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NOAA Data Report OMPA-6



MESA NEW YORK BIGHT PROJECT
EXPANDED WATER COLUMN CHARACTERIZATION
CRUISE (XWCC 20)
NOAA SHIP GEORGE B. KELEZ
JULY-AUGUST 1978

John B. Hazelworth
George A. Berberian

Boulder, Colorado
May 1981

noaa

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

Office of Marine
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National Oceanic and Atmospheric Administration
Atlantic Oceanographic and Meteorological Laboratories
4301 Rickenbacker Causeway
Miami, Florida 33149

Boulder, Colorado
May 1981



UNITED STATES
DEPARTMENT OF COMMERCE

Malcolm Baldrige,
Secretary

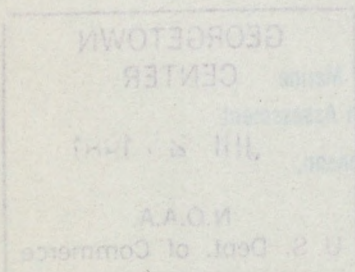
NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

James P. Walsh,
Acting Administrator

Office of Marine
Pollution Assessment
R.L. Swanson,
Director

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This report is a continuation of the Marine Ecosystem Analysis (MEA) Program's series of publications presenting oceanographic data from the New York Bight. In July-August of 1972, a cruise of 112 stations was conducted by the Atlantic Oceanographic and Meteorological Laboratories (AOML), Miami, Florida, aboard the NOAA Ship George B. Keeler. The instrumentation employed was the same as that described in previous reports (Hareworth et al., 1972, 1973, a.s. n.d.), an Inter Ocean Model 913-10 CSTD with associated sensors and equipment. The area of investigation was the expanded New York Bight region (Figure 1 and Table 1). Cruise date and participating AOML staff members are listed in Table 2. The physical and nutrient data obtained from the water column measurements are presented herein; the operational characteristics of the nutrient analysis system are found in Start et al. (1977). Water samples at selected stations were obtained for the analysis of dissolved inorganic carbon, dissolved organic carbon, and plankton. These results will be reported separately.

This report is the nineteenth of a series of reports describing the physical oceanographic measurements in the expanded area. Earlier volumes were reported by Church et al. (1974), Start et al. (1974, 1977 a,b), Hareworth and Church (1974), Kohn et al. (1974 a,b) and Hareworth et al. (1974, 1975 a,b, 1976 a,b,c,d,e, 1981 a,b,c,d,e).

MESA NEW YORK BIGHT PROJECT
EXPANDED WATER COLUMN CHARACTERIZATION CRUISE (XWCC 20)
NOAA SHIP GEORGE B. KELEZ
JULY-AUGUST 1978

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George A. Berberian

During the period 31 July-9 August 1978, an oceanographic cruise was made on the NOAA Ship George B. Kelez in the New York Bight. The objective of the cruise was to supply data to provide a base for analysis of the water characteristics and movements in the highly impacted ecosystem. This report represents the corrected physical and chemical (nutrient) data from this cruise.

Key Words: MESA, New York Bight, Physical Oceanography Data, Nutrient Data

1. INTRODUCTION

This report is a continuation in the Marine Ecosystem Analysis (MESA) Program's series of publications presenting oceanographic data from the New York Bight. In July-August of 1978, a cruise of 112 stations was conducted by the Atlantic Oceanographic and Meteorological Laboratories (AOML), Miami, Florida, aboard the NOAA Ship George B. Kelez. The instrumentation employed was the same as that described in previous reports (Hazelworth et al., 1974, 1975, a,b) namely, an Inter Ocean Model 513-10 CSTD with associated sensors and equipment. The area of investigation was the expanded New York Bight region (Figure 1 and Table 1). Cruise date and participating AOML staff members are listed in Table 2. The physical and nutrient data obtained from the water column measurements are presented herein; the operational characteristics of the nutrient analyses system are found in Starr et al. (1977). Water samples at selected stations were obtained for the analysis of dissolved carbohydrates, total dissolved organic carbon, and plankton. These results will be reported separately.

This report is the nineteenth of a series of reports describing the physical oceanographic measurements in the expanded area. Earlier cruises were reported by Charnell et al., (1976), Starr et al., (1976, 1977 a,b), Hazelworth and Darnell (1976), Kolitz et al., (1976 a,b) and Hazelworth et al., (1976, 1977 a,b, 1978 a,b,c,d,e, 1981 a,b,c).

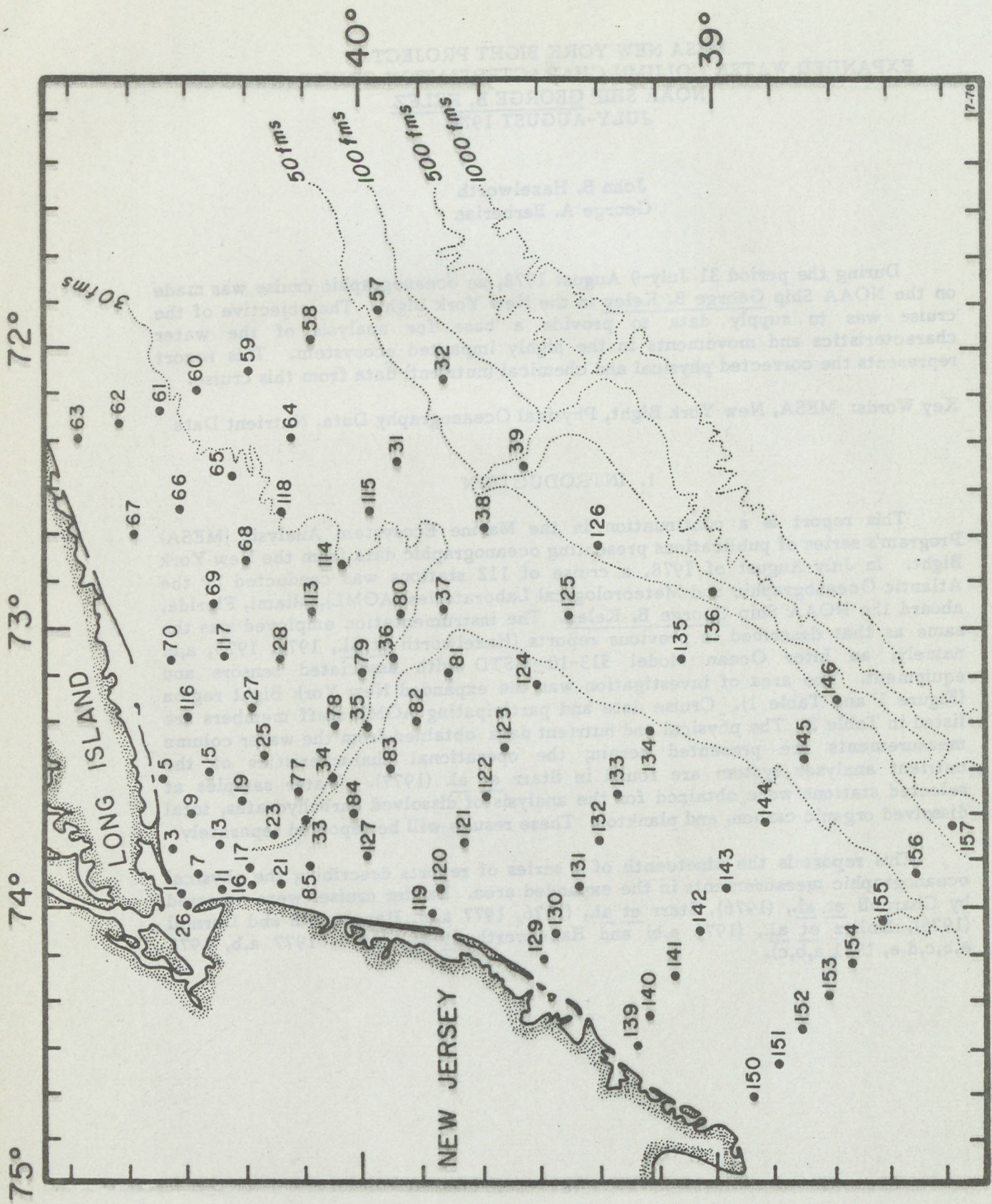


Figure 1: Locations of stations occupied during XWCC-20.

TABLE 1

NEW YORK BIGHT STATIONS POSITIONS

STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE
1*(2)	40° 30.2	73° 57.3	84	40° 02.0	73° 41.0
3	40° 31.5	73° 48.4	85	40° 08.0	73° 51.5
5	40° 33.3	73° 32.5	98	40° 31.4	73° 59.8
7*(2)	40° 26.9	73° 53.0	99	40° 33.4	74° 01.6
9	40° 28.3	73° 39.6	100	40° 35.7	74° 01.9
11	40° 22.2	73° 56.7	113	40° 08.8	72° 55.5
13	40° 23.3	73° 47.0	114	40° 04.0	72° 45.2
15	40° 25.2	73° 30.4	115	39° 58.7	72° 34.1
16*(2)	40° 18.2	73° 56.4	116	40° 30.0	73° 18.7
17*(12)	40° 18.5	73° 51.8	117	40° 23.1	72° 05.0
19	40° 20.2	73° 37.9	118	40° 14.4	72° 34.1
21*(2)	40° 13.5	73° 56.1	119	39° 48.4	74° 00.0
23	40° 14.8	73° 45.6	120*(3)	39° 46.5	73° 55.5
25	40° 16.9	73° 28.3	121*(2)	39° 42.9	73° 46.5
26	40° 29.0	73° 59.5	122	39° 39.5	73° 36.0
27	40° 18.0	73° 17.5	123	39° 35.0	73° 26.0
28	40° 13.5	73° 07.0	124	39° 30.0	72° 12.2
31	39° 54.0	72° 25.0	125	39° 23.8	72° 57.2
32	39° 46.0	72° 07.0	126	39° 18.9	72° 42.5
33	40° 10.0	73° 41.5	127	39° 57.2	73° 53.4
34	40° 05.5	73° 31.5	129	39° 30.0	74° 11.0
35	39° 59.0	73° 21.5	130*(3)	39° 27.7	74° 06.1
36	39° 55.0	73° 06.5	131*(2)	39° 23.2	73° 55.5
37	39° 46.0	72° 57.0	132	39° 20.0	73° 46.5
38	39° 39.0	72° 39.5	133	39° 16.9	73° 35.8
39	39° 32.0	72° 26.0	134	39° 11.1	73° 21.9
57	39° 57.0	71° 52.0	135	39° 05.2	73° 06.5
58	40° 08.0	71° 58.0	136	39° 00.0	72° 52.0
59	40° 18.0	72° 04.0	139	39° 13.5	74° 30.0
60	40° 27.0	72° 09.0	140	39° 11.0	74° 24.5
61	40° 33.0	72° 13.0	141	39° 06.8	74° 15.2
62	40° 40.0	72° 16.0	142	39° 02.9	74° 05.9
63	40° 47.0	72° 20.0	143	39° 58.1	73° 56.0
64	40° 12.0	72° 20.0	144	38° 51.6	73° 42.0
65	40° 21.0	72° 28.0	145	38° 45.0	73° 27.9
66	40° 30.0	72° 34.0	146	38° 39.4	73° 16.1
67	40° 38.0	72° 40.0	150	38° 53.8	74° 41.9
68	40° 19.0	72° 46.0	151	38° 49.7	74° 34.0
69	40° 25.0	72° 55.0	152	38° 45.4	74° 27.2
70	40° 32.0	73° 07.0	153	38° 41.5	74° 20.0
77	40° 10.5	73° 34.0	154	38° 37.1	74° 12.8
78	40° 05.0	73° 21.5	155	38° 31.4	74° 04.5
79	40° 00.0	73° 09.5	156	38° 25.3	73° 53.0
80	39° 54.5	72° 57.0	157	38° 19.5	73° 43.2
81	39° 44.5	73° 10.0			
82	39° 50.5	73° 20.5			
83	39° 56.5	73° 30.5			

*(n) Station occupied n-times

Table 2. Expanded Water Column Characterization Cruise by the
NOAA Ship George B. Kelez

Cruise	Date	AOML Personnel
XWCC 20	July 31 - August 9, 1978	Gregory Han, Chief Scientist John Hazelworth Phillip McGillivray Richard Requejo Phillip Hanson Joan Parker

2. DATA ANALYSIS

Prior reports, cited above give detailed information on instrumentation specification, data collection methods, and data processing techniques. The correction factors required to bring the sensor values into agreement with the water samples, as well as the data accuracy, are given in Table 3. No transmissivity correction factors were calculated. However, this sensor was calibrated before the cruise. The statistical parameters in Table 3 were computed using the following formulas:

$$\text{Calibration offset} = \frac{1}{N} \sum_{i=1}^N (\bar{E}_i - W_i)$$

Calibration recheck

$$\bar{X} = \text{Mean Difference} = \frac{1}{N} \sum_{i=1}^N (I_i - W_i)$$

$$S_x = \text{Standard Deviation} = \sqrt{\frac{1}{(N-1)} \sum_{i=1}^N (I_i - \bar{X})^2}$$

where N = total number of water samples for entire cruise;
W = water sample value;
 $\bar{E}$ = mean electronic sensor value at the depth corresponding to water sample at the same depth;
I = corrected interpolated one meter electronic sensor value at the nearest depth corresponding to the water sample value;
T = date (Julian day, Table 3); and
D = depth (Table 3).

Table 3. Correction Factors and Data Accuracy for Cruise XWCC 20

	Calib. Offset	Calib. Recheck	X	S _x	Precision (Repeatability)
Temperature (°C)	+0.002T-.001D-.497		+0.00	.02	
Salinity (°/oo)	+0.001T+.001D-.364		+0.00	.02	
O ₂ (m l/ l)	-.003T-.001D+.975		.00	.06	
Depth (Meters)	0.0				±0.5

3. DATA PRESENTATION

Tables of the interpolated data and the corresponding depth profiles of temperature (°C), salinity (°/oo), sigma-t and transmissivity (0-100% transmission) are given in Section 7, Station Data. The codes used in the headings are from the National Oceanographic Data Center Manual Series (1964). The tabulated data are given at 1-m intervals from the surface to 50-m and at 10-m intervals thereafter; in addition, data are presented at the depths at which water samples were obtained and at the bottom of the cast. The column O₂ is the dissolved oxygen data as recorded by the electronic probe. The column heading O₂W is the dissolved oxygen as determined by water samples by means of the modified Winkler method, Strickland and Parsons (1968). Dissolved ammonia values below the detection limit of 0.2 µg-at N/l are reported as zero. Profiles were produced from the processed 1-m interval data. The symbols, explained to the left of each horizontal axis and located on the curves at 5-m intervals, identify the parameters.

The distributions of temperature, salinity, and sigma-t are presented in Section 5: 1) Horizontally at the 1-m depth (Figures 2-4), and 2) vertically along the axis of the Hudson Shelf Valley (Figures 5-7). Information describing the methods used for the computer drawn figures can be found in Herman and Niedrauer (1978) and Niedrauer and Herman (1978).

The detection limits and accuracies of analysis for the five nutrients are listed in Table 4.

Table 4. Operational Characteristics of the Nutrient-Analysis System

Parameter	Detection Limit $\mu\text{g-at} / \ell$	Coefficient of Variation (95% confidence level) % at $\mu\text{g-at} / \ell$
Nitrate	0.4	0.17 at 15.0
Nitrite	0.1	1.2 at 3.2
Phosphate	0.05	1.6 at 0.64
Silicate	0.5	2.3 at 33.0
Ammonia	0.2	0.31 at 8.0

4. ACKNOWLEDGMENTS

The authors express their thanks to the officers and crew of the NOAA Ship George B. Kelez, under the command of Lcdr. C. Berman, for the long and diligent hours they devoted to collecting these data. The effort was sponsored by NOAA and funded jointly by the NOAA Environmental Research Laboratories and the MESA Program's New York Bight Office.

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6. AREAL AND CROSS-SECTION DISTRIBUTIONS OF TEMPERATURE, SALINITY, AND SIGMA-T

0533M

XWCC20

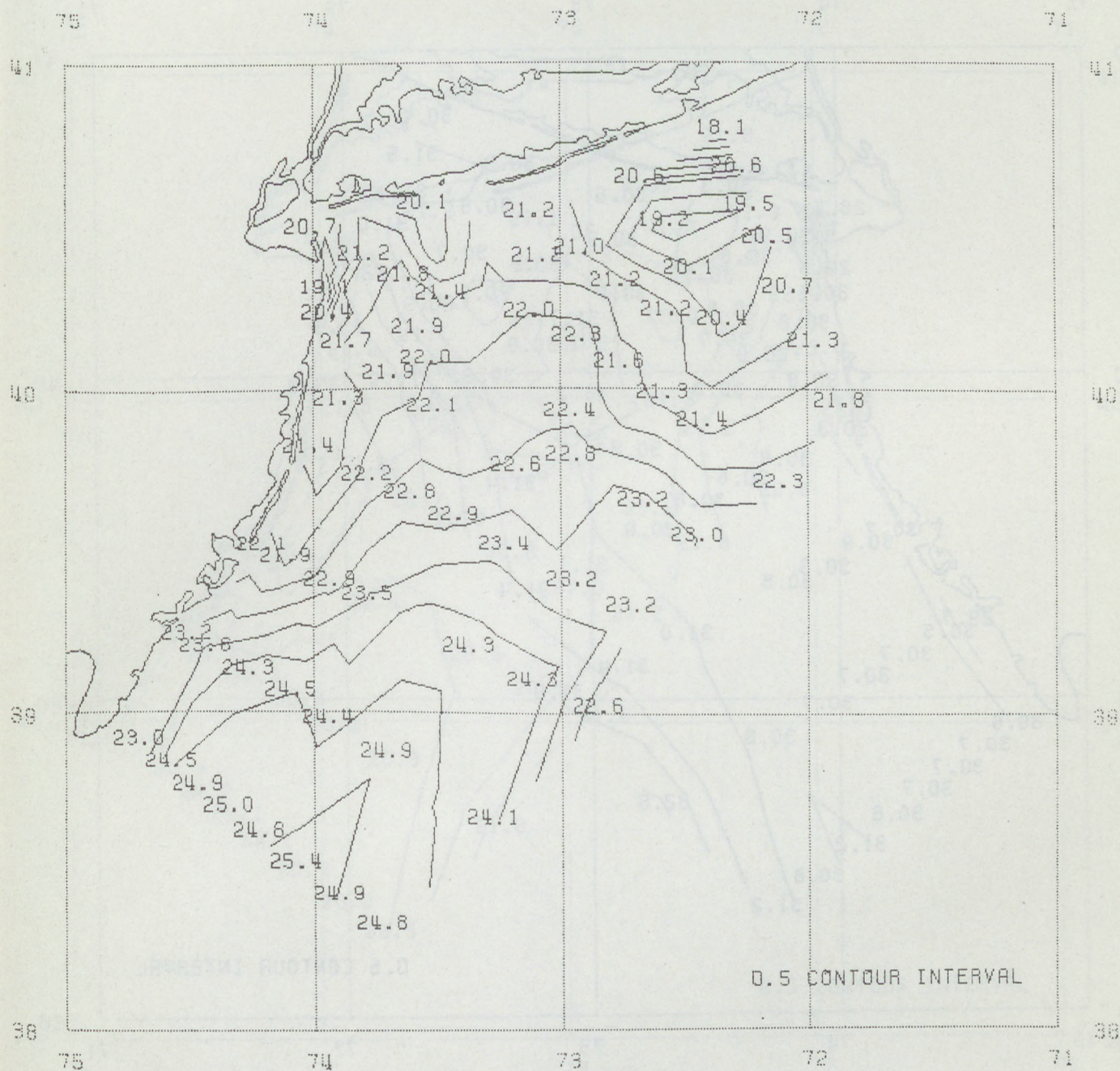


FIGURE 2. SURFACE WATER TEMPERATURES (C) 7/31/78-8/09/78

XWCC20

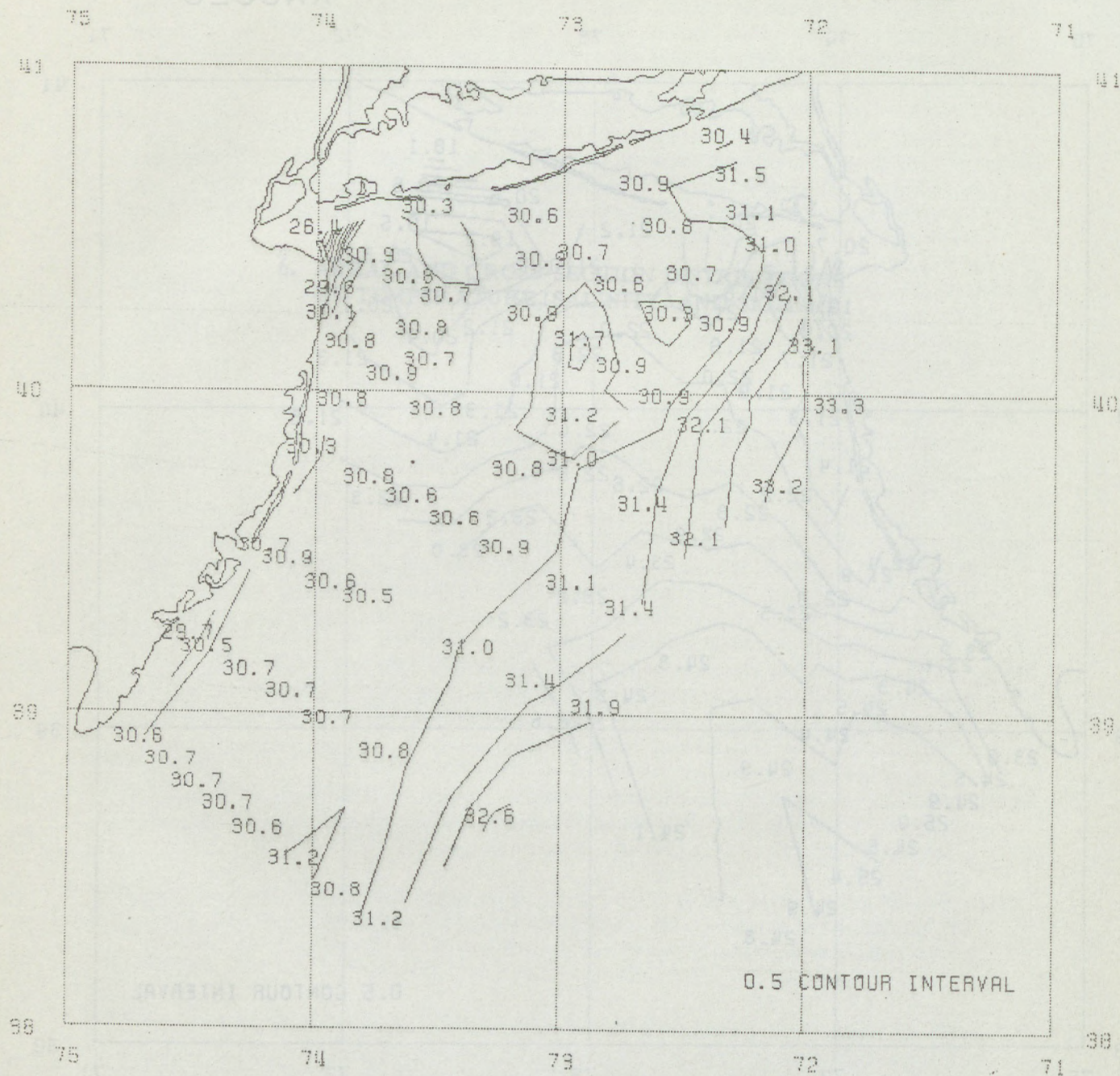


FIGURE 3. SURFACE SALINITIES (0/00) 7/31/78-8/09/78

XWCCC20

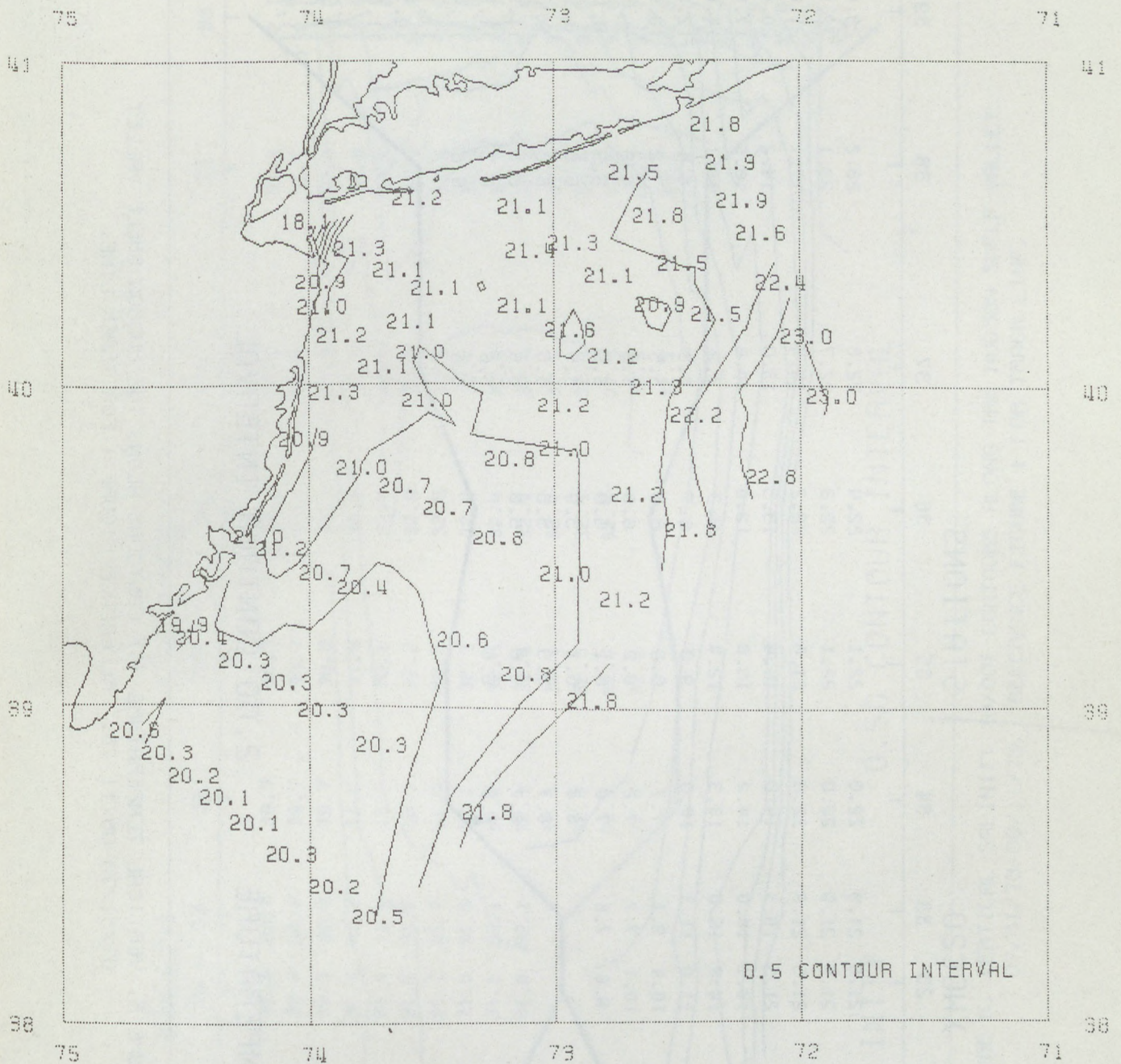


FIGURE 4. SURFACE SIGMA-T 7/31/78-8/09/78

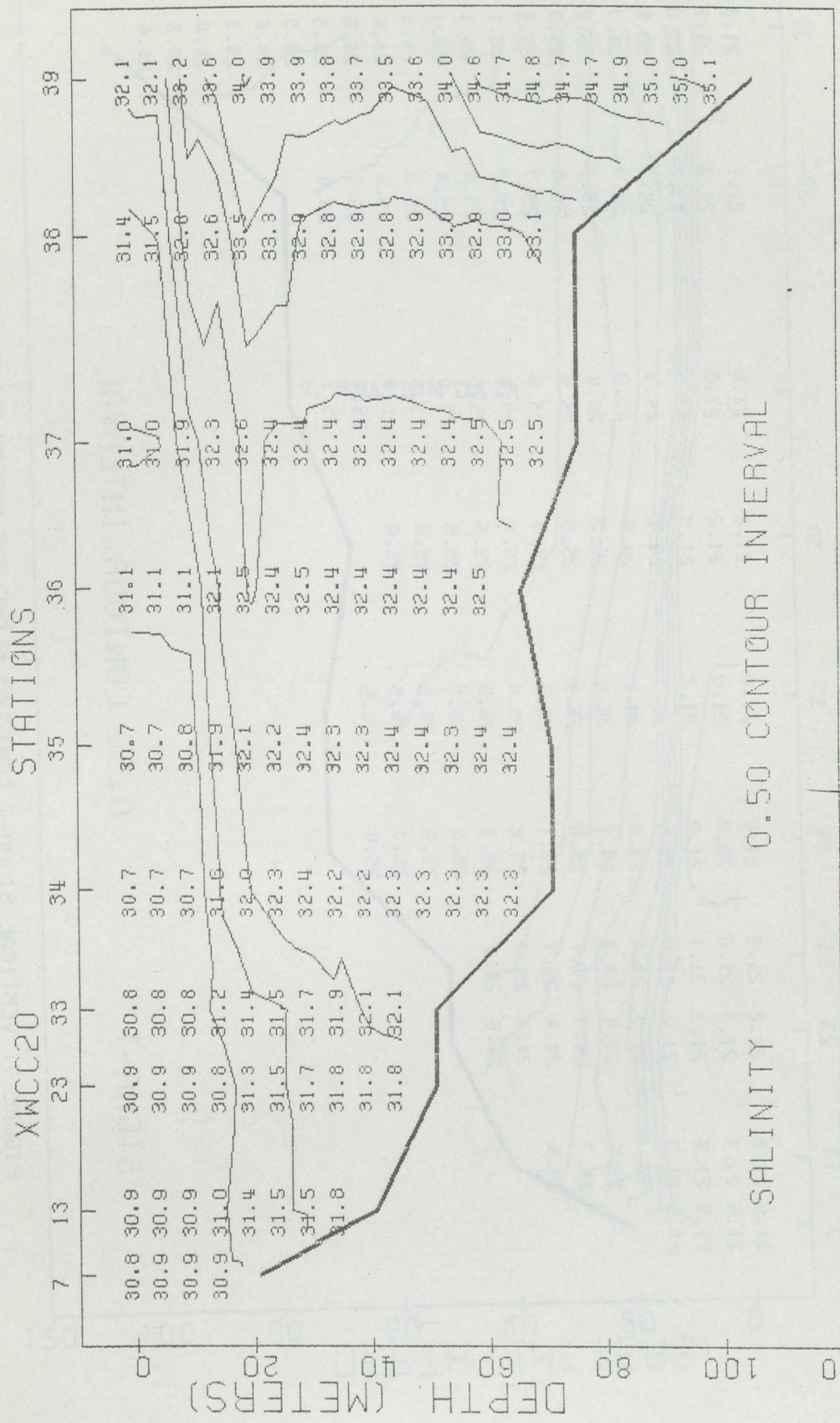


FIGURE 6. VERTICAL SALINITY (0/00) CONTOURS ALONG THE HUDSON SHELF VALLEY
07/31/78-08/11/78. REFERENCE FIGURE 1 FOR TRACK LINE.

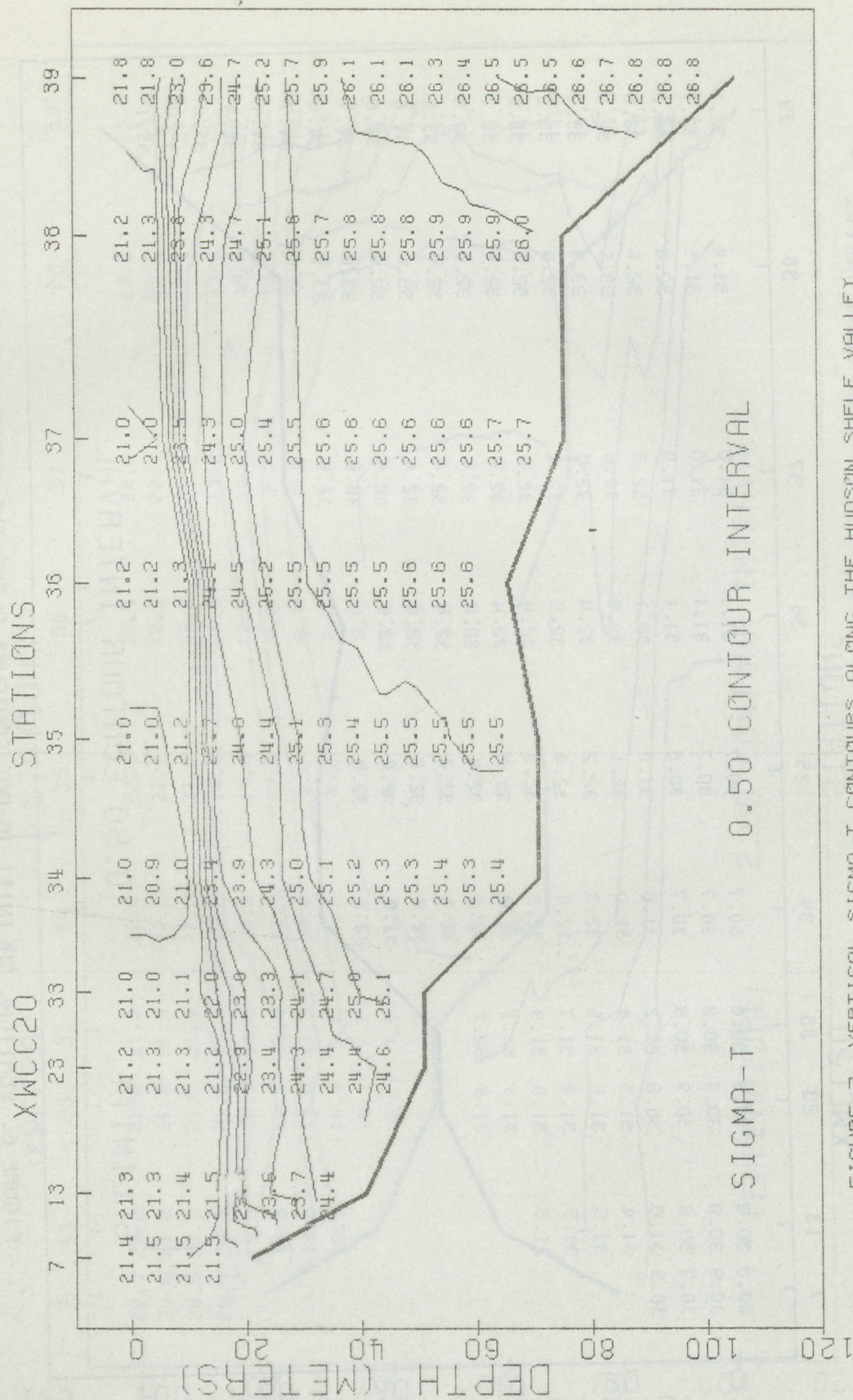


FIGURE 7. VERTICAL SIGMA-T CONTOURS ALONG THE HUDSON SHELF VALLEY
07/31/78-08/11/78, REFERENCE FIGURE 1 FOR TRACK LINE.

X:CC-20 STA.001 LAT 40 29.71; LONG 73 57.0W GMT 18.1 08/01/78
 DEPTH 009 AIR D/W 19.4/18.3 BARO 20.0 VTS 6 CLD TIP/CVR 7/8
 WTHR 4 WIND DIR/SPD 04/08 SEA DIR/HT 00/0 SWELL DIR/HT 06/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	20.06	27.22	18.86	81.9	3.89	3.93	18.7	1.69	5.40	0.08	1.70
2	20.08	27.22	18.86	81.9	3.89						
3	19.91	27.66	19.23	82.2	3.90						
4	19.86	27.62	19.22	82.6	3.92						
5	19.69	28.04	19.58	83.5	3.93						
6	19.59	28.24	19.75	83.9	3.97						
7	19.47	28.45	19.94	84.2	3.99	4.11	14.2	1.24	3.29	4.25	1.35

KELEZ CRUISE XWCC-20 STATION 1

08/01/78

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

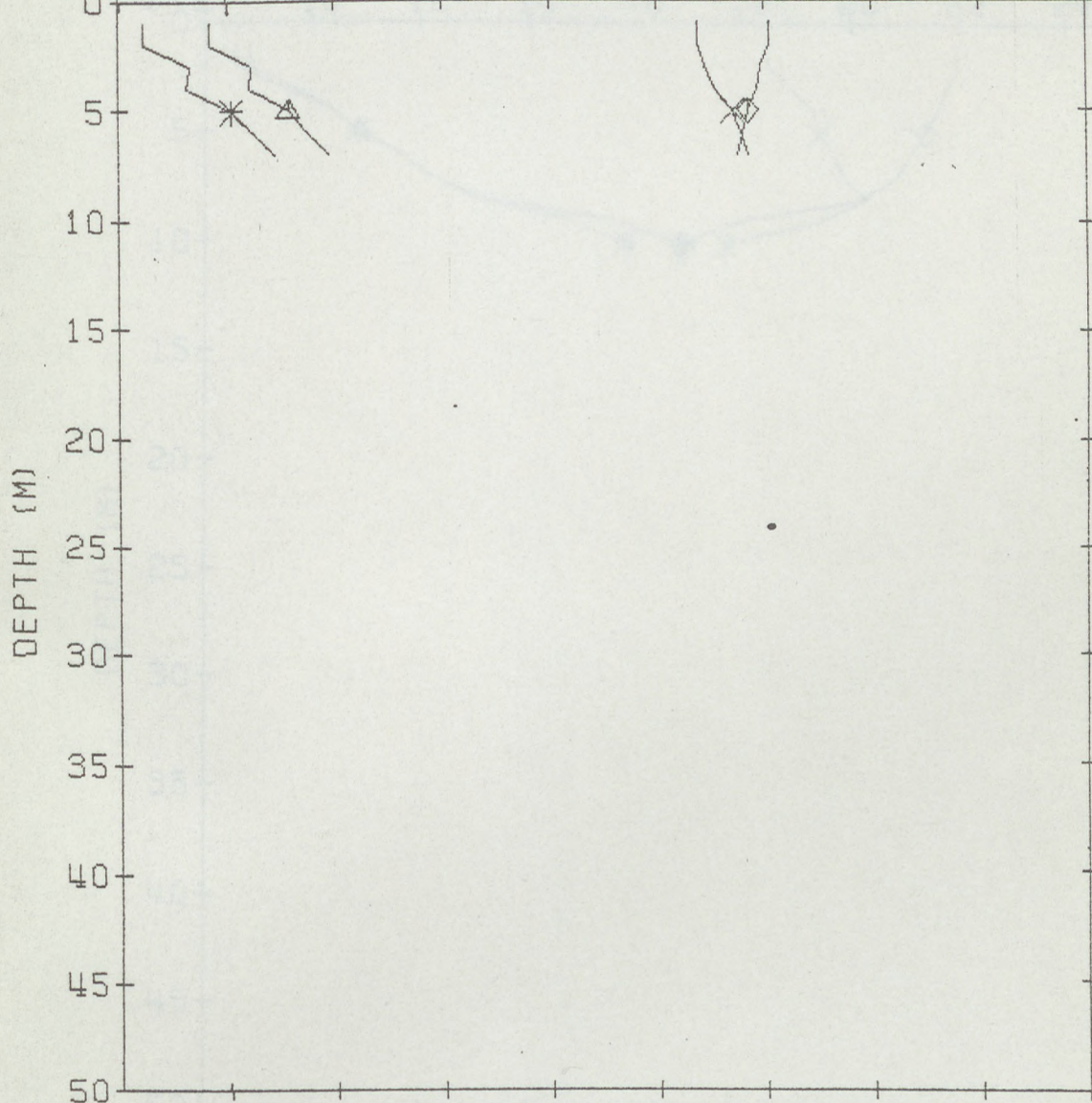
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-20 SIA.001 LAT 40 29.9N; LONG 73 57.3W GMT 12.1 08/09/78
 DEPTH U14 AIR D/W 24.7/22.2 SARG 21.0 VIS 6 CLU TYP/CVR 6/8
 WCTHR 2 WIND DIR/SPD 26/10 SEA DIR/HT 00/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	P04
1	21.09	27.28	18.40	81.1	3.78	3.83	20.0	2.04	6.13	7.70	1.69
2	21.09	27.28	18.40	81.1	3.78						
3	21.77	27.70	18.78	82.2	3.87						
4	21.59	28.17	19.18	83.2	3.93						
5	21.40	28.41	19.42	83.5	3.98						
6	21.29	28.80	19.79	84.2	4.04						
7	20.83	29.07	20.06	84.6	4.10						
8	20.14	29.49	20.56	85.7	4.18						
9	17.04	30.40	21.79	83.4	4.27						
10	16.78	30.89	22.44	79.1	4.36						
11	16.78	30.89	22.44	79.1	3.82	3.69	8.9	.31	.00	4.85	.69

KELEZ CRUISE XWCC-20 STATION 1 08/09/78

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

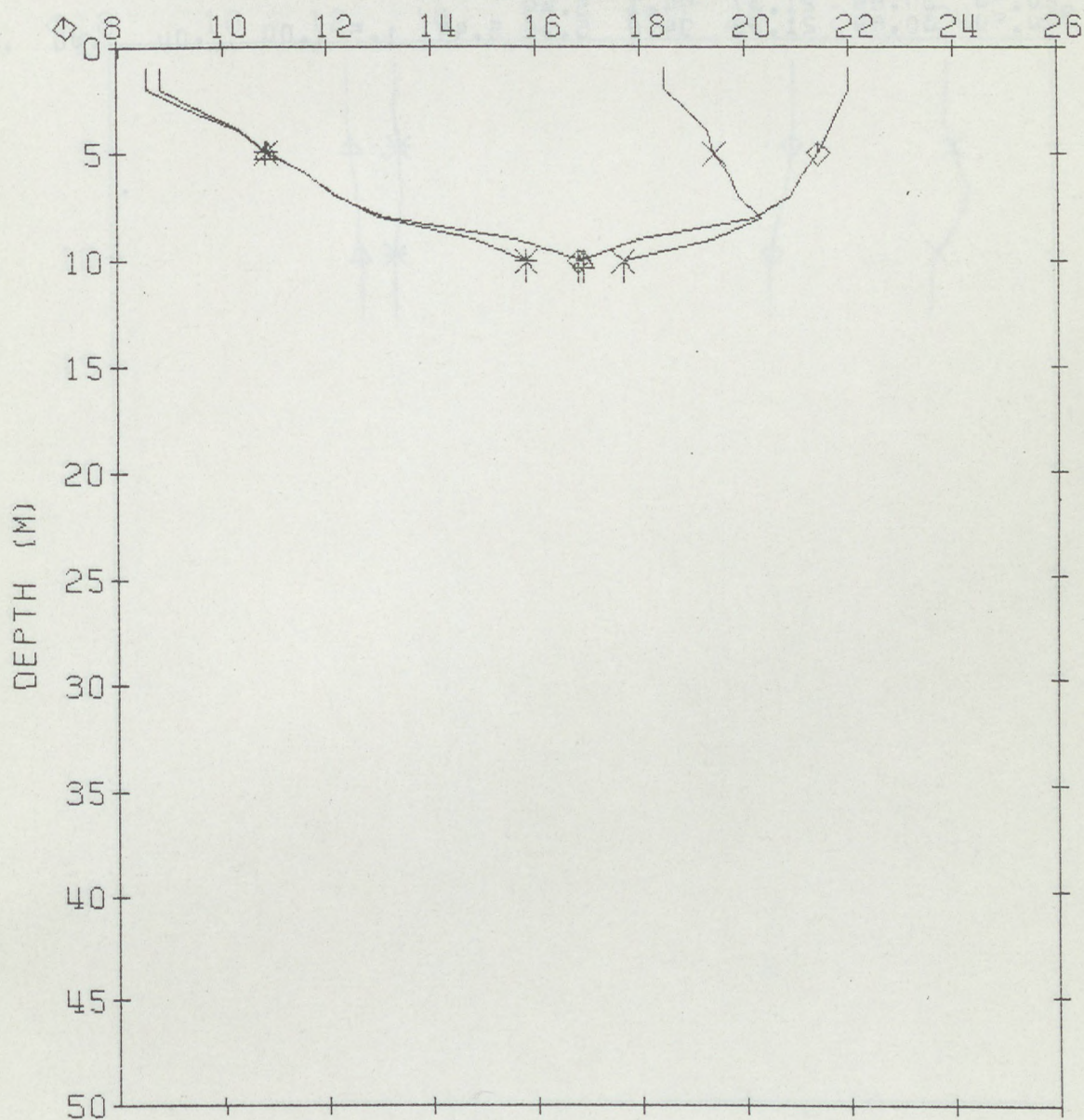
SIGMA-T

Δ 18 19 20 21 22 23 24 25 26 27

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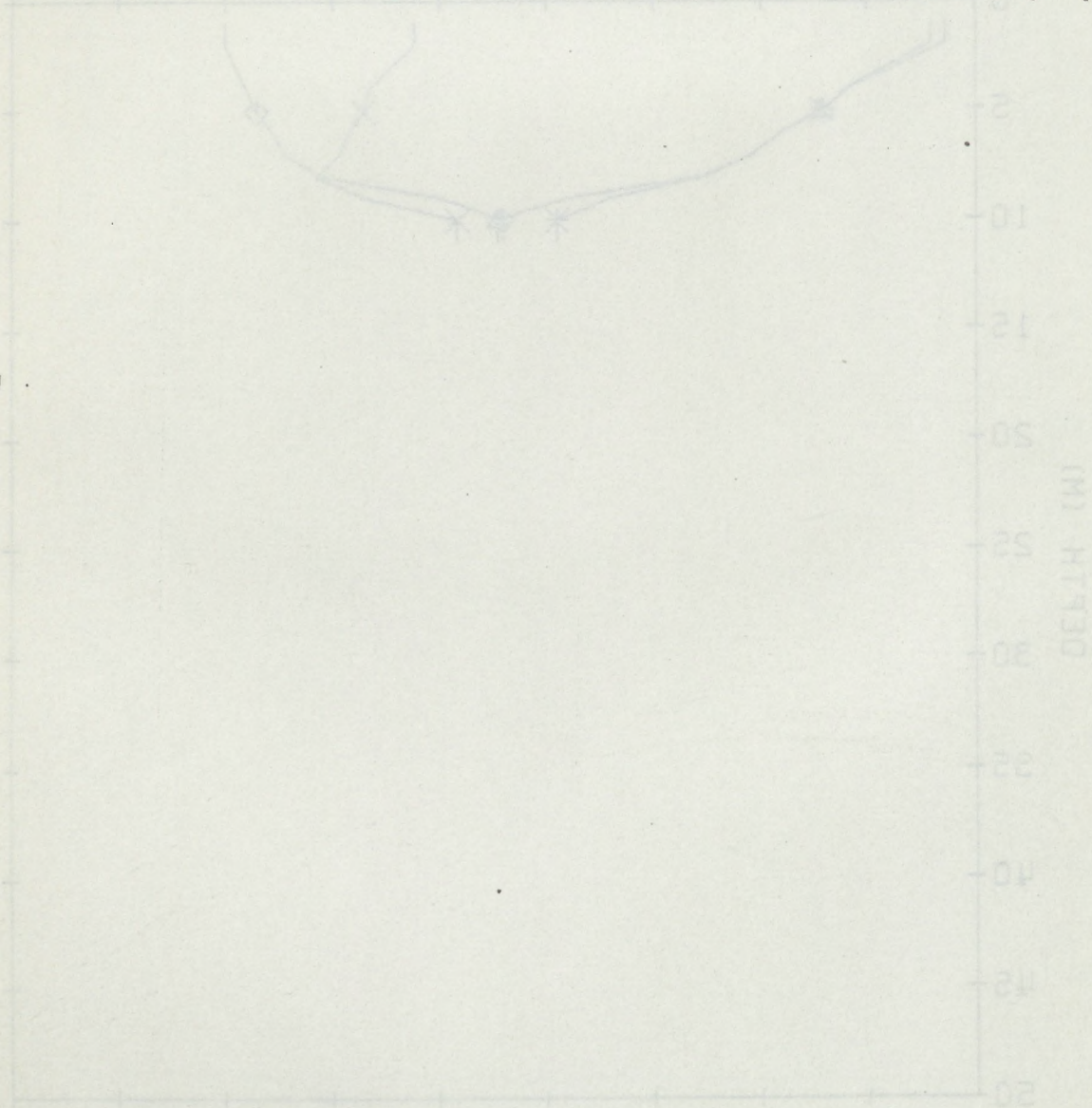
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TEMPERATURE (C)

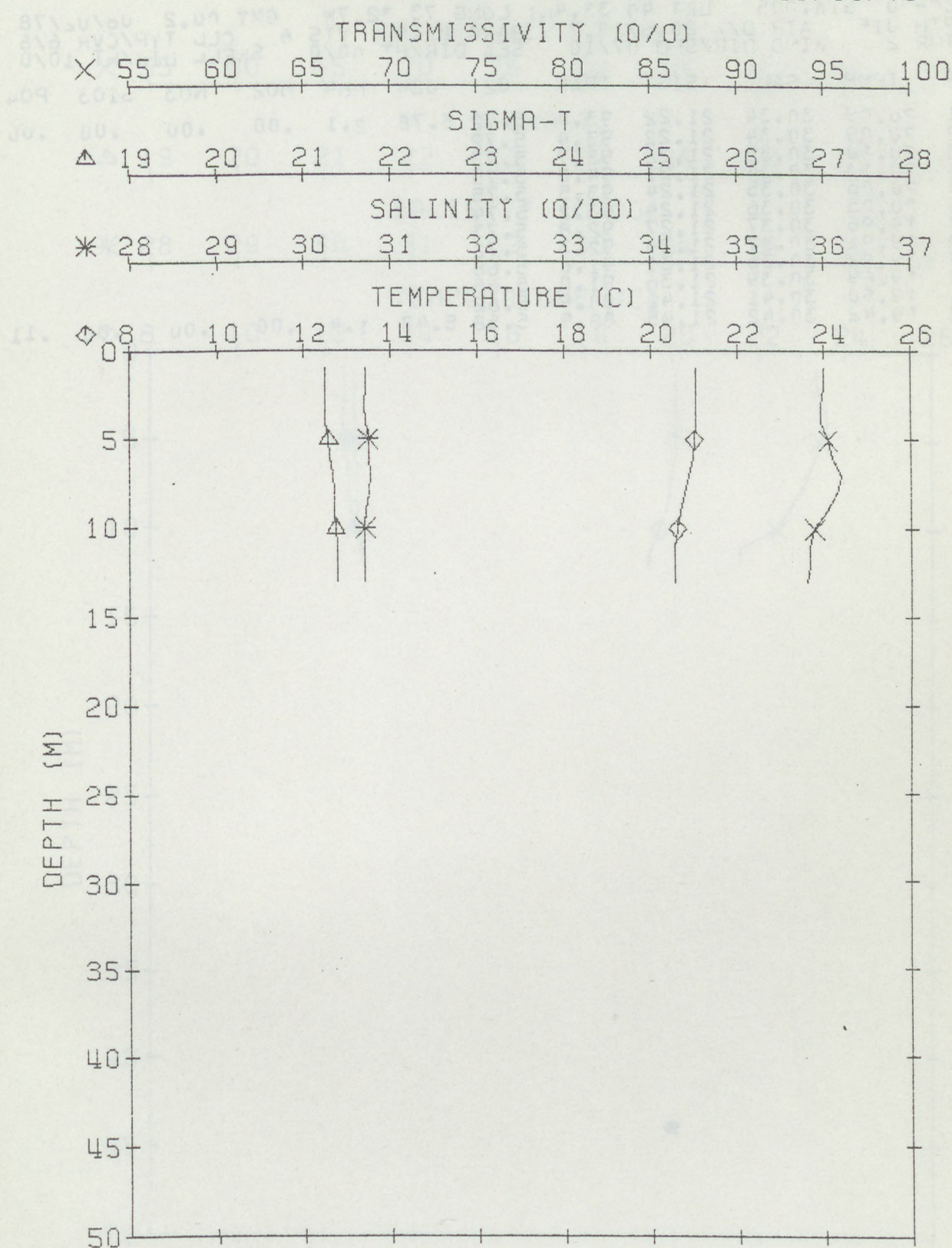


XWCC-20 SIA.003 LAT 40 31.8N; LONG 73 48.4W GMT 20.5 08/01/78
 DEPTH 016 AIR D/W 21.7/20.0 BARO 20.3 VIS 7 CLD TYP/CVR 6/8
 WTHR 2 WIND DIR/SPD 04/06 SEA DIR/HT 00/0 SWELL DIR/HT 09/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	P04
1	21.03	30.71	21.25	95.0	5.83	5.92	1.0	.00	.00	.00	.13
2	21.03	30.71	21.25	95.0	5.83						
3	21.03	30.70	21.24	94.8	5.83						
4	21.02	30.71	21.25	94.8	5.81						
5	20.99	30.73	21.28	95.2	5.80						
6	20.95	30.75	21.30	95.5	5.79						
7	20.86	30.76	21.34	96.0	5.77						
8	20.76	30.74	21.34	95.7	5.73						
9	20.55	30.71	21.36	95.1	5.65						
10	20.39	30.70	21.36	94.4	5.60						
11	20.36	30.70	21.38	94.1	5.54						
12	20.36	30.69	21.37	94.1	5.49						
13	20.30	30.69	21.38	94.0	5.46	5.44	1.5	.00	.00	.00	.26



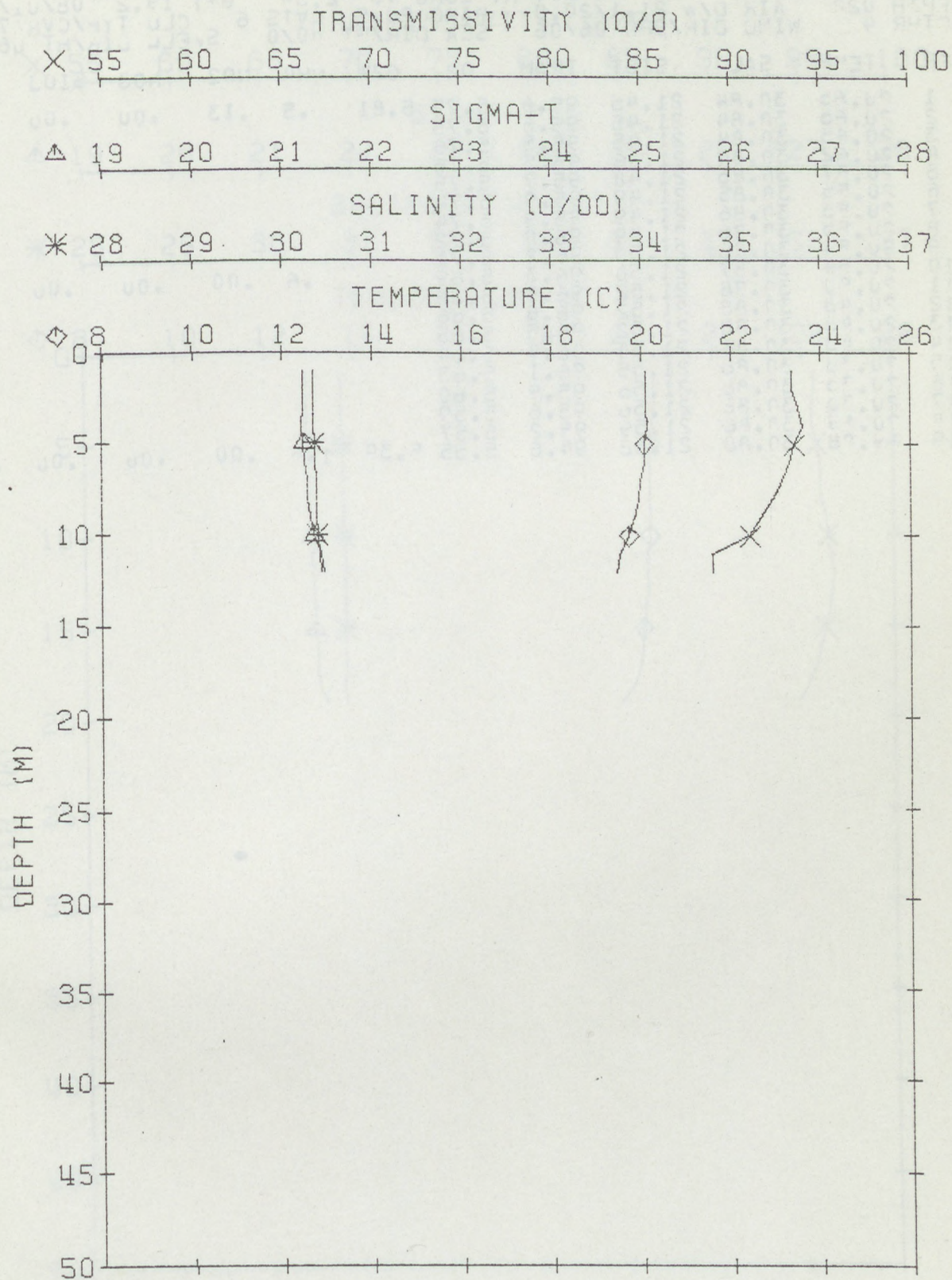
KELEZ CRUISE XWCC-20 STATION 3 08/01/78



XWCC-20 SIA.005 LAT 40 33.4N; LONG 73 32.7W GMT 00.2 08/02/78
 DEPTH 01' AIR D/W 20.6/19.7 BARO 21.0 VIS 6 CLD TYP/CVR 6/8
 WFTHR 2 WIND DIR/SPD 07/10 SEA DIR/HT 00/0 SWELL DIR/HT 10/0

DFP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	20.09	30.34	21.22	93.4	5.72	5.78	2.1	.00	.00	.00	.00
2	20.09	30.34	21.22	93.4	5.72						
3	20.10	30.35	21.22	93.7	5.73						
4	20.13	30.34	21.21	94.0	5.75						
5	20.05	30.35	21.24	93.5	5.75						
6	20.05	30.36	21.24	93.2	5.74						
7	19.06	30.37	21.27	92.8	5.73						
8	19.01	30.37	21.29	92.3	5.72						
9	19.02	30.38	21.31	91.6	5.68						
10	19.00	30.39	21.36	91.0	5.66						
11	19.50	30.41	21.40	88.9	5.62						
12	19.52	30.42	21.45	88.9	5.58	5.48	1.4	.00	.00	.00	.11

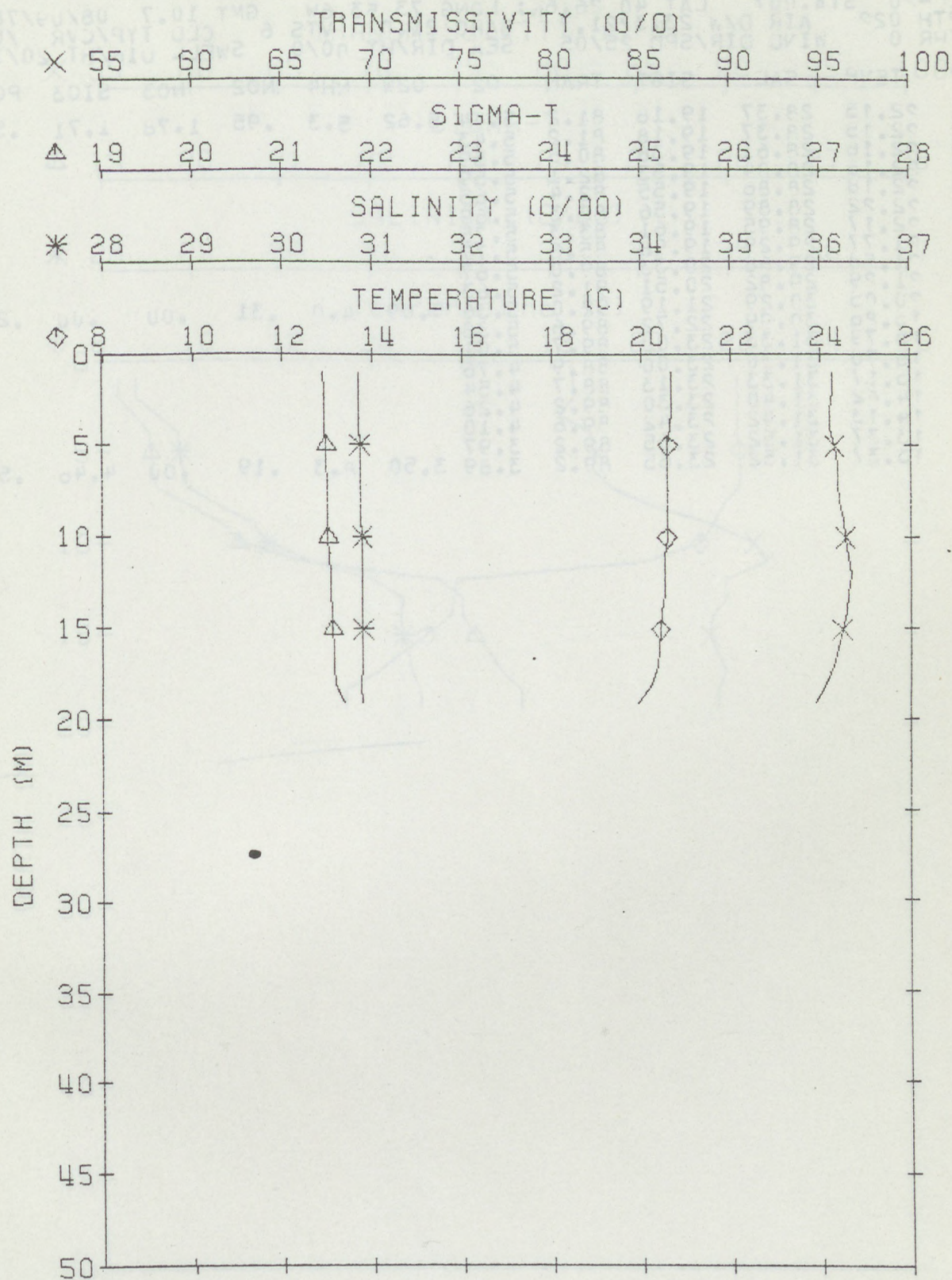
KELEZ CRUISE XWCC-20 STATION 5 08/02/78



X-CC-20 SIA.007 LAT 40 26.7N; LONG 73 52.5W GMT 19.2 08/01/78
 DEPTH 020 AIR D/W 21.1/20.0 BARO 20.5 VTS 6 CLU TIP/CVR 7/8
 WTHR 4 WIND DIR/SPD 06/06 SEA DIR/HT 00/0 SWELL DIR/HT 06/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SIO3	P04
1	20.65	30.84	21.45	95.6	5.75	5.81	.5	.13	.00	.00	.00
2	20.65	30.84	21.45	95.6	5.75						
3	20.65	30.84	21.45	95.6	5.75						
4	20.65	30.84	21.45	95.6	5.76						
5	20.67	30.85	21.46	95.7	5.76						
6	20.75	30.85	21.48	95.7	5.75						
7	20.75	30.85	21.49	95.9	5.74						
8	20.75	30.86	21.49	95.9	5.74						
9	20.75	30.86	21.49	96.0	5.72						
10	20.75	30.86	21.50	96.0	5.71						
11	20.75	30.87	21.50	96.0	5.69		.6	.00	.00	.00	.13
12	20.75	30.88	21.52	96.0	5.68						
13	20.75	30.88	21.52	96.0	5.66						
14	20.75	30.88	21.54	96.0	5.65						
15	20.75	30.88	21.54	96.0	5.64						
16	20.75	30.88	21.55	96.1	5.63						
17	20.75	30.88	21.55	96.0	5.60						
18	20.75	30.88	21.55	96.0	5.59						
19	20.75	30.88	21.55	96.0	5.57						
20	20.75	30.88	21.56	94.6	5.55	5.39	1.6	.00	.00	.00	.21

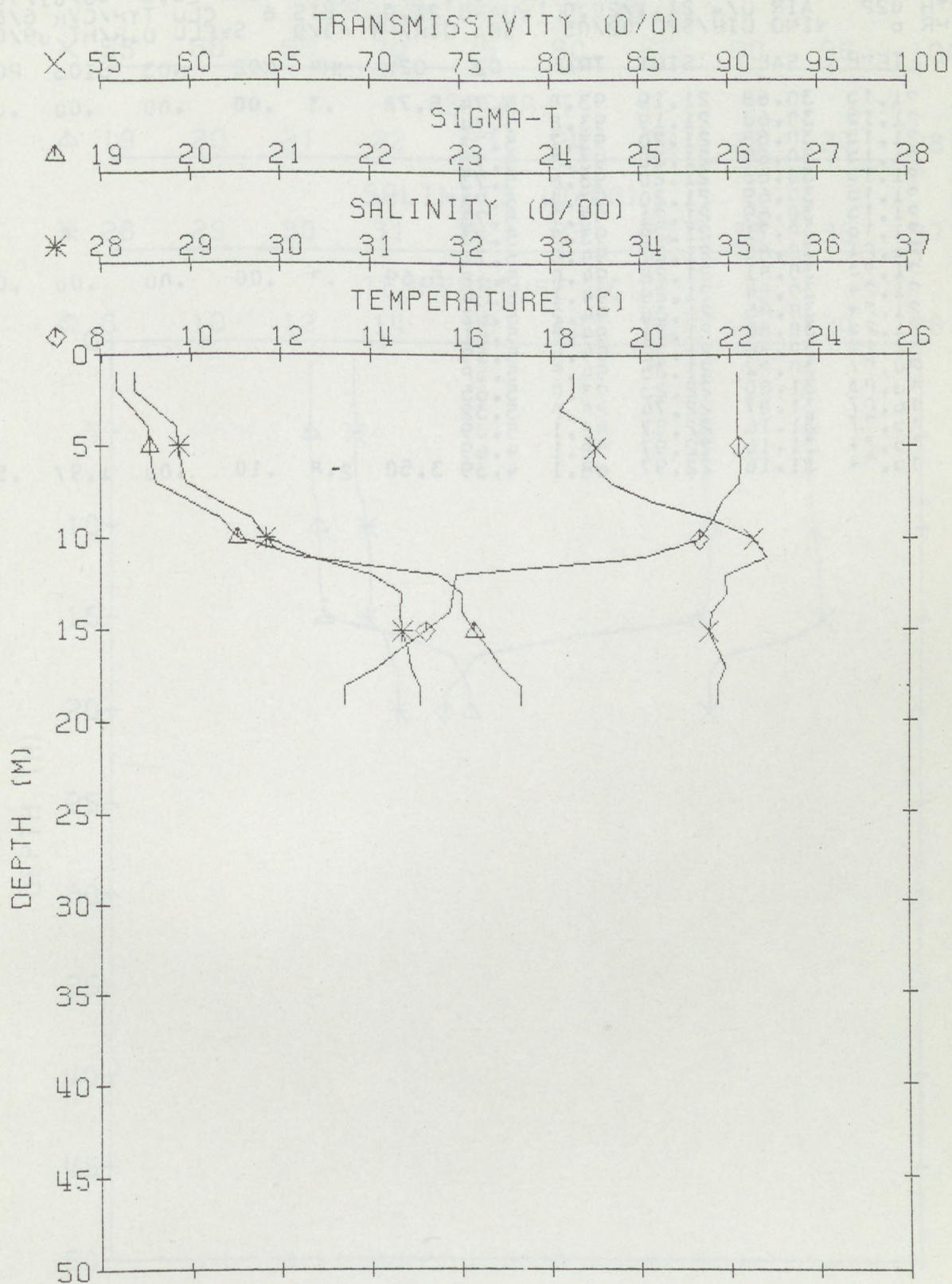
KELEZ CRUISE XWCC-20 STATION 7 08/01/78



X-CC-20 SIA.007 LAT 40 26.6N; LONG 73 53.6W GMT 10.7 08/09/78
 DEPTH 022 AIR D/W 23.3/21.7 BARO 21.0 VTS 6 CLD TYP/CVR /0
 WTHR 0 WIND DIR/SPD 25/05 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	N02	N03	SI03	P04
1	22.15	28.37	19.18	81.2	5.44	5.62	5.3	.95	1.78	1.71	.52
2	22.15	28.37	19.18	81.2	5.43						
3	22.16	28.61	19.36	80.5	5.59						
4	22.16	28.84	19.53	82.1	5.59						
5	22.18	28.86	19.55	82.4	5.65						
6	22.22	28.89	19.56	82.3	5.69						
7	22.17	28.95	19.61	83.3	5.75						
8	21.77	29.29	19.98	85.6	5.77						
9	21.53	29.36	20.33	89.0	5.67						
10	21.29	29.82	20.51	91.2	5.63						
11	20.05	30.29	21.19	92.0	5.36	5.09	4.0	.31	.00	.00	.23
12	15.88	30.29	22.72	89.6	5.38						
13	15.79	31.33	23.00	89.7	5.01						
14	15.70	31.30	23.00	88.9	4.76						
15	15.17	31.33	23.13	88.7	4.54						
16	14.62	31.40	23.30	89.2	4.26						
17	14.13	31.42	23.42	89.6	4.10						
18	13.37	31.52	23.65	89.2	3.97						
19	13.37	31.52	23.65	89.2	3.89	3.50	8.3	.19	.00	4.46	.58

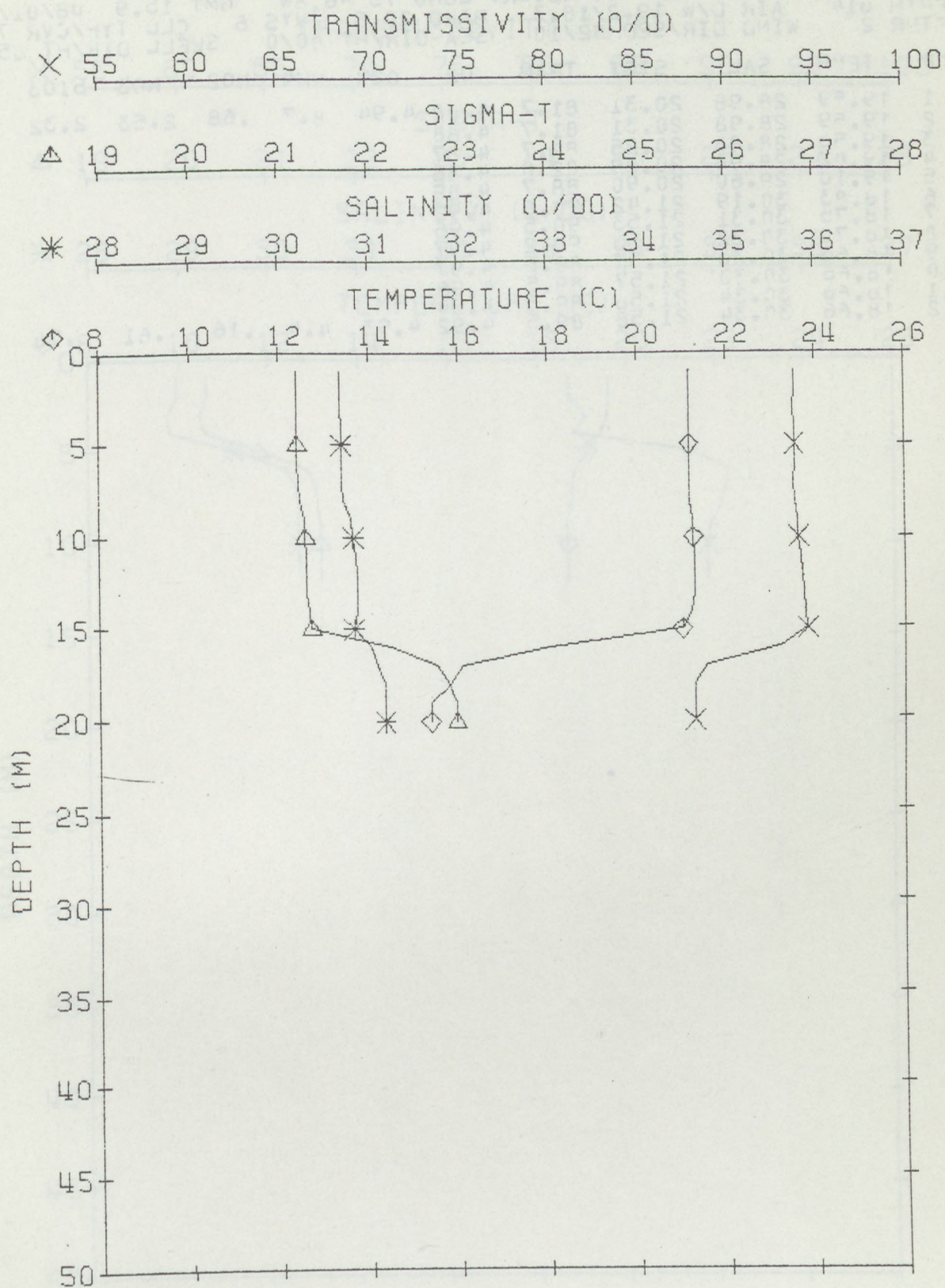
KELEZ CRUISE XWCC-20 STATION 7 08/09/78



X-CC-20 SIA.009 LAT 40 28.3N; LONG 73 39.5W GMT 23.0 08/01/78
 DEPTH 022 AIR D/W 21.1/20.0 BARO 21.0 VTS 6 CLD TYP/CVR 6/8
 WETR 0 WIND DIR/SPD 02/05 SEA DIR/HT 00/0 SWELL DIR/HT 09/0

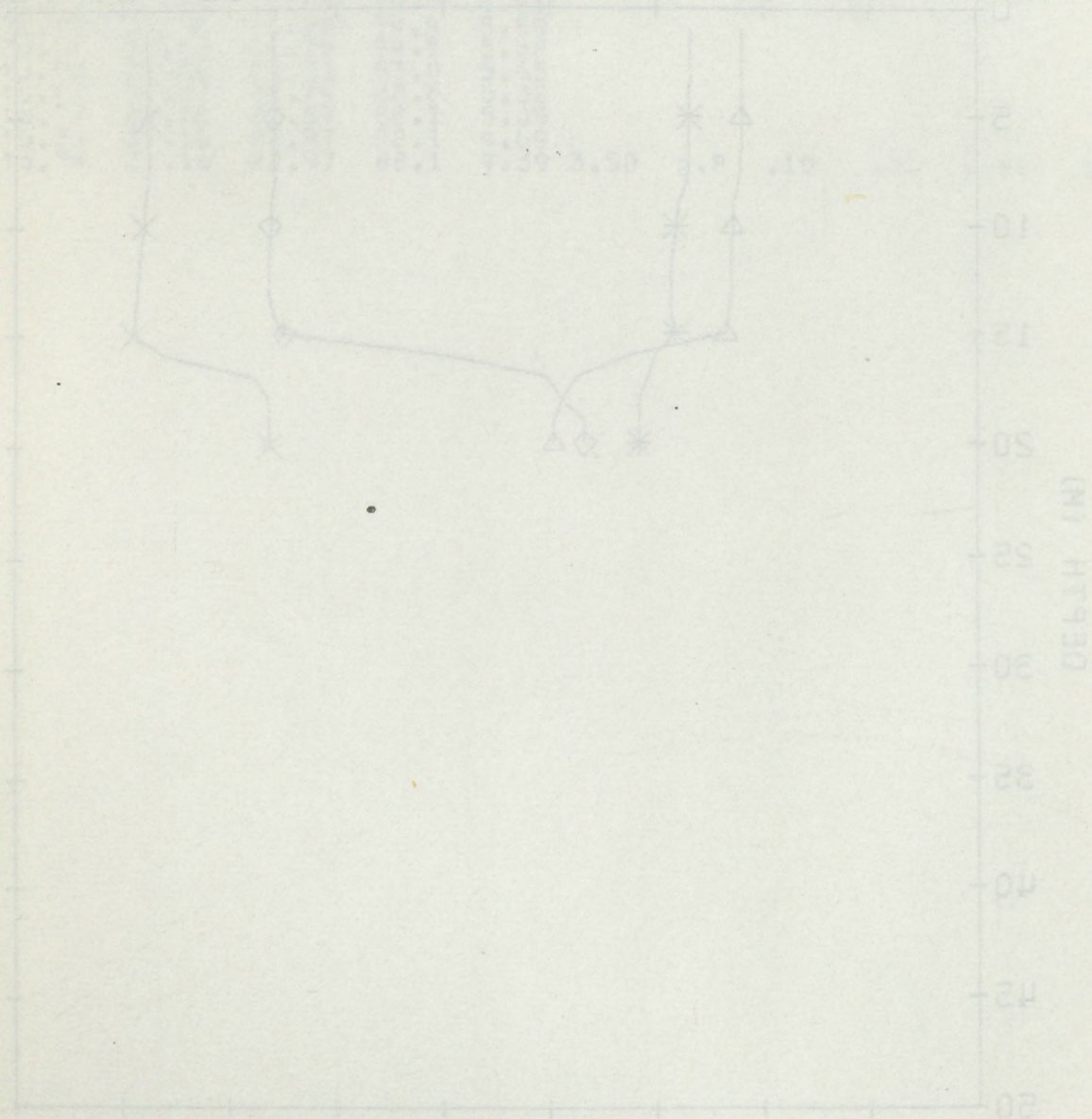
DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	21.15	30.68	21.19	93.8	5.74	5.78	.3	.00	.00	.00	.00
2	21.15	30.68	21.19	93.8	5.74						
3	21.15	30.68	21.20	93.7	5.73						
4	21.15	30.69	21.20	93.8	5.73						
5	21.15	30.68	21.20	93.8	5.73						
6	21.15	30.69	21.20	93.8	5.73						
7	21.15	30.69	21.21	93.7	5.73						
8	21.16	30.71	21.22	93.8	5.73						
9	21.21	30.80	21.27	94.0	5.71						
10	21.23	30.81	21.28	94.0	5.68	5.69	.3	.00	.00	.00	.00
11	21.24	30.84	21.29	94.1	5.64						
12	21.24	30.85	21.30	94.2	5.63						
13	21.23	30.86	21.31	94.3	5.61						
14	21.19	30.96	21.32	94.4	5.59						
15	20.07	30.92	21.35	94.5	5.58						
16	13.03	31.00	22.23	95.0	5.65						
17	10.07	31.07	22.74	95.3	5.32						
18	15.77	31.16	22.87	96.1	5.09						
19	15.34	31.16	22.97	96.1	4.69						
20	15.74	31.16	22.97	98.1	4.39	3.50	2.8	.10	.00	1.97	.57

KELEZ CRUISE XWCC-20 STATION 9 08/01/78

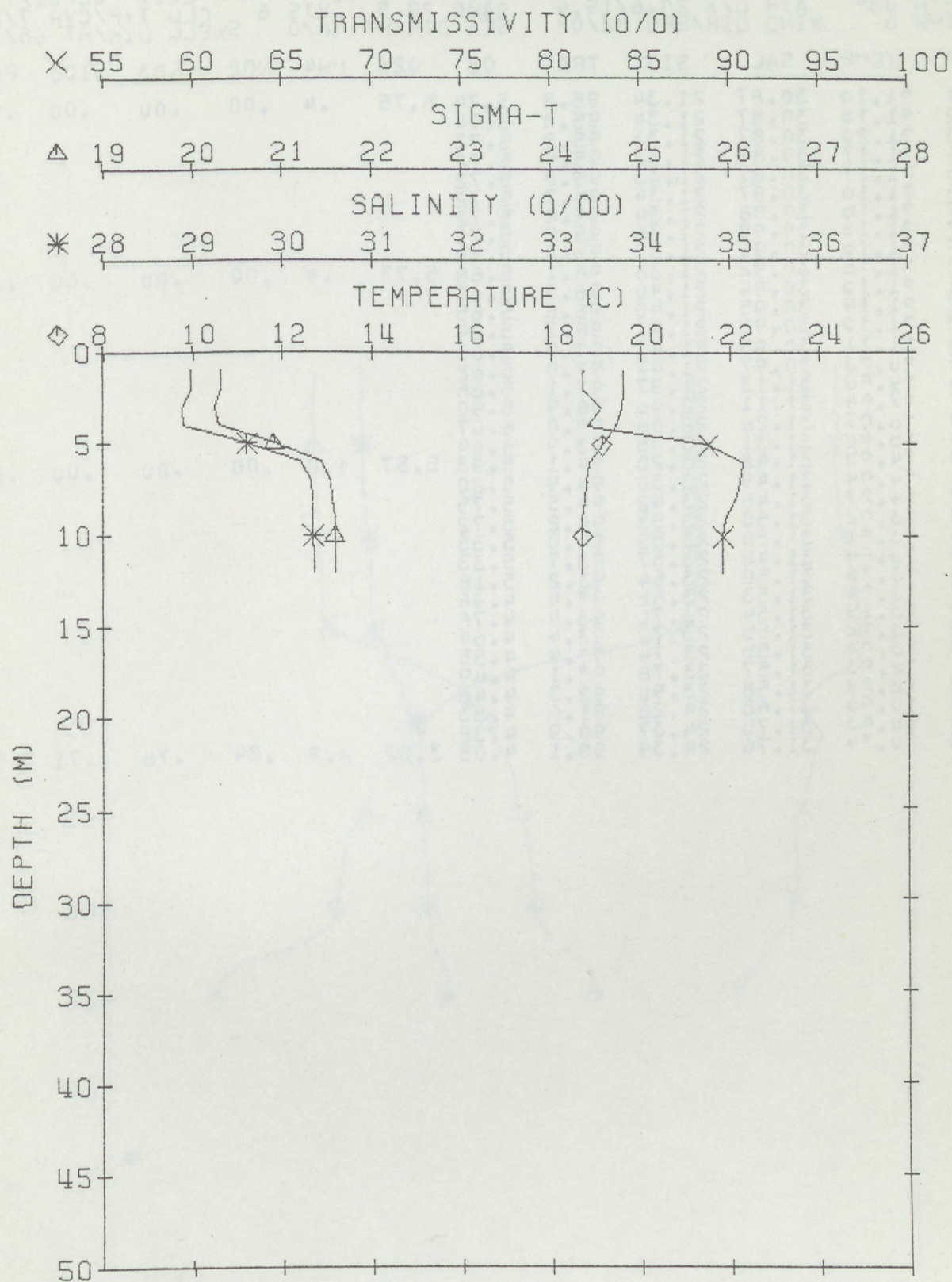


XMCC-20 SIA.011 LAT 40 22.3N; LONG 73 56.8W GMT 15.9 08/01/78
 DEPTH 014 AIR D/W 19.2/18.3 BARO 20.5 VTS 6 CLD TYP/CVR 7/8
 WETR 2 WIND DIR/SPD 02/10 SEA DIR/HT 00/0 SWELL DIR/HT 05/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	19.59	28.98	20.31	81.7	4.88	4.94	8.7	.68	2.53	2.32	.88
2	19.59	28.98	20.31	81.7	4.88						
3	19.55	28.88	20.25	82.7	4.87						
4	19.52	28.90	20.29	82.0	4.86						
5	19.10	29.60	20.90	88.7	4.89						
6	18.75	30.19	21.42	90.6	4.92						
7	18.75	30.31	21.53	90.5	4.96						
8	18.70	30.32	21.55	90.2	4.97						
9	18.70	30.33	21.57	89.8	4.97						
10	18.70	30.33	21.57	89.5	4.96						
11	18.70	30.34	21.56	89.5	4.94						
12	18.70	30.34	21.58	89.5	4.92	4.93	4.4	.16	.61	.70	.51



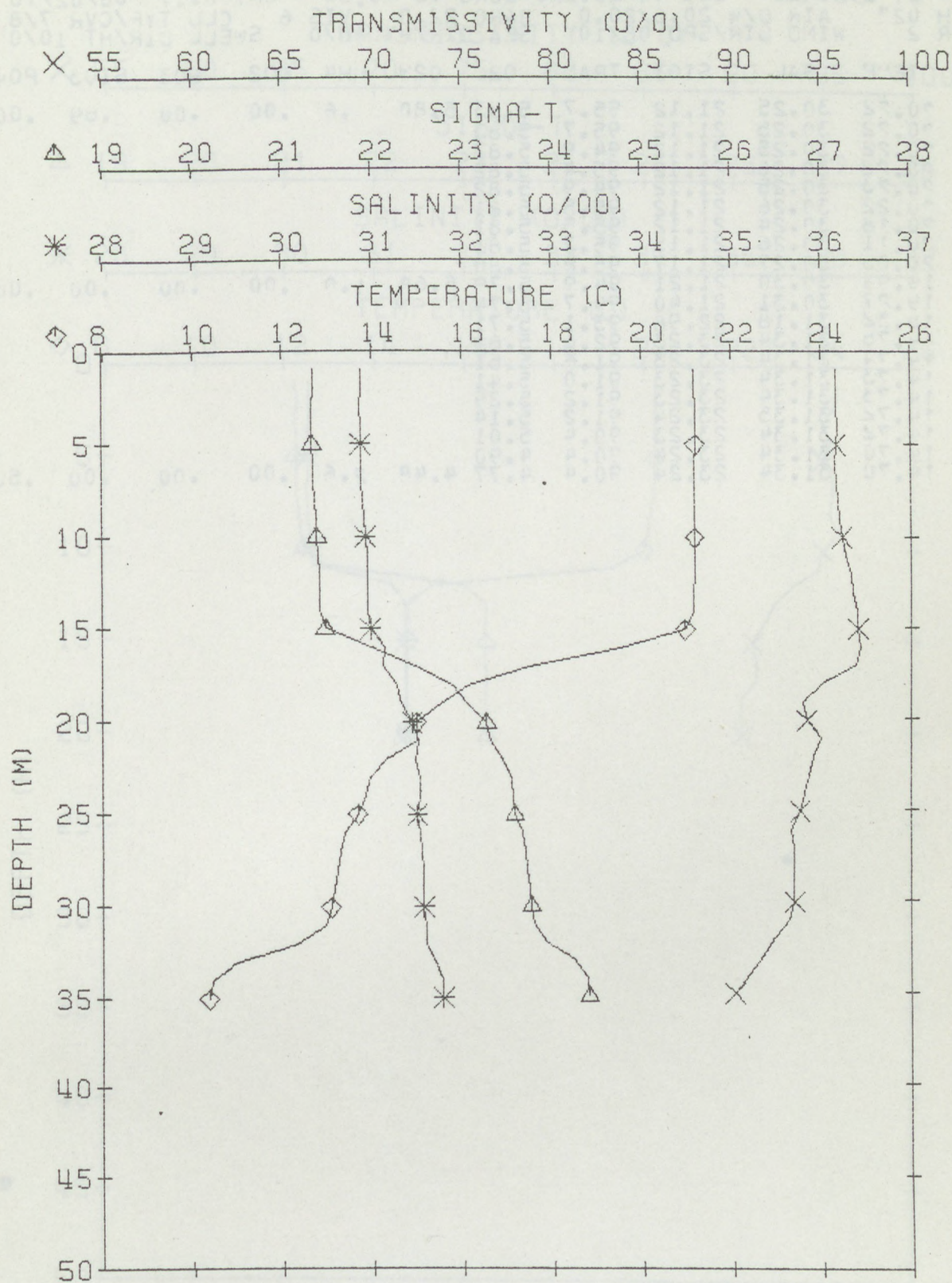
KELEZ CRUISE XWCC-20 STATION 11 08/01/78



XCC-20 SIA.013 LAT 40 24.2N LONG 73 47.0W GMT 21.7 06/01/78
 DEPTH 030 AIR D/W 20.6/19.4 BARO 20.5 VTS 6 CLD TYP/CVR 7/8
 WETUR 6 WIND DIR/SPD 02/08 SEA DIR/HT 06/0 SWELL DIR/HT 06/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	S103	P04
1	21.15	30.87	21.34	95.8	5.74	5.75	.4	.00	.00	.00	.00
2	21.15	30.87	21.34	95.8	5.74						
3	21.20	30.87	21.33	95.8	5.73						
4	21.17	30.87	21.33	95.9	5.72						
5	21.17	30.87	21.33	95.8	5.72						
6	21.16	30.87	21.34	95.7	5.72						
7	21.16	30.88	21.34	95.8	5.72						
8	21.15	30.90	21.36	95.9	5.71						
9	21.16	30.91	21.37	96.0	5.70						
10	21.16	30.92	21.38	96.1	5.68	5.73	.4	.00	.00	.00	.15
11	21.15	30.94	21.40	96.3	5.67						
12	21.14	30.95	21.40	96.6	5.65						
13	21.13	30.95	21.41	96.7	5.64						
14	21.11	30.95	21.41	97.0	5.63						
15	20.93	30.97	21.47	97.0	5.62						
16	19.70	31.13	21.97	97.1	5.60						
17	17.84	31.11	22.46	96.9	5.90						
18	16.79	31.26	22.88	96.0	6.07						
19	15.86	31.31	23.05	95.9	6.04						
20	14.89	31.42	23.25	94.1	5.93	5.57	1.0	.00	.00	.00	.26
21	14.84	31.49	23.30	94.9	5.80						
22	14.77	31.46	23.42	94.5	5.75						
23	13.82	31.50	23.53	94.2	5.72						
24	13.80	31.50	23.55	94.0	5.55						
25	13.74	31.46	23.57	93.7	5.33						
26	13.70	31.50	23.64	93.2	5.16						
27	13.63	31.53	23.68	93.4	4.96						
28	13.59	31.54	23.70	93.4	4.78						
29	13.51	31.55	23.72	93.4	4.64						
30	13.44	31.55	23.74	93.4	4.55						
31	12.33	31.57	23.78	93.1	4.49						
32	12.33	31.58	23.90	92.6	4.46						
33	10.86	31.68	24.22	91.6	4.53						
34	10.46	31.75	24.37	90.9	4.38						
35	10.74	31.76	24.39	90.1	4.05	3.02	8.2	.24	.78	0.71	5.95

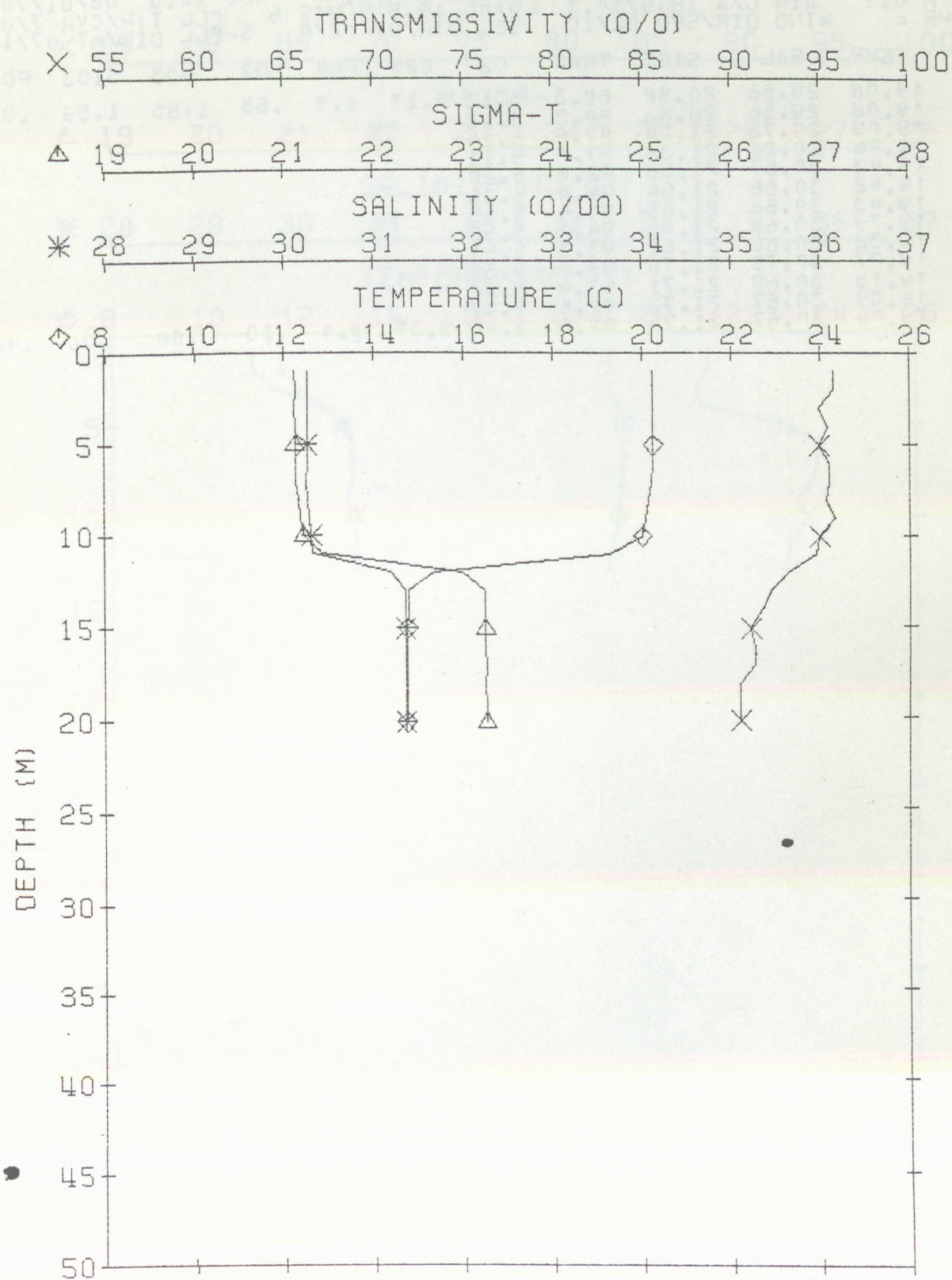
KELEZ CRUISE XWCC-20 STATION 13 08/01/78



XICC-20 STA.015 LAT 40 25.2N; LONG 73 30.5W GMT 01.7 08/02/78
 DEPTH 023 AIR D/W 20.6/20.0 BARO 22.0 VIS 6 CLD TYP/CVR 7/8
 WETHR 2 WIND DIR/SPD 06/10 SEA DIR/HT 00/0 SWELL DIR/HT 10/0

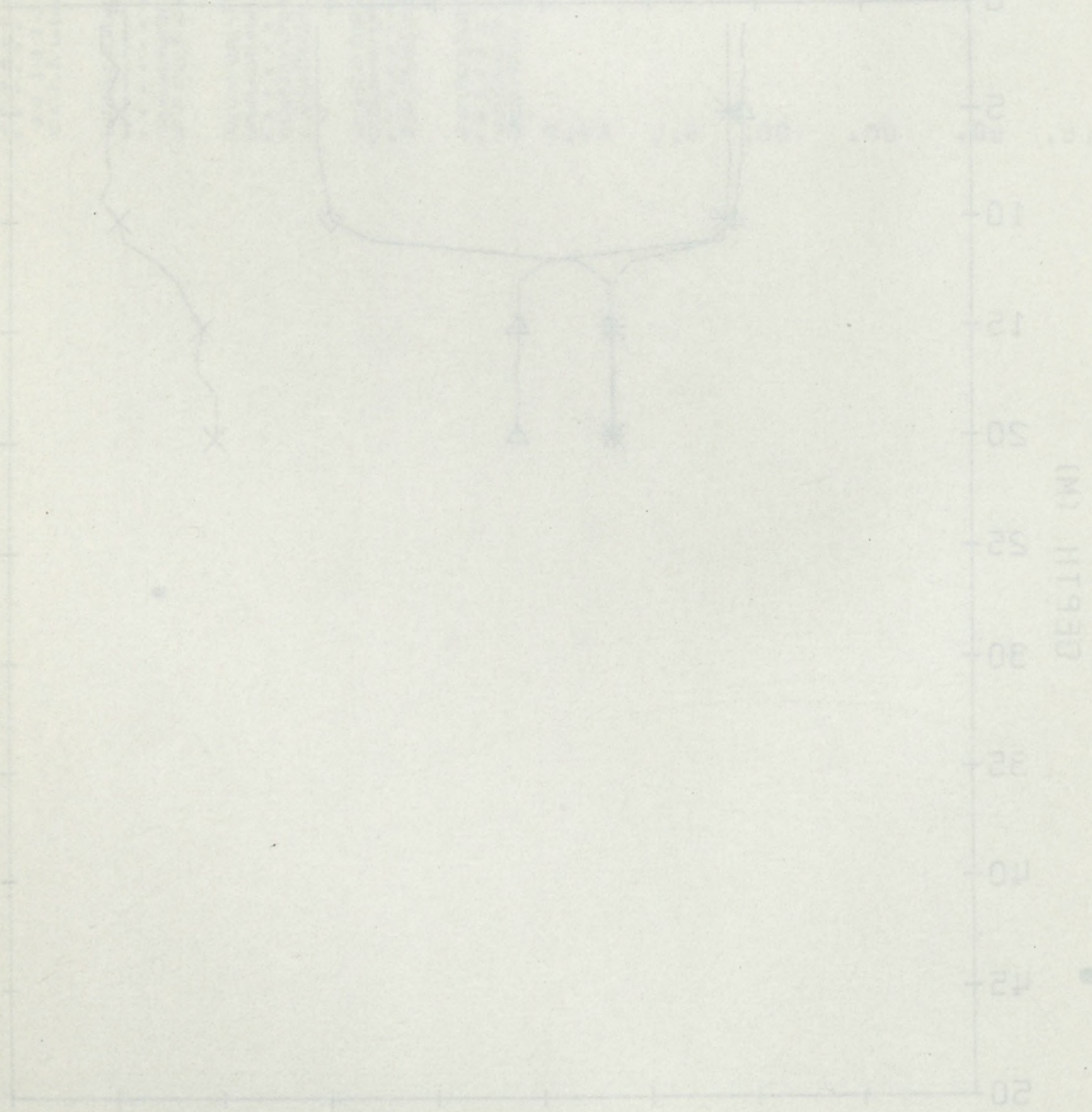
DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SIO3	P04
1	20.22	30.25	21.12	95.7	5.83	5.80	.6	.00	.00	.69	.00
2	20.22	30.25	21.12	95.7	5.83						
3	20.22	30.25	21.12	94.9	5.83						
4	20.22	30.26	21.12	95.4	5.82						
5	20.23	30.25	21.12	94.9	5.82						
6	20.22	30.26	21.12	95.5	5.81						
7	20.18	30.24	21.12	95.5	5.81						
8	20.11	30.26	21.15	95.3	5.81						
9	20.03	30.27	21.17	95.8	5.80						
10	19.93	30.30	21.21	94.9	5.79	5.68	1.0	.00	.00	.00	.00
11	19.27	30.31	21.40	94.7	5.74						
12	15.32	31.18	22.98	93.1	5.71						
13	14.75	31.34	23.23	92.1	5.61						
14	14.74	31.34	23.23	91.6	5.51						
15	14.73	31.34	23.23	91.0	5.41						
16	14.73	31.34	23.23	91.2	5.29						
17	14.72	31.35	23.24	91.2	5.14						
18	14.72	31.34	23.23	90.4	5.01						
19	14.70	31.34	23.24	90.4	4.90						
20	14.70	31.34	23.24	90.4	4.77	4.48	2.6	.00	.00	.00	.50

KELEZ CRUISE XWCC-20 STATION 15 08/02/78

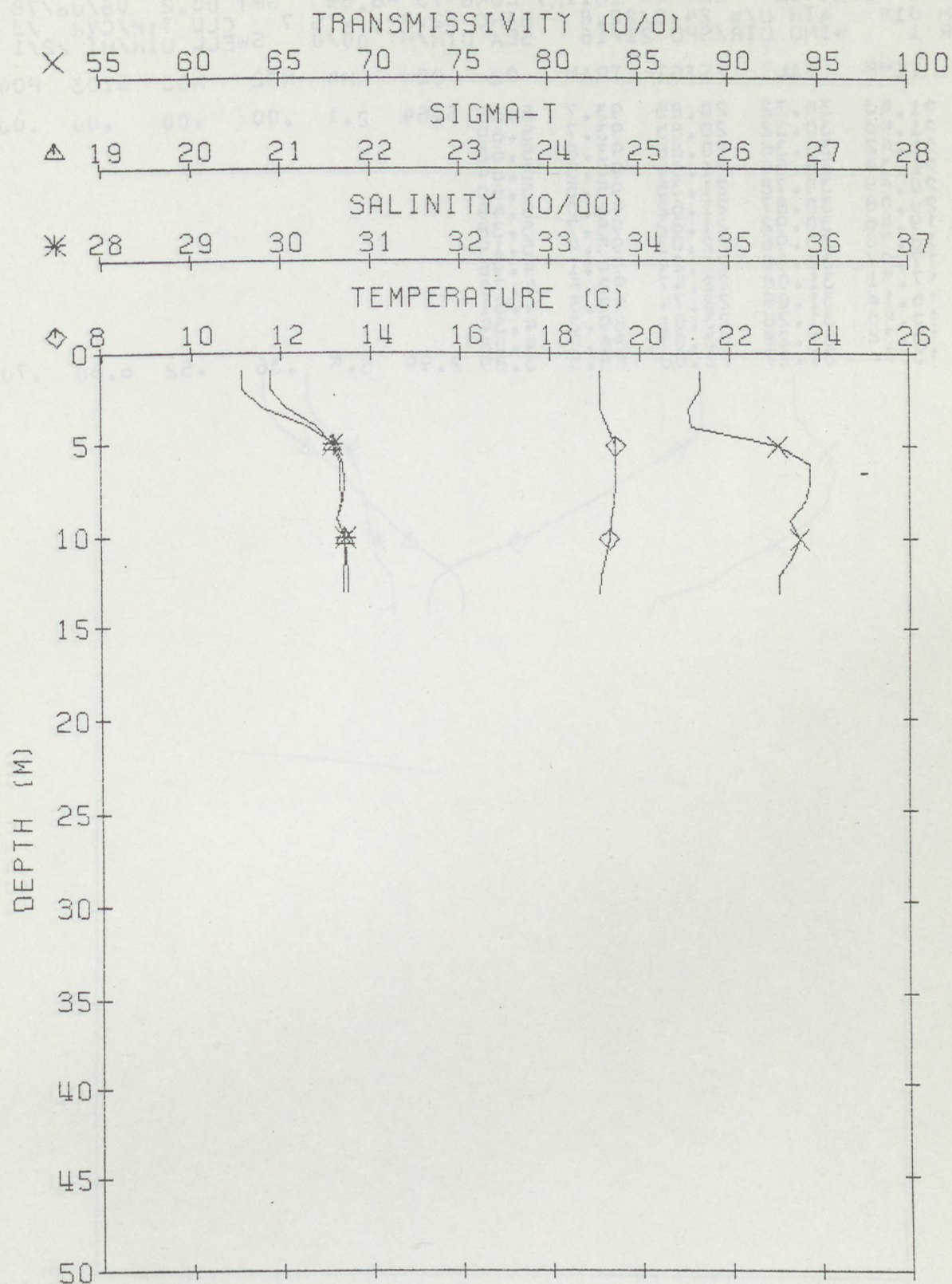


X-CC-20 STA.016 LAT 40 18.1N; LONG 73 56.4W GMT 15.0 08/01/78
 DEPTH 017 AIR D/W 18.9/18.3 BARC 19.5 VTS 6 CLD TYP/CVR 7/8
 WTHR 2 WIND DIR/SPD 02/10 SEA DIR/HT 02/0 SWELL DIR/HT 07/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	PO4
1	19.08	29.56	20.88	88.3	5.13	5.13	8.3	.65	1.85	1.59	.91
2	19.08	29.56	20.88	88.3	5.13						
3	19.09	29.78	21.04	87.6	5.14						
4	19.26	30.28	21.38	87.8	5.11						
5	19.43	30.57	21.56	92.6	5.20						
6	19.42	30.68	21.64	94.4	5.36						
7	19.43	30.68	21.65	94.4	5.45						
8	19.43	30.68	21.66	94.1	5.50						
9	19.43	30.68	21.61	93.3	5.51						
10	19.27	30.70	21.70	93.8	5.50						
11	19.10	30.69	21.71	93.4	5.48						
12	19.00	30.67	21.72	92.6	5.47						
13	19.04	30.67	21.74	92.6	5.45	5.35	2.4	.10	.00	.00	.42



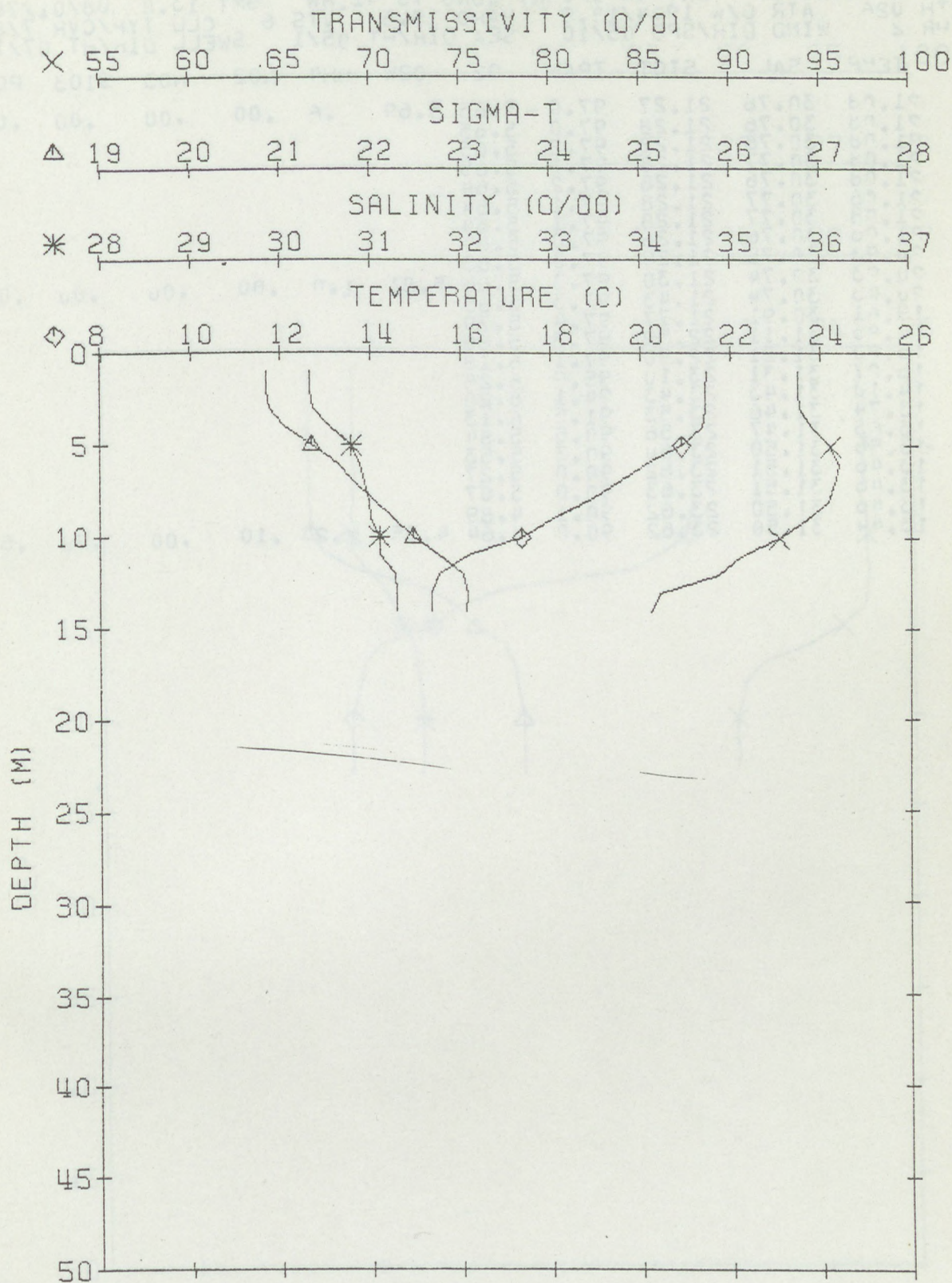
KELEZ CRUISE XWCC-20 STATION 16 08/01/78



XVCC-20 STA. 016 LAT 40 18.1N; LONG 73 56.5W GMT 05.2 08/06/78
 DEPTH 018 AIR D/W 24.2/22.8 BARO 22.0 VTS 7 CLD TYP/CVR /3
 WETUR 1 WIND DIR/SPD 21/16 SEA DIR/HT 00/0 SWELL DIR/HT 22/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	21.43	30.32	20.85	93.7	5.69	5.64	2.1	.00	.00	.00	.00
2	21.43	30.32	20.85	93.7	5.69						
3	21.42	30.36	20.88	93.8	5.68						
4	21.34	30.54	21.04	94.5	5.64						
5	20.89	30.78	21.35	95.5	5.60						
6	20.08	30.87	21.62	96.0	5.49						
7	19.40	30.92	21.82	95.7	5.38						
8	18.78	30.96	22.03	95.4	5.19						
9	17.97	31.00	22.24	94.1	4.96						
10	17.31	31.08	22.47	92.5	4.72						
11	16.12	31.09	22.74	90.5	4.51						
12	15.56	31.26	23.01	89.2	4.34						
13	15.32	31.28	23.07	86.0	4.08						
14	15.72	31.27	23.06	85.5	3.89	2.99	5.5	.36	.52	0.60	.70

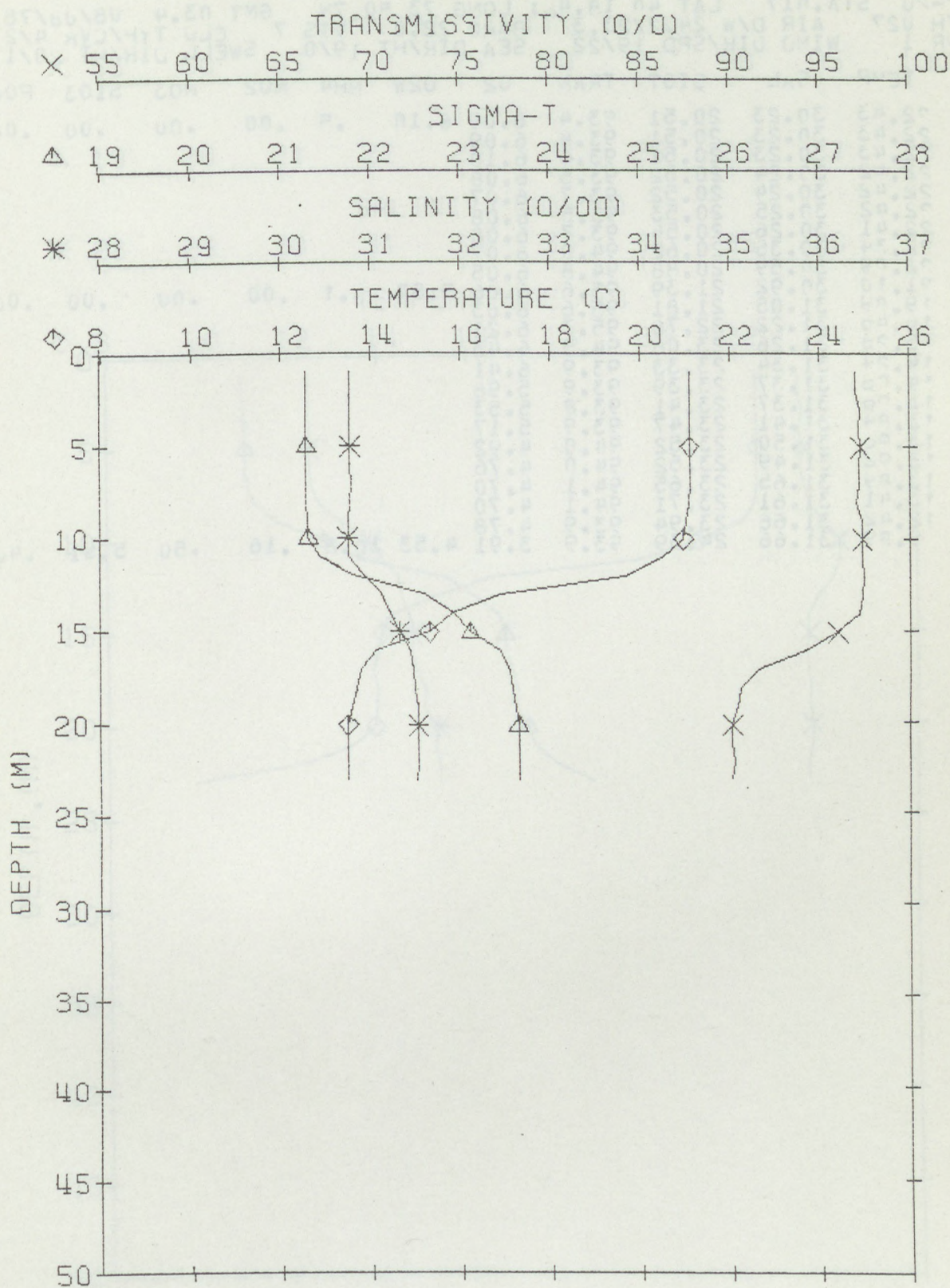
KELEZ CRUISE XWCC-20 STATION 16 08/08/78



X-CC-20 SIA.017 LAT 40 18.5N; LONG 73 51.8W GMT 13.8 08/01/78
 DEPTH 026 AIR D/W 19.4/19.9 BARO 19.5 VTS 6 CLD TYP/CVR 7/8
 WETR 2 WIND DIR/SPD 05/10 SEA DIR/HT 05/1 SWELL DIR/HT 07/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	21.03	30.76	21.27	97.0	5.65	5.69	.6	.00	.00	.00	.00
2	21.08	30.76	21.28	97.0	5.65						
3	21.08	30.76	21.28	97.2	5.65						
4	21.08	30.77	21.28	97.1	5.65						
5	21.08	30.76	21.28	97.2	5.64						
6	21.08	30.77	21.28	97.1	5.64						
7	21.08	30.77	21.28	97.1	5.64						
8	21.08	30.76	21.28	97.0	5.64						
9	20.98	30.75	21.29	97.3	5.63						
10	20.93	30.74	21.30	97.3	5.64	5.81	1.0	.00	.00	.00	.00
11	20.45	30.74	21.43	97.3	5.65						
12	19.61	30.91	21.77	97.4	5.70						
13	16.85	31.11	22.59	97.3	5.86						
14	15.20	31.21	22.90	97.1	5.18						
15	15.27	31.31	23.10	95.9	5.23						
16	14.10	31.43	23.43	94.1	5.23						
17	13.74	31.46	23.53	91.5	5.13						
18	13.65	31.47	23.56	90.5	5.84						
19	13.58	31.50	23.60	90.3	5.53						
20	13.46	31.51	23.62	90.0	5.27						
21	13.46	31.51	23.63	90.0	5.07						
22	13.46	31.50	23.62	90.1	4.89						
23	13.44	31.50	23.62	90.0	4.64	4.35	3.2	.10	.00	.70	.51

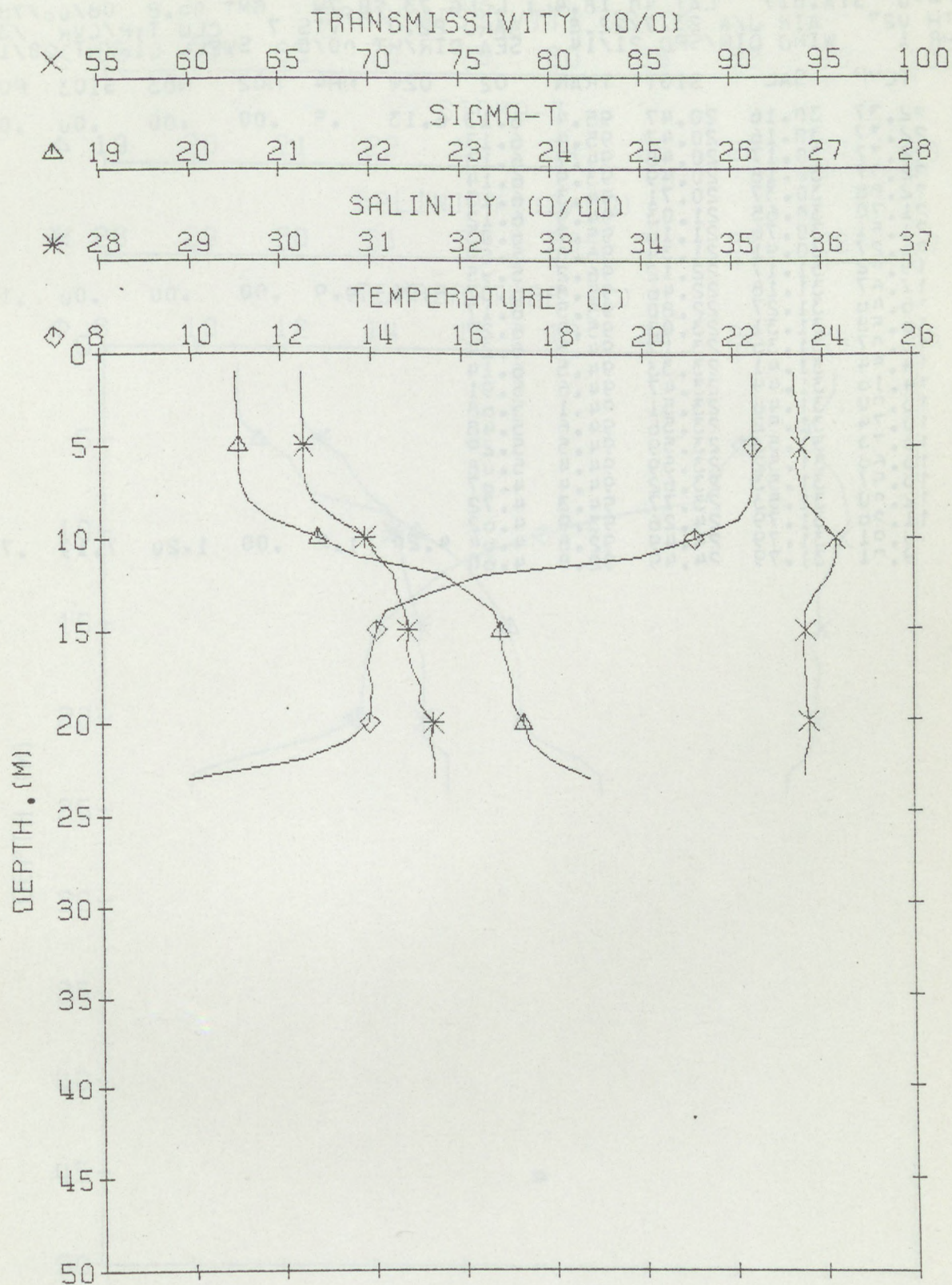
KELEZ CRUISE XWCC-20 STATION 17 08/01/78



XCCC-20 SIA.017 LAT 40 18.4N; LONG 73 50.7W GMT 03.4 08/08/78
 DEPTH 027 AIR D/W 24.2/23.3 BARO 22.0 VIS 7 CLD T/P/CVR 4/2
 WFTLR 1 WIND DIR/SPD 19/22 SEA DIR/HT 19/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	22.43	30.23	20.51	93.4	6.09	6.10	.5	.00	.00	.00	.00
2	22.43	30.23	20.51	93.4	6.09						
3	22.43	30.23	20.51	93.4	6.10						
4	22.42	30.24	20.52	93.5	6.08						
5	22.42	30.24	20.52	93.5	6.07						
6	22.42	30.25	20.53	93.7	6.08						
7	22.41	30.26	20.54	93.7	6.08						
8	22.44	30.25	20.62	94.0	6.07						
9	22.39	30.29	20.88	94.2	6.05						
10	21.10	30.92	21.39	95.2	6.06	5.57	5.1	.00	.00	.00	.00
11	19.39	31.05	21.81	95.6	6.03						
12	18.40	31.22	22.76	95.6	6.21						
13	15.00	31.26	23.06	94.5	6.43						
14	14.24	31.34	23.33	93.9	6.41						
15	14.70	31.37	23.39	93.9	5.98						
16	16.00	31.37	23.41	93.8	5.53						
17	16.00	31.41	23.47	93.9	5.17						
18	16.00	31.50	23.52	94.0	4.92						
19	16.00	31.49	23.52	94.0	4.76						
20	16.00	31.65	23.65	94.1	4.70						
21	16.41	31.61	23.71	94.1	4.70						
22	12.42	31.66	23.94	93.9	4.78						
23	9.39	31.66	24.39	93.9	3.91	4.53	10.2	.16	.50	5.51	.40

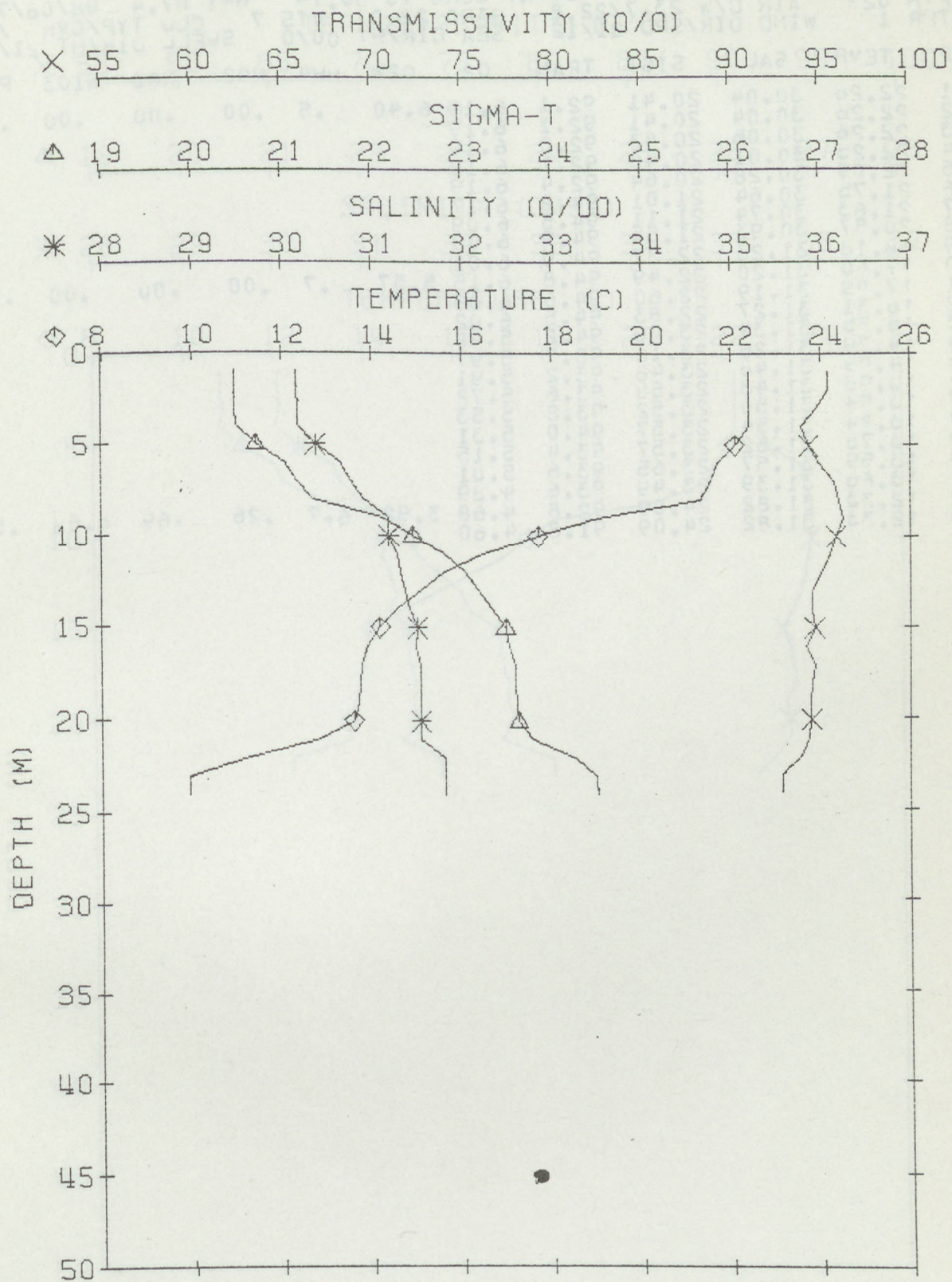
KELEZ CRUISE XWCC-20 STATION 17 08/08/78



XACC-20 SIA.017 LAT 40 18.4N; LONG 73 50.7W GMT 05.8 08/08/78
 DEPTH 027 AIR D/W 23.7/22.8 BARO 22.0 VIS 7 CLD TYP/CVR /3
 WTHR 1 WIND DIR/SPD 21/14 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	22.37	30.16	20.47	95.4	6.13	6.13	.5	.00	.00	.00	.00
2	22.37	30.16	20.47	95.4	6.13						
3	22.37	30.17	20.48	94.7	6.13						
4	22.37	30.18	20.49	93.9	6.14						
5	22.08	30.37	20.71	94.3	6.13						
6	21.70	30.65	21.03	94.9	6.12						
7	21.51	30.76	21.16	95.7	6.03						
8	21.27	30.91	21.34	96.0	5.89						
9	19.22	31.17	22.12	96.2	5.95						
10	17.67	31.18	22.46	95.3	6.07	6.06	9.9	.00	.00	.00	.11
11	16.56	31.27	22.80	95.5	6.17						
12	15.58	31.31	23.03	95.0	6.27						
13	15.07	31.35	23.17	94.5	6.24						
14	14.54	31.41	23.33	94.5	6.14						
15	14.16	31.49	23.47	94.6	5.91						
16	13.00	31.46	23.51	94.1	5.68						
17	13.74	31.52	23.56	94.6	5.43						
18	13.43	31.53	23.59	94.5	5.29						
19	13.36	31.52	23.59	94.4	5.08						
20	13.57	31.53	23.62	94.4	4.67						
21	12.00	31.53	23.77	94.3	4.72						
22	11.26	31.79	24.26	93.9	4.62						
23	9.01	31.79	24.49	92.8	4.64	4.20	1.2	.00	1.20	7.19	.70
24	9.1	31.79	24.49	92.8	4.60						

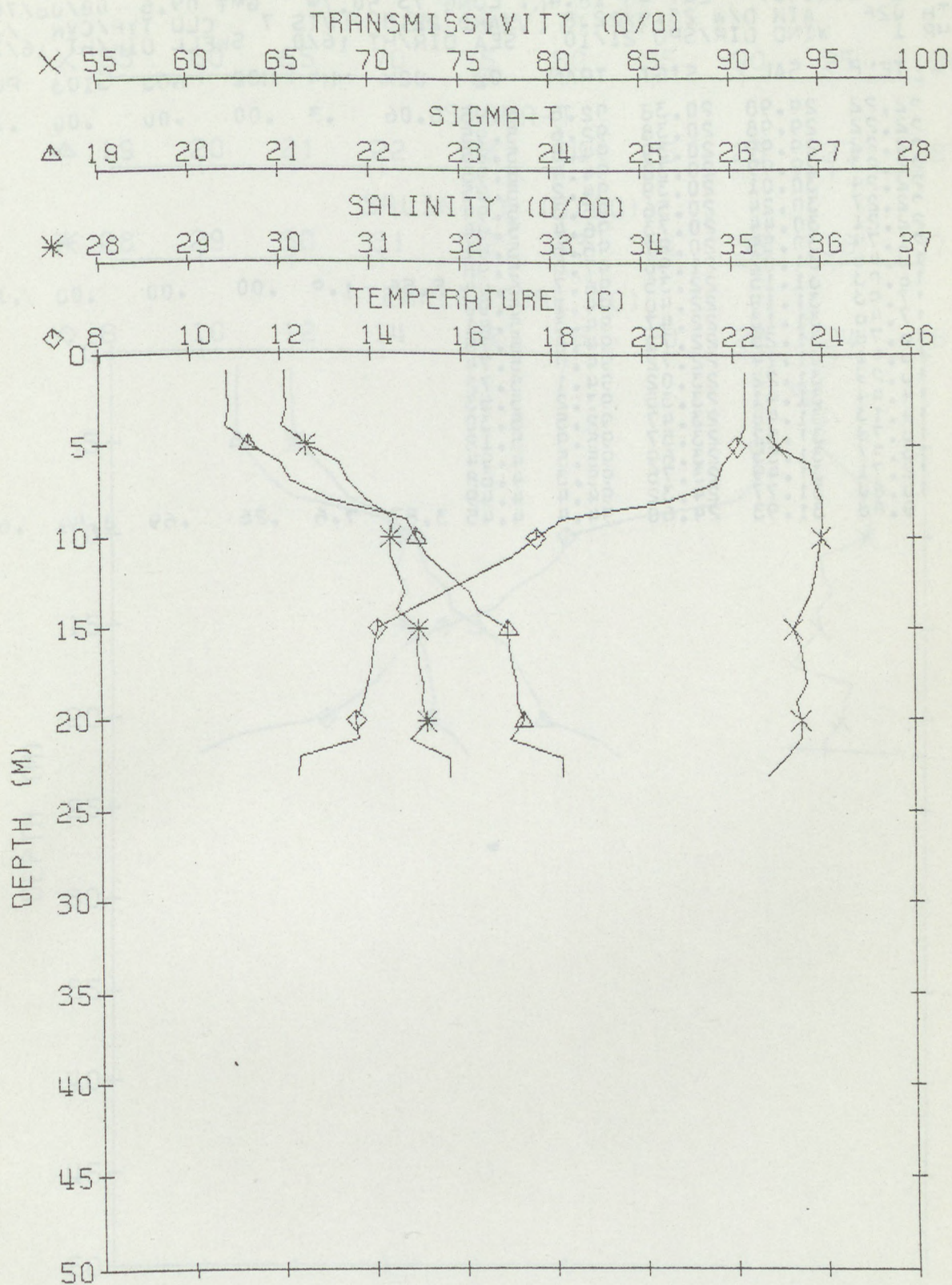
KELEZ CRUISE XWCC-20 STATION 17 08/08/78



XWCC-20 STA.017 LAT 40 18.4N; LONG 73 50.7W GMT 07.4 08/08/78
 DEPTH 027 AIR D/W 23.7/22.8 BARO 22.0 VTS 7 CLD TYP/CVR /3
 WETPR 1 WIND DIR/SPD 21/12 SEA DIR/HT 00/0 SWELL DIR/HT 21/1

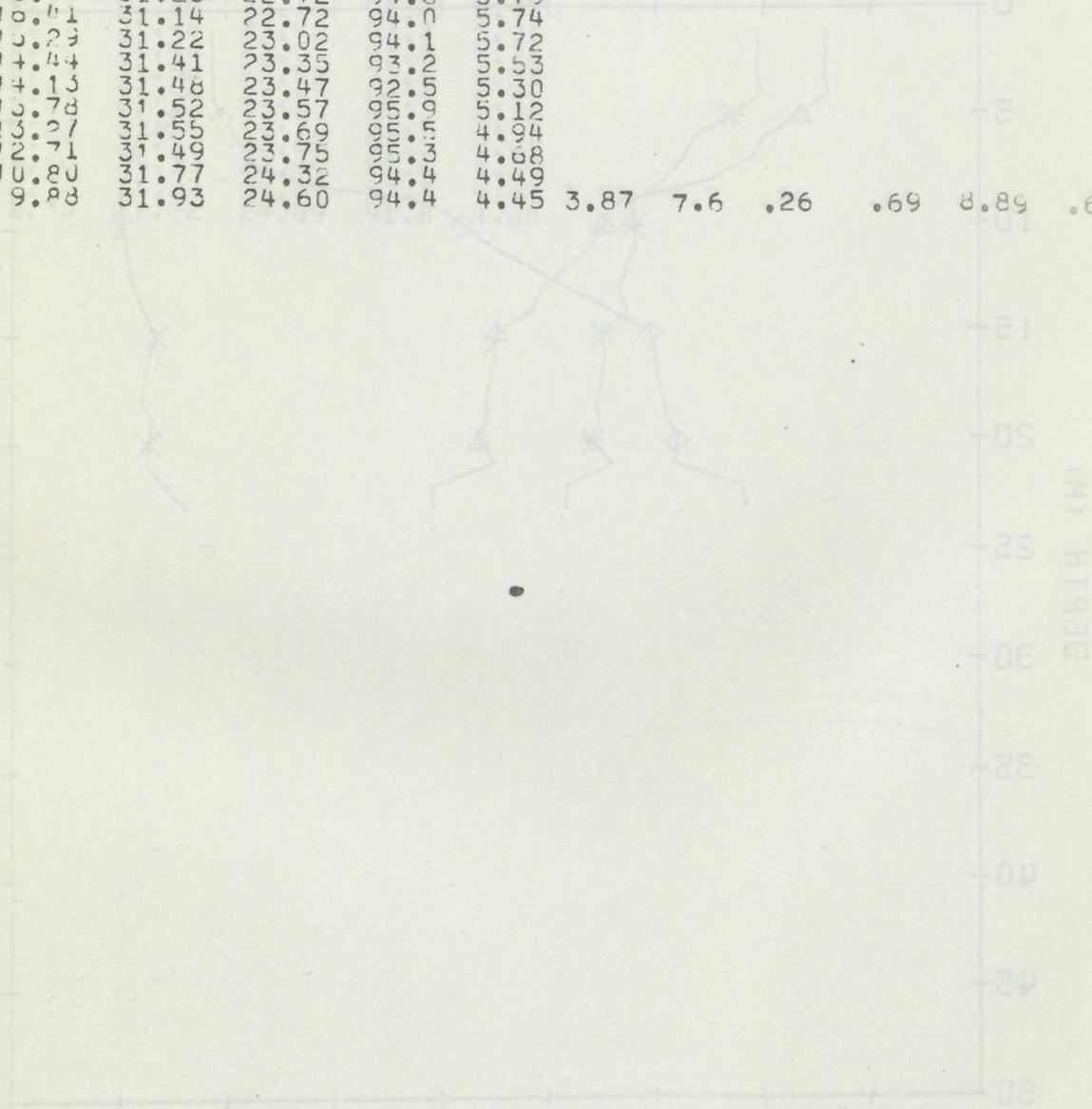
DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.20	30.04	20.41	92.1	6.19	6.40	.5	.00	.00	.00	.11
2	22.20	30.04	20.41	92.1	6.19						
3	22.20	30.06	20.43	92.0	6.19						
4	22.20	30.01	20.40	92.1	6.18						
5	22.00	30.28	20.64	92.4	6.19						
6	21.75	30.64	21.01	94.2	6.17						
7	21.63	30.74	21.11	94.5	6.00						
8	20.87	30.93	21.54	94.6	6.00						
9	18.18	31.23	22.37	94.9	6.01						
10	17.80	31.20	22.49	94.8	6.15	5.57	.7	.00	.00	.00	.11
11	17.39	31.19	22.60	94.6	6.09						
12	16.81	31.27	22.83	94.5	6.02						
13	16.55	31.34	23.06	94.2	6.08						
14	16.75	31.26	23.16	93.7	6.07						
15	14.75	31.48	23.48	93.2	6.01						
16	16.06	31.48	23.50	93.2	6.01						
17	16.04	31.50	23.52	93.8	6.03						
18	16.84	31.54	23.57	94.0	6.31						
19	16.77	31.52	23.57	93.4	6.15						
20	16.50	31.57	23.65	93.6	6.01						
21	16.66	31.39	23.49	93.6	4.69						
22	12.36	31.82	24.09	92.8	4.68	3.92	6.7	.26	.69	8.68	.58
23	12.33	31.82	24.09	91.8	4.60						

KELEZ CRUISE XWCC-20 STATION 17 08/08/78

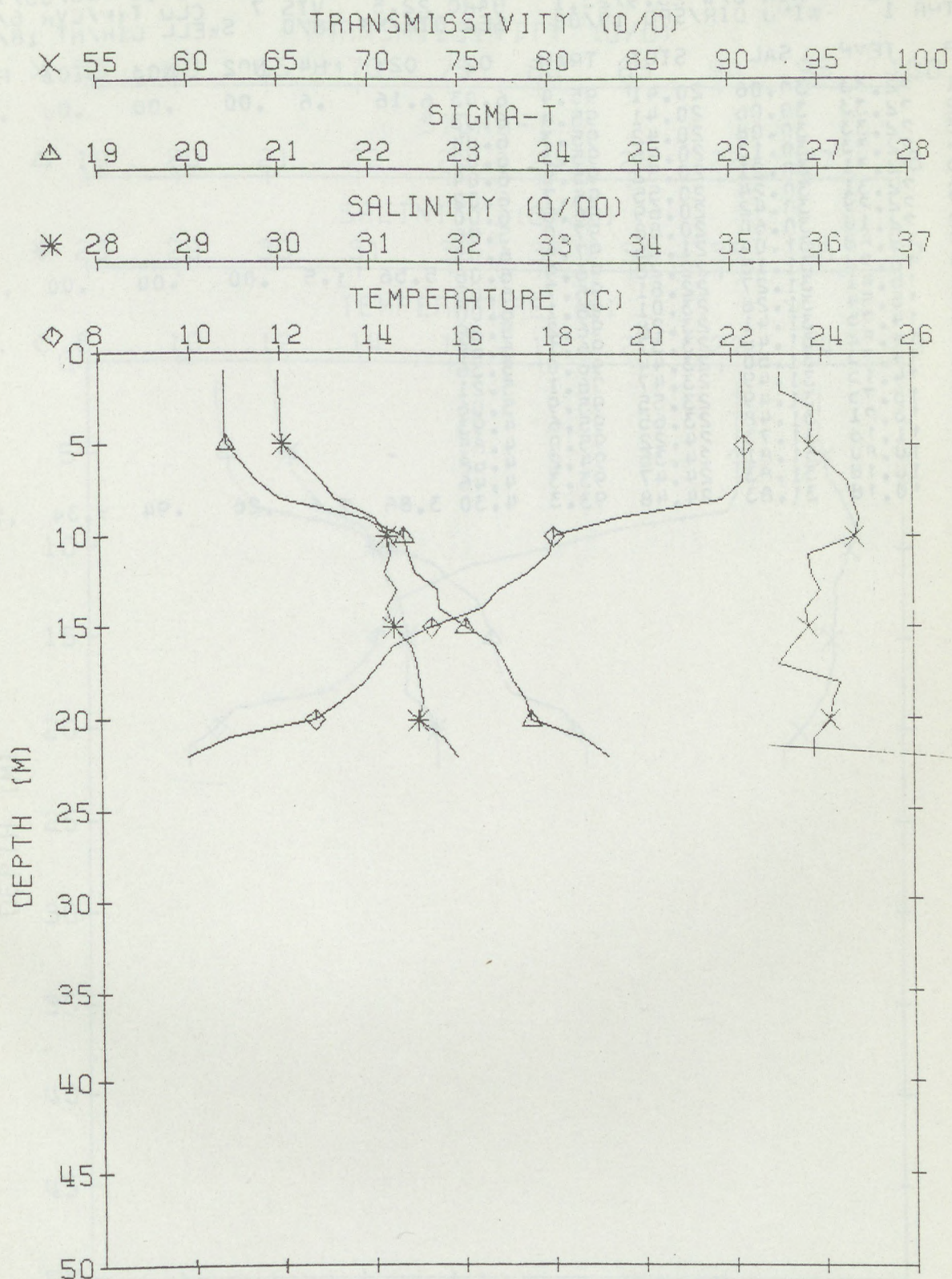


XHCC-20 STA.017 LAT 40 18.4N; LONG 73 50.7W GMT 09.6 08/08/78
 DEPTH 026 AIR D/W 23.9/22.8 BARKO 22.0 VIS 7 CLD TYP/CVR /3
 WTHR 1 WIND DIR/SPD 21/10 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.22	29.98	20.38	92.6	5.95	6.06	.3	.00	.00	.00	.11
2	22.22	29.98	20.38	92.6	5.95						
3	22.22	29.99	20.39	94.5	5.95						
4	22.23	29.99	20.38	94.4	5.95						
5	22.24	30.01	20.39	94.2	5.95						
6	22.27	30.24	20.56	95.3	5.94						
7	22.31	30.44	20.73	96.4	5.94						
8	21.74	30.59	20.97	96.6	5.91						
9	19.46	31.02	21.90	97.0	5.88						
10	16.03	31.15	22.35	96.7	5.04	5.56	1.0	.00	.00	.00	.11
11	17.03	31.19	22.40	94.1	5.90						
12	17.46	31.13	22.47	94.8	5.81						
13	16.78	31.25	22.72	94.8	5.79						
14	16.41	31.14	22.72	94.0	5.74						
15	16.23	31.22	23.02	94.1	5.72						
16	14.44	31.41	23.35	93.2	5.53						
17	14.13	31.48	23.47	92.5	5.30						
18	13.78	31.52	23.57	92.9	5.12						
19	13.27	31.55	23.69	92.7	4.94						
20	12.71	31.49	23.75	92.6	4.88						
21	10.80	31.77	24.32	94.4	4.49						
22	9.88	31.93	24.60	94.4	4.45	3.87	7.6	.26	.69	8.89	.64



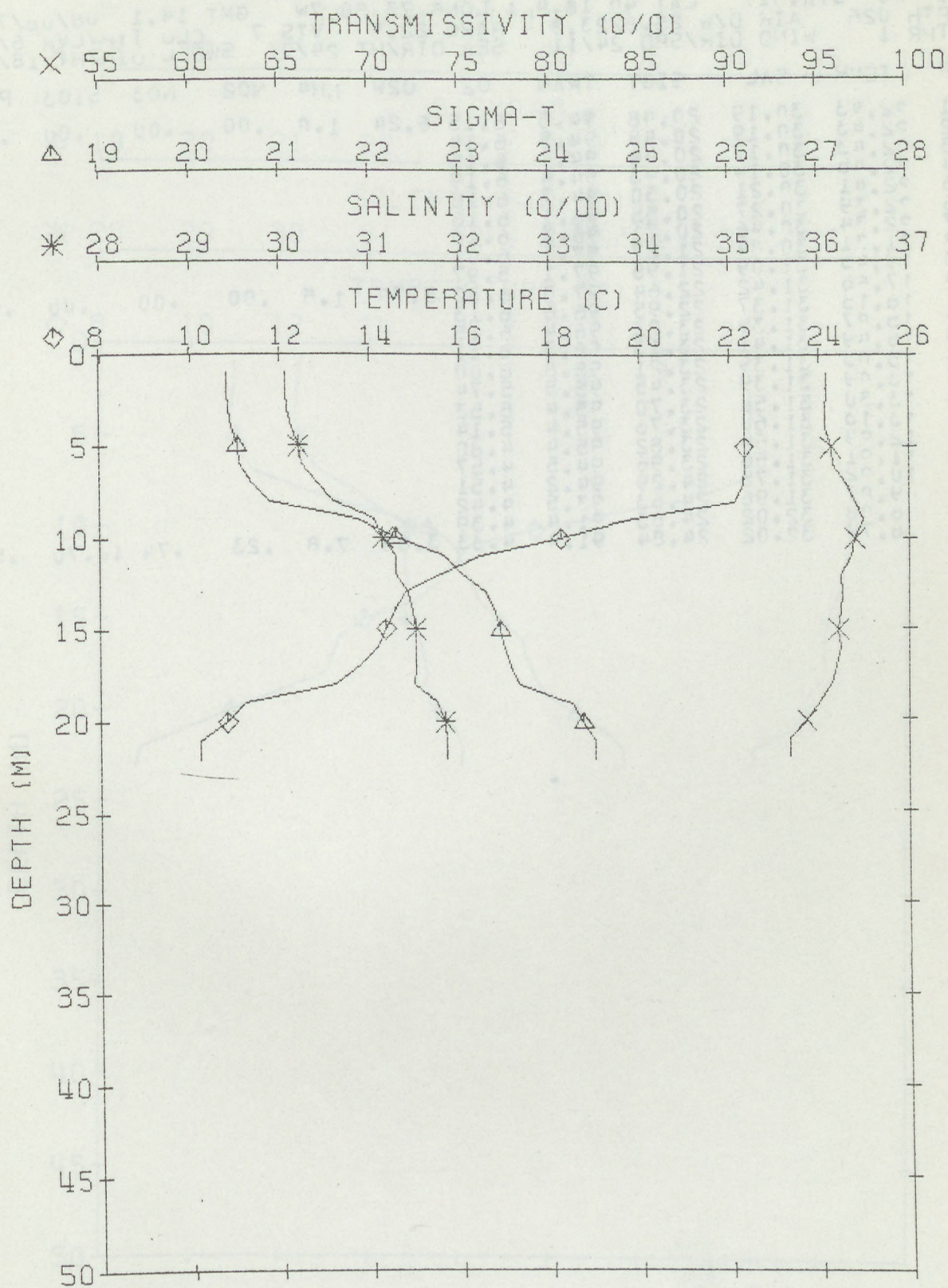
KELEZ CRUISE XWCC-20 STATION 17 08/08/78



XACC-20 STA.017 LAT 40 18.4N; LONG 73 50.7W GMT 11.5 08/08/78
 DEPTH 026 AIR D/W 23.9/23.1 BARO 22.5 VTS 7 CLU TIP/CVR 6/7
 WETR 1 WIND DIR/SPD 19/08 SEA DIR/HT 18/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	22.33	30.06	20.41	95.4	6.03	6.16	.6	.00	.00	.00	.11
2	22.33	30.06	20.41	95.4	6.03						
3	22.33	30.08	20.42	95.3	6.04						
4	22.33	30.13	20.46	95.3	6.02						
5	22.31	30.21	20.52	95.6	6.04						
6	22.31	30.24	20.55	95.7	6.02						
7	22.29	30.42	20.69	96.5	6.00						
8	22.10	30.60	20.88	97.0	5.96						
9	19.68	31.04	21.85	97.4	6.03						
10	16.22	31.13	22.28	96.9	6.06	5.56	1.5	.00	.00	.00	.00
11	16.41	31.27	22.81	96.7	6.05						
12	15.54	31.28	23.01	96.1	6.00						
13	14.75	31.41	23.28	96.2	5.89						
14	14.52	31.46	23.37	96.1	5.69						
15	14.36	31.50	23.44	96.0	5.36						
16	14.10	31.49	23.47	96.1	5.21						
17	13.75	31.49	23.55	95.9	5.06						
18	13.21	31.48	23.65	95.6	4.93						
19	11.18	31.73	24.22	95.0	4.85						
20	10.80	31.81	24.35	94.2	4.68						
21	10.18	31.83	24.47	93.3	4.46						
22	10.18	31.83	24.48	93.3	4.30	3.86	7.6	.26	.94	9.34	.58

KELEZ CRUISE XWCC-20 STATION 17 08/08/78



XACC-20 SIA.017 LAT 40 18.4N; LONG 73 50.7W GMT 14.1 08/08/78
 DEPTH 026 AIR D/W 25.8/23.9 BARO 22.5 VTS 7 CLU TYP/CVR 6/7
 WETPR 1 WIND DIR/SPD 24/11 SEA DIR/HT 24/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	22.43	30.19	20.48	94.5	6.15	6.24	1.0	.00	.00	.00	.00
2	22.43	30.19	20.48	94.5	6.14						
3	22.43	30.17	20.46	94.4	6.15						
4	22.45	30.14	20.43	94.4	6.19						
5	22.41	30.21	20.50	94.7	6.18						
6	22.39	30.27	20.55	96.1	6.16						
7	22.34	30.46	20.71	96.1	6.10						
8	21.31	30.84	21.27	97.1	6.01						
9	19.45	31.09	21.95	97.1	5.97						
10	17.66	31.42	22.64	97.0	6.02	5.70	1.5	.00	.00	.00	.00
11	16.13	31.37	22.95	96.6	6.13						
12	15.87	31.39	23.00	96.4	6.15						
13	15.89	31.41	23.13	96.3	6.11						
14	15.00	31.39	23.21	95.8	6.00						
15	13.99	31.39	23.45	95.5	5.74						
16	13.30	31.56	23.70	95.4	5.53						
17	13.10	31.60	23.70	95.4	5.14						
18	12.69	31.64	23.82	95.4	4.80						
19	11.91	31.56	23.95	94.5	4.57						
20	10.82	31.75	24.29	94.2	4.51						
21	9.87	31.96	24.63	93.3	4.42						
22	8.88	32.02	24.83	91.4	4.39						
23	8.79	32.02	24.84	91.4	4.33	3.86	7.8	.23	.74	10.70	.52

KELEZ CRUISE XWCC-20 STATION 17 08/08/78

TRANSMISSIVITY (0/0)

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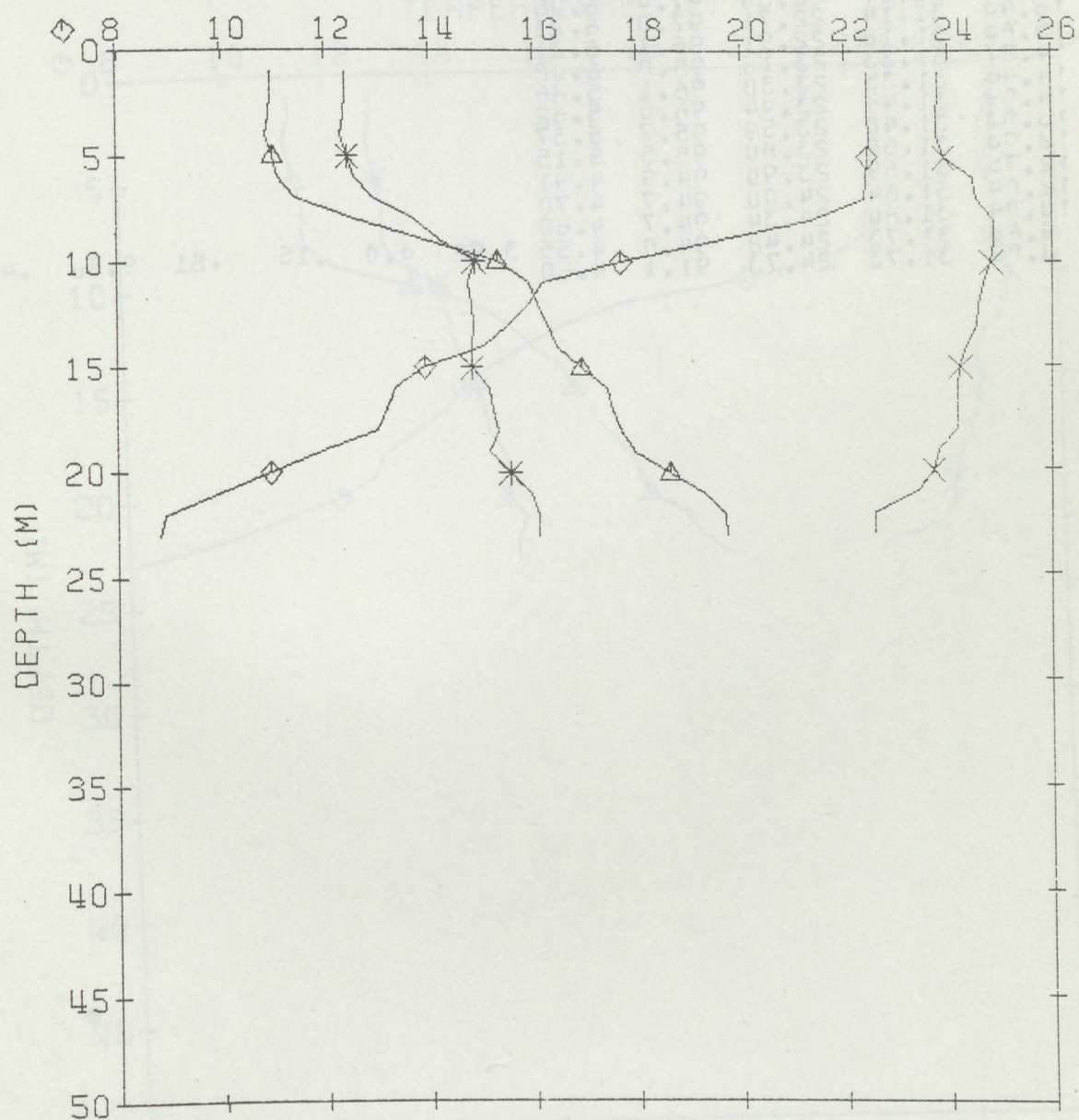
SIGMA-T

△ 19 20 21 22 23 24 25 26 27 28

SALINITY (0/00)

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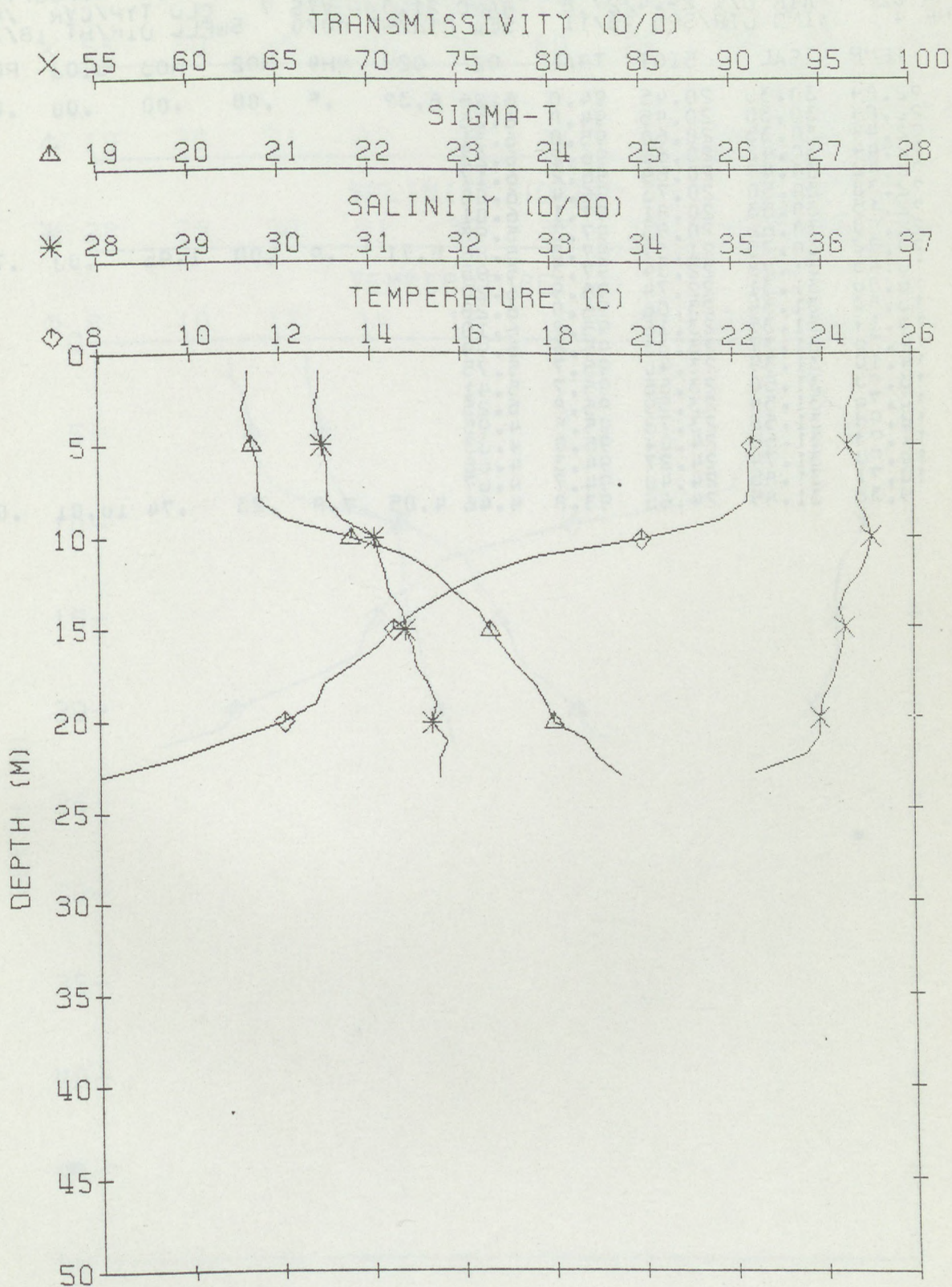
TEMPERATURE (C)



XWCC-20 SIA.017 LAT 40 18.4N; LONG 73 50.7W GMT 15.9 08/08/78
 DEPTH 027 AIR S/W 30.0/28.3 BARO 22.0 VTS 7 CLD TYP/CVR 6/7
 WFTUR 1 WIND DIR/SPD 23/15 SFA DIR/HT 00/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	PO4
1	22.46	30.42	20.64	96.7	6.00	6.16	.7	.00	.00	.00	.00
2	22.40	30.42	20.64	96.7	6.00						
3	22.54	30.37	20.58	96.3	6.00						
4	22.58	30.40	20.62	96.2	5.98						
5	22.40	30.45	20.69	96.3	5.96						
6	22.42	30.51	20.75	96.8	5.93						
7	22.42	30.51	20.75	97.0	5.91						
8	22.29	30.51	20.76	96.8	5.87						
9	21.66	30.68	21.05	97.4	5.84	5.71	1.5	.00	.00	.00	.00
10	19.65	31.02	21.77	97.6	5.89						
11	17.59	31.07	22.39	97.4	5.05						
12	16.46	31.14	22.71	97.0	5.21						
13	15.65	31.18	22.91	96.1	5.21						
14	14.87	31.33	23.18	95.8	5.28						
15	14.40	31.35	23.30	95.1	5.26						
16	14.33	31.44	23.44	95.0	5.22						
17	13.56	31.48	23.59	95.7	5.37						
18	12.66	31.60	23.80	95.5	5.15						
19	12.75	31.69	23.90	94.9	4.91						
20	12.74	31.64	24.00	94.7	4.70						
21	10.84	31.80	24.34	94.7	4.60						
22	9.68	31.73	24.48	94.0	4.55	3.92	9.0	.15	.81	9.56	.46
23	8.22	31.73	24.73	91.1	4.60						

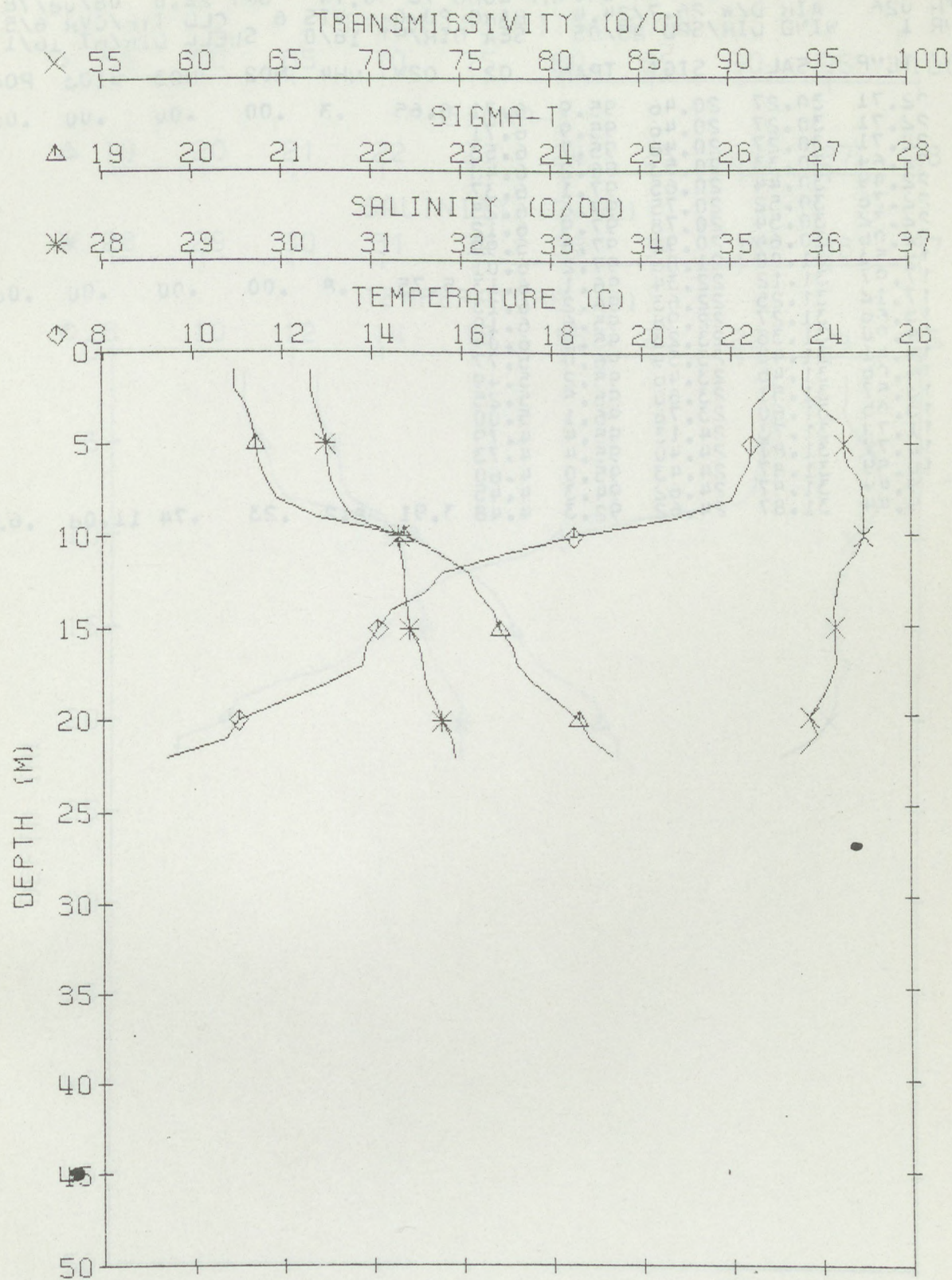
KELEZ CRUISE XWCC-20 STATION 17 08/08/78



X CC-20 SIA.017 LAT 40 18.4N; LONG 73 50.7W GMT 18.4 08/08/78
 DEPTH 026 AIR D/W 29.4/27.8 BARO 21.0 VIS 7 CLD TYP/CVR /4
 WETHR 4 WIND DIR/SPD 23/11 SEA DIR/HT 00/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	22.84	30.30	20.45	94.0	6.26	6.32	.5	.00	.00	.00	.00
2	22.84	30.30	20.45	94.0	6.26						
3	22.44	30.35	20.60	95.0	6.31						
4	22.44	30.42	20.65	96.2	6.23						
5	22.42	30.47	20.69	96.2	6.17						
6	22.38	30.50	20.73	96.4	6.08						
7	22.15	30.53	20.81	97.1	6.01						
8	22.00	30.62	20.93	97.3	5.93						
9	20.72	30.75	21.37	97.3	5.86	5.71	.0	.00	1.95	.00	.76
10	16.45	31.28	22.34	97.3	5.95						
11	16.80	31.31	22.74	96.9	6.20						
12	16.74	31.34	23.06	95.0	6.28						
13	16.14	31.35	23.16	95.8	6.19						
14	14.78	31.37	23.33	95.3	5.99						
15	14.10	31.39	23.40	95.7	5.75						
16	13.70	31.50	23.55	95.7	5.41						
17	13.70	31.54	23.59	95.8	4.95						
18	12.33	31.58	23.78	95.0	4.83						
19	11.33	31.68	24.04	95.0	4.66						
20	10.86	31.74	24.27	94.3	4.66						
21	10.71	31.85	24.40	94.7	4.67						
22	9.38	31.89	24.65	93.8	4.46	4.05	7.8	.23	.74	10.01	.00

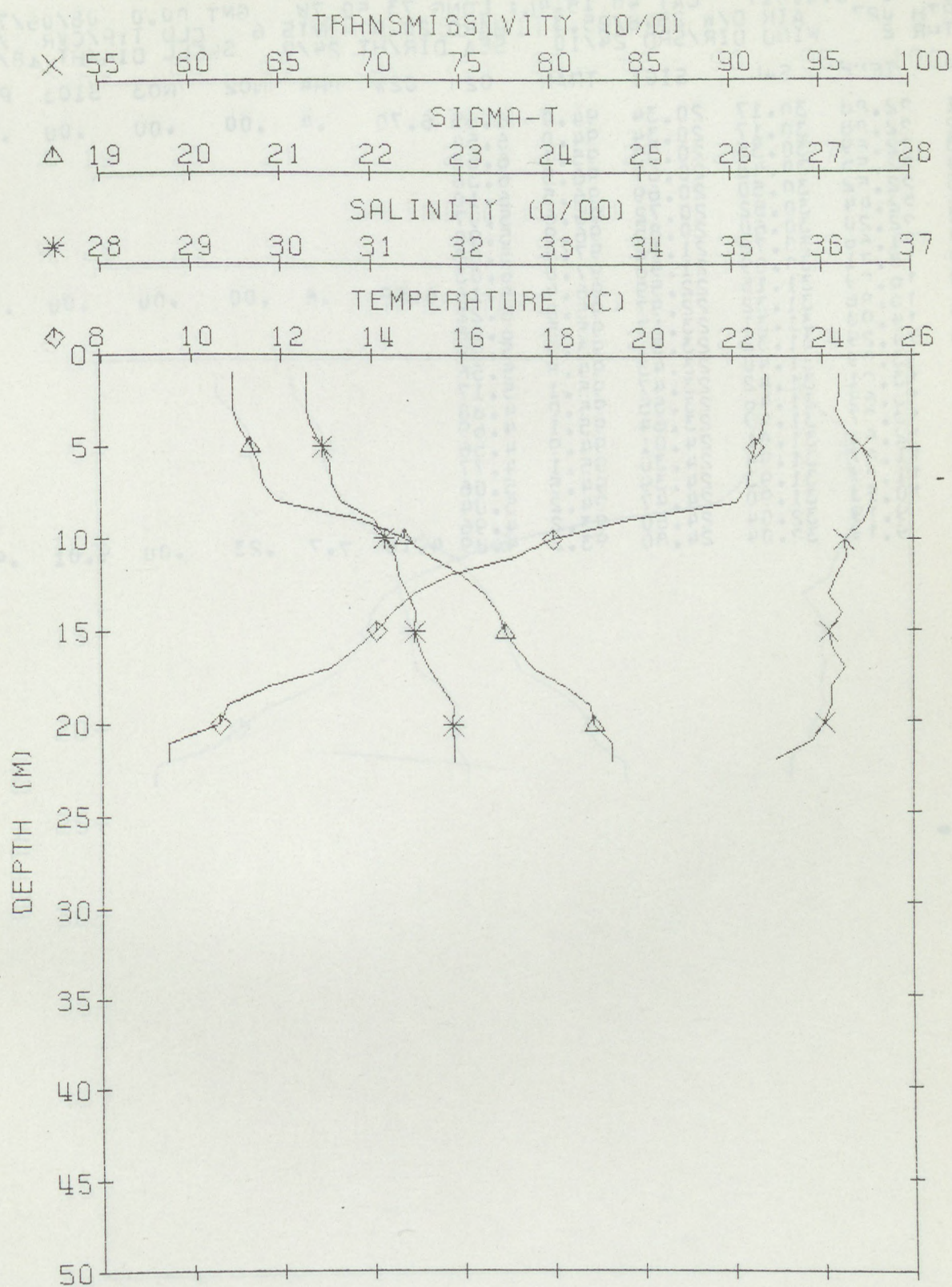
KELEZ CRUISE XWCC-20 STATION 17 08/08/78



X-CC-20 STA.017 LAT 40 18.4N; LONG 73 50.7W GMT 22.0 08/08/78
 DEPTH 026 AIR D/W 26.7/24.4 BARO 20.0 VTS 6 CLD TYP/CVR 6/5
 WFTHR 1 WIND DIR/SPD 25/05 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	22.71	30.27	20.46	95.9	6.71	6.65	.3	.00	.00	.00	.00
2	22.71	30.27	20.46	95.9	6.71						
3	22.71	30.27	20.46	95.7	6.53						
4	22.64	30.33	20.53	96.2	6.48						
5	22.49	30.44	20.65	97.1	6.37						
6	22.36	30.52	20.75	97.6	6.25						
7	22.32	30.54	20.78	97.9	6.12						
8	22.06	30.64	20.92	97.6	5.99						
9	19.83	31.00	21.86	97.2	6.01						
10	17.07	31.12	22.34	96.1	6.13	5.75	.8	.00	.00	.00	.00
11	17.12	31.25	22.63	95.2	6.13						
12	15.26	31.27	22.98	95.6	6.10						
13	14.00	31.36	23.23	95.2	6.04						
14	14.41	31.45	23.39	96.0	5.77						
15	14.06	31.45	23.46	95.2	5.49						
16	13.37	31.51	23.60	95.2	5.25						
17	13.05	31.60	23.76	96.1	5.00						
18	11.73	31.73	24.13	95.4	4.79						
19	10.77	31.87	24.40	95.4	4.73						
20	10.59	31.87	24.43	95.0	4.60						
21	9.44	31.87	24.62	94.3	4.45						
22	9.44	31.87	24.62	92.3	4.48	3.91	8.2	.23	.74	11.08	.63

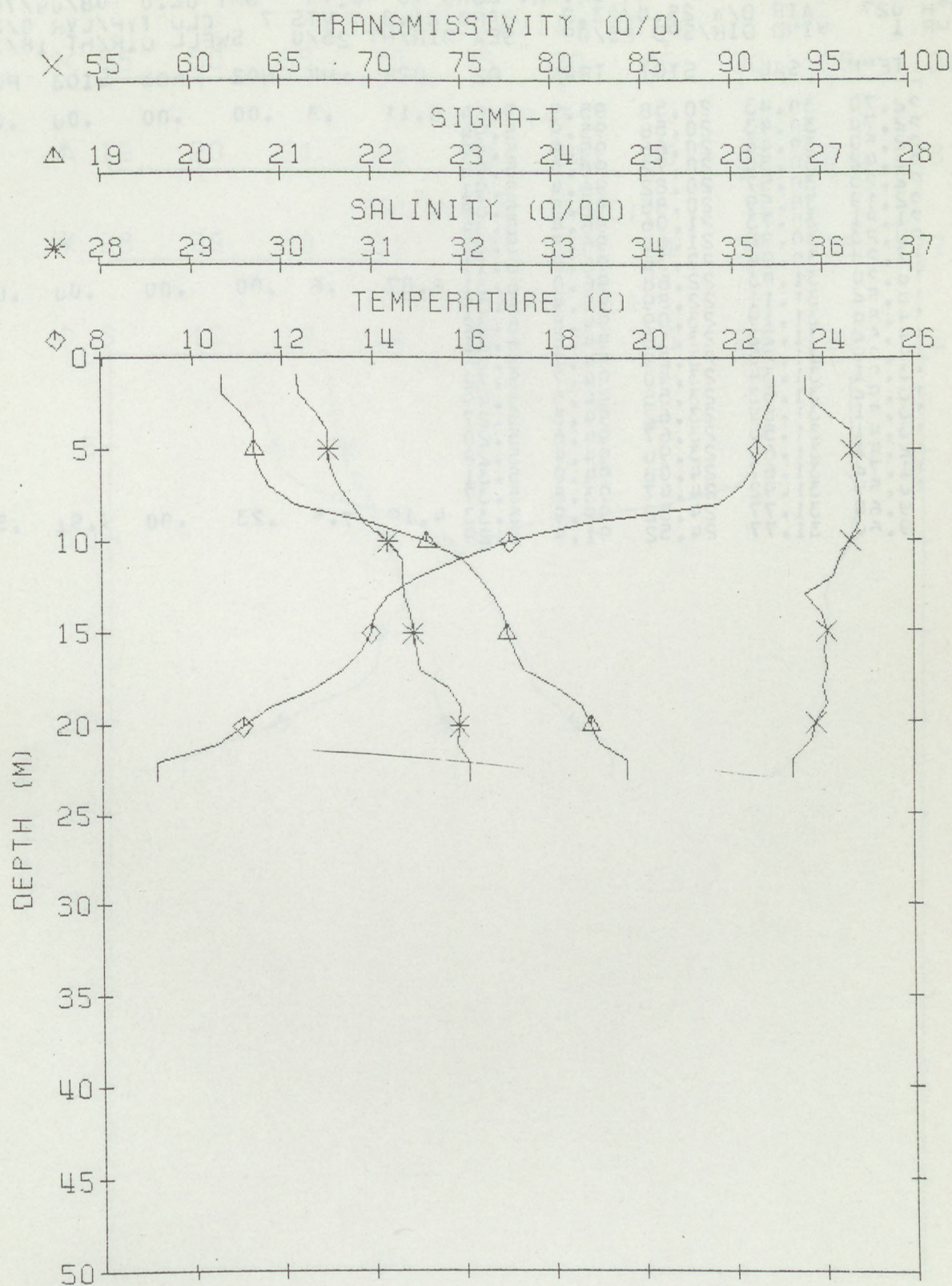
KELEZ CRUISE XWCC-20 STATION 17 08/08/78



X-CC-20 SIA.017 LAT 40 18.4N; LONG 73 50.7W GMT 00.0 08/09/78
 DEPTH 027 AIR D/W 25.8/25.3 BARK 20.0 VTS 6 CLD TYP/CVR /8
 WETHR 2 WIND DIR/SPD 24/10 SEA DIR/HT 24/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	P04
1	22.88	30.17	20.34	94.0	6.55	6.70	.4	.00	.00	.00	.00
2	22.88	30.17	20.34	94.0	6.54						
3	22.79	30.35	20.53	95.1	6.58						
4	22.59	30.48	20.67	96.5	6.38						
5	22.52	30.50	20.69	96.5	6.10						
6	22.44	30.52	20.72	96.6	5.97						
7	22.20	30.60	20.85	96.9	5.90						
8	21.88	30.76	21.12	97.0	5.88						
9	18.71	30.89	21.98	97.0	5.03						
10	16.93	31.15	22.59	96.4	5.16	6.09	.6	.00	.00	.00	.00
11	15.86	31.32	22.97	95.8	5.22						
12	14.86	31.31	23.17	95.5	5.08						
13	14.29	31.32	23.31	93.9	5.99						
14	13.99	31.40	23.43	94.8	5.36						
15	13.71	31.42	23.47	95.1	5.17						
16	13.63	31.48	23.55	95.0	4.88						
17	13.77	31.49	23.64	95.1	4.89						
18	12.80	31.81	24.01	94.9	4.56						
19	11.87	31.94	24.30	95.1	4.77						
20	11.37	31.93	24.39	94.5	5.06						
21	10.56	31.90	24.47	94.2	5.04						
22	9.19	32.04	24.80	93.2	4.96						
23	9.13	32.04	24.80	93.2	4.69	4.16	7.7	.23	.00	9.01	.40

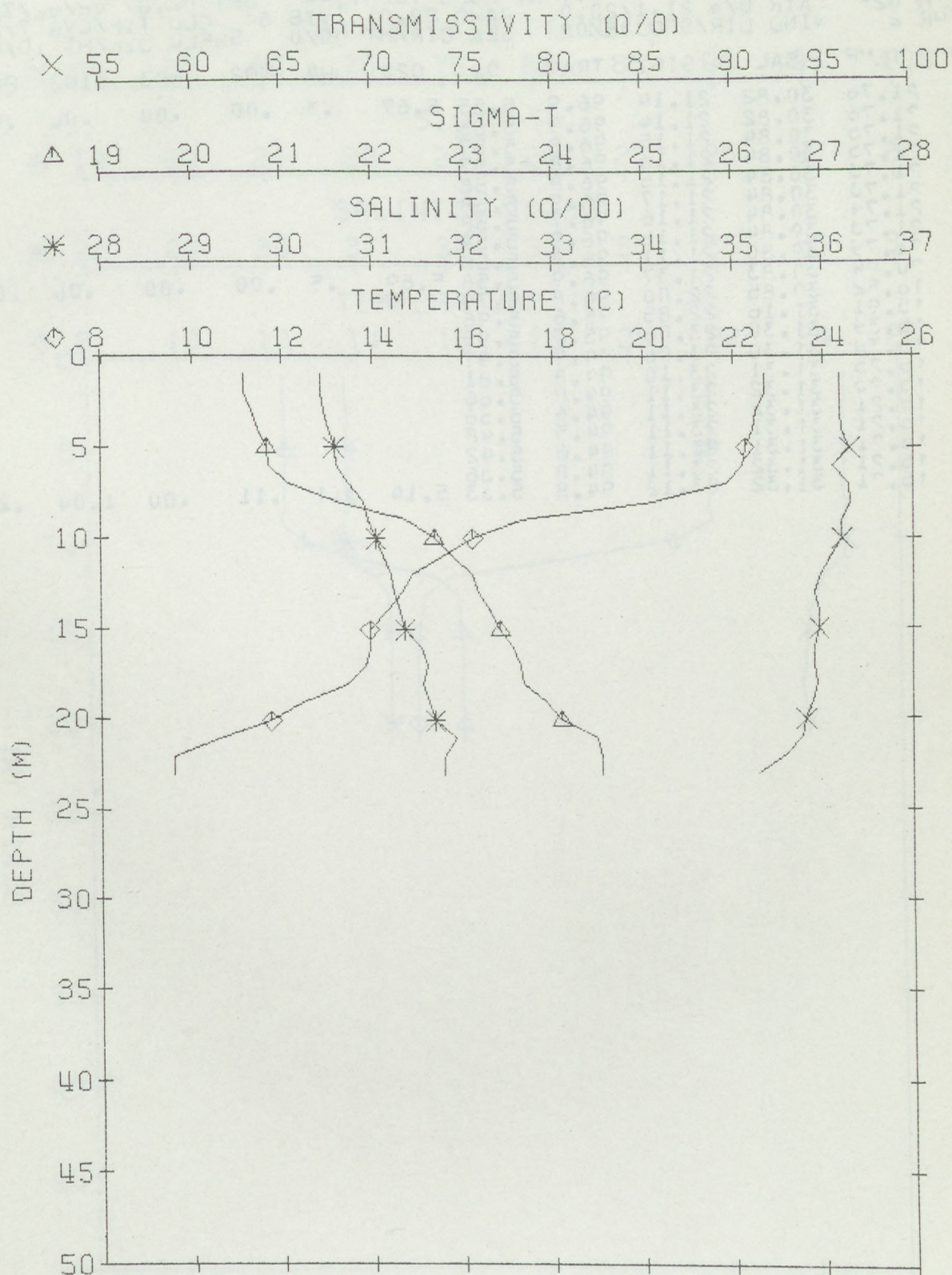
KELEZ CRUISE XWCC-20 STATION 17 08/09/78



XWCC-20 SIA.017 LAT 40 18.4N; LONG 73 50.7W GMT 02.0 08/09/78
 DEPTH 027 AIR D/W 25.0/23.2 BARO 21.0 VTS 7 CLD TYP/CVR 0/2
 WTHR 1 WIND DIR/SPD 25/09 SEA DIR/HT 25/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.70	30.43	20.58	95.9	5.94	6.11	.3	.00	.00	.00	.00
2	22.70	30.43	20.58	95.9	5.94						
3	22.50	30.46	20.66	95.9	5.99						
4	22.42	30.50	20.72	96.0	5.96						
5	22.23	30.57	20.82	96.4	5.91						
6	22.19	30.59	20.85	96.5	5.88						
7	21.81	30.73	21.06	96.4	5.84						
8	20.23	30.88	21.60	96.5	5.85						
9	17.23	30.94	22.36	96.0	5.11						
10	16.20	31.03	22.68	96.0	5.31	6.07	.6	.00	.00	.00	.00
11	15.22	31.11	22.89	95.4	5.35						
12	14.86	31.19	23.09	94.8	5.32						
13	14.82	31.22	23.16	94.5	5.24						
14	14.09	31.29	23.29	94.7	5.96						
15	13.01	31.34	23.40	94.7	5.72						
16	13.02	31.53	23.55	94.5	5.49						
17	13.01	31.59	23.62	94.5	5.27						
18	13.41	31.55	23.67	94.5	5.20						
19	12.41	31.60	23.90	94.4	5.28						
20	11.72	31.67	24.08	94.0	5.31						
21	10.89	31.92	24.47	93.8	5.37						
22	9.60	31.77	24.52	92.9	5.33	4.19	7.5	.23	.00	9.91	.52
23	9.60	31.77	24.52	91.4	5.29						

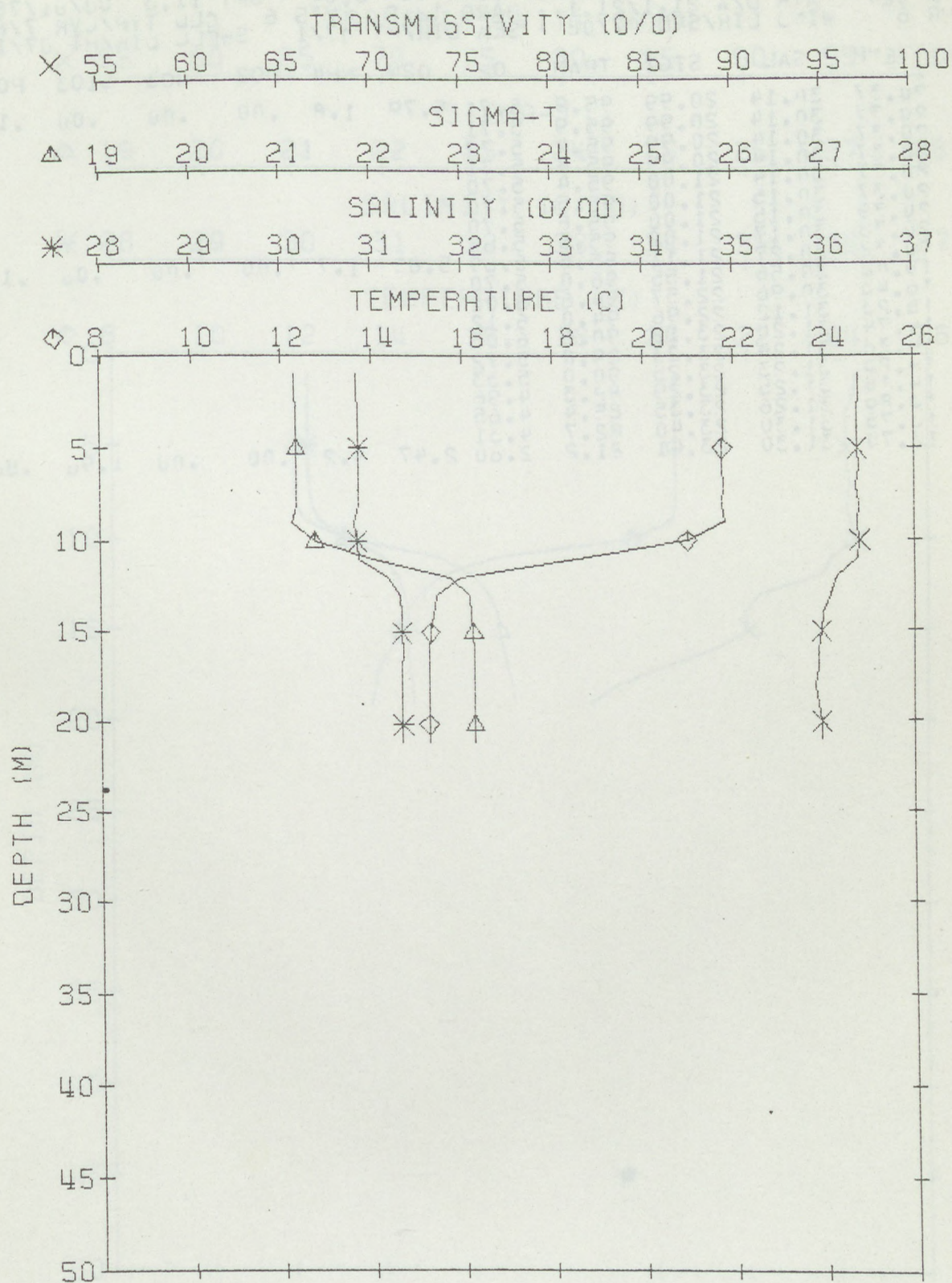
KELEZ CRUISE XWCC-20 STATION 17 08/09/78



XCCC-20 SIA.019 LAT 40 20.3N; LONG 73 37.4W GMT 02.8 08/02/78
 DEPTH 025 AIR D/W 21.1/20.0 BARO 22.0 VTS 6 CLD TYP/CVR 7/8
 WTHR 2 WIND DIR/SPD 08/08 SEA DIR/HT 00/0 SWELL DIR/HT 10/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	04H	N02	N03	S103	P04
1	21.76	30.82	21.14	96.9	5.55	5.67	.7	.00	.00	.00	.00
2	21.76	30.82	21.14	96.9	5.55						
3	21.75	30.84	21.15	96.8	5.57						
4	21.75	30.84	21.16	96.8	5.57						
5	21.73	30.84	21.16	96.8	5.58						
6	21.73	30.84	21.17	96.9	5.58						
7	21.74	30.84	21.16	96.7	5.58						
8	21.73	30.84	21.16	96.9	5.58						
9	21.79	30.80	21.11	96.9	5.58						
10	20.84	30.83	21.37	96.9	5.58	5.69	.5	.00	.00	.00	.00
11	18.52	30.85	22.00	96.8	5.79						
12	15.91	31.16	22.85	95.5	5.96						
13	15.39	31.30	23.06	95.3	5.95						
14	15.70	31.30	23.08	94.9	5.97						
15	15.25	31.31	23.10	94.8	5.81						
16	15.26	31.32	23.11	94.7	5.86						
17	15.21	31.32	23.11	94.6	5.86						
18	15.21	31.31	23.11	94.5	5.48						
19	15.21	31.31	23.11	94.6	5.42						
20	15.21	31.32	23.11	94.8	5.66						
21	15.21	31.32	23.12	94.8	5.63	5.14	2.1	.11	.00	1.04	.22

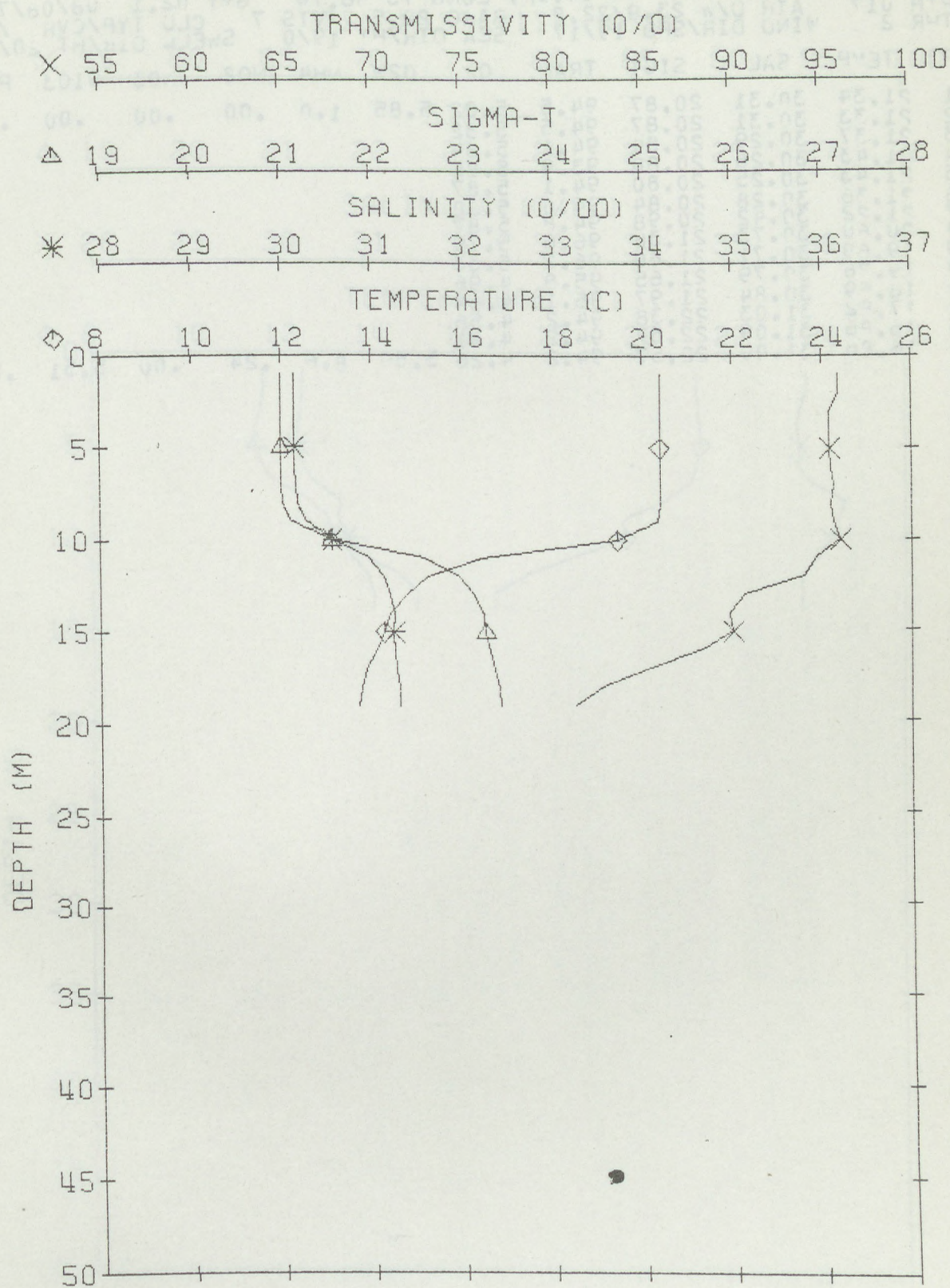
KELEZ CRUISE XWCC-20 STATION 19 08/02/78



X: CC-20 STA. 021 LAT 40 13.5N; LONG 73 56.0W GMT 11.3 08/01/78
 DEPTH 021 AIR D/W 21.1/21.1 BARO 13.2 VTS 6 CLD TYP/CVR 7/8
 WFTHR 6 WIND DIR/SPD 07/08 SEA DIR/HT 07/1 SWELL DIR/HT 07/1

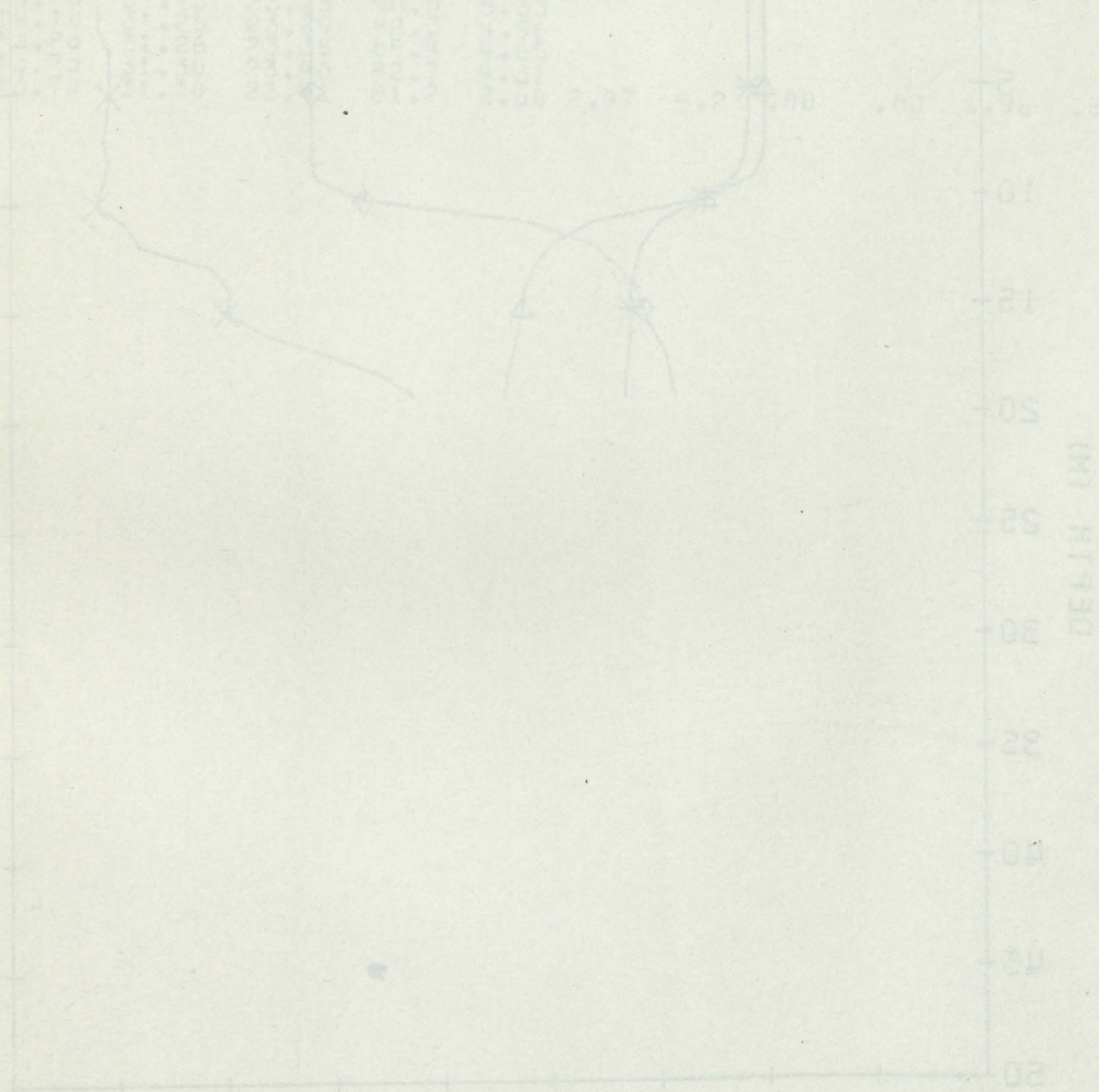
DEP	TEMP	SAL	SIGT	TRAN	OZ	OZW	NH4	N02	N03	SI03	P04
1	20.37	30.14	20.99	95.9	5.71	5.70	1.8	.00	.00	.00	.12
2	20.37	30.14	20.99	95.9	5.71						
3	20.37	30.14	20.99	95.4	5.72						
4	20.37	30.14	20.99	95.4	5.71						
5	20.37	30.14	21.00	95.4	5.70						
6	20.37	30.15	21.00	95.5	5.70						
7	20.37	30.15	21.00	95.5	5.70						
8	20.37	30.17	21.00	95.5	5.69						
9	20.37	30.27	21.11	95.6	5.69	5.83	1.7	.00	.00	.00	.10
10	19.82	30.56	21.55	95.0	5.70						
11	19.82	30.96	22.57	94.0	5.01						
12	15.22	31.12	22.96	94.0	5.12						
13	14.74	31.20	23.12	94.0	5.72						
14	14.74	31.24	23.22	94.0	5.72						
15	14.74	31.23	23.22	94.0	5.65						
16	14.74	31.23	23.22	94.0	4.95						
17	16.70	31.26	23.35	94.4	4.85						
18	16.70	31.30	23.40	92.7	4.61						
19	13.70	31.30	23.41	91.2	2.00	2.47	5.2	.00	.00	1.90	.80

KELEZ CRUISE XWCC-20 STATION 21 08/01/78

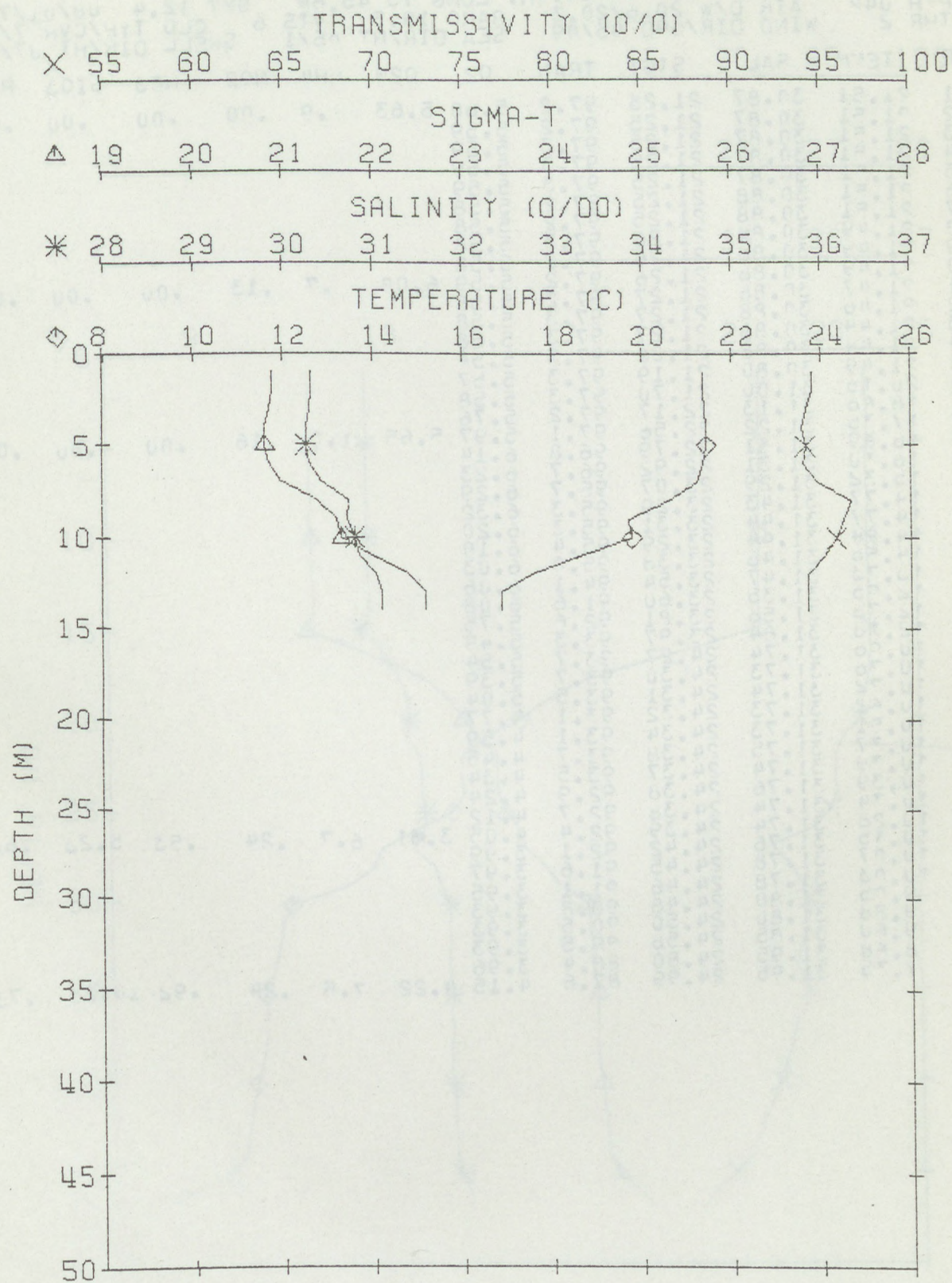


XPCC-20 SIA.021 LAT 40 14.1; LONG 73 56.7W GMT 02.1 08/08/78
 DEPTH 017 AIR D/W 23.9/22.8 BARO 22.5 VIS 7 CLD TYP/CVR /8
 WFTHR 2 WIND DIR/SPD 19/17 SEA DIR/HT 19/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SI03	P04
1	21.34	30.31	20.87	94.5	5.82	5.85	1.0	.00	.00	.00	.11
2	21.33	30.31	20.87	94.5	5.82						
3	21.37	30.29	20.84	94.1	5.84						
4	21.43	30.26	20.80	93.9	5.86						
5	21.43	30.25	20.80	94.1	5.87						
6	21.36	30.28	20.84	94.0	5.88						
7	21.22	30.42	20.98	94.8	5.87						
8	20.60	30.73	21.38	96.6	5.79						
9	19.69	30.71	21.60	96.2	5.33						
10	19.46	30.79	21.65	95.8	4.96						
11	18.59	30.84	21.97	95.1	4.64						
12	17.52	31.03	22.38	94.2	4.56						
13	16.86	31.09	22.57	94.2	4.41						
14	16.80	31.09	22.57	94.2	4.26	3.59	8.6	.24	.00	5.51	.58



KELEZ CRUISE XWCC-20 STATION 21 08/08/78



X-CC-20 SIA.023 LAT 40 14.7N; LONG 73 45.6W GMT 12.4 08/01/78
 DEPTH 042 AIR D/W 20.6/20.3 BARO 19.5 VTS 6 CLD TYP/CVR 7/8
 WETHR 2 WIND DIR/SPD 05/09 SEA DIR/HT 05/1 SWELL DIR/HT 07/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SI03	P04
1	21.51	30.87	21.25	97.2	5.60	5.63	.9	.00	.00	.00	.00
2	21.51	30.87	21.25	97.2	5.60						
3	21.51	30.87	21.25	97.3	5.60						
4	21.51	30.87	21.25	97.3	5.60						
5	21.51	30.87	21.25	97.3	5.60						
6	21.51	30.88	21.25	97.3	5.60						
7	21.51	30.88	21.25	97.2	5.60						
8	21.51	30.88	21.25	97.2	5.60						
9	21.51	30.88	21.26	97.3	5.60						
10	21.51	30.88	21.26	97.2	5.60	6.08	.7	.13	.00	.00	.00
11	21.51	30.88	21.27	97.3	5.60						
12	21.51	30.88	21.27	97.3	5.60						
13	21.51	30.88	21.27	97.3	5.60						
14	21.51	30.88	21.28	97.3	5.60						
15	21.51	30.88	21.19	97.3	5.60						
16	20.10	30.88	21.70	97.3	5.60						
17	18.73	30.88	22.17	97.2	5.60						
18	17.73	30.88	22.56	97.1	5.60	5.65	1.0	.16	.00	.00	.00
19	16.73	30.88	22.70	97.1	5.60						
20	15.73	30.88	22.90	97.1	5.60						
21	14.77	30.88	23.07	97.1	5.60						
22	14.77	30.88	23.09	97.1	5.60						
23	14.77	30.88	23.11	97.1	5.60						
24	14.77	30.88	23.11	97.1	5.60						
25	14.77	30.88	23.11	97.1	5.60						
26	14.77	30.88	23.11	97.1	5.60						
27	14.77	30.88	23.11	97.1	5.60						
28	14.77	30.88	23.11	97.1	5.60						
29	14.77	30.88	23.11	97.1	5.60						
30	14.77	30.88	23.11	97.1	5.60						
31	14.77	30.88	23.11	97.1	5.60						
32	14.77	30.88	23.11	97.1	5.60						
33	14.77	30.88	23.11	97.1	5.60						
34	14.77	30.88	23.11	97.1	5.60						
35	14.77	30.88	23.11	97.1	5.60						
36	14.77	30.88	23.11	97.1	5.60						
37	14.77	30.88	23.11	97.1	5.60						
38	14.77	30.88	23.11	97.1	5.60						
39	14.77	30.88	23.11	97.1	5.60	3.81	6.7	.24	.53	5.23	.60
40	14.77	30.88	23.11	97.1	5.60						
41	14.77	30.88	23.11	97.1	5.60						
42	14.77	30.88	23.11	97.1	5.60						
43	14.77	30.88	23.11	97.1	5.60						
44	14.77	30.88	23.11	97.1	5.60						
45	14.77	30.88	23.11	97.1	5.60						
46	14.77	30.88	23.11	97.1	5.60						
47	14.77	30.88	23.11	97.1	5.60	4.15	4.22	7.5	.24	.92	10.23

KELEZ CRUISE XWCC-20 STATION 23 08/01/78

TRANSMISSIVITY (0/0)

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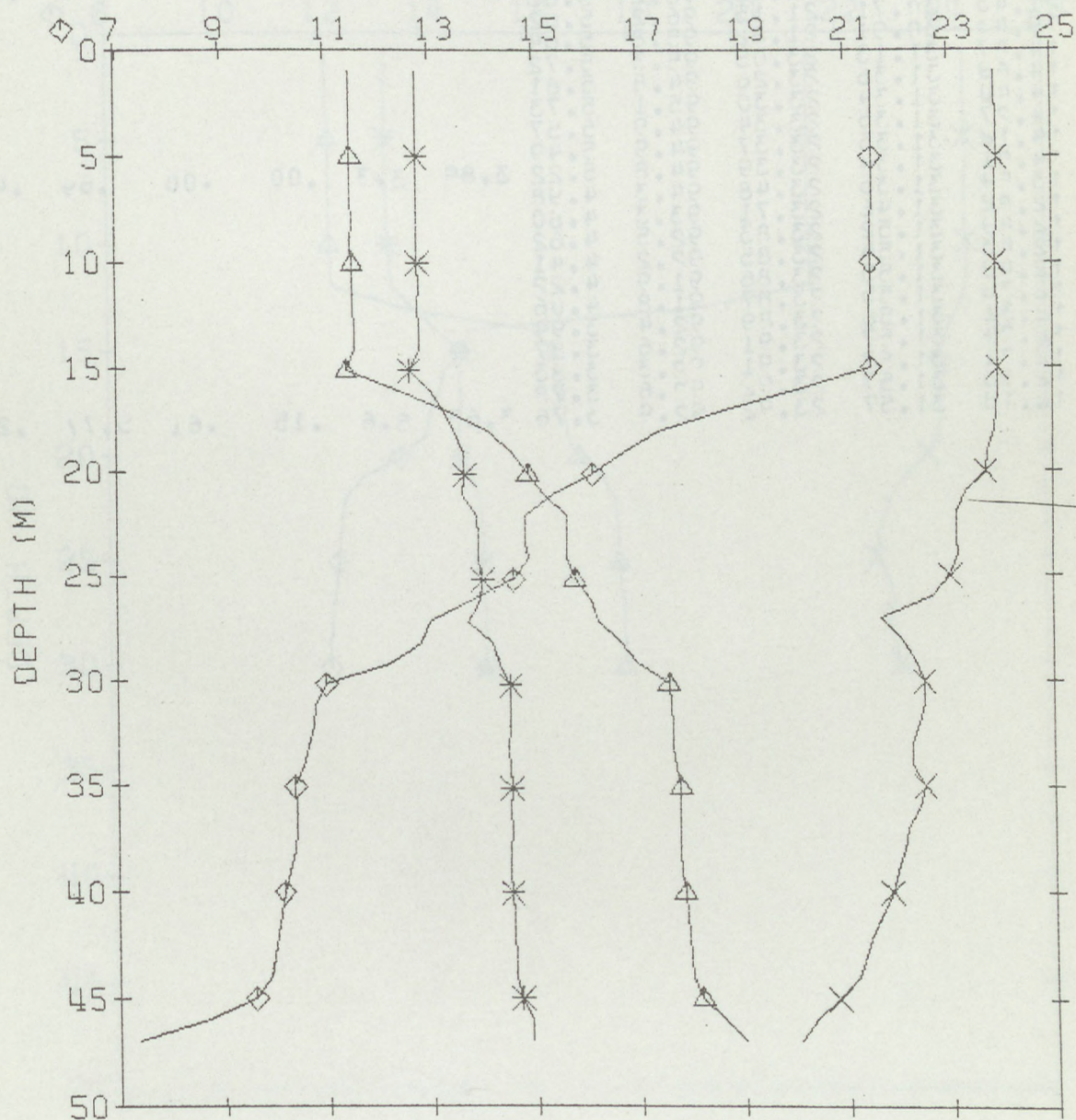
SIGMA-T

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SALINITY (0/00)

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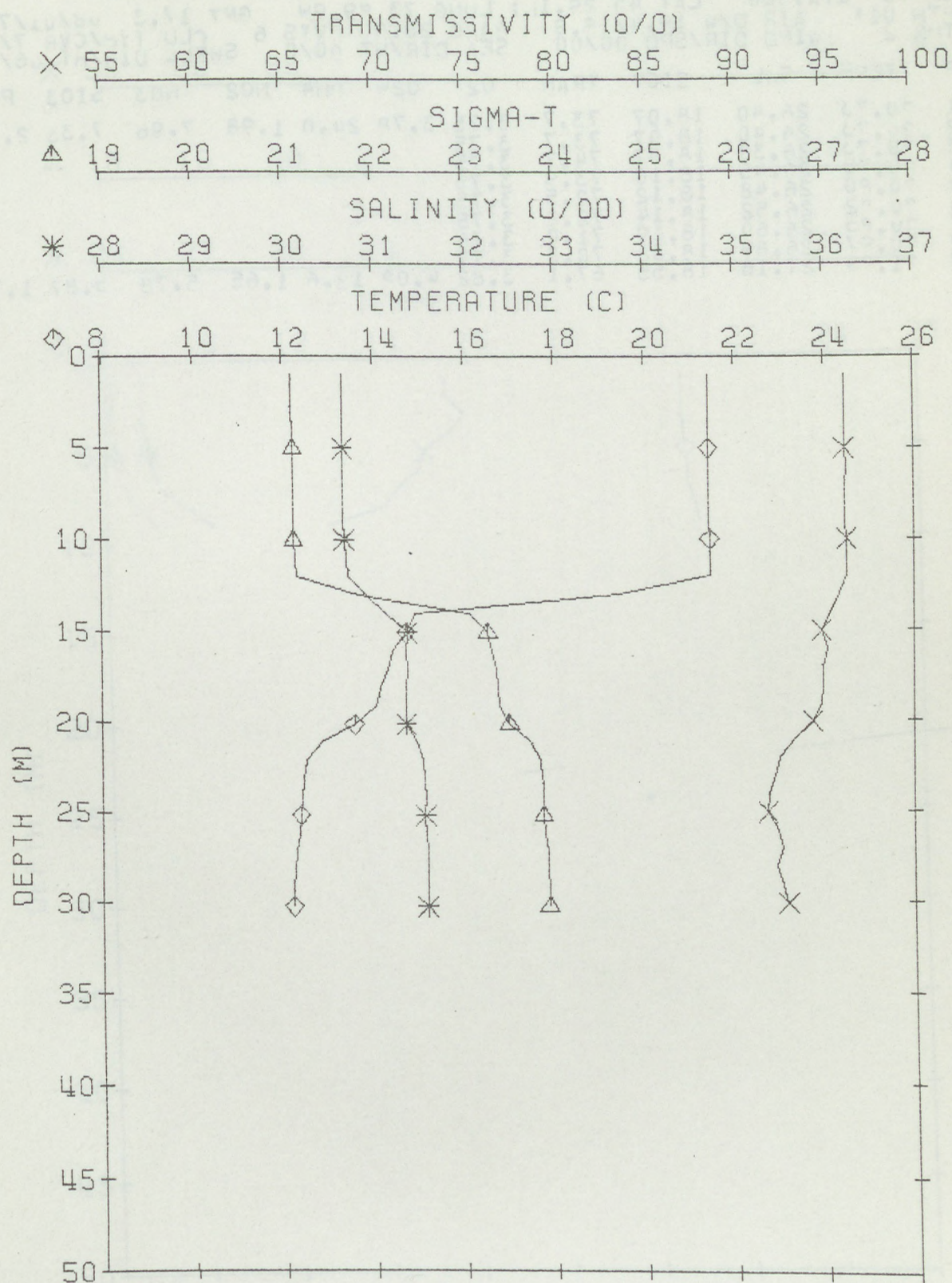
TEMPERATURE (C)



X-CC-20 SIA.025 LAT 40 16.9N; LONG 73 28.3W GMT 05.8 08/02/78
 DEPTH 032 AIR D/W 21.1/20.6 SAKO 22.0 VTS 6 CLD TYP/CVR 7/8
 WETHR 2 WIND DIR/SPD 04/10 SEA DIR/HT 00/0 SWELL DIR/HT 10/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	PO4
1	21.42	30.65	21.11	96.1	5.04	5.66	.3	.00	.00	.00	.11
2	21.42	30.66	21.11	96.1	5.64						
3	21.42	30.66	21.11	96.1	5.63						
4	21.42	30.66	21.11	96.1	5.63						
5	21.42	30.66	21.11	96.1	5.63						
6	21.42	30.66	21.11	96.1	5.63						
7	21.42	30.66	21.11	96.1	5.62						
8	21.42	30.66	21.11	96.1	5.62						
9	21.42	30.67	21.11	96.1	5.63						
10	21.44	30.67	21.11	96.1	5.63	5.83	.5	.00	.00	.00	.00
11	21.46	30.70	21.13	96.2	5.63						
12	21.46	30.71	21.15	96.2	5.62						
13	19.46	30.91	21.82	95.3	5.64						
14	14.07	31.13	23.05	95.3	5.72						
15	14.09	31.36	23.26	94.3	5.81						
16	14.40	31.34	23.30	95.1	5.73						
17	14.27	31.35	23.34	94.3	5.57						
18	14.12	31.35	23.37	94.3	5.49						
19	14.01	31.34	23.39	94.3	5.22	3.80	3.3	.00	.00	.69	.45
20	13.74	31.35	23.48	94.3	4.98						
21	12.82	31.46	23.71	93.3	4.60						
22	12.89	31.52	23.83	92.2	4.62						
23	12.45	31.54	23.85	92.2	4.41						
24	12.00	31.55	23.86	91.1	4.22						
25	12.70	31.55	23.87	91.1	4.06						
26	12.33	31.56	23.89	92.2	3.94						
27	12.34	31.57	23.91	92.2	3.87						
28	12.21	31.57	23.91	92.2	3.83						
29	12.18	31.57	23.92	92.2	3.78						
30	12.18	31.57	23.92	92.2	3.76	3.65	5.6	.15	.61	5.77	.22

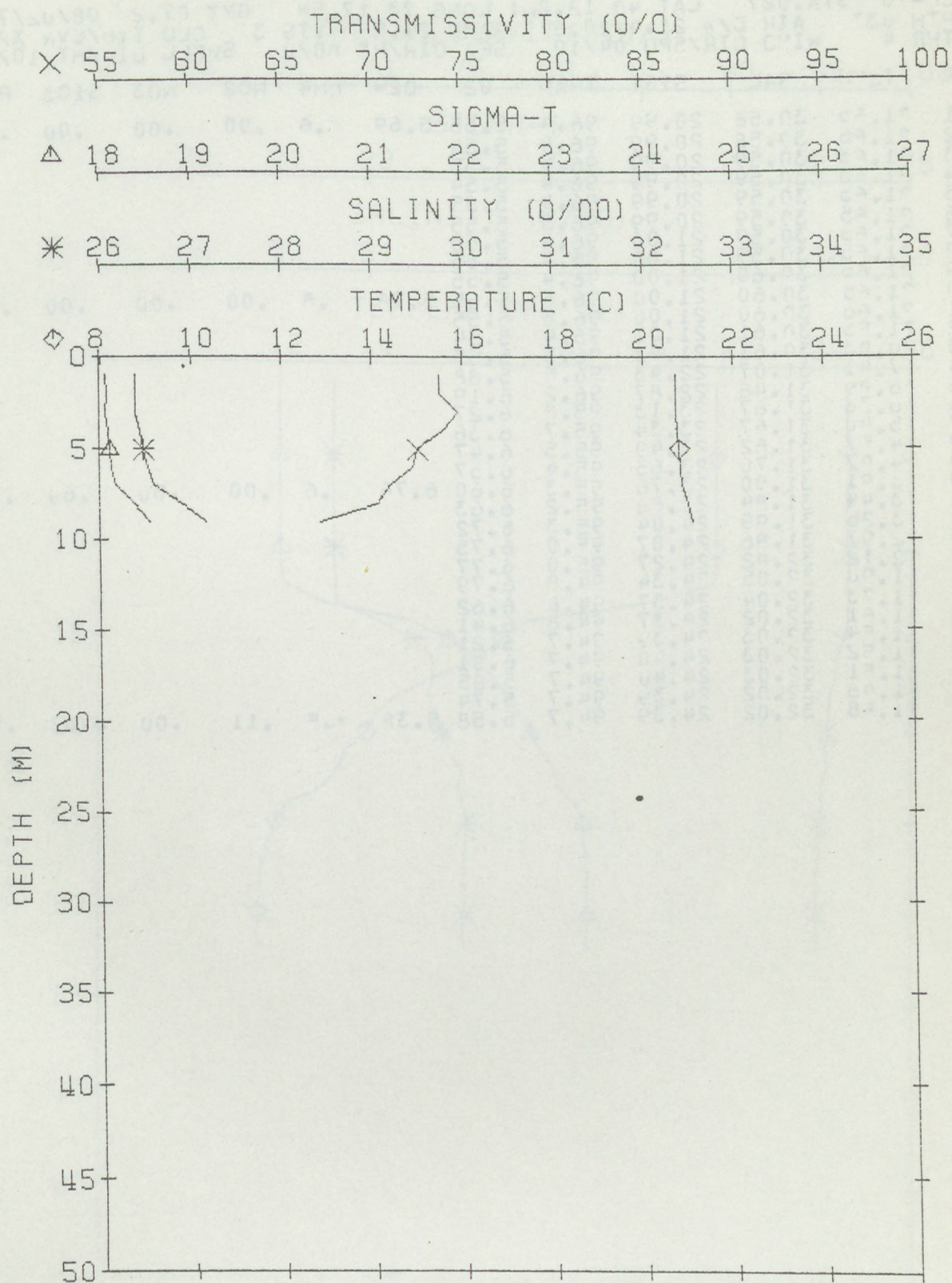
KELEZ CRUISE XWCC-20 STATION 25 08/02/78



XWCC-20 SIA.026 LAT 40 29.1N; LONG 73 59.9W GMT 17.3 08/01/78
 DEPTH 011 AIR D/W 19.4/18.9 BARO 20.0 VTS 6 CLD TYP/CVR 7/8
 WFTUR 2 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 06/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	P04
1	20.73	26.40	18.07	73.7	3.75	3.78	24.0	1.98	7.96	7.35	2.15
2	20.73	26.40	18.07	73.7	3.75						
3	20.73	26.39	18.07	74.7	3.75						
4	20.75	26.45	18.10	73.9	3.75						
5	20.80	26.48	18.12	72.5	3.75						
6	20.82	26.52	18.14	72.2	3.75						
7	20.85	26.60	18.19	71.0	3.76						
8	20.87	26.89	18.38	70.3	3.77						
9	21.09	27.16	18.55	67.1	3.82	4.02	13.6	1.65	5.78	5.87	1.71

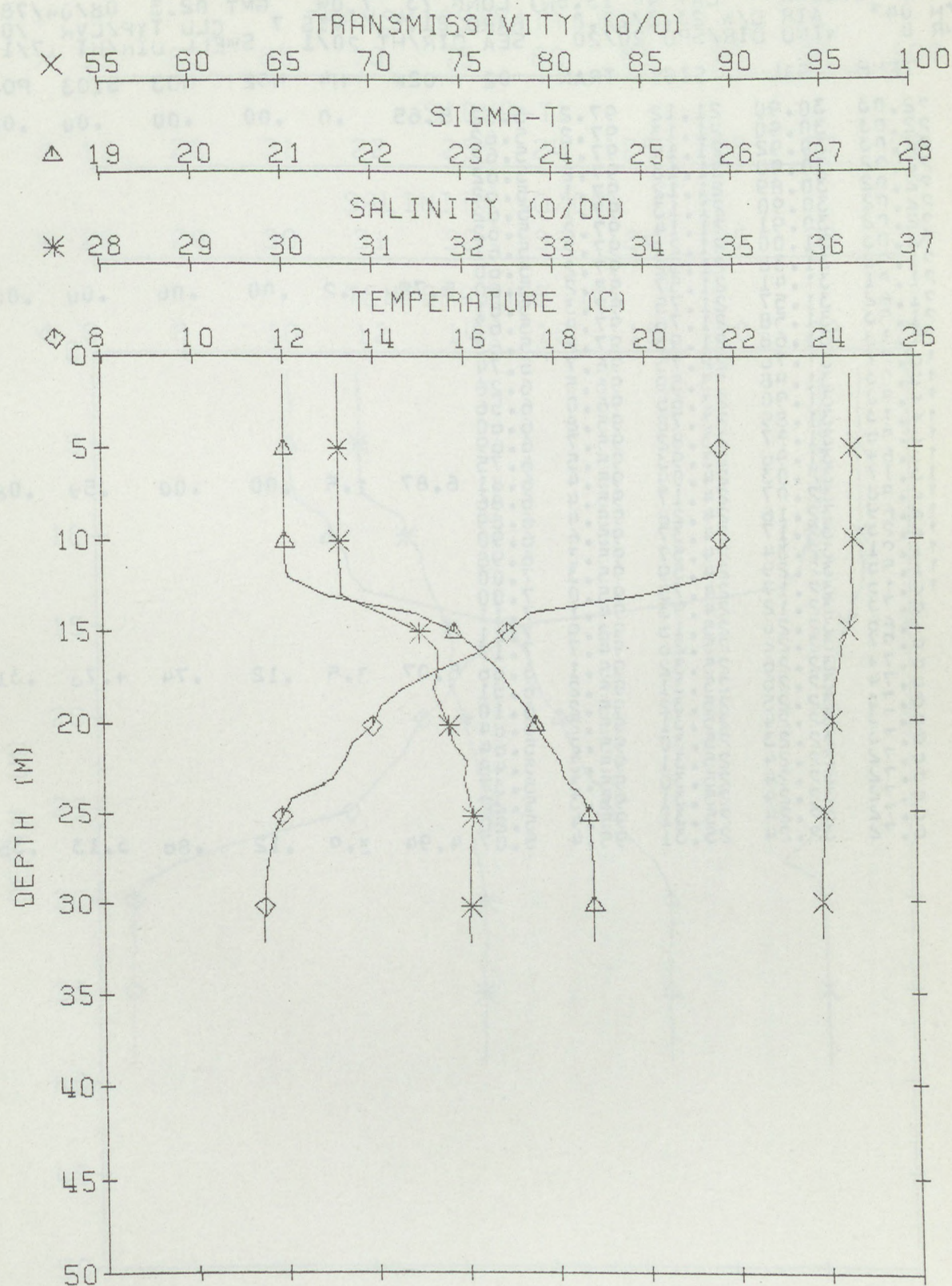
KELEZ CRUISE XWCC-20 STATION 26 08/01/78



XACC-20 SIA.027 LAT 40 18.2N; LONG 73 17.5W GMT 07.2 08/02/78
 DEPTH 037 AIR D/W 21.4/20.6 BARO 21.5 VIS 3 CLD TYP/CVR X/8
 WETHR 4 WIND DIR/SPD 04/10 SEA DIR/HT 00/0 SWELL DIR/HT 10/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	21.65	30.58	20.99	96.4	5.55	5.69	.6	.00	.00	.00	.00
2	21.65	30.58	20.99	96.4	5.54						
3	21.65	30.59	20.99	96.4	5.55						
4	21.65	30.59	20.99	96.4	5.54						
5	21.65	30.59	20.99	96.4	5.55						
6	21.65	30.59	20.99	96.4	5.55						
7	21.65	30.59	21.00	96.4	5.55						
8	21.65	30.59	21.00	96.4	5.55						
9	21.65	30.60	21.00	96.4	5.55						
10	21.65	30.60	21.00	96.4	5.55	5.78	.5	.00	.00	.00	.00
11	21.66	30.60	21.00	96.4	5.55						
12	21.66	30.61	21.03	96.4	5.54						
13	20.66	30.61	21.43	96.4	5.55						
14	17.61	31.07	22.43	96.4	5.55						
15	16.69	31.48	22.87	96.4	5.55						
16	16.69	31.67	23.13	96.4	5.55						
17	15.69	31.67	23.34	96.4	5.55						
18	14.67	31.62	23.49	96.4	5.55						
19	14.67	31.70	23.53	96.4	5.55						
20	13.61	31.80	23.76	96.4	5.55	6.76	.6	.00	.00	.69	.00
21	13.64	31.84	23.88	96.4	5.55						
22	13.26	31.89	24.04	96.4	5.55						
23	12.97	31.96	24.07	96.4	5.55						
24	12.12	32.02	24.27	96.4	5.55						
25	11.00	32.05	24.34	96.4	5.55						
26	11.73	32.04	24.37	96.4	5.55						
27	11.61	32.02	24.37	96.4	5.55						
28	11.64	32.03	24.39	96.4	5.55						
29	11.62	32.03	24.40	96.4	5.55						
30	11.61	32.03	24.40	96.4	5.55						
31	11.48	32.02	24.39	96.4	5.55						
32	11.48	32.02	24.39	96.4	5.58	5.32	2.5	.11	.00	0.37	.91

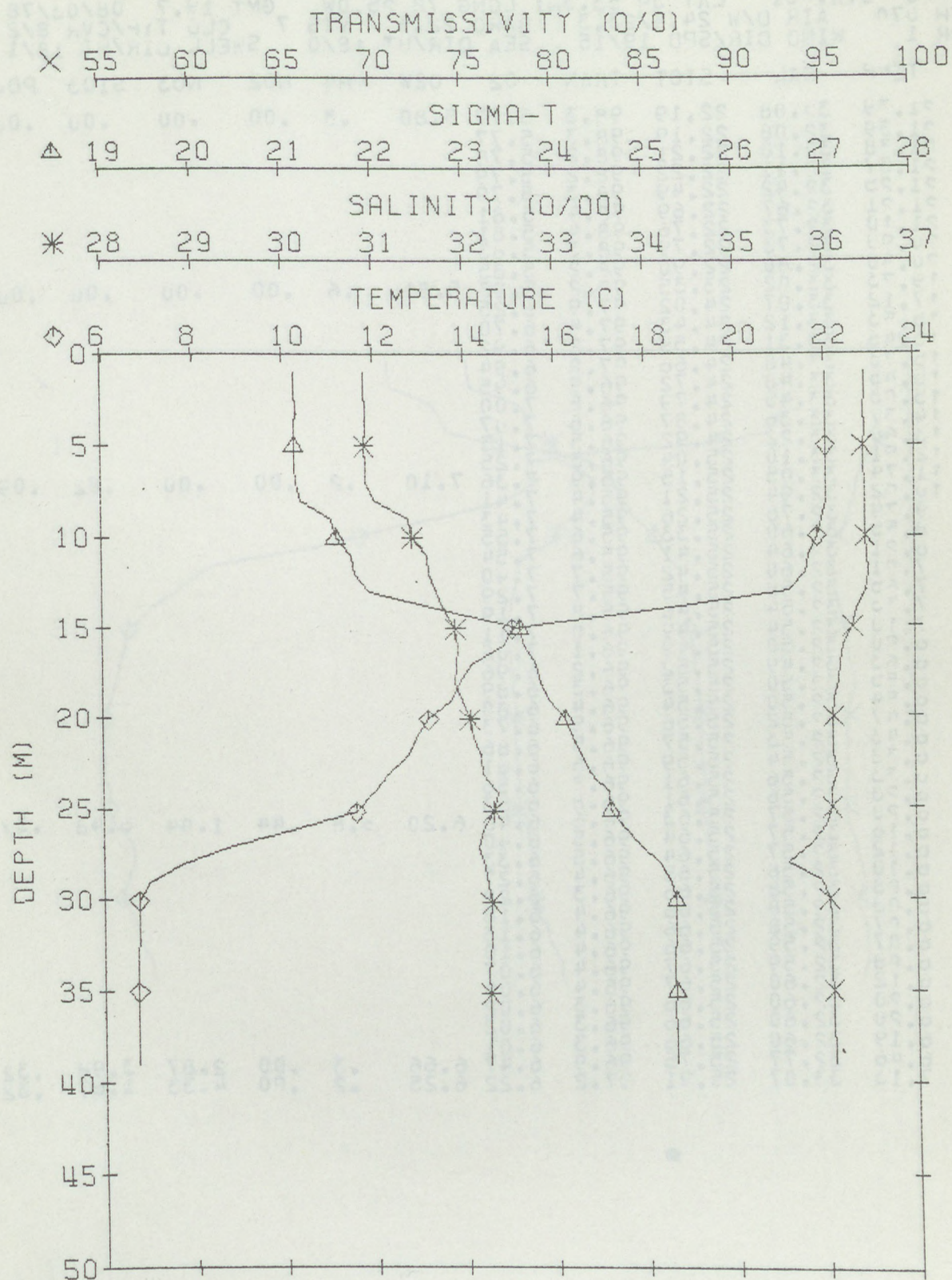
KELEZ CRUISE XWCC-20 STATION 27 08/02/78



XWCC-20 STA.029 LAT 40 13.5N; LONG 73 7.0W GMT 02.3 08/04/78
 DEPTH 047 AIR D/W 23.3/22.8 BARO 21.5 VIS 7 CLD TYP/CVR /0
 WETHR 0 WIND DIR/SPD 20/20 SEA DIR/HT 20/1 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	22.03	30.90	21.12	97.2	5.62	5.65	.0	.00	.00	.00	.00
2	22.03	30.90	21.13	97.2	5.62						
3	22.03	30.92	21.14	97.1	5.62						
4	22.02	30.90	21.13	97.2	5.62						
5	22.02	30.89	21.12	97.1	5.62						
6	22.02	30.90	21.13	97.1	5.62						
7	22.02	30.91	21.14	97.2	5.62						
8	22.03	31.00	21.21	97.2	5.61						
9	21.92	31.38	21.52	97.2	5.60						
10	21.91	31.41	21.57	97.2	5.60	5.79	.2	.00	.00	.00	.00
11	21.62	31.57	21.75	97.3	5.61						
12	21.53	31.58	21.78	97.4	5.63						
13	21.16	31.68	21.95	97.2	5.63						
14	19.27	31.76	22.75	96.7	5.74						
15	19.23	31.86	23.59	96.5	6.26						
16	14.90	31.90	23.65	96.0	6.56						
17	14.13	31.89	23.78	95.8	6.60						
18	13.64	31.87	23.82	95.7	6.69						
19	13.64	31.96	23.93	95.5	6.75						
20	13.17	32.03	24.09	95.4	6.81	6.87	1.5	.00	.00	.59	.08
21	12.88	32.07	24.17	95.4	6.86						
22	12.69	32.16	24.28	95.4	6.89						
23	12.23	32.17	24.37	95.6	6.90						
24	11.23	32.34	24.57	95.4	6.98						
25	11.53	32.29	24.59	95.3	7.00						
26	8.73	32.17	24.75	95.0	7.00						
27	8.73	32.12	24.93	94.1	7.11						
28	7.66	32.20	25.15	94.9	7.21						
29	6.27	32.22	25.26	94.7	7.13						
30	6.74	32.26	25.32	95.1	6.66	5.07	3.5	.12	.74	4.76	.31
31	6.74	32.25	25.31	95.2	6.51						
32	6.73	32.25	25.32	95.0	6.10						
33	6.73	32.24	25.31	95.2	6.64						
34	6.72	32.23	25.30	95.2	6.64						
35	6.72	32.24	25.31	95.3	6.48						
36	6.72	32.24	25.30	95.3	6.37						
37	6.72	32.24	25.31	95.4	6.20						
38	6.72	32.24	25.31	95.4	6.07	4.94	3.9	.12	.86	5.13	.35

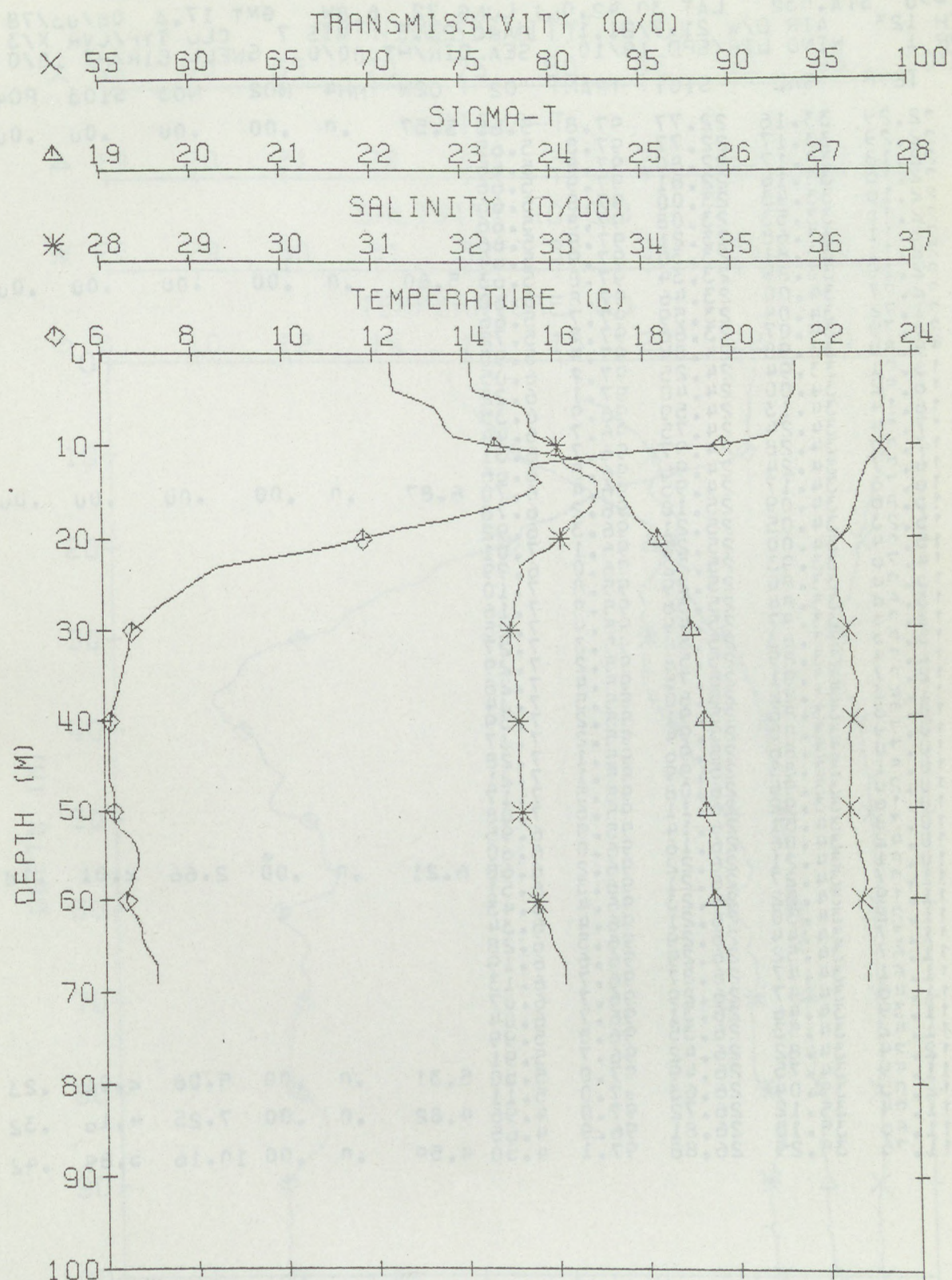
KELEZ CRUISE XWCC-20 STATION 28 08/04/78



XWCC-20 STA. 031 LAT 39 53.3N; LONG 72 25.0W GMT 19.7 08/05/78
 DEPTH 070 AIR D/W 24.4/23.3 BARO 22.5 VIS 7 CLD TYP/CVR 8/2
 WETDR 1 WIND DIR/SPD 19/15 SEA DIR/HT 18/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SIG3	P04
1	21.39	32.08	22.19	98.3	5.77	5.80	.3	.00	.00	.00	.00
2	21.39	32.08	22.19	98.3	5.77						
3	21.38	32.10	22.21	98.2	5.78						
4	21.37	32.11	22.22	98.2	5.79						
5	21.25	32.42	22.49	98.3	5.79						
6	21.21	32.67	22.69	98.4	5.81						
7	21.10	32.73	22.76	98.4	5.81						
8	20.00	32.73	22.79	98.3	5.83						
9	20.00	32.80	22.90	98.2	5.85						
10	19.73	33.02	23.35	98.2	5.93	5.81	.6	.00	.00	.00	.00
11	17.12	33.07	24.02	97.9	6.25						
12	15.33	33.12	24.43	97.4	6.70						
13	15.45	33.31	24.59	97.2	6.92						
14	15.73	33.48	24.68	97.0	6.94						
15	15.45	33.48	24.72	96.9	6.95						
16	15.33	33.45	24.79	96.8	7.00						
17	14.77	33.36	24.87	96.6	7.07						
18	13.80	33.22	24.92	96.5	7.13						
19	12.11	33.10	25.04	96.3	7.25						
20	11.74	33.05	25.15	96.3	7.36	7.10	.2	.00	.00	.82	.09
21	9.99	33.04	25.21	96.4	7.41						
22	8.73	33.76	25.26	96.4	7.43						
23	8.55	33.60	25.33	96.6	7.55						
24	8.21	33.64	25.41	96.6	7.54						
25	7.11	33.60	25.42	96.7	7.40						
26	7.63	33.58	25.45	96.7	7.29						
27	7.33	33.54	25.46	96.8	7.19						
28	7.10	33.54	25.46	96.8	7.11						
29	6.00	33.50	25.49	96.8	7.02						
30	6.00	33.49	25.50	96.8	6.96						
31	6.00	33.50	25.50	96.8	6.99						
32	6.00	33.50	25.50	96.8	6.90						
33	6.00	33.52	25.56	96.8	6.73						
34	6.00	33.53	25.57	96.8	6.66						
35	6.00	33.54	25.59	96.8	6.61						
36	6.00	33.56	25.61	96.8	6.56						
37	6.00	33.56	25.61	96.8	6.53						
38	6.00	33.57	25.63	96.8	6.46	6.20	.8	.44	1.04	0.48	.37
39	6.00	33.57	25.64	96.8	6.40						
40	6.00	33.57	25.64	96.8	6.33						
41	6.00	33.58	25.65	96.8	6.27						
42	6.00	33.58	25.66	96.8	6.22						
43	6.00	33.58	25.66	96.8	6.18						
44	6.00	33.58	25.66	96.8	6.13						
45	6.00	33.59	25.66	96.8	6.10						
46	6.00	33.59	25.67	96.8	6.07						
47	6.00	33.60	25.67	96.8	6.04						
48	6.00	33.60	25.66	96.8	6.02						
49	6.00	33.60	25.66	96.8	6.02						
50	6.19	33.60	25.66	96.8	6.01						
51	6.46	33.77	25.75	96.9	6.47	6.66	.3	.00	2.87	3.98	.32
52	7.13	33.07	25.91	97.2	6.22	6.25	.2	.00	4.33	1.67	.32

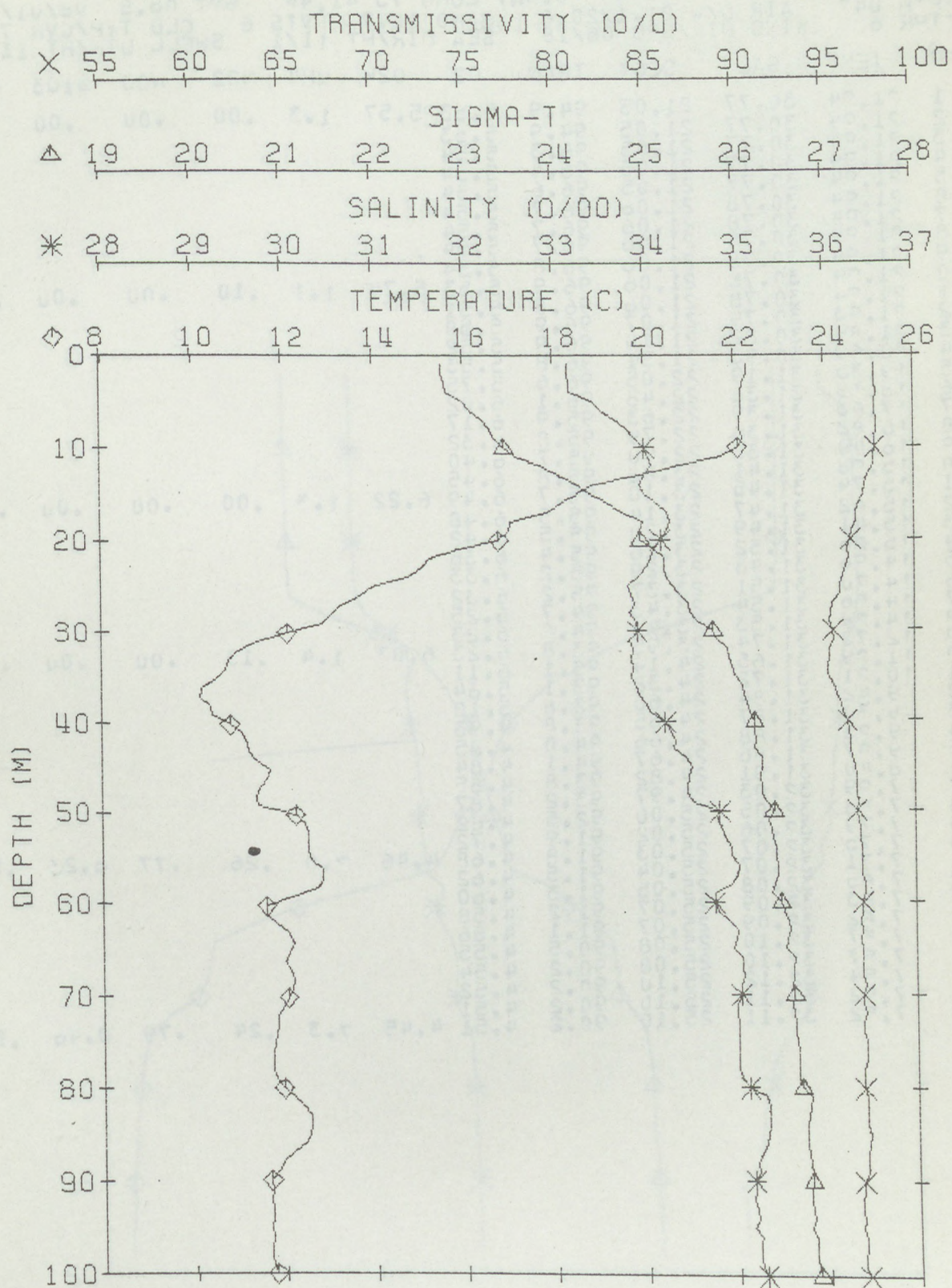
KELEZ CRUISE XWCC-20 STATION 31 08/03/78



XWCC-20 SIA.032 LAT 39 42.0N; LONG 72 6.8W GMT 17.3 08/03/78
 DEPTH 123 AIR D/W 21.7/21.1 BARO 23.5 VIS 7 CLU TYP/CVR X/3
 WETHR 1 WIND DIR/SPD 19/10 SEA DIR/HT 90/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SiO3	PO4
1	22.29	33.16	22.77	97.8	5.65	5.57	.0	.00	.00	.00	.00
2	22.29	33.17	22.77	97.8	5.65						
3	22.18	33.17	22.80	97.8	5.66						
4	22.16	33.18	22.81	97.9	5.66						
5	22.16	33.43	23.00	97.8	5.66						
6	22.15	33.53	23.08	97.8	5.66						
7	22.11	33.68	23.21	97.9	5.66						
8	22.11	33.81	23.30	97.9	5.64						
9	22.19	33.89	23.34	97.8	5.63	5.80	.0	.00	.00	.00	.00
10	22.07	34.00	23.46	97.8	5.60						
11	21.72	34.04	23.59	97.7	5.66						
12	20.79	34.07	23.86	97.7	5.72						
13	19.88	33.98	24.04	97.4	5.90						
14	18.51	33.94	24.25	97.2	6.05						
15	18.22	34.00	24.40	97.1	6.22						
16	18.14	34.13	24.59	96.9	6.35						
17	17.34	34.24	24.75	96.7	6.44						
18	17.03	34.28	24.97	96.7	6.51						
19	16.77	34.24	24.96	96.5	6.66						
20	16.06	34.17	24.95	96.4	6.70	6.87	.0	.00	.00	.00	.00
21	15.86	34.09	25.10	96.2	6.78						
22	15.23	34.05	25.21	96.3	6.92						
23	14.44	34.00	25.21	96.1	7.01						
24	14.06	33.93	25.22	96.0	6.99						
25	13.06	33.80	25.29	95.9	7.10						
26	13.08	33.84	25.38	95.8	7.16						
27	13.03	33.97	25.49	95.4	7.25						
28	13.03	33.83	25.50	95.3	7.27						
29	12.44	33.89	25.56	95.2	7.29						
30	12.07	33.91	25.75	95.4	7.28						
31	11.08	33.82	25.80	95.5	7.34						
32	10.08	33.86	25.91	95.2	7.39						
33	10.79	33.85	25.94	95.2	7.37						
34	10.70	33.86	25.96	95.1	7.28						
35	10.51	33.85	25.99	95.1	7.21						
36	10.20	33.90	26.08	95.5	7.17						
37	10.08	33.92	26.11	95.6	7.08						
38	10.38	34.01	26.14	95.9	6.95						
39	10.42	34.06	26.16	96.0	6.80						
40	10.91	34.21	26.22	96.2	6.68	6.21	.0	.00	2.66	2.01	.18
41	11.07	34.27	26.21	96.3	6.51						
42	11.19	34.32	26.23	96.4	6.43						
43	11.22	34.30	26.21	96.4	6.34						
44	11.77	34.44	26.29	96.5	6.28						
45	11.67	34.52	26.29	96.6	6.19						
46	11.61	34.47	26.27	96.7	6.13						
47	11.46	34.47	26.29	96.7	6.07						
48	11.39	34.46	26.31	96.7	6.04						
49	11.42	34.53	26.35	96.8	5.99						
50	12.24	34.82	26.42	96.7	5.91						
60	11.59	34.75	26.49	97.0	5.50	5.31	.0	.00	5.06	2.01	.23
70	11.05	35.04	26.63	97.0	5.11						
80	11.04	35.12	26.72	97.0	4.96	4.82	.0	.00	7.25	4.16	.32
90	11.60	35.18	26.81	96.9	4.65						
100	11.76	35.29	26.88	97.1	4.50	4.59	.0	.00	10.16	5.89	.42

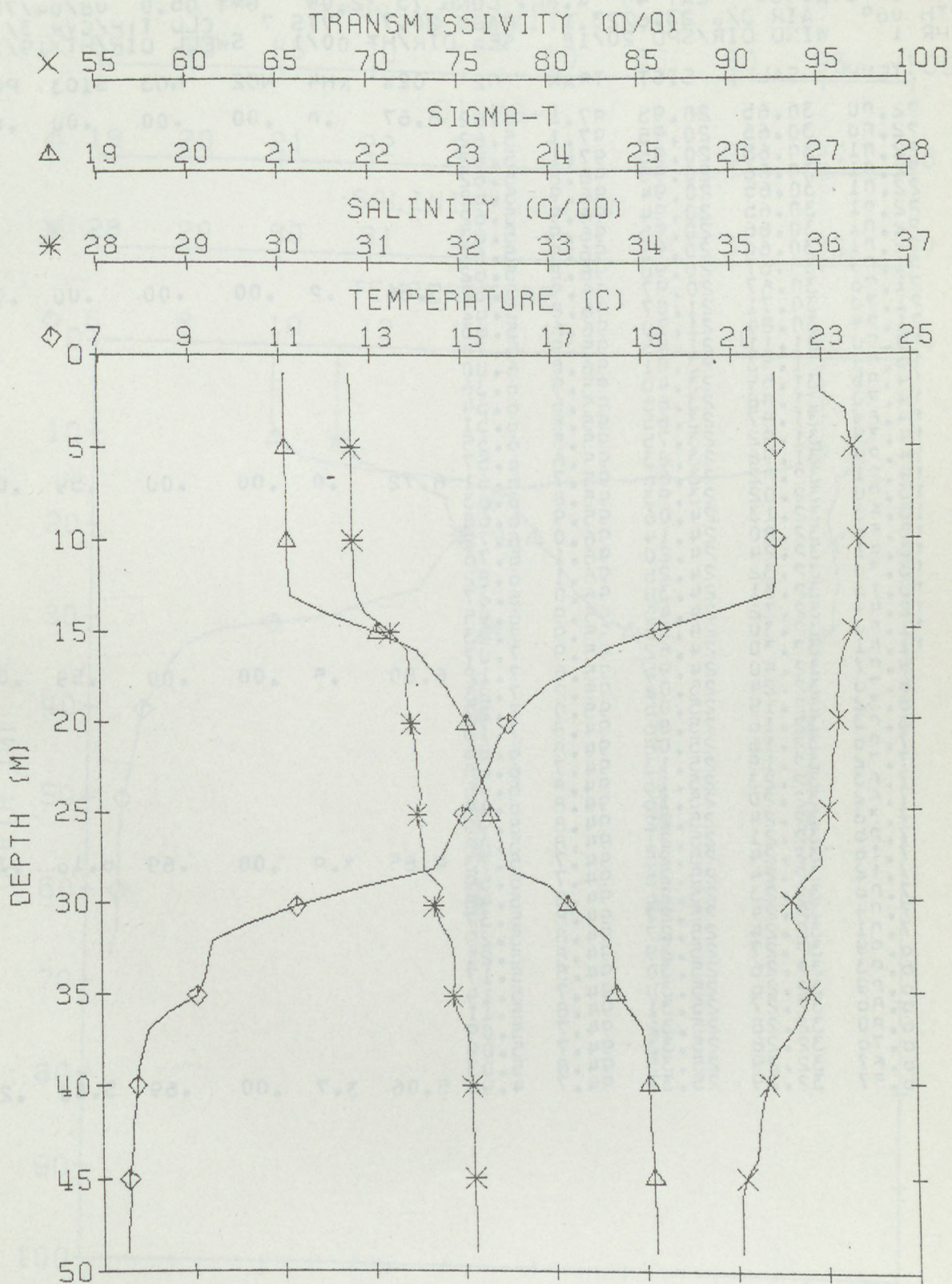
KELEZ CRUISE XWCC-20 STATION 32 08/03/78



XPCO-20 SIA.033 LAT 40 9.9N; LONG 73 41.4W GMT 08.5 08/01/78
 DEPTH 047 AIR D/W 21.1/20.6 BARO 16.7 VIS 6 CLO TYP/CVR 7/8
 WET 4R 6 WIND DIR/SPD 06/18 SEA DIR/HT 11/1 SWELL DIR/HT 11/2

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	21.94	30.77	21.05	94.9	5.53	5.57	1.3	.00	.00	.00	.00
2	21.94	30.77	21.05	94.9	5.53						
3	21.94	30.77	21.05	96.3	5.54						
4	21.94	30.77	21.05	96.4	5.54						
5	21.94	30.77	21.05	96.6	5.54						
6	21.94	30.78	21.06	96.7	5.54						
7	21.94	30.78	21.06	96.7	5.54						
8	21.94	30.78	21.06	96.7	5.54						
9	21.94	30.78	21.06	96.7	5.54						
10	21.94	30.78	21.06	96.7	5.54						
11	21.94	30.78	21.06	96.7	5.53	5.74	1.1	.10	.00	.00	.00
12	21.94	30.78	21.06	96.7	5.51						
13	21.94	30.79	21.07	96.7	5.50						
14	20.99	30.82	21.10	96.7	5.50						
15	19.33	30.93	21.51	96.7	5.52						
16	16.33	31.19	22.05	96.7	5.52						
17	17.33	31.36	22.48	96.7	5.52						
18	16.33	31.36	22.63	96.7	5.52						
19	16.33	31.36	22.79	96.7	5.52						
20	16.33	31.36	22.90	96.7	5.52						
21	15.74	31.41	23.02	96.7	5.52						
22	15.32	31.47	23.14	96.7	5.52	6.22	1.3	.00	.00	.00	.00
23	15.32	31.49	23.20	96.7	5.52						
24	15.32	31.52	23.26	96.7	5.52						
25	14.80	31.58	23.33	96.7	5.52						
26	14.70	31.51	23.37	96.7	5.52						
27	14.70	31.54	23.43	96.7	5.52						
28	14.70	31.53	23.46	96.7	5.52						
29	14.70	31.53	23.46	96.7	5.52						
30	14.70	31.53	23.46	96.7	5.52						
31	14.70	31.53	23.46	96.7	5.52	6.03	1.4	.13	.00	.00	.00
32	14.70	31.53	23.46	96.7	5.52						
33	14.70	31.53	23.46	96.7	5.52						
34	14.70	31.53	23.46	96.7	5.52						
35	14.70	31.53	23.46	96.7	5.52						
36	14.70	31.53	23.46	96.7	5.52						
37	14.70	31.53	23.46	96.7	5.52						
38	14.70	31.53	23.46	96.7	5.52						
39	14.70	31.53	23.46	96.7	5.52						
40	14.70	31.53	23.46	96.7	5.52						
41	14.70	31.53	23.46	96.7	5.52	4.46	7.0	.26	.77	8.23	.50
42	14.70	31.53	23.46	96.7	5.52						
43	14.70	31.53	23.46	96.7	5.52						
44	14.70	31.53	23.46	96.7	5.52						
45	14.70	31.53	23.46	96.7	5.52						
46	14.70	31.53	23.46	96.7	5.52						
47	14.70	31.53	23.46	96.7	5.52						
48	14.70	31.53	23.46	96.7	5.52						
49	14.70	31.53	23.46	96.7	5.52						
50	14.70	31.53	23.46	96.7	5.52	4.45	7.3	.24	.79	8.40	.50

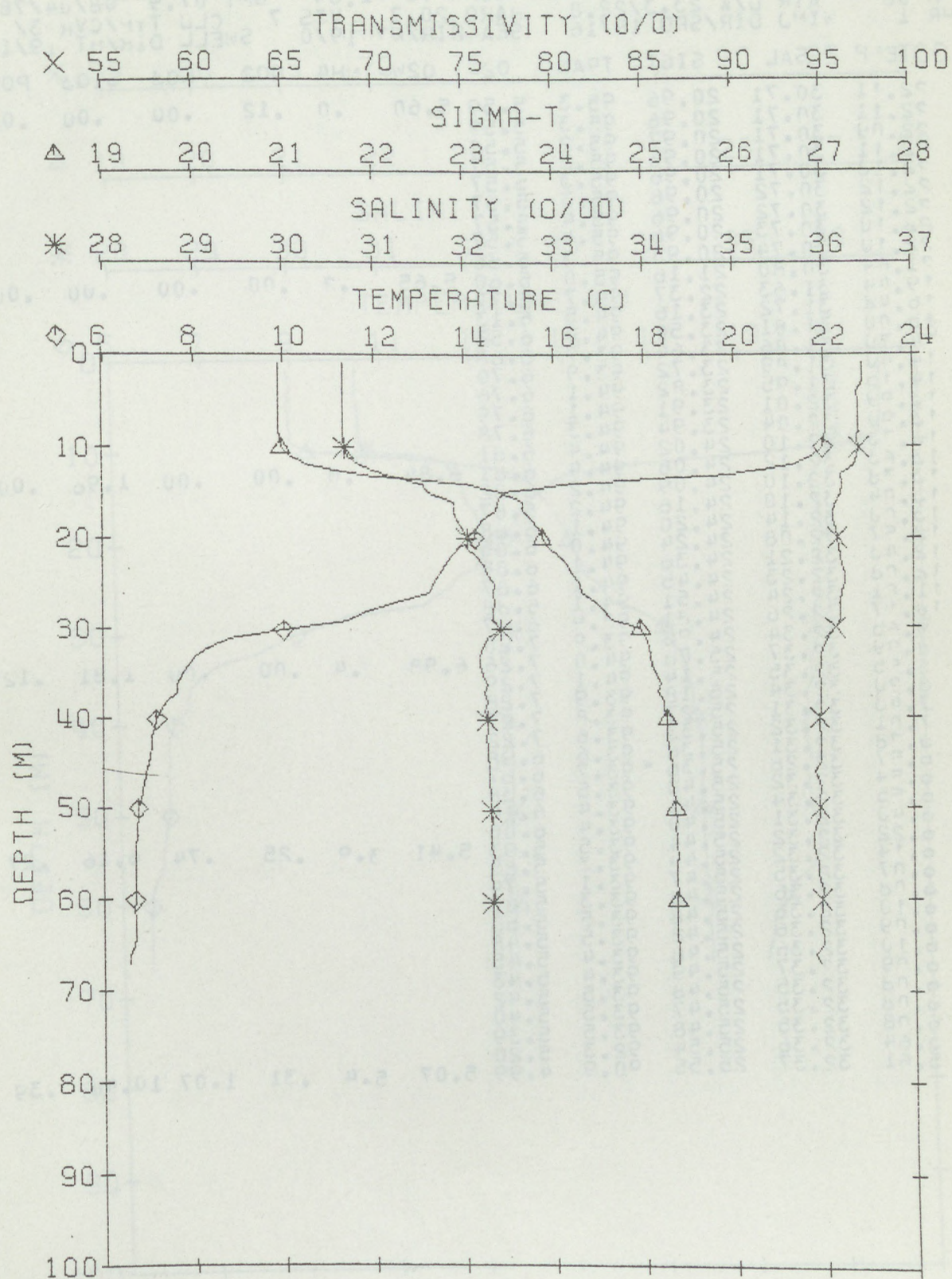
KELEZ CRUISE XWCC-20 STATION 33 08/01/78



XWCC-20 SIA.034 LAT 40 4.8N; LONG 73 32.0W GMT 05.0 08/04/78
 DEPTH 069 AIR D/W 23.6/23.1 BARO 20.7 VTS 7 CLD TYP/CVR 3/
 WETHR 1 WIND DIR/SPD 20/18 SEA DIR/HT 00/1 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	22.00	30.65	20.95	97.1	5.62	5.67	.0	.00	.00	.00	.00
2	22.00	30.65	20.95	97.1	5.62						
3	22.01	30.65	20.95	97.1	5.62						
4	22.01	30.66	20.95	96.8	5.62						
5	22.01	30.65	20.94	96.9	5.62						
6	22.01	30.65	20.94	96.9	5.62						
7	22.01	30.66	20.95	96.9	5.63						
8	22.01	30.66	20.95	96.9	5.62						
9	21.00	30.67	20.96	96.8	5.62						
10	21.00	30.67	20.97	96.8	5.62	5.66	.2	.00	.00	.00	.00
11	21.03	30.71	21.07	96.8	5.62						
12	21.04	30.84	21.30	96.8	5.63						
13	19.00	31.11	21.85	96.9	5.74						
14	16.00	31.53	23.01	96.9	5.00						
15	14.00	31.55	23.40	96.9	5.00						
16	14.00	31.86	23.65	96.9	5.04						
17	14.00	31.87	23.65	96.9	5.11						
18	14.00	31.92	23.75	96.9	5.55						
19	14.00	31.98	23.83	96.9	5.57						
20	14.00	32.02	23.86	96.7	5.61	6.72	.0	.00	.00	.59	.00
21	13.00	32.02	23.86	96.8	5.63						
22	13.00	32.13	24.06	96.8	5.68						
23	13.00	32.20	24.14	96.0	5.72						
24	13.00	32.24	24.20	96.1	5.76						
25	13.00	32.32	24.28	96.1	5.82						
26	13.00	32.31	24.30	96.0	5.87						
27	12.00	32.32	24.45	96.0	5.95						
28	11.00	32.30	24.55	96.0	7.03						
29	11.00	32.40	24.95	96.0	7.07						
30	9.00	32.40	25.05	96.0	7.12	6.80	.5	.00	.00	.59	.00
31	8.00	32.40	25.02	96.0	7.23						
32	8.00	32.19	25.05	96.0	7.27						
33	8.00	32.16	25.06	94.3	7.15						
34	7.00	32.16	25.08	94.3	6.86						
35	7.00	32.19	25.13	94.7	6.83						
36	7.00	32.23	25.18	94.3	6.46						
37	7.00	32.20	25.16	94.3	6.14						
38	7.00	32.24	25.22	94.3	5.99						
39	7.00	32.21	25.21	94.3	5.93						
40	7.00	32.24	25.25	94.7	5.73	4.85	3.0	.00	.69	0.16	.31
41	7.00	32.24	25.25	94.7	5.99						
42	7.00	32.23	25.26	94.3	5.43						
43	7.00	32.24	25.27	94.3	5.37						
44	7.00	32.24	25.27	94.3	5.29						
45	6.00	32.27	25.29	94.3	5.21						
46	6.00	32.26	25.30	94.5	5.17						
47	6.00	32.26	25.30	94.7	5.14						
48	6.00	32.27	25.31	94.3	5.11						
49	6.00	32.28	25.32	94.7	5.09						
50	6.00	32.28	25.33	94.3	5.09						
51	6.00	32.29	25.34	94.3	5.03						
52	6.00	32.29	25.34	94.3	5.03						
53	6.00	32.29	25.34	94.3	5.03						
54	6.00	32.29	25.34	94.3	5.03						
55	6.00	32.29	25.34	94.3	5.03						
56	6.00	32.29	25.34	94.3	5.03						
57	6.00	32.29	25.34	94.3	5.03	5.06	3.7	.00	.69	5.80	.27

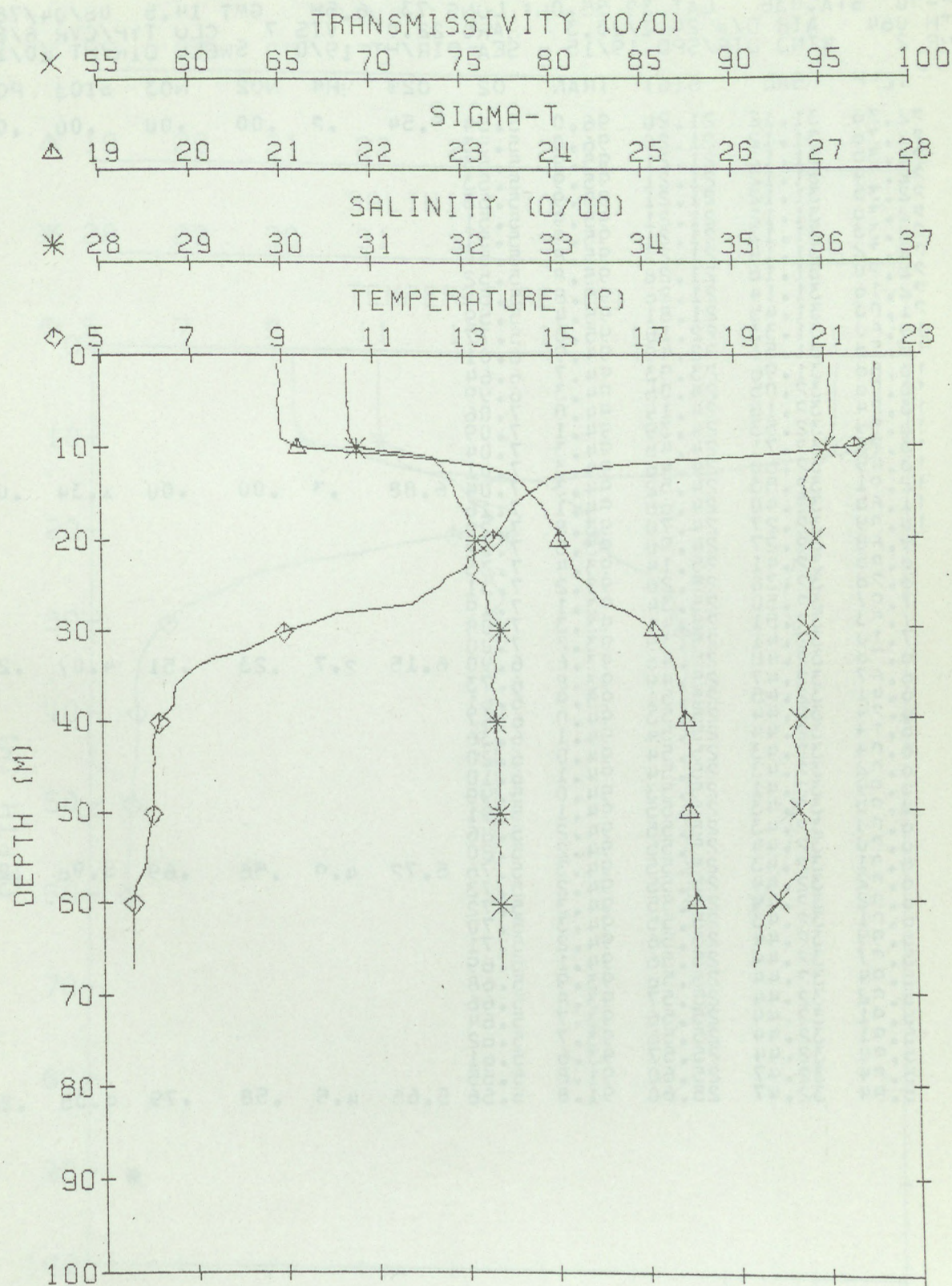
KELEZ CRUISE XWCC-20 STATION 34 08/04/78



X:CC-20 SIA.035 LAT 39 57.6N; LONG 73 21.6W GMT 07.9 08/04/78
 DEPTH 060 AIR D/W 23.3/22.8 BARO 20.7 VIS 7 CLD TYP/CVR 3/
 WETHR 1 WIND DIR/SPD 19/16 SEA DIR/HT 19/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	22.11	30.71	20.96	95.3	5.59	5.60	.0	.12	.00	.00	.00
2	22.11	30.71	20.96	95.3	5.59						
3	22.09	30.71	20.97	95.2	5.58						
4	22.11	30.71	20.96	95.3	5.57						
5	22.12	30.71	20.96	95.3	5.57						
6	22.12	30.72	20.96	95.3	5.57						
7	22.12	30.72	20.96	95.4	5.57						
8	22.10	30.73	20.96	95.4	5.57						
9	22.10	30.74	20.98	95.3	5.56						
10	21.64	30.80	21.16	95.0	5.60	5.65	.2	.00	.00	.00	.00
11	19.44	31.63	22.37	94.7	5.77						
12	16.42	31.72	23.16	94.5	5.13						
13	15.00	31.81	23.54	94.0	6.53						
14	14.70	31.86	23.64	93.7	6.68						
15	14.40	31.89	23.72	93.9	6.70						
16	14.15	31.95	23.82	94.1	6.76						
17	13.03	32.01	23.91	94.1	6.79						
18	13.00	32.04	23.94	94.3	6.78						
19	13.70	32.10	24.02	94.4	6.81						
20	13.63	32.12	24.06	94.4	6.81	6.84	.0	.00	.00	1.90	.00
21	13.73	32.10	24.09	94.2	6.82						
22	13.70	32.10	24.16	94.2	6.87						
23	13.70	32.14	24.20	94.1	6.88						
24	12.77	32.08	24.24	94.0	6.85						
25	12.43	32.21	24.36	94.1	6.88						
26	12.46	32.23	24.45	94.1	6.87						
27	11.77	32.24	24.51	94.1	6.88						
28	9.33	32.26	24.51	93.6	7.37						
29	8.33	32.34	24.90	93.0	7.20						
30	8.33	32.37	25.00	94.0	7.26	6.98	.4	.00	.00	1.81	.12
31	8.33	32.35	25.14	94.1	7.29						
32	8.33	32.34	25.18	94.9	7.28						
33	7.53	32.31	25.27	93.8	7.27						
34	7.53	32.32	25.33	93.6	7.22						
35	6.50	32.31	25.36	93.0	6.92						
36	6.50	32.28	25.36	93.7	6.67						
37	6.50	32.24	25.40	93.5	6.68						
38	6.50	32.22	25.41	93.4	6.68						
39	6.50	32.31	25.40	93.4	6.60						
40	6.50	32.32	25.44	93.5	6.93	5.41	3.0	.25	.74	6.16	.27
41	6.50	32.32	25.44	93.5	6.93						
42	6.50	32.35	25.47	93.1	6.74						
43	6.50	32.36	25.48	93.3	6.61						
44	6.50	32.36	25.48	93.5	6.53						
45	6.50	32.36	25.48	93.5	6.48						
46	6.50	32.36	25.48	93.4	6.45						
47	6.50	32.37	25.49	93.4	6.43						
48	6.50	32.35	25.48	93.5	6.40						
49	6.50	32.35	25.47	93.5	6.40						
50	6.50	32.35	25.48	93.3	6.39						
51	6.50	32.36	25.54	93.3	6.20						
52	5.37	32.37	25.55	90.9	4.99	5.07	5.4	.31	1.07	10.46	.39

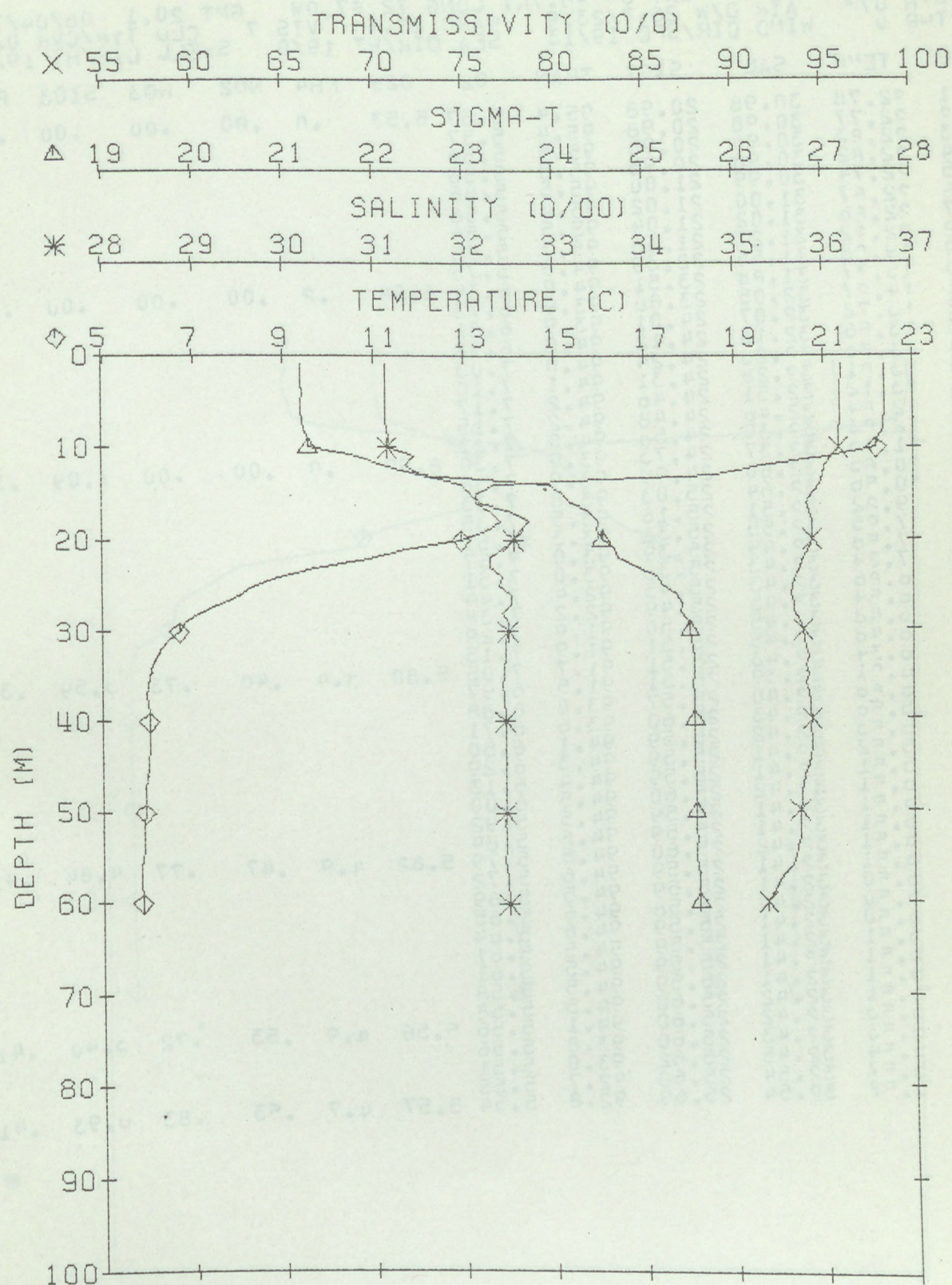
KELEZ CRUISE XWCC-20 STATION 35 08/04/78



X C-20 SIA.036 LAT 39 55.04; LONG 73 6.5W GMT 14.5 08/04/78
 DEPTH 064 AIR D/W 24.2/23.3 BARO 22.0 VIS 7 CLD TYP/CVR 6/8
 WTHR 2 WIND DIR/SPD 19/15 SEA DIR/HT 19/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.36	31.12	21.20	96.0	5.54	5.54	.2	.00	.00	.00	.00
2	22.36	31.12	21.20	96.0	5.53						
3	22.35	31.12	21.21	95.9	5.53						
4	22.34	31.12	21.21	95.9	5.53						
5	22.35	31.12	21.21	95.9	5.53						
6	22.35	31.12	21.21	95.9	5.51						
7	22.33	31.13	21.21	95.9	5.51						
8	22.22	31.14	21.23	95.8	5.50						
9	22.20	31.16	21.28	95.8	5.52						
10	22.16	31.14	21.26	95.8	5.51						
11	21.03	31.45	21.81	95.4	5.59						
12	19.50	31.33	22.10	95.0	5.77						
13	18.53	31.51	22.49	94.9	6.01						
14	13.58	31.96	23.93	94.7	6.64						
15	13.50	32.05	24.06	94.3	6.99						
16	13.24	32.18	24.19	94.0	7.06						
17	13.33	32.53	24.39	94.1	7.09						
18	13.79	32.71	24.48	94.3	7.04						
19	13.89	32.60	24.46	94.3	7.01						
20	12.91	32.53	24.52	94.3	7.04	6.88	.3	.00	.00	1.34	.00
21	11.65	32.40	24.66	94.1	7.16						
22	10.99	32.27	24.70	93.8	7.22						
23	9.88	32.27	24.90	93.6	7.32						
24	8.85	32.41	25.14	93.4	7.35						
25	8.28	32.38	25.20	93.2	7.31						
26	7.57	32.50	25.34	93.1	7.19						
27	7.53	32.51	25.41	93.3	7.08						
28	7.10	32.41	25.39	93.3	7.00						
29	6.74	32.48	25.46	93.6	6.90	6.15	2.7	.23	.51	4.07	.23
30	6.67	32.47	25.49	93.8	6.73						
31	6.61	32.45	25.51	93.9	6.61						
32	6.54	32.44	25.53	94.0	6.47						
33	6.44	32.44	25.54	94.1	6.36						
34	6.34	32.43	25.54	94.0	6.20						
35	6.22	32.43	25.54	94.1	6.10						
36	6.05	32.41	25.53	94.0	5.99						
37	5.95	32.43	25.55	94.1	5.91						
38	5.80	32.43	25.55	94.2	5.86						
39	5.60	32.44	25.55	94.2	5.80						
40	5.41	32.43	25.55	94.2	5.76	5.72	4.9	.56	.69	5.96	.23
41	5.22	32.44	25.55	94.2	5.73						
42	5.02	32.44	25.55	94.3	5.72						
43	4.99	32.43	25.55	94.3	5.70						
44	4.99	32.44	25.56	94.2	5.71						
45	4.77	32.44	25.56	94.1	5.69						
46	4.64	32.44	25.56	93.9	5.68						
47	4.52	32.44	25.57	93.8	5.66						
48	4.41	32.44	25.56	93.7	5.64						
49	4.31	32.44	25.56	93.7	5.62						
50	4.20	32.44	25.57	93.6	5.61						
60	3.84	32.47	25.60	91.8	5.55						
61	3.84	32.47	25.60	91.8	5.56	5.66	4.5	.58	.79	6.35	.27

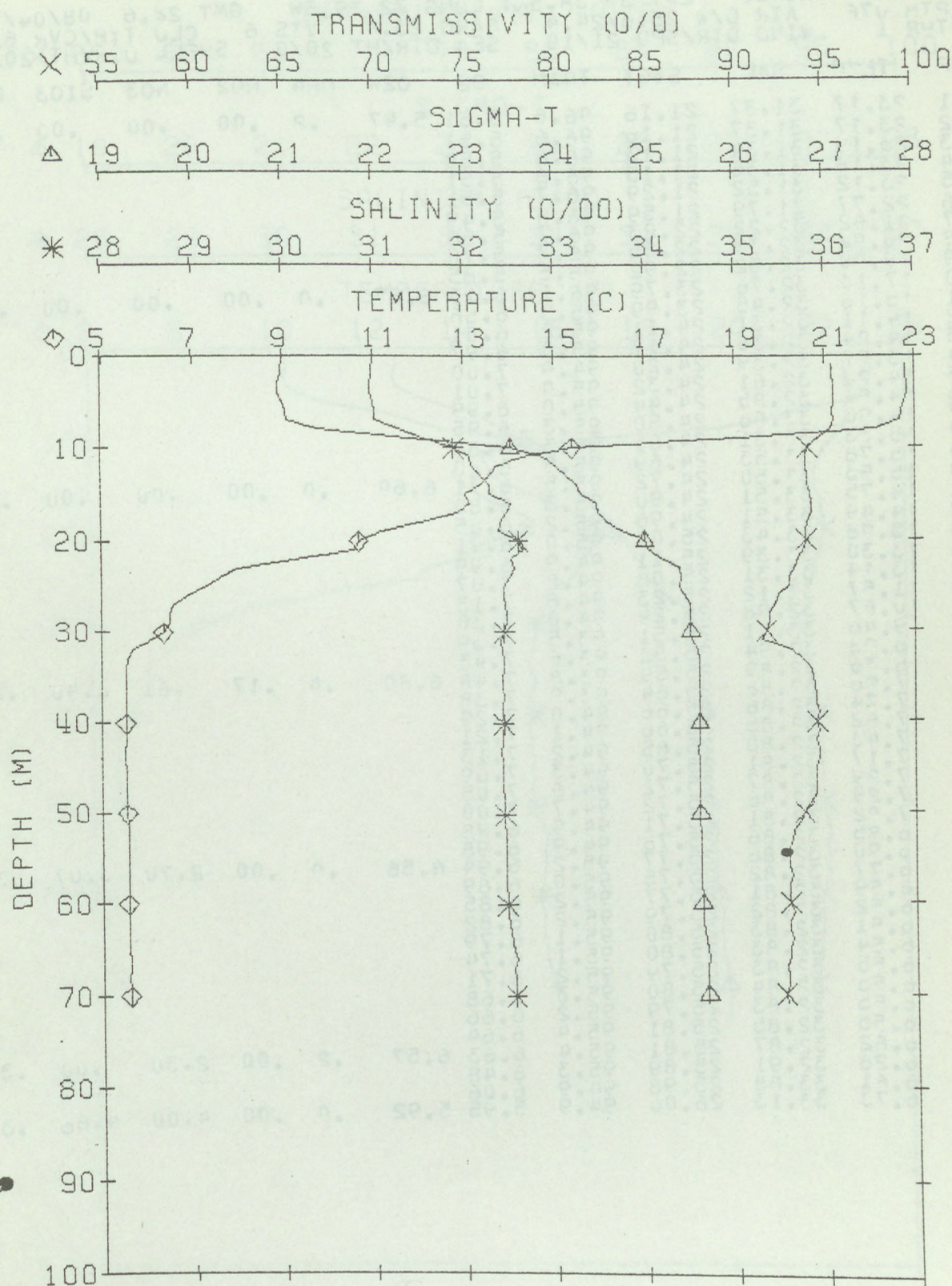
KELEZ CRUISE XWCC-20 STATION 36 08/04/78



X:CC-20 SIA.037 LAT 39 46.7N; LONG 72 57.0W GMT 20.1 08/04/78
 DEPTH 073 AIR D/W 26.7/23.9 BARO 22.5 VIS 7 CLU TYP/CVR 0/2
 WFTHR 0 WIND DIR/SPD 19/13 SEA DIR/HT 19/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.78	30.98	20.98	95.4	5.57	5.53	.0	.00	.00	.00	.00
2	22.77	30.98	20.98	95.4	5.57						
3	22.73	30.96	20.95	95.5	5.56						
4	22.72	30.96	20.95	95.5	5.56						
5	22.74	30.99	21.00	95.5	5.56						
6	22.67	31.00	21.02	95.4	5.56						
7	22.66	31.02	21.04	95.5	5.56						
8	22.12	31.27	21.38	95.3	5.58						
9	19.78	31.55	22.39	94.6	5.75						
10	15.77	31.88	23.51	94.0	6.34	6.84	.2	.00	.00	.00	.10
11	14.77	32.05	23.88	93.9	6.73						
12	13.72	32.07	24.01	93.9	6.81						
13	13.56	32.18	24.12	94.0	6.92						
14	13.55	32.28	24.24	94.0	7.03						
15	13.11	32.28	24.31	94.1	7.10						
16	13.12	32.51	24.46	94.2	7.17						
17	12.33	32.46	24.48	94.2	7.15						
18	12.33	32.39	24.58	94.2	7.21						
19	11.13	32.37	24.76	93.3	7.30	6.99	.0	.00	.00	1.09	.17
20	10.00	32.60	24.99	93.3	7.36						
21	9.00	32.64	25.03	93.3	7.33						
22	8.00	32.51	25.03	93.3	7.35						
23	7.00	32.55	25.33	93.3	7.51						
24	7.00	32.46	25.39	93.3	7.57						
25	7.00	32.43	25.40	93.3	7.51						
26	7.00	32.43	25.40	93.3	7.44						
27	7.00	32.45	25.40	93.3	7.38						
28	7.00	32.45	25.50	91.9	7.20						
29	7.00	32.45	25.50	91.9	7.15						
30	7.00	32.43	25.51	91.7	7.05	5.80	3.4	.40	.73	3.59	.37
31	7.00	32.39	25.51	91.5	6.97						
32	7.00	32.40	25.57	93.0	6.88						
33	7.00	32.43	25.60	93.6	6.71						
34	7.00	32.42	25.69	94.1	6.50						
35	7.00	32.41	25.69	94.3	6.29						
36	7.00	32.41	25.69	94.4	6.13						
37	7.00	32.41	25.69	94.4	6.00						
38	7.00	32.41	25.69	94.5	5.92						
39	7.00	32.41	25.69	94.7	5.84						
40	7.00	32.42	25.69	94.7	5.79	5.62	4.9	.47	.77	4.84	.41
41	7.00	32.41	25.69	94.6	5.72						
42	7.00	32.41	25.69	94.5	5.69						
43	7.00	32.40	25.68	94.6	5.65						
44	7.00	32.41	25.69	94.6	5.64						
45	7.00	32.41	25.69	94.6	5.61						
46	7.00	32.41	25.69	94.6	5.58						
47	7.00	32.41	25.69	94.6	5.58						
48	7.00	32.42	25.60	94.5	5.58						
49	7.00	32.42	25.60	94.1	5.56	5.56	4.9	.53	.72	3.40	.41
50	7.00	32.45	25.60	93.8	5.56						
51	7.00	32.45	25.62	93.0	5.51						
52	7.00	32.45	25.62	92.7	5.55						
53	7.00	32.45	25.69	92.8	5.54	5.57	4.7	.53	.83	3.93	.41

KELEZ CRUISE XWCC-20 STATION 37 08/04/78



XWCC-20 STA.038 LAT 39 38.5N; LONG 72 39.5W GMT 22.6 08/04/78
 DEPTH 076 AIR D/W 25.6/24.4 BARO 23.0 VIS 6 CLJ TYP/CVR 6/7
 WETHR 1 WIND DIR/SPD 21/10 SEA DIR/HT 20/0 SWELL DIR/HT 20/1

DFP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	23.17	31.37	21.16	96.6	5.51	5.47	.2	.00	.00	.00	.07
2	23.17	31.37	21.16	96.6	5.51						
3	23.19	31.34	21.13	96.6	5.50						
4	23.18	31.36	21.15	96.6	5.51						
5	23.12	31.52	21.29	96.7	5.51						
6	22.77	31.79	21.59	96.8	5.49						
7	21.62	32.22	22.23	96.7	5.56						
8	20.92	32.39	22.55	96.7	5.70						
9	19.30	32.52	22.92	96.5	5.85						
10	17.13	32.76	23.79	96.1	6.15	6.67	.0	.00	.00	.00	.00
11	15.18	32.45	23.99	95.5	6.56						
12	14.11	32.31	24.11	95.5	6.81						
13	14.04	32.38	24.17	95.0	6.97						
14	13.07	32.39	24.20	94.9	7.00						
15	14.00	32.61	24.32	95.0	7.01						
16	14.11	32.85	24.44	95.0	6.99						
17	14.06	32.06	24.50	95.0	6.95						
18	15.03	32.31	24.61	95.0	6.88						
19	15.78	32.53	24.69	95.0	6.80						
20	15.66	32.50	24.72	95.0	6.71	6.69	.0	.00	.00	.00	.07
21	14.75	32.51	24.90	95.0	6.80						
22	14.49	32.51	24.96	95.0	6.85						
23	13.08	32.43	25.00	95.0	6.91						
24	13.00	32.39	25.11	94.9	6.99						
25	13.14	32.31	25.08	94.8	7.07						
26	11.77	32.32	25.23	94.6	7.13						
27	10.77	32.98	25.29	94.0	7.30						
28	9.46	32.01	25.51	93.5	7.69						
29	8.03	32.44	25.53	93.3	7.43						
30	6.46	32.89	25.59	93.8	7.40	6.80	.4	.17	.61	2.40	.27
31	7.00	32.86	25.64	93.0	7.38						
32	7.74	32.86	25.66	94.0	7.29						
33	7.62	32.85	25.66	94.1	7.21						
34	7.43	32.80	25.65	94.2	7.13						
35	7.17	32.81	25.70	94.3	7.09						
36	7.29	32.87	25.72	94.6	7.05						
37	7.29	32.86	25.72	94.7	7.00						
38	7.22	32.81	25.71	94.9	6.98						
39	6.55	32.86	25.76	94.9	6.98						
40	6.00	32.86	25.77	95.2	6.94	6.56	.0	.00	2.70	3.07	.37
41	6.77	32.82	25.75	95.0	6.89						
42	6.79	32.81	25.77	95.2	6.85						
43	6.22	32.82	25.79	95.2	6.82						
44	6.11	32.83	25.80	95.1	6.79						
45	6.04	32.83	25.80	95.1	6.74						
46	6.05	32.83	25.79	95.2	6.71						
47	6.05	32.84	25.80	95.0	6.68						
48	6.05	32.83	25.79	95.2	6.66						
49	6.05	32.85	25.81	95.4	6.64						
50	6.62	32.87	25.81	95.4	6.63	6.57	.2	.00	2.30	.00	.34
60	6.28	32.91	25.89	95.3	6.48						
70	6.11	33.08	25.98	94.9	6.06						
74	6.73	33.13	26.00	94.9	5.95	5.92	.0	.00	4.00	4.60	.37

KELEZ CRUISE XWCC-20 STATION 38 08/04/78

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

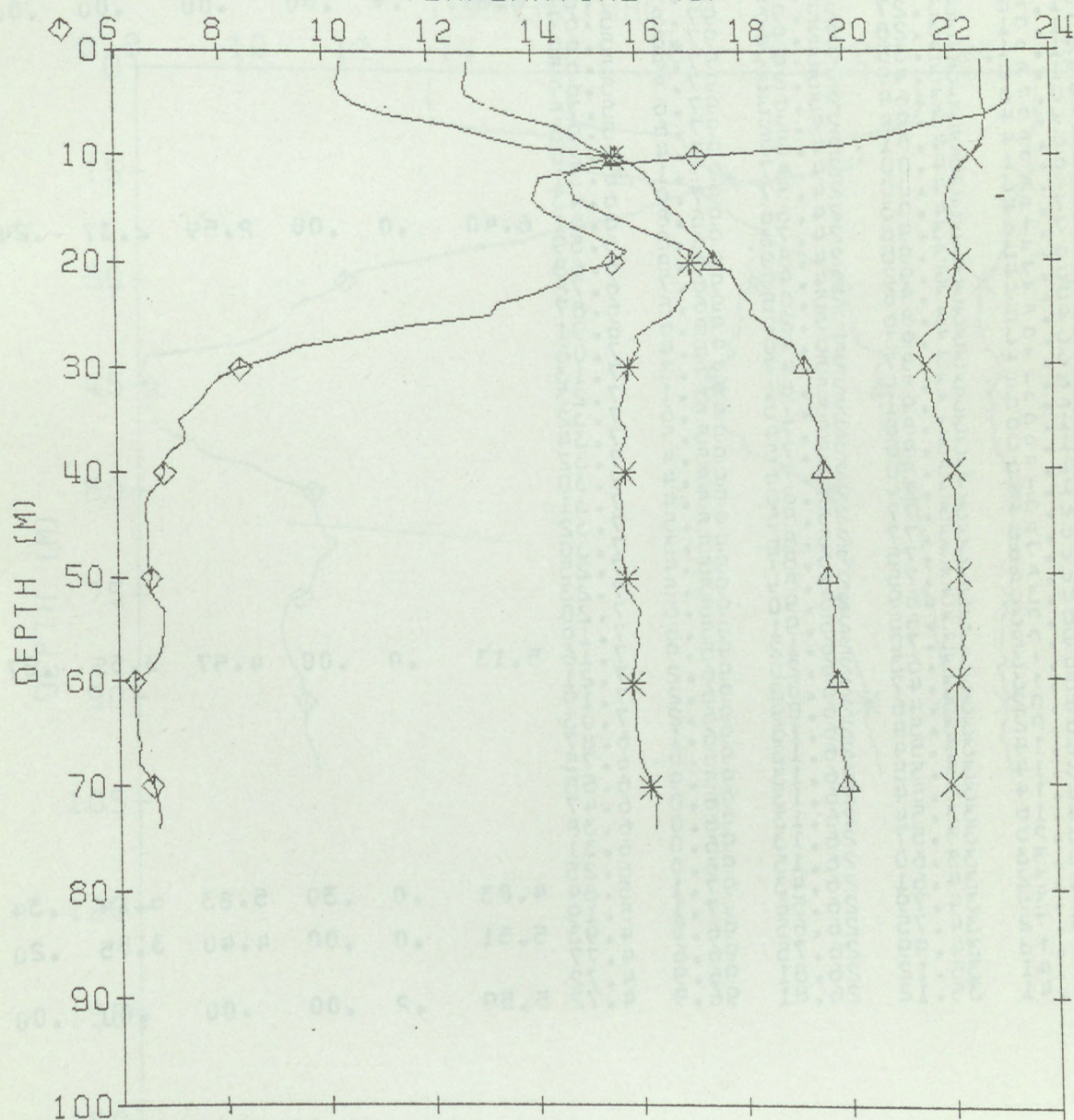
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SALINITY (0/00)

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TEMPERATURE (C)

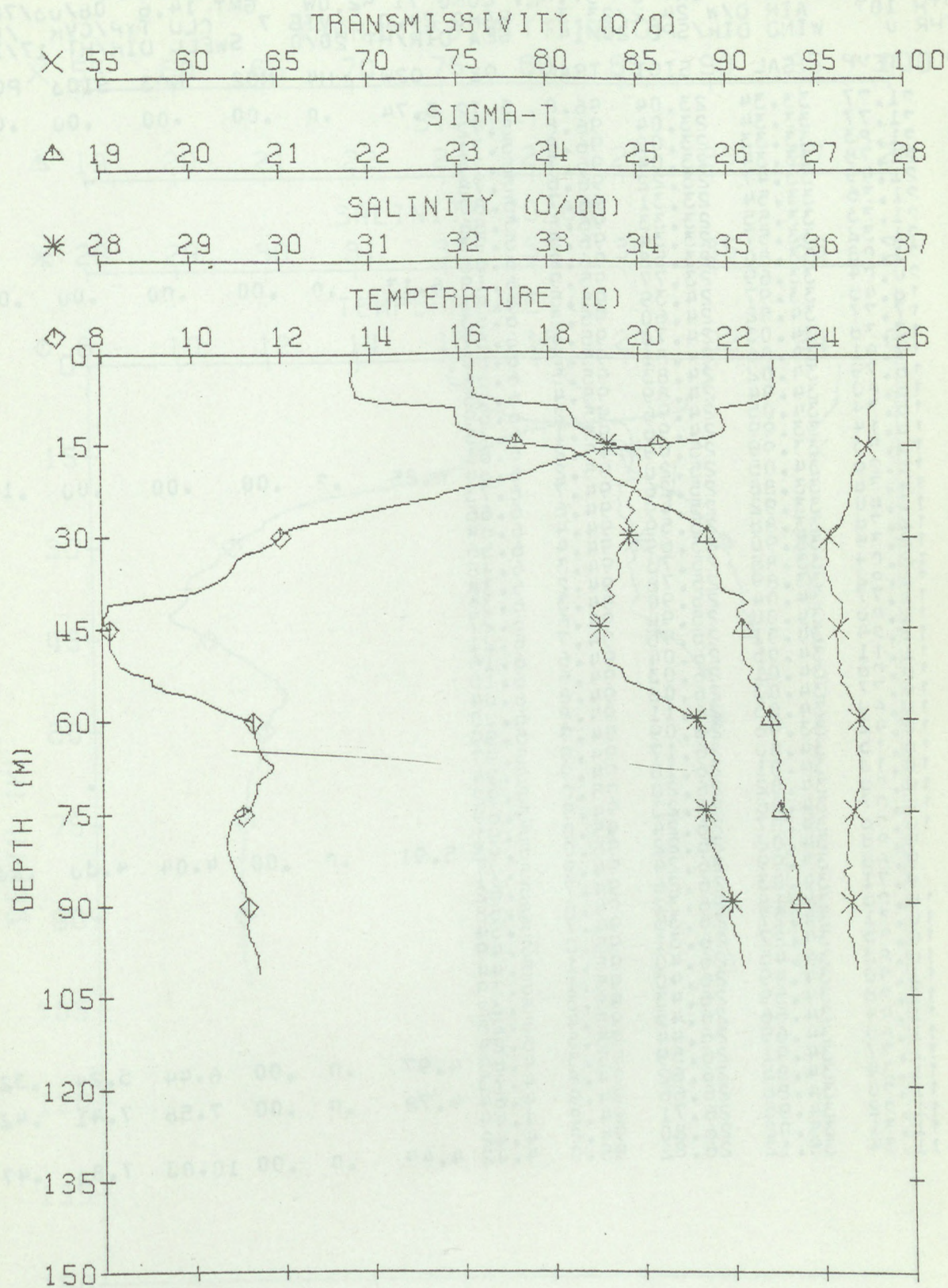
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XNCC-20 SIA.039 LAT 39 32.0N; LONG 72 26.5W GMT 00.5 08/05/78
 DEPTH 123 AIR D/W 24.4/23.6 BARO 24.0 VIS 7 CLD TYP/CVR 6/7
 WETHR 1 WIND DIR/SPD 26/03 SEA DIR/HT 00/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.99	32.15	21.80	98.1	5.58	5.56	.0	.00	.00	.00	.00
2	22.99	32.15	21.80	98.1	5.58						
3	23.00	32.15	21.79	98.1	5.57						
4	23.00	32.12	21.78	98.1	5.57						
5	23.00	32.14	21.79	98.1	5.57						
6	22.99	32.16	21.83	98.1	5.55						
7	22.99	32.14	21.82	98.1	5.57						
8	22.99	32.41	22.13	98.1	5.58						
9	21.73	32.19	22.95	97.8	5.68						
10	21.73	32.24	22.95	97.8	5.69	6.61	.5	.00	.00	.00	.00
11	21.96	32.27	22.96	97.8	5.67						
12	21.96	32.28	22.96	97.8	5.66						
13	21.96	32.38	23.07	97.8	5.65						
14	21.96	32.49	23.23	97.8	5.69						
15	20.46	32.64	23.63	97.6	5.75						
16	19.94	32.94	24.22	97.6	5.93						
17	18.64	34.01	24.37	97.4	6.20						
18	18.21	34.00	24.47	97.1	6.31						
19	17.93	34.00	24.57	97.0	6.43						
20	17.54	34.03	24.66	96.8	6.51	6.40	.0	.00	2.59	2.37	.24
21	17.00	33.98	24.73	96.8	6.59						
22	16.73	33.95	24.89	96.8	6.68						
23	15.74	33.92	24.99	96.7	6.78						
24	15.39	33.88	25.05	96.6	6.87						
25	14.86	33.86	25.20	96.6	6.91						
26	13.93	33.87	25.40	96.4	7.06						
27	13.44	33.87	25.47	96.3	7.13						
28	12.99	33.84	25.61	96.1	7.23						
29	12.99	33.91	25.75	96.0	7.32						
30	11.99	33.88	25.74	95.9	7.34						
31	11.99	33.85	25.75	95.9	7.32						
32	11.99	33.80	25.76	95.9	7.30						
33	11.12	33.74	25.80	95.9	7.31						
34	10.94	33.77	25.85	95.9	7.32						
35	10.94	33.77	25.86	95.9	7.30						
36	10.94	33.75	25.87	95.9	7.25						
37	10.94	33.75	25.89	95.9	7.23						
38	10.94	33.69	25.90	95.9	7.20						
39	10.94	33.65	25.91	95.9	7.19						
40	9.92	33.70	26.12	95.9	7.16	5.13	.0	.00	4.57	3.55	.27
41	8.91	33.63	26.20	96.2	7.21						
42	8.91	33.47	26.08	96.2	7.19						
43	8.91	33.46	26.09	96.2	7.03						
44	8.91	33.54	26.15	96.1	6.87						
45	8.91	33.54	26.15	96.0	6.75						
46	8.91	33.55	26.13	95.9	6.58						
47	8.91	33.54	26.13	96.0	6.47						
48	8.91	33.54	26.13	96.0	6.38						
49	8.91	33.57	26.13	96.0	6.31						
50	8.91	33.60	26.15	96.0	6.25						
60	11.33	34.61	26.43	97.1	5.84	4.83	.0	.30	5.83	5.14	.34
70	11.33	34.79	26.56	97.1	5.19						
80	10.99	34.75	26.65	96.5	4.93	5.51	.0	.00	4.40	3.55	.20
90	11.11	34.99	26.75	96.6	4.77						
100	11.11	35.12	26.81	96.9	4.72						
101	11.11	35.12	26.81	96.9	4.72	5.59	.2	.00	.00	.00	.00

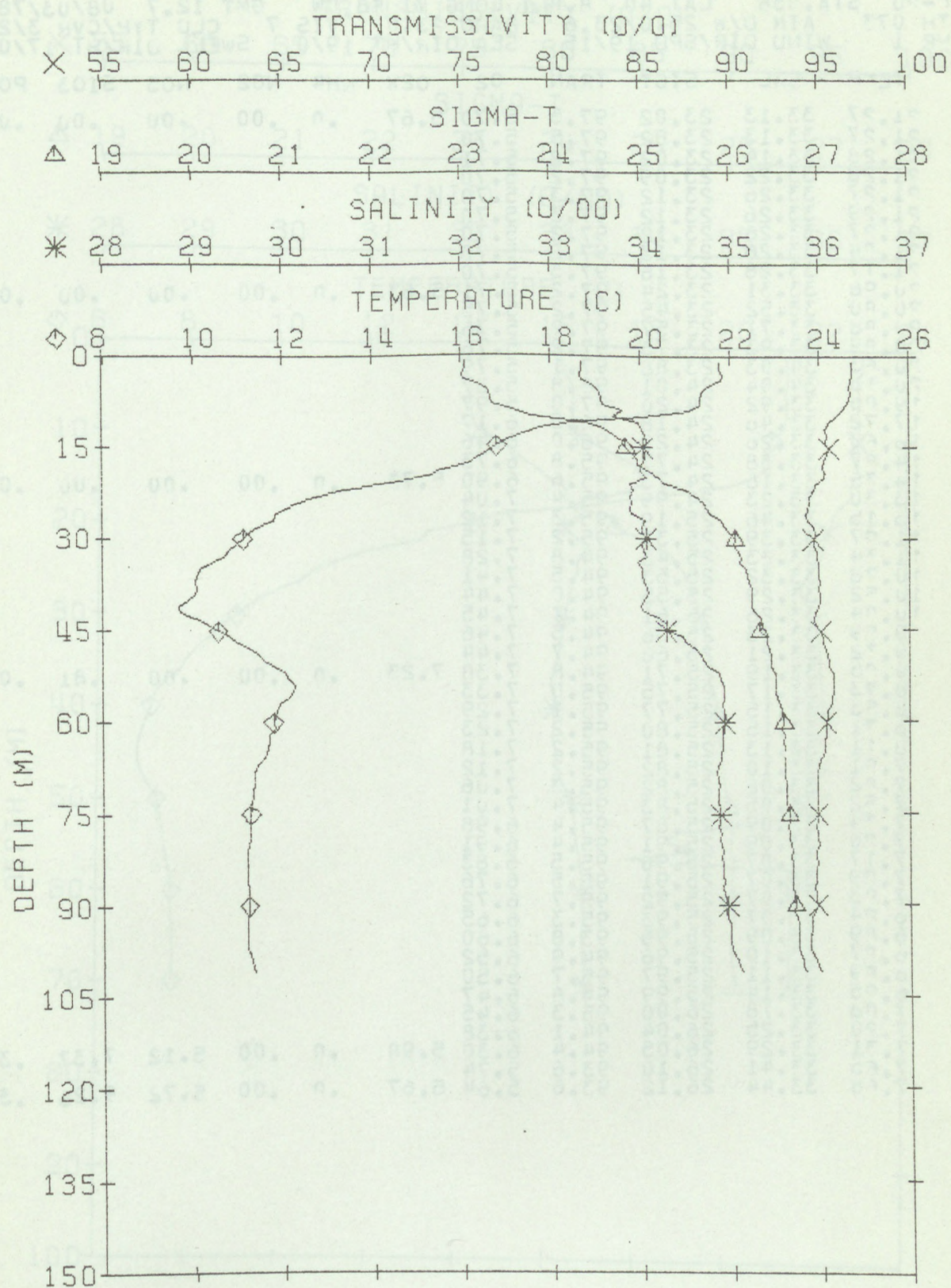
KELEZ CRUISE XWCC-20 STATION 39 08/05/78



X-CC-20 SIA.057 LAT 39 57.0N; LONG 71 52.0W GMT 14.6 08/03/78
 DEPTH 107 AIR D/W 24.2/23.3 BAKO 24.0 VIS 7 CLD TYP/CVR /0
 WETTR 0 WIND DIR/SPD 20/14 SEA DIR/HT 20/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	21.77	33.34	23.04	96.8	5.72	5.74	.0	.00	.00	.00	.00
2	21.77	33.34	23.04	96.8	5.72						
3	21.78	33.33	23.02	96.8	5.71						
4	21.78	33.34	23.04	96.7	5.74						
5	21.49	33.47	23.22	96.6	5.78						
6	21.76	33.54	23.31	96.7	5.80						
7	21.73	33.55	23.33	96.6	5.86						
8	21.73	33.57	23.34	96.6	5.93						
9	21.73	33.80	23.58	96.6	6.08						
10	20.74	33.69	23.77	96.6	6.19	6.13	.0	.00	.00	.00	.00
11	18.77	34.97	24.39	96.6	6.41						
12	17.77	34.02	24.60	96.6	6.53						
13	17.38	34.03	24.70	96.4	6.57						
14	17.01	34.06	24.81	96.6	6.60						
15	16.70	34.02	24.83	96.6	6.66						
16	16.00	34.04	24.89	96.6	6.69						
17	16.44	34.05	24.96	96.6	6.75						
18	16.11	33.99	25.00	96.6	6.81						
19	15.00	33.99	25.00	96.6	6.84	6.85	.2	.00	.00	.00	.14
20	14.00	33.86	25.00	96.4	6.73						
21	13.40	33.99	25.00	96.4	6.66						
22	12.44	33.99	25.00	96.4	6.66						
23	12.44	33.88	25.00	96.4	6.66						
24	12.44	33.88	25.00	96.4	6.66						
25	12.44	33.88	25.00	96.4	6.66						
26	11.77	33.88	25.00	96.4	6.66						
27	11.77	33.88	25.00	96.4	6.66						
28	11.77	33.88	25.00	96.4	6.66						
29	11.77	33.88	25.00	96.4	6.66						
30	11.77	33.88	25.00	96.4	6.66						
31	11.77	33.88	25.00	96.4	6.66						
32	11.77	33.88	25.00	96.4	6.66						
33	11.77	33.88	25.00	96.4	6.66						
34	11.77	33.88	25.00	96.4	6.66						
35	11.77	33.88	25.00	96.4	6.66						
36	11.77	33.88	25.00	96.4	6.66						
37	11.77	33.88	25.00	96.4	6.66						
38	11.77	33.88	25.00	96.4	6.66						
39	11.77	33.88	25.00	96.4	6.66						
40	11.77	33.88	25.00	96.4	6.66						
41	11.77	33.88	25.00	96.4	6.66	5.91	.0	.00	4.04	4.30	.23
42	11.77	33.88	25.00	96.4	6.66						
43	11.77	33.88	25.00	96.4	6.66						
44	11.77	33.88	25.00	96.4	6.66						
45	11.77	33.88	25.00	96.4	6.66						
46	11.77	33.88	25.00	96.4	6.66						
47	11.77	33.88	25.00	96.4	6.66						
48	11.77	33.88	25.00	96.4	6.66						
49	11.77	33.88	25.00	96.4	6.66						
50	11.77	33.88	25.00	96.4	6.66						
51	11.77	33.88	25.00	96.4	6.66						
52	11.77	33.88	25.00	96.4	6.66						
53	11.77	33.88	25.00	96.4	6.66						
54	11.77	33.88	25.00	96.4	6.66						
55	11.77	33.88	25.00	96.4	6.66						
56	11.77	33.88	25.00	96.4	6.66						
57	11.77	33.88	25.00	96.4	6.66						
58	11.77	33.88	25.00	96.4	6.66						
59	11.77	33.88	25.00	96.4	6.66						
60	11.77	33.88	25.00	96.4	6.66						
61	11.77	33.88	25.00	96.4	6.66						
62	11.77	33.88	25.00	96.4	6.66						
63	11.77	33.88	25.00	96.4	6.66						
64	11.77	33.88	25.00	96.4	6.66						
65	11.77	33.88	25.00	96.4	6.66						
66	11.77	33.88	25.00	96.4	6.66						
67	11.77	33.88	25.00	96.4	6.66						
68	11.77	33.88	25.00	96.4	6.66						
69	11.77	33.88	25.00	96.4	6.66						
70	11.77	33.88	25.00	96.4	6.66						
71	11.77	33.88	25.00	96.4	6.66						
72	11.77	33.88	25.00	96.4	6.66						
73	11.77	33.88	25.00	96.4	6.66						
74	11.77	33.88	25.00	96.4	6.66						
75	11.77	33.88	25.00	96.4	6.66						
76	11.77	33.88	25.00	96.4	6.66						
77	11.77	33.88	25.00	96.4	6.66						
78	11.77	33.88	25.00	96.4	6.66						
79	11.77	33.88	25.00	96.4	6.66						
80	11.77	33.88	25.00	96.4	6.66						
81	11.77	33.88	25.00	96.4	6.66						
82	11.77	33.88	25.00	96.4	6.66						
83	11.77	33.88	25.00	96.4	6.66						
84	11.77	33.88	25.00	96.4	6.66						
85	11.77	33.88	25.00	96.4	6.66						
86	11.77	33.88	25.00	96.4	6.66						
87	11.77	33.88	25.00	96.4	6.66						
88	11.77	33.88	25.00	96.4	6.66						
89	11.77	33.88	25.00	96.4	6.66						
90	11.77	33.88	25.00	96.4	6.66						
91	11.77	33.88	25.00	96.4	6.66						
92	11.77	33.88	25.00	96.4	6.66						
93	11.77	33.88	25.00	96.4	6.66						
94	11.77	33.88	25.00	96.4	6.66						
95	11.77	33.88	25.00	96.4	6.66						
96	11.77	33.88	25.00	96.4	6.66						
97	11.77	33.88	25.00	96.4	6.66						
98	11.77	33.88	25.00	96.4	6.66						
99	11.77	33.88	25.00	96.4	6.66						
100	11.77	33.88	25.00	96.4	6.66						
101	11.77	33.88	25.00	96.4	6.66						
102	11.77	33.88	25.00	96.4	6.66						
103	11.77	33.88	25.00	96.4	6.66						
104	11.77	33.88	25.00	96.4	6.66						
105	11.77	33.88	25.00	96.4	6.66						
106	11.77	33.88	25.00	96.4	6.66						
107	11.77	33.88	25.00	96.4	6.66						
108	11.77	33.88	25.00	96.4	6.66						
109	11.77	33.88	25.00	96.4	6.66						
110	11.77	33.88	25.00	96.4	6.66						
111	11.77	33.88	25.00	96.4	6.66						
112	11.77	33.88	25.00	96.4	6.66						
113	11.77	33.88	25.00	96.4	6.66						
114	11.77	33.88	25.00	96.4	6.66						
115	11.77	33.88	25.00	96.4	6.66						
116	11.77	33.88	25.00	96.4	6.66						
117	11.77	33.88	25.00	96.4	6.66						
118	11.77	33.88	25.00	96.4	6.66						
119	11.77	33.88	25.00	96.4	6.66						
120	11.77	33.88	25.00	96.4	6.66						
121	11.77	33.88	25.00	96.4	6.66						
122	11.77	33.88	25.00	96.4	6.66						
123	11.77	33.88	25.00	96.4	6.66						
124	11.77	33.88	25.00	96.4	6.66						
125	11.77	33.88	25.00	96.4	6.66						
126	11.77	33.88	25.00	96.4	6.66						
127	11.77	33.88	25.00	96.4	6.66						
128	11.77	33.88	25.00	96.4	6.66						
129	11.77	33.88	25.00	96.4	6.66						
130	11.77	33.88	25.00	96.4	6.66						
131	11.77	33.88	25.00	96.4	6.66						
132	11.77	33.88	25.00	96.4	6.66						
133	11.77	33.88	25.00	96.4	6.66						
134	11.77	33.88	25.00	96.4	6.66						
135	11.77	33.88	25.00	96.4	6.66						
136	11.77	33.88	25.00	96.4	6.66						
137	11.77	33.88	25.00	96.4	6.66						
138	11.77	33.88	25.00	96.4	6.66						
139	11.77	33.88	25.00	96.4	6.66						
140	11.77	33.88	25.00	96.4	6.66						
141	11.77	33.88	25.00	96.4	6.66						
142	11.77	33.88	25.00	96.4	6.66						
143	11.77	33.88	25.00	96.4	6.66						

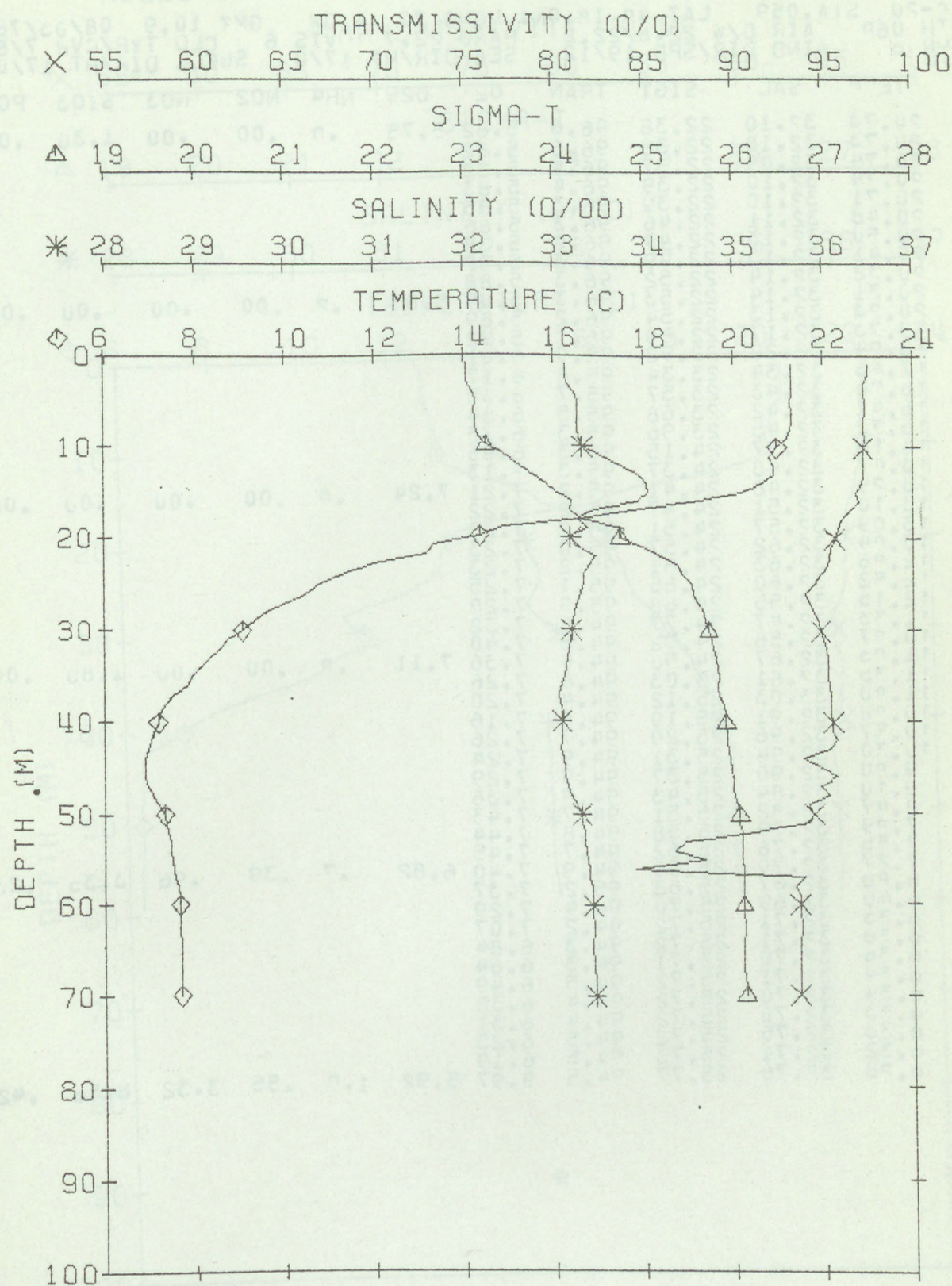
KELEZ CRUISE XWCC-20 STATION 57 08/03/78



XMCC-20 SIA.058 LAT 40 8.0N; LONG 71 58.0W GMT 12.7 08/03/78
 DEPTH 073 AIR D/W 25.0/23.6 BARO 23.0 VIS 7 CLD TYP/CVR 3/2
 WETUR 1 WIND DIR/SPD 19/15 SEA DIR/HT 19/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	PO4
1	21.27	33.13	23.02	97.5	5.70	5.67	.0	.00	.00	.00	.00
2	21.27	33.13	23.02	97.5	5.70						
3	21.28	33.14	23.02	97.2	5.71						
4	21.28	33.22	23.09	97.2	5.70						
5	21.27	33.26	23.12	97.3	5.70						
6	21.29	33.26	23.12	97.3	5.70						
7	21.27	33.26	23.12	97.2	5.70						
8	21.24	33.26	23.13	97.2	5.70						
9	21.17	33.28	23.16	97.3	5.70						
10	20.06	33.31	23.24	97.2	5.71	5.63	.0	.00	.00	.00	.00
11	20.00	33.52	23.45	97.2	5.75						
12	20.00	33.71	23.57	97.2	5.76						
13	20.00	33.93	23.73	97.2	5.76						
14	20.00	34.03	23.86	97.1	5.79						
15	20.00	34.04	24.01	96.9	5.87						
16	19.00	33.92	24.20	97.0	5.97						
17	17.72	33.46	24.18	96.0	6.17						
18	16.00	33.26	24.29	96.0	6.46						
19	14.00	33.38	24.77	95.0	6.73						
20	14.00	33.16	24.73	95.6	6.90	5.73	.0	.00	.00	.00	.00
21	13.00	33.23	24.99	95.4	7.04						
22	13.15	33.46	25.19	95.3	7.12						
23	11.00	33.73	25.37	95.2	7.15						
24	10.00	33.73	25.43	94.8	7.28						
25	10.00	33.32	25.53	94.5	7.41						
26	10.00	33.29	25.55	94.0	7.44						
27	9.00	33.26	25.61	94.0	7.45						
28	9.00	33.23	25.66	94.0	7.46						
29	9.00	33.21	25.68	94.7	7.44						
30	8.00	33.19	25.71	94.8	7.38	7.23	.0	.00	.00	.81	.09
31	8.00	33.17	25.75	95.0	7.33						
32	8.00	33.15	25.77	95.1	7.29						
33	8.00	33.15	25.80	95.2	7.23						
34	8.00	33.13	25.81	95.2	7.18						
35	7.00	33.10	25.82	95.2	7.12						
36	7.00	33.08	25.82	95.3	7.06						
37	7.00	33.05	25.83	95.4	7.01						
38	7.00	33.07	25.87	95.4	6.98						
39	7.00	33.09	25.91	95.4	6.91						
40	7.00	33.07	25.90	95.5	6.83						
41	7.00	33.07	25.91	95.5	6.76						
42	7.00	33.07	25.92	95.7	6.72						
43	6.00	33.07	25.93	95.3	6.65						
44	6.00	33.09	25.95	95.8	6.60						
45	6.00	33.10	25.96	94.9	6.52						
46	6.00	33.11	25.97	95.7	6.50						
47	6.00	33.14	25.99	94.8	6.47						
48	7.00	33.18	26.00	95.3	6.45						
49	7.00	33.25	26.04	94.1	6.38						
50	7.00	33.29	26.05	94.4	6.30	5.98	.0	.00	5.12	7.37	.37
60	7.00	33.41	26.10	93.6	5.74						
70	7.00	33.44	26.12	93.6	5.64	5.67	.0	.00	5.72	9.26	.37

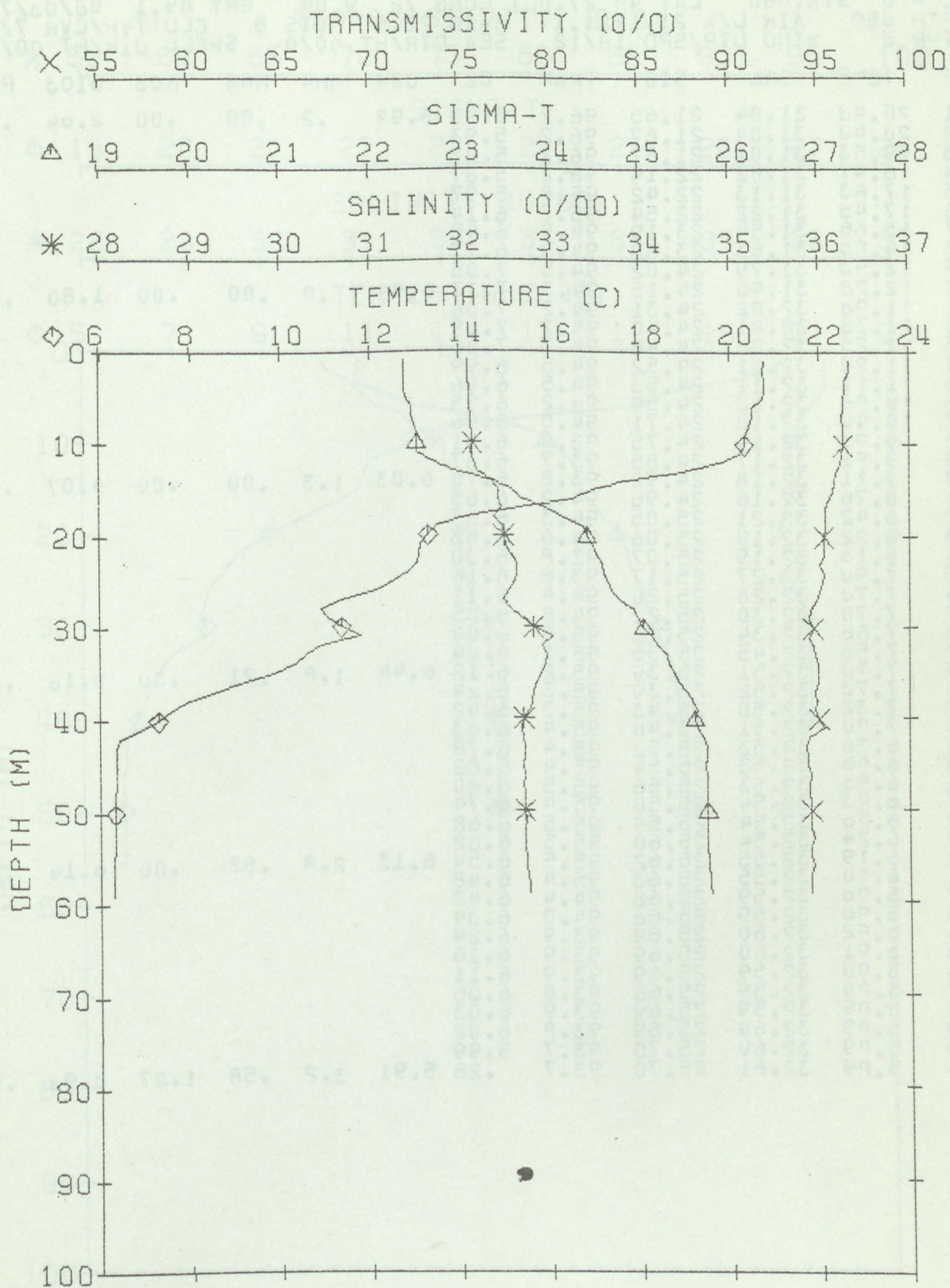
KELEZ CRUISE XWCC-20 STATION 58 08/03/78



XCC-20 SIA.059 LAT 40 18.0N; LONG 72 4.0W GMT 10.9 08/03/78
 DEPTH 060 AIR D/W 22.8/22.2 BARO 22.7 VJS 6 CLD TYP/CVR 7/8
 WETUR 0 WIND DIR/SPD 19/12 SEA DIR/HT 17/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.73	32.10	22.38	96.6	5.82	5.75	.0	.00	.00	1.30	.00
2	20.73	32.10	22.38	96.6	5.82						
3	20.74	32.09	22.37	96.4	5.82						
4	20.74	32.10	22.39	96.4	5.83						
5	20.71	32.10	22.39	96.3	5.85						
6	20.48	32.11	22.46	96.3	5.86						
7	20.40	32.13	22.47	96.3	5.88						
8	20.41	32.13	22.49	96.3	5.88						
9	20.32	32.14	22.52	96.3	5.88						
10	20.11	32.14	22.53	96.3	5.89	5.83	.2	.00	.00	.00	.00
11	19.23	32.13	22.54	96.2	5.89						
12	18.73	32.17	22.59	96.1	5.92						
13	18.04	32.20	22.92	96.0	6.01						
14	17.36	32.34	23.34	95.8	6.17						
15	16.00	32.43	23.57	95.7	6.38						
16	16.47	32.42	23.68	95.5	6.54						
17	15.32	32.45	23.96	95.3	6.73						
18	14.16	32.37	24.15	95.3	6.95						
19	13.57	32.48	24.37	95.3	7.13						
20	13.29	32.48	24.41	95.2	7.21	7.24	.0	.00	.00	.00	.00
21	13.10	32.51	24.47	95.2	7.22						
22	13.00	32.57	24.51	95.2	7.23						
23	12.30	32.62	24.57	95.0	7.23						
24	12.00	32.63	24.61	95.2	7.23						
25	12.52	32.60	24.65	95.1	7.25						
26	12.10	32.55	24.68	95.0	7.28						
27	11.33	32.47	24.77	94.8	7.32						
28	10.77	32.56	24.92	94.5	7.40						
29	11.00	32.67	24.96	94.4	7.56	7.11	.2	.00	.00	1.80	.09
30	11.33	32.81	25.03	94.6	7.26						
31	11.00	32.03	25.12	94.4	7.20						
32	10.58	32.91	25.19	94.6	7.16						
33	10.57	32.96	25.29	94.7	7.26						
34	9.30	32.94	25.31	94.9	7.24						
35	9.00	32.90	25.37	94.9	7.29						
36	8.10	32.84	25.43	94.9	7.36						
37	8.47	32.82	25.51	94.7	7.43						
38	7.59	32.79	25.58	94.8	7.44						
39	7.55	32.76	25.62	94.7	7.45						
40	7.27	32.70	25.59	94.9	7.37	6.82	.7	.39	.96	3.30	.23
41	6.28	32.67	25.63	95.2	7.30						
42	6.00	32.69	25.70	94.4	7.29						
43	6.00	32.71	25.72	94.2	7.07						
44	6.00	32.71	25.72	94.3	6.84						
45	6.00	32.70	25.71	94.3	6.64						
46	6.00	32.71	25.72	94.5	6.49						
47	6.00	32.70	25.72	94.4	6.38						
48	6.00	32.70	25.72	94.4	6.31						
49	6.00	32.70	25.72	94.5	6.23						
50	6.00	32.71	25.73	94.5	6.19						
59	6.00	32.76	25.77	94.5	5.97	5.92	1.0	.55	3.32	8.56	.42

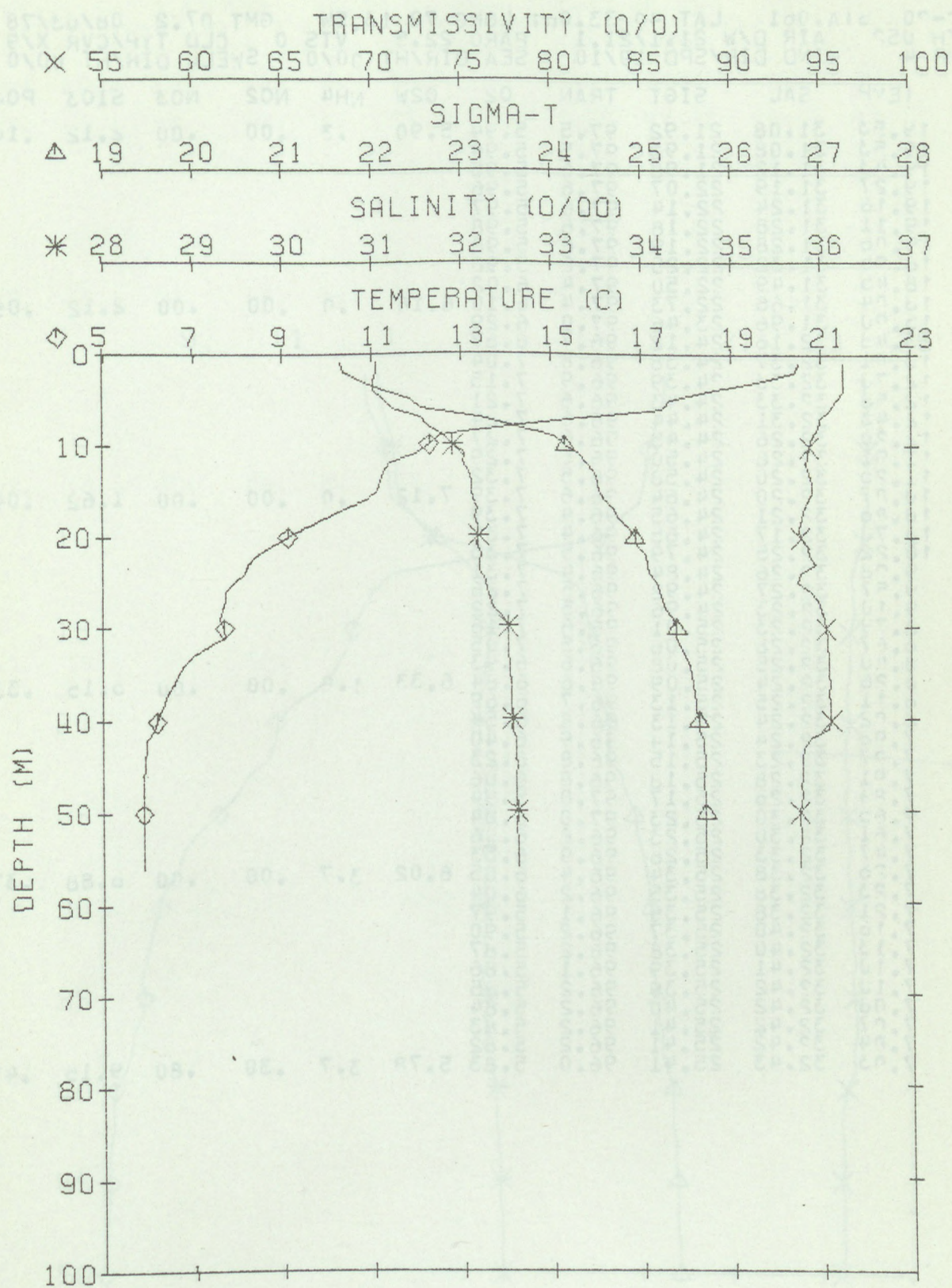
KELEZ CRUISE XWCC-20 STATION 59 08/03/78



XWCC-00 STA. 060 LAT 40 27.0N; LONG 72 9.0W GMT 09.1 08/05/78
 DEPTH 050 AIR D/W 21.1/21.1 BARO 22.0 VIS 5 CLD TYP/CVR 7/8
 WETHR 6 WIND DIR/SPD 18/12 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	20.48	31.04	21.65	96.2	5.93	5.92	.2	.00	.00	2.64	.09
2	20.40	31.04	21.67	96.2	5.93						
3	19.53	31.01	21.87	96.2	5.87						
4	18.47	31.02	22.14	96.2	5.87						
5	17.63	31.13	22.42	95.8	5.97						
6	17.25	31.22	22.54	95.5	6.14						
7	15.26	31.54	23.19	94.9	6.45						
8	14.30	31.63	23.60	94.8	6.77						
9	12.36	31.79	24.02	94.5	7.05						
10	12.00	31.90	24.15	94.3	7.13	6.98	.0	.00	.00	1.80	.09
11	11.30	32.02	24.31	94.2	7.08						
12	11.30	32.01	24.40	94.1	7.08						
13	11.20	32.08	24.48	94.3	7.06						
14	11.20	32.11	24.52	94.5	6.99						
15	11.11	32.11	24.53	94.5	6.96						
16	10.88	32.13	24.59	94.2	6.95						
17	10.40	32.18	24.71	94.0	6.96						
18	9.90	32.14	24.75	93.7	6.91						
19	9.50	32.17	24.85	93.7	6.87						
20	9.11	32.18	24.92	93.8	6.76	6.03	1.3	.00	.00	4.07	.1d
21	8.76	32.16	24.96	94.2	6.65						
22	8.22	32.21	25.06	94.5	6.53						
23	8.22	32.19	25.06	94.6	6.43						
24	8.15	32.19	25.07	94.7	6.30						
25	7.90	32.27	25.17	94.6	6.16						
26	7.70	32.28	25.20	94.4	6.11						
27	7.70	32.30	25.22	94.8	6.05						
28	7.66	32.34	25.26	94.0	6.00						
29	7.66	32.45	25.35	94.1	6.04						
30	7.70	32.51	25.39	94.2	6.12	6.44	1.8	.21	.00	5.16	.23
31	7.76	32.52	25.40	94.2	6.42						
32	7.32	32.50	25.43	94.7	6.42						
33	7.30	32.51	25.43	94.4	6.63						
34	6.76	32.53	25.44	94.4	6.78						
35	6.66	32.53	25.44	94.4	6.82						
36	6.66	32.53	25.46	94.5	6.80						
37	6.66	32.54	25.44	94.5	6.74						
38	6.66	32.54	25.49	94.5	6.68						
39	6.66	32.54	25.50	94.5	6.62						
40	6.66	32.55	25.62	94.0	6.54	6.13	2.8	.62	.00	6.14	.33
41	6.66	32.55	25.66	94.4	6.48						
42	6.66	32.59	25.68	94.4	6.42						
43	6.66	32.60	25.68	94.0	6.34						
44	6.66	32.60	25.69	93.3	6.24						
45	6.66	32.60	25.69	93.9	6.16						
46	6.66	32.60	25.69	93.9	6.11						
47	6.66	32.60	25.68	93.3	6.06						
48	6.66	32.60	25.69	93.3	6.00						
49	6.66	32.60	25.70	93.7	5.99						
50	6.66	32.61	25.70	93.7	.26	5.91	3.2	.58	1.27	8.93	.42

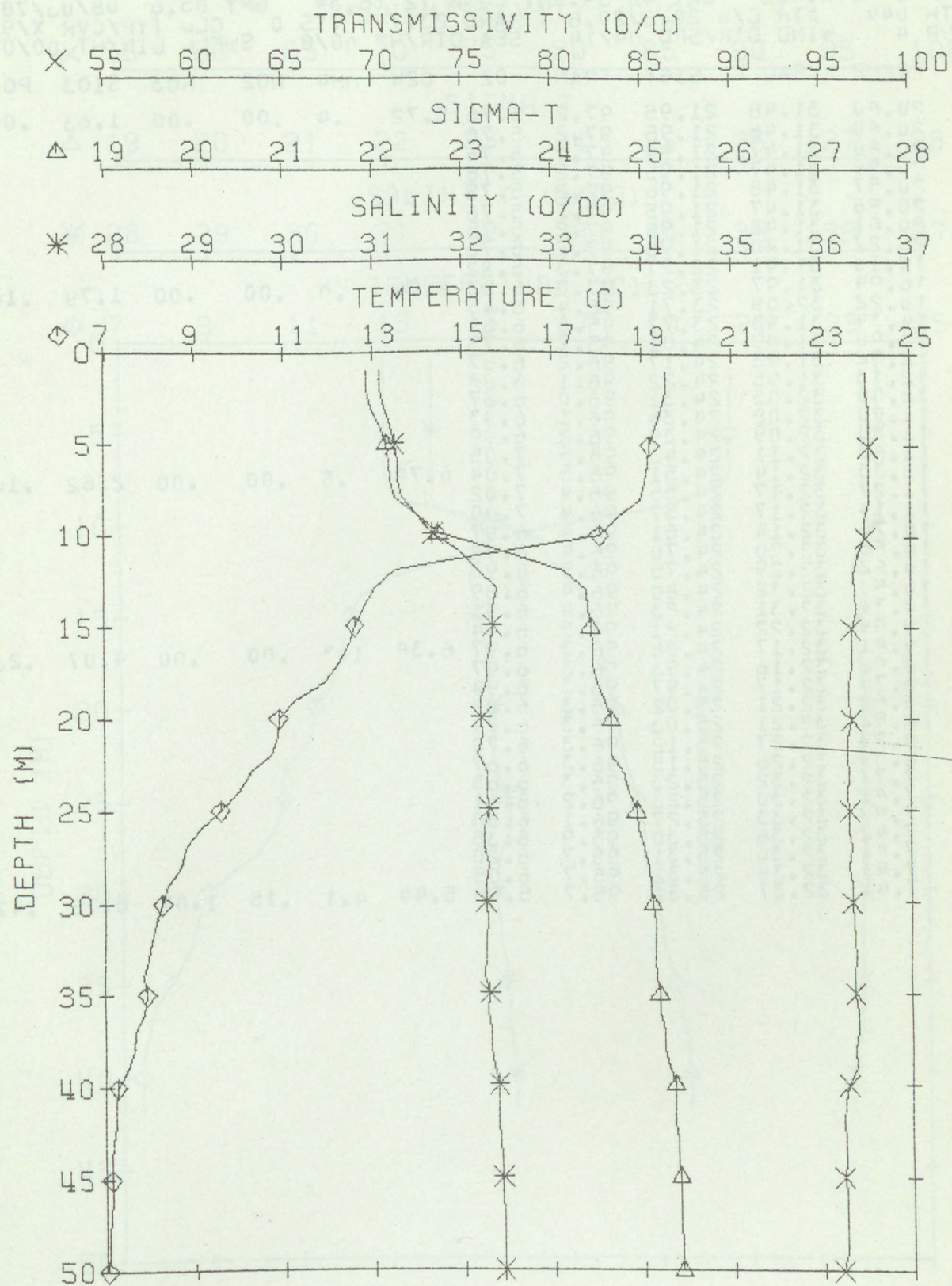
KELEZ CRUISE XWCC-20 STATION 60 08/03/78



XWCC-20 SIA.061 LAT 40 33.0N; LONG 72 13.5W GMT 07.2 08/03/78
 DEPTH 052 AIR D/W 21.1/21.1 BARO 22.5 VIS 0 CLD TYP/CVR X/9
 WFTWR 4 WIND DIR/SPD 19/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.53	31.08	21.92	97.5	5.94	5.90	.3	.00	.00	2.12	.14
2	19.53	31.08	21.92	97.5	5.94						
3	19.53	31.12	21.98	97.6	5.95						
4	19.27	31.19	22.07	97.6	5.96						
5	19.16	31.24	22.14	97.6	5.97						
6	19.11	31.28	22.18	97.6	5.98						
7	19.06	31.28	22.19	97.6	5.98						
8	18.55	31.32	22.25	97.6	5.98						
9	18.45	31.49	22.50	97.4	6.02						
10	18.37	31.66	22.73	97.4	6.10	6.16	.0	.00	.00	2.12	.05
11	18.33	31.96	23.46	97.0	6.29						
12	18.43	32.16	24.12	96.7	6.67						
13	18.11	32.37	24.38	96.8	7.04						
14	18.33	32.33	24.39	96.9	7.15						
15	18.43	32.33	24.43	96.6	7.21						
16	18.43	32.31	24.44	96.6	7.24						
17	18.33	32.26	24.45	96.6	7.27						
18	18.33	32.26	24.50	96.6	7.29						
19	18.33	32.20	24.50	96.6	7.32						
20	18.33	32.20	24.64	96.6	7.39	7.12	.0	.00	.00	1.62	.09
21	18.33	32.21	24.65	96.6	7.39						
22	18.33	32.17	24.65	96.6	7.34						
23	18.33	32.25	24.79	96.6	7.33						
24	18.33	32.26	24.84	96.6	7.31						
25	18.33	32.27	24.92	96.6	7.26						
26	18.33	32.30	24.96	96.6	7.22						
27	18.33	32.33	25.01	96.6	7.16						
28	18.33	32.28	25.06	96.6	7.05						
29	18.33	32.25	25.08	96.6	6.93						
30	18.33	32.24	25.09	96.6	6.84	6.33	1.8	.00	.00	5.15	.33
31	18.33	32.25	25.13	96.6	6.99						
32	18.33	32.24	25.13	96.6	6.54						
33	18.33	32.24	25.14	96.6	6.40						
34	18.33	32.23	25.15	96.6	6.23						
35	18.33	32.28	25.16	96.6	6.06						
36	18.33	32.26	25.17	96.6	5.94						
37	18.33	32.30	25.23	96.6	6.04						
38	18.33	32.30	25.23	96.6	6.06						
39	18.33	32.33	25.28	96.6	6.03						
40	18.33	32.38	25.34	96.6	6.05	6.02	3.7	.00	.00	6.88	.37
41	18.33	32.38	25.35	96.6	6.04						
42	18.33	32.38	25.35	96.6	5.97						
43	18.33	32.40	25.37	96.6	5.90						
44	18.33	32.40	25.38	96.6	5.87						
45	18.33	32.41	25.39	96.6	5.86						
46	18.33	32.42	25.39	96.6	5.85						
47	18.33	32.42	25.40	96.6	5.84						
48	18.33	32.42	25.41	96.6	5.83						
49	18.33	32.42	25.41	96.6	5.82						
50	18.33	32.43	25.41	96.6	5.83	5.78	3.7	.30	.80	9.15	.47

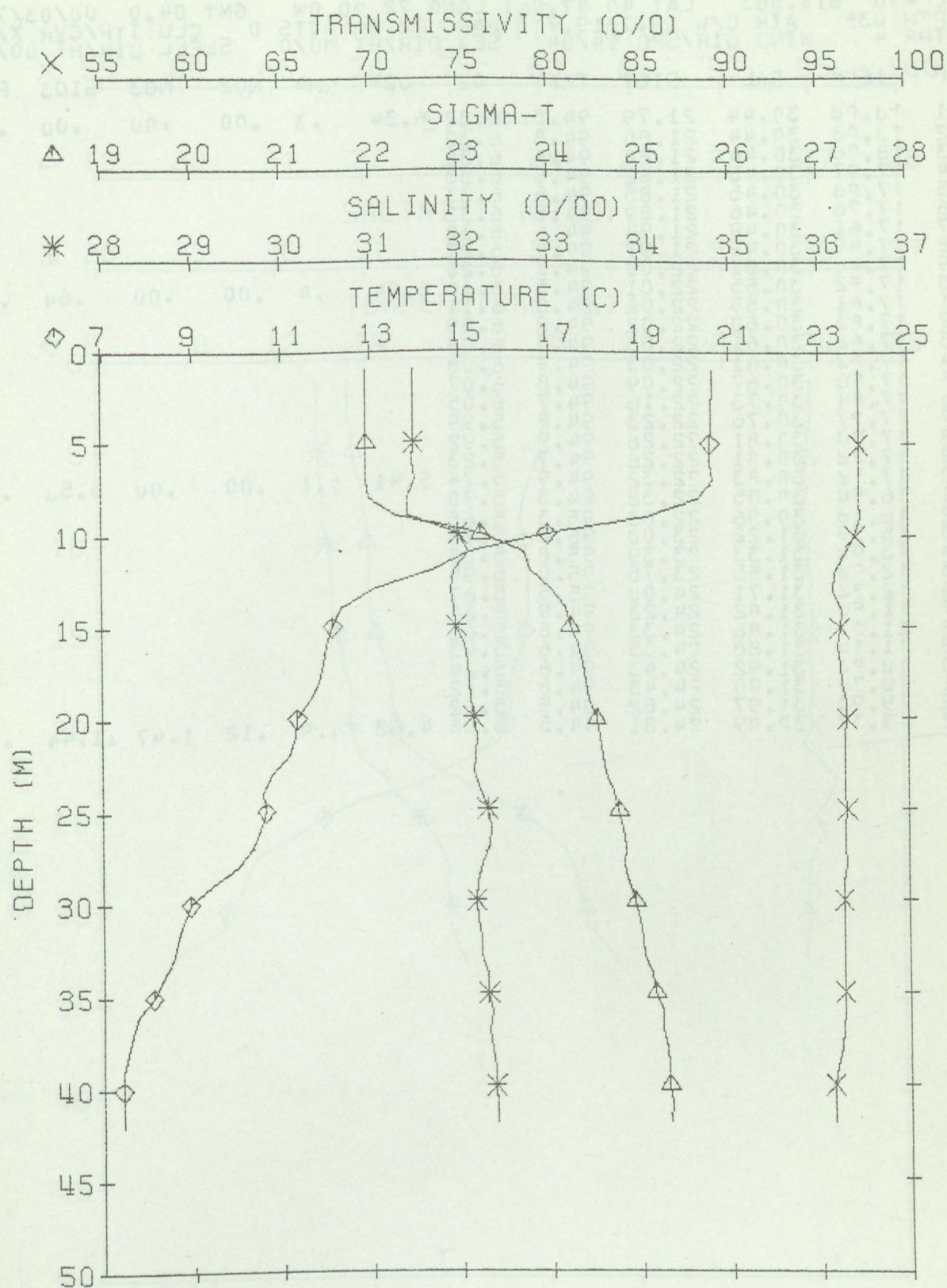
KELEZ CRUISE XWCC-20 STATION 61 08/03/78



X-CC-20 SIA.062 LAT 40 39.9N; LONG 72 16.3W GMT 05.6 08/03/78
 DEPTH 044 AIR C/W 20.8/20.6 BARO 23.7 VTS 0 CLD TYP/CVR X/9
 WETHR 4 WIND DIR/SPD 04/14 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	04	N02	N03	SI03	P04
1	20.60	31.48	21.95	97.2	5.76	5.72	.4	.00	.00	1.63	.09
2	20.60	31.48	21.95	97.2	5.76						
3	20.60	31.47	21.94	97.2	5.76						
4	20.60	31.47	21.95	97.2	5.76						
5	20.57	31.48	21.96	97.2	5.75						
6	20.56	31.47	21.95	97.2	5.76						
7	20.51	31.48	21.95	97.2	5.75						
8	20.47	31.40	21.96	97.2	5.76						
9	19.13	31.41	22.27	97.2	5.82						
10	16.04	31.97	23.23	97.2	6.03	6.54	.0	.00	.00	1.79	.14
11	15.22	33.09	23.71	97.2	6.45						
12	14.24	31.93	23.77	97.2	6.63						
13	13.00	31.89	24.01	97.2	6.75						
14	12.32	31.93	24.17	97.2	6.87						
15	12.11	31.95	24.22	97.2	6.88						
16	12.00	32.00	24.31	97.2	6.93						
17	11.00	32.00	24.36	97.2	6.97						
18	11.00	32.00	24.39	97.2	6.99						
19	11.00	32.00	24.43	97.2	7.05						
20	11.00	32.14	24.51	97.2	7.04	6.72	.5	.00	.00	2.62	.14
21	11.27	32.17	24.55	97.2	7.02						
22	11.14	32.17	24.57	97.2	7.00						
23	10.06	32.14	24.61	97.2	6.97						
24	10.00	32.20	24.70	97.2	6.98						
25	10.00	32.29	24.75	97.2	6.93						
26	10.00	32.32	24.80	97.2	6.99						
27	10.00	32.31	24.83	97.2	6.91						
28	9.00	32.22	24.92	97.2	6.94						
29	9.00	32.17	24.96	97.2	6.97	6.32	1.2	.00	.00	4.07	.26
30	8.00	32.16	24.99	97.2	6.97						
31	8.00	32.17	24.97	97.2	6.94						
32	8.00	32.21	25.02	97.2	6.84						
33	8.00	32.21	25.03	97.2	6.74						
34	8.00	32.27	25.12	97.2	6.70						
35	8.00	32.32	25.15	97.2	6.67						
36	7.00	32.32	25.23	97.2	6.65						
37	7.00	32.30	25.23	97.2	6.61						
38	7.00	32.33	25.27	97.2	6.50						
39	7.00	32.36	25.30	97.2	6.55						
40	7.00	32.36	25.31	97.2	6.55						
41	7.00	32.36	25.32	97.2	6.55						
42	7.00	32.38	25.32	97.2	6.55						
43	7.00	32.41	25.32	97.2	6.05						
44	7.00	32.41	25.31	97.2	5.96	5.44	4.1	.15	1.07	5.75	.47

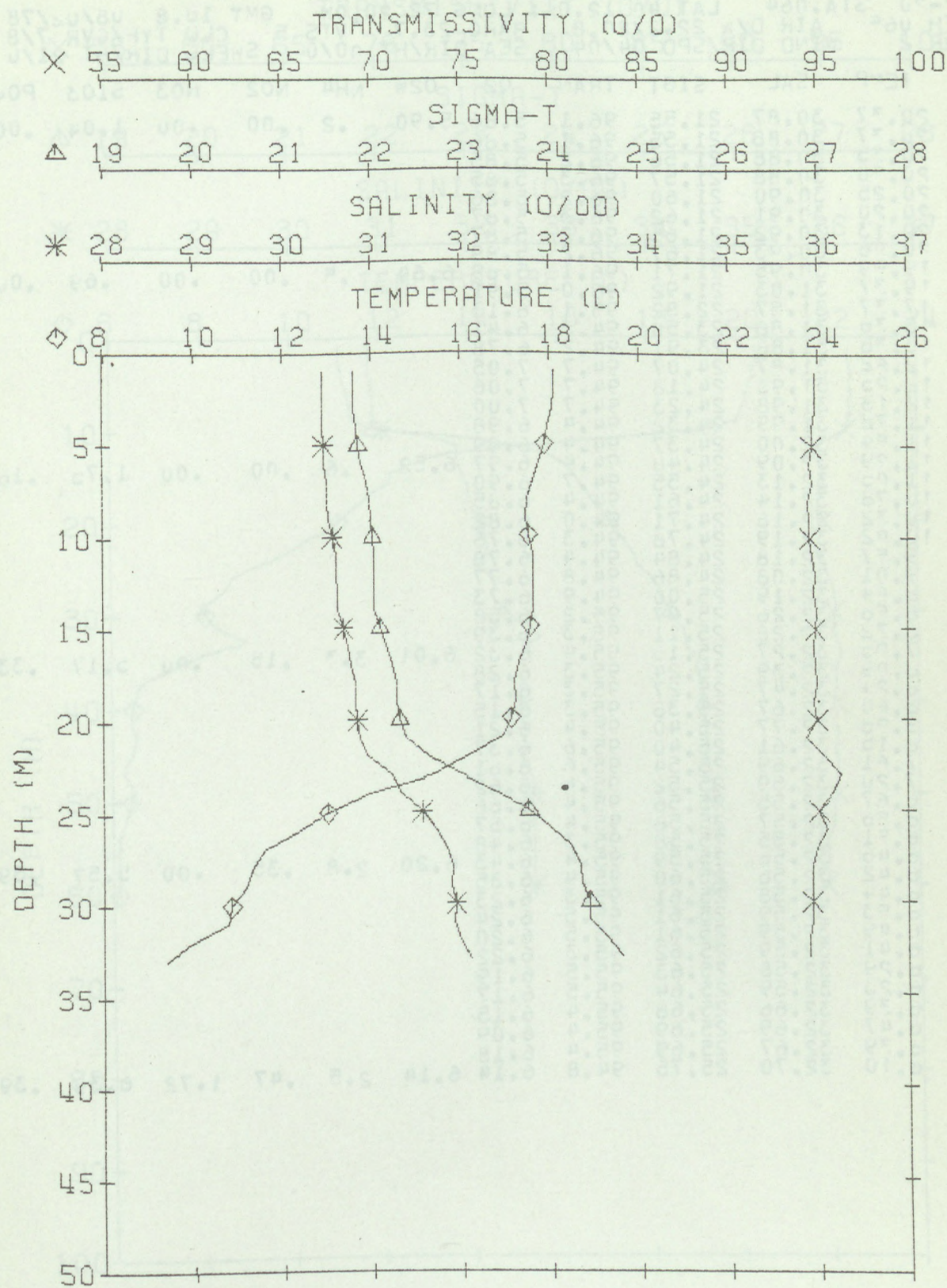
KELEZ CRUISE XWCC-20 STATION 62 08/03/78



XWCC-20 STA.063 LAT 40 47.0N; LONG 72 20.0W GMT 04.0 08/03/78
 DEPTH 035 AIR C/W 19.7/19.7 BARO 23.5 VIS 0 CLD TYP/CVR X/9
 WFTHR 4 WIND DIR/SPD 14/04 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	18.08	30.44	21.79	94.8	6.32	6.34	.3	.00	.00	.00	.14
2	18.08	30.44	21.80	94.8	6.32						
3	18.06	30.44	21.80	94.8	6.32						
4	17.07	30.45	21.82	94.8	6.33						
5	17.08	30.45	21.85	94.8	6.33						
6	17.76	30.46	21.89	94.8	6.33						
7	17.61	30.49	21.94	94.8	6.33						
8	17.49	30.49	21.97	94.8	6.33						
9	17.40	30.51	22.00	94.8	6.33						
10	17.22	30.55	22.01	94.8	6.33	6.04	.4	.00	.00	.64	.14
11	17.61	30.59	22.02	94.8	6.11						
12	17.63	30.60	22.02	94.8	6.09						
13	17.62	30.61	22.03	94.8	6.08						
14	17.62	30.61	22.03	94.8	6.08						
15	17.66	30.67	22.09	94.8	6.07						
16	17.44	30.73	22.16	94.8	6.05						
17	17.27	30.76	22.23	94.8	6.00						
18	17.20	30.81	22.28	94.8	6.00						
19	17.22	30.81	22.28	94.8	6.00						
20	17.12	30.83	22.30	94.8	6.00						
21	16.00	30.85	22.38	94.8	5.74	5.41	2.1	.00	.00	3.50	.33
22	16.16	30.96	22.33	94.8	5.70						
23	15.33	31.11	22.30	94.8	5.63						
24	15.05	31.33	22.39	94.8	5.33						
25	12.08	31.55	22.37	94.8	5.05						
26	12.22	31.71	22.40	94.8	5.00						
27	11.00	31.82	22.40	94.8	5.00						
28	11.27	31.88	22.40	94.8	5.00						
29	11.15	31.88	22.40	94.8	5.00						
30	10.96	31.92	22.40	94.8	5.00						
31	10.74	31.90	22.40	94.8	5.00						
32	9.06	31.97	22.40	94.8	5.00						
33	9.37	32.09	22.40	94.8	5.00	4.63	4.9	.12	1.47	11.44	.71

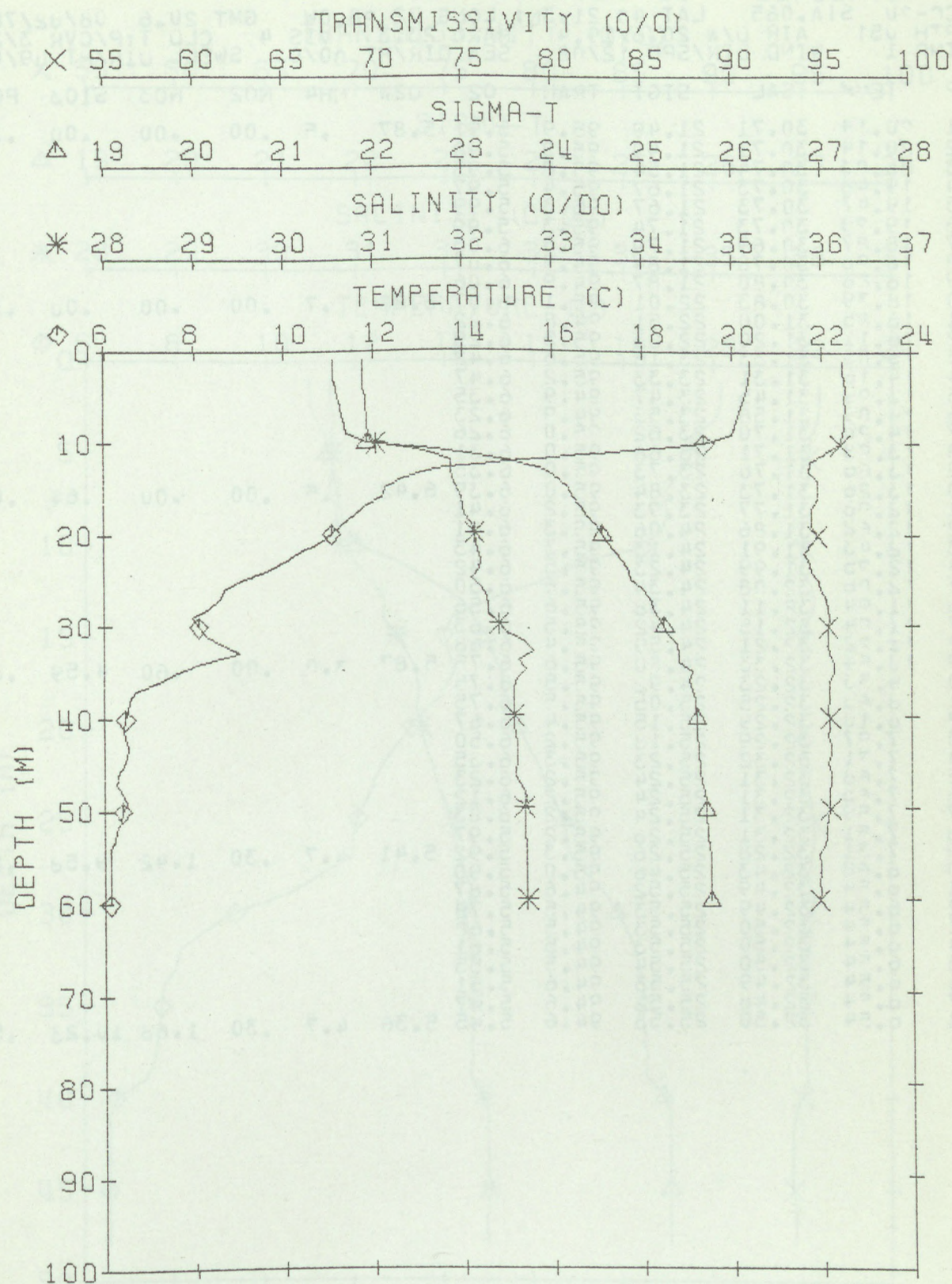
KELEZ CRUISE XWCC-20 STATION 63 08/03/78



XWCC-20 SIA.064 LAT 40 12.0N; LONG 72 20.0W GMT 18.8 08/02/78
 DEPTH 065 AIR D/W 22.2/27.8 BARO 23.7 VTS 5 CLD 1Y/CVR 7/8
 WFTHR 2 WIND DIR/SPD 04/04 SEA DIR/HT 00/0 SWELL DIR/HT 21/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	20.37	30.87	21.55	96.1	5.86	5.90	.2	.00	.00	1.04	.00
2	20.37	30.88	21.55	96.1	5.86						
3	20.37	30.88	21.56	96.2	5.85						
4	20.37	30.88	21.56	96.3	5.85						
5	20.37	30.89	21.57	96.3	5.85						
6	20.37	30.90	21.60	96.3	5.86						
7	20.37	30.91	21.62	96.3	5.87						
8	20.37	30.92	21.65	96.3	5.87						
9	20.37	30.93	21.67	96.3	5.89						
10	19.37	30.95	21.71	96.3	5.89	6.64	.5	.00	.00	.69	.00
11	17.37	31.03	21.92	96.0	5.91						
12	15.37	31.57	22.82	95.1	6.13						
13	13.37	31.86	23.50	94.2	6.41						
14	12.37	31.86	23.91	94.2	6.78						
15	12.37	31.87	24.07	94.7	7.05						
16	12.37	31.93	24.12	94.7	7.06						
17	12.37	31.98	24.23	94.7	7.00						
18	11.37	31.99	24.32	94.4	6.98						
19	11.37	32.00	24.37	94.4	6.99						
20	11.37	32.09	24.48	94.4	6.97	6.52	.6	.00	.00	1.75	.16
21	11.37	32.13	24.55	94.4	6.90						
22	10.37	32.14	24.61	94.4	6.85						
23	10.37	32.16	24.71	94.0	6.82						
24	10.37	32.19	24.78	94.3	6.76						
25	9.37	32.18	24.84	94.4	6.78						
26	8.37	32.08	24.86	94.3	6.77						
27	8.37	32.19	25.00	94.0	6.73						
28	8.37	32.26	25.07	94.0	6.68						
29	7.37	32.27	25.11	94.0	6.62	6.01	3.7	.15	.00	5.17	.33
30	6.37	32.39	25.16	94.0	6.52						
31	6.37	32.47	25.24	94.0	6.43						
32	6.37	32.67	25.36	94.0	6.37						
33	6.37	32.77	25.40	94.0	6.31						
34	6.37	32.61	25.40	94.0	6.27						
35	7.37	32.69	25.54	94.0	6.21						
36	6.37	32.59	25.62	94.4	6.16						
37	6.37	32.57	25.62	94.4	6.12						
38	6.37	32.57	25.62	94.4	6.06						
39	6.37	32.57	25.62	94.4	6.05						
40	6.37	32.57	25.62	94.4	6.04	6.20	2.8	.35	.00	5.57	.39
41	6.37	32.66	25.60	94.4	6.03						
42	6.37	32.64	25.61	94.3	6.03						
43	6.37	32.66	25.61	94.3	6.02						
44	6.37	32.66	25.61	94.3	6.02						
45	6.37	32.66	25.61	94.3	6.02						
46	6.37	32.66	25.61	94.3	6.02						
47	6.37	32.66	25.61	94.3	6.02						
48	6.37	32.66	25.61	94.3	6.02						
49	6.37	32.66	25.61	94.3	6.02						
50	6.37	32.66	25.61	94.3	6.02						
51	6.37	32.66	25.61	94.3	6.02						
52	6.37	32.66	25.61	94.3	6.02						
53	6.37	32.66	25.61	94.3	6.02						
54	6.37	32.66	25.61	94.3	6.02						
55	6.37	32.66	25.61	94.3	6.02						
56	6.37	32.66	25.61	94.3	6.02						
57	6.37	32.66	25.61	94.3	6.02						
58	6.37	32.66	25.61	94.3	6.02						
59	6.37	32.66	25.61	94.3	6.02						
60	6.37	32.66	25.61	94.3	6.02						
61	6.37	32.66	25.61	94.3	6.02						
62	6.37	32.66	25.61	94.3	6.02						
63	6.37	32.66	25.61	94.3	6.02						
64	6.37	32.66	25.61	94.3	6.02						
65	6.37	32.66	25.61	94.3	6.02						
66	6.37	32.66	25.61	94.3	6.02						
67	6.37	32.66	25.61	94.3	6.02						
68	6.37	32.66	25.61	94.3	6.02						
69	6.37	32.66	25.61	94.3	6.02						
70	6.37	32.66	25.61	94.3	6.02						
71	6.37	32.66	25.61	94.3	6.02						
72	6.37	32.66	25.61	94.3	6.02						
73	6.37	32.66	25.61	94.3	6.02						
74	6.37	32.66	25.61	94.3	6.02						
75	6.37	32.66	25.61	94.3	6.02						
76	6.37	32.66	25.61	94.3	6.02						
77	6.37	32.66	25.61	94.3	6.02						
78	6.37	32.66	25.61	94.3	6.02						
79	6.37	32.66	25.61	94.3	6.02						
80	6.37	32.66	25.61	94.3	6.02						
81	6.37	32.66	25.61	94.3	6.02						
82	6.37	32.66	25.61	94.3	6.02						
83	6.37	32.66	25.61	94.3	6.02						
84	6.37	32.66	25.61	94.3	6.02						
85	6.37	32.66	25.61	94.3	6.02						
86	6.37	32.66	25.61	94.3	6.02						
87	6.37	32.66	25.61	94.3	6.02						
88	6.37	32.66	25.61	94.3	6.02						
89	6.37	32.66	25.61	94.3	6.02						
90	6.37	32.66	25.61	94.3	6.02						
91	6.37	32.66	25.61	94.3	6.02						
92	6.37	32.66	25.61	94.3	6.02						
93	6.37	32.66	25.61	94.3	6.02						
94	6.37	32.66	25.61	94.3	6.02						
95	6.37	32.66	25.61	94.3	6.02						
96	6.37	32.66	25.61	94.3	6.02						
97	6.37	32.66	25.61	94.3	6.02						
98	6.37	32.66	25.61	94.3	6.02						
99	6.37	32.66	25.61	94.3	6.02						
100	6.37	32.66	25.61	94.3	6.02						

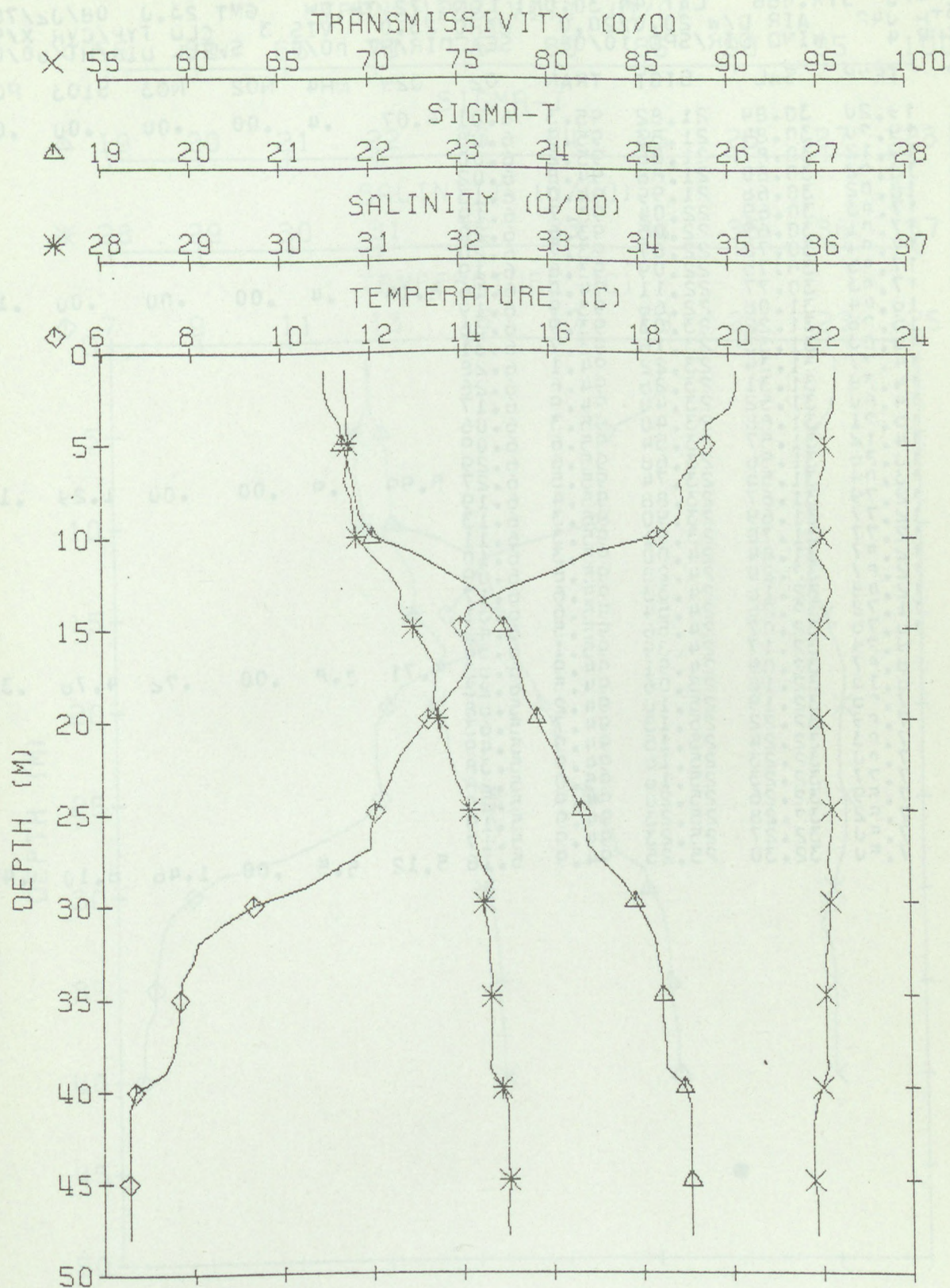
KELEZ CRUISE XWCC-20 STATION 64 08/02/78



XCCC-20 SIA.065 LAT 40 21.3N; LONG 72 28.0W GMT 20.6 08/02/78
 DEPTH 051 AIR 0/W 20.6/19.4 BARO 23.3 VIS 4 CLD TYP/CVR 3/2
 WETHR 1 WIND DIR/SPD 12/08 SEA DIR/HT 00/0 SWELL DIR/HT 09/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	20.14	30.71	21.49	95.9	5.91	5.87	.5	.00	.00	.00	.14
2	20.14	30.71	21.49	95.9	5.90						
3	20.14	30.74	21.54	95.8	5.93						
4	19.46	30.73	21.67	95.7	5.97						
5	19.46	30.73	21.67	95.7	5.99						
6	19.46	30.73	21.74	95.7	5.99						
7	18.87	30.69	21.79	95.6	6.03						
8	18.87	30.78	21.84	95.6	6.07						
9	18.87	30.80	21.87	95.6	6.06						
10	18.87	30.83	22.01	95.1	6.07	6.28	.7	.00	.00	.00	.14
11	16.11	31.00	22.51	95.2	6.22						
12	16.11	31.20	22.83	95.2	6.29						
13	15.11	31.33	23.16	95.4	6.42						
14	14.11	31.31	23.33	95.7	6.47						
15	13.11	31.45	23.47	95.9	6.55						
16	14.11	31.58	23.55	95.9	6.62						
17	14.11	31.70	23.62	95.9	6.63						
18	13.11	31.71	23.68	95.9	6.61						
19	13.11	31.70	23.73	95.9	6.61						
20	13.11	31.73	23.84	95.9	6.69	6.42	.5	.00	.00	.64	.00
21	12.11	31.77	23.93	95.9	6.71						
22	12.11	31.86	24.00	95.9	6.71						
23	12.11	31.91	24.13	95.9	6.73						
24	12.11	31.99	24.23	95.9	6.73						
25	12.11	32.08	24.34	95.9	6.75						
26	11.11	32.11	24.38	95.9	6.75						
27	11.11	32.15	24.42	95.9	6.75						
28	11.11	32.21	24.53	95.9	6.75						
29	10.11	32.33	24.59	95.9	6.75	5.87	3.0	.00	.60	4.59	.37
30	9.11	32.33	24.59	95.9	6.75						
31	8.11	32.33	24.59	95.9	6.75						
32	7.11	32.33	24.59	95.9	6.75						
33	7.11	32.33	24.59	95.9	6.75						
34	7.11	32.33	24.59	95.9	6.75						
35	7.11	32.33	24.59	95.9	6.75						
36	7.11	32.33	24.59	95.9	6.75						
37	7.11	32.33	24.59	95.9	6.75						
38	7.11	32.33	24.59	95.9	6.75						
39	7.11	32.33	24.59	95.9	6.75						
40	6.11	32.33	24.59	95.9	6.75	5.41	4.7	.30	1.42	9.58	.50
41	6.11	32.33	24.59	95.9	6.75						
42	6.11	32.33	24.59	95.9	6.75						
43	6.11	32.33	24.59	95.9	6.75						
44	6.11	32.33	24.59	95.9	6.75						
45	6.11	32.33	24.59	95.9	6.75						
46	6.11	32.33	24.59	95.9	6.75						
47	6.11	32.33	24.59	95.9	6.75						
48	6.11	32.33	24.59	95.9	6.75	5.36	4.7	.30	1.68	10.23	.56

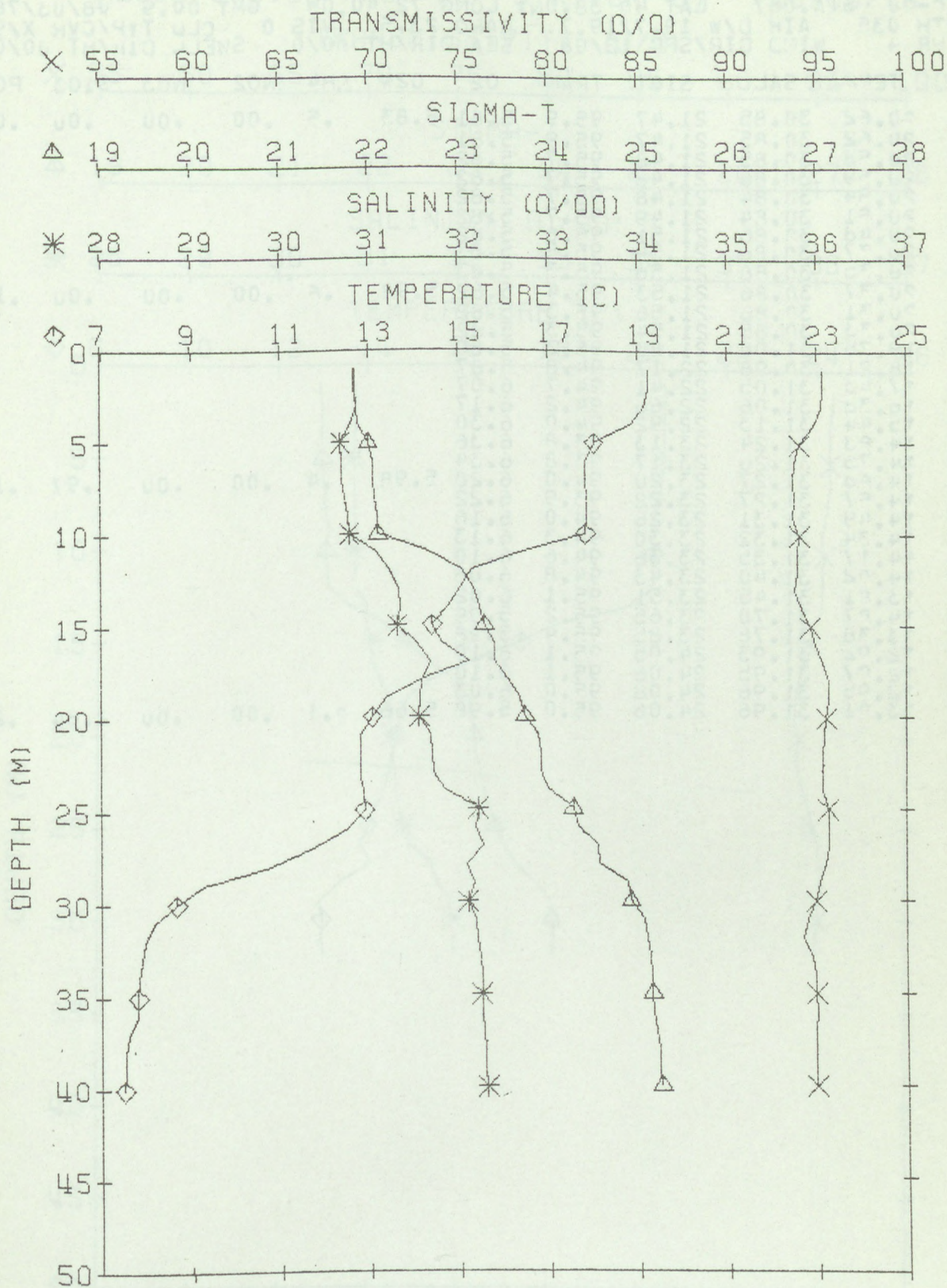
KELEZ CRUISE XWCC-20 STATION 65 08/02/78



XWCC-20 SIA.066 LAT 40 30.0N; LONG 72 34.0W GMT 23.0 08/02/78
 DEPTH 042 AIR D/W 20.0/20.0 HARG 23.0 VIS 3 CLD TYP/CVR X/9
 WETR 4 WIND DIR/SPD 10/08 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	19.20	30.84	21.82	95.3	6.01	6.07	.4	.00	.00	.00	.09
2	19.20	30.84	21.83	95.3	6.00						
3	19.12	30.87	21.86	95.2	6.00						
4	18.92	30.80	21.88	94.8	6.02						
5	18.68	30.68	21.99	94.0	6.13						
6	17.93	30.69	22.04	93.7	6.19						
7	17.71	30.69	22.05	93.6	6.20						
8	17.54	30.72	22.07	93.7	6.20						
9	17.33	30.75	22.09	93.6	6.19						
10	17.03	30.77	22.11	93.6	6.16	6.14	.4	.00	.00	.00	.18
11	16.58	31.08	22.66	93.0	6.16						
12	15.93	31.22	23.03	93.3	6.36						
13	14.77	31.33	23.16	93.1	6.31						
14	14.33	31.34	23.22	93.1	6.28						
15	14.33	31.31	23.28	93.4	6.26						
16	14.00	31.59	23.40	93.3	6.17						
17	13.78	31.78	23.40	93.3	6.06						
18	14.11	31.57	23.33	93.3	6.00						
19	13.74	31.56	23.33	93.3	6.00						
20	13.40	31.56	23.33	93.3	6.29						
21	12.79	31.67	23.33	93.3	6.27	5.99	.9	.00	.00	1.29	.14
22	12.77	31.69	23.33	93.3	6.19						
23	12.77	31.70	23.33	93.1	6.13						
24	12.83	31.84	23.40	93.0	6.11						
25	12.83	31.20	23.40	93.0	6.10						
26	12.53	31.16	23.33	93.0	6.09						
27	12.22	31.20	23.44	93.0	6.17						
28	11.70	31.07	23.44	93.0	6.31						
29	11.34	31.17	23.44	93.0	6.42						
30	10.67	31.00	23.44	93.0	6.56	5.71	3.8	.00	.72	4.70	.33
31	10.13	31.16	23.50	94.0	6.53						
32	9.99	31.10	23.50	94.0	6.88						
33	9.93	31.22	23.50	94.0	6.63						
34	9.93	31.24	23.50	94.0	6.49						
35	9.90	31.33	23.50	94.0	6.38						
36	9.77	31.26	23.50	94.0	6.28						
37	9.77	31.26	23.50	94.0	6.20						
38	9.77	31.26	23.50	94.0	6.19						
39	9.77	31.27	23.50	94.0	6.17						
40	9.77	31.30	23.50	94.0	6.16	5.12	5.5	.00	1.46	8.10	.47

KELEZ CRUISE XWCC-20 STATION 66 08/02/78



XWCC-20 STA.067 LAT 40 38.0N; LONG 72 40.0W GMT 00.9 08/03/78
 DEPTH 035 AIR D/W 19.7/19.7 BARO 23.5 VIS 0 CLD TYP/CVR X/9
 WETHR 4 WIND DIR/SPD 12/08 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	20.62	30.85	21.47	95.9	5.81	5.83	.5	.00	.00	.00	.00
2	20.62	30.85	21.47	95.9	5.81						
3	20.62	30.85	21.48	95.7	5.82						
4	20.62	30.86	21.48	95.7	5.82						
5	20.62	30.84	21.48	95.7	5.82						
6	20.62	30.84	21.49	95.7	5.82						
7	20.62	30.86	21.51	95.6	5.82						
8	20.62	30.86	21.54	95.5	5.83						
9	20.62	30.86	21.56	95.3	5.83						
10	20.62	30.86	21.53	95.4	5.82	5.98	.6	.00	.00	.00	.1d
11	20.62	30.86	21.56	95.3	5.82						
12	20.62	30.85	21.54	95.3	5.82						
13	19.75	30.90	21.80	95.3	5.80						
14	18.21	30.98	22.17	94.8	5.87						
15	17.40	31.05	22.41	94.7	5.07						
16	16.48	31.06	22.60	94.2	5.17						
17	15.64	31.13	22.90	94.2	5.30						
18	14.77	31.24	23.13	93.8	5.36						
19	14.50	31.26	23.17	93.8	5.34						
20	14.50	31.27	23.20	94.0	5.28	5.98	.4	.00	.00	.97	.14
21	14.50	31.27	23.22	93.9	5.22						
22	14.59	31.31	23.26	94.0	5.16						
23	14.74	31.32	23.30	94.7	5.13						
24	14.77	31.35	23.36	94.7	5.10						
25	14.90	31.40	23.43	94.8	5.06						
26	15.01	31.45	23.51	95.1	5.02						
27	15.07	31.70	23.65	95.2	5.00						
28	15.38	31.78	23.65	95.4	5.00						
29	16.00	31.93	24.00	95.1	5.10						
30	16.07	31.95	24.06	95.1	5.10						
31	16.07	31.96	24.08	95.0	5.03						
32	16.01	31.96	24.06	95.0	5.98	5.66	2.1	.00	.00	2.64	.23

KELEZ CRUISE XWCC-20 STATION 67 08/03/78

TRANSMISSIVITY (0/0)

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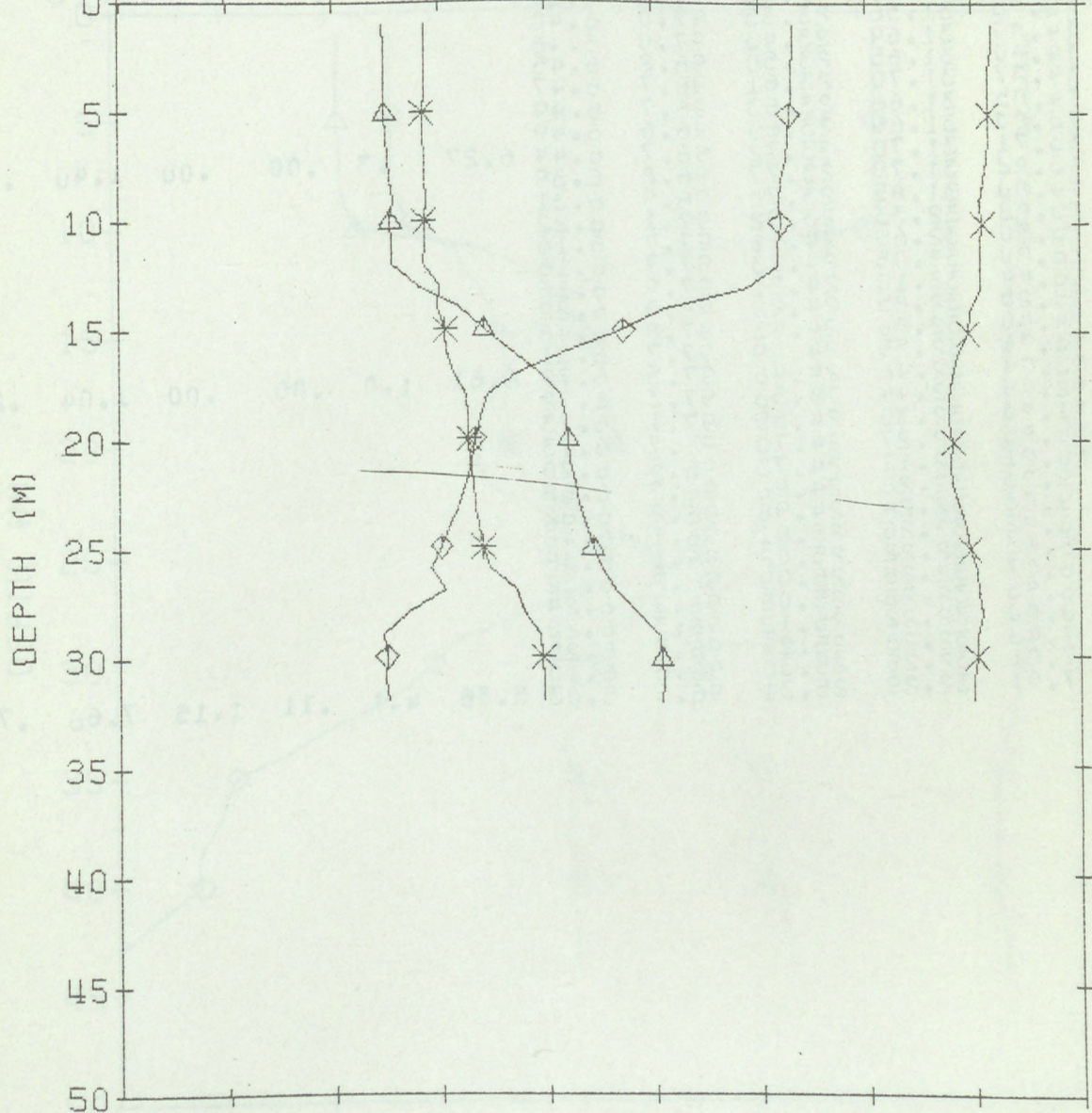
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SALINITY (0/00)

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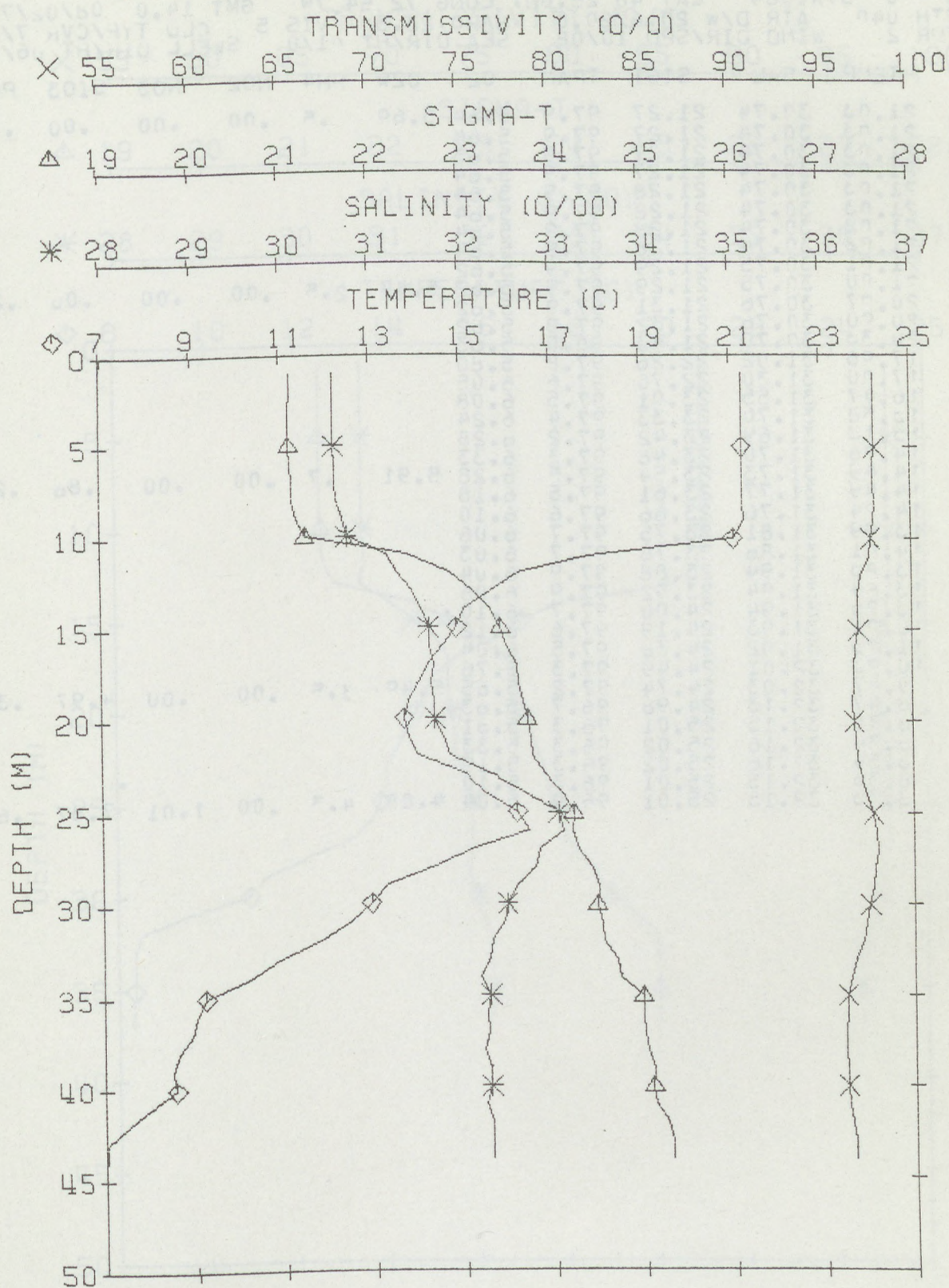
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XCCC-20 SIA.068 LAT 40 19.0N LONG 72 46.0W GMT 15.5 08/02/78
 DEPTH 04 AIR D/W 22.2/20.8 BARO 23.5 VIS 4 CLU TYP/CVR 7/8
 WTHR 2 WIND DIR/SPD 05/08 SEA DIR/HT 05/0 SWELL DIR/HT 06/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SIO3	P04
1	21.24	30.60	21.11	98.0	5.59	5.63	.4	.00	.00	.00	.16
2	21.24	30.60	21.11	98.0	5.59						
3	21.26	30.59	21.10	98.0	5.57						
4	21.26	30.59	21.10	98.0	5.57						
5	21.23	30.60	21.11	98.0	5.57						
6	21.25	30.60	21.11	97.9	5.57						
7	21.24	30.62	21.12	97.9	5.58						
8	21.25	30.63	21.13	98.0	5.57						
9	21.24	30.69	21.17	97.9	5.57						
10	21.24	30.73	21.27	97.7	5.53	5.28	.4	.00	.00	1.04	.22
11	17.26	31.17	22.40	97.6	5.96						
12	16.26	31.30	22.87	97.1	6.24						
13	15.24	31.45	23.13	97.0	6.32						
14	15.55	31.56	23.33	97.0	6.40						
15	14.33	31.64	23.43	97.0	6.46						
16	14.00	31.65	23.50	96.8	6.45						
17	14.77	31.70	23.61	96.7	6.47						
18	14.55	31.66	23.63	96.7	6.49						
19	13.55	31.69	23.69	96.6	6.49						
20	13.71	31.70	23.72	96.7	6.44	6.27	.3	.00	.00	1.40	.33
21	13.22	31.79	23.77	96.8	6.39						
22	14.00	31.85	23.78	96.9	6.31						
23	15.33	32.33	23.92	97.1	6.22						
24	15.00	32.69	24.11	97.4	6.16						
25	16.00	33.05	24.23	97.7	6.16						
26	16.44	33.10	24.21	97.0	6.16						
27	15.55	33.85	24.26	97.2	6.22						
28	14.40	33.80	24.43	97.8	6.46						
29	13.24	33.99	24.49	97.7	6.61	6.61	1.0	.00	.00	1.04	.27
30	12.44	33.44	24.56	97.3	6.72						
31	11.49	33.44	24.56	97.3	6.72						
32	11.33	33.30	24.55	97.1	6.73						
33	10.55	33.27	24.70	96.7	6.73						
34	10.21	33.17	24.73	96.5	6.70						
35	9.33	33.26	24.98	96.2	6.68						
36	9.33	33.24	24.98	96.2	6.62						
37	8.22	33.26	25.01	96.1	6.48						
38	8.33	33.22	25.02	96.1	6.38						
39	8.57	33.22	25.09	96.2	6.32						
40	8.55	33.22	25.08	96.2	6.24						
41	8.00	33.22	25.12	96.3	6.22						
42	7.56	33.22	25.24	96.5	6.25						
43	7.01	33.22	25.30	96.6	6.10						
44	7.01	32.29	25.31	96.6	5.03	5.36	4.1	.11	1.15	7.66	.73

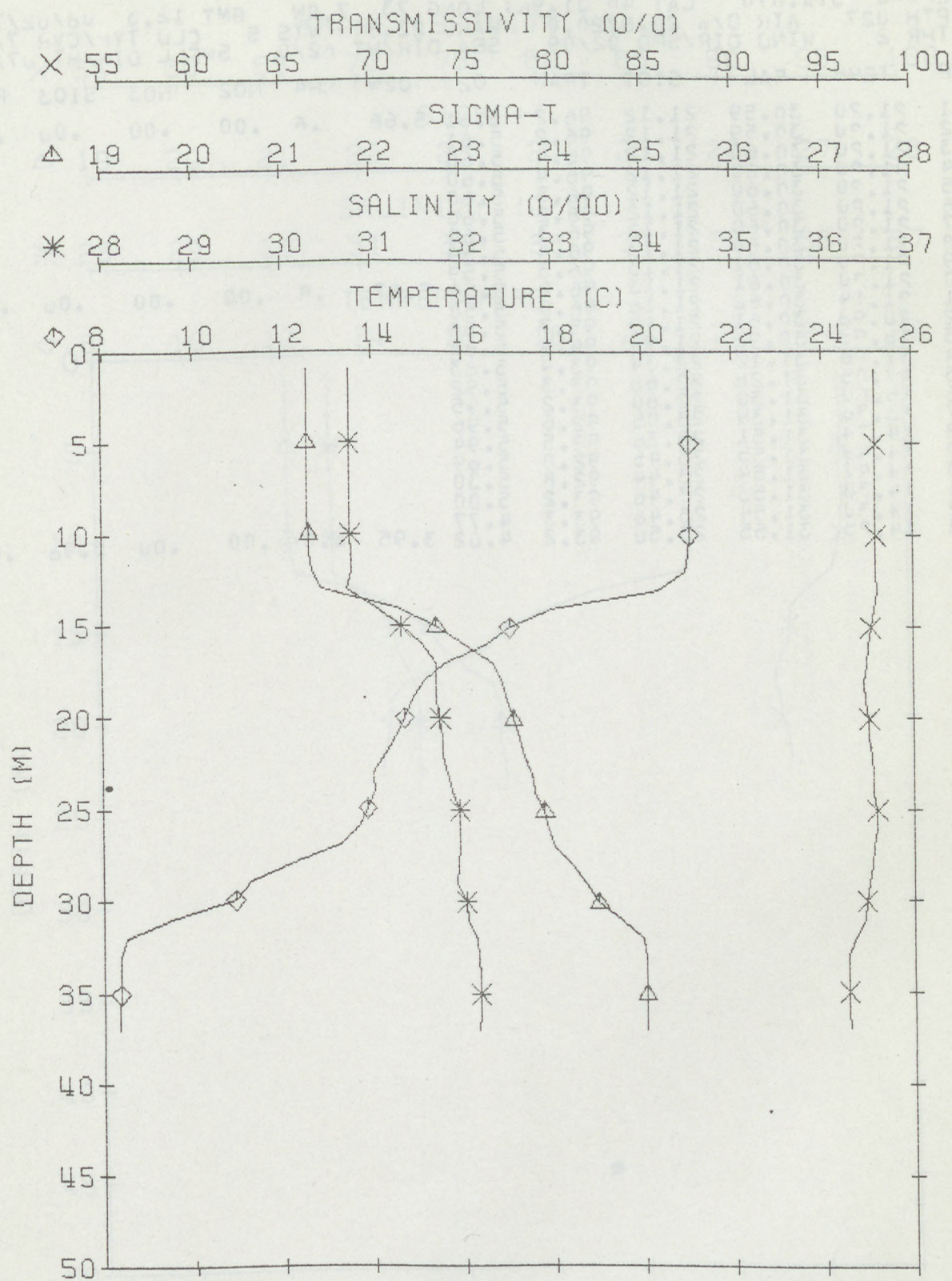
KELEZ CRUISE XWCC-20 STATION 68 08/02/78



XPC-20 SIA.069 LAT 40 25.0N; LONG 72 54.7W GMT 14.0 08/02/78
 DEPTH 040 AIR D/W 20.6/20.0 BARO 23.5 VIS 5 CLD TYP/CVR 7/8
 WFTUR 2 WIND DIR/SPD 10/08 SEA DIR/HT 01/0 SWELL DIR/HT 06/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SiO3	PO4
1	21.03	30.74	21.27	97.9	5.64	5.64	.5	.00	.00	.00	.11
2	21.03	30.74	21.27	97.9	5.64						
3	21.03	30.74	21.27	97.9	5.63						
4	21.03	30.74	21.27	97.9	5.64						
5	21.03	30.74	21.28	97.9	5.64						
6	21.03	30.74	21.28	97.9	5.64						
7	21.02	30.74	21.28	97.9	5.64						
8	21.02	30.74	21.28	97.9	5.64						
9	21.01	30.75	21.29	97.9	5.62						
10	21.00	30.75	21.29	97.9	5.62	5.44	2.5	.00	.00	.00	.20
11	20.99	30.76	21.31	97.9	5.62						
12	20.97	30.76	21.32	97.9	5.62						
13	20.94	30.70	21.43	97.9	5.62						
14	17.00	31.02	22.20	97.8	5.60						
15	17.00	31.30	22.70	97.7	5.60						
16	16.47	31.55	23.01	97.5	5.60						
17	15.54	31.70	23.33	97.4	5.62						
18	15.12	31.69	23.42	97.2	5.62						
19	14.59	31.70	23.48	97.1	5.63						
20	14.59	31.73	23.54	97.1	5.63	5.91	.7	.00	.00	.80	.28
21	14.49	31.77	23.61	97.5	5.68						
22	14.49	31.76	23.66	97.6	5.10						
23	13.99	31.81	23.75	97.7	5.06						
24	13.77	31.86	23.78	97.7	5.03						
25	13.70	31.94	23.88	97.9	5.04						
26	13.54	31.94	23.92	97.9	5.06						
27	13.33	31.94	24.00	97.7	5.10						
28	13.11	31.93	24.19	97.6	5.12						
29	11.00	31.92	24.30	97.5	5.04						
30	10.00	32.01	24.49	97.3	5.76						
31	9.57	32.03	24.74	97.2	5.55	5.40	3.5	.00	.00	4.97	.39
32	8.47	32.13	24.98	96.7	5.03						
33	8.34	32.15	25.01	96.3	5.51						
34	8.34	32.16	25.02	96.3	5.33						
35	8.34	32.16	25.02	96.3	5.10						
36	8.34	32.15	25.01	96.3	5.10						
37	8.34	32.15	25.01	96.4	5.04	4.88	4.3	.00	1.01	7.87	.60

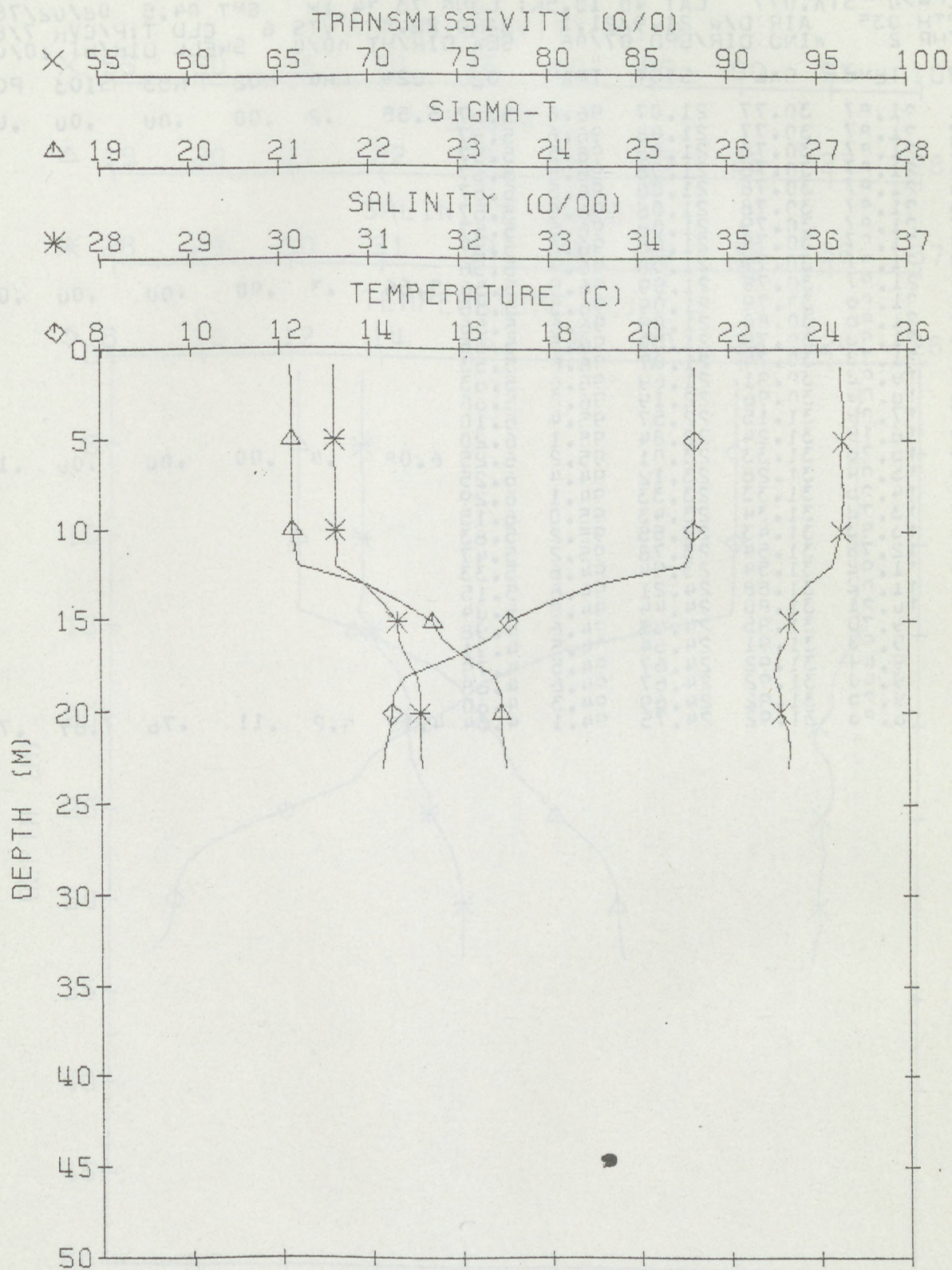
KELEZ CRUISE XWCC-20 STATION 69 08/02/78



XCCC-20 SIA.070 LAT 40 31.9N; LONG 73 7.0W GMT 12.3 08/02/78
 DEPTH 027 AIR D/W 20.6/20.0 BARO 22.5 VIS 5 CLD TYP/CVR 7/8
 WTHR 2 WIND DIR/SPD 02/09 SEA DIR/HT 02/0 SWELL DIR/HT 07/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	21.20	30.59	21.12	96.2	5.61	5.66	.6	.00	.00	.00	.16
2	21.20	30.59	21.12	96.2	5.61						
3	21.20	30.60	21.12	96.4	5.60						
4	21.20	30.60	21.12	96.4	5.60						
5	21.20	30.60	21.12	96.4	5.60						
6	21.20	30.60	21.12	96.4	5.60						
7	21.20	30.60	21.12	96.4	5.60						
8	21.20	30.60	21.12	96.4	5.60						
9	21.20	30.61	21.13	96.4	5.60						
10	21.20	30.61	21.13	96.4	5.60	5.67	.5	.00	.00	.00	.00
11	21.14	30.61	21.16	96.4	5.60						
12	20.88	30.62	21.19	96.4	5.60						
13	18.88	30.92	21.94	96.4	5.60						
14	17.88	31.12	22.34	96.4	5.60						
15	17.00	31.33	22.68	96.4	5.60						
16	16.70	31.33	22.68	96.4	5.60						
17	15.70	31.50	23.00	96.4	5.60						
18	14.74	31.50	23.36	96.4	5.60						
19	14.49	31.50	23.45	96.4	5.60						
20	14.47	31.50	23.45	96.4	5.60						
21	14.48	31.50	23.45	96.4	5.60						
22	14.48	31.50	23.45	96.4	5.60						
23	14.48	31.50	23.45	96.4	5.60	3.95	4.0	.00	.00	5.90	.62

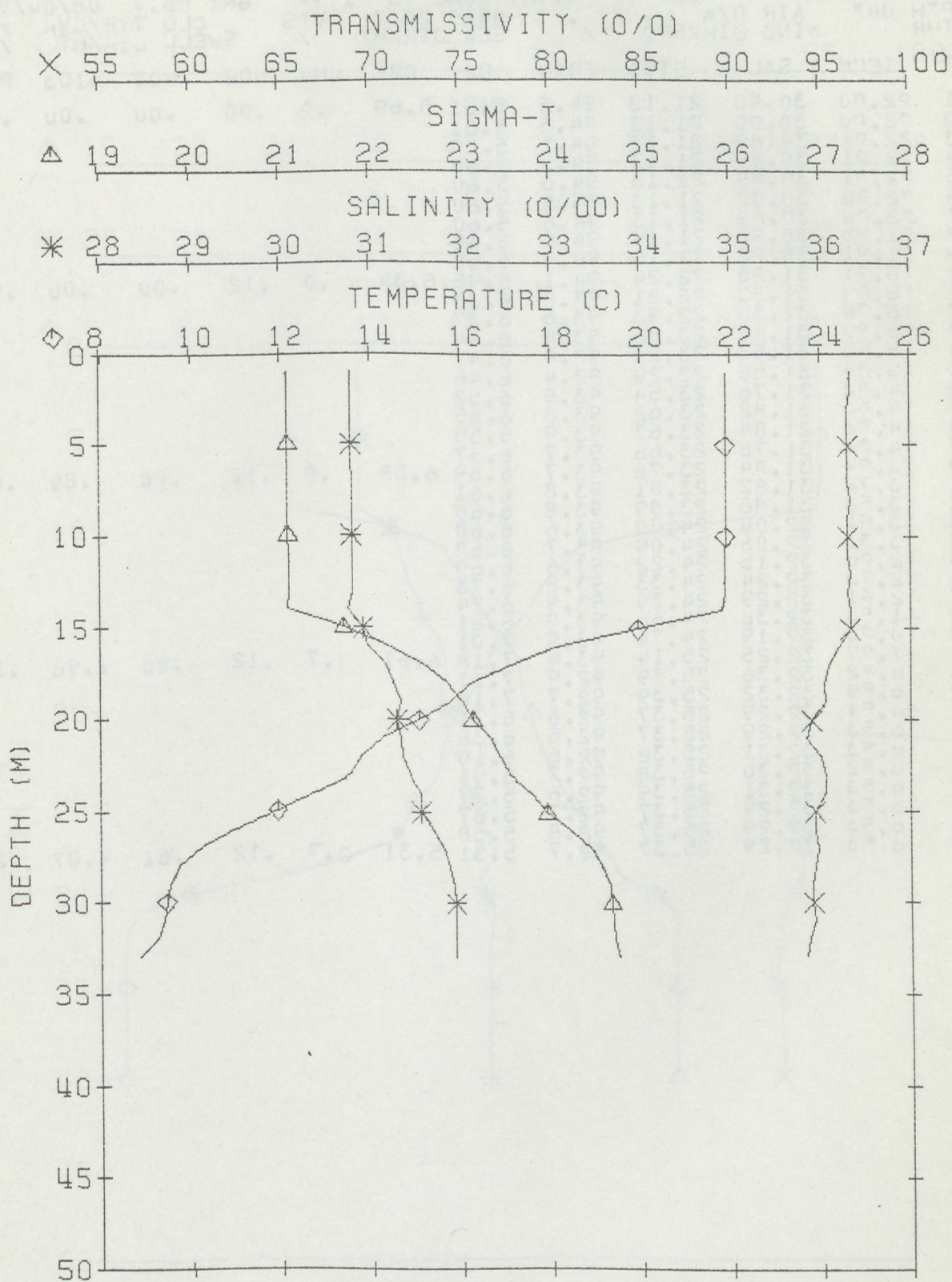
KELEZ CRUISE XWCC-20 STATION 70 08/02/78



XCCC-20 SIA.077 LAT 40 10.5N; LONG 73 34.1W GMT 04.5 08/02/78
 DEPTH 035 AIR D/W 21.9/21.1 BARO 22.0 VIS 6 CLD TYP/CVR 7/8
 WETHR 2 WIND DIR/SPD 07/06 SEA DIR/HT 00/0 SWELL DIR/HT 10/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	04H	NO2	NO3	SI03	PO4
1	21.87	30.77	21.07	96.6	5.37	5.55	.2	.00	.00	.00	.00
2	21.87	30.77	21.08	96.6	5.37						
3	21.87	30.78	21.08	96.5	5.37						
4	21.87	30.78	21.08	96.5	5.37						
5	21.87	30.78	21.08	96.5	5.37						
6	21.87	30.78	21.08	96.5	5.37						
7	21.87	30.79	21.08	96.5	5.37						
8	21.87	30.79	21.08	96.5	5.37						
9	21.87	30.79	21.08	96.5	5.37						
10	21.87	30.79	21.09	96.5	5.66	5.66	.3	.00	.00	.00	.00
11	21.86	30.79	21.09	96.5	5.66						
12	21.86	30.80	21.09	96.5	5.66						
13	21.86	30.79	21.09	96.5	5.66						
14	21.86	30.74	21.07	96.5	5.66						
15	19.82	30.91	21.69	96.5	5.66						
16	18.89	30.96	22.19	96.5	5.66						
17	17.09	31.15	22.57	96.5	5.66						
18	16.19	31.24	22.84	96.5	5.66						
19	15.76	31.33	23.01	96.5	5.66	6.08	.4	.00	.00	.00	.11
20	15.44	31.28	23.12	96.5	5.66						
21	14.99	31.33	23.33	96.5	5.66						
22	13.76	31.74	23.43	96.5	5.66						
23	13.56	31.43	23.55	96.5	5.66						
24	12.77	31.54	23.78	96.5	5.66						
25	11.66	31.54	23.94	96.5	5.66						
26	11.00	31.68	24.21	96.5	5.66						
27	10.21	31.80	24.44	96.5	5.66						
28	9.50	31.85	24.57	96.5	5.66						
29	9.50	31.91	24.64	96.5	5.66						
30	9.44	31.82	24.67	96.5	5.66						
31	9.44	31.82	24.67	96.5	5.66						
32	9.44	31.82	24.69	96.5	5.66						
33	9.44	31.82	24.75	96.5	5.66	4.19	5.2	.11	.78	1.87	.73

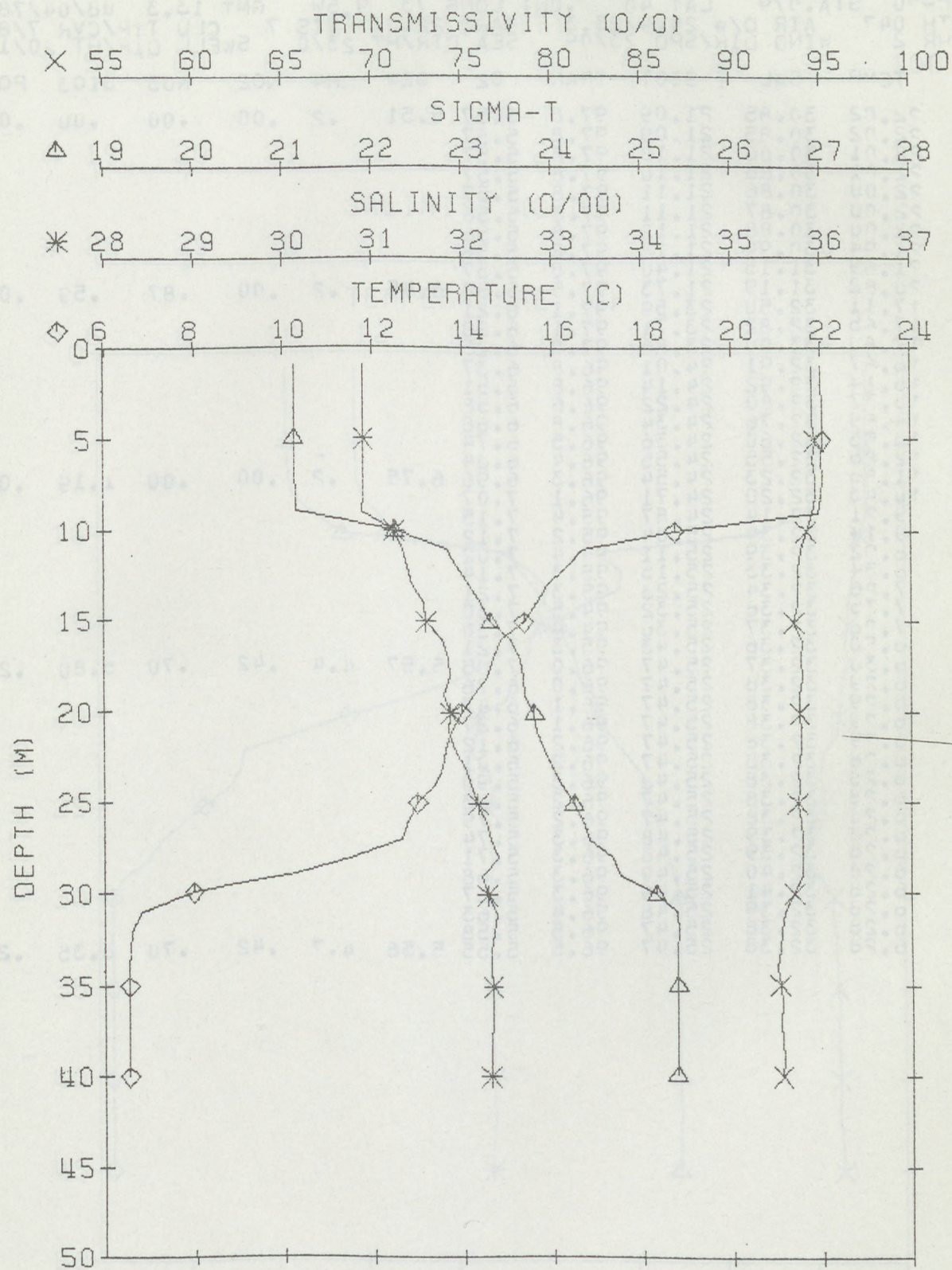
KELEZ CRUISE XWCC-20 STATION 77 08/02/78



X-CC-20 SIA.078 LAT 40 4.9N; LONG 73 21.9W GMT 06.7 08/04/78
 DEPTH 043 AIR D/W BARO 20.7 VIS
 WETHR WIND DIR/SPD / SEA DIR/HT / CLD TYP/CVR /
 SWELL DIR/HT /

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	22.00	30.90	21.13	94.5	5.61	5.69	.2	.00	.00	.00	.00
2	22.00	30.90	21.13	94.5	5.61						
3	22.00	30.90	21.13	94.5	5.61						
4	22.00	30.90	21.13	94.5	5.61						
5	22.00	30.90	21.13	94.5	5.61						
6	22.00	30.90	21.13	94.5	5.61						
7	22.00	30.90	21.13	94.5	5.61						
8	22.00	30.90	21.13	94.5	5.61						
9	21.98	30.90	21.14	94.5	5.61						
10	18.71	31.23	21.15	94.5	5.61						
11	16.44	31.33	22.24	94.5	5.61	6.34	.0	.12	.00	.00	.00
12	16.00	31.33	22.24	94.5	5.61						
13	15.00	31.33	22.24	94.5	5.61						
14	15.00	31.33	22.24	94.5	5.61						
15	15.00	31.33	22.24	94.5	5.61						
16	14.66	31.33	22.24	94.5	5.61						
17	14.66	31.33	22.24	94.5	5.61						
18	14.66	31.33	22.24	94.5	5.61						
19	14.66	31.33	22.24	94.5	5.61						
20	14.66	31.33	22.24	94.5	5.61						
21	14.66	31.33	22.24	94.5	5.61	6.58	.0	.12	.00	.89	.00
22	14.66	31.33	22.24	94.5	5.61						
23	14.66	31.33	22.24	94.5	5.61						
24	14.66	31.33	22.24	94.5	5.61						
25	14.66	31.33	22.24	94.5	5.61						
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27	14.66	31.33	22.24	94.5	5.61						
28	14.66	31.33	22.24	94.5	5.61						
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32	14.66	31.33	22.24	94.5	5.61						
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144	14.66										

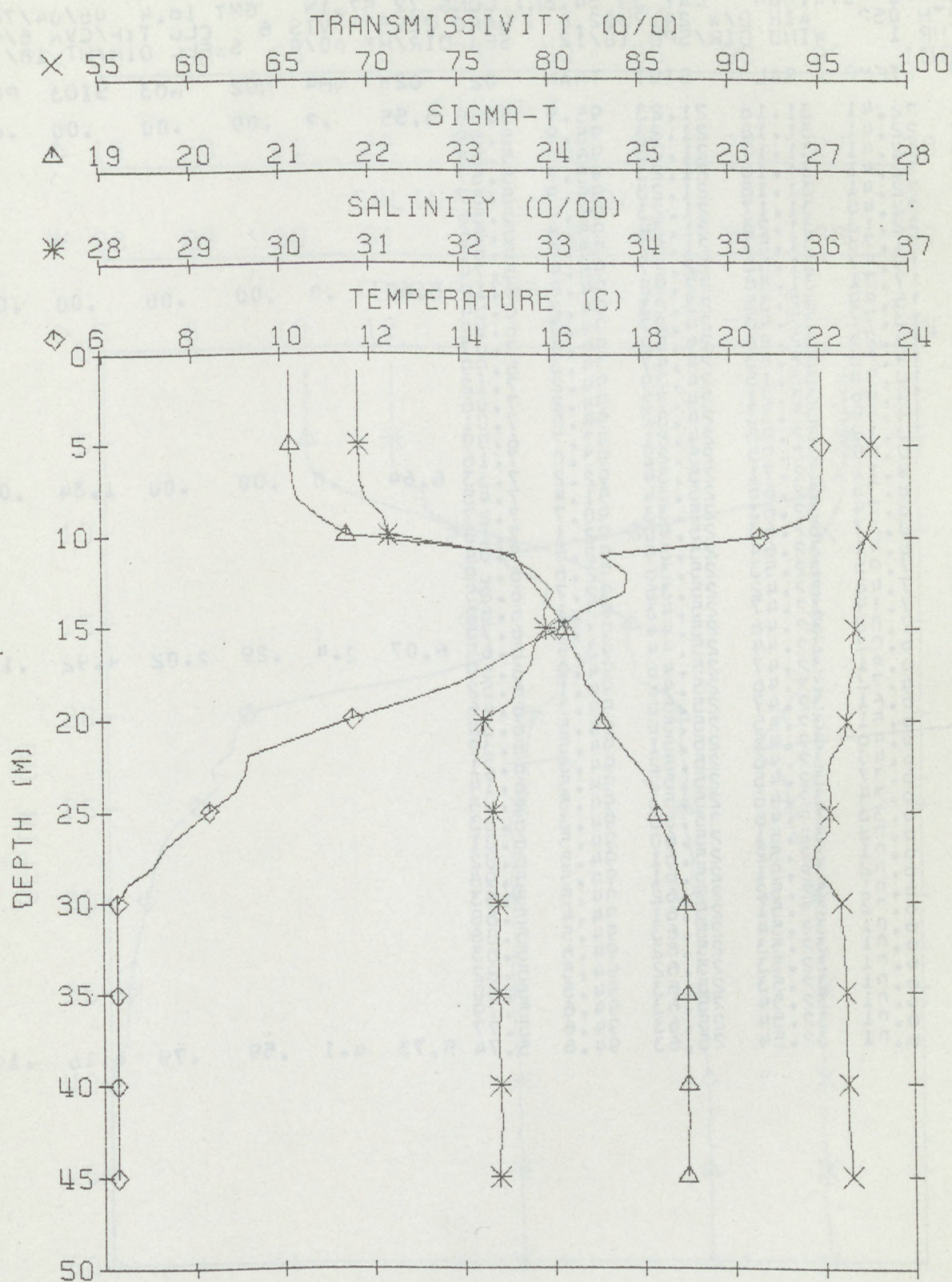
KELEZ CRUISE XWCC-20 STATION 78 08/04/78



XCCC-20 SIA.079 LAT 40.0N; LONG 73 9.5W GMT 13.3 08/04/78
 DEPTH 047 AIR D/W 24.4/23.3 BARO 22.0 VIS 7 CLD TYP/CVR 7/8
 WETHR 2 WIND DIR/SPD 23/09 SEA DIR/HT 23/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.02	30.85	21.09	97.8	5.57	5.51	.2	.00	.00	.00	.00
2	22.02	30.85	21.09	97.8	5.57						
3	22.01	30.86	21.10	97.8	5.57						
4	22.01	30.86	21.10	97.8	5.57						
5	22.00	30.86	21.11	97.8	5.57						
6	22.00	30.87	21.11	97.8	5.56						
7	22.00	30.88	21.12	97.8	5.56						
8	21.99	30.94	21.18	97.8	5.56						
9	21.69	31.15	21.40	97.8	5.56						
10	20.62	31.19	21.73	97.8	5.58	6.45	.2	.00	.87	.53	.00
11	17.11	32.50	23.59	97.7	5.58						
12	17.55	32.32	23.71	97.7	5.58						
13	17.60	33.00	23.86	97.7	5.58						
14	16.77	33.01	24.01	97.7	5.57						
15	15.77	33.00	24.14	97.7	5.57						
16	14.69	33.76	24.34	97.7	5.58						
17	13.33	33.60	24.56	97.7	5.58						
18	11.11	33.55	24.74	97.7	5.56						
19	9.55	33.20	24.71	97.7	5.56	6.75	.2	.00	.00	1.19	.00
20	9.00	33.14	24.87	97.7	5.55						
21	8.00	33.44	25.04	97.7	5.55						
22	7.00	33.33	25.11	97.7	5.55						
23	7.00	33.44	25.15	97.7	5.55						
24	7.00	33.44	25.15	97.7	5.55						
25	7.00	33.44	25.15	97.7	5.55						
26	7.00	33.44	25.15	97.7	5.55						
27	7.00	33.44	25.15	97.7	5.55						
28	7.00	33.44	25.15	97.7	5.55						
29	7.00	33.44	25.15	97.7	5.55						
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32	7.00	33.44	25.15	97.7	5.55						
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37	7.00	33.44	25.15	97.7	5.55						
38	7.00	33.44	25.15	97.7	5.55						
39	7.00	33.44	25.15	97.7	5.55						
40	7.00	33.44	25.15	97.7	5.55						
41	7.00	33.44	25.15	97.7	5.55						
42	7.00	33.44	25.15	97.7	5.55						
43	7.00	33.44	25.15	97.7	5.55						
44	7.00	33.44	25.15	97.7	5.55						
45	7.00	33.44	25.15	97.7	5.55						
46	7.00	33.44	25.15	97.7	5.55						
47	7.00	33.44	25.15	97.7	5.55						
48	7.00	33.44	25.15	97.7	5.55						
49	7.00	33.44	25.15	97.7	5.55						
50	7.00	33.44	25.15	97.7	5.55						
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52	7.00	33.44	25.15	97.7	5.55						
53	7.00	33.44	25.15	97.7	5.55						
54	7.00	33.44	25.15	97.7	5.55						
55	7.00	33.44	25.15	97.7	5.55						
56	7.00	33.44	25.15	97.7	5.55						
57	7.00	33.44	25.15	97.7	5.55						
58	7.00	33.44	25.15	97.7	5.55						
59	7.00	33.44	25.15	97.7	5.55						
60	7.00	33.44	25.15	97.7	5.55						
61	7.00	33.44	25.15	97.7	5.55						
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63	7.00	33.44	25.15	97.7	5.55						
64	7.00	33.44	25.15	97.7	5.55						
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66	7.00	33.44	25.15	97.7	5.55						
67	7.00	33.44	25.15	97.7	5.55						
68	7.00	33.44	25.15	97.7	5.55						
69	7.00	33.44	25.15	97.7	5.55						
70	7.00	33.44	25.15	97.7	5.55						
71	7.00	33.44	25.15	97.7	5.55						
72	7.00	33.44	25.15	97.7	5.55						
73	7.00	33.44	25.15	97.7	5.55						
74	7.00	33.44	25.15	97.7	5.55						
75	7.00	33.44	25.15	97.7	5.55						
76	7.00	33.44	25.15	97.7	5.55						
77	7.00	33.44	25.15	97.7	5.55						
78	7.00	33.44	25.15	97.7	5.55						
79	7.00	33.44	25.15	97.7	5.55						
80	7.00	33.44	25.15	97.7	5.55						
81	7.00	33.44	25.15	97.7	5.55						
82	7.00	33.44	25.15	97.7	5.55						
83	7.00	33.44	25.15	97.7	5.55						
84	7.00	33.44	25.15	97.7	5.55						
85	7.00	33.44	25.15	97.7	5.55						
86	7.00	33.44	25.15	97.7	5.55						
87	7.00	33.44	25.15	97.7	5.55						
88	7.00	33.44	25.15	97.7	5.55						
89	7.00	33.44	25.15	97.7	5.55						
90	7.00	33.44	25.15	97.7	5.55						
91	7.00	33.44	25.15	97.7	5.55						
92	7.00	33.44	25.15	97.7	5.55						
93	7.00	33.44	25.15	97.7	5.55						
94	7.00	33.44	25.15	97.7	5.55						
95	7.00	33.44	25.15	97.7	5.55						
96	7.00	33.44	25.15	97.7	5.55						
97	7.00	33.44	25.15	97.7	5.55						
98	7.00	33.44	25.15	97.7	5.55						
99	7.00	33.44	25.15	97.7	5.55						
100	7.00	33.44	25.15	97.7	5.55						

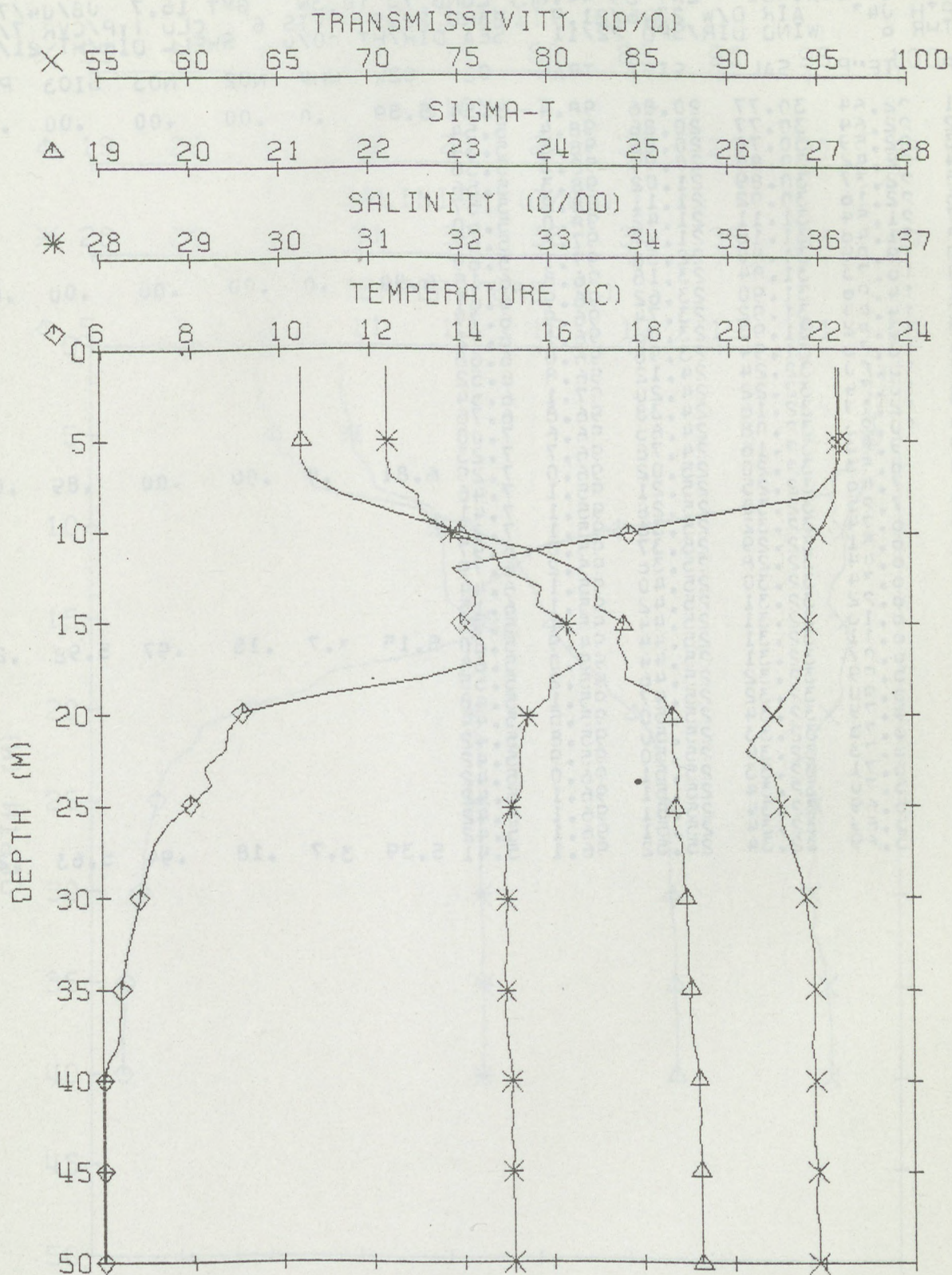
KELEZ CRUISE XWCC-20 STATION 79 08/04/78



X-CC-20 SIA.080 LAT 39 54.8N; LONG 72 57.1W GMT 18.4 08/04/78
 DEPTH 052 AIR D/W 24.7/22.8 BARO 22.5 VIS 6 CLD TYP/CVR 6/6
 WETHR 1 WIND DIR/SPD 18/12 SEA DIR/HT 00/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	STGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	PO4
1	22.41	31.18	21.23	95.9	5.59	5.55	.2	.00	.00	.00	.00
2	22.41	31.18	21.23	95.9	5.59						
3	22.41	31.17	21.23	95.0	5.58						
4	22.41	31.18	21.23	95.9	5.57						
5	22.41	31.18	21.23	95.9	5.57						
6	22.40	31.17	21.23	95.9	5.56						
7	22.18	31.15	21.23	95.8	5.56						
8	21.73	31.15	21.67	95.8	5.51						
9	19.57	31.55	22.27	95.4	5.74						
10	17.51	31.88	22.98	94.8	6.12	6.60	.0	.00	.00	.00	.00
11	15.59	32.35	23.83	94.2	6.54						
12	13.77	32.43	24.27	94.3	6.92						
13	14.23	32.28	24.52	94.4	7.07						
14	14.23	32.33	24.47	94.3	6.99						
15	13.08	32.15	24.79	94.2	7.12						
16	14.40	32.21	24.73	94.4	7.06						
17	14.40	32.33	24.82	94.2	7.01						
18	13.19	32.08	24.81	94.7	6.99						
19	10.00	32.05	25.22	94.0	7.16						
20	8.11	32.71	25.34	92.2	7.33	6.64	.0	.00	.00	1.34	.00
21	8.73	32.65	25.34	91.4	7.45						
22	8.74	32.63	25.33	90.0	7.27						
23	8.27	32.63	25.40	92.1	7.13						
24	8.41	32.64	25.39	92.5	7.04						
25	7.55	32.53	25.36	92.9	6.85						
26	7.46	32.42	25.35	92.7	6.85						
27	7.14	32.47	25.43	93.1	6.82						
28	7.00	32.46	25.44	93.3	6.75						
29	6.02	32.44	25.44	93.3	6.63	6.07	2.4	.29	2.02	4.92	.12
30	6.01	32.47	25.48	94.0	6.59						
31	6.72	32.46	25.48	94.1	6.52						
32	6.71	32.47	25.50	94.1	6.46						
33	6.51	32.45	25.50	94.1	6.38						
34	6.48	32.45	25.51	94.1	6.30						
35	6.45	32.46	25.52	94.1	6.21						
36	6.47	32.45	25.53	94.1	6.14						
37	6.44	32.46	25.53	94.1	6.03						
38	6.33	32.46	25.55	94.3	6.03						
39	6.08	32.51	25.60	94.1	6.01						
40	6.11	32.52	25.61	94.1	6.00						
41	6.22	32.51	25.61	94.1	5.93						
42	6.11	32.52	25.62	94.1	5.83						
43	6.00	32.51	25.61	94.1	5.88						
44	6.00	32.51	25.63	94.1	5.86						
45	6.00	32.53	25.62	94.1	5.83						
46	6.00	32.53	25.62	94.1	5.82						
47	6.00	32.53	25.63	94.1	5.80						
48	6.00	32.54	25.63	94.1	5.79						
49	6.00	32.54	25.63	94.1	5.77						
50	6.00	32.54	25.63	94.6	5.74	5.73	4.1	.59	.79	6.16	.19

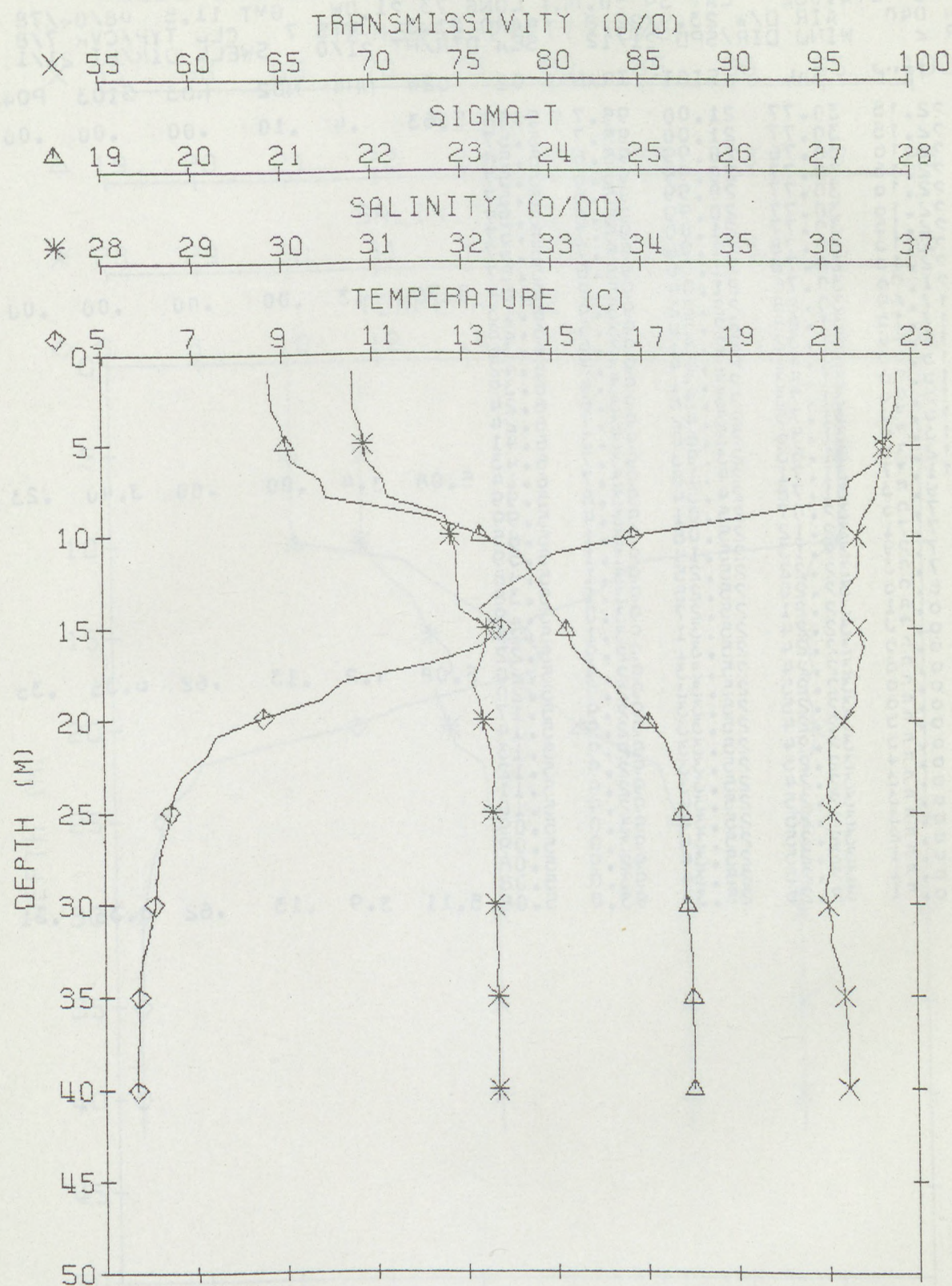
KELEZ CRUISE XWCC-20 STATION 80 08/04/78



X-CC-20 SIA.081 LAT 39 44.6N; LONG 73 10.3W GMT 16.7 08/04/78
 DEPTH 047 AIR D/W 23.6/21.9 BARO 22.5 VTS 6 CLD TYP/CVR 7/8
 WETTR 0 WIND DIR/SPD 22/11 SEA DIR/HT 00/0 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.64	30.77	20.86	98.4	5.54	5.59	.0	.00	.00	.00	.00
2	22.64	30.77	20.86	98.4	5.54						
3	22.59	30.78	20.88	98.4	5.54						
4	22.59	30.86	20.99	98.4	5.54						
5	22.59	30.89	21.02	98.4	5.56						
6	22.59	30.92	21.11	98.4	5.57						
7	21.11	31.11	21.42	98.4	5.60						
8	21.11	31.16	21.47	97.8	5.60						
9	21.11	31.80	22.58	97.1	5.69						
10	16.34	31.84	22.18	96.8	6.15	6.44	.0	.00	.00	.00	.00
11	14.50	31.90	23.62	96.9	6.61						
12	14.50	31.92	23.74	96.9	6.77						
13	13.50	31.93	23.88	96.1	6.72						
14	13.50	31.94	23.98	96.3	6.68						
15	13.50	32.24	24.12	96.3	6.52						
16	13.50	32.22	24.12	96.1	6.52						
17	13.50	32.16	24.38	96.3	6.54						
18	13.50	32.08	24.53	96.7	7.00						
19	13.50	32.16	24.78	96.7	7.23						
20	13.50	32.25	25.02	96.0	7.29	6.81	.4	.00	.00	.89	.00
21	13.50	32.25	25.11	96.1	7.46						
22	13.50	32.30	25.66	96.1	7.41						
23	13.50	32.32	25.66	96.1	7.23						
24	13.50	32.37	25.66	96.1	6.99						
25	13.50	32.40	25.66	96.1	6.44						
26	13.50	32.42	25.66	96.1	6.15						
27	13.50	32.44	25.66	96.1	5.93						
28	13.50	32.44	25.66	96.0	5.64	5.15	3.7	.15	.97	5.98	.23
29	13.50	32.44	25.66	96.1	5.55						
30	13.50	32.44	25.66	96.1	5.48						
31	13.50	32.44	25.66	96.1	5.44						
32	13.50	32.44	25.66	96.1	5.44						
33	13.50	32.44	25.66	96.1	5.44						
34	13.50	32.44	25.66	96.1	5.44						
35	13.50	32.44	25.66	96.1	5.44						
36	13.50	32.44	25.66	96.1	5.44						
37	13.50	32.44	25.66	96.1	5.44						
38	13.50	32.44	25.66	96.1	5.44						
39	13.50	32.44	25.66	96.1	5.44						
40	13.50	32.44	25.66	96.1	5.44						
41	13.50	32.44	25.66	96.1	5.44	5.39	3.7	.18	.94	5.63	.23

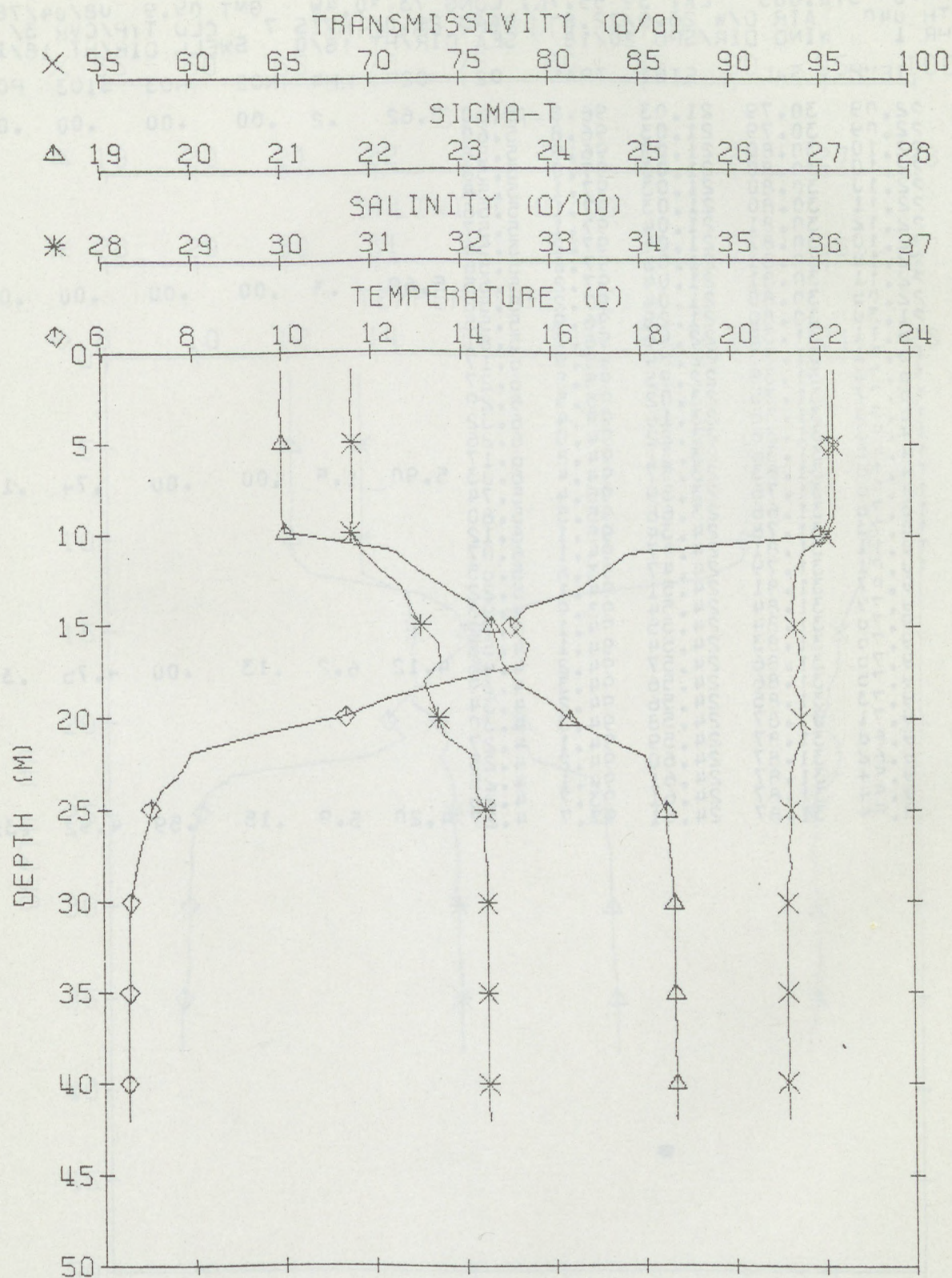
KELEZ CRUISE XWCC-20 STATION 81 08/04/78



XWCC-20 SIA.092 LAT 39 50.0N; LONG 73 21.0W GMT 11.5 08/04/78
 DEPTH 040 AIR D/W 23.9/22.8 BARO 21.3 VTS 7 CLU TYP/CVR 7/8
 WTHR 2 WIND DIR/SPD 21/12 SEA DIR/HT 21/0 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SI03	PO4
1	22.15	30.77	21.00	95.7	5.58	5.63	.4	.10	.00	.00	.00
2	22.15	30.77	21.00	95.7	5.57						
3	22.16	30.76	20.99	95.6	5.58						
4	22.16	30.77	20.99	95.6	5.57						
5	22.16	30.77	20.99	95.6	5.57						
6	22.16	30.77	20.99	95.6	5.57						
7	22.15	30.77	21.00	95.7	5.57						
8	22.15	30.78	21.00	95.7	5.57						
9	22.15	30.78	21.00	95.6	5.57						
10	21.86	30.76	21.04	95.2	5.54	5.79	.3	.00	.00	.00	.00
11	17.69	30.88	22.22	95.9	5.13						
12	17.15	30.88	22.22	95.9	5.13						
13	16.60	31.32	22.81	96.4	5.08						
14	15.55	31.41	23.32	96.4	5.08						
15	15.46	31.53	23.78	96.4	5.08						
16	15.46	31.73	24.18	96.4	5.08						
17	15.46	31.75	24.18	96.4	5.08						
18	13.77	31.56	23.60	96.3	5.08						
19	12.35	31.63	23.93	96.3	5.08						
20	11.77	31.71	24.18	96.7	5.08	5.08	3.4	.00	.00	3.40	.23
21	9.73	31.78	24.54	96.8	5.08						
22	7.06	32.07	25.01	96.4	5.08						
23	7.71	32.12	25.08	96.1	5.08						
24	7.29	32.13	25.14	96.1	5.08						
25	7.06	32.22	25.11	96.1	5.08						
26	6.06	32.20	25.11	96.1	5.08						
27	6.06	32.21	25.11	96.1	5.08						
28	6.06	32.24	25.11	96.1	5.08						
29	6.06	32.24	25.11	96.1	5.08						
30	6.06	32.24	25.11	96.1	5.08	5.08	4.2	.13	.62	6.35	.35
31	6.06	32.25	25.11	96.1	5.08						
32	6.06	32.25	25.11	96.1	5.08						
33	6.06	32.24	25.11	96.1	5.08						
34	6.06	32.24	25.11	96.1	5.08						
35	6.06	32.25	25.11	96.1	5.08						
36	6.06	32.24	25.11	96.1	5.08						
37	6.06	32.25	25.11	96.1	5.08						
38	6.06	32.25	25.11	96.1	5.08						
39	6.06	32.25	25.11	96.1	5.08						
40	6.06	32.25	25.11	96.1	5.08						
41	6.06	32.25	25.11	96.1	5.08						
42	6.06	32.25	25.11	96.1	5.08	5.11	3.9	.13	.62	6.35	.31

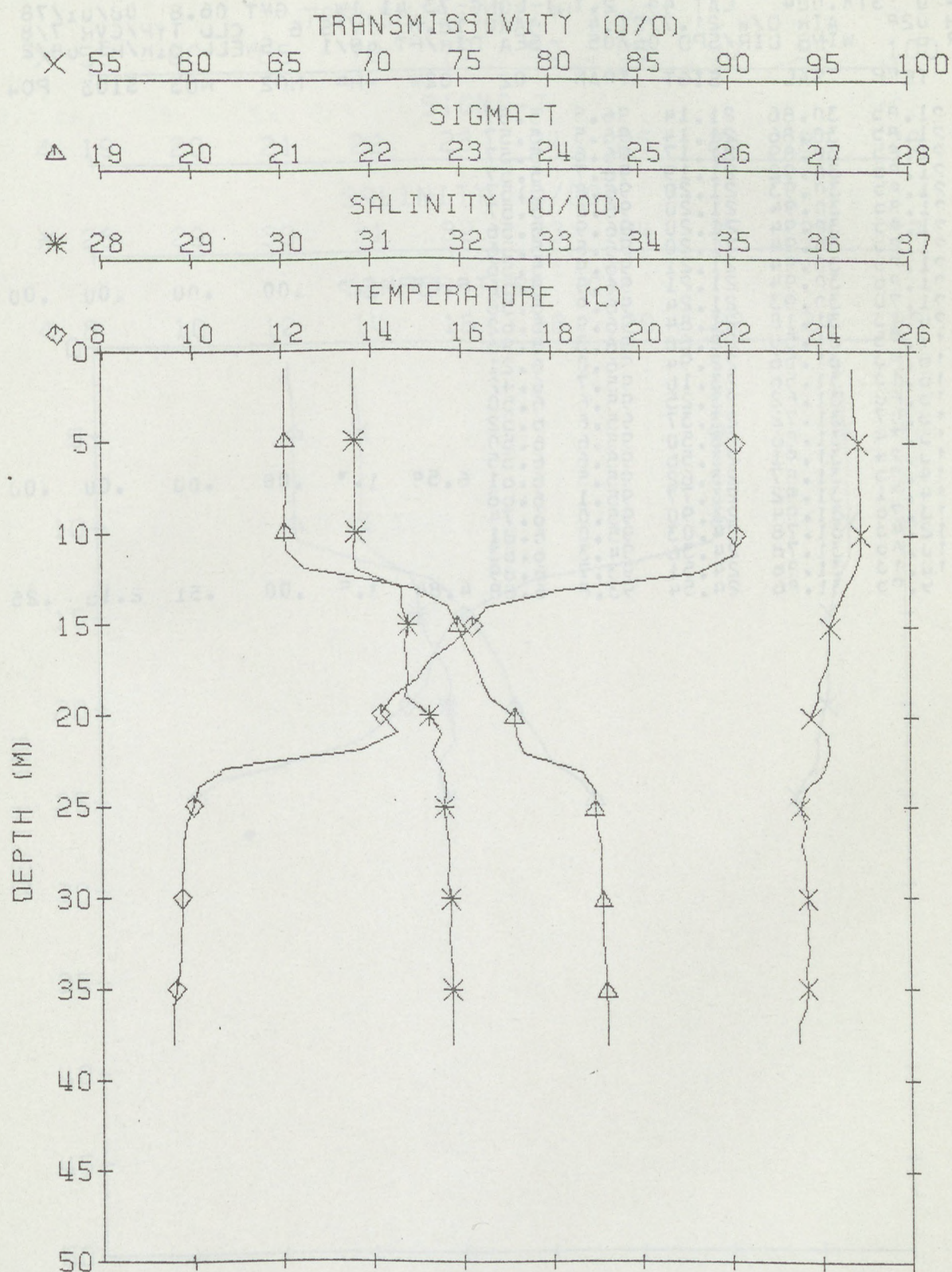
KELEZ CRUISE XWCC-20 STATION 82 08/04/78



XWCC-20 STA.083 LAT 39 55.7N; LONG 73 30.4W GMT 09.9 08/04/78
 DEPTH 040 AIR D/W 23.9/22.8 BARO 21.0 VIS 7 CLU TYP/CVR 3/
 WTHR 1 WIND DIR/SPD 20/18 SEA DIR/HT 18/0 SWELL DIR/HT 18/1

DFP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	22.09	30.79	21.03	96.8	5.60	5.62	.2	.00	.00	.00	.00
2	22.09	30.79	21.03	96.8	5.60						
3	22.10	30.80	21.03	96.9	5.60						
4	22.10	30.80	21.03	97.0	5.60						
5	22.10	30.80	21.03	97.1	5.60						
6	22.11	30.80	21.03	97.1	5.60						
7	22.12	30.81	21.04	97.1	5.60						
8	22.10	30.81	21.04	97.2	5.60						
9	22.10	30.81	21.03	97.2	5.60						
10	22.11	30.81	21.04	97.2	5.60	5.69	.3	.00	.00	.00	.00
11	22.13	30.80	21.04	97.3	5.60						
12	21.33	30.80	21.04	97.3	5.60						
13	18.11	31.33	22.46	96.6	5.60						
14	18.11	31.33	22.34	96.5	5.60						
15	18.12	31.33	22.35	96.5	5.60						
16	19.07	31.33	22.35	96.5	5.60						
17	19.03	31.33	22.35	96.5	5.60						
18	14.00	31.33	22.35	96.5	5.60						
19	14.00	31.33	22.35	96.5	5.60						
20	14.00	31.33	22.35	96.5	5.60						
21	14.56	31.76	23.59	95.4	5.60	5.90	1.5	.00	.00	.74	.12
22	13.00	31.66	23.68	95.5	5.60						
23	10.73	31.78	24.34	95.1	5.60						
24	10.11	31.31	24.47	94.7	5.60						
25	9.11	31.79	24.47	94.3	5.60						
26	9.07	31.31	24.51	94.1	5.60						
27	9.07	31.34	24.54	94.3	5.60						
28	9.07	31.34	24.55	94.1	5.60						
29	9.07	31.33	24.54	94.1	5.60						
30	9.07	31.36	24.57	94.2	5.60						
31	9.07	31.36	24.56	94.3	5.60	4.12	6.2	.13	.00	4.75	.39
32	9.07	31.35	24.56	94.3	5.60						
33	9.07	31.37	24.58	94.3	5.60						
34	9.07	31.37	24.59	94.1	5.60						
35	9.07	31.37	24.60	94.2	5.60						
36	9.07	31.37	24.61	94.1	5.60						
37	9.07	31.37	24.61	93.7	5.60						
38	9.04	31.37	24.61	93.7	5.60	4.20	5.9	.15	.59	4.92	.35

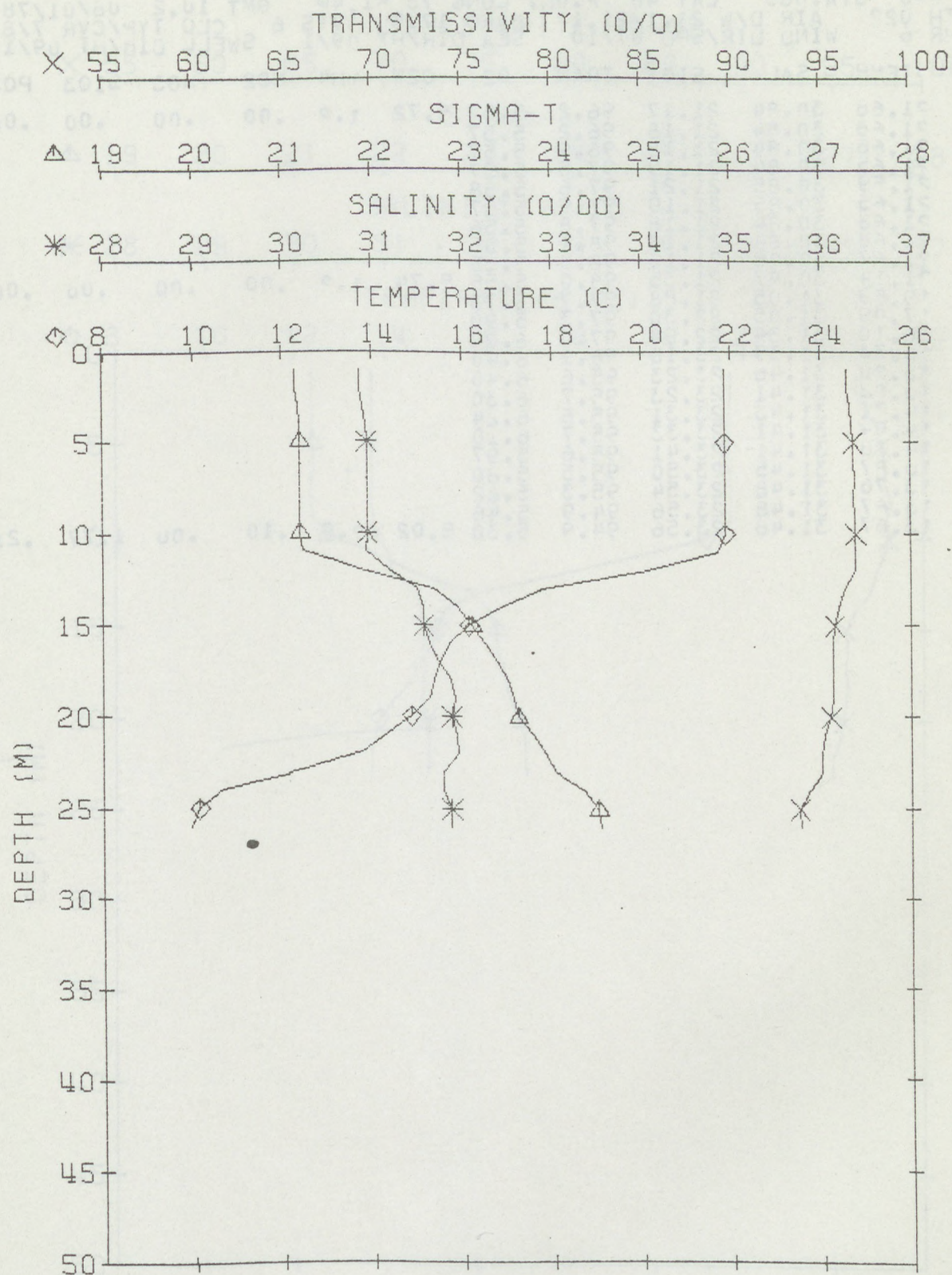
KELEZ CRUISE XWCC-20 STATION 83 08/04/78



X-CC-20 STA. 024 LAT 40 2.1N; LONG 73 41.1W GMT 06.8 08/01/78
 DEPTH 02P AIR D/W 21.7/21.4 BARO 18.0 VTS 6 CLD TYP/CVR 7/8
 WETR 0 WIND DIR/SPD 06/05 SEA DIR/HT 49/1 SWELL DIR/HT 08/2

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SI03	P04
1	21.25	30.86	21.14	96.5	5.57						
2	21.25	30.86	21.14	96.5	5.57						
3	21.25	30.89	21.17	96.6	5.57						
4	21.25	30.92	21.19	96.7	5.57						
5	21.25	30.93	21.20	96.8	5.57						
6	21.25	30.94	21.20	96.8	5.57						
7	21.25	30.94	21.20	96.9	5.56						
8	21.25	30.94	21.20	96.9	5.56						
9	21.25	30.94	21.21	96.9	5.56						
10	21.26	30.94	21.21	96.9	5.56	5.65	1.2	.00	.00	.00	.00
11	21.70	30.93	21.24	96.9	5.56						
12	20.13	31.18	21.84	96.9	5.52						
13	17.75	31.50	22.68	96.3	5.56						
14	16.63	31.56	22.94	96.7	5.51						
15	16.16	31.56	23.10	96.7	5.51						
16	15.66	31.62	23.25	96.7	5.50						
17	15.47	31.72	23.37	96.7	5.52						
18	15.44	31.86	23.50	96.6	5.50						
19	15.44	31.91	23.56	96.6	5.55						
20	14.33	31.87	23.62	96.5	5.55						
21	14.11	31.92	23.77	96.1	5.58	6.58	1.3	.00	.00	.00	.00
22	13.70	31.94	23.90	96.0	5.58						
23	12.43	31.78	24.03	96.0	5.74						
24	11.78	31.78	24.36	96.4	5.81						
25	10.60	31.86	24.51	96.7	5.99						
26	9.5	31.86	24.54	96.8	6.88	4.84	3.5	.00	.51	2.15	.25

KELEZ CRUISE XWCC-20 STATION 84 08/01/78



XWCC-20 SIA.085 LAT 40 8.0N; LONG 73 51.4W GMT 10.2 06/01/78
 DEPTH 022 AIR D/W 21.1/21.1 BARO 17.5 VIS 6 CLD TYP/CVR 7/8
 WETHR 6 WIND DIR/SPD 07/10 SEA DIR/HT 09/1 SWELL DIR/HT 09/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	21.68	30.84	21.17	96.2	5.57	5.72	1.2	.00	.00	.00	.00
2	21.68	30.84	21.18	96.2	5.57						
3	21.68	30.84	21.18	96.2	5.57						
4	21.68	30.84	21.19	96.2	5.57						
5	21.68	30.84	21.21	97.5	5.57						
6	21.68	30.85	21.19	97.6	5.58						
7	21.68	30.84	21.18	97.9	5.57						
8	21.68	30.84	21.18	97.8	5.56						
9	21.68	30.86	21.18	98.1	5.55						
10	21.68	30.87	21.19	98.0	5.55	5.74	1.2	.00	.00	.00	.00
11	19.73	31.05	21.35	99.0	5.55						
12	17.89	31.05	22.30	97.7	5.73						
13	16.10	31.34	22.94	97.0	5.90						
14	15.33	31.39	23.15	96.1	5.20						
15	15.20	31.46	23.23	95.6	5.40						
16	15.77	31.41	23.33	95.7	5.40						
17	14.71	31.43	23.41	95.7	5.30						
18	14.54	31.43	23.41	95.6	5.24						
19	14.16	31.41	23.43	95.7	5.10						
20	13.87	31.45	23.41	95.6	5.97						
21	13.76	31.48	23.47	95.5	5.80						
22	13.67	31.48	23.47	95.5	5.62						
23	13.67	31.48	23.47	94.9	5.46	5.02	2.9	.10	.00	1.77	.21

KELEZ CRUISE XWCC-20 STATION 85 08/01/78

TRANSMISSIVITY (0/0)

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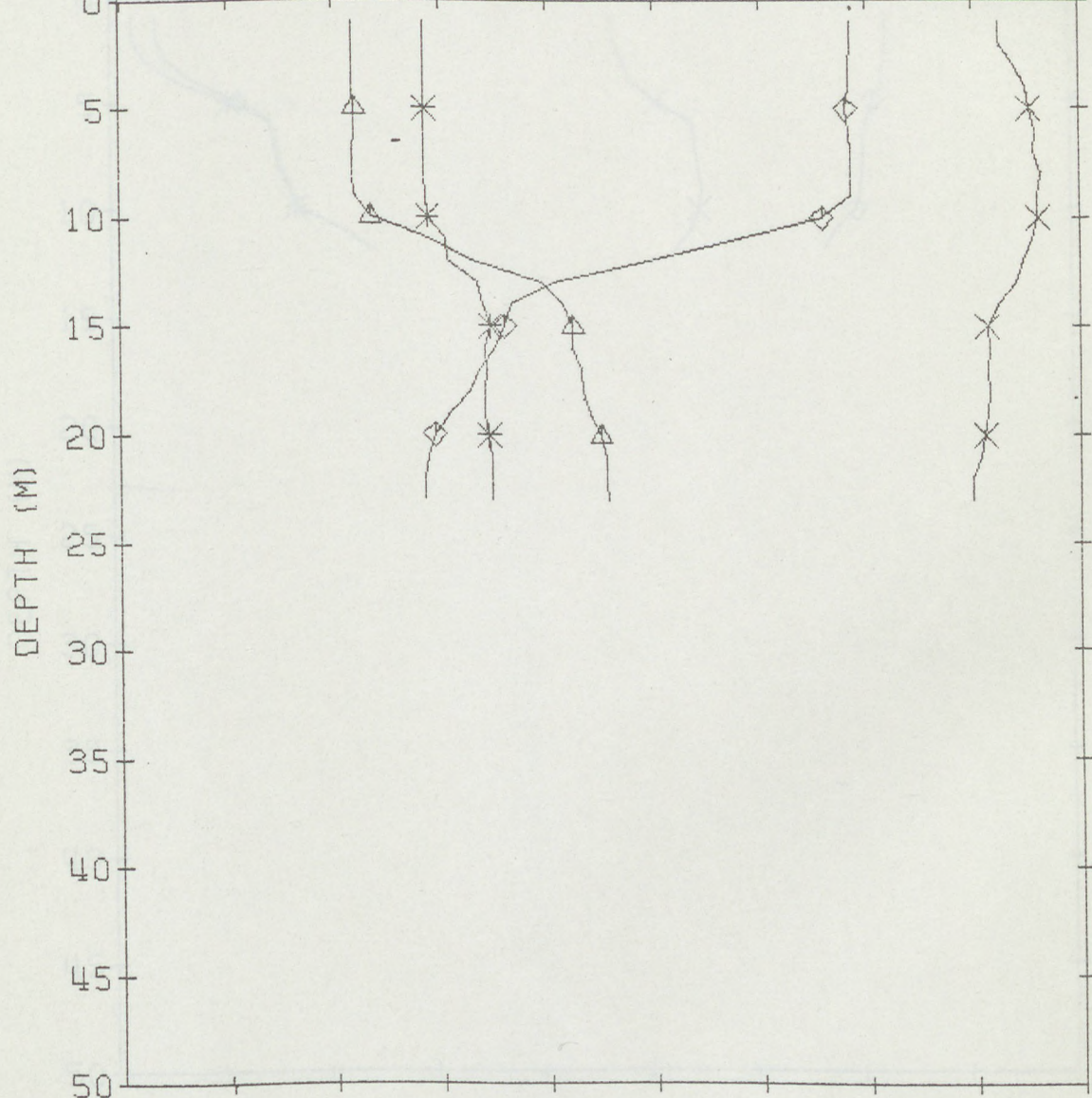
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SALINITY (0/00)

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TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



X-CC-20 SIA.098 LAT 40 31.4N; LONG 73 59.8W GMT 12.9 08/09/78
 DEPTH J17 AIR D/W 24.7/21.9 BARO 20.5 VIS 6 CLD TYP/CVR 1/2
 WFTHR 1 WIND DIR/SPD 25/07 SEA DIR/HT 00/0 SWELL DIR/HT 15/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	22.51	26.18	17.44	78.5	3.55	3.51	23.6	2.63	9.79	9.23	2.09
2	22.51	26.19	17.44	78.5	3.55						
3	22.48	26.30	17.54	78.9	3.55						
4	22.46	26.59	17.77	79.2	3.62						
5	22.25	27.10	18.19	80.5	3.70						
6	22.11	27.47	18.52	82.2	3.78						
7	22.09	27.52	18.56	82.3	3.85						
8	22.07	27.56	18.59	82.5	3.89						
9	22.01	27.65	18.68	82.6	3.93						
10	21.94	27.72	18.75	82.5	3.94						
11	21.50	28.12	19.16	82.1	3.98						
12	21.31	28.43	19.45	81.3	4.00	4.10	15.1	1.32	2.19	5.44	1.18

KELEZ CRUISE XWCC-20 STATION 98 08/09/78

TRANSMISSIVITY (0/0)

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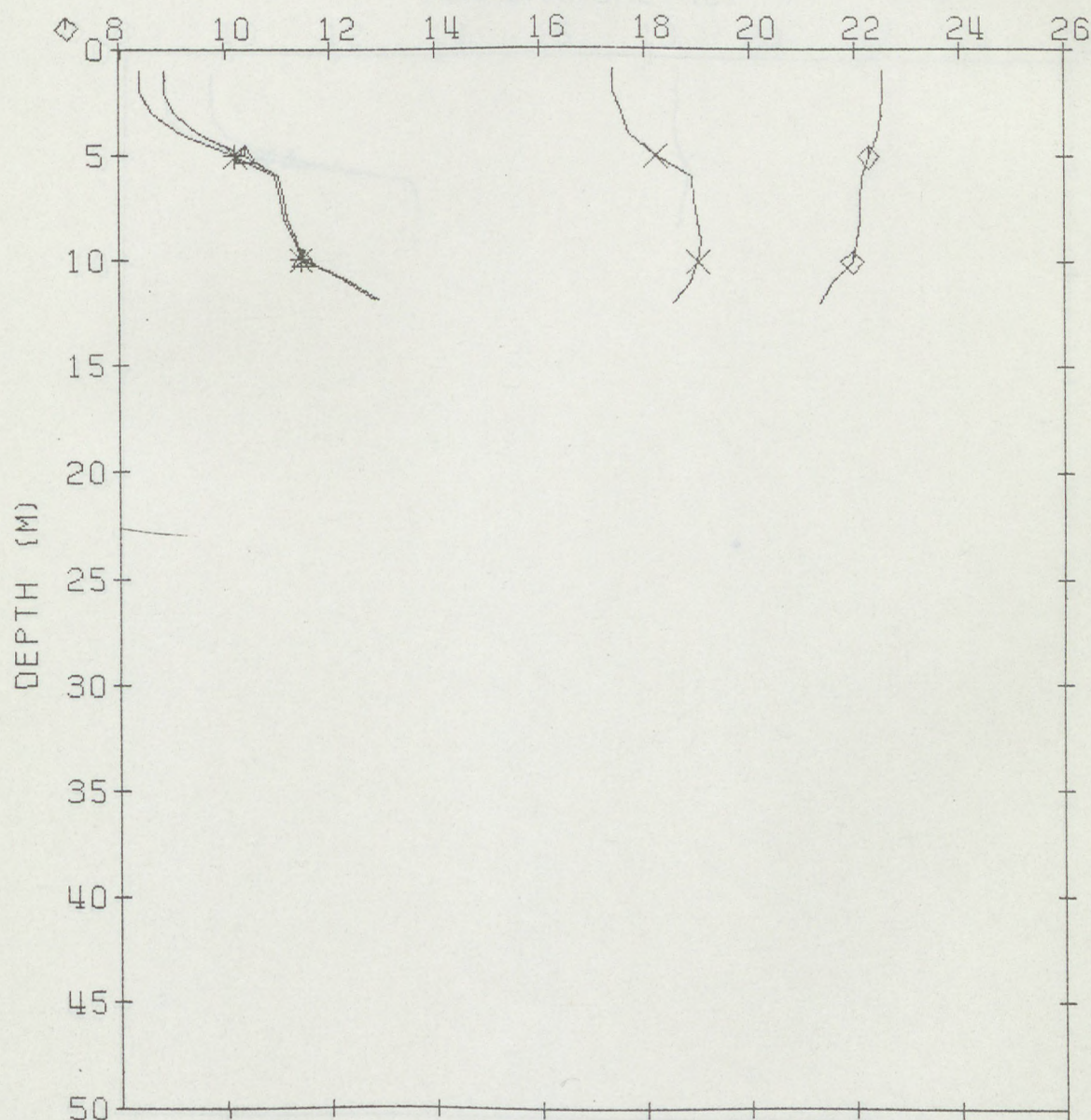
SIGMA-T

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SALINITY (0/00)

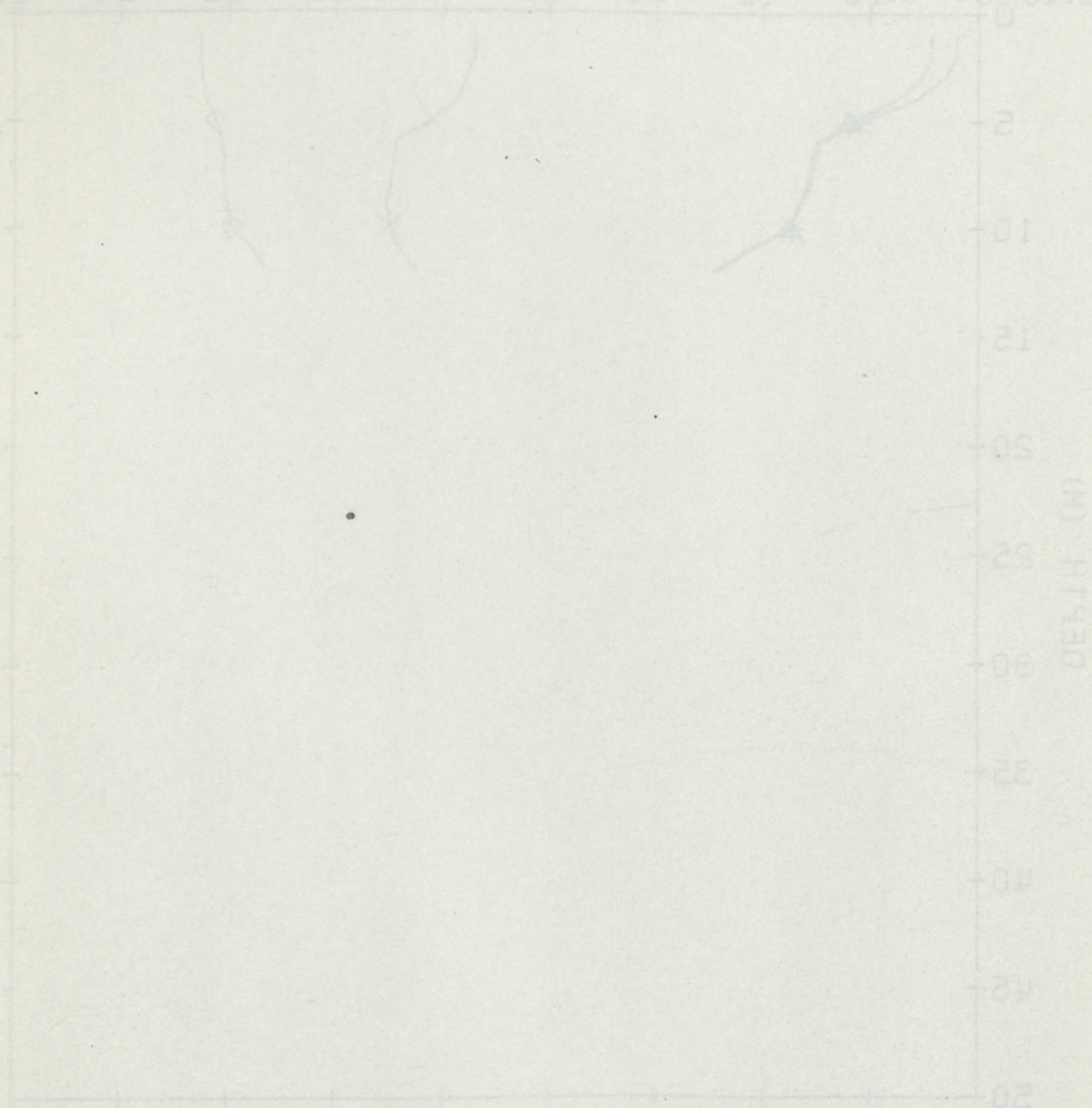
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TEMPERATURE (C)



XMCC-20 SIA.099 LAT 40 33.4N; LONG 74 1.6W GMT 13.6 08/09/78
 DEPTH 011 AIR D/W 25.0/22.2 BARO 20.5 VTS 6 CLD TYP/CVR 1/2
 WETHR 1 WIND DIR/SPD 24/08 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.58	25.38	16.81	81.2	2.97	2.92	27.8	2.95	11.76	11.56	2.65
2	22.53	25.38	16.81	81.2	2.97						
3	22.59	25.40	16.82	81.1	2.98						
4	22.56	25.59	16.98	81.2	3.01						
5	22.30	26.31	17.59	81.6	3.09						
6	21.00	27.71	18.73	81.7	3.34						
7	21.05	27.79	18.80	81.5	3.55	3.94	10.7	1.77	4.42	0.65	1.56
8	21.02	27.79	18.81	81.3	3.68						



KELEZ CRUISE XWCC-20 STATION 99 08/09/78

TRANSMISSIVITY (0/0)

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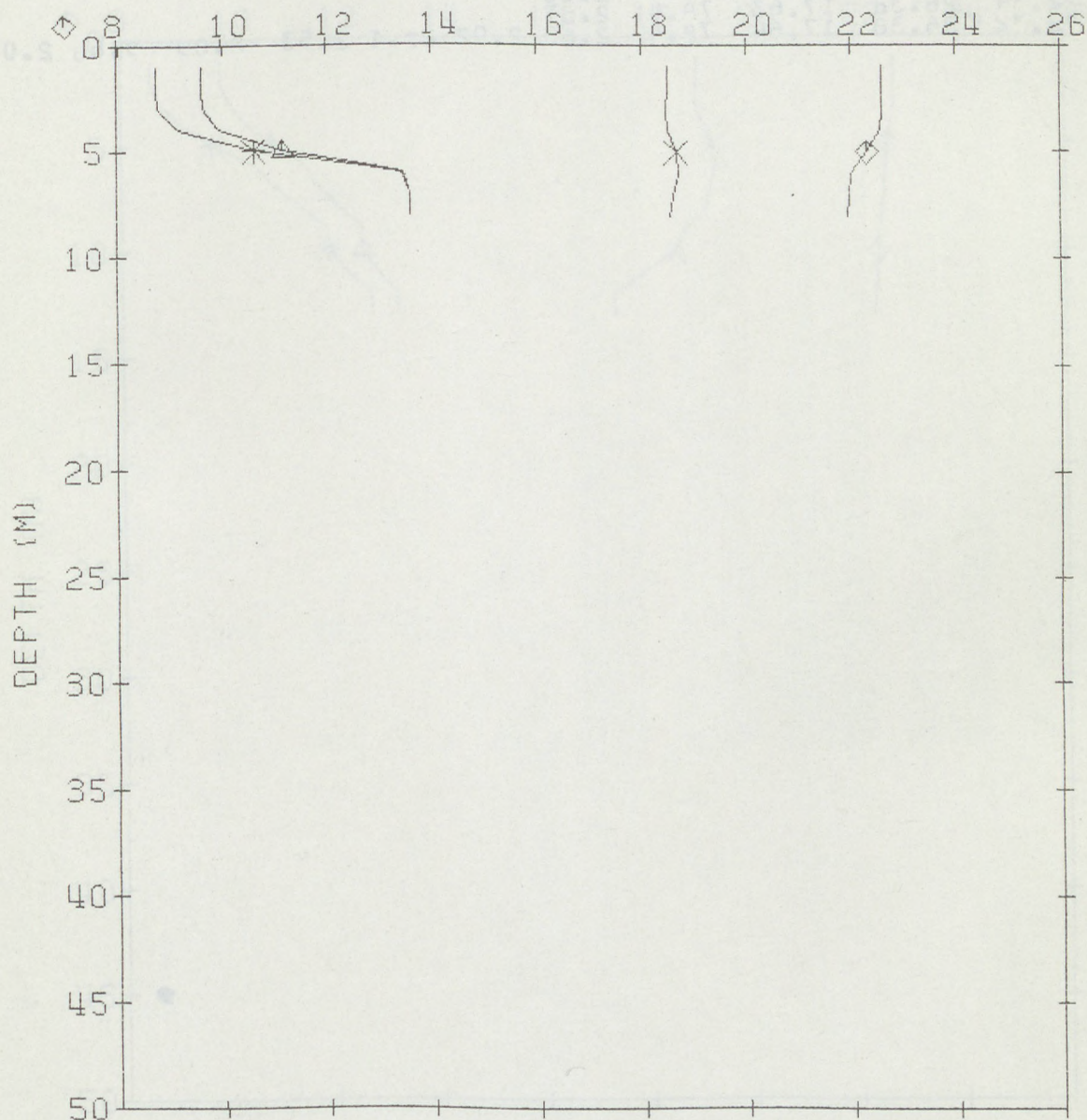
SIGMA-T

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SALINITY (0/00)

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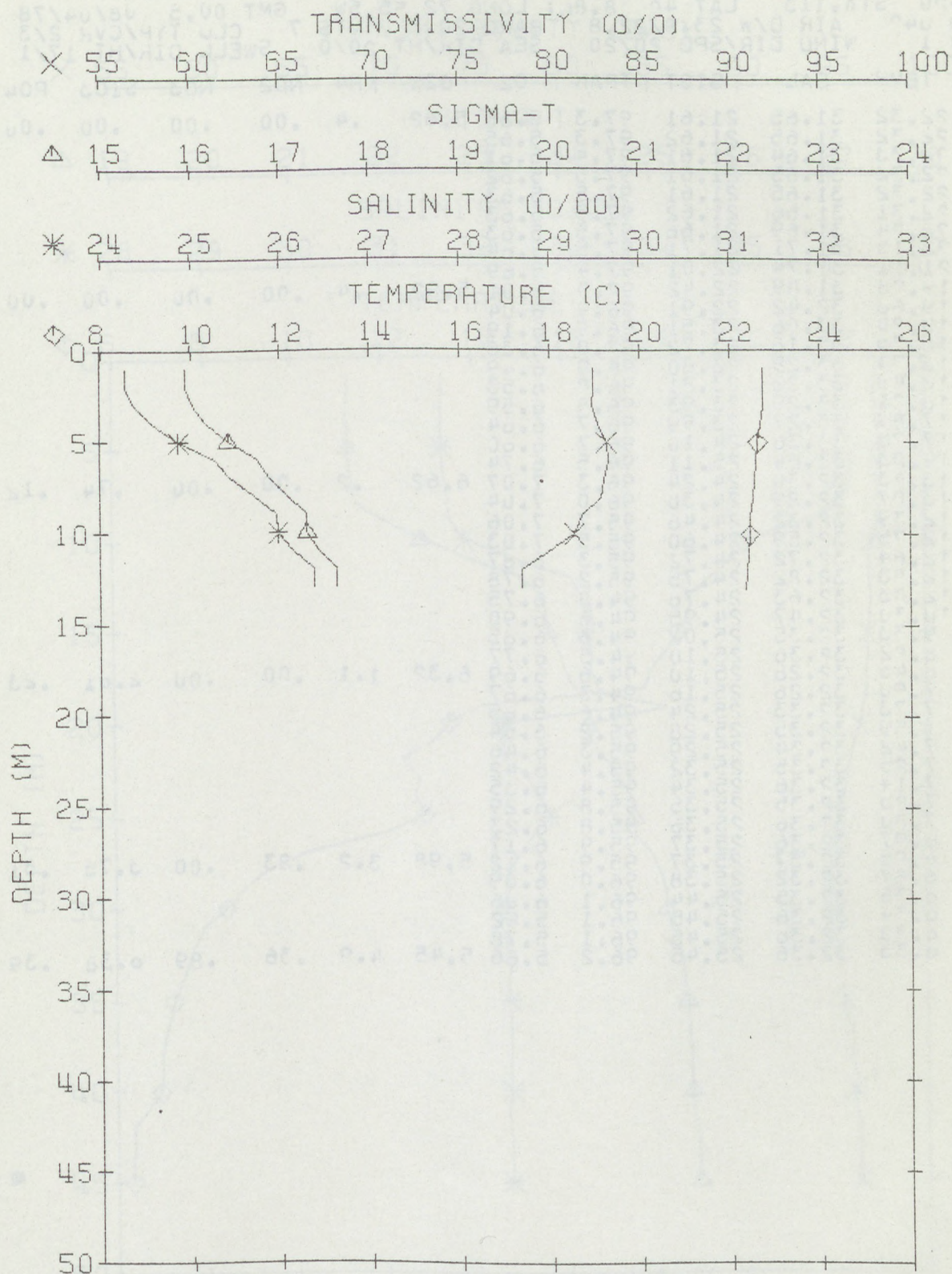
TEMPERATURE (C)



XACC-70 SIA.100 LAT 40 35.7N; LONG 74 1.9W GMT 14.3 08/09/78
 DEPTH 017 AIR D/W 25.8/21.9 BARO 20.5 VIS 6 CLD TYP/CVR 2/4
 WETR 1 WIND DIR/SPD 23/07 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.72	24.27	15.94	82.4	2.17	2.12	32.0	3.58	14.62	13.83	2.80
2	22.72	24.27	15.94	82.4	2.17						
3	22.70	24.38	16.03	82.3	2.17						
4	22.65	24.57	16.18	82.6	2.17						
5	22.60	24.87	16.42	83.1	2.17						
6	22.54	25.27	16.74	83.2	2.20						
7	22.51	25.44	16.88	83.0	2.26						
8	22.47	25.70	17.09	82.8	2.34						
9	22.41	25.96	17.29	81.7	2.41						
10	22.41	25.98	17.31	81.3	2.46						
11	22.39	26.14	17.44	79.9	2.53						
12	22.34	26.38	17.63	78.4	2.57						
13	22.32	26.38	17.64	78.4	2.63	2.92	22.1	2.53	8.09	9.60	2.09

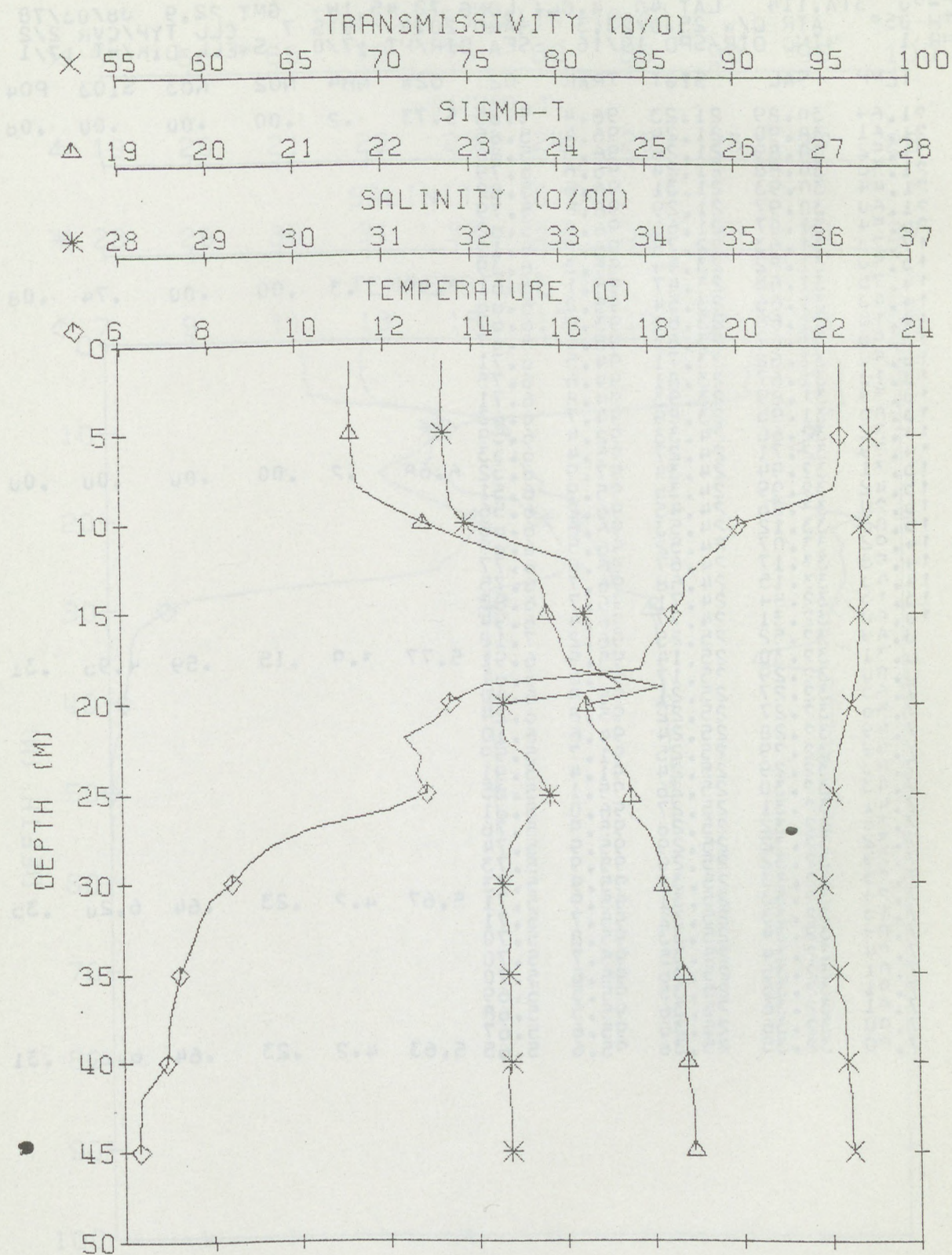
KELEZ CRUISE XWCC-20 STATION 100 08/09/78



XCCC-20 STA. 113 LAT 40 8.8N; LONG 72 55.5W GMT 00.5 08/04/78
 DEPTH 040 AIR D/W 23.9/22.8 BARO 20.5 VTS 7 CLD TYP/CVR 2/3
 WFT4R 1 WIND DIR/SPD 20/20 SEA DIR/HT 20/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	N02	N03	SI03	P04
1	22.32	31.65	21.61	97.3	5.66	5.62	.4	.00	.00	.00	.00
2	22.32	31.65	21.62	97.3	5.65						
3	22.33	31.64	21.61	97.4	5.61						
4	22.32	31.65	21.61	97.5	5.62						
5	22.32	31.65	21.61	97.5	5.63						
6	22.31	31.66	21.62	97.5	5.63						
7	22.24	31.69	21.66	97.5	5.63						
8	22.15	31.71	21.71	97.5	5.64						
9	21.11	31.74	22.01	97.4	5.69						
10	19.28	31.89	22.42	97.0	5.91	5.92	.4	.00	.00	.00	.00
11	19.28	32.42	22.91	96.9	6.04						
12	19.20	33.06	23.51	96.9	6.19						
13	18.74	33.16	23.72	97.0	6.36						
14	18.43	33.29	23.80	96.9	6.49						
15	18.11	33.32	23.81	96.9	6.53						
16	17.99	33.32	23.93	96.9	6.59						
17	17.75	33.32	23.99	96.7	6.64						
18	17.36	33.36	24.10	96.7	6.60						
19	14.36	33.64	25.11	96.3	6.74						
20	13.37	32.60	24.24	96.3	7.07	6.62	.2	.00	.00	.74	.12
21	12.73	32.29	24.30	96.0	7.04						
22	12.75	32.32	24.46	95.7	7.06						
23	12.75	32.32	24.60	95.5	7.03						
24	12.64	32.32	24.72	95.3	6.87						
25	12.66	32.32	24.75	95.2	6.78						
26	12.66	32.32	24.76	94.8	6.75						
27	12.66	32.32	24.95	94.6	6.90						
28	12.66	32.32	25.02	94.6	6.77						
29	12.66	32.32	25.10	94.4	6.69	6.32	1.1	.00	.00	2.01	.23
30	12.66	32.32	25.16	94.4	6.67						
31	12.66	32.32	25.24	94.4	6.65						
32	12.66	32.32	25.28	94.4	6.54						
33	12.66	32.32	25.32	94.4	6.46						
34	12.66	32.32	25.34	94.4	6.46						
35	12.66	32.32	25.35	94.4	6.46						
36	12.66	32.32	25.36	94.4	6.46						
37	12.66	32.32	25.36	94.4	6.46						
38	12.66	32.32	25.36	94.4	6.46						
39	12.66	32.32	25.36	94.4	6.46						
40	12.66	32.32	25.36	94.4	6.46	5.98	3.2	.23	.00	3.75	.31
41	12.66	32.32	25.38	94.4	6.46						
42	12.66	32.32	25.44	94.4	6.46						
43	12.66	32.32	25.45	94.4	6.46						
44	12.66	32.32	25.45	94.4	6.46						
45	12.66	32.32	25.45	94.4	6.46	5.45	4.9	.36	.89	0.38	.39

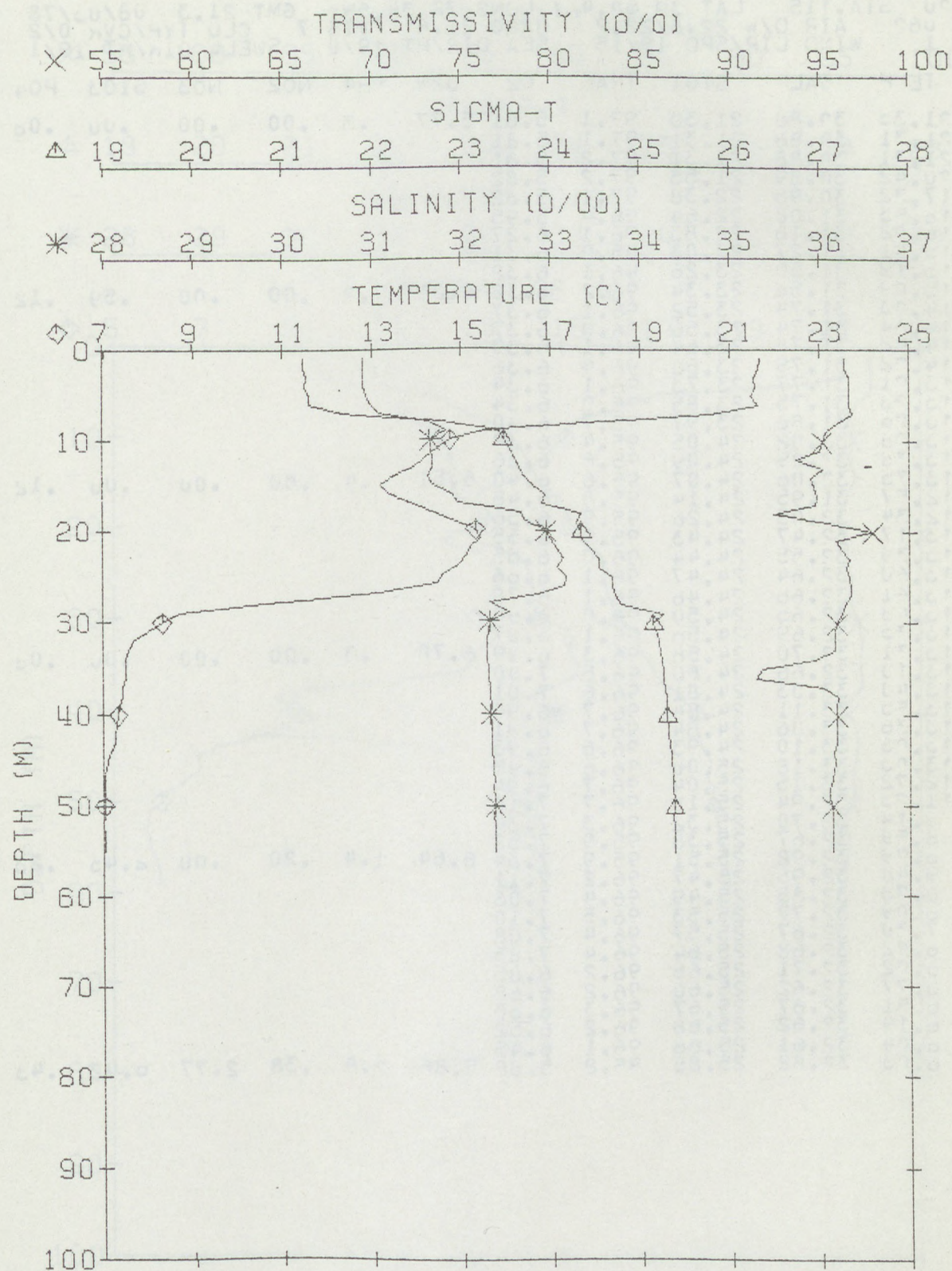
KELEZ CRUISE XWCC-20 STATION 113 08/04/78



XWCR-20 STA. 114 LAT 40 4.0N; LONG 72 45.1W GMT 22.9 08/03/78
 DEPTH 050 AIR D/W 25.0/23.3 BARO 20.8 VTS 7 CLD TYP/CVR 2/2
 WTHR 1 WIND DIR/SPD 19/16 SEA DIR/HT 17/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	21.64	30.89	21.23	96.4	5.85	5.73	.2	.00	.00	.00	.08
2	21.61	30.90	21.24	96.4	5.85						
3	21.52	30.89	21.26	96.6	5.80						
4	21.50	30.88	21.24	96.6	5.79						
5	21.44	30.93	21.31	96.6	5.82						
6	21.60	30.97	21.29	96.6	5.79						
7	20.54	31.07	21.66	96.8	5.82						
8	17.75	31.63	22.78	96.0	6.12						
9	15.50	31.82	23.44	95.3	6.39						
10	14.75	31.65	23.47	95.1	6.61	6.40	.3	.00	.00	.74	.08
11	14.43	31.66	23.54	95.0	6.68						
12	14.18	31.68	23.61	95.6	6.67						
13	13.90	31.67	23.65	95.1	6.67						
14	13.50	31.62	23.71	94.5	6.71						
15	13.13	31.67	23.81	94.6	6.75						
16	12.79	31.89	23.93	94.8	6.71						
17	12.30	31.95	23.89	94.7	6.63						
18	11.72	32.66	24.33	92.4	6.59						
19	11.22	32.71	24.27	92.4	6.53						
20	10.71	32.94	24.34	97.9	6.52	6.68	.2	.00	.00	.00	.00
21	10.42	32.99	24.35	95.9	6.51						
22	10.00	33.06	24.45	96.2	6.56						
23	9.58	33.12	24.53	96.6	6.66						
24	9.00	33.07	24.52	96.5	6.69						
25	8.50	33.17	24.67	96.6	6.77						
26	8.00	33.15	24.68	96.7	6.75						
27	7.50	33.14	24.71	96.7	6.83						
28	7.00	33.31	24.77	96.4	6.94						
29	6.50	33.52	25.25	96.2	7.18						
30	6.00	33.30	25.14	96.6	6.91	5.77	4.9	.15	.59	4.95	.31
31	5.50	33.29	25.17	96.5	6.81						
32	5.00	33.27	25.21	96.8	6.40						
33	4.50	33.27	25.22	96.8	6.24						
34	4.00	33.28	25.24	94.6	6.10						
35	3.50	33.29	25.25	91.7	5.99						
36	3.00	33.29	25.24	91.4	5.91						
37	2.50	33.30	25.26	91.1	5.85						
38	2.00	33.31	25.27	90.0	5.61						
39	1.50	33.32	25.28	90.0	5.76						
40	1.00	33.32	25.29	90.0	5.74						
41	.50	33.32	25.29	90.0	5.73						
42	0.00	33.33	25.31	90.0	5.73						
43	7.24	33.33	25.31	90.0	5.71	5.67	4.2	.23	.64	6.20	.35
44	7.13	33.33	25.32	90.0	5.71						
45	7.00	33.34	25.33	90.0	5.70						
46	6.84	33.34	25.35	90.0	5.70						
47	6.61	33.35	25.36	90.0	5.70						
48	6.31	33.35	25.36	90.0	5.69						
49	6.00	33.36	25.36	90.0	5.67						
50	5.70	33.36	25.36	90.0	5.65	5.63	4.2	.23	.64	6.20	.31

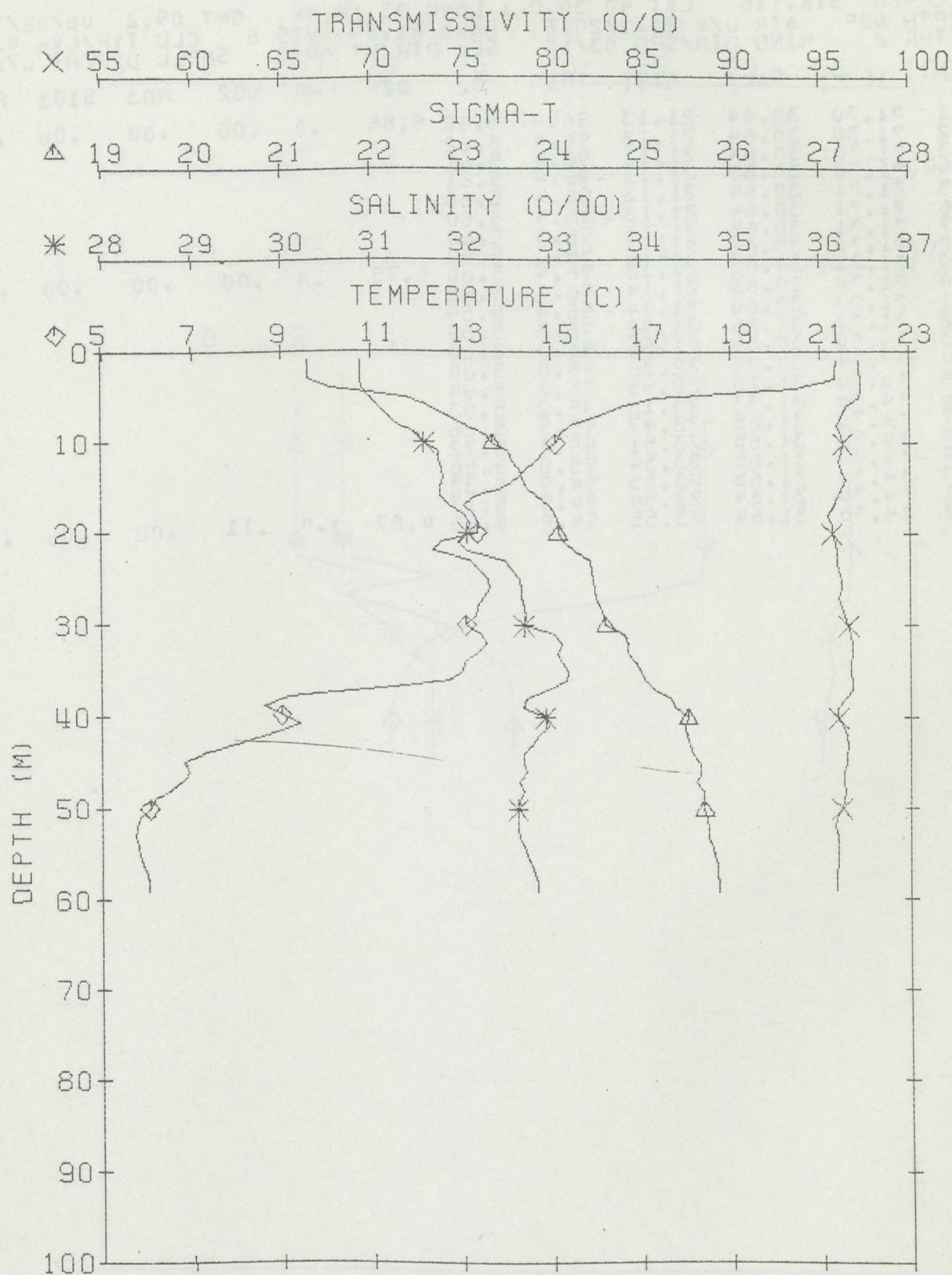
KELEZ CRUISE XWCC-20 STATION 114 08/03/78



XCCC-20 STA. 115 LAT 39 53.4N; LONG 72 34.6W GMT 21.3 08/03/78
 DEPTH 062 AIR D/W 22.8/22.3 BARO 21.6 VIS 7 CLD TYP/CVR 0/2
 WETUR 1 WIND DIR/SPD 19/15 SEA DIR/HT 19/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	21.33	30.86	21.30	97.1	5.81	5.77	.3	.00	.00	.00	.00
2	21.31	30.88	21.31	97.1	5.81						
3	21.31	30.86	21.31	97.2	5.81						
4	21.34	30.89	21.55	97.2	5.82						
5	17.00	30.98	22.38	97.1	5.82						
6	16.00	31.08	22.64	96.4	5.95						
7	16.00	31.16	22.83	96.1	6.07						
8	16.00	31.27	23.00	95.9	6.31						
9	16.00	31.50	23.26	95.1	6.32						
10	16.00	31.56	23.34	95.2	6.32	6.21	.2	.00	.00	.59	.12
11	14.00	31.74	23.52	96.1	6.37						
12	14.00	31.74	23.56	96.0	6.37						
13	14.00	31.78	23.64	96.1	6.39						
14	14.00	31.79	23.66	96.4	6.36						
15	16.00	31.77	23.73	96.1	6.34						
16	16.00	31.75	23.85	95.3	6.34						
17	16.00	31.86	23.97	95.7	6.40						
18	16.00	32.00	24.05	96.4	6.39						
19	16.00	32.00	24.09	96.6	6.36						
20	16.00	32.00	24.07	96.6	6.40	6.51	.4	.00	.00	.00	.12
21	12.00	32.19	24.14	96.0	6.40						
22	12.00	32.20	24.26	95.9	6.50						
23	13.00	32.47	24.43	95.9	6.50						
24	16.00	32.56	24.44	96.0	6.55						
25	16.00	32.64	24.47	96.1	6.55						
26	16.00	32.66	24.48	96.1	6.78						
27	16.00	32.66	24.50	96.3	6.90						
28	16.00	32.66	24.50	96.3	6.97						
29	16.00	32.66	24.50	96.3	6.99	6.78	.3	.00	.00	.00	.03
30	16.00	32.66	24.50	96.5	7.00						
31	16.00	32.66	24.81	96.6	7.01						
32	16.00	32.66	24.84	96.7	6.94						
33	16.00	32.66	24.84	96.7	6.91						
34	16.00	32.66	24.84	96.6	6.93						
35	16.00	32.66	24.84	96.6	6.95						
36	16.00	32.66	24.84	96.6	6.94						
37	16.00	32.66	24.84	96.7	7.10						
38	16.00	32.66	24.84	96.7	7.34						
39	16.00	32.66	24.84	96.9	7.32	6.64	1.4	.20	.00	2.45	.23
40	16.00	32.66	24.84	96.9	7.34						
41	16.00	32.66	24.84	96.9	7.11						
42	16.00	32.66	24.84	96.6	7.06						
43	16.00	32.66	24.84	96.6	7.10						
44	16.00	32.66	24.84	96.6	7.08						
45	16.00	32.66	24.84	96.6	7.05						
46	16.00	32.66	24.84	96.6	6.85						
47	16.00	32.66	24.84	96.6	6.88						
48	16.00	32.66	24.84	96.6	6.85						
49	16.00	32.66	24.84	96.6	6.52						
50	16.00	32.66	24.84	96.6	6.45						
51	16.00	32.66	24.84	96.6	5.86	5.86	2.8	.38	2.77	0.02	.43

KELEZ CRUISE XWCC-20 STATION 115 08/03/78



XWCC-20 SIA.116 LAT 40 30.0N; LONG 73 18.4W GMT 09.2 08/02/78
 DEPTH 025 AIR D/W 21.1/20.6 BARO 21.5 VIS 6 CLD TYP/CVR 4/8
 WTHR 2 WIND DIR/SPD 03/10 SEA DIR/HT 00/0 SWELL DIR/HT 07/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	21.30	30.64	21.13	96.4	5.62	5.85	.4	.00	.00	.00	.00
2	21.27	30.64	21.13	96.4	5.62						
3	21.24	30.64	21.13	96.4	5.61						
4	21.21	30.65	21.13	96.4	5.61						
5	21.18	30.64	21.13	96.4	5.60						
6	21.15	30.64	21.13	96.4	5.60						
7	21.12	30.65	21.13	96.4	5.60						
8	21.09	30.65	21.13	96.4	5.60						
9	21.06	30.65	21.13	96.4	5.60	5.75	.4	.00	.00	.00	.00
10	21.03	30.65	21.14	96.4	5.60						
11	21.00	30.66	21.14	96.4	5.59						
12	19.97	30.66	21.14	96.4	5.59						
13	19.94	30.66	21.56	96.4	5.59						
14	17.91	30.66	22.36	96.4	5.59						
15	15.88	31.20	22.95	96.4	5.59						
16	13.85	31.33	23.13	96.4	5.59						
17	11.82	31.65	23.47	96.4	5.59						
18	9.79	31.65	23.51	96.4	5.59						
19	7.76	31.65	23.54	96.4	5.59						
20	5.73	31.65	23.55	96.4	5.59						
21	3.70	31.64	23.54	96.4	5.59						
22	1.67	31.64	23.55	96.4	5.06	4.87	3.0	.11	.00	.00	.39

KELEZ CRUISE XWCC-20 STATION 116 08/02/78

TRANSMISSIVITY (0/0)

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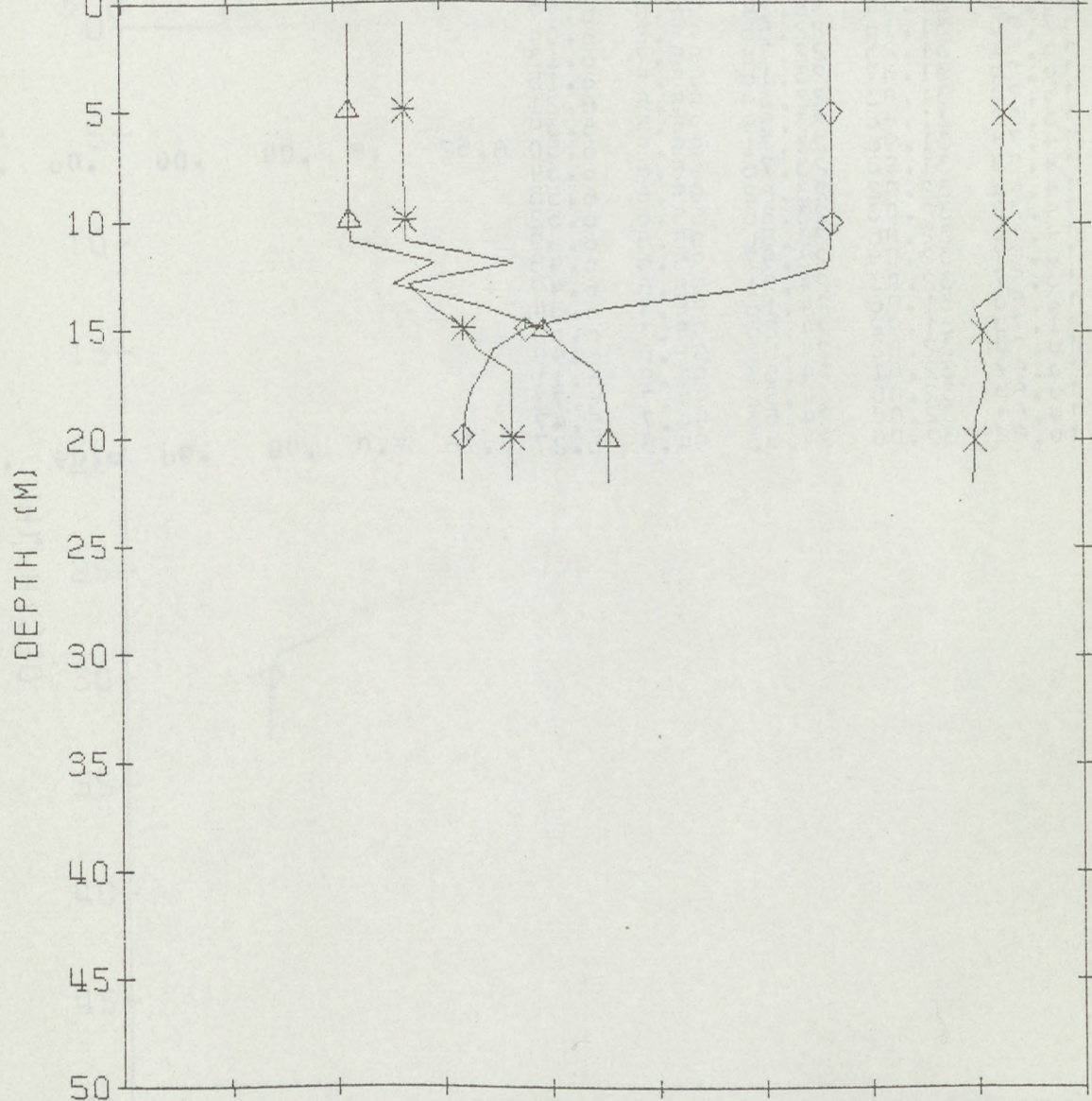
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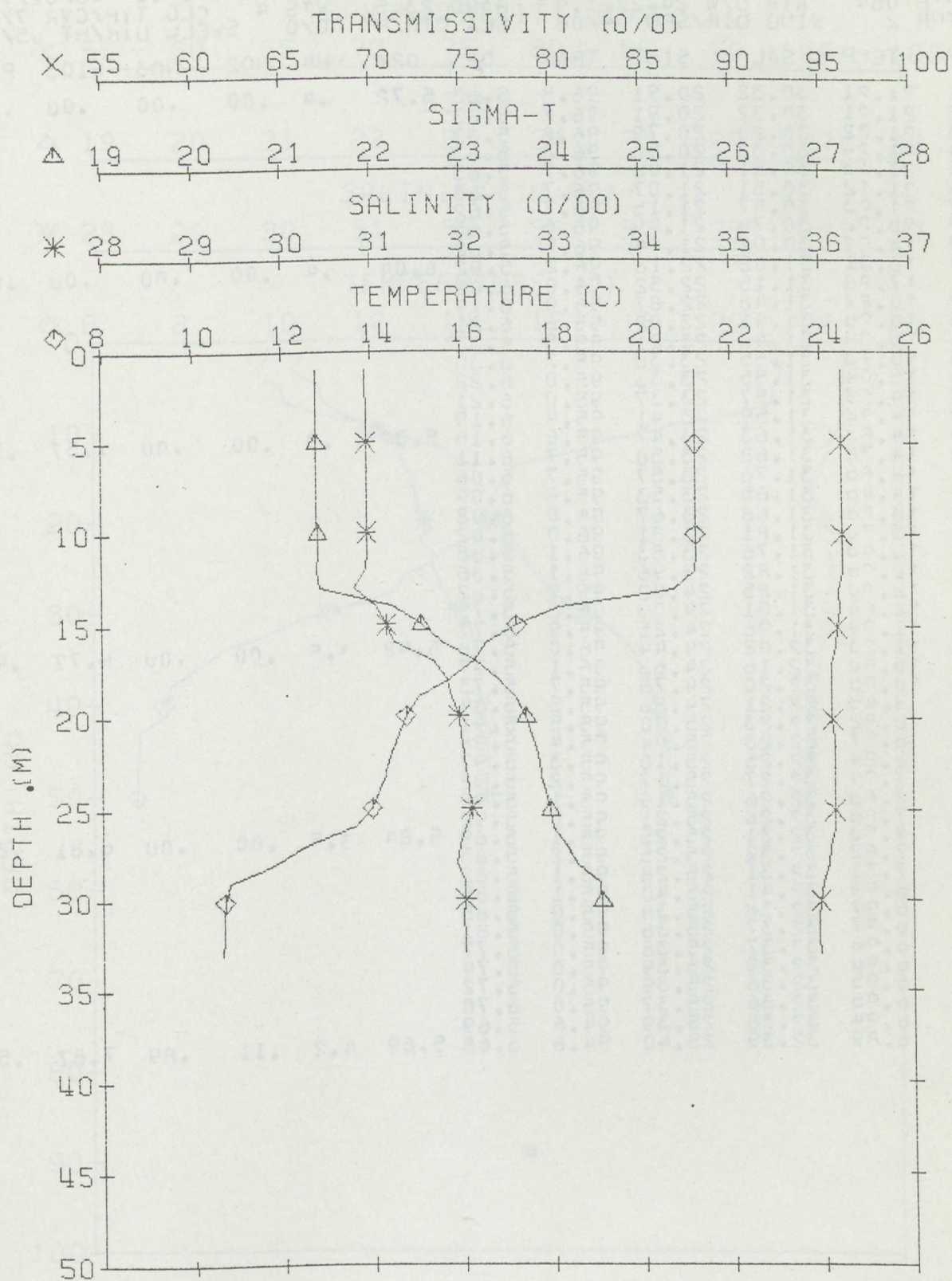
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X:CC-20 SIA.117 LAT 40 23.6N; LONG 73 5.0W GMT 10.9 08/02/78
 DEPTH 036 AIR D/W 20.0/19.4 BARO 22.0 VIS 4 CLD TYP/CVR 7/8
 WETUR 2 WIND DIR/SPD 06/10 SEA DIR/HT 06/0 SWELL DIR/HT 06/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	S103	P04
1	21.19	30.93	21.38	96.1	5.63	5.71	.3	.00	.00	.00	.10
2	21.19	30.93	21.38	96.1	5.62						
3	21.19	30.94	21.38	96.1	5.63						
4	21.18	30.94	21.39	96.1	5.63						
5	21.19	30.94	21.38	96.1	5.63						
6	21.19	30.94	21.38	96.1	5.62						
7	21.18	30.94	21.39	96.1	5.63						
8	21.18	30.94	21.39	96.1	5.63						
9	21.17	30.94	21.39	96.1	5.62						
10	21.17	30.94	21.39	96.1	5.61	5.72	.6	.00	.00	.00	.10
11	21.18	30.94	21.39	96.1	5.60						
12	21.18	30.93	21.39	96.1	5.60						
13	20.69	30.79	21.41	96.1	5.62						
14	18.15	31.04	22.24	96.1	5.77						
15	17.20	31.10	22.55	96.1	6.04						
16	16.51	31.25	22.78	96.1	6.13						
17	16.26	31.67	23.16	96.1	6.15						
18	15.73	31.86	23.39	96.1	6.21						
19	15.00	31.88	23.59	96.1	6.39						
20	14.74	31.98	23.71	96.1	6.50	6.52	.8	.00	.00	.00	.10
21	14.58	31.98	23.76	96.1	6.54						
22	14.42	32.02	23.82	96.1	6.53						
23	14.26	32.03	23.86	96.1	6.52						
24	14.16	32.06	23.90	96.1	6.48						
25	13.97	32.09	23.97	96.1	6.48						
26	13.57	32.03	24.01	96.1	6.49						
27	12.50	31.96	24.16	96.1	6.54						
28	11.77	31.92	24.26	96.1	6.53						
29	10.90	32.02	24.51	96.1	6.40						
30	10.67	32.01	24.53	96.1	6.11						
31	10.63	32.00	24.52	96.1	6.73						
32	10.60	32.00	24.53	96.1	6.47						
33	10.62	32.00	24.53	96.1	5.27	4.76	5.0	.00	.98	8.09	.50

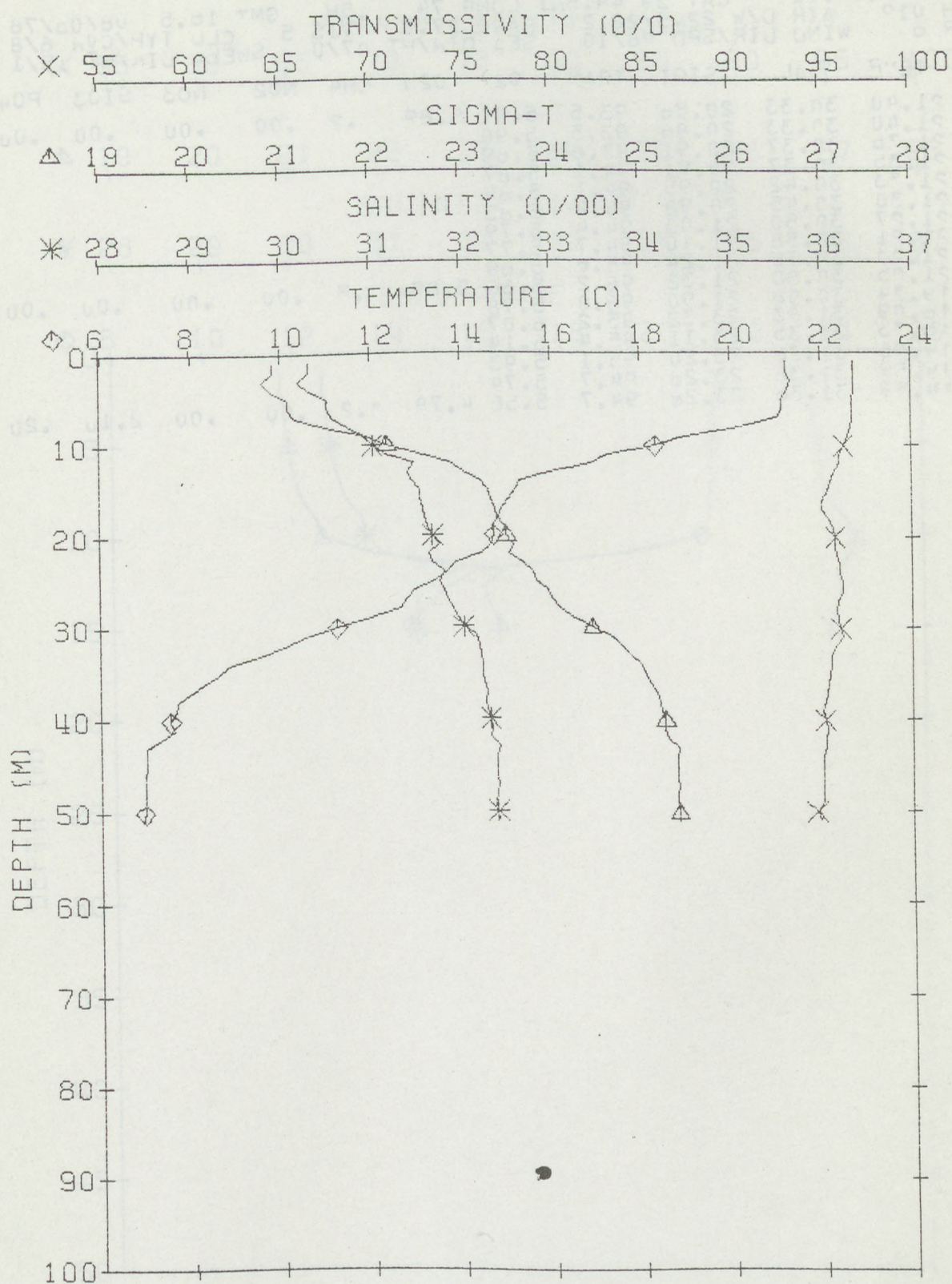
KELEZ CRUISE XWCC-20 STATION 117 08/02/78



XACC-20 STA.118 LAT 40 13.8N; LONG 72 33.7W GMT 17.1 08/02/78
 DEPTH 054 AIR D/W 24.2/21.9 BARO 23.5 VTS 4 CLD TYP/CVR 7/8
 WFTWR 2 WIND DIR/SPD 04/08 SEA DIR/HT 00/0 SWELL DIR/HT 05/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SIO3	P04
1	21.21	30.32	20.91	96.8	5.63	5.72	.4	.00	.00	.00	.00
2	21.21	30.32	20.91	96.8	5.63						
3	21.22	30.20	20.79	96.8	5.63						
4	21.24	30.32	20.90	96.8	5.63						
5	21.13	30.51	21.08	96.7	5.63						
6	21.12	30.51	21.07	96.7	5.63						
7	21.03	30.57	21.15	96.7	5.62						
8	20.92	30.74	21.49	96.6	5.55						
9	18.92	30.92	21.94	96.5	5.82						
10	18.31	31.02	22.18	96.2	5.92	6.04	.4	.00	.00	.00	.00
11	17.29	31.15	22.52	96.0	6.02						
12	16.27	31.48	22.87	95.8	6.14						
13	15.26	31.41	23.02	95.6	6.21						
14	15.29	31.48	23.21	95.5	6.33						
15	15.10	31.55	23.30	95.4	6.30						
16	15.24	31.55	23.33	95.4	6.22						
17	14.99	31.57	23.37	95.4	6.21						
18	14.22	31.59	23.41	95.4	6.19						
19	14.38	31.63	23.47	95.4	6.16	5.30	.9	.00	.00	1.57	.16
20	14.22	31.68	23.50	95.7	6.11						
21	14.55	31.76	23.57	95.7	6.06						
22	14.46	31.65	23.53	95.8	6.04						
23	13.38	31.68	23.67	95.8	6.08						
24	13.47	31.81	23.81	95.8	6.02						
25	12.45	31.76	23.83	95.6	5.88						
26	12.00	31.82	23.96	95.6	5.66						
27	12.00	31.85	24.02	95.9	5.92						
28	12.00	31.91	24.09	95.9	5.75						
29	11.00	31.96	24.25	95.9	5.77						
30	11.00	32.02	24.44	95.9	5.78	5.42	3.5	.00	.00	4.77	.44
31	10.50	32.16	24.68	95.7	5.77						
32	10.48	32.20	24.78	95.7	5.73						
33	10.48	32.21	24.88	95.6	5.64						
34	8.38	32.33	25.00	95.6	5.91						
35	8.38	32.33	25.04	95.6	5.98						
36	6.38	32.27	25.10	95.6	5.97						
37	7.78	32.27	25.17	95.6	5.98						
38	7.78	32.26	25.19	95.6	5.98						
39	7.78	32.26	25.21	95.6	5.92						
40	7.78	32.31	25.25	95.6	5.88	5.84	3.5	.00	.00	6.81	.39
41	7.78	32.32	25.25	95.6	5.82						
42	6.83	32.31	25.28	95.6	5.82						
43	6.83	32.41	25.40	95.6	5.85						
44	6.83	32.38	25.38	95.6	5.85						
45	6.83	32.37	25.38	95.6	5.81						
46	6.83	32.37	25.38	95.6	5.77						
47	6.83	32.39	25.39	95.6	5.74						
48	6.83	32.38	25.39	95.6	5.72						
49	6.83	32.36	25.37	95.6	5.70						
50	6.83	32.39	25.39	95.6	5.69						
51	6.83	32.39	25.40	95.6	5.68	5.69	4.2	.11	.89	7.87	.56

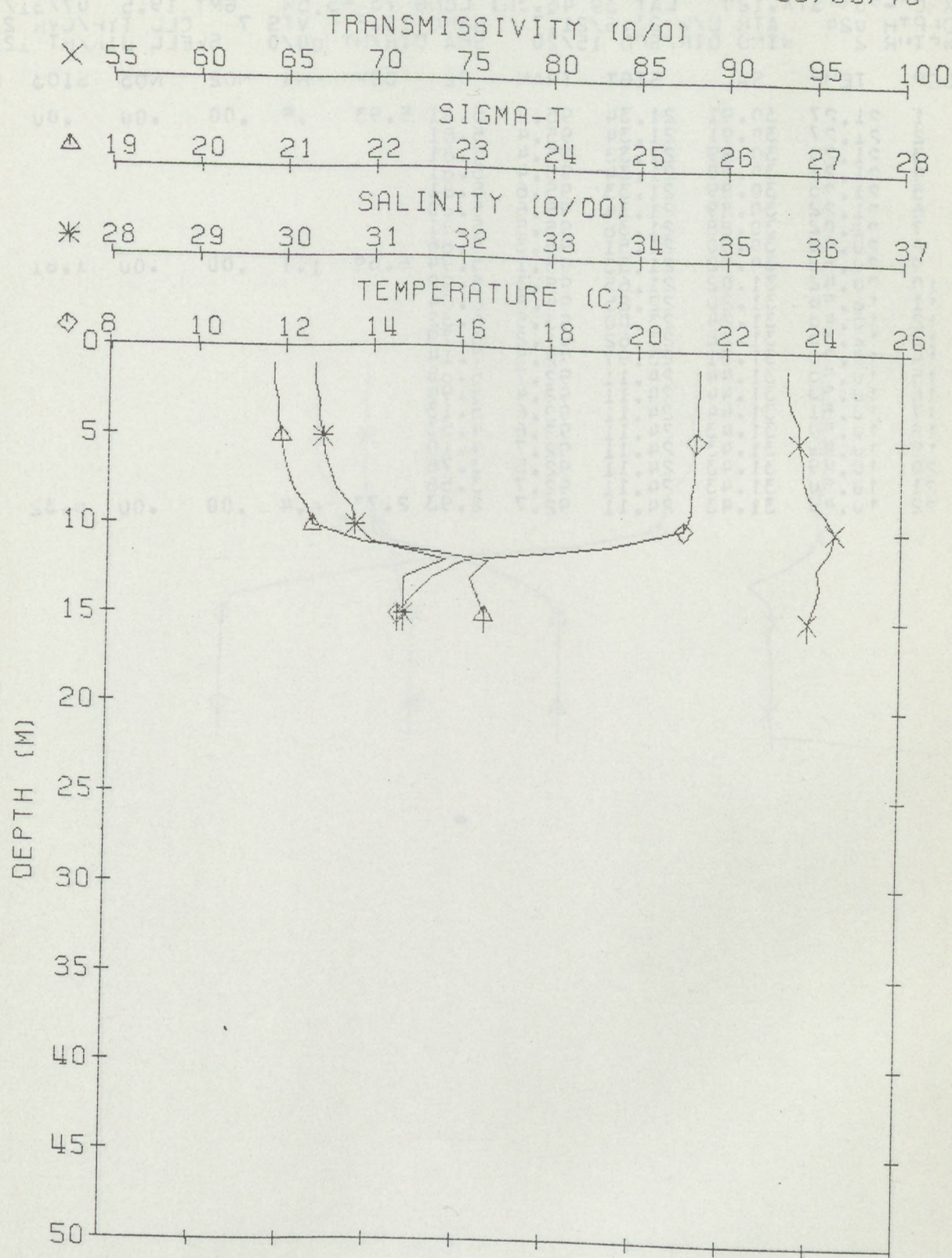
KELEZ CRUISE XWCC-20 STATION 118 08/02/78



X-CC-20 SIA.119 LAT 39 48.5N; LONG 74
 DEPTH 010 AIR D/W 22.5/22.2 BARO 27.0 .5W GMT 16.5 08/05/78
 WETHR 0 WIND DIR/SPD 08/10 SEA DIR/HT 07/0 VIS 5 CLD TYP/CVR 6/8
 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	21.40	30.33	20.86	93.5	5.91	5.89	.2	.00	.00	.00	.00
2	21.40	30.33	20.86	93.5	5.90						
3	21.35	30.37	20.91	93.6	5.89						
4	21.35	30.37	20.91	94.1	5.87						
5	21.33	30.42	20.95	94.1	5.84						
6	21.30	30.45	20.98	94.4	5.83						
7	21.27	30.50	21.03	94.4	5.79						
8	21.21	30.58	21.10	94.7	5.77						
9	21.23	30.76	21.24	95.6	5.69						
10	21.05	30.80	21.32	96.2	5.66	5.89	.5	.00	.00	.00	.00
11	19.74	30.98	21.90	96.0	5.78						
12	18.09	31.83	23.32	95.2	6.07						
13	15.75	31.35	23.11	95.4	6.14						
14	14.86	31.36	23.20	95.1	5.93						
15	14.59	31.36	23.28	94.7	5.74						
16	14.59	31.36	23.28	94.7	5.56	4.78	3.2	.00	.00	2.10	.20

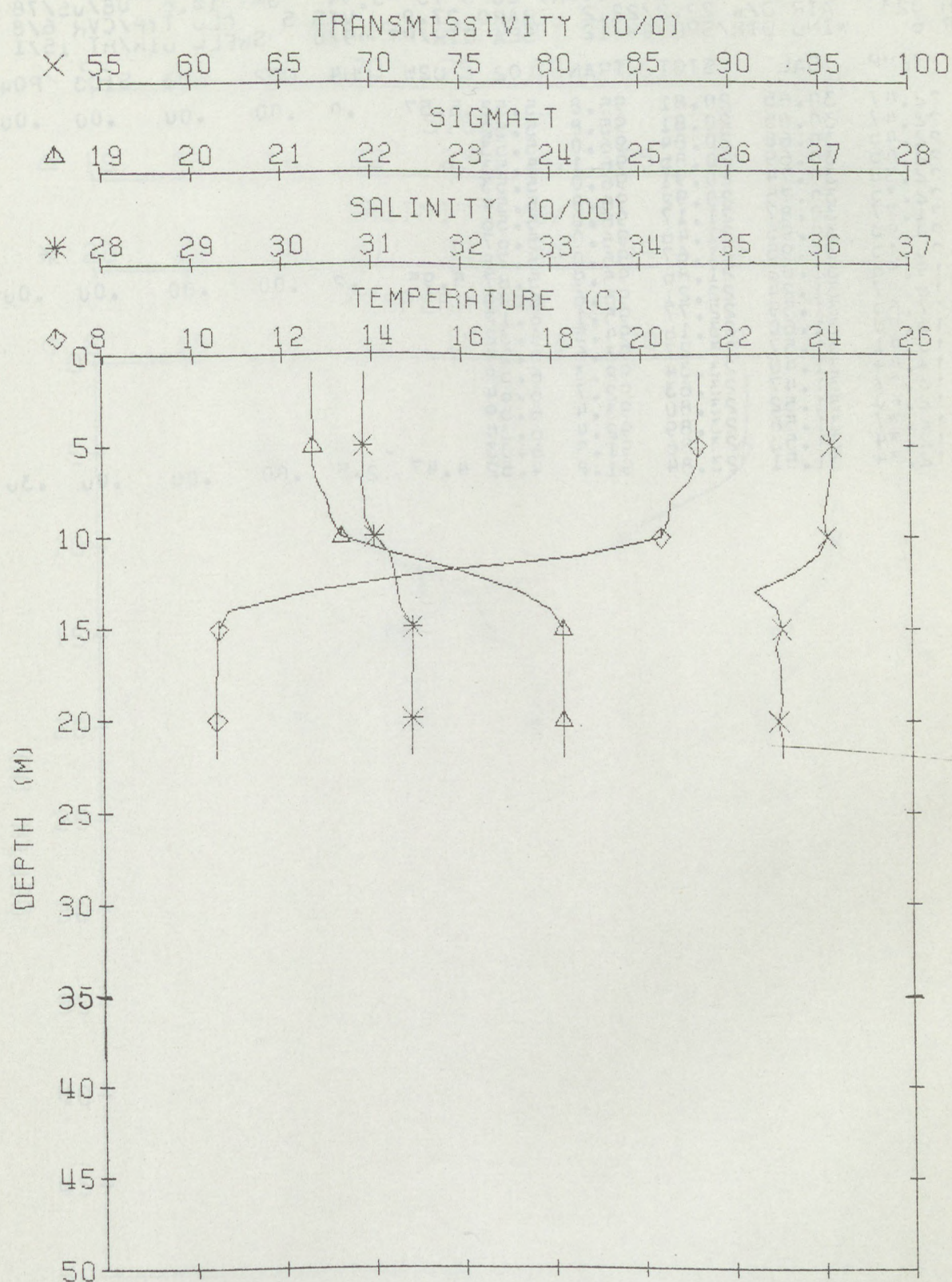
KELEZ CRUISE XWCC-20 STATION 119 08/05/78



X-CC-20 STA. 120 LAT 39 46.3N; LONG 73 55.5W GMT 19.5 07/31/78
 DEPTH 024 ATR D/W 23.6/21.7 BARO 16.5 VTS 7 CLL TYP/CVR 2/8
 WFTHR 2 WIND DIR/SPD 15/20 SEA DIR/HT 00/0 SWELL DIR/HT 12/2

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	21.27	30.91	21.34	95.4	5.81	5.93	.5	.00	.00	.00	.12
2	21.27	30.91	21.34	95.4	5.81						
3	21.25	30.89	21.33	95.4	5.81						
4	21.22	30.90	21.34	95.4	5.81						
5	21.25	30.89	21.33	95.4	5.81						
6	21.22	30.89	21.34	95.6	5.81						
7	21.22	30.88	21.34	95.6	5.81						
8	20.86	30.90	21.51	95.6	5.81						
9	20.86	30.92	21.53	95.6	5.81						
10	20.82	31.02	21.65	95.9	5.94	6.69	1.1	.00	.00	1.61	.63
11	18.86	31.20	22.25	95.9	5.92						
12	18.86	31.24	22.36	95.9	5.92						
13	18.86	31.28	22.62	95.9	5.92						
14	18.70	31.31	23.97	95.9	5.92						
15	18.66	31.44	24.11	95.9	5.92						
16	18.66	31.44	24.11	95.9	5.92						
17	18.66	31.44	24.11	95.9	5.92						
18	18.66	31.43	24.11	95.9	5.92						
19	18.66	31.43	24.11	95.9	5.92						
20	18.66	31.43	24.11	95.9	5.92						
21	18.66	31.43	24.11	95.9	5.92						
22	18.66	31.43	24.11	95.9	5.92	2.73	6.4	.00	.00	0.32	.59

KELEZ CRUISE XWCC-20 STATION 120 07/31/78



XWCC-20 SIA.120 LAT 39 46.5N; LONG 73 55.5W GMT 15.6 08/05/78
 DEPTH 023 AIR D/W 22.2/22.2 BARO 27.0 VTS 5 CLD TYP/CVR 6/8
 WFTHR 6 WIND DIR/SPD 09/12 SEA DIR/HT 09/0 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	04	N02	N03	S103	P04
1	22.47	30.65	20.81	95.8	5.53	5.57	.0	.00	.00	.00	.00
2	22.47	30.65	20.81	95.8	5.52						
3	22.45	30.66	20.84	96.0	5.53						
4	22.45	30.69	20.85	96.1	5.53						
5	22.38	30.74	20.91	96.0	5.53						
6	22.35	30.75	20.92	96.0	5.54						
7	21.77	30.87	21.17	96.0	5.56						
8	20.93	30.95	21.46	96.0	5.67						
9	20.15	30.95	21.67	96.0	5.78						
10	19.58	31.02	21.86	95.9	5.87	5.95	.2	.00	.00	.00	.00
11	18.87	31.24	22.21	95.6	6.00						
12	17.65	31.59	22.77	95.1	6.12						
13	16.30	31.60	23.16	94.5	6.32						
14	15.81	31.57	23.27	93.6	6.54						
15	14.84	31.40	23.34	92.3	6.58						
16	13.50	31.47	23.63	92.7	6.64						
17	12.60	31.52	23.80	93.4	6.59						
18	12.77	31.58	23.89	92.4	6.34						
19	12.74	31.53	23.86	91.9	6.03						
20	12.74	31.51	23.84	91.8	4.52	4.47	2.5	.00	.00	.00	.30

KELEZ CRUISE XWCC-20 STATION 120 08/05/78

TRANSMISSIVITY (0/0)

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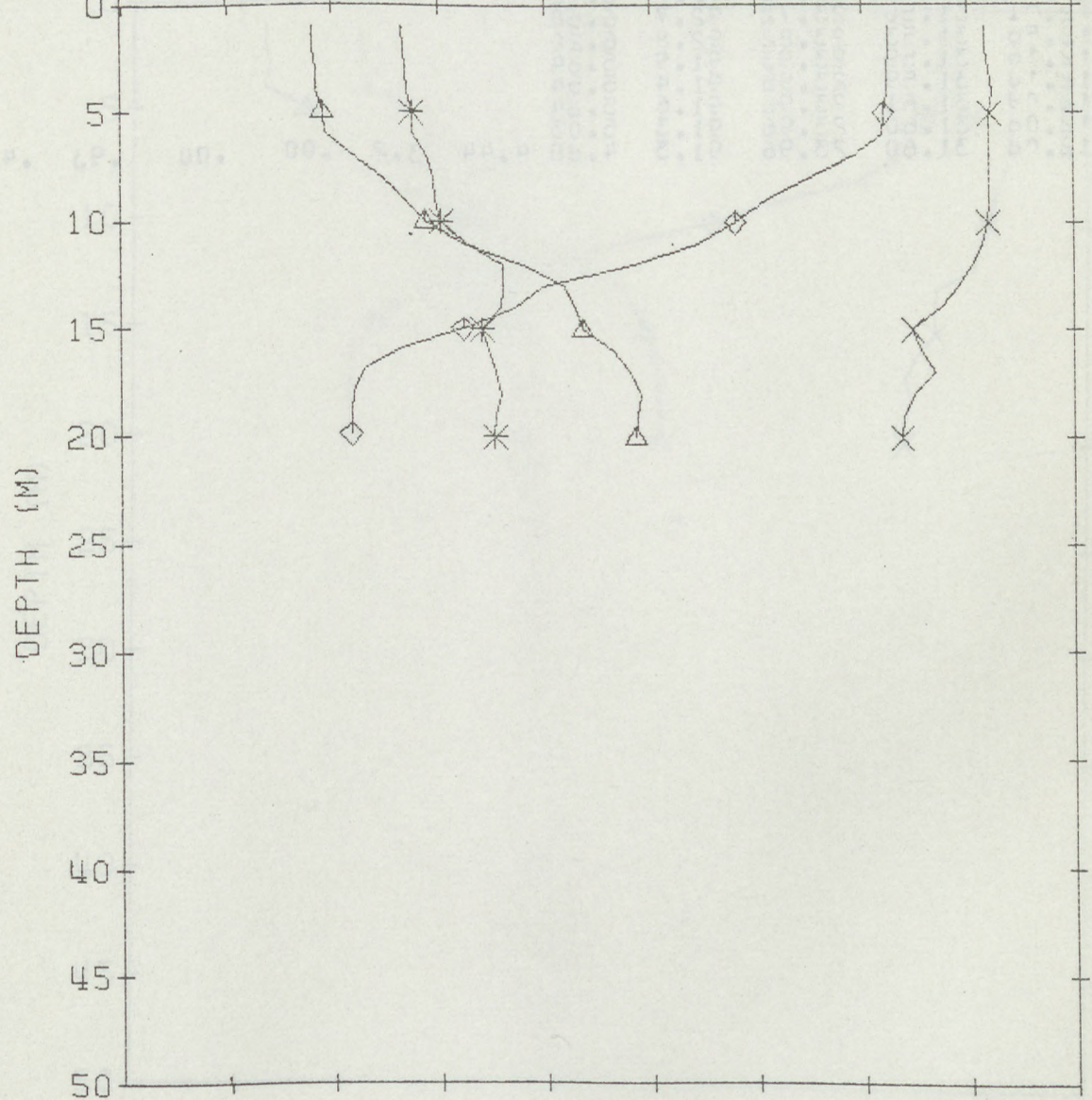
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SALINITY (0/00)

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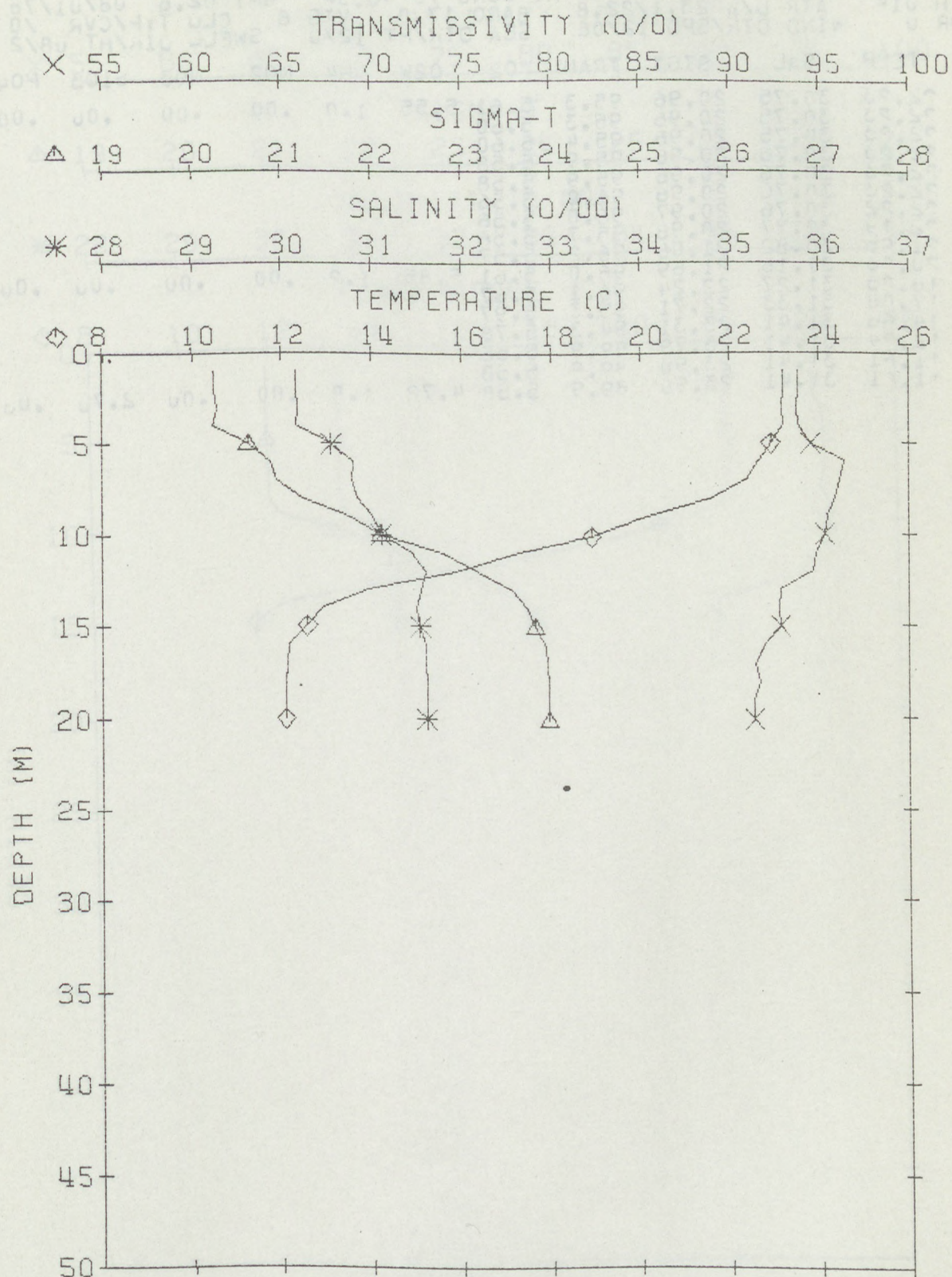
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XACC-20 SIA.120 LAT 39 45.1N; LONG 73 55.5W GMT 23.1 08/07/78
 DEPTH 024 AIR D/W 25.0/23.9 BARO 23.5 VTS 7 CLD TYP/CVR /0
 WETHR 0 WIND DIR/SPD 20/17 SEA DIR/HT 20/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SI03	P04
1	23.18	30.16	20.25	93.8	5.86	5.93	.3	.00	.00	.00	.00
2	23.18	30.17	20.25	93.8	5.86						
3	23.18	30.18	20.27	93.7	5.88						
4	23.19	30.15	20.24	93.8	5.88						
5	22.91	30.55	20.62	94.5	5.88						
6	22.22	30.80	20.89	96.4	5.88						
7	22.24	30.78	20.95	96.1	5.81						
8	21.56	30.85	21.22	96.9	5.73						
9	20.03	31.01	21.74	95.5	5.94						
10	17.29	31.10	22.10	95.3	5.10	5.97	.2	.00	.00	.00	.00
11	16.13	31.44	22.78	94.8	5.33						
12	15.96	31.59	23.18	94.6	5.56						
13	16.01	31.54	23.56	92.8	5.72						
14	14.11	31.50	23.72	92.7	5.60						
15	12.56	31.56	23.82	92.8	5.20						
16	12.56	31.56	23.93	91.9	5.44						
17	12.59	31.59	23.95	91.4	5.54						
18	12.59	31.61	23.96	91.6	5.24						
19	12.59	31.60	23.96	91.6	5.03						
20	12.58	31.60	23.96	91.6	4.88	4.44	3.2	.00	.00	.93	.46

KELEZ CRUISE XWCC-20 STATION 120 08/07/78



X-CC-20 SIA.121 LAT 39 42.91; LONG 73 46.5W GMT 02.6 08/01/78
 DEPTH 018 AIR D/W 23.1/22.8 BARO 17.0 VTS 6 CLD TYP/CVR /0
 WETR U WIND DIR/SPD 12/06 SEA DIR/HT 12/0 SWELL DIR/HT 08/2

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	P04
1	22.23	30.75	20.96	95.3	5.61	5.55	1.0	.00	.00	.00	.00
2	22.23	30.75	20.96	95.3	5.60						
3	22.23	30.75	20.96	95.4	5.60						
4	22.23	30.76	20.96	95.9	5.58						
5	22.23	30.76	20.96	95.9	5.58						
6	22.23	30.76	20.96	95.0	5.56						
7	22.22	30.76	20.97	95.0	5.56						
8	22.13	30.77	20.98	95.7	5.56						
9	21.73	30.82	21.06	95.2	5.57						
10	20.66	31.16	21.69	95.0	5.61	5.85	1.2	.00	.00	.00	.00
11	18.33	31.27	22.24	95.1	5.67						
12	17.08	31.33	22.71	95.3	5.97						
13	14.60	31.41	23.31	94.5	5.78						
14	12.04	31.41	23.79	90.9	5.58						
15	11.51	31.41	23.90	40.9	5.58						
16	11.61	31.41	23.90	30.9	5.58	4.72	1.8	.00	.00	2.73	.00

KELEZ CRUISE XWCC-20 STATION 121 08/01/78

TRANSMISSIVITY (0/0)

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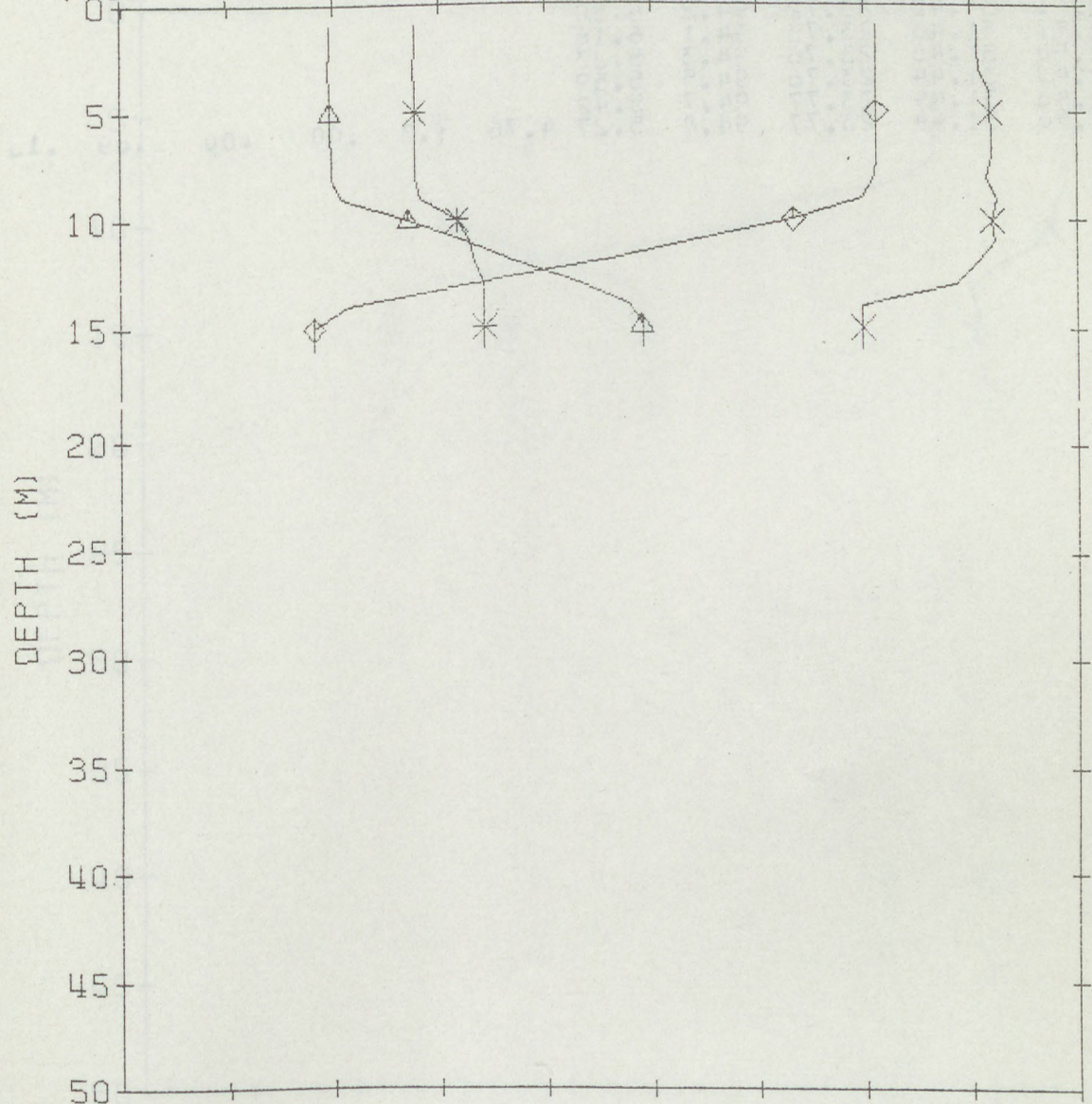
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SALINITY (0/00)

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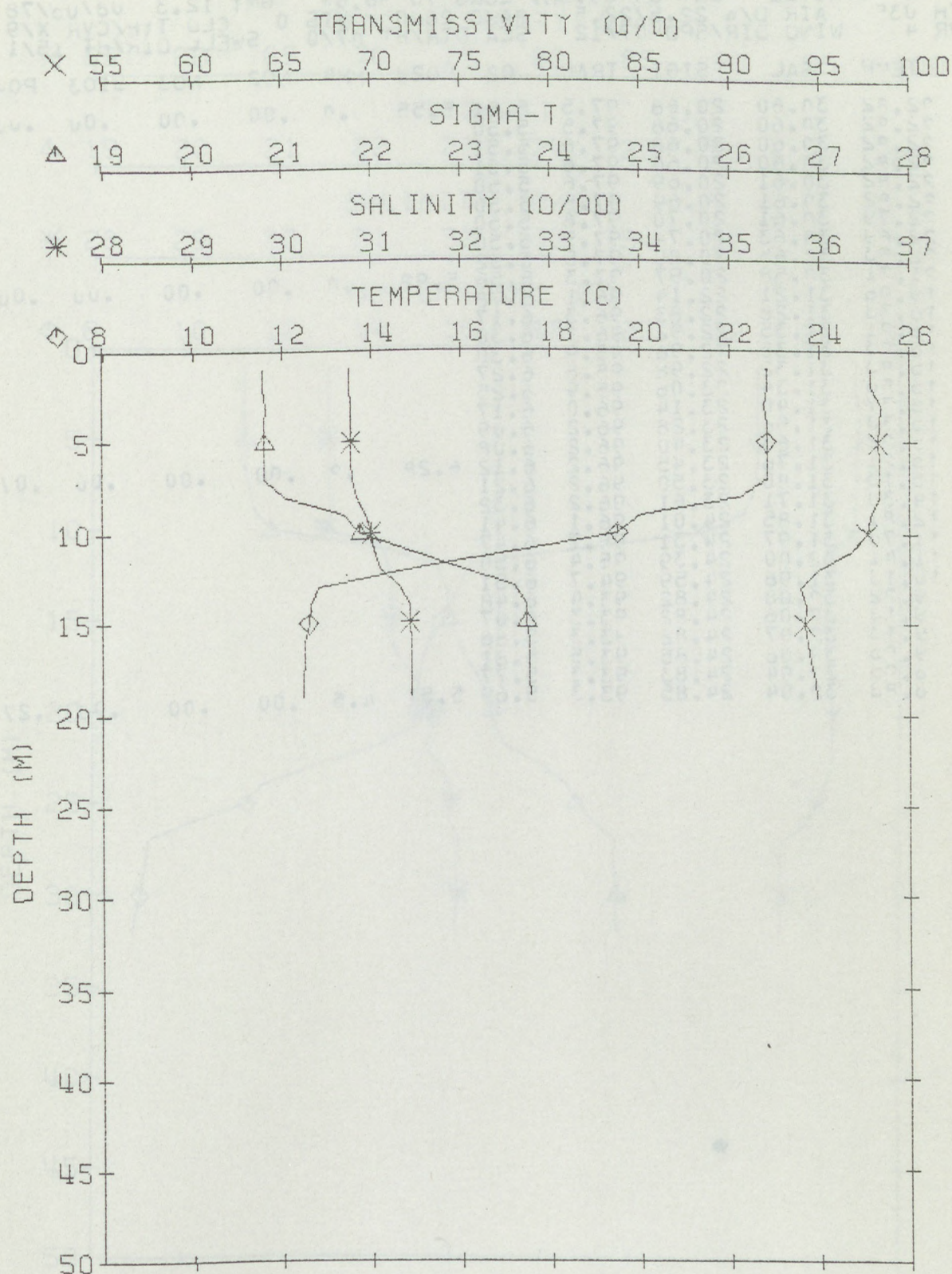
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XWCC-20 SIA.121 LAT 39 42.4N; LONG 73 47.5W GMT 14.4 08/05/78
 DEPTH 022 AIR D/W 22.2/22.2 BARO 26.5 VIS 3 CLD TYP/CVR 7/8
 WETUR 6 WIND DIR/SPD 07/10 SEA DIR/HT 07/0 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	P04
1	22.83	30.74	20.78	97.8	5.47	5.53	.2	.00	.00	.00	.00
2	22.83	30.74	20.78	97.8	5.47						
3	22.75	30.76	20.82	98.4	5.47						
4	22.80	30.76	20.81	98.3	5.47						
5	22.81	30.76	20.80	98.2	5.46						
6	22.82	30.75	20.80	98.3	5.46						
7	22.82	30.77	20.81	98.3	5.46						
8	22.83	30.83	21.02	98.3	5.48						
9	20.83	30.93	21.68	97.8	5.71						
10	19.49	30.99	21.87	97.5	5.81	6.10	.4	.00	.00	.00	.00
11	17.45	31.03	22.39	96.7	6.02						
12	15.00	31.08	22.98	94.9	6.17						
13	12.79	31.30	23.60	93.9	6.56						
14	12.61	31.42	23.72	94.2	6.50						
15	12.57	31.43	23.73	94.1	6.16						
16	12.50	31.45	23.76	94.3	5.83						
17	12.49	31.44	23.76	94.5	5.50						
18	12.46	31.44	23.77	94.7	5.42						
19	12.46	31.44	23.77	94.8	5.27	4.76	1.3	.00	.00	.89	.15

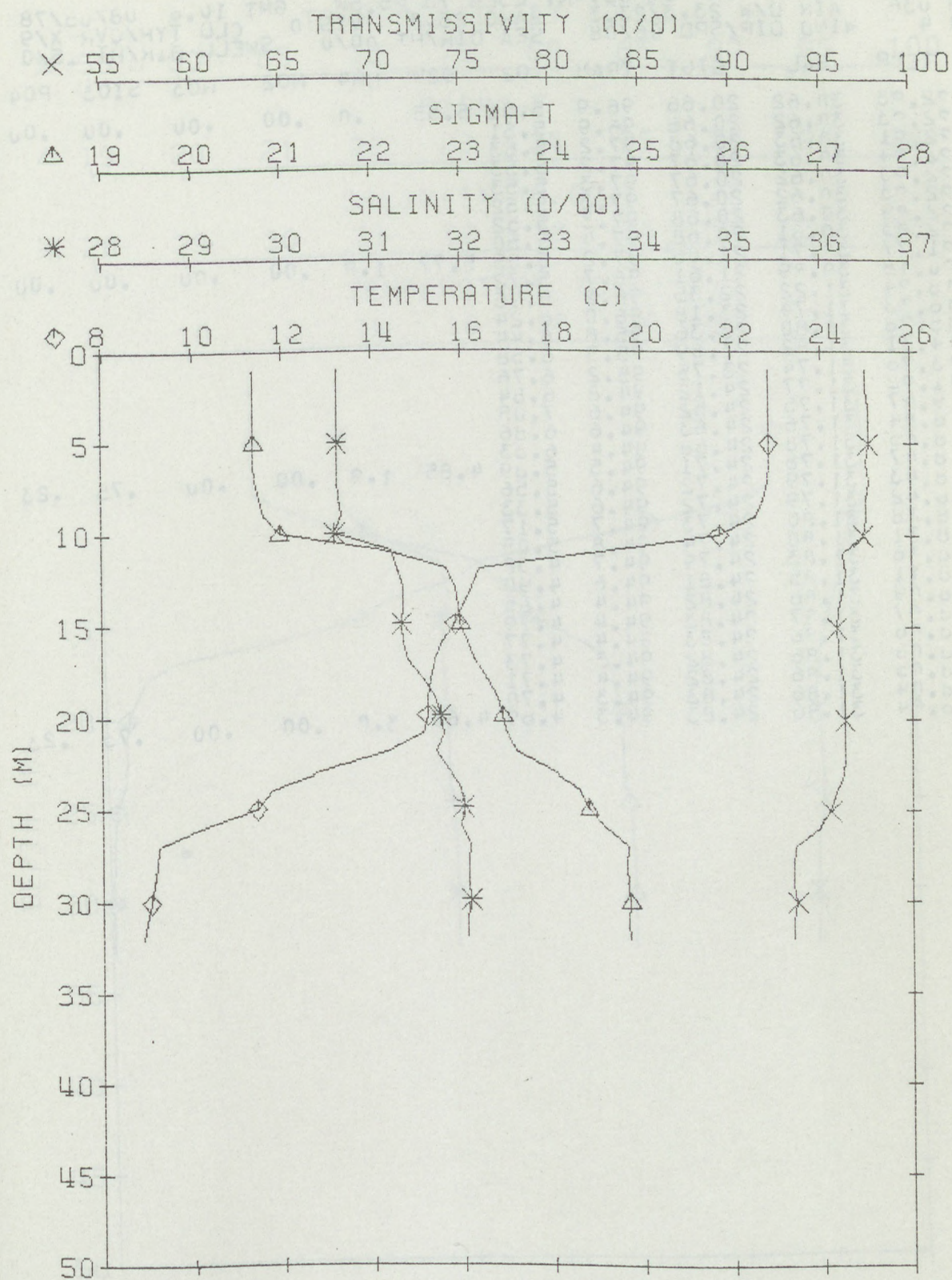
KELEZ CRUISE XWCC-20 STATION 121 08/05/78



XHCC-20 SIA.122 LAT 39 39.51; LONG 73 36.0W GMT 12.3 08/05/78
 DEPTH 035 AIR D/W 22.5/22.5 BARO 26.0 VTS 0 CLD TYP/CVR X/9
 WETHR 4 WIND DIR/SPD 07/12 SEA DIR/HT 07/0 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	N02	N03	SI03	P04
1	22.82	30.60	20.68	97.5	5.51	5.55	.0	.00	.00	.00	.00
2	22.82	30.60	20.68	97.5	5.50						
3	22.82	30.60	20.68	97.6	5.51						
4	22.82	30.60	20.68	97.6	5.51						
5	22.82	30.61	20.69	97.6	5.50						
6	22.82	30.61	20.69	97.5	5.50						
7	22.79	30.61	20.70	97.5	5.50						
8	22.73	30.63	20.74	97.5	5.50						
9	22.53	30.65	20.80	97.5	5.52						
10	21.71	30.58	20.97	97.3	5.56	5.92	.0	.00	.00	.00	.00
11	19.30	31.21	22.14	96.1	5.78						
12	16.36	31.28	22.83	96.3	5.17						
13	16.21	31.35	22.92	96.1	5.30						
14	16.03	31.35	22.96	95.9	5.30						
15	15.70	31.32	22.98	95.8	5.27						
16	15.70	31.34	23.06	95.0	5.25						
17	15.77	31.40	23.14	95.0	5.17						
18	15.70	31.50	23.28	96.0	5.09						
19	15.32	31.68	23.40	96.0	5.08						
20	15.21	31.70	23.45	96.0	5.12	6.28	.2	.00	.00	.00	.07
21	15.13	31.80	23.50	96.0	5.21						
22	14.70	31.71	23.61	96.0	5.32						
23	12.91	31.85	24.01	96.1	5.41						
24	11.70	31.97	24.31	95.7	5.47						
25	11.41	32.00	24.39	95.4	5.50						
26	10.13	31.98	24.59	95.7	5.51						
27	9.22	32.08	24.80	95.3	5.48						
28	9.13	32.06	24.82	95.2	5.07						
29	9.13	32.07	24.82	95.2	5.86						
30	9.03	32.08	24.83	95.1	5.81						
31	9.03	32.04	24.83	95.1	5.77						
32	6.83	32.04	24.85	95.0	5.69	5.51	4.5	.00	.00	.00	.27

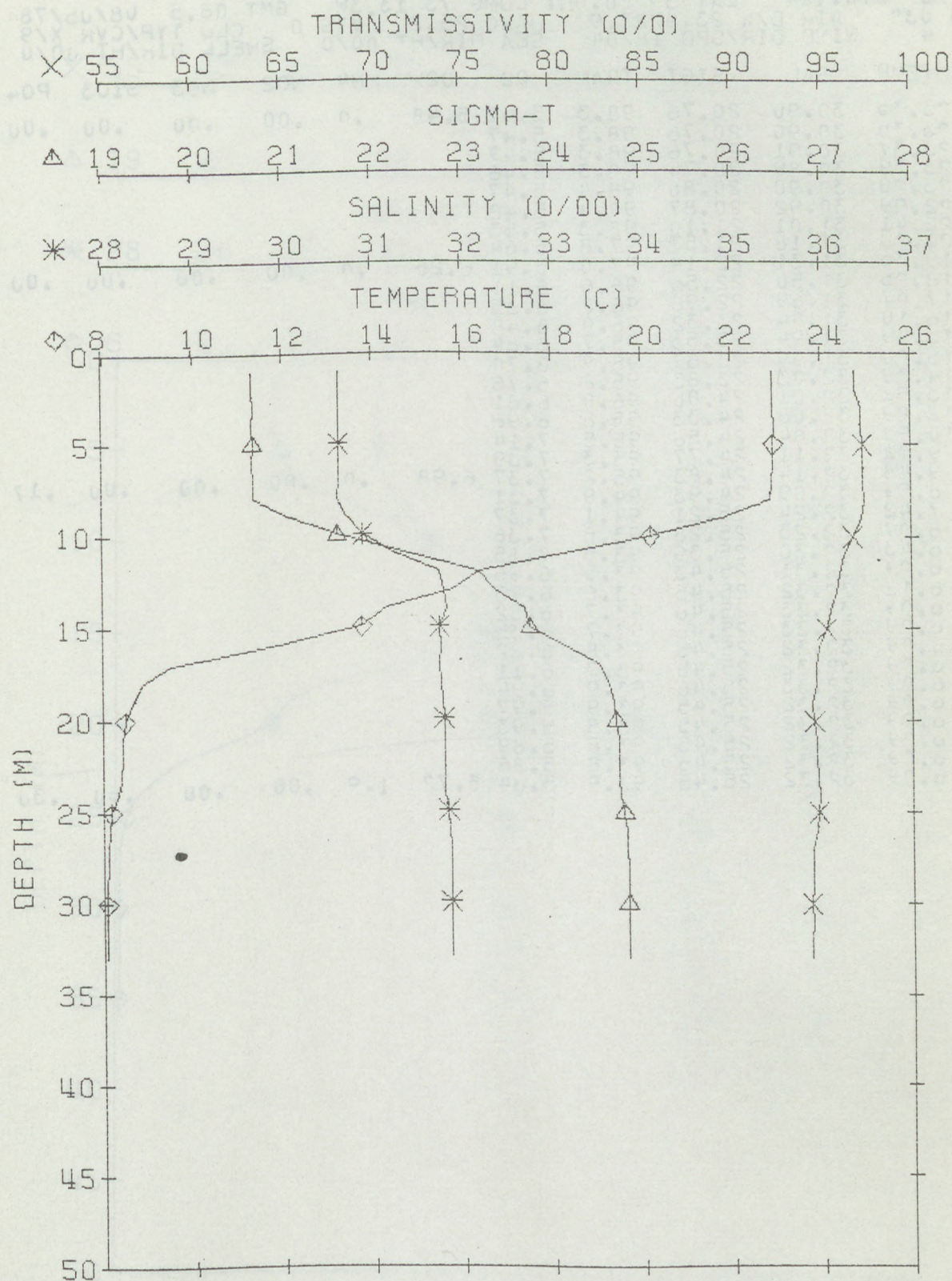
KELEZ CRUISE XWCC-20 STATION 122 08/05/78



XCCC-20 SIA.123 LAT 39 35.4N; LONG 73 25.5W GMT 10.0 08/05/78
 DEPTH 036 AIR D/W 23.3/23.3 BARO 25.3 VIS 0 CLD TYP/CVR X/9
 WTHR 4 WIND DIR/SPD 06/08 SEA DIR/HT 00/0 SWELL DIR/HT 15/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SI03	P04
1	22.03	30.62	20.66	96.9	5.51	5.55	.0	.00	.00	.00	.00
2	22.03	30.62	20.66	96.9	5.51						
3	22.01	30.63	20.68	97.2	5.53						
4	22.04	30.63	20.67	97.2	5.53						
5	22.03	30.62	20.67	97.3	5.53						
6	22.03	30.62	20.67	97.3	5.52						
7	22.09	30.63	20.68	97.3	5.52						
8	22.03	30.61	20.68	97.4	5.50						
9	21.77	30.71	21.06	97.2	5.55	5.77	1.0	.00	.00	.00	.00
10	20.15	30.89	21.61	96.7	5.72						
11	18.24	31.22	22.35	96.2	5.35						
12	18.74	31.74	23.18	96.0	5.24						
13	15.78	31.80	23.36	95.8	5.44						
14	14.31	31.82	23.69	95.5	5.58						
15	13.76	31.74	23.75	95.2	5.76						
16	11.02	31.77	24.12	94.8	5.64						
17	9.47	31.75	24.52	94.6	5.05						
18	8.84	31.76	24.63	94.6	5.36						
19	8.63	31.78	24.68	94.5	5.33						
20	8.47	31.78	24.71	94.5	5.69	4.85	1.0	.00	.00	.75	.23
21	8.43	31.79	24.72	94.6	5.56						
22	8.42	31.79	24.72	94.6	5.33						
23	8.46	31.80	24.73	94.7	5.17						
24	8.41	31.80	24.74	94.8	5.05						
25	8.16	31.83	24.79	94.7	4.98						
26	8.11	31.85	24.81	94.6	4.90						
27	8.09	31.86	24.82	94.4	4.65						
28	8.07	31.87	24.83	94.4	4.79						
29	8.06	31.86	24.83	94.4	4.77						
30	8.06	31.86	24.82	94.4	4.73						
31	8.06	31.86	24.82	94.4	4.71						
32	8.06	31.86	24.83	94.3	4.70						
33	8.04	31.86	24.83	94.3	4.69	4.65	3.0	.00	.00	.75	.23

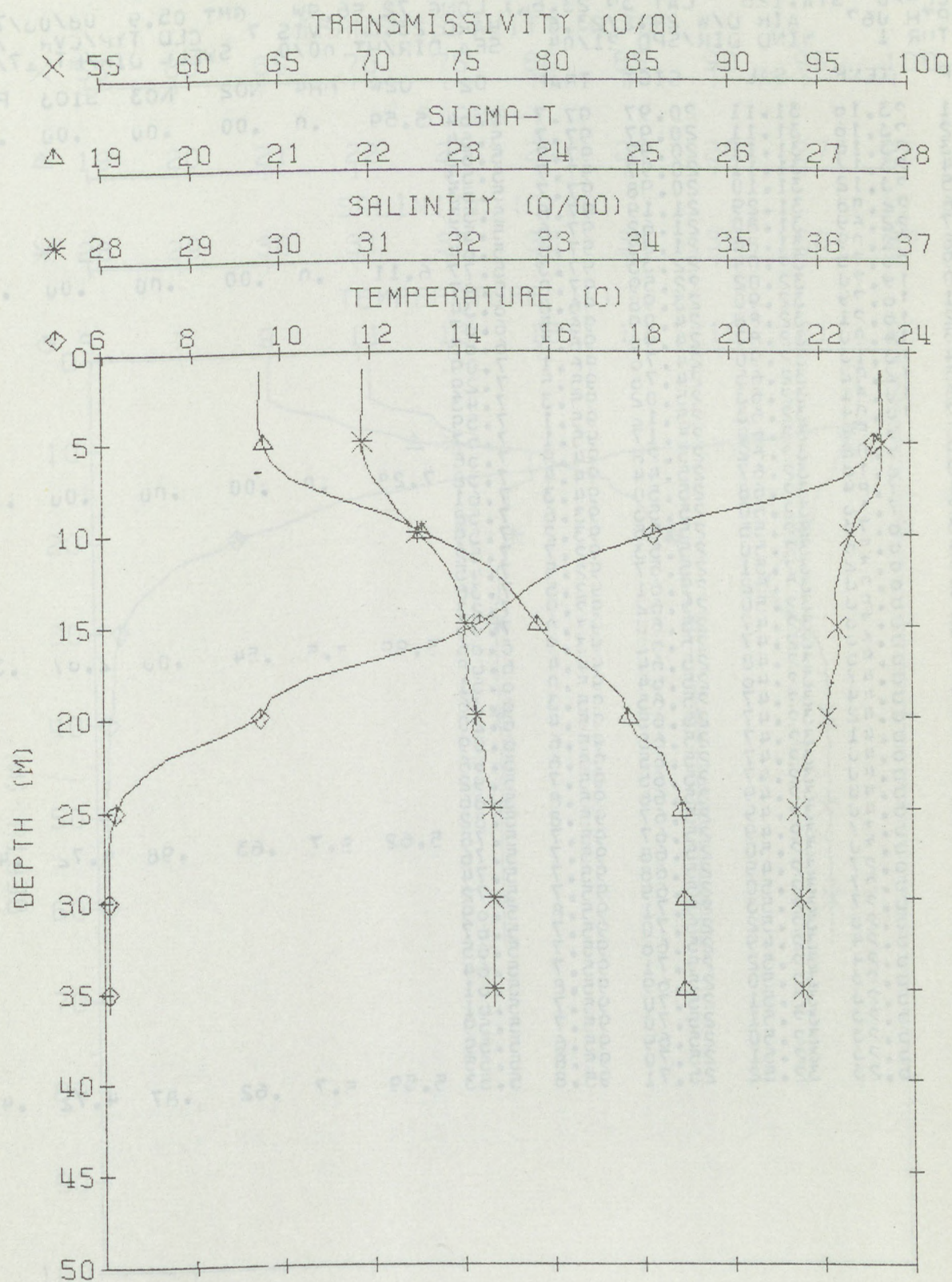
KELEZ CRUISE XWCC-20 STATION 123 08/05/78



X-CC-20 SIA.124 LAT 39 30.0N; LONG 73 13.3W GMT 08.5 08/05/78
 DEPTH 030 AIR D/W 23.9/23.9 BARO 25.3 VIS 0 CLU TYP/CVR X/9
 WETHR 4 WIND DIR/SPD 18/04 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DFP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	23.73	30.90	20.76	98.3	5.47	5.48	.0	.00	.00	.00	.00
2	23.73	30.90	20.76	98.3	5.47						
3	23.73	30.91	20.76	98.3	5.47						
4	23.73	30.89	20.74	98.3	5.46						
5	23.73	30.90	20.80	98.4	5.47						
6	22.41	30.92	20.87	98.4	5.48						
7	22.41	31.01	21.10	98.3	5.53						
8	21.70	31.18	21.57	97.8	5.64						
9	19.77	31.51	22.14	97.0	5.91	6.25	.0	.00	.00	.00	.00
10	18.77	31.69	22.56	96.6	6.11						
11	17.77	31.84	22.98	96.2	6.35						
12	16.77	31.94	23.32	95.7	6.48						
13	15.77	31.94	23.53	95.7	6.64						
14	15.77	31.99	23.67	95.7	6.70						
15	14.77	32.03	23.83	95.7	6.76						
16	13.77	32.01	24.00	95.7	6.81						
17	12.77	32.08	24.33	95.8	6.96						
18	10.77	32.04	24.56	95.5	7.14						
19	9.77	32.11	24.77	95.5	7.39						
20	8.77	32.14	24.83	95.2	7.37	6.98	.0	.00	.00	.00	.17
21	8.77	32.09	24.93	94.9	7.31						
22	7.77	32.24	25.21	94.1	7.37						
23	6.77	32.23	25.28	93.6	7.36						
24	6.77	32.30	25.39	93.6	7.15						
25	6.77	32.31	25.43	93.6	6.96						
26	6.77	32.33	25.45	93.6	6.73						
27	6.77	32.33	25.45	93.6	6.52						
28	6.77	32.33	25.45	93.6	6.35						
29	6.77	32.33	25.45	93.6	6.22						
30	6.77	32.33	25.45	93.6	6.11						
31	6.77	32.33	25.45	93.6	6.04						
32	6.77	32.33	25.45	93.6	5.97						
33	6.77	32.33	25.45	93.6	5.93						
34	6.77	32.33	25.45	93.6	5.89						
35	6.77	32.33	25.45	93.6	5.86						
36	6.77	32.33	25.45	93.6	5.84	5.72	1.0	.00	.00	.60	.30

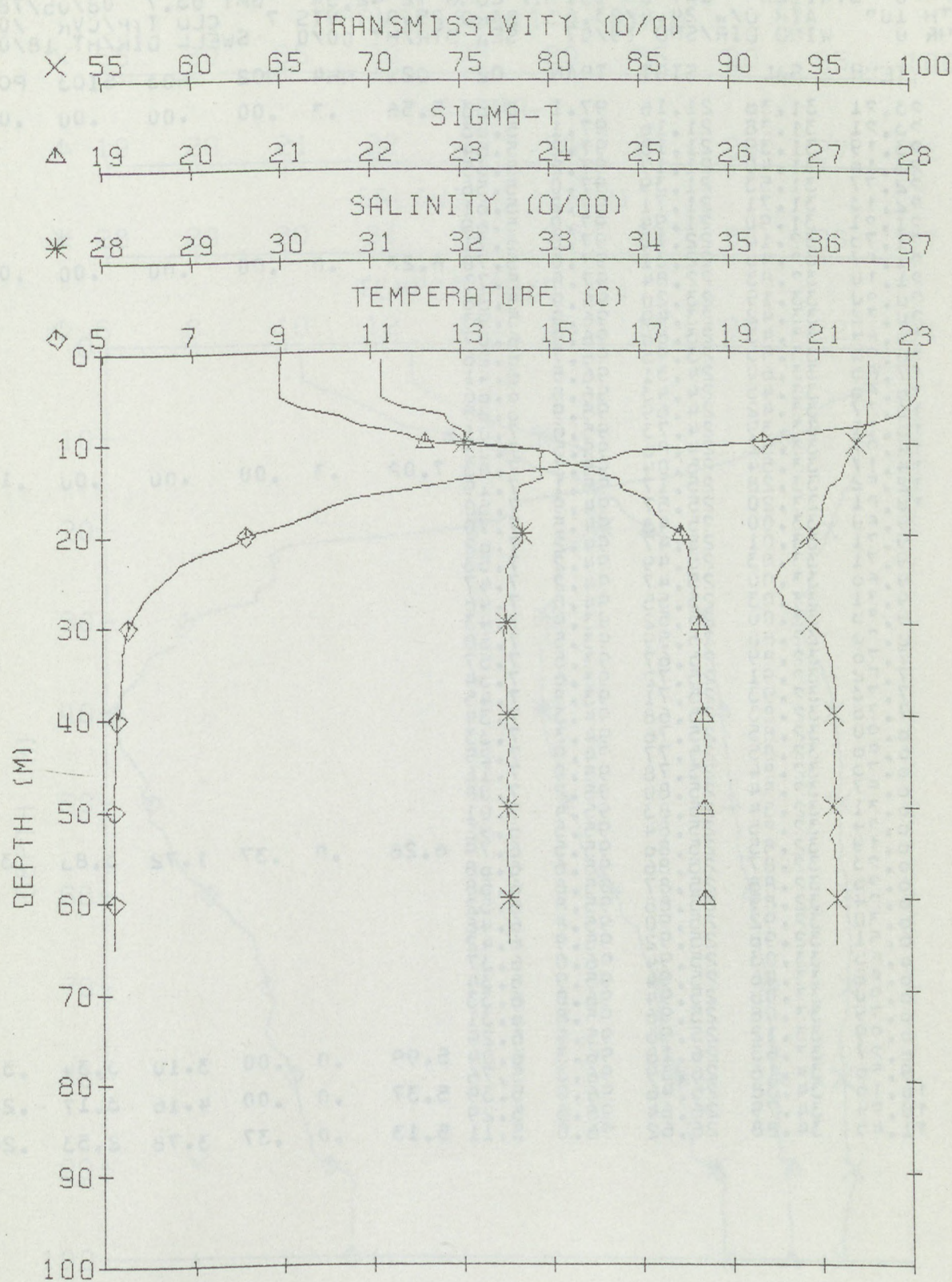
KELEZ CRUISE XWCC-20 STATION 124 08/05/78



X-CC-20 SIA.125 LAT 30 23.6N; LONG 72 56.9W GMT 05.9 08/03/78
 DEPTH 067 AIR D/W 24.2/23.6 BARO 25.0 VIS 7 CLD TYP/CVR /3
 WTHR 1 WIND DIR/SPD 21/04 SEA DIR/HT 00/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	23.10	31.11	20.97	97.7	5.54	5.59	.0	.00	.00	.00	.00
2	23.10	31.11	20.97	97.7	5.54						
3	23.10	31.11	20.97	97.7	5.52						
4	23.10	31.11	20.97	97.7	5.53						
5	23.12	31.10	20.98	97.7	5.53						
6	22.98	31.29	21.19	97.6	5.53						
7	22.79	31.30	21.62	97.6	5.56						
8	22.66	31.36	21.33	97.6	5.64						
9	22.75	31.04	22.36	97.3	5.77	6.11	.0	.00	.00	.00	.10
10	22.70	32.02	22.59	97.3	5.97						
11	22.73	32.90	23.98	96.8	6.34						
12	22.11	32.88	24.09	96.5	6.67						
13	22.00	32.87	24.40	96.3	6.83						
14	22.13	32.00	24.70	96.1	7.09						
15	22.22	32.55	24.76	95.7	7.26						
16	22.11	32.63	25.02	95.3	7.43						
17	22.44	32.66	25.15	95.0	7.59						
18	22.99	32.60	25.17	94.1	7.57						
19	22.02	32.60	25.26	94.4	7.56						
20	22.11	32.67	25.44	94.9	7.58	7.28	.0	.00	.00	.00	.17
21	22.44	32.68	25.50	94.6	7.61						
22	22.76	32.60	25.63	94.0	7.58						
23	22.76	32.55	25.66	93.2	7.55						
24	22.22	32.55	25.77	92.7	7.55						
25	22.22	32.55	25.77	92.7	7.55						
26	22.22	32.55	25.77	92.7	7.55						
27	22.22	32.55	25.77	92.7	7.55						
28	22.22	32.55	25.77	92.7	7.55						
29	22.22	32.55	25.77	92.7	7.55						
30	22.22	32.55	25.77	92.7	7.55	5.00	2.5	.54	.00	2.07	.37
31	22.47	32.46	25.64	92.3	7.51						
32	22.47	32.47	25.65	92.4	7.53						
33	22.47	32.47	25.65	92.4	7.53						
34	22.47	32.47	25.65	92.6	7.50						
35	22.47	32.47	25.65	92.7	7.53						
36	22.47	32.47	25.65	92.7	7.53						
37	22.47	32.47	25.65	92.7	7.53						
38	22.47	32.47	25.65	92.7	7.53						
39	22.47	32.47	25.65	92.7	7.53	5.62	5.7	.63	.98	4.72	.41
40	22.47	32.47	25.65	92.7	7.53						
41	22.47	32.47	25.65	92.7	7.53						
42	22.47	32.47	25.65	92.7	7.53						
43	22.47	32.47	25.65	92.7	7.53						
44	22.47	32.47	25.65	92.7	7.53						
45	22.47	32.47	25.65	92.7	7.53						
46	22.47	32.47	25.65	92.7	7.53						
47	22.47	32.47	25.65	92.7	7.53						
48	22.47	32.47	25.65	92.7	7.53						
49	22.47	32.47	25.65	92.7	7.53						
50	22.47	32.47	25.65	92.7	7.53						
51	22.47	32.47	25.65	92.7	7.53						
52	22.47	32.47	25.65	92.7	7.53						
53	22.47	32.47	25.65	92.7	7.53						
54	22.47	32.47	25.65	92.7	7.53						
55	22.47	32.47	25.65	92.7	7.53						
56	22.47	32.47	25.65	92.7	7.53						
57	22.47	32.47	25.65	92.7	7.53						
58	22.47	32.47	25.65	92.7	7.53						
59	22.47	32.47	25.65	92.7	7.53						
60	22.47	32.47	25.65	92.7	7.53						
61	22.47	32.47	25.65	92.7	7.53						
62	22.47	32.47	25.65	92.7	7.53						
63	22.47	32.47	25.65	92.7	7.53						
64	22.47	32.47	25.65	92.7	7.53						
65	22.47	32.47	25.65	92.7	7.53	5.59	5.7	.62	.87	4.72	.44

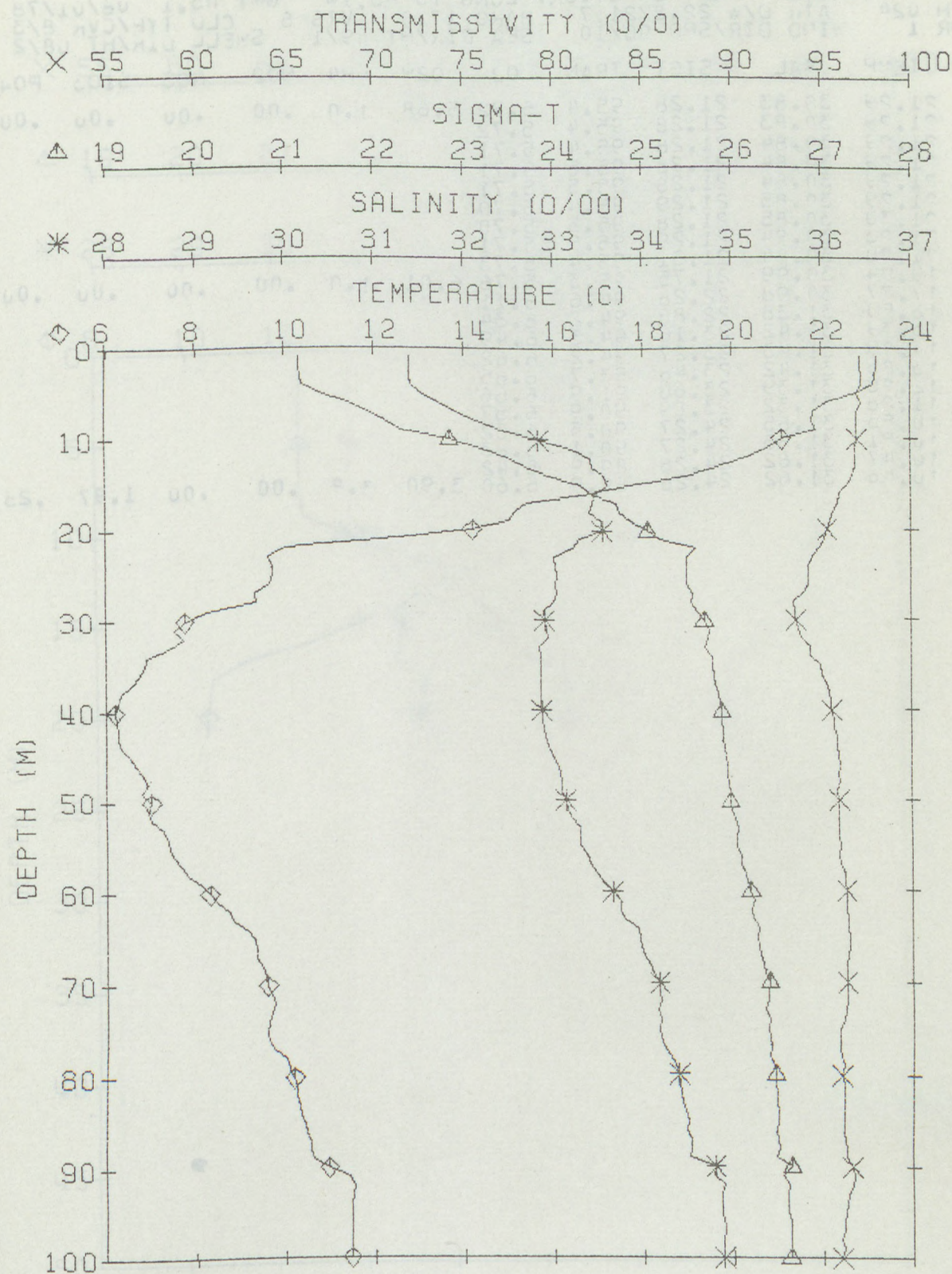
KELEZ CRUISE XWCC-20 STATION 125 08/05/78



X-CC-20 STA. 126 LAT 39 18.9N; LONG 72 42.5W GMT 03.7 08/05/78
 DEPTH 100 AIR D/W 24.4/23.6 BAKO 25.0 VIS 7 CLD TYP/CVR /0
 WETDR 0 WIND DIR/SPD 19/07 SEA DIR/HT 00/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SI03	PO4
1	23.21	31.38	21.16	97.1	5.53	5.56	.3	.00	.00	.00	.00
2	23.21	31.38	21.16	97.1	5.53						
3	23.19	31.39	21.18	97.2	5.54						
4	23.18	31.40	21.19	97.2	5.55						
5	22.77	31.53	21.39	97.0	5.56						
6	22.13	31.71	21.71	97.2	5.61						
7	21.81	31.90	21.94	97.0	5.69						
8	21.73	32.14	22.13	97.0	5.71						
9	21.27	32.40	22.31	97.0	5.70	6.23	.0	.00	.00	.00	.00
10	21.10	32.83	22.84	97.0	5.73						
11	20.22	33.19	23.20	96.9	5.66						
12	20.22	33.42	23.49	96.9	5.93						
13	19.64	33.43	23.68	96.9	6.07						
14	18.65	33.55	23.95	96.7	6.26						
15	17.65	33.60	24.31	96.5	6.41						
16	16.65	33.45	24.43	96.0	6.66						
17	15.77	33.42	24.69	95.8	6.85						
18	15.11	33.79	24.73	95.8	7.01						
19	14.77	33.52	24.86	95.5	7.03	7.02	.3	.00	.00	.00	.10
20	14.17	33.54	25.04	95.4	7.03						
21	12.22	33.28	25.17	95.1	7.19						
22	9.01	33.20	25.57	94.0	7.50						
23	9.00	33.00	25.48	94.0	7.70						
24	9.71	33.01	25.47	94.0	7.62						
25	9.71	33.03	25.49	94.0	7.63						
26	9.60	33.00	25.47	94.0	7.47						
27	9.71	33.03	25.55	94.0	7.46						
28	9.70	33.00	25.52	94.0	7.43						
29	7.70	33.00	25.60	93.5	7.50						
30	7.70	33.09	25.67	93.5	7.57						
31	7.72	33.01	25.72	93.5	7.54						
32	7.73	33.03	25.71	93.5	7.45						
33	7.73	33.03	25.68	94.0	7.34						
34	6.00	33.05	25.76	94.0	7.33						
35	6.00	33.25	25.77	94.0	7.29						
36	6.73	33.44	25.78	95.0	7.18						
37	6.77	33.44	25.80	95.0	7.08						
38	6.74	33.44	25.86	95.0	7.01						
39	6.44	33.55	25.84	95.0	6.92	6.26	.0	.37	1.72	3.85	.30
40	6.19	33.55	25.86	95.0	6.79						
41	6.23	33.87	25.86	95.0	6.68						
42	6.23	33.88	25.87	95.0	6.58						
43	6.23	33.90	25.88	95.0	6.52						
44	6.30	33.92	25.90	95.0	6.48						
45	6.51	33.98	25.92	95.0	6.42						
46	6.52	33.06	25.94	95.0	6.37						
47	6.55	33.06	25.94	95.0	6.34						
48	6.00	33.06	25.94	95.0	6.33						
49	6.79	33.08	25.96	95.0	6.31						
50	6.00	33.12	25.96	95.0	6.29						
51	6.77	33.63	25.98	96.0	6.04	5.99	.0	.00	3.10	3.34	.30
52	9.00	34.16	26.03	96.0	5.76						
53	10.16	34.38	26.04	96.0	5.39	5.37	.0	.00	4.16	3.17	.24
54	10.24	34.79	26.64	96.6	5.29						
100	11.45	34.88	26.62	96.0	5.11	5.13	.0	.37	3.78	2.53	.24

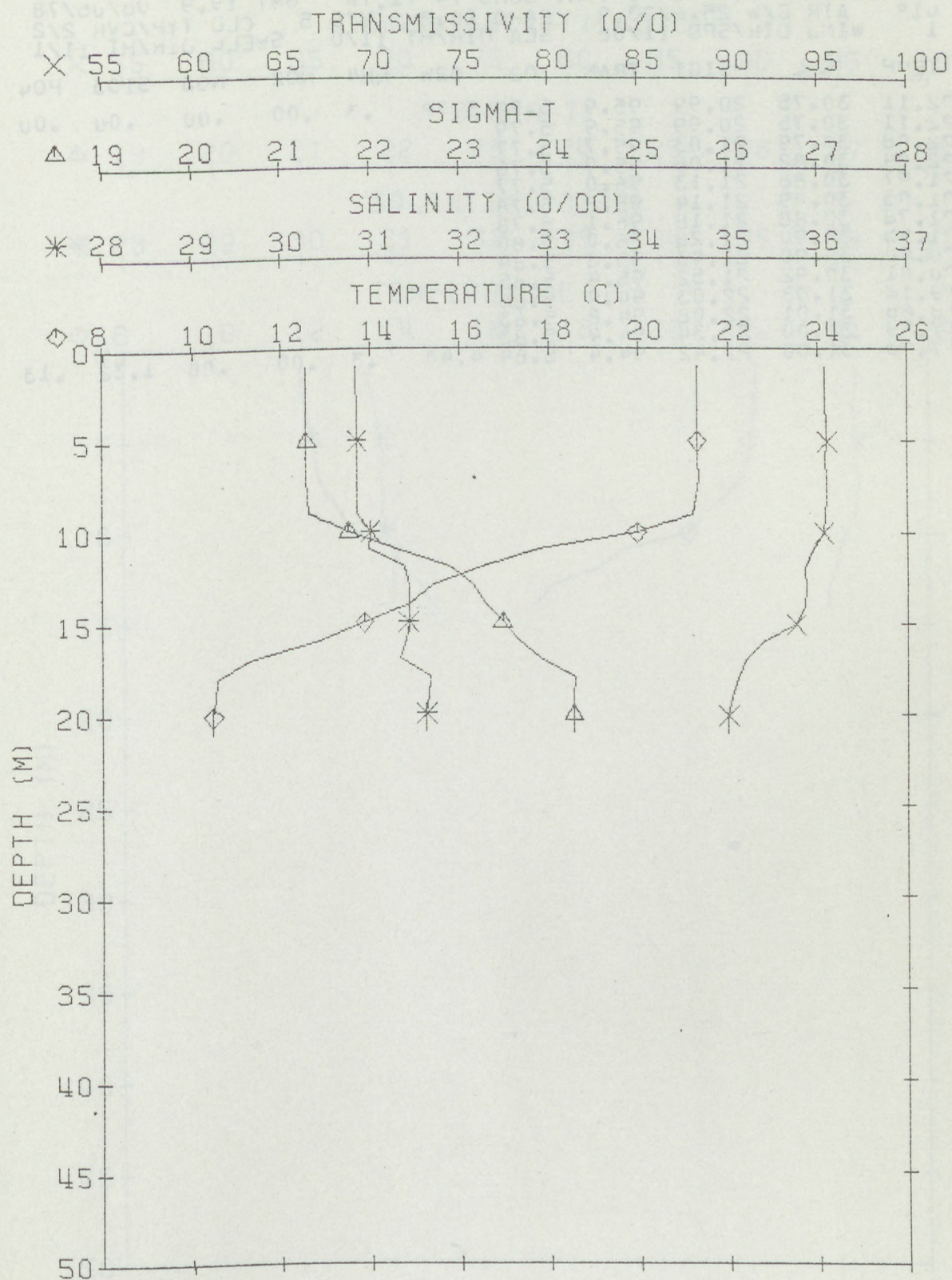
KELEZ CRUISE XWCC-20 STATION 126 08/05/78



XWCC-20 SIA.127 LAT 39 57.3N; LONG 73 53.1W GMT 05.1 08/01/78
 DEPTH 024 AIR D/W 22.2/21.7 BARO 17.0 VIS 6 CLD TYP/CVR 8/3
 WFTHR 1 WIND DIR/SPD 06/10 SEA DIR/HT 49/1 SWELL DIR/HT 08/2

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SIGS	P04
1	21.29	30.83	21.28	95.4	5.72	5.68	1.0	.00	.00	.00	.00
2	21.29	30.83	21.28	95.4	5.72						
3	21.29	30.84	21.28	95.4	5.71						
4	21.29	30.84	21.28	95.5	5.71						
5	21.29	30.84	21.28	95.5	5.71						
6	21.29	30.85	21.29	95.4	5.70						
7	21.29	30.85	21.28	95.5	5.70						
8	21.29	30.84	21.29	95.5	5.71						
9	21.29	30.84	21.31	95.4	5.73						
10	19.77	30.99	21.75	95.3	5.76	6.01	1.0	.00	.00	.00	.00
11	17.77	30.98	22.28	94.6	6.11						
12	16.50	31.38	22.88	94.2	6.34						
13	15.43	31.42	23.18	94.3	6.49						
14	14.89	31.43	23.27	94.2	6.62						
15	13.85	31.42	23.48	93.7	6.65						
16	12.85	31.39	23.66	91.9	6.66						
17	11.88	31.39	23.89	90.9	6.57						
18	10.90	31.33	24.27	90.5	6.32						
19	10.55	31.53	24.27	90.1	6.83						
20	10.47	30.62	24.26	89.9	6.42						
21	10.00	31.62	24.26	89.9	5.60	3.90	3.8	.00	.00	1.97	.25

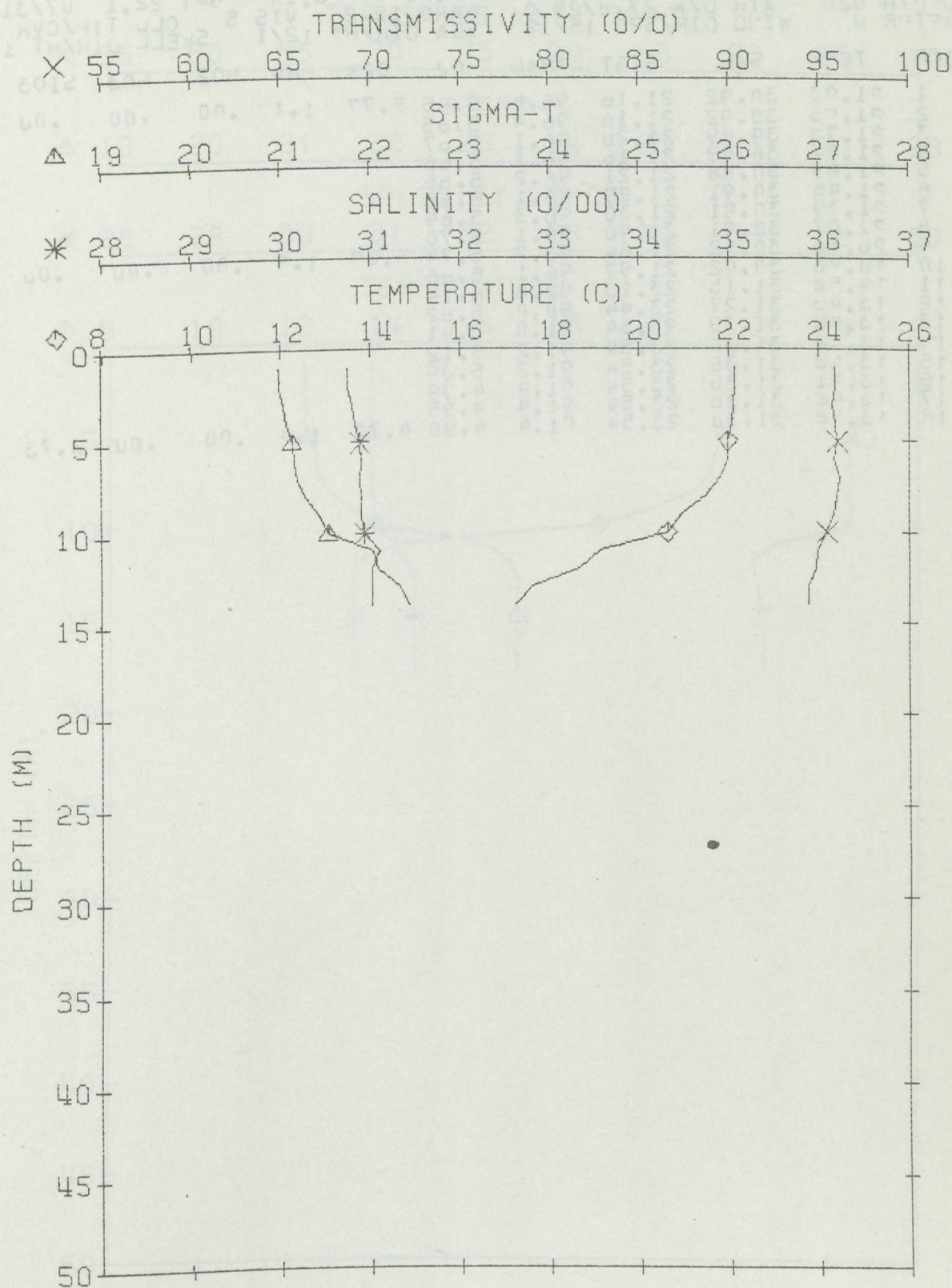
KELEZ CRUISE XWCC-20 STATION 127 08/01/78



XNCC-20 SIA.129 LAT 39 30.0N; LONG 74 11.7W GMT 19.9 08/05/78
 DEPTH 01° AIR C/W 25.6/23.9 BARO 26.8 VIS 5 CLD TYP/CVR 2/2
 WETHR 1 WIND DIR/SPD 11/08 SEA DIR/HT 11/0 SWELL DIR/HT 11/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	P04
1	22.11	30.75	20.99	95.9	5.79	5.78	.3	.00	.00	.00	.00
2	22.11	30.75	20.99	95.9	5.79						
3	22.08	30.79	21.03	95.7	5.77						
4	22.04	30.82	21.06	95.9	5.76						
5	21.97	30.88	21.13	95.0	5.77						
6	21.83	30.89	21.14	95.8	5.78						
7	21.78	30.88	21.18	96.1	5.78						
8	21.45	30.90	21.28	95.0	5.80						
9	20.90	30.90	21.43	95.8	5.84						
10	20.61	30.92	21.52	95.4	5.85						
11	19.12	31.08	22.03	94.9	5.86						
12	18.68	31.01	22.08	94.8	5.83						
13	17.59	31.00	22.34	94.4	5.83						
14	17.25	31.00	22.42	94.4	5.69	4.40	.3	.00	.00	1.32	.13

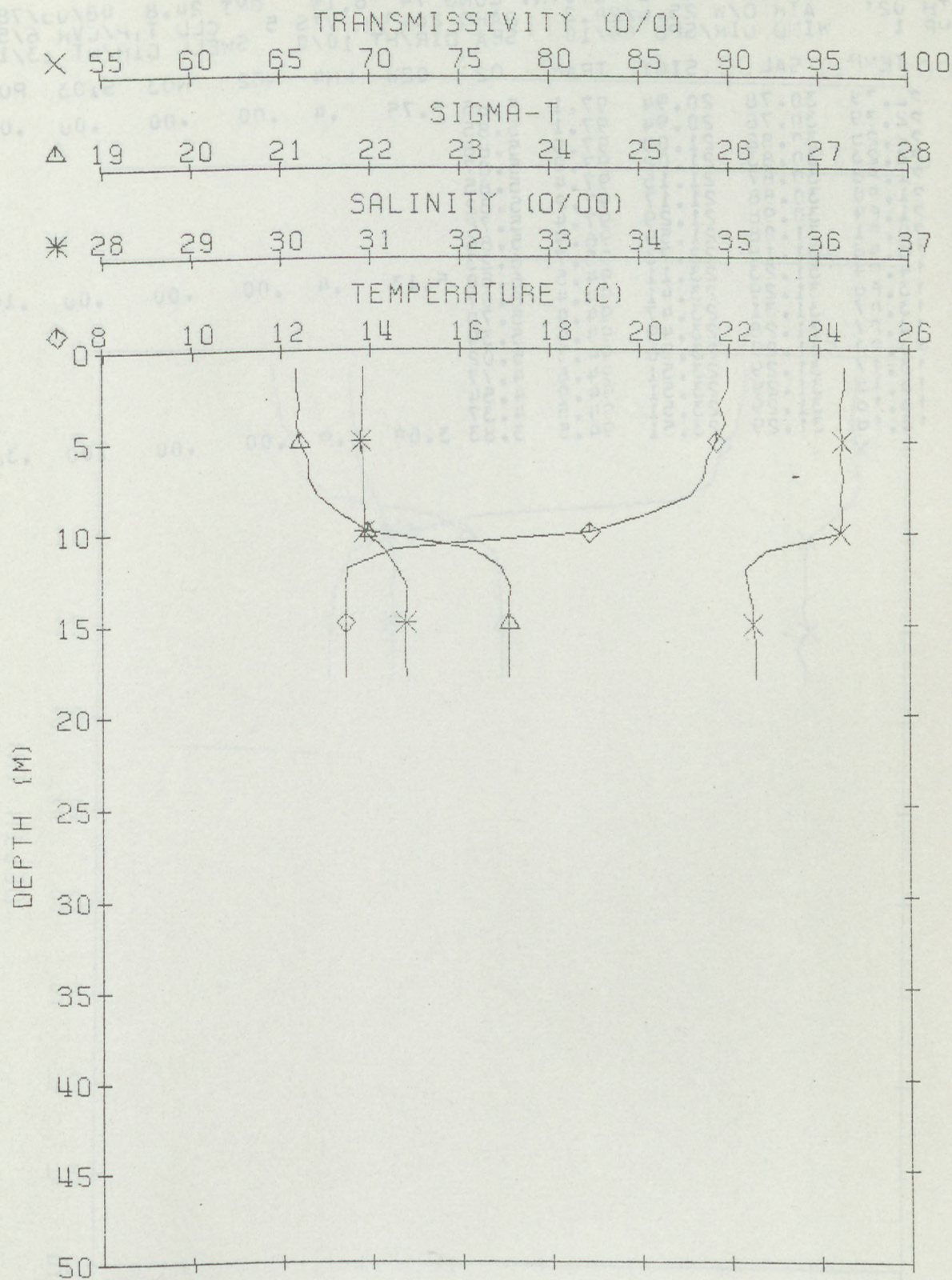
KELEZ CRUISE XWCC-20 STATION 129 08/05/78



X-CC-20 SIA.130 LAT 39 27.7N; LONG 74 6.1W GMT 22.1 07/31/78
 DEPTH 020 AIR D/W 27.8/25.0 BARO 15.2 VTS 5 CLD TYP/CVR /0
 WETR 0 WIND DIR/SPD 15/12 SEA DIR/HT 12/1 SWELL DIR/HT 12/2

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SI03	P04
1	21.03	30.92	21.16	96.4	5.65	5.77	1.1	.00	.00	.00	.00
2	21.03	30.92	21.16	96.4	5.65						
3	21.73	30.89	21.20	96.1	5.67						
4	21.87	30.89	21.16	96.1	5.66						
5	21.69	30.88	21.21	96.2	5.66						
6	21.45	30.91	21.29	96.1	5.68						
7	21.39	30.91	21.30	96.3	5.69						
8	21.07	30.91	21.40	96.1	5.70						
9	20.13	30.92	21.64	96.2	5.74	5.69	1.9	.00	.00	.00	.12
10	18.86	30.92	21.97	96.1	5.66						
11	14.52	31.15	23.13	92.0	5.14						
12	13.45	31.27	23.44	90.8	5.82						
13	13.42	31.39	23.54	91.0	5.41						
14	13.42	31.38	23.54	91.2	5.12						
15	13.42	31.36	23.54	91.2	5.09						
16	13.41	31.36	23.54	91.4	4.99						
17	13.42	31.36	23.54	91.4	4.95						
18	13.42	31.38	23.54	91.4	4.90	4.72	1.4	.00	.00	2.73	.42

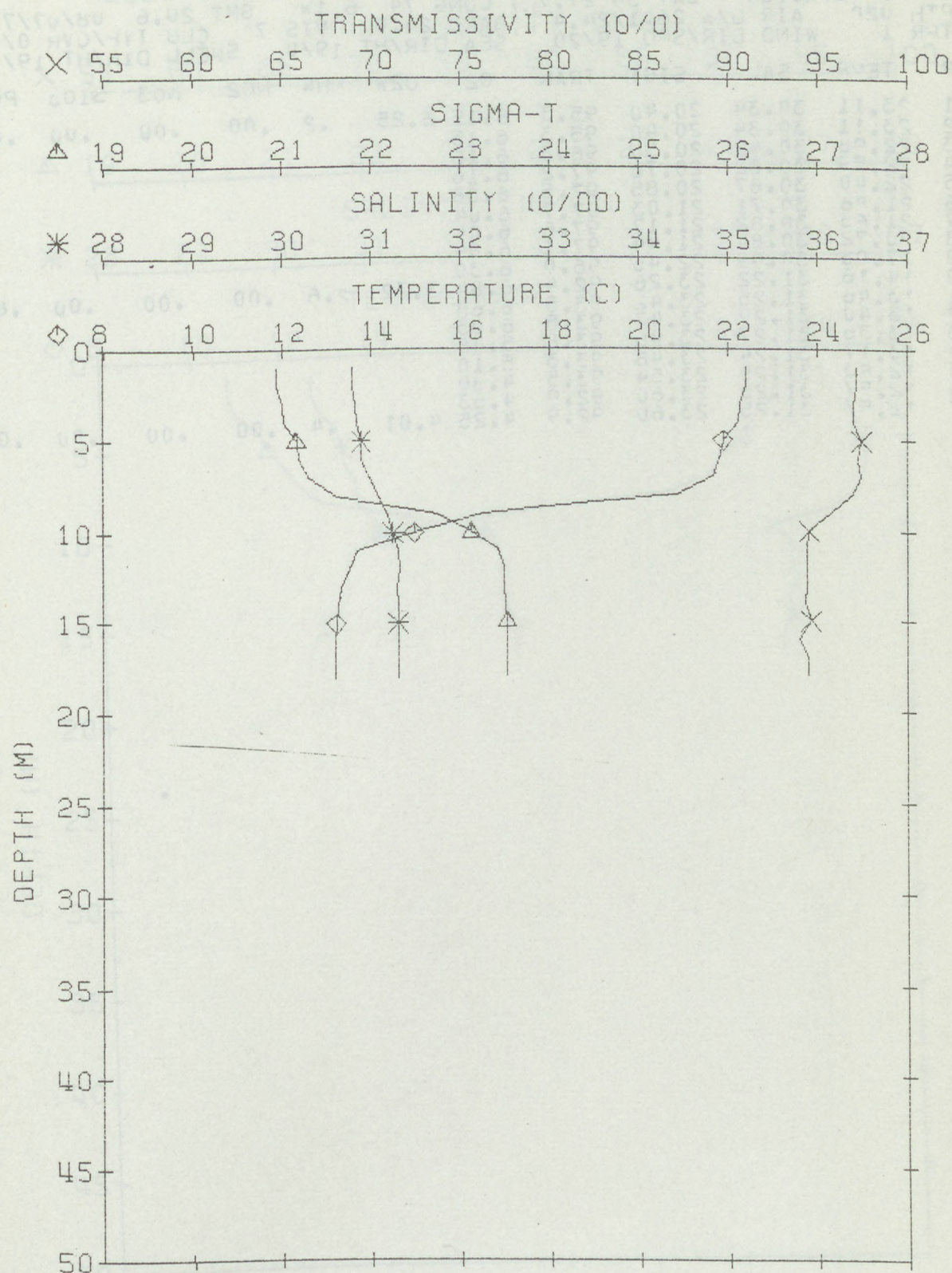
KELEZ CRUISE XWCC-20 STATION 130 07/31/78



XWCC-20 STA.130 LAT 39 27.7N; LONG 74 6.1W GMT 20.8 08/05/78
 DEPTH 021 AIR D/W 25.6/24.2 BARO 26.0 VTS 5 CLD T/P/CVR 6/5
 WETHR 1 WIND DIR/SPD 09/10 SEA DIR/HT 10/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	22.79	30.78	20.94	97.1	5.85	5.75	.4	.00	.00	.00	.00
2	22.39	30.78	20.94	97.1	5.85						
3	22.25	30.82	21.00	97.0	5.86						
4	22.23	30.83	21.02	97.0	5.87						
5	21.88	30.87	21.15	97.4	5.85						
6	21.80	30.88	21.17	97.2	5.82						
7	21.64	30.98	21.29	97.4	5.78						
8	20.91	31.08	21.59	96.9	5.86						
9	18.48	31.18	22.73	95.7	5.23						
10	14.24	31.23	23.11	94.5	5.50	5.13	.4	.00	.00	.00	.19
11	13.68	31.29	23.41	94.4	5.07						
12	13.47	31.31	23.47	94.4	5.70						
13	13.27	31.28	23.49	94.4	5.34						
14	13.23	31.29	23.50	94.3	5.02						
15	13.17	31.29	23.51	94.6	4.77						
16	13.15	31.29	23.51	94.0	4.54						
17	13.10	31.29	23.51	94.5	4.37						
18	13.10	31.29	23.51	94.5	3.83	3.68	.9	.00	.00	.00	.38

KELEZ CRUISE XWCC-20 STATION 130 08/05/78



XYCC-20 STA.130 LAT 39 27.7; LONG 74 6.1W GMT 20.6 08/07/78
 DEPTH 020 AIR D/W 26.1/24.4 BARO 24.0 VTS 7 CLU TYP/CVR 0/1
 WETHR 1 WIND DIR/SPD 19/20 SEA DIR/HT 19/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SIO3	P04
1	23.11	30.34	20.40	95.3	6.15	6.25	.2	.00	.00	.00	.00
2	23.11	30.34	20.40	95.3	6.15						
3	22.98	30.42	20.50	96.3	6.16						
4	22.59	30.62	20.76	97.2	6.16						
5	22.40	30.67	20.85	97.5	6.08						
6	21.86	30.71	21.03	97.7	6.04						
7	21.63	30.82	21.17	97.6	6.04						
8	20.72	30.84	21.44	97.1	6.04						
9	17.05	30.99	22.45	96.0	6.30						
10	14.16	31.22	23.26	92.4	6.84	3.32	2.6	.00	.00	.00	.64
11	13.40	31.25	23.42	93.5	6.68						
12	13.40	31.29	23.47	93.5	6.03						
13	13.30	31.27	23.46	93.3	5.48						
14	13.17	31.24	23.48	93.3	5.10						
15	12.83	31.25	23.54	92.5	4.30						
16	12.57	31.25	23.60	92.2	4.53						
17	12.57	31.25	23.60	92.9	4.25	4.01	.4	.00	.00	.00	.00

KELEZ CRUISE XWCC-20 STATION 130 08/07/78

TRANSMISSIVITY (0/0)

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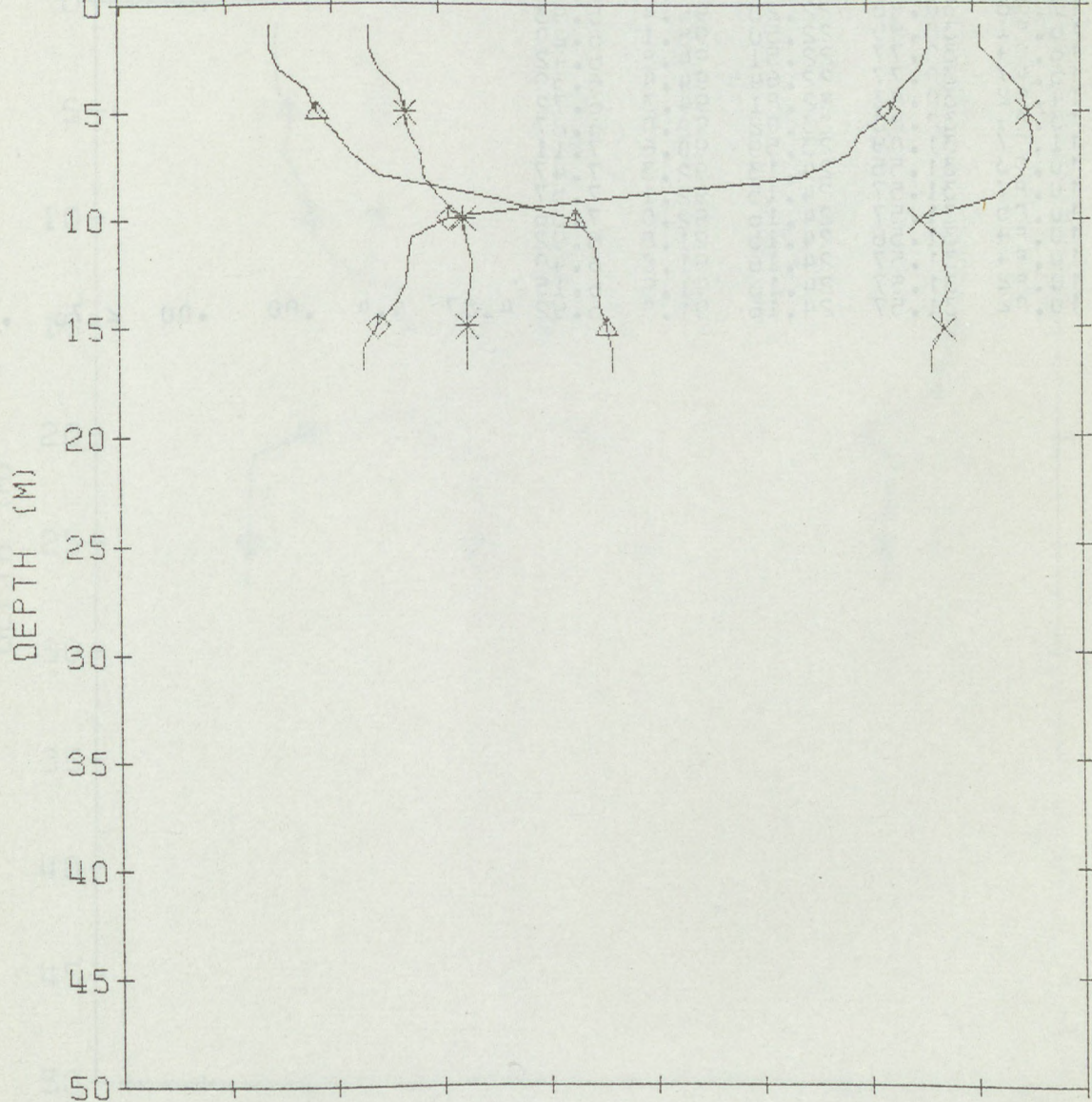
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SALINITY (0/00)

* 28 29 30 31 32 33 34 35 36 37

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XVCC-20 STA.131 LAT 30 23.2N; LONG 73 55.5W GMT 00.0 08/01/78
 DEPTH 020 AIR D/W 23.9/23.1 SARC 16.0 VTS 5 CLD TYP/CVR 3/1
 WETHR 1 WIND DIR/SPD 12/06 SEA DIR/HT 12/0 SWELL DIR/HT 08/2

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	22.87	30.60	20.67	95.6	5.52	5.61	1.0	.00	.00	.00	.00
2	22.87	30.61	20.67	95.6	5.52						
3	22.87	30.62	20.68	95.7	5.53						
4	22.88	30.63	20.69	95.6	5.51						
5	22.88	30.64	20.80	95.7	5.52						
6	22.49	30.63	20.80	95.7	5.55						
7	22.89	30.61	20.73	95.7	5.55						
8	22.86	30.63	20.86	95.6	5.57						
9	22.71	30.66	20.95	95.6	5.60						
10	21.76	30.64	21.01	95.6	5.62	6.07	1.2	.00	.00	.00	.00
11	21.40	30.55	21.03	95.3	5.67						
12	20.76	30.57	21.24	95.6	5.70						
13	19.67	30.63	21.55	95.4	5.78						
14	17.76	30.88	22.20	95.4	5.93						
15	16.51	30.89	22.50	95.1	6.20						
16	16.04	30.77	22.51	94.8	6.42						
17	15.67	30.77	22.64	94.4	6.50						
18	14.92	30.83	22.81	94.3	6.72						
19	13.89	30.83	23.02	92.0	6.87						
20	11.77	31.09	23.59	90.6	7.11						
21	10.83	31.55	24.13	92.3	7.47						
22	10.87	31.57	24.15	92.1	7.57						
23	10.85	31.57	24.16	92.0	7.36						
24	10.84	31.56	24.15	91.8	6.92						
25	10.84	31.57	24.16	91.8	6.49						
26	10.82	31.57	24.16	91.9	6.15						
27	10.82	31.57	24.16	91.8	5.92	4.87	4.4	.00	.00	2.75	.10

KELEZ CRUISE XWCC-20 STATION 131 08/01/78

TRANSMISSIVITY (0/0)

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SIGMA-T

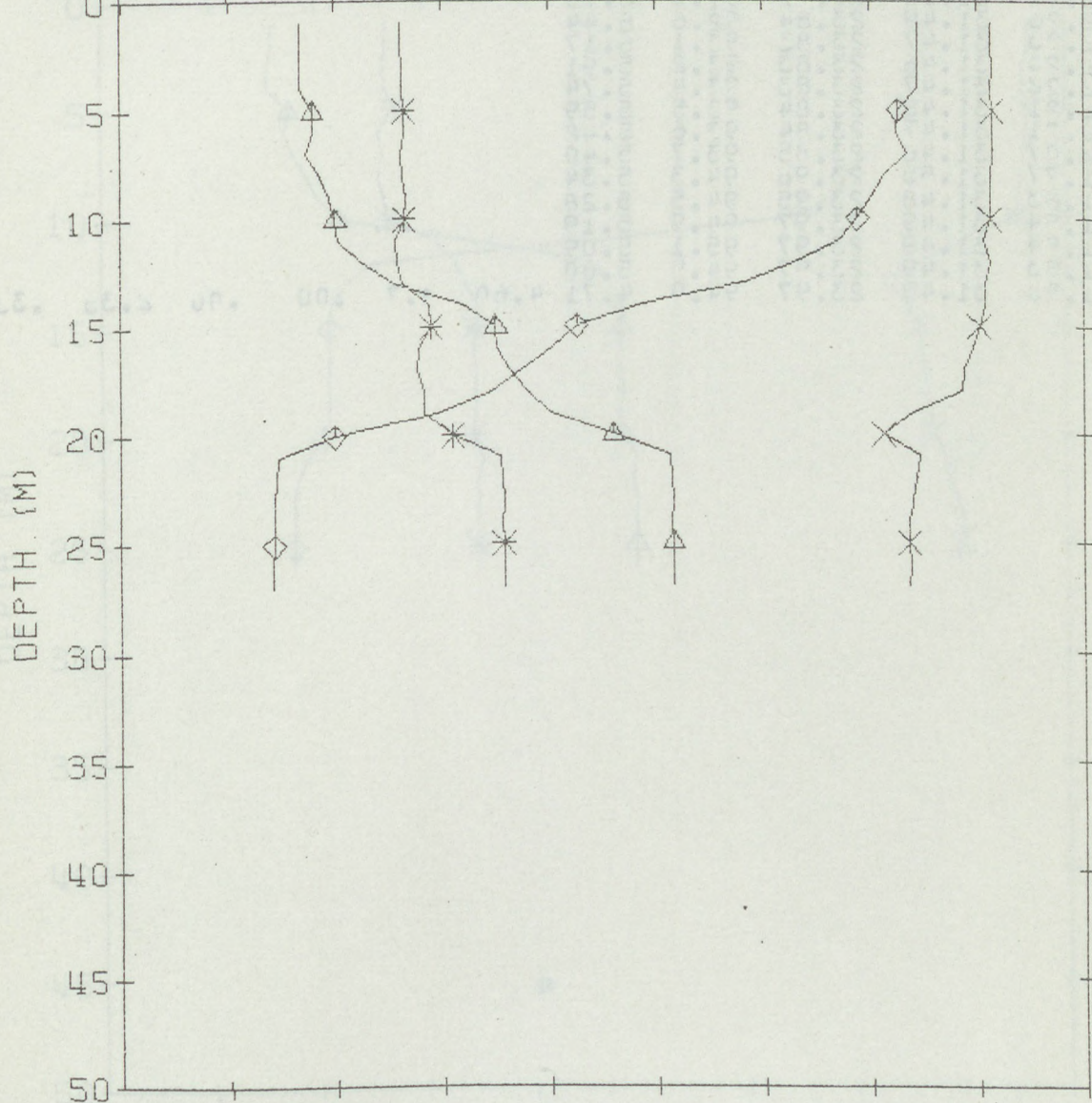
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SALINITY (0/00)

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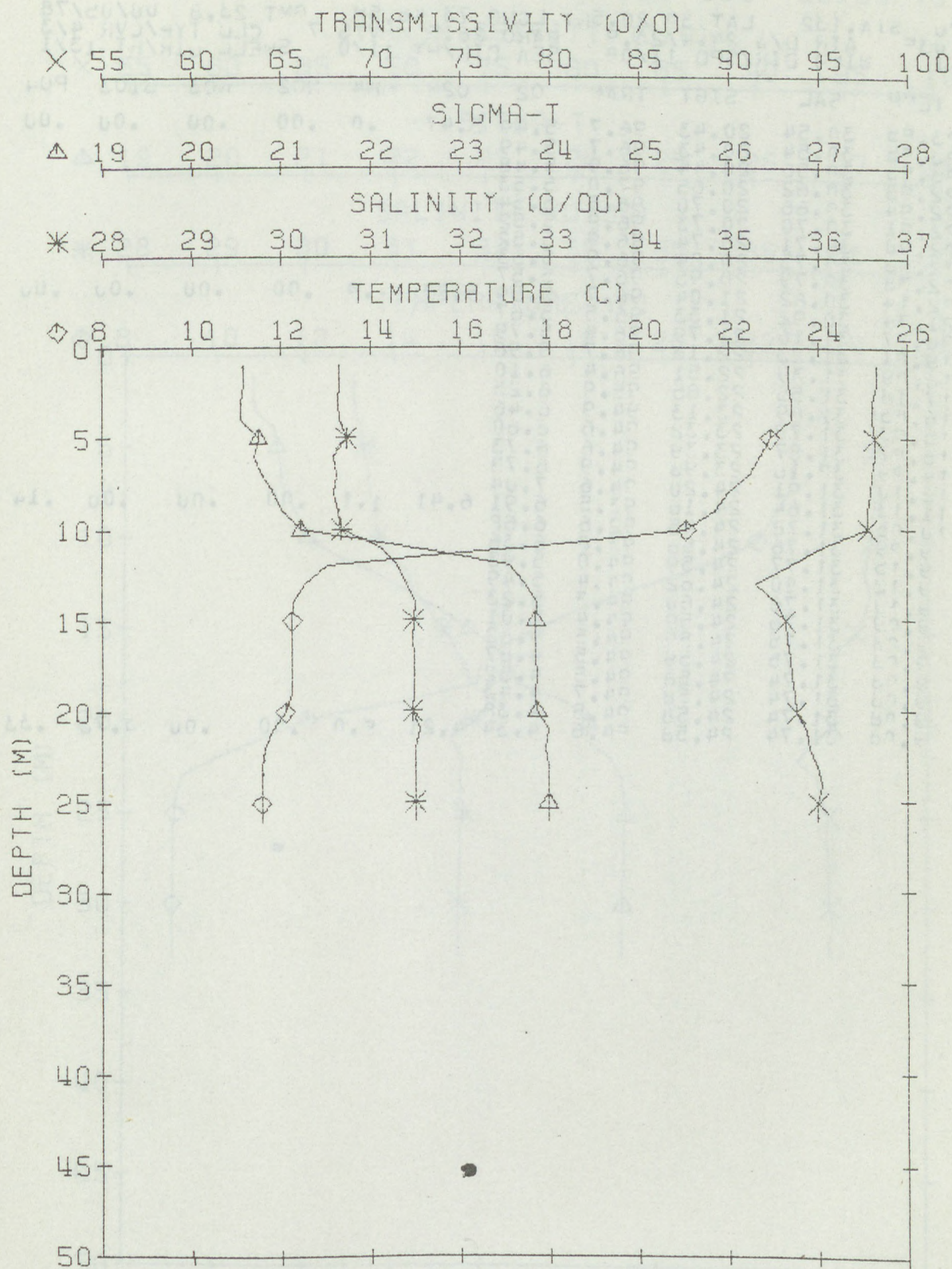
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X:CC-20 SIA.131 LAT 39 23.3N; LONG 73 55.0W GMT 22.5 08/05/78
 DEPTH 02P AIR D/W 25.0/23.9 BARO 26.2 VIS 0 CLD TYP/CVR X/9
 WETHR 4 WIND DIR/SPD 11/10 SEA DIR/HT 11/0 SWELL DIR/HT 11/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	23.31	30.64	20.57	98.2	5.48	5.50	.4	.00	.00	.00	.00
2	23.31	30.64	20.57	98.2	5.47						
3	23.31	30.63	20.54	98.0	5.47						
4	23.31	30.63	20.54	98.0	5.46						
5	22.91	30.72	20.75	98.1	5.52						
6	22.70	30.57	20.69	98.1	5.50						
7	22.45	30.60	20.79	98.0	5.55						
8	21.84	30.58	20.91	97.7	5.60						
9	21.86	30.62	21.02	97.7	5.66						
10	21.73	30.66	21.22	97.7	5.72	6.09	1.9	.00	.00	.00	.00
11	17.59	31.08	22.40	95.2	6.13						
12	13.00	31.28	23.54	91.4	6.77						
13	12.11	31.38	23.71	91.5	6.70						
14	12.06	31.49	23.84	92.6	6.44						
15	12.00	31.47	23.83	93.1	6.17						
16	12.00	31.46	23.83	93.2	5.91						
17	12.02	31.47	23.83	93.4	5.74						
18	12.01	31.46	23.84	93.5	5.59						
19	12.01	31.47	23.84	93.6	5.48						
20	12.07	31.46	23.85	93.7	5.40						
21	11.77	31.55	23.96	94.3	5.34						
22	11.63	31.48	23.95	94.5	5.28						
23	11.54	31.49	23.97	94.9	5.19						
24	11.54	31.49	23.97	95.1	5.09						
25	11.53	31.49	23.97	95.2	5.00						
26	11.50	31.49	23.97	94.9	4.71	4.60	3.7	.00	.00	2.35	.35

KELEZ CRUISE XWCC-20 STATION 131 08/05/78



P	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	P04
5	30.54	20.43	96.7	5.49	5.47	.0	.00	.00	.00	.00
5	30.54	20.43	96.7	5.49						
5	30.56	20.44	96.9	5.48						
5	30.62	20.65	97.0	5.53						
4	30.66	20.70	96.8	5.54						
1	30.70	20.73	96.9	5.52						
0	30.71	20.74	96.9	5.52						
8	30.75	20.84	96.9	5.53						
8	30.79	20.95	96.7	5.57						
4	30.82	21.04	96.7	5.59	5.83	.0	.00	.00	.00	.00
4	30.92	21.33	96.5	5.67						
7	31.16	21.79	96.7	5.79						
0	31.23	22.16	96.7	5.96						
9	31.39	22.51	95.4	6.10						
1	31.55	22.85	95.9	6.25						
3	31.69	23.13	94.9	6.46						
3	31.79	23.32	94.6	6.60						
7	31.87	23.36	94.6	6.73						
3	32.16	23.96	94.9	7.78						
1	31.91	24.20	94.6	7.84						
1	31.64	24.16	93.3	6.91	6.41	1.1	.00	.00	.00	.1
6	31.78	24.45	92.6	6.68						
3	31.76	24.55	92.8	6.63						
1	31.77	24.55	94.0	6.93						
1	31.80	24.62	94.4	7.49						
0	31.76	24.66	94.4	7.23						
3	31.75	24.66	94.4	7.01						
3	31.75	24.66	94.4	6.87						
3	31.74	24.66	94.4	6.52						
3	31.74	24.66	94.4	6.46						
8	31.74	24.66	94.4	6.38						
0	31.74	24.66	94.4	6.64	4.21	5.0	.00	.00	5.76	.3

KELEZ CRUISE XWCC-20 STATION 132 08/05/78

TRANSMISSIVITY (0/0)

× 55 60 65 70 75 80 85 90 95 100

SIGMA-T

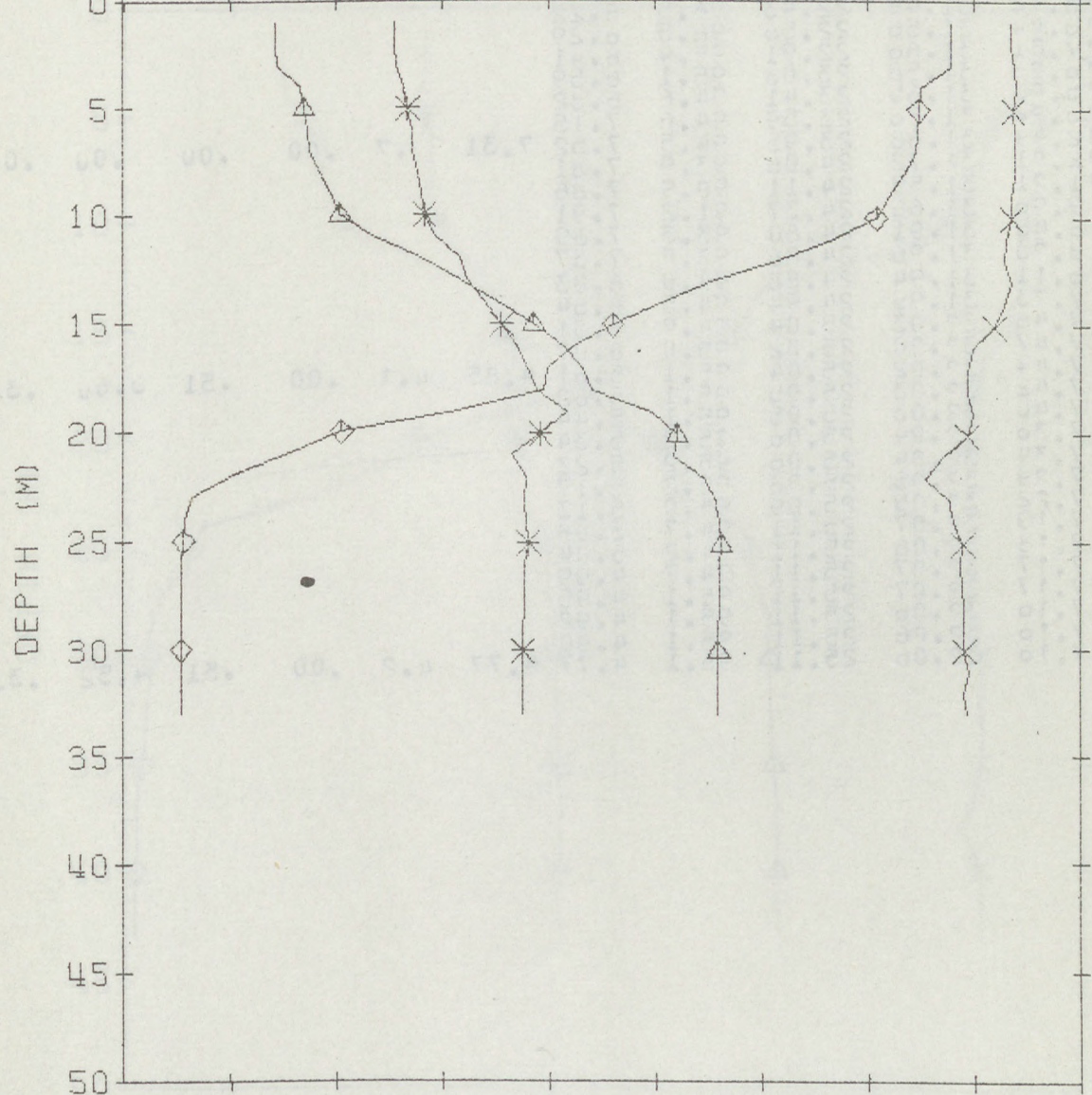
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SALINITY (0/00)

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TEMPERATURE (C)

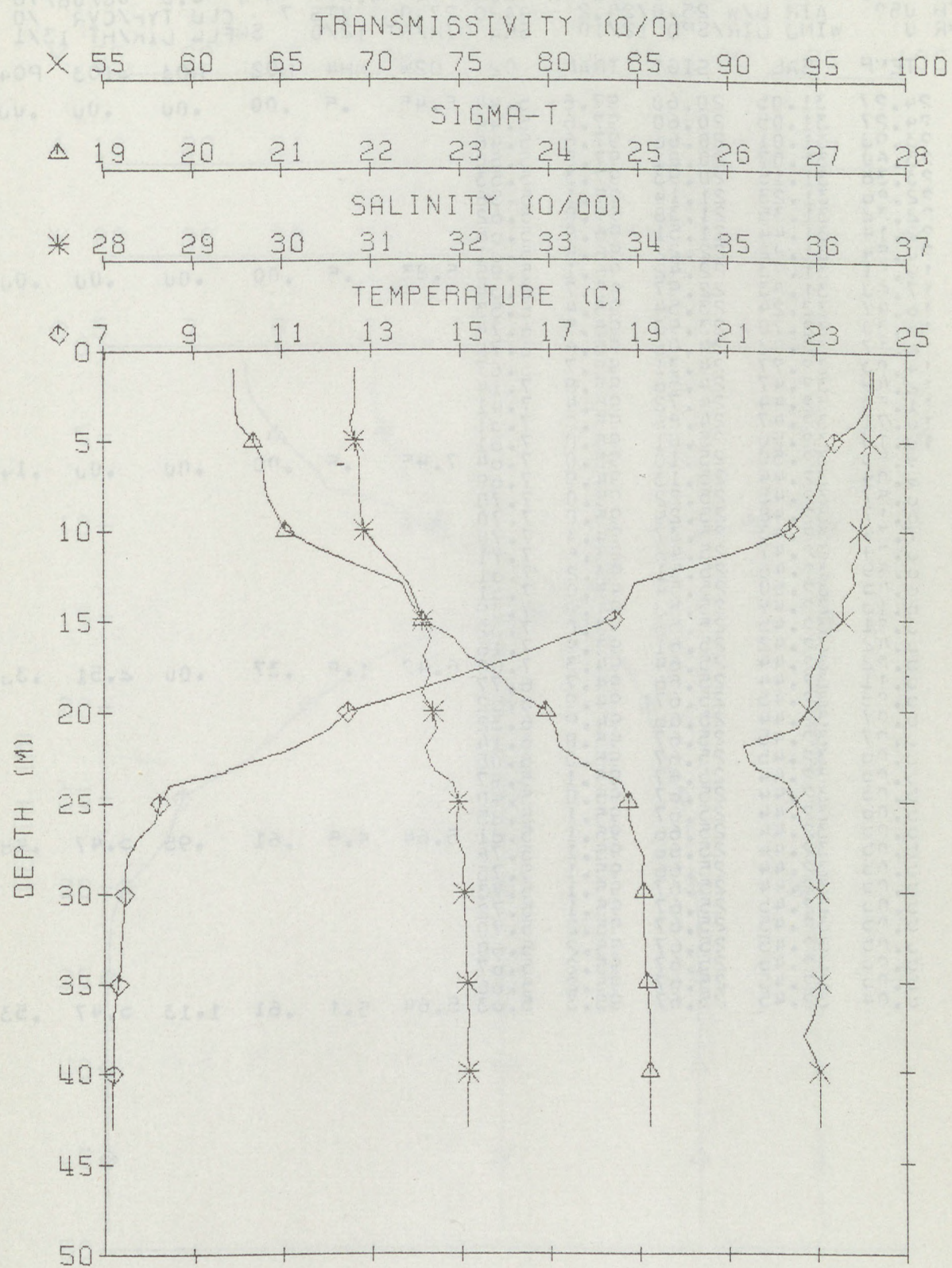
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X-CC-20 SIA.133 LAT 30 16.9N; LONG 73 26.3W GMT 01.3 08/06/78
 DEPTH 046 AIR L/W 24.4/23.9 BAKO 26.5 VIS 7 CLD TYP/CVR 4/2
 WTHR 1 WIND DIR/SPD 11/09 SEA DIR/HT 11/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	24.16	30.81	20.45	98.1	5.39	5.46	.7	.00	.00	.00	.00
2	24.18	30.81	20.45	98.1	5.39						
3	24.11	30.81	20.47	98.0	5.40						
4	23.89	30.76	20.49	98.0	5.42						
5	23.38	30.80	20.68	98.0	5.45						
6	23.15	30.86	20.78	97.9	5.50						
7	23.07	30.85	20.80	97.8	5.51						
8	22.85	30.85	20.84	97.7	5.51						
9	22.63	30.88	20.83	97.6	5.53						
10	22.36	30.91	21.04	97.4	5.55	7.52	.0	.00	.00	.00	.00
11	21.52	31.06	21.39	97.4	5.65						
12	20.29	31.12	21.55	97.0	5.76						
13	18.87	31.41	22.34	97.1	6.04						
14	18.72	31.49	22.43	96.5	6.22						
15	18.44	31.56	22.56	96.5	6.29						
16	17.31	31.66	23.01	96.4	6.41						
17	16.33	31.58	23.03	96.1	6.59						
18	15.00	31.55	23.41	94.6	6.83						
19	13.92	31.56	23.59	94.5	7.15						
20	12.44	31.68	23.95	94.5	7.52	7.31	.7	.00	.00	.00	.00
21	12.01	31.72	24.06	93.6	7.81						
22	11.21	31.59	24.11	90.9	7.86						
23	9.86	31.66	24.37	91.2	7.91						
24	8.48	31.91	24.80	93.3	7.69						
25	8.23	31.96	24.86	92.8	7.57						
26	8.11	31.94	24.88	94.0	6.93						
27	7.73	31.95	24.94	94.5	6.54						
28	7.48	32.03	25.04	94.9	6.31						
29	7.47	32.00	25.02	95.0	6.07						
30	7.44	32.02	25.04	95.1	5.81	4.85	4.1	.00	.51	3.60	.33
31	7.42	32.03	25.05	95.1	5.62						
32	7.40	32.03	25.05	95.1	5.44						
33	7.36	32.04	25.06	95.2	5.34						
34	7.34	32.04	25.06	95.2	5.23						
35	7.29	32.05	25.06	95.2	5.17						
36	7.22	32.05	25.09	95.2	5.13						
37	7.19	32.07	25.11	94.7	5.08						
38	7.13	32.06	25.11	94.2	5.04						
39	7.17	32.07	25.11	94.7	4.99						
40	7.17	32.07	25.11	95.1	4.95						
41	7.16	32.06	25.11	95.1	4.92						
42	7.16	32.06	25.11	95.1	4.90						
43	7.16	32.06	25.11	95.1	4.77	4.77	4.2	.00	.51	4.52	.33

KELEZ CRUISE XWCC-20 STATION 133 08/06/78



XHCC-00 SIA.134 LAT 39 11.1; LONG 73 21.9W GMT 03.3 08/06/78
 DEPTH 050 AIR D/W 25.0/24.2 BARO 27.0 VTS 7 CLD TYP/CVR /0
 WATHR U WIND DIR/SPD 12/10 SEA DIR/HT 12/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	SIG3	P04
1	24.27	31.05	20.60	97.6	5.44	5.45	.5	.00	.00	.00	.00
2	24.27	31.05	20.60	97.6	5.44						
3	23.93	31.01	20.66	97.6	5.46						
4	23.60	31.07	20.81	97.5	5.50						
5	23.38	31.15	20.93	97.3	5.53						
6	22.96	31.23	21.14	97.1	5.56						
7	22.72	31.35	21.38	97.0	5.62						
8	22.14	31.44	21.51	96.8	5.66						
9	20.54	31.82	22.22	96.4	5.81						
10	19.51	31.73	22.42	96.1	5.95	5.83	.5	.00	.00	.00	.00
11	17.60	31.83	22.97	95.7	6.34						
12	16.47	32.24	23.54	95.4	6.53						
13	16.20	32.70	23.93	95.5	6.74						
14	16.17	32.83	24.06	95.6	6.78						
15	14.83	32.77	24.31	95.7	6.87						
16	12.89	32.47	24.56	95.8	7.14						
17	11.50	32.44	24.72	95.4	7.41						
18	10.71	32.47	24.88	95.2	7.51						
19	10.10	32.50	25.01	95.0	7.61						
20	9.53	32.50	25.10	95.0	7.64	7.45	.5	.00	.00	.00	.14
21	9.34	32.44	25.13	94.9	7.69						
22	8.57	32.45	25.22	95.0	7.70						
23	8.17	32.48	25.29	95.0	7.70						
24	7.74	32.43	25.37	94.4	7.70						
25	6.74	32.47	25.48	93.5	7.71						
26	6.39	32.48	25.51	93.2	7.61						
27	6.10	32.50	25.54	93.0	7.51						
28	6.10	32.49	25.53	93.3	7.39						
29	6.11	32.45	25.58	93.7	7.32						
30	6.22	32.42	25.61	93.9	7.16						
31	6.44	32.44	25.64	94.3	7.00	6.42	1.2	.37	.00	2.51	.30
32	6.11	32.44	25.66	94.7	6.77						
33	6.33	32.45	25.67	94.9	6.52						
34	6.77	32.44	25.68	94.9	6.32						
35	6.77	32.45	25.67	95.0	6.14						
36	6.66	32.45	25.67	95.0	6.05						
37	6.66	32.44	25.67	95.1	5.97						
38	6.66	32.44	25.67	95.0	5.90						
39	6.66	32.44	25.67	95.1	5.85						
40	6.66	32.44	25.66	95.1	5.81	5.64	5.5	.61	.95	5.47	.48
41	6.66	32.44	25.66	95.1	5.78						
42	6.66	32.44	25.66	95.1	5.75						
43	6.66	32.44	25.66	95.1	5.73						
44	6.66	32.45	25.67	95.1	5.72						
45	6.66	32.45	25.67	95.2	5.70						
46	6.66	32.45	25.67	95.2	5.69						
47	6.66	32.45	25.67	95.2	5.67						
48	6.66	32.45	25.67	95.2	5.66						
49	6.66	32.45	25.67	95.3	5.63	5.64	5.1	.61	1.13	5.47	.53

KELEZ CRUISE XWCC-20 STATION 134 08/06/78

TRANSMISSIVITY (0/0)

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SIGMA-T

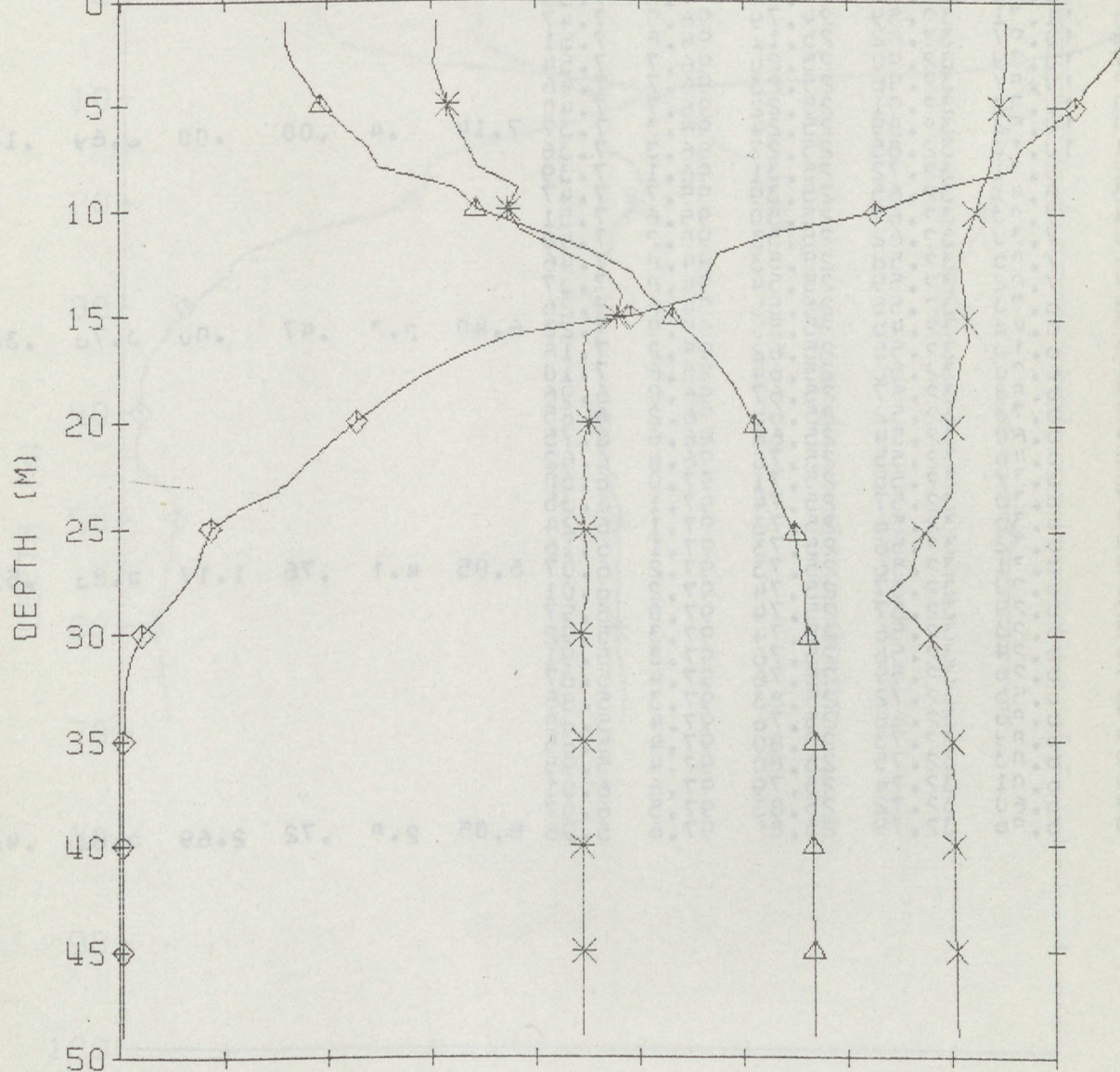
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SALINITY (0/00)

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TEMPERATURE (C)

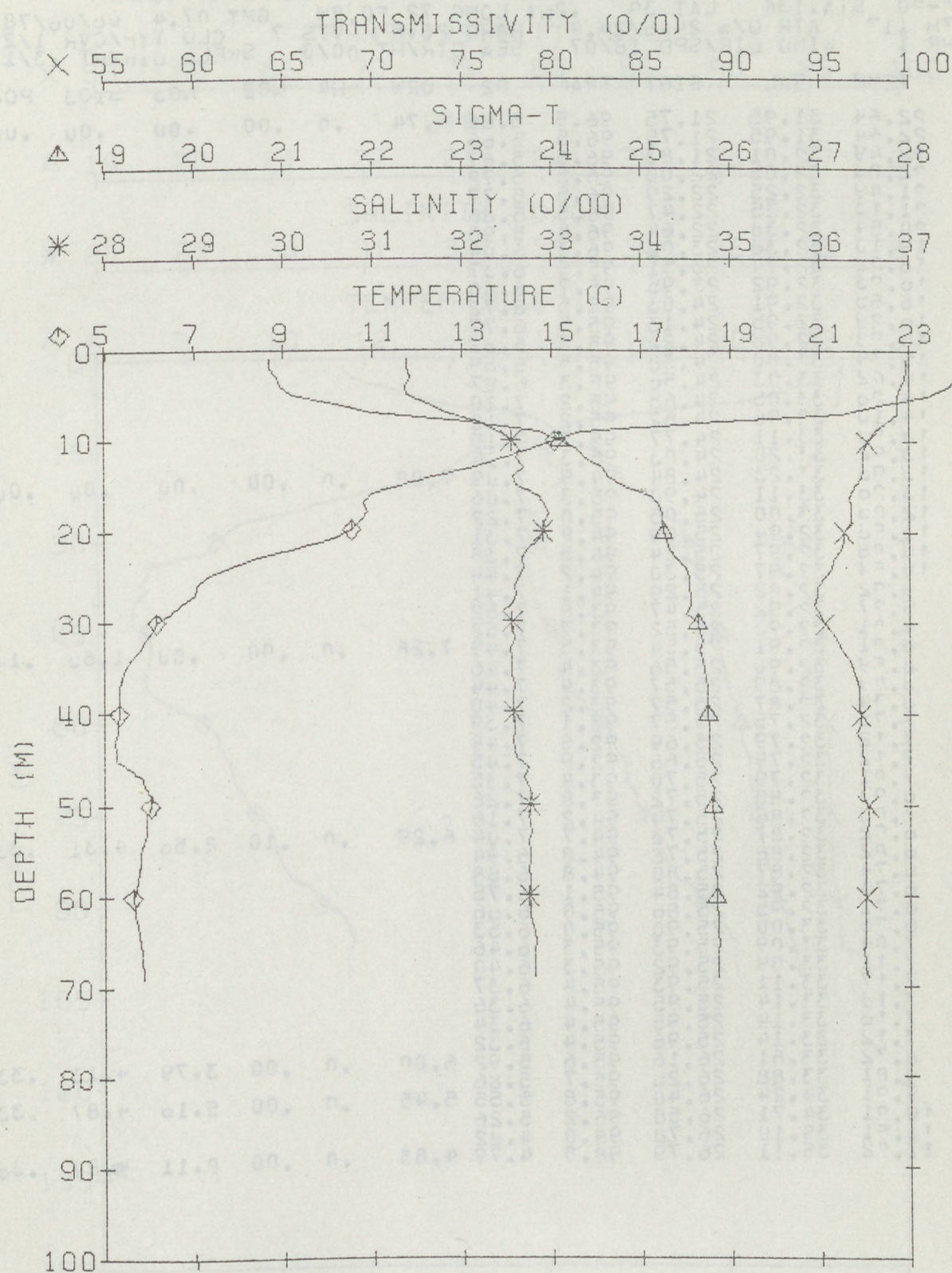
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X-CC-20 SIA.135 LAT 39 5.0N; LONG 73 6.5W GMT 05.3 08/06/78
 DEPTH 070 AIR D/W 24.8/24.3 BARO 27.0 VIS 7 CLD TYP/CVR /0
 WETTR U WIND DIR/SPD 18/08 SEA DIR/HT 00/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	24.26	31.37	20.85	99.8	5.44	5.55	.4	.00	.00	.00	.00
2	24.26	31.37	20.85	99.8	5.44						
3	24.07	31.40	20.93	99.7	5.45						
4	23.95	31.36	20.96	99.5	5.44						
5	23.38	31.37	21.10	99.3	5.51						
6	22.42	31.60	21.58	99.3	5.60						
7	21.46	31.83	21.99	99.3	5.70						
8	18.29	32.17	23.06	98.6	5.90						
9	15.64	32.39	23.84	98.0	6.09						
10	15.23	32.54	24.09	97.6	6.96	7.20	.0	.00	.00	.00	.09
11	14.47	32.63	24.28	97.4	7.11						
12	13.27	32.59	24.37	97.4	7.18						
13	13.28	32.66	24.56	97.4	7.28						
14	12.25	32.57	24.64	97.3	7.35						
15	11.71	32.59	24.79	96.9	7.47						
16	11.07	32.82	25.11	96.6	7.51						
17	10.79	32.90	25.20	96.7	7.54						
18	10.27	32.96	25.23	96.7	7.46						
19	10.23	32.91	25.22	96.7	7.40						
20	10.22	32.89	25.24	96.3	7.37	7.14	.4	.00	.00	2.69	.19
21	9.31	32.85	25.27	96.3	7.36						
22	8.31	32.72	25.31	96.1	7.39						
23	7.41	32.65	25.39	96.1	7.47						
24	7.33	32.67	25.50	95.6	7.51						
25	7.33	32.62	25.53	95.3	7.48						
26	7.33	32.58	25.53	94.2	7.46						
27	7.32	32.59	25.54	94.2	7.37						
28	6.76	32.55	25.55	94.6	7.26						
29	6.58	32.45	25.50	95.0	7.23	6.40	2.3	.47	.00	3.70	.38
30	6.16	32.55	25.62	95.2	7.18						
31	6.00	32.55	25.64	95.2	7.10						
32	5.88	32.57	25.67	95.0	6.96						
33	5.77	32.52	25.65	96.0	6.85						
34	5.70	32.54	25.68	96.6	6.75						
35	5.60	32.55	25.70	96.8	6.62						
36	5.47	32.55	25.71	97.0	6.50						
37	5.33	32.55	25.74	97.1	6.35						
38	5.22	32.56	25.73	97.1	6.24						
39	5.11	32.56	25.73	97.2	6.16						
40	5.03	32.57	25.74	97.2	6.07	6.05	4.1	.76	1.17	5.85	.53
41	4.99	32.57	25.74	97.0	6.01						
42	4.93	32.57	25.74	97.3	5.97						
43	4.86	32.56	25.74	97.3	5.92						
44	4.80	32.56	25.76	97.3	5.91						
45	4.76	32.56	25.76	97.4	5.87						
46	4.72	32.57	25.83	97.3	5.85						
47	4.66	32.57	25.76	97.4	5.80						
48	4.63	32.57	25.80	97.4	5.85						
49	4.60	32.75	25.80	97.4	5.95						
50	4.61	32.74	25.79	97.6	6.01						
51	4.60	32.72	25.86	97.5	6.07						
52	4.60	32.79	25.87	97.6	5.96	6.05	2.8	.72	2.69	5.83	.48

KELEZ CRUISE XWCC-20 STATION 135 08/06/78



X 00-20 SIA.136 LAT 39.2N; LONG 72 50.8W GMT 07.4 08/06/78
 DEPTH 117 AIR D/W 24.6/24.4 BARO 26.5 VTS 7 CLD TYP/CVR 1/2
 WETHR 1 WIND DIR/SPD 18/07 SEA DIR/HT 00/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	MH4	N02	N03	S103	P04
1	22.64	31.95	21.75	96.5	5.66	5.74	.0	.00	.00	.00	.00
2	22.64	31.95	21.75	96.5	5.66						
3	22.64	31.95	21.75	96.5	5.66						
4	22.64	31.95	21.75	96.5	5.66						
5	22.64	31.95	21.75	96.5	5.66						
6	22.64	31.95	21.75	96.5	5.66						
7	22.64	31.95	21.75	96.5	5.66						
8	22.64	31.95	21.75	96.5	5.66						
9	22.64	31.95	21.75	96.5	5.66						
10	22.64	31.95	21.75	96.5	5.66						
11	22.64	31.95	21.75	96.5	5.66						
12	22.64	31.95	21.75	96.5	5.66						
13	22.64	31.95	21.75	96.5	5.66						
14	22.64	31.95	21.75	96.5	5.66						
15	22.64	31.95	21.75	96.5	5.66						
16	22.64	31.95	21.75	96.5	5.66						
17	22.64	31.95	21.75	96.5	5.66						
18	22.64	31.95	21.75	96.5	5.66						
19	22.64	31.95	21.75	96.5	5.66						
20	22.64	31.95	21.75	96.5	5.66	7.00	.0	.00	.00	.00	.00
21	22.64	31.95	21.75	96.5	5.66						
22	22.64	31.95	21.75	96.5	5.66						
23	22.64	31.95	21.75	96.5	5.66						
24	22.64	31.95	21.75	96.5	5.66						
25	22.64	31.95	21.75	96.5	5.66						
26	22.64	31.95	21.75	96.5	5.66						
27	22.64	31.95	21.75	96.5	5.66						
28	22.64	31.95	21.75	96.5	5.66						
29	22.64	31.95	21.75	96.5	5.66	7.26	.0	.00	.00	1.60	.14
30	22.64	31.95	21.75	96.5	5.66						
31	22.64	31.95	21.75	96.5	5.66						
32	22.64	31.95	21.75	96.5	5.66						
33	22.64	31.95	21.75	96.5	5.66						
34	22.64	31.95	21.75	96.5	5.66						
35	22.64	31.95	21.75	96.5	5.66						
36	22.64	31.95	21.75	96.5	5.66						
37	22.64	31.95	21.75	96.5	5.66						
38	22.64	31.95	21.75	96.5	5.66						
39	22.64	31.95	21.75	96.5	5.66	6.29	.0	.10	2.50	4.31	.33
40	22.64	31.95	21.75	96.5	5.66						
41	22.64	31.95	21.75	96.5	5.66						
42	22.64	31.95	21.75	96.5	5.66						
43	22.64	31.95	21.75	96.5	5.66						
44	22.64	31.95	21.75	96.5	5.66						
45	22.64	31.95	21.75	96.5	5.66						
46	22.64	31.95	21.75	96.5	5.66						
47	22.64	31.95	21.75	96.5	5.66						
48	22.64	31.95	21.75	96.5	5.66						
49	22.64	31.95	21.75	96.5	5.66						
50	22.64	31.95	21.75	96.5	5.66	6.00	.0	.00	3.79	4.13	.33
51	22.64	31.95	21.75	96.5	5.66						
52	22.64	31.95	21.75	96.5	5.66	5.45	.0	.00	5.10	4.87	.33
53	22.64	31.95	21.75	96.5	5.66						
54	22.64	31.95	21.75	96.5	5.66						
55	22.64	31.95	21.75	96.5	5.66						
56	22.64	31.95	21.75	96.5	5.66						
57	22.64	31.95	21.75	96.5	5.66						
58	22.64	31.95	21.75	96.5	5.66						
59	22.64	31.95	21.75	96.5	5.66						
60	22.64	31.95	21.75	96.5	5.66	4.83	.0	.00	8.11	8.87	.30

KELEZ CRUISE XWCC-20 STATION 136 08/06/78

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

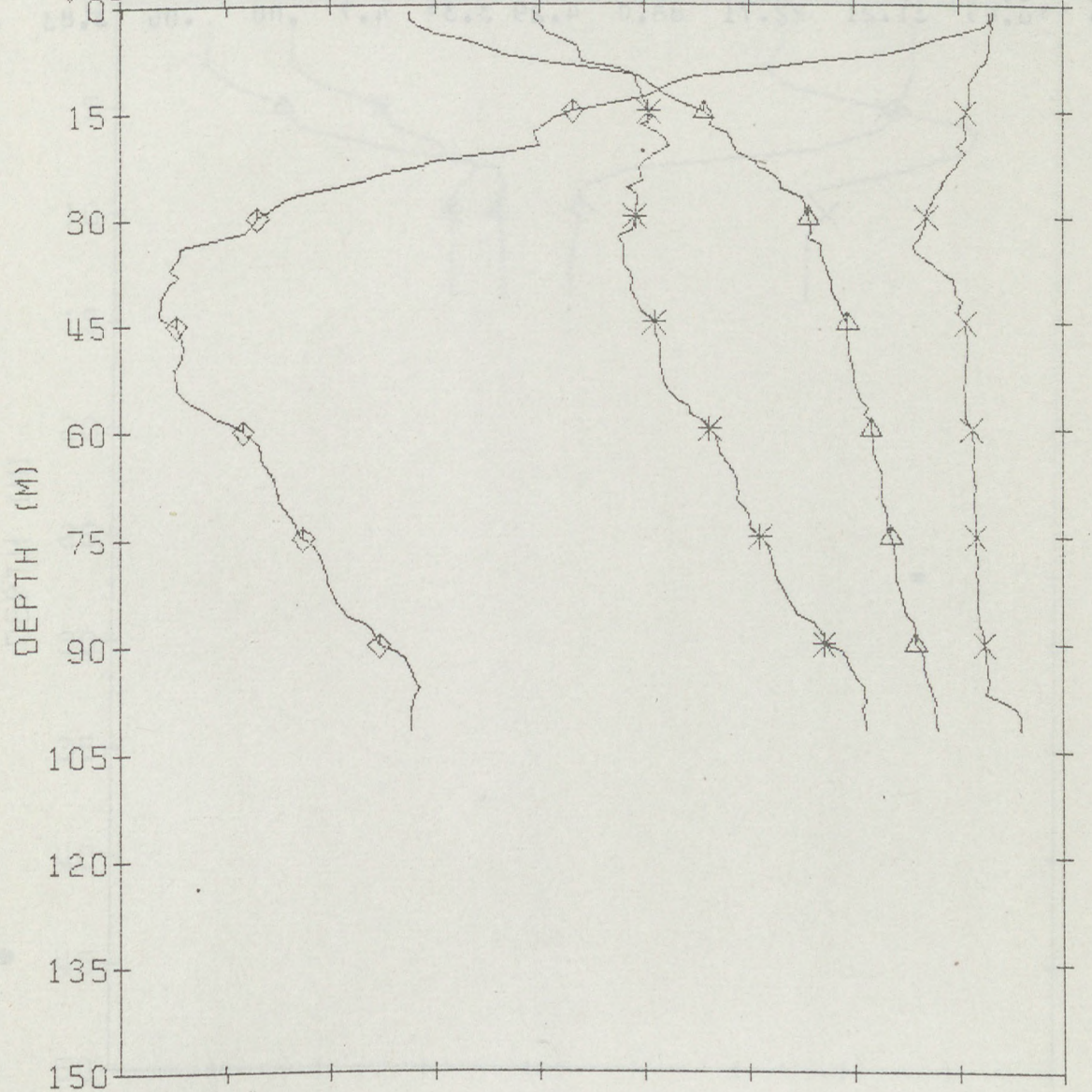
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SALINITY (0/00)

* 28 29 30 31 32 33 34 35 36 37

TEMPERATURE (C)

◇ 6 8 10 12 14 16 18 20 22 24



X-CC-20 SIA.139 LAT 39 13.5N; LONG 74 30.0W GMT 23.0 08/06/78
 DEPTH 017 AIR D/W 25.6/24.4 BARO 24.2 VIS 7 CLU TYP/CYR 6/8
 WETR 2 WIND DIR/SPD 16/12 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	23.20	29.67	19.88	86.8	6.67	6.73	.6	.00	.00	.00	.15
2	23.20	29.67	19.88	86.8	6.67						
3	23.21	29.64	19.85	85.8	6.79						
4	23.10	29.93	20.09	87.1	6.81						
5	22.87	30.51	20.60	91.7	6.57						
6	22.60	30.62	20.76	96.1	6.17						
7	21.26	31.14	21.52	95.7	6.02						
8	17.73	31.43	22.62	92.4	6.20						
9	16.83	31.26	22.71	88.0	6.07						
10	16.89	31.20	22.65	88.0	5.52						
11	16.79	31.21	22.68	88.0	5.05						
12	16.73	31.21	22.69	88.0	4.77						
13	16.69	31.21	22.70	88.0	4.56						
14	16.69	31.21	22.71	88.0	4.29	3.33	4.7	.00	.00	5.83	.47

KELEZ CRUISE XWCC-20 STATION 139 08/06/78

TRANSMISSIVITY (0/0)

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SIGMA-T

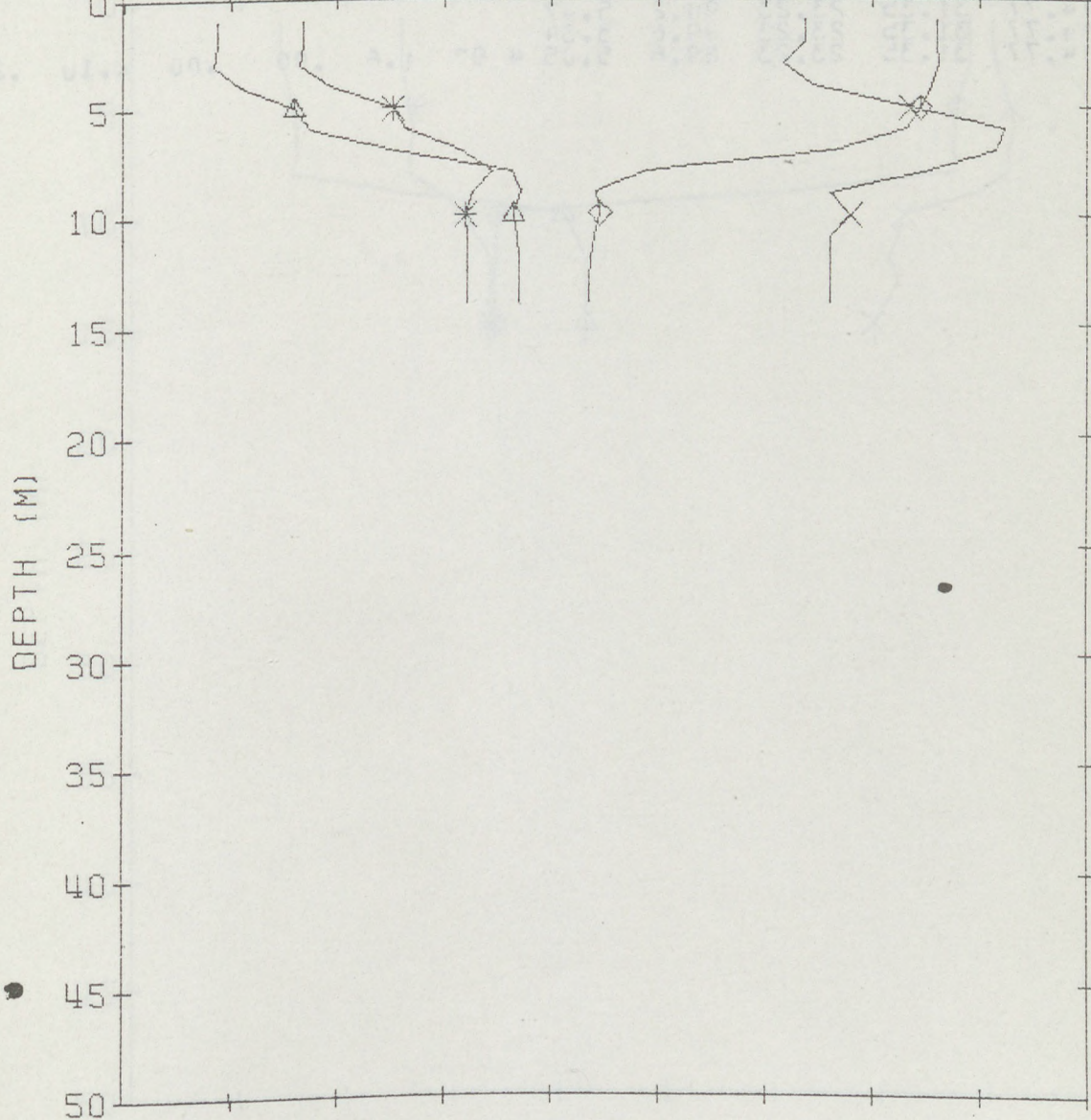
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SALINITY (0/00)

* 28 29 30 31 32 33 34 35 36 37

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



X-CC-20 SIA.140 LAT 39 11.0N; LONG 74 25.5W GMT 22.0 08/06/78
 DEPTH 010 AIR D/W 26.7/25.6 BARO 25.0 VTS 7 CLD TYP/CVR /8
 WFTUR 2 WIND DIR/SPD 18/08 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	23.60	30.50	20.38	95.1	5.56	5.56	.8	.00	.00	.00	.00
2	23.60	30.50	20.38	95.1	5.56						
3	23.60	30.51	20.39	95.3	5.54						
4	23.50	30.55	20.45	95.6	5.54						
5	23.40	30.58	20.50	96.00	5.56						
6	23.35	30.61	20.53	96.2	5.56						
7	23.33	30.60	20.54	96.2	5.56						
8	23.33	30.56	20.49	95.9	5.52						
9	20.18	30.25	21.58	94.5	5.76						
10	14.22	31.08	23.02	91.0	6.44	5.50	.8	.00	.00	1.60	.10
11	14.79	31.22	23.13	90.7	6.16						
12	14.78	31.35	23.23	90.7	5.95						
13	14.77	31.35	23.23	90.7	5.62						
14	14.77	31.35	23.23	90.2	5.47						
15	14.77	31.35	23.23	89.6	5.34						
16	14.77	31.35	23.23	89.6	5.05	4.92	1.6	.00	.00	2.10	.20

KELEZ CRUISE XWCC-20 STATION 140 08/06/78

TRANSMISSIVITY (0/0)

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SIGMA-T

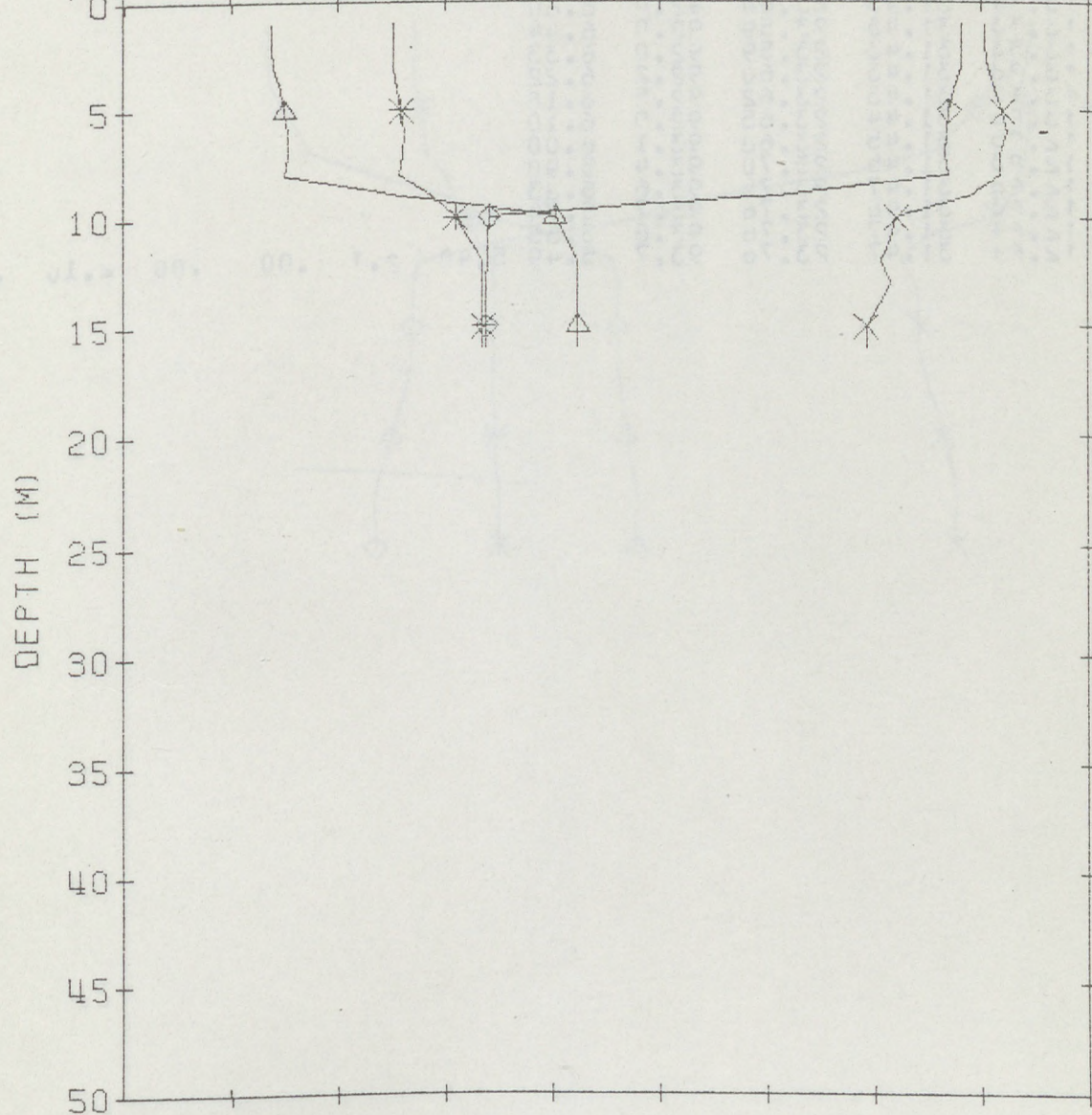
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SALINITY (0/00)

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TEMPERATURE (C)

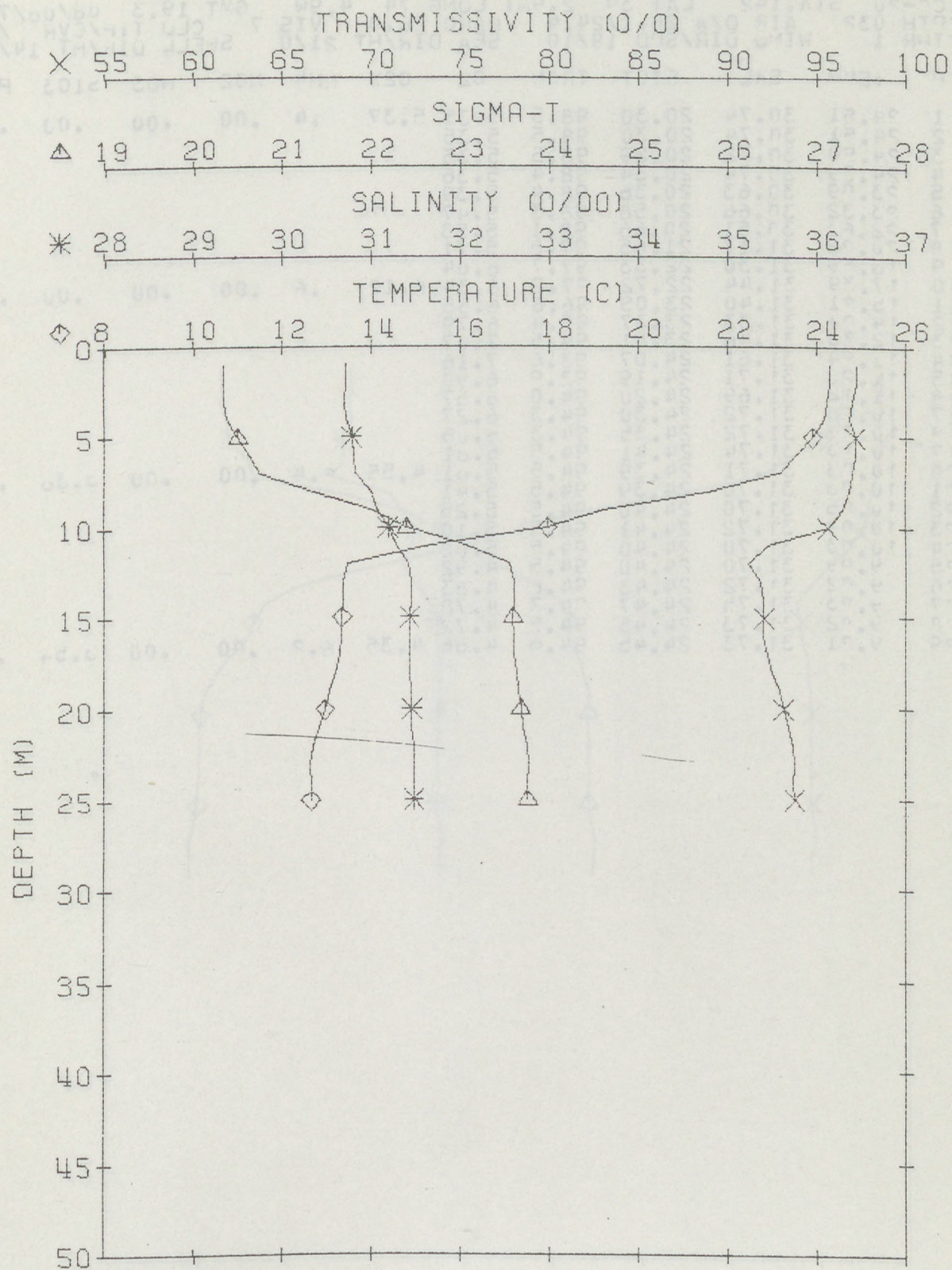
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XNCC-20 SIA.141 LAT 39 6.8N; LONG 74 15.1W GMT 20.6 08/06/78
 DEPTH 026 AIR D/W 26.7/24.4 BARO 25.7 VTS 7 CLD TIP/CVR 6/5
 WETHR 1 WIND DIR/SPD 17/06 SEA DIR/HT 18/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	PH4	NO2	NO3	SI03	P04
1	24.29	30.71	20.34	97.2	5.43	5.41	.3	.00	.00	.00	.00
2	24.29	30.71	20.34	97.2	5.43						
3	24.26	30.69	20.34	97.0	5.43						
4	24.15	30.70	20.38	96.8	5.44						
5	23.88	30.77	20.50	97.1	5.45						
6	23.52	30.79	20.62	97.1	5.47						
7	23.15	30.80	20.74	97.0	5.53						
8	21.51	30.99	21.34	96.8	5.61						
9	19.22	31.06	21.99	96.5	6.02						
10	17.05	31.18	22.39	95.6	6.26	6.43	.6	.00	.00	.00	.00
11	15.35	31.27	23.05	92.2	6.66						
12	13.45	31.40	23.54	91.1	6.89						
13	13.37	31.44	23.59	91.8	6.79						
14	13.34	31.45	23.60	92.0	6.60						
15	13.33	31.43	23.59	92.0	6.44						
16	13.36	31.43	23.59	92.0	6.33						
17	13.26	31.43	23.60	92.2	6.22						
18	13.17	31.43	23.62	92.2	6.18						
19	13.06	31.44	23.65	92.2	6.10						
20	12.95	31.45	23.68	93.1	6.00						
21	12.86	31.45	23.70	93.4	5.90						
22	12.78	31.47	23.75	93.6	5.83						
23	12.73	31.46	23.76	93.7	5.74						
24	12.64	31.47	23.76	93.6	5.55						
25	12.64	31.47	23.76	93.7	5.49	5.40	2.1	.00	.00	2.10	.10

KELEZ CRUISE XWCC-20 STATION 141 08/06/78



XNCC-20 SIA.142 LAT 39 2.9N; LONG 74 4.9W GMT 19.3 08/06/78
 DEPTH 032 AIR D/W 26.1/24.4 BARO 26.0 VIS 7 CLU TIP/CVR /4
 WTHR 1 WIND DIR/SPD 19/10 SEA DIR/HT 21/0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	24.51	30.74	20.30	98.5	5.35	5.37	.4	.00	.00	.00	.00
2	24.51	30.74	20.30	98.5	5.35						
3	24.51	30.72	20.29	98.5	5.35						
4	24.51	30.74	20.34	98.4	5.36						
5	23.39	30.63	20.36	98.4	5.39						
6	23.32	30.66	20.58	98.3	5.47						
7	22.33	30.51	20.66	98.1	5.53						
8	20.33	31.17	21.65	97.2	5.71						
9	18.33	31.30	22.33	97.7	6.04						
10	17.33	31.44	22.72	97.2	6.34	6.12	.6	.00	.00	.00	.00
11	15.33	31.40	23.05	96.6	6.55						
12	14.33	31.33	23.37	95.4	6.79						
13	12.33	31.46	23.81	94.5	7.07						
14	11.33	31.61	24.07	93.6	7.16						
15	11.33	31.71	24.19	92.6	6.90						
16	11.33	31.69	24.20	94.0	6.57						
17	10.33	31.72	24.30	94.3	6.27						
18	10.33	31.72	24.35	94.3	5.06						
19	10.33	31.74	24.41	94.5	5.81	4.55	5.4	.00	.00	5.30	.14
20	10.33	31.71	24.39	94.5	5.41						
21	10.33	31.70	24.39	94.5	5.41						
22	10.33	31.70	24.40	94.5	5.25						
23	10.33	31.72	24.41	94.5	5.10						
24	10.33	31.70	24.40	94.5	5.02						
25	9.33	31.70	24.40	94.5	4.92						
26	9.33	31.72	24.43	94.6	4.83						
27	9.33	31.75	24.47	94.7	4.78						
28	9.33	31.73	24.45	94.5	4.72						
29	9.33	31.73	24.45	94.6	4.86	4.35	6.2	.00	.00	5.54	.14

KELEZ CRUISE XWCC-20 STATION 142 08/06/78

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

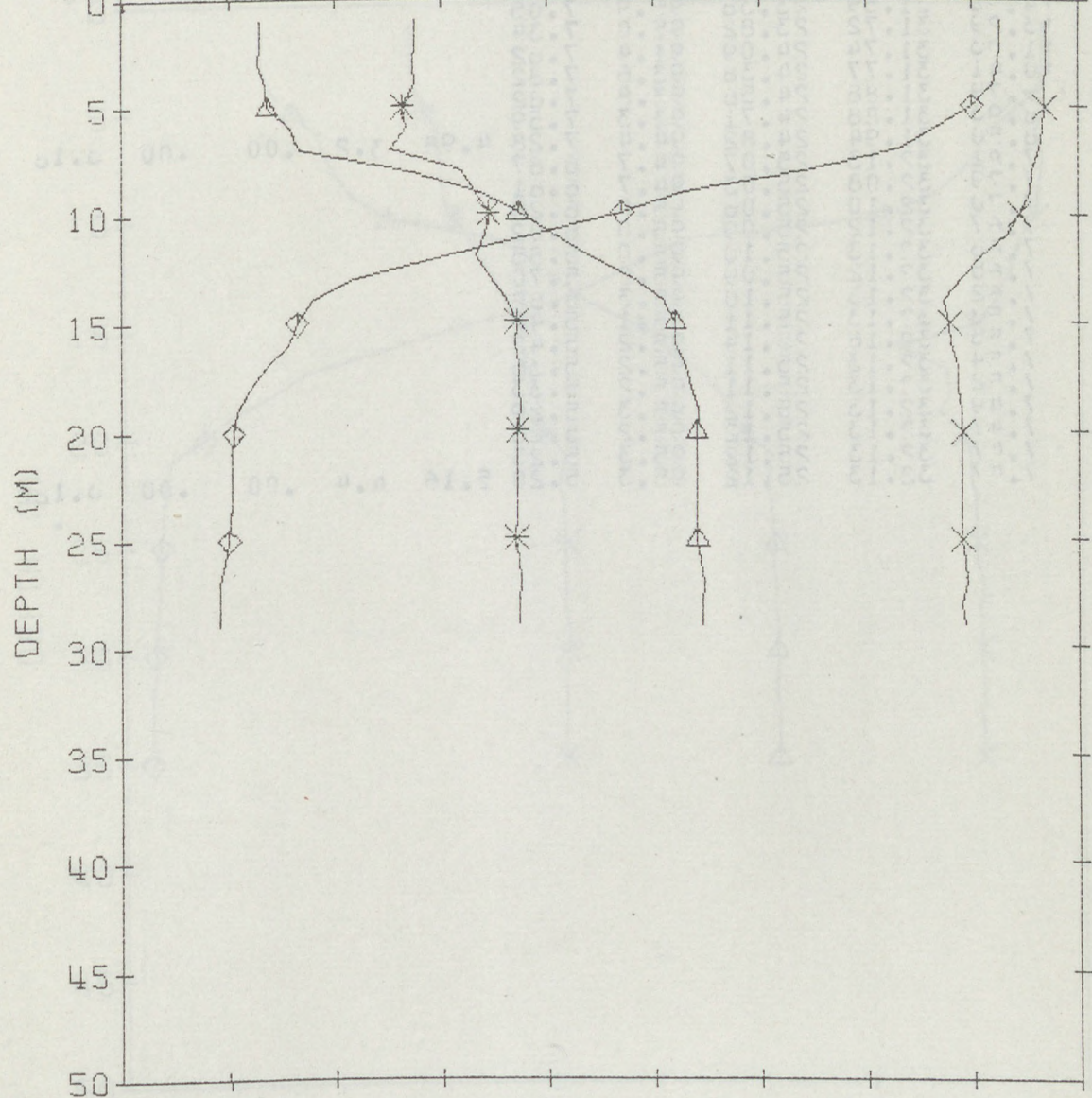
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SALINITY (0/00)

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TEMPERATURE (C)

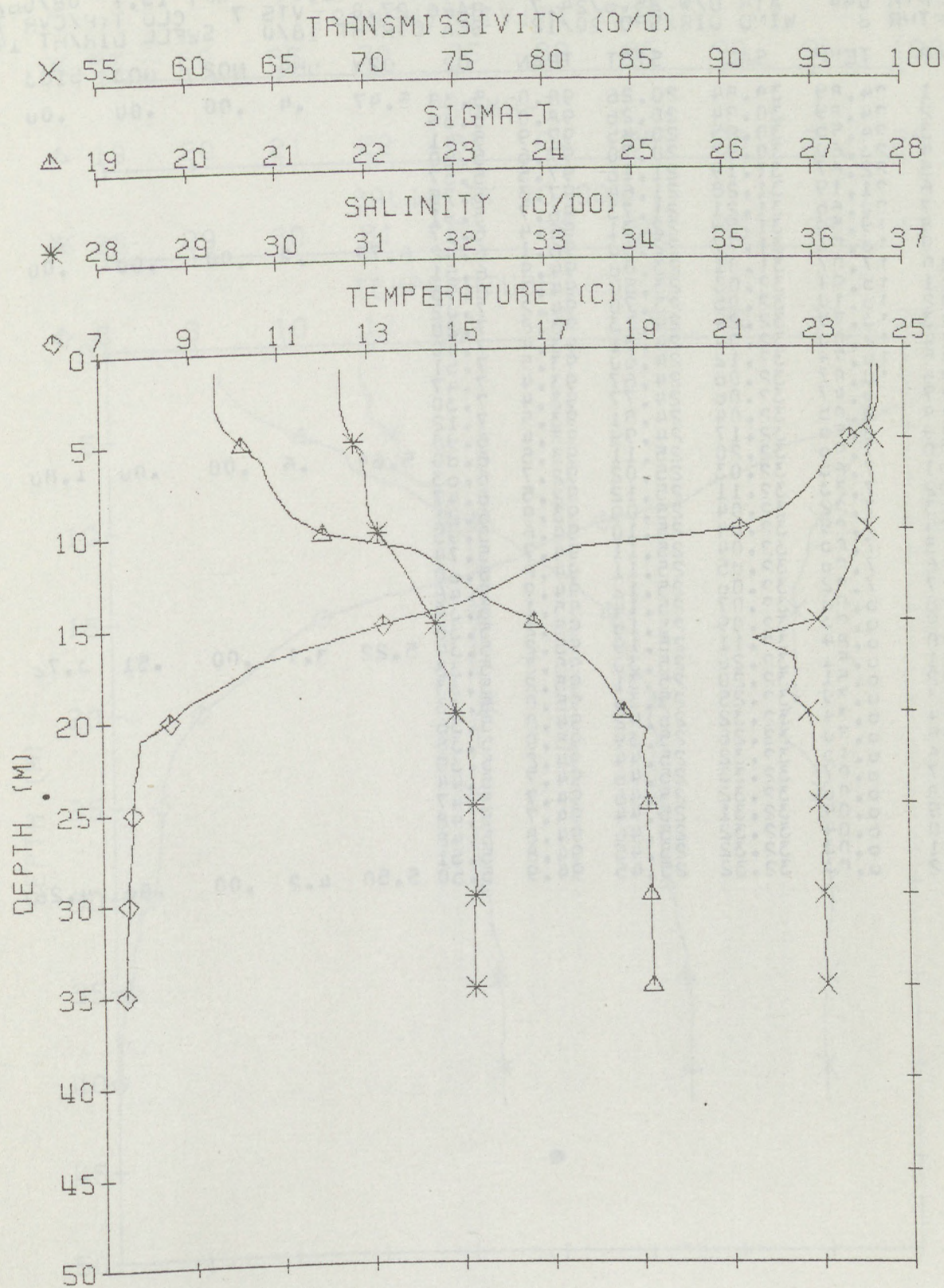
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X-CC-20 SIA.143 LAT 32 57.8N; LONG 73 56.0W GMT 17.8 08/06/78
 DPTH 038 AIR D/W 25.0/23.3 BARO 26.3 VIS 7 CLD TYP/CVR 7/8
 WFTUR 0 WIND DIR/SPD 20/05 SEA DIR/HT 90/0 SWELL DIR/HT 14/1

D/P	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	24.41	30.68	20.29	98.2	5.37	5.40	.3	.00	.00	.00	.00
2	24.41	30.69	20.29	98.2	5.37						
3	24.41	30.69	20.29	98.2	5.36						
4	24.27	30.75	20.38	98.0	5.37						
5	23.78	30.83	20.58	98.3	5.40						
6	23.28	30.94	20.81	97.9	5.48						
7	23.08	30.95	20.88	98.2	5.52						
8	22.72	30.97	20.99	98.1	5.56						
9	22.24	31.00	21.14	98.0	5.63						
10	21.27	31.08	21.47	97.9	5.68	5.83	.0	.00	.00	.00	.00
11	17.60	31.23	22.51	97.1	6.18						
12	16.29	31.38	22.83	95.9	6.64						
13	15.01	31.49	23.09	96.4	6.87						
14	14.25	31.59	23.38	95.9	7.05						
15	13.29	31.72	23.82	95.0	7.34						
16	11.23	31.74	24.09	93.4	7.62						
17	10.41	31.77	24.38	92.6	7.82						
18	8.79	31.88	24.58	92.8	7.82						
19	8.06	31.88	24.71	93.3	7.59						
20	6.50	31.94	24.82	94.4	7.28	4.98	3.2	.00	.00	3.18	.14
21	7.31	32.13	25.07	94.7	6.87						
22	7.79	32.08	25.03	94.7	6.61						
23	7.70	32.10	25.06	95.0	6.29						
24	7.67	32.12	25.09	95.0	6.02						
25	7.66	32.13	25.10	95.0	5.85						
26	7.65	32.12	25.09	95.0	5.70						
27	7.62	32.13	25.10	95.0	5.52						
28	7.53	32.13	25.11	95.1	5.42						
29	7.55	32.16	25.14	95.2	5.42						
30	7.54	32.13	25.11	95.2	5.36						
31	7.52	32.13	25.11	95.2	5.33						
32	7.49	32.13	25.12	95.3	5.20						
33	7.47	32.13	25.12	95.3	5.26						
34	7.47	32.13	25.12	95.3	5.23						
35	7.47	32.13	25.12	95.3	5.20	5.16	4.4	.00	.00	3.18	.19

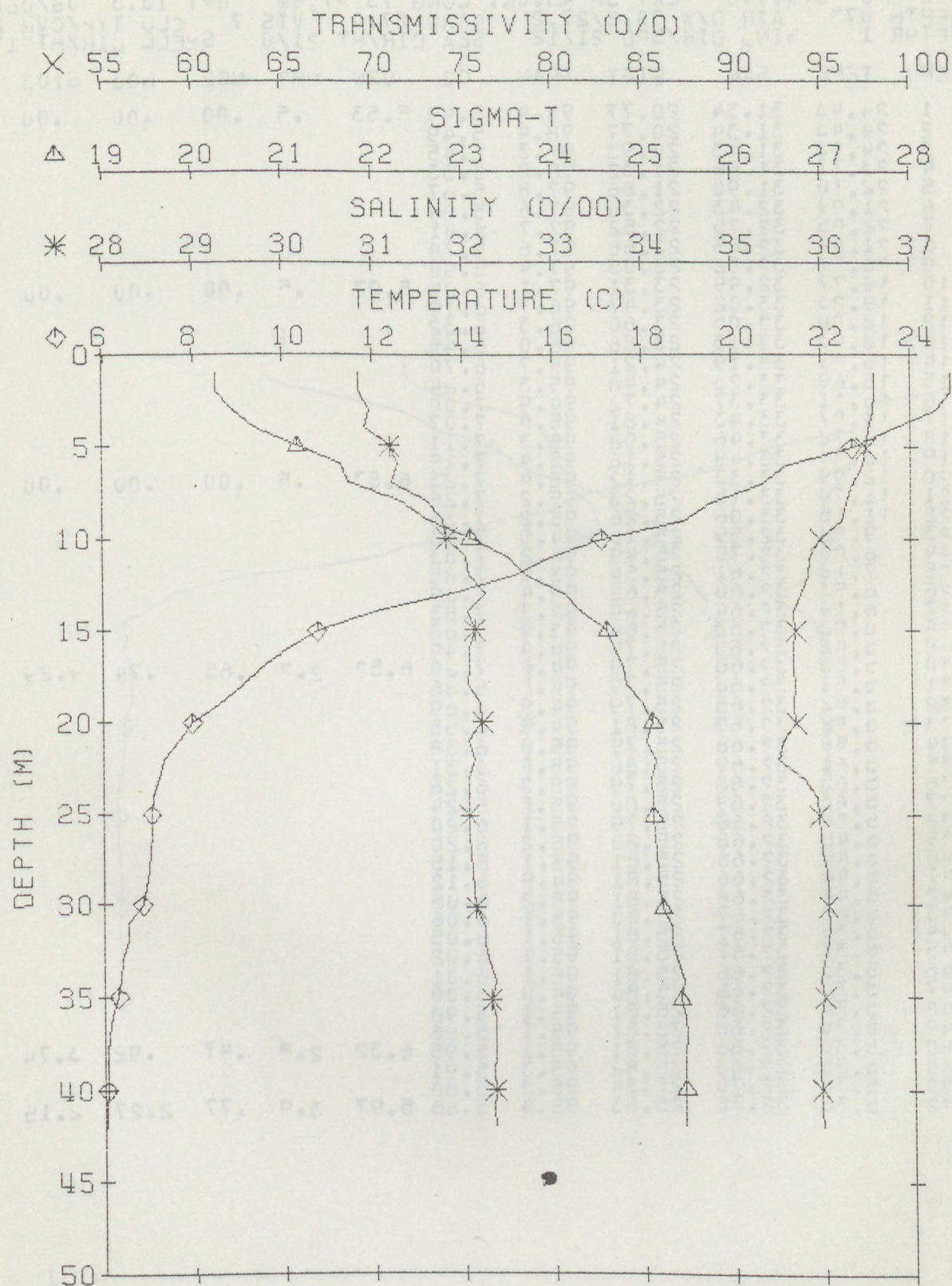
KELEZ CRUISE XWCC-20 STATION 143 08/06/78



XWCC-00 STA.144 LAT 38 51.5N; LONG 73 42.0W GMT 15.7 08/06/78
 DEPTH 044 ATR D/W 25.8/24.7 BARO 27.0 VTS 7 CLU TYP/CVR 7/7
 WETPR 8 WIND DIR/SPD 20/12 SEA DIR/HT 18/0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	24.89	30.84	20.26	98.0	5.38	5.47	.4	.00	.00	.00	.00
2	24.89	30.84	20.26	98.0	5.38						
3	24.55	30.95	20.45	97.9	5.41						
4	23.60	30.92	20.70	97.6	5.50						
5	22.67	31.19	21.16	97.5	5.57						
6	21.19	31.28	21.64	97.3	5.75						
7	19.56	31.21	21.73	96.7	5.91						
8	19.56	31.59	22.31	96.4	6.17						
9	18.01	31.77	22.60	96.1	6.42	6.79	.2	.00	.00	.00	.00
10	17.07	31.81	23.08	94.9	6.51						
11	15.04	32.03	23.50	94.3	6.93						
12	15.10	32.05	23.70	94.2	7.02						
13	13.75	32.24	24.13	93.8	7.20						
14	12.00	32.04	24.31	93.4	7.40						
15	10.74	32.12	24.60	93.5	7.51						
16	10.77	32.06	24.67	93.4	7.47						
17	9.57	32.06	24.77	93.4	7.30						
18	9.55	32.04	24.81	93.5	7.12						
19	8.33	32.17	24.99	93.4	6.98						
20	7.06	32.20	25.11	93.5	6.80	5.69	.6	.00	.00	1.80	.19
21	7.53	32.03	25.02	92.7	6.63						
22	7.33	32.11	25.12	92.5	6.47						
23	7.33	32.04	25.09	93.0	6.21						
24	7.33	32.04	25.10	94.3	5.95						
25	7.33	32.04	25.11	94.7	5.74						
26	7.33	32.05	25.11	94.8	5.60						
27	7.33	32.06	25.12	94.9	5.48						
28	6.33	32.07	25.14	95.1	5.36						
29	6.33	32.09	25.16	95.3	5.26	5.22	3.1	.00	.51	3.72	.23
30	6.33	32.11	25.19	95.3	5.14						
31	6.33	32.20	25.30	95.3	5.03						
32	6.33	32.20	25.31	95.3	4.93						
33	6.33	32.25	25.36	95.3	4.83						
34	6.33	32.28	25.42	95.3	4.73						
35	6.33	32.28	25.43	95.3	4.63						
36	6.33	32.32	25.48	95.3	4.53						
37	6.33	32.33	25.49	95.3	4.43						
38	6.33	32.33	25.49	95.3	4.33						
39	6.33	32.31	25.44	95.3	4.23						
40	6.33	32.32	25.45	95.3	4.13						
41	6.33	32.32	25.45	95.3	4.03	5.50	4.2	.00	.86	4.26	.28
42	6.33	32.32	25.45	95.3	3.93						

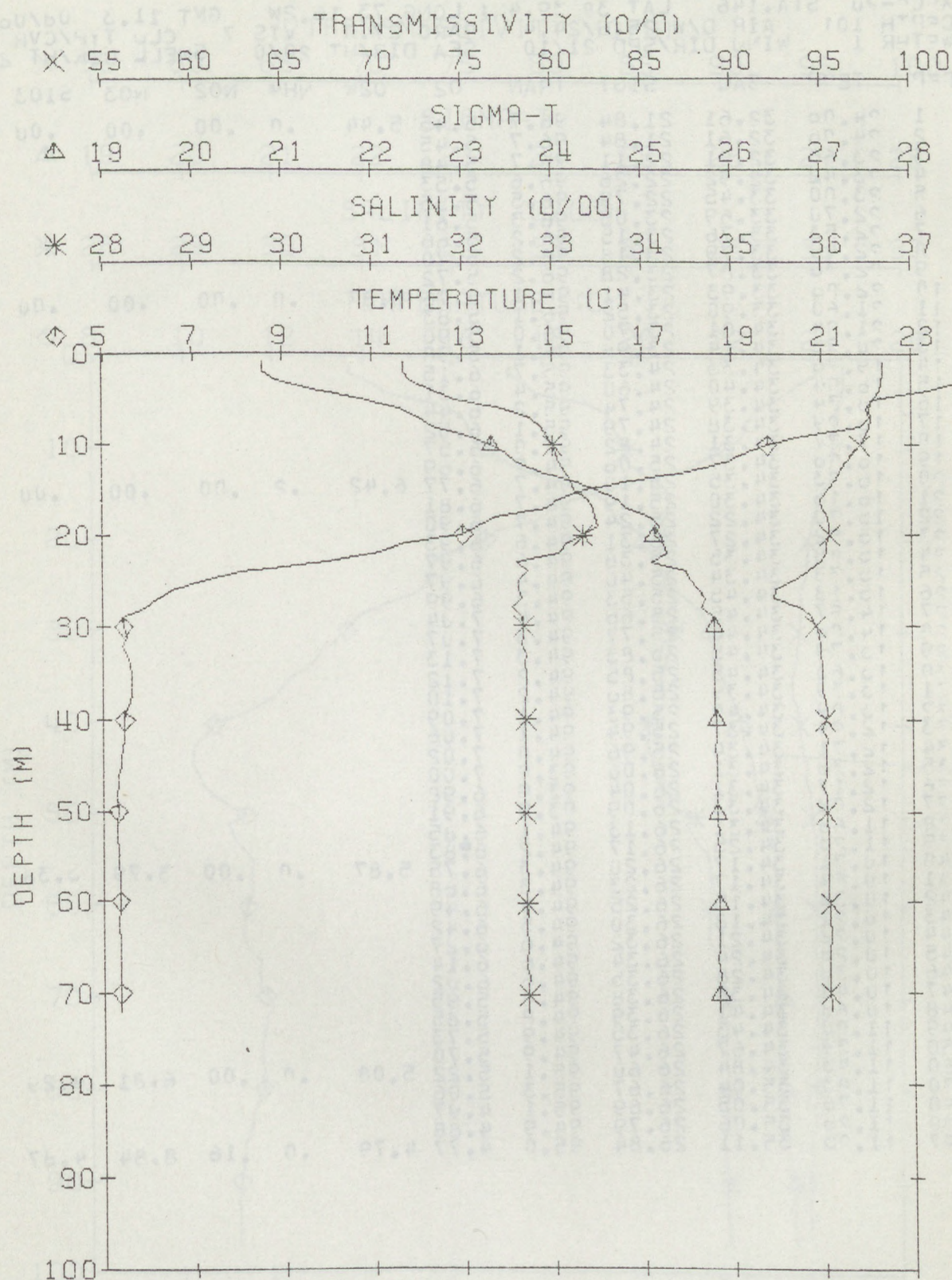
KELEZ CRUISE XWCC-20 STATION 144 08/06/78



XWCC-20 S14.145 LAT 3A 45.0N; LONG 73 27.9W GMT 13.3 08/06/78
 DEPTH 073 AIR D/W 30.8/27.2 BARO 27.0 VTS 7 CLU TYP/CVR 2/2
 WFT4R 1 WIND DIR/SPD 21/12 SEA DIR/HT 21/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	24.43	31.34	20.77	98.4	5.49	5.53	.5	.00	.00	.00	.00
2	24.43	31.34	20.77	98.4	5.49						
3	24.43	31.43	20.93	98.3	5.45						
4	23.77	31.66	21.32	98.2	5.53						
5	22.10	31.90	21.86	97.8	5.67						
6	21.09	32.43	22.30	97.6	5.84						
7	21.05	32.75	22.52	97.7	5.81						
8	21.04	32.85	22.66	97.6	5.78						
9	20.97	32.92	22.80	97.4	5.90						
10	19.77	32.99	23.31	97.1	6.04	5.97	.5	.00	.00	.00	.00
11	19.33	33.02	23.47	96.7	6.10						
12	18.30	33.05	23.60	96.3	6.32						
13	18.33	33.13	23.86	96.0	6.45						
14	18.73	33.19	24.21	95.7	6.70						
15	18.99	33.23	24.48	95.3	6.64						
16	18.11	33.37	24.72	94.6	7.00						
17	17.73	33.43	24.81	94.0	7.07						
18	17.77	33.46	25.08	93.3	7.11						
19	16.34	33.49	25.18	93.5	7.19						
20	15.99	33.33	25.12	93.4	7.23	6.83	.5	.00	.00	.00	.00
21	15.70	33.15	25.23	93.2	7.26						
22	15.06	33.06	25.26	93.2	7.35						
23	14.55	32.70	25.10	94.9	7.43						
24	14.00	32.61	25.44	93.8	7.53						
25	13.50	32.60	25.44	93.8	7.55						
26	13.03	32.60	25.62	93.4	7.69						
27	12.53	32.53	25.69	93.2	7.83						
28	12.02	32.53	25.76	93.4	7.83						
29	11.52	32.60	25.79	94.3	7.83	6.52	2.2	.65	.74	4.23	.24
30	11.52	32.60	25.79	94.3	7.83						
31	11.52	32.60	25.79	94.3	7.83						
32	11.52	32.60	25.79	94.3	7.83						
33	11.52	32.60	25.79	94.3	7.83						
34	11.52	32.60	25.79	94.3	7.83						
35	11.52	32.60	25.79	94.3	7.83						
36	11.52	32.60	25.79	94.3	7.83						
37	11.52	32.60	25.79	94.3	7.83						
38	11.52	32.60	25.79	94.3	7.83						
39	11.52	32.60	25.79	94.3	7.83						
40	11.52	32.60	25.79	94.3	7.83						
41	11.52	32.60	25.79	94.3	7.83						
42	11.52	32.60	25.79	94.3	7.83						
43	11.52	32.60	25.79	94.3	7.83						
44	11.52	32.60	25.79	94.3	7.83						
45	11.52	32.60	25.79	94.3	7.83						
46	11.52	32.60	25.79	94.3	7.83						
47	11.52	32.60	25.79	94.3	7.83						
48	11.52	32.60	25.79	94.3	7.83						
49	11.52	32.60	25.79	94.3	7.83						
50	11.52	32.60	25.79	94.3	7.83	6.32	2.8	.47	.92	3.74	.24
51	11.52	32.60	25.79	94.3	7.83						
52	11.52	32.60	25.79	94.3	7.83						
53	11.52	32.60	25.79	94.3	7.83						
54	11.52	32.60	25.79	94.3	7.83						
55	11.52	32.60	25.79	94.3	7.83						
56	11.52	32.60	25.79	94.3	7.83						
57	11.52	32.60	25.79	94.3	7.83						
58	11.52	32.60	25.79	94.3	7.83						
59	11.52	32.60	25.79	94.3	7.83						
60	11.52	32.60	25.79	94.3	7.83						
61	11.52	32.60	25.79	94.3	7.83						
62	11.52	32.60	25.79	94.3	7.83						
63	11.52	32.60	25.79	94.3	7.83						
64	11.52	32.60	25.79	94.3	7.83						
65	11.52	32.60	25.79	94.3	7.83						
66	11.52	32.60	25.79	94.3	7.83						
67	11.52	32.60	25.79	94.3	7.83						
68	11.52	32.60	25.79	94.3	7.83						
69	11.52	32.60	25.79	94.3	7.83						
70	11.52	32.60	25.79	94.3	7.83						
71	11.52	32.60	25.79	94.3	7.83						
72	11.52	32.60	25.79	94.3	7.83	5.97	3.9	.77	2.27	2.15	.33

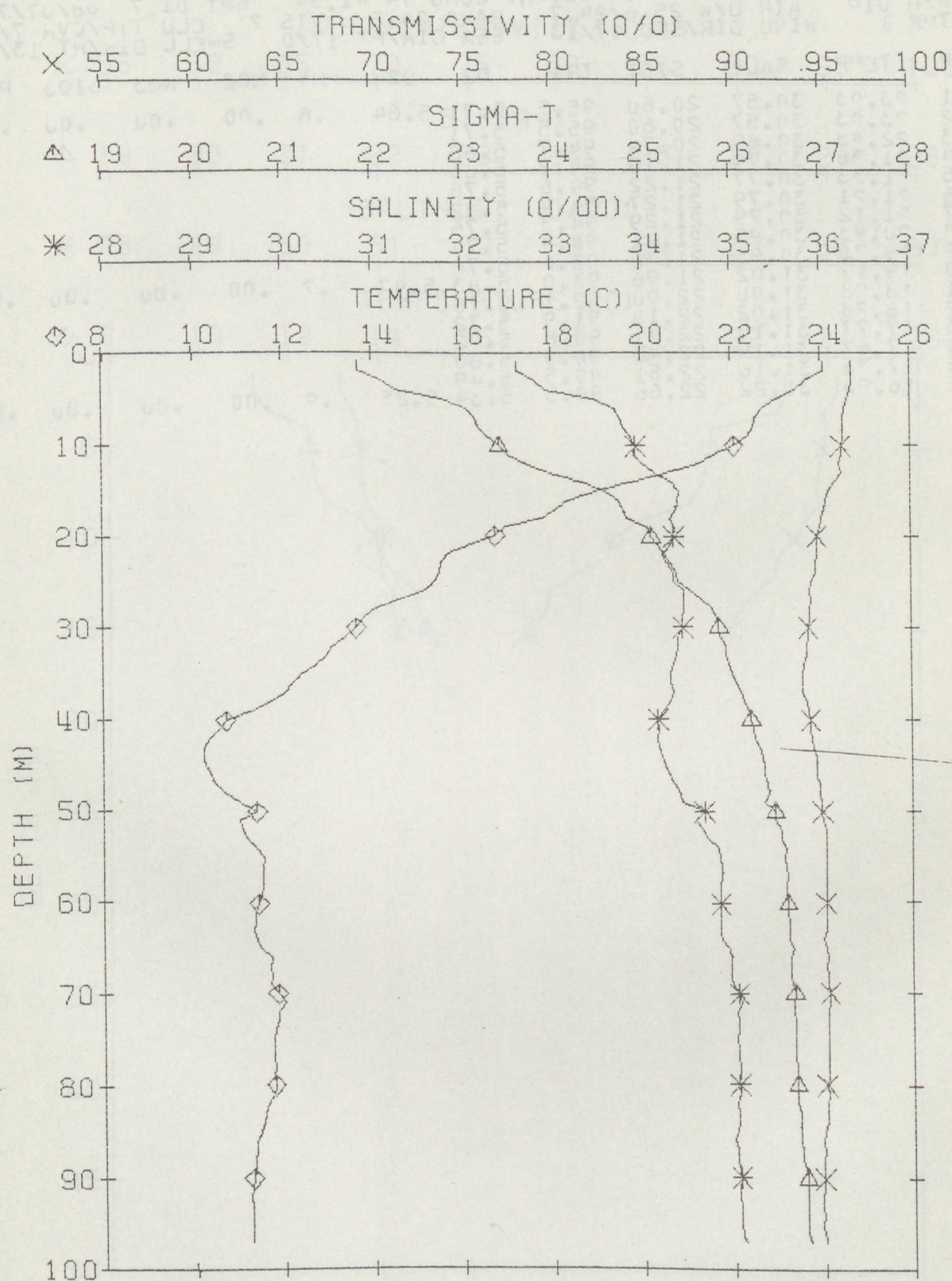
KELEZ CRUISE XWCC-20 STATION 145 08/06/78



X/C-20 SIA.146 LAT 38 39.4N; LONG 73 16.2W GMT 11.3 08/06/78
 DEPTH 101 AIR D/W 25.6/24.4 BARO 27.0 VIS 7 CLD TYP/CVR 1/2
 WETUR 1 WIND DIR/SPD 21/10 SEA DIR/HT 20/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	N02	N03	SI03	P04
1	24.06	32.61	21.84	96.7	5.45	5.44	.0	.00	.00	.00	.00
2	24.06	32.61	21.84	96.7	5.45						
3	23.66	32.81	22.11	96.7	5.48						
4	23.42	32.92	22.26	96.6	5.53						
5	23.00	33.45	22.79	96.5	5.55						
6	22.70	33.59	23.05	96.3	5.61						
7	22.50	33.76	23.15	96.2	5.66						
8	22.50	33.79	23.18	96.2	5.70						
9	22.46	33.87	23.28	96.2	5.72						
10	22.00	33.93	23.41	96.1	5.76	5.87	.0	.00	.00	.00	.00
11	21.00	33.90	23.52	96.1	5.83						
12	20.00	34.01	23.70	96.0	5.90						
13	20.00	34.14	23.98	96.1	5.98						
14	19.00	34.33	24.33	96.7	6.15						
15	18.00	34.40	24.60	96.4	6.31						
16	18.00	34.39	24.74	96.2	6.44						
17	18.00	34.38	24.79	96.1	6.52						
18	17.00	34.31	24.82	96.0	6.57						
19	16.00	34.37	25.06	96.4	6.69						
20	16.00	34.35	25.10	96.7	6.77	6.42	.2	.00	.00	.00	.00
21	16.00	34.30	25.19	96.7	6.81						
22	15.00	34.22	25.24	96.7	6.90						
23	15.00	34.27	25.31	96.6	6.93						
24	15.00	34.35	25.38	96.4	6.97						
25	15.00	34.34	25.40	96.4	6.97						
26	15.00	34.45	25.56	96.4	6.96						
27	14.00	34.46	25.66	96.4	7.04						
28	14.00	34.46	25.77	96.4	7.07						
29	13.00	34.45	25.83	96.4	7.13						
30	13.00	34.45	25.85	96.4	7.12						
31	13.00	34.39	25.86	96.4	7.10						
32	13.00	34.40	25.93	96.4	7.09						
33	12.00	34.37	25.94	96.4	7.06						
34	12.00	34.34	25.96	96.4	7.02						
35	12.00	34.31	26.00	96.3	7.00						
36	12.00	34.31	26.04	96.3	6.98						
37	12.00	34.33	26.09	96.3	6.91						
38	11.00	34.31	26.13	96.4	6.85						
39	11.00	34.25	26.17	96.4	6.80						
40	10.00	34.17	26.20	96.4	6.75	5.87	.0	.00	3.79	3.38	.24
41	10.00	34.17	26.23	96.4	6.68						
42	10.00	34.15	26.25	96.4	6.49						
43	10.00	34.18	26.30	96.5	6.42						
44	10.00	34.21	26.32	96.4	6.27						
45	10.00	34.24	26.34	96.6	6.14						
46	10.00	34.28	26.35	96.4	6.00						
47	10.00	34.35	26.38	96.4	5.95						
48	10.00	34.41	26.39	96.4	5.85						
49	11.00	34.43	26.35	96.4	5.73						
50	11.00	34.67	26.47	96.4	5.70						
60	11.00	34.84	26.60	95.1	5.22	5.08	.0	.00	6.81	4.29	.28
70	11.00	35.04	26.67	95.3	4.06						
80	11.00	35.05	26.69	95.1	4.97						
90	11.00	35.06	26.79	94.9	4.88						
97	11.00	35.11	26.84	95.0	4.77	4.79	.0	.16	8.84	4.87	.33

KELEZ CRUISE XWCC-20 STATION 146 08/06/78



XCCC-20 STA.150 LAT 38 53.8N; LONG 74 41.9W GMT 01.7 08/07/78
 DEPTH 010 AIR D/W 25.6/24.7 BARO 24.5 VIS 7 CLD TYP/CVR 7/3
 WFTUR 1 WIND DIR/SPD 17/13 SEA DIR/HT 17/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	NO2	NO3	SIO3	PO4
1	23.03	30.57	20.60	95.5	5.71	5.64	.6	.00	.00	.00	.00
2	23.03	30.57	20.60	95.5	5.71						
3	22.85	30.69	20.74	94.7	5.68						
4	21.36	30.74	21.19	94.8	5.66						
5	21.33	30.77	21.22	94.6	5.76						
6	21.21	30.79	21.27	94.4	5.82						
7	21.12	30.79	21.29	94.3	5.76						
8	20.80	30.85	21.41	94.4	5.74						
9	19.73	30.95	21.78	93.6	5.78						
10	19.19	31.02	21.96	93.0	5.83	5.47	.7	.00	.00	.00	.00
11	18.28	31.00	22.00	92.1	5.76						
12	18.28	31.02	22.18	91.9	5.72						
13	17.77	31.15	22.41	90.8	5.72						
14	17.67	31.14	22.43	90.0	5.60						
15	17.20	31.16	22.51	89.5	5.49						
16	16.00	31.22	22.66	89.5	5.34	5.25	.0	.00	.00	.00	.00

KELEZ CRUISE XWCC-20 STATION 150 08/07/78

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

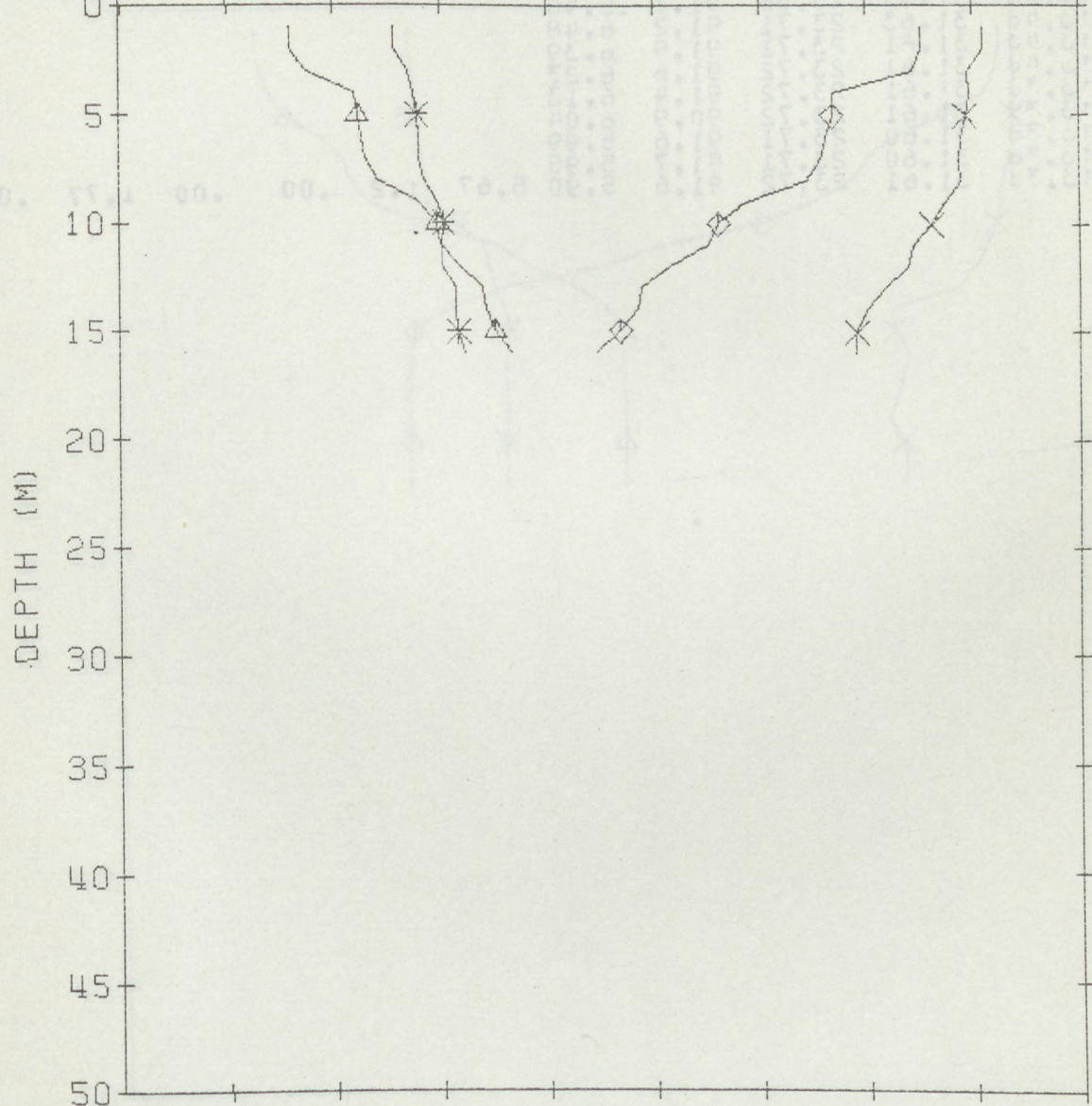
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SALINITY (0/00)

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TEMPERATURE (C)

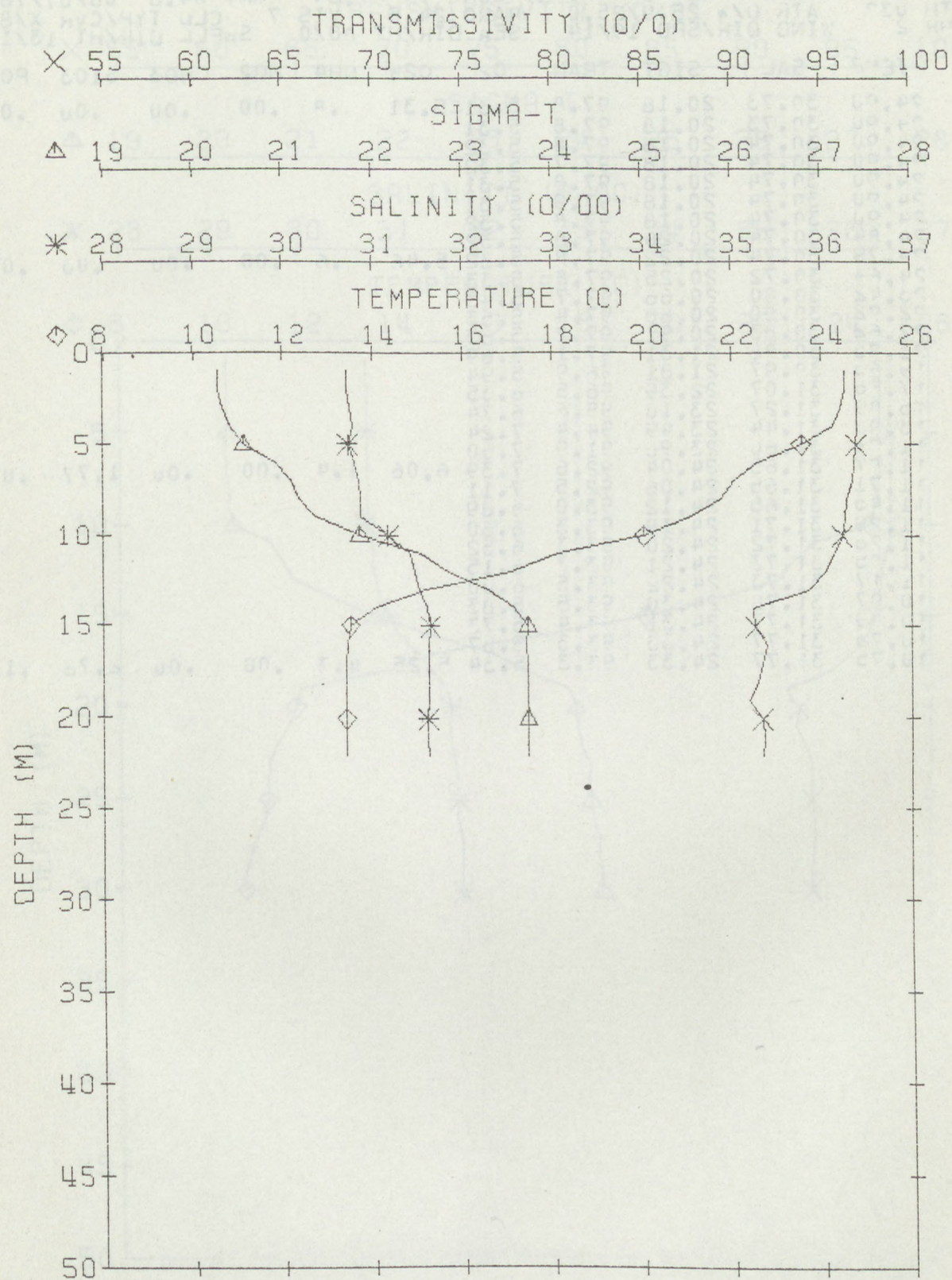
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XCCC-20 SIA.151 LAT 38 49.7N; LONG 74 34.0W GMT 03.3 08/07/78
 DEPTH 025 AIR D/W 25.6/25.0 BARO 25.0 VTS 7 CLD TYP/CVR X/8
 WETHR 2 WIND DIR/SPD 19/16 SEA DIR/HT 19/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SI03	PO4
1	24.50	30.71	20.28	96.9	5.41	5.43	.7	.00	.00	.00	.00
2	24.50	30.71	20.28	96.9	5.41						
3	24.43	30.74	20.32	97.0	5.40						
4	24.25	30.77	20.40	97.0	5.41						
5	23.54	30.72	20.57	96.9	5.48						
6	22.54	30.79	20.90	96.8	5.59						
7	22.01	30.84	21.09	96.7	5.65						
8	21.71	30.86	21.19	96.4	5.73						
9	21.22	30.85	21.36	96.3	5.78						
10	20.03	31.16	21.86	96.1	5.84	5.74	1.0	.00	.00	.00	.00
11	13.12	31.41	22.52	95.6	6.01						
12	17.04	31.47	22.82	95.1	6.11						
13	15.15	31.51	23.28	94.2	6.23						
14	14.06	31.59	23.56	91.1	6.40						
15	13.53	31.63	23.71	91.2	6.48						
16	13.56	31.61	23.71	91.9	6.39						
17	13.50	31.61	23.72	91.6	6.23						
18	13.50	31.61	23.72	91.4	6.13						
19	13.50	31.61	23.72	90.9	6.04						
20	13.50	31.60	23.71	91.6	5.99						
21	13.50	31.60	23.71	91.7	5.95						
22	13.50	31.61	23.72	91.6	5.90	5.67	1.2	.00	.00	1.77	.05

KELEZ CRUISE XWCC-20 STATION 151 08/07/78



XNCC-20 SIA.152 LAT 38 45.4; LONG 74 27.6W GMT 04.8 08/07/78
 DEPTH 030 AIR D/W 25.9/25.0 BARO 24.5 VTS 7 CLD TYP/CVR X/8
 WFTHR 2 WIND DIR/SPD 19/14 SEA DIR/HT 00/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	OZ	OZW	NH4	N02	N03	S103	P04
1	24.00	30.73	20.18	97.8	5.31	5.31	.8	.00	.00	.00	.00
2	24.00	30.73	20.18	97.8	5.31						
3	24.00	30.74	20.18	97.8	5.32						
4	24.00	30.74	20.18	97.7	5.32						
5	24.00	30.74	20.18	97.8	5.31						
6	24.00	30.74	20.18	97.9	5.31						
7	24.00	30.74	20.18	97.8	5.32						
8	24.04	30.74	20.20	97.8	5.32						
9	24.79	30.74	20.22	97.8	5.32	5.46	.6	.00	.00	.00	.00
10	24.64	30.72	20.25	97.8	5.33						
11	23.42	30.80	20.66	97.7	5.43						
12	22.02	30.80	20.80	97.4	5.53						
13	22.62	30.83	20.91	97.2	5.63						
14	21.63	30.86	21.31	97.1	5.69						
15	19.65	30.97	21.81	96.9	5.94						
16	17.50	31.07	22.39	96.5	6.35						
17	15.29	31.27	23.10	95.7	6.74						
18	13.23	31.44	23.49	94.4	7.24						
19	11.25	31.60	23.96	91.0	7.50						
20	11.27	31.65	24.04	92.6	7.39	6.06	1.4	.00	.00	1.77	.00
21	11.71	31.65	24.06	92.5	7.11						
22	11.45	31.65	24.12	93.0	6.89						
23	11.29	31.71	24.19	93.3	6.60						
24	11.20	31.72	24.20	93.3	6.52						
25	11.05	31.73	24.21	93.7	6.15						
26	11.17	31.73	24.22	93.5	6.00						
27	10.87	31.78	24.30	93.5	5.83						
28	10.89	31.77	24.31	93.4	5.73						
29	10.75	31.77	24.33	93.6	5.57						
30	10.75	31.77	24.33	93.6	5.54	5.25	4.3	.00	.00	2.78	.13

KELEZ CRUISE XWCC-20 STATION 152 08/07/78

TRANSMISSIVITY (0/0)

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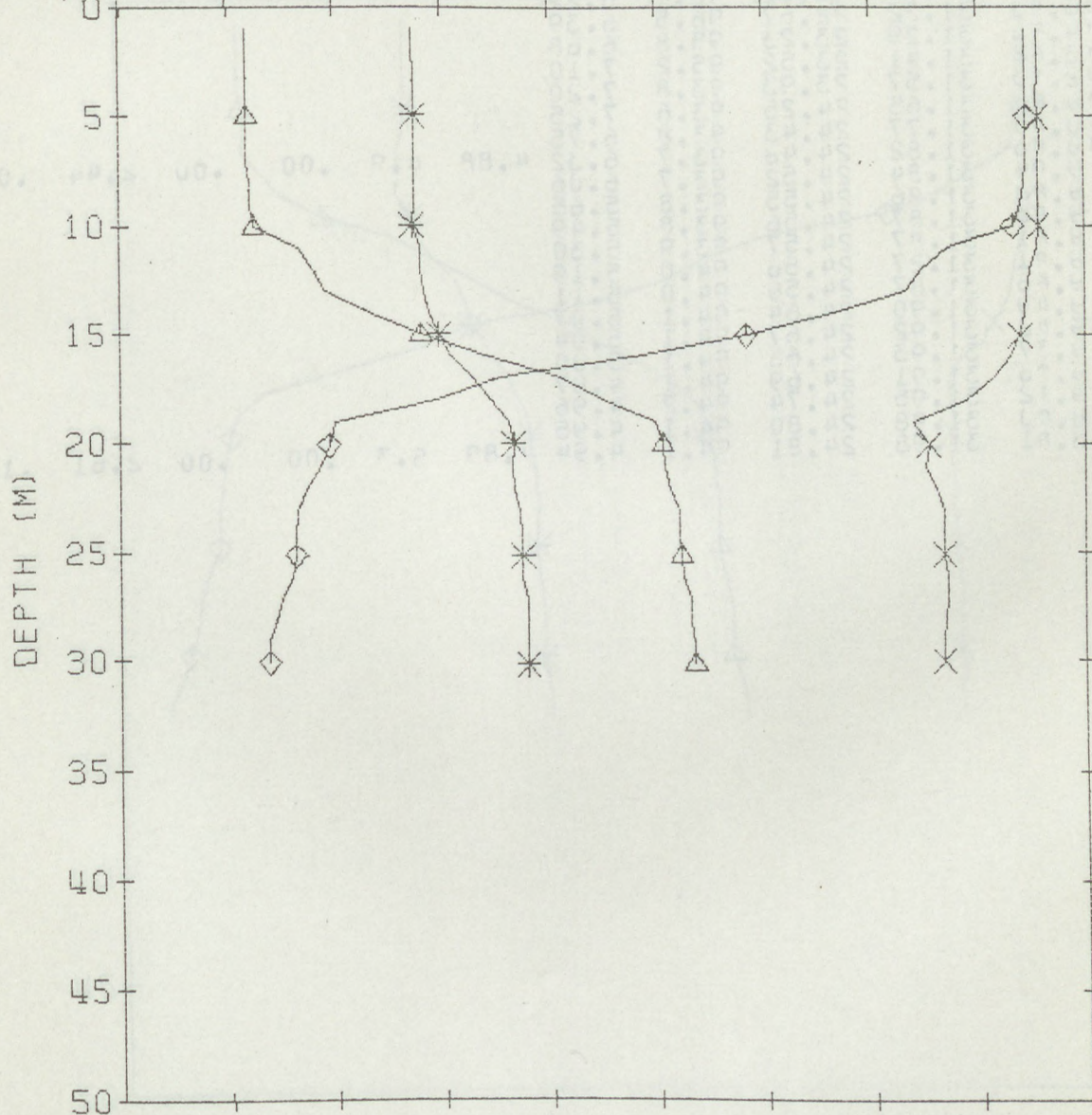
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SALINITY (0/00)

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TEMPERATURE (C)

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X-CC-20 SIA.153 LAT 38 41.5; LONG 74 20.0W GMT 05.9 08/07/78
 DEPTH 036 AIR D/W 25.9/25.0 BARO 24.7 VTS 7 CLD TYP/CVR X/8
 WETUR Z WIND DIR/SPD 19/16 SEA DIR/HT 19/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	24.00	30.68	20.12	98.0	5.28	5.29	.0	.00	.00	.00	.00
2	24.00	30.68	20.12	98.0	5.28						
3	24.00	30.68	20.13	97.9	5.27						
4	24.00	30.68	20.13	97.9	5.28						
5	24.06	30.68	20.15	97.9	5.29						
6	24.73	30.66	20.18	97.9	5.29						
7	24.73	30.66	20.11	97.9	5.31						
8	24.73	30.62	20.35	97.8	5.34						
9	26.74	30.59	20.52	97.7	5.42						
10	26.74	30.73	20.90	97.4	5.47	5.58	.4	.00	.00	.00	.00
11	26.00	30.80	21.57	97.2	5.78						
12	26.00	30.94	21.96	96.9	5.95						
13	26.10	31.14	22.32	96.7	6.22						
14	26.10	31.22	22.67	96.5	6.39						
15	26.10	31.29	23.23	95.8	6.68						
16	26.22	31.41	23.52	95.2	7.10						
17	26.10	31.57	23.93	95.8	7.20						
18	26.00	31.65	24.25	95.6	7.25						
19	26.00	31.77	24.43	95.3	6.75						
20	26.00	31.82	24.48	95.7	6.32	4.88	4.9	.00	.00	2.44	.00
21	26.00	31.84	24.55	95.7	6.06						
22	26.00	31.86	24.55	95.8	5.65						
23	26.00	31.87	24.56	95.8	5.49						
24	26.00	31.87	24.56	94.0	5.30						
25	26.00	31.87	24.56	94.0	5.19						
26	26.00	31.87	24.56	94.1	5.11						
27	26.00	31.90	24.54	94.1	5.07						
28	26.00	31.92	24.67	94.1	5.04						
29	26.00	31.93	24.66	94.1	5.00						
30	26.00	31.91	24.69	94.1	4.97						
31	26.00	31.95	24.74	94.2	4.96						
32	26.00	31.98	24.80	94.1	4.95						
33	26.00	31.98	24.81	94.1	4.94	4.89	5.3	.00	.00	2.61	.10

KELEZ CRUISE XWCC-20 STATION 153 08/07/78

TRANSMISSIVITY (0/0)

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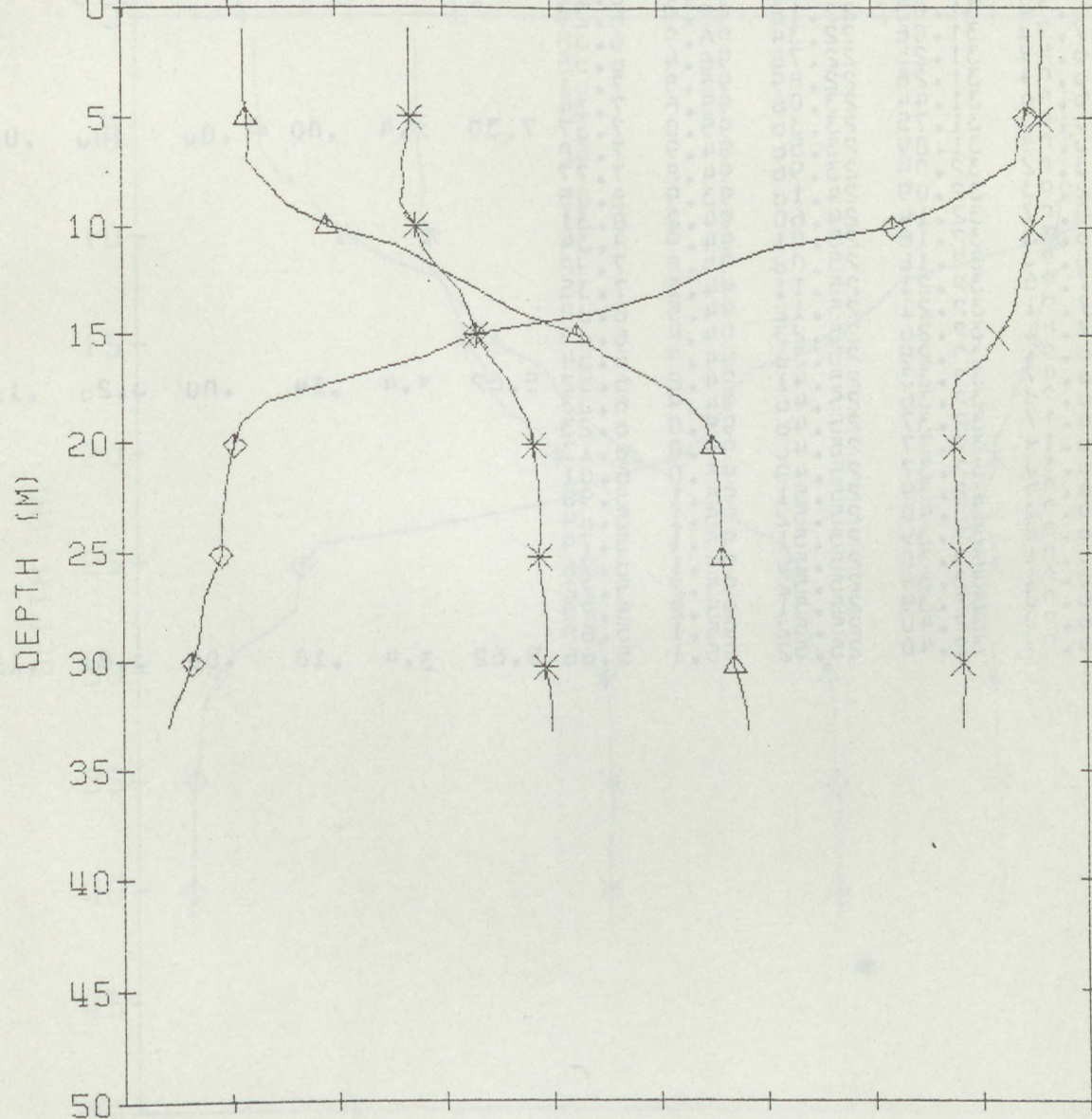
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SALINITY (0/00)

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TEMPERATURE (C)

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XCCC-20 SIA.154 LAT 38 36.7N; LONG 74 12.7W GMT 07.1 08/07/78
 DEPTH 045 ATR D/W 25.9/25.0 BARO 25.0 VTS 7 CLD TYP/CVR X/3
 WETR 1 WIND DIR/SPD 20/19 SEA DIR/HT 19/0 SWELL DIR/HT 13/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	MH4	N02	N03	S103	P04
1	24.82	30.61	20.11	97.6	5.32	5.35	.0	.00	.00	.00	.00
2	24.82	30.61	20.11	97.6	5.32						
3	24.82	30.61	20.11	98.3	5.31						
4	24.80	30.61	20.12	98.3	5.32						
5	24.76	30.61	20.13	98.3	5.33						
6	24.71	30.63	20.16	98.3	5.34						
7	24.28	30.66	20.31	98.2	5.35						
8	23.73	30.69	20.61	99.1	5.45						
9	22.80	30.65	20.71	98.0	5.52						
10	22.14	30.72	20.96	97.7	5.56	5.70	.2	.00	.00	.00	.00
11	20.71	30.62	21.27	97.4	5.76						
12	19.21	30.82	21.81	97.4	5.88						
13	18.33	30.91	21.97	97.1	6.16						
14	18.12	31.03	22.18	96.9	6.29						
15	17.73	31.06	22.34	96.9	6.38						
16	16.49	31.25	22.78	96.4	6.55						
17	15.33	31.26	22.89	95.8	7.01						
18	15.06	31.44	23.06	95.0	7.34						
19	15.33	31.75	23.36	95.0	7.67	7.30	.4	.00	.00	.00	.00
20	15.33	31.89	23.58	94.9	7.82						
21	15.22	32.04	23.96	94.8	7.77						
22	15.00	32.09	24.18	93.9	8.05						
23	15.00	32.14	24.60	94.2	8.31						
24	6.33	32.16	25.01	94.8	8.34						
25	6.33	32.18	25.08	94.8	7.93						
26	7.00	32.21	25.11	94.5	7.35						
27	7.00	32.21	25.12	94.5	6.88						
28	7.41	32.26	25.23	94.4	6.62						
29	6.11	32.29	25.33	94.8	6.54						
30	6.47	32.33	25.41	94.8	6.52	5.62	3.4	.14	.00	5.20	.13
31	6.36	32.36	25.46	94.8	6.53						
32	6.17	32.37	25.48	95.0	6.23						
33	6.14	32.37	25.48	95.0	6.13						
34	6.10	32.37	25.49	95.0	6.01						
35	6.06	32.39	25.51	95.1	5.90						
36	6.03	32.40	25.52	95.1	5.84						
37	6.02	32.39	25.51	95.1	5.79						
38	6.00	32.38	25.50	95.1	5.76						
39	6.00	32.39	25.52	95.2	5.72						
40	6.00	32.39	25.51	95.2	5.70						
41	6.00	32.40	25.52	95.1	5.68						
42	5.99	32.40	25.52	95.1	5.66	5.62	3.4	.18	.00	5.81	.15

KELEZ CRUISE XWCC-20 STATION 154 08/07/78

TRANSMISSIVITY (0/0)

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SIGMA-T

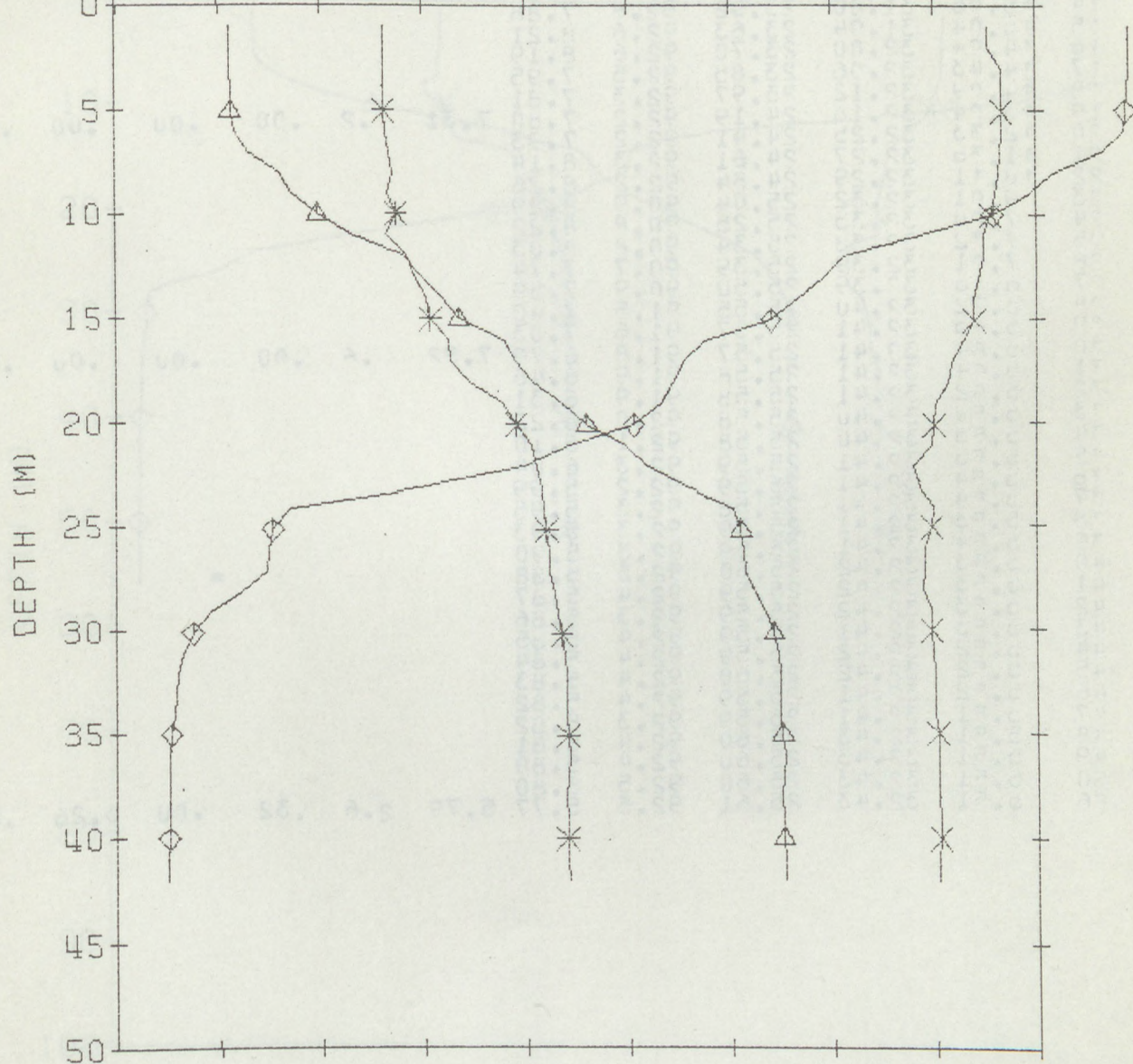
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SALINITY (0/00)

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TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XACC-20 SIA.155 LAT 39 31.0; LONG 74 4.0W GMT 08.8 08/07/78
 DEPTH 060 AIR D/W 26.1/25.0 BARO 25.0 VIS 7 CLU TYP/CVR X/3
 WETHR 1 WIND DIR/SPD 21/14 SEA DIR/HT 24/0 SWELL DIR/HT 24/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	25.42	31.18	20.36	95.5	5.24	5.27	.2	.00	.00	.00	.00
2	25.42	31.18	20.36	95.5	5.24						
3	25.42	31.18	20.36	95.5	5.24						
4	25.41	31.18	20.36	95.4	5.24						
5	25.37	31.16	20.36	95.4	5.24						
6	25.13	31.14	20.41	95.4	5.25						
7	24.73	31.16	20.54	95.3	5.28						
8	26.58	31.01	20.77	95.1	5.41						
9	22.75	31.06	21.04	94.9	5.49						
10	21.36	31.18	21.52	94.9	5.70	5.91	2.7	.21	.00	4.71	.15
11	19.80	31.24	22.07	94.4	5.98						
12	18.99	31.29	22.70	93.9	6.48						
13	18.74	31.34	23.04	93.2	7.15						
14	18.06	31.30	23.52	92.2	7.86						
15	18.07	31.34	23.63	92.0	8.21						
16	14.44	32.00	23.70	92.0	8.19						
17	14.43	32.06	23.85	92.0	7.95						
18	13.22	32.12	23.97	92.0	7.81						
19	13.44	32.18	24.19	92.0	7.80	7.31	.2	.00	.00	.00	.00
20	12.26	32.25	24.41	92.0	7.93						
21	11.20	32.27	24.61	92.0	8.14						
22	10.11	32.29	24.84	92.0	8.26						
23	9.00	32.32	25.04	92.0	8.29						
24	7.77	32.33	25.55	92.0	8.22						
25	7.77	32.33	25.34	92.0	8.03						
26	7.77	32.33	25.30	92.0	7.74						
27	7.77	32.33	25.50	92.0	7.59						
28	7.77	32.40	25.55	91.5	7.40						
29	7.77	32.41	25.57	91.5	7.03						
30	7.77	32.41	25.57	91.5	6.79	7.82	.6	.00	.00	.00	.00
31	7.77	32.41	25.57	91.5	6.48						
32	7.77	32.41	25.57	91.5	6.31						
33	7.77	32.40	25.58	92.0	6.22						
34	7.77	32.40	25.58	92.0	6.10						
35	7.77	32.41	25.59	92.0	6.04						
36	7.77	32.41	25.59	92.0	5.99						
37	7.77	32.41	25.59	92.0	5.95						
38	7.77	32.41	25.59	92.0	5.93						
39	7.77	32.41	25.59	92.0	5.90						
40	7.77	32.42	25.60	92.0	5.88						
41	7.77	32.42	25.60	92.0	5.87						
42	7.77	32.42	25.60	92.0	5.86						
43	7.77	32.41	25.60	92.0	5.85						
44	7.77	32.42	25.60	92.0	5.84						
45	7.77	32.42	25.60	92.0	5.83						
46	7.77	32.41	25.59	92.0	5.82						
47	7.77	32.41	25.59	92.0	5.82						
48	7.77	32.43	25.60	92.0	5.81						
49	7.77	32.43	25.60	92.0	5.80						
50	7.77	32.43	25.60	92.0	5.80						
51	7.77	32.43	25.61	92.0	5.77	5.79	2.6	.32	.00	5.26	.20

KELEZ CRUISE XWCC-20 STATION 155 08/07/78

TRANSMISSIVITY (0/0)

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SIGMA-T

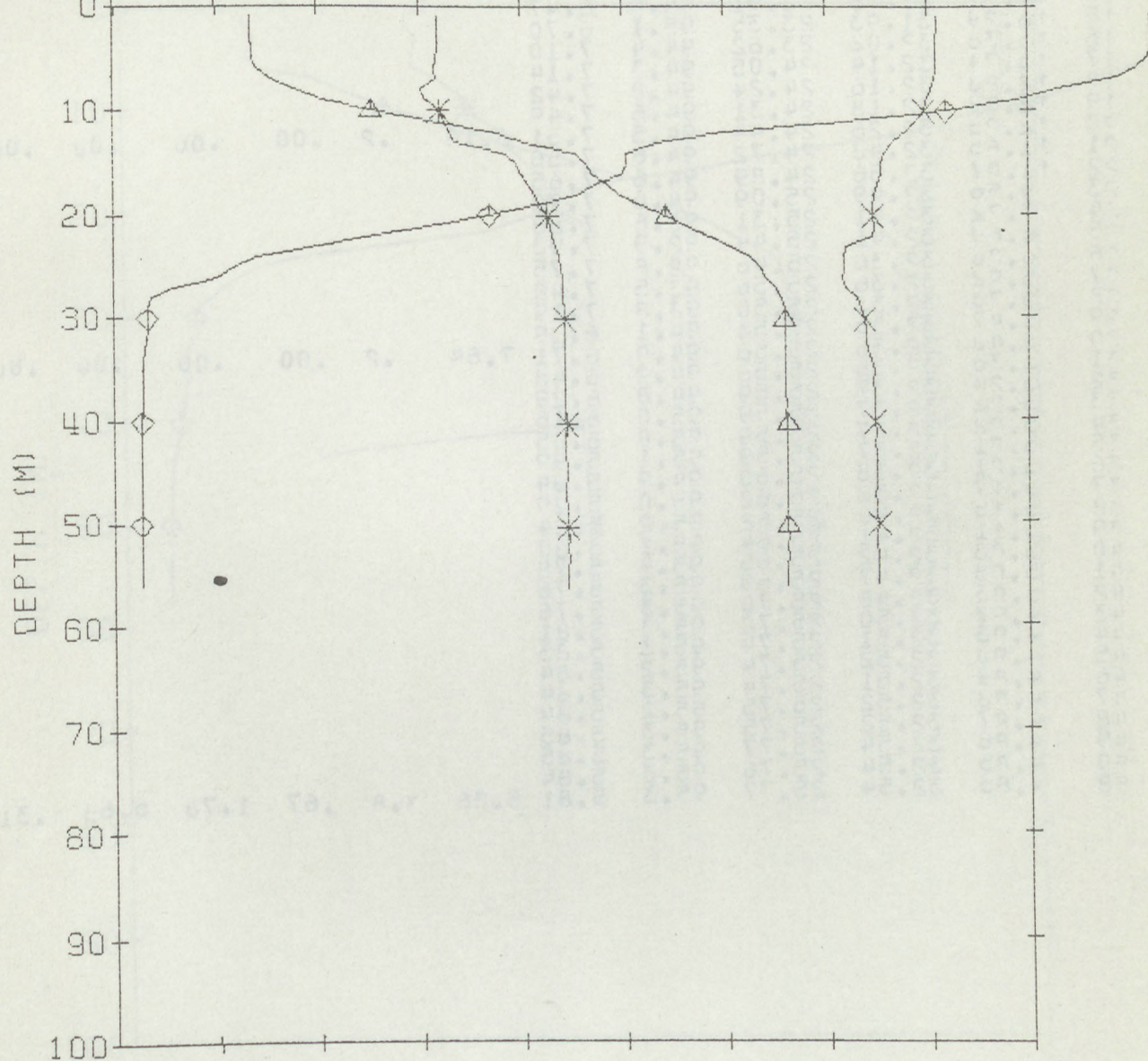
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SALINITY (0/00)

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TEMPERATURE (C)

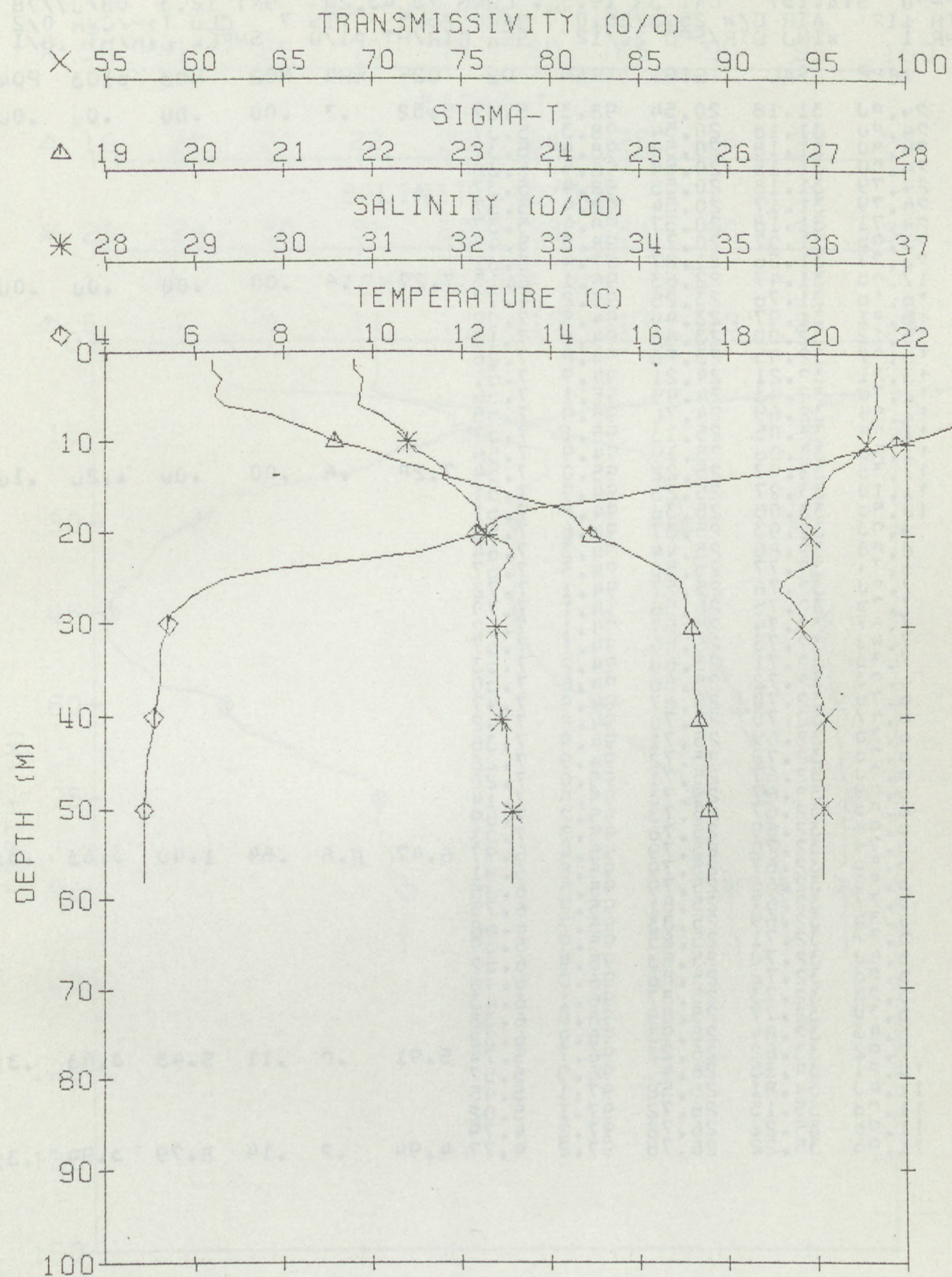
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X-CC-20 STA.156 LAT 38 25.0,; LONG 73 53.5W GMT 10.6 08/07/78
 DPTH 060 AIR D/W 26.7/25.6 BARO 25.3 VTS 7 CLD TYP/CVR 0/2
 WETHR 1 WIND DIR/SPD 21/12 SEA DIR/HT 21/0 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	S103	P04
1	24.95	30.77	20.19	98.3	5.30	5.35	.2	.00	.00	.00	.00
2	24.94	30.77	20.19	98.3	5.30						
3	24.88	30.88	20.29	98.2	5.30						
4	24.87	30.86	20.25	98.3	5.29						
5	24.89	30.84	20.23	98.3	5.29						
6	24.63	30.83	20.33	98.2	5.30						
7	23.47	31.06	20.84	98.3	5.40						
8	23.00	31.20	21.08	98.0	5.51						
9	22.47	31.35	21.34	97.8	5.61						
10	21.76	31.38	21.56	97.7	5.70	5.80	2.8	.29	1.12	5.60	.20
11	20.64	31.49	21.95	97.1	5.94						
12	20.00	31.66	22.22	96.8	6.07						
13	19.00	31.79	22.60	95.8	6.24						
14	17.57	31.78	22.91	95.4	6.47						
15	16.33	31.93	23.33	95.1	6.70						
16	15.33	32.02	23.62	94.4	7.10						
17	13.74	32.14	24.00	94.3	7.14						
18	12.88	32.16	24.24	94.0	7.42						
19	12.33	32.18	24.31	94.0	7.46						
20	12.33	32.26	24.44	94.5	7.51	6.18	.2	.00	.00	.00	.00
21	11.77	32.48	24.72	94.6	7.56						
22	10.56	32.56	24.89	94.6	7.65						
23	9.49	32.49	25.09	94.6	7.70						
24	7.72	32.41	25.31	94.3	7.88						
25	6.41	32.41	25.44	94.2	7.93						
26	5.36	32.36	25.46	94.0	7.75						
27	5.00	32.36	25.50	94.0	7.48						
28	5.00	32.36	25.50	94.0	7.19						
29	5.00	32.36	25.50	94.1	6.39						
30	5.00	32.36	25.50	94.1	6.71	7.64	.2	.00	.00	.00	.00
31	5.00	32.36	25.50	94.1	6.48						
32	5.00	32.36	25.50	94.0	6.29						
33	5.00	32.36	25.50	94.0	6.16						
34	5.00	32.36	25.50	94.0	6.05						
35	5.00	32.36	25.50	94.0	6.04						
36	5.00	32.36	25.50	94.0	6.04						
37	5.00	32.36	25.50	94.0	6.04						
38	5.00	32.36	25.50	94.0	6.04						
39	5.00	32.36	25.50	94.0	6.04						
40	5.00	32.36	25.50	94.0	6.04						
41	5.00	32.36	25.50	94.0	6.04						
42	5.00	32.36	25.50	94.0	6.04						
43	5.00	32.36	25.50	94.0	6.04						
44	5.00	32.36	25.50	94.0	6.04						
45	5.00	32.36	25.50	94.0	6.04						
46	5.00	32.36	25.50	94.0	6.04						
47	5.00	32.36	25.50	94.0	6.04						
48	5.00	32.36	25.50	94.0	6.04						
49	5.00	32.36	25.50	94.0	6.04						
50	5.00	32.36	25.50	94.0	6.04						
51	5.00	32.36	25.50	94.0	6.04						
52	5.00	32.36	25.50	94.0	6.04						
53	5.00	32.36	25.50	94.0	6.04						
54	5.00	32.36	25.50	94.0	6.04						
55	5.00	32.36	25.50	94.0	6.04						
56	5.00	32.36	25.50	94.0	6.04						
57	5.00	32.36	25.50	94.0	6.04						
58	5.00	32.36	25.50	94.0	6.04						
59	5.00	32.36	25.50	94.0	6.04						
60	5.00	32.36	25.50	94.0	6.04						
61	5.00	32.36	25.50	94.0	6.04						
62	5.00	32.36	25.50	94.0	6.04						
63	5.00	32.36	25.50	94.0	6.04						
64	5.00	32.36	25.50	94.0	6.04						
65	5.00	32.36	25.50	94.0	6.04						
66	5.00	32.36	25.50	94.0	6.04						
67	5.00	32.36	25.50	94.0	6.04						
68	5.00	32.36	25.50	94.0	6.04						
69	5.00	32.36	25.50	94.0	6.04						
70	5.00	32.36	25.50	94.0	6.04						
71	5.00	32.36	25.50	94.0	6.04						
72	5.00	32.36	25.50	94.0	6.04						
73	5.00	32.36	25.50	94.0	6.04						
74	5.00	32.36	25.50	94.0	6.04						
75	5.00	32.36	25.50	94.0	6.04						
76	5.00	32.36	25.50	94.0	6.04						
77	5.00	32.36	25.50	94.0	6.04						
78	5.00	32.36	25.50	94.0	6.04						
79	5.00	32.36	25.50	94.0	6.04						
80	5.00	32.36	25.50	94.0	6.04						
81	5.00	32.36	25.50	94.0	6.04						
82	5.00	32.36	25.50	94.0	6.04						
83	5.00	32.36	25.50	94.0	6.04						
84	5.00	32.36	25.50	94.0	6.04						
85	5.00	32.36	25.50	94.0	6.04						
86	5.00	32.36	25.50	94.0	6.04						
87	5.00	32.36	25.50	94.0	6.04						
88	5.00	32.36	25.50	94.0	6.04						
89	5.00	32.36	25.50	94.0	6.04						
90	5.00	32.36	25.50	94.0	6.04						
91	5.00	32.36	25.50	94.0	6.04						
92	5.00	32.36	25.50	94.0	6.04						
93	5.00	32.36	25.50	94.0	6.04						
94	5.00	32.36	25.50	94.0	6.04						
95	5.00	32.36	25.50	94.0	6.04						
96	5.00	32.36	25.50	94.0	6.04						
97	5.00	32.36	25.50	94.0	6.04						
98	5.00	32.36	25.50	94.0	6.04						
99	5.00	32.36	25.50	94.0	6.04						
100	5.00	32.36	25.50	94.0	6.04						

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X-CC-20 SIA.157 LAT 33 19.5; LONG 73 43.2W GMT 12.3 08/07/78
 DEPTH 112 AIR D/W 25.8/25.0 BARO 25.5 VIS 7 CLO TYP/CVR 0/2
 WETHR 1 WIND DIR/SPD 21/12 SEA DIR/HT 21/0 SWELL DIR/HT 18/1

DEPTH	TEMP	SAL	SIGT	TRAN	02	02W	NH4	N02	N03	SI03	P04
1	24.80	31.18	20.54	98.3	5.37	5.52	.3	.00	.00	.00	.00
2	24.80	31.18	20.54	98.3	5.37						
3	24.80	31.18	20.54	98.4	5.37						
4	24.80	31.18	20.54	98.4	5.38						
5	24.79	31.18	20.55	98.4	5.37						
6	24.79	31.17	20.54	98.4	5.37						
7	24.71	31.18	20.57	98.4	5.37						
8	23.95	31.07	20.71	98.3	5.43						
9	23.27	31.26	21.87	97.4	5.81						
10	17.35	31.47	22.63	96.15	6.15	7.27	.6	.00	.00	.00	.00
11	16.16	31.76	23.25	95.2	6.77						
12	15.81	31.97	23.49	94.9	7.00						
13	15.12	32.00	23.66	94.6	7.13						
14	13.87	32.05	23.96	94.2	7.26						
15	13.21	32.21	24.21	94.9	7.51						
16	12.70	32.45	24.49	95.1	7.56						
17	12.64	32.69	24.70	95.0	7.55						
18	11.84	33.05	25.13	95.1	7.53						
19	11.56	33.06	25.19	94.9	7.56						
20	11.38	33.07	25.22	95.0	7.54	7.28	.6	.00	.00	1.26	.10
21	11.10	33.07	25.28	94.9	7.51						
22	10.55	33.06	25.36	94.2	7.51						
23	9.93	32.93	25.37	94.6	7.53						
24	8.38	32.80	25.44	94.3	7.64						
25	8.77	32.77	25.50	94.3	7.67						
26	7.75	32.76	25.57	94.1	7.72						
27	7.75	32.75	25.56	94.1	7.70						
28	7.74	32.74	25.57	94.1	7.62						
29	7.73	32.73	25.59	94.1	7.57						
30	7.71	32.71	25.60	94.2	7.53						
31	6.72	32.72	25.66	94.6	7.50						
32	6.70	32.70	25.67	94.9	7.47						
33	6.70	32.70	25.70	94.2	7.42						
34	6.69	32.69	25.71	94.9	7.36						
35	6.70	32.70	25.72	95.0	7.28						
36	6.67	32.67	25.71	95.0	7.20						
37	6.67	32.67	25.73	95.0	7.14						
38	6.67	32.67	25.76	95.2	7.09						
39	6.69	32.70	25.79	95.4	7.03	6.47	2.6	.64	1.40	3.63	.31
40	6.67	32.67	25.79	95.5	6.91						
41	6.66	32.66	25.79	95.5	6.85						
42	6.67	32.67	25.81	95.7	6.75						
43	6.69	32.69	25.85	95.9	6.68						
44	6.71	32.71	25.85	95.9	6.59						
45	6.70	32.70	25.86	95.9	6.52						
46	6.72	32.72	25.86	96.0	6.46						
47	6.73	32.73	25.87	96.1	6.43						
48	6.77	32.77	25.89	96.0	6.38						
49	6.84	32.84	25.93	96.0	6.32						
50	7.21	33.62	26.22	96.7	5.74	5.91	.0	.11	5.43	3.63	.31
60	10.22	34.35	26.47	96.9	5.57						
70	11.40	34.81	26.58	97.1	5.45						
80	11.38	35.15	26.72	97.1	5.02						
90	11.06	35.22	26.78	97.2	4.79						
100	11.06	35.22	26.78	97.2	4.77	4.94	.2	.14	8.79	3.99	.31

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