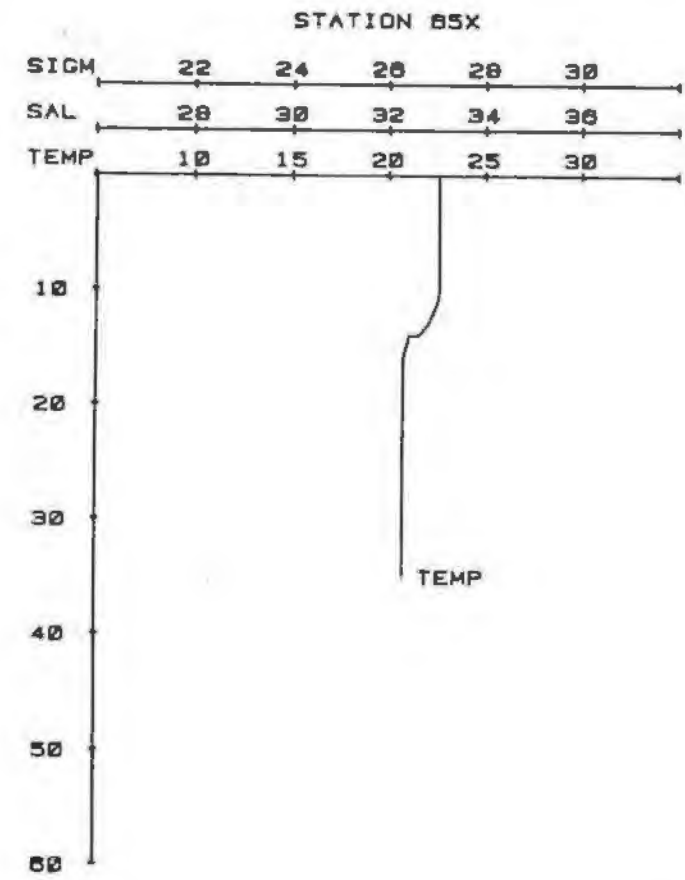
LAT 38 30.6N LONG 68 26.5W DEPTH = 35M DIST LAST STA = 5.3KM

WEATHER DATA

WIND SPEED	= 11KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 110
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.6	.	.	.	.	.	.	.	.	.
10.0	22.6	.	.	.	.	.	.	.	.	.
11.0	22.5	.	.	.	.	.	.	.	.	.
13.0	22.0	.	.	.	.	.	.	.	.	.
14.0	21.5	.	.	.	.	.	.	.	.	.
14.0	21.0	.	.	.	.	.	.	.	.	.
16.0	20.7	.	.	.	.	.	.	.	.	.
35.0	20.7	.	.	.	.	.	.	.	.	.

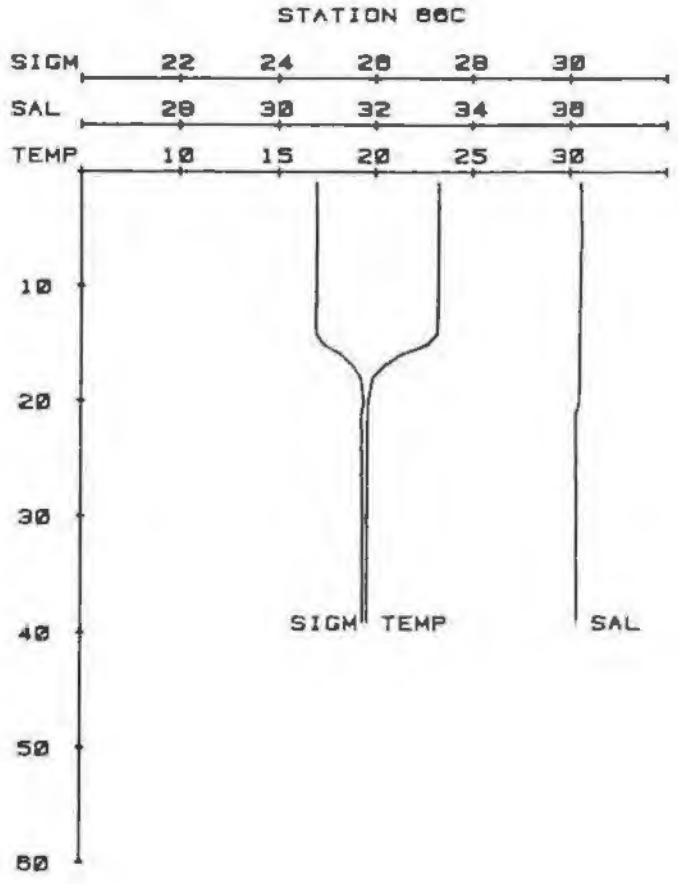


GILLISS CRUISE STA 86C 21/04/79 15.2 GMT CONSEC STA 66

LAT 30 29.3N LONG 80 21.4W DEPTH = 41M DIST LAST STA = 8.5NM

WEATHER DATA
WIND SPEED = 13KTS
WIND DIRECTION = 130
AIR TEMP = 23.3C
WEATHER CODE = 21
BAROMETRIC PRES= 1021.0
SEA STATE = 3
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

				OBSERVATIONS						
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.26	36.22	24.79	317	.	.	.	.	.	.
2.0	23.26	36.23	24.80	316	.	.	.	.	.	.
3.0	23.26	36.23	24.80	316	.	.	.	0.45	0.0	0.1
4.0	23.26	36.24	24.81	315	.	.	.	.	.	.
5.0	23.26	36.25	24.81	315	.	.	.	.	.	.
6.0	23.26	36.25	24.81	315	.	.	.	.	.	.
7.0	23.26	36.23	24.80	316	.	.	.	.	.	.
8.0	23.26	36.24	24.81	315	.	.	.	.	.	.
9.0	23.26	36.24	24.81	315	.	.	.	.	.	.
10.0	23.26	36.23	24.80	316	.	.	.	.	.	.
11.0	23.25	36.24	24.81	315	.	.	.	.	.	.
12.0	23.25	36.22	24.79	317	.	.	.	0.07	0.0	1.0
13.0	23.23	36.23	24.81	316	.	.	.	.	.	.
14.0	23.23	36.23	24.81	316	.	.	.	.	.	.
15.0	22.71	36.23	24.96	301	.	.	.	.	.	.
16.0	21.20	36.23	25.36	263	.	.	.	.	.	.
17.0	20.44	36.23	25.59	241	.	.	.	.	.	.
18.0	19.86	36.23	25.74	227	.	.	.	.	.	.
19.0	19.76	36.22	25.76	225	.	.	.	.	.	.
20.0	19.64	36.22	25.79	222	.	.	.	.	.	.
21.0	19.62	36.14	25.74	227	.	.	.	.	.	.
22.0	19.61	36.15	25.75	226	.	.	.	.	.	.
23.0	19.61	36.15	25.75	226	.	.	.	0.26	1.0	4.0
24.0	19.61	36.15	25.75	226	.	.	.	.	.	.
25.0	19.60	36.16	25.76	225	.	.	.	.	.	.
26.0	19.59	36.14	25.75	227	.	.	.	.	.	.
27.0	19.60	36.16	25.76	225	.	.	.	.	.	.
28.0	19.60	36.16	25.76	225	.	.	.	.	.	.
29.0	19.60	36.16	25.76	225	.	.	.	.	.	.
30.0	19.59	36.17	25.77	225	.	.	.	.	.	.
31.0	19.59	36.16	25.76	225	.	.	.	.	.	.
32.0	19.59	36.16	25.76	225	.	.	.	.	.	.
33.0	19.59	36.15	25.75	226	.	.	.	.	.	.
34.0	19.59	36.16	25.76	225	.	.	.	.	.	.
35.0	19.58	36.17	25.77	224	.	.	.	.	.	.
36.0	19.58	36.16	25.76	225	.	.	.	.	.	.
37.0	19.58	36.16	25.76	225	.	.	.	.	.	.
38.0	19.58	36.16	25.76	225	.	.	.	.	.	.
39.0	19.58	36.16	25.76	225	.	.	.	0.75	2.3	3.4

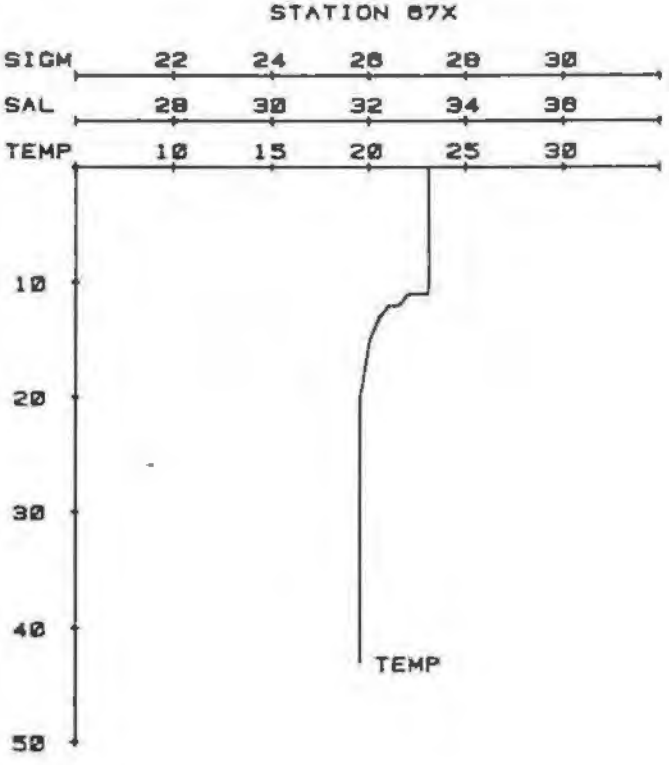


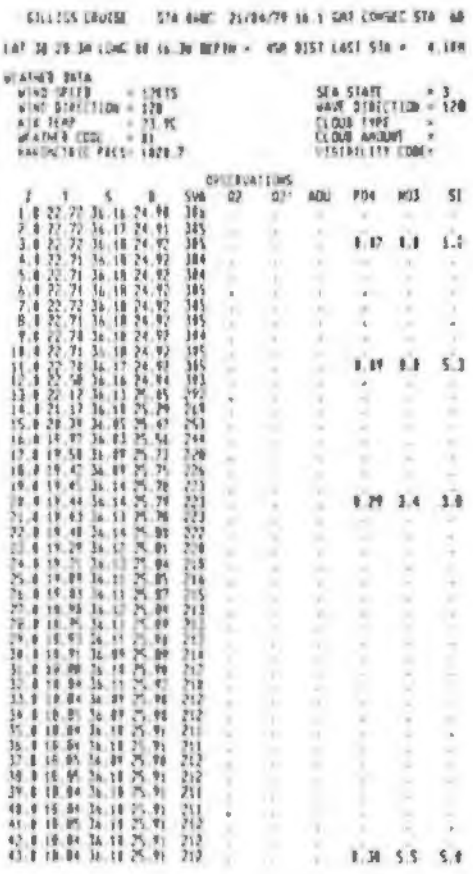
GILLISS CRUISE STA 87X 21/04/79 15.8 GMT CONSEC STA 67

LAT 30 28.9N LONG 80 18.8W DEPTH = 43M DIST LAST STA = 4.2NM

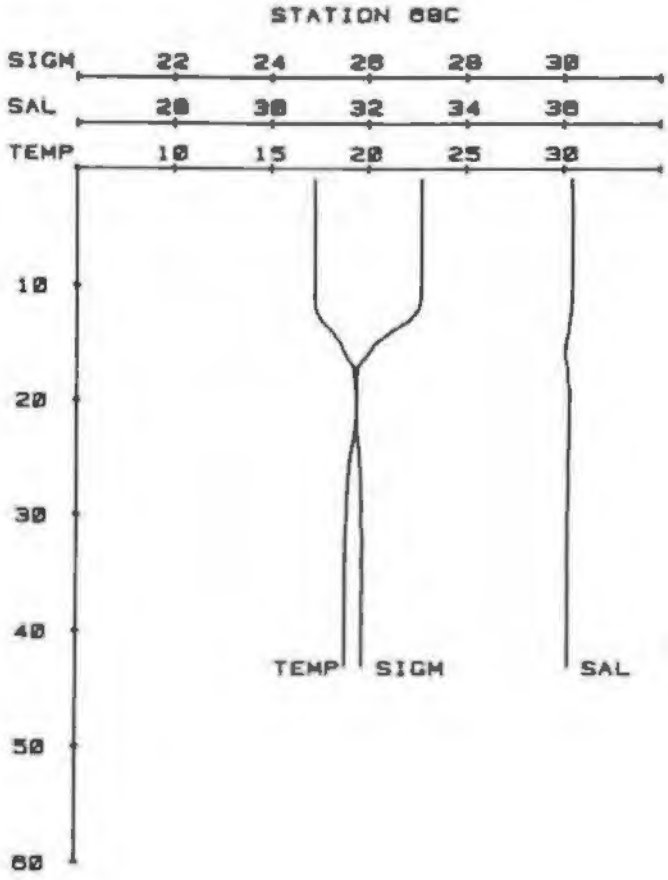
WEATHER DATA
WIND SPEED = 13KTS
WIND DIRECTION = 130
AIR TEMP = 23.3C
WEATHER CODE = 21
BAROMETRIC PRES= 1020.3
SEA STATE = 3
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

				OBSERVATIONS						
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.1	.	.	.	.	.	.	.	.	.
10.0	23.1	.	.	.	.	.	.	.	.	.
11.0	23.0	.	.	.	.	.	.	.	.	.
11.0	22.5	.	.	.	.	.	.	.	.	.
11.0	22.0	.	.	.	.	.	.	.	.	.
12.0	21.5	.	.	.	.	.	.	.	.	.
12.0	21.0	.	.	.	.	.	.	.	.	.
13.0	20.5	.	.	.	.	.	.	.	.	.
15.0	20.0	.	.	.	.	.	.	.	.	.
20.0	19.5	.	.	.	.	.	.	.	.	.
43.0	19.5	.	.	.	.	.	.	.	.	.





P	T	S	D	SVA	O2	O2%	ADJ	PO4	NO3	SI
1.0	22.72	36.16	24.90	384						
2.0	22.72	36.17	24.91	385						
3.0	22.72	36.18	24.92	385				0.07	0.0	5.0
4.0	22.71	36.18	24.92	384						
5.0	22.71	36.18	24.92	384						
6.0	22.71	36.18	24.93	385						
7.0	22.72	36.18	24.92	385						
8.0	22.71	36.18	24.92	385						
9.0	22.70	36.18	24.93	384						
10.0	22.71	36.18	24.92	385						
11.0	22.70	36.17	24.93	385				0.09	0.0	5.3
12.0	22.68	36.16	24.94	383						
13.0	22.12	36.13	25.05	392						
14.0	21.33	36.10	25.29	388						
15.0	20.30	36.05	25.67	393						
16.0	19.97	36.03	25.74	394						
17.0	19.58	36.00	25.77	390						
18.0	19.47	36.00	25.79	389						
19.0	19.41	36.14	25.78	393						
20.0	19.44	36.14	25.79	393				0.29	3.4	3.0
21.0	19.43	36.13	25.78	393						
22.0	19.40	36.14	25.80	393						
23.0	19.29	36.12	25.81	390						
24.0	19.21	36.13	25.84	390						
25.0	19.09	36.11	25.85	389						
26.0	19.03	36.11	25.87	389						
27.0	18.98	36.12	25.89	390						
28.0	18.95	36.11	25.89	390						
29.0	18.93	36.11	25.90	390						
30.0	18.91	36.09	25.89	390						
31.0	18.90	36.10	25.90	390						
32.0	18.84	36.11	25.92	390						
33.0	18.84	36.09	25.93	390						
34.0	18.81	36.09	25.93	390						
35.0	18.84	36.10	25.91	390						
36.0	18.84	36.10	25.91	390						
37.0	18.85	36.09	25.90	390						
38.0	18.85	36.10	25.91	390						
39.0	18.84	36.10	25.91	390						
40.0	18.84	36.10	25.91	390						
41.0	18.85	36.10	25.91	390						
42.0	18.84	36.10	25.91	390						
43.0	18.84	36.10	25.91	390				0.38	5.5	5.0



GILLISS CRUISE STA 8691 21/04/79 16.7 GMT CONSEC STA 69

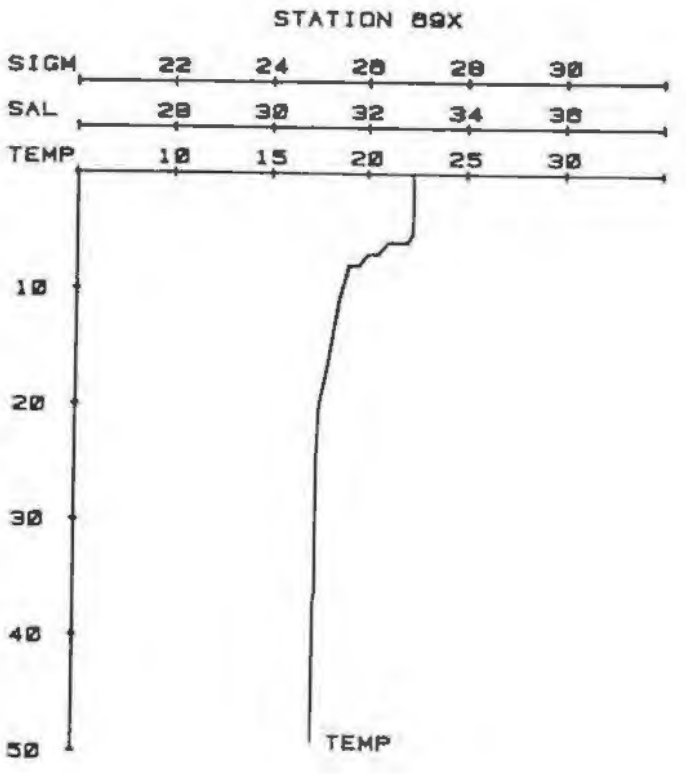
LAT 38 27.7N LONG 88 12.8W DEPTH = 49M DIST LAST STA = 5.7KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 3
WIND DIRECTION	= 120	WAVE DIRECTION	= 120
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES=	1026.3	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.3	*	*	*	*	*	*	*	*	*
5.0	22.3	*	*	*	*	*	*	*	*	*
6.0	22.0	*	*	*	*	*	*	*	*	*
6.0	21.5	*	*	*	*	*	*	*	*	*
6.0	21.0	*	*	*	*	*	*	*	*	*
7.0	20.5	*	*	*	*	*	*	*	*	*
7.0	20.0	*	*	*	*	*	*	*	*	*
8.0	19.5	*	*	*	*	*	*	*	*	*
8.0	19.0	*	*	*	*	*	*	*	*	*
11.0	18.5	*	*	*	*	*	*	*	*	*
16.0	18.0	*	*	*	*	*	*	*	*	*
20.0	17.5	*	*	*	*	*	*	*	*	*
25.0	17.4	*	*	*	*	*	*	*	*	*
36.0	17.4	*	*	*	*	*	*	*	*	*
37.0	17.3	*	*	*	*	*	*	*	*	*
49.0	17.3	*	*	*	*	*	*	*	*	*



GILLISS CRUISE STA 8701 21/04/79 17.1 GMT CONSEC STA 70

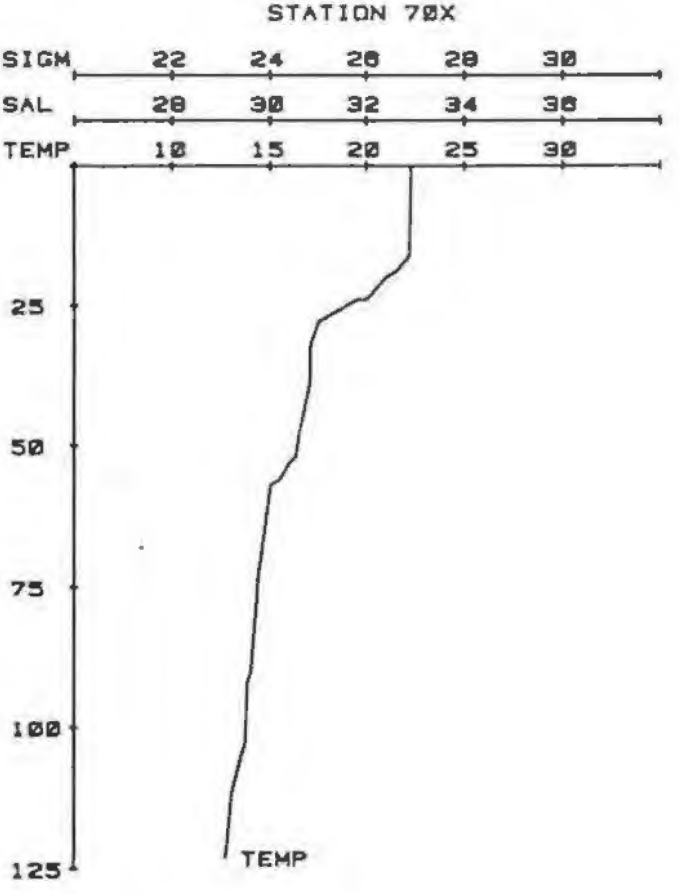
LAT 38 27.5N LONG 88 10.8W DEPTH = 123M DIST LAST STA = 3.2KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 3
WIND DIRECTION	= 120	WAVE DIRECTION	= 120
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES=	1026.3	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.3	*	*	*	*	*	*	*	*	*
16.0	22.2	*	*	*	*	*	*	*	*	*
17.0	22.0	*	*	*	*	*	*	*	*	*
19.0	21.5	*	*	*	*	*	*	*	*	*
20.0	21.0	*	*	*	*	*	*	*	*	*
22.0	20.5	*	*	*	*	*	*	*	*	*
24.0	20.0	*	*	*	*	*	*	*	*	*
24.0	19.5	*	*	*	*	*	*	*	*	*
25.0	19.0	*	*	*	*	*	*	*	*	*
26.0	18.5	*	*	*	*	*	*	*	*	*
27.0	18.0	*	*	*	*	*	*	*	*	*
28.0	17.5	*	*	*	*	*	*	*	*	*
32.0	17.1	*	*	*	*	*	*	*	*	*
38.0	17.1	*	*	*	*	*	*	*	*	*
48.0	17.0	*	*	*	*	*	*	*	*	*
49.0	16.5	*	*	*	*	*	*	*	*	*
52.0	16.3	*	*	*	*	*	*	*	*	*
53.0	16.0	*	*	*	*	*	*	*	*	*
56.0	15.5	*	*	*	*	*	*	*	*	*
57.0	15.0	*	*	*	*	*	*	*	*	*
70.0	14.5	*	*	*	*	*	*	*	*	*
72.0	14.4	*	*	*	*	*	*	*	*	*
90.0	14.0	*	*	*	*	*	*	*	*	*
92.0	13.9	*	*	*	*	*	*	*	*	*
103.0	13.7	*	*	*	*	*	*	*	*	*
105.0	13.5	*	*	*	*	*	*	*	*	*
113.0	13.0	*	*	*	*	*	*	*	*	*
123.0	12.9	*	*	*	*	*	*	*	*	*



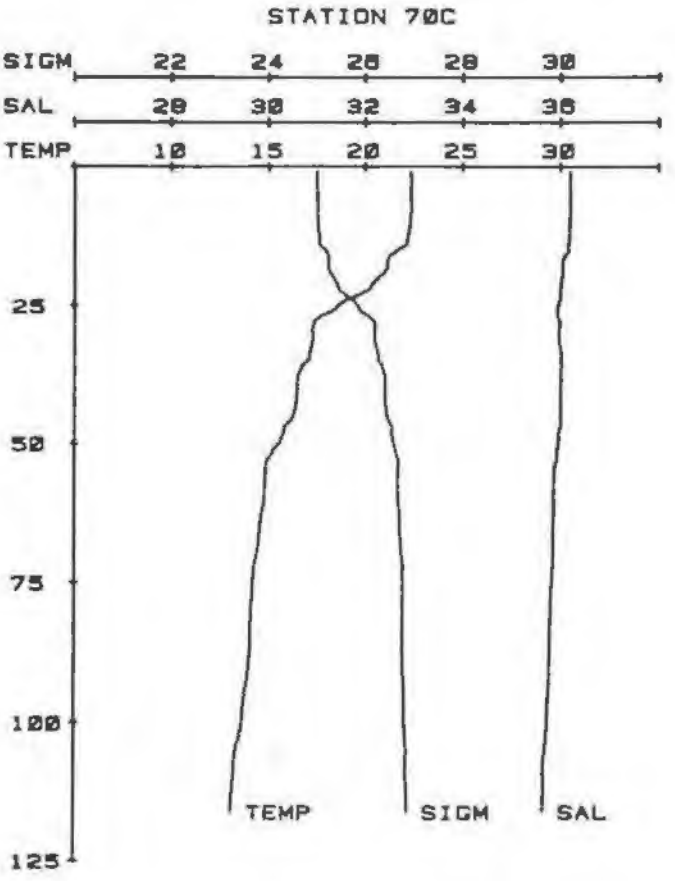
CALISS CRUISE STA 070C 21/04/79 17.6 GMT CONSEC STA 71

LAT 30 27.00 LONG 88 09.5W DEPTH = 123M DIST LAST STA = 2.3KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 130
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= XI	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.3	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.38	36.10	25.81	295	.	.	.	.	.	.
2.0	22.38	36.10	25.81	295	.	.	.	0.14	0.0	0.5
3.0	22.38	36.10	25.81	295	.	.	.	.	.	.
4.0	22.37	36.19	25.83	294	.	.	.	.	.	.
5.0	22.36	36.19	25.83	294	.	.	.	.	.	.
6.0	22.37	36.18	25.82	295	.	.	.	.	.	.
7.0	22.38	36.19	25.82	295	.	.	.	.	.	.
8.0	22.37	36.19	25.83	295	.	.	.	.	.	.
9.0	22.33	36.18	25.83	294	.	.	.	.	.	.
10.0	22.31	36.18	25.84	294	.	.	.	.	.	.
11.0	22.28	36.17	25.84	294	.	.	.	.	.	.
12.0	22.21	36.18	25.86	291	.	.	.	.	.	.
13.0	22.17	36.14	25.86	292	.	.	.	.	.	.
14.0	22.10	36.15	25.87	290	.	.	.	.	.	.
15.0	21.63	36.16	25.21	277	.	.	.	.	.	.
16.0	21.21	36.07	25.26	273	.	.	.	.	.	.
17.0	21.12	36.03	25.25	273	.	.	.	.	.	.
18.0	21.13	36.03	25.25	274	.	.	.	.	.	.
19.0	20.95	36.03	25.30	269	.	.	.	.	.	.
20.0	20.65	36.02	25.37	262	.	.	.	.	.	.
21.0	20.35	36.00	25.44	256	.	.	.	.	.	.
22.0	20.10	35.99	25.48	252	.	.	.	1.25	0.9	4.9
23.0	19.78	35.99	25.60	248	.	.	.	.	.	.
24.0	18.96	35.98	25.79	223	.	.	.	.	.	.
25.0	18.56	35.94	25.84	216	.	.	.	.	.	.
26.0	18.38	35.92	25.91	211	.	.	.	1.57	7.5	6.5
27.0	17.67	35.94	26.00	195	.	.	.	.	.	.
28.0	17.34	36.00	26.21	183	.	.	.	.	.	.
29.0	17.26	35.97	26.21	183	.	.	.	.	.	.
30.0	17.24	35.96	26.20	184	.	.	.	.	.	.
31.0	17.24	35.97	26.20	183	.	.	.	.	.	.
32.0	17.24	35.98	26.22	182	.	.	.	.	.	.
33.0	17.16	36.00	26.25	179	.	.	.	.	.	.
34.0	17.09	36.02	26.28	176	.	.	.	.	.	.
35.0	17.07	36.00	26.27	177	.	.	.	.	.	.
36.0	16.97	36.01	26.35	169	.	.	.	.	.	.
37.0	16.68	36.00	26.38	166	.	.	.	.	.	.
38.0	16.47	36.01	26.42	163	.	.	.	.	.	.
39.0	16.46	36.01	26.43	162	.	.	.	.	.	.
40.0	16.45	36.00	26.42	163	.	.	.	.	.	.
41.0	16.44	36.00	26.42	163	.	.	.	.	.	.
42.0	16.41	36.01	26.44	161	.	.	.	.	.	.
43.0	16.39	36.00	26.43	162	.	.	.	.	.	.
44.0	16.33	36.01	26.46	160	.	.	.	.	.	.
45.0	16.24	36.00	26.47	159	.	.	.	.	.	.
46.0	16.12	36.01	26.50	155	.	.	.	1.85	18.6	7.4
47.0	15.79	35.99	26.52	149	.	.	.	.	.	.
48.0	15.74	35.96	26.55	151	.	.	.	.	.	.
49.0	15.65	35.96	26.57	149	.	.	.	.	.	.
50.0	15.58	35.96	26.60	146	.	.	.	.	.	.
51.0	15.29	35.93	26.64	142	.	.	.	.	.	.
52.0	15.16	35.93	26.66	140	.	.	.	.	.	.
53.0	14.89	35.92	26.71	135	.	.	.	.	.	.
54.0	14.84	35.90	26.69	137	.	.	.	.	.	.
55.0	14.82	35.87	26.69	138	.	.	.	.	.	.
56.0	14.81	35.86	26.69	138	.	.	.	.	.	.
57.0	14.79	35.86	26.69	138	.	.	.	.	.	.
58.0	14.79	35.86	26.69	138	.	.	.	.	.	.
59.0	14.72	35.86	26.69	137	.	.	.	.	.	.
60.0	14.72	35.86	26.69	137	.	.	.	.	.	.
61.0	14.74	35.87	26.71	136	.	.	.	.	.	.
62.0	14.64	35.87	26.73	134	.	.	.	.	.	.
63.0	14.58	35.86	26.74	134	.	.	.	.	.	.
64.0	14.56	35.85	26.73	134	.	.	.	.	.	.
65.0	14.53	35.85	26.74	133	.	.	.	.	.	.
66.0	14.51	35.85	26.74	133	.	.	.	.	.	.
67.0	14.46	35.85	26.75	132	.	.	.	.	.	.
68.0	14.44	35.85	26.76	132	.	.	.	.	.	.
69.0	14.41	35.85	26.77	131	.	.	.	.	.	.
70.0	14.36	35.85	26.78	130	.	.	.	.	.	.
71.0	14.27	35.85	26.80	128	.	.	.	.	.	.
72.0	14.22	35.85	26.81	127	.	.	.	.	.	.
73.0	14.20	35.83	26.79	128	.	.	.	.	.	.
74.0	14.17	35.83	26.80	128	.	.	.	.	.	.
75.0	14.14	35.83	26.81	127	.	.	.	.	.	.
76.0	14.13	35.81	26.79	128	.	.	.	.	.	.
77.0	14.12	35.82	26.80	127	.	.	.	.	.	.
78.0	14.11	35.81	26.80	128	.	.	.	.	.	.
79.0	14.07	35.80	26.80	128	.	.	.	.	.	.
80.0	14.09	35.82	26.81	127	.	.	.	.	.	.
81.0	14.07	35.80	26.80	128	.	.	.	.	.	.
82.0	14.05	35.80	26.80	128	.	.	.	.	.	.
83.0	14.05	35.80	26.80	128	.	.	.	.	.	.
84.0	14.05	35.79	26.80	128	.	.	.	.	.	.
85.0	14.05	35.80	26.80	128	.	.	.	.	.	.
86.0	14.05	35.79	26.80	129	.	.	.	.	.	.
87.0	14.03	35.79	26.80	128	.	.	.	.	.	.
88.0	13.99	35.79	26.81	127	.	.	.	.	.	.
89.0	13.96	35.79	26.81	128	.	.	.	.	.	.
90.0	13.96	35.78	26.81	128	.	.	.	.	.	.
91.0	13.91	35.78	26.82	127	.	.	.	.	.	.
92.0	13.89	35.79	26.83	125	.	.	.	.	.	.
93.0	13.85	35.78	26.83	125	.	.	.	.	.	.
94.0	13.76	35.77	26.84	124	.	.	.	.	.	.
95.0	13.74	35.76	26.84	125	.	.	.	.	.	.



96.0	13.70	35.75	26.84	125	.	.	.	.	.	.
97.0	13.69	35.75	26.84	125	.	.	.	.	.	.
98.0	13.65	35.75	26.85	124	.	.	.	.	.	.
99.0	13.65	35.74	26.84	125	.	.	.	.	.	.
100.0	13.63	35.74	26.85	124	.	.	.	.	.	.
101.0	13.59	35.74	26.85	123	.	.	.	.	.	.
102.0	13.58	35.72	26.86	123	.	.	.	.	.	.
103.0	13.47	35.73	26.87	122	.	.	.	.	.	.
104.0	13.33	35.70	26.88	121	.	.	.	.	.	.
105.0	13.30	35.71	26.89	120	.	.	.	.	.	.
106.0	13.25	35.67	26.87	122	.	.	.	.	.	.
107.0	13.23	35.67	26.87	122	.	.	.	.	.	.
108.0	13.21	35.66	26.87	122	.	.	.	.	.	.
109.0	13.22	35.67	26.88	121	.	.	.	.	.	.
110.0	13.18	35.67	26.89	121	.	.	.	.	.	.
111.0	13.17	35.67	26.89	120	.	.	.	.	.	.
112.0	13.16	35.68	26.90	120	.	.	.	1.24	19.2	11.0
113.0	13.11	35.67	26.90	119	.	.	.	.	.	.
114.0	13.12	35.67	26.90	120	.	.	.	.	.	.
115.0	13.08	35.67	26.91	119	.	.	.	.	.	.
116.0	13.08	35.66	26.90	120	.	.	.	.	.	.

GILLISS CRUISE STA 0718 21/04/79 18.6 GMT CONSEC STA 72

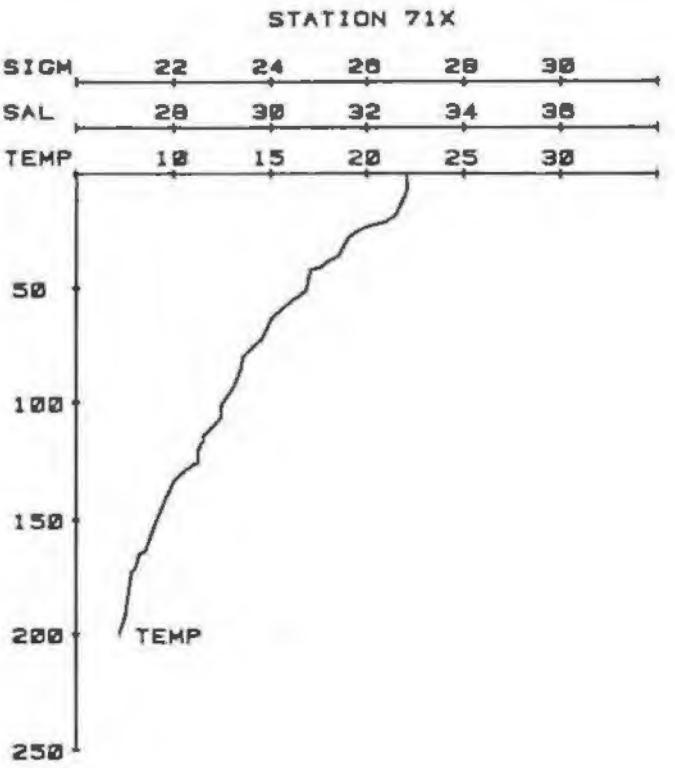
LAT 36 26.5N LONG 88 06.2W DEPTH = 233M DIST LAST STA = 5 NM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= XI	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.8	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.1	.	.	.	.	.	.	.	.	.
7.0	22.1	.	.	.	.	.	.	.	.	.
9.0	22.0	.	.	.	.	.	.	.	.	.
10.0	21.5	.	.	.	.	.	.	.	.	.
21.0	21.0	.	.	.	.	.	.	.	.	.
22.0	20.5	.	.	.	.	.	.	.	.	.
23.0	20.0	.	.	.	.	.	.	.	.	.
25.0	19.5	.	.	.	.	.	.	.	.	.
28.0	19.0	.	.	.	.	.	.	.	.	.
36.0	18.5	.	.	.	.	.	.	.	.	.
38.0	18.0	.	.	.	.	.	.	.	.	.
41.0	17.5	.	.	.	.	.	.	.	.	.
42.0	17.0	.	.	.	.	.	.	.	.	.
51.0	16.0	.	.	.	.	.	.	.	.	.
53.0	16.5	.	.	.	.	.	.	.	.	.
56.0	16.0	.	.	.	.	.	.	.	.	.
60.0	15.5	.	.	.	.	.	.	.	.	.
64.0	15.0	.	.	.	.	.	.	.	.	.
73.0	14.5	.	.	.	.	.	.	.	.	.
77.0	14.0	.	.	.	.	.	.	.	.	.
81.0	13.5	.	.	.	.	.	.	.	.	.
86.0	13.4	.	.	.	.	.	.	.	.	.
94.0	13.0	.	.	.	.	.	.	.	.	.
100.0	12.5	.	.	.	.	.	.	.	.	.
101.0	12.4	.	.	.	.	.	.	.	.	.
105.0	12.4	.	.	.	.	.	.	.	.	.
110.0	12.0	.	.	.	.	.	.	.	.	.
114.0	11.5	.	.	.	.	.	.	.	.	.
116.0	11.5	.	.	.	.	.	.	.	.	.
120.0	11.2	.	.	.	.	.	.	.	.	.
126.0	11.2	.	.	.	.	.	.	.	.	.
126.0	11.0	.	.	.	.	.	.	.	.	.
129.0	10.5	.	.	.	.	.	.	.	.	.
133.0	10.0	.	.	.	.	.	.	.	.	.
142.0	9.5	.	.	.	.	.	.	.	.	.
152.0	9.0	.	.	.	.	.	.	.	.	.
164.0	8.5	.	.	.	.	.	.	.	.	.
165.0	8.2	.	.	.	.	.	.	.	.	.
171.0	8.0	.	.	.	.	.	.	.	.	.
173.0	7.0	.	.	.	.	.	.	.	.	.
191.0	7.5	.	.	.	.	.	.	.	.	.
200.0	7.2	.	.	.	.	.	.	.	.	.



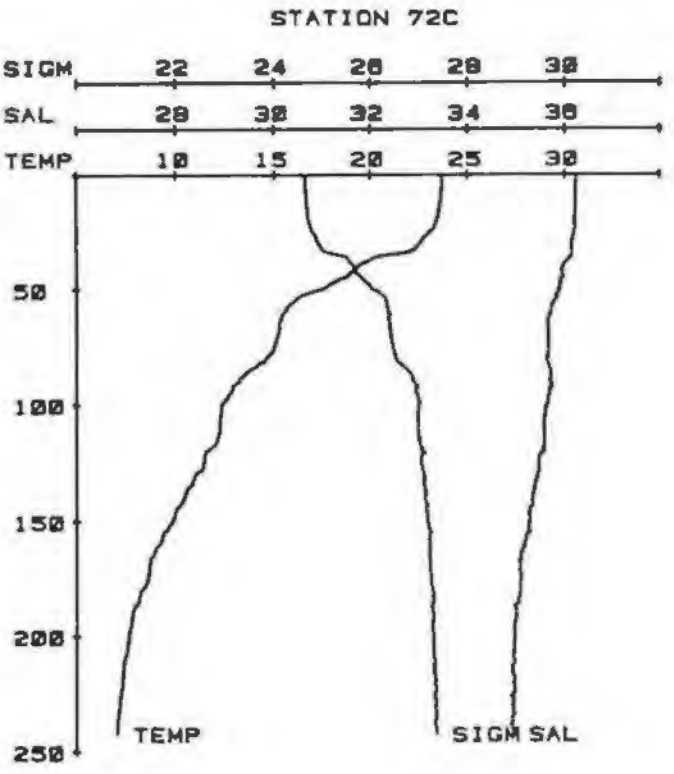
GILLISS CRUISE STA 072C 21/04/79 19.0 GMT CONSEC STA 73

LAT 38 26.2N LONG 80 03.0W DEPTH = 305M DIST LAST STA = 5.1KM

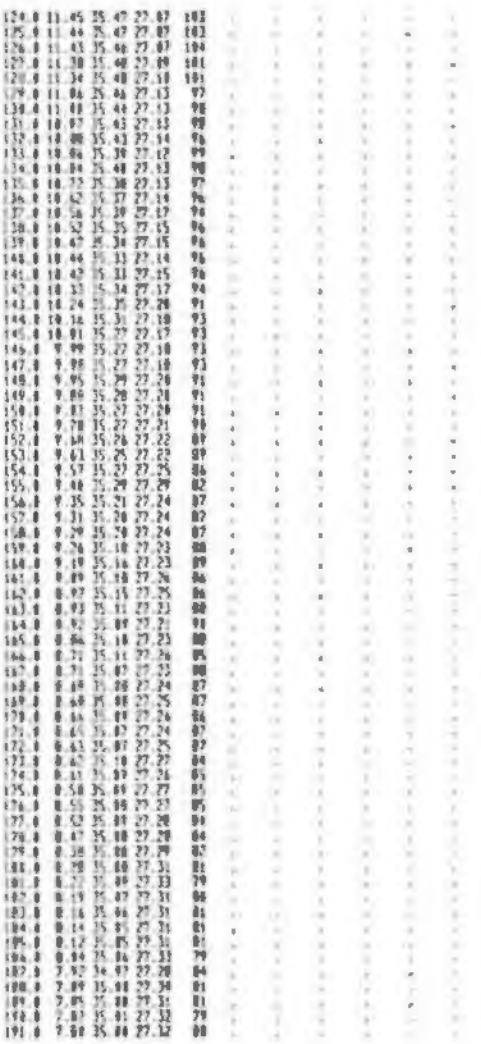
WEATHER DATA

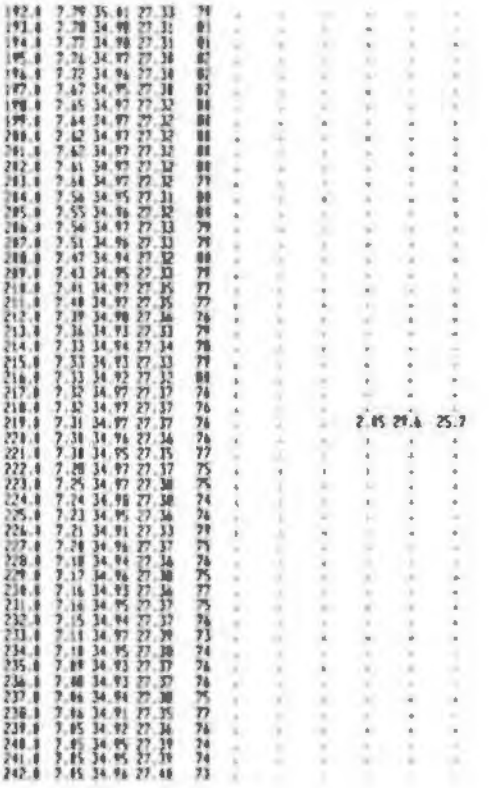
WIND SPEED	= 13KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 130
AIR TEMP	= 24.8C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.0	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.71	36.24	24.67	328	.	.	.	.	.	.
2.0	23.71	36.24	24.67	328	.	.	.	.	.	.
3.0	23.70	36.24	24.68	328	.	.	.	0.15	4.0	6.8
4.0	23.69	36.24	24.68	327	.	.	.	.	.	.
5.0	23.70	36.23	24.67	328	.	.	.	.	.	.
6.0	23.69	36.24	24.68	327	.	.	.	.	.	.
7.0	23.69	36.23	24.67	328	.	.	.	.	.	.
8.0	23.64	36.24	24.69	326	.	.	.	.	.	.
9.0	23.63	36.23	24.69	327	.	.	.	.	.	.
10.0	23.66	36.24	24.69	327	.	.	.	.	.	.
11.0	23.66	36.24	24.69	327	.	.	.	.	.	.
12.0	23.58	36.24	24.71	325	.	.	.	.	.	.
13.0	23.58	36.23	24.70	325	.	.	.	.	.	.
14.0	23.58	36.24	24.71	325	.	.	.	.	.	.
15.0	23.55	36.24	24.72	324	.	.	.	.	.	.
16.0	23.51	36.23	24.73	323	.	.	.	.	.	.
17.0	23.51	36.22	24.72	324	.	.	.	.	.	.
18.0	23.51	36.22	24.72	324	.	.	.	.	.	.
19.0	23.43	36.22	24.74	322	.	.	.	.	.	.
20.0	23.39	36.21	24.75	322	.	.	.	.	.	.
21.0	23.36	36.22	24.76	320	.	.	.	.	.	.
22.0	23.31	36.22	24.78	319	.	.	.	.	.	.
23.0	23.29	36.22	24.78	318	.	.	.	.	.	.
24.0	23.19	36.22	24.81	316	.	.	.	.	.	.
25.0	23.07	36.20	24.83	314	.	.	.	.	.	.
26.0	22.92	36.19	24.87	310	.	.	.	.	.	.
27.0	22.81	36.19	24.90	307	.	.	.	.	.	.
28.0	22.78	36.16	24.91	307	.	.	.	.	.	.
29.0	22.66	36.16	24.92	305	.	.	.	.	.	.
30.0	22.54	36.16	24.95	302	.	.	.	.	.	.
31.0	22.48	36.16	24.97	301	.	.	.	.	.	.
32.0	22.35	36.16	25.01	297	.	.	.	.	.	.
33.0	22.27	36.16	25.03	295	.	.	.	.	.	.
34.0	21.94	36.16	25.12	286	.	.	.	.	.	.
35.0	21.14	36.16	25.35	265	.	.	.	.	.	.
36.0	20.34	36.13	25.54	247	.	.	.	0.24	1.4	2.2
37.0	20.11	36.09	25.57	244	.	.	.	.	.	.
38.0	19.91	36.03	25.58	243	.	.	.	.	.	.
39.0	19.54	36.00	25.65	236	.	.	.	.	.	.
40.0	19.38	35.97	25.67	234	.	.	.	.	.	.
41.0	19.29	35.95	25.68	233	.	.	.	.	.	.
42.0	19.24	35.95	25.69	232	.	.	.	.	.	.
43.0	19.08	35.94	25.75	227	.	.	.	.	.	.
44.0	18.89	35.90	25.81	222	.	.	.	.	.	.
45.0	18.76	35.90	25.84	218	.	.	.	.	.	.
46.0	18.48	35.92	25.88	214	.	.	.	.	.	.
47.0	18.17	35.92	25.94	209	.	.	.	.	.	.
48.0	17.95	35.92	26.00	204	.	.	.	.	.	.
49.0	17.75	35.89	26.02	201	.	.	.	.	.	.
50.0	17.62	35.91	26.07	199	.	.	.	0.70	0.0	5.9
51.0	17.06	35.89	26.19	185	.	.	.	.	.	.
52.0	16.76	35.85	26.23	181	.	.	.	.	.	.
53.0	16.42	35.85	26.31	174	.	.	.	.	.	.
54.0	16.25	35.85	26.35	170	.	.	.	.	.	.
55.0	16.18	35.86	26.35	170	.	.	.	.	.	.
56.0	15.92	35.78	26.37	168	.	.	.	.	.	.
57.0	15.84	35.74	26.36	169	.	.	.	.	.	.
58.0	15.68	35.72	26.38	167	.	.	.	.	.	.
59.0	15.64	35.72	26.39	166	.	.	.	.	.	.
60.0	15.57	35.73	26.42	164	.	.	.	.	.	.
61.0	15.45	35.73	26.44	161	.	.	.	.	.	.
62.0	15.43	35.67	26.40	165	.	.	.	.	.	.
63.0	15.37	35.67	26.41	164	.	.	.	.	.	.
64.0	15.35	35.66	26.41	164	.	.	.	0.94	12.2	9.0
65.0	15.30	35.68	26.44	162	.	.	.	.	.	.
66.0	15.31	35.67	26.43	163	.	.	.	.	.	.
67.0	15.31	35.66	26.42	164	.	.	.	.	.	.
68.0	15.29	35.69	26.45	161	.	.	.	.	.	.
69.0	15.27	35.67	26.44	162	.	.	.	.	.	.
70.0	15.24	35.69	26.46	160	.	.	.	.	.	.
71.0	15.17	35.68	26.47	159	.	.	.	.	.	.
72.0	15.16	35.68	26.47	159	.	.	.	.	.	.
73.0	15.12	35.68	26.48	158	.	.	.	.	.	.
74.0	15.09	35.67	26.48	159	.	.	.	.	.	.
75.0	15.03	35.68	26.50	157	.	.	.	.	.	.
76.0	15.00	35.68	26.51	156	.	.	.	.	.	.
77.0	14.96	35.68	26.51	155	.	.	.	.	.	.
78.0	14.91	35.67	26.52	155	.	.	.	.	.	.
79.0	14.77	35.69	26.56	151	.	.	.	.	.	.
80.0	14.70	35.64	26.54	153	.	.	.	.	.	.
81.0	14.57	35.65	26.58	149	.	.	.	.	.	.
82.0	14.53	35.66	26.59	148	.	.	.	.	.	.
83.0	14.19	35.68	26.68	139	.	.	.	.	.	.
84.0	14.10	35.71	26.72	136	.	.	.	.	.	.
85.0	13.87	35.72	26.78	131	.	.	.	.	.	.
86.0	13.72	35.73	26.82	126	.	.	.	.	.	.
87.0	13.56	35.73	26.85	123	.	.	.	.	.	.
88.0	13.42	35.74	26.89	120	.	.	.	.	.	.
89.0	13.29	35.77	26.91	118	.	.	.	.	.	.
90.0	13.26	35.78	26.89	119	.	.	.	.	.	.
91.0	13.13	35.75	26.96	113	.	.	.	.	.	.
92.0	12.95	35.76	27.00	109	.	.	.	.	.	.
93.0	12.91	35.71	26.97	112	.	.	.	.	.	.
94.0	12.87	35.69	26.96	113	.	.	.	.	.	.
95.0	12.84	35.71	26.99	111	.	.	.	.	.	.



96.0	12.69	35.68	26.99	110	.	.	.	.	.	.
97.0	12.67	35.67	26.99	110	.	.	.	.	.	.
98.0	12.57	35.68	27.02	108	.	.	.	.	.	.
99.0	12.49	35.69	27.04	106	.	.	.	.	.	.
100.0	12.36	35.64	27.03	107	.	.	.	.	.	.
101.0	12.36	35.62	27.01	108	.	.	.	.	.	.
102.0	12.36	35.61	27.00	109	.	.	.	.	.	.
103.0	12.34	35.61	27.01	109	.	.	.	1.42	20.0	12.2
104.0	12.32	35.60	27.00	109	.	.	.	.	.	.
105.0	12.31	35.60	27.01	109	.	.	.	.	.	.
106.0	12.30	35.60	27.01	109	.	.	.	.	.	.
107.0	12.28	35.58	27.00	110	.	.	.	.	.	.
108.0	12.26	35.59	27.01	109	.	.	.	.	.	.
109.0	12.27	35.59	27.01	109	.	.	.	.	.	.
110.0	12.27	35.58	27.00	110	.	.	.	.	.	.
111.0	12.26	35.59	27.01	109	.	.	.	.	.	.
112.0	12.22	35.58	27.01	109	.	.	.	.	.	.
113.0	12.19	35.59	27.02	108	.	.	.	.	.	.
114.0	12.17	35.60	27.03	107	.	.	.	.	.	.
115.0	12.11	35.59	27.04	106	.	.	.	.	.	.
116.0	12.08	35.58	27.03	106	.	.	.	.	.	.
117.0	12.04	35.59	27.05	105	.	.	.	.	.	.
118.0	11.89	35.58	27.07	103	.	.	.	.	.	.
119.0	11.77	35.56	27.08	102	.	.	.	.	.	.
120.0	11.57	35.59	27.14	96	.	.	.	.	.	.
121.0	11.50	35.51	27.09	101	.	.	.	.	.	.
122.0	11.49	35.48	27.07	103	.	.	.	.	.	.
123.0	11.47	35.47	27.07	104	.	.	.	.	.	.



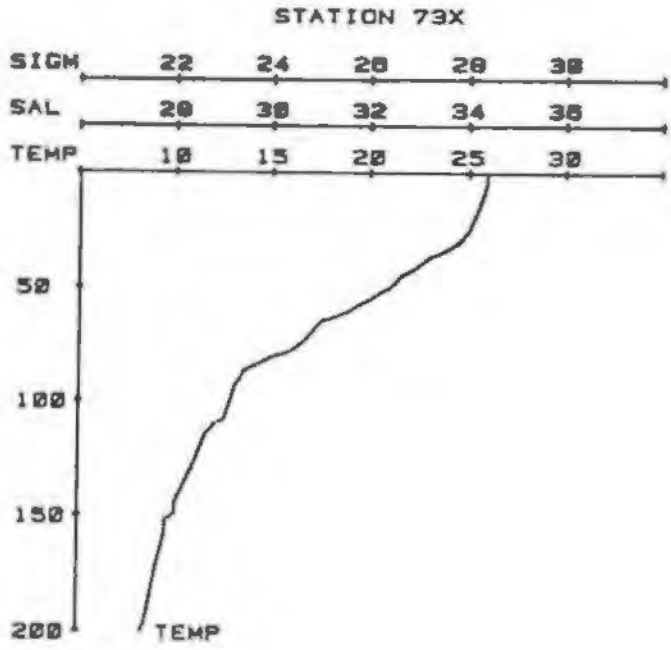


GILLISS CRUISE STA 0733 21/04/79 20.3 GMT CONSEC STA 74

LAT 30 25.0N LONG 79 58.5W DEPTH = 2999 DIST LAST STA = 103.1KM

WEATHER DATA
WIND SPEED = 14KTS
WIND DIRECTION = 110
AIR TEMP = 24.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1019.6
SEA STATE = 4
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	25.9	.	.	.	.	.	.	.	.	.
5.0	25.9	.	.	.	.	.	.	.	.	.
15.0	25.5	.	.	.	.	.	.	.	.	.
25.0	25.0	.	.	.	.	.	.	.	.	.
30.0	24.5	.	.	.	.	.	.	.	.	.
33.0	24.0	.	.	.	.	.	.	.	.	.
35.0	23.5	.	.	.	.	.	.	.	.	.
37.0	23.0	.	.	.	.	.	.	.	.	.
40.0	22.5	.	.	.	.	.	.	.	.	.
43.0	22.0	.	.	.	.	.	.	.	.	.
45.0	21.5	.	.	.	.	.	.	.	.	.
50.0	21.0	.	.	.	.	.	.	.	.	.
52.0	20.5	.	.	.	.	.	.	.	.	.
55.0	20.0	.	.	.	.	.	.	.	.	.
57.0	19.5	.	.	.	.	.	.	.	.	.
60.0	19.0	.	.	.	.	.	.	.	.	.
62.0	18.5	.	.	.	.	.	.	.	.	.
64.0	18.0	.	.	.	.	.	.	.	.	.
65.0	17.5	.	.	.	.	.	.	.	.	.
70.0	17.0	.	.	.	.	.	.	.	.	.
75.0	16.5	.	.	.	.	.	.	.	.	.
78.0	16.0	.	.	.	.	.	.	.	.	.
80.0	15.5	.	.	.	.	.	.	.	.	.
81.0	15.0	.	.	.	.	.	.	.	.	.
83.0	14.5	.	.	.	.	.	.	.	.	.
85.0	14.0	.	.	.	.	.	.	.	.	.
87.0	13.5	.	.	.	.	.	.	.	.	.
94.0	13.0	.	.	.	.	.	.	.	.	.
100.0	12.5	.	.	.	.	.	.	.	.	.
110.0	12.0	.	.	.	.	.	.	.	.	.
115.0	11.5	.	.	.	.	.	.	.	.	.
126.0	11.0	.	.	.	.	.	.	.	.	.
135.0	10.5	.	.	.	.	.	.	.	.	.
144.0	10.0	.	.	.	.	.	.	.	.	.
149.0	10.0	.	.	.	.	.	.	.	.	.
152.0	9.5	.	.	.	.	.	.	.	.	.
157.0	9.5	.	.	.	.	.	.	.	.	.
174.0	9.0	.	.	.	.	.	.	.	.	.
196.0	8.5	.	.	.	.	.	.	.	.	.
200.0	8.3	.	.	.	.	.	.	.	.	.

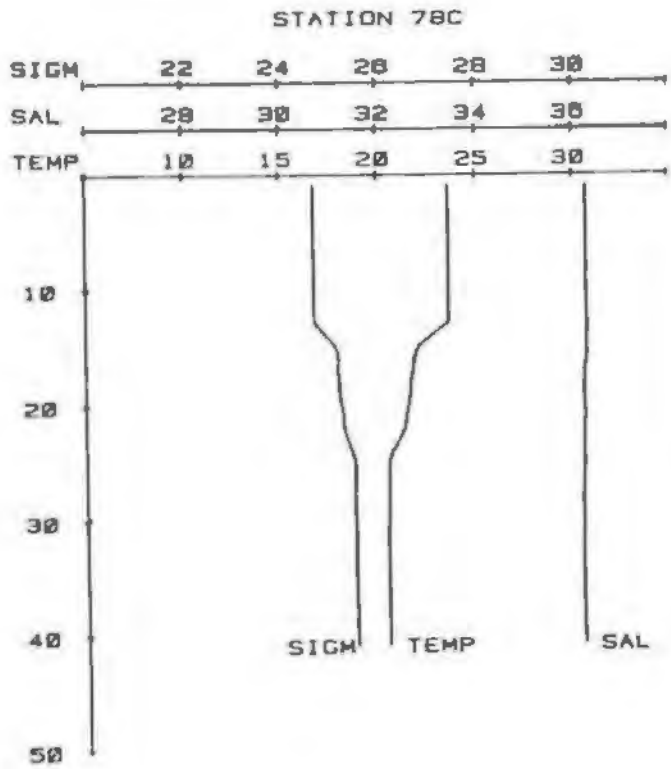


GILLISS CRUISE STA 078C 21/04/79 23.4 GMT CONSEC STA 79

LAT 30 46.1N LONG 80 29.0W DEPTH = 43M DIST LAST STA = 135.3KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 110
AIR TEMP = 25.9C
WEATHER CODE = 31
BAROMETRIC PRES= 1019.6
SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
1.0	23.63	36.29	24.74	322	.	.	.	.	.	.
2.0	23.63	36.28	24.73	321	.	.	.	.	.	.
3.0	23.64	36.29	24.75	322	.	.	.	.	.	.
4.0	23.63	36.29	24.74	322	.	.	.	0.08	0.1	1.0
5.0	23.64	36.29	24.73	322	.	.	.	.	.	.
6.0	23.64	36.29	24.73	322	.	.	.	.	.	.
7.0	23.63	36.29	24.74	322	.	.	.	.	.	.
8.0	23.63	36.29	24.74	322	.	.	.	.	.	.
9.0	23.62	36.28	24.73	321	.	.	.	.	.	.
10.0	23.62	36.29	24.74	322	.	.	.	.	.	.
11.0	23.62	36.29	24.74	322	.	.	.	0.12	0.7	1.6
12.0	23.62	36.29	24.74	322	.	.	.	.	.	.
13.0	23.60	36.31	24.76	324	.	.	.	.	.	.
14.0	22.81	36.29	24.97	300	.	.	.	.	.	.
15.0	22.11	36.29	25.17	281	.	.	.	.	.	.
16.0	21.88	36.29	25.24	274	.	.	.	.	.	.
17.0	21.81	36.29	25.27	277	.	.	.	.	.	.
18.0	21.79	36.29	25.28	277	.	.	.	.	.	.
19.0	21.67	36.27	25.29	273	.	.	.	.	.	.
20.0	21.57	36.25	25.30	269	.	.	.	.	.	.
21.0	21.44	36.26	25.34	265	.	.	.	.	.	.
22.0	21.37	36.24	25.34	265	.	.	.	.	.	.
23.0	21.12	36.24	25.41	258	.	.	.	.	.	.
24.0	20.77	36.23	25.50	250	.	.	.	.	.	.
25.0	20.56	36.24	25.57	244	.	.	.	.	.	.
26.0	20.55	36.22	25.55	245	.	.	.	0.14	1.0	1.9
27.0	20.54	36.21	25.55	246	.	.	.	.	.	.
28.0	20.53	36.20	25.54	246	.	.	.	.	.	.
29.0	20.52	36.20	25.55	246	.	.	.	.	.	.
30.0	20.51	36.21	25.56	245	.	.	.	.	.	.
31.0	20.48	36.21	25.56	244	.	.	.	.	.	.
32.0	20.48	36.19	25.55	246	.	.	.	.	.	.
33.0	20.49	36.19	25.55	246	.	.	.	.	.	.
34.0	20.49	36.18	25.54	247	.	.	.	.	.	.
35.0	20.48	36.20	25.56	245	.	.	.	.	.	.
36.0	20.47	36.18	25.54	246	.	.	.	.	.	.
37.0	20.47	36.19	25.55	246	.	.	.	.	.	.
38.0	20.46	36.20	25.56	245	.	.	.	.	.	.
39.0	20.47	36.18	25.54	246	.	.	.	.	.	.
40.0	20.46	36.20	25.56	245	.	.	.	.	.	.
41.0	20.46	36.20	25.56	245	.	.	.	0.20	1.2	4.0



GILLISS CRUISE STA 079X 21/04/79 23.9 GMT CONSEC STA 09

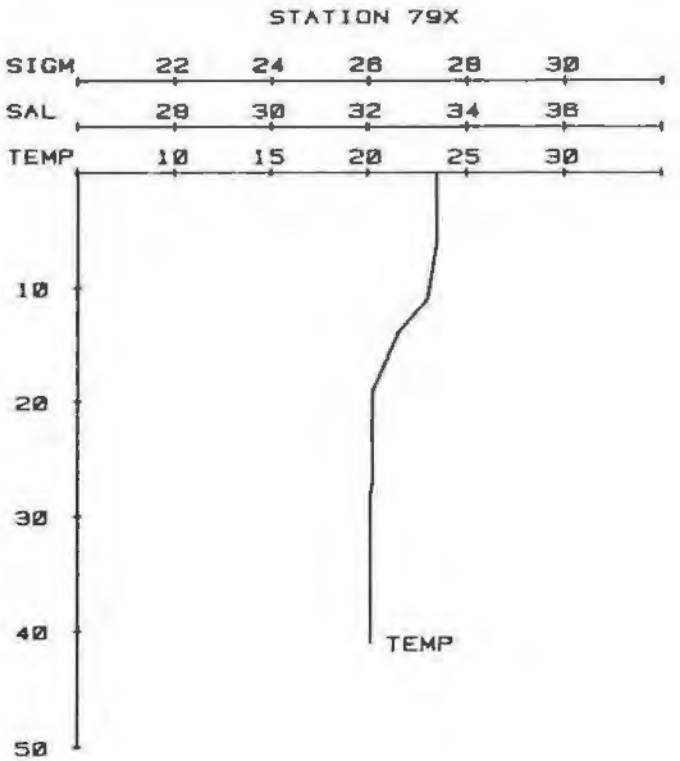
LAT 30 45.2N LONG 80 17.8W DEPTH = 41M DIST LAST STA = 5.1KM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 22	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.5	.	.	.	.	.	.	.	.	.
6.0	23.5	.	.	.	.	.	.	.	.	.
7.0	23.4	.	.	.	.	.	.	.	.	.
11.0	23.0	.	.	.	.	.	.	.	.	.
12.0	22.5	.	.	.	.	.	.	.	.	.
13.0	22.0	.	.	.	.	.	.	.	.	.
14.0	21.5	.	.	.	.	.	.	.	.	.
16.0	21.0	.	.	.	.	.	.	.	.	.
18.0	20.5	.	.	.	.	.	.	.	.	.
19.0	20.2	.	.	.	.	.	.	.	.	.
27.0	20.2	.	.	.	.	.	.	.	.	.
28.0	20.1	.	.	.	.	.	.	.	.	.
41.0	20.1	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 080C 22/04/79 00.4 GMT CONSEC STA 01

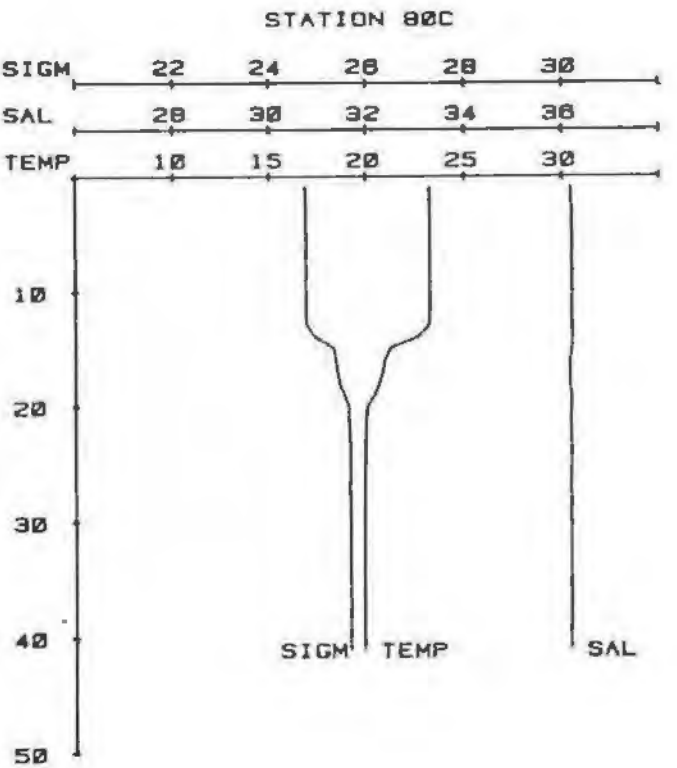
LAT 30 44.7N LONG 80 14.0W DEPTH = 43M DIST LAST STA = 4.9KM

WEATHER DATA

WIND SPEED	= 16KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 130
AIR TEMP	= 22.8C	CLOUD TYPE	=
WEATHER CODE	= 22	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.24	36.18	24.77	319	.	.	.	.	.	.
2.0	23.24	36.18	24.77	319	.	.	.	.	.	.
3.0	23.24	36.24	24.78	318	.	.	.	0.05	0.0	1.0
4.0	23.24	36.18	24.77	319	.	.	.	.	.	.
5.0	23.24	36.20	24.78	318	.	.	.	.	.	.
6.0	23.24	36.20	24.78	318	.	.	.	.	.	.
7.0	23.24	36.18	24.77	319	.	.	.	.	.	.
8.0	23.24	36.20	24.78	318	.	.	.	.	.	.
9.0	23.24	36.19	24.77	319	.	.	.	.	.	.
10.0	23.24	36.20	24.78	318	.	.	.	.	.	.
11.0	23.24	36.19	24.77	319	.	.	.	.	.	.
12.0	23.23	36.19	24.78	318	.	.	.	.	.	.
13.0	23.19	36.20	24.82	317	.	.	.	.	.	.
14.0	22.61	36.20	24.96	301	.	.	.	0.04	0.0	1.0
15.0	21.28	36.19	25.35	264	.	.	.	.	.	.
16.0	20.92	36.15	25.48	259	.	.	.	.	.	.
17.0	20.83	36.16	25.43	256	.	.	.	.	.	.
18.0	20.66	36.15	25.47	253	.	.	.	.	.	.
19.0	20.42	36.19	25.56	244	.	.	.	.	.	.
20.0	20.04	36.18	25.66	235	.	.	.	.	.	.
21.0	19.98	36.17	25.67	234	.	.	.	.	.	.
22.0	19.97	36.18	25.68	233	.	.	.	.	.	.
23.0	19.95	36.19	25.69	232	.	.	.	0.13	0.5	1.3
24.0	19.95	36.19	25.69	232	.	.	.	.	.	.
25.0	19.93	36.18	25.69	232	.	.	.	.	.	.
26.0	19.93	36.18	25.69	232	.	.	.	.	.	.
27.0	19.93	36.17	25.68	233	.	.	.	.	.	.
28.0	19.92	36.19	25.70	231	.	.	.	.	.	.
29.0	19.91	36.18	25.69	232	.	.	.	.	.	.
30.0	19.91	36.19	25.70	231	.	.	.	.	.	.
31.0	19.91	36.18	25.69	232	.	.	.	.	.	.
32.0	19.91	36.18	25.69	232	.	.	.	.	.	.
33.0	19.91	36.18	25.69	232	.	.	.	.	.	.
34.0	19.90	36.18	25.70	232	.	.	.	.	.	.
35.0	19.90	36.18	25.70	232	.	.	.	.	.	.
36.0	19.90	36.18	25.70	232	.	.	.	.	.	.
37.0	19.90	36.18	25.70	232	.	.	.	.	.	.
38.0	19.90	36.18	25.70	232	.	.	.	.	.	.
39.0	19.93	36.17	25.69	233	.	.	.	.	.	.
40.0	19.90	36.17	25.69	233	.	.	.	.	.	.
41.0	19.89	36.18	25.70	232	.	.	.	0.20	1.9	2.9



GILLISS CRUISE STA 81X 22/04/79 01.0 GMT CONSEC STA 82

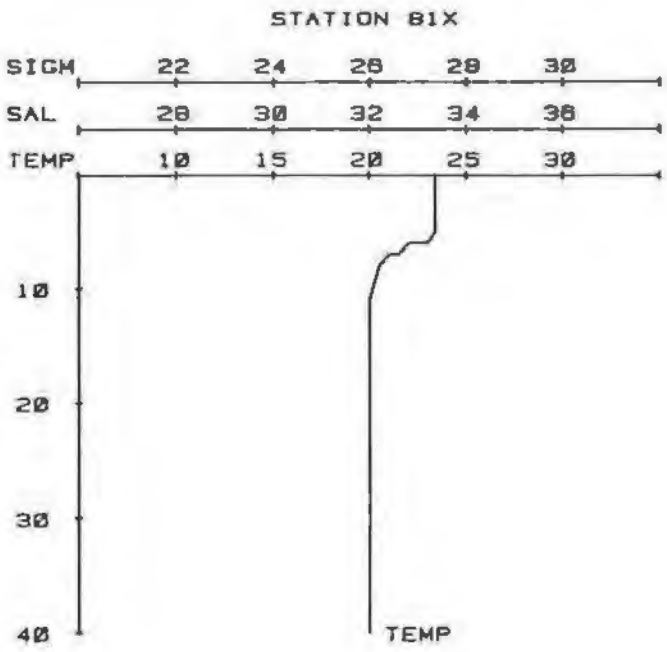
LAT 38 44.1N LONG 80 11.8W DEPTH = 40M DIST LAST STA = 4.9KM

WEATHER DATA
WIND SPEED = 16KTS
WIND DIRECTION = 130
AIR TEMP = 22.0C
WEATHER CODE = XI
BAROMETRIC PRES= 1020.7

SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2*	AOU	PO4	NO3	SI
0.0	23.4	.	.	.	.	.	.	.	.	.
5.0	23.4	.	.	.	.	.	.	.	.	.
6.0	23.0	.	.	.	.	.	.	.	.	.
6.0	22.5	.	.	.	.	.	.	.	.	.
6.0	22.0	.	.	.	.	.	.	.	.	.
7.0	21.5	.	.	.	.	.	.	.	.	.
7.0	21.0	.	.	.	.	.	.	.	.	.
8.0	20.5	.	.	.	.	.	.	.	.	.
11.0	20.0	.	.	.	.	.	.	.	.	.
40.0	20.0	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 82C 22/04/79 01.4 GMT CONSEC STA 83

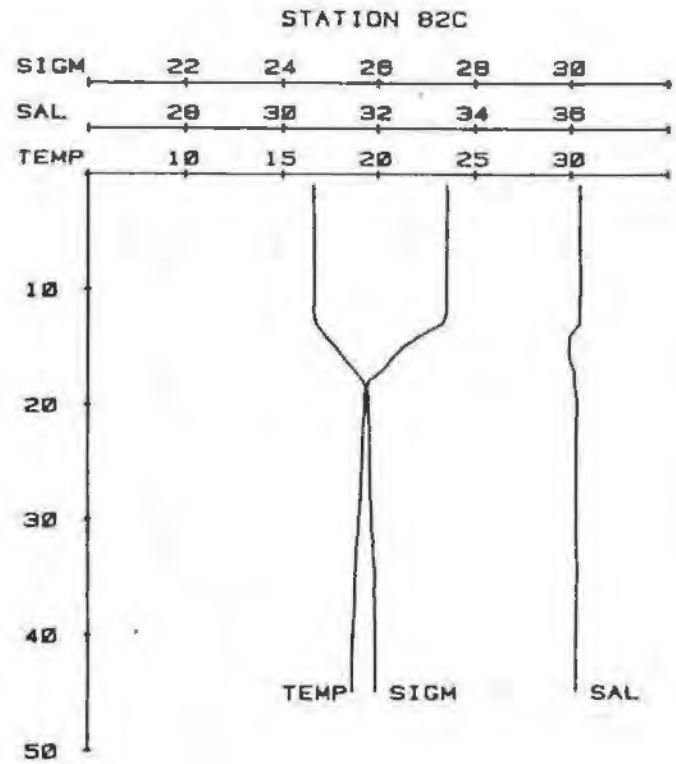
LAT 38 43.5N LONG 80 08.1W DEPTH = 45M DIST LAST STA = 4.8KM

WEATHER DATA
WIND SPEED = 16KTS
WIND DIRECTION = 130
AIR TEMP = 22.0C
WEATHER CODE = XI
BAROMETRIC PRES= 1020.7

SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2*	AOU	PO4	NO3	SI
1.0	23.57	36.18	24.67	328	.	.	.	.	.	.
2.0	23.57	36.18	24.67	328	.	.	.	.	.	.
3.0	23.57	36.19	24.68	327	.	.	.	0.64	0.8	0.7
4.0	23.55	36.19	24.68	327	.	.	.	.	.	.
5.0	23.55	36.18	24.68	328	.	.	.	.	.	.
6.0	23.55	36.19	24.68	327	.	.	.	.	.	.
7.0	23.55	36.19	24.68	327	.	.	.	.	.	.
8.0	23.55	36.20	24.69	326	.	.	.	.	.	.
9.0	23.55	36.20	24.69	326	.	.	.	.	.	.
10.0	23.55	36.20	24.69	326	.	.	.	.	.	.
11.0	23.55	36.19	24.68	327	.	.	.	0.62	0.8	1.9
12.0	23.55	36.18	24.68	328	.	.	.	.	.	.
13.0	23.34	36.18	24.74	322	.	.	.	.	.	.
14.0	22.17	35.98	24.92	305	.	.	.	.	.	.
15.0	21.38	35.96	25.15	283	.	.	.	.	.	.
16.0	20.73	35.97	25.31	267	.	.	.	.	.	.
17.0	20.25	36.00	25.53	247	.	.	.	.	.	.
18.0	19.59	36.07	25.72	229	.	.	.	.	.	.
19.0	19.29	36.12	25.81	220	.	.	.	.	.	.
20.0	19.38	36.14	25.82	219	.	.	.	.	.	.
21.0	19.25	36.13	25.83	219	.	.	.	.	.	.
22.0	19.20	36.13	25.84	217	.	.	.	.	.	.
23.0	19.19	36.12	25.84	218	.	.	.	.	.	.
24.0	19.18	36.13	25.85	217	.	.	.	.	.	.
25.0	19.15	36.12	25.85	217	.	.	.	.	.	.
26.0	19.13	36.12	25.85	217	.	.	.	.	.	.
27.0	19.10	36.12	25.86	216	.	.	.	.	.	.
28.0	19.06	36.11	25.86	216	.	.	.	.	.	.
29.0	19.04	36.13	25.88	214	.	.	.	.	.	.
30.0	18.98	36.12	25.89	213	.	.	.	.	.	.
31.0	18.96	36.11	25.89	213	.	.	.	.	.	.
32.0	18.87	36.13	25.93	210	.	.	.	.	.	.
33.0	18.86	36.12	25.92	210	.	.	.	.	.	.
34.0	18.83	36.14	25.94	208	.	.	.	.	.	.
35.0	18.78	36.14	25.96	207	.	.	.	.	.	.
36.0	18.78	36.12	25.94	208	.	.	.	.	.	.
37.0	18.77	36.13	25.95	208	.	.	.	.	.	.
38.0	18.75	36.11	25.94	209	.	.	.	.	.	.
39.0	18.71	36.12	25.96	207	.	.	.	.	.	.
40.0	18.67	36.10	25.95	207	.	.	.	.	.	.
41.0	18.65	36.10	25.96	207	.	.	.	.	.	.
42.0	18.63	36.10	25.96	206	.	.	.	.	.	.
43.0	18.63	36.10	25.96	207	.	.	.	.	.	.
45.0	18.63	36.10	25.96	207	.	.	.	0.62	5.7	3.9



GILLISS CRUISE STA 083I 22/04/77 01.9 GMT CONSEC STA 84

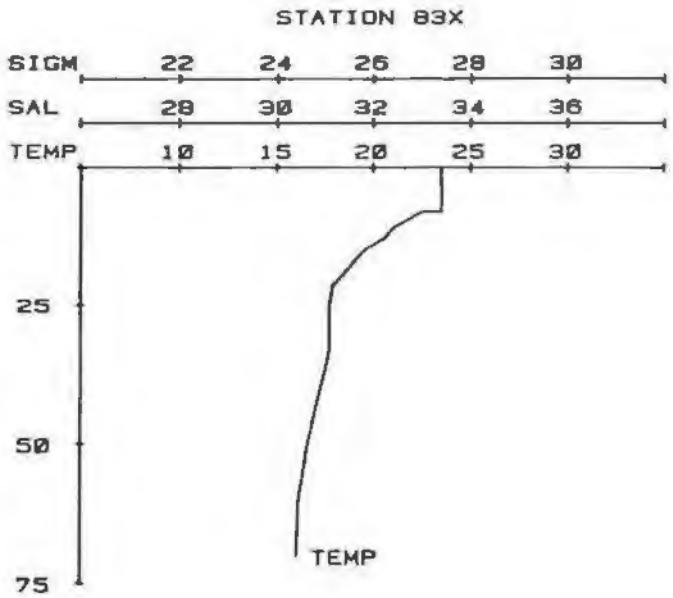
LAT 38 43.0N LONG 80 05.4W DCPTH = 70M DIST LAST STA = 4.4KM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.7	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Ø	SVA	Ø2	Ø2'	AOU	PO4	NO3	SI
0.0	23.5									
8.0	23.5									
8.0	23.0									
8.0	22.5									
9.0	22.0									
10.0	21.5									
11.0	21.0									
13.0	20.5									
14.0	20.0									
15.0	19.5									
17.0	19.0									
19.0	18.5									
21.0	18.0									
21.0	17.9									
25.0	17.7									
33.0	17.7									
36.0	17.5									
43.0	17.0									
51.0	16.5									
60.0	16.1									
70.0	16.0									



STILLSS CRUISE STA 084C 22/04/29 02.2 SAT CONTIC STA 95

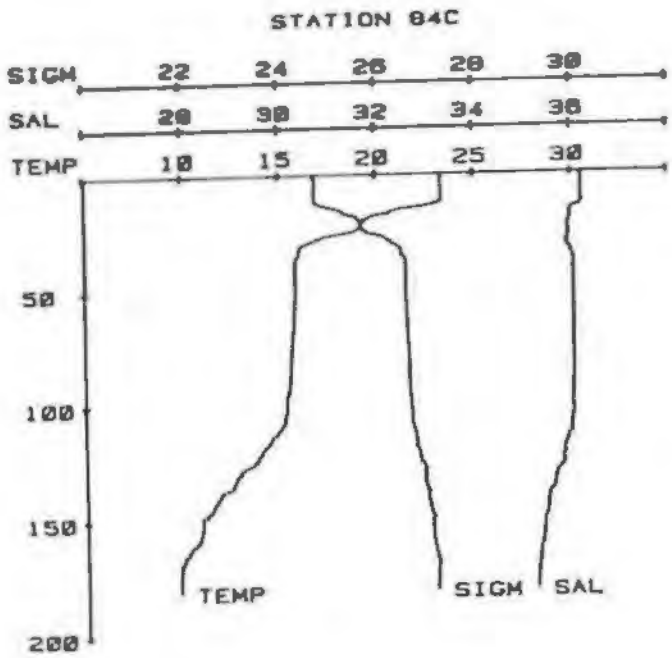
LAT 38 42.30 LONG 00 02.50 DEPTH = 1054 DIST LAST STA = 4.0NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 81	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.7	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	Sva	O2	O2*	AOU	PO4	NO3	SI
1.0	23.37	36.28	24.76	321	.	.	.	.	.	.
2.0	23.37	36.21	24.75	320	.	.	.	.	.	.
3.0	23.35	36.22	24.76	319	.	.	.	0.81	0.4	0.0
4.0	23.36	36.21	24.75	320	.	.	.	.	.	.
5.0	23.36	36.20	24.75	321	.	.	.	.	.	.
6.0	23.37	36.20	24.74	321	.	.	.	.	.	.
7.0	23.37	36.19	24.74	322	.	.	.	.	.	.
8.0	23.37	36.20	24.74	321	.	.	.	.	.	.
9.0	23.37	36.21	24.75	321	.	.	.	.	.	.
10.0	23.38	36.21	24.75	321	.	.	.	.	.	.
11.0	23.37	36.21	24.75	321	.	.	.	.	.	.
12.0	23.34	36.22	24.77	319	.	.	.	.	.	.
13.0	23.08	36.20	24.85	311	.	.	.	.	.	.
14.0	22.46	36.17	25.08	297	.	.	.	.	.	.
15.0	21.21	36.08	25.21	278	.	.	.	.	.	.
16.0	20.74	35.98	25.32	267	.	.	.	.	.	.
17.0	20.60	35.97	25.33	266	.	.	.	.	.	.
18.0	19.82	35.97	25.56	244	.	.	.	.	.	.
19.0	19.56	35.98	25.63	237	.	.	.	.	.	.
20.0	19.34	35.96	25.68	233	.	.	.	.	.	.
21.0	19.25	35.95	25.69	232	.	.	.	0.10	1.0	1.0
22.0	19.22	35.92	25.68	233	.	.	.	.	.	.
23.0	19.19	35.93	25.69	232	.	.	.	.	.	.
24.0	19.03	35.95	25.75	226	.	.	.	.	.	.
25.0	18.75	35.94	25.81	220	.	.	.	.	.	.
26.0	18.02	35.94	26.00	203	.	.	.	.	.	.
27.0	17.28	35.93	26.17	186	.	.	.	.	.	.
28.0	17.08	35.92	26.23	181	.	.	.	0.48	6.3	4.8
29.0	16.72	35.93	26.30	175	.	.	.	.	.	.
30.0	16.46	35.89	26.34	170	.	.	.	.	.	.
31.0	16.09	35.92	26.44	161	.	.	.	.	.	.
32.0	16.03	35.96	26.49	156	.	.	.	.	.	.
33.0	16.01	35.99	26.52	154	.	.	.	.	.	.
34.0	16.01	36.00	26.52	153	.	.	.	.	.	.
35.0	16.01	35.99	26.52	154	.	.	.	0.74	12.3	6.6
36.0	15.99	36.04	26.60	146	.	.	.	.	.	.
37.0	15.98	36.05	26.61	145	.	.	.	.	.	.
38.0	15.98	36.05	26.61	145	.	.	.	.	.	.
39.0	15.98	36.05	26.61	145	.	.	.	.	.	.
40.0	15.97	36.04	26.60	146	.	.	.	.	.	.
41.0	15.98	36.04	26.60	146	.	.	.	.	.	.
42.0	15.98	36.05	26.61	145	.	.	.	.	.	.
43.0	15.98	36.04	26.60	146	.	.	.	.	.	.
44.0	15.98	36.05	26.61	145	.	.	.	.	.	.
45.0	15.98	36.04	26.60	146	.	.	.	.	.	.
46.0	15.98	36.05	26.61	145	.	.	.	.	.	.
47.0	15.98	36.04	26.60	146	.	.	.	.	.	.
48.0	15.98	36.05	26.61	145	.	.	.	.	.	.
49.0	15.98	36.04	26.60	146	.	.	.	.	.	.
50.0	15.79	36.05	26.61	145	.	.	.	.	.	.
51.0	15.79	36.05	26.61	145	.	.	.	.	.	.
52.0	15.79	36.05	26.61	145	.	.	.	.	.	.
53.0	15.78	36.05	26.61	145	.	.	.	.	.	.
54.0	15.76	36.05	26.62	145	.	.	.	.	.	.
55.0	15.76	36.05	26.62	145	.	.	.	.	.	.
56.0	15.75	36.05	26.62	144	.	.	.	.	.	.



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66.0 15.69 36.04 26.63 144
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69.0 15.65 36.04 26.64 143
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79.0 15.54 36.04 26.66 141
80.0 15.53 36.05 26.67 140
81.0 15.52 36.05 26.67 140
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84.0 15.51 36.04 26.67 141
85.0 15.51 36.04 26.67 141
86.0 15.50 36.04 26.67 141
87.0 15.49 36.03 26.66 141
88.0 15.48 36.03 26.67 141
89.0 15.46 36.04 26.68 140
90.0 15.47 36.02 26.66 142
91.0 15.45 36.02 26.67 141
92.0 15.44 36.03 26.68 140
93.0 15.43 36.02 26.67 141
94.0 15.41 36.02 26.68 140
95.0 15.39 36.02 26.68 140
96.0 15.34 36.01 26.69 140
97.0 15.29 36.01 26.69 139
98.0 15.29 36.00 26.69 139
99.0 15.29 36.02 26.70 138
100.0 15.28 36.00 26.69 139
101.0 15.28 36.03 26.71 137
102.0 15.25 36.02 26.70 138
103.0 15.27 36.02 26.71 138
104.0 15.24 36.02 26.71 137
105.0 15.18 36.02 26.73 136
106.0 15.17 35.99 26.71 138
107.0 15.16 35.98 26.70 138
108.0 15.15 35.98 26.72 137
109.0 15.06 35.97 26.72 137
110.0 14.99 35.98 26.74 135
111.0 14.91 35.97 26.75 134
112.0 14.83 35.99 26.78 131
113.0 14.73 35.98 26.80 129
114.0 14.58 35.89 26.78 131
115.0 14.48 35.91 26.80 129
116.0 14.38 35.89 26.80 129
117.0 14.34 35.88 26.80 129
118.0 14.21 35.83 26.79 131
119.0 14.08 35.83 26.82 127
120.0 13.97 35.83 26.84 125
121.0 13.94 35.84 26.86 124
122.0 13.86 35.82 26.86 124
123.0 13.74 35.80 26.87 123
124.0 13.73 35.78 26.86 124
125.0 13.65 35.82 26.90 119
126.0 13.53 35.83 26.94 116
127.0 13.21 35.77 26.96 114
128.0 13.02 35.77 27.00 111
```

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129.0 12.86 35.67 26.95 115
130.0 12.89 35.66 26.94 116
131.0 12.73 35.67 26.98 112
132.0 12.66 35.62 26.95 115
133.0 12.62 35.63 26.97 113
134.0 12.53 35.62 26.98 112
135.0 12.50 35.61 26.97 113
136.0 12.46 35.62 26.99 111
137.0 12.23 35.58 27.01 110
138.0 11.87 35.54 27.04 106
139.0 11.84 35.49 27.01 109
140.0 11.82 35.50 27.02 108
141.0 11.70 35.48 27.03 107
142.0 11.65 35.47 27.03 107
143.0 11.53 35.47 27.05 105
144.0 11.47 35.46 27.06 105
145.0 11.42 35.46 27.07 104
146.0 11.37 35.46 27.08 103
147.0 11.18 35.44 27.10 101
148.0 11.18 35.43 27.09 102
149.0 10.88 35.42 27.14 97
150.0 10.89 35.38 27.10 101
151.0 10.90 35.38 27.11 101
152.0 10.89 35.39 27.11 101
153.0 10.88 35.38 27.10 101
154.0 10.86 35.38 27.11 101
155.0 10.83 35.36 27.10 101
156.0 10.79 35.37 27.11 101
157.0 10.76 35.38 27.13 98
158.0 10.73 35.35 27.11 101
159.0 10.69 35.35 27.12 99
160.0 10.55 35.34 27.13 98
161.0 10.49 35.34 27.14 97
162.0 10.38 35.30 27.15 97
163.0 10.28 35.29 27.16 96
164.0 10.21 35.30 27.16 95
165.0 10.12 35.30 27.10 94
166.0 9.93 35.28 27.19 92
167.0 10.00 35.27 27.18 94
168.0 9.87 35.30 27.22 89
169.0 9.80 35.27 27.21 91
170.0 9.79 35.26 27.20 91
171.0 9.77 35.27 27.21 90
172.0 9.79 35.24 27.19 93
173.0 9.79 35.23 27.18 93
174.0 9.78 35.25 27.20 92
175.0 9.74 35.24 27.20 92
176.0 9.76 35.23 27.19 93
177.0 9.73 35.22 27.18 93
178.0 9.74 35.22 27.18 93
181.0 9.74 35.22 27.18 93
```

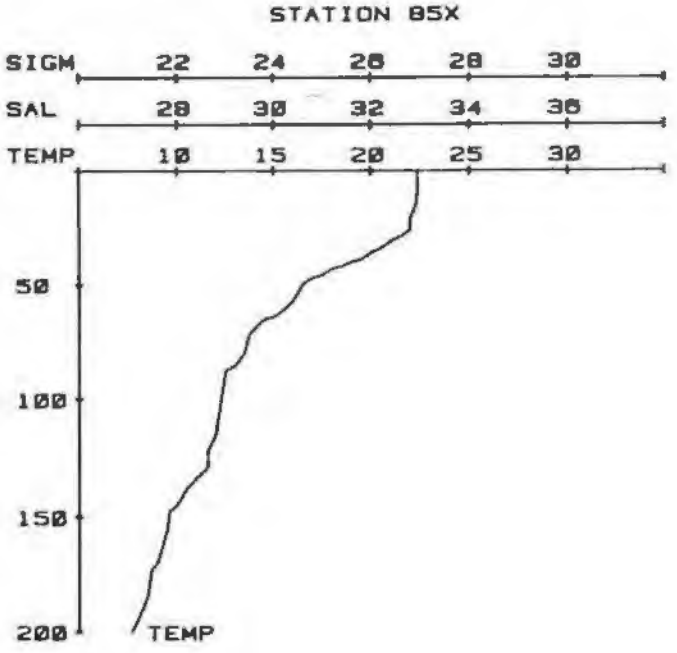
GILLISS CRUISE STA 8853 22/04/79 03.1 GMT CONSEC STA 86

LAT 30 41.6N LONG 79 59.5W DEPTH = 232M DIST LAST STA = 5.0KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 140
AIR TEMP = 22.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1020.7
SEA STATE = 3
WAVE DIRECTION = 140
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.4	.	.	.	.	.	.	.	.	.
9.0	22.4	.	.	.	.	.	.	.	.	.
15.0	22.3	.	.	.	.	.	.	.	.	.
21.0	22.0	.	.	.	.	.	.	.	.	.
26.0	22.0	.	.	.	.	.	.	.	.	.
29.0	21.5	.	.	.	.	.	.	.	.	.
31.0	21.0	.	.	.	.	.	.	.	.	.
34.0	20.5	.	.	.	.	.	.	.	.	.
36.0	20.0	.	.	.	.	.	.	.	.	.
39.0	19.5	.	.	.	.	.	.	.	.	.
40.0	19.0	.	.	.	.	.	.	.	.	.
42.0	18.5	.	.	.	.	.	.	.	.	.
43.0	18.0	.	.	.	.	.	.	.	.	.
46.0	17.5	.	.	.	.	.	.	.	.	.
47.0	17.0	.	.	.	.	.	.	.	.	.
50.0	16.5	.	.	.	.	.	.	.	.	.
58.0	16.0	.	.	.	.	.	.	.	.	.
62.0	15.5	.	.	.	.	.	.	.	.	.
65.0	15.0	.	.	.	.	.	.	.	.	.
66.0	14.5	.	.	.	.	.	.	.	.	.
70.0	14.0	.	.	.	.	.	.	.	.	.
73.0	13.7	.	.	.	.	.	.	.	.	.
80.0	13.5	.	.	.	.	.	.	.	.	.
86.0	13.0	.	.	.	.	.	.	.	.	.
88.0	12.5	.	.	.	.	.	.	.	.	.
115.0	12.0	.	.	.	.	.	.	.	.	.
122.0	11.6	.	.	.	.	.	.	.	.	.
128.0	11.6	.	.	.	.	.	.	.	.	.
130.0	11.5	.	.	.	.	.	.	.	.	.
134.0	11.0	.	.	.	.	.	.	.	.	.
138.0	10.5	.	.	.	.	.	.	.	.	.
145.0	10.0	.	.	.	.	.	.	.	.	.
148.0	9.6	.	.	.	.	.	.	.	.	.
155.0	9.5	.	.	.	.	.	.	.	.	.
170.0	9.0	.	.	.	.	.	.	.	.	.
173.0	8.7	.	.	.	.	.	.	.	.	.
185.0	8.5	.	.	.	.	.	.	.	.	.
195.0	8.4	.	.	.	.	.	.	.	.	.
200.0	7.7	.	.	.	.	.	.	.	.	.



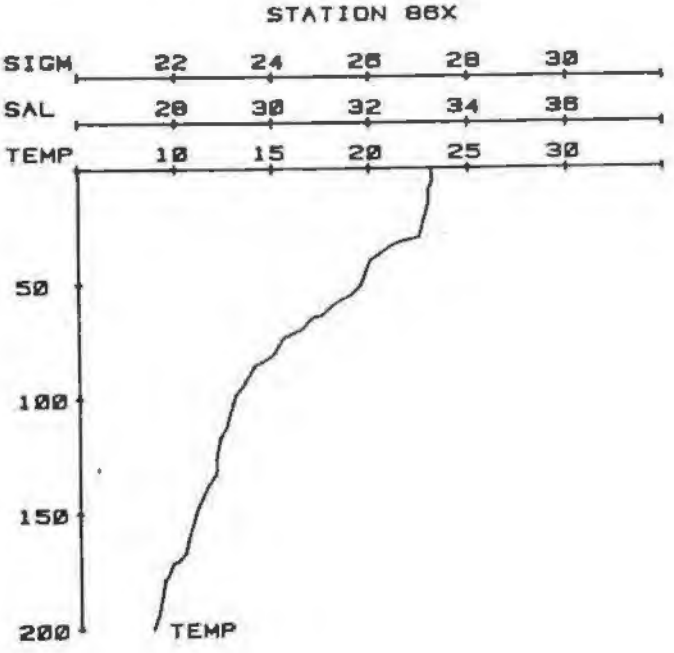
GILLISS CRUISE STA 8863 22/04/79 03.4 GMT CONSEC STA 87

LAT 30 41.1N LONG 79 56.5W DEPTH = 291M DIST LAST STA = 4.9KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 140
AIR TEMP = 22.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1021.0
SEA STATE = 3
WAVE DIRECTION = 140
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.2	.	.	.	.	.	.	.	.	.
6.0	23.2	.	.	.	.	.	.	.	.	.
9.0	23.0	.	.	.	.	.	.	.	.	.
15.0	23.0	.	.	.	.	.	.	.	.	.
30.0	22.5	.	.	.	.	.	.	.	.	.
31.0	22.0	.	.	.	.	.	.	.	.	.
32.0	21.5	.	.	.	.	.	.	.	.	.
34.0	21.0	.	.	.	.	.	.	.	.	.
37.0	20.5	.	.	.	.	.	.	.	.	.
46.0	20.0	.	.	.	.	.	.	.	.	.
51.0	19.5	.	.	.	.	.	.	.	.	.
55.0	19.0	.	.	.	.	.	.	.	.	.
57.0	18.5	.	.	.	.	.	.	.	.	.
60.0	18.0	.	.	.	.	.	.	.	.	.
64.0	17.5	.	.	.	.	.	.	.	.	.
65.0	17.0	.	.	.	.	.	.	.	.	.
70.0	16.5	.	.	.	.	.	.	.	.	.
72.0	16.0	.	.	.	.	.	.	.	.	.
74.0	15.5	.	.	.	.	.	.	.	.	.
81.0	15.0	.	.	.	.	.	.	.	.	.
84.0	14.5	.	.	.	.	.	.	.	.	.
86.0	14.0	.	.	.	.	.	.	.	.	.
93.0	13.5	.	.	.	.	.	.	.	.	.
99.0	13.0	.	.	.	.	.	.	.	.	.
113.0	12.5	.	.	.	.	.	.	.	.	.
117.0	12.2	.	.	.	.	.	.	.	.	.
125.0	12.0	.	.	.	.	.	.	.	.	.
132.0	12.0	.	.	.	.	.	.	.	.	.
139.0	11.5	.	.	.	.	.	.	.	.	.
148.0	11.0	.	.	.	.	.	.	.	.	.
162.0	10.5	.	.	.	.	.	.	.	.	.
167.0	10.4	.	.	.	.	.	.	.	.	.
171.0	10.0	.	.	.	.	.	.	.	.	.
172.0	9.7	.	.	.	.	.	.	.	.	.
177.0	9.5	.	.	.	.	.	.	.	.	.
179.0	9.3	.	.	.	.	.	.	.	.	.
193.0	9.0	.	.	.	.	.	.	.	.	.
200.0	8.7	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 0873 22/04/79 03.6 GMT CONSEC STA 88

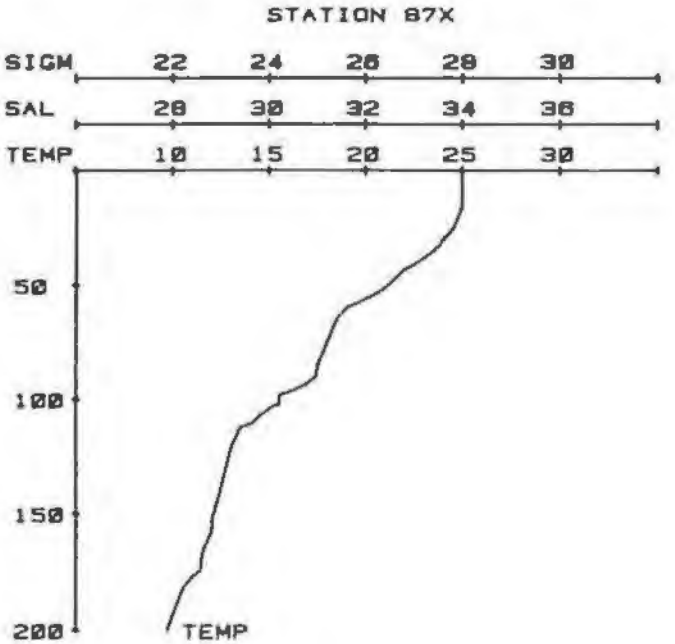
LAT 38 48.4N LONG 79 54.0W DEPTH = 308M DIST LAST STA = 4.2NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 140	WAVE DIRECTION	= 140
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	D2	D2'	AOU	PO4	NO3	SI
0.0	25.0	-	-	-	-	-	-	-	-	-
15.0	25.0	-	-	-	-	-	-	-	-	-
25.0	24.5	-	-	-	-	-	-	-	-	-
30.0	24.0	-	-	-	-	-	-	-	-	-
35.0	23.5	-	-	-	-	-	-	-	-	-
38.0	23.0	-	-	-	-	-	-	-	-	-
41.0	22.5	-	-	-	-	-	-	-	-	-
43.0	22.0	-	-	-	-	-	-	-	-	-
47.0	21.5	-	-	-	-	-	-	-	-	-
51.0	21.0	-	-	-	-	-	-	-	-	-
54.0	20.5	-	-	-	-	-	-	-	-	-
58.0	20.0	-	-	-	-	-	-	-	-	-
58.0	19.5	-	-	-	-	-	-	-	-	-
60.0	19.0	-	-	-	-	-	-	-	-	-
65.0	18.5	-	-	-	-	-	-	-	-	-
75.0	18.0	-	-	-	-	-	-	-	-	-
85.0	17.5	-	-	-	-	-	-	-	-	-
90.0	17.0	-	-	-	-	-	-	-	-	-
93.0	17.0	-	-	-	-	-	-	-	-	-
95.0	16.5	-	-	-	-	-	-	-	-	-
97.0	16.0	-	-	-	-	-	-	-	-	-
98.0	15.5	-	-	-	-	-	-	-	-	-
102.0	15.5	-	-	-	-	-	-	-	-	-
104.0	15.0	-	-	-	-	-	-	-	-	-
107.0	14.5	-	-	-	-	-	-	-	-	-
111.0	14.0	-	-	-	-	-	-	-	-	-
112.0	13.5	-	-	-	-	-	-	-	-	-
121.0	13.0	-	-	-	-	-	-	-	-	-
137.0	12.5	-	-	-	-	-	-	-	-	-
152.0	12.0	-	-	-	-	-	-	-	-	-
157.0	12.0	-	-	-	-	-	-	-	-	-
167.0	11.5	-	-	-	-	-	-	-	-	-
175.0	11.0	-	-	-	-	-	-	-	-	-
177.0	11.0	-	-	-	-	-	-	-	-	-
182.0	10.5	-	-	-	-	-	-	-	-	-
193.0	10.0	-	-	-	-	-	-	-	-	-
208.0	9.7	-	-	-	-	-	-	-	-	-



GILLISS CRUISE STA 093X 22/04/79 06.0 GMT CONSEC STA 94

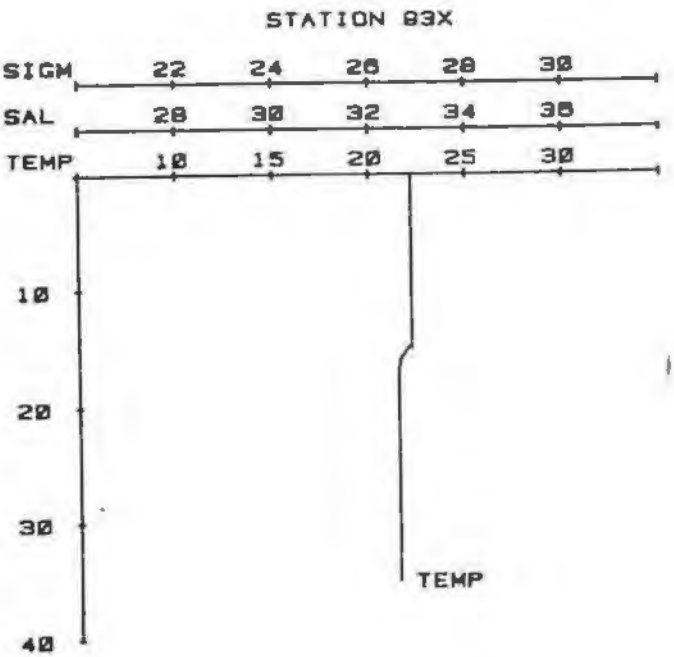
LAT 31 00.4N LONG 80 17.0W DEPTH = 35M DIST LAST STA = 64.5NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 140
AIR TEMP	= 21.9C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	D2	D2'	AOU	PO4	NO3	SI
0.0	22.2	-	-	-	-	-	-	-	-	-
15.0	22.2	-	-	-	-	-	-	-	-	-
15.0	22.0	-	-	-	-	-	-	-	-	-
16.0	21.6	-	-	-	-	-	-	-	-	-
17.0	21.5	-	-	-	-	-	-	-	-	-
35.0	21.5	-	-	-	-	-	-	-	-	-



GILLISS CRUISE STA 0941 22/04/29 07.0 GMT CONSEC STA 95

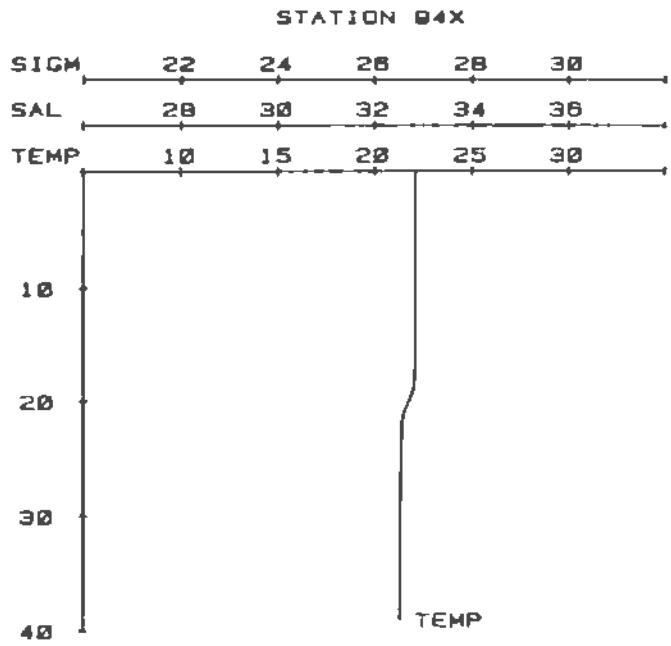
LAT 31 00.5N LONG 80 16.0W DEPTH = 39M DIST LAST STA = 2.9NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 140
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 01	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2*	AOU	PO4	NO3	SI
0.0	22.1									
17.0	22.1									
19.0	22.0									
21.0	21.5									
22.0	21.4									
29.0	21.3									
39.0	21.3									



GILLISS CRUISE STA 0951 22/04/29 07.4 GMT CONSEC STA 96

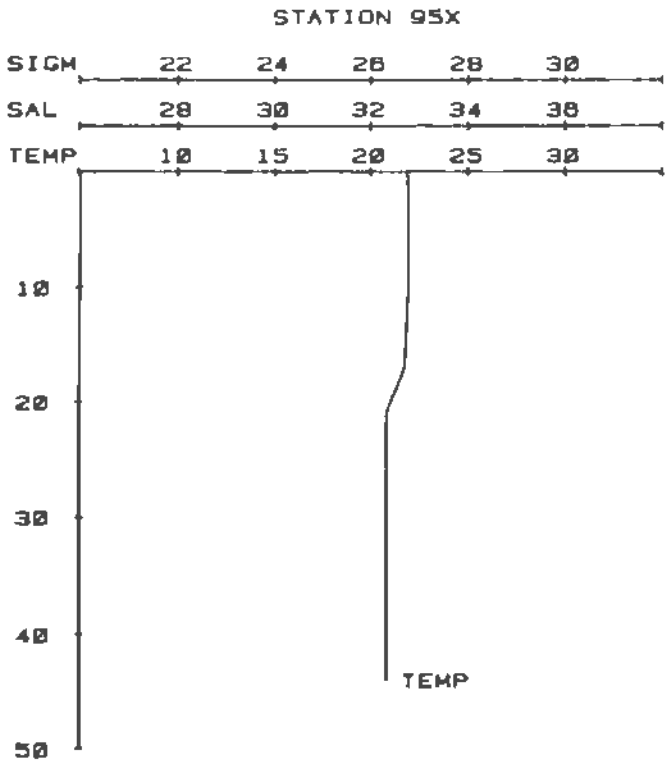
LAT 31 07.3N LONG 80 11.2W DEPTH = 44M DIST LAST STA = 7.9NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 01	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2*	AOU	PO4	NO3	SI
0.0	21.9									
10.0	21.9									
17.0	21.7									
18.0	21.5									
20.0	21.1									
21.0	21.0									
44.0	20.8									



GILLISS CRUISE STA 096X 22/04/79 07.0 GMT CONSEC STA 97

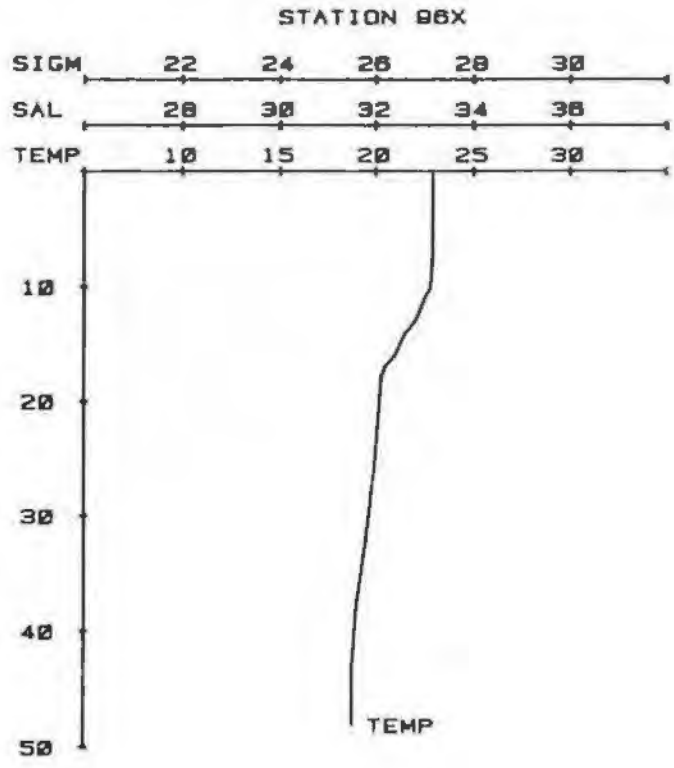
LAT 31 06.3N LONG 80 07.0W DEPTH = 48M DIST LAST STA = 6.9KM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES=	1020.0	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.9	-	-	-	-	-	-	-	-	-
7.0	22.9	-	-	-	-	-	-	-	-	-
10.0	22.8	-	-	-	-	-	-	-	-	-
11.0	22.5	-	-	-	-	-	-	-	-	-
13.0	22.0	-	-	-	-	-	-	-	-	-
14.0	21.5	-	-	-	-	-	-	-	-	-
16.0	21.0	-	-	-	-	-	-	-	-	-
17.0	20.5	-	-	-	-	-	-	-	-	-
18.0	20.3	-	-	-	-	-	-	-	-	-
25.0	20.0	-	-	-	-	-	-	-	-	-
32.0	19.5	-	-	-	-	-	-	-	-	-
38.0	19.0	-	-	-	-	-	-	-	-	-
43.0	18.8	-	-	-	-	-	-	-	-	-
48.0	18.8	-	-	-	-	-	-	-	-	-



GILLISS CRUISE STA 097X 22/04/79 08.1 GMT CONSEC STA 98

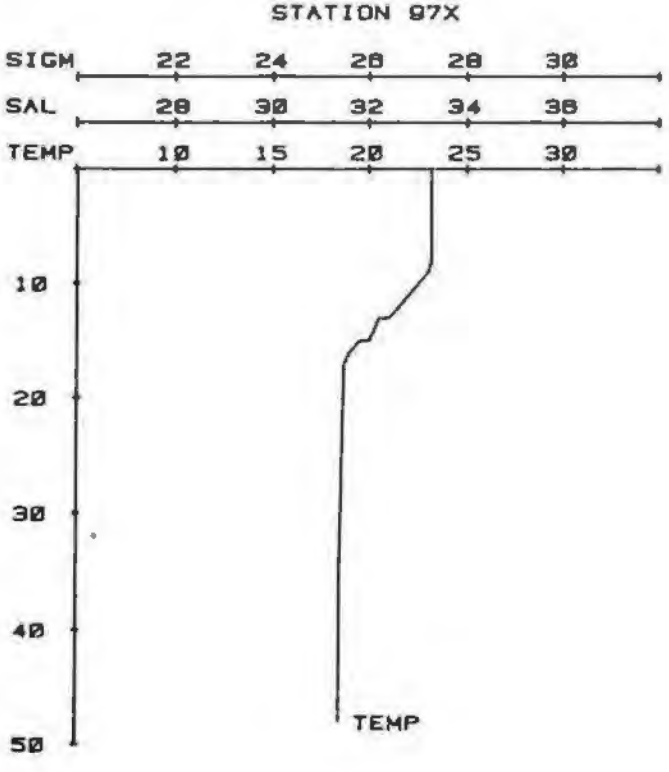
LAT 31 05.1N LONG 80 02.5W DEPTH = 48M DIST LAST STA = 7.5KM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES=	1020.0	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.2	-	-	-	-	-	-	-	-	-
8.0	23.2	-	-	-	-	-	-	-	-	-
9.0	23.0	-	-	-	-	-	-	-	-	-
10.0	22.5	-	-	-	-	-	-	-	-	-
11.0	22.0	-	-	-	-	-	-	-	-	-
12.0	21.5	-	-	-	-	-	-	-	-	-
13.0	21.0	-	-	-	-	-	-	-	-	-
13.6	20.5	-	-	-	-	-	-	-	-	-
15.0	20.0	-	-	-	-	-	-	-	-	-
15.0	19.5	-	-	-	-	-	-	-	-	-
16.0	19.0	-	-	-	-	-	-	-	-	-
17.0	18.7	-	-	-	-	-	-	-	-	-
34.0	18.5	-	-	-	-	-	-	-	-	-
48.0	18.5	-	-	-	-	-	-	-	-	-



GILLISS CRUISE STA 098X 22/04/79 08.6 GMT CONSEC STA 99

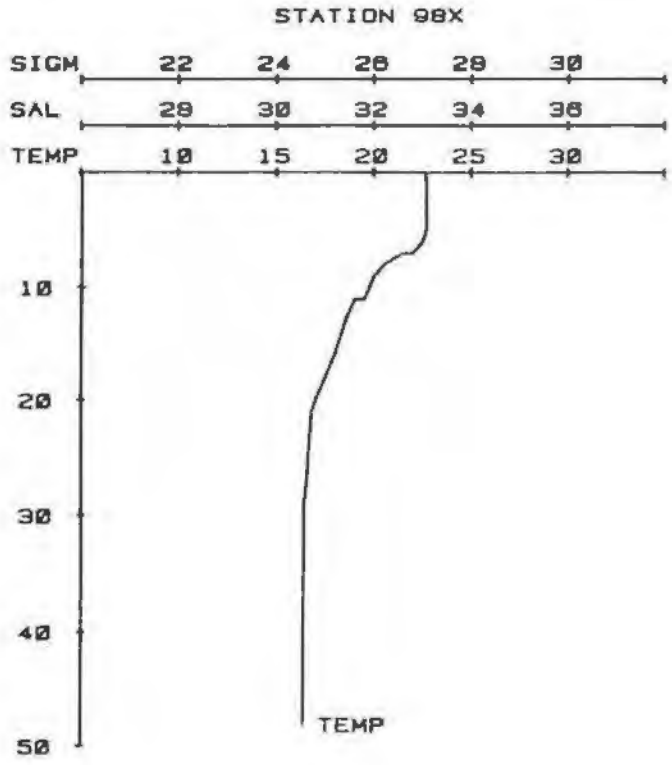
LAT 31 03.9N LONG 79 58.8W DEPTH = 48M DIST LAST STA = 7.5KM

WEATHER DATA
WIND SPEED = 13KTS
WIND DIRECTION = 130
AIR TEMP = 22.2C
WEATHER CODE = X1
BAROMETRIC PRES= 1020.0

SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.7	.	.	.	.	.	.	.	.	.
5.0	22.7	.	.	.	.	.	.	.	.	.
6.0	22.5	.	.	.	.	.	.	.	.	.
7.0	22.0	.	.	.	.	.	.	.	.	.
7.0	21.5	.	.	.	.	.	.	.	.	.
8.0	20.5	.	.	.	.	.	.	.	.	.
9.0	20.0	.	.	.	.	.	.	.	.	.
11.0	19.5	.	.	.	.	.	.	.	.	.
11.0	19.0	.	.	.	.	.	.	.	.	.
13.0	18.5	.	.	.	.	.	.	.	.	.
16.0	18.0	.	.	.	.	.	.	.	.	.
18.0	17.5	.	.	.	.	.	.	.	.	.
20.0	17.0	.	.	.	.	.	.	.	.	.
21.9	16.8	.	.	.	.	.	.	.	.	.
28.0	16.5	.	.	.	.	.	.	.	.	.
29.0	16.4	.	.	.	.	.	.	.	.	.
48.0	16.4	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 099X 22/04/79 09.1 GMT CONSEC STA 100

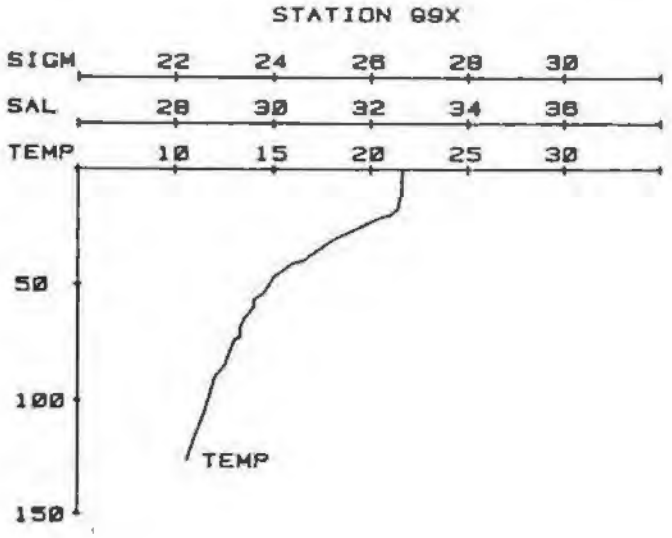
LAT 31 02.8N LONG 79 53.2W DEPTH = 190M DIST LAST STA = 7.9KM

WEATHER DATA
WIND SPEED = 13KTS
WIND DIRECTION = 130
AIR TEMP = 22.2C
WEATHER CODE = X1
BAROMETRIC PRES= 1020.0

SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.7	.	.	.	.	.	.	.	.	.
3.0	21.6	.	.	.	.	.	.	.	.	.
11.0	21.6	.	.	.	.	.	.	.	.	.
12.0	21.5	.	.	.	.	.	.	.	.	.
17.0	21.4	.	.	.	.	.	.	.	.	.
20.0	21.0	.	.	.	.	.	.	.	.	.
21.0	20.5	.	.	.	.	.	.	.	.	.
23.0	20.0	.	.	.	.	.	.	.	.	.
25.0	19.5	.	.	.	.	.	.	.	.	.
27.0	19.0	.	.	.	.	.	.	.	.	.
29.0	18.5	.	.	.	.	.	.	.	.	.
31.0	18.0	.	.	.	.	.	.	.	.	.
34.0	17.5	.	.	.	.	.	.	.	.	.
37.0	17.0	.	.	.	.	.	.	.	.	.
40.0	16.5	.	.	.	.	.	.	.	.	.
41.0	16.0	.	.	.	.	.	.	.	.	.
44.0	15.5	.	.	.	.	.	.	.	.	.
47.0	15.0	.	.	.	.	.	.	.	.	.
54.0	14.5	.	.	.	.	.	.	.	.	.
57.0	14.0	.	.	.	.	.	.	.	.	.
60.0	14.0	.	.	.	.	.	.	.	.	.
65.0	13.5	.	.	.	.	.	.	.	.	.
68.0	13.3	.	.	.	.	.	.	.	.	.
73.0	13.3	.	.	.	.	.	.	.	.	.
74.0	13.0	.	.	.	.	.	.	.	.	.
85.0	12.5	.	.	.	.	.	.	.	.	.
98.0	12.0	.	.	.	.	.	.	.	.	.
105.0	11.5	.	.	.	.	.	.	.	.	.
116.0	11.0	.	.	.	.	.	.	.	.	.
126.0	10.6	.	.	.	.	.	.	.	.	.



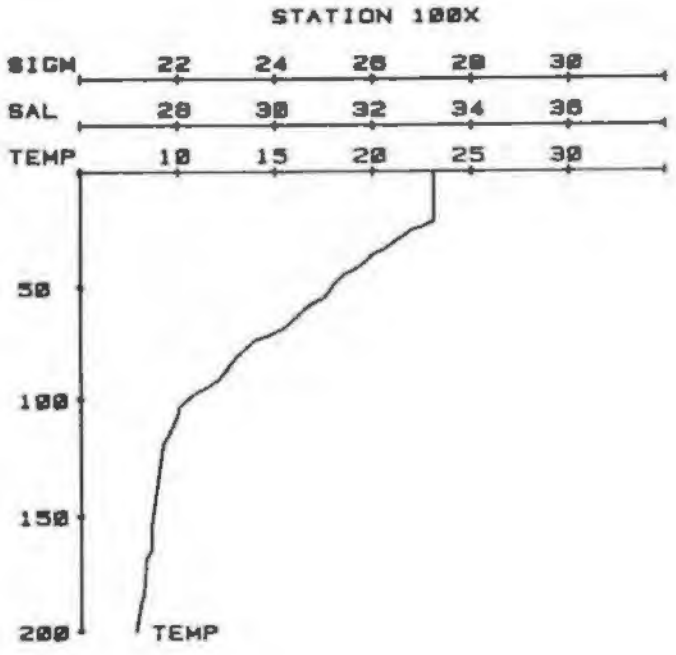
CTD CRUISE STA 1003 22/04/79 09.3 GMT CONSEC STA 101

LAT 31 02.0N LONG 79 40.0W DEPTH = 2600 DIST LAST STA = 7.1NM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES=	1020.0	VISIBILITY CODE=	

Z	T	S	D	OBSERVATIONS SIGMA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.1	.	.	.	.	.	.	.	.	.
21.0	25.1	.	.	.	.	.	.	.	.	.
22.0	23.0	.	.	.	.	.	.	.	.	.
24.0	22.5	.	.	.	.	.	.	.	.	.
25.0	22.0	.	.	.	.	.	.	.	.	.
29.0	21.5	.	.	.	.	.	.	.	.	.
31.0	21.0	.	.	.	.	.	.	.	.	.
34.0	20.5	.	.	.	.	.	.	.	.	.
36.0	20.0	.	.	.	.	.	.	.	.	.
40.0	19.5	.	.	.	.	.	.	.	.	.
43.0	19.0	.	.	.	.	.	.	.	.	.
45.0	18.5	.	.	.	.	.	.	.	.	.
49.0	18.0	.	.	.	.	.	.	.	.	.
55.0	17.5	.	.	.	.	.	.	.	.	.
57.0	17.0	.	.	.	.	.	.	.	.	.
59.0	16.5	.	.	.	.	.	.	.	.	.
64.0	16.0	.	.	.	.	.	.	.	.	.
68.0	15.5	.	.	.	.	.	.	.	.	.
70.0	15.0	.	.	.	.	.	.	.	.	.
72.0	14.5	.	.	.	.	.	.	.	.	.
73.0	14.0	.	.	.	.	.	.	.	.	.
77.0	13.5	.	.	.	.	.	.	.	.	.
81.0	13.0	.	.	.	.	.	.	.	.	.
87.0	12.5	.	.	.	.	.	.	.	.	.
92.0	12.0	.	.	.	.	.	.	.	.	.
95.0	11.5	.	.	.	.	.	.	.	.	.
97.0	11.0	.	.	.	.	.	.	.	.	.
100.0	10.5	.	.	.	.	.	.	.	.	.
104.0	10.0	.	.	.	.	.	.	.	.	.
106.0	10.0	.	.	.	.	.	.	.	.	.
115.0	9.5	.	.	.	.	.	.	.	.	.
119.0	9.2	.	.	.	.	.	.	.	.	.
130.0	9.0	.	.	.	.	.	.	.	.	.
154.0	8.6	.	.	.	.	.	.	.	.	.
157.0	8.6	.	.	.	.	.	.	.	.	.
165.0	8.4	.	.	.	.	.	.	.	.	.
166.0	8.5	.	.	.	.	.	.	.	.	.
169.0	8.3	.	.	.	.	.	.	.	.	.
183.0	8.2	.	.	.	.	.	.	.	.	.
189.0	8.1	.	.	.	.	.	.	.	.	.
200.0	7.8	.	.	.	.	.	.	.	.	.



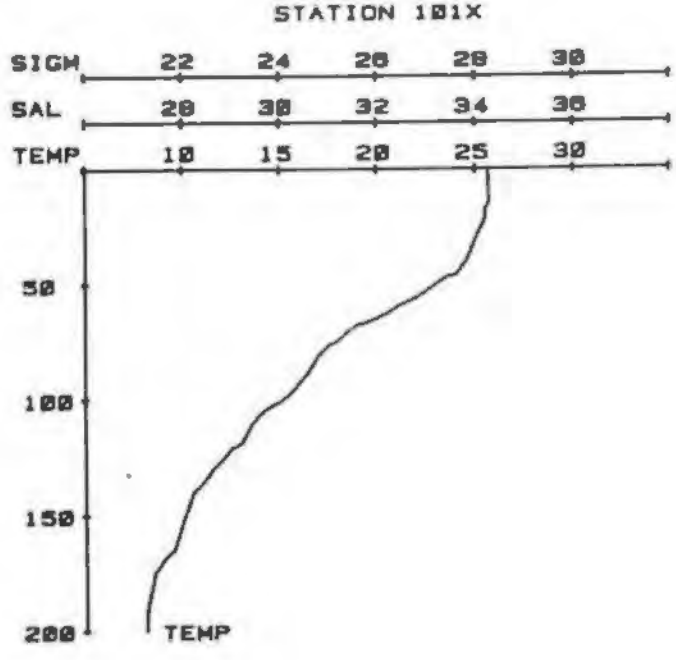
CTD CRUISE STA 1013 22/04/79 09.7 GMT CONSEC STA 102

LAT 31 00.7N LONG 79 42.6W DEPTH = 30MM DIST LAST STA = 8.4NM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 139	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES=	1020.0	VISIBILITY CODE=	

Z	T	S	D	OBSERVATIONS SIGMA	O2	O2'	AOU	PO4	NO3	SI
0.0	25.7	.	.	.	.	.	.	.	.	.
15.0	25.7	.	.	.	.	.	.	.	.	.
17.0	25.5	.	.	.	.	.	.	.	.	.
21.0	25.5	.	.	.	.	.	.	.	.	.
30.0	25.0	.	.	.	.	.	.	.	.	.
40.0	24.5	.	.	.	.	.	.	.	.	.
46.0	24.0	.	.	.	.	.	.	.	.	.
47.0	23.5	.	.	.	.	.	.	.	.	.
50.0	23.0	.	.	.	.	.	.	.	.	.
53.0	22.5	.	.	.	.	.	.	.	.	.
56.0	22.0	.	.	.	.	.	.	.	.	.
58.0	21.5	.	.	.	.	.	.	.	.	.
60.0	21.0	.	.	.	.	.	.	.	.	.
61.0	20.5	.	.	.	.	.	.	.	.	.
65.0	20.0	.	.	.	.	.	.	.	.	.
67.0	19.5	.	.	.	.	.	.	.	.	.
68.0	19.0	.	.	.	.	.	.	.	.	.
71.0	18.5	.	.	.	.	.	.	.	.	.
75.0	18.0	.	.	.	.	.	.	.	.	.
77.0	17.5	.	.	.	.	.	.	.	.	.
81.0	17.0	.	.	.	.	.	.	.	.	.
88.0	16.5	.	.	.	.	.	.	.	.	.
93.0	16.0	.	.	.	.	.	.	.	.	.
98.0	15.5	.	.	.	.	.	.	.	.	.
101.0	15.0	.	.	.	.	.	.	.	.	.
103.0	14.5	.	.	.	.	.	.	.	.	.
106.0	14.0	.	.	.	.	.	.	.	.	.
111.0	13.5	.	.	.	.	.	.	.	.	.
119.0	13.0	.	.	.	.	.	.	.	.	.
125.0	12.5	.	.	.	.	.	.	.	.	.
126.0	12.0	.	.	.	.	.	.	.	.	.
130.0	11.5	.	.	.	.	.	.	.	.	.
136.0	11.0	.	.	.	.	.	.	.	.	.
142.0	10.5	.	.	.	.	.	.	.	.	.
152.0	10.0	.	.	.	.	.	.	.	.	.
165.0	9.5	.	.	.	.	.	.	.	.	.
169.0	9.0	.	.	.	.	.	.	.	.	.
175.0	8.5	.	.	.	.	.	.	.	.	.
191.0	8.1	.	.	.	.	.	.	.	.	.
200.0	8.0	.	.	.	.	.	.	.	.	.



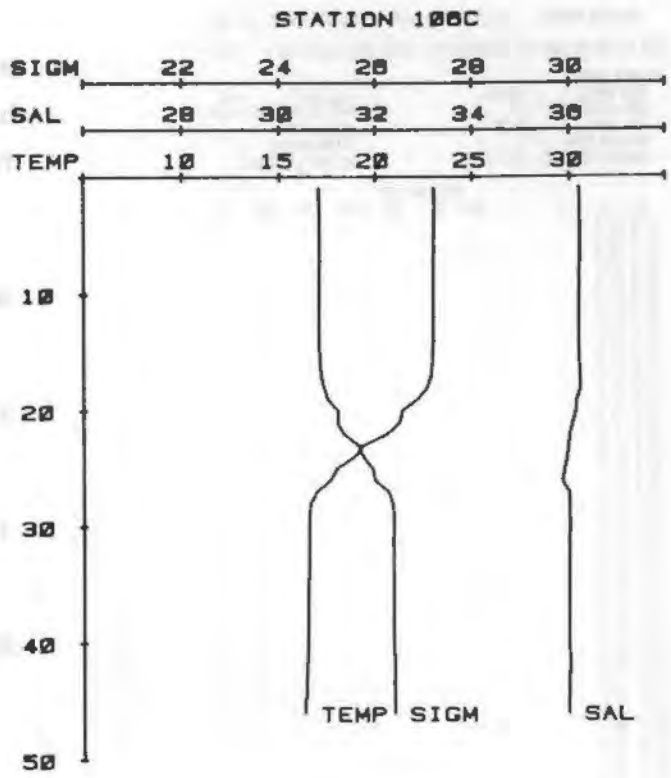
CTLISS CRUISE STA 108C 22/04/79 13.3 GMT CONSEC STA 107

LAT 38 47.1N LONG 79 59.9W DEPTH = 75M DIST LAST STA = 34.2KM

WEATHER DATA

WIND SPEED	= KTS	SEA STATE	=
WIND DIRECTION	=	WAVE DIRECTION	=
AIR TEMP	= . C	CLOUD TYPE	=
WEATHER CODE	=	CLOUD AMOUNT	=
BAROMETRIC PRES= 10 .		VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.05	36.20	24.84	312	.	.	.	.	.	.
2.0	23.05	36.21	24.84	312	.	.	.	.	.	.
3.0	23.02	34.21	24.85	311	5.23	4.87	-0.36	0.05	0.0	0.5
4.0	23.03	36.21	24.85	311	.	.	.	.	.	.
5.0	23.01	34.21	24.86	311	.	.	.	.	.	.
6.0	23.01	34.21	24.86	311	.	.	.	.	.	.
7.0	23.00	34.21	24.86	310	.	.	.	.	.	.
8.0	23.00	36.19	24.84	312	.	.	.	.	.	.
9.0	23.00	36.20	24.85	311	.	.	.	.	.	.
10.0	23.00	36.19	24.84	312	.	.	.	.	.	.
11.0	23.00	36.19	24.84	312	.	.	.	.	.	.
12.0	23.00	36.19	24.84	312	.	.	.	.	.	.
13.0	22.99	36.19	24.85	312	.	.	.	.	.	.
14.0	22.99	36.19	24.85	312	.	.	.	.	.	.
15.0	22.95	36.20	24.87	310	5.25	4.88	-0.37	0.07	0.0	0.9
16.0	22.94	36.21	24.88	309	.	.	.	.	.	.
17.0	22.88	36.22	24.90	307	5.46	4.88	-0.58	0.07	0.1	1.0
18.0	22.69	36.23	24.96	301	.	.	.	.	.	.
19.0	22.19	36.14	25.04	294	5.43	4.94	-0.49	0.23	1.9	3.8
20.0	21.48	36.13	25.25	273	.	.	.	.	.	.
21.0	21.26	36.06	25.24	275	.	.	.	.	.	.
22.0	20.61	36.00	25.37	262	.	.	.	.	.	.
23.0	19.36	35.97	25.60	233	.	.	.	.	.	.
24.0	18.85	35.94	25.79	223	.	.	.	.	.	.
25.0	17.98	35.89	25.97	206	.	.	.	.	.	.
26.0	17.64	35.85	26.02	201	.	.	.	.	.	.
27.0	16.93	35.99	26.18	174	.	.	.	.	.	.
28.0	16.60	36.00	26.30	166	.	.	.	.	.	.
29.0	16.54	36.00	26.40	165	.	.	.	.	.	.
30.0	16.53	36.00	26.40	164	.	.	.	.	.	.
31.0	16.54	35.99	26.38	166	.	.	.	.	.	.
32.0	16.54	35.99	26.39	165	.	.	.	.	.	.
33.0	16.53	35.98	26.39	166	.	.	.	.	.	.
34.0	16.51	35.98	26.39	166	.	.	.	.	.	.
35.0	16.49	35.98	26.40	165	.	.	.	.	.	.
36.0	16.48	35.97	26.39	166	.	.	.	.	.	.
37.0	16.49	35.98	26.40	165	.	.	.	.	.	.
38.0	16.50	35.97	26.39	166	.	.	.	.	.	.
39.0	16.47	35.97	26.39	166	.	.	.	.	.	.
40.0	16.47	35.97	26.39	166	.	.	.	.	.	.
41.0	16.44	35.99	26.41	164	.	.	.	.	.	.
42.0	16.42	35.99	26.42	163	.	.	.	.	.	.
43.0	16.40	35.97	26.41	164	.	.	.	.	.	.
44.0	16.40	35.98	26.42	163	.	.	.	.	.	.
45.0	16.32	35.96	26.42	163	3.84	5.52	1.68	0.67	10.8	6.8
46.0	16.35	35.97	26.42	163	.	.	.	.	.	.



GILLISS CRUISE STA 111C 22/04/79 19.6 GMT CONSEC STA 112

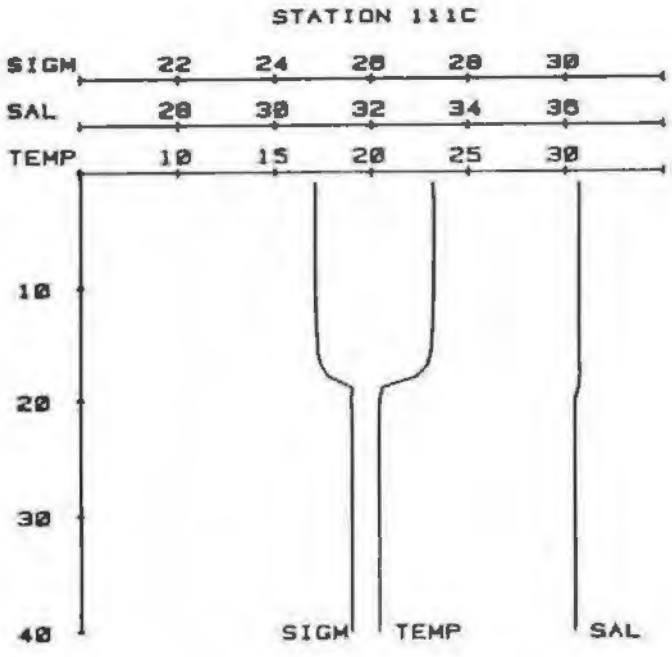
LAT 38 45.4N LONG 88 16.7W DEPTH = 43M DIST LAST STA = 26.9KM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 51	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.21	36.27	24.84	312	.	.	.	.	.	.
2.0	23.24	36.28	24.84	312	5.68	4.85	-0.83	0.15	0.0	0.3
3.0	23.23	36.27	24.84	312	.	.	.	.	.	.
4.0	23.23	36.28	24.85	312	.	.	.	.	.	.
5.0	23.23	36.27	24.84	312	.	.	.	.	.	.
6.0	23.22	36.27	24.84	312	.	.	.	.	.	.
7.0	23.22	36.27	24.84	312	.	.	.	.	.	.
8.0	23.21	36.27	24.84	312	.	.	.	.	.	.
9.0	23.21	36.28	24.85	311	.	.	.	.	.	.
10.0	23.20	36.27	24.85	312	.	.	.	.	.	.
11.0	23.19	36.28	24.86	311	.	.	.	.	.	.
12.0	23.15	36.27	24.86	310	.	.	.	.	.	.
13.0	23.14	36.27	24.86	310	.	.	.	.	.	.
14.0	23.11	36.28	24.88	309	.	.	.	.	.	.
15.0	23.07	36.28	24.89	308	.	.	.	.	.	.
16.0	23.01	36.27	24.90	307	.	.	.	.	.	.
17.0	22.84	36.29	24.97	301	.	.	.	.	.	.
18.0	22.28	36.28	25.12	296	5.08	4.93	-0.15	0.05	0.0	0.1
19.0	20.49	36.26	25.48	248	.	.	.	.	.	.
20.0	20.36	36.18	25.57	243	5.14	5.11	-0.03	0.09	0.1	0.0
21.0	20.33	36.19	25.59	241	.	.	.	.	.	.
22.0	20.32	36.18	25.58	242	.	.	.	.	.	.
23.0	20.31	36.19	25.59	241	.	.	.	.	.	.
24.0	20.32	36.18	25.58	242	.	.	.	.	.	.
25.0	20.32	36.18	25.58	242	.	.	.	.	.	.
26.0	20.31	36.18	25.59	242	.	.	.	.	.	.
27.0	20.32	36.18	25.58	242	.	.	.	.	.	.
28.0	20.32	36.18	25.58	242	.	.	.	.	.	.
29.0	20.32	36.18	25.58	242	.	.	.	.	.	.
30.0	20.32	36.18	25.58	242	4.79	5.11	0.32	0.17	1.3	3.0
31.0	20.32	36.18	25.58	242	.	.	.	.	.	.
32.0	20.32	36.18	25.58	242	.	.	.	.	.	.
33.0	20.32	36.18	25.58	242	.	.	.	.	.	.
34.0	20.32	36.18	25.58	242	.	.	.	.	.	.
35.0	20.32	36.18	25.58	242	.	.	.	.	.	.
36.0	20.32	36.18	25.58	242	.	.	.	.	.	.
37.0	20.32	36.18	25.58	242	.	.	.	.	.	.
38.0	20.32	36.18	25.58	243	.	.	.	.	.	.
39.0	20.32	36.18	25.58	243	.	.	.	.	.	.
40.0	20.32	36.18	25.58	243	4.96	5.11	0.15	0.20	1.4	2.6



GILLISS CRUISE STA 112X 22/04/79 20.5 GMT CONSEC STA 113

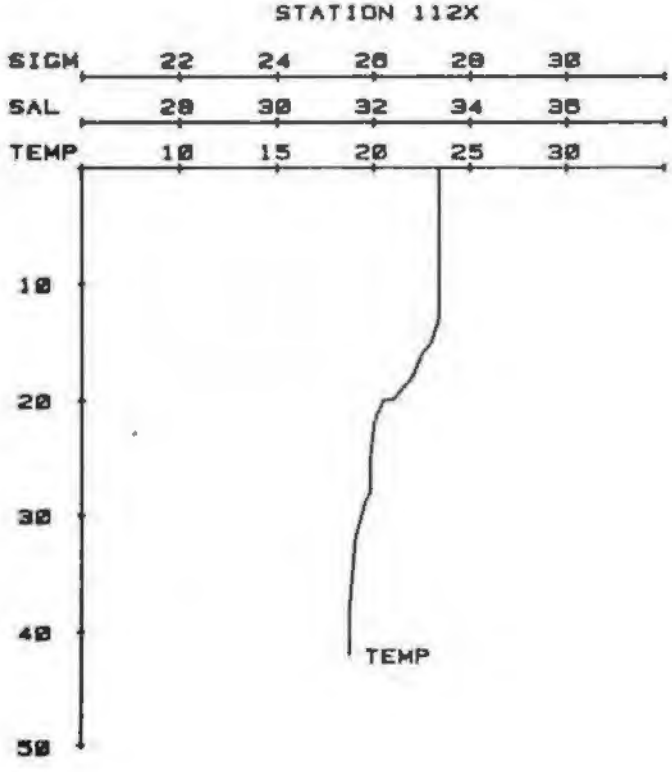
LAT 38 44.5N LONG 88 13.5W DEPTH = 42M DIST LAST STA = 5.4KM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 51	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.4	.	.	.	.	.	.	.	.	.
13.0	23.4	.	.	.	.	.	.	.	.	.
15.0	23.0	.	.	.	.	.	.	.	.	.
16.0	22.5	.	.	.	.	.	.	.	.	.
18.0	22.0	.	.	.	.	.	.	.	.	.
19.0	21.5	.	.	.	.	.	.	.	.	.
20.0	21.0	.	.	.	.	.	.	.	.	.
21.0	20.5	.	.	.	.	.	.	.	.	.
22.0	20.0	.	.	.	.	.	.	.	.	.
25.0	19.0	.	.	.	.	.	.	.	.	.
28.0	19.0	.	.	.	.	.	.	.	.	.
29.0	19.5	.	.	.	.	.	.	.	.	.
32.0	19.0	.	.	.	.	.	.	.	.	.
38.0	18.7	.	.	.	.	.	.	.	.	.
42.0	18.7	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 113C 22/04/79 20.0 GMT CONSEC STA 114

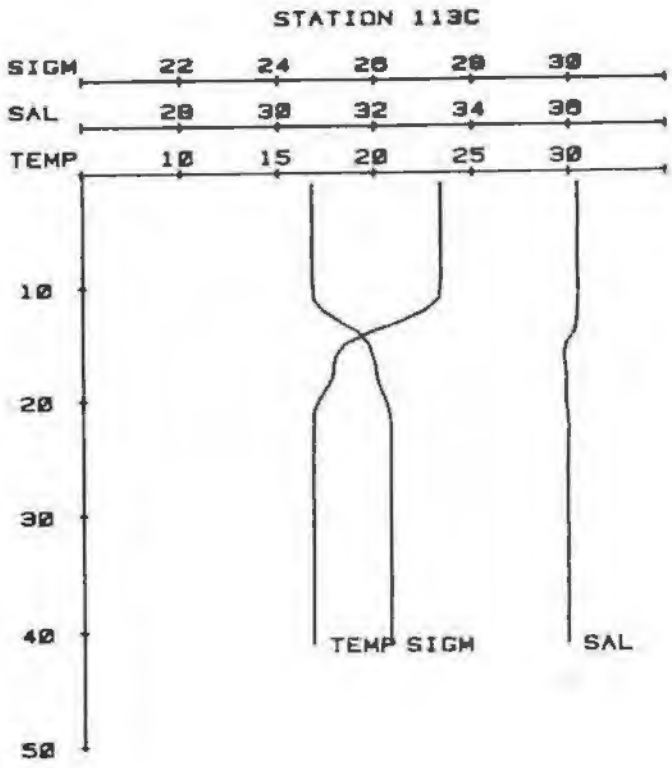
LAT 38 43.9N LONG 68 10.9W DEPTH = 43M DIST LAST STA = 4.3NM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.38	36.17	24.72	324	.	.	.	.	.	.
2.0	23.38	36.17	24.72	324	4.71	4.84	0.13	0.05	0.0	0.0
3.0	23.38	36.18	24.73	323	.	.	.	.	.	.
4.0	23.38	36.18	24.73	323	.	.	.	.	.	.
5.0	23.38	36.17	24.72	324	.	.	.	.	.	.
6.0	23.38	36.17	24.72	324	.	.	.	.	.	.
7.0	23.38	36.17	24.72	324	.	.	.	.	.	.
8.0	23.38	36.17	24.72	324	.	.	.	.	.	.
9.0	23.38	36.18	24.73	323	.	.	.	.	.	.
10.0	23.33	36.19	24.75	321	5.47	4.84	-0.63	0.07	0.0	0.0
11.0	23.27	36.18	24.76	320	.	.	.	.	.	.
12.0	22.61	36.17	24.94	303	.	.	.	.	.	.
13.0	21.31	36.15	25.29	269	.	.	.	.	.	.
14.0	19.65	36.10	25.70	231	5.45	5.10	-0.27	0.42	1.5	2.3
15.0	18.48	35.93	25.89	212	.	.	.	.	.	.
16.0	17.99	35.89	25.96	206	.	.	.	.	.	.
17.0	17.83	35.92	26.03	208	.	.	.	.	.	.
18.0	17.79	35.94	26.05	197	.	.	.	.	.	.
19.0	17.46	35.93	26.13	198	.	.	.	.	.	.
20.0	17.05	35.93	26.22	181	.	.	.	.	.	.
21.0	16.82	35.96	26.30	174	4.80	5.47	1.47	0.65	0.5	5.0
22.0	16.81	35.99	26.33	171	.	.	.	.	.	.
23.0	16.79	35.98	26.32	172	.	.	.	.	.	.
24.0	16.79	35.97	26.32	172	.	.	.	.	.	.
25.0	16.78	35.97	26.32	172	.	.	.	.	.	.
26.0	16.78	35.96	26.31	173	.	.	.	.	.	.
27.0	16.78	35.97	26.32	172	.	.	.	.	.	.
28.0	16.78	35.96	26.31	173	.	.	.	.	.	.
29.0	16.78	35.96	26.31	173	3.99	5.48	1.49	0.62	0.9	6.5
30.0	16.78	35.96	26.31	173	.	.	.	.	.	.
31.0	16.78	35.97	26.32	172	.	.	.	.	.	.
32.0	16.78	35.97	26.32	172	.	.	.	.	.	.
33.0	16.78	35.97	26.32	172	.	.	.	.	.	.
34.0	16.77	35.96	26.31	173	.	.	.	.	.	.
35.0	16.76	35.97	26.32	172	.	.	.	.	.	.
36.0	16.76	35.96	26.32	173	.	.	.	.	.	.
37.0	16.77	35.97	26.32	172	.	.	.	.	.	.
38.0	16.77	35.96	26.31	173	.	.	.	.	.	.
39.0	16.77	35.96	26.31	173	.	.	.	.	.	.
40.0	16.77	35.96	26.31	173	.	.	.	.	.	.
41.0	16.77	35.96	26.31	173	4.83	5.48	1.65	0.57	9.1	5.0



GILLISS CRUISE STA 114X 22/04/79 21.4 GMT CONSEC STA 115

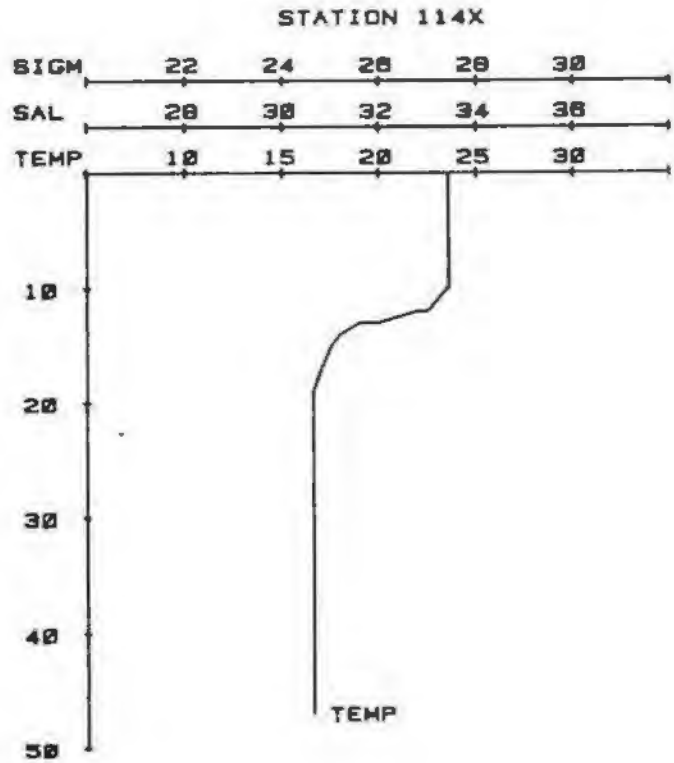
LAT 38 43.5N LONG 68 08.8W DEPTH = 47M DIST LAST STA = 6.7NM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.6	.	.	.	.	.	.	.	.	.
10.0	23.6	.	.	.	.	.	.	.	.	.
11.0	23.5	.	.	.	.	.	.	.	.	.
11.0	23.0	.	.	.	.	.	.	.	.	.
12.0	22.5	.	.	.	.	.	.	.	.	.
12.0	22.0	.	.	.	.	.	.	.	.	.
13.0	20.0	.	.	.	.	.	.	.	.	.
13.0	19.0	.	.	.	.	.	.	.	.	.
14.0	18.0	.	.	.	.	.	.	.	.	.
15.0	17.5	.	.	.	.	.	.	.	.	.
17.0	17.0	.	.	.	.	.	.	.	.	.
19.0	16.6	.	.	.	.	.	.	.	.	.
47.0	16.6	.	.	.	.	.	.	.	.	.



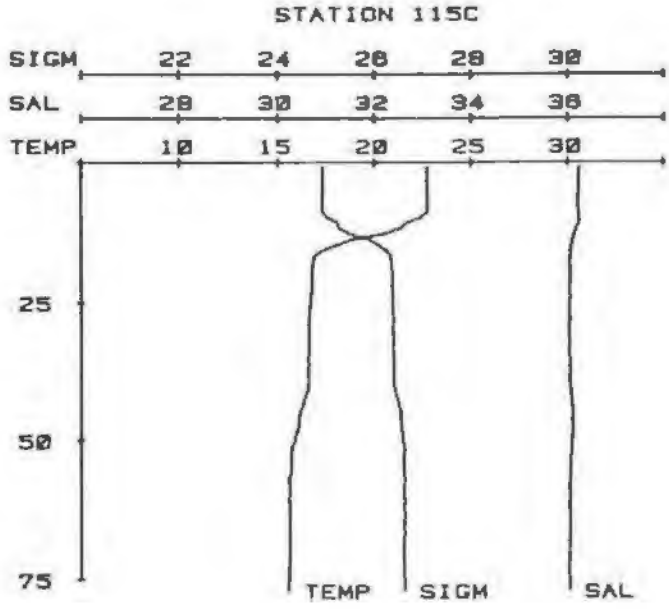
CALLISTO CRUISE STA 115C 22/04/79 21.9 GMT COMSEC STA 116

LAT 30 42.9N LONG 88 05.0W DEPTH = 79M DIST LAST STA = 9.9KM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.0C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES=	1021.0	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.76	36.23	24.94	382	.	.	.	.	.	.
2.0	22.76	36.22	24.94	383	.	.	.	.	.	.
3.0	22.76	36.22	24.94	383	5.36	4.89	-0.47	0.18	0.8	0.3
4.0	22.76	36.22	24.94	383	.	.	.	.	.	.
5.0	22.76	36.22	24.94	383	.	.	.	.	.	.
6.0	22.78	36.21	24.93	384	.	.	.	.	.	.
7.0	22.76	36.21	24.93	384	.	.	.	.	.	.
8.0	22.76	36.21	24.93	384	.	.	.	.	.	.
9.0	22.76	36.23	24.94	382	.	.	.	.	.	.
10.0	22.45	36.23	25.03	294	.	.	.	.	.	.
11.0	21.64	36.24	25.27	272	5.48	6.09	0.61	1.09	8.8	8.2
12.0	21.39	36.17	25.29	270	.	.	.	.	.	.
13.0	20.59	36.13	25.50	250	.	.	.	.	.	.
14.0	18.82	36.10	25.92	210	.	.	.	.	.	.
15.0	18.01	36.07	26.10	193	.	.	.	.	.	.
16.0	17.24	36.06	26.27	176	.	.	.	.	.	.
17.0	16.86	36.05	26.36	168	.	.	.	.	.	.
18.0	16.80	36.04	26.37	167	.	.	.	.	.	.
19.0	16.78	36.06	26.39	165	.	.	.	.	.	.
20.0	16.77	36.06	26.39	165	4.06	5.47	1.41	0.54	7.2	4.9
21.0	16.75	36.05	26.39	165	.	.	.	.	.	.
22.0	16.76	36.05	26.39	166	.	.	.	.	.	.
23.0	16.74	36.04	26.38	166	.	.	.	.	.	.
24.0	16.69	36.06	26.41	163	.	.	.	.	.	.
25.0	16.70	36.04	26.39	165	.	.	.	.	.	.
26.0	16.63	36.04	26.41	164	.	.	.	.	.	.
27.0	16.63	36.04	26.41	164	.	.	.	.	.	.
28.0	16.61	36.06	26.43	162	.	.	.	.	.	.
29.0	16.60	36.03	26.41	164	.	.	.	.	.	.
30.0	16.60	36.04	26.42	163	.	.	.	.	.	.
31.0	16.60	36.04	26.42	163	.	.	.	.	.	.
32.0	16.60	36.05	26.42	162	.	.	.	.	.	.
33.0	16.60	36.04	26.42	164	.	.	.	.	.	.
34.0	16.59	36.03	26.41	164	.	.	.	.	.	.
35.0	16.59	36.04	26.43	162	.	.	.	.	.	.
36.0	16.59	36.05	26.43	162	.	.	.	.	.	.
37.0	16.59	36.05	26.43	162	.	.	.	.	.	.
38.0	16.57	36.06	26.43	162	.	.	.	.	.	.
39.0	16.59	36.05	26.43	162	.	.	.	.	.	.
40.0	16.58	36.06	26.44	161	.	.	.	.	.	.
41.0	16.55	36.08	26.46	159	3.94	5.50	1.56	0.64	8.2	5.6
42.0	16.45	36.08	26.48	157	.	.	.	.	.	.
43.0	16.34	36.10	26.52	153	.	.	.	.	.	.
44.0	16.29	36.11	26.54	152	.	.	.	.	.	.
45.0	16.14	36.12	26.58	148	.	.	.	.	.	.
46.0	16.13	36.10	26.57	149	.	.	.	.	.	.
47.0	16.11	36.12	26.59	147	.	.	.	.	.	.
48.0	16.08	36.11	26.59	147	.	.	.	.	.	.
49.0	15.92	36.10	26.62	144	.	.	.	.	.	.
50.0	15.92	36.09	26.61	145	.	.	.	.	.	.
51.0	15.76	36.09	26.65	142	.	.	.	.	.	.
52.0	15.72	36.09	26.66	141	.	.	.	.	.	.
53.0	15.72	36.06	26.64	143	3.69	5.59	1.90	0.67	10.2	5.6
54.0	15.72	36.07	26.64	142	.	.	.	.	.	.
55.0	15.71	36.06	26.64	143	.	.	.	.	.	.
56.0	15.69	36.07	26.65	142	.	.	.	.	.	.
57.0	15.57	36.05	26.66	141	.	.	.	.	.	.
58.0	15.62	36.04	26.64	142	.	.	.	.	.	.
59.0	15.67	36.05	26.64	143	.	.	.	.	.	.
60.0	15.68	36.05	26.66	141	.	.	.	.	.	.
61.0	15.62	36.05	26.65	142	.	.	.	.	.	.
62.0	15.64	36.04	26.64	143	.	.	.	.	.	.
63.0	15.63	36.06	26.66	141	.	.	.	.	.	.
64.0	15.63	36.05	26.65	142	.	.	.	.	.	.
65.0	15.64	36.05	26.65	142	.	.	.	.	.	.
66.0	15.64	36.05	26.65	142	.	.	.	.	.	.
67.0	15.63	36.05	26.65	142	.	.	.	.	.	.
68.0	15.64	36.04	26.64	143	.	.	.	.	.	.
69.0	15.64	36.04	26.64	143	.	.	.	.	.	.
70.0	15.62	36.04	26.64	143	.	.	.	.	.	.
71.0	15.65	36.04	26.64	143	.	.	.	.	.	.
72.0	15.61	36.04	26.65	143	.	.	.	.	.	.
73.0	15.59	36.04	26.65	142	.	.	.	.	.	.
74.0	15.61	36.03	26.64	143	.	.	.	.	.	.
75.0	15.59	36.05	26.66	142	.	.	.	.	.	.
76.0	15.56	36.04	26.66	142	.	.	.	.	.	.
77.0	15.56	36.04	26.66	142	3.94	5.61	1.67	0.68	11.2	5.9



GILLISS CRUISE STA 1133 22/04/79 22.6 GMT CONSEC STA 117

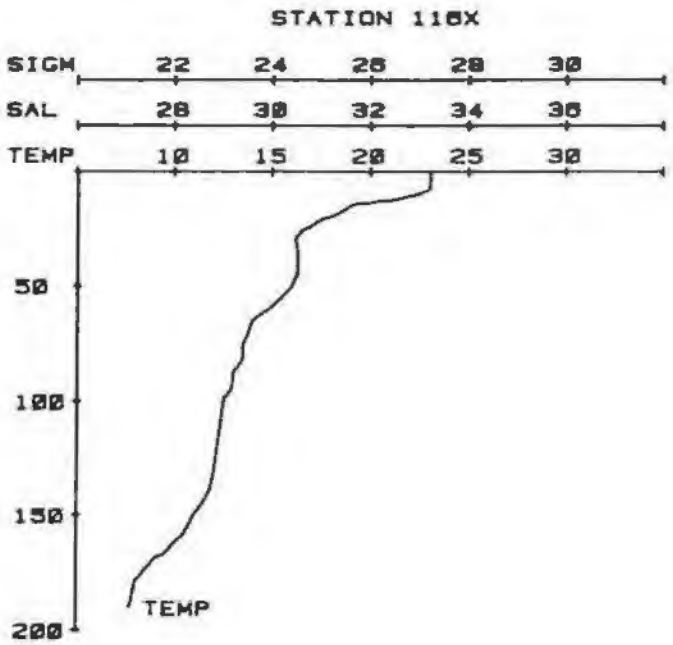
LAT 38 42.4N LONG 80 02.5W DEPTH = 198M DIST LAST STA = 4.18N

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 02	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.8	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.1	.	.	.	.	.	.	.	.	.
8.0	23.0	.	.	.	.	.	.	.	.	.
10.0	22.5	.	.	.	.	.	.	.	.	.
11.0	22.0	.	.	.	.	.	.	.	.	.
12.0	21.5	.	.	.	.	.	.	.	.	.
13.0	21.0	.	.	.	.	.	.	.	.	.
13.0	20.5	.	.	.	.	.	.	.	.	.
14.0	20.0	.	.	.	.	.	.	.	.	.
14.0	19.5	.	.	.	.	.	.	.	.	.
15.0	19.0	.	.	.	.	.	.	.	.	.
18.0	18.5	.	.	.	.	.	.	.	.	.
20.0	18.0	.	.	.	.	.	.	.	.	.
21.0	17.5	.	.	.	.	.	.	.	.	.
24.0	17.0	.	.	.	.	.	.	.	.	.
26.0	16.5	.	.	.	.	.	.	.	.	.
29.0	16.2	.	.	.	.	.	.	.	.	.
35.0	16.3	.	.	.	.	.	.	.	.	.
44.0	16.3	.	.	.	.	.	.	.	.	.
50.0	16.0	.	.	.	.	.	.	.	.	.
55.0	15.5	.	.	.	.	.	.	.	.	.
59.0	15.0	.	.	.	.	.	.	.	.	.
62.0	14.5	.	.	.	.	.	.	.	.	.
65.0	14.0	.	.	.	.	.	.	.	.	.
76.0	13.5	.	.	.	.	.	.	.	.	.
82.0	13.5	.	.	.	.	.	.	.	.	.
88.0	13.0	.	.	.	.	.	.	.	.	.
95.0	12.9	.	.	.	.	.	.	.	.	.
99.0	12.5	.	.	.	.	.	.	.	.	.
132.0	12.0	.	.	.	.	.	.	.	.	.
139.0	11.0	.	.	.	.	.	.	.	.	.
144.0	11.5	.	.	.	.	.	.	.	.	.
150.0	11.0	.	.	.	.	.	.	.	.	.
158.0	10.5	.	.	.	.	.	.	.	.	.
162.0	10.0	.	.	.	.	.	.	.	.	.
167.0	9.5	.	.	.	.	.	.	.	.	.
169.0	9.0	.	.	.	.	.	.	.	.	.
174.0	8.5	.	.	.	.	.	.	.	.	.
179.0	8.1	.	.	.	.	.	.	.	.	.
188.0	7.8	.	.	.	.	.	.	.	.	.
198.0	7.7	.	.	.	.	.	.	.	.	.



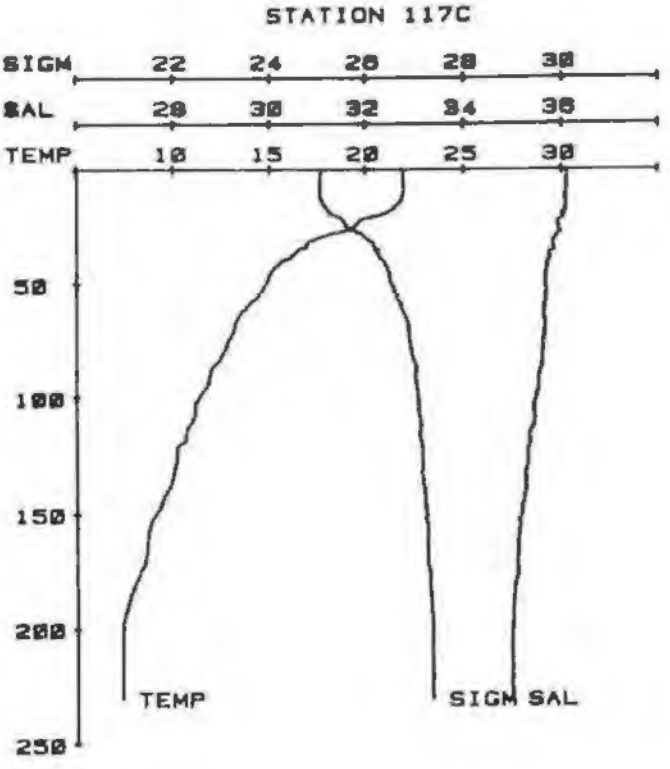
CILLISS CRUISE STA 117C 22/04/79 23.0 GMT CONSEC STA 118

LAT 38 41.5N LONG 79 59.5W DEPTH = 245M DIST LAST STA = 5.1KM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 22	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

Z	T	S	Θ	SVA	OBSERVATIONS O2	O2'	AOU	PO4	NO3	SI
1.0	21.96	36.11	25.88	289	.	.	.	.	.	.
2.0	21.96	36.11	25.88	289	.	.	.	.	.	.
3.0	21.96	36.09	25.87	291	5.72	4.97	-0.75	0.00	0.2	0.9
4.0	21.96	36.09	25.87	291	.	.	.	.	.	.
5.0	21.97	36.09	25.86	291	.	.	.	.	.	.
6.0	21.96	36.08	25.86	291	.	.	.	.	.	.
7.0	21.97	36.10	25.87	290	.	.	.	.	.	.
8.0	21.97	36.11	25.88	290	.	.	.	.	.	.
9.0	21.97	36.08	25.85	292	.	.	.	.	.	.
10.0	21.96	36.08	25.86	292	.	.	.	.	.	.
11.0	21.91	36.09	25.88	290	.	.	.	.	.	.
12.0	21.87	36.06	25.87	291	.	.	.	.	.	.
13.0	21.82	36.07	25.89	289	.	.	.	.	.	.
14.0	21.76	36.08	25.91	286	.	.	.	.	.	.
15.0	21.64	36.08	25.94	284	.	.	.	.	.	.
16.0	21.59	36.08	25.95	280	.	.	.	.	.	.
17.0	21.46	36.07	25.95	277	.	.	.	.	.	.
18.0	21.22	36.08	25.96	272	.	.	.	.	.	.
19.0	21.03	35.99	25.95	274	.	.	.	.	.	.
20.0	20.71	36.04	25.97	262	.	.	.	.	.	.
21.0	20.10	36.00	25.91	249	.	.	.	.	.	.
22.0	19.72	35.94	25.86	244	5.09	5.10	0.01	0.38	1.6	3.0
23.0	19.65	35.91	25.84	245	.	.	.	.	.	.
24.0	19.54	35.93	25.88	248	.	.	.	.	.	.
25.0	19.48	35.92	25.83	238	.	.	.	.	.	.
26.0	19.25	35.94	25.88	233	.	.	.	.	.	.
27.0	18.96	35.97	25.98	223	.	.	.	.	.	.
28.0	18.24	35.93	25.93	209	.	.	.	.	.	.
29.0	17.89	35.87	25.97	205	.	.	.	.	.	.
30.0	17.58	35.84	26.05	198	4.65	5.40	0.75	0.52	6.7	4.0
31.0	17.27	35.82	26.09	194	.	.	.	.	.	.
32.0	16.97	35.83	26.17	187	.	.	.	.	.	.
33.0	16.93	35.83	26.18	186	.	.	.	.	.	.
34.0	16.86	35.83	26.19	184	.	.	.	.	.	.
35.0	16.52	35.84	26.28	176	.	.	.	.	.	.
36.0	16.48	35.73	26.22	181	.	.	.	.	.	.
37.0	16.35	35.74	26.27	177	.	.	.	.	.	.
38.0	16.14	35.75	26.30	174	.	.	.	.	.	.
39.0	16.05	35.74	26.31	173	4.10	5.56	1.46	0.01	11.0	0.5
40.0	15.55	35.69	26.39	166	.	.	.	.	.	.
41.0	15.53	35.71	26.41	164	.	.	.	.	.	.
42.0	15.34	35.69	26.44	161	.	.	.	.	.	.
43.0	15.23	35.69	26.46	159	.	.	.	.	.	.
44.0	15.11	35.69	26.49	157	.	.	.	.	.	.
45.0	15.05	35.66	26.48	158	.	.	.	.	.	.
46.0	14.97	35.67	26.50	155	.	.	.	.	.	.
47.0	14.95	35.66	26.50	155	.	.	.	.	.	.
48.0	14.91	35.66	26.51	155	.	.	.	.	.	.
49.0	14.85	35.65	26.52	154	.	.	.	.	.	.
50.0	14.80	35.67	26.54	152	.	.	.	.	.	.
51.0	14.66	35.68	26.58	148	.	.	.	.	.	.
52.0	14.62	35.68	26.59	147	.	.	.	.	.	.
53.0	14.58	35.66	26.58	148	.	.	.	.	.	.
54.0	14.42	35.68	26.63	143	.	.	.	.	.	.
55.0	14.37	35.66	26.63	144	.	.	.	.	.	.
56.0	14.32	35.68	26.65	141	.	.	.	.	.	.
57.0	14.12	35.66	26.68	139	.	.	.	.	.	.
58.0	13.95	35.68	26.73	134	.	.	.	.	.	.
59.0	13.85	35.62	26.71	136	.	.	.	.	.	.
60.0	13.75	35.64	26.74	133	.	.	.	.	.	.
61.0	13.60	35.63	26.75	132	.	.	.	.	.	.
62.0	13.47	35.63	26.79	128	.	.	.	.	.	.
63.0	13.44	35.64	26.81	127	.	.	.	.	.	.
64.0	13.33	35.63	26.82	125	.	.	.	.	.	.
65.0	13.20	35.66	26.86	122	.	.	.	.	.	.
66.0	13.20	35.66	26.87	121	.	.	.	.	.	.
67.0	13.16	35.65	26.87	121	.	.	.	.	.	.
68.0	13.11	35.67	26.90	119	.	.	.	.	.	.
69.0	13.11	35.65	26.88	120	.	.	.	.	.	.
70.0	13.09	35.66	26.90	119	.	.	.	.	.	.
71.0	13.06	35.65	26.89	119	.	.	.	.	.	.
72.0	12.96	35.62	26.89	119	.	.	.	.	.	.
73.0	12.93	35.64	26.91	117	.	.	.	.	.	.
74.0	12.84	35.61	26.91	117	.	.	.	.	.	.
75.0	12.79	35.61	26.92	117	.	.	.	.	.	.
76.0	12.76	35.61	26.92	116	.	.	.	.	.	.
77.0	12.72	35.62	26.94	115	.	.	.	.	.	.
78.0	12.69	35.61	26.94	115	.	.	.	.	.	.
79.0	12.64	35.61	26.95	114	.	.	.	.	.	.
80.0	12.59	35.60	26.96	113	.	.	.	.	.	.
81.0	12.51	35.60	26.97	112	.	.	.	.	.	.
82.0	12.44	35.59	26.97	112	.	.	.	.	.	.
83.0	12.38	35.59	26.98	110	.	.	.	.	.	.
84.0	12.31	35.61	27.01	108	.	.	.	.	.	.
85.0	12.25	35.59	27.01	108	.	.	.	.	.	.
86.0	12.16	35.60	27.05	104	.	.	.	.	.	.
87.0	11.96	35.56	27.04	105	.	.	.	.	.	.
88.0	11.94	35.54	27.03	106	.	.	.	.	.	.
89.0	11.89	35.53	27.03	106	.	.	.	.	.	.
90.0	11.88	35.52	27.03	106	.	.	.	.	.	.
91.0	11.84	35.52	27.03	106	.	.	.	.	.	.
92.0	11.82	35.52	27.04	105	.	.	.	.	.	.
93.0	11.81	35.52	27.04	105	.	.	.	.	.	.
94.0	11.77	35.53	27.06	104	.	.	.	.	.	.
95.0	11.71	35.52	27.06	103	.	.	.	.	.	.



96.0	11.63	35.51	27.07	102	.	.	.	.	.	.		
97.0	11.54	35.51	27.08	101	.	.	.	.	.	.		
98.0	11.44	35.47	27.07	102	.	.	.	.	.	.		
99.0	11.37	35.46	27.08	102								
100.0	11.34	35.46	27.08	101	2.97	6.16	3.17	1.30	26.5	12.3		
101.0	11.28	35.45	27.09	101	.	.	.	.	.	.		
102.0	11.16	35.42	27.08	101	.	.	.	.	.	.		
103.0	11.13	35.43	27.10	100	.	.	.	.	.	.		
104.0	11.12	35.42	27.09	101	.	.	.	.	.	.		
105.0	11.12	35.42	27.09	101	.	.	.	.	.	.		
106.0	11.12	35.41	27.08	101	.	.	.	.	.	.		
107.0	11.17	35.44	27.11	99	.	.	.	.	.	.		
108.0	11.19	35.44	27.11	99	.	.	.	.	.	.		
109.0	11.11	35.44	27.13	97	.	.	.	.	.	.		
110.0	10.99	35.43	27.13	97	.	.	.	.	.	.		
111.0	10.93	35.43	27.14	96	.	.	.	.	.	.		
112.0	10.78	35.43	27.16	94	.	.	.	.	.	.		
113.0	10.71	35.36	27.12	98	.	.	.	.	.	.		
114.0	10.66	35.37	27.13	97	.	.	.	.	.	.		
115.0	10.60	35.34	27.13	99	.	.	.	.	.	.		
116.0	10.62	35.32	27.10	99	.	.	.	.	.	.		
117.0	10.61	35.34	27.12	98	.	.	.	.	.	.		
118.0	10.69	35.35	27.13	97	.	.	.	.	.	.		
119.0	10.57	35.36	27.15	96	.	.	.	.	.	.		
120.0	10.33	35.33	27.16	94	.	.	.	.	.	.		
121.0	10.19	35.31	27.17	93	.	.	.	.	.	.		
122.0	10.19	35.31	27.17	93	.	.	.	.	.	.		
123.0	10.19	35.29	27.16	95	.	.	.	.	.	.		

GILLISS CRUISE STA 1172 22/04/79 23.7 GMT CONSEC STA 119

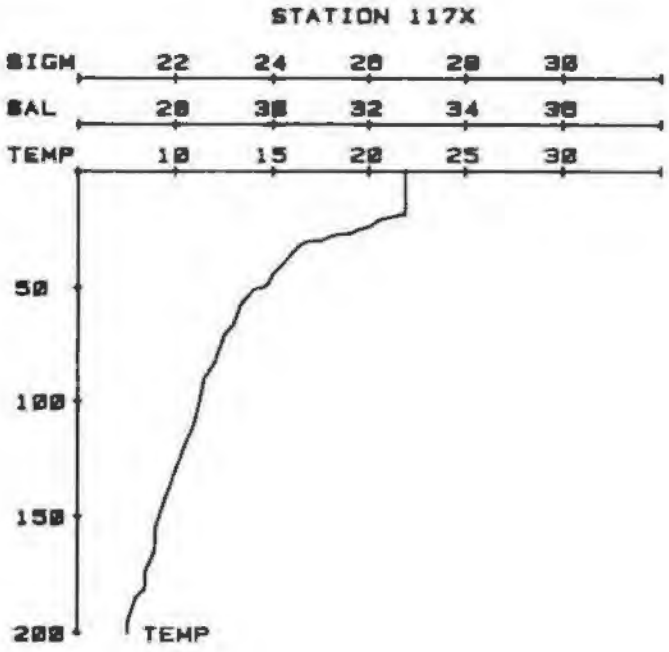
LAT 30 41.5N LONG 79 59.5W DEPTH = 2458 DIST LAST STA = 8.0KM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 23.9C	CLOUD TYPE	=
WEATHER CODE	= 02	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	D2	D2'	ADJ	P04	H33	BI
0.0	21.9	.	.	.	.	.	.	.	.	.
10.0	21.9	.	.	.	.	.	.	.	.	.
19.0	21.5	.	.	.	.	.	.	.	.	.
20.0	21.0	.	.	.	.	.	.	.	.	.
21.0	20.5	.	.	.	.	.	.	.	.	.
24.0	20.0	.	.	.	.	.	.	.	.	.
25.0	19.5	.	.	.	.	.	.	.	.	.
27.0	19.0	.	.	.	.	.	.	.	.	.
27.0	18.5	.	.	.	.	.	.	.	.	.
28.0	18.0	.	.	.	.	.	.	.	.	.
30.0	17.5	.	.	.	.	.	.	.	.	.
30.0	17.0	.	.	.	.	.	.	.	.	.
31.0	16.5	.	.	.	.	.	.	.	.	.
35.0	16.0	.	.	.	.	.	.	.	.	.
40.0	15.5	.	.	.	.	.	.	.	.	.
44.0	15.0	.	.	.	.	.	.	.	.	.
49.0	14.7	.	.	.	.	.	.	.	.	.
50.0	14.5	.	.	.	.	.	.	.	.	.
51.0	14.0	.	.	.	.	.	.	.	.	.
56.0	13.5	.	.	.	.	.	.	.	.	.
58.0	13.2	.	.	.	.	.	.	.	.	.
66.0	13.0	.	.	.	.	.	.	.	.	.
71.0	12.5	.	.	.	.	.	.	.	.	.
84.0	12.0	.	.	.	.	.	.	.	.	.
98.0	11.5	.	.	.	.	.	.	.	.	.
109.0	11.0	.	.	.	.	.	.	.	.	.
119.0	10.5	.	.	.	.	.	.	.	.	.
130.0	10.0	.	.	.	.	.	.	.	.	.
142.0	9.5	.	.	.	.	.	.	.	.	.
155.0	9.0	.	.	.	.	.	.	.	.	.
164.0	9.0	.	.	.	.	.	.	.	.	.
174.0	8.5	.	.	.	.	.	.	.	.	.
181.0	8.5	.	.	.	.	.	.	.	.	.
195.0	8.0	.	.	.	.	.	.	.	.	.
199.0	7.6	.	.	.	.	.	.	.	.	.
208.0	7.6	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 1183 23/04/79 00.2 GMT CONSEC STA 120

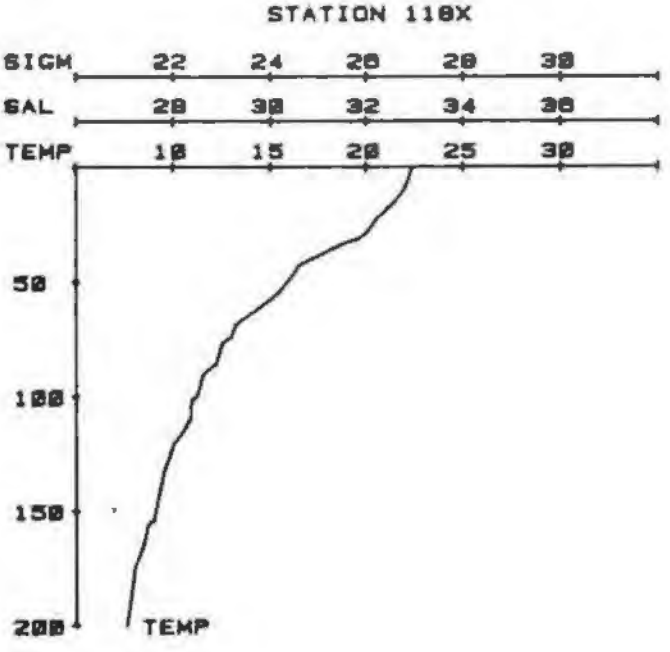
LAT 30 48.0N LONG 79 56.1W DEPTH = 3184 DIST LAST STA = 5.6KM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 130	WAVE DIRECTION	= 130
AIR TEMP	= 22.8C	CLOUD TYPE	=
WEATHER CODE	= 02	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	D2	D2'	ADJ	P04	H33	BI
0.0	22.4	.	.	.	.	.	.	.	.	.
9.0	22.0	.	.	.	.	.	.	.	.	.
15.0	21.5	.	.	.	.	.	.	.	.	.
19.0	21.0	.	.	.	.	.	.	.	.	.
23.0	20.5	.	.	.	.	.	.	.	.	.
29.0	20.0	.	.	.	.	.	.	.	.	.
32.0	19.5	.	.	.	.	.	.	.	.	.
33.0	19.0	.	.	.	.	.	.	.	.	.
35.0	18.5	.	.	.	.	.	.	.	.	.
37.0	18.0	.	.	.	.	.	.	.	.	.
39.0	17.5	.	.	.	.	.	.	.	.	.
41.0	17.0	.	.	.	.	.	.	.	.	.
43.0	16.5	.	.	.	.	.	.	.	.	.
49.0	16.0	.	.	.	.	.	.	.	.	.
54.0	15.5	.	.	.	.	.	.	.	.	.
58.0	15.0	.	.	.	.	.	.	.	.	.
61.0	14.5	.	.	.	.	.	.	.	.	.
64.0	14.0	.	.	.	.	.	.	.	.	.
67.0	13.5	.	.	.	.	.	.	.	.	.
69.0	13.2	.	.	.	.	.	.	.	.	.
74.0	13.0	.	.	.	.	.	.	.	.	.
77.0	12.5	.	.	.	.	.	.	.	.	.
86.0	12.2	.	.	.	.	.	.	.	.	.
87.0	12.0	.	.	.	.	.	.	.	.	.
91.0	11.5	.	.	.	.	.	.	.	.	.
100.0	11.2	.	.	.	.	.	.	.	.	.
101.0	11.0	.	.	.	.	.	.	.	.	.
103.0	10.9	.	.	.	.	.	.	.	.	.
109.0	10.9	.	.	.	.	.	.	.	.	.
115.0	10.5	.	.	.	.	.	.	.	.	.
121.0	10.0	.	.	.	.	.	.	.	.	.
133.0	9.5	.	.	.	.	.	.	.	.	.
154.0	9.0	.	.	.	.	.	.	.	.	.
156.0	8.7	.	.	.	.	.	.	.	.	.
164.0	8.5	.	.	.	.	.	.	.	.	.
175.0	8.0	.	.	.	.	.	.	.	.	.
208.0	7.6	.	.	.	.	.	.	.	.	.



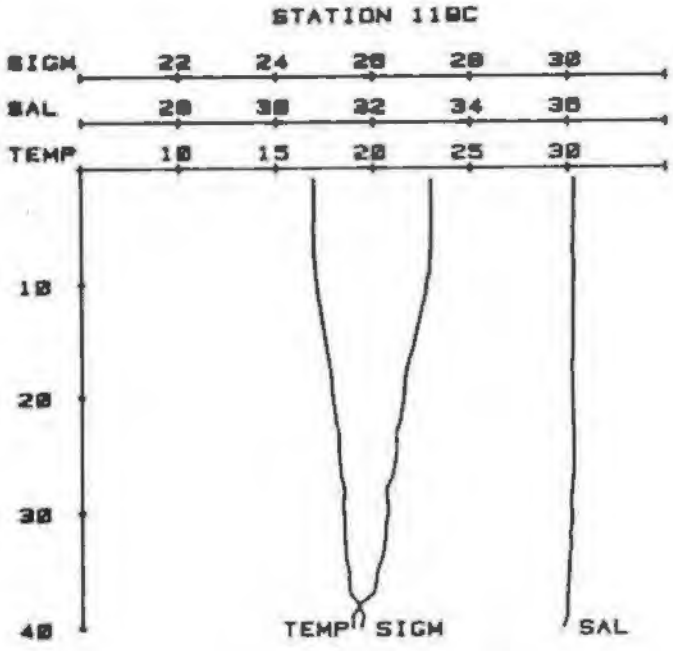
CTD/XBT CRUISE STA 110C 23/04/79 00.4 GMT CONSEC STA 121

LAT 30 41.5N LONG 79 54.5W DEPTH = 3300 DIST LAST STA = 2.9NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 120	WAVE DIRECTION	= 130
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.0	VISIBILITY CODE	=

Z	T	S	σ	SND	OBSERVATIONS O2	O2'	ADJ	PO4	NO3	SI
1.0	22.99	36.12	24.79	316	.	.	.	.	.	.
2.0	22.99	36.12	24.79	316	.	.	.	.	.	.
3.0	22.98	36.11	24.79	317	.	.	.	0.12	0.9	0.4
4.0	22.98	36.12	24.80	316	.	.	.	.	.	.
5.0	22.98	36.09	24.77	310	.	.	.	.	.	.
6.0	22.97	36.11	24.79	317	.	.	.	.	.	.
7.0	22.94	36.08	24.78	310	.	.	.	.	.	.
8.0	22.91	36.12	24.82	314	.	.	.	.	.	.
9.0	22.88	36.12	24.83	314	.	.	.	.	.	.
10.0	22.71	36.10	24.86	310	.	.	.	0.13	0.1	3.0
11.0	22.66	36.11	24.88	308	.	.	.	.	.	.
12.0	22.48	36.10	24.93	304	.	.	.	.	.	.
13.0	22.36	36.10	24.96	301	.	.	.	.	.	.
14.0	22.20	36.09	25.01	297	.	.	.	.	.	.
15.0	22.08	36.10	25.04	294	.	.	.	.	.	.
16.0	21.95	36.10	25.08	291	.	.	.	.	.	.
17.0	21.77	36.08	25.11	287	.	.	.	.	.	.
18.0	21.63	36.09	25.16	282	.	.	.	.	.	.
19.0	21.58	36.09	25.17	281	.	.	.	.	.	.
20.0	21.55	36.10	25.19	280	.	.	.	.	.	.
21.0	21.45	36.11	25.22	276	.	.	.	.	.	.
22.0	21.36	36.11	25.25	274	.	.	.	.	.	.
23.0	21.17	36.12	25.31	268	.	.	.	.	.	.
24.0	21.19	36.12	25.30	269	.	.	.	.	.	.
25.0	21.17	36.12	25.31	268	.	.	.	.	.	.
26.0	21.05	36.12	25.34	265	.	.	.	.	.	.
27.0	20.94	36.10	25.36	264	.	.	.	.	.	.
28.0	20.64	36.08	25.42	258	.	.	.	.	.	.
29.0	20.52	36.06	25.39	261	.	.	.	.	.	.
30.0	20.23	36.08	25.48	260	.	.	.	0.13	1.3	0.9
31.0	20.61	36.07	25.42	258	.	.	.	.	.	.
32.0	20.60	36.04	25.40	260	.	.	.	.	.	.
33.0	20.51	36.06	25.44	256	.	.	.	.	.	.
34.0	20.41	36.02	25.44	256	.	.	.	.	.	.
35.0	20.14	36.02	25.51	250	.	.	.	.	.	.
36.0	20.00	35.99	25.50	250	.	.	.	.	.	.
37.0	19.90	35.98	25.52	248	.	.	.	.	.	.
38.0	19.26	35.97	25.70	231	.	.	.	.	.	.
39.0	18.87	35.97	25.80	222	.	.	.	.	.	.
40.0	18.89	35.89	25.74	228	.	.	.	0.25	2.7	1.6



GILLISS CRUISE STA 120C 23/04/79 01.9 GMT CONSEC STA 122

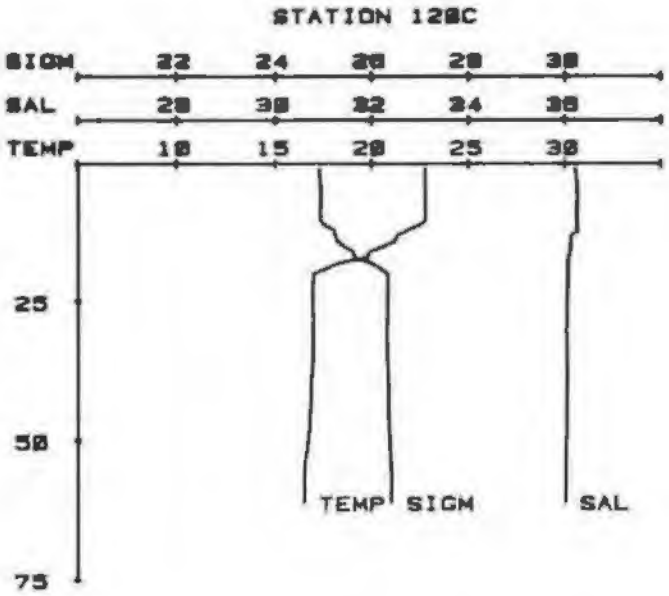
LAT 38 42.0N LONG 08 05.2W DEPTH = 730 DIST LAST STA = 17.0NM

WEATHER DATA

WIND SPEED	= 17KTS	SEA STATE	= 3
WIND DIRECTION	= 110	WAVE DIRECTION	= 120
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 51	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1021.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.78	36.22	24.93	343	.	.	.	.	.	.
2.0	22.78	36.22	24.93	343	.	.	.	.	.	.
3.0	22.77	36.25	24.96	301	.	.	.	.	.	.
4.0	22.77	36.26	24.96	300	.	.	.	.	.	.
5.0	22.77	36.25	24.96	301	.	.	.	.	.	.
6.0	22.77	36.26	24.96	300	.	.	.	.	.	.
7.0	22.78	36.24	24.95	301	.	.	.	.	.	.
8.0	22.77	36.24	24.95	302	.	.	.	.	.	.
9.0	22.78	36.25	24.95	301	.	.	.	.	.	.
10.0	22.78	36.25	24.95	301	.	.	.	0.09	0.0	1.0
11.0	22.51	36.25	25.13	284	.	.	.	.	.	.
12.0	21.84	36.27	25.23	275	.	.	.	.	.	.
13.0	21.30	36.12	25.27	271	.	.	.	.	.	.
14.0	21.29	36.13	25.31	268	.	.	.	.	.	.
15.0	20.62	36.11	25.45	256	.	.	.	.	.	.
16.0	19.89	36.10	25.64	237	.	.	.	.	.	.
17.0	19.67	36.06	25.67	234	.	.	.	.	.	.
18.0	18.29	36.06	26.02	200	.	.	.	.	.	.
19.0	17.61	36.06	26.19	186	.	.	.	.	.	.
20.0	16.95	36.06	26.35	169	.	.	.	0.27	3.1	3.3
21.0	16.93	36.05	26.34	170	.	.	.	.	.	.
22.0	16.92	36.05	26.35	169	.	.	.	.	.	.
23.0	16.92	36.05	26.35	169	.	.	.	.	.	.
24.0	16.92	36.03	26.33	171	.	.	.	.	.	.
25.0	16.92	36.04	26.34	170	.	.	.	0.14	5.1	2.9
26.0	16.92	36.04	26.34	170	.	.	.	.	.	.
27.0	16.92	36.03	26.33	171	.	.	.	.	.	.
28.0	16.92	36.04	26.34	170	.	.	.	.	.	.
29.0	16.93	36.03	26.33	171	.	.	.	.	.	.
30.0	16.93	36.02	26.32	172	.	.	.	.	.	.
31.0	16.92	36.03	26.33	171	.	.	.	.	.	.
32.0	16.92	36.03	26.33	171	.	.	.	.	.	.
33.0	16.92	36.04	26.34	170	.	.	.	.	.	.
34.0	16.92	36.03	26.33	171	.	.	.	.	.	.
35.0	16.92	36.03	26.33	171	.	.	.	.	.	.
36.0	16.93	36.04	26.34	170	.	.	.	.	.	.
37.0	16.86	36.03	26.35	170	.	.	.	.	.	.
38.0	16.85	36.04	26.36	169	.	.	.	.	.	.
39.0	16.83	36.04	26.36	169	.	.	.	.	.	.
40.0	16.82	36.03	26.36	169	.	.	.	.	.	.
41.0	16.81	36.04	26.37	168	.	.	.	0.32	4.8	4.7
42.0	16.81	36.03	26.36	169	.	.	.	.	.	.
43.0	16.81	36.03	26.36	169	.	.	.	.	.	.
44.0	16.79	36.03	26.36	169	.	.	.	.	.	.
45.0	16.77	36.03	26.37	168	.	.	.	.	.	.
46.0	16.75	36.03	26.37	168	.	.	.	.	.	.
47.0	16.77	36.03	26.37	168	.	.	.	.	.	.
48.0	16.73	36.03	26.38	167	.	.	.	.	.	.
49.0	16.68	36.03	26.39	166	.	.	.	.	.	.
50.0	16.66	36.02	26.39	167	.	.	.	.	.	.
51.0	16.63	36.02	26.39	166	.	.	.	.	.	.
52.0	16.59	36.02	26.40	165	.	.	.	.	.	.
53.0	16.52	36.01	26.41	164	.	.	.	.	.	.
54.0	16.50	36.02	26.42	163	.	.	.	.	.	.
55.0	16.50	36.02	26.42	163	.	.	.	.	.	.
56.0	16.47	36.02	26.43	163	.	.	.	.	.	.
57.0	16.49	36.02	26.43	163	.	.	.	.	.	.
58.0	16.49	36.01	26.42	164	.	.	.	.	.	.
59.0	16.47	36.01	26.42	163	.	.	.	.	.	.
60.0	16.47	36.00	26.42	164	.	.	.	.	.	.
61.0	16.44	36.00	26.42	163	.	.	.	0.52	7.6	6.3



GILLISS CRUISE STA 122X 23/04/79 08.6 GMT CONSEC STA 124

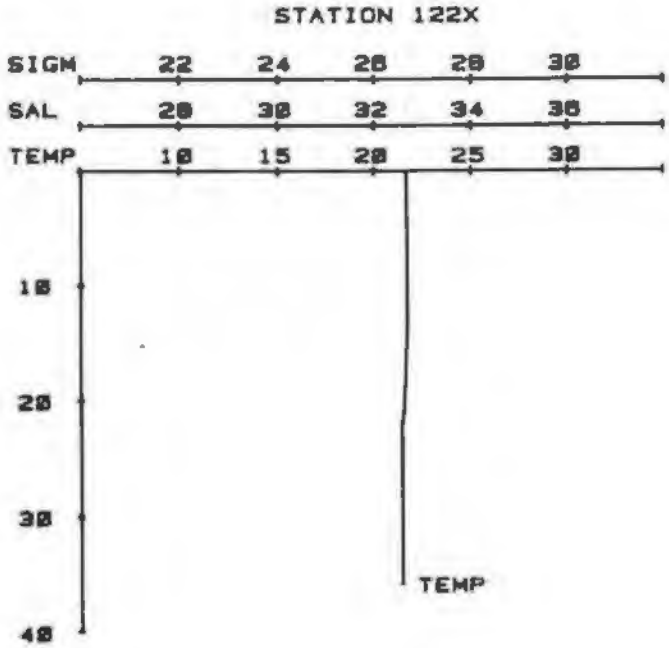
LAT 38 48.1N LONG 08 29.6W DEPTH = 36M DIST LAST STA = 40.1NM

WEATHER DATA

WIND SPEED	= 20KTS	SEA STATE	= 4
WIND DIRECTION	= 140	WAVE DIRECTION	= 130
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= 51	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.7	.	.	.	.	.	.	.	.	.
13.0	21.7	.	.	.	.	.	.	.	.	.
21.0	21.5	.	.	.	.	.	.	.	.	.
22.0	21.4	.	.	.	.	.	.	.	.	.
36.0	21.4	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 123X 23/04/79 08 9 GMT CONSEC STA 125

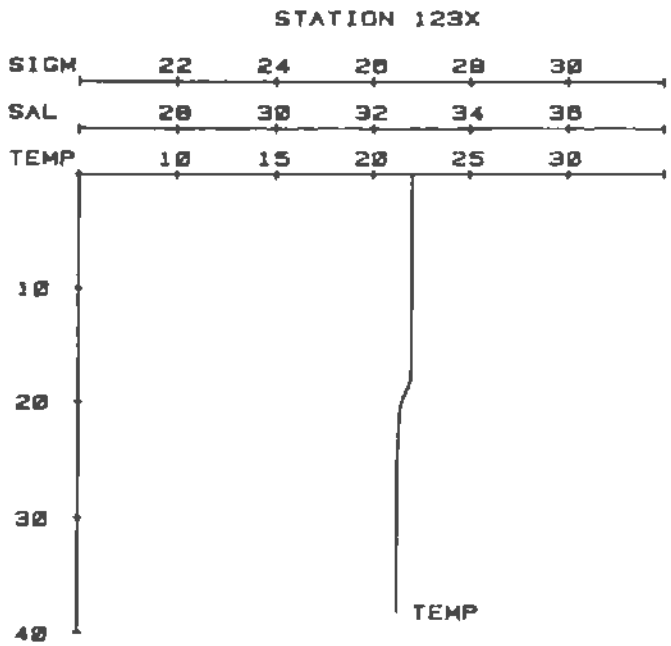
LAT 38 47.4N LONG 88 26.5W DEPTH = 36M DIST LAST STA = 5.1KM

WEATHER DATA

WIND SPEED	= 20KTS	SEA STATE	= 4
WIND DIRECTION	= 140	WAVE DIRECTION	= 130
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= 61	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	22.0									
10.0	22.0									
20.0	21.5									
21.0	21.4									
25.0	21.3									
36.0	21.3									



GILLISS CRUISE STA 124X 23/04/79 09.2 GMT CONSEC STA 126

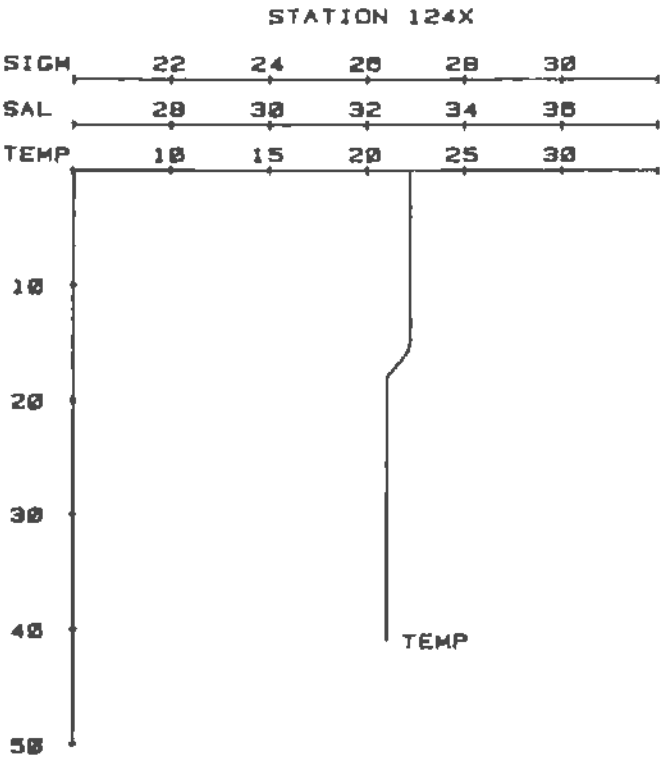
LAT 38 47.8N LONG 88 23.2W DEPTH = 41M DIST LAST STA = 5.3KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 61	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.8	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	22.2									
15.0	22.2									
16.0	22.0									
17.0	21.5									
18.0	21.0									
41.0	21.0									



GILLISS CRUISE STA 125X 23/04/79 09.5 GMT CONSEC STA 127

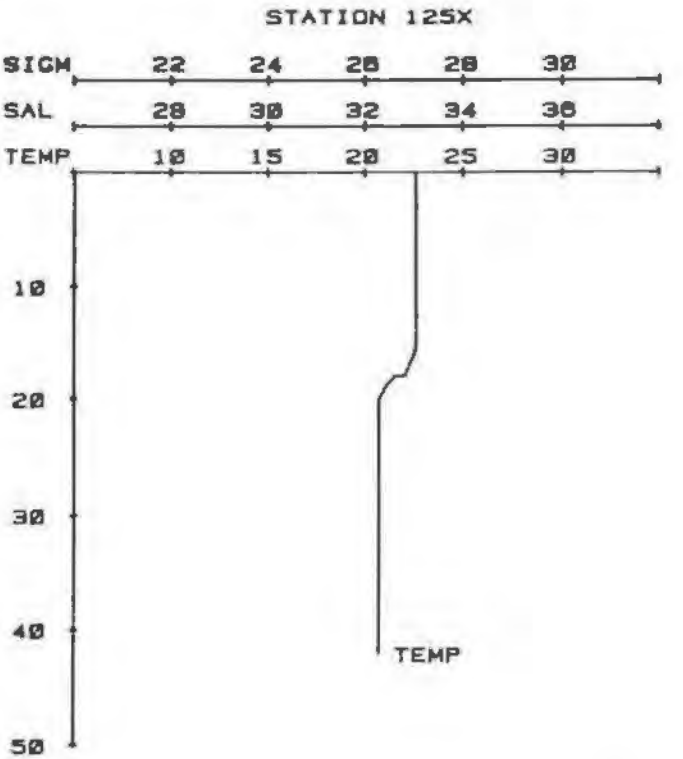
LAT 39 46.1N LONG 80 29.6W DEPTH = 42M DIST LAST STA = 5.4KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES=	1020.8	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NLC	SI
0.0	22.6	.	.	.	.	.	.	.	.	.
15.0	22.6	.	.	.	.	.	.	.	.	.
16.0	22.5	.	.	.	.	.	.	.	.	.
18.9	22.0	.	.	.	.	.	.	.	.	.
18.0	21.5	.	.	.	.	.	.	.	.	.
19.0	21.0	.	.	.	.	.	.	.	.	.
28.9	20.7	.	.	.	.	.	.	.	.	.
42.0	20.2	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 126X 23/04/79 09.0 GMT CONSEC STA 128

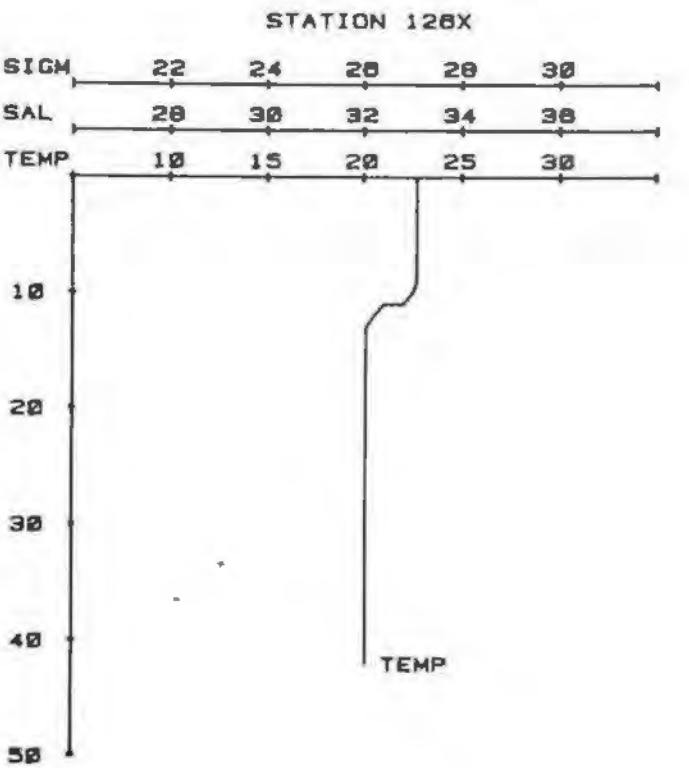
LAT 39 45.1N LONG 80 16.8W DEPTH = 42M DIST LAST STA = 5.4KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES=	1020.8	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.7	.	.	.	.	.	.	.	.	.
9.0	22.7	.	.	.	.	.	.	.	.	.
10.0	22.5	.	.	.	.	.	.	.	.	.
11.9	22.0	.	.	.	.	.	.	.	.	.
11.9	21.5	.	.	.	.	.	.	.	.	.
11.0	21.0	.	.	.	.	.	.	.	.	.
12.0	20.5	.	.	.	.	.	.	.	.	.
13.0	20.1	.	.	.	.	.	.	.	.	.
42.0	20.1	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 127X 23/04/79 18.1 GMT CONSEC STA 129

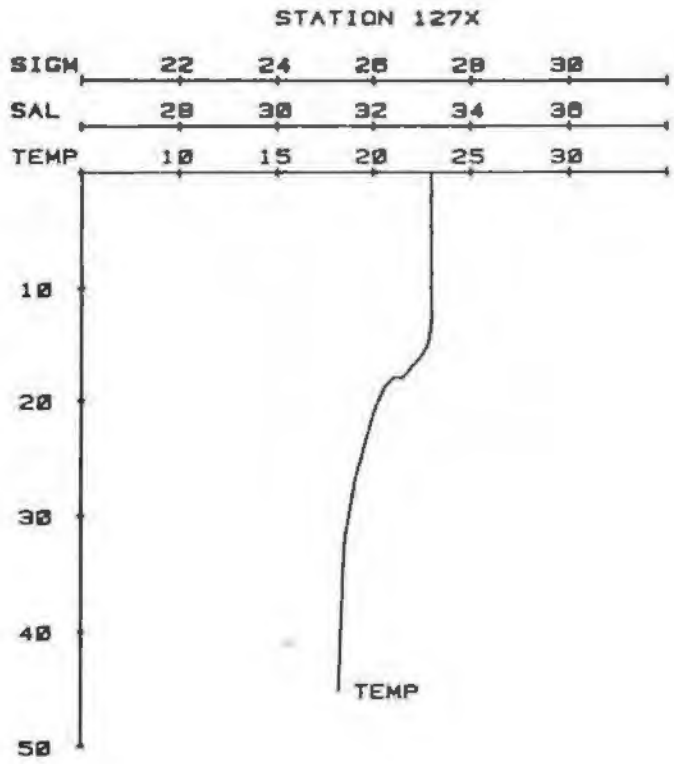
LAT 38 44.6N LONG 88 13.9W DEPTH = 45M DIST LAST STA = 4.7KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 02	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.8	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.0	.	.	.	.	.	.	.	.	.
13.0	23.0	.	.	.	.	.	.	.	.	.
15.0	22.0	.	.	.	.	.	.	.	.	.
16.0	22.5	.	.	.	.	.	.	.	.	.
17.0	22.0	.	.	.	.	.	.	.	.	.
18.0	21.5	.	.	.	.	.	.	.	.	.
18.0	21.0	.	.	.	.	.	.	.	.	.
19.0	20.5	.	.	.	.	.	.	.	.	.
21.0	20.0	.	.	.	.	.	.	.	.	.
24.0	19.5	.	.	.	.	.	.	.	.	.
27.0	19.0	.	.	.	.	.	.	.	.	.
32.0	18.5	.	.	.	.	.	.	.	.	.
35.0	18.4	.	.	.	.	.	.	.	.	.
45.0	18.2	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 128X 23/04/79 18.3 GMT CONSEC STA 130

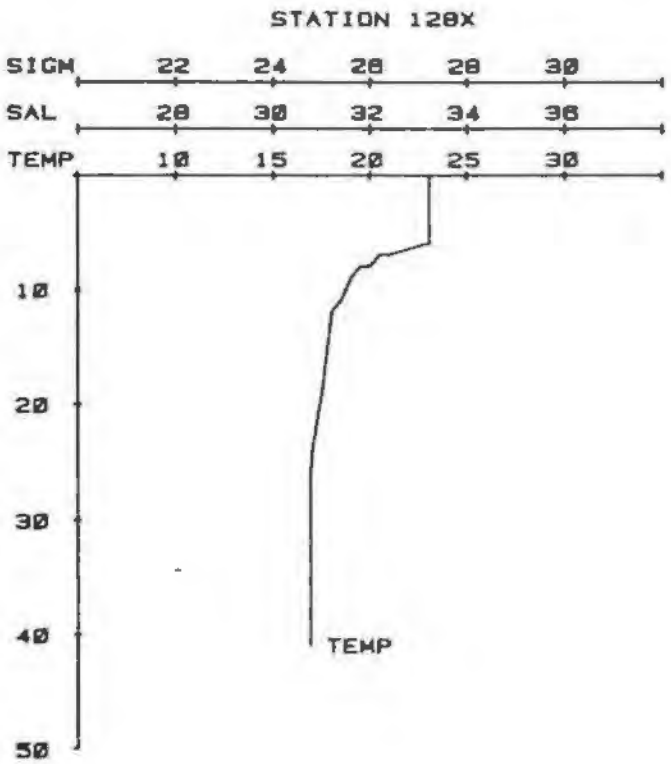
LAT 38 43.6N LONG 88 18.5W DEPTH = 41M DIST LAST STA = 5.7KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 02	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.8	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.1	.	.	.	.	.	.	.	.	.
4.0	23.1	.	.	.	.	.	.	.	.	.
6.0	23.0	.	.	.	.	.	.	.	.	.
7.0	21.0	.	.	.	.	.	.	.	.	.
7.0	20.5	.	.	.	.	.	.	.	.	.
8.0	20.0	.	.	.	.	.	.	.	.	.
8.0	19.5	.	.	.	.	.	.	.	.	.
9.0	19.0	.	.	.	.	.	.	.	.	.
11.0	18.5	.	.	.	.	.	.	.	.	.
12.0	18.0	.	.	.	.	.	.	.	.	.
19.0	17.5	.	.	.	.	.	.	.	.	.
24.0	17.0	.	.	.	.	.	.	.	.	.
26.0	16.9	.	.	.	.	.	.	.	.	.
41.0	16.9	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 129X 23/04/79 10 0 GMT CONSEC STA 131

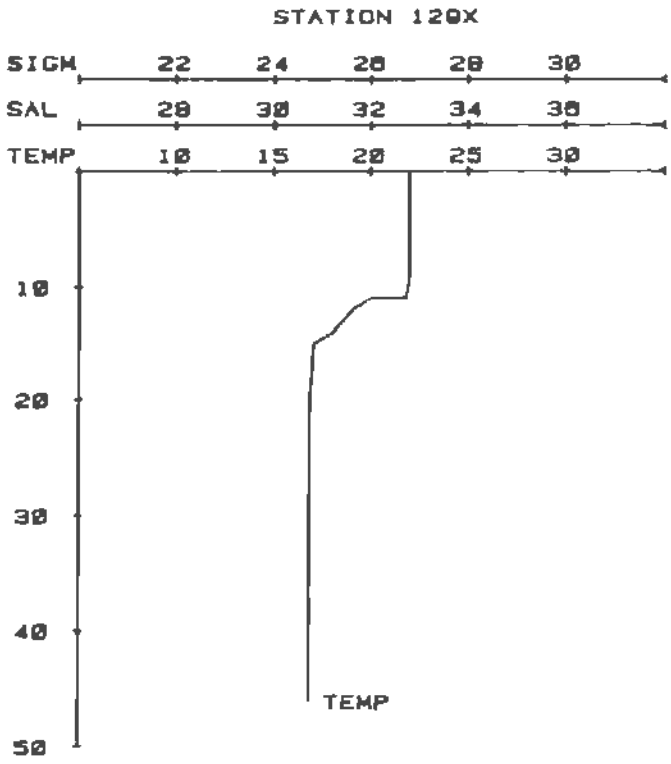
LAT 38 43.8N LONG 00 00.0W DEPTH = 46M DIST LAST STA = 4 NM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 17	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SIGθ	O2	O2'	AOU	PO4	NO3	SI
0.0	22.0	.	.	.	.	.	.	.	.	.
9.0	22.0	.	.	.	.	.	.	.	.	.
10.0	21.8	.	.	.	.	.	.	.	.	.
11.0	21.5	.	.	.	.	.	.	.	.	.
11.0	21.0	.	.	.	.	.	.	.	.	.
11.0	20.0	.	.	.	.	.	.	.	.	.
12.0	19.0	.	.	.	.	.	.	.	.	.
14.0	18.0			.	.	.	.			
15.0	17.0			.	.					
20.0	16.0			.	.	.				
46.0	16.0			.		.				



GILLISS CRUISE STA 130X 21/04/79 18.0 GMT CONSEC STA 132

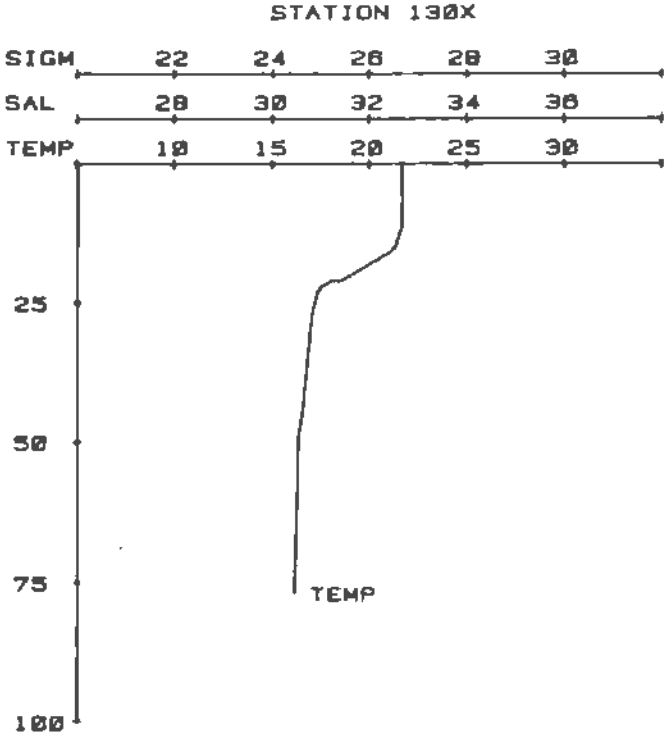
LAT 38 42.7N LONG 00 15.4W DEPTH = 77M DIST LAST STA = 4.2NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 22	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1020.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SIGθ	O2	O2'	AOU	PO4	NO3	SI
0.0	21.7	.	.	.	.	.	.	.	.	.
11.0	21.7	.	.	.	.	.	.	.	.	.
13.0	21.5	.	.	.	.	.	.	.	.	.
15.0	21.3			.				.		
16.0	21.0	.	.	.				.		
17.0	20.5	.	.	.				.		
18.0	20.0	.	.	.	.	.		.		
19.0	19.5									
20.0	19.0				.	.		.		
21.0	18.5									
21.0	18.0			.	.	.				.
22.0	17.5			.			.			
23.0	17.3	.	.	.	.	.	.			
27.0	17.0			.			.			
45.0	16.5									
49.0	16.3	.								.
77.0	16.1				.					



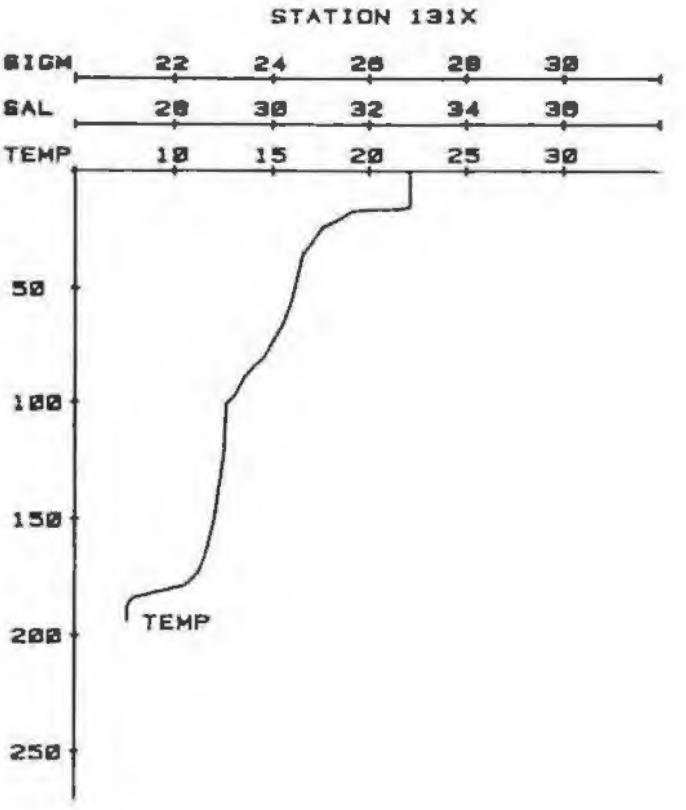
CTLISS CRUISE STA 1318 23/04/79 11.0 GMT CONSEC STA 133

LAT 38 42.6N LONG 80 02.4W DEPTH = 194M DIST LAST STA = 5.0KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 110
AIR TEMP = 21.7C
WEATHER CODE = 32
BAROMETRIC PRES= 1020.0
SEA STATE = 3
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.1	.	.	.	.	.	.	.	.	.
15.0	22.1	.	.	.	.	.	.	.	.	.
16.0	22.0	.	.	.	.	.	.	.	.	.
17.0	21.5	.	.	.	.	.	.	.	.	.
17.0	21.0	.	.	.	.	.	.	.	.	.
17.0	20.0	.	.	.	.	.	.	.	.	.
18.0	19.0	.	.	.	.	.	.	.	.	.
21.0	18.5	.	.	.	.	.	.	.	.	.
23.0	18.0	.	.	.	.	.	.	.	.	.
25.0	17.5	.	.	.	.	.	.	.	.	.
31.0	17.0	.	.	.	.	.	.	.	.	.
36.0	16.5	.	.	.	.	.	.	.	.	.
54.0	16.0	.	.	.	.	.	.	.	.	.
64.0	15.5	.	.	.	.	.	.	.	.	.
73.0	15.0	.	.	.	.	.	.	.	.	.
81.0	14.5	.	.	.	.	.	.	.	.	.
85.0	14.0	.	.	.	.	.	.	.	.	.
98.0	13.5	.	.	.	.	.	.	.	.	.
98.0	13.0	.	.	.	.	.	.	.	.	.
101.0	12.6	.	.	.	.	.	.	.	.	.
115.0	12.5	.	.	.	.	.	.	.	.	.
128.0	12.5	.	.	.	.	.	.	.	.	.
150.0	12.0	.	.	.	.	.	.	.	.	.
167.0	11.5	.	.	.	.	.	.	.	.	.
173.0	11.2	.	.	.	.	.	.	.	.	.
175.0	11.0	.	.	.	.	.	.	.	.	.
179.0	10.5	.	.	.	.	.	.	.	.	.
180.0	10.0	.	.	.	.	.	.	.	.	.
181.0	9.5	.	.	.	.	.	.	.	.	.
182.0	9.0	.	.	.	.	.	.	.	.	.
183.0	8.5	.	.	.	.	.	.	.	.	.
184.0	8.0	.	.	.	.	.	.	.	.	.
185.0	7.8	.	.	.	.	.	.	.	.	.
188.0	7.4	.	.	.	.	.	.	.	.	.
194.0	7.6	.	.	.	.	.	.	.	.	.



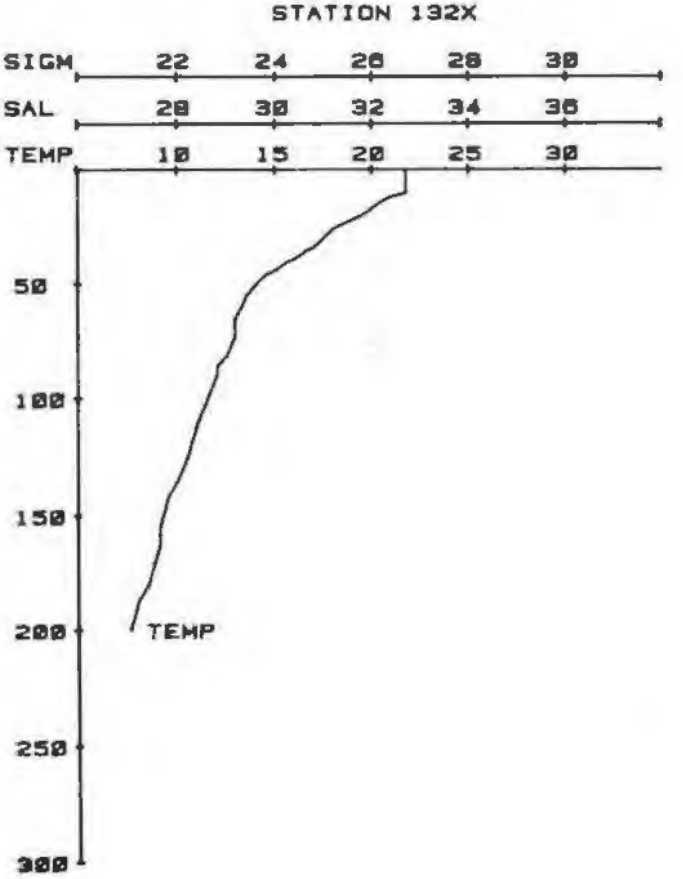
CTLISS CRUISE STA 132X 23/04/79 11.3 GMT CONSEC STA 134

LAT 38 41.5N LONG 79 59.5W DEPTH = 235M DIST LAST STA = 4.7KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 110
AIR TEMP = 21.7C
WEATHER CODE = 32
BAROMETRIC PRES= 1020.0
SEA STATE = 3
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.8	.	.	.	.	.	.	.	.	.
10.0	21.8	.	.	.	.	.	.	.	.	.
11.0	21.5	.	.	.	.	.	.	.	.	.
12.0	21.0	.	.	.	.	.	.	.	.	.
14.0	20.5	.	.	.	.	.	.	.	.	.
17.0	20.0	.	.	.	.	.	.	.	.	.
20.0	19.5	.	.	.	.	.	.	.	.	.
22.0	19.0	.	.	.	.	.	.	.	.	.
24.0	18.5	.	.	.	.	.	.	.	.	.
26.0	18.0	.	.	.	.	.	.	.	.	.
30.0	17.5	.	.	.	.	.	.	.	.	.
34.0	17.0	.	.	.	.	.	.	.	.	.
36.0	16.5	.	.	.	.	.	.	.	.	.
39.0	16.0	.	.	.	.	.	.	.	.	.
41.0	15.5	.	.	.	.	.	.	.	.	.
44.0	15.0	.	.	.	.	.	.	.	.	.
46.0	14.5	.	.	.	.	.	.	.	.	.
50.0	14.0	.	.	.	.	.	.	.	.	.
55.0	13.5	.	.	.	.	.	.	.	.	.
64.0	13.0	.	.	.	.	.	.	.	.	.
65.0	12.9	.	.	.	.	.	.	.	.	.
73.0	12.9	.	.	.	.	.	.	.	.	.
81.0	12.5	.	.	.	.	.	.	.	.	.
86.0	12.0	.	.	.	.	.	.	.	.	.
89.0	12.0	.	.	.	.	.	.	.	.	.
100.0	11.5	.	.	.	.	.	.	.	.	.
110.0	11.0	.	.	.	.	.	.	.	.	.
125.0	10.5	.	.	.	.	.	.	.	.	.
135.0	10.0	.	.	.	.	.	.	.	.	.
142.0	9.5	.	.	.	.	.	.	.	.	.
155.0	9.1	.	.	.	.	.	.	.	.	.
162.0	9.1	.	.	.	.	.	.	.	.	.
165.0	9.0	.	.	.	.	.	.	.	.	.
180.0	8.5	.	.	.	.	.	.	.	.	.
187.0	8.0	.	.	.	.	.	.	.	.	.
210.0	7.6	.	.	.	.	.	.	.	.	.



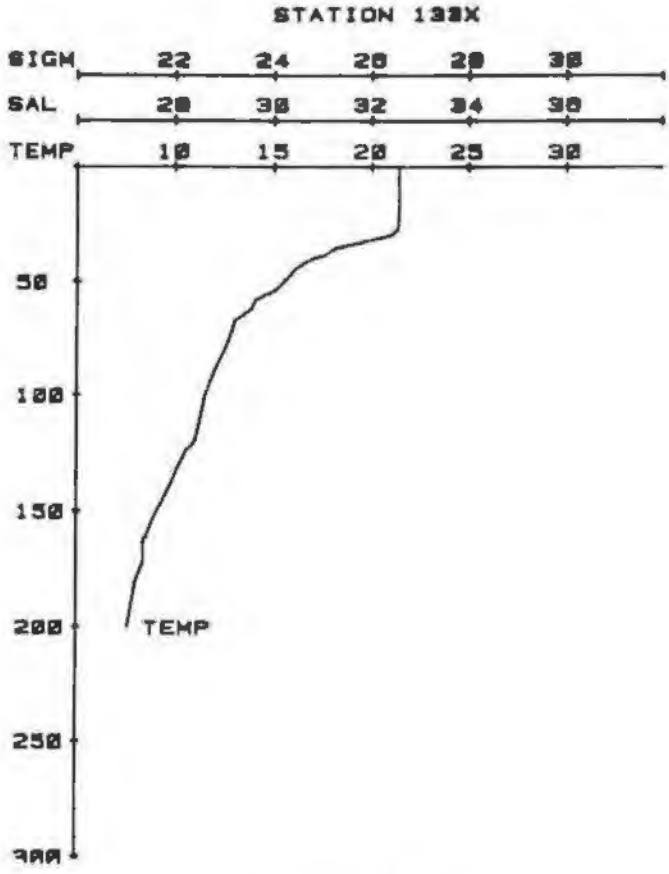
CILLISS CRUISE STA 133X 23/04/79 11.6 GMT CONSEC STA 135

LAT 30 40.6N LONG 79 54.5W DEPTH = 300M DIST LAST STA = 5.1KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 110
AIR TEMP = 22.2C
WEATHER CODE = X2
BAROMETRIC PRES= 1020.6

SEA STATE = 3
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	O	OBSERVATIONS BVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.4	.	.	.	.	.	.	.	.	.
10.0	21.4	.	.	.	.	.	.	.	.	.
29.0	21.3	.	.	.	.	.	.	.	.	.
30.0	21.0	.	.	.	.	.	.	.	.	.
31.0	20.5	.	.	.	.	.	.	.	.	.
32.0	20.0	.	.	.	.	.	.	.	.	.
33.0	19.5	.	.	.	.	.	.	.	.	.
34.0	19.0	.	.	.	.	.	.	.	.	.
35.0	18.5	.	.	.	.	.	.	.	.	.
36.0	18.0	.	.	.	.	.	.	.	.	.
39.0	17.5	.	.	.	.	.	.	.	.	.
40.0	17.0	.	.	.	.	.	.	.	.	.
42.0	16.5	.	.	.	.	.	.	.	.	.
45.0	16.0	.	.	.	.	.	.	.	.	.
50.0	15.5	.	.	.	.	.	.	.	.	.
54.0	15.0	.	.	.	.	.	.	.	.	.
56.0	14.5	.	.	.	.	.	.	.	.	.
58.0	14.0	.	.	.	.	.	.	.	.	.
62.0	13.0	.	.	.	.	.	.	.	.	.
64.0	13.5	.	.	.	.	.	.	.	.	.
67.0	13.0	.	.	.	.	.	.	.	.	.
80.0	12.5	.	.	.	.	.	.	.	.	.
89.0	12.0	.	.	.	.	.	.	.	.	.
100.0	11.5	.	.	.	.	.	.	.	.	.
120.0	11.0	.	.	.	.	.	.	.	.	.
125.0	10.5	.	.	.	.	.	.	.	.	.
136.0	10.0	.	.	.	.	.	.	.	.	.
143.0	9.5	.	.	.	.	.	.	.	.	.
151.0	9.0	.	.	.	.	.	.	.	.	.
161.0	8.5	.	.	.	.	.	.	.	.	.
162.0	8.4	.	.	.	.	.	.	.	.	.
171.0	8.4	.	.	.	.	.	.	.	.	.
180.0	8.0	.	.	.	.	.	.	.	.	.
200.0	7.6	.	.	.	.	.	.	.	.	.



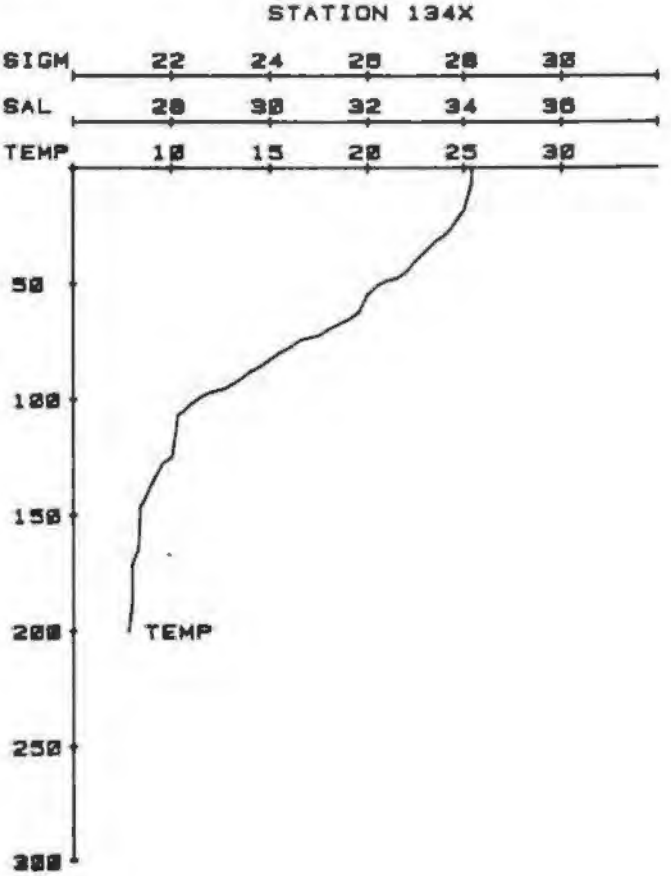
CILLISS CRUISE STA 134X 23/04/79 11.9 GMT CONSEC STA 136

LAT 30 40.0N LONG 79 52.0W DEPTH = 300M DIST LAST STA = 6.9KM

WEATHER DATA
WIND SPEED = 17KTS
WIND DIRECTION = 110
AIR TEMP = 22.2C
WEATHER CODE = X1
BAROMETRIC PRES= 1020.3

SEA STATE = 3
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	O	OBSERVATIONS BVA	O2	O2'	AOU	PO4	NO3	SI
0.0	25.4	.	.	.	.	.	.	.	.	.
6.0	25.4	.	.	.	.	.	.	.	.	.
18.0	25.0	.	.	.	.	.	.	.	.	.
24.0	24.5	.	.	.	.	.	.	.	.	.
29.0	24.0	.	.	.	.	.	.	.	.	.
32.0	23.5	.	.	.	.	.	.	.	.	.
34.0	23.0	.	.	.	.	.	.	.	.	.
40.0	22.5	.	.	.	.	.	.	.	.	.
45.0	22.0	.	.	.	.	.	.	.	.	.
48.0	21.5	.	.	.	.	.	.	.	.	.
49.0	21.0	.	.	.	.	.	.	.	.	.
51.0	20.5	.	.	.	.	.	.	.	.	.
55.0	20.0	.	.	.	.	.	.	.	.	.
63.0	19.5	.	.	.	.	.	.	.	.	.
66.0	19.0	.	.	.	.	.	.	.	.	.
68.0	18.5	.	.	.	.	.	.	.	.	.
70.0	18.0	.	.	.	.	.	.	.	.	.
73.0	17.5	.	.	.	.	.	.	.	.	.
74.0	17.0	.	.	.	.	.	.	.	.	.
75.0	16.5	.	.	.	.	.	.	.	.	.
78.0	16.0	.	.	.	.	.	.	.	.	.
80.0	15.5	.	.	.	.	.	.	.	.	.
83.0	15.0	.	.	.	.	.	.	.	.	.
86.0	14.5	.	.	.	.	.	.	.	.	.
88.0	14.0	.	.	.	.	.	.	.	.	.
91.0	13.5	.	.	.	.	.	.	.	.	.
94.0	13.0	.	.	.	.	.	.	.	.	.
96.0	12.5	.	.	.	.	.	.	.	.	.
97.0	12.0	.	.	.	.	.	.	.	.	.
99.0	11.5	.	.	.	.	.	.	.	.	.
102.0	11.0	.	.	.	.	.	.	.	.	.
106.0	10.5	.	.	.	.	.	.	.	.	.
107.0	10.3	.	.	.	.	.	.	.	.	.
125.0	10.0	.	.	.	.	.	.	.	.	.
128.0	9.5	.	.	.	.	.	.	.	.	.
136.0	9.0	.	.	.	.	.	.	.	.	.
145.0	8.5	.	.	.	.	.	.	.	.	.
146.0	8.4	.	.	.	.	.	.	.	.	.
165.0	8.3	.	.	.	.	.	.	.	.	.
171.0	8.0	.	.	.	.	.	.	.	.	.
187.0	8.0	.	.	.	.	.	.	.	.	.
200.0	7.8	.	.	.	.	.	.	.	.	.



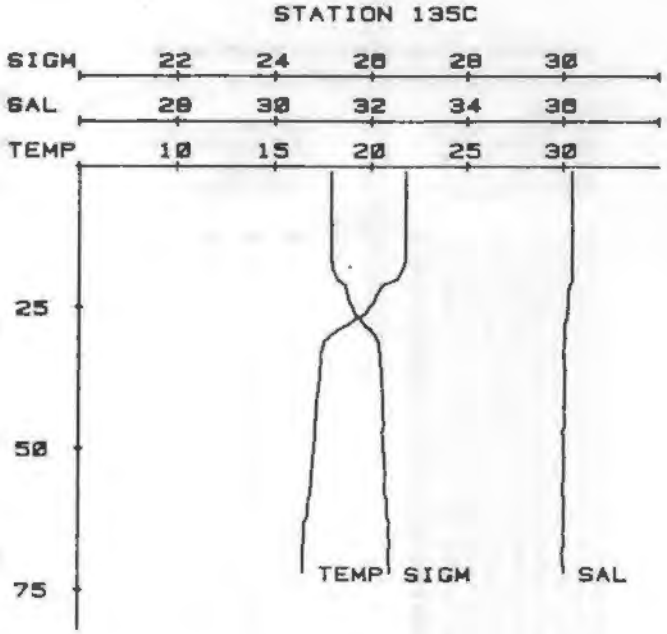
GILLISS CRUISE STA 135C 23/04/79 13.4 GMT CONSEC STA 137

LAT 30 42.7N LONG 80 05.3W DEPTH = 75M DIST LAST STA = 20.5KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 110
AIR TEMP = 22.8C
WEATHER CODE = 11
BAROMETRIC PRES= 1021.3

SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	ADU	PO4	NO3	SI
1.0	21.82	36.18	25.17	288	.	.	.	.	.	.
2.0	21.82	36.18	25.17	288	.	.	.	.	.	.
3.0	21.81	36.18	25.18	288	.	.	.	0.05	0.0	0.0
4.0	21.81	36.18	25.18	288	.	.	.	.	.	.
5.0	21.81	36.18	25.18	288	.	.	.	.	.	.
6.0	21.81	36.19	25.18	279	.	.	.	.	.	.
7.0	21.81	36.19	25.18	288	.	.	.	.	.	.
8.0	21.81	36.18	25.18	288	.	.	.	.	.	.
9.0	21.79	36.17	25.17	288	.	.	.	.	.	.
10.0	21.79	36.19	25.19	279	.	.	.	.	.	.
11.0	21.80	36.19	25.19	279	.	.	.	.	.	.
12.0	21.81	36.19	25.18	288	.	.	.	.	.	.
13.0	21.79	36.19	25.19	279	.	.	.	.	.	.
14.0	21.79	36.18	25.18	288	.	.	.	.	.	.
15.0	21.79	36.19	25.19	279	.	.	.	.	.	.
16.0	21.78	36.17	25.18	288	.	.	.	.	.	.
17.0	21.75	36.19	25.20	278	.	.	.	.	.	.
18.0	21.64	36.17	25.22	277	.	.	.	0.07	0.1	0.0
19.0	21.58	36.19	25.27	272	.	.	.	.	.	.
20.0	21.33	36.19	25.32	267	.	.	.	.	.	.
21.0	20.57	36.13	25.48	252	.	.	.	.	.	.
22.0	20.39	36.10	25.50	249	.	.	.	0.04	0.0	0.5
23.0	20.24	36.10	25.54	246	.	.	.	.	.	.
24.0	20.15	36.10	25.57	243	.	.	.	.	.	.
25.0	19.86	36.09	25.64	237	.	.	.	.	.	.
26.0	19.71	36.09	25.68	233	.	.	.	.	.	.
27.0	19.17	36.06	25.80	222	.	.	.	.	.	.
28.0	18.76	36.03	25.86	214	.	.	.	.	.	.
29.0	18.22	36.03	26.01	201	.	.	.	.	.	.
30.0	17.86	36.04	26.11	192	.	.	.	.	.	.
31.0	17.55	36.02	26.17	186	.	.	.	0.35	4.3	2.4
32.0	17.48	36.01	26.18	185	.	.	.	.	.	.
33.0	17.37	36.01	26.21	183	.	.	.	.	.	.
34.0	17.40	36.02	26.21	183	.	.	.	.	.	.
35.0	17.40	36.02	26.21	183	.	.	.	.	.	.
36.0	17.31	36.04	26.25	179	.	.	.	.	.	.
37.0	17.32	36.03	26.24	180	.	.	.	.	.	.
38.0	17.29	36.03	26.24	180	.	.	.	.	.	.
39.0	17.24	36.03	26.26	179	.	.	.	.	.	.
40.0	17.23	36.03	26.26	178	.	.	.	.	.	.
41.0	17.17	36.03	26.27	177	.	.	.	.	.	.
42.0	17.19	36.02	26.26	178	.	.	.	.	.	.
43.0	17.14	36.02	26.27	177	.	.	.	.	.	.
44.0	17.17	36.02	26.26	178	.	.	.	.	.	.
45.0	17.11	36.04	26.29	175	.	.	.	.	.	.
46.0	17.10	36.03	26.29	176	.	.	.	.	.	.
47.0	17.12	35.98	26.25	180	.	.	.	.	.	.
48.0	17.12	36.02	26.28	177	.	.	.	.	.	.
49.0	17.05	36.01	26.29	176	.	.	.	.	.	.
50.0	17.08	36.00	26.27	178	.	.	.	.	.	.
51.0	17.01	36.03	26.31	174	.	.	.	.	.	.
52.0	17.00	36.02	26.31	174	.	.	.	.	.	.
53.0	16.96	36.03	26.32	173	.	.	.	.	.	.
54.0	16.95	36.03	26.32	173	.	.	.	.	.	.
55.0	16.94	36.03	26.33	172	.	.	.	.	.	.



56.0	16.92	36.00	26.31	174	.	.	.	.	.	.
57.0	16.90	36.01	26.32	173	.	.	.	.	.	.
58.0	16.88	36.01	26.33	173	.	.	.	.	.	.
59.0	16.79	36.04	26.37	169	.	.	.	.	.	.
60.0	16.77	36.03	26.37	169	.	.	.	.	.	.
61.0	16.75	36.03	26.37	168	.	.	.	.	.	.
62.0	16.73	36.03	26.38	168	.	.	.	.	.	.
63.0	16.58	36.04	26.42	164	.	.	.	.	.	.
64.0	16.58	36.03	26.41	164	.	.	.	.	.	.
65.0	16.59	36.02	26.40	165	.	.	.	.	.	.
66.0	16.55	36.04	26.43	163	.	.	.	.	.	.
67.0	16.53	36.04	26.43	163	.	.	.	.	.	.
68.0	16.51	36.00	26.41	165	.	.	.	.	.	.
69.0	16.52	36.00	26.40	165	.	.	.	.	.	.
70.0	16.51	36.02	26.42	164	.	.	.	.	.	.
71.0	16.52	36.04	26.43	163	.	.	.	.	.	.
72.0	16.52	36.04	26.43	163	.	.	.	0.52	6.5	4.3

GILLISS CRUISE STA 135C 23/04/79 14.0 GMT CONSEC STA 138

LAT 30 42.7N LONG 80 05.3W DEPTH = 75M DIST LAST STA = 0.0KM

WEATHER DATA
WIND SPEED = 15KTS
WIND DIRECTION = 110
AIR TEMP = 22.8C
WEATHER CODE = 11
BAROMETRIC PRES= 1021.3

SEA STATE = 3
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	ADU	PO4	NO3	SI
1.0	21.73	36.15	25.18	288	.	.	.	.	.	.
2.0	21.72	36.19	25.21	277	.	.	.	.	.	.
3.0	21.72	36.19	25.21	277	.	.	.	0.12	0.2	1.5
4.0	21.71	36.18	25.20	277	.	.	.	.	.	.
5.0	21.71	36.18	25.20	277	.	.	.	.	.	.
6.0	21.70	36.17	25.20	278	.	.	.	0.07	0.0	0.3
7.0	21.71	36.17	25.20	278	.	.	.	.	.	.
8.0	21.71	36.18	25.20	278	.	.	.	.	.	.
9.0	21.71	36.18	25.20	278	.	.	.	.	.	.
10.0	21.69	36.18	25.21	277	.	.	.	.	.	.
11.0	21.69	36.18	25.21	277	.	.	.	0.17	0.1	1.4
12.0	21.71	36.17	25.20	278	.	.	.	.	.	.
13.0	21.68	36.16	25.20	278	.	.	.	.	.	.
14.0	21.69	36.17	25.20	278	.	.	.	.	.	.
15.0	21.68	36.18	25.21	277	.	.	.	.	.	.
16.0	21.68	36.17	25.20	278	.	.	.	.	.	.
17.0	21.67	36.16	25.20	278	.	.	.	.	.	.
18.0	21.66	36.17	25.21	277	.	.	.	.	.	.
19.0	21.66	36.16	25.20	278	.	.	.	.	.	.
20.0	21.64	36.14	25.19	280	.	.	.	.	.	.
21.0	21.65	36.15	25.20	279	.	.	.	0.10	0.1	0.6
22.0	21.58	36.16	25.22	276	.	.	.	.	.	.
23.0	21.32	36.17	25.30	269	.	.	.	.	.	.
24.0	21.00	36.11	25.32	267	.	.	.	.	.	.
25.0	20.58	36.05	25.44	256	.	.	.	.	.	.
26.0	20.35	36.07	25.49	251	.	.	.	.	.	.
27.0	18.97	36.06	25.85	217	.	.	.	.	.	.
28.0	18.97	36.05	25.84	218	.	.	.	.	.	.
29.0	18.89	36.04	25.85	217	.	.	.	.	.	.
30.0	18.98	36.01	25.83	219	.	.	.	.	.	.
31.0	18.76	36.01	25.86	216	.	.	.	.	.	.
32.0	18.75	36.01	25.86	216	.	.	.	.	.	.
33.0	18.37	35.98	25.94	209	.	.	.	.	.	.
34.0	17.89	36.02	26.09	194	.	.	.	.	.	.
35.0	17.86	36.03	26.10	193	.	.	.	.	.	.

36.0	17.76	36.03	26.13	191	.	.	.	.	.	.
37.0	17.71	36.02	26.13	191	.	.	.	.	.	.
38.0	17.69	36.02	26.14	191	.	.	.	.	.	.
39.0	17.67	36.03	26.15	189	.	.	.	.	.	.
40.0	17.62	36.02	26.15	188	.	.	.	.	.	.
41.0	17.42	36.03	26.21	183	.	.	.	.	.	.
42.0	17.17	36.04	26.28	176	.	.	.	0.44	4.7	5.1
43.0	17.15	36.03	26.28	177	.	.	.	.	.	.
44.0	17.11	36.02	26.28	177	.	.	.	.	.	.
45.0	17.18	36.01	26.27	177	.	.	.	.	.	.
46.0	17.18	36.02	26.28	176	.	.	.	.	.	.
47.0	17.09	36.02	26.28	176	.	.	.	.	.	.

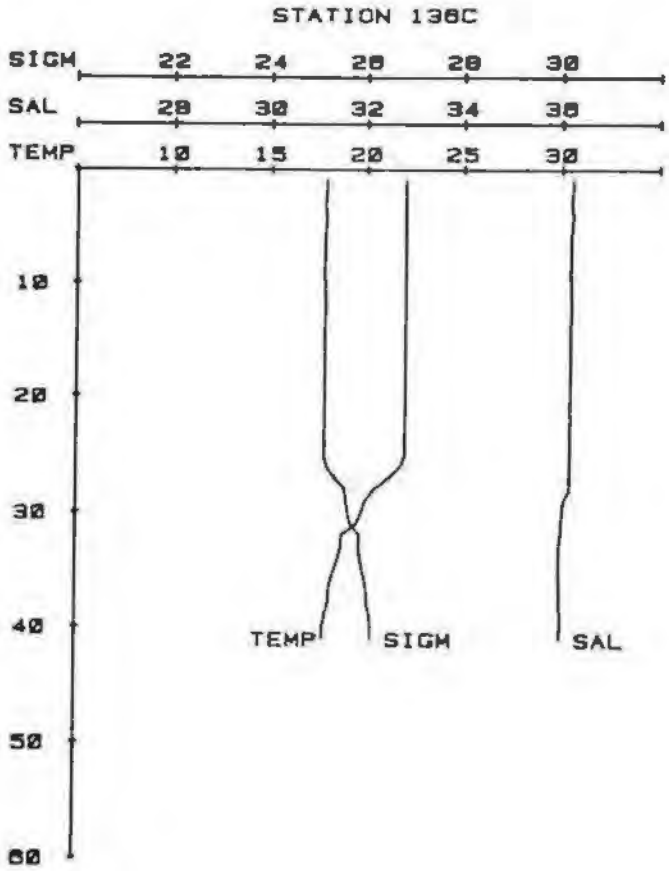
GILLISS CRUISE STA 136C 23/04/79 16.0 GMT CONSEC STA 139

LAT 38 42.6N LONG 80 05.5W DEPTH = 75M DIST LAST STA = 8.4KM

WEATHER DATA
WIND SPEED = 16KTS
WIND DIRECTION = 130
AIR TEMP = 22.0C
WEATHER CODE = 21
BAROMETRIC PRES= 1021.7
SEA STATE = 3
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.00	36.21	25.15	283	.	.	.	.	.	.
2.0	22.00	36.19	25.13	284	.	.	.	.	.	.
3.0	22.00	36.17	25.11	284	.	.	.	.	.	.
4.0	22.00	36.21	25.15	283	.	.	.	.	.	.
5.0	22.00	36.19	25.13	285	.	.	.	.	.	.
6.0	22.00	36.17	25.11	286	.	.	.	.	.	.
7.0	22.00	36.17	25.11	286	.	.	.	.	.	.
8.0	22.00	36.17	25.11	286	.	.	.	.	.	.
9.0	22.00	36.16	25.11	287	.	.	.	.	.	.
10.0	21.99	36.18	25.13	285	.	.	.	.	.	.
11.0	21.99	36.18	25.13	285	.	.	.	.	.	.
12.0	21.99	36.20	25.14	284	.	.	.	.	.	.
13.0	21.99	36.18	25.13	285	.	.	.	.	.	.
14.0	21.99	36.17	25.12	286	.	.	.	.	.	.
15.0	22.00	36.18	25.12	286	.	.	.	.	.	.
16.0	21.99	36.18	25.13	285	.	.	.	.	.	.
17.0	21.99	36.18	25.13	285	.	.	.	.	.	.
18.0	21.99	36.18	25.13	285	.	.	.	.	.	.
19.0	21.99	36.17	25.12	286	.	.	.	.	.	.
20.0	21.99	36.17	25.12	286	.	.	.	.	.	.
21.0	21.99	36.17	25.12	286	.	.	.	.	.	.
22.0	21.99	36.18	25.13	286	.	.	.	.	.	.
23.0	21.98	36.17	25.12	286	.	.	.	.	.	.
24.0	21.98	36.18	25.13	285	.	.	.	.	.	.
25.0	21.98	36.17	25.12	286	.	.	.	.	.	.
26.0	21.78	36.12	25.10	281	.	.	.	.	.	.
27.0	21.17	36.17	25.35	265	.	.	.	.	.	.
28.0	20.39	36.17	25.56	245	.	.	.	.	.	.
29.0	19.91	36.05	25.59	241	.	.	.	.	.	.
30.0	19.71	36.03	25.63	238	.	.	.	.	.	.
31.0	19.46	36.01	25.68	233	.	.	.	.	.	.
32.6	18.78	36.00	25.87	215	.	.	.	.	.	.
33.0	18.67	35.97	25.85	217	.	.	.	.	.	.
34.0	18.52	35.97	25.89	213	.	.	.	.	.	.
35.0	18.33	35.97	25.94	208	.	.	.	.	.	.
36.0	18.12	35.98	26.00	203	.	.	.	.	.	.
37.0	18.01	35.99	26.04	199	.	.	.	.	.	.
38.0	17.99	35.98	26.03	200	.	.	.	.	.	.
39.0	17.81	36.01	26.10	193	.	.	.	.	.	.
40.0	17.71	36.01	26.12	192	.	.	.	.	.	.
41.0	17.69	35.99	26.11	192	.	.	.	.	.	.



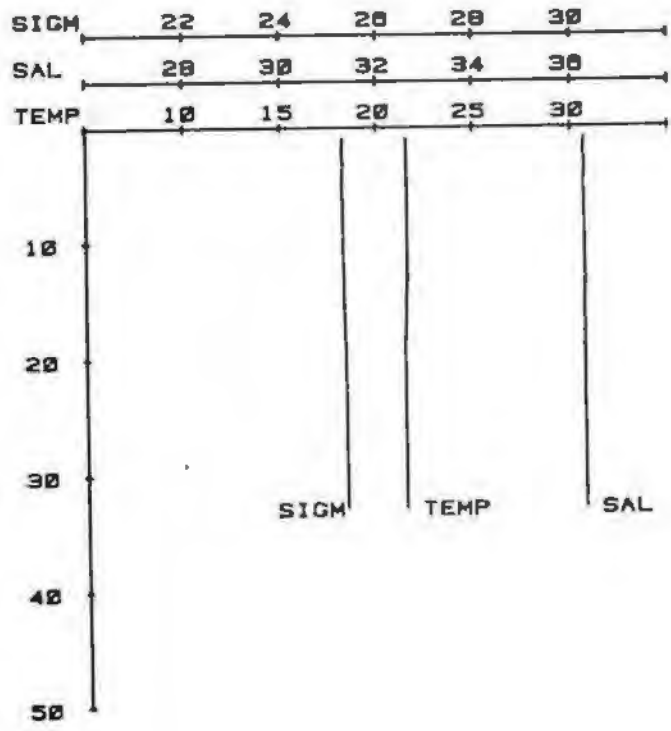
GILLISS CRUISE STA 137C 23/04/79 19.4 GMT CONSEC STA 140

LAT 38 40.5N LONG 80 03.0W DEPTH = 37M DIST LAST STA = 11.6KM

WEATHER DATA
WIND SPEED = 19KTS
WIND DIRECTION = 100
AIR TEMP = 25.0C
WEATHER CODE = 21
BAROMETRIC PRES= 1020.8
SEA STATE = 4
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.60	36.27	25.38	268	.	.	.	.	.	.
2.0	21.60	36.25	25.29	269	.	.	.	0.10	0.3	2.2
3.0	21.59	36.28	25.31	267	.	.	.	.	.	.
4.0	21.60	36.26	25.30	269	.	.	.	.	.	.
5.0	21.60	36.25	25.29	270	.	.	.	.	.	.
6.0	21.59	36.27	25.31	268	.	.	.	.	.	.
7.0	21.59	36.26	25.30	269	.	.	.	.	.	.
8.0	21.59	36.27	25.31	268	.	.	.	.	.	.
9.0	21.58	36.27	25.31	268	.	.	.	.	.	.
10.0	21.59	36.27	25.31	268	.	.	.	.	.	.
11.0	21.59	36.27	25.31	268	.	.	.	.	.	.
12.0	21.58	36.28	25.32	267	.	.	.	.	.	.
13.0	21.57	36.29	25.33	266	.	.	.	.	.	.
14.0	21.55	36.27	25.32	267	.	.	.	0.10	0.2	2.0
15.0	21.58	36.26	25.32	267	.	.	.	.	.	.
16.0	21.51	36.26	25.32	267	.	.	.	.	.	.
17.0	21.48	36.27	25.34	265	.	.	.	.	.	.
18.0	21.44	36.26	25.34	265	.	.	.	.	.	.
19.0	21.42	36.26	25.35	265	.	.	.	.	.	.
20.0	21.43	36.26	25.34	265	.	.	.	.	.	.
21.0	21.43	36.26	25.34	265	.	.	.	.	.	.
22.0	21.42	36.26	25.35	265	.	.	.	.	.	.
23.0	21.42	36.25	25.34	265	.	.	.	.	.	.
24.0	21.42	36.26	25.35	265	.	.	.	.	.	.
25.0	21.42	36.26	25.35	265	.	.	.	0.09	0.6	1.6
26.0	21.42	36.26	25.35	265	.	.	.	.	.	.
27.0	21.43	36.26	25.34	265	.	.	.	.	.	.
28.0	21.42	36.26	25.35	265	.	.	.	.	.	.
29.0	21.41	36.26	25.35	265	.	.	.	.	.	.
30.0	21.41	36.26	25.35	265	.	.	.	.	.	.
31.0	21.41	36.26	25.35	265	.	.	.	.	.	.
32.0	21.41	36.26	25.35	265	.	.	.	0.09	0.3	0.9
33.0	21.41	36.26	25.35	265	.	.	.	.	.	.



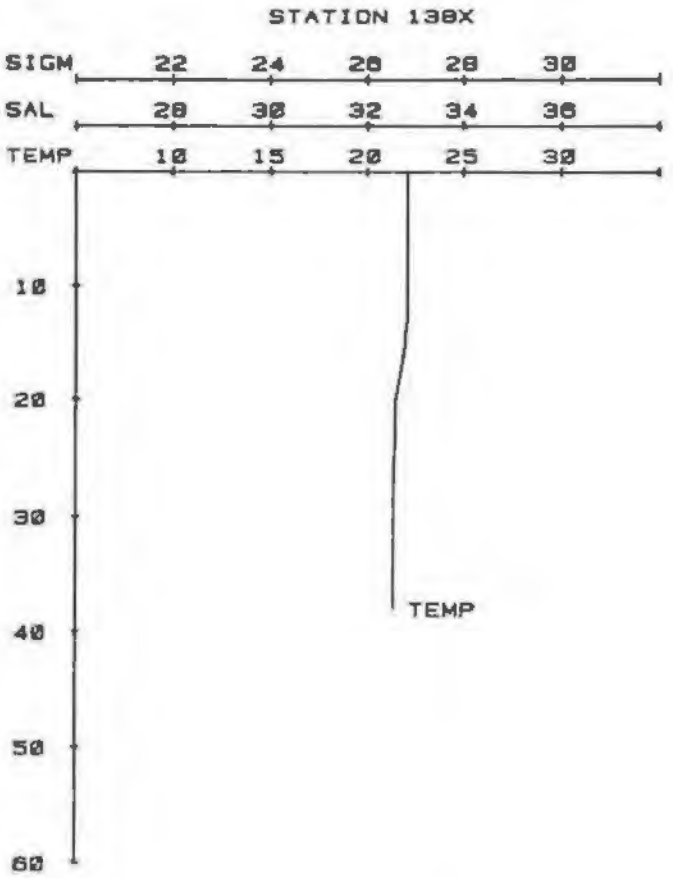
GILLISS CRUISE STA 130X 23/04/79 20.4 GMT CONSEC STA 141

LAT 38 47.4N LONG 88 26.5W DEPTH = 38m DIST LAST STA = 37.5KM

WEATHER DATA
WIND SPEED = 13KTS
WIND DIRECTION = 180
AIR TEMP = 22.0C
WEATHER CODE = 31
BAROMETRIC PRES= 1020.0
SEA STATE = 4
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.1	.	.	.	.	.	.	.	.	.
13.0	22.5	.	.	.	.	.	.	.	.	.
14.0	22.0	.	.	.	.	.	.	.	.	.
15.0	22.0	.	.	.	.	.	.	.	.	.
20.0	21.5	.	.	.	.	.	.	.	.	.
23.0	21.5	.	.	.	.	.	.	.	.	.
26.0	21.4	.	.	.	.	.	.	.	.	.
30.0	21.4	.	.	.	.	.	.	.	.	.



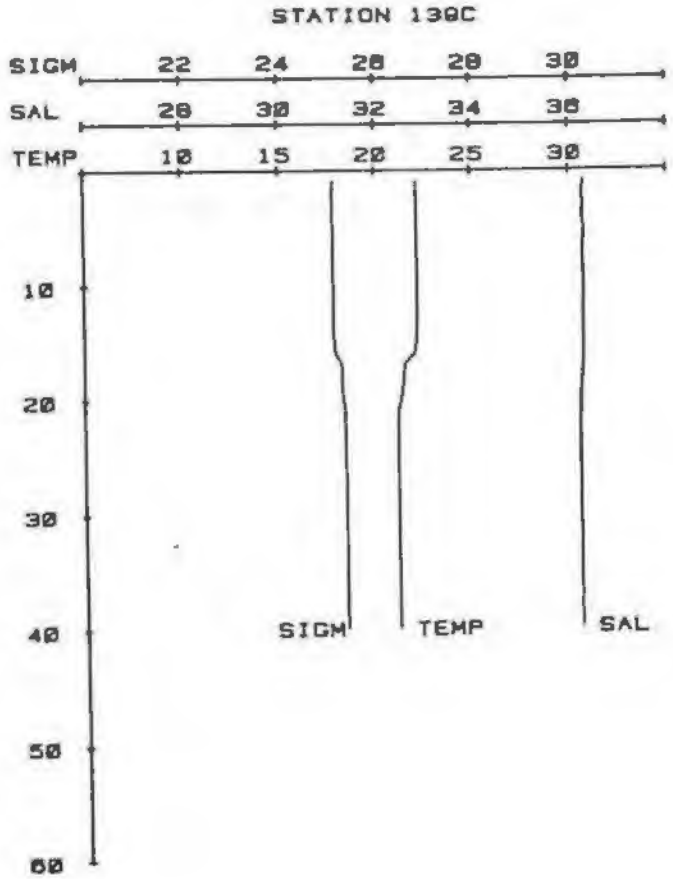
GILLISS CRUISE STA 130C 23/04/79 20.8 GMT CONSEC STA 142

LAT 38 47.2N LONG 88 23.3W DEPTH = 42m DIST LAST STA = 5.1KM

WEATHER DATA
WIND SPEED = 10KTS
WIND DIRECTION = 180
AIR TEMP = 22 0C
WEATHER CODE = 31
BAROMETRIC PRES= 1019.6
SEA STATE = 4
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.23	36.31	25.16	282	.	.	.	.	.	.
2.0	22.23	36.28	25.13	284	.	.	.	.	.	.
3.0	22.23	36.31	25.16	282	.	.	.	.	.	.
4.0	22.23	36.28	25.13	284	.	.	.	0.09	0.7	0.9
5.0	22.23	36.32	25.16	281	.	.	.	.	.	.
6.0	22.23	36.31	25.16	282	.	.	.	.	.	.
7.0	22.23	36.29	25.14	284	.	.	.	.	.	.
8.0	22.23	36.30	25.15	283	.	.	.	.	.	.
9.0	22.23	36.30	25.15	283	.	.	.	.	.	.
10.0	22.22	36.31	25.16	282	.	.	.	.	.	.
11.0	22.22	36.30	25.15	283	.	.	.	.	.	.
12.0	22.23	36.29	25.14	284	.	.	.	.	.	.
13.0	22.21	36.29	25.15	283	.	.	.	.	.	.
14.0	22.19	36.29	25.15	283	.	.	.	.	.	.
15.0	22.15	36.30	25.17	281	.	.	.	.	.	.
16.0	22.06	36.29	25.19	279	.	.	.	0.06	0.0	0.0
17.0	21.55	36.20	25.32	266	.	.	.	.	.	.
18.0	21.50	36.26	25.32	267	.	.	.	.	.	.
19.0	21.43	36.24	25.33	266	.	.	.	.	.	.
20.0	21.34	36.23	25.34	265	.	.	.	.	.	.
21.0	21.28	36.23	25.38	261	.	.	.	.	.	.
22.0	21.17	36.22	25.38	261	.	.	.	0.09	0.2	0.3
23.0	21.19	36.22	25.38	262	.	.	.	.	.	.
24.0	21.17	36.22	25.38	261	.	.	.	.	.	.
25.0	21.17	36.22	25.38	261	.	.	.	.	.	.
26.0	21.16	36.22	25.39	261	.	.	.	.	.	.
27.0	21.16	36.23	25.39	260	.	.	.	.	.	.
28.0	21.16	36.22	25.39	261	.	.	.	.	.	.
29.0	21.16	36.22	25.39	261	.	.	.	.	.	.
30.0	21.16	36.22	25.39	261	.	.	.	.	.	.
31.0	21.16	36.22	25.39	261	.	.	.	0.07	0.1	1.1
32.0	21.16	36.23	25.39	260	.	.	.	.	.	.
33.0	21.16	36.22	25.39	261	.	.	.	.	.	.
34.0	21.16	36.22	25.39	261	.	.	.	.	.	.
35.0	21.16	36.21	25.38	262	.	.	.	.	.	.
36.0	21.16	36.22	25.39	261	.	.	.	.	.	.
37.0	21.16	36.23	25.39	261	.	.	.	.	.	.
38.0	21.16	36.21	25.38	262	.	.	.	.	.	.
39.0	21.16	36.23	25.39	261	.	.	.	0.07	0.4	1.0
40.0	21.16	36.22	25.39	261	.	.	.	.	.	.



GILLISS CRUISE STA 140X 23/04/79 21.7 GMT CONSEC STA 143

LAT 38 46.1N LONG 88 19.9W DEPTH = 42M DIST LAST STA = 5.8NM

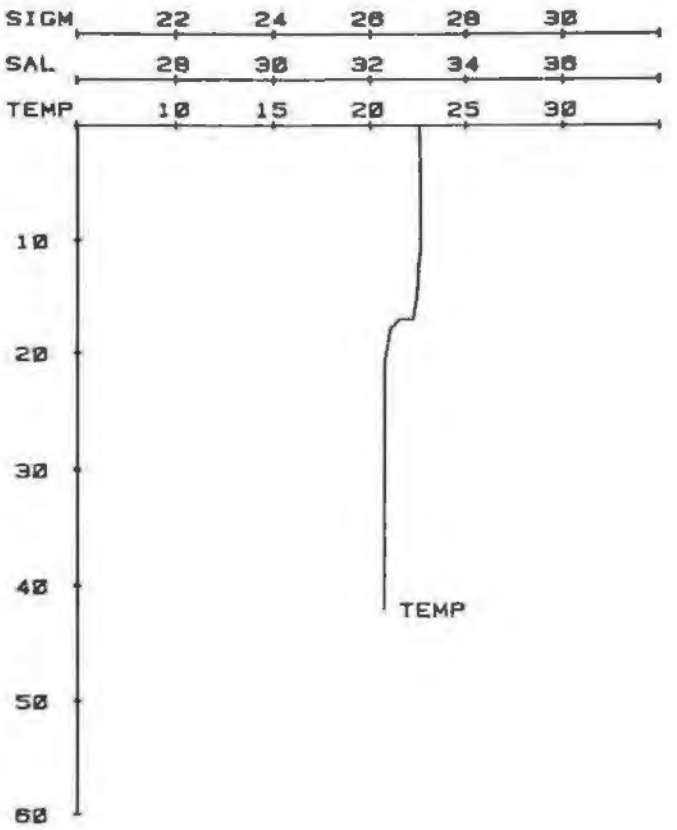
WEATHER DATA

WIND SPEED	= 1KTS	SEA STATE	= 0
WIND DIRECTION	= 180	WAVE DIRECTION	= 120
AIR TEMP	= 22.8C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.6	.	.	.	.	.	.	.	.	.
11.0	22.6	.	.	.	.	.	.	.	.	.
12.0	22.5	.	.	.	.	.	.	.	.	.
15.0	22.4	.	.	.	.	.	.	.	.	.
17.0	22.2	.	.	.	.	.	.	.	.	.
17.0	22.0	.	.	.	.	.	.	.	.	.
17.0	21.5	.	.	.	.	.	.	.	.	.
18.0	21.0	.	.	.	.	.	.	.	.	.
21.0	20.7	.	.	.	.	.	.	.	.	.
42.0	20.7	.	.	.	.	.	.	.	.	.

STATION 140X



GILLISS CRUISE STA 141X 23/04/79 22.1 GMT CONSEC STA 144

LAT 38 45.3N LONG 88 17.8W DEPTH = 42M DIST LAST STA = 4.9NM

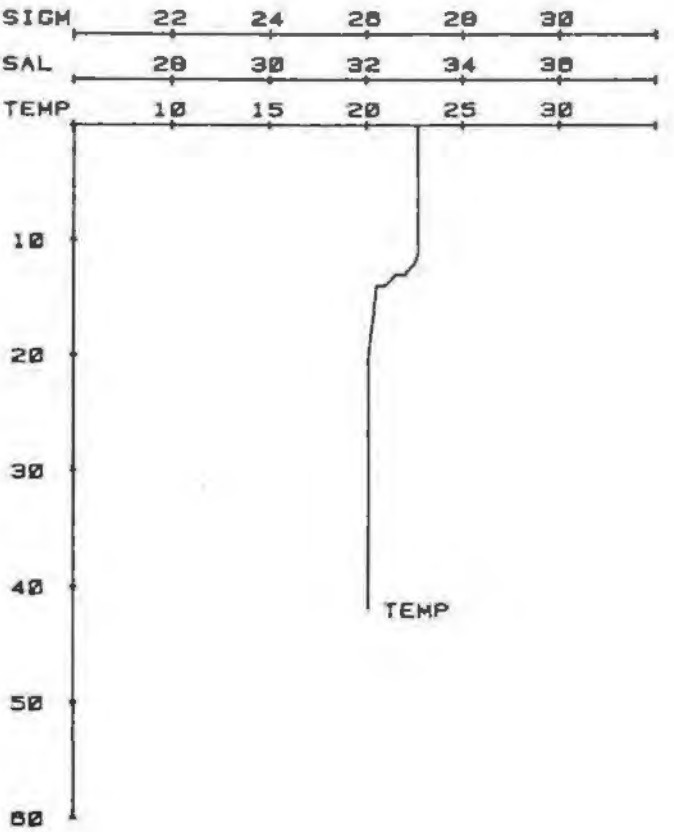
WEATHER DATA

WIND SPEED	= 20KTS	SEA STATE	= 4
WIND DIRECTION	= 120	WAVE DIRECTION	= 120
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.7	.	.	.	.	.	.	.	.	.
11.0	22.7	.	.	.	.	.	.	.	.	.
12.0	22.5	.	.	.	.	.	.	.	.	.
13.0	22.0	.	.	.	.	.	.	.	.	.
13.0	21.5	.	.	.	.	.	.	.	.	.
14.0	21.0	.	.	.	.	.	.	.	.	.
14.0	20.5	.	.	.	.	.	.	.	.	.
20.0	20.1	.	.	.	.	.	.	.	.	.
42.0	20.1	.	.	.	.	.	.	.	.	.

STATION 141X



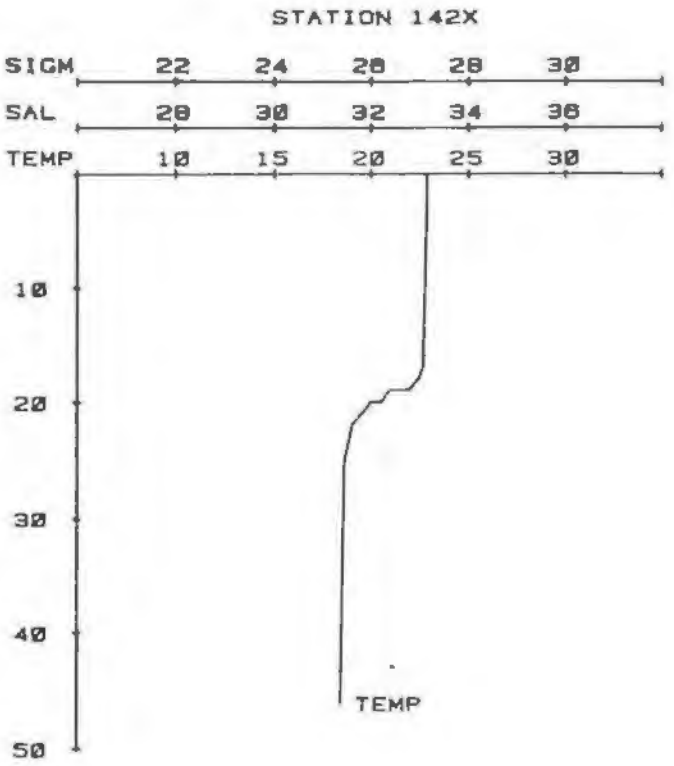
GILLISS CRUISE STA 1423 23/04/79 22.4 GMT CONSEC STA 145

LAT 38 44.6N LONG 80 13.9W DEPTH = 46M DIST LAST STA = 5.1KM

WEATHER DATA
WIND SPEED = 20KTS
WIND DIRECTION = 120
AIR TEMP = 23.3C
WEATHER CODE = 51
BAROMETRIC PRES= 1019.6
SEA STATE = 4
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2*	AOU	PO4	NO3	SI
0.0	22.9									
17.0	22.7									
18.0	22.5									
19.0	22.0									
19.0	21.0									
21.0	20.5									
28.0	20.0									
23.0	19.5									
22.0	19.0									
25.0	18.6									
34.0	18.5									
46.0	18.4									



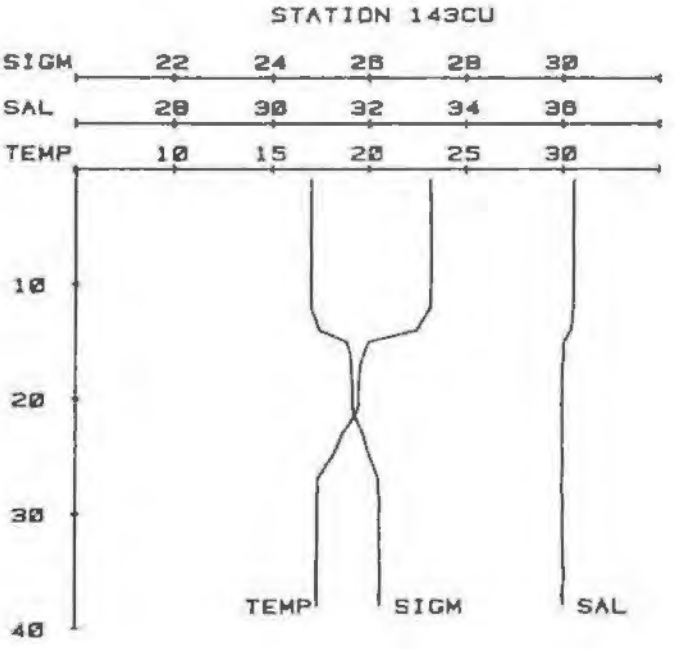
GILLISS CRUISE STA 143CU 23/04/79 22.7 GMT CONSEC STA 141

LAT 38 43.7N LONG 80 10.8W DEPTH = 43M DIST LAST STA = 5.2KM

WEATHER DATA
WIND SPEED = 18KTS
WIND DIRECTION = 110
AIR TEMP = 22.8C
WEATHER CODE = 51
BAROMETRIC PRES= 1019.6
SEA STATE = 4
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2*	AOU	PO4	NO3	SI
1.0	23.19	36.22	24.81	315						
2.0	23.19	36.22	24.81	315						
3.0	23.19	36.22	24.81	315				0.04	0.0	0.0
4.0	23.19	36.22	24.81	315						
5.0	23.19	36.21	24.80	316						
6.0	23.19	36.20	24.80	316						
7.0	23.19	36.22	24.81	315						
8.0	23.19	36.22	24.81	315						
9.0	23.19	36.21	24.80	316						
10.0	23.18	36.21	24.81	315				0.09	0.0	0.0
11.0	23.17	36.21	24.81	315						
12.0	23.14	36.20	24.81	315						
13.0	22.77	36.18	24.90	306						
14.0	22.44	36.16	24.98	299						
15.0	19.95	36.00	25.55	245						
16.0	19.71	36.01	25.62	239						
17.0	19.52	35.98	25.64	236						
18.0	19.46	35.97	25.65	235						
19.0	19.42	35.98	25.67	234						
20.0	19.44	35.97	25.66	235				0.09	0.1	0.0
21.0	19.36	35.97	25.68	233						
22.0	19.00	35.97	25.77	224						
23.0	18.59	35.98	25.88	214						
24.0	18.32	35.97	25.94	208						
25.0	18.07	35.99	26.02	200						
26.0	17.65	35.98	26.12	191						
27.0	17.29	35.97	26.20	184						
28.0	17.20	35.97	26.20	184				0.29	4.5	2.2
29.0	17.27	36.01	26.23	180						
30.0	17.27	35.98	26.21	183						
31.0	17.27	35.99	26.22	182						
32.0	17.27	35.99	26.22	182						
33.0	17.26	36.00	26.23	181						
34.0	17.25	36.00	26.23	181						
35.0	17.25	36.02	26.24	180						
36.0	17.25	36.01	26.24	180						
37.0	17.25	35.98	26.21	182						
38.0	17.25	36.01	26.24	180				0.49	5.9	3.6



GILLISS CRUISE STA 144X 23/04/79 23.6 GMT CONSEC STA 147

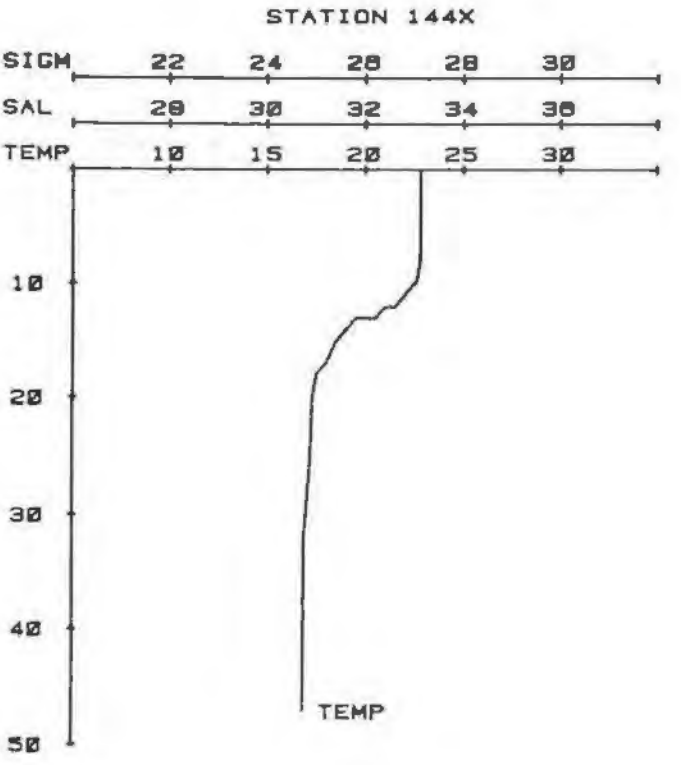
LAT 36 42.8N LONG 80 08.3W DEPTH = 47M DIST LAST STA = 4.3KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 22.8C	CLOUD TYPE	=
WEATHER CODE	= X2	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.8	.	.	.	.	.	.	.	.	.
8.0	22.8	.	.	.	.	.	.	.	.	.
10.0	22.6	.	.	.	.	.	.	.	.	.
10.0	22.5	.	.	.	.	.	.	.	.	.
11.0	22.0	.	.	.	.	.	.	.	.	.
12.0	21.5	.	.	.	.	.	.	.	.	.
12.0	21.0	.	.	.	.	.	.	.	.	.
13.0	20.5	.	.	.	.	.	.	.	.	.
13.0	20.0	.	.	.	.	.	.	.	.	.
13.0	19.5	.	.	.	.	.	.	.	.	.
14.0	19.0	.	.	.	.	.	.	.	.	.
15.0	18.5	.	.	.	.	.	.	.	.	.
17.0	18.0	.	.	.	.	.	.	.	.	.
18.0	17.5	.	.	.	.	.	.	.	.	.
20.0	17.3	.	.	.	.	.	.	.	.	.
25.0	17.2	.	.	.	.	.	.	.	.	.
30.0	17.0	.	.	.	.	.	.	.	.	.
32.0	16.9	.	.	.	.	.	.	.	.	.
47.0	16.9	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 145X 24/04/79 00.1 GMT CONSEC STA 148

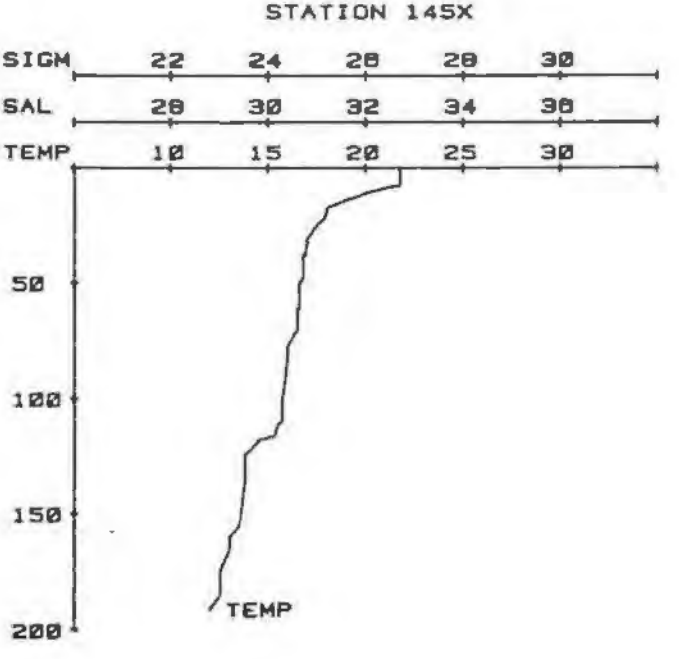
LAT 36 42.4N LONG 80 02.5W DEPTH = 191M DIST LAST STA = 9.3KM

WEATHER DATA

WIND SPEED	= 20KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X2	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.8	.	.	.	.	.	.	.	.	.
7.0	21.8	.	.	.	.	.	.	.	.	.
8.0	21.7	.	.	.	.	.	.	.	.	.
8.0	21.5	.	.	.	.	.	.	.	.	.
9.0	21.0	.	.	.	.	.	.	.	.	.
10.0	20.5	.	.	.	.	.	.	.	.	.
11.0	20.0	.	.	.	.	.	.	.	.	.
13.0	19.5	.	.	.	.	.	.	.	.	.
14.0	19.0	.	.	.	.	.	.	.	.	.
16.0	18.5	.	.	.	.	.	.	.	.	.
17.0	18.1	.	.	.	.	.	.	.	.	.
18.0	18.0	.	.	.	.	.	.	.	.	.
22.0	17.9	.	.	.	.	.	.	.	.	.
25.0	17.5	.	.	.	.	.	.	.	.	.
31.0	17.0	.	.	.	.	.	.	.	.	.
38.0	16.9	.	.	.	.	.	.	.	.	.
38.0	16.8	.	.	.	.	.	.	.	.	.
48.0	16.8	.	.	.	.	.	.	.	.	.
50.0	16.6	.	.	.	.	.	.	.	.	.
61.0	16.6	.	.	.	.	.	.	.	.	.
61.0	16.5	.	.	.	.	.	.	.	.	.
70.0	16.5	.	.	.	.	.	.	.	.	.
77.0	16.0	.	.	.	.	.	.	.	.	.
81.0	16.0	.	.	.	.	.	.	.	.	.
101.0	15.7	.	.	.	.	.	.	.	.	.
110.0	15.7	.	.	.	.	.	.	.	.	.
111.0	15.5	.	.	.	.	.	.	.	.	.
116.0	15.3	.	.	.	.	.	.	.	.	.
117.0	15.0	.	.	.	.	.	.	.	.	.
118.0	14.5	.	.	.	.	.	.	.	.	.
123.0	14.0	.	.	.	.	.	.	.	.	.
124.0	13.8	.	.	.	.	.	.	.	.	.
135.0	13.8	.	.	.	.	.	.	.	.	.
155.0	13.5	.	.	.	.	.	.	.	.	.
160.0	13.0	.	.	.	.	.	.	.	.	.
165.0	13.0	.	.	.	.	.	.	.	.	.
175.0	12.5	.	.	.	.	.	.	.	.	.
185.0	12.5	.	.	.	.	.	.	.	.	.
191.0	12.0	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 146X 24/04/79 00.4 GMT CONSEC STA 149

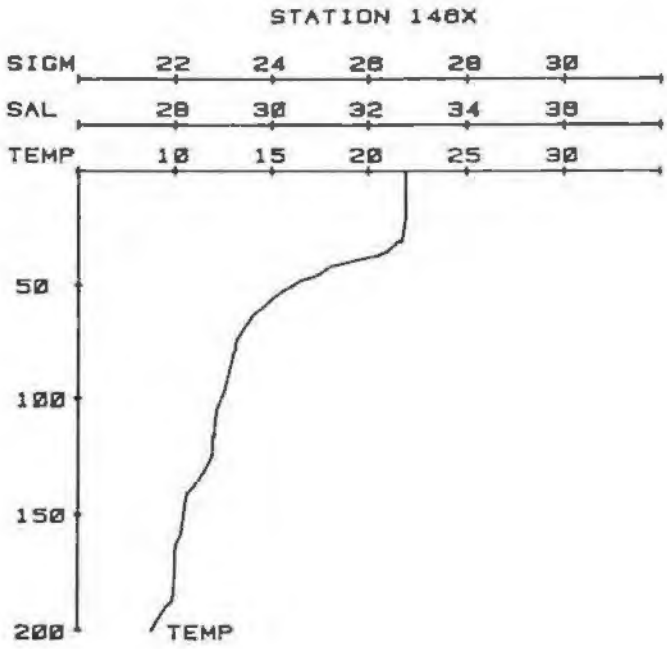
LAT 30 41.1N LONG 79 59.8W DEPTH = 233M DIST LAST STA = 13.9KM

WEATHER DATA

WIND SPEED	= 20KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1015.9	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	21.9	*	*	*	*	*	*	*	*	*
28.0	21.9	*	*	*	*	*	*	*	*	*
31.0	21.7	*	*	*	*	*	*	*	*	*
31.0	21.5	*	*	*	*	*	*	*	*	*
35.0	21.0	*	*	*	*	*	*	*	*	*
37.0	20.5	*	*	*	*	*	*	*	*	*
38.0	20.0	*	*	*	*	*	*	*	*	*
39.0	19.5	*	*	*	*	*	*	*	*	*
40.0	19.0	*	*	*	*	*	*	*	*	*
41.0	18.5	*	*	*	*	*	*	*	*	*
42.0	18.0	*	*	*	*	*	*	*	*	*
45.0	17.5	*	*	*	*	*	*	*	*	*
47.0	17.0	*	*	*	*	*	*	*	*	*
48.0	16.5	*	*	*	*	*	*	*	*	*
51.0	16.0	*	*	*	*	*	*	*	*	*
53.0	15.5	*	*	*	*	*	*	*	*	*
56.0	15.0	*	*	*	*	*	*	*	*	*
60.0	14.5	*	*	*	*	*	*	*	*	*
63.0	14.0	*	*	*	*	*	*	*	*	*
69.0	13.5	*	*	*	*	*	*	*	*	*
75.0	13.1	*	*	*	*	*	*	*	*	*
78.0	13.5	*	*	*	*	*	*	*	*	*
80.0	13.0	*	*	*	*	*	*	*	*	*
97.0	12.5	*	*	*	*	*	*	*	*	*
105.0	12.1	*	*	*	*	*	*	*	*	*
113.0	12.0	*	*	*	*	*	*	*	*	*
116.0	12.0	*	*	*	*	*	*	*	*	*
116.0	11.9	*	*	*	*	*	*	*	*	*
124.0	11.9	*	*	*	*	*	*	*	*	*
131.0	11.5	*	*	*	*	*	*	*	*	*
137.0	11.0	*	*	*	*	*	*	*	*	*
141.0	10.6	*	*	*	*	*	*	*	*	*
145.0	10.5	*	*	*	*	*	*	*	*	*
158.0	10.3	*	*	*	*	*	*	*	*	*
164.0	10.0	*	*	*	*	*	*	*	*	*
167.0	10.0	*	*	*	*	*	*	*	*	*
170.0	10.0	*	*	*	*	*	*	*	*	*
185.0	9.9	*	*	*	*	*	*	*	*	*
188.0	9.8	*	*	*	*	*	*	*	*	*
194.0	9.5	*	*	*	*	*	*	*	*	*
197.0	9.0	*	*	*	*	*	*	*	*	*
200.0	8.8	*	*	*	*	*	*	*	*	*



GILLISS CRUISE STA 147C 24/04/79 01.3 GMT CONSEC STA 150

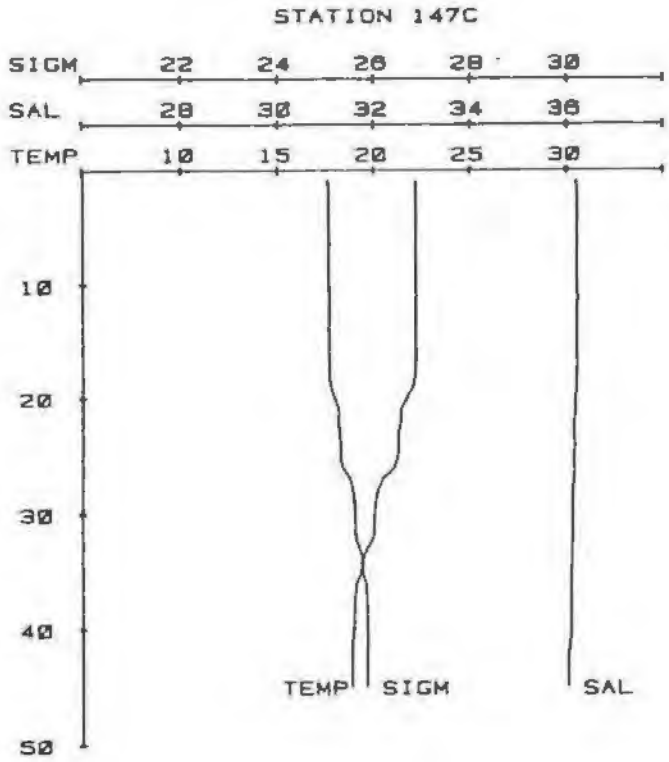
LAT 38 42.9N LONG 00 05.2W DEPTH = 75M DIST LAST STA = 9.2KM

WEATHER DATA
WIND SPEED = 22KTS
WIND DIRECTION = 110
AIR TEMP = 21.7C
WEATHER CODE = 32
BAROMETRIC PRES= 1020.7

SEA STATE = 4
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.20	36.19	25.07	290	.	.	.	.	.	.
2.0	22.20	36.21	25.09	288	.	.	.	.	.	.
3.0	22.20	36.21	25.09	288	.	.	.	0.00	0.0	11.1
4.0	22.20	36.21	25.09	288	.	.	.	.	.	.
5.0	22.19	36.20	25.08	289	.	.	.	.	.	.
6.0	22.18	36.21	25.09	288	.	.	.	.	.	.
7.0	22.19	36.20	25.08	289	.	.	.	.	.	.
8.0	22.19	36.20	25.08	289	.	.	.	.	.	.
9.0	22.18	36.20	25.09	289	.	.	.	.	.	.
10.0	22.18	36.21	25.09	288	.	.	.	.	.	.
11.0	22.18	36.22	25.10	287	.	.	.	.	.	.
12.0	22.17	36.20	25.09	289	.	.	.	.	.	.
13.0	22.17	36.20	25.09	289	.	.	.	.	.	.
14.0	22.17	36.20	25.09	289	.	.	.	.	.	.
15.0	22.16	36.20	25.09	288	.	.	.	0.07	0.0	0.0
16.0	22.15	36.20	25.10	288	.	.	.	.	.	.
17.0	22.14	36.21	25.11	287	.	.	.	.	.	.
18.0	22.11	36.19	25.10	288	.	.	.	.	.	.
19.0	22.01	36.19	25.13	285	.	.	.	.	.	.
20.0	21.69	36.17	25.20	278	.	.	.	.	.	.
21.0	21.38	36.17	25.29	270	.	.	.	.	.	.
22.0	21.35	36.14	25.27	271	.	.	.	0.08	0.2	0.0
23.0	21.22	36.14	25.31	268	.	.	.	.	.	.
24.0	21.23	36.16	25.32	267	.	.	.	.	.	.
25.0	21.19	36.13	25.31	268	.	.	.	.	.	.
26.0	21.05	36.15	25.36	263	.	.	.	.	.	.
27.0	20.41	36.13	25.52	248	.	.	.	0.10	1.0	0.0
28.0	20.16	36.11	25.57	243	.	.	.	.	.	.
29.0	20.04	36.11	25.61	240	.	.	.	.	.	.
30.0	19.99	36.11	25.62	239	.	.	.	.	.	.
31.0	19.96	36.11	25.63	238	.	.	.	.	.	.
32.0	19.96	36.11	25.63	238	.	.	.	.	.	.
33.0	19.63	36.10	25.71	231	.	.	.	.	.	.
34.0	19.34	36.10	25.78	224	.	.	.	.	.	.
35.0	19.33	36.08	25.77	225	.	.	.	.	.	.
36.0	19.04	36.08	25.84	218	.	.	.	.	.	.
37.0	18.99	36.08	25.86	216	.	.	.	.	.	.
38.0	18.94	36.08	25.87	215	.	.	.	.	.	.
39.0	18.93	36.08	25.87	215	.	.	.	.	.	.
40.0	18.92	36.08	25.87	215	.	.	.	.	.	.
41.0	18.84	36.07	25.89	214	.	.	.	.	.	.
42.0	18.83	36.07	25.86	216	.	.	.	.	.	.
45.0	18.83	36.03	25.86	216	.	.	.	0.17	1.0	0.7



GILLISS CRUISE STA 149X 24/04/79 07.1 GMT CONSEC STA 152

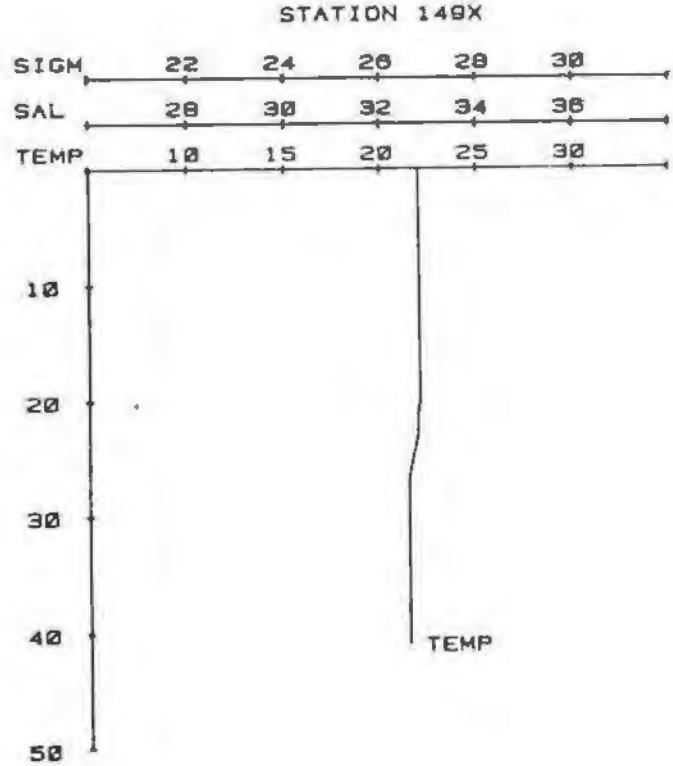
LAT 38 46.9N LONG 00 23.5W DEPTH = 41M DIST LAST STA = 30.1KM

WEATHER DATA
WIND SPEED = 28KTS
WIND DIRECTION = 120
AIR TEMP = 22.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1018.6

SEA STATE = 4
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.0	.	.	.	.	.	.	.	.	.
20.0	22.0	.	.	.	.	.	.	.	.	.
21.0	21.9	.	.	.	.	.	.	.	.	.
23.0	21.9	.	.	.	.	.	.	.	.	.
26.0	21.5	.	.	.	.	.	.	.	.	.
27.0	21.4	.	.	.	.	.	.	.	.	.
41.0	21.4	.	.	.	.	.	.	.	.	.



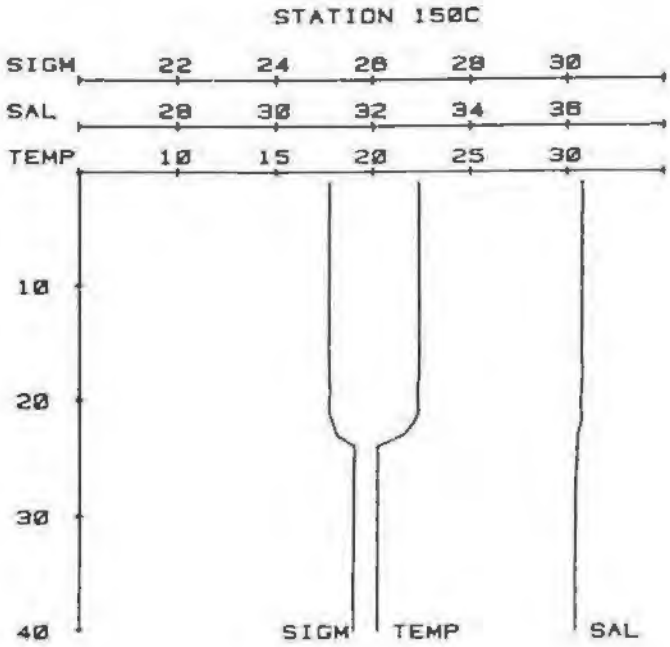
GILLISS CRUISE STA 150C 24/04/79 08.8 GMT CONSEC STA 153

LAT 30 45.3N LONG 80 16.5W DEPTH = 47M DIST LAST STA = 11.5KM

WEATHER DATA
WIND SPEED = 22KTS
WIND DIRECTION = 120
AIR TEMP = 22.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1018.3

SEA STATE = 4
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

				OBSERVATIONS						
Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.38	36.38	25.11	287	.	.	.	.	.	.
2.0	22.38	36.35	25.11	286	.	.	.	.	.	.
3.0	22.38	36.31	25.11	286	5.11	4.92	-0.19	0.07	0.0	0.9
4.0	22.37	36.29	25.10	287	.	.	.	.	.	.
5.0	22.38	36.30	25.11	287	.	.	.	.	.	.
6.0	22.37	36.30	25.11	287	.	.	.	.	.	.
7.0	22.38	36.30	25.11	287	.	.	.	.	.	.
8.0	22.38	36.30	25.11	287	.	.	.	.	.	.
9.0	22.38	36.31	25.11	286	.	.	.	.	.	.
10.0	22.38	36.29	25.10	288	.	.	.	.	.	.
11.0	22.39	36.30	25.10	287	.	.	.	.	.	.
12.0	22.39	36.30	25.10	287	.	.	.	.	.	.
13.0	22.38	36.30	25.11	287	.	.	.	.	.	.
14.0	22.38	36.29	25.10	288	.	.	.	.	.	.
15.0	22.39	36.29	25.10	288	.	.	.	.	.	.
16.0	22.39	36.29	25.10	288	.	.	.	.	.	.
17.0	22.37	36.31	25.12	286	.	.	.	.	.	.
18.0	22.37	36.30	25.11	287	.	.	.	.	.	.
19.0	22.27	36.29	25.13	285	.	.	.	.	.	.
20.0	22.31	36.27	25.10	288	.	.	.	.	.	.
21.0	22.33	36.28	25.10	288	5.15	4.93	-0.10	0.10	0.0	1.4
22.0	22.06	36.28	25.10	288	.	.	.	.	.	.
23.0	21.59	36.28	25.26	273	.	.	.	.	.	.
24.0	20.19	36.19	25.63	238	.	.	.	.	.	.
25.0	20.22	36.20	25.63	239	5.08	5.12	0.04	0.10	0.2	1.1
26.0	20.20	36.17	25.61	240	.	.	.	.	.	.
27.0	20.21	36.17	25.61	240	.	.	.	.	.	.
28.0	20.20	36.16	25.60	241	.	.	.	.	.	.
29.0	20.20	36.16	25.60	241	.	.	.	.	.	.
30.0	20.20	36.17	25.61	240	.	.	.	.	.	.
31.0	20.20	36.16	25.60	241	.	.	.	.	.	.
32.0	20.21	36.16	25.60	241	.	.	.	.	.	.
33.0	20.20	36.16	25.60	241	.	.	.	.	.	.
34.0	20.20	36.15	25.59	241	.	.	.	.	.	.
35.0	20.20	36.15	25.59	242	.	.	.	.	.	.
36.0	20.20	36.15	25.59	242	.	.	.	.	.	.
37.0	20.20	36.16	25.60	241	.	.	.	.	.	.
38.0	20.20	36.16	25.60	241	.	.	.	.	.	.
39.0	20.20	36.16	25.60	241	.	.	.	.	.	.
40.0	20.20	36.16	25.60	241	4.98	5.13	0.15	0.14	0.4	1.0



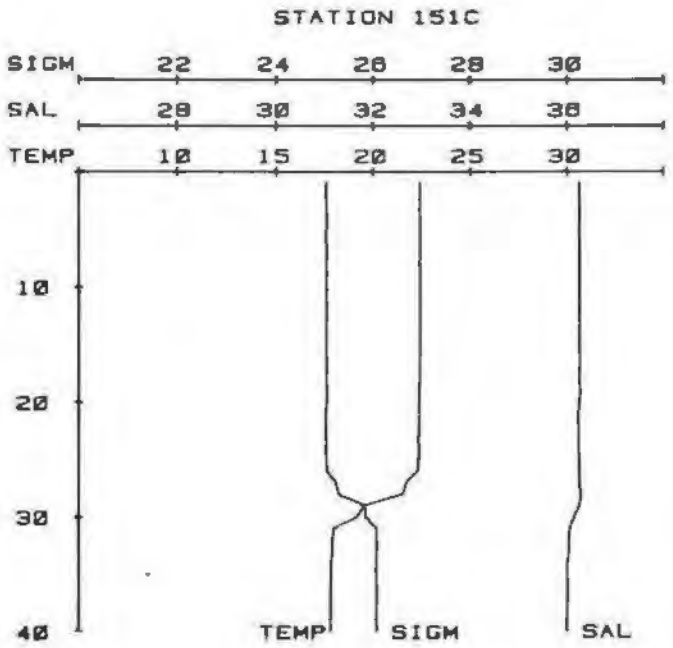
GILLISS CRUISE STA 151C 24/04/79 09.3 GMT CONSEC STA 154

LAT 30 44.1N LONG 80 10.6W DEPTH = 43M DIST LAST STA = 9.7KM

WEATHER DATA
WIND SPEED = 24KTS
WIND DIRECTION = 120
AIR TEMP = 22.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1018.3

SEA STATE = 4
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

				OBSERVATIONS						
Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.44	36.25	25.85	292	.	.	.	.	.	.
2.0	22.44	36.25	25.85	292	.	.	.	.	.	.
3.0	22.44	36.26	25.86	291	.	.	.	.	.	.
4.0	22.44	36.26	25.86	291	5.35	4.92	-0.43	0.05	0.0	0.7
5.0	22.44	36.25	25.85	292	.	.	.	.	.	.
6.0	22.44	36.26	25.86	291	.	.	.	.	.	.
7.0	22.44	36.26	25.86	291	.	.	.	.	.	.
8.0	22.44	36.26	25.86	291	.	.	.	.	.	.
9.0	22.44	36.26	25.86	291	.	.	.	.	.	.
10.0	22.44	36.26	25.86	292	.	.	.	.	.	.
11.0	22.45	36.26	25.86	292	.	.	.	.	.	.
12.0	22.44	36.26	25.86	292	.	.	.	.	.	.
13.0	22.44	36.26	25.86	292	.	.	.	.	.	.
14.0	22.44	36.26	25.86	292	.	.	.	.	.	.
15.0	22.45	36.26	25.86	292	.	.	.	.	.	.
16.0	22.44	36.27	25.87	291	.	.	.	.	.	.
17.0	22.44	36.27	25.87	291	.	.	.	.	.	.
18.0	22.44	36.26	25.86	292	.	.	.	.	.	.
19.0	22.41	36.28	25.88	290	.	.	.	.	.	.
20.0	22.40	36.26	25.87	291	.	.	.	.	.	.
21.0	22.42	36.24	25.85	293	.	.	.	.	.	.
22.0	22.41	36.25	25.86	292	.	.	.	.	.	.
23.0	22.38	36.25	25.87	291	.	.	.	.	.	.
24.0	22.41	36.25	25.86	292	.	.	.	.	.	.
25.0	22.39	36.26	25.87	291	.	.	.	.	.	.
26.0	22.32	36.26	25.89	289	.	.	.	.	.	.
27.0	21.74	36.27	25.26	273	.	.	.	.	.	.
28.0	21.54	36.29	25.33	266	.	.	.	0.00	0.0	0.6
29.0	19.51	36.26	25.84	216	.	.	.	.	.	.
30.0	19.17	36.16	25.87	215	.	.	.	.	.	.
31.0	17.97	36.06	26.10	193	.	.	.	.	.	.
32.0	17.98	36.04	26.10	193	.	.	.	.	.	.
33.0	17.89	36.04	26.10	193	.	.	.	.	.	.
34.0	17.84	36.00	26.09	195	.	.	.	.	.	.
35.0	17.85	36.01	26.09	194	4.91	5.36	0.45	0.05	0.1	2.1
36.0	17.82	36.01	26.10	194	.	.	.	.	.	.
37.0	17.81	36.01	26.10	193	.	.	.	.	.	.
38.0	17.81	36.00	26.09	194	.	.	.	.	.	.
39.0	17.81	36.00	26.09	194	.	.	.	.	.	.
40.0	17.81	36.01	26.10	193	4.32	5.27	0.95	0.42	5.2	4.2

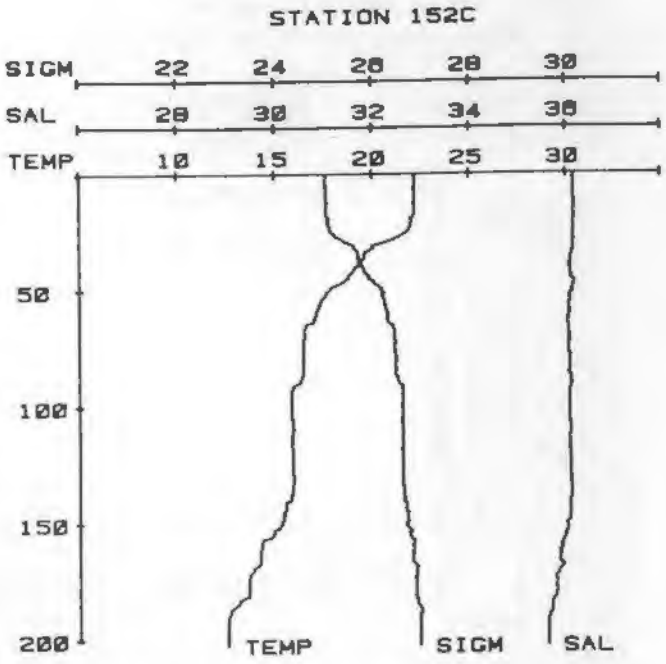


GILLISS CRUISE STA 152C 24/04/79 11.1 GMT CONSEC STA 155

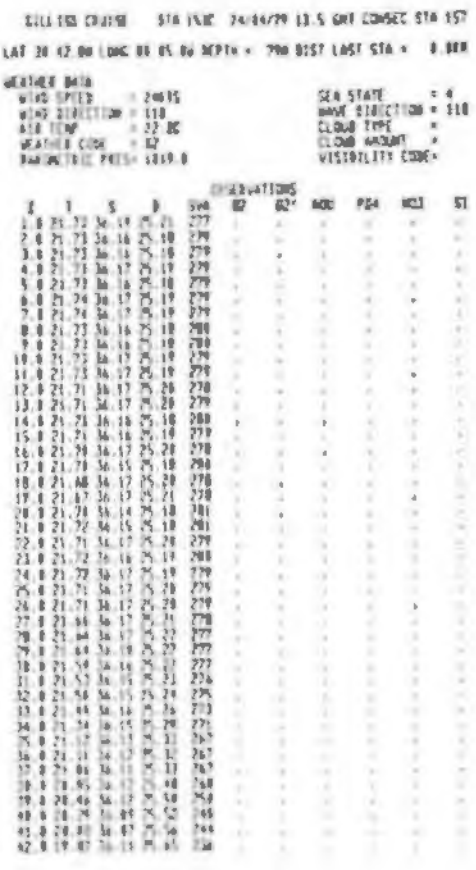
LAT 38 41.7N LONG 29 59.5W DEPTH = 2328M DIST LAST STA = 18.2KM

WEATHER DATA
WIND SPEED = 24KTS
WIND DIRECTION = 110
AIR TEMP = 22.2C
WEATHER CODE = X1
BAROMETRIC PRES= 1018.3
SEA STATE = 4
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	D	SVA	OBSERVATIONS O2	O2'	ADJ	PO4	NO3	SI
1.0	22.17	36.16	25.86	291	.	.	.	0.22	0.1	0.4
2.0	22.18	36.14	25.84	293	.	.	.	.	.	.
3.0	22.19	36.16	25.85	292	.	.	.	.	.	.
4.0	22.18	36.15	25.85	292	.	.	.	.	.	.
5.0	22.12	36.16	25.86	291	.	.	.	.	.	.
6.0	22.15	36.15	25.86	291	.	.	.	.	.	.
7.0	22.15	36.16	25.86	291	.	.	.	.	.	.
8.0	22.15	36.16	25.86	291	.	.	.	.	.	.
9.0	22.15	36.15	25.86	292	.	.	.	.	.	.
10.0	22.15	36.15	25.86	292	.	.	.	.	.	.
11.0	22.15	36.17	25.87	290	.	.	.	.	.	.
12.0	22.13	36.18	25.89	289	.	.	.	.	.	.
13.0	22.13	36.16	25.87	290	.	.	.	.	.	.
14.0	22.16	36.17	25.87	291	.	.	.	.	.	.
15.0	22.15	36.16	25.86	291	.	.	.	.	.	.
16.0	22.15	36.16	25.86	291	.	.	.	.	.	.
17.0	22.14	36.16	25.87	291	.	.	.	.	.	.
18.0	22.10	36.17	25.89	289	.	.	.	.	.	.
19.0	21.96	36.17	25.93	285	.	.	.	.	.	.
20.0	21.99	36.15	25.90	288	.	.	.	.	.	.
21.0	21.96	36.15	25.91	287	.	.	.	.	.	.
22.0	21.95	36.15	25.91	287	.	.	.	.	.	.
23.0	21.89	36.16	25.94	284	.	.	.	.	.	.
24.0	21.86	36.16	25.95	284	.	.	.	.	.	.
25.0	21.77	36.14	25.96	283	.	.	.	.	.	.
26.0	21.54	36.15	25.23	276	.	.	.	.	.	.
27.0	21.38	36.14	25.27	272	.	.	.	.	.	.
28.0	21.09	36.16	25.36	263	.	.	.	.	.	.
29.0	20.80	36.15	25.43	257	.	.	.	.	.	.
30.0	20.43	36.14	25.52	248	.	.	.	.	.	.
31.0	19.98	36.14	25.64	237	.	.	.	.	.	.
32.0	20.04	36.14	25.63	238	.	.	.	.	.	.
33.0	19.84	36.15	25.69	232	.	.	.	.	.	.
34.0	19.60	36.11	25.72	229	.	.	.	.	.	.
35.0	19.58	36.11	25.73	229	.	.	.	.	.	.
36.0	19.57	36.09	25.71	238	4.88	5.19	0.39	0.27	2.3	4.6
37.0	19.47	36.09	25.74	228	.	.	.	.	.	.
38.0	19.31	36.08	25.77	224	.	.	.	.	.	.
39.0	19.30	36.06	25.76	226	.	.	.	.	.	.
40.0	19.16	36.08	25.81	221	4.76	5.23	0.47	0.37	3.9	3.3
41.0	19.06	36.08	25.84	218	.	.	.	.	.	.
42.0	18.99	36.08	25.86	217	.	.	.	.	.	.
43.0	18.86	36.08	25.89	214	.	.	.	.	.	.
44.0	18.75	36.11	25.94	209	.	.	.	.	.	.
45.0	18.76	36.10	25.93	210	.	.	.	.	.	.
46.0	18.57	36.17	26.03	201	.	.	.	.	.	.
47.0	18.42	36.15	26.06	198	.	.	.	.	.	.
48.0	18.16	36.16	26.13	191	.	.	.	.	.	.
49.0	17.85	36.14	26.19	185	.	.	.	.	.	.
50.0	17.80	36.11	26.18	186	.	.	.	.	.	.
51.0	17.62	36.13	26.24	181	.	.	.	.	.	.
52.0	17.57	36.07	26.21	184	.	.	.	.	.	.
53.0	17.50	36.07	26.22	182	.	.	.	.	.	.
54.0	17.39	36.08	26.26	179	.	.	.	.	.	.
55.0	17.33	36.07	26.26	178	.	.	.	.	.	.
56.0	17.29	36.05	26.26	179	.	.	.	.	.	.
57.0	17.22	36.06	26.28	177	.	.	.	.	.	.
58.0	17.19	36.06	26.29	176	.	.	.	.	.	.
59.0	17.13	36.04	26.30	175	.	.	.	.	.	.
60.0	17.08	36.08	26.33	172	.	.	.	.	.	.
61.0	17.07	36.05	26.31	174	.	.	.	.	.	.
62.0	16.99	36.03	26.32	174	.	.	.	.	.	.
63.0	17.01	36.04	26.32	173	.	.	.	.	.	.
64.0	16.91	36.03	26.33	172	.	.	.	.	.	.
65.0	16.56	36.04	26.43	163	.	.	.	.	.	.
66.0	16.54	36.05	26.44	162	.	.	.	.	.	.
67.0	16.46	36.05	26.46	160	.	.	.	.	.	.
68.0	16.48	36.05	26.45	161	.	.	.	.	.	.
69.0	16.50	36.07	26.46	160	.	.	.	.	.	.
70.0	16.54	36.06	26.45	162	.	.	.	.	.	.
71.0	16.45	36.05	26.46	160	.	.	.	.	.	.
72.0	16.44	36.08	26.48	158	.	.	.	.	.	.
73.0	16.43	36.04	26.46	161	.	.	.	.	.	.
74.0	16.43	36.05	26.46	160	.	.	.	.	.	.
75.0	16.43	36.05	26.46	160	.	.	.	.	.	.
76.0	16.42	36.05	26.47	160	.	.	.	.	.	.
77.0	16.42	36.05	26.47	160	.	.	.	.	.	.
78.0	16.42	36.08	26.49	158	.	.	.	.	.	.
79.0	16.42	36.07	26.48	158	.	.	.	.	.	.
80.0	16.42	36.08	26.49	158	.	.	.	.	.	.
81.0	16.42	36.07	26.48	159	.	.	.	.	.	.
82.0	16.42	36.06	26.47	159	3.67	5.51	1.84	0.70	10.7	6.4
83.0	16.42	36.07	26.48	159	.	.	.	.	.	.
84.0	16.42	36.08	26.49	158	.	.	.	.	.	.
85.0	16.40	36.05	26.47	160	.	.	.	.	.	.
86.0	16.39	36.05	26.47	160	.	.	.	.	.	.
87.0	16.38	36.10	26.51	156	.	.	.	.	.	.
88.0	16.32	36.10	26.53	154	.	.	.	.	.	.
89.0	16.28	36.09	26.53	154	.	.	.	.	.	.
90.0	16.25	36.12	26.56	151	.	.	.	.	.	.
91.0	15.92	36.10	26.62	146	.	.	.	.	.	.
92.0	15.91	36.08	26.61	147	.	.	.	.	.	.
93.0	15.92	36.07	26.62	146	.	.	.	.	.	.
94.0	15.92	36.06	26.61	146	.	.	.	.	.	.
95.0	15.92	36.07	26.62	146	.	.	.	.	.	.
96.0	15.92	36.06	26.61	146	.	.	.	.	.	.
97.0	15.92	36.06	26.61	147	.	.	.	.	.	.
98.0	15.93	36.07	26.62	146	.	.	.	.	.	.
99.0	15.93	36.06	26.61	147	.	.	.	.	.	.
100.0	15.93	36.06	26.61	147	.	.	.	.	.	.
101.0	15.93	36.07	26.62	146	.	.	.	.	.	.
102.0	15.93	36.07	26.62	146	.	.	.	.	.	.
103.0	15.93	36.06	26.61	147	.	.	.	.	.	.



104.0	15.83	36.07	26.62	146	.	.	.	.	.	.
105.0	15.86	36.06	26.60	148	.	.	.	.	.	.
106.0	15.90	36.07	26.60	148	.	.	.	.	.	.
107.0	15.89	36.08	26.61	147	.	.	.	.	.	.
108.0	15.90	36.09	26.62	146	.	.	.	.	.	.
109.0	15.91	36.09	26.61	147	.	.	.	.	.	.
110.0	15.93	36.09	26.61	147	.	.	.	.	.	.
111.0	15.85	36.09	26.63	145	.	.	.	.	.	.
112.0	15.84	36.06	26.61	147	.	.	.	.	.	.
113.0	15.83	36.06	26.61	147	.	.	.	.	.	.
114.0	15.83	36.07	26.62	147	.	.	.	.	.	.
115.0	15.85	36.07	26.61	147	.	.	.	.	.	.
116.0	15.82	36.07	26.62	146	.	.	.	.	.	.
117.0	15.84	36.07	26.62	147	.	.	.	.	.	.
118.0	15.88	36.05	26.59	149	.	.	.	.	.	.
119.0	15.88	36.08	26.61	147	.	.	.	.	.	.
120.0	15.88	36.07	26.61	148	.	.	.	.	.	.
121.0	15.88	36.08	26.61	147	.	.	.	.	.	.
122.0	15.88	36.09	26.62	146	.	.	.	.	.	.
123.0	15.88	36.08	26.61	147	.	.	.	.	.	.
124.0	15.88	36.08	26.61	147	.	.	.	.	.	.
125.0	15.88	36.09	26.62	147	.	.	.	.	.	.
126.0	15.89	36.08	26.61	148	.	.	.	.	.	.
127.0	15.88	36.08	26.61	147	.	.	.	.	.	.
128.0	15.90	36.08	26.61	148	.	.	.	.	.	.
129.0	15.92	36.08	26.60	148	.	.	.	.	.	.
130.0	15.92	36.10	26.62	147	.	.	.	.	.	.
131.0	15.92	36.09	26.61	148	.	.	.	.	.	.
132.0	15.92	36.09	26.61	148	.	.	.	.	.	.
133.0	15.89	36.10	26.63	146	.	.	.	.	.	.
134.0	15.90	36.09	26.62	147	.	.	.	.	.	.
135.0	15.88	36.11	26.64	145	3.64	5.57	1.93	0.70	9.8	7.6
136.0	15.85	36.11	26.64	145	.	.	.	.	.	.
137.0	15.85	36.09	26.63	146	.	.	.	.	.	.
138.0	15.80	36.10	26.65	144	.	.	.	.	.	.
139.0	15.78	36.10	26.65	144	.	.	.	.	.	.
140.0	15.78	36.07	26.63	146	.	.	.	.	.	.
141.0	15.52	36.07	26.69	141	.	.	.	.	.	.
142.0	15.51	36.07	26.69	140	.	.	.	.	.	.
143.0	15.55	36.07	26.68	141	.	.	.	.	.	.
144.0	15.55	36.06	26.67	142	.	.	.	.	.	.
145.0	15.44	36.09	26.72	138	.	.	.	.	.	.
146.0	15.45	36.06	26.70	140	.	.	.	.	.	.
147.0	15.41	36.07	26.71	138	.	.	.	.	.	.
148.0	15.44	36.07	26.71	139	.	.	.	.	.	.
149.0	15.34	36.07	26.73	137	.	.	.	.	.	.
150.0	15.32	36.08	26.60	142	.	.	.	.	.	.
151.0	15.24	36.01	26.71	139	.	.	.	.	.	.
152.0	15.17	36.02	26.73	137	.	.	.	.	.	.
153.0	14.91	36.03	26.79	131	.	.	.	.	.	.
154.0	14.95	35.98	26.75	135	.	.	.	.	.	.
155.0	14.86	35.98	26.77	133	.	.	.	.	.	.
156.0	14.78	35.97	26.78	133	.	.	.	.	.	.
157.0	14.32	35.93	26.85	126	.	.	.	.	.	.
158.0	14.32	35.92	26.84	127	.	.	.	.	.	.
159.0	14.32	35.88	26.81	130	.	.	.	.	.	.
160.0	14.31	35.91	26.83	127	.	.	.	.	.	.
161.0	14.24	35.90	26.84	127	.	.	.	.	.	.
162.0	14.23	35.85	26.80	130	.	.	.	.	.	.
163.0	14.22	35.88	26.83	128	.	.	.	.	.	.
164.0	14.23	35.86	26.81	129	.	.	.	.	.	.
165.0	14.22	35.86	26.81	129	.	.	.	.	.	.
166.0	14.21	35.84	26.80	130	.	.	.	.	.	.
167.0	14.19	35.89	26.84	126	.	.	.	.	.	.
168.0	14.12	35.94	26.90	121	.	.	.	.	.	.



STATION 153C

SIGM 22 24 26 28 30

SAL 28 30 32 34 36

TEMP 10 15 20 25 30

10

20

30

40

50

SIGM TEMP SAL

GILLISS CRUISE STA 153C 24/04/79 12.9 GMT CONSEC STA 154

LAT 38 42.8N LONG 80 05.6W DEPTH = 80M DIST LAST STA = 9.0KM

WEATHER DATA
WIND SPEED = 24KTS
WIND DIRECTION = 110
AIR TEMP = 22.2C
WEATHER CODE = X2
BAROMETRIC PRES= 1019.0
SEA STATE = 4
WAVE DIRECTION = 110
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.66	36.20	25.23	275	.	.	.	.	.	.
2.0	21.66	36.20	25.23	275	.	.	.	.	.	.
3.0	21.66	36.16	25.20	278	.	.	.	.	.	.
4.0	21.66	36.17	25.21	277	.	.	.	.	.	.
5.0	21.66	36.16	25.20	278	.	.	.	.	.	.
6.0	21.64	36.17	25.21	277	.	.	.	.	.	.
7.0	21.64	36.16	25.20	278	.	.	.	.	.	.
8.0	21.64	36.17	25.21	277	.	.	.	.	.	.
9.0	21.66	36.17	25.21	277	5.33	4.99	-0.34	0.09	0.0	0.0
10.0	21.67	36.17	25.21	277	.	.	.	.	.	.
11.0	21.67	36.16	25.20	278	.	.	.	.	.	.
12.0	21.67	36.17	25.21	277	.	.	.	.	.	.
13.0	21.67	36.18	25.21	277	.	.	.	.	.	.
14.0	21.67	36.18	25.21	277	.	.	.	.	.	.
15.0	21.67	36.16	25.20	278	.	.	.	.	.	.
16.0	21.67	36.17	25.21	278	.	.	.	.	.	.
17.0	21.67	36.16	25.20	278	.	.	.	.	.	.
18.0	21.67	36.17	25.21	278	.	.	.	.	.	.
19.0	21.67	36.17	25.21	278	.	.	.	.	.	.
20.0	21.67	36.17	25.21	278	.	.	.	.	.	.
21.0	21.67	36.16	25.20	278	.	.	.	.	.	.
22.0	21.67	36.16	25.20	279	.	.	.	.	.	.
23.0	21.66	36.17	25.21	278	.	.	.	.	.	.
24.0	21.64	36.17	25.21	278	.	.	.	.	.	.
25.0	21.66	36.16	25.20	278	.	.	.	.	.	.
26.0	21.63	36.17	25.22	277	.	.	.	.	.	.
27.0	21.58	36.17	25.23	276	.	.	.	.	.	.
28.0	21.60	36.15	25.21	278	.	.	.	.	.	.
29.0	21.58	36.17	25.23	276	.	.	.	.	.	.
30.0	21.35	36.16	25.29	270	5.30	5.02	-0.28	0.10	0.0	0.0
31.0	21.28	36.15	25.30	269	.	.	.	.	.	.
32.0	21.16	36.14	25.33	267	.	.	.	.	.	.
33.0	21.12	36.14	25.34	266	.	.	.	.	.	.
34.0	20.89	36.12	25.38	261	.	.	.	.	.	.
35.0	20.72	36.10	25.42	258	.	.	.	.	.	.
36.0	20.70	36.10	25.42	258	.	.	.	.	.	.
37.0	20.52	36.10	25.47	253	.	.	.	.	.	.
38.0	20.29	36.12	25.55	246	.	.	.	.	.	.
39.0	19.99	36.10	25.61	240	.	.	.	.	.	.
40.0	19.51	36.09	25.73	229	.	.	.	.	.	.
41.0	19.45	36.08	25.74	228	.	.	.	.	.	.
42.0	19.28	36.03	25.74	227	.	.	.	.	.	.
43.0	19.24	36.04	25.76	226	.	.	.	.	.	.
44.0	19.09	36.05	25.81	221	.	.	.	.	.	.
45.0	19.07	36.04	25.81	222	.	.	.	.	.	.
46.0	19.05	36.05	25.82	220	.	.	.	.	.	.
47.0	19.05	36.05	25.82	220	.	.	.	.	.	.
48.0	18.95	36.05	25.84	218	.	.	.	.	.	.
49.0	18.84	36.05	25.87	215	.	.	.	.	.	.
50.0	18.76	36.06	25.90	213	5.40	5.27	-0.13	0.22	1.5	0.4
51.0	18.78	36.04	25.90	213	.	.	.	.	.	.
52.0	18.56	36.05	25.94	209	.	.	.	.	.	.
53.0	18.33	36.07	26.02	202	.	.	.	.	.	.
54.0	18.07	36.05	26.07	197	.	.	.	.	.	.
55.0	17.95	36.05	26.10	194	.	.	.	.	.	.
56.0	17.81	36.05	26.13	191	.	.	.	.	.	.
57.0	17.46	36.04	26.21	184	5.01	5.40	0.39	0.30	3.3	1.1
58.0	17.38	36.01	26.21	184	.	.	.	.	.	.
59.0	17.33	36.01	26.22	183	.	.	.	.	.	.
60.0	17.34	36.02	26.22	182	.	.	.	.	.	.
61.0	17.33	36.01	26.22	183	.	.	.	.	.	.
62.0	17.32	36.02	26.23	182	.	.	.	.	.	.
63.0	17.32	36.00	26.21	184	.	.	.	.	.	.
64.0	17.31	36.01	26.22	183	.	.	.	.	.	.
65.0	17.31	35.99	26.21	184	.	.	.	.	.	.
66.0	17.34	36.03	26.24	181	.	.	.	.	.	.
67.0	17.38	36.02	26.23	182	.	.	.	.	.	.
68.0	17.25	36.02	26.24	181	.	.	.	.	.	.
69.0	17.11	36.03	26.29	177	.	.	.	.	.	.
70.0	17.09	35.98	26.25	180	4.24	5.44	1.20	0.53	7.1	5.1
71.0	17.08	36.01	26.28	178	.	.	.	.	.	.
72.0	17.05	36.01	26.29	177	.	.	.	.	.	.

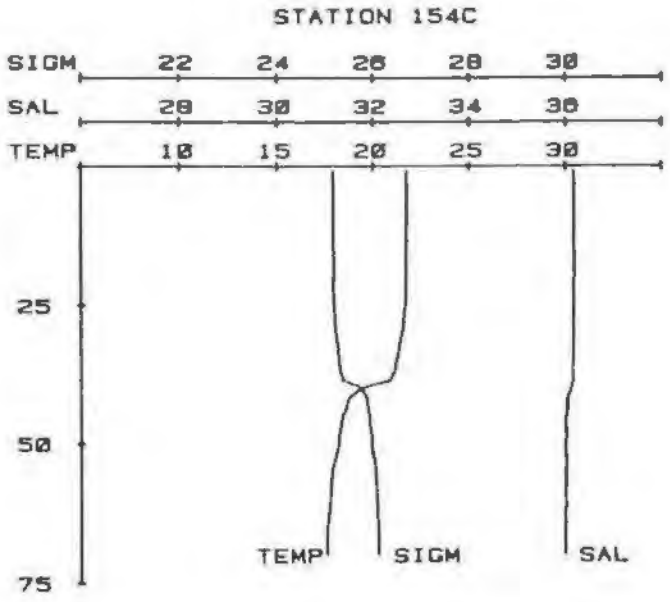
GILLISS CRUISE STA 154C 24/04/79 17.8 GMT CONSEC STA 158

LAT 30 42.5N LONG 80 03.0W DEPTH = 75M DIST LAST STA = 3.2KM

WEATHER DATA

WIND SPEED	= 21KTS	SEA STATE	= 4
WIND DIRECTION	= 110	WAVE DIRECTION	= 130
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= 02	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1018.6	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	D	SVA	02	02'	ADJ	P04	M03	SI
1.0	21.76	36.17	25.18	279	.	.	.	.	.	.
2.0	21.76	36.18	25.19	279	.	.	.	.	.	.
3.0	21.76	36.19	25.20	278	.	.	.	.	.	.
4.0	21.76	36.18	25.19	279	.	.	.	.	.	.
5.0	21.76	36.19	25.20	278	.	.	.	.	.	.
6.0	21.76	36.18	25.19	279	.	.	.	.	.	.
7.0	21.76	36.19	25.20	278	.	.	.	.	.	.
8.0	21.76	36.18	25.19	279	.	.	.	.	.	.
9.0	21.76	36.19	25.20	278	.	.	.	.	.	.
10.0	21.76	36.18	25.19	279	.	.	.	.	.	.
11.0	21.76	36.19	25.20	278	.	.	.	.	.	.
12.0	21.75	36.18	25.19	279	.	.	.	.	.	.
13.0	21.76	36.18	25.19	279	.	.	.	.	.	.
14.0	21.75	36.17	25.18	280	.	.	.	.	.	.
15.0	21.75	36.19	25.20	278	.	.	.	.	.	.
16.0	21.74	36.20	25.21	277	.	.	.	.	.	.
17.0	21.74	36.19	25.20	278	.	.	.	.	.	.
18.0	21.74	36.19	25.20	278	.	.	.	.	.	.
19.0	21.74	36.19	25.20	278	.	.	.	.	.	.
20.0	21.73	36.19	25.21	278	.	.	.	.	.	.
21.0	21.73	36.17	25.19	279	.	.	.	.	.	.
22.0	21.73	36.18	25.20	279	.	.	.	.	.	.
23.0	21.72	36.18	25.20	278	.	.	.	.	.	.
24.0	21.70	36.18	25.21	278	.	.	.	.	.	.
25.0	21.68	36.18	25.21	277	.	.	.	.	.	.
26.0	21.64	36.18	25.22	276	.	.	.	.	.	.
27.0	21.61	36.18	25.23	276	.	.	.	.	.	.
28.0	21.60	36.17	25.23	276	.	.	.	.	.	.
29.0	21.57	36.18	25.24	275	.	.	.	.	.	.
30.0	21.53	36.18	25.25	274	.	.	.	.	.	.
31.0	21.44	36.18	25.28	271	.	.	.	.	.	.
32.0	21.41	36.17	25.28	271	.	.	.	.	.	.
33.0	21.34	36.18	25.31	269	.	.	.	.	.	.
34.0	21.31	36.17	25.31	269	.	.	.	.	.	.
35.0	21.25	36.17	25.32	267	.	.	.	.	.	.
36.0	21.18	36.16	25.34	266	.	.	.	.	.	.
37.0	21.15	36.16	25.34	265	.	.	.	.	.	.
38.0	21.04	36.16	25.37	263	.	.	.	.	.	.
39.0	20.98	36.17	25.42	258	.	.	.	.	.	.
40.0	19.70	36.14	25.72	230	.	.	.	.	.	.
41.0	19.15	36.10	25.83	219	.	.	.	.	.	.
42.0	18.75	36.05	25.90	213	.	.	.	.	.	.
43.0	18.66	36.05	25.92	211	.	.	.	.	.	.
44.0	18.61	36.05	25.93	209	.	.	.	.	.	.
45.0	18.48	36.02	25.96	207	.	.	.	.	.	.
46.0	18.38	36.00	25.95	206	.	.	.	.	.	.
47.0	18.35	36.01	25.97	206	.	.	.	.	.	.
48.0	18.27	36.02	25.99	204	.	.	.	.	.	.
49.0	18.24	36.03	26.01	202	.	.	.	.	.	.
50.0	18.23	36.00	25.99	204	.	.	.	.	.	.
51.0	18.15	36.01	26.02	202	.	.	.	.	.	.
52.0	18.10	36.00	26.02	201	.	.	.	.	.	.
53.0	18.02	36.03	26.06	197	.	.	.	.	.	.
54.0	17.95	36.02	26.07	196	.	.	.	.	.	.
55.0	17.88	36.01	26.08	196	.	.	.	.	.	.
56.0	17.86	36.01	26.09	195	.	.	.	.	.	.
57.0	17.84	36.01	26.09	195	.	.	.	.	.	.
58.0	17.81	36.01	26.10	194	.	.	.	.	.	.
59.0	17.81	36.01	26.10	194	.	.	.	.	.	.
60.0	17.79	36.01	26.11	194	.	.	.	.	.	.
61.0	17.75	36.02	26.12	192	.	.	.	.	.	.
62.0	17.72	36.01	26.12	192	.	.	.	.	.	.
63.0	17.69	35.98	26.11	194	.	.	.	.	.	.
64.0	17.68	36.01	26.13	191	.	.	.	.	.	.
65.0	17.61	35.99	26.13	191	.	.	.	.	.	.
66.0	17.60	36.00	26.14	190	.	.	.	.	.	.
67.0	17.60	35.99	26.14	191	.	.	.	.	.	.
68.0	17.59	36.00	26.15	190	.	.	.	.	.	.
69.0	17.59	36.00	26.15	190	.	.	.	.	.	.
70.0	17.59	35.98	26.13	191	.	.	.	.	.	.



GILLISS CRUISE STA 155X 24/04/79 19.5 GMT CONSEC STA 159

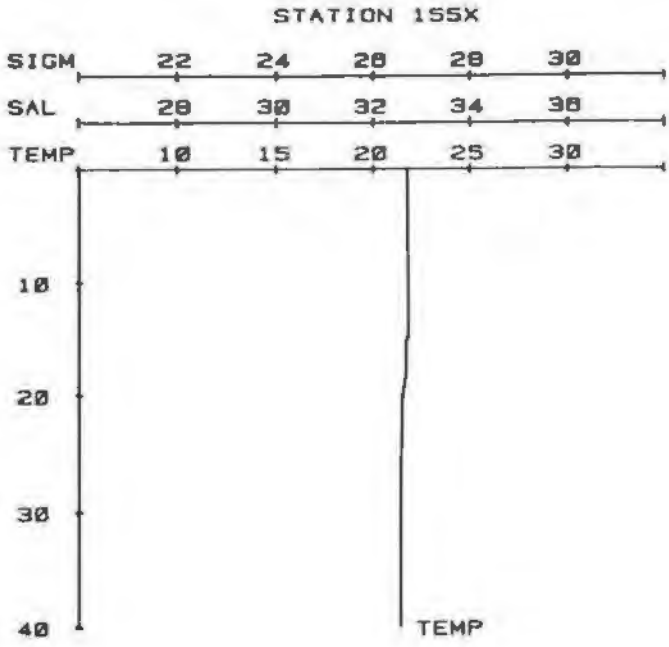
LAT 30 47.0W LONG 88 23.3W DEPTH = 48M DIST LAST STA = 33.4KM

WEATHER DATA
WIND SPEED = 21KTS
WIND DIRECTION = 110
AIR TEMP = 23.3C
WEATHER CODE = X2
BAROMETRIC PRES= 1016.9

SEA STATE = 4
WAVE DIRECTION = 130
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.0	.	.	.	.	.	.	.	.	.
5.0	21.0	.	.	.	.	.	.	.	.	.
15.0	21.7	.	.	.	.	.	.	.	.	.
18.0	21.7	.	.	.	.	.	.	.	.	.
20.0	21.5	.	.	.	.	.	.	.	.	.
26.0	21.4	.	.	.	.	.	.	.	.	.
40.0	21.4	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 156C 24/04/79 20.6 GMT CONSEC STA 160

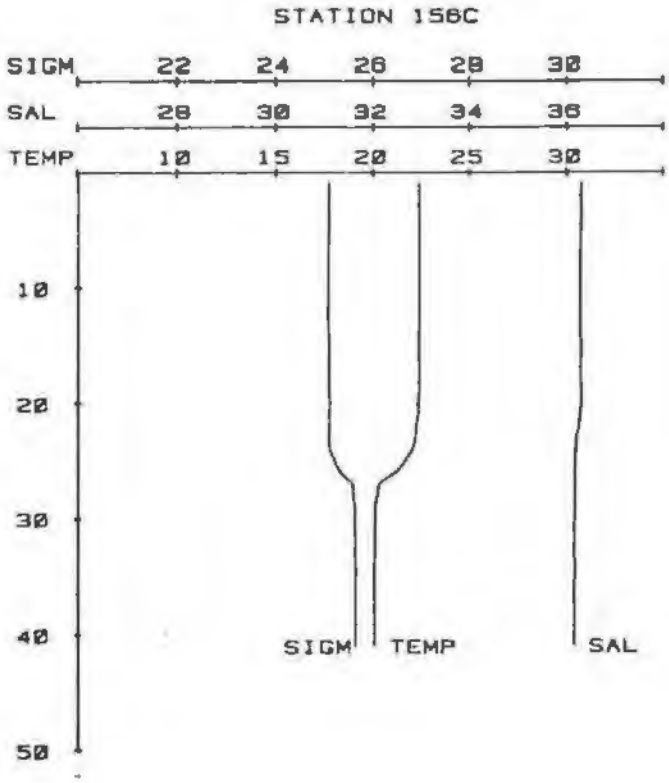
LAT 30 45.3W LONG 88 16.0W DEPTH = 43M DIST LAST STA = 10.0KM

WEATHER DATA
WIND SPEED = 24KTS
WIND DIRECTION = 110
AIR TEMP = 22.8C
WEATHER CODE = X2
BAROMETRIC PRES= 1016.6

SEA STATE = 5
WAVE DIRECTION = 120
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	22.41	34.29	25.89	288	.	.	.			
2.0	22.41	36.28	25.88	289	.	.	.			
3.0	22.41	34.29	25.89	288	.	.	.			
4.0	22.41	36.29	25.89	286	.	.	.	.	.	.
5.0	22.41	36.28	25.88	289	.	.	.			
6.0	22.41	36.28	25.88	289	.	.	.	0.87	0.0	1.6
7.0	22.42	36.27	25.87	290	.	.	.	.	.	.
8.0	22.41	36.28	25.88	289	.	.	.	.	.	.
9.0	22.41	36.27	25.87	290	.	.	.	.	.	.
10.0	22.41	36.27	25.87	290	.	.	.			
11.0	22.41	36.28	25.88	289	.	.	.			.
12.0	22.41	36.27	25.87	290	.	.	.			
13.0	22.40	36.28	25.88	289	.	.	.			.
14.0	22.39	36.27	25.88	289	.	.	.			
15.0	22.38	36.38	25.11	287	.	.	.	.	.	.
16.0	22.39	36.28	25.89	289	.	.	.	.	.	.
17.0	22.40	34.28	25.88	289	.	.	.	.	.	
18.0	22.39	36.28	25.89	289	.	.	.			
19.0	22.37	36.29	25.10	288	.	.	.	0.84	0.0	0.3
20.0	22.33	36.29	25.11	287	.	.	.	.	.	.
21.0	22.33	36.24	25.89	289	.	.	.			
22.0	22.22	36.24	25.11	287	.	.	.	.		
23.0	22.17	36.18	25.87	290	.	.	.	.		
24.0	22.03	36.17	25.11	287	.	.	.	.		
25.0	21.63	36.16	25.21	278	.	.	.			
26.0	21.10	36.15	25.33	266	.	.	.			.
27.0	20.27	36.16	25.50	242	.	.	.			
28.0	20.18	36.15	25.60	241	.	.	.			
29.0	20.07	36.16	25.64	237	.	.	.			
30.0	20.00	36.14	25.62	239	.	.	.			
31.0	20.05	36.15	25.63	238	.	.	.	0.17	0.1	2.2
32.0	20.05	36.14	25.63	238	.	.	.			
33.0	20.05	36.14	25.63	238	.	.	.			
34.0	20.04	36.16	25.64	237	.	.	.			
35.0	20.04	36.15	25.64	237	.	.	.			
36.0	20.04	36.14	25.63	238	.	.	.			
37.0	20.04	36.14	25.63	238	.	.	.			.
38.0	20.03	36.15	25.64	237	.	.	.			
39.0	20.04	36.14	25.63	238	.	.	.			
40.0	20.04	36.14	25.63	238	.	.	.			
41.0	20.04	36.14	25.63	238	.	.	.	0.19	0.0	0.1



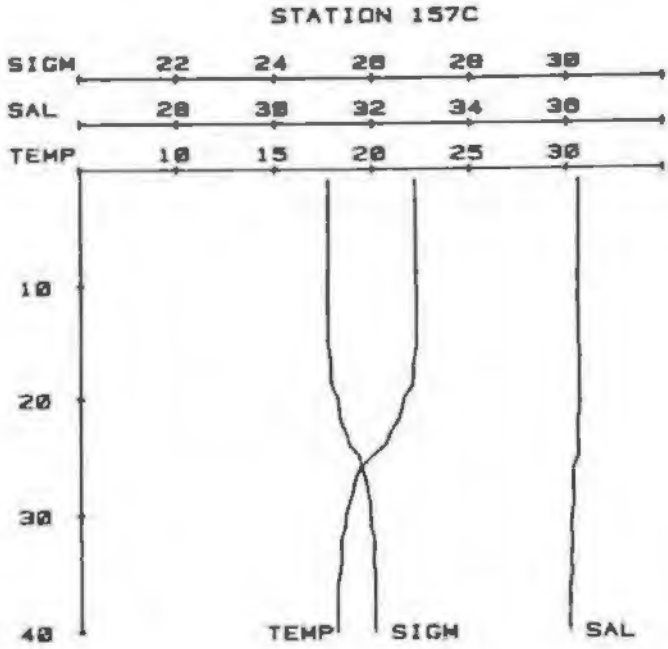
GILLISS COURSE STA 157C 24/04/79 21.0 GAT CONSEC STA 161

LAT 38 43.0N LONG 80 10.0W DEPTH = 44A DIST LAST STA = 18.3KM

WEATHER DATA

WIND SPEED	= 22KTS	SEA STATE	= 5
WIND DIRECTION	= 110	WAVE DIRECTION	= 120
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 12	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1016.6	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	σ	SVA	O2	O2*	AOU	PO4	NO3	SI
1.0	22.28	36.23	25.10	207	.	.	.	.	.	.
2.0	22.29	36.23	25.10	207	.	.	.	.	.	.
3.0	22.28	36.23	25.10	207	.	.	.	.	.	.
4.0	22.28	36.22	25.10	208	5.33	4.94	-0.39	0.05	0.0	0.7
5.0	22.21	36.23	25.10	207	.	.	.	.	.	.
6.0	22.21	36.23	25.10	207	.	.	.	.	.	.
7.0	22.21	36.22	25.09	208	.	.	.	.	.	.
8.0	22.21	36.23	25.10	207	.	.	.	.	.	.
9.0	22.21	36.18	25.08	210	.	.	.	.	.	.
10.0	22.21	36.22	25.09	208	.	.	.	.	.	.
11.0	22.21	36.20	25.08	211	.	.	.	.	.	.
12.0	22.21	36.22	25.09	208	.	.	.	.	.	.
13.0	22.20	36.22	25.10	208	.	.	.	.	.	.
14.0	22.21	36.22	25.09	208	.	.	.	.	.	.
15.0	22.21	36.22	25.09	208	.	.	.	.	.	.
16.0	22.15	36.25	25.13	205	.	.	.	.	.	.
17.0	22.03	36.24	25.16	202	.	.	.	.	.	.
18.0	22.05	36.24	25.15	203	5.19	4.95	-0.24	0.08	0.1	3.3
19.0	21.97	36.25	25.18	200	.	.	.	.	.	.
20.0	21.54	36.25	25.38	260	.	.	.	.	.	.
21.0	21.43	36.25	25.33	264	.	.	.	.	.	.
22.0	21.21	36.28	25.36	263	.	.	.	.	.	.
23.0	20.92	36.22	25.48	252	.	.	.	.	.	.
24.0	20.62	36.22	25.53	247	.	.	.	.	.	.
25.0	19.89	36.23	25.74	228	.	.	.	.	.	.
26.0	19.31	36.11	25.80	222	.	.	.	.	.	.
27.0	19.05	36.11	25.86	215	.	.	.	.	.	.
28.0	18.94	36.12	25.91	212	.	.	.	.	.	.
29.0	18.75	36.13	25.96	207	.	.	.	.	.	.
30.0	18.58	36.08	25.96	206	.	.	.	.	.	.
31.0	18.57	36.07	25.96	207	.	.	.	.	.	.
32.0	18.34	36.09	26.03	200	.	.	.	.	.	.
33.0	18.34	36.08	26.02	201	.	.	.	.	.	.
34.0	18.33	36.06	26.01	202	4.67	5.21	0.64	0.32	4.1	3.1
35.0	18.25	36.09	26.05	198	.	.	.	.	.	.
36.0	18.13	36.04	26.04	199	.	.	.	.	.	.
37.0	18.14	36.04	26.04	199	.	.	.	.	.	.
38.0	18.12	36.04	26.05	198	.	.	.	.	.	.
39.0	18.13	36.03	26.04	199	.	.	.	.	.	.
40.0	18.12	36.04	26.05	199	4.95	5.33	0.38	0.32	4.4	5.0



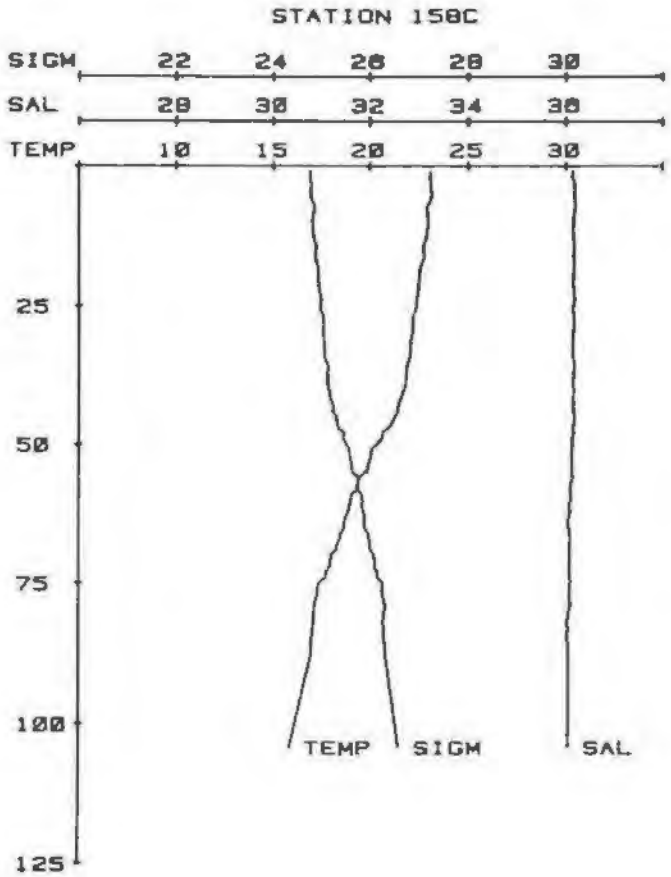
CILLISS CRUISE STA 158C 25/04/79 00.1 GMT CONSEC STA 162

LAT 38 42.4N LONG 79 58.5W DEPTH = 2358 DIST LAST STA = 19.5KM

WEATHER DATA

WIND SPEED	= 25KTS	SEA STATE	= 5
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 02	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1016.3	VISIBILITY CODE	=

					OBSERVATIONS						
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.07	36.14	24.79	317	.	.	.	.	.	.
2.0	23.07	36.14	24.79	317	.	.	.	.	.	.
3.0	23.09	36.18	24.81	315	.	.	.	.	.	.
4.0	23.11	36.18	24.80	315	.	.	.	0.09	0.3	3.0
5.0	23.14	36.18	24.80	314	.	.	.	.	.	.
6.0	23.08	36.19	24.82	314	.	.	.	.	.	.
7.0	22.91	36.20	24.88	309	.	.	.	.	.	.
8.0	22.91	36.19	24.86	310	.	.	.	.	.	.
9.0	22.93	36.16	24.84	312	.	.	.	.	.	.
10.0	22.96	36.16	24.83	313	.	.	.	.	.	.
11.0	22.93	36.14	24.84	312	.	.	.	.	.	.
12.0	22.87	36.16	24.86	311	.	.	.	.	.	.
13.0	22.85	36.16	24.86	310	.	.	.	.	.	.
14.0	22.73	36.18	24.91	305	.	.	.	.	.	.
15.0	22.74	36.18	24.91	306	.	.	.	.	.	.
16.0	22.76	36.16	24.89	308	.	.	.	.	.	.
17.0	22.73	36.18	24.91	305	.	.	.	.	.	.
18.0	22.56	36.17	24.96	302	.	.	.	.	.	.
19.0	22.53	36.16	24.96	302	.	.	.	.	.	.
20.0	22.54	36.16	24.95	302	.	.	.	.	.	.
21.0	22.47	36.16	24.97	300	.	.	.	.	.	.
22.0	22.47	36.16	24.97	300	.	.	.	.	.	.
23.0	22.41	36.18	25.01	297	.	.	.	.	.	.
24.0	22.37	36.19	25.03	295	.	.	.	.	.	.
25.0	22.34	36.15	25.00	298	.	.	.	.	.	.
26.0	22.32	36.15	25.01	297	.	.	.	.	.	.
27.0	22.15	36.17	25.07	291	.	.	.	.	.	.
28.0	22.17	36.18	25.07	291	.	.	.	.	.	.
29.0	22.14	36.17	25.08	291	.	.	.	.	.	.
30.0	22.14	36.15	25.06	292	.	.	.	.	.	.
31.0	22.06	36.16	25.09	289	.	.	.	.	.	.
32.0	22.04	36.14	25.08	290	.	.	.	0.10	0.2	1.0
33.0	22.04	36.16	25.10	289	.	.	.	.	.	.
34.0	22.01	36.14	25.09	289	.	.	.	.	.	.
35.0	21.99	36.17	25.12	287	.	.	.	.	.	.
36.0	21.96	36.19	25.17	282	.	.	.	.	.	.
37.0	21.87	36.17	25.15	284	.	.	.	.	.	.
38.0	21.83	36.17	25.16	283	.	.	.	.	.	.
39.0	21.85	36.16	25.15	284	.	.	.	.	.	.
40.0	21.77	36.17	25.18	281	.	.	.	.	.	.
41.0	21.67	36.18	25.21	278	.	.	.	.	.	.
42.0	21.56	36.15	25.22	277	.	.	.	.	.	.
43.0	21.44	36.18	25.28	272	.	.	.	.	.	.
44.0	21.44	36.15	25.26	274	.	.	.	.	.	.
45.0	21.25	36.20	25.35	265	.	.	.	0.12	1.1	2.5
46.0	21.15	36.18	25.36	264	.	.	.	.	.	.
47.0	20.99	36.15	25.38	262	.	.	.	.	.	.
48.0	20.65	36.18	25.51	251	.	.	.	.	.	.
49.0	20.63	36.14	25.47	254	.	.	.	.	.	.
50.0	20.37	36.15	25.55	246	.	.	.	.	.	.
51.0	20.09	36.13	25.61	241	.	.	.	.	.	.
52.0	20.07	36.13	25.61	240	.	.	.	.	.	.
53.0	19.98	36.14	25.64	237	.	.	.	.	.	.
54.0	19.98	36.13	25.64	236	.	.	.	.	.	.
55.0	19.85	36.14	25.68	234	.	.	.	.	.	.
56.0	19.44	36.15	25.79	223	.	.	.	.	.	.
57.0	19.39	36.11	25.78	225	.	.	.	.	.	.
58.0	19.34	36.10	25.78	224	.	.	.	.	.	.
59.0	19.06	36.11	25.86	217	.	.	.	.	.	.
60.0	19.02	36.12	25.88	215	.	.	.	0.35	5.3	4.0
61.0	18.95	36.07	25.86	217	.	.	.	.	.	.
62.0	18.89	36.10	25.90	213	.	.	.	.	.	.
63.0	18.76	36.08	25.92	212	.	.	.	.	.	.
64.0	18.68	36.04	25.91	213	.	.	.	.	.	.
65.0	18.69	36.07	25.93	211	.	.	.	.	.	.
66.0	18.51	36.10	25.99	206	.	.	.	.	.	.
67.0	18.43	36.10	26.01	203	.	.	.	.	.	.
68.0	18.31	36.09	26.04	200	.	.	.	.	.	.
69.0	18.28	36.09	26.04	200	.	.	.	0.39	6.2	3.7
70.0	18.08	36.09	26.11	193	.	.	.	.	.	.
71.0	17.96	36.10	26.13	191	.	.	.	.	.	.
72.0	17.96	36.08	26.12	193	.	.	.	.	.	.
73.0	17.75	36.09	26.18	187	.	.	.	.	.	.
74.0	17.74	36.09	26.18	187	.	.	.	.	.	.
75.0	17.38	36.11	26.28	177	.	.	.	.	.	.
76.0	17.31	36.09	26.28	177	.	.	.	.	.	.
77.0	17.31	36.08	26.29	176	.	.	.	.	.	.
78.0	17.19	36.10	26.32	174	.	.	.	.	.	.
79.0	17.15	36.12	26.35	171	.	.	.	.	.	.
80.0	17.14	36.07	26.31	175	.	.	.	.	.	.
81.0	17.12	36.06	26.31	175	.	.	.	.	.	.
82.0	17.09	36.03	26.29	177	.	.	.	.	.	.
83.0	17.08	36.06	26.32	174	.	.	.	.	.	.
84.0	17.05	36.04	26.31	175	.	.	.	.	.	.
85.0	17.00	36.04	26.33	173	.	.	.	.	.	.
86.0	17.00	36.07	26.34	172	.	.	.	.	.	.
87.0	17.00	36.06	26.34	173	.	.	.	.	.	.
88.0	16.96	36.07	26.35	171	.	.	.	.	.	.
104.0	15.87	36.07	26.61	147	.	.	.	0.71	11.6	6.2



GILLISS CRUISE STA 159X 25/04/79 01.8 GMT CONSEC STA 163

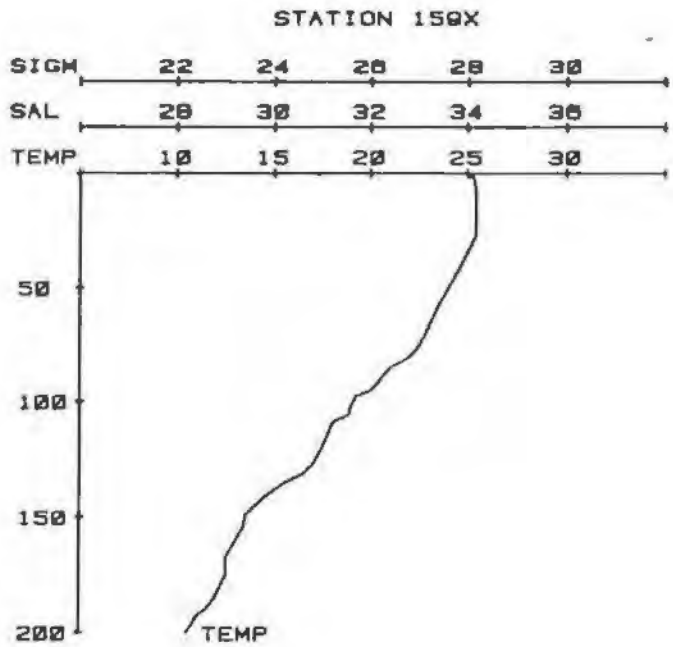
LAT 30 42.8N LONG 79 54.9W DEPTH = 329M DIST LAST STA = 5.8NM

WEATHER DATA

WIND SPEED	= 23KTS	SEA STATE	= 5
WIND DIRECTION	= 110	WAVE DIRECTION	= 110
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1016.9	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	25.0	.	.	.	.	.	.	.	.	.
2.0	25.3	.	.	.	.	.	.	.	.	.
6.0	25.4	.	.	.	.	.	.	.	.	.
27.0	25.4	.	.	.	.	.	.	.	.	.
34.0	25.0	.	.	.	.	.	.	.	.	.
42.0	24.5	.	.	.	.	.	.	.	.	.
50.0	24.0	.	.	.	.	.	.	.	.	.
57.0	23.5	.	.	.	.	.	.	.	.	.
66.0	23.0	.	.	.	.	.	.	.	.	.
75.0	22.5	.	.	.	.	.	.	.	.	.
80.0	22.0	.	.	.	.	.	.	.	.	.
83.0	21.5	.	.	.	.	.	.	.	.	.
85.0	21.0	.	.	.	.	.	.	.	.	.
90.0	20.5	.	.	.	.	.	.	.	.	.
95.0	20.0	.	.	.	.	.	.	.	.	.
97.0	19.5	.	.	.	.	.	.	.	.	.
98.0	19.2	.	.	.	.	.	.	.	.	.
101.0	19.0	.	.	.	.	.	.	.	.	.
106.0	18.0	.	.	.	.	.	.	.	.	.
107.0	18.5	.	.	.	.	.	.	.	.	.
109.0	18.0	.	.	.	.	.	.	.	.	.
119.0	17.5	.	.	.	.	.	.	.	.	.
127.0	17.0	.	.	.	.	.	.	.	.	.
131.0	16.5	.	.	.	.	.	.	.	.	.
133.0	16.0	.	.	.	.	.	.	.	.	.
135.0	15.5	.	.	.	.	.	.	.	.	.
138.0	15.0	.	.	.	.	.	.	.	.	.
141.0	14.5	.	.	.	.	.	.	.	.	.
145.0	14.0	.	.	.	.	.	.	.	.	.
149.0	13.5	.	.	.	.	.	.	.	.	.
154.0	13.4	.	.	.	.	.	.	.	.	.
168.0	13.0	.	.	.	.	.	.	.	.	.
167.0	12.5	.	.	.	.	.	.	.	.	.
175.0	12.5	.	.	.	.	.	.	.	.	.
184.0	12.0	.	.	.	.	.	.	.	.	.
190.0	11.5	.	.	.	.	.	.	.	.	.
193.0	11.0	.	.	.	.	.	.	.	.	.
200.0	10.5	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 160X 25/04/79 03.9 GMT CONSEC STA 164

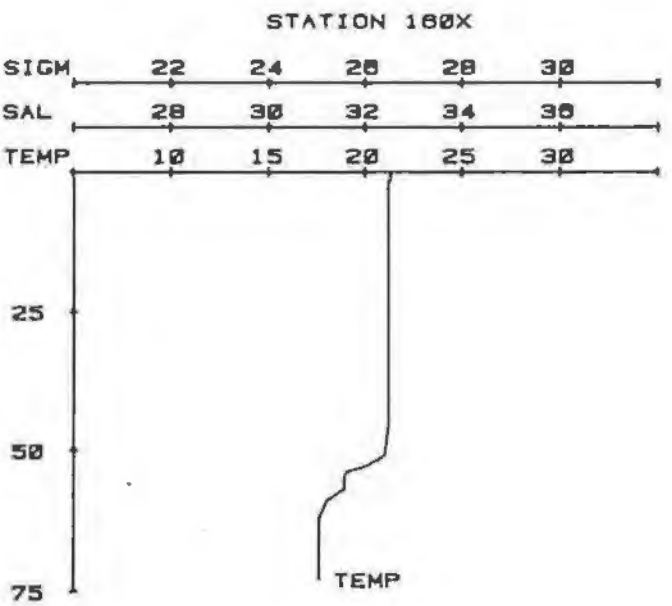
LAT . N LONG . W DEPTH = 73M DIST LAST STA = 8.0NM

WEATHER DATA

WIND SPEED	= KTS	SEA STATE	=
WIND DIRECTION	=	WAVE DIRECTION	=
AIR TEMP	= .C	CLOUD TYPE	=
WEATHER CODE	=	CLOUD AMOUNT	=
BAROMETRIC PRES	= 10 .	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.4	.	.	.	.	.	.	.	.	.
2.0	21.2	.	.	.	.	.	.	.	.	.
45.0	21.2	.	.	.	.	.	.	.	.	.
51.0	21.0	.	.	.	.	.	.	.	.	.
52.0	20.5	.	.	.	.	.	.	.	.	.
53.0	20.0	.	.	.	.	.	.	.	.	.
53.0	20.0	.	.	.	.	.	.	.	.	.
54.0	19.0	.	.	.	.	.	.	.	.	.
55.0	18.9	.	.	.	.	.	.	.	.	.
57.0	18.9	.	.	.	.	.	.	.	.	.
58.0	18.5	.	.	.	.	.	.	.	.	.
59.0	18.0	.	.	.	.	.	.	.	.	.
62.0	17.6	.	.	.	.	.	.	.	.	.
73.0	17.6	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 166X 26/04/79 21.7 GMT CONSEC STA 170

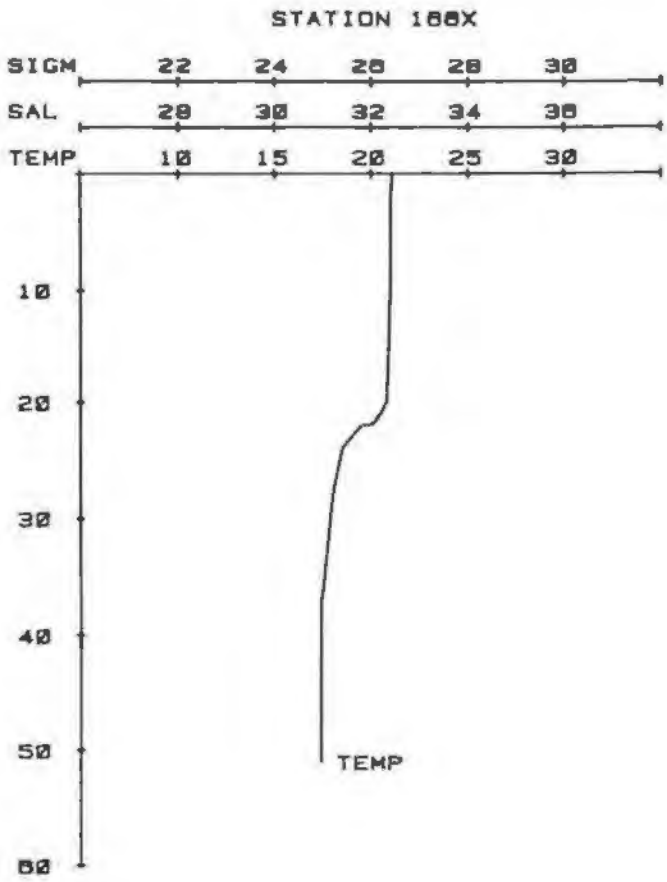
LAT 30 59.8N LONG 79 58.8W DEPTH = 51M DIST LAST STA = 0.0KM

WEATHER DATA

WIND SPEED	= 10KTS	SEA STATE	= 4
WIND DIRECTION	= 280	WAVE DIRECTION	= 210
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= 81	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1007.1	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.1	.	.	.	.	.	.	.	.	.
2.0	21.0	.	.	.	.	.	.	.	.	.
9.0	21.0	.	.	.	.	.	.	.	.	.
20.0	20.8	.	.	.	.	.	.	.	.	.
21.0	20.5	.	.	.	.	.	.	.	.	.
22.0	20.0	.	.	.	.	.	.	.	.	.
22.0	19.5	.	.	.	.	.	.	.	.	.
23.0	19.0	.	.	.	.	.	.	.	.	.
24.0	18.5	.	.	.	.	.	.	.	.	.
28.0	18.0	.	.	.	.	.	.	.	.	.
36.0	17.5	.	.	.	.	.	.	.	.	.
37.0	17.4	.	.	.	.	.	.	.	.	.
51.0	17.4	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 167X 26/04/79 22.2 GMT CONSEC STA 171

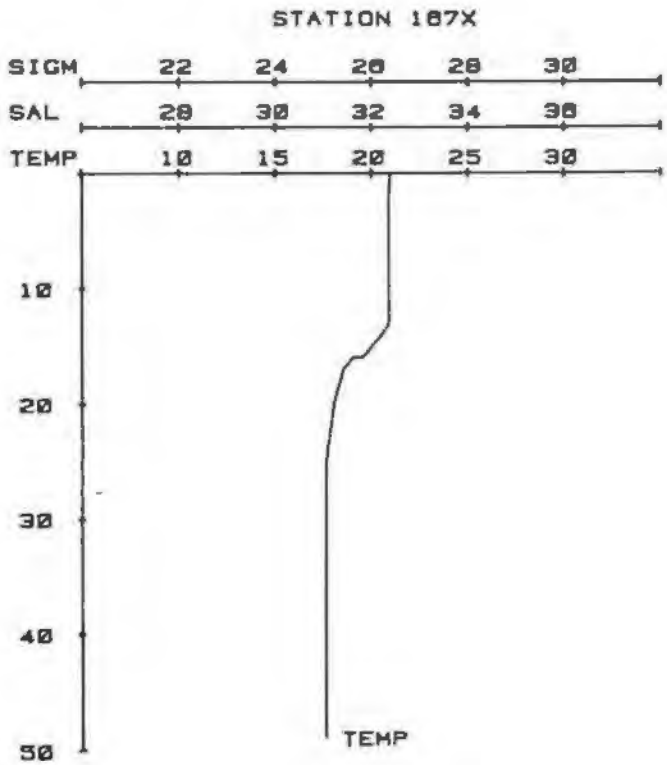
LAT 30 55.5N LONG 80 01.3W DEPTH = 49M DIST LAST STA = 8.9KM

WEATHER DATA

WIND SPEED	= 14KTS	SEA STATE	= 4
WIND DIRECTION	= 280	WAVE DIRECTION	= 190
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 82	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1007.8	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.0	.	.	.	.	.	.	.	.	.
2.0	20.9	.	.	.	.	.	.	.	.	.
13.0	20.9	.	.	.	.	.	.	.	.	.
14.0	20.5	.	.	.	.	.	.	.	.	.
15.0	20.0	.	.	.	.	.	.	.	.	.
16.0	19.5	.	.	.	.	.	.	.	.	.
16.0	19.0	.	.	.	.	.	.	.	.	.
17.0	18.5	.	.	.	.	.	.	.	.	.
20.0	18.0	.	.	.	.	.	.	.	.	.
35.0	17.4	.	.	.	.	.	.	.	.	.
49.0	17.6	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 168X 26/04/79 22.6 GMT CONSEC STA 172

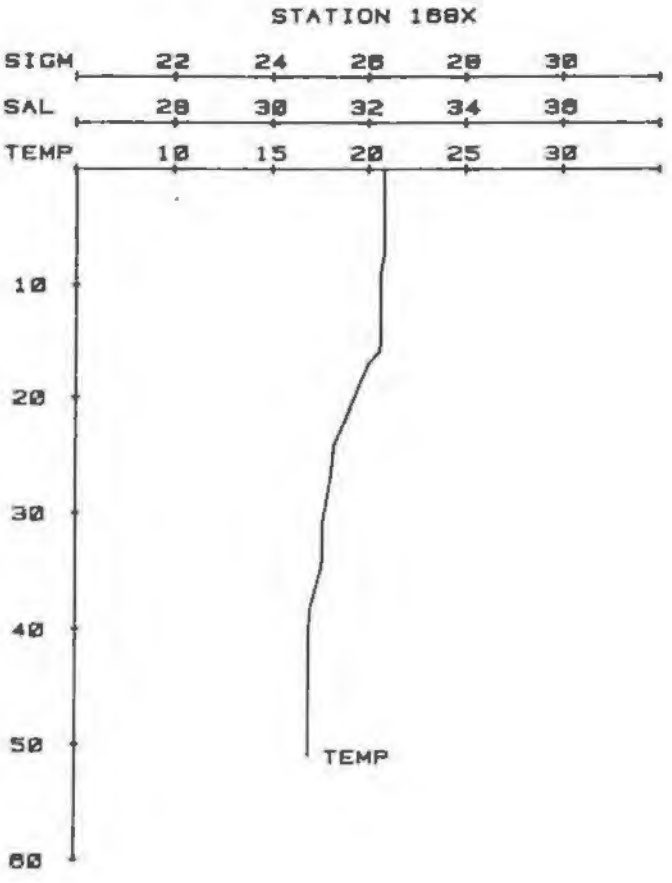
LAT 38 52.0N LONG 88 02.5W DEPTH = SIN DIST LAST STA = 6.0NM

WEATHER DATA

WIND SPEED	= 16KTS	SEA STATE	= 4
WIND DIRECTION	= 280	WAVE DIRECTION	= 190
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES=	1007.1	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SIGT	O2	O2'	AOU	PO4	NO3	SI
0.0	20.0	.	.	.	.	.	.	.	.	.
7.0	20.0	.	.	.	.	.	.	.	.	.
9.0	20.6	.	.	.	.	.	.	.	.	.
15.0	20.6	.	.	.	.	.	.	.	.	.
16.0	20.5	.	.	.	.	.	.	.	.	.
17.9	21.0	.	.	.	.	.	.	.	.	.
19.0	19.5	.	.	.	.	.	.	.	.	.
21.0	19.0	.	.	.	.	.	.	.	.	.
23.0	18.5	.	.	.	.	.	.	.	.	.
24.0	18.2	.	.	.	.	.	.	.	.	.
27.0	18.0	.	.	.	.	.	.	.	.	.
31.0	17.6	.	.	.	.	.	.	.	.	.
34.0	17.6	.	.	.	.	.	.	.	.	.
35.0	17.5	.	.	.	.	.	.	.	.	.
38.0	17.0	.	.	.	.	.	.	.	.	.
48.0	16.9	.	.	.	.	.	.	.	.	.
51.0	16.9	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 169X 26/04/79 23.8 GMT CONSEC STA 173

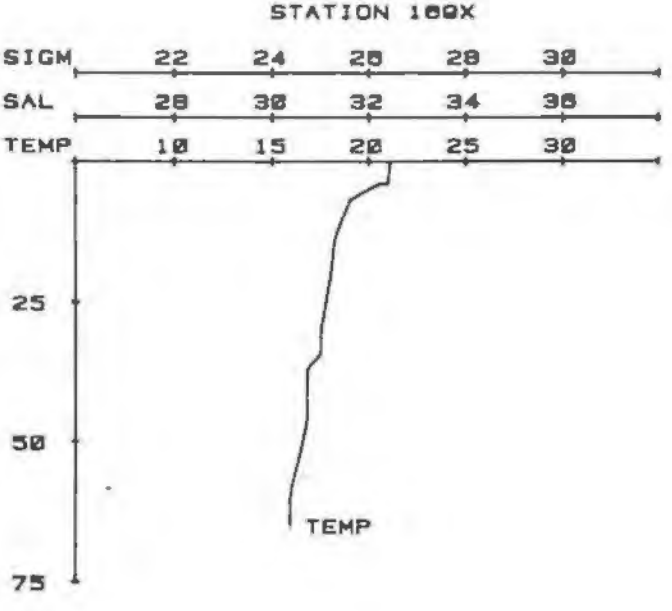
LAT 38 47.5N LONG 88 03.7W DEPTH = 65M DIST LAST STA = 8.6NM

WEATHER DATA

WIND SPEED	= 16KTS	SEA STATE	= 4
WIND DIRECTION	= 280	WAVE DIRECTION	= 190
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES=	1007.1	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SIGT	O2	O2'	AOU	PO4	NO3	SI
0.0	21.1	.	.	.	.	.	.	.	.	.
4.0	21.0	.	.	.	.	.	.	.	.	.
4.0	20.5	.	.	.	.	.	.	.	.	.
5.0	20.0	.	.	.	.	.	.	.	.	.
6.0	19.5	.	.	.	.	.	.	.	.	.
7.0	19.0	.	.	.	.	.	.	.	.	.
11.0	18.5	.	.	.	.	.	.	.	.	.
14.0	18.2	.	.	.	.	.	.	.	.	.
20.0	18.0	.	.	.	.	.	.	.	.	.
30.0	17.5	.	.	.	.	.	.	.	.	.
34.0	17.5	.	.	.	.	.	.	.	.	.
36.0	17.0	.	.	.	.	.	.	.	.	.
37.0	16.8	.	.	.	.	.	.	.	.	.
46.0	16.8	.	.	.	.	.	.	.	.	.
51.0	16.5	.	.	.	.	.	.	.	.	.
58.0	16.0	.	.	.	.	.	.	.	.	.
60.0	15.9	.	.	.	.	.	.	.	.	.
65.0	15.9	.	.	.	.	.	.	.	.	.



BILLISS CRUISE STA 170C 26/04/79 23.0 GMT CONSEC STA 17

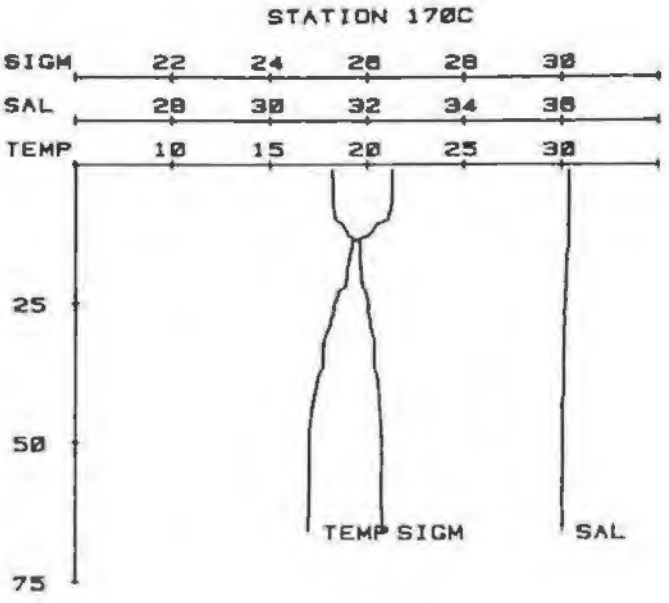
LAT 30 42.7N LONG 80 06.0W DEPTH = 70M DIST LAST STA = 9 NM

WEATHER DATA

WIND SPEED	= 1 KNTS	SEA STATE	= 3
WIND DIRECTION	= 280	WAVE DIRECTION	= 190
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1007.1	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	Q2	Q2'	ADU	PO4	NO3	SI
1.0	21.29	36.14	25.29	269	,	,	,	,	,	,
2.0	21.29	36.15	25.30	268	,	,	,	,	,	,
3.0	21.28	36.15	25.30	268	,	,	,	0.00	0.0	0.0
4.0	21.28	36.15	25.30	268	,	,	,	,	,	,
5.0	21.28	36.15	25.30	268	,	,	,	,	,	,
6.0	21.27	36.15	25.30	268	,	,	,	,	,	,
7.0	21.24	36.15	25.31	267	,	,	,	,	,	,
8.0	21.21	36.14	25.31	267	,	,	,	,	,	,
9.0	21.19	36.14	25.34	264	,	,	,	,	,	,
10.0	21.08	36.15	25.36	263	,	,	,	,	,	,
11.0	20.44	36.13	25.51	248	,	,	,	0.09	0.0	0.1
12.0	20.27	36.15	25.57	242	,	,	,	,	,	,
13.0	20.03	36.14	25.63	237	,	,	,	,	,	,
14.0	19.28	36.14	25.85	216	,	,	,	0.19	1.0	1.4
15.0	19.18	36.15	25.86	215	,	,	,	,	,	,
16.0	19.18	36.18	25.84	217	,	,	,	,	,	,
17.0	19.04	36.18	25.86	216	,	,	,	,	,	,
18.0	18.99	36.18	25.87	214	,	,	,	,	,	,
19.0	18.93	36.09	25.88	213	,	,	,	,	,	,
20.0	18.92	36.18	25.89	213	,	,	,	,	,	,
21.0	18.86	36.08	25.89	213	,	,	,	,	,	,
22.0	18.82	36.19	25.92	210	,	,	,	0.37	4.5	3.2
23.0	18.46	36.07	25.98	204	,	,	,	,	,	,
24.0	18.45	36.08	25.99	203	,	,	,	,	,	,
25.0	18.26	36.08	26.04	198	,	,	,	,	,	,
26.0	18.27	36.05	26.02	201	,	,	,	,	,	,
27.0	18.18	36.05	26.04	199	,	,	,	,	,	,
28.0	18.08	36.06	26.07	196	,	,	,	,	,	,
29.0	18.05	36.05	26.07	196	,	,	,	,	,	,
30.0	17.91	36.04	26.10	193	,	,	,	,	,	,
31.0	17.79	36.05	26.14	190	,	,	,	,	,	,
32.0	17.71	36.05	26.16	188	,	,	,	,	,	,
33.0	17.70	36.04	26.15	188	,	,	,	,	,	,
34.0	17.69	36.04	26.15	188	,	,	,	,	,	,
35.0	17.69	36.04	26.15	188	,	,	,	,	,	,
36.0	17.68	36.03	26.15	189	,	,	,	,	,	,
37.0	17.67	36.04	26.16	188	,	,	,	,	,	,
38.0	17.49	36.05	26.21	183	,	,	,	,	,	,
39.0	17.39	36.04	26.23	181	,	,	,	,	,	,
40.0	17.37	36.04	26.23	181	,	,	,	,	,	,
41.0	17.31	36.04	26.25	179	,	,	,	,	,	,
42.0	17.25	36.05	26.27	178	,	,	,	,	,	,
43.0	17.19	36.08	26.25	180	,	,	,	,	,	,
44.0	17.12	36.01	26.27	178	,	,	,	,	,	,
45.0	17.08	36.01	26.28	177	,	,	,	0.44	6.2	4.2
46.0	17.06	36.01	26.28	176	,	,	,	,	,	,
47.0	17.08	36.01	26.30	175	,	,	,	,	,	,
48.0	17.08	36.01	26.30	175	,	,	,	,	,	,
49.0	16.99	36.02	26.31	174	,	,	,	,	,	,
50.0	17.08	36.02	26.31	174	,	,	,	,	,	,
51.0	17.08	36.01	26.30	175	,	,	,	,	,	,
52.0	17.08	36.02	26.31	174	,	,	,	,	,	,
53.0	17.08	36.02	26.31	174	,	,	,	,	,	,
54.0	16.98	36.02	26.31	174	,	,	,	,	,	,
55.0	16.99	36.01	26.30	175	,	,	,	,	,	,
56.0	16.98	36.01	26.30	175	,	,	,	,	,	,
57.0	16.99	36.00	26.29	176	,	,	,	,	,	,
58.0	16.99	36.02	26.31	174	,	,	,	,	,	,
59.0	16.96	36.00	26.30	175	,	,	,	,	,	,
60.0	16.96	36.01	26.31	174	,	,	,	0.53	7.7	5.0
61.0	16.96	36.00	26.30	175	,	,	,	,	,	,
62.0	16.96	36.01	26.31	174	,	,	,	,	,	,
63.0	16.96	36.02	26.31	174	,	,	,	,	,	,
64.0	16.93	36.02	26.32	173	,	,	,	,	,	,
65.0	16.93	36.01	26.31	174	,	,	,	,	,	,
66.0	16.89	36.00	26.32	174	,	,	,	,	,	,



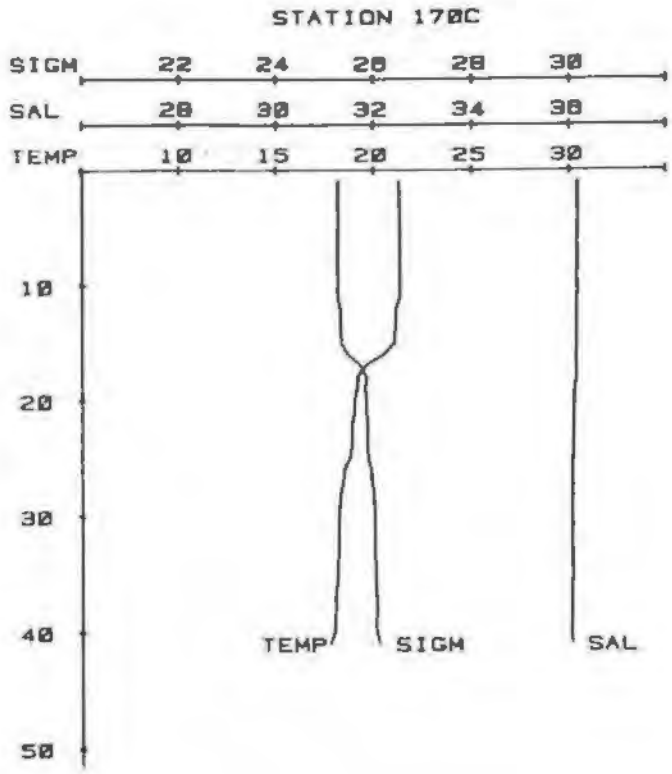
GILLISS CRUISE STA 170C 27/04/79 01.6 GMT CONSEC STA 175

LAT 30 42.5N LONG 88 05.0W DEPTH = 65M DIST LAST STA = 8.5KM

WEATHER DATA

WIND SPEED	= 14KTS	SEA STATE	= 3
WIND DIRECTION	= 260	WAVE DIRECTION	= 190
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1007.5	VISIBILITY CODE	=

				OBSERVATIONS						
Z	T	S	D	SVA	O2	O2*	AOU	PO4	NO3	SI
1.0	21.34	36.16	25.29	269	.	.	.	.	.	.
2.0	21.34	36.16	25.29	269	.	.	.	.	.	.
3.0	21.34	36.16	25.29	269	.	.	.	.	.	.
4.0	21.35	36.16	25.29	269	.	.	.	.	.	.
5.0	21.35	36.16	25.29	269	.	.	.	.	.	.
6.0	21.35	36.15	25.28	270	.	.	.	.	.	.
7.0	21.35	36.16	25.29	269	.	.	.	.	.	.
8.0	21.35	36.16	25.29	270	.	.	.	.	.	.
9.0	21.35	36.15	25.28	270	.	.	.	.	.	.
10.0	21.35	36.16	25.29	270	.	.	.	.	.	.
11.0	21.35	36.15	25.28	270	.	.	.	.	.	.
12.0	21.12	36.15	25.34	264	.	.	.	.	.	.
13.0	21.12	36.15	25.34	264	.	.	.	.	.	.
14.0	21.06	36.14	25.35	264	.	.	.	.	.	.
15.0	21.03	36.15	25.37	262	.	.	.	.	.	.
16.0	20.58	36.13	25.48	252	.	.	.	.	.	.
17.0	19.64	36.14	25.73	227	.	.	.	.	.	.
18.0	19.17	36.15	25.86	215	.	.	.	.	.	.
19.0	19.14	36.18	25.83	218	.	.	.	.	.	.
20.0	19.01	36.18	25.87	215	.	.	.	.	.	.
21.0	18.99	36.19	25.86	215	.	.	.	.	.	.
22.0	18.89	36.19	25.89	213	.	.	.	.	.	.
23.0	18.88	36.18	25.89	213	.	.	.	.	.	.
24.0	18.87	36.18	25.89	213	.	.	.	.	.	.
25.0	18.72	36.17	25.91	211	.	.	.	.	.	.
26.0	18.58	36.16	25.97	206	.	.	.	.	.	.
27.0	18.44	36.16	25.98	204	.	.	.	.	.	.
28.0	18.32	36.17	26.02	201	.	.	.	.	.	.
29.0	18.24	36.19	26.02	201	.	.	.	.	.	.
30.0	18.22	36.16	26.04	199	.	.	.	.	.	.
31.0	18.20	36.16	26.04	199	.	.	.	.	.	.
32.0	18.20	36.15	26.03	199	.	.	.	.	.	.
33.0	18.20	36.16	26.04	199	.	.	.	.	.	.
34.0	18.16	36.16	26.05	198	.	.	.	.	.	.
35.0	18.17	36.16	26.05	198	.	.	.	.	.	.
36.0	18.09	36.15	26.06	197	.	.	.	.	.	.
37.0	18.04	36.15	26.07	196	.	.	.	.	.	.
38.0	18.04	36.15	26.07	196	.	.	.	.	.	.
39.0	18.02	36.14	26.07	196	.	.	.	.	.	.
40.0	17.99	36.13	26.07	196	.	.	.	.	.	.
41.0	17.98	36.16	26.14	198	.	.	.	.	.	.



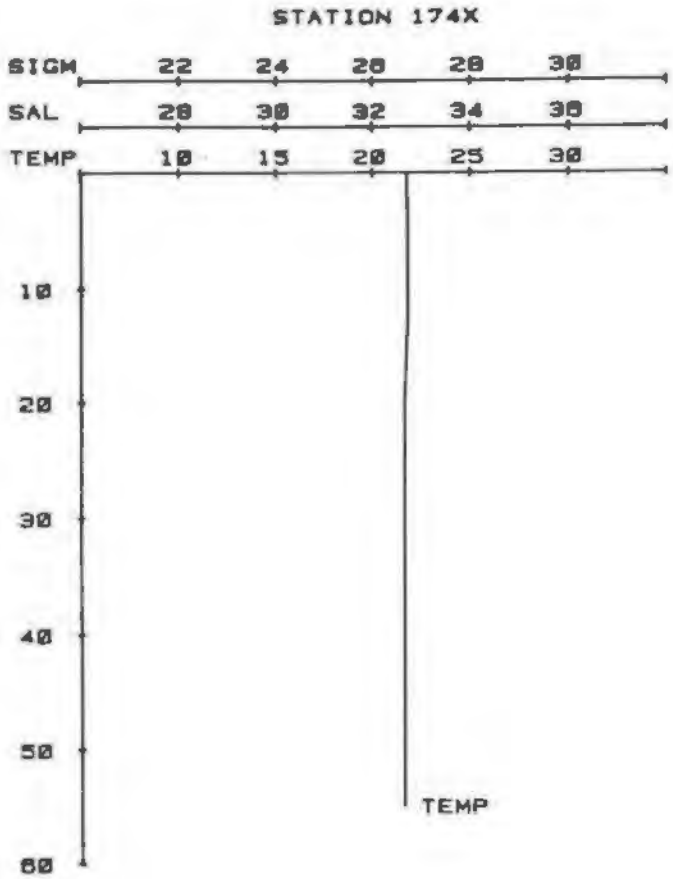
GILLISS CRUISE STA 174X 27/04/79 04.2 GMT CONSEC STA 179

LAT 38 46.9N LONG 80 23.4W DEPTH = 55M DIST LAST STA = 29.2NM

WEATHER DATA
WIND SPEED = 24KTS
WIND DIRECTION = 220
AIR TEMP = 22.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1007.8
SEA STATE = 3
WAVE DIRECTION = 220
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	21.0	.	.	.	.	.	.	.	.	.
12.0	21.0	.	.	.	.	.	.	.	.	.
29.0	21.6	.	.	.	.	.	.	.	.	.
55.0	21.6	.	.	.	.	.	.	.	.	.



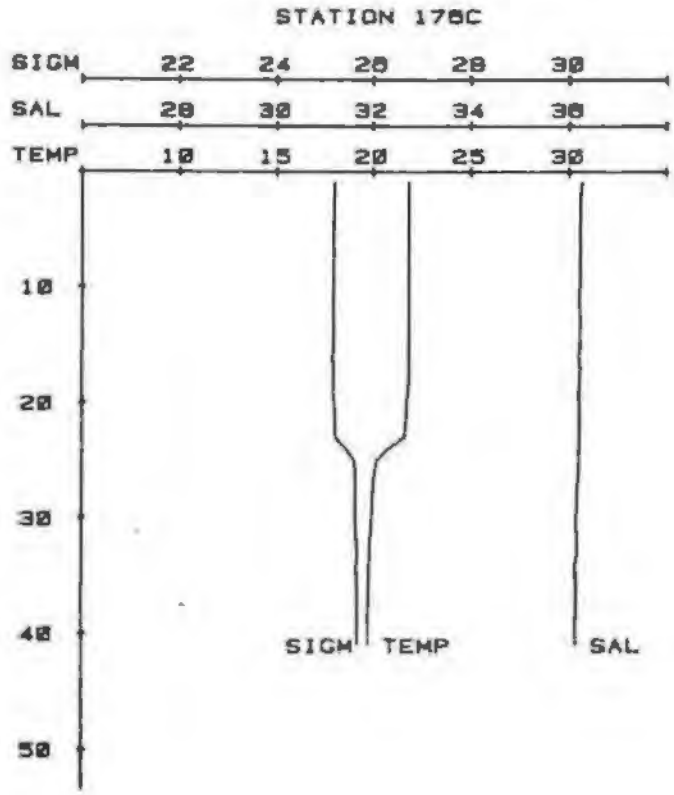
GILLISS CRUISE STA 176C 27/04/79 05.1 GMT CONSEC STA 181

LAT 38 45.2N LONG 80 16.4W DEPTH = 43M DIST LAST STA = 11.6NM

WEATHER DATA
WIND SPEED = 1KTS
WIND DIRECTION = 220
AIR TEMP = 22.2C
WEATHER CODE = 31
BAROMETRIC PRES= 1008.0
SEA STATE = 3
WAVE DIRECTION = 220
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
1.0	21.05	34.25	25.22	276	.	.	.	.	.	.
2.0	21.05	34.23	25.20	277	.	.	.	.	.	.
3.0	21.05	34.23	25.20	278	.	.	.	0.10	0.2	1.5
4.0	21.05	34.23	25.20	278	.	.	.	.	.	.
5.0	21.05	34.22	25.19	278	.	.	.	.	.	.
6.0	21.05	34.23	25.20	278	.	.	.	.	.	.
7.0	21.05	34.23	25.20	278	.	.	.	.	.	.
8.0	21.05	34.22	25.19	278	.	.	.	.	.	.
9.0	21.05	34.23	25.20	278	.	.	.	.	.	.
10.0	21.05	34.22	25.19	279	.	.	.	.	.	.
11.0	21.05	34.21	25.19	279	.	.	.	.	.	.
12.0	21.05	34.22	25.19	279	.	.	.	.	.	.
13.0	21.05	34.23	25.20	278	.	.	.	.	.	.
14.0	21.05	34.22	25.19	279	.	.	.	.	.	.
15.0	21.04	34.23	25.21	278	.	.	.	.	.	.
16.0	21.05	34.20	25.18	280	.	.	.	.	.	.
17.0	21.05	34.23	25.20	278	.	.	.	.	.	.
18.0	21.05	34.22	25.19	279	.	.	.	.	.	.
19.0	21.04	34.20	25.19	279	.	.	.	.	.	.
20.0	21.74	34.21	25.22	277	.	.	.	.	.	.
21.0	21.72	34.22	25.23	275	.	.	.	0.07	0.6	0.8
22.0	21.69	34.21	25.23	275	.	.	.	.	.	.
23.0	21.63	34.21	25.25	274	.	.	.	.	.	.
24.0	20.76	34.20	25.48	252	.	.	.	.	.	.
25.0	20.19	34.20	25.63	237	.	.	.	.	.	.
26.0	20.09	34.20	25.64	235	.	.	.	.	.	.
27.0	20.01	34.17	25.64	235	.	.	.	.	.	.
28.0	20.00	34.16	25.65	235	.	.	.	0.05	1.0	2.1
29.0	19.97	34.16	25.66	235	.	.	.	.	.	.
30.0	19.93	34.14	25.66	235	.	.	.	.	.	.
31.0	19.91	34.16	25.68	232	.	.	.	.	.	.
32.0	19.86	34.16	25.69	232	.	.	.	.	.	.
33.0	19.83	34.17	25.71	231	.	.	.	.	.	.
34.0	19.81	34.13	25.68	233	.	.	.	.	.	.
35.0	19.81	34.14	25.69	232	.	.	.	.	.	.
36.0	19.79	34.15	25.70	231	.	.	.	.	.	.
37.0	19.78	34.15	25.70	231	.	.	.	.	.	.
38.0	19.77	34.14	25.70	231	.	.	.	.	.	.
39.0	19.75	34.14	25.71	231	.	.	.	.	.	.
40.0	19.74	34.13	25.70	232	.	.	.	0.13	0.8	1.6
41.0	19.74	34.13	25.70	232	.	.	.	.	.	.



GILLISS CRUISE STA 177C 27/04/79 05.9 GMT CONSEC STA 182

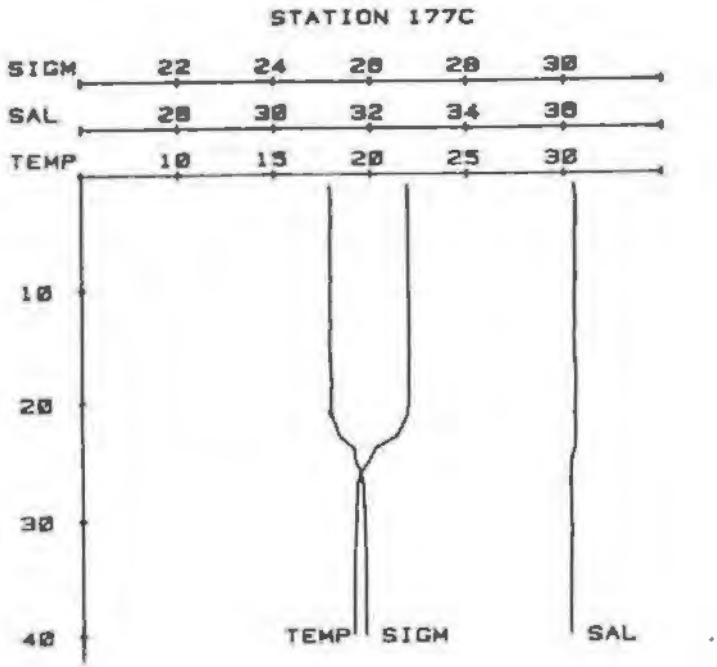
LAT 38 43.0m LONG 68 41.0W DEPTH = 41M DIST LAST STA = 9.0KM

WEATHER DATA

WIND SPEED	= KNOTS	SEA STATE	= 1
WIND DIRECTION	= 220	WAVE DIRECTION	= 220
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1000.0	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SIGMA	O2	O2*	AOU	PO4	NO3	SI
1.0	21.93	34.19	25.15	202	.	.	.	.	.	.
2.0	21.93	34.23	25.18	200	.	.	.	.	.	.
3.0	21.93	34.21	25.16	201	.	.	.	0.05	0.0	0.0
4.0	21.93	34.23	25.18	200	.	.	.	.	.	.
5.0	21.93	34.20	25.16	202	.	.	.	.	.	.
6.0	21.93	34.21	25.16	201	.	.	.	.	.	.
7.0	21.93	34.21	25.16	201	.	.	.	.	.	.
8.0	21.93	34.22	25.17	201	.	.	.	.	.	.
9.0	21.93	34.22	25.17	201	.	.	.	.	.	.
10.0	21.93	34.20	25.16	202	.	.	.	.	.	.
11.0	21.93	34.20	25.16	202	.	.	.	.	.	.
12.0	21.93	34.20	25.16	202	.	.	.	.	.	.
13.0	21.93	34.22	25.17	201	.	.	.	.	.	.
14.0	21.93	34.18	25.14	204	.	.	.	.	.	.
15.0	21.93	34.20	25.16	202	.	.	.	.	.	.
16.0	21.93	34.20	25.16	202	.	.	.	.	.	.
17.0	21.92	34.22	25.18	201	.	.	.	.	.	.
18.0	21.91	34.23	25.19	200	.	.	.	.	.	.
19.0	21.92	34.22	25.18	201	.	.	.	.	.	.
20.0	21.91	34.21	25.17	201	.	.	.	.	.	.
21.0	21.84	34.26	25.18	200	.	.	.	.	.	.
22.0	21.59	34.22	25.22	202	.	.	.	0.22	1.6	3.2
23.0	21.26	34.21	25.35	204	.	.	.	.	.	.
24.0	20.16	34.20	25.64	206	.	.	.	.	.	.
25.0	19.84	34.12	25.67	214	.	.	.	.	.	.
26.0	19.48	34.11	25.77	224	.	.	.	.	.	.
27.0	19.19	34.11	25.83	219	.	.	.	.	.	.
28.0	19.10	34.11	25.83	219	.	.	.	.	.	.
29.0	19.14	34.12	25.85	217	.	.	.	.	.	.
30.0	19.14	34.11	25.84	218	.	.	.	0.24	2.4	3.8
31.0	19.10	34.13	25.87	215	.	.	.	.	.	.
32.0	19.07	34.11	25.86	216	.	.	.	.	.	.
33.0	19.05	34.12	25.87	215	.	.	.	.	.	.
34.0	19.04	34.10	25.86	216	.	.	.	.	.	.
35.0	19.03	34.10	25.86	216	.	.	.	.	.	.
36.0	19.03	34.10	25.86	216	.	.	.	.	.	.
37.0	19.02	34.09	25.86	217	.	.	.	.	.	.
38.0	19.02	34.10	25.86	216	.	.	.	.	.	.
39.0	19.01	34.10	25.87	216	.	.	.	.	.	.
40.0	19.01	34.10	25.87	216	.	.	.	0.24	2.2	3.7

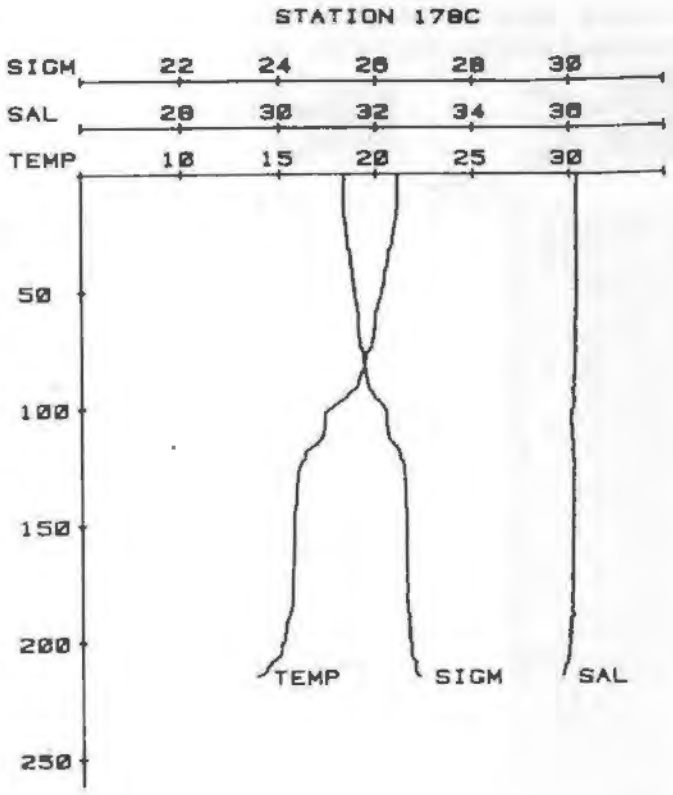


CTLISS CRUISE STA 178C 27/04/79 07.3 GMT CONSEC STA 183

LAT 39 41.6N LONG 79 59.2W DEPTH = 2426 DIST LAST STA = 19.2NM

WEATHER DATA
WIND SPEED = 28KTS
WIND DIRECTION = 220
AIR TEMP = 22.2C
WEATHER CODE = X1
BAROMETRIC PRES= 1000.0
SEA STATE = 3
WAVE DIRECTION = 220
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.12	36.16	25.35	263	.	.	.	.	.	.
2.0	21.12	36.16	25.35	263	.	.	.	.	.	.
3.0	21.11	36.15	25.35	264	.	.	.	1.47	0.2	0.5
4.0	21.11	36.15	25.35	264	.	.	.	.	.	.
5.0	21.11	36.14	25.34	265	.	.	.	.	.	.
6.0	21.11	36.13	25.33	265	.	.	.	.	.	.
7.0	21.11	36.14	25.34	265	.	.	.	.	.	.
8.0	21.11	36.14	25.34	265	.	.	.	.	.	.
9.0	21.11	36.14	25.34	265	.	.	.	.	.	.
10.0	21.10	36.14	25.34	264	.	.	.	.	.	.
11.0	21.11	36.14	25.34	265	.	.	.	.	.	.
12.0	21.11	36.14	25.34	265	.	.	.	.	.	.
13.0	21.11	36.14	25.34	265	.	.	.	.	.	.
14.0	21.09	36.14	25.34	264	.	.	.	.	.	.
15.0	21.07	36.14	25.35	264	.	.	.	.	.	.
16.0	21.06	36.13	25.35	264	.	.	.	.	.	.
17.0	21.07	36.14	25.35	264	.	.	.	.	.	.
18.0	21.06	36.14	25.35	264	.	.	.	.	.	.
19.0	21.02	36.14	25.36	263	.	.	.	.	.	.
20.0	21.01	36.14	25.37	263	.	.	.	.	.	.
21.0	20.95	36.14	25.38	261	.	.	.	.	.	.
22.0	20.94	36.14	25.39	261	.	.	.	.	.	.
23.0	20.93	36.13	25.38	261	.	.	.	.	.	.
24.0	20.90	36.14	25.40	260	.	.	.	.	.	.
25.0	20.89	36.13	25.39	260	.	.	.	.	.	.
26.0	20.86	36.14	25.41	259	.	.	.	.	.	.
27.0	20.85	36.13	25.40	259	.	.	.	.	.	.
28.0	20.83	36.14	25.42	258	.	.	.	.	.	.
29.0	20.82	36.14	25.42	258	.	.	.	.	.	.
30.0	20.81	36.14	25.42	258	.	.	.	.	.	.
31.0	20.77	36.14	25.43	257	.	.	.	.	.	.
32.0	20.75	36.12	25.42	258	.	.	.	.	.	.
33.0	20.64	36.14	25.47	253	.	.	.	.	.	.
34.0	20.62	36.14	25.47	253	.	.	.	.	.	.
35.0	20.60	36.15	25.49	252	.	.	.	.	.	.
36.0	20.58	36.14	25.48	252	.	.	.	.	.	.
37.0	20.57	36.13	25.48	252	.	.	.	.	.	.
38.0	20.56	36.14	25.49	252	.	.	.	.	.	.
39.0	20.55	36.14	25.49	251	.	.	.	.	.	.
40.0	20.51	36.14	25.50	250	.	.	.	.	.	.
41.0	20.45	36.15	25.53	248	.	.	.	.	.	.
42.0	20.42	36.14	25.53	248	.	.	.	.	.	.
43.0	20.42	36.13	25.52	249	.	.	.	.	.	.
44.0	20.41	36.13	25.52	249	.	.	.	.	.	.
45.0	20.39	36.13	25.53	248	.	.	.	.	.	.
46.0	20.39	36.15	25.54	247	.	.	.	.	.	.
47.0	20.38	36.13	25.53	248	.	.	.	.	.	.
48.0	20.34	36.14	25.54	247	.	.	.	.	.	.
49.0	20.29	36.15	25.57	244	.	.	.	.	.	.
50.0	20.27	36.12	25.55	246	.	.	.	.	.	.
51.0	20.25	36.14	25.57	244	.	.	.	.	.	.
52.0	20.23	36.13	25.57	244	.	.	.	.	.	.
53.0	20.19	36.13	25.58	243	.	.	.	.	.	.
54.0	20.16	36.13	25.59	243	.	.	.	.	.	.
55.0	20.10	36.13	25.61	241	.	.	.	.	.	.
56.0	20.10	36.13	25.60	241	.	.	.	.	.	.
57.0	20.04	36.13	25.62	240	.	.	.	.	.	.
58.0	20.03	36.13	25.62	239	.	.	.	.	.	.
59.0	19.95	36.11	25.63	239	.	.	.	.	.	.
60.0	19.95	36.13	25.64	238	.	.	.	.	.	.
61.0	19.94	36.12	25.64	238	.	.	.	.	.	.
62.0	19.93	36.11	25.63	239	.	.	.	.	.	.
63.0	19.91	36.11	25.64	238	.	.	.	.	.	.
64.0	19.91	36.11	25.64	238	.	.	.	.	.	.
65.0	19.91	36.09	25.62	241	.	.	.	.	.	.
66.0	19.91	36.11	25.64	238	.	.	.	.	.	.
67.0	19.87	36.09	25.64	239	.	.	.	.	.	.
68.0	19.87	36.12	25.66	237	.	.	.	.	.	.
69.0	19.86	36.10	25.65	238	.	.	.	.	.	.
70.0	19.84	36.12	25.67	236	.	.	.	.	.	.
71.0	19.79	36.10	25.66	236	.	.	.	.	.	.
72.0	19.76	36.12	25.69	234	.	.	.	.	.	.
73.0	19.76	36.10	25.67	235	.	.	.	0.20	1.0	1.0
74.0	19.74	36.10	25.68	235	.	.	.	.	.	.
75.0	19.66	36.13	25.72	231	.	.	.	.	.	.
76.0	19.53	36.10	25.73	230	.	.	.	.	.	.
77.0	19.46	36.12	25.77	227	.	.	.	.	.	.
78.0	19.46	36.10	25.75	228	.	.	.	.	.	.
79.0	19.44	36.09	25.75	228	.	.	.	.	.	.
80.0	19.43	36.10	25.76	227	.	.	.	.	.	.
81.0	19.40	36.09	25.76	227	.	.	.	.	.	.
82.0	19.38	36.09	25.76	227	.	.	.	.	.	.
83.0	19.34	36.10	25.78	225	.	.	.	.	.	.
84.0	19.29	36.10	25.79	224	.	.	.	.	.	.
85.0	19.21	36.09	25.81	223	.	.	.	.	.	.
86.0	19.19	36.09	25.81	222	.	.	.	.	.	.
87.0	19.11	36.07	25.82	222	.	.	.	.	.	.
88.0	19.09	36.08	25.83	221	.	.	.	.	.	.
89.0	19.04	36.07	25.84	220	.	.	.	.	.	.
90.0	19.03	36.08	25.85	219	.	.	.	.	.	.
91.0	18.98	36.08	25.86	218	.	.	.	.	.	.
92.0	18.91	36.08	25.88	216	.	.	.	.	.	.
93.0	18.67	36.05	25.92	213	.	.	.	.	.	.
94.0	18.57	36.06	25.95	210	.	.	.	.	.	.
95.0	18.40	36.06	25.97	208	.	.	.	.	.	.



96.0	18.38	36.06	26.00	205	.	.	.	.	.	.
97.0	18.21	36.09	26.06	199	.	.	.	.	.	.
98.0	18.08	36.08	26.11	195	.	.	.	.	.	.
99.0	17.84	36.09	26.15	191	.	.	.	.	.	.
100.0	17.78	36.07	26.17	189	.	.	.	.	.	.
101.0	17.49	36.06	26.22	184	.	.	.	.	.	.
102.0	17.33	36.02	26.23	184	.	.	.	.	.	.
103.0	17.31	36.03	26.24	182	.	.	.	.	.	.
104.0	17.31	36.03	26.24	182	.	.	.	.	.	.
105.0	17.30	36.01	26.23	184	.	.	.	1.92	6.9	4.6
106.0	17.30	36.02	26.23	183	.	.	.	.	.	.
107.0	17.30	36.02	26.23	183	.	.	.	.	.	.
108.0	17.28	36.02	26.24	183	.	.	.	.	.	.
109.0	17.28	36.05	26.26	180	.	.	.	.	.	.
110.0	17.27	36.03	26.25	182	.	.	.	.	.	.
111.0	17.22	36.05	26.28	179	.	.	.	.	.	.
112.0	17.21	36.03	26.26	180	.	.	.	.	.	.
113.0	17.14	36.04	26.29	178	.	.	.	.	.	.
114.0	17.07	36.04	26.31	177	.	.	.	.	.	.
115.0	16.95	36.06	26.35	172	.	.	.	.	.	.
116.0	16.83	36.07	26.38	169	.	.	.	.	.	.
117.0	16.57	36.07	26.45	163	.	.	.	.	.	.
118.0	16.43	36.06	26.47	161	.	.	.	.	.	.
119.0	16.20	36.04	26.49	159	.	.	.	.	.	.
120.0	16.31	36.07	26.51	157	.	.	.	.	.	.
121.0	16.29	36.05	26.50	158	.	.	.	.	.	.
122.0	16.26	36.07	26.52	156	.	.	.	.	.	.
123.0	16.18	36.08	26.54	152	.	.	.	.	.	.
124.0	16.08	36.08	26.57	152	.	.	.	.	.	.
125.0	15.99	36.08	26.59	150	.	.	.	.	.	.

126.0	15.99	36.08	26.59	150	.	.	.	.	.	.
127.0	15.93	36.07	26.59	149	.	.	.	.	.	.
128.0	15.92	36.07	26.60	149	.	.	.	.	.	.
129.0	15.90	36.08	26.61	148	.	.	.	.	.	.
130.0	15.89	36.07	26.60	148	.	.	.	.	.	.
131.0	15.88	36.06	26.60	149	.	.	.	8.69	9.5	5.5
132.0	15.88	36.07	26.61	148	.	.	.	.	.	.
133.0	15.85	36.07	26.61	148	.	.	.	.	.	.
134.0	15.86	36.07	26.61	148	.	.	.	.	.	.
135.0	15.84	36.07	26.62	147	.	.	.	.	.	.
136.0	15.84	36.07	26.62	147	.	.	.	.	.	.
137.0	15.84	36.07	26.62	148	.	.	.	.	.	.
138.0	15.83	36.07	26.62	147	.	.	.	.	.	.
139.0	15.83	36.07	26.62	147	.	.	.	.	.	.
140.0	15.82	36.07	26.62	147	.	.	.	.	.	.
141.0	15.81	36.06	26.61	148	.	.	.	.	.	.
142.0	15.79	36.07	26.63	147	.	.	.	.	.	.
143.0	15.76	36.06	26.63	147	.	.	.	.	.	.
144.0	15.73	36.06	26.63	146	.	.	.	.	.	.
145.0	15.72	36.06	26.64	146	.	.	.	.	.	.
146.0	15.72	36.07	26.64	145	.	.	.	.	.	.
147.0	15.72	36.07	26.64	145	.	.	.	.	.	.
148.0	15.71	36.06	26.64	146	.	.	.	.	.	.
149.0	15.71	36.06	26.64	146	.	.	.	.	.	.
150.0	15.71	36.04	26.62	147	.	.	.	.	.	.
151.0	15.71	36.05	26.63	147	.	.	.	8.59	9.3	6.0
152.0	15.70	36.07	26.65	145	.	.	.	.	.	.
153.0	15.70	36.06	26.64	146	.	.	.	.	.	.
154.0	15.70	36.05	26.63	146	.	.	.	.	.	.
155.0	15.71	36.06	26.64	146	.	.	.	.	.	.
156.0	15.70	36.06	26.64	146	.	.	.	.	.	.
157.0	15.70	36.04	26.62	147	.	.	.	.	.	.
158.0	15.69	36.04	26.63	147	.	.	.	.	.	.
159.0	15.69	36.05	26.63	146	.	.	.	.	.	.
160.0	15.68	36.05	26.64	146	.	.	.	.	.	.
161.0	15.68	36.05	26.64	146	.	.	.	.	.	.
162.0	15.68	36.04	26.63	147	.	.	.	.	.	.
163.0	15.67	36.05	26.64	146	.	.	.	.	.	.
164.0	15.67	36.05	26.64	146	.	.	.	.	.	.
165.0	15.67	36.05	26.64	146	.	.	.	.	.	.
166.0	15.67	36.04	26.63	147	.	.	.	.	.	.
167.0	15.66	36.05	26.64	146	.	.	.	.	.	.
168.0	15.64	36.04	26.64	146	.	.	.	.	.	.
169.0	15.64	36.05	26.65	146	.	.	.	.	.	.
170.0	15.63	36.05	26.65	145	.	.	.	.	.	.
171.0	15.63	36.04	26.64	146	.	.	.	.	.	.
172.0	15.63	36.05	26.65	145	.	.	.	.	.	.
173.0	15.62	36.02	26.63	147	.	.	.	.	.	.
174.0	15.62	36.04	26.64	146	.	.	.	.	.	.
175.0	15.61	36.04	26.65	146	.	.	.	.	.	.

176.0	15.61	36.04	26.65	146	.	.	.	.	.	.
177.0	15.61	36.04	26.65	146	.	.	.	.	.	.
178.0	15.61	36.04	26.65	146	.	.	.	.	.	.
179.0	15.61	36.04	26.65	146	.	.	.	.	.	.
180.0	15.61	36.03	26.64	147	.	.	.	.	.	.
181.0	15.60	36.03	26.64	147	.	.	.	.	.	.
182.0	15.60	36.03	26.64	147	.	.	.	.	.	.
183.0	15.60	36.03	26.64	147	.	.	.	.	.	.
184.0	15.59	36.02	26.63	147	.	.	.	.	.	.
185.0	15.58	36.04	26.65	146	.	.	.	.	.	.
186.0	15.56	36.03	26.65	146	.	.	.	.	.	.
187.0	15.51	36.02	26.65	146	.	.	.	.	.	.
188.0	15.48	36.02	26.66	145	.	.	.	.	.	.
189.0	15.45	36.06	26.70	141	.	.	.	.	.	.
190.0	15.38	36.05	26.70	141	.	.	.	.	.	.
191.0	15.38	35.99	26.66	145	.	.	.	.	.	.
192.0	15.29	36.00	26.69	142	.	.	.	.	.	.
193.0	15.32	36.01	26.69	142	.	.	.	.	.	.
194.0	15.30	35.99	26.68	143	.	.	.	.	.	.
195.0	15.25	36.01	26.70	141	.	.	.	.	.	.
196.0	15.25	35.97	26.67	144	.	.	.	.	.	.
197.0	15.21	36.01	26.71	140	.	.	.	.	.	.
198.0	15.24	35.97	26.67	144	.	.	.	.	.	.
199.0	15.19	35.99	26.70	141	.	.	.	.	.	.
200.0	15.18	35.98	26.70	142	.	.	.	.	.	.
201.0	15.04	35.99	26.73	138	.	.	.	.	.	.
202.0	15.04	35.97	26.72	139	.	.	.	.	.	.
203.0	15.02	35.96	26.72	140	.	.	.	.	.	.
204.0	15.02	35.97	26.72	139	.	.	.	.	.	.
205.0	15.00	35.95	26.71	140	.	.	.	.	.	.
206.0	14.98	35.97	26.73	138	.	.	.	.	.	.
207.0	14.84	35.94	26.74	138	.	.	.	.	.	.
208.0	14.66	35.94	26.78	134	.	.	.	.	.	.
209.0	14.58	35.95	26.82	130	.	.	.	.	.	.
210.0	14.48	35.91	26.80	132	.	.	.	.	.	.
211.0	14.31	35.88	26.81	131	.	.	.	.	.	.
212.0	14.28	35.87	26.81	131	.	.	.	.	.	.
213.0	14.22	35.85	26.81	131	.	.	.	.	.	.
214.0	14.09	35.85	26.83	129	.	.	.	8.97	10.5	10.1
215.0	13.79	35.83	26.88	124	.	.	.	.	.	.

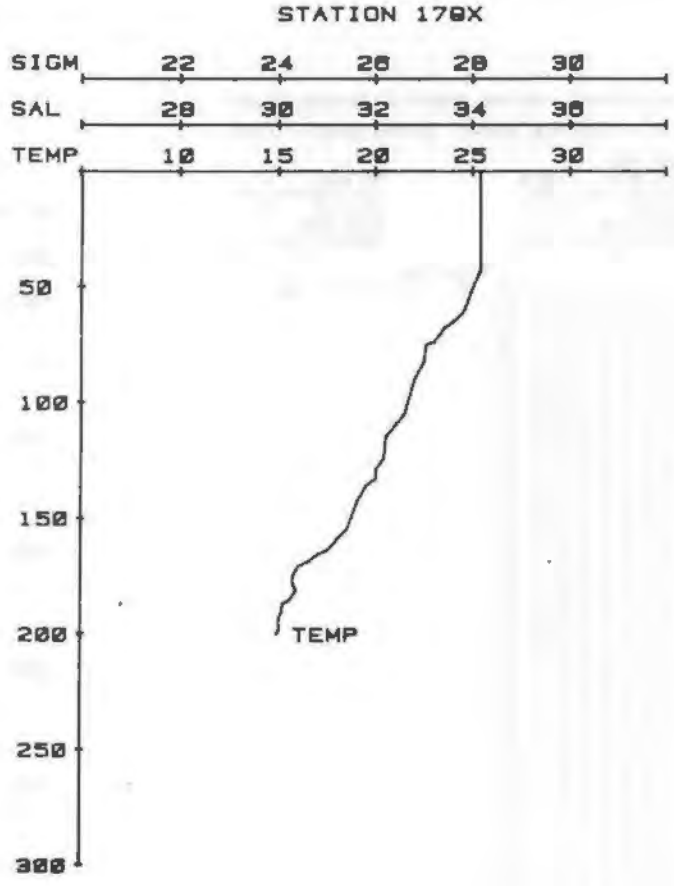
GILLISS CRUISE STA 179I 27/04/79 08.6 GMT CONSEC STA 184

LAT 38 48.0N LONG 79 52.9W DEPTH = 370M DIST LAST STA = 10.5KM

WEATHER DATA

WIND SPEED	= 28KTS	SEA STATE	= 3
WIND DIRECTION	= 240	WAVE DIRECTION	= 240
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= XI	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1009.1	VISIBILITY CODE	=

				OBSERVATIONS						
Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
8.0	25.4	.	.	.	.	.	.	.	.	.
42.0	25.4	.	.	.	.	.	.	.	.	.
58.0	25.0	.	.	.	.	.	.	.	.	.
61.0	24.5	.	.	.	.	.	.	.	.	.
65.0	24.0	.	.	.	.	.	.	.	.	.
68.0	23.5	.	.	.	.	.	.	.	.	.
74.0	23.0	.	.	.	.	.	.	.	.	.
75.0	22.6	.	.	.	.	.	.	.	.	.
82.0	22.5	.	.	.	.	.	.	.	.	.
96.0	22.1	.	.	.	.	.	.	.	.	.
105.0	21.5	.	.	.	.	.	.	.	.	.
110.0	21.0	.	.	.	.	.	.	.	.	.
115.0	20.5	.	.	.	.	.	.	.	.	.
124.0	20.4	.	.	.	.	.	.	.	.	.
129.0	20.0	.	.	.	.	.	.	.	.	.
133.0	20.0	.	.	.	.	.	.	.	.	.
136.0	19.5	.	.	.	.	.	.	.	.	.
143.0	19.0	.	.	.	.	.	.	.	.	.
155.0	18.5	.	.	.	.	.	.	.	.	.
159.0	18.0	.	.	.	.	.	.	.	.	.
164.0	17.5	.	.	.	.	.	.	.	.	.
166.0	17.0	.	.	.	.	.	.	.	.	.
169.0	16.5	.	.	.	.	.	.	.	.	.
171.0	16.0	.	.	.	.	.	.	.	.	.
175.0	15.7	.	.	.	.	.	.	.	.	.
178.0	15.7	.	.	.	.	.	.	.	.	.
181.0	15.9	.	.	.	.	.	.	.	.	.
186.0	15.5	.	.	.	.	.	.	.	.	.
187.0	15.2	.	.	.	.	.	.	.	.	.
190.0	15.2	.	.	.	.	.	.	.	.	.
193.0	15.0	.	.	.	.	.	.	.	.	.
199.0	15.0	.	.	.	.	.	.	.	.	.
200.0	14.9	.	.	.	.	.	.	.	.	.

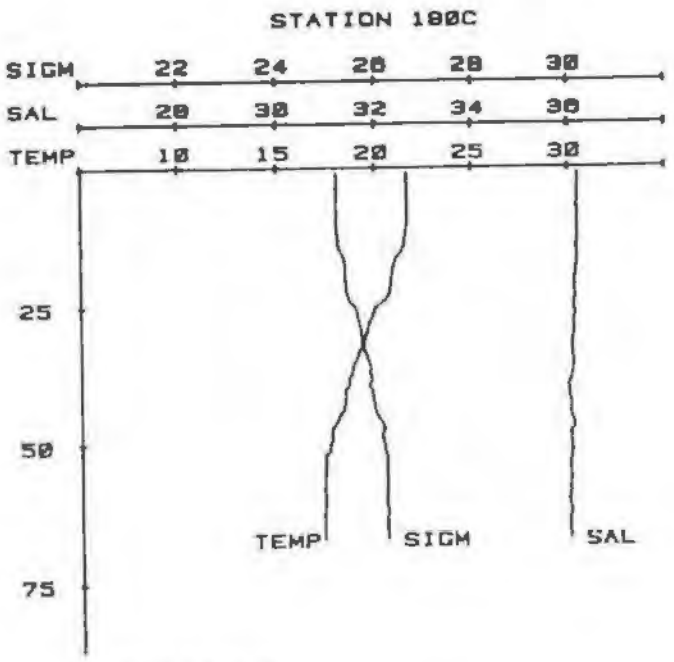


GILLISS CRUISE STA 180C 27/04/79 11.2 GMT CONSEC STA 185

LAT 38 42.4N LONG 79 05.3W DEPTH = 70M DIST LAST STA = 76.0KM

WEATHER DATA
WIND SPEED = 22KTS
WIND DIRECTION = 220
AIR TEMP = 21.7C
WEATHER CODE = 31
BAROMETRIC PRES= 1008.5
SEA STATE = 3
WAVE DIRECTION = 230
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	D	SVA	OBSERVATIONS O2	O2'	AOU	PO4	NO3	SI
1.0	21.65	36.19	25.23	275	.	.	.	.	.	.
2.0	21.65	36.20	25.24	274	.	.	.	.	.	.
3.0	21.65	36.19	25.23	275	.	.	.	.	.	.
4.0	21.65	36.18	25.22	276	.	.	.	0.08	0.1	0.8
5.0	21.65	36.19	25.23	275	.	.	.	.	.	.
6.0	21.66	36.18	25.22	276	.	.	.	.	.	.
7.0	21.65	36.17	25.21	277	.	.	.	.	.	.
8.0	21.65	36.20	25.24	275	.	.	.	.	.	.
9.0	21.66	36.18	25.22	276	.	.	.	.	.	.
10.0	21.64	36.19	25.23	275	.	.	.	.	.	.
11.0	21.59	36.19	25.24	274	.	.	.	.	.	.
12.0	21.54	36.18	25.25	273	.	.	.	.	.	.
13.0	21.50	36.19	25.27	272	.	.	.	.	.	.
14.0	21.45	36.16	25.26	272	.	.	.	.	.	.
15.0	21.35	36.19	25.31	268	.	.	.	.	.	.
16.0	21.09	36.18	25.38	261	.	.	.	.	.	.
17.0	20.98	36.17	25.40	259	.	.	.	.	.	.
18.0	20.90	36.16	25.41	258	.	.	.	.	.	.
19.0	20.85	36.15	25.42	258	.	.	.	.	.	.
20.0	20.80	36.12	25.41	259	.	.	.	0.10	0.2	0.3
21.0	20.78	36.14	25.43	257	.	.	.	.	.	.
22.0	20.75	36.13	25.43	257	.	.	.	.	.	.
23.0	20.67	36.14	25.46	254	.	.	.	.	.	.
24.0	20.48	36.12	25.50	250	.	.	.	.	.	.
25.0	20.03	36.10	25.60	240	.	.	.	.	.	.
26.0	19.91	36.14	25.66	235	.	.	.	.	.	.
27.0	19.84	36.12	25.67	234	.	.	.	.	.	.
28.0	19.65	36.10	25.70	231	.	.	.	.	.	.
29.0	19.61	36.12	25.73	229	.	.	.	.	.	.
30.0	19.51	36.10	25.74	228	.	.	.	.	.	.
31.0	19.41	36.08	25.75	227	.	.	.	.	.	.
32.0	19.43	36.07	25.74	228	.	.	.	.	.	.
33.0	19.16	36.00	25.81	221	.	.	.	.	.	.
34.0	19.00	36.10	25.85	217	.	.	.	.	.	.
35.0	18.93	36.10	25.89	214	.	.	.	0.15	1.2	0.9
36.0	19.00	36.09	25.91	211	.	.	.	.	.	.
37.0	18.88	36.07	25.90	213	.	.	.	.	.	.
38.0	18.81	36.06	25.94	209	.	.	.	.	.	.
39.0	18.67	36.00	25.88	215	.	.	.	.	.	.
40.0	18.41	36.01	25.95	208	.	.	.	.	.	.
41.0	18.49	36.02	25.94	209	.	.	.	.	.	.
42.0	18.46	36.05	25.98	205	.	.	.	.	.	.
43.0	18.39	36.05	25.99	204	.	.	.	.	.	.
44.0	18.30	36.05	26.01	202	.	.	.	.	.	.
45.0	18.09	36.05	26.06	197	.	.	.	.	.	.
46.0	18.01	36.11	26.13	191	.	.	.	.	.	.



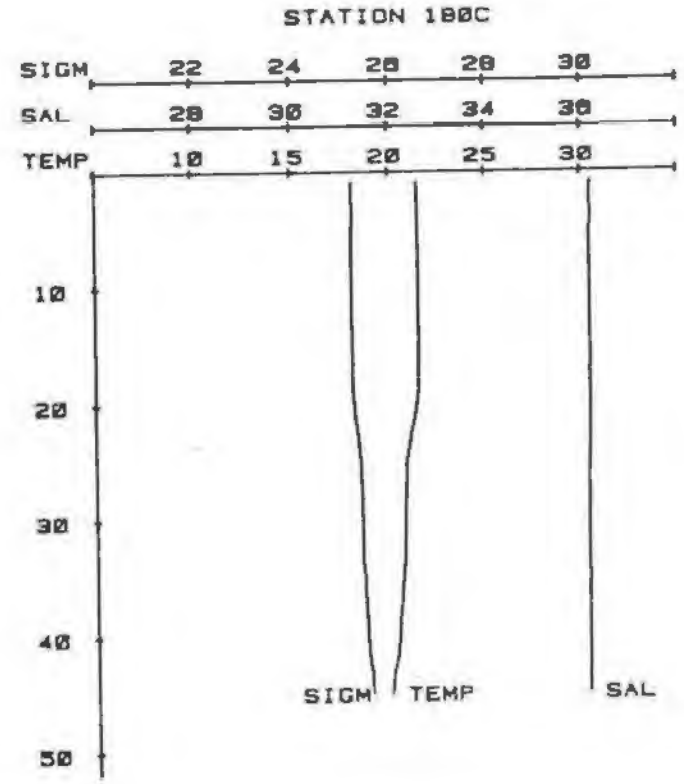
47.0	17.77	36.11	26.19	185	.	.	.	.	.	.
48.0	17.70	36.04	26.15	189	.	.	.	.	.	.
49.0	17.79	36.05	26.14	190	.	.	.	.	.	.
50.0	17.63	36.06	26.18	186	.	.	.	.	.	.
51.0	17.64	36.08	26.19	185	.	.	.	0.42	4.4	7.5
52.0	17.48	36.06	26.24	181	.	.	.	.	.	.
53.0	17.48	36.04	26.22	182	.	.	.	.	.	.
54.0	17.34	36.03	26.23	182	.	.	.	.	.	.
55.0	17.37	36.04	26.23	181	.	.	.	.	.	.
56.0	17.35	36.04	26.24	181	.	.	.	.	.	.
57.0	17.34	36.03	26.23	182	.	.	.	.	.	.
58.0	17.35	36.03	26.23	182	.	.	.	.	.	.
59.0	17.36	36.02	26.22	183	.	.	.	.	.	.
60.0	17.34	36.00	26.20	184	.	.	.	.	.	.
61.0	17.35	36.04	26.24	181	.	.	.	.	.	.
62.0	17.33	36.06	26.26	179	.	.	.	.	.	.
63.0	17.32	36.02	26.23	182	.	.	.	.	.	.
64.0	17.33	36.02	26.23	182	.	.	.	0.57	7.2	4.9
65.0	17.33	36.01	26.22	183	.	.	.	.	.	.
66.0	17.33	36.04	26.24	181	.	.	.	.	.	.
67.0	17.32	36.03	26.24	181	.	.	.	.	.	.

GILLISS CRUISE STA 180C 27/04/79 13.4 GMT CONSEC STA 186

LAT 38 42.4N LONG 79 05.3W DEPTH = 72M DIST LAST STA = 8.0KM

WEATHER DATA
WIND SPEED = 22KTS
WIND DIRECTION = 220
AIR TEMP = 21.7C
WEATHER CODE = 31
BAROMETRIC PRES= 1008.5
SEA STATE = 3
WAVE DIRECTION = 230
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

Z	T	S	D	SVA	OBSERVATIONS O2	O2'	AOU	PO4	NO3	SI
1.0	21.51	36.19	25.27	271	.	.	.	.	.	.
2.0	21.51	36.18	25.26	272	.	.	.	.	.	.
3.0	21.51	36.20	25.27	271	.	.	.	.	.	.
4.0	21.51	36.20	25.27	271	.	.	.	.	.	.
5.0	21.51	36.17	25.25	273	.	.	.	.	.	.
6.0	21.52	36.17	25.25	273	.	.	.	.	.	.
7.0	21.52	36.18	25.26	273	.	.	.	.	.	.
8.0	21.52	36.18	25.26	273	.	.	.	.	.	.
9.0	21.52	36.18	25.26	273	.	.	.	.	.	.
10.0	21.51	36.18	25.26	272	.	.	.	.	.	.
11.0	21.51	36.18	25.26	272	.	.	.	.	.	.
12.0	21.51	36.18	25.26	272	.	.	.	.	.	.
13.0	21.51	36.18	25.26	272	.	.	.	.	.	.
14.0	21.51	36.18	25.26	273	.	.	.	.	.	.
15.0	21.50	36.18	25.26	272	.	.	.	.	.	.
16.0	21.49	36.19	25.27	271	.	.	.	.	.	.
17.0	21.48	36.17	25.26	273	.	.	.	.	.	.
18.0	21.49	36.18	25.26	272	.	.	.	.	.	.
19.0	21.45	36.18	25.28	271	.	.	.	.	.	.
20.0	21.37	36.18	25.31	269	.	.	.	.	.	.
21.0	21.28	36.17	25.32	267	.	.	.	.	.	.
22.0	21.13	36.17	25.36	264	.	.	.	.	.	.
23.0	21.03	36.17	25.38	261	.	.	.	.	.	.
24.0	20.93	36.16	25.40	259	.	.	.	.	.	.
25.0	20.81	36.15	25.43	257	.	.	.	.	.	.
26.0	20.81	36.14	25.42	258	.	.	.	.	.	.
27.0	20.79	36.15	25.43	256	.	.	.	.	.	.
28.0	20.77	36.16	25.45	255	.	.	.	.	.	.
29.0	20.74	36.14	25.44	256	.	.	.	.	.	.
30.0	20.74	36.14	25.44	256	.	.	.	.	.	.
31.0	20.73	36.14	25.44	256	.	.	.	.	.	.
32.0	20.71	36.14	25.45	255	.	.	.	.	.	.
33.0	20.70	36.14	25.45	255	.	.	.	.	.	.
34.0	20.66	36.14	25.46	254	.	.	.	.	.	.
35.0	20.58	36.15	25.49	251	.	.	.	.	.	.
36.0	20.53	36.13	25.49	251	.	.	.	.	.	.
37.0	20.50	36.14	25.51	250	.	.	.	.	.	.
38.0	20.43	36.13	25.52	249	.	.	.	.	.	.
39.0	20.39	36.13	25.53	248	.	.	.	.	.	.
40.0	20.37	36.13	25.53	247	.	.	.	.	.	.
41.0	20.34	36.13	25.55	246	.	.	.	.	.	.
42.0	20.25	36.13	25.56	244	.	.	.	.	.	.
43.0	20.07	36.12	25.61	241	.	.	.	.	.	.
44.0	20.03	36.12	25.62	240	.	.	.	.	.	.
45.0	19.94	36.12	25.63	238	.	.	.	.	.	.



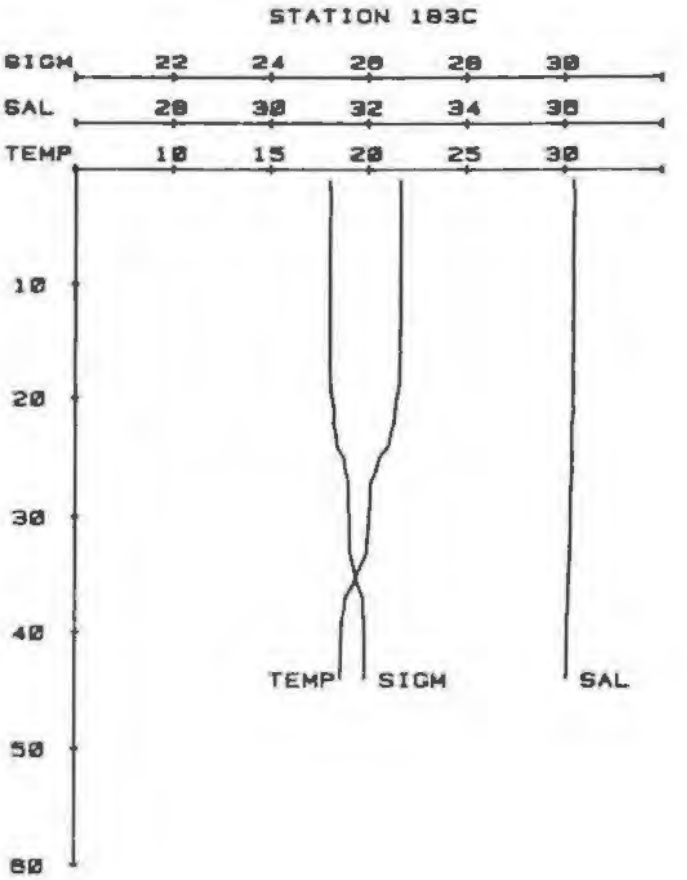
GILLISS CRUISE STA 183C 27/04/79 15.0 GMT CONSEC STA 189

LAT 38 43.50 LONG 08 16.0W DEPTH = 490 DIST LAST STA = 98.0KM

WEATHER DATA

WIND SPEED	= 20KTS	SEA STATE	= 4
WIND DIRECTION	= 240	WAVE DIRECTION	= 230
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1018.8	VISIBILITY CODE	=

				OBSERVATIONS						
Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.66	36.18	25.22	276	.	.	.	.	.	.
2.0	21.66	36.21	25.24	274	.	.	.	.	.	.
3.0	21.66	36.21	25.24	274	.	.	.	.	.	.
4.0	21.66	36.19	25.23	275	.	.	.	.	.	.
5.0	21.66	36.19	25.23	275	.	.	.	.	.	.
6.0	21.66	36.19	25.23	275	.	.	.	.	.	.
7.0	21.66	36.19	25.23	276	.	.	.	.	.	.
8.0	21.65	36.18	25.22	276	.	.	.	.	.	.
9.0	21.65	36.20	25.24	275	.	.	.	.	.	.
10.0	21.65	36.20	25.24	275	.	.	.	.	.	.
11.0	21.65	36.20	25.24	275	.	.	.	.	.	.
12.0	21.65	36.19	25.23	275	.	.	.	.	.	.
13.0	21.65	36.19	25.23	275	.	.	.	.	.	.
14.0	21.62	36.19	25.24	275	.	.	.	.	.	.
15.0	21.63	36.19	25.23	275	.	.	.	.	.	.
16.0	21.63	36.19	25.23	275	.	.	.	.	.	.
17.0	21.59	36.18	25.24	275	.	.	.	.	.	.
18.0	21.58	36.19	25.25	274	.	.	.	.	.	.
19.0	21.56	36.19	25.25	273	.	.	.	.	.	.
20.0	21.44	36.18	25.28	271	.	.	.	.	.	.
21.0	21.34	36.20	25.32	267	.	.	.	.	.	.
22.0	21.31	36.16	25.30	269	.	.	.	.	.	.
23.0	21.13	36.16	25.35	264	.	.	.	.	.	.
24.0	21.02	36.16	25.38	261	.	.	.	.	.	.
25.0	20.53	36.17	25.52	248	.	.	.	.	.	.
26.0	20.41	36.17	25.55	245	.	.	.	.	.	.
27.0	20.13	36.15	25.62	239	.	.	.	.	.	.
28.0	20.11	36.14	25.61	240	.	.	.	.	.	.
29.0	20.08	36.14	25.62	239	.	.	.	.	.	.
30.0	20.02	36.14	25.63	237	.	.	.	.	.	.
31.0	20.00	36.14	25.64	237	.	.	.	.	.	.
32.0	19.94	36.13	25.65	236	.	.	.	.	.	.
33.0	19.94	36.13	25.65	236	.	.	.	.	.	.
34.0	19.68	36.12	25.71	231	.	.	.	.	.	.
35.0	19.62	36.10	25.76	226	.	.	.	.	.	.
36.0	19.19	36.10	25.82	220	.	.	.	.	.	.
37.0	18.81	36.10	25.92	211	.	.	.	.	.	.
38.0	18.76	36.09	25.93	210	.	.	.	.	.	.
39.0	18.63	36.07	25.94	209	.	.	.	.	.	.
40.0	18.63	36.08	25.95	208	.	.	.	.	.	.
41.0	18.59	36.07	25.95	208	.	.	.	.	.	.
42.0	18.59	36.07	25.95	208	.	.	.	.	.	.
43.0	18.58	36.07	25.95	207	.	.	.	.	.	.
44.0	18.57	36.05	25.94	209	.	.	.	.	.	.



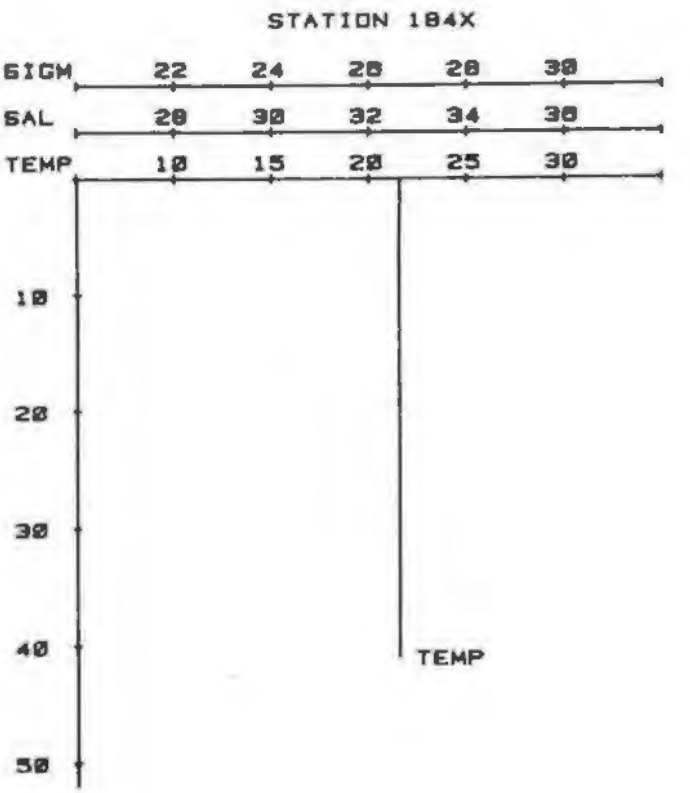
GILLISS CRUISE STA 184X 27/04/79 18.0 GMT CONSEC STA 196

LAT 38 46.70 LONG 08 23.6W DEPTH = 418 DIST LAST STA = 27.4KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 3
WIND DIRECTION	= 240	WAVE DIRECTION	= 240
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1019.8	VISIBILITY CODE	=

				OBSERVATIONS						
Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.6	.	.	.	.	.	.	.	.	.
6.0	21.5	.	.	.	.	.	.	.	.	.
41.0	21.5	.	.	.	.	.	.	.	.	.



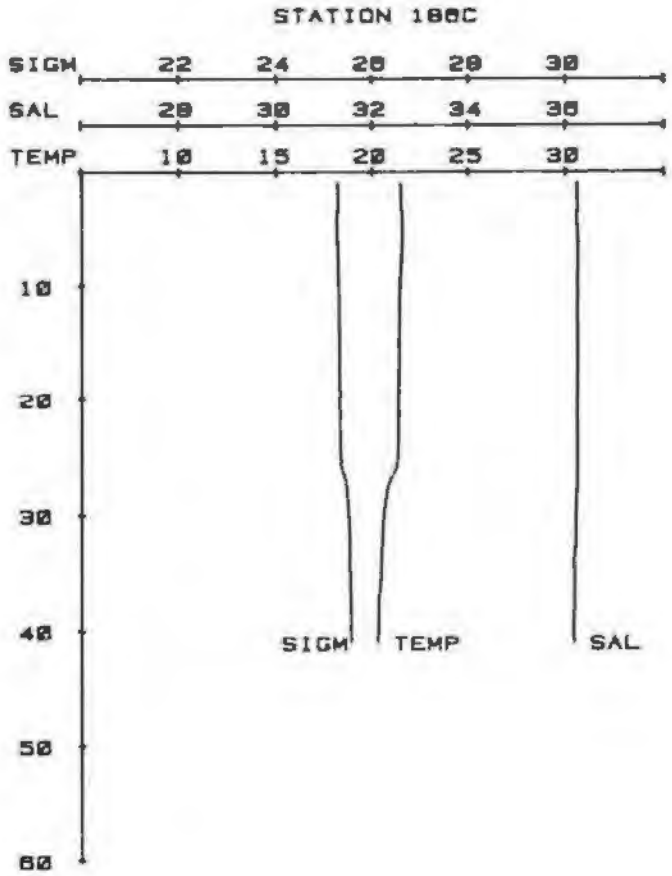
GILLISS CRUISE STA 186C 27/04/79 18.9 GMT CONSEC STA 192

LAT 38 45.2N LONG 88 16.6W DEPTH = 41M DIST LAST STA = 11.0KM

WEATHER DATA

WIND SPEED	= 10KTS	SEA STATE	= 3
WIND DIRECTION	= 170	WAVE DIRECTION	= 240
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1009.8	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.52	34.23	25.29	269	.	.	.	.	.	.
2.0	21.53	34.24	25.30	268	.	.	.	.	.	.
3.0	21.53	34.24	25.30	268	.	.	.	.	.	.
4.0	21.59	34.22	25.27	271	.	.	.	0.12	0.1	2.1
5.0	21.58	34.24	25.29	270	.	.	.	.	.	.
6.0	21.58	34.25	25.29	269	.	.	.	.	.	.
7.0	21.54	34.25	25.30	268	.	.	.	.	.	.
8.0	21.51	34.25	25.31	267	.	.	.	.	.	.
9.0	21.47	34.24	25.32	267	.	.	.	.	.	.
10.0	21.45	34.24	25.32	266	.	.	.	.	.	.
11.0	21.42	34.24	25.33	266	.	.	.	.	.	.
12.0	21.42	34.23	25.32	266	.	.	.	.	.	.
13.0	21.41	34.24	25.33	266	.	.	.	.	.	.
14.0	21.39	34.24	25.34	265	.	.	.	.	.	.
15.0	21.38	34.24	25.34	265	.	.	.	.	.	.
16.0	21.38	34.24	25.34	265	.	.	.	.	.	.
17.0	21.38	34.24	25.34	265	.	.	.	.	.	.
18.0	21.37	34.24	25.34	265	.	.	.	.	.	.
19.0	21.36	34.24	25.35	264	.	.	.	.	.	.
20.0	21.35	34.23	25.34	265	.	.	.	.	.	.
21.0	21.35	34.23	25.34	265	.	.	.	.	.	.
22.0	21.34	34.23	25.34	265	.	.	.	.	.	.
23.0	21.34	34.24	25.35	264	.	.	.	.	.	.
24.0	21.33	34.23	25.35	265	.	.	.	.	.	.
25.0	21.30	34.24	25.36	263	.	.	.	.	.	.
26.0	21.25	34.24	25.38	262	.	.	.	0.10	0.0	1.1
27.0	20.90	34.23	25.47	253	.	.	.	.	.	.
28.0	20.75	34.22	25.50	250	.	.	.	.	.	.
29.0	20.67	34.21	25.51	249	.	.	.	.	.	.
30.0	20.58	34.20	25.53	247	.	.	.	.	.	.
31.0	20.54	34.20	25.54	246	.	.	.	.	.	.
32.0	20.50	34.20	25.55	245	.	.	.	.	.	.
33.0	20.47	34.19	25.55	245	.	.	.	.	.	.
34.0	20.44	34.16	25.54	247	.	.	.	.	.	.
35.0	20.42	34.18	25.56	245	.	.	.	.	.	.
36.0	20.42	34.17	25.55	246	.	.	.	.	.	.
37.0	20.32	34.17	25.58	243	.	.	.	.	.	.
38.0	20.33	34.17	25.57	243	.	.	.	.	.	.
39.0	20.31	34.16	25.57	244	.	.	.	.	.	.
40.0	20.30	34.16	25.57	244	.	.	.	0.16	1.1	2.0
41.0	20.29	34.17	25.58	243	.	.	.	.	.	.



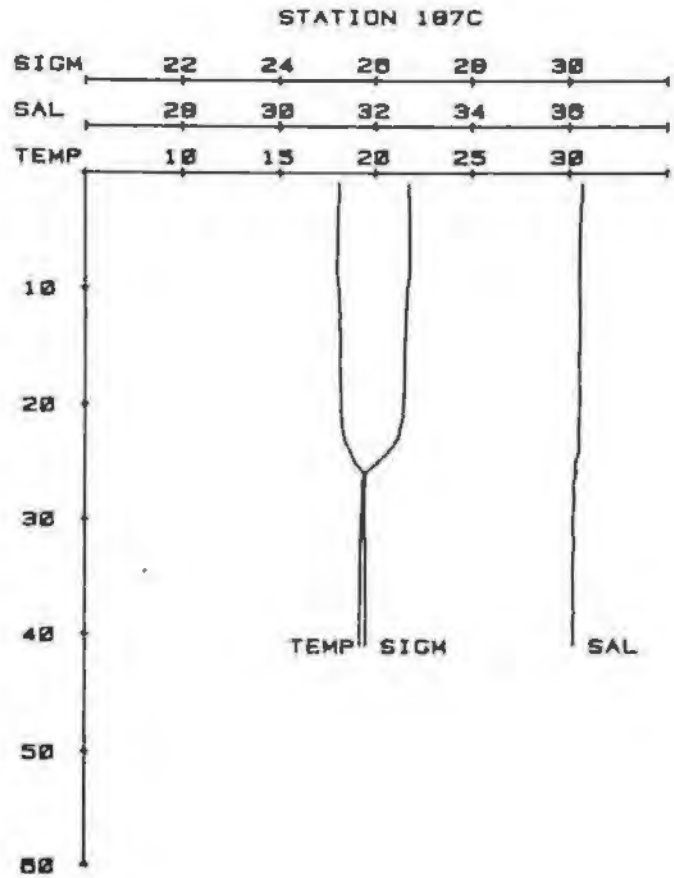
GILLISS CRUISE STA 187C 27/04/79 19.7 GMT CONSEC STA 193

LAT 38 44.8N LONG 88 18.9W DEPTH = 43M DIST LAST STA = 9.8KM

WEATHER DATA

WIND SPEED	= 10KTS	SEA STATE	= 2
WIND DIRECTION	= 200	WAVE DIRECTION	= 220
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= X2	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1009.5	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.74	34.26	25.26	272	.	.	.	.	.	.
2.0	21.75	34.27	25.26	272	.	.	.	0.09	0.0	1.9
3.0	21.77	34.23	25.22	275	.	.	.	.	.	.
4.0	21.77	34.23	25.22	275	.	.	.	.	.	.
5.0	21.78	34.22	25.21	276	.	.	.	.	.	.
6.0	21.78	34.22	25.21	276	.	.	.	.	.	.
7.0	21.78	34.22	25.21	277	.	.	.	.	.	.
8.0	21.78	34.21	25.21	277	.	.	.	.	.	.
9.0	21.74	34.21	25.22	276	.	.	.	.	.	.
10.0	21.65	34.22	25.25	273	.	.	.	.	.	.
11.0	21.61	34.22	25.26	272	.	.	.	.	.	.
12.0	21.59	34.23	25.28	271	.	.	.	.	.	.
13.0	21.57	34.22	25.27	271	.	.	.	.	.	.
14.0	21.54	34.23	25.28	270	.	.	.	.	.	.
15.0	21.54	34.23	25.28	270	.	.	.	.	.	.
16.0	21.52	34.21	25.28	271	.	.	.	.	.	.
17.0	21.51	34.22	25.29	270	.	.	.	.	.	.
18.0	21.50	34.22	25.29	270	.	.	.	.	.	.
19.0	21.48	34.23	25.31	268	.	.	.	.	.	.
20.0	21.46	34.22	25.30	269	.	.	.	.	.	.
21.0	21.43	34.22	25.31	268	.	.	.	.	.	.
22.0	21.29	34.20	25.34	266	.	.	.	0.05	0.0	0.6
23.0	21.18	34.21	25.37	262	.	.	.	.	.	.
24.0	20.75	34.22	25.50	250	.	.	.	.	.	.
25.0	20.18	34.14	25.59	241	.	.	.	.	.	.
26.0	19.48	34.15	25.70	233	.	.	.	.	.	.
27.0	19.48	34.09	25.74	227	.	.	.	.	.	.
28.0	19.33	34.12	25.81	222	.	.	.	.	.	.
29.0	19.31	34.10	25.79	223	.	.	.	.	.	.
30.0	19.24	34.08	25.79	223	.	.	.	0.20	2.5	9.2
31.0	19.24	34.09	25.80	222	.	.	.	.	.	.
32.0	19.22	34.11	25.82	220	.	.	.	.	.	.
33.0	19.20	34.09	25.81	221	.	.	.	.	.	.
34.0	19.20	34.08	25.80	222	.	.	.	.	.	.
35.0	19.20	34.08	25.81	222	.	.	.	.	.	.
36.0	19.19	34.09	25.81	221	.	.	.	.	.	.
37.0	19.19	34.09	25.81	221	.	.	.	.	.	.
38.0	19.18	34.10	25.82	220	.	.	.	.	.	.
39.0	19.17	34.08	25.81	221	.	.	.	.	.	.
40.0	19.17	34.09	25.82	220	.	.	.	.	.	.
41.0	19.17	34.09	25.82	220	.	.	.	0.19	2.6	2.0



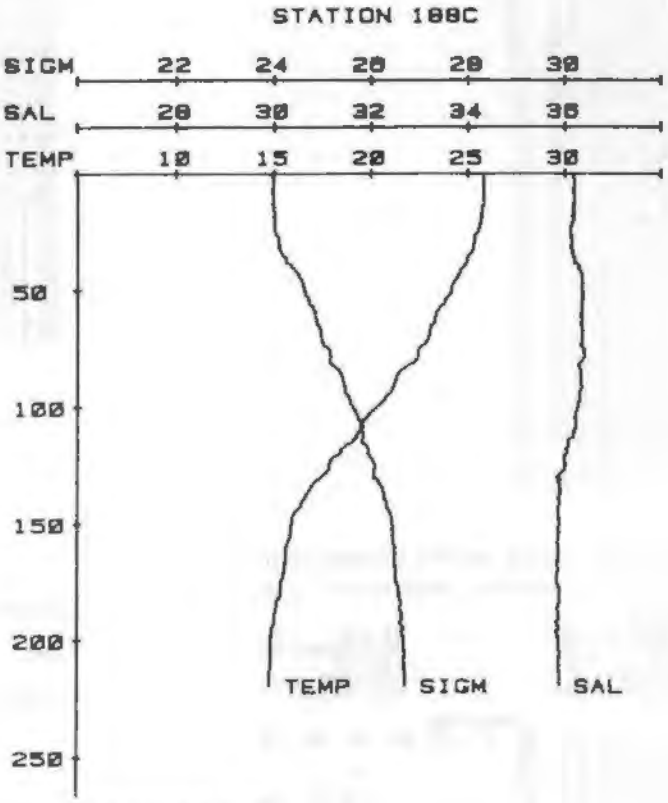
GILLISS CRUISE STA 188C 27/04/79 22.1 GMT COMSEC STA 194

LAT 38 41.9N LONG 77 58.5W DEPTH = 247M DIST LAST STA = 28.1KM

WEATHER DATA

WIND SPEED	= 17KTS	SEA STATE	= 3
WIND DIRECTION	= 220	WAVE DIRECTION	= 200
AIR TEMP	= 23.3C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1008.8	VISIBILITY CODE	=

				OBSERVATIONS						
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	25.82	36.17	23.90	394	.	.	.	.	.	.
2.0	25.82	36.17	23.90	394	.	.	.	.	.	.
3.0	25.82	36.20	24.00	392	.	.	.	.	.	.
4.0	25.82	36.19	24.00	393	.	.	.	0.02	0.1	0.5
5.0	25.82	36.18	23.99	393	.	.	.	.	.	.
6.0	25.82	36.19	24.00	393	.	.	.	.	.	.
7.0	25.82	36.16	23.97	395	.	.	.	.	.	.
8.0	25.82	36.18	23.99	393	.	.	.	.	.	.
9.0	25.82	36.19	24.00	393	.	.	.	.	.	.
10.0	25.82	36.19	24.00	393	.	.	.	.	.	.
11.0	25.82	36.19	24.00	393	.	.	.	.	.	.
12.0	25.82	36.20	24.00	392	.	.	.	.	.	.
13.0	25.82	36.17	23.98	394	.	.	.	.	.	.
14.0	25.73	36.18	24.02	391	.	.	.	.	.	.
15.0	25.73	36.16	24.00	392	.	.	.	.	.	.
16.0	25.72	36.18	24.02	391	.	.	.	.	.	.
17.0	25.69	36.19	24.04	389	.	.	.	.	.	.
18.0	25.70	36.15	24.00	392	.	.	.	.	.	.
19.0	25.68	36.17	24.02	390	.	.	.	.	.	.
20.0	25.65	36.17	24.03	390	.	.	.	.	.	.
21.0	25.63	36.14	24.02	391	.	.	.	.	.	.
22.0	25.59	36.12	24.01	392	.	.	.	.	.	.
23.0	25.58	36.11	24.01	392	.	.	.	.	.	.
24.0	25.56	36.11	24.03	390	.	.	.	.	.	.
25.0	25.47	36.11	24.04	389	.	.	.	.	.	.
26.0	25.39	36.12	24.08	386	.	.	.	.	.	.
27.0	25.31	36.13	24.11	383	.	.	.	.	.	.
28.0	25.34	36.13	24.10	384	.	.	.	.	.	.
29.0	25.29	36.15	24.13	381	.	.	.	.	.	.
30.0	25.29	36.14	24.12	382	.	.	.	.	.	.
31.0	25.28	36.12	24.11	383	.	.	.	.	.	.
32.0	25.25	36.14	24.13	380	.	.	.	.	.	.
33.0	25.22	36.16	24.16	378	.	.	.	.	.	.
34.0	25.12	36.15	24.18	376	.	.	.	.	.	.
35.0	25.03	36.16	24.22	373	.	.	.	.	.	.
36.0	24.96	36.19	24.26	369	.	.	.	.	.	.
37.0	24.96	36.20	24.27	368	.	.	.	.	.	.
38.0	24.96	36.20	24.27	368	.	.	.	.	.	.
39.0	24.84	36.29	24.37	358	.	.	.	.	.	.
40.0	24.81	36.28	24.37	358	.	.	.	.	.	.
41.0	24.62	36.29	24.44	352	.	.	.	.	.	.
42.0	24.59	36.33	24.48	348	.	.	.	.	.	.
43.0	24.51	36.36	24.53	344	.	.	.	.	.	.
44.0	24.49	36.35	24.52	344	.	.	.	.	.	.
45.0	24.48	36.36	24.56	340	.	.	.	.	.	.
46.0	24.31	36.36	24.59	338	.	.	.	.	.	.
47.0	24.23	36.37	24.62	335	.	.	.	.	.	.
48.0	24.19	36.36	24.62	335	.	.	.	.	.	.
49.0	24.15	36.35	24.63	334	.	.	.	.	.	.
50.0	24.13	36.37	24.65	332	.	.	.	0.10	0.0	0.0
51.0	24.10	36.38	24.66	331	.	.	.	.	.	.
52.0	24.03	36.36	24.67	330	.	.	.	.	.	.
53.0	23.94	36.38	24.71	326	.	.	.	.	.	.
54.0	23.82	36.36	24.73	324	.	.	.	.	.	.
55.0	23.81	36.35	24.73	325	.	.	.	.	.	.
56.0	23.71	36.35	24.76	322	.	.	.	.	.	.
57.0	23.55	36.37	24.82	316	.	.	.	.	.	.
58.0	23.51	36.35	24.82	316	.	.	.	.	.	.
59.0	23.40	36.34	24.86	313	.	.	.	.	.	.
60.0	23.37	36.34	24.85	313	.	.	.	.	.	.
61.0	23.30	36.33	24.86	312	.	.	.	.	.	.
62.0	23.29	36.36	24.89	310	.	.	.	.	.	.
63.0	23.29	36.35	24.88	311	.	.	.	.	.	.
64.0	23.23	36.33	24.88	310	.	.	.	.	.	.
65.0	23.09	36.35	24.94	305	.	.	.	.	.	.
66.0	23.05	36.35	24.95	304	.	.	.	.	.	.
67.0	23.02	36.37	24.97	302	.	.	.	.	.	.
68.0	23.01	36.36	24.97	302	.	.	.	.	.	.
69.0	22.99	36.37	24.98	301	.	.	.	.	.	.
70.0	22.96	36.37	24.99	300	.	.	.	.	.	.
71.0	22.91	36.36	25.00	300	.	.	.	.	.	.
72.0	22.85	36.37	25.02	297	.	.	.	.	.	.
73.0	22.78	36.33	25.01	298	.	.	.	.	.	.
74.0	22.55	36.34	25.09	291	.	.	.	.	.	.
75.0	22.47	36.40	25.16	285	.	.	.	.	.	.
76.0	22.43	36.40	25.17	284	.	.	.	.	.	.
77.0	22.42	36.40	25.17	283	.	.	.	.	.	.
78.0	22.41	36.41	25.18	283	.	.	.	.	.	.
79.0	22.41	36.40	25.17	283	.	.	.	.	.	.
80.0	22.30	36.36	25.17	283	.	.	.	.	.	.
81.0	22.21	36.31	25.16	284	.	.	.	.	.	.
82.0	21.95	36.29	25.22	279	.	.	.	.	.	.
83.0	21.77	36.30	25.28	273	.	.	.	.	.	.
84.0	21.58	36.33	25.35	266	.	.	.	.	.	.
85.0	21.48	36.33	25.38	264	.	.	.	.	.	.
86.0	21.38	36.33	25.41	261	.	.	.	.	.	.
87.0	21.32	36.34	25.43	259	.	.	.	.	.	.
88.0	21.28	36.34	25.44	258	.	.	.	.	.	.
89.0	21.24	36.33	25.45	257	.	.	.	.	.	.
90.0	21.21	36.33	25.47	256	.	.	.	.	.	.
91.0	21.17	36.35	25.48	254	.	.	.	.	.	.
92.0	21.12	36.35	25.50	253	.	.	.	.	.	.
93.0	21.09	36.32	25.48	254	.	.	.	.	.	.
94.0	21.01	36.31	25.50	253	.	.	.	.	.	.
95.0	20.84	36.31	25.54	249	.	.	.	.	.	.
96.0	20.76	36.31	25.56	247	.	.	.	.	.	.
97.0	20.70	36.32	25.59	244	.	.	.	.	.	.
98.0	20.57	36.28	25.59	244	.	.	.	.	.	.
99.0	20.43	36.28	25.63	240	.	.	.	.	.	.
100.0	20.29	36.26	25.65	238	.	.	.	.	.	.



101.0	20.17	36.26	25.69	235	.	.	.	.	.	.
102.0	20.02	36.24	25.71	233	.	.	.	.	.	.
103.0	19.98	36.22	25.73	231	.	.	.	0.17	2.6	1.6
104.0	19.86	36.22	25.75	229	.	.	.	.	.	.
105.0	19.72	36.21	25.77	228	.	.	.	.	.	.
106.0	19.68	36.23	25.81	223	.	.	.	.	.	.
107.0	19.56	36.22	25.82	222	.	.	.	.	.	.
108.0	19.58	36.22	25.81	223	.	.	.	.	.	.
109.0	19.48	36.23	25.84	220	.	.	.	.	.	.
110.0	19.43	36.21	25.83	221	.	.	.	.	.	.
111.0	19.31	36.18	25.85	220	.	.	.	.	.	.
112.0	19.23	36.17	25.86	219	.	.	.	.	.	.
113.0	19.23	36.16	25.86	219	.	.	.	.	.	.
114.0	19.07	36.17	25.83	222	.	.	.	.	.	.
115.0	19.04	36.17	25.84	221	.	.	.	.	.	.
116.0	18.72	36.17	25.92	213	.	.	.	.	.	.
117.0	18.62	36.17	25.94	211	.	.	.	.	.	.
118.0	18.62	36.13	25.96	209	.	.	.	.	.	.
119.0	18.47	36.14	25.96	210	.	.	.	.	.	.
120.0	18.41	36.13	25.97	209	.	.	.	.	.	.
121.0	18.14	35.99	26.00	205	.	.	.	.	.	.
122.0	17.95	35.98	26.04	202	.	.	.	.	.	.
123.0	17.88	35.99	26.07	199	.	.	.	0.26	3.5	3.9
124.0	17.83	36.00	26.09	197	.	.	.	.	.	.
125.0	17.81	36.01	26.10	196	.	.	.	.	.	.
126.0	17.81	36.01	26.09	197	.	.	.	.	.	.
127.0	17.78	35.98	26.08	198	.	.	.	.	.	.
128.0	17.69	35.95	26.08	198	.	.	.	.	.	.
129.0	17.51	35.88	26.07	199	.	.	.	.	.	.
130.0	17.38	35.84	26.08	199	.	.	.	.	.	.
131.0	17.24	35.92	26.17	191	.	.	.	.	.	.
132.0	17.18	35.87	26.17	191	.	.	.	.	.	.
133.0	16.99	35.91	26.22	186	.	.	.	.	.	.
134.0	16.98	35.91	26.24	183	.	.	.	.	.	.
135.0	16.83	35.92	26.27	180	.	.	.	.	.	.
136.0	16.77	35.91	26.27	181	.	.	.	.	.	.
137.0	16.65	35.91	26.30	177	.	.	.	.	.	.
138.0	16.63	35.88	26.29	179	.	.	.	.	.	.
139.0	16.54	35.87	26.31	178	.	.	.	.	.	.
140.0	16.44	35.88	26.33	175	.	.	.	.	.	.
141.0	16.40	35.89	26.35	173	.	.	.	.	.	.
142.0	16.36	35.89	26.36	172	.	.	.	.	.	.
143.0	16.31	35.86	26.35	173	.	.	.	.	.	.
144.0	16.16	35.86	26.38	170	.	.	.	.	.	.
145.0	16.07	35.87	26.41	167	.	.	.	.	.	.
146.0	15.98	35.87	26.43	165	.	.	.	0.66	9.0	6.4
147.0	15.94	35.87	26.44	165	.	.	.	.	.	.
148.0	15.91	35.89	26.46	162	.	.	.	.	.	.
149.0	15.90	35.88	26.46	163	.	.	.	.	.	.
150.0	15.88	35.89	26.47	162	.	.	.	.	.	.
151.0	15.86	35.89	26.47	161	.	.	.	.	.	.
152.0	15.86	35.86	26.45	164	.	.	.	.	.	.
153.0	15.86	35.89	26.47	162	.	.	.	.	.	.
154.0	15.83	35.88	26.47	162	.	.	.	.	.	.
155.0	15.83	35.87	26.46	162	.	.	.	.	.	.
156.0	15.79	35.87	26.47	162	.	.	.	.	.	.
157.0	15.72	35.86	26.48	161	.	.	.	.	.	.
158.0	15.72	35.86	26.48	161	.	.	.	.	.	.
159.0	15.64	35.85	26.49	160	.	.	.	.	.	.
160.0	15.61	35.87	26.51	158	.	.	.	.	.	.

161.0	15.61	35.07	26.51	158	.	.	.	.	.	.			
162.0	15.61	35.07	26.51	158	.	.	.	.	.	.			
163.0	15.61	35.07	26.51	158	.	.	.	.	.	.			
164.0	15.60	35.07	26.52	158	.	.	.	.	.	.			
165.0	15.59	35.06	26.51	158	.	.	.	.	.	.			
166.0	15.57	35.06	26.52	158	.	.	.	.	.	.			
167.0	15.57	35.06	26.52	158	.	.	.	.	.	.			
168.0	15.55	35.05	26.51	158	.	.	.	.	.	.			
169.0	15.52	35.06	26.53	157	.	.	.	.	.	.			
170.0	15.50	35.07	26.54	156	.	.	.	.	.	.			
171.0	15.50	35.06	26.53	156	.	.	.	.	.	.			
172.0	15.49	35.04	26.52	158	.	.	.	.	.	.			
173.0	15.45	35.04	26.53	157	.	.	.	.	.	.			
174.0	15.38	35.04	26.54	155	.	.	.	.	.	.			
175.0	15.37	35.03	26.54	156	.	.	.	.	.	.			
176.0	15.35	35.07	26.57	152	.	.	.	.	.	.			
177.0	15.35	35.09	26.59	151	.	.	.	.	.	.			
178.0	15.34	35.90	26.60	150	.	.	.	.	.	.			
179.0	15.33	35.90	26.60	150	.	.	.	.	.	.			
180.0	15.32	35.90	26.60	150	.	.	.	.	.	.			
181.0	15.31	35.89	26.60	150	.	.	.	.	.	.			
182.0	15.24	35.90	26.62	148	.	.	.	.	.	.			
183.0	15.13	35.90	26.65	146	.	.	.	.	.	.			
184.0	15.14	35.90	26.64	146	.	.	.	.	.	.			
185.0	15.13	35.88	26.63	147	.	.	.	.	.	.			
186.0	15.11	35.86	26.62	148	.	.	.	.	.	.			
187.0	15.07	35.86	26.63	148	.	.	.	.	.	.			
188.0	15.03	35.88	26.65	145	.	.	.	.	.	.			
189.0	15.02	35.87	26.65	146	.	.	.	.	.	.			
190.0	15.12	35.89	26.66	145	.	.	.	.	.	.			
191.0	15.02	35.88	26.65	145	.	.	.	.	.	.			
192.0	15.01	35.84	26.63	148	.	.	.	.	.	.			
193.0	15.00	35.05	26.64	147	.	.	.	.	.	.			
194.0	14.89	35.00	26.68	143	.	.	.	.	.	.			
195.0	14.00	35.09	26.69	142	.	.	.	.	.	.			

196.0	14.87	35.04	26.66	145	.	.	.	.	.	.			
197.0	14.87	35.05	26.66	144	.	.	.	.	.	.			
198.0	14.04	35.06	26.60	143	.	.	.	.	.	.			
199.0	14.02	35.09	26.71	141	.	.	.	.	.	.			
200.0	14.03	35.00	26.70	142	.	.	.	.	.	.			
201.0	14.03	35.00	26.70	142	.	.	.	.	.	.			
202.0	14.03	35.09	26.70	141	.	.	.	.	.	.			
203.0	14.03	35.00	26.70	142	.	.	.	.	.	.			
204.0	14.03	35.09	26.70	141	.	.	.	.	.	.			
205.0	14.03	35.91	26.72	139	.	.	.	.	.	.			
206.0	14.03	35.91	26.72	140	.	.	.	.	.	.			
207.0	14.03	35.91	26.71	140	.	.	.	.	.	.			
208.0	14.03	35.09	26.70	141	.	.	.	.	.	.			
209.0	14.03	35.09	26.70	141	.	.	.	.	.	.			
210.0	14.02	35.91	26.71	140	.	.	.	.	.	.			
211.0	14.00	35.91	26.72	140	.	.	.	.	.	.			
212.0	14.00	35.09	26.71	141	.	.	.	.	.	.			
213.0	14.77	35.09	26.72	140	.	.	.	.	.	.			
214.0	14.75	35.91	26.73	139	.	.	.	.	.	.			
215.0	14.75	35.91	26.73	139	.	.	.	.	.	.			
216.0	14.75	35.91	26.73	139	.	.	.	.	.	.			
217.0	14.75	35.91	26.73	139	.	.	.	0.79	19.9	15.1			
218.0	14.75	35.91	26.73	139	.	.	.	.	.	.			
219.0	14.75	35.91	26.73	139	.	.	.	.	.	.			

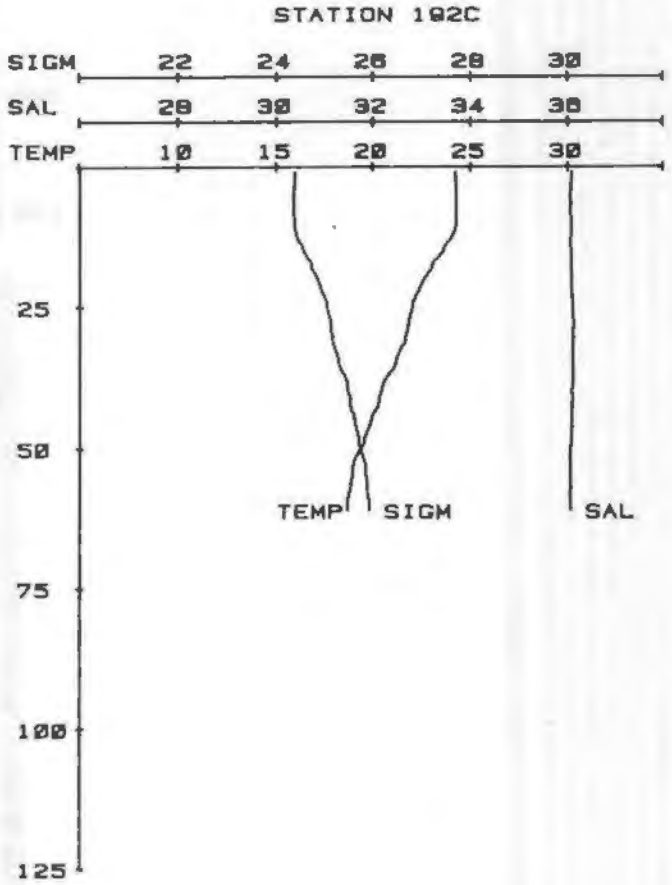
GILLISS CRUISE STA 192C 20/04/79 01.2 GMT CONSEC STA 198

LAT 38 43.2N LONG 00 05.1W DEPTH = 73M DIST LAST STA = 10.0KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 2
WIND DIRECTION	= 230	WAVE DIRECTION	= 220
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1018.5	VISIBILITY CODE	=

					OBSERVATIONS					
Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	24.26	36.08	24.39	355	.	.	.	.	.	.
2.0	24.26	36.07	24.38	356	.	.	.	.	.	.
3.0	24.27	36.06	24.37	357	.	.	.	.	.	.
4.0	24.27	36.06	24.37	357	.	.	.	0.00	0.0	0.0
5.0	24.27	36.04	24.36	358	.	.	.	.	.	.
6.0	24.27	36.06	24.37	357	.	.	.	.	.	.
7.0	24.27	36.06	24.37	357	.	.	.	.	.	.
8.0	24.26	36.04	24.36	358	.	.	.	.	.	.
9.0	24.26	36.07	24.38	356	.	.	.	.	.	.
10.0	24.27	36.06	24.37	357	.	.	.	0.05	0.0	0.3
11.0	24.20	34.08	24.41	354	.	.	.	.	.	.
12.0	24.08	36.06	24.43	352	.	.	.	.	.	.
13.0	23.94	36.05	24.46	348	.	.	.	.	.	.
14.0	23.68	36.06	24.55	340	.	.	.	.	.	.
15.0	23.59	36.07	24.58	337	.	.	.	.	.	.
16.0	23.36	36.07	24.65	331	.	.	.	.	.	.
17.0	23.08	36.07	24.73	323	.	.	.	.	.	.
18.0	23.02	36.06	24.74	322	.	.	.	.	.	.
19.0	22.81	36.08	24.82	315	.	.	.	.	.	.
20.0	22.61	36.07	24.87	310	.	.	.	.	.	.
21.0	22.46	36.08	24.92	305	.	.	.	.	.	.
22.0	22.35	36.08	24.95	303	.	.	.	.	.	.
23.0	22.10	36.09	25.00	297	.	.	.	.	.	.
24.0	22.04	36.10	25.05	293	.	.	.	.	.	.
25.0	22.00	36.10	25.06	292	.	.	.	0.07	1.0	0.5
26.0	21.92	36.11	25.09	289	.	.	.	.	.	.
27.0	21.85	36.12	25.12	286	.	.	.	.	.	.
28.0	21.79	36.13	25.14	284	.	.	.	.	.	.
29.0	21.74	36.10	25.13	285	.	.	.	.	.	.
30.0	21.66	36.12	25.17	281	.	.	.	.	.	.
31.0	21.64	36.11	25.17	282	.	.	.	.	.	.
32.0	21.46	36.10	25.21	278	.	.	.	.	.	.
33.0	21.33	36.11	25.26	274	.	.	.	.	.	.
34.0	21.20	36.11	25.29	271	.	.	.	.	.	.
35.0	21.15	36.11	25.31	269	.	.	.	.	.	.
36.0	21.03	36.12	25.35	265	.	.	.	.	.	.
37.0	20.77	36.12	25.42	258	.	.	.	.	.	.
38.0	20.54	36.12	25.47	253	.	.	.	.	.	.
39.0	20.47	36.10	25.48	252	.	.	.	.	.	.
40.0	20.38	36.08	25.49	251	.	.	.	.	.	.
41.0	20.29	36.11	25.54	247	.	.	.	.	.	.
42.0	20.26	36.09	25.53	248	.	.	.	.	.	.
43.0	20.16	36.09	25.56	245	.	.	.	.	.	.
44.0	19.94	36.09	25.62	240	.	.	.	0.20	1.5	1.5
45.0	19.87	36.09	25.64	238	.	.	.	.	.	.
46.0	19.79	36.09	25.66	236	.	.	.	.	.	.
47.0	19.65	36.08	25.69	233	.	.	.	.	.	.
48.0	19.53	36.08	25.72	230	.	.	.	.	.	.
49.0	19.51	36.07	25.71	230	.	.	.	.	.	.
50.0	19.32	36.06	25.76	227	.	.	.	.	.	.
51.0	19.15	36.05	25.79	223	.	.	.	.	.	.
52.0	18.99	36.05	25.83	219	.	.	.	.	.	.
53.0	18.92	36.07	25.87	216	.	.	.	.	.	.
54.0	18.91	36.06	25.86	217	.	.	.	.	.	.
55.0	18.80	36.07	25.90	215	.	.	.	.	.	.
56.0	18.81	36.07	25.90	214	.	.	.	.	.	.
57.0	18.81	36.07	25.90	214	.	.	.	.	.	.
58.0	18.71	36.05	25.91	213	.	.	.	0.39	4.7	3.0
59.0	18.65	36.07	25.94	210	.	.	.	.	.	.
60.0	18.64	36.07	25.94	210	.	.	.	.	.	.
61.0	18.64	36.07	25.94	210	.	.	.	.	.	.



GILLISS CRUISE STA 192C 20/04/79 02.2 GMT CONSEC STA 199

LAT 38 43.2N LONG 88 05.1W DEPTH = 78M DIST LAST STA = 6.0KM

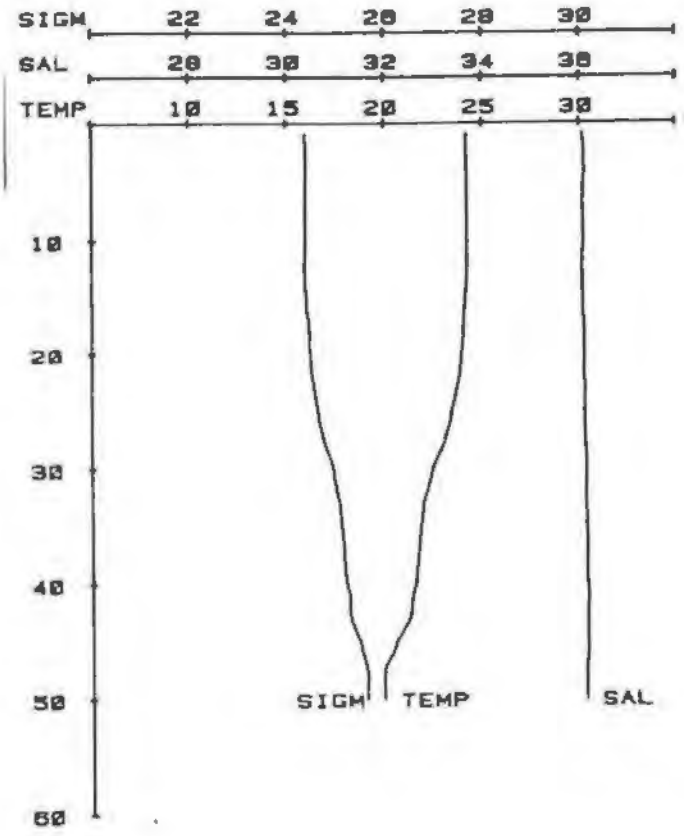
WEATHER DATA
WIND SPEED = 10KTS
WIND DIRECTION = 230
AIR TEMP = 22.8C
WEATHER CODE = 21
BAROMETRIC PRES= 1010.5

SEA STATE = 2
WAVE DIRECTION = 220
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	24.21	36.06	24.39	355	.	.	.	.	.	.
2.0	24.21	36.09	24.41	353	.	.	.	.	.	.
3.0	24.21	36.09	24.41	353	.	.	.	.	.	.
4.0	24.21	36.10	24.42	352	.	.	.	.	.	.
5.0	24.21	36.07	24.40	354	.	.	.	.	.	.
6.0	24.21	36.07	24.40	354	.	.	.	.	.	.
7.0	24.21	36.06	24.39	355	.	.	.	.	.	.
8.0	24.22	36.07	24.39	355	.	.	.	.	.	.
9.0	24.22	36.07	24.39	355	.	.	.	.	.	.
10.0	24.22	36.08	24.40	354	.	.	.	.	.	.
11.0	24.21	36.06	24.39	355	.	.	.	.	.	.
12.0	24.21	36.05	24.38	356	.	.	.	.	.	.
13.0	24.20	36.06	24.39	355	.	.	.	.	.	.
14.0	24.17	36.06	24.40	354	.	.	.	.	.	.
15.0	24.09	36.07	24.43	351	.	.	.	.	.	.
16.0	24.06	36.06	24.43	351	.	.	.	.	.	.
17.0	24.02	36.09	24.47	348	.	.	.	.	.	.
18.0	23.99	36.10	24.49	346	.	.	.	.	.	.
19.0	23.96	36.09	24.49	346	.	.	.	.	.	.
20.0	23.91	36.10	24.51	344	.	.	.	.	.	.
21.0	23.86	36.09	24.52	344	.	.	.	.	.	.
22.0	23.79	36.09	24.54	342	.	.	.	.	.	.
23.0	23.68	36.11	24.58	337	.	.	.	.	.	.
24.0	23.56	36.10	24.61	335	.	.	.	.	.	.
25.0	23.41	36.10	24.66	330	.	.	.	.	.	.
26.0	23.32	36.10	24.68	329	.	.	.	.	.	.
27.0	23.13	36.11	24.75	322	.	.	.	.	.	.
28.0	22.97	36.12	24.80	317	.	.	.	.	.	.
29.0	22.69	36.14	24.90	308	.	.	.	.	.	.
30.0	22.42	36.14	24.97	301	.	.	.	.	.	.
31.0	22.30	36.13	25.00	298	.	.	.	.	.	.
32.0	22.12	36.12	25.04	294	.	.	.	.	.	.
33.0	21.95	36.13	25.10	289	.	.	.	.	.	.
34.0	21.92	36.14	25.11	287	.	.	.	.	.	.
35.0	21.81	36.13	25.14	285	.	.	.	.	.	.
36.0	21.78	36.15	25.16	283	.	.	.	.	.	.
37.0	21.72	36.16	25.19	281	.	.	.	.	.	.
38.0	21.66	36.14	25.19	281	.	.	.	.	.	.
39.0	21.59	36.14	25.21	278	.	.	.	.	.	.
40.0	21.55	36.16	25.23	276	.	.	.	.	.	.
41.0	21.38	36.18	25.30	270	.	.	.	.	.	.
42.0	21.32	36.15	25.29	271	.	.	.	.	.	.
43.0	21.23	36.15	25.31	268	.	.	.	.	.	.
44.0	20.99	36.15	25.40	260	.	.	.	.	.	.
45.0	20.54	36.16	25.51	250	.	.	.	.	.	.
46.0	20.35	36.14	25.56	245	.	.	.	.	.	.
47.0	19.99	36.12	25.63	239	.	.	.	.	.	.
48.0	19.91	36.13	25.66	236	.	.	.	.	.	.
49.0	19.94	36.12	25.64	238	.	.	.	.	.	.
50.0	19.95	36.13	25.64	237	.	.	.	.	.	.

STATION 192C



GILLISS CRUISE STA 193X 20/04/79 05.9 GMT CONSEC STA 200

LAT 38 47.0N LONG 88 23.2W DEPTH = 39M DIST LAST STA = 29.2KM

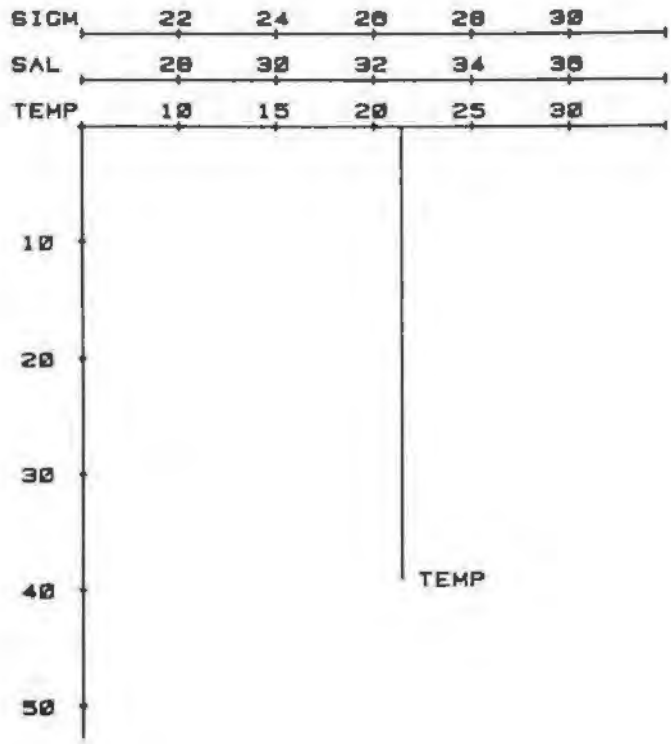
WEATHER DATA
WIND SPEED = 12KTS
WIND DIRECTION = 220
AIR TEMP = 21.7C
WEATHER CODE = X2
BAROMETRIC PRES= 1011.2

SEA STATE = 2
WAVE DIRECTION = 220
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.4	.	.	.	.	.	.	.	.	.
39.0	21.4	.	.	.	.	.	.	.	.	.

STATION 193X



GILLISS CRUISE STA 194C 20/04/79 06.5 GMT CONSEC STA 201

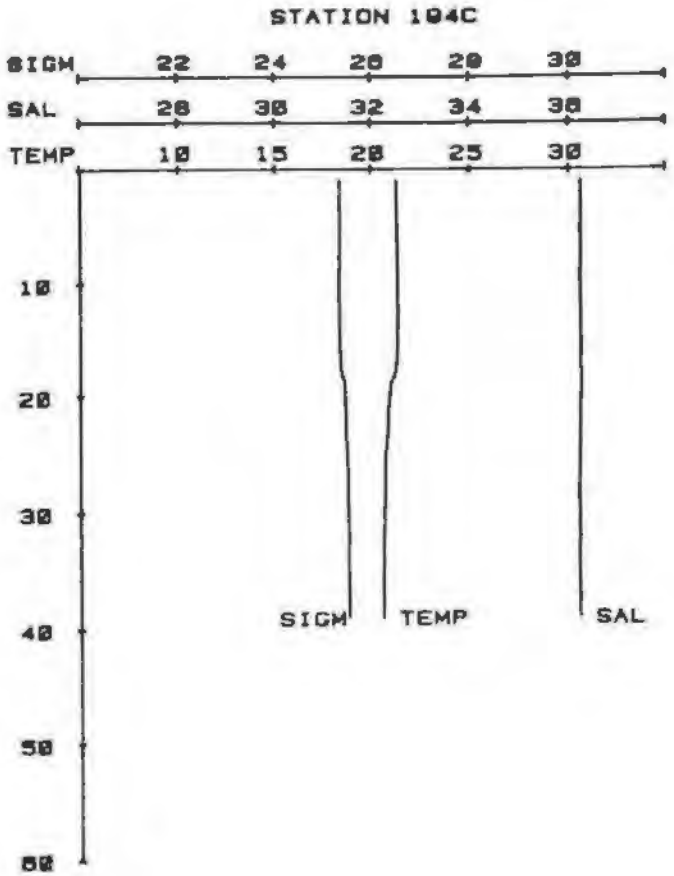
LAT 38 44.4N LONG 80 16.0W DEPTH = 41M DIST LAST STA = 11.1KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 2
WIND DIRECTION	= 300	WAVE DIRECTION	= 300
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 20	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1018.5	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.33	34.24	25.35	263	.	.	.	.	.	.
2.0	21.33	34.24	25.35	263	.	.	.	.	.	.
3.0	21.33	34.24	25.35	263	.	.	.	0.07	0.2	1.7
4.0	21.33	34.24	25.35	263	.	.	.	.	.	.
5.0	21.33	34.23	25.35	264	.	.	.	.	.	.
6.0	21.33	34.24	25.35	263	.	.	.	.	.	.
7.0	21.33	34.24	25.35	263	.	.	.	.	.	.
8.0	21.33	34.24	25.35	263	.	.	.	.	.	.
9.0	21.34	34.22	25.34	265	.	.	.	.	.	.
10.0	21.34	34.23	25.34	264	.	.	.	.	.	.
11.0	21.34	34.23	25.34	264	.	.	.	.	.	.
12.0	21.34	34.24	25.35	264	.	.	.	.	.	.
13.0	21.33	34.24	25.35	263	.	.	.	.	.	.
14.0	21.33	34.24	25.35	263	.	.	.	.	.	.
15.0	21.31	34.24	25.36	263	.	.	.	.	.	.
16.0	21.29	34.24	25.37	262	.	.	.	0.07	0.1	1.0
17.0	21.26	34.23	25.37	262	.	.	.	.	.	.
18.0	21.20	34.25	25.48	259	.	.	.	.	.	.
19.0	20.96	34.25	25.46	253	.	.	.	.	.	.
20.0	20.92	34.24	25.47	253	.	.	.	.	.	.
21.0	20.83	34.22	25.48	252	.	.	.	.	.	.
22.0	20.83	34.23	25.48	251	.	.	.	.	.	.
23.0	20.80	34.22	25.48	251	.	.	.	.	.	.
24.0	20.76	34.22	25.50	250	.	.	.	.	.	.
25.0	20.67	34.21	25.51	249	.	.	.	0.14	0.7	2.4
26.0	20.66	34.21	25.52	249	.	.	.	.	.	.
27.0	20.66	34.20	25.51	249	.	.	.	.	.	.
28.0	20.65	34.20	25.51	249	.	.	.	.	.	.
29.0	20.64	34.20	25.51	249	.	.	.	.	.	.
30.0	20.62	34.22	25.53	247	.	.	.	.	.	.
31.0	20.62	34.20	25.52	248	.	.	.	.	.	.
32.0	20.58	34.22	25.54	246	.	.	.	.	.	.
33.0	20.58	34.19	25.52	248	.	.	.	.	.	.
34.0	20.59	34.19	25.52	249	.	.	.	.	.	.
35.0	20.56	34.20	25.53	247	.	.	.	.	.	.
36.0	20.56	34.20	25.53	247	.	.	.	.	.	.
37.0	20.56	34.21	25.54	246	.	.	.	.	.	.
38.0	20.55	34.20	25.54	247	.	.	.	.	.	.
39.0	20.54	34.21	25.55	246	.	.	.	0.09	0.8	2.2



GILLISS CRUISE STA 195C 20/04/79 07.6 GMT CONSEC STA 202

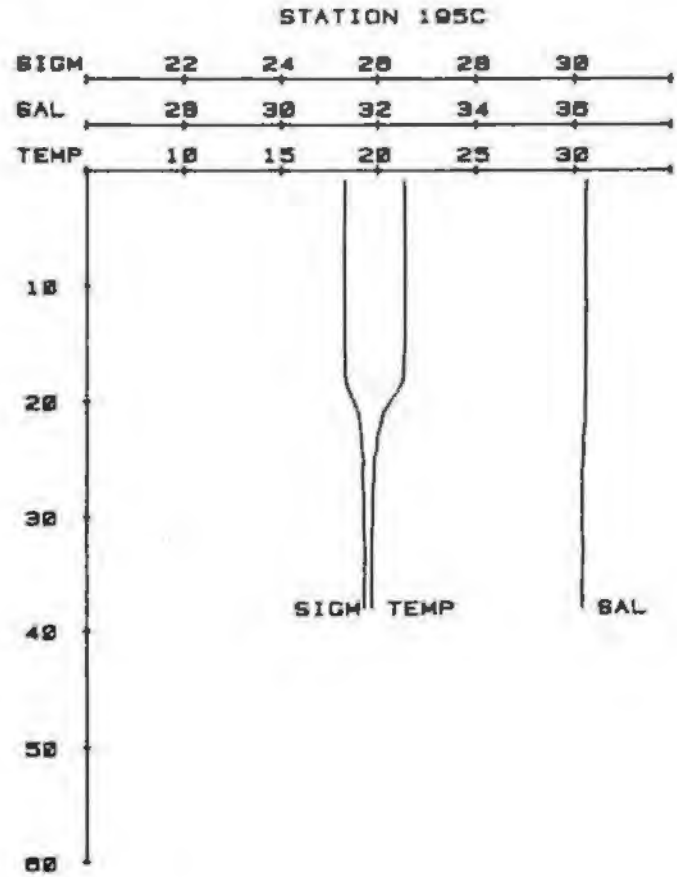
LAT 38 43.7N LONG 80 15.0W DEPTH = 42M DIST LAST STA = 9.4KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 2
WIND DIRECTION	= 300	WAVE DIRECTION	= 300
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1018.5	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.39	34.23	25.33	265	.	.	.	.	.	.
2.0	21.39	34.22	25.32	266	.	.	.	.	.	.
3.0	21.39	34.22	25.32	266	.	.	.	0.05	0.8	1.5
4.0	21.39	34.22	25.32	266	.	.	.	.	.	.
5.0	21.40	34.21	25.31	267	.	.	.	.	.	.
6.0	21.41	34.22	25.32	266	.	.	.	.	.	.
7.0	21.40	34.22	25.32	266	.	.	.	.	.	.
8.0	21.41	34.21	25.31	267	.	.	.	.	.	.
9.0	21.40	34.22	25.32	267	.	.	.	.	.	.
10.0	21.39	34.22	25.32	266	.	.	.	.	.	.
11.0	21.39	34.22	25.32	266	.	.	.	.	.	.
12.0	21.39	34.23	25.33	266	.	.	.	.	.	.
13.0	21.39	34.22	25.32	266	.	.	.	.	.	.
14.0	21.40	34.22	25.32	267	.	.	.	.	.	.
15.0	21.38	34.22	25.33	266	.	.	.	.	.	.
16.0	21.33	34.22	25.34	265	.	.	.	.	.	.
17.0	21.31	34.21	25.34	265	.	.	.	.	.	.
18.0	21.29	34.21	25.34	265	.	.	.	.	.	.
19.0	21.05	34.21	25.41	258	.	.	.	0.05	0.8	1.7
20.0	20.62	34.20	25.52	248	.	.	.	.	.	.
21.0	20.25	34.20	25.62	239	.	.	.	.	.	.
22.0	20.12	34.20	25.65	235	.	.	.	.	.	.
23.0	19.93	34.16	25.67	234	.	.	.	.	.	.
24.0	19.92	34.17	25.68	233	.	.	.	.	.	.
25.0	19.77	34.16	25.72	230	.	.	.	.	.	.
26.0	19.76	34.13	25.69	232	.	.	.	.	.	.
27.0	19.75	34.14	25.71	231	.	.	.	.	.	.
28.0	19.69	34.14	25.72	229	.	.	.	.	.	.
29.0	19.69	34.14	25.72	229	.	.	.	.	.	.
30.0	19.69	34.14	25.72	229	.	.	.	.	.	.
31.0	19.66	34.13	25.72	229	.	.	.	.	.	.
32.0	19.64	34.15	25.74	227	.	.	.	.	.	.
33.0	19.64	34.16	25.75	227	.	.	.	.	.	.
34.0	19.64	34.14	25.73	228	.	.	.	.	.	.
35.0	19.64	34.14	25.73	228	.	.	.	.	.	.
36.0	19.64	34.13	25.73	229	.	.	.	.	.	.
37.0	19.64	34.14	25.73	228	.	.	.	.	.	.
38.0	19.64	34.14	25.73	228	.	.	.	0.35	2.8	3.5



GILLISS CRUISE STA 196X 28/04/79 08.4 GMT CONSEC STA 203

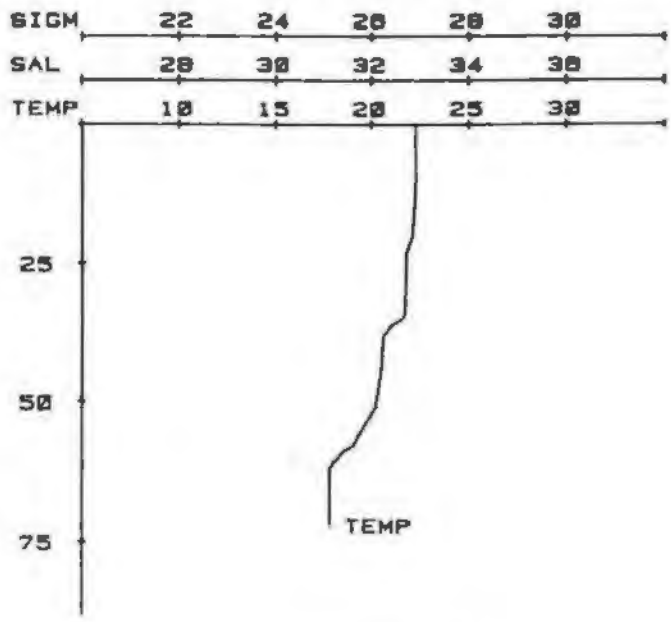
LAT 38 42.6N LONG 80 05.5W DEPTH = 72M DIST LAST STA = 9.0KM

WEATHER DATA
WIND SPEED = 12KTS
WIND DIRECTION = 310
AIR TEMP = 21.7C
WEATHER CODE = 61
BAROMETRIC PRES= 1018.5
SEA STATE = 2
WAVE DIRECTION = 300
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.3	.	.	.	.	.	.	.	.	.
10.0	22.3	.	.	.	.	.	.	.	.	.
20.0	22.1	.	.	.	.	.	.	.	.	.
21.0	22.0	.	.	.	.	.	.	.	.	.
23.0	21.8	.	.	.	.	.	.	.	.	.
34.0	21.7	.	.	.	.	.	.	.	.	.
35.0	21.5	.	.	.	.	.	.	.	.	.
36.0	21.0	.	.	.	.	.	.	.	.	.
38.0	20.6	.	.	.	.	.	.	.	.	.
44.0	20.5	.	.	.	.	.	.	.	.	.
51.0	20.2	.	.	.	.	.	.	.	.	.
52.0	20.1	.	.	.	.	.	.	.	.	.
55.0	19.5	.	.	.	.	.	.	.	.	.
58.0	19.0	.	.	.	.	.	.	.	.	.
59.0	18.5	.	.	.	.	.	.	.	.	.
61.0	18.0	.	.	.	.	.	.	.	.	.
62.0	17.8	.	.	.	.	.	.	.	.	.
72.0	17.0	.	.	.	.	.	.	.	.	.

STATION 196X



GILLISS CRUISE STA 197C 28/04/79 09.4 GMT CONSEC STA 204

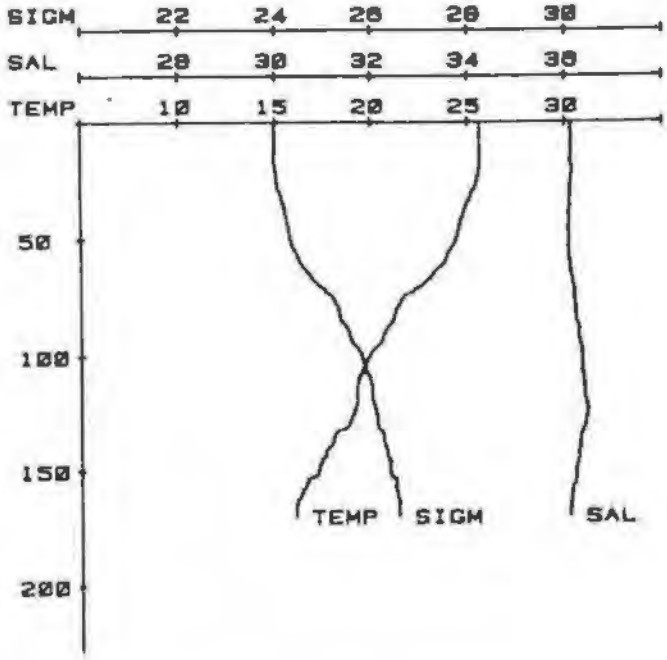
LAT 38 42.5N LONG 79 50.5W DEPTH = 232M DIST LAST STA = 11.2KM

WEATHER DATA
WIND SPEED = 11KTS
WIND DIRECTION = 310
AIR TEMP = 21.7C
WEATHER CODE = 32
BAROMETRIC PRES= 1018.5
SEA STATE = 2
WAVE DIRECTION = 300
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	25.63	36.14	24.02	390	.	.	.	.	.	.
2.0	25.63	36.12	24.00	392	.	.	.	.	.	.
3.0	25.64	36.12	24.00	392	.	.	.	0.02	0.0	0.0
4.0	25.62	36.13	24.01	391	.	.	.	.	.	.
5.0	25.62	36.14	24.02	390	.	.	.	.	.	.
6.0	25.63	36.14	24.02	391	.	.	.	.	.	.
7.0	25.63	36.13	24.01	391	.	.	.	.	.	.
8.0	25.63	36.13	24.01	391	.	.	.	.	.	.
9.0	25.63	36.13	24.01	391	.	.	.	.	.	.
10.0	25.63	36.13	24.01	391	.	.	.	.	.	.
11.0	25.63	36.13	24.01	392	.	.	.	.	.	.
12.0	25.63	36.13	24.01	392	.	.	.	.	.	.
13.0	25.63	36.13	24.01	392	.	.	.	.	.	.
14.0	25.63	36.14	24.02	391	.	.	.	.	.	.
15.0	25.63	36.13	24.01	392	.	.	.	.	.	.
16.0	25.63	36.11	23.99	393	.	.	.	.	.	.
17.0	25.63	36.11	23.99	393	.	.	.	.	.	.
18.0	25.63	36.13	24.01	392	.	.	.	.	.	.
19.0	25.63	36.15	24.02	390	.	.	.	.	.	.
20.0	25.62	36.16	24.04	389	.	.	.	.	.	.
21.0	25.61	36.15	24.03	390	.	.	.	.	.	.
22.0	25.56	36.15	24.05	388	.	.	.	.	.	.
23.0	25.55	36.14	24.04	389	.	.	.	.	.	.
24.0	25.50	36.14	24.06	387	.	.	.	.	.	.
25.0	25.48	36.13	24.06	388	.	.	.	.	.	.
26.0	25.44	36.12	24.06	387	.	.	.	.	.	.
27.0	25.44	36.12	24.06	387	.	.	.	.	.	.
28.0	25.37	36.11	24.07	386	.	.	.	.	.	.
29.0	25.34	36.11	24.08	385	.	.	.	.	.	.
30.0	25.23	36.11	24.12	382	.	.	.	.	.	.
31.0	25.17	36.12	24.14	380	.	.	.	.	.	.
32.0	25.13	36.12	24.16	378	.	.	.	.	.	.
33.0	25.10	36.10	24.15	379	.	.	.	.	.	.
34.0	25.01	36.10	24.18	376	.	.	.	.	.	.
35.0	24.98	36.10	24.19	376	.	.	.	.	.	.
36.0	24.92	36.12	24.22	372	.	.	.	.	.	.
37.0	24.87	36.10	24.22	372	.	.	.	.	.	.
38.0	24.83	36.08	24.22	373	.	.	.	.	.	.
39.0	24.78	36.08	24.23	371	.	.	.	.	.	.
40.0	24.76	36.09	24.25	370	.	.	.	.	.	.
41.0	24.71	36.09	24.26	369	.	.	.	.	.	.
42.0	24.68	36.09	24.27	368	.	.	.	.	.	.
43.0	24.62	36.09	24.29	366	.	.	.	.	.	.
44.0	24.60	36.09	24.29	366	.	.	.	.	.	.
45.0	24.56	36.07	24.29	366	.	.	.	.	.	.
46.0	24.54	36.08	24.31	365	.	.	.	.	.	.
47.0	24.52	36.09	24.32	363	.	.	.	.	.	.
48.0	24.51	36.08	24.32	364	.	.	.	.	.	.
49.0	24.45	36.10	24.35	361	.	.	.	.	.	.
50.0	24.43	36.08	24.34	362	.	.	.	.	.	.
51.0	24.36	36.08	24.36	360	.	.	.	.	.	.
52.0	24.34	36.08	24.37	359	.	.	.	.	.	.
53.0	24.25	36.08	24.39	357	.	.	.	.	.	.
54.0	24.19	36.08	24.41	355	.	.	.	.	.	.
55.0	24.12	36.09	24.43	353	.	.	.	.	.	.

STATION 197C



56.0	24.12	36.09	24.47	359	.	.	.	.	.	.
57.0	23.96	36.09	24.49	348	.	.	.	.	.	.
58.0	23.93	36.10	24.50	346	.	.	.	.	.	.
59.0	23.90	36.09	24.50	346	.	.	.	.	.	.
61.0	23.82	36.12	24.55	342	.	.	.	.	.	.
61.0	23.73	36.12	24.58	339	.	.	.	.	.	.
62.0	23.65	36.11	24.59	338	.	.	.	.	.	.
63.0	23.45	36.13	24.67	331	.	.	.	.	.	.
64.0	23.38	36.12	24.68	330	.	.	.	.	.	.
65.0	23.23	36.13	24.73	325	.	.	.	.	.	.
66.0	23.21	36.16	24.76	322	.	.	.	.	.	.
67.0	23.06	36.16	24.80	318	.	.	.	.	.	.
68.0	22.96	36.16	24.83	315	.	.	.	.	.	.
69.0	22.76	36.18	24.91	308	.	.	.	.	.	.
71.0	22.68	36.18	24.93	306	.	.	.	.	.	.

71.0	22.47	36.21	25.81	290	.	.	.	0.20	3.0	2.0
72.0	22.23	36.21	25.80	292	.	.	.	.	.	.
73.0	22.19	36.20	25.80	292	.	.	.	.	.	.
74.0	21.78	36.21	25.73	281	.	.	.	.	.	.
75.0	21.72	36.20	25.72	279	.	.	.	.	.	.
76.0	21.64	36.22	25.76	274	.	.	.	.	.	.
77.0	21.56	36.28	25.76	275	.	.	.	.	.	.
78.0	21.50	36.23	25.70	271	.	.	.	.	.	.
79.0	21.39	36.24	25.74	267	.	.	.	.	.	.
80.0	21.32	36.23	25.75	266	.	.	.	.	.	.
81.0	21.29	36.23	25.74	266	.	.	.	.	.	.
82.0	21.26	36.24	25.77	264	.	.	.	.	.	.
83.0	21.21	36.23	25.78	264	.	.	.	.	.	.
84.0	21.18	36.24	25.78	262	.	.	.	.	.	.
85.0	21.17	36.23	25.79	263	.	.	.	.	.	.
86.0	21.09	36.26	25.84	258	.	.	.	.	.	.
87.0	20.95	36.29	25.90	253	.	.	.	.	.	.
88.0	20.89	36.30	25.92	250	.	.	.	.	.	.
89.0	20.79	36.31	25.96	247	.	.	.	.	.	.
90.0	20.75	36.29	25.95	248	.	.	.	.	.	.
91.0	20.65	36.29	25.98	245	.	.	.	.	.	.
92.0	20.64	36.29	25.98	245	.	.	.	.	.	.
93.0	20.59	36.31	25.61	242	.	.	.	0.15	2.6	1.3
94.0	20.55	36.31	25.62	241	.	.	.	.	.	.
95.0	20.49	36.33	25.65	238	.	.	.	.	.	.
96.0	20.33	36.35	25.71	233	.	.	.	.	.	.
97.0	20.18	36.36	25.74	228	.	.	.	.	.	.
98.0	20.08	36.34	25.77	227	.	.	.	.	.	.
99.0	19.98	36.37	25.82	222	.	.	.	.	.	.
100.0	19.94	36.36	25.82	222	.	.	.	.	.	.
101.0	19.89	36.35	25.83	222	.	.	.	.	.	.
102.0	19.77	36.35	25.86	219	.	.	.	.	.	.
103.0	19.75	36.37	25.88	217	.	.	.	.	.	.
104.0	19.78	36.35	25.88	217	.	.	.	.	.	.
105.0	19.66	36.38	25.91	214	.	.	.	.	.	.
106.0	19.68	36.36	25.91	214	.	.	.	.	.	.
107.0	19.52	36.35	25.93	213	.	.	.	.	.	.
108.0	19.50	36.38	25.95	210	.	.	.	.	.	.
109.0	19.38	36.39	25.99	206	.	.	.	.	.	.
110.0	19.35	36.39	26.00	206	.	.	.	.	.	.
111.0	19.33	36.40	26.01	204	.	.	.	.	.	.
112.0	19.29	36.41	26.03	203	.	.	.	.	.	.
113.0	19.28	36.41	26.03	202	.	.	.	.	.	.
114.0	19.26	36.41	26.04	202	.	.	.	.	.	.
115.0	19.27	36.41	26.04	202	.	.	.	.	.	.
116.0	19.26	36.41	26.04	202	.	.	.	.	.	.
117.0	19.26	36.41	26.04	202	.	.	.	.	.	.
118.0	19.26	36.41	26.04	202	.	.	.	.	.	.
119.0	19.29	36.43	26.05	201	.	.	.	.	.	.
120.0	19.29	36.44	26.05	201	.	.	.	.	.	.
121.0	19.23	36.46	26.08	198	.	.	.	.	.	.
122.0	19.21	36.46	26.09	197	.	.	.	.	.	.
123.0	19.19	36.48	26.11	196	.	.	.	.	.	.
124.0	19.12	36.47	26.12	195	.	.	.	.	.	.
125.0	19.11	36.46	26.12	195	.	.	.	.	.	.

126.0	19.13	36.40	26.15	192	.	.	.	.	.	.
127.0	18.98	36.44	26.13	193	.	.	.	.	.	.
128.0	18.92	36.43	26.14	193	.	.	.	.	.	.
129.0	18.88	36.43	26.15	192	.	.	.	.	.	.
130.0	18.83	36.41	26.15	192	.	.	.	.	.	.
131.0	18.76	36.41	26.17	190	.	.	.	.	.	.
132.0	18.63	36.39	26.19	189	.	.	.	.	.	.
133.0	18.22	36.35	26.26	182	.	.	.	.	.	.
134.0	18.12	36.34	26.28	180	.	.	.	.	.	.
135.0	18.06	36.33	26.28	179	.	.	.	.	.	.
136.0	18.12	36.32	26.29	179	.	.	.	0.47	7.9	4.3
137.0	18.01	36.32	26.29	179	.	.	.	.	.	.
138.0	18.00	36.31	26.28	180	.	.	.	.	.	.
139.0	17.92	36.33	26.32	176	.	.	.	.	.	.
140.0	17.85	36.33	26.34	175	.	.	.	.	.	.
141.0	17.74	36.31	26.35	173	.	.	.	.	.	.
142.0	17.63	36.28	26.35	173	.	.	.	.	.	.
143.0	17.61	36.28	26.36	173	.	.	.	.	.	.
144.0	17.62	36.28	26.35	173	.	.	.	.	.	.
145.0	17.51	36.29	26.39	170	.	.	.	.	.	.
146.0	17.38	36.30	26.43	166	.	.	.	.	.	.
147.0	17.38	36.25	26.39	170	.	.	.	.	.	.
148.0	17.28	36.25	26.41	167	.	.	.	.	.	.
149.0	17.27	36.23	26.40	169	.	.	.	.	.	.
150.0	17.27	36.23	26.40	169	.	.	.	.	.	.
151.0	17.19	36.23	26.42	167	.	.	.	.	.	.
152.0	17.22	36.23	26.41	167	.	.	.	.	.	.
153.0	17.03	36.23	26.46	163	.	.	.	.	.	.
154.0	16.68	36.23	26.54	155	.	.	.	.	.	.
155.0	16.69	36.22	26.53	156	.	.	.	.	.	.
156.0	16.59	36.21	26.55	155	.	.	.	.	.	.
157.0	16.59	36.16	26.51	158	.	.	.	.	.	.
158.0	16.52	36.16	26.53	157	.	.	.	.	.	.
159.0	16.38	36.16	26.56	154	.	.	.	.	.	.
160.0	16.37	36.14	26.55	155	.	.	.	.	.	.
161.0	16.38	36.14	26.56	153	.	.	.	.	.	.
162.0	16.28	36.13	26.56	154	.	.	.	.	.	.
163.0	16.15	36.14	26.60	150	.	.	.	.	.	.
164.0	16.11	36.13	26.60	150	.	.	.	.	.	.
165.0	16.08	36.11	26.59	151	.	.	.	.	.	.
166.0	16.07	36.11	26.59	151	.	.	.	.	.	.
167.0	16.08	36.11	26.59	151	.	.	.	.	.	.
168.0	16.08	36.11	26.59	151	.	.	.	.	.	.
169.0	16.07	36.10	26.59	151	.	.	.	.	.	.
170.0	16.05	36.11	26.60	150	.	.	.	0.62	13.4	4.9

GILLISS CRUISE STA 198C 28/04/79 10.9 GMT CONSEC STA 285

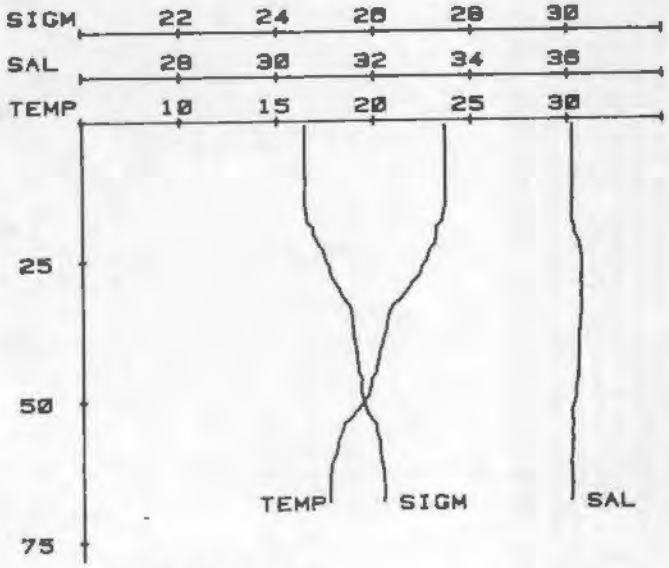
LAT 38 42.4N LONG 88 05.3W DEPTH = 71M DIST LAST STA = 10.0KM

WEATHER DATA

WIND SPEED	= 10KTS	SEA STATE	= 2
WIND DIRECTION	= 300	WAVE DIRECTION	= 300
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 31	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1011.2	VISIBILITY CODE	=

				OBSERVATIONS						
Z	T	S	σ	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.66	36.09	24.58	337	.	.	.	.	.	.
2.0	23.66	36.08	24.57	338	.	.	.	.	.	.
3.0	23.66	36.08	24.57	338	.	.	.	0.08	0.5	1.2
4.0	23.67	36.08	24.56	338	.	.	.	.	.	.
5.0	23.67	36.08	24.56	338	.	.	.	.	.	.
6.0	23.64	36.08	24.57	338	.	.	.	.	.	.
7.0	23.65	36.08	24.57	338	.	.	.	.	.	.
8.0	23.65	36.08	24.57	338	.	.	.	.	.	.
9.0	23.65	36.08	24.57	338	.	.	.	.	.	.
10.0	23.65	36.09	24.58	337	.	.	.	.	.	.
11.0	23.65	36.08	24.57	338	.	.	.	.	.	.
12.0	23.65	36.08	24.57	338	.	.	.	.	.	.
13.0	23.65	36.07	24.56	339	.	.	.	.	.	.
14.0	23.65	36.08	24.57	338	.	.	.	0.10	2.2	1.1
15.0	23.65	36.06	24.56	340	.	.	.	.	.	.
16.0	23.55	36.08	24.60	335	.	.	.	.	.	.
17.0	23.50	36.06	24.60	335	.	.	.	.	.	.
18.0	23.46	36.07	24.62	334	.	.	.	.	.	.
19.0	23.17	36.12	24.74	322	.	.	.	.	.	.
20.0	23.10	36.11	24.73	323	.	.	.	.	.	.
21.0	23.11	36.12	24.80	317	.	.	.	.	.	.
22.0	23.00	36.23	24.85	312	.	.	.	.	.	.
23.0	22.81	36.25	24.94	303	.	.	.	.	.	.
24.0	22.73	36.27	24.98	299	.	.	.	.	.	.
25.0	22.64	36.27	25.01	297	.	.	.	.	.	.
26.0	22.48	36.28	25.08	291	.	.	.	0.15	2.0	3.7
27.0	22.36	36.27	25.09	289	.	.	.	.	.	.
28.0	22.16	36.26	25.14	285	.	.	.	.	.	.
29.0	21.88	36.25	25.21	278	.	.	.	.	.	.
30.0	21.71	36.28	25.28	271	.	.	.	.	.	.
31.0	21.47	36.25	25.32	267	.	.	.	.	.	.
32.0	21.22	36.26	25.41	261	.	.	.	.	.	.
33.0	20.88	36.27	25.50	253	.	.	.	.	.	.
34.0	20.74	36.26	25.53	247	.	.	.	.	.	.
35.0	20.66	36.25	25.55	246	.	.	.	.	.	.
36.0	20.59	36.24	25.56	245	.	.	.	.	.	.
37.0	20.57	36.24	25.56	245	.	.	.	0.19	2.0	2.0
38.0	20.48	36.21	25.56	244	.	.	.	.	.	.
39.0	20.37	36.21	25.59	242	.	.	.	.	.	.
40.0	20.34	36.22	25.61	240	.	.	.	.	.	.

STATION 198C



41.0	20.22	36.21	25.63	238	.	.	.	.	.	.
42.0	20.20	36.21	25.64	237	.	.	.	.	.	.
43.0	20.10	36.20	25.66	236	.	.	.	.	.	.
44.0	20.05	36.20	25.67	234	.	.	.	.	.	.
45.0	20.00	36.19	25.68	234	.	.	.	.	.	.
46.0	19.79	36.20	25.74	228	.	.	.	.	.	.
47.0	19.77	36.16	25.72	230	.	.	.	.	.	.
48.0	19.68	36.14	25.72	230	.	.	.	.	.	.
49.0	19.63	36.14	25.74	228	.	.	.	.	.	.
50.0	19.38	36.13	25.79	223	.	.	.	.	.	.
51.0	19.20	36.09	25.81	221	.	.	.	.	.	.
52.0	18.94	36.05	25.85	218	.	.	.	.	.	.
53.0	18.73	36.07	25.92	211	.	.	.	.	.	.
54.0	18.36	36.08	26.02	202	.	.	.	0.47	6.5	4.7
55.0	18.26	36.07	26.03	200	.	.	.	.	.	.

56.0	18.16	36.06	26.05	199	.	.	.	.	.	.	.
57.0	18.03	36.08	26.10	194	.	.	.	.	.	.	.
58.0	17.99	36.06	26.09	195	.	.	.	0.07	4.9	4.6	
59.0	17.94	36.07	26.11	193	.	.	.	.	.	.	
60.0	17.85	36.05	26.12	192	.	.	.	.	.	.	
61.0	17.78	36.03	26.14	190	.	.	.	.	.	.	
62.0	17.66	36.05	26.17	188	.	.	.	.	.	.	
63.0	17.62	36.05	26.18	187	.	.	.	.	.	.	
64.0	17.61	36.06	26.19	186	.	.	.	.	.	.	
65.0	17.59	36.06	26.19	185	.	.	.	.	.	.	
66.0	17.59	36.06	26.19	186	.	.	.	.	.	.	
67.0	17.59	36.05	26.19	186	.	.	.	.	.	.	
68.0	17.59	36.03	26.17	188	.	.	.	.	.	.	

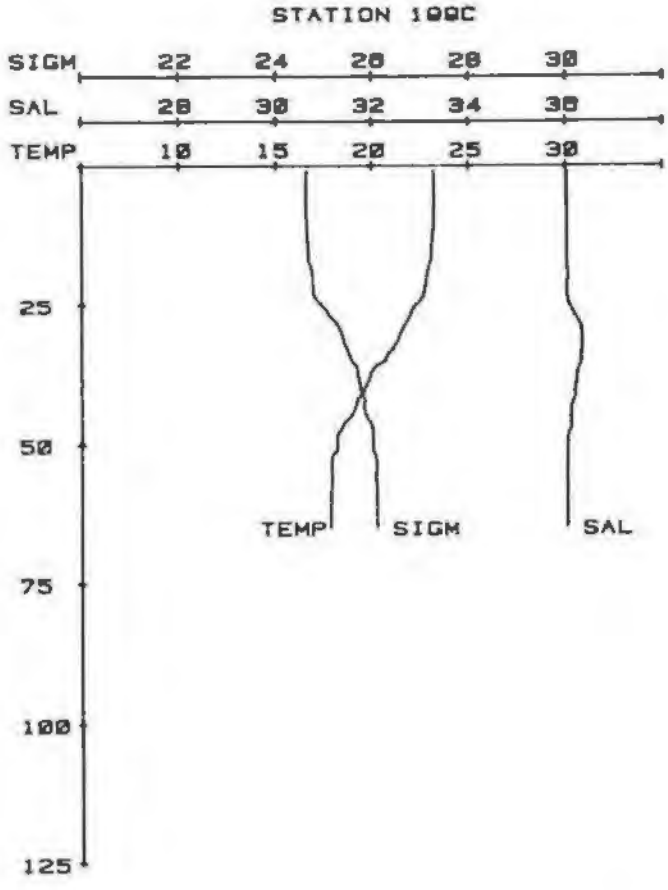
GTLLISS CRUISE STA 199C 20/04/79 13.7 GMT CONSEC STA 206

LAT 38 42.9N LONG 08 05.3W DEPTH = 21M DIST LAST STA = 0.9NM

WEATHER DATA

WIND SPEED	= 15KTS	SEA STATE	= 3
WIND DIRECTION	= 300	WAVE DIRECTION	= 310
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1012.5	VISIBILITY CODE	=

				OBSERVATIONS						
Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.24	36.03	24.65	330	.	.	.	.	.	.
2.0	23.24	36.01	24.64	331	.	.	.	.	.	.
3.0	23.24	36.02	24.65	331	.	.	.	.	.	.
4.0	23.24	36.02	24.65	331	.	.	.	.	.	.
5.0	23.24	36.01	24.64	331	.	.	.	.	.	.
6.0	23.24	36.02	24.65	331	.	.	.	0.04	0.0	0.0
7.0	23.24	36.02	24.65	331	.	.	.	.	.	.
8.0	23.22	36.02	24.65	330	.	.	.	.	.	.
9.0	23.21	36.02	24.65	330	.	.	.	.	.	.
10.0	23.19	36.02	24.66	329	.	.	.	.	.	.
11.0	23.19	36.02	24.66	329	.	.	.	.	.	.
12.0	23.15	36.02	24.67	328	.	.	.	0.05	0.6	0.3
13.0	23.12	36.02	24.68	328	.	.	.	.	.	.
14.0	23.10	36.02	24.69	327	.	.	.	.	.	.
15.0	23.08	36.02	24.69	327	.	.	.	.	.	.
16.0	23.06	36.02	24.70	326	.	.	.	.	.	.
17.0	23.04	36.01	24.70	326	.	.	.	.	.	.
18.0	22.92	36.04	24.75	321	.	.	.	.	.	.
19.0	22.86	36.04	24.77	319	.	.	.	.	.	.
20.0	22.83	36.05	24.79	318	.	.	.	.	.	.
21.0	22.79	36.02	24.78	319	.	.	.	.	.	.
22.0	22.72	36.03	24.80	316	.	.	.	.	.	.
23.0	22.69	36.03	24.81	315	.	.	.	.	.	.
24.0	22.54	36.05	24.87	310	.	.	.	.	.	.
25.0	22.28	36.08	24.97	301	.	.	.	0.07	0.1	0.0
26.0	22.04	36.14	25.08	296	.	.	.	.	.	.
27.0	21.97	36.20	25.15	294	.	.	.	.	.	.
28.0	21.78	36.28	25.26	293	.	.	.	.	.	.
29.0	21.63	36.33	25.34	265	.	.	.	.	.	.
30.0	21.47	36.33	25.38	261	.	.	.	.	.	.
31.0	21.38	36.34	25.42	258	.	.	.	.	.	.
32.0	21.24	36.34	25.46	255	.	.	.	.	.	.
33.0	21.04	36.33	25.50	250	.	.	.	.	.	.
34.0	20.79	36.31	25.56	245	.	.	.	.	.	.
35.0	20.68	36.32	25.59	242	.	.	.	.	.	.
36.0	20.17	36.28	25.70	231	.	.	.	.	.	.
37.0	19.96	36.23	25.72	230	.	.	.	.	.	.
38.0	19.89	36.23	25.74	228	.	.	.	.	.	.
39.0	19.72	36.21	25.77	225	.	.	.	.	.	.
40.0	19.61	36.19	25.78	224	.	.	.	.	.	.
41.0	19.43	36.20	25.83	219	.	.	.	.	.	.
42.0	19.20	36.17	25.87	215	.	.	.	.	.	.
43.0	19.15	36.15	25.84	218	.	.	.	.	.	.
44.0	19.03	36.11	25.87	216	.	.	.	.	.	.
45.0	18.87	36.14	25.91	212	.	.	.	0.12	2.4	1.3
46.0	18.56	36.11	25.99	204	.	.	.	.	.	.
47.0	18.41	36.11	26.03	201	.	.	.	.	.	.
48.0	18.19	36.05	26.04	200	.	.	.	.	.	.
49.0	18.14	36.04	26.04	200	.	.	.	.	.	.
50.0	18.10	36.04	26.03	200	.	.	.	.	.	.
51.0	18.14	36.03	26.03	201	.	.	.	.	.	.
52.0	17.92	36.04	26.10	194	.	.	.	.	.	.
53.0	17.87	36.04	26.11	193	.	.	.	.	.	.
54.0	17.87	36.03	26.10	194	.	.	.	.	.	.
55.0	17.89	36.03	26.10	194	.	.	.	.	.	.
56.0	17.92	36.02	26.08	196	.	.	.	.	.	.
57.0	17.88	36.04	26.11	193	.	.	.	.	.	.
58.0	17.85	36.04	26.11	193	.	.	.	.	.	.
59.0	17.85	36.03	26.11	194	.	.	.	.	.	.
60.0	17.84	36.03	26.11	193	.	.	.	.	.	.
61.0	17.83	36.04	26.12	192	.	.	.	.	.	.
62.0	17.83	36.03	26.11	193	.	.	.	.	.	.
63.0	17.83	36.04	26.12	192	.	.	.	.	.	.
64.0	17.84	36.03	26.11	193	.	.	.	.	.	.
65.0	17.81	36.04	26.12	192	.	.	.	.	.	.



GILLISS CRUISE STA 200C 26/04/79 20.3 GMT CONSEC STA 216

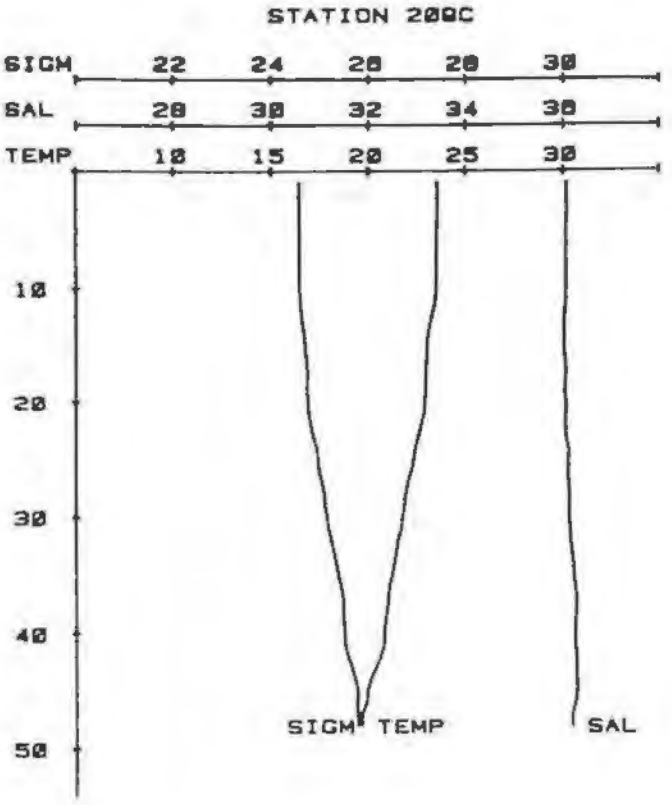
LAT 38 37.8N LONG 00 07.2W DEPTH = ASM DIST LAST STA = 11.3NM

WEATHER DATA
WIND SPEED = 10KTS
WIND DIRECTION = 310
AIR TEMP = 22.2C
WEATHER CODE = 00
BAROMETRIC PRES= 1012.9

SEA STATE = 2
WAVE DIRECTION = 340
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.55	36.07	24.59	335	.	.	.	.	.	.
2.0	23.55	36.07	24.59	336	.	.	.	0.05	0.3	0.3
3.0	23.55	36.08	24.60	335	.	.	.	.	.	.
4.0	23.54	36.07	24.60	335	.	.	.	.	.	.
5.0	23.52	36.07	24.60	335	.	.	.	.	.	.
6.0	23.52	36.07	24.60	335	.	.	.	.	.	.
7.0	23.51	36.07	24.60	335	.	.	.	.	.	.
8.0	23.51	36.07	24.60	335	.	.	.	.	.	.
9.0	23.51	36.07	24.60	335	.	.	.	0.04	0.0	0.0
10.0	23.49	36.07	24.61	334	.	.	.	.	.	.
11.0	23.45	36.07	24.62	333	.	.	.	.	.	.
12.0	23.32	36.04	24.64	332	.	.	.	.	.	.
13.0	23.18	36.03	24.67	329	.	.	.	.	.	.
14.0	23.07	36.04	24.71	325	.	.	.	.	.	.
15.0	23.03	36.03	24.71	324	.	.	.	0.19	0.3	0.3
16.0	23.01	36.06	24.74	322	.	.	.	.	.	.
17.0	22.97	36.08	24.77	319	.	.	.	.	.	.
18.0	22.97	36.06	24.75	321	.	.	.	.	.	.
19.0	22.95	36.05	24.75	321	.	.	.	0.07	0.6	0.3
20.0	22.91	36.08	24.79	318	.	.	.	.	.	.
21.0	22.88	36.07	24.79	318	.	.	.	.	.	.
22.0	22.72	36.07	24.83	313	.	.	.	.	.	.
23.0	22.59	36.08	24.88	309	.	.	.	.	.	.
24.0	22.43	36.13	24.96	301	.	.	.	.	.	.
25.0	22.35	36.13	24.99	299	.	.	.	0.25	1.2	2.6
26.0	22.21	36.12	25.02	296	.	.	.	.	.	.
27.0	22.03	36.13	25.08	290	.	.	.	.	.	.
28.0	21.92	36.15	25.12	286	.	.	.	.	.	.
29.0	21.86	36.14	25.13	285	.	.	.	.	.	.
30.0	21.73	36.14	25.17	282	.	.	.	.	.	.
31.0	21.67	36.16	25.20	279	.	.	.	.	.	.
32.0	21.49	36.17	25.26	273	.	.	.	.	.	.
33.0	21.41	36.20	25.30	269	.	.	.	.	.	.
34.0	21.36	36.23	25.36	264	.	.	.	.	.	.
35.0	21.19	36.24	25.39	261	.	.	.	.	.	.
36.0	21.04	36.26	25.45	255	.	.	.	.	.	.
37.0	20.98	36.29	25.49	252	.	.	.	.	.	.
38.0	20.92	36.27	25.49	251	.	.	.	.	.	.
39.0	20.83	36.26	25.51	250	.	.	.	.	.	.
40.0	20.76	36.25	25.52	249	.	.	.	.	.	.
41.0	20.75	36.26	25.53	248	.	.	.	.	.	.
42.0	20.57	36.28	25.59	242	.	.	.	.	.	.
43.0	20.33	36.29	25.67	235	.	.	.	.	.	.
44.0	20.05	36.29	25.74	228	.	.	.	.	.	.
45.0	19.89	36.29	25.78	224	.	.	.	.	.	.
46.0	19.85	36.25	25.76	226	.	.	.	.	.	.
47.0	19.68	36.19	25.78	224	.	.	.	.	.	.
48.0	19.68	36.19	25.78	224	.	.	.	0.35	5.6	3.5



GILLISS CRUISE STA 210X 28/04/79 22.0 GMT CONSEC STA 217

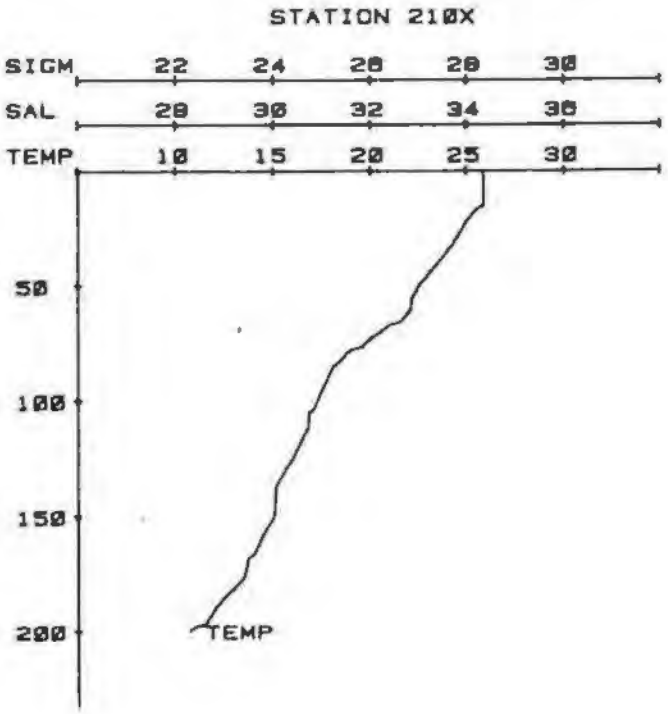
LAT 38 41.5N LONG 79 59.0W DEPTH = 250M DIST LAST STA = 15.5KM

WEATHER DATA
WIND SPEED = 11KTS
WIND DIRECTION = 300
AIR TEMP = 22.8C
WEATHER CODE = 20
BAROMETRIC PRES= 1012.5

SEA STATE = 2
WAVE DIRECTION = 300
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	25.0	.	.	.	.	.	.	.	.	.
15.0	25.0	.	.	.	.	.	.	.	.	.
17.0	25.5	.	.	.	.	.	.	.	.	.
22.0	25.0	.	.	.	.	.	.	.	.	.
29.0	24.5	.	.	.	.	.	.	.	.	.
35.0	24.0	.	.	.	.	.	.	.	.	.
40.0	23.5	.	.	.	.	.	.	.	.	.
45.0	23.0	.	.	.	.	.	.	.	.	.
50.0	22.5	.	.	.	.	.	.	.	.	.
56.0	22.1	.	.	.	.	.	.	.	.	.
60.0	22.1	.	.	.	.	.	.	.	.	.
61.0	22.0	.	.	.	.	.	.	.	.	.
66.0	21.5	.	.	.	.	.	.	.	.	.
67.0	21.0	.	.	.	.	.	.	.	.	.
70.0	20.5	.	.	.	.	.	.	.	.	.
73.0	20.0	.	.	.	.	.	.	.	.	.
77.0	19.5	.	.	.	.	.	.	.	.	.
78.0	19.0	.	.	.	.	.	.	.	.	.
79.0	18.8	.	.	.	.	.	.	.	.	.
82.0	18.5	.	.	.	.	.	.	.	.	.
86.0	18.0	.	.	.	.	.	.	.	.	.
95.0	17.5	.	.	.	.	.	.	.	.	.
104.0	17.0	.	.	.	.	.	.	.	.	.
105.0	16.8	.	.	.	.	.	.	.	.	.
112.0	16.7	.	.	.	.	.	.	.	.	.
115.0	16.5	.	.	.	.	.	.	.	.	.
124.0	16.0	.	.	.	.	.	.	.	.	.
131.0	15.5	.	.	.	.	.	.	.	.	.
137.0	15.1	.	.	.	.	.	.	.	.	.
150.0	15.0	.	.	.	.	.	.	.	.	.
157.0	14.5	.	.	.	.	.	.	.	.	.
166.0	14.0	.	.	.	.	.	.	.	.	.
168.0	13.7	.	.	.	.	.	.	.	.	.
176.0	13.5	.	.	.	.	.	.	.	.	.
181.0	13.0	.	.	.	.	.	.	.	.	.
185.0	12.5	.	.	.	.	.	.	.	.	.
190.0	12.0	.	.	.	.	.	.	.	.	.
197.0	11.5	.	.	.	.	.	.	.	.	.
198.0	11.0	.	.	.	.	.	.	.	.	.
200.0	10.7	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 211X 28/04/79 22.5 GMT CONSEC STA 210

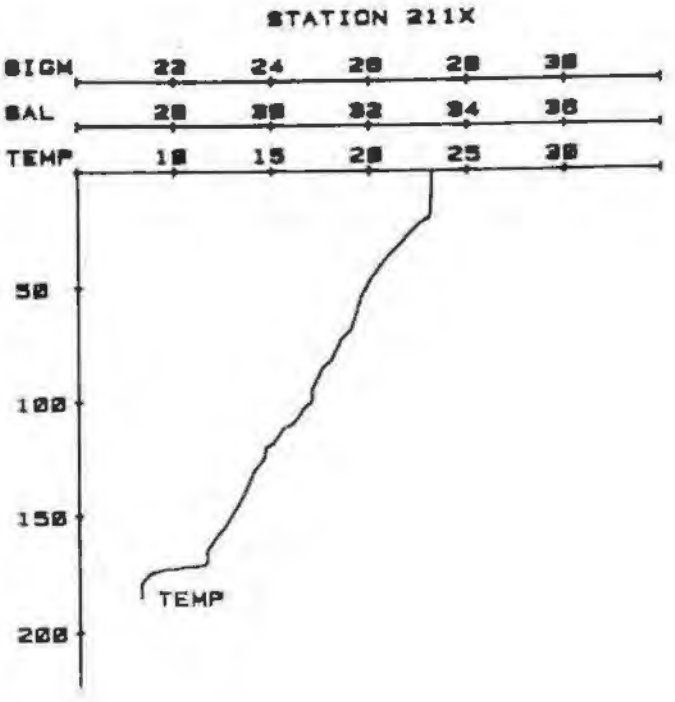
LAT 38 42.00 LONG 68 62.90 DEPTH = 1054 DIST LAST STA = 6.3NM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 2
WIND DIRECTION	= 270	WAVE DIRECTION	= 360
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 10	CLOUD AMOUNT	=
BAROMETRIC PRES=	1012.5	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ACU	PO4	NO3	SI
0.0	23.2	.	.	.	.	.	.	.	.	.
10.0	23.1	.	.	.	.	.	.	.	.	.
20.0	23.0	.	.	.	.	.	.	.	.	.
23.0	22.5	.	.	.	.	.	.	.	.	.
27.0	22.0	.	.	.	.	.	.	.	.	.
32.0	21.5	.	.	.	.	.	.	.	.	.
36.0	21.0	.	.	.	.	.	.	.	.	.
41.0	20.5	.	.	.	.	.	.	.	.	.
47.0	20.0	.	.	.	.	.	.	.	.	.
55.0	19.5	.	.	.	.	.	.	.	.	.
69.0	19.0	.	.	.	.	.	.	.	.	.
73.0	18.5	.	.	.	.	.	.	.	.	.
82.0	18.0	.	.	.	.	.	.	.	.	.
84.0	17.5	.	.	.	.	.	.	.	.	.
95.0	17.0	.	.	.	.	.	.	.	.	.
100.0	17.0	.	.	.	.	.	.	.	.	.
104.0	16.5	.	.	.	.	.	.	.	.	.
110.0	16.0	.	.	.	.	.	.	.	.	.
112.0	15.5	.	.	.	.	.	.	.	.	.
119.0	15.0	.	.	.	.	.	.	.	.	.
121.0	14.6	.	.	.	.	.	.	.	.	.
126.0	14.5	.	.	.	.	.	.	.	.	.
131.0	14.0	.	.	.	.	.	.	.	.	.
141.0	13.5	.	.	.	.	.	.	.	.	.
148.0	13.0	.	.	.	.	.	.	.	.	.
155.0	12.5	.	.	.	.	.	.	.	.	.
160.0	12.0	.	.	.	.	.	.	.	.	.
165.0	11.6	.	.	.	.	.	.	.	.	.
170.0	11.6	.	.	.	.	.	.	.	.	.
171.0	11.5	.	.	.	.	.	.	.	.	.
172.0	11.0	.	.	.	.	.	.	.	.	.
172.0	10.5	.	.	.	.	.	.	.	.	.
173.0	10.0	.	.	.	.	.	.	.	.	.
173.0	9.5	.	.	.	.	.	.	.	.	.
174.0	9.0	.	.	.	.	.	.	.	.	.
175.0	8.6	.	.	.	.	.	.	.	.	.
176.0	8.5	.	.	.	.	.	.	.	.	.
179.0	8.2	.	.	.	.	.	.	.	.	.
185.0	8.2	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 212X 29/04/79 22.9 GMT CONSEC STA 219

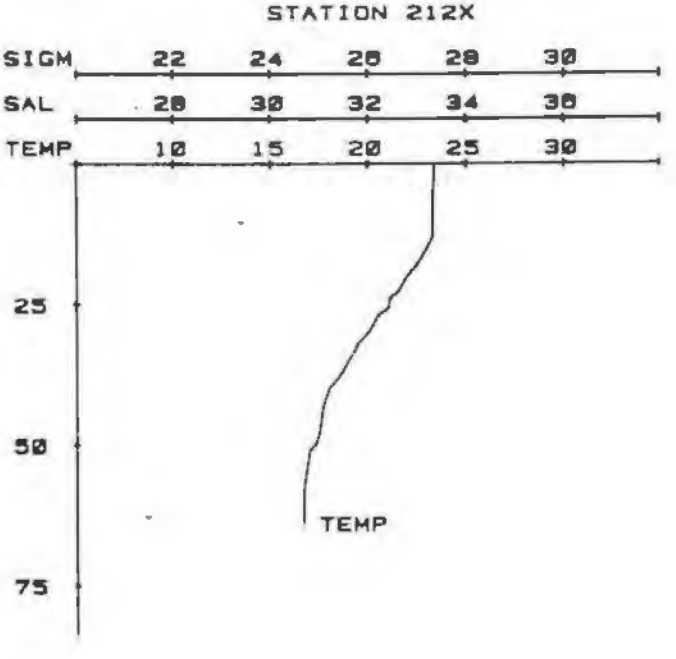
LAT 38 42.80 LONG 68 05.00 DEPTH = 64M DIST LAST STA = 3.7NM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 2
WIND DIRECTION	= 270	WAVE DIRECTION	= 360
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 10	CLOUD AMOUNT	=
BAROMETRIC PRES=	1012.5	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ACU	PO4	NO3	SI
0.0	23.4	.	.	.	.	.	.	.	.	.
6.0	23.3	.	.	.	.	.	.	.	.	.
13.0	23.3	.	.	.	.	.	.	.	.	.
15.0	23.0	.	.	.	.	.	.	.	.	.
18.0	22.5	.	.	.	.	.	.	.	.	.
20.0	22.0	.	.	.	.	.	.	.	.	.
23.0	21.5	.	.	.	.	.	.	.	.	.
24.0	21.1	.	.	.	.	.	.	.	.	.
26.0	21.0	.	.	.	.	.	.	.	.	.
27.0	20.5	.	.	.	.	.	.	.	.	.
30.0	20.0	.	.	.	.	.	.	.	.	.
32.0	19.5	.	.	.	.	.	.	.	.	.
35.0	19.0	.	.	.	.	.	.	.	.	.
38.0	18.5	.	.	.	.	.	.	.	.	.
40.0	18.0	.	.	.	.	.	.	.	.	.
43.0	17.7	.	.	.	.	.	.	.	.	.
48.0	17.5	.	.	.	.	.	.	.	.	.
50.0	17.3	.	.	.	.	.	.	.	.	.
51.0	17.0	.	.	.	.	.	.	.	.	.
58.0	16.7	.	.	.	.	.	.	.	.	.
64.0	16.7	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 213X 20/04/79 23.1 GMT CONSEC STA 220

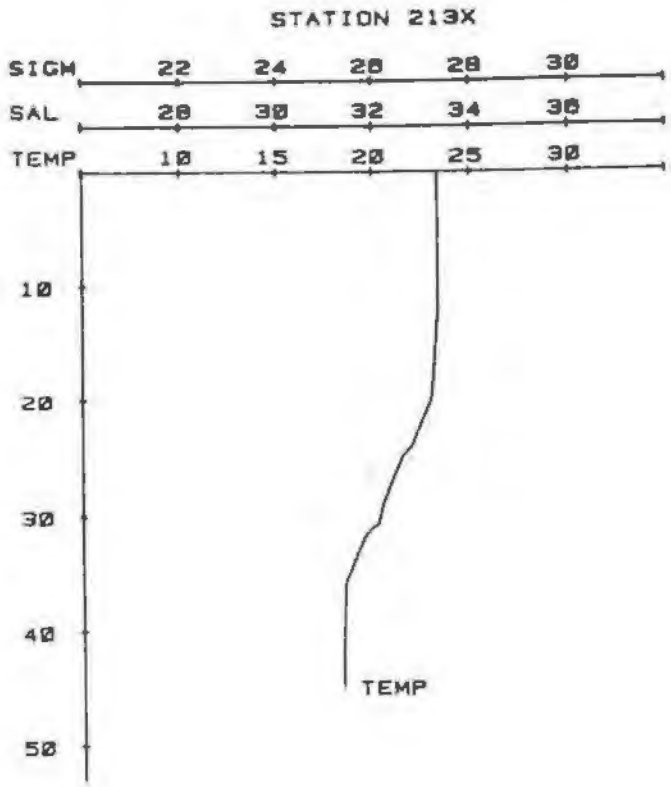
LAT 38 42.0N LONG 88 07.0W DEPTH = 45M DIST LAST STA = 4.5KM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 2
WIND DIRECTION	= 270	WAVE DIRECTION	= 300
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= X0	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1012.5	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	Ω2	Ω2'	ADJ	PO4	NO3	SI
0.0	23.4	.	.	.	.	.	.	.	.	.
12.0	23.4	.	.	.	.	.	.	.	.	.
20.0	23.0	.	.	.	.	.	.	.	.	.
22.0	22.5	.	.	.	.	.	.	.	.	.
24.0	22.0	.	.	.	.	.	.	.	.	.
25.0	21.5	.	.	.	.	.	.	.	.	.
27.0	21.0	.	.	.	.	.	.	.	.	.
29.0	20.5	.	.	.	.	.	.	.	.	.
31.0	20.2	.	.	.	.	.	.	.	.	.
31.1	20.0	.	.	.	.	.	.	.	.	.
32.0	19.5	.	.	.	.	.	.	.	.	.
34.0	19.0	.	.	.	.	.	.	.	.	.
36.0	18.5	.	.	.	.	.	.	.	.	.
42.0	18.4	.	.	.	.	.	.	.	.	.
45.0	18.4	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 214X 20/04/79 23.3 GMT CONSEC STA 221

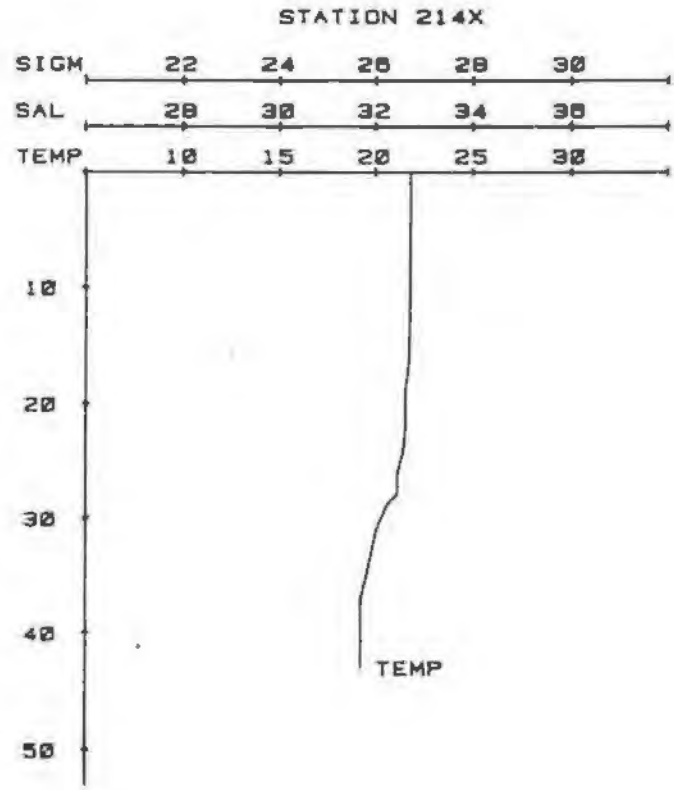
LAT 38 44.1N LONG 88 11.0W DEPTH = 43M DIST LAST STA = 5.4KM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 2
WIND DIRECTION	= 260	WAVE DIRECTION	= 300
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= X0	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1012.5	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	Ω2	Ω2'	ADJ	PO4	NO3	SI
0.0	21.8	.	.	.	.	.	.	.	.	.
16.0	21.7	.	.	.	.	.	.	.	.	.
19.0	21.5	.	.	.	.	.	.	.	.	.
22.0	21.5	.	.	.	.	.	.	.	.	.
24.0	21.4	.	.	.	.	.	.	.	.	.
26.0	21.1	.	.	.	.	.	.	.	.	.
28.0	21.1	.	.	.	.	.	.	.	.	.
28.0	21.0	.	.	.	.	.	.	.	.	.
29.0	20.5	.	.	.	.	.	.	.	.	.
31.0	20.0	.	.	.	.	.	.	.	.	.
35.0	19.5	.	.	.	.	.	.	.	.	.
37.0	19.2	.	.	.	.	.	.	.	.	.
43.0	19.2	.	.	.	.	.	.	.	.	.



CTD CRUISE STA 215X 79/04/29 23.6 GMT CONSEC STA 222

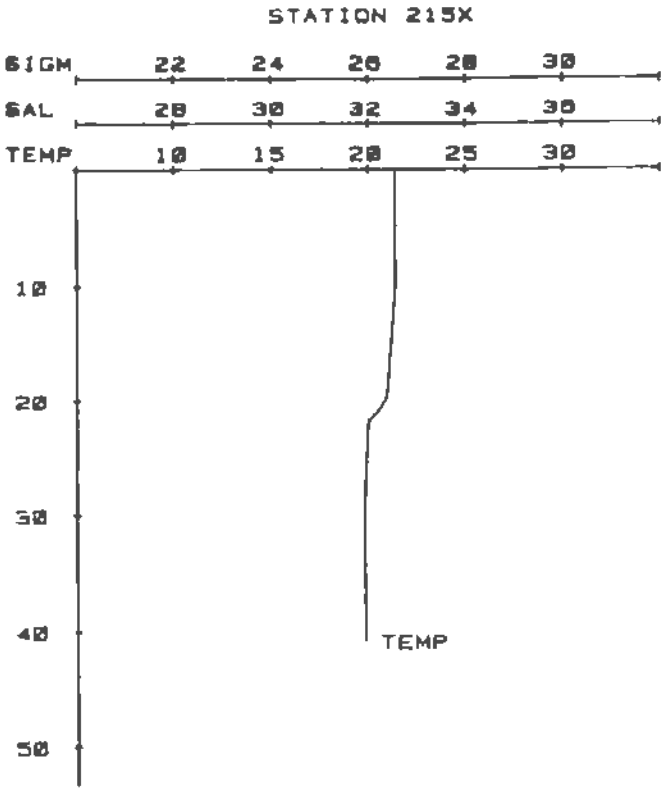
LAT 38 43.5N LONG 00 14.0W DEPTH = 41M DIST LAST STA = 4.9NM

WEATHER DATA

WIND SPEED	= 13KTS	SEA STATE	= 2
WIND DIRECTION	= 260	WAVE DIRECTION	= 300
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 33	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1012.9	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.4	.	.	.	.	.	.	.	.	
10.0	21.4	.	.	.	.	.	.			
19.3	21.0	.	.	.	.	.	.			
20.1	20.9	.	.	.	.	.	.		.	
21.0	20.5	.	.	.	.	.	.			
22.1	20.0	.	.	.	.	.	.	.		
25.0	19.9	.	.	.	.	.	.	.	.	
29.0	19.0	.	.	.	.	.	.	.	.	
41.0	19.0	.	.	.	.	.	.	.	.	



CTD CRUISE STA 216X 79/04/29 23.8 GMT CONSEC STA 223

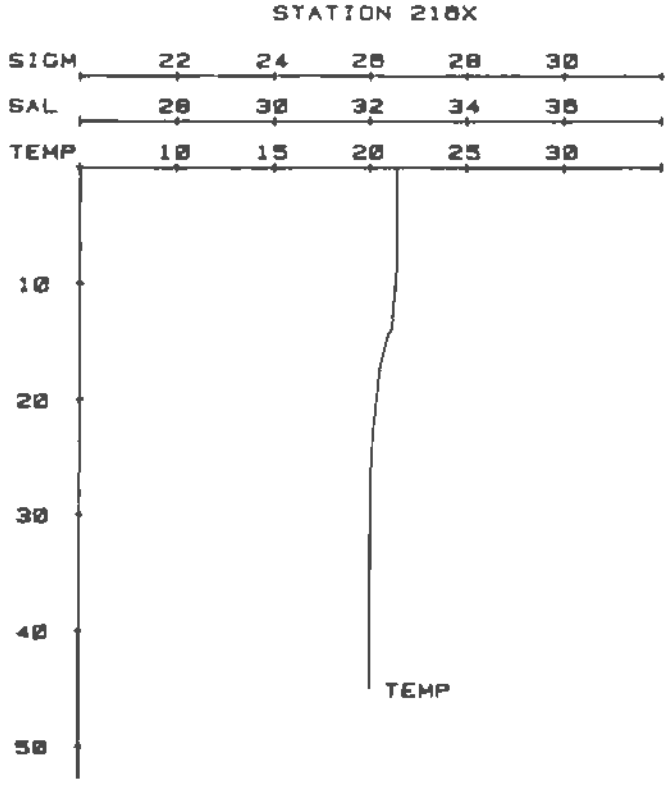
LAT 38 45.4N LONG 00 16.5W DEPTH = 45M DIST LAST STA = 4 9NM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 2
WIND DIRECTION	= 250	WAVE DIRECTION	= 300
AIR TEMP	= 22.0C	CLOUD TYPE	=
WEATHER CODE	= 33	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1012.9	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.4			.	.		.	.	.	
8.0	21.4		.	.	.		.	.	.	
14.0	21.1	.	.	.	.		.	.	.	
14.0	21.0	.		.			.	.	.	
15.0	20.8	.	.	.	.		.	.	.	
17.0	20.5	.	.	.	.		.	.	.	
23.0	20.1	.	.		.		.	.		
27.0	20.0	.			.	.				
45.0	20.0	.			.		.		.	



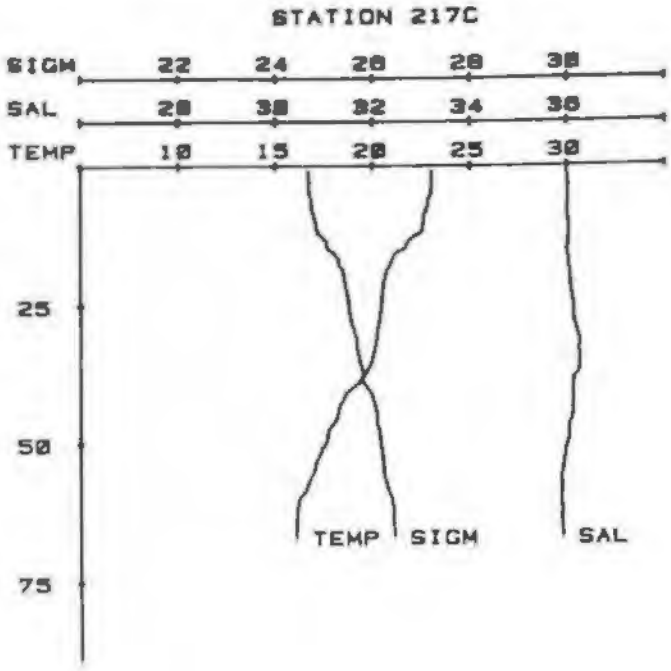
CRUISE 816 217C 29/04/79 01.1 CAT CONSEC 816 224

LAT 30 42.90 LONG 88 05.40 DEPTH = 720 DIST LAST 816 = 18.188

WEATHER DATA

WIND SPEED	= KNTS	SEA STATE	= 1
WIND DIRECTION	= 215	WAVE DIRECTION	= 210
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= 20	CLOUD AMOUNT	=
BAROMETRIC PRES=	1013.0	VISIBILITY CODE=	

Z	T	S	D	OBSERVATIONS SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	23.83	35.99	24.68	327	.	.	.	.	.	.
2.0	23.83	36.01	24.70	325	.	.	.	.	.	.
3.0	23.82	36.02	24.71	324	.	.	.	0.07	0.0	0.0
4.0	23.81	36.02	24.71	324	.	.	.	.	.	.
5.0	22.99	36.01	24.71	324	.	.	.	.	.	.
6.0	22.82	36.02	24.77	319	.	.	.	.	.	.
7.0	22.85	36.08	24.74	321	.	.	.	.	.	.
8.0	22.74	36.08	24.78	318	.	.	.	.	.	.
9.0	22.61	36.01	24.82	314	.	.	.	.	.	.
10.0	22.61	36.03	24.84	313	.	.	.	.	.	.
11.0	22.55	36.04	24.86	310	.	.	.	0.16	0.2	0.0
12.0	22.49	36.03	24.87	310	.	.	.	.	.	.
13.0	22.04	36.07	24.99	298	.	.	.	.	.	.
14.0	21.74	36.02	25.07	291	.	.	.	.	.	.
15.0	21.66	35.99	25.07	291	.	.	.	.	.	.
16.0	21.11	36.08	25.23	275	.	.	.	.	.	.
17.0	20.95	36.04	25.31	268	.	.	.	.	.	.
18.0	20.87	36.03	25.32	267	.	.	.	.	.	.
19.0	20.66	36.07	25.41	258	.	.	.	.	.	.
20.0	20.61	36.07	25.42	257	.	.	.	.	.	.
21.0	20.55	36.07	25.45	255	.	.	.	.	.	.
22.0	20.51	36.08	25.46	254	.	.	.	.	.	.
23.0	20.44	36.10	25.49	251	.	.	.	0.32	0.9	1.7
24.0	20.42	36.13	25.52	248	.	.	.	.	.	.
25.0	20.42	36.14	25.53	247	.	.	.	.	.	.
26.0	20.38	36.14	25.54	246	.	.	.	.	.	.
27.0	20.33	36.14	25.55	245	.	.	.	.	.	.
28.0	20.31	36.16	25.57	243	.	.	.	.	.	.
29.0	20.22	36.21	25.63	238	.	.	.	.	.	.
30.0	20.21	36.22	25.64	237	.	.	.	.	.	.
31.0	20.15	36.26	25.69	232	.	.	.	.	.	.
32.0	20.11	36.25	25.69	232	.	.	.	.	.	.
33.0	20.05	36.24	25.70	231	.	.	.	.	.	.
34.0	19.97	36.26	25.74	228	.	.	.	0.27	2.6	2.5
35.0	19.92	36.25	25.74	227	.	.	.	.	.	.
36.0	19.79	36.25	25.78	224	.	.	.	.	.	.
37.0	19.62	36.25	25.82	220	.	.	.	.	.	.
38.0	19.44	36.13	25.78	224	.	.	.	.	.	.
39.0	19.29	36.12	25.84	218	.	.	.	.	.	.
40.0	19.19	36.12	25.91	212	.	.	.	.	.	.
41.0	18.56	36.12	26.18	213	.	.	.	.	.	.
42.0	18.50	36.13	26.23	211	.	.	.	.	.	.
43.0	18.31	36.11	26.35	198	.	.	.	.	.	.
44.0	18.20	36.12	26.40	195	.	.	.	.	.	.
45.0	18.16	36.12	26.41	194	.	.	.	0.49	6.6	5.0
46.0	18.05	36.10	26.39	194	.	.	.	.	.	.
47.0	17.83	36.04	26.42	192	.	.	.	.	.	.
48.0	17.74	36.04	26.45	189	.	.	.	.	.	.
49.0	17.64	36.04	26.48	188	.	.	.	.	.	.
50.0	17.57	36.02	26.47	187	.	.	.	.	.	.
51.0	17.33	35.97	26.49	186	.	.	.	.	.	.
52.0	17.28	35.97	26.50	184	.	.	.	.	.	.
53.0	17.09	35.93	26.51	183	.	.	.	.	.	.
54.0	17.01	35.92	26.53	182	.	.	.	.	.	.
55.0	16.97	35.91	26.53	182	.	.	.	.	.	.



56.0	16.84	35.87	26.51	182	.	.	.	.	.	.	
57.0	16.68	35.89	26.28	177	.	.	.	.	.	.	
58.0	16.61	35.89	26.38	175	.	.	.	.	.	.	
59.0	16.45	35.89	26.34	172	.	.	.	.	.	.	
60.0	16.19	35.89	26.48	166	.	.	.	.	.	.	
61.0	16.16	35.88	26.48	166	.	.	.	.	.	.	
62.0	16.09	35.87	26.44	165	.	.	.	.	.	.	
63.0	16.09	35.89	26.42	164	.	.	.	.	.	.	
64.0	16.07	35.89	26.42	163	.	.	.	.	.	.	
65.0	16.06	35.90	26.43	162	.	.	.	.	.	.	
66.0	16.05	35.92	26.45	161	.	.	.	0.74	11.4	7.0	
67.0	16.04	35.91	26.45	161	.	.	.	.	.	.	

GILLISS CRUISE STA 2181 29/04/79 00.5 GMT CONSEC STA 225

LAT 38 44.0N LONG 00 16.9W DEPTH = 41M DIST LAST STA = 10.7KM

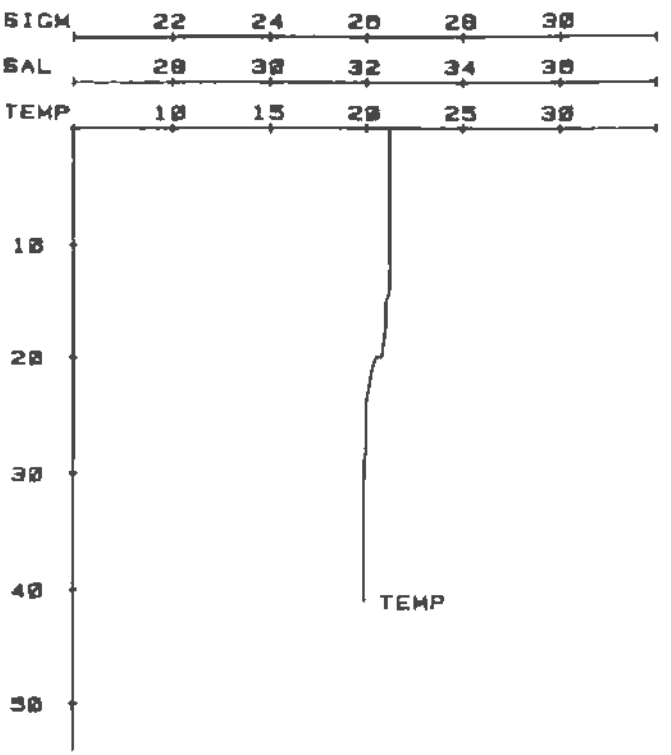
WEATHER DATA

WIND SPEED	= 14KTS	SEA STATE	= 1
WIND DIRECTION	= 320	WAVE DIRECTION	=
AIR TEMP	= 20.4C	CLOUD TYPE	=
WEATHER CODE	= 00	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1015.2	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.2	.	.	.	.	.	.	.	.	.
14.0	21.2	.	.	.	.	.	.	.	.	.
15.0	21.0	.	.	.	.	.	.	.	.	.
17.0	21.0	.	.	.	.	.	.	.	.	.
20.0	20.8	.	.	.	.	.	.	.	.	.
20.0	20.5	.	.	.	.	.	.	.	.	.
21.0	20.3	.	.	.	.	.	.	.	.	.
24.0	20.0	.	.	.	.	.	.	.	.	.
28.0	20.0	.	.	.	.	.	.	.	.	.
29.0	19.9	.	.	.	.	.	.	.	.	.
41.0	19.9	.	.	.	.	.	.	.	.	.

STATION 218X



GILLISS CRUISE STA 2191 29/04/79 00.0 GMT CONSEC STA 224

LAT 38 44.3N LONG 00 13.7W DEPTH = 43M DIST LAST STA = 5.2KM

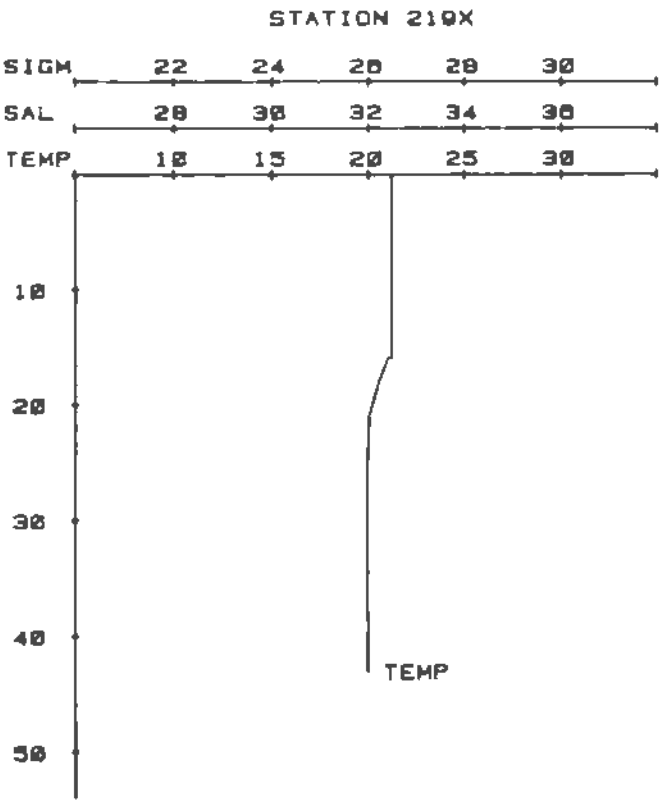
WEATHER DATA

WIND SPEED	= 14KTS	SEA STATE	= 1
WIND DIRECTION	= 320	WAVE DIRECTION	=
AIR TEMP	= 20.6C	CLOUD TYPE	=
WEATHER CODE	= 00	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1015.2	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.2	.	.				.			
14.0	21.2	.	.				.			
16.0	21.0									
18.0	20.5	.		.	.		.	.		
21.0	20.0						.			
25.0	19.9									
43.0	19.9			.				.		

STATION 219X



GILLISS CRUISE STA 2208 29/04/79 09.1 GMT CONSEC STA 227

LAT 38 43.9N LONG 68 10.0W DEPTH = 48M DIST LAST STA = 6.7NM

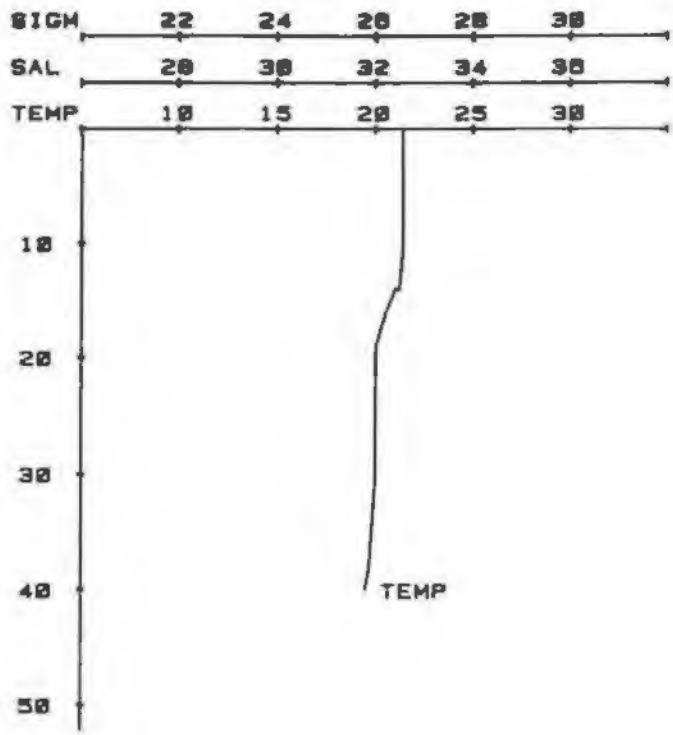
WEATHER DATA

WIND SPEED	= 14KTS	SEA STATE	= 1
WIND DIRECTION	= 320	WAVE DIRECTION	=
AIR TEMP	= 20.0C	CLOUD TYPE	=
WEATHER CODE	= 30	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1015.2	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	21.4	-	-	-	-	-	-	-	-	-
10.0	21.4	-	-	-	-	-	-	-	-	-
14.0	21.2	-	-	-	-	-	-	-	-	-
14.5	21.0	-	-	-	-	-	-	-	-	-
16.0	20.5	-	-	-	-	-	-	-	-	-
19.0	20.0	-	-	-	-	-	-	-	-	-
22.0	20.0	-	-	-	-	-	-	-	-	-
30.0	19.7	-	-	-	-	-	-	-	-	-
40.0	19.5	-	-	-	-	-	-	-	-	-

STATION 220X



GILLISS CRUISE STA 2210 29/04/79 09.3 GMT CONSEC STA 229

LAT 38 43.5N LONG 68 07.5W DEPTH = 44M DIST LAST STA = 5.3NM

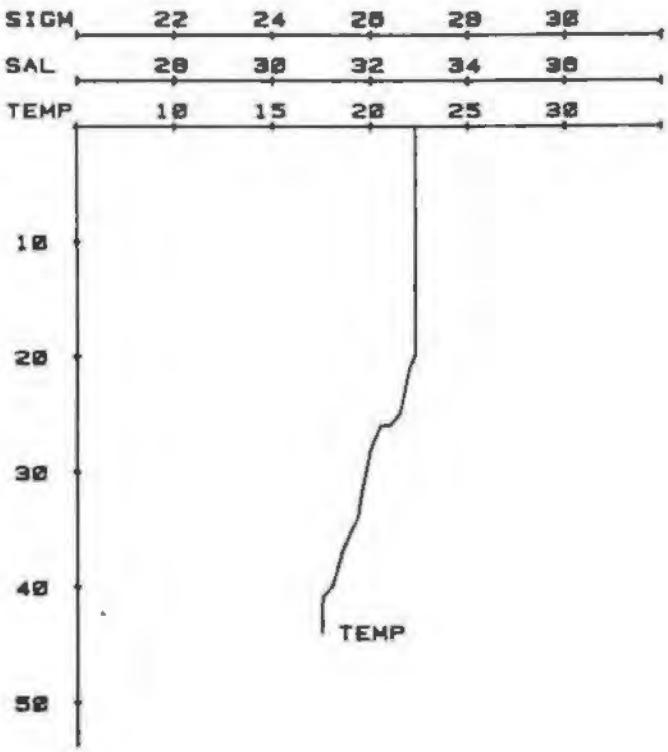
WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 1
WIND DIRECTION	= 334	WAVE DIRECTION	=
AIR TEMP	= 20.0C	CLOUD TYPE	=
WEATHER CODE	= 30	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1015.2	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	Θ	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.3	-	-	-	-	-	-	-	-	-
20.0	22.3	-	-	-	-	-	-	-	-	-
21.0	22.0	-	-	-	-	-	-	-	-	-
25.0	21.5	-	-	-	-	-	-	-	-	-
26.0	21.0	-	-	-	-	-	-	-	-	-
26.0	20.5	-	-	-	-	-	-	-	-	-
28.0	20.0	-	-	-	-	-	-	-	-	-
32.0	19.5	-	-	-	-	-	-	-	-	-
34.0	19.3	-	-	-	-	-	-	-	-	-
35.0	19.0	-	-	-	-	-	-	-	-	-
37.0	18.5	-	-	-	-	-	-	-	-	-
40.0	18.0	-	-	-	-	-	-	-	-	-
41.0	17.5	-	-	-	-	-	-	-	-	-
44.0	17.5	-	-	-	-	-	-	-	-	-

STATION 221X



GILLISS CRUISE STA 222X 29/04/79 09.7 GMT CONSEC STA 229

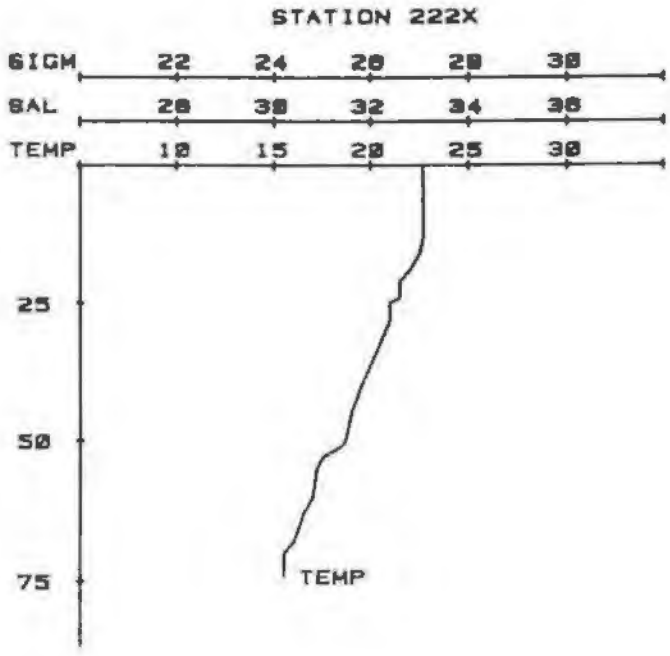
LAT 38 42.7N LONG 89 04.9W DEPTH = 74M DIST LAST STA = 4.4KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 1
WIND DIRECTION	= 330	WAVE DIRECTION	=
AIR TEMP	= 20.0C	CLOUD TYPE	=
WEATHER CODE	= 00	CLOUD AMOUNT	=
BAROMETRIC PRES=	1015.2	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.7	.	.	.	.	.	.	.	.	.
13.0	22.7	.	.	.	.	.	.	.	.	.
16.0	22.5	.	.	.	.	.	.	.	.	.
19.0	22.0	.	.	.	.	.	.	.	.	.
21.0	21.5	.	.	.	.	.	.	.	.	.
24.0	21.5	.	.	.	.	.	.	.	.	.
25.0	21.0	.	.	.	.	.	.	.	.	.
28.0	21.0	.	.	.	.	.	.	.	.	.
32.0	20.5	.	.	.	.	.	.	.	.	.
36.0	20.0	.	.	.	.	.	.	.	.	.
40.0	19.5	.	.	.	.	.	.	.	.	.
45.0	19.0	.	.	.	.	.	.	.	.	.
50.0	18.7	.	.	.	.	.	.	.	.	.
51.0	18.5	.	.	.	.	.	.	.	.	.
52.0	18.0	.	.	.	.	.	.	.	.	.
53.0	17.5	.	.	.	.	.	.	.	.	.
55.0	17.2	.	.	.	.	.	.	.	.	.
61.0	17.0	.	.	.	.	.	.	.	.	.
63.0	16.5	.	.	.	.	.	.	.	.	.
68.0	16.0	.	.	.	.	.	.	.	.	.
70.0	15.5	.	.	.	.	.	.	.	.	.
74.0	15.5	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 223X 29/04/79 09.9 GMT CONSEC STA 230

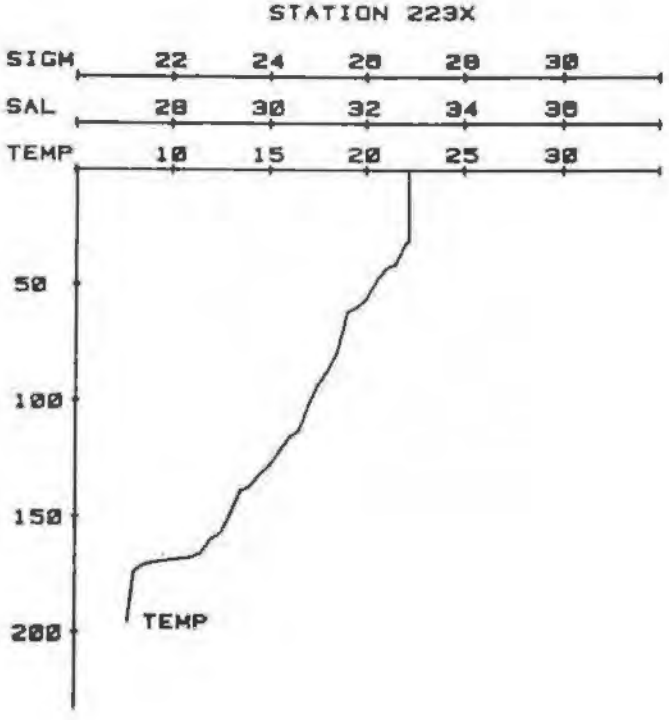
LAT 38 42.1N LONG 89 03.0W DEPTH = 195M DIST LAST STA = 3.2KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 1
WIND DIRECTION	= 330	WAVE DIRECTION	= 330
AIR TEMP	= 20.0C	CLOUD TYPE	=
WEATHER CODE	= 00	CLOUD AMOUNT	=
BAROMETRIC PRES=	1015.2	VISIBILITY CODE=	

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	22.2	.	.	.	.	.	.	.	.	.
31.0	22.2	.	.	.	.	.	.	.	.	.
32.0	22.0	.	.	.	.	.	.	.	.	.
41.0	21.5	.	.	.	.	.	.	.	.	.
43.0	21.0	.	.	.	.	.	.	.	.	.
48.0	20.5	.	.	.	.	.	.	.	.	.
54.0	20.0	.	.	.	.	.	.	.	.	.
60.0	19.5	.	.	.	.	.	.	.	.	.
62.0	19.0	.	.	.	.	.	.	.	.	.
79.0	18.5	.	.	.	.	.	.	.	.	.
87.0	18.0	.	.	.	.	.	.	.	.	.
93.0	17.5	.	.	.	.	.	.	.	.	.
102.0	17.0	.	.	.	.	.	.	.	.	.
113.0	16.5	.	.	.	.	.	.	.	.	.
116.0	16.0	.	.	.	.	.	.	.	.	.
122.0	15.5	.	.	.	.	.	.	.	.	.
128.0	15.0	.	.	.	.	.	.	.	.	.
132.0	14.5	.	.	.	.	.	.	.	.	.
137.0	14.0	.	.	.	.	.	.	.	.	.
139.0	13.5	.	.	.	.	.	.	.	.	.
149.0	13.0	.	.	.	.	.	.	.	.	.
157.0	12.5	.	.	.	.	.	.	.	.	.
160.0	12.0	.	.	.	.	.	.	.	.	.
166.0	11.5	.	.	.	.	.	.	.	.	.
168.0	11.0	.	.	.	.	.	.	.	.	.
169.0	10.0	.	.	.	.	.	.	.	.	.
170.0	9.0	.	.	.	.	.	.	.	.	.
171.0	8.5	.	.	.	.	.	.	.	.	.
174.0	8.0	.	.	.	.	.	.	.	.	.
195.0	7.7	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 224X 29/04/79 10.5 GMT CONSEC STA 23

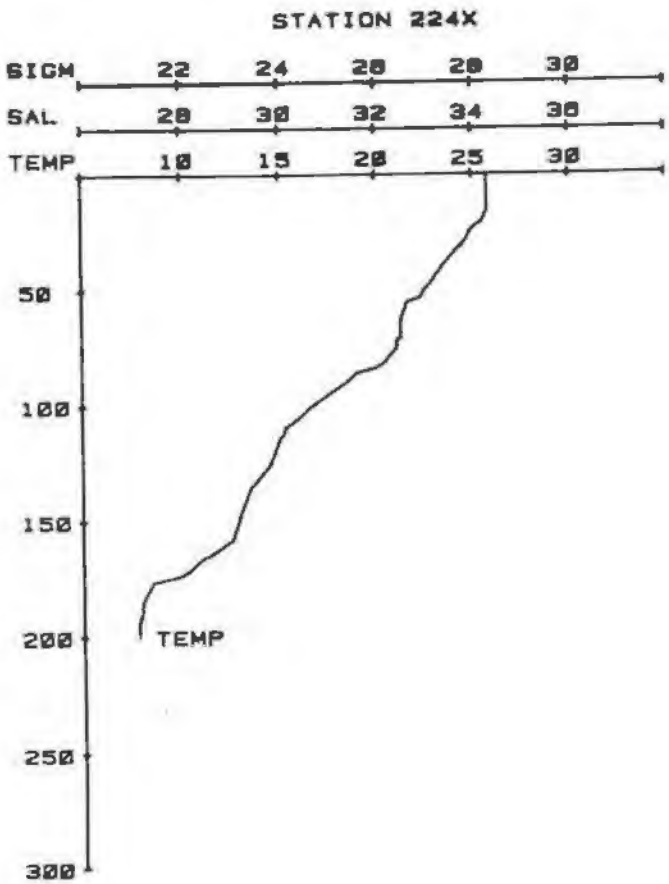
LAT 38 43.6N LONG 79 59.2W DEPTH = 240M DIST LAST STA = 6.5KM

WEATHER DATA

WIND SPEED	= 12KTS	SEA STATE	= 1
WIND DIRECTION	= 350	WAVE DIRECTION	= 330
AIR TEMP	= 20.0C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1015.2	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	25.0	.	.	.	.	.	.	.	.	.
16.0	25.0	.	.	.	.	.	.	.	.	.
21.0	25.5	.	.	.	.	.	.	.	.	.
24.0	25.0	.	.	.	.	.	.	.	.	.
31.0	24.5	.	.	.	.	.	.	.	.	.
35.0	24.0	.	.	.	.	.	.	.	.	.
41.0	23.5	.	.	.	.	.	.	.	.	.
46.0	23.0	.	.	.	.	.	.	.	.	.
51.0	22.5	.	.	.	.	.	.	.	.	.
54.0	22.3	.	.	.	.	.	.	.	.	.
55.0	22.0	.	.	.	.	.	.	.	.	.
56.0	21.6	.	.	.	.	.	.	.	.	.
59.0	21.5	.	.	.	.	.	.	.	.	.
63.0	21.3	.	.	.	.	.	.	.	.	.
71.0	21.3	.	.	.	.	.	.	.	.	.
72.0	21.1	.	.	.	.	.	.	.	.	.
75.0	21.1	.	.	.	.	.	.	.	.	.
76.0	21.0	.	.	.	.	.	.	.	.	.
81.0	20.5	.	.	.	.	.	.	.	.	.
84.0	20.0	.	.	.	.	.	.	.	.	.
85.0	19.5	.	.	.	.	.	.	.	.	.
86.0	19.0	.	.	.	.	.	.	.	.	.
90.0	18.5	.	.	.	.	.	.	.	.	.
93.0	18.0	.	.	.	.	.	.	.	.	.
96.0	17.5	.	.	.	.	.	.	.	.	.
99.0	17.0	.	.	.	.	.	.	.	.	.
102.0	16.5	.	.	.	.	.	.	.	.	.
106.0	16.0	.	.	.	.	.	.	.	.	.
109.0	15.5	.	.	.	.	.	.	.	.	.
110.0	15.3	.	.	.	.	.	.	.	.	.
113.0	15.2	.	.	.	.	.	.	.	.	.
115.0	15.0	.	.	.	.	.	.	.	.	.
126.0	14.5	.	.	.	.	.	.	.	.	.
131.0	14.0	.	.	.	.	.	.	.	.	.
136.0	13.5	.	.	.	.	.	.	.	.	.
147.0	13.0	.	.	.	.	.	.	.	.	.
150.0	12.6	.	.	.	.	.	.	.	.	.
159.0	12.5	.	.	.	.	.	.	.	.	.
162.0	12.0	.	.	.	.	.	.	.	.	.
165.0	11.5	.	.	.	.	.	.	.	.	.
167.0	11.0	.	.	.	.	.	.	.	.	.
171.0	10.5	.	.	.	.	.	.	.	.	.
174.0	10.0	.	.	.	.	.	.	.	.	.
175.0	9.5	.	.	.	.	.	.	.	.	.
176.0	9.0	.	.	.	.	.	.	.	.	.
177.0	8.5	.	.	.	.	.	.	.	.	.
185.0	8.0	.	.	.	.	.	.	.	.	.
192.0	7.9	.	.	.	.	.	.	.	.	.
193.0	7.8	.	.	.	.	.	.	.	.	.
240.0	7.8	.	.	.	.	.	.	.	.	.



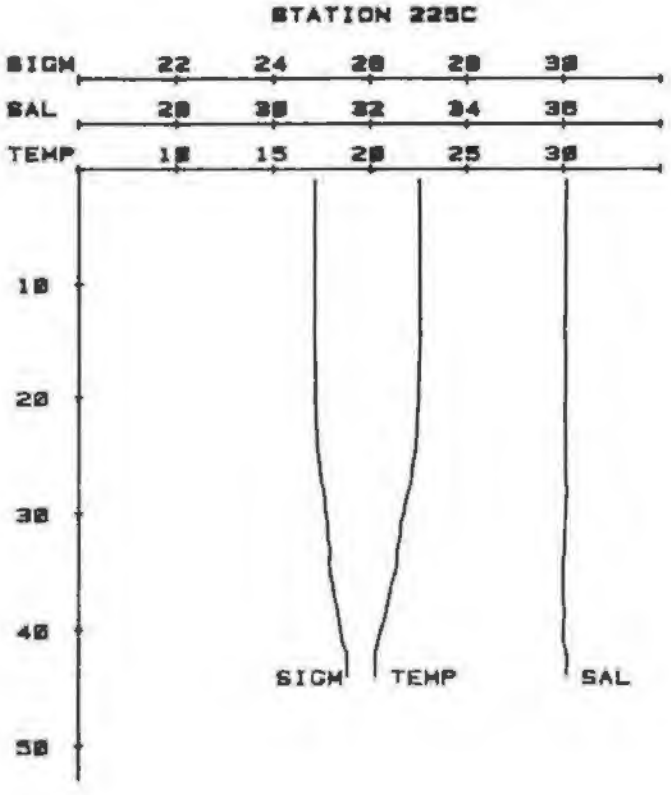
GILLISS CRUISE STA 225C 29/04/79 12.2 GMT CORREC STA 232

LAT 31 42.60 LONG 80 04.20 DEPTH = 52m DIST LAST STA = 0.2KM

WEATHER DATA

WIND SPEED	= 10KTS	SEA STATE	= 1
WIND DIRECTION	= 350	WAVE DIRECTION	= 320
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES=	1015.6	VISIBILITY CODE=	

					OBSERVATIONS						
Z	T	S	σ	σt	O2	O2'	AOU	PO4	NO3	SI
1.0	22.56	36.05	24.06	310	.	.	.	.	.	.
2.0	22.56	36.05	24.06	310	.	.	.	.	.	.
3.0	22.56	36.04	24.06	310	.	.	.	0.07	0.0	0.0
4.0	22.56	36.05	24.06	310	.	.	.	.	.	.
5.0	22.56	36.03	24.05	311	.	.	.	.	.	.
6.0	22.56	36.05	24.06	310	.	.	.	.	.	.
7.0	22.56	36.05	24.06	310	.	.	.	.	.	.
8.0	22.56	36.04	24.06	311	.	.	.	.	.	.
9.0	22.56	36.04	24.06	311	.	.	.	.	.	.
10.0	22.56	36.04	24.06	311	.	.	.	.	.	.
11.0	22.56	36.05	24.06	310	.	.	.	.	.	.
12.0	22.56	36.05	24.06	310	.	.	.	.	.	.
13.0	22.56	36.03	24.05	312	.	.	.	.	.	.
14.0	22.56	36.03	24.05	312	.	.	.	.	.	.
15.0	22.56	36.04	24.06	311	.	.	.	0.10	0.0	0.0
16.0	22.53	36.05	24.07	309	.	.	.	.	.	.
17.0	22.50	36.05	24.08	309	.	.	.	.	.	.
18.0	22.49	36.05	24.08	308	.	.	.	.	.	.
19.0	22.48	36.05	24.09	308	.	.	.	.	.	.
20.0	22.44	36.04	24.08	309	.	.	.	.	.	.
21.0	22.43	36.04	24.09	308	.	.	.	.	.	.
22.0	22.41	36.04	24.10	307	.	.	.	.	.	.
23.0	22.36	36.05	24.12	306	.	.	.	.	.	.
24.0	22.35	36.05	24.12	305	.	.	.	.	.	.
25.0	22.26	36.05	24.15	302	.	.	.	.	.	.
26.0	22.13	36.05	24.19	299	.	.	.	0.19	1.3	0.4
27.0	22.11	36.06	25.20	298	.	.	.	.	.	.
28.0	21.94	36.08	25.26	292	.	.	.	.	.	.
29.0	21.89	36.06	25.29	289	.	.	.	.	.	.
30.0	21.78	36.05	25.31	288	.	.	.	.	.	.
31.0	21.53	36.04	25.35	284	.	.	.	.	.	.
32.0	21.54	36.03	25.34	285	.	.	.	.	.	.
33.0	21.36	36.04	25.39	279	.	.	.	.	.	.
34.0	21.34	36.04	25.36	282	.	.	.	.	.	.
35.0	21.27	36.04	25.39	281	.	.	.	0.30	2.7	1.3
36.0	21.07	36.04	25.24	275	.	.	.	.	.	.
37.0	20.97	36.04	25.27	272	.	.	.	.	.	.
38.0	20.84	36.03	25.33	267	.	.	.	.	.	.
39.0	20.71	36.03	25.36	263	.	.	.	.	.	.
40.0	20.51	36.01	25.40	260	.	.	.	.	.	.
41.0	20.37	36.01	25.44	256	.	.	.	.	.	.
42.0	20.23	36.00	25.53	248	.	.	.	.	.	.
44.0	20.23	36.00	25.53	248	.	.	.	0.34	4.1	2.4



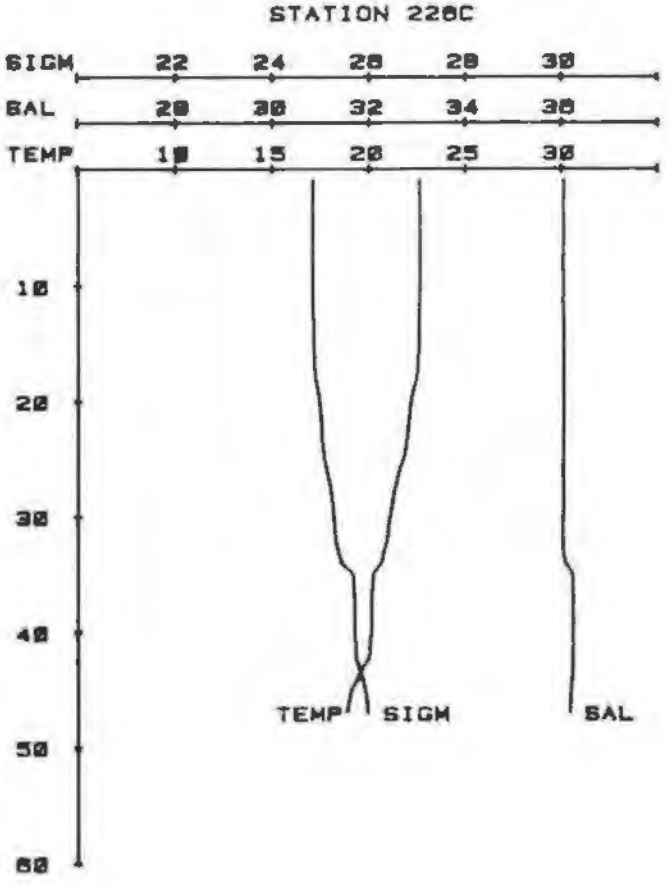
GILLISS CRUISE STA 226C 29/04/79 13.8 GMT CORREC STA 233

LAT 31 42.90 LONG 80 15.44 DEPTH = 67M DIST LAST STA = 2.0KM

WEATHER DATA

WIND SPEED	= 10KTS	SEA STATE	= 2
WIND DIRECTION	= 020	WAVE DIRECTION	= 330
AIR TEMP	= 21.1C	CLOUD TYPE	=
WEATHER CODE	= 21	CLOUD AMOUNT	=
BAROMETRIC PRES=	1015.9	VISIBILITY CODE=	

					OBSERVATIONS						
Z	T	S	σ	σt	O2	O2'	AOU	PO4	NO3	SI
1.0	22.63	36.05	24.04	312	.	.	.	.	.	.
2.0	22.64	36.04	24.03	313	.	.	.	.	.	.
3.0	22.64	36.03	24.03	313	.	.	.	.	.	.
4.0	22.64	36.04	24.03	313	.	.	.	.	.	.
5.0	22.64	36.04	24.03	313	.	.	.	.	.	.
6.0	22.64	36.04	24.03	313	.	.	.	.	.	.
7.0	22.63	36.03	24.03	313	.	.	.	.	.	.
8.0	22.63	36.03	24.03	313	.	.	.	.	.	.
9.0	22.63	36.04	24.04	313	.	.	.	.	.	.
10.0	22.62	36.04	24.04	312	.	.	.	.	.	.
11.0	22.60	36.03	24.04	313	.	.	.	.	.	.
12.0	22.59	36.04	24.05	312	.	.	.	.	.	.
13.0	22.57	36.05	24.06	310	.	.	.	.	.	.
14.0	22.57	36.05	24.06	310	.	.	.	.	.	.
15.0	22.57	36.04	24.05	311	.	.	.	.	.	.
16.0	22.51	36.05	24.08	309	.	.	.	.	.	.
17.0	22.49	36.04	24.08	309	.	.	.	.	.	.
18.0	22.41	36.04	24.09	307	.	.	.	.	.	.
19.0	22.24	36.04	24.15	302	.	.	.	.	.	.
20.0	22.12	36.05	24.19	299	.	.	.	.	.	.
21.0	22.04	36.04	25.18	297	.	.	.	.	.	.
22.0	21.98	36.04	25.22	295	.	.	.	.	.	.
23.0	21.93	36.03	25.23	293	.	.	.	.	.	.
24.0	21.86	36.04	25.24	292	.	.	.	.	.	.
25.0	21.73	36.03	25.28	290	.	.	.	.	.	.
26.0	21.52	36.03	25.34	284	.	.	.	.	.	.
27.0	21.37	36.04	25.39	279	.	.	.	.	.	.
28.0	21.23	36.04	25.43	276	.	.	.	.	.	.
29.0	21.14	36.05	25.46	273	.	.	.	.	.	.
30.0	21.02	36.03	25.48	271	.	.	.	.	.	.
31.0	20.94	36.03	25.51	269	.	.	.	.	.	.
32.0	20.89	36.03	25.53	268	.	.	.	.	.	.
33.0	20.77	36.04	25.57	265	.	.	.	.	.	.
34.0	20.59	36.08	25.64	259	.	.	.	.	.	.
35.0	20.36	36.24	25.67	254	.	.	.	.	.	.
36.0	20.11	36.24	25.69	253	.	.	.	.	.	.
37.0	20.06	36.25	25.71	251	.	.	.	.	.	.
38.0	20.00	36.24	25.69	252	.	.	.	.	.	.
39.0	20.07	36.25	25.70	251	.	.	.	.	.	.
40.0	20.07	36.24	25.70	252	.	.	.	.	.	.
41.0	19.98	36.25	25.73	249	.	.	.	.	.	.
42.0	19.97	36.24	25.72	249	.	.	.	.	.	.
43.0	19.64	36.23	25.80	242	.	.	.	.	.	.
44.0	19.34	36.22	25.87	235	.	.	.	.	.	.
45.0	19.03	36.19	25.93	231	.	.	.	.	.	.
46.0	18.90	36.19	25.96	227	.	.	.	.	.	.
47.0	18.78	36.17	25.98	225	.	.	.	.	.	.



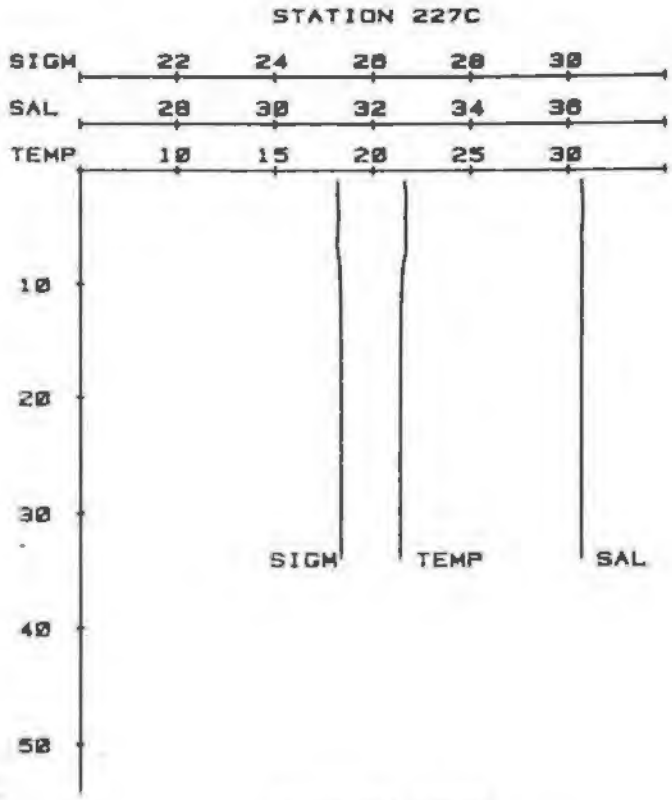
GILLISS CRUISE STA 227C 29/04/79 18.1 GMT CONSEC STA 234

LAT 38 47.8N LONG 80 38.8W DEPTH = 34M DIST LAST STA = 40.2NM

WEATHER DATA
WIND SPEED = 8KTS
WIND DIRECTION = 010
AIR TEMP = 20.6C
WEATHER CODE = 31
BAROMETRIC PRES= 1016.6
SEA STATE = 2
WAVE DIRECTION = 350
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	21.63	36.28	25.30	260	.	.	.	.	.	.
2.0	21.69	36.30	25.30	260	.	.	.	0.04	0.0	0.5
3.0	21.68	36.31	25.31	267	.	.	.	.	.	.
4.0	21.64	36.31	25.32	266	.	.	.	.	.	.
5.0	21.68	36.29	25.30	269	.	.	.	.	.	.
6.0	21.67	36.28	25.29	269	.	.	.	.	.	.
7.0	21.70	36.30	25.30	269	.	.	.	.	.	.
8.0	21.56	36.30	25.34	265	.	.	.	.	.	.
9.0	21.50	36.29	25.35	264	.	.	.	.	.	.
10.0	21.47	36.29	25.35	263	.	.	.	0.05	0.0	0.4
11.0	21.44	36.29	25.36	263	.	.	.	.	.	.
12.0	21.42	36.29	25.37	262	.	.	.	.	.	.
13.0	21.42	36.29	25.37	262	.	.	.	.	.	.
14.0	21.41	36.29	25.37	262	.	.	.	.	.	.
15.0	21.40	36.29	25.37	262	.	.	.	.	.	.
16.0	21.39	36.29	25.38	261	.	.	.	.	.	.
17.0	21.39	36.29	25.38	262	.	.	.	.	.	.
18.0	21.39	36.29	25.38	262	.	.	.	.	.	.
19.0	21.39	36.29	25.38	262	.	.	.	.	.	.
20.0	21.39	36.29	25.38	262	.	.	.	0.05	0.0	0.0
21.0	21.39	36.29	25.38	262	.	.	.	.	.	.
22.0	21.39	36.29	25.38	262	.	.	.	.	.	.
23.0	21.39	36.29	25.38	262	.	.	.	.	.	.
24.0	21.39	36.29	25.38	262	.	.	.	.	.	.
25.0	21.39	36.29	25.38	262	.	.	.	.	.	.
26.0	21.39	36.29	25.38	262	.	.	.	.	.	.
27.0	21.39	36.29	25.38	262	.	.	.	.	.	.
28.0	21.39	36.29	25.38	262	.	.	.	.	.	.
29.0	21.39	36.29	25.38	262	.	.	.	.	.	.
30.0	21.39	36.29	25.38	262	.	.	.	.	.	.
31.0	21.39	36.29	25.38	262	.	.	.	.	.	.
32.0	21.39	36.29	25.38	262	.	.	.	.	.	.
33.0	21.39	36.29	25.38	262	.	.	.	.	.	.
34.0	21.39	36.29	25.38	262	.	.	.	0.04	0.0	0.2



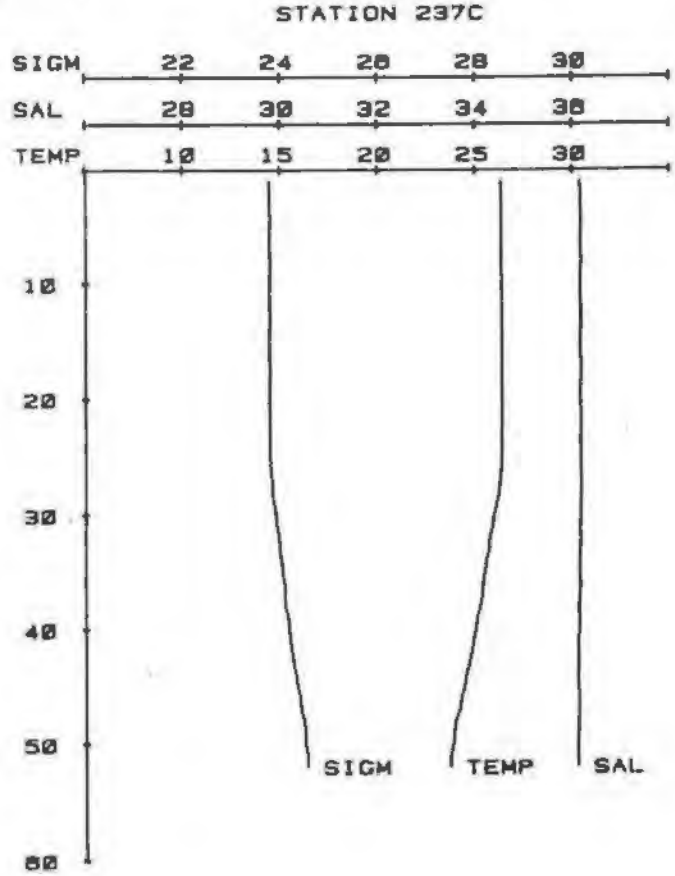
GILLISS CRUISE STA 237C 30/04/79 08.1 GMT CONSEC STA 244

LAT 38 41.5N LONG 79 58.5W DEPTH = 219M DIST LAST STA = 51.5KM

WEATHER DATA
WIND SPEED = 8KTS
WIND DIRECTION = 040
AIR TEMP = 21.7C
WEATHER CODE = 31
BAROMETRIC PRES= 1016.3
SEA STATE = 2
WAVE DIRECTION = 000
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
1.0	26.34	36.15	23.88	411	.	.	.	.	.	.
2.0	26.34	36.17	23.82	409	.	.	.	.	.	.
3.0	26.35	36.16	23.81	411	.	.	.	0.00	0.0	0.0
4.0	26.34	36.18	23.82	409	.	.	.	.	.	.
5.0	26.35	36.17	23.81	410	.	.	.	.	.	.
6.0	26.34	36.16	23.81	410	.	.	.	.	.	.
7.0	26.34	36.17	23.82	410	.	.	.	.	.	.
8.0	26.33	36.18	23.83	409	.	.	.	.	.	.
9.0	26.34	36.16	23.81	410	.	.	.	.	.	.
10.0	26.34	36.16	23.81	411	.	.	.	.	.	.
11.0	26.34	36.16	23.81	411	.	.	.	.	.	.
12.0	26.34	36.17	23.82	410	.	.	.	.	.	.
13.0	26.34	36.18	23.82	409	.	.	.	.	.	.
14.0	26.35	36.16	23.81	411	.	.	.	.	.	.
15.0	26.35	36.16	23.81	411	.	.	.	.	.	.
16.0	26.35	36.16	23.81	411	.	.	.	.	.	.
17.0	26.34	36.18	23.82	409	.	.	.	.	.	.
18.0	26.34	36.17	23.82	410	.	.	.	.	.	.
19.0	26.35	36.16	23.81	411	.	.	.	.	.	.
20.0	26.35	36.16	23.81	411	.	.	.	0.00	0.0	0.5
21.0	26.35	36.17	23.81	411	.	.	.	.	.	.
22.0	26.34	36.17	23.82	410	.	.	.	.	.	.
23.0	26.31	36.16	23.82	410	.	.	.	.	.	.
24.0	26.33	36.16	23.81	411	.	.	.	.	.	.
25.0	26.38	36.16	23.82	410	.	.	.	.	.	.
26.0	26.29	36.17	23.83	409	.	.	.	.	.	.
27.0	26.22	36.18	23.86	406	.	.	.	.	.	.
28.0	26.17	36.17	23.87	405	.	.	.	0.00	0.0	0.5
29.0	26.05	36.16	23.90	403	.	.	.	.	.	.
30.0	25.91	36.16	23.94	398	.	.	.	.	.	.
31.0	25.84	36.15	23.96	397	.	.	.	.	.	.
32.0	25.78	36.16	24.01	392	.	.	.	.	.	.
33.0	25.68	36.15	24.01	392	.	.	.	.	.	.
34.0	25.51	36.14	24.05	388	.	.	.	.	.	.
35.0	25.45	36.14	24.07	386	.	.	.	.	.	.
36.0	25.35	36.16	24.12	382	.	.	.	.	.	.
37.0	25.30	36.15	24.11	383	.	.	.	.	.	.
38.0	25.21	36.12	24.13	381	.	.	.	.	.	.
39.0	25.04	36.13	24.19	375	.	.	.	.	.	.
40.0	24.99	36.13	24.21	374	.	.	.	0.02	0.0	0.0
41.0	24.85	36.10	24.23	372	.	.	.	.	.	.
42.0	24.76	36.11	24.26	369	.	.	.	.	.	.
43.0	24.63	36.11	24.30	365	.	.	.	.	.	.
44.0	24.47	36.10	24.34	361	.	.	.	.	.	.
45.0	24.39	36.11	24.37	358	.	.	.	.	.	.
46.0	24.23	36.12	24.43	353	.	.	.	.	.	.
47.0	24.15	36.11	24.45	351	.	.	.	.	.	.
48.0	23.93	36.11	24.51	345	.	.	.	.	.	.
49.0	23.84	36.11	24.53	343	.	.	.	.	.	.
50.0	23.81	36.09	24.53	343	.	.	.	.	.	.
51.0	23.67	36.10	24.58	339	.	.	.	.	.	.
52.0	23.67	36.10	24.58	339	.	.	.	0.06	0.0	0.3



GILLISS CRUISE STA 238C 30/04/79 04.5 GMT CONSEC STA 245

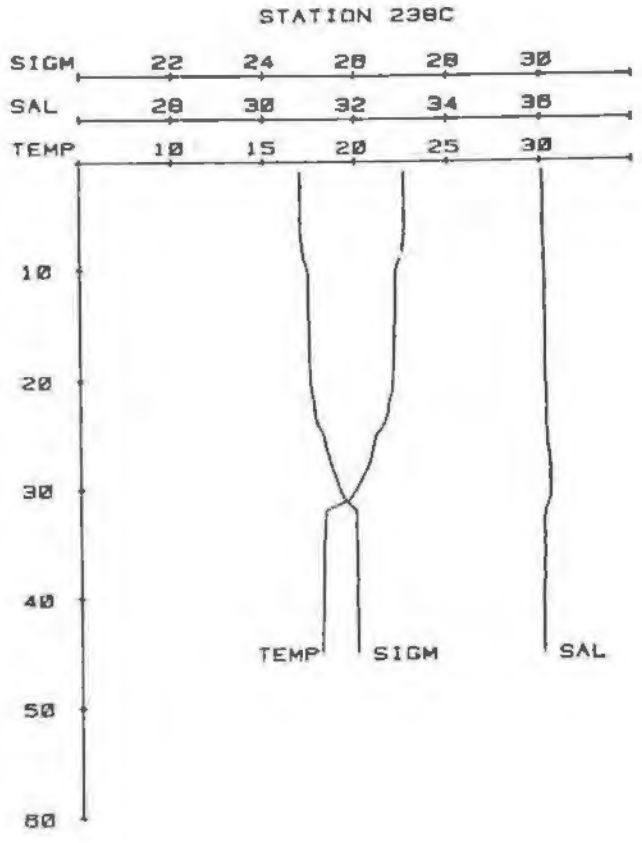
LAT 30 43.8N LONG 88 89.8W DEPTH = 47M DIST LAST STA = 18.5KM

WEATHER DATA

WIND SPEED	= 8KTS	SEA STATE	= 1
WIND DIRECTION	= 120	WAVE DIRECTION	= 180
AIR TEMP	= 21.7C	CLOUD TYPE	=
WEATHER CODE	= X1	CLOUD AMOUNT	=
BAROMETRIC PRES=	1016.9	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
1.0	22.68	36.04	24.82	314	.	.	.	.	.	.
2.0	22.69	36.06	24.84	312	.	.	.	.	.	.
3.0	22.70	36.06	24.83	313	.	.	.	.	.	.
4.0	22.70	36.06	24.83	313	.	.	.	.	.	.
5.0	22.70	36.06	24.83	313	.	.	.	.	.	.
6.0	22.70	36.06	24.83	313	.	.	.	.	.	.
7.0	22.67	36.06	24.84	312	.	.	.	.	.	.
8.0	22.59	36.06	24.88	309	.	.	.	0.07	0.0	0.0
9.0	22.47	36.07	24.91	306	.	.	.	.	.	.
10.0	22.21	36.09	24.99	298	.	.	.	.	.	.
11.0	22.18	36.10	25.01	296	.	.	.	.	.	.
12.0	22.15	36.09	25.00	297	.	.	.	.	.	.
13.0	22.19	36.09	25.00	297	.	.	.	.	.	.
14.0	22.17	36.10	25.01	296	.	.	.	.	.	.
15.0	22.12	36.10	25.03	295	.	.	.	.	.	.
16.0	22.12	36.10	25.03	295	.	.	.	.	.	.
17.0	22.09	36.10	25.04	294	.	.	.	.	.	.
18.0	22.08	36.09	25.03	294	.	.	.	0.10	1.2	0.2
19.0	22.06	36.10	25.04	293	.	.	.	.	.	.
20.0	22.03	36.10	25.05	292	.	.	.	.	.	.
21.0	22.00	36.13	25.08	289	.	.	.	.	.	.
22.0	21.92	36.13	25.13	285	.	.	.	0.04	0.0	0.0
23.0	21.78	36.13	25.15	284	.	.	.	.	.	.
24.0	21.57	36.12	25.20	279	.	.	.	.	.	.
25.0	21.14	36.15	25.34	265	.	.	.	0.14	2.1	1.0
26.0	20.99	36.15	25.38	262	.	.	.	.	.	.
27.0	20.86	36.19	25.45	255	.	.	.	.	.	.
28.0	20.67	36.21	25.51	249	.	.	.	.	.	.
29.0	20.35	36.21	25.60	241	.	.	.	.	.	.
30.0	20.05	36.21	25.68	233	.	.	.	.	.	.
31.0	19.63	36.20	25.78	223	.	.	.	.	.	.
32.0	18.37	36.10	26.03	208	.	.	.	.	.	.
33.0	18.31	36.07	26.02	201	.	.	.	.	.	.
34.0	18.30	36.08	26.03	200	.	.	.	.	.	.
35.0	18.25	36.08	26.04	199	.	.	.	.	.	.
36.0	18.25	36.08	26.04	199	.	.	.	.	.	.
37.0	18.25	36.07	26.04	199	.	.	.	.	.	.
38.0	18.23	36.08	26.05	198	.	.	.	.	.	.
39.0	18.21	36.06	26.04	199	.	.	.	.	.	.
40.0	18.21	36.05	26.03	200	.	.	.	.	.	.
41.0	18.20	36.07	26.05	196	.	.	.	.	.	.
42.0	18.18	36.06	26.05	199	.	.	.	.	.	.
43.0	18.18	36.06	26.05	198	.	.	.	.	.	.
44.0	18.14	36.06	26.06	198	.	.	.	.	.	.
45.0	18.14	36.06	26.06	198	.	.	.	0.29	4.5	3.1



GILLISS CRUISE STA 239X 30/04/79 08.5 GMT CONSEC STA 246

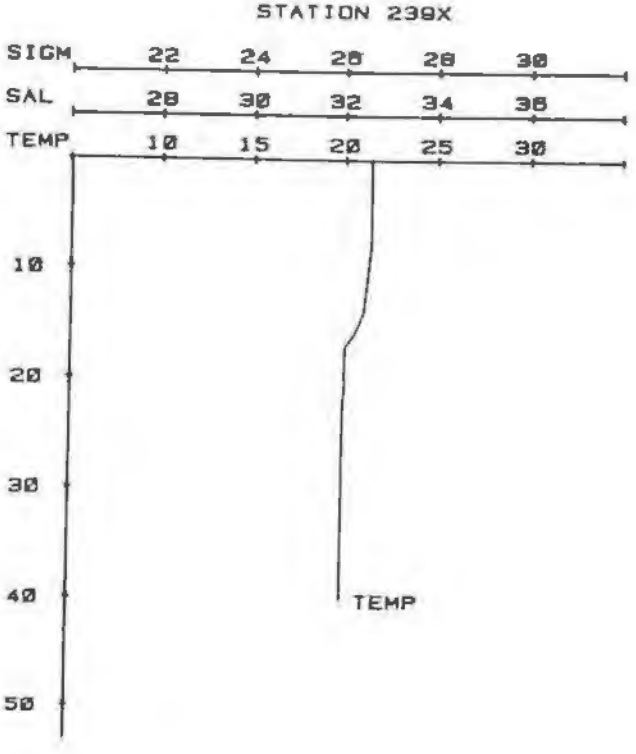
LAT 30 44.6N LONG 88 13.0W DEPTH = 43M DIST LAST STA = 6.5KM

WEATHER DATA

WIND SPEED	= 8KTS	SEA STATE	= 1
WIND DIRECTION	= 120	WAVE DIRECTION	= 180
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X8	CLOUD AMOUNT	=
BAROMETRIC PRES=	1016.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	21.4	.	.	.	.	.	.	.	.	.
8.0	21.4	.	.	.	.	.	.	.	.	.
14.0	21.0	.	.	.	.	.	.	.	.	.
16.0	20.5	.	.	.	.	.	.	.	.	.
17.0	20.0	.	.	.	.	.	.	.	.	.
21.0	20.0	.	.	.	.	.	.	.	.	.
22.0	19.9	.	.	.	.	.	.	.	.	.
40.0	19.9	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 240X 30/04/79 08.8 GMT CONSEC STA 247

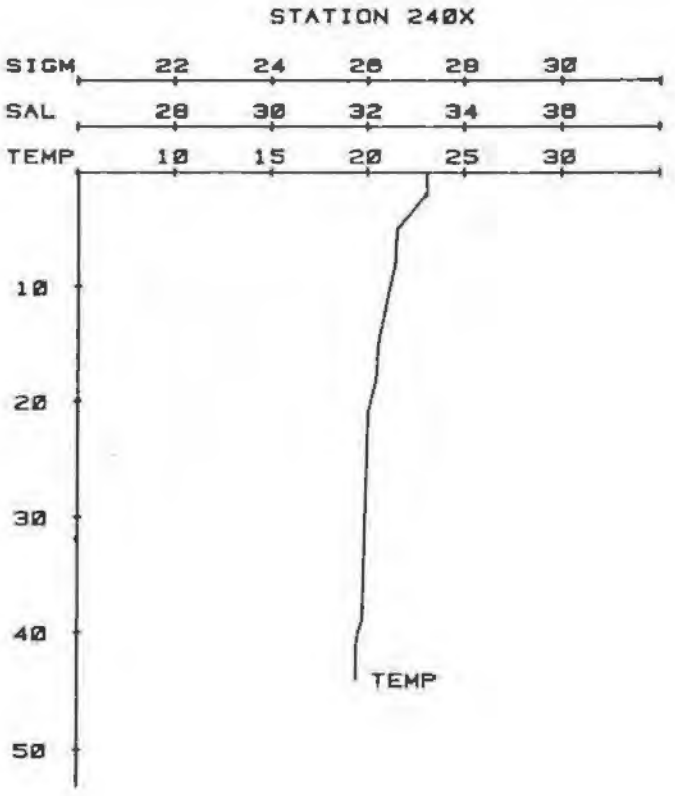
LAT 30 43.6N LONG 80 11.0W DEPTH = 44M DIST LAST STA = 4.8KM

WEATHER DATA

WIND SPEED	= 06KTS	SEA STATE	= 1
WIND DIRECTION	= 120	WAVE DIRECTION	= 180
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X0	CLOUD AMOUNT	=
BAROMETRIC PRES=	1016.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.1	.	.	.	.	.	.	.	.	.
2.0	23.1	.	.	.	.	.	.	.	.	.
2.8	23.0	.	.	.	.	.	.	.	.	.
3.0	22.5	.	.	.	.	.	.	.	.	.
4.0	22.0	.	.	.	.	.	.	.	.	.
5.0	21.5	.	.	.	.	.	.	.	.	.
8.0	21.4	.	.	.	.	.	.	.	.	.
11.0	21.0	.	.	.	.	.	.	.	.	.
15.0	20.5	.	.	.	.	.	.	.	.	.
18.0	20.4	.	.	.	.	.	.	.	.	.
21.0	20.0	.	.	.	.	.	.	.	.	.
39.0	19.2	.	.	.	.	.	.	.	.	.
40.0	19.5	.	.	.	.	.	.	.	.	.
41.0	19.4	.	.	.	.	.	.	.	.	.
44.0	19.4	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 241X 30/04/79 09.1 GMT CONSEC STA 248

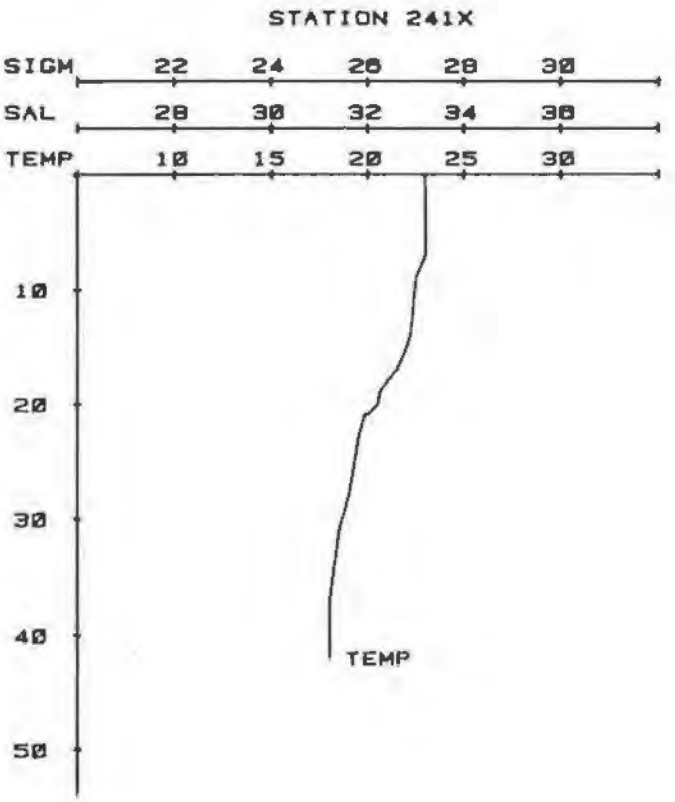
LAT 30 43.2N LONG 80 07.5W DEPTH = 42M DIST LAST STA = 5.6KM

WEATHER DATA

WIND SPEED	= 06KTS	SEA STATE	= 1
WIND DIRECTION	= 120	WAVE DIRECTION	= 180
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= X0	CLOUD AMOUNT	=
BAROMETRIC PRES=	1016.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	AOU	PO4	NO3	SI
0.0	23.0	.	.	.	.	.	.	.	.	.
7.0	23.0	.	.	.	.	.	.	.	.	.
9.0	22.5	.	.	.	.	.	.	.	.	.
14.0	22.2	.	.	.	.	.	.	.	.	.
15.0	22.0	.	.	.	.	.	.	.	.	.
17.0	21.5	.	.	.	.	.	.	.	.	.
18.0	21.0	.	.	.	.	.	.	.	.	.
19.0	20.6	.	.	.	.	.	.	.	.	.
20.0	20.5	.	.	.	.	.	.	.	.	.
21.0	20.0	.	.	.	.	.	.	.	.	.
21.0	19.8	.	.	.	.	.	.	.	.	.
23.0	19.5	.	.	.	.	.	.	.	.	.
29.0	19.0	.	.	.	.	.	.	.	.	.
31.0	18.5	.	.	.	.	.	.	.	.	.
37.0	18.0	.	.	.	.	.	.	.	.	.
42.0	18.0	.	.	.	.	.	.	.	.	.



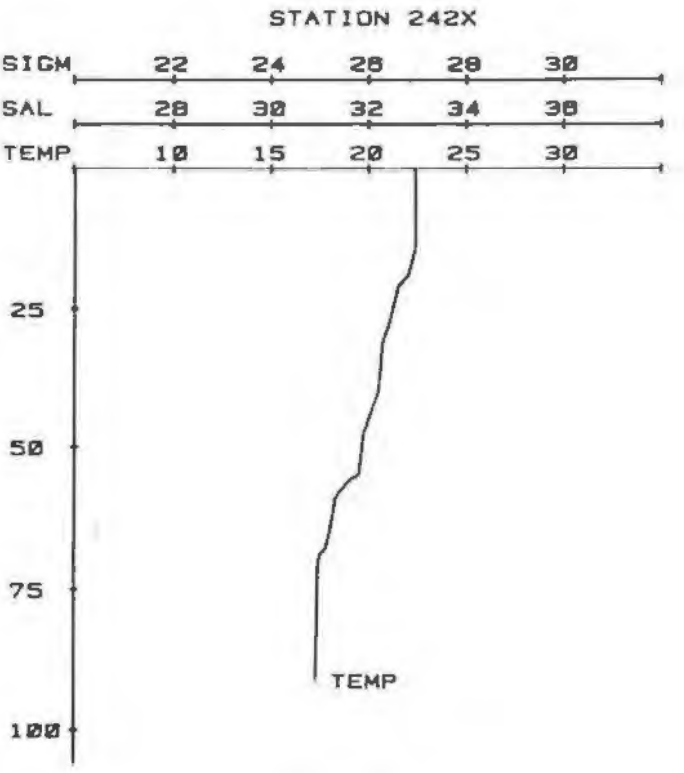
GILLISS CRUISE STA 242X 30/04/79 09.4 GMT CONSEC STA 249

LAT 30 43.2N LONG 88 05.1W DEPTH = 91M DIST LAST STA = 3.8KM

WEATHER DATA
WIND SPEED = 02KTS
WIND DIRECTION = 990
AIR TEMP = 21.7C
WEATHER CODE = X1
BAROMETRIC PRES= 1016.3
SEA STATE = 1
WAVE DIRECTION = 000
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	22.4									
14.0	22.4									
19.0	22.0									
21.0	21.5									
28.0	21.0									
31.0	20.7									
40.0	20.5									
45.6	20.0									
48.0	19.7									
55.0	19.5									
56.0	19.0									
58.6	18.5									
59.4	18.3									
65.0	18.0									
68.0	17.8									
69.0	17.5									
71.0	17.4									
91.0	17.3									



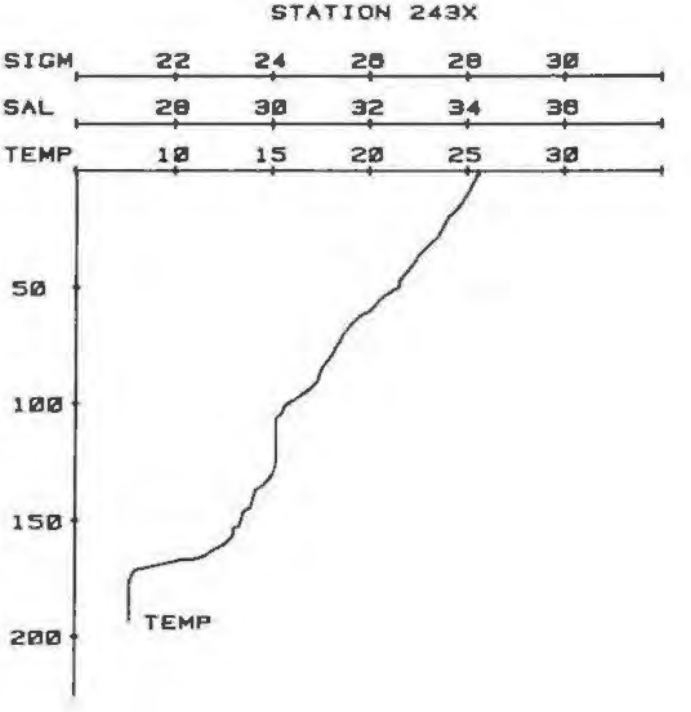
GILLISS CRUISE STA 243X 30/04/79 09.6 GMT CONSEC STA 250

LAT 30 42.2N LONG 88 02.5W DEPTH = 193M DIST LAST STA = 4.5KM

WEATHER DATA
WIND SPEED = 02KTS
WIND DIRECTION = 990
AIR TEMP = 21.7C
WEATHER CODE = X1
BAROMETRIC PRES= 1016.3
SEA STATE = 1
WAVE DIRECTION = 000
CLOUD TYPE =
CLOUD AMOUNT =
VISIBILITY CODE=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	25.6									
2.0	25.6									
2.0	25.5									
10.0	25.0									
16.0	24.5									
20.0	24.0									
28.0	23.5									
32.0	23.0									
36.0	22.5									
42.0	22.0									
47.0	21.5									
50.0	21.5									
52.0	21.0									
55.0	20.5									
60.0	20.0									
62.0	19.5									
66.0	19.0									
70.0	18.6									
72.0	18.5									
79.0	18.0									
85.0	17.5									
90.0	17.3									
93.0	17.0									
96.0	16.5									
99.0	16.0									
101.0	15.6									
104.0	15.5									
106.0	15.2									
125.0	15.2									
130.0	15.0									
135.0	14.5									
137.0	14.1									
140.0	14.0									
144.0	13.0									
146.0	13.5									
152.0	13.1									
153.0	13.0									
156.0	13.0									
160.0	12.5									
162.0	12.4									
165.0	11.5									
166.0	11.0									
166.0	10.5									
167.0	10.0									
168.0	9.5									
169.0	9.0									
170.0	8.5									
171.0	8.0									
172.0	7.9									
176.0	7.7									
193.0	7.7									



GILLISS CRUISE STA 244X 30/04/79 10.0 GMT CONSEC STA 251

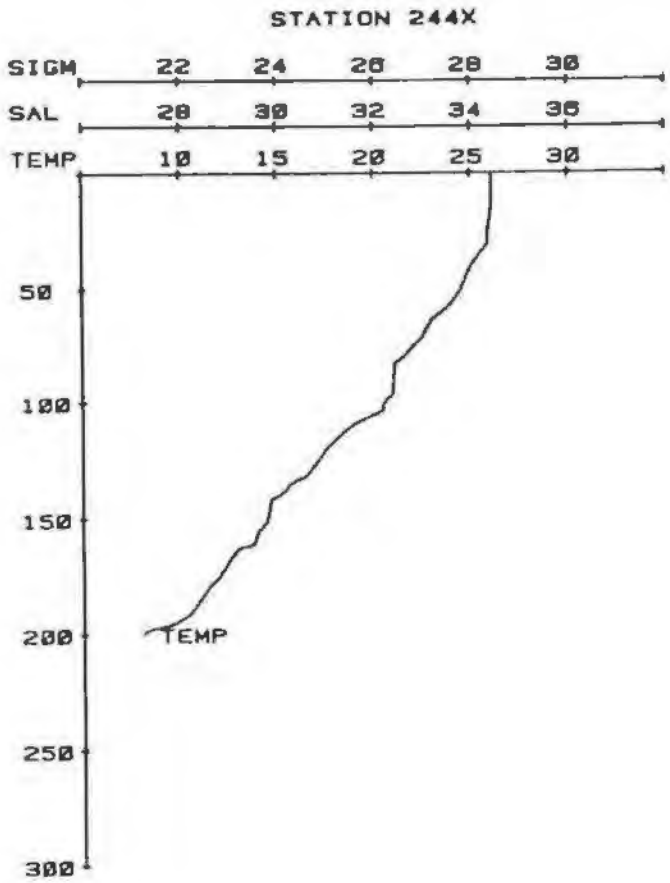
LAT 30 41.5N LONG 79 59.5W DEPTH = 230M DIST LAST STA = 5.0KM

WEATHER DATA

WIND SPEED	= 02KTS	SEA STATE	= 1
WIND DIRECTION	= 990	WAVE DIRECTION	= 000
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1016.3	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
0.0	26.1	.	.	.	.	.	.	.	.	.
14.0	26.1	.	.	.	.	.	.	.	.	.
20.0	26.0	.	.	.	.	.	.	.	.	.
25.0	25.9	.	.	.	.	.	.	.	.	.
31.0	25.9	.	.	.	.	.	.	.	.	.
35.0	25.5	.	.	.	.	.	.	.	.	.
41.0	25.0	.	.	.	.	.	.	.	.	.
51.0	24.5	.	.	.	.	.	.	.	.	.
57.0	24.0	.	.	.	.	.	.	.	.	.
61.0	23.5	.	.	.	.	.	.	.	.	.
64.0	23.0	.	.	.	.	.	.	.	.	.
72.0	22.5	.	.	.	.	.	.	.	.	.
76.0	22.0	.	.	.	.	.	.	.	.	.
81.0	21.5	.	.	.	.	.	.	.	.	.
83.0	21.1	.	.	.	.	.	.	.	.	.
97.0	21.0	.	.	.	.	.	.	.	.	.
100.0	20.6	.	.	.	.	.	.	.	.	.
102.0	20.5	.	.	.	.	.	.	.	.	.
104.0	20.5	.	.	.	.	.	.	.	.	.
106.0	20.0	.	.	.	.	.	.	.	.	.
108.0	19.5	.	.	.	.	.	.	.	.	.
110.0	19.0	.	.	.	.	.	.	.	.	.
113.0	18.5	.	.	.	.	.	.	.	.	.
117.0	18.0	.	.	.	.	.	.	.	.	.
121.0	17.5	.	.	.	.	.	.	.	.	.
127.0	17.0	.	.	.	.	.	.	.	.	.
132.0	16.5	.	.	.	.	.	.	.	.	.
134.0	16.0	.	.	.	.	.	.	.	.	.
136.0	15.6	.	.	.	.	.	.	.	.	.
138.0	15.5	.	.	.	.	.	.	.	.	.
141.0	15.0	.	.	.	.	.	.	.	.	.
142.0	14.7	.	.	.	.	.	.	.	.	.
151.0	14.5	.	.	.	.	.	.	.	.	.
156.0	14.0	.	.	.	.	.	.	.	.	.
161.0	13.0	.	.	.	.	.	.	.	.	.
162.0	13.5	.	.	.	.	.	.	.	.	.
163.0	13.0	.	.	.	.	.	.	.	.	.
168.0	12.5	.	.	.	.	.	.	.	.	.
175.0	12.0	.	.	.	.	.	.	.	.	.
179.0	11.5	.	.	.	.	.	.	.	.	.
185.0	11.0	.	.	.	.	.	.	.	.	.
191.0	10.5	.	.	.	.	.	.	.	.	.
194.0	10.0	.	.	.	.	.	.	.	.	.
196.0	9.5	.	.	.	.	.	.	.	.	.
197.0	9.0	.	.	.	.	.	.	.	.	.
198.0	8.5	.	.	.	.	.	.	.	.	.
199.0	8.2	.	.	.	.	.	.	.	.	.
200.0	8.1	.	.	.	.	.	.	.	.	.



GILLISS CRUISE STA 245C 30/04/79 12.5 GMT CONSEC STA 252

LAT 30 43.0N LONG 80 00.1W DEPTH = 43M DIST LAST STA = 14.8KM

WEATHER DATA

WIND SPEED	= 18KTS	SEA STATE	= 1
WIND DIRECTION	= 020	WAVE DIRECTION	= 000
AIR TEMP	= 22.2C	CLOUD TYPE	=
WEATHER CODE	= 32	CLOUD AMOUNT	=
BAROMETRIC PRES	= 1016.6	VISIBILITY CODE	=

OBSERVATIONS

Z	T	S	D	SVA	O2	O2'	ADJ	PO4	NO3	SI
1.0	22.67	36.05	24.83	313	.	.	.	.	.	.
2.0	22.66	36.05	24.84	312	.	.	.	.	.	.
3.0	22.66	36.05	24.84	312	.	.	.	0.90	0.0	0.1
4.0	22.64	36.05	24.84	312	.	.	.	.	.	.
5.0	22.64	36.05	24.84	312	.	.	.	.	.	.
6.0	22.63	36.05	24.84	312	.	.	.	0.85	0.0	0.5
7.0	22.63	36.06	24.85	311	.	.	.	.	.	.
8.0	22.62	36.05	24.85	311	.	.	.	.	.	.
9.0	22.63	36.05	24.84	312	.	.	.	.	.	.
10.0	22.62	36.06	24.86	311	.	.	.	0.86	0.0	0.0
11.0	22.56	36.05	24.86	310	.	.	.	.	.	.
12.0	22.44	36.06	24.91	306	.	.	.	.	.	.
13.0	22.37	36.05	24.92	305	.	.	.	.	.	.
14.0	22.24	36.09	24.99	299	.	.	.	.	.	.
15.0	22.21	36.09	24.99	298	.	.	.	.	.	.
16.0	22.14	36.13	25.04	293	.	.	.	.	.	.
17.0	22.14	36.12	25.04	294	.	.	.	.	.	.
18.0	22.12	36.12	25.04	293	.	.	.	.	.	.
19.0	22.12	36.12	25.04	293	.	.	.	.	.	.
20.0	22.11	36.15	25.07	291	.	.	.	.	.	.
21.0	22.09	36.14	25.07	291	.	.	.	.	.	.
22.0	22.08	36.14	25.07	291	.	.	.	.	.	.
23.0	22.07	36.13	25.06	291	.	.	.	.	.	.
24.0	22.04	36.14	25.08	290	.	.	.	.	.	.
25.0	21.95	36.14	25.11	288	.	.	.	0.87	0.2	0.2
26.0	21.94	36.14	25.11	287	.	.	.	.	.	.
27.0	21.88	36.15	25.13	285	.	.	.	.	.	.
28.0	21.82	36.17	25.17	282	.	.	.	.	.	.
29.0	20.87	36.18	25.44	256	.	.	.	.	.	.
30.0	20.43	36.18	25.55	245	.	.	.	0.25	3.6	2.8
31.0	19.31	36.18	25.85	217	.	.	.	.	.	.
32.0	19.30	36.15	25.83	219	.	.	.	.	.	.
33.0	19.07	36.12	25.88	214	.	.	.	.	.	.
34.0	19.13	36.11	25.87	215	.	.	.	.	.	.
35.0	18.65	36.10	25.96	207	.	.	.	.	.	.
36.0	18.56	36.09	25.97	205	.	.	.	.	.	.
37.0	18.57	36.09	25.97	206	.	.	.	.	.	.
38.0	18.57	36.11	25.99	204	.	.	.	.	.	.
39.0	18.27	36.06	26.02	201	.	.	.	.	.	.
40.0	18.31	36.07	26.02	201	.	.	.	.	.	.