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NOAA Data Report ERL MESA-37



MESA NEW YORK BIGHT PROJECT
EXPANDED WATER COLUMN CHARACTERIZATION CRUISE (XWCC 14)
NOAA SHIP GEORGE B. KELEZ, JUNE - JULY 1977

John B. Hazelworth
Terren M. Niedrauer
Philip G. Hanson

Marine Ecosystems Analysis Program
Boulder, Colorado
February 1978

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NATIONAL OCEANIC AND
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Atlantic Oceanographic and Meteorological Laboratories
Miami, Florida

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February 1978



**UNITED STATES
DEPARTMENT OF COMMERCE**
Juanita M. Kreps, Secretary

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
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CRUISE (XWCC 14) NOAA SHIP GEORGE B. KELEZ
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During the period 27 June-1 July 1977, 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 presents 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 publication presenting oceanographic data from the New York Bight. During June-July 1977, a cruise of 51 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 (Fig. 1 and Tab. 1). Only approximately half of the expanded grid was sampled during XWCC-14. It was a special planned cruise, designed to sample only within the area where an anoxia condition had occurred during the previous year. Cruise dates 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).

This report is the thirteenth 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 a,b, 1977), Hazelworth and Darnell (1976), Kolitz et al., (1976 a,b) and Hazelworth et al., (1977 a,b, 1978 a,b).

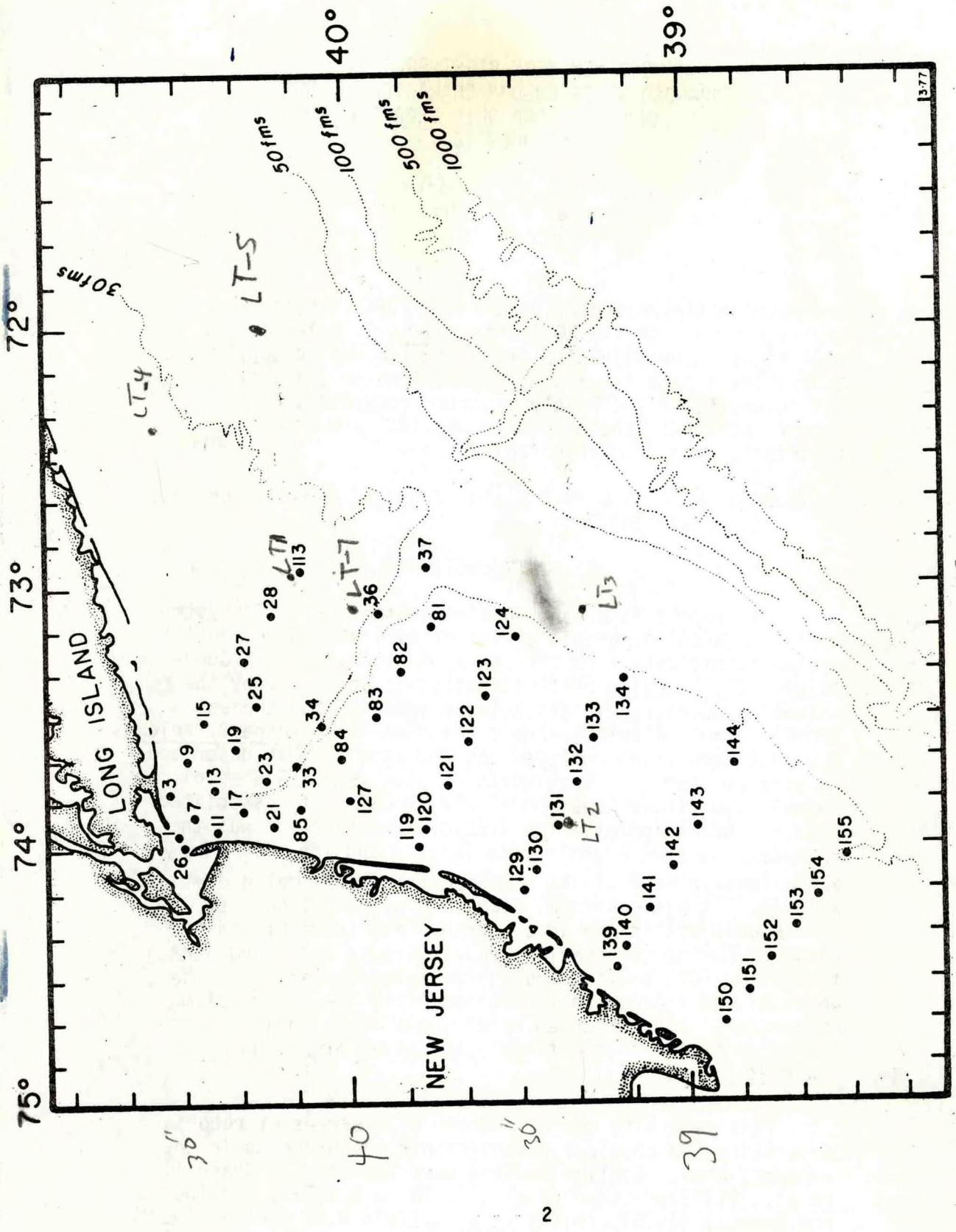


Figure 1. Locations of stations occupied during XWCC-14.

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TABLE 1.

NEW YORK BIGHT STATION POSITIONS

STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE
1	40°30.2'	73°57.3'	119	39°48.4'	74°00.0'
3	40°31.5'	73°48.4'	120	39°46.5'	73°55.5'
7	40°26.9'	73°53.0'	121	39°42.9'	73°46.5'
9	40°28.3'	73°39.6'	122	39°39.5'	73°36.0'
11	40°22.2'	73°56.7'	123	39°35.0'	73°26.0'
13*	40°23.3'	73°47.0'	124	39°30.0'	73°12.2'
15	40°25.2'	73°30.4'	127	39°57.2'	73°53.4'
17	40°18.5'	73°51.8'	129	39°30.0'	74°11.0'
19	40°20.2'	73°37.9'	130	39°27.7'	74°06.1'
21	40°13.5'	73°56.1'	131	39°23.2'	73°55.5'
23	40°14.8'	73°45.6'	132	39°20.0'	73°46.5'
25	40°16.9'	73°28.3'	133	39°16.9'	73°35.8'
26	40°29.0'	73°59.5'	134	39°11.1'	73°21.9'
27	40°18.0'	73°17.5'	139	39°13.5'	74°30.0'
28	40°13.5'	73°7.0'	140	39°11.0'	74°24.5'
33	40°10.0'	73°41.5'	141	39°06.8'	74°15.2'
34	40°5.5'	73°31.5'	142	39°02.9'	74°05.9'
36	39°55.0'	73°6.5'	143	38°58.1'	73°56.0'
37	39°46.0'	72°57.0'	144	38°51.6'	73°42.0'
81	39°44.5'	73°10.0'	150	38°53.8'	74°41.9'
82	39°50.5'	73°20.5'	151	38°49.7'	74°34.0'
83	39°56.5'	73°30.5'	152	38°45.4'	74°27.2'
84	40°2.0'	73°41.0'	153	38°41.5'	74°20.0'
85	40°8.0'	73°51.5'	154	38°37.1'	74°12.8'
113	40°8.5'	72°55.5'	155	38°31.4'	74°04.5'

*Station occupied twice

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

Cruise	Date	AOML Personnel
XWCC-14	June 27-July 1, 1977	Donald K. Atwood Chief Scientist George A. Berberian Dale Finch

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 calibration correction was calculated. However, the transmissivity sensor was calibrated before the cruise. Transmissivity was recorded only during the first several stations. Then the sensor malfunctioned. The ph sensor was inoperative during the entire 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 the 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)

Table 3. Correction Factors and Data Accuracy for
Cruise XWCC-14

	Temp. °C	Salinity o/oo	O ₂	Depth (Meters)
Calib. Offset	-.0121T+2.1788	.0046T-.9642	-.0071T+1.9382	0.0
Calib. Recheck				
\bar{X}	+0.00	+0.00	+0.00	
S _x	.04	.03	.05	
Precision (Repeatability)				<u>+0.5</u>

2. Data Presentation

Tables of the interpolated data and the corresponding depth profiles of temperature, salinity, sigma-t, and transmissivity are given in Section 6, 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 cast. Profiles were produced from the corrected 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, but south of, the axis of the Hudson Shelf Valley (Figures 5-7).

3. ACKNOWLEDGEMENTS

The authors express their thanks to the officers and crew of the NOAA Ship George B. Kelez, under the command of Capt. M. Kawka, 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.

4. REFERENCES

- Charnell, R. L., M. E. Darnell, G. A. Berberian, B. L. Kolitz, and J. B. Hazelworth (1976): New York Bight Project, Water Column Characterization Cruises 1 and 2 of the NOAA Ship Researcher, 4-15 March, 5-14 May, 1974, NOAA ERL MESA-18, Marine Ecosystems Analysis Program Off., Boulder, Co., 220 pp.
- Hazelworth, J. B., B. L. Kolitz, R. B. Starr, R. L. Charnell, and G. A. Berberian (1974): MESA New York Bight Project, Water Column Sampling Cruises #1-5 of the NOAA Ship Ferrel, August-November 1973, MESA Report No. 74-2, U. S. Govt. Print. Off., Washington D. C., 191 pp.
- Hazelworth, J. B., B. L. Kolitz, R. B. Starr, R. L. Charnell, G. A. Berberian, and M. A. Weiselberg (1975): MESA New York Bight Project, Water Column Sampling Cruises #6-8 of the NOAA Ship Ferrel, April-June 1974, NOAA Data Report MESA-1, Marine Ecosystems Analysis Program Off., Boulder, Co., 177 pp.
- Hazelworth, J. B., B. L. Kolitz, R. B. Starr, R. L. Charnell, G. A. Berberian and M. A. Weiselberg (1975): MESA New York Bight Project, Water Column Sampling Cruises #9-12 of the NOAA Ship Ferrel, July-November 1974, NOAA Data Report ERL MESA-3, Marine Ecosystems Analysis Program Off., Boulder, Co., 233 pp. (Microfiche).
- Hazelworth, J. B. and M. E. Darnell (1976): MESA New York Bight Project, Expanded Water Column Characterization Cruises (XWCC-2 and 3) NOAA Ship Researcher, 22 February - 5 March, 9-12 April, 1975, NOAA Data Report ERL MESA-23, Marine Ecosystems Analysis Program Off., Boulder, Co., 236 pp. (Microfiche).
- Hazelworth, J. B., S. R. Cummings, R. B. Starr, G. A. Berberian (1977): MESA New York Bight Project Expanded Water Column Characterization Cruise (XWCC 8) NOAA Ship George B. Kelez, April 1976, NOAA Data Report ERL MESA-27, Marine Ecosystems Analysis Program Off., Boulder, Co., 108 pp.
- Hazelworth, J. B., S. R. Cummings, S. M. Minton, and G. A. Berberian (1977): MESA New York Bight Project, Expanded Water Column Characterization Cruise (XWCC 11) NOAA Ship Researcher, September 1976, NOAA Data Report ERL MESA-29, Marine Ecosystems Analysis Program, Boulder, Co., 189 pp.
- Hazelworth, J. B., A. Herman, T. M. Niedrauer, and P. G. Hanson (1978): MESA New York Bight Project Expanded Water Column Characterization Cruise (XWCC-12) NOAA Ship George B. Kelez, April-May 1977, NOAA Data Report ERL MESA- , Marine Ecosystems Analysis Program Off., Boulder, Co., In Press.

- Hazelworth, J. B., T. M. Niedrauer, and P. G. Hanson (1978): MESA New York Bight Project Expanded Water Column Characterization Cruise (XWCC 13) NOAA Ship George B. Kelez, May-June 1977, NOAA Data Report MESA- , Marine Ecosystems Analysis Program Off., Boulder Co., In Press.
- Hazelworth, J. B., R. B. Starr, S. R. Cummings, G. A. Berberian (1977): MESA New York Bight Project, Expanded Water Column Characterization Cruise (XWCC 9) NOAA Ship George B. Kelez, May 1976, NOAA Data Report ERL MESA- , Marine Ecosystems Analysis Program Off., Boulder, Co., In Press.
- Kolitz, B. L., J. B. Hazelworth, R. B. Starr, and S. R. Cummings (1976): MESA New York Bight Project, Expanded Water Column Characterization Cruise (XWCC 4-5) NOAA Ship George B. Kelez, May-June 1975, NOAA Data Report ERL MESA-24, Marine Ecosystems Analysis Program Off., 230 pp., (Microfiche).
- Kolitz, B. L., J. B. Hazelworth, R. B. Starr, G. A. Berberian, and S. R. Cummings (1976): MESA New York Bight Project, Expanded Water Column Characterization Cruise (XWCC 7) NOAA Ship George B. Kelez, December 1975, NOAA Data Report ERL MESA-26, Marine Ecosystems Analysis Program Off., Boulder, Co., 121 pp., (Microfiche).
- National Oceanographic Data Center Manual Series (1964): Processing Physical and Chemical Data from Oceanographic Stations, Part 1. Code and Key punching, Publication M-2 revised, U. S. Naval Oceanographic Office, Washington, D. C., 117 pp.
- Starr, R. B., G. A. Berberian, and M. A. Weiselberg (1976): MESA New York Bight Project, Expanded Water Column Characterization Cruise (XWCC 1) R/V Advance II, January 1975, NOAA Data Report ERL MESA-22, Marine Ecosystems Analysis Program Off., Boulder, Co., 43 pp., (Microfiche).
- Starr, R. B., J. B. Hazelworth, S. R. Cummings, and G. A. Berberian (1977): MESA New York Bight Project, Expanded Water Column Characterization Cruise (XWCC 10) NOAA Ship George B. Kelez, 28 June-1 July 1976, NOAA Data Report ERL MESA-28, Marine Ecosystems Analysis Program Off., Boulder, Co., 91 pp.
- Starr, R. B., J. B. Hazelworth, and G. A. Berberian (1976): New York Bight Project, Expanded Water Column Characteristic Cruise (XWCC 6) NOAA Ship George B. Kelez, September-October 1975, NOAA Data Report ERL MESA-25, Marine Ecosystems Analysis Program Off., 132 pp., (Microfiche).

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

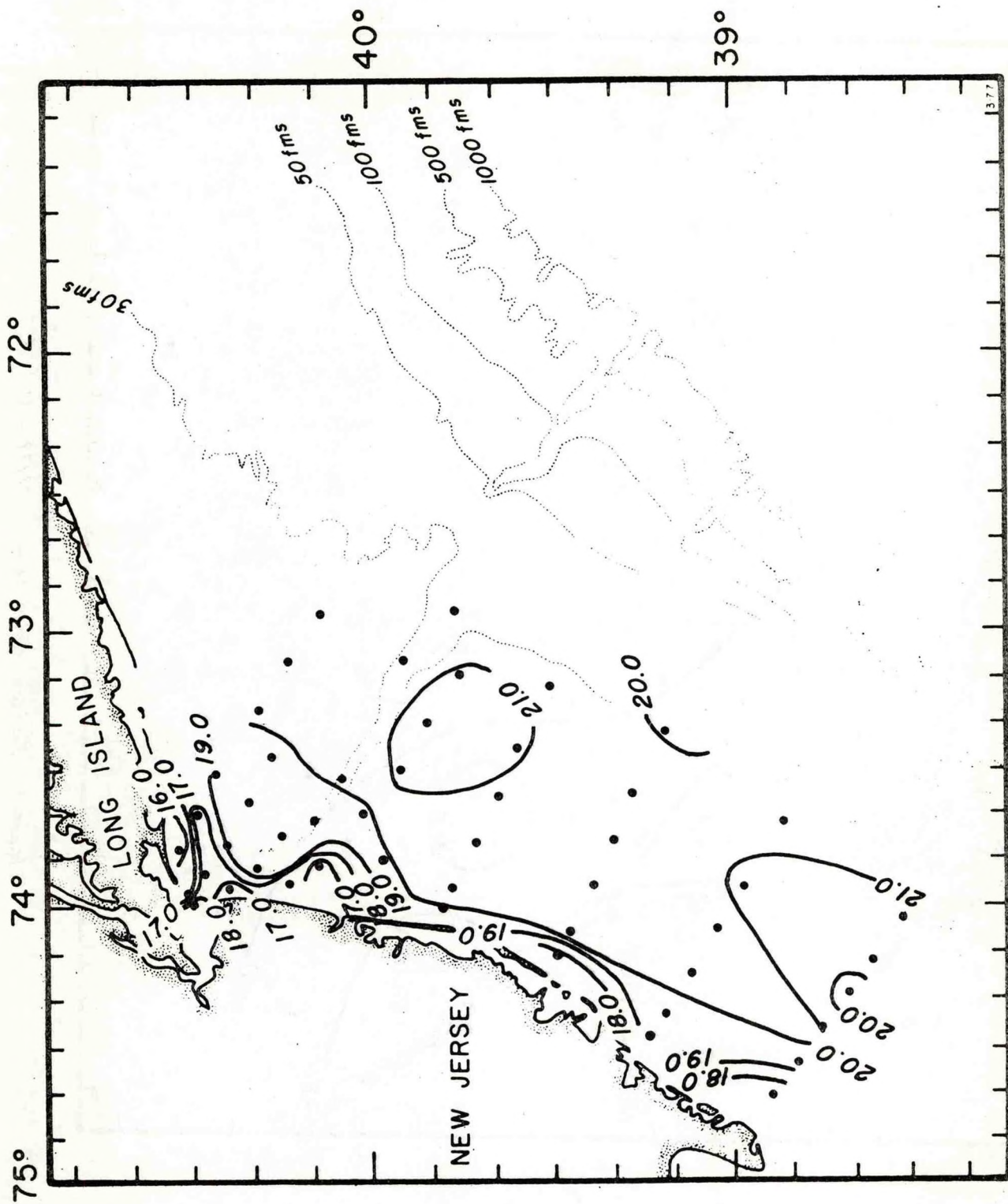


Figure 2. Surface Water Temperatures 06/27/77 - 07/01/77

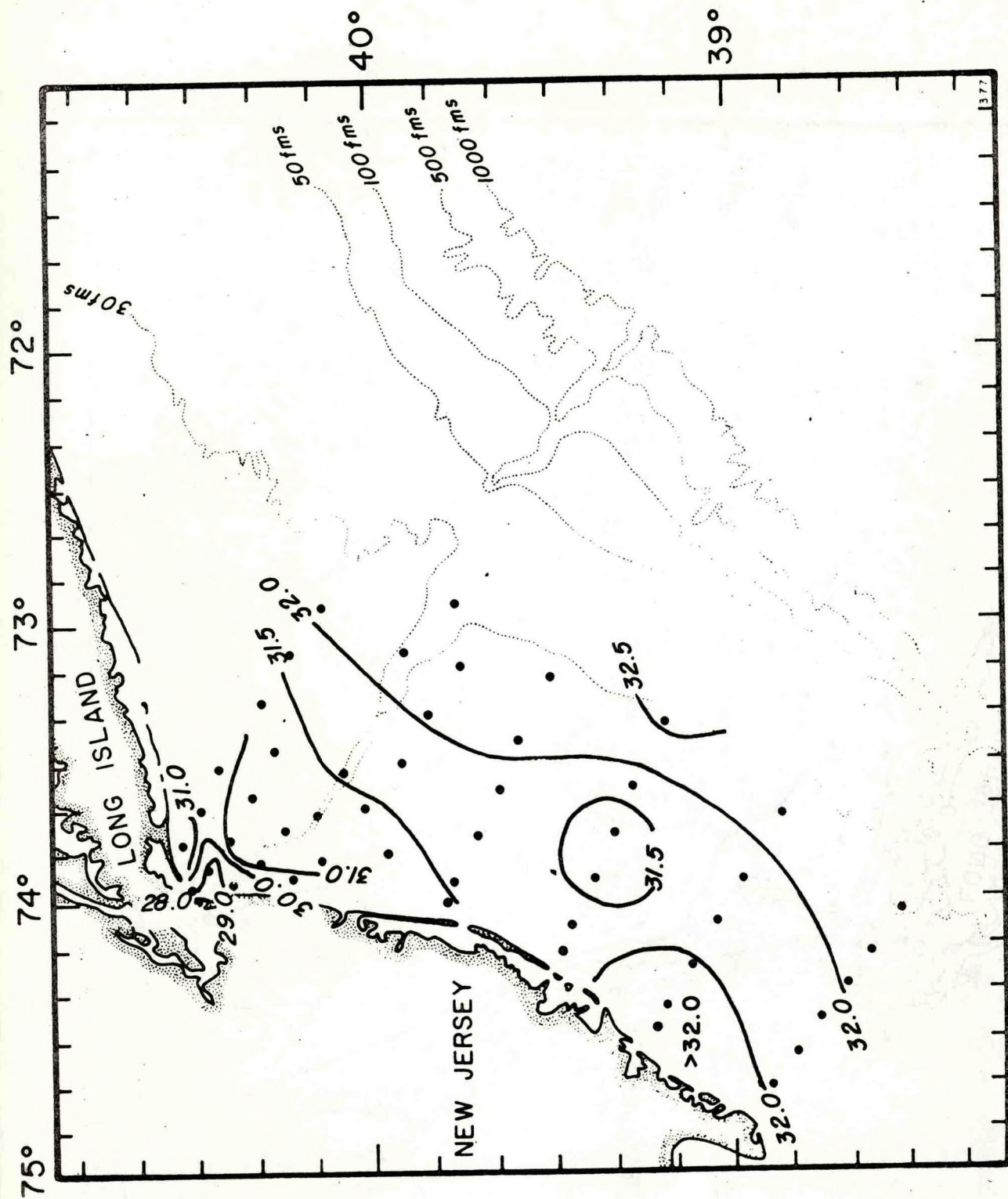


Figure 3. Surface Salinities 06/27/77 - 07/01/77

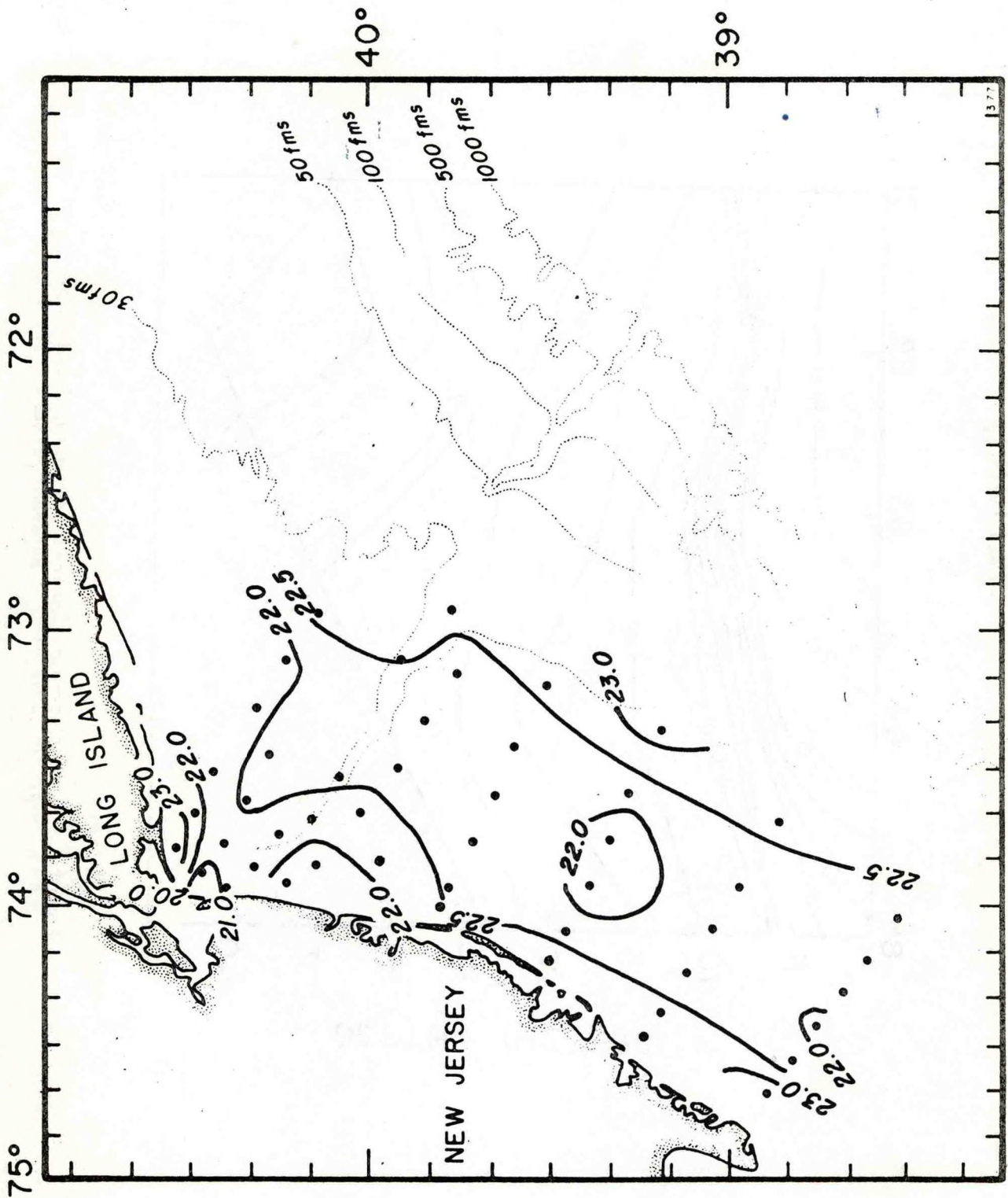


Figure 4. Surface Sigma-t 06/27/77 - 07/01/77

STATIONS

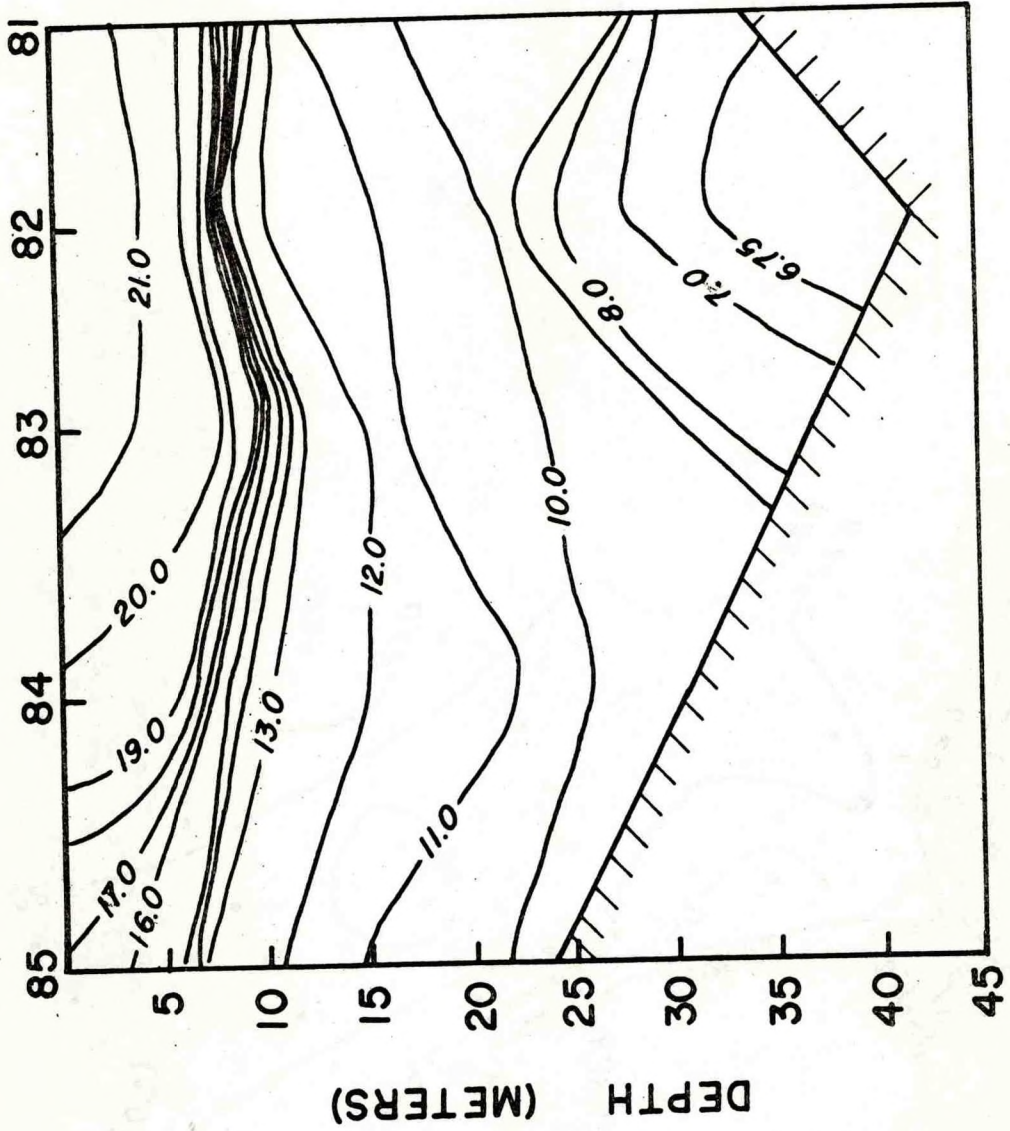


Figure 5. Vertical temperature contours south of Hudson Shelf Valley, 06/27/77 - 07/01/77. Reference Figure 1 for track line.

STATIONS

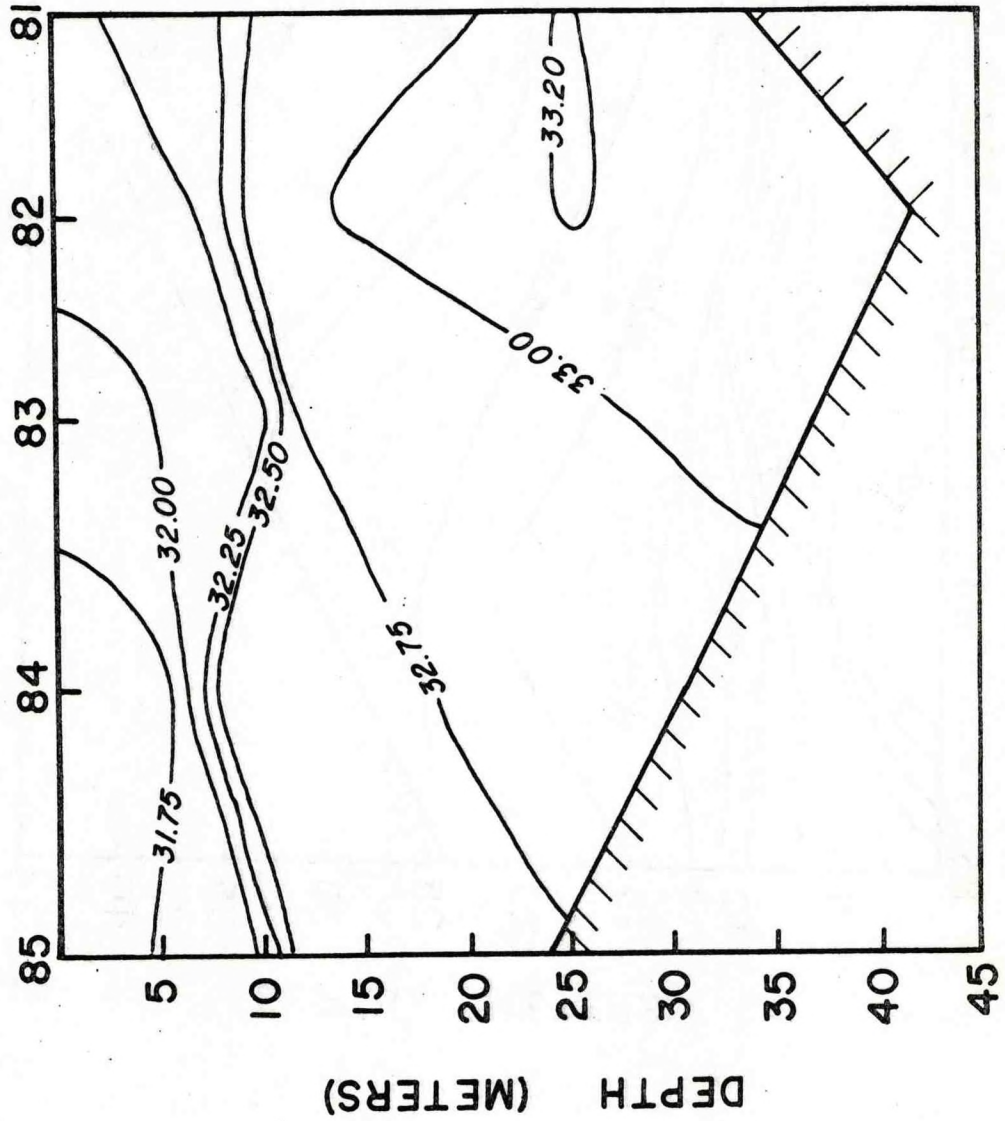


Figure 6. Vertical salinity contours south of Hudson Shelf Valley. 06/27/77 - 07/01/77. Reference Figure 1 for track line.

STATIONS

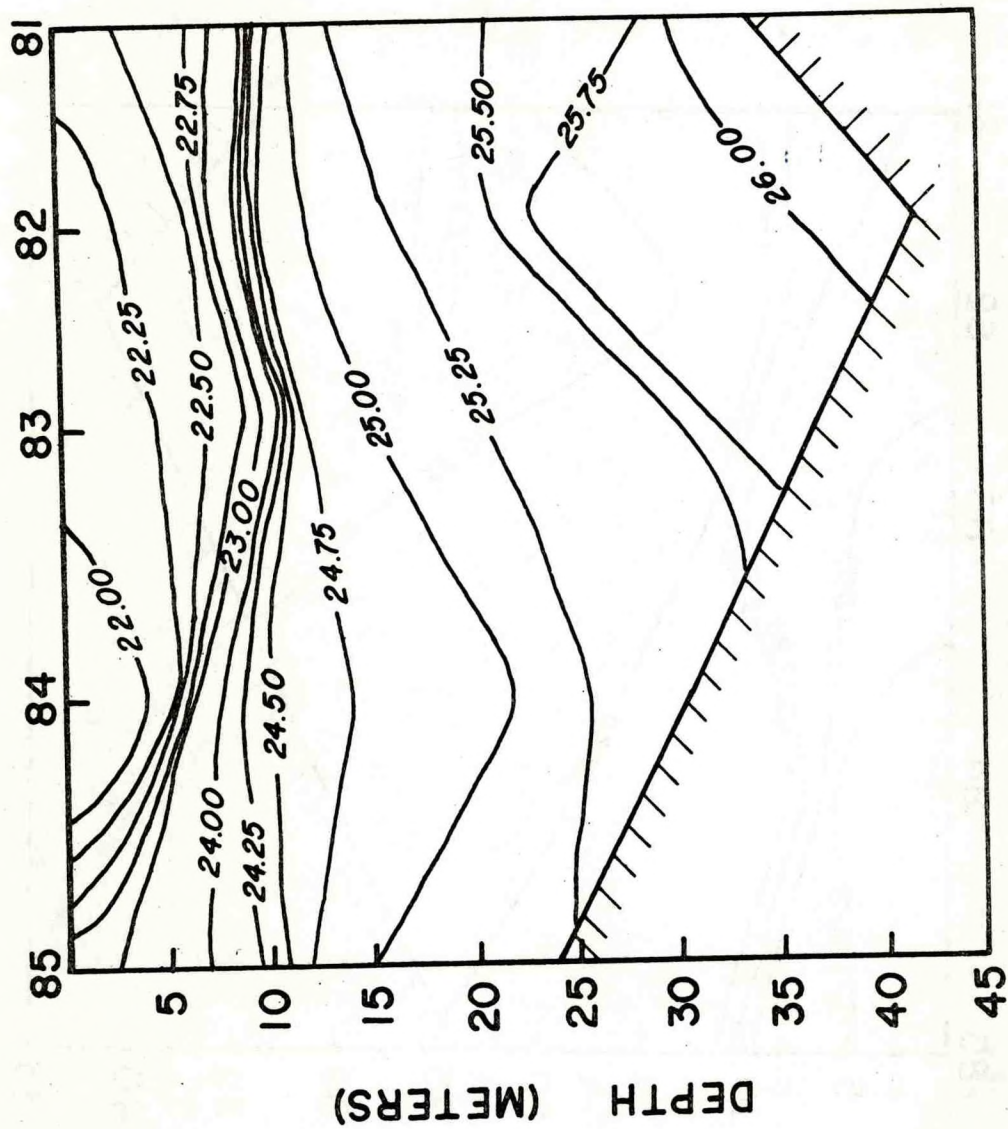


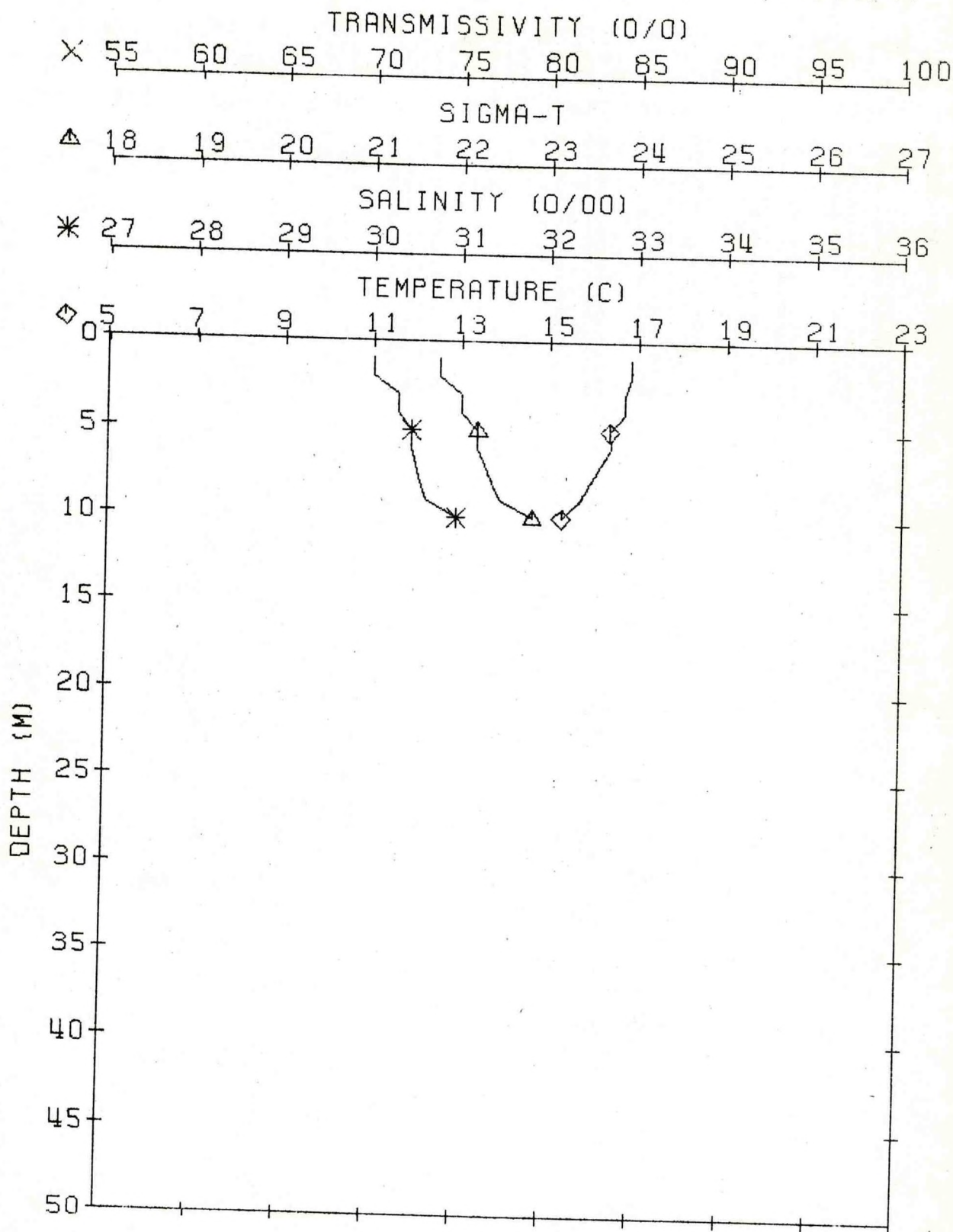
Figure 7. Vertical sigma-t contours south of Hudson Shelf Valley
06/27/77 - 07/01/77. Reference Figure 1 for track line.

6. STATION DATA

XWCC-14 STA. 1 LAT 40 30.5N; LONG 73 56.5W GMT 16.5 07/01/77
 DEPTH 11 AIR D/W 50.0/11.1 BARO 10.0 VIS 7 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 27/16 SEA DIR/HT 27/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	16.83	29.99	21.74			4.61	.64	.54	3.12	.83
2	16.83	29.99	21.74			4.61				
3	16.69	30.27	21.99			4.90				
4	16.67	30.28	22.00			4.93				
5	16.36	30.43	22.18			4.93				
6	16.38	30.43	22.18			4.90				
7	16.16	30.47	22.26			4.84				
8	15.91	30.52	22.35			4.88				
9	15.68	30.59	22.46			4.88				
10	15.27	30.94	22.82			4.81	.34	.53	5.62	.68

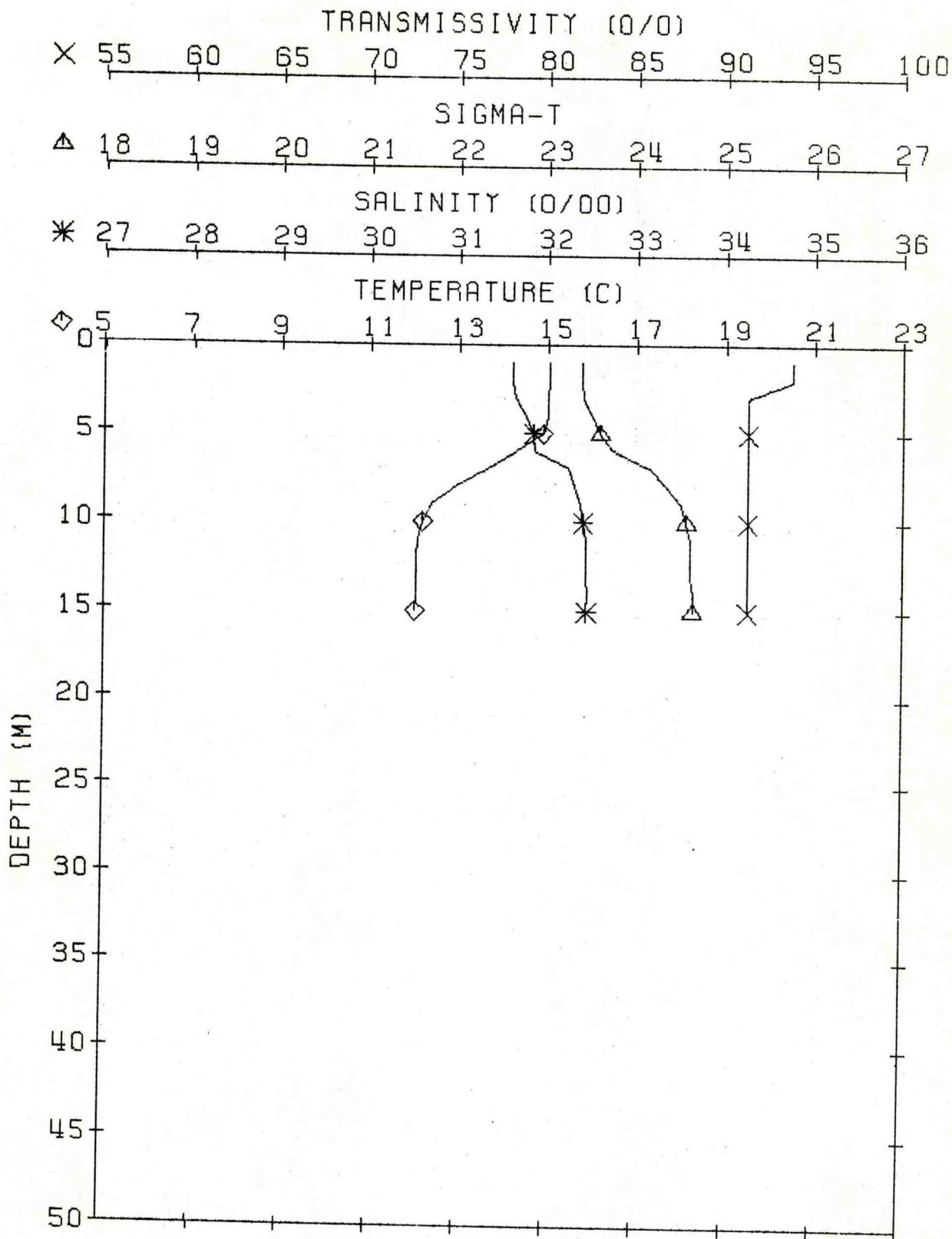
KELEZ CRUISE XWCC-14 STATION 1 07/01/77



XWCC-14 STA. 3 LAT 40 31.5N; LONG 73 48.4W GMT 15.1 07/01/77
 DEPTH 17 AIR D/W 38.9/16.7 BARO 09.5 VIS 6 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 26/15 SEA DIR/HT 26/0 SWELL DIR/HT 19/3

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	15.01	31.59	23.37	93.7		5.19				
2	15.01	31.59	23.37	93.7		5.19	.04	.07	2.79	.31
3	14.99	31.62	23.40	91.2		5.12				
4	14.98	31.74	23.49	91.2		5.12				
5	14.87	31.88	23.58	91.2		5.13				
6	14.88	31.95	23.72	91.2		5.13				
7	13.96	32.06	24.14	91.2		5.18				
8	12.97	32.06	24.33	91.2		5.27				
9	12.97	32.06	24.49	91.2		5.29				
10	12.01	32.09	24.56	91.2		5.25	.04	.07	4.72	.37
11	12.01	32.09	24.56	91.2		5.14				
12	12.00	32.09	24.61	91.2		4.92				
13	12.00	32.09	24.60	91.2		4.80				
14	12.00	32.09	24.60	91.2		4.62				
15	11.99	32.09	24.62	91.2		4.46	.05	.37	8.86	.52

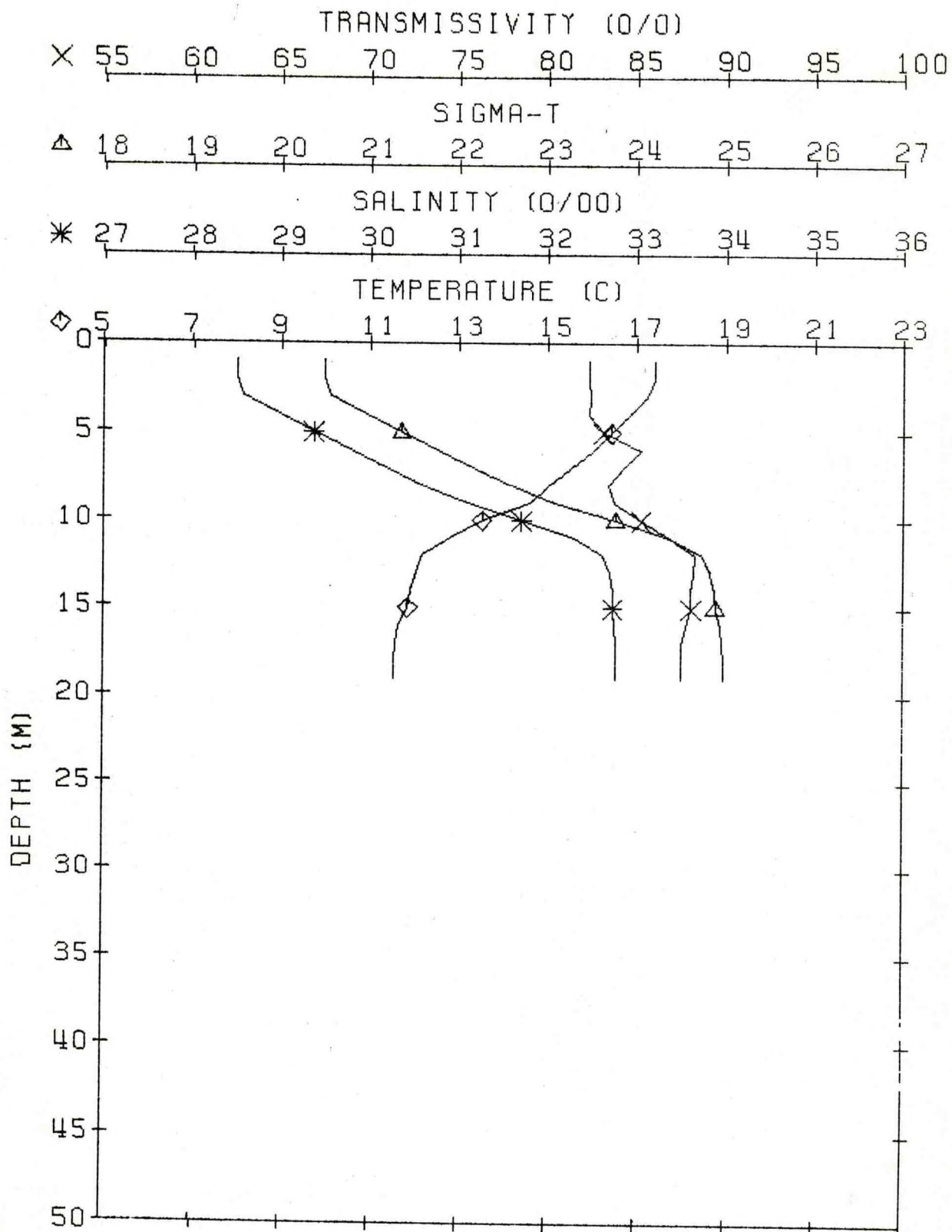
KELEZ CRUISE XWCC-14 STATION 3 07/01/77



XWCC-14 STA. 07 LAT 40 26.9N; LONG 73 53.2W GMT 16.5 06/27/77
 DEPTH 21 AIR D/W 05.6/88.9 BARO 14.5 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 16/13 SEA DIR/HT 16/1 SWELL DIR/HT 16/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	17.37	28.49	20.48	82.3	5.46					
2	17.37	28.49	20.48	82.3	5.46					
3	17.21	28.55	20.56	82.4	5.45	.64	4.47	3.38	1.27	
4	16.81	28.95	20.95	82.3	5.42					
5	16.41	29.35	21.35	82.1	5.50					
6	16.02	29.75	21.74	82.2	5.71					
7	15.52	30.15	22.16	84.2	5.99					
8	15.02	30.55	22.57	83.4	5.54					
9	14.59	31.09	23.07	83.7	5.33	.00	.20	3.40	.55	
10	13.51	31.70	23.76	85.2	5.62					
11	12.80	32.29	24.36	86.8	5.66					
12	12.16	32.60	24.72	88.2	5.77					
13	12.00	32.99	24.81	88.1	5.94					
14	11.88	33.22	24.88	88.0	6.03					
15	11.88	33.22	24.88	88.0	6.06					
16	11.68	33.22	24.93	87.7	6.03					
17	11.55	33.22	24.99	87.5	6.00					
18	11.55	32.75	24.99	87.5	6.04	.00	.00	3.95	.41	
19	11.50	32.76	24.96	87.5	6.87					

KELEZ CRUISE XWCC-14 STATION 7 06/27/77



XWCC-14 STA. 9 LAT 40 28.3N; LONG 73 39.1W GMT 14.0 07/01/77
 DEPTH 22 AIR D/W 25.0/08.3 BARO 09.5 VIS 6 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 22/20 SEA DIR/HT 22/0 SWELL DIR/HT 20/3

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	18.02	30.98	22.22			5.99				
2	18.02	30.98	22.22			5.99				
3	17.69	31.09	22.22			5.77	.01	.01	.00	.11
4	16.30	31.68	22.35			5.79				
5	15.89	31.91	22.34			5.69				
6	15.05	32.08	22.37			5.60				
7	13.17	32.21	22.42			5.57				
8	12.85	32.25	22.43			5.53				
9	12.52	32.28	22.44			5.38	.00	.00	1.57	.17
10	11.99	32.42	22.46			5.25				
11	11.79	32.46	22.46			5.10				
12	11.75	32.47	22.46			5.77				
13	11.72	32.47	22.46			4.55				
14	11.71	32.46	22.46			4.39				
15	11.70	32.46	22.46			4.27				
16	11.69	32.46	22.46			4.22				
17	11.69	32.47	22.46			4.17				
18	11.69	32.46	22.46			4.14				
19	11.68	32.47	22.46			4.11				
20	11.68	32.47	22.47			4.09				
21	11.68	32.46	22.47			4.08	.04	.57	9.08	.46
22	11.68	32.47	22.47			4.06				

KELEZ CRUISE XWCC-14 STATION 9 07/01/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

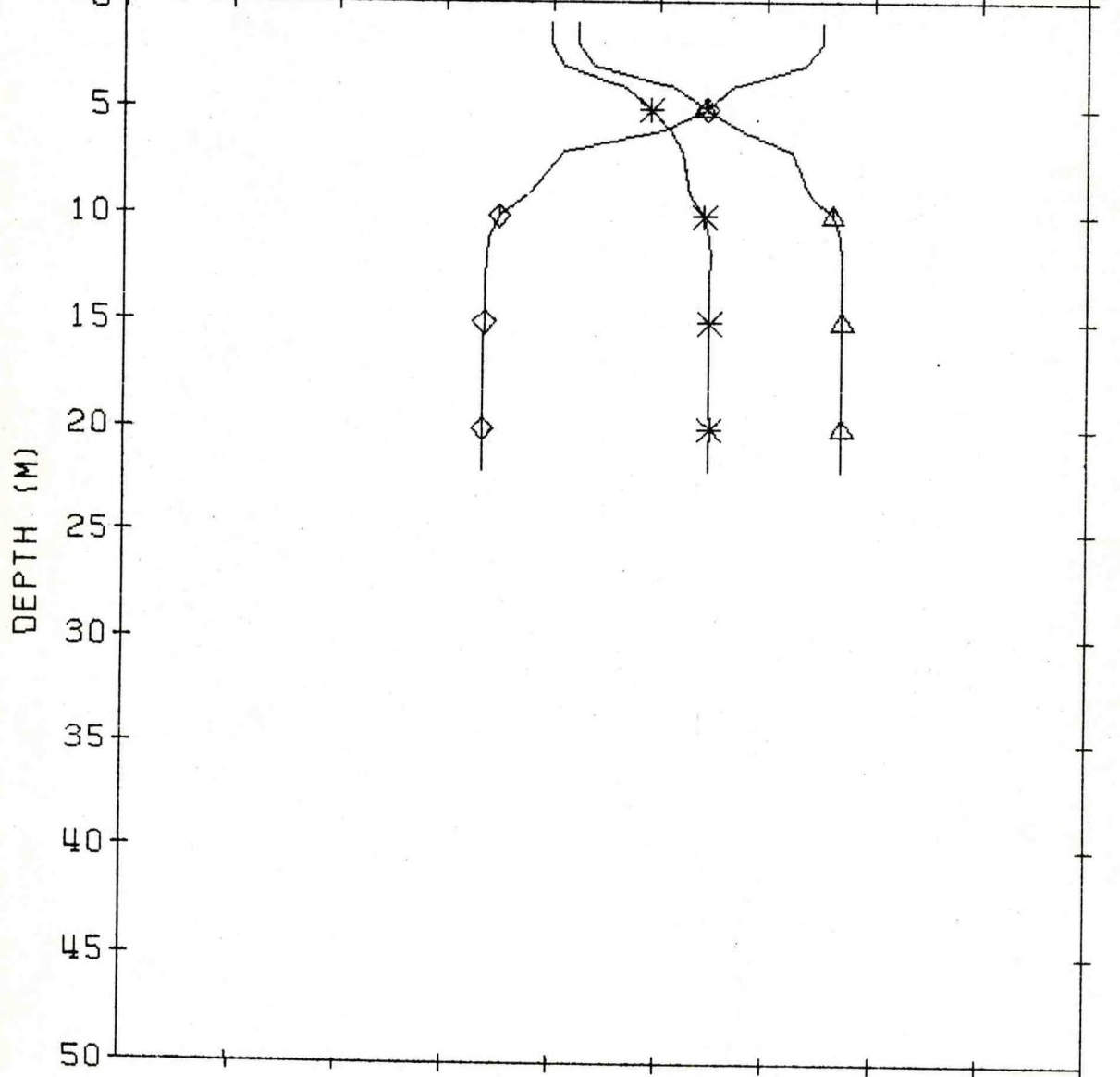
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 11 LAT 40 22.0N; LONG 73 56.8W GMT 21.1 06/27/77
 DEPTH 14 AIR D/W 16.7/94.4 BARO 14.0 VIS 6 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 21/12 SEA DIR/HT 18/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.92	29.69	21.49	81.0		6.54				
2	16.92	29.69	21.49	81.0		6.54	.07	1.45	1.30	.67
3	16.92	29.69	21.49	81.8		6.43				
4	16.86	29.74	21.54	81.7		6.45				
5	16.30	29.91	21.80	81.7		6.54				
6	16.28	29.95	21.83	81.7		6.54				
7	16.23	29.99	21.88	81.9		6.52				
8	15.96	30.14	22.05	82.4		6.04				
9	15.94	30.35	22.22	83.0		6.03				
10	15.90	30.60	22.41	82.0		6.03				
11	15.90	30.80	22.57	82.7		6.14				
12	14.45	31.02	23.05	83.6		5.13				
13	13.00	31.89	24.01	84.7		5.98	.00	.31	4.66	.61

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

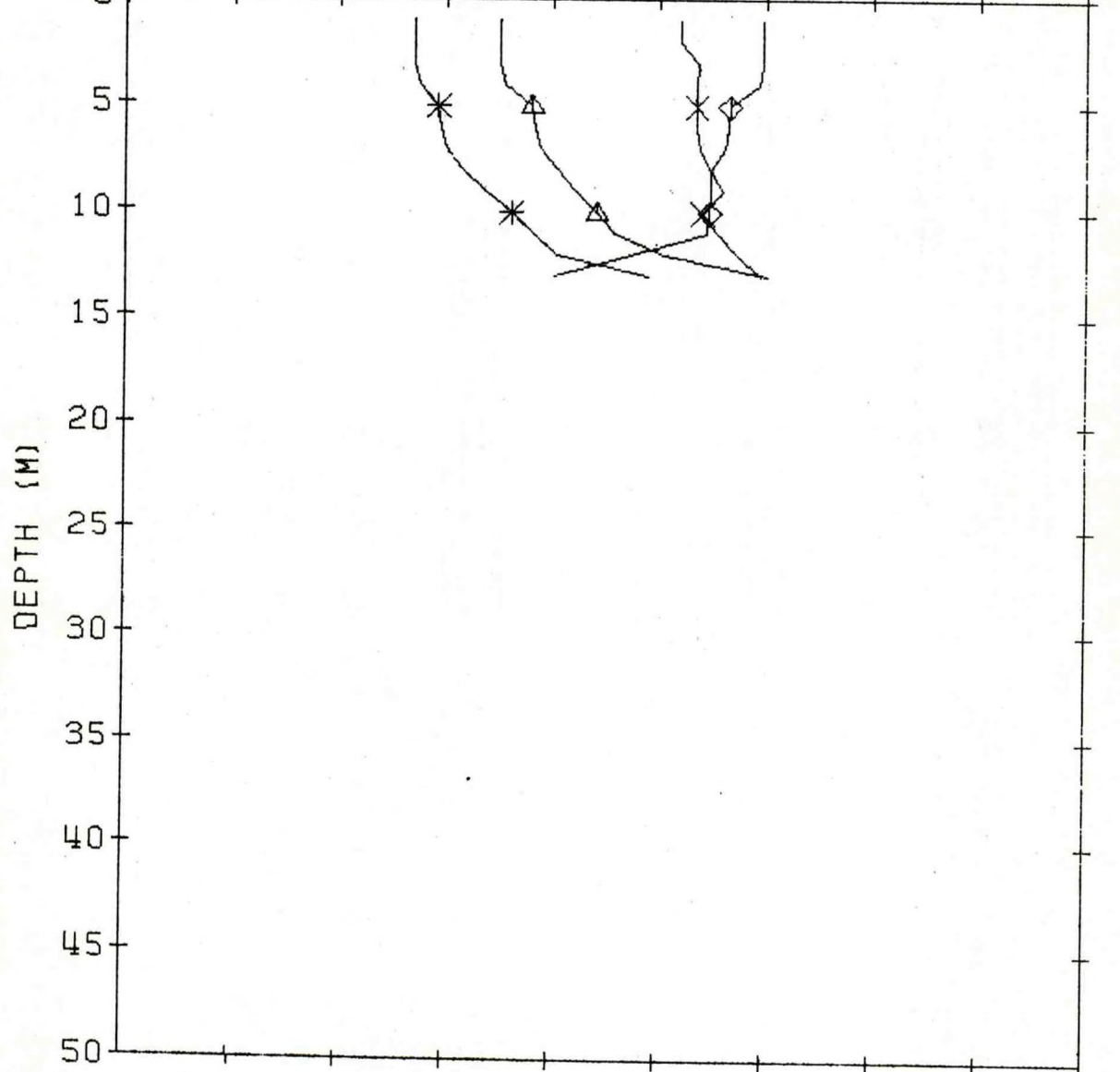
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

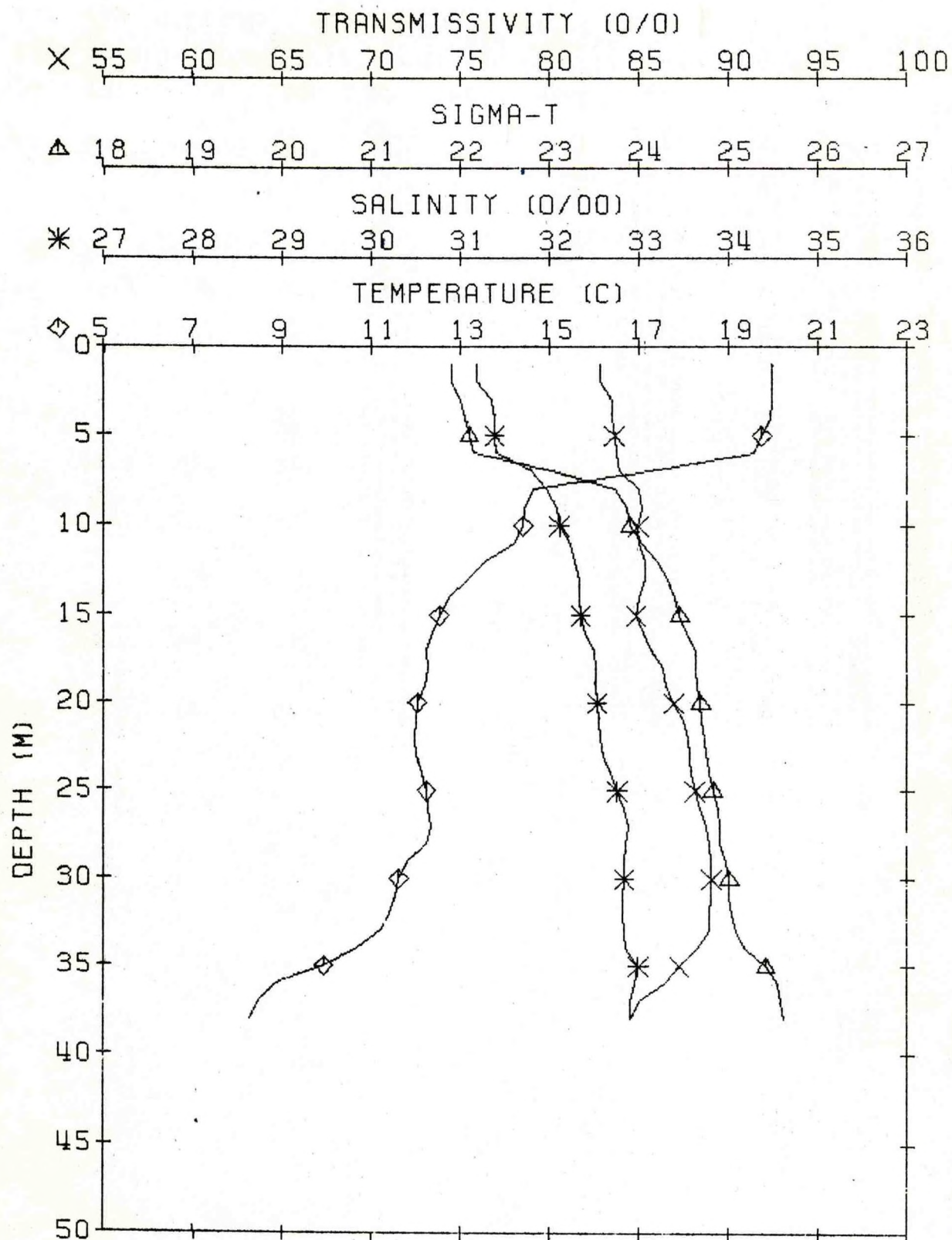
◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 13 LAT 40 23.4N; LONG 73 47.1W GMT 18.5 06/27/77
 DEPTH 38 AIR D/W 16.7/94.4 BARO 14.5 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 15/15 SEA DIR/HT 14/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.96	31.18	21.89	82.8		6.23				
2	19.96	31.18	21.89	82.8		6.23	.00	.00	.00	.11
3	19.96	31.34	22.01	83.5		6.44				
4	19.96	31.37	22.05	83.5		6.43				
5	19.72	31.37	22.10	83.6		6.46				
6	19.56	31.39	22.15	83.3		6.66				
7	17.2	31.11	22.33	85.0		6.70				
8	14.62	31.99	23.73	85.0		6.84				
9	14.44	31.07	23.33	85.1		6.81				
10	14.34	31.00	23.33	85.4		6.58	.00	.00	3.13	.35
11	13.51	31.22	24.19	85.5		6.45				
12	13.41	31.33	24.31	85.5		6.46				
13	12.57	31.33	24.44	85.5		6.46				
14	12.00	31.44	24.55	85.5		6.46				
15	12.00	31.44	24.55	85.5		6.46				
16	12.00	31.44	24.55	85.5		6.46				
17	12.00	31.44	24.55	85.5		6.46				
18	12.00	31.44	24.55	85.5		6.46				
19	12.00	31.44	24.55	85.5		6.46				
20	12.00	31.44	24.55	85.5		6.46				
21	11.99	31.33	24.65	85.9		6.10				
22	11.99	31.33	24.65	85.9		6.06				
23	11.99	31.33	24.65	85.9		6.06	.00	.00	3.66	.55
24	11.99	31.33	24.65	85.9		6.06				
25	11.99	31.33	24.65	85.9		6.06				
26	11.99	31.33	24.65	85.9		6.06				
27	11.99	31.33	24.65	85.9		6.06				
28	11.99	31.33	24.65	85.9		6.06				
29	11.99	31.33	24.65	85.9		6.06	.00	.00	.76	.39
30	11.99	31.33	24.65	85.9		6.06				
31	11.99	31.33	24.65	85.9		6.06				
32	11.99	31.33	24.65	85.9		6.06				
33	11.99	31.33	24.65	85.9		6.06				
34	11.99	31.33	24.65	85.9		6.06				
35	11.99	31.33	24.65	85.9		6.06				
36	11.99	31.33	24.65	85.9		6.06				
37	11.99	31.33	24.65	85.9		6.06				
38	11.99	31.33	24.65	85.9		6.06	.13	2.04	11.80	1.26

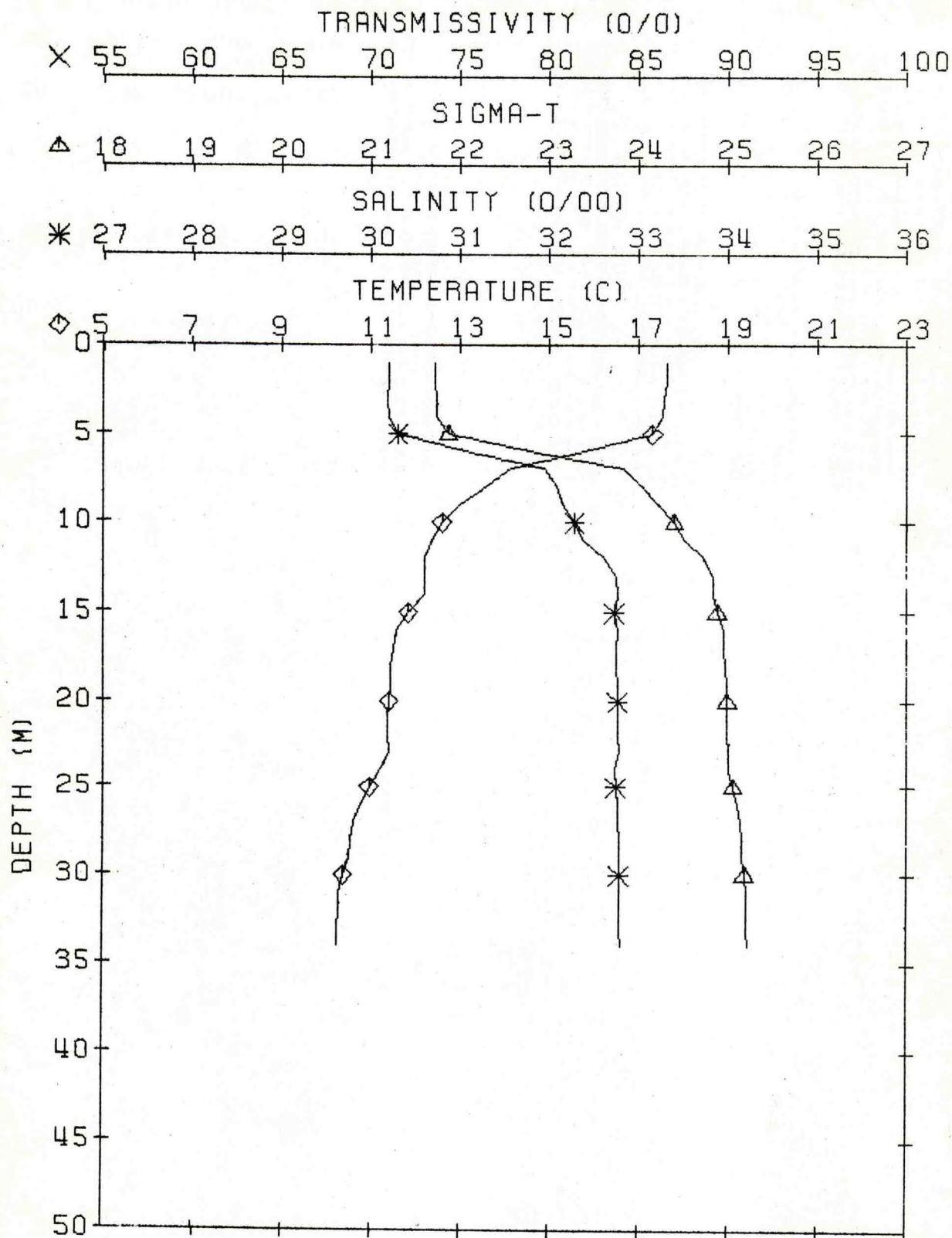
KELEZ CRUISE XWCC-14 STATION 13 06/27/77



XWCC-14 STA. 13 LAT 40 23.4N; LONG 73 47.0W GMT 12.2 07/01/77
 DEPTH 35 AIR D/W 25.0/69.4 BARO 09.0 VIS 6 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 21/20 SEA DIR/HT 21/0 SWELL DIR/HT 20/3

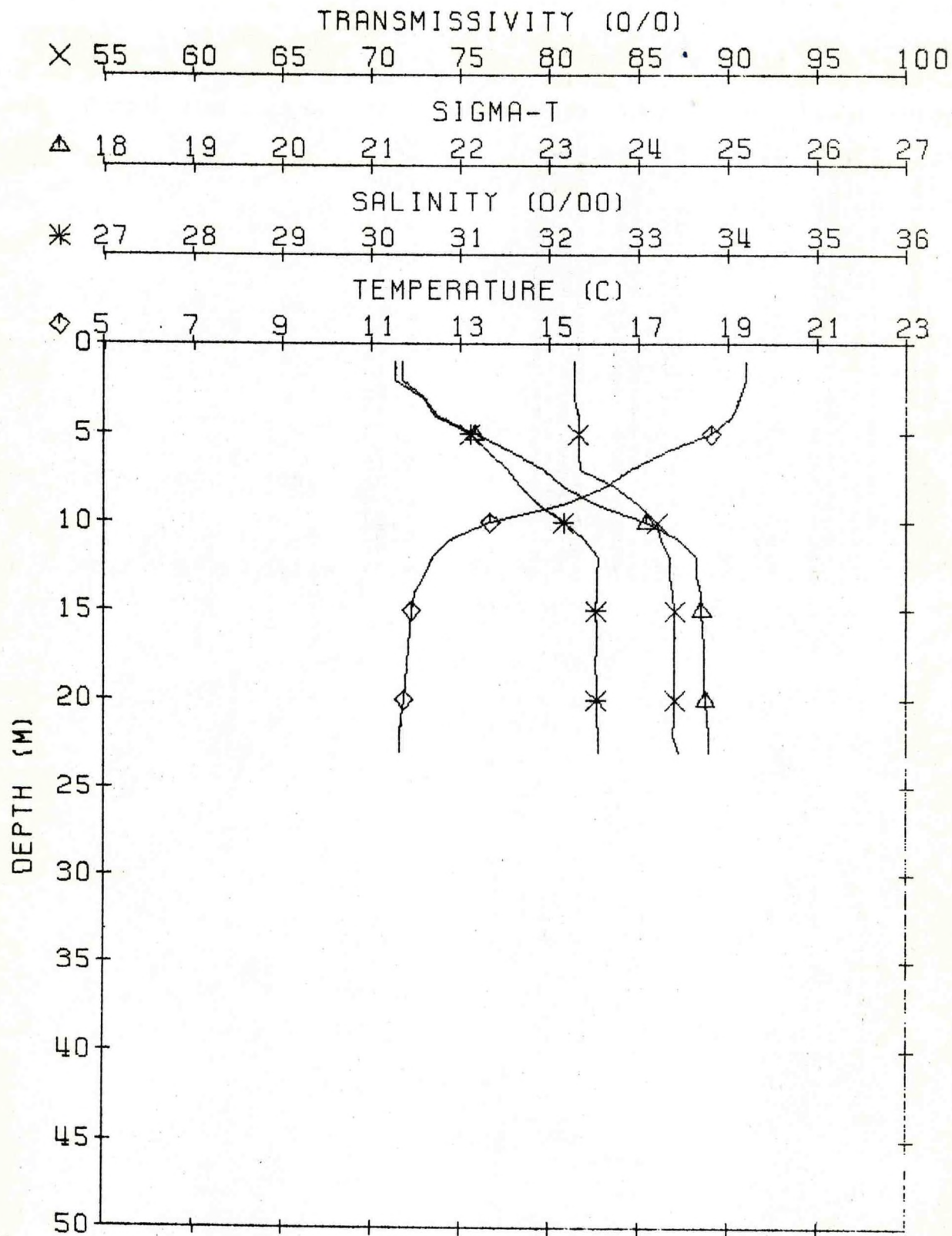
DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	17.60	30.19	21.71			5.33				
2	17.60	30.19	21.71			5.33	.07	.60	.00	.35
3	17.55	30.18	21.72			5.33				
4	17.55	30.18	21.73			5.33				
5	17.52	30.29	21.86			5.33				
6	15.80	31.11	22.78			5.33				
7	14.12	31.95	23.83			5.33				
8	13.57	32.07	24.03			5.33				
9	12.98	32.15	24.31			5.33				
10	12.57	32.38	24.39			5.33	.00	.03	2.66	.21
11	12.34	32.38	24.51			5.33				
12	12.17	32.61	24.72			5.33				
13	12.19	32.74	24.88			5.33				
14	12.19	32.76	24.88			5.33				
15	11.88	32.72	24.87			5.33				
16	11.56	32.74	24.95			5.33				
17	11.50	32.74	24.95			5.33				
18	11.43	32.75	24.97			5.33				
19	11.41	32.75	24.98			5.33	.02	.26	5.01	.39
20	11.33	32.76	24.99			5.33				
21	11.33	32.76	24.99			5.33				
22	11.33	32.77	24.99			5.33				
23	11.33	32.77	24.99			5.33				
24	11.33	32.77	24.99			5.33				
25	11.33	32.77	24.99			5.33				
26	10.94	32.73	25.05			5.33				
27	10.75	32.75	25.09			5.33				
28	10.60	32.76	25.12			5.33				
29	10.50	32.78	25.15			5.33				
30	10.47	32.77	25.17			5.33	.10	.44	9.26	.69
31	10.36	32.77	25.20			5.33				
32	10.27	32.78	25.20			5.33				
33	10.24	32.78	25.21			5.33				
34	10.21	32.78	25.21			5.33	.05	.31	10.46	.55
34	10.21	32.79	25.21			5.33				

KELEZ CRUISE XWCC-14 STATION 13 07/01/77



XWCC-14 STA. 15 LAT 40 25.3N; LONG 73 30.4W GMT 04.4 06/28/77
 DEPTH 23 AIR D/W 00.0/94.4 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 18/08 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

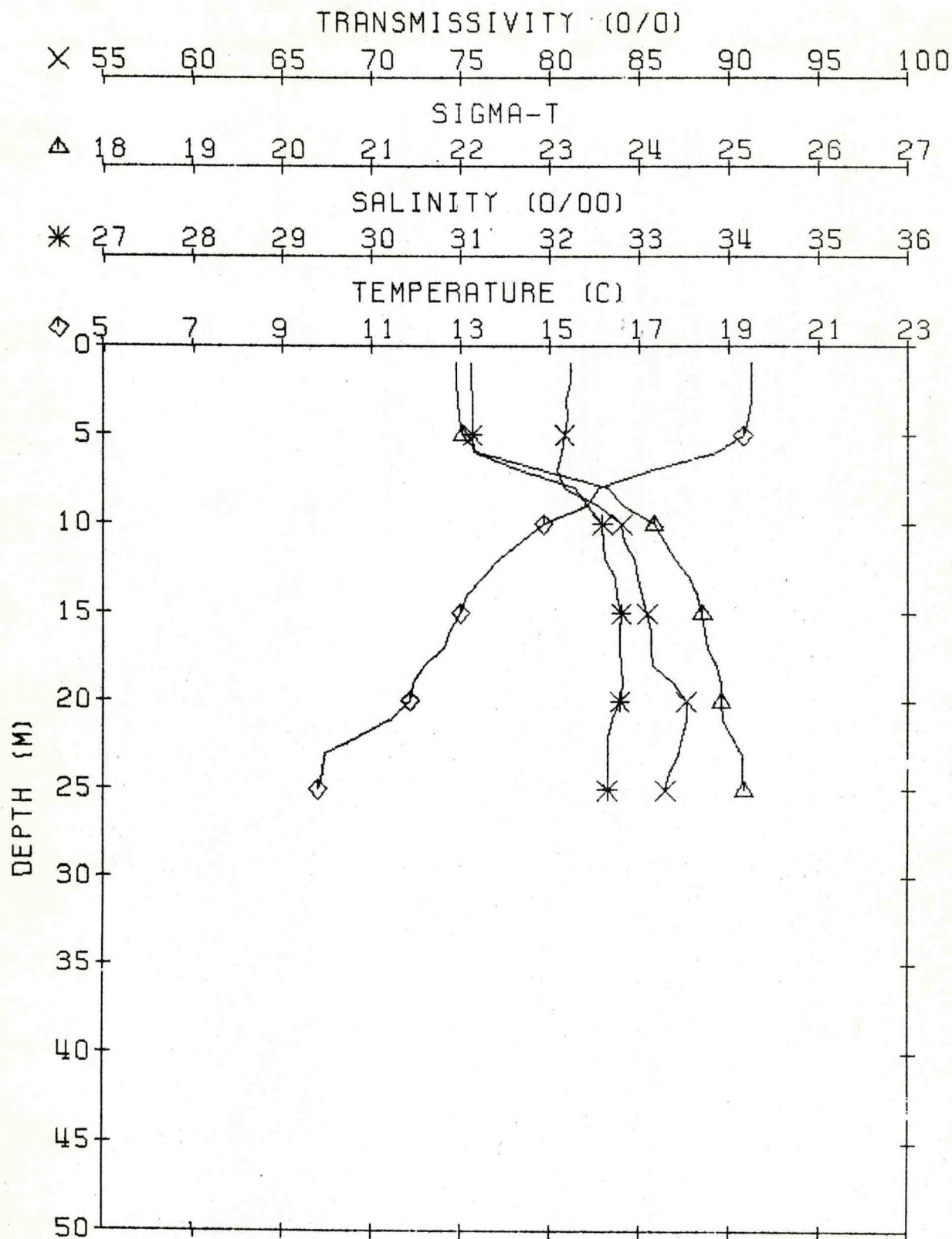
DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.39	30.27	21.34	81.4		7.11				
2	19.39	30.27	21.34	81.4		7.11	.00	.00	.00	.05
3	19.39	30.27	21.34	81.4		7.34				
4	19.25	30.57	21.60	81.4		7.53				
5	19.10	30.72	21.75	81.6		7.69				
6	18.61	31.10	22.17	81.6		7.90				
7	17.61	31.31	22.57	81.6		8.13				
8	16.86	31.53	22.92	81.7		8.16				
9	16.24	31.67	23.16	83.6		8.17				
10	15.88	31.87	23.52	85.0		8.21	.00	.00	2.52	.26
11	13.66	32.11	24.08	86.0		8.23				
12	12.75	32.31	24.45	86.2		8.23				
13	12.34	32.55	24.64	86.7		8.13				
14	11.99	32.79	24.65	86.7		7.92				
15	11.88	32.99	24.70	86.9		7.58				
16	11.88	33.22	24.70	87.0		6.79				
17	11.82	33.45	24.72	87.0		6.18				
18	11.78	33.68	24.72	87.0		5.99				
19	11.75	33.91	24.73	87.0		5.86				
20	11.72	34.14	24.74	87.0		5.81				
21	11.64	34.37	24.76	87.0		5.76				
22	11.62	34.60	24.77	86.9		5.72				
23	11.61	34.83	24.77	87.2		5.66	.00	1.21	9.02	.75



XWCC-14 STA. 17 LAT 40 18.5N; LONG 73 50.7W GMT 22.4 06/27/77
 DEPTH 27 AIR D/W 16.7/94.4 BARO 14.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 17/10 SEA DIR/HT 16/1 SWELL DIR/HT 00/0

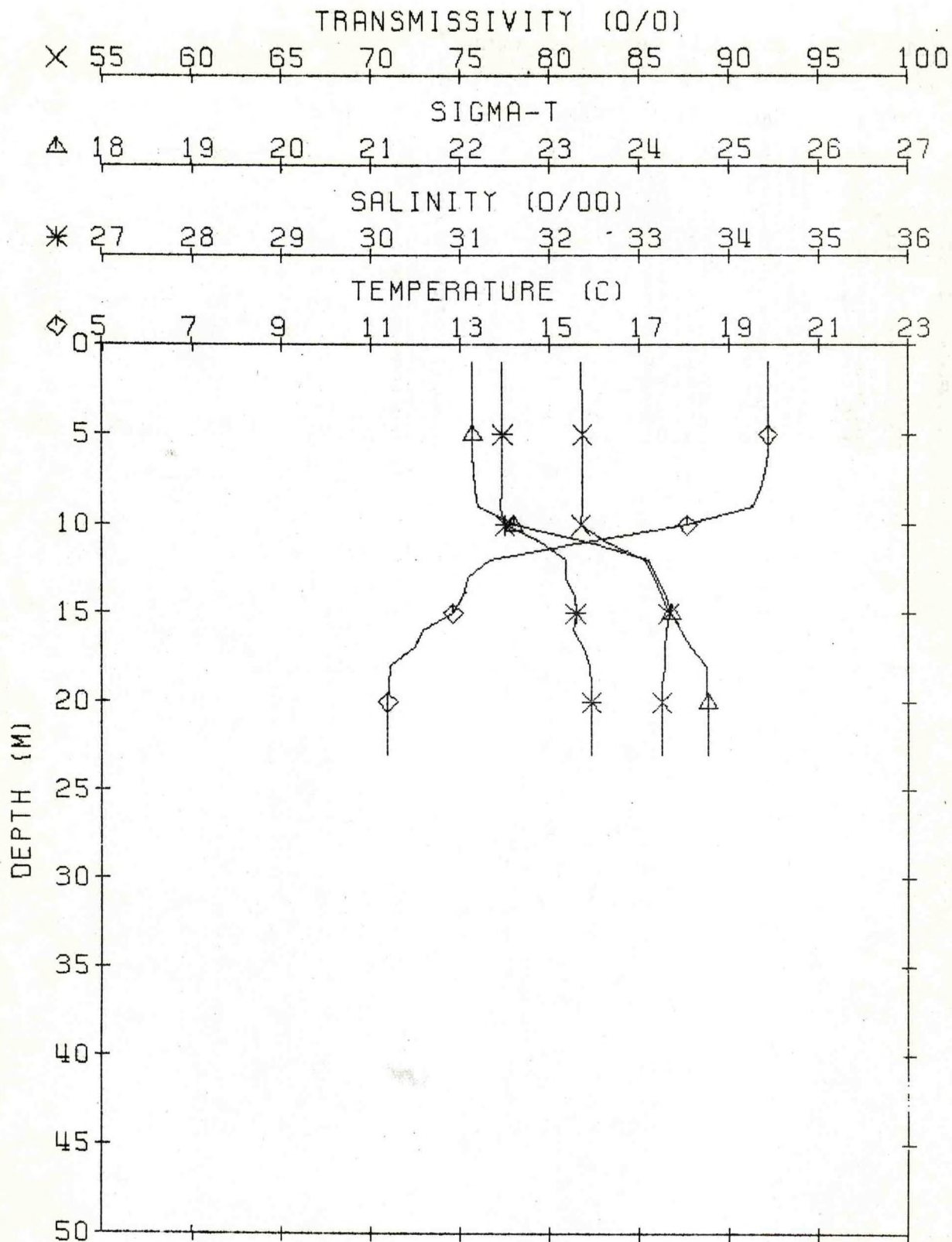
DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.50	31.11	21.96	81.1		7.08				
2	19.50	31.11	21.96	81.1		7.08	.00	.00	.28	.15
3	19.48	31.12	21.97	80.9		7.09				
4	19.42	31.12	21.98	81.0		7.10				
5	19.31	31.12	22.01	80.8		7.11				
6	18.71	31.14	22.17	80.6		7.14				
7	17.29	31.63	22.89	80.4		7.20				
8	16.08	32.27	23.65	80.8		7.39				
9	15.83	32.43	23.83	82.7		7.40				
10	14.85	32.58	24.16	84.0		7.34	.00	.00	.37	.18
11	14.34	32.59	24.28	84.1		7.36				
12	13.87	32.61	24.39	84.7		7.34				
13	13.49	32.73	24.56	84.9		7.34				
14	13.11	32.74	24.65	85.1		7.34				
15	12.99	32.79	24.70	85.4		7.33				
16	12.74	32.77	24.74	85.6		7.29				
17	12.61	32.77	24.76	85.6		7.26				
18	12.18	32.79	24.86	85.7		7.18				
19	11.93	32.80	24.92	86.9		7.15				
20	11.86	32.77	24.91	87.6		7.08	.00	.00	2.72	.55
21	11.44	32.69	24.92	87.6		6.94				
22	10.71	32.65	25.02	87.4		6.87				
23	9.93	32.63	25.14	87.1		6.83				
24	9.89	32.64	25.15	86.6		6.74				
25	9.78	32.64	25.17	86.4		6.74	.17	1.42	8.34	1.06

KELEZ CRUISE XWCC-14 STATION 17 06/27/77



XWCC-14 STA. 19 LAT 40 20.2N; LONG 73 37.9W GMT 03.2 06/28/77
 DEPTH 25 AIR D/W 11.1/00.0 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 20/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

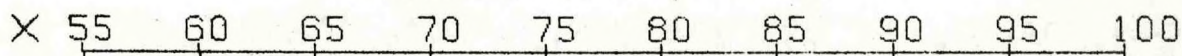
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.86	31.46	22.13	81.7		6.67				
2	19.86	31.46	22.13	81.7		6.67	.00	.00	.00	.48
3	19.86	31.46	22.13	81.8		6.67				
4	19.86	31.46	22.13	81.8		6.68				
5	19.85	31.46	22.13	81.8		6.69				
6	19.84	31.46	22.13	81.8		6.69				
7	19.80	31.46	22.14	81.8		6.69				
8	19.70	31.46	22.17	81.8		6.70				
9	19.52	31.44	22.20	81.8		6.71				
10	18.06	31.49	22.60	81.7		6.76	.00	.00	.00	.05
11	15.78	31.90	23.44	83.1		6.77				
12	13.65	32.17	24.09	85.3		6.76				
13	13.15	32.18	24.21	85.8		6.51				
14	13.04	32.27	24.29	86.2		6.29				
15	12.83	32.29	24.35	86.5		6.16				
16	12.16	32.26	24.46	86.5		6.05				
17	11.94	32.38	24.59	86.4		5.72				
18	11.42	32.45	24.74	86.4		5.56				
19	11.37	32.45	24.76	86.2		5.34				
20	11.35	32.46	24.76	86.2		5.12				
21	11.33	32.46	24.76	86.2		4.96				
22	11.35	32.46	24.76	86.2		4.86				
23	11.36	32.46	24.76	86.2		4.79	.00	.44	6.38	.00



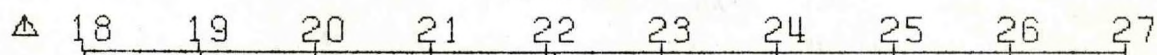
XWCC-14 STA. 21 LAT 40 14.0N; LONG 73 56.0W GMT 13.4 06/28/77
 DEPTH 19 AIR D/W 38.0/16.7 BARO 15.3 VIS 5 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 18/08 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	17.50	30.96	22.32			6.60				
2	17.50	30.96	22.32			6.60	.00	.00	.11	.13
3	16.35	31.11	22.33			6.77				
4	15.45	31.11	22.33			6.79				
5	15.00	31.11	22.33			6.75				
6	14.84	31.11	22.33			6.60				
7	13.53	31.11	22.33			6.65				
8	12.69	31.11	22.33			6.46				
9	12.33	31.11	22.33			6.28				
10	11.77	31.11	22.33			6.08	.00	.00	3.81	.40
11	11.90	31.11	22.33			6.01				
12	11.33	31.11	22.33			5.97				
13	11.38	31.11	22.33			5.92				
14	11.14	31.11	22.33			5.79				
15	10.78	31.11	22.33			5.67				
16	10.75	31.11	22.33			5.47				
17	10.66	31.11	22.33			5.21	.00	1.23	10.02	.83

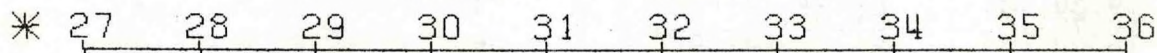
TRANSMISSIVITY (0/0)



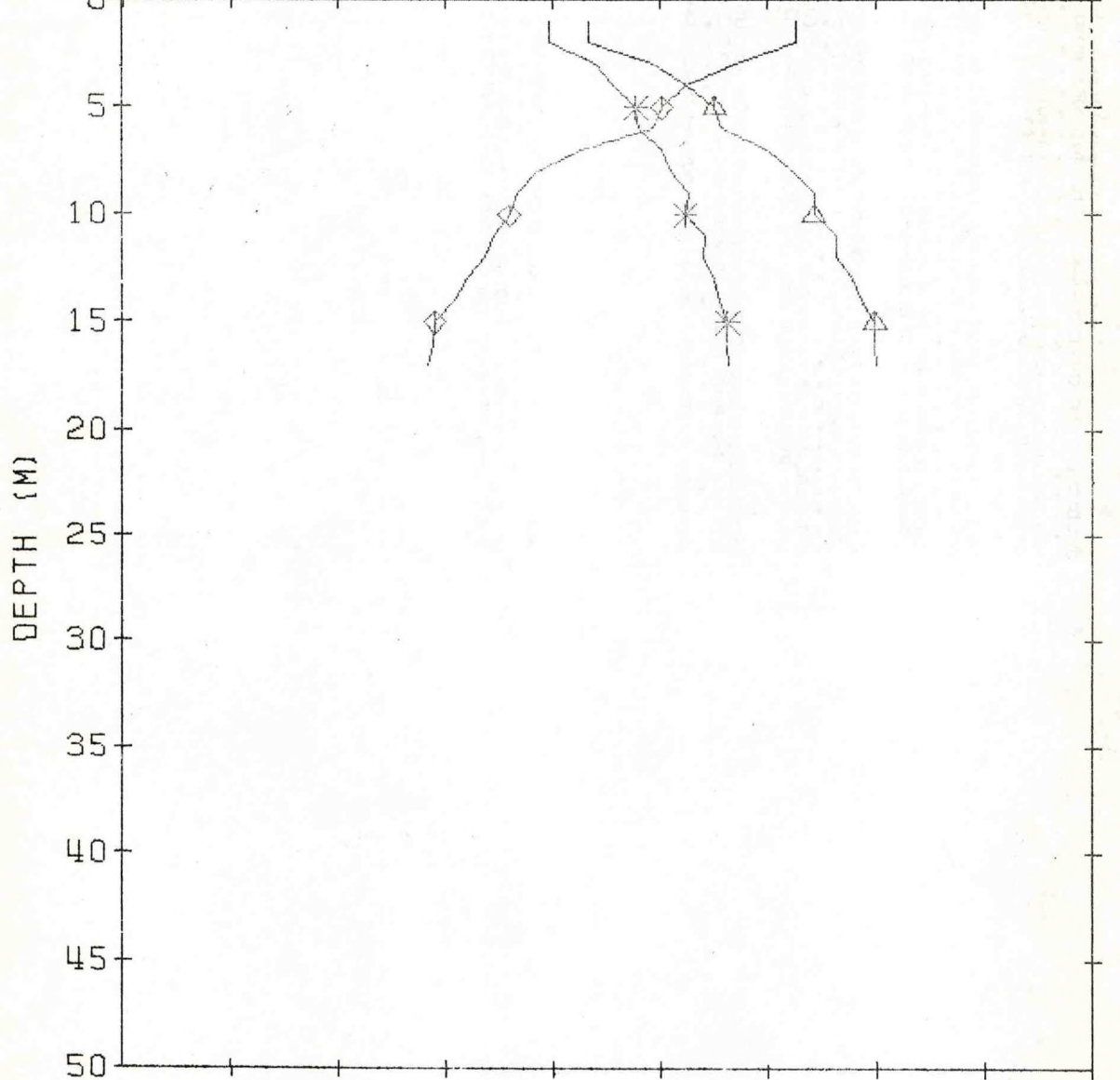
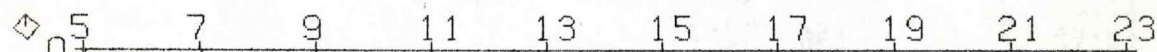
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)



XWCC-14 STA. 23 LAT 40 14.8N; LONG 73 45.4W GMT 00.7 06/28/77
 DEPTH 39 AIR D/W 00.0/94.4 BARO 14.5 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 15/10 SEA DIR/HT 18/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.91	31.11	21.85	80.8	6.54					
2	19.91	31.11	21.85	80.8	6.54	.00	.00	.31	.07	
3	19.83	31.16	21.90	81.5	6.70					
4	19.80	31.15	21.91	81.6	6.84					
5	19.79	31.15	21.91	81.7	6.83					
6	19.78	31.15	21.91	81.9	6.84					
7	19.70	31.14	21.92	81.7	6.83					
8	16.99	31.45	22.82	83.7	6.81					
9	13.89	31.80	23.53	85.0	6.31					
10	13.22	32.22	24.22	85.9	7.44	.00	.00	2.25	.00	
11	13.10	32.55	24.44	86.1	7.29					
12	12.97	32.58	24.49	86.3	7.10					
13	12.96	32.58	24.52	86.6	6.98					
14	12.90	32.68	24.61	86.6	6.88					
15	12.90	32.71	24.65	86.6	6.80					
16	12.88	32.77	24.72	86.6	6.72					
17	12.80	32.76	24.74	86.6	6.69					
18	12.72	32.79	24.74	86.6	6.67					
19	12.51	32.80	24.80	86.7	6.33					
20	12.43	32.80	24.80	86.7	6.00	.00	.00	.91	.16	
21	12.37	32.79	24.83	86.7	5.95					
22	12.33	32.66	24.90	86.8	5.60					
23	12.33	32.71	24.95	86.7	5.46					
24	12.33	32.75	25.01	86.8	5.33					
25	12.30	32.73	25.02	86.8	5.15					
26	12.26	32.76	25.00	86.8	5.06					
27	12.26	32.78	25.00	86.8	4.97					
28	12.26	32.78	25.00	86.8	4.90					
29	12.26	32.78	25.00	86.8	4.85	.00	1.03	7.59	.79	
30	12.26	32.78	25.00	86.8	4.80					
31	12.26	32.78	25.00	86.8	4.77					
32	12.26	32.78	25.00	86.8	4.74					
33	12.26	32.78	25.00	86.8	4.71					
34	12.26	32.78	25.00	86.8	4.68					
35	12.26	32.78	25.00	86.8	4.65					
36	12.26	32.78	25.00	86.8	4.62	.00	2.49	11.73	.99	
37	12.26	32.78	25.00	86.8	4.59					
38	12.26	32.78	25.00	86.8	4.56					
39	12.26	32.78	25.00	86.8	4.54					

KELEZ CRUISE XWCC-14 STATION 23 06/28/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

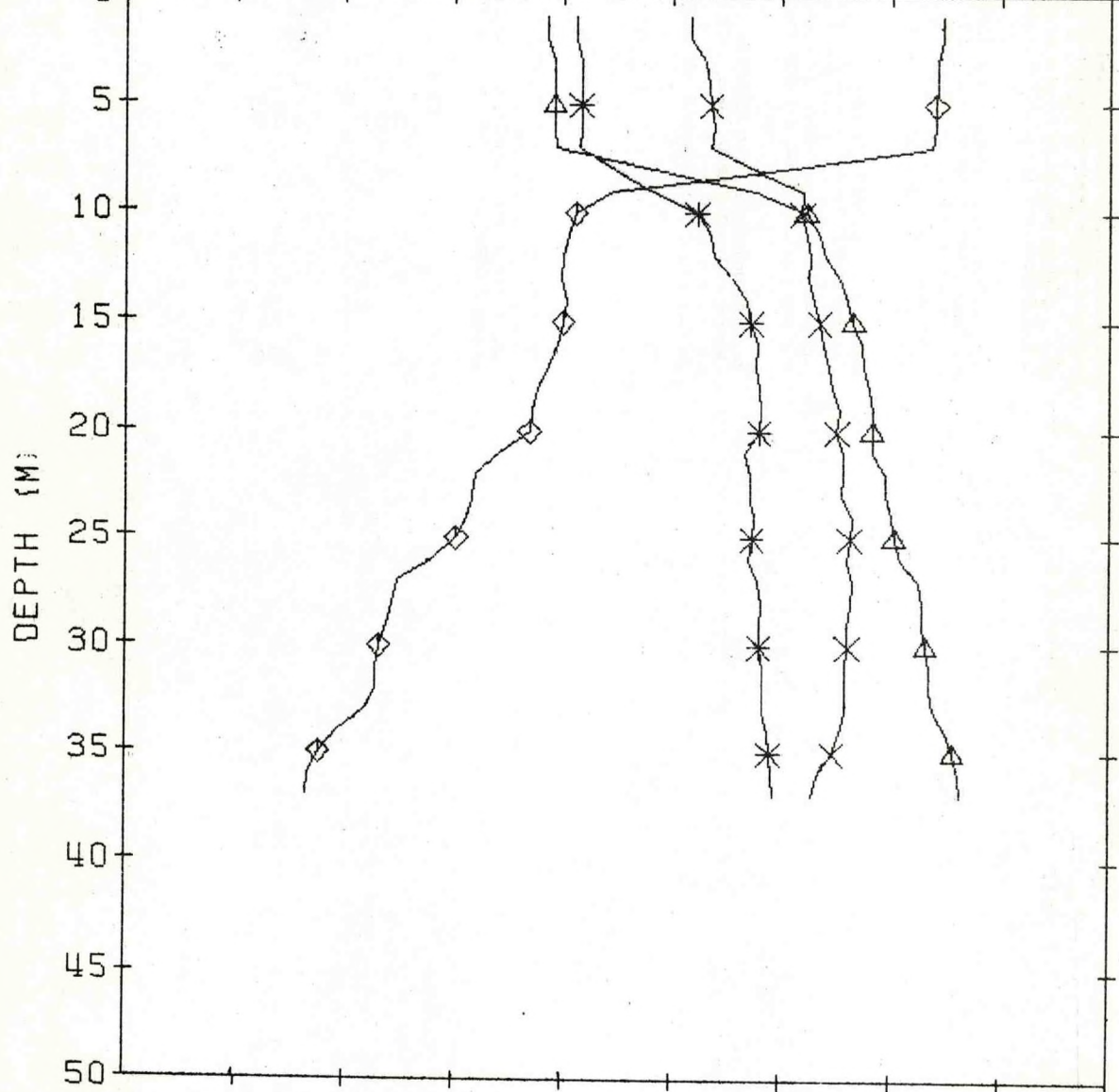
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 25 LAT 40 17.0N; LONG 73 28.4W GMT 06.1 06/28/77
 DEPTH 32 AIR D/W 05.6/94.4 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 20/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.5	31.2	22.0	83.1	6.4					
11	19.5	31.2	22.0	83.1	6.4					
13	19.5	31.2	22.0	83.1	6.4					
14	18.9	31.1	22.0	83.3	6.4					
15	18.6	31.1	22.0	83.3	6.4					
16	18.2	31.1	22.0	83.3	6.4					
17	16.9	31.1	22.0	83.3	6.4					
18	16.8	31.1	22.0	83.3	6.4					
19	16.0	31.1	22.0	83.3	6.4					
20	14.7	31.1	22.0	83.3	6.4					
21	13.3	31.1	22.0	83.3	6.4					
22	12.6	31.1	22.0	83.3	6.4					
23	12.6	31.1	22.0	83.3	6.4					
24	12.6	31.1	22.0	83.3	6.4					
25	12.4	31.1	22.0	83.3	6.4					
26	12.4	31.1	22.0	83.3	6.4					
27	12.4	31.1	22.0	83.3	6.4					
28	12.3	31.1	22.0	83.3	6.4					
29	12.3	31.1	22.0	83.3	6.4					
30	11.9	31.1	22.0	83.3	6.4					
31	11.7	31.1	22.0	83.3	6.4					
32	11.4	31.1	22.0	83.3	6.4					
33	11.2	31.1	22.0	83.3	6.4					
34	11.0	31.1	22.0	83.3	6.4					
35	10.9	31.1	22.0	83.3	6.4					
36	10.8	31.1	22.0	83.3	6.4					
37	10.7	31.1	22.0	83.3	6.4					
38	10.7	31.1	22.0	83.3	6.4					
39	10.7	31.1	22.0	83.3	6.4					
40	10.7	31.1	22.0	83.3	6.4					
41	10.8	31.1	22.0	83.3	6.4					
42	10.8	31.1	22.0	83.3	6.4					
43	10.8	31.1	22.0	83.3	6.4					
44	10.8	31.1	22.0	83.3	6.4					
45	10.8	31.1	22.0	83.3	6.4					
46	10.8	31.1	22.0	83.3	6.4					
47	10.8	31.1	22.0	83.3	6.4					
48	10.8	31.1	22.0	83.3	6.4					
49	10.8	31.1	22.0	83.3	6.4					
50	10.8	31.1	22.0	83.3	6.4					
51	10.8	31.1	22.0	83.3	6.4					
52	10.8	31.1	22.0	83.3	6.4					
53	10.8	31.1	22.0	83.3	6.4					
54	10.8	31.1	22.0	83.3	6.4					
55	10.8	31.1	22.0	83.3	6.4					
56	10.8	31.1	22.0	83.3	6.4					
57	10.8	31.1	22.0	83.3	6.4					
58	10.8	31.1	22.0	83.3	6.4					
59	10.8	31.1	22.0	83.3	6.4					
60	10.8	31.1	22.0	83.3	6.4					
61	10.8	31.1	22.0	83.3	6.4					
62	10.8	31.1	22.0	83.3	6.4					
63	10.8	31.1	22.0	83.3	6.4					
64	10.8	31.1	22.0	83.3	6.4					
65	10.8	31.1	22.0	83.3	6.4					
66	10.8	31.1	22.0	83.3	6.4					
67	10.8	31.1	22.0	83.3	6.4					
68	10.8	31.1	22.0	83.3	6.4					
69	10.8	31.1	22.0	83.3	6.4					
70	10.8	31.1	22.0	83.3	6.4					
71	10.8	31.1	22.0	83.3	6.4					
72	10.8	31.1	22.0	83.3	6.4					
73	10.8	31.1	22.0	83.3	6.4					
74	10.8	31.1	22.0	83.3	6.4					
75	10.8	31.1	22.0	83.3	6.4					
76	10.8	31.1	22.0	83.3	6.4					
77	10.8	31.1	22.0	83.3	6.4					
78	10.8	31.1	22.0	83.3	6.4					
79	10.8	31.1	22.0	83.3	6.4					
80	10.8	31.1	22.0	83.3	6.4					
81	10.8	31.1	22.0	83.3	6.4					
82	10.8	31.1	22.0	83.3	6.4					
83	10.8	31.1	22.0	83.3	6.4					
84	10.8	31.1	22.0	83.3	6.4					
85	10.8	31.1	22.0	83.3	6.4					
86	10.8	31.1	22.0	83.3	6.4					
87	10.8	31.1	22.0	83.3	6.4					
88	10.8	31.1	22.0	83.3	6.4					
89	10.8	31.1	22.0	83.3	6.4					
90	10.8	31.1	22.0	83.3	6.4					
91	10.8	31.1	22.0	83.3	6.4					
92	10.8	31.1	22.0	83.3	6.4					
93	10.8	31.1	22.0	83.3	6.4					
94	10.8	31.1	22.0	83.3	6.4					
95	10.8	31.1	22.0	83.3	6.4					
96	10.8	31.1	22.0	83.3	6.4					
97	10.8	31.1	22.0	83.3	6.4					
98	10.8	31.1	22.0	83.3	6.4					
99	10.8	31.1	22.0	83.3	6.4					
100	10.8	31.1	22.0	83.3	6.4					

KELEZ CRUISE XWCC-14 STATION 25 06/28/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

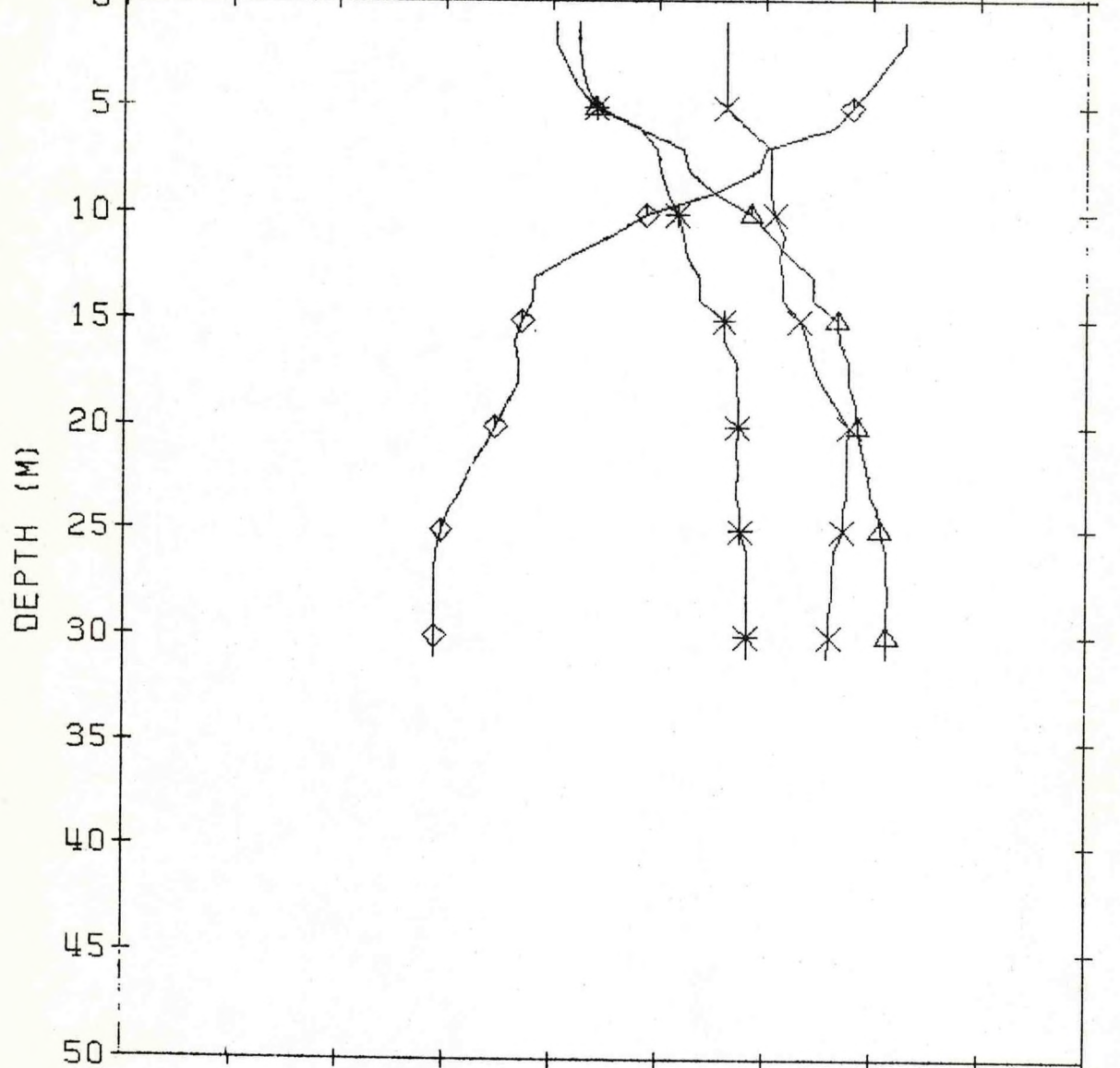
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 26 LAT 40 29.1N; LONG 73 59.0W GMT 15.4 06/27/77
 DEPTH 11 AIR D/W 22.2/11.1 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 17/10 SEA DIR/HT 17/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	18.19	27.36	19.43	83.0		4.91				
2	18.19	27.36	19.43	83.0		4.91	1.00	9.16	2.80	1.73
3	18.04	27.44	19.52	82.2		4.92				
4	17.99	27.44	19.53	82.7		4.94				
5	17.99	27.46	19.54	82.6		4.94				
6	18.00	27.47	19.55	82.4		4.94				
7	18.00	27.46	19.55	82.3		4.95				
8	18.00	27.46	19.54	82.3		4.95				
9	18.00	27.47	19.55	82.2		4.95	1.04	8.57	3.20	1.38

KELEZ CRUISE XWCC-14 STATION 26 06/27/77

TRANSMISSIVITY (0/0)

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SIGMA-T

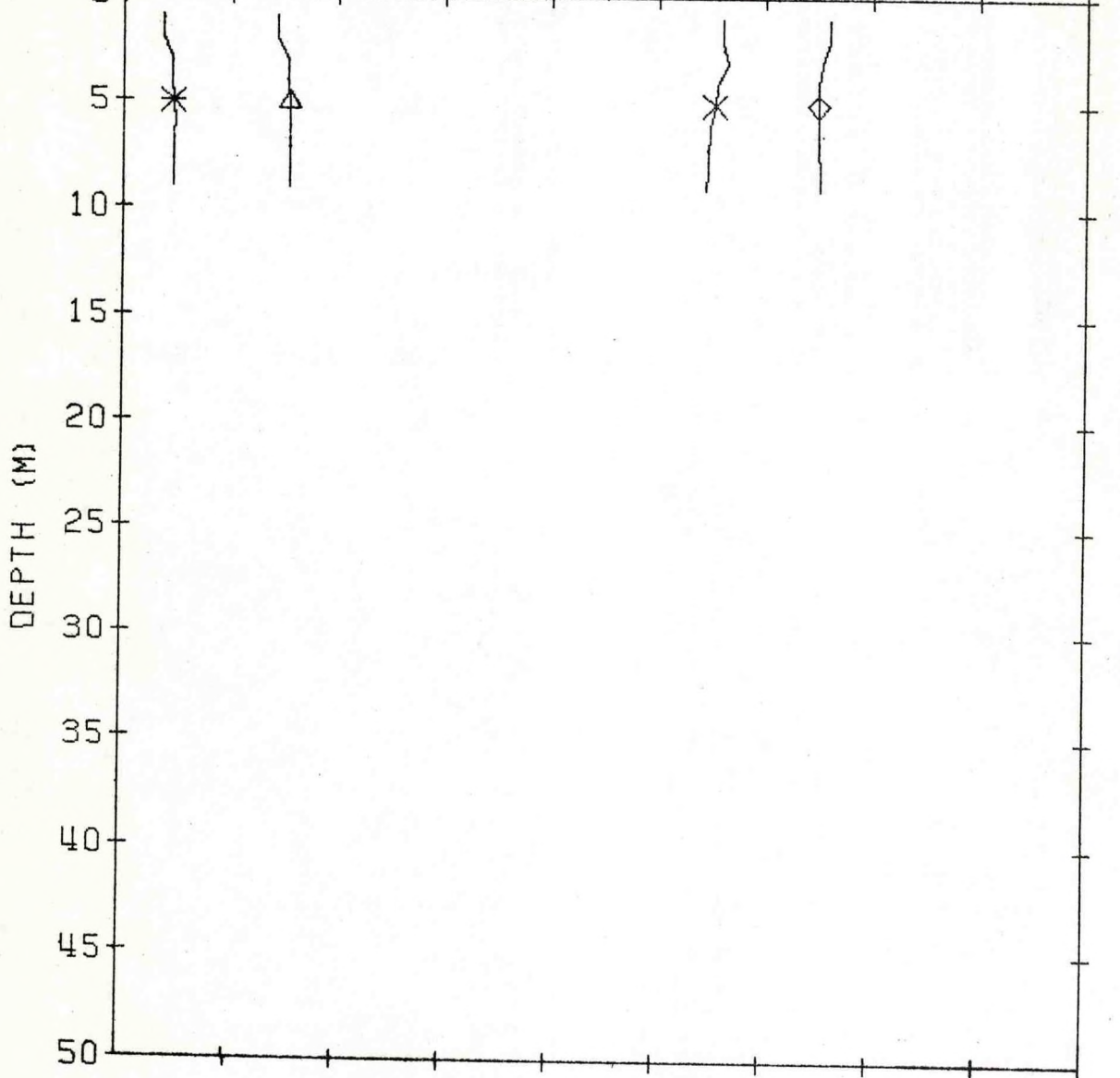
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 27 LAT 40 18.0N; LONG 73 17.5W GMT 08.7 07/01/77
 DEPTH 35 AIR D/W 25.0/05.6 BARO 11.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 20/24 SEA DIR/HT 20/0 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.84	31.34	21.78			5.94				
2	20.84	31.34	21.78			5.94	.00	.00	.00	.01
3	20.84	31.34	21.78			5.81				
4	20.84	31.34	21.78			5.66				
5	20.85	31.34	21.78			5.51				
6	20.23	31.38	21.97			5.66				
7	18.02	31.47	22.59			5.11				
8	13.72	31.82	23.81			3.16				
9	12.65	32.16	24.29			2.06				
10	12.65	32.20	24.32			1.98	.00	.00	3.96	.18
11	12.55	32.19	24.32			1.93				
12	12.45	32.21	24.37			1.90				
13	12.25	32.21	24.40			1.86				
14	11.98	32.28	24.51			1.82				
15	11.74	32.47	24.69			1.76				
16	11.74	32.55	24.73			1.68				
17	11.58	32.82	24.74			1.66				
18	11.31	32.88	24.85			1.71				
19	11.16	32.64	24.82			1.79				
20	11.11	32.64	24.92			1.82	.00	.00	2.55	.25
21	10.91	32.63	24.97			1.86				
22	10.87	32.69	25.02			1.87				
23	10.74	32.72	25.07			1.86				
24	10.63	32.78	25.13			1.87				
25	10.56	32.88	25.15			1.89				
26	10.45	32.88	25.22			1.91				
27	10.06	32.88	25.36			1.92				
28	9.98	32.76	25.32			1.94				
29	9.88	32.88	25.34			1.90				
30	9.74	32.88	25.36			1.81				
31	9.73	32.88	25.37			1.74				
32	9.73	32.88	25.37			1.65	.05	1.05	6.54	.47

KELEZ CRUISE XWCC-14 STATION 27 07/01/77

TRANSMISSIVITY (0/0)

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SIGMA-T

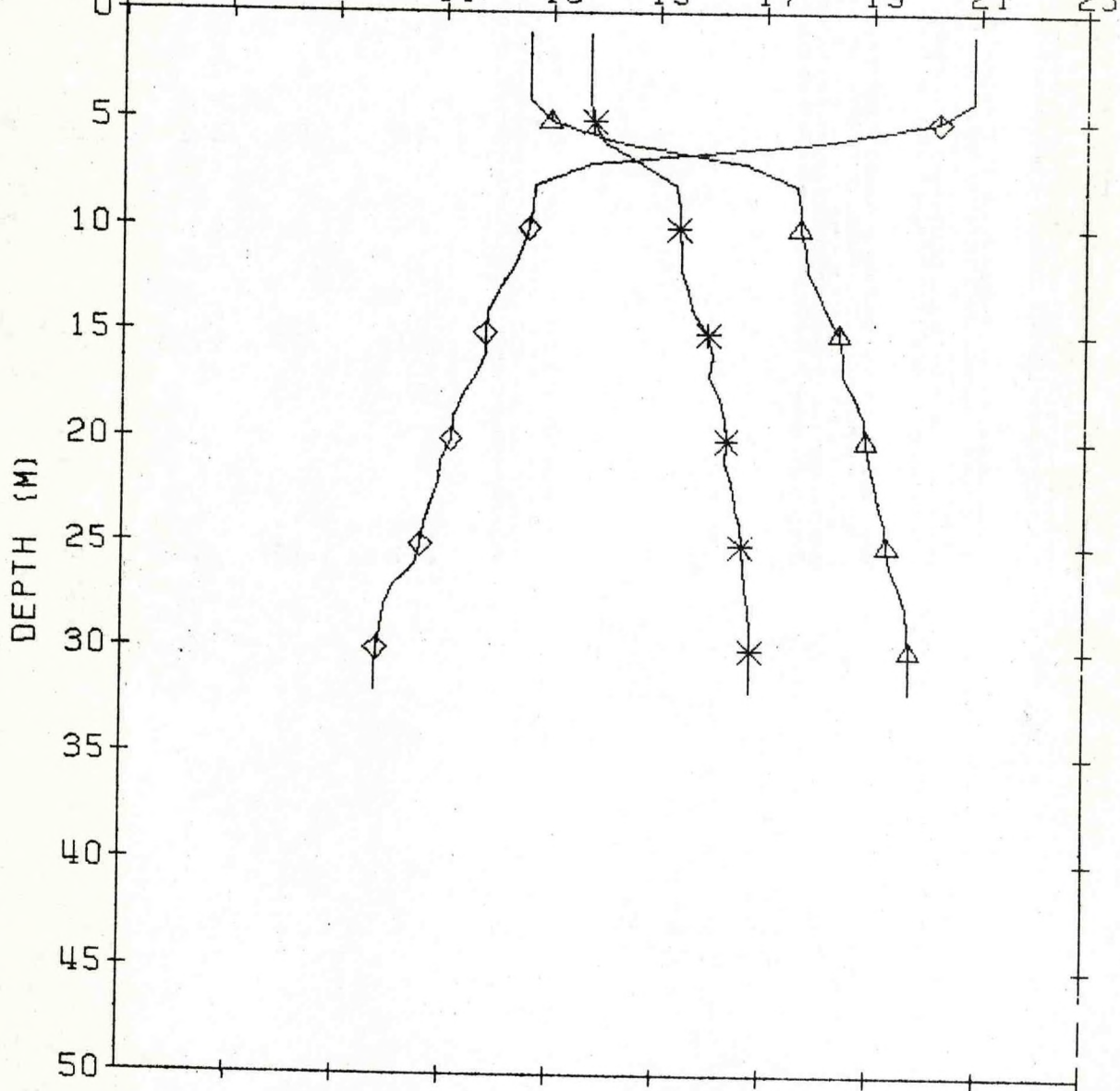
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 28 LAT 40 13.5N; LONG 73 7.0W GMT 06.8 07/01/77
 DEPTH 41 AIR D/W 16.7/05.6 BARO 12.0 VIS 7 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 19/18 SEA DIR/HT 19/0 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.73	31.59	21.99			.51				
2	20.73	31.59	21.99			.51	.00	.03	.90	.05
3	20.73	31.58	21.99			.68				
4	20.73	31.58	21.99			.69				
5	20.73	31.57	21.99			.69				
6	20.70	31.59	22.00			.71				
7	20.53	31.61	22.07			.72				
8	20.17	31.69	22.22			.77				
9	19.80	31.95	22.33			.82	.00	.00	3.96	.15
10	18.78	32.33	22.47			.97				
11	18.78	32.33	22.47			.97				
12	18.77	32.40	22.43			.94				
13	18.77	32.40	22.43			.94				
14	18.99	32.61	22.49			.80				
15	18.99	32.61	22.49			.80				
16	18.77	32.99	22.58			.72				
17	18.33	32.77	22.51			.64				
18	18.33	32.77	22.51			.64				
19	18.00	32.77	22.51			.64	.00	.03	3.29	.26
20	18.00	32.77	22.51			.64				
21	18.00	32.75	22.51			.68				
22	18.00	32.77	22.51			.68				
23	18.00	32.77	22.51			.68				
24	18.00	32.86	22.53			.97				
25	18.00	32.86	22.53			.97				
26	18.00	32.99	22.54			.98				
27	18.00	32.99	22.54			.98				
28	18.00	32.99	22.54			.98				
29	18.00	32.99	22.54			.98				
30	18.00	32.99	22.54			.98				
31	18.00	32.99	22.54			.98	.01	.26	2.13	.37
32	18.00	32.99	22.54			.98				
33	18.00	32.99	22.54			.98				
34	18.00	32.99	22.54			.98				
35	18.00	32.99	22.54			.98				
36	18.00	32.99	22.54			.98				
37	18.00	32.99	22.54			.98				
38	18.00	32.99	22.54			.98				
39	18.00	32.99	22.54			.98				
40	18.00	32.99	22.54			.98	.11	1.75	8.67	.66

KELEZ CRUISE XWCC-14 STATION 28 07/01/77

TRANSMISSIVITY (0/0)

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SIGMA-T

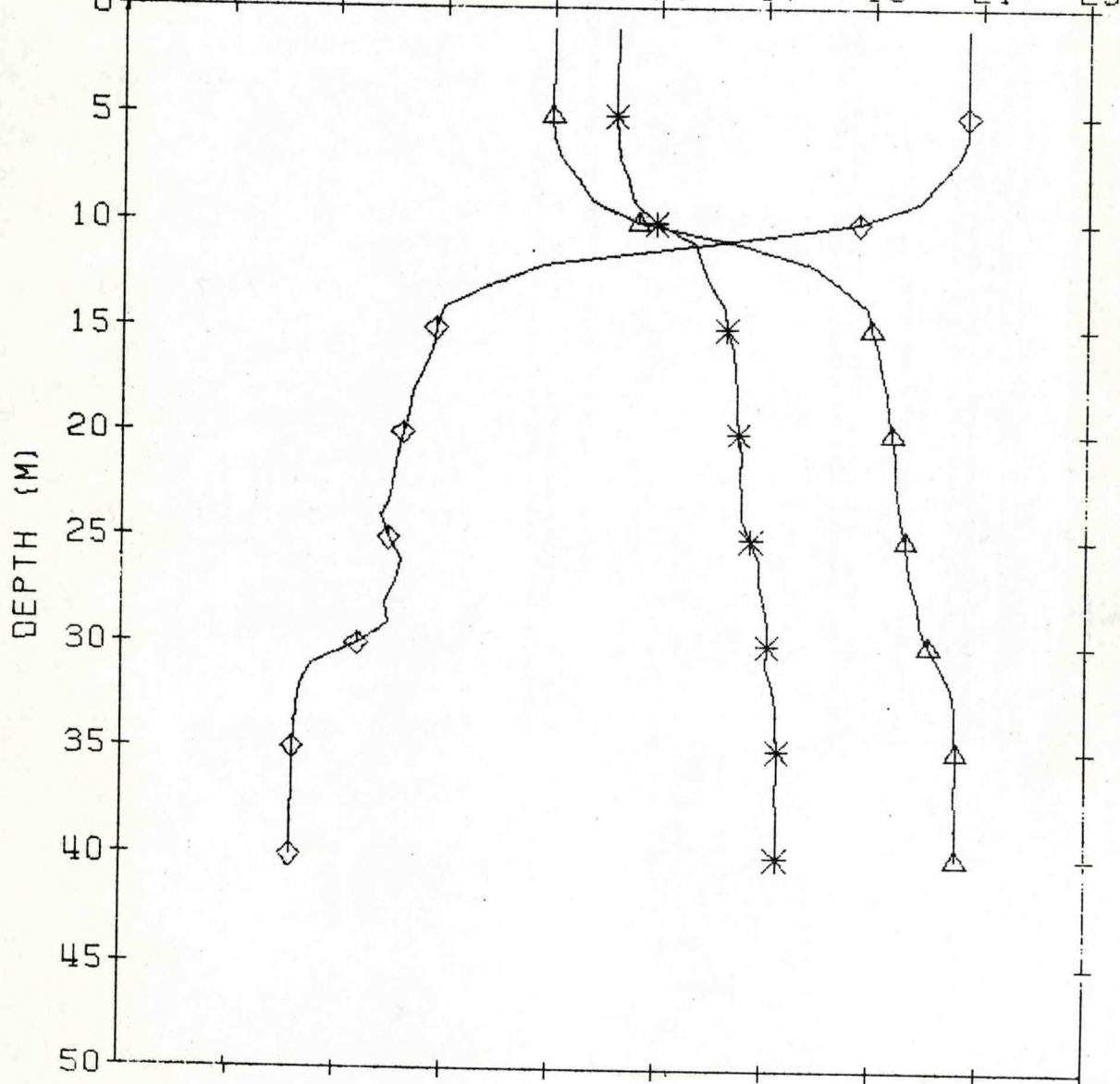
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 33 LAT 40 10.0N; LONG 73 41.5W GMT 11.5 06/28/77
 DEPTH 61 AIR D/W 02.8/00.0 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 17/08 SEA DIR/HT 00/0 SWELL DIR/HT 14/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.63	31.10	21.92			6.37				
2	19.9	31.1	21.1			6.37	.00	.00	.06	.04
3	19.9	31.1	21.1			6.71				
4	19.9	31.1	21.1			6.71				
5	19.9	31.1	21.1			6.71				
6	19.9	31.1	21.1			6.71				
7	19.9	31.1	21.1			6.71				
8	19.9	31.1	21.1			6.71				
9	19.9	31.1	21.1			6.71				
10	19.9	31.1	21.1			6.71				
11	19.9	31.1	21.1			6.71				
12	19.9	31.1	21.1			6.71				
13	19.9	31.1	21.1			6.71				
14	19.9	31.1	21.1			6.71				
15	19.9	31.1	21.1			6.71				
16	19.9	31.1	21.1			6.71				
17	19.9	31.1	21.1			6.71				
18	19.9	31.1	21.1			6.71				
19	19.9	31.1	21.1			6.71				
20	19.9	31.1	21.1			6.71				
21	19.9	31.1	21.1			6.71				
22	19.9	31.1	21.1			6.71				
23	19.9	31.1	21.1			6.71				
24	19.9	31.1	21.1			6.71				
25	19.9	31.1	21.1			6.71				
26	19.9	31.1	21.1			6.71				
27	19.9	31.1	21.1			6.71				
28	19.9	31.1	21.1			6.71				
29	19.9	31.1	21.1			6.71				
30	19.9	31.1	21.1			6.71				
31	19.9	31.1	21.1			6.71				
32	19.9	31.1	21.1			6.71				
33	19.9	31.1	21.1			6.71				
34	19.9	31.1	21.1			6.71				
35	19.9	31.1	21.1			6.71				
36	19.9	31.1	21.1			6.71				
37	19.9	31.1	21.1			6.71				
38	19.9	31.1	21.1			6.71				
39	19.9	31.1	21.1			6.71				
40	19.9	31.1	21.1			6.71				
41	19.9	31.1	21.1			6.71				
42	19.9	31.1	21.1			6.71				
43	19.9	31.1	21.1			6.71				
44	19.9	31.1	21.1			6.71				
45	19.9	31.1	21.1			6.71				
46	19.9	31.1	21.1			6.71				
47	19.9	31.1	21.1			6.71				
48	19.9	31.1	21.1			6.71				
49	19.9	31.1	21.1			6.71				
50	19.9	31.1	21.1			6.71				
51	19.9	31.1	21.1			6.71				
52	19.9	31.1	21.1			6.71				
53	19.9	31.1	21.1			6.71				
54	19.9	31.1	21.1			6.71				
55	19.9	31.1	21.1			6.71				
56	19.9	31.1	21.1			6.71				
57	19.9	31.1	21.1			6.71				
58	19.9	31.1	21.1			6.71				
59	19.9	31.1	21.1			6.71				
60	19.9	31.1	21.1			6.71				

KELEZ CRUISE XWCC-14 STATION 33 06/28/77

TRANSMISSIVITY (0/0)

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SIGMA-T

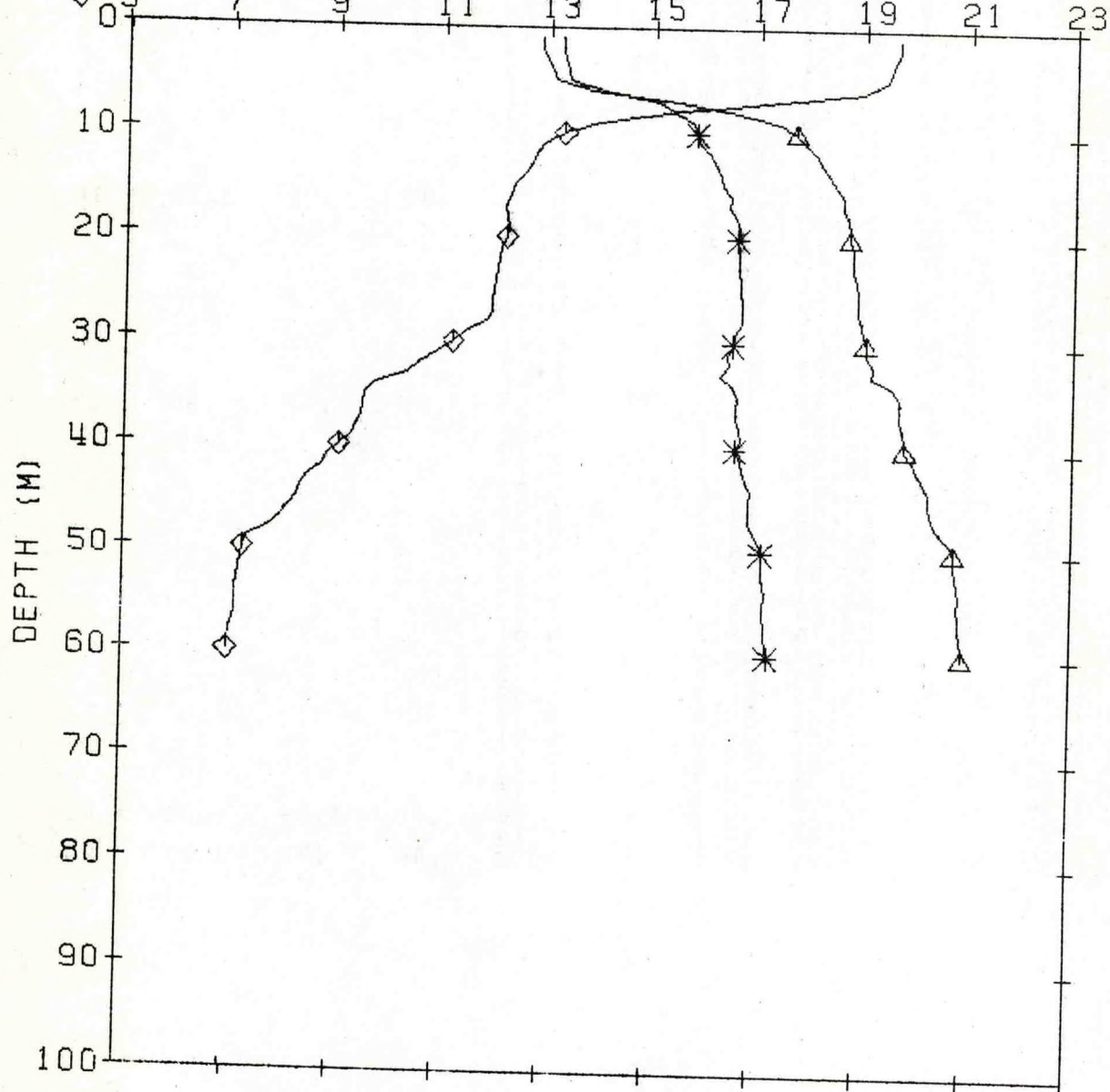
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

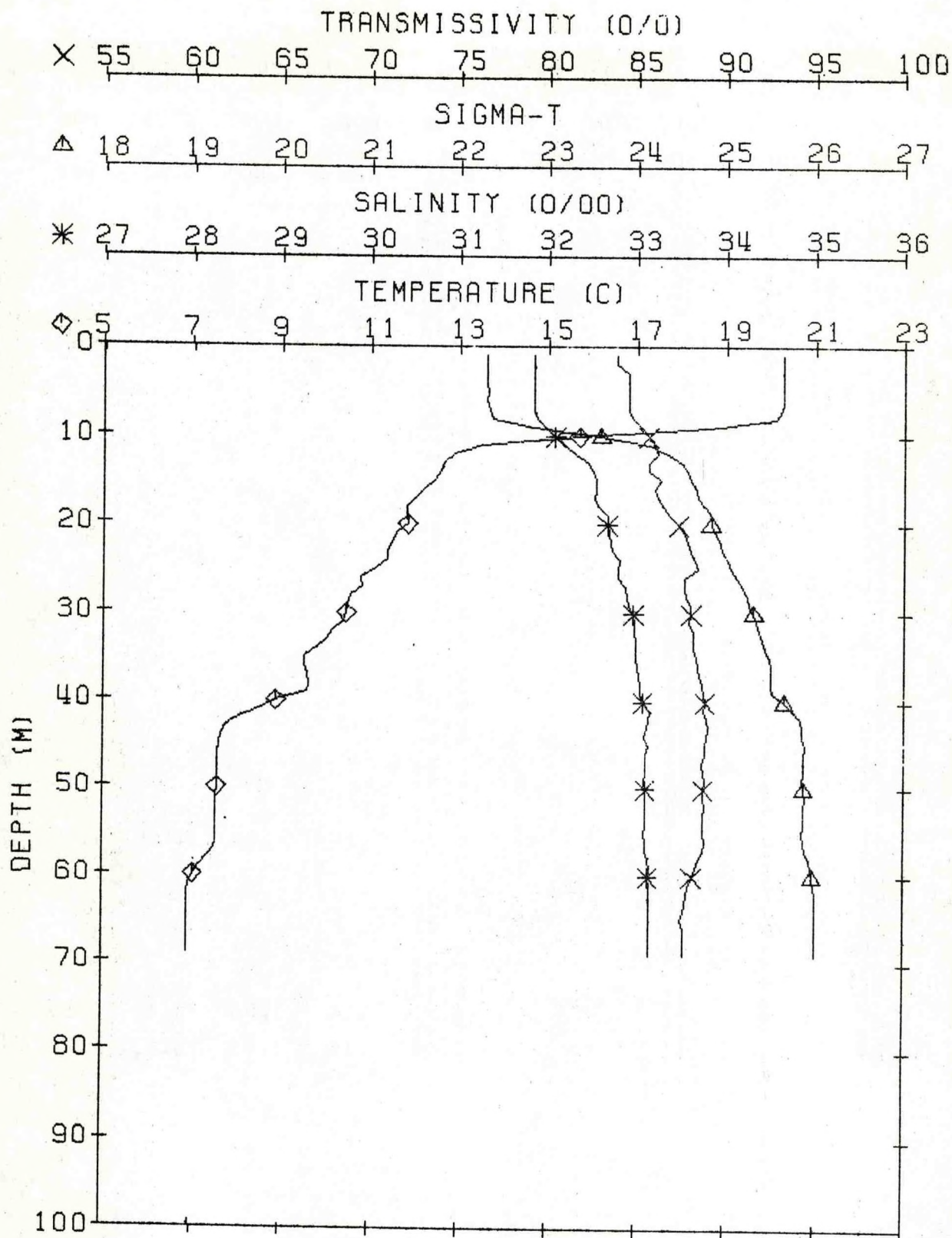
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XWCC-14 STA. 34 LAT 40 5.5N; LONG 73 32.0W GMT 08.3 06/28/77
 DEPTH 71 AIR 0/W 00.0/88.9 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 20/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.25	31.82	22.30	83.8		6.06				
3	20.25	31.82	22.30	83.8		6.06	.00	.00	.00	.06
5	20.25	31.82	22.30	83.8		6.06				
7	20.25	31.82	22.30	83.8		6.06				
9	20.25	31.82	22.30	83.8		6.06				
11	19.87	31.82	22.30	83.8		6.06	.00	.00	1.74	.22
13	19.87	31.82	22.30	83.8		6.06				
15	19.87	31.82	22.30	83.8		6.06				
17	19.87	31.82	22.30	83.8		6.06				
19	19.87	31.82	22.30	83.8		6.06				
21	19.87	31.82	22.30	83.8		6.06				
23	19.87	31.82	22.30	83.8		6.06				
25	19.87	31.82	22.30	83.8		6.06				
27	19.87	31.82	22.30	83.8		6.06				
29	19.87	31.82	22.30	83.8		6.06				
31	19.87	31.82	22.30	83.8		6.06				
33	19.87	31.82	22.30	83.8		6.06				
35	19.87	31.82	22.30	83.8		6.06				
37	19.87	31.82	22.30	83.8		6.06				
39	19.87	31.82	22.30	83.8		6.06				
41	19.87	31.82	22.30	83.8		6.06				
43	19.87	31.82	22.30	83.8		6.06				
45	19.87	31.82	22.30	83.8		6.06				
47	19.87	31.82	22.30	83.8		6.06				
49	19.87	31.82	22.30	83.8		6.06				
51	19.87	31.82	22.30	83.8		6.06				
53	19.87	31.82	22.30	83.8		6.06				
55	19.87	31.82	22.30	83.8		6.06				
57	19.87	31.82	22.30	83.8		6.06				
59	19.87	31.82	22.30	83.8		6.06				
61	19.87	31.82	22.30	83.8		6.06				
63	19.87	31.82	22.30	83.8		6.06				
65	19.87	31.82	22.30	83.8		6.06				
67	19.87	31.82	22.30	83.8		6.06				
69	19.87	31.82	22.30	83.8		6.06				
71	19.87	31.82	22.30	83.8		6.06	.00	.00	.60	.35
73	19.87	31.82	22.30	83.8		6.06				
75	19.87	31.82	22.30	83.8		6.06				
77	19.87	31.82	22.30	83.8		6.06				
79	19.87	31.82	22.30	83.8		6.06				
81	19.87	31.82	22.30	83.8		6.06				
83	19.87	31.82	22.30	83.8		6.06				
85	19.87	31.82	22.30	83.8		6.06				
87	19.87	31.82	22.30	83.8		6.06				
89	19.87	31.82	22.30	83.8		6.06				
91	19.87	31.82	22.30	83.8		6.06				
93	19.87	31.82	22.30	83.8		6.06				
95	19.87	31.82	22.30	83.8		6.06				
97	19.87	31.82	22.30	83.8		6.06				
99	19.87	31.82	22.30	83.8		6.06				
101	19.87	31.82	22.30	83.8		6.06				
103	19.87	31.82	22.30	83.8		6.06				
105	19.87	31.82	22.30	83.8		6.06				
107	19.87	31.82	22.30	83.8		6.06				
109	19.87	31.82	22.30	83.8		6.06				
111	19.87	31.82	22.30	83.8		6.06				
113	19.87	31.82	22.30	83.8		6.06				
115	19.87	31.82	22.30	83.8		6.06				
117	19.87	31.82	22.30	83.8		6.06				
119	19.87	31.82	22.30	83.8		6.06				
121	19.87	31.82	22.30	83.8		6.06				
123	19.87	31.82	22.30	83.8		6.06				
125	19.87	31.82	22.30	83.8		6.06				
127	19.87	31.82	22.30	83.8		6.06				
129	19.87	31.82	22.30	83.8		6.06				
131	19.87	31.82	22.30	83.8		6.06				
133	19.87	31.82	22.30	83.8		6.06				
135	19.87	31.82	22.30	83.8		6.06				
137	19.87	31.82	22.30	83.8		6.06				
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145	19.87	31.82	22.30	83.8		6.06				
147	19.87	31.82	22.30	83.8		6.06				
149	19.87	31.82	22.30	83.8		6.06				
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155	19.87	31.82	22.30	83.8		6.06				
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163	19.87	31.82	22.30	83.8		6.06				
165	19.87	31.82	22.30	83.8		6.06				
167	19.87	31.82	22.30	83.8		6.06				
169	19.87	31.82	22.30	83.8		6.06				
171	19.87	31.82	22.30	83.8		6.06				
173	19.87	31.82	22.30	83.8		6.06				
175	19.87	31.82	22.30	83.8		6.06				
177	19.87	31.82	22.30	83.8		6.06				
179	19.87	31.82	22.30	83.8		6.06				
181	19.87	31.82	22.30	83.8		6.06				
183	19.87	31.82	22.30	83.8		6.06				
185	19.87	31.82	22.30	83.8		6.06				
187	19.87	31.82	22.30	83.8		6.06				
189	19.87	31.82	22.30	83.8		6.06				
191	19.87	31.82	22.30	83.8		6.06				
193	19.87	31.82	22.30	83.8		6.06				
195	19.87	31.82	22.30	83.8		6.06				
197	19.87	31.82	22.30	83.8		6.06				
199	19.87	31.82	22.30	83.8		6.06				
201	19.87	31.82	22.30	83.8		6.06				
203	19.87	31.82	22.30	83.8		6.06				
205	19.87	31.82	22.30	83.8		6.06				
207	19.87	31.82	22.30	83.8		6.06				
209	19.87	31.82	22.30	83.8		6.06				
211	19.87	31.82	22.30	83.8		6.06				
213	19.87	31.82	22.30	83.8		6.06				
215	19.87	31.82	22.30	83.8		6.06				
217	19.87	31.82	22.30	83.8		6.06				
219	19.87	31.82	22.30	83.8		6.06				
221	19.87	31.82	22.30	83.8		6.06				
223	19.87	31.82	22.30	83.8		6.06				
225	19.87	31.82	22.30	83.8		6.06				
227	19.87	31.82	22.30	83.8		6.06				
229	19.87	31.82	22.30	83.8		6.06				
231	19.87	31.82	22.30	83.8		6.06				
233	19.87	31.82	22.30	83.8		6.06				
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237	19.87	31.82	22.30	83.8		6.06				
239	19.87	31.82	22.30	83.8		6.06				
241	19.87	31.82	22.30	83.8		6.06				
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245	19.87	31.82	22.30	83.8		6.06				
247	19.87	31.82	22.30	83.8		6.06				
249	19.87	31.82	22.30	83.8		6.06				
251	19.87	31.82	22.30	83.8		6.06				
253	19.87	31.82	22.30	83.8		6.06				
255	19.87	31.82	22.30	83.8		6.06				
257	19.87	31.82	22.30	83.8		6.06				

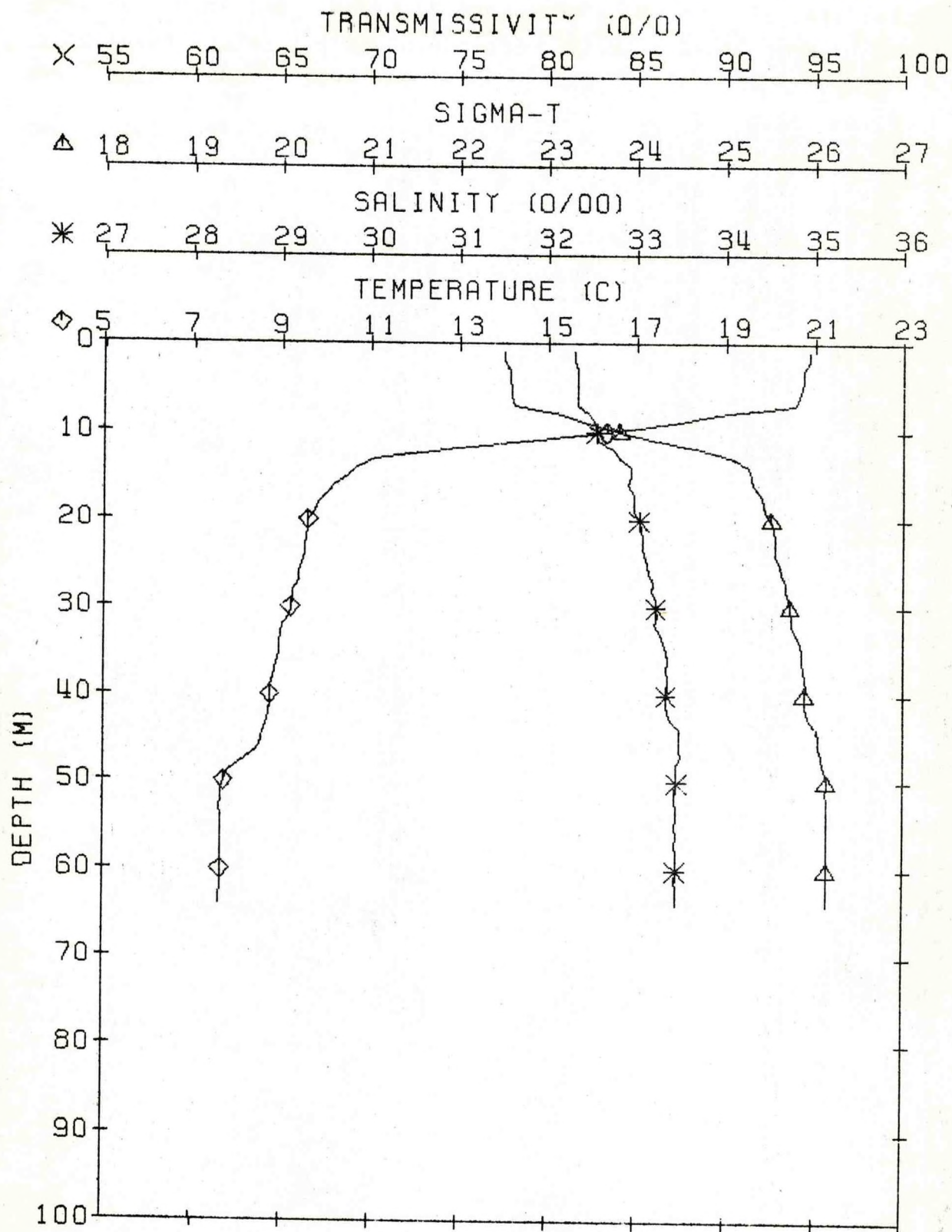
KELEZ CRUISE XWCC-14 STATION 34 06/28/77



XWCC_14 STA. 36 LAT 39 53.5N; LONG 73 6.7W GMT 02.3 07/01/77
 DEPTH 66 AIR D/W 27.8/00.0 BARO 14.0 VIS 7 CLD TYP/CVR / /
 WETHR 0 WIND DIR/SPD 22/20 SEA DIR/HT 22/1 SWELL DIR/HT 23/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.86	33.30	22.50			6.12				
2	22.86	33.30	22.50			6.12	.00	.00	1.61	.09
3	22.86	33.30	22.50			6.12				
4	22.86	33.30	22.50			6.12				
5	22.86	33.30	22.50			6.12				
6	22.86	33.30	22.50			6.12				
7	22.86	33.30	22.50			6.12				
8	22.86	33.30	22.50			6.12				
9	22.86	33.30	22.50			6.12				
10	22.86	33.30	22.50			6.12				
11	22.86	33.30	22.50			6.12				
12	22.86	33.30	22.50			6.12				
13	22.86	33.30	22.50			6.12				
14	22.86	33.30	22.50			6.12				
15	22.86	33.30	22.50			6.12				
16	22.86	33.30	22.50			6.12				
17	22.86	33.30	22.50			6.12				
18	22.86	33.30	22.50			6.12				
19	22.86	33.30	22.50			6.12				
20	22.86	33.30	22.50			6.12				
21	22.86	33.30	22.50			6.12				
22	22.86	33.30	22.50			6.12				
23	22.86	33.30	22.50			6.12				
24	22.86	33.30	22.50			6.12				
25	22.86	33.30	22.50			6.12				
26	22.86	33.30	22.50			6.12				
27	22.86	33.30	22.50			6.12				
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29	22.86	33.30	22.50			6.12				
30	22.86	33.30	22.50			6.12				
31	22.86	33.30	22.50			6.12				
32	22.86	33.30	22.50			6.12				
33	22.86	33.30	22.50			6.12				
34	22.86	33.30	22.50			6.12				
35	22.86	33.30	22.50			6.12				
36	22.86	33.30	22.50			6.12				
37	22.86	33.30	22.50			6.12				
38	22.86	33.30	22.50			6.12				
39	22.86	33.30	22.50			6.12				
40	22.86	33.30	22.50			6.12				
41	22.86	33.30	22.50			6.12				
42	22.86	33.30	22.50			6.12				
43	22.86	33.30	22.50			6.12				
44	22.86	33.30	22.50			6.12				
45	22.86	33.30	22.50			6.12				
46	22.86	33.30	22.50			6.12				
47	22.86	33.30	22.50			6.12				
48	22.86	33.30	22.50			6.12				
49	22.86	33.30	22.50			6.12				
50	22.86	33.30	22.50			6.12				
51	22.86	33.30	22.50			6.12				
52	22.86	33.30	22.50			6.12				
53	22.86	33.30	22.50			6.12				
54	22.86	33.30	22.50			6.12				
55	22.86	33.30	22.50			6.12				
56	22.86	33.30	22.50			6.12				
57	22.86	33.30	22.50			6.12				
58	22.86	33.30	22.50			6.12				
59	22.86	33.30	22.50			6.12				
60	22.86	33.30	22.50			6.12				
61	22.86	33.30	22.50			6.12				
62	22.86	33.30	22.50			6.12				
63	22.86	33.30	22.50			6.12				
64	22.86	33.30	22.50			6.12				
65	22.86	33.30	22.50			6.12				
66	22.86	33.30	22.50			6.12				
67	22.86	33.30	22.50			6.12				
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70	22.86	33.30	22.50			6.12				
71	22.86	33.30	22.50			6.12				
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73	22.86	33.30	22.50			6.12				
74	22.86	33.30	22.50			6.12				
75	22.86	33.30	22.50			6.12				
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82	22.86	33.30	22.50			6.12				
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89	22.86	33.30	22.50			6.12				
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92	22.86	33.30	22.50			6.12				
93	22.86	33.30	22.50			6.12				
94	22.86	33.30	22.50			6.12				
95	22.86	33.30	22.50			6.12				
96	22.86	33.30	22.50			6.12				
97	22.86	33.30	22.50			6.12				
98	22.86	33.30	22.50			6.12				
99	22.86	33.30	22.50			6.12				
100	22.86	33.30	22.50			6.12				
101	22.86	33.30	22.50			6.12				
102	22.86	33.30	22.50			6.12				
103	22.86	33.30	22.50			6.12				
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106	22.86	33.30	22.50			6.12				
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108	22.86	33.30	22.50			6.12				
109	22.86	33.30	22.50			6.12				
110	22.86	33.30	22.50			6.12				
111	22.86	33.30	22.50			6.12				
112	22.86	33.30	22.50			6.12				
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117	22.86	33.30	22.50			6.12				
118	22.86	33.30	22.50			6.12				
119	22.86	33.30	22.50			6.12				
120	22.86	33.30	22.50			6.12				
121	22.86	33.30	22.50			6.12				
122	22.86	33.30	22.50			6.12				
123	22.86	33.30	22.50			6.12				
124	22.86	33.30	22.50			6.12				
125	22.86	33.30	22.50			6.12				
126	22.86	33.30	22.50			6.12				
127	22.86	33.30	22.50			6.12				
128	22.86	33.30	22.50			6.12				
129	22.86	33.30	22.50			6.12				
130	22.86	33.30	22.50			6.12				
131	22.86	33.30	22.50			6.12				
132	22.86	33.30	22.50			6.12				
133	22.86	33.30	22.50			6.12				
134	22.86	33.30	22.50			6.12				
135	22.86	33.30	22.50			6.12				
136	22.86	33.30	22.50			6.12				
137	22.86	33.30	22.50			6.12				

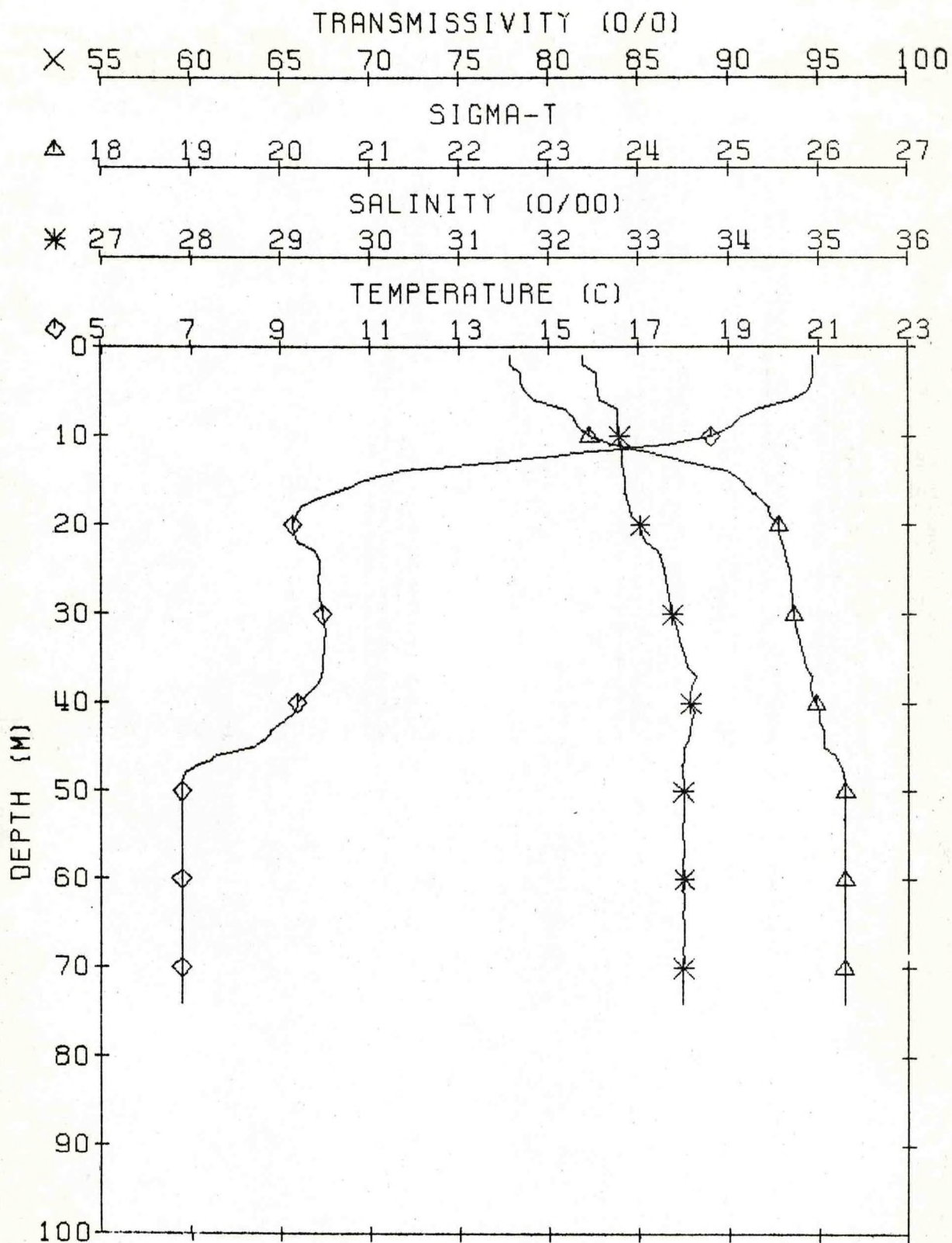
KELEZ CRUISE XWCC-14 STATION 36 07/01/77



XWCC-14 STA. 37 LAT 39 45.5N; LONG 72 57.0W GMT 00.2 07/01/77
 DEPTH 75 AIR D/W 33.3/05.6 BARO 14.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 22/17 SEA DIR/HT 22/1 SWELL DIR/HT 23/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.84	37.3	22.5	22.5	7.41					
2	20.84	37.3	22.5	22.5	7.41		.00	.00	1.18	.05
3	20.84	37.3	22.5	22.5	7.41					
4	20.84	37.3	22.5	22.5	7.41					
5	20.84	37.3	22.5	22.5	7.41					
6	20.84	37.3	22.5	22.5	7.41					
7	20.84	37.3	22.5	22.5	7.41					
8	20.84	37.3	22.5	22.5	7.41					
9	20.84	37.3	22.5	22.5	7.41					
10	20.84	37.3	22.5	22.5	7.41		.00	.14	.03	.19
11	20.84	37.3	22.5	22.5	7.41					
12	20.84	37.3	22.5	22.5	7.41					
13	20.84	37.3	22.5	22.5	7.41					
14	20.84	37.3	22.5	22.5	7.41					
15	20.84	37.3	22.5	22.5	7.41					
16	20.84	37.3	22.5	22.5	7.41					
17	20.84	37.3	22.5	22.5	7.41					
18	20.84	37.3	22.5	22.5	7.41					
19	20.84	37.3	22.5	22.5	7.41					
20	20.84	37.3	22.5	22.5	7.41		.00	.00	.63	.30
21	20.84	37.3	22.5	22.5	7.41					
22	20.84	37.3	22.5	22.5	7.41					
23	20.84	37.3	22.5	22.5	7.41					
24	20.84	37.3	22.5	22.5	7.41					
25	20.84	37.3	22.5	22.5	7.41					
26	20.84	37.3	22.5	22.5	7.41					
27	20.84	37.3	22.5	22.5	7.41					
28	20.84	37.3	22.5	22.5	7.41					
29	20.84	37.3	22.5	22.5	7.41					
30	20.84	37.3	22.5	22.5	7.41					
31	20.84	37.3	22.5	22.5	7.41					
32	20.84	37.3	22.5	22.5	7.41					
33	20.84	37.3	22.5	22.5	7.41					
34	20.84	37.3	22.5	22.5	7.41					
35	20.84	37.3	22.5	22.5	7.41					
36	20.84	37.3	22.5	22.5	7.41					
37	20.84	37.3	22.5	22.5	7.41					
38	20.84	37.3	22.5	22.5	7.41					
39	20.84	37.3	22.5	22.5	7.41					
40	20.84	37.3	22.5	22.5	7.41		.02	.22	.03	.44
41	20.84	37.3	22.5	22.5	7.41					
42	20.84	37.3	22.5	22.5	7.41					
43	20.84	37.3	22.5	22.5	7.41					
44	20.84	37.3	22.5	22.5	7.41					
45	20.84	37.3	22.5	22.5	7.41					
46	20.84	37.3	22.5	22.5	7.41					
47	20.84	37.3	22.5	22.5	7.41					
48	20.84	37.3	22.5	22.5	7.41					
49	20.84	37.3	22.5	22.5	7.41					
50	20.84	37.3	22.5	22.5	7.41		.13	.78	6.31	1.02
51	20.84	37.3	22.5	22.5	7.41		.15	.93	6.31	1.01

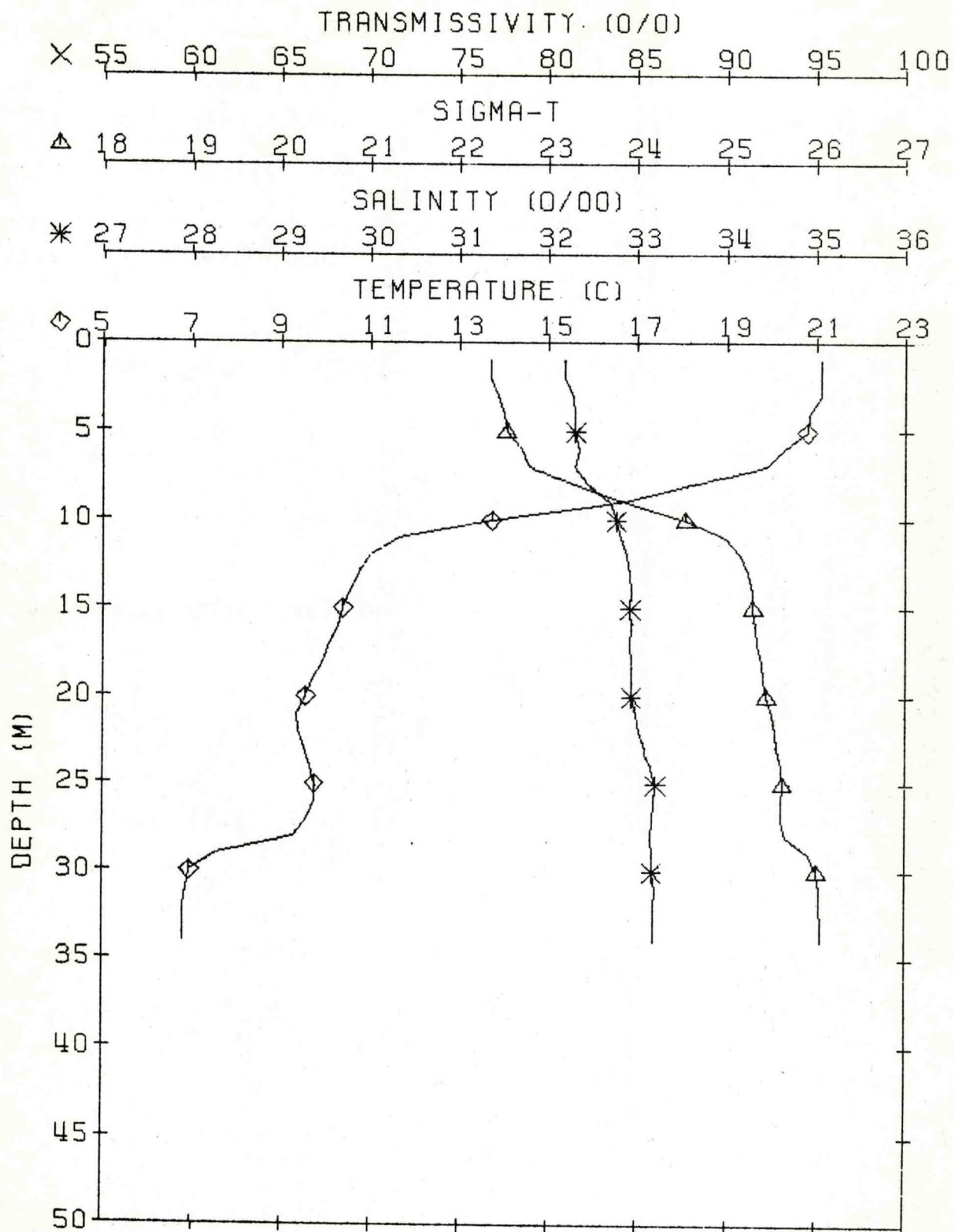
KELEZ CRUISE XWCC-14 STATION 37 07/01/77



XWCC-14 STA. 81 LAT 39 44.5N; LONG 73 10.0W GMT 22.4 06/30/77
 DEPTH 34 AIR D/W 38.9/00.0 BARO 14.0 VIS 7 CLD TYP/CVR /
 WETR 0 WIND DIR/SPD 23/18 SEA DIR/HT 23/1 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.07	32.18	22.35		6.36					
2	21.07	32.18	22.35		6.37		.00	.35	1.94	.05
3	21.07	32.18	22.35		6.39					
4	20.81	32.18	22.35		6.42					
5	20.78	32.18	22.35		6.42					
6	20.27	32.18	22.35		6.44					
7	19.83	32.18	22.35		6.44					
8	18.83	32.18	22.35		6.44					
9	18.17	32.18	22.35		6.44					
10	16.53	32.18	22.35		6.44		.00	.00	1.01	.09
11	16.71	32.18	22.35		6.44					
12	16.61	32.18	22.35		6.44					
13	16.98	32.18	22.35		6.44					
14	16.98	32.18	22.35		6.44					
15	16.71	32.18	22.35		6.44					
16	16.50	32.18	22.35		6.44					
17	16.50	32.18	22.35		6.44					
18	16.50	32.18	22.35		6.44					
19	16.50	32.18	22.35		6.44		.00	.00	.17	.30
20	16.50	32.18	22.35		6.44					
21	16.50	32.18	22.35		6.44					
22	16.50	32.18	22.35		6.44					
23	16.50	32.18	22.35		6.44					
24	16.50	32.18	22.35		6.44					
25	16.50	32.18	22.35		6.44					
26	16.50	32.18	22.35		6.44					
27	16.50	32.18	22.35		6.44					
28	16.50	32.18	22.35		6.44					
29	16.50	32.18	22.35		6.44					
30	16.50	32.18	22.35		6.44					
31	16.50	32.18	22.35		6.44					
32	16.50	32.18	22.35		6.44					
33	16.50	32.18	22.35		6.44					
34	16.50	32.18	22.35		6.44		.07	1.23	8.88	.77

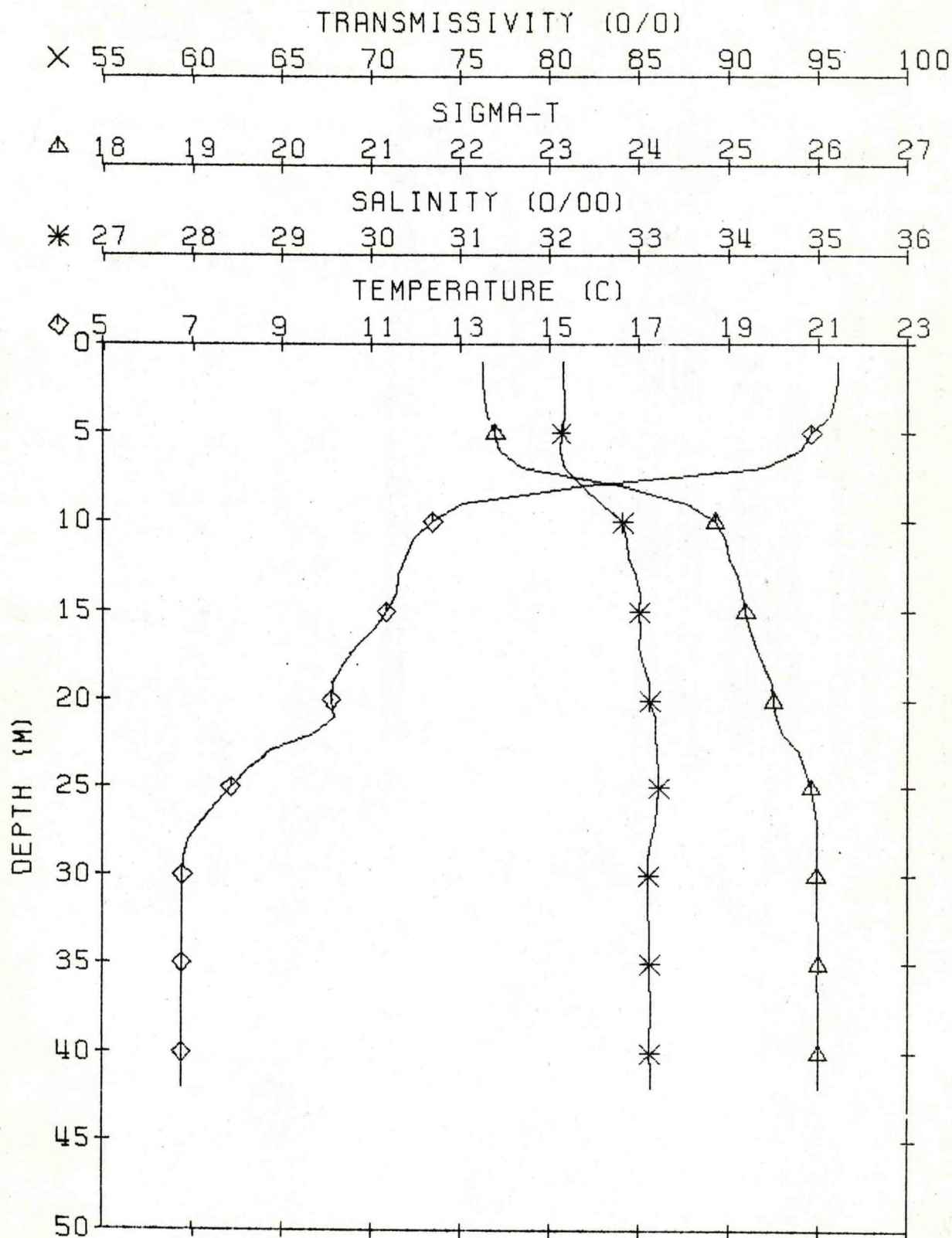
KELEZ CRUISE XWCC-14 STATION 81 06/30/77



XWCC-14 STA. 82 LAT 39 49.0N; LONG 73 21.5W GMT 20.4 06/30/77
 DEPTH 43 AIR D/W 33.3/94.4 BARO 14.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 23/18 SEA DIR/HT 23/1 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.41	32.15	22.24			6.11				
11	21.41	32.15	22.24			6.11	.00	.13	1.88	.07
12	21.41	32.15	22.24			6.11				
13	21.41	32.15	22.24			6.11				
14	21.41	32.15	22.24			6.11				
15	21.41	32.15	22.24			6.11				
16	21.41	32.15	22.24			6.11				
17	21.41	32.15	22.24			6.11				
18	21.41	32.15	22.24			6.11				
19	21.41	32.15	22.24			6.11				
20	21.41	32.15	22.24			6.11				
21	21.41	32.15	22.24			6.11				
22	21.41	32.15	22.24			6.11				
23	21.41	32.15	22.24			6.11				
24	21.41	32.15	22.24			6.11				
25	21.41	32.15	22.24			6.11				
26	21.41	32.15	22.24			6.11				
27	21.41	32.15	22.24			6.11				
28	21.41	32.15	22.24			6.11				
29	21.41	32.15	22.24			6.11				
30	21.41	32.15	22.24			6.11				
31	21.41	32.15	22.24			6.11				
32	21.41	32.15	22.24			6.11				
33	21.41	32.15	22.24			6.11				
34	21.41	32.15	22.24			6.11				
35	21.41	32.15	22.24			6.11				
36	21.41	32.15	22.24			6.11				
37	21.41	32.15	22.24			6.11				
38	21.41	32.15	22.24			6.11				
39	21.41	32.15	22.24			6.11				
40	21.41	32.15	22.24			6.11				
41	21.41	32.15	22.24			6.11				
42	21.41	32.15	22.24			6.11				
43	21.41	32.15	22.24			6.11	.17	1.93	11.53	.92

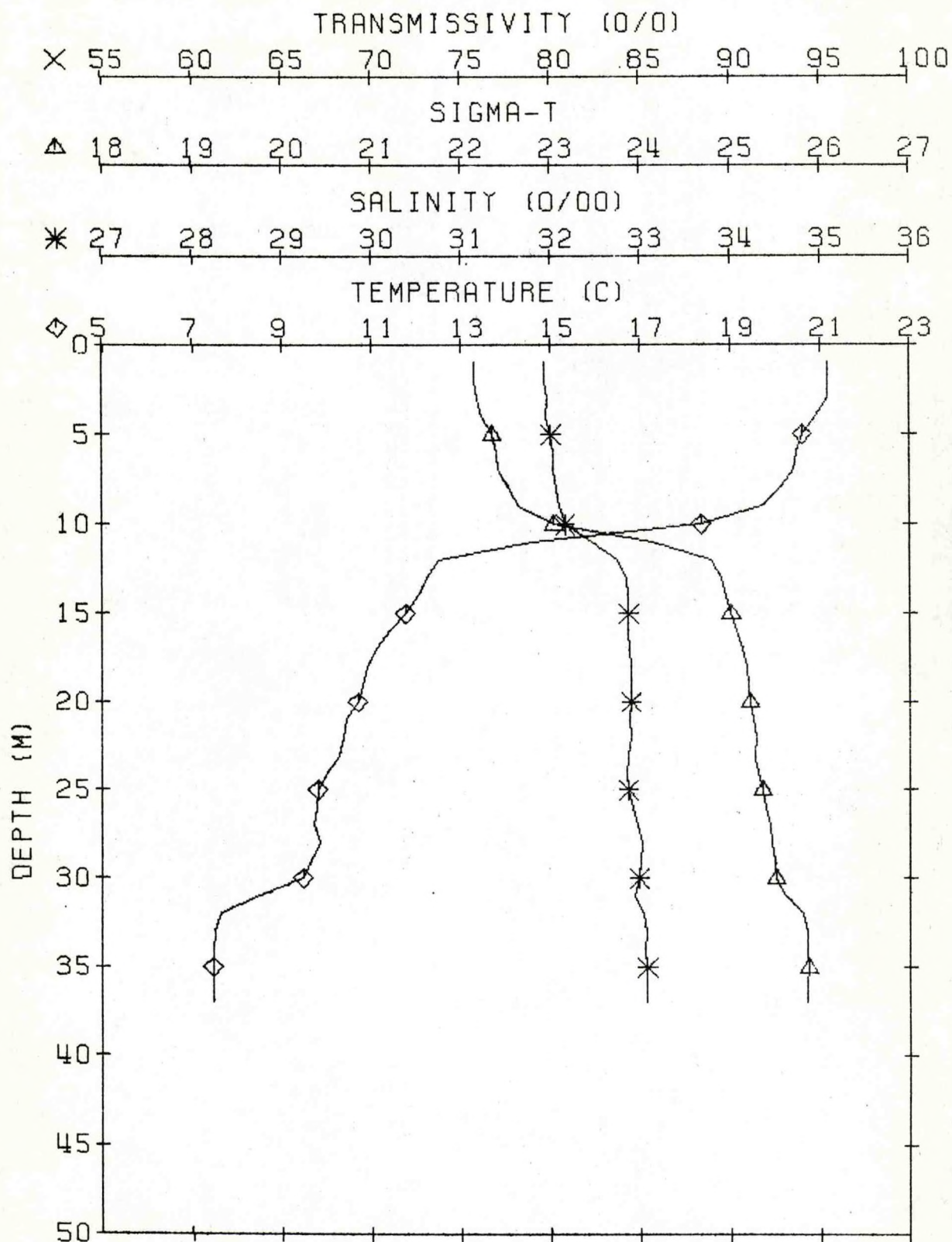
KELEZ CRUISE XWCC-14 STATION 82 06/30/77



XWCC_14 STA. 83 LAT 39 56.5N; LONG 73 30.0W GMT 19.0 06/30/77
 DEPTH 0 39 AIR D/W 55.6/16.7 BARO 14.5 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 22/14 SEA DIR/HT 22/0 SWELL DIR/HT 20/0

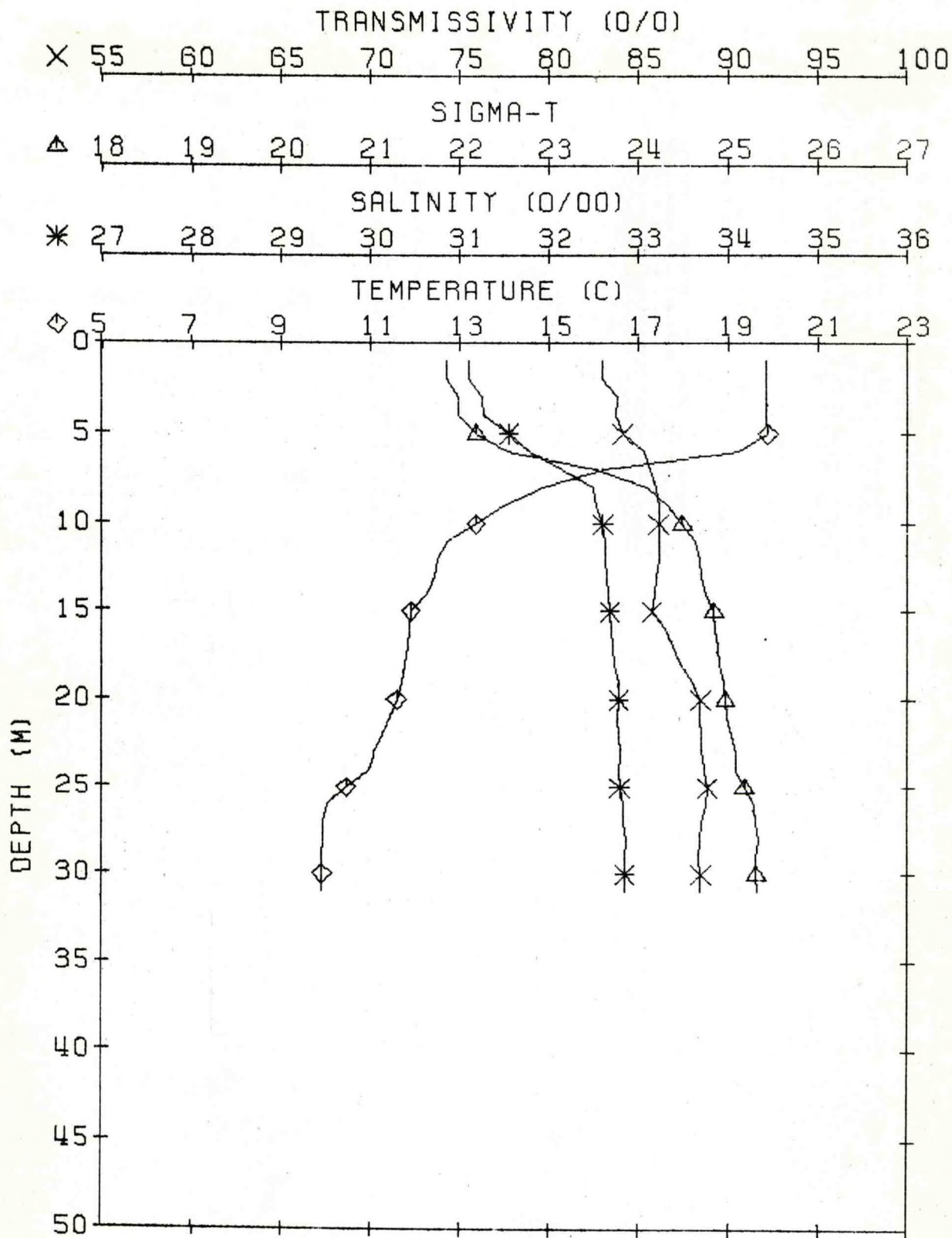
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.14	31.92	22.14		6.26		.00	.05	1.64	.08
2	21.14	31.92	22.14		6.26					
3	21.14	31.92	22.14		6.26					
4	21.14	31.92	22.14		6.26					
5	21.14	31.92	22.14		6.26					
6	21.14	31.92	22.14		6.26					
7	21.14	31.92	22.14		6.26					
8	21.14	31.92	22.14		6.26					
9	21.14	31.92	22.14		6.26					
10	21.14	31.92	22.14		6.26					
11	21.14	31.92	22.14		6.26					
12	21.14	31.92	22.14		6.26					
13	21.14	31.92	22.14		6.26					
14	21.14	31.92	22.14		6.26					
15	21.14	31.92	22.14		6.26					
16	21.14	31.92	22.14		6.26					
17	21.14	31.92	22.14		6.26					
18	21.14	31.92	22.14		6.26					
19	21.14	31.92	22.14		6.26					
20	21.14	31.92	22.14		6.26					
21	21.14	31.92	22.14		6.26					
22	21.14	31.92	22.14		6.26					
23	21.14	31.92	22.14		6.26					
24	21.14	31.92	22.14		6.26					
25	21.14	31.92	22.14		6.26					
26	21.14	31.92	22.14		6.26					
27	21.14	31.92	22.14		6.26					
28	21.14	31.92	22.14		6.26					
29	21.14	31.92	22.14		6.26					
30	21.14	31.92	22.14		6.26					
31	21.14	31.92	22.14		6.26					
32	21.14	31.92	22.14		6.26					
33	21.14	31.92	22.14		6.26					
34	21.14	31.92	22.14		6.26					
35	21.14	31.92	22.14		6.26					
36	21.14	31.92	22.14		6.26					
37	21.14	31.92	22.14		6.26					
38	21.14	31.92	22.14		6.26					
39	21.14	31.92	22.14		6.26					
40	21.14	31.92	22.14		6.26					
41	21.14	31.92	22.14		6.26					
42	21.14	31.92	22.14		6.26					
43	21.14	31.92	22.14		6.26					
44	21.14	31.92	22.14		6.26					
45	21.14	31.92	22.14		6.26					
46	21.14	31.92	22.14		6.26					
47	21.14	31.92	22.14		6.26					
48	21.14	31.92	22.14		6.26					
49	21.14	31.92	22.14		6.26					
50	21.14	31.92	22.14		6.26					
51	21.14	31.92	22.14		6.26					
52	21.14	31.92	22.14		6.26					
53	21.14	31.92	22.14		6.26					
54	21.14	31.92	22.14		6.26					
55	21.14	31.92	22.14		6.26					
56	21.14	31.92	22.14		6.26					
57	21.14	31.92	22.14		6.26					
58	21.14	31.92	22.14		6.26					
59	21.14	31.92	22.14		6.26					
60	21.14	31.92	22.14		6.26					
61	21.14	31.92	22.14		6.26					
62	21.14	31.92	22.14		6.26					
63	21.14	31.92	22.14		6.26					
64	21.14	31.92	22.14		6.26					
65	21.14	31.92	22.14		6.26					
66	21.14	31.92	22.14		6.26					
67	21.14	31.92	22.14		6.26					
68	21.14	31.92	22.14		6.26					
69	21.14	31.92	22.14		6.26					
70	21.14	31.92	22.14		6.26					
71	21.14	31.92	22.14		6.26					
72	21.14	31.92	22.14		6.26					
73	21.14	31.92	22.14		6.26					
74	21.14	31.92	22.14		6.26					
75	21.14	31.92	22.14		6.26					
76	21.14	31.92	22.14		6.26					
77	21.14	31.92	22.14		6.26					
78	21.14	31.92	22.14		6.26					
79	21.14	31.92	22.14		6.26					
80	21.14	31.92	22.14		6.26					
81	21.14	31.92	22.14		6.26					
82	21.14	31.92	22.14		6.26					
83	21.14	31.92	22.14		6.26					
84	21.14	31.92	22.14		6.26					
85	21.14	31.92	22.14		6.26					
86	21.14	31.92	22.14		6.26					
87	21.14	31.92	22.14		6.26					
88	21.14	31.92	22.14		6.26					
89	21.14	31.92	22.14		6.26					
90	21.14	31.92	22.14		6.26					
91	21.14	31.92	22.14		6.26					
92	21.14	31.92	22.14		6.26					
93	21.14	31.92	22.14		6.26					
94	21.14	31.92	22.14		6.26					
95	21.14	31.92	22.14		6.26					
96	21.14	31.92	22.14		6.26					
97	21.14	31.92	22.14		6.26					
98	21.14	31.92	22.14		6.26					
99	21.14	31.92	22.14		6.26					
100	21.14	31.92	22.14		6.26					
101	21.14	31.92	22.14		6.26					
102	21.14	31.92	22.14		6.26					
103	21.14	31.92	22.14		6.26					
104	21.14	31.92	22.14		6.26					
105	21.14	31.92	22.14		6.26					
106	21.14	31.92	22.14		6.26					
107	21.14	31.92	22.14		6.26					
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113	21.14	31.92	22.14		6.26					
114	21.14	31.92	22.14		6.26					
115	21.14	31.92	22.14		6.26					
116	21.14	31.92	22.14		6.26					
117	21.14	31.92	22.14		6.26					
118	21.14	31.92	22.14		6.26					
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122	21.14	31.92	22.14		6.26					
123	21.14	31.92	22.14		6.26					
124	21.14	31.92	22.14		6.26					
125	21.14	31.92	22.14		6.26					
126	21.14	31.92	22.14		6.26					
127	21.14	31.92	22.14		6.26					
128	21.14	31.92	22.14		6.26					
129	21.14	31.92	22.14		6.26					
130	21.14	31.92	22.14		6.26					
131	21.14	31.92	22.14		6.26					
132	21.14	31.92	22.14		6.26					
133	21.14	31.92	22.14		6.26					
134	21.14	31.92	22.14		6.26					
135	21.14	31.92	22.14		6.26					
136	21.14	31.92	22.14		6.26					
137	21.14	31.92	22.14		6.26					

KELEZ CRUISE XWCC-14 STATION 83 06/30/77



XWCC-14 STA. 84 LAT 40 2.0N; LONG 73 41.5W GMT 10.3 06/28/77
 DEPTH 31 AIR D/W 00.0/94.4 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 19/10 SEA DIR/HT 00/0 SWELL DIR/HT 16/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.81	31.09	21.85	83.0		6.46				
2	19.81	31.09	21.85	83.0		6.46				
3	19.82	31.25	21.98	83.8		6.49	.00	.00	.03	.10
4	19.82	31.26	21.99	83.7		6.49				
5	19.86	31.54	22.19	84.1		6.48				
6	19.83	31.77	22.52	85.3		6.48				
7	16.22	32.14	23.53	85.6		6.62				
8	14.84	32.59	24.10	86.0		6.98				
9	13.93	32.53	24.32	86.1		7.10				
10	13.36	32.60	24.49	86.1		7.17	.00	.00	1.22	.10
11	12.71	32.63	24.64	86.1		7.20				
12	12.48	32.63	24.68	86.1		7.21				
13	12.42	32.64	24.70	86.0		7.14				
14	12.24	32.66	24.75	85.9		7.06				
15	11.88	32.68	24.83	85.7		7.00				
16	11.84	32.69	24.85	85.5		6.96				
17	11.82	32.71	24.87	86.0		6.84				
18	11.74	32.72	24.89	86.7		6.72				
19	11.67	32.78	24.95	88.0		6.55	.00	.00	1.92	.37
20	11.57	32.77	24.96	88.4		6.59				
21	11.42	32.76	24.98	88.8		6.54				
22	11.26	32.77	25.02	88.5		6.50				
23	11.07	32.80	25.07	88.5		6.46				
24	10.95	32.78	25.08	88.6		6.42				
25	10.44	32.79	25.17	88.8		6.36				
26	9.01	32.83	25.28	88.7		6.33				
27	9.90	32.83	25.30	88.5		6.30				
28	9.90	32.84	25.32	88.4		6.21				
29	9.99	32.84	25.33	88.3		6.13				
30	9.88	32.84	25.31	88.4		6.01				
31	9.88	32.84	25.31	88.4		5.95	.00	.80	5.69	.65



XWCC-14 STA. 85 LAT 40 8.0N; LONG 73 51.5W GMT 14.5 06/28/77
 DEPTH 25 AIR D/W 11.1/05.6 BARO 15.0 VIS 5 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 03/08 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	16.98	31.56	22.90			6.40				
2	16.98	31.56	22.90			6.40	.00	.00	2.34	.16
3	16.04	31.65	22.19			6.46				
4	15.88	31.74	22.29			6.55				
5	15.79	31.78	22.33			6.48				
6	15.07	31.81	22.52			6.47				
7	12.63	31.86	22.05			6.29				
8	12.55	31.91	22.15			6.49				
9	12.32	31.95	22.19			6.42				
10	12.37	32.22	22.39			6.89	.00	.00	2.69	.26
11	12.00	32.37	22.57			6.69				
12	11.75	32.51	22.73			6.84				
13	11.46	32.60	22.85			6.95				
14	11.25	32.59	22.88			6.10				
15	10.74	32.61	22.99			6.87				
16	10.74	32.68	22.07			6.69				
17	10.55	32.70	22.09			6.74				
18	10.35	32.72	22.14			6.40				
19	10.16	32.74	22.19			6.49				
20	10.11	32.74	22.19			6.24	.00	.52	7.59	.52
21	10.10	32.74	22.20			6.51				
22	10.01	32.74	22.21			6.90				
23	9.97	32.74	22.22			6.00				
24	9.81	32.74	22.24			6.00	.00	1.41	9.54	.81

KELEZ CRUISE XWCC-14 STATION 85 06/28/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

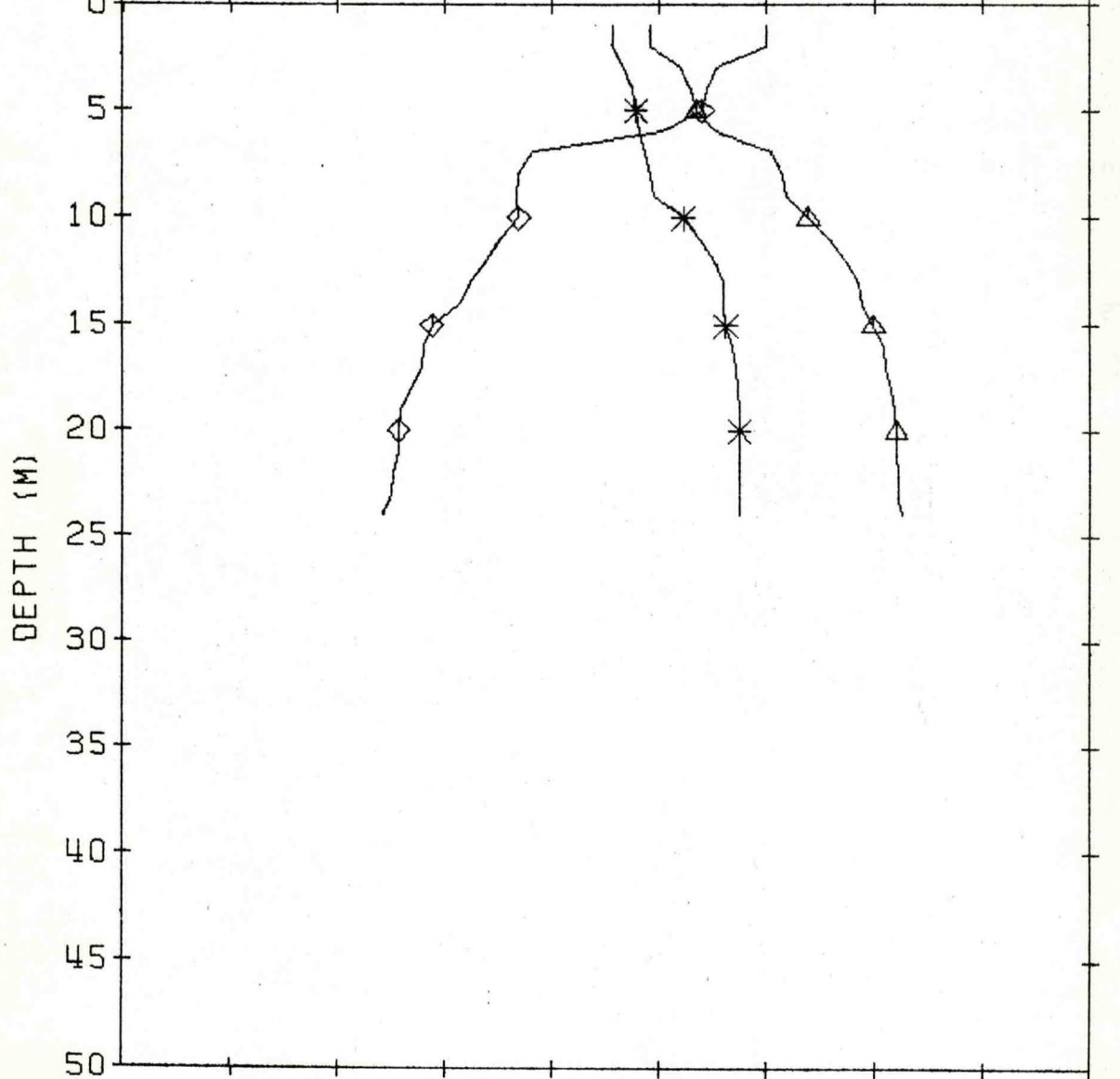
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

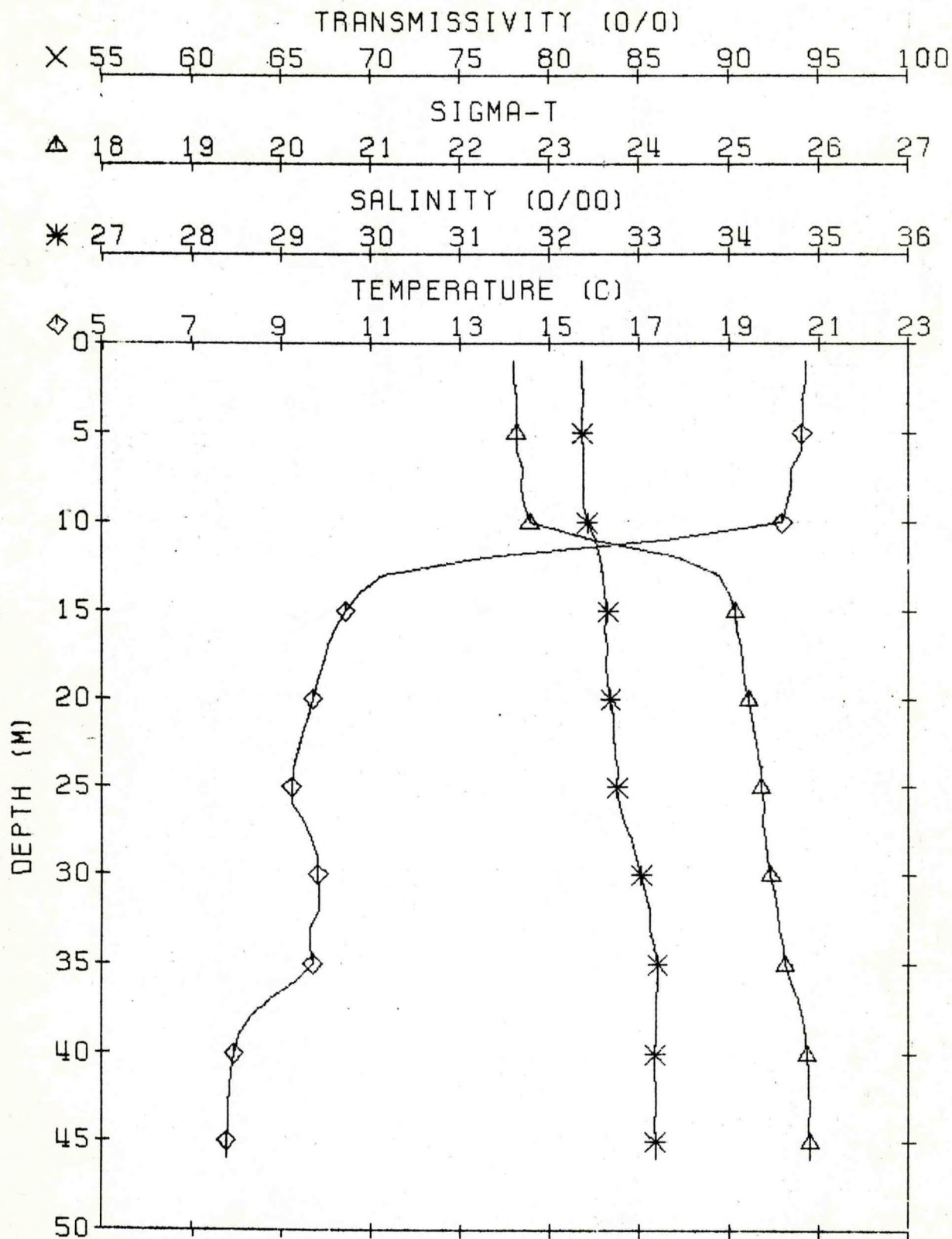
◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 113 LAT 40 8.5N; LONG 72 55.5W GMT 04.5 07/01/77
 DEPTH 47 AIR D/W 16.7/00.0 BARO 14.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 20/15 SEA DIR/HT 20/0 SWELL DIR/HT 19/2

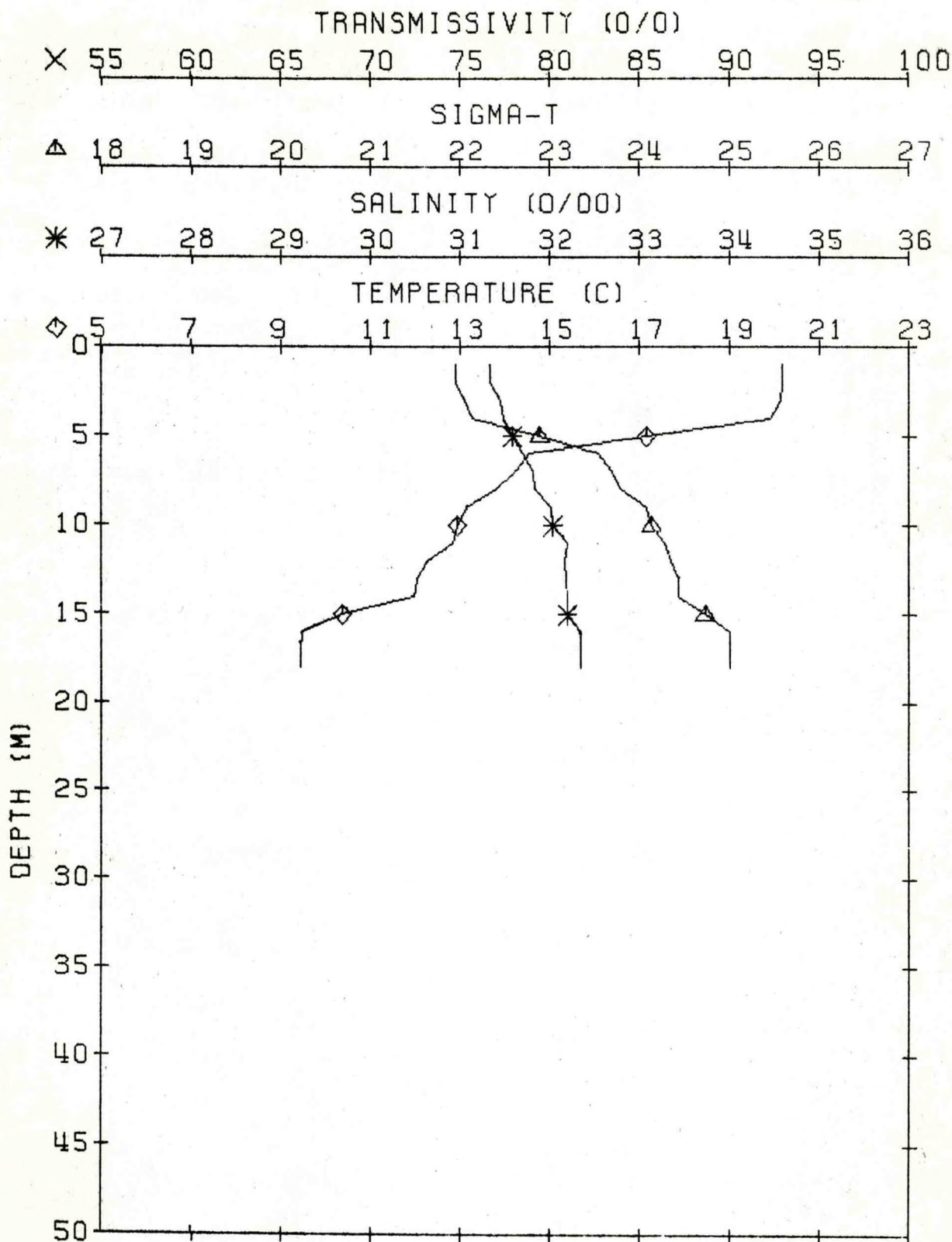
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.70	33.37	22.60			5.92				
2	20.70	33.37	22.60			5.92	.00	.00	1.28	.00
3	20.62	33.37	22.60			5.92				
4	20.60	33.36	22.62			5.92				
5	20.60	33.36	22.62			5.92				
6	20.60	33.36	22.62			5.92				
7	20.60	33.37	22.62			5.92				
8	20.64	33.37	22.69			5.92				
9	20.66	33.37	22.68			5.92				
10	20.76	33.42	22.71			5.92	.00	.17	1.79	.00
11	20.77	33.42	22.77			5.92				
12	20.77	33.42	22.77			5.92				
13	20.77	33.42	22.77			5.92				
14	20.77	33.42	22.77			5.92				
15	20.77	33.42	22.77			5.92				
16	20.77	33.42	22.77			5.92				
17	20.77	33.42	22.77			5.92				
18	20.77	33.42	22.77			5.92				
19	20.77	33.42	22.77			5.92				
20	20.77	33.42	22.77			5.92				
21	20.77	33.42	22.77			5.92				
22	20.77	33.42	22.77			5.92				
23	20.77	33.42	22.77			5.92				
24	20.77	33.42	22.77			5.92				
25	20.77	33.42	22.77			5.92				
26	20.77	33.42	22.77			5.92				
27	20.77	33.42	22.77			5.92				
28	20.77	33.42	22.77			5.92				
29	20.77	33.42	22.77			5.92				
30	20.77	33.42	22.77			5.92				
31	20.77	33.42	22.77			5.92				
32	20.77	33.42	22.77			5.92				
33	20.77	33.42	22.77			5.92				
34	20.77	33.42	22.77			5.92				
35	20.77	33.42	22.77			5.92				
36	20.77	33.42	22.77			5.92				
37	20.77	33.42	22.77			5.92				
38	20.77	33.42	22.77			5.92				
39	20.77	33.42	22.77			5.92				
40	20.77	33.42	22.77			5.92				
41	20.77	33.42	22.77			5.92				
42	20.77	33.42	22.77			5.92				
43	20.77	33.42	22.77			5.92				
44	20.77	33.42	22.77			5.92				
45	20.77	33.42	22.77			5.92				
46	20.77	33.42	22.77			5.92				
47	20.77	33.42	22.77			5.92				
48	20.77	33.42	22.77			5.92				
49	20.77	33.42	22.77			5.92				
50	20.77	33.42	22.77			5.92	.07	1.87	7.25	.47
51	20.77	33.42	22.77			5.92				
52	20.77	33.42	22.77			5.92				
53	20.77	33.42	22.77			5.92				
54	20.77	33.42	22.77			5.92				
55	20.77	33.42	22.77			5.92				
56	20.77	33.42	22.77			5.92	.07	1.77	10.30	.53

KELEZ CRUISE XWCC-14 STATION 113 07/01/77



XWCC-14 STA. 119 LAT 39 48.4N; LONG 74 .0W GMT 18.3 06/28/77
 DEPTH 20 AIR D/W 27.8/11.1 BARO 15.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 15/14 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

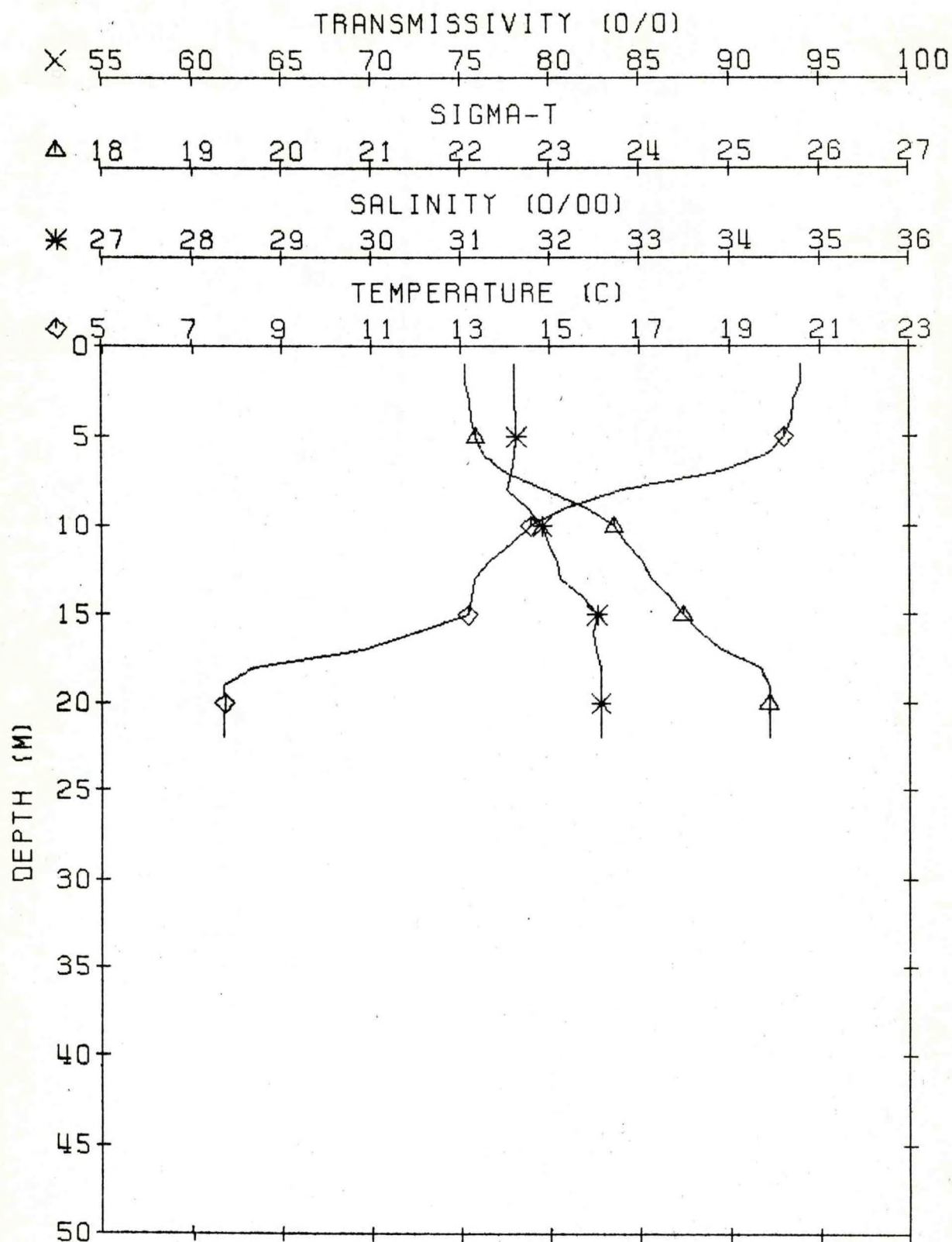
DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.15	31.32	21.94			6.32				
2	20.15	31.32	21.94			6.32	.00	.00	4.13	.12
3	20.13	31.44	22.04			6.32				
4	19.88	31.47	22.13			6.33				
5	17.15	31.58	22.88			6.41				
6	14.51	31.69	23.55			6.83				
7	14.21	31.81	23.71			6.84				
8	13.78	31.83	23.81			6.79				
9	13.12	32.01	24.08			6.78				
10	12.92	32.03	24.13			6.67	.00	.00	1.88	.21
11	12.81	32.19	24.28			6.54				
12	12.26	32.15	24.35			6.42				
13	12.01	32.18	24.42			6.42				
14	11.95	32.18	24.44			6.32				
15	10.35	32.19	24.72			6.34				
16	9.46	32.34	24.99			6.25				
17	9.43	32.34	25.00			5.62				
18	9.43	32.34	25.00			4.98	.00	3.42	13.07	1.21



XWCC-14 STA.120 LAT 39 46.5N; LONG 73 55.5W GMT 19.4 06/28/77
 DEPTH 23 AIR D/W 22.2/05.6 BARO 13.0 VIS 6 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 16/16 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.56	31.59	22.04			6.25				
2	20.56	31.59	22.04			6.25	.00	.00	5.95	.26
3	20.38	31.59	22.09			6.25				
4	20.35	31.60	22.11			6.25				
5	20.19	31.61	22.16			6.25				
6	19.82	31.60	22.24			6.25				
7	18.74	31.56	22.48			6.25				
8	16.60	31.51	22.96			6.25				
9	15.60	31.74	22.34			6.25				
10	14.54	31.91	23.71			6.25	.00	.00	2.56	.14
11	14.13	31.97	23.84			6.25				
12	13.63	32.07	24.02			6.25				
13	13.27	32.10	24.10			6.25				
14	13.11	32.36	24.33			6.25				
15	13.14	32.22	24.47			6.25				
16	11.98	32.48	24.66			6.25				
17	10.77	32.51	24.90			6.25				
18	8.36	32.55	25.33			6.25				
19	7.70	32.55	25.42			6.25				
20	7.71	32.56	25.42			6.25	.50	2.81	8.78	.89
21	7.70	32.56	25.42			6.25				
22	7.70	32.57	25.43			6.25				

KELEZ CRUISE XWCC-14 STATION 120 06/28/77



XWCC-14 STA. 121 LAT 39 43.0N; LONG 73 46.5W GMT 21.1 06/28/77
 DEPTH 19 AIR D/W 27.8/11.1 BARO 12.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 17/18 SEA DIR/HT 15/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.31	31.51	22.05			6.44				
2	20.31	31.51	22.05			6.44	.00	.00	2.81	.08
3	20.27	31.52	22.07			6.43				
4	19.89	31.52	22.16			6.48				
5	19.80	31.50	22.17			6.53				
6	18.89	31.71	22.56			6.60				
7	17.78	31.79	22.89			6.76				
8	17.19	31.82	23.03			6.82				
9	16.13	31.82	23.30			7.00	.00	.00	2.19	.21
10	15.60	31.80	23.40			7.02				
11	14.48	31.93	23.74			7.09				
12	13.70	32.09	24.02			7.15				
13	13.52	32.06	24.04			7.07				
14	13.00	32.15	24.21			6.99				
15	13.00	32.31	24.33			6.89				
16	12.94	32.43	24.44			6.86				
17	12.76	32.53	24.55			6.84				
18	11.93	32.43	24.63			6.89				
19	10.93	32.99	24.78			6.80	.15	.43	5.01	.64
20	10.66	32.39	24.82			6.80				

KELEZ CRUISE XWCC-14 STATION 121 06/28/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

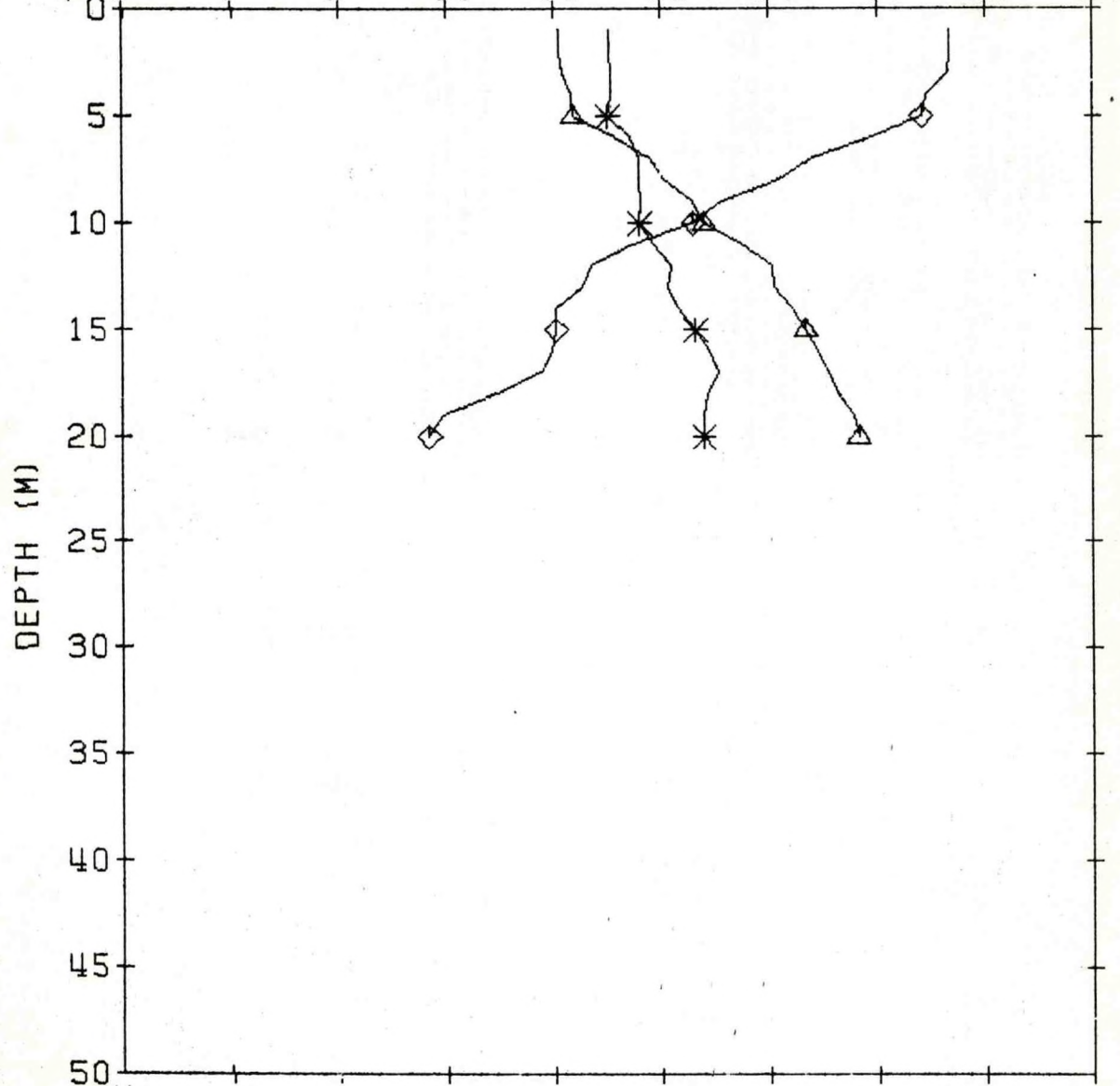
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

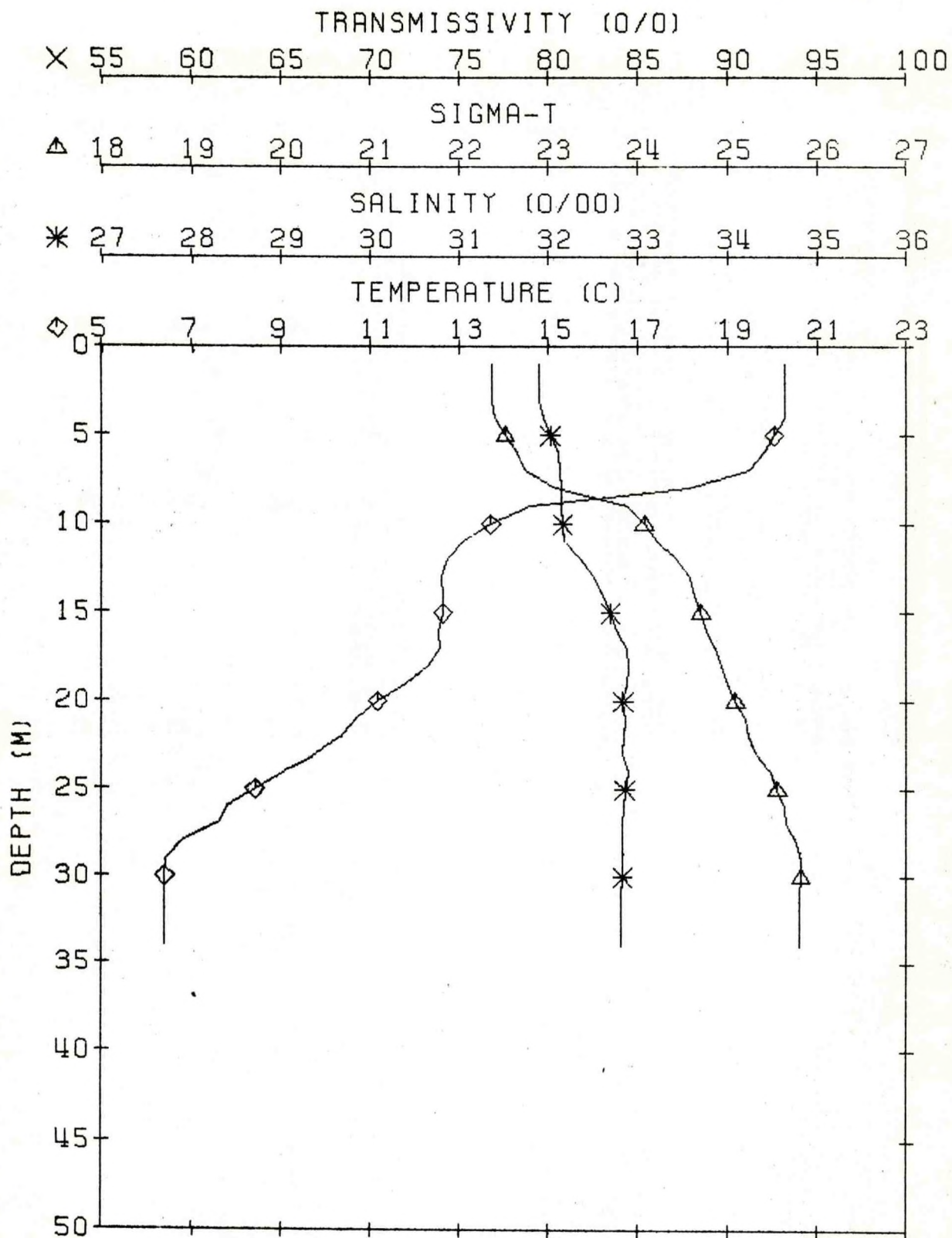
TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 122 LAT 39 40.0N; LONG 73 36.0W GMT 22.4 06/28/77
 DEPTH 36 AIR D/W 27.8/05.6 BARO 11.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 16/22 SEA DIR/HT 15/0 SWELL DIR/HT 15/2

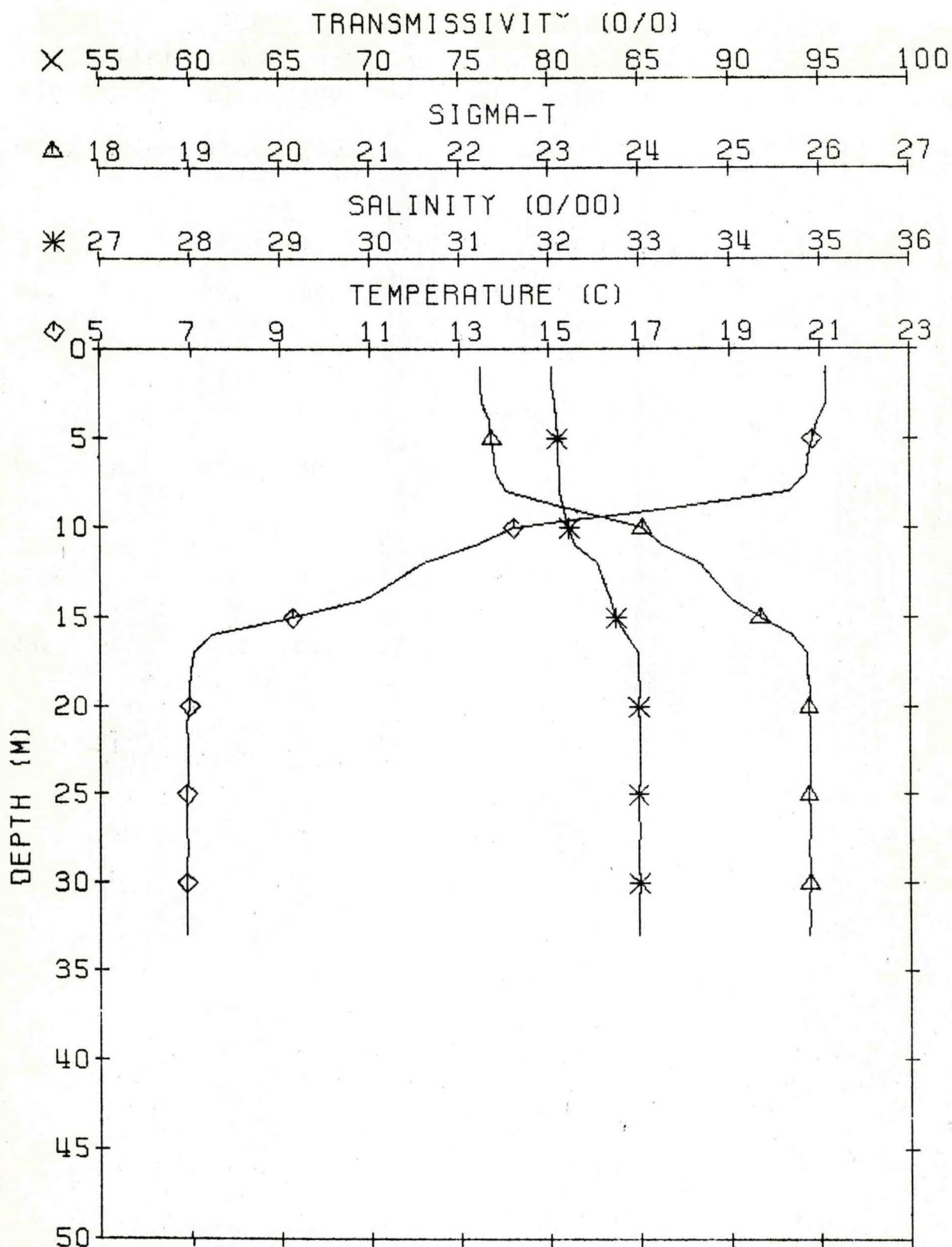
DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.24	31.90	22.36			6.25				
2	20.24	31.90	22.36			6.25	.00	.00	1.88	.06
3	20.24	31.90	22.36			6.25				
4	20.24	31.90	22.36			6.25				
5	20.24	31.90	22.36			6.25				
6	20.24	31.90	22.36			6.25				
7	19.78	32.02	22.40			6.47				
8	19.44	32.11	22.64			6.47				
9	18.11	32.15	22.74			6.74				
10	14.60	32.15	23.88			7.04	.00	.32	2.56	.16
11	13.70	32.16	24.08			7.26				
12	13.10	32.18	24.21			7.29				
13	12.71	32.36	24.43			7.26				
14	12.59	32.51	24.57			7.14				
15	12.61	32.60	24.63			7.04				
16	12.62	32.69	24.70			6.98				
17	12.55	32.75	24.77			7.00				
18	12.55	32.88	24.86			7.04				
19	12.55	32.90	24.93			7.09				
20	11.79	32.88	25.00			7.18	.00	.00	1.73	.22
21	11.11	32.88	25.08			7.27				
22	10.68	32.88	25.19			7.31				
23	10.36	32.88	25.33			7.26				
24	9.99	32.88	25.41			7.17				
25	9.99	32.88	25.47			7.03				
26	9.99	32.88	25.55			6.97				
27	9.99	32.88	25.55			6.87				
28	9.99	32.88	25.55			6.70				
29	9.99	32.88	25.55			6.42				
30	9.99	32.88	25.55			6.33				
31	9.99	32.88	25.55			6.11				
32	9.99	32.88	25.55			6.00				
33	9.99	32.88	25.55			5.80				
34	9.99	32.88	25.55			5.80	.49	1.90	8.23	.85



XWCC 14 STA. 123 LAT 39 32.0N; LONG 73 26.0W GMT 16.2 06/30/77
 DEPTH 35 AIR D/W 38.9/16.7 BARO 15.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 25/08 SEA DIR/HT 25/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.11	32.03	22.23		6.37	.00	.00	1.50	.06	
2	21.11	32.03	22.23		6.37					
3	21.10	32.06	22.26		6.39					
4	20.92	32.08	22.25		6.02					
5	20.80	32.08	22.35		6.04					
6	20.72	32.09	22.38		6.05					
7	20.67	32.10	22.40		6.05					
8	20.28	32.11	22.51		6.05					
9	17.44	32.16	23.26		6.31	.00	.05	1.50	.16	
10	14.17	32.21	24.02		6.72					
11	13.32	32.27	24.24		6.93					
12	12.14	32.25	24.67		6.95					
13	11.53	32.29	24.83		6.87					
14	10.84	32.67	25.01		6.65					
15	9.88	32.73	25.33		6.61					
16	7.77	32.84	25.68		6.64					
17	7.77	32.99	25.84		6.44					
18	6.99	32.99	25.88		6.04					
19	6.66	32.99	25.87		6.07	.46	1.55	8.54	.87	
20	6.66	32.99	25.88		6.44					
21	6.66	32.99	25.88		6.00					
22	6.66	32.99	25.88		6.01					
23	6.66	32.99	25.88		6.77					
24	6.66	32.99	25.88		6.00					
25	6.66	32.99	25.88		6.00					
26	6.66	32.99	25.88		6.00					
27	6.66	32.99	25.88		6.00					
28	6.66	32.99	25.88		6.00					
29	6.66	32.99	25.88		6.00					
30	6.66	32.99	25.88		6.00					
31	6.66	32.99	25.88		6.00					
32	6.66	32.99	25.88		6.00	.57	1.32	8.85	.84	
33	6.66	32.99	25.88		6.77					

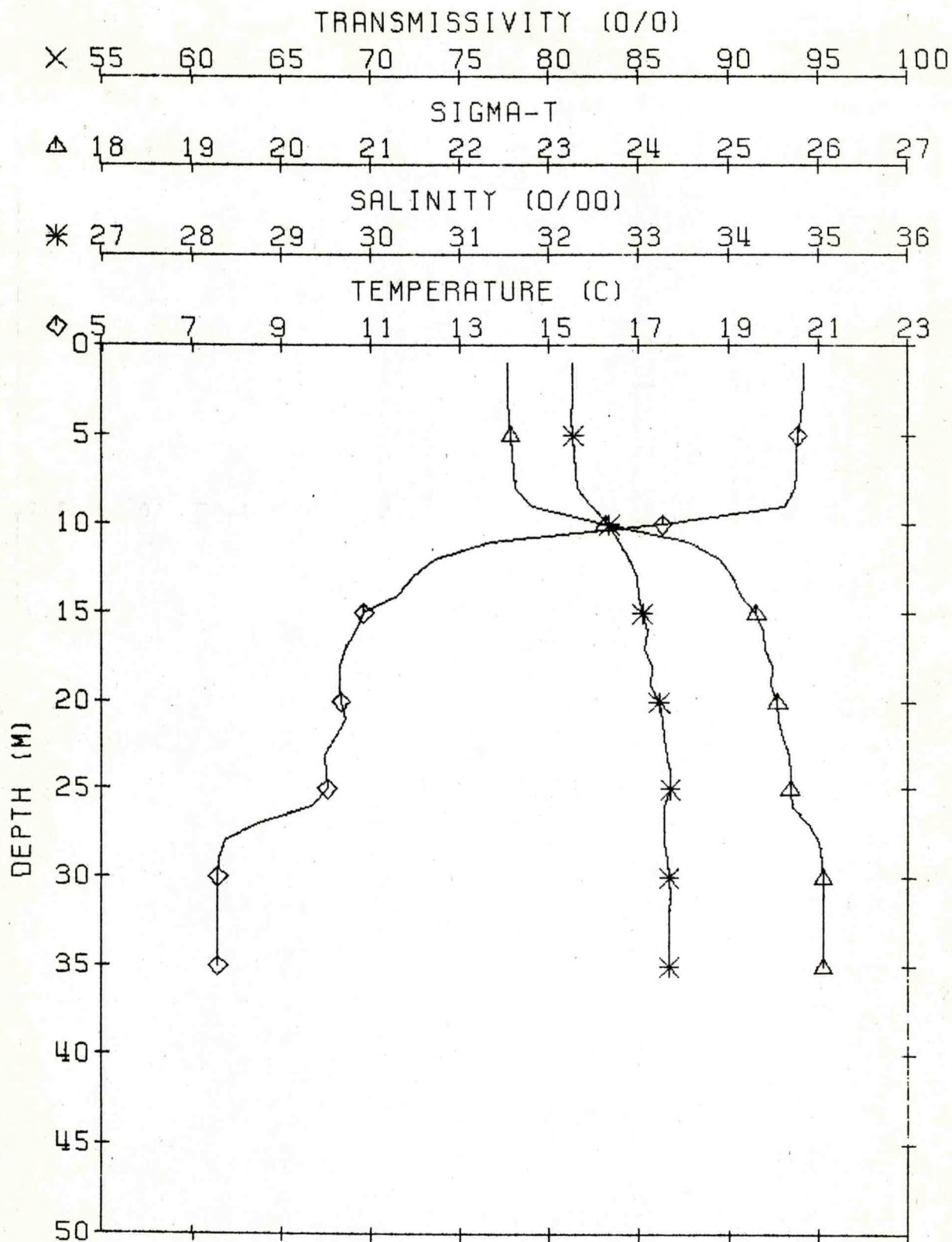
KELEZ CRUISE XWCC-14 STATION 123 06/30/77



XWCC-14 STA.124 LAT 39 30.1N; LONG 73 12.0W GMT 14.2 06/30/77
 DEPTH 38 AIR D/W 38.9/16.7 BARO 15.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 25/08 SEA DIR/HT 25/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.67	33.26	22.53		6.14					
2	20.67	33.26	22.53		6.14	.00	.00	.47	.06	
3	20.67	33.26	22.53		6.11					
4	20.57	33.26	22.53		6.07					
5	20.52	33.26	22.53		6.07					
6	20.50	33.26	22.53		6.07					
7	20.48	33.26	22.53		6.07					
8	20.46	33.26	22.53		6.07					
9	20.46	33.26	22.53		6.06					
10	17.50	33.26	22.53		6.06	.00	.00	.17	.19	
11	13.68	33.26	22.53		6.91					
12	12.40	33.26	22.53		7.35					
13	11.91	33.26	22.53		7.54					
14	11.85	33.26	22.53		7.64					
15	10.88	33.26	22.53		7.75					
16	10.64	33.26	22.53		7.81					
17	10.44	33.26	22.53		7.82					
18	10.29	33.26	22.53		7.82					
19	10.20	33.26	22.53		7.78	.00	.00	.50	.30	
20	10.33	33.26	22.53		7.74					
21	10.41	33.26	22.53		7.68					
22	10.41	33.26	22.53		7.68					
23	9.99	33.26	22.53		7.70					
24	9.99	33.26	22.53		7.69					
25	9.99	33.26	22.53		7.59					
26	9.99	33.26	22.53		7.49					
27	8.99	33.26	22.53		7.42					
28	7.71	33.26	22.53		7.41					
29	7.71	33.26	22.53		7.25	.05	1.30	6.19	.60	
30	7.71	33.26	22.53		7.00					
31	7.71	33.26	22.53		6.71					
32	7.71	33.26	22.53		6.50					
33	7.71	33.26	22.53		6.33					
34	7.71	33.26	22.53		6.21					
35	7.71	33.26	22.53		6.11	.12	1.17	5.79	.60	

KELEZ CRUISE XWCC-14 STATION 124 06/30/77



XWCC-14 STA.127 LAT 39 57.1N; LONG 73 53.4W GMT 16.5 06/28/77
 DEPTH 23 AIR D/W 19.4/08.3 BARO 15.0 VIS 5 CLD TYP/CVR /
 WETHR 4 WIND DIR/SPD 18/12 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.10	31.36	21.99			6.37				
2	20.10	31.36	21.99			6.37	.00	.00	2.91	.11
3	20.03	31.47	22.09			6.39				
4	19.82	31.44	22.12			6.41				
5	19.78	31.46	22.14			6.43				
6	19.59	31.45	22.19			6.45				
7	19.51	31.45	22.21			6.47				
8	19.46	31.43	22.20			6.46				
9	17.43	31.83	23.00			6.54				
10	14.44	32.13	23.90			6.99	.00	.00	2.47	.15
11	13.81	32.16	24.06			7.15				
12	13.70	32.17	24.09			7.15				
13	13.58	32.20	24.14			7.01				
14	12.51	32.23	24.37			6.97				
15	10.77	32.27	24.72			6.93				
16	8.93	32.31	25.05			6.76				
17	8.55	32.41	25.17			6.36				
18	8.55	32.44	25.21			5.71				
19	8.44	32.45	25.33			5.30				
20	8.38	32.46	25.55			5.03				
21	8.36	32.45	25.55			4.81				
22	8.36	32.45	25.55			4.65	.41	1.45	10.48	1.06

KELEZ CRUISE XWCC-14 STATION 127 06/28/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

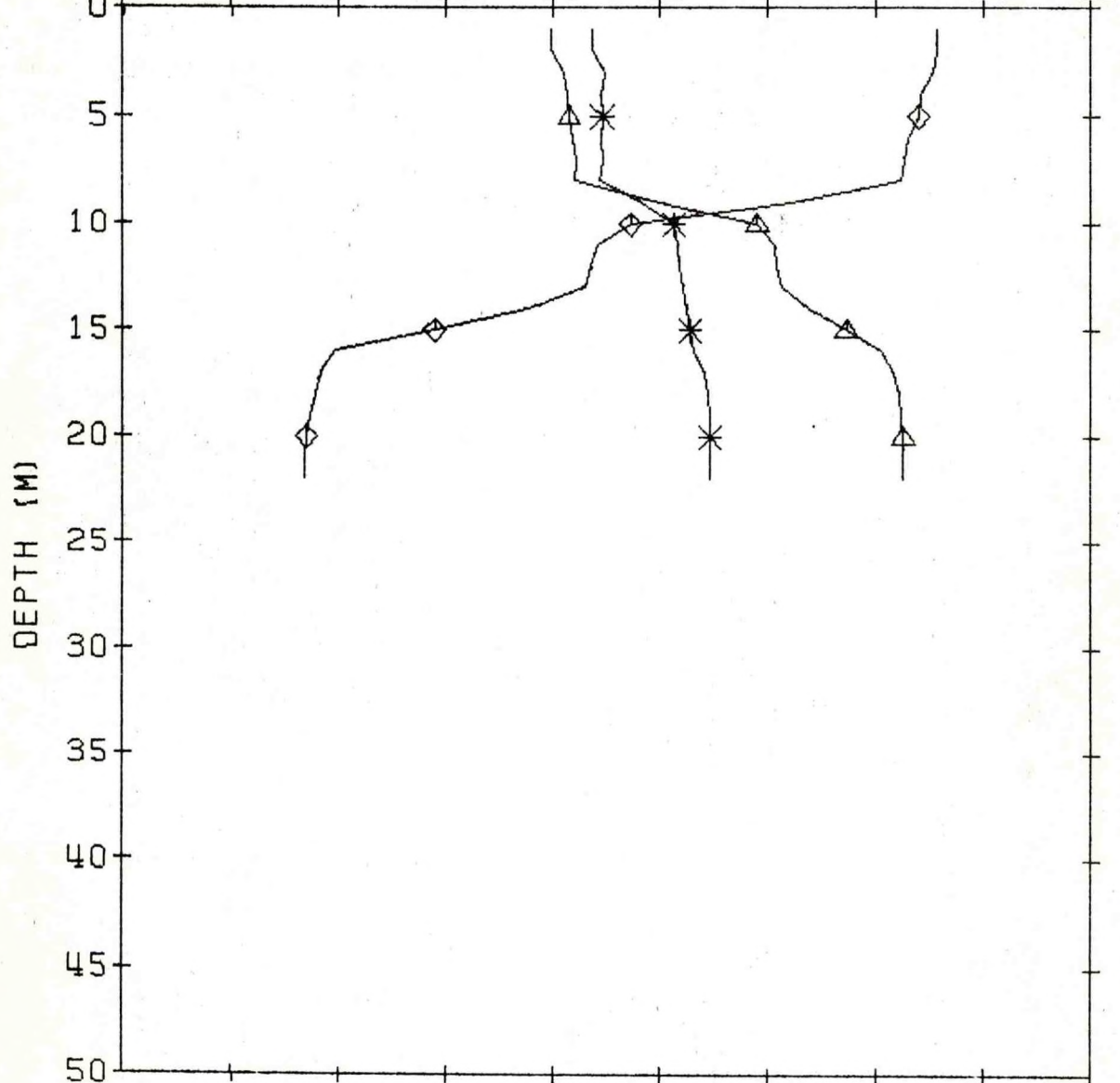
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA.129 LAT 39 30.0N; LONG 74 11.0W GMT 04.3 06/29/77
 DEPTH 16 AIR D/W 05.6/00.0 BARO 08.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 17/20 SEA DIR/HT 17/1 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	17.76	31.82	22.92			5.69				
2	17.76	31.82	22.93			5.69	.00	.00	10.92	.43
3	17.53	31.82	22.97			5.69				
4	16.37	31.86	23.28			5.69				
5	15.68	31.89	23.45			5.68				
6	15.61	31.90	23.58			5.68				
7	15.43	32.00	23.70			5.66				
8	15.10	32.05	24.05			5.69				
9	14.07	32.23	24.37			5.61	.00	.00	12.08	.64
10	12.48	32.33	24.43			5.62				
11	12.22	32.33	24.44			5.66				
12	12.17	32.22	24.43			5.64				
13	12.16	32.33	24.43			5.64				
14	12.16	32.33	24.43			5.61	.00	.00	10.91	.51
15	12.16	32.33	24.43			5.01				

KELEZ CRUISE XWCC-14 STATION 129 06/29/77

TRANSMISSIVITY. (0/0)

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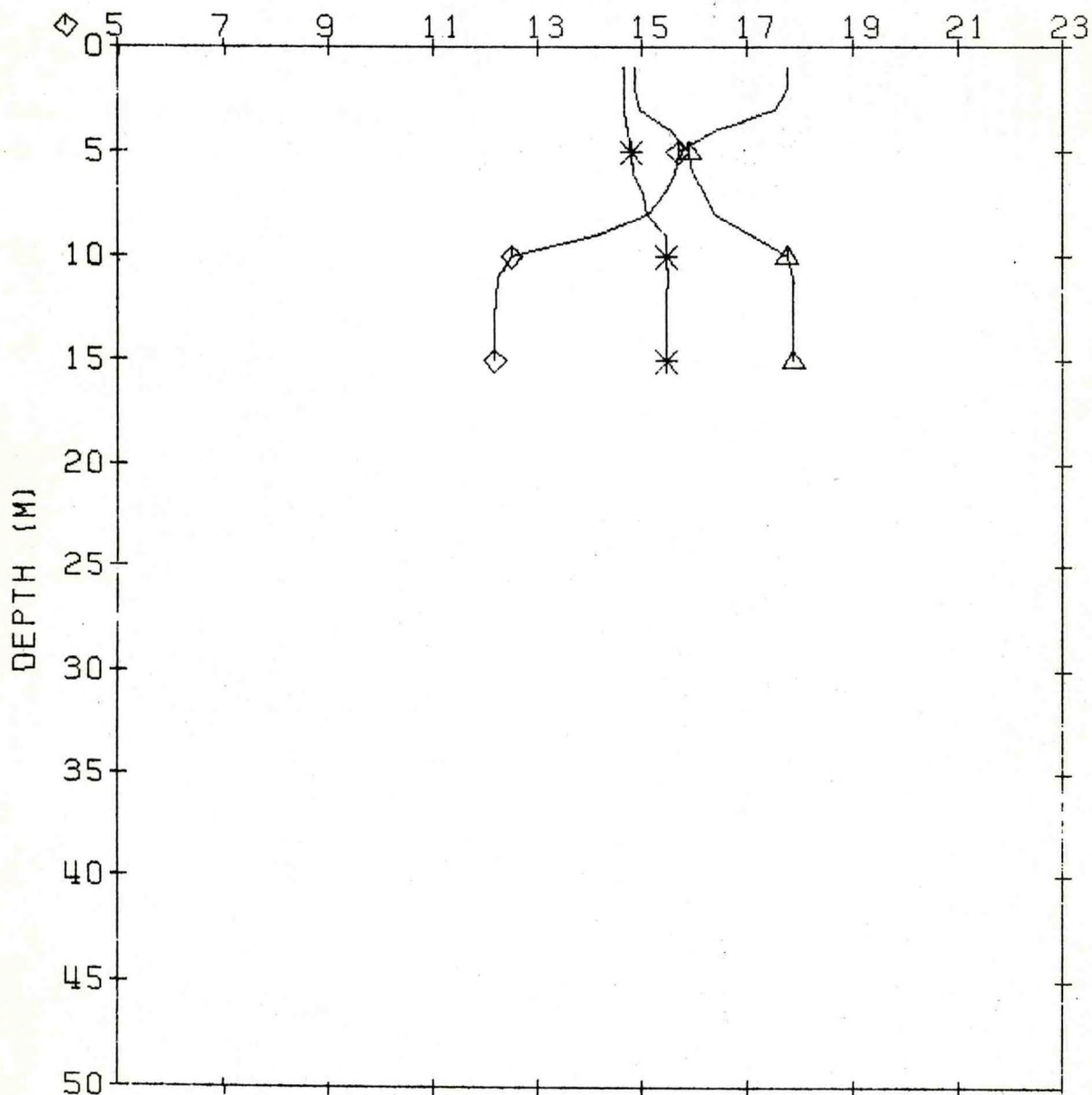
SIGMA-T

△ 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)



XWCC-14 STA.130 LAT 39 28.0N; LONG 74 6.5W GMT 03.2 06/29/77
 DEPTH 19 AIR D/W 44.4/11.1 BARO 07.5 VIS CLD TYP/CVR /
 WETHR WIND DIR/SPD 17/20 SEA DIR/HT 17/1 SWELL DIR/HT 16/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.29	31.92	22.36			6.54				
2	20.29	31.92	22.36			6.54	.00	.00	6.66	.19
3	20.27	31.91	22.37			6.30				
4	20.26	31.91	22.36			6.31				
5	20.22	31.91	22.37			6.31				
6	20.15	31.91	22.40			6.31				
7	19.83	31.91	22.48			6.32				
8	19.10	31.95	22.69			6.37				
9	17.89	31.99	23.02			6.45				
10	15.31	32.00	23.62			6.56	.00	.00	6.03	.20
11	14.56	32.02	23.79			6.60				
12	13.41	32.04	24.04			6.47				
13	12.26	32.05	24.27			6.25				
14	11.21	32.40	24.74			6.04				
15	11.15	32.44	24.78			5.61				
16	11.13	32.45	24.79			5.16				
17	11.12	32.46	24.80			4.86	.18	1.88	9.76	.93

KELEZ CRUISE XWCC-14 STATION 130 06/29/77

TRANSMISSIVITY (0/0)

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SIGMA-T

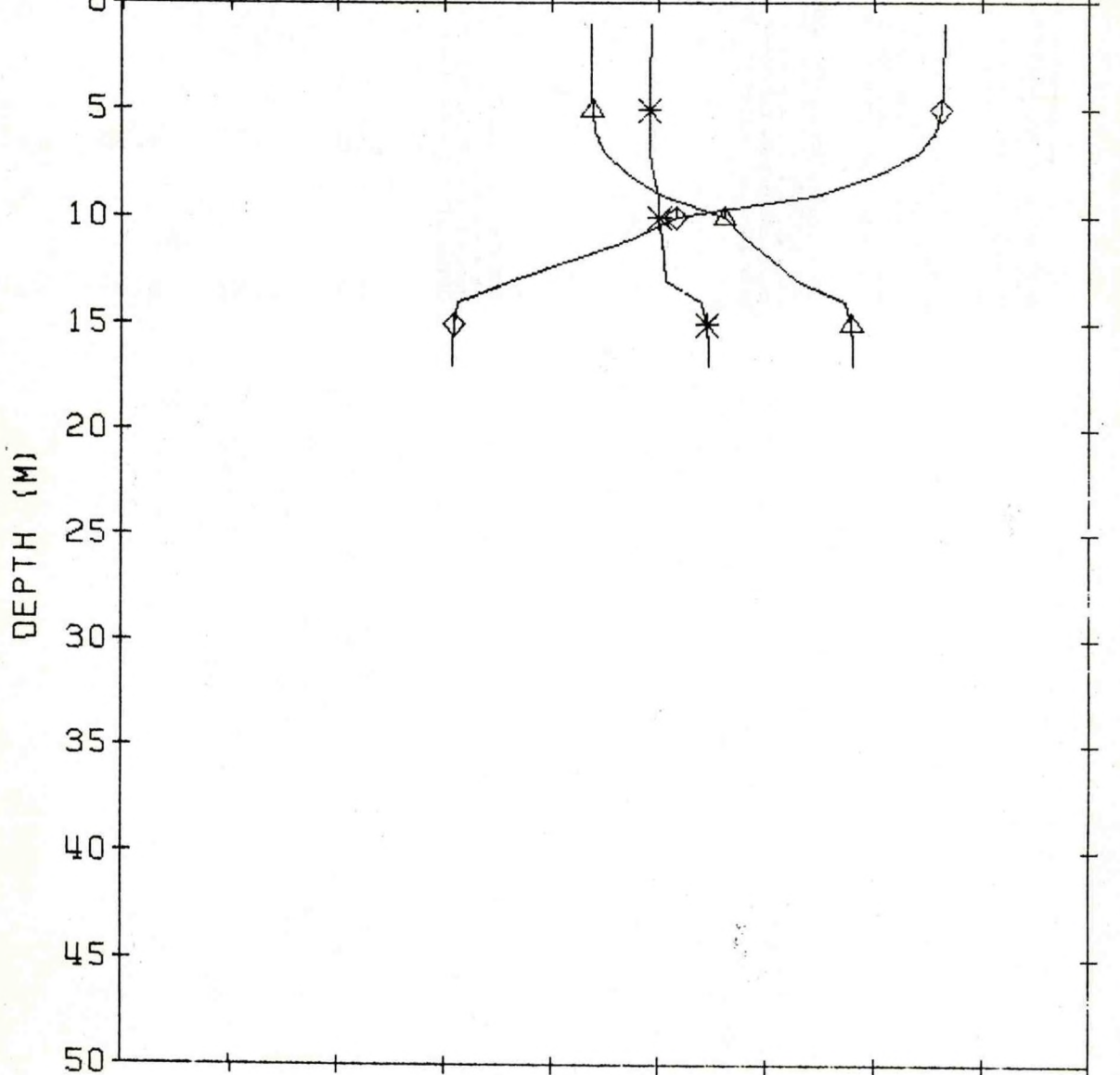
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

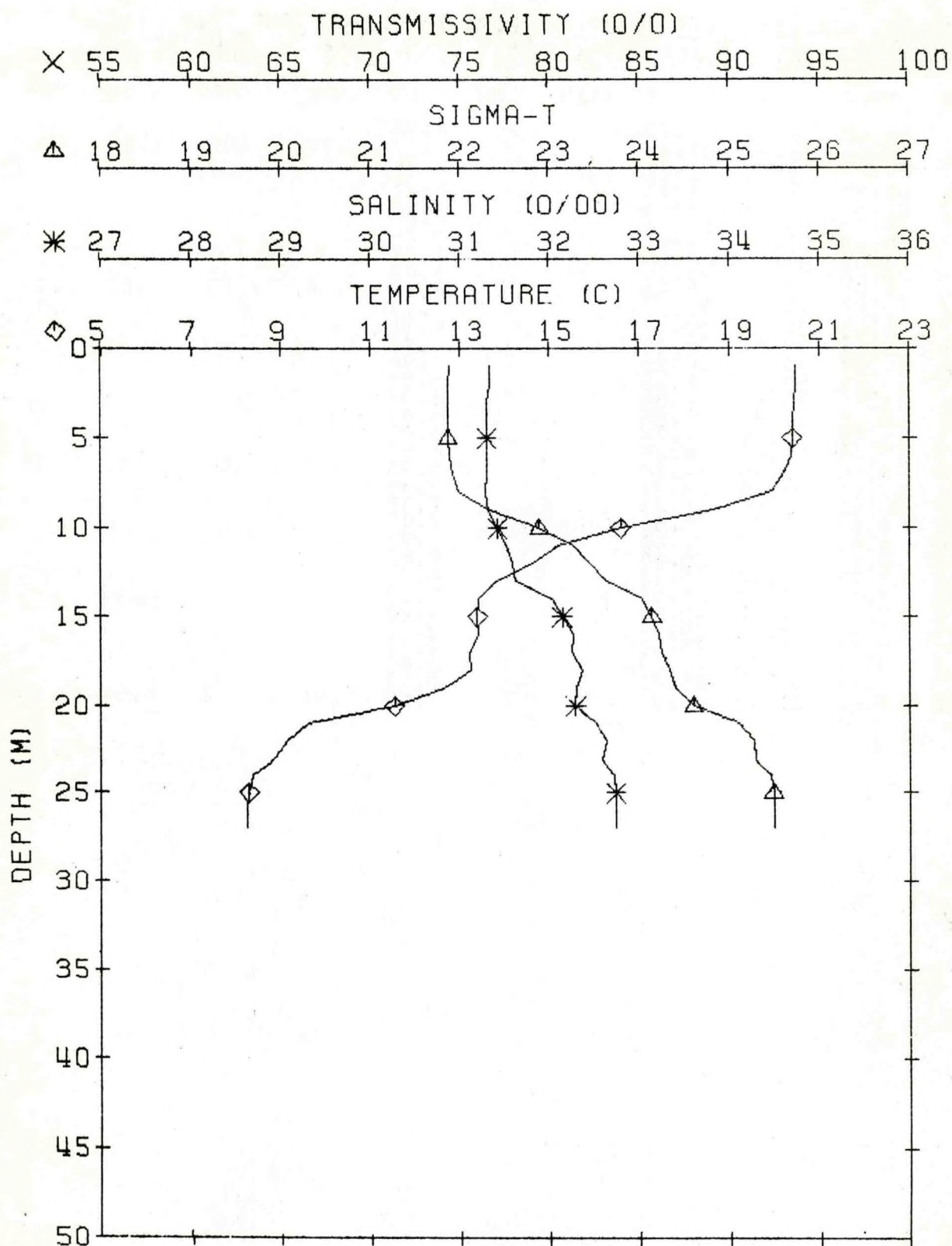
◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA.131 LAT 39 23.3N; LONG 73 55.5W GMT 01.5 06/29/77
 DEPTH 28 AIR D/W 22.2/11.1 BARO 10.5 VIS 5 CLD TYP/CVR /
 WETHR 6 WIND DIR/SPD 17/20 SEA DIR/HT 16/1 SWELL DIR/HT 16/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.46	31.32	21.87			6.34				
2	20.46	31.32	21.87			6.34	.00	.00	1.88	.07
3	20.41	31.32	21.86			6.34				
4	20.40	31.30	21.86			6.34				
5	20.37	31.30	21.88			6.34				
6	20.33	31.30	21.88			6.34				
7	20.18	31.30	21.90			6.34				
8	19.90	31.31	21.90			6.34				
9	18.63	31.31	21.90			6.34				
10	16.57	31.41	22.00			6.41				
11	15.19	31.51	22.30			6.66	.00	.00	1.53	.18
12	14.62	31.50	22.33			6.88				
13	13.78	31.60	22.33			6.90				
14	13.40	32.00	22.40			6.77				
15	13.33	32.14	22.41			6.58				
16	13.33	32.25	22.41			6.58				
17	13.18	32.24	22.44			6.67				
18	13.20	32.33	22.44			6.64				
19	12.60	32.36	22.44			6.63	.00	.00	2.75	.40
20	11.51	32.50	22.50			6.57				
21	9.90	32.50	22.50			6.05				
22	8.10	32.50	22.50			4.84				
23	8.00	32.50	22.50			4.84				
24	8.00	32.50	22.50			4.60				
25	8.26	32.77	22.50			4.56				
26	8.26	32.73	22.50			4.55	.54	2.93	8.39	.89
27	8.22	32.72	22.50			4.55				

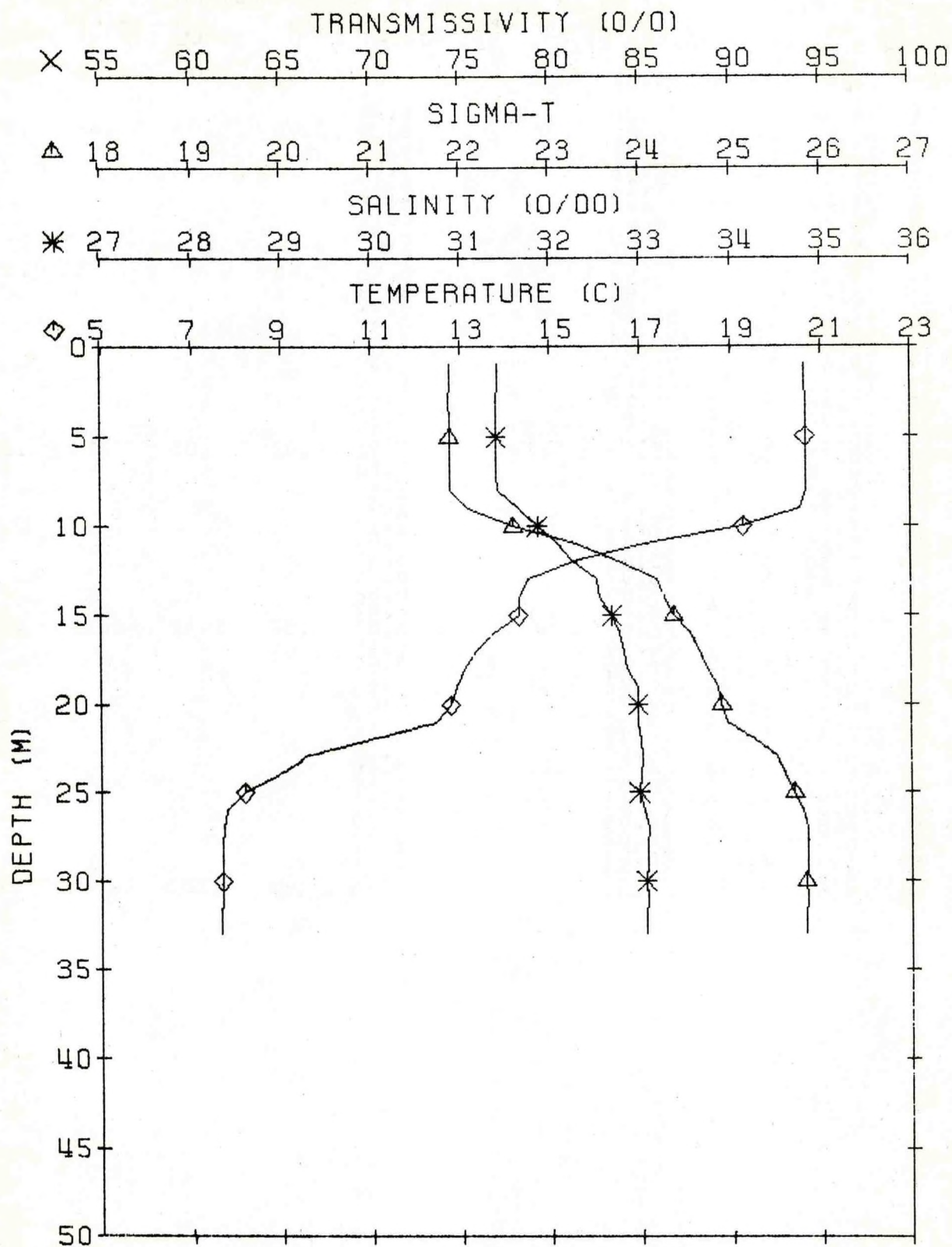
KELEZ CRUISE XWCC-14 STATION 131 06/29/77



XWCC-14 STA. 132 LAT 39 20.7N; LONG 73 46.7W GMT 07.5 06/30/77
 DEPTH 34 AIR D/W 22.2/00.0 BARO 12.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 27/07 SEA DIR/HT 27/0 SWELL DIR/HT 19/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.62	31.41	21.89			6.06				
2	20.62	31.41	21.89			6.07	.00	.00	1.69	.05
3	20.65	31.39	21.86			6.04				
4	20.64	31.39	21.87			6.04				
5	20.64	31.39	21.87			6.04				
6	20.64	31.39	21.87			6.05				
7	20.64	31.39	21.87			6.04				
8	20.65	31.41	21.88			6.04				
9	20.53	31.64	22.00			6.05				
10	19.25	31.55	22.58			6.13	.00	.03	.63	.07
11	17.12	32.22	23.77			6.40				
12	15.53	32.23	23.75			6.71				
13	14.48	32.22	23.75			6.96				
14	14.27	32.22	23.75			6.96				
15	14.27	32.22	23.75			6.88				
16	13.72	32.22	23.75			6.88				
17	13.33	32.22	23.75			6.87				
18	13.03	32.22	23.75			6.89				
19	12.90	32.22	23.75			6.89	.00	.00	.50	.17
20	12.41	32.22	23.75			6.84				
21	12.41	32.22	23.75			6.85				
22	12.33	32.22	23.75			6.84				
23	12.00	32.22	23.75			6.84				
24	11.91	32.22	23.75			6.81				
25	11.77	32.22	23.75			6.82				
26	11.55	32.22	23.75			6.77				
27	11.55	32.22	23.75			6.88				
28	11.55	32.22	23.75			6.99				
29	11.55	32.22	23.75			6.82				
30	11.55	32.22	23.75			6.82				
31	11.55	32.22	23.75			6.71				
32	11.55	32.22	23.75			6.55	.41	.92	5.54	.59
33	11.55	32.22	23.75			6.50				

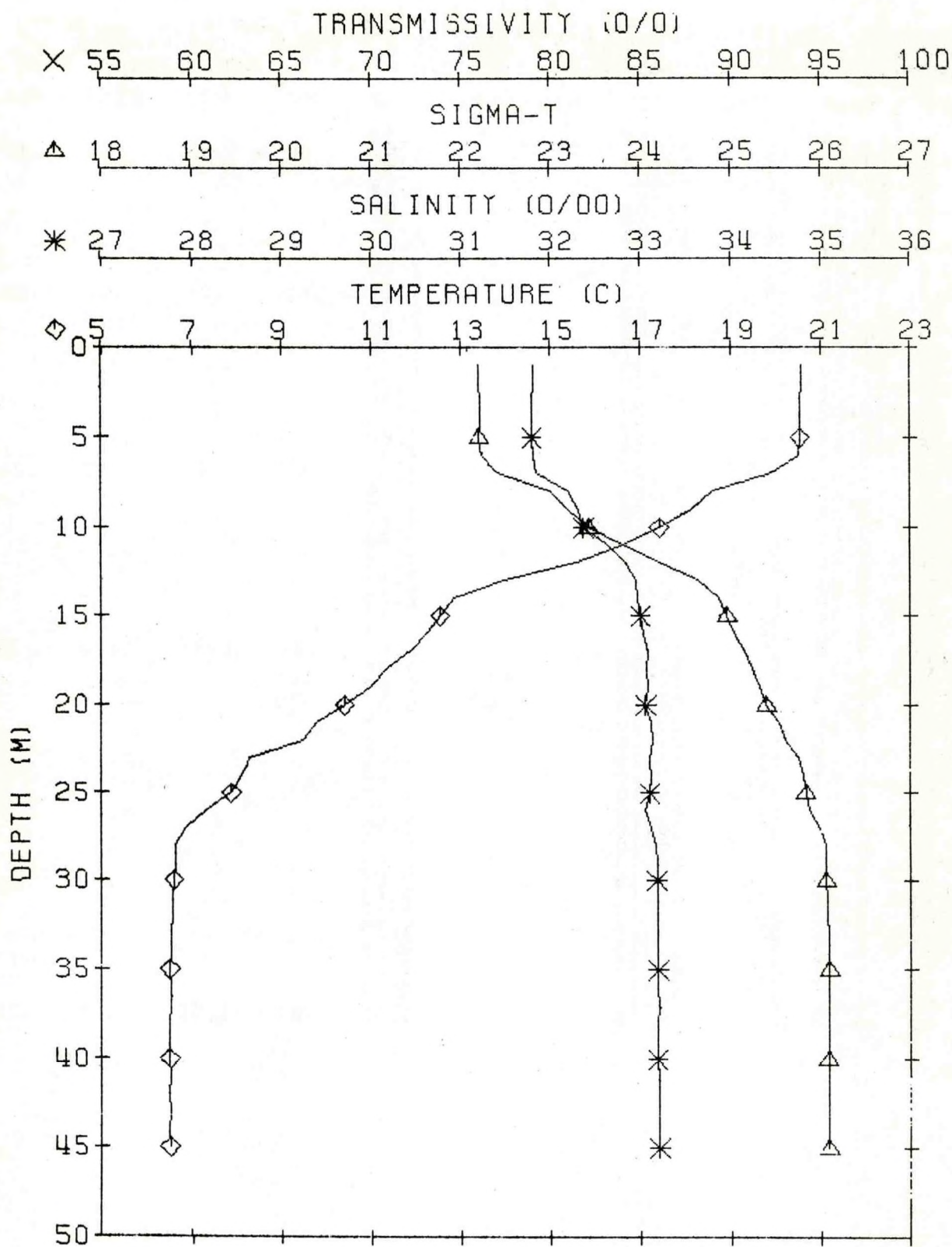
KELEZ CRUISE XWCC-14 STATION 132 06/30/77



XWCC-14 STA. 133 LAT 39 17.0N; LONG 73 36.0W GMT 09.3 06/30/77
 DEPTH 45 AIR D/W 16.7/94.4 BARO 12.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 27/07 SEA DIR/HT 27/0 SWELL DIR/HT 19/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.56	31.80	22.20			6.25				
2	20.56	31.80	22.20			6.25	.00	.03	.64	.07
3	20.51	31.79	22.21			6.22				
4	20.51	31.79	22.21			6.12				
5	20.51	31.79	22.21			6.11				
6	20.49	31.80	22.22			6.12				
7	19.89	31.85	22.41			6.11				
8	18.57	31.19	22.00			6.25				
9	18.12	32.31	22.21			6.38				
10	17.41	32.66	22.42			6.46	.00	.03	1.01	.11
11	16.61	32.82	22.80			6.58				
12	15.77	32.98	24.19			6.74				
13	13.94	32.95	24.63			6.99				
14	12.08	32.95	24.87			7.27				
15	12.11	32.00	24.96			7.50				
16	12.20	32.00	25.03			7.58				
17	11.82	32.00	25.15			7.64				
18	11.33	32.00	25.33			7.72				
19	10.95	32.00	25.31			7.75				
20	10.38	32.00	25.88			7.71	.00	.00	.74	.31
21	9.76	32.11	25.54			7.66				
22	9.46	32.09	25.60			7.45				
23	8.22	32.00	25.76			7.30				
24	8.00	32.01	25.81			7.18				
25	7.77	32.05	25.86			7.03				
26	6.66	32.17	26.05			6.75				
27	6.66	32.17	26.05			6.47				
28	6.66	32.17	26.05			6.32	.32	1.12	8.25	.72
29	6.66	32.17	26.06			6.16				
30	6.66	32.18	26.07			6.05				
31	6.66	32.18	26.07			5.94				
32	6.66	32.18	26.07			5.87				
33	6.66	32.17	26.08			5.79				
34	6.66	32.18	26.08			5.74				
35	6.66	32.18	26.08			5.68				
36	6.66	32.18	26.08			5.66				
37	6.66	32.18	26.07			5.62				
38	6.66	32.18	26.08			5.60				
39	6.66	32.18	26.08			5.51				
40	6.66	32.18	26.08			5.46				
41	6.66	32.18	26.08			5.40				
42	6.66	32.18	26.08			5.36				
43	6.66	32.18	26.08			5.31				
44	6.66	32.18	26.08			5.26				
45	6.66	32.18	26.08			5.21	.34	1.33	8.85	.72

KELEZ CRUISE XWCC-14 STATION 133 06/30/77



XWCC 14 STA. 134 LAT 39 11.0N; LONG 73 22.0W GMT 11.4 06/30/77
 DEPTH 53 AIR D/W 50.0/16.7 BARO 15.0 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 26/08 SEA DIR/HT 26/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.99	32.74	23.07			6.52				
2	19.99	32.74	23.06			6.52	.00	.03	.64	.10
3	19.99	32.71	23.07			6.52				
4	19.90	32.71	23.07			6.52				
5	19.90	32.72	23.08			6.52				
6	19.87	32.71	23.07			6.52				
7	19.89	32.71	23.07			6.52				
8	19.87	32.73	23.14			6.52				
9	18.88	32.77	23.09			6.52				
10	17.88	32.83	23.09			6.52	.00	.00	.40	.12
11	16.99	32.88	23.02			6.52				
12	16.99	32.99	23.02			6.52				
13	16.99	32.99	23.02			6.52				
14	16.99	32.99	23.02			6.52				
15	16.99	32.99	23.02			6.52				
16	16.99	32.99	23.02			6.52				
17	16.99	32.99	23.02			6.52				
18	16.99	32.99	23.02			6.52				
19	16.99	32.99	23.02			6.52	.00	.08	.67	.24
20	16.99	32.99	23.02			6.52				
21	16.99	32.99	23.02			6.52				
22	16.99	32.99	23.02			6.52				
23	16.99	32.99	23.02			6.52				
24	16.99	32.99	23.02			6.52				
25	16.99	32.99	23.02			6.52				
26	16.99	32.99	23.02			6.52				
27	16.99	32.99	23.02			6.52				
28	16.99	32.99	23.02			6.52				
29	16.99	32.99	23.02			6.52				
30	16.99	32.99	23.02			6.52	.07	1.27	6.23	.70
31	16.99	32.99	23.02			6.52				
32	16.99	32.99	23.02			6.52				
33	16.99	32.99	23.02			6.52				
34	16.99	32.99	23.02			6.52				
35	16.99	32.99	23.02			6.52				
36	16.99	32.99	23.02			6.52				
37	16.99	32.99	23.02			6.52				
38	16.99	32.99	23.02			6.52				
39	16.99	32.99	23.02			6.52				
40	16.99	32.99	23.02			6.52				
41	16.99	32.99	23.02			6.52				
42	16.99	32.99	23.02			6.52				
43	16.99	32.99	23.02			6.52				
44	16.99	32.99	23.02			6.52				
45	16.99	32.99	23.02			6.52				
46	16.99	32.99	23.02			6.52				
47	16.99	32.99	23.02			6.52				
48	16.99	32.99	23.02			6.52				
49	16.99	32.99	23.02			6.52				
50	16.99	32.99	23.02			6.52	.07	1.30	7.22	.73
51	16.99	32.99	23.02			6.52				
52	16.99	32.99	23.02			6.52				
53	16.99	32.99	23.02			6.52				

KELEZ CRUISE XWCC-14 STATION 134 06/30/77

TRANSMISSIVITY (0/0)

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SIGMA-T

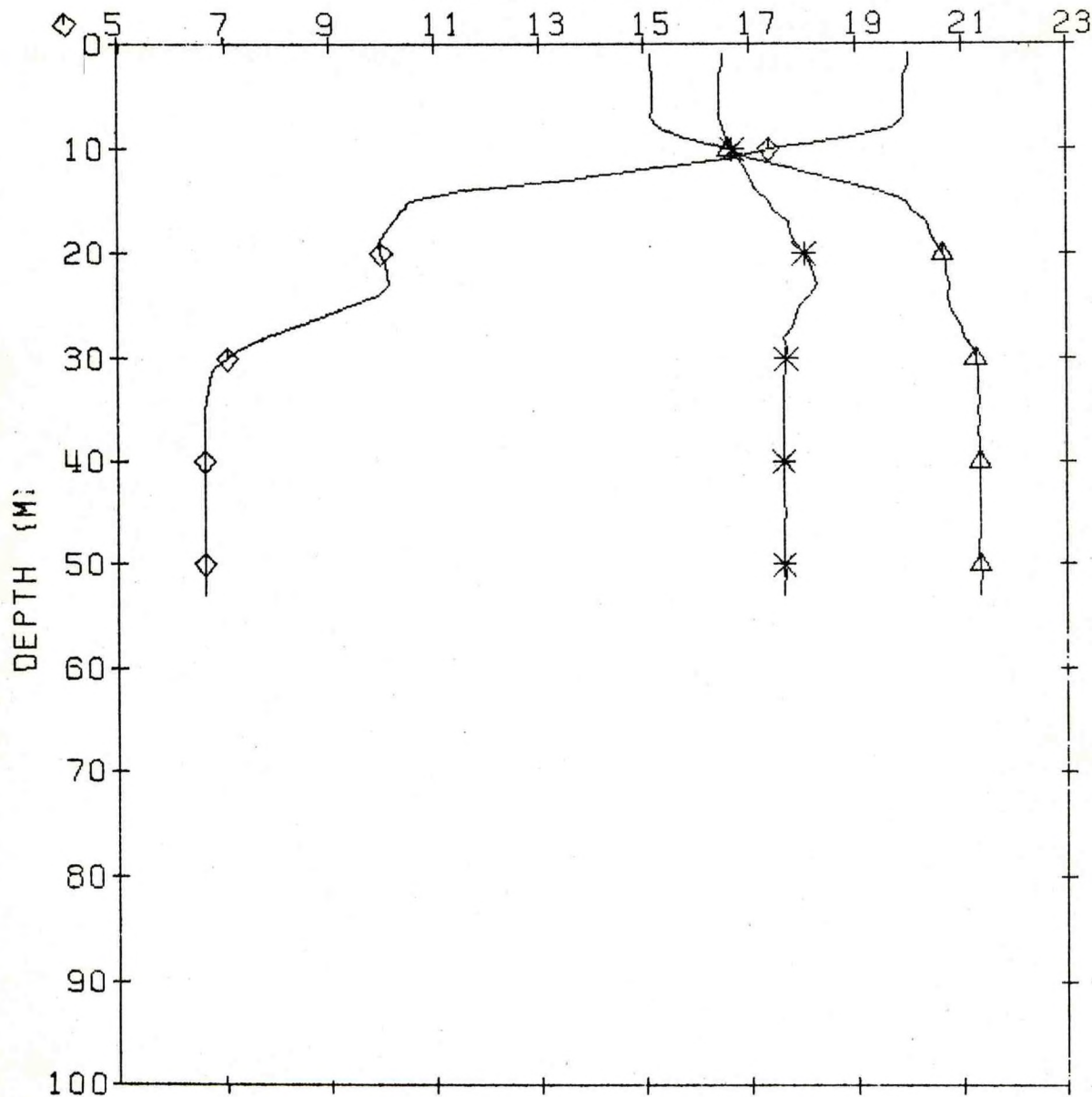
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SALINITY (0/00)

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TEMPERATURE (C)

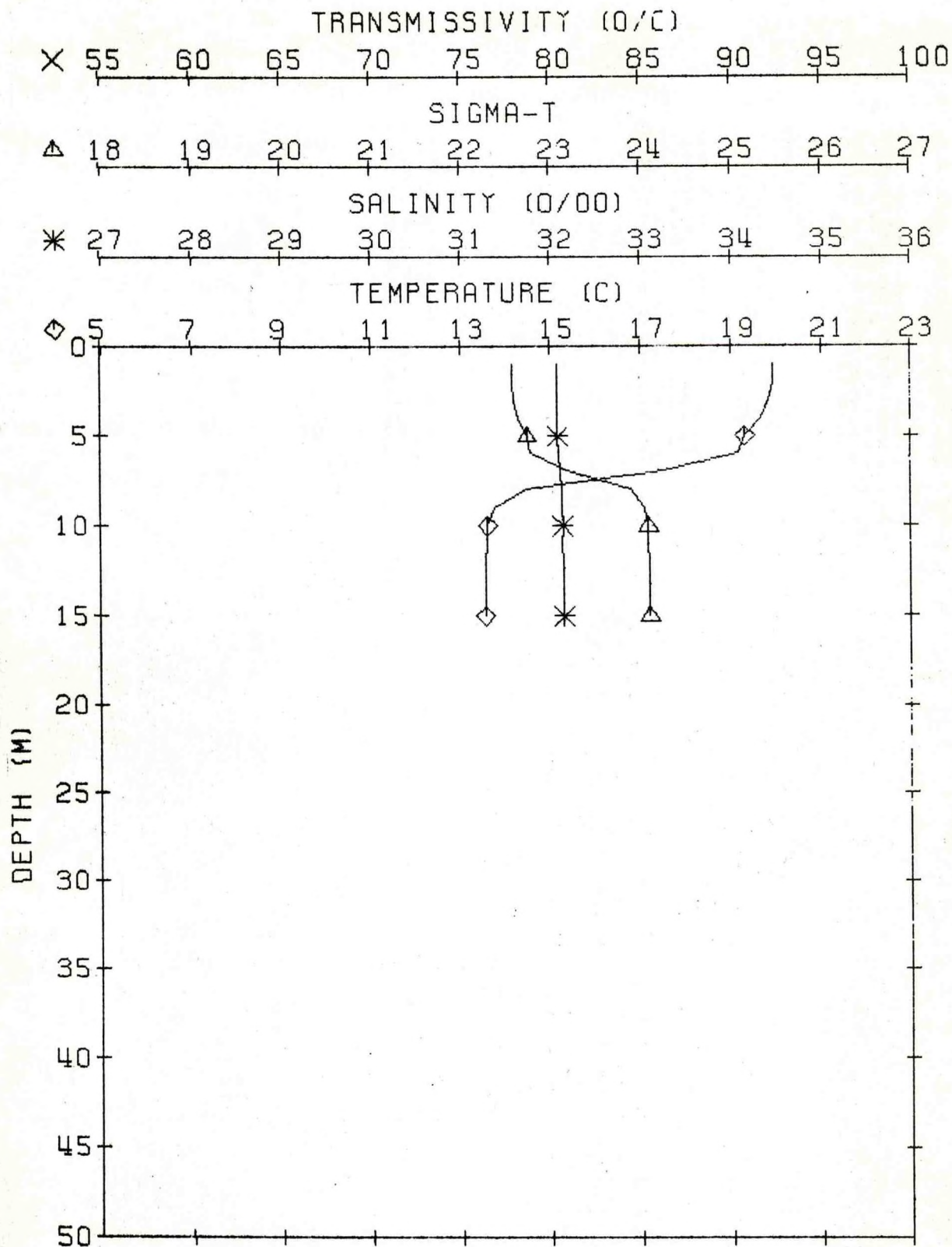
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XWCC-14 STA.139 LAT 39 13.6N; LONG 74 30.0W GMT 07.3 06/29/77
 DEPTH 16 AIR D/W 16.7/11.1 BARO 07.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 21/16 SEA DIR/HT 21/2 SWELL DIR/HT 18/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.91	32.08	22.58		6.32					
2	19.91	32.08	22.58		6.32	.00	.00	7.91	.22	
3	19.82	32.07	22.60		6.05					
4	19.64	32.08	22.65		6.05					
5	19.29	32.08	22.74		6.07					
6	19.15	32.09	22.79		6.10					
7	17.50	32.11	23.20		6.12					
8	14.45	32.13	23.90		6.51					
9	13.76	32.12	24.04		6.55					
10	13.59	32.14	24.08		6.11	.00	.11	14.97	.72	
11	13.58	32.13	24.08		5.51					
12	13.54	32.14	24.10		4.98					
13	13.54	32.15	24.10		4.55					
14	13.54	32.15	24.10		4.36					
15	13.53	32.15	24.10		4.18	.06	.46	16.85	1.00	

KELEZ CRUISE XWCC-14 STATION 139 06/29/77



XWCC-14 STA.140 LAT 39 11.0N; LONG 74 24.5W GMT 08.3 06/29/77
 DEPTH 19 AIR D/W 16.7/08.3 BARO 07.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 21/18 SEA DIR/HT 21/1 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.92	32.02	22.54			6.17				
2	19.92	32.02	22.54			6.17	.00	.00	3.53	.11
3	19.83	32.03	22.57			6.20				
4	19.80	32.03	22.57			6.23				
5	19.77	32.03	22.59			6.21				
6	19.73	32.05	22.61			6.22				
7	19.47	32.06	22.68			6.23				
8	18.89	32.06	22.83			6.23				
9	16.60	32.05	23.37			6.48				
10	15.37	32.04	23.63			6.68	.00	.00	3.57	.11
11	14.82	32.05	23.76			6.73				
12	13.90	32.12	24.01			6.70				
13	13.00	32.33	24.35			6.66				
14	12.84	32.33	24.40			6.38				
15	12.77	32.33	24.44			6.06				
16	12.74	32.33	24.44			5.81				
17	12.71	32.33	24.45			5.61				
18	12.71	32.39	24.45			5.42	.04	.28	7.48	.60
19	12.70	32.39	24.45			5.32				

KELEZ CRUISE XWCC-14 STATION 140 06/29/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

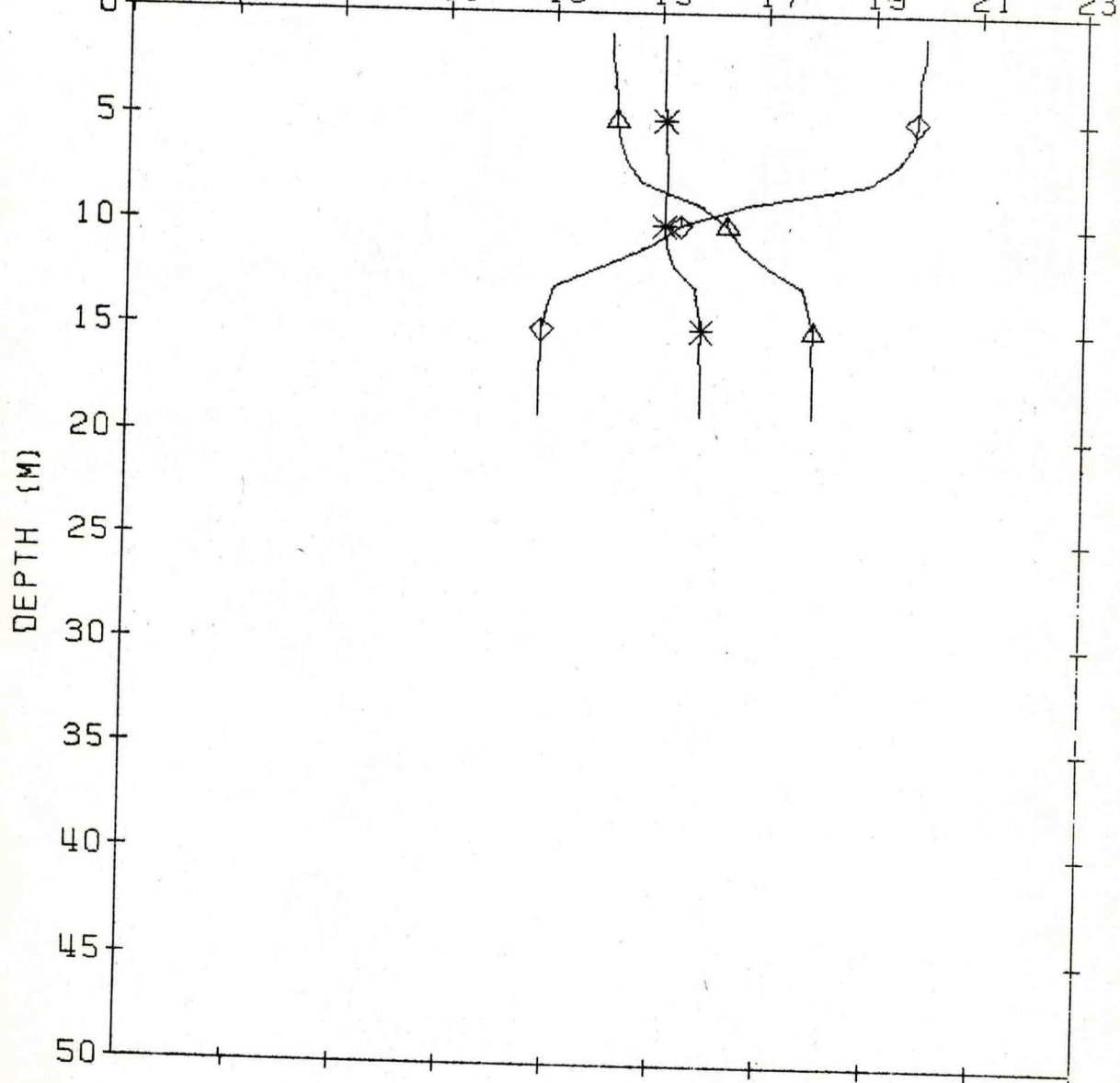
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA.141 LAT 39 6.8N; LONG 74 15.2W GMT 09.5 06/29/77
 DEPTH 25 AIR D/W 22.2/11.1 BARO 07.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 21/17 SEA DIR/HT 21/0 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.31	32.01	22.43			6.09				
2	20.31	32.01	22.43			6.09	.00	.00	2.91	.12
3	20.21	32.00	22.43			6.16				
4	20.14	32.00	22.53			6.18				
5	20.15	32.00	22.52			6.17				
6	20.15	32.00	22.53			6.17				
7	20.13	32.12	22.56			6.16				
8	20.11	32.00	22.71			6.15				
9	19.78	32.37	22.84			6.18				
10	19.44	32.41	22.95			6.22	.00	.00	.94	.11
11	18.74	32.50	23.05			6.27				
12	17.91	32.55	23.44			6.42				
13	17.27	32.55	23.74			6.50				
14	16.86	32.81	23.89			6.64				
15	15.67	32.88	24.00			6.68				
16	14.99	32.88	24.36			6.92				
17	14.24	32.93	24.56			7.07				
18	13.54	32.84	24.63			7.11				
19	13.16	32.80	24.68			7.15				
20	12.65	32.75	24.74			7.16				
21	12.10	32.78	24.87			7.11				
22	11.22	32.81	25.05			7.07				
23	10.96	32.83	25.12			7.02				
24	10.60	32.84	25.18			6.92	.17	.54	4.48	.38

KELEZ CRUISE XWCC-14 STATION 141 06/29/77

TRANSMISSIVITY (0/0)

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SIGMA-T

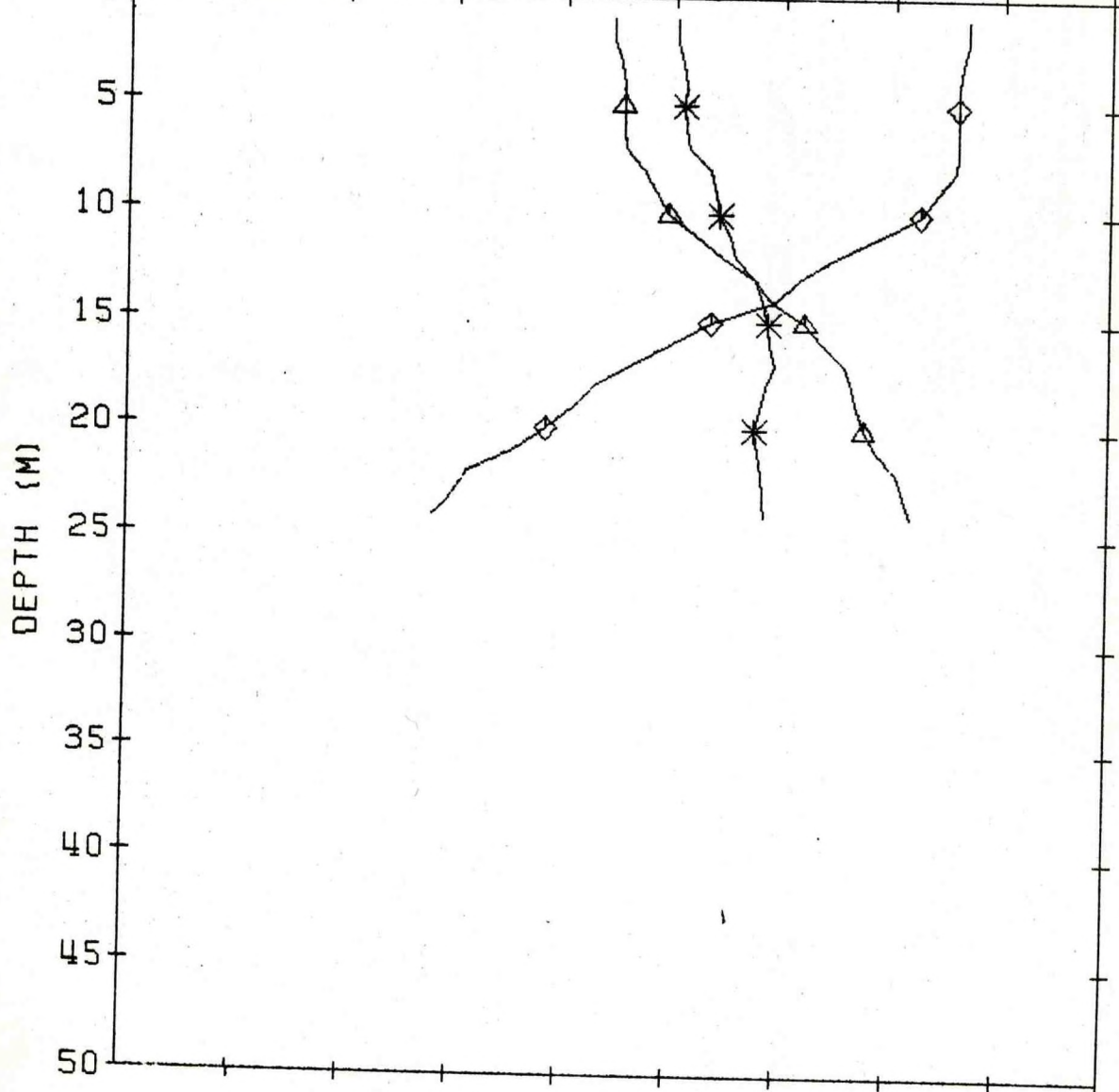
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA.142 LAT 39 3.0N; LONG 74 6.0W GMT 11.1 06/29/77
 DEPTH 32 AIR D/W 33.3/16.7 BARO 07.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 20/16 SEA DIR/HT 20/0 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.18	31.77	22.28			6.17				
2	20.18	31.77	22.28			6.17	.00	.00	.29	.02
3	20.18	31.76	22.27			6.16				
4	20.17	31.77	22.28			6.15				
5	20.18	31.76	22.27			6.15				
6	20.17	31.77	22.28			6.15				
7	20.17	31.77	22.28			6.15				
8	20.16	31.76	22.28			6.15				
9	20.06	31.99	22.33			6.15	.00	.00	.64	.05
10	16.54	31.12	22.33			6.24				
11	15.84	31.12	22.33			6.68				
12	15.18	31.12	22.33			6.76				
13	14.40	31.49	22.33			6.88				
14	14.40	31.49	22.33			6.98				
15	13.33	31.50	22.33			6.99				
16	13.56	31.51	22.33			6.98				
17	13.22	31.66	22.33			6.95				
18	12.92	31.66	22.33			6.91				
19	12.11	31.77	22.33			6.89	.00	.00	1.15	.17
20	8.85	31.81	22.33			6.90				
21	8.46	31.87	22.33			7.09				
22	8.44	31.96	22.33			7.10				
23	7.63	31.97	22.33			7.02				
24	7.41	31.97	22.33			6.76				
25	7.21	31.96	22.33			6.55				
26	7.07	31.98	22.33			6.53				
27	6.94	31.98	22.33			6.53				
28	6.95	31.97	22.33			6.29				
29	6.95	31.95	22.33			6.09				
30	6.94	31.96	22.33			5.85	.79	1.40	6.57	.70

KELEZ CRUISE XWCC-14 STATION 142 06/29/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

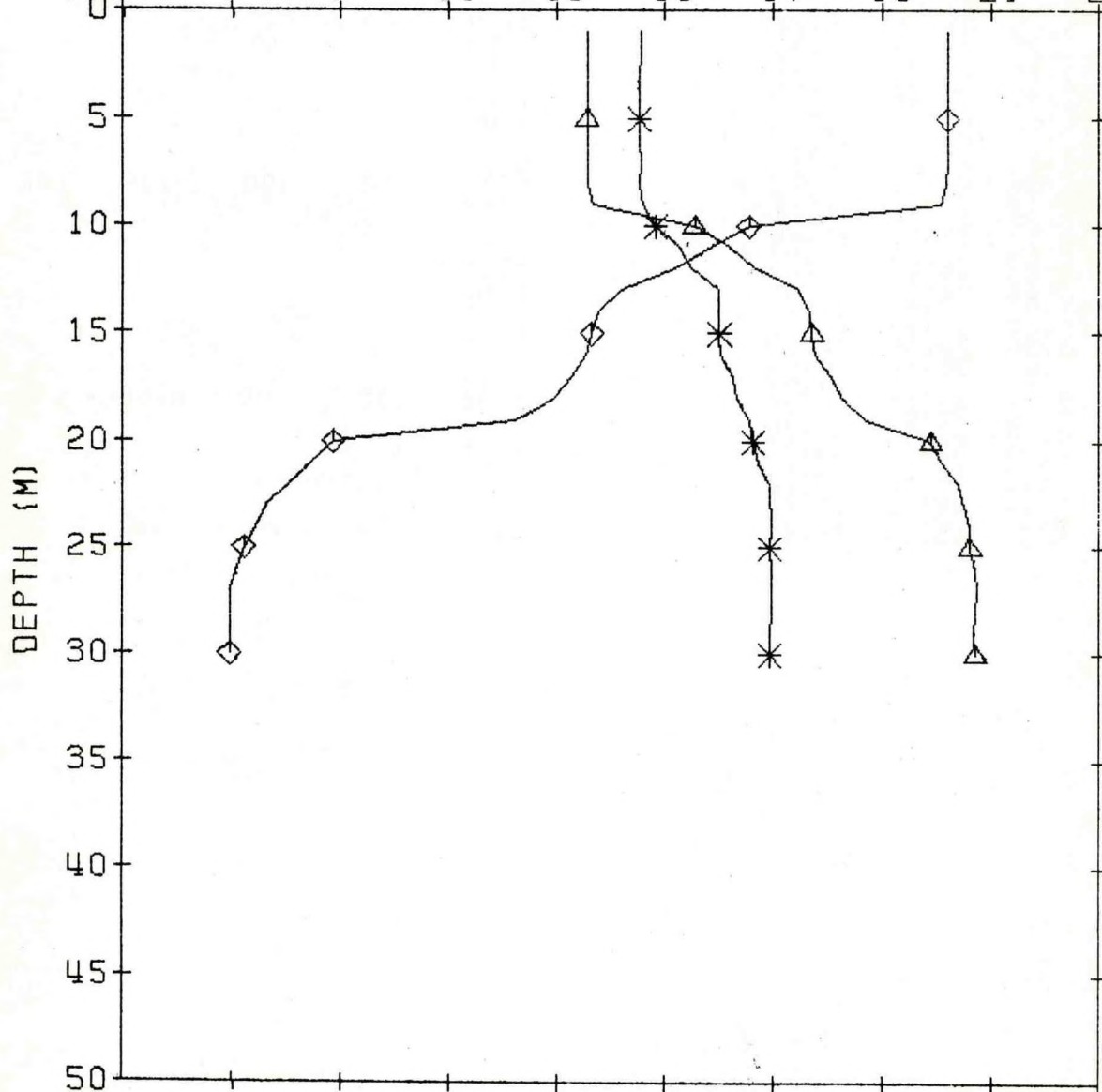
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 143 LAT 38 58.0N; LONG 73 56.0W GMT 04.4 06/30/77
 DEPTH 38 AIR D/W 38.9/11.1 BARO 10.5 VIS 7 CLD TYP/CVR /
 WETHR 0 WIND DIR/SPD 29/13 SEA DIR/HT 29/0 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.11	31.73	22.01			6.32				
2	21.11	31.73	22.01			6.32	.00	.00	.33	.05
3	21.06	31.73	22.02			6.12				
4	21.06	31.73	22.02			6.16				
5	21.06	31.73	22.02			6.17				
6	21.06	31.73	22.02			6.19				
7	21.06	31.73	22.02			6.19				
8	21.04	31.74	22.03			6.22				
9	20.92	31.78	22.09			6.25				
10	20.51	31.92	22.30			6.25	.00	.08	.77	.15
11	18.25	32.10	22.02			6.40				
12	15.92	32.29	22.70			6.70				
13	13.92	32.49	22.88			6.90				
14	13.38	32.64	22.41			7.04				
15	13.38	32.81	22.60			7.00				
16	13.24	32.83	22.64			7.05				
17	13.24	32.87	22.72			7.07				
18	13.00	32.92	22.79			7.06				
19	12.90	32.97	22.83			7.02				
20	12.79	32.97	22.86			6.95	.00	.00	.36	.21
21	12.73	33.13	22.50			6.95				
22	12.73	33.13	22.51			6.95				
23	12.73	33.13	22.51			6.95				
24	12.73	33.13	22.51			6.95				
25	12.73	33.13	22.51			6.95				
26	12.73	33.13	22.51			6.95				
27	12.73	33.13	22.51			6.95				
28	12.73	33.13	22.51			6.95				
29	12.73	33.13	22.51			6.95				
30	12.73	33.13	22.51			6.95	.00	.00	5.00	.56
31	12.73	33.13	22.51			6.95				
32	12.73	33.13	22.51			6.95				
33	12.73	33.13	22.51			6.95				
34	12.73	33.13	22.51			6.95				
35	12.73	33.13	22.51			6.95				
36	12.73	33.13	22.51			6.95	.00	.00	.80	.04

KELEZ CRUISE XWCC-14 STATION 143 06/30/77

TRANSMISSIVITY (0/0)

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SIGMA-T

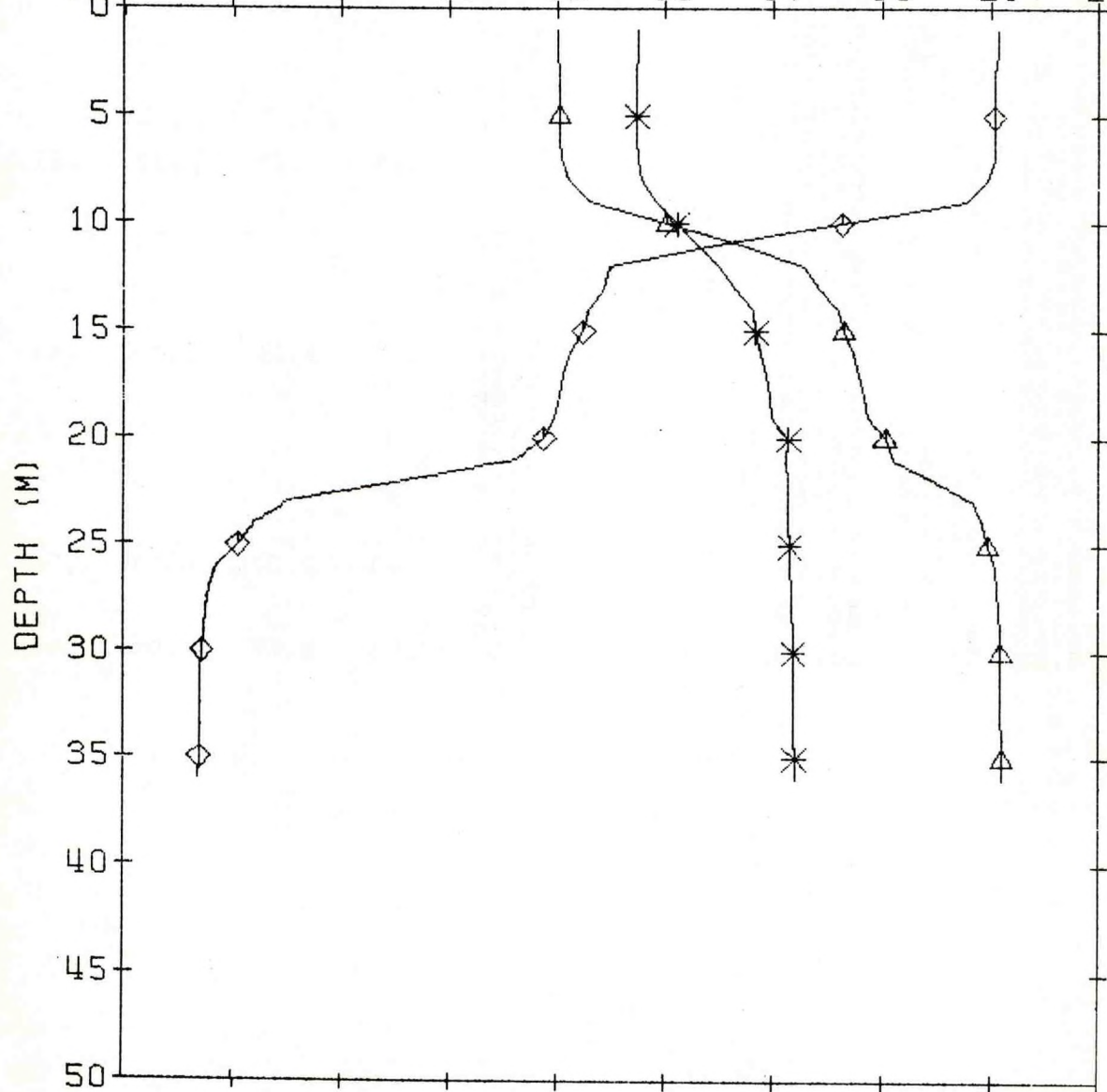
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

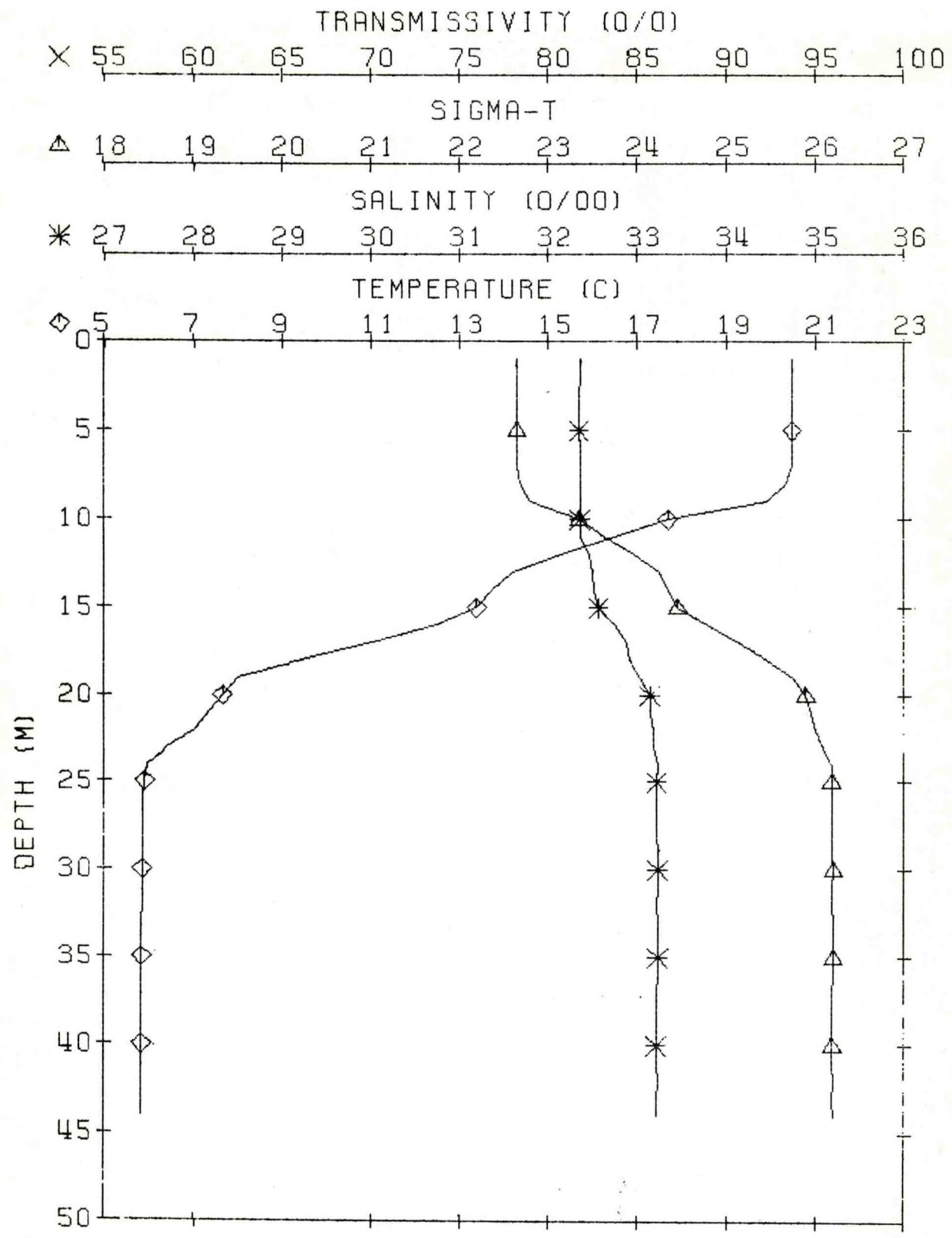
◇ 5 7 9 11 13 15 17 19 21 23



XWCC_14 STA.144 LAT 38 51.7N; LONG 73 42.0W GMT 01.3 06/30/77
 DEPTH 47 AIR D/W 27.8/11.1 BARO 08.5 VIS 7 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 23/14 SEA DIR/HT 23/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.46	35.3	22.65			6.37				
2	20.46	35.3	22.65			6.37	.00	.25	1.34	.03
3	20.46	35.3	22.65			6.27				
4	20.46	35.3	22.65			6.27				
5	20.46	35.3	22.65			6.27				
6	20.46	35.3	22.65			6.27				
7	20.46	35.3	22.65			6.27				
8	20.46	35.3	22.65			6.27				
9	20.46	35.3	22.65			6.27				
10	20.46	35.3	22.65			6.27				
11	20.46	35.3	22.65			6.27				
12	20.46	35.3	22.65			6.27				
13	20.46	35.3	22.65			6.27				
14	20.46	35.3	22.65			6.27				
15	20.46	35.3	22.65			6.27				
16	20.46	35.3	22.65			6.27				
17	20.46	35.3	22.65			6.27				
18	20.46	35.3	22.65			6.27				
19	20.46	35.3	22.65			6.27				
20	20.46	35.3	22.65			6.27				
21	20.46	35.3	22.65			6.27				
22	20.46	35.3	22.65			6.27				
23	20.46	35.3	22.65			6.27				
24	20.46	35.3	22.65			6.27				
25	20.46	35.3	22.65			6.27				
26	20.46	35.3	22.65			6.27				
27	20.46	35.3	22.65			6.27				
28	20.46	35.3	22.65			6.27				
29	20.46	35.3	22.65			6.27				
30	20.46	35.3	22.65			6.27				
31	20.46	35.3	22.65			6.27				
32	20.46	35.3	22.65			6.27				
33	20.46	35.3	22.65			6.27				
34	20.46	35.3	22.65			6.27				
35	20.46	35.3	22.65			6.27				
36	20.46	35.3	22.65			6.27				
37	20.46	35.3	22.65			6.27				
38	20.46	35.3	22.65			6.27				
39	20.46	35.3	22.65			6.27				
40	20.46	35.3	22.65			6.27				
41	20.46	35.3	22.65			6.27				
42	20.46	35.3	22.65			6.27				
43	20.46	35.3	22.65			6.27				
44	20.46	35.3	22.65			6.27				
45	20.46	35.3	22.65			6.27				
46	20.46	35.3	22.65			6.27				
47	20.46	35.3	22.65			6.27				
48	20.46	35.3	22.65			6.27				
49	20.46	35.3	22.65			6.27				
50	20.46	35.3	22.65			6.27				
51	20.46	35.3	22.65			6.27				
52	20.46	35.3	22.65			6.27				
53	20.46	35.3	22.65			6.27				
54	20.46	35.3	22.65			6.27				
55	20.46	35.3	22.65			6.27				
56	20.46	35.3	22.65			6.27				
57	20.46	35.3	22.65			6.27				
58	20.46	35.3	22.65			6.27				
59	20.46	35.3	22.65			6.27				
60	20.46	35.3	22.65			6.27				
61	20.46	35.3	22.65			6.27				
62	20.46	35.3	22.65			6.27				
63	20.46	35.3	22.65			6.27				
64	20.46	35.3	22.65			6.27				
65	20.46	35.3	22.65			6.27				
66	20.46	35.3	22.65			6.27				
67	20.46	35.3	22.65			6.27				
68	20.46	35.3	22.65			6.27				
69	20.46	35.3	22.65			6.27				
70	20.46	35.3	22.65			6.27				
71	20.46	35.3	22.65			6.27				
72	20.46	35.3	22.65			6.27				
73	20.46	35.3	22.65			6.27				
74	20.46	35.3	22.65			6.27				
75	20.46	35.3	22.65			6.27				
76	20.46	35.3	22.65			6.27				
77	20.46	35.3	22.65			6.27				
78	20.46	35.3	22.65			6.27				
79	20.46	35.3	22.65			6.27				
80	20.46	35.3	22.65			6.27				
81	20.46	35.3	22.65			6.27				
82	20.46	35.3	22.65			6.27				
83	20.46	35.3	22.65			6.27				
84	20.46	35.3	22.65			6.27				
85	20.46	35.3	22.65			6.27				
86	20.46	35.3	22.65			6.27				
87	20.46	35.3	22.65			6.27				
88	20.46	35.3	22.65			6.27				
89	20.46	35.3	22.65			6.27				
90	20.46	35.3	22.65			6.27				
91	20.46	35.3	22.65			6.27				
92	20.46	35.3	22.65			6.27				
93	20.46	35.3	22.65			6.27				
94	20.46	35.3	22.65			6.27				
95	20.46	35.3	22.65			6.27				
96	20.46	35.3	22.65			6.27				
97	20.46	35.3	22.65			6.27				
98	20.46	35.3	22.65			6.27				
99	20.46	35.3	22.65			6.27				
100	20.46	35.3	22.65			6.27				

KELEZ CRUISE XWCC-14 STATION 144 06/30/77



XWCC-14 STA.150 LAT 38 53.8N; LONG 74 41.9W GMT 14.4 06/29/77
 DEPTH 16 AIR D/W 27.8/22.2 BARO 07.0 VIS 5 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 23/14 SEA DIR/HT 23/0 SWELL DIR/HT 22/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	17.23	31.92	23.12			6.62				
2	17.20	31.94	23.15			6.02	.00	.27	5.03	.21
3	17.18	31.96	23.16			5.94				
4	16.88	31.94	23.22			5.97				
5	16.74	31.97	23.27			5.99				
6	16.36	31.98	23.37			6.02				
7	15.72	32.04	23.56			6.04				
8	14.57	32.33	24.03			6.08				
9	14.56	32.31	24.02			6.03				
10	14.53	32.32	24.03			5.91	.00	.00	5.18	.28
11	14.52	32.32	24.03			5.83				
12	14.52	32.31	24.03			5.79				
13	14.51	32.31	24.03			5.75				
14	14.51	32.33	24.04			5.70	.00	.00	5.31	.32

KELEZ CRUISE XWCC-14 STATION 150 06/29/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

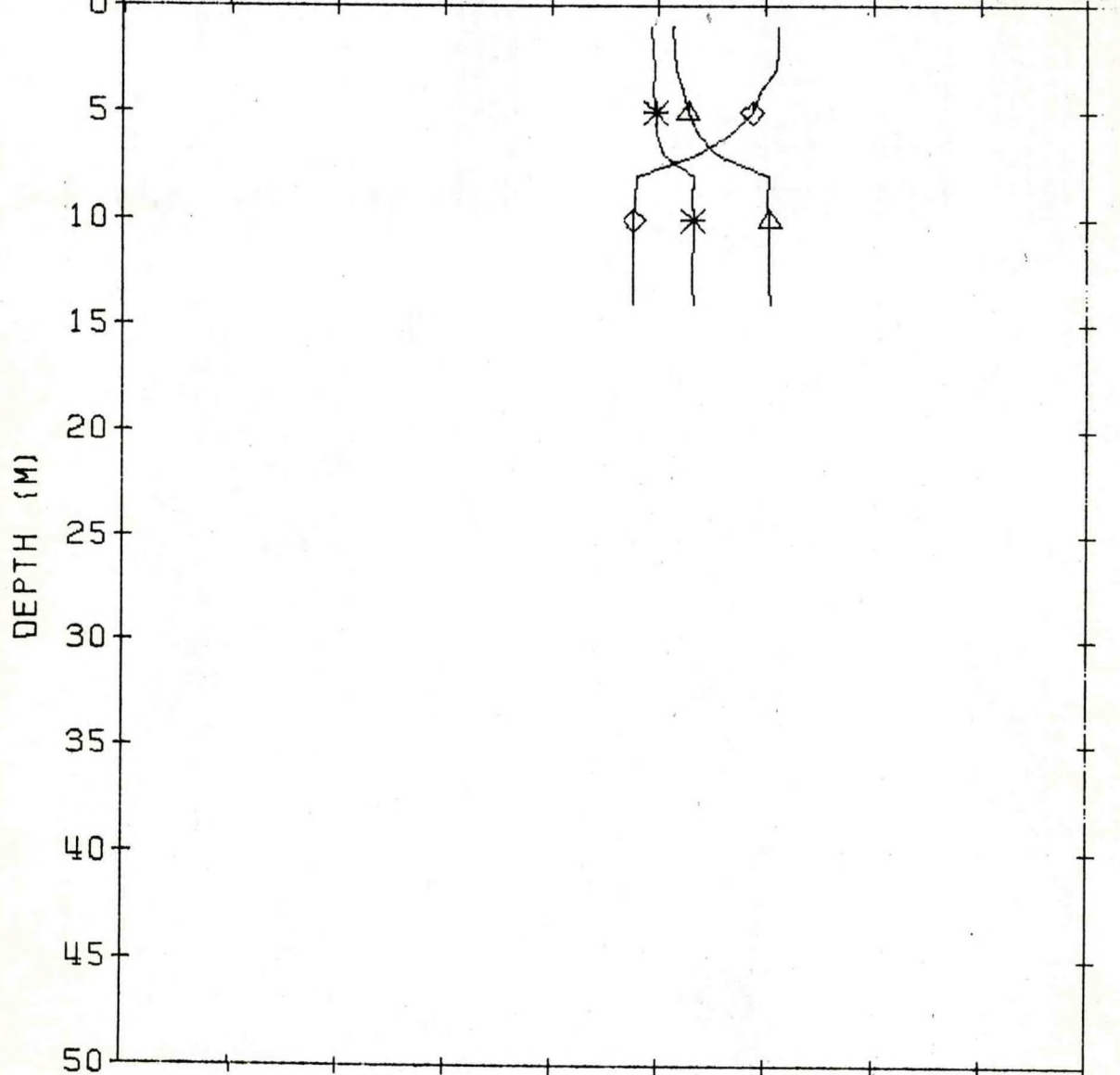
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA.151 LAT 38 49.8N; LONG 74 34.0W GMT 16.0 06/29/77
 DEPTH 24 AIR D/W 22.2/11.1 BARO 08.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 25/12 SEA DIR/HT 25/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.6	31.5	22.2			6.18				
2	19.6	31.5	22.2			6.18	.00	.00	4.20	.11
3	19.7	31.5	22.2			6.14				
4	19.5	31.5	22.2			6.14				
5	19.4	31.5	22.2			6.16				
6	19.4	31.5	22.2			6.17				
7	19.0	31.5	22.2			6.15				
8	18.3	31.5	22.2			6.21				
9	16.4	31.5	22.2			6.42				
10	15.2	31.5	22.2			6.63	.00	.00	1.99	.10
11	14.6	31.5	22.2			6.75				
12	14.6	31.5	22.2			6.67				
13	14.4	31.5	22.2			6.58				
14	14.3	31.5	22.2			6.54				
15	14.2	31.5	22.2			6.49				
16	14.1	31.5	22.2			6.41				
17	13.9	31.5	22.2			6.34				
18	13.7	31.5	22.2			6.27				
19	13.5	31.5	22.2			6.22				
20	13.2	31.5	22.2			6.13				
21	13.1	31.5	22.2			6.02				
22	12.9	31.5	22.2			5.87	.00	.14	5.50	.47

KELEZ CRUISE XWCC-14 STATION 151 06/29/77

TRANSMISSIVITY (0/0)

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SIGMA-T

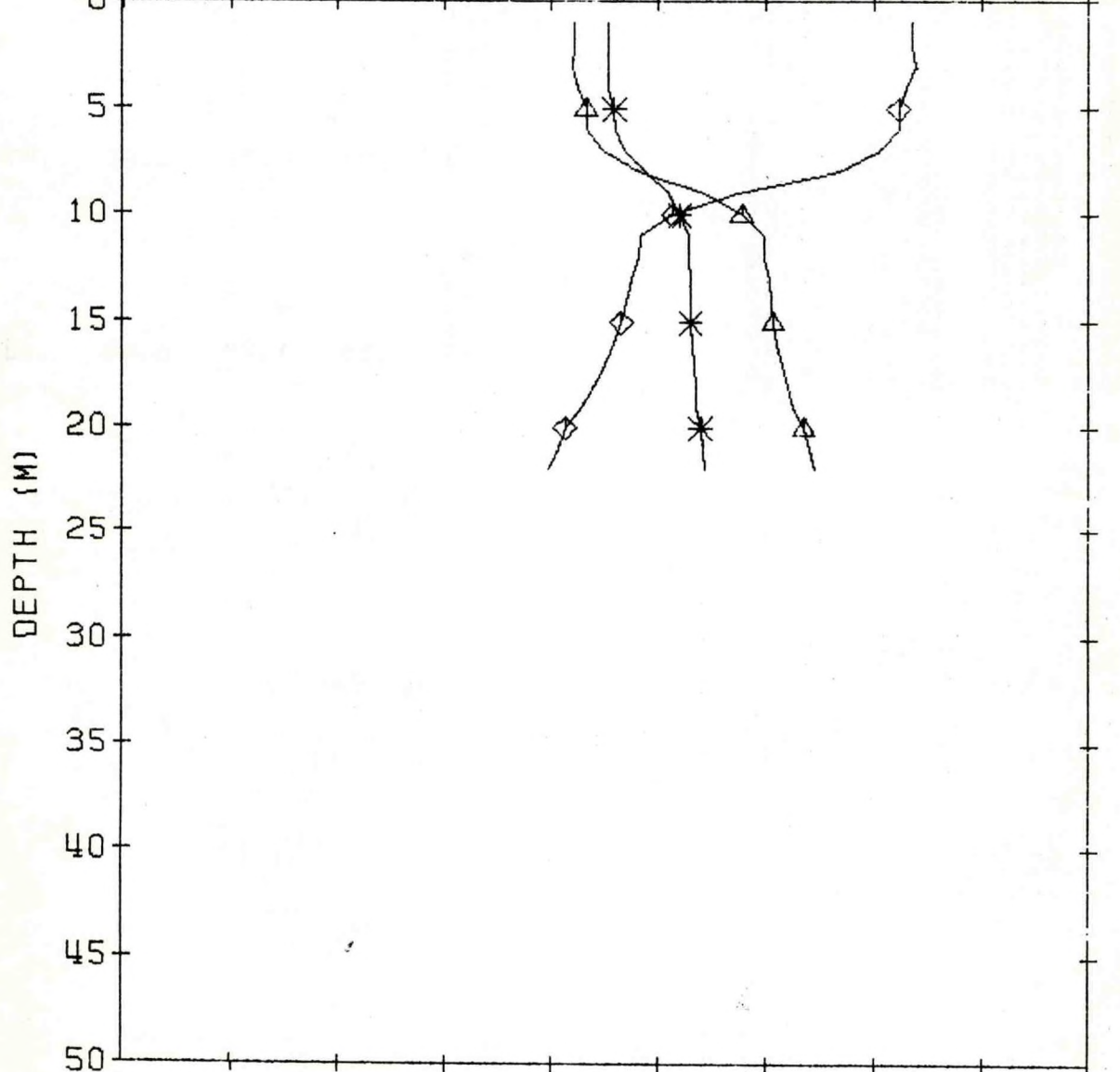
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SALINITY (0/00)

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TEMPERATURE (C)

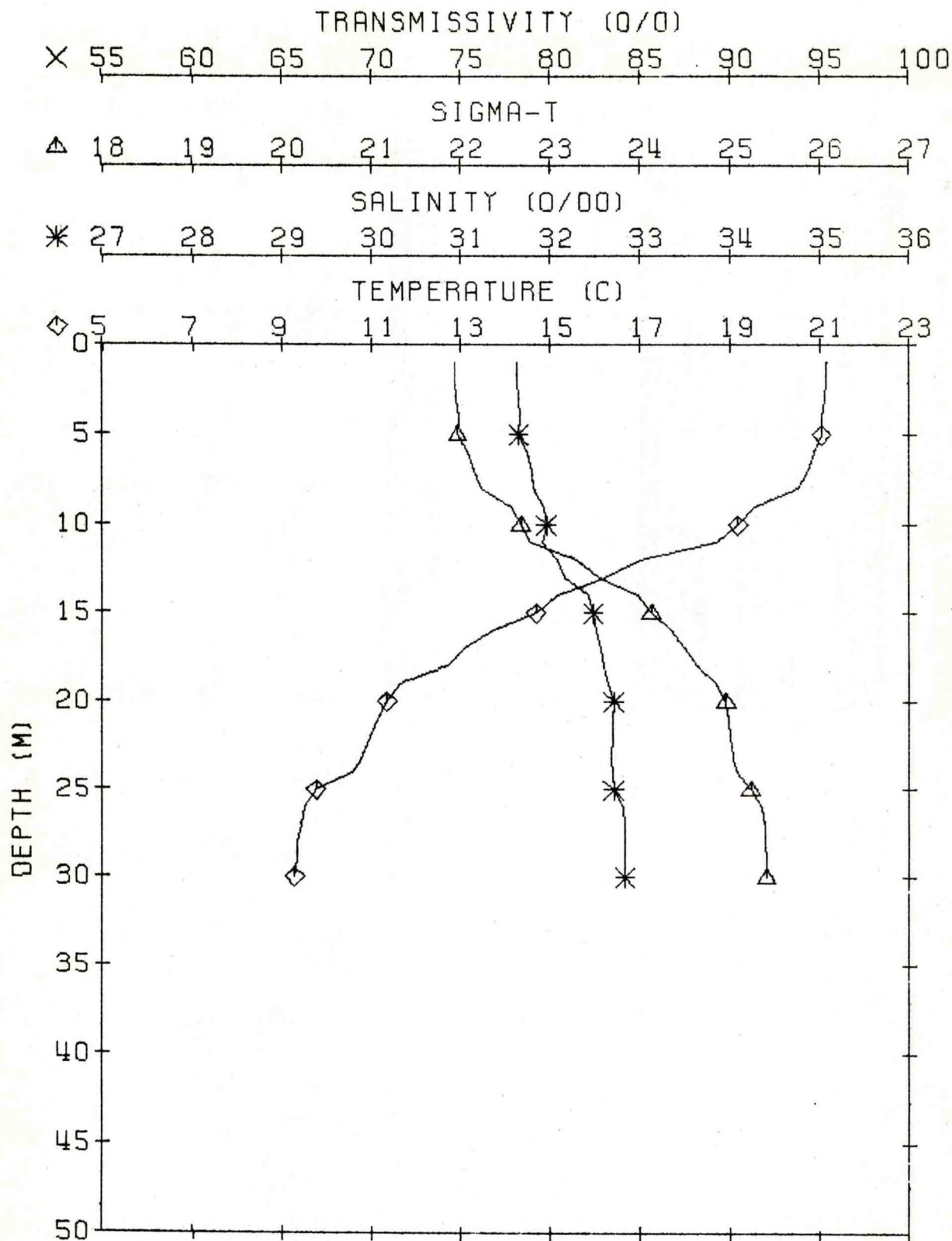
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XWCC-14 STA.152 LAT 38 45.5N; LONG 74 27.6W GMT 17.2 06/29/77
 DEPTH 30 AIR D/W 33.3/11.1 BARO 08.0 VIS 6 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 25/12 SEA DIR/HT 25/1 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.11	31.63	21.93			6.86				
2	21.11	31.63	21.93			6.86	.00	.00	1.81	.06
3	21.07	31.64	21.94			6.48				
4	21.01	31.66	21.97			6.18				
5	21.02	31.64	21.96			6.18				
6	20.98	31.74	22.08			6.19				
7	20.72	31.11	22.15			6.22				
8	20.54	31.81	22.23			6.25				
9	19.52	31.99	22.55			6.31	.00	.03	.91	.08
10	19.17	31.99	22.68			6.41				
11	18.68	32.00	22.77			6.50				
12	17.00	32.00	22.99			6.60				
13	16.22	32.16	23.54			6.87				
14	15.14	32.42	23.98			7.01				
15	14.67	32.42	24.11			7.00				
16	13.71	32.51	24.33			7.08				
17	13.08	32.55	24.55			7.15				
18	12.67	32.60	24.62			7.13				
19	11.60	32.65	24.88			7.06	.03	1.02	4.82	.47
20	11.33	32.70	24.95			6.99				
21	11.13	32.69	24.98			6.78				
22	10.96	32.69	25.00			6.58				
23	10.80	32.67	25.02			6.40				
24	10.74	32.70	25.08			6.25				
25	9.99	32.81	25.33			6.07				
26	9.50	32.81	25.35			5.94				
27	9.41	32.83	25.38			5.82				
28	9.33	32.83	25.39			5.82	.39	1.25	6.48	.68
29	9.31	32.82	25.39			5.67				
30	9.26	32.82	25.39			5.67				

KELEZ CRUISE XWCC-14 STATION 152 06/29/77



XWCC-14 STA.153 LAT 38 41.8N; LONG 74 20.0W GMT 18.6 06/29/77
 DEPTH 33 AIR D/W 61.1/33.3 BARO 08.5 VIS 7 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 24/10 SEA DIR/HT 24/1 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.97	33.06	22.29		6.21					
2	20.97	33.06	22.29		6.21	.00	.00	1.17	.15	
3	20.97	33.06	22.29		6.23					
4	20.97	33.07	22.29		6.24					
5	20.98	33.06	22.29		6.24					
6	20.94	33.06	22.29		6.23					
7	20.83	33.07	22.29		6.24					
8	20.70	33.09	22.29		6.24					
9	20.21	33.19	22.29		6.25					
10	17.67	33.20	22.29		6.26	.00	.00	1.42	.11	
11	16.17	33.21	22.29		6.33					
12	15.91	33.22	22.29		6.35					
13	15.68	33.24	22.29		6.35					
14	15.36	33.24	22.29		6.38					
15	14.68	33.24	22.29		6.38					
16	13.59	33.49	22.29		6.41					
17	13.59	33.33	22.29		6.48					
18	12.82	33.57	22.29		6.48					
19	12.52	33.61	22.29		6.49					
20	11.45	33.81	22.29		6.70	.00	.03	3.11	.35	
21	11.55	33.98	22.29		6.88					
22	11.55	33.97	22.29		6.96					
23	11.55	33.97	22.29		6.10					
24	11.55	33.97	22.29		6.17					
25	11.55	33.97	22.29		6.45					
26	11.55	33.97	22.29		6.72					
27	11.55	33.96	22.29		6.90					
28	11.55	33.97	22.29		6.91					
29	11.55	33.97	22.29		6.73					
30	11.55	33.97	22.29		6.75					
31	11.55	33.97	22.29		6.77					
32	11.55	33.97	22.29		6.79					
33	11.55	33.97	22.29		6.79					
34	11.55	33.97	22.29		6.79					
35	11.55	33.97	22.29		6.79					
36	11.55	33.97	22.29		6.79					
37	11.55	33.97	22.29		6.79					
38	11.55	33.97	22.29		6.79					
39	11.55	33.97	22.29		6.79					
40	11.55	33.97	22.29		6.79					
41	11.55	33.97	22.29		6.79					
42	11.55	33.97	22.29		6.79	.24	.78	5.09	.59	

KELEZ CRUISE XWCC-14 STATION 153 06/29/77

TRANSMISSIVITY (0/0)

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SIGMA-T

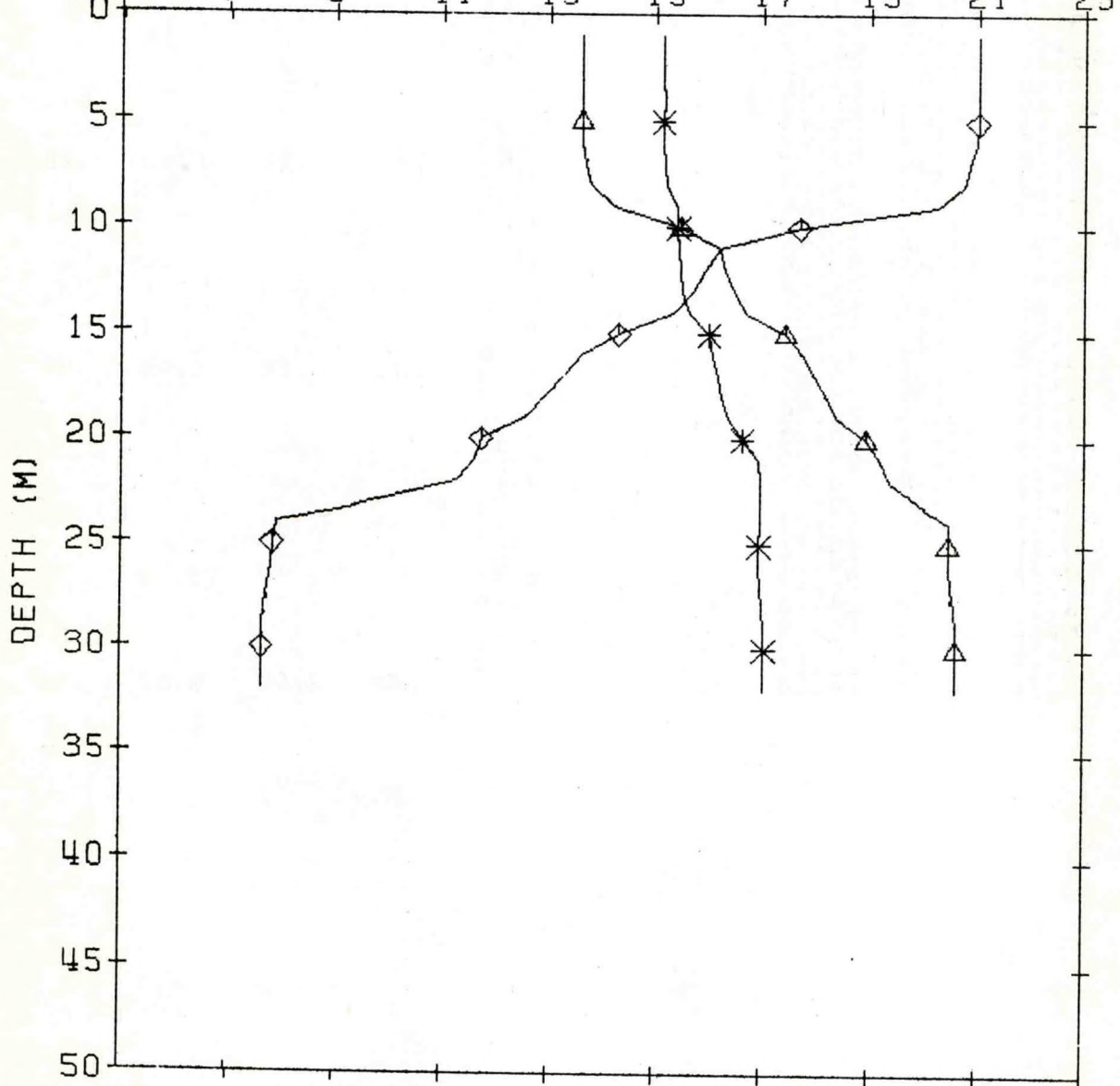
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA.154 LAT 38 37.0N; LONG 74 13.0W GMT 20.3 06/29/77
 DEPTH 45 AIR D/W 44.4/22.2 BARO 08.0 VIS 7 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 22/11 SEA DIR/HT 22/0 SWELL DIR/HT 18/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.20	35.08	22.25			6.20				
2	21.20	35.08	22.25			6.21	.00	.00	1.20	.08
3	21.14	35.14	22.31			6.11				
4	21.09	35.14	22.32			6.13				
5	20.99	35.14	22.35			6.13				
6	20.84	35.21	22.44			6.14				
7	20.43	35.34	22.64			6.16				
8	18.83	35.53	23.20			6.23				
9	17.46	35.75	23.70			6.49				
10	16.21	35.85	24.07			6.76	.00	.00	.75	.11
11	15.57	35.94	24.28			6.98				
12	14.17	35.21	24.79			7.11				
13	13.41	35.33	25.04			7.30				
14	13.00	35.41	25.18			7.42				
15	12.66	35.37	25.22			7.48				
16	12.40	35.43	25.32			7.52				
17	12.46	35.43	25.33			7.55				
18	12.44	35.49	25.33			7.55				
19	12.44	35.53	25.47			7.53				
20	12.15	35.64	25.52			7.48	.00	.00	1.42	.20
21	11.68	35.66	25.63			7.47				
22	11.46	35.66	25.64			7.45				
23	11.40	35.64	25.64			7.43				
24	10.74	35.59	25.77			7.37				
25	9.98	35.44	25.85			7.36				
26	9.28	35.44	25.88			7.40				
27	8.77	35.44	25.88			7.46				
28	8.05	35.44	25.84			7.37				
29	7.25	35.44	25.84			7.15	.39	1.80	5.99	.57
30	6.66	35.44	25.84			6.96				
31	6.66	35.44	25.84			6.91				
32	6.66	35.44	25.84			6.88				
33	6.66	35.44	25.84			6.84				
34	6.66	35.44	25.84			6.81				
35	6.66	35.44	25.84			6.77				
36	6.66	35.44	25.84			6.74				
37	6.66	35.44	25.84			6.71				
38	6.66	35.44	25.84			6.68				
39	6.66	35.44	25.84			6.65				
40	6.66	35.44	25.84			6.62				
41	6.66	35.44	25.84			6.59				
42	6.66	35.44	25.84			6.56				
43	6.66	35.44	25.84			6.53				
44	6.66	35.44	25.84			6.50				
45	6.66	35.44	25.84			6.47	.33	2.00	6.12	.58

KELEZ CRUISE XWCC-14 STATION 154 06/29/77

TRANSMISSIVITY (0/0)

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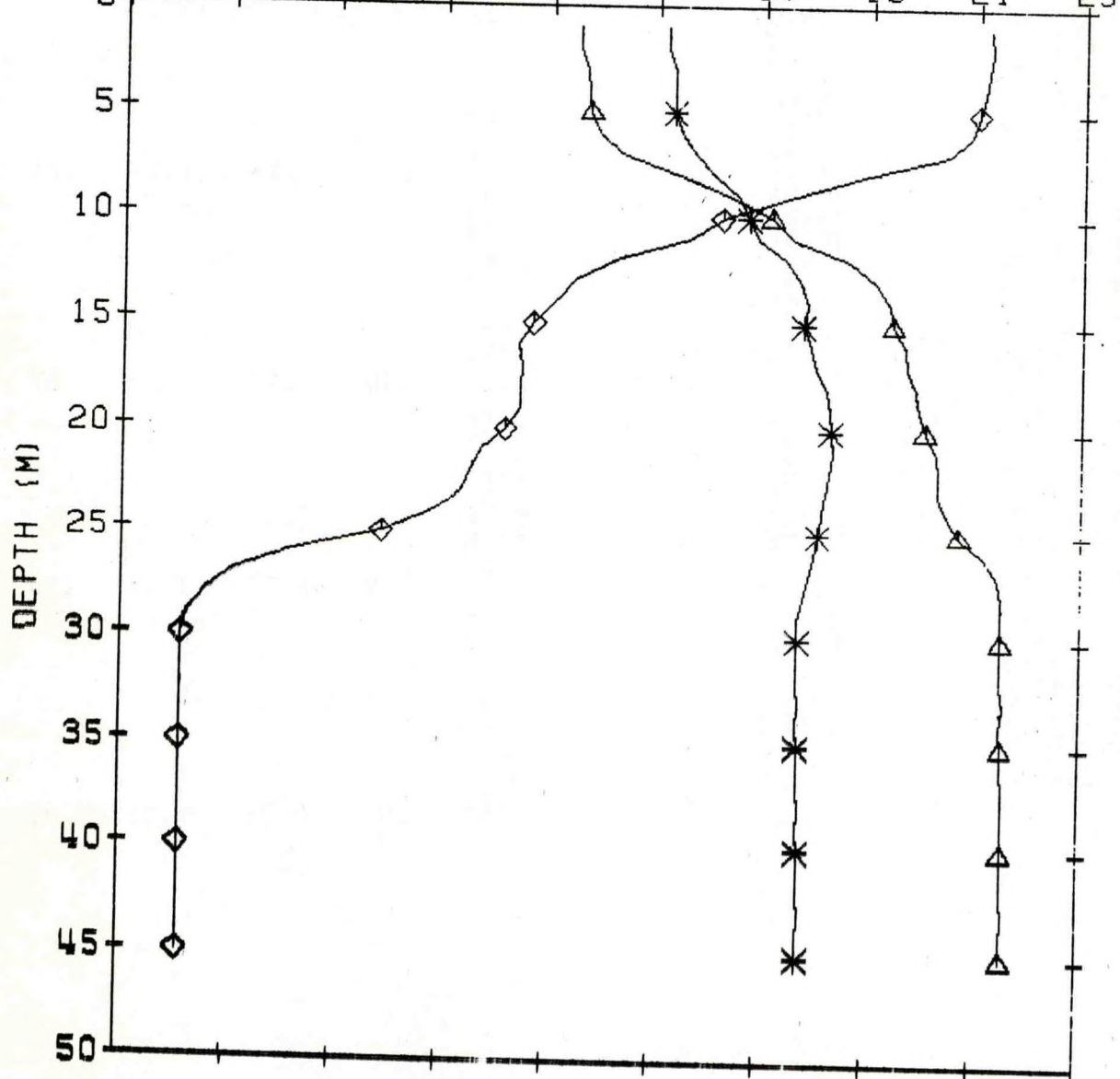
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SALINITY (0/00)

* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 5 7 9 11 13 15 17 19 21 23



XWCC-14 STA. 155 LAT 38 31.5N; LONG 74 4.5W GMT 22.1 06/29/77
 DEPTH 57 AIR D/W 44.4/22.2 BARO 07.5 VIS 7 CLD TYP/CVR /
 WETHR 1 WIND DIR/SPD 23/14 SEA DIR/HT 23/0 SWELL DIR/HT 18/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.58	33.26	22.27		6.56					
2	21.59	33.26	22.27		6.56		.00	.00	.79	.06
3	21.48	33.26	22.27		6.01					
4	21.48	33.26	22.27		6.02					
5	21.26	33.26	22.27		6.03					
6	20.96	33.26	22.27		6.08					
7	19.80	33.26	22.27		6.16					
8	18.47	33.26	22.27		6.44					
9	16.61	33.26	22.27		6.68					
10	16.07	33.26	22.27		6.95					
11	15.99	33.26	22.27		7.06					
12	15.40	33.26	22.27		7.14					
13	14.41	33.26	22.27		7.25					
14	13.99	33.26	22.27		7.41					
15	13.40	33.26	22.27		7.50					
16	13.00	33.26	22.27		7.58					
17	12.40	33.26	22.27		7.63					
18	12.00	33.26	22.27		7.69					
19	11.60	33.26	22.27		7.71					
20	11.60	33.26	22.27		7.70		.00	.14	1.19	.21
21	11.60	33.26	22.27		7.67					
22	11.50	33.26	22.27		7.56					
23	11.50	33.26	22.27		7.49					
24	11.00	33.26	22.27		7.44					
25	10.90	33.26	22.27		7.39					
26	10.90	33.26	22.27		7.35					
27	10.90	33.26	22.27		7.31					
28	10.90	33.26	22.27		7.27					
29	10.90	33.26	22.27		7.25					
30	10.90	33.26	22.27		7.25		.00	.00	2.89	.37
31	10.90	33.26	22.27		7.19					
32	10.90	33.26	22.27		7.17					
33	10.90	33.26	22.27		7.15					
34	10.90	33.26	22.27		7.13					
35	10.90	33.26	22.27		7.16					
36	10.90	33.26	22.27		7.10					
37	10.90	33.26	22.27		7.09					
38	10.90	33.26	22.27		7.05					
39	10.90	33.26	22.27		7.04		.52	2.35	7.30	.70
40	10.90	33.26	22.27		7.00					
41	10.90	33.26	22.27		7.00					
42	10.90	33.26	22.27		7.00					
43	10.90	33.26	22.27		7.00					
44	10.90	33.26	22.27		7.00					
45	10.90	33.26	22.27		7.00					
46	10.90	33.26	22.27		7.00					
47	10.90	33.26	22.27		7.00					
48	10.90	33.26	22.27		7.00					
49	10.90	33.26	22.27		7.00					
50	10.90	33.26	22.27		7.00		.54	2.38	7.31	.69
51	10.90	33.26	22.27		7.00					
52	10.90	33.26	22.27		7.00					

KELEZ CRUISE XWCC-14 STATION 155 06/29/77

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)

◇ 5 7 9 11 13 15 17 19 21 23

