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NOAA Data Report OMPA-10

MESA NEW YORK BIGHT PROJECT

EXPANDED WATER COLUMN CHARACTERIZATION

CRUISE (XWCC 24)

NOAA SHIP GEORGE B. KELEZ

AUGUST 1979

John B. Hazelworth
George A. Berberian
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Boulder, Colorado
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noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / Office of Marine Pollution Assessment

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4301 Rickenbacker Causeway
Miami, Florida 33149

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GEORGETOWN CENTER
Office of Marine Pollution Assessment
R.L. Swanson
Director
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Secretary

NATIONAL OCEANIC AND
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During the period 13-23 August 1979, an oceanographic cruise was made on the NOAA Ship George B. Kelez in the New York Bight. The objective of the cruise was to supply data to provide a base for analysis of the water characteristics and movements in the highly impacted ecosystem. This report represents the corrected physical and chemical (nutrient) data from this cruise.

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

1. INTRODUCTION

This report is a continuation in the Marine Ecosystem Analysis (MESA) Program's series of publications presenting oceanographic data from the New York Bight. In August of 1979, a cruise of 133 stations was conducted by the Atlantic Oceanographic and Meteorological Laboratories (AOML), Miami, Florida, aboard the NOAA Ship George B. Kelez. The instrumentation employed was the same as that described in previous reports (Hazelworth et al., 1974, 1975, a,b) namely, an Inter Ocean Model 513-10 CSTD with associated sensors and equipment. The area of investigation was the expanded New York Bight region (Figure 1 and Table 1). Cruise date and participating AOML staff members are listed in Table 2. The physical and nutrient data, obtained from the water column measurements are presented herein. Nutrient and dissolved oxygen analyses were performed by personnel of the Bionetics Corporation, Hampton, Virginia, contracted by the NOAA Marine Ecosystems Analysis Program (MESA) New York Bight Project Office through NOAA's Atlantic Oceanographic and Meteorological Laboratories (AOML) Ocean Chemistry Laboratory (OCL). Water samples at selected stations were obtained for the analysis of chlorophyll and phytoplankton. These results will be reported separately.

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

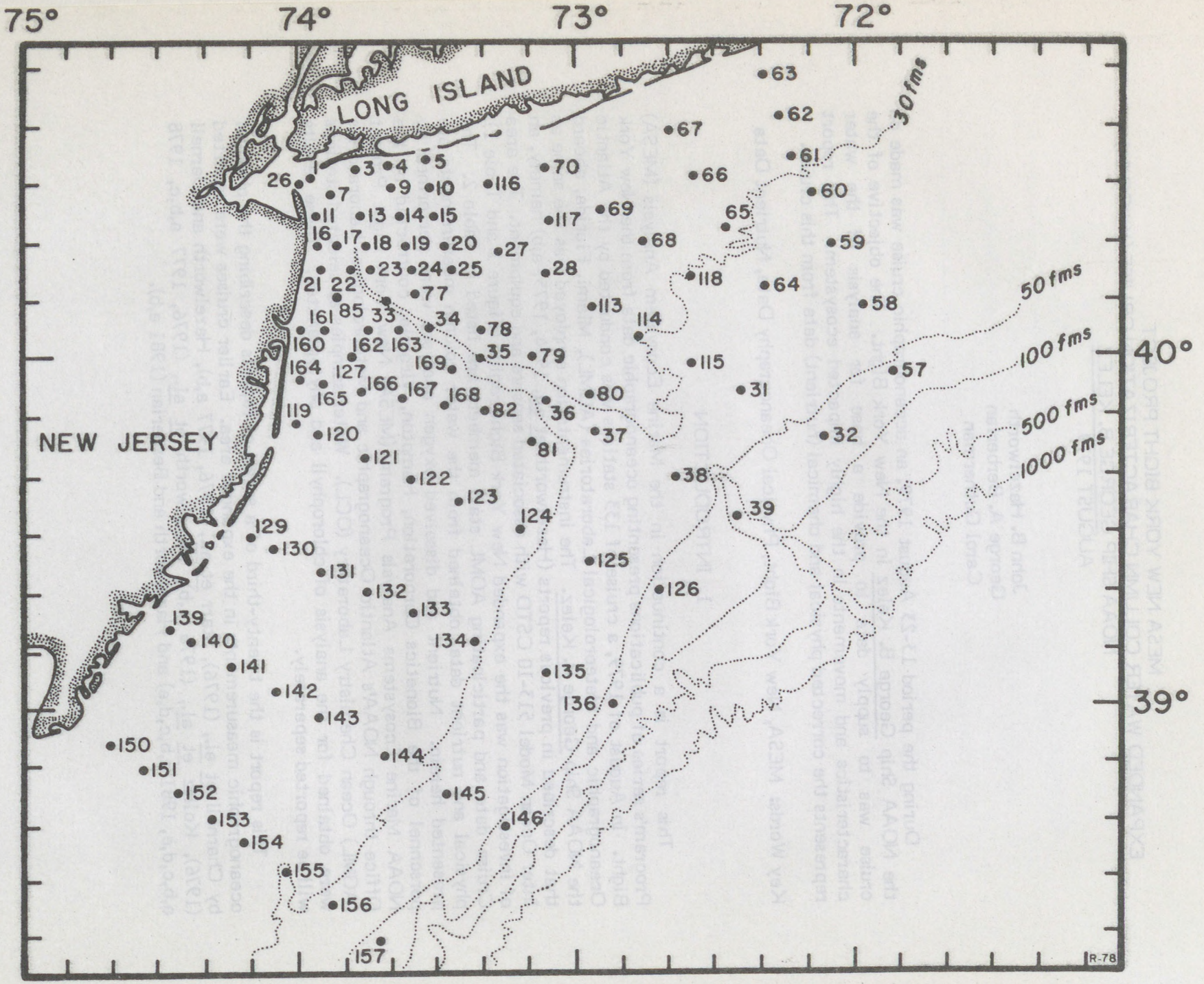


Figure 1. Locations of stations occupied during XWCC-24.

TABLE 1

NEW YORK BIGHT STATIONS POSITIONS

STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE
1	40° 30.2	73° 57.3	85*(3)	40° 08.0	73° 51.5
3	40° 31.5	73° 48.4	113	40° 08.8	72° 55.5
4*(2)	40° 32.4	73° 40.5	114	40° 04.0	72° 45.2
5	40° 33.3	73° 32.5	115	39° 58.7	72° 34.1
7*(3)	40° 26.9	73° 53.0	116	40° 30.0	73° 18.7
9*(2)	40° 28.3	73° 39.6	117	40° 23.1	72° 05.0
10	40° 29.2	73° 31.5	118	40° 14.4	72° 34.1
11*(3)	40° 22.2	73° 56.7	119	39° 48.4	74° 00.0
13*(3)	40° 23.3	73° 47.0	120	39° 46.5	73° 55.5
14*(3)	40° 24.3	73° 38.7	121	39° 42.9	73° 46.5
15	40° 25.2	73° 30.4	122	39° 39.5	73° 36.0
16*(3)	40° 18.2	73° 56.4	123	39° 35.0	73° 26.0
17*(3)	40° 18.5	73° 51.8	124	39° 30.0	72° 12.2
18*(3)	40° 19.1	73° 47.5	125	39° 23.8	72° 57.2
19*(3)	40° 20.2	73° 37.9	126	39° 18.9	72° 42.5
20	40° 21.2	73° 29.4	127	39° 57.2	73° 53.4
21*(3)	40° 13.5	73° 56.1	129	39° 30.0	74° 11.0
22*(3)	40° 14.4	73° 51.2	130	39° 27.7	74° 06.1
23*(3)	40° 14.8	73° 45.6	131	39° 23.2	73° 55.5
24*(3)	40° 15.8	73° 37.0	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	135	39° 05.2	73° 06.5
28	40° 13.5	73° 07.0	136	39° 00.0	72° 52.0
31	39° 54.0	72° 25.0	139	39° 13.5	74° 30.0
32	39° 46.0	72° 07.0	140	39° 11.0	74° 24.5
33*(3)	40° 10.0	73° 41.5	141	39° 06.8	74° 15.2
34	40° 05.5	73° 31.5	142	39° 02.9	74° 05.9
35	39° 59.0	73° 21.5	143	39° 58.1	73° 56.0
36	39° 55.0	73° 06.5	144	38° 51.6	73° 42.0
37	39° 46.0	72° 57.0	145	38° 45.0	73° 27.9
38	39° 39.0	72° 39.5	146	38° 39.4	73° 16.1
39	39° 32.0	72° 26.0	150	38° 53.8	74° 41.9
57	39° 57.0	71° 52.0	151	38° 49.7	74° 34.0
58	40° 08.0	71° 58.0	152	38° 45.4	74° 27.2
59	40° 18.0	72° 04.0	153	38° 41.5	74° 20.0
60	40° 27.0	72° 09.0	154	38° 37.1	74° 12.8
61	40° 33.0	72° 13.0	155	38° 31.4	74° 04.5
62	40° 40.0	72° 16.0	156	38° 25.3	73° 53.0
63	40° 47.0	72° 20.0	157	38° 19.5	73° 43.2
64	40° 12.0	72° 20.0	160	40° 05.0	73° 59.6
65	40° 21.0	72° 28.0	161	40° 05.0	73° 54.7
66	40° 30.0	72° 34.0	162	40° 05.0	73° 47.0
67	40° 38.0	72° 40.0	163	40° 05.0	73° 38.0
68	40° 19.0	72° 46.0	164	39° 57.2	74° 01.5
69	40° 25.0	72° 55.0	165	39° 56.5	73° 56.3
70	40° 32.0	73° 07.0	166	39° 55.0	73° 48.0
77	40° 10.5	73° 34.0	167	39° 53.5	73° 39.0
78	40° 05.0	73° 21.5	168	39° 52.0	73° 30.0
79	40° 00.0	73° 09.5	169	39° 58.5	73° 28.5
80	39° 54.5	72° 57.0			
81	39° 44.5	73° 10.0			
82	39° 50.5	73° 20.5			

*(n) Station occupied n-times

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

Cruise	Date	AOML Personnel
XWCC 24	13 - 23 August 1979	Gregory Han, Chief Scientist Gary Brach Phillip Perelmuter

2. DATA ANALYSIS

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

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

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;
$\underline{W}$ = water sample value;
$\bar{E}$ = mean electronic sensor value at the depth corresponding to water sample at the same depth;
I = corrected interpolated one meter electronic sensor value at the nearest depth corresponding to the water sample value;
T = date (Julian day, Table 3);
D = depth (Table 3); and
U = uncorrected data value.

Table 3. Correction Factors and Data Accuracy for Cruise XWCC 24

	Calib. Offset	Calib. Recheck	X	S_x	Precision (Repeatability)
Temperature (^oC)	-.0012U-.0054T-.0003D-.1423		+.00	.03	
Salinity ($^o/oo$)	-.0259U+.0031T-.0009D+.7181		+.00	.06	
O_2 (mℓ/ℓ)	-.1171U-.0159T-.0009D+.5191		.00	.07	
Depth (Meters)	0.0				±0.5

The specific method and detail used in each nutrient channel is outlined in the Technicon Industrial Systems, Auto-Analyzer Methodologies (1973, 1976, 1977 a,b, and 1978). The detection limit for nitrite is 0.1 µg-at N/ℓ and the coefficient of variation at 1.0 µg-at N/ℓ is 0.95%. The detection limit for nitrate is 0.1 µg-at N/ℓ, and the coefficient of variation at 2.5 µg-at N/ℓ is 0.59%. The detection limit for silicate is 0.5 µg-at Si/ℓ, and the coefficient of variation at 2.5 µg-at Si/ℓ is 0.95%. The detection limit for phosphate is 0.08 µg-at P/ℓ and the coefficient of variation at 2 µg-at P/ℓ is 1.98%. The detection limit for ammonia is 0.2 µg-at N/ℓ, and the coefficient of variation at 8.0 µg-at N/ℓ is 0.31%.

3. DATA PRESENTATION

Tables of the interpolated data and the corresponding depth profiles of temperature (^oC), salinity ($^o/oo$), sigma-t and transmissivity (0-100% transmission) are given in Section 7, Station Data. The codes used in the headings are from the National Oceanographic Data Center Manual Series (1964). The tabulated data are given at 1-m intervals from the surface to 50-m and at 10-m intervals thereafter; in addition, data are presented at the depths at which water samples were obtained and at the bottom of the cast. The column O_2 is the dissolved oxygen data as recorded by the electronic probe. The column heading O_2W is the dissolved oxygen as determined by the modified Winkler method from the water samples, Strickland and Parsons (1968).

Nutrients (nitrite, nitrate, phosphate, silicate and ammonia) values below detection limits are noted as less than (<) their respective detection limits as specified above.

Profiles of temperature, salinity, sigma-t and transmissivity vs. depth were produced from the processed 1-m interval data. The symbols, explained to the left of each horizontal axis and located on the curves at 5-m intervals, identify the parameters. The distributions of temperature, salinity, and sigma-t are presented in Section 5: 1) Horizontally at the 1-m depth (Figures 2-4), and 2) vertically along the axis of the Hudson Shelf Valley (Figures 5-7). Information describing the methods used for the computer drawn figures can be found in Herman and Niedrauer (1978) and Niedrauer and Herman (1978).

4. ACKNOWLEDGMENTS

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

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

XWCC24

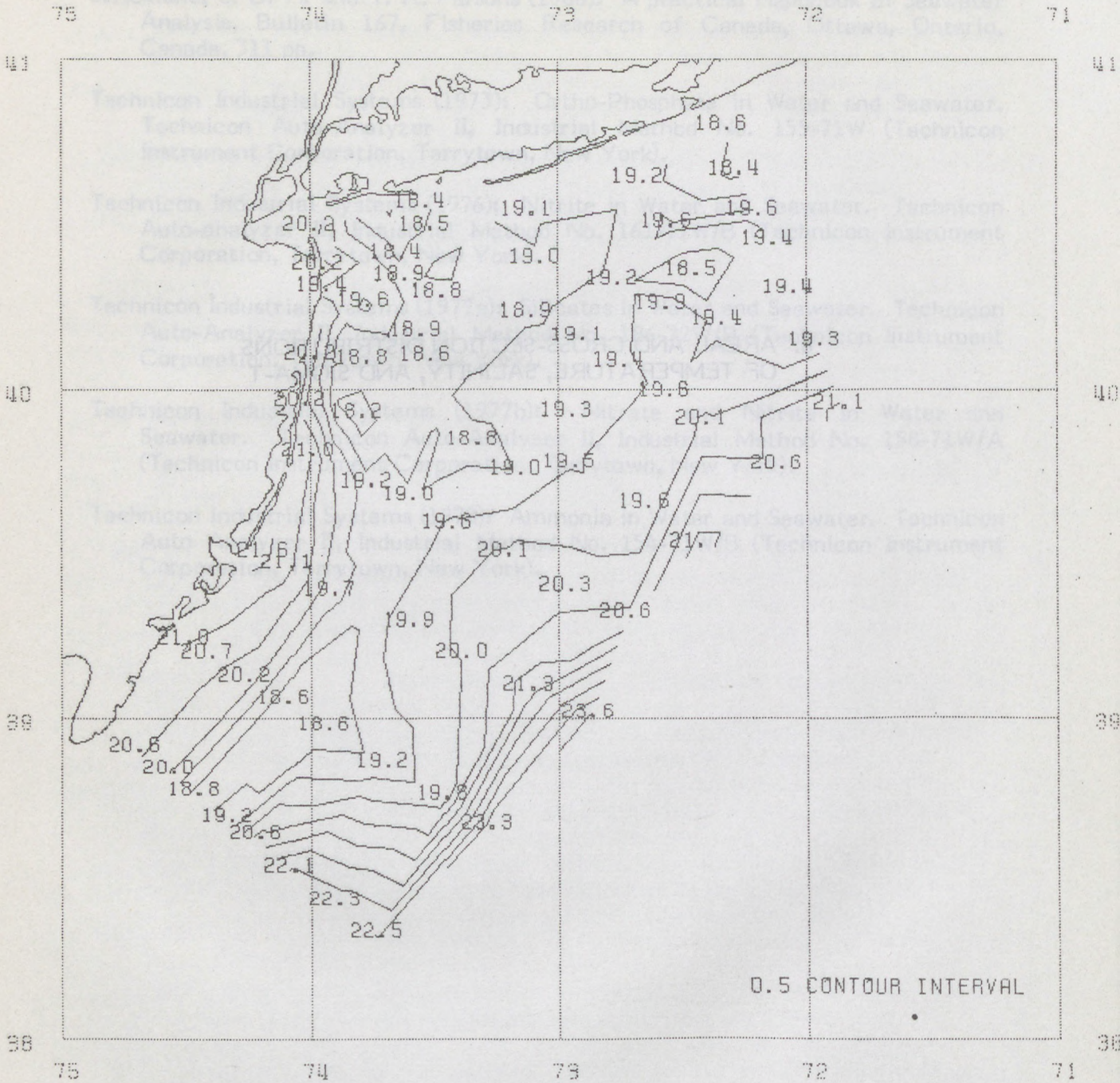


FIGURE 2. SURFACE WATER TEMPERATURES (C) 8/13/79-8/23/79

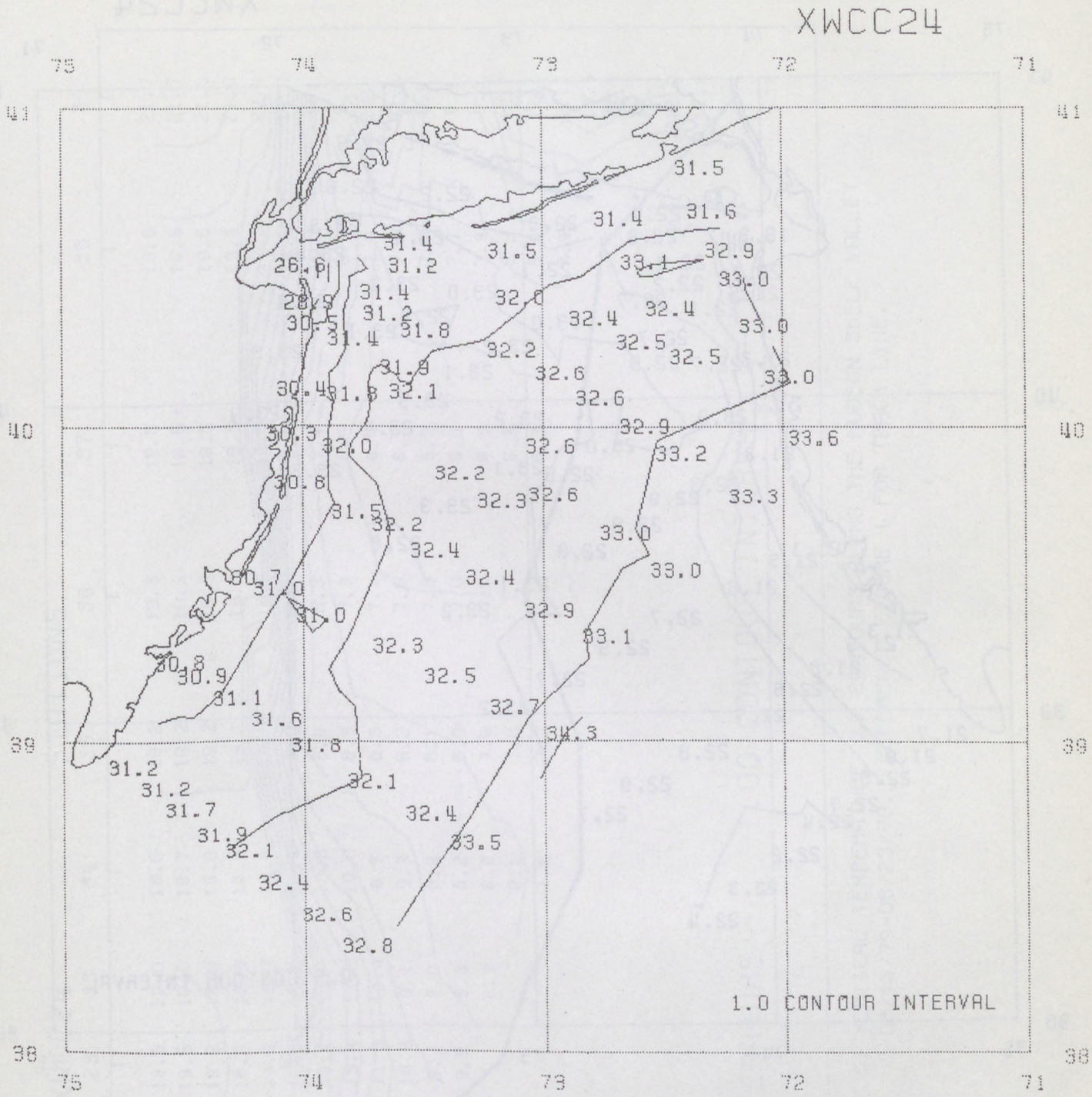


FIGURE 3. SURFACE SALINITIES (0/00) 8/13/79-8/23/79

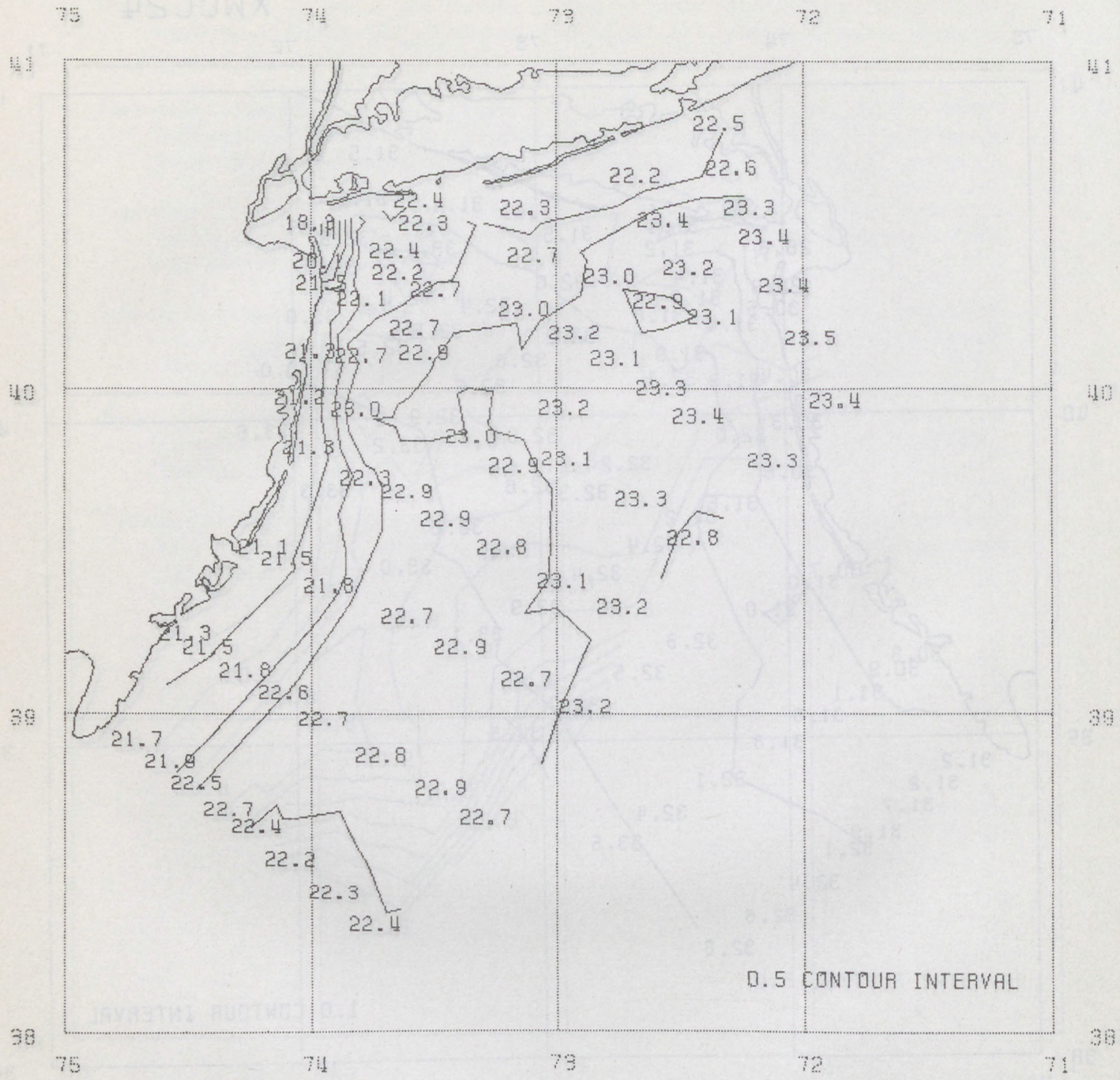


FIGURE 4. SURFACE SIGMA-T 8/13/79-8/23/79

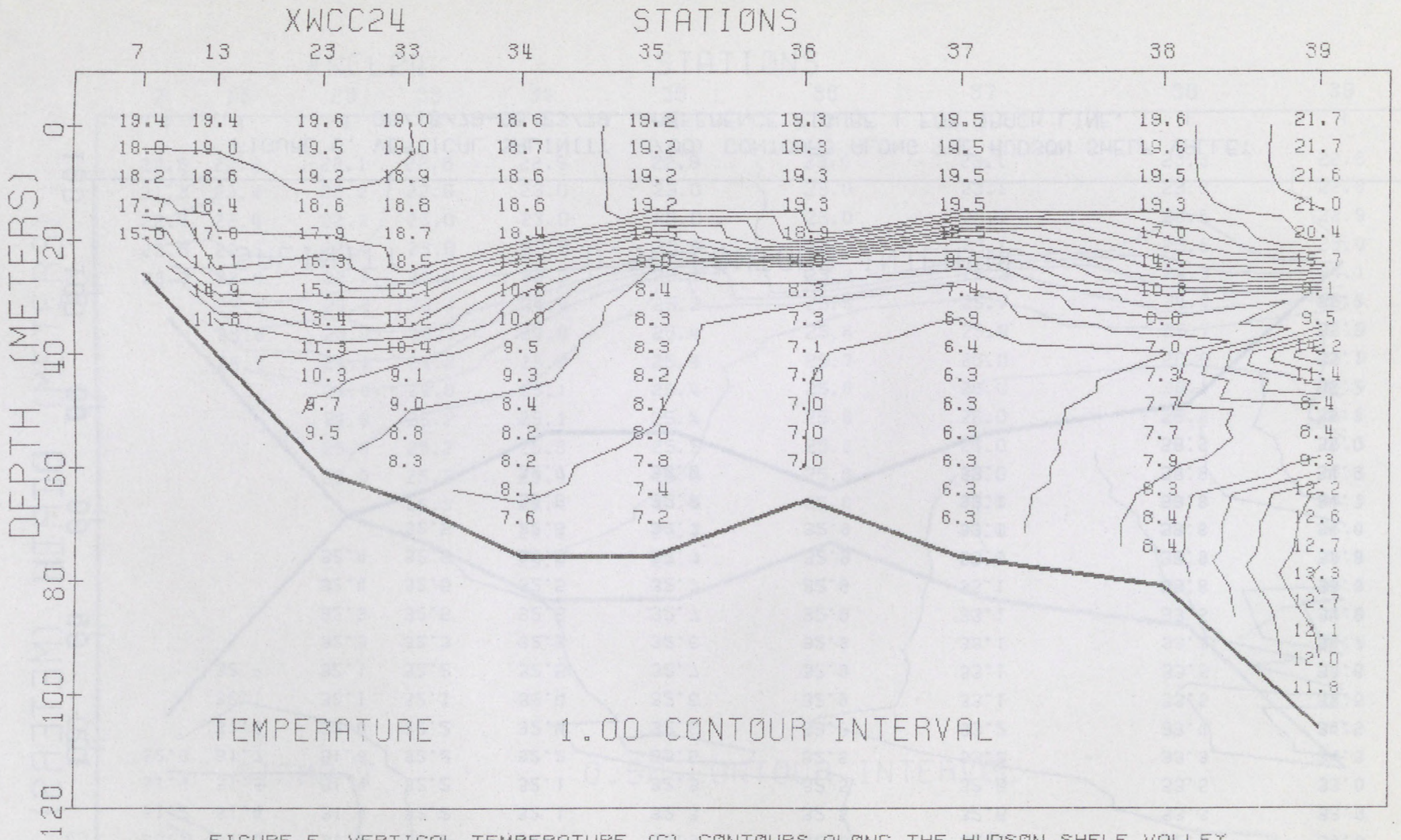


FIGURE 5. VERTICAL TEMPERATURE (C) CONTOURS ALONG THE HUDSON SHELF VALLEY 08/13/79-08/23/79. REFERENCE FIGURE 1 FOR TRACK LINE.

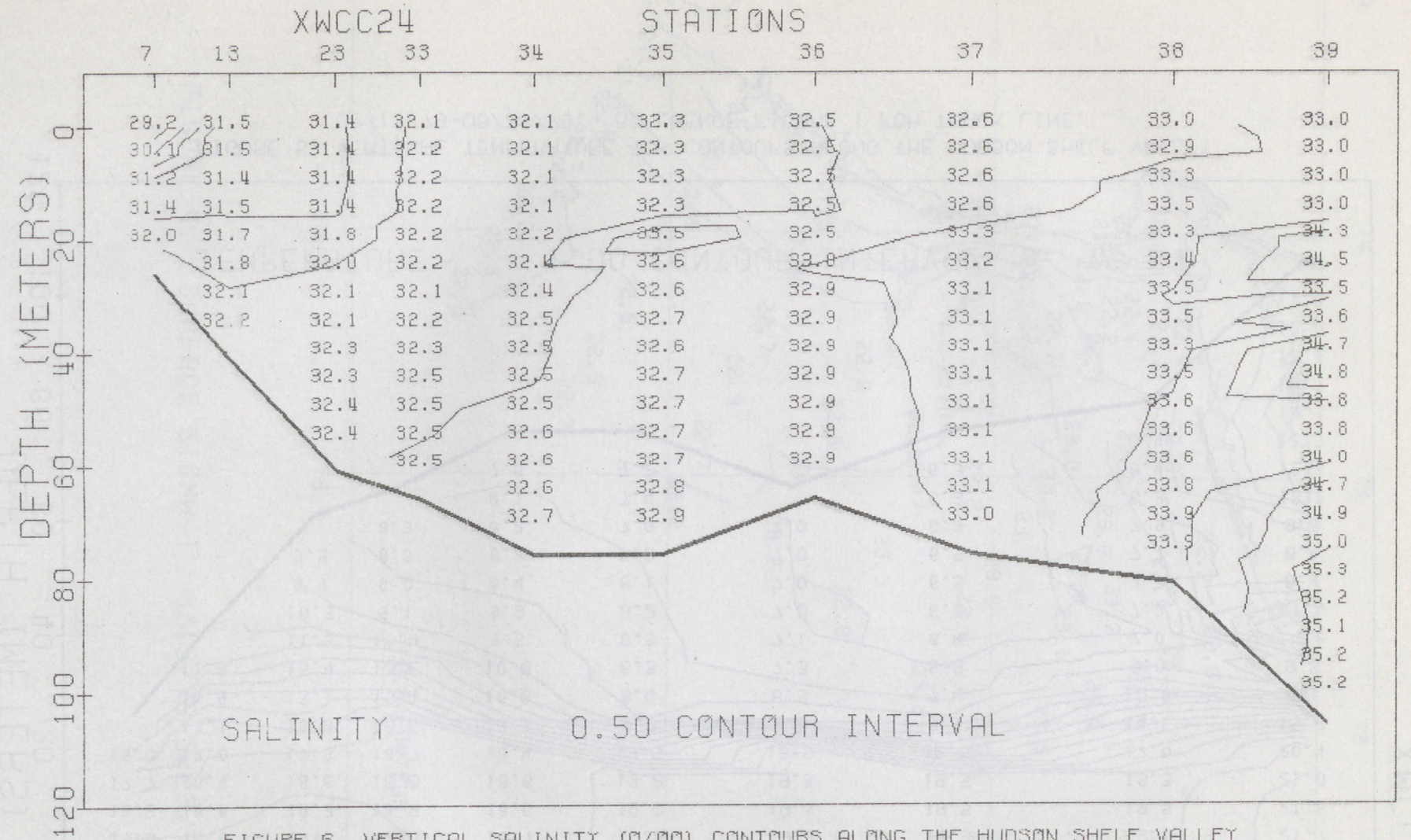


FIGURE 6. VERTICAL SALINITY (0/00) CONTOURS ALONG THE HUDSON SHELF VALLEY 08/13/79-08/23/79. REFERENCE FIGURE 1 FOR TRACK LINE.

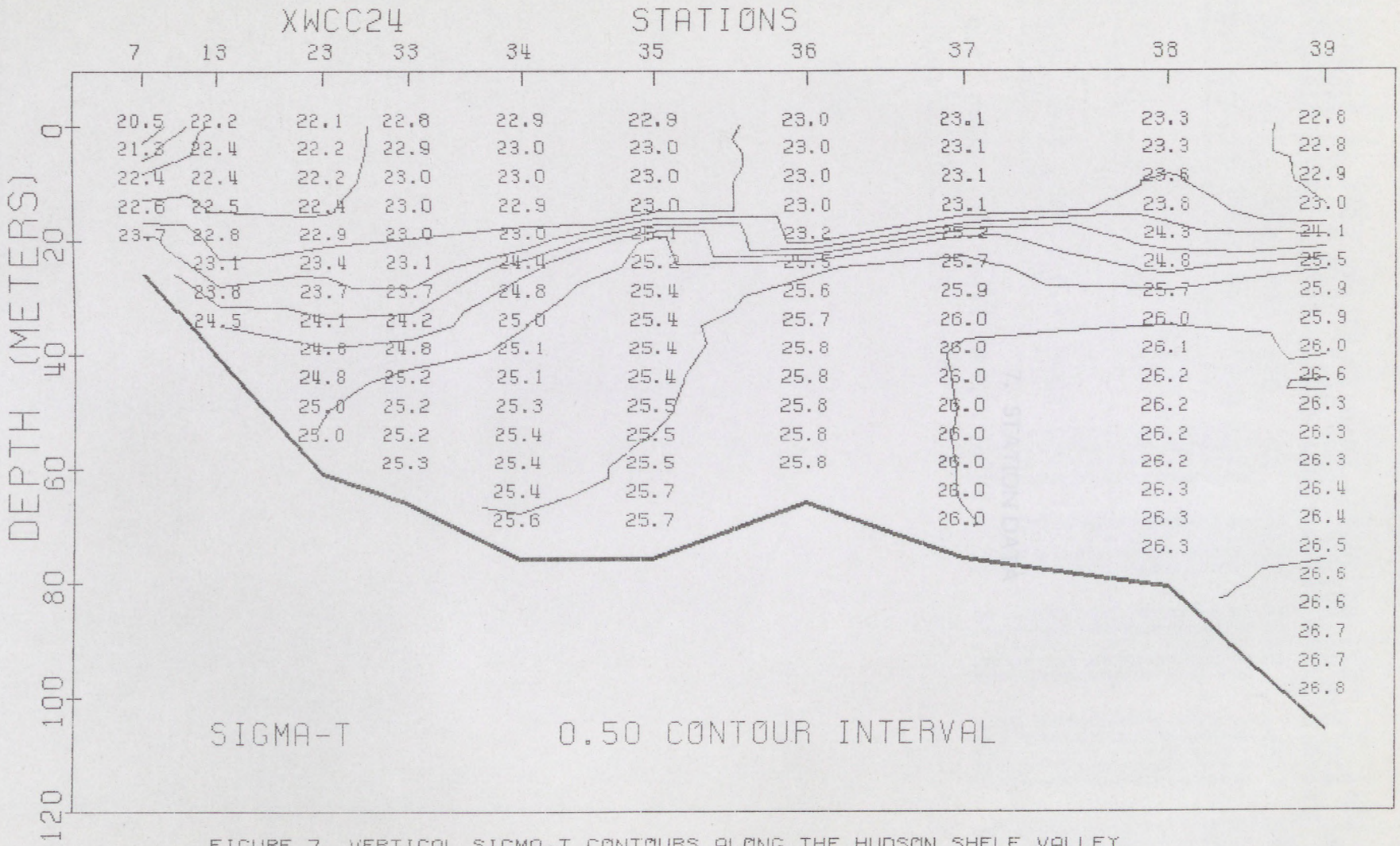
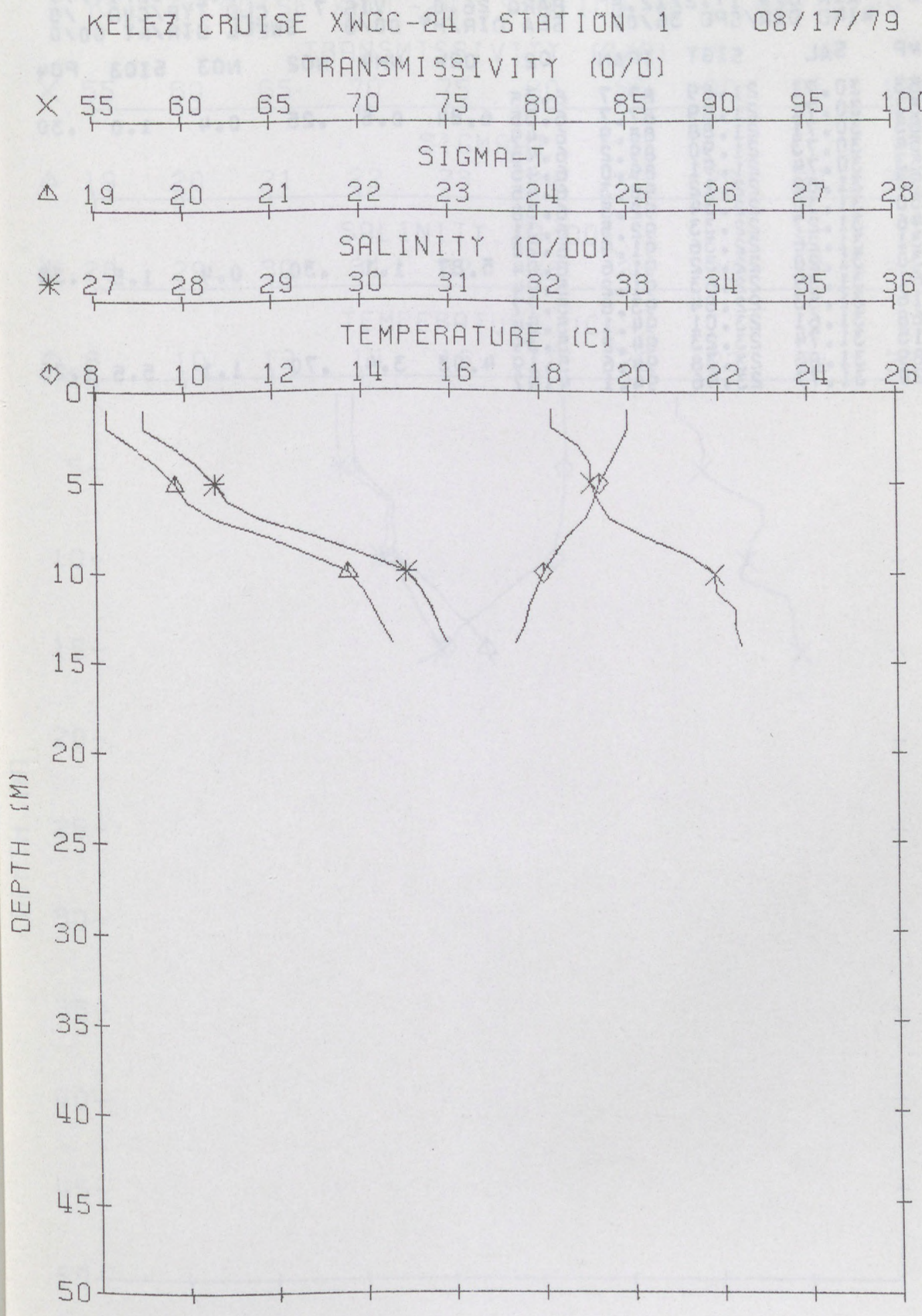


FIGURE 7. VERTICAL SIGMA-T CONTOURS ALONG THE HUDSON SHELF VALLEY 08/13/79-08/23/79, REFERENCE FIGURE 1 FOR TRACK LINE.

7. STATION DATA

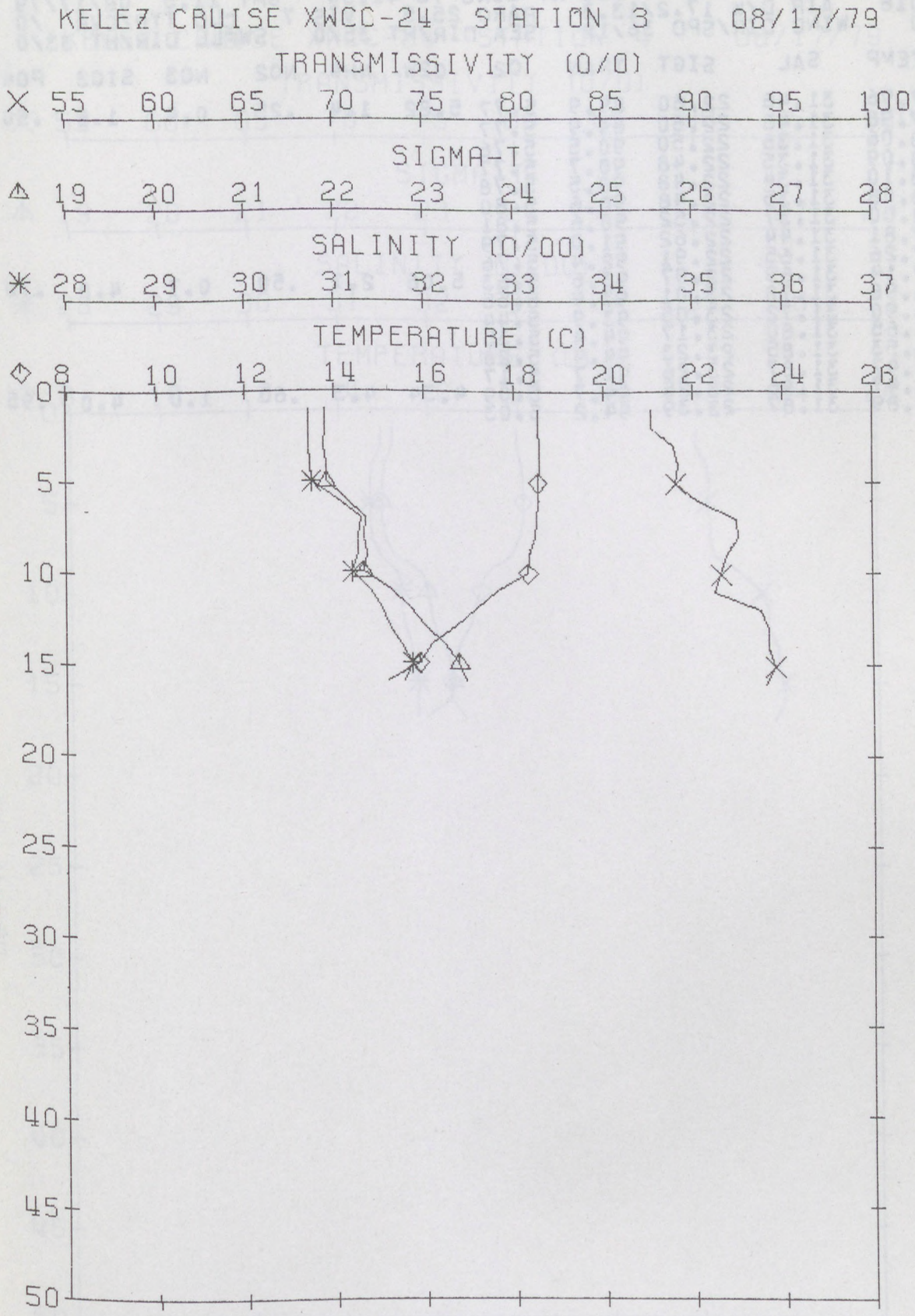
XWCC-24 STA. 1 LAT 40 30.2N; LONG 73 57.0W GMT 16.0 08/17/79
DEPTH 016 AIR D/W 20.0/15.0 BARO 26.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 18/04 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.94	27.54	19.14	80.6	6.18	6.47	6.8	3.80	12.0	1.5	1.90
2	19.94	27.54	19.14	80.6	6.18						
3	19.76	27.87	19.43	82.2	6.22						
4	19.55	28.15	19.69	82.8	6.21						
5	19.31	28.34	19.89	82.8	6.19						
6	19.19	28.48	20.03	83.3	6.15						
7	18.99	28.85	20.36	83.9	6.11						
8	18.60	29.46	20.92	86.0	6.10						
9	18.31	29.98	21.39	88.3	5.96						
10	18.05	30.48	21.83	89.7	5.80	5.06	4.5	1.35	2.8	0.5	1.15
11	17.89	30.64	21.99	89.8	5.67						
12	17.74	30.76	22.11	90.9	5.55						
13	17.63	30.84	22.21	90.9	5.47						
14	17.41	30.94	22.33	91.3	5.40	4.87	4.6	.70	2.6	1.0	1.20


KELEZ CRUISE XWCC-24 STATION 1 08/17/79
TRANSMISSIVITY (O/O)
X 55 60 65 70 75 80 85 90 95 100
SIGMA-T
Δ 19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
✳ 27 28 29 30 31 32 33 34 35 36
TEMPERATURE (C)
◇ 8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

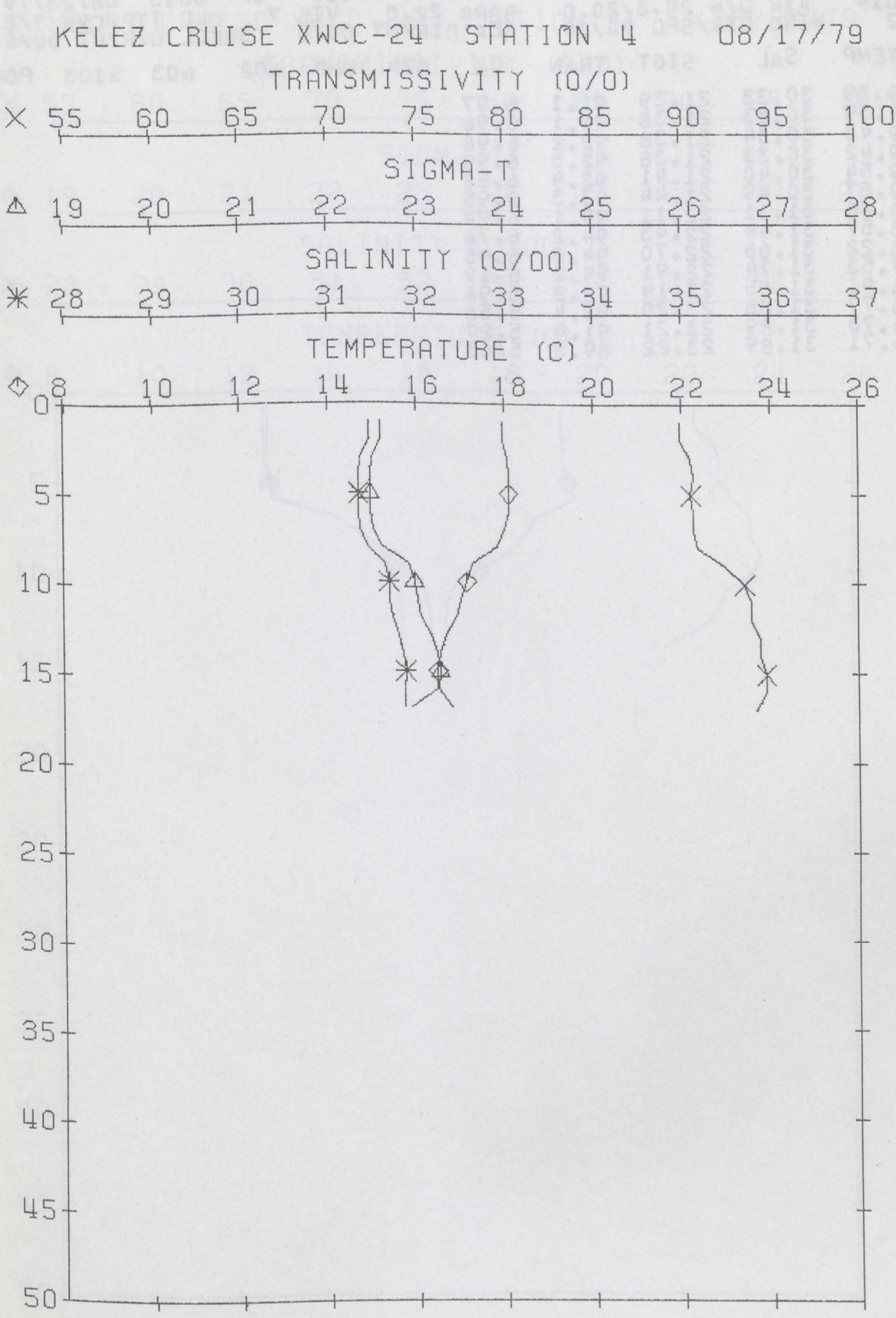
XWCC-24 STA. 3 LAT 40 31.3N; LONG 73 48.8W GMT 12.6 08/17/79
DEPTH 016 AIR D/W 17.2/12.8 BARO 26.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 36/07 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.53	30.71	21.89	87.7	6.35						
2	18.53	30.71	21.89	87.7	6.35	6.84	0.5	.25	0.4	1.0	.30
3	18.55	30.71	21.88	88.9	6.49						
4	18.54	30.73	21.90	89.2	6.45						
5	18.53	30.74	21.91	89.0	6.45						
6	18.53	31.02	22.12	90.3	6.45						
7	18.50	31.30	22.34	92.5	6.38						
8	18.46	31.27	22.33	92.5	6.31						
9	18.31	31.26	22.36	91.9	6.20						
10	18.30	31.20	22.32	91.6	6.04	5.87	1.1	.30	0.4	1.5	.35
11	17.61	31.39	22.63	91.2	5.94						
12	17.16	31.53	22.84	93.8	5.77						
13	16.68	31.61	23.01	94.1	5.54						
14	16.15	31.74	23.23	94.2	5.39						
15	15.89	31.86	23.38	94.6	5.19	4.03	3.4	.70	1.1	5.5	1.25
16	15.20	31.77	23.46	94.1	4.97						


KELEZ CRUISE XWCC-24 STATION 3 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

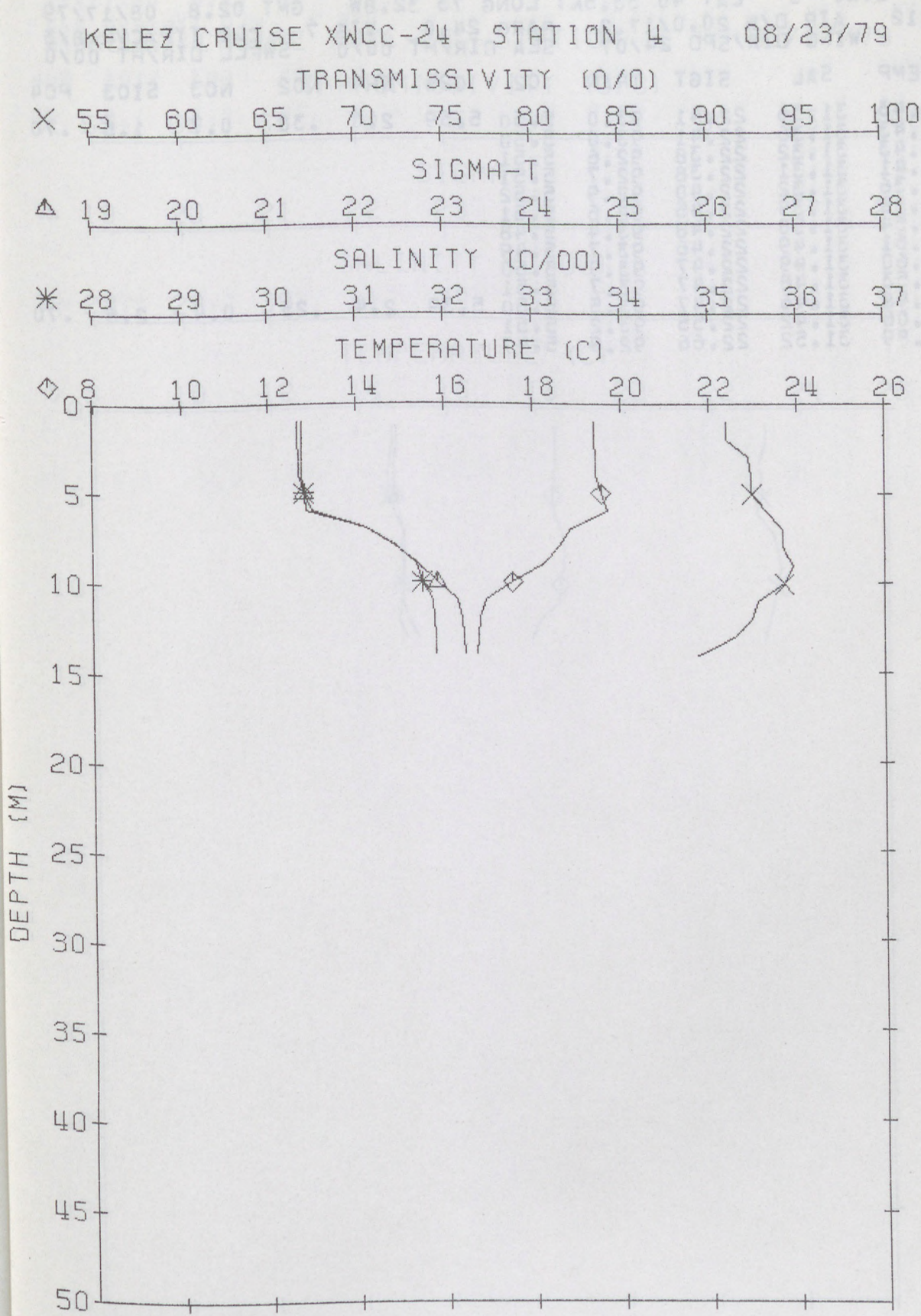
XWCC-24 STA. 4 LAT 40 32.7N; LONG 73 41.0W GMT 11.5 08/17/79
DEPTH 016 AIR D/W 17.2/13.3 BARO 25.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 36/12 SEA DIR/HT 35/0 SWELL DIR/HT 33/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	17.96	31.46	22.60	89.9	5.77	5.82	1.4	.25	0.4	1.5	.50
2	17.96	31.46	22.60	89.9	5.77						
3	18.06	31.36	22.50	90.5	5.76						
4	18.09	31.35	22.48	90.7	5.77						
5	18.10	31.34	22.48	90.5	5.78						
6	18.08	31.35	22.48	90.6	5.80						
7	18.00	31.37	22.52	90.6	5.81						
8	17.81	31.44	22.62	91.0	5.79						
9	17.26	31.65	22.91	92.4	5.76						
10	17.14	31.69	22.97	93.6	5.63	5.06	2.1	.50	0.7	4.0	.70
11	16.98	31.70	23.01	93.9	5.55						
12	16.90	31.72	23.05	93.9	5.44						
13	16.65	31.80	23.17	94.4	5.35						
14	16.53	31.85	23.23	94.4	5.28						
15	16.47	31.87	23.26	94.7	5.17						
16	16.47	31.86	23.25	94.7	5.09	4.34	4.3	.60	1.0	4.0	.95
17	15.89	31.87	23.39	94.2	5.03						


KELEZ CRUISE XWCC-24 STATION 4 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

XWCC-24 STA. 4 LAT 40 32.5N; LONG 73 40.3W GMT 08.5 08/23/79
DEPTH 014 AIR D/W 20.3/20.0 BARO 22.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

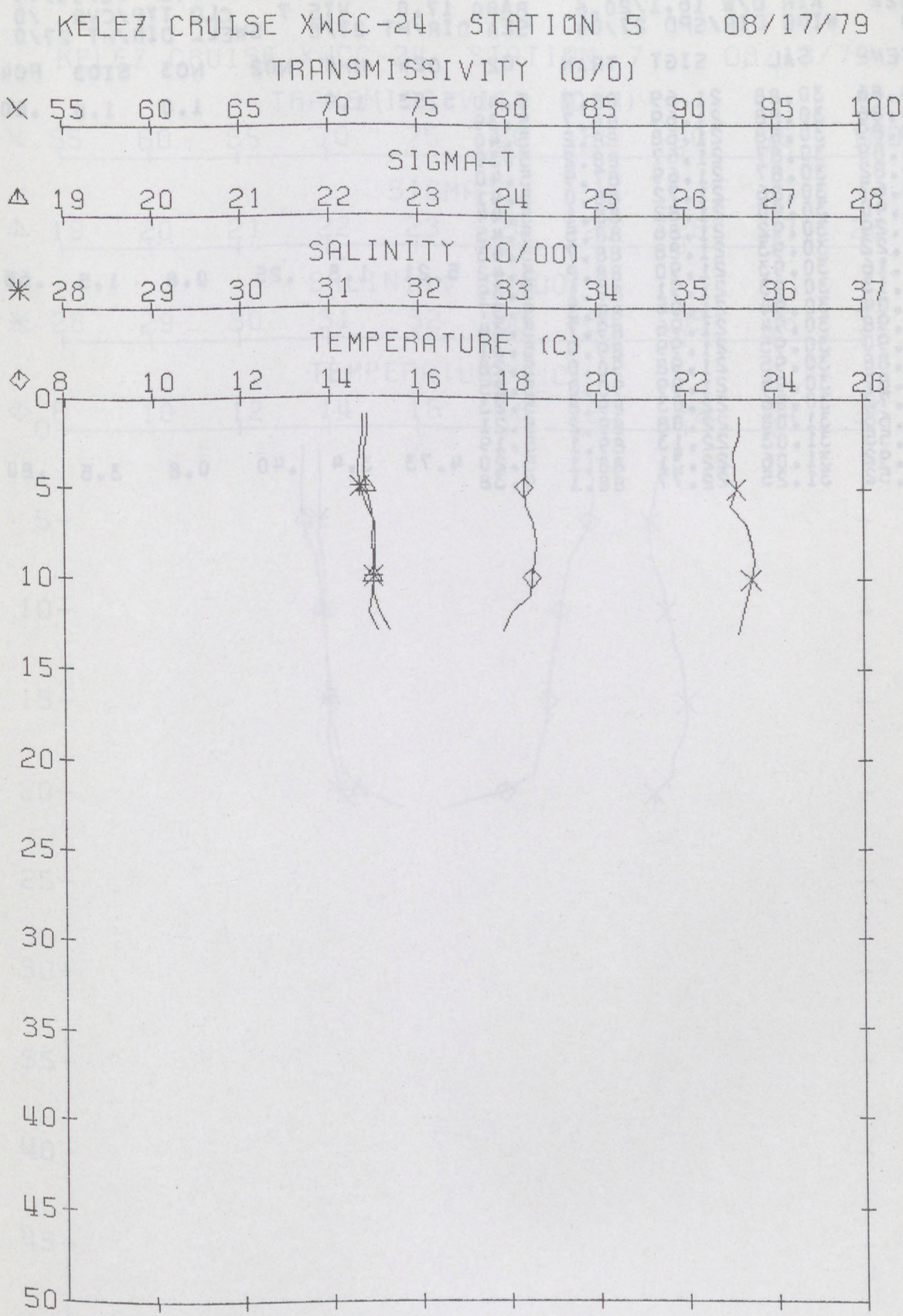
DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.39	30.33	21.39	91.1	6.97						
2	19.39	30.33	21.38	91.1	6.96						
3	19.43	30.34	21.38	92.2	6.98						
4	19.42	30.33	21.38	92.5	6.99						
5	19.54	30.40	21.41	92.4	6.98						
6	19.67	30.49	21.44	93.3	6.95						
7	18.86	31.11	22.11	94.1	6.94						
8	18.57	31.44	22.43	94.2	6.76						
9	18.22	31.68	22.70	94.8	6.45						
10	17.53	31.74	22.91	94.2	6.19						
11	16.91	31.85	23.14	92.8	5.96						
12	16.77	31.88	23.20	92.4	5.58						
13	16.73	31.89	23.21	91.4	5.27						
14	16.71	31.89	23.22	89.3	5.03						


KELEZ CRUISE XWCC-24 STATION 4 08/23/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

XWCC-24 STA. 5 LAT 40 33.5N; LONG 73 32.8W GMT 02.8 08/17/79
DEPTH 012 AIR D/W 20.0/17.2 BARO 24.0 VIS 7 CLD TYP/CVR 8/3
WETHR 1 WIND DIR/SPD 24/07 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

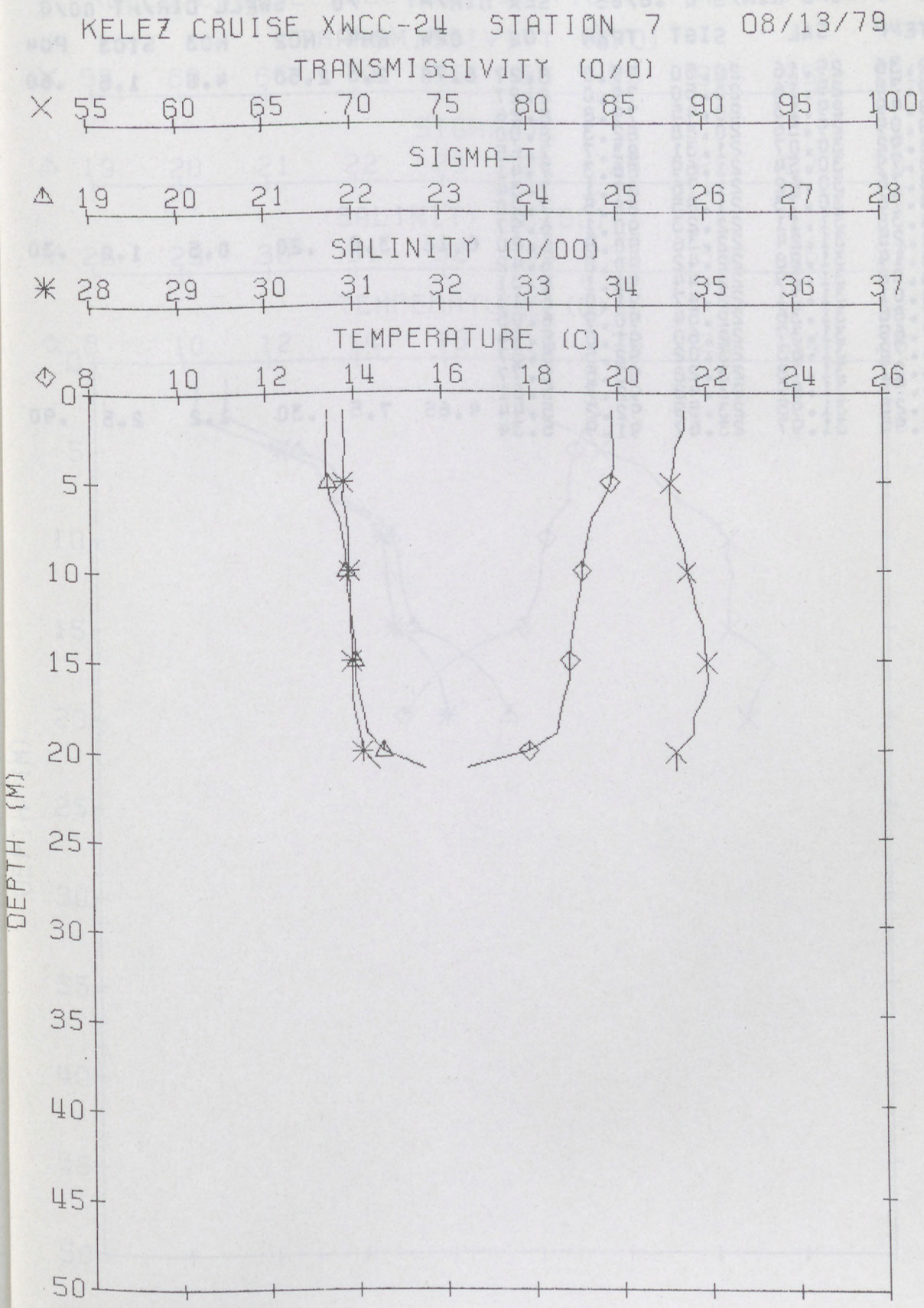
DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.43	31.36	22.41	93.0	5.50	5.59	2.0	.30	0.7	1.5	.70
2	18.43	31.36	22.41	93.0	5.50						
3	18.43	31.32	22.38	92.6	5.51						
4	18.41	31.31	22.38	92.7	5.51						
5	18.36	31.32	22.40	92.9	5.52						
6	18.38	31.39	22.45	92.6	5.51						
7	18.54	31.50	22.48	93.4	5.48						
8	18.61	31.49	22.46	93.7	5.49						
9	18.60	31.49	22.47	93.9	5.50						
10	18.53	31.48	22.47	93.7	5.51						
11	18.48	31.46	22.47	93.5	5.50	5.39	2.4	.25	0.4	2.5	.70
12	18.06	31.42	22.55	93.2	5.51						
13	17.89	31.52	22.66	92.9	5.47						




KELEZ CRUISE XWCC-24 STATION 5 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

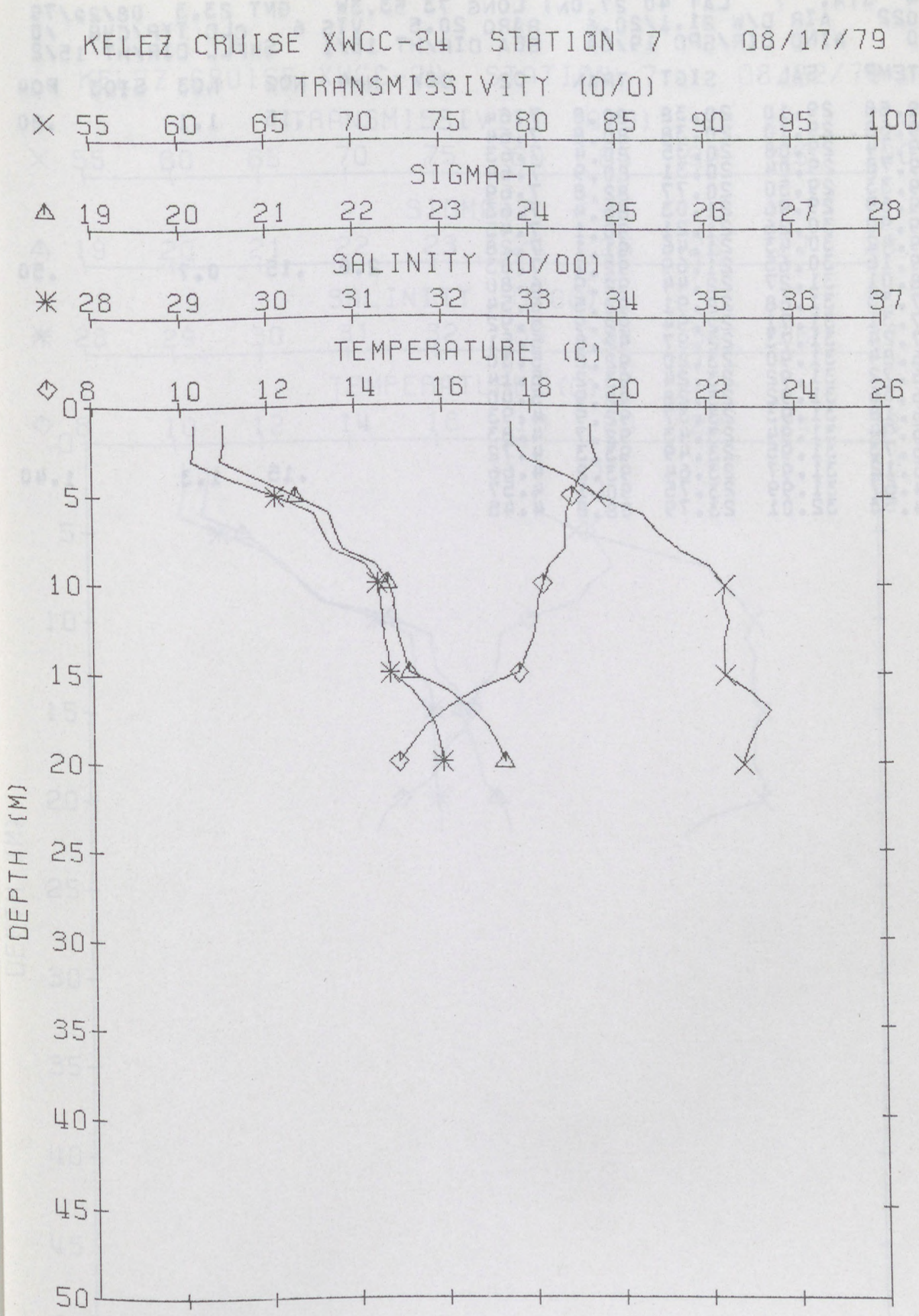
XWCC-24 STA. 7 LAT 40 26.9N; LONG 73 53.0W GMT 18.5 08/13/79
DEPTH 022 AIR D/W 16.1/20.6 BARO 17.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 27/04 SEA DIR/HT 27/0 SWELL DIR/HT 27/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.86	30.88	21.69	88.7	5.40	5.53	1.9		1.0	1.0	.60
2	19.86	30.88	21.69	88.7	5.39						
3	19.89	30.88	21.68	88.2	5.40						
4	19.89	30.87	21.67	88.2	5.39						
5	19.82	30.87	21.69	87.9	5.40						
6	19.67	30.86	21.72	88.0	5.41						
7	19.40	30.90	21.82	88.1	5.44						
8	19.29	30.92	21.86	88.5	5.45						
9	19.22	30.93	21.88	88.7	5.43						
10	19.16	30.93	21.90	88.8	5.42	5.21	1.8	.25	0.8	1.5	.65
11	19.13	30.93	21.91	89.1	5.39						
12	19.04	30.94	21.94	89.3	5.37						
13	18.98	30.94	21.96	89.7	5.34						
14	18.90	30.95	21.99	89.9	5.31						
15	18.88	30.95	21.98	90.0	5.28						
16	18.87	30.95	21.99	90.0	5.25						
17	18.72	30.96	22.03	89.8	5.23						
18	18.63	31.00	22.08	89.2	5.21						
19	18.55	31.03	22.13	89.1	5.19						
20	17.92	31.06	22.31	88.1	5.20	4.73	3.4	.40	0.8	3.5	.80
21	16.52	31.25	22.77	88.1	4.38						


KELEZ CRUISE XWCC-24 STATION 7 08/13/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

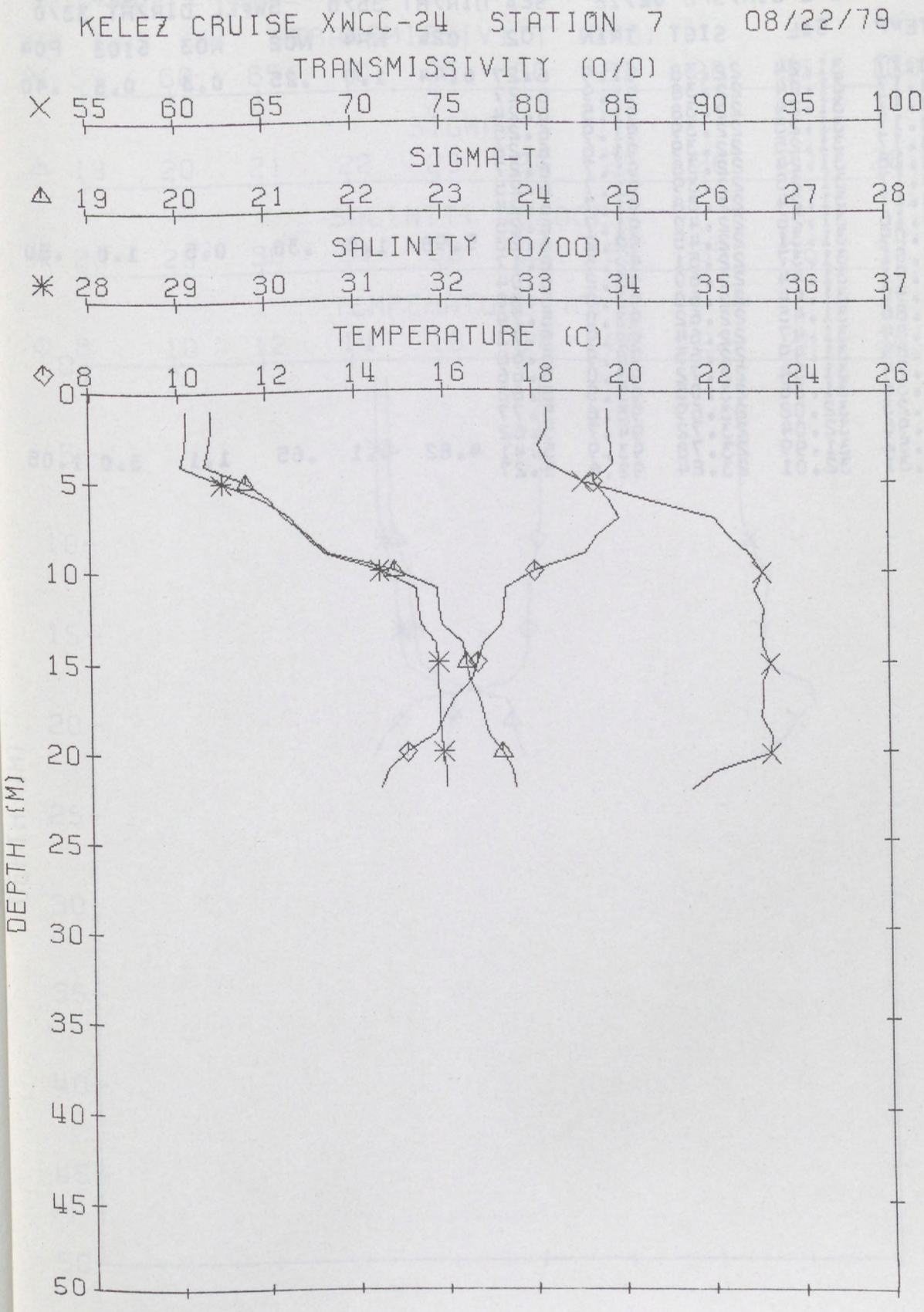
XWCC-24 STA. 7 LAT 40 27.0N; LONG 73 53.0W GMT 17.8 08/17/79
DEPTH 021 AIR D/W 22.2/15.6 BARO 25.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 18/05 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.36	29.16	20.50	79.0	8.27	8.78	2.3	2.50	4.8	1.5	.60
2	19.36	29.16	20.50	79.0	8.27						
3	19.49	29.13	20.45	79.8	8.26						
4	19.09	29.56	20.88	82.3	8.00						
5	18.92	30.07	21.31	83.7	7.65						
6	18.79	30.54	21.69	86.3	7.41						
7	18.76	30.62	21.76	87.1	7.34						
8	18.76	30.73	21.85	88.5	7.20						
9	18.38	31.11	22.23	90.1	6.97						
10	18.25	31.24	22.36	90.9	6.80	6.16	3.0	.20	0.5	1.0	.30
11	18.14	31.28	22.42	90.8	6.42						
12	18.08	31.29	22.44	91.1	6.31						
13	18.01	31.31	22.47	91.0	6.13						
14	17.86	31.36	22.54	90.9	6.05						
15	17.69	31.37	22.60	91.0	5.94						
16	16.72	31.63	23.02	92.5	5.87						
17	16.07	31.78	23.28	93.5	5.77						
18	15.55	31.89	23.48	92.7	5.61						
19	15.25	31.95	23.59	92.2	5.44	4.65	7.5	.30	1.2	2.5	.90
20	14.95	31.97	23.67	91.9	5.34						


KELEZ CRUISE XWCC-24 STATION 7 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

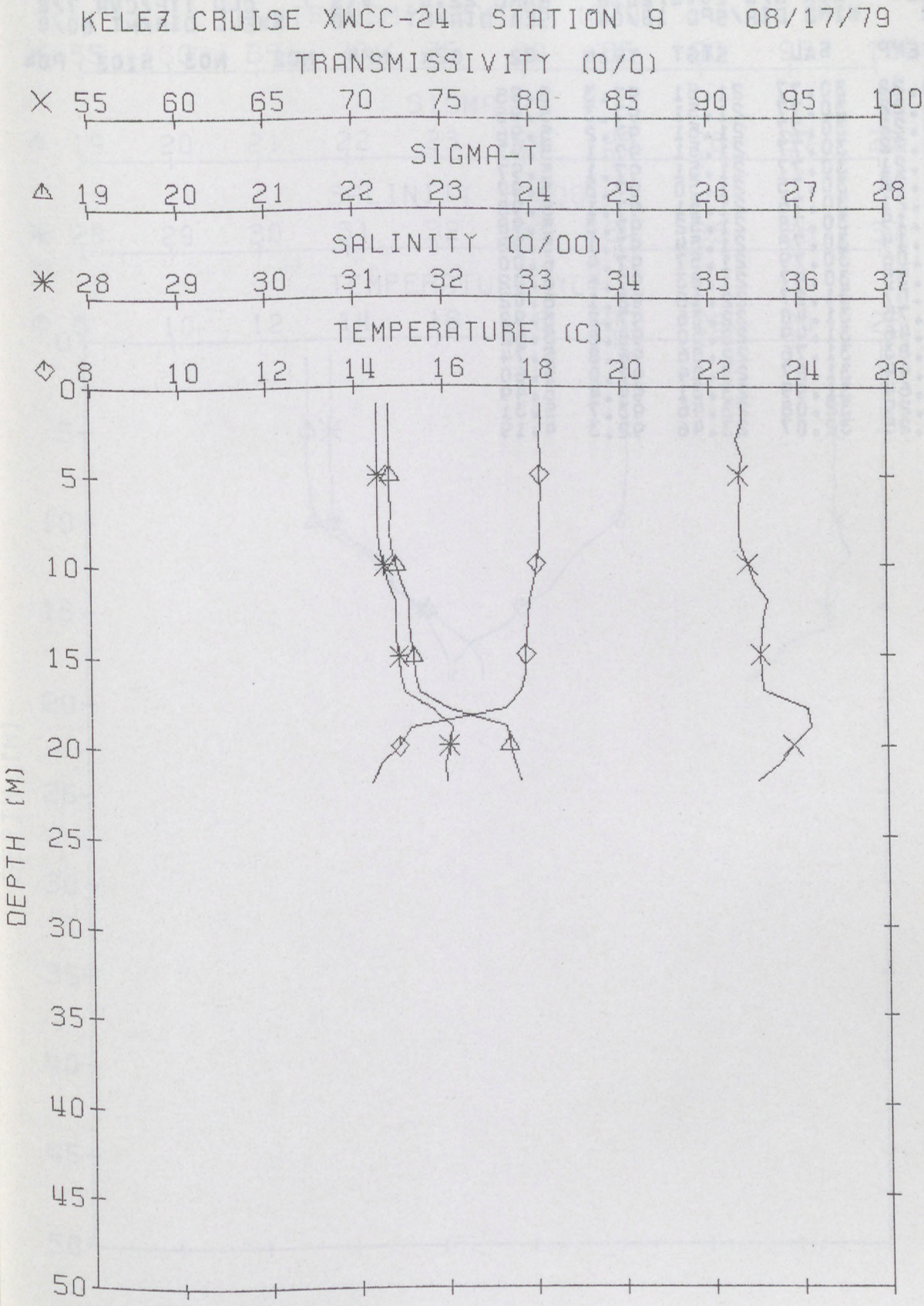
XWCC-24 STA. 7 LAT 40 27.0N; LONG 73 53.3W GMT 23.3 08/22/79
DEPTH 022 AIR D/W 21.1/20.6 BARO 20.5 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 19/08 SEA DIR/HT 15/1 SWELL DIR/HT 15/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.68	29.10	20.38	80.8	7.64			.15	1.1		.80
2	19.68	29.10	20.38	80.8	7.64						
3	19.74	29.08	20.35	80.4	7.63						
4	19.78	29.04	20.31	80.9	7.64						
5	19.33	29.50	20.77	82.8	7.69						
6	19.69	29.96	21.03	86.4	7.63						
7	19.90	30.26	21.21	90.1	7.45						
8	19.42	30.43	21.46	91.1	7.28						
9	19.16	30.65	21.69	92.1	7.03		2.6	.15	0.7		.50
10	18.01	31.27	22.44	92.9	6.80						
11	17.35	31.68	22.91	92.5	6.54						
12	17.31	31.71	22.94	92.9	5.92						
13	17.24	31.73	22.97	92.8	5.51						
14	16.84	31.90	23.20	92.8	5.30						
15	16.72	31.92	23.24	93.2	5.14						
16	16.56	31.92	23.28	92.9	5.00						
17	16.18	31.93	23.37	92.9	4.93						
18	15.94	31.94	23.43	92.7	4.83						
19	15.73	31.95	23.49	93.3	4.72						
20	15.12	31.97	23.64	93.2	4.66			.15	1.3		1.40
21	14.67	31.99	23.75	90.1	4.57						
22	14.53	32.01	23.79	88.8	4.45						


KELEZ CRUISE XWCC-24 STATION 7 08/22/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

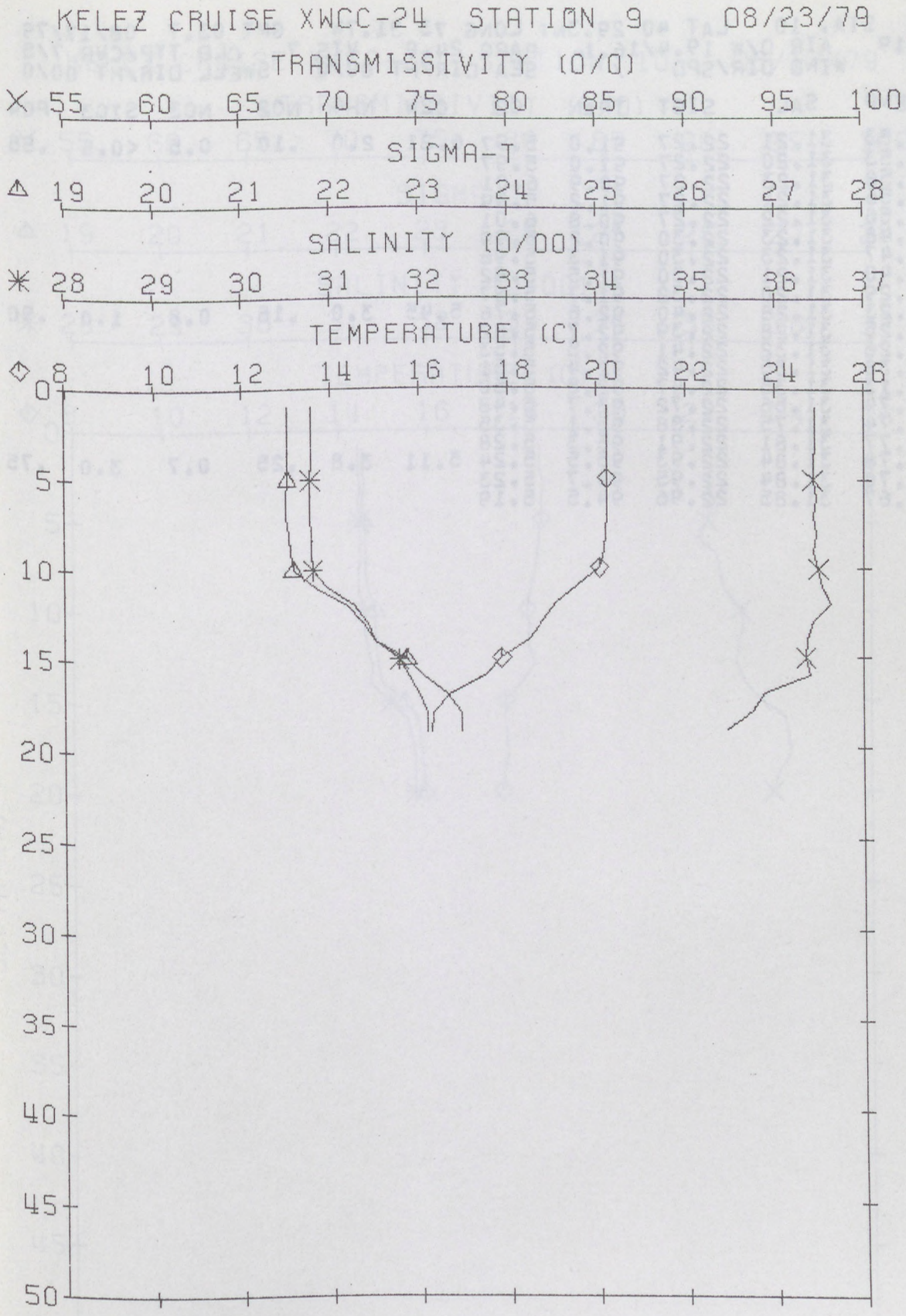
XWCC-24 STA. 9 LAT 40 28.5N; LONG 73 39.3W GMT 10.6 08/17/79
DEPTH 022 AIR D/W 17.2/13.3 BARO 25.1 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 02/16 SEA DIR/HT 35/0 SWELL DIR/HT 33/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.17	31.24	22.38	91.9	6.27	6.44	1.0	.25	0.3	0.5	.40
2	18.17	31.24	22.38	91.9	6.27						
3	18.17	31.24	22.38	91.5	6.24						
4	18.17	31.25	22.39	91.9	6.25						
5	18.17	31.25	22.39	91.6	6.26						
6	18.18	31.24	22.38	91.7	6.27						
7	18.17	31.25	22.39	91.7	6.25						
8	18.17	31.24	22.38	91.7	6.24						
9	18.16	31.26	22.40	91.7	6.25						
10	18.09	31.31	22.45	92.2	6.23	5.98	1.8	.30	0.5	1.0	.50
11	18.01	31.37	22.51	92.5	6.17						
12	17.91	31.44	22.60	93.2	6.04						
13	17.90	31.44	22.60	93.0	5.90						
14	17.86	31.45	22.62	93.0	5.79						
15	17.84	31.47	22.64	92.9	5.73						
16	17.84	31.49	22.65	92.9	5.68						
17	17.74	31.54	22.72	93.0	5.66						
18	17.36	31.86	23.05	95.5	5.63						
19	15.23	32.08	23.69	95.6	5.77						
20	14.96	32.04	23.72	94.7	5.62						
21	14.52	31.99	23.78	93.9	5.41	4.82	4.1	.65	1.1	3.0	1.05
22	14.31	32.01	23.84	92.6	5.27						


KELEZ CRUISE XWCC-24 STATION 9 08/17/79
TRANSMISSIVITY (0/0)
X 55 60 65 70 75 80 85 90 95 100
SIGMA-T
Δ 19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
✳ 28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
◇ 8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

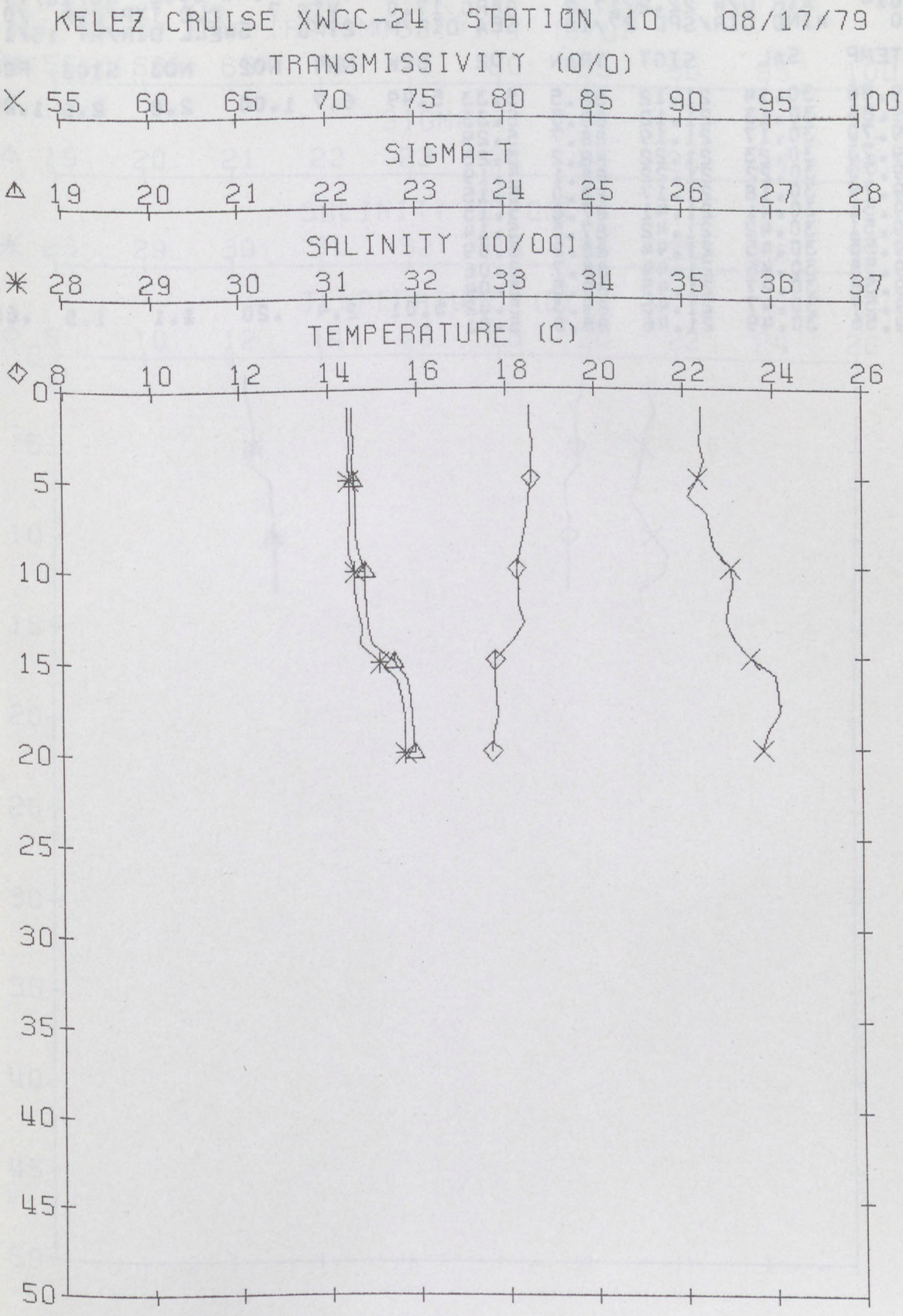
XWCC-24 STA. 9 LAT 40 28.2N LONG 73 39.9W GMT 07.0 08/23/79
DEPTH 020 AIR D/W 20.6/20.6 BARO 22.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 18/04 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.22	30.77	21.51	97.3	5.95						
2	20.22	30.77	21.51	97.3	5.95						
3	20.22	30.77	21.51	97.2	5.96						
4	20.22	30.77	21.51	97.1	5.97						
5	20.21	30.77	21.51	97.1	5.97						
6	20.22	30.75	21.50	97.3	5.97						
7	20.21	30.76	21.51	97.1	5.98						
8	20.19	30.78	21.52	97.3	5.98						
9	20.14	30.78	21.54	97.1	5.98						
10	20.06	30.79	21.57	97.4	6.00						
11	19.55	30.97	21.83	97.6	6.02						
12	19.07	31.27	22.18	98.1	6.02						
13	18.75	31.40	22.36	97.2	5.92						
14	18.46	31.49	22.50	96.8	5.82						
15	17.83	31.76	22.86	96.8	5.74						
16	17.44	31.87	23.04	97.0	5.60						
17	16.64	31.99	23.31	94.4	5.49						
18	16.29	32.08	23.46	93.7	5.31						
19	16.25	32.07	23.46	92.3	4.19						


KELEZ CRUISE XWCC-24 STATION 9 08/23/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

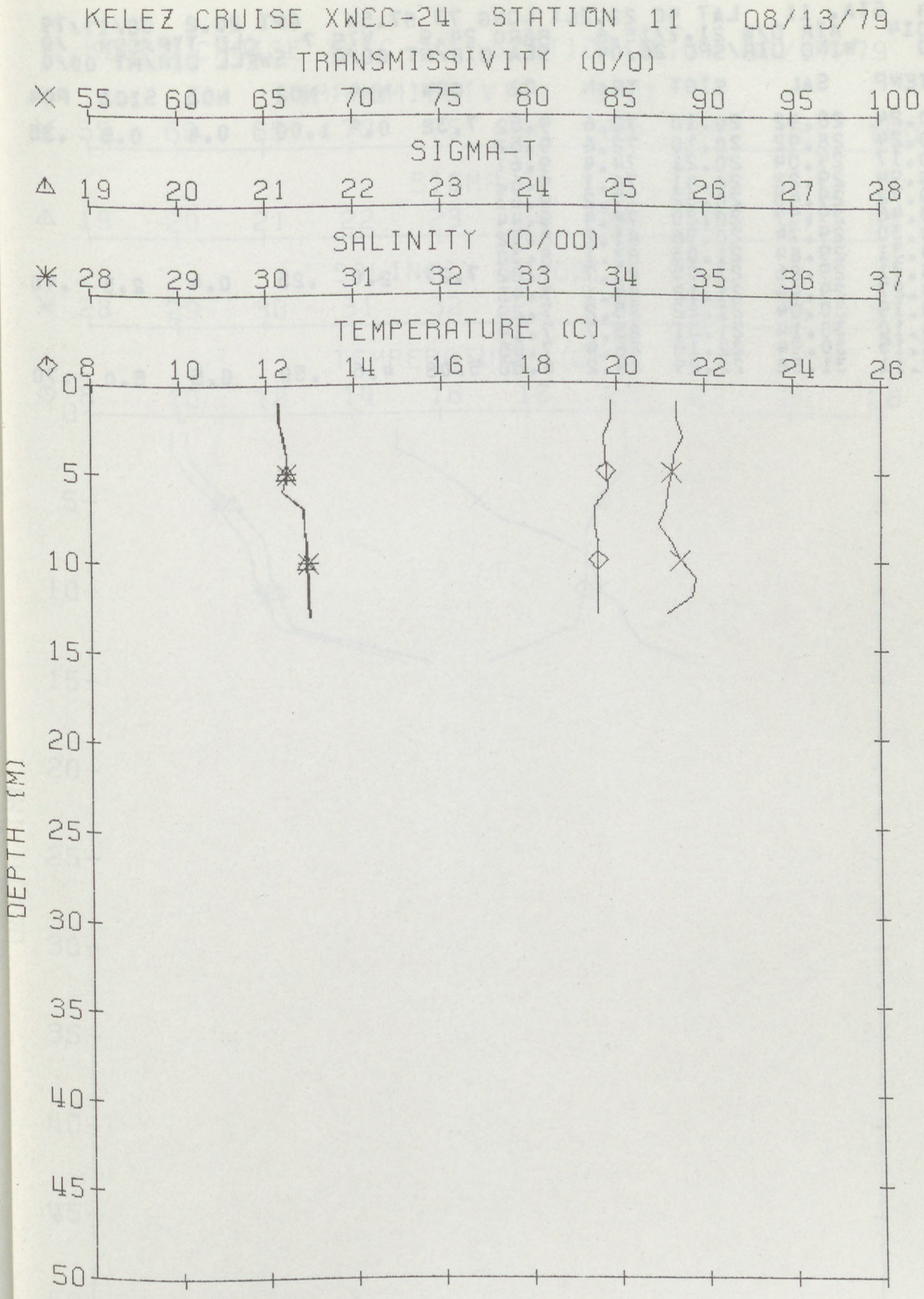
XWCC-24 STA. 10 LAT 40 29.3N; LONG 73 31.7W GMT 03.7 08/17/79
DEPTH 019 AIR D/W 19.4/16.1 BARO 24.0 VIS 7 CLD TYP/CVR 7/5
WETHR 1 WIND DIR/SPD / SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.53	31.21	22.27	91.0	5.97	6.21	2.0	.10	0.5	<0.5	.55
2	18.53	31.20	22.27	91.0	5.97						
3	18.58	31.23	22.27	90.9	6.01						
4	18.56	31.21	22.27	91.2	5.99						
5	18.56	31.22	22.27	90.8	6.01						
6	18.48	31.23	22.30	90.2	5.99						
7	18.47	31.23	22.30	91.3	5.96						
8	18.40	31.21	22.30	91.5	5.92						
9	18.29	31.20	22.32	91.7	5.87						
10	18.23	31.28	22.40	92.6	5.76	5.45	3.0	.15	0.8	1.0	.90
11	18.25	31.28	22.39	92.7	5.62						
12	18.26	31.32	22.41	92.5	5.53						
13	18.38	31.35	22.42	92.4	5.51						
14	18.13	31.35	22.47	92.8	5.50						
15	17.74	31.56	22.72	93.7	5.48						
16	17.74	31.75	22.88	95.1	5.35						
17	17.77	31.81	22.91	95.3	5.28						
18	17.78	31.84	22.93	95.5	5.24	5.11	3.8	.25	0.7	3.0	.75
19	17.70	31.84	22.95	94.7	5.23						
20	17.67	31.85	22.96	94.5	5.19						


KELEZ CRUISE XWCC-24 STATION 10 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

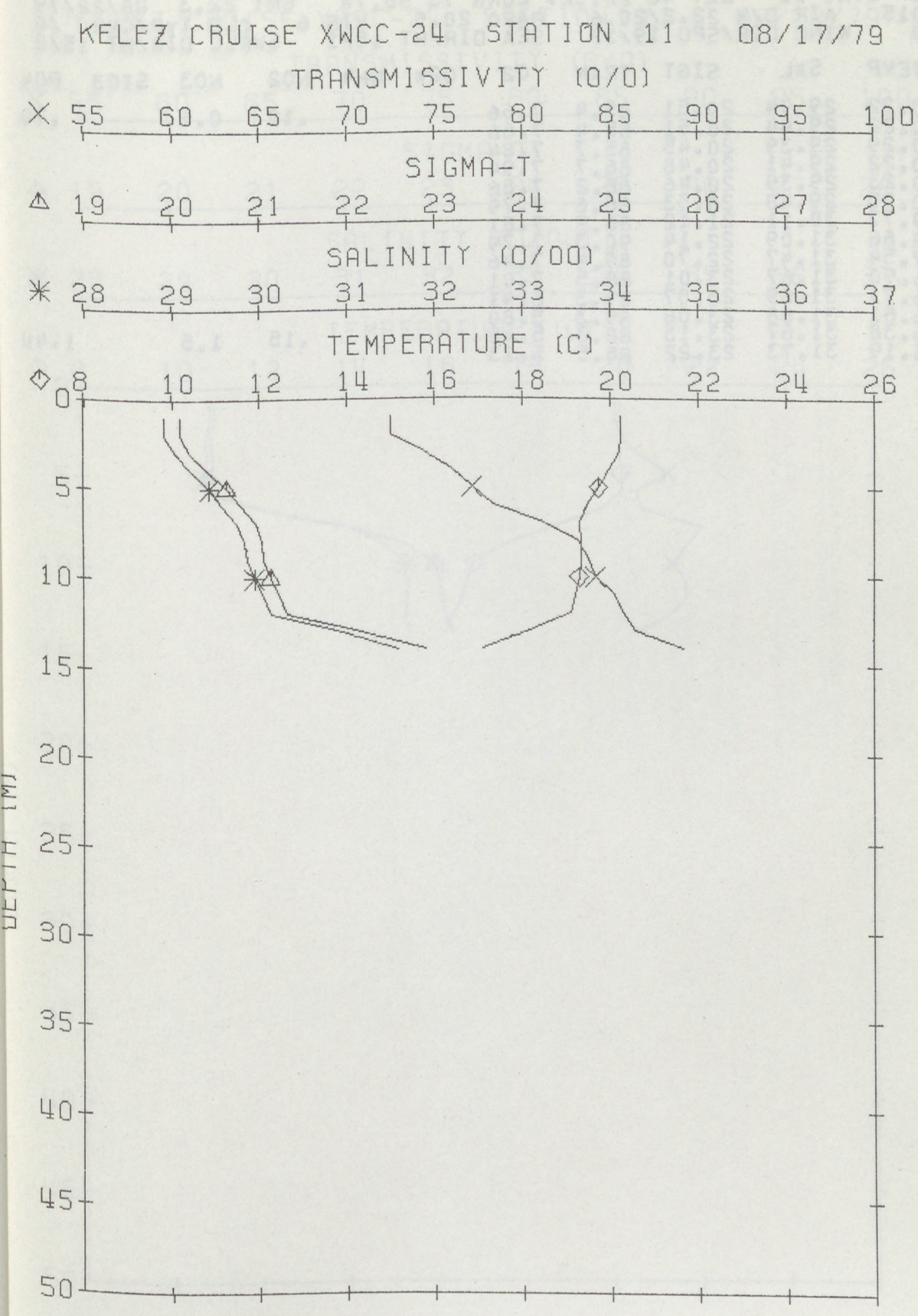
XWCC-24 STA. 11 LAT 40 22.5N; LONG 73 56.5W GMT 19.8 08/13/79
DEPTH 014 AIR D/W 22.2/17.2 BARO 17.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 27/10 SEA DIR/HT 27/0 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.86	30.14	21.12	88.5	5.33	5.49	6.7	1.00	2.8	2.0	1.20
2	19.86	30.13	21.12	88.5	5.33						
3	19.70	30.17	21.19	88.7	5.29						
4	19.73	30.23	21.22	88.2	5.25						
5	19.75	30.22	21.22	88.1	5.19						
6	19.79	30.18	21.17	88.0	5.15						
7	19.51	30.41	21.41	87.8	5.15						
8	19.51	30.42	21.42	87.5	5.14						
9	19.55	30.45	21.44	88.2	5.09						
10	19.58	30.46	21.44	88.7	5.06						
11	19.58	30.47	21.45	89.5	5.04						
12	19.57	30.47	21.45	89.3	5.02	5.01	2.4	.20	1.1	1.5	.60
13	19.56	30.49	21.46	88.0	5.01						


KELEZ CRUISE XWCC-24 STATION 11 08/13/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

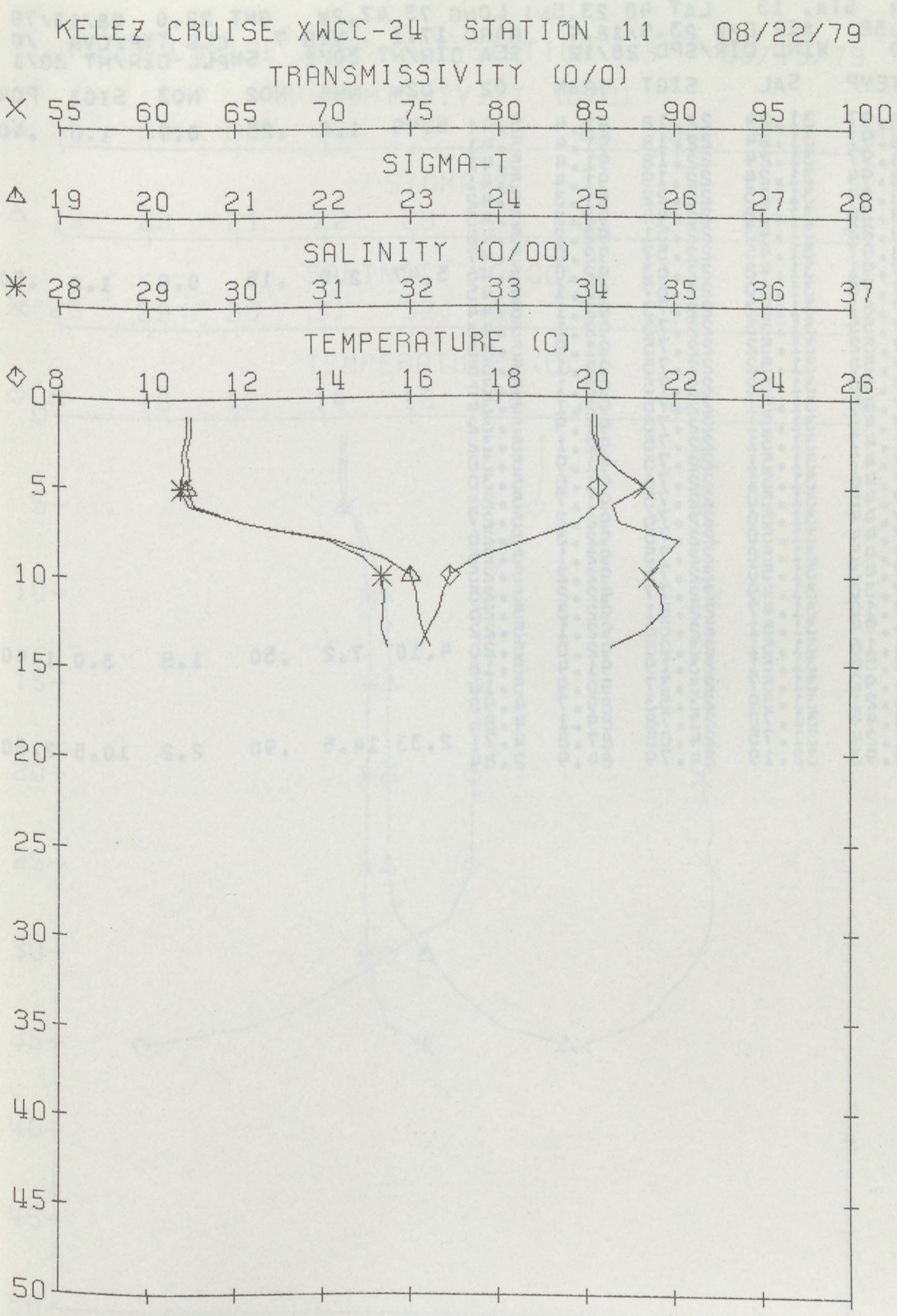
XWCC-24 STA. 11 LAT 40 22.2N; LONG 73 57.5W GMT 20.2 08/17/79
DEPTH 014 AIR D/W 21.7/15.6 BARO 24.9 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 26/04 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.24	28.92	20.10	72.6	9.52	7.38	0.9	1.00	0.4	0.5	.35
2	20.24	28.92	20.10	72.6	9.52						
3	20.17	29.04	20.21	74.4	9.61						
4	19.94	29.22	20.41	76.1	9.62						
5	19.72	29.43	20.62	77.2	9.63						
6	19.46	29.57	20.80	78.4	9.44						
7	19.30	29.74	20.96	81.2	8.92						
8	19.31	29.84	21.03	83.1	8.30						
9	19.31	29.86	21.05	83.7	7.82	7.27	2.0	.25	0.4	2.5	.40
10	19.27	29.94	21.12	84.1	7.45						
11	19.19	30.04	21.22	85.2	7.29						
12	19.10	30.14	21.31	85.7	7.19						
13	18.15	30.94	22.16	86.4	7.05						
14	17.11	31.58	22.89	89.2	6.80	5.08	4.6	.50	0.5	5.0	.70


KELEZ CRUISE XWCC-24 STATION 11 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

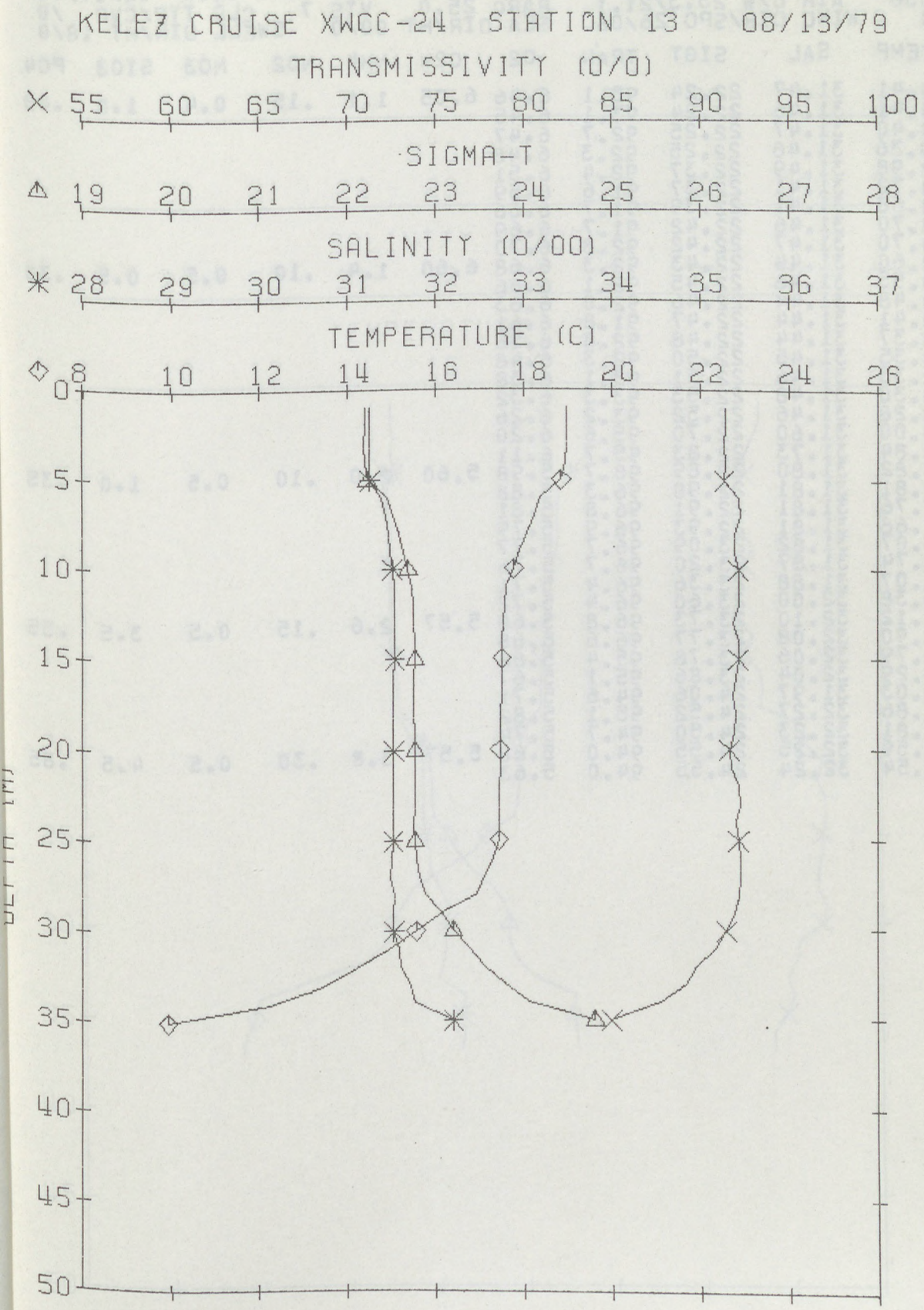
XWCC-24 STA. 11 LAT 40 22.5N; LONG 73 56.7W GMT 22.3 08/22/79
DEPTH 015 AIR D/W 22.2/20.6 BARO 20.5 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 19/12 SEA DIR/HT 15/1 SWELL DIR/HT 15/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.22	29.44	20.51	85.4	7.66			.10	0.6		.70
2	20.22	29.44	20.51	85.4	7.66						
3	20.29	29.39	20.45	85.7	7.84						
4	20.22	29.41	20.48	86.7	7.94						
5	20.23	29.39	20.46	88.2	7.86						
6	20.25	29.48	20.53	86.6	7.79						
7	19.77	30.11	21.12	86.9	7.81						
8	18.66	31.09	22.14	90.3	7.79						
9	17.54	31.47	22.70	89.4	7.46						
10	16.90	31.67	23.01	88.5	7.01						
11	16.71	31.69	23.07	89.3	6.41						
12	16.61	31.68	23.08	89.3	5.80						
13	16.38	31.67	23.13	88.3	5.48			.15	1.5		1.40
14	16.19	31.73	23.22	86.5	5.13						


KELEZ CRUISE XWCC-24 STATION 11 08/22/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0
5
10
15
20
25
30
35
40
45
50

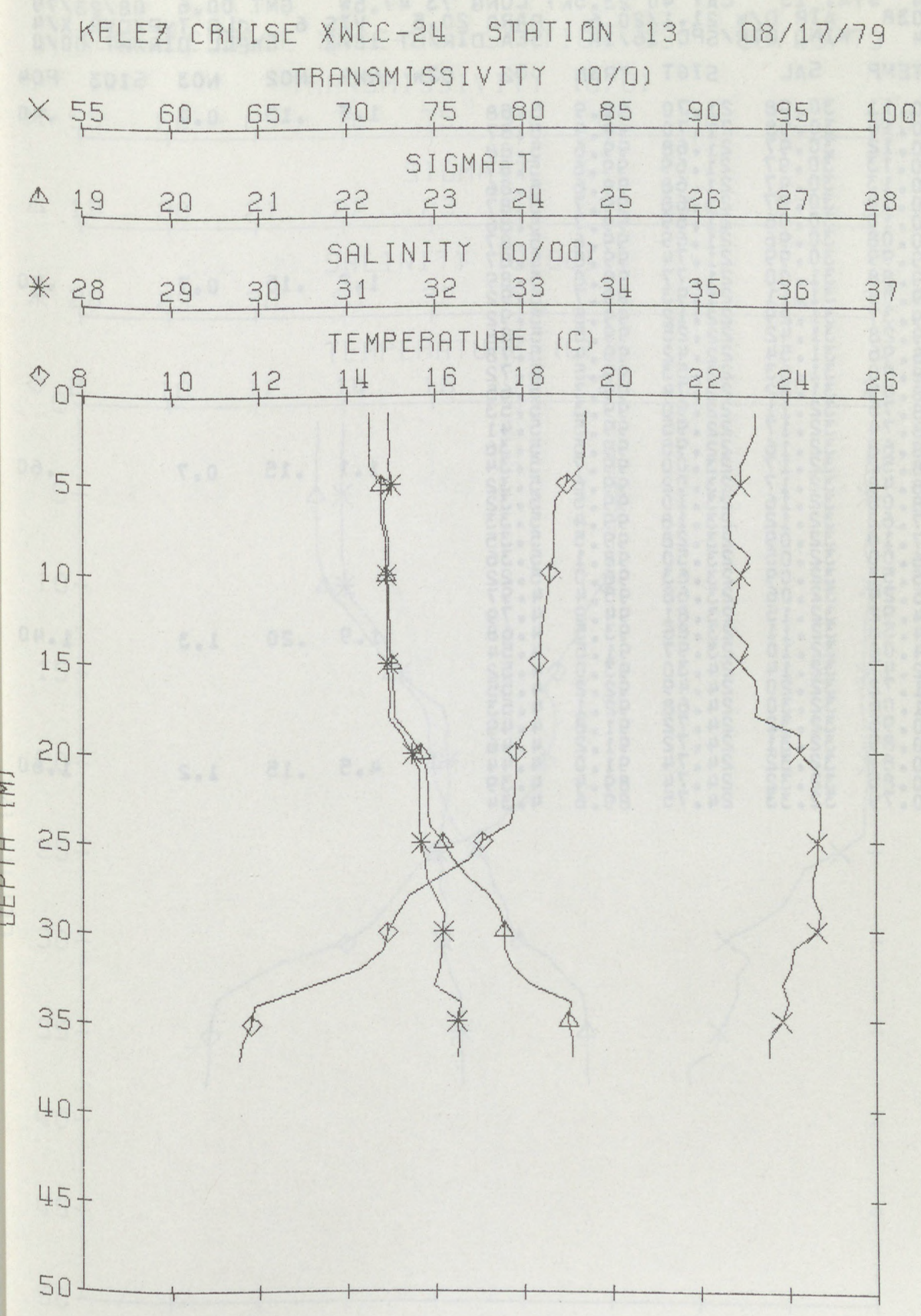
XWCC-24 STA. 13 LAT 40 23.5N; LONG 73 47.2W GMT 22.0 08/13/79
DEPTH 038 AIR D/W 23.9/18.9 BARO 17.1 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 28/12 SEA DIR/HT 30/1 SWELL DIR/HT 30/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.97	31.24	22.18	91.4	5.41	5.49	1.8	.25	0.7	1.0	.40
2	18.97	31.24	22.18	91.4	5.41						
3	18.97	31.24	22.18	91.4	5.41						
4	18.94	31.24	22.19	91.4	5.41						
5	18.84	31.25	22.22	91.3	5.42						
6	18.36	31.38	22.44	92.2	5.45						
7	18.22	31.43	22.51	92.2	5.48						
8	18.07	31.46	22.57	92.0	5.47						
9	17.91	31.48	22.63	92.0	5.46	5.47	2.0	.15	0.9	1.0	.50
10	17.78	31.50	22.67	92.1	5.45						
11	17.61	31.52	22.73	92.1	5.44						
12	17.55	31.53	22.75	92.1	5.43						
13	17.52	31.52	22.75	91.9	5.40						
14	17.50	31.52	22.75	92.1	5.38						
15	17.50	31.52	22.75	92.1	5.36						
16	17.49	31.51	22.75	92.1	5.34						
17	17.49	31.51	22.75	91.9	5.32						
18	17.47	31.51	22.75	92.1	5.32						
19	17.47	31.51	22.75	91.9	5.30						
20	17.46	31.51	22.76	91.6	5.30						
21	17.45	31.50	22.75	91.7	5.28						
22	17.44	31.50	22.76	92.2	5.27						
23	17.44	31.50	22.75	92.3	5.26						
24	17.45	31.50	22.75	92.1	5.25						
25	17.43	31.50	22.76	92.2	5.25						
26	17.30	31.49	22.77	92.2	5.25						
27	17.10	31.47	22.81	92.3	5.25						
28	16.94	31.51	22.88	92.1	5.22						
29	16.16	31.51	23.05	92.0	5.20	4.10	7.2	.50	1.5	3.0	1.40
30	15.56	31.51	23.19	91.4	5.18						
31	14.92	31.57	23.37	90.9	5.10						
32	14.21	31.59	23.53	89.7	4.98						
33	13.44	31.70	23.78	89.1	4.86						
34	12.24	31.75	24.05	87.8	4.71	2.33	14.5	.90	2.2	10.5	2.30
35	9.93	32.19	24.79	84.9	2.84						


KELEZ CRUISE XWCC-24 STATION 13 08/13/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50

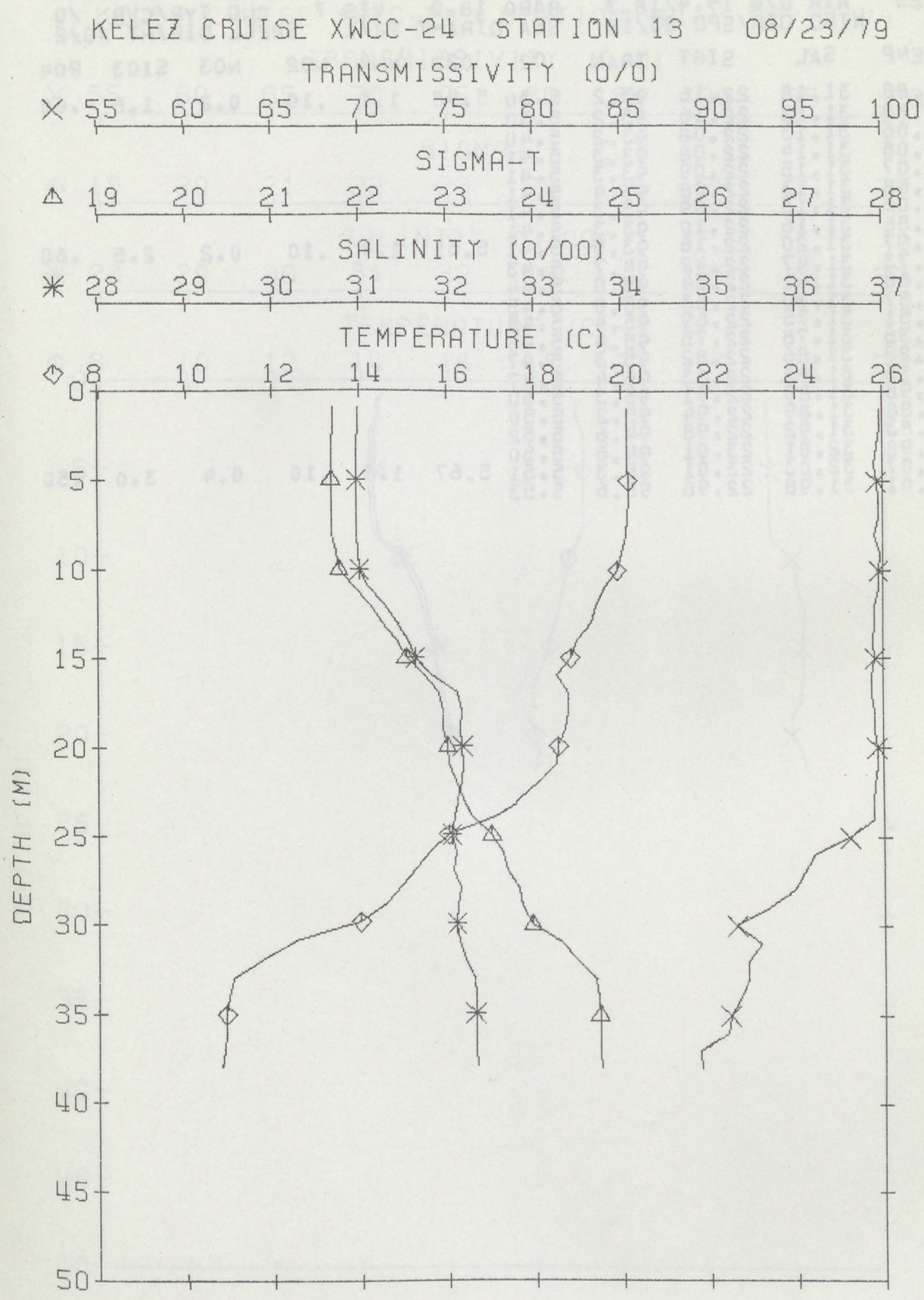
XWCC-24 STA. 13 LAT 40 23.5N; LONG 73 47.2W GMT 18.8 08/17/79
DEPTH 038 AIR D/W 23.3/21.1 BARO 25.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 26/06 SEA DIR/HT 00/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.41	31.47	22.24	93.1	6.46	6.05	1.1	.15	0.4	1.0	.45
2	19.41	31.46	22.24	93.1	6.45						
3	19.40	31.47	22.25	92.7	6.47						
4	19.36	31.46	22.25	92.3	6.48						
5	18.98	31.49	22.37	92.4	6.51						
6	18.72	31.41	22.37	91.6	6.59						
7	18.68	31.41	22.39	91.7	6.66						
8	18.70	31.46	22.42	91.7	6.69						
9	18.70	31.47	22.42	92.8	6.70						
10	18.60	31.44	22.43	92.3	6.68	6.60	1.4	.10	0.5	0.5	.30
11	18.55	31.46	22.45	92.1	6.66						
12	18.48	31.44	22.46	92.0	6.63						
13	18.41	31.44	22.47	91.8	6.61						
14	18.37	31.44	22.48	92.8	6.56						
15	18.35	31.45	22.50	92.3	6.48						
16	18.33	31.46	22.51	93.1	6.38						
17	18.30	31.48	22.53	93.3	6.32						
18	18.28	31.46	22.52	93.2	6.26						
19	18.00	31.60	22.70	95.6	6.20						
20	17.84	31.73	22.83	95.7	6.11						
21	17.82	31.80	22.89	96.7	5.98	5.60	2.0	.10	0.5	1.0	.35
22	17.81	31.81	22.90	96.3	5.88						
23	17.76	31.81	22.91	96.8	5.81						
24	17.68	31.81	22.93	96.9	5.79						
25	17.07	31.82	23.09	96.7	5.77						
26	16.74	31.87	23.20	96.7	5.76						
27	16.07	31.88	23.36	96.4	5.71						
28	15.38	32.00	23.60	96.4	5.72						
29	15.12	32.10	23.73	96.8	5.68	5.57	2.6	.15	0.5	3.5	.55
30	14.90	32.08	23.77	96.6	5.68						
31	14.79	32.06	23.78	95.4	5.68						
32	14.29	32.04	23.86	95.1	5.67						
33	13.03	31.97	24.06	94.6	5.71						
34	11.86	32.27	24.52	95.1	5.82						
35	11.81	32.23	24.50	94.7	5.74						
36	11.59	32.25	24.55	94.0	5.68	5.57	3.8	.30	0.5	4.5	.85
37	11.54	32.24	24.55	94.0	5.63						


KELEZ CRUISE XWCC-24 STATION 13 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

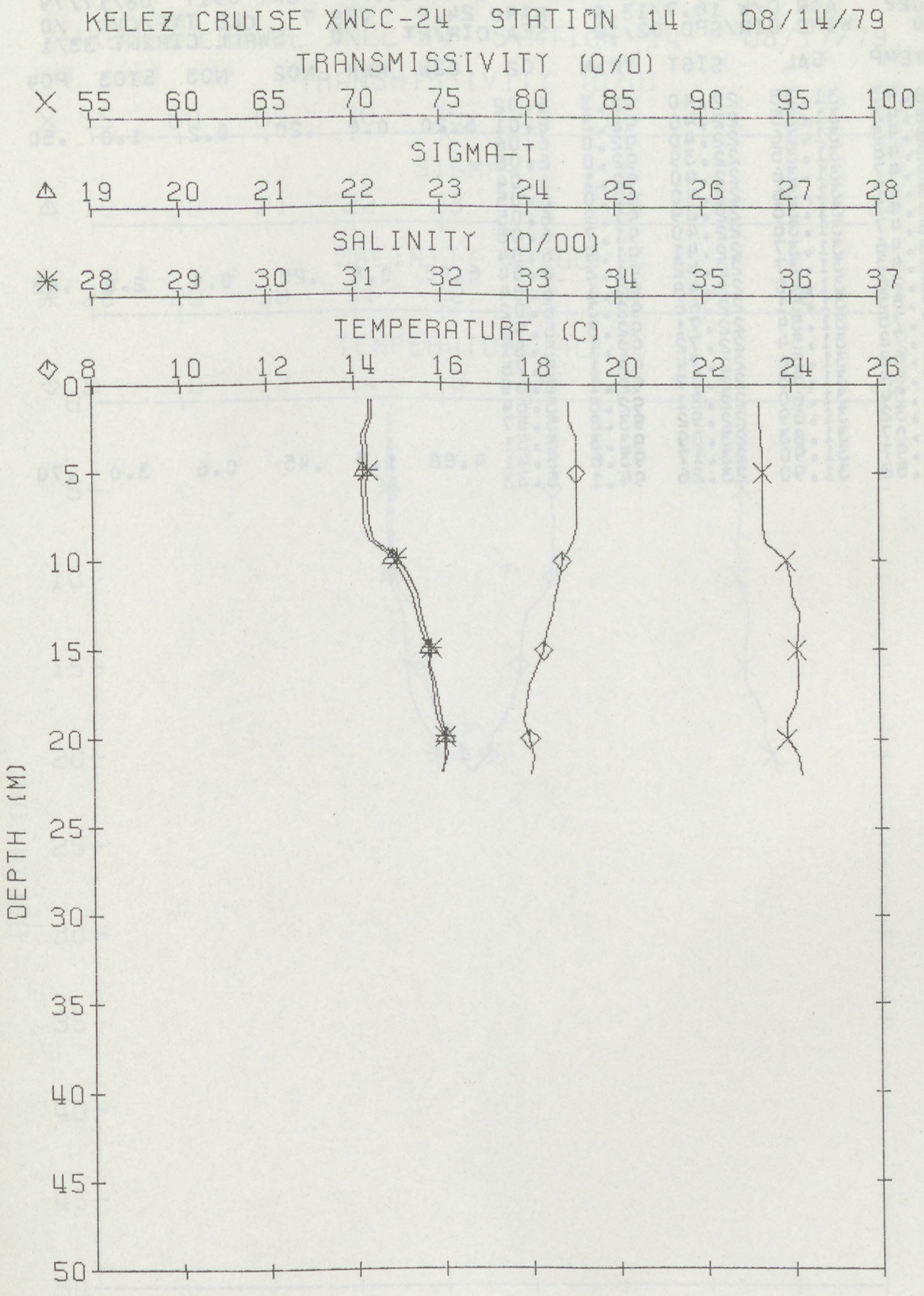
XWCC-24 STA. 13 LAT 40 23.5N; LONG 73 47.5W GMT 00.6 08/23/79
DEPTH 038 AIR D/W 21.1/20.6 BARO 20.5 VIS 6 CLD TYP/CVR X/4
WETHR 4 WIND DIR/SPD 16/18 SEA DIR/HT 18/2 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.11	30.98	21.70	99.9	5.88		1.5	.15	0.7		.40
2	20.10	30.98	21.70	99.9	5.87						
3	20.12	30.97	21.68	99.6	5.88						
4	20.13	30.97	21.69	99.6	5.87						
5	20.13	30.97	21.68	99.6	5.86						
6	20.14	30.97	21.68	99.7	5.87						
7	20.10	30.96	21.69	99.7	5.86						
8	20.08	30.96	21.69	99.6	5.87						
9	19.99	30.99	21.74	99.8	5.87						
10	19.88	31.00	21.77	99.8	5.89		1.2	.15	0.7		.40
11	19.58	31.11	21.93	99.7	5.92						
12	19.37	31.29	22.12	99.5	5.92						
13	19.28	31.42	22.25	99.5	5.88						
14	18.96	31.54	22.42	99.4	5.78						
15	18.80	31.63	22.53	99.5	5.72						
16	18.49	31.82	22.74	99.3	5.65						
17	18.75	32.11	22.90	99.3	5.53						
18	18.74	32.17	22.95	99.5	5.41						
19	18.68	32.16	22.95	99.5	5.36						
20	18.52	32.17	23.00	99.7	5.34		1.1	.15	0.7		.60
21	18.48	32.17	23.02	99.6	5.32						
22	18.08	32.16	23.10	99.5	5.32						
23	17.62	32.12	23.18	99.4	5.33						
24	17.10	32.09	23.28	99.5	5.35						
25	16.00	32.05	23.50	98.1	5.36						
26	15.58	32.09	23.63	96.0	5.22						
27	15.24	32.06	23.68	95.4	4.97						
28	14.92	32.15	23.81	94.9	4.79						
29	14.58	32.11	23.86	93.5	4.68		1.9	.20	1.3		1.40
30	14.00	32.10	23.97	91.5	4.54						
31	12.47	32.14	24.30	93.0	4.52						
32	11.72	32.20	24.49	92.2	4.55						
33	11.06	32.30	24.68	92.1	4.53						
34	10.95	32.32	24.72	91.8	4.49						
35	10.89	32.31	24.72	91.2	4.46						
36	10.87	32.32	24.74	91.0	4.44		4.5	.15	1.2		1.60
37	10.85	32.32	24.74	89.4	4.39						
38	10.79	32.33	24.75	89.6	4.34						


KELEZ CRUISE XWCC-24 STATION 13 08/23/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

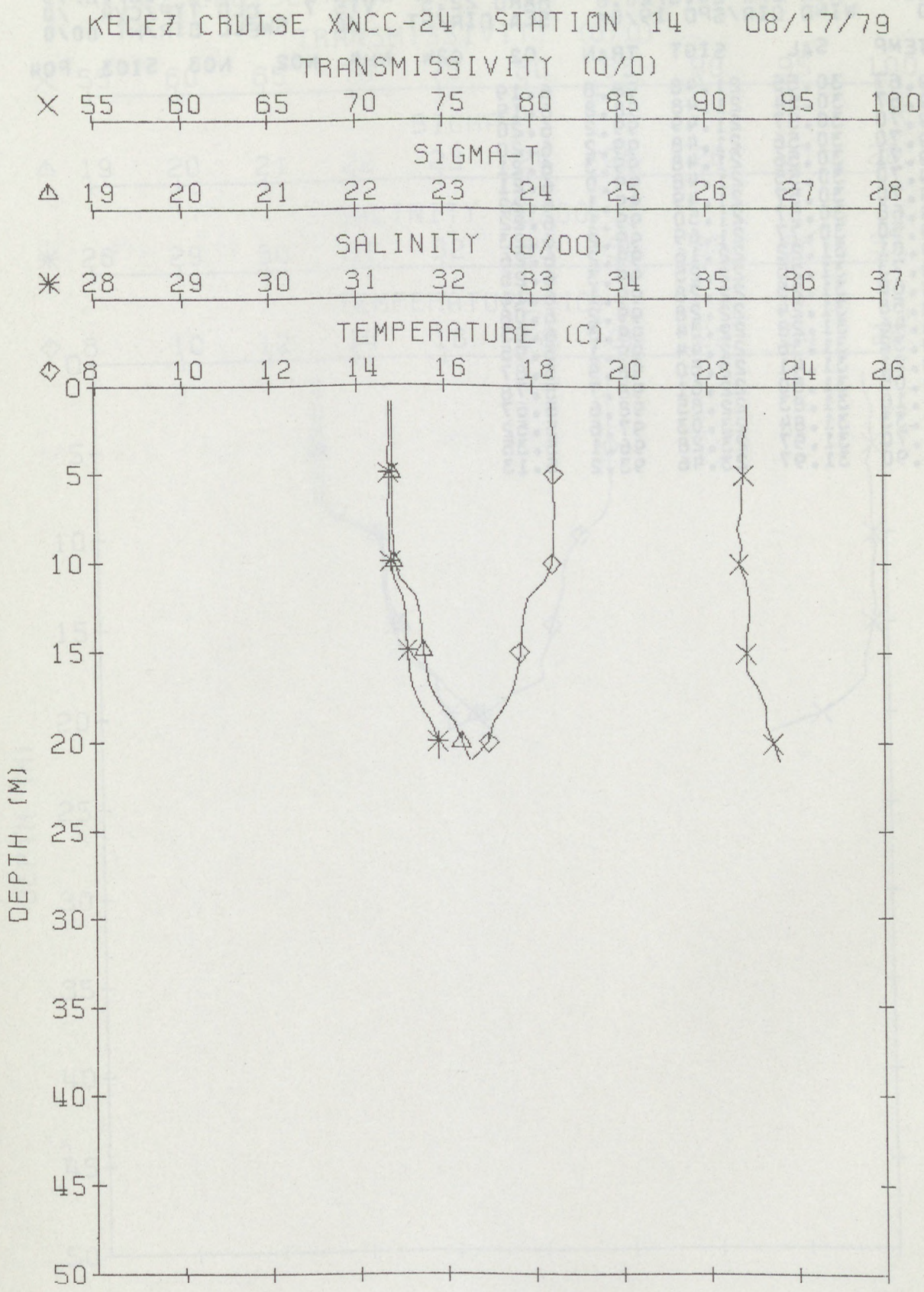
XWCC-24 STA. 14 LAT 40 24.8N; LONG 73 38.8W GMT 10.6 08/14/79
DEPTH 023 AIR D/W 19.4/18.3 BARO 18.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 23/16 SEA DIR/HT 22/1 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.88	31.18	22.16	93.2	5.30	5.48	1.1	.10	0.2	1.5	.60
2	18.88	31.18	22.16	93.2	5.30						
3	19.06	31.13	22.08	93.2	5.40						
4	19.06	31.14	22.08	93.3	5.41						
5	19.07	31.15	22.09	93.3	5.41						
6	19.08	31.13	22.08	93.4	5.41						
7	19.06	31.15	22.09	93.3	5.41						
8	19.06	31.16	22.10	93.3	5.41						
9	18.97	31.20	22.16	93.5	5.41	5.51	1.4	.10	0.2	2.5	.60
10	18.73	31.47	22.42	94.7	5.43						
11	18.68	31.61	22.54	95.0	5.44						
12	18.57	31.70	22.63	95.0	5.45						
13	18.51	31.75	22.69	95.4	5.45						
14	18.36	31.78	22.75	95.4	5.46						
15	18.29	31.86	22.82	95.3	5.47						
16	18.15	31.83	22.83	95.4	5.47						
17	17.98	31.88	22.91	95.3	5.50						
18	17.88	31.89	22.94	95.2	5.50						
19	17.83	31.92	22.98	94.6	5.52						
20	17.98	32.01	23.01	94.6	5.50						
21	18.07	32.03	23.01	95.3	5.51	5.67	1.1	.10	0.4	3.0	.50
22	18.01	31.98	22.98	95.6	5.53						


KELEZ CRUISE XWCC-24 STATION 14 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

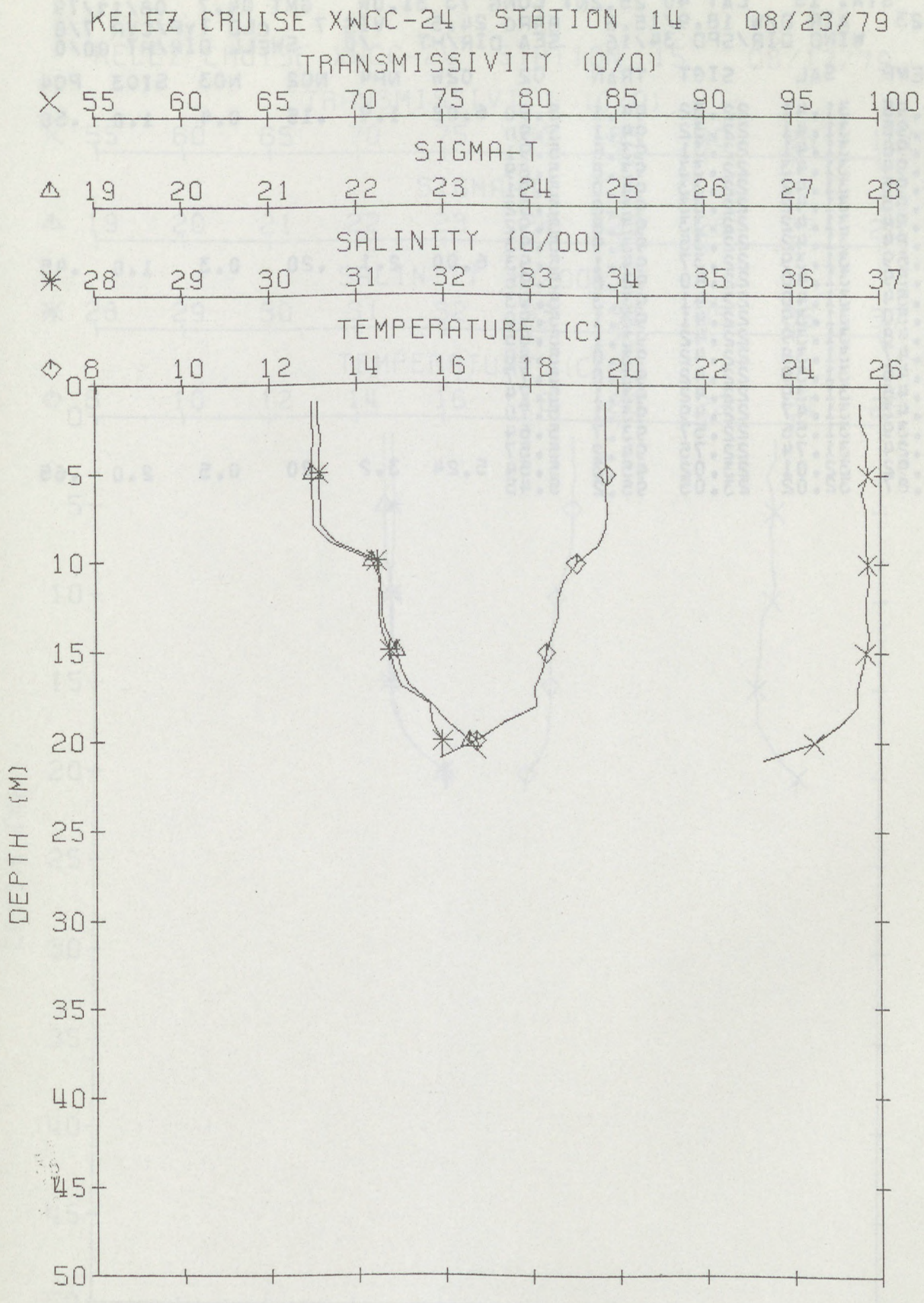
XWCC-24 STA. 14 LAT 40 24.2N; LONG 73 38.7W GMT 09.7 08/17/79
DEPTH 022 AIR D/W 16.7/13.9 BARO 24.9 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 02/12 SEA DIR/HT /0 SWELL DIR/HT 33/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.43	31.35	22.40	92.3	6.02						
2	18.43	31.35	22.40	92.3	6.01	6.20	0.6	.20	0.2	1.0	.50
3	18.48	31.36	22.40	92.0	6.06						
4	18.48	31.35	22.39	92.0	6.06						
5	18.47	31.36	22.40	92.1	6.04						
6	18.47	31.36	22.40	92.0	6.05						
7	18.47	31.35	22.39	91.9	6.05						
8	18.47	31.36	22.40	91.7	6.05						
9	18.46	31.37	22.41	91.9	6.04						
10	18.43	31.37	22.42	91.8	6.04	6.05	0.8	.25	0.4	2.0	.45
11	18.26	31.40	22.48	92.1	6.04						
12	17.85	31.51	22.66	92.3	6.02						
13	17.75	31.54	22.71	92.3	5.91						
14	17.72	31.54	22.72	92.1	5.81						
15	17.68	31.56	22.74	92.1	5.75						
16	17.64	31.58	22.77	92.1	5.69						
17	17.54	31.60	22.81	92.8	5.64						
18	17.32	31.69	22.92	93.2	5.57						
19	17.07	31.83	23.09	93.3	5.51						
20	16.97	31.90	23.17	93.6	5.41	4.88	1.5	.45	0.6	3.0	.70
21	16.58	31.90	23.26	94.1	5.33						


KELEZ CRUISE XWCC-24 STATION 14 08/17/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

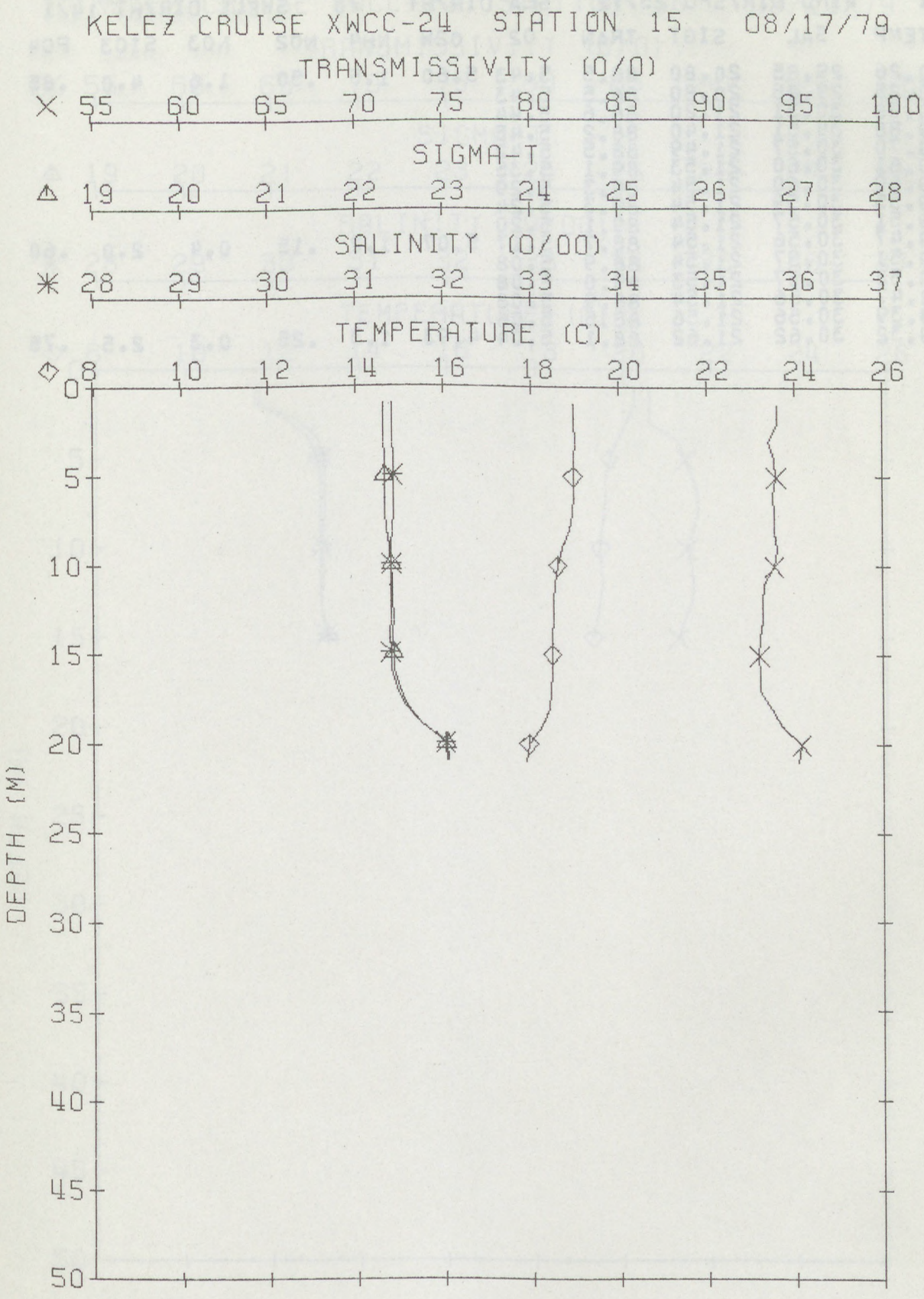
XWCC-24 STA. 14 LAT 40 24.5N; LONG 73 38.6W GMT 05.9 08/23/79
DEPTH 022 AIR D/W 20.6/20.6 BARO 22.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 19/06 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.67	30.55	21.48	98.8	6.19						
2	19.67	30.54	21.48	98.8	6.19						
3	19.70	30.57	21.49	99.2	6.20						
4	19.70	30.56	21.48	99.2	6.20						
5	19.71	30.56	21.48	99.3	6.21						
6	19.70	30.55	21.48	99.0	6.21						
7	19.70	30.57	21.49	99.1	6.22						
8	19.68	30.57	21.50	99.1	6.22						
9	19.50	30.77	21.69	99.2	6.23						
10	19.01	31.22	22.16	99.2	6.26						
11	18.73	31.25	22.25	99.3	6.25						
12	18.60	31.25	22.28	99.1	6.16						
13	18.58	31.24	22.28	99.2	6.08						
14	18.46	31.28	22.34	99.3	6.03						
15	18.32	31.36	22.44	99.1	5.95						
16	18.21	31.41	22.50	98.9	5.87						
17	18.05	31.50	22.61	98.7	5.78						
18	18.10	31.83	22.85	98.6	5.67						
19	17.33	31.84	23.03	97.6	5.52						
20	16.70	31.97	23.28	96.1	5.35						
21	15.90	31.97	23.46	93.2	5.13						


KELEZ CRUISE XWCC-24 STATION 14 08/23/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

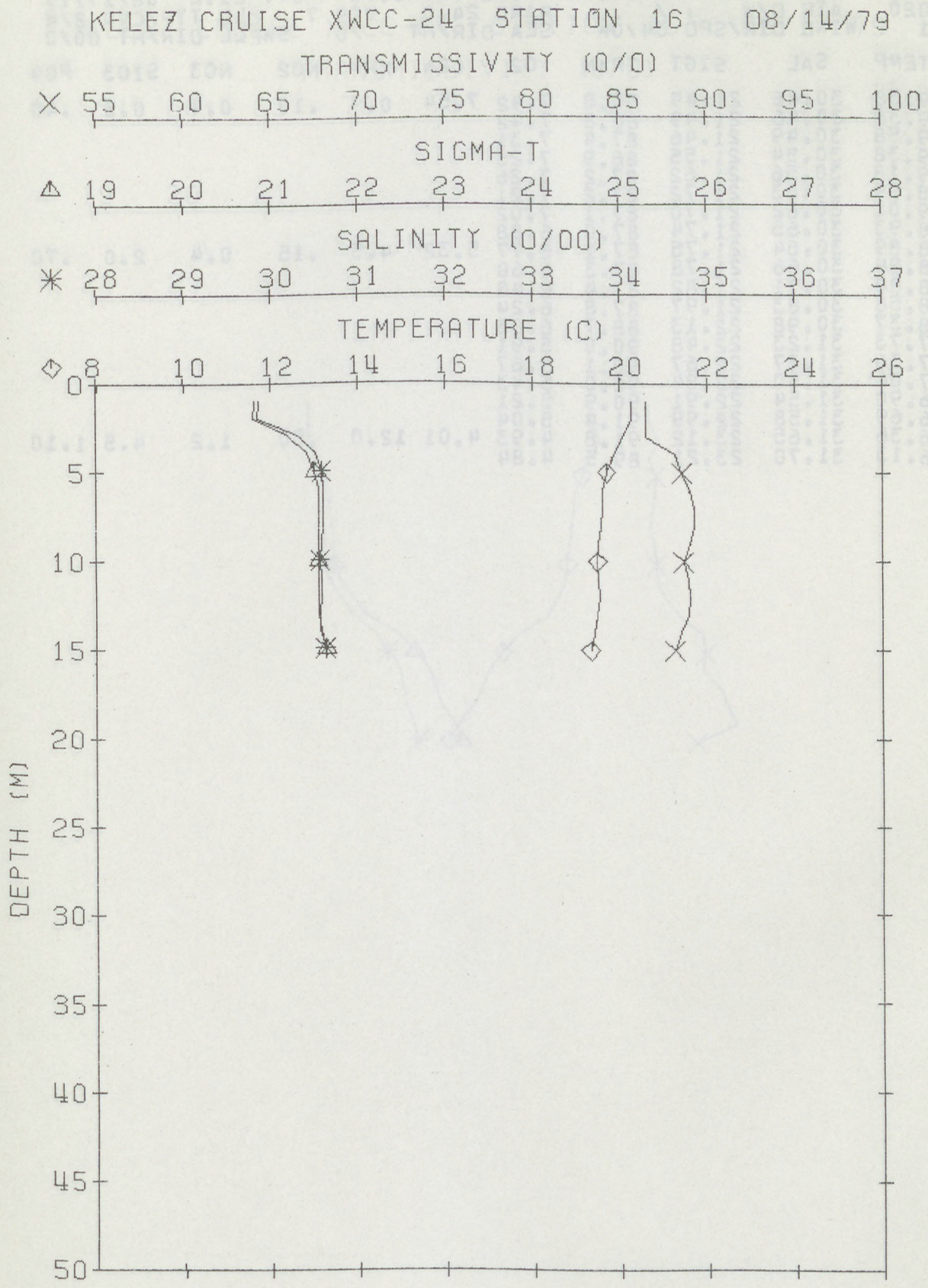
XWCC-24 STA. 15 LAT 40 25.2N; LONG 73 31.0W GMT 04.7 08/17/79
DEPTH 023 AIR D/W 18.9/15.6 BARO 24.5 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 34/16 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.95	31.41	22.32	94.1	5.90	6.08	1.9	.15	0.4	1.0	.50
2	18.95	31.41	22.32	94.1	5.90						
3	18.98	31.41	22.31	93.6	5.91						
4	18.94	31.43	22.33	93.8	5.89						
5	18.95	31.42	22.33	94.0	5.91						
6	18.95	31.42	22.33	93.8	5.92						
7	18.94	31.42	22.33	93.8	5.92						
8	18.84	31.42	22.35	93.9	5.93						
9	18.69	31.39	22.37	94.1	5.93	6.00	2.1	.20	0.3	1.0	.45
10	18.59	31.40	22.40	93.8	5.95						
11	18.54	31.40	22.41	93.3	5.93						
12	18.50	31.39	22.41	93.1	5.90						
13	18.48	31.39	22.42	93.1	5.85						
14	18.47	31.38	22.42	93.0	5.80						
15	18.46	31.39	22.42	93.0	5.77						
16	18.46	31.39	22.42	93.1	5.74						
17	18.43	31.47	22.49	93.1	5.70						
18	18.39	31.56	22.57	93.7	5.64						
19	18.24	31.74	22.75	94.2	5.57						
20	17.92	32.01	23.02	95.3	5.54	5.24	3.2	.20	0.5	2.0	.65
21	17.87	32.02	23.05	95.2	5.45						


KELEZ CRUISE XWCC-24 STATION 15 08/17/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

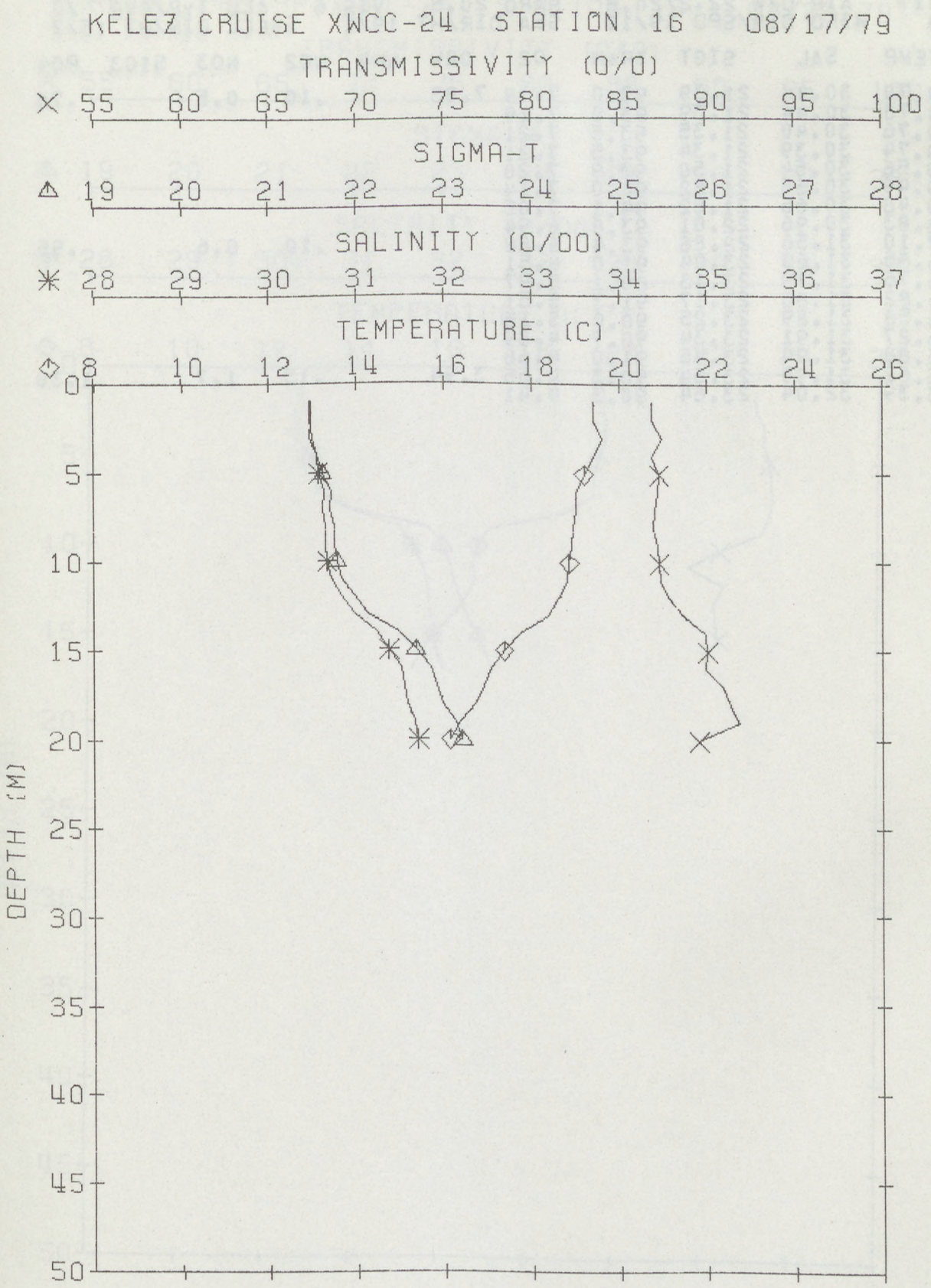
XWCC-24 STA. 16 LAT 40 18.2N; LONG 73 56.7W GMT 01.1 08/14/79
DEPTH 010 AIR D/W 21.1/17.8 BARO 18.0 VIS 7 CLD TYP/CVR 3/8
WETHR 1 WIND DIR/SPD 25/12 SEA DIR/HT /0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.26	29.85	20.80	86.5	5.43	5.60	1.5	.50	1.6	4.0	.85
2	20.25	29.85	20.80	86.5	5.43						
3	20.08	30.31	21.20	86.6	5.44						
4	19.88	30.51	21.40	88.2	5.45						
5	19.70	30.57	21.49	88.5	5.42						
6	19.61	30.60	21.53	89.1	5.35						
7	19.60	30.60	21.54	89.3	5.29						
8	19.55	30.59	21.54	89.3	5.24						
9	19.51	30.57	21.54	89.1	5.20						
10	19.47	30.56	21.54	88.7	5.17	5.07	1.2	.15	0.4	2.0	.60
11	19.51	30.57	21.54	88.9	5.08						
12	19.53	30.57	21.53	89.0	5.08						
13	19.47	30.56	21.54	88.9	5.08						
14	19.39	30.56	21.56	88.5	5.06						
15	19.32	30.62	21.62	88.1	5.04	4.93	1.3	.25	0.3	2.5	.75


KELEZ CRUISE XWCC-24 STATION 16 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

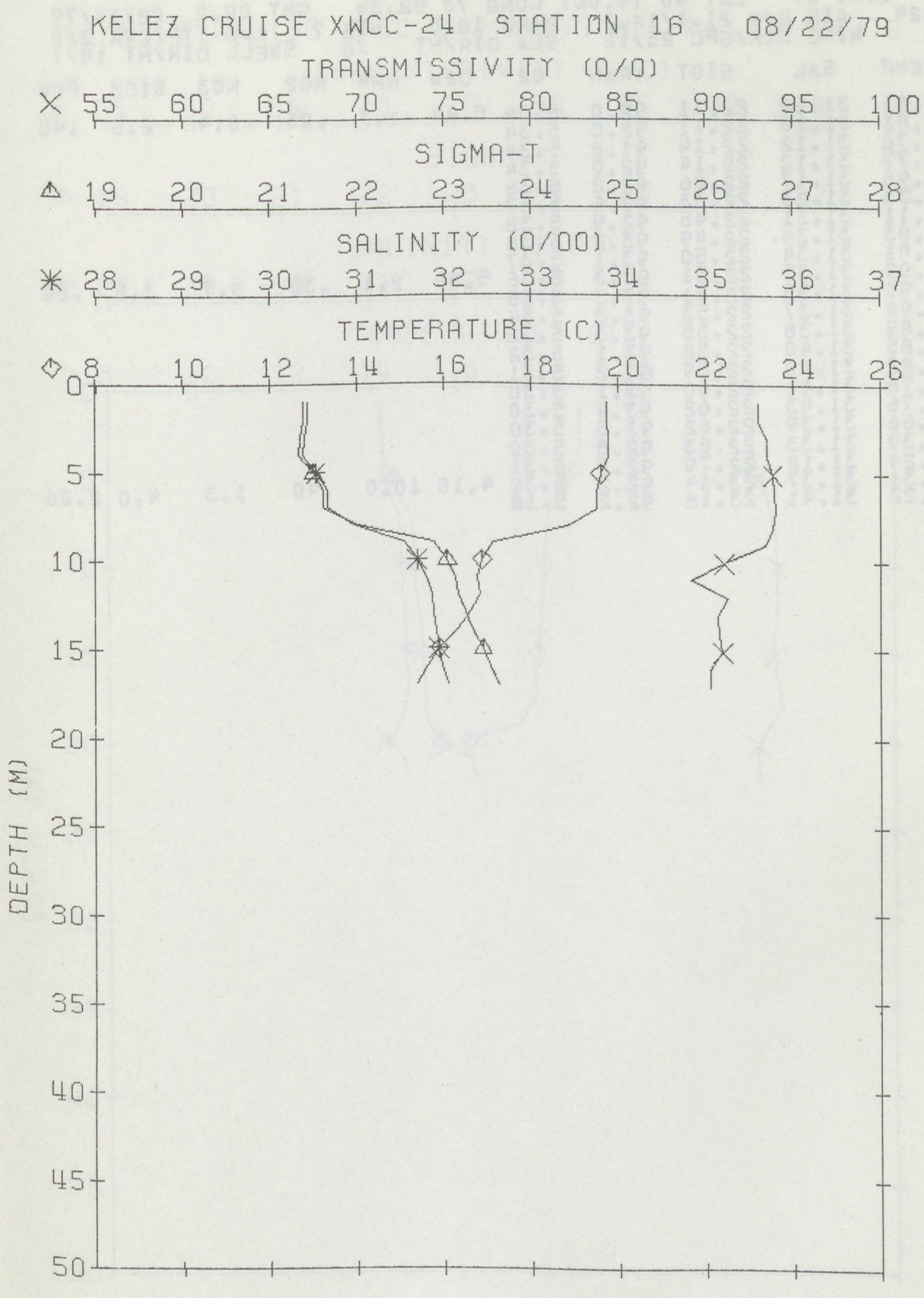
XWCC-24 STA. 16 LAT 40 18.2N; LONG 73 56.7W GMT 21.2 08/17/79
DEPTH 020 AIR D/W . / . BARO 24.0 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 34/06 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.38	30.46	21.49	86.8	7.42	7.54	0.9	.10	0.4	0.5	.40
2	19.38	30.46	21.49	86.8	7.42						
3	19.58	30.49	21.46	87.4	7.31						
4	19.38	30.54	21.55	86.9	7.25						
5	19.18	30.56	21.62	87.2	7.26						
6	18.99	30.63	21.72	87.2	7.21						
7	19.00	30.62	21.70	87.1	7.02						
8	18.93	30.65	21.74	87.0	6.88						
9	18.89	30.64	21.75	87.1	6.77	5.32	4.5	.15	0.4	2.0	.70
10	18.84	30.66	21.78	87.3	6.60						
11	18.80	30.71	21.82	87.4	6.48						
12	18.58	30.83	21.97	87.8	6.24						
13	18.37	30.98	22.13	88.7	6.03						
14	17.73	31.23	22.48	90.0	5.91						
15	17.36	31.37	22.67	90.1	5.67						
16	17.06	31.50	22.84	90.0	5.43						
17	16.90	31.54	22.91	90.9	5.21						
18	16.69	31.58	22.99	91.4	5.04						
19	16.36	31.65	23.12	91.8	4.93	4.01	12.0	.50	1.2	4.5	1.10
20	16.13	31.70	23.21	89.5	4.84						


KELEZ CRUISE XWCC-24 STATION 16 08/17/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

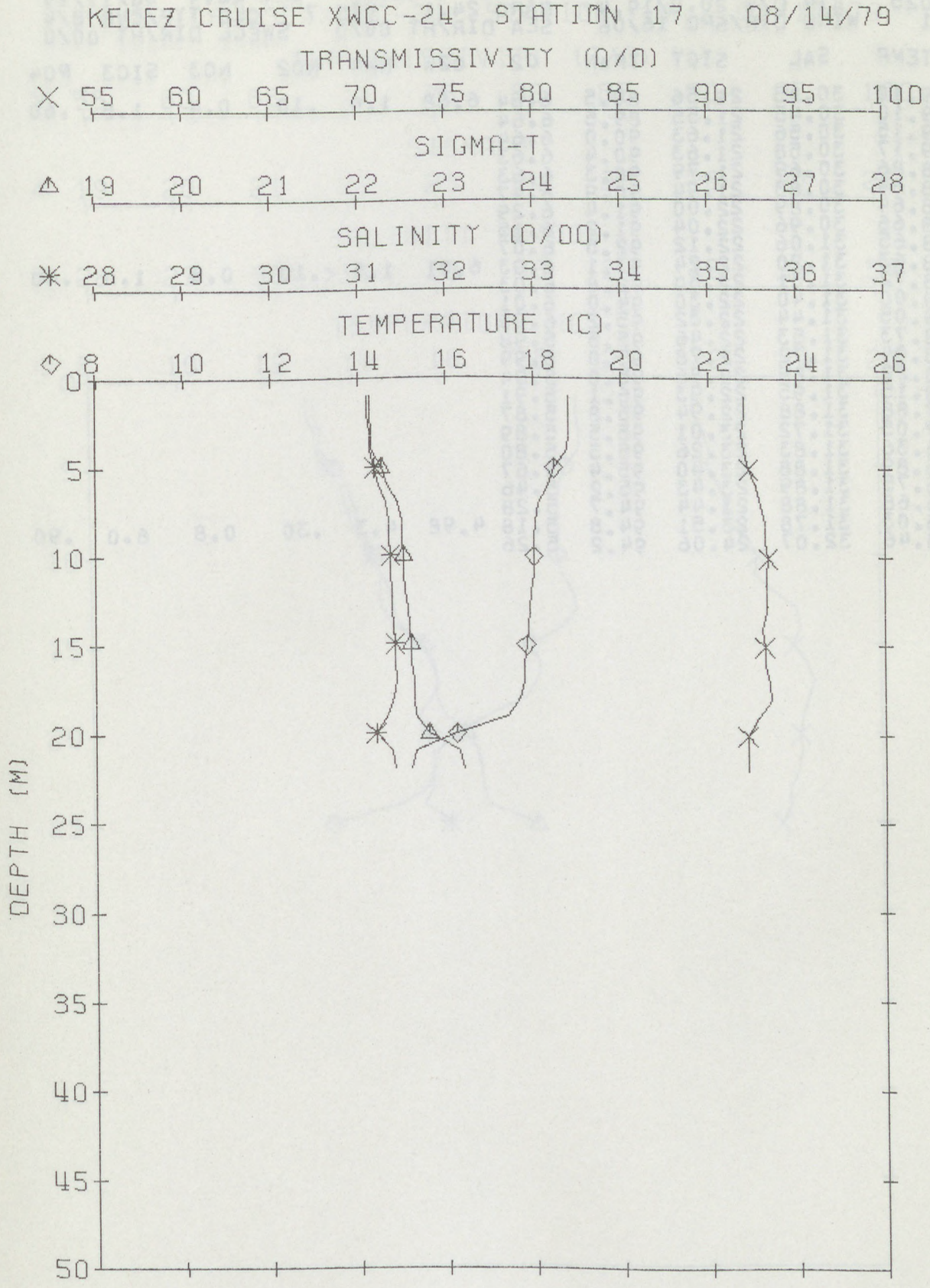
XWCC-24 STA. 16 LAT 40 18.2N; LONG 73 56.5W GMT 21.5 08/22/79
DEPTH 017 AIR D/W 22.2/20.6 BARO 20.5 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 19/12 SEA DIR/HT 19/1 SWELL DIR/HT 15/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.70	30.44	21.39	93.0	7.19	7.83		.10	0.5		.70
2	19.70	30.44	21.39	93.0	7.19						
3	19.76	30.40	21.35	93.5	7.21						
4	19.74	30.39	21.34	93.5	7.21						
5	19.56	30.54	21.50	93.9	7.20						
6	19.49	30.66	21.62	94.0	7.14						
7	19.48	30.66	21.62	94.1	7.05						
8	18.83	30.96	22.01	93.8	6.94						
9	17.10	31.56	22.88	93.4	6.88			.10	0.6		.95
10	16.85	31.69	23.04	91.0	6.51						
11	16.76	31.79	23.13	89.1	5.97						
12	16.82	31.86	23.17	91.3	5.51						
13	16.58	31.89	23.25	90.6	5.15						
14	16.27	31.91	23.34	90.7	4.89						
15	15.88	31.94	23.45	91.0	4.68						
16	15.62	31.99	23.54	90.3	4.55	3.94		.15	1.7		1.30
17	15.39	32.04	23.64	90.3	4.41						


KELEZ CRUISE XWCC-24 STATION 16 08/22/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

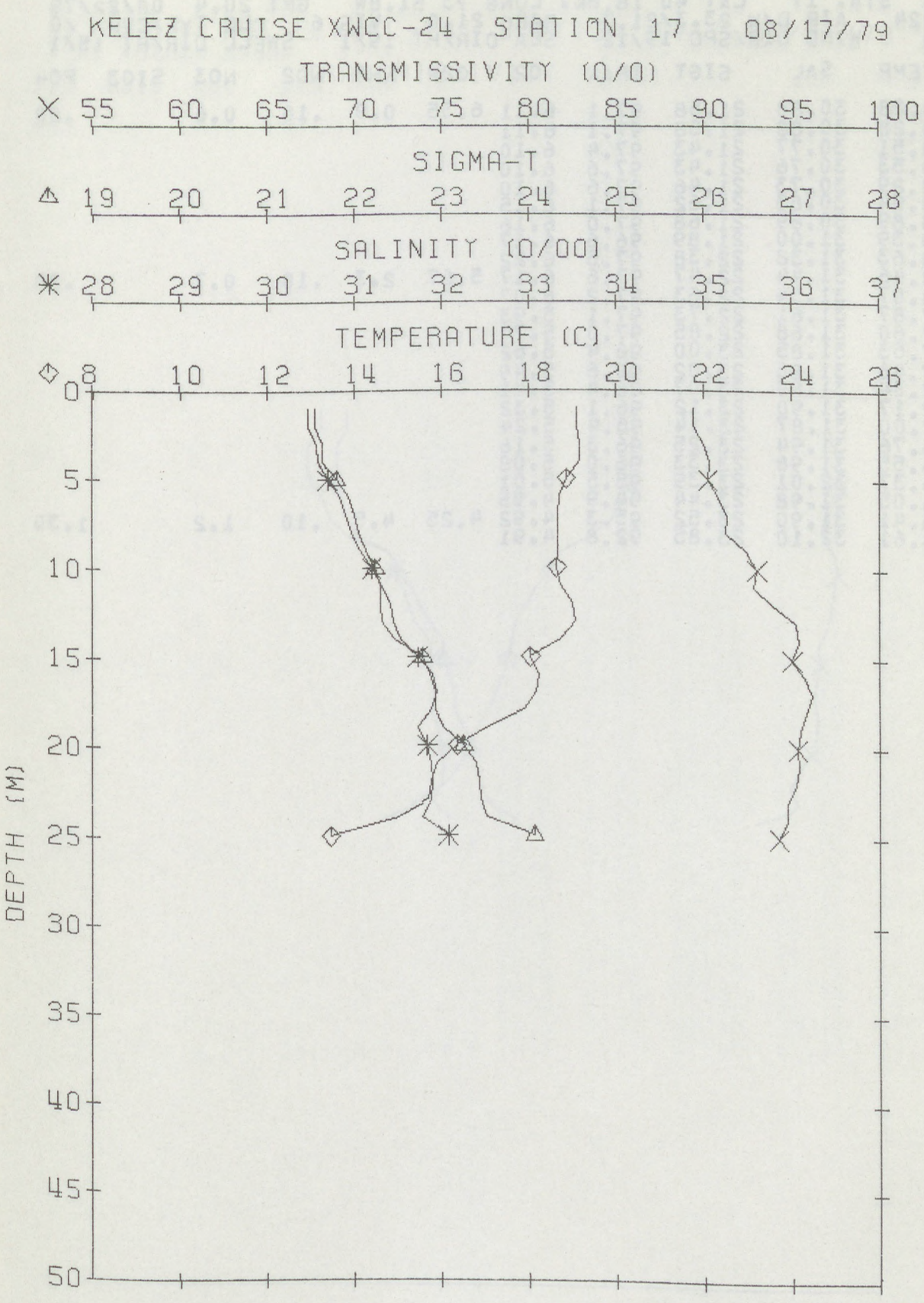
XWCC-24 STA. 17 LAT 40 19.0N; LONG 73 52.3W GMT 00.2 08/14/79
DEPTH 024 AIR D/W 21.1/18.3 BARO 18.0 VIS 7 CLD TYP/CVR 3/8
WETHR 1 WIND DIR/SPD 25/12 SEA DIR/HT /0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.81	31.10	22.11	92.0	5.34	5.44	1.7	.25	0.4	2.5	.40
2	18.81	31.10	22.11	92.0	5.34						
3	18.78	31.12	22.14	91.8	5.34						
4	18.77	31.12	22.14	92.0	5.34						
5	18.46	31.17	22.26	92.2	5.36						
6	18.35	31.23	22.33	92.6	5.37						
7	18.11	31.31	22.45	92.9	5.38						
8	18.03	31.34	22.49	93.2	5.38						
9	18.01	31.34	22.50	93.1	5.37						
10	17.99	31.35	22.51	93.3	5.36	5.39	2.1	.30	0.7	3.5	.80
11	17.99	31.35	22.51	93.2	5.35						
12	17.94	31.37	22.53	93.3	5.34						
13	17.89	31.38	22.55	93.3	5.32						
14	17.85	31.40	22.58	93.1	5.32						
15	17.82	31.40	22.59	93.2	5.31						
16	17.78	31.41	22.60	93.1	5.30						
17	17.76	31.43	22.62	93.4	5.30						
18	17.66	31.39	22.62	93.5	5.30						
19	17.39	31.33	22.63	92.8	5.30						
20	16.24	31.18	22.79	92.2	5.31						
21	15.31	31.37	23.14	92.2	5.30	4.10	10.0	.40	1.3	4.0	2.20
22	15.22	31.41	23.18	92.2	5.18						


KELEZ CRUISE XWCC-24 STATION 17 08/14/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

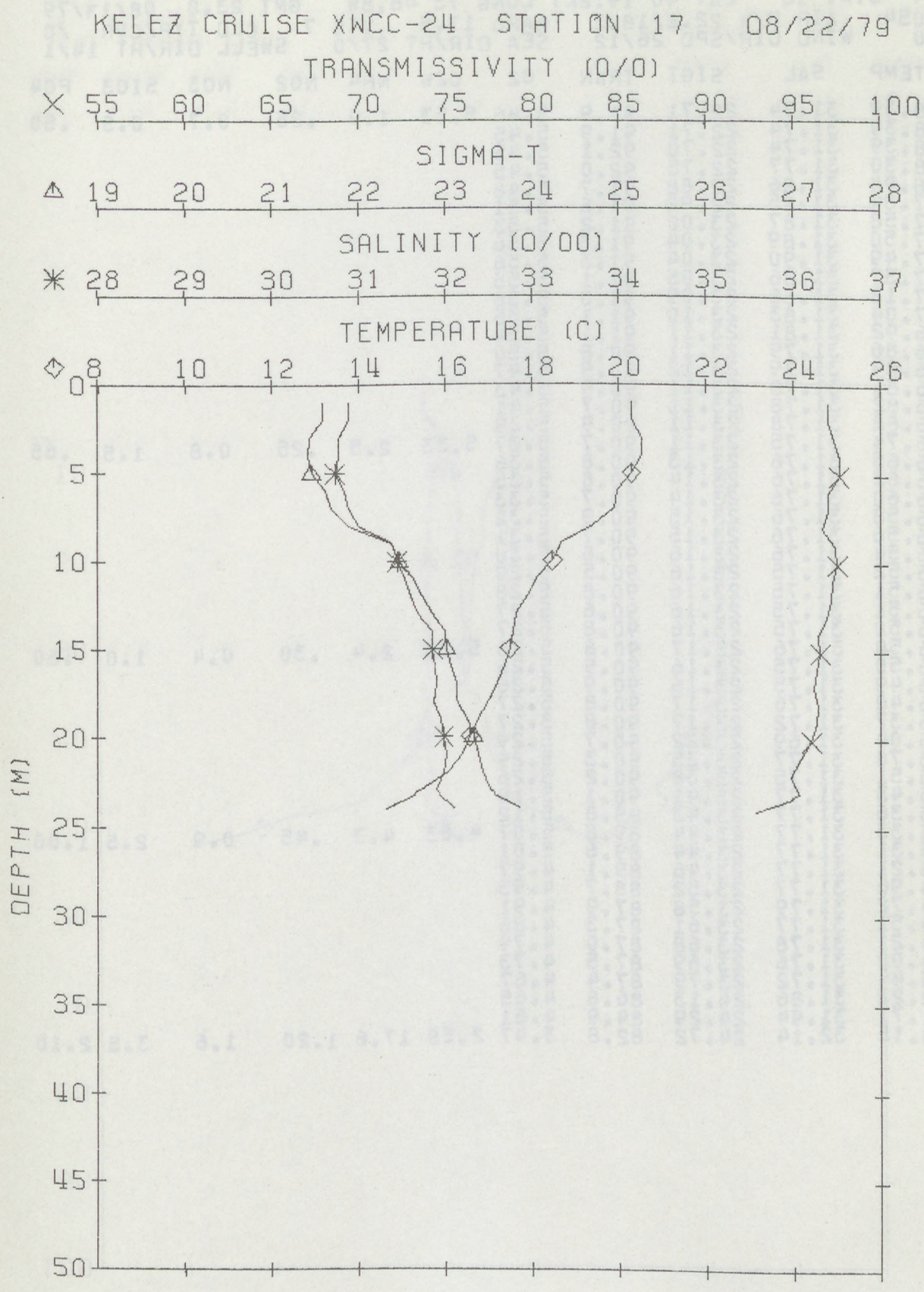
XWCC-24 STA. 17 LAT 40 18.7N; LONG 73 52.3W GMT 22.4 08/17/79
DEPTH 025 AIR D/W 20.0/19.4 BARO 24.1 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 16/06 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.10	30.45	21.56	89.5	6.64	6.88	1.0	.10	0.4	1.5	.60
2	19.10	30.45	21.55	89.5	6.64						
3	19.15	30.56	21.63	90.0	6.64						
4	19.17	30.58	21.63	90.4	6.63						
5	18.86	30.69	21.79	90.3	6.63						
6	18.69	30.83	21.94	90.9	6.47						
7	18.64	30.89	22.00	91.4	6.29						
8	18.66	30.96	22.04	91.2	6.15						
9	18.65	31.06	22.12	92.5	6.07						
10	18.63	31.20	22.24	93.1	6.03	6.01	1.5	<.10	0.5	1.0	.40
11	18.72	31.31	22.30	92.8	6.03						
12	19.00	31.40	22.30	94.0	6.01						
13	19.05	31.44	22.32	95.2	6.00						
14	18.73	31.53	22.46	95.5	5.98						
15	18.04	31.72	22.78	95.0	5.99						
16	18.22	31.89	22.86	95.8	5.94						
17	18.15	31.95	22.93	96.1	5.91						
18	17.88	31.88	22.94	95.8	5.87						
19	17.05	31.72	23.01	95.5	5.89						
20	16.36	31.83	23.26	95.3	5.80						
21	15.89	31.88	23.40	95.4	5.67						
22	15.75	31.89	23.43	95.2	5.46						
23	15.68	31.88	23.44	94.7	5.28						
24	15.03	31.78	23.51	94.8	5.18	4.98	4.3	.30	0.8	6.0	.90
25	13.46	32.07	24.06	94.2	5.26						


KELEZ CRUISE XWCC-24 STATION 17 08/17/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

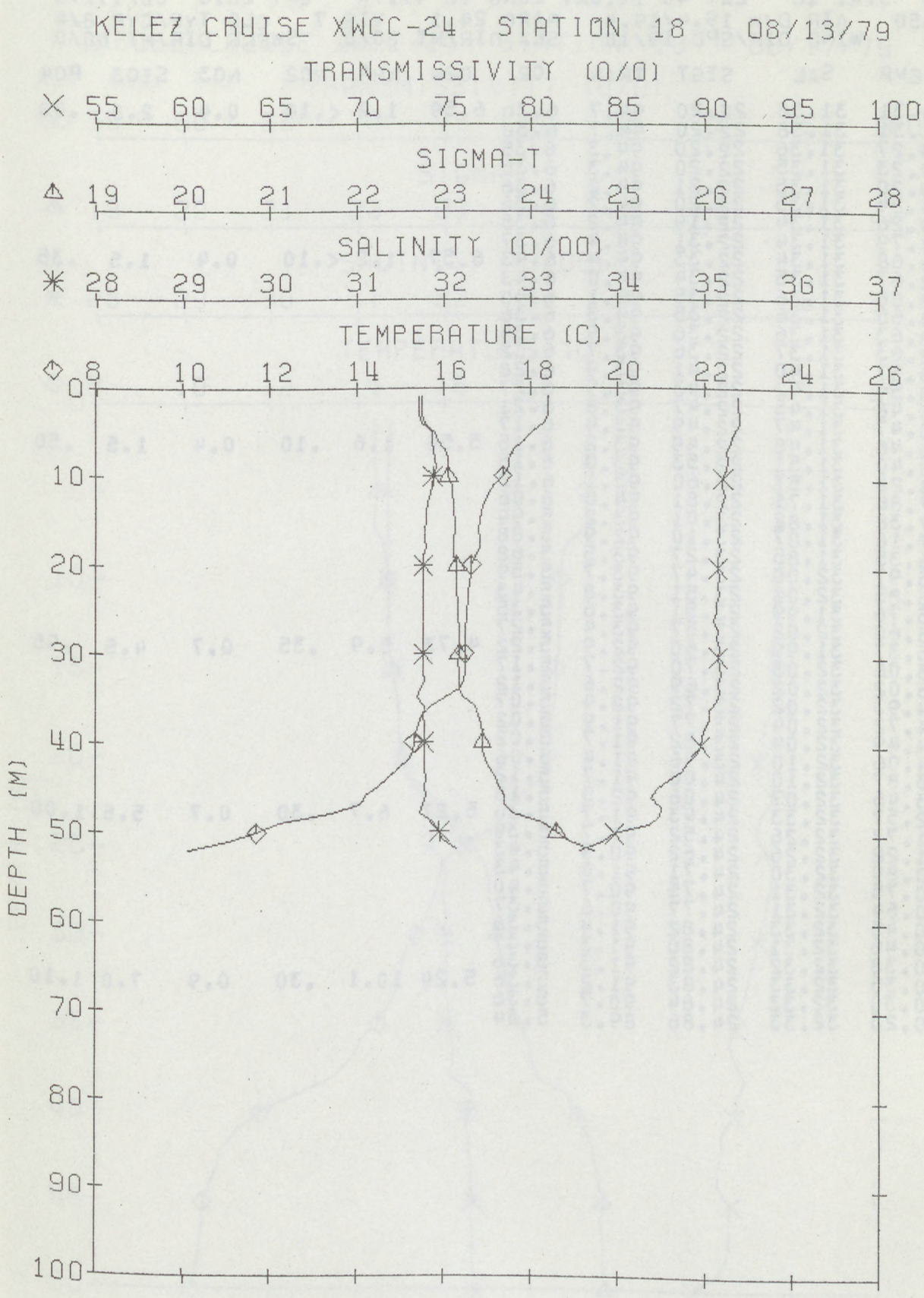
XWCC-24 STA. 17 LAT 40 18.8N; LONG 73 51.8W GMT 20.4 08/22/79
DEPTH 024 AIR D/W 23.3/21.7 BARO 21.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 19/12 SEA DIR/HT 19/1 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.28	30.88	21.58	97.1	6.11	6.35	0.9	.10	0.6		.80
2	20.28	30.88	21.58	97.1	6.11						
3	20.51	30.77	21.43	97.4	6.10						
4	20.53	30.76	21.43	97.6	6.10						
5	20.29	30.73	21.46	97.6	6.10						
6	19.94	30.83	21.62	97.1	6.15						
7	19.89	30.89	21.68	97.0	6.16						
8	19.39	31.00	21.89	96.6	6.17						
9	18.63	31.38	22.38	97.5	6.22						
10	18.46	31.44	22.47	97.6	6.17	5.67	2.3	.10	0.7		.80
11	18.07	31.54	22.63	97.2	6.07						
12	17.87	31.61	22.73	97.1	5.93						
13	17.60	31.68	22.85	97.0	5.77						
14	17.53	31.85	23.00	96.4	5.62						
15	17.46	31.85	23.02	96.6	5.49						
16	17.34	31.89	23.07	96.4	5.41						
17	17.17	31.90	23.12	96.1	5.32						
18	17.00	31.87	23.14	96.4	5.24						
19	16.76	31.94	23.25	96.3	5.16						
20	16.55	31.98	23.33	96.0	5.08						
21	16.37	32.01	23.39	95.5	5.01						
22	16.05	31.98	23.44	94.9	4.95						
23	15.41	31.90	23.52	95.3	4.92	4.25	4.5	.10	1.2		1.30
24	14.61	32.10	23.85	92.8	4.91						


KELEZ CRUISE XWCC-24 STATION 17 08/22/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

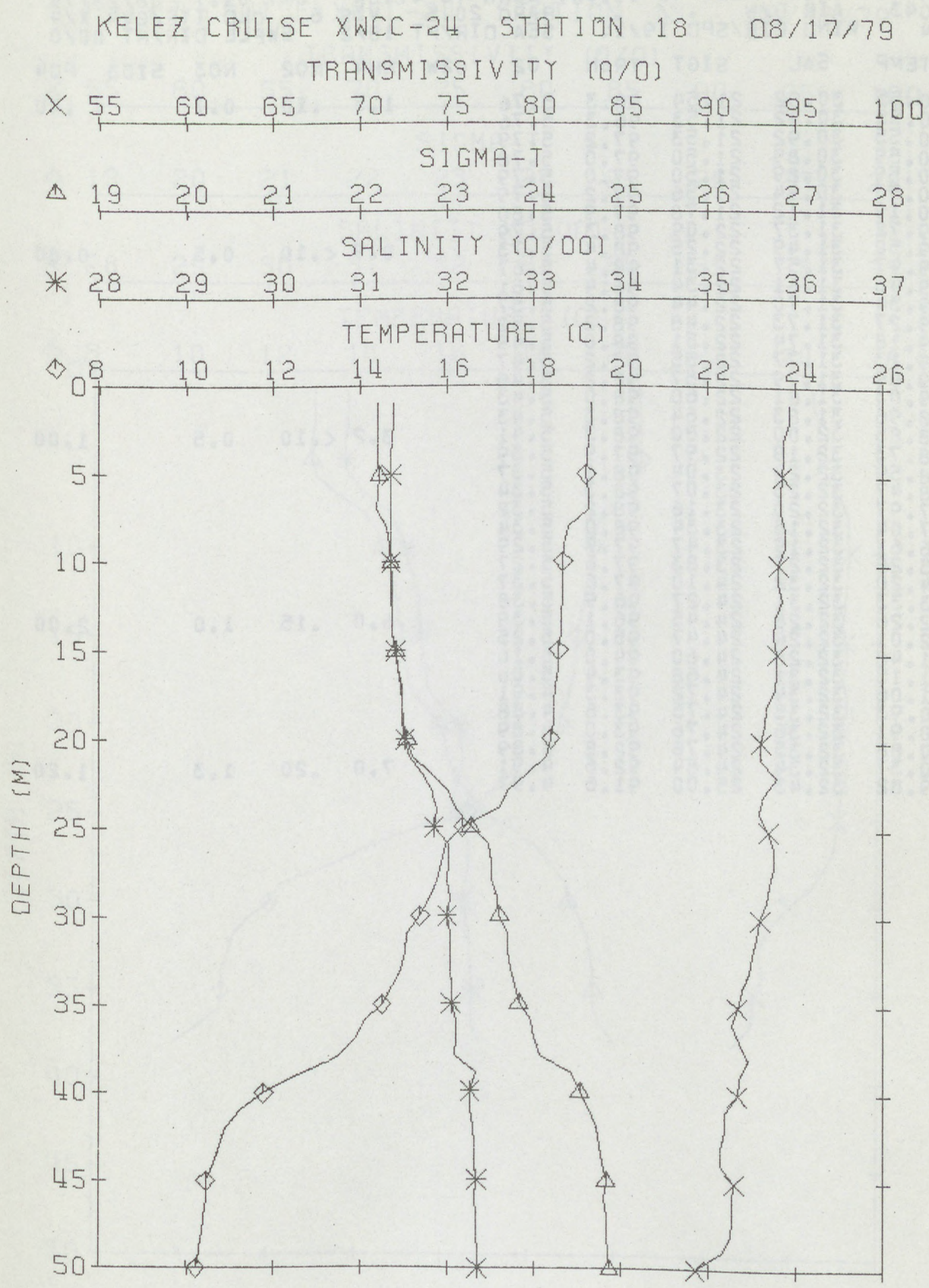
XWCC-24 STA. 18 LAT 40 19.2N; LONG 73 46.8W GMT 23.0 08/13/79
DEPTH 054 AIR D/W 22.2/18.3 BARO 17.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 26/12 SEA DIR/HT 27/0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.39	31.74	22.71	91.9	5.46	5.53	1.9	.25	0.7	0.5	.50
2	18.39	31.74	22.71	91.9	5.45						
3	18.39	31.74	22.70	92.1	5.45						
4	18.30	31.77	22.75	92.0	5.45						
5	18.04	31.86	22.88	91.7	5.48						
6	17.84	31.85	22.92	91.6	5.51						
7	17.58	31.87	23.00	91.2	5.53						
8	17.50	31.89	23.04	91.3	5.56						
9	17.49	31.90	23.04	91.3	5.56						
10	17.37	31.86	23.05	91.1	5.55						
11	17.18	31.86	23.09	91.0	5.56						
12	17.04	31.83	23.10	91.1	5.55						
13	16.92	31.81	23.11	91.1	5.54						
14	16.86	31.79	23.11	90.8	5.50						
15	16.84	31.79	23.12	90.9	5.47						
16	16.81	31.78	23.11	90.9	5.43						
17	16.82	31.78	23.11	90.7	5.41						
18	16.82	31.78	23.11	90.9	5.39						
19	16.74	31.75	23.11	90.7	5.37	5.33	2.5	.25	0.8	1.5	.65
20	16.65	31.76	23.13	90.8	5.36						
21	16.62	31.76	23.14	90.8	5.35						
22	16.60	31.76	23.14	90.7	5.33						
23	16.58	31.76	23.15	90.9	5.32						
24	16.56	31.76	23.15	90.7	5.31						
25	16.54	31.76	23.16	90.6	5.30						
26	16.52	31.75	23.16	90.5	5.29						
27	16.51	31.75	23.16	90.8	5.28						
28	16.51	31.75	23.16	90.6	5.27						
29	16.50	31.75	23.16	90.8	5.27						
30	16.50	31.76	23.17	90.8	5.26	5.33	2.4	.30	0.4	1.0	.60
31	16.50	31.75	23.16	90.9	5.26						
32	16.49	31.75	23.16	90.9	5.26						
33	16.48	31.76	23.17	90.8	5.27						
34	16.37	31.72	23.17	90.8	5.27						
35	16.04	31.69	23.22	90.7	5.29						
36	15.70	31.77	23.35	90.3	5.29						
37	15.51	31.75	23.38	90.2	5.26						
38	15.43	31.77	23.41	90.1	5.19						
39	15.36	31.77	23.43	89.8	5.12						
40	15.33	31.77	23.44	89.8	5.07	4.83	4.3	.45	0.9	2.5	1.00
41	15.31	31.77	23.44	89.6	5.01						
42	15.21	31.77	23.46	89.1	4.97						
43	14.96	31.77	23.52	88.7	4.95						
44	14.72	31.79	23.58	87.9	4.91						
45	14.51	31.77	23.61	87.3	4.86						
46	14.21	31.78	23.68	87.0	4.79						
47	14.08	31.76	23.69	87.5	4.73						
48	13.44	31.72	23.79	87.4	4.67						
49	12.23	31.86	24.13	86.8	4.65						
50	11.71	31.94	24.29	84.9	4.61						
52	10.13	32.14	24.72	82.8	3.47	2.58	17.6	1.20	1.6	3.5	2.10


KELEZ CRUISE XWCC-24 STATION 18 08/13/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

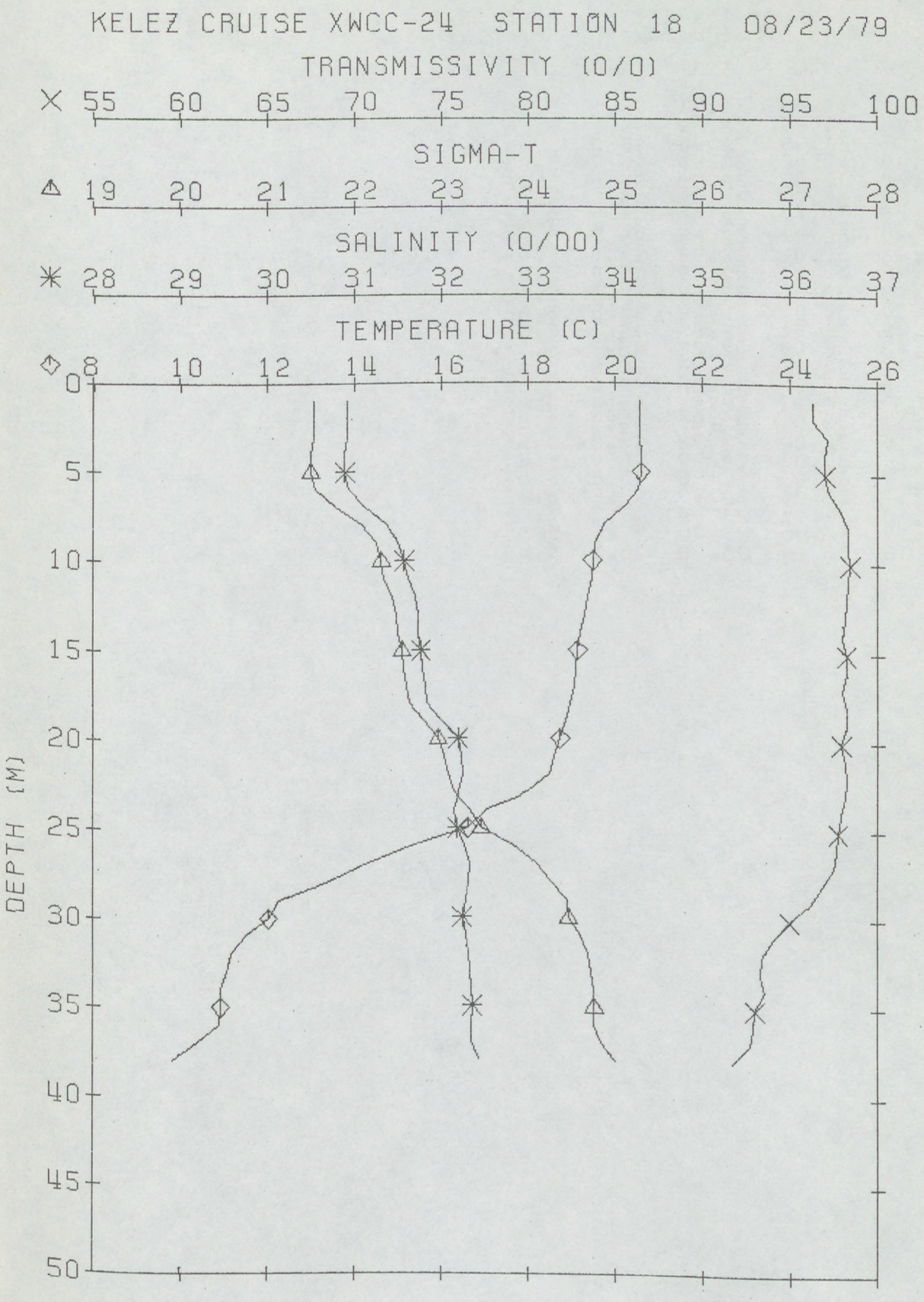
XWCC-24 STA. 18 LAT 40 19.3N; LONG 73 47.7W GMT 23.3 08/17/79
DEPTH 050 AIR D/W 19.4/19.4 BARO 24.1 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 19/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.31	31.38	22.20	94.7	6.30	6.59	1.2	<.10	0.4	2.0	.40
2	19.31	31.38	22.20	94.7	6.30						
3	19.27	31.36	22.20	94.3	6.35						
4	19.23	31.35	22.20	94.3	6.35						
5	19.20	31.35	22.21	94.2	6.36						
6	19.24	31.35	22.20	94.2	6.36						
7	19.26	31.34	22.19	94.2	6.35						
8	18.79	31.34	22.31	94.4	6.37						
9	18.68	31.34	22.33	94.4	6.43	6.57	1.2	<.10	0.4	1.5	.35
10	18.67	31.35	22.34	94.0	6.43						
11	18.66	31.36	22.35	94.1	6.40						
12	18.65	31.36	22.35	94.3	6.36						
13	18.63	31.36	22.36	93.9	6.34						
14	18.63	31.37	22.36	93.7	6.32						
15	18.57	31.40	22.41	93.9	6.28						
16	18.54	31.42	22.43	93.9	6.27						
17	18.48	31.45	22.47	93.8	6.21						
18	18.47	31.47	22.49	93.4	6.17						
19	18.46	31.48	22.49	93.2	6.15	5.56	1.6	.10	0.4	1.5	.50
20	18.40	31.51	22.53	93.0	6.15						
21	18.28	31.57	22.60	93.1	6.13						
22	17.86	31.71	22.81	94.0	6.06						
23	17.38	31.82	23.01	93.2	5.99						
24	17.18	31.87	23.10	92.9	5.88						
25	16.35	31.85	23.27	93.5	5.68						
26	15.97	32.00	23.47	93.7	5.59						
27	15.85	32.01	23.51	93.8	5.43						
28	15.76	31.99	23.51	93.6	5.35						
29	15.60	32.02	23.57	93.4	5.27						
30	15.37	31.99	23.60	92.9	5.22	4.73	5.9	.35	0.7	4.5	.95
31	15.06	32.03	23.70	92.7	5.17						
32	15.02	32.02	23.69	92.6	5.12						
33	14.93	32.02	23.72	92.4	5.07						
34	14.72	32.04	23.77	91.9	5.02						
35	14.49	32.04	23.82	91.7	5.02						
36	14.06	32.10	23.96	91.4	5.06						
37	13.87	32.10	24.00	91.7	5.12						
38	13.45	32.07	24.06	92.3	5.18						
39	12.57	32.33	24.43	91.7	5.30	5.27	6.7	.30	0.7	5.5	1.00
40	11.77	32.26	24.52	91.7	5.39						
41	11.22	32.26	24.62	90.9	5.43						
42	10.89	32.30	24.71	91.0	5.43						
43	10.75	32.31	24.75	90.7	5.40						
44	10.64	32.31	24.77	90.6	5.37						
45	10.45	32.33	24.82	91.4	5.36						
46	10.46	32.31	24.80	91.3	5.37						
47	10.38	32.32	24.82	91.3	5.36						
48	10.35	32.33	24.83	91.2	5.36	5.24	10.1	.30	0.9	7.0	1.10
49	10.30	32.33	24.84	90.7	5.36						
50	10.23	32.33	24.86	89.3	5.34						


KELEZ CRUISE XWCC-24 STATION 18 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

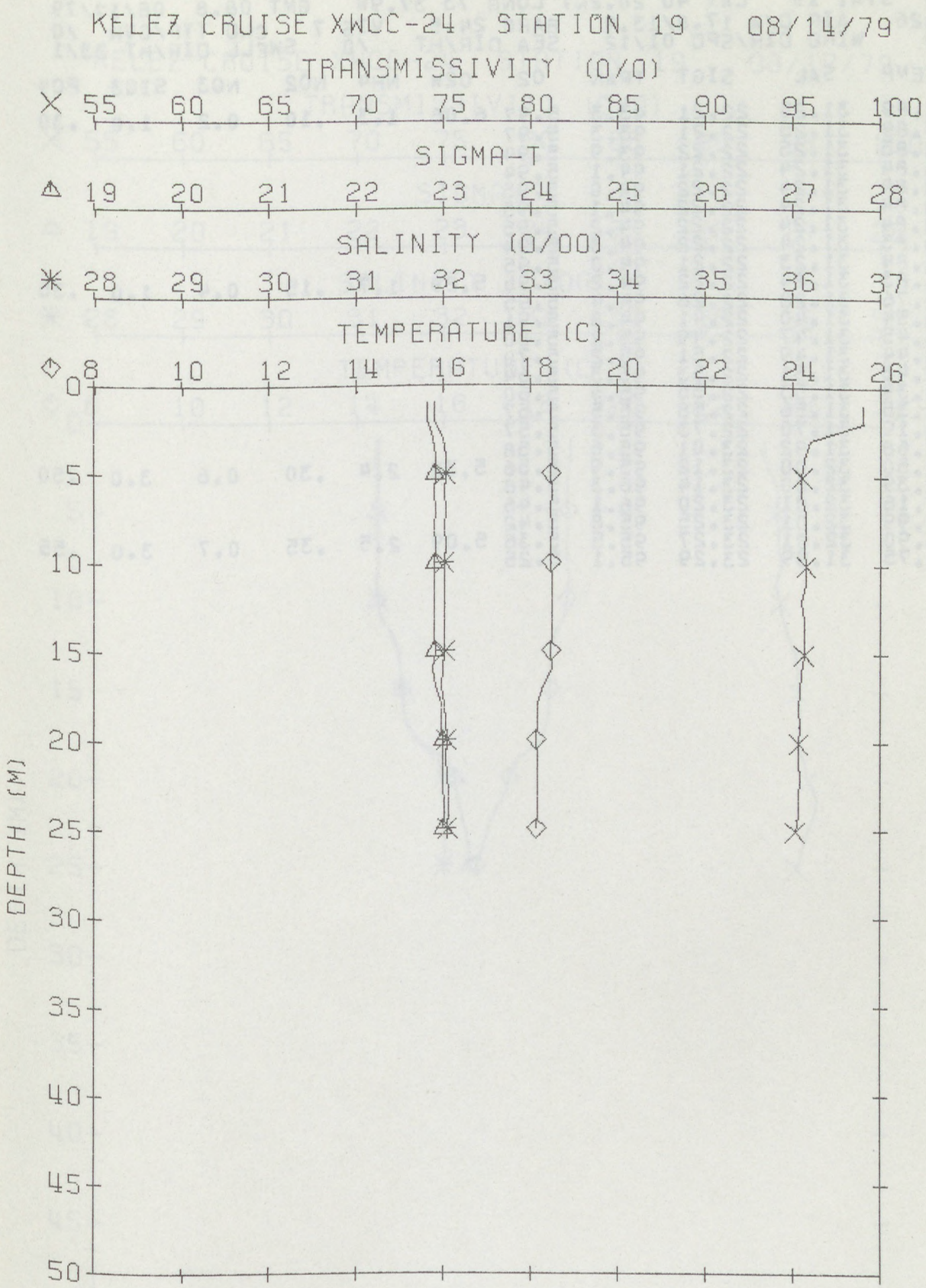
XWCC-24 STA. 18 LAT 40 19.0N; LONG 73 47.8W GMT 01.7 08/23/79
DEPTH 043 AIR D/W . / . BARO 20.5 VIS 6 CLD TYP/CVR X/4
WETHR 4 WIND DIR/SPD 19/14 SEA DIR/HT 18/2 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.55	30.92	21.54	96.3	5.76		1.5	.10	0.7		.40
2	20.55	30.92	21.53	96.3	5.76						
3	20.55	30.92	21.53	97.2	5.79						
4	20.59	30.89	21.50	97.0	5.78						
5	20.59	30.89	21.50	97.0	5.79						
6	20.53	30.94	21.56	97.2	5.79						
7	20.19	31.12	21.78	97.9	5.80						
8	19.72	31.37	22.09	98.3	5.79						
9	19.50	31.49	22.25	98.4	5.73		0.9	<.10	0.5		0.80
10	19.47	31.57	22.31	98.4	5.67						
11	19.45	31.61	22.34	98.4	5.61						
12	19.34	31.70	22.44	98.2	5.57						
13	19.27	31.73	22.48	98.2	5.52						
14	19.18	31.74	22.51	98.0	5.49						
15	19.13	31.77	22.55	98.2	5.47						
16	19.09	31.79	22.57	98.2	5.45						
17	19.03	31.81	22.60	98.0	5.43						
18	18.96	31.83	22.64	98.3	5.43						
19	18.85	32.00	22.80	98.3	5.41		3.2	<.10	0.5		1.00
20	18.73	32.19	22.97	97.9	5.39						
21	18.59	32.24	23.04	98.1	5.37						
22	18.47	32.25	23.07	98.3	5.34						
23	17.97	32.20	23.16	98.2	5.32						
24	17.04	32.15	23.34	98.0	5.34						
25	16.61	32.19	23.47	97.7	5.29						
26	15.28	32.27	23.83	97.6	5.27						
27	14.20	32.32	24.10	97.6	5.37						
28	13.33	32.31	24.27	96.9	5.38						
29	12.26	32.28	24.45	96.1	5.39		6.0	.15	1.0		2.00
30	12.01	32.24	24.47	95.0	5.25						
31	11.48	32.28	24.60	94.0	5.10						
32	11.15	32.31	24.68	93.4	5.00						
33	11.06	32.34	24.72	93.3	4.91						
34	10.93	32.35	24.75	93.6	4.88						
35	10.91	32.36	24.76	93.0	4.89						
36	10.88	32.35	24.76	92.8	4.89						
37	10.37	32.34	24.84	92.6	4.91		7.0	.20	1.3		1.20
38	9.82	32.43	25.00	91.6	4.97						


KELEZ CRUISE XWCC-24 STATION 18 08/23/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

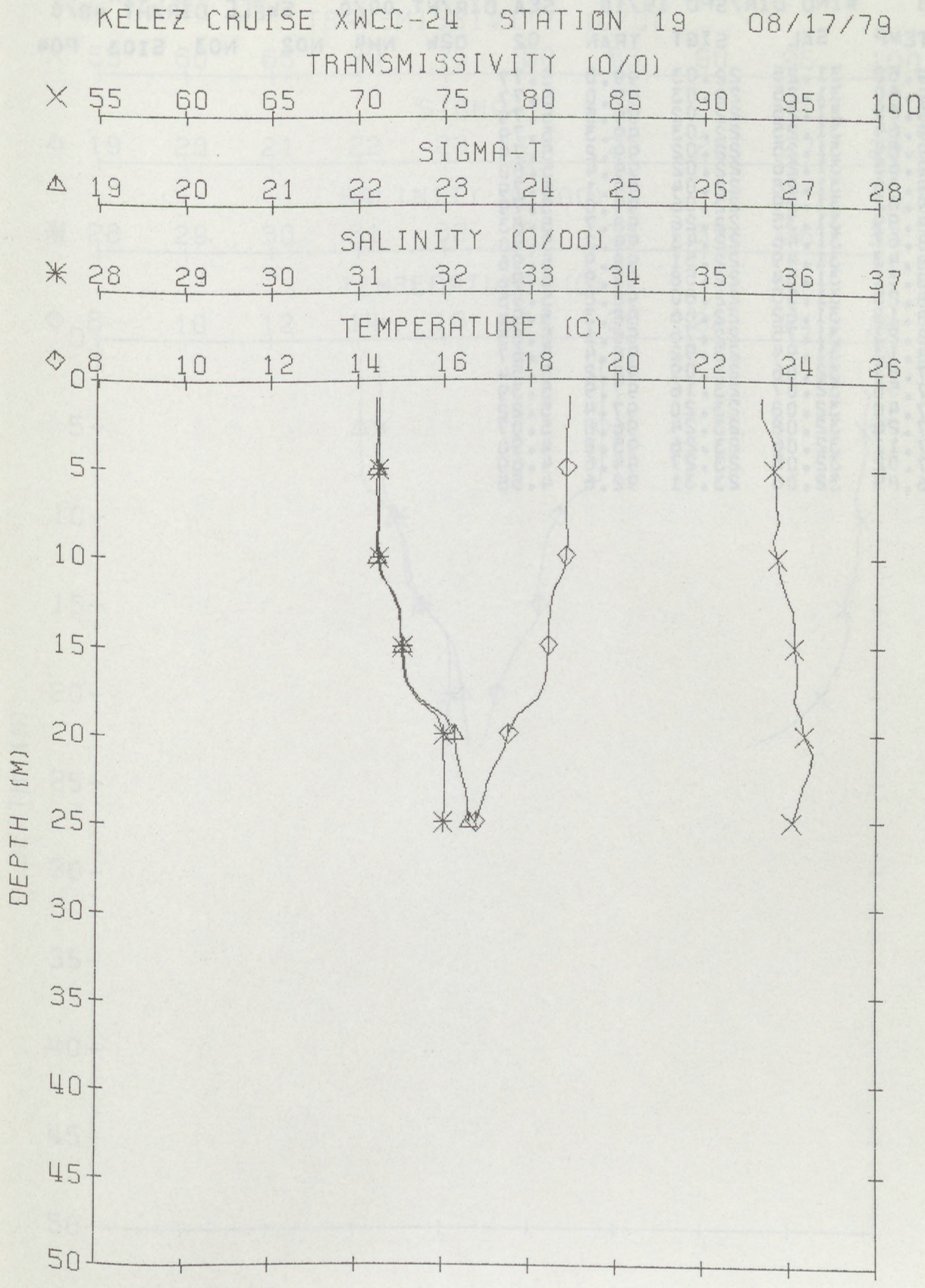
XWCC-24 STA. 19 LAT 40 20.7N; LONG 73 37.6W GMT 09.8 08/14/79
DEPTH 025 AIR D/W 19.4/17.8 BARO 18.1 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 23/16 SEA DIR/HT 22/1 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.46	31.89	22.81	99.1	5.69						
2	18.46	31.89	22.80	99.1	5.69	5.59	0.8	.10	0.3	0.5	.50
3	18.47	31.99	22.88	96.0	5.64						
4	18.49	32.02	22.90	95.7	5.63						
5	18.48	32.02	22.90	95.6	5.62						
6	18.49	32.01	22.89	95.5	5.63						
7	18.48	32.02	22.90	95.7	5.63						
8	18.48	32.01	22.89	95.7	5.63						
9	18.48	32.02	22.90	95.7	5.63	5.72	1.0	.10	0.3	2.0	.40
10	18.48	32.01	22.89	95.8	5.62						
11	18.49	32.00	22.88	95.7	5.62						
12	18.50	32.01	22.89	95.5	5.62						
13	18.48	32.01	22.89	95.7	5.61						
14	18.48	32.00	22.88	95.7	5.61						
15	18.47	32.01	22.89	95.6	5.61						
16	18.48	32.00	22.88	95.6	5.61						
17	18.30	31.97	22.91	95.4	5.62						
18	18.15	32.01	22.97	95.3	5.64	5.68	1.0	.10	0.3	1.5	.40
19	18.16	32.02	22.98	95.5	5.65						
20	18.14	32.03	22.99	95.4	5.63						
21	18.17	32.03	22.98	95.3	5.63						
22	18.17	32.03	22.99	95.4	5.62						
23	18.18	32.05	23.00	95.3	5.62	5.68	1.0	.10	0.4	2.5	.60
24	18.17	32.06	23.00	95.4	5.60						
25	18.15	32.04	23.00	95.2	5.58						


KELEZ CRUISE XWCC-24 STATION 19 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

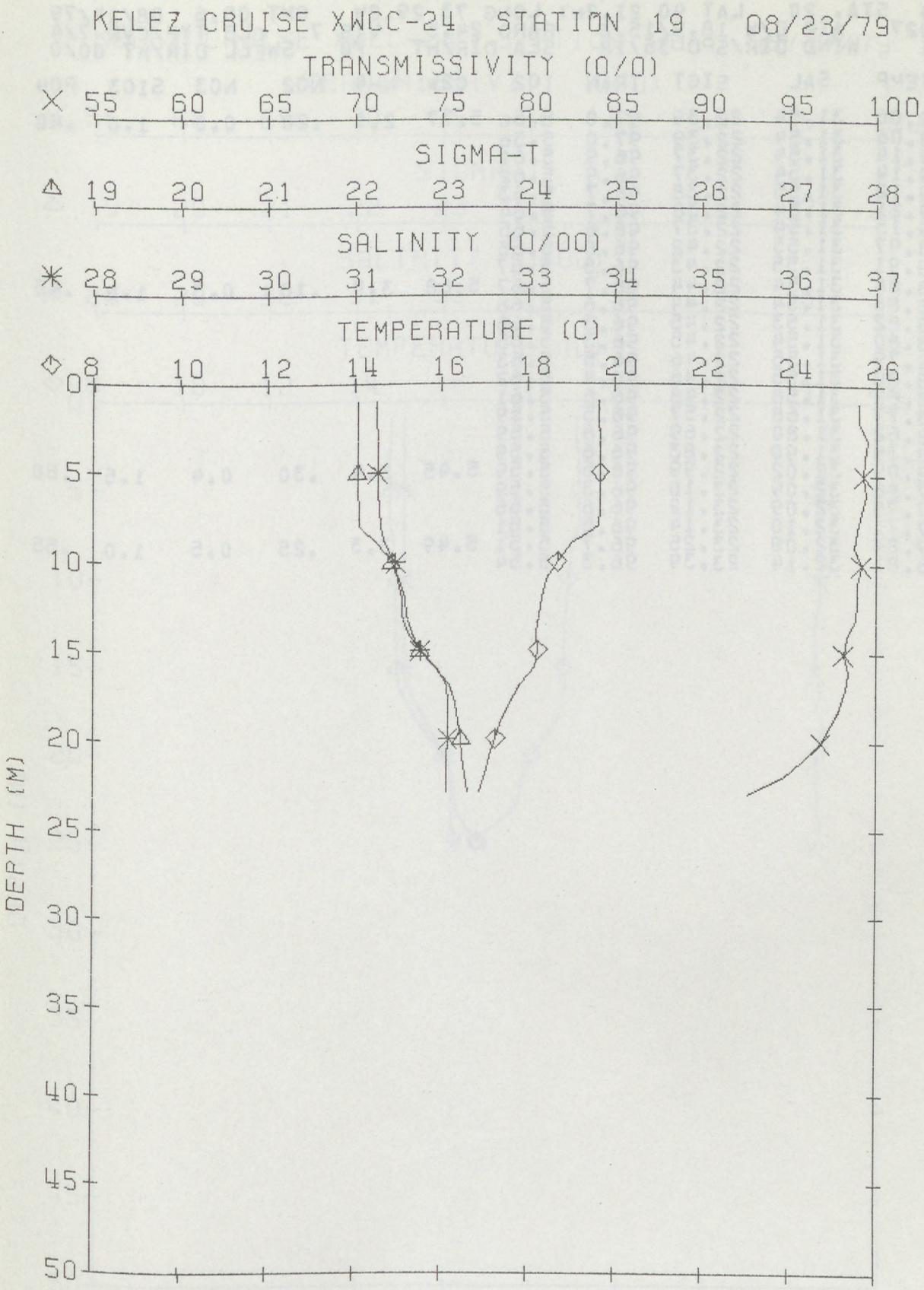
XWCC-24 STA. 19 LAT 40 20.2N; LONG 73 37.9W GMT 08.8 08/17/79
DEPTH 026 AIR D/W 17.8/13.9 BARO 24.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 01/12 SEA DIR/HT /0 SWELL DIR/HT 33/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.89	31.25	22.21	93.3	5.97	6.06	1.3	.10	0.2	1.0	.30
2	18.89	31.25	22.21	93.3	5.97						
3	18.83	31.25	22.22	93.9	5.94						
4	18.84	31.24	22.21	94.1	5.94						
5	18.84	31.24	22.22	94.0	5.95						
6	18.84	31.24	22.22	94.1	5.95						
7	18.84	31.24	22.22	94.2	5.95						
8	18.83	31.24	22.22	94.3	5.94						
9	18.84	31.23	22.21	94.0	5.95						
10	18.83	31.24	22.22	94.2	5.95	5.89	1.7	.15	0.4	1.0	.35
11	18.76	31.28	22.26	94.4	5.95						
12	18.54	31.40	22.41	94.8	5.91						
13	18.45	31.47	22.49	95.2	5.80						
14	18.44	31.49	22.51	95.2	5.70						
15	18.43	31.51	22.53	95.3	5.64						
16	18.39	31.53	22.55	95.5	5.60						
17	18.35	31.56	22.58	95.5	5.57						
18	18.19	31.70	22.73	95.3	5.57						
19	17.68	31.92	23.01	95.6	5.58						
20	17.50	32.00	23.12	95.9	5.56	5.32	2.4	.30	0.6	3.0	.50
21	17.39	32.00	23.14	96.3	5.48						
22	17.16	32.01	23.20	96.1	5.46						
23	16.99	32.01	23.25	95.8	5.42						
24	16.90	32.01	23.27	95.5	5.36	5.09	2.5	.35	0.7	3.0	.55
25	16.75	31.99	23.29	95.1	5.25						


KELEZ CRUISE XWCC-24 STATION 19 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

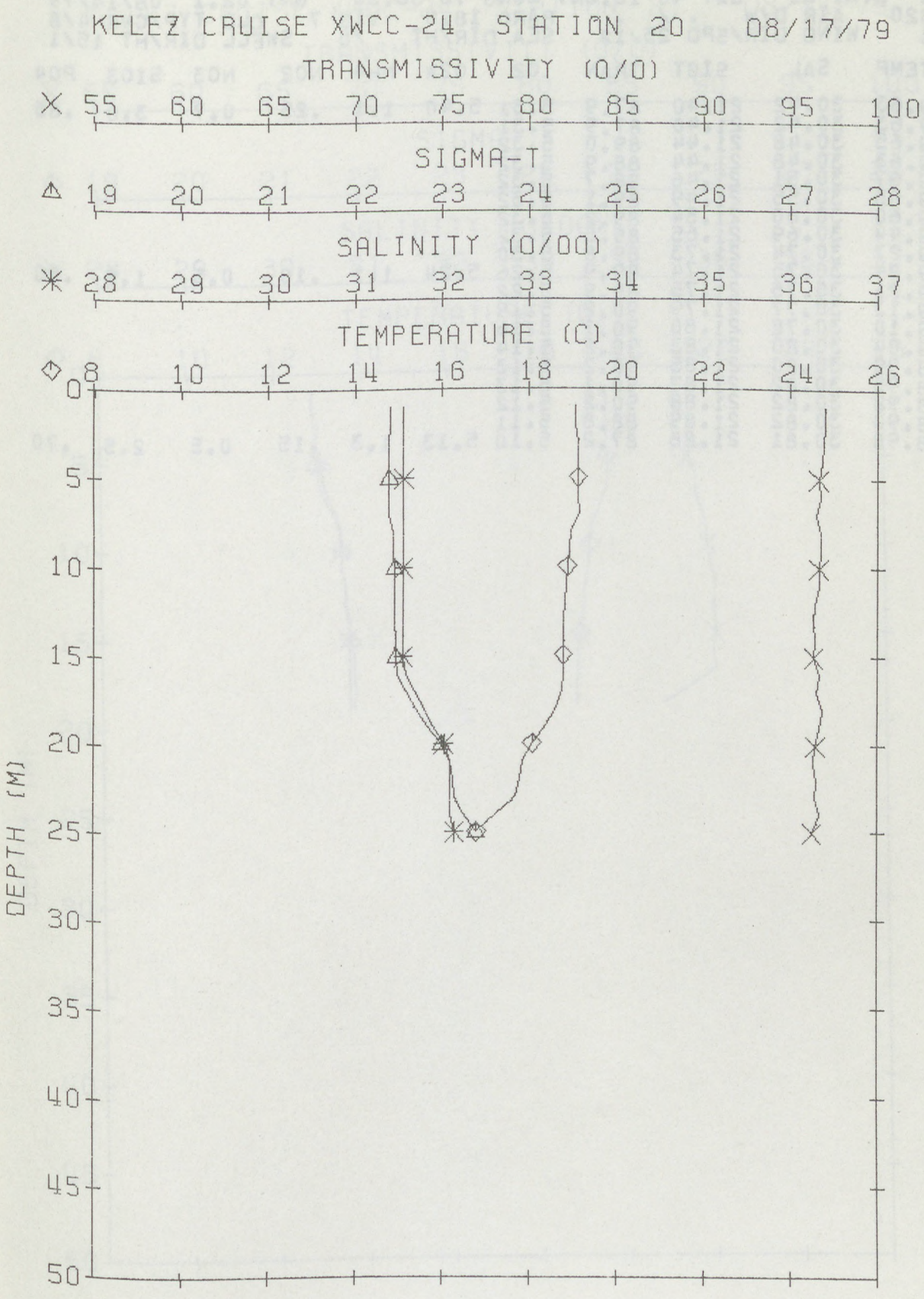
XWCC-24 STA. 19 LAT 40 20.2N; LONG 73 37.8W GMT 05.1 08/23/79
DEPTH 025 AIR D/W 20.6/20.6 BARO 22.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 19/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.60	31.25	22.03	99.0	5.77						
2	19.60	31.25	22.03	99.0	5.77						
3	19.65	31.25	22.02	99.5	5.79						
4	19.64	31.25	22.03	99.3	5.79						
5	19.64	31.25	22.02	99.2	5.79						
6	19.65	31.26	22.02	99.4	5.80						
7	19.66	31.28	22.04	99.1	5.79						
8	19.62	31.29	22.06	99.0	5.79						
9	18.99	31.35	22.26	98.7	5.83						
10	18.67	31.46	22.43	99.2	5.90						
11	18.43	31.49	22.51	98.9	5.96						
12	18.31	31.54	22.58	98.9	5.96						
13	18.25	31.55	22.60	98.8	5.95						
14	18.18	31.62	22.66	98.3	5.94						
15	18.23	31.75	22.76	98.1	5.85						
16	18.13	31.94	22.92	98.4	5.67						
17	17.83	32.06	23.09	98.2	5.54						
18	17.58	32.07	23.16	97.9	5.39						
19	17.40	32.08	23.20	97.4	5.22						
20	17.26	32.08	23.24	96.8	5.07						
21	17.11	32.06	23.26	95.8	4.90						
22	17.02	32.05	23.27	94.6	4.69						
23	16.89	32.06	23.31	92.6	4.55						


KELEZ CRUISE XWCC-24 STATION 19 08/23/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

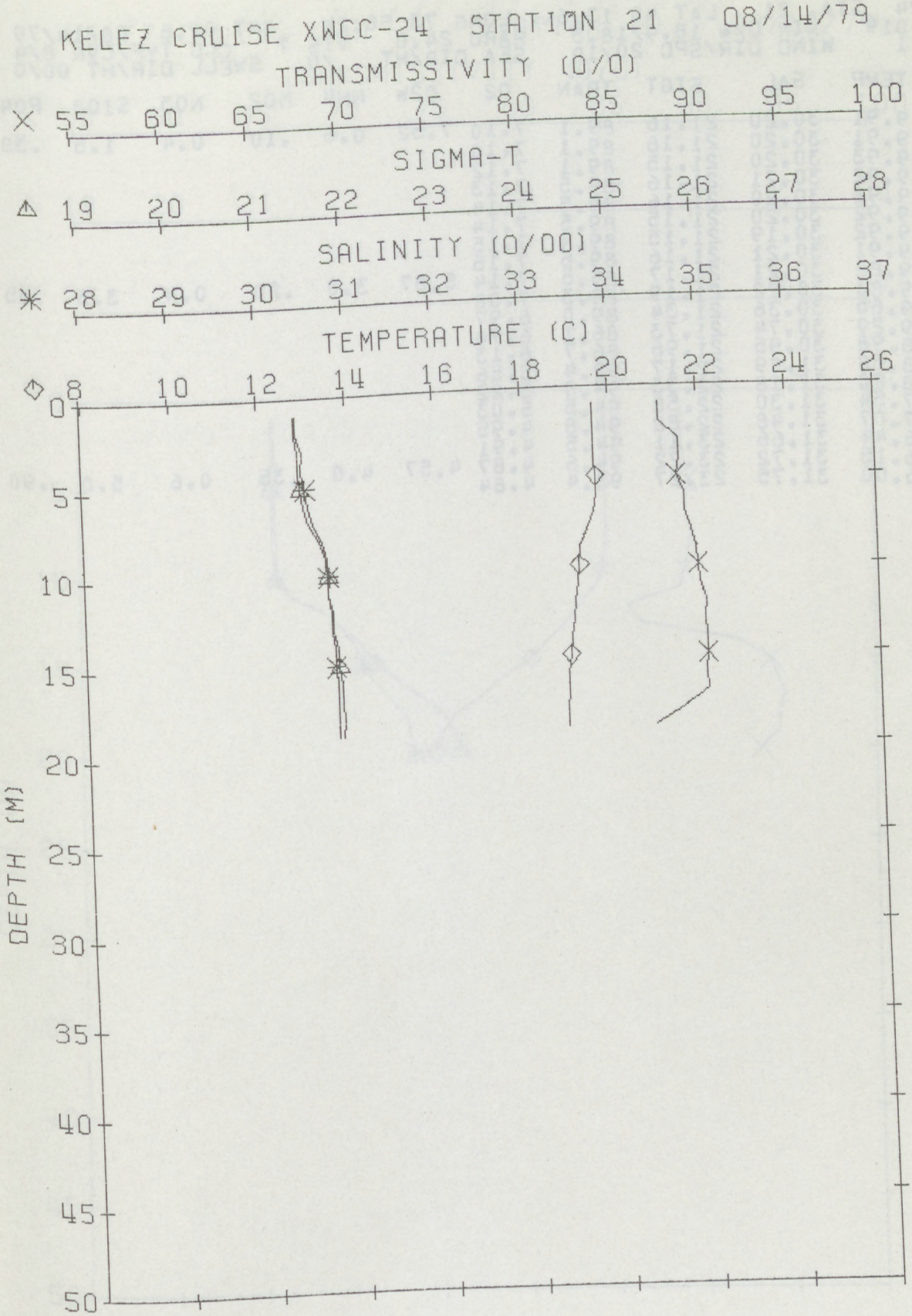
XWCC-24 STA. 20 LAT 40 21.2N; LONG 73 29.2W GMT 05.6 08/17/79
DEPTH 027 AIR D/W 18.9/15.3 BARO 24.5 VIS 7 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 35/18 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.06	31.54	22.39	97.0	5.56	5.77	2.1	.20	0.3	1.0	.40
2	19.06	31.54	22.39	97.0	5.56						
3	19.14	31.54	22.37	96.9	5.61						
4	19.14	31.54	22.37	96.9	5.62						
5	19.12	31.55	22.38	96.7	5.63						
6	19.11	31.54	22.38	96.7	5.64						
7	19.15	31.54	22.37	96.6	5.65						
8	18.97	31.55	22.42	96.8	5.65						
9	18.91	31.55	22.43	96.8	5.67						
10	18.88	31.54	22.44	96.7	5.67	5.68	3.0	.10	0.3	1.0	.45
11	18.86	31.54	22.44	96.6	5.66						
12	18.82	31.53	22.45	96.5	5.65						
13	18.80	31.54	22.45	96.3	5.65						
14	18.79	31.55	22.46	96.5	5.63						
15	18.80	31.55	22.46	96.4	5.62						
16	18.80	31.58	22.48	96.6	5.61						
17	18.77	31.68	22.57	96.5	5.59						
18	18.62	31.80	22.69	96.8	5.59						
19	18.39	31.90	22.83	96.6	5.59						
20	18.09	32.02	22.99	96.5	5.59	5.45	3.4	.30	0.4	1.5	.50
21	17.86	32.09	23.10	96.3	5.59						
22	17.79	32.09	23.12	96.6	5.55						
23	17.71	32.10	23.14	96.5	5.51						
24	17.24	32.09	23.25	96.7	5.51	5.49	3.3	.25	0.5	1.0	.55
25	16.81	32.14	23.39	96.3	5.54						


KELEZ CRUISE XWCC-24 STATION 20 08/17/79
TRANSMISSIVITY (O/O)
X 55 60 65 70 75 80 85 90 95 100
SIGMA-T
Δ 19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
✳ 28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
◇ 8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

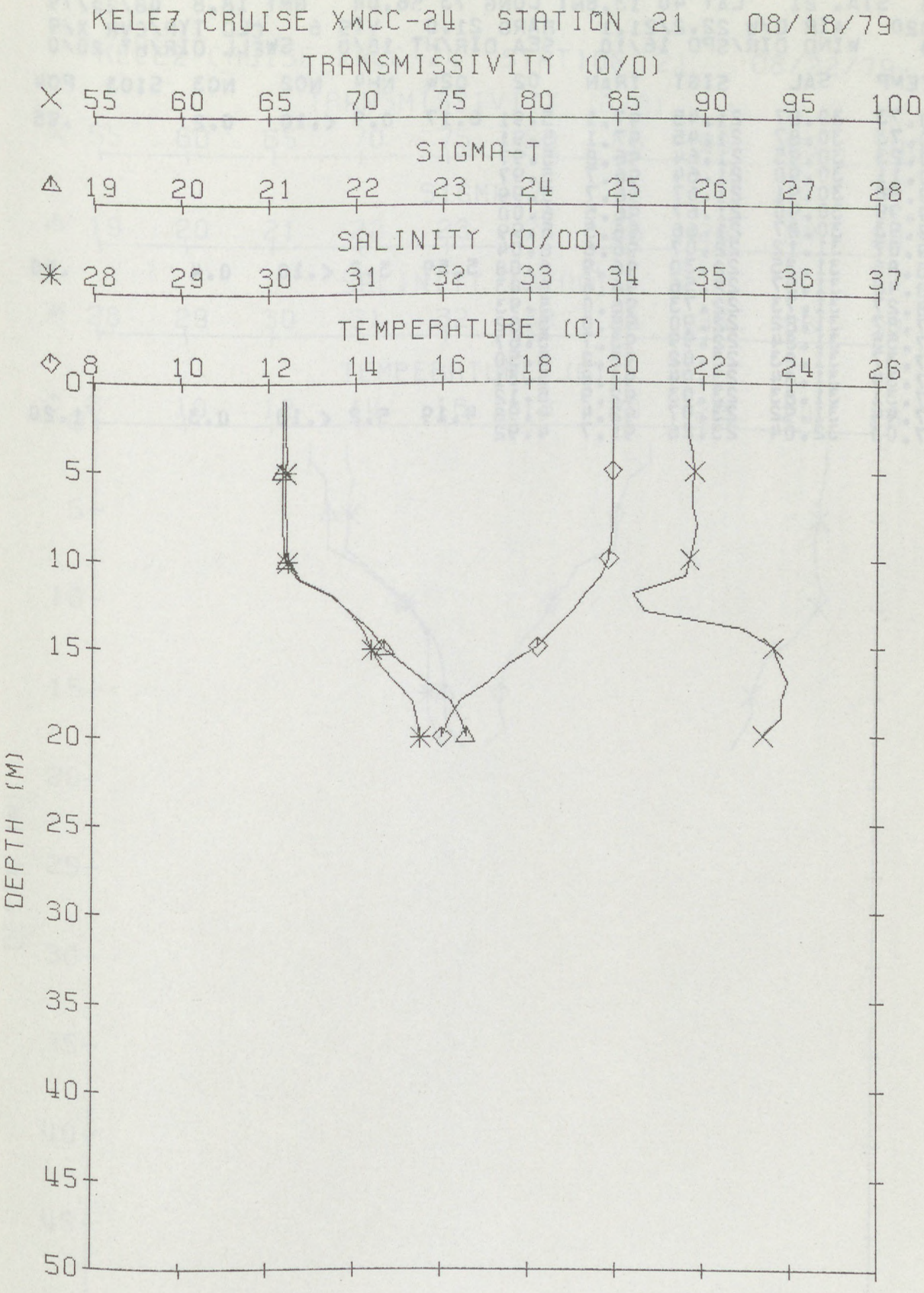
XWCC-24 STA. 21 LAT 40 13.3N; LONG 73 56.3W GMT 02.1 08/14/79
DEPTH 020 AIR D/W . / . BARO 18.0 VIS 7 CLD TYP/CVR 4/8
WETHR 1 WIND DIR/SPD 25/12 SEA DIR/HT /0 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.63	30.42	21.40	87.9	5.31	5.40	1.1	.25	0.7	3.0	.65
2	19.63	30.42	21.40	87.9	5.31						
3	19.65	30.48	21.44	89.0	5.32						
4	19.63	30.48	21.44	88.9	5.32						
5	19.67	30.51	21.46	88.7	5.32						
6	19.65	30.55	21.49	89.1	5.32						
7	19.60	30.60	21.54	89.2	5.32						
8	19.44	30.69	21.65	89.5	5.32						
9	19.27	30.74	21.73	89.8	5.30						
10	19.24	30.75	21.74	89.9	5.26	5.24	1.1	.10	0.5	1.5	.60
11	19.21	30.75	21.75	89.9	5.22						
12	19.13	30.77	21.79	90.2	5.19						
13	19.10	30.78	21.80	90.1	5.16						
14	19.04	30.80	21.83	90.2	5.14						
15	18.99	30.80	21.85	90.2	5.13						
16	18.95	30.82	21.87	90.1	5.13						
17	18.92	30.82	21.88	90.2	5.12						
18	18.90	30.82	21.89	88.8	5.11						
19	18.90	30.81	21.88	87.2	5.10	5.13	1.3	.15	0.5	2.5	.70


KELEZ CRUISE XWCC-24 STATION 21 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

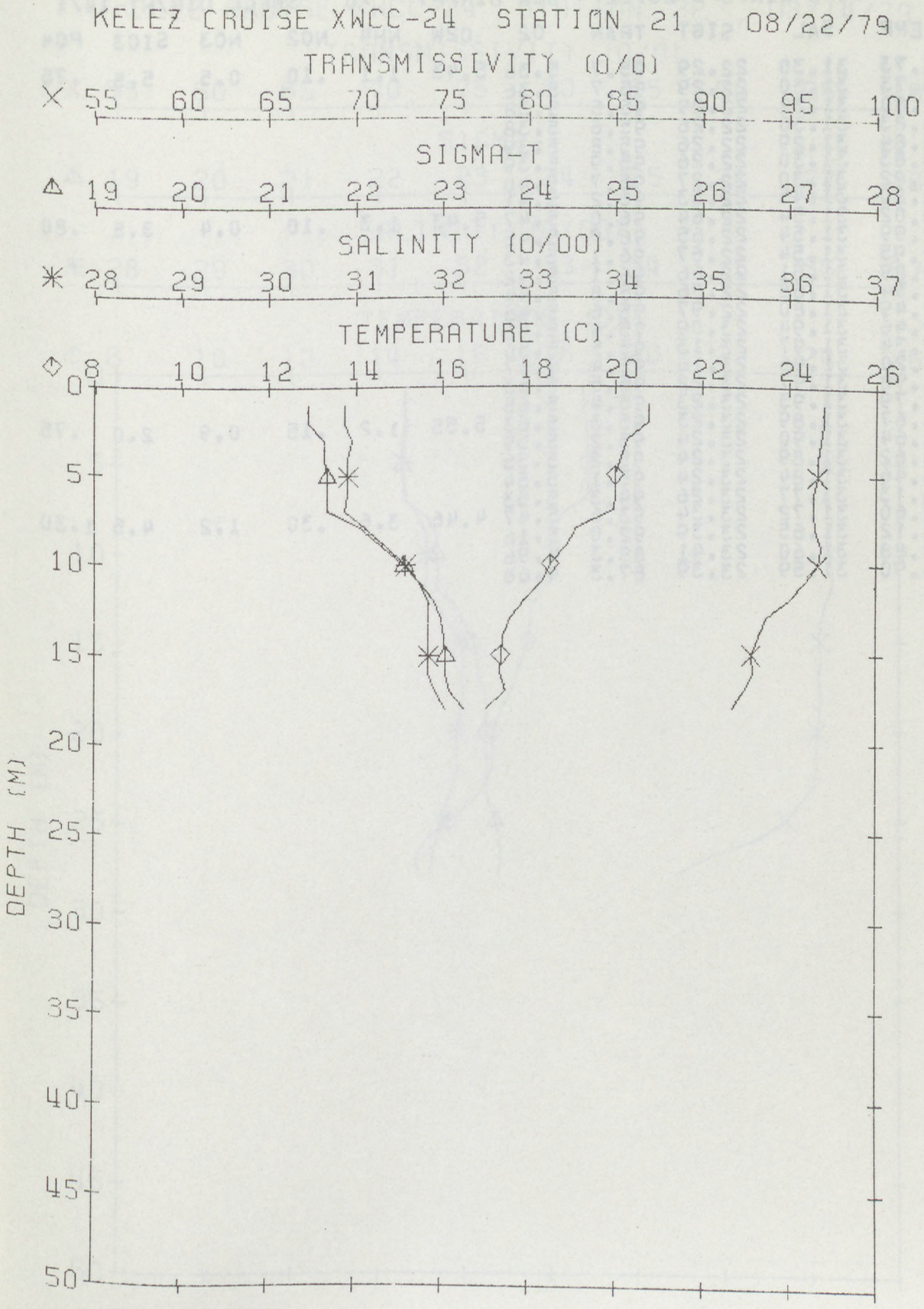
XWCC-24 STA. 21 LAT 40 13.6N; LONG 73 56.2W GMT 02.6 08/18/79
DEPTH 019 AIR D/W 18.9/18.3 BARO 24.0 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 20/10 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.91	30.20	21.16	89.1	7.10	7.52	0.6	.10	0.4	1.5	.30
2	19.91	30.20	21.16	89.1	7.10						
3	19.93	30.20	21.15	89.1	7.12						
4	19.92	30.21	21.16	89.5	7.13						
5	19.92	30.20	21.16	89.5	7.14						
6	19.92	30.20	21.15	89.5	7.14						
7	19.92	30.19	21.15	89.4	7.15						
8	19.91	30.21	21.16	89.6	7.15						
9	19.88	30.21	21.17	89.5	7.14	5.87	3.0	.20	0.4	3.5	.55
10	19.83	30.22	21.19	89.3	7.08						
11	19.65	30.36	21.34	89.0	6.97						
12	19.29	30.74	21.73	86.1	6.74						
13	18.98	30.95	21.96	86.7	6.13						
14	18.58	31.09	22.17	92.4	5.56						
15	18.20	31.18	22.33	94.0	5.22						
16	17.54	31.30	22.58	94.5	5.03						
17	17.07	31.48	22.82	94.8	4.95						
18	16.44	31.66	23.11	94.5	4.91						
19	16.15	31.72	23.22	94.6	4.87	4.57	4.0	.35	0.6	5.0	.90
20	16.00	31.75	23.27	93.4	4.84						


KELEZ CRUISE XWCC-24 STATION 21 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

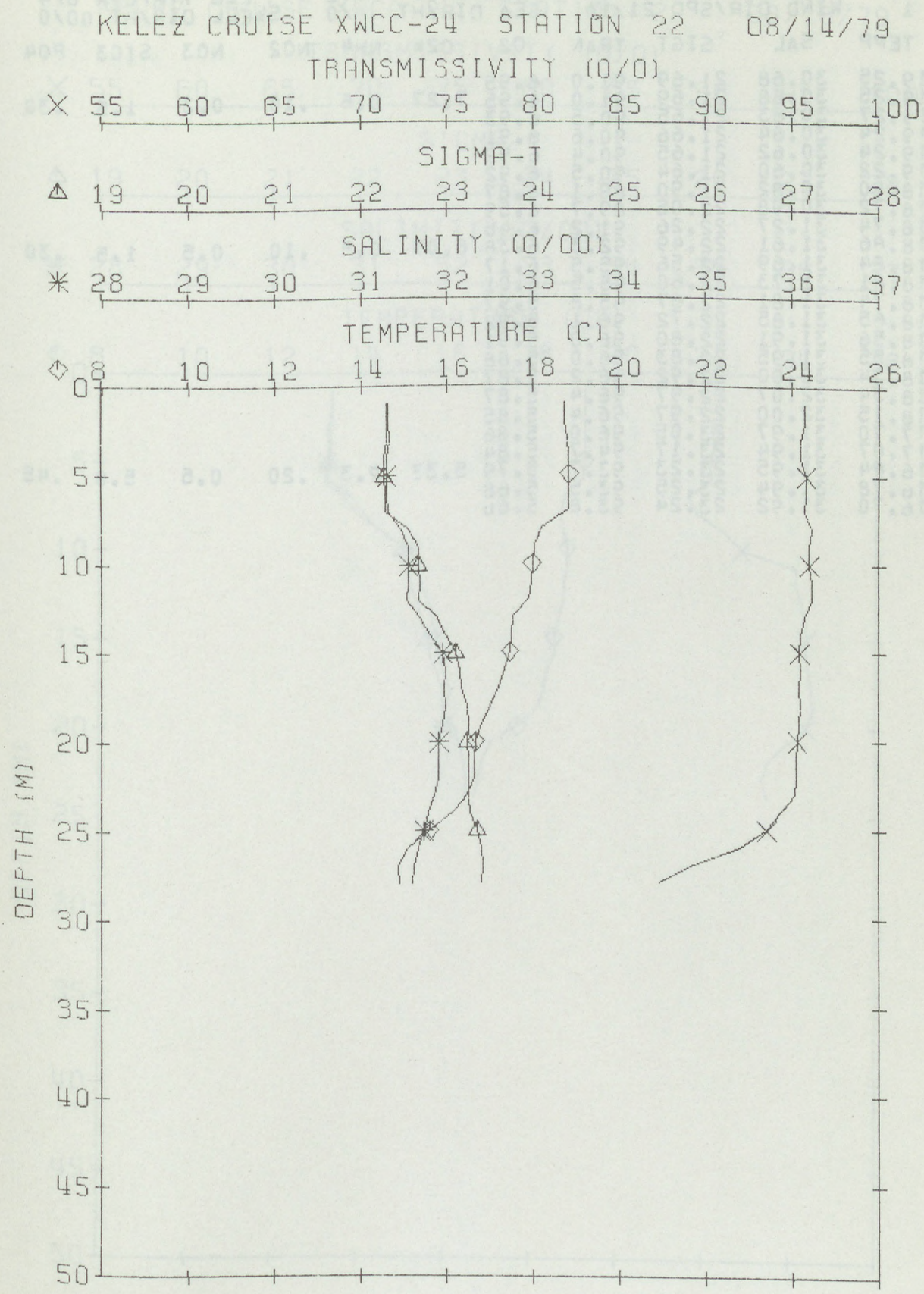
XWCC-24 STA. 21 LAT 40 13.8N; LONG 73 56.0W GMT 18.8 08/22/79
DEPTH 020 AIR D/W 22.2/21.1 BARO 21.0 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 16/10 SEA DIR/HT 18/0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.73	30.87	21.45	97.1	5.91	6.17	0.9	<.10	0.2		.95
2	20.73	30.87	21.45	97.1	5.91						
3	20.23	30.95	21.64	96.8	5.97						
4	20.11	30.90	21.64	96.7	5.97						
5	19.98	30.91	21.67	96.7	5.99						
6	19.99	30.90	21.67	96.5	6.00						
7	19.93	30.87	21.66	96.5	5.99						
8	19.07	31.12	22.07	96.6	6.04						
9	18.86	31.35	22.30	96.9	6.08	5.59	3.2	<.10	0.4		.90
10	18.48	31.57	22.56	96.6	6.03						
11	18.27	31.73	22.73	96.0	5.93						
12	17.87	31.82	22.90	95.0	5.82						
13	17.55	31.84	22.99	93.7	5.67						
14	17.37	31.83	23.02	93.2	5.50						
15	17.34	31.84	23.04	92.8	5.31						
16	17.31	31.83	23.03	92.9	5.12						
17	17.44	31.92	23.07	92.4	4.98	4.19	5.2	<.10	0.3		1.20
18	17.03	32.04	23.26	91.7	4.92						


KELEZ CRUISE XWCC-24 STATION 21 08/22/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

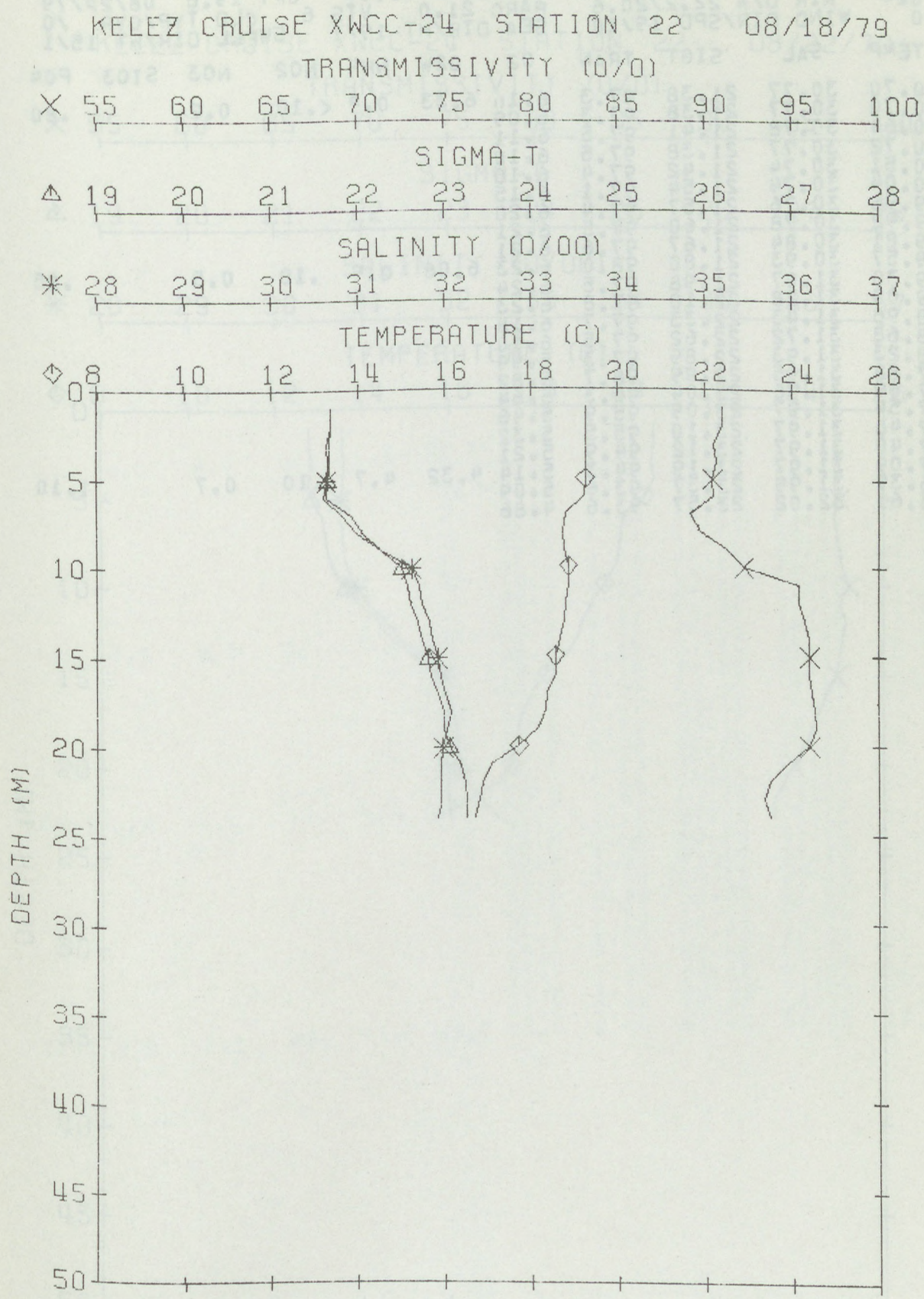
XWCC-24 STA. 22 LAT 40 14.2N; LONG 73 51.5W GMT 03.1 08/14/79
DEPTH 025 AIR D/W 20.0/17.8 BARO 18.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 25/12 SEA DIR/HT /0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.73	31.30	22.29	95.7	5.36	5.43	1.1	.10	0.5	5.5	.75
2	18.73	31.30	22.29	95.7	5.36						
3	18.80	31.32	22.29	95.5	5.38						
4	18.83	31.30	22.26	95.6	5.38						
5	18.84	31.29	22.26	95.8	5.39						
6	18.83	31.30	22.26	95.9	5.39						
7	18.82	31.30	22.27	95.7	5.40						
8	18.20	31.45	22.53	96.2	5.41						
9	18.02	31.54	22.64	96.0	5.47	5.43	1.3	.10	0.4	3.5	.80
10	17.99	31.54	22.65	96.0	5.45						
11	17.95	31.54	22.67	96.1	5.43						
12	17.89	31.51	22.66	96.1	5.42						
13	17.54	31.68	22.86	95.8	5.44						
14	17.49	31.80	22.97	95.6	5.45						
15	17.46	31.94	23.09	95.4	5.45						
16	17.34	31.97	23.13	95.5	5.50						
17	17.20	31.96	23.16	95.4	5.57						
18	16.98	31.97	23.22	95.5	5.63						
19	16.79	31.93	23.23	95.4	5.65						
20	16.67	31.89	23.23	95.3	5.63	5.55	1.2	.15	0.9	2.0	.75
21	16.64	31.90	23.24	95.2	5.59						
22	16.62	31.89	23.24	95.2	5.55						
23	16.46	31.84	23.24	95.1	5.54						
24	16.13	31.77	23.26	94.3	5.53						
25	15.60	31.72	23.34	93.6	5.47	4.46	3.6	.30	1.2	4.5	1.30
26	15.12	31.65	23.39	92.0	5.16						
27	14.88	31.60	23.41	89.3	4.96						
28	14.90	31.59	23.39	87.3	4.68						


KELEZ CRUISE XWCC-24 STATION 22 08/14/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

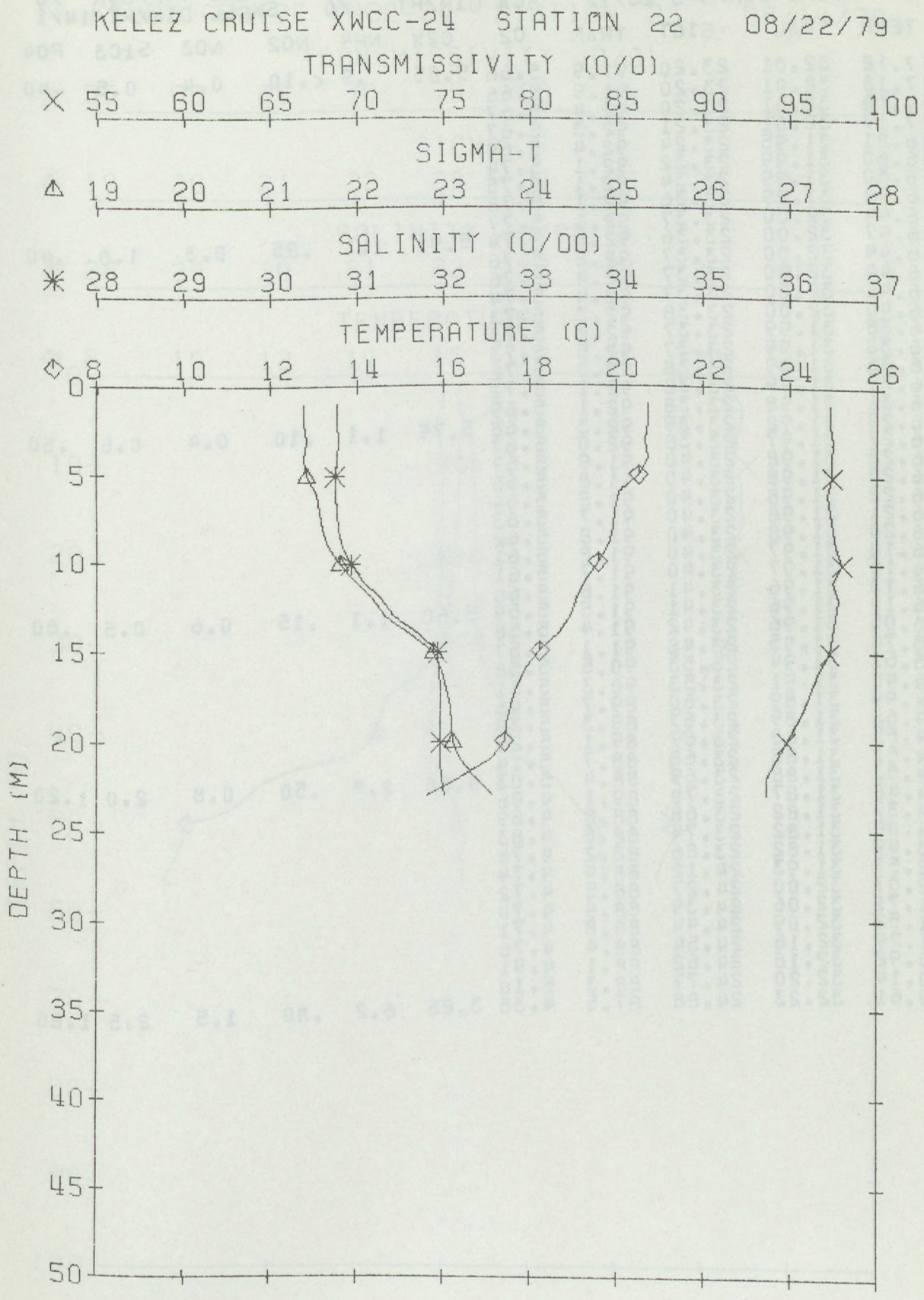
XWCC-24 STA. 22 LAT 40 14.3N; LONG 73 51.0W GMT 01.7 08/18/79
DEPTH 023 AIR D/W . / . BARO 24.0 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 21/10 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.25	30.68	21.69	91.0	6.95						
2	19.25	30.68	21.69	91.0	6.95	7.27	0.6	.10	0.3	1.5	.30
3	19.27	30.63	21.65	90.5	6.93						
4	19.24	30.64	21.66	90.6	6.91						
5	19.24	30.62	21.65	90.4	6.92						
6	19.22	30.60	21.64	90.5	6.92						
7	18.80	30.82	21.90	89.1	6.87						
8	18.72	30.98	22.05	89.7	6.59						
9	18.74	31.27	22.26	91.2	6.45						
10	18.86	31.61	22.49	92.3	6.38	6.09	0.8	.10	0.5	1.5	.30
11	18.84	31.69	22.56	95.5	6.17						
12	18.81	31.73	22.60	95.5	6.01						
13	18.74	31.81	22.67	95.8	5.97						
14	18.65	31.85	22.72	96.1	5.92						
15	18.56	31.91	22.80	96.0	5.91						
16	18.55	31.95	22.83	96.0	5.88						
17	18.34	32.00	22.92	96.2	5.87						
18	18.34	32.07	22.97	96.4	5.87						
19	18.15	32.00	22.97	96.4	5.85						
20	17.70	31.97	23.05	96.0	5.86						
21	17.07	31.94	23.17	94.7	5.84						
22	16.84	31.95	23.23	93.7	5.79	5.33	2.3	.20	0.5	5.0	.45
23	16.78	31.94	23.25	93.5	5.68						
24	16.70	31.92	23.24	93.8	5.60						


KELEZ CRUISE XWCC-24 STATION 22 08/18/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

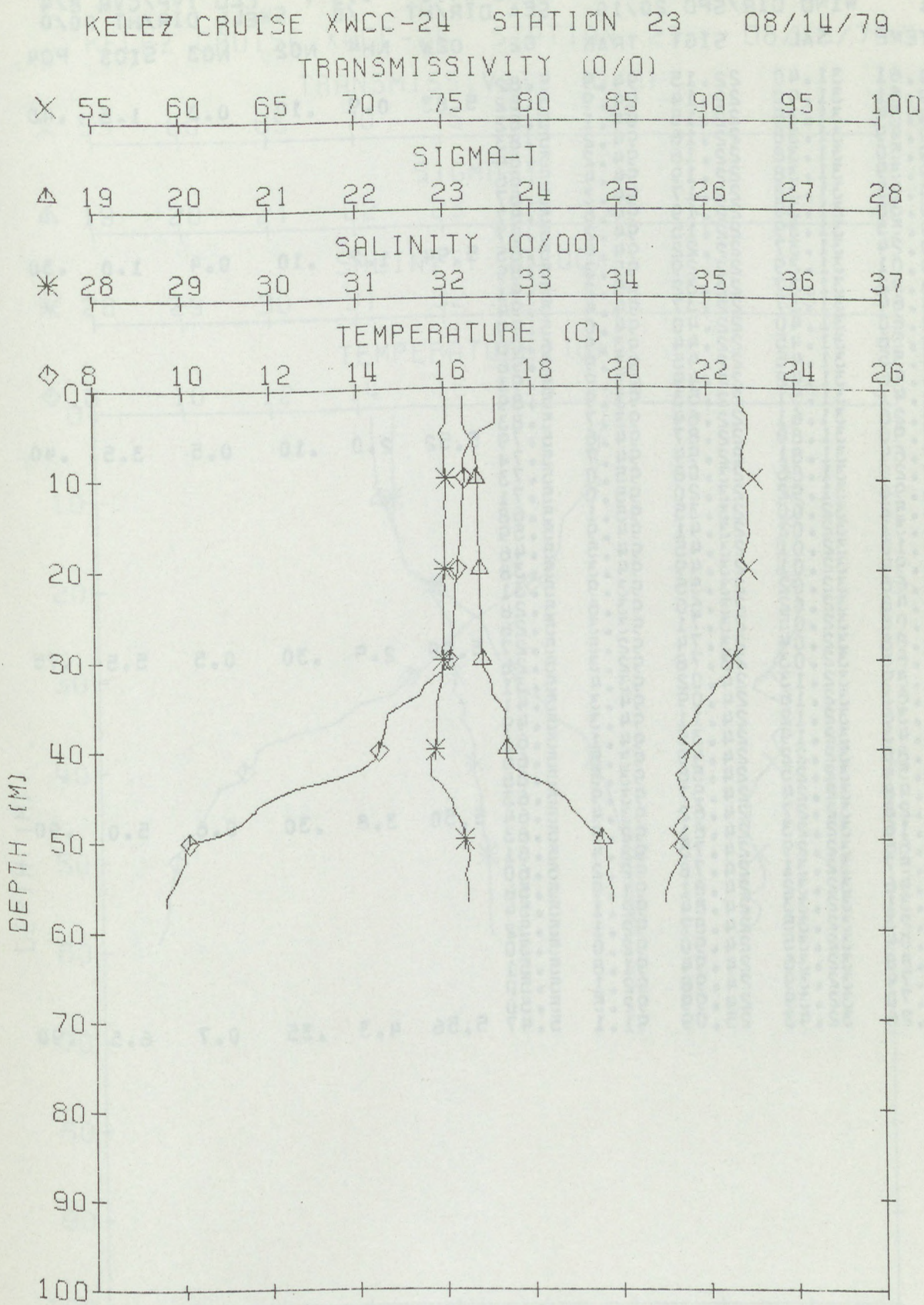
XWCC-24 STA. 22 LAT 40 14.5N; LONG 73 51.3W GMT 19.6 08/22/79
DEPTH 024 AIR D/W 22.2/20.6 BARO 21.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 19/10 SEA DIR/HT 19/1 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.70	30.77	21.38	97.3	6.10	6.33	0.8	<.10	0.2		.80
2	20.70	30.77	21.38	97.3	6.09						
3	20.64	30.78	21.41	97.5	6.11						
4	20.72	30.77	21.38	97.5	6.10						
5	20.51	30.74	21.42	97.4	6.10						
6	20.04	30.74	21.54	97.1	6.15						
7	19.96	30.76	21.57	97.4	6.20						
8	19.92	30.78	21.60	97.5	6.21						
9	19.81	30.84	21.67	97.6	6.21						
10	19.57	30.93	21.80	98.0	6.23	6.06	0.9	.10	0.5		.85
11	19.30	31.07	21.98	97.5	6.24						
12	19.09	31.28	22.18	97.8	6.23						
13	18.96	31.43	22.33	97.7	6.18						
14	18.68	31.72	22.62	97.5	6.10						
15	18.23	31.93	22.89	97.3	5.99						
16	17.88	31.95	22.99	96.7	5.82						
17	17.69	31.96	23.04	96.3	5.64						
18	17.54	31.97	23.09	95.9	5.46						
19	17.46	31.97	23.10	95.5	5.32						
20	17.40	31.97	23.12	94.9	5.21						
21	17.09	31.97	23.19	94.3	5.14	4.32	4.7	.10	0.7		1.10
22	16.39	31.99	23.37	93.6	5.09						
23	15.61	32.02	23.57	93.6	4.86						


KELEZ CRUISE XWCC-24 STATION 22 08/22/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

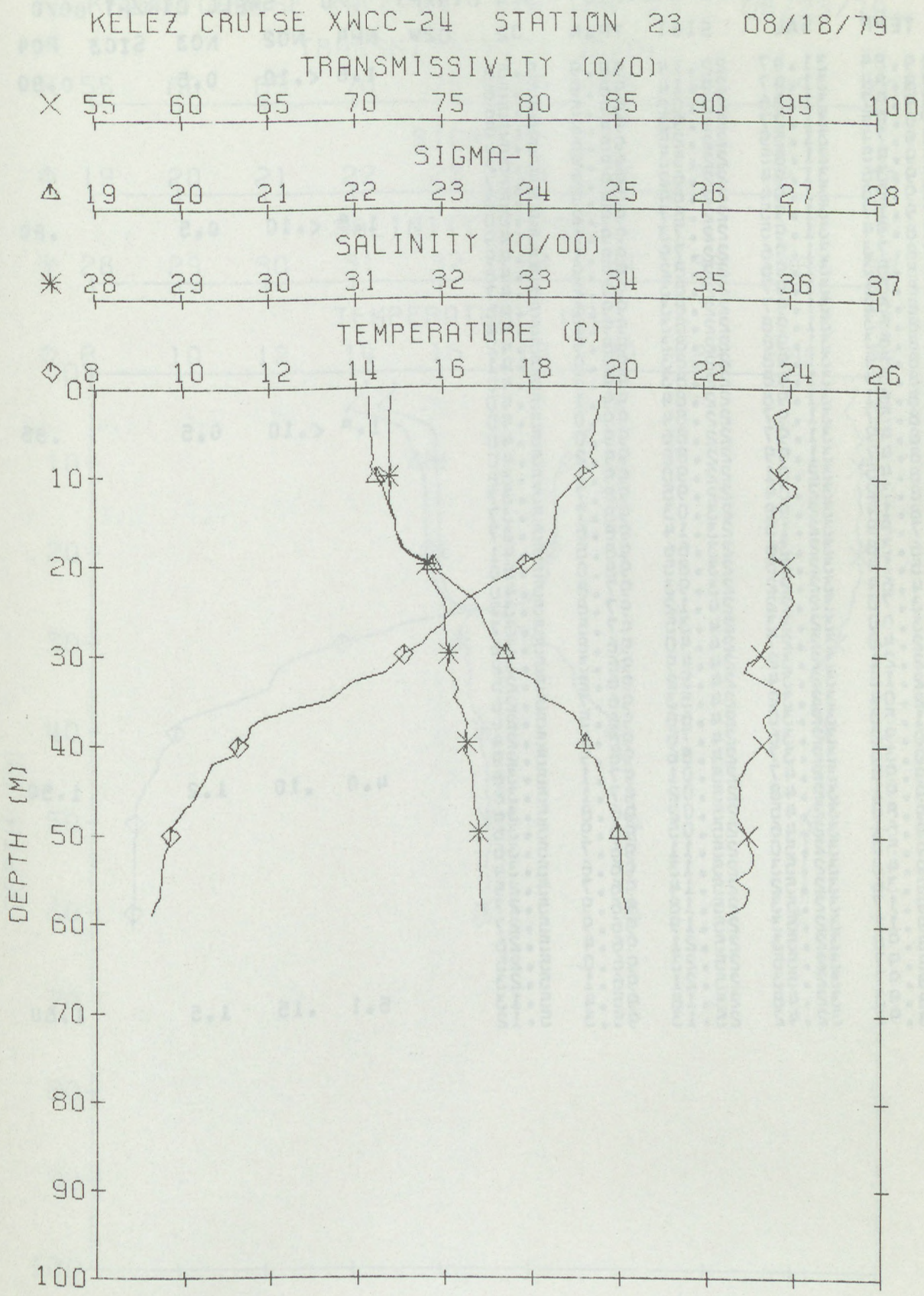
XWCR-24 STA. 23 LAT 40 15.0N; LONG 73 46.3W GMT 04.1 08/14/79
DEPTH 058 AIR D/W . / . BARO 18.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 25/12 SEA DIR/HT /0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	17.18	32.01	23.20	91.9	5.66	5.85	.9	<.10	0.4	0.5	.40
2	17.18	32.01	23.20	91.9	5.66						
3	17.18	32.01	23.20	92.4	5.67						
4	17.17	32.01	23.21	92.3	5.67						
5	16.81	31.95	23.24	92.4	5.69						
6	16.60	31.99	23.32	92.1	5.74						
7	16.50	31.99	23.34	92.1	5.75						
8	16.44	31.99	23.36	92.1	5.76						
9	16.44	32.00	23.37	92.1	5.77						
10	16.47	32.00	23.36	92.6	5.79	5.91	1.1	.25	0.3	1.0	.40
11	16.44	32.00	23.37	92.2	5.76						
12	16.44	32.00	23.37	92.4	5.76						
13	16.41	32.00	23.37	92.4	5.74						
14	16.40	32.00	23.38	92.3	5.73						
15	16.38	31.99	23.37	92.4	5.73						
16	16.38	31.99	23.37	92.5	5.73						
17	16.36	31.99	23.38	92.3	5.72						
18	16.32	31.99	23.38	92.1	5.71						
19	16.31	31.98	23.38	92.1	5.69						
20	16.29	31.98	23.39	92.3	5.68	5.79	1.1	.10	0.4	0.5	.50
21	16.27	31.97	23.38	92.0	5.67						
22	16.23	31.98	23.40	91.9	5.67						
23	16.23	31.98	23.40	91.8	5.65						
24	16.22	31.98	23.40	91.8	5.64						
25	16.21	31.98	23.40	91.7	5.63						
26	16.20	31.98	23.40	91.8	5.62						
27	16.18	31.97	23.40	91.8	5.61						
28	16.16	31.97	23.40	91.7	5.61						
29	16.13	31.96	23.41	91.6	5.60						
30	16.10	31.96	23.41	91.5	5.59	5.60	1.1	.15	0.6	0.5	.60
31	16.05	31.96	23.42	91.4	5.58						
32	15.74	31.95	23.48	91.1	5.57						
33	15.51	31.94	23.53	90.5	5.56						
34	15.40	31.91	23.53	90.3	5.51						
35	14.99	31.89	23.60	89.7	5.45						
36	14.68	31.89	23.67	89.3	5.39						
37	14.65	31.88	23.67	89.1	5.25						
38	14.61	31.88	23.68	88.7	5.14						
39	14.53	31.88	23.69	88.4	5.03	4.66	2.8	.50	0.8	2.0	1.20
40	14.48	31.87	23.70	89.1	4.96						
41	14.37	31.82	23.68	88.8	4.89						
42	14.09	31.82	23.74	88.6	4.83						
43	13.49	31.82	23.86	88.2	4.78						
44	12.57	31.93	24.12	88.4	4.74						
45	12.07	32.00	24.27	88.5	4.72						
46	11.71	32.06	24.39	88.8	4.70						
47	11.52	32.09	24.44	88.8	4.71						
48	11.29	32.16	24.54	88.4	4.76						
49	10.92	32.18	24.62	88.1	4.91						
50	10.14	32.20	24.77	88.3	5.10						
57	9.61	32.23	24.88	87.5	4.35	3.86	6.2	.80	1.5	2.5	1.80


KELEZ CRUISE XWCC-24 STATION 23 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

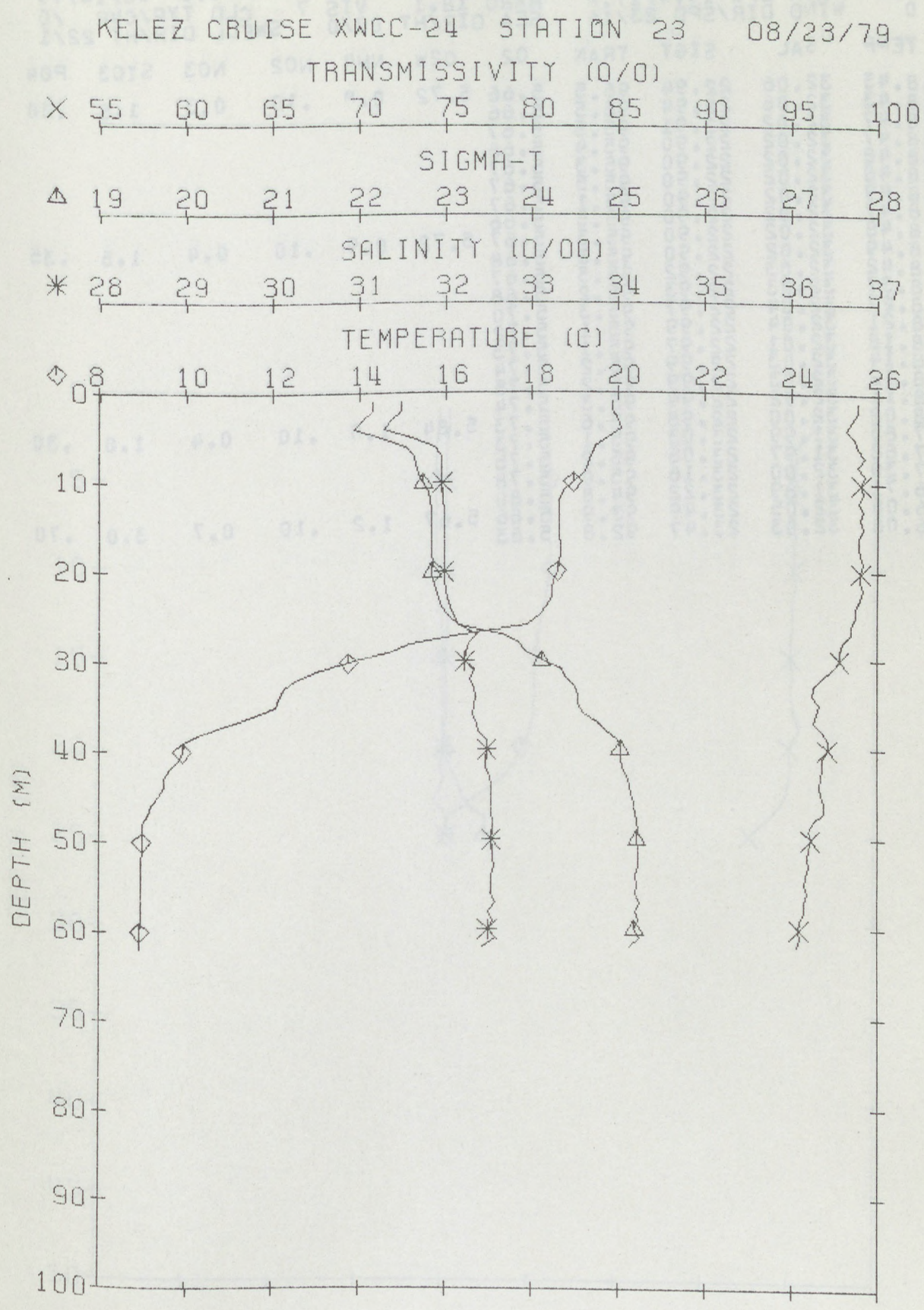
XWCC-24 STA. 23 LAT 40 15.3N; LONG 73 46.7W GMT 00.5 08/18/79
DEPTH 057 AIR D/W 18.9/18.9 BARO 24.0 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 20/10 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.61	31.40	22.15	94.9	5.82						
2	19.61	31.40	22.14	94.9	5.82	5.83	0.9	.10	0.3	1.5	.40
3	19.54	31.38	22.15	94.1	5.82						
4	19.49	31.38	22.16	94.2	5.83						
5	19.50	31.38	22.16	94.2	5.84						
6	19.39	31.38	22.19	94.4	5.86						
7	19.45	31.38	22.17	94.3	5.87						
8	19.38	31.39	22.19	94.6	5.87						
9	19.55	31.39	22.15	94.2	5.87						
10	19.24	31.37	22.22	94.4	5.85	5.94	1.2	.10	0.4	1.0	.30
11	19.01	31.39	22.29	95.3	5.89						
12	18.82	31.37	22.32	95.2	5.91						
13	18.64	31.37	22.37	94.4	5.94						
14	18.60	31.40	22.40	94.0	5.99						
15	18.56	31.45	22.44	93.9	6.00						
16	18.55	31.45	22.45	93.9	5.96						
17	18.46	31.48	22.49	93.9	5.93						
18	18.41	31.51	22.53	93.9	5.89						
19	18.26	31.61	22.64	93.7	5.83						
20	17.90	31.80	22.87	94.6	5.79	5.52	2.0	.10	0.5	3.5	.40
21	17.64	31.81	22.94	94.7	5.74						
22	17.20	31.86	23.08	95.0	5.73						
23	16.90	31.92	23.20	95.0	5.71						
24	16.52	32.00	23.35	95.1	5.68						
25	16.31	32.02	23.41	94.9	5.59						
26	16.10	32.01	23.45	94.5	5.46						
27	15.94	32.01	23.49	94.3	5.38						
28	15.66	32.02	23.55	93.9	5.31						
29	15.48	32.02	23.60	93.6	5.28						
30	15.08	32.05	23.71	93.3	5.26						
31	14.88	32.04	23.74	92.5	5.27	5.29	2.9	.30	0.5	5.5	.75
32	14.65	32.03	23.78	92.3	5.25						
33	13.89	32.13	24.02	93.4	5.31						
34	13.63	32.16	24.09	94.3	5.41						
35	13.36	32.12	24.11	94.3	5.49						
36	12.43	32.19	24.35	94.1	5.61						
37	11.80	32.22	24.49	93.5	5.66						
38	11.54	32.25	24.56	93.5	5.65						
39	11.48	32.24	24.57	93.9	5.63						
40	11.28	32.27	24.62	93.4	5.64	5.50	3.8	.30	0.6	5.0	.90
41	11.16	32.23	24.61	92.9	5.63						
42	10.66	32.29	24.75	92.4	5.61						
43	10.57	32.31	24.78	92.2	5.60						
44	10.46	32.32	24.81	91.9	5.56						
45	10.31	32.33	24.84	92.1	5.54						
46	10.23	32.35	24.87	92.1	5.52						
47	10.04	32.35	24.90	92.0	5.50						
48	9.88	32.36	24.94	91.8	5.51						
49	9.74	32.39	24.98	92.1	5.50						
50	9.70	32.39	24.99	92.5	5.50						
59	9.26	32.43	25.09	91.1	5.47	5.56	4.3	.35	0.7	6.5	.90


KELEZ CRUISE XWCC-24 STATION 23 08/18/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

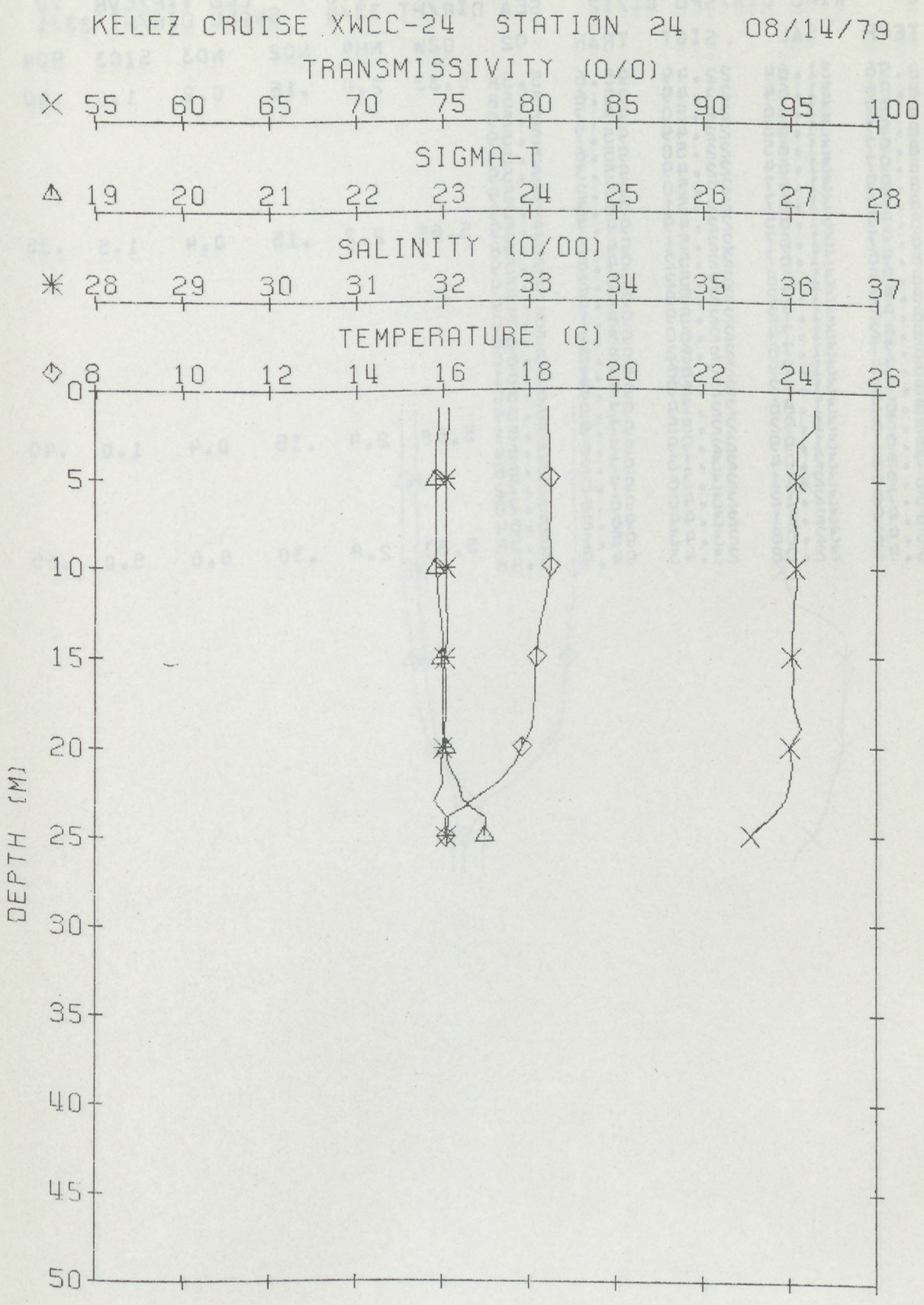
XWCC-24 STA. 23 LAT 40 14.8N; LONG 73 46.8W GMT 02.8 08/23/79
DEPTH 061 AIR D/W 21.1/20.6 BARO 21.0 VIS 7 CLD TYP/CVR X/4
WETHR 4 WIND DIR/SPD 19/15 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.84	31.47	22.14	98.9	5.58		1.6	<.10	0.5		0.80
2	19.84	31.47	22.14	98.9	5.58						
3	19.97	31.36	22.02	98.5	5.56						
4	20.05	31.27	21.93	98.2	5.55						
5	19.74	31.59	22.25	98.6	5.60						
6	19.45	31.85	22.53	98.8	5.62						
7	19.36	31.94	22.62	99.2	5.57						
8	19.28	31.94	22.64	98.9	5.53						
9	19.17	31.95	22.67	99.2	5.50		1.8	<.10	0.5		.80
10	18.94	31.95	22.73	99.1	5.49						
11	18.73	31.96	22.79	99.1	5.49						
12	18.63	31.96	22.82	98.9	5.48						
13	18.61	31.97	22.83	99.2	5.47						
14	18.62	31.97	22.83	99.1	5.45						
15	18.63	31.98	22.83	99.1	5.44						
16	18.63	31.98	22.83	98.9	5.42						
17	18.64	31.98	22.83	99.0	5.41						
18	18.64	31.98	22.83	99.0	5.40						
19	18.61	31.98	22.84	99.1	5.40						
20	18.57	31.97	22.84	99.0	5.40		1.8	<.10	0.5		.85
21	18.49	31.97	22.86	99.0	5.40						
22	18.47	31.99	22.88	99.2	5.40						
23	18.45	32.01	22.90	99.1	5.38						
24	18.32	32.04	22.95	98.7	5.37						
25	18.14	32.08	23.03	98.7	5.37						
26	17.89	32.15	23.14	98.6	5.37						
27	16.38	32.36	23.66	98.5	5.41						
28	15.14	32.25	23.85	98.0	5.50						
29	14.64	32.22	23.93	97.8	5.40						
30	13.73	32.22	24.12	97.8	5.37						
31	13.00	32.33	24.35	97.5	5.37						
32	12.48	32.27	24.40	96.8	5.36						
33	12.21	32.32	24.49	96.3	5.32						
34	12.12	32.34	24.52	96.2	5.25						
35	12.04	32.32	24.53	96.7	5.20						
36	11.53	32.30	24.60	96.5	5.20						
37	10.92	32.36	24.76	96.4	5.24						
38	10.35	32.37	24.86	96.9	5.29						
39	9.95	32.47	25.01	97.1	5.38		4.0	.10	1.2		1.50
40	9.91	32.48	25.02	97.1	5.38						
41	9.80	32.45	25.02	96.8	5.36						
42	9.61	32.46	25.05	96.9	5.36						
43	9.50	32.50	25.11	96.7	5.36						
44	9.48	32.53	25.13	96.6	5.34						
45	9.36	32.52	25.14	96.7	5.29						
46	9.17	32.53	25.18	96.9	5.27						
47	9.11	32.53	25.19	96.9	5.27						
48	8.98	32.53	25.21	96.4	5.26						
49	8.97	32.55	25.23	96.0	5.25						
50	8.97	32.53	25.21	96.1	5.23						
60	8.93	32.48	25.18	95.4	5.13		5.1	.15	1.5		1.60
62	8.91	32.42	25.13	95.3	5.12						


KELEZ CRUISE XWCC-24 STATION 23 08/23/79
TRANSMISSIVITY (O/O)
X 55 60 65 70 75 80 85 90 95 100
SIGMA-T
Δ 19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
✳ 28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
◇ 8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

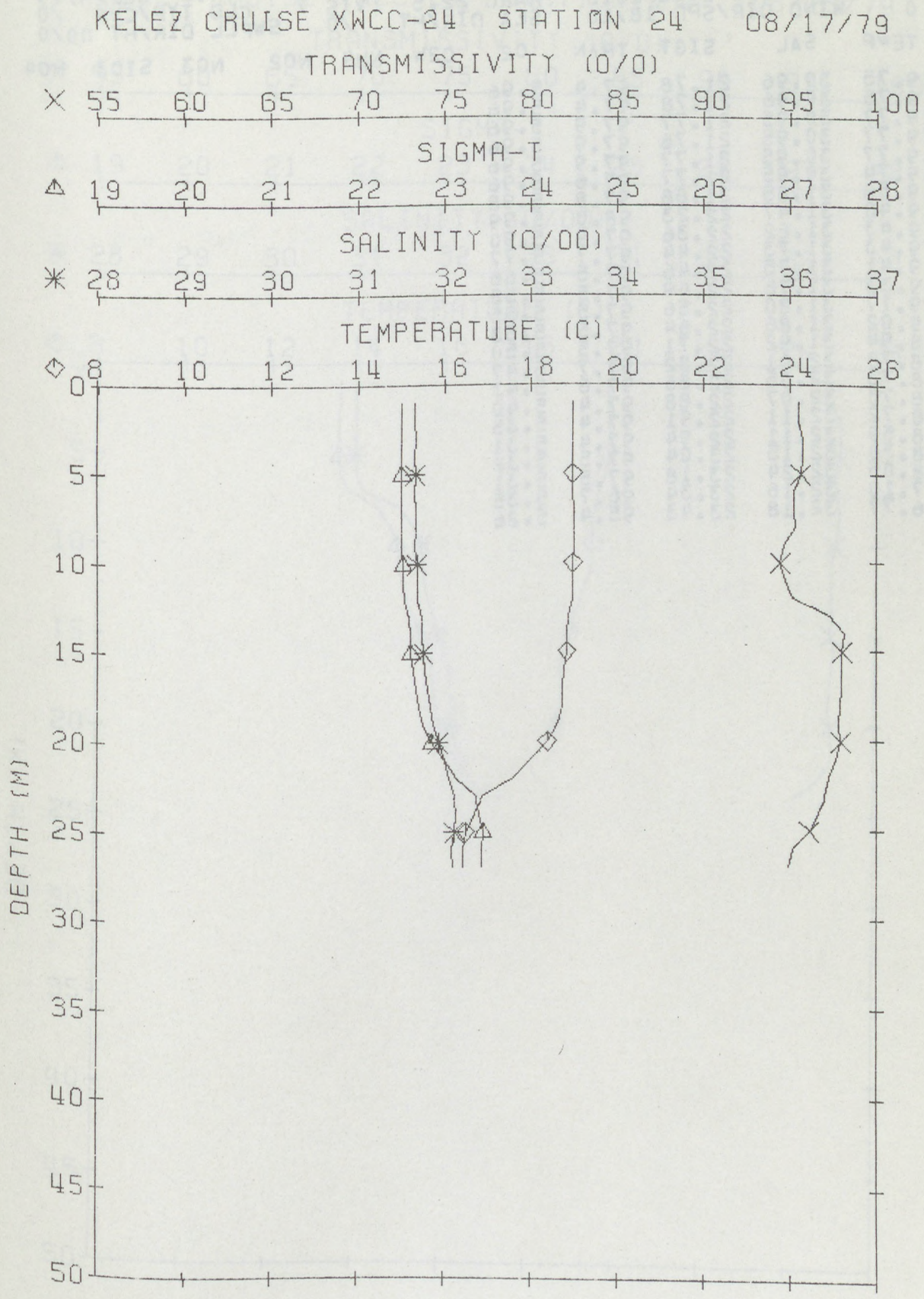
XWCC-24 STA. 24 LAT 40 15.9N; LONG 73 36.0W GMT 08.8 08/14/79
DEPTH 026 AIR D/W 19.4/17.8 BARO 18.1 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 23/16 SEA DIR/HT 00/0 SWELL DIR/HT 22/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.43	32.06	22.94	96.5	5.66	5.72	0.8	.10	0.3	1.5	.30
2	18.43	32.06	22.94	96.5	5.66						
3	18.47	32.02	22.91	95.5	5.67						
4	18.47	32.02	22.90	95.4	5.66						
5	18.48	32.02	22.90	95.3	5.67						
6	18.48	32.02	22.90	95.5	5.67						
7	18.49	32.02	22.90	95.1	5.67						
8	18.47	32.02	22.90	95.5	5.66						
9	18.48	32.02	22.90	95.3	5.67	5.72	0.9	.10	0.4	1.5	.35
10	18.49	32.02	22.90	95.3	5.68						
11	18.42	32.03	22.92	95.5	5.67						
12	18.37	32.03	22.93	95.2	5.68						
13	18.27	32.04	22.97	95.3	5.70						
14	18.21	32.04	22.99	95.1	5.72						
15	18.18	32.01	22.97	95.1	5.73						
16	18.14	32.03	22.99	95.2	5.74						
17	18.12	32.03	22.99	95.2	5.75						
18	18.11	32.02	22.99	95.3	5.74						
19	18.08	32.00	22.98	95.6	5.73	5.84	1.0	.10	0.4	1.0	.30
20	17.85	31.99	23.03	95.1	5.73						
21	17.68	31.97	23.05	95.2	5.75						
22	17.30	32.00	23.16	95.0	5.78						
23	16.71	31.89	23.22	94.8	5.80						
24	16.08	32.05	23.49	93.9	5.86	5.67	1.2	.10	0.7	3.0	.70
25	16.08	32.03	23.47	92.8	5.83						


KELEZ CRUISE XWCC-24 STATION 24 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

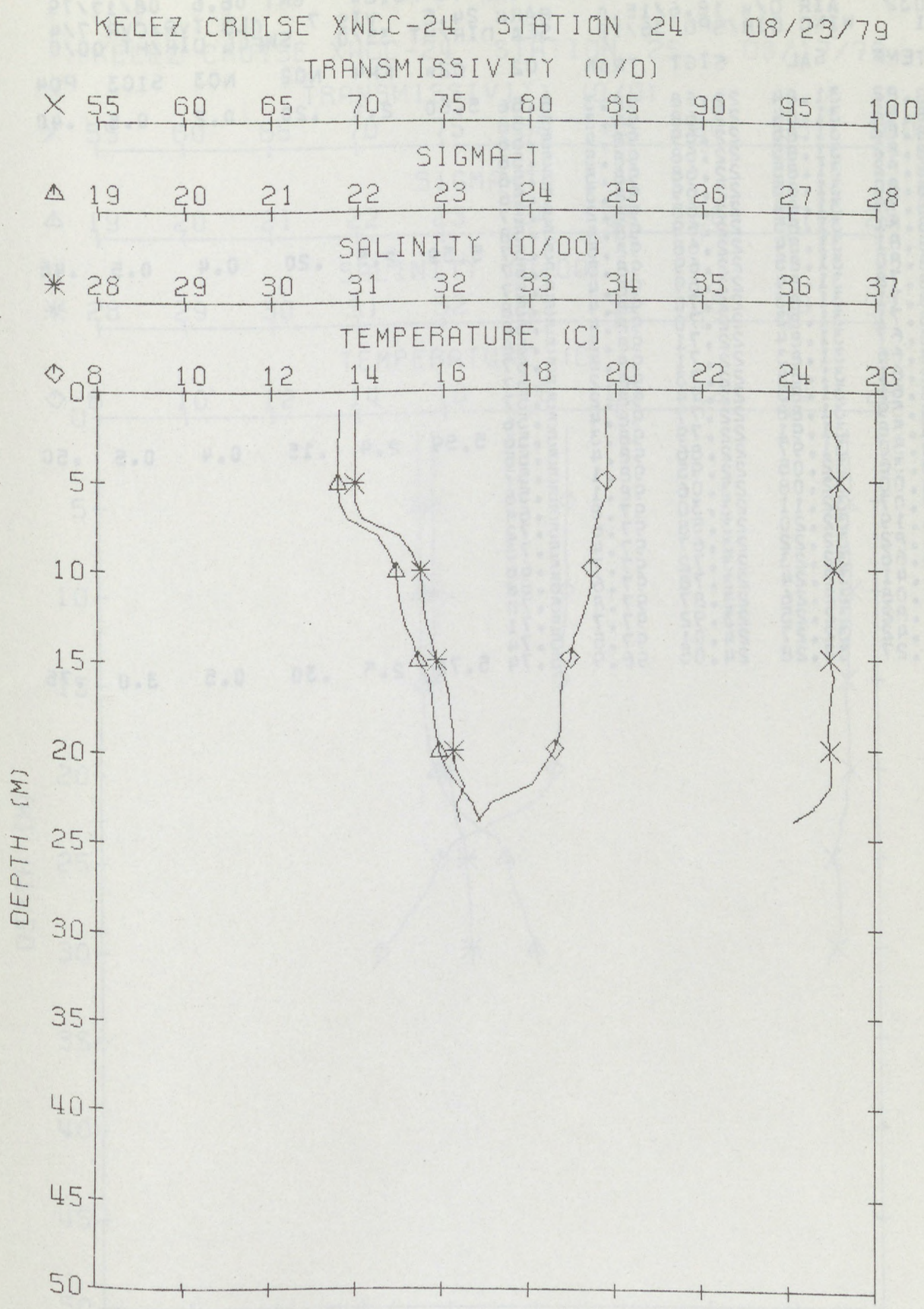
XWCC-24 STA. 24 LAT 40 15.9N; LONG 73 36.9W GMT 07.8 08/17/79
DEPTH 028 AIR D/W 18.3/13.9 BARO 24.1 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 01/12 SEA DIR/HT 33/0 SWELL DIR/HT 33/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.96	31.64	22.49	95.6	5.58	5.33	2.0	.15	0.2	1.0	.40
2	18.96	31.64	22.49	95.6	5.58						
3	18.97	31.66	22.50	95.7	5.59						
4	18.97	31.65	22.49	95.7	5.59						
5	18.97	31.65	22.50	95.6	5.59						
6	18.97	31.64	22.49	95.3	5.59						
7	18.99	31.67	22.50	95.2	5.59						
8	18.98	31.67	22.51	95.3	5.59						
9	18.99	31.65	22.49	94.7	5.59	5.65	2.2	.15	0.4	1.5	.35
10	18.97	31.67	22.51	94.5	5.58						
11	18.96	31.67	22.52	94.8	5.59						
12	18.96	31.68	22.52	95.2	5.59						
13	18.85	31.72	22.58	97.3	5.59						
14	18.82	31.72	22.59	98.1	5.60						
15	18.82	31.74	22.60	98.1	5.60						
16	18.77	31.76	22.63	98.0	5.60						
17	18.74	31.79	22.66	98.1	5.61						
18	18.72	31.82	22.69	97.9	5.60						
19	18.62	31.86	22.74	97.9	5.59						
20	18.38	31.92	22.85	97.9	5.61	5.68	2.4	.15	0.4	1.0	.40
21	18.01	31.99	22.99	97.6	5.64						
22	17.60	32.04	23.13	97.2	5.66						
23	16.86	32.11	23.36	97.0	5.72						
24	16.70	32.12	23.40	96.6	5.70						
25	16.49	32.11	23.44	96.2	5.64						
26	16.42	32.08	23.43	95.1	5.58	5.33	2.8	.30	0.6	5.0	.65
27	16.43	32.08	23.43	94.9	5.48						


KELEZ CRUISE XWCC-24 STATION 24 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

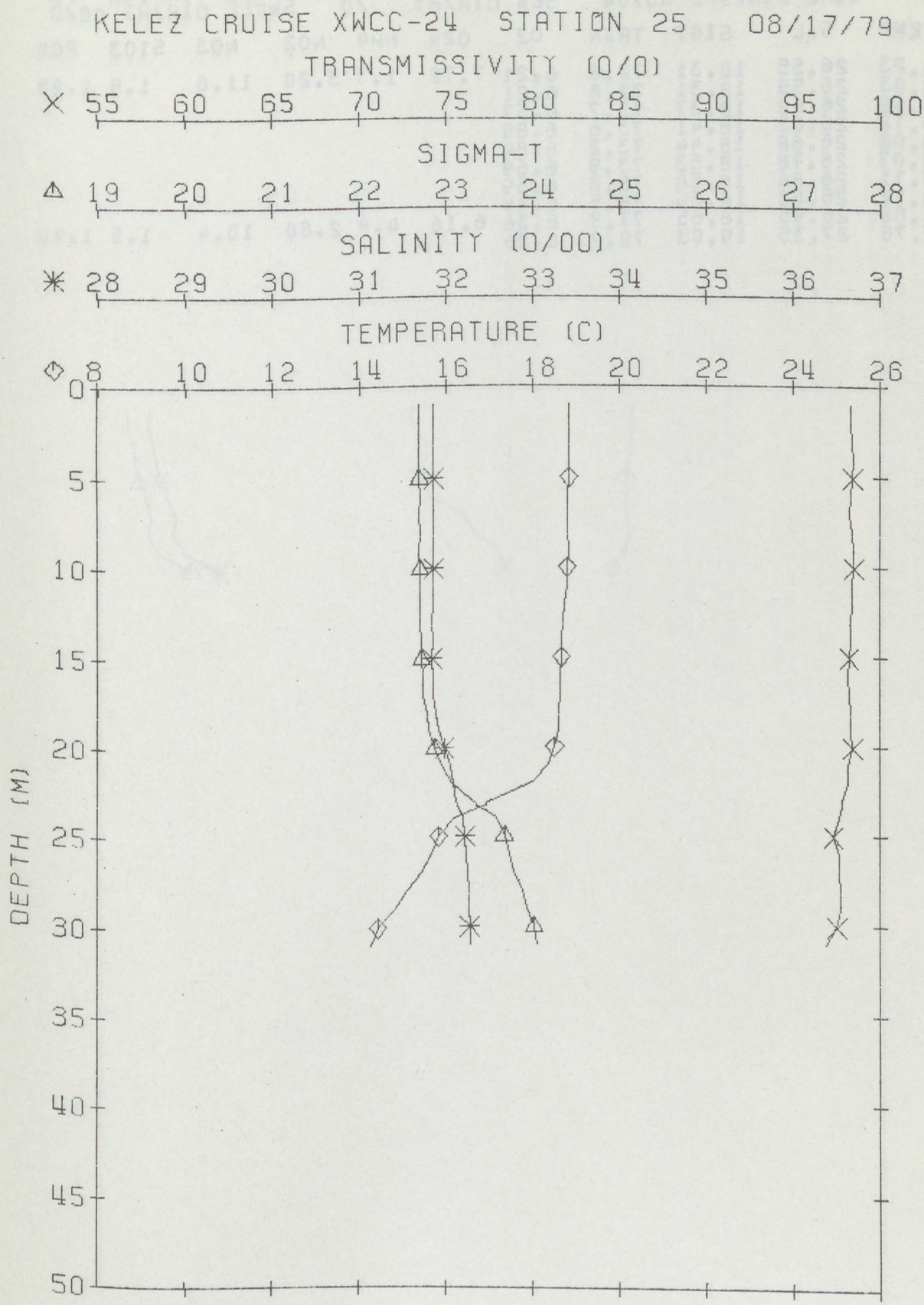
XWCC-24 STA. 24 LAT 40 15.8N ; LONG 73 36.8W GMT 04.2 08/23/79
DEPTH 025 AIR D/W 20.6/20.6 BARO 22.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 18/10 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.75	30.96	21.78	97.4	5.96						
2	19.75	30.96	21.78	97.4	5.96						
3	19.77	30.95	21.77	97.9	5.96						
4	19.77	30.95	21.76	97.9	5.96						
5	19.77	30.95	21.77	97.9	5.96						
6	19.74	30.95	21.77	97.6	5.96						
7	19.58	31.05	21.88	97.8	5.98						
8	19.48	31.47	22.23	98.0	5.99						
9	19.43	31.62	22.36	97.9	5.90						
10	19.43	31.73	22.44	97.7	5.77						
11	19.41	31.75	22.46	97.5	5.66						
12	19.33	31.76	22.49	97.5	5.58						
13	19.17	31.80	22.56	97.5	5.55						
14	19.02	31.86	22.64	97.5	5.53						
15	18.94	31.92	22.71	97.5	5.50						
16	18.78	32.01	22.82	97.7	5.47						
17	18.73	32.05	22.86	97.6	5.43						
18	18.73	32.07	22.88	97.4	5.40						
19	18.72	32.11	22.91	97.4	5.35						
20	18.59	32.11	22.94	97.4	5.31						
21	18.30	32.15	23.04	97.5	5.32						
22	18.05	32.24	23.18	97.5	5.31						
23	17.10	32.16	23.34	96.7	5.36						
24	16.77	32.18	23.43	95.4	5.26						


KELEZ CRUISE XWCC-24 STATION 24 08/23/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

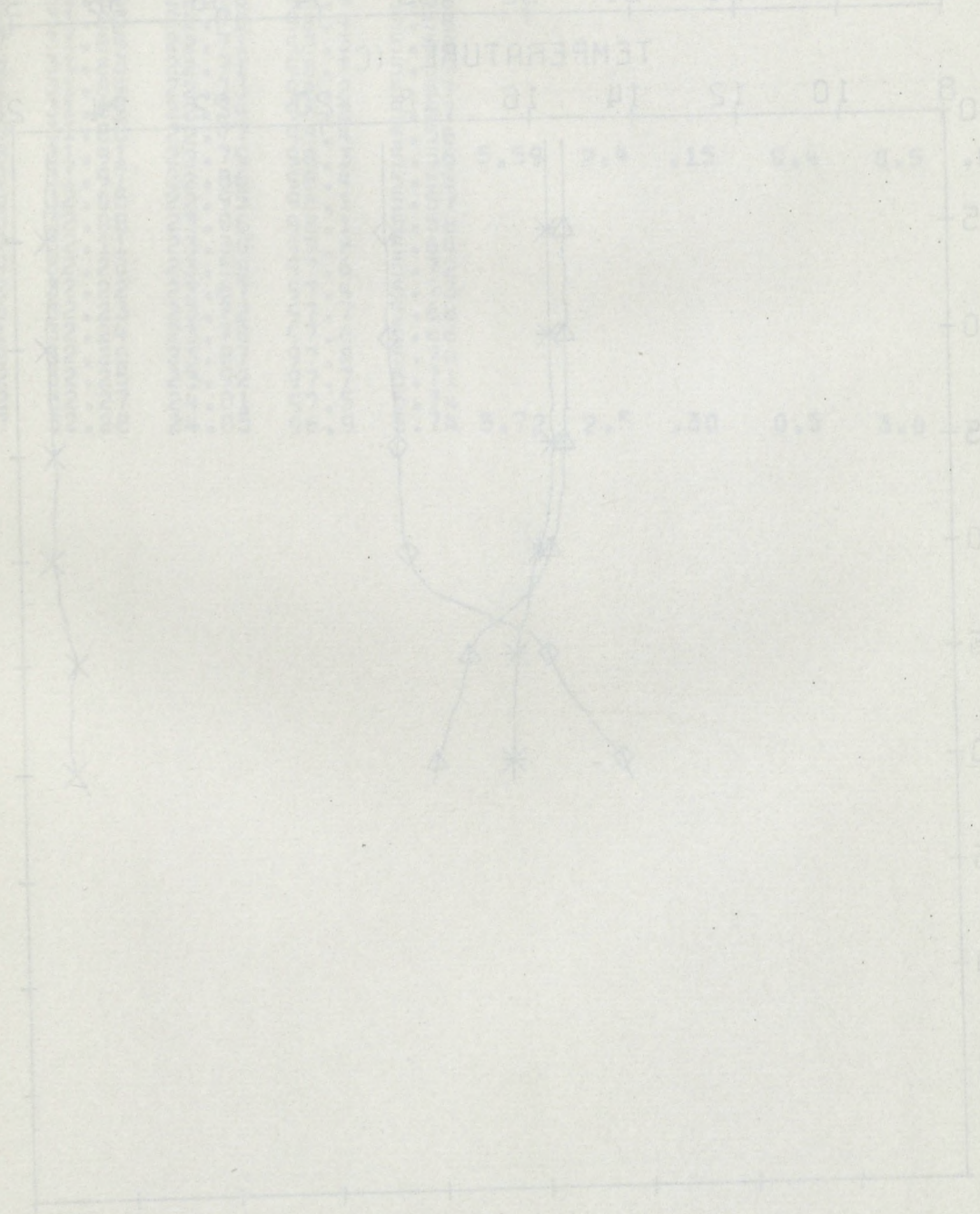
XWCC-24 STA. 25 LAT 40 17.0N; LONG 73 28.8W GMT 06.6 08/17/79
DEPTH 032 AIR D/W 18.6/15.0 BARO 24.5 VIS 7 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 36/18 SEA DIR/HT 35/0 SWELL DIR/HT 00/0

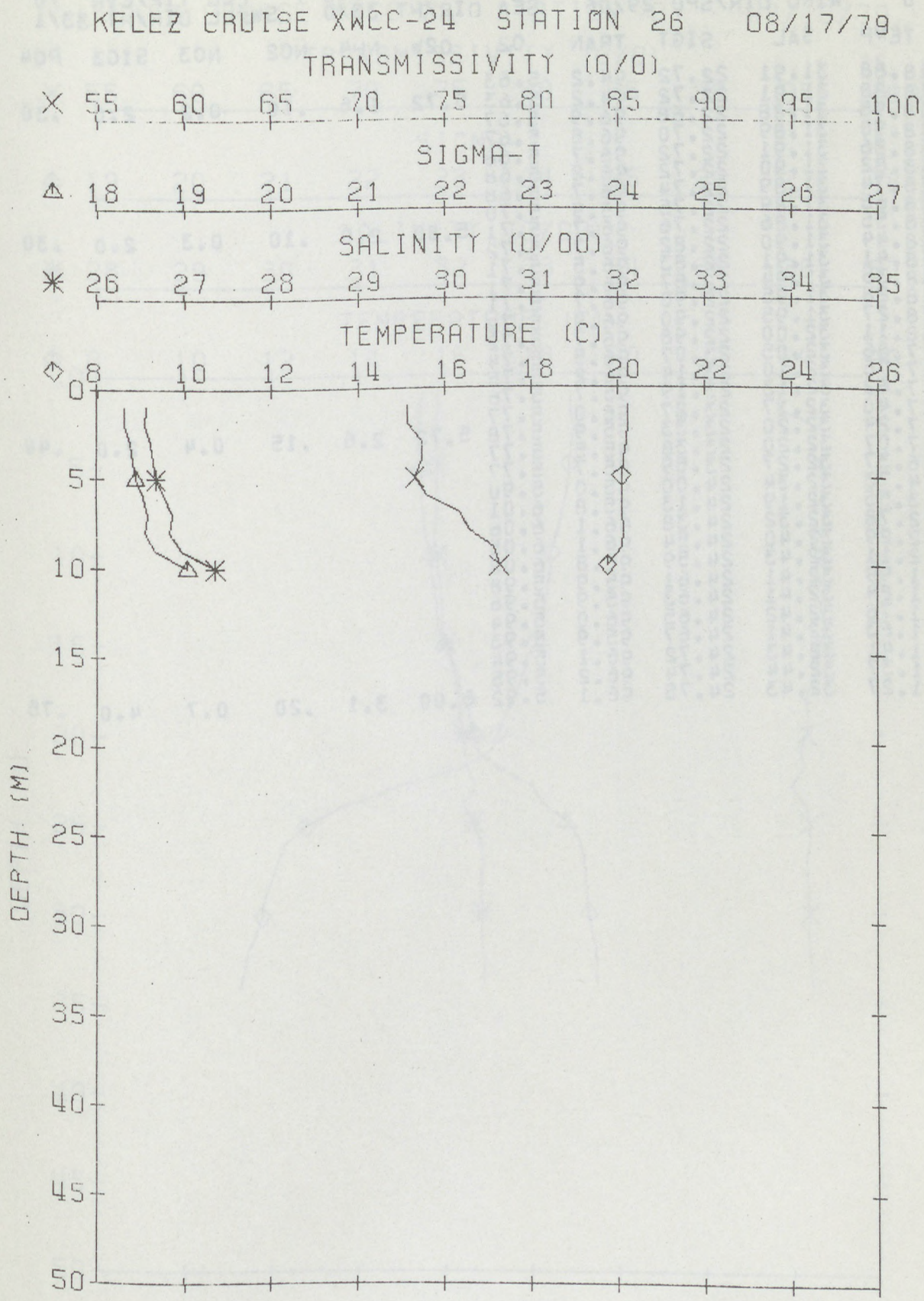
DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.82	31.84	22.68	98.3	5.56	5.60	2.1	.20	0.2	0.5	.40
2	18.82	31.84	22.68	98.3	5.56						
3	18.82	31.85	22.69	98.4	5.56						
4	18.82	31.85	22.68	98.5	5.56						
5	18.82	31.85	22.68	98.5	5.56						
6	18.80	31.85	22.69	98.3	5.56						
7	18.79	31.84	22.68	98.2	5.57						
8	18.81	31.85	22.69	98.4	5.58						
9	18.81	31.84	22.68	98.5	5.57	5.59	2.5	.20	0.4	0.5	.45
10	18.80	31.85	22.69	98.5	5.57						
11	18.78	31.84	22.69	98.4	5.57						
12	18.71	31.83	22.70	98.4	5.58						
13	18.71	31.83	22.70	98.4	5.58						
14	18.67	31.84	22.71	98.3	5.58						
15	18.66	31.83	22.71	98.3	5.57						
16	18.61	31.84	22.73	98.2	5.57						
17	18.61	31.85	22.74	98.2	5.57						
18	18.59	31.88	22.77	98.4	5.56						
19	18.58	31.91	22.79	98.3	5.56	5.59	2.4	.15	0.4	0.5	.50
20	18.50	31.97	22.86	98.4	5.55						
21	18.36	32.05	22.95	98.1	5.57						
22	18.00	32.08	23.06	98.1	5.58						
23	17.07	32.11	23.30	97.8	5.64						
24	16.19	32.20	23.58	97.6	5.72						
25	15.82	32.22	23.67	97.4	5.73						
26	15.66	32.23	23.72	97.7	5.68						
27	15.41	32.24	23.78	97.6	5.68						
28	15.08	32.26	23.87	97.8	5.70						
29	14.82	32.25	23.92	97.7	5.71						
30	14.42	32.27	24.01	97.5	5.74						
31	14.27	32.28	24.05	96.9	5.74	5.72	2.5	.30	0.5	3.0	.75


KELEZ CRUISE XWCC-24 STATION 25 08/17/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

XWCC-24 STA. 26 LAT 40 29.2N; LONG 73 59.6W GMT 16.9 08/17/79
DEPTH 012 AIR D/W 21.7/16.1 BARO 26.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 33/04 SEA DIR/HT /0 SWELL DIR/HT 00/0

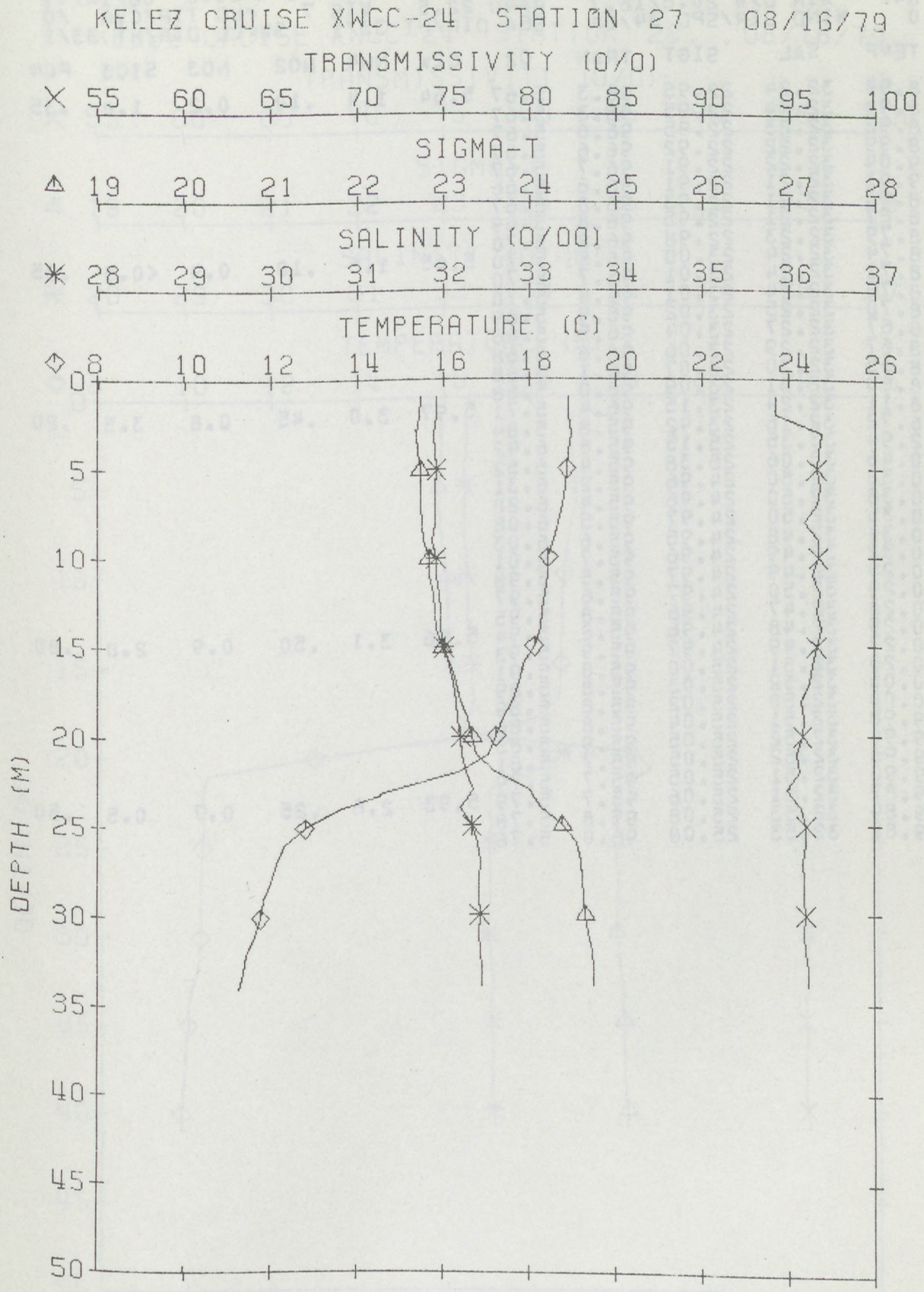
DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.23	26.55	18.31	72.8	6.21	7.72	1.3	3.20	11.8	1.5	1.25
2	20.23	26.55	18.31	72.8	6.21						
3	20.18	26.62	18.37	73.7	6.57						
4	20.12	26.65	18.41	73.6	6.89						
5	20.08	26.68	18.44	73.2	6.84						
6	20.07	26.78	18.53	73.9	6.69						
7	20.11	26.86	18.58	75.8	6.59						
8	20.12	26.83	18.55	76.5	6.44						
9	20.08	26.95	18.65	77.9	6.36	6.16	4.8	2.80	10.4	1.5	1.40
10	19.76	27.35	19.03	78.2	6.26						




KELEZ CRUISE XWCC-24 STATION 26 08/17/79
TRANSMISSIVITY (0/0)
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)
26 27 28 29 30 31 32 33 34 35
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

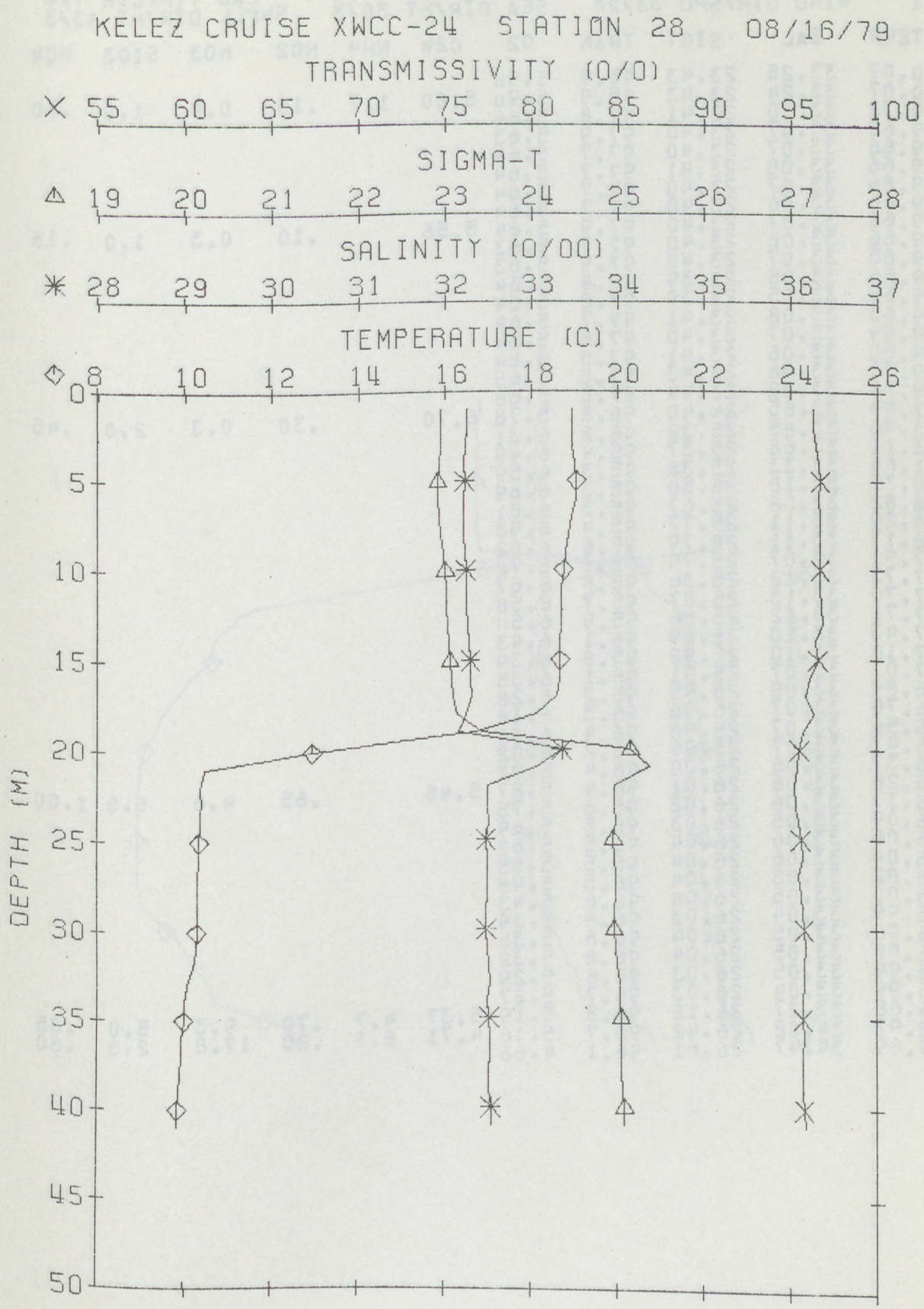
XWCC-24 STA. 27 LAT 40 17.7N; LONG 73 17.7W GMT 21.5 08/16/79
DEPTH 036 AIR D/W 21.1/17.2 BARO 22.1 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 29/06 SEA DIR/HT 33/0 SWELL DIR/HT 33/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.88	31.91	22.72	94.2	5.63						
2	18.88	31.91	22.72	94.2	5.63	5.72	1.6	.10	0.2	2.0	.30
3	18.95	31.88	22.68	96.9	5.67						
4	18.90	31.89	22.70	96.8	5.67						
5	18.86	31.91	22.72	96.7	5.68						
6	18.82	31.90	22.72	96.8	5.68						
7	18.74	31.89	22.74	96.7	5.68						
8	18.65	31.89	22.75	96.9	5.70						
9	18.55	31.86	22.76	96.7	5.71	5.80	2.0	.10	0.3	2.0	.30
10	18.44	31.90	22.82	96.7	5.72						
11	18.41	31.91	22.83	96.5	5.71						
12	18.35	31.94	22.87	96.9	5.71						
13	18.28	31.95	22.90	96.7	5.71						
14	18.27	31.95	22.90	96.9	5.72						
15	18.11	32.00	22.98	96.7	5.72						
16	17.86	32.05	23.07	96.5	5.74						
17	17.75	32.10	23.14	96.2	5.75						
18	17.62	32.13	23.19	95.7	5.76						
19	17.40	32.17	23.27	96.0	5.77						
20	17.24	32.20	23.33	95.9	5.78	5.72	2.6	.15	0.4	2.0	.40
21	17.07	32.20	23.38	95.5	5.77						
22	16.37	32.27	23.59	95.7	5.77						
23	14.73	32.34	24.00	95.0	5.90						
24	13.55	32.19	24.13	95.8	6.01						
25	12.78	32.32	24.38	96.1	6.06						
26	12.29	32.40	24.54	96.1	6.05						
27	12.11	32.43	24.59	95.8	6.02						
28	11.99	32.41	24.61	95.9	5.98						
29	11.84	32.41	24.63	95.9	5.96						
30	11.76	32.42	24.65	96.0	5.94						
31	11.63	32.41	24.67	95.9	5.93						
32	11.41	32.43	24.72	96.1	5.94						
33	11.37	32.44	24.74	96.2	5.95						
34	11.27	32.43	24.75	96.1	5.92	6.00	3.1	.20	0.7	4.0	.75


KELEZ CRUISE XWCC-24 STATION 27 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

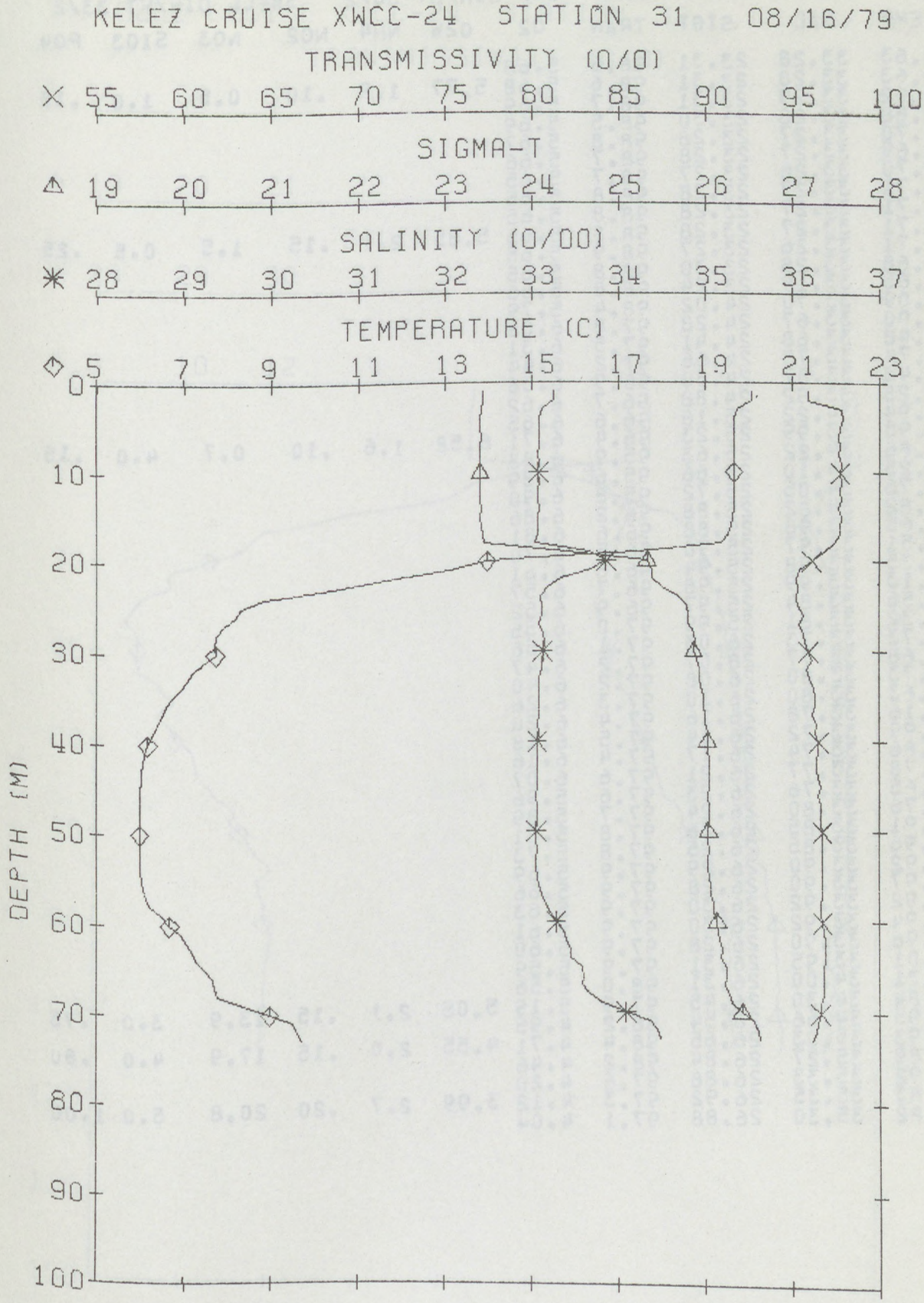
XWCC-24 STA. 28 LAT 40 13.3N; LONG 73 7.3W GMT 19.8 08/14/79
DEPTH 042 AIR D/W 20.6/16.7 BARO 22.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 34/08 SEA DIR/HT 33/1 SWELL DIR/HT 33/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.94	32.24	22.95	96.3	5.67	5.64	1.4	.10	0.2	1.0	.35
2	18.94	32.24	22.95	96.3	5.67						
3	18.92	32.23	22.95	96.6	5.67						
4	18.99	32.22	22.92	96.6	5.67						
5	19.04	32.22	22.91	96.7	5.67						
6	19.01	32.21	22.91	96.6	5.66						
7	18.93	32.21	22.93	96.8	5.67						
8	18.87	32.21	22.95	96.8	5.69						
9	18.79	32.23	22.98	96.8	5.70						
10	18.74	32.24	23.00	96.8	5.70	5.65	1.5	.10	0.4	<0.5	.35
11	18.71	32.24	23.01	96.7	5.70						
12	18.70	32.24	23.01	96.8	5.70						
13	18.70	32.25	23.02	96.9	5.69						
14	18.67	32.27	23.04	96.5	5.68						
15	18.67	32.29	23.06	96.6	5.68						
16	18.65	32.30	23.07	96.1	5.68						
17	18.60	32.31	23.09	96.0	5.68						
18	18.11	32.24	23.15	96.4	5.71	5.97	3.0	.45	0.8	3.5	.80
19	16.72	32.16	23.42	95.8	5.84						
20	12.94	33.35	25.15	95.6	6.42						
21	10.46	33.06	25.38	95.4	6.52						
22	10.38	32.50	24.96	95.2	6.31						
23	10.38	32.50	24.96	95.4	6.20						
24	10.35	32.50	24.97	95.5	6.08						
25	10.34	32.48	24.95	95.6	6.03						
26	10.32	32.49	24.96	95.7	6.01						
27	10.29	32.49	24.97	95.5	5.98						
28	10.29	32.50	24.97	95.6	5.97						
29	10.28	32.47	24.96	95.8	5.95						
30	10.29	32.48	24.96	95.8	5.94	5.96	3.1	.50	0.9	2.0	.80
31	10.27	32.49	24.97	95.9	5.93						
32	10.20	32.51	25.00	95.8	5.91						
33	10.05	32.52	25.03	95.8	5.89						
34	10.00	32.50	25.02	95.8	5.89						
35	9.98	32.51	25.04	95.8	5.86						
36	9.94	32.52	25.05	95.9	5.83						
37	9.93	32.52	25.05	95.7	5.81						
38	9.90	32.51	25.05	95.7	5.79						
39	9.87	32.51	25.06	95.7	5.79	5.93	2.6	.25	0.7	0.5	.50
40	9.84	32.53	25.08	95.8	5.78						
41	9.82	32.53	25.08	96.0	5.76						


KELEZ CRUISE XWCC-24 STATION 28 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

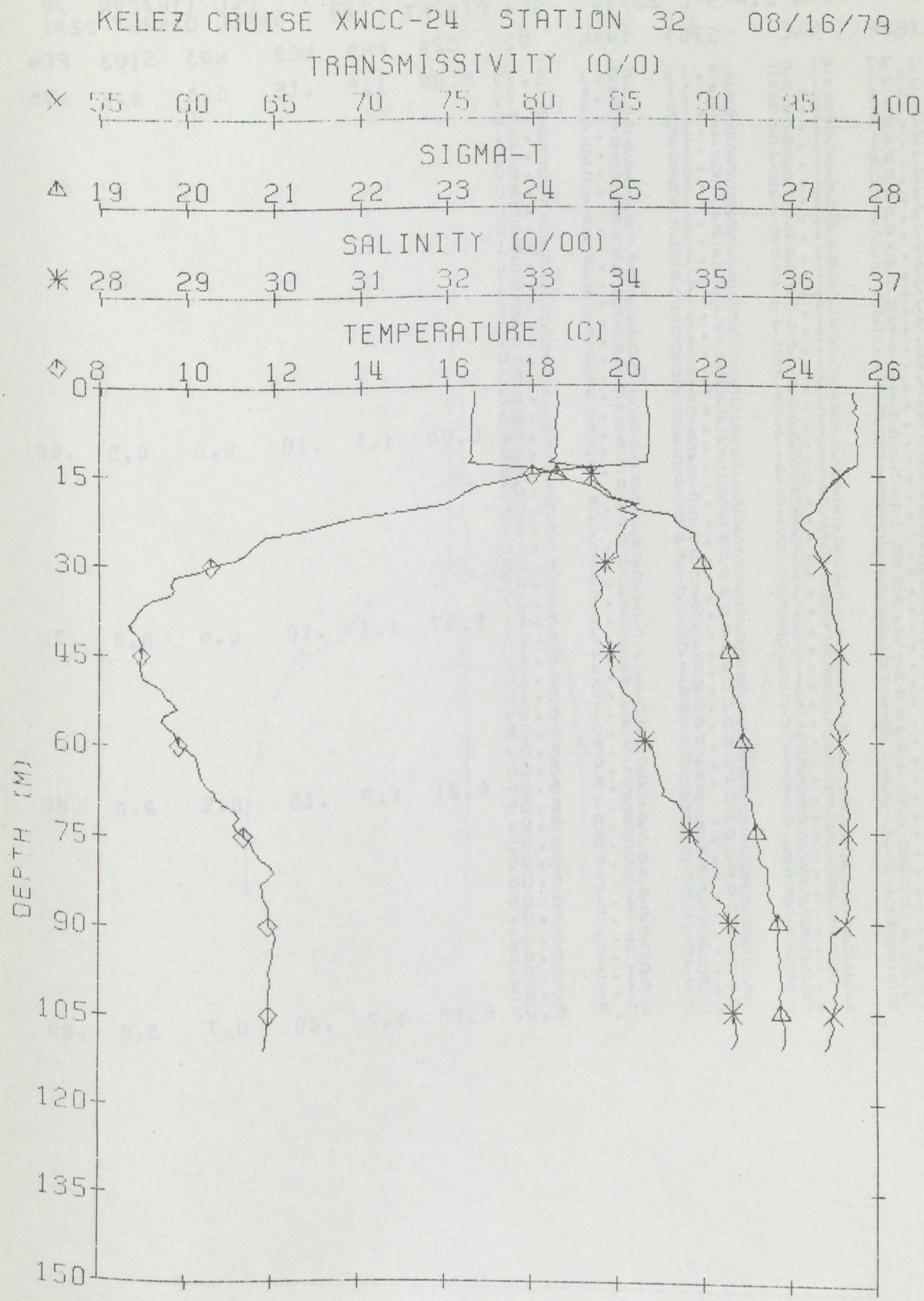
XWCC-24 STA. 31 LAT 39 53.8N LONG 72 25.0W GMT 10.5 08/16/79
DEPTH 073 AIR D/W 17.2/14.4 BARO 19.5 VIS 7 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 33/20 SEA DIR/HT 30/3 SWELL DIR/HT 33/3

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.07	33.25	23.43	95.9	5.90						
2	20.07	33.24	23.43	95.9	5.90	5.60	1.7	.10	0.4	1.0	.10
3	19.72	33.10	23.41	97.8	5.66						
4	19.65	33.07	23.40	97.9	5.63						
5	19.66	33.07	23.40	97.7	5.64						
6	19.66	33.08	23.41	97.7	5.64						
7	19.66	33.07	23.40	97.7	5.64						
8	19.66	33.06	23.40	97.7	5.64						
9	19.66	33.07	23.40	97.9	5.64	5.56		.10	0.3	1.0	.15
10	19.66	33.06	23.40	97.7	5.63						
11	19.65	33.07	23.40	97.9	5.63						
12	19.66	33.05	23.39	97.8	5.64						
13	19.65	33.05	23.39	97.8	5.64						
14	19.65	33.08	23.41	97.7	5.64						
15	19.64	33.07	23.40	97.8	5.64						
16	19.60	33.06	23.41	97.8	5.64						
17	19.53	33.06	23.43	97.8	5.65						
18	19.38	33.02	23.44	97.5	5.68						
19	17.44	33.65	24.40	96.8	5.78	6.70		.30	0.3	2.0	.45
20	13.96	33.85	25.32	96.2	6.31						
21	13.11	33.68	25.37	95.4	6.49						
22	11.64	33.33	25.38	95.3	6.59						
23	10.35	33.18	25.50	95.3	6.69						
24	8.82	33.08	25.67	95.3	6.81						
25	8.29	33.11	25.77	95.4	6.93						
26	8.17	33.11	25.79	95.6	6.82						
27	7.91	33.07	25.79	95.5	6.72						
28	7.73	33.12	25.86	95.6	6.67						
29	7.70	33.13	25.87	95.7	6.58						
30	7.71	33.12	25.86	95.9	6.50						
31	7.43	33.10	25.89	96.1	6.43						
32	7.18	33.10	25.92	95.8	6.39						
33	7.07	33.07	25.91	96.1	6.35						
34	6.89	33.08	25.95	96.2	6.28						
35	6.70	33.07	25.96	96.3	6.18						
36	6.56	33.07	25.98	96.4	6.11						
37	6.47	33.07	25.99	96.2	6.02						
38	6.37	33.06	26.00	96.4	5.92						
39	6.26	33.06	26.01	96.4	5.87	5.45		.65	4.6	5.5	1.00
40	6.17	33.06	26.02	96.6	5.75						
41	6.09	33.05	26.03	96.5	5.69						
42	6.06	33.06	26.04	96.5	5.62						
43	6.04	33.06	26.04	96.5	5.55						
44	6.02	33.05	26.04	96.5	5.48						
45	6.00	33.05	26.04	96.6	5.43						
46	5.99	33.04	26.03	96.6	5.39						
47	6.00	33.05	26.04	96.6	5.35						
48	6.00	33.05	26.04	96.6	5.32						
49	5.99	33.05	26.03	96.6	5.29						
50	5.99	33.04	26.03	96.7	5.27						
60	6.68	33.27	26.12	96.8	5.19	5.37	4.7	.70	9.3	5.0	.85
70	8.97	34.08	26.42	96.7	5.16	4.71	6.1	.20	17.8	2.5	.80
73	9.69	34.47	26.61	96.1	4.66						


KELEZ CRUISE XWCC-24 STATION 31 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
5 7 9 11 13 15 17 19 21 23
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

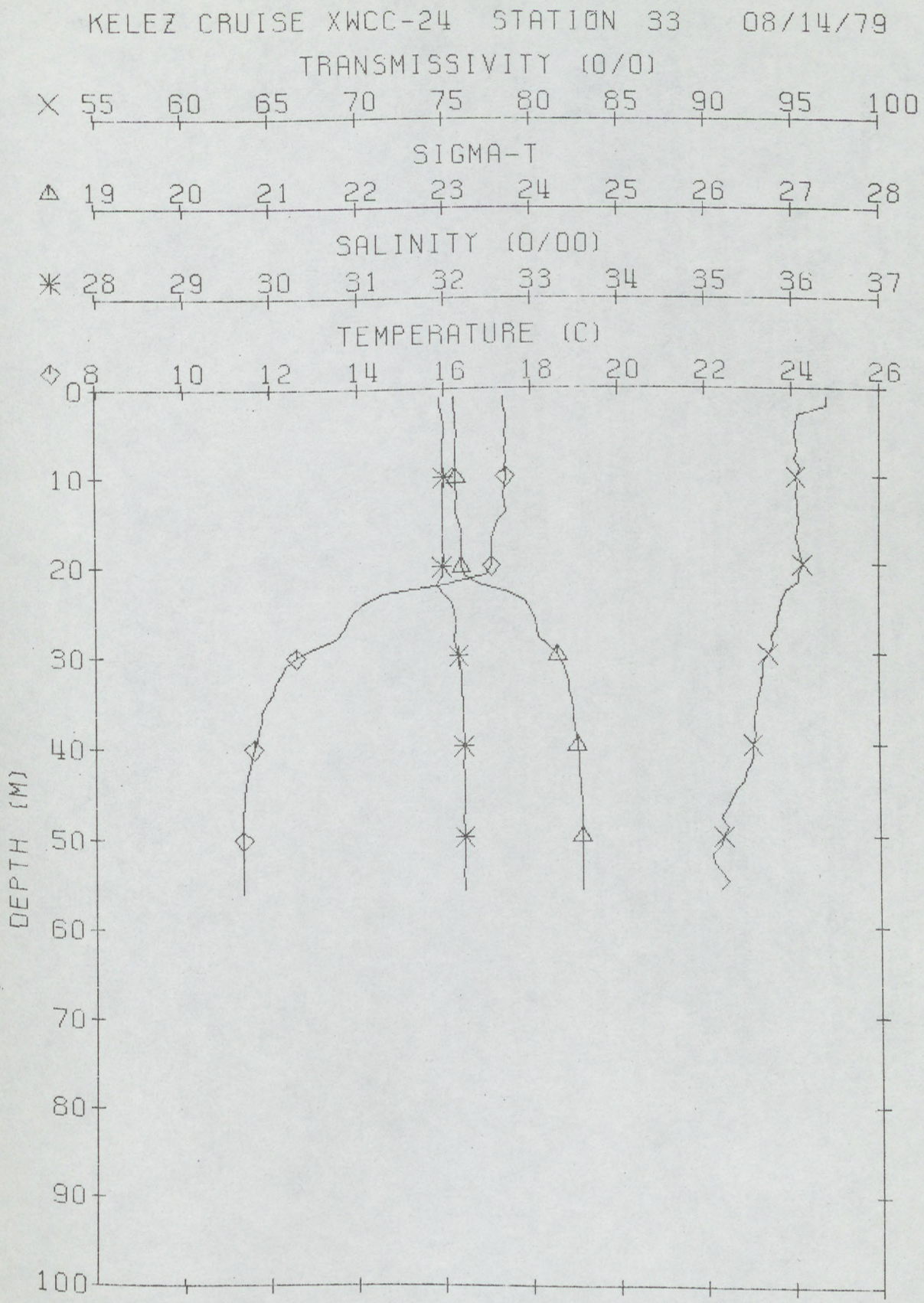
XWCC-24 STA. 32 LAT 39 45.7N LONG 72 7.0W GMT 07.1 08/16/79
DEPTH 110 AIR D/W 17.8/14.4 BARO 18.5 VIS 7 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 30/22 SEA DIR/HT 30/2 SWELL DIR/HT 33/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.63	33.28	23.31	98.6	5.68						
2	20.63	33.28	23.31	98.6	5.68	5.77	1.9	.10	0.5	1.0	.15
3	20.62	33.29	23.31	98.7	5.69						
4	20.68	33.28	23.30	98.5	5.69						
5	20.70	33.27	23.28	98.8	5.67						
6	20.69	33.27	23.28	98.7	5.66						
7	20.70	33.26	23.27	98.7	5.65						
8	20.71	33.27	23.28	98.8	5.65						
9	20.71	33.27	23.28	98.8	5.65						
10	20.71	33.27	23.28	98.8	5.65	5.85	2.1	.15	1.5	0.5	.25
11	20.71	33.26	23.27	98.9	5.65						
12	20.68	33.28	23.30	98.8	5.65						
13	20.65	33.19	23.24	98.8	5.66						
14	19.09	33.70	24.02	98.4	5.79						
15	18.00	33.67	24.28	97.8	6.08						
16	17.48	33.68	24.41	97.5	6.31						
17	16.74	33.78	24.66	97.2	6.44						
18	16.43	33.87	24.80	96.9	6.56						
19	16.25	33.92	24.88	96.7	6.62						
20	15.94	34.22	25.18	96.6	6.65						
21	14.95	33.99	25.23	96.4	6.71	6.58	1.6	.10	0.7	4.0	.15
22	13.86	34.22	25.63	95.9	6.83						
23	13.25	34.10	25.66	95.6	6.89						
24	12.76	34.05	25.72	95.8	6.90						
25	11.82	34.02	25.88	96.2	6.86						
26	11.65	33.98	25.88	96.6	6.81						
27	11.51	33.97	25.90	96.5	6.70						
28	11.35	33.98	25.94	96.6	6.61						
29	11.13	33.99	25.98	96.7	6.57						
30	10.56	33.84	25.97	96.9	6.52						
31	10.32	33.81	25.99	97.0	6.55						
32	9.73	33.73	26.03	97.1	6.56						
33	9.68	33.77	26.07	97.2	6.47						
34	9.73	33.80	26.08	97.2	6.40						
35	9.63	33.80	26.10	97.3	6.26						
36	9.16	33.78	26.16	97.4	6.20						
37	8.99	33.72	26.14	97.5	6.18						
38	8.86	33.74	26.17	97.4	6.16						
39	8.78	33.77	26.21	97.6	6.07						
40	8.65	33.76	26.23	97.6	5.96						
41	8.76	33.80	26.24	97.7	5.89						
42	8.91	33.85	26.26	97.8	5.81						
43	8.96	33.85	26.25	97.8	5.73						
44	8.92	33.90	26.29	97.9	5.69						
45	8.97	33.90	26.28	97.9	5.66						
46	8.92	33.92	26.30	97.9	5.63						
47	8.94	33.92	26.30	97.9	5.61						
48	8.96	33.90	26.28	97.9	5.60						
49	9.01	33.95	26.31	97.9	5.59						
50	9.31	34.00	26.31	98.0	5.56						
60	9.84	34.30	26.45	97.9	5.19	5.05	2.1	.15	13.9	3.0	.75
70	10.95	34.66	26.54	98.2	4.95						
80	11.93	35.03	26.65	98.4	4.71	4.55	2.0	.15	17.9	4.0	.80
90	11.89	35.27	26.84	98.2	4.46						
100	11.92	35.33	26.88	97.6	4.20						
110	11.83	35.35	26.92	97.3	4.12	3.99	2.7	.20	20.8	5.0	1.00
111	11.82	35.30	26.88	97.1	4.04						


KELEZ CRUISE XWCC-24 STATION 32 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0
15
30
45
60
75
90
105
120
135
150
DEPTH (M)

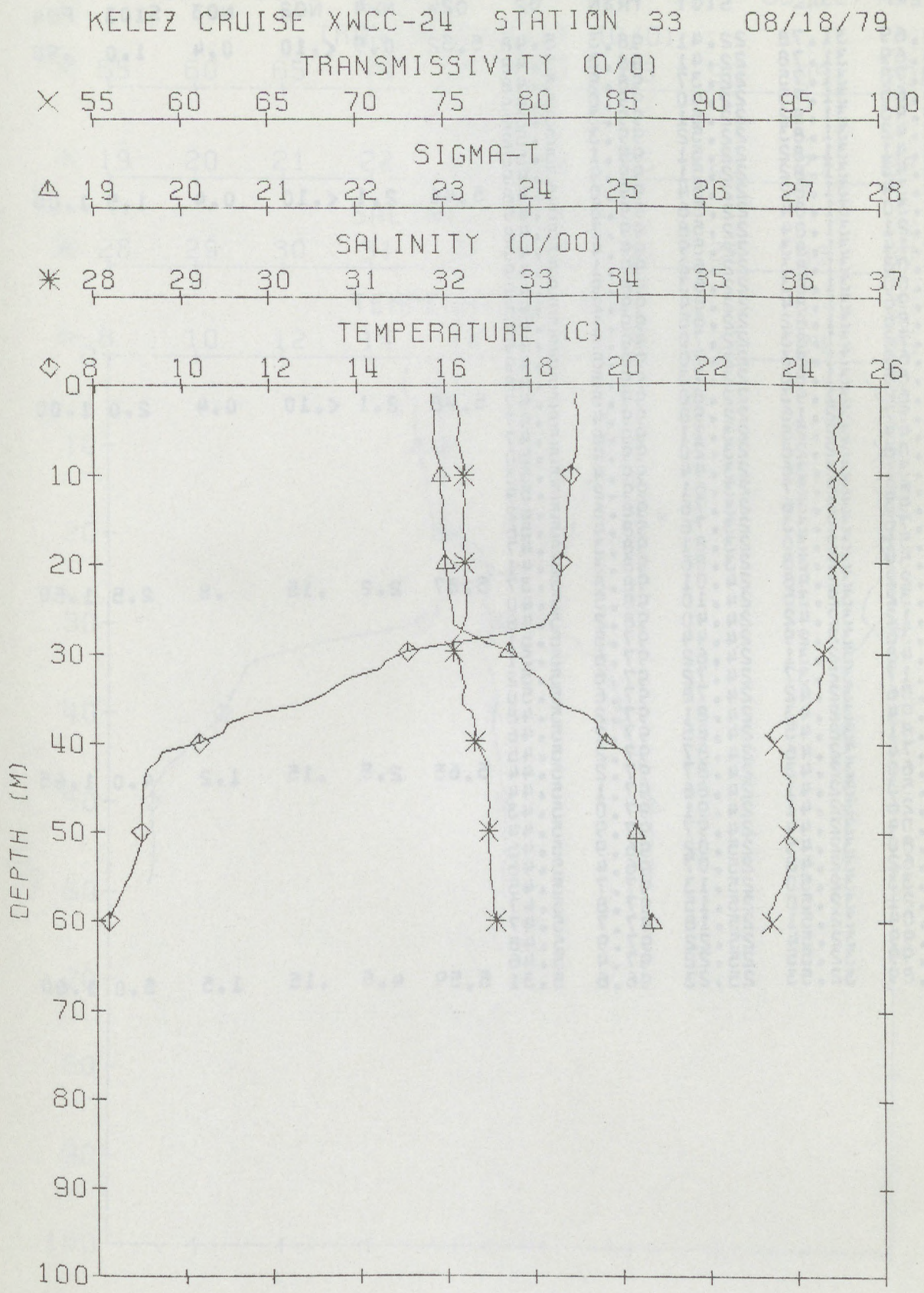
XWCC-24 STA. 33 LAT 40 10.0N; LONG 73 41.5W GMT 07.3 08/14/79
DEPTH 058 AIR D/W 18.9/17.2 BARO 19.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 23/14 SEA DIR/HT /0 SWELL DIR/HT 22/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	17.37	31.95	23.11	97.1	5.77	5.89	1.0	.15	0.3	2.5	.75
2	17.37	31.95	23.11	97.1	5.77						
3	17.42	31.98	23.12	96.3	5.80						
4	17.44	31.99	23.12	96.3	5.81						
5	17.41	31.99	23.13	96.2	5.79						
6	17.42	31.97	23.12	96.2	5.80						
7	17.40	31.98	23.12	96.3	5.80						
8	17.42	31.97	23.12	96.1	5.80						
9	17.41	31.97	23.12	96.5	5.80						
10	17.42	31.98	23.13	96.3	5.81						
11	17.39	31.98	23.13	96.4	5.80						
12	17.35	31.98	23.14	96.3	5.81						
13	17.41	31.97	23.12	96.3	5.81						
14	17.42	31.97	23.12	96.3	5.81						
15	17.23	31.97	23.16	96.5	5.81						
16	17.15	31.98	23.19	96.4	5.84						
17	17.11	31.97	23.20	96.3	5.83						
18	17.11	31.98	23.19	96.4	5.83						
19	17.09	31.97	23.20	96.6	5.83						
20	16.96	31.97	23.19	96.6	5.82	6.20	1.1	.10	0.5	0.5	.60
21	16.04	31.91	23.23	96.5	5.82						
22	14.61	31.97	23.39	96.4	5.85						
23	14.16	32.08	23.74	94.7	6.03						
24	13.92	32.11	23.92	94.5	6.09						
25	13.76	32.12	23.99	94.3	6.11						
26	13.67	32.12	24.04	94.2	6.10						
27	13.50	32.10	24.06	94.1	6.08						
28	13.00	32.12	24.07	93.9	6.07						
29	12.58	32.16	24.19	93.9	6.07						
30	12.35	32.18	24.29	93.6	6.11	5.97	1.1	.10	0.6	0.5	.70
31	12.23	32.19	24.36	93.3	6.13						
32	12.10	32.19	24.39	93.4	6.12						
33	12.06	32.19	24.41	93.3	6.10						
34	11.91	32.20	24.42	93.2	6.10						
35	11.81	32.20	24.46	93.1	6.09						
36	11.79	32.20	24.47	93.0	6.08						
37	11.74	32.21	24.48	92.8	6.07						
38	11.71	32.21	24.49	92.9	6.06						
39	11.62	32.21	24.50	92.9	6.06	6.21	1.2	.15	0.9	2.0	.80
40	11.57	32.22	24.52	92.7	6.05						
41	11.52	32.21	24.54	92.8	6.04						
42	11.47	32.22	24.55	92.6	6.05						
43	11.44	32.22	24.56	92.4	6.05						
44	11.41	32.22	24.56	92.2	6.06						
45	11.40	32.22	24.56	91.7	6.05						
46	11.38	32.22	24.57	91.5	6.04						
47	11.38	32.21	24.56	91.3	6.03						
48	11.38	32.22	24.57	90.9	6.03						
49	11.38	32.22	24.57	91.3	6.03						
50	11.36	32.21	24.56	91.1	6.03						
56				90.8	6.02	6.18	1.2	.20	0.7	3.0	.80


KELEZ CRUISE XWCC-24 STATION 33 08/14/79
TRANSMISSIVITY (0/0)
X 55 60 65 70 75 80 85 90 95 100
SIGMA-T
Δ 19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
✳ 28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
◇ 8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

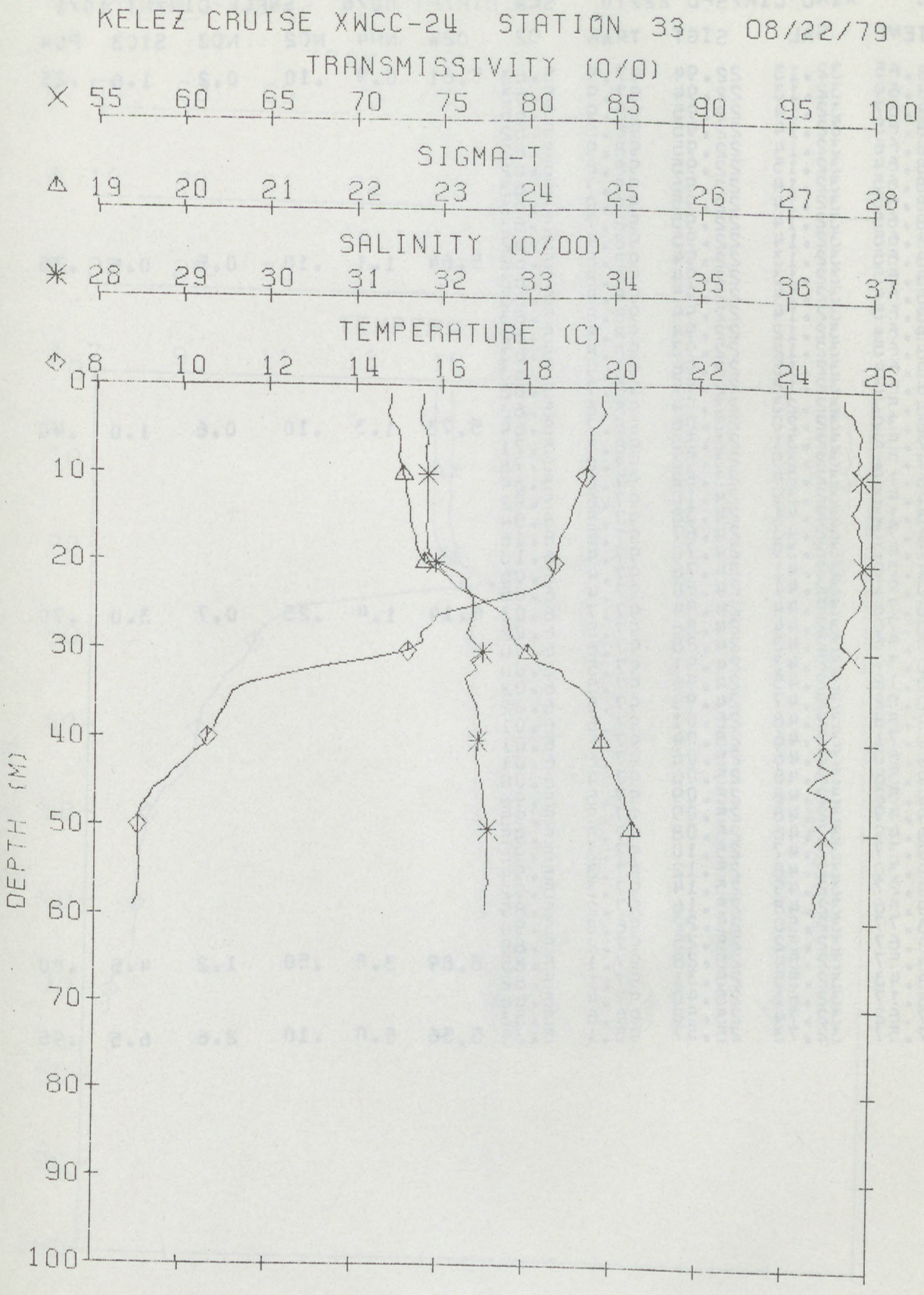
XWCC-24 STA. 33 LAT 40 10.2N; LONG 73 41.3W GMT 05.6 08/18/79
DEPTH 062 AIR D/W 18.9/18.9 BARO 24.0 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 21/10 SEA DIR/HT 21/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.01	32.13	22.85	97.6	5.56	5.43	0.9	<.10	0.3	1.0	.25
2	19.01	32.13	22.85	97.6	5.56						
3	19.04	32.17	22.87	97.6	5.58						
4	19.04	32.17	22.88	97.7	5.58						
5	19.02	32.17	22.88	97.3	5.58						
6	19.04	32.15	22.86	97.5	5.58						
7	19.02	32.17	22.88	97.5	5.59						
8	18.99	32.20	22.91	97.6	5.60						
9	18.94	32.22	22.94	97.3	5.60						
10	18.88	32.22	22.95	97.5	5.61	5.40	2.1	.10	0.3	1.0	.30
11	18.87	32.22	22.96	97.3	5.62						
12	18.85	32.21	22.95	97.2	5.62						
13	18.82	32.22	22.97	97.4	5.62						
14	18.81	32.21	22.97	97.1	5.61						
15	18.79	32.21	22.97	97.4	5.61						
16	18.78	32.21	22.97	97.4	5.61						
17	18.76	32.23	22.99	97.3	5.61						
18	18.71	32.21	22.99	97.2	5.61						
19	18.69	32.22	23.00	97.5	5.62	5.52	3.8	.10	0.4	2.0	.50
20	18.67	32.22	23.00	97.5	5.62						
21	18.66	32.23	23.02	97.3	5.61						
22	18.62	32.24	23.03	97.4	5.60						
23	18.59	32.23	23.03	97.4	5.60						
24	18.59	32.25	23.04	97.4	5.61						
25	18.48	32.25	23.07	97.5	5.60						
26	18.39	32.24	23.09	97.4	5.61						
27	18.25	32.21	23.10	97.2	5.60						
28	17.54	32.18	23.25	97.2	5.65						
29	16.31	32.07	23.45	96.7	5.78	5.54	3.0	.15	0.6	2.5	.60
30	15.13	32.09	23.73	96.7	5.86						
31	14.65	32.15	23.88	96.7	5.87						
32	14.50	32.18	23.93	96.7	5.82						
33	13.79	32.19	24.09	96.4	5.84						
34	13.46	32.22	24.18	96.4	5.87						
35	13.16	32.19	24.21	96.2	5.83						
36	12.64	32.20	24.31	95.7	5.82						
37	11.52	32.31	24.61	95.1	5.85						
38	10.99	32.33	24.72	93.8	5.89						
39	10.89	32.35	24.75	93.4	5.85						
40	10.37	32.33	24.83	93.8	5.78	5.65	3.6	.25	1.1	3.0	.85
41	9.50	32.39	25.02	94.3	5.85						
42	9.40	32.45	25.08	94.1	5.88						
43	9.15	32.48	25.15	94.1	5.82						
44	9.08	32.48	25.15	94.6	5.77						
45	9.07	32.48	25.16	94.6	5.72						
46	9.07	32.47	25.15	94.6	5.70						
47	9.03	32.48	25.17	94.8	5.66						
48	9.03	32.47	25.16	94.9	5.65						
49	9.02	32.49	25.17	94.9	5.64						
50	9.02	32.47	25.16	94.6	5.63						
60	8.28	32.55	25.33	93.6	5.52	5.43	5.0	.35	1.4	6.0	.90
61	8.25	32.56	25.35	93.5	5.47						


KELEZ CRUISE XWCC-24 STATION 33 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

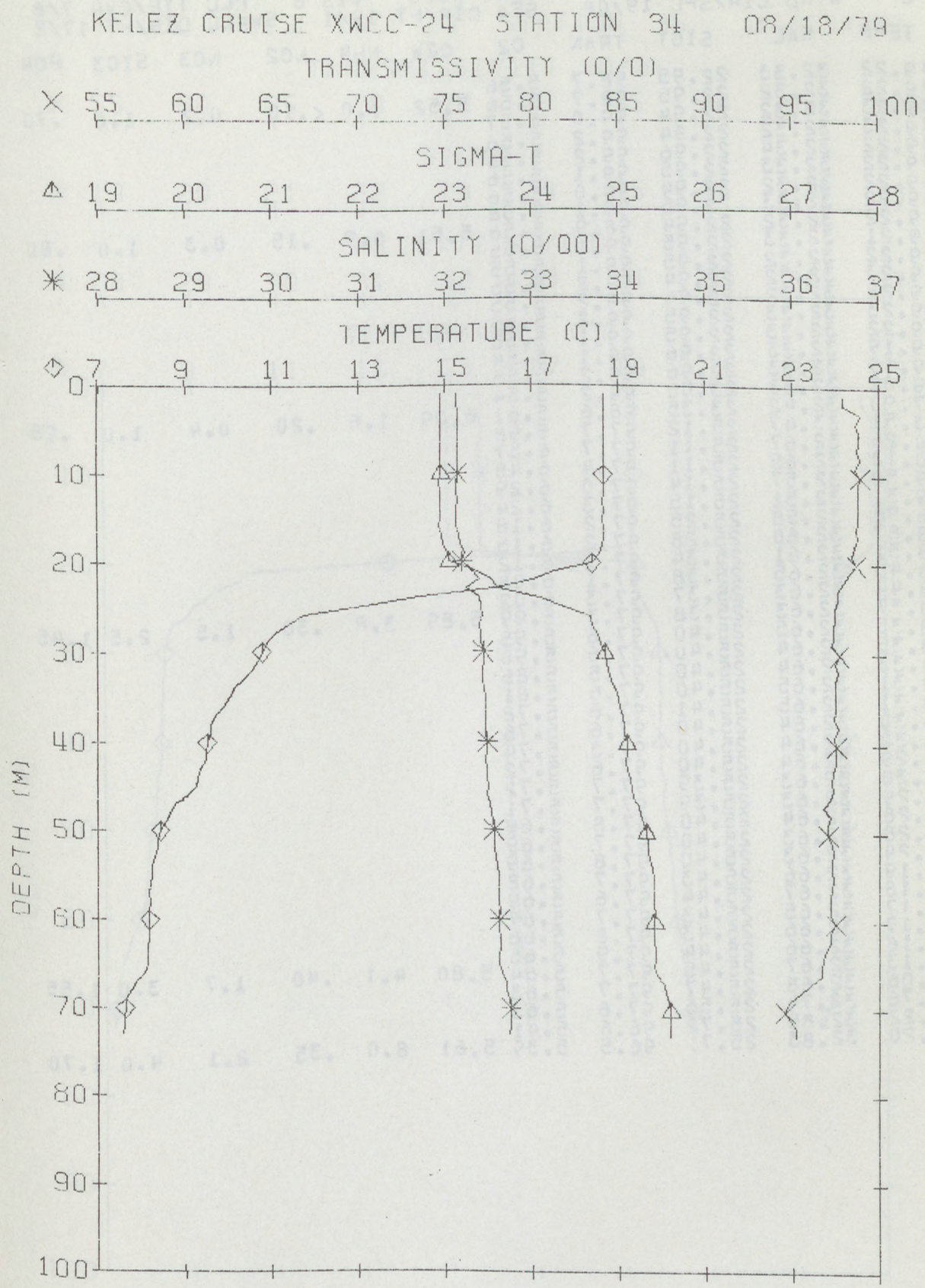
XWCC-24 STA. 33 LAT 40 10.3N; LONG 73 41.8W GMT 16.0 08/22/79
DEPTH 060 AIR D/W 23.3/21.1 BARO 22.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 23/07 SEA DIR/HT /0 SWELL DIR/HT 09/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.69	31.78	22.41	98.3	5.48	5.52	0.9	<.10	0.4	1.0	.90
2	19.69	31.78	22.41	98.3	5.48						
3	19.78	31.75	22.37	98.9	5.48						
4	19.65	31.75	22.40	99.0	5.49						
5	19.43	31.82	22.51	99.3	5.52						
6	19.42	31.83	22.52	99.3	5.52						
7	19.41	31.82	22.51	99.1	5.50						
8	19.43	31.82	22.51	99.4	5.49						
9	19.34	31.82	22.54	99.0	5.48	5.46	2.1	<.10	0.4	1.5	1.00
10	19.30	31.84	22.56	99.3	5.49						
11	19.21	31.84	22.58	99.3	5.48						
12	19.14	31.83	22.59	99.4	5.49						
13	19.03	31.83	22.62	99.1	5.49						
14	19.00	31.83	22.63	98.9	5.49						
15	18.96	31.84	22.64	99.2	5.48						
16	18.86	31.82	22.65	99.1	5.48						
17	18.72	31.83	22.70	99.5	5.49						
18	18.69	31.83	22.70	99.5	5.49						
19	18.65	31.86	22.73	99.5	5.48						
20	18.62	31.93	22.80	99.5	5.47	5.48	2.1	<.10	0.4	2.0	1.00
21	18.57	32.16	22.98	99.4	5.47						
22	18.44	32.28	23.11	99.6	5.47						
23	18.08	32.28	23.20	99.4	5.50						
24	17.31	32.36	23.44	99.4	5.53						
25	16.62	32.37	23.61	99.2	5.59						
26	15.93	32.36	23.76	98.6	5.62						
27	15.76	32.33	23.78	98.4	5.56						
28	15.51	32.30	23.81	98.3	5.47						
29	15.54	32.38	23.86	98.3	5.41						
30	15.22	32.48	24.01	98.8	5.37	5.37	2.2	.15	.8	2.5	1.50
31	14.32	32.35	24.10	98.5	5.40						
32	13.12	32.42	24.40	98.2	5.48						
33	12.36	32.29	24.44	97.5	5.51						
34	11.48	32.31	24.62	97.6	5.51						
35	11.17	32.37	24.72	97.6	5.52						
36	11.06	32.42	24.78	97.6	5.50						
37	10.94	32.43	24.81	97.2	5.48						
38	10.81	32.45	24.85	97.2	5.46						
39	10.74	32.46	24.87	97.2	5.45						
40	10.60	32.43	24.87	97.2	5.44	5.65	2.5	.15	1.2	4.0	1.65
41	10.53	32.41	24.86	97.1	5.44						
42	10.26	32.41	24.91	97.0	5.43						
43	10.04	32.44	24.97	97.9	5.44						
44	9.80	32.45	25.02	96.9	5.45						
45	9.62	32.48	25.07	96.4	5.46						
46	9.33	32.50	25.13	97.7	5.45						
47	9.21	32.50	25.15	97.8	5.47						
48	9.04	32.51	25.18	97.7	5.47						
49	8.99	32.54	25.22	97.9	5.48						
50	8.99	32.55	25.22	97.4	5.46						
59	8.89	32.53	25.23	96.6	5.31	5.59	4.6	.15	1.5	5.0	1.60


KELEZ CRUISE XWCC-24 STATION 33 08/22/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

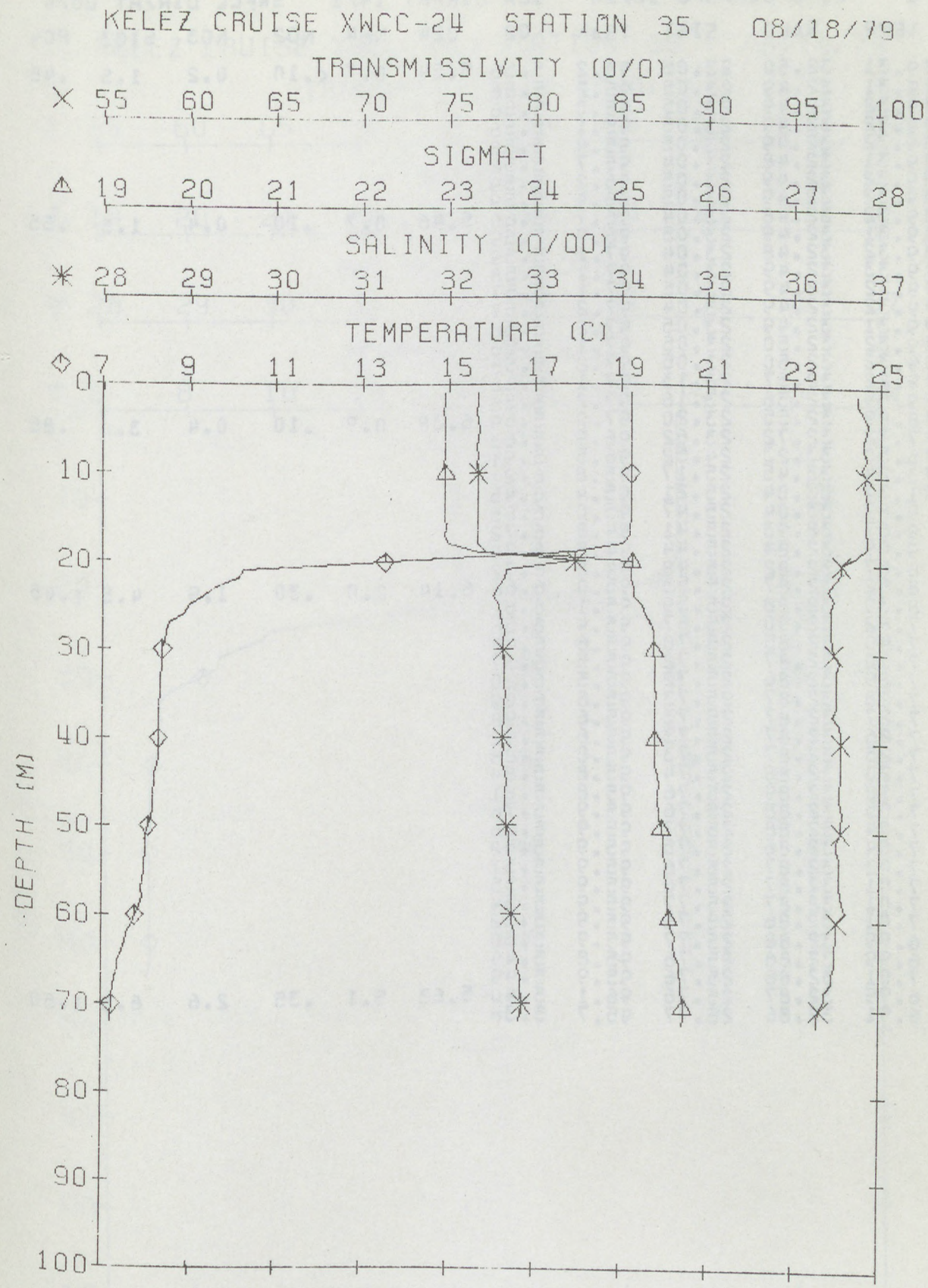
XWCC-24 STA. 34 LAT 40 5.5N; LONG 73 31.7W GMT 07.9 08/18/79
DEPTH 073 AIR D/W 18.9/18.9 BARO 23.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 22/10 SEA DIR/HT 00/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.65	32.13	22.94	97.9	5.63	5.61	0.9	.10	0.2	1.0	.25
2	18.64	32.13	22.94	97.9	5.63						
3	18.67	32.14	22.95	98.9	5.65						
4	18.65	32.14	22.95	98.6	5.62						
5	18.66	32.14	22.95	98.9	5.62						
6	18.64	32.15	22.95	98.8	5.62						
7	18.65	32.14	22.95	98.7	5.63						
8	18.65	32.14	22.95	99.0	5.63						
9	18.65	32.14	22.95	98.7	5.63						
10	18.65	32.14	22.95	98.9	5.62						
11	18.65	32.13	22.94	98.8	5.63	5.64	1.1	.10	0.5	0.5	.35
12	18.65	32.13	22.94	98.8	5.63						
13	18.64	32.14	22.95	98.8	5.63						
14	18.65	32.14	22.94	98.8	5.63						
15	18.64	32.12	22.94	98.8	5.62						
16	18.65	32.12	22.93	98.8	5.63						
17	18.64	32.15	22.96	98.9	5.63						
18	18.63	32.18	22.99	98.7	5.63						
19	18.57	32.23	23.04	98.6	5.63						
20	18.39	32.20	23.06	98.7	5.64	5.73	1.3	.10	0.6	1.0	.40
21	17.52	32.31	23.35	98.3	5.71						
22	17.01	32.39	23.53	98.0	5.78						
23	16.15	32.24	23.62	97.6	5.84						
24	14.43	32.39	24.10	97.6	5.92						
25	13.13	32.41	24.38	97.5	6.04						
26	11.73	32.43	24.67	97.5	6.16						
27	11.40	32.39	24.70	97.4	6.10						
28	11.09	32.41	24.76	97.4	6.05						
29	10.91	32.41	24.80	97.4	6.05						
30	10.78	32.44	24.84	97.7	6.03	6.14	1.4	.25	0.7	3.0	.70
31	10.70	32.44	24.86	97.5	6.02						
32	10.56	32.43	24.88	97.6	6.00						
33	10.37	32.43	24.91	97.5	6.00						
34	10.12	32.45	24.96	97.5	6.02						
35	10.02	32.47	24.99	97.5	6.02						
36	9.88	32.46	25.01	97.6	6.01						
37	9.71	32.46	25.04	97.5	6.01						
38	9.60	32.46	25.06	97.6	6.01						
39	9.58	32.46	25.06	97.4	6.00						
40	9.52	32.48	25.09	97.5	5.98						
41	9.49	32.48	25.09	97.5	5.95						
42	9.49	32.46	25.08	97.5	5.95						
43	9.37	32.47	25.10	97.3	5.96						
44	9.30	32.48	25.12	97.3	5.94						
45	9.27	32.49	25.14	97.3	5.92						
46	9.06	32.48	25.16	97.2	5.89						
47	8.77	32.50	25.22	96.8	5.90						
48	8.67	32.52	25.25	97.2	5.89						
49	8.57	32.54	25.28	97.1	5.85	5.89	3.8	.50	1.2	4.5	.80
50	8.43	32.55	25.31	97.1	5.82						
60	8.17	32.61	25.40	97.4	5.66						
70	7.62	32.74	25.58	94.6	5.53						
73	7.57	32.73	25.57	95.1	5.39	5.56	5.0	.10	2.6	6.5	.95


KELEZ CRUISE XWCC-24 STATION 34 08/18/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

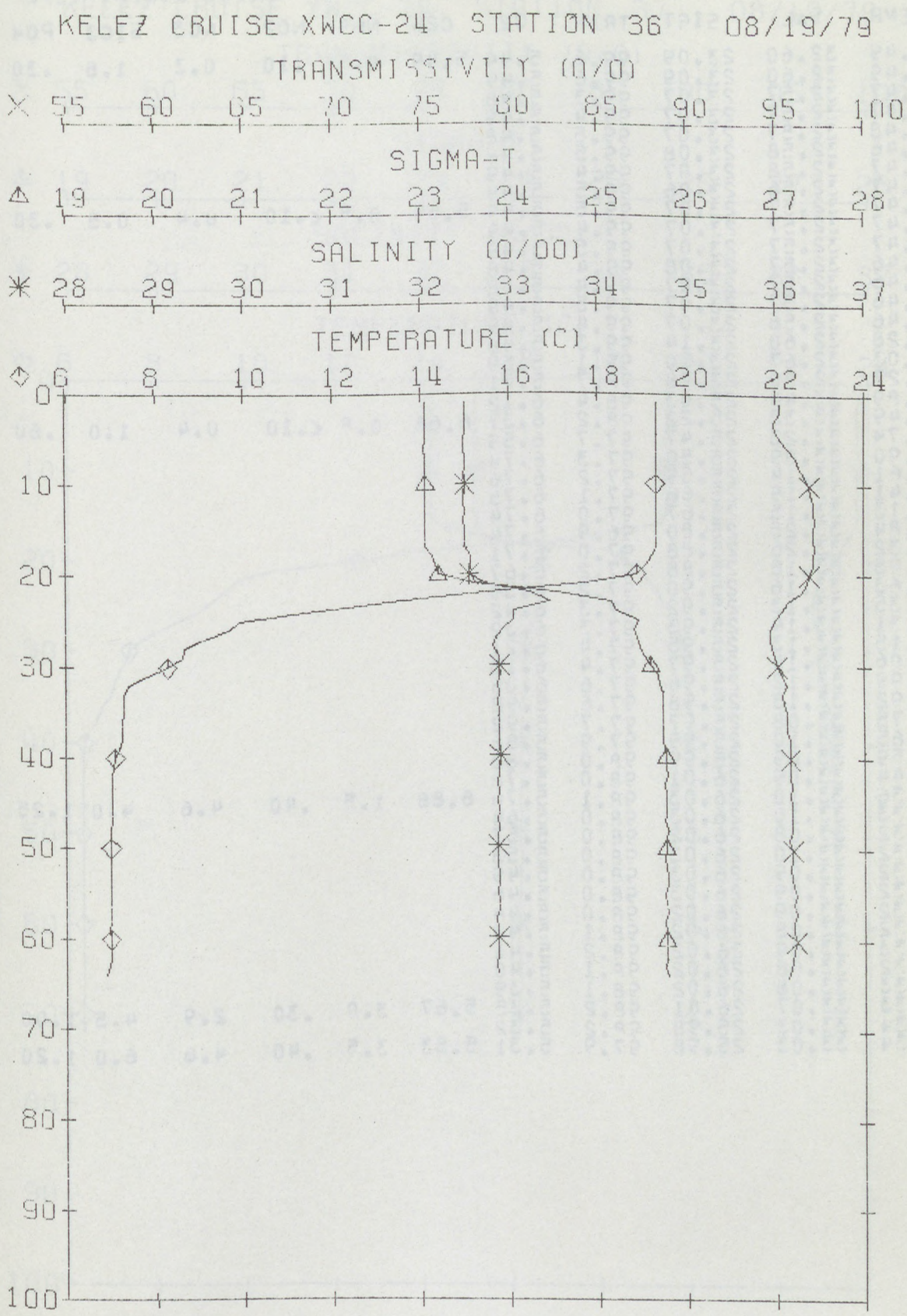
XWCC-24 STA. 35 LAT 39 59.0N; LONG 73 21.5W GMT 21.7 08/18/79
DEPTH 073 AIR D/W 18.3/16.7 BARO 20.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 19/08 SEA DIR/HT 19/1 SWELL DIR/HT 17/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.22	32.33	22.95	98.7	5.56						
2	19.22	32.32	22.95	98.7	5.56	5.52	1.0	<.10	0.2	1.0	.70
3	19.23	32.32	22.94	99.0	5.57						
4	19.23	32.32	22.94	99.2	5.56						
5	19.22	32.34	22.96	99.2	5.56						
6	19.22	32.33	22.95	99.1	5.56						
7	19.22	32.32	22.94	99.0	5.56						
8	19.22	32.33	22.95	99.1	5.56						
9	19.22	32.32	22.94	98.9	5.56	5.51	0.9	.15	0.3	1.0	.80
10	19.21	32.33	22.95	99.1	5.55						
11	19.22	32.32	22.95	99.1	5.55						
12	19.23	32.32	22.94	99.2	5.55						
13	19.22	32.32	22.94	99.2	5.55						
14	19.23	32.33	22.95	99.2	5.55						
15	19.22	32.33	22.95	99.1	5.56						
16	19.19	32.33	22.96	99.1	5.54						
17	19.19	32.33	22.96	99.2	5.55						
18	19.02	32.33	23.00	99.2	5.54						
19	17.90	32.42	23.35	98.6	5.61	6.09	1.6	.20	0.4	1.0	.95
20	13.51	32.47	25.12	97.7	5.98						
21	10.26	32.67	25.11	97.7	6.57						
22	10.13	32.65	25.11	97.4	6.45						
23	9.58	32.57	25.14	97.0	6.29						
24	9.31	32.51	25.15	97.3	6.24						
25	8.88	32.58	25.25	97.2	6.18						
26	8.87	32.60	25.28	97.2	6.15						
27	8.51	32.61	25.34	97.1	6.12						
28	8.46	32.65	25.38	97.1	6.08						
29	8.44	32.63	25.37	97.3	6.02						
30	8.37	32.63	25.38	97.3	5.99	5.89	3.8	.30	1.5	2.5	1.45
31	8.35	32.65	25.40	97.6	5.95						
32	8.35	32.64	25.40	97.6	5.90						
33	8.33	32.64	25.40	97.5	5.85						
34	8.31	32.65	25.40	97.6	5.81						
35	8.31	32.65	25.41	97.6	5.78						
36	8.30	32.64	25.40	97.6	5.75						
37	8.30	32.64	25.40	97.3	5.74						
38	8.29	32.64	25.40	97.6	5.72						
39	8.30	32.63	25.39	97.7	5.72						
40	8.29	32.63	25.39	97.7	5.71						
41	8.28	32.64	25.40	97.8	5.69						
42	8.28	32.63	25.40	97.7	5.69						
43	8.24	32.63	25.40	97.8	5.69						
44	8.19	32.66	25.43	97.7	5.68						
45	8.18	32.67	25.44	97.6	5.69						
46	8.17	32.65	25.43	97.7	5.67						
47	8.17	32.66	25.43	97.8	5.66						
48	8.16	32.66	25.44	97.9	5.65						
49	8.13	32.67	25.45	97.7	5.64	5.80	4.1	.40	1.7	3.0	1.55
50	8.06	32.68	25.47	97.7	5.63						
60	7.76	32.74	25.55	97.6	5.63						
70	7.22	32.85	25.72	96.6	5.41						
72	7.20	32.83	25.7[illegible]	96.5	5.39	5.61	8.0	.35	2.1	4.0	1.70


KELEZ CRUISE XWCC-24 STATION 35 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

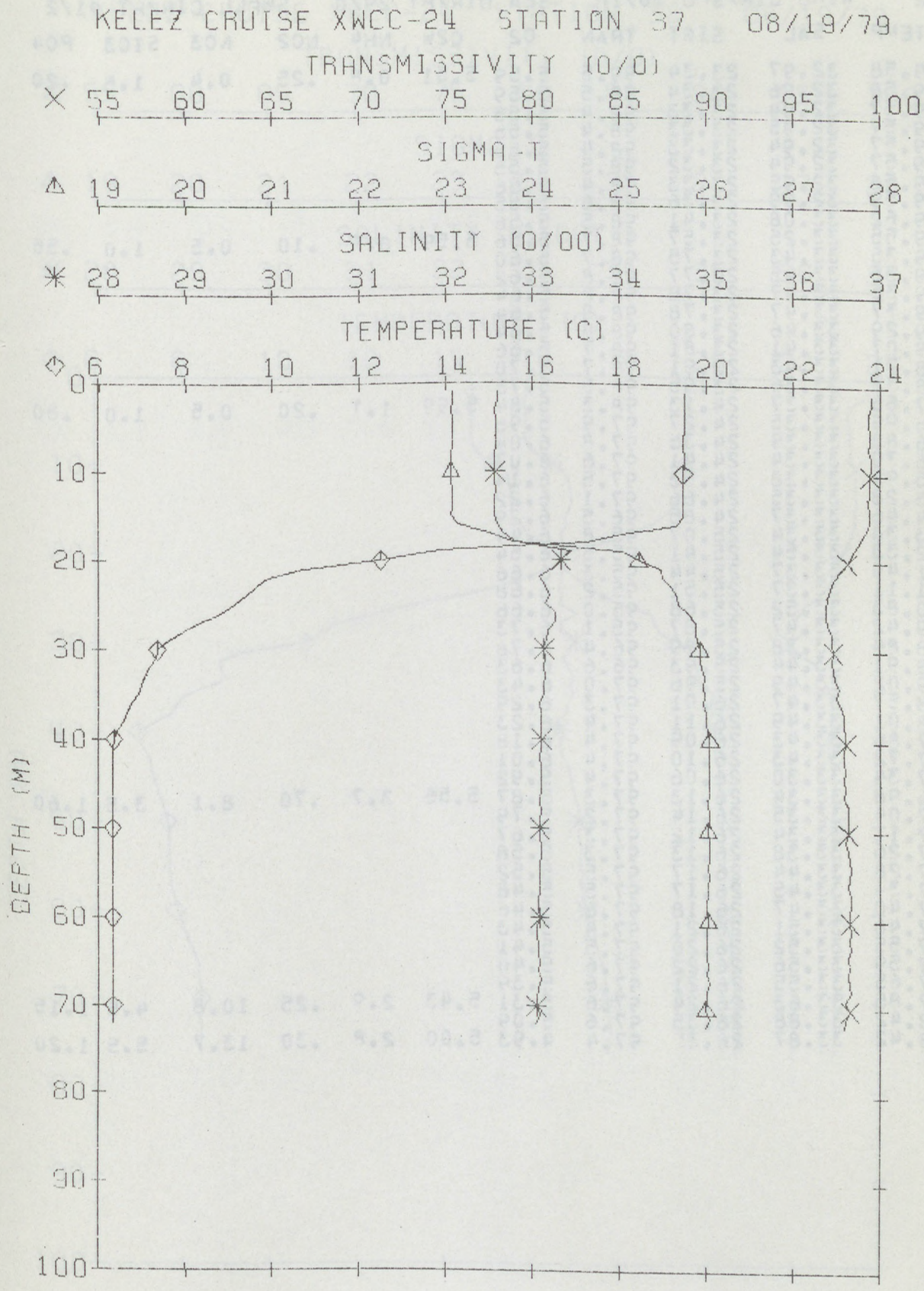
XWCC-24 STA. 36 LAT 39 55.4N; LONG 73 7.0W GMT 05.1 08/19/79
DEPTH 065 AIR D/W 17.8/17.2 BARO 19.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 18/20 SEA DIR/HT 14/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.31	32.50	23.05	95.2	5.56	5.54	0.7	<.10	0.2	1.5	.45
2	19.31	32.49	23.05	95.2	5.56						
3	19.32	32.49	23.05	95.0	5.56						
4	19.32	32.49	23.05	95.1	5.58						
5	19.32	32.49	23.05	95.4	5.58						
6	19.31	32.48	23.04	95.7	5.58						
7	19.32	32.49	23.05	96.2	5.59						
8	19.32	32.49	23.05	96.4	5.59						
9	19.32	32.48	23.04	96.7	5.60	5.46	0.7	.10	0.4	1.5	.55
10	19.31	32.49	23.05	96.9	5.59						
11	19.32	32.48	23.04	97.1	5.59						
12	19.33	32.49	23.04	97.1	5.58						
13	19.32	32.49	23.05	97.1	5.57						
14	19.32	32.49	23.04	97.2	5.57						
15	19.31	32.49	23.05	97.2	5.56						
16	19.32	32.50	23.05	97.1	5.56						
17	19.32	32.50	23.05	97.2	5.55						
18	19.22	32.57	23.13	97.1	5.55						
19	19.09	32.56	23.16	97.2	5.56						
20	18.89	32.55	23.20	97.0	5.59	6.38	0.9	.10	0.4	3.0	.85
21	17.72	32.72	23.62	96.9	5.63						
22	15.50	33.23	24.52	96.5	5.91						
23	13.24	33.45	25.17	95.8	6.21						
24	11.37	33.04	25.21	95.4	6.45						
25	9.87	33.04	25.47	95.0	6.65						
26	9.67	32.93	25.41	94.8	6.72						
27	9.09	32.84	25.44	94.8	6.70						
28	8.67	32.82	25.48	94.8	6.72						
29	8.62	32.87	25.53	95.0	6.68	6.14	2.0	.30	1.9	4.5	1.45
30	8.30	32.88	25.59	95.1	6.62						
31	7.82	32.90	25.67	95.4	6.56						
32	7.40	32.85	25.70	95.6	6.48						
33	7.30	32.87	25.72	95.5	6.37						
34	7.29	32.86	25.72	95.5	6.20						
35	7.28	32.87	25.73	95.6	6.09						
36	7.27	32.87	25.73	95.6	5.98						
37	7.26	32.87	25.73	95.6	5.92						
38	7.25	32.87	25.73	95.8	5.88						
39	7.20	32.88	25.74	95.8	5.84						
40	7.10	32.89	25.76	95.8	5.81						
41	7.05	32.88	25.76	95.9	5.76						
42	7.04	32.88	25.77	95.9	5.66						
43	7.04	32.86	25.75	95.9	5.62						
44	7.03	32.87	25.76	95.9	5.57						
45	7.01	32.87	25.76	95.9	5.55						
46	7.01	32.87	25.77	95.9	5.54						
47	7.01	32.86	25.75	95.9	5.52						
48	6.99	32.88	25.77	95.9	5.50						
49	6.99	32.86	25.76	95.8	5.49						
50	7.01	32.86	25.76	95.9	5.49						
60	6.99	32.87	25.76	96.1	5.40	5.63	5.1	.35	2.6	6.5	1.50
64	6.91	32.86	25.77	95.7	5.38						


KELEZ CRUISE XWCC-24 STATION 36 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

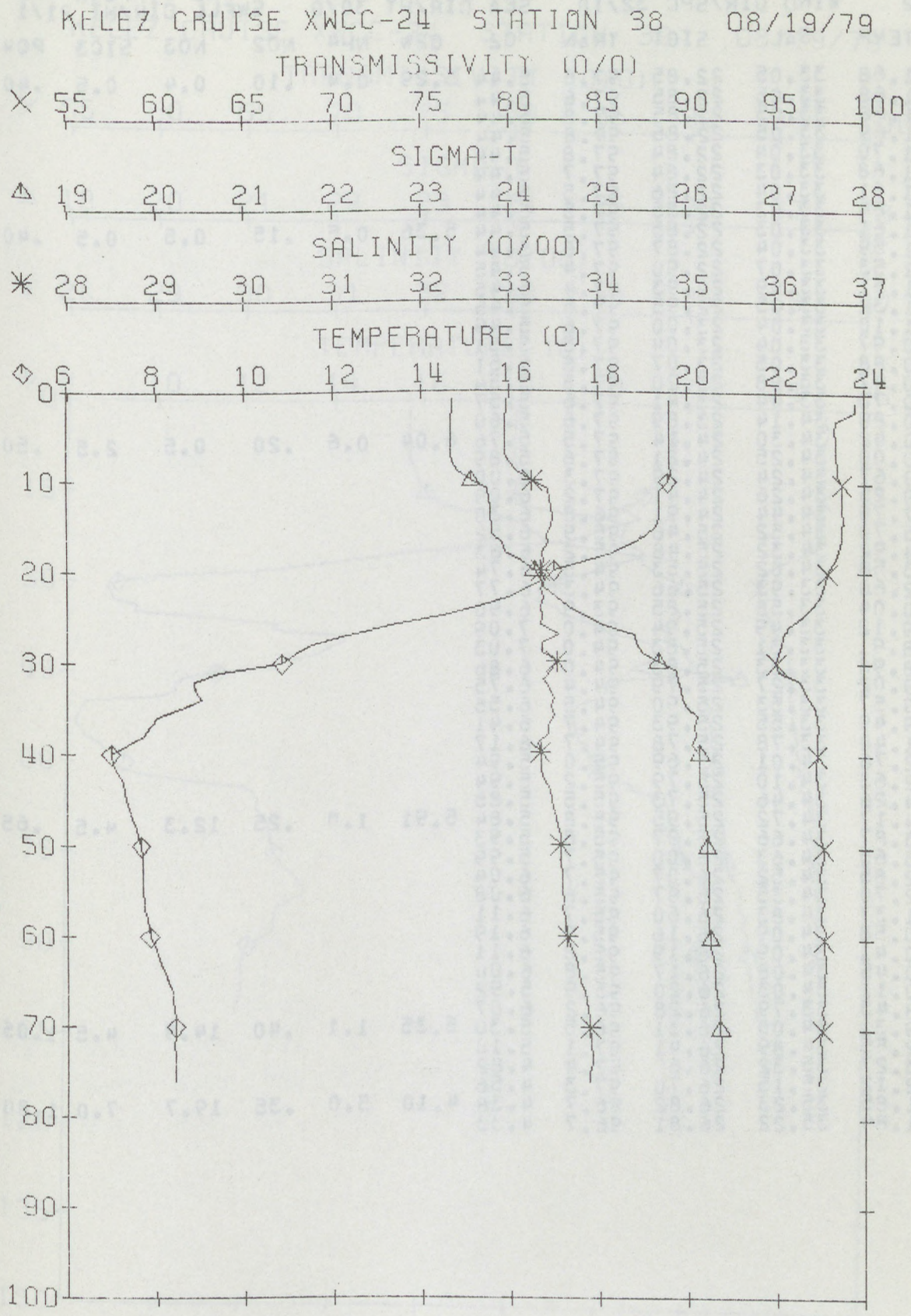
XWCC-24 STA. 37 LAT 39 46.0N; LONG 72 57.0W GMT 11.1 08/10/79
DEPTH 075 AIR D/W 20.0/19.4 BARO 16.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 15/0 SWELL DIR/HT 15/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.49	32.60	23.09	99.6	5.49	5.49	0.5	.10	0.3	1.5	.30
2	19.49	32.60	23.09	99.6	5.49						
3	19.47	32.57	23.07	99.3	5.48						
4	19.47	32.57	23.07	99.4	5.49						
5	19.48	32.57	23.07	99.5	5.48						
6	19.46	32.58	23.08	99.5	5.48						
7	19.47	32.58	23.07	99.4	5.49						
8	19.47	32.56	23.06	99.5	5.49						
9	19.47	32.57	23.07	99.5	5.49	5.59	0.5	<.10	0.4	0.5	.30
10	19.47	32.57	23.07	99.4	5.49						
11	19.47	32.57	23.07	99.5	5.49						
12	19.46	32.57	23.08	99.4	5.48						
13	19.46	32.57	23.07	99.4	5.48						
14	19.46	32.57	23.07	99.5	5.49						
15	19.46	32.56	23.07	99.4	5.49						
16	19.28	32.60	23.14	99.3	5.48						
17	18.03	32.67	23.50	99.1	5.59						
18	17.27	32.80	23.78	98.7	5.71						
19	13.89	33.44	25.03	98.4	6.12						
20	12.49	33.33	25.22	98.2	6.37	6.66	0.8	<.10	0.4	1.0	.60
21	10.74	33.23	25.47	97.7	6.59						
22	9.90	33.09	25.50	97.3	6.74						
23	9.61	33.14	25.59	97.2	6.76						
24	9.41	33.19	25.66	97.1	6.75						
25	9.13	33.15	25.67	97.0	6.74						
26	8.84	33.25	25.80	96.9	6.74						
27	8.32	33.26	25.88	97.0	6.71						
28	7.95	33.18	25.88	97.2	6.67						
29	7.63	33.16	25.90	97.2	6.55						
30	7.35	33.13	25.92	97.3	6.42						
31	7.31	33.14	25.93	97.3	6.32						
32	7.15	33.13	25.95	97.4	6.21						
33	7.06	33.14	25.97	97.4	6.13						
34	6.99	33.12	25.96	97.6	6.05						
35	6.92	33.13	25.98	97.6	5.98						
36	6.75	33.08	25.97	97.7	5.92						
37	6.65	33.10	25.99	97.9	5.88						
38	6.59	33.09	25.99	98.0	5.83						
39	6.44	33.09	26.01	98.0	5.78						
40	6.36	33.10	26.03	98.1	5.70	6.86	1.5	.40	4.6	4.0	1.25
41	6.33	33.10	26.03	98.0	5.64						
42	6.32	33.08	26.02	98.0	5.57						
43	6.32	33.10	26.03	98.0	5.53						
44	6.32	33.09	26.03	98.0	5.49						
45	6.32	33.09	26.03	98.0	5.46						
46	6.32	33.09	26.02	98.0	5.44						
47	6.32	33.08	26.02	98.1	5.43						
48	6.32	33.09	26.02	98.2	5.41						
49	6.32	33.08	26.02	98.1	5.40						
50	6.33	33.08	26.02	98.1	5.39						
60	6.33	33.07	26.01	98.2	5.35	5.67	3.0	.30	2.9	4.5	1.00
70	6.34	33.03	25.98	98.2	5.32						
72	6.34	33.03	25.98	97.9	5.31	5.53	3.5	.40	4.6	6.0	1.20


KELEZ CRUISE XWCC-24 STATION 37 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

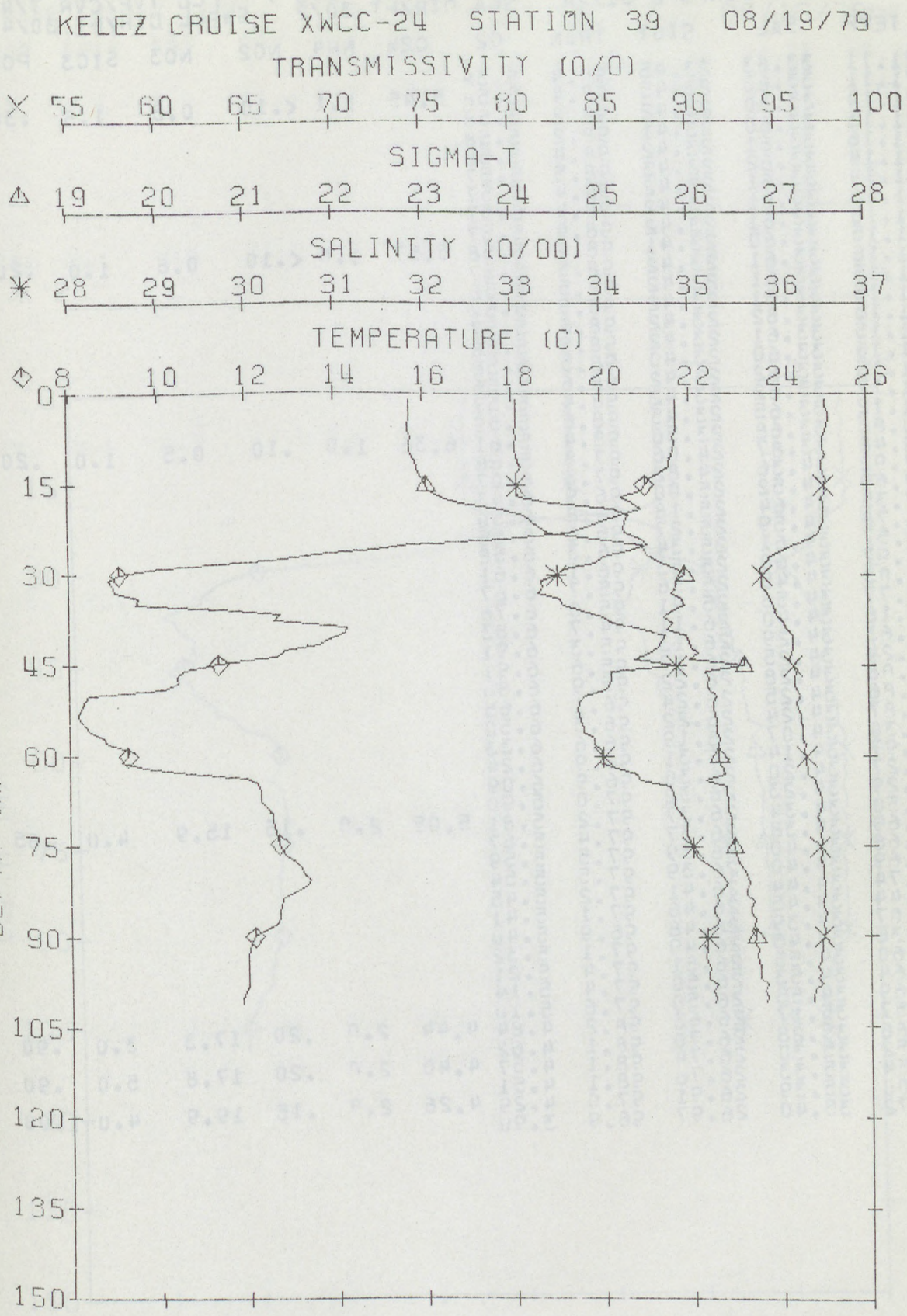
XWCC-24 STA. 38 LAT 39 38.7N; LONG 72 39.0W GMT 13.3 08/19/79
DEPTH 076 AIR D/W 20.0/19.4 BARO 15.8 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 30/10 SEA DIR/HT 29/0 SWELL DIR/HT 21/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.58	32.97	23.34	99.5	5.59	5.51	0.8	.25	0.4	1.5	.20
2	19.58	32.96	23.34	99.5	5.59						
3	19.57	32.94	23.33	98.4	5.55						
4	19.57	32.95	23.33	98.4	5.55						
5	19.57	32.94	23.33	98.4	5.55						
6	19.57	32.94	23.32	98.5	5.55						
7	19.58	32.95	23.33	98.4	5.56						
8	19.59	32.99	23.36	98.6	5.55						
9	19.62	33.08	23.41	98.5	5.56						
10	19.55	33.25	23.57	98.7	5.56	5.59	0.9	.10	0.5	1.0	.55
11	19.35	33.43	23.75	98.7	5.60						
12	19.36	33.45	23.77	98.8	5.62						
13	19.36	33.47	23.78	98.8	5.64						
14	19.37	33.47	23.78	98.8	5.64						
15	19.29	33.46	23.80	98.8	5.64						
16	19.07	33.41	23.81	98.7	5.66						
17	18.71	33.43	23.91	98.7	5.70						
18	18.33	33.36	23.95	98.5	5.75						
19	17.65	33.37	24.13	98.3	5.84	5.99	1.1	.20	0.5	1.0	.80
20	16.99	33.35	24.27	97.9	5.95						
21	16.80	33.39	24.35	97.9	6.04						
22	16.79	33.44	24.41	97.6	6.07						
23	15.94	33.38	24.53	97.5	6.14						
24	15.28	33.35	24.66	97.1	6.22						
25	14.46	33.37	24.85	96.5	6.29						
26	13.30	33.44	25.07	95.8	6.44						
27	12.33	33.54	25.41	95.5	6.54						
28	11.49	33.57	25.44	95.3	6.66						
29	11.11	33.57	25.51	95.2	6.68						
30	10.83	33.52	25.68	95.0	6.66						
31	9.42	33.47	25.87	95.1	6.73						
32	8.84	33.38	25.89	96.4	6.78						
33	8.91	33.44	25.93	96.6	6.63						
34	9.02	33.49	25.96	97.0	6.43						
35	8.57	33.47	26.01	97.3	6.29						
36	8.01	33.49	26.11	97.4	6.23						
37	7.86	33.43	26.09	97.4	6.18						
38	7.72	33.43	26.10	97.4	6.01						
39	7.34	33.30	26.06	97.4	5.92						
40	6.98	33.34	26.13	97.3	5.87	5.56	3.7	.70	8.1	3.5	1.60
41	7.04	33.35	26.14	97.2	5.79						
42	7.11	33.34	26.12	97.3	5.67						
43	7.26	33.38	26.13	97.3	5.58						
44	7.28	33.44	26.17	97.5	5.52						
45	7.34	33.45	26.17	97.5	5.48						
46	7.40	33.47	26.18	97.6	5.46						
47	7.46	33.51	26.21	97.4	5.43						
48	7.55	33.52	26.20	97.5	5.41						
49	7.59	33.56	26.22	97.6	5.40						
50	7.65	33.55	26.21	97.6	5.39						
60	7.85	33.63	26.24	97.6	5.31	5.43	2.9	.25	10.8	4.5	1.15
70	8.42	33.88	26.35	97.6	5.09						
76	8.42	33.87	26.35	97.4	4.93	5.00	2.8	.30	13.7	5.5	1.20


KELEZ CRUISE XWCC-24 STATION 38 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

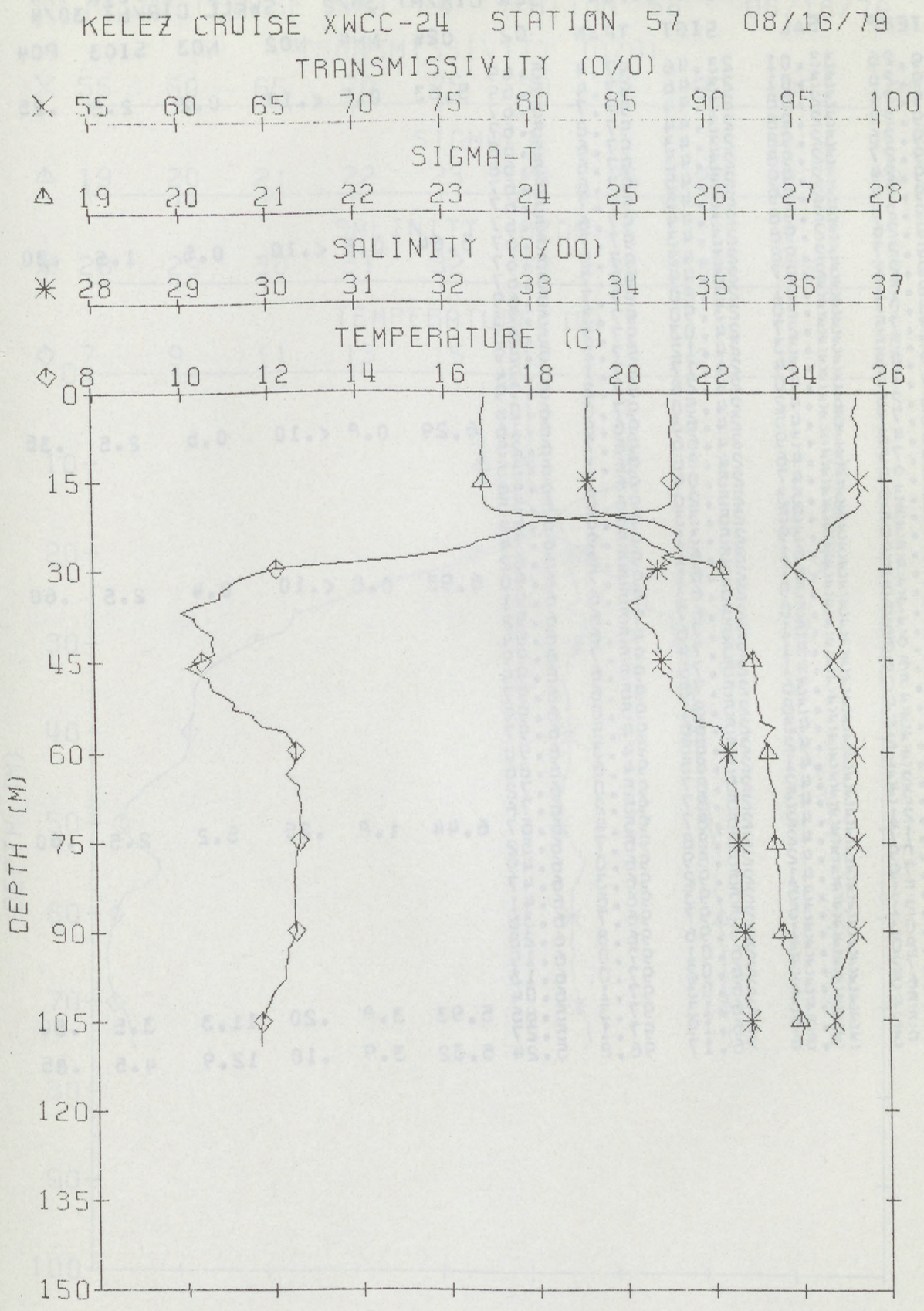
XWCC-24 STA. 39 LAT 39 31.6N; LONG 72 26.5W GMT 15.4 08/19/79
DEPTH 121 AIR D/W 20.6/19.4 BARO 17.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 32/10 SEA DIR/HT 30/0 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	21.68	33.05	22.85	97.6	5.44	5.29	0.4	.10	0.4	0.5	.40
2	21.68	33.05	22.85	97.6	5.44						
3	21.68	33.05	22.85	97.8	5.44						
4	21.69	33.05	22.85	97.8	5.44						
5	21.70	33.04	22.84	97.8	5.44						
6	21.68	33.03	22.84	97.7	5.44						
7	21.61	33.04	22.86	97.5	5.44						
8	21.64	33.03	22.85	97.5	5.44						
9	21.61	33.03	22.85	97.5	5.44	5.36	0.5	.15	0.5	0.5	.40
10	21.59	33.04	22.87	97.6	5.44						
11	21.53	33.07	22.90	97.4	5.45						
12	21.51	33.09	22.93	97.4	5.45						
13	21.32	33.05	22.95	97.6	5.45						
14	21.10	33.04	23.00	97.6	5.49						
15	20.97	33.04	23.04	97.5	5.51						
16	20.88	33.05	23.07	97.6	5.51						
17	20.47	33.08	23.20	97.5	5.54						
18	20.70	33.44	23.41	97.6	5.57						
19	20.89	34.14	23.89	97.6	5.60						
20	20.42	34.30	24.14	97.5	5.76	6.04	0.6	.20	0.5	2.5	.50
21	20.00	34.25	24.21	97.6	5.89						
22	19.67	34.24	24.29	97.3	6.00						
23	19.25	34.26	24.41	97.2	6.09						
24	17.79	34.44	24.91	96.8	6.30						
25	15.70	34.52	25.46	95.9	6.52						
26	14.92	34.32	25.48	95.2	6.63						
27	13.58	34.02	25.53	94.5	6.74						
28	12.60	33.93	25.66	94.3	6.77						
29	10.04	33.58	25.85	93.9	6.90						
30	9.12	33.49	25.94	94.0	7.09						
31	8.91	33.31	25.83	94.0	7.03						
32	8.98	33.33	25.83	94.0	6.86						
33	9.02	33.27	25.79	94.4	6.75						
34	9.57	33.53	25.90	94.5	6.55						
35	9.49	33.55	25.93	94.7	6.41						
36	11.40	33.78	25.78	94.7	6.17						
37	12.76	34.01	25.69	95.0	5.94						
38	12.63	34.10	25.79	95.2	5.94						
39	14.26	34.46	25.73	95.5	5.85						
40	14.17	34.72	25.95	95.8	5.84	5.91	1.0	.25	12.3	4.5	.65
41	13.87	34.66	25.97	95.8	5.93						
42	13.65	34.63	26.00	95.7	5.99						
43	12.85	34.52	26.07	95.7	6.04						
44	12.70	34.35	25.97	95.6	6.08						
45	11.37	34.83	26.60	95.7	6.11						
46	10.58	34.09	26.16	95.9	6.19						
47	10.41	34.09	26.19	95.8	6.11						
48	10.45	34.08	26.17	95.8	6.00						
49	10.11	34.03	26.20	95.9	5.92						
50	8.43	33.79	26.28	96.2	6.07						
60	9.31	34.00	26.31	96.5	5.30	5.35	1.1	.40	14.9	4.5	1.05
70	12.55	34.89	26.41	97.1	5.10						
80	13.27	35.32	26.60	97.4	4.82						
90	12.12	35.15	26.70	97.3	4.56						
100	11.85	35.23	26.82	96.7	4.38	4.10	5.0	.35	19.7	7.0	1.80
101	11.84	35.22	26.81	96.7	4.33						


KELEZ CRUISE XWCC-24 STATION 39 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 15 30 45 60 75 90 105 120 135 150

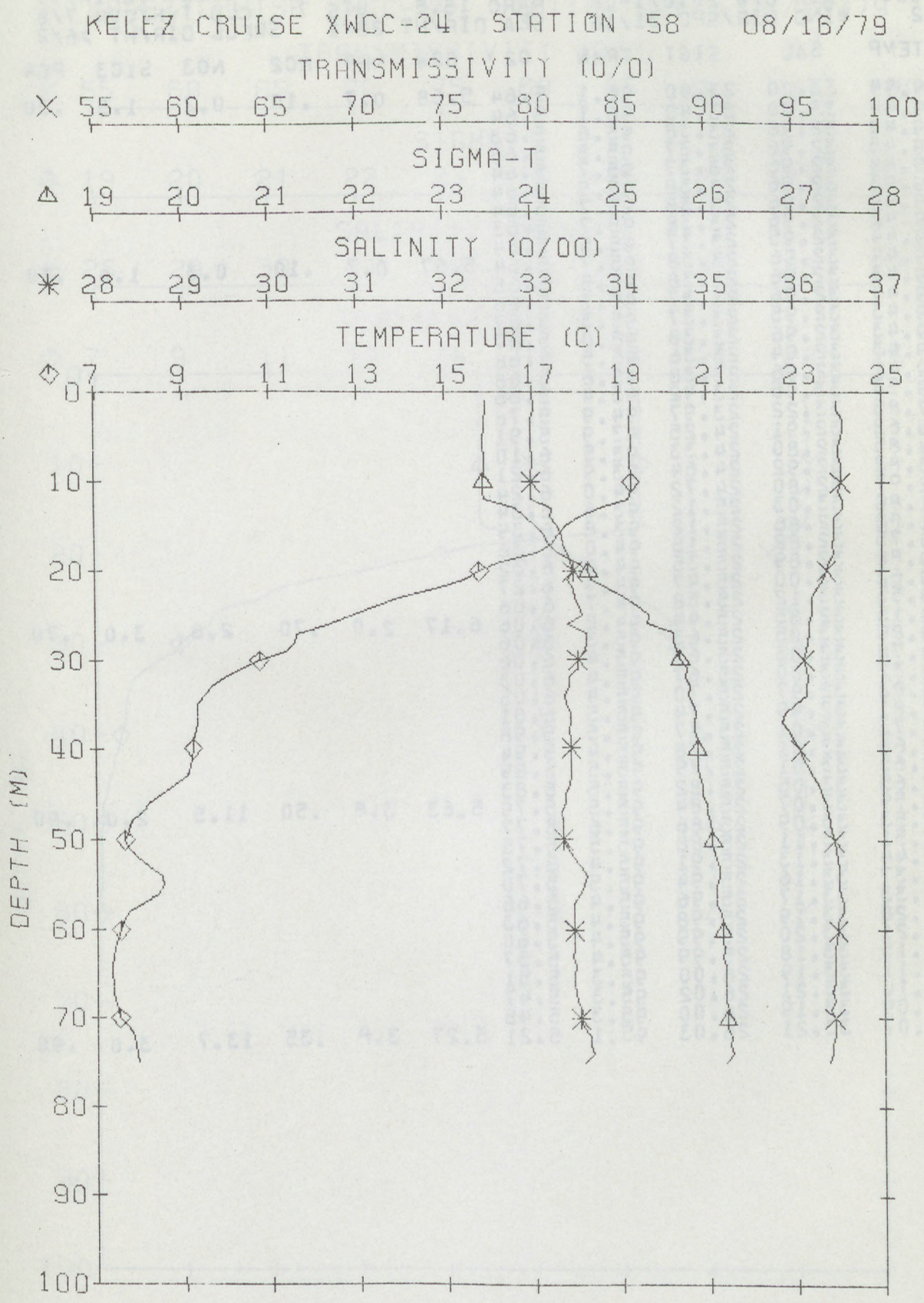
XWCC-24 STA. 57 LAT 39 56.7N; LONG 71 52.0W GMT 02.4 08/16/79
DEPTH 107 AIR D/W 18.3/15.0 BARO 18.0 VIS 7 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 31/28 SEA DIR/HT 30/2 SWELL DIR/HT 30/4

DEP	TEMP	SAL	SIGT	TRAN	O2	O2%	NH4	NO2	NO3	SIC3	PO4
1	21.11	33.63	23.45	98.4	5.58						
2	21.11	33.63	23.45	98.4	5.58	5.45	1.1	<.10	0.5	1.5	.30
3	21.14	33.60	23.42	98.2	5.58						
4	21.15	33.60	23.41	98.2	5.58						
5	21.16	33.61	23.42	98.4	5.58						
6	21.14	33.62	23.43	98.5	5.57						
7	21.14	33.61	23.42	98.4	5.57						
8	21.16	33.61	23.42	98.4	5.57						
9	21.15	33.61	23.42	98.4	5.57						
10	21.15	33.60	23.41	98.4	5.58	5.57	1.0	<.10	0.6	1.0	.20
11	21.16	33.61	23.42	98.5	5.57						
12	21.15	33.61	23.42	98.5	5.56						
13	21.15	33.61	23.42	98.5	5.57						
14	21.16	33.62	23.42	98.5	5.57						
15	21.15	33.61	23.42	98.5	5.56						
16	21.16	33.60	23.40	98.5	5.58						
17	21.15	33.62	23.42	98.6	5.56						
18	21.17	33.62	23.42	98.4	5.57						
19	21.12	33.65	23.45	98.6	5.59						
20	20.83	33.68	23.56	98.4	5.61	6.36	1.0	.10	0.5	1.0	.20
21	19.48	33.87	24.06	97.8	5.68						
22	17.92	34.36	24.82	97.3	6.07						
23	17.69	34.52	25.00	96.9	6.43						
24	17.35	34.64	25.18	96.8	6.50						
25	16.78	34.59	25.27	96.6	6.55						
26	16.57	34.61	25.34	96.3	6.58						
27	15.97	34.68	25.53	96.1	6.61						
28	15.03	34.45	25.56	95.7	6.67						
29	13.77	34.56	25.91	95.0	6.76						
30	12.16	34.40	26.11	94.7	6.83						
31	11.63	34.29	26.13	95.3	6.91						
32	11.24	34.25	26.17	95.6	6.91						
33	11.08	34.28	26.22	95.9	6.80						
34	10.86	34.25	26.24	96.1	6.65						
35	10.87	34.24	26.22	96.3	6.50						
36	10.30	34.07	26.19	96.6	6.33						
37	9.97	34.14	26.31	96.9	6.24						
38	10.27	34.20	26.30	96.9	6.09						
39	10.29	34.23	26.32	97.0	5.90						
40	10.50	34.34	26.37	97.2	5.81	5.05	2.0	.15	15.9	4.0	.85
41	10.69	34.38	26.37	97.4	5.67						
42	10.68	34.40	26.39	97.5	5.59						
43	10.69	34.40	26.39	97.5	5.54						
44	10.74	34.44	26.41	97.2	5.45						
45	10.44	34.45	26.46	97.1	5.41						
46	10.07	34.39	26.48	96.9	5.40						
47	10.36	34.46	26.49	97.1	5.32						
48	10.60	34.55	26.51	97.4	5.21						
49	10.64	34.53	26.50	97.4	5.14						
50	10.69	34.55	26.50	97.6	5.10						
60	12.57	35.17	26.63	98.2	4.84	4.44	2.0	.20	17.3	3.0	.90
70	12.66	35.28	26.70	98.1	4.62						
80	12.52	35.30	26.74	98.1	4.57	4.40	2.0	.20	17.8	5.0	.90
90	12.54	35.33	26.76	98.1	4.51						
100	12.00	35.39	26.91	97.0	4.29	4.26	2.8	.15	19.9	4.0	1.00
109	11.72	35.40	26.97	96.9	3.90						


KELEZ CRUISE XWCC-24 STATION 57 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 15 30 45 60 75 90 105 120 135 150

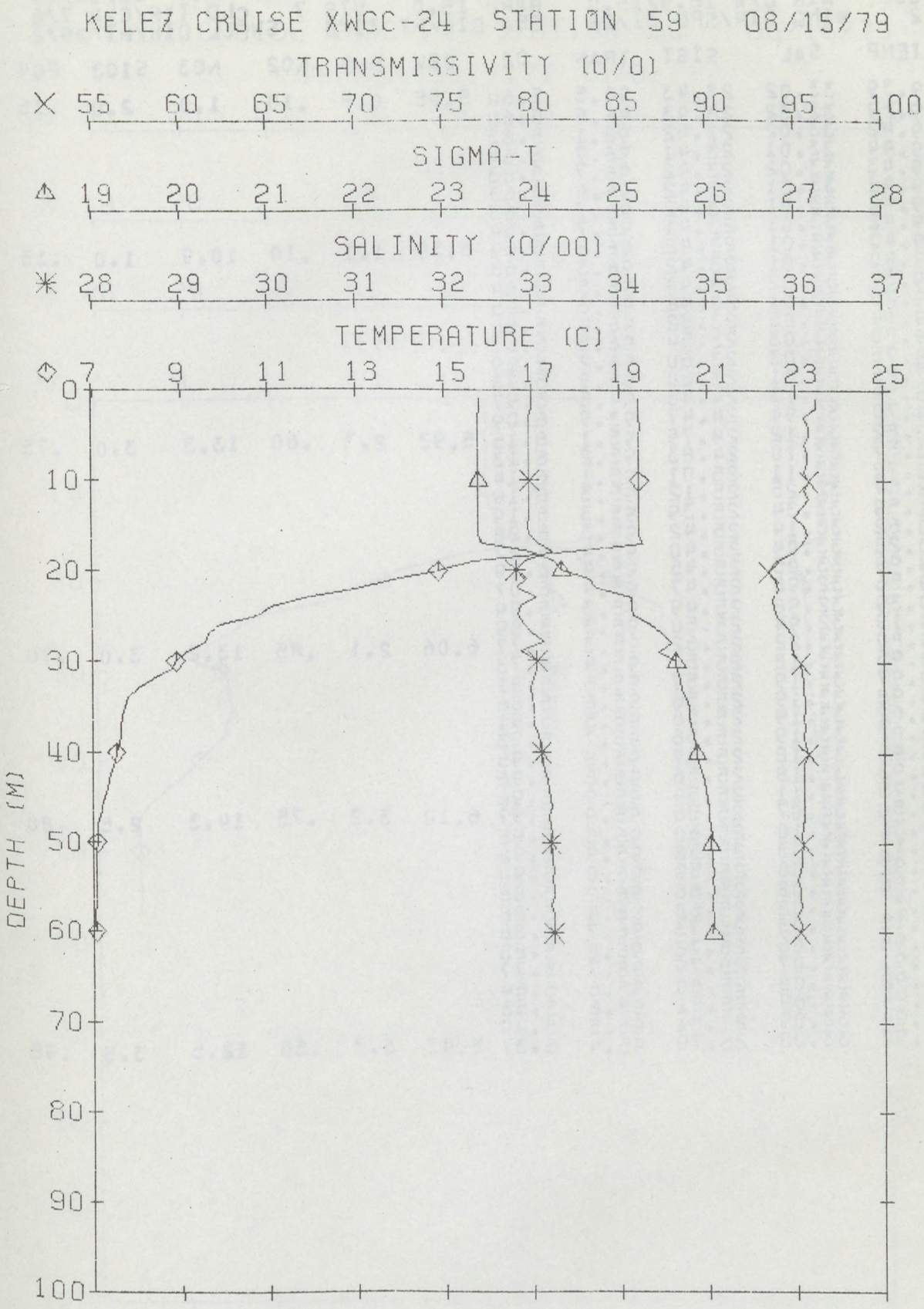
XWCC-24 STA. 58 LAT 40 8.2N; LONG 71 57.8W GMT 00.2 08/16/79
DEPTH 072 AIR D/W 18.9/15.6 BARO 17.0 VIS 7 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 30/24 SEA DIR/HT 30/2 SWELL DIR/HT 30/4

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.26	33.01	23.46	97.4	5.69						
2	19.26	33.01	23.46	97.4	5.69	5.63	0.5	<.10	0.2	2.5	.25
3	19.24	32.98	23.44	97.7	5.67						
4	19.24	32.98	23.44	97.8	5.67						
5	19.26	32.98	23.43	97.6	5.68						
6	19.27	32.98	23.43	97.6	5.68						
7	19.24	32.99	23.45	97.6	5.67						
8	19.24	32.99	23.45	97.7	5.67						
9	19.25	32.98	23.44	97.6	5.67						
10	19.26	32.98	23.43	97.7	5.67	5.64	0.8	<.10	0.5	1.5	.30
11	19.27	32.98	23.43	97.5	5.67						
12	19.21	32.97	23.44	97.7	5.67						
13	18.51	33.21	23.80	97.7	5.69						
14	18.07	33.20	23.90	97.3	5.73						
15	17.75	33.27	24.03	97.2	5.83						
16	17.55	33.33	24.12	97.2	5.89						
17	17.42	33.34	24.17	97.1	5.94						
18	17.10	33.40	24.28	97.2	5.99						
19	16.25	33.42	24.50	97.0	6.06						
20	15.77	33.45	24.63	96.8	6.16	6.29	0.8	<.10	0.5	2.5	.35
21	15.42	33.39	24.66	96.7	6.25						
22	14.75	33.46	24.86	96.3	6.35						
23	13.94	33.47	25.04	96.1	6.48						
24	13.36	33.53	25.20	96.0	6.55						
25	12.82	33.55	25.33	96.0	6.64						
26	12.30	33.39	25.31	95.9	6.74						
27	11.59	33.61	25.61	95.8	6.82						
28	11.55	33.61	25.61	95.7	6.90	6.93	0.8	<.10	0.4	2.5	.60
29	11.38	33.59	25.63	95.6	6.91						
30	10.76	33.50	25.67	95.6	6.92						
31	10.32	33.51	25.76	95.6	6.94						
32	9.96	33.41	25.74	95.7	6.99						
33	9.68	33.41	25.79	95.6	6.99						
34	9.50	33.36	25.78	95.6	6.97						
35	9.34	33.38	25.81	95.0	6.99						
36	9.34	33.43	25.86	94.5	6.97						
37	9.32	33.42	25.85	94.3	6.90						
38	9.31	33.41	25.85	94.6	6.86						
39	9.23	33.42	25.87	95.0	6.72						
40	9.23	33.43	25.87	95.2	6.76						
41	9.21	33.42	25.87	95.4	6.57	6.44	1.8	.25	5.2	2.5	.60
42	9.17	33.42	25.88	95.7	6.52						
43	9.09	33.42	25.89	96.0	6.49						
44	8.79	33.41	25.92	96.3	6.47						
45	8.51	33.35	25.93	96.6	6.41						
46	8.21	33.35	25.97	96.7	6.35						
47	8.03	33.31	25.96	96.8	6.28						
48	7.80	33.33	26.01	97.0	6.19						
49	7.72	33.33	26.02	97.0	6.13						
50	7.65	33.32	26.03	97.1	6.04						
60	7.54	33.43	26.13	97.3	5.85	5.93	3.8	.20	11.3	3.5	.80
70	7.52	33.50	26.19	97.1	5.27						
75	7.03	33.56	26.17	96.8	5.24	5.32	3.9	.10	12.9	4.5	.85


KELEZ CRUISE XWCC-24 STATION 58 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

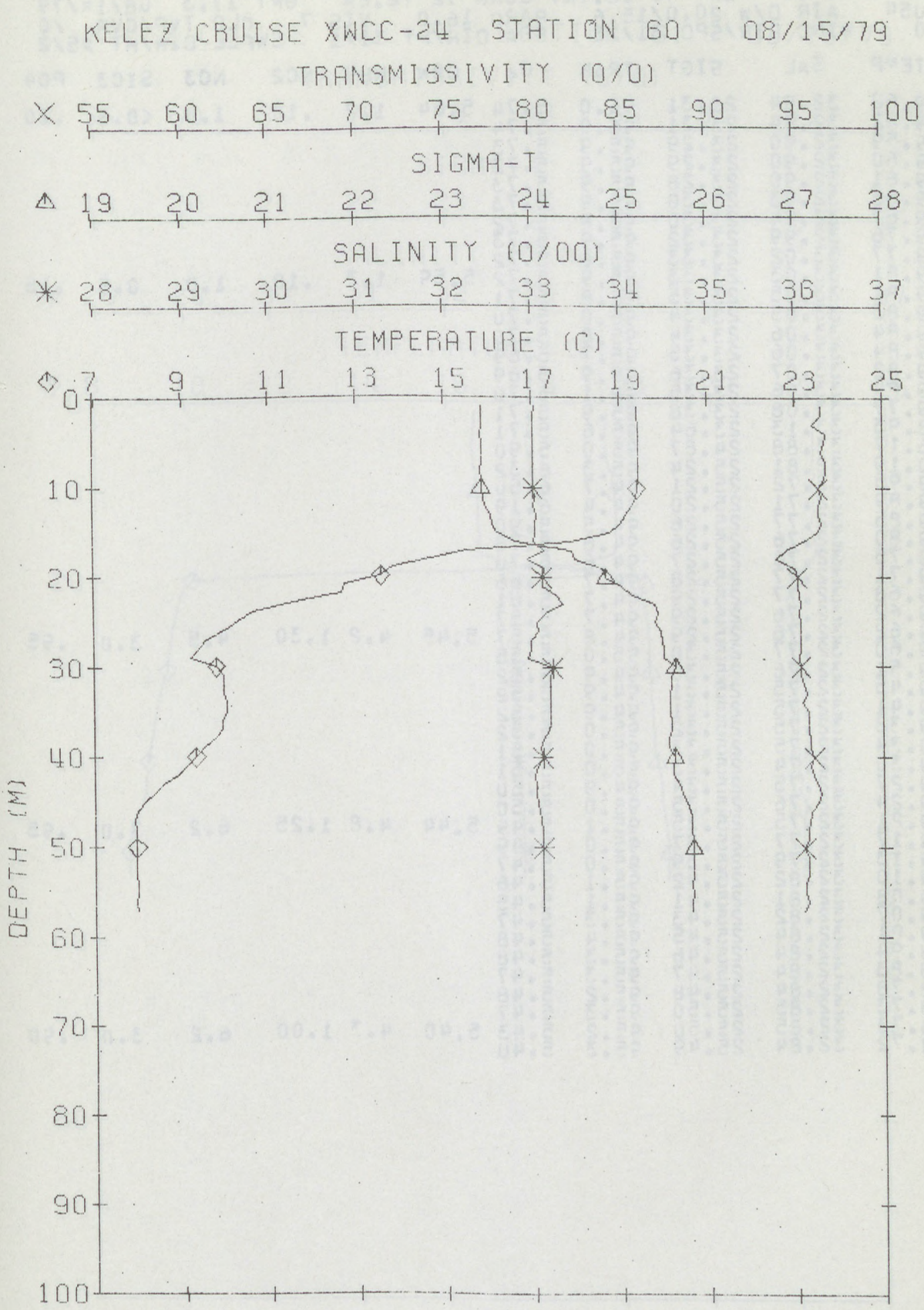
XWCC-24 STA. 59 LAT 40 17.8N; LONG 72 4.0W GMT 20.2 08/15/79
DEPTH 061 AIR D/W 20.0/15.6 BARO 15.5 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 31/16 SEA DIR/HT 28/1 SWELL DIR/HT 26/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.44	33.00	23.40	96.1	5.64	5.68	0.7	.10	0.2	1.5	.30
2	19.44	33.00	23.40	96.1	5.64						
3	19.43	32.96	23.38	95.6	5.63						
4	19.45	32.96	23.37	95.8	5.65						
5	19.44	32.96	23.37	95.7	5.64						
6	19.43	32.96	23.38	95.5	5.64						
7	19.44	32.96	23.38	95.7	5.64						
8	19.42	32.96	23.38	95.7	5.63						
9	19.44	32.95	23.37	95.5	5.64						
10	19.44	32.96	23.38	95.7	5.64	5.67	0.7	.10	0.3	1.0	.30
11	19.43	32.96	23.38	95.5	5.65						
12	19.44	32.96	23.37	95.7	5.66						
13	19.43	32.95	23.37	95.3	5.67						
14	19.43	32.96	23.38	95.0	5.67						
15	19.43	32.94	23.36	95.5	5.68						
16	19.41	32.96	23.38	95.6	5.68						
17	19.53	33.05	23.42	96.4	5.66						
18	17.85	33.22	23.97	94.9	5.78						
19	15.62	32.91	24.25	93.9	5.91						
20	14.85	32.80	24.33	93.5	6.10						
21	13.82	32.92	24.64	93.9	6.21						
22	12.97	32.80	24.72	94.0	6.24						
23	11.80	33.03	25.12	93.6	6.34						
24	11.08	32.86	25.12	93.8	6.39						
25	10.75	32.82	25.15	94.0	6.36						
26	9.88	32.89	25.35	94.4	6.32						
27	9.62	33.00	25.47	94.9	6.27						
28	9.55	33.12	25.58	94.7	6.06						
29	9.15	32.85	25.44	94.8	6.06	6.17	2.0	.70	2.8	3.0	.70
30	8.89	33.05	25.63	95.3	6.06						
31	8.78	33.03	25.63	95.4	6.06						
32	8.37	33.00	25.67	95.4	6.03						
33	8.03	32.97	25.70	95.4	6.05						
34	7.81	32.99	25.74	95.5	6.01						
35	7.73	33.01	25.77	95.5	5.98						
36	7.68	33.01	25.78	95.4	5.94						
37	7.65	33.01	25.79	95.5	5.89						
38	7.65	33.05	25.82	95.5	5.83						
39	7.59	33.07	25.84	95.5	5.79	5.63	3.8	.50	11.5	2.0	.90
40	7.53	33.09	25.86	95.6	5.77						
41	7.51	33.11	25.88	95.5	5.75						
42	7.44	33.13	25.91	95.4	5.72						
43	7.37	33.16	25.94	95.5	5.70						
44	7.33	33.17	25.96	95.4	5.66						
45	7.28	33.19	25.98	95.4	5.63						
46	7.21	33.20	25.99	95.4	5.60						
47	7.15	33.18	25.99	95.4	5.57						
48	7.11	33.19	26.00	95.3	5.51						
49	7.10	33.21	26.02	95.3	5.47						
50	7.09	33.19	26.00	95.3	5.45						
60	7.07	33.21	26.03	95.1	5.21	5.27	3.8	.35	13.7	3.0	.90


KELEZ CRUISE XWCC-24 STATION 59 08/15/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

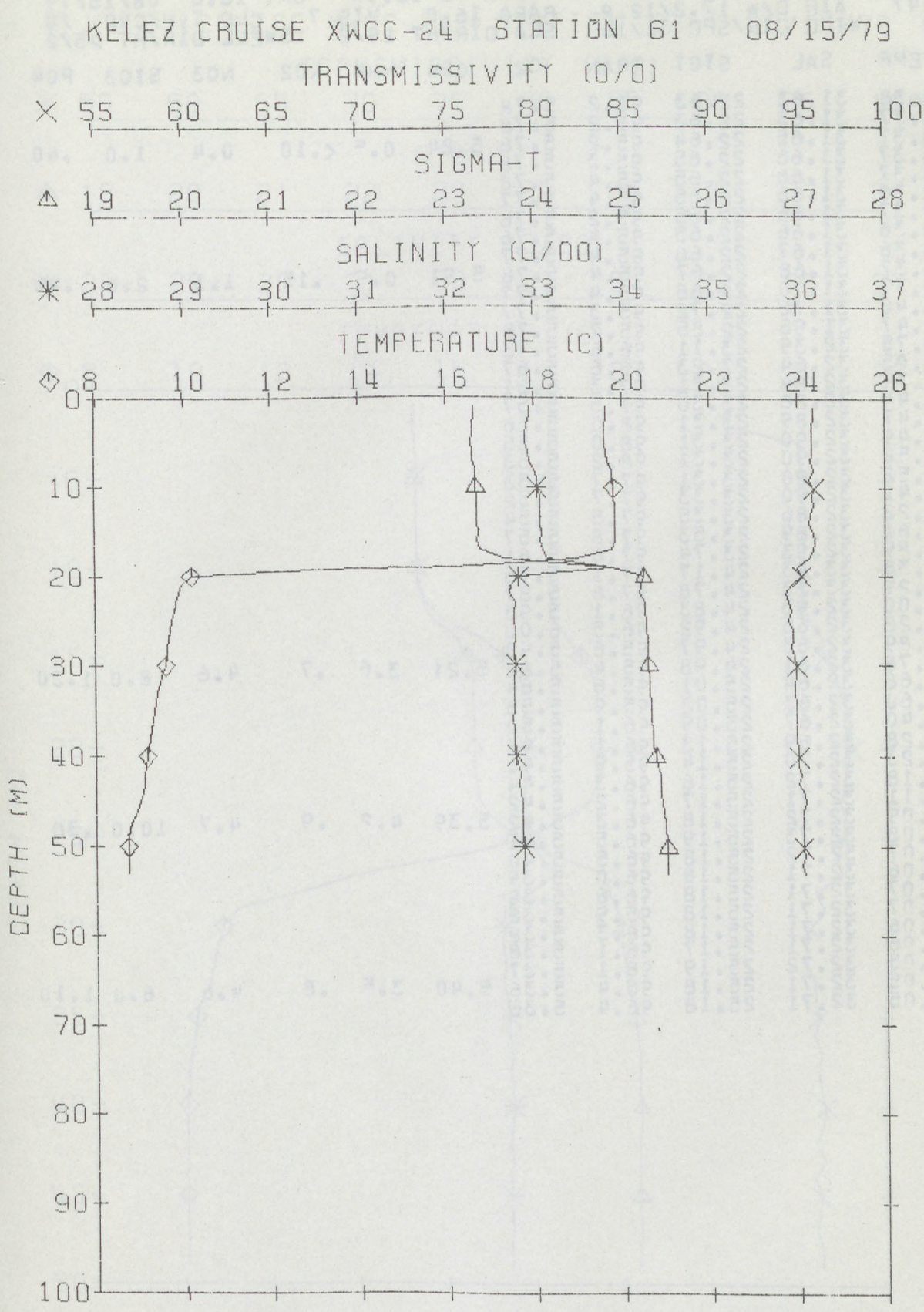
XWCC-24 STA. 60 LAT 40 26.7N; LONG 72 9.0W GMT 18.5 08/15/79
DEPTH 058 AIR D/W 18.9/15.0 BARO 15.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 31/12 SEA DIR/HT 31/0 SWELL DIR/HT 29/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.39	33.02	23.43	96.5	5.60	5.55	0.8	.10	1.0	2.0	.15
2	19.39	33.02	23.43	96.5	5.60						
3	19.42	33.02	23.42	96.1	5.63						
4	19.44	33.01	23.41	96.7	5.64						
5	19.43	33.02	23.42	96.7	5.63						
6	19.42	33.01	23.42	96.6	5.63						
7	19.42	33.01	23.42	96.7	5.63						
8	19.42	33.01	23.41	96.7	5.64						
9	19.43	33.01	23.42	96.6	5.64	5.59	1.1	.10	10.9	1.0	.15
10	19.40	33.01	23.42	96.3	5.63						
11	19.37	33.02	23.44	96.5	5.64						
12	19.26	33.01	23.46	96.3	5.65						
13	19.14	33.05	23.52	96.4	5.66						
14	19.00	33.03	23.54	96.5	5.67						
15	18.75	33.03	23.60	96.2	5.69						
16	17.86	33.01	23.80	95.5	5.73						
17	15.84	33.13	24.43	94.5	5.97						
18	14.70	32.94	24.47	93.9	6.09						
19	13.82	33.12	24.79	93.1	6.15	5.93	2.7	.60	13.3	3.0	.75
20	13.57	33.10	24.83	93.2	6.13						
21	12.72	33.11	25.01	93.1	6.14						
22	12.67	33.25	25.12	93.3	6.19						
23	11.59	33.34	25.39	93.3	6.19						
24	10.62	33.14	25.42	93.3	6.28						
25	10.28	33.04	25.40	93.4	6.27						
26	9.89	33.05	25.45	93.4	6.19						
27	9.56	32.98	25.47	93.4	6.07						
28	9.39	32.98	25.49	93.3	5.99						
29	9.19	32.94	25.50	93.3	5.89						
30	9.80	33.22	25.62	93.3	5.77	6.06	2.1	.85	13.2	3.0	.70
31	9.95	33.18	25.57	93.4	5.73						
32	9.97	33.19	25.57	93.6	5.81						
33	9.98	33.19	25.56	93.6	5.86						
34	10.02	33.19	25.56	93.5	5.91						
35	10.02	33.19	25.56	93.7	5.93						
36	9.95	33.18	25.57	93.8	5.95						
37	9.93	33.18	25.56	93.8	5.96						
38	9.75	33.11	25.54	93.9	5.96						
39	9.50	33.07	25.55	93.9	5.97	6.10	3.2	.75	14.3	2.5	.80
40	9.31	33.10	25.60	96.0	5.95						
41	9.11	33.03	25.58	95.9	5.92						
42	8.92	33.00	25.59	96.0	5.90						
43	8.56	33.02	25.66	96.2	5.88						
44	8.37	33.02	25.68	96.4	5.88						
45	8.15	33.03	25.73	96.2	5.88						
46	7.96	33.06	25.78	95.8	5.85						
47	7.91	33.07	25.79	95.7	5.77						
48	7.92	33.08	25.80	95.6	5.64						
49	7.94	33.09	25.81	95.6	5.53						
50	7.94	33.09	25.81	95.5	5.49						
57	7.97	33.08	25.79	95.4	5.37	5.43	5.7	.50	12.5	3.5	.95


KELEZ CRUISE XWCC-24 STATION 60 08/15/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

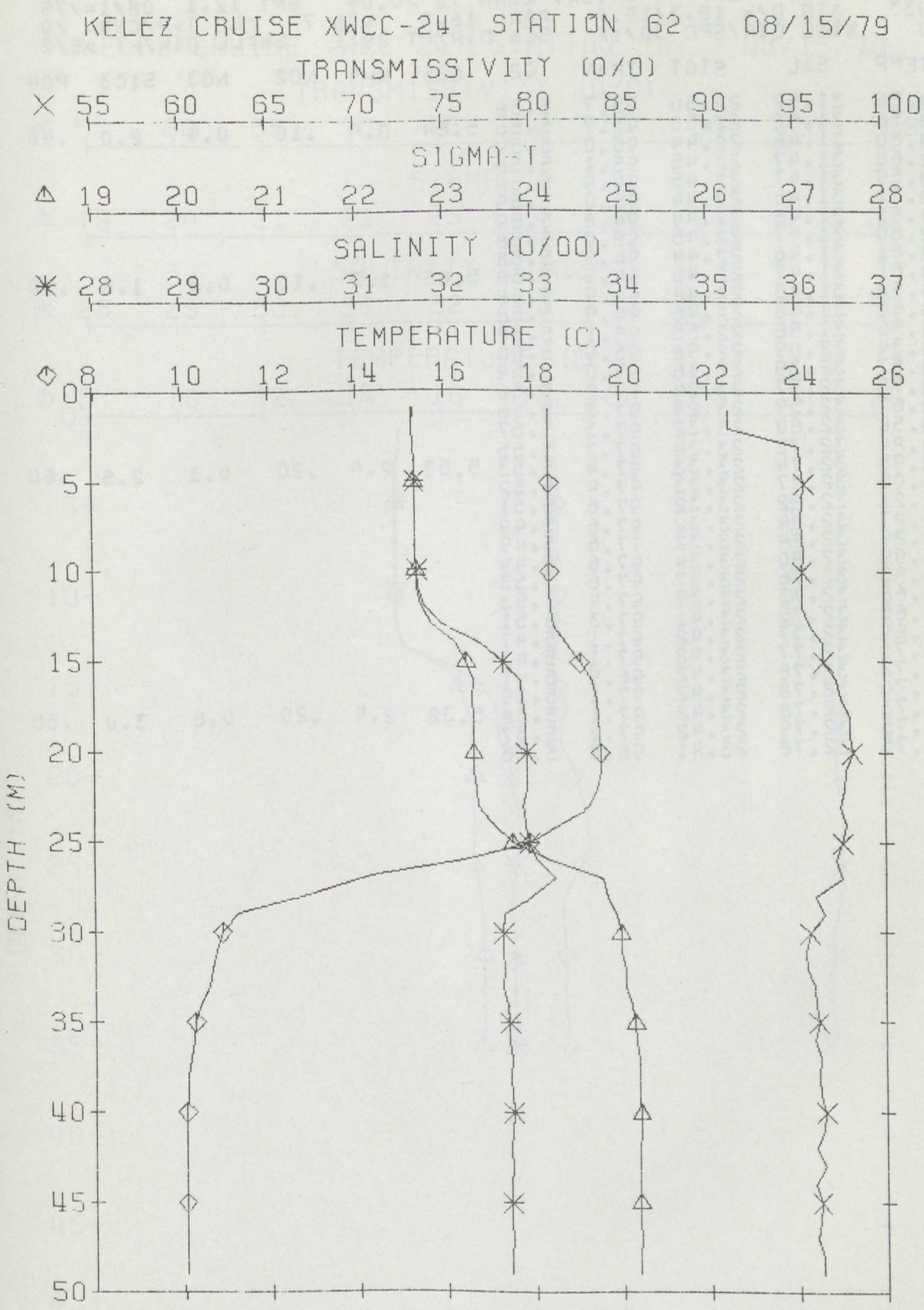
XWCC-24 STA. 61 LAT 40 32.1N; LONG 72 12.6W GMT 17.3 08/15/79
DEPTH 054 AIR D/W 20.0/15.6 BARO 16.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 31/15 SEA DIR/HT 31/1 SWELL DIR/HT 25/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.62	32.94	23.31	96.0	5.74	5.64	1.2	.10	1.0	<0.5	.20
2	19.62	32.94	23.31	96.0	5.74						
3	19.59	32.90	23.29	95.9	5.73						
4	19.60	32.90	23.29	95.9	5.73						
5	19.61	32.90	23.28	95.9	5.73						
6	19.63	32.93	23.30	95.9	5.73						
7	19.67	32.94	23.30	95.8	5.72						
8	19.76	32.99	23.32	95.9	5.73						
9	19.77	33.02	23.33	95.6	5.72						
10	19.81	33.03	23.35	95.9	5.72	5.59	1.3	.10	1.0	0.5	.15
11	19.81	33.05	23.35	95.8	5.71						
12	19.83	33.05	23.34	96.0	5.70						
13	19.84	33.06	23.34	95.8	5.70						
14	19.84	33.06	23.35	95.7	5.69						
15	19.82	33.07	23.36	95.9	5.69						
16	19.84	33.06	23.35	96.1	5.70						
17	19.77	33.08	23.38	95.9	5.71						
18	18.93	33.13	23.64	95.6	5.71						
19	16.17	33.88	24.87	95.0	5.90						
20	10.19	32.81	25.24	95.3	6.32						
21	9.95	32.72	25.21	94.7	6.50						
22	9.89	32.71	25.20	94.4	6.19						
23	9.85	32.77	25.26	94.5	5.90						
24	9.80	32.76	25.26	94.6	5.78						
25	9.75	32.76	25.27	94.6	5.70						
26	9.71	32.77	25.28	94.7	5.66						
27	9.68	32.77	25.29	94.7	5.61						
28	9.62	32.76	25.29	94.7	5.57						
29	9.62	32.76	25.29	94.8	5.57	5.45	4.2	1.30	4.5	3.0	.95
30	9.60	32.77	25.30	95.0	5.55						
31	9.51	32.76	25.30	94.9	5.52						
32	9.45	32.75	25.31	94.9	5.52						
33	9.41	32.75	25.31	94.9	5.52						
34	9.38	32.75	25.32	95.0	5.52						
35	9.34	32.75	25.33	95.0	5.51						
36	9.30	32.74	25.33	95.0	5.51						
37	9.27	32.75	25.34	94.9	5.50						
38	9.24	32.76	25.35	95.0	5.50						
39	9.21	32.75	25.35	95.1	5.49	5.44	4.8	1.25	6.2	7.0	.95
40	9.17	32.77	25.37	95.0	5.49						
41	9.13	32.79	25.39	95.0	5.47						
42	9.10	32.82	25.42	95.1	5.46						
43	9.08	32.81	25.41	95.1	5.45						
44	9.07	32.82	25.43	95.3	5.47						
45	9.01	32.84	25.45	95.4	5.48						
46	8.94	32.84	25.46	95.3	5.48						
47	8.83	32.84	25.47	95.3	5.47						
48	8.78	32.84	25.48	95.2	5.48						
49	8.73	32.85	25.50	95.3	5.47						
50	8.73	32.85	25.50	95.2	5.43	5.40	4.3	1.00	6.2	3.0	.90
53	8.72	32.84	25.49	95.3	5.40						


KELEZ CRUISE XWCC-24 STATION 61 08/15/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

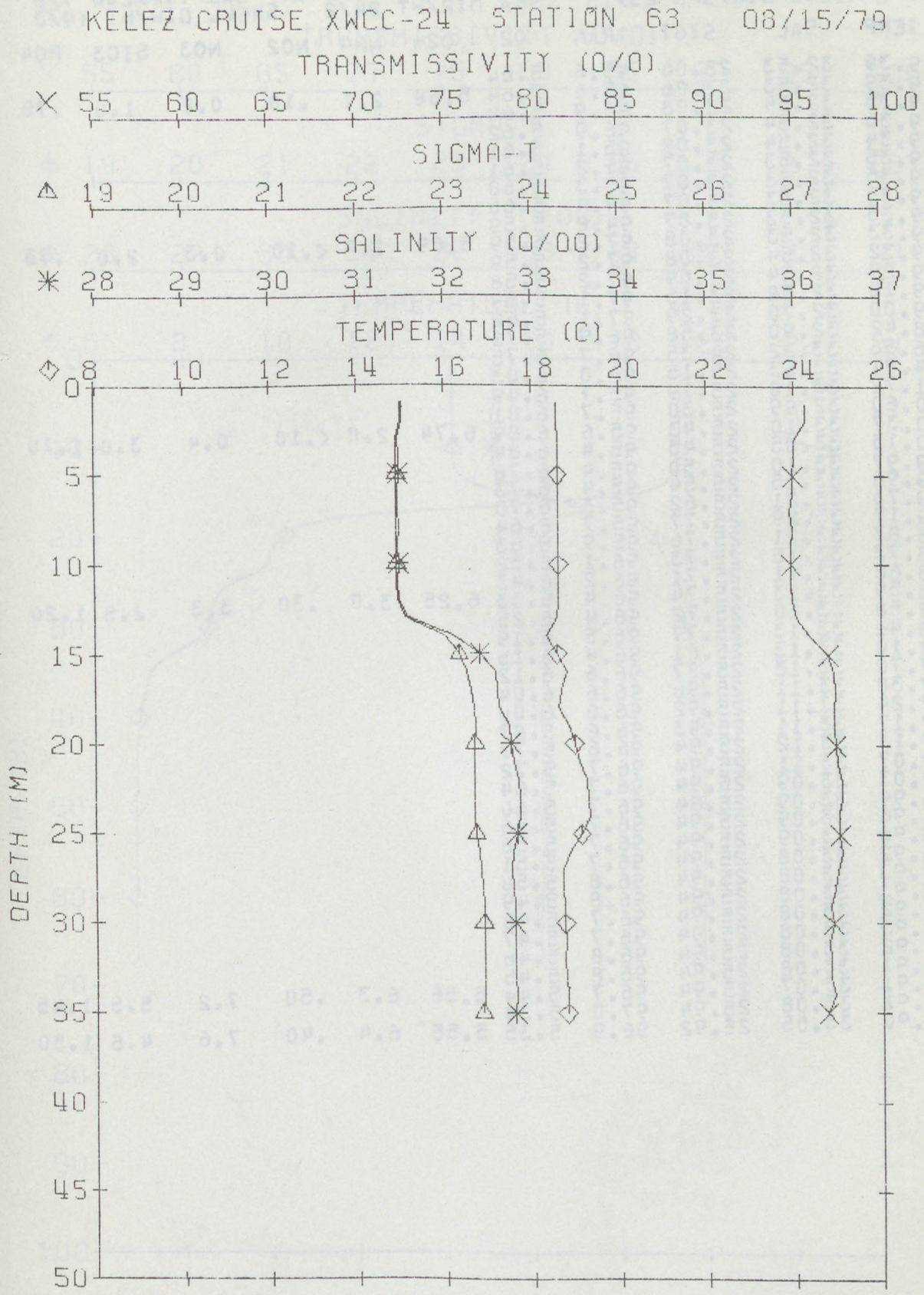
XWCC-24 STA. 62 LAT 40 39.5N; LONG 72 16.9W GMT 13.6 08/15/79
DEPTH 047 AIR D/W 17.2/12.8 BARO 16.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 31/16 SEA DIR/HT 29/2 SWELL DIR/HT 25/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	18.38	31.63	22.63	91.2	5.78						
2	18.37	31.63	22.63	91.2	5.78						
3	18.37	31.65	22.64	95.2	5.78	5.84	0.5	<.10	0.4	1.0	.40
4	18.37	31.66	22.65	95.3	5.78						
5	18.37	31.66	22.65	95.4	5.78						
6	18.38	31.66	22.65	95.4	5.77						
7	18.37	31.66	22.65	95.2	5.76						
8	18.36	31.66	22.65	95.4	5.76						
9	18.36	31.67	22.66	95.4	5.77						
10	18.37	31.68	22.67	95.4	5.78	5.91	0.9	.15	1.1	2.0	.40
11	18.37	31.70	22.68	95.4	5.77						
12	18.40	31.76	22.72	95.3	5.77						
13	18.47	31.96	22.85	95.7	5.75						
14	18.75	32.39	23.11	96.6	5.73						
15	19.05	32.64	23.23	96.6	5.67						
16	19.34	32.84	23.31	97.3	5.61						
17	19.44	32.86	23.30	97.5	5.57						
18	19.47	32.89	23.31	98.0	5.56						
19	19.49	32.90	23.31	98.0	5.55						
20	19.52	32.90	23.31	98.2	5.53						
21	19.52	32.90	23.31	97.7	5.53						
22	19.41	32.90	23.33	97.7	5.52						
23	19.22	32.86	23.35	97.5	5.54						
24	18.61	32.89	23.53	97.8	5.57						
25	17.89	32.93	23.74	97.6	5.61						
26	16.38	33.03	24.17	97.1	5.75						
27	14.29	33.23	24.78	97.6	5.87						
28	13.00	32.95	24.83	96.1	5.93						
29	11.28	32.65	24.92	96.5	6.00						
30	10.89	32.63	24.97	95.6	5.90						
31	10.78	32.61	24.98	95.4	5.82	5.21	3.6	.7	4.6	8.0	1.30
32	10.68	32.64	25.01	95.6	5.64						
33	10.60	32.63	25.02	95.9	5.55						
34	10.40	32.67	25.09	96.1	5.50						
35	10.28	32.69	25.13	96.1	5.48						
36	10.23	32.70	25.14	95.9	5.45						
37	10.18	32.72	25.16	96.3	5.44						
38	10.11	32.71	25.17	96.2	5.42						
39	10.09	32.72	25.18	96.3	5.42	5.39	4.2	.9	4.7	10.0	.30
40	10.08	32.73	25.19	96.5	5.41						
41	10.07	32.72	25.18	96.5	5.40						
42	10.06	32.71	25.18	96.0	5.39						
43	10.07	32.71	25.18	96.6	5.39						
44	10.07	32.71	25.18	95.9	5.38						
45	10.06	32.71	25.18	96.3	5.38						
46	10.06	32.71	25.17	96.1	5.38						
47	10.05	32.72	25.19	96.1	5.37						
48	10.05	32.71	25.18	96.4	5.36	5.40	3.5	.8	4.6	6.0	1.10
49	10.05	32.71	25.18	96.4	5.35						


KELEZ CRUISE XWCC-24 STATION 62 08/15/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

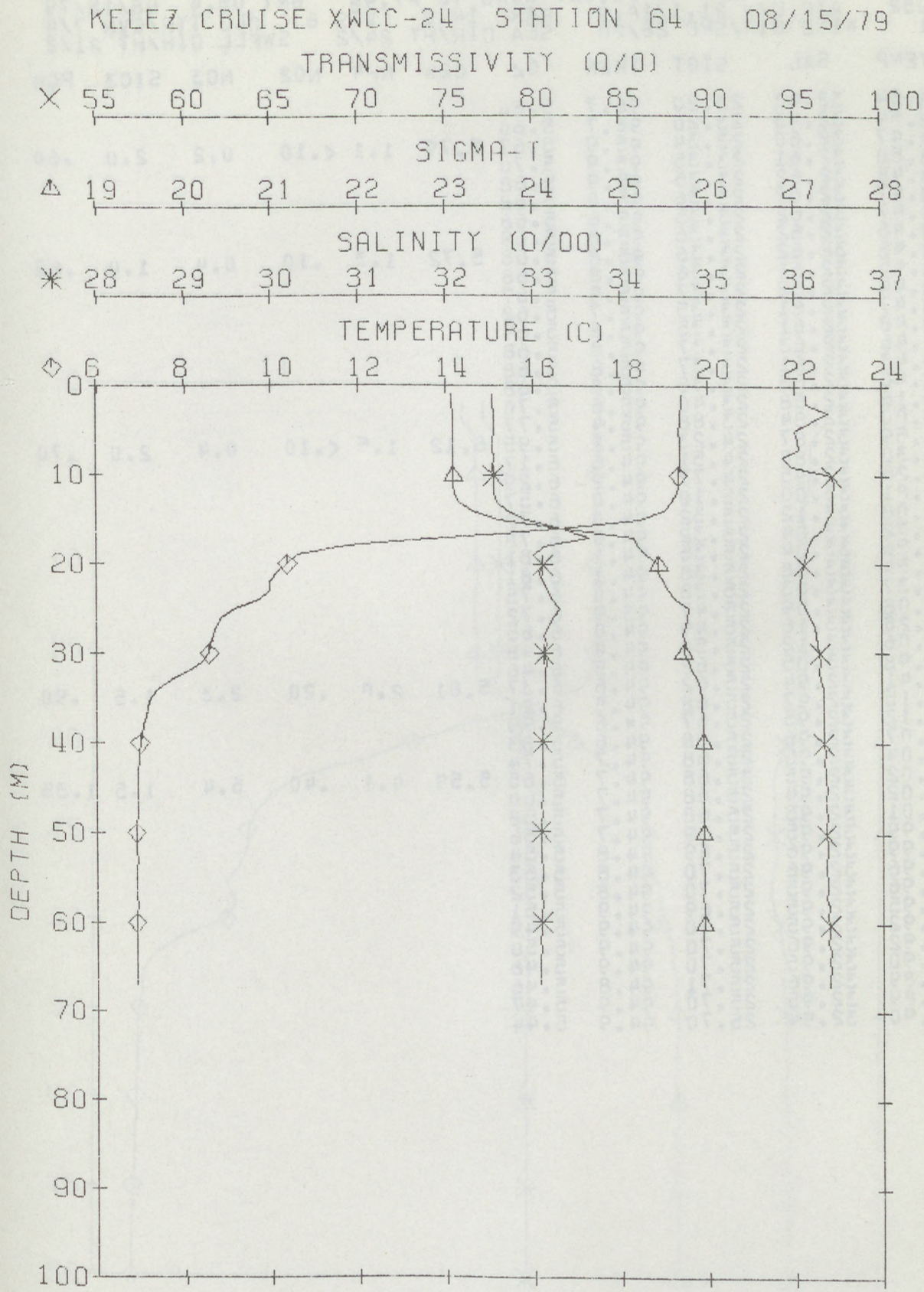
XWCC-24 STA. 63 LAT 40 47.5N; LONG 72 20.0W GMT 12.1 08/15/79
DEPTH 033 AIR D/W 18.3/15.0 BARO 16.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 30/16 SEA DIR/HT 29/1 SWELL DIR/HT 25/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2%	NH4	NO2	NO3	SIO3	PO4
1	18.56	31.52	22.50	95.7	5.56						
2	18.56	31.52	22.50	95.7	5.56	5.64	0.9	.10	0.9	2.0	.40
3	18.60	31.46	22.44	95.0	5.59						
4	18.60	31.47	22.45	95.1	5.58						
5	18.59	31.47	22.45	94.9	5.58						
6	18.61	31.46	22.44	95.0	5.59						
7	18.61	31.46	22.44	94.8	5.59						
8	18.60	31.47	22.45	95.0	5.58						
9	18.61	31.46	22.44	94.9	5.58						
10	18.61	31.47	22.45	94.9	5.58	5.65	1.2	.10	0.3	1.5	.50
11	18.60	31.45	22.44	94.9	5.58						
12	18.60	31.48	22.46	94.9	5.58						
13	18.55	31.58	22.55	95.1	5.58						
14	18.34	32.09	22.98	95.9	5.60						
15	18.57	32.39	23.16	97.0	5.59						
16	18.78	32.57	23.24	97.2	5.56						
17	18.67	32.59	23.29	97.3	5.56						
18	18.58	32.60	23.32	97.3	5.57						
19	18.84	32.72	23.34	97.3	5.55						
20	18.95	32.74	23.33	97.4	5.53	5.53	2.0	.20	0.3	2.5	.60
21	19.05	32.77	23.33	97.4	5.52						
22	19.21	32.82	23.32	97.6	5.51						
23	19.27	32.84	23.32	97.6	5.49						
24	19.29	32.84	23.32	97.6	5.49						
25	19.09	32.80	23.34	97.6	5.49						
26	18.83	32.76	23.37	97.6	5.53						
27	18.68	32.73	23.39	97.4	5.53						
28	18.65	32.75	23.41	97.3	5.51						
29	18.69	32.77	23.42	97.1	5.47						
30	18.71	32.77	23.42	97.1	5.43						
31	18.72	32.78	23.42	96.9	5.41						
32	18.70	32.78	23.42	97.1	5.39						
33	18.73	32.78	23.42	97.1	5.38	5.32	2.4	.20	0.6	3.0	.55
34	18.75	32.79	23.42	97.2	5.37						
35	18.75	32.78	23.41	96.8	5.36						


KELEZ CRUISE XWCC-24 STATION 63 08/15/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

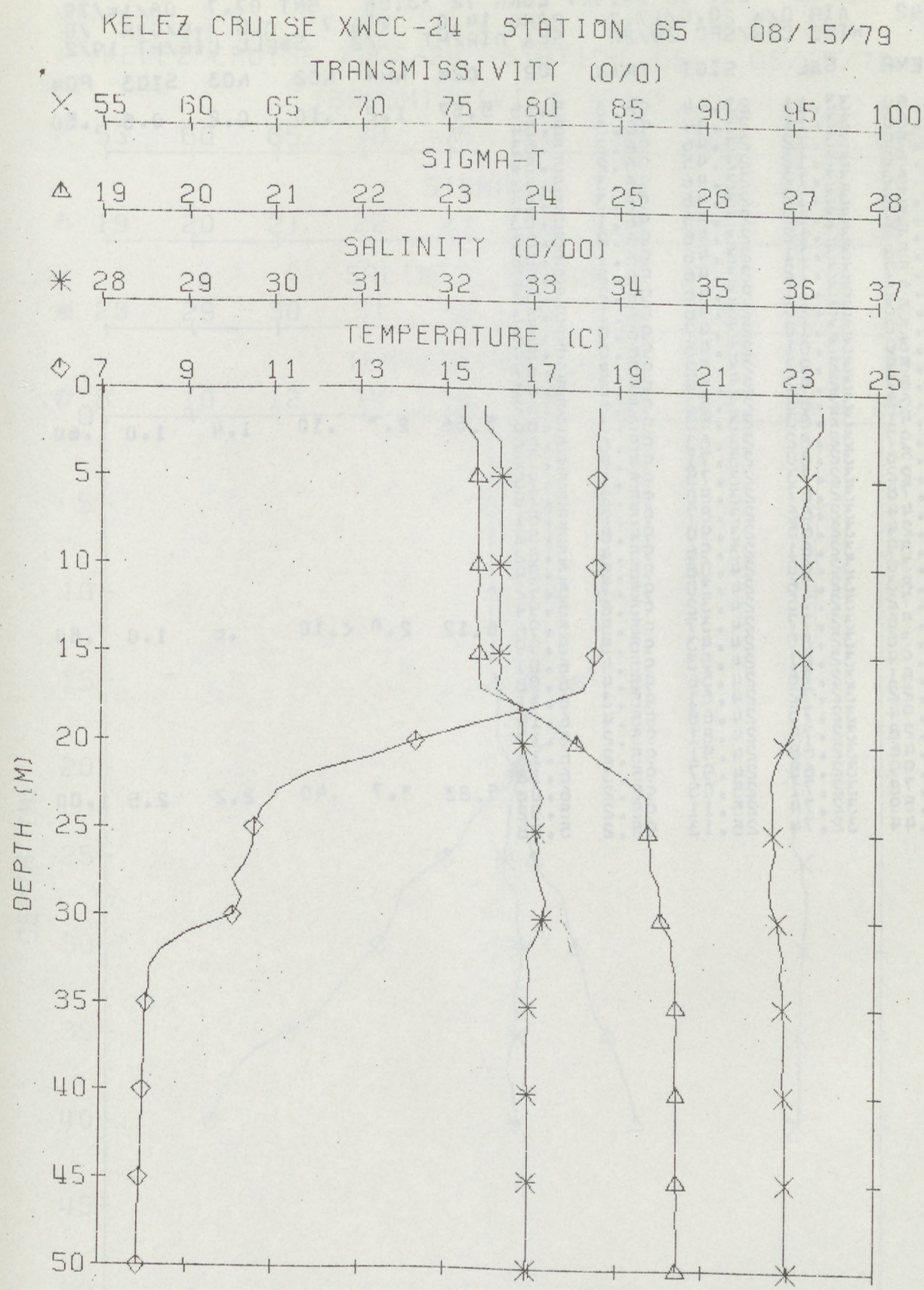
XWCC-24 STA. 64 LAT 40 12.0N; LONG 72 21.3W GMT 03.4 08/15/79
DEPTH 065 AIR D/W 21.1/19.7 BARO 14.0 VIS 6 CLD TYP/CVR 7/6
WETHR 1 WIND DIR/SPD 25/15 SEA DIR/HT 24/2 SWELL DIR/HT 19/3

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	19.39	32.53	23.06	95.6	5.64						
2	19.39	32.53	23.06	95.6	5.64	5.68	2.1	.10	0.2	1.0	.75
3	19.35	32.54	23.08	95.9	5.60						
4	19.36	32.54	23.07	96.0	5.62						
5	19.34	32.54	23.08	95.1	5.61						
6	19.35	32.53	23.07	95.2	5.61						
7	19.36	32.53	23.07	95.3	5.60						
8	19.35	32.53	23.07	94.4	5.60						
9	19.35	32.53	23.07	94.8	5.59						
10	19.33	32.53	23.08	97.2	5.59	5.69	1.9	<.10	0.3	2.0	.75
11	19.32	32.54	23.08	97.2	5.59						
12	19.29	32.54	23.09	97.2	5.58						
13	19.18	32.58	23.15	97.1	5.59						
14	19.00	32.70	23.29	97.1	5.62						
15	18.42	32.90	23.58	96.9	5.71						
16	16.56	33.32	24.35	96.7	5.75						
17	14.01	33.63	25.15	96.0	6.03						
18	11.72	33.10	25.19	95.7	6.49						
19	10.60	32.99	25.30	95.7	6.81						
20	10.37	33.10	25.43	95.6	6.89	6.74	2.0	<.10	0.4	3.0	1.10
21	10.13	33.05	25.43	95.4	6.84						
22	9.97	33.10	25.50	95.4	6.78						
23	9.96	33.15	25.54	95.4	6.73						
24	9.73	33.21	25.62	95.3	6.70						
25	9.17	33.29	25.77	95.7	6.64						
26	8.87	33.21	25.76	95.9	6.63						
27	8.73	33.15	25.73	96.1	6.52						
28	8.68	33.11	25.71	96.2	6.43						
29	8.59	33.13	25.74	96.4	6.33	6.25	3.0	.30	3.3	2.5	1.20
30	8.58	33.10	25.72	96.4	6.25						
31	8.41	33.13	25.77	96.5	6.19						
32	8.10	33.13	25.81	96.4	6.15						
33	7.70	33.13	25.87	96.6	6.12						
34	7.38	33.11	25.90	96.6	6.04						
35	7.24	33.11	25.92	96.6	6.00						
36	7.17	33.11	25.93	96.6	5.87						
37	7.13	33.12	25.94	96.6	5.77						
38	7.07	33.11	25.94	96.7	5.72						
39	7.03	33.09	25.94	96.7	5.64						
40	6.99	33.09	25.94	96.7	5.60						
41	6.96	33.09	25.94	96.7	5.56						
42	6.96	33.09	25.94	96.7	5.56						
43	6.92	33.08	25.94	96.7	5.51						
44	6.93	33.08	25.94	96.8	5.50						
45	6.93	33.08	25.94	96.8	5.49						
46	6.92	33.08	25.94	96.7	5.48						
47	6.93	33.08	25.94	96.7	5.47						
48	6.92	33.08	25.94	96.8	5.46						
49	6.91	33.08	25.94	96.8	5.45						
50	6.91	33.07	25.94	96.7	5.44	5.56	6.3	.50	7.2	5.5	1.45
60	6.91	33.08	25.94	97.0	5.39						
67	6.90	33.05	25.92	96.9	5.35	5.55	6.4	.40	7.6	4.5	1.50


KELEZ CRUISE XWCC-24 STATION 64 08/15/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

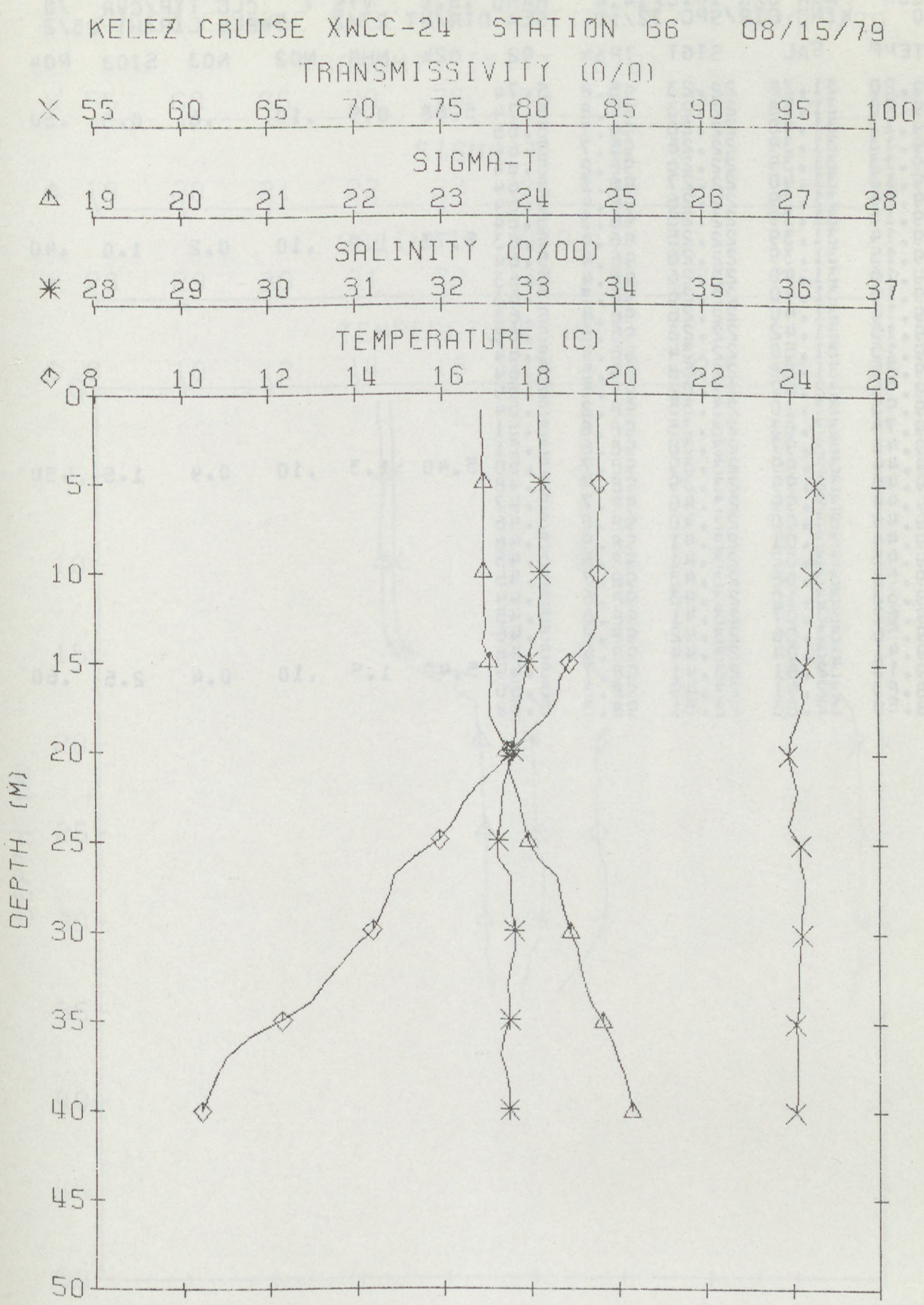
XWCC-24 STA. 65 LAT 40 21.0N; LONG 72 27.4W GMT 05.4 08/15/79
DEPTH 052 AIR D/W 21.1/18.9 BARO 14.0 VIS 6 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 28/20 SEA DIR/HT 24/2 SWELL DIR/HT 21/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.54	32.43	23.20	96.7	5.60						
2	18.54	32.43	23.20	96.7	5.60						
3	18.47	32.60	23.34	96.9	5.67						
4	18.50	32.61	23.35	96.9	5.70	5.79	1.1	<.10	0.2	2.0	.60
5	18.48	32.62	23.35	96.9	5.68						
6	18.47	32.62	23.36	96.8	5.68						
7	18.47	32.62	23.35	96.8	5.68						
8	18.46	32.62	23.36	96.8	5.69						
9	18.46	32.62	23.36	96.8	5.68						
10	18.45	32.61	23.36	96.8	5.68	5.72	1.3	.10	0.4	1.0	.60
11	18.44	32.62	23.37	96.9	5.67						
12	18.47	32.61	23.35	96.7	5.68						
13	18.48	32.61	23.35	96.8	5.69						
14	18.46	32.63	23.37	96.8	5.68						
15	18.43	32.61	23.37	96.8	5.68						
16	18.40	32.63	23.38	96.8	5.68						
17	18.16	32.58	23.40	96.6	5.70						
18	17.00	32.84	23.88	96.4	5.77						
19	15.59	32.87	24.23	96.2	5.95						
20	14.30	32.88	24.51	96.6	6.17	6.12	1.5	<.10	0.4	2.0	.70
21	13.26	32.95	24.77	96.2	6.29						
22	11.81	33.00	25.10	96.0	6.57						
23	11.08	33.12	25.32	96.0	6.72						
24	10.72	33.04	25.32	96.0	6.78						
25	10.56	33.04	25.35	96.1	6.81						
26	10.54	33.08	25.38	96.1	6.81						
27	10.37	33.03	25.38	96.0	6.75						
28	10.08	33.09	25.47	95.9	6.72						
29	10.28	33.16	25.49	96.0	6.65						
30	10.06	33.12	25.50	96.4	6.48						
31	8.98	33.05	25.62	96.5	6.46						
32	8.41	32.94	25.62	96.6	6.37	5.81	2.0	.20	2.3	1.5	.90
33	8.15	32.97	25.68	96.5	6.21						
34	8.12	32.95	25.67	96.6	5.99						
35	8.07	32.96	25.68	96.6	5.83						
36	8.04	32.95	25.68	96.7	5.74						
37	8.02	32.95	25.68	96.7	5.65	5.59	4.1	.40	5.4	1.5	1.35
38	8.02	32.94	25.68	96.7	5.60						
39	8.01	32.95	25.68	96.7	5.58						
40	7.99	32.95	25.69	96.7	5.56						
41	7.99	32.96	25.69	96.8	5.54						
42	7.96	32.96	25.70	96.8	5.53						
43	7.96	32.95	25.70	96.8	5.52						
44	7.95	32.95	25.69	96.9	5.51						
45	7.92	32.95	25.70	96.9	5.49						
46	7.92	32.96	25.70	96.9	5.50						
47	7.90	32.95	25.70	96.9	5.48						
48	7.89	32.96	25.71	96.8	5.46						
49	7.89	32.95	25.70	96.9	5.47						
50	7.90	32.94	25.70	96.9	5.44						


KELEZ CRUISE XWCC-24 STATION 65 08/15/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

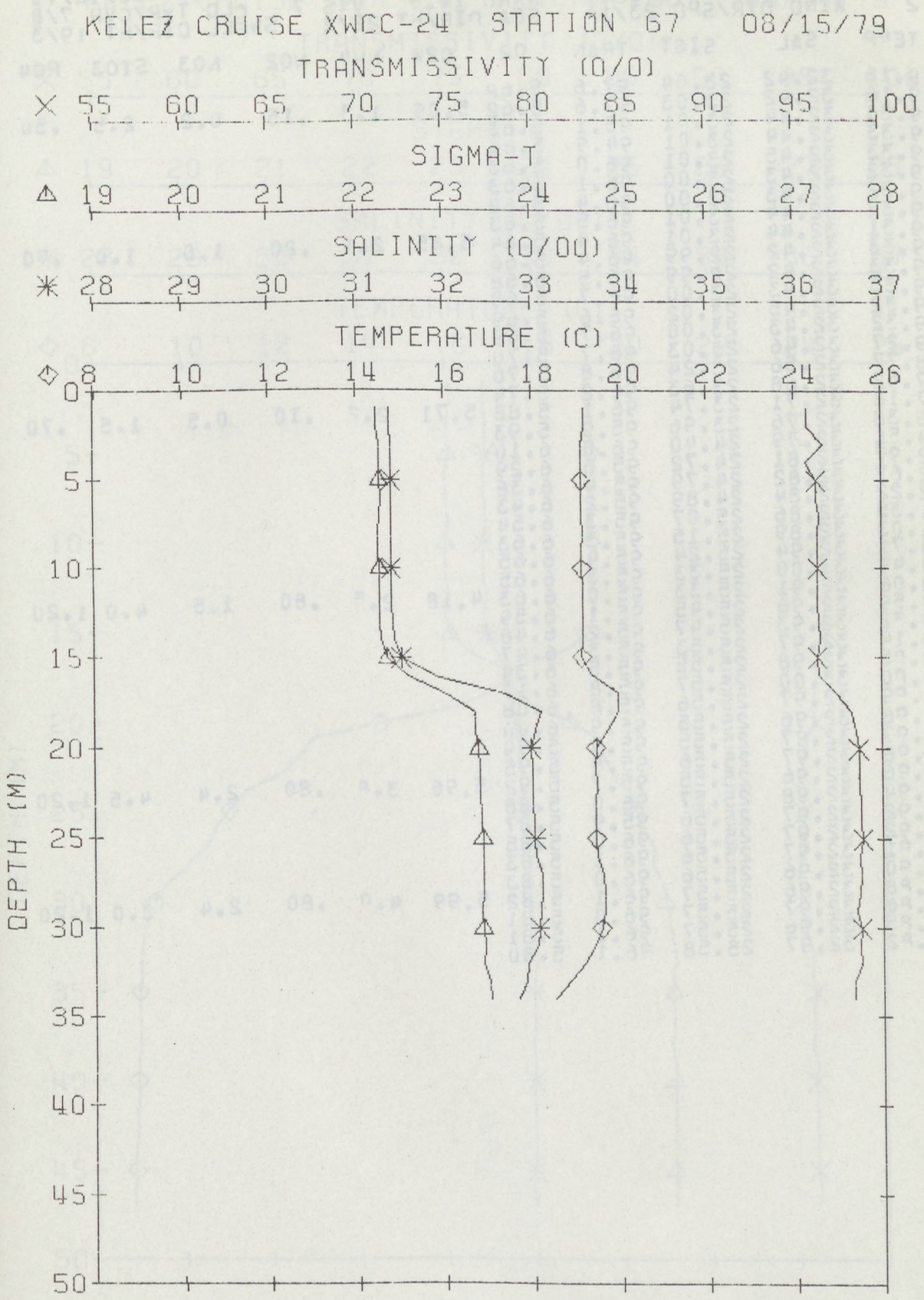
XWCC-24 STA. 66 LAT 40 29.9N; LONG 72 33.5W GMT 07.7 08/15/79
DEPTH 042 AIR D/W 20.0/17.2 BARO 14.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 29/20 SEA DIR/HT /2 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.60	33.11	23.44	96.3	5.55	5.57	1.2	.10	0.2	0.5	.50
2	19.60	33.11	23.44	96.3	5.54						
3	19.59	33.12	23.46	96.2	5.53						
4	19.60	33.12	23.45	96.2	5.54						
5	19.60	33.12	23.46	96.3	5.53						
6	19.59	33.12	23.46	96.3	5.53						
7	19.57	33.12	23.46	96.1	5.53						
8	19.57	33.12	23.46	96.2	5.53						
9	19.58	33.11	23.46	96.1	5.52						
10	19.57	33.12	23.46	96.2	5.52						
11	19.55	33.11	23.46	96.2	5.53						
12	19.53	33.10	23.46	96.1	5.53						
13	19.50	33.10	23.47	96.0	5.53						
14	19.30	33.01	23.45	96.0	5.54						
15	18.89	32.97	23.52	95.8	5.57						
16	18.67	32.92	23.54	95.5	5.61						
17	18.63	32.88	23.52	95.6	5.62						
18	18.41	32.83	23.53	95.3	5.63	5.56	2.3	.10	1.4	1.0	.60
19	17.97	32.82	23.63	95.0	5.69						
20	17.56	32.80	23.71	94.8	5.72						
21	17.22	32.73	23.75	95.1	5.75						
22	16.78	32.67	23.80	95.2	5.79						
23	16.44	32.66	23.87	95.0	5.81						
24	16.24	32.65	23.90	94.8	5.82						
25	15.89	32.61	23.96	95.4	5.82						
26	15.30	32.60	24.08	95.5	5.84						
27	14.83	32.76	24.30	95.7	5.92						
28	14.72	32.75	24.32	95.6	5.94						
29	14.56	32.77	24.37	95.5	5.96	6.12	2.0	<.10	.6	1.0	.80
30	14.36	32.80	24.43	95.5	5.99						
31	13.94	32.81	24.53	95.4	6.01						
32	13.61	32.76	24.56	95.4	6.08						
33	13.22	32.72	24.61	95.3	6.11						
34	12.94	32.75	24.68	95.4	6.14						
35	12.28	32.74	24.81	95.2	6.17						
36	11.46	32.68	24.91	95.2	6.18						
37	10.99	32.65	24.97	95.3	6.18						
38	10.78	32.71	25.05	95.2	6.06	5.83	3.7	.40	2.2	2.5	1.00
39	10.59	32.74	25.11	95.2	5.92						
40	10.44	32.74	25.13	95.2	5.88						


KELEZ CRUISE XWCC-24 STATION 66 08/15/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

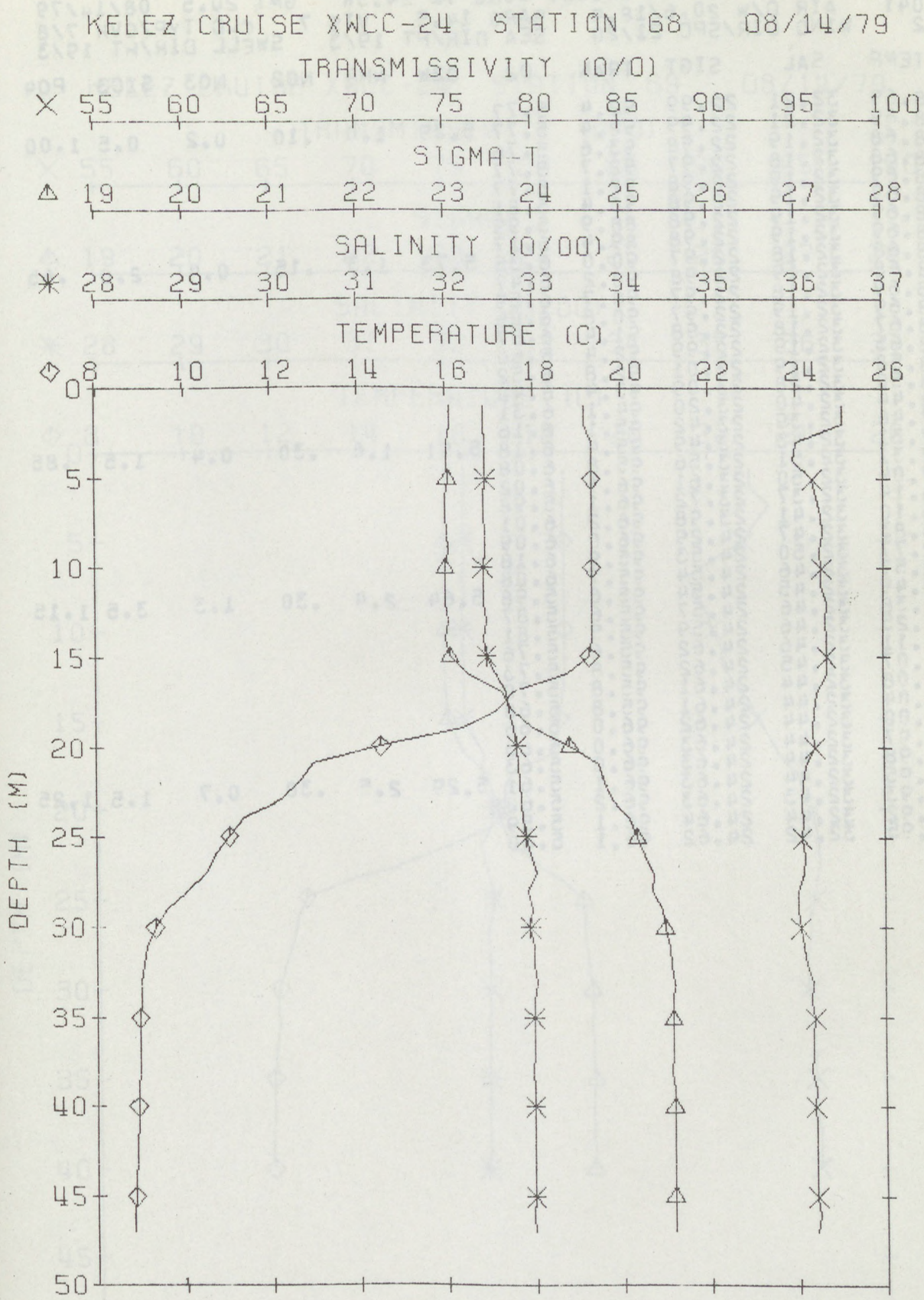
XWCC-24 STA. 67 LAT 40 38.0N; LONG 72 40.3W GMT 09.7 08/15/79
DEPTH 035 AIR D/W 18.3/14.4 BARO 15.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 32/20 SEA DIR/HT 27/2 SWELL DIR/HT 25/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.20	31.38	22.23	95.8	5.74						
2	19.20	31.38	22.23	95.8	5.74	5.68	0.9	.10	.6	0.5	.50
3	19.13	31.40	22.26	96.7	5.65						
4	19.13	31.39	22.26	95.7	5.64						
5	19.13	31.39	22.26	96.2	5.64						
6	19.13	31.40	22.27	96.3	5.64						
7	19.14	31.39	22.26	96.4	5.64						
8	19.15	31.39	22.25	96.3	5.64						
9	19.14	31.39	22.25	96.4	5.63	5.73	1.2	.10	0.2	1.0	.40
10	19.15	31.39	22.26	96.4	5.64						
11	19.16	31.40	22.26	96.4	5.63						
12	19.16	31.40	22.26	96.3	5.63						
13	19.16	31.40	22.26	96.4	5.63						
14	19.15	31.42	22.28	96.6	5.63						
15	19.15	31.50	22.34	96.4	5.64						
16	19.35	31.88	22.58	96.5	5.64						
17	19.85	32.67	23.02	97.5	5.59						
18	19.95	33.10	23.35	98.2	5.54						
19	19.74	33.03	23.35	98.6	5.51						
20	19.46	32.97	23.38	98.6	5.51						
21	19.44	32.99	23.39	98.7	5.50	5.40	1.3	.10	0.4	1.5	.50
22	19.45	32.99	23.39	98.7	5.48						
23	19.44	32.99	23.40	98.7	5.47						
24	19.44	33.00	23.40	98.8	5.46						
25	19.44	33.01	23.41	98.9	5.46						
26	19.45	33.02	23.41	98.6	5.45						
27	19.58	33.08	23.43	98.7	5.45						
28	19.63	33.10	23.43	98.6	5.44						
29	19.62	33.07	23.41	98.6	5.45						
30	19.56	33.06	23.42	98.8	5.46						
31	19.41	33.04	23.44	98.6	5.48						
32	19.15	32.91	23.41	98.7	5.49	5.40	1.5	.10	0.4	2.5	.60
33	18.93	32.91	23.49	98.3	5.50						
34	18.50	32.83	23.51	98.3	5.52						


KELEZ CRUISE XWCC-24 STATION 67 08/15/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OU)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

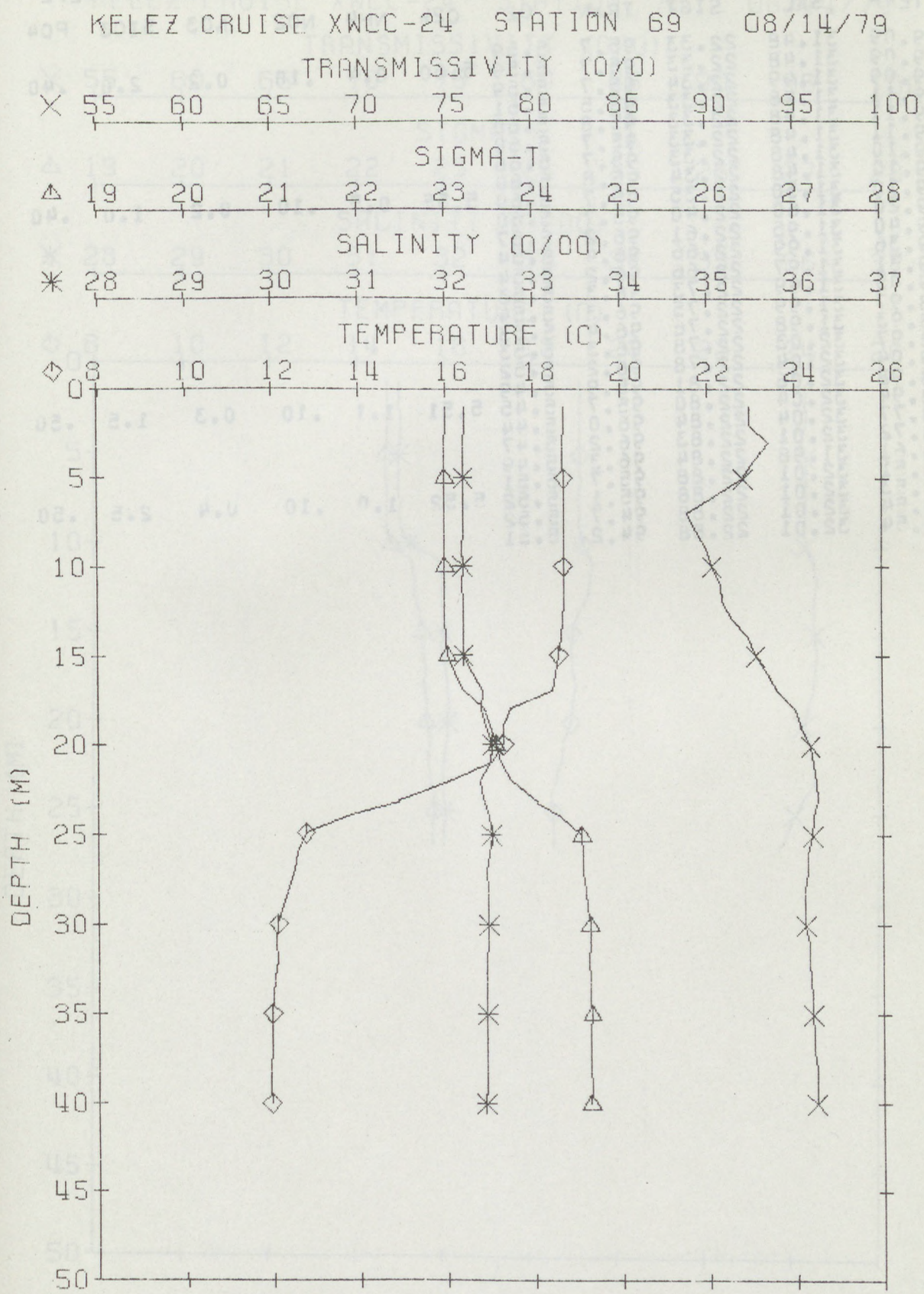
XWCC-24 STA. 68 LAT 40 19.3N; LONG 72 46.5W GMT 22.8 08/14/79
DEPTH 048 AIR D/W 21.7/16.7 BARO 14.5 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 23/18 SEA DIR/HT 22/2 SWELL DIR/HT 19/3

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.16	32.42	23.04	97.6	5.62						
2	19.16	32.42	23.03	97.6	5.62	5.09	1.3	.15	0.2	2.5	.50
3	19.33	32.44	23.01	95.1	5.63						
4	19.33	32.44	23.01	94.9	5.64						
5	19.33	32.45	23.01	96.0	5.63						
6	19.32	32.43	23.00	96.1	5.63						
7	19.32	32.43	23.00	96.4	5.62						
8	19.32	32.44	23.01	96.5	5.63						
9	19.31	32.44	23.01	96.4	5.64	5.65	2.1	.20	1.0	1.0	.70
10	19.33	32.42	22.99	96.4	5.66						
11	19.33	32.42	22.99	96.5	5.68						
12	19.33	32.43	23.00	96.7	5.69						
13	19.32	32.45	23.02	96.6	5.69						
14	19.32	32.43	23.00	96.7	5.69						
15	19.27	32.46	23.03	96.7	5.70						
16	18.77	32.56	23.24	96.8	5.70						
17	17.52	32.68	23.63	96.2	5.74						
18	17.18	32.71	23.74	96.1	5.88	5.71	2.2	.10	0.5	1.5	.70
19	16.38	32.76	23.96	95.9	5.93						
20	14.51	32.79	24.40	96.0	6.10						
21	12.97	32.81	24.72	95.6	6.29						
22	12.67	32.82	24.79	95.4	6.38						
23	12.22	32.84	24.89	95.2	6.43						
24	11.35	32.86	25.07	95.3	6.54						
25	11.03	32.89	25.15	95.3	6.63						
26	10.71	32.94	25.24	95.4	6.65						
27	10.49	33.00	25.33	95.3	6.65						
28	10.06	32.91	25.33	95.0	6.63	4.18	2.5	.80	1.5	4.0	1.20
29	9.59	32.96	25.45	95.1	6.59						
30	9.52	32.93	25.47	95.2	6.48						
31	9.14	32.97	25.53	95.3	6.47						
32	9.05	32.98	25.55	95.5	6.34						
33	9.00	33.00	25.57	95.8	6.17						
34	8.99	32.97	25.56	95.8	6.08						
35	8.96	32.96	25.55	95.9	6.00						
36	8.97	32.97	25.55	95.9	5.99						
37	8.96	32.97	25.56	95.8	5.95						
38	8.96	32.96	25.55	95.7	5.92	5.96	3.8	.80	2.4	4.5	1.20
39	8.94	32.98	25.57	96.0	5.88						
40	8.92	32.97	25.56	95.9	5.87						
41	8.92	32.97	25.56	96.0	5.85						
42	8.91	32.97	25.56	96.1	5.83						
43	8.90	32.96	25.56	96.0	5.83						
44	8.88	32.96	25.57	96.1	5.82	5.99	4.0	.80	2.4	3.0	1.20
45	8.86	32.97	25.57	96.0	5.81						
46	8.85	32.96	25.57	96.1	5.81						
47	8.82	32.97	25.58	96.1	5.80						


KELEZ CRUISE XWCC-24 STATION 68 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

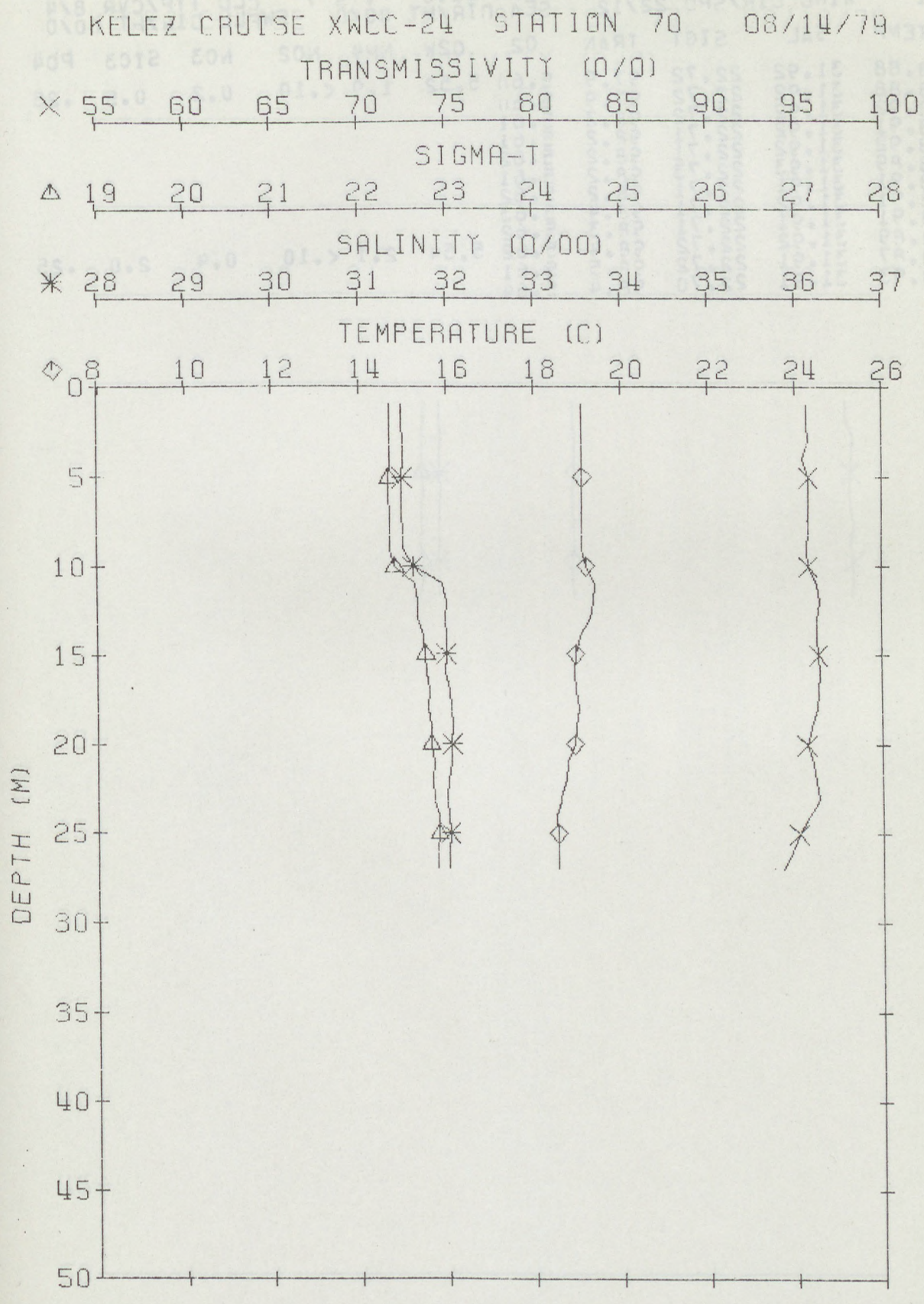
XWCC-24 STA. 69 LAT 40 25.0N ; LONG 72 54.5W GMT 20.5 08/14/79
DEPTH 041 AIR D/W 20.6/18.9 BARO 14.5 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 21/20 SEA DIR/HT 19/3 SWELL DIR/HT 19/3

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	18.69	32.21	22.99	92.4	5.77						
2	18.69	32.21	22.99	92.4	5.77	5.39	1.0	.10	0.2	0.5	1.00
3	18.68	32.19	22.98	93.6	5.76						
4	18.68	32.18	22.97	92.7	5.77						
5	18.69	32.19	22.98	92.1	5.77						
6	18.69	32.19	22.98	90.4	5.81						
7	18.69	32.19	22.98	88.9	5.99						
8	18.69	32.19	22.98	89.4	6.17						
9	18.68	32.18	22.97	90.0	6.35	5.73	1.3	.15	0.4	2.0	.65
10	18.68	32.19	22.98	90.2	6.47						
11	18.69	32.18	22.97	90.7	6.59						
12	18.69	32.19	22.97	90.8	6.65						
13	18.67	32.18	22.98	91.4	6.67						
14	18.65	32.19	22.99	92.4	6.60						
15	18.58	32.19	23.01	92.8	6.52						
16	18.50	32.28	23.09	93.4	6.40						
17	18.44	32.40	23.20	94.1	6.31						
18	17.46	32.39	23.42	95.1	6.16						
19	17.31	32.43	23.49	95.4	6.18	5.91	1.6	.30	0.4	1.5	.85
20	17.31	32.51	23.56	95.8	6.08						
21	17.04	32.50	23.61	96.1	6.02						
22	16.14	32.37	23.72	96.1	5.98						
23	15.10	32.41	23.98	96.2	6.01						
24	13.83	32.47	24.29	96.0	6.09						
25	12.77	32.50	24.53	95.9	6.18						
26	12.57	32.46	24.54	95.7	6.08						
27	12.49	32.45	24.54	95.6	5.98	5.64	2.4	.30	1.3	3.5	1.15
28	12.38	32.46	24.57	95.6	5.87						
29	12.25	32.46	24.59	95.5	5.81						
30	12.11	32.46	24.62	95.6	5.76						
31	12.07	32.45	24.62	95.8	5.73						
32	12.08	32.44	24.61	95.8	5.70						
33	12.04	32.44	24.61	95.8	5.68						
34	12.00	32.44	24.62	96.0	5.66						
35	11.97	32.44	24.63	96.0	5.63						
36	11.98	32.44	24.63	96.0	5.63						
37	11.95	32.44	24.63	96.1	5.61	5.29	2.5	.30	0.7	1.5	1.25
38	11.93	32.43	24.63	96.2	5.60						
39	11.92	32.44	24.64	96.1	5.59						
40	11.95	32.42	24.62	96.1	5.60						


KELEZ CRUISE XWCC-24 STATION 69 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

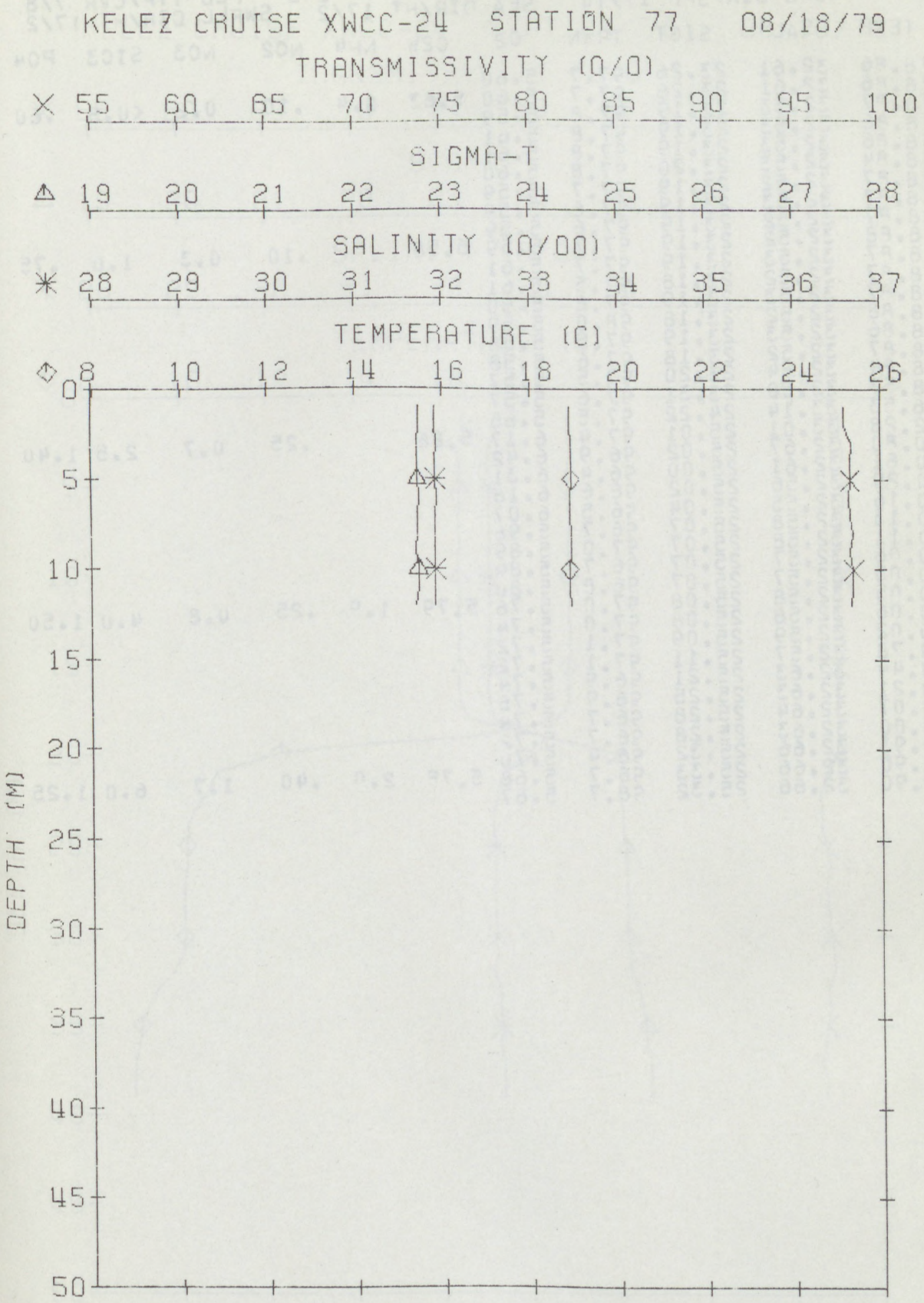
XWCC-24 STA. 70 LAT 40 32.1N; LONG 73 7.0W GMT 14.3 08/14/79
DEPTH 026 AIR D/W 20.0/18.3 BARO 17.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 23/14 SEA DIR/HT 22/1 SWELL DIR/HT 22/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	19.09	31.48	22.33	95.7	5.59						
2	19.09	31.48	22.33	95.7	5.59	5.60	0.4	.10	0.2	2.0	.40
3	19.09	31.49	22.34	95.7	5.59						
4	19.11	31.48	22.33	95.5	5.61						
5	19.11	31.48	22.33	95.8	5.60						
6	19.11	31.48	22.33	95.7	5.60						
7	19.10	31.48	22.33	95.7	5.60						
8	19.10	31.48	22.34	95.8	5.60						
9	19.10	31.50	22.35	95.7	5.60	5.55	0.5	.10	0.2	1.0	.40
10	19.20	31.60	22.40	95.7	5.60						
11	19.40	31.95	22.61	96.2	5.57						
12	19.36	31.99	22.66	96.4	5.54						
13	19.31	31.97	22.66	96.2	5.54						
14	19.05	31.99	22.73	96.3	5.53						
15	18.97	31.99	22.75	96.3	5.54						
16	18.93	31.98	22.76	96.4	5.53						
17	18.97	32.03	22.78	96.3	5.52						
18	19.04	32.04	22.78	96.2	5.52						
19	18.98	32.06	22.81	95.9	5.49						
20	18.94	32.04	22.80	95.7	5.45	5.51	1.1	.10	0.3	1.5	.50
21	18.77	32.04	22.84	96.0	5.44						
22	18.72	32.01	22.83	96.2	5.47						
23	18.61	31.98	22.84	96.3	5.49						
24	18.51	32.01	22.88	95.7	5.51						
25	18.53	32.01	22.88	95.1	5.52	5.52	1.0	.10	0.4	2.5	.50
26	18.54	32.01	22.88	94.7	5.52						
27	18.54	32.01	22.88	94.2	5.51						


KELEZ CRUISE XWCC-24 STATION 70 08/14/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

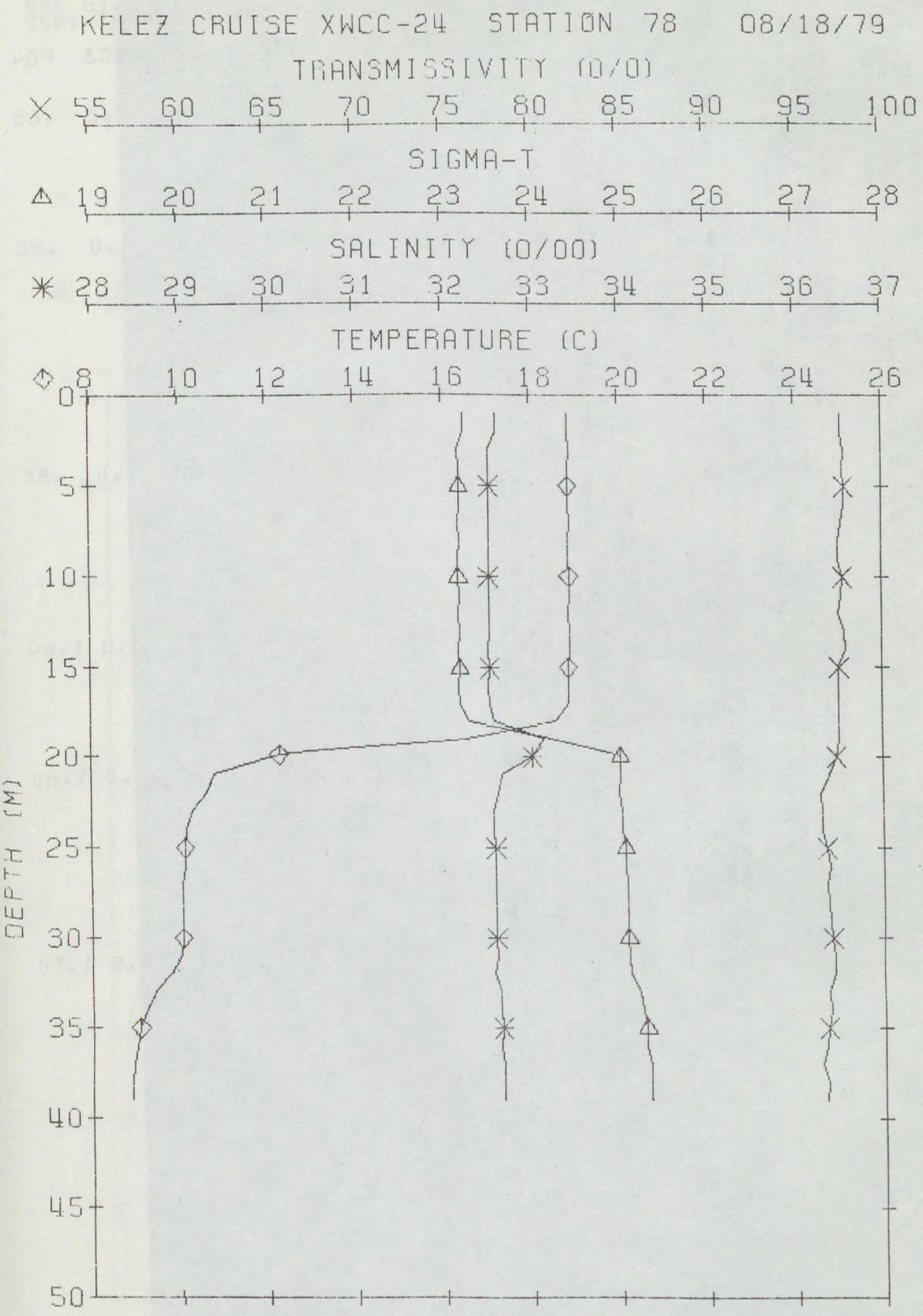
XWCC-24 STA. 77 LAT 40 10.0N; LONG 73 34.0W GMT 06.9 08/18/79
DEPTH 012 AIR D/W 18.9/18.9 BARO 23.5 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 22/12 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.88	31.92	22.72	97.9	5.60	5.52	1.0	<.10	0.2	0.5	.25
2	18.88	31.92	22.72	97.9	5.60						
3	18.92	31.92	22.72	98.3	5.61						
4	18.91	31.92	22.71	98.2	5.61						
5	18.92	31.92	22.71	98.2	5.62						
6	18.89	31.93	22.73	98.2	5.61						
7	18.91	31.91	22.71	98.2	5.62						
8	18.91	31.92	22.71	98.4	5.63						
9	18.91	31.91	22.71	98.3	5.62						
10	18.89	31.92	22.72	98.4	5.62	5.54	2.1	<.10	0.4	2.0	.25
11	18.87	31.91	22.72	98.5	5.61						
12	18.93	31.91	22.70	98.4	5.64						


KELEZ CRUISE XWCC-24 STATION 77 08/18/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

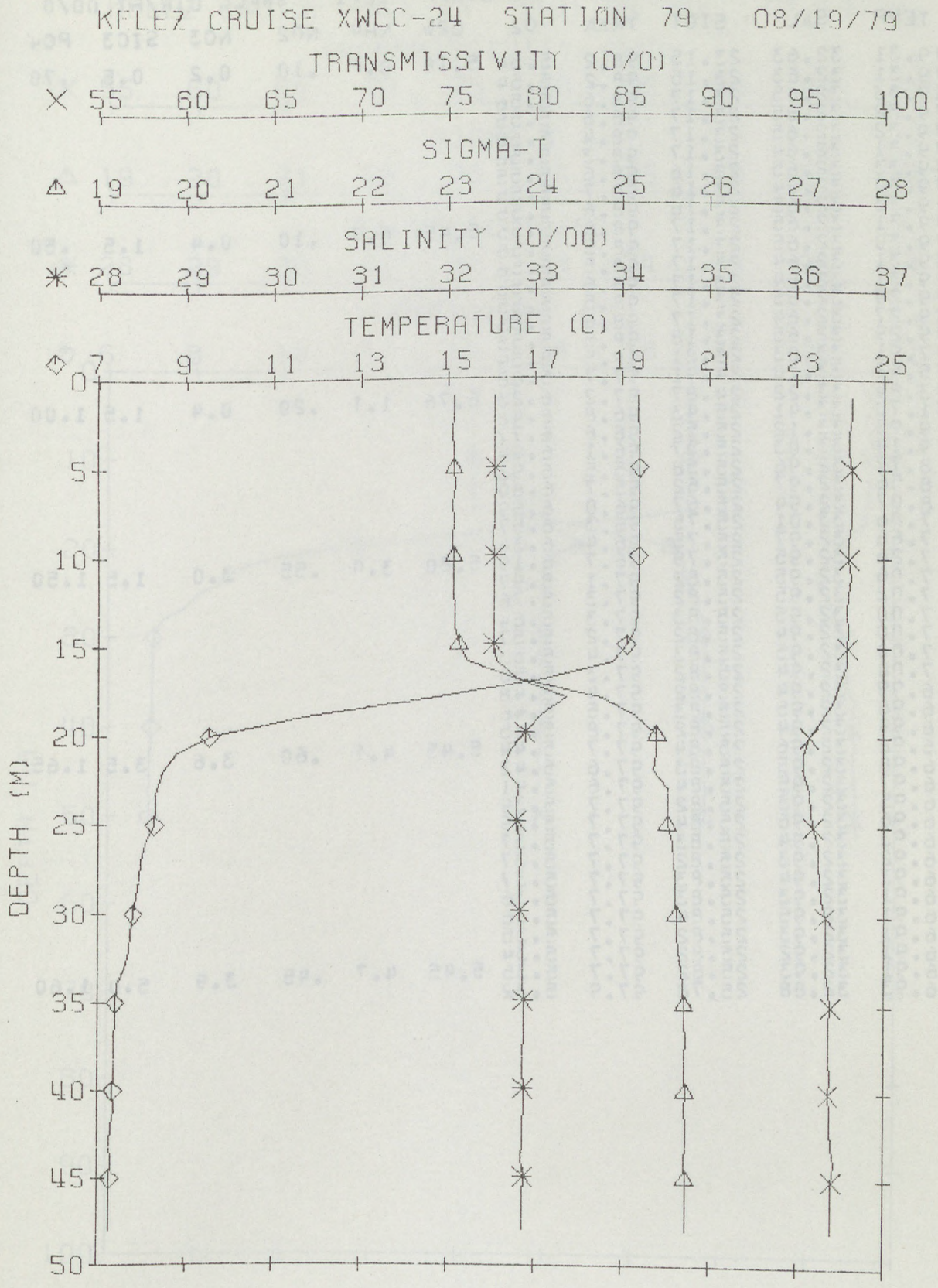
XWCC-24 STA. 78 LAT 40 5.0N; LONG 73 21.5W GMT 23.1 08/18/79
DEPTH 030 AIR D/W 17.8/17.2 BARO 20.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 17/14 SEA DIR/HT 17/2 SWELL DIR/HT 17/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.86	32.61	23.26	97.7	5.60						
2	18.86	32.61	23.26	97.7	5.60	5.63	0.4	.10	0.2	<0.5	.60
3	18.87	32.53	23.19	97.8	5.59						
4	18.86	32.53	23.19	97.8	5.61						
5	18.86	32.53	23.19	97.8	5.61						
6	18.84	32.53	23.20	97.8	5.60						
7	18.87	32.52	23.19	97.7	5.59						
8	18.87	32.53	23.19	97.6	5.59						
9	18.87	32.52	23.19	97.6	5.59						
10	18.88	32.52	23.19	97.7	5.59	5.58		.10	0.3	1.0	.75
11	18.87	32.53	23.19	97.7	5.61						
12	18.87	32.52	23.18	97.5	5.61						
13	18.87	32.53	23.19	97.8	5.60						
14	18.88	32.52	23.18	98.0	5.59						
15	18.86	32.53	23.19	97.5	5.58						
16	18.87	32.52	23.18	97.6	5.58						
17	18.84	32.54	23.20	97.5	5.57						
18	18.57	32.58	23.31	97.6	5.57						
19	16.53	33.14	24.22	97.5	5.65						
20	12.28	33.01	25.01	97.4	6.17	5.86		.25	0.7	2.5	1.40
21	10.80	32.67	25.02	96.9	6.42						
22	10.61	32.61	25.00	96.4	6.31						
23	10.29	32.56	25.02	96.6	6.18						
24	10.16	32.55	25.04	96.5	6.07						
25	10.13	32.58	25.07	96.7	5.98						
26	10.11	32.58	25.07	97.0	5.89						
27	10.06	32.57	25.07	96.7	5.84						
28	10.05	32.57	25.07	96.8	5.80						
29	10.05	32.58	25.08	97.0	5.76	5.79	1.0	.25	0.8	4.0	1.50
30	10.06	32.58	25.08	97.0	5.74						
31	10.02	32.59	25.09	97.1	5.72						
32	9.78	32.57	25.11	97.1	5.72						
33	9.44	32.63	25.21	96.9	5.74						
34	9.21	32.63	25.25	96.9	5.75						
35	9.07	32.64	25.28	96.7	5.74						
36	9.00	32.63	25.28	96.7	5.72						
37	8.93	32.66	25.32	96.4	5.70						
38	8.90	32.66	25.33	96.7	5.68	5.75	2.0	.40	1.7	6.0	1.25
39	8.90	32.66	25.32	96.7	5.67						


KELEZ CRUISE XWCC-24 STATION 78 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

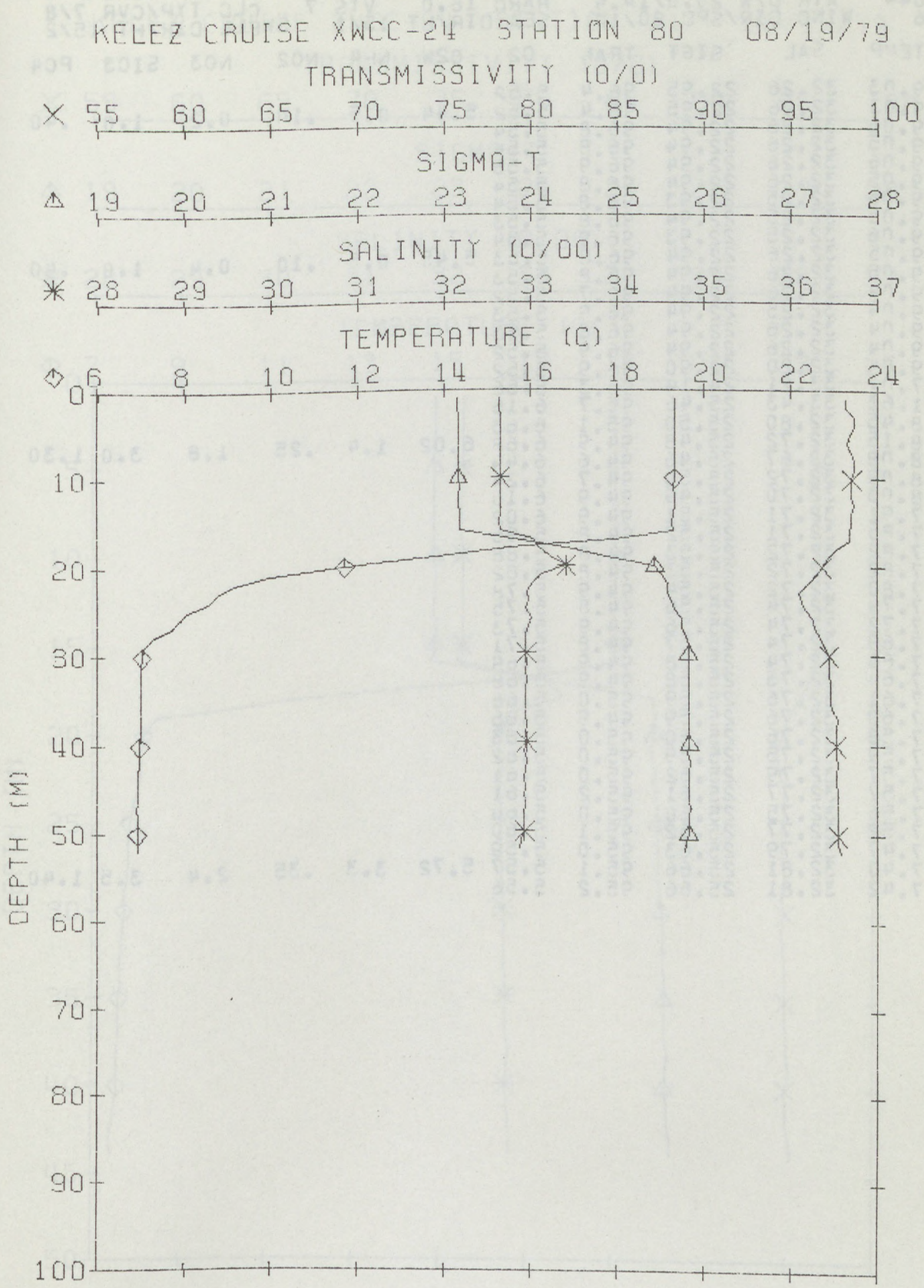
XWCC-24 STA. 79 LAT 40 .0N; LONG 73 10.0W GMT 00.9 08/1c/79
DEPTH 047 AIR D/W 17.2/16.7 BARO 20.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 14/18 SEA DIR/HT 20/2 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.36	32.53	23.06	98.1	5.55						
2	19.36	32.52	23.06	98.1	5.55						
3	19.38	32.53	23.06	98.1	5.55	5.52		.10	0.4	1.0	.65
4	19.38	32.53	23.07	98.1	5.56						
5	19.39	32.54	23.07	98.0	5.56						
6	19.38	32.55	23.07	98.2	5.56						
7	19.39	32.53	23.06	98.1	5.56						
8	19.38	32.53	23.06	98.1	5.56						
9	19.39	32.52	23.05	98.1	5.56						
10	19.38	32.54	23.07	98.1	5.55	5.54	0.8	.10	0.4	1.0	.60
11	19.38	32.53	23.06	98.1	5.55						
12	19.37	32.53	23.07	98.2	5.55						
13	19.36	32.53	23.07	98.1	5.56						
14	19.32	32.53	23.08	97.9	5.55						
15	19.11	32.52	23.12	98.1	5.56						
16	18.78	32.56	23.23	98.0	5.57						
17	17.23	32.80	23.79	98.0	5.62						
18	14.76	33.36	24.78	97.5	5.70						
19	11.72	33.07	25.17	97.2	5.87						
20	9.53	32.89	25.40	96.6	6.28						
21	8.76	32.73	25.40	96.8	6.70						
22	8.45	32.63	25.37	96.4	6.79	6.31	1.2	.15	0.5	1.0	.85
23	8.31	32.81	25.53	96.5	6.74						
24	8.30	32.79	25.52	96.7	6.64						
25	8.26	32.79	25.53	96.9	6.60						
26	8.05	32.82	25.58	96.8	6.56						
27	7.97	32.84	25.60	96.2	6.51						
28	7.91	32.83	25.61	96.3	6.48						
29	7.84	32.82	25.61	96.4	6.30						
30	7.79	32.83	25.62	96.6	6.22						
31	7.73	32.84	25.64	96.6	6.09	5.85		.60	2.0	3.0	1.60
32	7.69	32.85	25.66	96.6	5.97						
33	7.60	32.85	25.67	96.7	5.89						
34	7.43	32.87	25.70	96.8	5.82						
35	7.40	32.87	25.71	96.9	5.77						
36	7.38	32.87	25.71	96.9	5.72						
37	7.36	32.88	25.72	96.9	5.69						
38	7.35	32.86	25.71	96.9	5.66	5.78		.55	2.1	4.0	1.60
39	7.34	32.87	25.71	96.9	5.64						
40	7.34	32.87	25.72	96.9	5.63						
41	7.35	32.87	25.72	97.0	5.61						
42	7.28	32.86	25.72	97.0	5.61						
43	7.26	32.86	25.72	97.0	5.59						
44	7.28	32.85	25.71	97.1	5.59						
45	7.27	32.87	25.73	97.0	5.58						
46	7.27	32.86	25.72	97.0	5.58						
47	7.25	32.86	25.72	97.0	5.56						
48	7.26	32.85	25.72	97.1	5.54	5.72		.50	2.2	5.5	1.50


KELEZ CRUISE XWCC-24 STATION 79 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

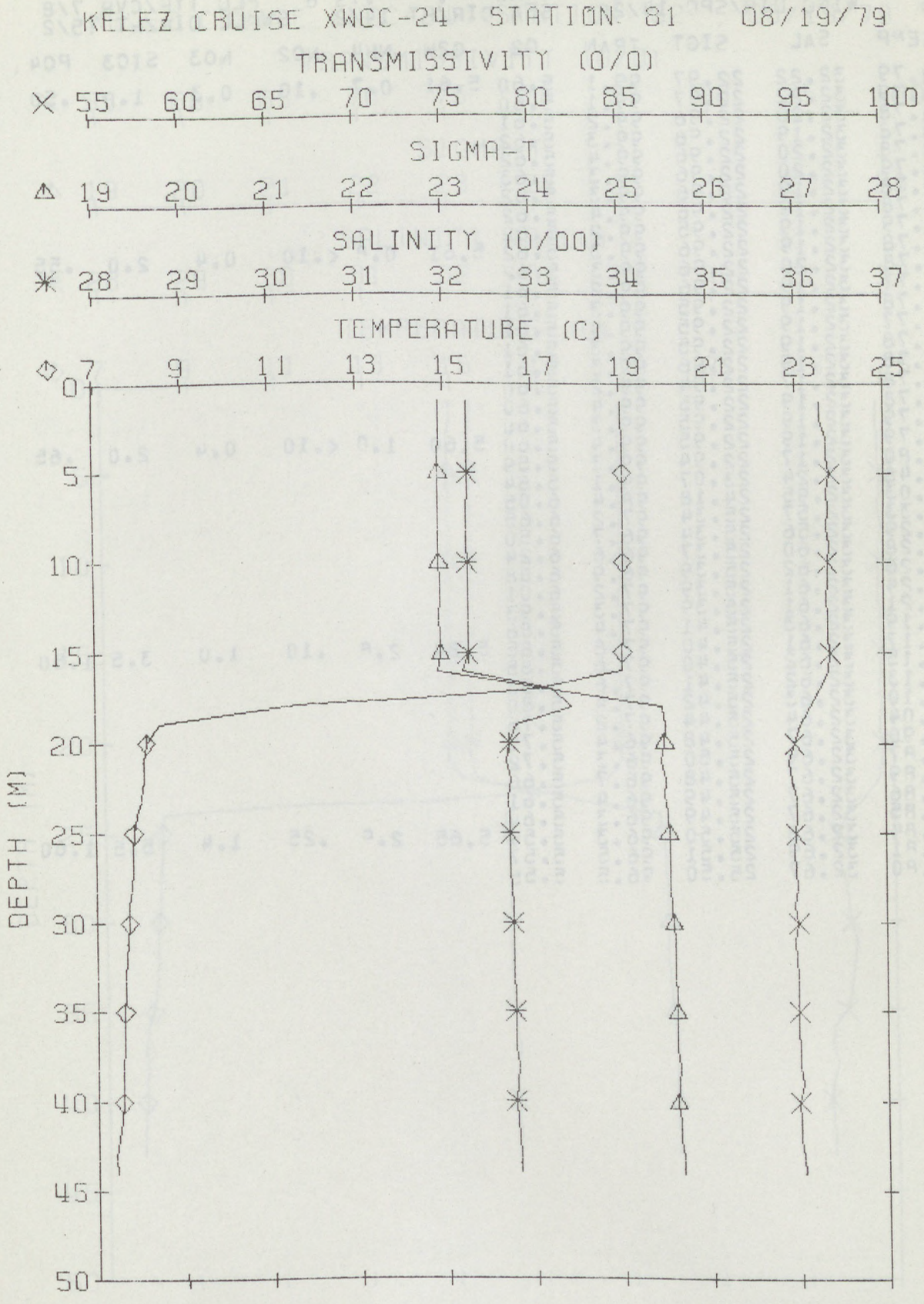
XWCC-24 STA.080 LAT 39 55.2N; LONG 72 57.6W GMT 06.6 08/19/79
DEPTH 051 AIR D/W 18.9/18.1 BARO 17.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 16/18 SEA DIR/HT 18/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	19.31	32.63	23.15	98.2	5.54	5.18	0.6	.10	0.2	0.5	.70
2	19.31	32.63	23.15	98.2	5.54						
3	19.33	32.65	23.17	98.6	5.56						
4	19.32	32.65	23.17	98.6	5.55						
5	19.32	32.65	23.17	98.4	5.56						
6	19.31	32.64	23.17	98.3	5.56						
7	19.33	32.65	23.16	98.6	5.55						
8	19.32	32.64	23.16	98.7	5.55						
9	19.33	32.65	23.16	98.6	5.55						
10	19.31	32.65	23.17	98.6	5.55						
11	19.30	32.65	23.17	98.5	5.55	5.45	0.7	.10	0.4	1.5	.50
12	19.31	32.64	23.17	98.5	5.55						
13	19.31	32.64	23.17	98.6	5.56						
14	19.29	32.65	23.17	98.5	5.55						
15	19.27	32.64	23.17	98.6	5.55						
16	19.29	32.65	23.18	98.5	5.55						
17	17.01	33.03	24.81	98.5	5.59						
18	15.52	33.10	25.41	97.7	5.88						
19	13.84	33.22	25.87	97.2	6.23	6.76	1.1	.20	0.4	1.5	1.00
20	11.70	33.41	25.43	96.8	6.48						
21	9.95	33.12	25.52	96.6	6.77						
22	9.14	33.03	25.57	96.1	6.94						
23	8.77	32.96	25.58	95.5	6.93						
24	8.56	32.97	25.62	95.7	6.80						
25	8.07	32.94	25.67	96.0	6.69						
26	7.86	33.01	25.75	96.3	6.57						
27	7.66	32.97	25.75	96.4	6.34						
28	7.26	32.95	25.79	96.7	6.19	5.80	3.0	.55	3.0	1.5	1.50
29	7.06	32.95	25.82	97.1	5.97						
30	7.02	32.95	25.82	97.3	5.76						
31	7.00	32.95	25.83	97.3	5.64						
32	7.00	32.94	25.82	97.2	5.57						
33	7.00	32.95	25.83	97.4	5.53						
34	7.00	32.94	25.82	97.3	5.50						
35	6.99	32.94	25.82	97.4	5.48						
36	6.98	32.95	25.83	97.5	5.46						
37	6.99	32.94	25.82	97.8	5.45						
38	6.98	32.96	25.84	97.7	5.44	5.45	4.1	.60	3.6	3.5	1.65
39	6.97	32.95	25.83	97.6	5.43						
40	6.95	32.93	25.84	97.6	5.41						
41	6.96	32.96	25.82	97.7	5.39						
42	6.93	32.94	25.84	97.7	5.39						
43	6.92	32.93	25.83	97.7	5.37						
44	6.93	32.94	25.82	97.7	5.37						
45	6.91	32.93	25.83	97.7	5.37						
46	6.91	32.95	25.84	97.7	5.36						
47	6.91	32.93	25.82	97.7	5.36						
48	6.91	32.92	25.82	97.7	5.35						
49	6.91	32.93	25.82	97.7	5.34						
50	6.91	32.93	25.82	97.7	5.35						
52	6.93	32.88	25.78	97.9	5.32	5.45	4.7	.45	3.9	5.0	1.60


KELEZ CRUISE XWCC-24 STATION 80 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

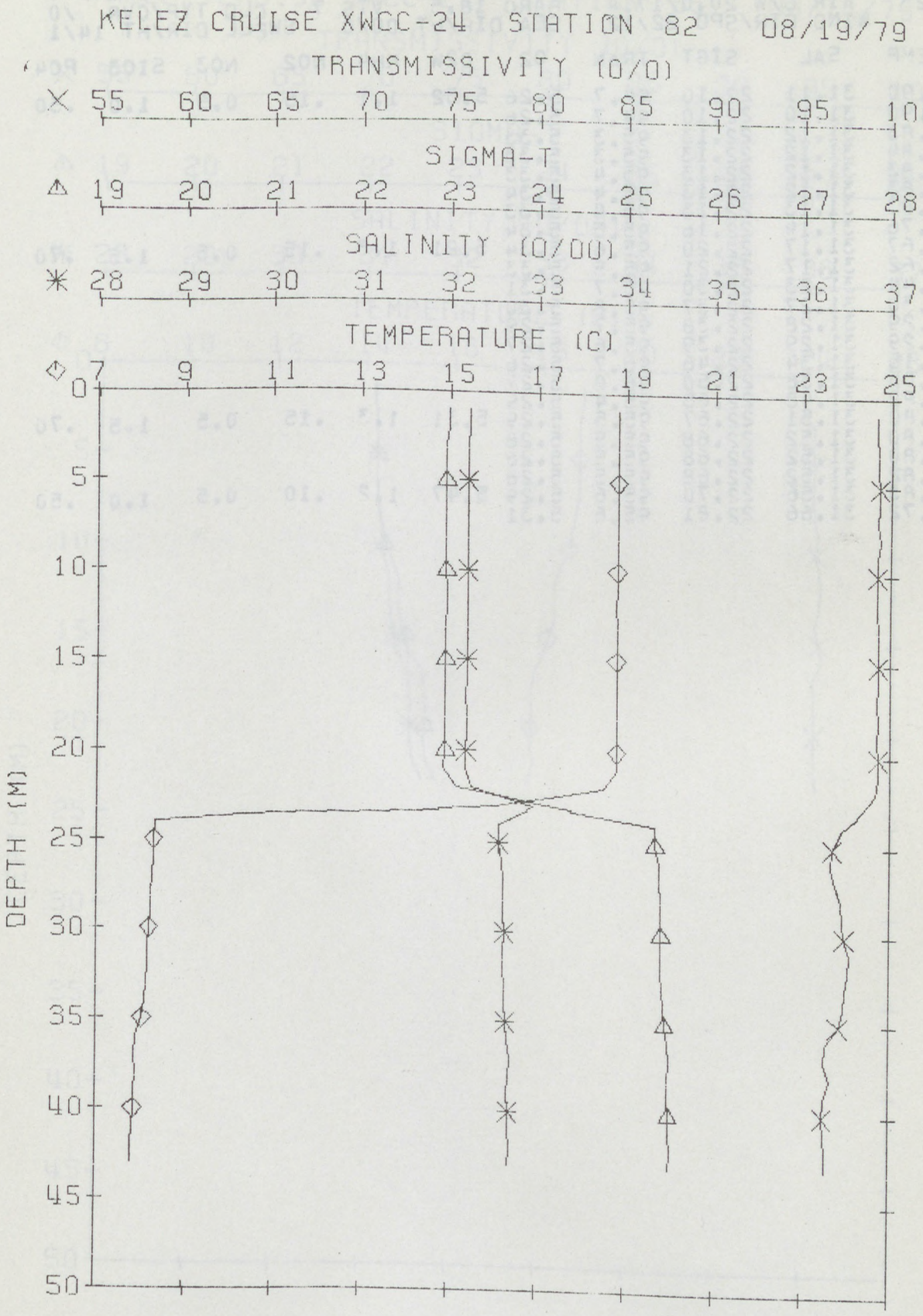
XWCC-24 STA. 81 LAT 39 44.7N; LONG 73 9.9W GMT 09.2 08/19/79
DEPTH 044 AIR D/W 20.0/18.9 BARO 16.0 VIS 7 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 20/12 SEA DIR/HT 15/1 SWELL DIR/HT 15/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.03	32.26	22.95	96.4	5.52						
2	19.03	32.26	22.95	96.4	5.52	5.44	0.5	.10	0.2	1.0	.40
3	19.06	32.26	22.94	96.8	5.54						
4	19.05	32.26	22.94	96.8	5.54						
5	19.06	32.26	22.94	96.9	5.55						
6	19.05	32.26	22.94	96.8	5.54						
7	19.06	32.25	22.93	96.8	5.54						
8	19.05	32.25	22.94	96.8	5.53						
9	19.06	32.25	22.93	96.9	5.54						
10	19.05	32.26	22.94	96.8	5.53	5.45	0.5	.10	0.4	1.0	.40
11	19.05	32.26	22.94	96.8	5.53						
12	19.04	32.26	22.94	96.7	5.52						
13	19.04	32.25	22.94	96.9	5.53						
14	19.04	32.26	22.94	96.8	5.53						
15	19.04	32.26	22.94	96.9	5.52						
16	19.04	32.20	22.90	96.9	5.52						
17	17.07	33.21	24.14	96.3	5.56						
18	11.63	33.43	25.46	95.7	6.15						
19	8.45	32.80	25.50	95.1	6.63						
20	8.15	32.72	25.48	94.9	6.68	6.02	1.4	.25	1.8	3.0	1.30
21	8.08	32.67	25.46	94.6	6.44						
22	8.09	32.72	25.50	94.7	6.24						
23	8.03	32.70	25.49	94.9	6.10						
24	7.91	32.71	25.51	94.9	6.02						
25	7.85	32.71	25.52	94.8	5.95						
26	7.82	32.72	25.53	94.8	5.88						
27	7.82	32.72	25.53	94.8	5.82						
28	7.80	32.72	25.54	94.9	5.78						
29	7.74	32.74	25.56	94.8	5.75						
30	7.72	32.74	25.56	94.9	5.73						
31	7.69	32.74	25.57	94.8	5.71						
32	7.66	32.74	25.58	94.9	5.69						
33	7.64	32.75	25.58	94.9	5.68						
34	7.61	32.76	25.59	95.0	5.66						
35	7.60	32.76	25.59	94.9	5.65						
36	7.58	32.76	25.60	95.0	5.63						
37	7.59	32.75	25.59	95.0	5.62						
38	7.57	32.79	25.62	95.0	5.61						
39	7.57	32.77	25.61	95.2	5.61						
40	7.56	32.75	25.60	95.0	5.60						
41	7.52	32.77	25.62	95.1	5.60						
42	7.47	32.79	25.63	95.0	5.59						
43	7.40	32.81	25.66	95.1	5.57	5.72	3.3	.35	2.4	3.5	1.40
44	7.42	32.81	25.66	95.2	5.56						


KELEZ CRUISE XWCC-24 STATION 81 08/19/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

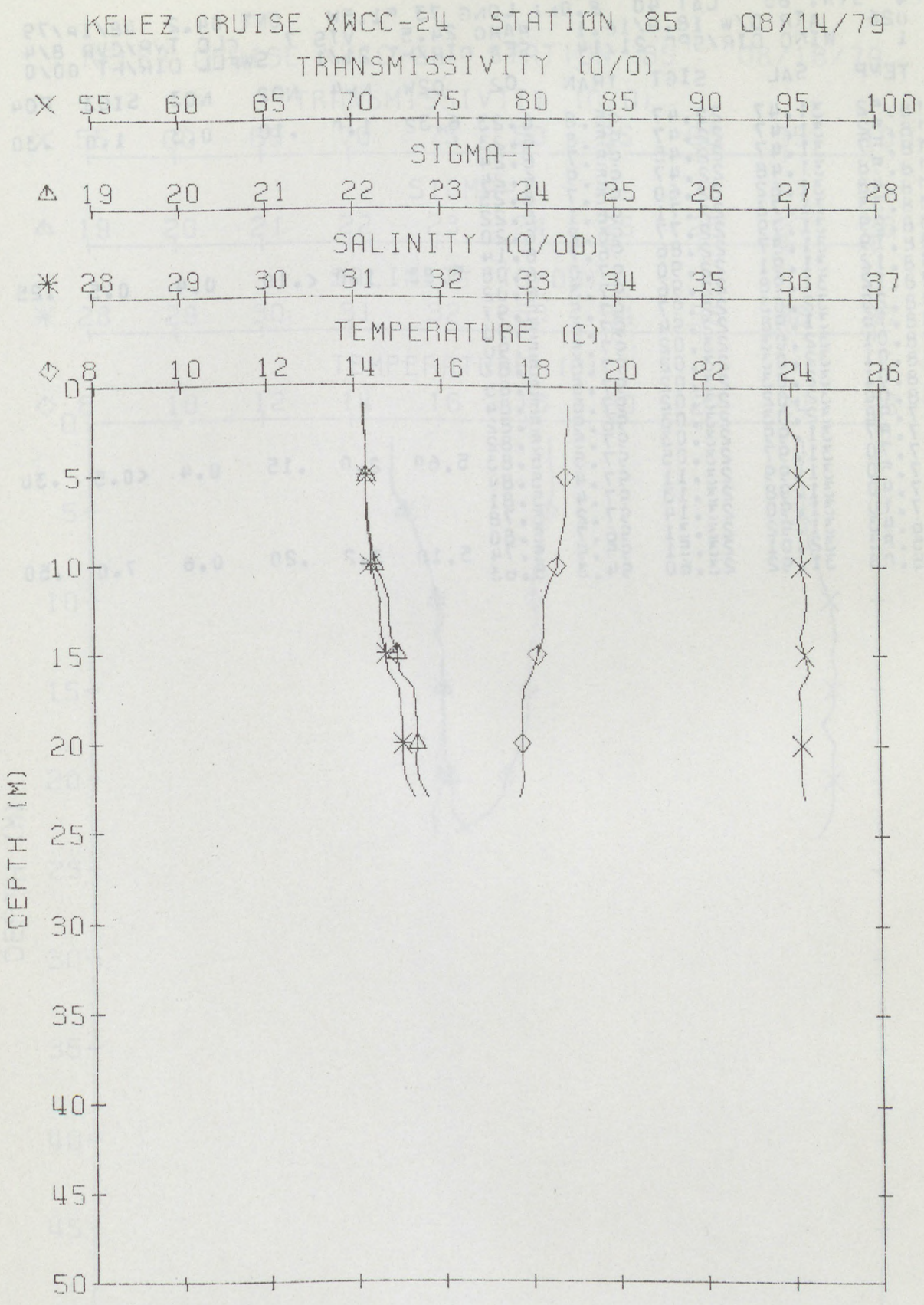
XWCC-24 STA. 82 LAT 39 50.0N; LONG 73 20.3W GMT 03.2 08/19/79
DEPTH 043 AIR D/W . / . BARO . VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 14/20 SEA DIR/HT 14/2 SWELL DIR/HT 15/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.79	32.22	22.97	99.1	5.60	5.61	0.7	.10	0.3	1.0	.50
2	18.79	32.22	22.97	99.1	5.60						
3	18.78	32.20	22.96	99.2	5.61						
4	18.78	32.19	22.96	99.3	5.62						
5	18.78	32.20	22.96	99.4	5.62						
6	18.79	32.20	22.96	99.3	5.63						
7	18.78	32.19	22.96	99.3	5.62						
8	18.78	32.19	22.96	99.4	5.62						
9	18.79	32.19	22.95	99.2	5.62						
10	18.78	32.19	22.96	99.3	5.62	5.61	0.8	<.10	0.4	2.0	.55
11	18.78	32.20	22.96	99.3	5.62						
12	18.77	32.19	22.96	99.2	5.61						
13	18.78	32.19	22.95	99.3	5.61						
14	18.77	32.19	22.95	99.4	5.61						
15	18.78	32.19	22.95	99.3	5.61						
16	18.78	32.19	22.96	99.3	5.61						
17	18.78	32.17	22.94	99.2	5.60						
18	18.78	32.19	22.95	99.4	5.60						
19	18.79	32.19	22.95	99.3	5.60						
20	18.79	32.19	22.95	99.4	5.60	5.60	1.0	<.10	0.4	2.0	.65
21	18.80	32.17	22.94	99.3	5.59						
22	18.48	32.24	23.07	99.1	5.64						
23	16.03	32.95	24.18	98.4	6.05						
24	8.33	32.57	25.34	97.2	6.65						
25	8.29	32.56	25.34	96.7	6.50						
26	8.28	32.60	25.37	96.6	6.24						
27	8.26	32.62	25.39	96.9	6.08						
28	8.24	32.61	25.39	97.2	6.01						
29	8.21	32.61	25.39	97.3	5.93						
30	8.19	32.63	25.41	97.4	5.88						
31	8.17	32.61	25.40	97.8	5.85	5.84	2.8	.10	1.0	3.5	1.50
32	8.15	32.62	25.40	97.6	5.85						
33	8.13	32.62	25.41	97.6	5.83						
34	8.10	32.63	25.42	97.4	5.80						
35	8.04	32.64	25.44	97.2	5.76						
36	7.90	32.67	25.48	96.4	5.75						
37	7.87	32.69	25.50	96.3	5.72						
38	7.89	32.67	25.48	96.7	5.66						
39	7.86	32.67	25.49	96.4	5.61						
40	7.85	32.67	25.49	96.3	5.60						
41	7.84	32.68	25.50	96.3	5.59	5.65	2.9	.25	1.4	5.5	1.60
42	7.81	32.69	25.51	96.5	5.57						
43	7.80	32.67	25.50	96.5	5.55						


KELEZ CRUISE XWCC-24 STATION 82 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

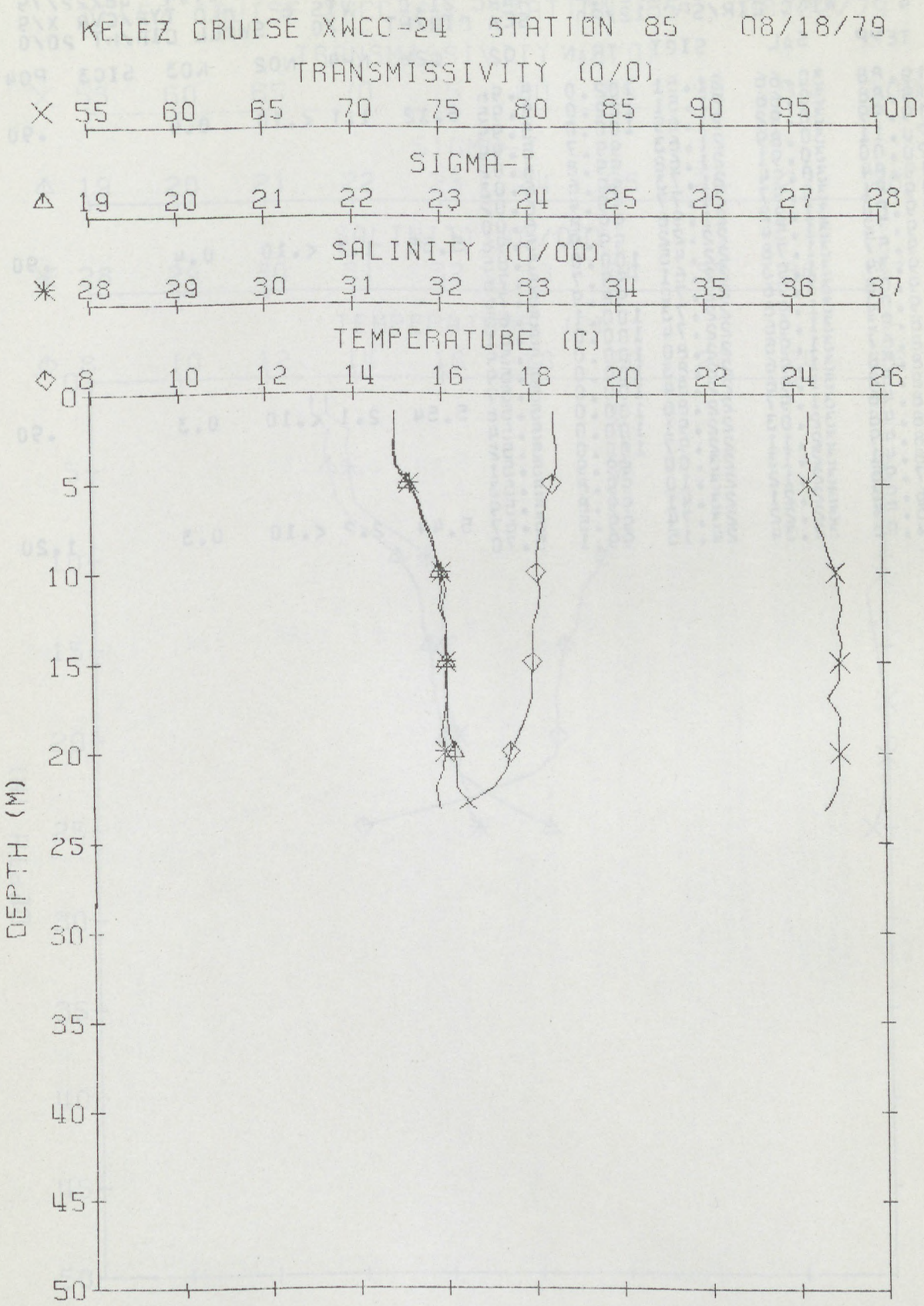
XWCC-24 STA. 85 LAT 40 8.0N; LONG 73 51.3W GMT 06.0 08/14/79
DEPTH 025 AIR D/W 20.0/17.8 BARO 18.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 22/12 SEA DIR/HT 00/0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.90	31.11	22.10	94.7	5.26	5.32	1.1	.15	0.5	1.0	.50
2	18.90	31.10	22.10	94.7	5.26						
3	18.83	31.12	22.13	95.3	5.33						
4	18.84	31.12	22.13	95.3	5.33						
5	18.83	31.12	22.13	95.4	5.33						
6	18.83	31.12	22.13	95.4	5.34						
7	18.83	31.13	22.13	95.4	5.33						
8	18.76	31.14	22.16	95.5	5.34						
9	18.67	31.17	22.20	95.6	5.34	5.21	1.3	.15	0.5	1.5	.70
10	18.62	31.17	22.21	95.5	5.33						
11	18.44	31.23	22.30	95.7	5.31						
12	18.30	31.27	22.37	95.8	5.30						
13	18.29	31.28	22.38	95.7	5.29						
14	18.29	31.29	22.39	95.6	5.27						
15	18.15	31.34	22.46	95.7	5.26						
16	18.05	31.36	22.50	96.0	5.27						
17	17.82	31.48	22.65	95.4	5.29						
18	17.80	31.51	22.67	95.5	5.29	5.31	1.3	.15	0.5	1.5	.70
19	17.80	31.52	22.68	95.5	5.28						
20	17.80	31.52	22.68	95.5	5.28						
21	17.82	31.52	22.68	95.5	5.28						
22	17.83	31.56	22.70	95.6	5.29	5.47	1.2	.10	0.5	1.0	.50
23	17.72	31.66	22.81	95.6	5.31						


KELEZ CRUISE XWCC-24 STATION 85 08/14/79
TRANSMISSIVITY (O/O)
X 55 60 65 70 75 80 85 90 95 100
SIGMA-T
Δ 19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
✳ 28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
◇ 8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

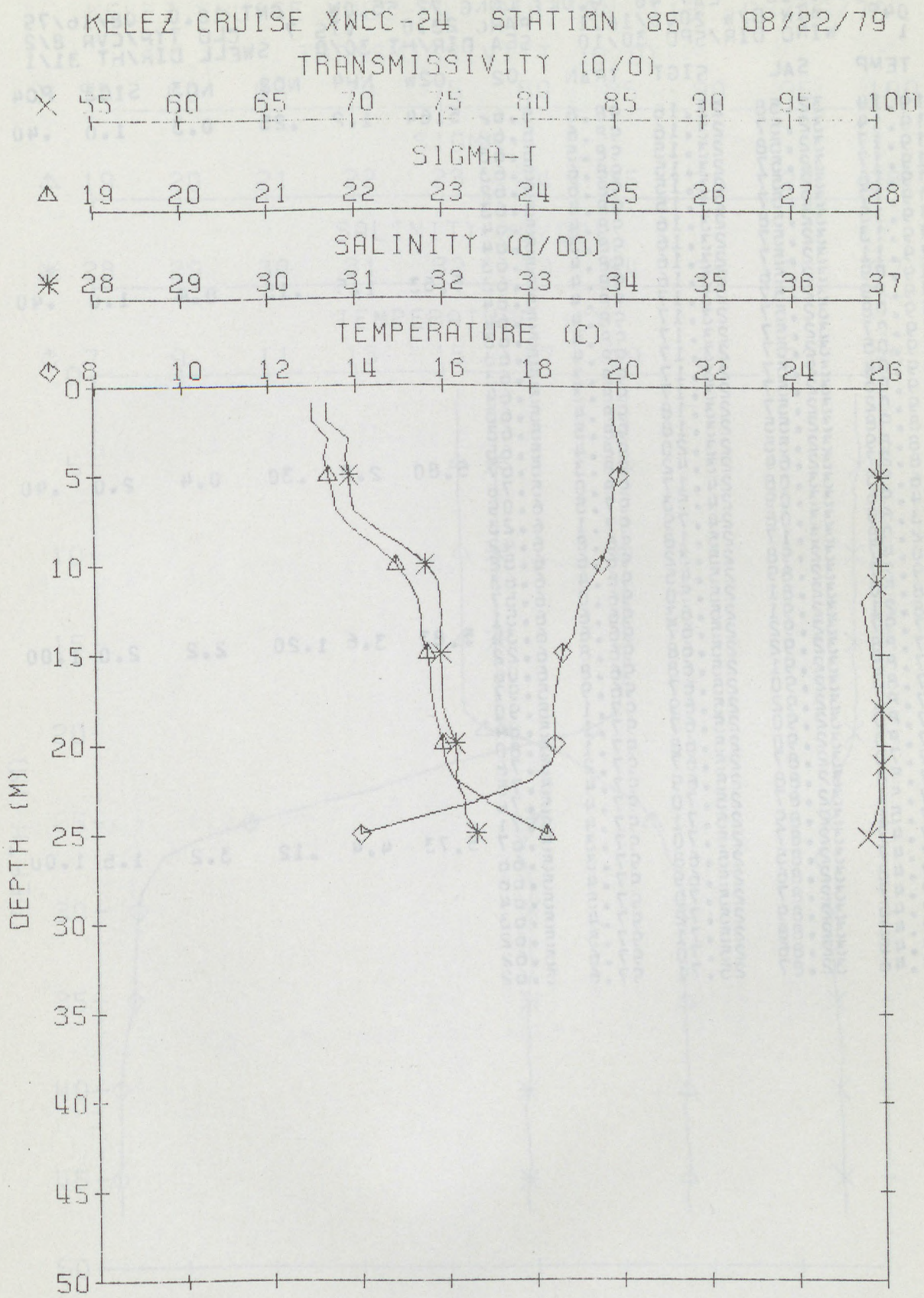
XWCC-24 STA. 85 LAT 40 8.0N; LONG 73 51.5W GMT 04.2 08/1A/79
DEPTH 026 AIR D/W 18.9/16.1 BARO 24.5 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 21/14 SEA DIR/HT 21/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.52	31.47	22.47	95.8	6.23	6.32	1.0	.10	0.3	1.0	.30
2	18.52	31.47	22.47	95.8	6.23						
3	18.57	31.47	22.45	95.7	6.24						
4	18.58	31.48	22.47	95.9	6.24						
5	18.48	31.62	22.60	95.7	6.25						
6	18.33	31.73	22.71	96.1	6.22						
7	18.29	31.79	22.77	96.2	6.20						
8	18.19	31.87	22.86	96.7	6.14						
9	18.12	31.91	22.90	97.0	6.08	5.83	1.0	<.10	0.4	0.5	.25
10	18.12	31.98	22.96	97.3	6.02						
11	18.20	32.03	22.97	97.5	5.97						
12	18.16	31.98	22.94	97.6	5.93						
13	18.01	32.03	23.02	97.5	5.90						
14	18.01	32.03	23.02	97.6	5.87						
15	18.01	32.03	23.02	97.5	5.85						
16	18.00	32.02	23.02	97.6	5.84						
17	17.98	32.03	23.03	96.9	5.82						
18	17.87	31.99	23.03	97.5	5.82						
19	17.70	31.97	23.05	97.5	5.83	5.68	2.0	.15	0.4	<0.5	.30
20	17.50	31.99	23.11	97.4	5.84						
21	17.40	31.98	23.13	97.4	5.81						
22	17.10	31.90	23.14	97.2	5.78						
23	16.43	31.92	23.31	96.7	5.80						
24	15.83	32.01	23.51	95.9	5.74	5.10	3.2	.20	0.6	7.0	.50
25	15.08	31.92	23.60	94.3	5.63						


KELEZ CRUISE XWCC-24 STATION 85 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

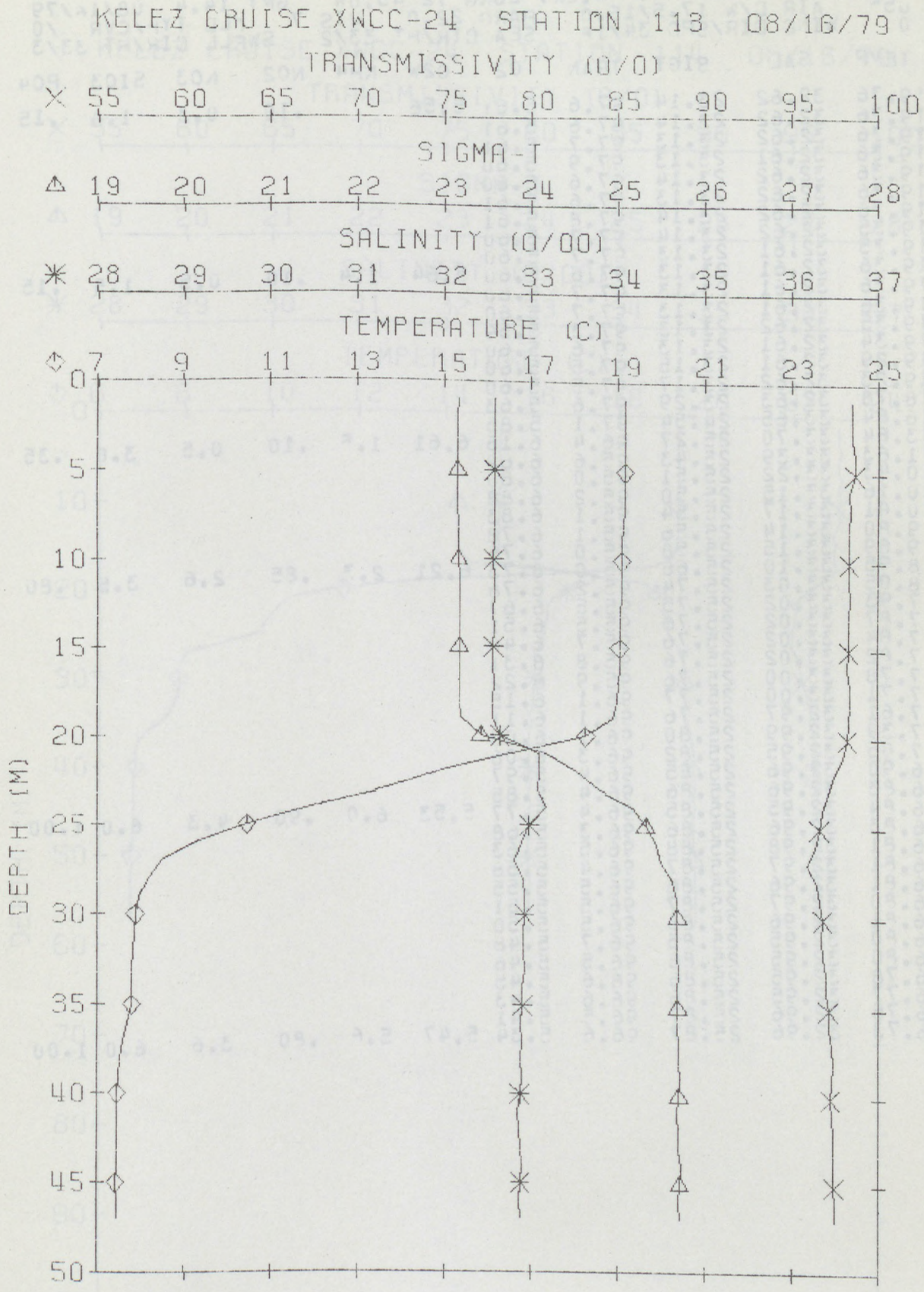
XWCC-24 STA. 85 LAT 40 8.0N ; LONG 73 51.8W GMT 17.4 08/22/79
DEPTH 027 AIR D/W 22.2/20.6 BARO 21.0 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 12/20 SEA DIR/HT /0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.88	30.66	21.51	102.0	5.96						
2	19.88	30.66	21.51	102.0	5.95	6.12	1.1	<.10	0.4		.90
3	19.99	30.92	21.69	100.0	5.99						
4	20.11	30.89	21.63	99.7	5.99						
5	20.00	30.91	21.68	99.8	6.02						
6	19.84	30.94	21.73	99.6	6.03						
7	19.81	30.97	21.77	99.4	6.02						
8	19.80	31.22	21.96	99.8	6.00						
9	19.72	31.54	22.22	99.9	5.96	5.55	1.1	<.10	0.4		.90
10	19.57	31.78	22.45	100.0	5.85						
11	19.34	31.93	22.61	99.7	5.76						
12	19.08	31.96	22.70	98.9	5.70						
13	19.00	31.96	22.73	100.1	5.65						
14	18.93	31.96	22.74	100.0	5.61						
15	18.67	31.95	22.80	100.0	5.59						
16	18.58	31.96	22.83	100.0	5.59						
17	18.52	31.96	22.84	100.0	5.57						
18	18.46	31.97	22.86	100.0	5.56	5.54	2.1	<.10	0.3		.90
19	18.48	32.03	22.91	100.0	5.54						
20	18.49	32.11	22.97	100.0	5.52						
21	18.41	32.13	23.00	99.9	5.51						
22	17.95	32.12	23.10	99.8	5.53						
23	16.93	32.21	23.41	99.8	5.59						
24	15.54	32.22	23.74	99.5	5.67	5.44	2.2	<.10	0.3		1.20
25	14.03	32.34	24.15	99.1	5.70						


KELEZ CRUISE XWCC-24 STATION 85 08/22/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

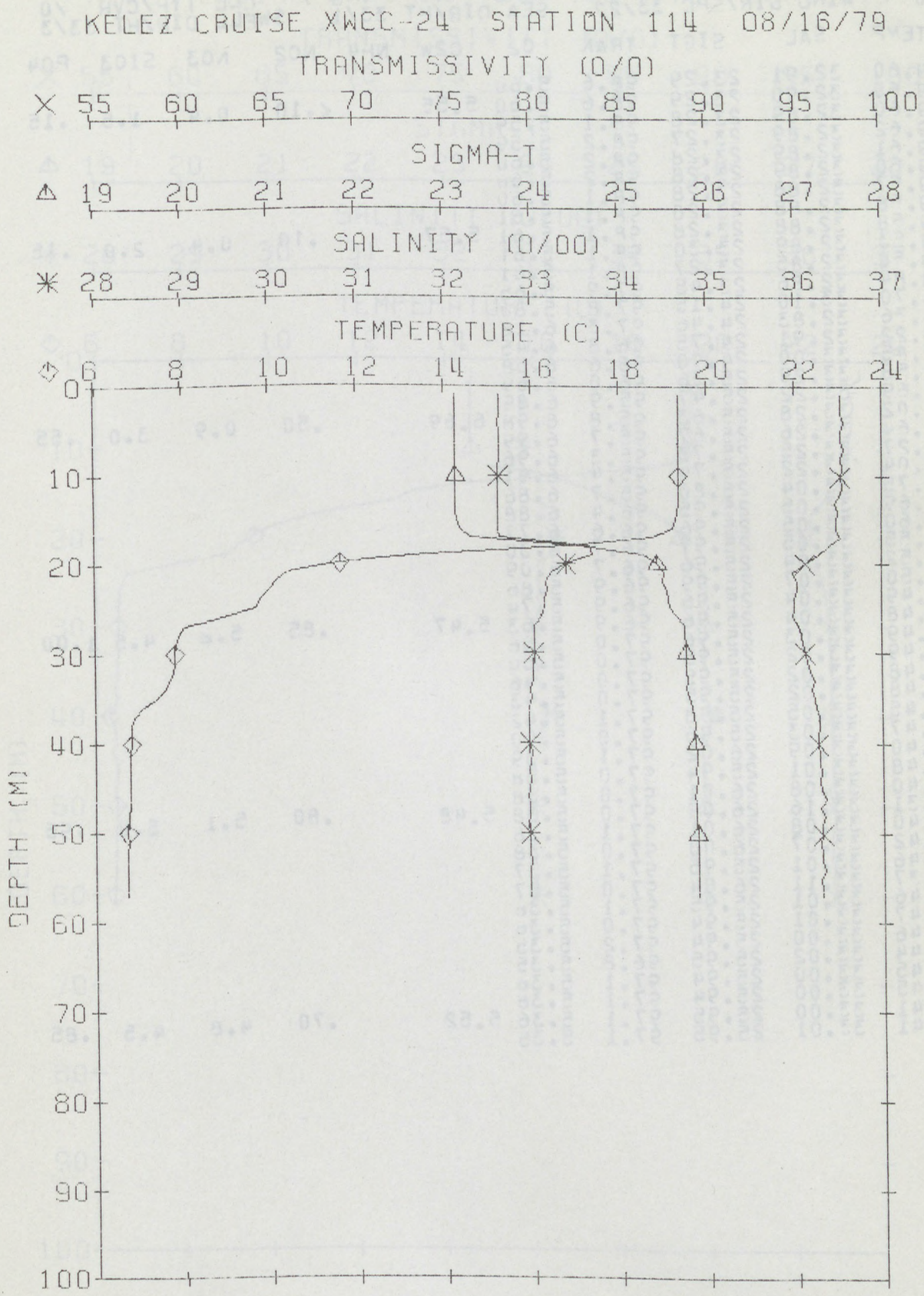
XWCC-24 STA.113 LAT 40 9.0N; LONG 72 55.0W GMT 18.0 08/16/79
DEPTH 049 AIR D/W 20.0/16.1 BARO 23.0 VIS 7 CLD TYP/CVR 8/2
WETHR 1 WIND DIR/SPD 30/10 SEA DIR/HT 30/0 SWELL DIR/HT 31/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.14	32.58	23.16	98.6	5.62	5.64	1.2	.25	0.3	1.0	.40
2	19.14	32.57	23.16	98.6	5.62						
3	19.17	32.58	23.15	98.5	5.63						
4	19.17	32.57	23.15	98.6	5.63						
5	19.16	32.57	23.15	98.6	5.62						
6	19.17	32.57	23.15	98.4	5.63						
7	19.15	32.58	23.16	98.4	5.64						
8	19.13	32.57	23.16	98.3	5.64						
9	19.11	32.57	23.16	98.4	5.63						
10	19.09	32.56	23.16	98.4	5.63	5.63	1.5	.15	0.4	1.0	.40
11	19.09	32.57	23.17	98.4	5.64						
12	19.08	32.57	23.17	98.4	5.64						
13	19.07	32.57	23.17	98.4	5.63						
14	19.05	32.57	23.17	98.4	5.63						
15	19.04	32.57	23.17	98.3	5.63						
16	19.05	32.57	23.17	98.3	5.64						
17	19.02	32.57	23.18	98.4	5.63						
18	18.98	32.55	23.18	98.5	5.63						
19	18.89	32.55	23.20	98.4	5.65						
20	18.27	32.64	23.42	98.3	5.67	5.80	2.0	.30	0.4	2.0	.40
21	16.55	33.08	24.17	98.0	5.78						
22	14.96	33.09	24.53	97.5	6.09						
23	13.69	33.08	24.79	97.1	6.23						
24	12.08	33.17	25.18	96.8	6.42						
25	10.47	32.98	25.32	96.6	6.58						
26	9.27	32.89	25.45	96.4	6.63						
27	8.50	32.81	25.50	96.0	6.57						
28	8.21	32.91	25.63	96.6	6.51						
29	7.97	32.92	25.67	96.6	6.35	5.83	3.6	1.20	2.2	2.0	1.00
30	7.88	32.92	25.68	96.8	6.22						
31	7.85	32.91	25.68	96.8	6.06						
32	7.83	32.90	25.67	96.9	5.97						
33	7.81	32.92	25.69	97.1	5.90						
34	7.80	32.90	25.67	97.1	5.84						
35	7.80	32.90	25.68	97.1	5.80						
36	7.70	32.87	25.67	97.2	5.76						
37	7.58	32.88	25.69	97.4	5.75						
38	7.51	32.87	25.70	97.4	5.74						
39	7.51	32.89	25.71	97.4	5.71						
40	7.47	32.87	25.70	97.3	5.67	5.73	4.4	.12	3.2	1.5	1.00
41	7.47	32.85	25.68	97.3	5.66						
42	7.48	32.86	25.69	97.4	5.66						
43	7.47	32.87	25.70	97.5	5.64						
44	7.45	32.89	25.72	97.4	5.63						
45	7.43	32.88	25.71	97.5	5.62						
46	7.45	32.86	25.70	97.6	5.62						
47	7.46	32.87	25.71	97.6	5.62						


KELEZ CRUISE XWCC-24 STATION 113 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

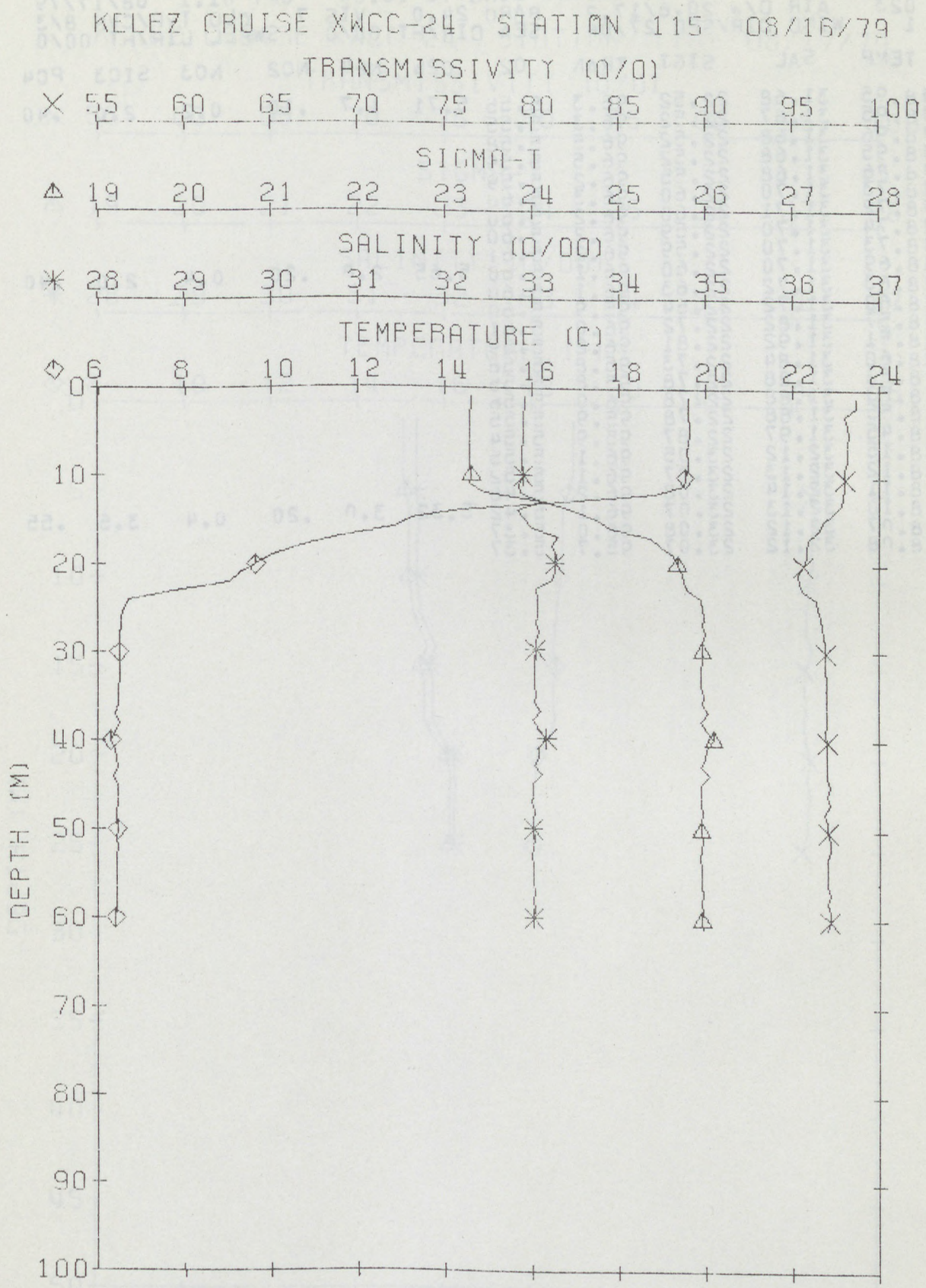
XWCC-24 STA.114 LAT 40 4.3N; LONG 72 45.0W GMT 14.4 08/16/79
DEPTH 055 AIR D/W 17.5/15.0 BARO 22.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 34/18 SEA DIR/HT 33/2 SWELL DIR/HT 33/3

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.36	32.62	23.14	97.6	5.61	5.56		.10	0.3	1.0	.15
2	19.36	32.62	23.14	97.6	5.61						
3	19.36	32.62	23.13	97.7	5.61						
4	19.36	32.61	23.13	97.9	5.60						
5	19.36	32.62	23.14	97.6	5.60						
6	19.36	32.62	23.13	97.6	5.61						
7	19.36	32.62	23.14	97.8	5.61						
8	19.35	32.62	23.14	97.7	5.60						
9	19.35	32.61	23.13	97.7	5.60						
10	19.36	32.61	23.13	97.6	5.60	5.64	1.4	.10	0.5	1.5	.15
11	19.36	32.61	23.13	97.7	5.60						
12	19.36	32.61	23.13	97.7	5.60						
13	19.35	32.62	23.13	97.3	5.59						
14	19.34	32.61	23.13	97.6	5.60						
15	19.29	32.61	23.15	97.5	5.60						
16	19.23	32.62	23.17	97.5	5.60						
17	18.78	32.63	23.29	97.6	5.63						
18	16.84	33.65	24.54	97.1	5.85						
19	13.64	33.70	25.27	96.4	6.15	6.61	1.5	.10	0.5	3.0	.35
20	11.63	33.39	25.43	95.6	6.62						
21	10.43	33.22	25.51	95.0	6.80						
22	10.16	33.15	25.50	95.2	6.88						
23	10.01	33.17	25.54	95.1	6.83						
24	9.80	33.14	25.56	95.1	6.78						
25	9.69	33.15	25.58	95.0	6.75						
26	8.95	33.10	25.66	95.0	6.73	6.21	2.3	.85	2.6	3.5	.80
27	8.05	33.03	25.74	95.2	6.78						
28	7.93	33.02	25.75	95.5	6.67						
29	7.87	33.02	25.76	95.5	6.51						
30	7.84	33.02	25.76	95.7	6.40						
31	7.82	33.02	25.76	95.8	6.31						
32	7.78	33.00	25.76	95.9	6.22						
33	7.71	33.00	25.77	96.1	6.15						
34	7.61	32.97	25.76	96.1	6.11						
35	7.39	32.99	25.80	96.1	6.08						
36	7.05	32.95	25.82	96.3	6.06						
37	6.90	32.96	25.85	96.4	5.97						
38	6.83	32.96	25.86	96.4	5.85						
39	6.84	32.95	25.85	96.4	5.77	5.53	6.0	.90	4.3	6.0	1.00
40	6.83	32.96	25.86	96.3	5.68						
41	6.81	32.98	25.88	96.5	5.63						
42	6.81	32.97	25.87	96.4	5.58						
43	6.81	32.96	25.86	96.5	5.55						
44	6.80	32.97	25.87	96.5	5.51						
45	6.81	32.96	25.86	96.5	5.50						
46	6.80	32.95	25.85	96.7	5.48						
47	6.80	32.95	25.86	96.5	5.46						
48	6.78	32.95	25.86	96.6	5.45						
49	6.77	32.95	25.86	96.6	5.43						
50	6.75	32.96	25.87	96.5	5.41						
57	6.73	32.96	25.87	96.6	5.34	5.47	5.6	.80	3.6	6.0	1.00


KELEZ CRUISE XWCC-24 STATION 114 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

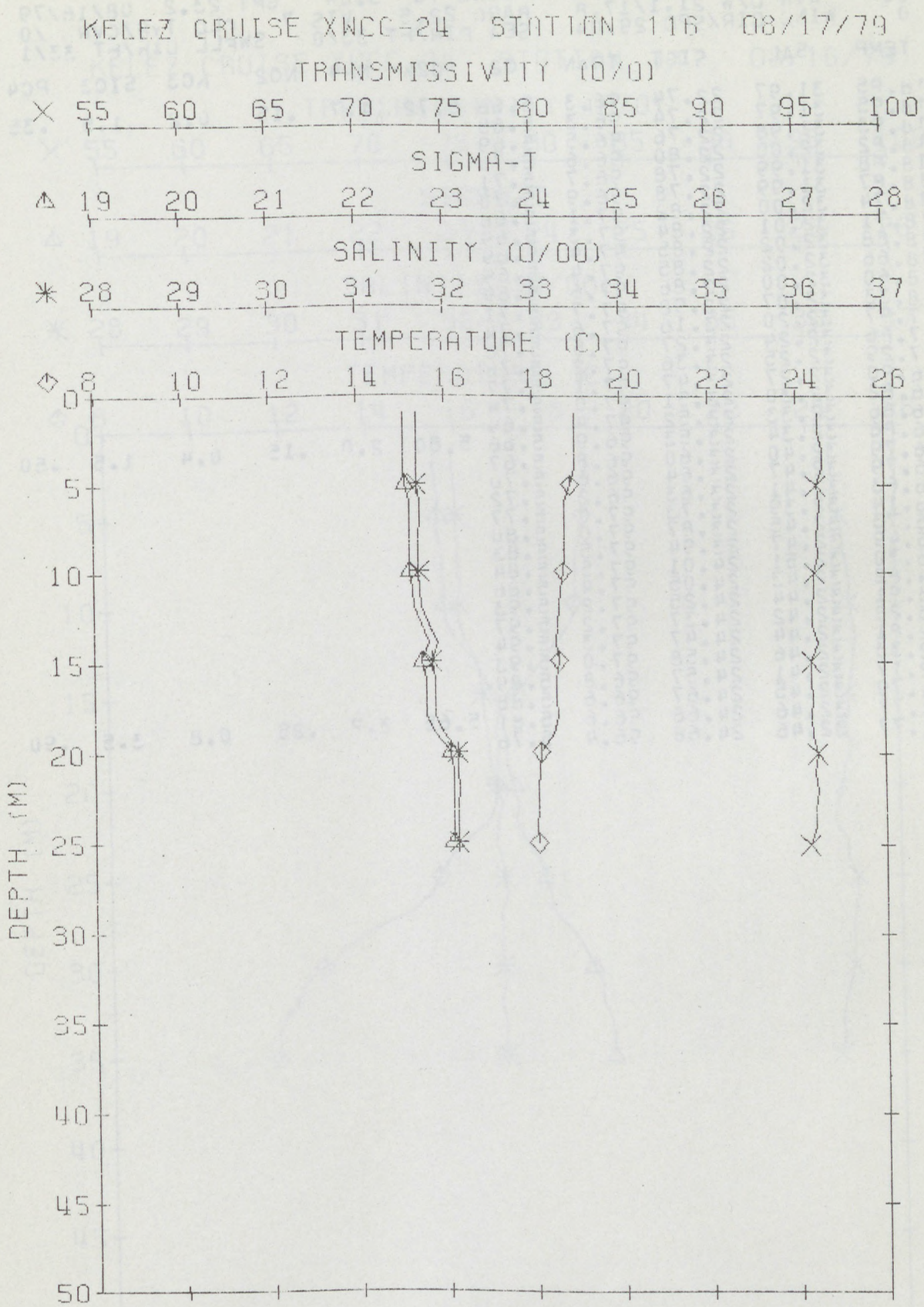
XWCC-24 STA.115 LAT 39 58.8N ; LONG 72 34.0W GMT 12.5 08/16/79
DEPTH 061 AIR D/W 17.8/15.0 BARO . VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 33/22 SEA DIR/HT 33/1 SWELL DIR/HT 33/3

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.60	32.91	23.29	98.6	5.60						
2	19.60	32.90	23.29	98.6	5.60	5.55		<.10	0.4	1.5	.15
3	19.60	32.89	23.28	98.1	5.59						
4	19.62	32.89	23.27	98.2	5.59						
5	19.61	32.89	23.28	98.2	5.60						
6	19.60	32.89	23.28	98.2	5.60						
7	19.57	32.88	23.28	98.1	5.60						
8	19.58	32.88	23.28	98.1	5.61						
9	19.58	32.88	23.28	98.1	5.61	5.57		.10	0.4	2.0	.15
10	19.53	32.89	23.30	98.1	5.61						
11	19.50	32.85	23.27	98.1	5.61						
12	18.84	32.86	23.45	97.9	5.65						
13	16.70	33.10	24.15	97.8	5.80						
14	14.36	32.83	24.46	97.3	6.18						
15	13.22	32.91	24.75	96.8	6.45						
16	12.85	33.00	24.90	96.6	6.58						
17	11.58	33.29	25.36	96.0	6.69						
18	10.69	33.22	25.47	95.9	6.89						
19	10.02	33.28	25.63	95.8	6.98	6.69		.50	0.9	3.0	.55
20	9.64	33.26	25.67	95.7	6.99						
21	9.27	33.25	25.73	95.3	6.96						
22	9.04	33.22	25.74	95.4	6.91						
23	7.75	33.04	25.80	95.7	6.86						
24	6.69	33.05	25.95	96.4	6.88						
25	6.60	33.05	25.96	96.6	6.77						
26	6.55	33.05	25.97	96.7	6.30						
27	6.52	33.04	25.96	96.7	6.09						
28	6.50	33.07	25.99	96.9	5.86						
29	6.49	33.04	25.96	96.9	5.74						
30	6.48	33.04	25.96	96.9	5.63	5.47		.85	5.2	4.5	1.00
31	6.49	33.03	25.96	97.0	5.56						
32	6.49	33.02	25.95	97.0	5.50						
33	6.48	33.02	25.95	97.0	5.46						
34	6.48	33.02	25.95	97.0	5.43						
35	6.45	33.05	25.98	97.1	5.42						
36	6.47	33.03	25.96	97.0	5.40						
37	6.40	33.09	26.02	97.1	5.39						
38	6.48	33.01	25.94	97.0	5.38						
39	6.40	33.08	26.01	97.0	5.38						
40	6.31	33.16	26.09	97.0	5.38	5.48		.80	5.1	5.0	.95
41	6.40	33.08	26.01	97.1	5.38						
42	6.42	33.07	26.00	97.0	5.38						
43	6.46	33.01	25.95	97.1	5.37						
44	6.37	33.11	26.04	97.0	5.37						
45	6.46	33.01	25.95	97.1	5.36						
46	6.47	33.01	25.94	97.0	5.36						
47	6.46	33.00	25.94	97.2	5.35						
48	6.44	33.02	25.95	96.8	5.35						
49	6.45	33.00	25.94	97.1	5.36						
50	6.45	33.00	25.94	97.1	5.36						
60	6.41	33.00	25.95	97.1	5.36	5.52		.70	4.8	4.5	.85
61	6.41	33.01	25.95	97.1	5.35						


KELEZ CRUISE XWCC-24 STATION 115 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

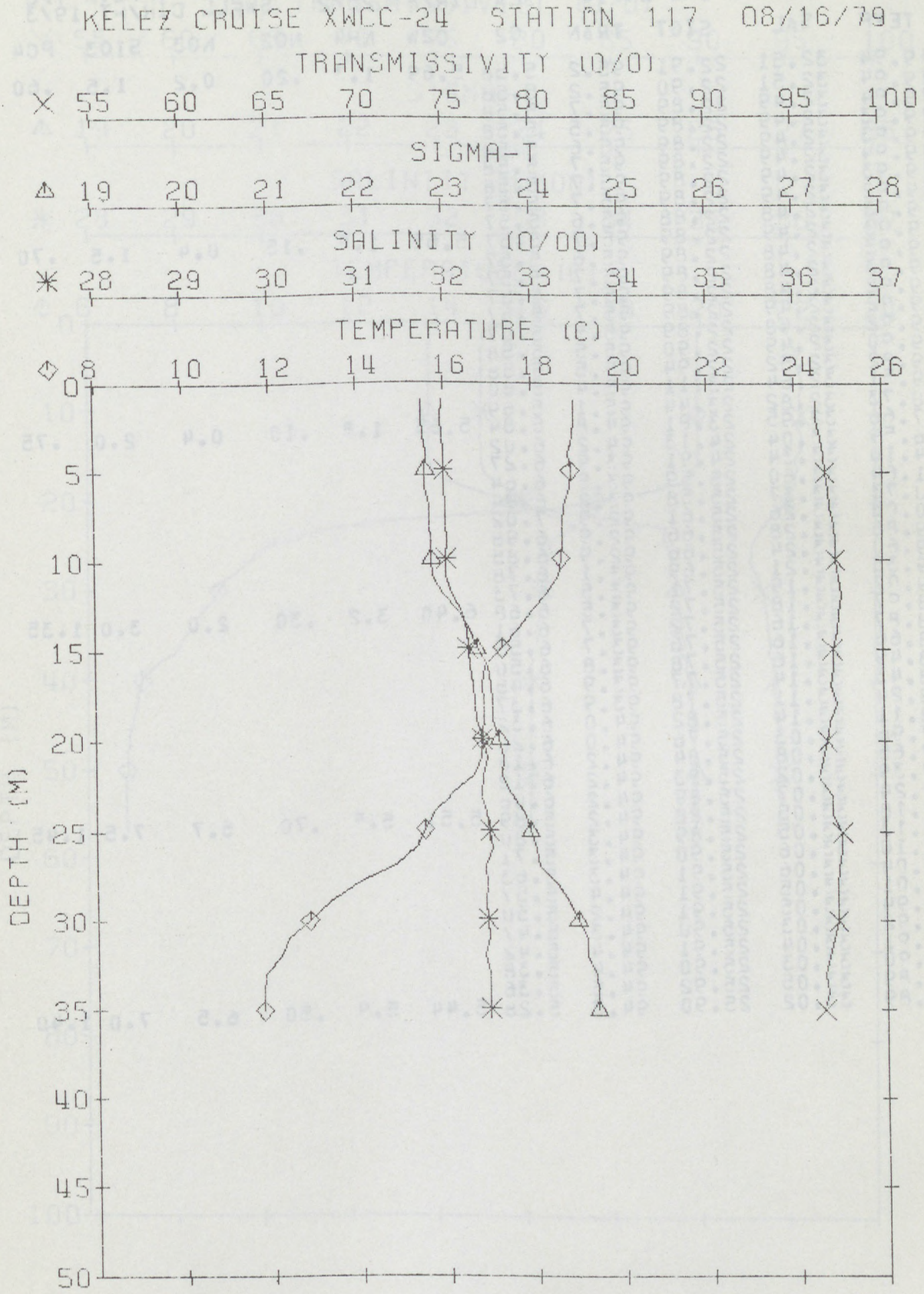
XWCC-24 STA.116 LAT 40 30.0N; LONG 73 18.8W GMT 01.1 08/17/79
DEPTH 023 AIR D/W 20.6/17.2 BARO 24.0 VIS 7 CLD TYP/CVR 8/3
WETHR 1 WIND DIR/SPD 27/06 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.95	31.68	22.52	96.3	5.55	5.71	1.7	.10	0.2	2.0	.40
2	18.95	31.67	22.52	96.3	5.55						
3	18.96	31.68	22.52	96.5	5.58						
4	18.95	31.68	22.52	96.5	5.59						
5	18.86	31.68	22.55	96.2	5.59						
6	18.73	31.70	22.60	96.3	5.60						
7	18.72	31.71	22.60	96.2	5.60						
8	18.74	31.70	22.59	96.2	5.60						
9	18.73	31.70	22.59	96.2	5.61						
10	18.69	31.70	22.60	96.1	5.60	5.65	2.8	.20	0.4	2.0	.40
11	18.63	31.72	22.63	96.1	5.60						
12	18.60	31.72	22.64	95.9	5.60						
13	18.57	31.82	22.72	96.0	5.61						
14	18.51	31.92	22.81	96.2	5.59						
15	18.60	31.84	22.73	95.8	5.56						
16	18.53	31.88	22.78	95.8	5.55						
17	18.53	31.88	22.78	96.0	5.56						
18	18.55	31.88	22.78	95.9	5.55						
19	18.45	31.97	22.87	95.9	5.54						
20	18.15	32.12	23.05	96.1	5.55						
21	18.12	32.13	23.07	96.1	5.52						
22	18.11	32.14	23.08	96.2	5.46						
23	18.10	32.13	23.07	96.1	5.42	5.32	3.0	.20	0.4	3.5	.55
24	18.07	32.12	23.08	96.0	5.37						
25	18.08	32.12	23.07	95.7	5.37						


KELEZ CRUISE XNCC-24 STATION 116 08/17/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

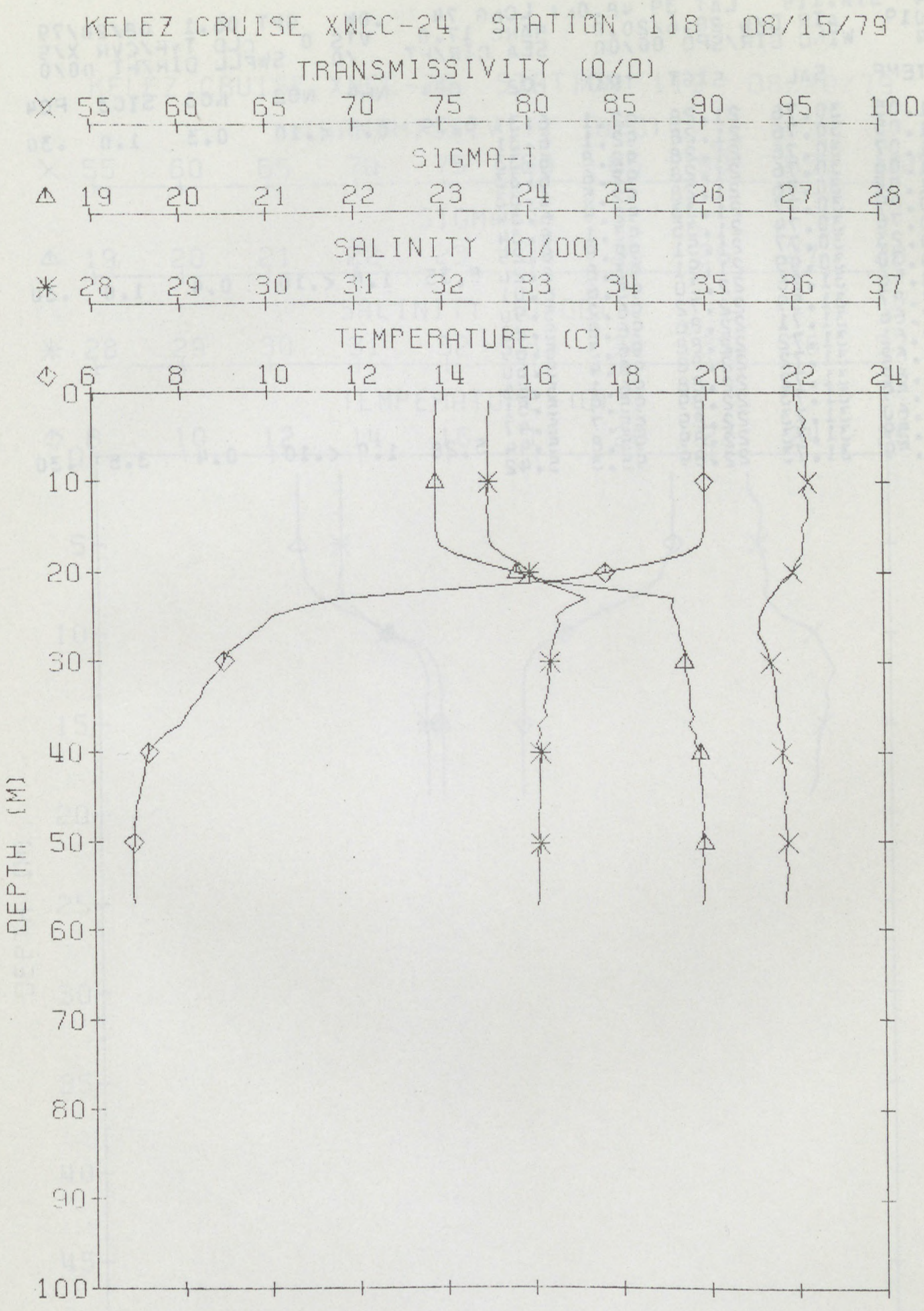
XWCC-24 STA.117 LAT 40 23.3N; LONG 73 5.0W GMT 23.2 08/16/79
DEPTH 036 AIR D/W 21.1/17.8 BARO 22.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 29/04 SEA DIR/HT 33/0 SWELL DIR/HT 33/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.95	31.97	22.74	96.3	5.66	5.72	1.7	.15	0.2	1.5	.35
2	18.95	31.97	22.74	96.3	5.65						
3	18.93	31.98	22.76	96.5	5.69						
4	18.82	32.00	22.80	96.6	5.70						
5	18.88	31.99	22.78	96.7	5.71						
6	18.87	31.99	22.78	96.9	5.70						
7	18.74	32.00	22.82	97.1	5.68						
8	18.71	32.01	22.84	97.3	5.69						
9	18.68	32.02	22.85	97.4	5.69						
10	18.66	32.02	22.85	97.4	5.69						
11	18.60	32.00	22.86	97.6	5.69						
12	18.33	32.07	22.98	97.7	5.71						
13	17.97	32.20	23.16	97.6	5.74						
14	17.66	32.24	23.27	97.5	5.76						
15	17.29	32.25	23.36	97.2	5.76						
16	16.00	32.27	23.47	97.1	5.77						
17	16.82	32.30	23.51	97.0	5.74						
18	16.86	32.33	23.52	97.4	5.69						
19	16.86	32.34	23.53	96.9	5.66	5.80	2.0	.15	0.4	1.5	.50
20	16.79	32.40	23.60	96.8	5.67						
21	16.79	32.47	23.64	96.6	5.70						
22	16.63	32.41	23.63	96.2	5.72						
23	16.14	32.39	23.73	97.0	5.77						
24	15.73	32.45	23.87	97.0	5.80						
25	15.49	32.47	23.94	97.5	5.83						
26	15.30	32.51	24.01	97.5	5.84						
27	14.82	32.43	24.05	97.4	5.86						
28	13.91	32.44	24.25	97.2	5.93						
29	13.28	32.42	24.37	97.2	5.97						
30	12.81	32.44	24.47	97.3	5.94						
31	12.33	32.46	24.58	97.0	5.93						
32	12.17	32.41	24.57	96.8	5.89						
33	11.79	32.45	24.67	96.6	5.85						
34	11.77	32.46	24.68	96.6	5.81	5.65	3.2	.25	0.8	3.5	.90
35	11.77	32.46	24.68	96.4	5.76						


KELEZ CRUISE XWCC-24 STATION 117 08/16/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

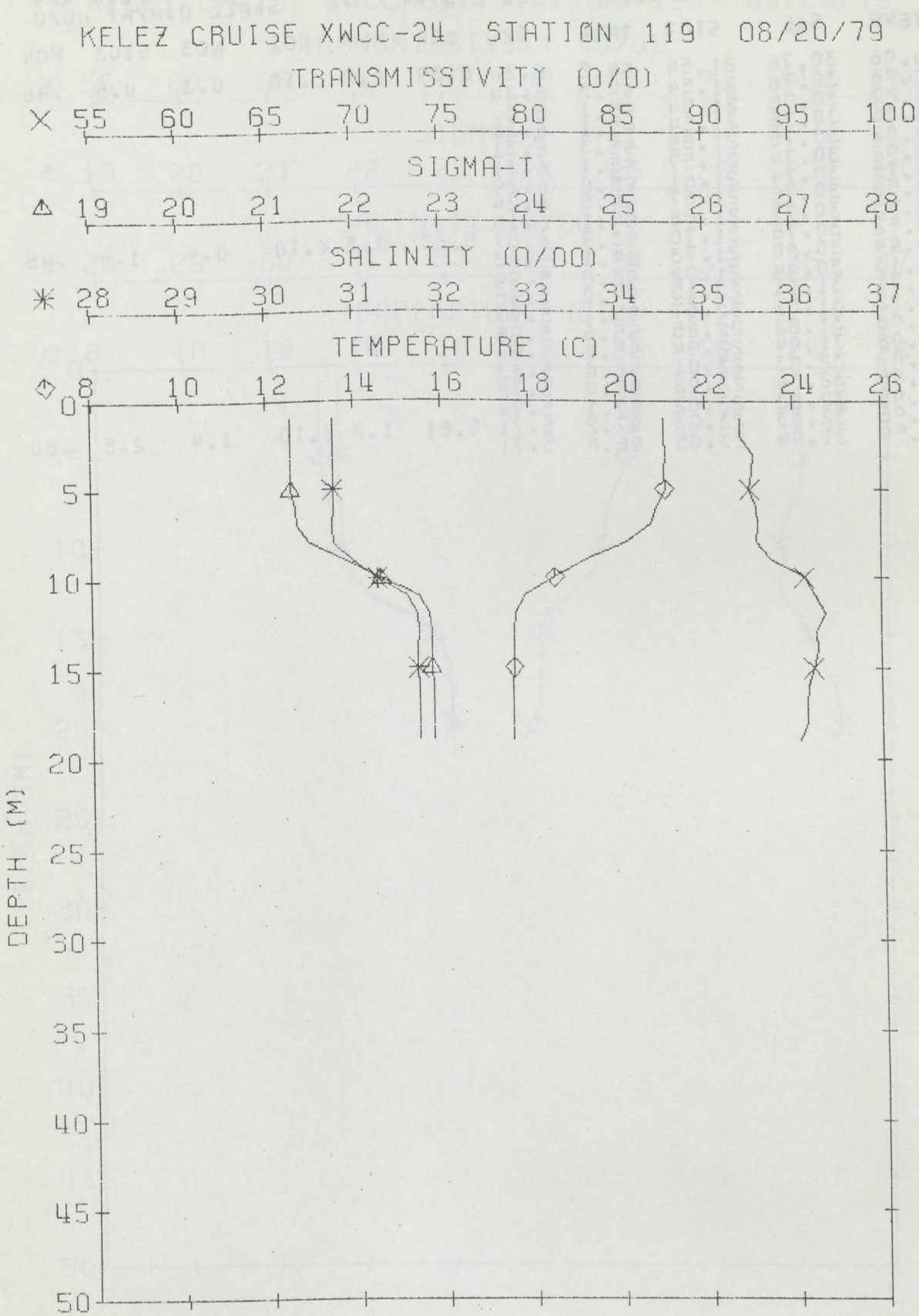
XWCC-24 STA.118 LAT 40 14.8N LONG 72 34.8W GMT 01.1 08/15/79
DEPTH 055 AIR D/W 20.6/19.4 BARO 14.5 VIS 6 CLD TYP/CVR 7/8
WETHR 5 WIND DIR/SPD 24/14 SEA DIR/HT 25/2 SWELL DIR/HT 19/3

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.94	32.51	22.91	95.2	5.58	5.69	1.3	.20	0.2	1.5	.60
2	19.94	32.51	22.90	95.2	5.58						
3	19.94	32.49	22.89	95.7	5.58						
4	19.93	32.49	22.89	95.5	5.58						
5	19.93	32.49	22.89	95.6	5.58						
6	19.94	32.49	22.89	95.7	5.58						
7	19.93	32.49	22.89	95.7	5.58						
8	19.92	32.49	22.89	95.7	5.57						
9	19.93	32.48	22.88	95.6	5.57						
10	19.93	32.49	22.89	95.7	5.57	5.65	1.8	.15	0.4	1.5	.70
11	19.93	32.48	22.89	95.6	5.57						
12	19.93	32.48	22.89	95.7	5.57						
13	19.92	32.48	22.89	95.7	5.57						
14	19.92	32.49	22.89	95.7	5.57						
15	19.92	32.48	22.89	95.5	5.57						
16	19.90	32.49	22.90	95.5	5.58						
17	19.82	32.52	22.94	95.5	5.58						
18	19.51	32.64	23.11	95.4	5.60						
19	18.73	32.82	23.44	95.1	5.69						
20	17.66	32.95	23.81	94.8	5.84	5.65	1.8	.10	0.4	2.0	.75
21	16.59	33.04	24.13	94.2	6.02						
22	14.10	33.34	24.91	93.9	6.27						
23	11.64	33.60	25.59	93.5	6.64						
24	10.73	33.37	25.58	93.2	6.94						
25	10.05	33.26	25.61	92.9	7.02						
26	9.86	33.28	25.66	92.9	6.98						
27	9.60	33.24	25.66	92.9	6.85						
28	9.35	33.21	25.69	93.1	6.78						
29	9.07	33.19	25.71	93.5	6.73						
30	8.97	33.18	25.72	93.5	6.68	6.40	3.2	.30	2.0	3.0	1.35
31	8.87	33.16	25.72	93.7	6.61						
32	8.66	33.16	25.76	93.7	6.55						
33	8.49	33.16	25.78	93.8	6.50						
34	8.43	33.14	25.77	93.9	6.45						
35	8.24	33.11	25.78	93.9	6.37						
36	8.11	33.14	25.82	94.0	6.32						
37	7.96	33.03	25.76	94.0	6.28						
38	7.65	33.08	25.84	94.2	6.18						
39	7.39	33.02	25.83	94.2	6.12						
40	7.24	33.07	25.89	94.2	6.06						
41	7.18	33.05	25.88	94.2	5.89	5.51	5.5	.70	5.7	7.5	1.45
42	7.13	33.05	25.89	94.3	5.80						
43	7.10	33.06	25.90	94.3	5.71						
44	7.04	33.06	25.91	94.4	5.63						
45	7.01	33.05	25.91	94.4	5.57						
46	6.94	33.05	25.91	94.2	5.50						
47	6.92	33.03	25.90	94.3	5.47						
48	6.91	33.04	25.91	94.4	5.42						
49	6.90	33.03	25.90	94.4	5.38						
50	6.89	33.05	25.92	94.5	5.36						
57	6.89	33.02	25.90	94.3	5.28	5.44	5.9	.50	6.5	7.0	1.40


KELEZ CRUISE XWCC-24 STATION 118 08/15/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

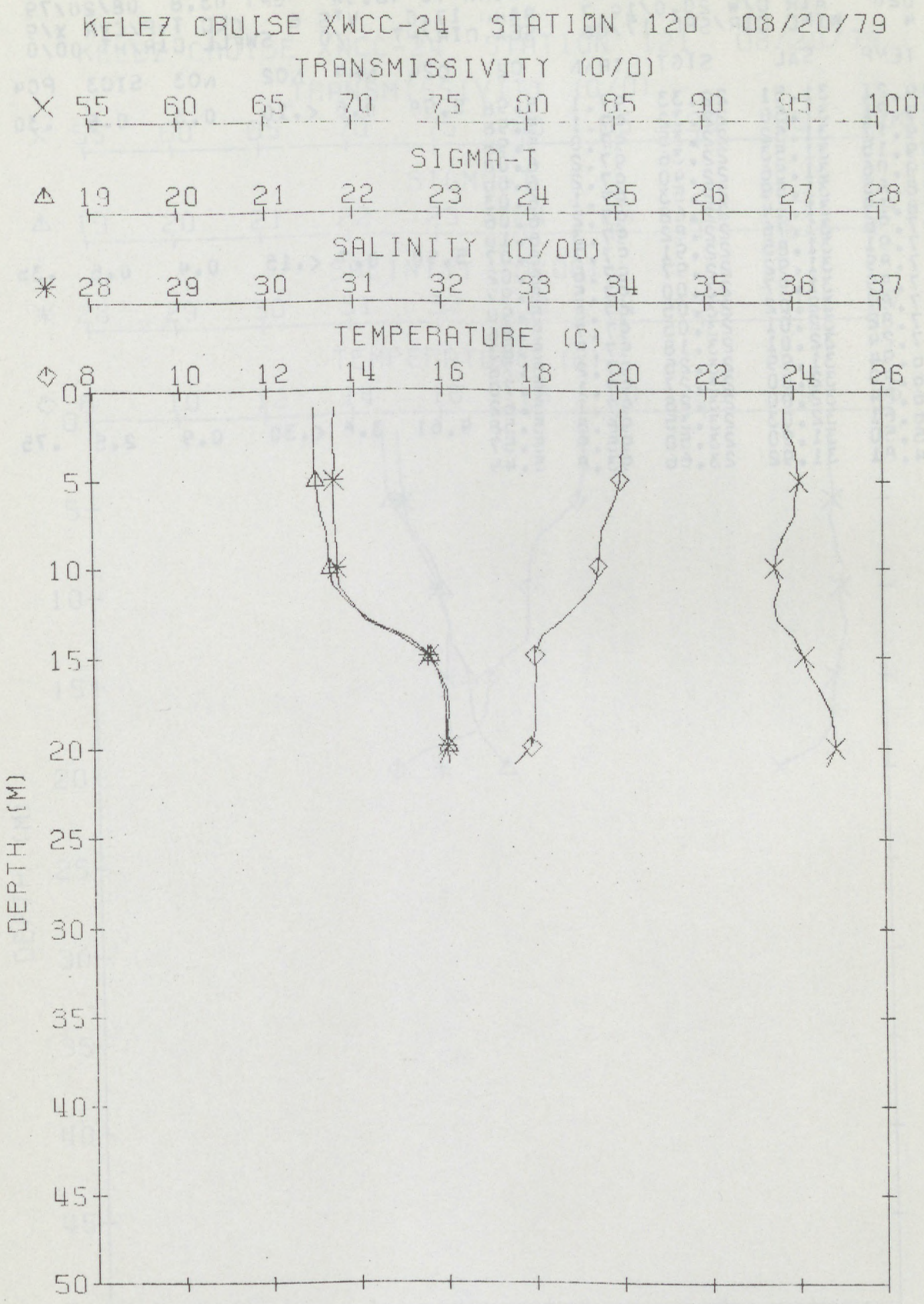
XWCC-24 STA.119 LAT 39 48.0N; LONG 74 .0W GMT 06.1 08/20/79
DEPTH 019 AIR D/W 20.6/20.0 BARO 17.0 VIS 0 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 00/00 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2%	NH4	NO2	NO3	SIC3	PO4
1	21.05	30.76	21.28	92.1	6.31	6.39	0.3	<.10	0.3	1.0	.30
2	21.05	30.76	21.28	92.1	6.31						
3	21.07	30.76	21.28	92.8	6.33						
4	21.06	30.76	21.28	92.6	6.33						
5	21.07	30.76	21.28	92.5	6.33						
6	20.89	30.77	21.33	92.9	6.34						
7	20.76	30.74	21.35	93.1	6.34						
8	20.23	30.77	21.51	92.9	6.29						
9	19.30	30.99	21.91	93.8	6.20	5.35	1.0	<.10	0.4	1.0	.30
10	18.56	31.26	22.30	95.6	6.01						
11	17.87	31.59	22.72	96.2	5.90						
12	17.66	31.71	22.86	96.8	5.83						
13	17.61	31.72	22.88	96.3	5.69						
14	17.62	31.72	22.88	96.4	5.60						
15	17.62	31.72	22.88	96.1	5.55						
16	17.59	31.73	22.89	95.9	5.51						
17	17.60	31.73	22.89	95.7	5.47						
18	17.59	31.73	22.89	95.8	5.44	5.28	1.0	<.10	0.4	3.5	.30
19	17.59	31.73	22.89	95.3	5.42						


KELEZ CRUISE XWCC-24 STATION 119 08/20/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

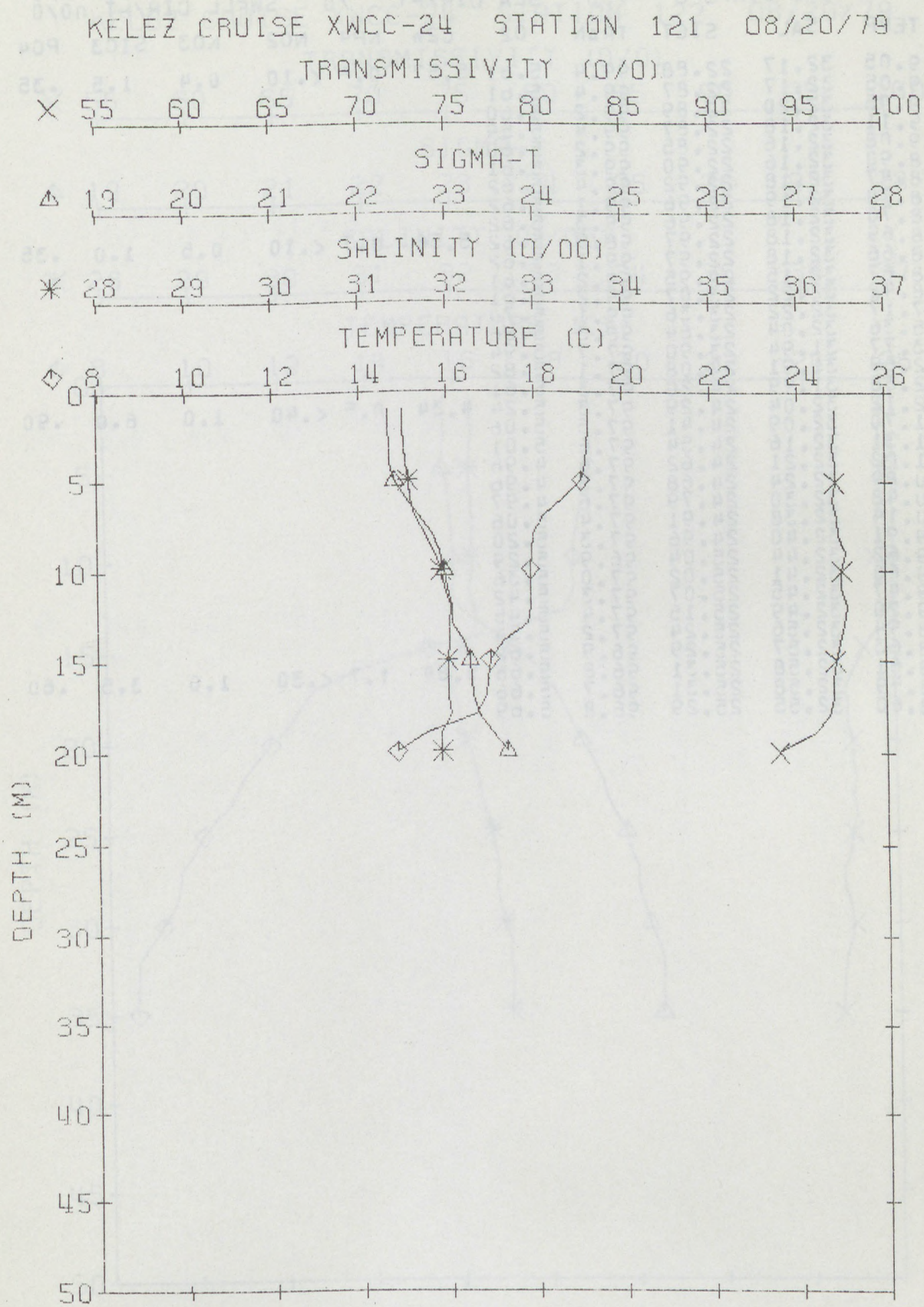
XWCC-24 STA.120 LAT 39 46.6N ; LONG 73 55.0W GMT 05.2 08/20/79
DEPTH 022 AIR D/W 20.6/20.0 BARO 17.5 VIS 0 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 18/06 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.06	30.76	21.54	94.5	6.30	6.39	0.2	<.10	0.3	0.5	.40
2	20.06	30.76	21.54	94.5	6.30						
3	20.07	30.76	21.54	95.1	6.30						
4	20.06	30.76	21.54	95.1	6.31						
5	20.02	30.75	21.55	95.3	6.31						
6	19.92	30.74	21.57	95.1	6.31						
7	19.75	30.74	21.61	95.0	6.29						
8	19.58	30.76	21.67	94.5	6.24						
9	19.55	30.77	21.68	94.1	6.15						
10	19.52	30.78	21.70	93.9	6.07	5.83	0.3	<.10	0.4	1.0	.45
11	19.44	30.80	21.73	94.1	6.03						
12	19.13	30.94	21.92	93.8	5.99						
13	18.71	31.11	22.15	94.0	5.96						
14	18.22	31.51	22.57	95.1	5.97						
15	18.06	31.82	22.85	95.6	5.95						
16	18.08	31.94	22.94	95.8	5.90						
17	18.07	32.03	23.01	96.6	5.83						
18	18.06	32.04	23.02	97.0	5.78						
19	18.05	32.03	23.02	97.1	5.74						
20	17.96	32.03	23.03	97.2	5.71	5.61	1.2	<.10	1.4	2.5	.80
21	17.59	31.94	23.05	96.8	5.71						


KELEZ CRUISE XWCC-24 STATION 120 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

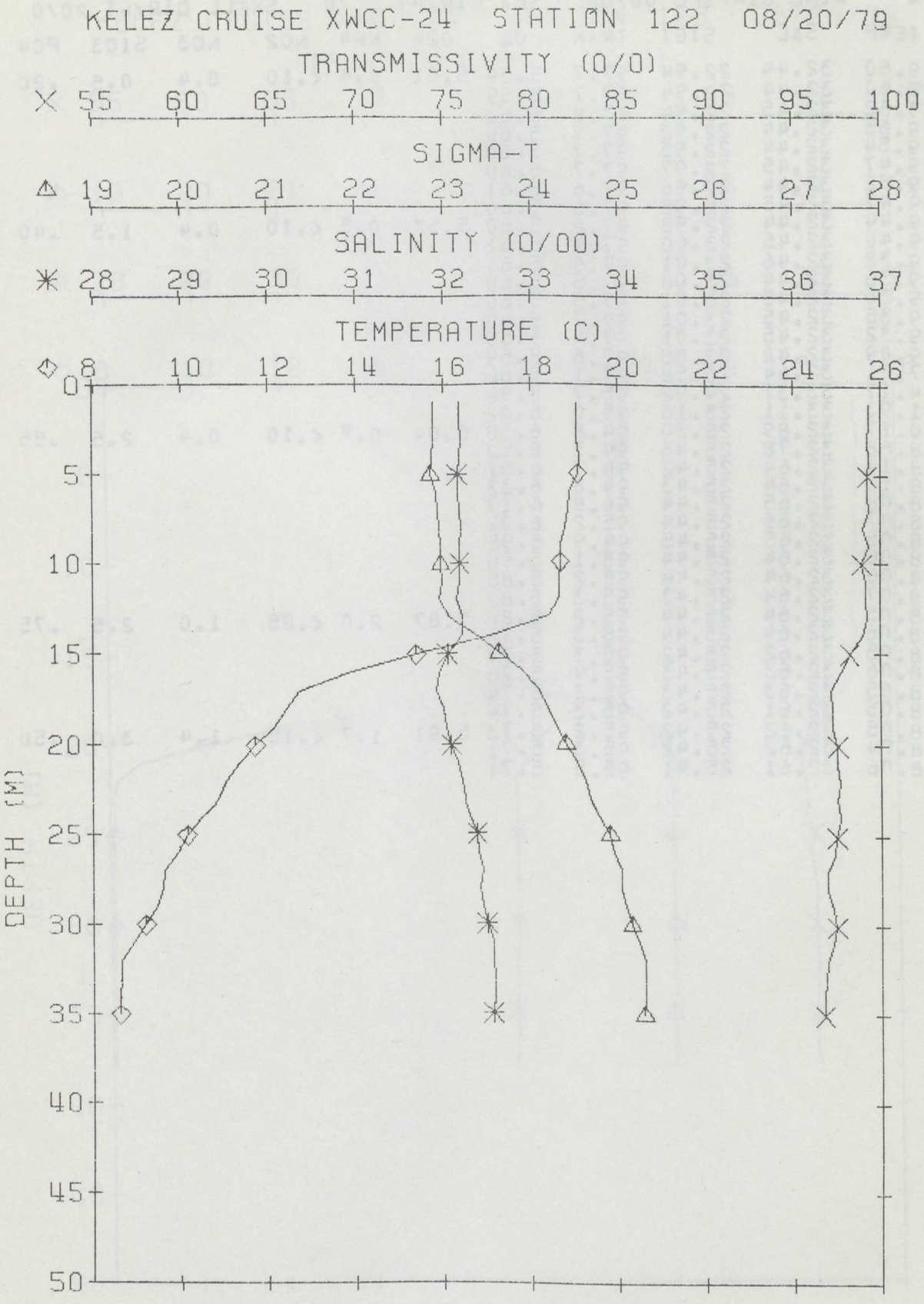
XWCC-24 STA.121 LAT 39 42.5N; LONG 73 46.0W GMT 03.8 08/20/79
DEPTH 020 AIR D/W 20.0/19.7 BARO 17.0 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 17/06 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.21	31.51	22.33	97.1	5.98	5.98	0.6	<.10	0.3	0.5	.30
2	19.21	31.50	22.32	97.1	5.98						
3	19.17	31.52	22.35	97.0	5.98						
4	19.15	31.53	22.36	97.2	6.00						
5	19.06	31.56	22.40	97.2	6.00						
6	18.65	31.59	22.53	97.1	6.03						
7	18.19	31.64	22.68	97.2	6.06						
8	17.96	31.76	22.82	97.3	6.10						
9	17.91	31.85	22.91	97.7	6.07	5.90	0.7	<.15	0.4	0.5	.35
10	17.89	31.92	22.97	97.6	6.02						
11	17.89	31.97	23.00	97.5	5.97						
12	17.87	32.02	23.05	97.8	5.90						
13	17.82	32.01	23.05	97.7	5.86						
14	17.24	32.01	23.18	97.5	5.83						
15	16.94	31.99	23.25	97.2	5.78						
16	16.89	32.00	23.27	97.1	5.70						
17	16.84	32.00	23.28	97.1	5.62						
18	16.61	32.03	23.35	96.8	5.58	4.61	3.6	<.30	0.9	2.5	.75
19	15.50	31.90	23.50	95.9	5.57						
20	14.81	31.92	23.66	93.8	5.49						


KELEZ CRUISE XWCC-24 STATION 121 08/20/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

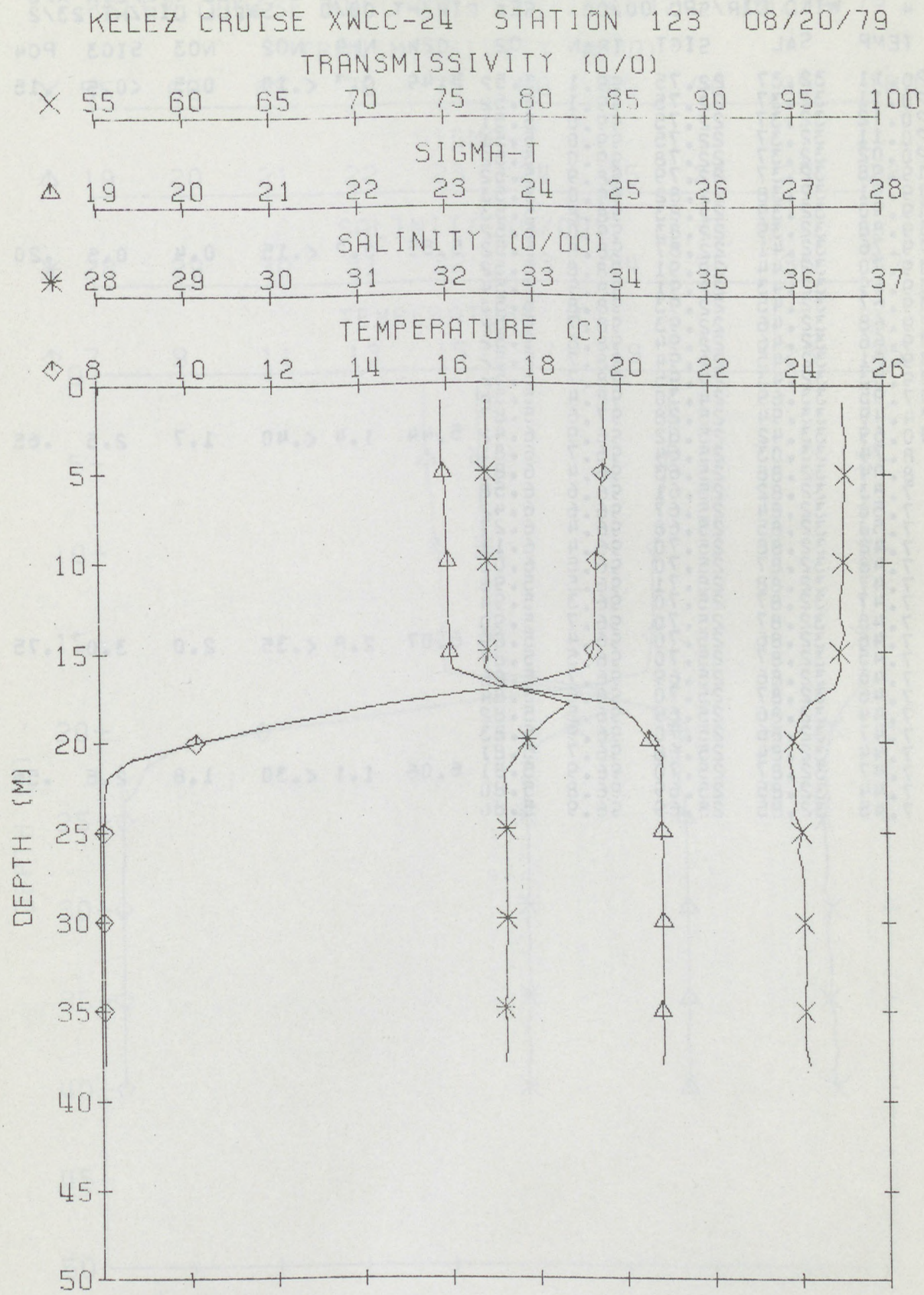
XBCC-24 STA.122 LAT 39 40.0N; LONG 73 36.0W GMT 02.3 08/20/79
DEPTH 034 AIR D/W 20.6/20.0 BARO 17.0 VIS 5 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD /00 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	C2W	NH4	NO2	NO3	SIC3	PO4
1	19.05	32.17	22.88	99.4	5.61	5.57	0.6	<.10	0.4	1.5	.35
2	19.05	32.17	22.87	99.4	5.61						
3	19.05	32.20	22.89	99.2	5.60						
4	19.11	32.18	22.87	99.4	5.59						
5	19.08	32.16	22.85	99.2	5.60						
6	18.90	32.16	22.90	99.3	5.61						
7	18.87	32.18	22.92	99.4	5.62						
8	18.78	32.19	22.96	99.1	5.62						
9	18.70	32.18	22.96	99.3	5.62						
10	18.69	32.18	22.97	98.9	5.62	5.56	0.7	<.10	0.5	1.0	.35
11	18.66	32.18	22.97	99.1	5.62						
12	18.67	32.15	22.95	99.2	5.61						
13	18.42	32.22	23.07	99.2	5.61						
14	17.17	32.22	23.36	99.1	5.70						
15	15.36	32.04	23.64	98.3	5.86						
16	13.77	31.94	23.90	97.7	5.94						
17	12.69	31.91	24.08	97.1	5.82						
18	12.38	31.99	24.20	97.3	5.61						
19	12.12	32.04	24.29	97.3	5.24	4.34	8.5	<.40	1.0	6.0	.90
20	11.70	32.09	24.41	97.5	5.06						
21	11.31	32.16	24.54	97.6	5.01						
22	11.02	32.21	24.62	97.6	4.98						
23	10.84	32.24	24.68	97.5	4.96						
24	10.48	32.30	24.79	97.6	4.97						
25	10.14	32.38	24.91	97.4	5.06						
26	9.91	32.40	24.96	97.3	5.20						
27	9.62	32.44	25.04	96.9	5.29						
28	9.60	32.41	25.02	97.0	5.36						
29	9.47	32.45	25.07	97.3	5.42						
30	9.20	32.49	25.15	97.4	5.45						
31	8.94	32.56	25.24	97.2	5.54						
32	8.63	32.57	25.29	96.9	5.62						
33	8.61	32.58	25.31	96.8	5.65	5.88	1.7	<.30	1.0	3.5	.60
34	8.59	32.58	25.31	96.7	5.66						
35	8.60	32.55	25.29	96.8	5.69						


KELEZ CRUISE XWCC-24 STATION 122 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

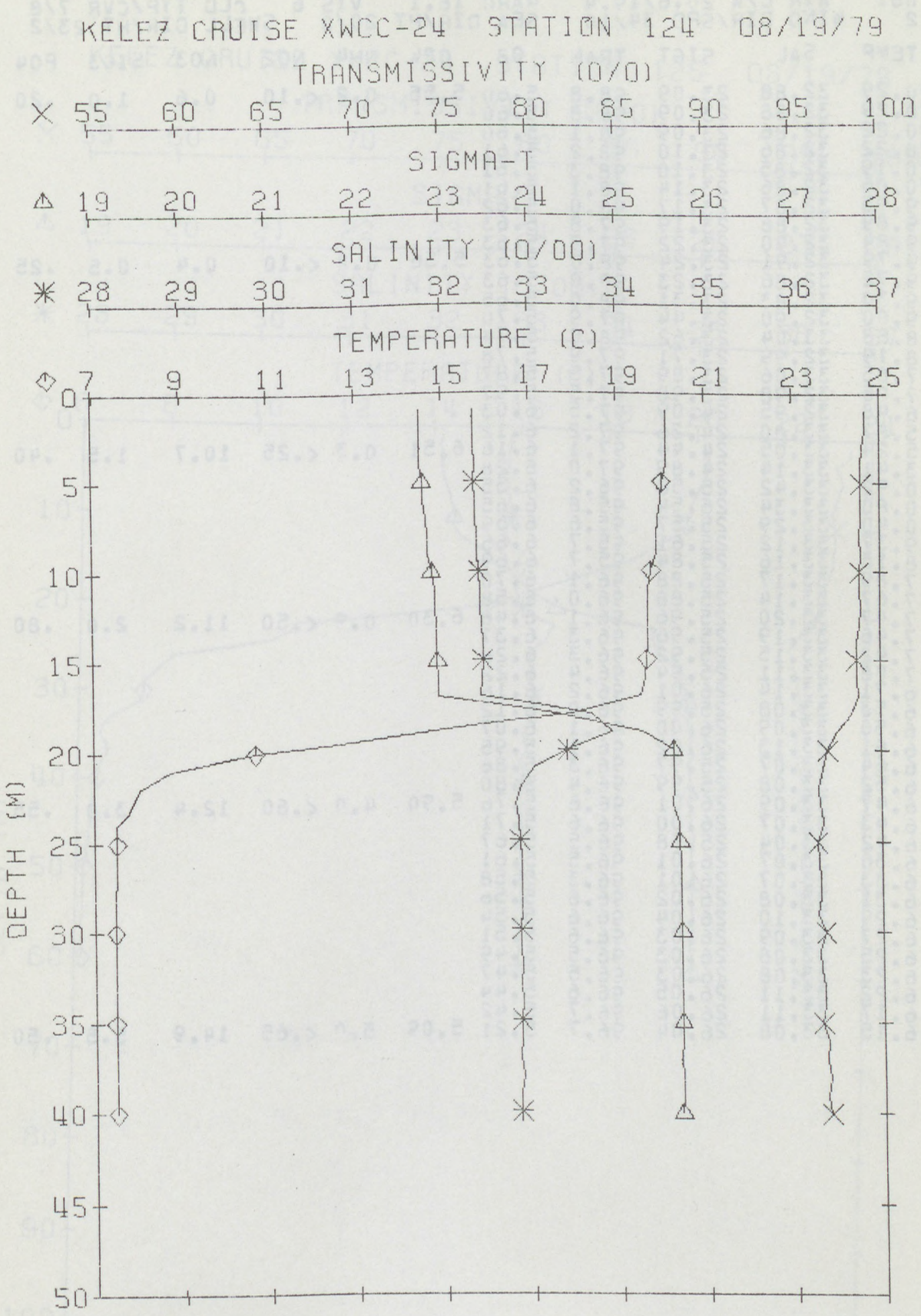
XWCC-24 STA.123 LAT 39 35.0N; LONG 73 26.4W GMT 00.7 08/20/79
DEPTH 036 AIR D/W 20.6/19.7 BARO 17.5 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 00/00 SEA DIR/HT /0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.60	32.44	22.94	97.7	5.59	5.61	0.4	<.10	0.4	0.5	.20
2	19.60	32.44	22.94	97.7	5.59						
3	19.62	32.45	22.94	97.8	5.60						
4	19.65	32.44	22.92	97.7	5.60						
5	19.54	32.44	22.95	97.7	5.60						
6	19.47	32.45	22.97	97.7	5.60						
7	19.52	32.44	22.96	97.6	5.61						
8	19.47	32.45	22.98	97.6	5.60						
9	19.44	32.44	22.98	97.6	5.60	5.53	0.5	<.10	0.4	1.5	.40
10	19.40	32.45	23.00	97.7	5.61						
11	19.38	32.46	23.01	97.6	5.61						
12	19.36	32.44	23.00	97.5	5.60						
13	19.35	32.45	23.01	97.5	5.60						
14	19.35	32.45	23.01	97.7	5.60						
15	19.32	32.45	23.01	97.4	5.59						
16	19.09	32.42	23.05	97.6	5.59						
17	17.61	32.64	23.58	97.1	5.62						
18	14.17	33.37	24.92	95.7	5.98						
19	11.93	33.11	25.16	95.0	6.32						
20	10.17	32.89	25.30	94.8	6.50	6.04	0.5	<.10	0.4	2.5	.55
21	8.68	32.78	25.45	94.5	6.52						
22	8.14	32.64	25.42	94.7	6.51						
23	8.10	32.64	25.43	94.8	6.33						
24	8.08	32.65	25.44	94.8	6.17						
25	8.07	32.65	25.44	95.2	6.07						
26	8.06	32.65	25.45	94.9	5.95						
27	8.06	32.64	25.44	95.1	5.90						
28	8.06	32.64	25.44	95.2	5.85						
29	8.07	32.64	25.43	95.3	5.82						
30	8.05	32.64	25.44	95.2	5.80	5.87	2.0	<.25	1.0	2.5	.75
31	8.06	32.64	25.44	95.3	5.78						
32	8.05	32.62	25.42	95.3	5.77						
33	8.06	32.63	25.43	95.4	5.76						
34	8.05	32.63	25.43	95.3	5.74						
35	8.05	32.61	25.42	95.3	5.74						
36	8.05	32.62	25.42	95.2	5.73	5.91	1.7	<.15	1.4	3.0	.50
37	8.04	32.62	25.42	95.3	5.71						
38	8.06	32.61	25.41	95.5	5.71						


KELEZ CRUISE XWCC-24 STATION 123 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

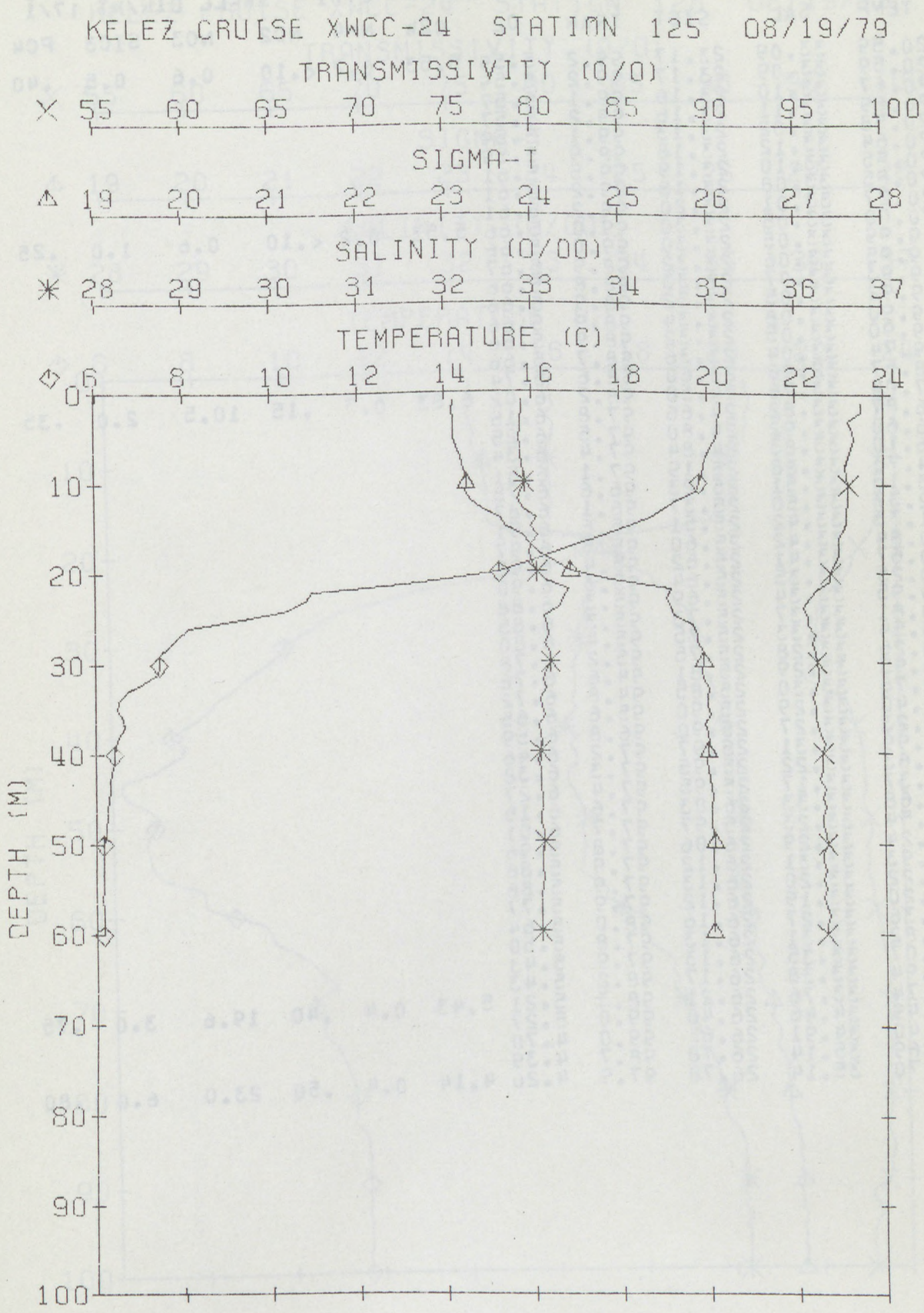
XWCr-24 STA.124 LAT 39 29.9N; LONG 73 12.8W GMT 22.8 08/19/79
DEPTH 040 AIR D/W 20.6/20.0 BARO 16.5 VIS 6 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 23/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.11	32.37	22.75	99.1	5.52	5.49	0.3	<.10	0.5	<0.5	.15
2	20.11	32.37	22.75	99.1	5.52						
3	20.12	32.37	22.75	99.0	5.51						
4	20.11	32.37	22.75	99.0	5.51						
5	20.02	32.37	22.78	99.0	5.52						
6	19.98	32.37	22.79	98.9	5.52						
7	19.91	32.38	22.82	99.0	5.53						
8	19.90	32.39	22.83	98.8	5.53						
9	19.88	32.39	22.83	99.0	5.52						
10	19.76	32.41	22.87	98.8	5.52	5.55	0.2	<.15	0.4	0.5	.20
11	19.70	32.44	22.91	98.8	5.52						
12	19.69	32.43	22.91	98.9	5.54						
13	19.67	32.45	22.93	98.8	5.53						
14	19.68	32.46	22.93	98.7	5.52						
15	19.66	32.46	22.94	98.6	5.52						
16	19.61	32.45	22.94	98.7	5.52						
17	19.53	32.43	22.95	98.7	5.52						
18	17.95	33.69	24.30	98.4	5.58						
19	14.49	33.94	25.28	97.6	5.87						
20	10.69	33.42	25.62	96.9	6.42	5.44	1.4	<.40	1.7	2.5	.65
21	8.74	33.03	25.64	96.7	6.81						
22	8.04	32.88	25.63	96.4	6.82						
23	7.83	32.82	25.61	96.6	6.58						
24	7.50	32.84	25.67	96.6	6.42						
25	7.50	32.85	25.68	96.4	6.27						
26	7.48	32.88	25.70	96.4	6.11						
27	7.48	32.87	25.70	96.5	6.05						
28	7.47	32.88	25.71	96.5	5.98						
29	7.47	32.87	25.70	96.3	5.94						
30	7.46	32.87	25.70	96.7	5.90						
31	7.46	32.86	25.70	96.4	5.89	6.07	2.8	<.35	2.0	3.0	.75
32	7.45	32.87	25.70	96.5	5.87						
33	7.45	32.86	25.69	96.7	5.85						
34	7.46	32.87	25.70	96.6	5.84						
35	7.44	32.86	25.69	96.5	5.82						
36	7.47	32.86	25.70	96.9	5.83						
37	7.44	32.84	25.68	96.7	5.81						
38	7.47	32.87	25.70	96.9	5.81	6.06	1.1	<.30	1.8	2.5	.55
39	7.44	32.85	25.69	96.8	5.80						
40	7.45	32.85	25.69	96.9	5.80						


KELEZ CRUISE XWCC-24 STATION 124 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

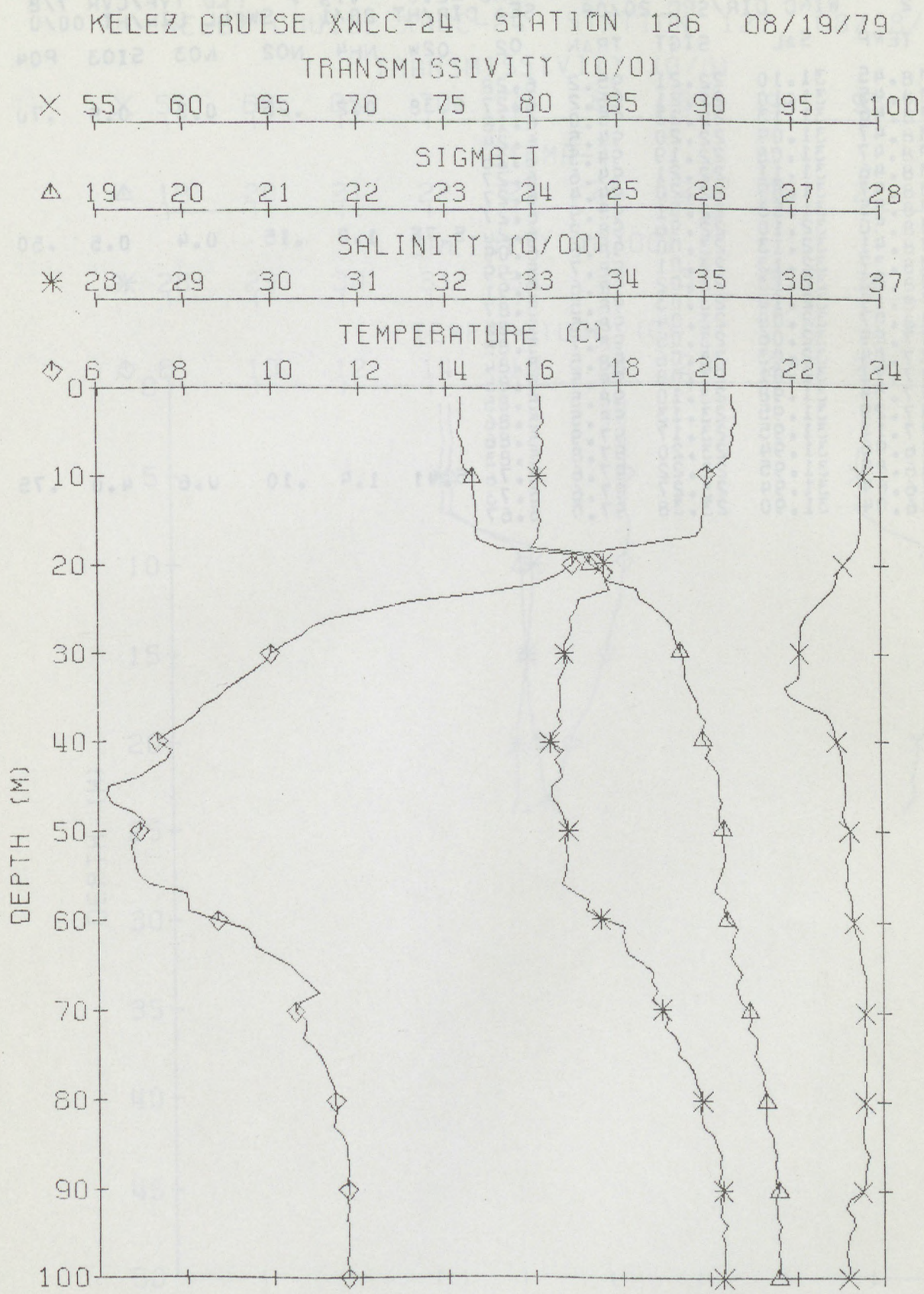
XWCC-24 STA.125 LAT 39 23.5N; LONG 72 58.0W GMT 20.8 08/19/79
DEPTH 061 AIR D/W 20.6/19.4 BARO 16.1 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 34/10 SEA DIR/HT 20/0 SWELL DIR/HT 23/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	20.29	32.88	23.09	98.8	5.60	5.55	0.2	<.10	0.6	1.0	.20
2	20.29	32.88	23.09	98.8	5.60						
3	20.22	32.86	23.09	98.1	5.60						
4	20.22	32.86	23.10	98.2	5.61						
5	20.19	32.85	23.10	98.3	5.61						
6	20.06	32.86	23.14	98.1	5.61						
7	19.95	32.87	23.17	98.0	5.62						
8	19.89	32.88	23.19	97.8	5.63						
9	19.84	32.90	23.22	97.9	5.63						
10	19.79	32.91	23.24	98.0	5.63	5.56	0.2	<.10	0.4	0.5	.25
11	19.72	32.86	23.23	98.0	5.63						
12	19.30	32.83	23.31	98.0	5.65						
13	19.00	32.90	23.44	97.9	5.70						
14	18.68	33.04	23.62	98.0	5.74						
15	18.19	32.99	23.71	97.9	5.78						
16	17.65	33.06	23.89	97.5	5.87						
17	17.05	32.98	23.98	97.5	5.97						
18	16.48	32.95	24.09	97.5	6.03						
19	15.87	33.00	24.26	97.2	6.12						
20	15.24	33.05	24.44	97.1	6.16	6.51	0.3	<.25	10.7	1.5	.40
21	13.41	33.14	24.89	97.0	6.28						
22	10.92	33.42	25.58	96.2	6.55						
23	10.80	33.34	25.54	95.8	6.65						
24	10.40	33.29	25.57	95.6	6.59						
25	9.37	33.12	25.61	95.7	6.65						
26	8.13	33.16	25.84	95.7	6.69						
27	7.89	33.17	25.88	96.1	6.70						
28	7.67	33.14	25.88	96.0	6.58						
29	7.47	33.20	25.96	96.1	6.46	6.30	0.9	<.50	11.2	2.0	.80
30	7.46	33.19	25.96	96.3	6.37						
31	7.42	33.15	25.92	96.3	6.28						
32	7.08	33.11	25.94	96.4	6.22						
33	6.71	33.14	26.01	96.2	6.16						
34	6.53	33.08	25.99	96.0	6.12						
35	6.50	33.09	26.00	96.1	6.07						
36	6.61	33.13	26.02	96.1	5.95						
37	6.64	33.07	25.97	96.3	5.86						
38	6.52	33.08	25.99	96.4	5.80						
39	6.47	33.09	26.01	96.6	5.76	5.90	4.0	<.60	12.4	3.0	.55
40	6.43	33.07	26.00	96.6	5.71						
41	6.42	33.04	25.98	96.5	5.67						
42	6.36	33.07	26.01	96.5	5.61						
43	6.33	33.07	26.01	96.3	5.58						
44	6.31	33.08	26.02	96.6	5.56						
45	6.29	33.10	26.04	96.6	5.54						
46	6.27	33.09	26.03	96.6	5.51						
47	6.25	33.08	26.03	96.5	5.49						
48	6.23	33.08	26.03	96.5	5.47						
49	6.22	33.11	26.05	96.6	5.44						
50	6.17	33.11	26.06	96.7	5.42						
60	6.15	33.08	26.04	96.7	5.21	5.09	5.0	<.65	14.9	5.5	.50


KELEZ CRUISE XWCC-24 STATION 125 08/19/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

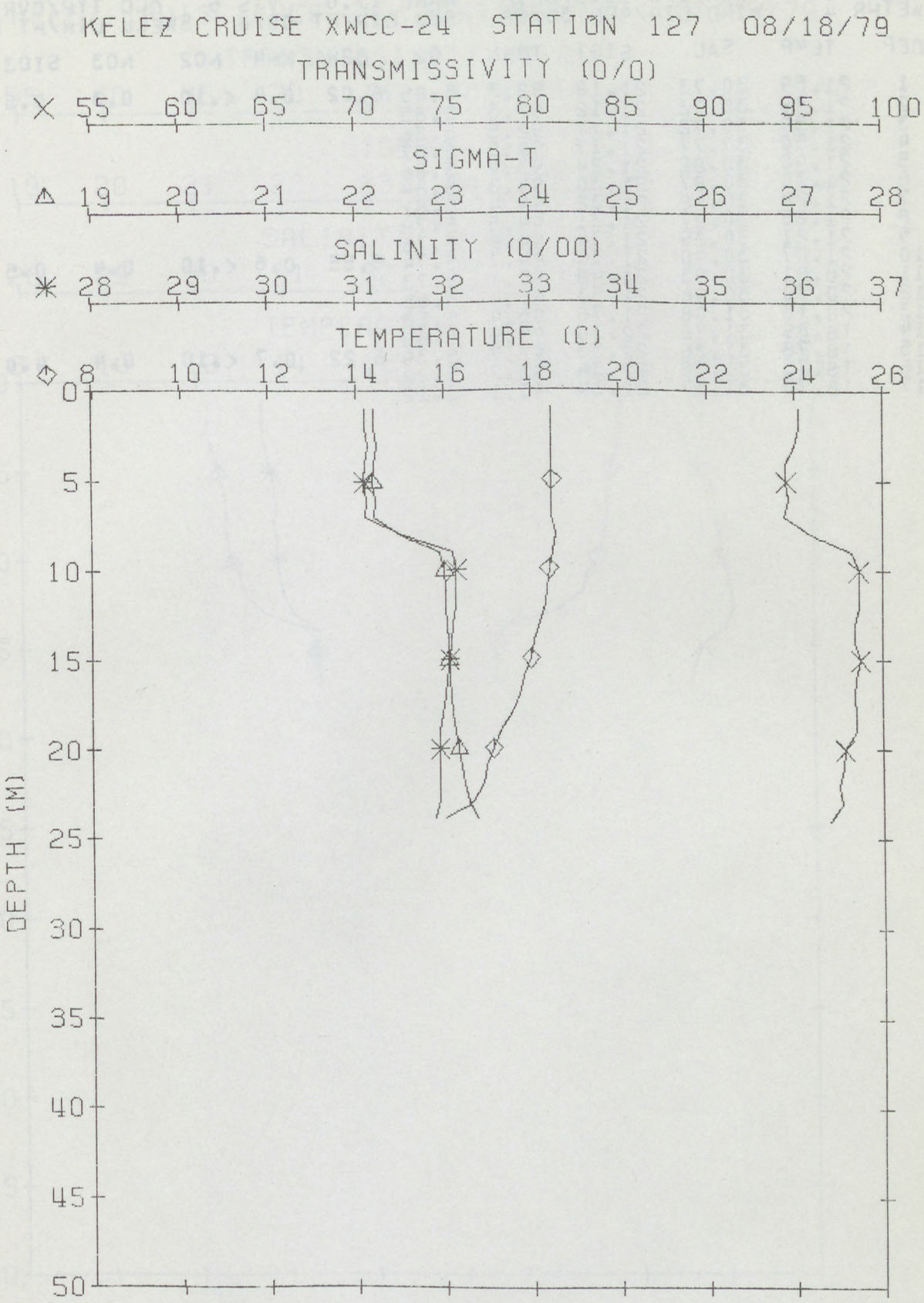
XWCC-24 STA.126 LAT 39 18.6N; LONG 72 43.6W GMT 18.5 08/19/79
DEPTH 101 AIR D/W 20.6/19.4 BARO 16.5 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 33/15 SEA DIR/HT 27/1 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	20.59	33.09	23.17	99.2	5.59	5.53	0.2	<.10	0.6	0.5	.40
2	20.59	33.09	23.17	99.2	5.59						
3	20.67	33.10	23.16	99.1	5.57						
4	20.69	33.11	23.16	99.2	5.57						
5	20.58	33.02	23.13	99.1	5.59						
6	20.64	33.12	23.18	99.9	5.59						
7	20.55	33.10	23.19	99.5	5.61						
8	20.55	33.08	23.18	99.2	5.61						
9	20.27	33.01	23.20	99.2	5.61						
10	20.00	33.05	23.30	99.0	5.66	5.53	0.2	<.10	0.6	1.0	.25
11	19.99	33.05	23.30	99.0	5.66						
12	19.95	33.06	23.32	98.9	5.67						
13	19.93	33.07	23.33	98.8	5.66						
14	19.92	33.05	23.32	98.9	5.66						
15	19.90	33.08	23.34	98.9	5.66						
16	19.90	33.05	23.32	98.9	5.66						
17	19.74	33.04	23.36	98.7	5.66						
18	18.57	33.96	23.60	98.6	5.74						
19	17.04	33.76	24.58	98.2	6.02	6.83	0.3	.15	10.5	2.0	.35
20	16.87	33.82	24.66	97.8	6.15						
21	16.60	33.92	24.80	97.5	6.25						
22	16.10	33.83	24.84	97.4	6.34						
23	14.73	33.88	25.19	97.1	6.51						
24	13.15	33.51	25.23	96.6	6.75						
25	12.37	33.50	25.37	96.1	6.87						
26	11.33	33.42	25.51	95.6	6.91						
27	10.84	33.42	25.60	95.5	6.97						
28	10.67	33.41	25.62	95.4	6.93						
29	10.25	33.35	25.64	95.3	6.90						
30	9.95	33.34	25.69	95.3	6.88						
31	9.81	33.37	25.73	95.4	6.85						
32	9.54	33.33	25.75	95.4	6.80						
33	9.26	33.28	25.75	95.2	6.78						
34	8.95	33.29	25.81	94.6	6.76						
35	8.76	33.30	25.85	94.8	6.72						
36	8.40	33.29	25.90	95.6	6.65						
37	8.23	33.27	25.90	96.8	6.59						
38	7.99	33.31	25.97	97.2	6.46						
39	7.63	33.22	25.95	97.3	6.38						
40	7.37	33.17	25.95	97.4	6.27						
41	7.68	33.33	26.03	97.6	6.15						
42	7.54	33.23	25.97	97.7	6.01						
43	7.24	33.29	26.06	97.8	5.96						
44	6.93	33.31	26.12	97.9	5.86						
45	6.22	33.20	26.13	97.9	5.86						
46	6.20	33.19	26.12	97.9	5.77						
47	6.36	33.27	26.16	98.0	5.64						
48	6.82	33.31	26.13	97.8	5.50						
49	7.07	33.35	26.13	97.9	5.43						
50	6.94	33.38	26.17	98.2	5.43						
60	8.74	33.76	26.21	98.3	5.21	5.43	0.4	.40	19.6	3.0	.75
70	10.49	34.46	26.46	99.0	5.27						
80	11.40	34.91	26.65	99.0	4.70						
90	11.69	35.14	26.78	98.7	4.39						
100	11.70	35.14	26.78	97.9	4.20	4.14	0.4	.50	23.0	6.0	.80


KELEZ CRUISE XWCC-24 STATION 126 08/19/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

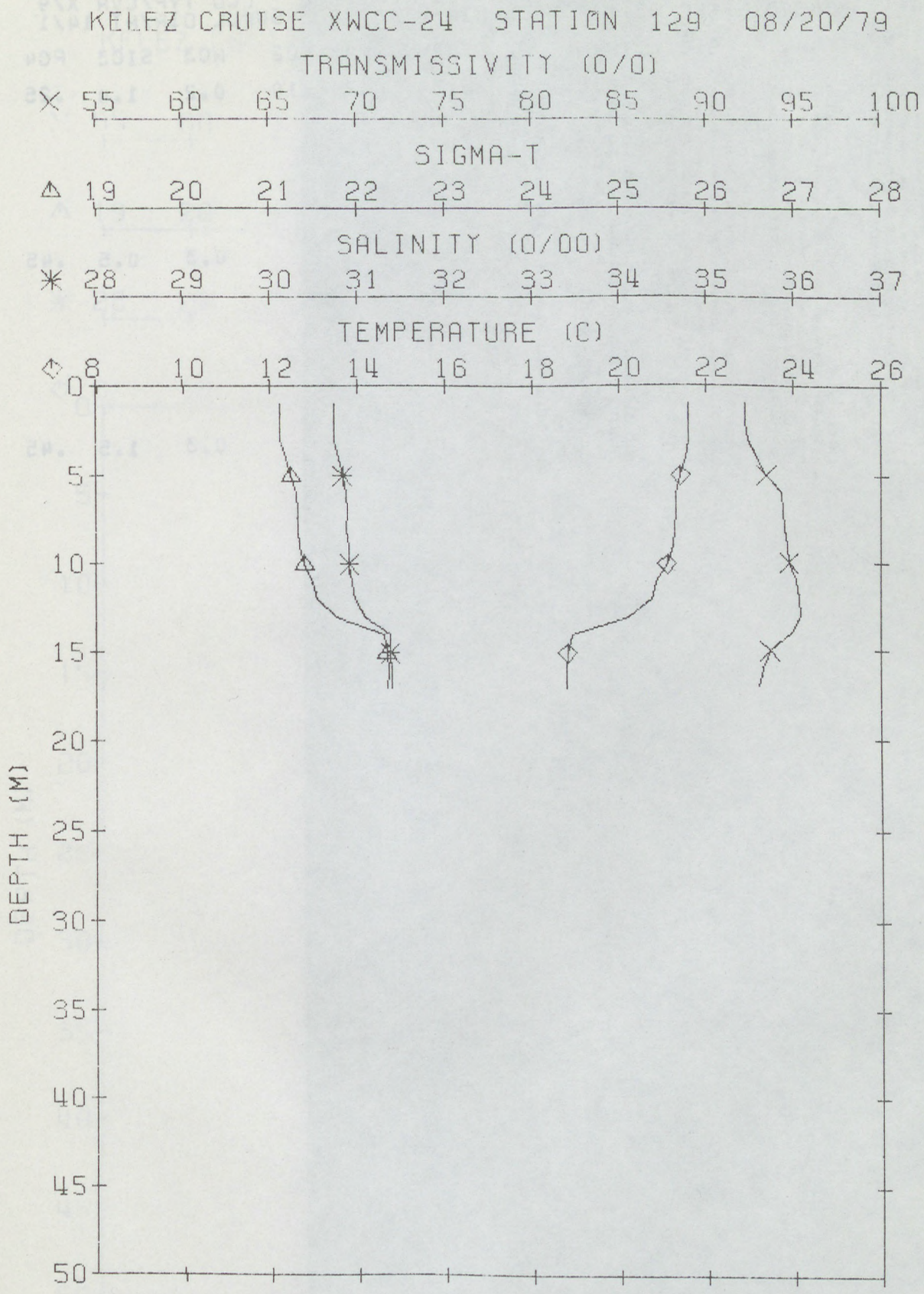
XWCC-24 STA.127 LAT 39 57.5N; LONG 73 53.2W GMT 15.6 08/1A/79
DEPTH 023 AIR D/W 18.9/16.1 BARO 22.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 20/0A SEA DIR/HT 20/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.45	31.10	22.21	95.2	6.28						
2	18.45	31.10	22.21	95.2	6.27	6.38	0.2	.25	0.3	0.5	.70
3	18.46	31.13	22.23	95.0	6.18						
4	18.47	31.09	22.20	94.5	6.24						
5	18.47	31.08	22.19	94.5	6.25						
6	18.46	31.11	22.21	94.6	6.27						
7	18.47	31.09	22.20	94.4	6.27						
8	18.55	31.53	22.51	95.9	6.27						
9	18.50	32.10	22.96	98.2	6.20	5.75	1.2	.15	0.4	0.5	.50
10	18.41	32.13	23.00	98.6	6.09						
11	18.37	32.13	23.01	98.7	5.99						
12	18.33	32.13	23.02	98.6	5.91						
13	18.19	32.10	23.03	98.5	5.87						
14	18.07	32.08	23.04	98.5	5.85						
15	17.99	32.06	23.05	98.7	5.85						
16	17.84	32.03	23.06	98.5	5.84						
17	17.71	32.01	23.08	98.5	5.85						
18	17.54	31.98	23.10	98.5	5.85						
19	17.29	31.95	23.13	98.5	5.86						
20	17.13	31.95	23.17	97.9	5.86						
21	16.96	31.94	23.20	97.8	5.83						
22	16.89	31.95	23.22	97.6	5.78	5.41	1.4	.10	0.6	4.0	.75
23	16.64	31.94	23.27	97.6	5.73						
24	16.04	31.90	23.38	97.0	5.67						


KELEZ CRUISE XWCC-24 STATION 127 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

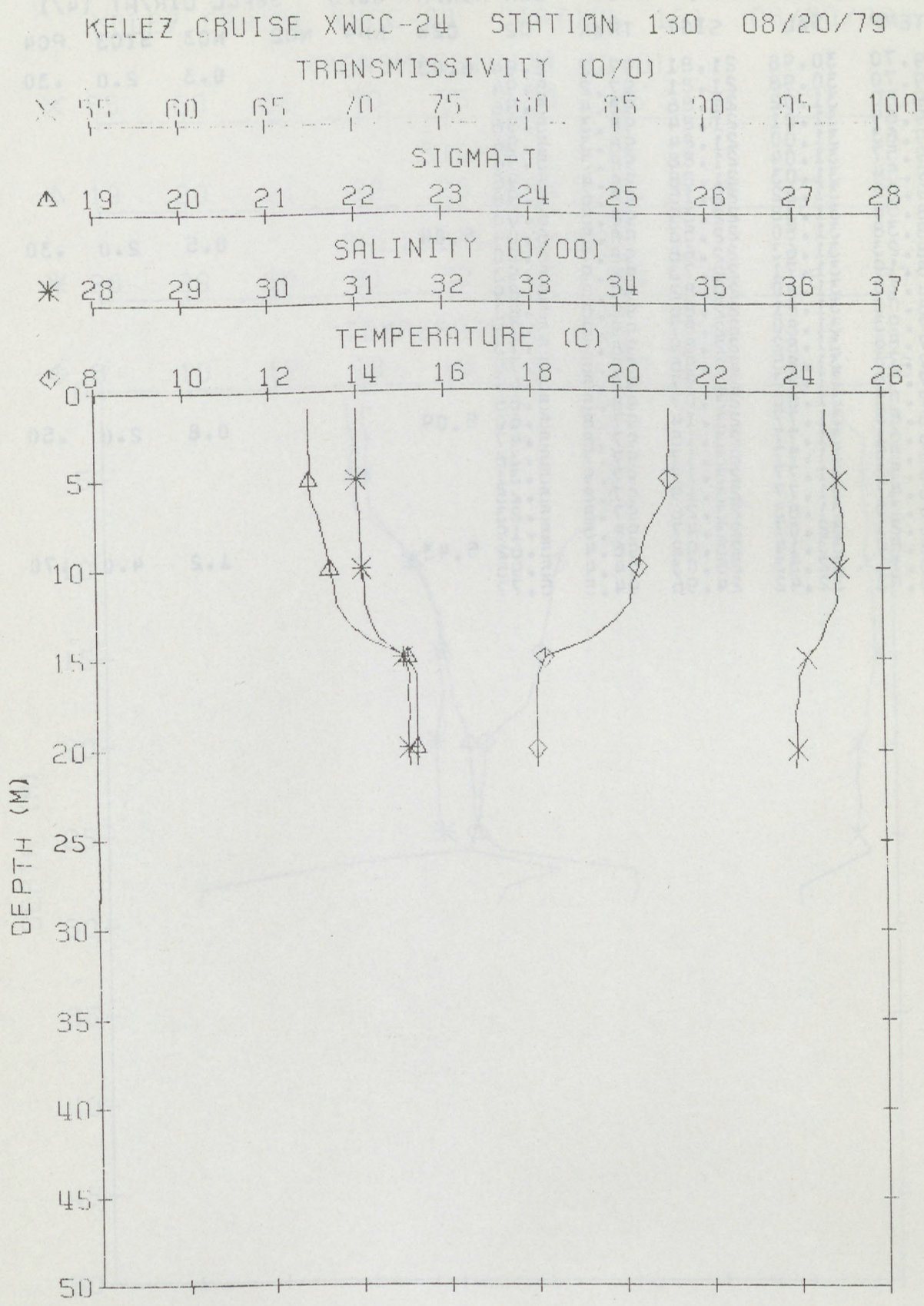
XWCC-24 STA.129 LAT 39 29.8N; LONG 74 10.9W GMT 09.2 08/20/79
DEPTH 017 AIR D/W 20.6/20.6 BARO 17.0 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 35/08 SEA DIR/HT 00/0 SWELL DIR/HT 49/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	21.59	30.73	21.12	92.3	5.85	6.02	0.4	<.10	0.3	0.5	.30
2	21.59	30.73	21.12	92.3	5.85						
3	21.59	30.72	21.11	92.5	5.86						
4	21.50	30.77	21.17	92.9	5.87						
5	21.40	30.82	21.24	93.4	5.86						
6	21.30	30.87	21.30	94.3	5.84						
7	21.28	30.88	21.32	94.4	5.81						
8	21.25	30.87	21.31	94.5	5.78						
9	21.21	30.89	21.34	94.6	5.76						
10	21.07	30.90	21.38	94.7	5.74	5.55	0.6	<.10	0.4	0.5	.25
11	20.81	30.93	21.48	95.1	5.73						
12	20.70	30.96	21.53	95.4	5.65						
13	20.18	31.08	21.76	95.4	5.58						
14	18.89	31.36	22.30	94.9	5.60						
15	18.78	31.36	22.33	93.7	5.39	6.22	0.7	<.10	0.4	4.0	.40
16	18.75	31.38	22.34	93.2	5.22						
17	18.75	31.37	22.34	93.1	5.12						


KELEZ CRUISE XWCC-24 STATION 129 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

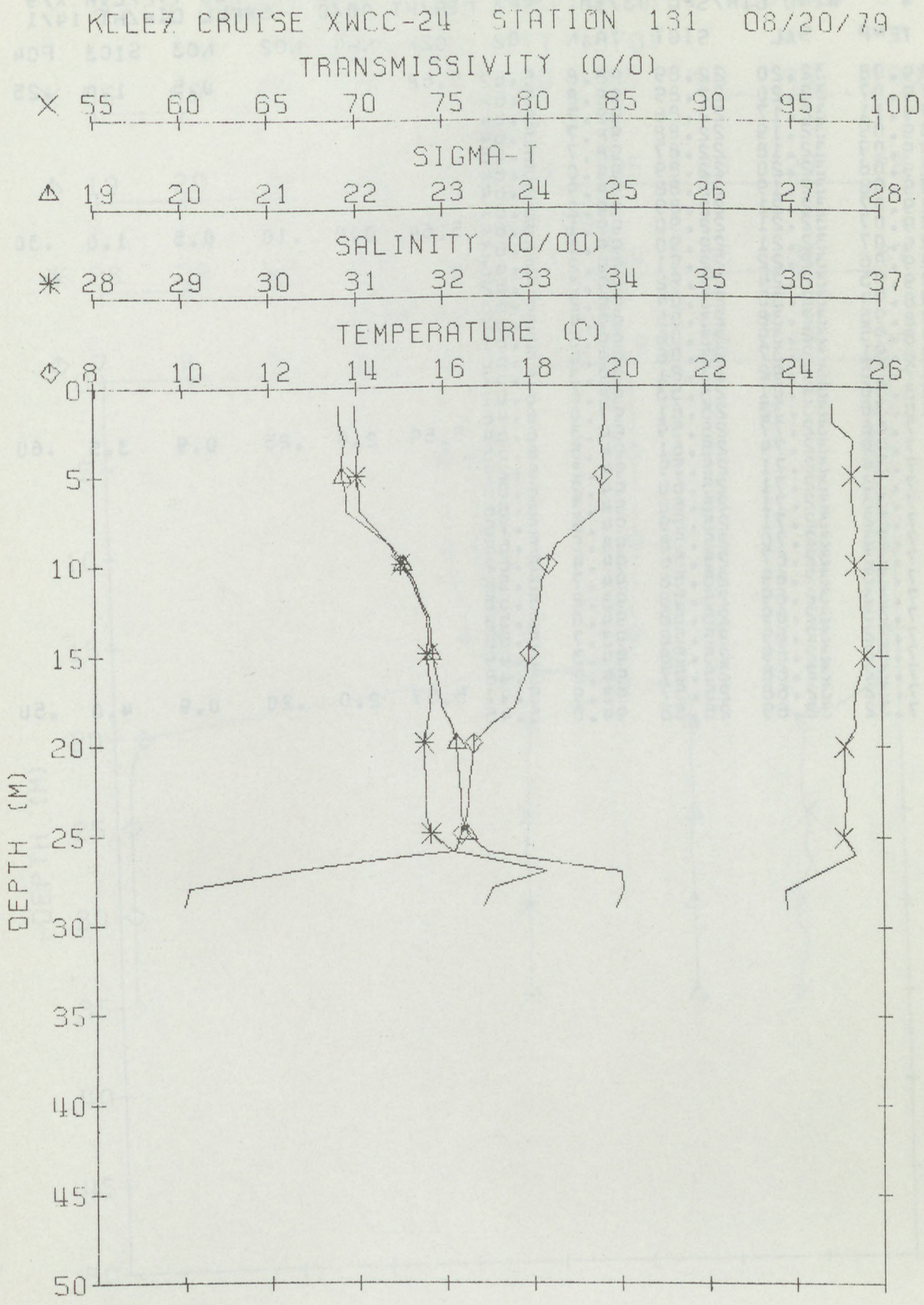
XWCC-24 STA.130 LAT 39 27.7N LONG 74 5.3W GMT 10.3 08/20/79
DEPTH 021 AIR D/W 20.0/20.0 BARO 17.5 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 03/16 SEA DIR/HT 00/0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	21.12	31.00	21.45	96.8	5.50	5.39	0.7	<.10	0.2	1.0	.25
2	21.12	31.00	21.45	96.8	5.50						
3	21.12	31.00	21.45	97.2	5.50						
4	21.10	31.00	21.45	97.3	5.49						
5	21.10	30.99	21.45	97.5	5.50						
6	21.06	31.00	21.47	97.5	5.50						
7	20.82	31.02	21.55	97.7	5.51						
8	20.59	31.03	21.61	97.8	5.52						
9	20.48	31.05	21.65	97.8	5.50						
10	20.41	31.05	21.67	97.6	5.47	3.66			0.3	0.5	.45
11	20.24	31.08	21.74	97.3	5.43						
12	20.20	31.07	21.75	97.4	5.39						
13	19.87	31.14	21.88	96.9	5.37						
14	19.32	31.24	22.10	96.6	5.40						
15	18.24	31.51	22.57	95.7	5.47						
16	18.07	31.58	22.66	95.2	5.52						
17	18.05	31.57	22.66	95.2	5.48						
18	18.05	31.57	22.67	95.0	5.44						
19	18.05	31.57	22.66	95.0	5.42						
20	18.05	31.57	22.66	95.0	5.40	5.08			0.3	1.5	.45
21	18.04	31.58	22.67	95.0	5.38						


KELEZ CRUISE XWCC-24 STATION 130 08/20/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

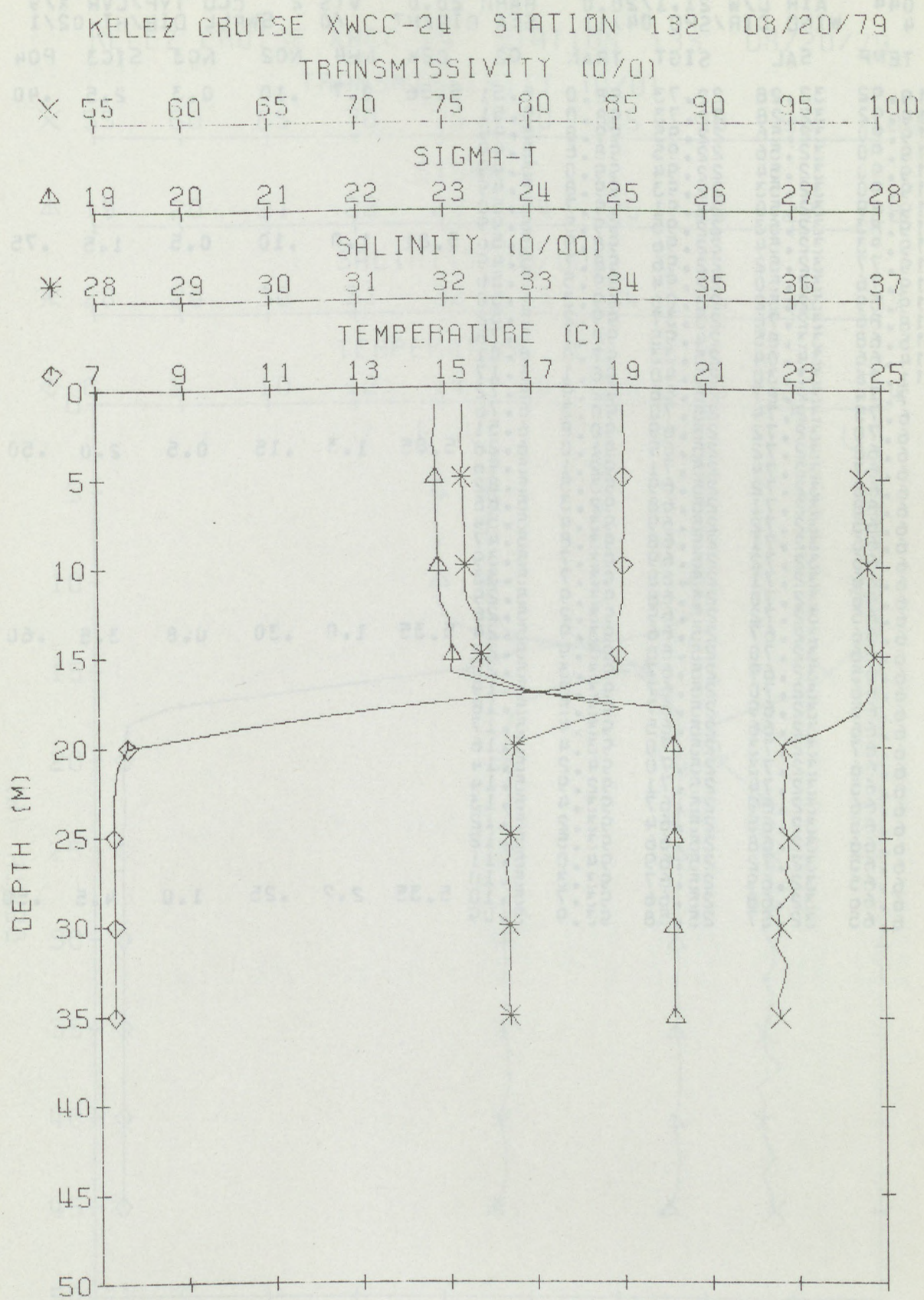
XWCC-24 STA.131 LAT 39 22.7N; LONG 73 55.0W GMT 12.0 08/20/79
DEPTH 028 AIR D/W . / . BARO 18.0 VIS 0 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 03/10 SEA DIR/HT 00/0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.70	30.98	21.81	97.2	5.94	6.03			0.3	2.0	.30
2	19.70	30.98	21.81	97.2	5.94						
3	19.60	31.02	21.86	98.4	5.96						
4	19.64	31.01	21.84	98.3	5.96						
5	19.63	31.00	21.84	98.3	5.96						
6	19.57	31.04	21.88	98.3	5.96						
7	19.54	31.03	21.88	98.4	5.96						
8	19.05	31.22	22.15	98.6	5.98						
9	18.56	31.38	22.39	98.5	6.03						
10	18.38	31.50	22.53	98.5	6.04	6.04			0.5	2.0	.30
11	18.23	31.63	22.66	98.7	6.00						
12	18.19	31.71	22.73	98.9	5.93						
13	18.10	31.80	22.82	99.0	5.89						
14	18.00	31.81	22.86	99.0	5.83						
15	17.93	31.80	22.87	99.0	5.78						
16	17.88	31.82	22.89	98.8	5.73						
17	17.73	31.85	22.95	98.5	5.70						
18	17.58	31.83	22.97	98.5	5.69						
19	17.05	31.80	23.07	98.5	5.65						
20	16.65	31.77	23.14	97.8	5.60	5.09			0.8	2.0	.50
21	16.61	31.77	23.15	97.8	5.47						
22	16.55	31.77	23.17	97.7	5.38						
23	16.53	31.77	23.17	97.9	5.31						
24	16.47	31.77	23.19	97.8	5.25						
25	16.35	31.83	23.26	97.8	5.23						
26	16.21	32.07	23.47	98.5	5.19						
27	12.80	33.14	25.02	96.4	5.62	5.43			1.2	4.0	.70
28	10.11	32.53	25.03	94.4	5.96						
29	10.03	32.42	24.96	94.5	5.77						


KCLE7 CRUISE XWCC-24 STATION 131 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

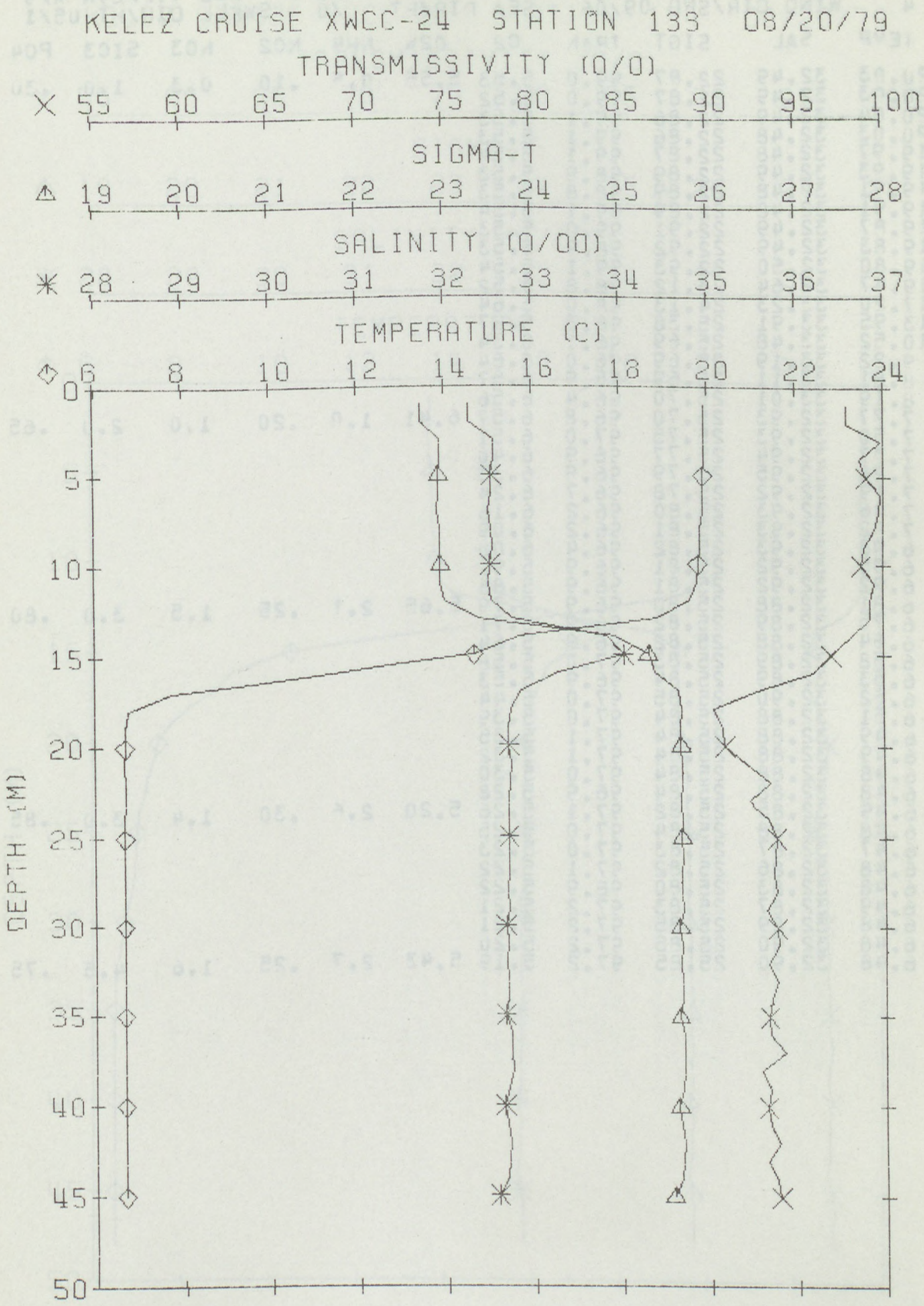
XWCC-24 STA.132 LAT 39 19.9N; LONG 73 47.0W GMT 13.6 08/20/79
DEPTH 035 AIR D/W 19.4/19.4 BARO 18.0 VIS 0 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 03/10 SEA DIR/HT 00/0 SWELL DIR/HT 14/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.08	32.20	22.89	98.8	5.62	5.68			0.5	1.0	.25
2	19.07	32.20	22.89	98.8	5.62						
3	19.11	32.17	22.86	98.7	5.64						
4	19.09	32.19	22.88	98.7	5.64						
5	19.09	32.18	22.87	98.7	5.65						
6	19.08	32.20	22.89	99.0	5.64						
7	19.08	32.19	22.88	98.9	5.64						
8	19.07	32.21	22.89	99.2	5.64						
9	19.07	32.21	22.90	99.1	5.64	5.64	0.8	.10	0.5	1.0	.30
10	19.07	32.21	22.90	99.1	5.63						
11	19.06	32.22	22.91	99.2	5.63						
12	19.05	32.24	22.92	99.3	5.62						
13	18.94	32.35	23.04	99.2	5.63						
14	18.95	32.38	23.05	99.4	5.62						
15	18.95	32.39	23.06	99.5	5.61						
16	18.91	32.37	23.06	99.4	5.60						
17	17.55	32.92	23.81	99.3	5.57						
18	13.56	34.01	25.53	98.6	6.01						
19	10.30	33.33	25.61	97.0	6.46						
20	7.66	32.77	25.59	94.3	6.64	5.59	2.0	.25	0.9	3.5	.60
21	7.40	32.74	25.61	94.5	6.55						
22	7.34	32.71	25.59	94.3	6.27						
23	7.33	32.71	25.60	94.2	6.00						
24	7.33	32.71	25.60	94.3	5.86						
25	7.32	32.71	25.59	94.6	5.75						
26	7.33	32.70	25.58	94.5	5.68						
27	7.33	32.67	25.56	94.4	5.62						
28	7.33	32.69	25.58	94.7	5.58						
29	7.33	32.69	25.58	93.8	5.55						
30	7.33	32.69	25.58	94.0	5.53						
31	7.32	32.69	25.58	93.7	5.50						
32	7.32	32.69	25.58	94.3	5.49						
33	7.32	32.68	25.57	94.2	5.48						
34	7.32	32.68	25.57	93.9	5.47	5.57	2.0	.20	0.9	4.0	.50
35	7.32	32.69	25.58	94.0	5.45						


KELEZ CRUISE XWCC-24 STATION 132 08/20/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

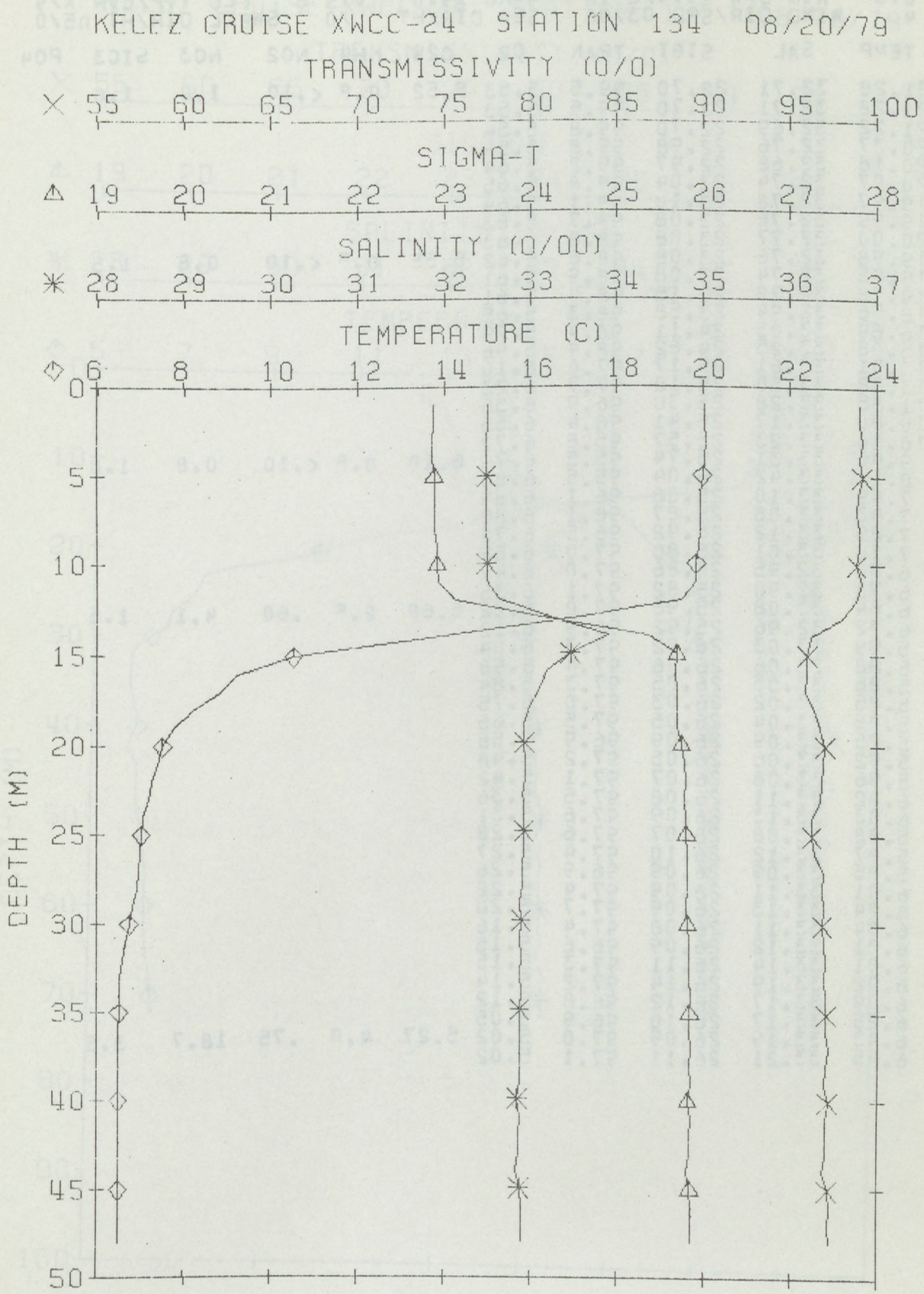
XWCC-24 STA.133 LAT 39 17.0N; LONG 73 36.0W GMT 15.3 08/20/79
DEPTH 044 AIR D/W 21.1/20.0 BARO 20.0 VIS 2 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 04/11 SEA DIR/HT /0 SWELL DIR/HT 02/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	19.92	32.28	22.73	98.0	5.51	5.56	0.7	.10	0.3	2.5	.40
2	19.92	32.28	22.73	98.0	5.51						
3	19.90	32.56	22.95	98.8	5.49						
4	19.90	32.56	22.95	98.6	5.49						
5	19.90	32.54	22.94	98.0	5.49						
6	19.90	32.53	22.93	98.0	5.49						
7	19.89	32.50	22.91	97.7	5.49						
8	19.83	32.53	22.95	97.5	5.50						
9	19.83	32.54	22.96	97.9	5.49						
10	19.77	32.52	22.96	97.7	5.50	5.81	1.0	.10	0.5	1.5	.75
11	19.76	32.50	22.94	97.5	5.49						
12	19.59	32.52	23.00	97.3	5.50						
13	18.86	32.76	23.37	97.2	5.50						
14	15.68	33.85	24.95	97.1	5.52						
15	14.66	34.04	25.33	97.0	5.78						
16	11.38	33.30	25.40	96.1	6.01						
17	7.74	32.87	25.66	92.9	6.17						
18	6.75	32.74	25.70	90.3	6.72						
19	6.70	32.72	25.69	90.8	6.76						
20	6.68	32.72	25.69	91.0	6.51						
21	6.67	32.74	25.71	92.1	6.26	5.85	1.3	.15	0.5	2.0	.50
22	6.68	32.72	25.69	92.5	6.98						
23	6.68	32.71	25.68	92.3	6.82						
24	6.65	32.72	25.69	92.4	6.66						
25	6.66	32.71	25.68	92.8	6.54						
26	6.65	32.72	25.69	92.7	6.47						
27	6.66	32.71	25.68	92.7	6.39						
28	6.66	32.70	25.68	92.9	6.33						
29	6.65	32.72	25.69	92.2	6.29						
30	6.66	32.67	25.66	92.9	6.26						
31	6.66	32.70	25.68	92.3	6.24	5.35	1.0	.30	0.8	3.5	.60
32	6.65	32.69	25.67	92.3	6.22						
33	6.66	32.70	25.67	92.8	6.20						
34	6.65	32.69	25.67	92.5	6.19						
35	6.66	32.66	25.65	92.4	6.18						
36	6.67	32.73	25.70	92.4	6.17						
37	6.66	32.73	25.70	92.2	6.16						
38	6.65	32.74	25.71	92.9	6.14						
39	6.66	32.69	25.67	92.4	6.14						
40	6.65	32.65	25.64	92.2	6.13						
41	6.66	32.68	25.66	92.5	6.12						
42	6.65	32.72	25.69	92.0	6.11						
43	6.65	32.69	25.67	92.3	6.10						
44	6.66	32.68	25.66	92.7	6.10	5.35	2.2	.25	1.0	4.5	.50
45	6.65	32.57	25.58	92.9	6.09						


KELEZ CRUISE XWCC-24 STATION 133 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

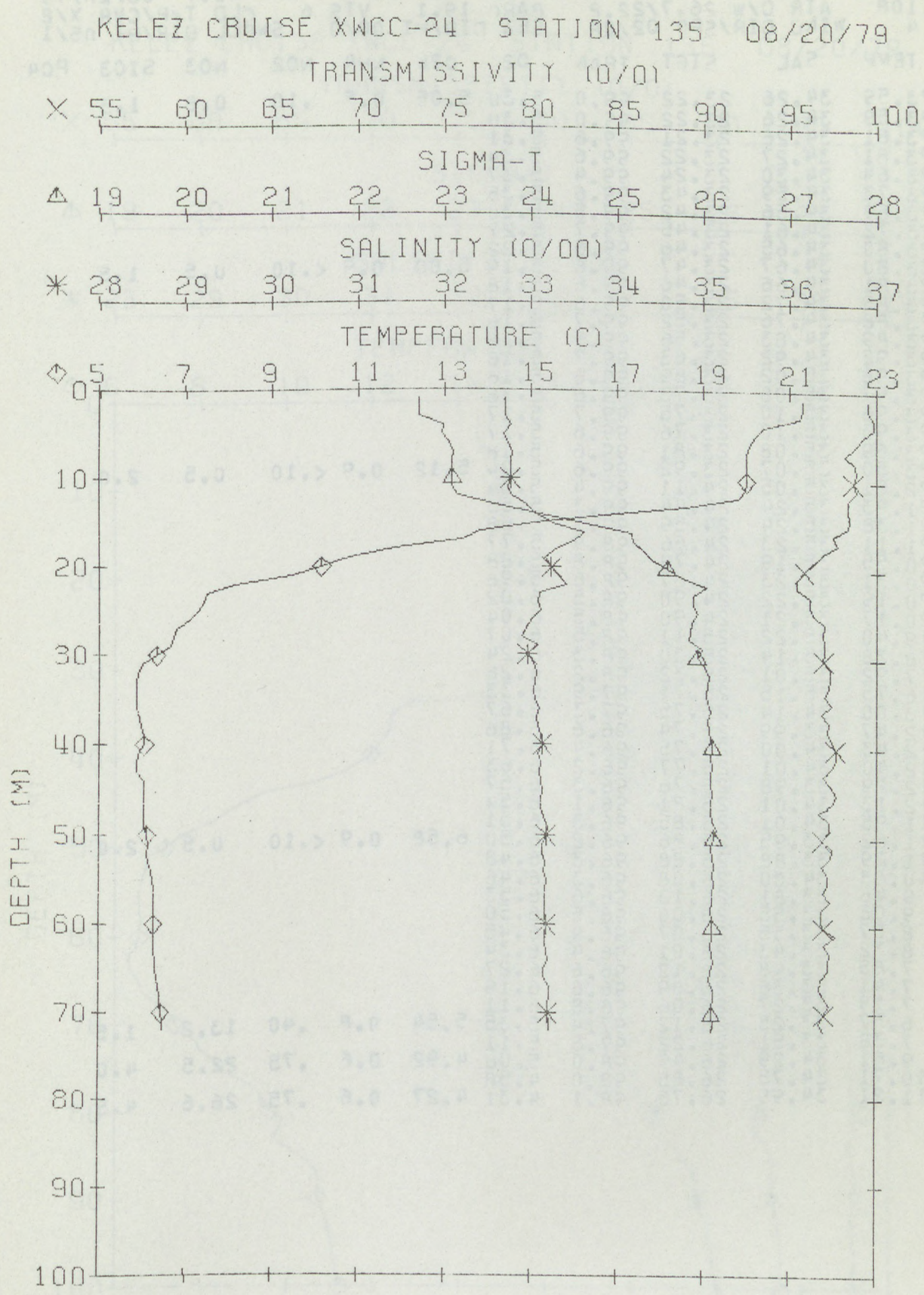
XWCC-24 STA.134 LAT 39 11.2N; LONG 73 23.0W GMT 17.4 08/20/79
DEPTH 049 AIR D/W 22.8/20.6 BARO 20.0 VIS 4 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 09/06 SEA DIR/HT /0 SWELL DIR/HT 05/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	20.03	32.49	22.87	99.0	5.53	5.55	0.5	.10	0.3	1.0	.30
2	20.03	32.49	22.87	99.0	5.52						
3	20.04	32.49	22.86	99.1	5.53						
4	20.03	32.48	22.86	99.1	5.53						
5	19.97	32.48	22.87	99.1	5.54						
6	19.93	32.49	22.89	98.9	5.53						
7	19.91	32.48	22.89	98.8	5.53						
8	19.91	32.48	22.89	99.1	5.54						
9	19.87	32.49	22.91	99.0	5.53						
10	19.83	32.49	22.92	98.9	5.53						
11	19.80	32.50	22.93	99.1	5.54						
12	19.47	32.64	23.12	98.8	5.52						
13	17.20	33.23	24.13	98.0	5.64						
14	13.95	33.91	25.38	96.3	5.97						
15	10.52	33.48	25.69	96.1	6.34						
16	9.22	33.19	25.69	96.0	6.64						
17	8.81	33.11	25.69	95.9	6.57						
18	8.19	33.01	25.70	96.4	6.56						
19	7.77	32.93	25.70	96.8	6.57	6.41	1.0	.20	1.0	2.0	.65
20	7.50	32.93	25.75	97.0	6.51						
21	7.37	32.94	25.77	96.9	6.40						
22	7.26	32.95	25.79	96.9	6.33						
23	7.19	32.92	25.78	96.7	6.24						
24	7.06	32.93	25.80	96.2	6.16						
25	7.02	32.93	25.81	96.2	6.09						
26	6.98	32.93	25.82	96.4	6.00						
27	6.95	32.92	25.81	96.9	5.92						
28	6.92	32.92	25.81	96.9	5.85						
29	6.81	32.88	25.80	96.9	5.79	5.65	2.1	.25	1.5	3.0	.80
30	6.75	32.89	25.82	96.9	5.71						
31	6.64	32.88	25.82	96.9	5.64						
32	6.58	32.89	25.83	97.0	5.58						
33	6.53	32.89	25.84	96.9	5.53						
34	6.52	32.90	25.85	97.0	5.44						
35	6.51	32.88	25.84	97.1	5.39						
36	6.49	32.88	25.84	97.1	5.35						
37	6.49	32.88	25.84	97.0	5.30						
38	6.48	32.88	25.84	96.9	5.28						
39	6.48	32.88	25.84	97.1	5.26	5.20	2.6	.30	1.4	3.0	.85
40	6.49	32.85	25.82	97.0	5.25						
41	6.48	32.88	25.84	97.1	5.23						
42	6.47	32.87	25.83	97.1	5.22						
43	6.48	32.86	25.82	96.9	5.22						
44	6.48	32.83	25.80	97.2	5.21						
45	6.49	32.87	25.83	97.2	5.21						
46	6.48	32.89	25.85	97.2	5.20						
47	6.48	32.90	25.85	97.2	5.19	5.43	2.7	.25	1.6	4.5	.75
48	6.48	32.90	25.85	97.2	5.19						


KELEZ CRUISE XWCC-24 STATION 134 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

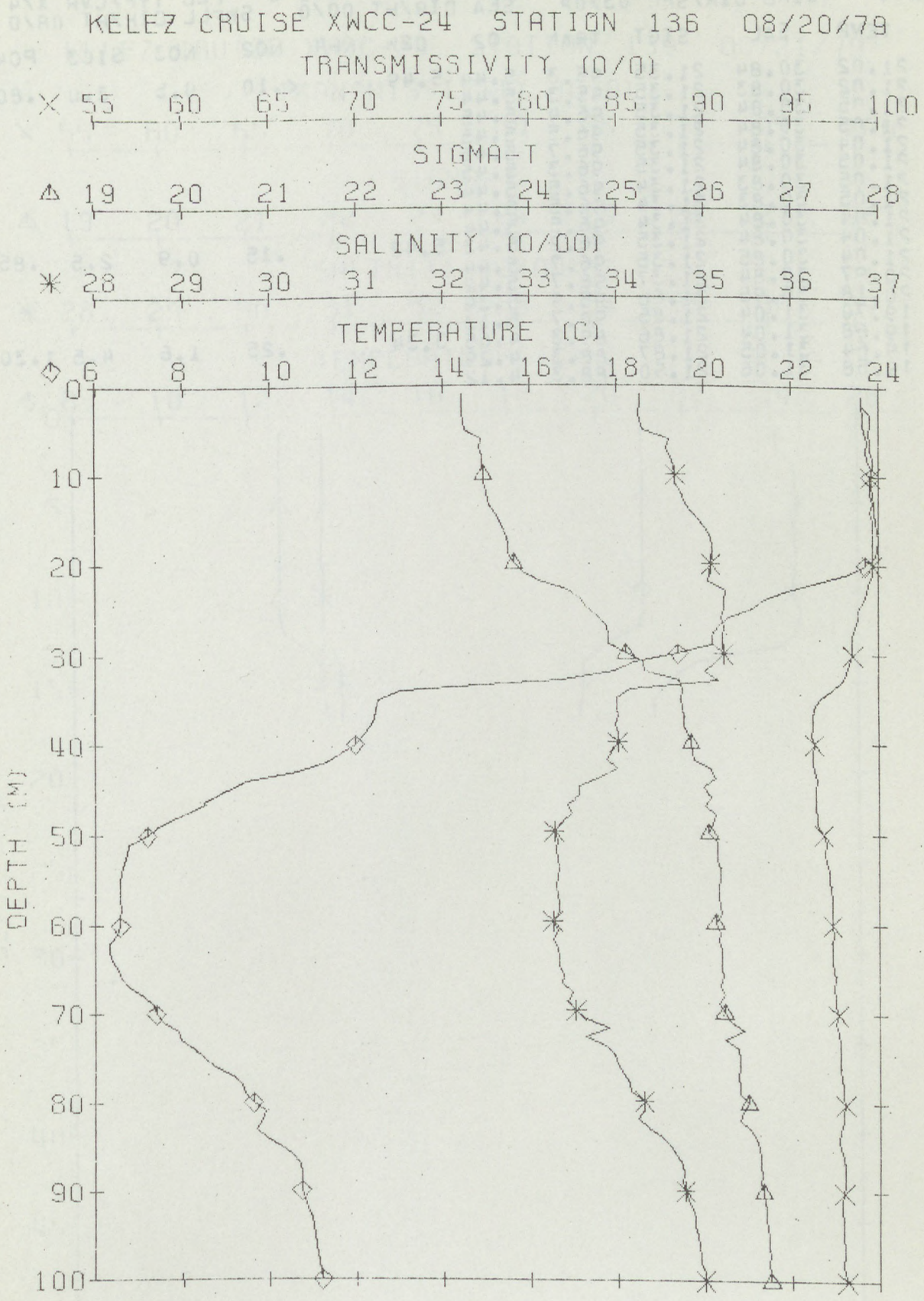
XWCC-24 STA.135 LAT 39 5.2N; LONG 73 7.0W GMT 19.5 08/20/79
DEPTH 073 AIR D/W 29.4/25.6 BARO 19.0 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 03/06 SEA DIR/HT /0 SWELL DIR/HT 05/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	21.28	32.71	22.70	99.5	5.53	5.52	0.8	<.10	1.0	1.0	
2	21.28	32.71	22.70	99.5	5.53						
3	21.22	32.69	22.70	99.8	5.54						
4	20.37	32.76	22.98	99.8	5.58						
5	20.18	32.68	22.97	99.2	5.64						
6	20.07	32.74	23.04	98.8	5.65						
7	19.97	32.78	23.10	98.1	5.64						
8	19.99	32.76	23.08	98.7	5.63						
9	20.00	32.77	23.08	98.8	5.63						
10	19.98	32.76	23.08	98.6	5.62	5.55	0.5	<.10	0.8	1.5	
11	19.95	32.74	23.08	98.9	5.61						
12	19.78	32.79	23.15	98.4	5.61						
13	18.56	32.94	23.58	98.3	5.65						
14	16.69	33.05	24.11	98.4	5.79						
15	15.08	33.25	24.62	98.4	5.96						
16	13.81	33.61	25.17	97.6	6.10						
17	13.38	33.50	25.18	97.7	6.23						
18	11.85	33.28	25.30	96.9	6.35						
19	10.80	33.17	25.41	96.4	6.55						
20	10.14	33.23	25.57	95.8	6.73						
21	9.46	33.31	25.74	95.5	6.79	6.10	0.5	<.10	0.8	1.0	
22	8.11	33.42	26.04	95.5	6.83						
23	7.49	33.10	25.88	96.1	6.89						
24	7.43	33.08	25.87	96.1	6.88						
25	7.29	33.12	25.92	96.5	6.72						
26	7.10	33.01	25.86	97.0	6.58						
27	6.80	32.95	25.86	97.0	6.47						
28	6.73	32.90	25.82	97.1	6.35						
29	6.64	33.08	25.98	97.0	6.22	5.68	2.5	.60	4.1	1.5	
30	6.72	32.96	25.92	96.9	6.12						
31	5.99	33.03	26.02	97.3	6.04						
32	5.88	33.06	26.06	97.4	5.98						
34	5.86	33.05	26.05	97.3	5.84						
35	5.85	33.02	26.03	97.0	5.75						
36	5.85	33.04	26.05	97.5	5.65						
37	5.85	33.09	26.09	96.9	5.55						
38	5.92	33.06	26.05	97.2	5.48						
39	5.96	33.08	26.07	97.1	5.42						
40	6.02	33.11	26.08	97.5	5.36						
41	6.03	33.13	26.09	97.6	5.31						
42	5.88	33.08	26.07	97.6	5.28						
43	5.87	33.12	26.10	97.4	5.27						
44	5.85	33.09	26.09	96.9	5.26						
45	6.01	33.11	26.09	97.4	5.22						
46	6.04	33.13	26.09	97.7	5.20						
47	6.04	33.11	26.08	97.4	5.16						
48	6.01	33.12	26.09	96.6	5.15						
49	6.02	33.14	26.11	97.3	5.15						
50	6.09	33.19	26.14	97.2	5.14						
60	6.25	33.17	26.12	96.8	5.12						
70	6.43	33.17	26.10	96.9	5.05						
72	6.45	33.19	26.09	97.0	5.02	5.27	4.0	.75	18.7	3.5	
		33.21	26.11	97.1	5.02						


KELEZ CRUISE XWCC-24 STATION 135 08/20/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
5 7 9 11 13 15 17 19 21 23
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

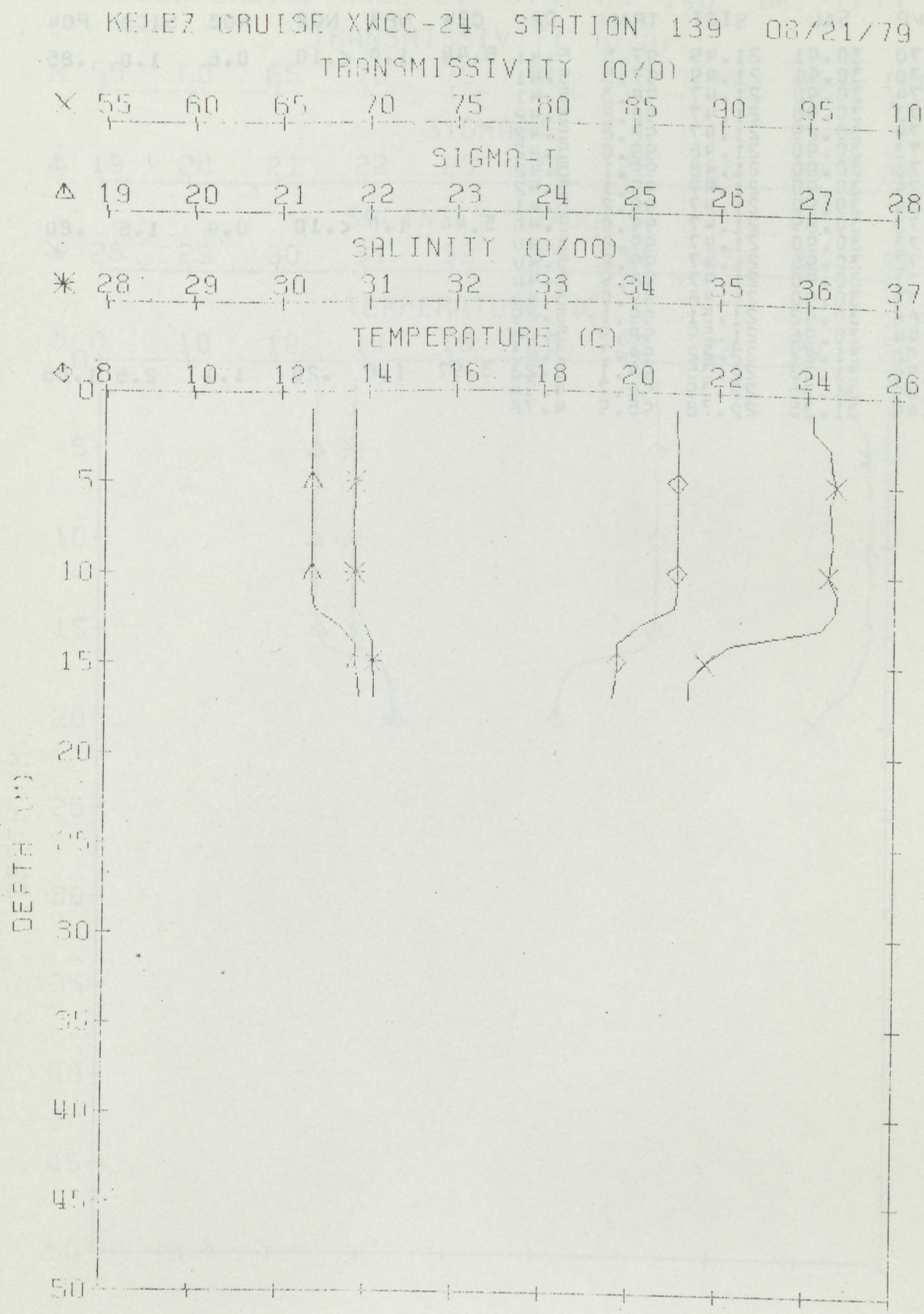
XWCC-24 STA.136 LAT 39 .1N; LONG 72 52.7W GMT 21.7 08/20/79
DEPTH 108 AIR D/W 26.7/22.8 BARO 19.1 VIS 6 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 02/08 SEA DIR/HT 00/0 SWELL DIR/HT 05/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	23.59	34.26	23.22	99.0	5.30	5.05	0.5	.10	0.8	1.5	
2	23.59	34.26	23.22	99.0	5.30						
3	23.61	34.26	23.21	99.6	5.31						
4	23.61	34.27	23.22	99.6	5.34						
5	23.64	34.30	23.24	99.4	5.37						
6	23.73	34.39	23.43	99.6	5.35						
7	23.69	34.56	23.42	99.5	5.30						
8	23.72	34.61	23.45	99.7	5.27						
9	23.80	34.65	23.46	99.6	5.22						
10	23.80	34.67	23.47	99.6	5.19	5.00	0.9	<.10	0.5	1.5	
11	23.81	34.66	23.46	99.6	5.18						
12	23.85	34.72	23.50	99.6	5.17						
13	23.88	34.76	23.52	99.7	5.16						
14	23.89	34.83	23.56	99.5	5.16						
15	23.92	34.92	23.63	99.7	5.16						
16	23.96	35.02	23.69	99.6	5.16						
17	23.97	35.08	23.73	99.6	5.16						
18	23.96	35.10	23.75	99.7	5.17						
19	23.93	35.10	23.76	99.6	5.17						
20	23.69	35.08	23.81	99.6	5.18						
21	23.30	35.07	23.92	99.6	5.24	5.12	0.9	<.10	0.5	2.0	
22	22.61	35.05	24.11	99.4	5.34						
23	21.93	35.24	24.44	99.3	5.53						
24	21.38	35.24	24.59	99.1	5.68						
25	21.11	35.23	24.66	98.9	5.77						
26	20.55	35.19	24.78	98.8	5.88						
27	20.31	35.23	24.87	98.6	5.98						
28	20.19	35.22	24.90	98.5	6.02						
29	20.17	35.21	24.90	98.5	6.04						
30	19.40	35.22	25.11	98.5	6.07						
31	18.38	35.14	25.30	98.3	6.24						
32	17.92	35.01	25.32	98.2	6.28						
33	16.75	35.15	25.71	97.9	6.33						
34	13.00	34.14	25.75	97.3	6.67						
35	12.47	33.99	25.74	96.6	6.86						
36	12.43	34.00	25.75	96.4	6.71						
37	12.40	34.01	25.77	96.2	6.63						
38	12.29	33.98	25.76	96.3	6.57						
39	12.13	34.01	25.81	96.1	6.54						
40	11.95	34.01	25.85	96.3	6.51						
41	11.62	33.95	25.86	96.2	6.50	6.58	0.9	<.10	0.5	2.0	
42	11.29	33.88	25.88	96.3	6.48						
43	10.63	34.00	26.08	96.3	6.46						
44	9.46	33.81	26.13	96.6	6.53						
45	9.03	33.55	26.00	96.5	6.50						
46	8.57	33.55	26.07	96.4	6.45						
47	8.32	33.43	26.01	96.4	6.34						
48	7.85	33.48	26.12	96.6	6.27						
49	7.41	33.36	26.09	96.6	6.19						
50	7.19	33.27	26.06	96.8	6.11						
60	6.57	33.25	26.12	97.4	5.35	5.54	0.8	.40	13.2	1.5	
70	7.38	33.51	26.22	97.6	5.11						
80	9.61	34.29	26.49	98.0	5.06	4.92	0.6	.75	22.5	4.0	
90	10.71	34.75	26.65	98.0	4.58						
100	11.21	34.99	26.75	98.1	4.31	4.27	0.6	.75	26.6	4.5	


KELEZ CRUISE XWCC-24 STATION 136 08/20/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

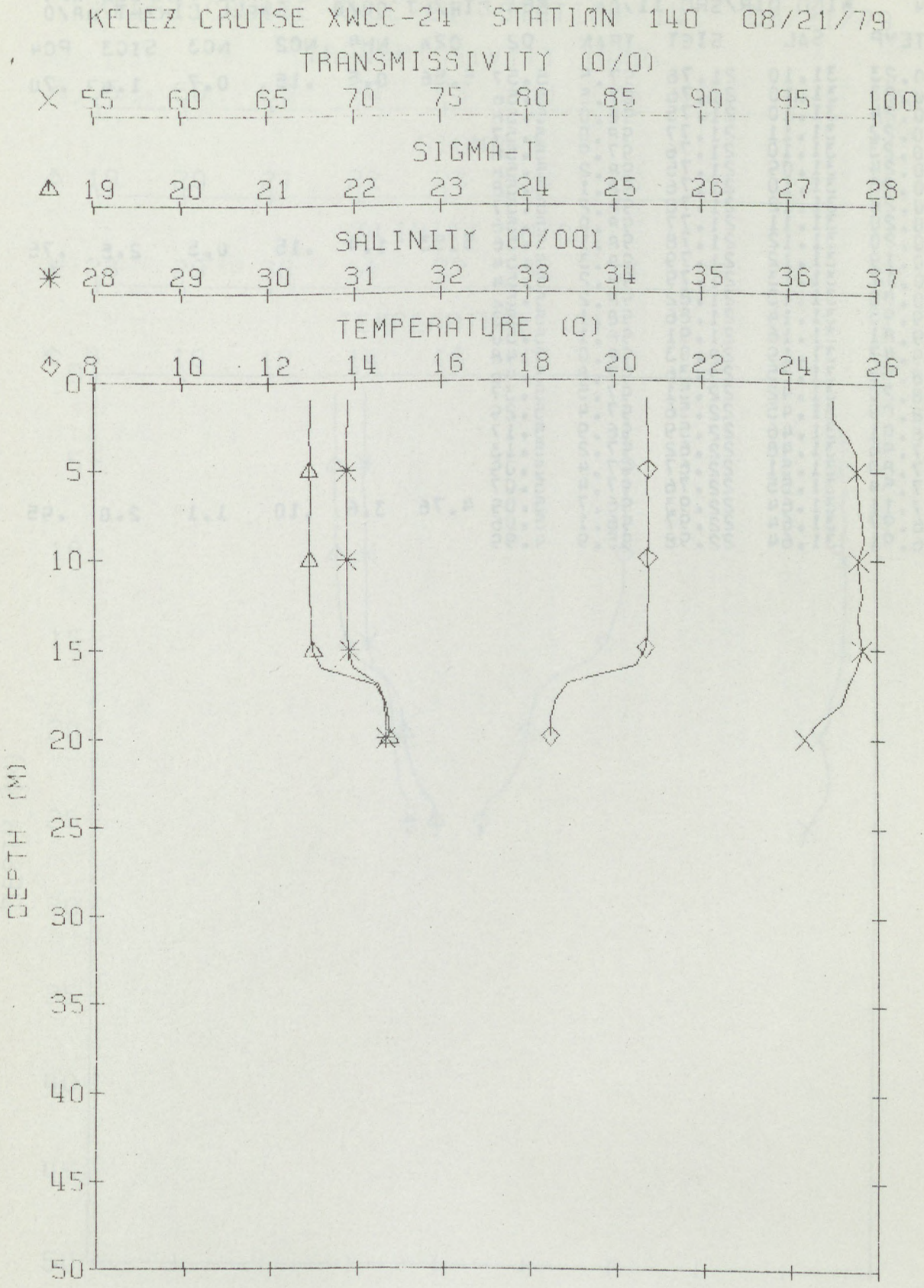
XWCC-24 STA.139 LAT 39 13.8N; LONG 74 30.0W GMT 12.5 08/21/79
DEPTH 016 AIR D/W 20.6/19.4 BARO . VIS 6 CLD TYP/CVR X/4
WETHR 4 WIND DIR/SPD 03/08 SEA DIR/HT 00/0 SWELL DIR/HT 08/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	21.02	30.84	21.35	95.3	5.44	5.49					
2	21.02	30.83	21.35	95.3	5.44			<.10	0.5	3.0	.80
3	21.05	30.84	21.35	96.4	5.45						
4	21.05	30.84	21.35	96.5	5.45						
5	21.04	30.84	21.35	96.7	5.45						
6	21.05	30.84	21.35	96.3	5.45						
7	21.05	30.83	21.34	96.5	5.44						
8	21.05	30.83	21.34	96.5	5.44						
9	21.04	30.84	21.34	96.5	5.44						
10	21.04	30.84	21.35	96.2	5.43	5.42					
11	21.04	30.85	21.35	96.7	5.44			.15	0.9	2.5	.85
12	20.97	30.84	21.37	96.7	5.42						
13	20.18	30.95	21.66	95.9	5.39						
14	19.70	31.04	21.85	90.7	5.13						
15	19.68	31.04	21.86	89.3	4.65	3.34					
16	19.64	31.05	21.87	88.3	4.29			.25	1.6	4.5	1.30
17	19.58	31.06	21.90	88.3	4.12						


KELEZ CRUISE XWCC-24 STATION 139 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

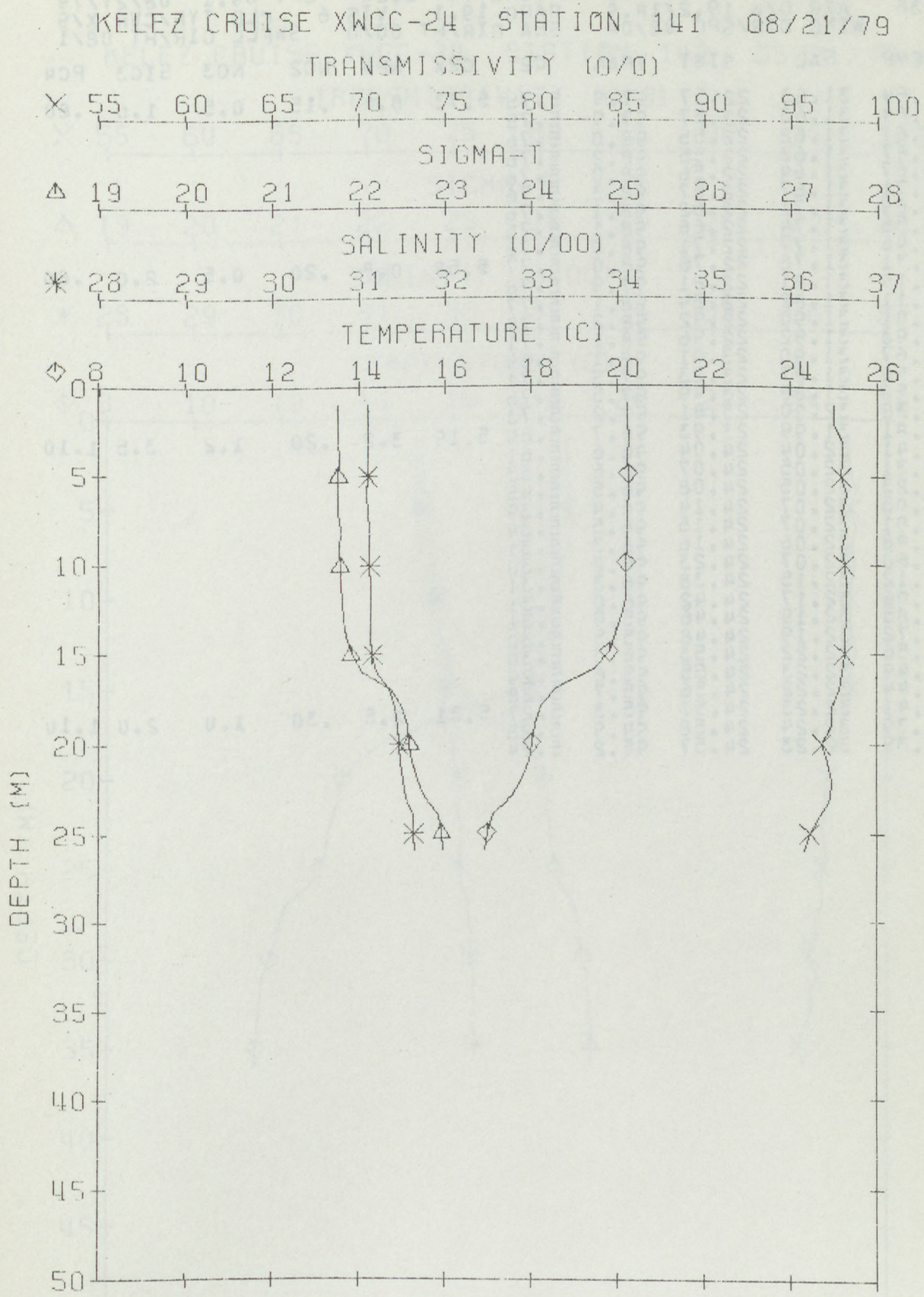
XWCC-24 STA.140 LAT 39 11.2N; LONG 74 24.5W GMT 11.6 08/21/79
DEPTH 020 AIR D/W 20.0/19.4 BARO 19.5 VIS 6 CLD TYP/CVR X/4
WETHR 4 WIND DIR/SPD 08/08 SEA DIR/HT 00/0 SWELL DIR/HT 08/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	20.70	30.91	21.49	97.5	5.41	5.44	1.0	<.10	0.6	1.0	.85
2	20.70	30.91	21.49	97.5	5.41						
3	20.74	30.90	21.47	98.3	5.41						
4	20.73	30.90	21.47	98.8	5.42						
5	20.74	30.89	21.47	98.8	5.42						
6	20.73	30.90	21.48	99.0	5.42						
7	20.73	30.90	21.48	99.1	5.42						
8	20.74	30.90	21.47	99.1	5.42						
9	20.74	30.90	21.47	99.2	5.41						
10	20.73	30.89	21.47	99.0	5.40	5.44	1.0	<.10	0.4	1.5	.80
11	20.73	30.90	21.47	99.0	5.40						
12	20.73	30.90	21.47	99.2	5.40						
13	20.73	30.90	21.47	98.9	5.40						
14	20.73	30.90	21.48	99.0	5.40						
15	20.68	30.92	21.51	99.1	5.39						
16	20.44	30.96	21.59	98.9	5.38						
17	18.90	31.27	22.22	98.3	5.43						
18	18.59	31.33	22.35	98.1	5.23	3.97	1.6	.20	1.1	2.5	1.05
19	18.49	31.35	22.39	96.7	4.98						
20	18.49	31.35	22.38	95.9	4.78						


KELEZ CRUISE XWCC-24 STATION 140 08/21/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

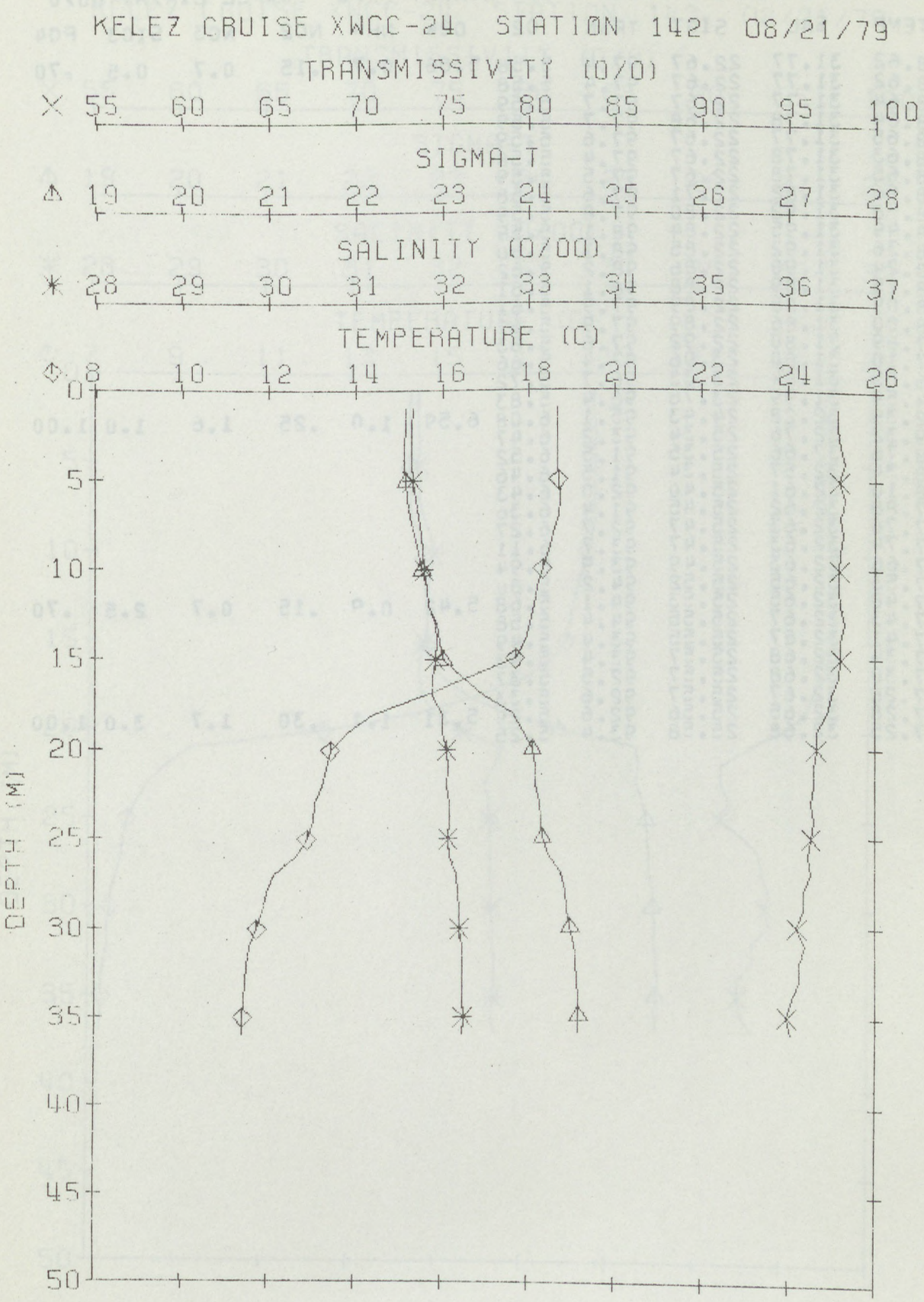
XWCC-24 STA.141 LAT 39 6.8N ; LONG 74 15.5W GMT 10.3 08/21/79
DEPTH 025 AIR D/W 19.4/19.2 BARO 19.0 VIS 6 CLD TYP/CVR X/4
WETHR 4 WIND DIR/SPD 11/06 SEA DIR/HT 00/0 SWELL DIR/HT 08/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.23	31.10	21.76	97.5	5.57	5.56	0.5	.15	0.7	1.0	.70
2	20.23	31.10	21.76	97.5	5.56						
3	20.24	31.10	21.75	98.0	5.58						
4	20.22	31.11	21.77	98.0	5.57						
5	20.23	31.10	21.76	97.9	5.56						
6	20.24	31.09	21.75	98.2	5.58						
7	20.23	31.10	21.76	98.1	5.58						
8	20.20	31.12	21.78	98.2	5.57						
9	20.20	31.11	21.77	98.0	5.56						
10	20.20	31.12	21.78	98.1	5.56	5.53	1.4	.15	0.5	2.5	.75
11	20.19	31.12	21.79	98.3	5.54						
12	20.17	31.13	21.79	98.2	5.54						
13	20.08	31.13	21.82	98.2	5.52						
14	19.95	31.14	21.86	98.1	5.53						
15	19.81	31.16	21.91	98.1	5.50						
16	19.47	31.19	22.03	98.0	5.48						
17	18.58	31.35	22.36	97.8	5.46						
18	18.20	31.42	22.51	97.5	5.37						
19	18.09	31.45	22.56	97.4	5.29						
20	18.01	31.46	22.59	96.9	5.17						
21	17.96	31.48	22.62	97.2	5.13						
22	17.80	31.51	22.67	97.4	5.09						
23	17.54	31.55	22.76	97.4	5.07						
24	17.11	31.64	22.93	96.7	5.09	4.76	3.6	.10	1.1	2.0	.95
25	16.97	31.64	22.97	96.1	5.05						
26	16.91	31.64	22.98	95.9	4.99						


KELEZ CRUISE XWCC-24 STATION 141 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0 5 10 15 20 25 30 35 40 45 50
DEPTH (M)

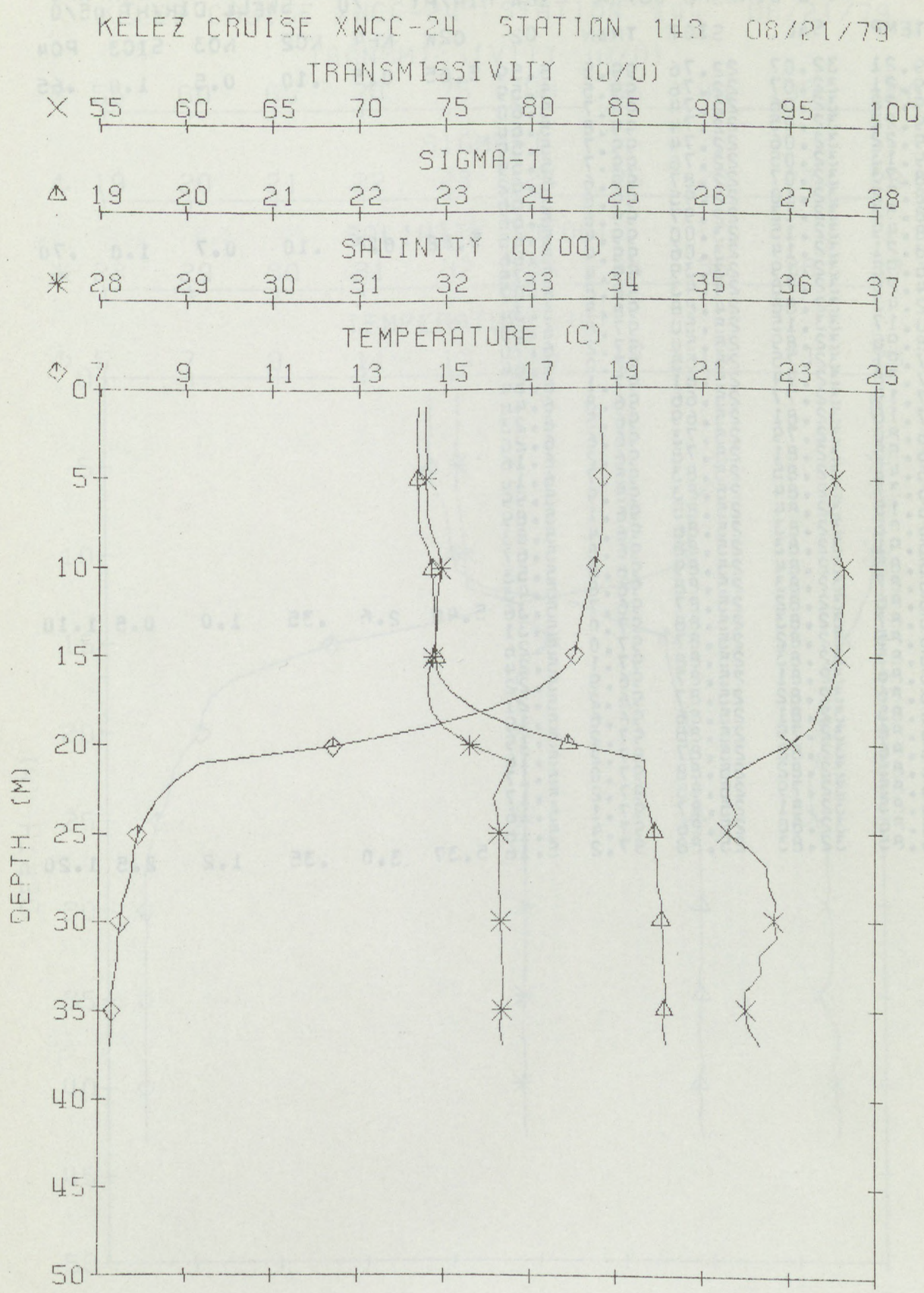
XWCC-24 STA.142 LAT 39 2.7N; LONG 74 6.2W GMT 09.1 08/21/79
DEPTH 036 AIR D/W 19.2/18.9 BARO 19.1 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 08/08 SEA DIR/HT 00/0 SWELL DIR/HT 08/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	18.64	31.63	22.57	97.9	5.75	5.73	0.6	.15	0.5	1.0	.80
2	18.64	31.63	22.57	97.9	5.75						
3	18.67	31.62	22.55	98.0	5.76						
4	18.67	31.63	22.55	98.2	5.76						
5	18.67	31.64	22.56	98.0	5.76						
6	18.71	31.67	22.57	98.3	5.76						
7	18.69	31.71	22.62	98.1	5.76						
8	18.56	31.74	22.66	98.1	5.75						
9	18.46	31.77	22.71	98.0	5.76						
10	18.31	31.78	22.76	98.0	5.77	5.58	0.8	.20	0.5	2.0	.80
11	18.19	31.81	22.81	97.9	5.78						
12	18.11	31.82	22.84	98.1	5.77						
13	18.01	31.90	22.92	98.2	5.74						
14	17.93	31.92	22.96	98.1	5.71						
15	17.67	31.90	23.01	98.1	5.69						
16	16.58	31.87	23.23	97.9	5.71						
17	15.50	31.88	23.49	97.5	5.75						
18	14.38	32.00	23.81	97.2	5.73						
19	13.81	31.99	23.93	96.7	5.69	5.19	3.2	.20	1.2	3.5	1.10
20	13.41	32.04	24.04	96.6	5.61						
21	13.31	32.05	24.07	96.6	5.53						
22	13.23	32.05	24.08	96.5	5.45						
23	13.05	32.07	24.14	96.4	5.39						
24	13.01	32.07	24.15	96.5	5.34						
25	12.88	32.06	24.16	96.3	5.31						
26	12.60	32.07	24.23	96.2	5.30						
27	12.12	32.15	24.38	96.3	5.31						
28	11.96	32.17	24.42	96.0	5.31						
29	11.85	32.19	24.46	95.9	5.31						
30	11.72	32.19	24.48	95.5	5.30						
31	11.56	32.22	24.53	96.0	5.30						
32	11.49	32.23	24.55	95.6	5.29						
33	11.44	32.22	24.56	95.7	5.28						
34	11.41	32.23	24.57	95.3	5.27	5.31	2.5	.30	1.0	2.0	1.10
35	11.39	32.24	24.58	94.9	5.25						
36	11.39	32.23	24.57	95.2	5.24						


KELEZ CRUISE XWCC-24 STATION 142 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

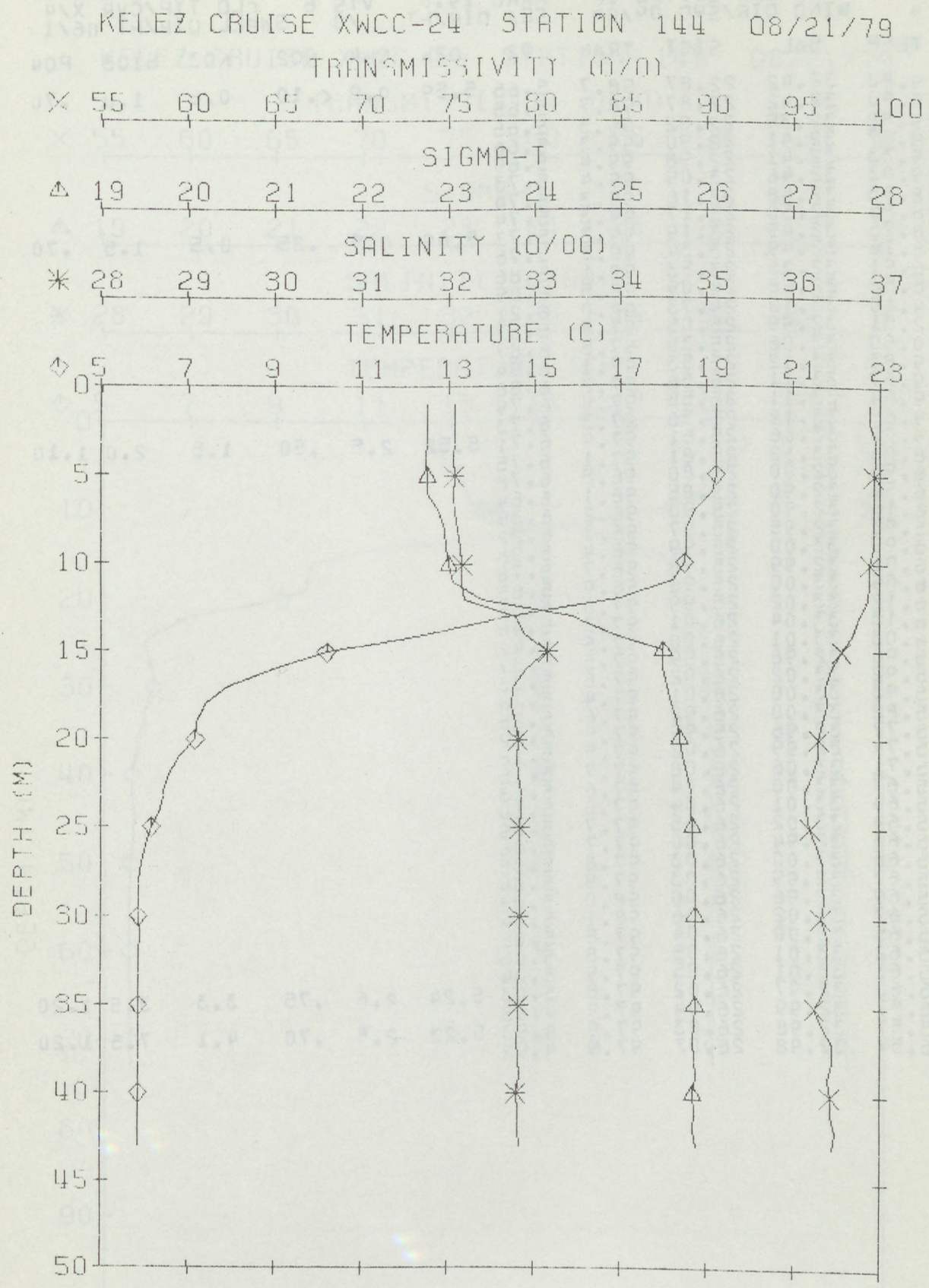
XWCC-24 STA.143 LAT 38 57.8N; LONG 73 56.5W GMT 07.6 08/21/79
DEPTH 039 AIR D/W 19.4/18.9 BARO 19.5 VIS 3 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 07/06 SEA DIR/HT /0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.62	31.77	22.67	97.4	5.58	5.66	0.7	.15	0.7	0.5	.70
2	18.62	31.77	22.67	97.4	5.58						
3	18.64	31.77	22.67	97.7	5.59						
4	18.64	31.78	22.68	97.7	5.59						
5	18.65	31.77	22.67	97.6	5.59						
6	18.63	31.78	22.67	97.4	5.58						
7	18.65	31.78	22.67	97.5	5.59						
8	18.66	31.82	22.71	97.6	5.58						
9	18.58	31.92	22.80	97.8	5.59						
10	18.49	31.95	22.84	98.1	5.59						
11	18.36	31.92	22.85	98.1	5.60						
12	18.24	31.90	22.86	98.2	5.62						
13	18.15	31.89	22.88	98.1	5.61						
14	18.09	31.88	22.89	97.9	5.61						
15	18.00	31.86	22.89	97.9	5.61						
16	17.69	31.80	22.92	97.6	5.63						
17	17.10	31.80	23.06	97.4	5.66						
18	16.05	31.84	23.33	96.7	5.72						
19	14.59	31.99	23.76	96.4	5.83						
20	12.39	32.28	24.43	95.1	6.08	6.59	1.0	.25	1.6	1.0	1.00
21	9.32	32.76	25.34	93.2	6.47						
22	8.76	32.66	25.35	91.5	6.52						
23	8.34	32.57	25.34	91.5	6.46						
24	8.10	32.61	25.40	92.0	6.43						
25	7.88	32.62	25.45	91.4	6.36						
26	7.78	32.63	25.47	92.7	6.27						
27	7.74	32.63	25.47	93.7	6.11						
28	7.66	32.63	25.49	93.9	5.94						
29	7.53	32.65	25.52	94.2	5.80						
30	7.48	32.65	25.53	94.1	5.68	5.42	0.9	.15	0.7	2.5	.70
31	7.43	32.67	25.55	94.4	5.58						
32	7.41	32.67	25.55	93.4	5.49						
33	7.34	32.68	25.57	93.4	5.43						
34	7.30	32.68	25.57	92.5	5.37						
35	7.28	32.67	25.57	92.6	5.33						
36	7.28	32.65	25.56	92.6	5.29	5.31	1.1	.30	1.7	3.0	1.00
37	7.25	32.68	25.58	93.4	5.25						


KELEZ CRUISE XWCC-24 STATION 143 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

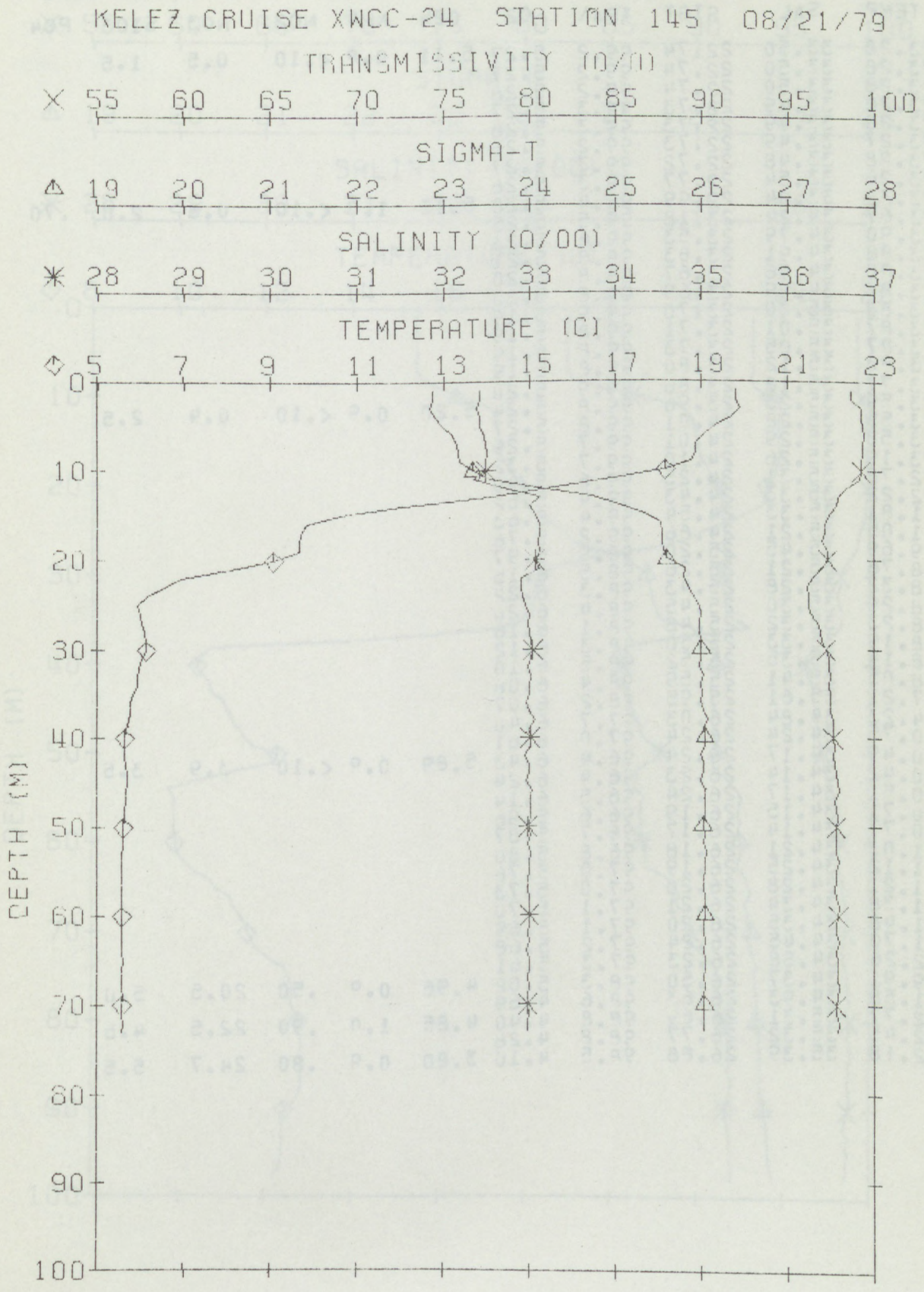
XWCC-24 STA.144 LAT 38 51.0N ; LONG 73 42.4W GMT 05.6 08/21/79
DEPTH 044 AIR D/W 20.0/20.0 BARO 20.0 VIS 6 CLD TYP/CVR X/0
WETHR 4 WIND DIR/SPD 05/08 SEA DIR/HT /0 SWELL DIR/HT 05/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.21	32.07	22.76	99.5	5.59	5.65	0.5	.10	0.5	1.0	.65
2	19.21	32.07	22.76	99.5	5.59						
3	19.22	32.06	22.74	99.7	5.60						
4	19.22	32.05	22.74	99.8	5.60						
5	19.22	32.06	22.74	99.7	5.59						
6	19.13	32.05	22.76	99.7	5.59						
7	18.73	32.07	22.87	99.6	5.62						
8	18.52	32.10	22.95	99.6	5.66						
9	18.53	32.13	22.97	99.6	5.66						
10	18.49	32.15	23.00	99.4	5.65	5.68	0.8	.10	0.7	1.0	.70
11	18.21	32.14	23.06	99.4	5.66						
12	16.98	32.19	23.39	99.4	5.75						
13	14.29	32.78	24.43	98.8	6.07						
14	12.43	32.88	24.88	98.5	6.34						
15	10.17	32.15	25.50	97.8	6.60						
16	8.96	32.89	25.60	97.2	6.70						
17	7.91	32.75	25.55	97.0	6.64						
18	7.38	32.74	25.61	97.1	6.54						
19	7.19	32.77	25.66	96.8	6.40						
20	7.16	32.81	25.69	96.5	6.23						
21	6.80	32.79	25.73	96.6	6.20						
22	6.55	32.81	25.78	96.2	6.16						
23	6.42	32.85	25.83	95.7	6.10						
24	6.37	32.84	25.83	95.9	5.99						
25	6.15	32.84	25.85	96.1	5.89						
26	6.02	32.83	25.86	96.4	5.83						
27	5.91	32.83	25.88	96.8	5.67						
28	5.85	32.84	25.89	96.8	5.53						
29	5.87	32.83	25.88	96.8	5.43						
30	5.86	32.82	25.87	96.7	5.36	5.40	2.6	.35	1.0	0.5	1.10
31	5.87	32.83	25.88	97.0	5.31						
32	5.85	32.82	25.87	97.0	5.26						
33	5.85	32.83	25.88	97.1	5.24						
34	5.86	32.81	25.87	96.9	5.22						
35	5.86	32.82	25.87	96.2	5.21						
36	5.85	32.81	25.86	96.6	5.19						
37	5.86	32.79	25.85	97.2	5.19						
38	5.86	32.82	25.87	97.2	5.18						
39	5.85	32.82	25.88	97.0	5.17						
40	5.85	32.79	25.85	97.2	5.17						
41	5.85	32.81	25.87	97.1	5.16						
42	5.86	32.80	25.86	97.4	5.16						
43	5.85	32.83	25.88	97.2	5.16	5.37	3.0	.35	1.2	2.5	1.20


KELEZ CRUISE XWCC-24 STATION 144 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
5 7 9 11 13 15 17 19 21 23
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

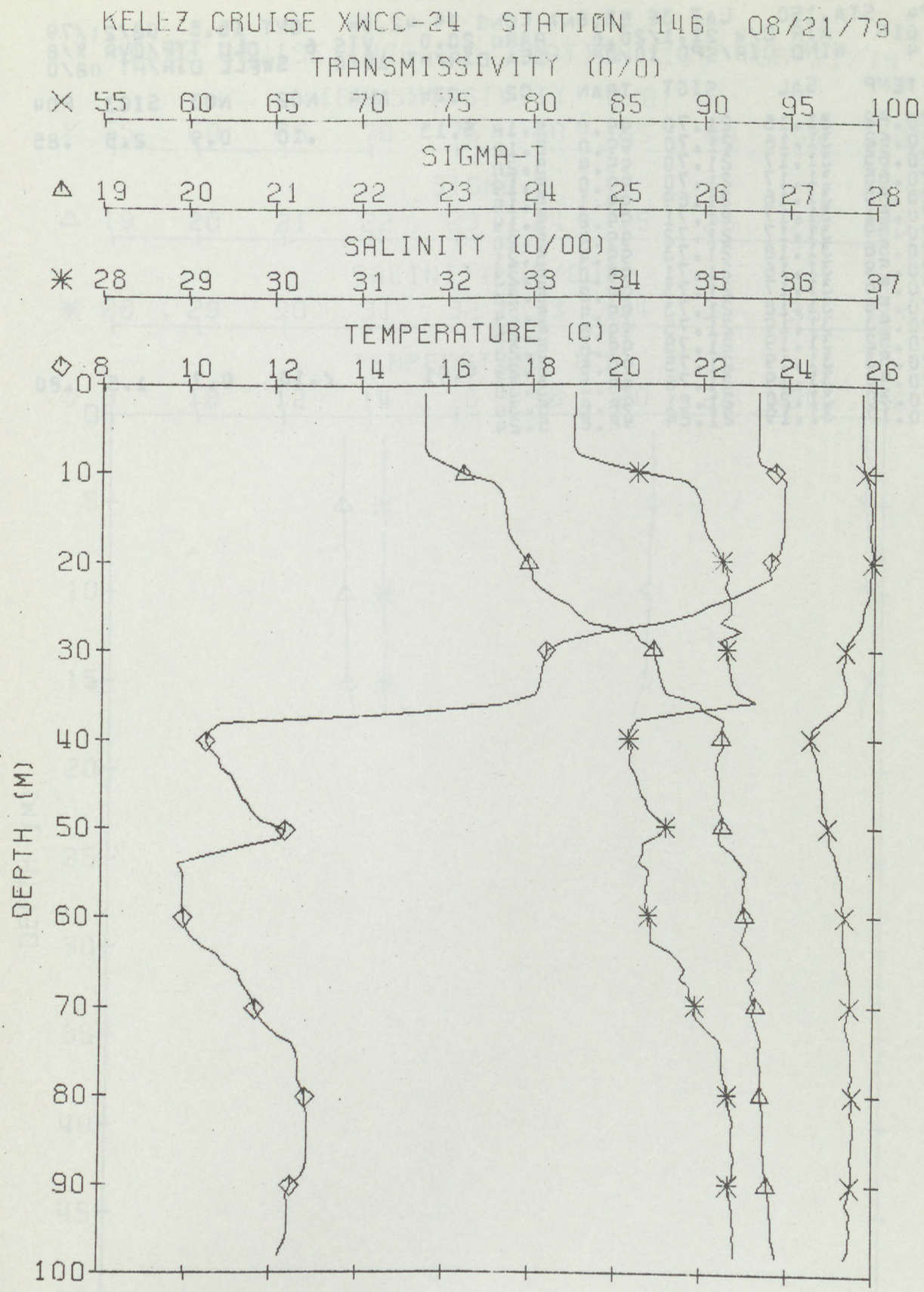
XBCC-24 STA.145 LAT 38 45.0N ; LONG 73 27.8W GMT 03.5 08/21/79
DEPTH 073 AIR D/W 21.7/20.6 BARO 19.0 VIS 6 CLD TYP/CVR X/4
WETHR 4 WIND DIR/SPD 09/08 SEA DIR/HT /0 SWELL DIR/HT 06/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.80	32.42	22.87	98.7	5.65	5.59	0.9	<.10	0.6	1.0	.70
2	19.80	32.42	22.87	98.7	5.65						
3	19.88	32.39	22.82	98.3	5.65						
4	19.67	32.41	22.90	98.3	5.66						
5	19.33	32.41	22.98	98.4	5.69						
6	19.03	32.46	23.09	98.4	5.73						
7	18.85	32.48	23.16	98.3	5.74						
8	18.85	32.50	23.17	98.3	5.74						
9	18.75	32.49	23.19	98.3	5.73						
10	18.16	32.49	23.34	98.2	5.75	5.69	0.9	.25	0.5	1.5	.70
11	16.91	32.35	23.53	98.1	5.86						
12	15.56	32.68	24.09	98.5	6.09						
13	14.10	33.12	24.73	98.0	6.21						
14	12.01	32.99	25.05	97.8	6.57						
15	10.60	33.06	25.35	97.5	6.87						
16	9.83	33.12	25.53	97.1	6.94						
17	9.67	33.11	25.56	97.2	6.88						
18	9.64	33.11	25.55	97.0	6.79						
19	9.65	33.12	25.56	97.3	6.73						
20	9.07	33.06	25.61	97.4	6.71	5.52	2.5	.50	1.5	2.0	1.10
21	8.06	33.12	25.81	97.1	6.75						
22	6.96	32.90	25.80	96.5	6.78						
23	6.51	32.90	25.85	96.1	6.64						
24	6.16	32.90	25.90	96.2	6.39						
25	5.83	32.95	25.97	96.3	6.22						
26	5.89	33.00	25.99	96.4	6.08						
27	6.01	32.99	25.98	96.7	5.78						
28	6.09	33.00	25.98	96.9	5.65						
29	6.12	33.02	25.99	97.0	5.55						
30	6.13	33.04	26.01	97.3	5.46						
31	6.03	33.01	26.00	97.5	5.42						
32	5.96	32.98	25.99	97.5	5.37						
33	5.92	33.02	26.02	97.6	5.33						
34	5.93	33.00	26.01	97.4	5.28						
35	5.82	33.00	26.02	97.6	5.25						
36	5.77	32.96	25.99	97.5	5.22						
37	5.74	32.99	26.02	97.5	5.18						
38	5.71	33.06	26.08	97.7	5.15						
39	5.67	33.00	26.04	97.6	5.13						
40	5.64	33.01	26.04	97.6	5.10						
41	5.64	33.02	26.05	97.7	5.09						
42	5.63	32.94	26.00	97.7	5.06						
43	5.65	33.00	26.03	97.8	5.05						
44	5.67	32.99	26.03	97.9	5.04						
45	5.69	32.96	26.00	98.0	5.03						
46	5.67	33.02	26.06	98.1	5.04						
47	5.65	33.00	26.04	97.8	5.05						
48	5.62	33.01	26.05	97.8	5.05						
49	5.61	33.01	26.05	97.9	5.04						
50	5.60	32.97	26.02	97.8	5.03	5.24	2.6	.75	3.3	3.5	1.20
60	5.57	32.99	26.04	97.9	4.95						
70	5.57	32.98	26.03	97.9	4.93	5.23	2.5	.70	4.1	7.5	1.20
73	5.57	32.98	26.03	97.9	4.92						


KELEZ CRUISE XWCC-24 STATION 145 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
5 7 9 11 13 15 17 19 21 23
0
10
20
30
40
50
60
70
80
90
100
DEPTH (M)

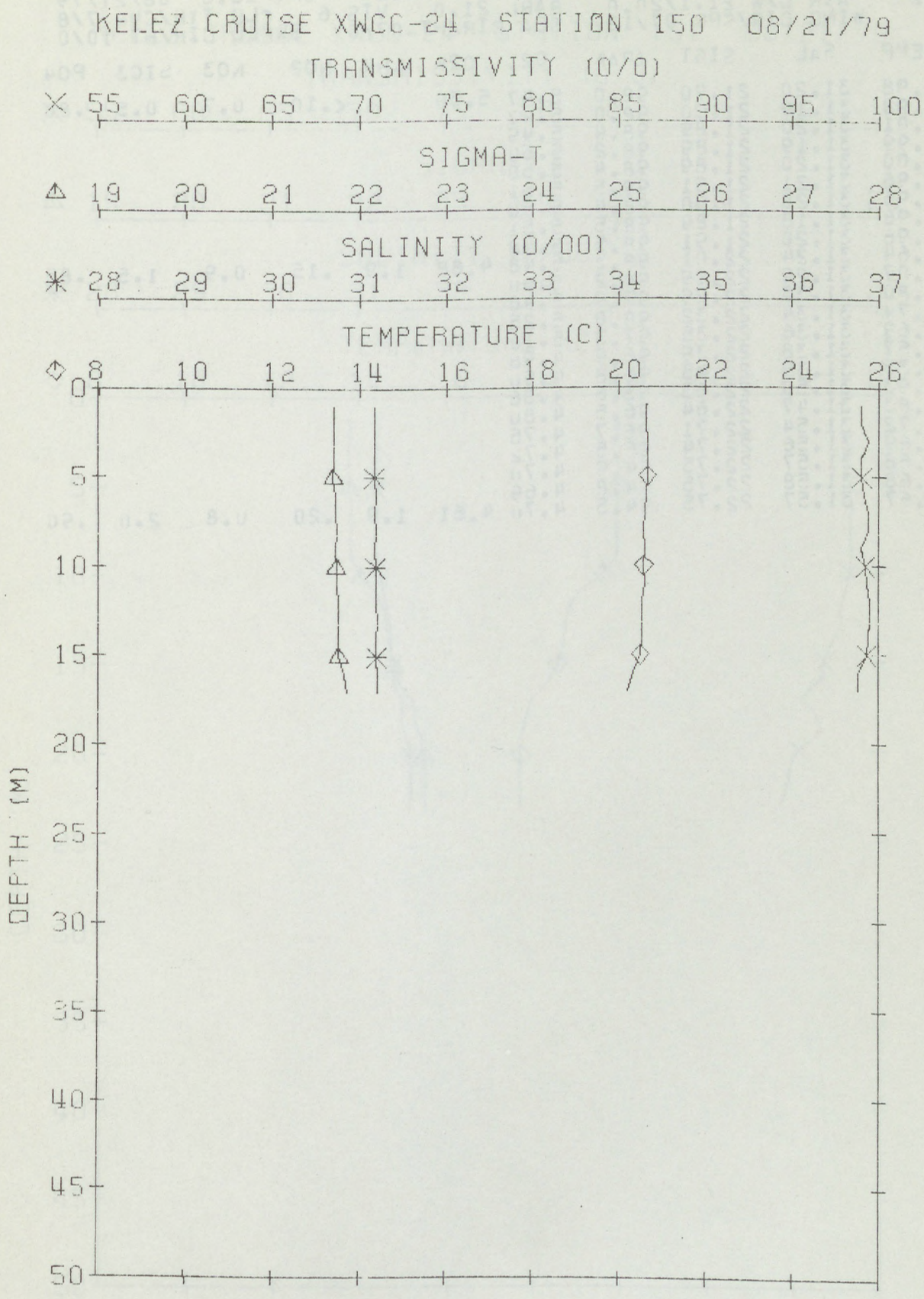
XWCC-24 STA.146 LAT 38 39.5N ; LONG 73 17.0W GMT 01.5 08/21/79
DEPTH 097 AIR D/W 22.2/21.1 BARO 19.5 VIS 6 CLD TYP/CVR X/9
WETHR 4 WIND DIR/SPD 06/08 SEA DIR/HT 00/0 SWELL DIR/HT 06/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	23.28	33.50	22.74	99.2	5.27	5.11	0.8	<.10	0.5	1.5	
2	23.28	33.50	22.74	99.2	5.27						
3	23.28	33.50	22.74	99.2	5.28						
4	23.28	33.49	22.73	99.3	5.27						
5	23.28	33.49	22.73	99.3	5.26						
6	23.27	33.49	22.73	99.2	5.26						
7	23.28	33.48	22.72	99.3	5.27						
8	23.26	33.54	22.77	99.3	5.26						
9	23.32	33.84	22.99	99.4	5.28	5.13	1.0	<.10	0.6	2.0	.70
10	23.67	34.24	23.18	99.5	5.25						
11	23.90	34.79	23.53	99.6	5.23						
12	23.88	34.91	23.63	99.8	5.21						
13	23.88	34.96	23.67	99.8	5.20						
14	23.88	34.99	23.69	99.8	5.20						
15	23.88	35.00	23.70	99.8	5.19						
16	23.87	35.01	23.71	99.8	5.19						
17	23.87	35.05	23.73	99.8	5.19						
18	23.83	35.12	23.80	99.8	5.19						
19	23.77	35.18	23.86	99.9	5.20						
20	23.69	35.23	23.96	99.8	5.24	5.20	0.9	<.10	0.4	2.5	
21	23.55	35.28	24.01	99.8	5.27						
22	23.58	35.29	24.01	99.7	5.29						
23	23.19	35.26	24.10	99.7	5.32						
24	22.78	35.31	24.25	99.6	5.40						
25	22.22	35.33	24.43	99.4	5.52						
26	21.81	35.33	24.54	99.4	5.63						
27	21.05	35.21	24.66	99.2	5.76						
28	19.69	35.45	25.20	98.9	5.97						
29	18.76	35.21	25.26	98.5	6.15						
30	18.32	35.28	25.43	98.3	6.22						
31	18.29	35.30	25.45	98.4	6.20						
32	18.23	35.32	25.48	98.1	6.16						
33	18.19	35.33	25.50	98.5	6.12						
34	18.14	35.36	25.52	98.4	6.10						
35	18.05	35.41	25.59	98.4	6.08						
36	17.21	35.61	25.95	98.2	6.07						
37	14.23	34.84	26.03	97.7	6.40						
38	10.75	34.24	26.24	97.0	6.61						
39	10.49	34.17	26.24	96.4	6.43	5.89	0.9	<.10	3.9	3.5	
40	10.42	34.14	26.23	96.4	6.24						
41	10.51	34.17	26.24	96.5	6.14						
42	10.71	34.15	26.19	96.6	5.96						
43	10.77	34.14	26.17	96.7	5.87						
44	11.03	34.21	26.18	96.8	5.80						
45	11.12	34.25	26.19	97.0	5.76						
46	11.21	34.28	26.20	97.0	5.73						
47	11.38	34.34	26.21	97.1	5.70						
48	11.48	34.35	26.20	97.1	5.69						
49	11.70	34.45	26.24	97.2	5.68						
50	12.26	34.58	26.23	97.3	5.61						
60	9.91	34.37	26.50	98.3	5.02	4.96	0.9	.50	20.5	5.0	
70	11.58	34.93	26.63	98.6	4.69						
80	12.77	35.31	26.69	98.8	4.40	4.85	1.0	.90	22.5	4.5	
90	12.45	35.32	26.77	98.8	4.28						
98	12.18	35.39	26.88	98.5	4.10	3.80	0.9	.80	24.7	5.5	


KELEZ CRUISE XWCC-24 STATION 146 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

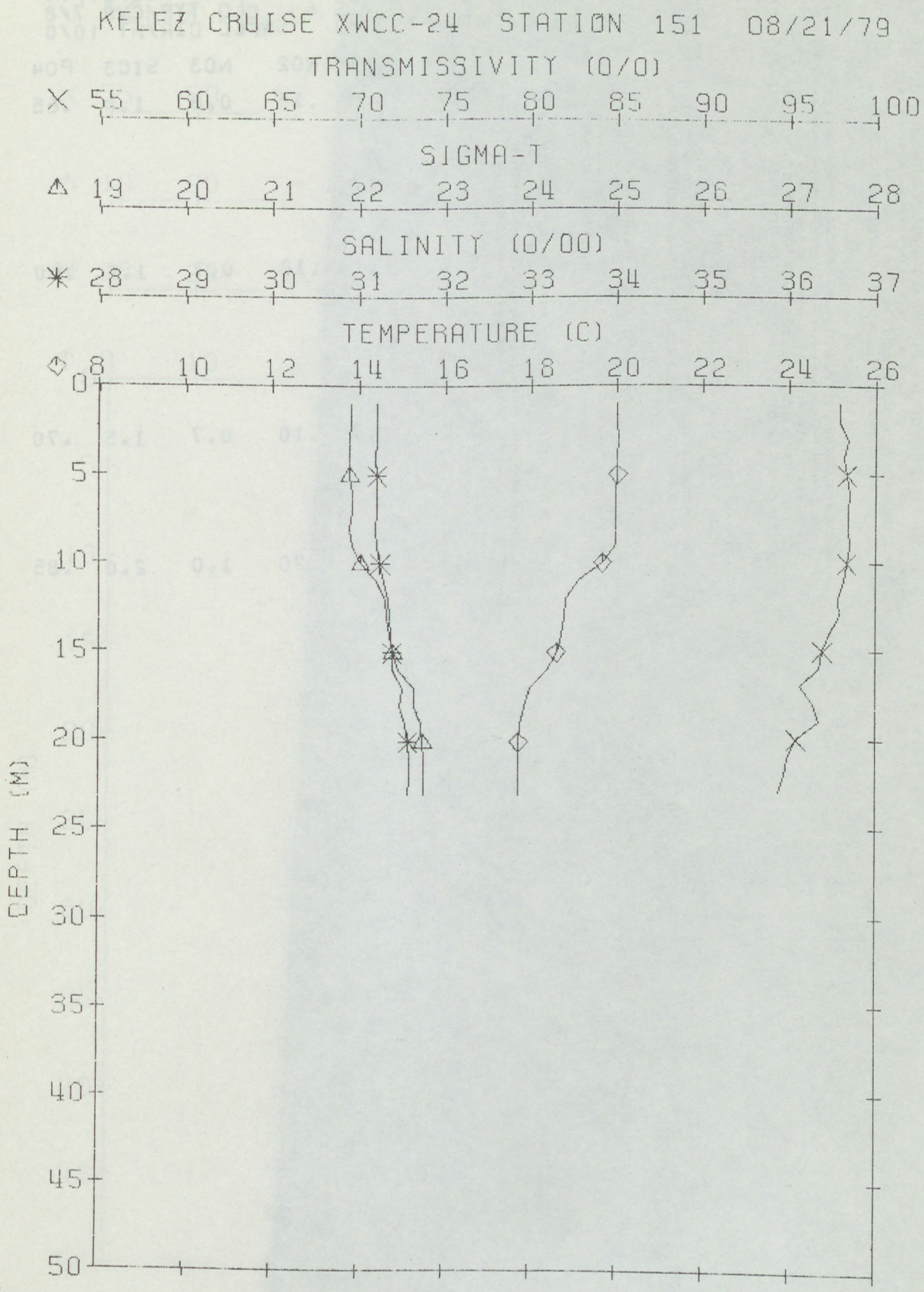
XWCC-24 STA.150 LAT 38 53.8N; LONG 74 42.0W GMT 15.5 08/21/79
DEPTH 016 AIR D/W 21.1/20.6 BARO 20.0 VIS 6 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 10/08 SEA DIR/HT 10/0 SWELL DIR/HT 08/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.62	31.16	21.70	99.0	5.18	5.13		.10	0.9	2.5	.85
2	20.62	31.16	21.70	99.0	5.18						
3	20.65	31.17	21.70	99.4	5.20						
4	20.65	31.17	21.70	99.0	5.19						
5	20.65	31.16	21.69	99.1	5.19						
6	20.61	31.17	21.71	99.2	5.19						
7	20.59	31.17	21.72	99.4	5.20						
8	20.56	31.18	21.73	99.4	5.21						
9	20.59	31.16	21.71	99.0	5.23						
10	20.56	31.17	21.73	99.2	5.23						
11	20.58	31.18	21.73	99.4	5.24						
12	20.53	31.19	21.75	99.6	5.25						
13	20.52	31.19	21.75	99.6	5.28						
14	20.53	31.19	21.75	99.5	5.29	4.91		<.10	0.7	1.5	.80
15	20.48	31.19	21.76	99.3	5.30						
16	20.30	31.20	21.81	98.8	5.30						
17	20.17	31.19	21.84	98.8	5.24						


KELEZ CRUISE XWCC-24 STATION 150 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

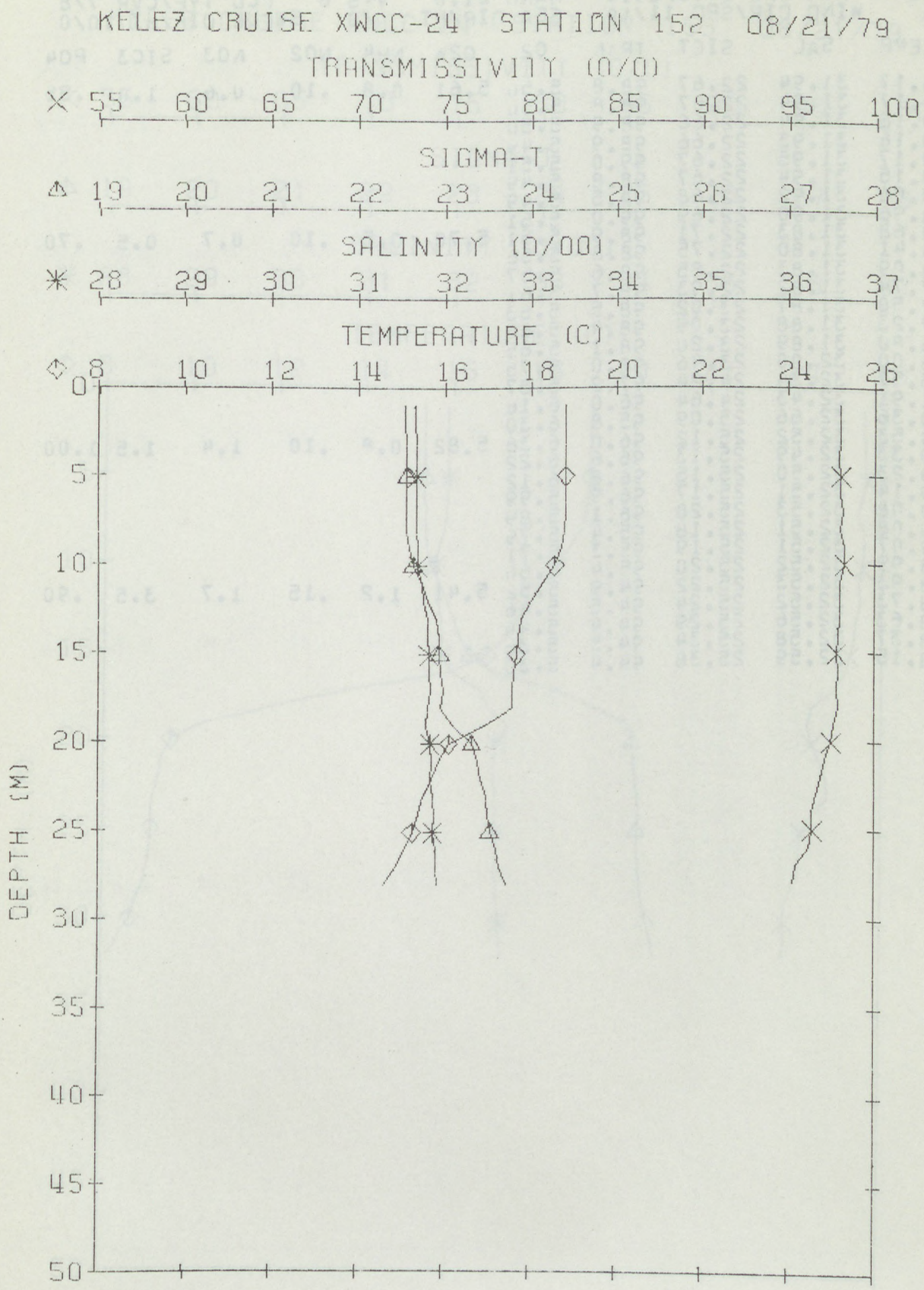
XWCC-24 STA.151 LAT 38 49.7N; LONG 74 33.8W GMT 16.8 08/21/79
DEPTH 025 AIR D/W 21.1/20.0 BARO 21.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 07/12 SEA DIR/HT 07/0 SWELL DIR/HT 10/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	19.98	31.20	21.90	98.0	5.47	5.50		<.10	0.7	0.5	.80
2	19.98	31.19	21.90	98.0	5.47						
3	20.01	31.20	21.89	98.4	5.49						
4	19.99	31.19	21.89	98.2	5.50						
5	20.00	31.20	21.89	98.4	5.50						
6	19.96	31.21	21.91	98.5	5.51						
7	19.95	31.20	21.90	98.4	5.50						
8	19.96	31.18	21.89	98.5	5.51						
9	19.96	31.20	21.91	98.5	5.48						
10	19.64	31.24	22.01	98.3	5.48	4.88	1.9	.15	0.9	1.5	.85
11	19.07	31.29	22.19	98.2	5.50						
12	18.80	31.33	22.29	97.9	5.40						
13	18.74	31.34	22.32	98.0	5.25						
14	18.69	31.36	22.35	97.3	5.10						
15	18.57	31.38	22.39	96.9	4.98						
16	18.35	31.39	22.45	96.8	4.90						
17	17.93	31.50	22.63	95.6	4.86						
18	17.83	31.47	22.64	96.5	4.80						
19	17.72	31.54	22.71	96.7	4.75						
20	17.69	31.56	22.74	95.5	4.72						
21	17.68	31.57	22.75	94.9	4.70						
22	17.68	31.58	22.75	94.8	4.69						
23	17.67	31.57	22.75	94.5	4.70	4.61	1.9	.20	0.8	2.0	.90


KELEZ CRUISE XWCC-24 STATION 151 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

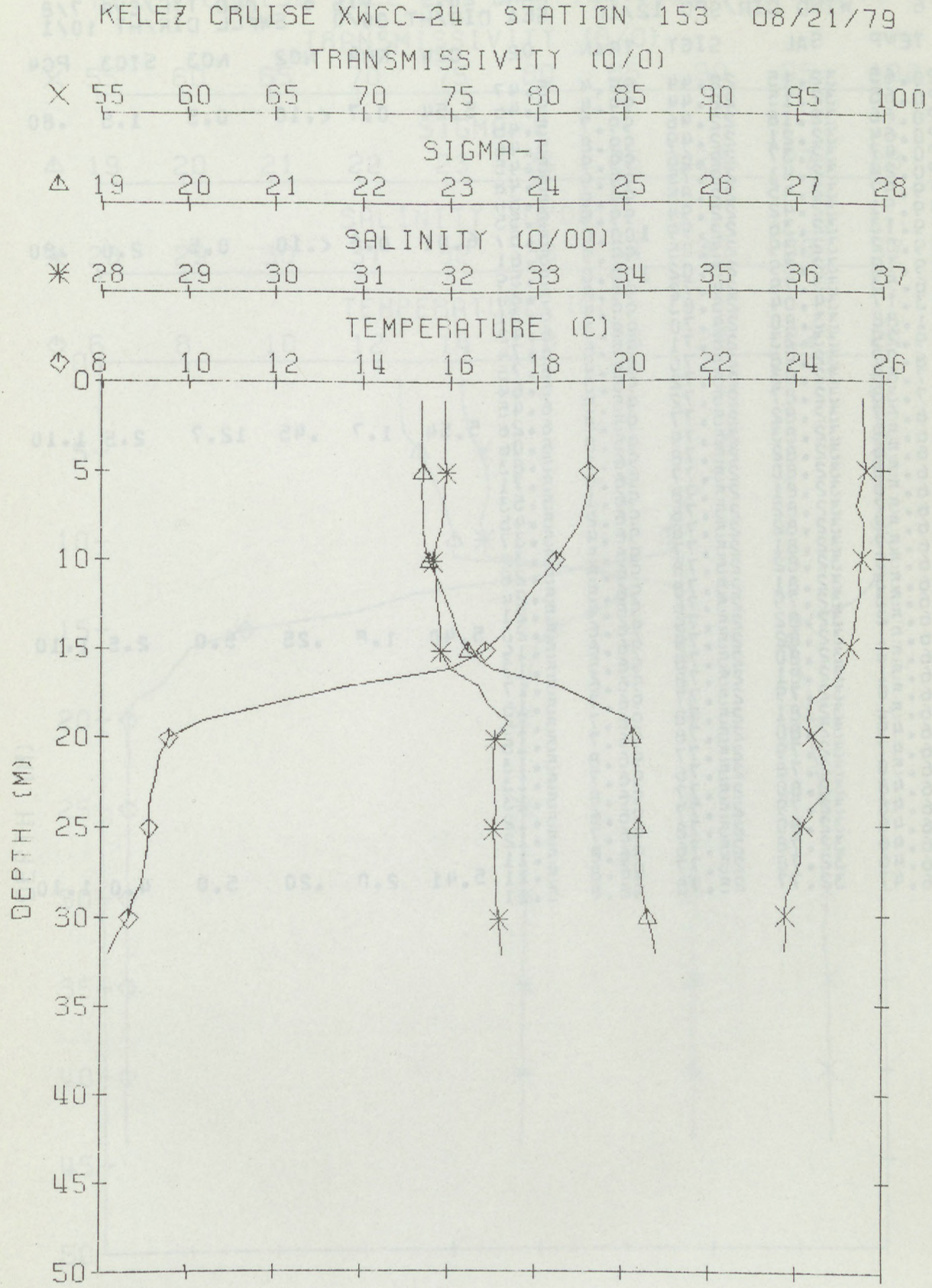
XWCC-24 STA.152 LAT 38 45.6N ; LONG 74 27.6W GMT 18.0 08/21/79
DEPTH 029 AIR D/W 21.1/20.0 BARO 21.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 09/10 SEA DIR/HT /0 SWELL DIR/HT 10/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	18.79	31.65	22.54	98.0	5.66	5.74	1.8	.15	0.8	1.0	.65
2	18.79	31.65	22.54	98.0	5.66						
3	18.79	31.67	22.55	98.0	5.65						
4	18.79	31.66	22.55	98.0	5.67						
5	18.78	31.67	22.56	98.0	5.66						
6	18.78	31.67	22.56	98.1	5.66						
7	18.77	31.66	22.55	98.2	5.65						
8	18.73	31.66	22.56	98.0	5.66						
9	18.68	31.67	22.59	98.2	5.66						
10	18.53	31.68	22.63	98.2	5.67	5.81	1.1	.10	0.7	1.5	.60
11	18.25	31.74	22.74	98.1	5.69						
12	17.98	31.74	22.81	98.1	5.71						
13	17.74	31.79	22.90	98.1	5.73						
14	17.67	31.80	22.93	97.9	5.71						
15	17.65	31.81	22.94	97.9	5.71						
16	17.59	31.82	22.96	97.9	5.70						
17	17.56	31.83	22.98	97.8	5.70						
18	17.54	31.80	22.96	97.9	5.69						
19	16.91	31.78	23.09	97.7	5.70	5.62	1.7	.10	0.7	1.5	.70
20	16.08	31.83	23.32	97.5	5.76						
21	15.87	31.84	23.37	97.2	5.67						
22	15.68	31.84	23.41	96.9	5.56						
23	15.48	31.86	23.48	96.6	5.42						
24	15.38	31.88	23.51	96.4	5.33						
25	15.24	31.86	23.53	96.5	5.25						
26	15.04	31.89	23.60	96.2	5.20	4.95	1.9	.20	1.0	2.0	.85
27	14.84	31.90	23.64	95.5	5.07						
28	14.57	31.92	23.71	95.3	5.03						


KELEZ CRUISE XWCC-24 STATION 152 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

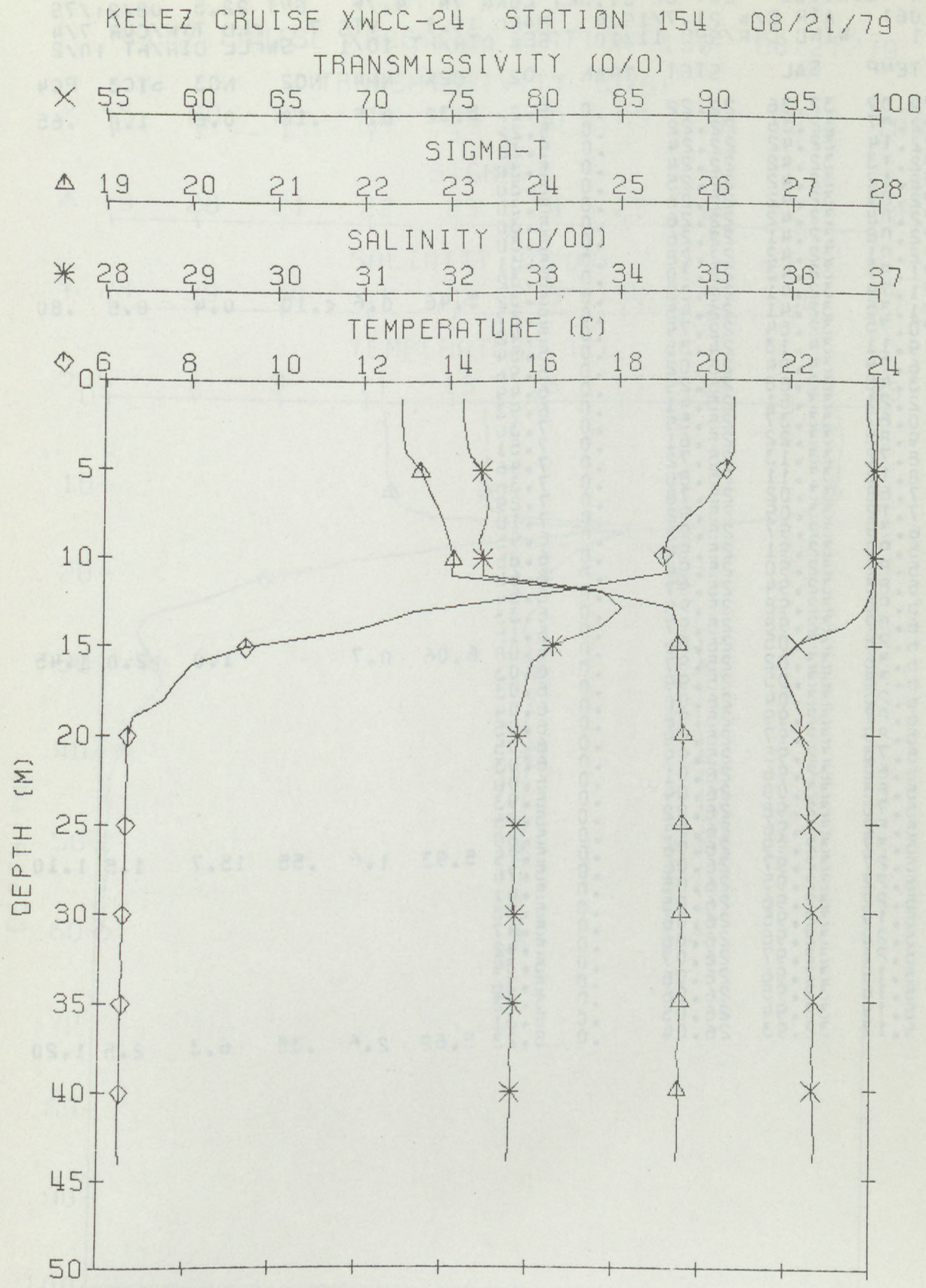
XWCC-24 STA.153 LAT 38 40.7N; LONG 74 19.7W GMT 19.4 08/21/79
DEPTH 034 AIR D/W 20.0/19.4 BARO 21.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 11/10 SEA DIR/HT /0 SWELL DIR/HT 10/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	19.17	31.94	22.67	98.8	5.50	5.61	0.8	.10	0.6	1.0	.55
2	19.17	31.94	22.67	98.8	5.50						
3	19.18	31.94	22.66	98.9	5.50						
4	19.16	31.93	22.66	98.9	5.49						
5	19.17	31.95	22.67	99.0	5.51						
6	19.15	31.94	22.67	98.8	5.49						
7	19.06	31.92	22.68	98.5	5.49						
8	18.96	31.90	22.69	99.0	5.51						
9	18.68	31.83	22.71	98.9	5.51	5.70	0.5	.10	0.7	0.5	.70
10	18.41	31.80	22.75	98.8	5.56						
11	18.09	31.83	22.85	98.6	5.57						
12	17.74	31.82	22.93	98.7	5.61						
13	17.50	31.87	23.02	98.6	5.63						
14	17.23	31.88	23.09	98.4	5.65						
15	16.80	31.89	23.20	98.1	5.65						
16	16.00	32.00	23.46	98.0	5.75						
17	13.57	32.34	24.24	97.2	5.87						
18	11.91	32.43	24.64	96.0	6.16						
19	10.36	32.66	25.09	95.8	6.30						
20	9.53	32.52	25.12	96.0	6.38	5.82	0.8	.10	1.4	1.5	1.00
21	9.33	32.49	25.13	96.6	6.22						
22	9.23	32.50	25.15	96.8	6.12						
23	9.14	32.51	25.17	96.9	5.99						
24	9.08	32.53	25.20	96.1	5.89						
25	9.08	32.51	25.18	95.4	5.79						
26	9.07	32.51	25.19	95.3	5.71						
27	8.99	32.52	25.20	95.4	5.60						
28	8.93	32.53	25.22	94.9	5.52	5.41	1.2	.15	1.7	3.5	.90
29	8.73	32.52	25.24	94.5	5.46						
30	8.63	32.56	25.29	94.4	5.40						
31	8.37	32.58	25.34	94.5	5.36						
32	8.15	32.59	25.38	94.4	5.30						


KELEZ CRUISE XWCC-24 STATION 153 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

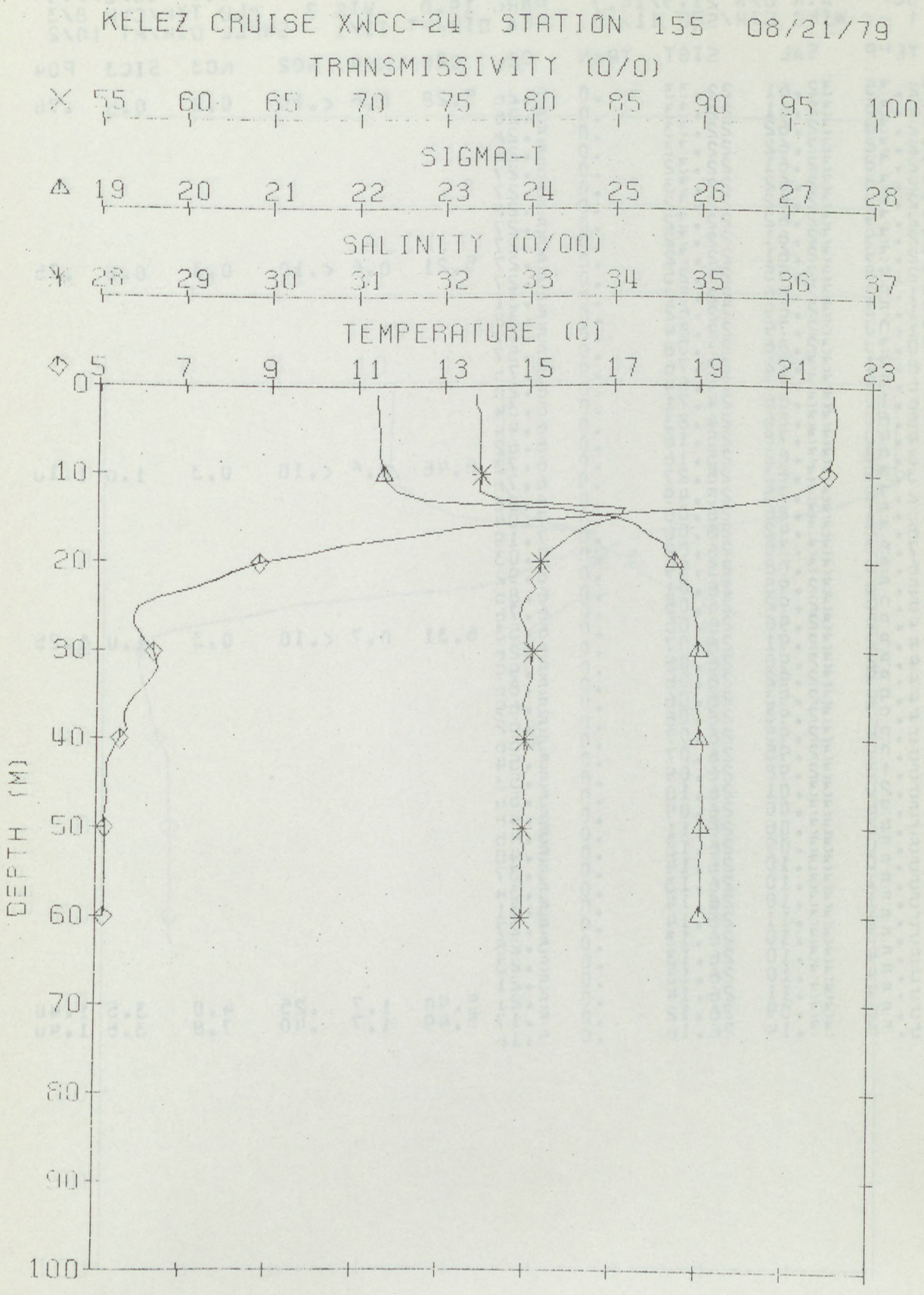
XWCC-24 STA.154 LAT 38 37.5N ; LONG 74 12.8W GMT 20.8 08/21/79
DEPTH 045 AIR D/W 20.0/19.4 BARO 20.5 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 12/10 SEA DIR/HT 00/0 SWELL DIR/HT 10/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	20.65	32.15	22.44	99.4	5.47						
2	20.65	32.15	22.44	99.4	5.46	5.54	0.7	<.10	0.5	1.5	.80
3	20.66	32.18	22.46	99.7	5.45						
4	20.64	32.21	22.49	99.8	5.46						
5	20.47	32.37	22.66	99.9	5.45						
6	20.24	32.41	22.75	99.9	5.48						
7	19.97	32.45	22.85	99.9	5.50						
8	19.51	32.42	22.94	99.9	5.55						
9	19.13	32.36	22.99	100.0	5.57	6.01	0.6	<.10	0.5	2.0	.80
10	19.02	32.39	23.05	99.9	5.61						
11	19.12	32.39	23.02	100.0	5.59						
12	16.53	33.79	24.72	99.8	5.80						
13	13.17	34.04	25.63	99.4	6.31						
14	11.88	33.80	25.70	98.3	6.42						
15	9.29	33.23	25.71	95.6	6.74						
16	8.07	32.98	25.70	94.4	6.75						
17	7.68	32.93	25.72	95.0	6.64						
18	7.38	32.87	25.72	95.5	6.45						
19	6.67	32.82	25.77	95.8	6.28	5.54	1.7	.45	12.7	2.5	1.10
20	6.59	32.83	25.79	95.8	6.06						
21	6.56	32.82	25.78	96.1	5.83						
22	6.58	32.80	25.77	96.0	5.71						
23	6.56	32.81	25.78	96.1	5.53						
24	6.57	32.82	25.78	96.2	5.45						
25	6.57	32.82	25.78	96.4	5.37						
26	6.57	32.81	25.77	96.5	5.32						
27	6.55	32.82	25.78	96.5	5.28						
28	6.53	32.81	25.78	96.5	5.24						
29	6.53	32.79	25.76	96.4	5.21						
30	6.52	32.82	25.79	96.6	5.20	5.40	1.8	.25	5.0	2.5	1.10
31	6.51	32.82	25.79	96.6	5.19						
32	6.50	32.80	25.78	96.5	5.17						
33	6.51	32.81	25.78	96.6	5.17						
34	6.50	32.79	25.77	96.7	5.15						
35	6.51	32.81	25.78	96.7	5.15						
36	6.49	32.80	25.78	96.7	5.15						
37	6.47	32.79	25.77	96.8	5.13						
38	6.50	32.78	25.76	96.7	5.13						
39	6.48	32.80	25.77	96.8	5.13						
40	6.48	32.79	25.77	96.6	5.12						
41	6.46	32.80	25.78	96.7	5.12						
42	6.46	32.78	25.76	96.8	5.11						
43	6.46	32.78	25.77	96.8	5.11	5.41	2.0	.20	5.0	4.0	1.10
44	6.47	32.77	25.75	96.8	5.11						


KELEZ CRUISE XWCC-24 STATION 154 08/21/79
TRANSMISSIVITY (O/O)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (O/OO)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
6 8 10 12 14 16 18 20 22 24
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

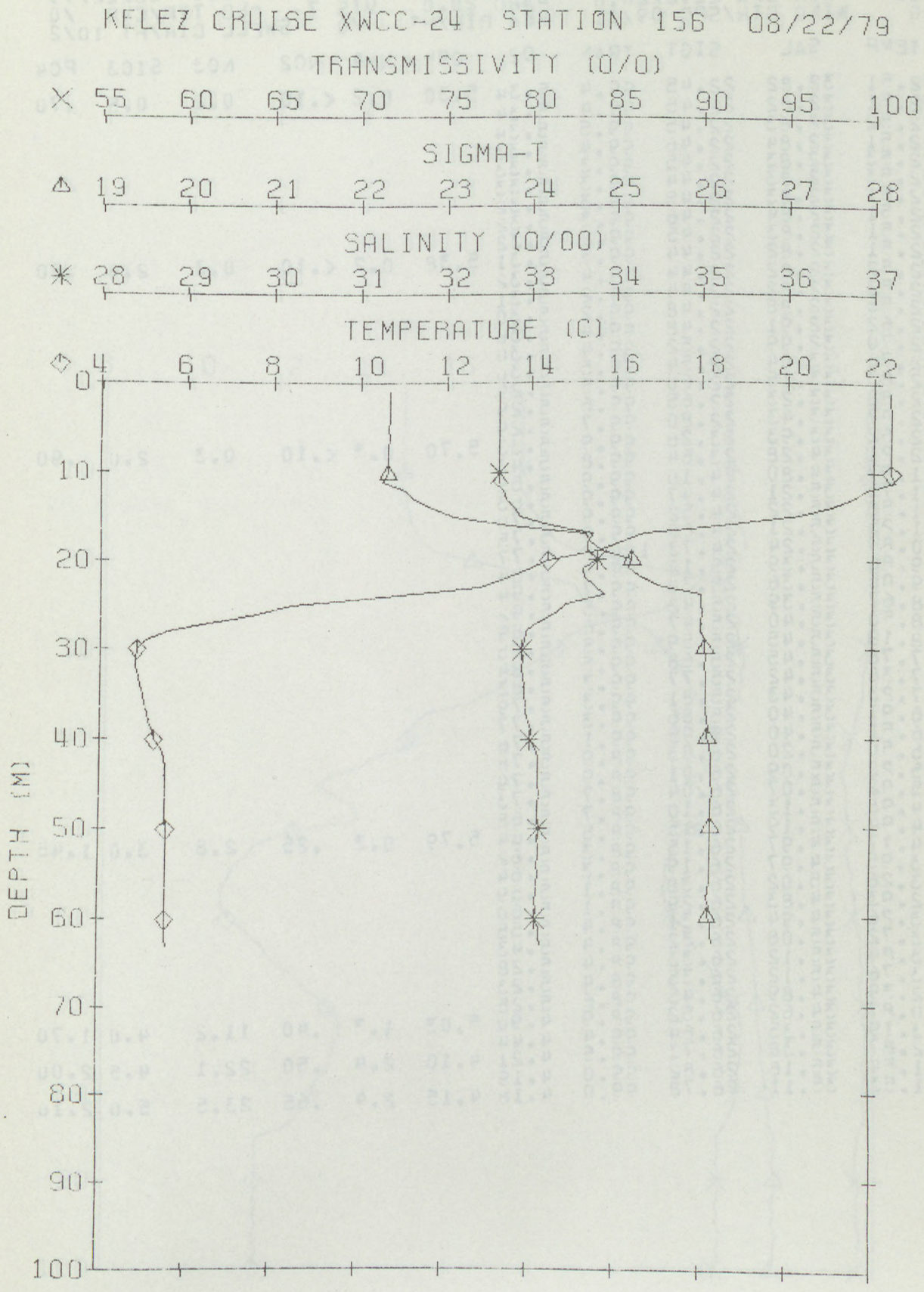
XWCC-24 STA.155 LAT 38 31.3N; LONG 74 4.7W GMT 22.5 08/21/79
DEPTH 061 AIR D/W 21.7/19.4 BARO 19.1 VIS 7 CLD TYP/CVR 7/4
WETHR 1 WIND DIR/SPD 11/10 SEA DIR/HT 10/1 SWELL DIR/HT 10/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	22.07	32.36	22.22	.0	5.22	5.32	0.5	.10	0.6	1.0	.65
2	22.07	32.36	22.22	.0	5.22						
3	22.14	32.42	22.24	.0	5.30						
4	22.13	32.42	22.24	.0	5.30						
5	22.12	32.42	22.25	.0	5.30						
6	22.09	32.42	22.26	.0	5.30						
7	22.08	32.42	22.26	.0	5.30						
8	22.08	32.41	22.26	.0	5.30						
9	22.01	32.42	22.28	.0	5.31						
10	21.97	32.43	22.30	.0	5.32						
11	21.74	32.41	22.35	.0	5.32						
12	21.35	32.41	22.45	.0	5.37	5.46	0.6	<.10	0.4	0.5	.80
13	20.75	32.64	22.79	.0	5.42						
14	19.11	34.13	24.35	.0	5.54						
15	16.04	34.04	25.02	.0	5.96						
16	13.48	33.68	25.29	.0	6.49						
17	12.21	33.51	25.41	.0	6.93						
18	10.67	33.37	25.59	.0	7.30						
19	9.85	33.22	25.61	.0	7.51						
20	8.72	33.13	25.72	.0	7.46						
21	8.12	33.11	25.80	.0	7.36						
22	7.68	33.02	25.78	.0	7.29						
23	7.12	33.09	25.92	.0	7.10						
24	6.39	32.97	25.92	.0	6.95						
25	5.90	32.91	25.94	.0	6.85						
26	5.82	32.90	25.94	.0	6.68						
27	5.83	32.94	25.97	.0	6.54						
28	5.96	32.98	25.99	.0	6.35						
29	6.07	32.98	25.97	.0	6.15						
30	6.28	33.05	26.00	.0	6.08	6.06	0.7		1.0	2.0	1.45
31	6.36	33.02	25.97	.0	6.03						
32	6.38	33.05	25.99	.0	6.03						
33	6.55	33.04	26.00	.0	6.04						
34	6.07	32.99	25.98	.0	6.05						
35	5.99	32.97	25.99	.0	6.05						
36	5.73	32.95	25.99	.0	6.03						
37	5.62	32.96	26.01	.0	6.00						
38	5.63	33.00	26.04	.0	5.93						
39	5.70	32.98	26.02	.0	5.85						
40	5.52	32.96	26.03	.0	5.80						
41	5.37	32.99	26.06	.0	5.79	5.93	1.6	.55	15.7	1.5	1.10
42	5.27	32.97	26.06	.0	5.70						
43	5.22	32.95	26.05	.0	5.61						
44	5.22	32.96	26.05	.0	5.53						
45	5.19	32.95	26.06	.0	5.47						
46	5.22	32.96	26.06	.0	5.42						
47	5.21	32.97	26.07	.0	5.39						
48	5.19	32.96	26.06	.0	5.36						
49	5.16	32.95	26.06	.0	5.33						
50	5.19	32.94	26.05	.0	5.31						
60	5.17	32.93	26.04	.0	5.23	5.62	2.6	.35	6.3	2.5	1.20


KELEZ CRUISE XWCC-24 STATION 155 08/21/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
5 7 9 11 13 15 17 19 21 23
0 10 20 30 40 50 60 70 80 90 100
DEPTH (M)

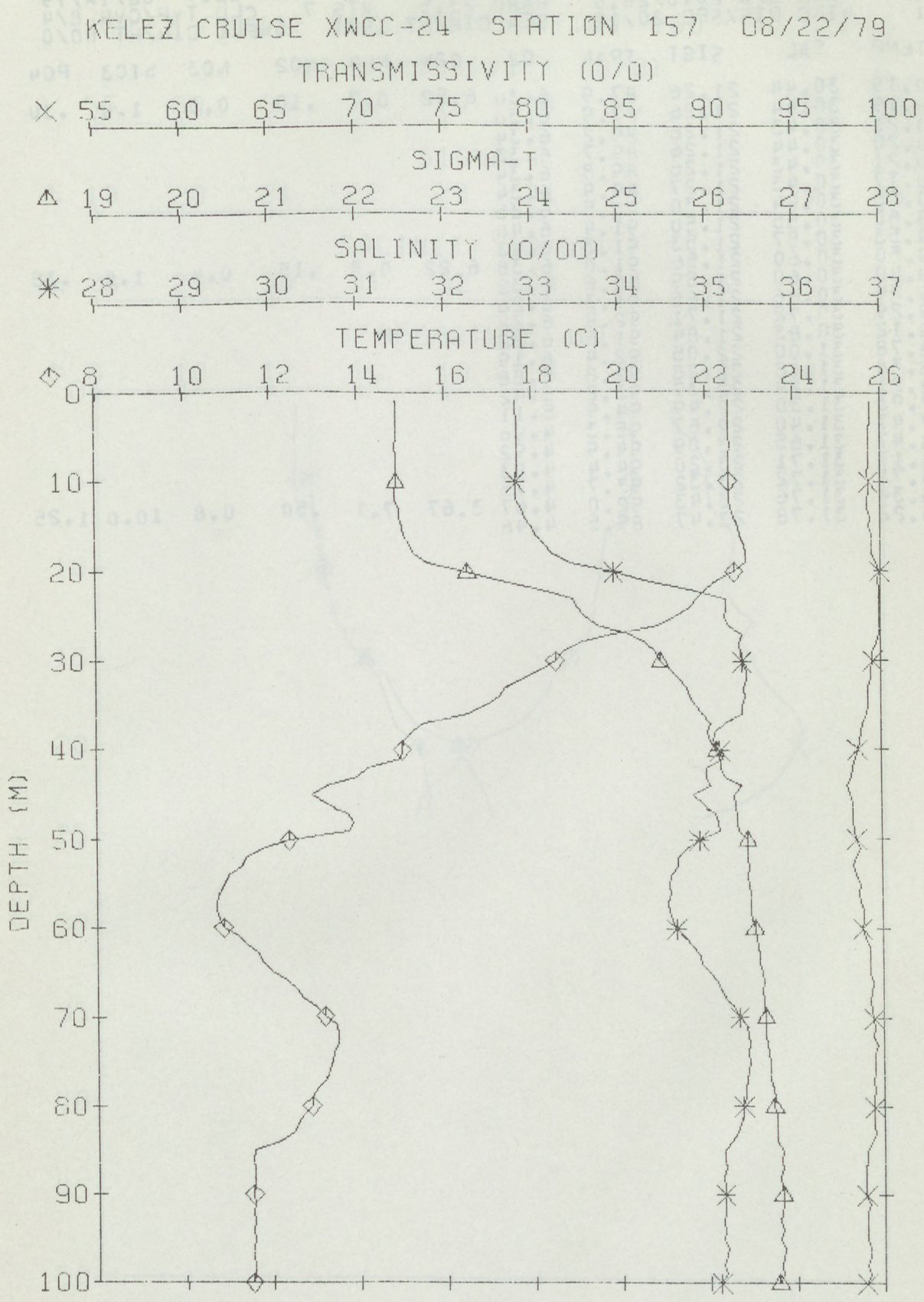
XWCC-24 STA.156 LAT 38 25.0N; LONG 73 54.0W GMT 00.5 08/22/79
DEPTH 062 AIR D/W 21.9/19.7 BARO 19.0 VIS 7 CLD TYP/CVR 8/3
WETHR 1 WIND DIR/SPD 11/10 SEA DIR/HT 11/1 SWELL DIR/HT 10/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	22.35	32.61	22.33	.0	5.26	5.28	0.6	<.10	0.2	0.5	.70
2	22.35	32.61	22.33	.0	5.26						
3	22.38	32.62	22.35	.0	5.28						
4	22.38	32.62	22.35	.0	5.28						
5	22.38	32.61	22.32	.0	5.27						
6	22.38	32.62	22.33	.0	5.27						
7	22.40	32.62	22.33	.0	5.28						
8	22.39	32.62	22.32	.0	5.27						
9	22.39	32.61	22.32	.0	5.27						
10	22.39	32.61	22.32	.0	5.27	5.21	0.6	<.10	0.3	0.5	.75
11	22.58	32.55	22.25	.0	5.27						
12	21.82	32.66	22.52	.0	5.31						
13	21.53	32.69	22.62	.0	5.38						
14	21.00	32.79	22.84	.0	5.47						
15	20.30	32.86	23.08	.0	5.57						
16	18.71	33.22	23.76	.0	5.75						
17	16.64	33.73	24.64	.0	6.20						
18	16.10	33.66	24.71	.0	6.34						
19	15.60	33.66	24.83	.0	6.44						
20	14.40	33.78	25.18	.0	6.62						
21	13.93	33.62	25.16	.0	6.73	6.46	0.6	<.10	0.3	1.0	1.10
22	13.39	33.63	25.27	.0	6.78						
23	12.78	33.75	25.49	.0	6.86						
24	10.51	33.86	26.00	.0	7.04						
25	8.38	33.42	26.00	.0	7.19						
26	7.63	33.30	26.02	.0	7.03						
27	6.50	33.08	25.99	.0	6.92						
28	5.86	32.95	26.01	.0	6.85						
29	5.25	32.92	26.05	.0	6.78						
30	4.85	32.90	26.05	.0	6.53	6.31	0.7	<.10	0.3	1.0	1.25
31	4.82	32.91	26.07	.0	6.26						
32	4.80	32.90	26.05	.0	6.09						
33	4.80	32.92	26.06	.0	5.86						
34	4.92	32.93	26.06	.0	5.69						
35	4.97	32.93	26.06	.0	5.62						
36	5.04	32.95	26.07	.0	5.58						
37	5.09	32.95	26.07	.0	5.54						
38	5.13	32.98	26.09	.0	5.53						
39	5.20	33.01	26.10	.0	5.50						
40	5.26	33.00	26.09	.0	5.48						
41	5.43	33.06	26.11	.0	5.45						
42	5.50	33.09	26.13	.0	5.40						
43	5.50	33.10	26.14	.0	5.37						
44	5.51	33.10	26.13	.0	5.34						
45	5.51	33.10	26.14	.0	5.31						
46	5.51	33.11	26.14	.0	5.27						
47	5.53	33.10	26.13	.0	5.25						
48	5.54	33.10	26.13	.0	5.23						
49	5.54	33.10	26.13	.0	5.21						
50	5.54	33.11	26.14	.0	5.21	5.90	1.7	.25	4.0	3.5	1.40
60	5.56	33.09	26.12	.0	5.17	5.49	1.7	.40	7.8	3.5	1.40
63	5.58	33.14	26.16	.0	5.16						


KELEZ CRUISE XWCC-24 STATION 156 08/22/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
4 6 8 10 12 14 16 18 20 22
0
10
20
30
40
50
60
70
80
90
100
DEPTH (M)

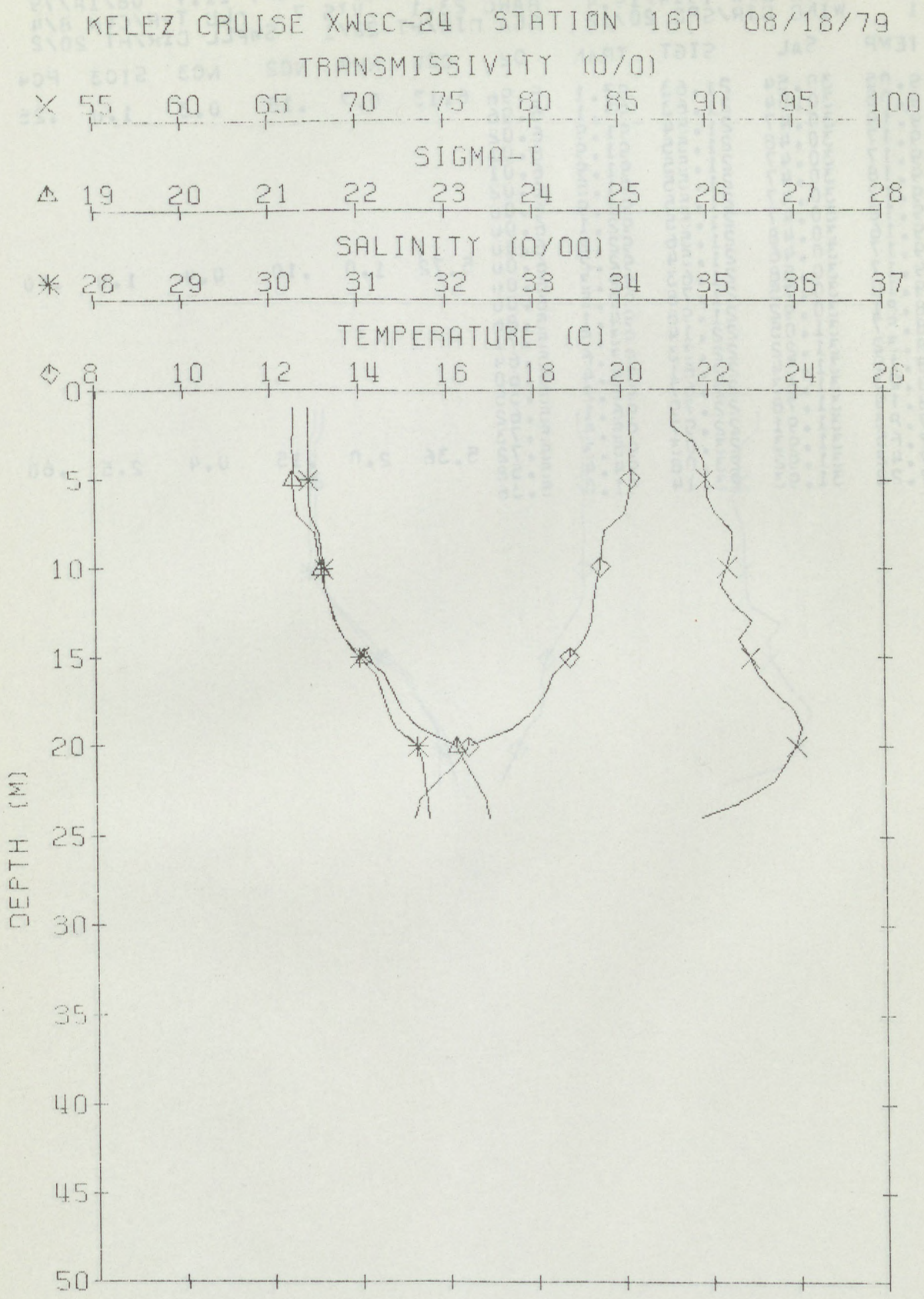
XWCC-24 SIA.157 LAT 38 19.0N ; LONG 73 44.0W GMT 02.5 08/22/79
DEPTH 108 AIR D/W 22.2/20.0 BARO 20.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 09/11 SEA DIR/HT /0 SWELL DIR/HT 10/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2%	NH4	NO2	NO3	SIO3	PO4
1	22.51	32.82	22.45	99.4	5.34	5.30	0.2	<.10	0.2	0.5	.70
2	22.51	32.82	22.45	99.4	5.34						
3	22.52	32.83	22.45	99.5	5.34						
4	22.51	32.84	22.46	99.4	5.33						
5	22.53	32.83	22.45	99.3	5.33						
6	22.53	32.83	22.44	99.3	5.33						
7	22.51	32.83	22.45	99.3	5.32						
8	22.51	32.84	22.46	99.3	5.32						
9	22.51	32.83	22.45	99.2	5.32						
10	22.51	32.82	22.44	99.3	5.31	5.38	0.2	<.10	0.3	2.0	.80
11	22.52	32.82	22.44	99.4	5.32						
12	22.52	32.82	22.44	99.2	5.31						
13	22.56	32.88	22.48	99.4	5.30						
14	22.62	32.91	22.52	99.4	5.30						
15	22.70	32.99	22.54	99.5	5.30						
16	22.76	33.04	22.60	99.5	5.29						
17	22.83	33.15	22.65	99.6	5.29						
18	22.88	33.23	22.70	99.7	5.29						
19	22.87	33.43	22.80	99.7	5.29						
20	22.62	33.93	23.26	99.9	5.33	5.70	0.3	<.10	0.3	2.0	.90
21	22.21	34.28	23.64	99.8	5.43						
22	21.97	34.80	24.10	99.9	5.55						
23	21.75	35.21	24.47	99.9	5.63						
24	21.58	35.22	24.52	99.9	5.70						
25	21.25	35.21	24.60	99.9	5.75						
26	20.89	35.24	24.73	100.0	5.77						
27	19.86	35.39	25.12	99.7	5.84						
28	19.05	35.36	25.30	99.5	5.94						
29	18.67	35.39	25.42	99.6	5.92						
30	18.50	35.40	25.47	99.6	5.89						
31	18.19	35.45	25.59	99.5	5.85						
32	17.78	35.45	25.68	99.5	5.84						
33	17.36	35.42	25.77	99.3	5.83						
34	17.23	35.43	25.81	99.3	5.79						
35	16.91	35.40	25.86	99.3	5.77						
36	16.51	35.40	25.95	99.1	5.76						
37	15.50	35.20	26.03	98.9	5.78						
38	15.22	35.09	26.01	98.9	5.79						
39	15.02	35.07	26.04	98.7	5.73						
40	14.88	35.13	26.10	98.7	5.68						
41	14.94	35.19	26.15	98.5	5.64	5.79	0.3	.25	2.8	3.0	1.45
42	14.17	34.97	26.15	98.3	5.62						
43	13.95	34.97	26.19	98.3	5.64						
44	13.26	35.02	26.38	98.1	5.59						
45	12.93	34.83	26.29	98.1	5.60						
46	13.26	34.94	26.31	98.4	5.55						
47	13.72	35.08	26.32	98.4	5.43						
48	13.84	35.12	26.33	98.4	5.28						
49	13.76	35.12	26.35	98.4	5.23						
50	12.79	34.89	26.45	98.6	5.25						
60	10.87	34.62	26.52	98.9	4.90	5.03	1.3	.40	11.2	4.0	1.70
70	13.19	35.35	26.64	99.4	4.44						
80	12.87	35.38	26.73	99.5	4.21	4.10	2.4	.50	22.1	4.5	2.00
90	11.54	35.16	26.82	99.0	4.19						
100	11.53	35.11	26.78	99.0	4.18	4.15	2.4	.65	23.5	5.0	2.10


KELEZ CRUISE XWCC-24 STATION 157 08/22/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

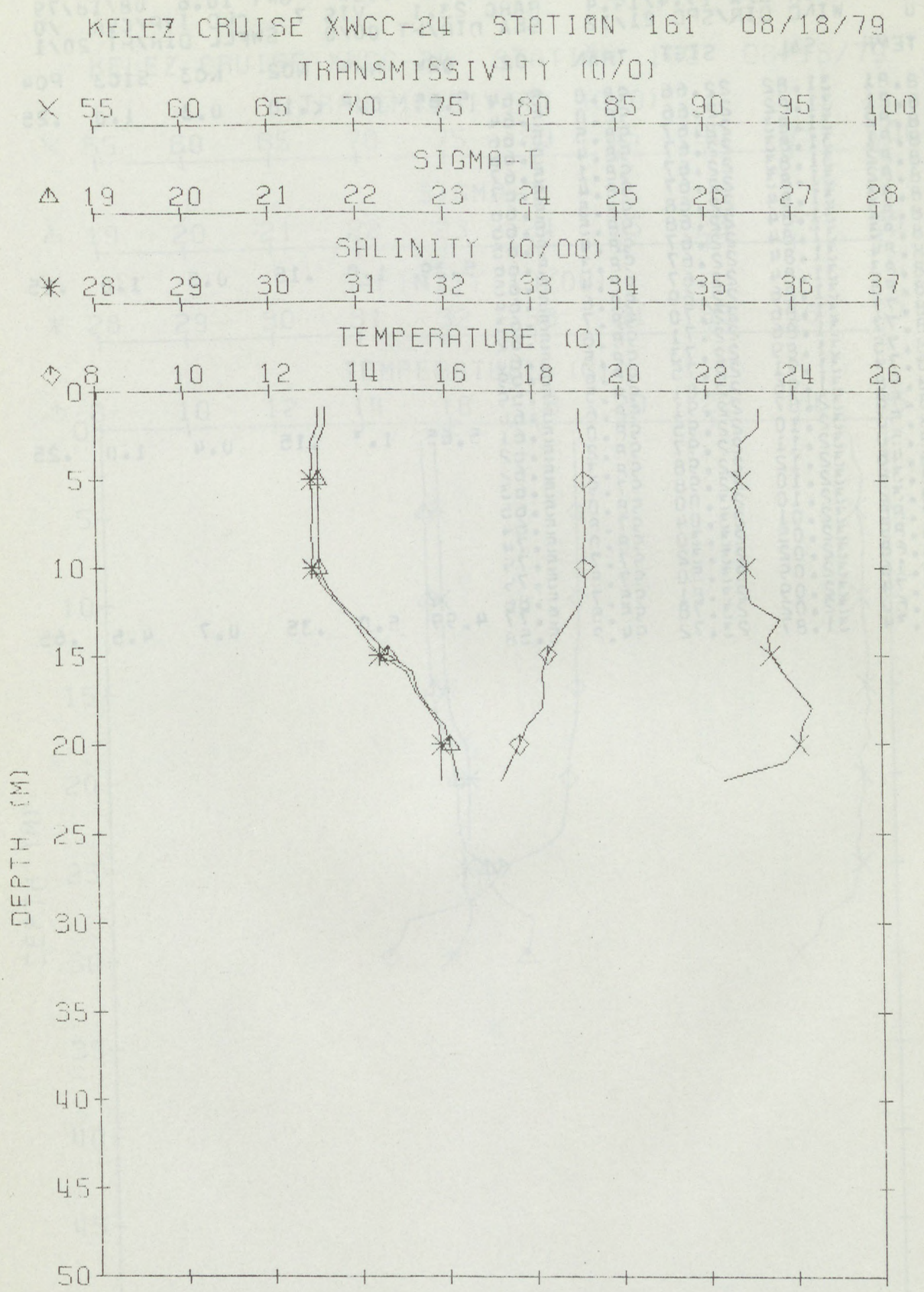
XWCC-24 STA.160 LAT 40 5.8N ; LONG 73 59.5W GMT 12.7 08/1A/79
DEPTH 024 AIR D/W 20.0/20.0 BARO 23.5 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 20/12 SEA DIR/HT 19/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	20.19	30.44	21.26	87.9	6.30	6.52	0.7	.10	0.3	1.0	.30
2	20.19	30.44	21.26	87.9	6.30						
3	20.21	30.43	21.26	88.2	6.34						
4	20.20	30.44	21.26	88.7	6.33						
5	20.21	30.43	21.26	88.8	6.34						
6	20.17	30.43	21.27	88.9	6.34						
7	20.05	30.44	21.30	89.5	6.35						
8	19.60	30.55	21.50	91.4	6.40						
9	19.53	30.57	21.53	91.6	6.43						
10	19.50	30.60	21.56	91.8	6.38	6.22	0.8	.15	0.4	1.5	.35
11	19.40	30.60	21.59	90.6	6.32						
12	19.34	30.66	21.65	91.3	6.26						
13	19.29	30.72	21.71	92.4	6.22						
14	19.12	30.83	21.84	91.6	6.22						
15	18.78	31.00	22.05	92.4	6.19						
16	18.38	31.18	22.28	92.8	5.88						
17	18.21	31.24	22.37	93.8	5.42						
18	17.83	31.30	22.49	94.3	5.11						
19	17.47	31.40	22.67	95.3	4.96						
20	16.47	31.65	23.09	94.9	4.92						
21	16.17	31.71	23.20	94.4	4.83						
22	15.71	31.72	23.32	93.7	4.75						
23	15.34	31.76	23.43	92.0	4.67	3.67	7.1	.50	0.8	10.0	1.25
24	15.22	31.78	23.47	89.5	4.48						


KELEZ CRUISE XWCC-24 STATION 160 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

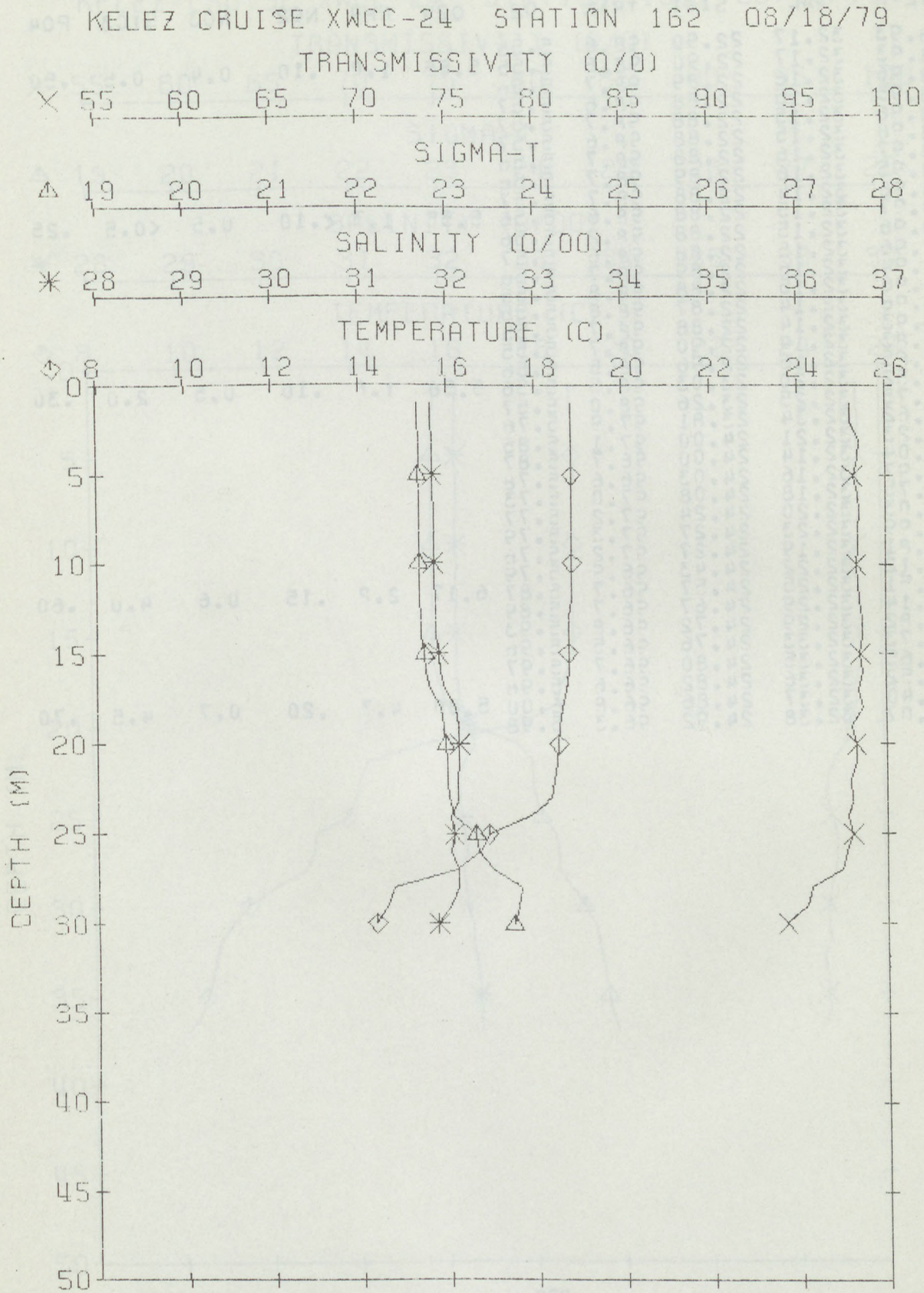
XWCC-24 STA.161 LAT 40 5.0N ; LONG 73 54.8W GMT 11.7 08/18/79
DEPTH 021 AIR D/W 19.4/19.4 BARO 23.1 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 20/12 SEA DIR/HT 22/1 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.05	30.54	21.63	93.1	5.96	6.13	0.7	.15	0.3	1.0	.25
2	19.05	30.54	21.63	93.1	5.96						
3	19.19	30.47	21.54	91.9	6.02						
4	19.17	30.48	21.55	91.9	6.01						
5	19.17	30.47	21.55	91.9	6.01						
6	19.18	30.47	21.55	91.5	6.02						
7	19.17	30.47	21.55	91.9	6.00						
8	19.18	30.47	21.55	92.1	6.00						
9	19.16	30.48	21.56	92.2	6.00						
10	19.17	30.46	21.54	92.2	6.00	5.72	1.0	.10	0.4	1.0	.40
11	19.17	30.58	21.63	92.3	6.00						
12	19.10	30.75	21.78	92.5	6.00						
13	18.81	30.92	21.98	94.1	5.86						
14	18.57	31.05	22.14	93.5	5.71						
15	18.32	31.22	22.33	93.6	5.64						
16	18.19	31.54	22.61	94.4	5.60						
17	18.23	31.63	22.67	95.2	5.55						
18	18.19	31.78	22.79	96.1	5.62						
19	17.83	31.91	22.97	95.5	5.73						
20	17.65	31.93	23.03	95.3	5.72	5.36	2.0	.15	0.4	2.5	.60
21	17.42	31.92	23.08	94.4	5.58						
22	17.22	31.93	23.14	91.0	5.36						


KELEZ CRUISE XWCC-24 STATION 161 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

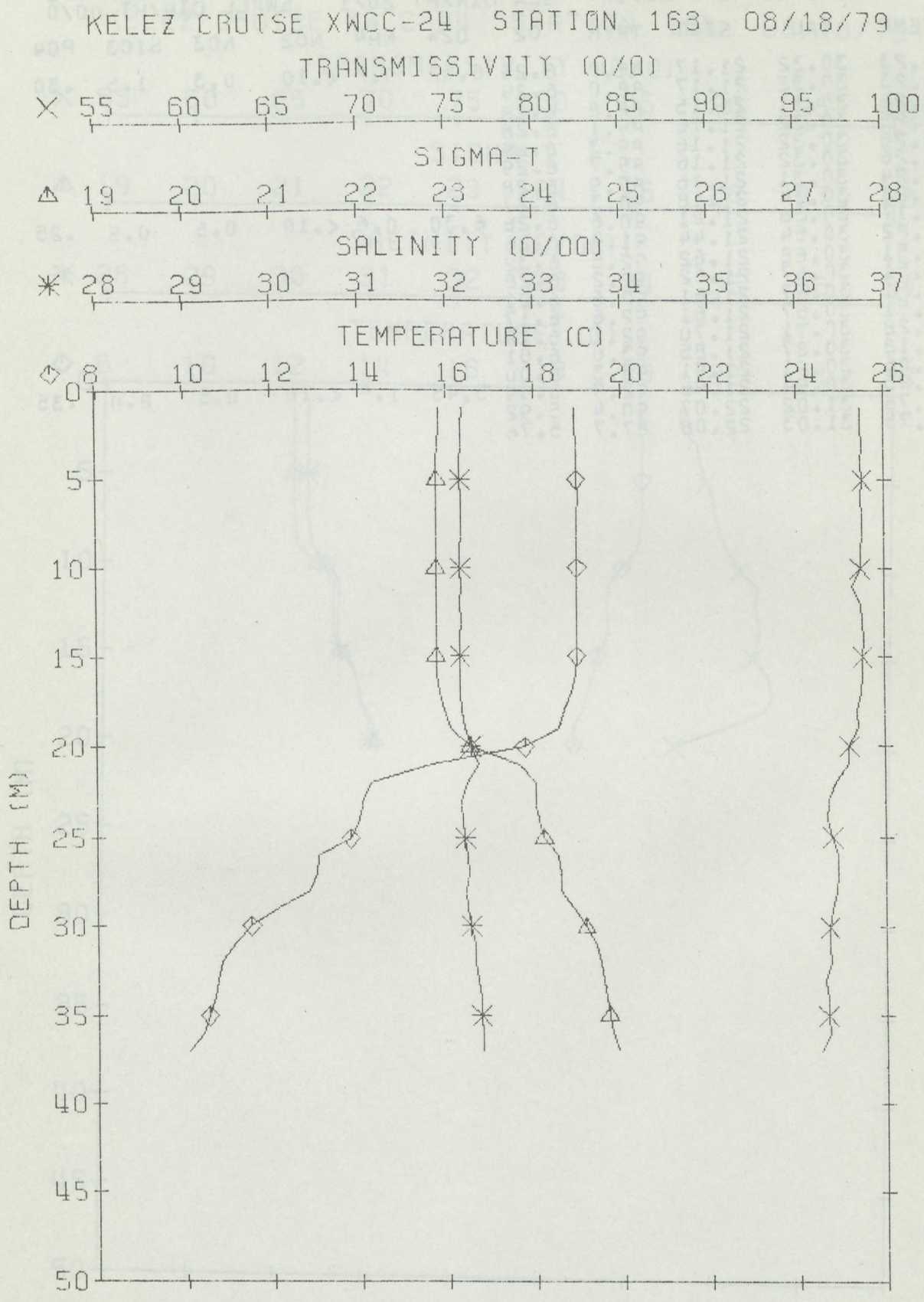
XWCC-24 STA.162 LAT 40 5.0N ; LONG 73 47.0W GMT 10.6 08/16/79
DEPTH 030 AIR D/W 19.4/19.4 BARO 23.1 VIS 7 CLD TYP/CVR /0
WETR 0 WIND DIR/SPD 21/12 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.81	31.82	22.66	98.0	5.64	5.65	0.8	<.10	0.3	1.0	.25
2	18.81	31.82	22.66	98.0	5.64						
3	18.82	31.83	22.67	98.5	5.66						
4	18.81	31.83	22.67	98.4	5.66						
5	18.82	31.83	22.67	98.1	5.67						
6	18.82	31.83	22.67	98.4	5.67						
7	18.83	31.84	22.68	98.5	5.66						
8	18.82	31.84	22.68	98.5	5.65						
9	18.83	31.84	22.67	98.4	5.65						
10	18.84	31.84	22.67	98.3	5.66	5.39	1.0	.15	0.5	1.0	.25
11	18.83	31.84	22.67	98.4	5.65						
12	18.83	31.86	22.69	98.6	5.64						
13	18.77	31.86	22.70	98.7	5.63						
14	18.77	31.86	22.71	98.6	5.62						
15	18.75	31.89	22.73	98.6	5.60						
16	18.74	31.91	22.75	98.6	5.59						
17	18.68	31.96	22.81	98.5	5.59						
18	18.58	32.07	22.91	98.6	5.60						
19	18.53	32.10	22.95	98.0	5.61	5.65	1.3	.15	0.4	1.0	.25
20	18.50	32.11	22.97	98.2	5.62						
21	18.46	32.12	22.98	97.9	5.62						
22	18.38	32.10	23.00	98.0	5.63						
23	18.32	32.10	23.04	97.8	5.65						
24	17.85	32.01	23.30	98.0	5.64						
25	16.89	32.05	23.32	97.7	5.74						
26	16.68	32.02	23.50	97.5	5.79						
27	16.16	32.09	23.81	95.7	5.86						
28	14.74	32.09	23.78	95.5	5.77	4.99	5.0	.35	0.7	4.5	.65
29	14.60	32.02	23.72	94.2	5.58						
30	14.34	31.87									


KELEZ CRUISE XWCC-24 STATION 162 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
0
5
10
15
20
25
30
35
40
45
50
DEPTH (M)

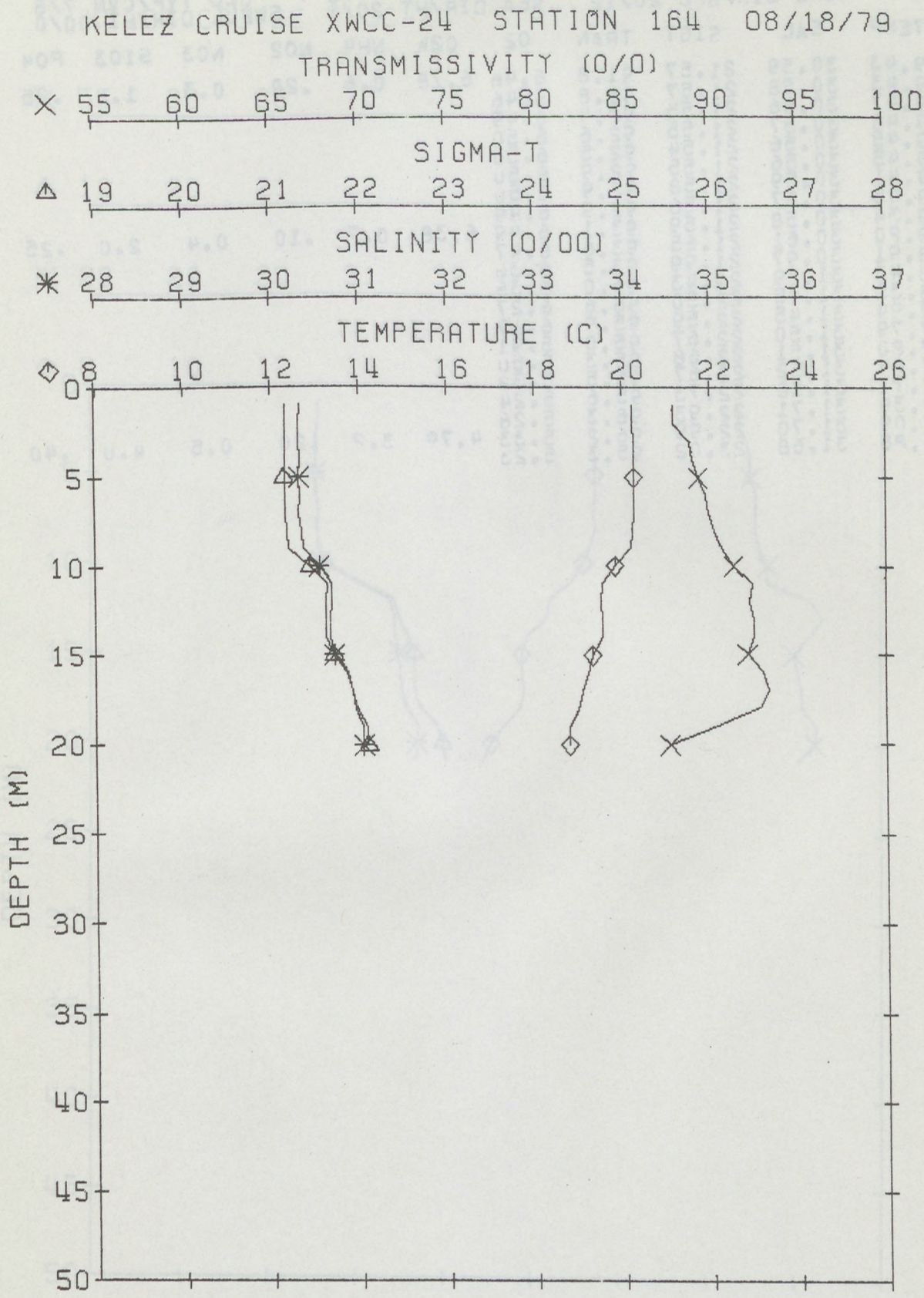
XWCC-24 STA.163 LAT 40 5.5N; LONG 73 38.8W GMT 09.2 08/18/79
DEPTH 038 AIR D/W 19.4/18.9 BARO 23.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 22/12 SEA DIR/HT 00/0 SWELL DIR/HT 19/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	18.93	32.17	22.90	98.6	5.55						
2	18.93	32.17	22.90	98.6	5.55	5.55	1.0	.10	0.4	0.5	.50
3	18.96	32.16	22.89	98.7	5.56						
4	18.95	32.15	22.88	98.6	5.57						
5	18.96	32.15	22.88	98.7	5.57						
6	18.98	32.15	22.88	98.6	5.57						
7	18.97	32.16	22.88	98.7	5.56						
8	18.95	32.16	22.89	98.7	5.56						
9	18.96	32.14	22.88	98.7	5.57						
10	18.97	32.15	22.88	98.6	5.56	5.55	1.3	<.10	0.5	<0.5	.25
11	18.96	32.15	22.88	98.2	5.56						
12	18.96	32.15	22.88	98.6	5.57						
13	18.94	32.16	22.89	98.7	5.56						
14	18.96	32.15	22.88	98.8	5.55						
15	18.96	32.14	22.87	98.8	5.55						
16	18.93	32.14	22.88	98.7	5.55						
17	18.83	32.14	22.90	98.7	5.55						
18	18.65	32.16	22.96	98.5	5.56						
19	18.52	32.20	23.03	98.5	5.56	5.56	1.8	.10	0.5	2.0	.30
20	17.75	32.25	23.26	98.0	5.57						
21	15.62	32.34	23.81	97.9	5.76						
22	14.23	32.21	24.00	97.1	5.85						
23	14.04	32.14	24.00	96.7	5.87						
24	13.97	32.16	24.03	96.6	5.78						
25	13.75	32.18	24.08	97.0	5.73						
26	13.03	32.20	24.24	97.2	5.77						
27	12.09	32.23	24.27	97.3	5.79						
28	12.81	32.19	24.27	97.2	5.76						
29	12.12	32.22	24.43	96.9	5.79						
30	11.51	32.25	24.57	96.7	5.87	6.17	2.2	.15	0.6	4.0	.60
31	11.14	32.29	24.67	96.7	5.89						
32	10.82	32.29	24.72	96.8	5.93						
33	10.73	32.33	24.76	96.5	5.96						
34	10.65	32.35	24.80	96.7	5.97						
35	10.52	32.36	24.82	96.6	5.98						
36	10.40	32.37	24.86	96.8	6.00	5.80	4.3	.20	0.7	4.5	.70
37	10.07	32.38	24.92	96.3	5.98						


KELEZ CRUISE XWCC-24 STATION 163 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

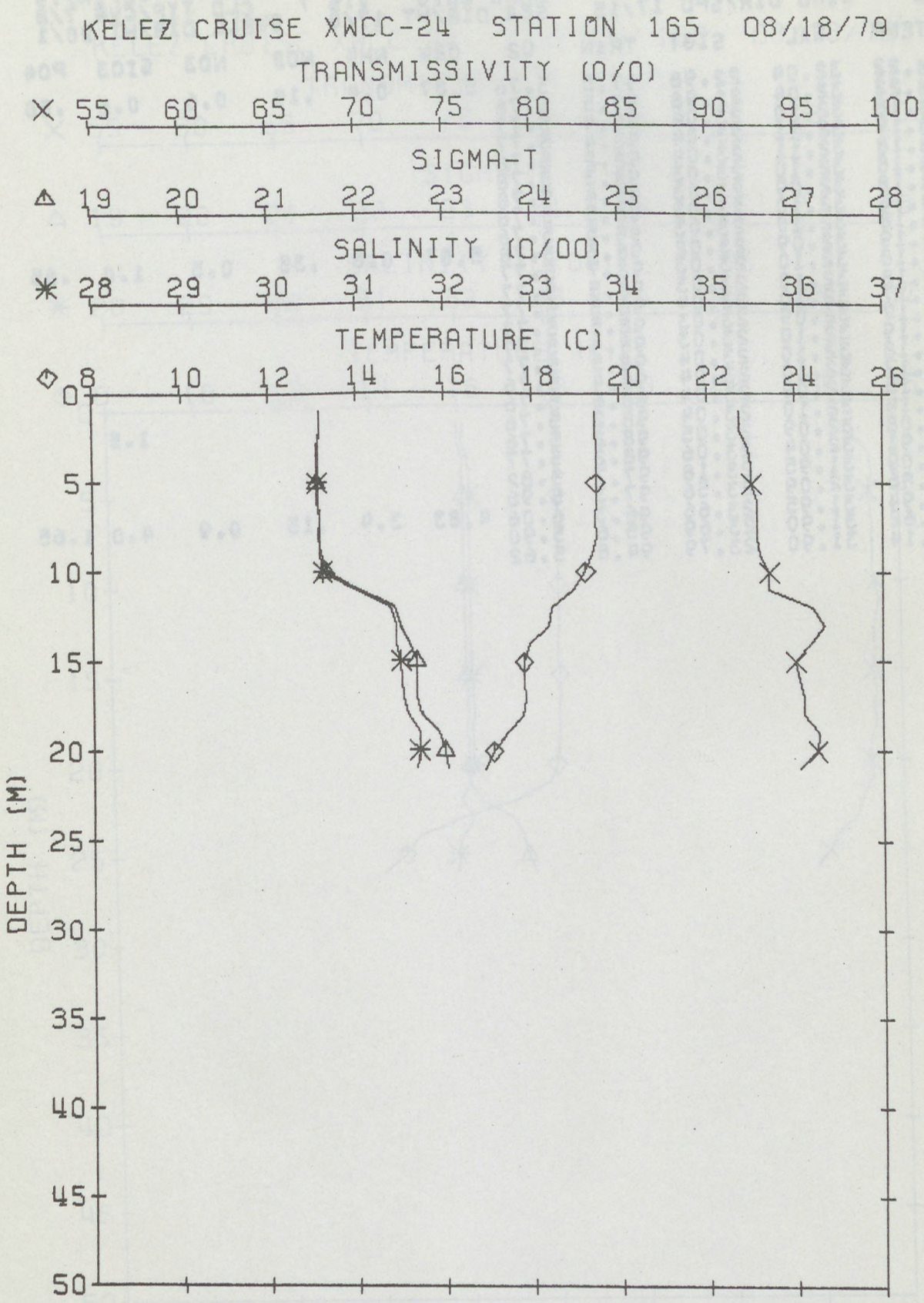
XWCC-24 STA.164 LAT 39 57.3N; LONG 74 2.0W GMT 14.0 08/18/79
DEPTH 010 AIR D/W 20.6/20.6 BARO 22.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 20/10 SEA DIR/HT 20/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TR/N	O2	O2W	NH4	NO2	NO3	SIC3	PO4
1	20.23	30.32	21.17	88.0	6.29	6.52	0.8	<.10	0.3	1.5	.30
2	20.23	30.32	21.17	88.0	6.29						
3	20.26	30.31	21.15	88.8	6.28						
4	20.25	30.32	21.16	89.1	6.28						
5	20.26	30.32	21.16	89.3	6.29						
6	20.26	30.32	21.16	89.7	6.29						
7	20.24	30.31	21.16	89.9	6.28						
8	20.23	30.34	21.18	90.3	6.27						
9	20.17	30.36	21.21	90.6	6.26	6.30	0.6	<.10	0.5	0.5	.25
10	19.82	30.54	21.44	91.4	6.26						
11	19.51	30.68	21.62	92.5	6.32						
12	19.51	30.67	21.62	92.2	6.28						
13	19.51	30.67	21.61	92.6	6.21						
14	19.51	30.67	21.61	92.6	6.17						
15	19.28	30.71	21.70	92.1	6.12						
16	19.18	30.87	21.85	93.0	6.01						
17	19.06	30.91	21.91	93.3	6.00						
18	18.95	30.94	21.96	92.9	5.99	5.45	1.8	<.10	0.5	8.0	.35
19	18.76	31.02	22.07	90.4	5.92						
20	18.75	31.03	22.08	87.7	5.76						


KELEZ CRUISE XWCC-24 STATION 164 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

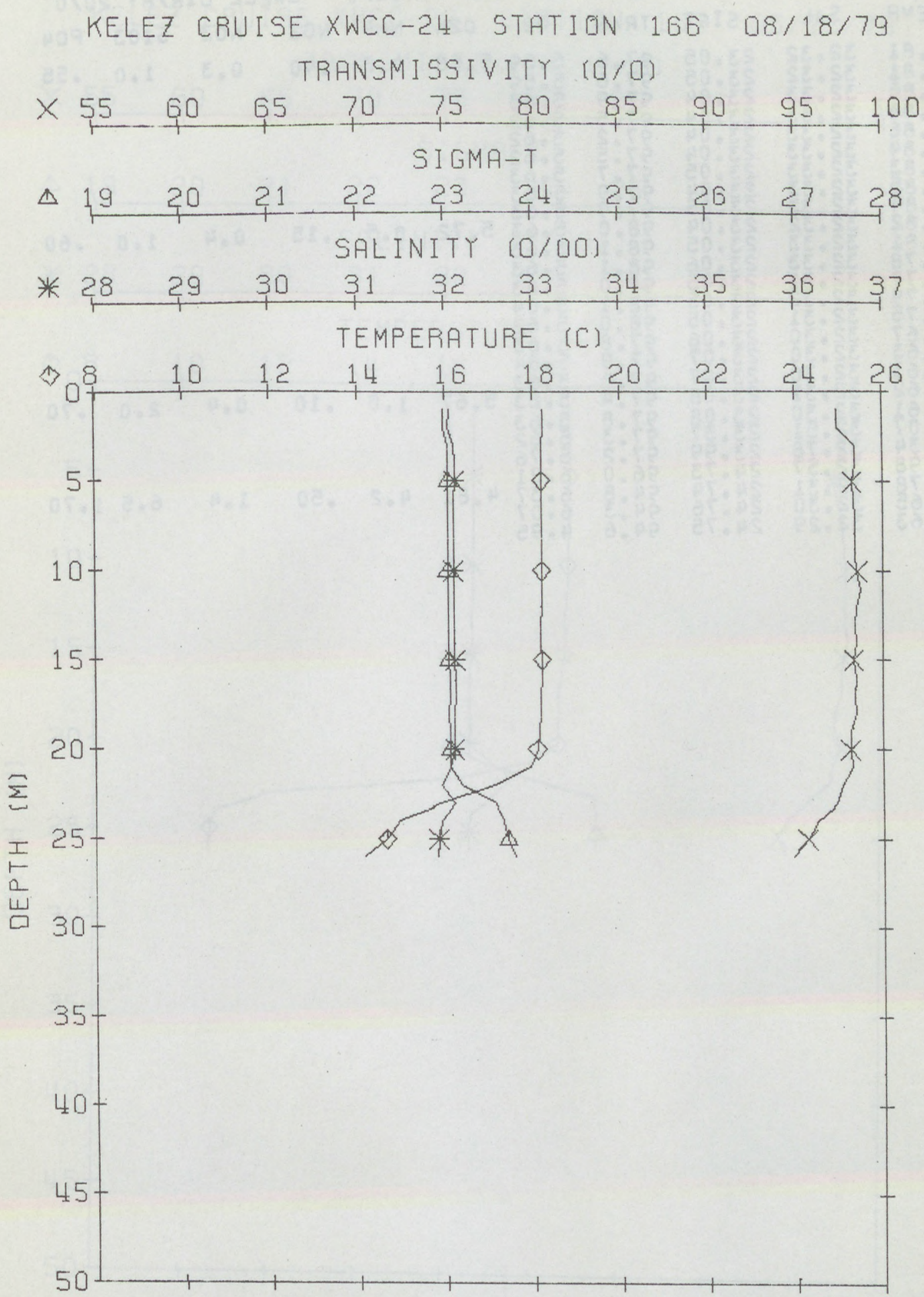
XWCC-24 STA.165 LAT 39 56.8N LONG 73 56.3W GMT 14.9 08/18/79
DEPTH 021 AIR D/W 20.6/ BARO 22.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 20/12 SEA DIR/HT 20/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.43	30.59	21.57	91.8	6.46	6.78	0.6	.20	0.3	1.0	.25
2	19.43	30.58	21.57	91.8	6.46						
3	19.47	30.56	21.55	92.4	6.49						
4	19.46	30.57	21.55	92.2	6.50						
5	19.45	30.56	21.55	92.2	6.50						
6	19.45	30.56	21.55	92.2	6.50						
7	19.41	30.59	21.58	92.2	6.50						
8	19.45	30.57	21.56	92.2	6.49						
9	19.34	30.58	21.59	92.1	6.49						
10	19.20	30.61	21.65	92.0	6.47	6.38	0.7	.10	0.4	2.0	.25
11	18.91	30.97	21.99	92.0	6.36						
12	18.43	31.39	22.44	92.0	6.35						
13	18.35	31.45	22.50	92.0	6.27						
14	17.94	31.45	22.55	92.0	6.17						
15	17.79	31.50	22.67	92.0	6.01						
16	17.80	31.51	22.68	92.0	5.91						
17	17.84	31.52	22.67	92.0	5.80						
18	17.77	31.58	22.73	92.0	5.63						
19	17.39	31.71	22.93	92.0	5.24						
20	17.09	31.70	22.99	92.0	5.38	4.79	3.2	.20	0.5	4.0	.40
21	16.88	31.68	23.02	92.0	5.23						


KELEZ CRUISE XWCC-24 STATION 165 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

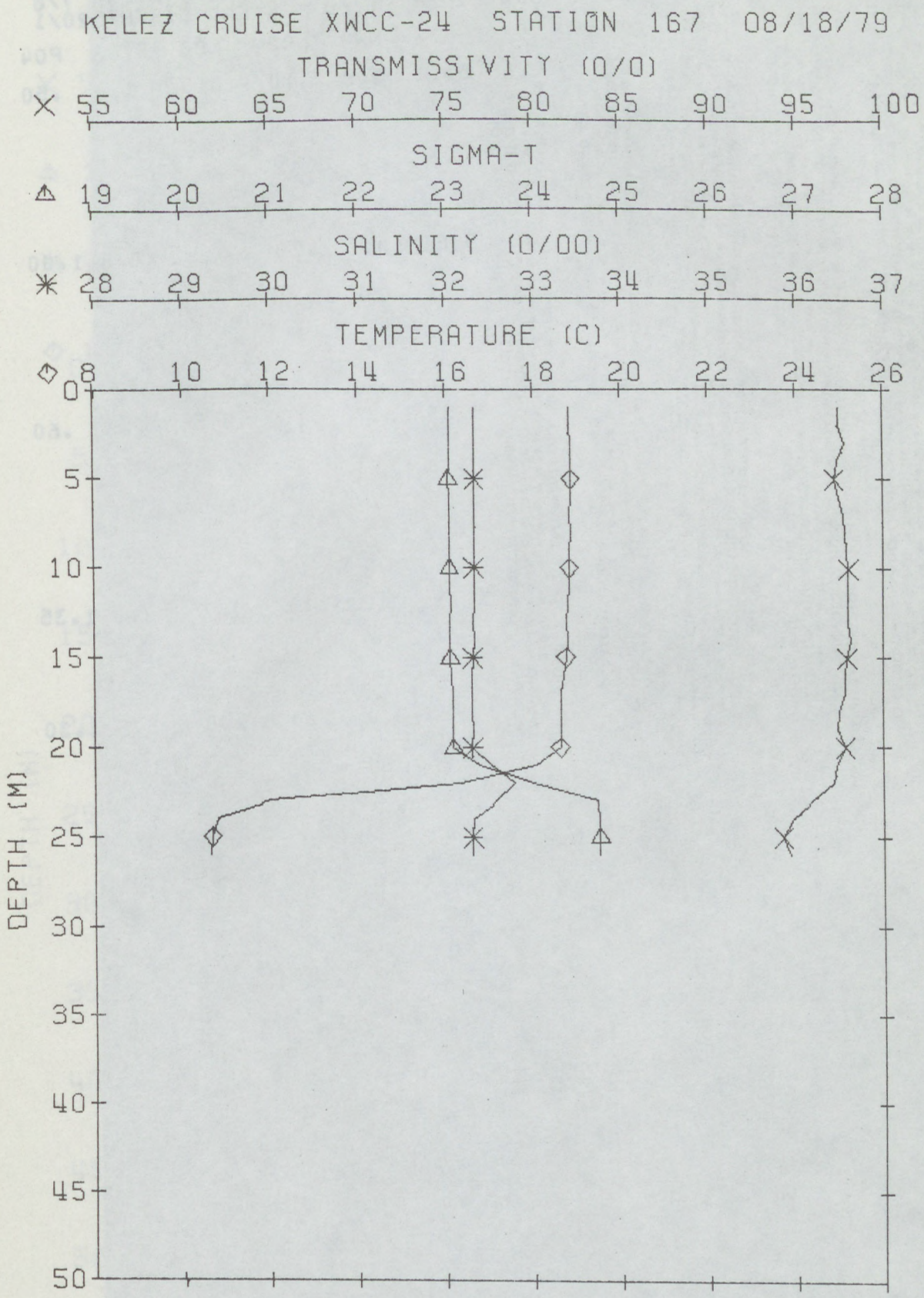
XWCC-24 STA.166 LAT 39 55.0N; LONG 73 48.3W GMT 16.5 08/1A/79
DEPTH 027 AIR D/W / BARO 23.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 17/15 SEA DIR/HT 17/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.22	32.04	22.98	97.5	5.76	5.87	0.4	.10	0.6	0.5	.50
2	18.22	32.04	22.98	97.5	5.76						
3	18.18	32.10	23.04	98.4	5.77						
4	18.19	32.11	23.04	98.4	5.77						
5	18.18	32.11	23.04	98.2	5.78						
6	18.18	32.10	23.03	98.2	5.78						
7	18.18	32.09	23.03	98.2	5.78						
8	18.18	32.10	23.03	98.2	5.78						
9	18.18	32.10	23.03	98.2	5.78						
10	18.19	32.09	23.02	98.2	5.78	5.87	0.6	.35	0.5	1.0	.65
11	18.18	32.10	23.03	98.2	5.77						
12	18.18	32.10	23.03	98.2	5.77						
13	18.17	32.10	23.04	98.1	5.77						
14	18.17	32.09	23.03	98.1	5.77						
15	18.19	32.10	23.03	98.2	5.77						
16	18.18	32.10	23.04	98.2	5.77						
17	18.17	32.10	23.04	98.1	5.76						
18	18.15	32.09	23.04	98.1	5.76						
19	18.14	32.10	23.04	98.2	5.76						
20	18.08	32.09	23.05	98.2	5.76					1.5	
21	17.91	32.04	23.06	98.2	5.77						
22	17.09	31.95	23.18	97.7	5.82						
23	15.86	32.09	23.56	97.3	5.96						
24	14.94	31.95	23.66	96.3	6.06	4.83	3.4	.15	0.9	4.0	1.65
25	14.62	31.90	23.69	95.6	5.90						
26	14.14	31.90	23.79	94.8	5.62						


KELEZ CRUISE XWCC-24 STATION 166 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

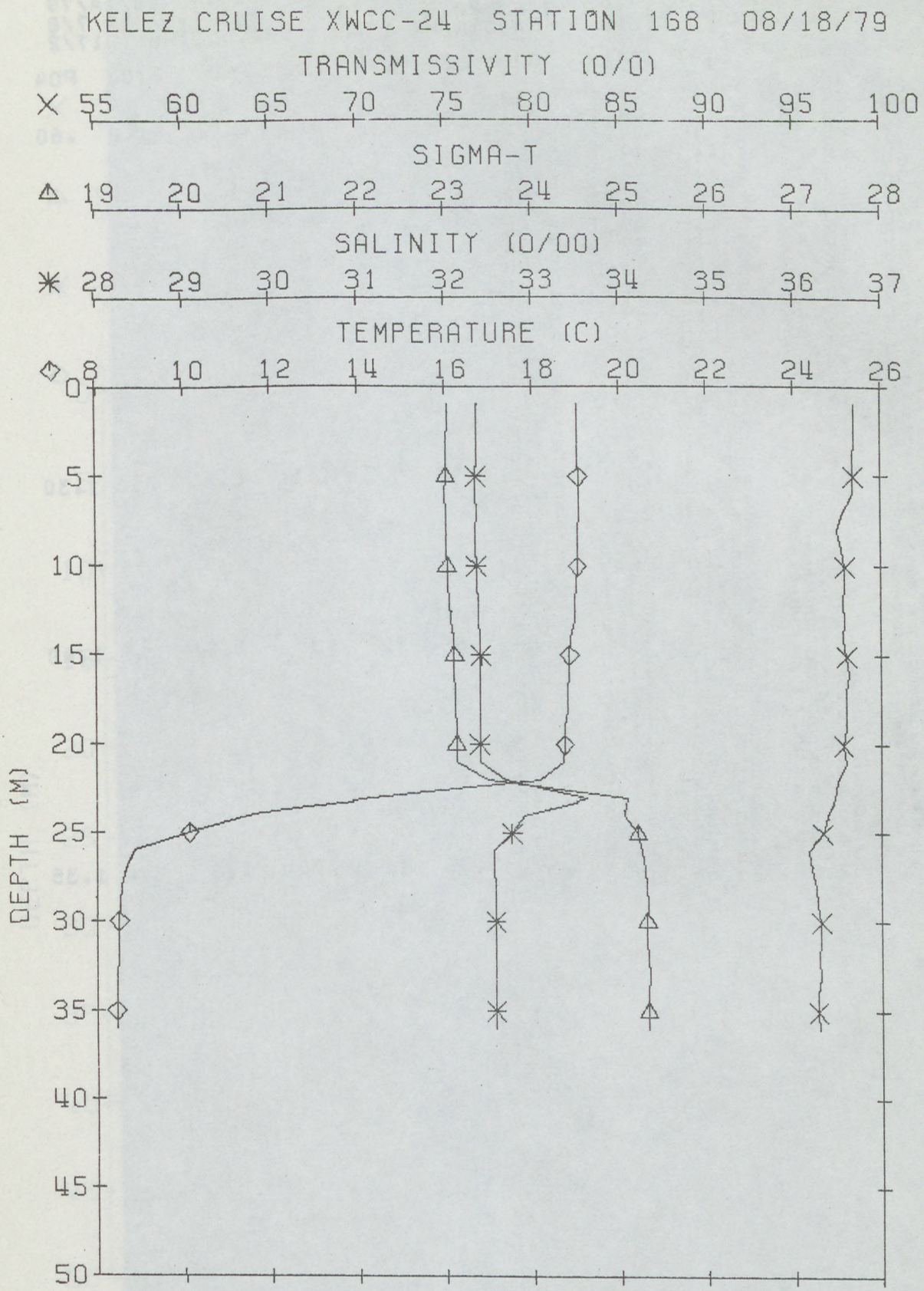
XWCC-24 STA.167 LAT 39 53.4N; LONG 73 39.0W GMT 17.7 08/18/79
DEPTH 026 AIR D/W 19.4/16.7 BARO 22.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 16/14 SEA DIR/HT 16/0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.81	32.32	23.05	97.6	5.59	5.68	0.3	.40	0.3	1.0	.55
2	18.81	32.32	23.05	97.6	5.59						
3	18.86	32.33	23.04	97.9	5.63						
4	18.86	32.33	23.04	97.5	5.62						
5	18.86	32.33	23.04	97.2	5.62						
6	18.84	32.33	23.04	97.5	5.62						
7	18.83	32.33	23.05	97.7	5.63						
8	18.85	32.33	23.04	97.9	5.63						
9	18.84	32.33	23.05	97.9	5.63						
10	18.82	32.32	23.04	98.0	5.63	5.72	0.5	.15	0.4	1.0	.60
11	18.81	32.33	23.05	98.1	5.63						
12	18.78	32.33	23.06	98.1	5.63						
13	18.77	32.31	23.05	98.0	5.63						
14	18.79	32.32	23.05	98.1	5.64						
15	18.75	32.31	23.05	98.0	5.63						
16	18.67	32.30	23.06	97.8	5.63						
17	18.63	32.30	23.07	97.9	5.64						
18	18.63	32.30	23.07	97.6	5.63						
19	18.62	32.31	23.08	97.4	5.63	5.67	1.0	.10	0.4	2.0	.70
20	18.61	32.30	23.08	97.8	5.63						
21	18.07	32.51	23.37	97.3	5.62						
22	16.34	32.78	23.99	97.2	5.76						
23	11.98	32.57	24.73	96.0	6.21						
24	10.78	32.31	24.74	94.8	6.37	4.81	4.2	.50	1.4	6.5	1.70
25	10.65	32.30	24.76	94.3	6.07						
26	10.63	32.29	24.75	94.6	4.95						


KELEZ CRUISE XWCC-24 STATION 167 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

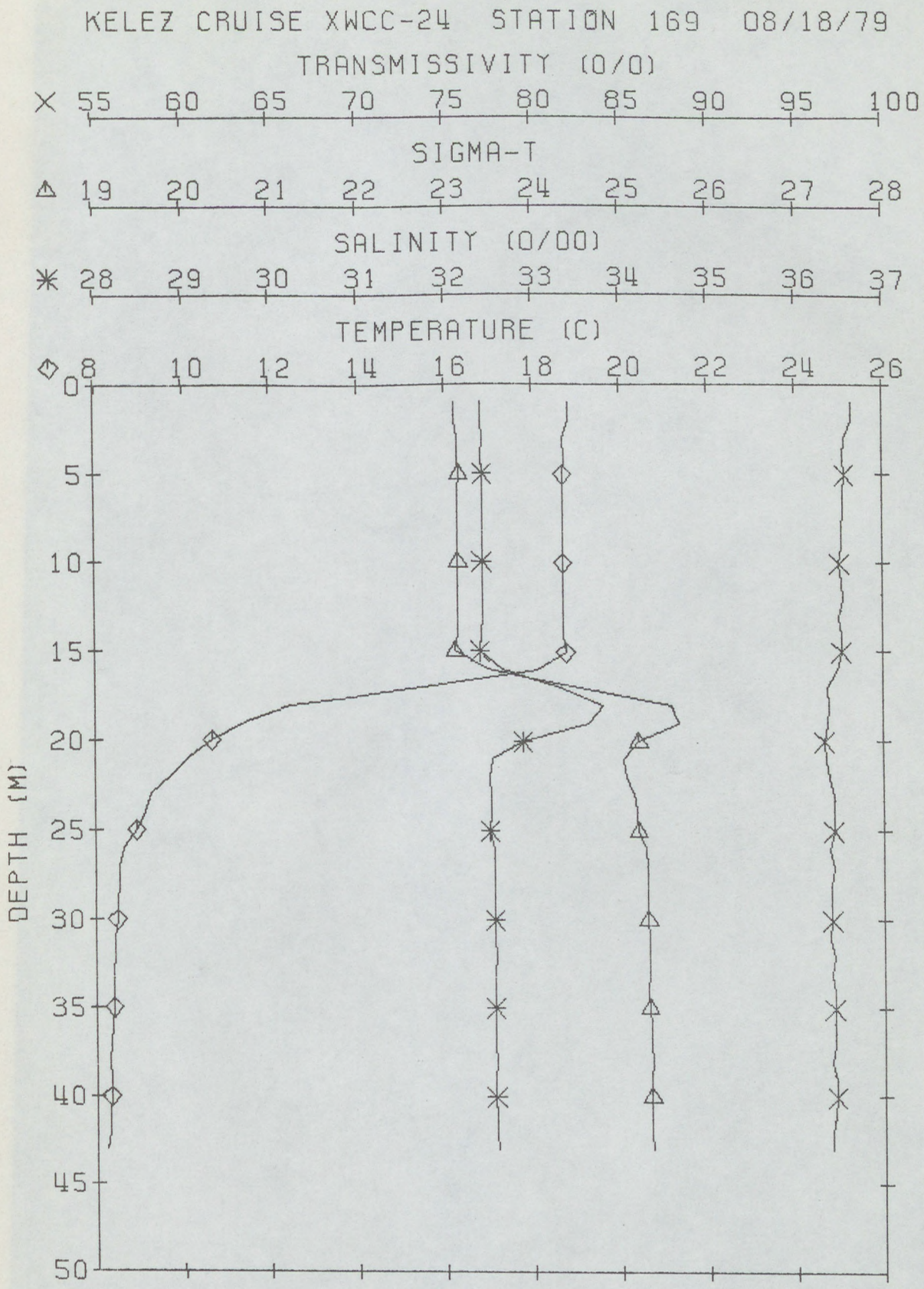
XWCC-24 STA.168 LAT 39 51.9N; LONG 73 30.0W GMT 19.0 08/18/79
DEPTH 037 AIR D/W . / . BARO 21.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 17/16 SEA DIR/HT 17/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	19.03	32.36	23.02	98.5	5.65	5.51	0.5	.10	0.5	1.0	.50
2	19.03	32.36	23.02	98.5	5.64						
3	19.03	32.35	23.02	98.6	5.64						
4	19.04	32.35	23.02	98.4	5.65						
5	19.05	32.35	23.01	98.4	5.65						
6	19.04	32.34	23.01	98.4	5.64						
7	19.04	32.36	23.02	97.8	5.64						
8	19.03	32.35	23.01	97.6	5.64						
9	19.04	32.35	23.01	97.8	5.64						
10	19.02	32.35	23.02	98.0	5.64	5.61	0.7	<.10	0.5	<0.5	1.00
11	19.00	32.36	23.03	98.0	5.63						
12	18.97	32.37	23.04	97.9	5.63						
13	18.94	32.38	23.06	98.0	5.64						
14	18.87	32.40	23.09	97.8	5.64						
15	18.83	32.40	23.10	98.0	5.65						
16	18.81	32.40	23.10	98.2	5.65						
17	18.80	32.40	23.11	98.0	5.65						
18	18.78	32.40	23.12	98.1	5.65						
19	18.73	32.40	23.12	98.0	5.64	5.53	0.7	<.10	0.5	1.0	.60
20	18.72	32.39	23.12	97.8	5.65						
21	18.70	32.40	23.13	98.1	5.65						
22	18.15	32.68	23.49	97.5	5.71						
23	14.30	33.62	25.08	97.4	6.06						
24	11.58	32.90	25.06	97.0	6.25						
25	10.13	32.75	25.20	96.7	6.45						
26	8.85	32.54	25.24	95.8	6.44						
27	8.66	32.54	25.27	96.1	6.28						
28	8.55	32.55	25.30	96.3	6.15						
29	8.52	32.56	25.31	96.4	6.02	5.73	3.2	.15	1.1	4.0	1.35
30	8.50	32.56	25.31	96.5	5.83						
31	8.50	32.55	25.30	96.6	5.75						
32	8.48	32.56	25.31	96.4	5.70						
33	8.46	32.57	25.32	96.5	5.67						
34	8.45	32.56	25.32	96.3	5.65						
35	8.45	32.56	25.31	96.4	5.65	5.73	3.1	.20	1.0	5.5	1.30
36	8.46	32.56	25.31	96.5	5.62						


KELEZ CRUISE XWCC-24 STATION 168 08/18/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

XWCC-24 STA.169 LAT 39 58.7N; LONG 73 28.5W GMT 20.4 08/1A/79
DEPTH 042 AIR D/W 20.0/17.2 BARO 20.9 VIS 7 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 18/18 SEA DIR/HT 17/2 SWELL DIR/HT 17/2

DEP	TEMP	SAL	SIGT	TRAN	O2	O2W	NH4	NO2	NO3	SIO3	PO4
1	18.84	32.42	23.11	98.2	5.63						
2	18.84	32.42	23.11	98.2	5.63	5.56	0.3	<.10	0.2	1.0	.60
3	18.70	32.43	23.16	97.8	5.61						
4	18.71	32.42	23.15	97.7	5.61						
5	18.69	32.43	23.16	97.8	5.60						
6	18.70	32.43	23.16	97.7	5.61						
7	18.70	32.43	23.15	97.7	5.61						
8	18.70	32.43	23.15	97.7	5.60						
9	18.70	32.43	23.15	97.7	5.60						
10	18.69	32.42	23.15	97.6	5.60						
11	18.70	32.43	23.15	97.7	5.61						
12	18.69	32.42	23.15	97.7	5.61						
13	18.70	32.42	23.15	97.5	5.60						
14	18.67	32.42	23.15	97.7	5.59						
15	18.75	32.39	23.12	97.6	5.60						
16	18.10	32.65	24.47	97.5	5.61						
17	15.74	33.31	25.53	96.8	5.73						
18	12.47	33.79	25.58	96.9	6.12						
19	11.39	33.63	25.66	96.9	6.38						
20	10.66	33.88	25.81	96.6	6.35						
21	10.11	33.53	25.03	96.8	6.32	6.12	0.7	.15	0.6	3.0	1.30
22	9.74	33.49	25.06	97.0	6.27						
23	9.26	33.52	25.16	97.1	6.20						
24	9.11	33.51	25.17	97.1	6.16						
25	8.92	33.50	25.19	97.2	6.10						
26	8.63	33.55	25.28	96.9	6.07						
27	8.53	33.54	25.29	97.1	6.01						
28	8.51	33.55	25.30	97.1	5.94						
29	8.48	33.55	25.30	97.0	5.88						
30	8.48	33.54	25.30	97.1	5.84	5.89	3.2	.15	1.0	4.5	1.40
31	8.44	33.55	25.31	97.0	5.80						
32	8.41	33.54	25.31	97.1	5.78						
33	8.40	33.54	25.31	97.0	5.76						
34	8.40	33.55	25.31	97.1	5.75						
35	8.39	33.55	25.31	97.2	5.74						
36	8.34	33.55	25.32	97.1	5.73						
37	8.31	33.55	25.32	97.2	5.74						
38	8.30	33.56	25.34	97.1	5.72						
39	8.31	33.55	25.32	97.2	5.72						
40	8.31	33.55	25.33	97.2	5.71						
41	8.29	33.56	25.34	97.2	5.71						
42	8.29	32.55	25.34	97.1	5.70	5.89	3.0	.20	1.2	5.0	1.35
43	8.23	32.57	25.35	97.0	5.67						



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