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NOAA Data Report OMPA-8

# MESA NEW YORK BIGHT PROJECT

# EXPANDED WATER COLUMN CHARACTERIZATION

# CRUISE (XWCC 22)

# NOAA SHIP GEORGE B. KELEZ

# MAY-JUNE 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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May 1981

UNITED STATES
DEPARTMENT OF COMMERCE

Malcolm Baldrige,
Secretary

NATIONAL OCEANIC AND
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During the period 29 May-7 June 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 May-June of 1979, a cruise of 108 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 oxygen and transmissivity 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. These results will be reported separately.

This report is the twenty-first 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) and Hazelworth and Berberian (1981 a,b).

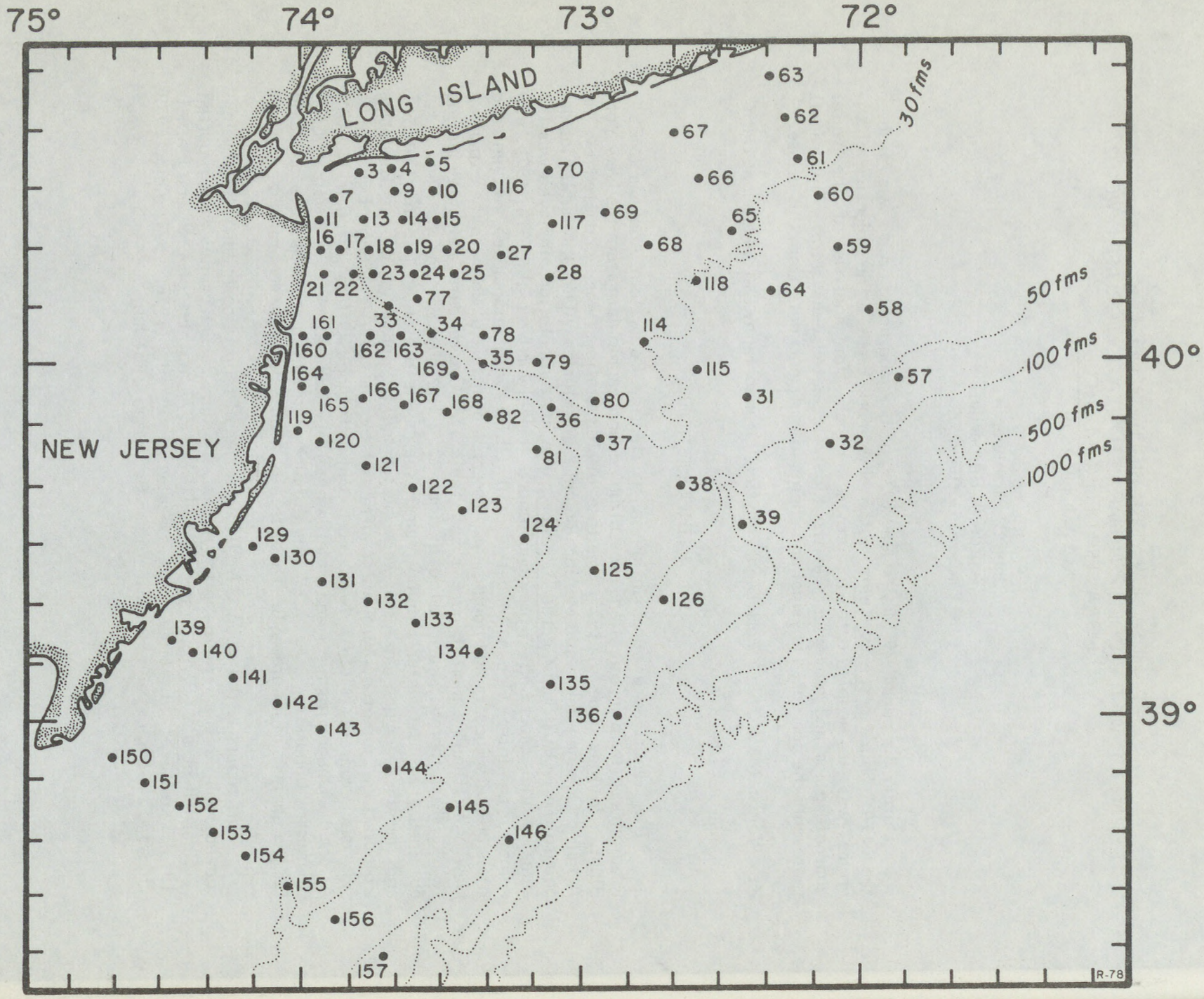


Figure 1. Locations of stations occupied during YVCC 22

TABLE 1

NEW YORK BIGHT STATIONS POSITIONS

| STATION | LATITUDE | LONGITUDE | STATION | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| 3 | 40° 31.5 | 73° 48.4 | 115*(2)+ | 39° 58.7 | 72° 34.1 |
| 4 | 40° 32.4 | 73° 40.5 | 116 | 40° 30.0 | 73° 18.7 |
| 5 | 40° 33.3 | 73° 32.5 | 117 | 40° 23.1 | 72° 05.0 |
| 7 | 40° 26.9 | 73° 53.0 | 118 | 40° 14.4 | 72° 34.1 |
| 9 | 40° 28.3 | 73° 39.6 | 119 | 39° 48.4 | 74° 00.0 |
| 10 | 40° 29.2 | 73° 31.5 | 120 | 39° 46.5 | 73° 55.5 |
| 11 | 40° 22.2 | 73° 56.7 | 121 | 39° 42.9 | 73° 46.5 |
| 13 | 40° 23.3 | 73° 47.0 | 122 | 39° 39.5 | 73° 36.0 |
| 14 | 40° 24.3 | 73° 38.7 | 123 | 39° 35.0 | 73° 26.0 |
| 15 | 40° 25.2 | 73° 30.4 | 124 | 39° 30.0 | 72° 12.2 |
| 16 | 40° 18.2 | 73° 56.4 | 125 | 39° 23.8 | 72° 57.2 |
| 17 | 40° 18.5 | 73° 51.8 | 126 | 39° 18.9 | 72° 42.5 |
| 18 | 40° 19.1 | 73° 47.5 | 129 | 39° 30.0 | 74° 11.0 |
| 19 | 40° 20.2 | 73° 37.9 | 130 | 39° 27.7 | 74° 06.1 |
| 20 | 40° 21.2 | 73° 29.4 | 131 | 39° 23.2 | 73° 55.5 |
| 21 | 40° 13.5 | 73° 56.1 | 132 | 39° 20.0 | 73° 46.5 |
| 22 | 40° 14.4 | 73° 51.2 | 133 | 39° 16.9 | 73° 35.8 |
| 23 | 40° 14.8 | 73° 45.6 | 134 | 39° 11.1 | 73° 21.9 |
| 24 | 40° 15.8 | 73° 37.0 | 135 | 39° 05.2 | 73° 06.5 |
| 25 | 40° 16.9 | 73° 28.3 | 136 | 39° 00.0 | 72° 52.0 |
| 27 | 40° 18.0 | 73° 17.5 | 139 | 39° 13.5 | 74° 30.0 |
| 28 | 40° 13.5 | 73° 07.0 | 140 | 39° 11.0 | 74° 24.5 |
| 31*(2)+ | 39° 54.0 | 72° 25.0 | 141 | 39° 06.8 | 74° 15.2 |
| 32*(2)+ | 39° 46.0 | 72° 07.0 | 142 | 39° 02.9 | 74° 05.9 |
| 33 | 40° 10.0 | 73° 41.5 | 143 | 39° 58.1 | 73° 56.0 |
| 34 | 40° 05.5 | 73° 31.5 | 144 | 38° 51.6 | 73° 42.0 |
| 35 | 39° 59.0 | 73° 21.5 | 145 | 38° 45.0 | 73° 27.9 |
| 36 | 39° 55.0 | 73° 06.5 | 146 | 38° 39.4 | 73° 16.1 |
| 37 | 39° 46.0 | 72° 57.0 | 150 | 38° 53.8 | 74° 41.9 |
| 38 | 39° 39.0 | 72° 39.5 | 151 | 38° 49.7 | 74° 34.0 |
| 39 | 39° 32.0 | 72° 26.0 | 152 | 38° 45.4 | 74° 27.2 |
| 57*(2)+ | 39° 57.0 | 71° 52.0 | 153 | 38° 41.5 | 74° 20.0 |
| 58*(2)+ | 40° 08.0 | 71° 58.0 | 154 | 38° 37.1 | 74° 12.8 |
| 59*(2)+ | 40° 18.0 | 72° 04.0 | 155 | 38° 31.4 | 74° 04.5 |
| 60*(2)+ | 40° 27.0 | 72° 09.0 | 156 | 38° 25.3 | 73° 53.0 |
| 61 | 40° 33.0 | 72° 13.0 | 157 | 38° 19.5 | 73° 43.2 |
| 62 | 40° 40.0 | 72° 16.0 | 160 | 40° 05.0 | 73° 59.6 |
| 63 | 40° 47.0 | 72° 20.0 | 161 | 40° 05.0 | 73° 54.7 |
| 64 | 40° 12.0 | 72° 20.0 | 162 | 40° 05.0 | 73° 47.0 |
| 65*(2) | 40° 21.0 | 72° 28.0 | 163 | 40° 05.0 | 73° 38.0 |
| 66 | 40° 30.0 | 72° 34.0 | 164 | 39° 57.2 | 74° 01.5 |
| 67 | 40° 38.0 | 72° 40.0 | 165 | 39° 56.5 | 73° 56.3 |
| 68*(2) | 40° 19.0 | 72° 46.0 | 166 | 39° 55.0 | 73° 48.0 |
| 69 | 40° 25.0 | 72° 55.0 | 167 | 39° 53.5 | 73° 39.0 |
| 70 | 40° 32.0 | 73° 07.0 | 168 | 39° 52.0 | 73° 30.0 |
| 77 | 40° 10.5 | 73° 34.0 | 169 | 39° 58.5 | 73° 28.5 |
| 78 | 40° 05.0 | 73° 21.5 | | | |
| 79 | 40° 00.0 | 73° 09.5 | | | |
| 80 | 39° 54.5 | 72° 57.0 | | | |
| 81 | 39° 44.5 | 73° 10.0 | | | |
| 82 | 39° 50.5 | 73° 20.5 | | | |
| 114*(2)+ | 40° 04.0 | 72° 45.2 | | | |

*(n) Station occupied n-times

+first occupation not reported: see text

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

| Cruise | Date | AOML Personnel |
|---|---|---|
| XWCC 22 | 29 May - 7 June 1979 | John B. Hazelworth, Chief Scientist<br>Mike Minton |

## 2. DATA ANALYSIS

Prior reports, cited above give detailed information on instrumentation specification, data collection methods, and data processing techniques. The correction factors required to bring the sensor values into agreement with the water samples, as well as the data accuracy, are given in Table 3. No transmissivity correction factors were calculated. However, this sensor was calibrated before the cruise. The statistical parameters in Table 3 were computed using the following 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;
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 22

| | | Precision (Repeatability) |
|---|---|---|
| **Temperature ($^{o}$C):** | | |
| Calib. Offset # 1 | -.0051U+.0127T-.0008D+.0928 | |
| Calib. Offset # 2 | .0061U+.0004T-.0003D+.2742 | |
| Calib. Recheck | | |
| X # 1 | +.00 | |
| X # 2 | +.00 | |
| $S_x$ # 1 | .01 | |
| $S_x$ # 2 | .02 | |
| **Salinity ($^{o}$/oo):** | | |
| Calib. Offset # 1 | +.0066U-.0385T+.0016D-.0451 | |
| Calib. Offset # 2 | -.0103U+.0047T+.0002D-.4491 | |
| X # 1 | +.00 | |
| X # 2 | +.00 | |
| $S_x$ # 1 | .00 | |
| $S_x$ # 2 | .02 | |
| **Oxygen (mℓ/ℓ):** | | |
| Calib. Offset # 1 | -.3204U-.0216T-.0048D+1.1968 | |
| Calib. Offset # 2 | -.3204U-.0216T-.0048D+1.1968 | |
| X # 1 | +.00 | |
| X # 2 | +.00 | |
| $S_x$ # 1 | .09 | |
| $S_x$ # 2 | .09 | |
| Depth (Meters) | .00 | ± 0.5 |

During the cruise the conductivity/salinity sensor failed. The sensors then were rebuilt and recalibrated. Examination of the data taken by the defective sensor indicated that stations 60, 59, 58, 57, 32, 31, 115, 114, and 113 could not be corrected by recalibration; thus, these stations were discarded. However, after the sensor had been repaired the stations, excluding 113, were reoccupied and are included in the data set. Separate calibration correction factors were computed: 1) stations taken before the sensor failure (stations 61-70, 118) and 2) stations taken after the sensor was recalibrated (all other stations not mentioned in item 1).

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 ($^{o}$C), 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

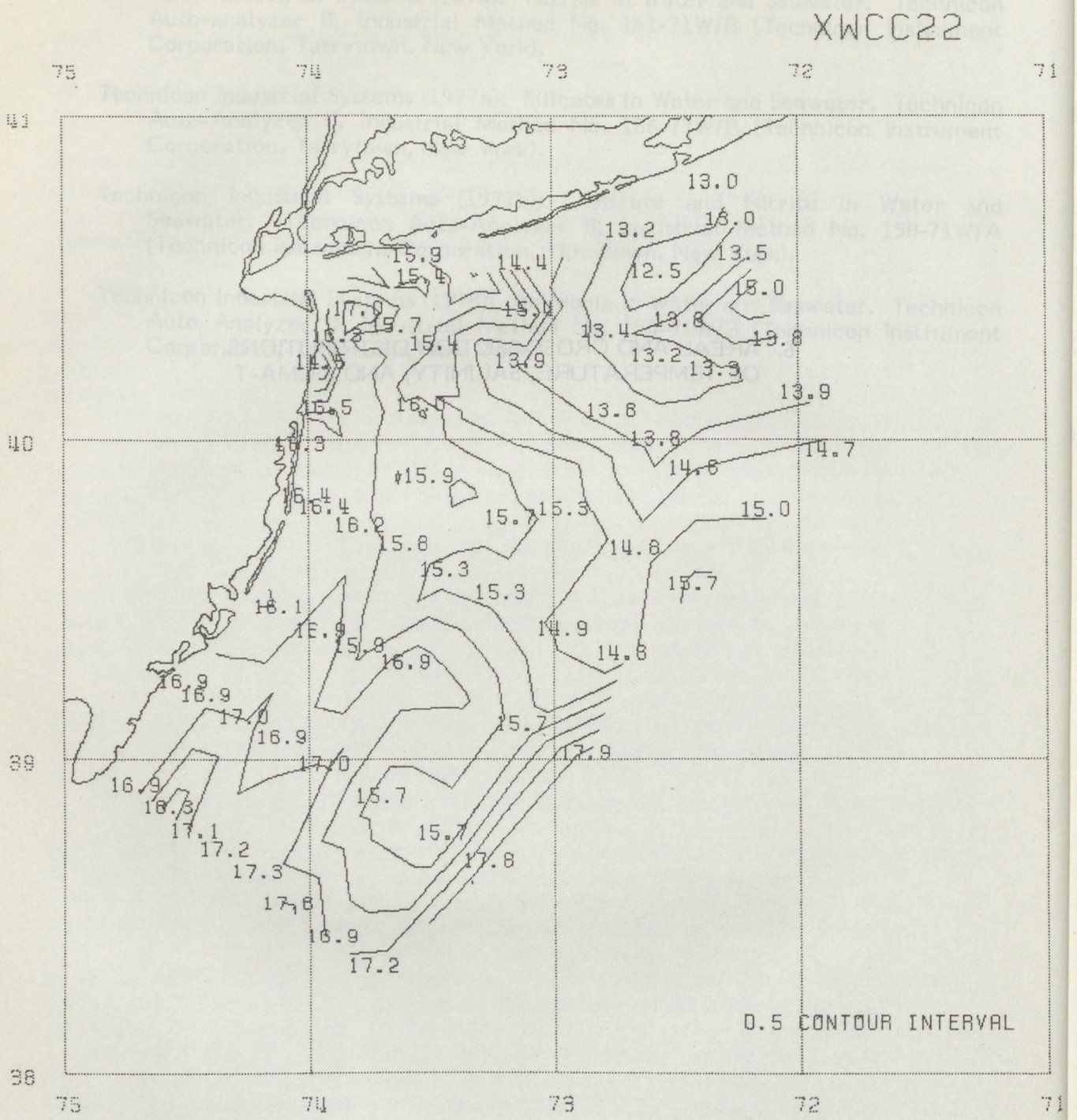



FIGURE 2. SURFACE WATER TEMPERATURES (C) 5/29/79-6/07/7

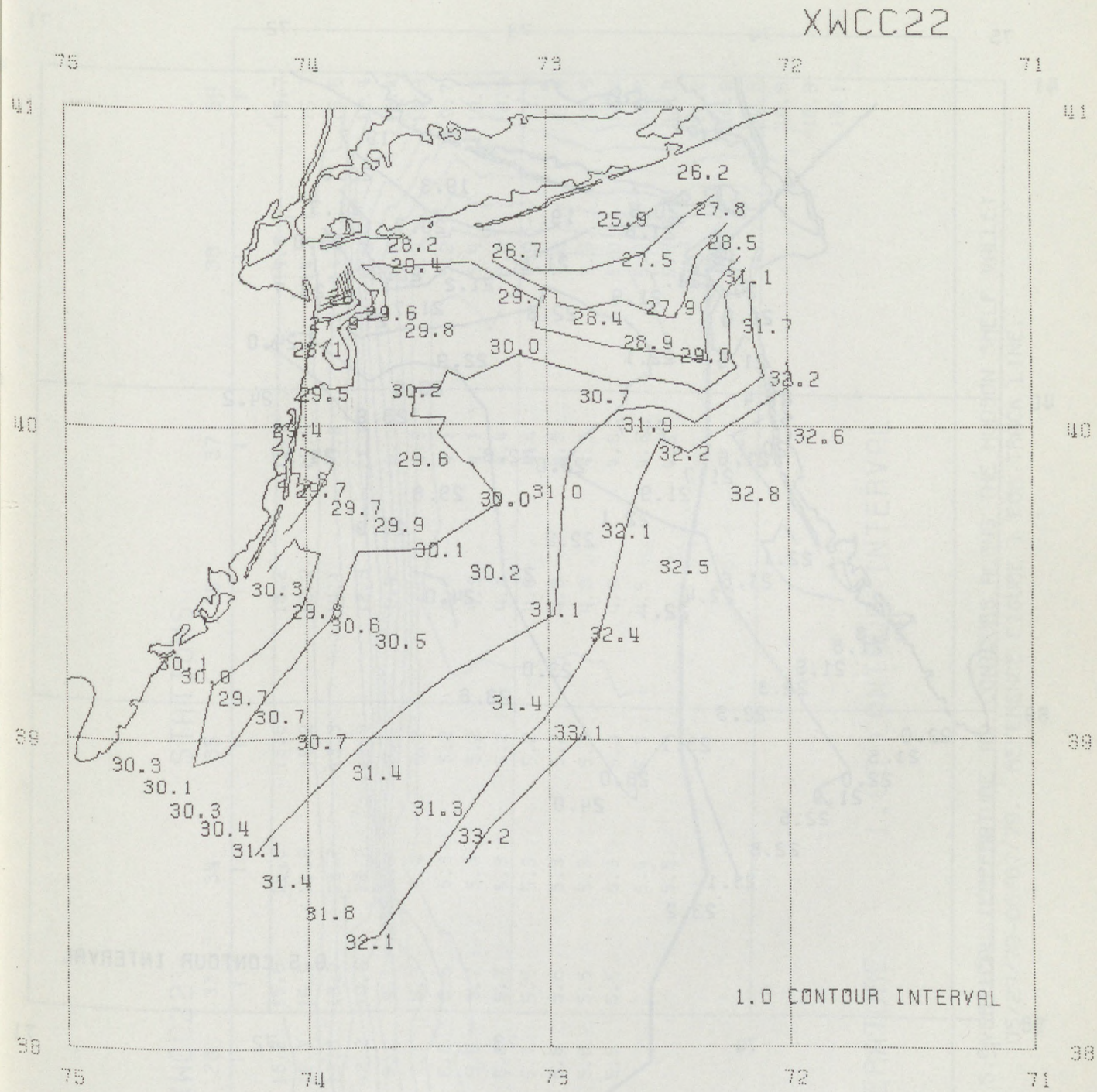



FIGURE 3. SURFACE SALINITIES (0/00) 5/29/79-6/07/79

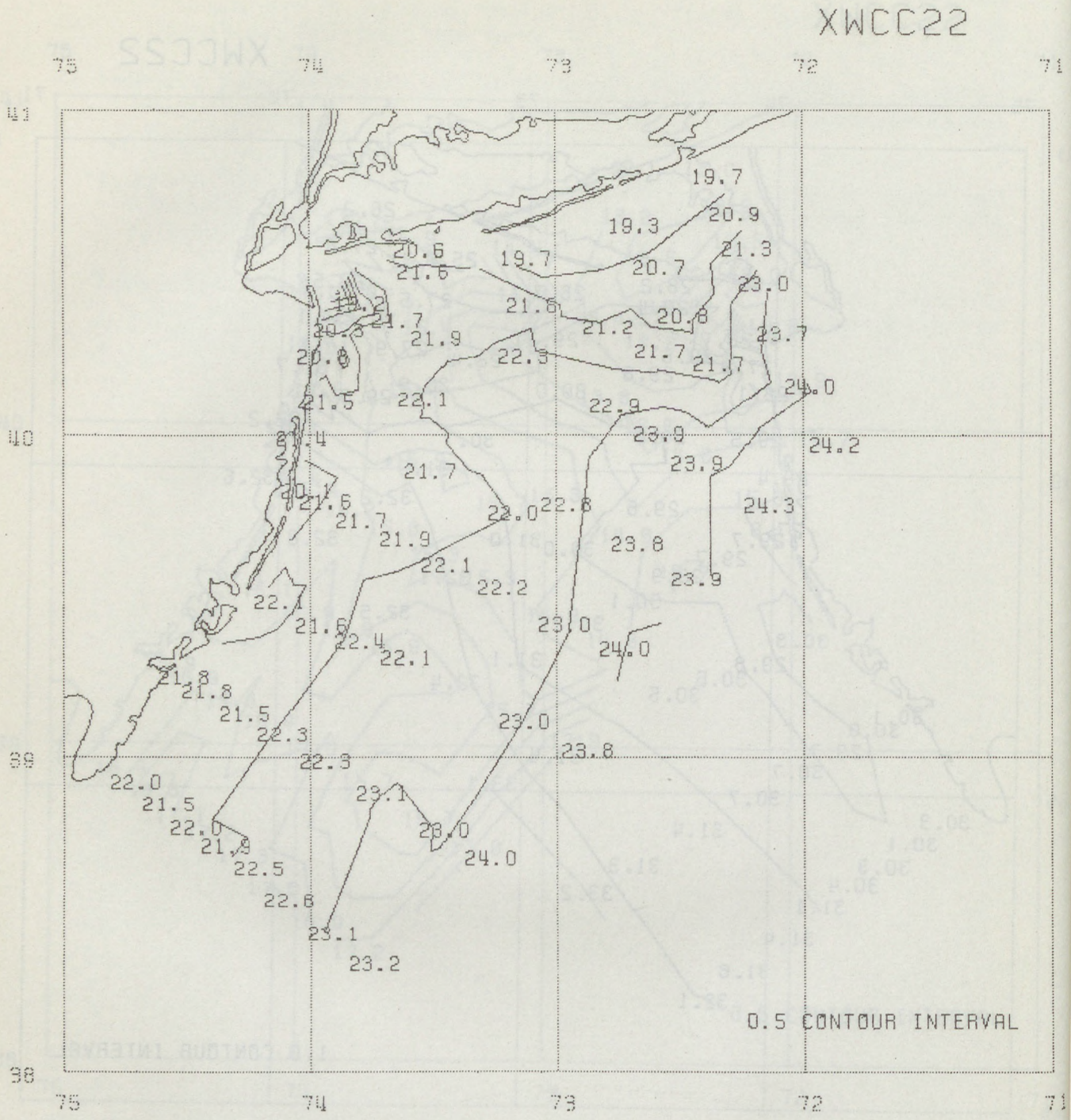



FIGURE 4. SURFACE SIGMA-T 5/29/79-6/07/79

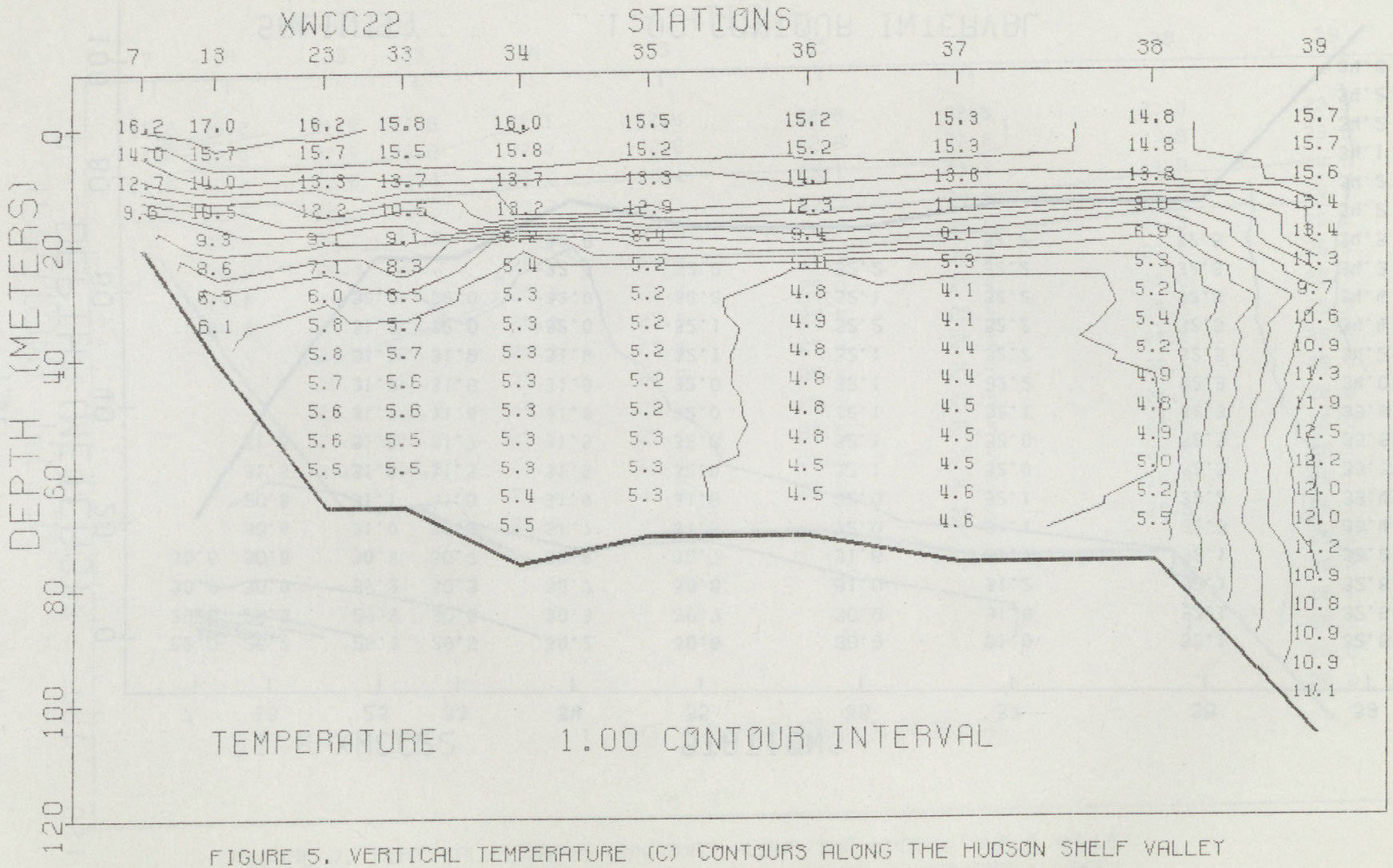



FIGURE 5. VERTICAL TEMPERATURE (C) CONTOURS ALONG THE HUDSON SHELF VALLEY 05/29/79-06/07/79. REFERENCE FIGURE 1 FOR TRACK LINE.

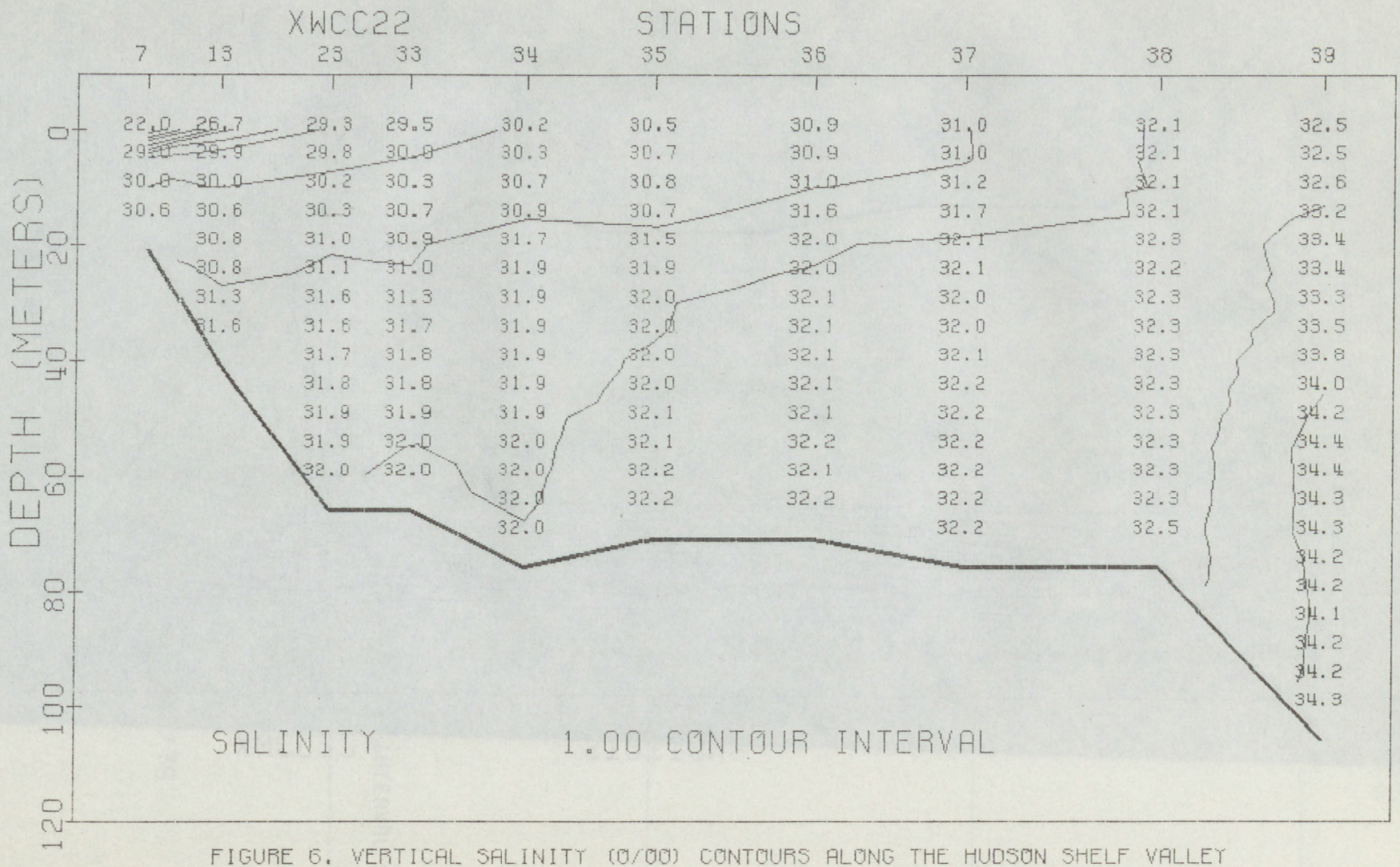



FIGURE 6. VERTICAL SALINITY (0/00) CONTOURS ALONG THE HUDSON SHELF VALLEY 05/29/79-06/07/79. REFERENCE FIGURE 1 FOR TRACK LINE.

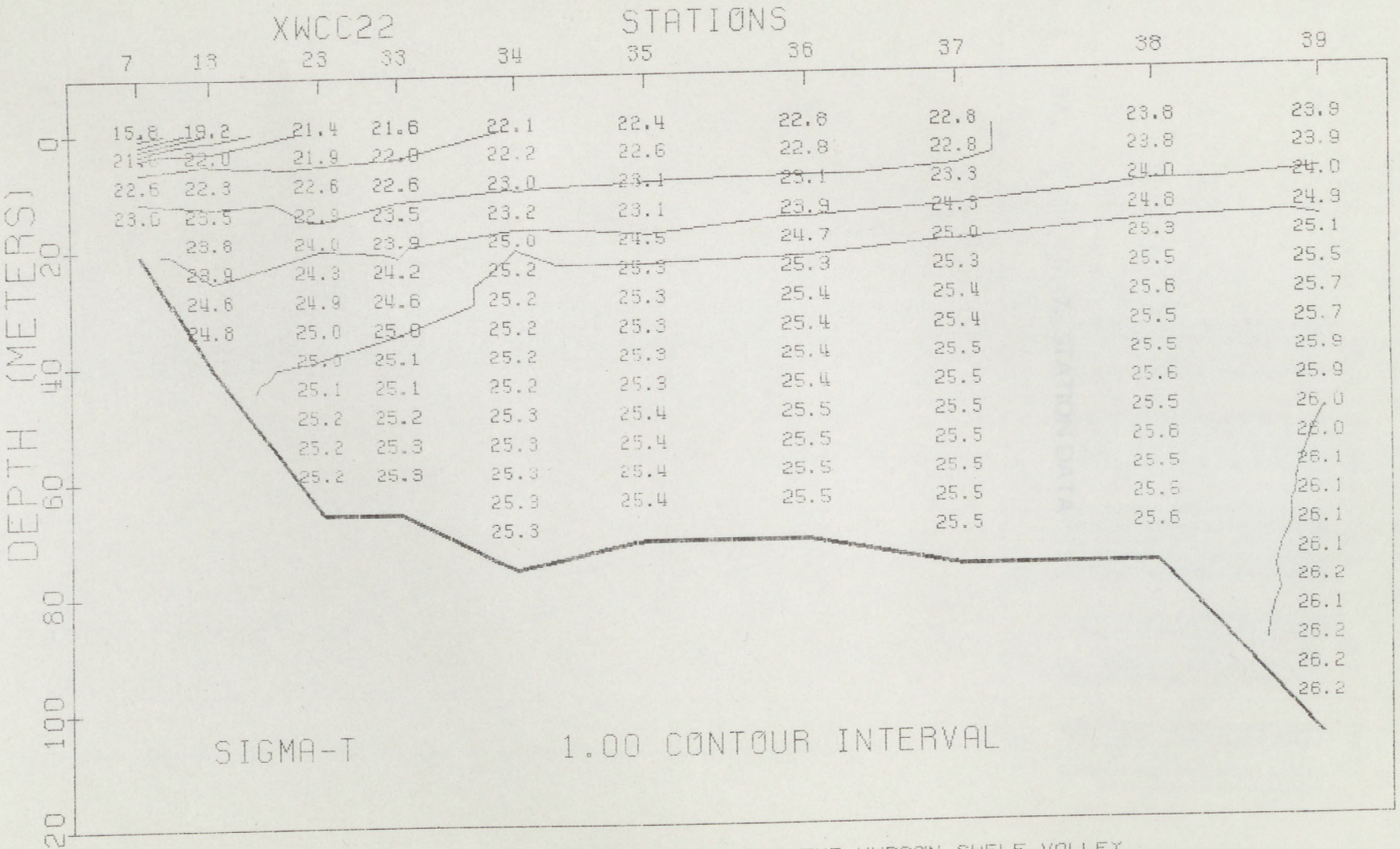
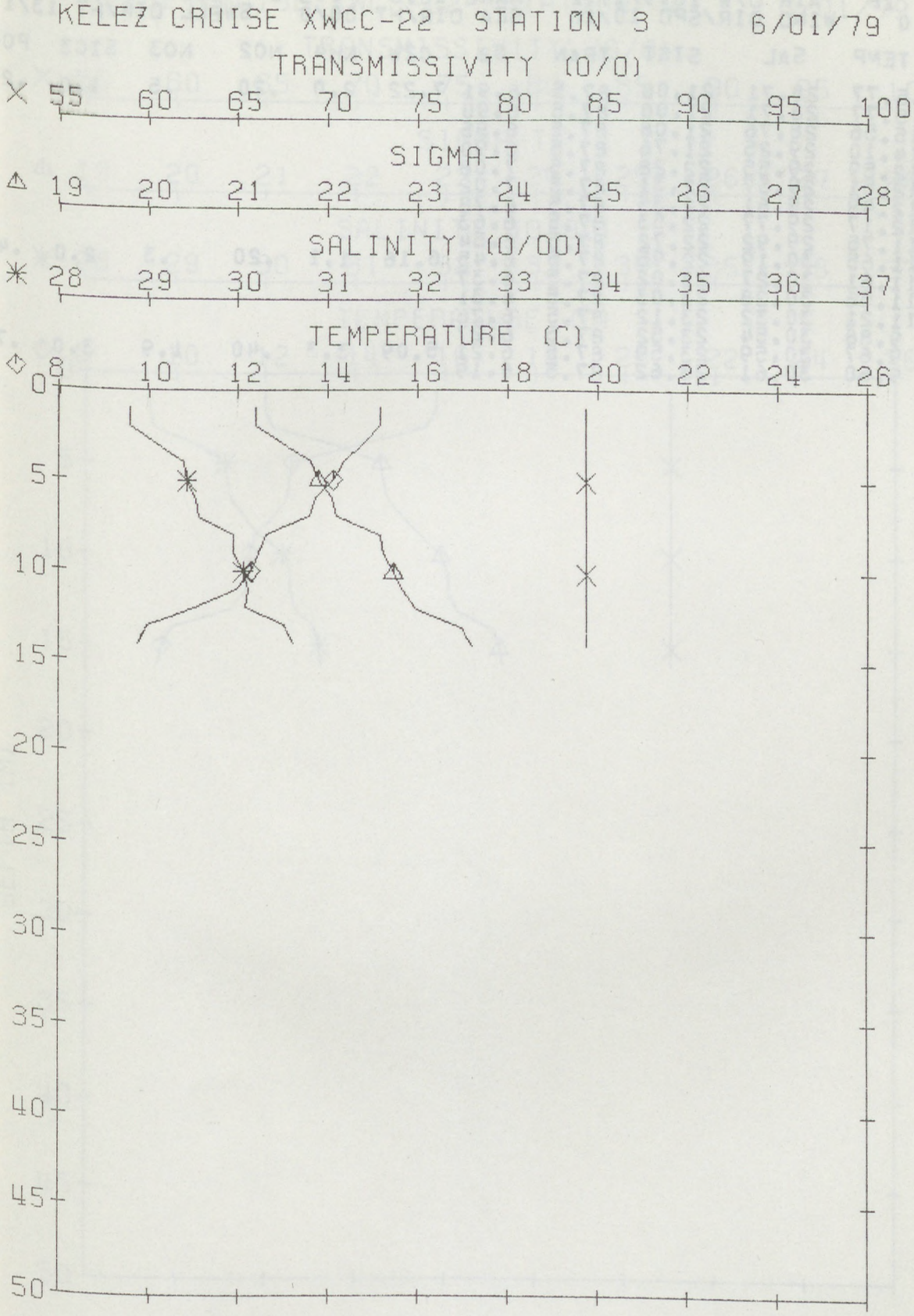



FIGURE 7. VERTICAL SIGMA-T CONTOURS ALONG THE HUDSON SHELF VALLEY 05/29/79-06/07/79. REFERENCE FIGURE 1 FOR TRACK LINE.

# 7. STATION DATA

XWCC-22 STA. 3 LAT 40 31.5N; LONG 73 48.5W GMT 16.2 6/01/79
DEPTH 16 AIR D/W 18.9/17.8 BARO 18.0 VIS 3 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 10/08 SEA DIR/HT 00/0 SWELL DIR/HT 13/0

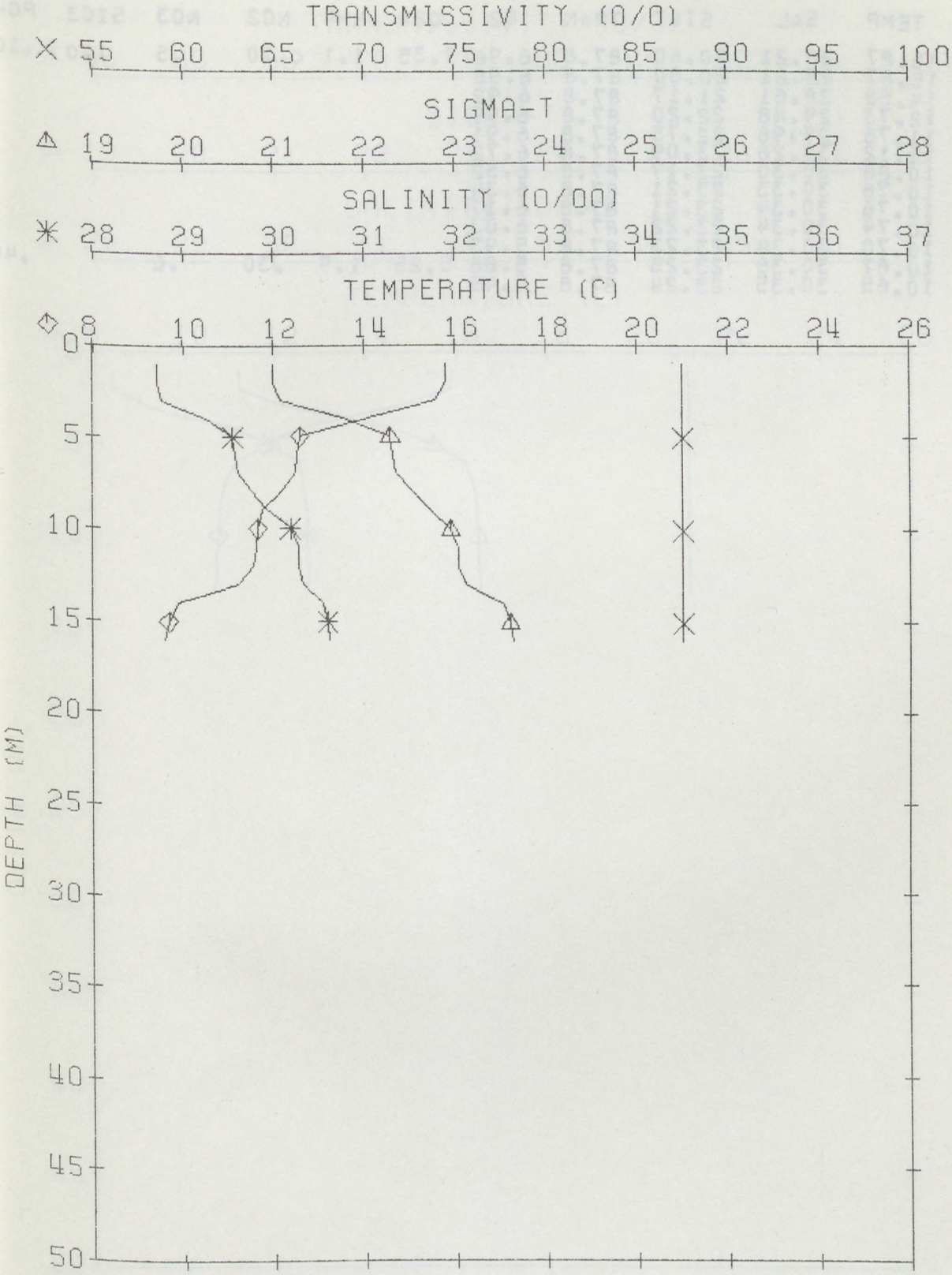
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.15 | 28.80 | 21.20 | 84.3 | 7.29 | 8.71 | 1.4 | .30 | .4 | 2.5 | .2 |
| 2 | 15.15 | 28.80 | 21.20 | 84.3 | 7.29 | | | | | | |
| 3 | 14.78 | 29.09 | 21.50 | 84.3 | 7.22 | | | | | | |
| 4 | 14.35 | 29.39 | 21.81 | 84.3 | 7.13 | | | | | | |
| 5 | 14.11 | 29.43 | 21.89 | 84.3 | 7.04 | | | | | | |
| 6 | 13.72 | 29.53 | 22.05 | 84.3 | 6.95 | | | | | | |
| 7 | 13.60 | 29.56 | 22.09 | 84.3 | 6.87 | | | | | | |
| 8 | 12.62 | 29.94 | 22.58 | 84.3 | 6.81 | | | | | | |
| 9 | 12.45 | 29.94 | 22.61 | 84.3 | 6.80 | | | | | | |
| 10 | 12.28 | 30.05 | 22.73 | 84.3 | 6.75 | | | | | | |
| 11 | 11.96 | 30.12 | 22.83 | 84.3 | 6.71 | | | | | | |
| 12 | 11.01 | 30.07 | 22.97 | 84.3 | 6.68 | | | | | | |
| 13 | 9.96 | 30.51 | 23.48 | 84.3 | 6.72 | | | | | | |
| 14 | 9.74 | 30.61 | 23.59 | 84.3 | 6.63 | 5.37 | 2.5 | .60 | 1.1 | 3.0 | .6 |


KELEZ CRUISE XWCC-22 STATION 3 6/01/79
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-22 STA. 4 LAT 40 32.5N; LONG 73 40.6W GMT 17.2 6/01/79
DEPTH 18 AIR D/W 18.9/17.2 BARO 18.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 10/10 SEA DIR/HT 00/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.77 | 28.71 | 21.00 | 87.5 | 6.91 | 7.22 | 2.0 | .20 | .5 | 1.0 | .2 |
| 2 | 15.77 | 28.71 | 21.00 | 87.5 | 6.90 | | | | | | |
| 3 | 15.56 | 28.76 | 21.08 | 87.5 | 6.95 | | | | | | |
| 4 | 14.10 | 29.25 | 21.76 | 87.5 | 6.90 | | | | | | |
| 5 | 12.59 | 29.55 | 22.28 | 87.5 | 7.08 | | | | | | |
| 6 | 12.51 | 29.57 | 22.31 | 87.5 | 7.02 | | | | | | |
| 7 | 12.48 | 29.61 | 22.35 | 87.5 | 6.78 | | | | | | |
| 8 | 12.17 | 29.77 | 22.53 | 87.5 | 6.63 | | | | | | |
| 9 | 11.75 | 29.92 | 22.72 | 87.5 | 6.54 | | | | | | |
| 10 | 11.65 | 30.19 | 22.95 | 87.5 | 6.45 | 6.16 | 1.1 | .20 | .3 | 2.0 | .4 |
| 11 | 11.61 | 30.27 | 23.02 | 87.5 | 6.37 | | | | | | |
| 12 | 11.56 | 30.28 | 23.03 | 87.5 | 6.31 | | | | | | |
| 13 | 11.21 | 30.32 | 23.12 | 87.5 | 6.26 | | | | | | |
| 14 | 9.88 | 30.54 | 23.52 | 87.5 | 6.27 | | | | | | |
| 15 | 9.67 | 30.59 | 23.59 | 87.5 | 6.21 | 5.09 | 3.3 | .40 | 1.9 | 3.0 | .7 |
| 16 | 9.60 | 30.61 | 23.62 | 87.5 | 6.19 | | | | | | |

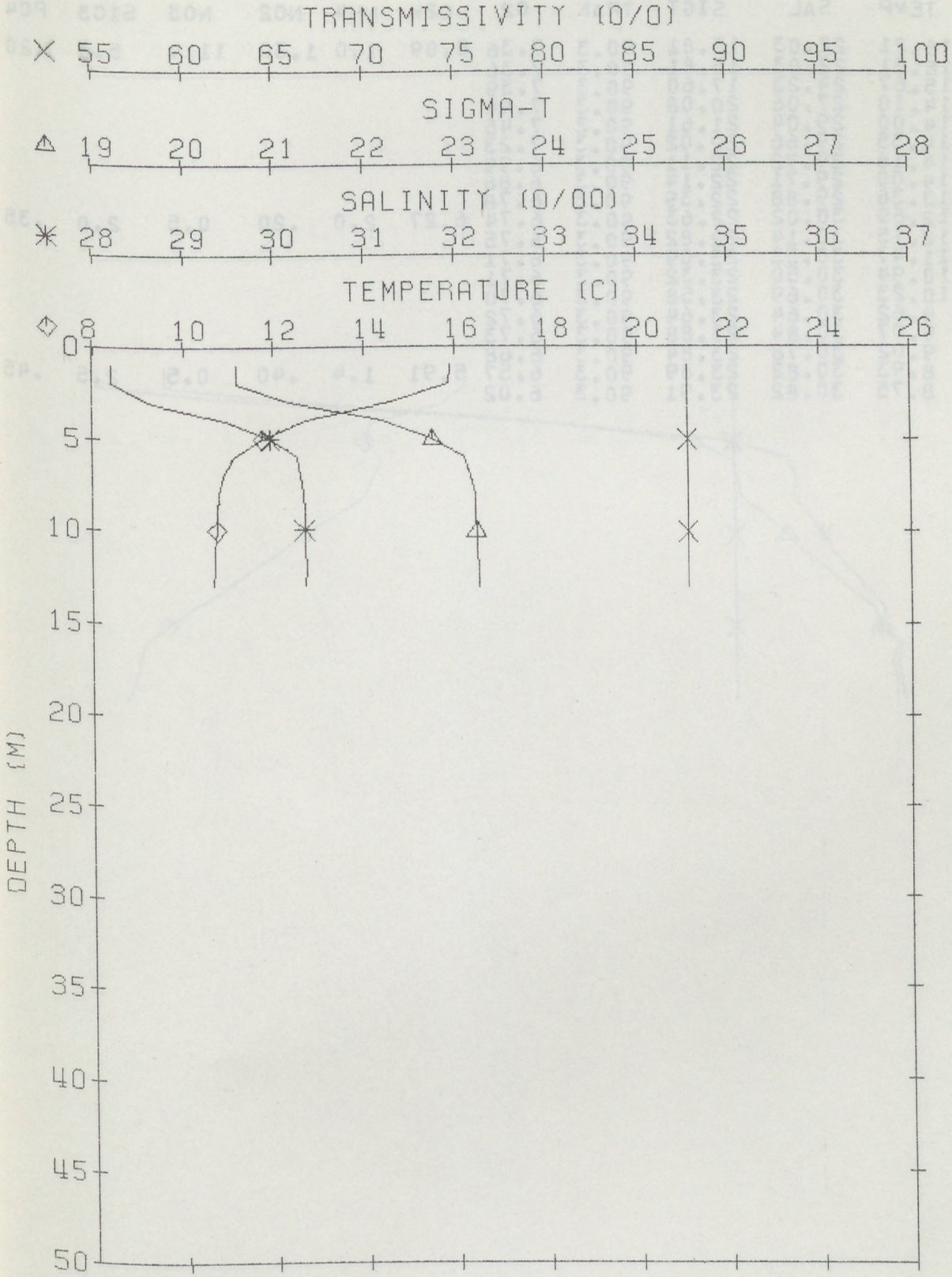
KELEZ CRUISE XWCC-22 STATION 4 6/01/79



XWCC-22 STA. 5 LAT 40 33.3N; LONG 73 32.4W GMT 20.2 6/01/79
DEPTH 16 AIR D/W 17.2/16.1 BARO 18.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 08/10 SEA DIR/HT 13/1 SWELL DIR/HT 13/1

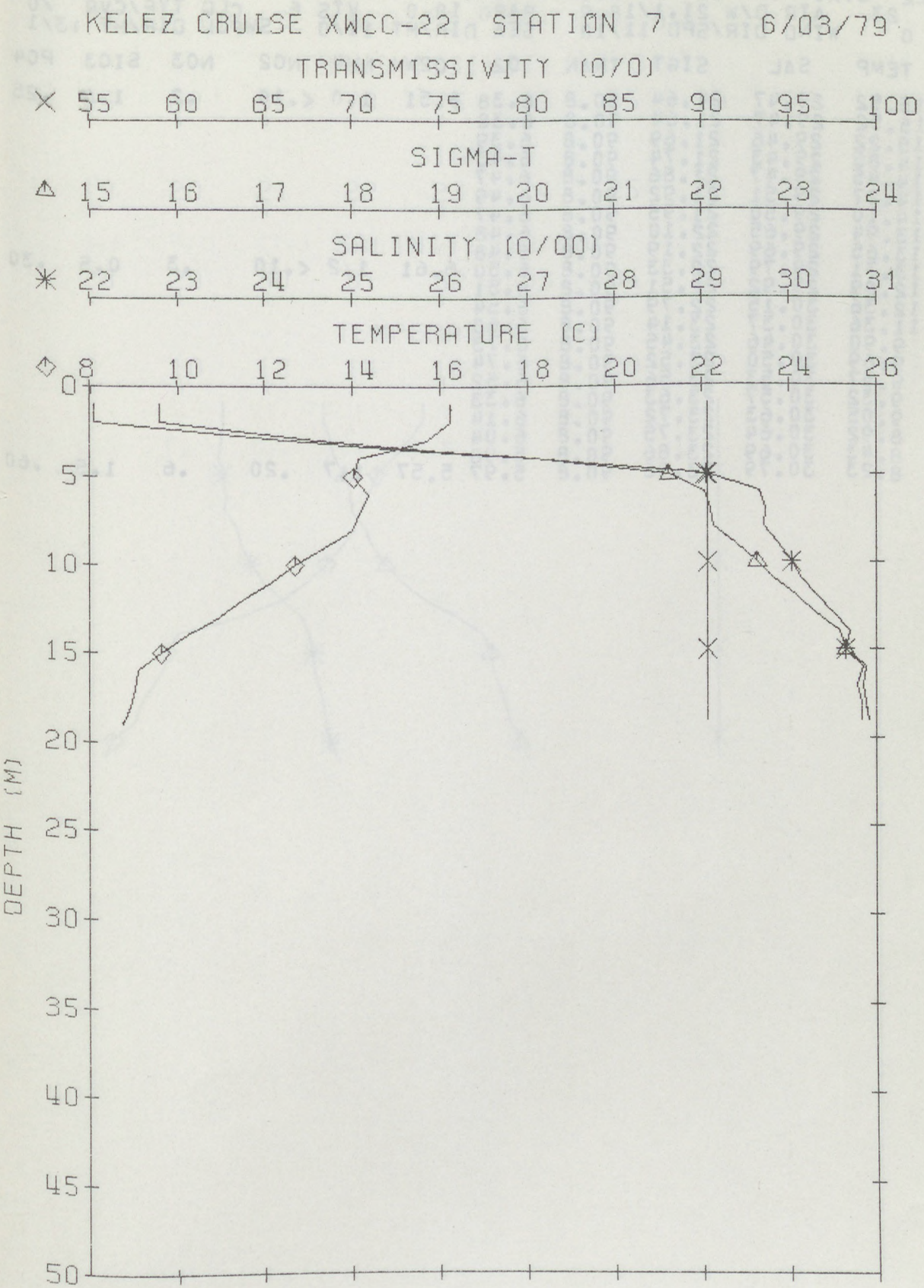
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.87 | 28.21 | 20.60 | 87.8 | 6.96 | 7.35 | 1.1 | <.10 | .5 | 1.0 | .10 |
| 2 | 15.87 | 28.21 | 20.60 | 87.8 | 6.95 | | | | | | |
| 3 | 14.58 | 28.61 | 21.17 | 87.8 | 6.92 | | | | | | |
| 4 | 12.73 | 29.48 | 22.20 | 87.8 | 6.99 | | | | | | |
| 5 | 11.76 | 29.96 | 22.75 | 87.8 | 6.91 | | | | | | |
| 6 | 11.12 | 30.26 | 23.09 | 87.8 | 6.72 | | | | | | |
| 7 | 10.88 | 30.30 | 23.17 | 87.8 | 6.52 | | | | | | |
| 8 | 10.78 | 30.33 | 23.21 | 87.8 | 6.34 | | | | | | |
| 9 | 10.76 | 30.34 | 23.21 | 87.8 | 6.17 | | | | | | |
| 10 | 10.74 | 30.34 | 23.22 | 87.8 | 6.03 | | | | | | |
| 11 | 10.70 | 30.34 | 23.23 | 87.8 | 5.93 | | | | | | |
| 12 | 10.67 | 30.36 | 23.25 | 87.8 | 5.86 | 5.25 | 1.9 | .30 | .6 | | .40 |
| 13 | 10.65 | 30.35 | 23.24 | 87.8 | 5.45 | | | | | | |

KELEZ CRUISE XWCC-22 STATION 5 6/01/79



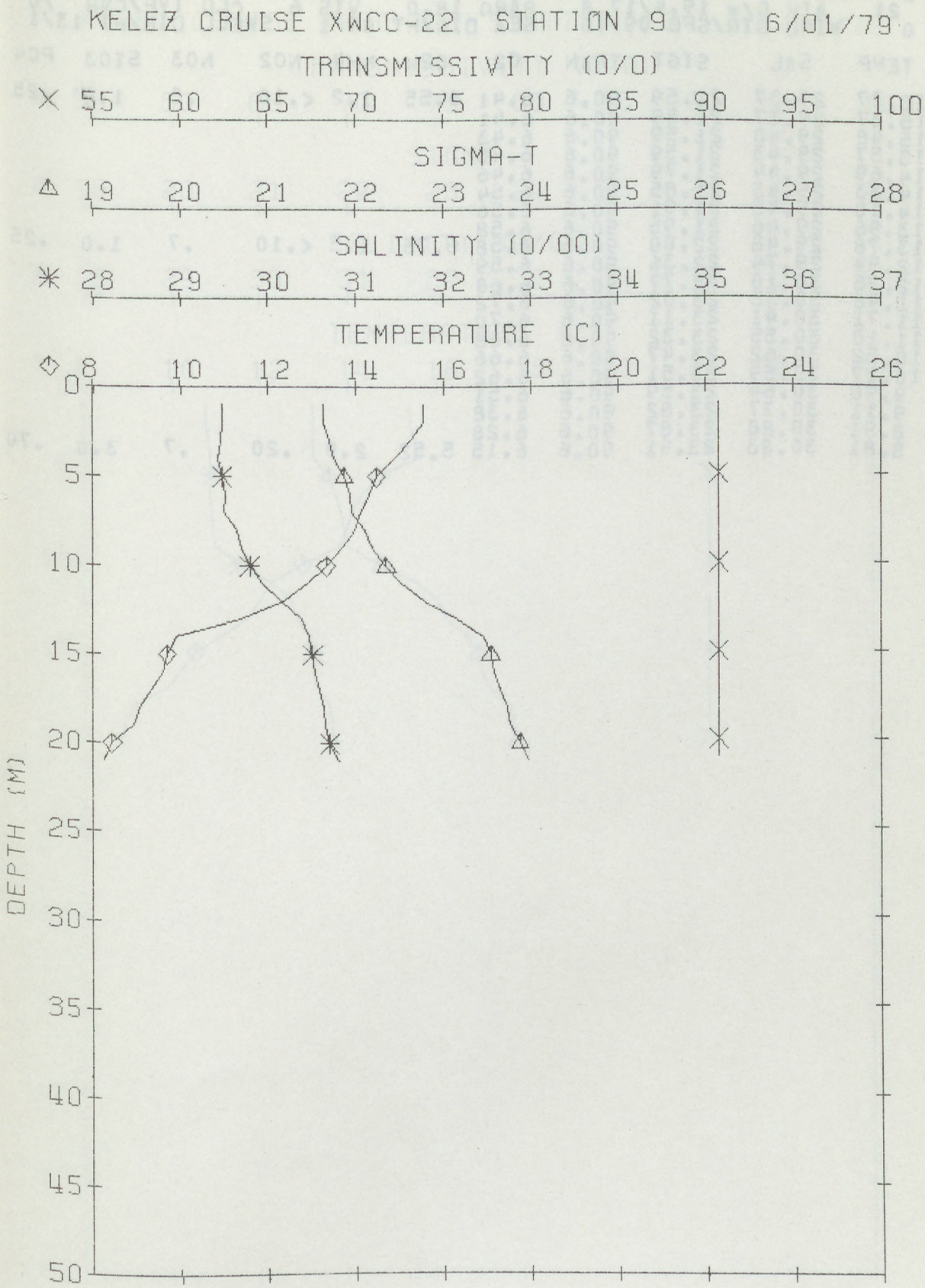
XWCC-22 STA. 7 LAT 40 26.7N; LONG 73 52.9W GMT 9.1 6/03/79
DEPTH 21 AIR D/W 16.7/16.1 BARO 19.0 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 21/07 SEA DIR/HT 17/0 SWELL DIR/HT 17/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.21 | 22.03 | 15.81 | 90.3 | 7.36 | 8.09 | 1.0 | 1.30 | 11.4 | 5.0 | .20 |
| 2 | 16.21 | 22.03 | 15.81 | 90.3 | 7.36 | | | | | | |
| 3 | 15.67 | 24.23 | 17.60 | 90.3 | 7.39 | | | | | | |
| 4 | 14.10 | 27.06 | 20.08 | 90.3 | 7.44 | | | | | | |
| 5 | 14.00 | 29.04 | 21.61 | 90.3 | 7.45 | | | | | | |
| 6 | 14.35 | 29.66 | 22.02 | 90.3 | 7.23 | | | | | | |
| 7 | 14.16 | 29.72 | 22.11 | 90.3 | 6.99 | | | | | | |
| 8 | 14.00 | 29.71 | 22.14 | 90.3 | 6.86 | | | | | | |
| 9 | 13.36 | 29.88 | 22.39 | 90.3 | 6.78 | | | | | | |
| 10 | 12.69 | 30.02 | 22.63 | 90.3 | 6.74 | 6.27 | 2.0 | .20 | 0.5 | 2.0 | .35 |
| 11 | 12.15 | 30.14 | 22.82 | 90.3 | 6.75 | | | | | | |
| 12 | 11.47 | 30.33 | 23.09 | 90.3 | 6.71 | | | | | | |
| 13 | 10.94 | 30.50 | 23.32 | 90.3 | 6.71 | | | | | | |
| 14 | 10.23 | 30.69 | 23.58 | 90.3 | 6.70 | | | | | | |
| 15 | 9.62 | 30.64 | 23.64 | 90.3 | 6.72 | | | | | | |
| 16 | 9.07 | 30.84 | 23.88 | 90.3 | 6.73 | | | | | | |
| 17 | 9.02 | 30.78 | 23.84 | 90.3 | 6.68 | | | | | | |
| 18 | 8.93 | 30.82 | 23.89 | 90.3 | 6.57 | 5.91 | 1.4 | .40 | 0.5 | 2.5 | .45 |
| 19 | 8.75 | 30.82 | 23.91 | 90.3 | 6.02 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 7 6/03/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
15 16 17 18 19 20 21 22 23 24
SALINITY (0/00)
22 23 24 25 26 27 28 29 30 31
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

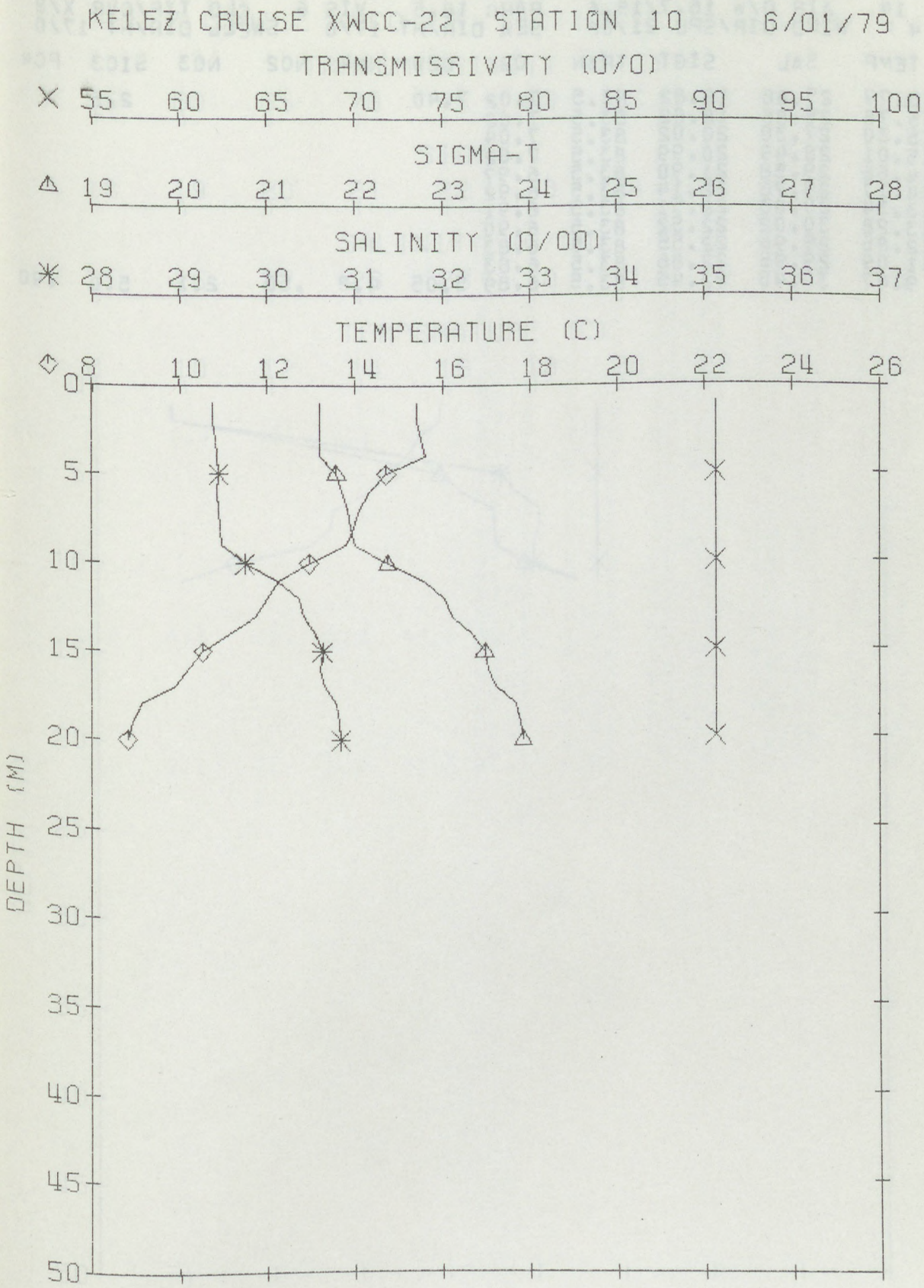
XWCC-22 STA. 9 LAT 40 28.2N; LONG 73 39.6W GMT 18.1 6/01/79
DEPTH 23 AIR D/W 21.1/18.9 BARO 18.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 11/10 SEA DIR/HT 11/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.52 | 29.47 | 21.64 | 90.8 | 6.38 | 6.51 | 1.0 | <.10 | .2 | 1.0 | .25 |
| 2 | 15.52 | 29.47 | 21.64 | 90.8 | 6.38 | | | | | | |
| 3 | 15.22 | 29.46 | 21.69 | 90.8 | 6.39 | | | | | | |
| 4 | 14.85 | 29.43 | 21.74 | 90.8 | 6.43 | | | | | | |
| 5 | 14.45 | 29.47 | 21.86 | 90.8 | 6.47 | | | | | | |
| 6 | 14.27 | 29.51 | 21.92 | 90.8 | 6.49 | | | | | | |
| 7 | 14.10 | 29.50 | 21.95 | 90.8 | 6.47 | | | | | | |
| 8 | 13.94 | 29.65 | 22.10 | 90.8 | 6.48 | | | | | | |
| 9 | 13.65 | 29.69 | 22.19 | 90.8 | 6.48 | | | | | | |
| 10 | 13.31 | 29.79 | 22.33 | 90.8 | 6.50 | 6.61 | 1.2 | <.10 | .3 | 0.5 | .30 |
| 11 | 12.89 | 29.92 | 22.51 | 90.8 | 6.51 | | | | | | |
| 12 | 12.36 | 30.15 | 22.79 | 90.8 | 6.54 | | | | | | |
| 13 | 11.36 | 30.37 | 23.14 | 90.8 | 6.60 | | | | | | |
| 14 | 9.90 | 30.46 | 23.45 | 90.8 | 6.73 | | | | | | |
| 15 | 9.69 | 30.50 | 23.52 | 90.8 | 6.74 | | | | | | |
| 16 | 9.57 | 30.53 | 23.56 | 90.8 | 6.52 | | | | | | |
| 17 | 9.32 | 30.57 | 23.63 | 90.8 | 6.33 | | | | | | |
| 18 | 9.05 | 30.63 | 23.72 | 90.8 | 6.14 | | | | | | |
| 19 | 8.92 | 30.64 | 23.75 | 90.8 | 6.04 | | | | | | |
| 20 | 8.43 | 30.69 | 23.86 | 90.8 | 5.98 | | | | | | |
| 21 | 8.23 | 30.79 | 23.96 | 90.8 | 5.97 | 5.57 | 1.7 | .20 | .6 | 1.5 | .60 |


KELEZ CRUISE XWCC-22 STATION 9 6/01/79
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

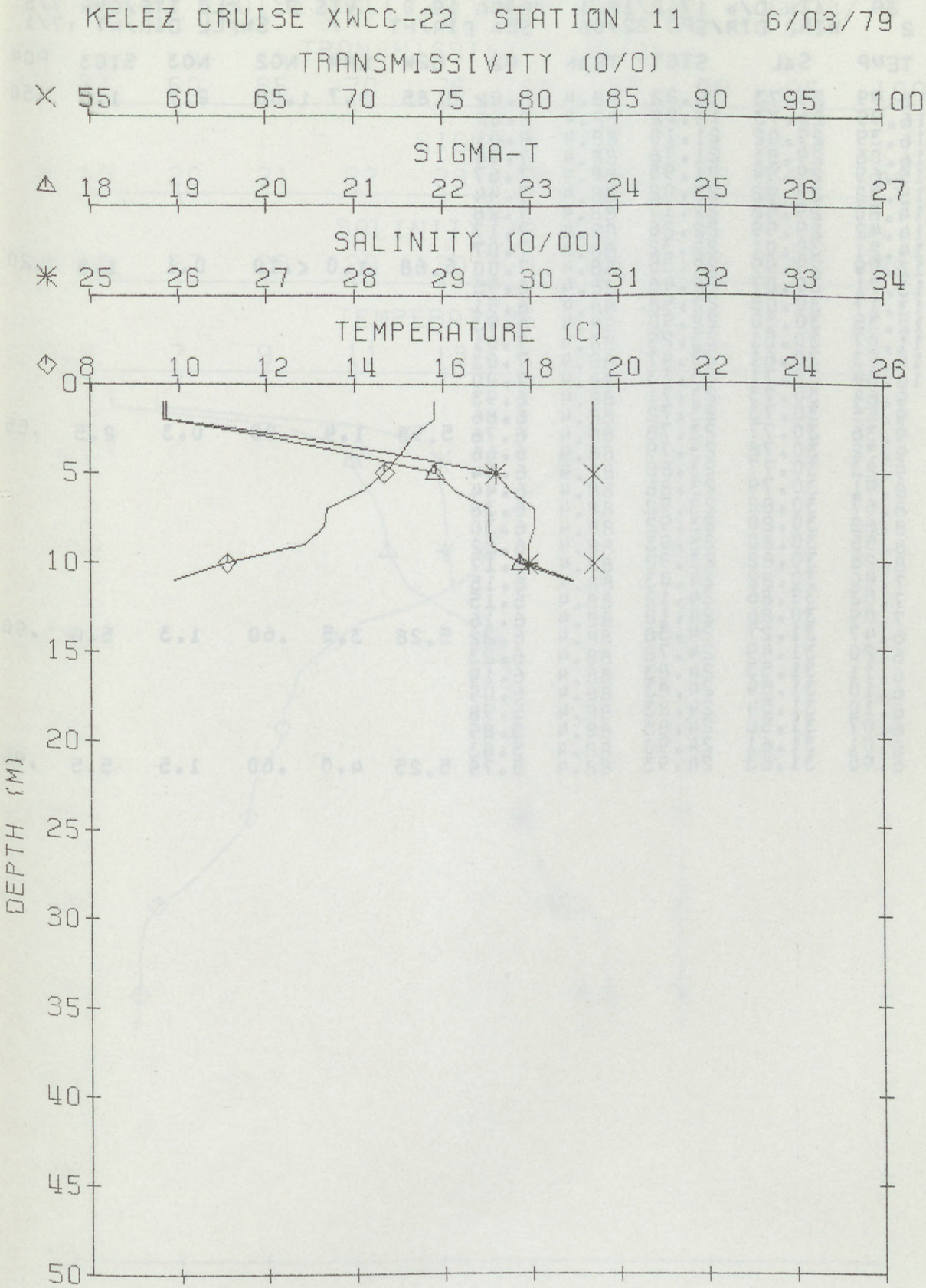
XWCC-22 STA. 10 LAT 40 29.3N; LONG 73 31.5W GMT 19.2 6/01/79
DEPTH 21 AIR D/W 19.4/17.8 BARO 18.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 09/10 SEA DIR/HT 09/1 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.37 | 29.37 | 21.59 | 90.6 | 6.41 | 6.55 | 1.2 | <.10 | .3 | 1.0 | .25 |
| 2 | 15.37 | 29.37 | 21.59 | 90.6 | 6.41 | | | | | | |
| 3 | 15.48 | 29.40 | 21.59 | 90.6 | 6.43 | | | | | | |
| 4 | 15.57 | 29.43 | 21.59 | 90.6 | 6.45 | | | | | | |
| 5 | 14.69 | 29.44 | 21.79 | 90.6 | 6.46 | | | | | | |
| 6 | 14.33 | 29.43 | 21.85 | 90.6 | 6.54 | | | | | | |
| 7 | 14.10 | 29.45 | 21.91 | 90.6 | 6.56 | | | | | | |
| 8 | 13.96 | 29.46 | 21.95 | 90.6 | 6.58 | | | | | | |
| 9 | 13.78 | 29.48 | 22.00 | 90.6 | 6.58 | 6.76 | 1.5 | <.10 | .7 | 1.0 | .25 |
| 10 | 12.94 | 29.74 | 22.36 | 90.6 | 6.59 | | | | | | |
| 11 | 12.25 | 30.10 | 22.77 | 90.6 | 6.68 | | | | | | |
| 12 | 11.98 | 30.35 | 23.02 | 90.6 | 6.72 | | | | | | |
| 13 | 11.71 | 30.41 | 23.11 | 90.6 | 6.70 | | | | | | |
| 14 | 11.10 | 30.55 | 23.32 | 90.6 | 6.68 | | | | | | |
| 15 | 10.52 | 30.62 | 23.47 | 90.6 | 6.66 | | | | | | |
| 16 | 10.17 | 30.59 | 23.51 | 90.6 | 6.62 | | | | | | |
| 17 | 9.90 | 30.64 | 23.59 | 90.6 | 6.51 | | | | | | |
| 18 | 9.11 | 30.77 | 23.82 | 90.6 | 6.38 | | | | | | |
| 19 | 8.91 | 30.80 | 23.87 | 90.6 | 6.28 | | | | | | |
| 20 | 8.81 | 30.83 | 23.91 | 90.6 | 6.15 | 5.52 | 2.0 | .20 | .7 | 3.0 | .70 |


KELEZ CRUISE XWCC-22 STATION 10 6/01/79
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

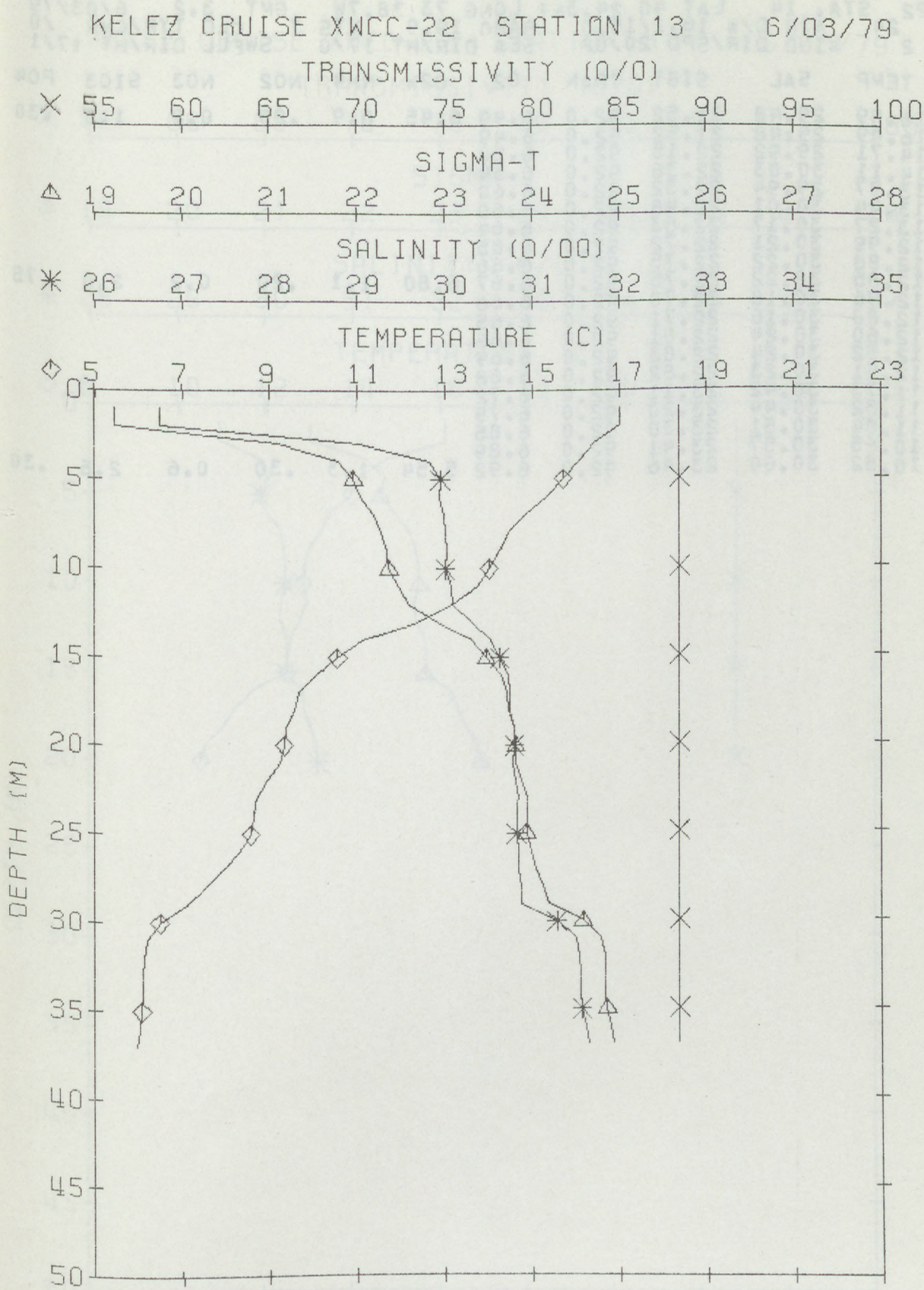
XWCC-22 STA. 11 LAT 40 22.1N; LONG 73 56.8W GMT 10.1 6/03/79
DEPTH 14 AIR D/W 16.7/15.6 BARO 18.5 VIS 6 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 21/06 SEA DIR/HT 17/0 SWELL DIR/HT 17/0

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.79 | 25.86 | 18.82 | 83.5 | 7.02 | 7.40 | | | | 2.5 | |
| 2 | 15.78 | 25.86 | 18.82 | 83.5 | 7.02 | | | | | | |
| 3 | 15.30 | 27.30 | 20.02 | 83.5 | 7.04 | | | | | | |
| 4 | 15.01 | 28.49 | 20.99 | 83.5 | 7.02 | | | | | | |
| 5 | 14.66 | 29.58 | 21.90 | 83.5 | 6.97 | | | | | | |
| 6 | 14.17 | 29.76 | 22.14 | 83.5 | 6.92 | | | | | | |
| 7 | 13.34 | 30.03 | 22.51 | 83.5 | 6.91 | | | | | | |
| 8 | 13.28 | 30.02 | 22.52 | 83.5 | 6.90 | | | | | | |
| 9 | 12.85 | 29.96 | 22.55 | 83.5 | 6.83 | | | | | | |
| 10 | 11.09 | 29.95 | 22.86 | 83.5 | 6.83 | | | | | | |
| 11 | 9.87 | 30.45 | 23.45 | 83.5 | 6.89 | 5.05 | 4.8 | .50 | 2.1 | 5.0 | .90 |


KELEZ CRUISE XWCC-22 STATION 11 6/03/79
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)
25 26 27 28 29 30 31 32 33 34
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

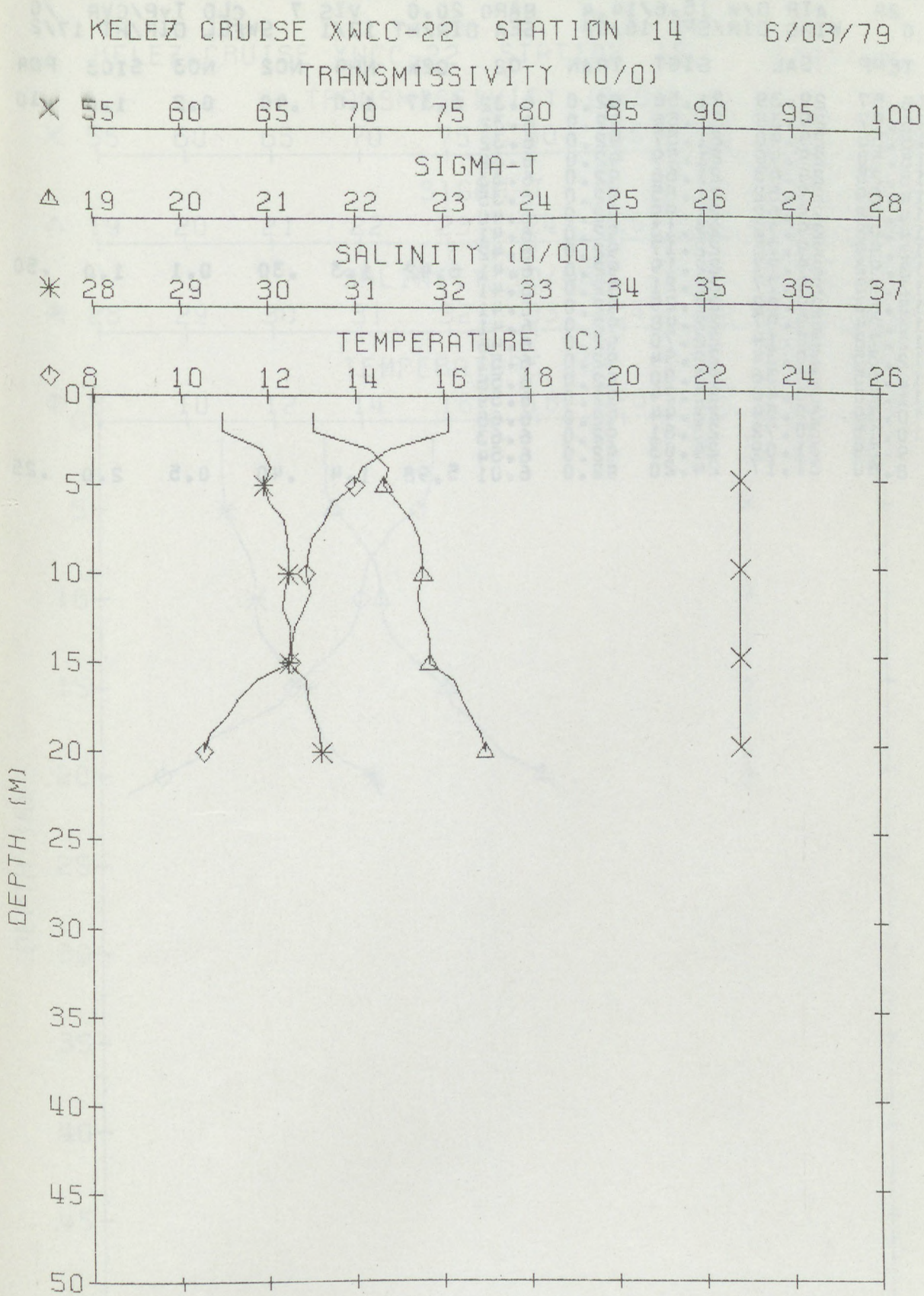
XWCC-22 STA. 13 LAT 40 23.4N; LONG 73 47.0W GMT 7.1 6/03/79
DEPTH 39 AIR D/W 17.2/16.1 BARO 19.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 22/06 SEA DIR/HT / SWELL DIR/HT 17/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.99 | 26.73 | 19.22 | 88.4 | 8.02 | 8.85 | 0.7 | 1.00 | 2.7 | 1.5 | .50 |
| 2 | 16.99 | 26.73 | 19.22 | 88.4 | 8.02 | | | | | | |
| 3 | 16.39 | 29.02 | 21.10 | 88.4 | 8.01 | | | | | | |
| 4 | 16.06 | 29.81 | 21.78 | 88.4 | 7.94 | | | | | | |
| 5 | 15.69 | 29.94 | 21.95 | 88.4 | 7.67 | | | | | | |
| 6 | 15.32 | 29.92 | 22.02 | 88.4 | 7.44 | | | | | | |
| 7 | 14.80 | 29.98 | 22.17 | 88.4 | 7.28 | | | | | | |
| 8 | 14.42 | 29.99 | 22.26 | 88.4 | 7.17 | | | | | | |
| 9 | 14.21 | 30.01 | 22.32 | 88.4 | 7.07 | | | | | | |
| 10 | 13.99 | 29.99 | 22.35 | 88.4 | 7.00 | 6.68 | 1.0 | <.10 | 0.1 | 1.5 | .20 |
| 11 | 13.71 | 30.07 | 22.46 | 88.4 | 6.95 | | | | | | |
| 12 | 13.17 | 30.08 | 22.58 | 88.4 | 6.91 | | | | | | |
| 13 | 12.35 | 30.30 | 22.90 | 88.4 | 6.93 | | | | | | |
| 14 | 11.07 | 30.51 | 23.29 | 88.4 | 7.01 | | | | | | |
| 15 | 10.53 | 30.61 | 23.47 | 88.4 | 7.03 | | | | | | |
| 16 | 10.04 | 30.71 | 23.63 | 88.4 | 7.00 | | | | | | |
| 17 | 9.64 | 30.73 | 23.71 | 88.4 | 6.93 | | | | | | |
| 18 | 9.55 | 30.73 | 23.72 | 88.4 | 6.86 | | | | | | |
| 19 | 9.36 | 30.77 | 23.78 | 88.4 | 6.76 | 5.98 | 1.4 | .20 | 0.3 | 2.5 | .55 |
| 20 | 9.32 | 30.78 | 23.79 | 88.4 | 6.66 | | | | | | |
| 21 | 9.23 | 30.77 | 23.80 | 88.4 | 6.54 | | | | | | |
| 22 | 8.91 | 30.79 | 23.86 | 88.4 | 6.44 | | | | | | |
| 23 | 8.67 | 30.82 | 23.92 | 88.4 | 6.38 | | | | | | |
| 24 | 8.62 | 30.80 | 23.92 | 88.4 | 6.30 | | | | | | |
| 25 | 8.55 | 30.80 | 23.93 | 88.4 | 6.22 | | | | | | |
| 26 | 8.28 | 30.82 | 23.98 | 88.4 | 6.17 | | | | | | |
| 27 | 7.90 | 30.82 | 24.03 | 88.4 | 6.15 | | | | | | |
| 28 | 7.53 | 30.86 | 24.12 | 88.4 | 6.15 | | | | | | |
| 29 | 7.09 | 30.86 | 24.18 | 88.4 | 6.16 | | | | | | |
| 30 | 6.47 | 31.27 | 24.58 | 88.4 | 6.22 | 5.28 | 3.5 | .60 | 1.3 | 5.0 | .90 |
| 31 | 6.20 | 31.49 | 24.78 | 88.4 | 6.23 | | | | | | |
| 32 | 6.11 | 31.53 | 24.83 | 88.4 | 6.19 | | | | | | |
| 33 | 6.10 | 31.54 | 24.83 | 88.4 | 6.09 | | | | | | |
| 34 | 6.10 | 31.54 | 24.83 | 88.4 | 5.98 | | | | | | |
| 35 | 6.07 | 31.56 | 24.85 | 88.4 | 5.89 | | | | | | |
| 36 | 6.01 | 31.61 | 24.90 | 88.4 | 5.83 | | | | | | |
| 37 | 5.95 | 31.63 | 24.93 | 88.4 | 5.79 | 5.25 | 4.0 | .60 | 1.5 | 5.5 | .90 |


KELEZ CRUISE XWCC-22 STATION 13 6/03/79
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)
26 27 28 29 30 31 32 33 34 35
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

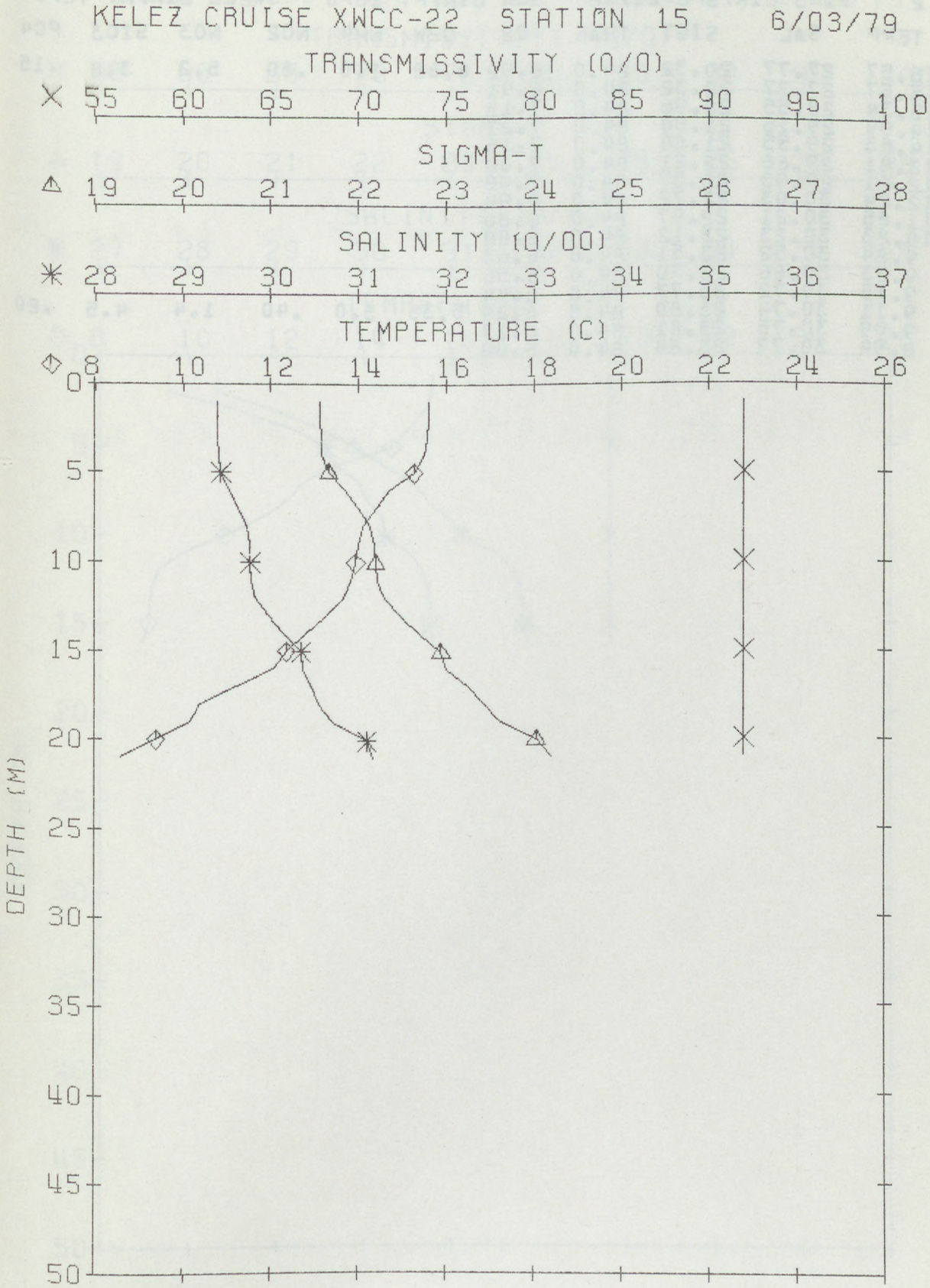
XWCC-22 STA. 14 LAT 40 24.3N; LONG 73 38.7W GMT 3.2 6/03/79
DEPTH 24 AIR D/W 16.1/15.0 BARO 19.9 VIS 7 CLD TYP/CVR /0
WETHR 2 WIND DIR/SPD 20/08 SEA DIR/HT 17/0 SWELL DIR/HT 17/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.09 | 29.48 | 21.52 | 92.0 | 6.49 | 6.45 | 0.9 | .20 | 0.2 | 1.5 | .30 |
| 2 | 16.09 | 29.48 | 21.52 | 92.0 | 6.49 | | | | | | |
| 3 | 14.71 | 29.92 | 22.15 | 92.0 | 6.50 | | | | | | |
| 4 | 14.11 | 30.03 | 22.36 | 92.0 | 6.54 | | | | | | |
| 5 | 13.97 | 29.94 | 22.32 | 92.0 | 6.60 | | | | | | |
| 6 | 13.44 | 30.01 | 22.48 | 92.0 | 6.60 | | | | | | |
| 7 | 13.27 | 30.17 | 22.63 | 92.0 | 6.64 | | | | | | |
| 8 | 12.99 | 30.21 | 22.72 | 92.0 | 6.65 | | | | | | |
| 9 | 12.88 | 30.22 | 22.75 | 92.0 | 6.66 | | | | | | |
| 10 | 12.85 | 30.22 | 22.75 | 92.0 | 6.67 | 6.80 | 1.1 | .20 | 0.2 | 2.0 | .75 |
| 11 | 12.96 | 30.18 | 22.70 | 92.0 | 6.66 | | | | | | |
| 12 | 12.80 | 30.16 | 22.71 | 92.0 | 6.65 | | | | | | |
| 13 | 12.60 | 30.24 | 22.81 | 92.0 | 6.66 | | | | | | |
| 14 | 12.52 | 30.24 | 22.83 | 92.0 | 6.69 | | | | | | |
| 15 | 12.51 | 30.23 | 22.82 | 92.0 | 6.68 | | | | | | |
| 16 | 11.73 | 30.42 | 23.11 | 92.0 | 6.72 | | | | | | |
| 17 | 11.32 | 30.44 | 23.20 | 92.0 | 6.79 | | | | | | |
| 18 | 11.04 | 30.51 | 23.30 | 92.0 | 6.85 | | | | | | |
| 19 | 10.65 | 30.57 | 23.41 | 92.0 | 6.89 | | | | | | |
| 20 | 10.52 | 30.60 | 23.46 | 92.0 | 6.92 | 5.54 | 1.3 | .30 | 0.6 | 2.5 | .30 |


KELEZ CRUISE XWCC-22 STATIØN 14 6/03/79
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

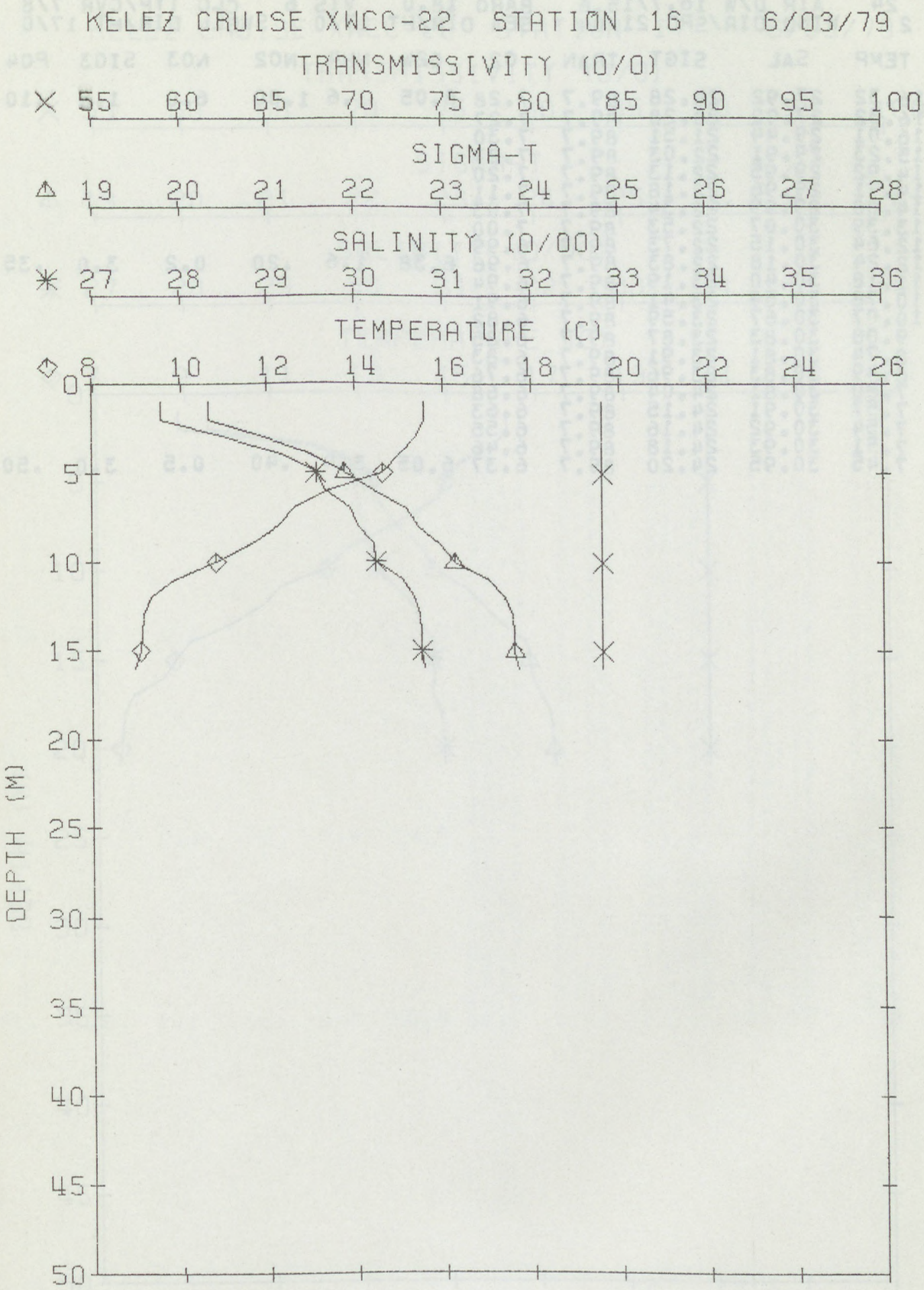
XWCC-22 STA. 15 LAT 40 25.2N; LONG 73 30.4W GMT 2.1 6/07/79
DEPTH 24 AIR D/W 15.6/14.4 BARO 20.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 16/08 SEA DIR/HT 17/1 SWELL DIR/HT 17/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.57 | 29.39 | 21.56 | 92.0 | 6.32 | 6.37 | 1.0 | .40 | 0.2 | 1.0 | .10 |
| 2 | 15.57 | 29.39 | 21.56 | 92.0 | 6.32 | | | | | | |
| 3 | 15.55 | 29.40 | 21.57 | 92.0 | 6.32 | | | | | | |
| 4 | 15.50 | 29.40 | 21.59 | 92.0 | 6.32 | | | | | | |
| 5 | 15.25 | 29.43 | 21.66 | 92.0 | 6.33 | | | | | | |
| 6 | 14.69 | 29.52 | 21.85 | 92.0 | 6.35 | | | | | | |
| 7 | 14.38 | 29.62 | 21.99 | 92.0 | 6.40 | | | | | | |
| 8 | 14.08 | 29.72 | 22.13 | 92.0 | 6.41 | | | | | | |
| 9 | 13.99 | 29.76 | 22.17 | 92.0 | 6.42 | | | | | | |
| 10 | 13.93 | 29.77 | 22.19 | 92.0 | 6.41 | 6.42 | 1.3 | .30 | 0.1 | 1.0 | .50 |
| 11 | 13.83 | 29.77 | 22.21 | 92.0 | 6.41 | | | | | | |
| 12 | 13.63 | 29.82 | 22.29 | 92.0 | 6.41 | | | | | | |
| 13 | 13.24 | 29.97 | 22.48 | 92.0 | 6.41 | | | | | | |
| 14 | 12.78 | 30.14 | 22.70 | 92.0 | 6.46 | | | | | | |
| 15 | 12.35 | 30.34 | 22.94 | 92.0 | 6.51 | | | | | | |
| 16 | 12.05 | 30.36 | 23.00 | 92.0 | 6.55 | | | | | | |
| 17 | 11.20 | 30.46 | 23.24 | 92.0 | 6.59 | | | | | | |
| 18 | 10.39 | 30.54 | 23.44 | 92.0 | 6.65 | | | | | | |
| 19 | 10.15 | 30.72 | 23.61 | 92.0 | 6.63 | | | | | | |
| 20 | 9.39 | 31.09 | 24.03 | 92.0 | 6.54 | | | | | | |
| 21 | 8.60 | 31.17 | 24.20 | 92.0 | 6.01 | 5.98 | 1.4 | .40 | 0.5 | 2.0 | .25 |


KELEZ CRUISE XWCC-22 STATION 15 6/03/79
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

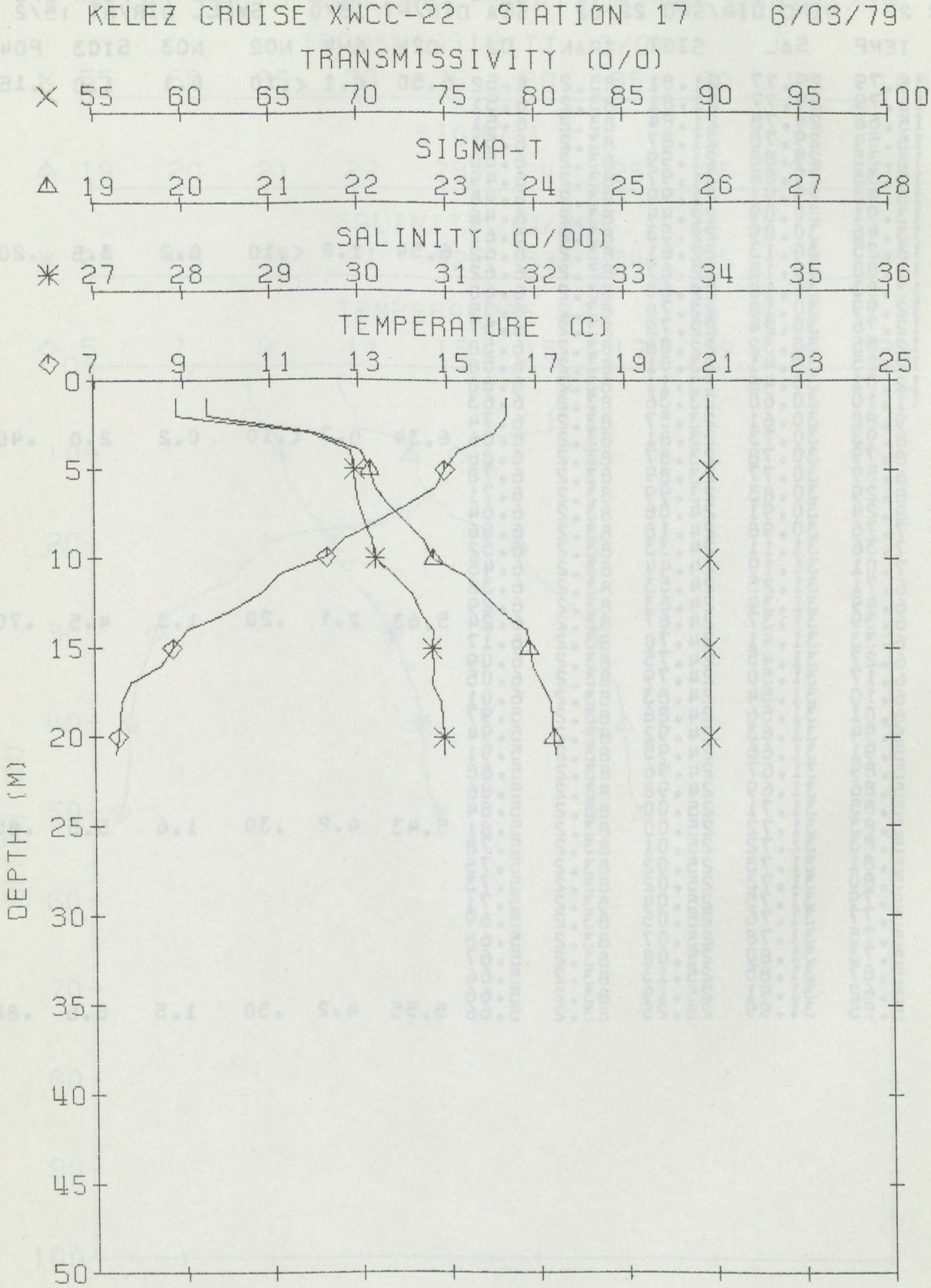
XWCC-22 STA. 16 LAT 40 18.6N; LONG 73 56.4W GMT 11.7 6/0?/79
DEPTH 17 AIR D/W 17.2/16.4 BARO 18.5 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 21/06 SEA DIR/HT 18/0 SWELL DIR/HT 18/0

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.57 | 27.77 | 20.32 | 84.0 | 6.92 | 6.68 | 1.0 | .60 | 5.2 | 3.0 | .15 |
| 2 | 15.57 | 27.77 | 20.32 | 84.0 | 6.91 | | | | | | |
| 3 | 15.34 | 28.55 | 20.96 | 84.0 | 7.13 | | | | | | |
| 4 | 14.99 | 29.15 | 21.50 | 84.0 | 7.21 | | | | | | |
| 5 | 14.63 | 29.55 | 21.88 | 84.0 | 7.16 | | | | | | |
| 6 | 13.41 | 29.66 | 22.21 | 84.0 | 7.09 | | | | | | |
| 7 | 12.61 | 29.93 | 22.57 | 84.0 | 7.08 | | | | | | |
| 8 | 12.24 | 30.03 | 22.72 | 84.0 | 6.94 | | | | | | |
| 9 | 11.65 | 30.21 | 22.97 | 84.0 | 6.80 | | | | | | |
| 10 | 10.83 | 30.23 | 23.12 | 84.0 | 6.68 | | | | | | |
| 11 | 9.84 | 30.52 | 23.51 | 84.0 | 6.63 | | | | | | |
| 12 | 9.33 | 30.66 | 23.70 | 84.0 | 6.56 | | | | | | |
| 13 | 9.15 | 30.72 | 23.77 | 84.0 | 6.44 | | | | | | |
| 14 | 9.11 | 30.74 | 23.80 | 84.0 | 6.29 | 5.35 | 3.0 | .40 | 1.4 | 4.5 | .80 |
| 15 | 9.09 | 30.75 | 23.81 | 84.0 | 6.17 | | | | | | |
| 16 | 8.94 | 30.77 | 23.84 | 84.0 | 6.08 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 16 6/03/79
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)
27 28 29 30 31 32 33 34 35 36
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-22 STA. 17 LAT 40 18.4N; LONG 73 52.1W GMT 10.9 6/03/79
DEPTH 24 AIR D/W 16.7/15.6 BARO 18.0 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 21/04 SEA DIR/HT 17/0 SWELL DIR/HT 17/0

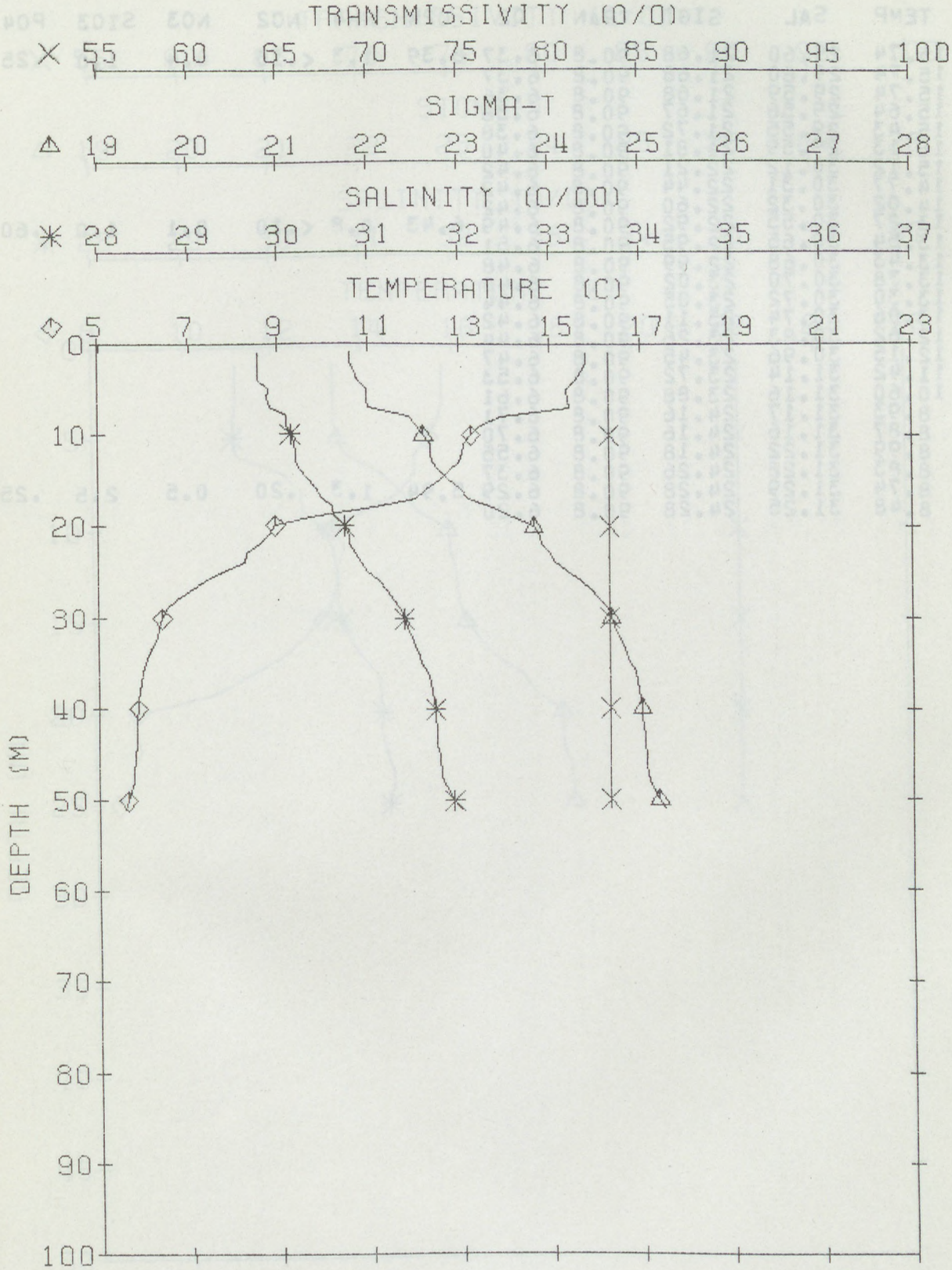
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.32 | 27.92 | 20.28 | 89.7 | 7.28 | 8.05 | .6 | 1.00 | 6.0 | 1.5 | .10 |
| 2 | 16.32 | 27.92 | 20.28 | 89.7 | 7.27 | | | | | | |
| 3 | 16.01 | 29.44 | 21.51 | 89.7 | 7.30 | | | | | | |
| 4 | 15.23 | 29.91 | 22.03 | 89.7 | 7.27 | | | | | | |
| 5 | 14.92 | 29.95 | 22.13 | 89.7 | 7.20 | | | | | | |
| 6 | 14.71 | 29.96 | 22.18 | 89.7 | 7.11 | | | | | | |
| 7 | 14.08 | 29.99 | 22.34 | 89.7 | 7.03 | | | | | | |
| 8 | 13.39 | 30.07 | 22.53 | 89.7 | 7.00 | | | | | | |
| 9 | 12.64 | 30.15 | 22.73 | 89.7 | 6.99 | | | | | | |
| 10 | 12.24 | 30.18 | 22.83 | 89.7 | 6.96 | 6.38 | 1.6 | .20 | 0.2 | 3.0 | .35 |
| 11 | 11.18 | 30.40 | 23.19 | 89.7 | 6.94 | | | | | | |
| 12 | 10.78 | 30.59 | 23.41 | 89.7 | 6.91 | | | | | | |
| 13 | 10.07 | 30.67 | 23.59 | 89.7 | 6.82 | | | | | | |
| 14 | 9.08 | 30.83 | 23.87 | 89.7 | 6.85 | | | | | | |
| 15 | 8.74 | 30.81 | 23.91 | 89.7 | 6.83 | | | | | | |
| 16 | 8.49 | 30.83 | 23.96 | 89.7 | 6.76 | | | | | | |
| 17 | 7.80 | 30.81 | 24.04 | 89.7 | 6.68 | | | | | | |
| 18 | 7.57 | 30.91 | 24.15 | 89.7 | 6.63 | | | | | | |
| 19 | 7.54 | 30.92 | 24.16 | 89.7 | 6.55 | | | | | | |
| 20 | 7.51 | 30.93 | 24.18 | 89.7 | 6.46 | | | | | | |
| 21 | 7.45 | 30.95 | 24.20 | 89.7 | 6.37 | 6.05 | 3.0 | .40 | 0.5 | 3.0 | .50 |


KELEZ CRUISE XWCC-22 STATION 17 6/03/79
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)
27 28 29 30 31 32 33 34 35 36
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-22 STA. 18 LAT 40 19.1N; LONG 73 47.5W GMT 15.6 6/03/79
DEPTH 53 AIR D/W 18.3/17.2 BARO 18.0 VIS 7 CLD TYP/CVR 6/8
WETHR 2 WIND DIR/SPD 22/02 SEA DIR/HT 15/0 SWELL DIR/HT 15/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.79 | 29.77 | 21.81 | 83.2 | 6.52 | 6.50 | 0.1 | <.10 | 0.1 | 1.0 | .15 |
| 2 | 15.79 | 29.77 | 21.81 | 83.2 | 6.51 | | | | | | |
| 3 | 15.68 | 29.78 | 21.84 | 83.2 | 6.51 | | | | | | |
| 4 | 15.54 | 29.78 | 21.87 | 83.2 | 6.51 | | | | | | |
| 5 | 15.35 | 29.88 | 21.99 | 83.2 | 6.50 | | | | | | |
| 6 | 15.38 | 29.88 | 21.97 | 83.2 | 6.49 | | | | | | |
| 7 | 15.43 | 29.91 | 21.99 | 83.2 | 6.48 | | | | | | |
| 8 | 13.91 | 30.09 | 22.44 | 83.2 | 6.48 | | | | | | |
| 9 | 13.46 | 30.09 | 22.53 | 83.2 | 6.61 | | | | | | |
| 10 | 13.25 | 30.13 | 22.61 | 83.2 | 6.62 | 6.54 | 1.8 | <.10 | 0.2 | 3.5 | .20 |
| 11 | 13.08 | 30.18 | 22.67 | 83.2 | 6.62 | | | | | | |
| 12 | 13.03 | 30.18 | 22.69 | 83.2 | 6.60 | | | | | | |
| 13 | 12.99 | 30.18 | 22.70 | 83.2 | 6.59 | | | | | | |
| 14 | 12.76 | 30.24 | 22.78 | 83.2 | 6.57 | | | | | | |
| 15 | 12.55 | 30.32 | 22.88 | 83.2 | 6.58 | | | | | | |
| 16 | 12.25 | 30.41 | 23.01 | 83.2 | 6.58 | | | | | | |
| 17 | 12.01 | 30.48 | 23.11 | 83.2 | 6.60 | | | | | | |
| 18 | 11.10 | 30.60 | 23.36 | 83.2 | 6.63 | | | | | | |
| 19 | 9.88 | 30.61 | 23.57 | 83.2 | 6.74 | | | | | | |
| 20 | 8.93 | 30.73 | 23.81 | 83.2 | 6.86 | 6.34 | 0.7 | <.10 | 0.2 | 2.0 | .40 |
| 21 | 8.79 | 30.78 | 23.87 | 83.2 | 6.86 | | | | | | |
| 22 | 8.59 | 30.77 | 23.89 | 83.2 | 6.78 | | | | | | |
| 23 | 8.29 | 30.83 | 23.99 | 83.2 | 6.71 | | | | | | |
| 24 | 8.24 | 30.91 | 24.06 | 83.2 | 6.64 | | | | | | |
| 25 | 7.76 | 30.98 | 24.18 | 83.2 | 6.56 | | | | | | |
| 26 | 7.36 | 31.11 | 24.33 | 83.2 | 6.52 | | | | | | |
| 27 | 7.01 | 31.19 | 24.44 | 83.2 | 6.45 | | | | | | |
| 28 | 6.71 | 31.25 | 24.53 | 83.2 | 6.38 | | | | | | |
| 29 | 6.49 | 31.34 | 24.63 | 83.2 | 6.29 | | | | | | |
| 30 | 6.39 | 31.37 | 24.67 | 83.2 | 6.24 | 5.63 | 2.1 | .20 | 1.3 | 4.5 | .70 |
| 31 | 6.33 | 31.41 | 24.70 | 83.2 | 6.17 | | | | | | |
| 32 | 6.27 | 31.45 | 24.75 | 83.2 | 6.09 | | | | | | |
| 33 | 6.17 | 31.50 | 24.79 | 83.2 | 6.05 | | | | | | |
| 34 | 6.10 | 31.54 | 24.83 | 83.2 | 6.01 | | | | | | |
| 35 | 6.01 | 31.56 | 24.86 | 83.2 | 5.97 | | | | | | |
| 36 | 5.94 | 31.63 | 24.92 | 83.2 | 5.94 | | | | | | |
| 37 | 5.91 | 31.66 | 24.95 | 83.2 | 5.91 | | | | | | |
| 38 | 5.89 | 31.67 | 24.96 | 83.2 | 5.88 | | | | | | |
| 39 | 5.86 | 31.69 | 24.98 | 83.2 | 5.86 | | | | | | |
| 40 | 5.85 | 31.71 | 25.00 | 83.2 | 5.84 | | | | | | |
| 41 | 5.83 | 31.72 | 25.00 | 83.2 | 5.81 | 5.43 | 4.2 | .30 | 1.6 | 5.5 | .85 |
| 42 | 5.83 | 31.72 | 25.01 | 83.2 | 5.78 | | | | | | |
| 43 | 5.81 | 31.73 | 25.02 | 83.2 | 5.75 | | | | | | |
| 44 | 5.80 | 31.73 | 25.02 | 83.2 | 5.73 | | | | | | |
| 45 | 5.79 | 31.75 | 25.04 | 83.2 | 5.71 | | | | | | |
| 46 | 5.77 | 31.76 | 25.05 | 83.2 | 5.69 | | | | | | |
| 47 | 5.75 | 31.78 | 25.07 | 83.2 | 5.68 | | | | | | |
| 48 | 5.73 | 31.80 | 25.08 | 83.2 | 5.67 | | | | | | |
| 49 | 5.67 | 31.85 | 25.13 | 83.2 | 5.66 | | | | | | |
| 50 | 5.62 | 31.91 | 25.19 | 83.2 | 5.66 | | | | | | |
| 51 | 5.55 | 31.99 | 25.25 | 83.2 | 5.66 | 5.55 | 4.2 | .30 | 1.5 | 5.5 | .80 |

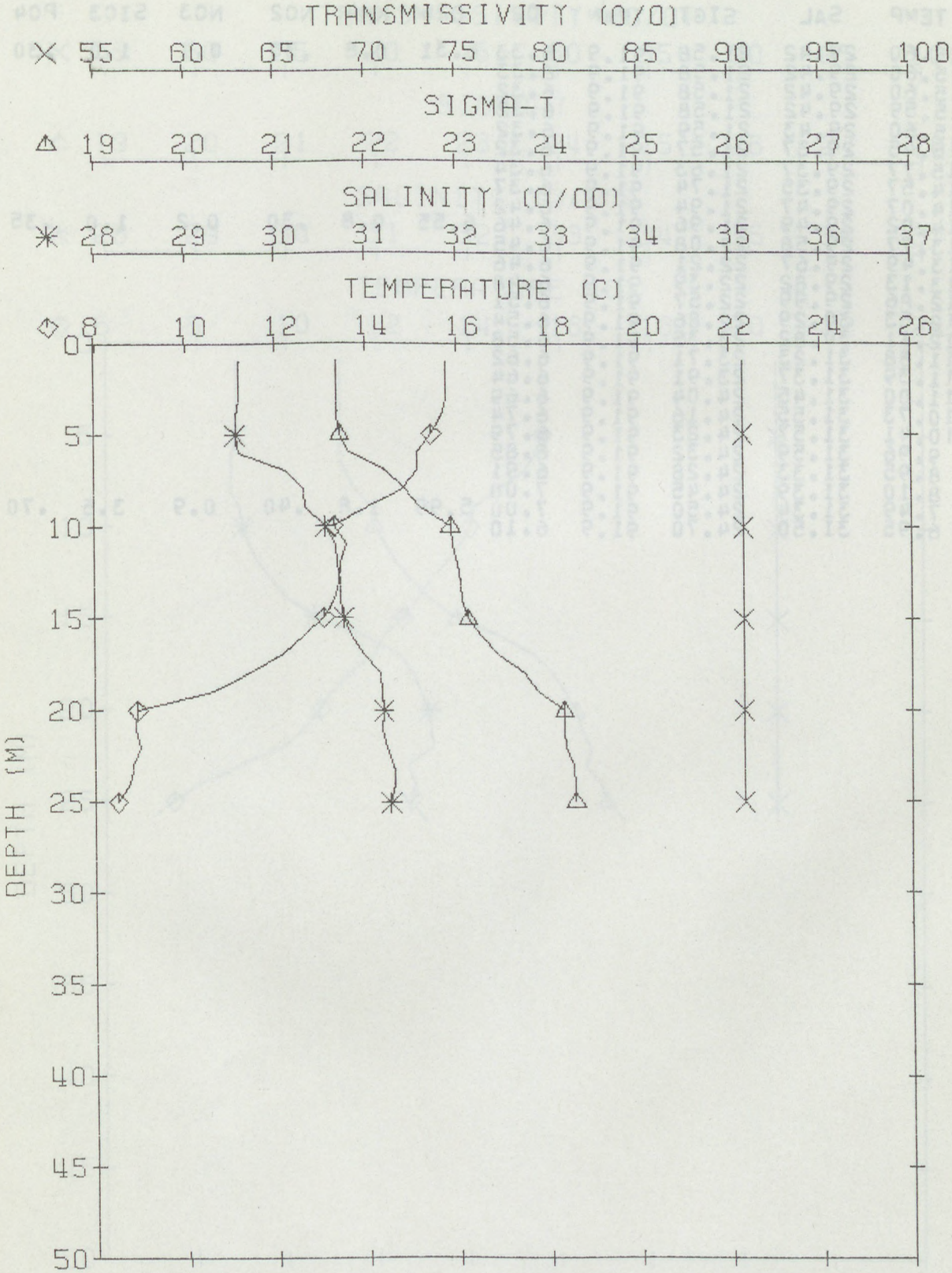
KELEZ CRUISE XWCC-22 STATION 18 6/03/79



XWCC-22 STA. 19 LAT 40 20.2N; LONG 73 37.8W GMT 4.4 6/03/79
DEPTH 27 AIR D/W 15.6/15.0 BARO 20.0 VIS 7 CLD TYP/CVR X/4
WETHR 1 WIND DIR/SPD 19/10 SEA DIR/HT 19/1 SWELL DIR/HT 17/1

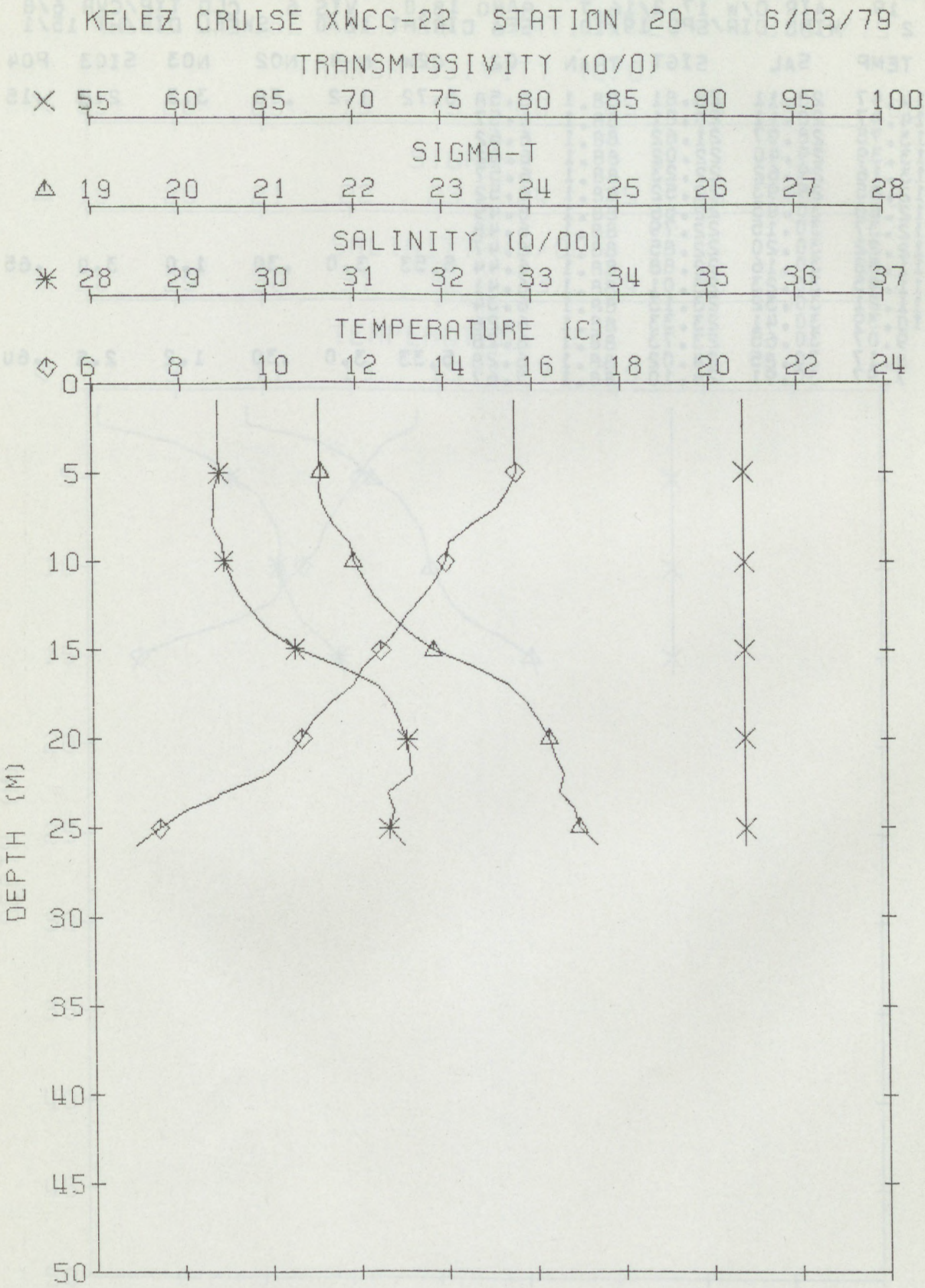
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.74 | 29.60 | 21.68 | 90.8 | 6.37 | 6.39 | 1.3 | <.10 | 0.4 | 1.0 | .25 |
| 2 | 15.74 | 29.60 | 21.68 | 90.8 | 6.37 | | | | | | |
| 3 | 15.74 | 29.59 | 21.68 | 90.8 | 6.36 | | | | | | |
| 4 | 15.64 | 29.56 | 21.67 | 90.8 | 6.36 | | | | | | |
| 5 | 15.43 | 29.55 | 21.72 | 90.8 | 6.38 | | | | | | |
| 6 | 15.13 | 29.59 | 21.81 | 90.8 | 6.40 | | | | | | |
| 7 | 15.12 | 30.12 | 22.21 | 90.8 | 6.42 | | | | | | |
| 8 | 14.77 | 30.31 | 22.44 | 90.8 | 6.42 | | | | | | |
| 9 | 14.02 | 30.32 | 22.60 | 90.8 | 6.42 | | | | | | |
| 10 | 13.27 | 30.55 | 22.92 | 90.8 | 6.49 | 6.43 | 0.8 | <.10 | 0.1 | 1.0 | .60 |
| 11 | 13.54 | 30.65 | 22.95 | 90.8 | 6.51 | | | | | | |
| 12 | 13.43 | 30.68 | 22.99 | 90.8 | 6.48 | | | | | | |
| 13 | 13.38 | 30.70 | 23.02 | 90.8 | 6.46 | | | | | | |
| 14 | 13.30 | 30.72 | 23.05 | 90.8 | 6.44 | | | | | | |
| 15 | 13.06 | 30.74 | 23.11 | 90.8 | 6.42 | | | | | | |
| 16 | 12.62 | 30.83 | 23.26 | 90.8 | 6.44 | | | | | | |
| 17 | 12.15 | 30.96 | 23.45 | 90.8 | 6.47 | | | | | | |
| 18 | 11.42 | 31.14 | 23.72 | 90.8 | 6.53 | | | | | | |
| 19 | 10.60 | 31.16 | 23.88 | 90.8 | 6.61 | | | | | | |
| 20 | 8.93 | 31.17 | 24.16 | 90.8 | 6.71 | | | | | | |
| 21 | 8.87 | 31.16 | 24.16 | 90.8 | 6.70 | | | | | | |
| 22 | 8.99 | 31.22 | 24.18 | 90.8 | 6.55 | | | | | | |
| 23 | 8.83 | 31.28 | 24.26 | 90.8 | 6.37 | | | | | | |
| 24 | 8.74 | 31.29 | 24.28 | 90.8 | 6.29 | 5.94 | 1.3 | .20 | 0.5 | 2.5 | .25 |
| 25 | 8.48 | 31.25 | 24.28 | 90.8 | 6.20 | | | | | | |

KELEZ CRUISE XWCC-22 STATION 19 6/03/79



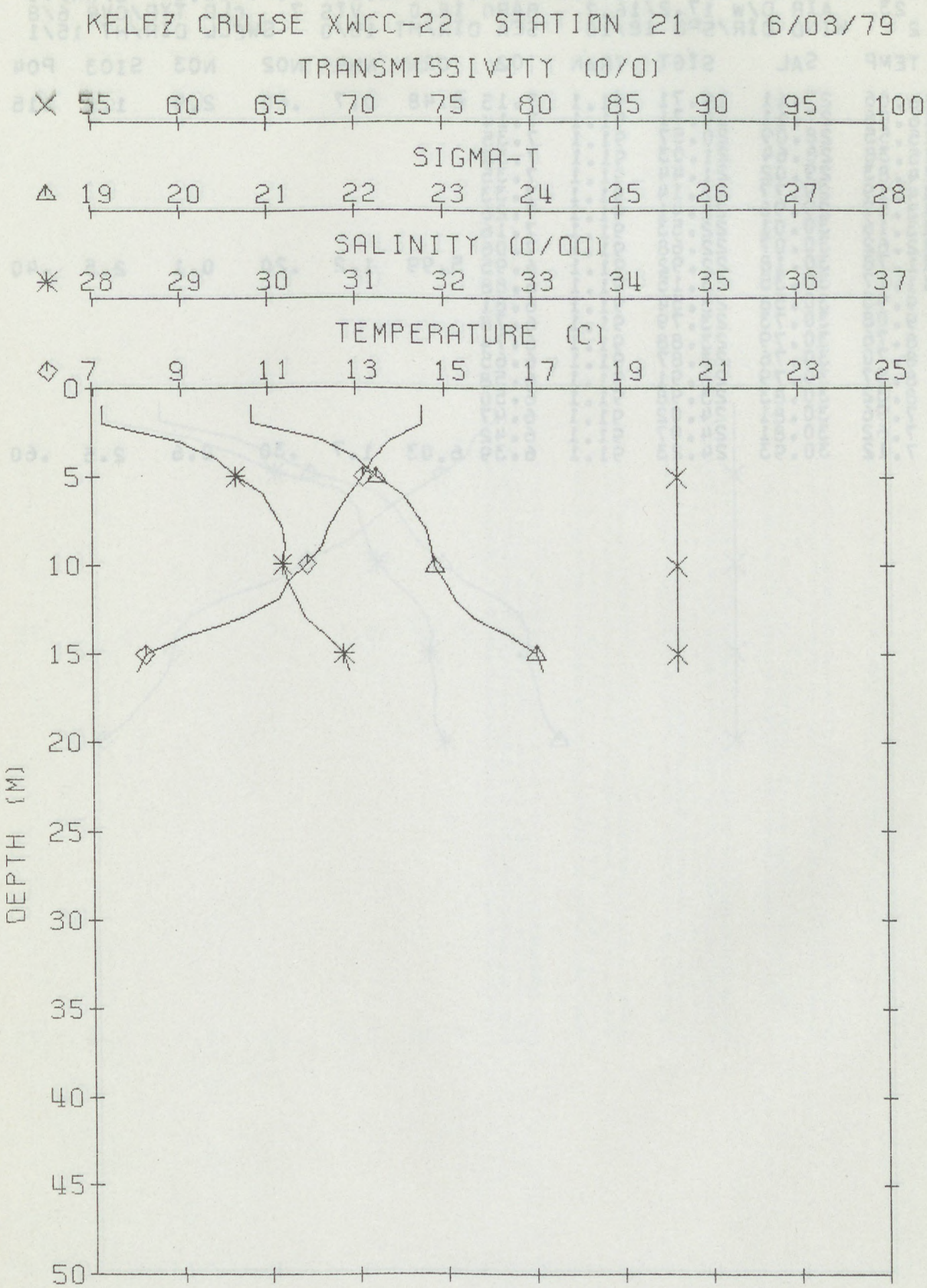
XWCC-22 STA. 20 LAT 40 21.2N; LONG 73 29.4W GMT 1.2 6/03/79
DEPTH 28 AIR D/W 15.6/14.4 BARO 20.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 15/10 SEA DIR/HT 17/0 SWELL DIR/HT 17/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.60 | 29.42 | 21.58 | 91.9 | 6.33 | 6.31 | 0.8 | .30 | 0.1 | 1.0 | .30 |
| 2 | 15.60 | 29.42 | 21.58 | 91.9 | 6.33 | | | | | | |
| 3 | 15.60 | 29.42 | 21.58 | 91.9 | 6.32 | | | | | | |
| 4 | 15.59 | 29.42 | 21.58 | 91.9 | 6.32 | | | | | | |
| 5 | 15.60 | 29.43 | 21.59 | 91.9 | 6.32 | | | | | | |
| 6 | 15.45 | 29.37 | 21.57 | 91.9 | 6.32 | | | | | | |
| 7 | 15.17 | 29.37 | 21.63 | 91.9 | 6.34 | | | | | | |
| 8 | 14.57 | 29.35 | 21.74 | 91.9 | 6.37 | | | | | | |
| 9 | 14.07 | 29.47 | 21.94 | 91.9 | 6.42 | | | | | | |
| 10 | 14.02 | 29.49 | 21.96 | 91.9 | 6.46 | 6.55 | 0.8 | .30 | 0.2 | 1.0 | .35 |
| 11 | 13.77 | 29.58 | 22.08 | 91.9 | 6.45 | | | | | | |
| 12 | 13.49 | 29.67 | 22.21 | 91.9 | 6.46 | | | | | | |
| 13 | 13.13 | 29.82 | 22.39 | 91.9 | 6.48 | | | | | | |
| 14 | 12.86 | 29.99 | 22.57 | 91.9 | 6.51 | | | | | | |
| 15 | 12.53 | 30.29 | 22.86 | 91.9 | 6.54 | | | | | | |
| 16 | 12.11 | 30.82 | 23.35 | 91.9 | 6.58 | | | | | | |
| 17 | 11.88 | 31.23 | 23.71 | 91.9 | 6.62 | | | | | | |
| 18 | 11.39 | 31.37 | 23.91 | 91.9 | 6.64 | | | | | | |
| 19 | 11.00 | 31.45 | 24.04 | 91.9 | 6.69 | | | | | | |
| 20 | 10.73 | 31.55 | 24.16 | 91.9 | 6.74 | | | | | | |
| 21 | 10.41 | 31.57 | 24.23 | 91.9 | 6.79 | | | | | | |
| 22 | 9.96 | 31.59 | 24.32 | 91.9 | 6.85 | | | | | | |
| 23 | 8.95 | 31.33 | 24.28 | 91.9 | 6.91 | | | | | | |
| 24 | 8.10 | 31.39 | 24.45 | 91.9 | 7.00 | | | | | | |
| 25 | 7.49 | 31.34 | 24.50 | 91.9 | 7.00 | 5.99 | 1.8 | .40 | 0.9 | 3.5 | .70 |
| 26 | 6.95 | 31.50 | 24.70 | 91.9 | 6.10 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 20 6/03/79
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-22 STA. 21 LAT 40 13.5N; LONG 73 56.1W GMT 13.0 6/03/79
DEPTH 19 AIR D/W 17.2/16.7 BARO 18.0 VIS 6 CLD TYP/CVR 6/8
WETHR 2 WIND DIR/SPD 19/10 SEA DIR/HT 15/0 SWELL DIR/HT 15/1

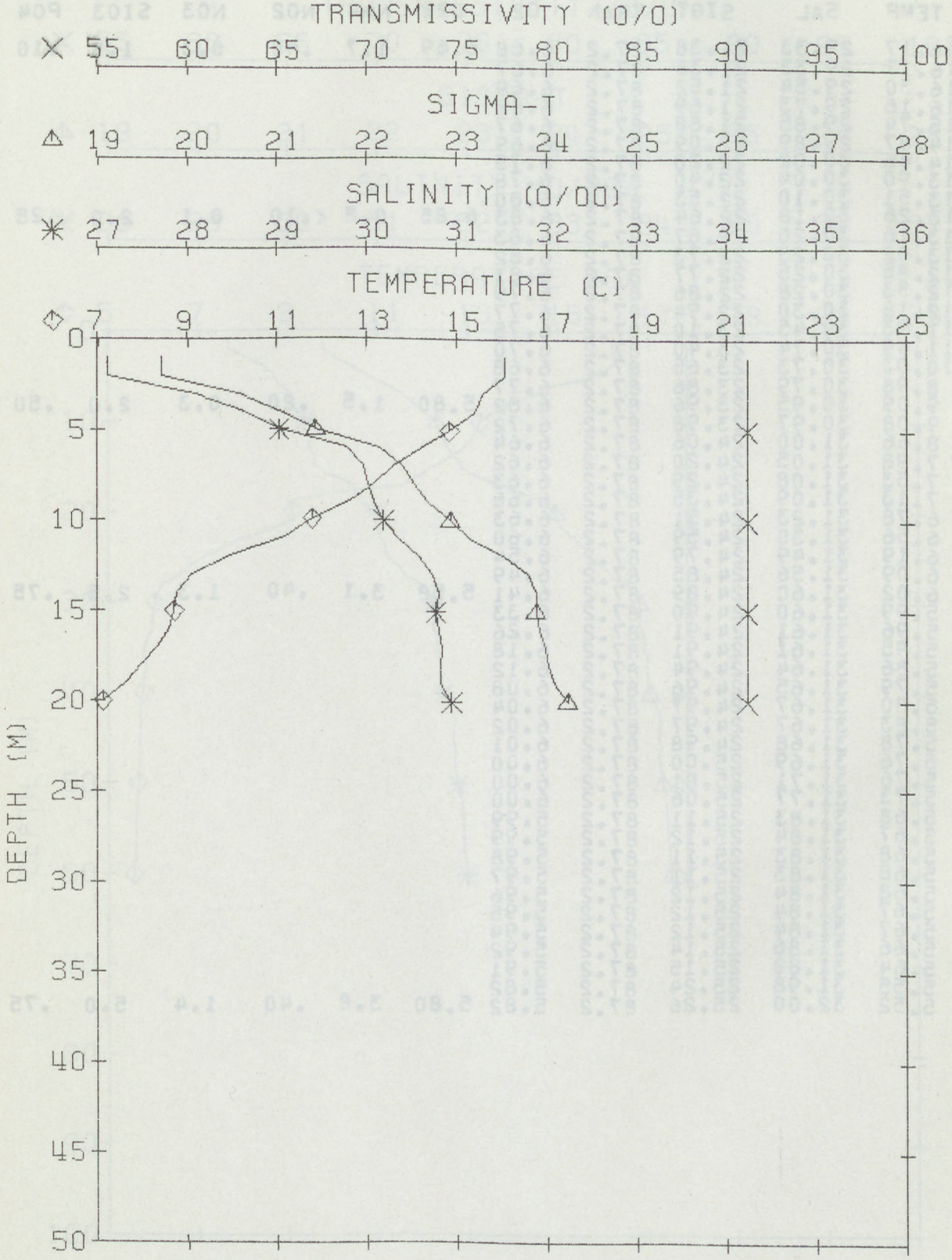
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.47 | 28.11 | 20.81 | 88.1 | 6.58 | 6.72 | 1.2 | .50 | 3.3 | 2.0 | .15 |
| 2 | 14.47 | 28.11 | 20.81 | 88.1 | 6.57 | | | | | | |
| 3 | 13.75 | 28.97 | 21.62 | 88.1 | 6.62 | | | | | | |
| 4 | 13.39 | 29.40 | 22.02 | 88.1 | 6.62 | | | | | | |
| 5 | 13.16 | 29.62 | 22.23 | 88.1 | 6.57 | | | | | | |
| 6 | 12.85 | 29.93 | 22.52 | 88.1 | 6.52 | | | | | | |
| 7 | 12.60 | 30.05 | 22.66 | 88.1 | 6.49 | | | | | | |
| 8 | 12.37 | 30.15 | 22.79 | 88.1 | 6.48 | | | | | | |
| 9 | 12.22 | 30.20 | 22.85 | 88.1 | 6.47 | | | | | | |
| 10 | 11.88 | 30.16 | 22.88 | 88.1 | 6.44 | 5.53 | 3.0 | .30 | 1.0 | 3.0 | .65 |
| 11 | 11.45 | 30.23 | 23.01 | 88.1 | 6.41 | | | | | | |
| 12 | 11.21 | 30.32 | 23.13 | 88.1 | 6.34 | | | | | | |
| 13 | 10.39 | 30.41 | 23.33 | 88.1 | 6.26 | | | | | | |
| 14 | 9.07 | 30.65 | 23.73 | 88.1 | 6.28 | | | | | | |
| 15 | 8.17 | 30.85 | 24.02 | 88.1 | 6.28 | 5.33 | 3.0 | .30 | 1.2 | 2.5 | .60 |
| 16 | 7.97 | 30.91 | 24.10 | 88.1 | 5.67 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 21 6/03/79
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-22 STA. 22 LAT 40 14.2N; LONG 73 51.2W GMT 13.8 6/03/79
DEPTH 23 AIR D/W 17.2/16.7 BARO 18.0 VIS 7 CLD TYP/CVR 6/8
WETHR 2 WIND DIR/SPD 18/10 SEA DIR/HT 15/0 SWELL DIR/HT 15/1

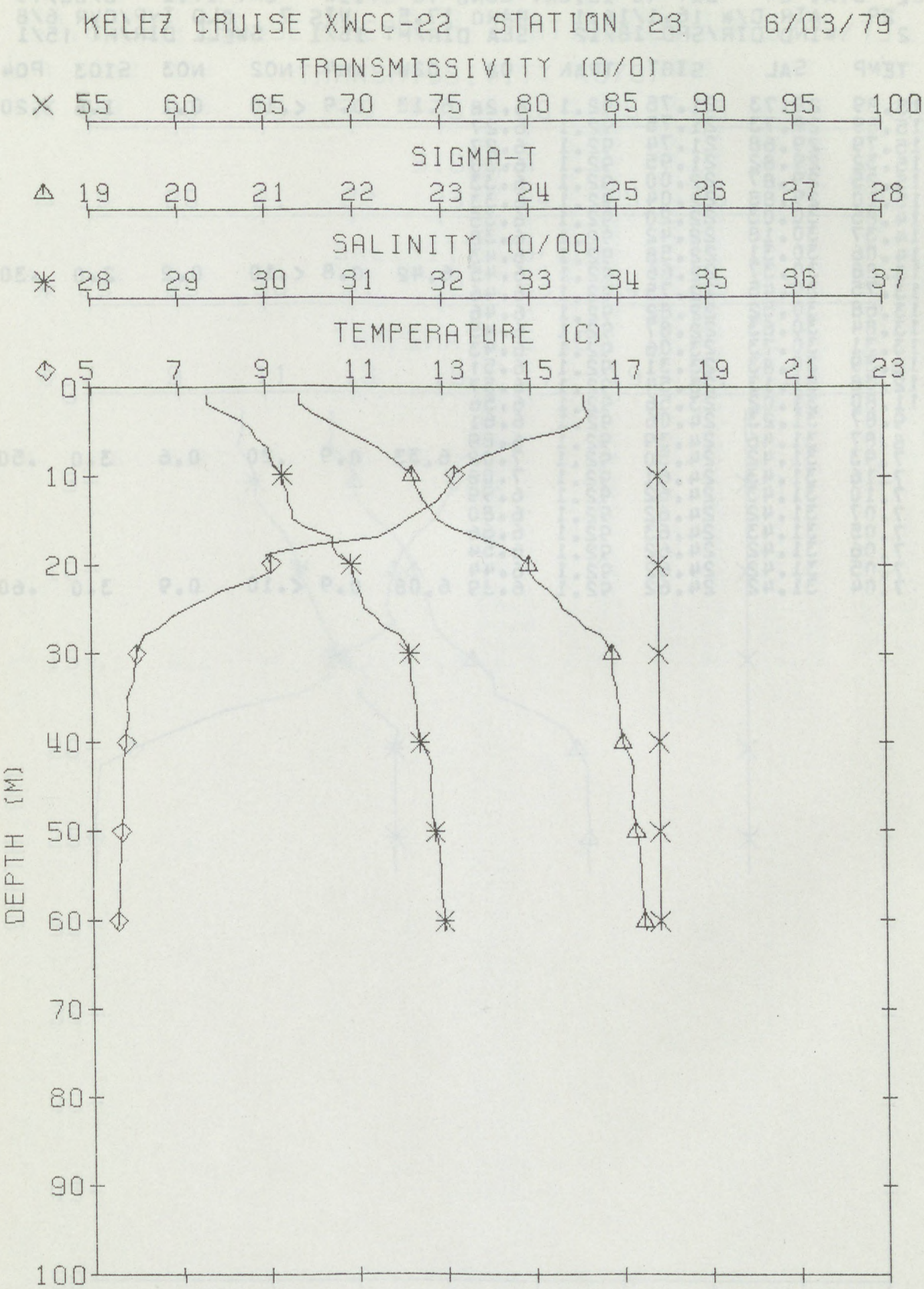
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.06 | 27.11 | 19.71 | 91.1 | 7.15 | 8.48 | 0.7 | .60 | 2.9 | 1.5 | .15 |
| 2 | 16.06 | 27.11 | 19.71 | 91.1 | 7.14 | | | | | | |
| 3 | 15.55 | 28.09 | 20.57 | 91.1 | 7.35 | | | | | | |
| 4 | 15.38 | 28.64 | 21.03 | 91.1 | 7.38 | | | | | | |
| 5 | 14.83 | 29.02 | 21.44 | 91.1 | 7.35 | | | | | | |
| 6 | 14.19 | 29.77 | 22.14 | 91.1 | 7.33 | | | | | | |
| 7 | 13.59 | 29.96 | 22.41 | 91.1 | 7.26 | | | | | | |
| 8 | 13.16 | 30.01 | 22.53 | 91.1 | 7.16 | | | | | | |
| 9 | 12.62 | 30.07 | 22.68 | 91.1 | 7.06 | | | | | | |
| 10 | 11.78 | 30.18 | 22.92 | 91.1 | 6.95 | 5.99 | 1.2 | .20 | 0.1 | 2.5 | .40 |
| 11 | 11.17 | 30.35 | 23.15 | 91.1 | 6.88 | | | | | | |
| 12 | 9.95 | 30.58 | 23.54 | 91.1 | 6.81 | | | | | | |
| 13 | 9.08 | 30.73 | 23.79 | 91.1 | 6.78 | | | | | | |
| 14 | 8.76 | 30.79 | 23.88 | 91.1 | 6.74 | | | | | | |
| 15 | 8.70 | 30.76 | 23.87 | 91.1 | 6.65 | | | | | | |
| 16 | 8.57 | 30.79 | 23.91 | 91.1 | 6.58 | | | | | | |
| 17 | 8.32 | 30.83 | 23.98 | 91.1 | 6.50 | | | | | | |
| 18 | 7.96 | 30.81 | 24.02 | 91.1 | 6.47 | | | | | | |
| 19 | 7.62 | 30.81 | 24.07 | 91.1 | 6.42 | | | | | | |
| 20 | 7.12 | 30.93 | 24.23 | 91.1 | 6.39 | 6.03 | 1.7 | .30 | 0.6 | 2.5 | .60 |

KELEZ CRUISE XWCC-22 STATION 22 6/03/79



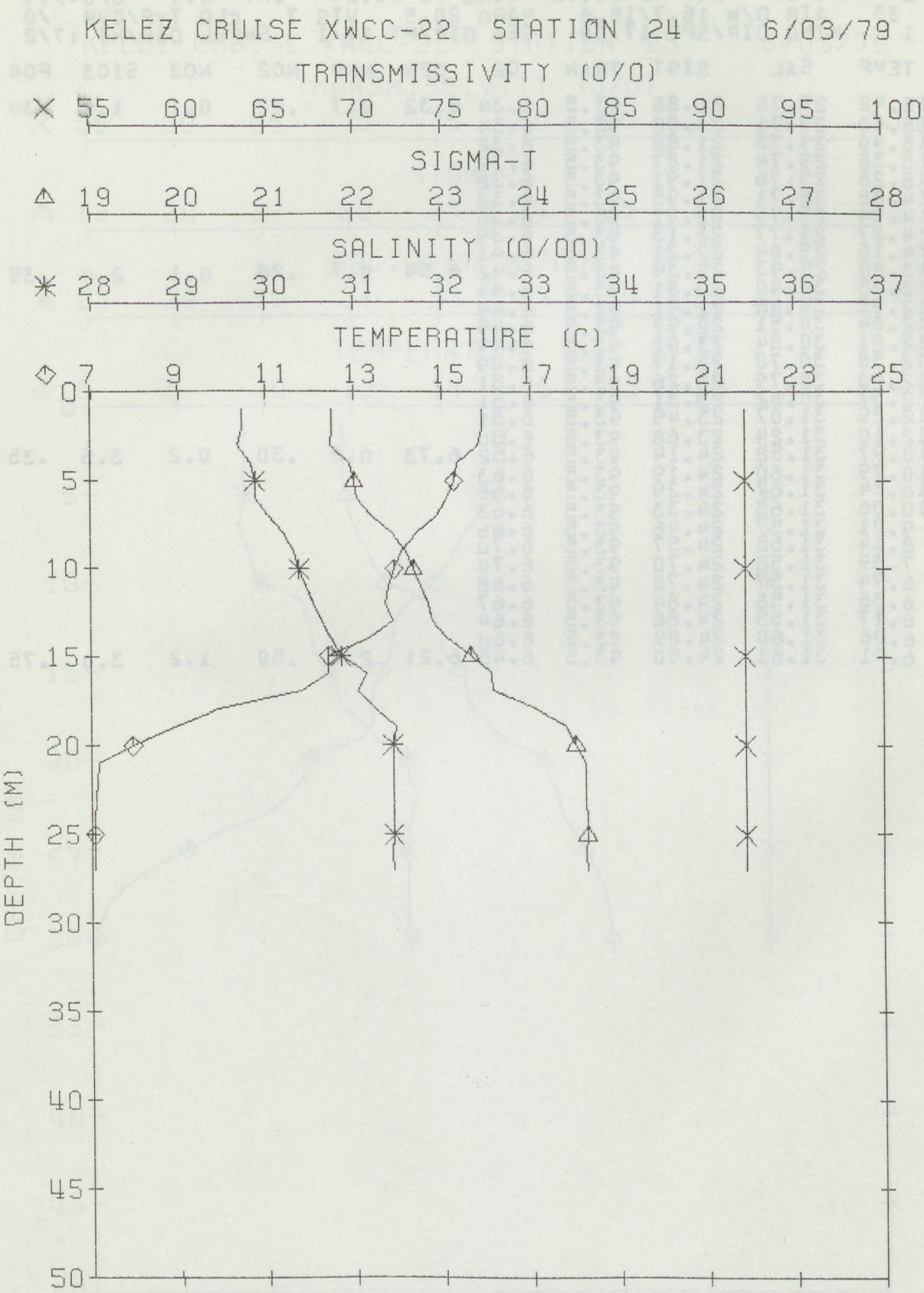
XWCC-22 STA. 23 LAT 40 14.9N; LONG 73 46.5W GMT 14.6 6/03/79
DEPTH 63 AIR D/W 17.2/16.7 BARO 18.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 14/10 SEA DIR/HT 15/0 SWELL DIR/HT 15/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.17 | 29.33 | 21.38 | 87.2 | 6.68 | 6.69 | 1.7 | .40 | 0.3 | 1.5 | .10 |
| 2 | 16.17 | 29.33 | 21.38 | 87.2 | 6.67 | | | | | | |
| 3 | 16.30 | 29.54 | 21.52 | 87.2 | 6.69 | | | | | | |
| 4 | 16.16 | 29.73 | 21.69 | 87.2 | 6.68 | | | | | | |
| 5 | 15.74 | 29.85 | 21.88 | 87.2 | 6.67 | | | | | | |
| 6 | 14.87 | 29.89 | 22.09 | 87.2 | 6.69 | | | | | | |
| 7 | 14.46 | 30.02 | 22.28 | 87.2 | 6.75 | | | | | | |
| 8 | 13.90 | 30.04 | 22.40 | 87.2 | 6.78 | | | | | | |
| 9 | 13.51 | 30.10 | 22.53 | 87.2 | 6.80 | | | | | | |
| 10 | 13.26 | 30.18 | 22.64 | 87.2 | 6.83 | 6.85 | 0.8 | <.10 | 0.1 | 2.0 | .25 |
| 11 | 13.16 | 30.20 | 22.67 | 87.2 | 6.83 | | | | | | |
| 12 | 13.02 | 30.23 | 22.73 | 87.2 | 6.82 | | | | | | |
| 13 | 12.85 | 30.25 | 22.77 | 87.2 | 6.81 | | | | | | |
| 14 | 12.53 | 30.28 | 22.86 | 87.2 | 6.79 | | | | | | |
| 15 | 12.18 | 30.30 | 22.94 | 87.2 | 6.77 | | | | | | |
| 16 | 11.93 | 30.45 | 23.10 | 87.2 | 6.75 | | | | | | |
| 17 | 11.49 | 30.74 | 23.40 | 87.2 | 6.70 | | | | | | |
| 18 | 10.03 | 30.73 | 23.65 | 87.2 | 6.68 | | | | | | |
| 19 | 8.98 | 30.79 | 23.86 | 87.2 | 6.77 | | | | | | |
| 20 | 9.09 | 30.95 | 23.96 | 87.2 | 6.82 | 5.80 | 1.5 | .20 | 0.3 | 2.0 | .50 |
| 21 | 9.08 | 30.97 | 23.98 | 87.2 | 6.72 | | | | | | |
| 22 | 8.66 | 31.00 | 24.06 | 87.2 | 6.64 | | | | | | |
| 23 | 7.98 | 31.05 | 24.20 | 87.2 | 6.62 | | | | | | |
| 24 | 7.53 | 31.08 | 24.29 | 87.2 | 6.63 | | | | | | |
| 25 | 7.13 | 31.09 | 24.35 | 87.2 | 6.65 | | | | | | |
| 26 | 6.78 | 31.23 | 24.51 | 87.2 | 6.63 | | | | | | |
| 27 | 6.56 | 31.30 | 24.59 | 87.2 | 6.60 | | | | | | |
| 28 | 6.19 | 31.49 | 24.79 | 87.2 | 6.54 | | | | | | |
| 29 | 6.09 | 31.56 | 24.85 | 87.2 | 6.49 | | | | | | |
| 30 | 6.02 | 31.60 | 24.89 | 87.2 | 6.41 | 5.58 | 3.1 | .40 | 1.3 | 2.5 | .75 |
| 31 | 5.99 | 31.60 | 24.90 | 87.2 | 6.33 | | | | | | |
| 32 | 5.96 | 31.61 | 24.91 | 87.2 | 6.26 | | | | | | |
| 33 | 5.95 | 31.61 | 24.91 | 87.2 | 6.18 | | | | | | |
| 34 | 5.86 | 31.64 | 24.94 | 87.2 | 6.12 | | | | | | |
| 35 | 5.79 | 31.65 | 24.96 | 87.2 | 6.08 | | | | | | |
| 36 | 5.80 | 31.67 | 24.97 | 87.2 | 6.04 | | | | | | |
| 37 | 5.83 | 31.67 | 24.97 | 87.2 | 6.02 | | | | | | |
| 38 | 5.78 | 31.68 | 24.98 | 87.2 | 6.01 | | | | | | |
| 39 | 5.76 | 31.69 | 25.00 | 87.2 | 6.00 | | | | | | |
| 40 | 5.76 | 31.71 | 25.01 | 87.2 | 6.00 | | | | | | |
| 41 | 5.73 | 31.77 | 25.06 | 87.2 | 6.00 | | | | | | |
| 42 | 5.68 | 31.83 | 25.11 | 87.2 | 5.99 | | | | | | |
| 43 | 5.67 | 31.84 | 25.12 | 87.2 | 5.99 | | | | | | |
| 44 | 5.68 | 31.83 | 25.11 | 87.2 | 5.98 | | | | | | |
| 45 | 5.68 | 31.83 | 25.11 | 87.2 | 5.97 | | | | | | |
| 46 | 5.68 | 31.84 | 25.12 | 87.2 | 5.96 | | | | | | |
| 47 | 5.67 | 31.84 | 25.12 | 87.2 | 5.95 | | | | | | |
| 48 | 5.67 | 31.84 | 25.12 | 87.2 | 5.94 | | | | | | |
| 49 | 5.66 | 31.86 | 25.14 | 87.2 | 5.92 | | | | | | |
| 50 | 5.64 | 31.88 | 25.15 | 87.2 | 5.91 | | | | | | |
| 60 | 5.55 | 31.98 | 25.24 | 87.2 | 5.82 | | | | | | |
| 61 | 5.52 | 32.00 | 25.26 | 87.2 | 5.82 | 5.80 | 3.8 | .40 | 1.4 | 5.0 | .75 |


KELEZ CRUISE XWCC-22 STATION 23 6/03/79
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

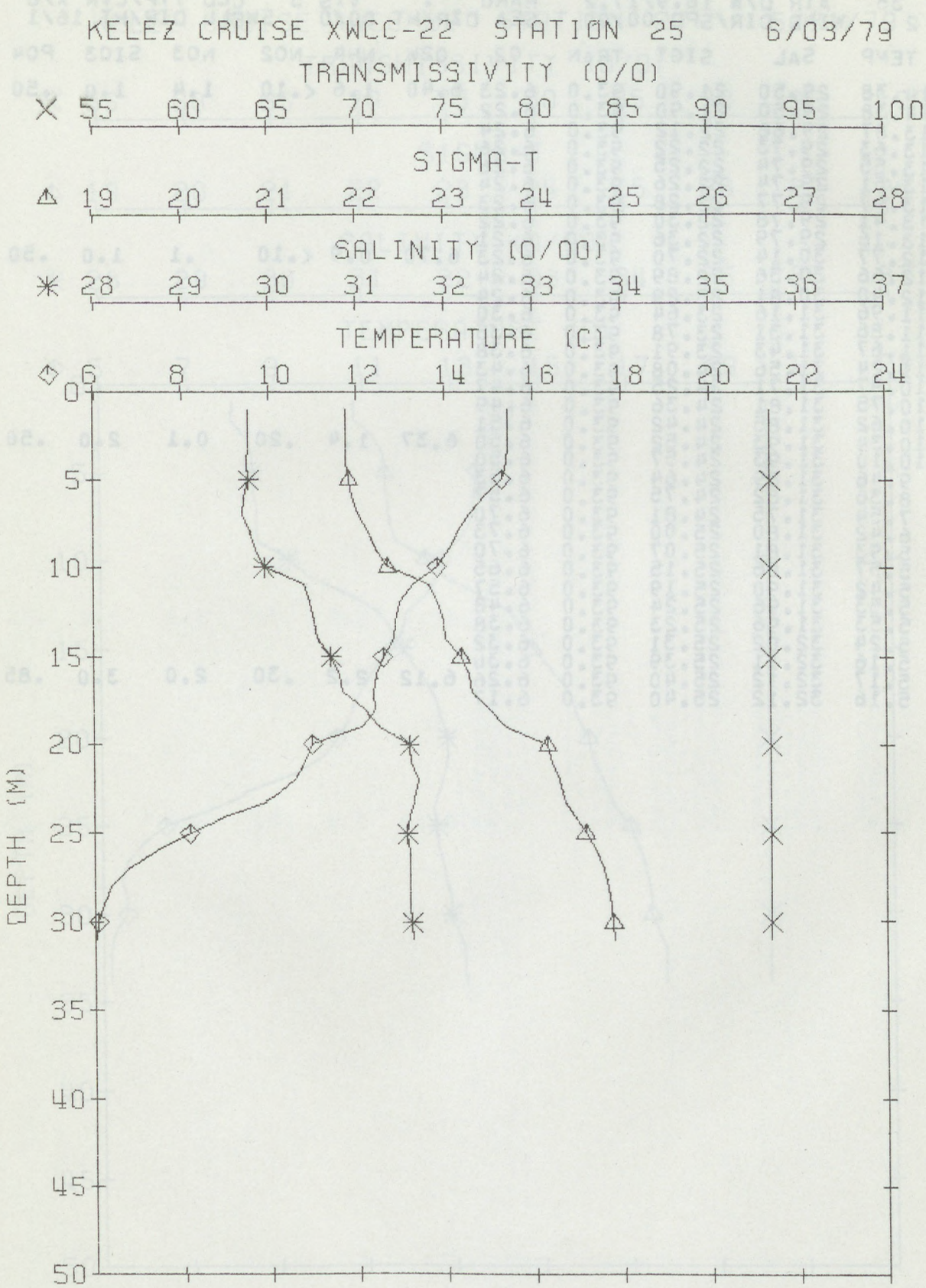
XWCC-22 STA. 24 LAT 40 15.8N; LONG 73 37.1W GMT 17.1 6/03/79
DEPTH 29 AIR D/W 16.1/16.1 BARO 17.5 VIS 7 CLD TYP/CVR 6/8
WETHR 2 WIND DIR/SPD 18/12 SEA DIR/HT 15/1 SWELL DIR/HT 15/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.89 | 29.73 | 21.75 | 92.1 | 6.28 | 6.13 | 0.9 | <.10 | 0.1 | 1.5 | .20 |
| 2 | 15.89 | 29.73 | 21.75 | 92.1 | 6.27 | | | | | | |
| 3 | 15.79 | 29.68 | 21.74 | 92.1 | 6.27 | | | | | | |
| 4 | 15.32 | 29.82 | 21.95 | 92.1 | 6.30 | | | | | | |
| 5 | 15.25 | 29.87 | 22.00 | 92.1 | 6.33 | | | | | | |
| 6 | 15.10 | 29.88 | 22.04 | 92.1 | 6.33 | | | | | | |
| 7 | 14.85 | 30.03 | 22.20 | 92.1 | 6.35 | | | | | | |
| 8 | 14.37 | 30.18 | 22.42 | 92.1 | 6.38 | | | | | | |
| 9 | 14.06 | 30.31 | 22.58 | 92.1 | 6.43 | | | | | | |
| 10 | 13.88 | 30.37 | 22.66 | 92.1 | 6.45 | 6.42 | 0.8 | <.10 | 0.2 | 2.0 | .30 |
| 11 | 13.75 | 30.45 | 22.75 | 92.1 | 6.46 | | | | | | |
| 12 | 13.68 | 30.52 | 22.82 | 92.1 | 6.46 | | | | | | |
| 13 | 13.84 | 30.63 | 22.87 | 92.1 | 6.45 | | | | | | |
| 14 | 13.31 | 30.73 | 23.06 | 92.1 | 6.43 | | | | | | |
| 15 | 12.39 | 30.83 | 23.31 | 92.1 | 6.51 | | | | | | |
| 16 | 12.38 | 31.13 | 23.54 | 92.1 | 6.57 | | | | | | |
| 17 | 11.80 | 31.02 | 23.56 | 92.1 | 6.56 | | | | | | |
| 18 | 9.87 | 31.23 | 24.06 | 92.1 | 6.61 | | | | | | |
| 19 | 8.87 | 31.46 | 24.39 | 92.1 | 6.89 | | | | | | |
| 20 | 7.93 | 31.42 | 24.50 | 92.1 | 7.02 | 6.33 | 0.9 | .20 | 0.6 | 3.0 | .50 |
| 21 | 7.16 | 31.43 | 24.61 | 92.1 | 7.08 | | | | | | |
| 22 | 7.10 | 31.43 | 24.62 | 92.1 | 6.99 | | | | | | |
| 23 | 7.07 | 31.42 | 24.62 | 92.1 | 6.80 | | | | | | |
| 24 | 7.05 | 31.43 | 24.63 | 92.1 | 6.66 | | | | | | |
| 25 | 7.06 | 31.42 | 24.62 | 92.1 | 6.54 | | | | | | |
| 26 | 7.05 | 31.42 | 24.62 | 92.1 | 6.44 | | | | | | |
| 27 | 7.04 | 31.42 | 24.62 | 92.1 | 6.39 | 6.08 | 0.9 | <.10 | 0.9 | 3.0 | .60 |


KELEZ CRUISE XWCC-22 STATION 24 6/03/79
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

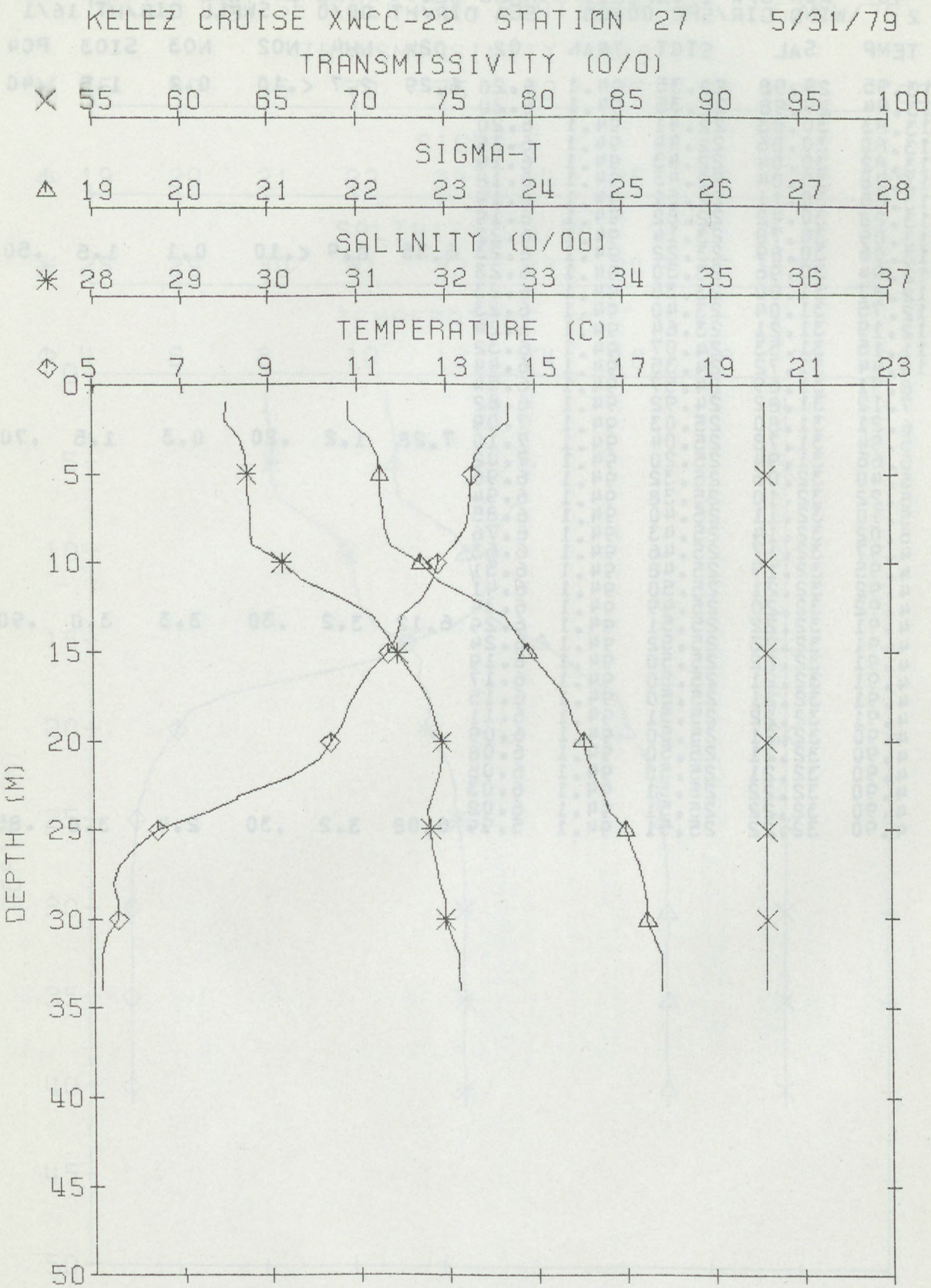
XWCC-22 STA. 25 LAT 40 16.9N; LONG 73 28.3W GMT 0.4 6/07/79
DEPTH 33 AIR D/W 16.7/15.6 BARO 20.5 VIS 7 CLD TYP/CVR /0
WETHR 1 WIND DIR/SPD 17/08 SEA DIR/HT 17/1 SWELL DIR/HT 17/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.42 | 29.76 | 21.88 | 93.5 | 6.34 | 6.32 | 0.7 | .40 | 0.1 | 1.5 | .30 |
| 2 | 15.42 | 29.76 | 21.88 | 93.5 | 6.34 | | | | | | |
| 3 | 15.40 | 29.75 | 21.88 | 93.5 | 6.32 | | | | | | |
| 4 | 15.38 | 29.74 | 21.87 | 93.5 | 6.32 | | | | | | |
| 5 | 15.28 | 29.76 | 21.91 | 93.5 | 6.32 | | | | | | |
| 6 | 14.88 | 29.71 | 21.95 | 93.5 | 6.32 | | | | | | |
| 7 | 14.54 | 29.70 | 22.01 | 93.5 | 6.36 | | | | | | |
| 8 | 14.27 | 29.77 | 22.13 | 93.5 | 6.39 | | | | | | |
| 9 | 14.10 | 29.84 | 22.21 | 93.5 | 6.41 | | | | | | |
| 10 | 13.80 | 29.93 | 22.34 | 93.5 | 6.42 | 6.54 | 0.7 | .20 | 0.1 | 2.0 | .35 |
| 11 | 13.25 | 30.40 | 22.81 | 93.5 | 6.44 | | | | | | |
| 12 | 12.95 | 30.45 | 22.91 | 93.5 | 6.49 | | | | | | |
| 13 | 12.84 | 30.51 | 22.97 | 93.5 | 6.49 | | | | | | |
| 14 | 12.81 | 30.54 | 23.01 | 93.5 | 6.49 | | | | | | |
| 15 | 12.58 | 30.70 | 23.17 | 93.5 | 6.49 | | | | | | |
| 16 | 12.43 | 30.79 | 23.26 | 93.5 | 6.51 | | | | | | |
| 17 | 12.37 | 30.82 | 23.31 | 93.5 | 6.51 | | | | | | |
| 18 | 12.39 | 31.07 | 23.49 | 93.5 | 6.51 | | | | | | |
| 19 | 12.10 | 31.24 | 23.68 | 93.5 | 6.50 | | | | | | |
| 20 | 10.97 | 31.58 | 24.14 | 93.5 | 6.52 | 6.73 | 0.8 | .30 | 0.2 | 3.5 | .35 |
| 21 | 10.79 | 31.60 | 24.19 | 93.5 | 6.63 | | | | | | |
| 22 | 10.54 | 31.67 | 24.29 | 93.5 | 6.65 | | | | | | |
| 23 | 10.06 | 31.63 | 24.33 | 93.5 | 6.63 | | | | | | |
| 24 | 9.01 | 31.57 | 24.46 | 93.5 | 6.66 | | | | | | |
| 25 | 8.14 | 31.55 | 24.57 | 93.5 | 6.70 | | | | | | |
| 26 | 7.39 | 31.58 | 24.70 | 93.5 | 6.70 | | | | | | |
| 27 | 6.74 | 31.57 | 24.78 | 93.5 | 6.68 | | | | | | |
| 28 | 6.35 | 31.58 | 24.84 | 93.5 | 6.67 | | | | | | |
| 29 | 6.17 | 31.58 | 24.86 | 93.5 | 6.64 | | | | | | |
| 30 | 6.06 | 31.60 | 24.89 | 93.5 | 6.60 | | | | | | |
| 31 | 6.01 | 31.61 | 24.90 | 93.5 | 6.45 | 6.21 | 2.0 | .50 | 1.2 | 3.0 | .75 |


KELEZ CRUISE XWCC-22 STATION 25 6/03/79
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

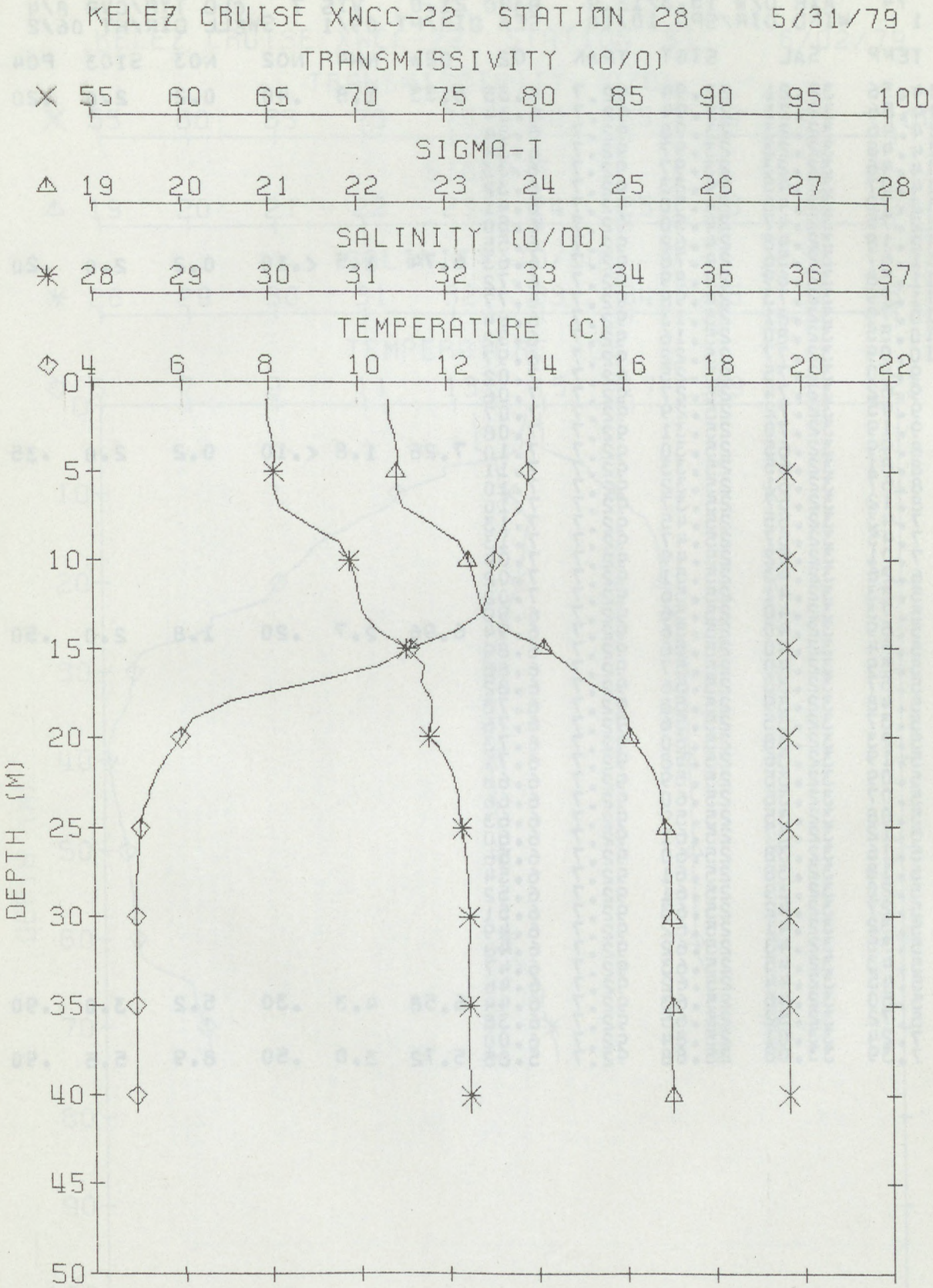
XWCC-22 STA. 27 LAT 40 18.0N; LONG 73 17.5W GMT 18.4 5/31/79
DEPTH 35 AIR D/W 18.9/17.2 BARO . VIS 5 CLD TYP/CVR X/8
WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.38 | 29.50 | 21.90 | 93.0 | 6.23 | 6.40 | 1.6 | <.10 | 1.4 | 1.0 | .50 |
| 2 | 14.38 | 29.50 | 21.90 | 93.0 | 6.22 | | | | | | |
| 3 | 13.87 | 29.66 | 22.12 | 93.0 | 6.24 | | | | | | |
| 4 | 13.63 | 29.73 | 22.22 | 93.0 | 6.26 | | | | | | |
| 5 | 13.55 | 29.74 | 22.25 | 93.0 | 6.26 | | | | | | |
| 6 | 13.51 | 29.74 | 22.26 | 93.0 | 6.24 | | | | | | |
| 7 | 13.47 | 29.77 | 22.28 | 93.0 | 6.23 | | | | | | |
| 8 | 13.41 | 29.78 | 22.30 | 93.0 | 6.22 | | | | | | |
| 9 | 13.16 | 29.79 | 22.36 | 93.0 | 6.21 | | | | | | |
| 10 | 12.77 | 30.14 | 22.70 | 93.0 | 6.23 | 6.70 | 0.9 | <.10 | .1 | 1.0 | .50 |
| 11 | 12.66 | 30.36 | 22.89 | 93.0 | 6.24 | | | | | | |
| 12 | 12.40 | 30.81 | 23.29 | 93.0 | 6.24 | | | | | | |
| 13 | 11.96 | 31.16 | 23.64 | 93.0 | 6.30 | | | | | | |
| 14 | 11.86 | 31.31 | 23.78 | 93.0 | 6.35 | | | | | | |
| 15 | 11.67 | 31.43 | 23.91 | 93.0 | 6.38 | | | | | | |
| 16 | 11.24 | 31.56 | 24.08 | 93.0 | 6.43 | | | | | | |
| 17 | 10.97 | 31.71 | 24.25 | 93.0 | 6.47 | | | | | | |
| 18 | 10.75 | 31.81 | 24.36 | 93.0 | 6.49 | | | | | | |
| 19 | 10.62 | 31.85 | 24.42 | 93.0 | 6.51 | | | | | | |
| 20 | 10.34 | 31.93 | 24.52 | 93.0 | 6.50 | 6.37 | 1.4 | .20 | 0.1 | 2.0 | .50 |
| 21 | 10.10 | 31.93 | 24.57 | 93.0 | 6.50 | | | | | | |
| 22 | 9.46 | 31.89 | 24.64 | 93.0 | 6.53 | | | | | | |
| 23 | 8.36 | 31.82 | 24.75 | 93.0 | 6.57 | | | | | | |
| 24 | 7.54 | 31.75 | 24.81 | 93.0 | 6.70 | | | | | | |
| 25 | 6.42 | 31.80 | 25.00 | 93.0 | 6.73 | | | | | | |
| 26 | 5.93 | 31.81 | 25.07 | 93.0 | 6.70 | | | | | | |
| 27 | 5.57 | 31.86 | 25.15 | 93.0 | 6.65 | | | | | | |
| 28 | 5.42 | 31.90 | 25.19 | 93.0 | 6.57 | | | | | | |
| 29 | 5.53 | 31.96 | 25.24 | 93.0 | 6.48 | | | | | | |
| 30 | 5.53 | 31.96 | 25.23 | 93.0 | 6.38 | | | | | | |
| 31 | 5.24 | 32.02 | 25.31 | 93.0 | 6.32 | | | | | | |
| 32 | 5.16 | 32.11 | 25.39 | 93.0 | 6.30 | | | | | | |
| 33 | 5.17 | 32.12 | 25.40 | 93.0 | 6.26 | 6.12 | 2.2 | .30 | 2.0 | 3.0 | .85 |
| 34 | 5.16 | 32.12 | 25.40 | 93.0 | 6.17 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 27 5/31/79
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

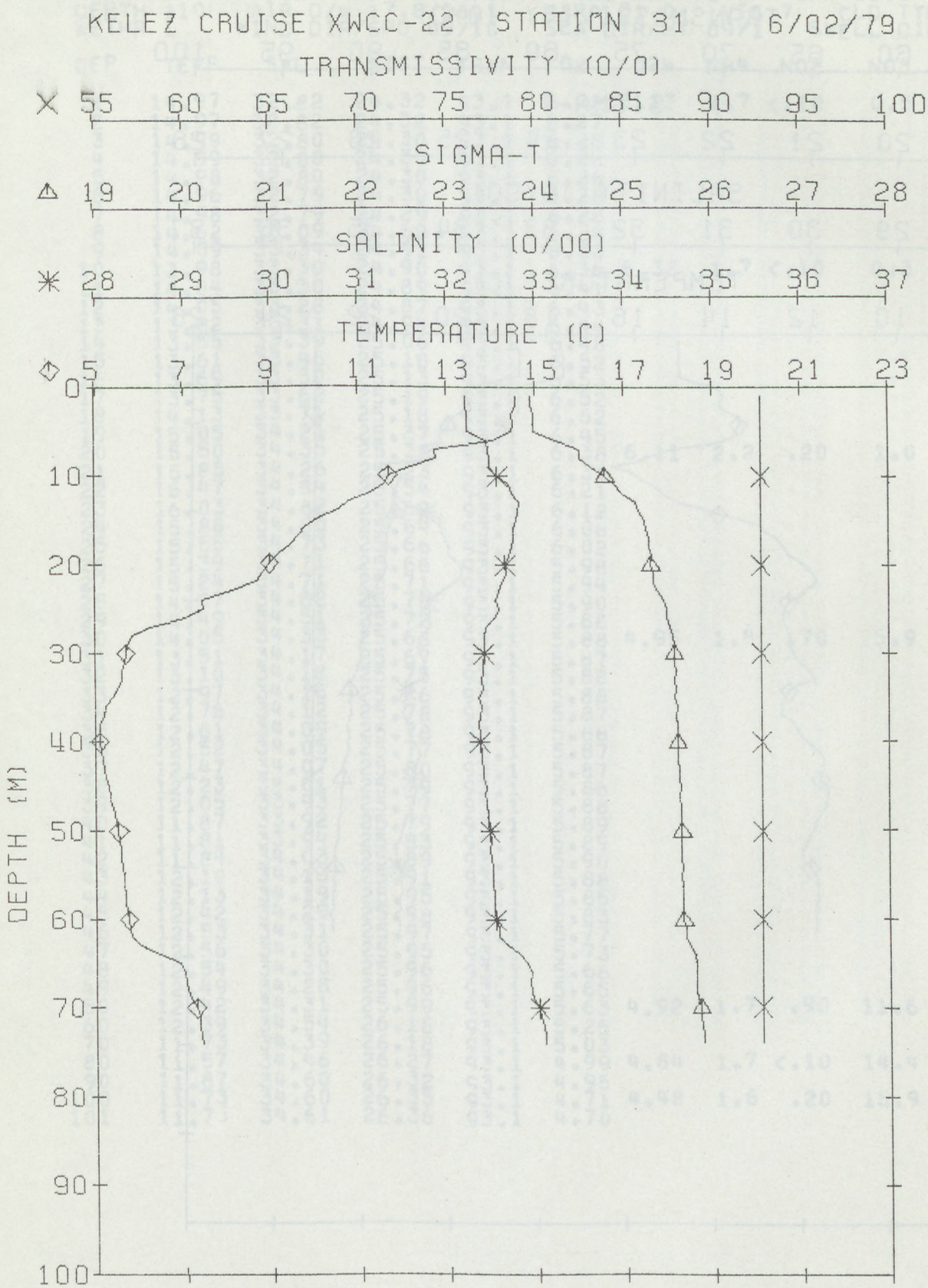
XWCC-22 STA. 28 LAT 40 13.5N; LONG 73 7.3W GMT 17.1 5/31/79
DEPTH 43 AIR D/W 17.2/16.1 BARO 22.0 VIS 5 CLD TYP/CVR X/8
WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 16/1

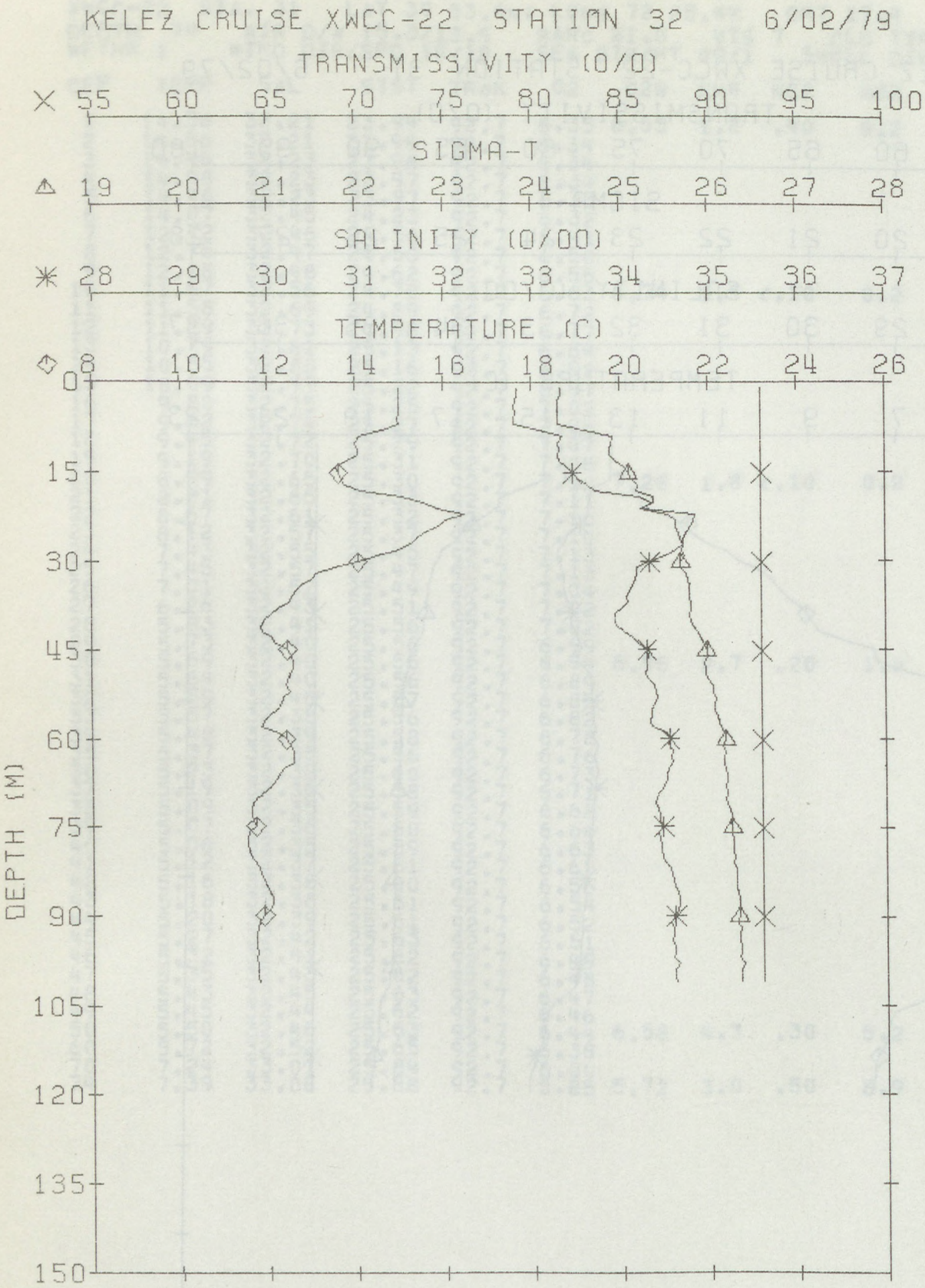
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.95 | 29.98 | 22.35 | 94.1 | 6.20 | 6.29 | 2.7 | <.10 | 0.2 | 1.5 | .40 |
| 2 | 13.94 | 29.98 | 22.35 | 94.1 | 6.20 | | | | | | |
| 3 | 13.83 | 30.03 | 22.41 | 94.1 | 6.20 | | | | | | |
| 4 | 13.80 | 30.06 | 22.44 | 94.1 | 6.19 | | | | | | |
| 5 | 13.82 | 30.04 | 22.43 | 94.1 | 6.19 | | | | | | |
| 6 | 13.78 | 30.04 | 22.43 | 94.1 | 6.18 | | | | | | |
| 7 | 13.65 | 30.11 | 22.51 | 94.1 | 6.19 | | | | | | |
| 8 | 13.28 | 30.42 | 22.82 | 94.1 | 6.19 | | | | | | |
| 9 | 13.09 | 30.78 | 23.14 | 94.1 | 6.22 | | | | | | |
| 10 | 13.06 | 30.89 | 23.22 | 94.1 | 6.23 | 6.35 | 0.9 | <.10 | 0.1 | 1.5 | .50 |
| 11 | 12.94 | 30.96 | 23.30 | 94.1 | 6.23 | | | | | | |
| 12 | 12.87 | 31.00 | 23.35 | 94.1 | 6.23 | | | | | | |
| 13 | 12.75 | 31.04 | 23.40 | 94.1 | 6.23 | | | | | | |
| 14 | 12.19 | 31.21 | 23.64 | 94.1 | 6.24 | | | | | | |
| 15 | 11.15 | 31.53 | 24.07 | 94.1 | 6.32 | | | | | | |
| 16 | 10.44 | 31.72 | 24.35 | 94.1 | 6.44 | | | | | | |
| 17 | 8.91 | 31.69 | 24.57 | 94.1 | 6.54 | | | | | | |
| 18 | 7.12 | 31.82 | 24.92 | 94.1 | 6.82 | | | | | | |
| 19 | 6.21 | 31.80 | 25.03 | 94.1 | 7.09 | | | | | | |
| 20 | 5.94 | 31.78 | 25.04 | 94.1 | 7.10 | 7.28 | 1.2 | .20 | 0.3 | 1.5 | .70 |
| 21 | 5.66 | 31.94 | 25.20 | 94.1 | 7.02 | | | | | | |
| 22 | 5.40 | 32.05 | 25.32 | 94.1 | 6.96 | | | | | | |
| 23 | 5.22 | 32.10 | 25.38 | 94.1 | 6.94 | | | | | | |
| 24 | 5.10 | 32.11 | 25.40 | 94.1 | 6.85 | | | | | | |
| 25 | 5.02 | 32.14 | 25.43 | 94.1 | 6.76 | | | | | | |
| 26 | 4.97 | 32.17 | 25.46 | 94.1 | 6.63 | | | | | | |
| 27 | 4.95 | 32.19 | 25.48 | 94.1 | 6.51 | | | | | | |
| 28 | 4.92 | 32.21 | 25.50 | 94.1 | 6.41 | | | | | | |
| 29 | 4.92 | 32.20 | 25.49 | 94.1 | 6.34 | | | | | | |
| 30 | 4.91 | 32.22 | 25.51 | 94.1 | 6.29 | 6.12 | 3.2 | .30 | 3.3 | 3.0 | .90 |
| 31 | 4.91 | 32.23 | 25.52 | 94.1 | 6.24 | | | | | | |
| 32 | 4.91 | 32.22 | 25.50 | 94.1 | 6.19 | | | | | | |
| 33 | 4.91 | 32.21 | 25.50 | 94.1 | 6.17 | | | | | | |
| 34 | 4.91 | 32.21 | 25.50 | 94.1 | 6.15 | | | | | | |
| 35 | 4.91 | 32.22 | 25.51 | 94.1 | 6.11 | | | | | | |
| 36 | 4.90 | 32.21 | 25.50 | 94.1 | 6.09 | | | | | | |
| 37 | 4.90 | 32.21 | 25.50 | 94.1 | 6.08 | | | | | | |
| 38 | 4.90 | 32.21 | 25.50 | 94.1 | 6.05 | | | | | | |
| 39 | 4.90 | 32.22 | 25.51 | 94.1 | 6.03 | | | | | | |
| 40 | 4.90 | 32.22 | 25.51 | 94.1 | 6.02 | | | | | | |
| 41 | 4.90 | 32.22 | 25.51 | 94.1 | 5.99 | 6.08 | 3.2 | .30 | 2.4 | 3.0 | .85 |


KELEZ CRUISE XWCC-22 STATION 28 5/31/79
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
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

XWCC-22 STA. 31 LAT 39 53.6N; LONG 72 25.4W GMT 17.4 6/09/79
DEPTH 74 AIR D/W 15.3/13.9 BARO 21.0 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 10/10 SEA DIR/HT 09/1 SWELL DIR/HT 06/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.56 | 32.21 | 23.94 | 92.7 | 6.35 | 6.53 | 1.8 | .40 | 0.2 | 2.0 | .20 |
| 2 | 14.56 | 32.21 | 23.94 | 92.7 | 6.34 | | | | | | |
| 3 | 14.46 | 32.23 | 23.98 | 92.7 | 6.34 | | | | | | |
| 4 | 14.48 | 32.23 | 23.97 | 92.7 | 6.34 | | | | | | |
| 5 | 14.46 | 32.23 | 23.97 | 92.7 | 6.33 | | | | | | |
| 6 | 14.07 | 32.45 | 24.23 | 92.7 | 6.32 | | | | | | |
| 7 | 12.72 | 32.46 | 24.50 | 92.7 | 6.41 | | | | | | |
| 8 | 12.75 | 32.47 | 24.50 | 92.7 | 6.50 | | | | | | |
| 9 | 12.18 | 32.48 | 24.62 | 92.7 | 6.55 | | | | | | |
| 10 | 11.67 | 32.56 | 24.78 | 92.7 | 6.63 | 6.74 | 1.5 | <.10 | 0.2 | 2.0 | .20 |
| 11 | 11.58 | 32.69 | 24.89 | 92.7 | 6.72 | | | | | | |
| 12 | 11.29 | 32.73 | 24.98 | 92.7 | 6.77 | | | | | | |
| 13 | 10.79 | 32.81 | 25.13 | 92.7 | 6.84 | | | | | | |
| 14 | 10.55 | 32.80 | 25.16 | 92.7 | 6.92 | | | | | | |
| 15 | 10.09 | 32.77 | 25.22 | 92.7 | 6.97 | | | | | | |
| 16 | 9.80 | 32.75 | 25.25 | 92.7 | 7.02 | | | | | | |
| 17 | 9.62 | 32.74 | 25.27 | 92.7 | 7.06 | | | | | | |
| 18 | 9.45 | 32.72 | 25.29 | 92.7 | 7.07 | | | | | | |
| 19 | 9.19 | 32.70 | 25.31 | 92.7 | 7.08 | | | | | | |
| 20 | 8.99 | 32.65 | 25.30 | 92.7 | 7.10 | 7.26 | 1.8 | <.10 | 0.2 | 2.0 | .35 |
| 21 | 8.81 | 32.65 | 25.33 | 92.7 | 7.11 | | | | | | |
| 22 | 8.67 | 32.61 | 25.32 | 92.7 | 7.10 | | | | | | |
| 23 | 8.12 | 32.57 | 25.37 | 92.7 | 7.10 | | | | | | |
| 24 | 7.43 | 32.55 | 25.45 | 92.7 | 7.13 | | | | | | |
| 25 | 7.45 | 32.57 | 25.47 | 92.7 | 7.13 | | | | | | |
| 26 | 7.01 | 32.52 | 25.49 | 92.7 | 7.04 | | | | | | |
| 27 | 6.26 | 32.43 | 25.51 | 92.7 | 7.02 | | | | | | |
| 28 | 5.83 | 32.41 | 25.56 | 92.7 | 7.02 | | | | | | |
| 29 | 5.73 | 32.40 | 25.56 | 92.7 | 6.99 | | | | | | |
| 30 | 5.69 | 32.40 | 25.56 | 92.7 | 6.94 | 6.96 | 2.7 | .20 | 1.8 | 2.0 | .50 |
| 31 | 5.64 | 32.40 | 25.56 | 92.7 | 6.89 | | | | | | |
| 32 | 5.59 | 32.40 | 25.57 | 92.7 | 6.85 | | | | | | |
| 33 | 5.57 | 32.38 | 25.56 | 92.7 | 6.82 | | | | | | |
| 34 | 5.48 | 32.39 | 25.58 | 92.7 | 6.78 | | | | | | |
| 35 | 5.37 | 32.35 | 25.56 | 92.7 | 6.76 | | | | | | |
| 36 | 5.23 | 32.38 | 25.60 | 92.7 | 6.73 | | | | | | |
| 37 | 5.19 | 32.36 | 25.58 | 92.7 | 6.71 | | | | | | |
| 38 | 5.09 | 32.35 | 25.59 | 92.7 | 6.68 | | | | | | |
| 39 | 5.07 | 32.36 | 25.60 | 92.7 | 6.66 | | | | | | |
| 40 | 5.08 | 32.35 | 25.59 | 92.7 | 6.63 | | | | | | |
| 41 | 5.12 | 32.37 | 25.61 | 92.7 | 6.60 | | | | | | |
| 42 | 5.16 | 32.38 | 25.60 | 92.7 | 6.56 | | | | | | |
| 43 | 5.18 | 32.38 | 25.61 | 92.7 | 6.54 | | | | | | |
| 44 | 5.20 | 32.39 | 25.61 | 92.7 | 6.52 | | | | | | |
| 45 | 5.27 | 32.42 | 25.63 | 92.7 | 6.51 | | | | | | |
| 46 | 5.32 | 32.41 | 25.62 | 92.7 | 6.49 | | | | | | |
| 47 | 5.35 | 32.43 | 25.62 | 92.7 | 6.48 | | | | | | |
| 48 | 5.43 | 32.45 | 25.63 | 92.7 | 6.47 | | | | | | |
| 49 | 5.45 | 32.44 | 25.62 | 92.7 | 6.46 | | | | | | |
| 50 | 5.50 | 32.46 | 25.63 | 92.7 | 6.44 | 6.58 | 4.3 | .30 | 5.2 | 3.0 | .90 |
| 60 | 5.72 | 32.52 | 25.65 | 92.7 | 6.38 | | | | | | |
| 70 | 7.24 | 33.01 | 25.84 | 92.7 | 6.00 | | | | | | |
| 74 | 7.39 | 33.08 | 25.88 | 92.7 | 5.85 | 5.72 | 3.0 | .50 | 8.9 | 5.5 | .90 |


KELEZ CRUISE XWCC-22 STATION 31 6/02/79
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

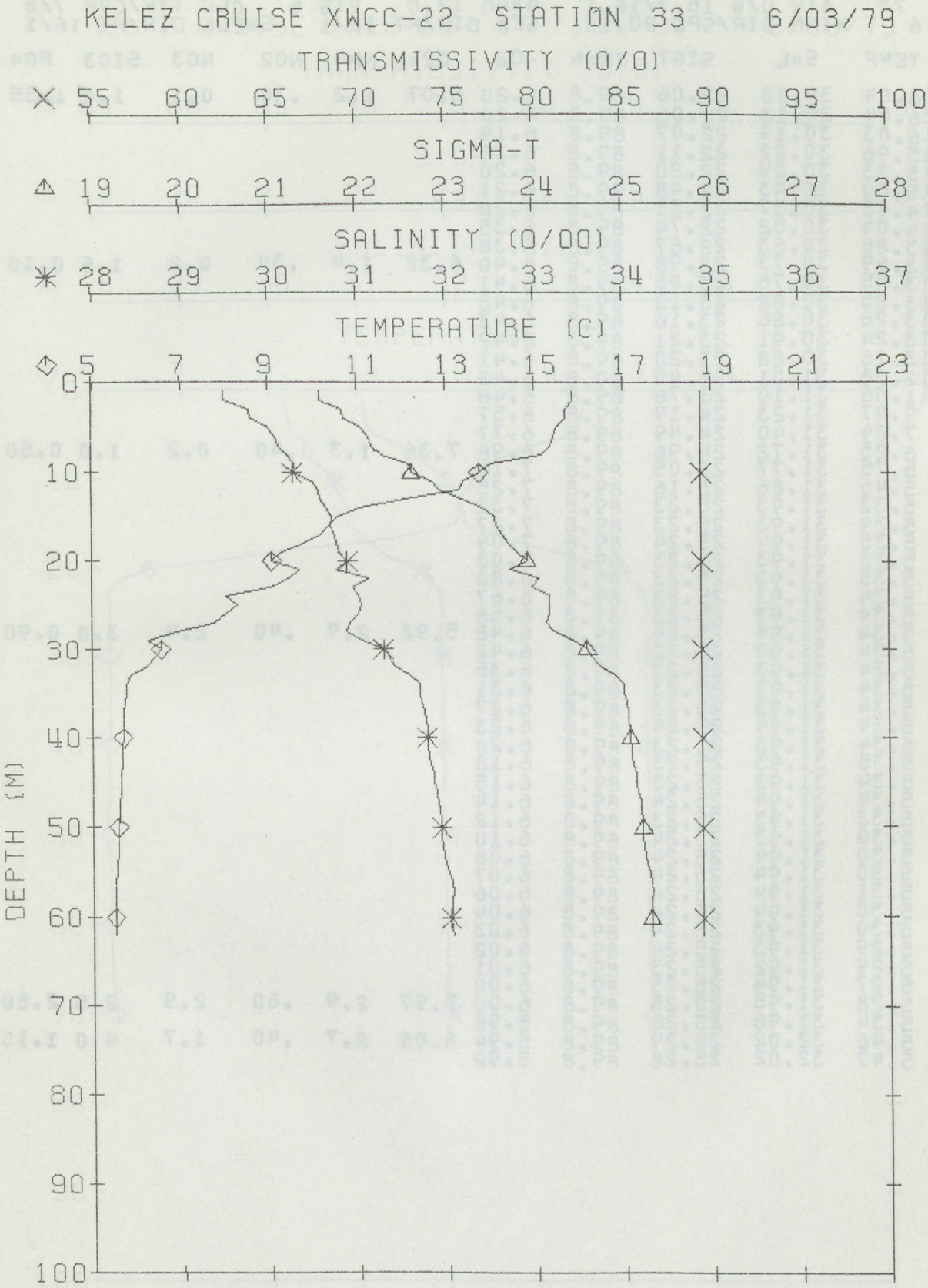

KELEZ CRUISE XWCC-22 STATION 32 6/02/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
8 10 12 14 16 18 20 22 24 26
DEPTH (M)
0 15 30 45 60 75 90 105 120 135 150

XWCC-22 STA. 32 LAT 39 45.8N; LONG 72 7.7W GMT 15.1 6/02/79
DEPTH 110 AIR D/W 17.8/16.1 BARO 21.0 VIS 7 CLD TYP/CVR 8/5
WETHR 1 WIND DIR/SPD 09/10 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.97 | 32.82 | 24.32 | 93.1 | 6.28 | 6.13 | 1.7 | <.10 | 0.5 | 1.5 | .10 |
| 2 | 14.97 | 32.82 | 24.32 | 93.1 | 6.27 | | | | | | |
| 3 | 14.99 | 32.80 | 24.30 | 93.1 | 6.28 | | | | | | |
| 4 | 14.99 | 32.80 | 24.30 | 93.1 | 6.28 | | | | | | |
| 5 | 14.98 | 32.80 | 24.30 | 93.1 | 6.28 | | | | | | |
| 6 | 14.96 | 32.79 | 24.30 | 93.1 | 6.28 | | | | | | |
| 7 | 14.98 | 32.79 | 24.29 | 93.1 | 6.28 | | | | | | |
| 8 | 14.62 | 33.09 | 24.60 | 93.1 | 6.28 | | | | | | |
| 9 | 14.09 | 33.34 | 24.91 | 93.1 | 6.32 | | | | | | |
| 10 | 13.98 | 33.30 | 24.90 | 93.1 | 6.36 | 6.32 | 1.7 | <.10 | 0.3 | 1.0 | .15 |
| 11 | 14.04 | 33.30 | 24.89 | 93.1 | 6.41 | | | | | | |
| 12 | 14.05 | 33.28 | 24.87 | 93.1 | 6.43 | | | | | | |
| 13 | 13.82 | 33.31 | 24.94 | 93.1 | 6.44 | | | | | | |
| 14 | 13.55 | 33.39 | 25.06 | 93.1 | 6.48 | | | | | | |
| 15 | 13.61 | 33.46 | 25.10 | 93.1 | 6.52 | | | | | | |
| 16 | 13.69 | 33.52 | 25.13 | 93.1 | 6.53 | | | | | | |
| 17 | 13.75 | 33.62 | 25.19 | 93.1 | 6.52 | | | | | | |
| 18 | 14.13 | 33.71 | 25.18 | 93.1 | 6.52 | | | | | | |
| 19 | 15.05 | 34.21 | 25.37 | 93.1 | 6.45 | | | | | | |
| 20 | 15.50 | 34.35 | 25.38 | 93.1 | 6.38 | 6.11 | 2.2 | .20 | 1.0 | 2.0 | .20 |
| 21 | 15.85 | 34.26 | 25.23 | 93.1 | 6.31 | | | | | | |
| 22 | 16.47 | 34.84 | 25.54 | 93.1 | 6.21 | | | | | | |
| 23 | 16.03 | 34.82 | 25.62 | 93.1 | 6.12 | | | | | | |
| 24 | 15.88 | 34.80 | 25.64 | 93.1 | 6.08 | | | | | | |
| 25 | 15.55 | 34.73 | 25.66 | 93.1 | 6.02 | | | | | | |
| 26 | 15.39 | 34.71 | 25.68 | 93.1 | 5.98 | | | | | | |
| 27 | 15.24 | 34.71 | 25.71 | 93.1 | 5.94 | | | | | | |
| 28 | 14.97 | 34.62 | 25.70 | 93.1 | 5.90 | | | | | | |
| 29 | 14.49 | 34.51 | 25.72 | 93.1 | 5.88 | | | | | | |
| 30 | 14.05 | 34.33 | 25.68 | 93.1 | 5.88 | 4.95 | 1.8 | .70 | 5.9 | 2.5 | .40 |
| 31 | 13.51 | 34.17 | 25.67 | 93.1 | 5.87 | | | | | | |
| 32 | 13.10 | 34.18 | 25.75 | 93.1 | 5.88 | | | | | | |
| 33 | 12.97 | 34.16 | 25.76 | 93.1 | 5.88 | | | | | | |
| 34 | 12.76 | 34.12 | 25.78 | 93.1 | 5.87 | | | | | | |
| 35 | 12.61 | 34.09 | 25.78 | 93.1 | 5.86 | | | | | | |
| 36 | 12.52 | 34.05 | 25.77 | 93.1 | 5.87 | | | | | | |
| 37 | 12.47 | 34.07 | 25.80 | 93.1 | 5.87 | | | | | | |
| 38 | 12.23 | 34.01 | 25.79 | 93.1 | 5.86 | | | | | | |
| 39 | 12.05 | 33.93 | 25.77 | 93.1 | 5.88 | | | | | | |
| 40 | 11.87 | 33.92 | 25.79 | 93.1 | 5.89 | | | | | | |
| 41 | 11.81 | 33.94 | 25.83 | 93.1 | 5.89 | | | | | | |
| 42 | 11.84 | 34.03 | 25.89 | 93.1 | 5.90 | | | | | | |
| 43 | 12.10 | 34.13 | 25.91 | 93.1 | 5.88 | | | | | | |
| 44 | 12.13 | 34.19 | 25.95 | 93.1 | 5.85 | | | | | | |
| 45 | 12.42 | 34.29 | 25.98 | 93.1 | 5.83 | | | | | | |
| 46 | 12.53 | 34.31 | 25.97 | 93.1 | 5.77 | | | | | | |
| 47 | 12.56 | 34.30 | 25.95 | 93.1 | 5.73 | | | | | | |
| 48 | 12.54 | 34.30 | 25.96 | 93.1 | 5.68 | | | | | | |
| 49 | 12.49 | 34.28 | 25.96 | 93.1 | 5.65 | | | | | | |
| 50 | 12.42 | 34.31 | 25.99 | 93.1 | 5.63 | 4.92 | 1.7 | .90 | 11.6 | 4.0 | .70 |
| 60 | 12.39 | 34.54 | 26.18 | 93.1 | 5.25 | | | | | | |
| 70 | 11.73 | 34.39 | 26.18 | 93.1 | 5.03 | | | | | | |
| 80 | 11.57 | 34.46 | 26.27 | 93.1 | 4.99 | 4.84 | 1.7 | <.10 | 14.4 | 5.0 | .85 |
| 90 | 11.87 | 34.60 | 26.32 | 93.1 | 4.95 | | | | | | |
| 100 | 11.73 | 34.60 | 26.35 | 93.1 | 4.71 | 4.48 | 1.6 | .20 | 15.9 | 8.0 | .90 |
| 101 | 11.73 | 34.61 | 26.36 | 93.1 | 4.70 | | | | | | |

XWCC-22 STA. 33 LAT 40 10.0N; LONG 73 41.6W GMT 19.3 6/03/79
DEPTH 64 AIR D/W 17.2/16.7 BARO 17.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 21/10 SEA DIR/HT 22/1 SWELL DIR/HT 15/1

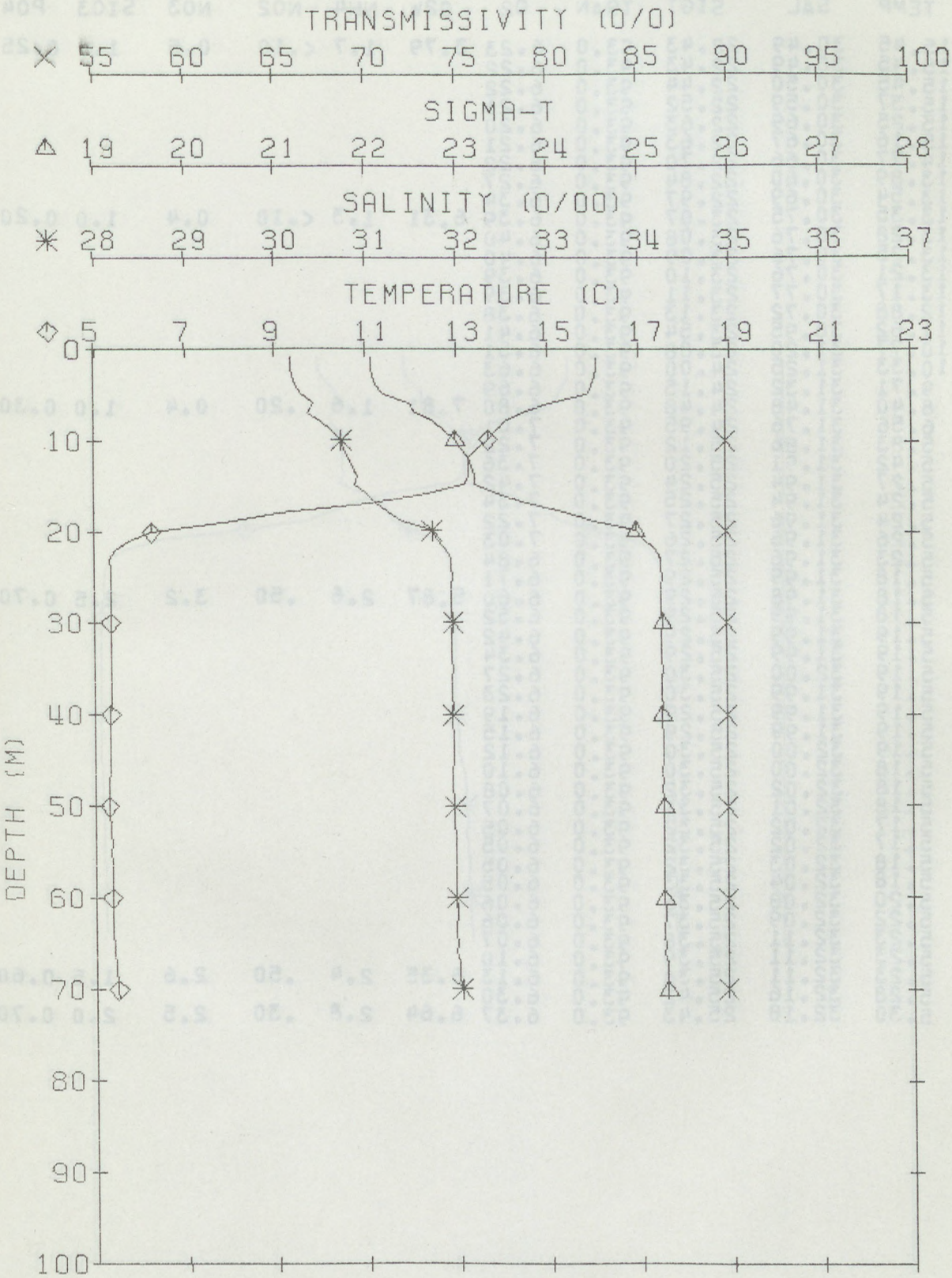
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.84 | 29.50 | 21.58 | 89.5 | 6.44 | 6.34 | 1.5 | .30 | 0.2 | 1.0 | .85 |
| 2 | 15.84 | 29.50 | 21.58 | 89.5 | 6.43 | | | | | | |
| 3 | 15.68 | 29.78 | 21.84 | 89.5 | 6.45 | | | | | | |
| 4 | 15.67 | 29.79 | 21.85 | 89.5 | 6.44 | | | | | | |
| 5 | 15.49 | 30.00 | 22.04 | 89.5 | 6.43 | | | | | | |
| 6 | 15.42 | 30.08 | 22.12 | 89.5 | 6.43 | | | | | | |
| 7 | 15.36 | 30.11 | 22.16 | 89.5 | 6.40 | | | | | | |
| 8 | 15.14 | 30.21 | 22.28 | 89.5 | 6.39 | | | | | | |
| 9 | 14.03 | 30.30 | 22.58 | 89.5 | 6.40 | | | | | | |
| 10 | 13.74 | 30.27 | 22.62 | 89.5 | 6.49 | 6.42 | 1.7 | .20 | 0.2 | 1.0 | 2.60 |
| 11 | 13.37 | 30.48 | 22.85 | 89.5 | 6.50 | | | | | | |
| 12 | 13.28 | 30.55 | 22.92 | 89.5 | 6.50 | | | | | | |
| 13 | 12.08 | 30.58 | 23.17 | 89.5 | 6.51 | | | | | | |
| 14 | 11.04 | 30.65 | 23.41 | 89.5 | 6.62 | | | | | | |
| 15 | 10.54 | 30.71 | 23.54 | 89.5 | 6.67 | | | | | | |
| 16 | 10.36 | 30.70 | 23.56 | 89.5 | 6.63 | | | | | | |
| 17 | 10.16 | 30.74 | 23.62 | 89.5 | 6.57 | | | | | | |
| 18 | 9.79 | 30.75 | 23.70 | 89.5 | 6.53 | | | | | | |
| 19 | 9.30 | 30.79 | 23.81 | 89.5 | 6.50 | | | | | | |
| 20 | 9.06 | 30.88 | 23.91 | 89.5 | 6.45 | 6.05 | 1.7 | .30 | 0.2 | 2.5 | .70 |
| 21 | 9.67 | 30.76 | 23.72 | 89.5 | 6.39 | | | | | | |
| 22 | 9.44 | 31.12 | 24.04 | 89.5 | 6.29 | | | | | | |
| 23 | 9.02 | 30.94 | 23.97 | 89.5 | 6.28 | | | | | | |
| 24 | 8.03 | 31.00 | 24.16 | 89.5 | 6.31 | | | | | | |
| 25 | 8.28 | 31.05 | 24.16 | 89.5 | 6.34 | | | | | | |
| 26 | 8.02 | 31.00 | 24.16 | 89.5 | 6.35 | | | | | | |
| 27 | 7.75 | 30.90 | 24.12 | 89.5 | 6.35 | | | | | | |
| 28 | 6.89 | 30.87 | 24.21 | 89.5 | 6.39 | | | | | | |
| 29 | 6.26 | 31.04 | 24.42 | 89.5 | 6.40 | | | | | | |
| 30 | 6.53 | 31.29 | 24.58 | 89.5 | 6.39 | 6.07 | 3.1 | .40 | 1.4 | 3.5 | 1.40 |
| 31 | 6.38 | 31.36 | 24.65 | 89.5 | 6.36 | | | | | | |
| 32 | 6.22 | 31.41 | 24.72 | 89.5 | 6.32 | | | | | | |
| 33 | 5.86 | 31.58 | 24.89 | 89.5 | 6.30 | | | | | | |
| 34 | 5.75 | 31.69 | 24.99 | 89.5 | 6.29 | | | | | | |
| 35 | 5.74 | 31.70 | 25.00 | 89.5 | 6.26 | | | | | | |
| 36 | 5.71 | 31.71 | 25.02 | 89.5 | 6.22 | | | | | | |
| 37 | 5.70 | 31.75 | 25.05 | 89.5 | 6.19 | | | | | | |
| 38 | 5.69 | 31.76 | 25.05 | 89.5 | 6.17 | | | | | | |
| 39 | 5.68 | 31.77 | 25.06 | 89.5 | 6.15 | | | | | | |
| 40 | 5.67 | 31.77 | 25.07 | 89.5 | 6.13 | 6.00 | 3.1 | .40 | 1.7 | 4.5 | 1.30 |
| 41 | 5.66 | 31.78 | 25.07 | 89.5 | 6.11 | | | | | | |
| 42 | 5.66 | 31.79 | 25.08 | 89.5 | 6.10 | | | | | | |
| 43 | 5.65 | 31.81 | 25.10 | 89.5 | 6.09 | | | | | | |
| 44 | 5.63 | 31.84 | 25.12 | 89.5 | 6.09 | | | | | | |
| 45 | 5.62 | 31.85 | 25.13 | 89.5 | 6.09 | | | | | | |
| 46 | 5.61 | 31.87 | 25.15 | 89.5 | 6.08 | | | | | | |
| 47 | 5.60 | 31.90 | 25.17 | 89.5 | 6.08 | | | | | | |
| 48 | 5.59 | 31.91 | 25.19 | 89.5 | 6.07 | | | | | | |
| 49 | 5.58 | 31.92 | 25.20 | 89.5 | 6.07 | | | | | | |
| 50 | 5.57 | 31.92 | 25.20 | 89.5 | 6.05 | | | | | | |
| 60 | 5.48 | 32.03 | 25.29 | 89.5 | 5.97 | | | | | | |
| 62 | 5.48 | 32.05 | 25.31 | 89.5 | 5.95 | 6.00 | 4.0 | .40 | 1.6 | 3.5 | 1.10 |


KELEZ CRUISE XWCC-22 STATION 33 6/03/79
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-22 STA. 34 LAT 40 5.3N; LONG 73 31.7W GMT 20.6 6/03/79
DEPTH 73 AIR D/W 16.7/16.1 BARO 17.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 20/10 SEA DIR/HT 16/1 SWELL DIR/HT 16/1

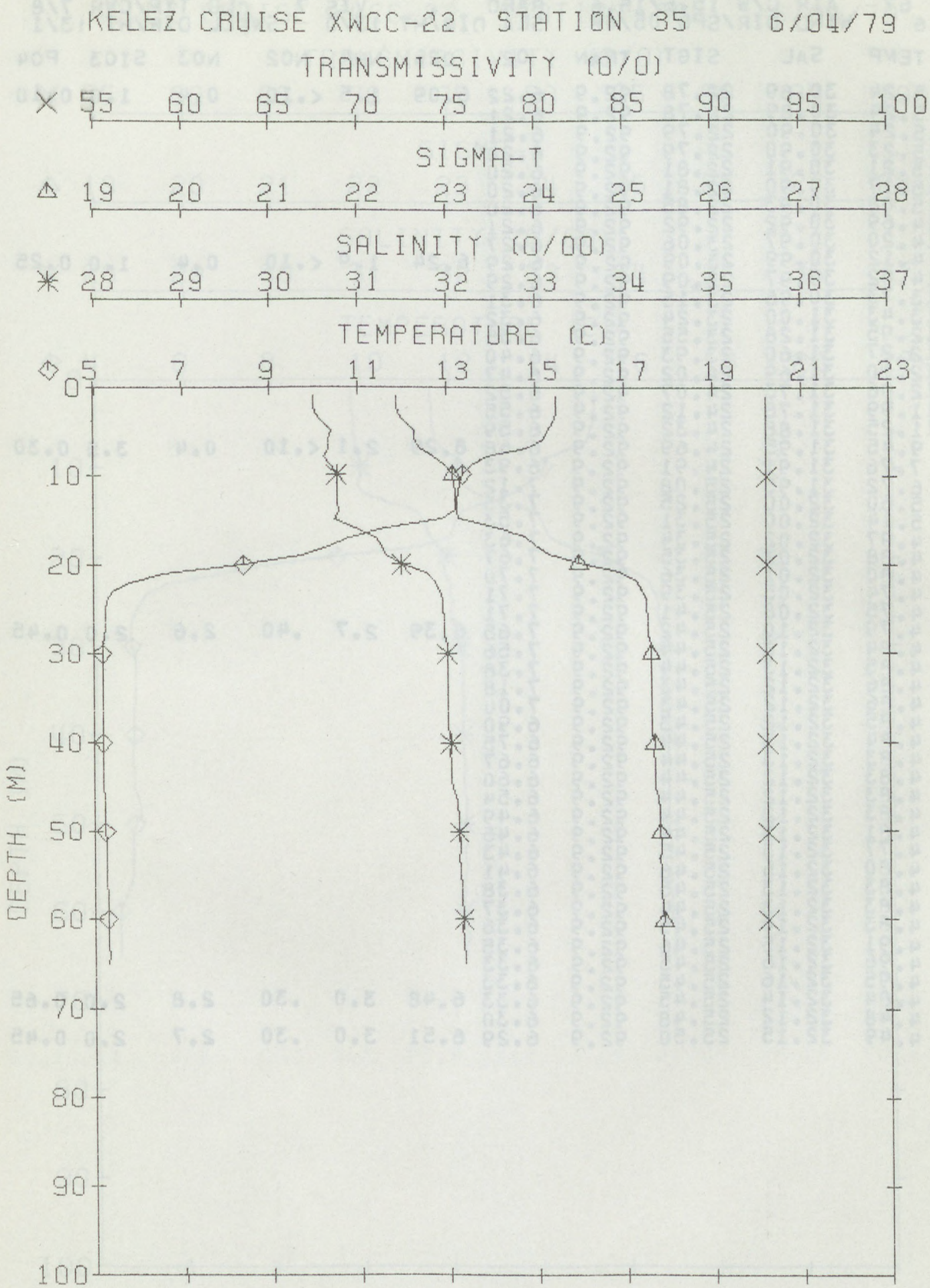
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.04 | 30.18 | 22.06 | 89.8 | 6.20 | 6.07 | 1.2 | .30 | 0.1 | 1.0 | 1.55 |
| 2 | 16.04 | 30.18 | 22.06 | 89.8 | 6.20 | | | | | | |
| 3 | 16.03 | 30.19 | 22.07 | 89.8 | 6.19 | | | | | | |
| 4 | 15.96 | 30.22 | 22.11 | 89.8 | 6.19 | | | | | | |
| 5 | 15.83 | 30.29 | 22.20 | 89.8 | 6.20 | | | | | | |
| 6 | 15.00 | 30.43 | 22.48 | 89.8 | 6.21 | | | | | | |
| 7 | 14.43 | 30.37 | 22.55 | 89.8 | 6.28 | | | | | | |
| 8 | 14.04 | 30.52 | 22.74 | 89.8 | 6.35 | | | | | | |
| 9 | 13.86 | 30.63 | 22.87 | 89.8 | 6.38 | | | | | | |
| 10 | 13.69 | 30.73 | 22.98 | 89.8 | 6.40 | 6.32 | 1.4 | .30 | 0.2 | 1.5 | 0.10 |
| 11 | 13.45 | 30.76 | 23.05 | 89.8 | 6.41 | | | | | | |
| 12 | 13.25 | 30.82 | 23.13 | 89.8 | 6.43 | | | | | | |
| 13 | 13.26 | 30.86 | 23.16 | 89.8 | 6.43 | | | | | | |
| 14 | 13.24 | 30.91 | 23.21 | 89.8 | 6.42 | | | | | | |
| 15 | 13.16 | 30.88 | 23.20 | 89.8 | 6.41 | | | | | | |
| 16 | 12.36 | 31.01 | 23.45 | 89.8 | 6.42 | | | | | | |
| 17 | 11.06 | 31.10 | 23.76 | 89.8 | 6.48 | | | | | | |
| 18 | 9.07 | 31.23 | 24.19 | 89.8 | 6.57 | | | | | | |
| 19 | 7.84 | 31.40 | 24.49 | 89.8 | 6.77 | | | | | | |
| 20 | 6.25 | 31.72 | 24.96 | 89.8 | 6.98 | 7.36 | 1.3 | .40 | 0.2 | 1.0 | 0.50 |
| 21 | 5.75 | 31.77 | 25.05 | 89.8 | 7.16 | | | | | | |
| 22 | 5.46 | 31.86 | 25.16 | 89.8 | 7.25 | | | | | | |
| 23 | 5.33 | 31.93 | 25.23 | 89.8 | 7.32 | | | | | | |
| 24 | 5.34 | 31.93 | 25.23 | 89.8 | 7.27 | | | | | | |
| 25 | 5.35 | 31.94 | 25.24 | 89.8 | 7.09 | | | | | | |
| 26 | 5.35 | 31.93 | 25.23 | 89.8 | 7.03 | | | | | | |
| 27 | 5.35 | 31.93 | 25.23 | 89.8 | 6.82 | | | | | | |
| 28 | 5.34 | 31.93 | 25.23 | 89.8 | 6.67 | | | | | | |
| 29 | 5.34 | 31.93 | 25.23 | 89.8 | 6.58 | | | | | | |
| 30 | 5.34 | 31.94 | 25.24 | 89.8 | 6.48 | 5.92 | 2.9 | .40 | 2.4 | 3.0 | 0.90 |
| 31 | 5.34 | 31.92 | 25.22 | 89.8 | 6.42 | | | | | | |
| 32 | 5.34 | 31.93 | 25.23 | 89.8 | 6.35 | | | | | | |
| 33 | 5.34 | 31.93 | 25.23 | 89.8 | 6.31 | | | | | | |
| 34 | 5.34 | 31.93 | 25.23 | 89.8 | 6.27 | | | | | | |
| 35 | 5.34 | 31.94 | 25.24 | 89.8 | 6.23 | | | | | | |
| 36 | 5.34 | 31.93 | 25.23 | 89.8 | 6.20 | | | | | | |
| 37 | 5.35 | 31.93 | 25.23 | 89.8 | 6.18 | | | | | | |
| 38 | 5.34 | 31.93 | 25.23 | 89.8 | 6.15 | | | | | | |
| 39 | 5.34 | 31.94 | 25.24 | 89.8 | 6.14 | | | | | | |
| 40 | 5.33 | 31.93 | 25.23 | 89.8 | 6.12 | | | | | | |
| 41 | 5.30 | 31.93 | 25.24 | 89.8 | 6.10 | | | | | | |
| 42 | 5.30 | 31.94 | 25.24 | 89.8 | 6.08 | | | | | | |
| 43 | 5.30 | 31.94 | 25.24 | 89.8 | 6.07 | | | | | | |
| 44 | 5.31 | 31.94 | 25.24 | 89.8 | 6.06 | | | | | | |
| 45 | 5.30 | 31.94 | 25.24 | 89.8 | 6.04 | | | | | | |
| 46 | 5.30 | 31.93 | 25.24 | 89.8 | 6.03 | | | | | | |
| 47 | 5.29 | 31.93 | 25.24 | 89.8 | 6.02 | | | | | | |
| 48 | 5.29 | 31.92 | 25.23 | 89.8 | 6.01 | | | | | | |
| 49 | 5.27 | 31.94 | 25.25 | 89.8 | 6.00 | | | | | | |
| 50 | 5.28 | 31.95 | 25.25 | 89.8 | 6.00 | 5.97 | 2.9 | .60 | 2.9 | 2.5 | 2.50 |
| 60 | 5.34 | 31.96 | 25.26 | 89.8 | 5.95 | | | | | | |
| 70 | 5.46 | 32.02 | 25.29 | 89.8 | 5.94 | 6.00 | 2.7 | .40 | 1.7 | 4.0 | 1.10 |
| 71 | 5.47 | 32.02 | 25.28 | 89.8 | 5.92 | | | | | | |

KELEZ CRUISE XWCC-22 STATION 34 6/03/79



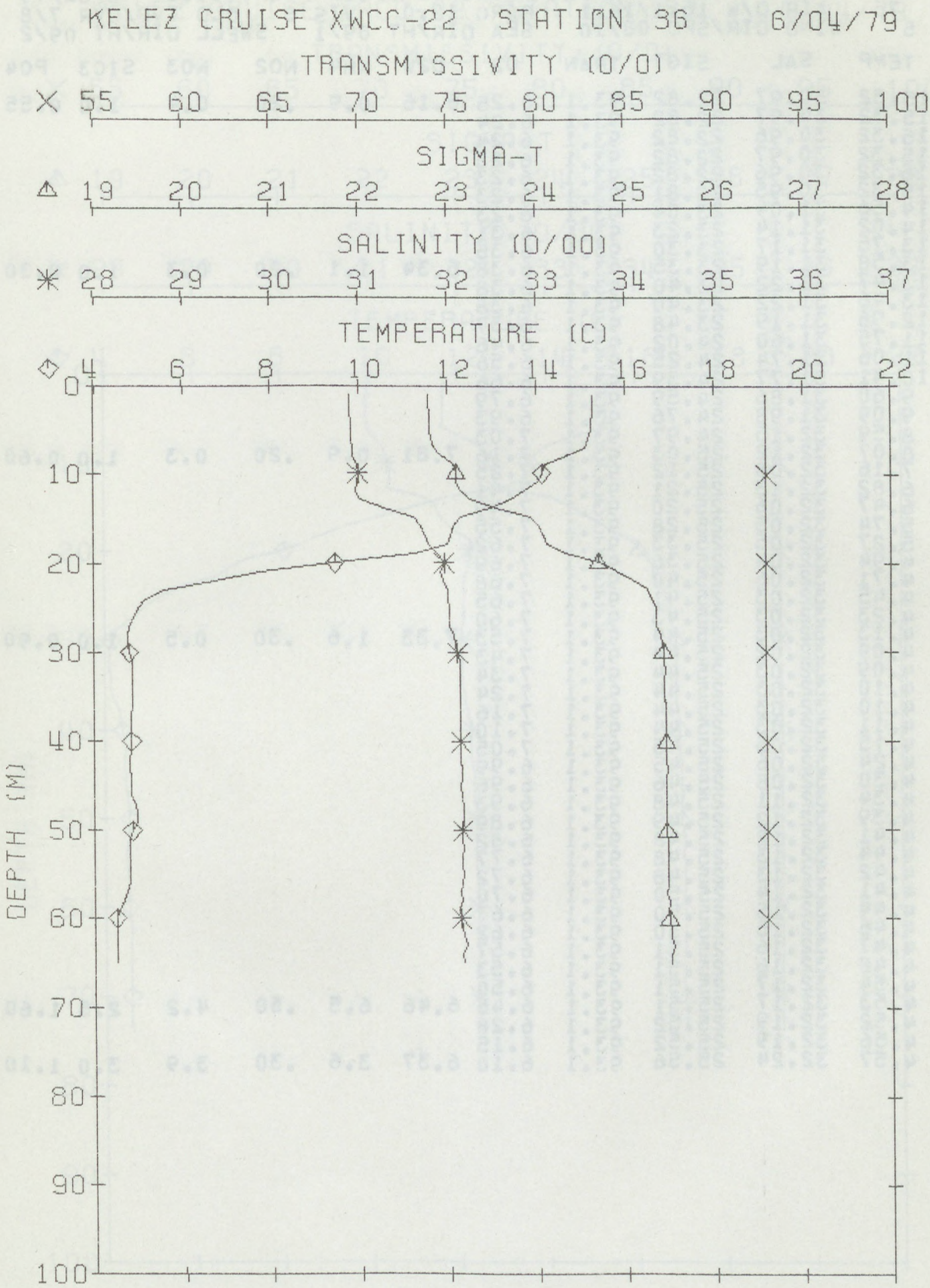
XWCC-22 STA. 35 LAT 39 58.8N; LONG 73 21.9W GMT 8.8 6/04/79
DEPTH 68 AIR D/W 15.6/15.0 BARO 15.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 10/05 SEA DIR/HT 13/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.45 | 30.49 | 22.43 | 93.0 | 6.23 | 3.79 | 1.7 | <.10 | 0.5 | 1.0 | 0.25 |
| 2 | 15.45 | 30.49 | 22.43 | 93.0 | 6.22 | | | | | | |
| 3 | 15.45 | 30.50 | 22.44 | 93.0 | 6.22 | | | | | | |
| 4 | 15.37 | 30.59 | 22.52 | 93.0 | 6.21 | | | | | | |
| 5 | 15.25 | 30.69 | 22.63 | 93.0 | 6.20 | | | | | | |
| 6 | 15.16 | 30.67 | 22.63 | 93.0 | 6.21 | | | | | | |
| 7 | 14.77 | 30.66 | 22.70 | 93.0 | 6.22 | | | | | | |
| 8 | 13.89 | 30.60 | 22.84 | 93.0 | 6.27 | | | | | | |
| 9 | 13.54 | 30.69 | 22.97 | 93.0 | 6.34 | | | | | | |
| 10 | 13.35 | 30.75 | 23.07 | 93.0 | 6.39 | 6.31 | 1.3 | <.10 | 0.4 | 1.0 | 0.20 |
| 11 | 13.28 | 30.76 | 23.08 | 93.0 | 6.40 | | | | | | |
| 12 | 13.25 | 30.76 | 23.09 | 93.0 | 6.40 | | | | | | |
| 13 | 13.21 | 30.76 | 23.10 | 93.0 | 6.39 | | | | | | |
| 14 | 13.17 | 30.77 | 23.11 | 93.0 | 6.39 | | | | | | |
| 15 | 12.88 | 30.72 | 23.13 | 93.0 | 6.38 | | | | | | |
| 16 | 11.62 | 30.95 | 23.54 | 93.0 | 6.41 | | | | | | |
| 17 | 10.77 | 31.20 | 23.88 | 93.0 | 6.51 | | | | | | |
| 18 | 10.33 | 31.25 | 24.00 | 93.0 | 6.63 | | | | | | |
| 19 | 9.71 | 31.32 | 24.15 | 93.0 | 6.69 | | | | | | |
| 20 | 8.40 | 31.48 | 24.48 | 93.0 | 6.80 | 7.81 | 1.6 | .20 | 0.4 | 1.0 | 0.30 |
| 21 | 6.56 | 31.76 | 24.95 | 93.0 | 7.01 | | | | | | |
| 22 | 5.83 | 31.86 | 25.12 | 93.0 | 7.22 | | | | | | |
| 23 | 5.42 | 31.91 | 25.20 | 93.0 | 7.36 | | | | | | |
| 24 | 5.27 | 31.94 | 25.24 | 93.0 | 7.42 | | | | | | |
| 25 | 5.24 | 31.94 | 25.25 | 93.0 | 7.34 | | | | | | |
| 26 | 5.24 | 31.96 | 25.27 | 93.0 | 7.22 | | | | | | |
| 27 | 5.26 | 31.96 | 25.26 | 93.0 | 7.03 | | | | | | |
| 28 | 5.23 | 31.96 | 25.27 | 93.0 | 6.84 | | | | | | |
| 29 | 5.18 | 31.99 | 25.29 | 93.0 | 6.71 | | | | | | |
| 30 | 5.18 | 31.98 | 25.29 | 93.0 | 6.60 | 5.87 | 2.6 | .50 | 3.2 | 2.5 | 0.70 |
| 31 | 5.18 | 31.99 | 25.29 | 93.0 | 6.52 | | | | | | |
| 32 | 5.19 | 31.99 | 25.29 | 93.0 | 6.42 | | | | | | |
| 33 | 5.19 | 31.99 | 25.29 | 93.0 | 6.34 | | | | | | |
| 34 | 5.19 | 32.00 | 25.30 | 93.0 | 6.27 | | | | | | |
| 35 | 5.19 | 31.99 | 25.30 | 93.0 | 6.23 | | | | | | |
| 36 | 5.19 | 31.99 | 25.29 | 93.0 | 6.19 | | | | | | |
| 37 | 5.19 | 31.99 | 25.29 | 93.0 | 6.15 | | | | | | |
| 38 | 5.19 | 32.00 | 25.30 | 93.0 | 6.12 | | | | | | |
| 39 | 5.18 | 32.00 | 25.30 | 93.0 | 6.10 | | | | | | |
| 40 | 5.18 | 32.02 | 25.32 | 93.0 | 6.08 | | | | | | |
| 41 | 5.18 | 32.01 | 25.31 | 93.0 | 6.07 | | | | | | |
| 42 | 5.17 | 32.02 | 25.32 | 93.0 | 6.05 | | | | | | |
| 43 | 5.17 | 32.02 | 25.32 | 93.0 | 6.05 | | | | | | |
| 44 | 5.18 | 32.03 | 25.32 | 93.0 | 6.05 | | | | | | |
| 45 | 5.18 | 32.04 | 25.33 | 93.0 | 6.05 | | | | | | |
| 46 | 5.20 | 32.08 | 25.36 | 93.0 | 6.06 | | | | | | |
| 47 | 5.22 | 32.09 | 25.37 | 93.0 | 6.06 | | | | | | |
| 48 | 5.23 | 32.11 | 25.38 | 93.0 | 6.07 | | | | | | |
| 49 | 5.23 | 32.11 | 25.39 | 93.0 | 6.10 | | | | | | |
| 50 | 5.23 | 32.11 | 25.38 | 93.0 | 6.13 | 6.35 | 2.4 | .50 | 2.6 | 1.5 | 0.60 |
| 60 | 5.28 | 32.16 | 25.42 | 93.0 | 6.30 | | | | | | |
| 65 | 5.30 | 32.18 | 25.43 | 93.0 | 6.37 | 6.64 | 2.8 | .30 | 2.5 | 2.0 | 0.70 |


KELEZ CRUISE XWCC-22 STATION 35 6/04/79
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

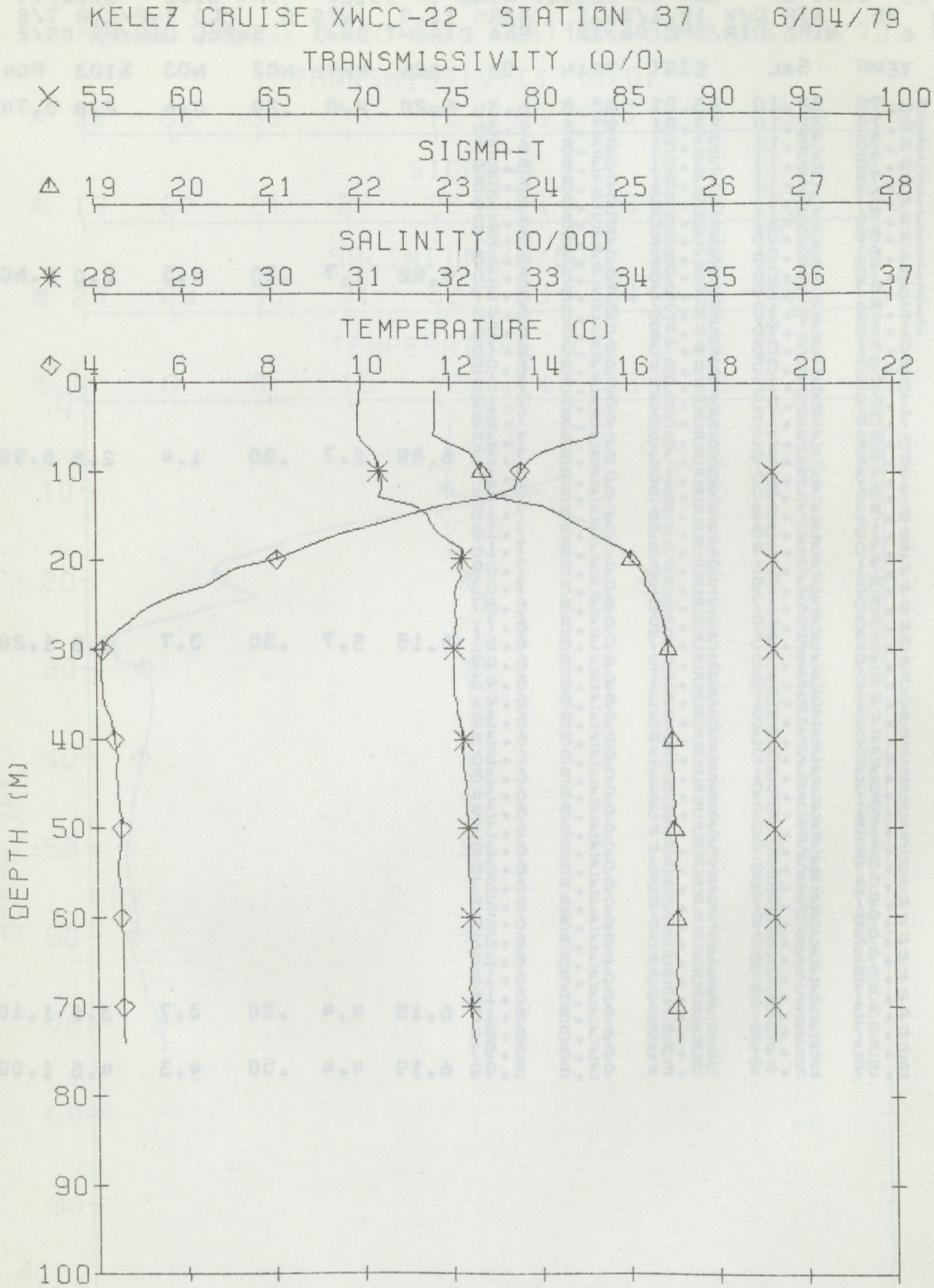
XWCC-22 STA. 36 LAT 39 55.0N; LONG 73 6.5W GMT 12.4 6/04/79
DEPTH 67 AIR D/W 15.6/15.6 BARO . VIS 7 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 05/08 SEA DIR/HT 13/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.24 | 30.89 | 22.78 | 92.9 | 6.22 | 6.09 | 1.5 | <.10 | 0.4 | 1.0 | 0.10 |
| 2 | 15.24 | 30.89 | 22.78 | 92.9 | 6.21 | | | | | | |
| 3 | 15.24 | 30.90 | 22.79 | 92.9 | 6.21 | | | | | | |
| 4 | 15.23 | 30.90 | 22.79 | 92.9 | 6.20 | | | | | | |
| 5 | 15.21 | 30.91 | 22.81 | 92.9 | 6.20 | | | | | | |
| 6 | 15.17 | 30.90 | 22.81 | 92.9 | 6.20 | | | | | | |
| 7 | 15.08 | 30.93 | 22.85 | 92.9 | 6.20 | | | | | | |
| 8 | 14.69 | 30.92 | 22.92 | 92.9 | 6.21 | | | | | | |
| 9 | 14.20 | 30.97 | 23.06 | 92.9 | 6.27 | | | | | | |
| 10 | 14.12 | 30.99 | 23.09 | 92.9 | 6.29 | 6.24 | 1.9 | <.10 | 0.4 | 1.0 | 0.25 |
| 11 | 14.02 | 30.97 | 23.09 | 92.9 | 6.29 | | | | | | |
| 12 | 13.73 | 30.96 | 23.15 | 92.9 | 6.31 | | | | | | |
| 13 | 13.43 | 31.00 | 23.24 | 92.9 | 6.32 | | | | | | |
| 14 | 12.95 | 31.28 | 23.55 | 92.9 | 6.35 | | | | | | |
| 15 | 12.27 | 31.60 | 23.93 | 92.9 | 6.40 | | | | | | |
| 16 | 12.10 | 31.69 | 24.02 | 92.9 | 6.47 | | | | | | |
| 17 | 12.06 | 31.73 | 24.07 | 92.9 | 6.52 | | | | | | |
| 18 | 11.99 | 31.78 | 24.12 | 92.9 | 6.55 | | | | | | |
| 19 | 11.25 | 31.88 | 24.32 | 92.9 | 6.59 | | | | | | |
| 20 | 9.45 | 31.95 | 24.69 | 92.9 | 6.68 | 8.29 | 2.1 | <.10 | 0.4 | 3.5 | 0.30 |
| 21 | 7.76 | 31.91 | 24.91 | 92.9 | 6.93 | | | | | | |
| 22 | 6.72 | 31.95 | 25.08 | 92.9 | 7.12 | | | | | | |
| 23 | 5.60 | 32.00 | 25.25 | 92.9 | 7.35 | | | | | | |
| 24 | 5.14 | 32.00 | 25.31 | 92.9 | 7.53 | | | | | | |
| 25 | 4.97 | 32.02 | 25.34 | 92.9 | 7.63 | | | | | | |
| 26 | 4.88 | 32.01 | 25.35 | 92.9 | 7.67 | | | | | | |
| 27 | 4.80 | 32.01 | 25.36 | 92.9 | 7.70 | | | | | | |
| 28 | 4.74 | 32.05 | 25.39 | 92.9 | 7.71 | | | | | | |
| 29 | 4.75 | 32.08 | 25.41 | 92.9 | 7.71 | | | | | | |
| 30 | 4.79 | 32.10 | 25.42 | 92.9 | 7.65 | 6.39 | 2.7 | .40 | 2.6 | 2.0 | 0.45 |
| 31 | 4.84 | 32.12 | 25.44 | 92.9 | 7.56 | | | | | | |
| 32 | 4.85 | 32.13 | 25.44 | 92.9 | 7.38 | | | | | | |
| 33 | 4.86 | 32.12 | 25.43 | 92.9 | 7.18 | | | | | | |
| 34 | 4.86 | 32.12 | 25.43 | 92.9 | 7.00 | | | | | | |
| 35 | 4.85 | 32.12 | 25.43 | 92.9 | 6.90 | | | | | | |
| 36 | 4.84 | 32.13 | 25.44 | 92.9 | 6.75 | | | | | | |
| 37 | 4.83 | 32.13 | 25.44 | 92.9 | 6.67 | | | | | | |
| 38 | 4.83 | 32.12 | 25.44 | 92.9 | 6.60 | | | | | | |
| 39 | 4.83 | 32.12 | 25.44 | 92.9 | 6.54 | | | | | | |
| 40 | 4.83 | 32.12 | 25.44 | 92.9 | 6.49 | | | | | | |
| 41 | 4.81 | 32.12 | 25.44 | 92.9 | 6.45 | | | | | | |
| 42 | 4.77 | 32.13 | 25.45 | 92.9 | 6.43 | | | | | | |
| 43 | 4.80 | 32.15 | 25.46 | 92.9 | 6.41 | | | | | | |
| 44 | 4.83 | 32.13 | 25.45 | 92.9 | 6.38 | | | | | | |
| 45 | 4.83 | 32.13 | 25.44 | 92.9 | 6.37 | | | | | | |
| 46 | 4.83 | 32.14 | 25.45 | 92.9 | 6.36 | | | | | | |
| 47 | 4.91 | 32.15 | 25.46 | 92.9 | 6.35 | | | | | | |
| 48 | 4.96 | 32.16 | 25.45 | 92.9 | 6.33 | | | | | | |
| 49 | 4.95 | 32.16 | 25.45 | 92.9 | 6.33 | | | | | | |
| 50 | 4.84 | 32.14 | 25.45 | 92.9 | 6.33 | 6.48 | 3.0 | .30 | 2.8 | 2.0 | 0.65 |
| 60 | 4.48 | 32.12 | 25.48 | 92.9 | 6.30 | | | | | | |
| 65 | 4.49 | 32.15 | 25.50 | 92.9 | 6.29 | 6.51 | 3.0 | .30 | 2.7 | 2.0 | 0.45 |


KELEZ CRUISE XWCC-22 STATION 36 6/04/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

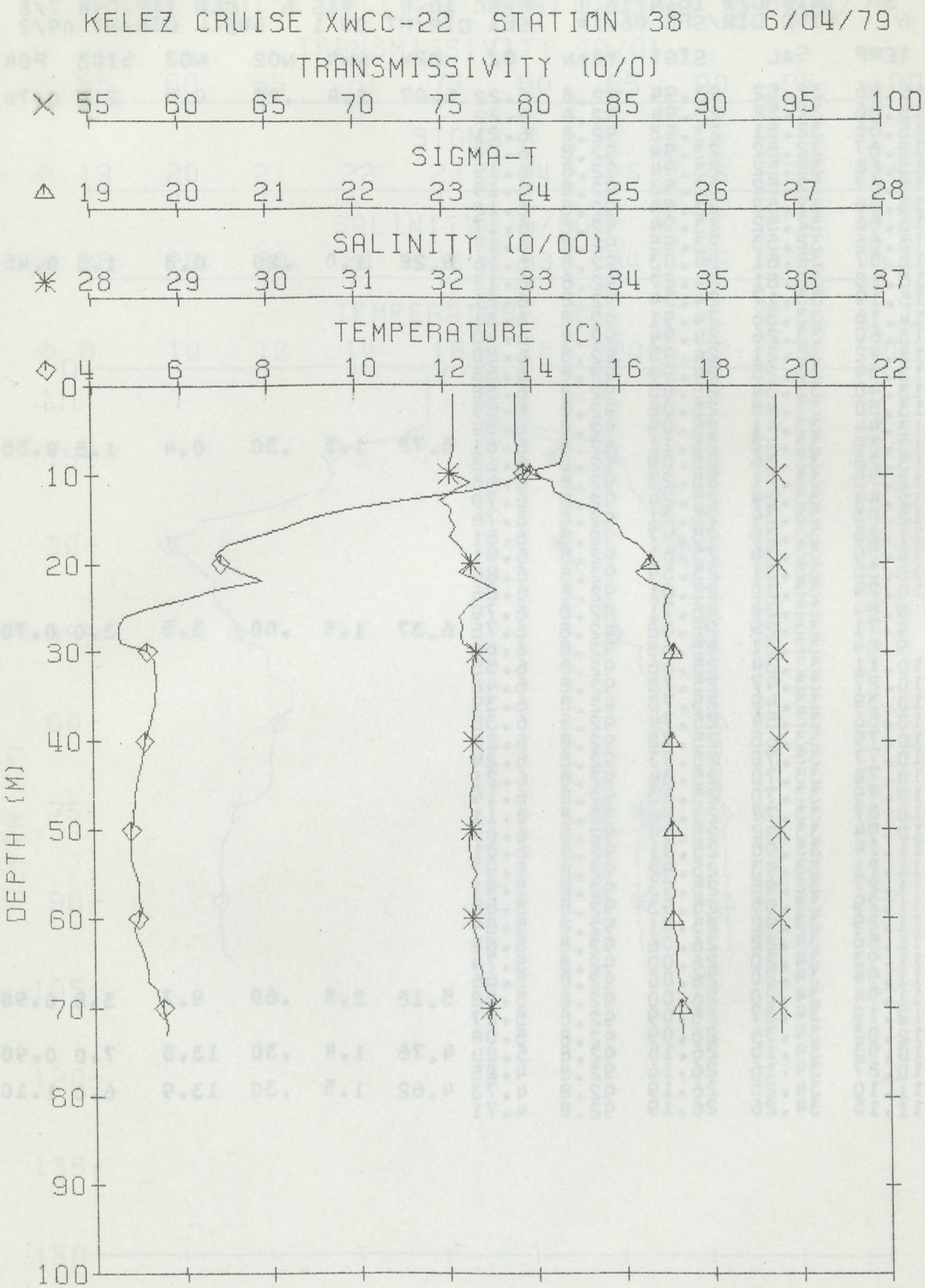
XWCC-22 STA. 37 LAT 39 46.0N; LONG 72 57.0W GMT 19.1 6/04/79
DEPTH 75 AIR D/W 16.1/16.1 BARO 12.0 VIS 6 CLD TYP/CVR 7/8
WETHR 5 WIND DIR/SPD 08/10 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.32 | 30.97 | 22.82 | 93.1 | 6.25 | 6.16 | 0.9 | .20 | 0.4 | 1.0 | 0.55 |
| 2 | 15.32 | 30.97 | 22.82 | 93.1 | 6.24 | | | | | | |
| 3 | 15.32 | 30.96 | 22.82 | 93.1 | 6.24 | | | | | | |
| 4 | 15.32 | 30.97 | 22.82 | 93.1 | 6.23 | | | | | | |
| 5 | 15.32 | 30.96 | 22.82 | 93.1 | 6.23 | | | | | | |
| 6 | 15.32 | 30.95 | 22.81 | 93.1 | 6.23 | | | | | | |
| 7 | 14.56 | 31.04 | 23.04 | 93.1 | 6.23 | | | | | | |
| 8 | 14.02 | 31.14 | 23.23 | 93.1 | 6.31 | | | | | | |
| 9 | 13.75 | 31.17 | 23.30 | 93.1 | 6.35 | | | | | | |
| 10 | 13.58 | 31.19 | 23.35 | 93.1 | 6.38 | 6.34 | 1.1 | .20 | 0.3 | 1.0 | 0.30 |
| 11 | 13.47 | 31.22 | 23.40 | 93.1 | 6.38 | | | | | | |
| 12 | 13.46 | 31.22 | 23.40 | 93.1 | 6.38 | | | | | | |
| 13 | 12.96 | 31.19 | 23.48 | 93.1 | 6.37 | | | | | | |
| 14 | 11.75 | 31.60 | 24.02 | 93.1 | 6.46 | | | | | | |
| 15 | 11.06 | 31.74 | 24.25 | 93.1 | 6.56 | | | | | | |
| 16 | 10.41 | 31.77 | 24.39 | 93.1 | 6.66 | | | | | | |
| 17 | 9.60 | 31.86 | 24.59 | 93.1 | 6.79 | | | | | | |
| 18 | 9.09 | 31.98 | 24.76 | 93.1 | 6.93 | | | | | | |
| 19 | 8.59 | 32.15 | 24.97 | 93.1 | 7.03 | | | | | | |
| 20 | 8.07 | 32.12 | 25.03 | 93.1 | 7.16 | 7.81 | 0.9 | .20 | 0.3 | 1.0 | 0.60 |
| 21 | 7.16 | 32.08 | 25.12 | 93.1 | 7.25 | | | | | | |
| 22 | 6.82 | 32.13 | 25.21 | 93.1 | 7.41 | | | | | | |
| 23 | 6.47 | 32.06 | 25.20 | 93.1 | 7.49 | | | | | | |
| 24 | 5.74 | 32.05 | 25.28 | 93.1 | 7.55 | | | | | | |
| 25 | 5.27 | 32.05 | 25.33 | 93.1 | 7.62 | | | | | | |
| 26 | 4.94 | 32.04 | 25.36 | 93.1 | 7.69 | | | | | | |
| 27 | 4.71 | 32.06 | 25.40 | 93.1 | 7.68 | | | | | | |
| 28 | 4.45 | 32.03 | 25.41 | 93.1 | 7.65 | | | | | | |
| 29 | 4.23 | 32.03 | 25.43 | 93.1 | 7.60 | | | | | | |
| 30 | 4.13 | 32.03 | 25.44 | 93.1 | 7.53 | 7.33 | 1.6 | .30 | 0.5 | 1.0 | 0.90 |
| 31 | 4.09 | 32.02 | 25.44 | 93.1 | 7.43 | | | | | | |
| 32 | 4.09 | 32.03 | 25.44 | 93.1 | 7.34 | | | | | | |
| 33 | 4.10 | 32.03 | 25.44 | 93.1 | 7.24 | | | | | | |
| 34 | 4.10 | 32.03 | 25.44 | 93.1 | 7.16 | | | | | | |
| 35 | 4.11 | 32.03 | 25.44 | 93.1 | 7.10 | | | | | | |
| 36 | 4.15 | 32.05 | 25.45 | 93.1 | 7.05 | | | | | | |
| 37 | 4.24 | 32.06 | 25.45 | 93.1 | 6.99 | | | | | | |
| 38 | 4.30 | 32.08 | 25.46 | 93.1 | 6.96 | | | | | | |
| 39 | 4.34 | 32.11 | 25.48 | 93.1 | 6.93 | | | | | | |
| 40 | 4.39 | 32.12 | 25.49 | 93.1 | 6.89 | | | | | | |
| 41 | 4.41 | 32.12 | 25.48 | 93.1 | 6.82 | | | | | | |
| 42 | 4.44 | 32.13 | 25.48 | 93.1 | 6.77 | | | | | | |
| 43 | 4.42 | 32.13 | 25.48 | 93.1 | 6.72 | | | | | | |
| 44 | 4.41 | 32.14 | 25.50 | 93.1 | 6.70 | | | | | | |
| 45 | 4.44 | 32.15 | 25.50 | 93.1 | 6.67 | | | | | | |
| 46 | 4.46 | 32.15 | 25.50 | 93.1 | 6.62 | | | | | | |
| 47 | 4.47 | 32.16 | 25.51 | 93.1 | 6.57 | | | | | | |
| 48 | 4.48 | 32.16 | 25.51 | 93.1 | 6.53 | | | | | | |
| 49 | 4.54 | 32.17 | 25.51 | 93.1 | 6.50 | | | | | | |
| 50 | 4.53 | 32.17 | 25.51 | 93.1 | 6.45 | 6.46 | 6.5 | .50 | 4.2 | 2.5 | 1.60 |
| 60 | 4.52 | 32.19 | 25.52 | 93.1 | 6.28 | | | | | | |
| 70 | 4.56 | 32.19 | 25.52 | 93.1 | 6.15 | | | | | | |
| 74 | 4.57 | 32.24 | 25.56 | 93.1 | 6.10 | 6.37 | 3.6 | .30 | 3.9 | 3.0 | 1.10 |


KELEZ CRUISE XWCC-22 STATION 37 6/04/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

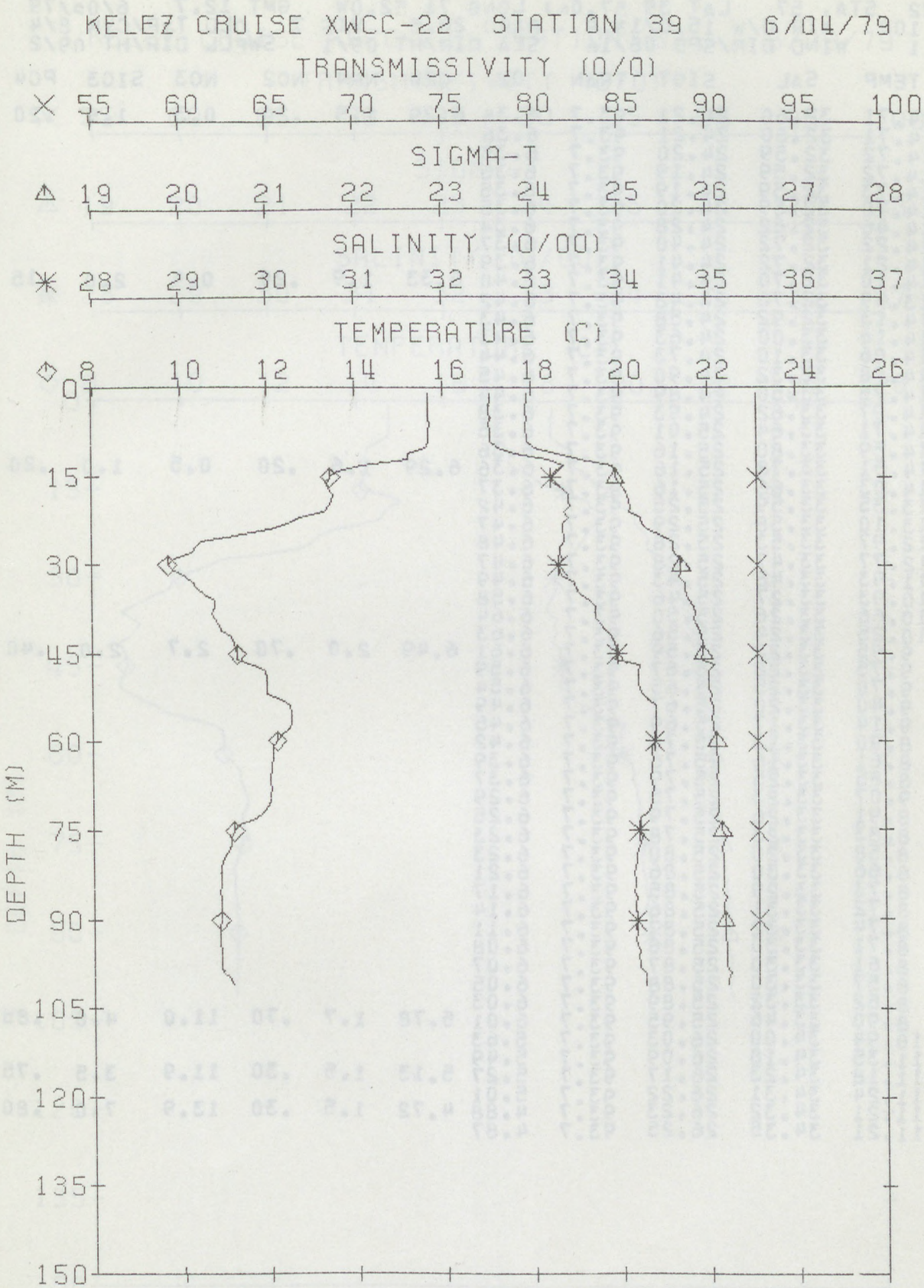
XWCC-22 STA. 38 LAT 39 38.6N; LONG 72 39.8W GMT 21.2 6/04/79
DEPTH 76 AIR D/W 16.1/16.1 BARO 11.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 06/12 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.79 | 32.10 | 23.81 | 93.8 | 6.30 | 6.20 | 2.0 | .20 | 0.6 | 2.0 | 0.70 |
| 2 | 14.79 | 32.10 | 23.81 | 93.8 | 6.30 | | | | | | |
| 3 | 14.78 | 32.11 | 23.81 | 93.8 | 6.29 | | | | | | |
| 4 | 14.78 | 32.11 | 23.81 | 93.8 | 6.29 | | | | | | |
| 5 | 14.78 | 32.11 | 23.81 | 93.8 | 6.28 | | | | | | |
| 6 | 14.77 | 32.11 | 23.82 | 93.8 | 6.28 | | | | | | |
| 7 | 14.76 | 32.11 | 23.82 | 93.8 | 6.28 | | | | | | |
| 8 | 14.68 | 32.08 | 23.82 | 93.8 | 6.27 | | | | | | |
| 9 | 14.61 | 32.06 | 23.82 | 93.8 | 6.28 | | | | | | |
| 10 | 13.78 | 32.06 | 23.98 | 93.8 | 6.30 | 6.62 | 1.7 | .20 | 0.5 | 2.0 | 0.60 |
| 11 | 13.47 | 32.29 | 24.23 | 93.8 | 6.37 | | | | | | |
| 12 | 12.58 | 32.10 | 24.26 | 93.8 | 6.42 | | | | | | |
| 13 | 11.10 | 31.96 | 24.42 | 93.8 | 6.56 | | | | | | |
| 14 | 9.81 | 32.08 | 24.73 | 93.8 | 6.75 | | | | | | |
| 15 | 8.96 | 32.05 | 24.84 | 93.8 | 6.95 | | | | | | |
| 16 | 8.43 | 32.12 | 24.98 | 93.8 | 7.08 | | | | | | |
| 17 | 7.69 | 32.05 | 25.03 | 93.8 | 7.17 | | | | | | |
| 18 | 7.06 | 32.15 | 25.20 | 93.8 | 7.29 | | | | | | |
| 19 | 6.82 | 32.23 | 25.29 | 93.8 | 7.35 | | | | | | |
| 20 | 6.92 | 32.29 | 25.32 | 93.8 | 7.33 | 6.89 | 2.7 | .20 | 1.4 | 2.5 | 0.90 |
| 21 | 7.33 | 32.16 | 25.16 | 93.8 | 7.30 | | | | | | |
| 22 | 7.86 | 32.40 | 25.28 | 93.8 | 7.22 | | | | | | |
| 23 | 6.83 | 32.58 | 25.56 | 93.8 | 7.15 | | | | | | |
| 24 | 6.15 | 32.38 | 25.49 | 93.8 | 7.18 | | | | | | |
| 25 | 5.30 | 32.24 | 25.48 | 93.8 | 7.16 | | | | | | |
| 26 | 4.71 | 32.16 | 25.48 | 93.8 | 7.09 | | | | | | |
| 27 | 4.58 | 32.19 | 25.52 | 93.8 | 7.03 | | | | | | |
| 28 | 4.60 | 32.17 | 25.50 | 93.8 | 6.87 | | | | | | |
| 29 | 4.60 | 32.19 | 25.52 | 93.8 | 6.71 | | | | | | |
| 30 | 5.23 | 32.35 | 25.57 | 93.8 | 6.61 | 6.15 | 5.7 | .30 | 3.7 | 3.5 | 1.20 |
| 31 | 5.39 | 32.30 | 25.52 | 93.8 | 6.47 | | | | | | |
| 32 | 5.40 | 32.29 | 25.51 | 93.8 | 6.43 | | | | | | |
| 33 | 5.41 | 32.31 | 25.53 | 93.8 | 6.41 | | | | | | |
| 34 | 5.43 | 32.32 | 25.53 | 93.8 | 6.39 | | | | | | |
| 35 | 5.40 | 32.33 | 25.54 | 93.8 | 6.38 | | | | | | |
| 36 | 5.38 | 32.32 | 25.53 | 93.8 | 6.36 | | | | | | |
| 37 | 5.33 | 32.31 | 25.53 | 93.8 | 6.35 | | | | | | |
| 38 | 5.27 | 32.29 | 25.52 | 93.8 | 6.34 | | | | | | |
| 39 | 5.21 | 32.29 | 25.53 | 93.8 | 6.32 | | | | | | |
| 40 | 5.15 | 32.30 | 25.54 | 93.8 | 6.31 | | | | | | |
| 41 | 5.12 | 32.29 | 25.54 | 93.8 | 6.30 | | | | | | |
| 42 | 5.09 | 32.28 | 25.53 | 93.8 | 6.28 | | | | | | |
| 43 | 5.04 | 32.29 | 25.55 | 93.8 | 6.27 | | | | | | |
| 44 | 4.97 | 32.27 | 25.54 | 93.8 | 6.25 | | | | | | |
| 45 | 4.95 | 32.29 | 25.56 | 93.8 | 6.24 | | | | | | |
| 46 | 4.92 | 32.26 | 25.53 | 93.8 | 6.22 | | | | | | |
| 47 | 4.92 | 32.26 | 25.54 | 93.8 | 6.20 | | | | | | |
| 48 | 4.88 | 32.27 | 25.55 | 93.8 | 6.18 | | | | | | |
| 49 | 4.87 | 32.25 | 25.54 | 93.8 | 6.16 | | | | | | |
| 50 | 4.83 | 32.27 | 25.55 | 93.8 | 6.15 | 6.15 | 4.4 | .30 | 3.7 | 3.5 | 1.10 |
| 60 | 4.97 | 32.28 | 25.55 | 93.8 | 6.04 | | | | | | |
| 70 | 5.53 | 32.47 | 25.63 | 93.8 | 5.97 | | | | | | |
| 73 | 5.59 | 32.49 | 25.64 | 93.8 | 5.99 | 6.19 | 4.4 | .50 | 4.3 | 4.5 | 1.00 |


KELEZ CRUISE XWCC-22 STATION 38 6/04/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

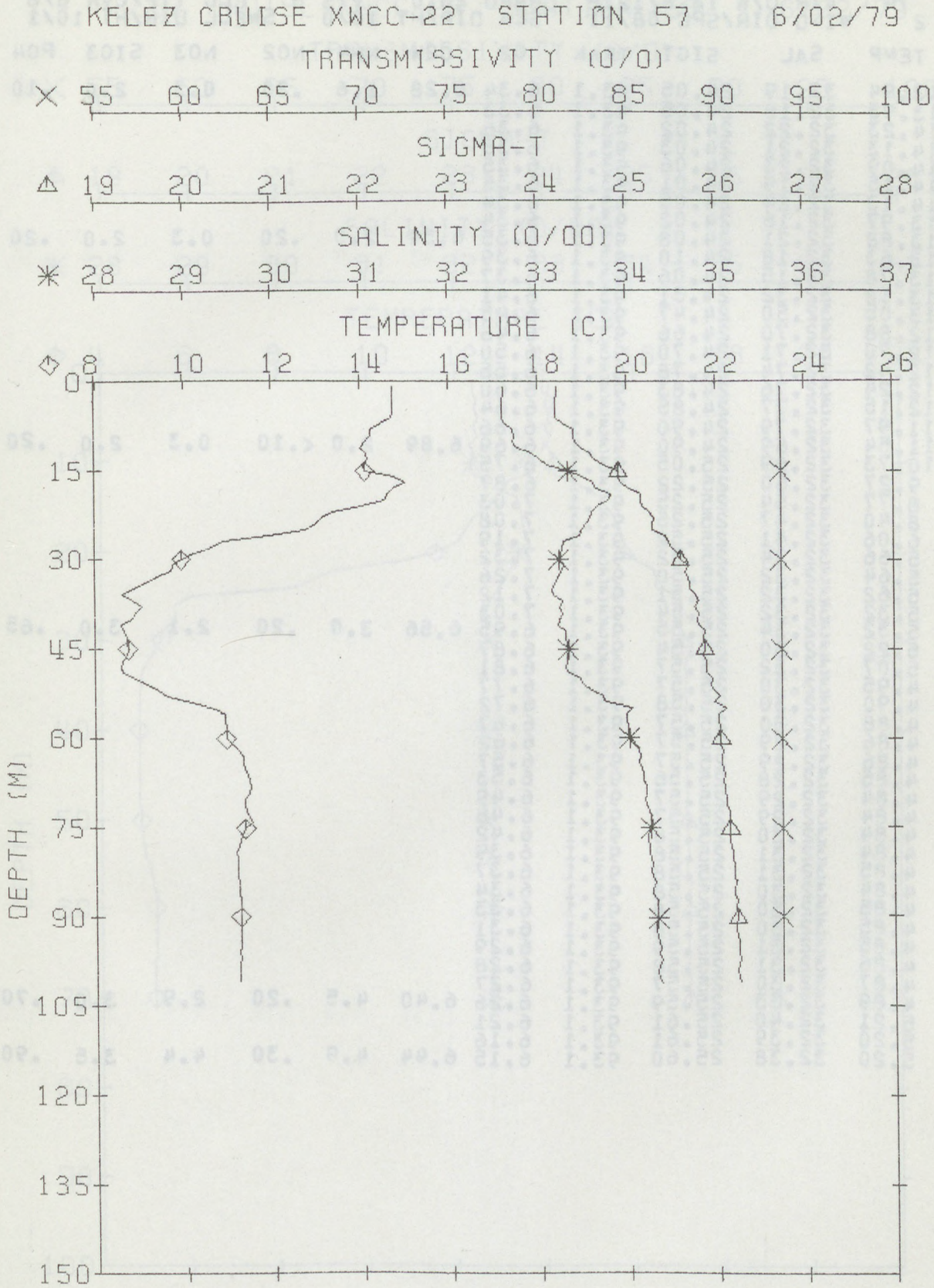
XWCC-22 STA. 39 LAT 39 32.0N; LONG 72 25.6W GMT 23.0 6/04/79
DEPTH 53 AIR D/W 16.4/16.1 BARO 10.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 06/18 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.66 | 32.52 | 23.94 | 92.8 | 6.22 | 6.07 | 2.4 | .20 | 0.5 | 2.0 | 0.70 |
| 2 | 15.66 | 32.52 | 23.94 | 92.8 | 6.22 | | | | | | |
| 3 | 15.66 | 32.51 | 23.93 | 92.8 | 6.21 | | | | | | |
| 4 | 15.67 | 32.52 | 23.94 | 92.8 | 6.20 | | | | | | |
| 5 | 15.66 | 32.52 | 23.94 | 92.8 | 6.19 | | | | | | |
| 6 | 15.67 | 32.52 | 23.93 | 92.8 | 6.19 | | | | | | |
| 7 | 15.66 | 32.52 | 23.94 | 92.8 | 6.18 | | | | | | |
| 8 | 15.66 | 32.52 | 23.94 | 92.8 | 6.17 | | | | | | |
| 9 | 15.66 | 32.53 | 23.95 | 92.8 | 6.17 | | | | | | |
| 10 | 15.57 | 32.61 | 24.03 | 92.8 | 6.16 | 6.28 | 1.0 | .20 | 0.3 | 1.5 | 0.45 |
| 11 | 15.18 | 32.81 | 24.27 | 92.8 | 6.17 | | | | | | |
| 12 | 15.19 | 33.17 | 24.54 | 92.8 | 6.21 | | | | | | |
| 13 | 14.16 | 33.36 | 24.91 | 92.8 | 6.31 | | | | | | |
| 14 | 13.60 | 33.26 | 24.94 | 92.8 | 6.40 | | | | | | |
| 15 | 13.42 | 33.21 | 24.95 | 92.8 | 6.50 | | | | | | |
| 16 | 13.34 | 33.25 | 24.99 | 92.8 | 6.55 | | | | | | |
| 17 | 13.40 | 33.34 | 25.05 | 92.8 | 6.58 | | | | | | |
| 18 | 13.50 | 33.40 | 25.08 | 92.8 | 6.59 | | | | | | |
| 19 | 13.44 | 33.41 | 25.09 | 92.8 | 6.59 | | | | | | |
| 20 | 13.39 | 33.42 | 25.11 | 92.8 | 6.61 | 6.78 | 1.5 | .30 | 0.4 | 1.5 | 0.55 |
| 21 | 13.28 | 33.36 | 25.09 | 92.8 | 6.63 | | | | | | |
| 22 | 12.75 | 33.41 | 25.23 | 92.8 | 6.65 | | | | | | |
| 23 | 12.44 | 33.34 | 25.24 | 92.8 | 6.70 | | | | | | |
| 24 | 12.05 | 33.34 | 25.31 | 92.8 | 6.76 | | | | | | |
| 25 | 11.26 | 33.35 | 25.47 | 92.8 | 6.81 | | | | | | |
| 26 | 10.50 | 33.36 | 25.61 | 92.8 | 6.91 | | | | | | |
| 27 | 10.35 | 33.31 | 25.59 | 92.8 | 6.89 | | | | | | |
| 28 | 10.24 | 33.30 | 25.61 | 92.8 | 6.86 | | | | | | |
| 29 | 9.84 | 33.34 | 25.71 | 92.8 | 6.79 | | | | | | |
| 30 | 9.71 | 33.29 | 25.68 | 92.8 | 6.75 | 6.37 | 1.5 | .60 | 3.5 | 3.0 | 0.70 |
| 31 | 9.84 | 33.31 | 25.68 | 92.8 | 6.66 | | | | | | |
| 32 | 10.11 | 33.34 | 25.66 | 92.8 | 6.55 | | | | | | |
| 33 | 10.27 | 33.47 | 25.73 | 92.8 | 6.46 | | | | | | |
| 34 | 10.39 | 33.49 | 25.73 | 92.8 | 6.39 | | | | | | |
| 35 | 10.56 | 33.54 | 25.74 | 92.8 | 6.35 | | | | | | |
| 36 | 10.79 | 33.65 | 25.78 | 92.8 | 6.28 | | | | | | |
| 37 | 10.77 | 33.70 | 25.83 | 92.8 | 6.24 | | | | | | |
| 38 | 10.70 | 33.70 | 25.84 | 92.8 | 6.21 | | | | | | |
| 39 | 10.79 | 33.70 | 25.83 | 92.8 | 6.19 | | | | | | |
| 40 | 10.87 | 33.77 | 25.86 | 92.8 | 6.11 | | | | | | |
| 41 | 10.94 | 33.82 | 25.89 | 92.8 | 6.07 | | | | | | |
| 42 | 11.14 | 33.90 | 25.91 | 92.8 | 6.01 | | | | | | |
| 43 | 11.21 | 33.93 | 25.92 | 92.8 | 5.97 | | | | | | |
| 44 | 11.27 | 33.95 | 25.93 | 92.8 | 5.91 | | | | | | |
| 45 | 11.29 | 33.95 | 25.93 | 92.8 | 5.88 | | | | | | |
| 46 | 11.29 | 33.92 | 25.91 | 92.8 | 5.84 | | | | | | |
| 47 | 11.66 | 34.22 | 26.06 | 92.8 | 5.82 | | | | | | |
| 48 | 11.93 | 34.20 | 26.00 | 92.8 | 5.74 | | | | | | |
| 49 | 11.94 | 34.20 | 26.00 | 92.8 | 5.66 | | | | | | |
| 50 | 11.94 | 34.20 | 26.00 | 92.8 | 5.58 | 5.18 | 2.8 | .60 | 9.7 | 3.5 | 0.90 |
| 60 | 12.19 | 34.37 | 26.09 | 92.8 | 5.27 | | | | | | |
| 70 | 12.03 | 34.34 | 26.09 | 92.8 | 5.08 | | | | | | |
| 80 | 10.93 | 34.15 | 26.15 | 92.8 | 5.00 | 4.76 | 1.4 | .30 | 13.5 | 7.0 | 0.90 |
| 90 | 10.87 | 34.16 | 26.16 | 92.8 | 4.85 | | | | | | |
| 100 | 11.10 | 34.25 | 26.19 | 92.8 | 4.73 | 4.62 | 1.5 | .30 | 13.9 | 6.0 | 1.10 |
| 101 | 11.15 | 34.26 | 26.19 | 92.8 | 4.71 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 39 6/04/79
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

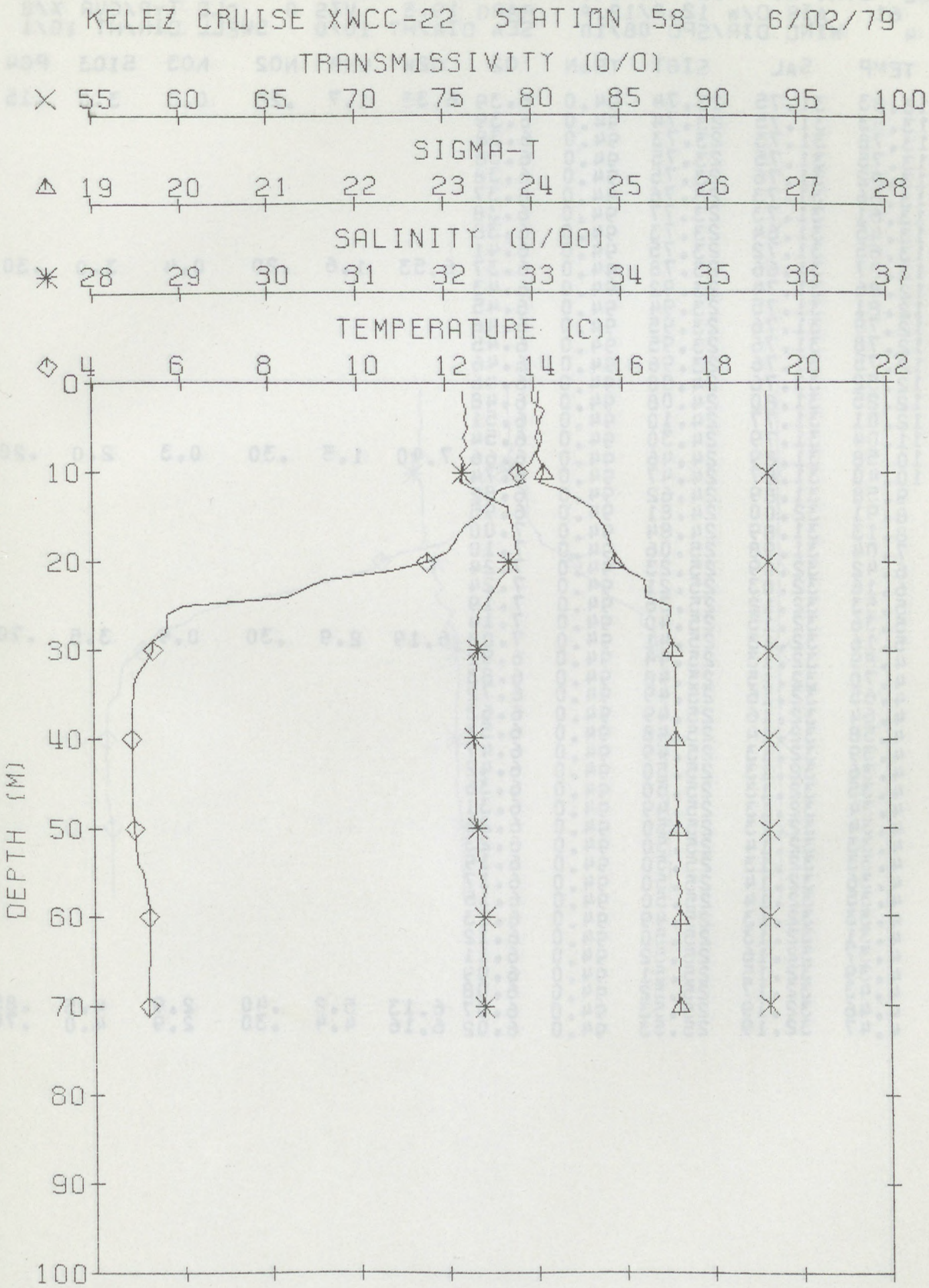
XWCC-22 STA. 57 LAT 39 57.0N LONG 71 52.0W GMT 12.7 6/02/79
DEPTH 108 AIR D/W 15.0/13.9 BARO 20.5 VIS 7 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 08/16 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.71 | 32.60 | 24.21 | 93.7 | 6.36 | 6.29 | 1.5 | .20 | 0.3 | 1.5 | .20 |
| 2 | 14.71 | 32.60 | 24.21 | 93.7 | 6.36 | | | | | | |
| 3 | 14.72 | 32.59 | 24.20 | 93.7 | 6.35 | | | | | | |
| 4 | 14.72 | 32.59 | 24.19 | 93.7 | 6.35 | | | | | | |
| 5 | 14.73 | 32.59 | 24.19 | 93.7 | 6.35 | | | | | | |
| 6 | 14.70 | 32.59 | 24.20 | 93.7 | 6.35 | | | | | | |
| 7 | 14.46 | 32.62 | 24.28 | 93.7 | 6.34 | | | | | | |
| 8 | 14.22 | 32.72 | 24.40 | 93.7 | 6.37 | | | | | | |
| 9 | 14.21 | 32.72 | 24.41 | 93.7 | 6.39 | | | | | | |
| 10 | 14.10 | 32.70 | 24.41 | 93.7 | 6.40 | 6.33 | 1.9 | .20 | 0.4 | 2.0 | .15 |
| 11 | 13.99 | 32.76 | 24.48 | 93.7 | 6.42 | | | | | | |
| 12 | 14.13 | 32.92 | 24.58 | 93.7 | 6.43 | | | | | | |
| 13 | 14.16 | 33.00 | 24.63 | 93.7 | 6.43 | | | | | | |
| 14 | 14.06 | 33.10 | 24.73 | 93.7 | 6.44 | | | | | | |
| 15 | 14.08 | 33.32 | 24.90 | 93.7 | 6.45 | | | | | | |
| 16 | 14.75 | 33.50 | 24.89 | 93.7 | 6.44 | | | | | | |
| 17 | 14.97 | 33.62 | 24.93 | 93.7 | 6.38 | | | | | | |
| 18 | 14.71 | 33.64 | 25.01 | 93.7 | 6.35 | | | | | | |
| 19 | 14.59 | 33.80 | 25.16 | 93.7 | 6.36 | | | | | | |
| 20 | 14.51 | 33.78 | 25.16 | 93.7 | 6.36 | 6.29 | 1.6 | .20 | 0.5 | 1.0 | .20 |
| 21 | 14.03 | 33.66 | 25.16 | 93.7 | 6.37 | | | | | | |
| 22 | 13.35 | 33.59 | 25.25 | 93.7 | 6.42 | | | | | | |
| 23 | 13.10 | 33.58 | 25.29 | 93.7 | 6.47 | | | | | | |
| 24 | 12.97 | 33.53 | 25.28 | 93.7 | 6.48 | | | | | | |
| 25 | 12.77 | 33.47 | 25.28 | 93.7 | 6.47 | | | | | | |
| 26 | 11.93 | 33.46 | 25.43 | 93.7 | 6.49 | | | | | | |
| 27 | 10.93 | 33.27 | 25.46 | 93.7 | 6.58 | | | | | | |
| 28 | 10.66 | 33.26 | 25.50 | 93.7 | 6.64 | | | | | | |
| 29 | 10.25 | 33.24 | 25.56 | 93.7 | 6.63 | | | | | | |
| 30 | 9.95 | 33.22 | 25.59 | 93.7 | 6.61 | 6.49 | 2.0 | .70 | 2.7 | 2.0 | .40 |
| 31 | 9.75 | 33.28 | 25.67 | 93.7 | 6.59 | | | | | | |
| 32 | 9.70 | 33.25 | 25.65 | 93.7 | 6.54 | | | | | | |
| 33 | 9.40 | 33.20 | 25.67 | 93.7 | 6.49 | | | | | | |
| 34 | 9.14 | 33.17 | 25.69 | 93.7 | 6.45 | | | | | | |
| 35 | 8.90 | 33.13 | 25.70 | 93.7 | 6.42 | | | | | | |
| 36 | 8.61 | 33.16 | 25.76 | 93.7 | 6.39 | | | | | | |
| 37 | 8.85 | 33.25 | 25.79 | 93.7 | 6.37 | | | | | | |
| 38 | 9.07 | 33.23 | 25.75 | 93.7 | 6.29 | | | | | | |
| 39 | 8.91 | 33.26 | 25.79 | 93.7 | 6.25 | | | | | | |
| 40 | 8.83 | 33.23 | 25.78 | 93.7 | 6.23 | | | | | | |
| 41 | 8.58 | 33.20 | 25.80 | 93.7 | 6.23 | | | | | | |
| 42 | 8.66 | 33.30 | 25.86 | 93.7 | 6.21 | | | | | | |
| 43 | 8.73 | 33.29 | 25.85 | 93.7 | 6.17 | | | | | | |
| 44 | 8.72 | 33.31 | 25.86 | 93.7 | 6.14 | | | | | | |
| 45 | 8.74 | 33.32 | 25.87 | 93.7 | 6.11 | | | | | | |
| 46 | 8.71 | 33.30 | 25.86 | 93.7 | 6.08 | | | | | | |
| 47 | 8.61 | 33.30 | 25.87 | 93.7 | 6.07 | | | | | | |
| 48 | 8.57 | 33.30 | 25.88 | 93.7 | 6.05 | | | | | | |
| 49 | 8.62 | 33.32 | 25.89 | 93.7 | 6.03 | | | | | | |
| 50 | 8.90 | 33.46 | 25.95 | 93.7 | 6.01 | 5.78 | 1.7 | .70 | 11.0 | 4.0 | .85 |
| 60 | 10.94 | 34.00 | 26.03 | 93.7 | 5.63 | | | | | | |
| 70 | 11.35 | 34.18 | 26.09 | 93.7 | 5.49 | | | | | | |
| 80 | 11.18 | 34.23 | 26.17 | 93.7 | 5.27 | 5.13 | 1.5 | .30 | 11.9 | 3.5 | .75 |
| 90 | 11.24 | 34.31 | 26.22 | 93.7 | 5.01 | | | | | | |
| 100 | 11.21 | 34.32 | 26.23 | 93.7 | 4.88 | 4.72 | 1.5 | .30 | 13.9 | 7.0 | .80 |
| 101 | 11.21 | 34.35 | 26.25 | 93.7 | 4.87 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 57 6/02/79
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

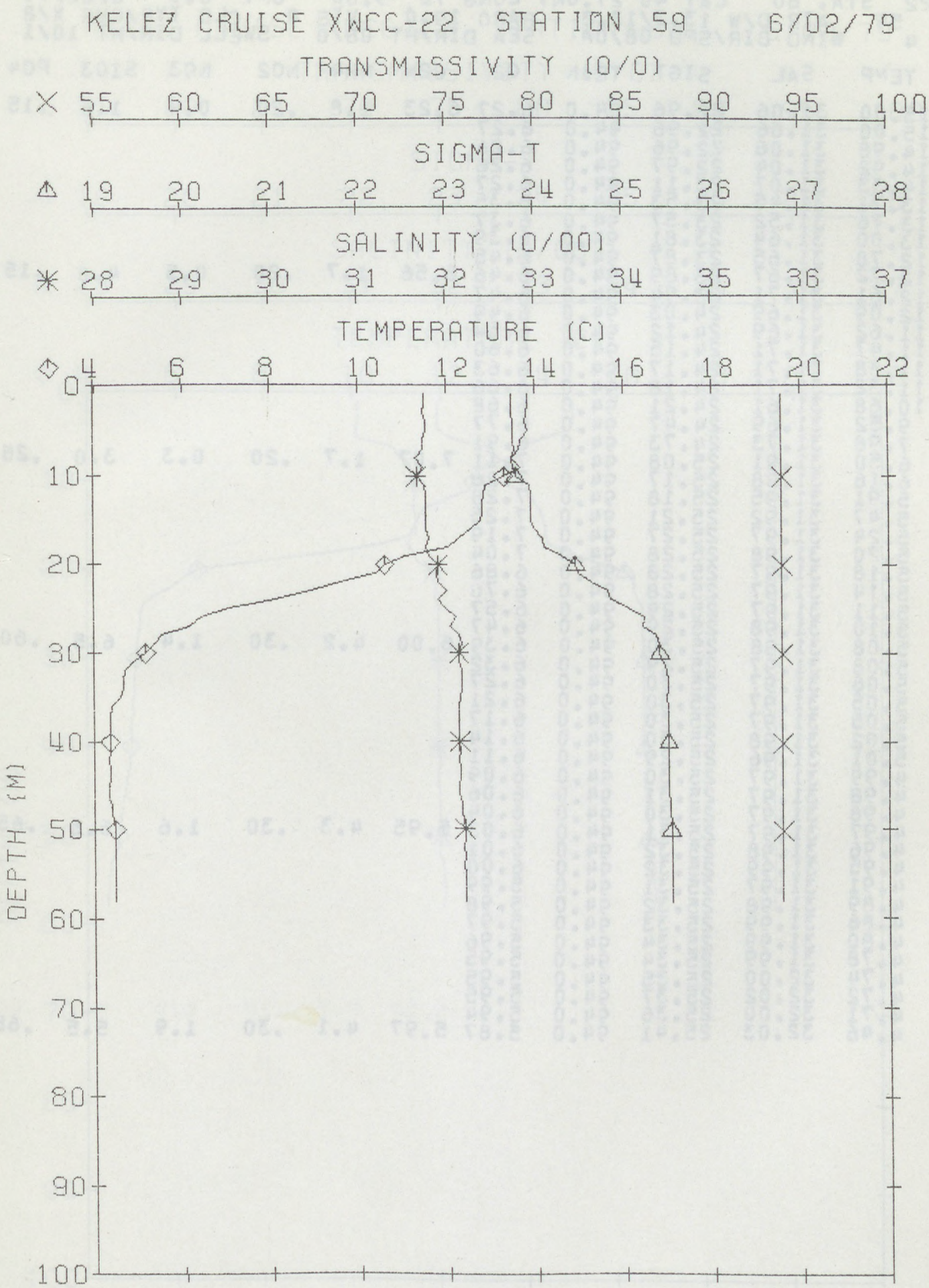
XWCC-22 STA. 58 LAT 40 7.8N LONG 71 57.9W GMT 10.6 6/02/79
DEPTH 74 AIR D/W 12.8/12.8 BARO 20.0 VIS 6 CLD TYP/CVR 6/8
WETHR 2 WIND DIR/SPD 08/11 SEA DIR/HT 10/0 SWELL DIR/HT 10/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.94 | 32.19 | 24.05 | 93.1 | 6.34 | 6.28 | 1.6 | .20 | 0.3 | 2.0 | .10 |
| 2 | 13.93 | 32.18 | 24.05 | 93.1 | 6.33 | | | | | | |
| 3 | 14.23 | 32.22 | 24.02 | 93.1 | 6.36 | | | | | | |
| 4 | 14.13 | 32.21 | 24.03 | 93.1 | 6.35 | | | | | | |
| 5 | 14.09 | 32.23 | 24.06 | 93.1 | 6.35 | | | | | | |
| 6 | 14.15 | 32.19 | 24.01 | 93.1 | 6.35 | | | | | | |
| 7 | 14.13 | 32.24 | 24.05 | 93.1 | 6.34 | | | | | | |
| 8 | 13.97 | 32.16 | 24.02 | 93.1 | 6.34 | | | | | | |
| 9 | 13.88 | 32.21 | 24.08 | 93.1 | 6.35 | 6.34 | 2.0 | .20 | 0.3 | 2.0 | .20 |
| 10 | 13.63 | 32.18 | 24.10 | 93.1 | 6.39 | | | | | | |
| 11 | 13.78 | 32.15 | 24.06 | 93.1 | 6.37 | | | | | | |
| 12 | 13.18 | 32.32 | 24.31 | 93.1 | 6.41 | | | | | | |
| 13 | 13.05 | 32.50 | 24.47 | 93.1 | 6.45 | | | | | | |
| 14 | 12.88 | 32.70 | 24.66 | 93.1 | 6.46 | | | | | | |
| 15 | 12.70 | 32.71 | 24.70 | 93.1 | 6.50 | | | | | | |
| 16 | 12.42 | 32.74 | 24.78 | 93.1 | 6.55 | | | | | | |
| 17 | 12.24 | 32.76 | 24.83 | 93.1 | 6.60 | | | | | | |
| 18 | 12.15 | 32.77 | 24.85 | 93.1 | 6.64 | | | | | | |
| 19 | 11.97 | 32.79 | 24.90 | 93.1 | 6.66 | | | | | | |
| 20 | 11.54 | 32.69 | 24.90 | 93.1 | 6.69 | 6.89 | 2.0 | <.10 | 0.3 | 2.0 | .20 |
| 21 | 10.73 | 32.69 | 25.05 | 93.1 | 6.75 | | | | | | |
| 22 | 9.27 | 32.60 | 25.22 | 93.1 | 6.87 | | | | | | |
| 23 | 8.77 | 32.54 | 25.25 | 93.1 | 7.03 | | | | | | |
| 24 | 8.40 | 32.47 | 25.25 | 93.1 | 7.08 | | | | | | |
| 25 | 6.06 | 32.41 | 25.52 | 93.1 | 7.19 | | | | | | |
| 26 | 5.66 | 32.34 | 25.52 | 93.1 | 7.32 | | | | | | |
| 27 | 5.64 | 32.32 | 25.50 | 93.1 | 7.26 | | | | | | |
| 28 | 5.62 | 32.32 | 25.51 | 93.1 | 7.12 | | | | | | |
| 29 | 5.32 | 32.32 | 25.54 | 93.1 | 7.03 | | | | | | |
| 30 | 5.32 | 32.34 | 25.55 | 93.1 | 6.95 | 6.56 | 3.0 | .20 | 2.1 | 3.0 | .65 |
| 31 | 5.22 | 32.30 | 25.54 | 93.1 | 6.87 | | | | | | |
| 32 | 5.07 | 32.32 | 25.57 | 93.1 | 6.81 | | | | | | |
| 33 | 4.95 | 32.30 | 25.57 | 93.1 | 6.77 | | | | | | |
| 34 | 4.90 | 32.30 | 25.58 | 93.1 | 6.72 | | | | | | |
| 35 | 4.88 | 32.30 | 25.57 | 93.1 | 6.67 | | | | | | |
| 36 | 4.86 | 32.29 | 25.57 | 93.1 | 6.62 | | | | | | |
| 37 | 4.86 | 32.29 | 25.57 | 93.1 | 6.57 | | | | | | |
| 38 | 4.85 | 32.28 | 25.56 | 93.1 | 6.53 | | | | | | |
| 39 | 4.84 | 32.29 | 25.57 | 93.1 | 6.49 | | | | | | |
| 40 | 4.84 | 32.29 | 25.57 | 93.1 | 6.45 | | | | | | |
| 41 | 4.84 | 32.30 | 25.58 | 93.1 | 6.42 | | | | | | |
| 42 | 4.84 | 32.31 | 25.58 | 93.1 | 6.39 | | | | | | |
| 43 | 4.85 | 32.31 | 25.58 | 93.1 | 6.37 | | | | | | |
| 44 | 4.84 | 32.30 | 25.58 | 93.1 | 6.34 | | | | | | |
| 45 | 4.85 | 32.30 | 25.58 | 93.1 | 6.33 | | | | | | |
| 46 | 4.85 | 32.30 | 25.58 | 93.1 | 6.31 | | | | | | |
| 47 | 4.85 | 32.31 | 25.59 | 93.1 | 6.29 | | | | | | |
| 48 | 4.86 | 32.31 | 25.58 | 93.1 | 6.28 | | | | | | |
| 49 | 4.87 | 32.30 | 25.57 | 93.1 | 6.27 | | | | | | |
| 50 | 4.89 | 32.33 | 25.59 | 93.1 | 6.26 | 6.40 | 4.5 | .20 | 2.9 | 3.0 | .70 |
| 60 | 5.21 | 32.40 | 25.61 | 93.1 | 6.21 | | | | | | |
| 70 | 5.20 | 32.39 | 25.61 | 93.1 | 6.16 | | | | | | |
| 71 | 5.20 | 32.38 | 25.60 | 93.1 | 6.15 | 6.44 | 4.9 | .30 | 4.4 | 3.5 | .90 |


KELEZ CRUISE XWCC-22 STATION 58 6/02/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

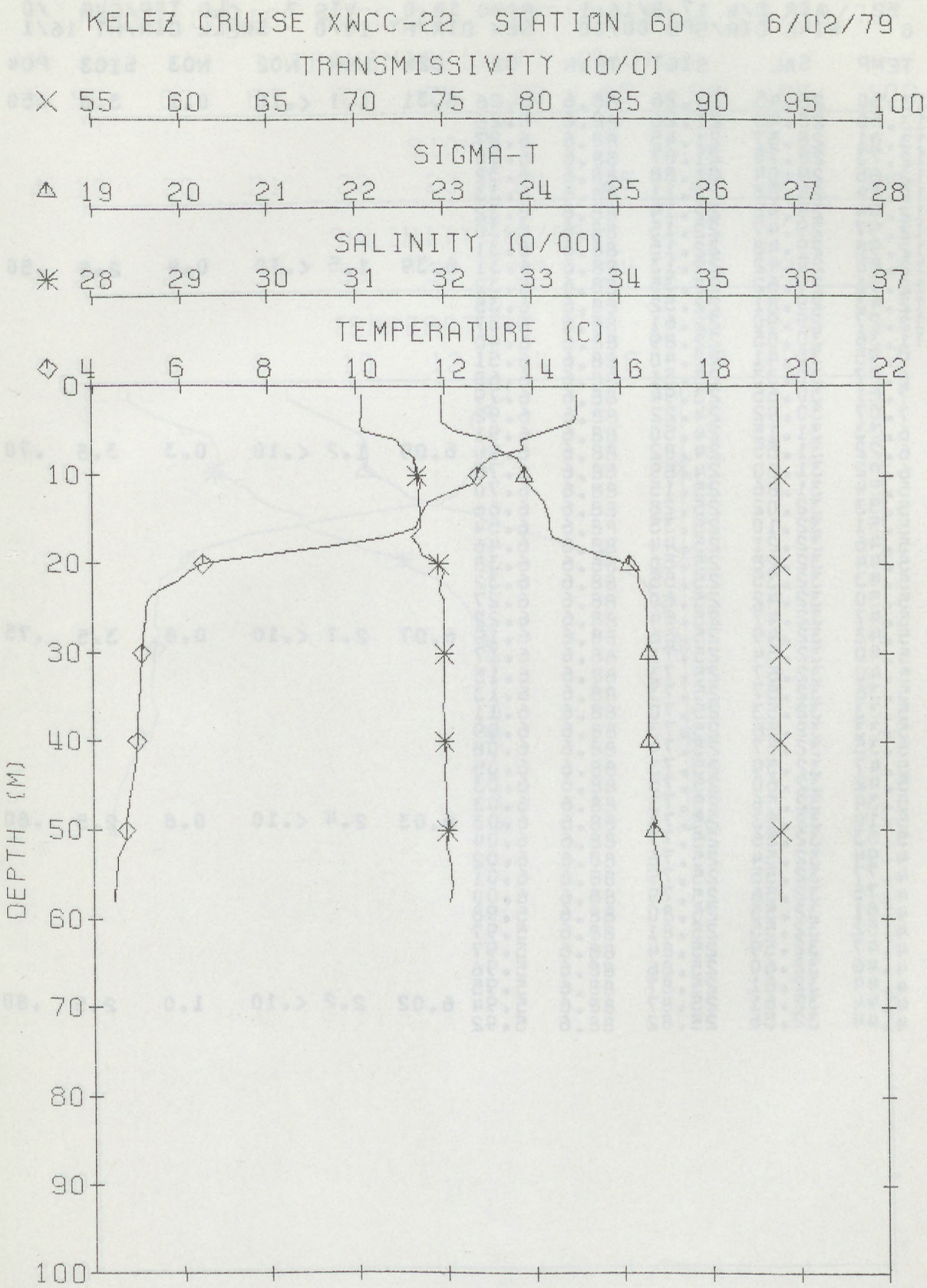
XWCC-22 STA. 59 LAT 40 17.6N; LONG 72 4.5W GMT 8.8 6/02/79
DEPTH 61 AIR D/W 12.8/12.8 BARO 19.5 VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 08/10 SEA DIR/HT 10/0 SWELL DIR/HT 10/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.83 | 31.75 | 23.74 | 94.0 | 6.39 | 6.33 | 1.7 | .20 | 0.3 | 3.0 | .15 |
| 2 | 13.83 | 31.75 | 23.74 | 94.0 | 6.39 | | | | | | |
| 3 | 13.78 | 31.73 | 23.73 | 94.0 | 6.38 | | | | | | |
| 4 | 13.75 | 31.75 | 23.75 | 94.0 | 6.38 | | | | | | |
| 5 | 13.82 | 31.76 | 23.75 | 94.0 | 6.38 | | | | | | |
| 6 | 13.66 | 31.73 | 23.76 | 94.0 | 6.37 | | | | | | |
| 7 | 13.61 | 31.73 | 23.77 | 94.0 | 6.38 | | | | | | |
| 8 | 13.45 | 31.64 | 23.73 | 94.0 | 6.38 | | | | | | |
| 9 | 13.65 | 31.72 | 23.75 | 94.0 | 6.41 | | | | | | |
| 10 | 13.27 | 31.66 | 23.78 | 94.0 | 6.37 | 6.53 | 1.6 | .20 | 0.4 | 3.0 | .30 |
| 11 | 12.86 | 31.74 | 23.92 | 94.0 | 6.43 | | | | | | |
| 12 | 12.81 | 31.75 | 23.94 | 94.0 | 6.45 | | | | | | |
| 13 | 12.79 | 31.76 | 23.95 | 94.0 | 6.46 | | | | | | |
| 14 | 12.78 | 31.76 | 23.95 | 94.0 | 6.45 | | | | | | |
| 15 | 12.75 | 31.76 | 23.96 | 94.0 | 6.46 | | | | | | |
| 16 | 12.52 | 31.76 | 24.00 | 94.0 | 6.46 | | | | | | |
| 17 | 12.25 | 31.80 | 24.08 | 94.0 | 6.48 | | | | | | |
| 18 | 12.01 | 31.77 | 24.10 | 94.0 | 6.51 | | | | | | |
| 19 | 11.04 | 31.79 | 24.30 | 94.0 | 6.54 | | | | | | |
| 20 | 10.58 | 31.89 | 24.46 | 94.0 | 6.66 | 7.40 | 1.5 | .30 | 0.3 | 2.0 | .20 |
| 21 | 10.40 | 31.87 | 24.47 | 94.0 | 6.74 | | | | | | |
| 22 | 9.58 | 31.89 | 24.62 | 94.0 | 6.82 | | | | | | |
| 23 | 8.91 | 32.00 | 24.81 | 94.0 | 6.95 | | | | | | |
| 24 | 8.13 | 31.89 | 24.84 | 94.0 | 7.00 | | | | | | |
| 25 | 7.04 | 31.98 | 25.06 | 94.0 | 7.10 | | | | | | |
| 26 | 6.42 | 32.09 | 25.23 | 94.0 | 7.24 | | | | | | |
| 27 | 6.16 | 32.03 | 25.21 | 94.0 | 7.24 | | | | | | |
| 28 | 5.53 | 32.12 | 25.36 | 94.0 | 7.19 | | | | | | |
| 29 | 5.36 | 32.15 | 25.40 | 94.0 | 7.14 | | | | | | |
| 30 | 5.16 | 32.13 | 25.41 | 94.0 | 7.03 | 6.19 | 2.9 | .30 | 0.9 | 3.5 | .70 |
| 31 | 4.89 | 32.13 | 25.44 | 94.0 | 6.92 | | | | | | |
| 32 | 4.70 | 32.15 | 25.48 | 94.0 | 6.83 | | | | | | |
| 33 | 4.65 | 32.16 | 25.49 | 94.0 | 6.72 | | | | | | |
| 34 | 4.64 | 32.16 | 25.49 | 94.0 | 6.63 | | | | | | |
| 35 | 4.58 | 32.14 | 25.48 | 94.0 | 6.53 | | | | | | |
| 36 | 4.39 | 32.13 | 25.49 | 94.0 | 6.47 | | | | | | |
| 37 | 4.36 | 32.13 | 25.50 | 94.0 | 6.42 | | | | | | |
| 38 | 4.35 | 32.13 | 25.50 | 94.0 | 6.36 | | | | | | |
| 39 | 4.34 | 32.13 | 25.49 | 94.0 | 6.31 | | | | | | |
| 40 | 4.34 | 32.13 | 25.50 | 94.0 | 6.26 | | | | | | |
| 41 | 4.33 | 32.14 | 25.50 | 94.0 | 6.23 | | | | | | |
| 42 | 4.33 | 32.13 | 25.50 | 94.0 | 6.19 | | | | | | |
| 43 | 4.36 | 32.14 | 25.50 | 94.0 | 6.17 | | | | | | |
| 44 | 4.35 | 32.14 | 25.50 | 94.0 | 6.15 | | | | | | |
| 45 | 4.33 | 32.13 | 25.49 | 94.0 | 6.13 | | | | | | |
| 46 | 4.31 | 32.13 | 25.50 | 94.0 | 6.12 | | | | | | |
| 47 | 4.37 | 32.16 | 25.52 | 94.0 | 6.11 | | | | | | |
| 48 | 4.39 | 32.15 | 25.51 | 94.0 | 6.09 | | | | | | |
| 49 | 4.43 | 32.17 | 25.52 | 94.0 | 6.08 | | | | | | |
| 50 | 4.46 | 32.19 | 25.53 | 94.0 | 6.07 | 6.13 | 5.2 | .40 | 2.9 | 4.5 | .85 |
| 58 | 4.47 | 32.19 | 25.53 | 94.0 | 6.02 | 6.16 | 4.4 | .30 | 2.9 | 4.0 | .70 |


KELEZ CRUISE XWCC-22 STATION 59 6/02/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

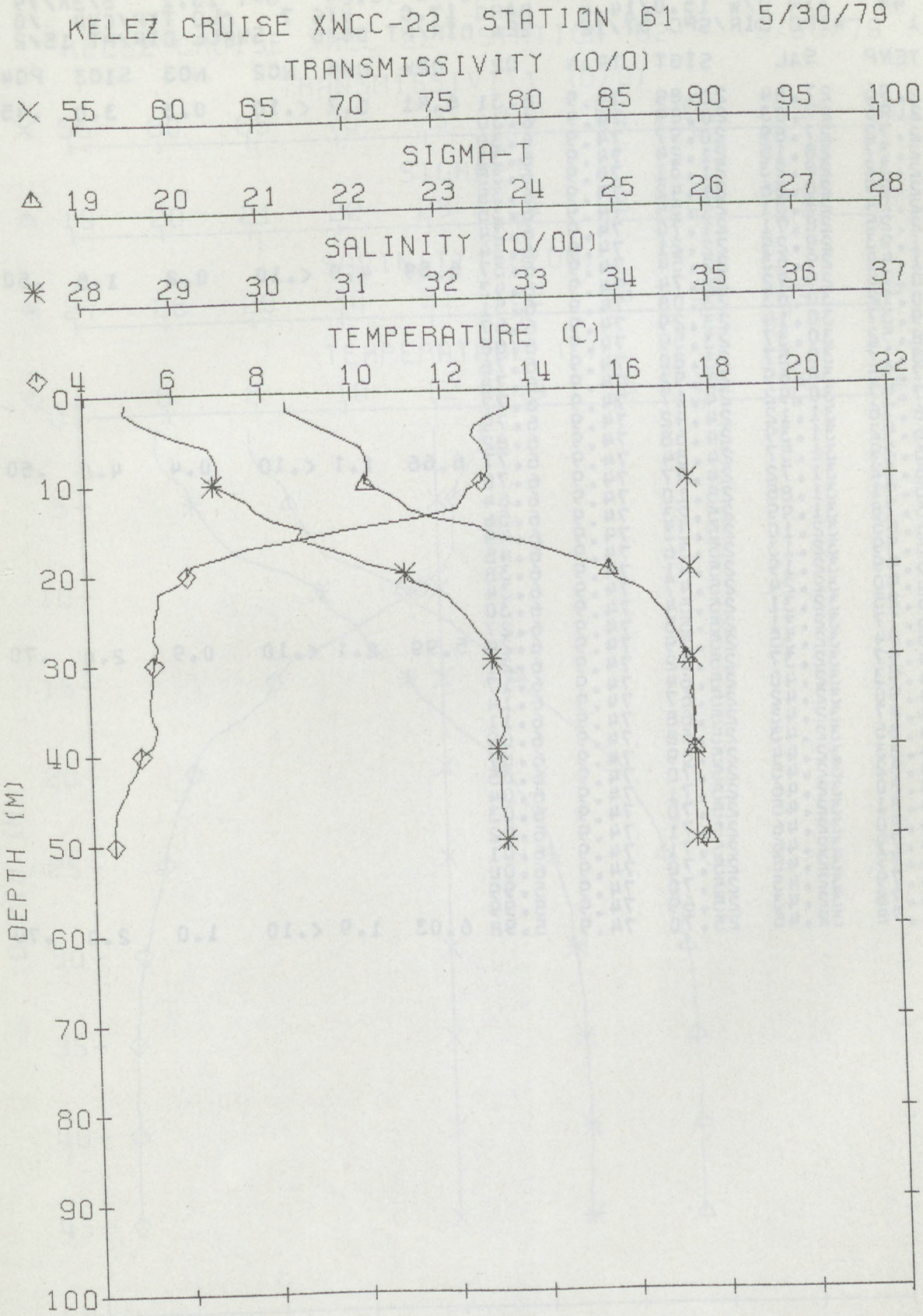
XWCC-22 STA. 60 LAT 40 27.0N; LONG 72 9.0W GMT 6.9 6/02/79
DEPTH 59 AIR D/W 13.3/13.3 BARO 19.0 VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 08/08 SEA DIR/HT 08/0 SWELL DIR/HT 10/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.00 | 31.06 | 22.96 | 94.0 | 6.27 | 6.23 | 1.8 | .20 | 0.4 | 1.5 | .15 |
| 2 | 15.00 | 31.06 | 22.96 | 94.0 | 6.27 | | | | | | |
| 3 | 14.98 | 31.06 | 22.96 | 94.0 | 6.26 | | | | | | |
| 4 | 14.92 | 31.04 | 22.97 | 94.0 | 6.26 | | | | | | |
| 5 | 14.33 | 31.07 | 23.11 | 94.0 | 6.27 | | | | | | |
| 6 | 13.71 | 31.45 | 23.53 | 94.0 | 6.35 | | | | | | |
| 7 | 13.76 | 31.52 | 23.57 | 94.0 | 6.37 | | | | | | |
| 8 | 13.00 | 31.64 | 23.81 | 94.0 | 6.39 | | | | | | |
| 9 | 12.78 | 31.65 | 23.87 | 94.0 | 6.45 | | | | | | |
| 10 | 12.72 | 31.67 | 23.89 | 94.0 | 6.46 | 6.56 | 1.7 | .20 | 0.5 | 4.0 | .15 |
| 11 | 12.61 | 31.71 | 23.94 | 94.0 | 6.47 | | | | | | |
| 12 | 12.09 | 31.69 | 24.03 | 94.0 | 6.49 | | | | | | |
| 13 | 11.62 | 31.69 | 24.12 | 94.0 | 6.54 | | | | | | |
| 14 | 11.47 | 31.71 | 24.15 | 94.0 | 6.60 | | | | | | |
| 15 | 11.38 | 31.71 | 24.17 | 94.0 | 6.63 | | | | | | |
| 16 | 11.32 | 31.71 | 24.18 | 94.0 | 6.66 | | | | | | |
| 17 | 10.68 | 31.61 | 24.21 | 94.0 | 6.68 | | | | | | |
| 18 | 9.52 | 31.69 | 24.47 | 94.0 | 6.77 | | | | | | |
| 19 | 7.98 | 31.73 | 24.73 | 94.0 | 6.91 | | | | | | |
| 20 | 6.50 | 31.91 | 25.08 | 94.0 | 7.11 | 7.07 | 1.7 | .20 | 0.3 | 3.0 | .25 |
| 21 | 6.16 | 31.98 | 25.17 | 94.0 | 7.26 | | | | | | |
| 22 | 5.91 | 31.95 | 25.18 | 94.0 | 7.28 | | | | | | |
| 23 | 5.47 | 31.92 | 25.21 | 94.0 | 7.25 | | | | | | |
| 24 | 5.24 | 31.97 | 25.27 | 94.0 | 7.19 | | | | | | |
| 25 | 5.20 | 31.98 | 25.28 | 94.0 | 7.04 | | | | | | |
| 26 | 5.18 | 31.97 | 25.28 | 94.0 | 6.86 | | | | | | |
| 27 | 5.14 | 31.97 | 25.28 | 94.0 | 6.70 | | | | | | |
| 28 | 5.11 | 31.97 | 25.29 | 94.0 | 6.57 | | | | | | |
| 29 | 5.10 | 31.98 | 25.29 | 94.0 | 6.47 | | | | | | |
| 30 | 5.08 | 31.98 | 25.30 | 94.0 | 6.39 | 6.00 | 4.2 | .30 | 1.4 | 6.5 | .60 |
| 31 | 5.08 | 31.97 | 25.29 | 94.0 | 6.32 | | | | | | |
| 32 | 5.06 | 31.97 | 25.30 | 94.0 | 6.27 | | | | | | |
| 33 | 5.05 | 31.97 | 25.30 | 94.0 | 6.21 | | | | | | |
| 34 | 5.05 | 31.97 | 25.30 | 94.0 | 6.17 | | | | | | |
| 35 | 5.02 | 31.98 | 25.30 | 94.0 | 6.14 | | | | | | |
| 36 | 5.01 | 31.96 | 25.29 | 94.0 | 6.11 | | | | | | |
| 37 | 4.99 | 31.97 | 25.30 | 94.0 | 6.09 | | | | | | |
| 38 | 4.98 | 31.97 | 25.31 | 94.0 | 6.06 | | | | | | |
| 39 | 4.98 | 31.97 | 25.30 | 94.0 | 6.04 | | | | | | |
| 40 | 4.97 | 31.97 | 25.31 | 94.0 | 6.03 | 5.95 | 4.3 | .30 | 1.6 | 6.5 | .65 |
| 41 | 4.96 | 31.98 | 25.32 | 94.0 | 6.01 | | | | | | |
| 42 | 4.95 | 31.99 | 25.32 | 94.0 | 6.00 | | | | | | |
| 43 | 4.91 | 31.97 | 25.31 | 94.0 | 5.99 | | | | | | |
| 44 | 4.89 | 31.98 | 25.32 | 94.0 | 5.98 | | | | | | |
| 45 | 4.86 | 31.99 | 25.33 | 94.0 | 5.97 | | | | | | |
| 46 | 4.80 | 31.99 | 25.34 | 94.0 | 5.96 | | | | | | |
| 47 | 4.78 | 31.99 | 25.34 | 94.0 | 5.95 | | | | | | |
| 48 | 4.74 | 32.00 | 25.35 | 94.0 | 5.95 | | | | | | |
| 49 | 4.72 | 32.02 | 25.37 | 94.0 | 5.95 | | | | | | |
| 50 | 4.71 | 32.00 | 25.36 | 94.0 | 5.94 | | | | | | |
| 58 | 4.46 | 32.03 | 25.41 | 94.0 | 5.87 | 5.97 | 4.1 | .30 | 1.9 | 5.5 | .65 |


KELEZ CRUISE XWCC-22 STATION 60 6/02/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

XWCC-22 STA. 61 LAT 40 33.5N LONG 72 13.0W GMT 16.8 5/30/79
DEPTH 52 AIR D/W 17.8/16.1 BARO 18.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 00/00 SEA DIR/HT 10/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.50 | 28.45 | 21.26 | 88.6 | 6.26 | 6.31 | 1.1 | <.10 | 0.1 | 3.0 | .50 |
| 2 | 13.50 | 28.45 | 21.26 | 88.6 | 6.26 | | | | | | |
| 3 | 13.01 | 28.57 | 21.45 | 88.6 | 6.27 | | | | | | |
| 4 | 12.73 | 28.79 | 21.67 | 88.6 | 6.30 | | | | | | |
| 5 | 12.65 | 29.04 | 21.88 | 88.6 | 6.32 | | | | | | |
| 6 | 12.84 | 29.38 | 22.11 | 88.6 | 6.33 | | | | | | |
| 7 | 12.94 | 29.45 | 22.14 | 88.6 | 6.32 | | | | | | |
| 8 | 12.97 | 29.47 | 22.15 | 88.6 | 6.30 | | | | | | |
| 9 | 12.98 | 29.48 | 22.15 | 88.6 | 6.31 | | | | | | |
| 10 | 12.85 | 29.42 | 22.13 | 88.6 | 6.31 | 6.39 | 1.5 | <.10 | 0.4 | 2.5 | .50 |
| 11 | 12.51 | 29.62 | 22.35 | 88.6 | 6.32 | | | | | | |
| 12 | 12.43 | 29.81 | 22.52 | 88.6 | 6.35 | | | | | | |
| 13 | 12.27 | 29.90 | 22.61 | 88.6 | 6.37 | | | | | | |
| 14 | 11.36 | 30.05 | 22.89 | 88.6 | 6.40 | | | | | | |
| 15 | 9.95 | 30.41 | 23.40 | 88.6 | 6.51 | | | | | | |
| 16 | 8.87 | 30.33 | 23.51 | 88.6 | 6.68 | | | | | | |
| 17 | 7.61 | 30.65 | 23.94 | 88.6 | 6.79 | | | | | | |
| 18 | 7.07 | 30.92 | 24.22 | 88.6 | 6.92 | | | | | | |
| 19 | 6.33 | 31.15 | 24.50 | 88.6 | 6.91 | | | | | | |
| 20 | 6.22 | 31.55 | 24.82 | 88.6 | 6.90 | 6.09 | 1.2 | <.10 | 0.3 | 3.5 | .70 |
| 21 | 6.02 | 31.60 | 24.89 | 88.6 | 6.79 | | | | | | |
| 22 | 5.54 | 31.86 | 25.15 | 88.6 | 6.70 | | | | | | |
| 23 | 5.53 | 32.02 | 25.28 | 88.6 | 6.66 | | | | | | |
| 24 | 5.51 | 32.10 | 25.35 | 88.6 | 6.54 | | | | | | |
| 25 | 5.46 | 32.21 | 25.44 | 88.6 | 6.46 | | | | | | |
| 26 | 5.44 | 32.28 | 25.50 | 88.6 | 6.38 | | | | | | |
| 27 | 5.43 | 32.35 | 25.55 | 88.6 | 6.32 | | | | | | |
| 28 | 5.50 | 32.42 | 25.60 | 88.6 | 6.27 | | | | | | |
| 29 | 5.47 | 32.47 | 25.64 | 88.6 | 6.22 | | | | | | |
| 30 | 5.43 | 32.49 | 25.66 | 88.6 | 6.19 | 6.07 | 2.1 | <.10 | 0.8 | 3.5 | .75 |
| 31 | 5.40 | 32.54 | 25.71 | 88.6 | 6.17 | | | | | | |
| 32 | 5.40 | 32.57 | 25.73 | 88.6 | 6.15 | | | | | | |
| 33 | 5.36 | 32.57 | 25.73 | 88.6 | 6.13 | | | | | | |
| 34 | 5.33 | 32.53 | 25.70 | 88.6 | 6.11 | | | | | | |
| 35 | 5.33 | 32.56 | 25.73 | 88.6 | 6.09 | | | | | | |
| 36 | 5.35 | 32.57 | 25.74 | 88.6 | 6.08 | | | | | | |
| 37 | 5.47 | 32.59 | 25.73 | 88.6 | 6.05 | | | | | | |
| 38 | 5.42 | 32.60 | 25.75 | 88.6 | 6.03 | | | | | | |
| 39 | 5.34 | 32.56 | 25.73 | 88.6 | 6.03 | | | | | | |
| 40 | 5.10 | 32.53 | 25.73 | 88.6 | 6.03 | 6.03 | 2.4 | <.10 | 0.8 | 2.5 | .80 |
| 41 | 5.03 | 32.56 | 25.77 | 88.6 | 6.04 | | | | | | |
| 42 | 4.94 | 32.54 | 25.76 | 88.6 | 6.02 | | | | | | |
| 43 | 4.77 | 32.55 | 25.79 | 88.6 | 6.01 | | | | | | |
| 44 | 4.75 | 32.56 | 25.79 | 88.6 | 6.00 | | | | | | |
| 45 | 4.61 | 32.55 | 25.80 | 88.6 | 5.98 | | | | | | |
| 46 | 4.52 | 32.55 | 25.81 | 88.6 | 5.97 | | | | | | |
| 47 | 4.47 | 32.59 | 25.84 | 88.6 | 5.97 | | | | | | |
| 48 | 4.46 | 32.60 | 25.86 | 88.6 | 5.96 | | | | | | |
| 49 | 4.44 | 32.61 | 25.87 | 88.6 | 5.95 | | | | | | |
| 50 | 4.44 | 32.61 | 25.87 | 88.6 | 5.94 | 6.02 | 2.2 | <.10 | 1.0 | 2.5 | .80 |
| 51 | 4.44 | 32.56 | 25.82 | 88.6 | 5.92 | | | | | | |

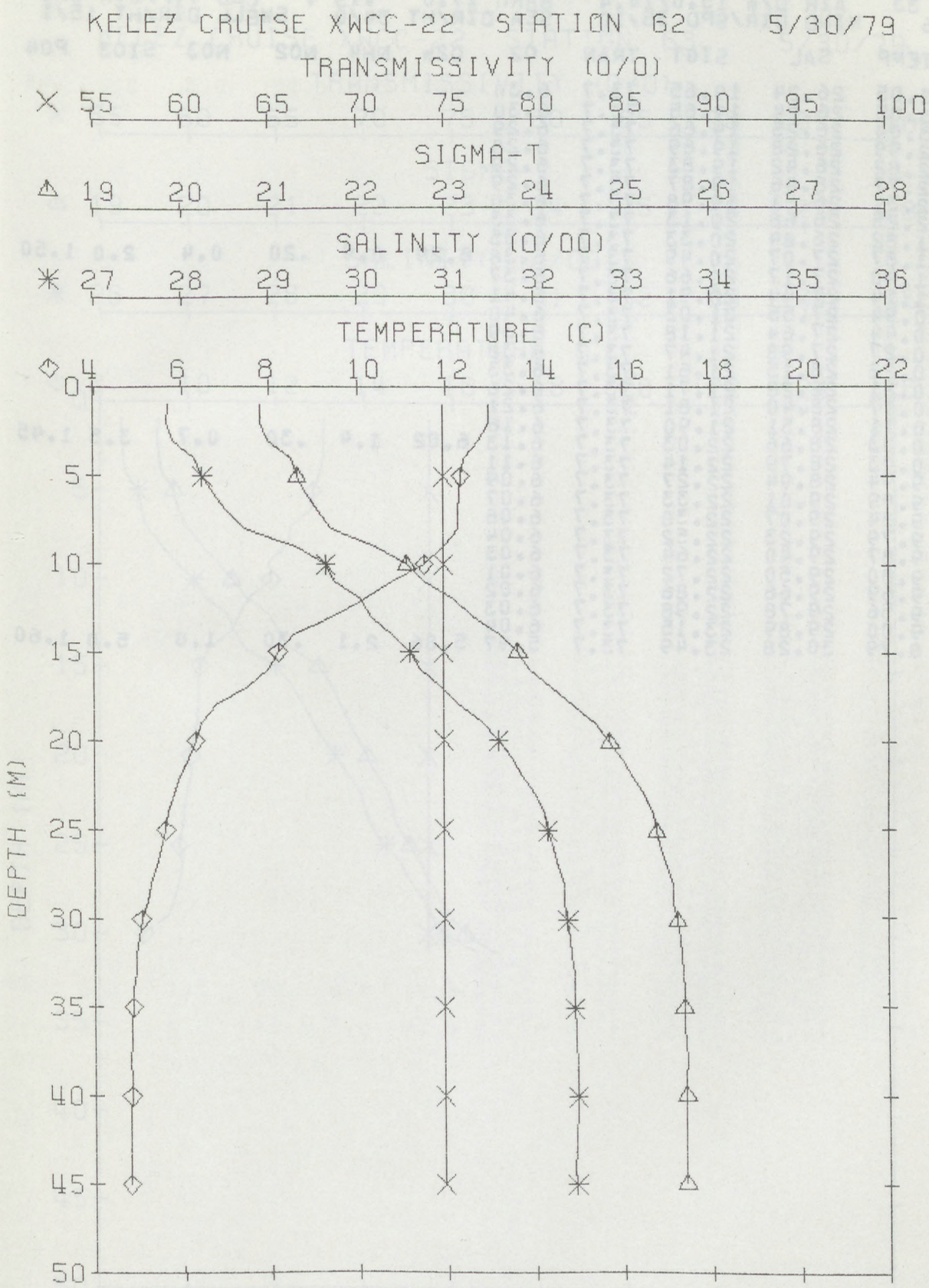

KELEZ CRUISE XWCC-22 STATION 61 5/30/79
TRANSMISSIVITY (0/0)
55 60 65 70 75 80 85 90 95 100
SIGMA-T
19 20 21 22 23 24 25 26 27 28
SALINITY (0/00)
28 29 30 31 32 33 34 35 36 37
TEMPERATURE (C)
4 6 8 10 12 14 16 18 20 22
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100



(95)

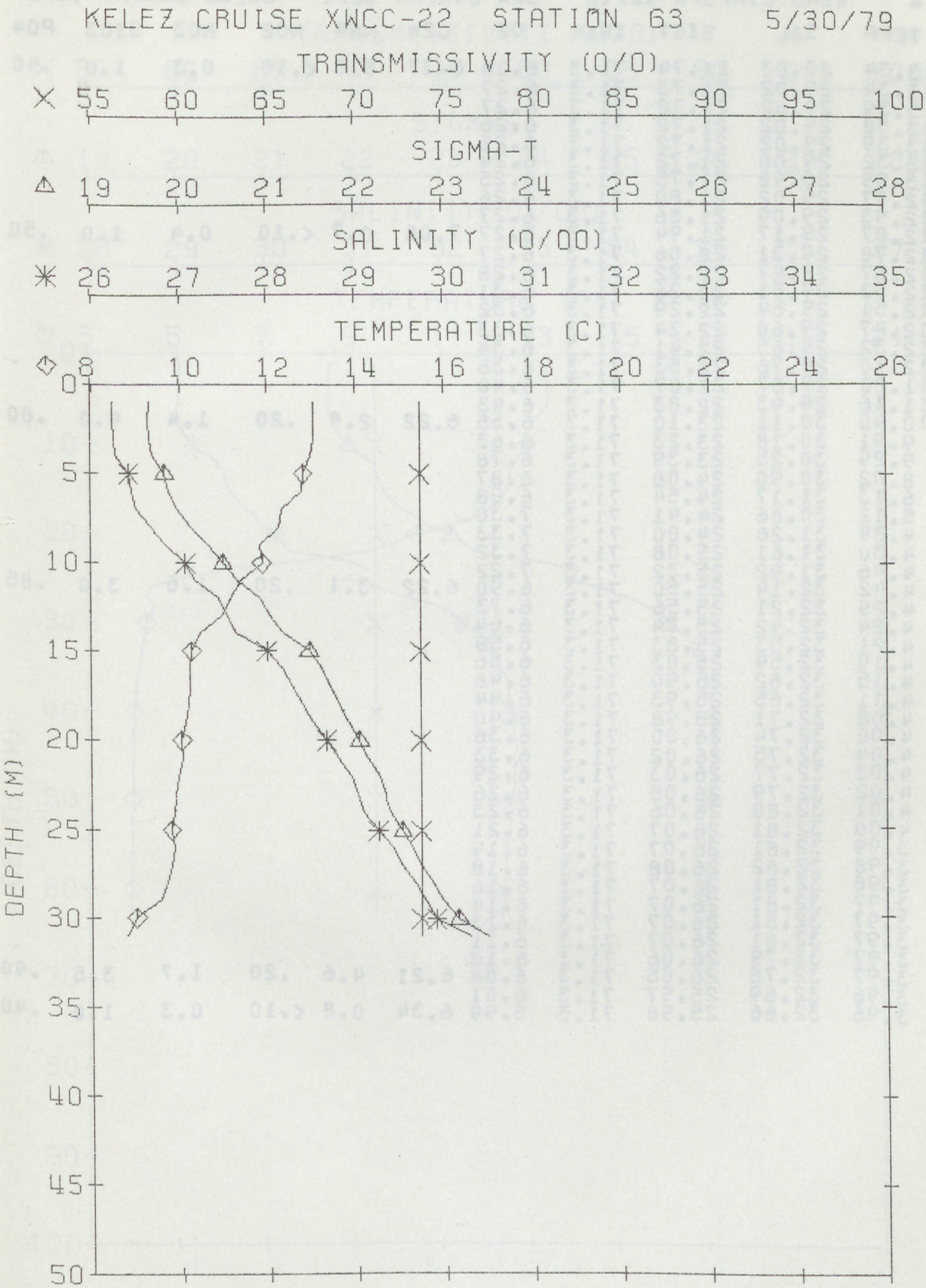
XWCC-22 STA. 62 LAT 40 39.8N; LONG 72 15.8W GMT 13.1 5/30/79
DEPTH 48 AIR D/W 15.0/14.4 BARO 17.0 VIS 7 CLD TYP/CVR /0
WETHR 1 WIND DIR/SPD 07/12 SEA DIR/HT 06/0 SWELL DIR/HT 15/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.96 | 27.84 | 20.89 | 74.9 | 6.31 | 6.41 | 0.7 | <.10 | 0.3 | 3.0 | .45 |
| 2 | 12.96 | 27.83 | 20.89 | 74.9 | 6.30 | | | | | | |
| 3 | 12.72 | 27.89 | 20.97 | 74.9 | 6.30 | | | | | | |
| 4 | 12.37 | 28.15 | 21.24 | 74.9 | 6.33 | | | | | | |
| 5 | 12.32 | 28.23 | 21.31 | 74.9 | 6.35 | | | | | | |
| 6 | 12.29 | 28.36 | 21.42 | 74.9 | 6.35 | | | | | | |
| 7 | 12.24 | 28.51 | 21.54 | 74.9 | 6.35 | | | | | | |
| 8 | 12.25 | 28.71 | 21.70 | 74.9 | 6.34 | | | | | | |
| 9 | 11.93 | 29.29 | 22.21 | 74.9 | 6.34 | | | | | | |
| 10 | 11.48 | 29.63 | 22.54 | 74.9 | 6.37 | 6.59 | 4.0 | <.10 | 0.2 | 1.5 | .50 |
| 11 | 10.75 | 29.72 | 22.74 | 74.9 | 6.43 | | | | | | |
| 12 | 10.12 | 30.03 | 23.08 | 74.9 | 6.51 | | | | | | |
| 13 | 9.37 | 30.14 | 23.29 | 74.9 | 6.57 | | | | | | |
| 14 | 8.52 | 30.37 | 23.59 | 74.9 | 6.68 | | | | | | |
| 15 | 8.17 | 30.57 | 23.80 | 74.9 | 6.76 | | | | | | |
| 16 | 7.95 | 30.69 | 23.92 | 74.9 | 6.78 | | | | | | |
| 17 | 7.47 | 30.92 | 24.17 | 74.9 | 6.77 | | | | | | |
| 18 | 6.76 | 31.12 | 24.42 | 74.9 | 6.79 | | | | | | |
| 19 | 6.42 | 31.39 | 24.68 | 74.9 | 6.82 | | | | | | |
| 20 | 6.29 | 31.57 | 24.84 | 74.9 | 6.77 | 6.66 | 1.1 | <.10 | 0.4 | 4.0 | .50 |
| 21 | 6.12 | 31.72 | 24.97 | 74.9 | 6.70 | | | | | | |
| 22 | 5.91 | 31.85 | 25.10 | 74.9 | 6.64 | | | | | | |
| 23 | 5.78 | 31.99 | 25.23 | 74.9 | 6.56 | | | | | | |
| 24 | 5.65 | 32.10 | 25.33 | 74.9 | 6.49 | | | | | | |
| 25 | 5.59 | 32.13 | 25.36 | 74.9 | 6.45 | | | | | | |
| 26 | 5.49 | 32.19 | 25.41 | 74.9 | 6.38 | | | | | | |
| 27 | 5.40 | 32.24 | 25.47 | 74.9 | 6.34 | | | | | | |
| 28 | 5.25 | 32.31 | 25.54 | 74.9 | 6.30 | | | | | | |
| 29 | 5.17 | 32.31 | 25.55 | 74.9 | 6.27 | | | | | | |
| 30 | 5.04 | 32.35 | 25.59 | 74.9 | 6.24 | 5.99 | 2.1 | <.10 | 0.9 | 2.0 | .70 |
| 31 | 4.97 | 32.37 | 25.62 | 74.9 | 6.21 | | | | | | |
| 32 | 4.93 | 32.40 | 25.64 | 74.9 | 6.17 | | | | | | |
| 33 | 4.90 | 32.42 | 25.67 | 74.9 | 6.14 | | | | | | |
| 34 | 4.87 | 32.43 | 25.68 | 74.9 | 6.11 | | | | | | |
| 35 | 4.85 | 32.43 | 25.68 | 74.9 | 6.09 | | | | | | |
| 36 | 4.83 | 32.44 | 25.69 | 74.9 | 6.07 | | | | | | |
| 37 | 4.82 | 32.45 | 25.70 | 74.9 | 6.05 | | | | | | |
| 38 | 4.80 | 32.46 | 25.71 | 74.9 | 6.04 | | | | | | |
| 39 | 4.81 | 32.45 | 25.70 | 74.9 | 6.03 | | | | | | |
| 40 | 4.80 | 32.46 | 25.71 | 74.9 | 6.02 | | | | | | |
| 41 | 4.79 | 32.46 | 25.71 | 74.9 | 6.01 | | | | | | |
| 42 | 4.79 | 32.45 | 25.70 | 74.9 | 6.00 | | | | | | |
| 43 | 4.79 | 32.45 | 25.70 | 74.9 | 5.99 | | | | | | |
| 44 | 4.78 | 32.43 | 25.69 | 74.9 | 5.99 | | | | | | |
| 45 | 4.78 | 32.45 | 25.70 | 74.9 | 5.98 | 6.03 | 1.9 | <.10 | 1.0 | 2.0 | .70 |


KELEZ CRUISE XWCC-22 STATION 62 5/30/79
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)
27 28 29 30 31 32 33 34 35 36
TEMPERATURE (C)
4 6 8 10 12 14 16 18 20 22
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

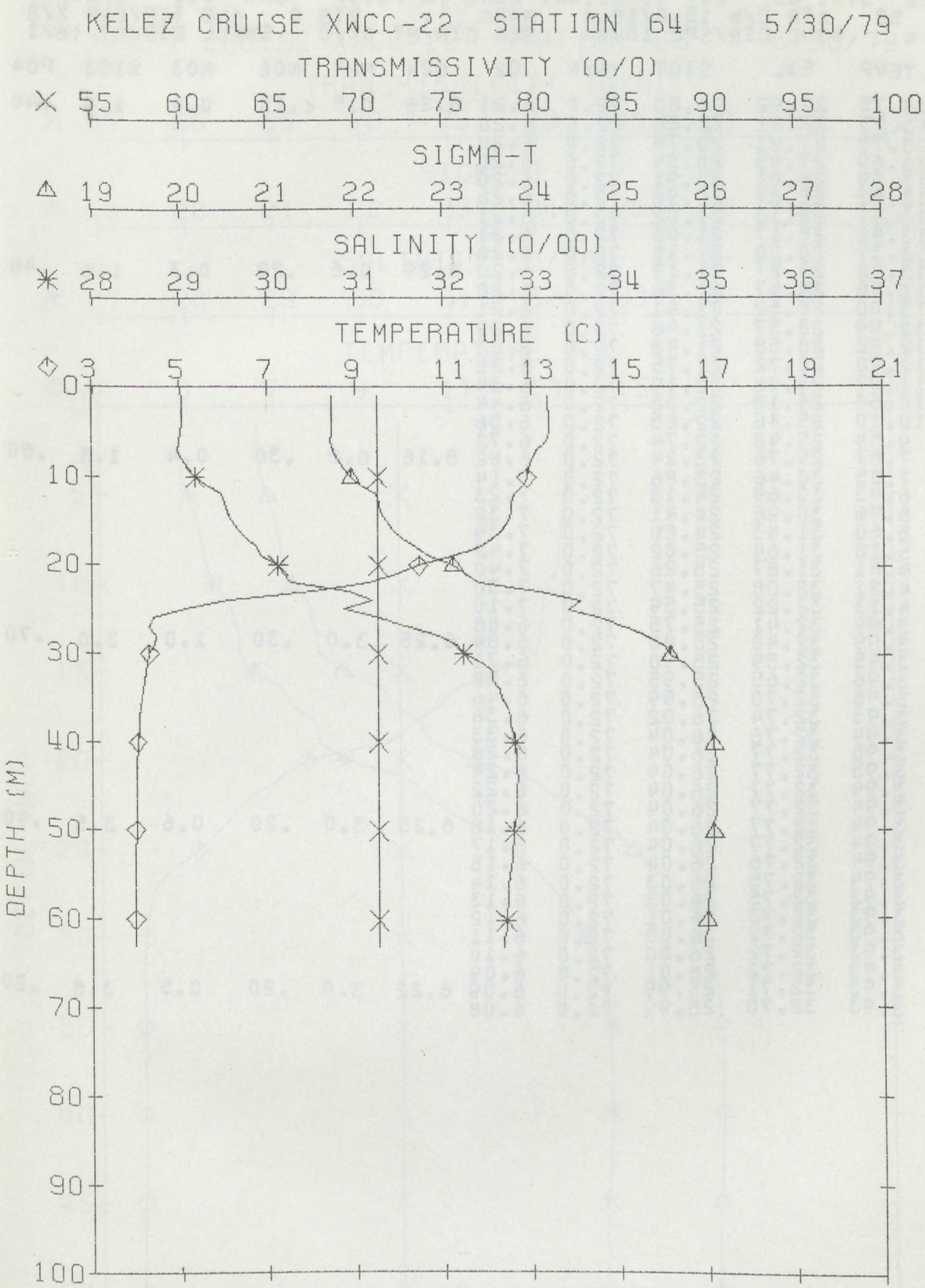
XWCC-22 STA. 63 LAT 40 46.8N LONG 72 20.2W GMT 11.8 5/30/79
DEPTH 33 AIR D/W 15.0/14.4 BARO 17.0 VIS 7 CLD TYP/CVR 6/5
WETHR 6 WIND DIR/SPD 35/10 SEA DIR/HT 34/0 SWELL DIR/HT 15/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.05 | 26.24 | 19.65 | 73.7 | 6.30 | | | | | | |
| 2 | 13.05 | 26.24 | 19.65 | 73.7 | 6.30 | | | | | | |
| 3 | 13.04 | 26.25 | 19.66 | 73.7 | 6.29 | | | | | | |
| 4 | 12.99 | 26.28 | 19.69 | 73.7 | 6.28 | | | | | | |
| 5 | 12.82 | 26.42 | 19.83 | 73.7 | 6.29 | | | | | | |
| 6 | 12.77 | 26.46 | 19.87 | 73.7 | 6.29 | | | | | | |
| 7 | 12.31 | 26.51 | 19.98 | 73.7 | 6.30 | | | | | | |
| 8 | 12.25 | 26.68 | 20.13 | 73.7 | 6.33 | | | | | | |
| 9 | 11.82 | 26.84 | 20.33 | 73.7 | 6.35 | | | | | | |
| 10 | 11.87 | 27.07 | 20.49 | 73.7 | 6.38 | 6.29 | 0.9 | .20 | 0.4 | 2.0 | 1.50 |
| 11 | 11.40 | 27.17 | 20.66 | 73.7 | 6.37 | | | | | | |
| 12 | 11.14 | 27.44 | 20.91 | 73.7 | 6.41 | | | | | | |
| 13 | 10.94 | 27.55 | 21.03 | 73.7 | 6.40 | | | | | | |
| 14 | 10.44 | 27.64 | 21.18 | 73.7 | 6.39 | | | | | | |
| 15 | 10.27 | 27.98 | 21.47 | 73.7 | 6.38 | | | | | | |
| 16 | 10.22 | 28.15 | 21.61 | 73.7 | 6.33 | | | | | | |
| 17 | 10.21 | 28.28 | 21.71 | 73.7 | 6.26 | | | | | | |
| 18 | 10.17 | 28.40 | 21.81 | 73.7 | 6.21 | | | | | | |
| 19 | 10.11 | 28.51 | 21.90 | 73.7 | 6.16 | | | | | | |
| 20 | 10.03 | 28.66 | 22.03 | 73.7 | 6.13 | 6.02 | 1.4 | .30 | 0.7 | 3.5 | 1.45 |
| 21 | 10.03 | 28.79 | 22.14 | 73.7 | 6.11 | | | | | | |
| 22 | 9.94 | 28.94 | 22.27 | 73.7 | 6.09 | | | | | | |
| 23 | 9.89 | 29.01 | 22.33 | 73.7 | 6.07 | | | | | | |
| 24 | 9.84 | 29.07 | 22.38 | 73.7 | 6.06 | | | | | | |
| 25 | 9.79 | 29.23 | 22.52 | 73.7 | 6.04 | | | | | | |
| 26 | 9.87 | 29.40 | 22.64 | 73.7 | 6.03 | | | | | | |
| 27 | 9.80 | 29.50 | 22.72 | 73.7 | 6.01 | | | | | | |
| 28 | 9.69 | 29.66 | 22.86 | 73.7 | 6.02 | | | | | | |
| 29 | 9.56 | 29.78 | 22.98 | 73.7 | 6.03 | | | | | | |
| 30 | 9.00 | 29.89 | 23.15 | 73.7 | 6.04 | | | | | | |
| 31 | 8.79 | 30.28 | 23.49 | 73.7 | 5.97 | 5.86 | 2.1 | .30 | 1.0 | 5.0 | 1.60 |


KELEZ CRUISE XWCC-22 STATION 63 5/30/79
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)
26 27 28 29 30 31 32 33 34 35
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

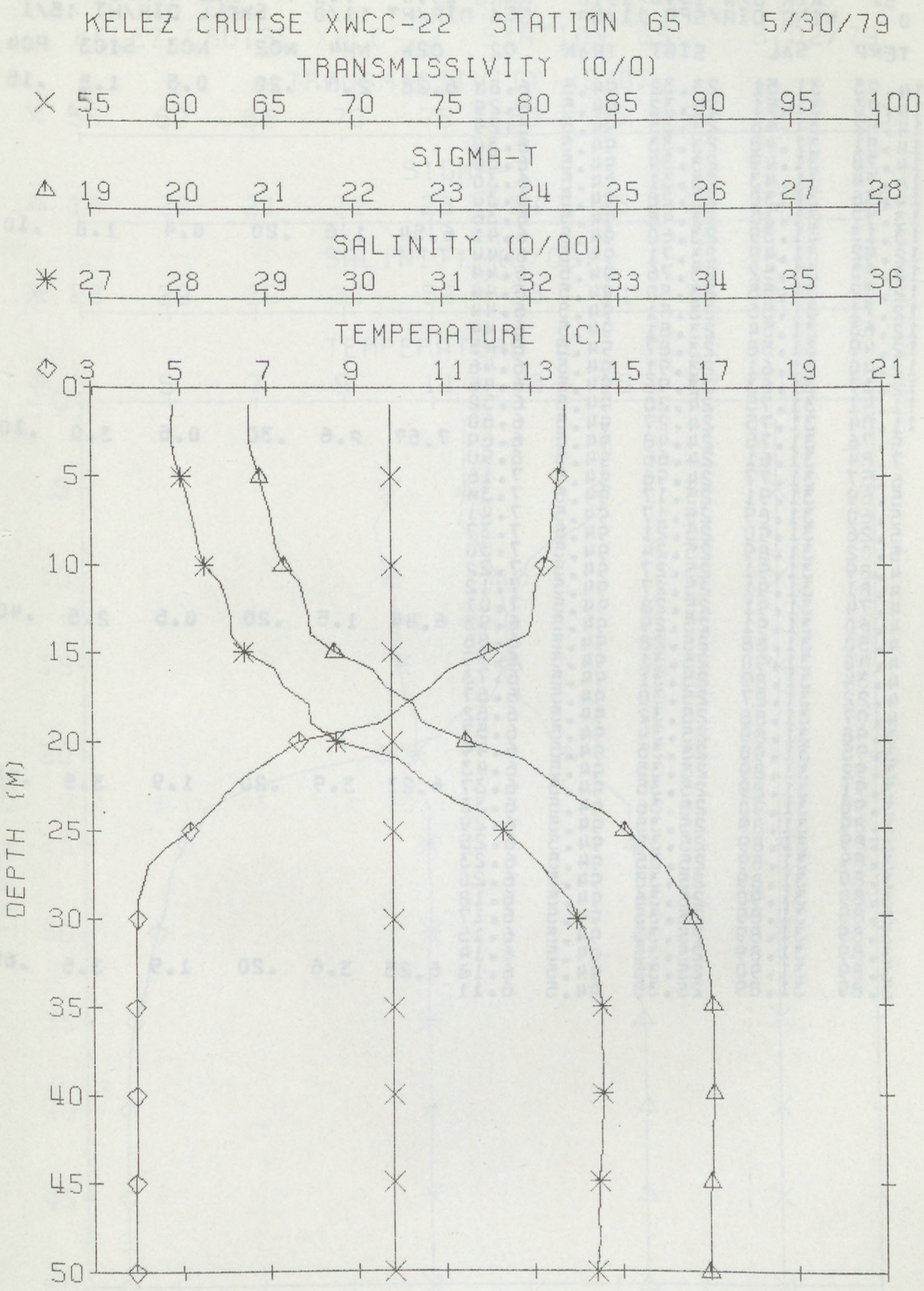
XWCC-22 STA. 64 LAT 40 12.0N; LONG 72 20.0W GMT 2.2 5/30/79
DEPTH 67 AIR D/W 15.0/15.0 BARO 16.0 VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 12/10 SEA DIR/HT 16/1 SWELL DIR/HT 16/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.34 | 29.03 | 21.74 | 71.3 | 6.28 | 6.37 | 5.6 | <.10 | 0.3 | 1.0 | .40 |
| 2 | 13.34 | 29.02 | 21.73 | 71.3 | 6.27 | | | | | | |
| 3 | 13.39 | 29.02 | 21.72 | 71.3 | 6.27 | | | | | | |
| 4 | 13.38 | 29.02 | 21.72 | 71.3 | 6.26 | | | | | | |
| 5 | 13.39 | 29.02 | 21.72 | 71.3 | 6.25 | | | | | | |
| 6 | 13.32 | 29.00 | 21.72 | 71.3 | 6.24 | | | | | | |
| 7 | 13.09 | 28.98 | 21.75 | 71.3 | 6.25 | | | | | | |
| 8 | 12.97 | 29.02 | 21.80 | 71.3 | 6.26 | | | | | | |
| 9 | 12.93 | 29.09 | 21.86 | 71.3 | 6.27 | | | | | | |
| 10 | 12.87 | 29.17 | 21.94 | 71.3 | 6.27 | 7.06 | 0.7 | <.10 | 0.4 | 1.0 | .50 |
| 11 | 12.78 | 29.31 | 22.06 | 71.3 | 6.27 | | | | | | |
| 12 | 12.57 | 29.47 | 22.22 | 71.3 | 6.28 | | | | | | |
| 13 | 12.53 | 29.51 | 22.26 | 71.3 | 6.31 | | | | | | |
| 14 | 12.51 | 29.54 | 22.29 | 71.3 | 6.32 | | | | | | |
| 15 | 12.47 | 29.60 | 22.34 | 71.3 | 6.33 | | | | | | |
| 16 | 12.32 | 29.65 | 22.41 | 71.3 | 6.34 | | | | | | |
| 17 | 12.10 | 29.76 | 22.53 | 71.3 | 6.35 | | | | | | |
| 18 | 11.80 | 29.87 | 22.67 | 71.3 | 6.40 | | | | | | |
| 19 | 11.16 | 29.93 | 22.83 | 71.3 | 6.43 | | | | | | |
| 20 | 10.40 | 30.11 | 23.10 | 71.3 | 6.55 | 6.22 | 2.8 | .20 | 1.4 | 4.0 | .80 |
| 21 | 9.91 | 30.18 | 23.23 | 71.3 | 6.63 | | | | | | |
| 22 | 9.29 | 30.25 | 23.39 | 71.3 | 6.78 | | | | | | |
| 23 | 8.02 | 30.90 | 24.08 | 71.3 | 6.87 | | | | | | |
| 24 | 6.13 | 31.17 | 24.54 | 71.3 | 6.98 | | | | | | |
| 25 | 5.12 | 30.86 | 24.41 | 71.3 | 7.30 | | | | | | |
| 26 | 4.39 | 31.26 | 24.80 | 71.3 | 7.33 | | | | | | |
| 27 | 4.30 | 31.61 | 25.08 | 71.3 | 7.32 | | | | | | |
| 28 | 4.46 | 31.92 | 25.32 | 71.3 | 7.22 | | | | | | |
| 29 | 4.42 | 32.14 | 25.50 | 71.3 | 6.90 | 6.22 | 3.1 | .20 | 1.6 | 3.0 | .85 |
| 30 | 4.29 | 32.21 | 25.56 | 71.3 | 6.73 | | | | | | |
| 31 | 4.24 | 32.42 | 25.74 | 71.3 | 6.64 | | | | | | |
| 32 | 4.21 | 32.53 | 25.83 | 71.3 | 6.58 | | | | | | |
| 33 | 4.19 | 32.54 | 25.83 | 71.3 | 6.56 | | | | | | |
| 34 | 4.15 | 32.62 | 25.90 | 71.3 | 6.48 | | | | | | |
| 35 | 4.11 | 32.65 | 25.93 | 71.3 | 6.44 | | | | | | |
| 36 | 4.08 | 32.71 | 25.98 | 71.3 | 6.40 | | | | | | |
| 37 | 4.06 | 32.74 | 26.00 | 71.3 | 6.36 | | | | | | |
| 38 | 4.04 | 32.75 | 26.02 | 71.3 | 6.33 | | | | | | |
| 39 | 4.03 | 32.77 | 26.03 | 71.3 | 6.29 | | | | | | |
| 40 | 4.02 | 32.79 | 26.05 | 71.3 | 6.26 | | | | | | |
| 41 | 4.01 | 32.80 | 26.06 | 71.3 | 6.23 | | | | | | |
| 42 | 4.00 | 32.81 | 26.07 | 71.3 | 6.21 | | | | | | |
| 43 | 3.99 | 32.81 | 26.07 | 71.3 | 6.19 | | | | | | |
| 44 | 3.98 | 32.82 | 26.08 | 71.3 | 6.18 | | | | | | |
| 45 | 3.98 | 32.81 | 26.07 | 71.3 | 6.16 | | | | | | |
| 46 | 3.97 | 32.81 | 26.07 | 71.3 | 6.14 | | | | | | |
| 47 | 3.97 | 32.81 | 26.07 | 71.3 | 6.13 | | | | | | |
| 48 | 3.97 | 32.81 | 26.07 | 71.3 | 6.11 | | | | | | |
| 49 | 3.97 | 32.79 | 26.06 | 71.3 | 6.10 | | | | | | |
| 50 | 3.97 | 32.78 | 26.05 | 71.3 | 6.08 | 6.21 | 4.6 | .20 | 1.7 | 3.5 | .90 |
| 60 | 3.96 | 32.69 | 25.97 | 71.3 | 6.01 | | | | | | |
| 63 | 3.96 | 32.66 | 25.96 | 71.3 | 5.99 | 6.34 | 0.8 | <.10 | 0.3 | 1.0 | .40 |


KELEZ CRUISE XWCC-22 STATION 64 5/30/79
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)
3 5 7 9 11 13 15 17 19 21
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

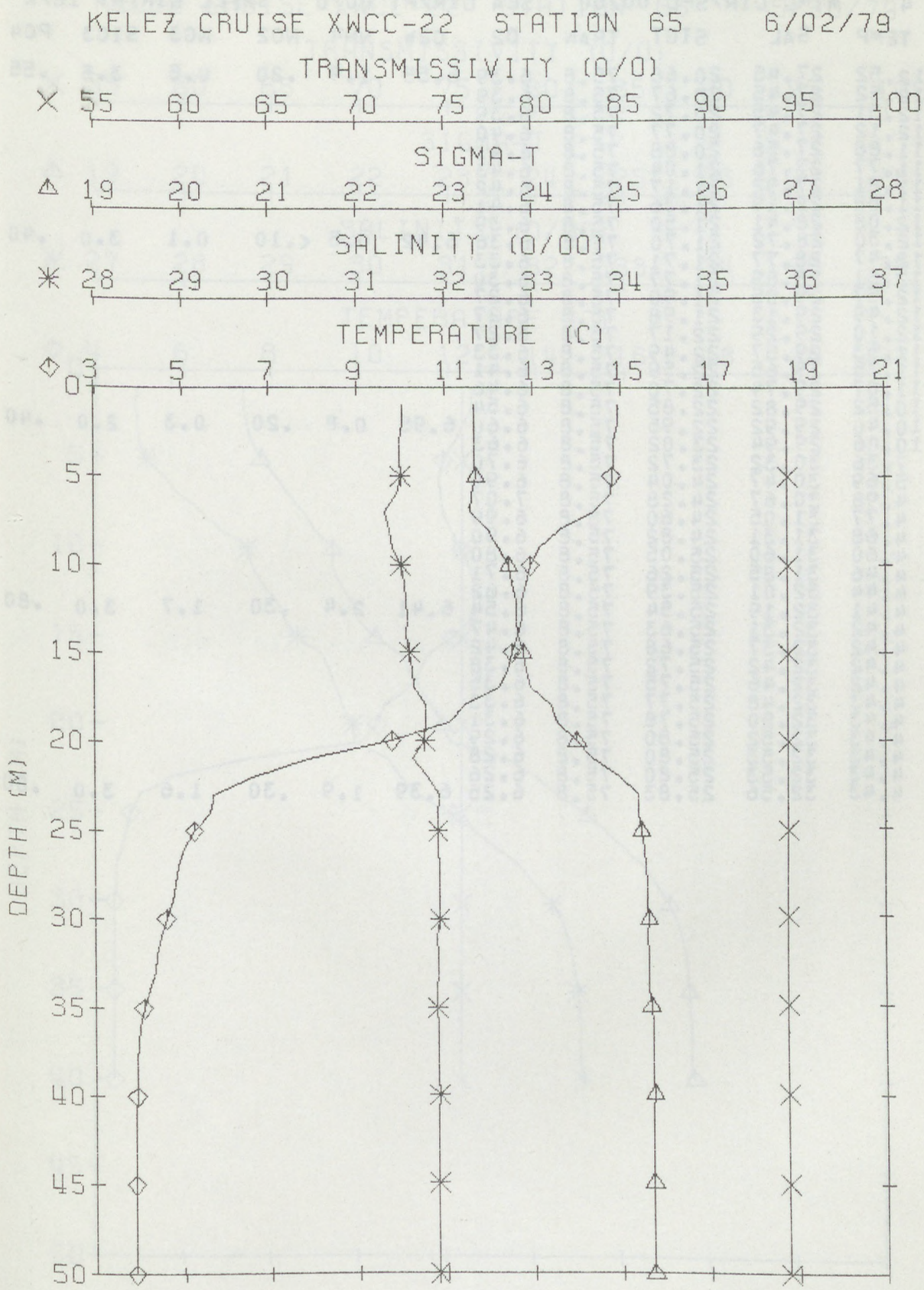
XWCC-22 STA. 65 LAT 40 21.0N; LONG 72 28.5W GMT 5.1 5/30/79
DEPTH 52 AIR D/W 15.0/15.0 BARO . VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 15/04 SEA DIR/HT 00/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.75 | 27.92 | 20.80 | 72.0 | 6.21 | 6.26 | 0.5 | <.10 | 0.4 | 1.0 | .40 |
| 2 | 13.75 | 27.91 | 20.80 | 72.0 | 6.20 | | | | | | |
| 3 | 13.75 | 27.91 | 20.79 | 72.0 | 6.20 | | | | | | |
| 4 | 13.69 | 27.95 | 20.84 | 72.0 | 6.20 | | | | | | |
| 5 | 13.59 | 28.01 | 20.91 | 72.0 | 6.20 | | | | | | |
| 6 | 13.53 | 28.07 | 20.96 | 72.0 | 6.20 | | | | | | |
| 7 | 13.47 | 28.13 | 21.02 | 72.0 | 6.21 | | | | | | |
| 8 | 13.42 | 28.17 | 21.06 | 72.0 | 6.21 | | | | | | |
| 9 | 13.37 | 28.20 | 21.10 | 72.0 | 6.20 | | | | | | |
| 10 | 13.26 | 28.27 | 21.17 | 72.0 | 6.20 | 6.29 | 0.6 | .20 | 0.3 | 1.0 | .40 |
| 11 | 13.06 | 28.47 | 21.36 | 72.0 | 6.20 | | | | | | |
| 12 | 13.00 | 28.52 | 21.41 | 72.0 | 6.21 | | | | | | |
| 13 | 12.99 | 28.57 | 21.46 | 72.0 | 6.22 | | | | | | |
| 14 | 12.88 | 28.58 | 21.48 | 72.0 | 6.23 | | | | | | |
| 15 | 12.00 | 28.72 | 21.75 | 72.0 | 6.25 | | | | | | |
| 16 | 11.07 | 29.08 | 22.19 | 72.0 | 6.34 | | | | | | |
| 17 | 10.68 | 29.18 | 22.33 | 72.0 | 6.44 | | | | | | |
| 18 | 10.10 | 29.46 | 22.65 | 72.0 | 6.56 | | | | | | |
| 19 | 9.54 | 29.48 | 22.74 | 72.0 | 6.72 | | | | | | |
| 20 | 7.67 | 29.76 | 23.24 | 72.0 | 6.82 | 8.16 | 0.8 | .30 | 0.4 | 1.5 | .50 |
| 21 | 7.05 | 30.46 | 23.86 | 72.0 | 7.14 | | | | | | |
| 22 | 6.43 | 30.69 | 24.13 | 72.0 | 7.23 | | | | | | |
| 23 | 5.96 | 30.98 | 24.41 | 72.0 | 7.32 | | | | | | |
| 24 | 5.60 | 31.43 | 24.80 | 72.0 | 7.39 | | | | | | |
| 25 | 5.18 | 31.64 | 25.02 | 72.0 | 7.42 | | | | | | |
| 26 | 4.61 | 31.87 | 25.26 | 72.0 | 7.40 | | | | | | |
| 27 | 4.21 | 32.08 | 25.47 | 72.0 | 7.30 | | | | | | |
| 28 | 4.13 | 32.22 | 25.59 | 72.0 | 7.15 | | | | | | |
| 29 | 3.99 | 32.41 | 25.75 | 72.0 | 6.88 | | | | | | |
| 30 | 3.99 | 32.48 | 25.80 | 72.0 | 6.84 | 6.25 | 3.0 | .30 | 1.0 | 3.0 | .70 |
| 31 | 3.95 | 32.59 | 25.90 | 72.0 | 6.71 | | | | | | |
| 32 | 3.96 | 32.65 | 25.95 | 72.0 | 6.52 | | | | | | |
| 33 | 3.95 | 32.70 | 25.99 | 72.0 | 6.46 | | | | | | |
| 34 | 3.95 | 32.74 | 26.02 | 72.0 | 6.36 | | | | | | |
| 35 | 3.94 | 32.76 | 26.04 | 72.0 | 6.33 | | | | | | |
| 36 | 3.95 | 32.77 | 26.04 | 72.0 | 6.28 | | | | | | |
| 37 | 3.95 | 32.77 | 26.04 | 72.0 | 6.24 | | | | | | |
| 38 | 3.94 | 32.77 | 26.04 | 72.0 | 6.22 | | | | | | |
| 39 | 3.94 | 32.77 | 26.04 | 72.0 | 6.20 | | | | | | |
| 40 | 3.94 | 32.77 | 26.04 | 72.0 | 6.18 | 6.25 | 3.0 | .20 | 0.6 | 3.5 | .90 |
| 41 | 3.94 | 32.77 | 26.04 | 72.0 | 6.17 | | | | | | |
| 42 | 3.94 | 32.76 | 26.04 | 72.0 | 6.15 | | | | | | |
| 43 | 3.94 | 32.75 | 26.03 | 72.0 | 6.14 | | | | | | |
| 44 | 3.93 | 32.75 | 26.03 | 72.0 | 6.13 | | | | | | |
| 45 | 3.93 | 32.73 | 26.01 | 72.0 | 6.12 | | | | | | |
| 46 | 3.93 | 32.72 | 26.00 | 72.0 | 6.11 | | | | | | |
| 47 | 3.93 | 32.72 | 26.00 | 72.0 | 6.10 | | | | | | |
| 48 | 3.93 | 32.72 | 26.01 | 72.0 | 6.09 | | | | | | |
| 49 | 3.93 | 32.71 | 25.99 | 72.0 | 6.09 | 6.22 | 3.0 | .20 | 0.5 | 3.5 | .80 |
| 50 | 3.93 | 32.70 | 25.99 | 72.0 | 6.08 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 65 5/30/79
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)
27 28 29 30 31 32 33 34 35 36
TEMPERATURE (C)
3 5 7 9 11 13 15 17 19 21
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

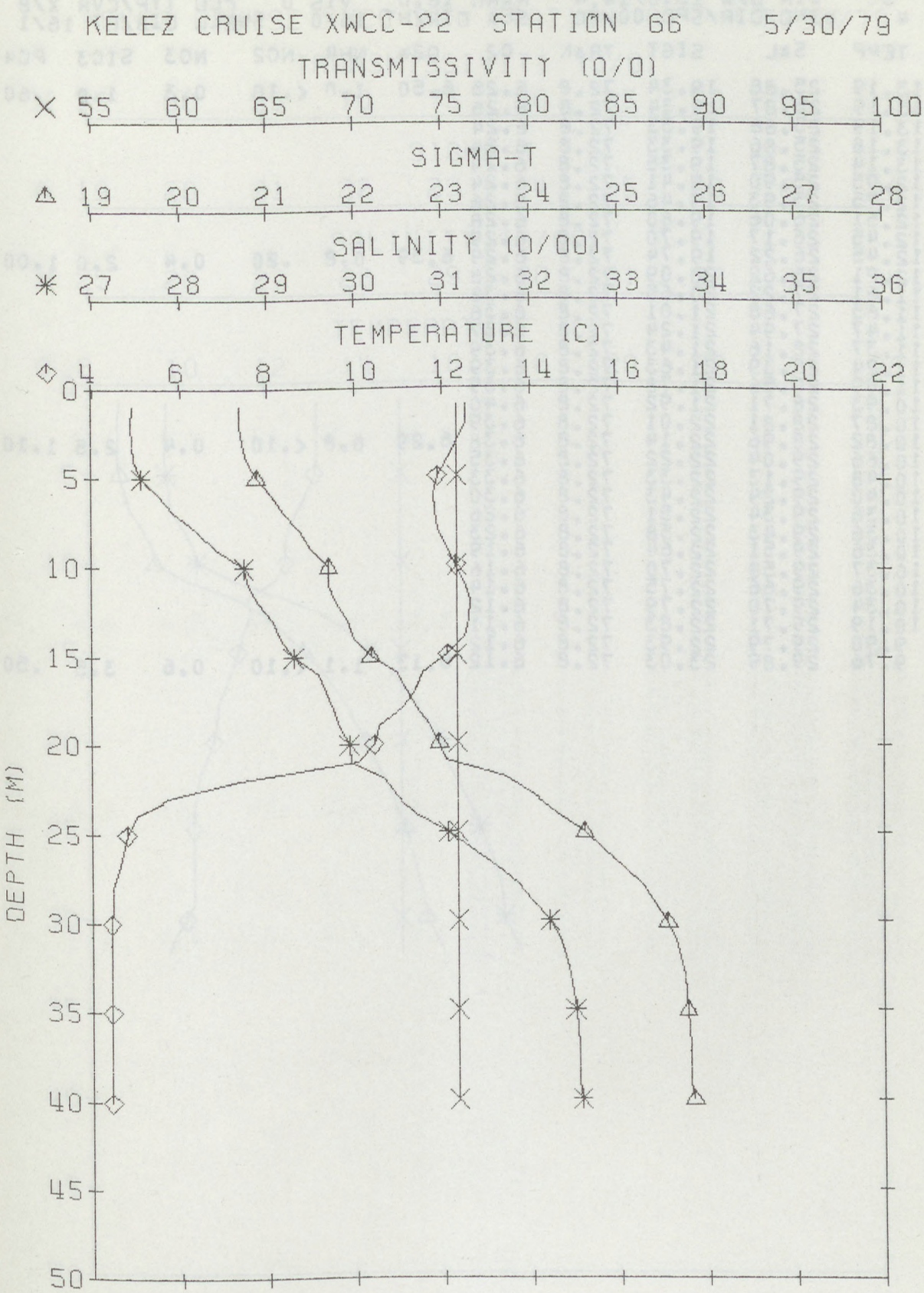
XWCC-22 STA. 65 LAT 40 21.2N; LONG 72 28.0W GMT 4.3 6/02/79
DEPTH 52 AIR D/W 15.6/15.0 BARO 19.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 11/08 SEA DIR/HT 11/0 SWELL DIR/HT 15/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.93 | 31.51 | 23.32 | 94.5 | 6.30 | 6.28 | 2.0 | .20 | 0.5 | 1.5 | .15 |
| 2 | 14.93 | 31.51 | 23.32 | 94.5 | 6.29 | | | | | | |
| 3 | 14.82 | 31.48 | 23.33 | 94.5 | 6.29 | | | | | | |
| 4 | 14.81 | 31.48 | 23.33 | 94.5 | 6.30 | | | | | | |
| 5 | 14.78 | 31.49 | 23.34 | 94.5 | 6.30 | | | | | | |
| 6 | 14.74 | 31.43 | 23.31 | 94.5 | 6.30 | | | | | | |
| 7 | 14.36 | 31.30 | 23.28 | 94.5 | 6.30 | | | | | | |
| 8 | 13.57 | 31.35 | 23.48 | 94.5 | 6.36 | | | | | | |
| 9 | 13.13 | 31.39 | 23.60 | 94.5 | 6.41 | 6.54 | 1.6 | .20 | 0.4 | 1.0 | .10 |
| 10 | 12.92 | 31.49 | 23.71 | 94.5 | 6.44 | | | | | | |
| 11 | 12.83 | 31.52 | 23.76 | 94.5 | 6.44 | | | | | | |
| 12 | 12.72 | 31.55 | 23.80 | 94.5 | 6.44 | | | | | | |
| 13 | 12.71 | 31.56 | 23.81 | 94.5 | 6.44 | | | | | | |
| 14 | 12.63 | 31.54 | 23.81 | 94.5 | 6.44 | | | | | | |
| 15 | 12.49 | 31.58 | 23.87 | 94.5 | 6.45 | | | | | | |
| 16 | 12.40 | 31.61 | 23.91 | 94.5 | 6.46 | | | | | | |
| 17 | 12.17 | 31.63 | 23.96 | 94.5 | 6.46 | | | | | | |
| 18 | 11.41 | 31.75 | 24.20 | 94.5 | 6.52 | | | | | | |
| 19 | 11.04 | 31.75 | 24.27 | 94.5 | 6.60 | | | | | | |
| 20 | 9.76 | 31.75 | 24.48 | 94.5 | 6.69 | 7.57 | 2.6 | .30 | 0.5 | 3.0 | .10 |
| 21 | 7.84 | 31.61 | 24.66 | 94.5 | 6.90 | | | | | | |
| 22 | 6.57 | 31.77 | 24.96 | 94.5 | 7.16 | | | | | | |
| 23 | 5.69 | 31.91 | 25.17 | 94.5 | 7.34 | | | | | | |
| 24 | 5.60 | 31.89 | 25.17 | 94.5 | 7.41 | | | | | | |
| 25 | 5.26 | 31.90 | 25.21 | 94.5 | 7.37 | | | | | | |
| 26 | 5.02 | 31.89 | 25.24 | 94.5 | 7.30 | | | | | | |
| 27 | 4.89 | 31.91 | 25.27 | 94.5 | 7.22 | | | | | | |
| 28 | 4.81 | 31.91 | 25.27 | 94.5 | 7.12 | | | | | | |
| 29 | 4.74 | 31.91 | 25.28 | 94.5 | 7.01 | | | | | | |
| 30 | 4.60 | 31.91 | 25.29 | 94.5 | 6.93 | 6.44 | 1.5 | .20 | 0.5 | 2.5 | .40 |
| 31 | 4.50 | 31.88 | 25.28 | 94.5 | 6.86 | | | | | | |
| 32 | 4.40 | 31.90 | 25.31 | 94.5 | 6.79 | | | | | | |
| 33 | 4.34 | 31.89 | 25.31 | 94.5 | 6.73 | | | | | | |
| 34 | 4.22 | 31.87 | 25.30 | 94.5 | 6.67 | | | | | | |
| 35 | 4.07 | 31.88 | 25.32 | 94.5 | 6.62 | | | | | | |
| 36 | 3.98 | 31.89 | 25.34 | 94.5 | 6.57 | | | | | | |
| 37 | 3.95 | 31.90 | 25.35 | 94.5 | 6.49 | | | | | | |
| 38 | 3.92 | 31.89 | 25.35 | 94.5 | 6.43 | | | | | | |
| 39 | 3.91 | 31.89 | 25.35 | 94.5 | 6.37 | 6.23 | 3.9 | .20 | 1.9 | 3.5 | .65 |
| 40 | 3.90 | 31.90 | 25.36 | 94.5 | 6.33 | | | | | | |
| 41 | 3.89 | 31.89 | 25.35 | 94.5 | 6.29 | | | | | | |
| 42 | 3.89 | 31.89 | 25.35 | 94.5 | 6.25 | | | | | | |
| 43 | 3.89 | 31.89 | 25.35 | 94.5 | 6.23 | | | | | | |
| 44 | 3.89 | 31.89 | 25.35 | 94.5 | 6.20 | | | | | | |
| 45 | 3.89 | 31.90 | 25.36 | 94.5 | 6.18 | | | | | | |
| 46 | 3.89 | 31.89 | 25.35 | 94.5 | 6.17 | | | | | | |
| 47 | 3.89 | 31.89 | 25.35 | 94.5 | 6.15 | | | | | | |
| 48 | 3.89 | 31.89 | 25.35 | 94.5 | 6.14 | | | | | | |
| 49 | 3.89 | 31.90 | 25.35 | 94.5 | 6.13 | 6.25 | 3.6 | .20 | 1.9 | 3.5 | .65 |
| 50 | 3.89 | 31.89 | 25.35 | 94.5 | 6.11 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 65 6/02/79
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)
3 5 7 9 11 13 15 17 19 21
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

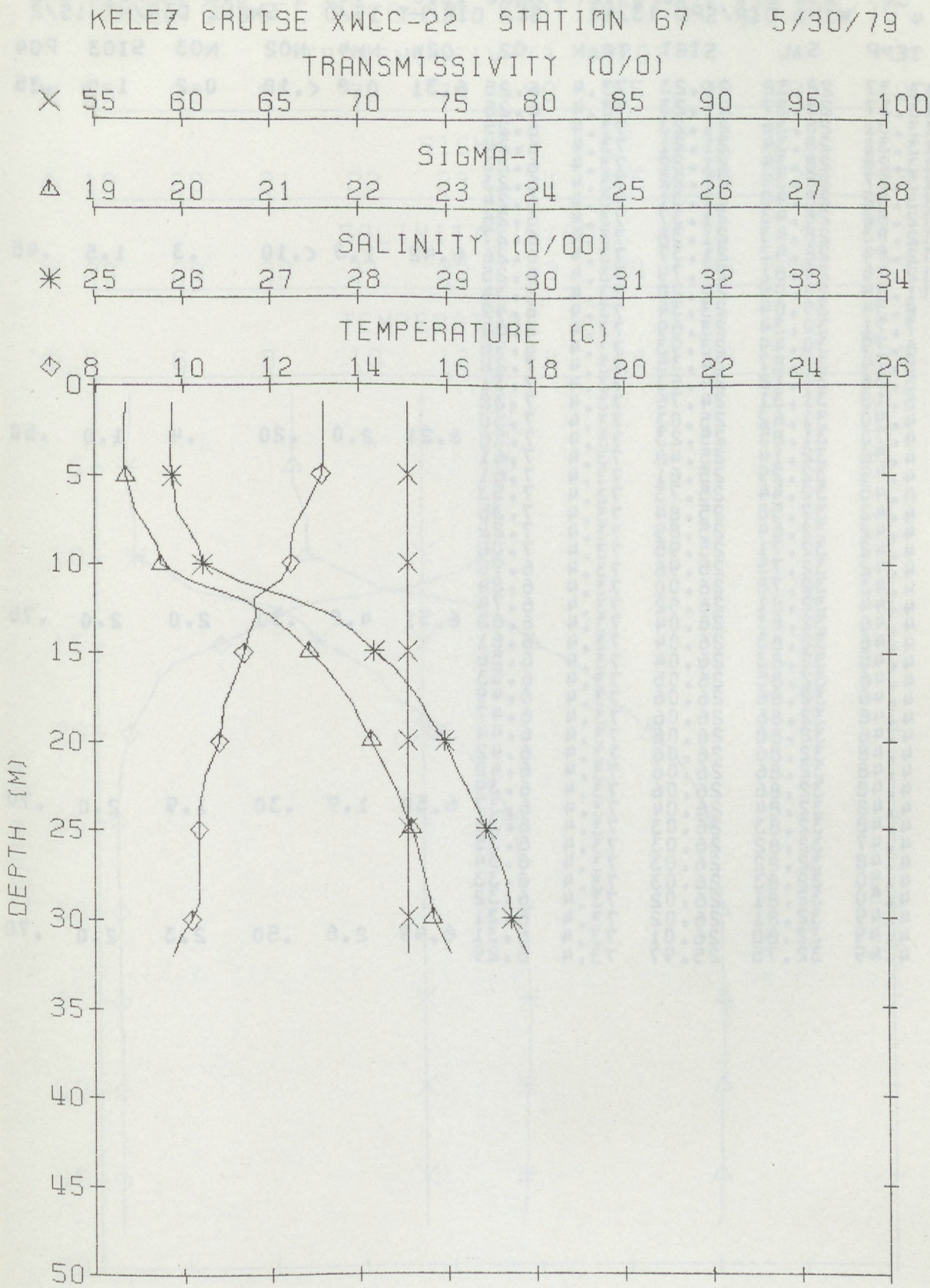
XWCC-22 STA. 66 LAT 40 30.0N; LONG 72 34.2W GMT 7.1 5/30/79
DEPTH 43 AIR D/W 14.4/14.4 BARO 16.0 VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 16/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12.52 | 27.45 | 20.68 | 75.8 | 6.39 | 6.55 | 1.9 | .20 | 0.5 | 3.5 | .55 |
| 2 | 12.52 | 27.45 | 20.67 | 75.8 | 6.39 | | | | | | |
| 3 | 12.31 | 27.45 | 20.72 | 75.8 | 6.39 | | | | | | |
| 4 | 12.12 | 27.47 | 20.77 | 75.8 | 6.40 | | | | | | |
| 5 | 11.88 | 27.56 | 20.88 | 75.8 | 6.41 | | | | | | |
| 6 | 11.77 | 27.76 | 21.04 | 75.8 | 6.43 | | | | | | |
| 7 | 11.81 | 27.92 | 21.17 | 75.8 | 6.42 | | | | | | |
| 8 | 11.88 | 28.19 | 21.36 | 75.8 | 6.41 | | | | | | |
| 9 | 12.08 | 28.41 | 21.50 | 75.8 | 6.39 | | | | | | |
| 10 | 12.30 | 28.72 | 21.70 | 75.8 | 6.36 | 6.42 | 0.5 | <.10 | 0.1 | 3.0 | .40 |
| 11 | 12.47 | 28.77 | 21.71 | 75.8 | 6.33 | | | | | | |
| 12 | 12.61 | 28.89 | 21.77 | 75.8 | 6.30 | | | | | | |
| 13 | 12.57 | 29.05 | 21.90 | 75.8 | 6.27 | | | | | | |
| 14 | 12.49 | 29.13 | 21.98 | 75.8 | 6.27 | | | | | | |
| 15 | 12.10 | 29.29 | 22.17 | 75.8 | 6.27 | | | | | | |
| 16 | 11.53 | 29.57 | 22.49 | 75.8 | 6.33 | | | | | | |
| 17 | 11.35 | 29.65 | 22.59 | 75.8 | 6.41 | | | | | | |
| 18 | 11.07 | 29.74 | 22.70 | 75.8 | 6.46 | | | | | | |
| 19 | 10.52 | 29.82 | 22.85 | 75.8 | 6.54 | | | | | | |
| 20 | 10.40 | 29.92 | 22.95 | 75.8 | 6.60 | 6.95 | 0.8 | .20 | 0.3 | 2.0 | .40 |
| 21 | 10.06 | 29.94 | 23.02 | 75.8 | 6.63 | | | | | | |
| 22 | 7.36 | 30.32 | 23.72 | 75.8 | 6.70 | | | | | | |
| 23 | 5.69 | 30.47 | 24.04 | 75.8 | 6.99 | | | | | | |
| 24 | 4.98 | 30.67 | 24.28 | 75.8 | 7.07 | | | | | | |
| 25 | 4.77 | 31.05 | 24.60 | 75.8 | 6.99 | | | | | | |
| 26 | 4.68 | 31.31 | 24.82 | 75.8 | 6.90 | | | | | | |
| 27 | 4.60 | 31.60 | 25.05 | 75.8 | 6.80 | | | | | | |
| 28 | 4.46 | 31.85 | 25.26 | 75.8 | 6.71 | | | | | | |
| 29 | 4.44 | 32.01 | 25.39 | 75.8 | 6.62 | | | | | | |
| 30 | 4.41 | 32.19 | 25.54 | 75.8 | 6.54 | 6.41 | 2.4 | .30 | 1.7 | 3.0 | .80 |
| 31 | 4.42 | 32.31 | 25.63 | 75.8 | 6.47 | | | | | | |
| 32 | 4.42 | 32.37 | 25.68 | 75.8 | 6.42 | | | | | | |
| 33 | 4.42 | 32.42 | 25.72 | 75.8 | 6.38 | | | | | | |
| 34 | 4.42 | 32.46 | 25.75 | 75.8 | 6.35 | | | | | | |
| 35 | 4.43 | 32.48 | 25.77 | 75.8 | 6.33 | | | | | | |
| 36 | 4.43 | 32.50 | 25.78 | 75.8 | 6.31 | | | | | | |
| 37 | 4.43 | 32.52 | 25.80 | 75.8 | 6.29 | | | | | | |
| 38 | 4.43 | 32.53 | 25.80 | 75.8 | 6.28 | | | | | | |
| 39 | 4.43 | 32.53 | 25.80 | 75.8 | 6.26 | | | | | | |
| 40 | 4.43 | 32.56 | 25.83 | 75.8 | 6.25 | 6.39 | 1.9 | .30 | 1.6 | 3.0 | .80 |


KELEZ CRUISE XWCC-22 STATION 66 5/30/79
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)
27 28 29 30 31 32 33 34 35 36
TEMPERATURE (C)
4 6 8 10 12 14 16 18 20 22
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

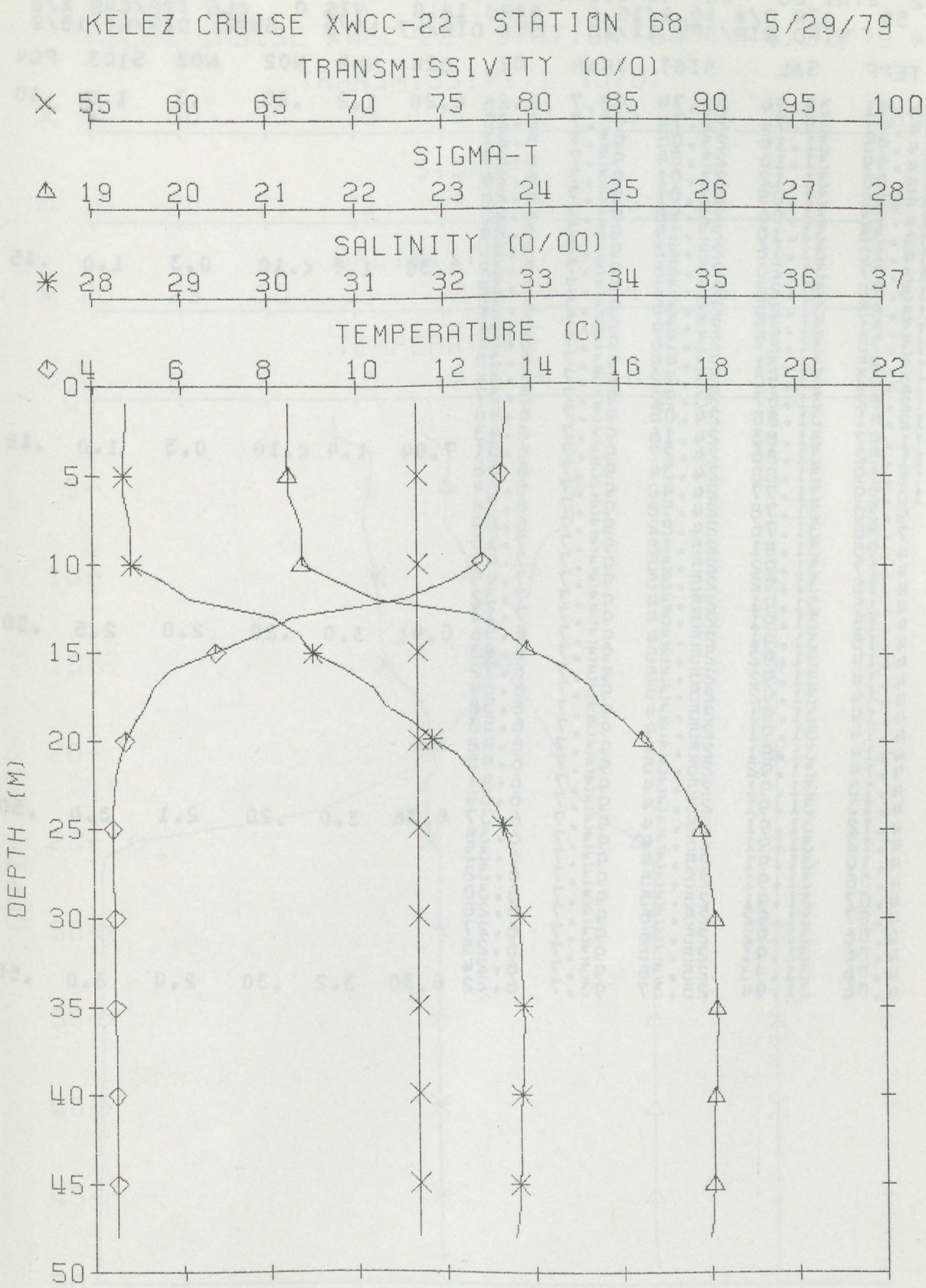
XWCC-22 STA. 67 LAT 40 37.8N; LONG 72 40.2W GMT 8.9 5/30/79
DEPTH 35 AIR D/W 15.0/14.4 BARO 16.0 VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 00/00 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.19 | 25.88 | 19.34 | 72.8 | 6.25 | 6.50 | 1.0 | <.10 | 0.3 | 1.0 | .60 |
| 2 | 13.19 | 25.87 | 19.34 | 72.8 | 6.25 | | | | | | |
| 3 | 13.19 | 25.86 | 19.33 | 72.8 | 6.24 | | | | | | |
| 4 | 13.18 | 25.86 | 19.33 | 72.8 | 6.24 | | | | | | |
| 5 | 13.14 | 25.87 | 19.35 | 72.8 | 6.24 | | | | | | |
| 6 | 12.95 | 25.90 | 19.41 | 72.8 | 6.24 | | | | | | |
| 7 | 12.75 | 25.93 | 19.46 | 72.8 | 6.26 | | | | | | |
| 8 | 12.51 | 26.06 | 19.60 | 72.8 | 6.28 | | | | | | |
| 9 | 12.45 | 26.17 | 19.70 | 72.8 | 6.29 | | | | | | |
| 10 | 12.45 | 26.22 | 19.74 | 72.8 | 6.29 | 6.39 | 0.8 | .20 | 0.4 | 2.0 | 1.00 |
| 11 | 12.21 | 26.62 | 20.09 | 72.8 | 6.28 | | | | | | |
| 12 | 11.61 | 27.22 | 20.65 | 72.8 | 6.32 | | | | | | |
| 13 | 11.65 | 27.68 | 21.01 | 72.8 | 6.36 | | | | | | |
| 14 | 11.47 | 27.94 | 21.24 | 72.8 | 6.37 | | | | | | |
| 15 | 11.37 | 28.16 | 21.43 | 72.8 | 6.39 | | | | | | |
| 16 | 11.24 | 28.39 | 21.63 | 72.8 | 6.39 | | | | | | |
| 17 | 11.09 | 28.56 | 21.78 | 72.8 | 6.39 | | | | | | |
| 18 | 10.93 | 28.71 | 21.92 | 72.8 | 6.40 | | | | | | |
| 19 | 10.87 | 28.81 | 22.01 | 72.8 | 6.39 | | | | | | |
| 20 | 10.82 | 28.96 | 22.14 | 72.8 | 6.38 | 6.29 | 0.8 | <.10 | 0.4 | 2.5 | 1.10 |
| 21 | 10.66 | 29.04 | 22.22 | 72.8 | 6.35 | | | | | | |
| 22 | 10.48 | 29.13 | 22.33 | 72.8 | 6.33 | | | | | | |
| 23 | 10.40 | 29.24 | 22.43 | 72.8 | 6.30 | | | | | | |
| 24 | 10.36 | 29.34 | 22.51 | 72.8 | 6.26 | | | | | | |
| 25 | 10.36 | 29.43 | 22.58 | 72.8 | 6.23 | | | | | | |
| 26 | 10.36 | 29.51 | 22.64 | 72.8 | 6.19 | | | | | | |
| 27 | 10.37 | 29.58 | 22.70 | 72.8 | 6.16 | | | | | | |
| 28 | 10.36 | 29.66 | 22.75 | 72.8 | 6.14 | | | | | | |
| 29 | 10.34 | 29.70 | 22.79 | 72.8 | 6.12 | | | | | | |
| 30 | 10.19 | 29.71 | 22.83 | 72.8 | 6.11 | | | | | | |
| 31 | 9.90 | 29.79 | 22.93 | 72.8 | 6.12 | | | | | | |
| 32 | 9.76 | 29.89 | 23.03 | 72.8 | 6.12 | 6.13 | 1.1 | <.10 | 0.6 | 3.5 | .50 |


KELEZ CRUISE XWCC-22 STATION 67 5/30/79
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)
25 26 27 28 29 30 31 32 33 34
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

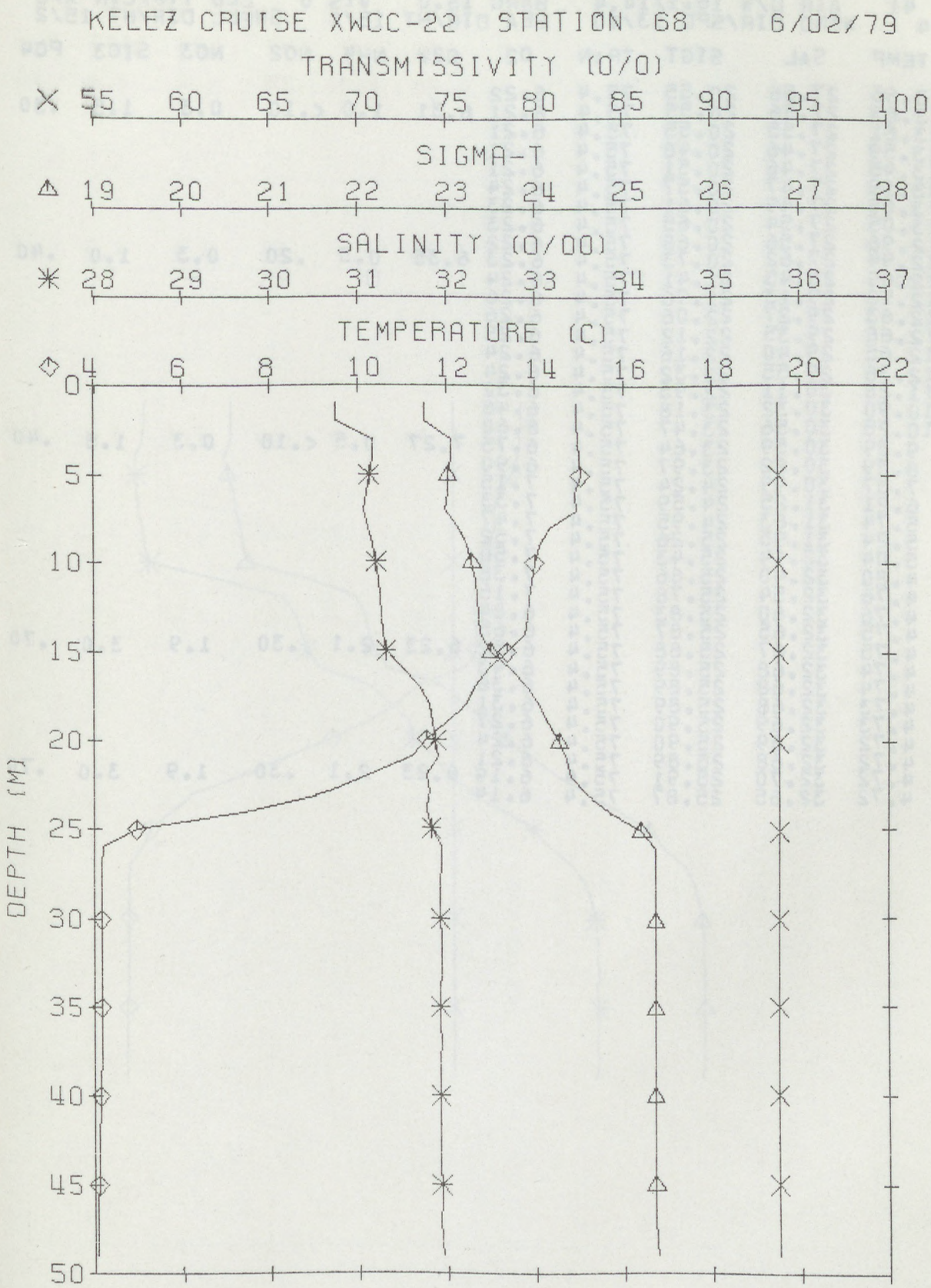
XWCC-22 STA. 68 LAT 40 19.0N; LONG 72 46.5W GMT 22.2 5/29/79
DEPTH 50 AIR D/W 17.8/15.6 BARO 15.0 VIS 4 CLD TYP/CVR 2/2
WETHR 4 WIND DIR/SPD 13/10 SEA DIR/HT 15/0 SWELL DIR/HT 15/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.37 | 28.38 | 21.23 | 73.4 | 6.25 | 6.31 | 0.8 | <.10 | 0.2 | 1.0 | .35 |
| 2 | 13.37 | 28.37 | 21.23 | 73.4 | 6.25 | | | | | | |
| 3 | 13.31 | 28.36 | 21.23 | 73.4 | 6.25 | | | | | | |
| 4 | 13.31 | 28.34 | 21.21 | 73.4 | 6.24 | | | | | | |
| 5 | 13.28 | 28.34 | 21.22 | 73.4 | 6.23 | | | | | | |
| 6 | 13.27 | 28.34 | 21.22 | 73.4 | 6.23 | | | | | | |
| 7 | 13.02 | 28.40 | 21.31 | 73.4 | 6.24 | | | | | | |
| 8 | 12.82 | 28.43 | 21.37 | 73.4 | 6.26 | | | | | | |
| 9 | 12.83 | 28.43 | 21.38 | 73.4 | 6.27 | | | | | | |
| 10 | 12.84 | 28.43 | 21.37 | 73.4 | 6.26 | 6.42 | 1.3 | <.10 | .3 | 1.5 | .45 |
| 11 | 12.16 | 28.81 | 21.79 | 73.4 | 6.25 | | | | | | |
| 12 | 11.04 | 29.09 | 22.20 | 73.4 | 6.34 | | | | | | |
| 13 | 8.54 | 30.04 | 23.34 | 73.4 | 6.49 | | | | | | |
| 14 | 7.71 | 30.34 | 23.69 | 73.4 | 6.82 | | | | | | |
| 15 | 6.79 | 30.49 | 23.93 | 73.4 | 6.96 | | | | | | |
| 16 | 5.74 | 30.87 | 24.35 | 73.4 | 7.28 | | | | | | |
| 17 | 5.36 | 31.18 | 24.63 | 73.4 | 7.31 | | | | | | |
| 18 | 5.18 | 31.31 | 24.76 | 73.4 | 7.38 | | | | | | |
| 19 | 4.90 | 31.62 | 25.03 | 73.4 | 7.50 | | | | | | |
| 20 | 4.70 | 31.85 | 25.23 | 73.4 | 7.58 | 8.21 | 2.0 | .20 | .4 | 1.0 | .50 |
| 21 | 4.58 | 32.14 | 25.48 | 73.4 | 7.61 | | | | | | |
| 22 | 4.49 | 32.29 | 25.61 | 73.4 | 7.61 | | | | | | |
| 23 | 4.45 | 32.44 | 25.73 | 73.4 | 7.53 | | | | | | |
| 24 | 4.43 | 32.58 | 25.84 | 73.4 | 7.35 | | | | | | |
| 25 | 4.42 | 32.64 | 25.89 | 73.4 | 7.22 | | | | | | |
| 26 | 4.42 | 32.71 | 25.95 | 73.4 | 7.00 | | | | | | |
| 27 | 4.42 | 32.75 | 25.98 | 73.4 | 6.90 | | | | | | |
| 28 | 4.43 | 32.78 | 26.00 | 73.4 | 6.84 | | | | | | |
| 29 | 4.44 | 32.81 | 26.02 | 73.4 | 6.74 | | | | | | |
| 30 | 4.46 | 32.83 | 26.04 | 73.4 | 6.68 | 6.51 | 4.8 | .30 | 2.0 | 2.0 | .75 |
| 31 | 4.46 | 32.83 | 26.04 | 73.4 | 6.61 | | | | | | |
| 32 | 4.45 | 32.83 | 26.04 | 73.4 | 6.56 | | | | | | |
| 33 | 4.46 | 32.85 | 26.05 | 73.4 | 6.53 | | | | | | |
| 34 | 4.46 | 32.86 | 26.06 | 73.4 | 6.49 | | | | | | |
| 35 | 4.46 | 32.86 | 26.06 | 73.4 | 6.47 | | | | | | |
| 36 | 4.46 | 32.88 | 26.08 | 73.4 | 6.44 | | | | | | |
| 37 | 4.48 | 32.86 | 26.06 | 73.4 | 6.42 | | | | | | |
| 38 | 4.48 | 32.86 | 26.06 | 73.4 | 6.40 | | | | | | |
| 39 | 4.48 | 32.86 | 26.06 | 73.4 | 6.39 | | | | | | |
| 40 | 4.48 | 32.84 | 26.04 | 73.4 | 6.37 | 6.50 | 1.9 | .30 | 1.9 | 2.0 | .70 |
| 41 | 4.48 | 32.83 | 26.03 | 73.4 | 6.36 | | | | | | |
| 42 | 4.47 | 32.82 | 26.03 | 73.4 | 6.35 | | | | | | |
| 43 | 4.48 | 32.82 | 26.03 | 73.4 | 6.34 | | | | | | |
| 44 | 4.50 | 32.83 | 26.03 | 73.4 | 6.33 | | | | | | |
| 45 | 4.50 | 32.81 | 26.02 | 73.4 | 6.32 | | | | | | |
| 46 | 4.49 | 32.81 | 26.02 | 73.4 | 6.31 | | | | | | |
| 47 | 4.49 | 32.80 | 26.01 | 73.4 | 6.31 | 6.49 | 2.6 | .50 | 2.3 | 2.0 | .70 |
| 48 | 4.49 | 32.75 | 25.97 | 73.4 | 6.29 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 68 5/29/79
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
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

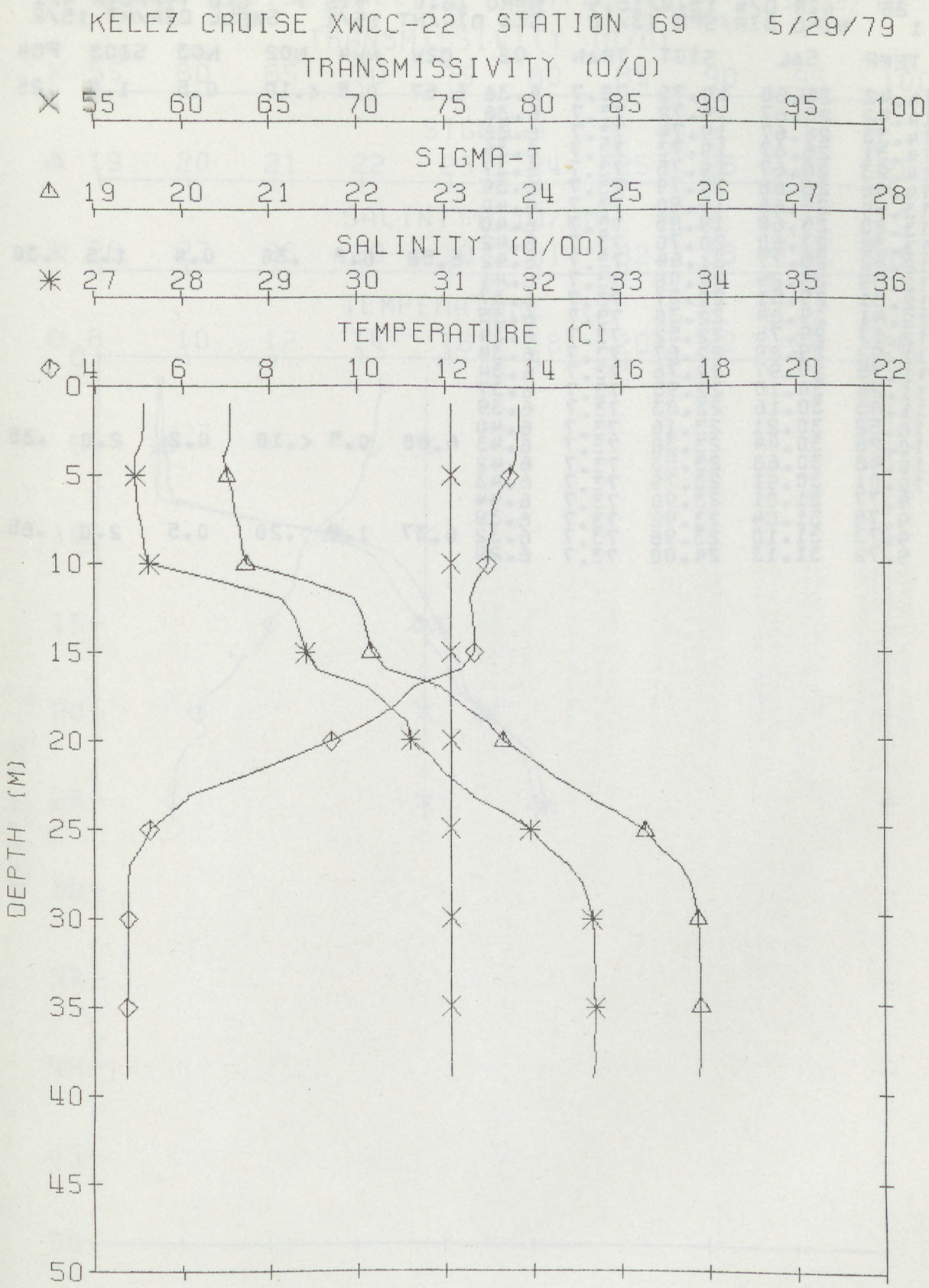
XWCC-22 STA. 68 LAT 40 19.0N; LONG 72 46.0W GMT 2.2 6/02/79
DEPTH 50 AIR D/W 16.1/15.6 BARO 18.0 VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 11/10 SEA DIR/HT 15/0 SWELL DIR/HT 15/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.91 | 30.74 | 22.74 | 93.7 | 6.26 | 6.20 | 1.2 | .20 | .3 | 1.0 | .10 |
| 2 | 14.91 | 30.74 | 22.74 | 93.7 | 6.25 | | | | | | |
| 3 | 14.95 | 31.16 | 23.05 | 93.7 | 6.27 | | | | | | |
| 4 | 14.99 | 31.16 | 23.04 | 93.7 | 6.27 | | | | | | |
| 5 | 15.00 | 31.12 | 23.01 | 93.7 | 6.26 | | | | | | |
| 6 | 14.90 | 31.09 | 23.01 | 93.7 | 6.26 | | | | | | |
| 7 | 14.93 | 31.06 | 22.98 | 93.7 | 6.25 | | | | | | |
| 8 | 14.33 | 31.10 | 23.14 | 93.7 | 6.26 | | | | | | |
| 9 | 14.10 | 31.16 | 23.23 | 93.7 | 6.30 | | | | | | |
| 10 | 13.97 | 31.20 | 23.28 | 93.7 | 6.32 | 6.30 | 1.5 | <.10 | 0.3 | 1.0 | .15 |
| 11 | 13.90 | 31.23 | 23.32 | 93.7 | 6.32 | | | | | | |
| 12 | 13.85 | 31.25 | 23.35 | 93.7 | 6.32 | | | | | | |
| 13 | 13.81 | 31.25 | 23.36 | 93.7 | 6.32 | | | | | | |
| 14 | 13.75 | 31.27 | 23.38 | 93.7 | 6.31 | | | | | | |
| 15 | 13.35 | 31.31 | 23.49 | 93.7 | 6.30 | | | | | | |
| 16 | 12.92 | 31.50 | 23.72 | 93.7 | 6.34 | | | | | | |
| 17 | 12.62 | 31.67 | 23.92 | 93.7 | 6.37 | | | | | | |
| 18 | 12.41 | 31.80 | 24.05 | 93.7 | 6.40 | | | | | | |
| 19 | 11.97 | 31.83 | 24.16 | 93.7 | 6.43 | | | | | | |
| 20 | 11.52 | 31.86 | 24.27 | 93.7 | 6.51 | 7.04 | 1.4 | <.10 | 0.3 | 1.0 | .15 |
| 21 | 11.19 | 31.88 | 24.34 | 93.7 | 6.58 | | | | | | |
| 22 | 10.29 | 31.77 | 24.40 | 93.7 | 6.64 | | | | | | |
| 23 | 9.30 | 31.78 | 24.58 | 93.7 | 6.78 | | | | | | |
| 24 | 7.58 | 31.76 | 24.82 | 93.7 | 6.89 | | | | | | |
| 25 | 4.95 | 31.81 | 25.18 | 93.7 | 7.15 | | | | | | |
| 26 | 4.17 | 31.92 | 25.35 | 93.7 | 7.47 | | | | | | |
| 27 | 4.15 | 31.92 | 25.35 | 93.7 | 7.49 | | | | | | |
| 28 | 4.15 | 31.91 | 25.34 | 93.7 | 7.32 | | | | | | |
| 29 | 4.15 | 31.91 | 25.34 | 93.7 | 7.13 | | | | | | |
| 30 | 4.15 | 31.91 | 25.34 | 93.7 | 6.96 | 6.41 | 3.0 | .20 | 2.0 | 2.5 | .50 |
| 31 | 4.14 | 31.92 | 25.35 | 93.7 | 6.83 | | | | | | |
| 32 | 4.14 | 31.92 | 25.35 | 93.7 | 6.72 | | | | | | |
| 33 | 4.14 | 31.92 | 25.35 | 93.7 | 6.64 | | | | | | |
| 34 | 4.14 | 31.91 | 25.34 | 93.7 | 6.58 | | | | | | |
| 35 | 4.14 | 31.91 | 25.34 | 93.7 | 6.53 | | | | | | |
| 36 | 4.14 | 31.91 | 25.34 | 93.7 | 6.48 | | | | | | |
| 37 | 4.14 | 31.92 | 25.35 | 93.7 | 6.45 | | | | | | |
| 38 | 4.13 | 31.91 | 25.34 | 93.7 | 6.41 | | | | | | |
| 39 | 4.13 | 31.91 | 25.34 | 93.7 | 6.39 | | | | | | |
| 40 | 4.12 | 31.91 | 25.34 | 93.7 | 6.37 | 6.36 | 3.0 | .20 | 2.1 | 3.0 | .50 |
| 41 | 4.12 | 31.91 | 25.34 | 93.7 | 6.35 | | | | | | |
| 42 | 4.10 | 31.91 | 25.34 | 93.7 | 6.33 | | | | | | |
| 43 | 4.08 | 31.91 | 25.35 | 93.7 | 6.32 | | | | | | |
| 44 | 4.07 | 31.91 | 25.35 | 93.7 | 6.30 | | | | | | |
| 45 | 4.07 | 31.92 | 25.36 | 93.7 | 6.28 | | | | | | |
| 46 | 4.06 | 31.92 | 25.36 | 93.7 | 6.27 | | | | | | |
| 47 | 4.06 | 31.91 | 25.35 | 93.7 | 6.25 | | | | | | |
| 48 | 4.06 | 31.93 | 25.36 | 93.7 | 6.24 | | | | | | |
| 49 | 4.06 | 31.94 | 25.37 | 93.7 | 6.22 | 6.30 | 3.2 | .30 | 2.0 | 3.0 | .50 |


KELEZ CRUISE XWCC-22 STATION 68 6/02/79
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
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

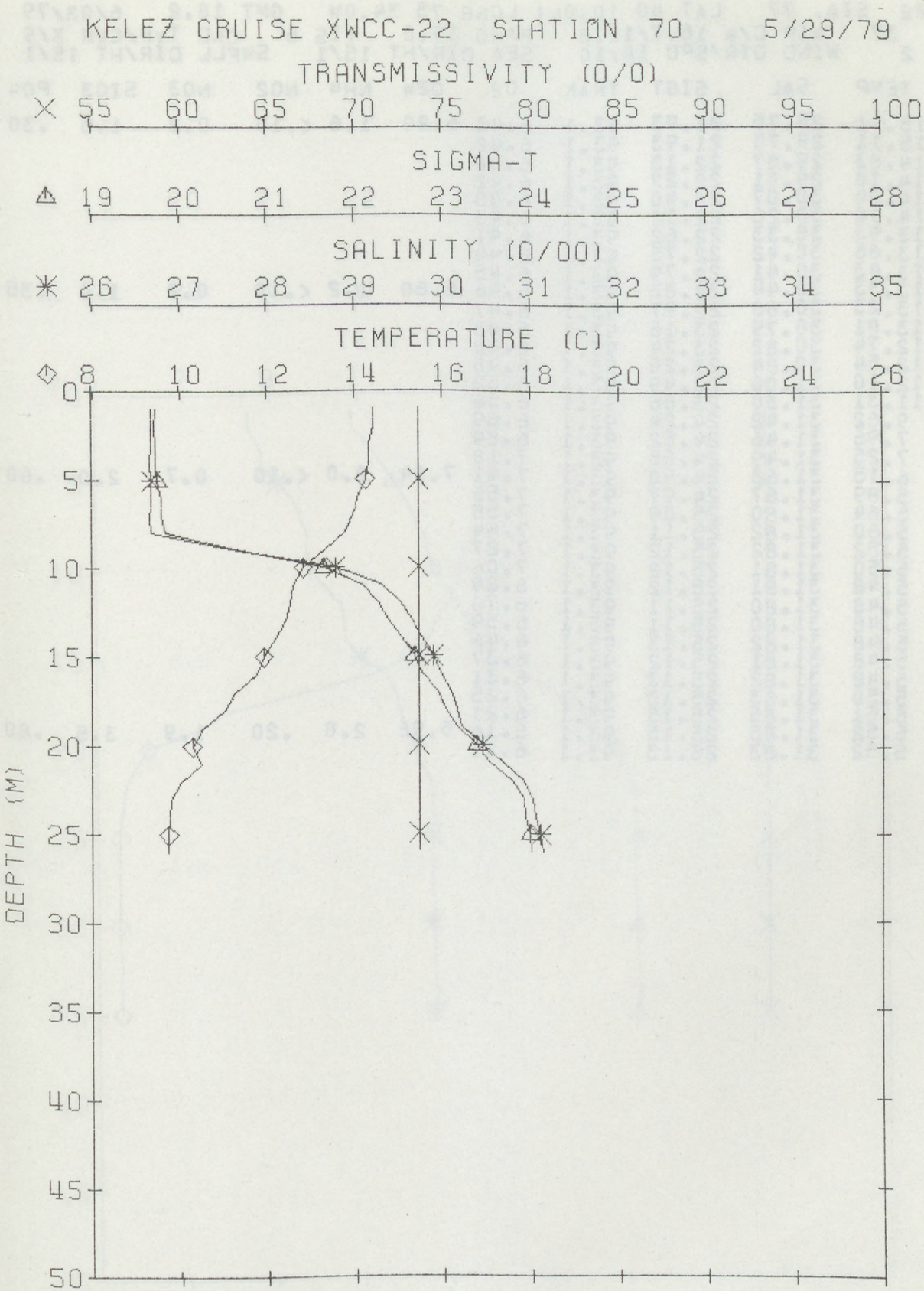
XWCC-22 STA. 69 LAT 40 25.1N; LONG 72 55.5W GMT 20.2 5/20/79
DEPTH 41 AIR D/W 16.1/14.4 BARO 16.0 VIS 0 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 13/10 SEA DIR/HT 15/1 SWELL DIR/HT 15/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.65 | 27.56 | 20.55 | 75.4 | 6.22 | | | | | | |
| 2 | 13.65 | 27.56 | 20.55 | 75.4 | 6.21 | 6.31 | 1.0 | <.10 | 0.3 | 1.5 | .30 |
| 3 | 13.61 | 27.55 | 20.55 | 75.4 | 6.21 | | | | | | |
| 4 | 13.59 | 27.46 | 20.48 | 75.4 | 6.21 | | | | | | |
| 5 | 13.45 | 27.46 | 20.51 | 75.4 | 6.21 | | | | | | |
| 6 | 13.19 | 27.47 | 20.57 | 75.4 | 6.24 | | | | | | |
| 7 | 13.05 | 27.49 | 20.61 | 75.4 | 6.23 | | | | | | |
| 8 | 13.05 | 27.54 | 20.65 | 75.4 | 6.23 | | | | | | |
| 9 | 12.96 | 27.56 | 20.68 | 75.4 | 6.22 | | | | | | |
| 10 | 12.94 | 27.62 | 20.73 | 75.4 | 6.23 | 6.35 | 0.5 | .20 | 0.3 | 1.0 | .40 |
| 11 | 12.69 | 28.45 | 21.41 | 75.4 | 6.24 | | | | | | |
| 12 | 12.56 | 29.13 | 21.96 | 75.4 | 6.26 | | | | | | |
| 13 | 12.63 | 29.27 | 22.06 | 75.4 | 6.26 | | | | | | |
| 14 | 12.66 | 29.35 | 22.12 | 75.4 | 6.25 | | | | | | |
| 15 | 12.65 | 29.40 | 22.16 | 75.4 | 6.24 | | | | | | |
| 16 | 12.36 | 29.55 | 22.32 | 75.4 | 6.24 | | | | | | |
| 17 | 11.28 | 30.11 | 22.95 | 75.4 | 6.32 | | | | | | |
| 18 | 10.90 | 30.32 | 23.18 | 75.4 | 6.48 | | | | | | |
| 19 | 10.25 | 30.56 | 23.47 | 75.4 | 6.60 | | | | | | |
| 20 | 9.39 | 30.59 | 23.64 | 75.4 | 6.75 | 7.27 | 0.5 | <.10 | 0.3 | 1.5 | .40 |
| 21 | 8.39 | 30.82 | 23.97 | 75.4 | 6.90 | | | | | | |
| 22 | 7.37 | 30.99 | 24.24 | 75.4 | 7.15 | | | | | | |
| 23 | 6.21 | 31.25 | 24.59 | 75.4 | 7.33 | | | | | | |
| 24 | 5.74 | 31.63 | 24.95 | 75.4 | 7.47 | | | | | | |
| 25 | 5.24 | 31.95 | 25.26 | 75.4 | 7.52 | | | | | | |
| 26 | 5.04 | 32.14 | 25.43 | 75.4 | 7.50 | | | | | | |
| 27 | 4.80 | 32.40 | 25.66 | 75.4 | 7.38 | | | | | | |
| 28 | 4.76 | 32.54 | 25.78 | 75.4 | 7.15 | | | | | | |
| 29 | 4.76 | 32.60 | 25.83 | 75.4 | 6.84 | | | | | | |
| 30 | 4.75 | 32.65 | 25.87 | 75.4 | 6.65 | | | | | | |
| 31 | 4.75 | 32.67 | 25.88 | 75.4 | 6.52 | 6.23 | 2.1 | .30 | 1.9 | 3.0 | .70 |
| 32 | 4.74 | 32.68 | 25.89 | 75.4 | 6.43 | | | | | | |
| 33 | 4.74 | 32.68 | 25.89 | 75.4 | 6.36 | | | | | | |
| 34 | 4.73 | 32.68 | 25.89 | 75.4 | 6.31 | | | | | | |
| 35 | 4.73 | 32.69 | 25.90 | 75.4 | 6.27 | | | | | | |
| 36 | 4.72 | 32.69 | 25.90 | 75.4 | 6.24 | | | | | | |
| 37 | 4.72 | 32.68 | 25.89 | 75.4 | 6.21 | | | | | | |
| 38 | 4.72 | 32.70 | 25.91 | 75.4 | 6.19 | 6.23 | 2.1 | .30 | 1.9 | 3.0 | .70 |
| 39 | 4.72 | 32.65 | 25.87 | 75.4 | 6.14 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 69 5/29/79
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)
27 28 29 30 31 32 33 34 35 36
TEMPERATURE (C)
4 6 8 10 12 14 16 18 20 22
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

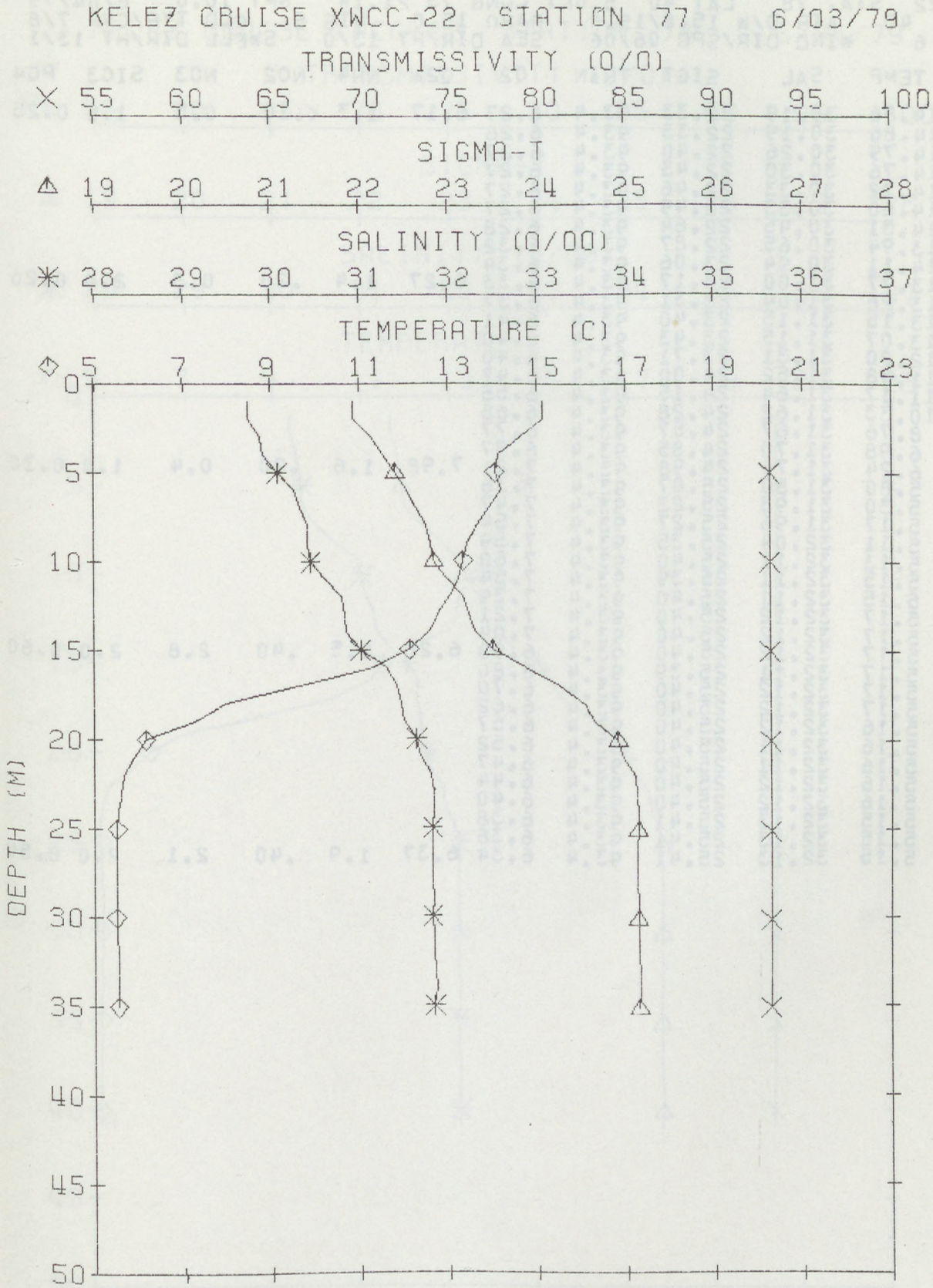
XWCC-22 STA. 70 LAT 40 31.7N; LONG 73 6.6W GMT 17.9 5/29/79
DEPTH 28 AIR D/W 15.0/13.9 BARO 16.0 VIS 7 CLD TYP/CVR 4/1
WETHR 1 WIND DIR/SPD 13/10 SEA DIR/HT 15/1 SWELL DIR/HT 15/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.42 | 26.68 | 19.72 | 73.7 | 6.36 | 6.57 | 0.5 | <.10 | 0.5 | 1.0 | .25 |
| 2 | 14.42 | 26.67 | 19.72 | 73.7 | 6.36 | | | | | | |
| 3 | 14.33 | 26.67 | 19.74 | 73.7 | 6.36 | | | | | | |
| 4 | 14.31 | 26.67 | 19.73 | 73.7 | 6.36 | | | | | | |
| 5 | 14.23 | 26.67 | 19.75 | 73.7 | 6.37 | | | | | | |
| 6 | 14.06 | 26.68 | 19.79 | 73.7 | 6.39 | | | | | | |
| 7 | 13.94 | 26.66 | 19.80 | 73.7 | 6.40 | | | | | | |
| 8 | 13.80 | 26.68 | 19.85 | 73.7 | 6.40 | | | | | | |
| 9 | 13.32 | 27.68 | 20.70 | 73.7 | 6.42 | | | | | | |
| 10 | 12.82 | 28.77 | 21.64 | 73.7 | 6.42 | 6.58 | 0.8 | .30 | 0.4 | 1.5 | .30 |
| 11 | 12.59 | 29.29 | 22.08 | 73.7 | 6.41 | | | | | | |
| 12 | 12.51 | 29.51 | 22.27 | 73.7 | 6.37 | | | | | | |
| 13 | 12.41 | 29.64 | 22.38 | 73.7 | 6.35 | | | | | | |
| 14 | 12.17 | 29.76 | 22.52 | 73.7 | 6.34 | | | | | | |
| 15 | 11.92 | 29.89 | 22.67 | 73.7 | 6.34 | | | | | | |
| 16 | 11.75 | 29.97 | 22.76 | 73.7 | 6.34 | | | | | | |
| 17 | 11.24 | 30.10 | 22.95 | 73.7 | 6.37 | | | | | | |
| 18 | 11.03 | 30.16 | 23.03 | 73.7 | 6.39 | | | | | | |
| 19 | 10.52 | 30.21 | 23.16 | 73.7 | 6.40 | | | | | | |
| 20 | 10.28 | 30.44 | 23.38 | 73.7 | 6.43 | 6.68 | 0.5 | <.10 | 0.2 | 2.0 | .35 |
| 21 | 10.48 | 30.68 | 23.53 | 73.7 | 6.42 | | | | | | |
| 22 | 10.01 | 30.91 | 23.79 | 73.7 | 6.43 | | | | | | |
| 23 | 9.77 | 31.01 | 23.90 | 73.7 | 6.44 | | | | | | |
| 24 | 9.75 | 31.04 | 23.92 | 73.7 | 6.39 | | | | | | |
| 25 | 9.73 | 31.10 | 23.98 | 73.7 | 6.32 | 6.37 | 1.8 | .20 | 0.5 | 2.0 | .65 |
| 26 | 9.72 | 31.13 | 24.00 | 73.7 | 6.29 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 70 5/29/79
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)
26 27 28 29 30 31 32 33 34 35
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

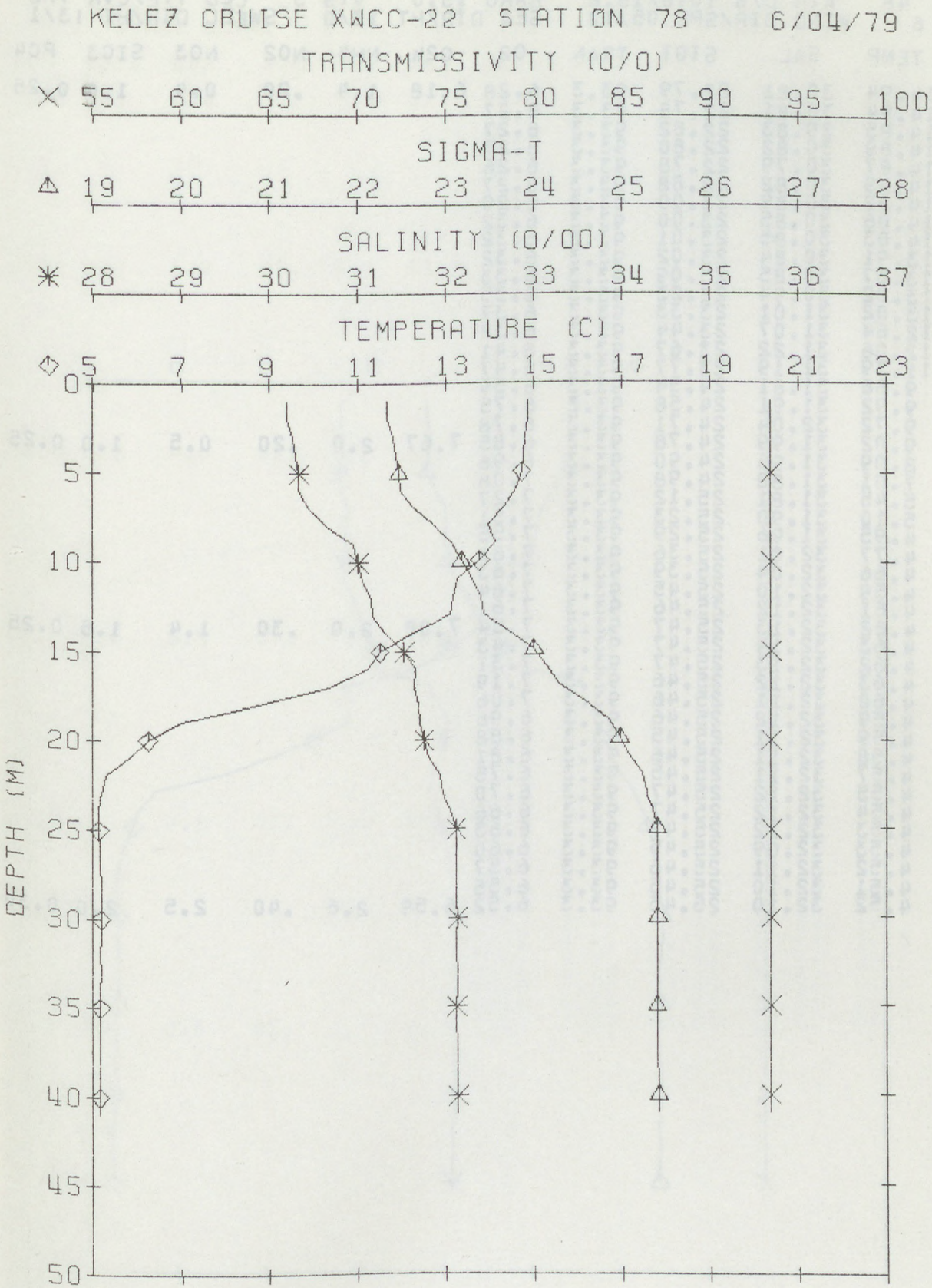
XWCC-22 STA. 77 LAT 40 10.0N; LONG 73 34.0W GMT 18.2 6/03/79
DEPTH 37 AIR D/W 16.7/15.8 BARO 17.0 VIS 6 CLD TYP/CVR X/9
WETHR 2 WIND DIR/SPD 18/10 SEA DIR/HT 15/1 SWELL DIR/HT 15/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.11 | 29.75 | 21.93 | 93.1 | 6.43 | 6.20 | 1.6 | <.10 | 0.2 | 1.5 | .30 |
| 2 | 15.11 | 29.75 | 21.93 | 93.1 | 6.42 | | | | | | |
| 3 | 14.63 | 29.87 | 22.13 | 93.1 | 6.40 | | | | | | |
| 4 | 14.10 | 29.91 | 22.27 | 93.1 | 6.42 | | | | | | |
| 5 | 14.04 | 30.07 | 22.40 | 93.1 | 6.45 | | | | | | |
| 6 | 14.18 | 30.26 | 22.52 | 93.1 | 6.43 | | | | | | |
| 7 | 13.93 | 30.33 | 22.62 | 93.1 | 6.41 | | | | | | |
| 8 | 13.65 | 30.42 | 22.75 | 93.1 | 6.44 | | | | | | |
| 9 | 13.43 | 30.41 | 22.79 | 93.1 | 6.45 | | | | | | |
| 10 | 13.33 | 30.44 | 22.83 | 93.1 | 6.46 | 6.60 | 1.2 | <.10 | 0.2 | 1.0 | .35 |
| 11 | 13.23 | 30.60 | 22.97 | 93.1 | 6.47 | | | | | | |
| 12 | 13.01 | 30.79 | 23.16 | 93.1 | 6.46 | | | | | | |
| 13 | 12.74 | 30.82 | 23.24 | 93.1 | 6.46 | | | | | | |
| 14 | 12.54 | 30.84 | 23.29 | 93.1 | 6.48 | | | | | | |
| 15 | 12.10 | 31.00 | 23.49 | 93.1 | 6.52 | | | | | | |
| 16 | 11.31 | 31.30 | 23.86 | 93.1 | 6.56 | | | | | | |
| 17 | 9.62 | 31.42 | 24.24 | 93.1 | 6.69 | | | | | | |
| 18 | 7.96 | 31.46 | 24.52 | 93.1 | 6.89 | | | | | | |
| 19 | 7.25 | 31.49 | 24.65 | 93.1 | 7.18 | | | | | | |
| 20 | 6.15 | 31.63 | 24.90 | 93.1 | 7.41 | 7.14 | 2.0 | <.10 | 0.7 | 2.0 | .60 |
| 21 | 5.89 | 31.67 | 24.97 | 93.1 | 7.55 | | | | | | |
| 22 | 5.64 | 31.80 | 25.09 | 93.1 | 7.55 | | | | | | |
| 23 | 5.60 | 31.82 | 25.11 | 93.1 | 7.44 | | | | | | |
| 24 | 5.52 | 31.82 | 25.12 | 93.1 | 7.27 | | | | | | |
| 25 | 5.50 | 31.81 | 25.12 | 93.1 | 7.06 | | | | | | |
| 26 | 5.48 | 31.81 | 25.12 | 93.1 | 6.89 | | | | | | |
| 27 | 5.48 | 31.80 | 25.11 | 93.1 | 6.70 | | | | | | |
| 28 | 5.48 | 31.80 | 25.11 | 93.1 | 6.59 | | | | | | |
| 29 | 5.48 | 31.82 | 25.13 | 93.1 | 6.46 | | | | | | |
| 30 | 5.48 | 31.81 | 25.12 | 93.1 | 6.37 | | | | | | |
| 31 | 5.48 | 31.82 | 25.13 | 93.1 | 6.31 | | | | | | |
| 32 | 5.50 | 31.83 | 25.13 | 93.1 | 6.25 | | | | | | |
| 33 | 5.51 | 31.85 | 25.15 | 93.1 | 6.21 | | | | | | |
| 34 | 5.52 | 31.85 | 25.15 | 93.1 | 6.16 | 5.96 | 2.0 | .20 | 1.9 | 3.5 | .80 |
| 35 | 5.52 | 31.83 | 25.13 | 93.1 | 6.11 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 77 6/03/79
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

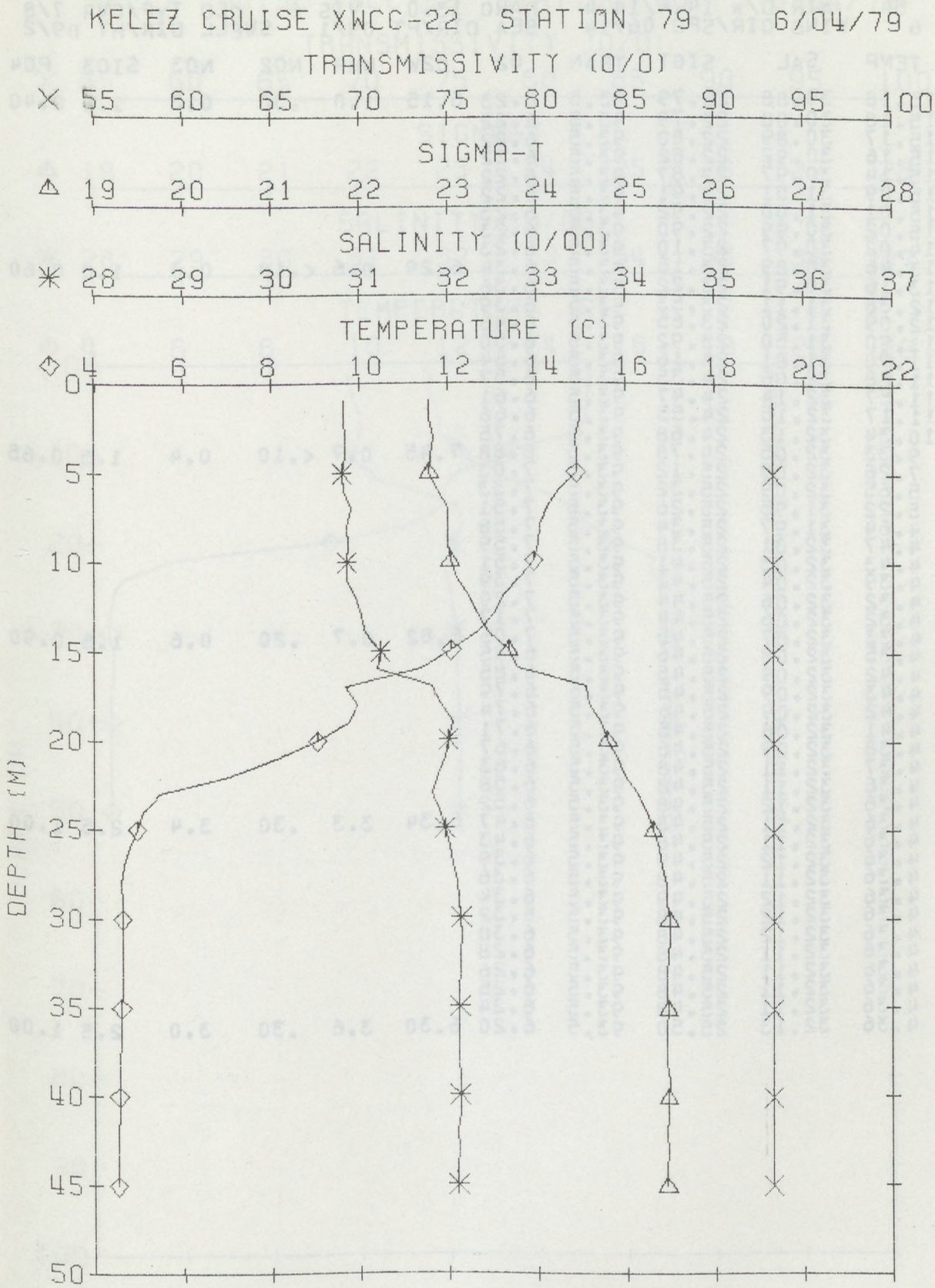
XWCC-22 STA. 78 LAT 40 5.0N LONG 73 21.1W GMT 10.0 6/04/79
DEPTH 45 AIR D/W 15.6/15.0 BARO 15.0 VIS 5 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 06/06 SEA DIR/HT 13/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.86 | 30.19 | 22.33 | 93.4 | 6.27 | 6.17 | 1.3 | <.10 | 0.5 | 1.5 | 0.25 |
| 2 | 14.86 | 30.19 | 22.33 | 93.4 | 6.26 | | | | | | |
| 3 | 14.79 | 30.26 | 22.40 | 93.4 | 6.27 | | | | | | |
| 4 | 14.76 | 30.30 | 22.43 | 93.4 | 6.27 | | | | | | |
| 5 | 14.72 | 30.33 | 22.46 | 93.4 | 6.27 | | | | | | |
| 6 | 14.60 | 30.33 | 22.49 | 93.4 | 6.27 | | | | | | |
| 7 | 14.31 | 30.45 | 22.64 | 93.4 | 6.28 | | | | | | |
| 8 | 13.94 | 30.65 | 22.87 | 93.4 | 6.32 | | | | | | |
| 9 | 14.11 | 30.94 | 23.06 | 93.4 | 6.34 | | | | | | |
| 10 | 13.77 | 31.00 | 23.17 | 93.4 | 6.33 | 6.27 | 1.4 | .20 | 0.3 | 2.0 | 0.20 |
| 11 | 13.26 | 31.04 | 23.31 | 93.4 | 6.37 | | | | | | |
| 12 | 13.15 | 31.15 | 23.40 | 93.4 | 6.41 | | | | | | |
| 13 | 13.07 | 31.15 | 23.43 | 93.4 | 6.40 | | | | | | |
| 14 | 12.20 | 31.31 | 23.71 | 93.4 | 6.40 | | | | | | |
| 15 | 11.48 | 31.52 | 24.00 | 93.4 | 6.47 | | | | | | |
| 16 | 11.17 | 31.64 | 24.15 | 93.4 | 6.55 | | | | | | |
| 17 | 10.33 | 31.62 | 24.28 | 93.4 | 6.65 | | | | | | |
| 18 | 8.76 | 31.67 | 24.57 | 93.4 | 6.77 | | | | | | |
| 19 | 6.98 | 31.70 | 24.85 | 93.4 | 6.97 | | | | | | |
| 20 | 6.24 | 31.74 | 24.98 | 93.4 | 7.21 | 7.98 | 1.6 | .20 | 0.4 | 1.0 | 0.30 |
| 21 | 5.80 | 31.80 | 25.07 | 93.4 | 7.36 | | | | | | |
| 22 | 5.30 | 31.93 | 25.23 | 93.4 | 7.47 | | | | | | |
| 23 | 5.17 | 31.96 | 25.27 | 93.4 | 7.54 | | | | | | |
| 24 | 5.11 | 32.04 | 25.35 | 93.4 | 7.59 | | | | | | |
| 25 | 5.13 | 32.11 | 25.40 | 93.4 | 7.60 | | | | | | |
| 26 | 5.15 | 32.11 | 25.39 | 93.4 | 7.54 | | | | | | |
| 27 | 5.15 | 32.11 | 25.40 | 93.4 | 7.39 | | | | | | |
| 28 | 5.17 | 32.12 | 25.40 | 93.4 | 7.21 | | | | | | |
| 29 | 5.17 | 32.12 | 25.40 | 93.4 | 7.04 | | | | | | |
| 30 | 5.17 | 32.12 | 25.40 | 93.4 | 6.90 | 6.20 | 2.5 | .40 | 2.8 | 2.0 | 0.60 |
| 31 | 5.17 | 32.11 | 25.39 | 93.4 | 6.80 | | | | | | |
| 32 | 5.17 | 32.12 | 25.40 | 93.4 | 6.70 | | | | | | |
| 33 | 5.17 | 32.12 | 25.40 | 93.4 | 6.62 | | | | | | |
| 34 | 5.16 | 32.12 | 25.40 | 93.4 | 6.57 | | | | | | |
| 35 | 5.16 | 32.11 | 25.40 | 93.4 | 6.52 | | | | | | |
| 36 | 5.16 | 32.11 | 25.40 | 93.4 | 6.47 | | | | | | |
| 37 | 5.16 | 32.12 | 25.40 | 93.4 | 6.44 | | | | | | |
| 38 | 5.16 | 32.12 | 25.40 | 93.4 | 6.40 | | | | | | |
| 39 | 5.15 | 32.13 | 25.41 | 93.4 | 6.38 | | | | | | |
| 40 | 5.15 | 32.13 | 25.41 | 93.4 | 6.36 | | | | | | |
| 41 | 5.15 | 32.13 | 25.41 | 93.4 | 6.34 | 6.37 | 1.9 | .40 | 2.1 | 2.0 | 0.50 |


KELEZ CRUISE XWCC-22 STATION 78 6/04/79
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

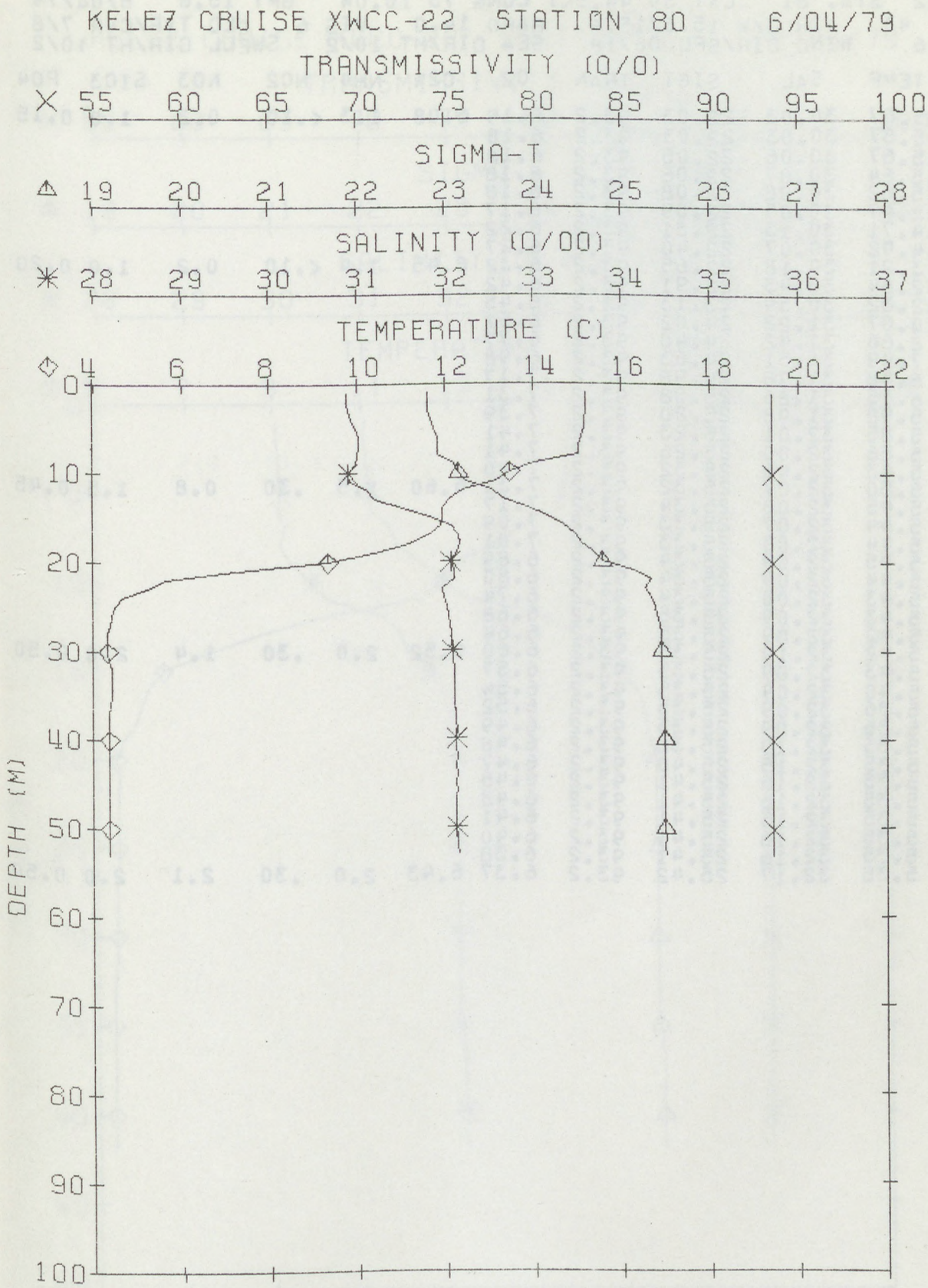
XWCC-22 STA. 79 LAT 39 59.9N; LONG 73 9.5W GMT 11.3 6/04/79
DEPTH 48 AIR D/W 15.6/15.6 BARO 15.0 VIS 5 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 05/10 SEA DIR/HT 13/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIC3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.94 | 30.81 | 22.79 | 93.3 | 6.28 | 6.18 | 1.4 | .20 | 0.4 | 1.0 | 0.25 |
| 2 | 14.94 | 30.81 | 22.78 | 93.3 | 6.27 | | | | | | |
| 3 | 14.85 | 30.83 | 22.82 | 93.3 | 6.27 | | | | | | |
| 4 | 14.89 | 30.82 | 22.80 | 93.3 | 6.27 | | | | | | |
| 5 | 14.87 | 30.79 | 22.78 | 93.3 | 6.26 | | | | | | |
| 6 | 14.49 | 30.82 | 22.88 | 93.3 | 6.27 | | | | | | |
| 7 | 14.22 | 30.89 | 23.00 | 93.3 | 6.29 | | | | | | |
| 8 | 14.06 | 30.85 | 23.00 | 93.3 | 6.32 | | | | | | |
| 9 | 14.03 | 30.85 | 23.01 | 93.3 | 6.32 | | | | | | |
| 10 | 13.91 | 30.84 | 23.02 | 93.3 | 6.32 | | | | | | |
| 11 | 13.57 | 30.85 | 23.09 | 93.3 | 6.33 | | | | | | |
| 12 | 13.22 | 30.94 | 23.23 | 93.3 | 6.35 | | | | | | |
| 13 | 13.02 | 31.01 | 23.33 | 93.3 | 6.37 | | | | | | |
| 14 | 12.64 | 31.07 | 23.44 | 93.3 | 6.38 | | | | | | |
| 15 | 12.06 | 31.22 | 23.67 | 93.3 | 6.41 | | | | | | |
| 16 | 11.39 | 31.19 | 23.77 | 93.3 | 6.47 | | | | | | |
| 17 | 9.66 | 31.81 | 24.54 | 93.3 | 6.59 | | | | | | |
| 18 | 9.92 | 31.91 | 24.58 | 93.3 | 6.75 | | | | | | |
| 19 | 9.72 | 32.04 | 24.71 | 93.3 | 6.78 | | | | | | |
| 20 | 9.02 | 31.99 | 24.78 | 93.3 | 6.85 | 7.67 | 2.0 | .20 | 0.5 | 1.0 | 0.25 |
| 21 | 8.09 | 31.96 | 24.90 | 93.3 | 6.96 | | | | | | |
| 22 | 7.01 | 31.88 | 24.98 | 93.3 | 7.08 | | | | | | |
| 23 | 5.45 | 31.81 | 25.12 | 93.3 | 7.27 | | | | | | |
| 24 | 5.10 | 31.90 | 25.23 | 93.3 | 7.51 | | | | | | |
| 25 | 4.95 | 31.96 | 25.29 | 93.3 | 7.55 | | | | | | |
| 26 | 4.77 | 32.01 | 25.36 | 93.3 | 7.61 | | | | | | |
| 27 | 4.66 | 32.04 | 25.39 | 93.3 | 7.63 | | | | | | |
| 28 | 4.59 | 32.10 | 25.45 | 93.3 | 7.64 | | | | | | |
| 29 | 4.61 | 32.12 | 25.46 | 93.3 | 7.61 | | | | | | |
| 30 | 4.62 | 32.13 | 25.47 | 93.3 | 7.54 | 7.08 | 2.0 | .30 | 1.4 | 1.5 | 0.25 |
| 31 | 4.63 | 32.14 | 25.47 | 93.3 | 7.43 | | | | | | |
| 32 | 4.62 | 32.13 | 25.47 | 93.3 | 7.31 | | | | | | |
| 33 | 4.63 | 32.12 | 25.46 | 93.3 | 7.19 | | | | | | |
| 34 | 4.60 | 32.11 | 25.46 | 93.3 | 7.06 | | | | | | |
| 35 | 4.59 | 32.12 | 25.46 | 93.3 | 6.96 | | | | | | |
| 36 | 4.59 | 32.11 | 25.45 | 93.3 | 6.88 | | | | | | |
| 37 | 4.58 | 32.11 | 25.46 | 93.3 | 6.81 | | | | | | |
| 38 | 4.57 | 32.11 | 25.45 | 93.3 | 6.75 | | | | | | |
| 39 | 4.55 | 32.12 | 25.47 | 93.3 | 6.70 | | | | | | |
| 40 | 4.54 | 32.12 | 25.47 | 93.3 | 6.66 | | | | | | |
| 41 | 4.53 | 32.12 | 25.47 | 93.3 | 6.63 | | | | | | |
| 42 | 4.53 | 32.09 | 25.45 | 93.3 | 6.60 | | | | | | |
| 43 | 4.52 | 32.11 | 25.46 | 93.3 | 6.57 | | | | | | |
| 44 | 4.51 | 32.10 | 25.45 | 93.3 | 6.55 | | | | | | |
| 45 | 4.52 | 32.10 | 25.45 | 93.3 | 6.52 | 6.59 | 2.6 | .40 | 2.5 | 2.0 | 0.30 |


KELEZ CRUISE XWCC-22 STATION 79 6/04/79
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
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

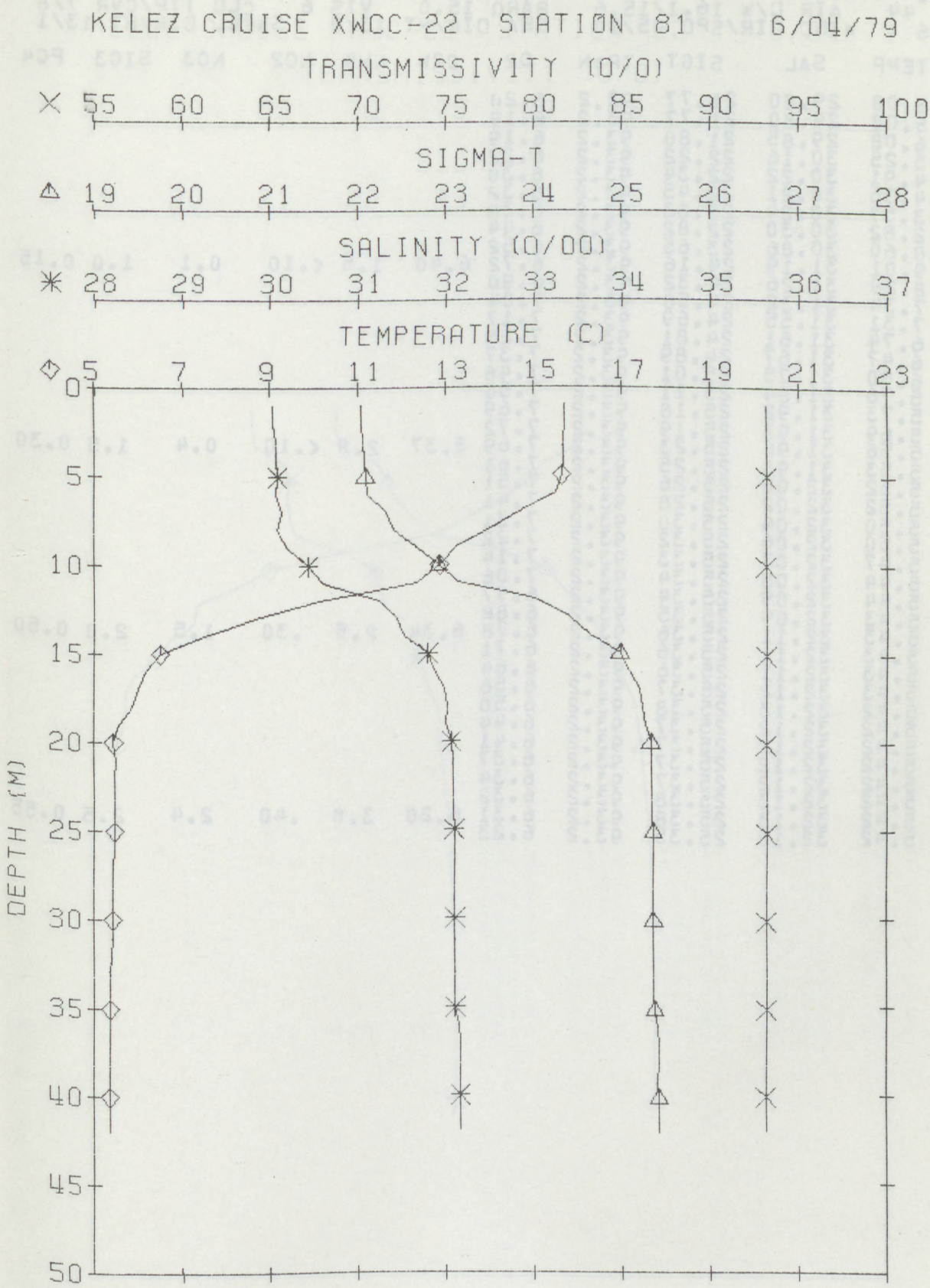
XWCC-22 STA. 80 LAT 39 54.5N LONG 72 56.8W GMT 17.7 6/04/79
DEPTH 54 AIR D/W 14.4/14.4 BARO 13.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 06/14 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.18 | 30.88 | 22.79 | 93.5 | 6.23 | 6.15 | 1.0 | .30 | 0.3 | 1.0 | 0.40 |
| 2 | 15.18 | 30.88 | 22.79 | 93.5 | 6.22 | | | | | | |
| 3 | 15.17 | 30.89 | 22.80 | 93.5 | 6.22 | | | | | | |
| 4 | 15.16 | 30.92 | 22.82 | 93.5 | 6.22 | | | | | | |
| 5 | 15.14 | 30.97 | 22.87 | 93.5 | 6.22 | | | | | | |
| 6 | 15.09 | 31.01 | 22.91 | 93.5 | 6.22 | | | | | | |
| 7 | 15.01 | 31.00 | 22.92 | 93.5 | 6.23 | | | | | | |
| 8 | 15.02 | 30.99 | 22.90 | 93.5 | 6.23 | | | | | | |
| 9 | 14.02 | 30.97 | 23.10 | 93.5 | 6.23 | | | | | | |
| 10 | 13.46 | 30.89 | 23.15 | 93.5 | 6.34 | 6.29 | 0.6 | <.10 | 0.3 | 1.0 | 0.60 |
| 11 | 13.16 | 30.91 | 23.22 | 93.5 | 6.36 | | | | | | |
| 12 | 12.38 | 31.11 | 23.53 | 93.5 | 6.39 | | | | | | |
| 13 | 12.09 | 31.20 | 23.65 | 93.5 | 6.46 | | | | | | |
| 14 | 11.90 | 31.50 | 23.92 | 93.5 | 6.50 | | | | | | |
| 15 | 11.90 | 31.81 | 24.16 | 93.5 | 6.54 | | | | | | |
| 16 | 11.88 | 32.06 | 24.35 | 93.5 | 6.57 | | | | | | |
| 17 | 11.57 | 32.14 | 24.47 | 93.5 | 6.61 | | | | | | |
| 18 | 11.17 | 32.15 | 24.55 | 93.5 | 6.68 | | | | | | |
| 19 | 10.34 | 32.13 | 24.68 | 93.5 | 6.75 | | | | | | |
| 20 | 9.33 | 32.05 | 24.78 | 93.5 | 6.88 | 7.45 | 0.7 | <.10 | 0.4 | 1.5 | 0.65 |
| 21 | 7.26 | 32.09 | 25.12 | 93.5 | 7.03 | | | | | | |
| 22 | 5.65 | 32.09 | 25.32 | 93.5 | 7.33 | | | | | | |
| 23 | 5.22 | 31.95 | 25.26 | 93.5 | 7.51 | | | | | | |
| 24 | 4.64 | 31.97 | 25.34 | 93.5 | 7.58 | | | | | | |
| 25 | 4.47 | 32.01 | 25.38 | 93.5 | 7.59 | | | | | | |
| 26 | 4.43 | 32.03 | 25.41 | 93.5 | 7.51 | | | | | | |
| 27 | 4.39 | 32.04 | 25.42 | 93.5 | 7.39 | | | | | | |
| 28 | 4.32 | 32.06 | 25.44 | 93.5 | 7.29 | | | | | | |
| 29 | 4.32 | 32.06 | 25.44 | 93.5 | 7.17 | | | | | | |
| 30 | 4.33 | 32.07 | 25.45 | 93.5 | 7.05 | 6.82 | 0.7 | .20 | 0.6 | 1.5 | 0.90 |
| 31 | 4.35 | 32.08 | 25.46 | 93.5 | 6.95 | | | | | | |
| 32 | 4.42 | 32.09 | 25.45 | 93.5 | 6.85 | | | | | | |
| 33 | 4.43 | 32.09 | 25.45 | 93.5 | 6.79 | | | | | | |
| 34 | 4.42 | 32.09 | 25.46 | 93.5 | 6.74 | | | | | | |
| 35 | 4.41 | 32.08 | 25.45 | 93.5 | 6.71 | | | | | | |
| 36 | 4.38 | 32.09 | 25.46 | 93.5 | 6.67 | | | | | | |
| 37 | 4.37 | 32.11 | 25.48 | 93.5 | 6.63 | | | | | | |
| 38 | 4.36 | 32.11 | 25.48 | 93.5 | 6.58 | | | | | | |
| 39 | 4.36 | 32.12 | 25.48 | 93.5 | 6.52 | | | | | | |
| 40 | 4.36 | 32.11 | 25.48 | 93.5 | 6.47 | 6.34 | 3.3 | .30 | 3.4 | 2.5 | 1.00 |
| 41 | 4.36 | 32.11 | 25.48 | 93.5 | 6.43 | | | | | | |
| 42 | 4.36 | 32.12 | 25.49 | 93.5 | 6.39 | | | | | | |
| 43 | 4.36 | 32.11 | 25.48 | 93.5 | 6.36 | | | | | | |
| 44 | 4.36 | 32.12 | 25.49 | 93.5 | 6.34 | | | | | | |
| 45 | 4.36 | 32.12 | 25.48 | 93.5 | 6.32 | | | | | | |
| 46 | 4.36 | 32.12 | 25.48 | 93.5 | 6.30 | | | | | | |
| 47 | 4.36 | 32.11 | 25.48 | 93.5 | 6.28 | | | | | | |
| 48 | 4.36 | 32.11 | 25.48 | 93.5 | 6.26 | | | | | | |
| 49 | 4.36 | 32.11 | 25.48 | 93.5 | 6.25 | | | | | | |
| 50 | 4.36 | 32.11 | 25.48 | 93.5 | 6.24 | | | | | | |
| 53 | 4.36 | 32.13 | 25.50 | 93.5 | 6.20 | 6.30 | 3.6 | .30 | 3.0 | 2.5 | 1.00 |


KELEZ CRUISE XWCC-22 STATION 80 6/04/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

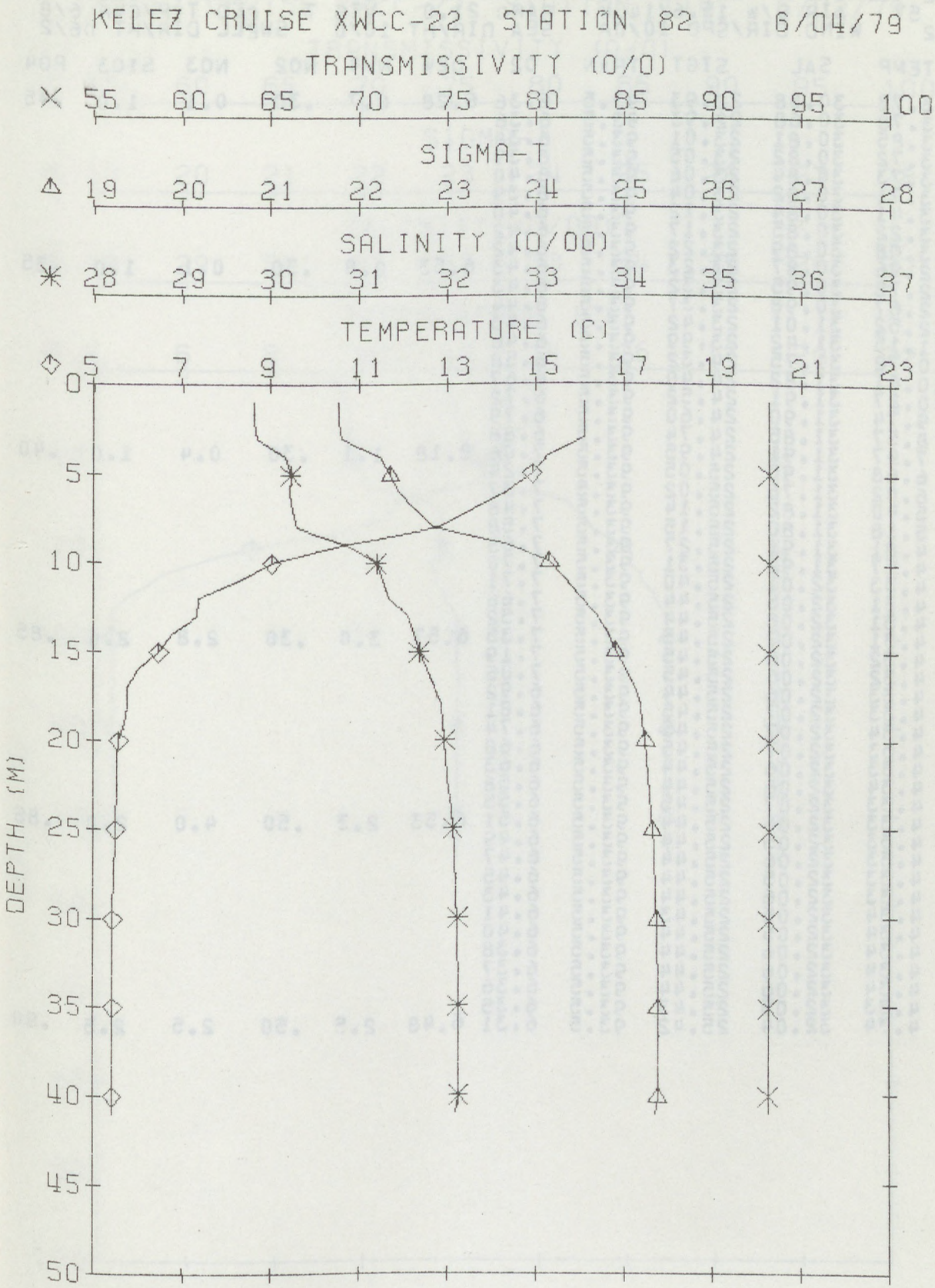
XWCC-22 STA. 81 LAT 39 44.5N; LONG 73 10.0W GMT 15.6 6/04/79
DEPTH 43 AIR D/W 15.6/15.6 BARO 14.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 06/18 SEA DIR/HT 10/2 SWELL DIR/HT 10/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.67 | 30.03 | 22.03 | 93.2 | 6.19 | 6.08 | 1.3 | <.10 | 0.2 | 1.0 | 0.15 |
| 2 | 15.67 | 30.03 | 22.03 | 93.2 | 6.18 | | | | | | |
| 3 | 15.67 | 30.06 | 22.05 | 93.2 | 6.18 | | | | | | |
| 4 | 15.64 | 30.07 | 22.06 | 93.2 | 6.18 | | | | | | |
| 5 | 15.62 | 30.08 | 22.08 | 93.2 | 6.18 | | | | | | |
| 6 | 15.47 | 30.05 | 22.09 | 93.2 | 6.17 | | | | | | |
| 7 | 14.71 | 30.13 | 22.31 | 93.2 | 6.22 | | | | | | |
| 8 | 14.02 | 30.07 | 22.40 | 93.2 | 6.27 | | | | | | |
| 9 | 13.21 | 30.18 | 22.65 | 93.2 | 6.32 | 6.45 | 1.4 | <.10 | 0.2 | 1.0 | 0.20 |
| 10 | 12.84 | 30.43 | 22.91 | 93.2 | 6.42 | | | | | | |
| 11 | 12.32 | 30.59 | 23.13 | 93.2 | 6.45 | | | | | | |
| 12 | 10.07 | 31.22 | 24.02 | 93.2 | 6.52 | | | | | | |
| 13 | 8.66 | 31.42 | 24.40 | 93.2 | 6.77 | | | | | | |
| 14 | 7.49 | 31.51 | 24.63 | 93.2 | 6.98 | | | | | | |
| 15 | 6.48 | 31.78 | 24.98 | 93.2 | 7.17 | | | | | | |
| 16 | 6.15 | 31.86 | 25.08 | 93.2 | 7.31 | | | | | | |
| 17 | 5.98 | 31.98 | 25.20 | 93.2 | 7.39 | | | | | | |
| 18 | 5.85 | 32.01 | 25.23 | 93.2 | 7.41 | | | | | | |
| 19 | 5.56 | 32.00 | 25.26 | 93.2 | 7.41 | | | | | | |
| 20 | 5.43 | 32.06 | 25.32 | 93.2 | 7.40 | | | | | | |
| 21 | 5.50 | 32.07 | 25.32 | 93.2 | 7.31 | 6.60 | 1.5 | .30 | 0.8 | 1.5 | 0.45 |
| 22 | 5.45 | 32.08 | 25.34 | 93.2 | 7.17 | | | | | | |
| 23 | 5.44 | 32.07 | 25.33 | 93.2 | 7.09 | | | | | | |
| 24 | 5.44 | 32.08 | 25.33 | 93.2 | 7.01 | | | | | | |
| 25 | 5.45 | 32.09 | 25.34 | 93.2 | 6.89 | | | | | | |
| 26 | 5.44 | 32.09 | 25.34 | 93.2 | 6.80 | | | | | | |
| 27 | 5.43 | 32.08 | 25.34 | 93.2 | 6.74 | | | | | | |
| 28 | 5.43 | 32.09 | 25.35 | 93.2 | 6.68 | | | | | | |
| 29 | 5.42 | 32.09 | 25.35 | 93.2 | 6.64 | | | | | | |
| 30 | 5.42 | 32.10 | 25.35 | 93.2 | 6.60 | 6.52 | 2.0 | .30 | 1.4 | 2.0 | 0.50 |
| 31 | 5.43 | 32.09 | 25.35 | 93.2 | 6.57 | | | | | | |
| 32 | 5.40 | 32.09 | 25.35 | 93.2 | 6.54 | | | | | | |
| 33 | 5.36 | 32.09 | 25.35 | 93.2 | 6.52 | | | | | | |
| 34 | 5.36 | 32.09 | 25.35 | 93.2 | 6.49 | | | | | | |
| 35 | 5.35 | 32.10 | 25.36 | 93.2 | 6.48 | | | | | | |
| 36 | 5.35 | 32.15 | 25.40 | 93.2 | 6.47 | | | | | | |
| 37 | 5.35 | 32.16 | 25.41 | 93.2 | 6.45 | | | | | | |
| 38 | 5.35 | 32.16 | 25.41 | 93.2 | 6.43 | | | | | | |
| 39 | 5.35 | 32.15 | 25.41 | 93.2 | 6.41 | | | | | | |
| 40 | 5.35 | 32.16 | 25.41 | 93.2 | 6.40 | | | | | | |
| 41 | 5.35 | 32.16 | 25.41 | 93.2 | 6.38 | | | | | | |
| 42 | 5.35 | 32.17 | 25.42 | 93.2 | 6.37 | 6.43 | 2.0 | .30 | 2.1 | 2.0 | 0.50 |


KELEZ CRUISE XWCC-22 STATION 81 6/04/79
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

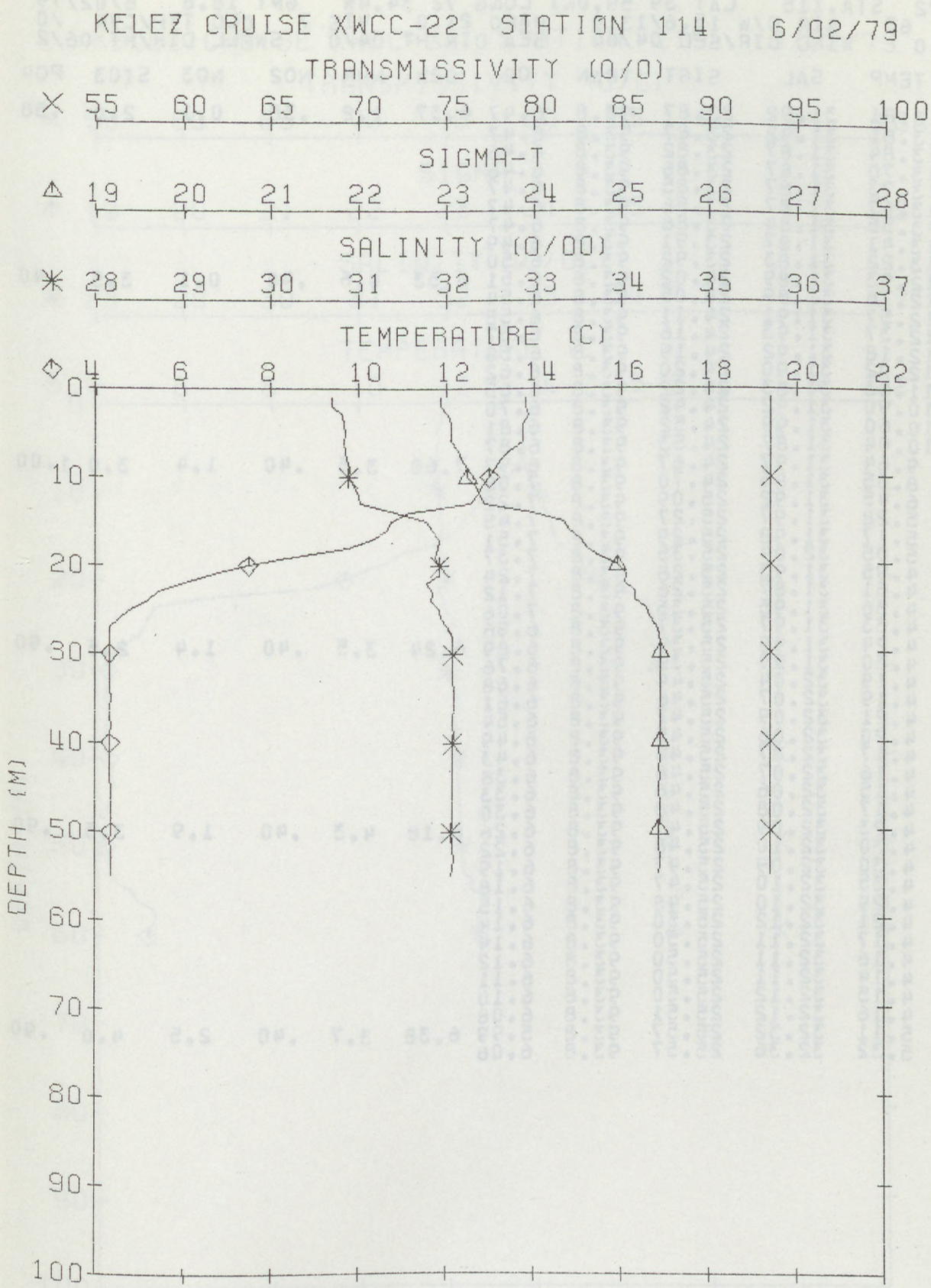
XWCC-22 STA. 82 LAT 39 50.4N; LONG 73 20.5W GMT 14.1 6/04/79
DEPTH 44 AIR D/W 16.1/15.6 BARO 15.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 05/10 SEA DIR/HT 13/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.08 | 29.80 | 21.77 | 93.2 | 6.20 | | | | | | |
| 2 | 16.08 | 29.80 | 21.77 | 93.2 | 6.19 | | | | | | |
| 3 | 16.08 | 29.85 | 21.80 | 93.2 | 6.19 | | | | | | |
| 4 | 15.25 | 30.16 | 22.22 | 93.2 | 6.22 | | | | | | |
| 5 | 14.91 | 30.22 | 22.34 | 93.2 | 6.30 | | | | | | |
| 6 | 14.35 | 30.21 | 22.45 | 93.2 | 6.32 | | | | | | |
| 7 | 13.57 | 30.24 | 22.63 | 93.2 | 6.38 | | | | | | |
| 8 | 12.82 | 30.30 | 22.82 | 93.2 | 6.44 | | | | | | |
| 9 | 10.60 | 30.86 | 23.65 | 93.2 | 6.52 | | | | | | |
| 10 | 9.01 | 31.19 | 24.16 | 93.2 | 6.72 | 6.40 | 1.5 | <.10 | 0.1 | 1.0 | 0.15 |
| 11 | 8.29 | 31.26 | 24.32 | 93.2 | 6.90 | | | | | | |
| 12 | 7.34 | 31.32 | 24.50 | 93.2 | 7.04 | | | | | | |
| 13 | 7.31 | 31.55 | 24.69 | 93.2 | 7.17 | | | | | | |
| 14 | 6.74 | 31.61 | 24.81 | 93.2 | 7.25 | | | | | | |
| 15 | 6.47 | 31.67 | 24.89 | 93.2 | 7.37 | | | | | | |
| 16 | 6.00 | 31.75 | 25.01 | 93.2 | 7.46 | | | | | | |
| 17 | 5.76 | 31.84 | 25.11 | 93.2 | 7.56 | | | | | | |
| 18 | 5.73 | 31.92 | 25.18 | 93.2 | 7.69 | | | | | | |
| 19 | 5.69 | 31.93 | 25.19 | 93.2 | 7.72 | | | | | | |
| 20 | 5.56 | 31.96 | 25.23 | 93.2 | 7.69 | 8.37 | 2.0 | <.10 | 0.4 | 1.5 | 0.30 |
| 21 | 5.53 | 31.98 | 25.25 | 93.2 | 7.61 | | | | | | |
| 22 | 5.52 | 32.00 | 25.26 | 93.2 | 7.51 | | | | | | |
| 23 | 5.52 | 32.02 | 25.28 | 93.2 | 7.41 | | | | | | |
| 24 | 5.50 | 32.04 | 25.30 | 93.2 | 7.31 | | | | | | |
| 25 | 5.50 | 32.06 | 25.32 | 93.2 | 7.22 | | | | | | |
| 26 | 5.47 | 32.07 | 25.33 | 93.2 | 7.14 | | | | | | |
| 27 | 5.44 | 32.08 | 25.34 | 93.2 | 7.06 | | | | | | |
| 28 | 5.44 | 32.09 | 25.34 | 93.2 | 6.97 | | | | | | |
| 29 | 5.43 | 32.09 | 25.35 | 93.2 | 6.88 | | | | | | |
| 30 | 5.43 | 32.11 | 25.36 | 93.2 | 6.78 | 6.34 | 2.5 | .30 | 1.5 | 2.0 | 0.50 |
| 31 | 5.43 | 32.11 | 25.36 | 93.2 | 6.71 | | | | | | |
| 32 | 5.43 | 32.11 | 25.36 | 93.2 | 6.64 | | | | | | |
| 33 | 5.43 | 32.12 | 25.37 | 93.2 | 6.56 | | | | | | |
| 34 | 5.42 | 32.13 | 25.38 | 93.2 | 6.50 | | | | | | |
| 35 | 5.42 | 32.12 | 25.37 | 93.2 | 6.44 | | | | | | |
| 36 | 5.42 | 32.12 | 25.37 | 93.2 | 6.41 | | | | | | |
| 37 | 5.42 | 32.12 | 25.37 | 93.2 | 6.37 | | | | | | |
| 38 | 5.42 | 32.12 | 25.37 | 93.2 | 6.34 | | | | | | |
| 39 | 5.42 | 32.13 | 25.38 | 93.2 | 6.32 | | | | | | |
| 40 | 5.42 | 32.13 | 25.38 | 93.2 | 6.31 | 6.20 | 3.0 | .40 | 2.4 | 2.5 | 0.55 |
| 41 | 5.42 | 32.10 | 25.35 | 93.2 | 6.23 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 82 6/04/79
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

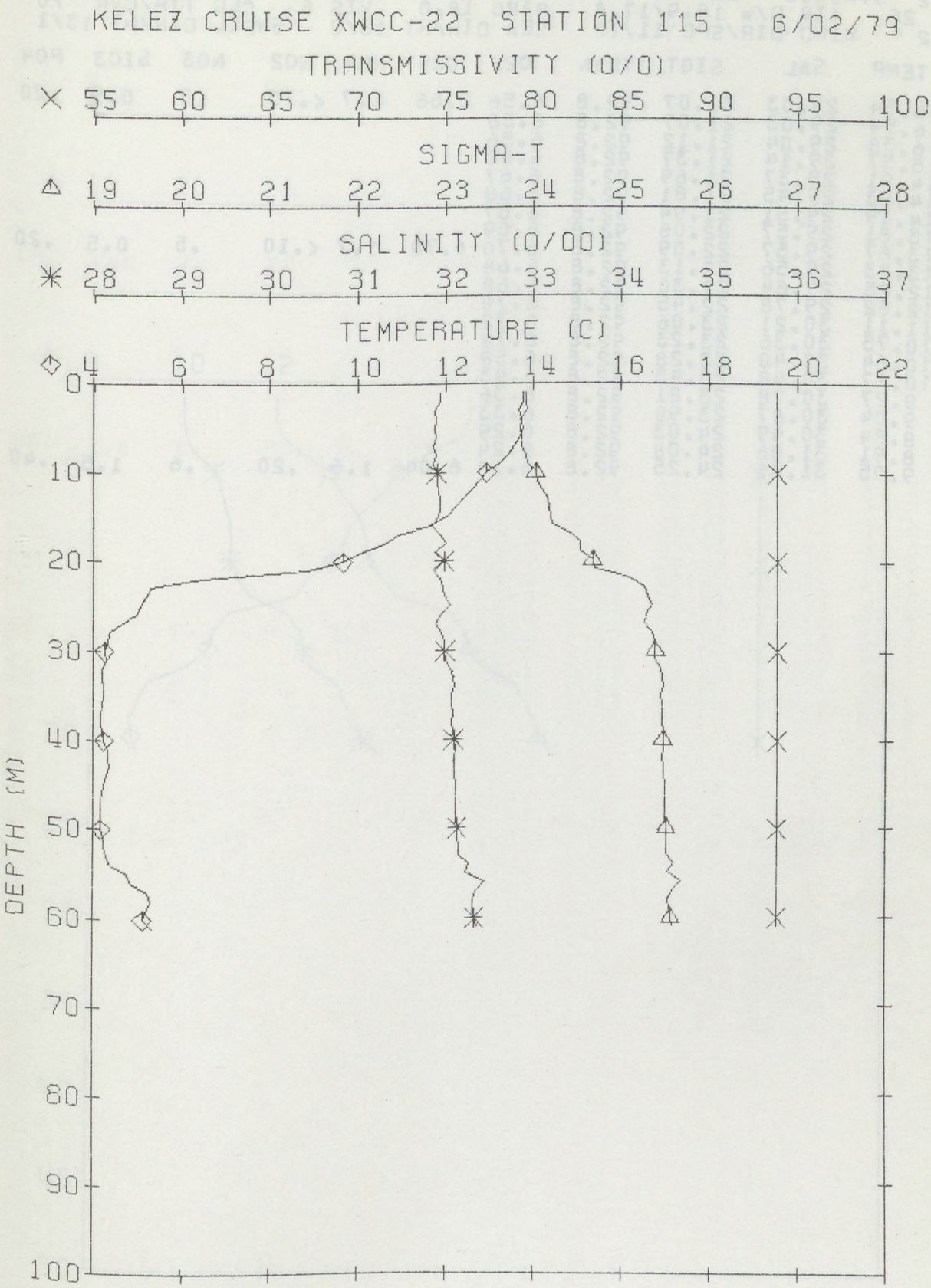
XWCC-22 STA.114 LAT 40 4.2N; LONG 72 45.2W GMT 20.3 6/02/79
DEPTH 57 AIR D/W 15.6/14.4 BARO 21.0 VIS 7 CLD TYP/CVR 6/8
WETHR 2 WIND DIR/SPD 10/08 SEA DIR/HT 10/0 SWELL DIR/HT 06/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.78 | 30.68 | 22.93 | 93.5 | 6.36 | 6.28 | 0.7 | .30 | 0.1 | 1.0 | .45 |
| 2 | 13.78 | 30.68 | 22.93 | 93.5 | 6.36 | | | | | | |
| 3 | 13.85 | 30.81 | 23.01 | 93.5 | 6.38 | | | | | | |
| 4 | 13.72 | 30.82 | 23.05 | 93.5 | 6.39 | | | | | | |
| 5 | 13.73 | 30.84 | 23.06 | 93.5 | 6.40 | | | | | | |
| 6 | 13.71 | 30.82 | 23.04 | 93.5 | 6.39 | | | | | | |
| 7 | 13.41 | 30.84 | 23.12 | 93.5 | 6.40 | | | | | | |
| 8 | 13.22 | 30.85 | 23.17 | 93.5 | 6.42 | | | | | | |
| 9 | 13.08 | 30.89 | 23.22 | 93.5 | 6.42 | | | | | | |
| 10 | 12.96 | 30.87 | 23.23 | 93.5 | 6.43 | 6.53 | 0.8 | .30 | 0.1 | 1.0 | .35 |
| 11 | 12.78 | 30.95 | 23.32 | 93.5 | 6.43 | | | | | | |
| 12 | 12.67 | 30.98 | 23.37 | 93.5 | 6.44 | | | | | | |
| 13 | 12.52 | 31.01 | 23.42 | 93.5 | 6.43 | | | | | | |
| 14 | 11.15 | 31.42 | 23.99 | 93.5 | 6.46 | | | | | | |
| 15 | 10.72 | 31.75 | 24.32 | 93.5 | 6.58 | | | | | | |
| 16 | 10.61 | 31.82 | 24.40 | 93.5 | 6.67 | | | | | | |
| 17 | 10.27 | 31.91 | 24.52 | 93.5 | 6.72 | | | | | | |
| 18 | 9.74 | 31.90 | 24.60 | 93.5 | 6.79 | | | | | | |
| 19 | 8.57 | 31.85 | 24.74 | 93.5 | 6.88 | | | | | | |
| 20 | 7.47 | 31.91 | 24.95 | 93.5 | 7.06 | 8.18 | 1.1 | .30 | 0.4 | 1.0 | .40 |
| 21 | 6.68 | 31.90 | 25.05 | 93.5 | 7.24 | | | | | | |
| 22 | 6.02 | 31.76 | 25.02 | 93.5 | 7.37 | | | | | | |
| 23 | 5.40 | 31.82 | 25.14 | 93.5 | 7.48 | | | | | | |
| 24 | 5.18 | 31.80 | 25.15 | 93.5 | 7.58 | | | | | | |
| 25 | 4.81 | 31.91 | 25.27 | 93.5 | 7.65 | | | | | | |
| 26 | 4.57 | 31.92 | 25.31 | 93.5 | 7.70 | | | | | | |
| 27 | 4.33 | 32.01 | 25.40 | 93.5 | 7.71 | | | | | | |
| 28 | 4.31 | 32.05 | 25.44 | 93.5 | 7.66 | | | | | | |
| 29 | 4.31 | 32.06 | 25.44 | 93.5 | 7.52 | | | | | | |
| 30 | 4.31 | 32.07 | 25.45 | 93.5 | 7.35 | 6.57 | 3.0 | .30 | 2.8 | 2.0 | .85 |
| 31 | 4.32 | 32.06 | 25.45 | 93.5 | 7.19 | | | | | | |
| 32 | 4.32 | 32.06 | 25.45 | 93.5 | 7.05 | | | | | | |
| 33 | 4.33 | 32.06 | 25.44 | 93.5 | 6.92 | | | | | | |
| 34 | 4.33 | 32.07 | 25.45 | 93.5 | 6.81 | | | | | | |
| 35 | 4.34 | 32.07 | 25.45 | 93.5 | 6.74 | | | | | | |
| 36 | 4.33 | 32.07 | 25.45 | 93.5 | 6.68 | | | | | | |
| 37 | 4.33 | 32.06 | 25.44 | 93.5 | 6.63 | | | | | | |
| 38 | 4.34 | 32.06 | 25.44 | 93.5 | 6.58 | | | | | | |
| 39 | 4.33 | 32.07 | 25.45 | 93.5 | 6.55 | | | | | | |
| 40 | 4.33 | 32.06 | 25.44 | 93.5 | 6.51 | 6.53 | 2.3 | .50 | 4.0 | 2.0 | .85 |
| 41 | 4.33 | 32.05 | 25.44 | 93.5 | 6.49 | | | | | | |
| 42 | 4.33 | 32.06 | 25.44 | 93.5 | 6.47 | | | | | | |
| 43 | 4.33 | 32.05 | 25.44 | 93.5 | 6.45 | | | | | | |
| 44 | 4.33 | 32.06 | 25.44 | 93.5 | 6.43 | | | | | | |
| 45 | 4.34 | 32.05 | 25.43 | 93.5 | 6.41 | | | | | | |
| 46 | 4.34 | 32.05 | 25.44 | 93.5 | 6.40 | | | | | | |
| 47 | 4.34 | 32.06 | 25.44 | 93.5 | 6.38 | | | | | | |
| 48 | 4.34 | 32.06 | 25.44 | 93.5 | 6.37 | | | | | | |
| 49 | 4.34 | 32.06 | 25.44 | 93.5 | 6.36 | | | | | | |
| 50 | 4.33 | 32.05 | 25.43 | 93.5 | 6.35 | | | | | | |
| 55 | 4.34 | 32.04 | 25.42 | 93.5 | 6.31 | 6.48 | 2.5 | .50 | 2.5 | 2.5 | .90 |


KELEZ CRUISE XWCC-22 STATION 114 6/02/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

XWCC-22 STA.115 LAT 39 59.0N; LONG 72 34.4W GMT 18.8 6/02/79
DEPTH 63 AIR D/W 15.6/13.9 BARO 21.0 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 04/04 SEA DIR/HT 04/0 SWELL DIR/HT 06/2

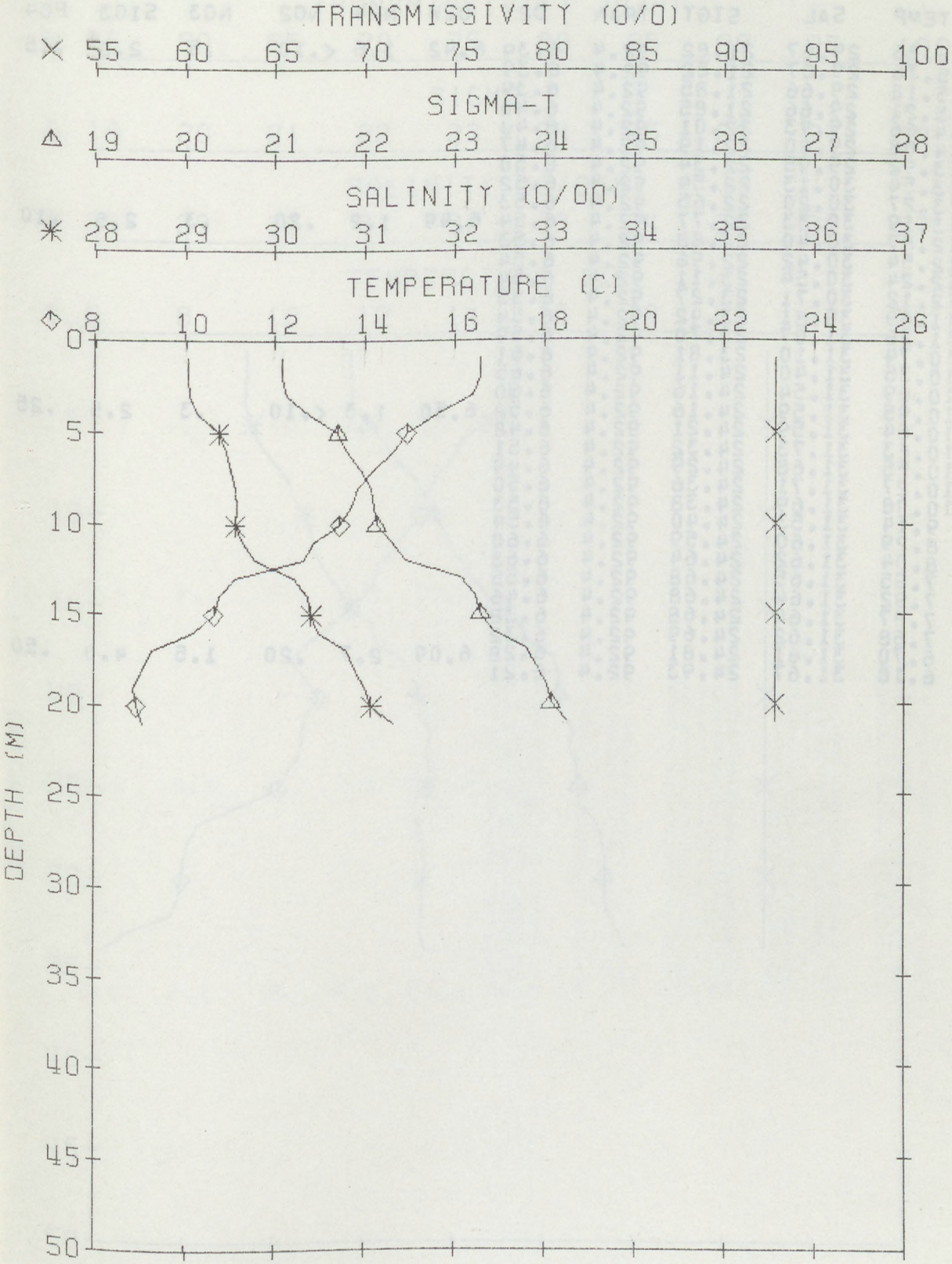
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.81 | 31.92 | 23.87 | 93.8 | 6.47 | 6.37 | 1.2 | .30 | 0.1 | 2.0 | .50 |
| 2 | 13.81 | 31.92 | 23.87 | 93.8 | 6.47 | | | | | | |
| 3 | 13.84 | 31.87 | 23.82 | 93.8 | 6.46 | | | | | | |
| 4 | 13.70 | 31.87 | 23.86 | 93.8 | 6.46 | | | | | | |
| 5 | 13.73 | 31.87 | 23.85 | 93.8 | 6.47 | | | | | | |
| 6 | 13.67 | 31.87 | 23.86 | 93.8 | 6.47 | | | | | | |
| 7 | 13.55 | 31.84 | 23.86 | 93.8 | 6.47 | | | | | | |
| 8 | 13.41 | 31.87 | 23.91 | 93.8 | 6.49 | | | | | | |
| 9 | 13.22 | 31.83 | 23.92 | 93.8 | 6.50 | | | | | | |
| 10 | 12.93 | 31.89 | 24.02 | 93.8 | 6.51 | 6.53 | 0.6 | .40 | 0.1 | 3.5 | .40 |
| 11 | 12.76 | 31.89 | 24.05 | 93.8 | 6.54 | | | | | | |
| 12 | 12.57 | 31.91 | 24.11 | 93.8 | 6.55 | | | | | | |
| 13 | 12.37 | 31.93 | 24.16 | 93.8 | 6.57 | | | | | | |
| 14 | 12.18 | 31.92 | 24.19 | 93.8 | 6.59 | | | | | | |
| 15 | 12.02 | 31.90 | 24.20 | 93.8 | 6.62 | | | | | | |
| 16 | 11.63 | 31.83 | 24.22 | 93.8 | 6.65 | | | | | | |
| 17 | 10.90 | 31.92 | 24.42 | 93.8 | 6.70 | | | | | | |
| 18 | 10.60 | 31.99 | 24.52 | 93.8 | 6.81 | | | | | | |
| 19 | 10.04 | 31.87 | 24.53 | 93.8 | 6.87 | | | | | | |
| 20 | 9.64 | 31.97 | 24.67 | 93.8 | 6.97 | 7.60 | 3.6 | .40 | 1.4 | 3.0 | 1.00 |
| 21 | 8.85 | 31.85 | 24.70 | 93.8 | 7.05 | | | | | | |
| 22 | 6.45 | 31.92 | 25.09 | 93.8 | 7.22 | | | | | | |
| 23 | 5.28 | 31.97 | 25.27 | 93.8 | 7.45 | | | | | | |
| 24 | 5.17 | 31.98 | 25.29 | 93.8 | 7.51 | | | | | | |
| 25 | 5.05 | 32.04 | 25.35 | 93.8 | 7.37 | | | | | | |
| 26 | 4.95 | 31.93 | 25.28 | 93.8 | 7.24 | | | | | | |
| 27 | 4.61 | 31.87 | 25.26 | 93.8 | 7.12 | | | | | | |
| 28 | 4.36 | 31.95 | 25.35 | 93.8 | 7.06 | | | | | | |
| 29 | 4.33 | 31.97 | 25.37 | 93.8 | 6.96 | | | | | | |
| 30 | 4.24 | 31.98 | 25.39 | 93.8 | 6.89 | 6.24 | 3.5 | .40 | 1.4 | 2.5 | .90 |
| 31 | 4.30 | 31.99 | 25.39 | 93.8 | 6.76 | | | | | | |
| 32 | 4.19 | 32.04 | 25.44 | 93.8 | 6.68 | | | | | | |
| 33 | 4.19 | 32.07 | 25.46 | 93.8 | 6.61 | | | | | | |
| 34 | 4.21 | 32.09 | 25.47 | 93.8 | 6.54 | | | | | | |
| 35 | 4.20 | 32.06 | 25.45 | 93.8 | 6.49 | | | | | | |
| 36 | 4.17 | 32.07 | 25.46 | 93.8 | 6.43 | | | | | | |
| 37 | 4.16 | 32.07 | 25.46 | 93.8 | 6.38 | | | | | | |
| 38 | 4.15 | 32.06 | 25.46 | 93.8 | 6.33 | | | | | | |
| 39 | 4.17 | 32.08 | 25.48 | 93.8 | 6.30 | | | | | | |
| 40 | 4.23 | 32.09 | 25.47 | 93.8 | 6.26 | 6.16 | 4.3 | .40 | 1.9 | 3.5 | .90 |
| 41 | 4.30 | 32.10 | 25.48 | 93.8 | 6.22 | | | | | | |
| 42 | 4.30 | 32.09 | 25.47 | 93.8 | 6.19 | | | | | | |
| 43 | 4.35 | 32.10 | 25.47 | 93.8 | 6.18 | | | | | | |
| 44 | 4.29 | 32.10 | 25.48 | 93.8 | 6.15 | | | | | | |
| 45 | 4.21 | 32.12 | 25.50 | 93.8 | 6.14 | | | | | | |
| 46 | 4.17 | 32.11 | 25.50 | 93.8 | 6.14 | | | | | | |
| 47 | 4.16 | 32.11 | 25.50 | 93.8 | 6.12 | | | | | | |
| 48 | 4.14 | 32.11 | 25.50 | 93.8 | 6.11 | | | | | | |
| 49 | 4.15 | 32.12 | 25.50 | 93.8 | 6.10 | | | | | | |
| 50 | 4.16 | 32.12 | 25.51 | 93.8 | 6.08 | | | | | | |
| 60 | 5.11 | 32.32 | 25.57 | 93.8 | 5.99 | 6.38 | 3.7 | .40 | 2.5 | 4.0 | .90 |
| 61 | 5.32 | 32.36 | 25.57 | 93.8 | 6.06 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 115 6/02/79
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
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

XWCC-22 STA.116 LAT 40 30.8N; LONG 73 18.7W GMT 21.7 6/01/79
DEPTH 26 AIR D/W 18.9/17.8 BARO 18.0 VIS 6 CLD TYP/CVR /0
WETHR 2 WIND DIR/SPD 11/10 SEA DIR/HT 13/0 SWELL DIR/HT 13/1

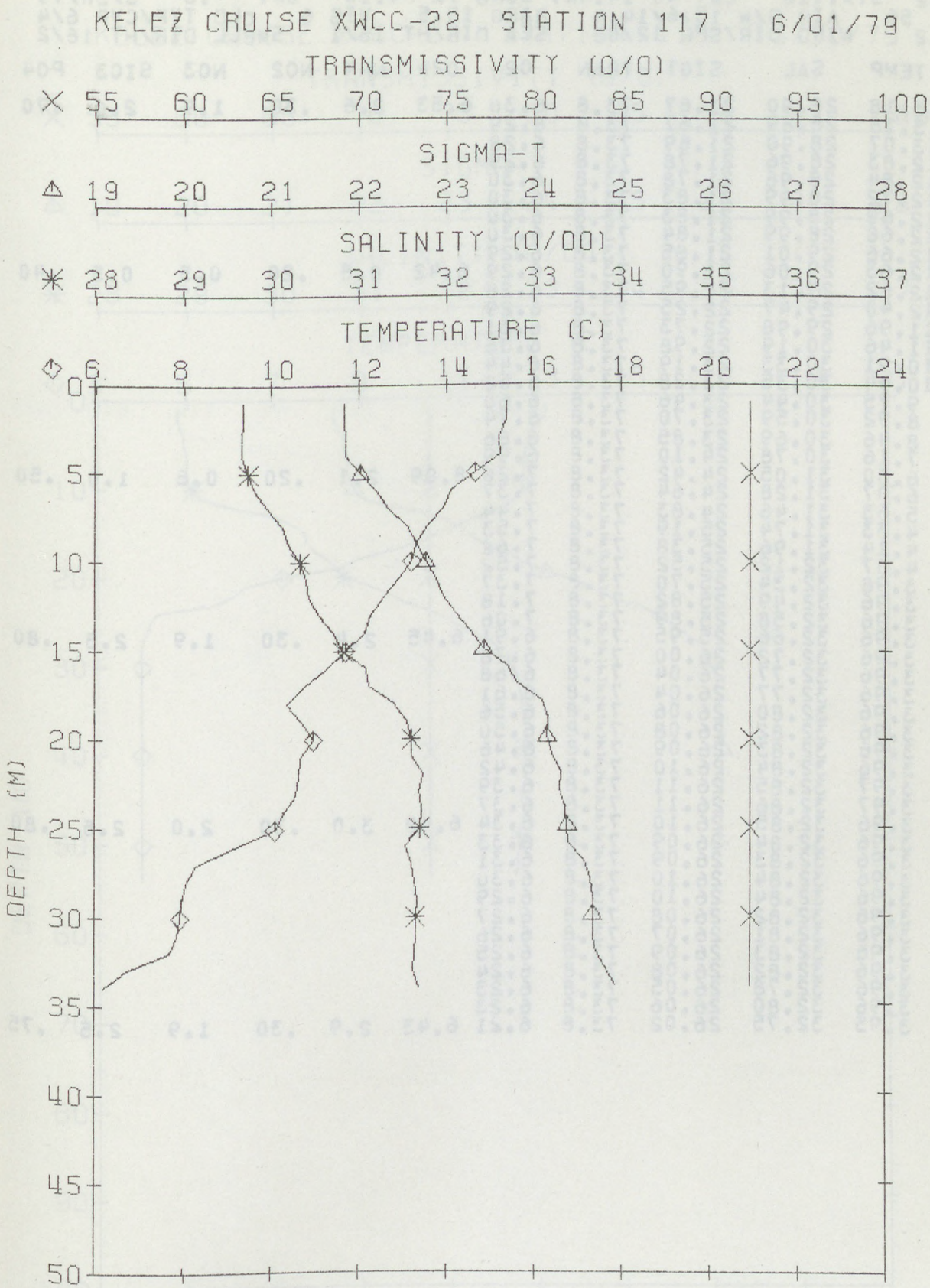
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.54 | 29.03 | 21.07 | 92.8 | 6.56 | 6.66 | 1.7 | <.10 | .5 | 0.5 | .20 |
| 2 | 16.54 | 29.03 | 21.07 | 92.8 | 6.56 | | | | | | |
| 3 | 16.38 | 29.04 | 21.12 | 92.8 | 6.56 | | | | | | |
| 4 | 15.57 | 29.14 | 21.37 | 92.8 | 6.60 | | | | | | |
| 5 | 14.91 | 29.37 | 21.69 | 92.8 | 6.67 | | | | | | |
| 6 | 14.63 | 29.45 | 21.81 | 92.8 | 6.68 | | | | | | |
| 7 | 14.19 | 29.51 | 21.94 | 92.8 | 6.67 | | | | | | |
| 8 | 13.81 | 29.57 | 22.06 | 92.8 | 6.69 | | | | | | |
| 9 | 13.67 | 29.57 | 22.09 | 92.8 | 6.70 | 6.70 | 1.7 | <.10 | .5 | 0.5 | .20 |
| 10 | 13.43 | 29.56 | 22.13 | 92.8 | 6.68 | | | | | | |
| 11 | 12.85 | 29.64 | 22.30 | 92.8 | 6.68 | | | | | | |
| 12 | 12.62 | 29.78 | 22.45 | 92.8 | 6.70 | | | | | | |
| 13 | 11.11 | 30.21 | 23.06 | 92.8 | 6.72 | | | | | | |
| 14 | 10.75 | 30.36 | 23.23 | 92.8 | 6.72 | | | | | | |
| 15 | 10.64 | 30.40 | 23.28 | 92.8 | 6.58 | | | | | | |
| 16 | 10.17 | 30.48 | 23.43 | 92.8 | 6.43 | | | | | | |
| 17 | 9.27 | 30.78 | 23.81 | 92.8 | 6.36 | | | | | | |
| 18 | 9.04 | 30.87 | 23.90 | 92.8 | 6.33 | | | | | | |
| 19 | 8.84 | 30.99 | 24.03 | 92.8 | 6.29 | | | | | | |
| 20 | 8.91 | 31.06 | 24.08 | 92.8 | 6.24 | | | | | | |
| 21 | 9.05 | 31.31 | 24.25 | 92.8 | 6.18 | 6.04 | 1.6 | .20 | .6 | 1.5 | .40 |

KELEZ CRUISE XWCC-22 STATION 116 6/01/79



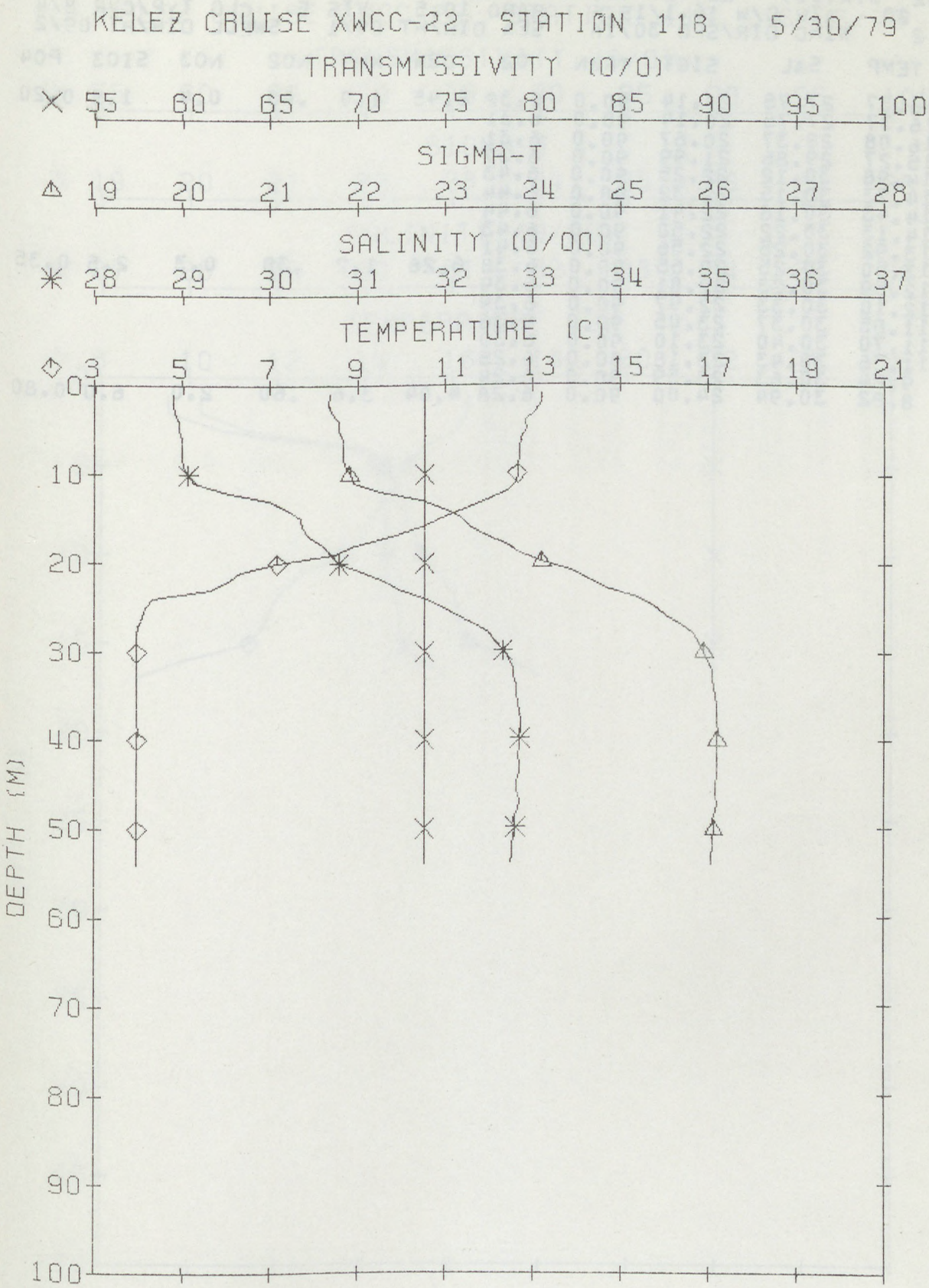
XWCC-22 STA.117 LAT 40 23.0N; LONG 73 5.1W GMT 23.5 6/01/79
DEPTH 36 AIR D/W 17.5/16.4 BARO 17.5 VIS 3 CLD TYP/CVR X/8
WETHR 4 WIND DIR/SPD 10/11 SEA DIR/HT 13/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.36 | 29.67 | 21.82 | 92.4 | 6.39 | 6.42 | 1.6 | <.10 | .5 | 2.0 | .15 |
| 2 | 15.36 | 29.67 | 21.82 | 92.4 | 6.39 | | | | | | |
| 3 | 15.18 | 29.66 | 21.85 | 92.4 | 6.39 | | | | | | |
| 4 | 15.21 | 29.66 | 21.85 | 92.4 | 6.40 | | | | | | |
| 5 | 14.66 | 29.73 | 22.01 | 92.4 | 6.40 | | | | | | |
| 6 | 14.08 | 29.80 | 22.19 | 92.4 | 6.47 | | | | | | |
| 7 | 13.92 | 29.95 | 22.34 | 92.4 | 6.50 | | | | | | |
| 8 | 13.54 | 30.13 | 22.54 | 92.4 | 6.52 | | | | | | |
| 9 | 13.27 | 30.20 | 22.65 | 92.4 | 6.53 | | | | | | |
| 10 | 13.19 | 30.33 | 22.77 | 92.4 | 6.54 | 6.49 | 1.2 | .20 | .3 | 2.5 | .10 |
| 11 | 12.87 | 30.40 | 22.88 | 92.4 | 6.53 | | | | | | |
| 12 | 12.54 | 30.42 | 22.96 | 92.4 | 6.54 | | | | | | |
| 13 | 12.24 | 30.54 | 23.11 | 92.4 | 6.54 | | | | | | |
| 14 | 12.12 | 30.71 | 23.27 | 92.4 | 6.55 | | | | | | |
| 15 | 11.69 | 30.81 | 23.42 | 92.4 | 6.54 | | | | | | |
| 16 | 11.26 | 31.07 | 23.70 | 92.4 | 6.59 | | | | | | |
| 17 | 10.74 | 31.10 | 23.81 | 92.4 | 6.61 | | | | | | |
| 18 | 10.35 | 31.40 | 24.11 | 92.4 | 6.65 | | | | | | |
| 19 | 10.69 | 31.54 | 24.16 | 92.4 | 6.60 | | | | | | |
| 20 | 10.95 | 31.59 | 24.16 | 92.4 | 6.52 | 6.50 | 1.3 | <.10 | .3 | 2.5 | .25 |
| 21 | 10.64 | 31.59 | 24.21 | 92.4 | 6.48 | | | | | | |
| 22 | 10.63 | 31.73 | 24.32 | 92.4 | 6.51 | | | | | | |
| 23 | 10.55 | 31.68 | 24.29 | 92.4 | 6.49 | | | | | | |
| 24 | 10.27 | 31.71 | 24.36 | 92.4 | 6.50 | | | | | | |
| 25 | 10.08 | 31.69 | 24.38 | 92.4 | 6.53 | | | | | | |
| 26 | 9.14 | 31.53 | 24.40 | 92.4 | 6.54 | | | | | | |
| 27 | 8.29 | 31.60 | 24.59 | 92.4 | 6.60 | | | | | | |
| 28 | 8.04 | 31.62 | 24.64 | 92.4 | 6.63 | | | | | | |
| 29 | 7.95 | 31.65 | 24.68 | 92.4 | 6.55 | | | | | | |
| 30 | 7.92 | 31.64 | 24.68 | 92.4 | 6.46 | | | | | | |
| 31 | 7.87 | 31.64 | 24.68 | 92.4 | 6.38 | | | | | | |
| 32 | 7.68 | 31.62 | 24.69 | 92.4 | 6.32 | | | | | | |
| 33 | 6.70 | 31.61 | 24.81 | 92.4 | 6.28 | 6.09 | 2.7 | .20 | 1.5 | 4.0 | .50 |
| 34 | 6.18 | 31.67 | 24.93 | 92.4 | 6.21 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 117 6/01/79
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

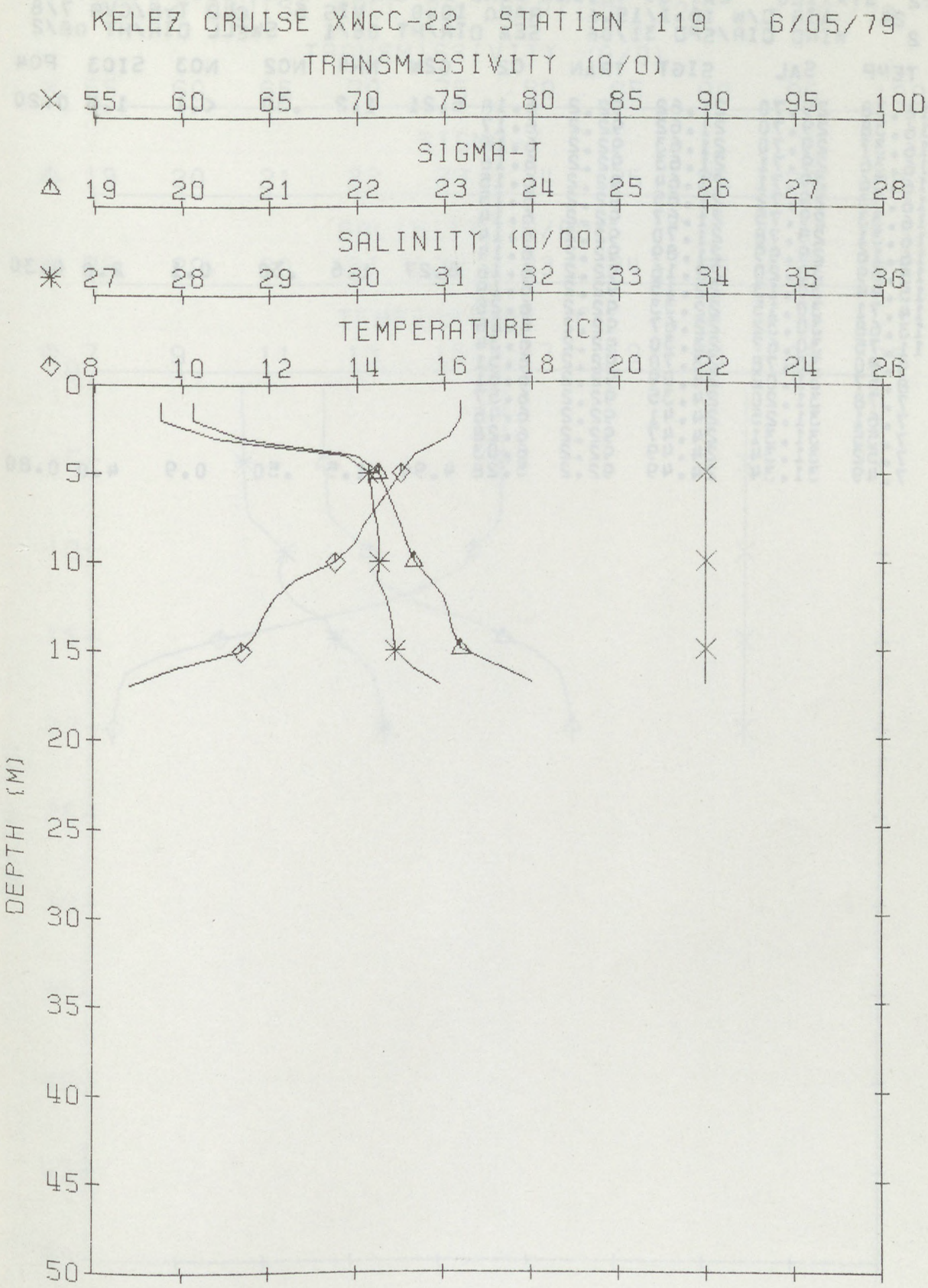
XWCC-22 STA.118 LAT 40 14.4N; LONG 72 34.1W GMT .3 5/30/79
DEPTH 56 AIR D/W 15.6/14.4 BARO 15.5 VIS 6 CLD TYP/CVR 6/4
WETHR 2 WIND DIR/SPD 12/08 SEA DIR/HT 16/1 SWELL DIR/HT 16/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.18 | 28.90 | 21.67 | 73.8 | 6.30 | 6.53 | 2.6 | .30 | 1.9 | 2.0 | .70 |
| 2 | 13.18 | 28.89 | 21.67 | 73.8 | 6.29 | | | | | | |
| 3 | 13.07 | 28.90 | 21.69 | 73.8 | 6.28 | | | | | | |
| 4 | 12.83 | 28.96 | 21.78 | 73.8 | 6.29 | | | | | | |
| 5 | 12.84 | 28.96 | 21.78 | 73.8 | 6.30 | | | | | | |
| 6 | 12.72 | 28.99 | 21.83 | 73.8 | 6.30 | | | | | | |
| 7 | 12.69 | 28.99 | 21.83 | 73.8 | 6.30 | | | | | | |
| 8 | 12.68 | 28.99 | 21.84 | 73.8 | 6.30 | | | | | | |
| 9 | 12.66 | 29.01 | 21.85 | 73.8 | 6.29 | | | | | | |
| 10 | 12.63 | 29.06 | 21.90 | 73.8 | 6.29 | 6.42 | 0.8 | .20 | 0.5 | 0.5 | .40 |
| 11 | 12.62 | 29.13 | 21.95 | 73.8 | 6.28 | | | | | | |
| 12 | 12.40 | 29.47 | 22.25 | 73.8 | 6.29 | | | | | | |
| 13 | 11.96 | 29.98 | 22.73 | 73.8 | 6.31 | | | | | | |
| 14 | 11.46 | 30.19 | 22.98 | 73.8 | 6.36 | | | | | | |
| 15 | 10.91 | 30.33 | 23.19 | 73.8 | 6.44 | | | | | | |
| 16 | 10.44 | 30.35 | 23.28 | 73.8 | 6.52 | | | | | | |
| 17 | 9.75 | 30.44 | 23.46 | 73.8 | 6.60 | | | | | | |
| 18 | 8.92 | 30.59 | 23.70 | 73.8 | 6.74 | | | | | | |
| 19 | 8.46 | 30.69 | 23.85 | 73.8 | 6.86 | | | | | | |
| 20 | 7.16 | 30.78 | 24.10 | 73.8 | 6.99 | | | | | | |
| 21 | 6.30 | 31.05 | 24.42 | 73.8 | 7.20 | 8.09 | 2.1 | .20 | 0.6 | 1.0 | .50 |
| 22 | 6.07 | 31.28 | 24.64 | 73.8 | 7.37 | | | | | | |
| 23 | 5.63 | 31.46 | 24.83 | 73.8 | 7.44 | | | | | | |
| 24 | 4.33 | 31.74 | 25.19 | 73.8 | 7.53 | | | | | | |
| 25 | 4.14 | 31.96 | 25.38 | 73.8 | 7.62 | | | | | | |
| 26 | 4.07 | 32.12 | 25.52 | 73.8 | 7.52 | | | | | | |
| 27 | 3.98 | 32.34 | 25.70 | 73.8 | 7.37 | | | | | | |
| 28 | 3.96 | 32.49 | 25.82 | 73.8 | 7.18 | | | | | | |
| 29 | 3.96 | 32.58 | 25.89 | 73.8 | 7.06 | | | | | | |
| 30 | 3.96 | 32.66 | 25.95 | 73.8 | 6.91 | 6.45 | 2.4 | .30 | 1.9 | 2.5 | .80 |
| 31 | 3.96 | 32.72 | 26.00 | 73.8 | 6.78 | | | | | | |
| 32 | 3.96 | 32.77 | 26.04 | 73.8 | 6.68 | | | | | | |
| 33 | 3.96 | 32.77 | 26.04 | 73.8 | 6.61 | | | | | | |
| 34 | 3.96 | 32.80 | 26.06 | 73.8 | 6.56 | | | | | | |
| 35 | 3.96 | 32.82 | 26.08 | 73.8 | 6.50 | | | | | | |
| 36 | 3.96 | 32.83 | 26.09 | 73.8 | 6.46 | | | | | | |
| 37 | 3.96 | 32.84 | 26.10 | 73.8 | 6.42 | | | | | | |
| 38 | 3.97 | 32.85 | 26.11 | 73.8 | 6.39 | | | | | | |
| 39 | 3.97 | 32.86 | 26.11 | 73.8 | 6.37 | | | | | | |
| 40 | 3.96 | 32.85 | 26.10 | 73.8 | 6.34 | 6.42 | 3.0 | .30 | 2.0 | 2.5 | .80 |
| 41 | 3.96 | 32.84 | 26.09 | 73.8 | 6.33 | | | | | | |
| 42 | 3.96 | 32.83 | 26.09 | 73.8 | 6.31 | | | | | | |
| 43 | 3.96 | 32.84 | 26.10 | 73.8 | 6.30 | | | | | | |
| 44 | 3.96 | 32.84 | 26.10 | 73.8 | 6.29 | | | | | | |
| 45 | 3.96 | 32.82 | 26.08 | 73.8 | 6.27 | | | | | | |
| 46 | 3.96 | 32.81 | 26.07 | 73.8 | 6.26 | | | | | | |
| 47 | 3.96 | 32.83 | 26.09 | 73.8 | 6.25 | | | | | | |
| 48 | 3.96 | 32.82 | 26.08 | 73.8 | 6.24 | | | | | | |
| 49 | 3.96 | 32.78 | 26.05 | 73.8 | 6.23 | | | | | | |
| 50 | 3.96 | 32.80 | 26.06 | 73.8 | 6.23 | | | | | | |
| 54 | 3.95 | 32.75 | 26.02 | 73.8 | 6.21 | 6.43 | 2.9 | .30 | 1.9 | 2.5 | .75 |


KELEZ CRUISE XWCC-22 STATION 118 5/30/79
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)
3 5 7 9 11 13 15 17 19 21
DEPTH (M)
0 10 20 30 40 50 60 70 80 90 100

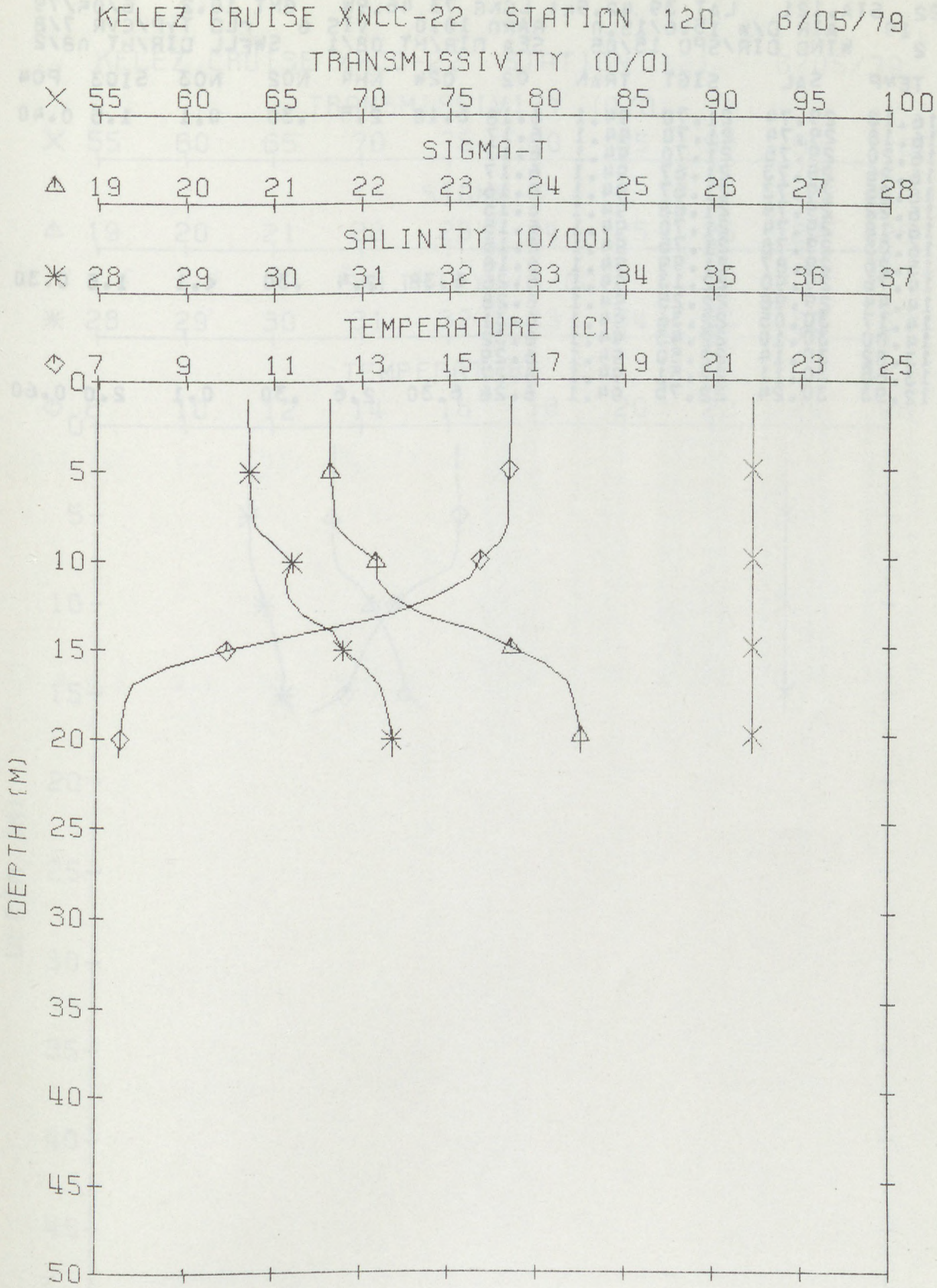
XWCC-22 STA.119 LAT 39 48.4N; LONG 74 .0W GMT 12.2 6/05/79
DEPTH 20 AIR D/W 16.1/15.6 BARO 10.5 VIS 5 CLD TYP/CVR 8/4
WETHR 2 WIND DIR/SPD 30/16 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.37 | 27.75 | 20.14 | 90.0 | 6.32 | 6.45 | 1.0 | .40 | 0.4 | 1.5 | 0.20 |
| 2 | 16.37 | 27.75 | 20.14 | 90.0 | 6.31 | | | | | | |
| 3 | 16.08 | 28.37 | 20.67 | 90.0 | 6.31 | | | | | | |
| 4 | 15.27 | 29.86 | 21.99 | 90.0 | 6.37 | | | | | | |
| 5 | 14.98 | 30.12 | 22.25 | 90.0 | 6.43 | | | | | | |
| 6 | 14.73 | 30.15 | 22.32 | 90.0 | 6.44 | | | | | | |
| 7 | 14.43 | 30.18 | 22.41 | 90.0 | 6.44 | | | | | | |
| 8 | 14.13 | 30.22 | 22.50 | 90.0 | 6.43 | | | | | | |
| 9 | 13.92 | 30.25 | 22.56 | 90.0 | 6.41 | | | | | | |
| 10 | 13.50 | 30.25 | 22.65 | 90.0 | 6.38 | 6.26 | 1.2 | .30 | 0.3 | 2.5 | 0.35 |
| 11 | 12.59 | 30.23 | 22.81 | 90.0 | 6.39 | | | | | | |
| 12 | 12.10 | 30.33 | 22.97 | 90.0 | 6.39 | | | | | | |
| 13 | 11.85 | 30.37 | 23.05 | 90.0 | 6.36 | | | | | | |
| 14 | 11.70 | 30.40 | 23.10 | 90.0 | 6.30 | | | | | | |
| 15 | 11.36 | 30.43 | 23.18 | 90.0 | 6.25 | | | | | | |
| 16 | 9.84 | 30.63 | 23.59 | 90.0 | 6.24 | | | | | | |
| 17 | 8.82 | 30.94 | 24.00 | 90.0 | 6.28 | 4.04 | 3.6 | .60 | 2.0 | 6.0 | 0.80 |


KELEZ CRUISE XWCC-22 STATION 119 6/05/79
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)
27 28 29 30 31 32 33 34 35 36
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-22 STA.120 LAT 39 46.5N; LONG 73 55.5W GMT 11.4 6/05/79
DEPTH 24 AIR D/W 16.1/15.6 BARO 10.0 VIS 5 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 31/06 SEA DIR/HT 08/1 SWELL DIR/HT 08/2

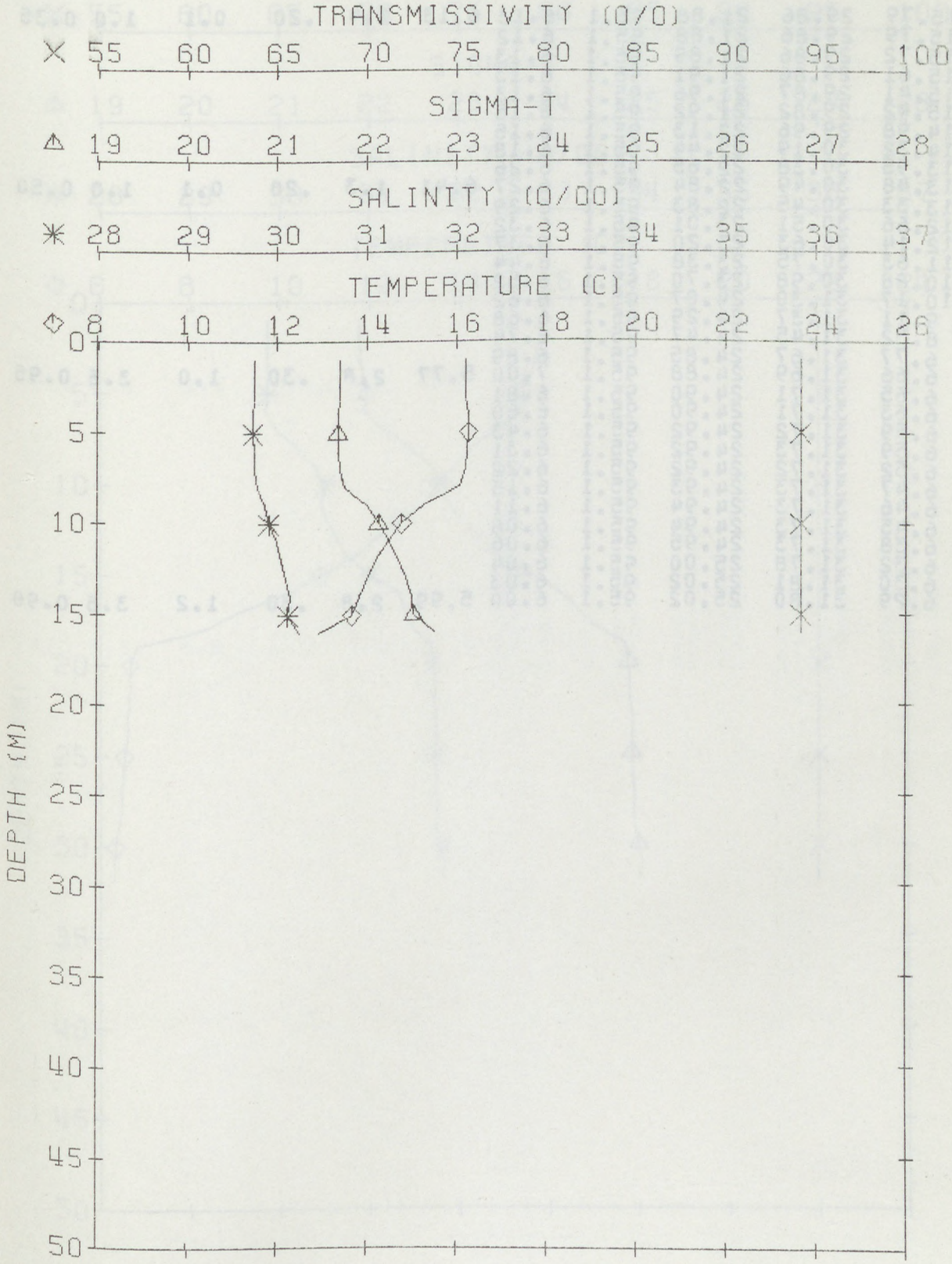
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.38 | 29.70 | 21.62 | 92.2 | 6.18 | 6.21 | 1.2 | .30 | <.1 | 1.5 | 0.20 |
| 2 | 16.38 | 29.70 | 21.62 | 92.2 | 6.17 | | | | | | |
| 3 | 16.37 | 29.70 | 21.63 | 92.2 | 6.16 | | | | | | |
| 4 | 16.36 | 29.71 | 21.63 | 92.2 | 6.16 | | | | | | |
| 5 | 16.36 | 29.71 | 21.64 | 92.2 | 6.15 | | | | | | |
| 6 | 16.33 | 29.72 | 21.65 | 92.2 | 6.15 | | | | | | |
| 7 | 16.33 | 29.75 | 21.67 | 92.2 | 6.14 | | | | | | |
| 8 | 16.31 | 29.78 | 21.70 | 92.2 | 6.14 | | | | | | |
| 9 | 16.16 | 29.99 | 21.89 | 92.2 | 6.14 | | | | | | |
| 10 | 15.69 | 30.20 | 22.16 | 92.2 | 6.16 | 6.27 | 1.6 | .30 | 0.1 | 2.0 | 0.30 |
| 11 | 15.44 | 30.13 | 22.15 | 92.2 | 6.19 | | | | | | |
| 12 | 14.71 | 30.15 | 22.33 | 92.2 | 6.25 | | | | | | |
| 13 | 13.68 | 30.32 | 22.67 | 92.2 | 6.26 | | | | | | |
| 14 | 11.75 | 30.67 | 23.30 | 92.2 | 6.34 | | | | | | |
| 15 | 9.90 | 30.78 | 23.70 | 92.2 | 6.51 | | | | | | |
| 16 | 8.57 | 31.02 | 24.09 | 92.2 | 6.61 | | | | | | |
| 17 | 7.78 | 31.20 | 24.35 | 92.2 | 6.57 | | | | | | |
| 18 | 7.61 | 31.25 | 24.41 | 92.2 | 6.45 | | | | | | |
| 19 | 7.55 | 31.31 | 24.47 | 92.2 | 6.28 | | | | | | |
| 20 | 7.52 | 31.34 | 24.49 | 92.2 | 6.03 | | | | | | |
| 21 | 7.49 | 31.34 | 24.49 | 92.2 | 5.28 | 4.94 | 1.5 | .50 | 0.9 | 4.0 | 0.80 |


KELEZ CRUISE XWCC-22 STATION 120 6/05/79
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-22 STA.121 LAT 39 42.9N LONG 73 46.9W GMT 10.2 6/05/79
DEPTH 19 AIR D/W 15.6/15.0 BARO 10.0 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 15/05 SEA DIR/HT 08/1 SWELL DIR/HT 08/2

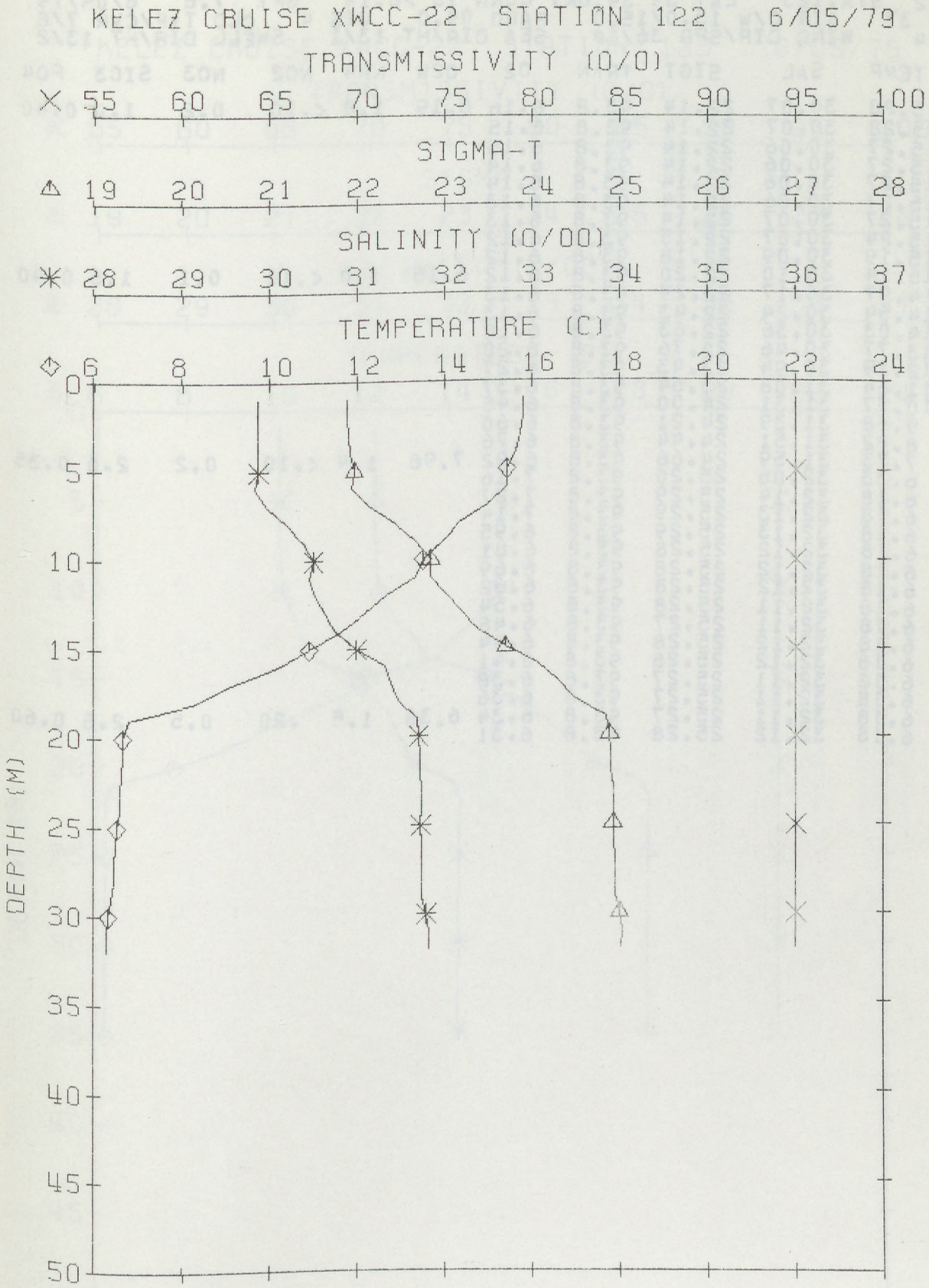
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.18 | 29.74 | 21.70 | 94.1 | 6.18 | 6.18 | 2.5 | .30 | 0.1 | 1.5 | 0.40 |
| 2 | 16.18 | 29.74 | 21.70 | 94.1 | 6.17 | | | | | | |
| 3 | 16.20 | 29.75 | 21.70 | 94.1 | 6.17 | | | | | | |
| 4 | 16.26 | 29.73 | 21.67 | 94.1 | 6.17 | | | | | | |
| 5 | 16.25 | 29.73 | 21.67 | 94.1 | 6.16 | | | | | | |
| 6 | 16.22 | 29.74 | 21.68 | 94.1 | 6.15 | | | | | | |
| 7 | 16.18 | 29.74 | 21.70 | 94.1 | 6.15 | | | | | | |
| 8 | 16.05 | 29.78 | 21.75 | 94.1 | 6.15 | | | | | | |
| 9 | 15.26 | 29.87 | 21.99 | 94.1 | 6.18 | | | | | | |
| 10 | 14.76 | 29.90 | 22.13 | 94.1 | 6.26 | 6.38 | 2.4 | .30 | <.1 | 1.5 | 0.30 |
| 11 | 14.44 | 29.98 | 22.25 | 94.1 | 6.28 | | | | | | |
| 12 | 14.17 | 30.05 | 22.36 | 94.1 | 6.31 | | | | | | |
| 13 | 14.00 | 30.10 | 22.43 | 94.1 | 6.32 | | | | | | |
| 14 | 13.82 | 30.14 | 22.50 | 94.1 | 6.29 | | | | | | |
| 15 | 13.65 | 30.11 | 22.51 | 94.1 | 6.27 | | | | | | |
| 16 | 12.93 | 30.24 | 22.75 | 94.1 | 6.26 | 6.30 | 2.6 | .30 | 0.1 | 2.0 | 0.60 |

KELEZ CRUISE XWCC-22 STATION 121 6/05/79



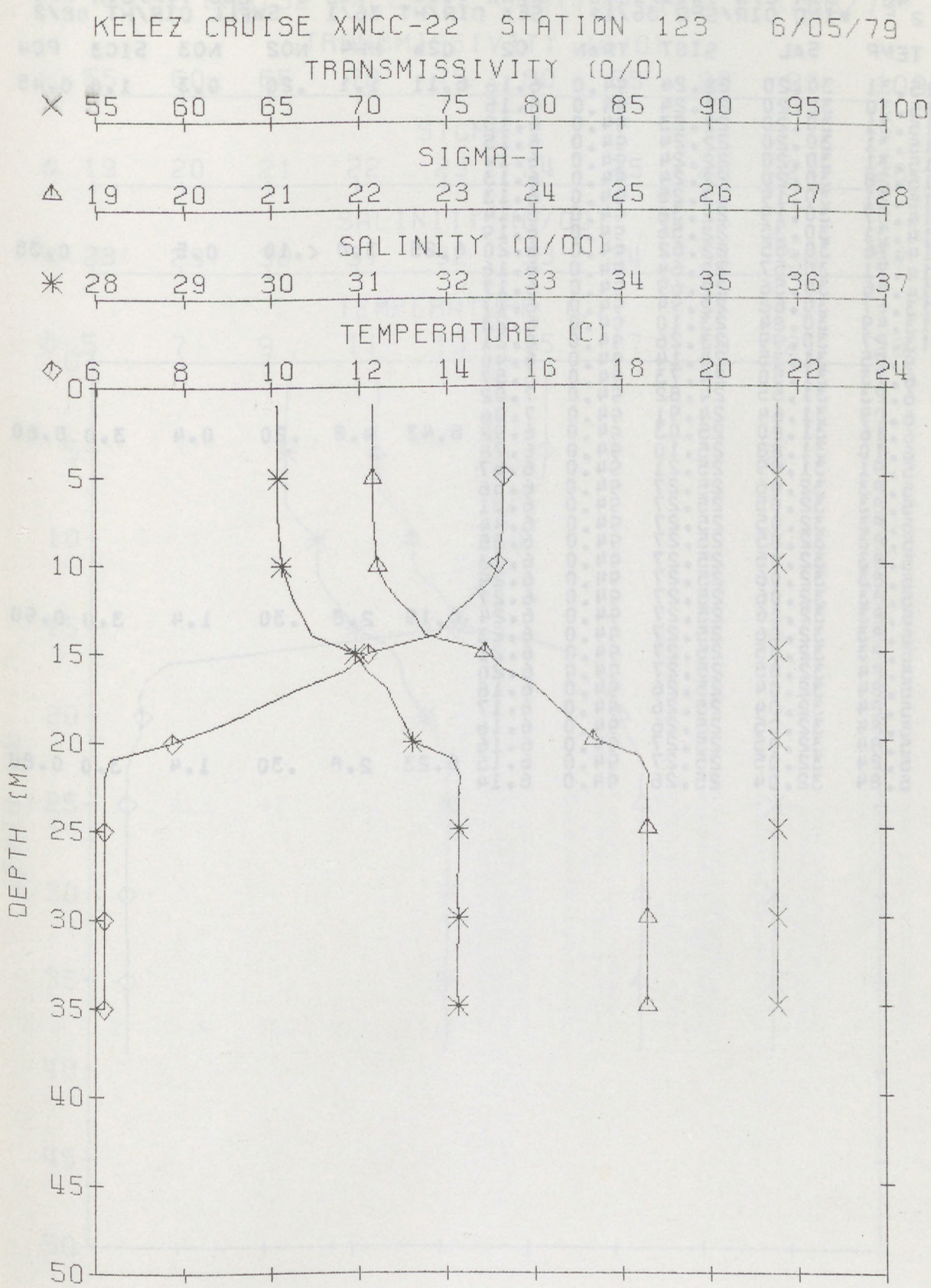
XWCC-22 STA.122 LAT 39 39.5N; LONG 73 36.1W GMT 9.0 6/05/79
DEPTH 35 AIR D/W 15.3/15.0 BARO 09.0 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 36/10 SEA DIR/HT 08/1 SWELL DIR/HT 08/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.79 | 29.86 | 21.88 | 95.1 | 6.13 | 6.13 | 1.4 | .20 | 0.1 | 1.0 | 0.35 |
| 2 | 15.79 | 29.86 | 21.88 | 95.1 | 6.12 | | | | | | |
| 3 | 15.72 | 29.86 | 21.89 | 95.1 | 6.13 | | | | | | |
| 4 | 15.61 | 29.86 | 21.91 | 95.1 | 6.13 | | | | | | |
| 5 | 15.41 | 29.87 | 21.96 | 95.1 | 6.13 | | | | | | |
| 6 | 15.42 | 29.82 | 21.92 | 95.1 | 6.15 | | | | | | |
| 7 | 14.98 | 29.96 | 22.13 | 95.1 | 6.15 | | | | | | |
| 8 | 14.32 | 30.19 | 22.44 | 95.1 | 6.18 | | | | | | |
| 9 | 13.95 | 30.38 | 22.65 | 95.1 | 6.26 | | | | | | |
| 10 | 13.48 | 30.49 | 22.84 | 95.1 | 6.27 | 6.41 | 1.3 | .20 | 0.1 | 1.0 | 0.50 |
| 11 | 13.33 | 30.45 | 22.83 | 95.1 | 6.29 | | | | | | |
| 12 | 12.66 | 30.51 | 23.01 | 95.1 | 6.32 | | | | | | |
| 13 | 12.14 | 30.63 | 23.20 | 95.1 | 6.37 | | | | | | |
| 14 | 11.63 | 30.75 | 23.38 | 95.1 | 6.44 | | | | | | |
| 15 | 10.88 | 30.98 | 23.70 | 95.1 | 6.52 | | | | | | |
| 16 | 10.17 | 31.30 | 24.07 | 95.1 | 6.62 | | | | | | |
| 17 | 9.11 | 31.37 | 24.29 | 95.1 | 6.68 | | | | | | |
| 18 | 8.32 | 31.45 | 24.47 | 95.1 | 6.74 | | | | | | |
| 19 | 6.77 | 31.67 | 24.85 | 95.1 | 6.89 | | | | | | |
| 20 | 6.66 | 31.69 | 24.88 | 95.1 | 7.00 | 5.77 | 2.8 | .30 | 1.0 | 3.5 | 0.95 |
| 21 | 6.65 | 31.71 | 24.90 | 95.1 | 6.81 | | | | | | |
| 22 | 6.63 | 31.71 | 24.90 | 95.1 | 6.60 | | | | | | |
| 23 | 6.59 | 31.72 | 24.92 | 95.1 | 6.43 | | | | | | |
| 24 | 6.59 | 31.73 | 24.92 | 95.1 | 6.31 | | | | | | |
| 25 | 6.52 | 31.72 | 24.92 | 95.1 | 6.22 | | | | | | |
| 26 | 6.47 | 31.73 | 24.93 | 95.1 | 6.15 | | | | | | |
| 27 | 6.46 | 31.73 | 24.94 | 95.1 | 6.11 | | | | | | |
| 28 | 6.45 | 31.73 | 24.94 | 95.1 | 6.08 | | | | | | |
| 29 | 6.38 | 31.73 | 24.95 | 95.1 | 6.06 | | | | | | |
| 30 | 6.32 | 31.78 | 25.00 | 95.1 | 6.04 | | | | | | |
| 31 | 6.30 | 31.81 | 25.02 | 95.1 | 6.03 | | | | | | |
| 32 | 6.29 | 31.80 | 25.02 | 95.1 | 6.00 | 5.99 | 2.8 | .30 | 1.2 | 3.5 | 0.90 |


KELEZ CRUISE XWCC-22 STATION 122 6/05/79
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

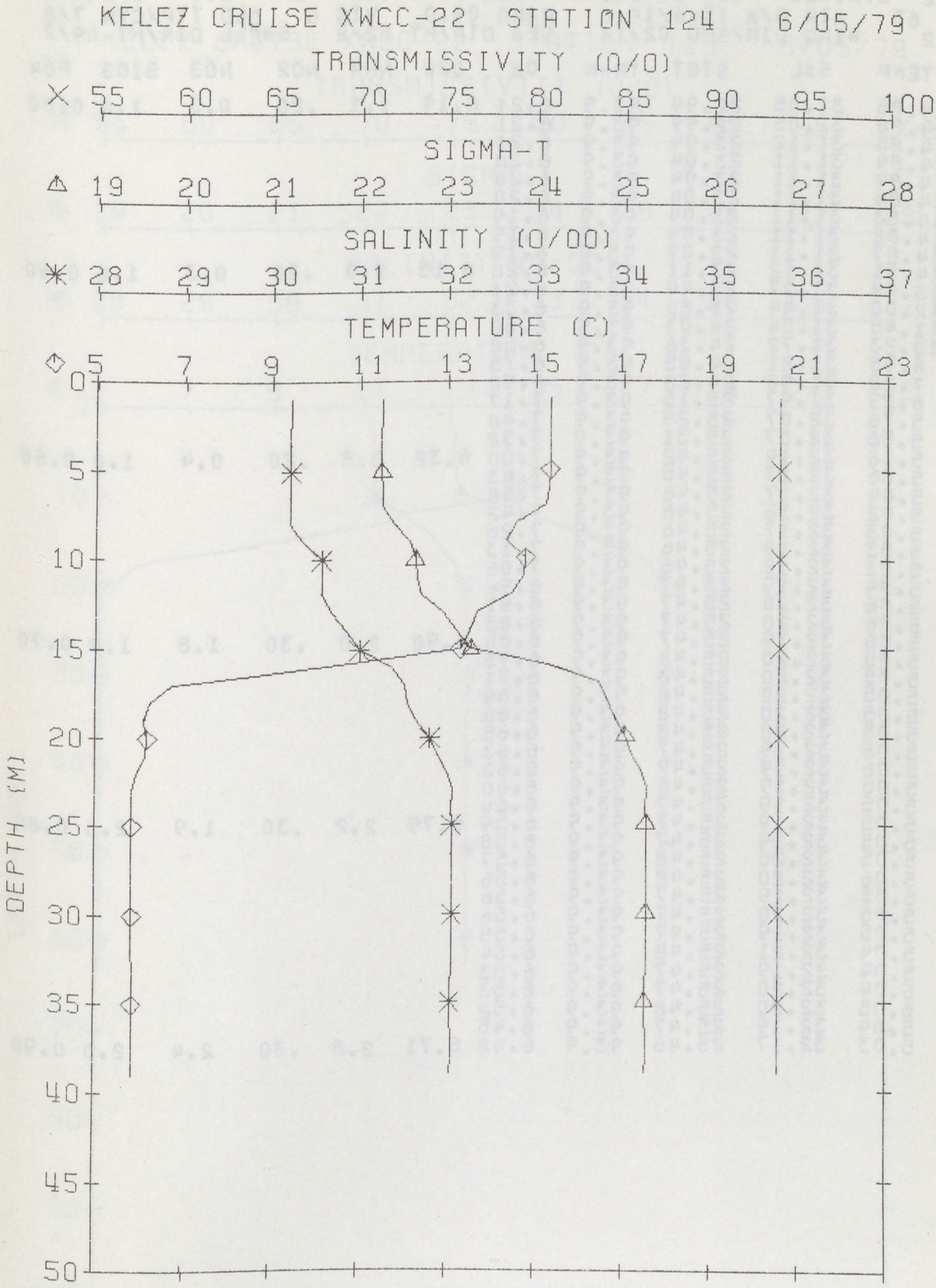
XWCC-22 STA.123 LAT 39 34.6N LONG 73 26.1W GMT 7.6 6/05/79
DEPTH 37 AIR D/W 15.0/15.0 BARO 09.0 VIS 4 CLD TYP/CVR 7/8
WETHR 4 WIND DIR/SPD 36/18 SEA DIR/HT 13/1 SWELL DIR/HT 13/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.28 | 30.07 | 22.14 | 93.8 | 6.16 | 6.19 | 1.8 | <.10 | 0.2 | 1.0 | 0.40 |
| 2 | 15.28 | 30.07 | 22.14 | 93.8 | 6.15 | | | | | | |
| 3 | 15.27 | 30.06 | 22.14 | 93.8 | 6.15 | | | | | | |
| 4 | 15.27 | 30.06 | 22.14 | 93.8 | 6.14 | | | | | | |
| 5 | 15.27 | 30.06 | 22.14 | 93.8 | 6.14 | | | | | | |
| 6 | 15.27 | 30.06 | 22.14 | 93.8 | 6.13 | | | | | | |
| 7 | 15.27 | 30.07 | 22.14 | 93.8 | 6.13 | | | | | | |
| 8 | 15.24 | 30.07 | 22.15 | 93.8 | 6.12 | | | | | | |
| 9 | 15.19 | 30.09 | 22.18 | 93.8 | 6.12 | | | | | | |
| 10 | 15.14 | 30.10 | 22.20 | 93.8 | 6.12 | 6.15 | 1.0 | <.10 | 0.1 | 1.5 | 0.40 |
| 11 | 14.97 | 30.17 | 22.29 | 93.8 | 6.13 | | | | | | |
| 12 | 14.54 | 30.24 | 22.43 | 93.8 | 6.13 | | | | | | |
| 13 | 14.03 | 30.36 | 22.63 | 93.8 | 6.18 | | | | | | |
| 14 | 13.77 | 30.46 | 22.76 | 93.8 | 6.20 | | | | | | |
| 15 | 12.19 | 30.94 | 23.43 | 93.8 | 6.27 | | | | | | |
| 16 | 11.64 | 31.08 | 23.64 | 93.8 | 6.37 | | | | | | |
| 17 | 10.57 | 31.31 | 24.00 | 93.8 | 6.45 | | | | | | |
| 18 | 9.68 | 31.39 | 24.21 | 93.8 | 6.60 | | | | | | |
| 19 | 8.82 | 31.51 | 24.44 | 93.8 | 6.76 | | | | | | |
| 20 | 7.73 | 31.59 | 24.66 | 93.8 | 6.92 | 7.96 | 1.4 | <.10 | 0.2 | 2.0 | 0.35 |
| 21 | 6.33 | 32.05 | 25.20 | 93.8 | 7.16 | | | | | | |
| 22 | 6.18 | 32.14 | 25.29 | 93.8 | 7.27 | | | | | | |
| 23 | 6.18 | 32.13 | 25.29 | 93.8 | 7.14 | | | | | | |
| 24 | 6.18 | 32.13 | 25.29 | 93.8 | 6.95 | | | | | | |
| 25 | 6.18 | 32.12 | 25.28 | 93.8 | 6.81 | | | | | | |
| 26 | 6.18 | 32.12 | 25.28 | 93.8 | 6.69 | | | | | | |
| 27 | 6.18 | 32.12 | 25.28 | 93.8 | 6.62 | | | | | | |
| 28 | 6.18 | 32.11 | 25.28 | 93.8 | 6.54 | | | | | | |
| 29 | 6.18 | 32.11 | 25.27 | 93.8 | 6.48 | | | | | | |
| 30 | 6.18 | 32.12 | 25.28 | 93.8 | 6.44 | | | | | | |
| 31 | 6.18 | 32.12 | 25.28 | 93.8 | 6.41 | | | | | | |
| 32 | 6.18 | 32.11 | 25.27 | 93.8 | 6.38 | | | | | | |
| 33 | 6.18 | 32.11 | 25.27 | 93.8 | 6.36 | | | | | | |
| 34 | 6.18 | 32.11 | 25.27 | 93.8 | 6.34 | 6.38 | 1.5 | .20 | 0.5 | 2.5 | 0.60 |
| 35 | 6.18 | 32.12 | 25.28 | 93.8 | 6.31 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 123 6/05/79
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

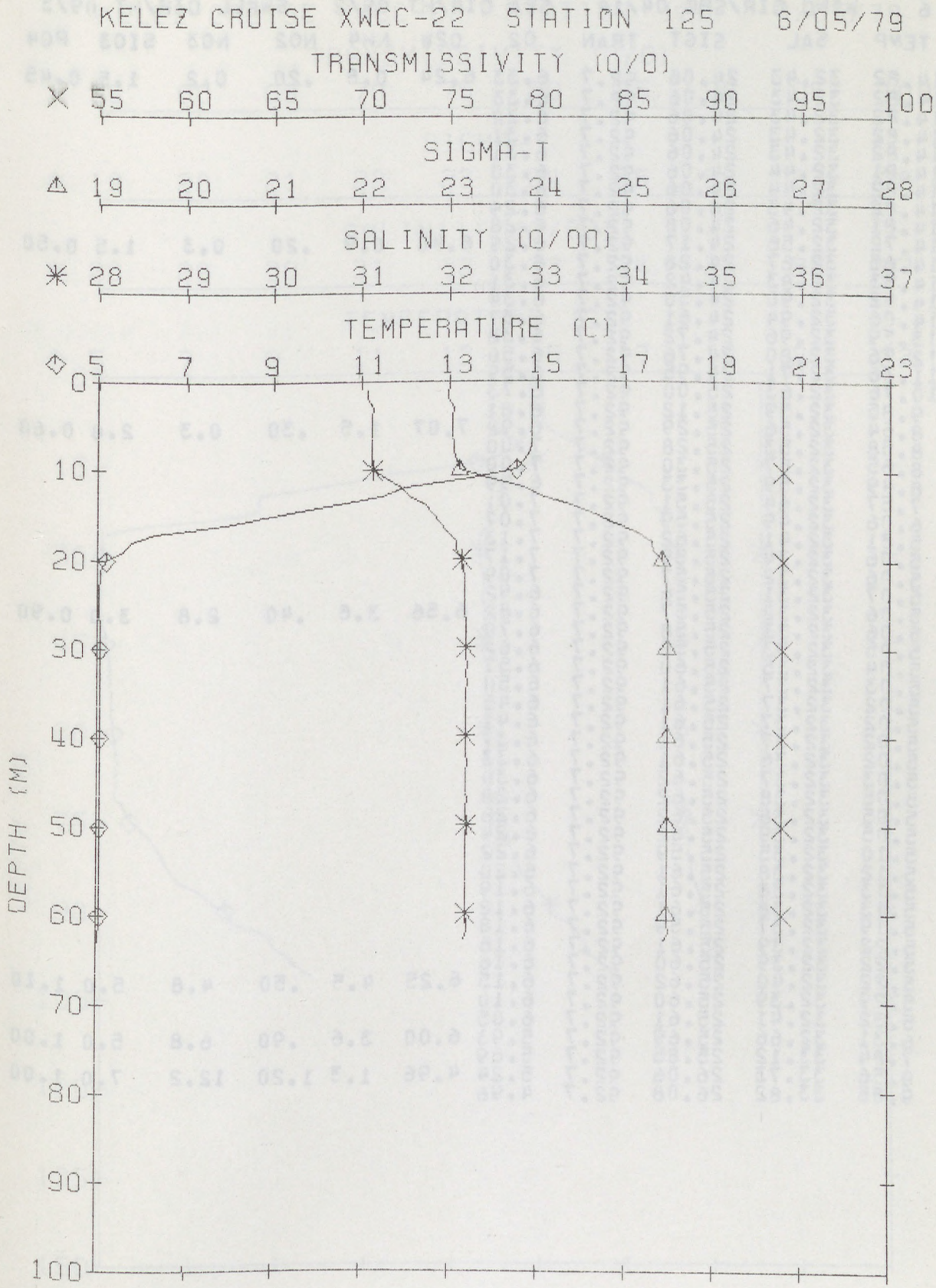
XWCC-22 STA.124 LAT 39 30.3N; LONG 73 12.5W GMT 5.8 6/06/79
DEPTH 40 AIR D/W 15.0/15.0 BARO 09.0 VIS 5 CLD TYP/CVR X/9
WETHR 2 WIND DIR/SPD 36/12 SEA DIR/HT 36/1 SWELL DIR/HT 08/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.31 | 30.20 | 22.24 | 94.0 | 6.16 | 6.11 | 1.1 | .20 | 0.3 | 1.0 | 0.45 |
| 2 | 15.30 | 30.20 | 22.24 | 94.0 | 6.15 | | | | | | |
| 3 | 15.31 | 30.20 | 22.23 | 94.0 | 6.15 | | | | | | |
| 4 | 15.31 | 30.20 | 22.24 | 94.0 | 6.15 | | | | | | |
| 5 | 15.31 | 30.20 | 22.24 | 94.0 | 6.14 | | | | | | |
| 6 | 15.28 | 30.20 | 22.24 | 94.0 | 6.13 | | | | | | |
| 7 | 15.21 | 30.19 | 22.25 | 94.0 | 6.13 | | | | | | |
| 8 | 14.57 | 30.19 | 22.38 | 94.0 | 6.14 | | | | | | |
| 9 | 14.31 | 30.35 | 22.56 | 94.0 | 6.19 | | | | | | |
| 10 | 14.76 | 30.55 | 22.62 | 94.0 | 6.20 | 6.25 | 3.0 | <.10 | 0.5 | | 0.35 |
| 11 | 14.71 | 30.57 | 22.64 | 94.0 | 6.16 | | | | | | |
| 12 | 14.46 | 30.56 | 22.69 | 94.0 | 6.17 | | | | | | |
| 13 | 13.67 | 30.68 | 22.94 | 94.0 | 6.17 | | | | | | |
| 14 | 13.49 | 30.84 | 23.10 | 94.0 | 6.23 | | | | | | |
| 15 | 13.27 | 30.99 | 23.26 | 94.0 | 6.21 | | | | | | |
| 16 | 9.95 | 31.35 | 24.14 | 94.0 | 6.40 | | | | | | |
| 17 | 6.73 | 31.50 | 24.73 | 94.0 | 6.57 | | | | | | |
| 18 | 6.23 | 31.55 | 24.82 | 94.0 | 7.02 | | | | | | |
| 19 | 6.09 | 31.64 | 24.91 | 94.0 | 7.06 | | | | | | |
| 20 | 6.16 | 31.80 | 25.03 | 94.0 | 6.92 | 6.43 | 4.8 | .20 | 0.4 | 3.0 | 0.60 |
| 21 | 6.10 | 31.88 | 25.10 | 94.0 | 6.78 | | | | | | |
| 22 | 5.91 | 31.99 | 25.21 | 94.0 | 6.67 | | | | | | |
| 23 | 5.83 | 32.06 | 25.27 | 94.0 | 6.58 | | | | | | |
| 24 | 5.83 | 32.05 | 25.27 | 94.0 | 6.51 | | | | | | |
| 25 | 5.83 | 32.05 | 25.27 | 94.0 | 6.44 | | | | | | |
| 26 | 5.83 | 32.05 | 25.27 | 94.0 | 6.38 | | | | | | |
| 27 | 5.83 | 32.05 | 25.27 | 94.0 | 6.33 | | | | | | |
| 28 | 5.83 | 32.06 | 25.27 | 94.0 | 6.29 | | | | | | |
| 29 | 5.83 | 32.06 | 25.27 | 94.0 | 6.27 | | | | | | |
| 30 | 5.83 | 32.06 | 25.27 | 94.0 | 6.24 | 6.19 | 2.8 | .30 | 1.4 | 3.0 | 0.90 |
| 31 | 5.83 | 32.06 | 25.27 | 94.0 | 6.23 | | | | | | |
| 32 | 5.83 | 32.05 | 25.27 | 94.0 | 6.21 | | | | | | |
| 33 | 5.84 | 32.05 | 25.27 | 94.0 | 6.20 | | | | | | |
| 34 | 5.84 | 32.04 | 25.26 | 94.0 | 6.18 | | | | | | |
| 35 | 5.84 | 32.04 | 25.26 | 94.0 | 6.17 | | | | | | |
| 36 | 5.84 | 32.05 | 25.26 | 94.0 | 6.16 | | | | | | |
| 37 | 5.84 | 32.05 | 25.27 | 94.0 | 6.16 | | | | | | |
| 38 | 5.84 | 32.05 | 25.27 | 94.0 | 6.15 | 6.23 | 2.8 | .30 | 1.4 | 3.0 | 0.80 |
| 39 | 5.84 | 32.04 | 25.26 | 94.0 | 6.14 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 124 6/05/79
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

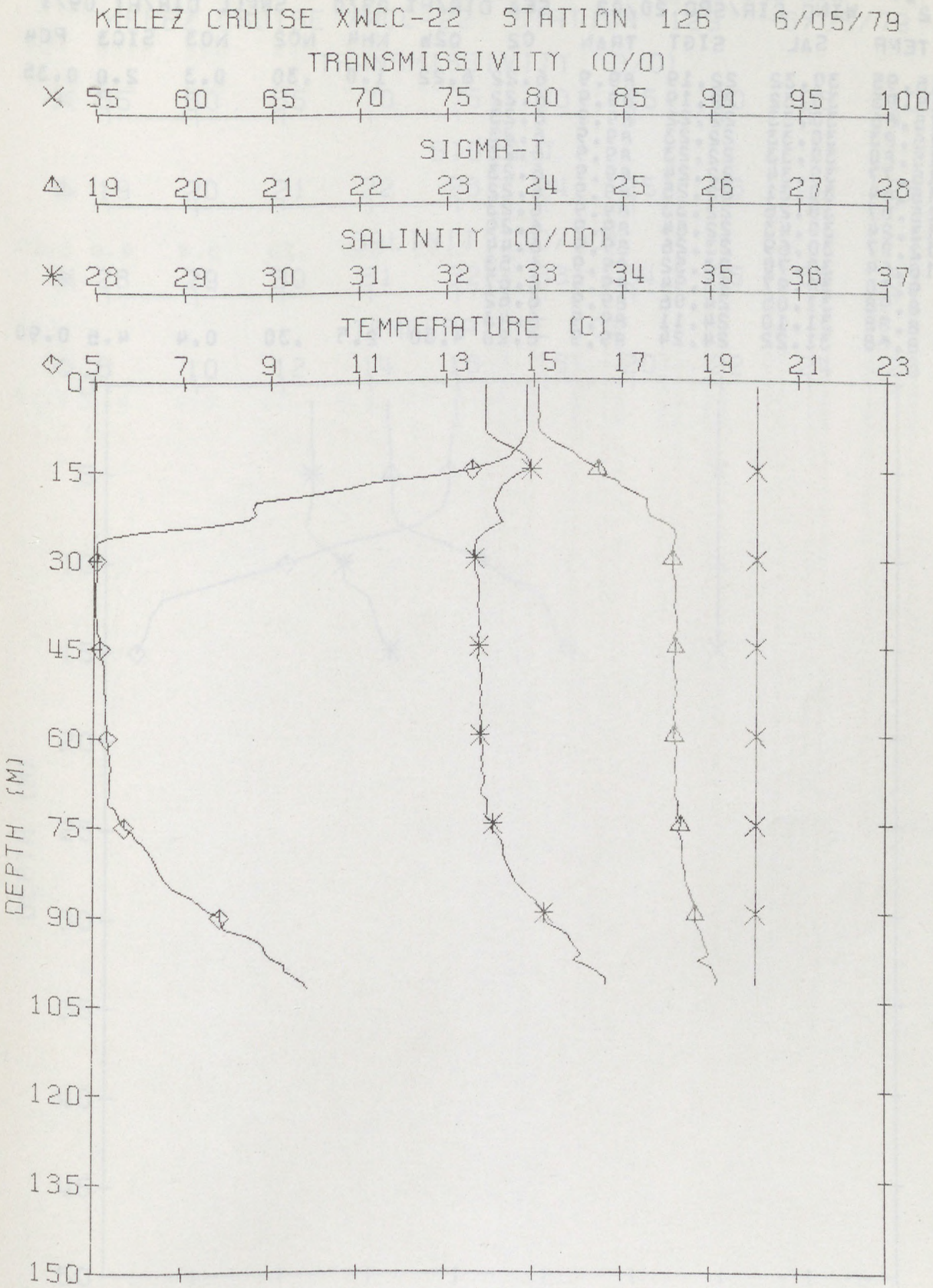
XWCC-22 STA.125 LAT 39 23.5N; LONG 72 57.5W GMT 3.8 6/06/79
DEPTH 63 AIR D/W 15.6/15.0 BARO 09.0 VIS 6 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 02/16 SEA DIR/HT 02/2 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.86 | 31.05 | 22.99 | 93.9 | 6.21 | 6.19 | 1.1 | .20 | 0.3 | 1.0 | 0.80 |
| 2 | 14.86 | 31.05 | 22.99 | 93.9 | 6.21 | | | | | | |
| 3 | 14.85 | 31.12 | 23.04 | 93.9 | 6.21 | | | | | | |
| 4 | 14.84 | 31.11 | 23.04 | 93.9 | 6.20 | | | | | | |
| 5 | 14.84 | 31.11 | 23.04 | 93.9 | 6.20 | | | | | | |
| 6 | 14.84 | 31.11 | 23.04 | 93.9 | 6.20 | | | | | | |
| 7 | 14.83 | 31.11 | 23.04 | 93.9 | 6.19 | | | | | | |
| 8 | 14.82 | 31.11 | 23.04 | 93.9 | 6.19 | | | | | | |
| 9 | 14.67 | 31.11 | 23.07 | 93.9 | 6.19 | | | | | | |
| 10 | 14.51 | 31.12 | 23.11 | 93.9 | 6.20 | 6.15 | 1.0 | .20 | 0.3 | 1.0 | 0.60 |
| 11 | 13.49 | 31.27 | 23.44 | 93.9 | 6.21 | | | | | | |
| 12 | 12.00 | 31.44 | 23.85 | 93.9 | 6.33 | | | | | | |
| 13 | 11.45 | 31.54 | 24.03 | 93.9 | 6.50 | | | | | | |
| 14 | 10.23 | 31.72 | 24.38 | 93.9 | 6.58 | | | | | | |
| 15 | 8.95 | 31.81 | 24.65 | 93.9 | 6.75 | | | | | | |
| 16 | 7.88 | 31.90 | 24.88 | 93.9 | 6.90 | | | | | | |
| 17 | 6.29 | 31.97 | 25.15 | 93.9 | 7.17 | | | | | | |
| 18 | 5.76 | 32.07 | 25.29 | 93.9 | 7.40 | | | | | | |
| 19 | 5.56 | 32.07 | 25.31 | 93.9 | 7.52 | | | | | | |
| 20 | 5.18 | 32.14 | 25.42 | 93.9 | 7.60 | 6.32 | 5.8 | .20 | 0.4 | 1.0 | 0.60 |
| 21 | 5.06 | 32.17 | 25.45 | 93.9 | 7.63 | | | | | | |
| 22 | 5.04 | 32.17 | 25.46 | 93.9 | 7.58 | | | | | | |
| 23 | 5.02 | 32.18 | 25.46 | 93.9 | 7.42 | | | | | | |
| 24 | 5.03 | 32.17 | 25.46 | 93.9 | 7.26 | | | | | | |
| 25 | 5.03 | 32.18 | 25.46 | 93.9 | 7.13 | | | | | | |
| 26 | 5.03 | 32.18 | 25.46 | 93.9 | 7.06 | | | | | | |
| 27 | 5.04 | 32.19 | 25.47 | 93.9 | 6.96 | | | | | | |
| 28 | 5.06 | 32.20 | 25.47 | 93.9 | 6.91 | | | | | | |
| 29 | 5.06 | 32.20 | 25.47 | 93.9 | 6.85 | | | | | | |
| 30 | 5.06 | 32.19 | 25.47 | 93.9 | 6.80 | 6.90 | 2.0 | .30 | 1.8 | 1.0 | 0.70 |
| 31 | 5.05 | 32.20 | 25.48 | 93.9 | 6.75 | | | | | | |
| 32 | 5.05 | 32.20 | 25.48 | 93.9 | 6.71 | | | | | | |
| 33 | 5.05 | 32.20 | 25.48 | 93.9 | 6.69 | | | | | | |
| 34 | 5.05 | 32.20 | 25.48 | 93.9 | 6.66 | | | | | | |
| 35 | 5.05 | 32.20 | 25.48 | 93.9 | 6.65 | | | | | | |
| 36 | 5.06 | 32.19 | 25.47 | 93.9 | 6.63 | | | | | | |
| 37 | 5.06 | 32.19 | 25.47 | 93.9 | 6.62 | | | | | | |
| 38 | 5.05 | 32.19 | 25.46 | 93.9 | 6.60 | | | | | | |
| 39 | 5.05 | 32.19 | 25.47 | 93.9 | 6.60 | | | | | | |
| 40 | 5.05 | 32.19 | 25.47 | 93.9 | 6.59 | 6.79 | 2.2 | .30 | 1.9 | 2.0 | 0.80 |
| 41 | 5.05 | 32.19 | 25.47 | 93.9 | 6.58 | | | | | | |
| 42 | 5.05 | 32.20 | 25.48 | 93.9 | 6.57 | | | | | | |
| 43 | 5.06 | 32.20 | 25.48 | 93.9 | 6.56 | | | | | | |
| 44 | 5.05 | 32.19 | 25.47 | 93.9 | 6.56 | | | | | | |
| 45 | 5.05 | 32.20 | 25.47 | 93.9 | 6.56 | | | | | | |
| 46 | 5.05 | 32.19 | 25.47 | 93.9 | 6.55 | | | | | | |
| 47 | 5.04 | 32.21 | 25.48 | 93.9 | 6.54 | | | | | | |
| 48 | 5.04 | 32.19 | 25.47 | 93.9 | 6.53 | | | | | | |
| 49 | 5.04 | 32.20 | 25.47 | 93.9 | 6.53 | | | | | | |
| 50 | 5.05 | 32.20 | 25.48 | 93.9 | 6.52 | | | | | | |
| 60 | 5.04 | 32.19 | 25.47 | 93.9 | 6.45 | | | | | | |
| 63 | 5.03 | 32.17 | 25.46 | 93.9 | 6.42 | 6.71 | 2.8 | .30 | 2.4 | 2.0 | 0.90 |


KELEZ CRUISE XWCC-22 STATION 125 6/05/79
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

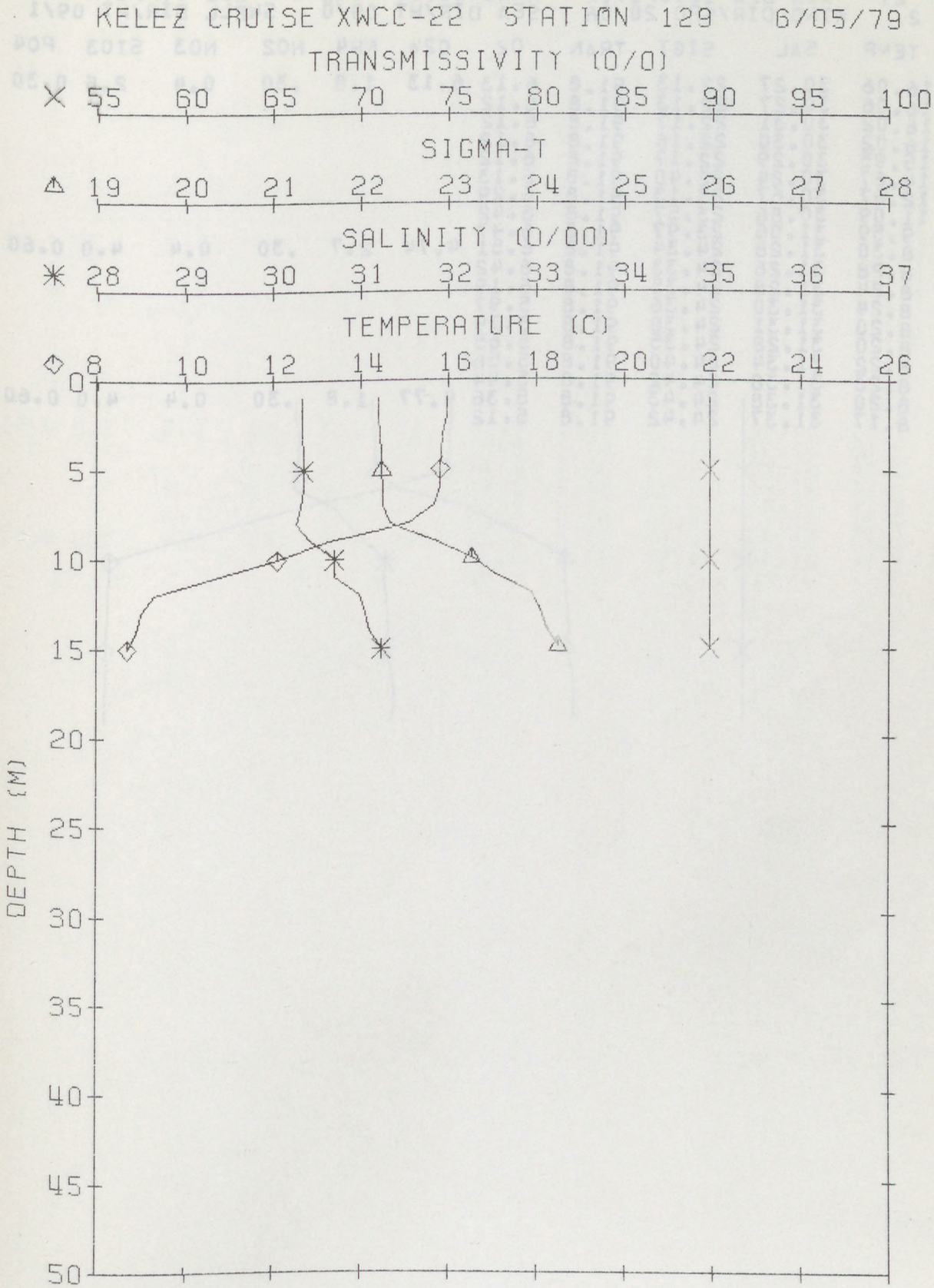
XWCC-22 STA.126 LAT 39 19.0N; LONG 72 43.0W GMT 1.6 6/08/79
DEPTH 105 AIR D/W 15.6/15.6 BARO 10.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 04/18 SEA DIR/HT 09/2 SWELL DIR/HT 09/3

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 14.82 | 32.43 | 24.06 | 92.7 | 6.33 | 6.24 | 0.8 | .20 | 0.2 | 1.5 | 0.45 |
| 2 | 14.82 | 32.43 | 24.06 | 92.7 | 6.33 | | | | | | |
| 3 | 14.82 | 32.43 | 24.06 | 92.7 | 6.32 | | | | | | |
| 4 | 14.82 | 32.43 | 24.06 | 92.7 | 6.31 | | | | | | |
| 5 | 14.82 | 32.43 | 24.06 | 92.7 | 6.31 | | | | | | |
| 6 | 14.81 | 32.44 | 24.06 | 92.7 | 6.30 | | | | | | |
| 7 | 14.82 | 32.44 | 24.06 | 92.7 | 6.30 | | | | | | |
| 8 | 14.82 | 32.43 | 24.06 | 92.7 | 6.29 | | | | | | |
| 9 | 14.81 | 32.46 | 24.08 | 92.7 | 6.28 | | | | | | |
| 10 | 14.72 | 32.56 | 24.17 | 92.7 | 6.29 | 6.40 | 0.9 | .20 | 0.3 | 1.5 | 0.50 |
| 11 | 14.65 | 32.67 | 24.28 | 92.7 | 6.30 | | | | | | |
| 12 | 14.53 | 32.83 | 24.42 | 92.7 | 6.31 | | | | | | |
| 13 | 14.42 | 32.90 | 24.50 | 92.7 | 6.34 | | | | | | |
| 14 | 14.06 | 32.94 | 24.61 | 92.7 | 6.37 | | | | | | |
| 15 | 13.59 | 32.96 | 24.72 | 92.7 | 6.38 | | | | | | |
| 16 | 12.76 | 32.80 | 24.76 | 92.7 | 6.50 | | | | | | |
| 17 | 11.36 | 32.71 | 24.95 | 92.7 | 6.59 | | | | | | |
| 18 | 10.76 | 32.63 | 25.00 | 92.7 | 6.73 | | | | | | |
| 19 | 9.85 | 32.59 | 25.12 | 92.7 | 6.81 | | | | | | |
| 20 | 8.64 | 32.56 | 25.29 | 92.7 | 6.92 | 7.07 | 1.5 | .30 | 0.3 | 2.0 | 0.60 |
| 21 | 8.58 | 32.53 | 25.28 | 92.7 | 7.00 | | | | | | |
| 22 | 8.65 | 32.57 | 25.30 | 92.7 | 7.00 | | | | | | |
| 23 | 8.49 | 32.59 | 25.33 | 92.7 | 6.99 | | | | | | |
| 24 | 7.57 | 32.64 | 25.51 | 92.7 | 7.01 | | | | | | |
| 25 | 6.06 | 32.49 | 25.59 | 92.7 | 7.07 | | | | | | |
| 26 | 5.31 | 32.41 | 25.62 | 92.7 | 7.13 | | | | | | |
| 27 | 5.06 | 32.34 | 25.59 | 92.7 | 7.17 | | | | | | |
| 28 | 5.06 | 32.32 | 25.57 | 92.7 | 7.09 | | | | | | |
| 29 | 5.07 | 32.31 | 25.56 | 92.7 | 6.92 | | | | | | |
| 30 | 5.06 | 32.32 | 25.57 | 92.7 | 6.82 | 6.56 | 3.6 | .40 | 2.8 | 3.0 | 0.90 |
| 31 | 5.06 | 32.33 | 25.58 | 92.7 | 6.70 | | | | | | |
| 32 | 5.05 | 32.33 | 25.58 | 92.7 | 6.62 | | | | | | |
| 33 | 5.04 | 32.35 | 25.60 | 92.7 | 6.57 | | | | | | |
| 34 | 5.03 | 32.37 | 25.61 | 92.7 | 6.50 | | | | | | |
| 35 | 5.02 | 32.37 | 25.61 | 92.7 | 6.45 | | | | | | |
| 36 | 5.02 | 32.37 | 25.61 | 92.7 | 6.41 | | | | | | |
| 37 | 5.02 | 32.37 | 25.61 | 92.7 | 6.37 | | | | | | |
| 38 | 5.02 | 32.36 | 25.61 | 92.7 | 6.33 | | | | | | |
| 39 | 5.03 | 32.37 | 25.62 | 92.7 | 6.30 | | | | | | |
| 40 | 5.05 | 32.38 | 25.62 | 92.7 | 6.28 | | | | | | |
| 41 | 5.05 | 32.38 | 25.62 | 92.7 | 6.26 | | | | | | |
| 42 | 5.05 | 32.39 | 25.62 | 92.7 | 6.24 | | | | | | |
| 43 | 5.10 | 32.35 | 25.59 | 92.7 | 6.22 | | | | | | |
| 44 | 5.12 | 32.38 | 25.61 | 92.7 | 6.20 | | | | | | |
| 45 | 5.13 | 32.38 | 25.61 | 92.7 | 6.19 | | | | | | |
| 46 | 5.13 | 32.38 | 25.61 | 92.7 | 6.18 | | | | | | |
| 47 | 5.19 | 32.37 | 25.59 | 92.7 | 6.18 | | | | | | |
| 48 | 5.22 | 32.39 | 25.61 | 92.7 | 6.16 | | | | | | |
| 49 | 5.22 | 32.39 | 25.60 | 92.7 | 6.16 | | | | | | |
| 50 | 5.22 | 32.40 | 25.62 | 92.7 | 6.15 | 6.25 | 4.5 | .50 | 4.8 | 5.0 | 1.10 |
| 60 | 5.29 | 32.39 | 25.60 | 92.7 | 6.10 | | | | | | |
| 70 | 5.32 | 32.41 | 25.61 | 92.7 | 6.05 | | | | | | |
| 80 | 6.31 | 32.66 | 25.69 | 92.7 | 5.93 | 6.00 | 3.6 | .90 | 6.8 | 5.0 | 1.00 |
| 90 | 7.84 | 33.12 | 25.85 | 92.7 | 5.69 | | | | | | |
| 100 | 9.56 | 33.73 | 26.06 | 92.7 | 5.24 | 4.96 | 1.3 | 1.20 | 12.2 | 7.0 | 1.00 |
| 102 | 9.85 | 33.82 | 26.08 | 92.7 | 4.96 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 126 6/05/79
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 15 30 45 60 75 90 105 120 135 150

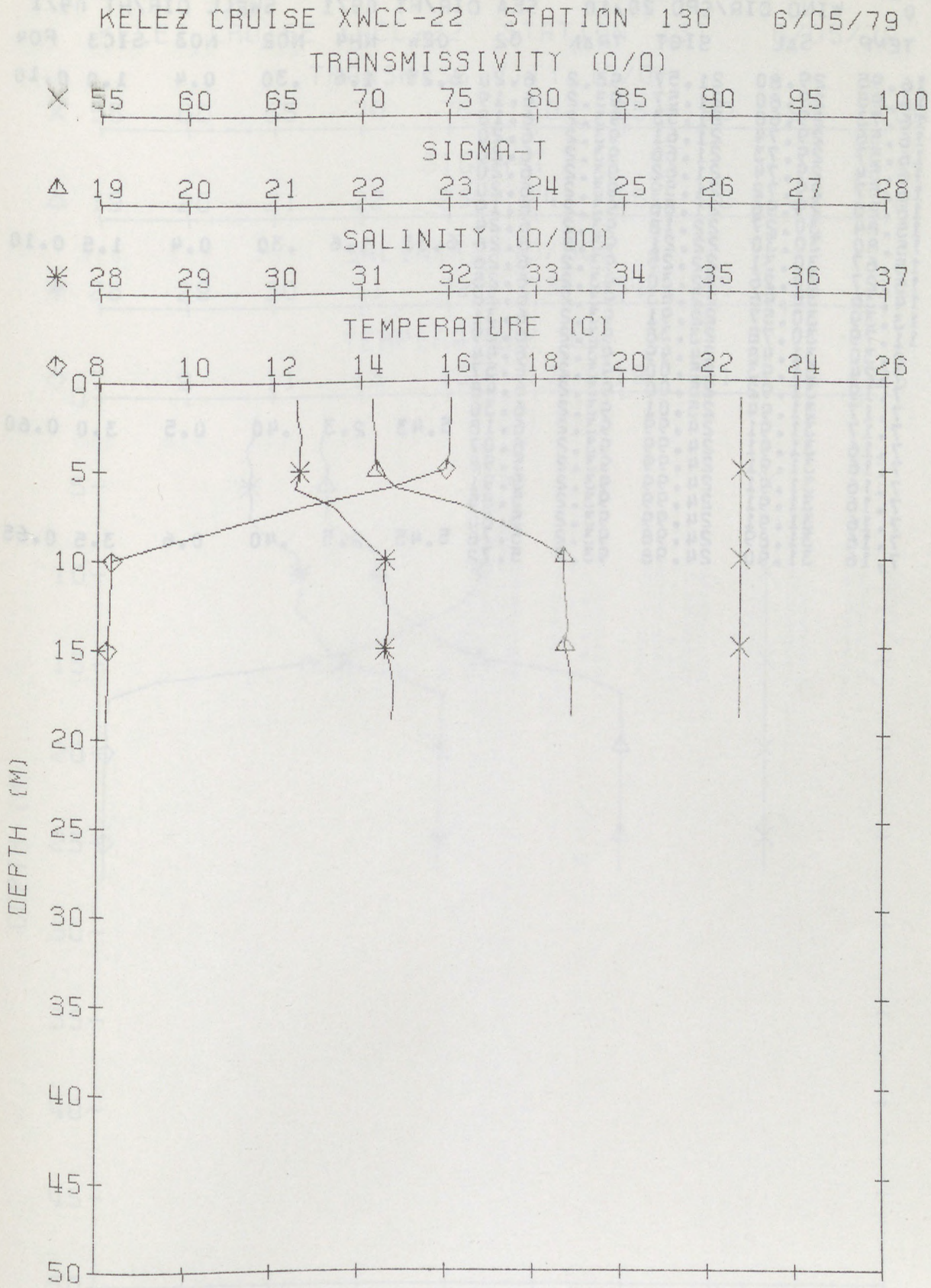
XWCC-22 STA.129 LAT 39 30.0N; LONG 74 11.0W GMT 14.7 6/05/79
DEPTH 17 AIR D/W 18.3/17.2 BARO 10.5 VIS 6 CLD TYP/CVR /0
WETHR 2 WIND DIR/SPD 20/02 SEA DIR/HT 09/0 SWELL DIR/HT 09/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.95 | 30.32 | 22.19 | 89.9 | 6.22 | 6.22 | 1.0 | .30 | 0.3 | 2.0 | 0.35 |
| 2 | 15.95 | 30.32 | 22.19 | 89.9 | 6.22 | | | | | | |
| 3 | 15.86 | 30.33 | 22.22 | 89.9 | 6.23 | | | | | | |
| 4 | 15.83 | 30.33 | 22.23 | 89.9 | 6.23 | | | | | | |
| 5 | 15.80 | 30.33 | 22.23 | 89.9 | 6.23 | | | | | | |
| 6 | 15.77 | 30.34 | 22.24 | 89.9 | 6.23 | | | | | | |
| 7 | 15.64 | 30.31 | 22.25 | 89.9 | 6.22 | | | | | | |
| 8 | 15.07 | 30.26 | 22.33 | 89.9 | 6.23 | | | | | | |
| 9 | 13.24 | 30.43 | 22.84 | 89.9 | 6.29 | | | | | | |
| 10 | 12.07 | 30.69 | 23.26 | 89.9 | 6.44 | | | | | | |
| 11 | 10.64 | 30.70 | 23.52 | 89.9 | 6.53 | | | | | | |
| 12 | 9.30 | 30.97 | 23.94 | 89.9 | 6.67 | | | | | | |
| 13 | 8.98 | 31.05 | 24.06 | 89.9 | 6.62 | | | | | | |
| 14 | 8.88 | 31.10 | 24.11 | 89.9 | 6.43 | | | | | | |
| 15 | 8.68 | 31.22 | 24.24 | 89.9 | 6.20 | 4.50 | 2.5 | .30 | 0.4 | 4.5 | 0.90 |


KELEZ CRUISE XWCC-22 STATION 129 6/05/79
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

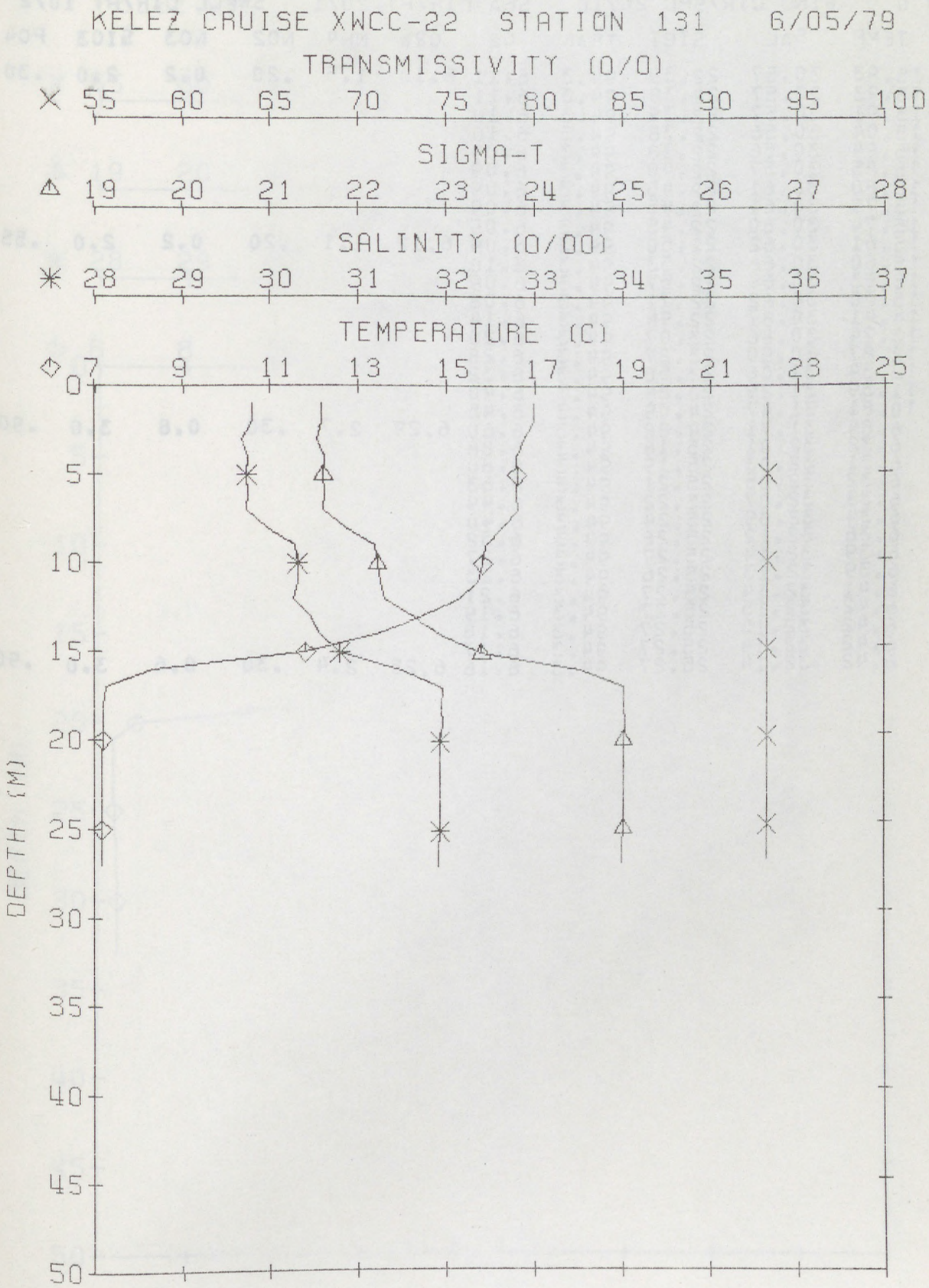
XWCC-22 STA.130 LAT 39 27.7N; LONG 74 6.6W GMT 15.5 6/05/79
DEPTH 21 AIR D/W 18.3/17.2 BARO 10.5 VIS 6 CLD TYP/CVR /0
WETHR 2 WIND DIR/SPD 20/06 SEA DIR/HT 09/0 SWELL DIR/HT 09/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.06 | 30.27 | 22.13 | 91.8 | 6.13 | 6.13 | 1.8 | .30 | 0.4 | 2.5 | 0.30 |
| 2 | 16.06 | 30.27 | 22.13 | 91.8 | 6.12 | | | | | | |
| 3 | 16.02 | 30.31 | 22.17 | 91.8 | 6.12 | | | | | | |
| 4 | 16.02 | 30.30 | 22.16 | 91.8 | 6.12 | | | | | | |
| 5 | 15.95 | 30.29 | 22.17 | 91.8 | 6.12 | | | | | | |
| 6 | 14.67 | 30.24 | 22.40 | 91.8 | 6.13 | | | | | | |
| 7 | 12.67 | 30.67 | 23.13 | 91.8 | 6.29 | | | | | | |
| 8 | 11.09 | 30.86 | 23.57 | 91.8 | 6.42 | | | | | | |
| 9 | 9.59 | 31.06 | 23.97 | 91.8 | 6.47 | | | | | | |
| 10 | 8.30 | 31.28 | 24.34 | 91.8 | 6.51 | 4.74 | 2.7 | .30 | 0.4 | 4.0 | 0.60 |
| 11 | 8.28 | 31.26 | 24.33 | 91.8 | 6.42 | | | | | | |
| 12 | 8.24 | 31.28 | 24.35 | 91.8 | 6.19 | | | | | | |
| 13 | 8.24 | 31.30 | 24.36 | 91.8 | 5.97 | | | | | | |
| 14 | 8.20 | 31.31 | 24.38 | 91.8 | 5.79 | | | | | | |
| 15 | 8.20 | 31.28 | 24.35 | 91.8 | 5.65 | | | | | | |
| 16 | 8.22 | 31.34 | 24.40 | 91.8 | 5.56 | | | | | | |
| 17 | 8.23 | 31.38 | 24.42 | 91.8 | 5.44 | | | | | | |
| 18 | 8.20 | 31.38 | 24.43 | 91.8 | 5.36 | 4.77 | 1.8 | .30 | 0.4 | 4.0 | 0.60 |
| 19 | 8.17 | 31.37 | 24.42 | 91.8 | 5.12 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 130 6/05/79
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

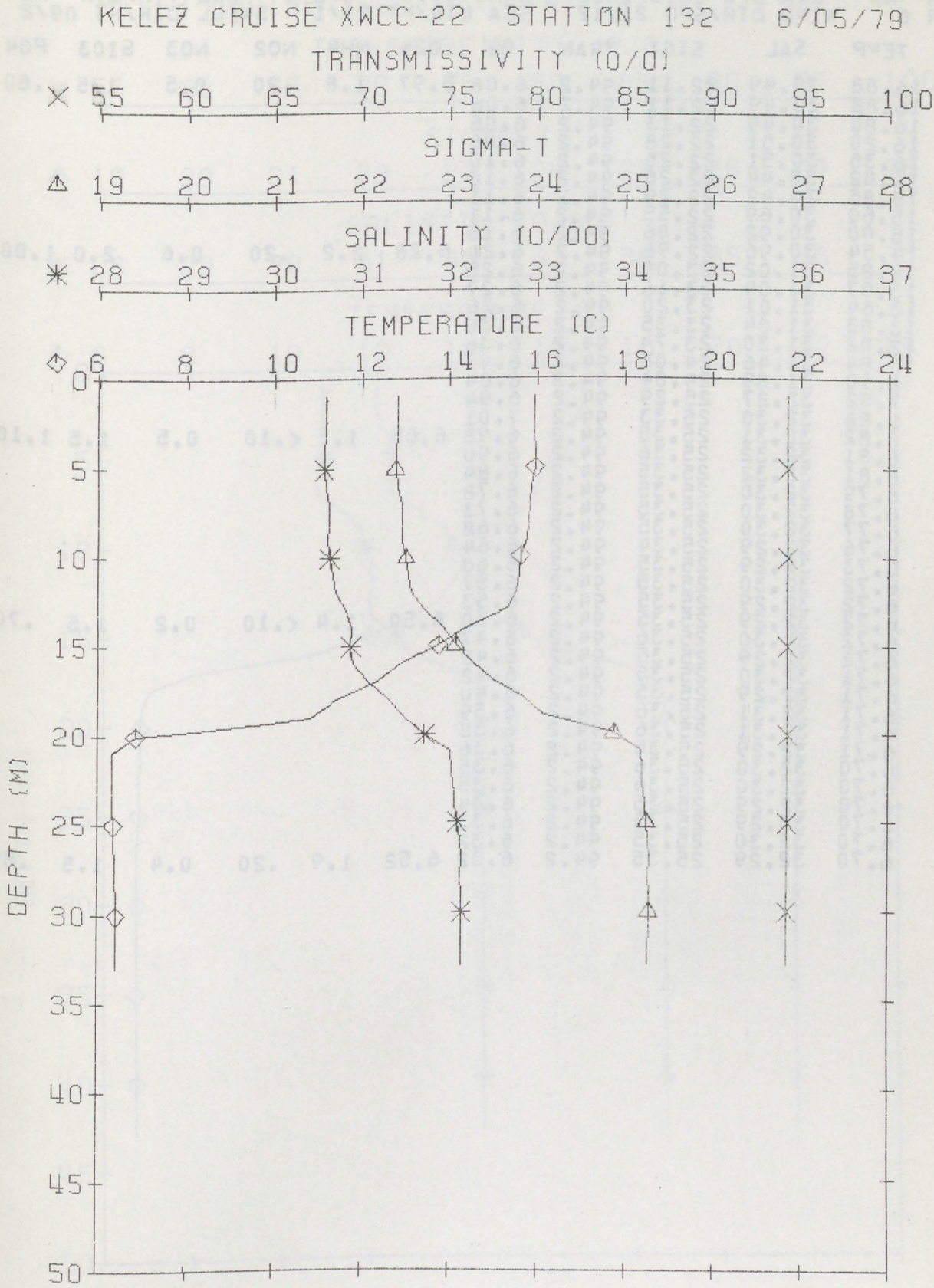
XWCC-22 STA.131 LAT 39 23.3N; LONG 73 56.6W GMT 16.7 6/05/79
DEPTH 29 AIR D/W 17.8/16.7 BARO 10.5 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 20/10 SEA DIR/HT 09/1 SWELL DIR/HT 09/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.95 | 29.80 | 21.57 | 93.2 | 6.20 | 6.25 | 1.6 | .30 | 0.4 | 1.0 | 0.10 |
| 2 | 16.95 | 29.80 | 21.57 | 93.2 | 6.19 | | | | | | |
| 3 | 16.73 | 29.68 | 21.53 | 93.2 | 6.18 | | | | | | |
| 4 | 16.56 | 29.74 | 21.61 | 93.2 | 6.20 | | | | | | |
| 5 | 16.57 | 29.73 | 21.60 | 93.2 | 6.20 | | | | | | |
| 6 | 16.54 | 29.74 | 21.62 | 93.2 | 6.20 | | | | | | |
| 7 | 16.57 | 29.72 | 21.59 | 93.2 | 6.20 | | | | | | |
| 8 | 16.20 | 29.96 | 21.86 | 93.2 | 6.19 | | | | | | |
| 9 | 15.84 | 30.27 | 22.18 | 93.2 | 6.24 | | | | | | |
| 10 | 15.80 | 30.30 | 22.21 | 93.2 | 6.26 | 6.13 | 1.6 | .30 | 0.4 | 1.5 | 0.10 |
| 11 | 15.67 | 30.31 | 22.25 | 93.2 | 6.26 | | | | | | |
| 12 | 15.27 | 30.26 | 22.30 | 93.2 | 6.25 | | | | | | |
| 13 | 14.36 | 30.46 | 22.63 | 93.2 | 6.28 | | | | | | |
| 14 | 13.39 | 30.57 | 22.91 | 93.2 | 6.31 | | | | | | |
| 15 | 11.79 | 30.78 | 23.38 | 93.2 | 6.29 | | | | | | |
| 16 | 8.30 | 31.48 | 24.49 | 93.2 | 6.44 | | | | | | |
| 17 | 7.24 | 31.93 | 25.00 | 93.2 | 6.57 | | | | | | |
| 18 | 7.19 | 31.92 | 25.00 | 93.2 | 6.48 | | | | | | |
| 19 | 7.17 | 31.94 | 25.01 | 93.2 | 6.30 | | | | | | |
| 20 | 7.17 | 31.91 | 24.99 | 93.2 | 6.18 | 5.43 | 2.3 | .40 | 0.5 | 3.0 | 0.60 |
| 21 | 7.16 | 31.91 | 24.99 | 93.2 | 6.07 | | | | | | |
| 22 | 7.16 | 31.91 | 24.99 | 93.2 | 5.98 | | | | | | |
| 23 | 7.16 | 31.91 | 24.99 | 93.2 | 5.91 | | | | | | |
| 24 | 7.16 | 31.91 | 24.99 | 93.2 | 5.85 | | | | | | |
| 25 | 7.16 | 31.91 | 24.99 | 93.2 | 5.80 | | | | | | |
| 26 | 7.16 | 31.89 | 24.98 | 93.2 | 5.76 | 5.45 | 2.5 | .40 | 0.6 | 3.5 | 0.65 |
| 27 | 7.16 | 31.90 | 24.98 | 93.2 | 5.72 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 131 6/05/79
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

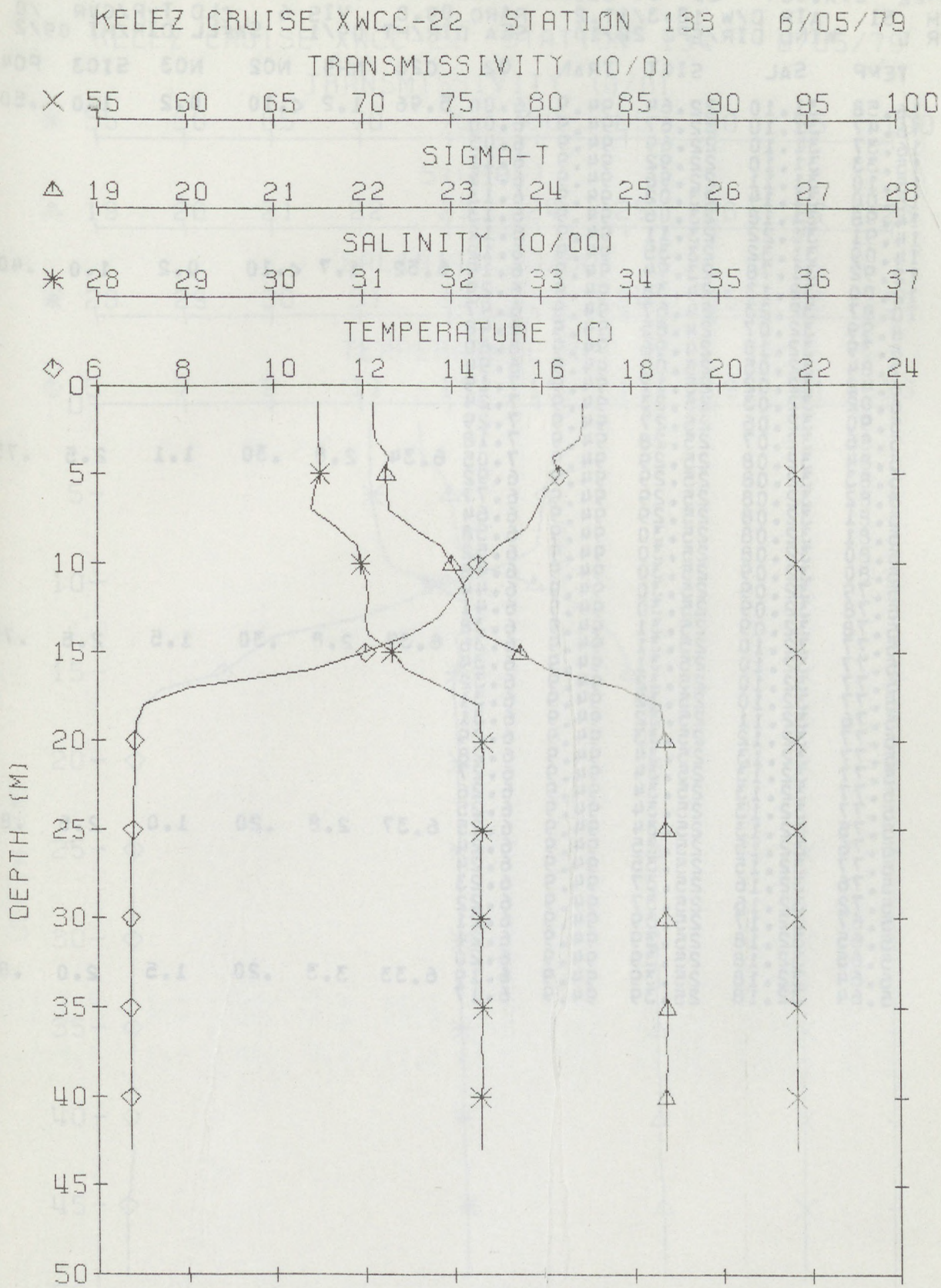
XWCC-22 STA.132 LAT 39 20.3N; LONG 73 47.2W GMT 17.9 6/05/79
DEPTH 36 AIR D/W 17.8/16.7 BARO 09.9 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 20/10 SEA DIR/HT 20/1 SWELL DIR/HT 10/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.93 | 30.57 | 22.39 | 94.3 | 6.11 | 6.10 | 1.5 | .20 | 0.2 | 2.0 | .30 |
| 2 | 15.93 | 30.57 | 22.39 | 94.3 | 6.11 | | | | | | |
| 3 | 15.91 | 30.57 | 22.39 | 94.3 | 6.10 | | | | | | |
| 4 | 15.94 | 30.56 | 22.38 | 94.3 | 6.10 | | | | | | |
| 5 | 15.94 | 30.56 | 22.38 | 94.3 | 6.09 | | | | | | |
| 6 | 15.85 | 30.57 | 22.40 | 94.3 | 6.09 | | | | | | |
| 7 | 15.80 | 30.61 | 22.45 | 94.3 | 6.09 | | | | | | |
| 8 | 15.79 | 30.61 | 22.45 | 94.3 | 6.09 | | | | | | |
| 9 | 15.74 | 30.60 | 22.45 | 94.3 | 6.09 | | | | | | |
| 10 | 15.61 | 30.62 | 22.50 | 94.3 | 6.09 | 6.12 | 1.1 | .20 | 0.2 | 2.0 | .55 |
| 11 | 15.60 | 30.66 | 22.53 | 94.3 | 6.10 | | | | | | |
| 12 | 15.53 | 30.69 | 22.57 | 94.3 | 6.09 | | | | | | |
| 13 | 15.30 | 30.82 | 22.71 | 94.3 | 6.08 | | | | | | |
| 14 | 14.41 | 30.87 | 22.94 | 94.3 | 6.14 | | | | | | |
| 15 | 13.74 | 30.86 | 23.07 | 94.3 | 6.20 | | | | | | |
| 16 | 12.87 | 30.90 | 23.27 | 94.3 | 6.28 | | | | | | |
| 17 | 12.34 | 31.06 | 23.50 | 94.3 | 6.32 | | | | | | |
| 18 | 11.39 | 31.29 | 23.84 | 94.3 | 6.40 | | | | | | |
| 19 | 10.81 | 31.47 | 24.09 | 94.3 | 6.45 | | | | | | |
| 20 | 6.84 | 31.71 | 24.88 | 94.3 | 6.60 | 6.29 | 2.7 | .30 | 0.8 | 3.0 | .90 |
| 21 | 6.32 | 32.01 | 25.18 | 94.3 | 6.88 | | | | | | |
| 22 | 6.31 | 32.03 | 25.19 | 94.3 | 6.80 | | | | | | |
| 23 | 6.32 | 32.05 | 25.21 | 94.3 | 6.63 | | | | | | |
| 24 | 6.33 | 32.07 | 25.22 | 94.3 | 6.49 | | | | | | |
| 25 | 6.34 | 32.09 | 25.24 | 94.3 | 6.40 | | | | | | |
| 26 | 6.36 | 32.12 | 25.26 | 94.3 | 6.32 | | | | | | |
| 27 | 6.39 | 32.14 | 25.27 | 94.3 | 6.27 | | | | | | |
| 28 | 6.39 | 32.13 | 25.26 | 94.3 | 6.23 | | | | | | |
| 29 | 6.41 | 32.14 | 25.27 | 94.3 | 6.21 | | | | | | |
| 30 | 6.42 | 32.15 | 25.27 | 94.3 | 6.19 | | | | | | |
| 31 | 6.42 | 32.15 | 25.27 | 94.3 | 6.18 | | | | | | |
| 32 | 6.42 | 32.14 | 25.27 | 94.3 | 6.17 | | | | | | |
| 33 | 6.42 | 32.14 | 25.27 | 94.3 | 6.16 | 6.25 | 2.4 | .30 | 0.6 | 3.0 | .90 |


KELEZ CRUISE XWCC-22 STATION 132 6/05/79
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

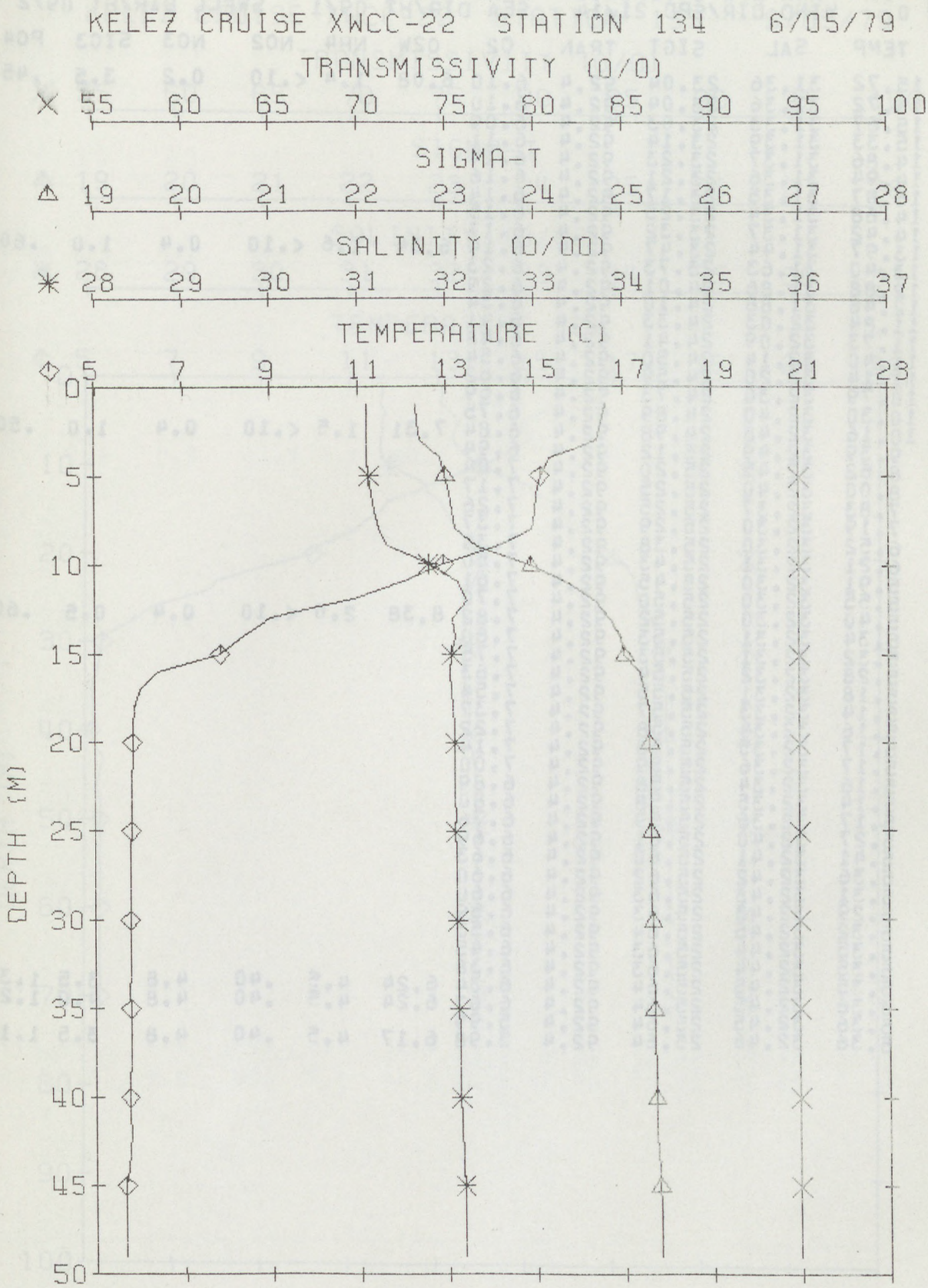
XWCC-22 STA.133 LAT 39 17.3N; LONG 73 36.0W GMT 19.1 6/05/79
DEPTH 45 AIR D/W 18.3/16.7 BARO 09.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 21/12 SEA DIR/HT 21/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.88 | 30.49 | 22.11 | 94.2 | 6.06 | 5.97 | 1.8 | .20 | 0.5 | 1.5 | .60 |
| 2 | 16.88 | 30.49 | 22.11 | 94.2 | 6.06 | | | | | | |
| 3 | 16.80 | 30.49 | 22.13 | 94.2 | 6.05 | | | | | | |
| 4 | 16.20 | 30.51 | 22.28 | 94.2 | 6.08 | | | | | | |
| 5 | 16.35 | 30.51 | 22.25 | 94.2 | 6.10 | | | | | | |
| 6 | 16.02 | 30.44 | 22.26 | 94.2 | 6.10 | | | | | | |
| 7 | 15.85 | 30.42 | 22.29 | 94.2 | 6.11 | | | | | | |
| 8 | 15.60 | 30.69 | 22.55 | 94.2 | 6.11 | | | | | | |
| 9 | 15.00 | 30.92 | 22.86 | 94.2 | 6.15 | | | | | | |
| 10 | 14.54 | 30.96 | 22.98 | 94.2 | 6.20 | 6.28 | 2.2 | .20 | 0.6 | 2.0 | 1.00 |
| 11 | 14.25 | 31.02 | 23.09 | 94.2 | 6.25 | | | | | | |
| 12 | 13.97 | 31.04 | 23.16 | 94.2 | 6.27 | | | | | | |
| 13 | 13.64 | 31.01 | 23.20 | 94.2 | 6.28 | | | | | | |
| 14 | 13.03 | 31.04 | 23.35 | 94.2 | 6.30 | | | | | | |
| 15 | 12.02 | 31.30 | 23.74 | 94.2 | 6.36 | | | | | | |
| 16 | 10.84 | 31.46 | 24.08 | 94.2 | 6.47 | | | | | | |
| 17 | 8.10 | 31.89 | 24.84 | 94.2 | 6.64 | | | | | | |
| 18 | 7.02 | 32.27 | 25.29 | 94.2 | 6.94 | | | | | | |
| 19 | 6.86 | 32.30 | 25.33 | 94.2 | 7.01 | | | | | | |
| 20 | 6.82 | 32.31 | 25.35 | 94.2 | 6.98 | 6.65 | 1.5 | <.10 | 0.5 | 1.5 | 1.10 |
| 21 | 6.81 | 32.32 | 25.36 | 94.2 | 6.90 | | | | | | |
| 22 | 6.81 | 32.32 | 25.35 | 94.2 | 6.84 | | | | | | |
| 23 | 6.79 | 32.30 | 25.35 | 94.2 | 6.78 | | | | | | |
| 24 | 6.78 | 32.30 | 25.35 | 94.2 | 6.73 | | | | | | |
| 25 | 6.77 | 32.30 | 25.35 | 94.2 | 6.68 | | | | | | |
| 26 | 6.76 | 32.29 | 25.34 | 94.2 | 6.64 | | | | | | |
| 27 | 6.73 | 32.29 | 25.35 | 94.2 | 6.60 | | | | | | |
| 28 | 6.72 | 32.30 | 25.35 | 94.2 | 6.57 | | | | | | |
| 29 | 6.72 | 32.29 | 25.35 | 94.2 | 6.53 | | | | | | |
| 30 | 6.72 | 32.29 | 25.35 | 94.2 | 6.50 | 6.50 | 1.4 | <.10 | 0.2 | 1.5 | .70 |
| 31 | 6.72 | 32.30 | 25.36 | 94.2 | 6.47 | | | | | | |
| 32 | 6.72 | 32.29 | 25.35 | 94.2 | 6.45 | | | | | | |
| 33 | 6.71 | 32.30 | 25.35 | 94.2 | 6.42 | | | | | | |
| 34 | 6.71 | 32.29 | 25.35 | 94.2 | 6.40 | | | | | | |
| 35 | 6.71 | 32.31 | 25.36 | 94.2 | 6.39 | | | | | | |
| 36 | 6.71 | 32.31 | 25.36 | 94.2 | 6.38 | | | | | | |
| 37 | 6.71 | 32.29 | 25.35 | 94.2 | 6.36 | | | | | | |
| 38 | 6.70 | 32.30 | 25.36 | 94.2 | 6.35 | | | | | | |
| 39 | 6.70 | 32.30 | 25.36 | 94.2 | 6.35 | | | | | | |
| 40 | 6.70 | 32.29 | 25.35 | 94.2 | 6.34 | | | | | | |
| 41 | 6.70 | 32.29 | 25.35 | 94.2 | 6.33 | | | | | | |
| 42 | 6.70 | 32.30 | 25.35 | 94.2 | 6.32 | | | | | | |
| 43 | 6.70 | 32.29 | 25.35 | 94.2 | 6.32 | 6.52 | 1.9 | .20 | 0.4 | 1.5 | .85 |


KELEZ CRUISE XWCC-22 STATION 133 6/05/79
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

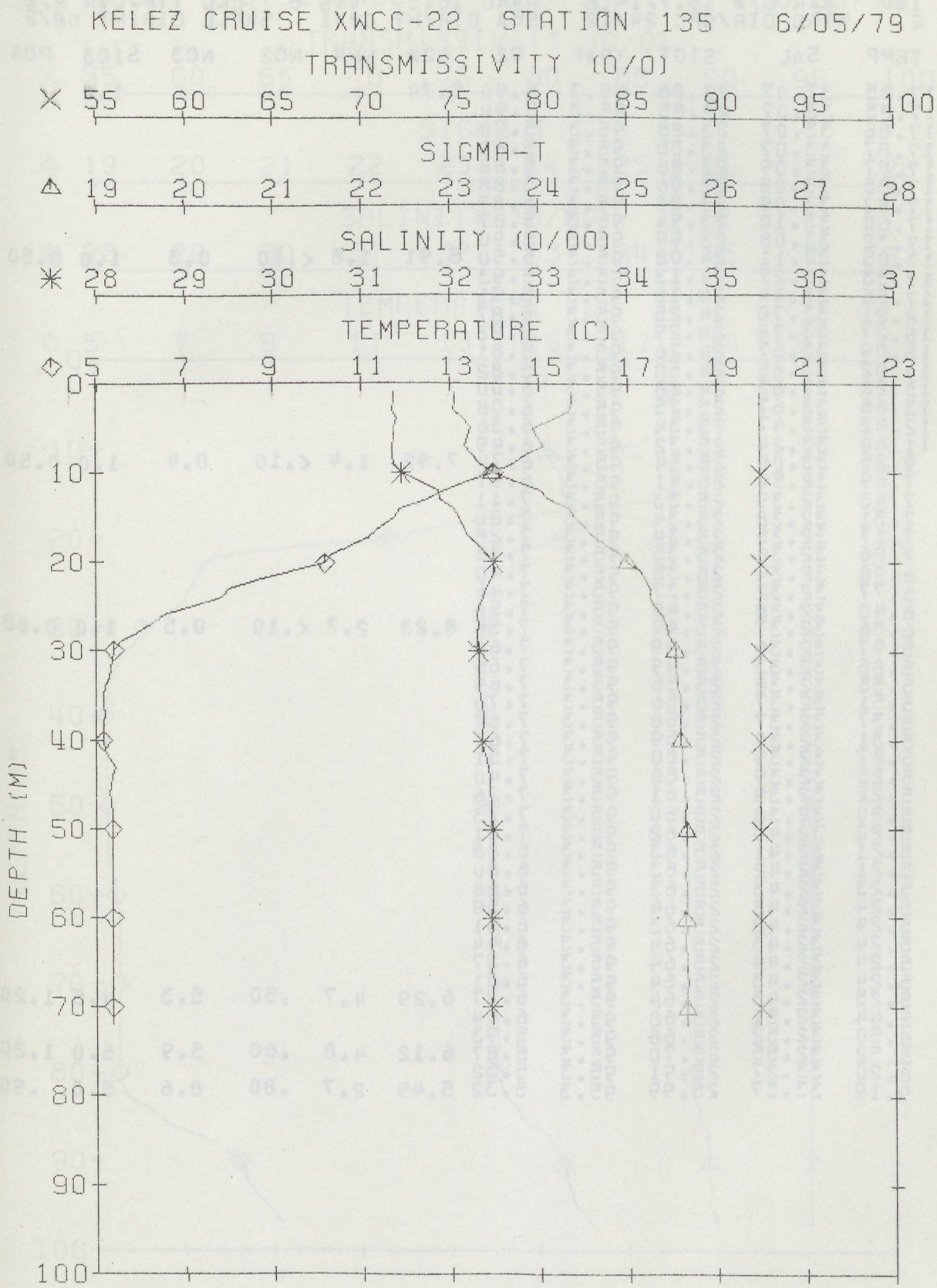
XWCC-22 STA.134 LAT 39 11.5N; LONG 73 22.1W GMT 20.7 6/05/79
DEPTH 51 AIR D/W 18.3/17.2 BARO 09.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 22/10 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.58 | 31.10 | 22.64 | 94.9 | 6.00 | 5.96 | 1.2 | <.10 | 0.2 | 1.0 | .50 |
| 2 | 16.47 | 31.10 | 22.67 | 94.9 | 6.00 | | | | | | |
| 3 | 16.37 | 31.10 | 22.69 | 94.9 | 6.05 | | | | | | |
| 4 | 15.33 | 31.10 | 22.92 | 94.9 | 6.11 | | | | | | |
| 5 | 15.10 | 31.11 | 22.98 | 94.9 | 6.11 | | | | | | |
| 6 | 15.00 | 31.14 | 23.02 | 94.9 | 6.13 | | | | | | |
| 7 | 14.98 | 31.18 | 23.06 | 94.9 | 6.13 | | | | | | |
| 8 | 14.91 | 31.22 | 23.11 | 94.9 | 6.12 | | | | | | |
| 9 | 14.09 | 31.32 | 23.35 | 94.9 | 6.12 | | | | | | |
| 10 | 12.92 | 31.78 | 23.94 | 94.9 | 6.19 | 6.52 | 1.7 | <.10 | 0.2 | 1.0 | .40 |
| 11 | 12.00 | 32.13 | 24.38 | 94.9 | 6.29 | | | | | | |
| 12 | 10.87 | 32.23 | 24.67 | 94.9 | 6.47 | | | | | | |
| 13 | 8.99 | 32.07 | 24.85 | 94.9 | 6.48 | | | | | | |
| 14 | 8.39 | 32.10 | 24.96 | 94.9 | 6.80 | | | | | | |
| 15 | 7.84 | 32.05 | 25.00 | 94.9 | 6.94 | | | | | | |
| 16 | 6.42 | 32.02 | 25.17 | 94.9 | 7.19 | | | | | | |
| 17 | 6.02 | 32.03 | 25.23 | 94.9 | 7.24 | | | | | | |
| 18 | 5.90 | 32.06 | 25.27 | 94.9 | 7.29 | | | | | | |
| 19 | 5.86 | 32.07 | 25.28 | 94.9 | 7.18 | | | | | | |
| 20 | 5.84 | 32.08 | 25.29 | 94.9 | 7.05 | 6.34 | 2.8 | .30 | 1.1 | 2.5 | .75 |
| 21 | 5.83 | 32.08 | 25.29 | 94.9 | 6.92 | | | | | | |
| 22 | 5.82 | 32.08 | 25.29 | 94.9 | 6.77 | | | | | | |
| 23 | 5.81 | 32.08 | 25.29 | 94.9 | 6.64 | | | | | | |
| 24 | 5.81 | 32.08 | 25.30 | 94.9 | 6.58 | | | | | | |
| 25 | 5.80 | 32.08 | 25.30 | 94.9 | 6.52 | | | | | | |
| 26 | 5.80 | 32.09 | 25.30 | 94.9 | 6.48 | | | | | | |
| 27 | 5.79 | 32.09 | 25.30 | 94.9 | 6.44 | | | | | | |
| 28 | 5.78 | 32.09 | 25.30 | 94.9 | 6.41 | | | | | | |
| 29 | 5.78 | 32.09 | 25.31 | 94.9 | 6.38 | | | | | | |
| 30 | 5.77 | 32.10 | 25.31 | 94.9 | 6.36 | 6.37 | 2.8 | .30 | 1.5 | 2.5 | .75 |
| 31 | 5.77 | 32.10 | 25.31 | 94.9 | 6.34 | | | | | | |
| 32 | 5.77 | 32.10 | 25.32 | 94.9 | 6.32 | | | | | | |
| 33 | 5.77 | 32.10 | 25.32 | 94.9 | 6.31 | | | | | | |
| 34 | 5.76 | 32.11 | 25.32 | 94.9 | 6.31 | | | | | | |
| 35 | 5.77 | 32.12 | 25.33 | 94.9 | 6.29 | | | | | | |
| 36 | 5.77 | 32.13 | 25.34 | 94.9 | 6.28 | | | | | | |
| 37 | 5.77 | 32.13 | 25.34 | 94.9 | 6.27 | | | | | | |
| 38 | 5.77 | 32.13 | 25.34 | 94.9 | 6.26 | | | | | | |
| 39 | 5.77 | 32.13 | 25.34 | 94.9 | 6.25 | | | | | | |
| 40 | 5.75 | 32.13 | 25.34 | 94.9 | 6.25 | 6.37 | 2.8 | .20 | 1.0 | 2.5 | .80 |
| 41 | 5.76 | 32.15 | 25.35 | 94.9 | 6.24 | | | | | | |
| 42 | 5.77 | 32.15 | 25.35 | 94.9 | 6.24 | | | | | | |
| 43 | 5.76 | 32.16 | 25.37 | 94.9 | 6.23 | | | | | | |
| 44 | 5.72 | 32.16 | 25.37 | 94.9 | 6.22 | | | | | | |
| 45 | 5.67 | 32.17 | 25.39 | 94.9 | 6.21 | | | | | | |
| 46 | 5.65 | 32.18 | 25.39 | 94.9 | 6.21 | | | | | | |
| 47 | 5.65 | 32.18 | 25.39 | 94.9 | 6.20 | | | | | | |
| 48 | 5.64 | 32.18 | 25.39 | 94.9 | 6.19 | 6.33 | 3.3 | .20 | 1.5 | 2.0 | .85 |
| 49 | 5.64 | 32.18 | 25.39 | 94.9 | 6.17 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 134 6/05/79
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

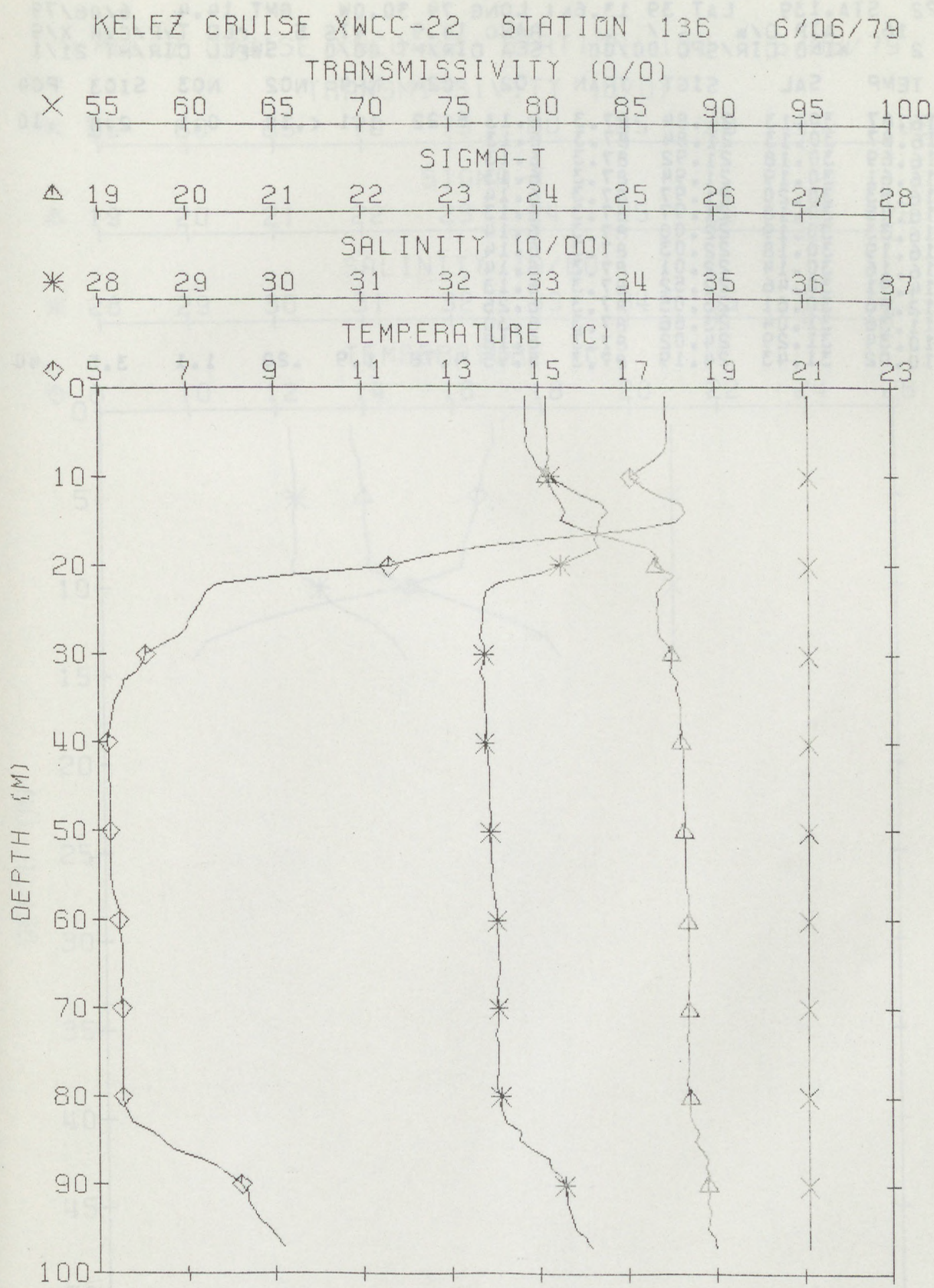
XWCC-22 STA.135 LAT 39 5.4N; LONG 73 7.4W GMT 22.6 6/05/79
DEPTH 76 AIR D/W 17.8/16.1 BARO 09.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 21/14 SEA DIR/HT 09/1 SWELL DIR/HT 09/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.72 | 31.36 | 23.04 | 92.4 | 6.10 | 6.08 | 1.4 | <.10 | 0.2 | 3.5 | .45 |
| 2 | 15.72 | 31.36 | 23.04 | 92.4 | 6.10 | | | | | | |
| 3 | 15.67 | 31.33 | 23.03 | 92.4 | 6.09 | | | | | | |
| 4 | 15.33 | 31.39 | 23.14 | 92.4 | 6.11 | | | | | | |
| 5 | 14.86 | 31.37 | 23.23 | 92.4 | 6.14 | | | | | | |
| 6 | 14.94 | 31.36 | 23.21 | 92.4 | 6.16 | | | | | | |
| 7 | 15.07 | 31.35 | 23.17 | 92.4 | 6.14 | | | | | | |
| 8 | 14.68 | 31.34 | 23.25 | 92.4 | 6.15 | | | | | | |
| 9 | 14.42 | 31.37 | 23.32 | 92.4 | 6.17 | | | | | | |
| 10 | 13.97 | 31.44 | 23.47 | 92.4 | 6.19 | 6.34 | 1.6 | <.10 | 0.4 | 1.0 | .60 |
| 11 | 13.40 | 31.63 | 23.73 | 92.4 | 6.23 | | | | | | |
| 12 | 12.88 | 31.86 | 24.01 | 92.4 | 6.29 | | | | | | |
| 13 | 12.48 | 31.88 | 24.10 | 92.4 | 6.34 | | | | | | |
| 14 | 11.84 | 32.03 | 24.33 | 92.4 | 6.41 | | | | | | |
| 15 | 11.73 | 32.09 | 24.41 | 92.4 | 6.48 | | | | | | |
| 16 | 11.40 | 32.14 | 24.50 | 92.4 | 6.54 | | | | | | |
| 17 | 11.14 | 32.20 | 24.59 | 92.4 | 6.62 | | | | | | |
| 18 | 10.79 | 32.30 | 24.73 | 92.4 | 6.69 | | | | | | |
| 19 | 10.30 | 32.40 | 24.89 | 92.4 | 6.75 | | | | | | |
| 20 | 10.16 | 32.48 | 24.98 | 92.4 | 6.84 | 7.31 | 1.5 | <.10 | 0.4 | 1.0 | .50 |
| 21 | 9.39 | 32.49 | 25.12 | 92.4 | 6.94 | | | | | | |
| 22 | 8.62 | 32.45 | 25.20 | 92.4 | 7.04 | | | | | | |
| 23 | 8.00 | 32.40 | 25.25 | 92.4 | 7.17 | | | | | | |
| 24 | 7.83 | 32.37 | 25.25 | 92.4 | 7.26 | | | | | | |
| 25 | 7.19 | 32.30 | 25.29 | 92.4 | 7.37 | | | | | | |
| 26 | 6.52 | 32.30 | 25.38 | 92.4 | 7.39 | | | | | | |
| 27 | 6.21 | 32.31 | 25.43 | 92.4 | 7.50 | | | | | | |
| 28 | 5.91 | 32.30 | 25.45 | 92.4 | 7.61 | | | | | | |
| 29 | 5.55 | 32.30 | 25.50 | 92.4 | 7.70 | | | | | | |
| 30 | 5.40 | 32.30 | 25.52 | 92.4 | 7.82 | 8.38 | 2.0 | <.10 | 0.4 | 0.5 | .60 |
| 31 | 5.34 | 32.31 | 25.53 | 92.4 | 7.80 | | | | | | |
| 32 | 5.32 | 32.31 | 25.53 | 92.4 | 7.75 | | | | | | |
| 33 | 5.28 | 32.32 | 25.54 | 92.4 | 7.63 | | | | | | |
| 34 | 5.18 | 32.31 | 25.55 | 92.4 | 7.54 | | | | | | |
| 35 | 5.14 | 32.33 | 25.57 | 92.4 | 7.37 | | | | | | |
| 36 | 5.16 | 32.34 | 25.58 | 92.4 | 7.22 | | | | | | |
| 37 | 5.17 | 32.35 | 25.58 | 92.4 | 7.14 | | | | | | |
| 38 | 5.17 | 32.36 | 25.59 | 92.4 | 7.00 | | | | | | |
| 39 | 5.16 | 32.34 | 25.58 | 92.4 | 6.89 | | | | | | |
| 40 | 5.14 | 32.35 | 25.58 | 92.4 | 6.80 | | | | | | |
| 41 | 5.17 | 32.36 | 25.59 | 92.4 | 6.76 | | | | | | |
| 42 | 5.27 | 32.40 | 25.61 | 92.4 | 6.69 | | | | | | |
| 43 | 5.41 | 32.41 | 25.60 | 92.4 | 6.63 | | | | | | |
| 44 | 5.36 | 32.42 | 25.62 | 92.4 | 6.60 | | | | | | |
| 45 | 5.31 | 32.43 | 25.63 | 92.4 | 6.60 | | | | | | |
| 46 | 5.29 | 32.43 | 25.63 | 92.4 | 6.59 | | | | | | |
| 47 | 5.32 | 32.45 | 25.64 | 92.4 | 6.53 | | | | | | |
| 48 | 5.35 | 32.44 | 25.63 | 92.4 | 6.45 | | | | | | |
| 49 | 5.35 | 32.44 | 25.63 | 92.4 | 6.38 | | | | | | |
| 50 | 5.35 | 32.45 | 25.64 | 92.4 | 6.34 | 6.24 | 4.5 | .40 | 4.8 | 3.5 | 1.30 |
| 60 | 5.36 | 32.45 | 25.64 | 92.4 | 6.07 | 6.24 | 4.5 | .40 | 4.8 | 4.0 | 1.20 |
| 70 | 5.36 | 32.45 | 25.64 | 92.4 | 5.99 | | | | | | |
| 72 | 5.36 | 32.46 | 25.64 | 92.4 | 5.98 | 6.17 | 4.5 | .40 | 4.8 | 3.5 | 1.10 |


KELEZ CRUISE XWCC-22 STATION 135 6/05/79
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

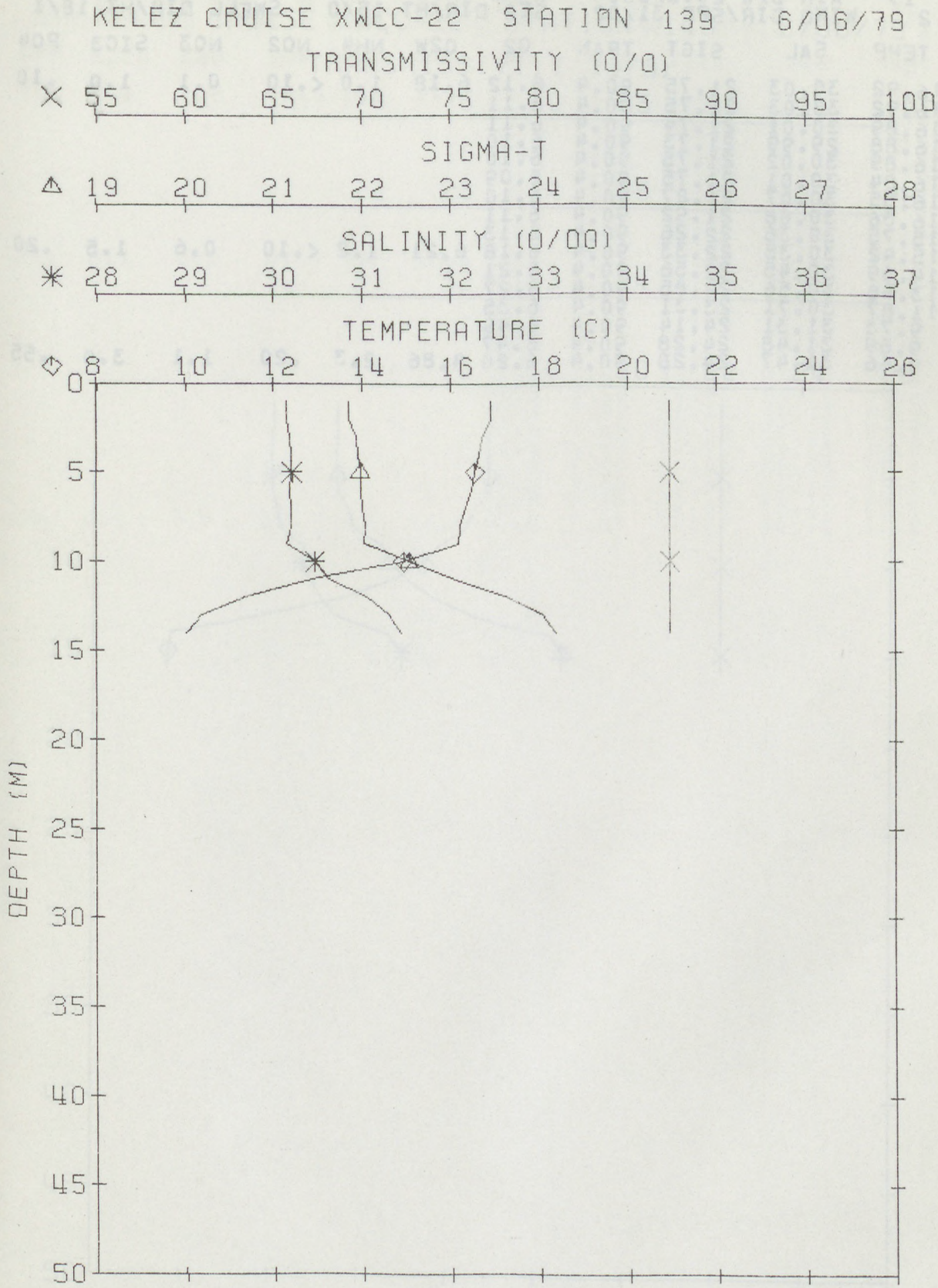
XWCC-22 STA.136 LAT 39 .0N; LONG 72 52.0W GMT 0.3 6/06/79
DEPTH 100 AIR D/W 16.7/15.6 BARO 10.5 VIS 6 CLD TYP/CVR 4/2
WETHR 2 WIND DIR/SPD 24/12 SEA DIR/HT 08/1 SWELL DIR/HT 08/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 1.0 | |
| 1 | 17.85 | 33.07 | 23.85 | 95.3 | 5.90 | 5.74 | | | | | |
| 2 | 17.85 | 33.07 | 23.85 | 95.3 | 5.90 | | | | | | |
| 3 | 17.86 | 33.07 | 23.85 | 95.3 | 5.90 | | | | | | |
| 4 | 17.87 | 33.07 | 23.85 | 95.3 | 5.89 | | | | | | |
| 5 | 17.87 | 33.09 | 23.86 | 95.3 | 5.88 | | | | | | |
| 6 | 17.88 | 33.08 | 23.86 | 95.3 | 5.88 | | | | | | |
| 7 | 17.82 | 33.09 | 23.88 | 95.3 | 5.87 | | | | | | |
| 8 | 17.60 | 33.10 | 23.94 | 95.3 | 5.87 | | | | | | |
| 9 | 17.32 | 33.08 | 23.99 | 95.3 | 5.90 | | | | | | |
| 10 | 17.05 | 33.11 | 24.08 | 95.3 | 5.90 | 5.91 | 1.6 | <.10 | 0.3 | 1.0 | 0.50 |
| 11 | 17.33 | 33.27 | 24.13 | 95.3 | 5.93 | | | | | | |
| 12 | 17.66 | 33.44 | 24.18 | 95.3 | 5.91 | | | | | | |
| 13 | 18.21 | 33.70 | 24.25 | 95.3 | 5.87 | | | | | | |
| 14 | 18.27 | 33.78 | 24.29 | 95.3 | 5.83 | | | | | | |
| 15 | 18.09 | 33.67 | 24.26 | 95.3 | 5.81 | | | | | | |
| 16 | 17.02 | 33.65 | 24.50 | 95.3 | 5.82 | | | | | | |
| 17 | 15.28 | 33.63 | 24.88 | 95.3 | 6.00 | | | | | | |
| 18 | 13.66 | 33.67 | 25.25 | 95.3 | 6.08 | | | | | | |
| 19 | 12.42 | 33.47 | 25.34 | 95.3 | 6.36 | | | | | | |
| 20 | 11.60 | 33.24 | 25.32 | 95.3 | 6.49 | | | | | | |
| 21 | 9.25 | 33.00 | 25.54 | 95.3 | 6.74 | 7.92 | 1.4 | <.10 | 0.4 | 1.0 | 0.50 |
| 22 | 7.69 | 32.54 | 25.41 | 95.3 | 6.97 | | | | | | |
| 23 | 7.43 | 32.39 | 25.33 | 95.3 | 7.11 | | | | | | |
| 24 | 7.31 | 32.38 | 25.34 | 95.3 | 7.20 | | | | | | |
| 25 | 7.17 | 32.35 | 25.34 | 95.3 | 7.28 | | | | | | |
| 26 | 7.06 | 32.36 | 25.35 | 95.3 | 7.35 | | | | | | |
| 27 | 6.98 | 32.34 | 25.35 | 95.3 | 7.40 | | | | | | |
| 28 | 6.77 | 32.32 | 25.37 | 95.3 | 7.46 | | | | | | |
| 29 | 6.40 | 32.38 | 25.46 | 95.3 | 7.50 | | | | | | |
| 30 | 6.06 | 32.37 | 25.49 | 95.3 | 7.59 | 8.23 | 2.3 | <.10 | 0.5 | 1.0 | 0.85 |
| 31 | 5.97 | 32.36 | 25.49 | 95.3 | 7.62 | | | | | | |
| 32 | 5.86 | 32.33 | 25.49 | 95.3 | 7.65 | | | | | | |
| 33 | 5.55 | 32.38 | 25.56 | 95.3 | 7.69 | | | | | | |
| 34 | 5.51 | 32.37 | 25.56 | 95.3 | 7.70 | | | | | | |
| 35 | 5.37 | 32.37 | 25.58 | 95.3 | 7.67 | | | | | | |
| 36 | 5.31 | 32.38 | 25.59 | 95.3 | 7.61 | | | | | | |
| 37 | 5.27 | 32.39 | 25.60 | 95.3 | 7.51 | | | | | | |
| 38 | 5.25 | 32.39 | 25.60 | 95.3 | 7.40 | | | | | | |
| 39 | 5.22 | 32.39 | 25.61 | 95.3 | 7.26 | | | | | | |
| 40 | 5.20 | 32.38 | 25.60 | 95.3 | 7.13 | | | | | | |
| 41 | 5.22 | 32.40 | 25.62 | 95.3 | 7.01 | | | | | | |
| 42 | 5.21 | 32.41 | 25.63 | 95.3 | 6.88 | | | | | | |
| 43 | 5.21 | 32.42 | 25.63 | 95.3 | 6.80 | | | | | | |
| 44 | 5.23 | 32.43 | 25.63 | 95.3 | 6.68 | | | | | | |
| 45 | 5.24 | 32.43 | 25.64 | 95.3 | 6.59 | | | | | | |
| 46 | 5.24 | 32.42 | 25.63 | 95.3 | 6.51 | | | | | | |
| 47 | 5.24 | 32.43 | 25.64 | 95.3 | 6.44 | | | | | | |
| 48 | 5.24 | 32.44 | 25.64 | 95.3 | 6.37 | | | | | | |
| 49 | 5.24 | 32.43 | 25.64 | 95.3 | 6.31 | | | | | | |
| 50 | 5.25 | 32.43 | 25.64 | 95.3 | 6.27 | 6.29 | 4.7 | .50 | 5.3 | 4.5 | 1.20 |
| 60 | 5.44 | 32.51 | 25.68 | 95.3 | 6.04 | | | | | | |
| 70 | 5.50 | 32.52 | 25.68 | 95.3 | 5.93 | | | | | | |
| 80 | 5.52 | 32.55 | 25.70 | 95.3 | 5.87 | 6.12 | 4.8 | .60 | 5.9 | 5.0 | 1.20 |
| 90 | 8.20 | 33.27 | 25.91 | 95.3 | 5.52 | | | | | | |
| 97 | 9.19 | 33.57 | 25.99 | 95.3 | 5.32 | 5.49 | 2.7 | .80 | 8.6 | 5.0 | .90 |


KELEZ CRUISE XWCC-22 STATION 136 6/06/79
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-22 STA.139 LAT 39 13.6N; LONG 74 30.0W GMT 14.4 6/06/79
DEPTH 16 AIR D/W . / . BARO 14.9 VIS 5 CLD TYP/CVR X/9
WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 21/1

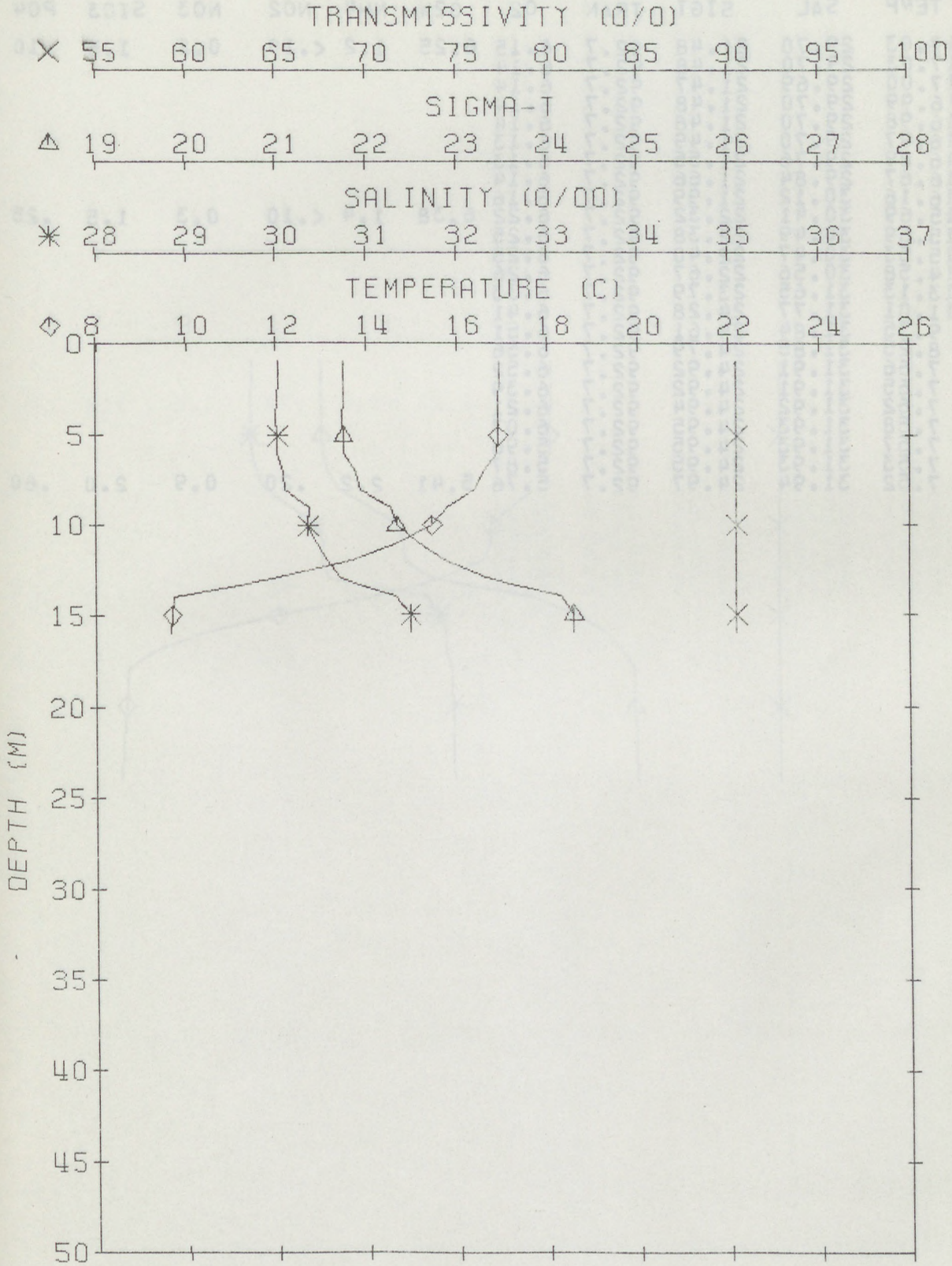
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.87 | 30.13 | 21.84 | 87.3 | 6.13 | 6.22 | 1.1 | <.10 | 0.1 | 2.0 | .10 |
| 2 | 16.87 | 30.13 | 21.84 | 87.3 | 6.13 | | | | | | |
| 3 | 16.69 | 30.18 | 21.92 | 87.3 | 6.13 | | | | | | |
| 4 | 16.61 | 30.19 | 21.94 | 87.3 | 6.13 | | | | | | |
| 5 | 16.53 | 30.20 | 21.97 | 87.3 | 6.14 | | | | | | |
| 6 | 16.45 | 30.18 | 21.97 | 87.3 | 6.13 | | | | | | |
| 7 | 16.33 | 30.19 | 22.00 | 87.3 | 6.14 | | | | | | |
| 8 | 16.19 | 30.18 | 22.03 | 87.3 | 6.14 | | | | | | |
| 9 | 16.16 | 30.14 | 22.01 | 87.3 | 6.14 | | | | | | |
| 10 | 14.91 | 30.46 | 22.52 | 87.3 | 6.13 | | | | | | |
| 11 | 12.86 | 30.61 | 23.05 | 87.3 | 6.25 | | | | | | |
| 12 | 11.36 | 31.04 | 23.66 | 87.3 | 6.30 | | | | | | |
| 13 | 10.34 | 31.29 | 24.02 | 87.3 | 6.18 | | | | | | |
| 14 | 10.02 | 31.43 | 24.19 | 87.3 | 5.95 | 4.78 | 1.9 | .20 | 1.1 | 3.5 | .40 |


KELEZ CRUISE XWCC-22 STATION 139 6/06/79
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-22 STA.140 LAT 39 11.0N; LONG 74 24.5W GMT 13.4 6/06/79
DEPTH 19 AIR D/W 20.6/18.9 BARO 14.5 VIS 5 CLD TYP/CVR 8/4
WETHR 2 WIND DIR/SPD 31/02 SEA DIR/HT 15/0 SWELL DIR/HT 18/1

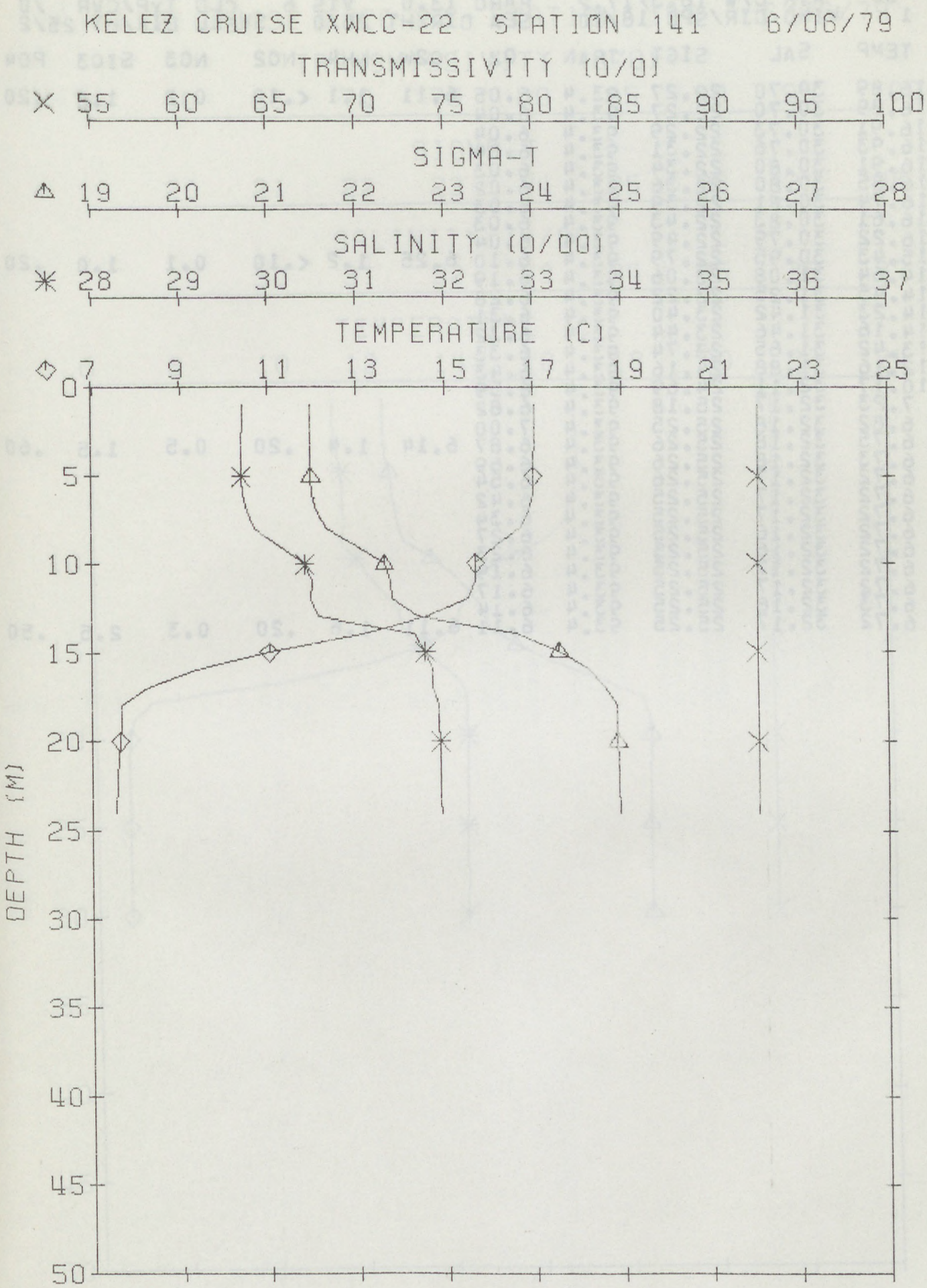
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.92 | 30.03 | 21.75 | 90.4 | 6.12 | 6.18 | 1.0 | <.10 | 0.1 | 1.0 | .10 |
| 2 | 16.92 | 30.03 | 21.75 | 90.4 | 6.11 | | | | | | |
| 3 | 16.89 | 30.01 | 21.74 | 90.4 | 6.11 | | | | | | |
| 4 | 16.88 | 29.99 | 21.73 | 90.4 | 6.10 | | | | | | |
| 5 | 16.89 | 30.02 | 21.75 | 90.4 | 6.10 | | | | | | |
| 6 | 16.84 | 30.01 | 21.75 | 90.4 | 6.09 | | | | | | |
| 7 | 16.55 | 30.07 | 21.87 | 90.4 | 6.10 | | | | | | |
| 8 | 16.36 | 30.08 | 21.92 | 90.4 | 6.11 | | | | | | |
| 9 | 15.75 | 30.36 | 22.26 | 90.4 | 6.13 | | | | | | |
| 10 | 15.42 | 30.35 | 22.33 | 90.4 | 6.18 | 6.21 | 1.2 | <.10 | 0.6 | 1.5 | .20 |
| 11 | 14.69 | 30.45 | 22.56 | 90.4 | 6.21 | | | | | | |
| 12 | 13.66 | 30.56 | 22.85 | 90.4 | 6.27 | | | | | | |
| 13 | 11.87 | 30.71 | 23.31 | 90.4 | 6.35 | | | | | | |
| 14 | 9.73 | 31.31 | 24.14 | 90.4 | 6.49 | | | | | | |
| 15 | 9.69 | 31.48 | 24.28 | 90.4 | 6.47 | | | | | | |
| 16 | 9.66 | 31.47 | 24.28 | 90.4 | 6.20 | 4.86 | 2.3 | .20 | 1.1 | 3.0 | .55 |

KELEZ CRUISE XWCC-22 STATION 140 6/06/79



XWCC-22 STA.141 LAT 39 6.8N; LONG 74 15.2W GMT 12.2 6/06/79
DEPTH 27 AIR D/W 21.1/18.9 BARO 14.0 VIS 6 CLD TYP/CVR /0
WETHR 1 WIND DIR/SPD 20/06 SEA DIR/HT 25/0 SWELL DIR/HT 25/2

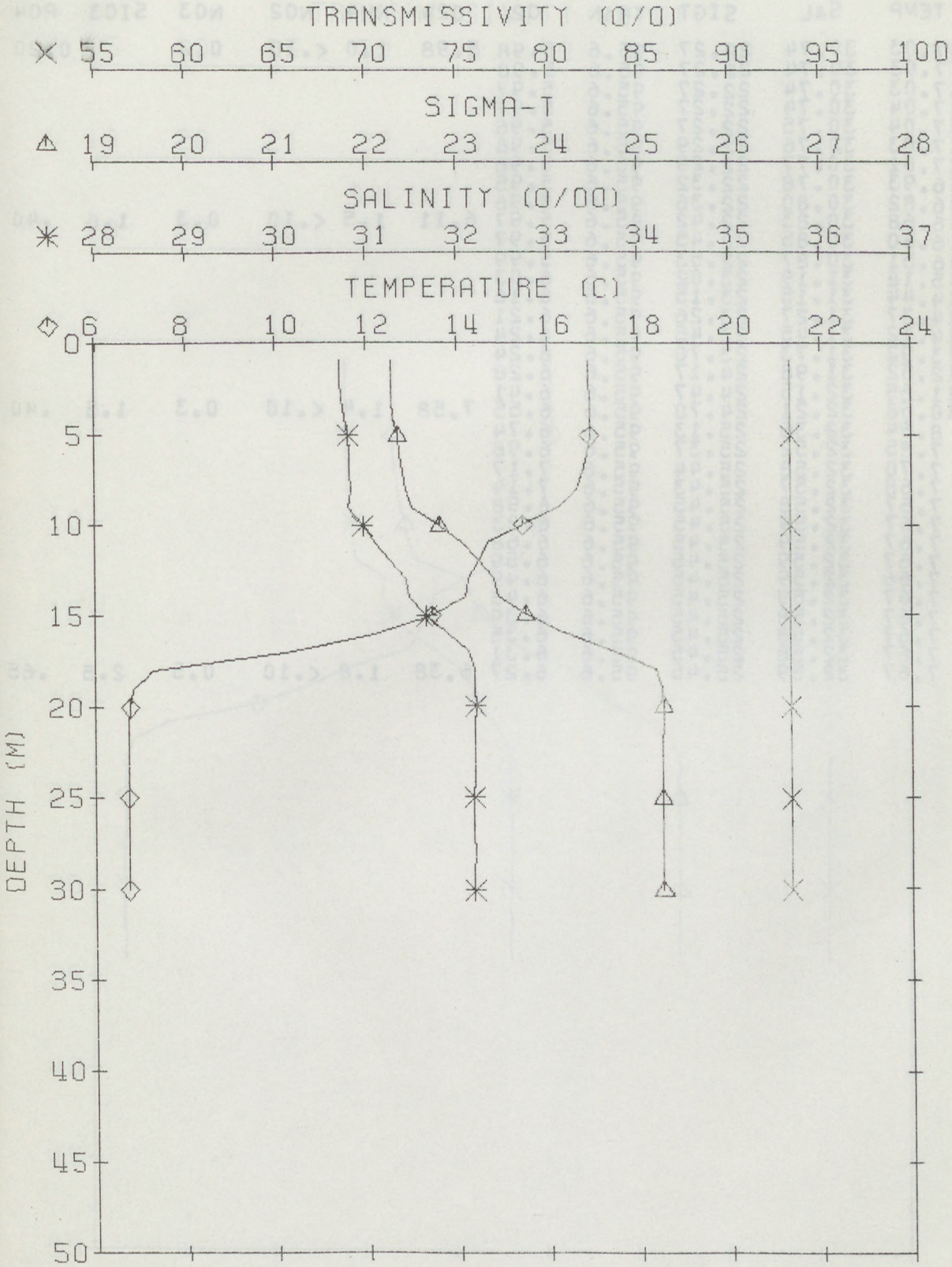
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.03 | 29.70 | 21.48 | 92.7 | 6.15 | 6.25 | 1.2 | <.10 | 0.2 | 1.5 | .10 |
| 2 | 17.03 | 29.70 | 21.48 | 92.7 | 6.14 | | | | | | |
| 3 | 17.00 | 29.69 | 21.47 | 92.7 | 6.14 | | | | | | |
| 4 | 16.99 | 29.70 | 21.48 | 92.7 | 6.14 | | | | | | |
| 5 | 16.98 | 29.70 | 21.48 | 92.7 | 6.14 | | | | | | |
| 6 | 16.97 | 29.70 | 21.49 | 92.7 | 6.13 | | | | | | |
| 7 | 16.89 | 29.76 | 21.55 | 92.7 | 6.13 | | | | | | |
| 8 | 16.67 | 29.84 | 21.66 | 92.7 | 6.14 | | | | | | |
| 9 | 16.16 | 30.12 | 21.99 | 92.7 | 6.16 | | | | | | |
| 10 | 15.69 | 30.41 | 22.32 | 92.7 | 6.22 | 6.38 | 1.4 | <.10 | 0.3 | 1.5 | .25 |
| 11 | 15.69 | 30.49 | 22.38 | 92.7 | 6.25 | | | | | | |
| 12 | 15.53 | 30.47 | 22.40 | 92.7 | 6.25 | | | | | | |
| 13 | 14.58 | 30.56 | 22.67 | 92.7 | 6.26 | | | | | | |
| 14 | 13.13 | 31.65 | 23.79 | 92.7 | 6.33 | | | | | | |
| 15 | 11.01 | 31.77 | 24.28 | 92.7 | 6.41 | | | | | | |
| 16 | 9.35 | 31.84 | 24.61 | 92.7 | 6.51 | | | | | | |
| 17 | 8.25 | 31.85 | 24.79 | 92.7 | 6.56 | | | | | | |
| 18 | 7.66 | 31.91 | 24.92 | 92.7 | 6.52 | | | | | | |
| 19 | 7.65 | 31.91 | 24.92 | 92.7 | 6.39 | | | | | | |
| 20 | 7.62 | 31.92 | 24.94 | 92.7 | 6.21 | | | | | | |
| 21 | 7.58 | 31.93 | 24.95 | 92.7 | 6.07 | | | | | | |
| 22 | 7.57 | 31.93 | 24.95 | 92.7 | 5.96 | | | | | | |
| 23 | 7.53 | 31.93 | 24.95 | 92.7 | 5.87 | | | | | | |
| 24 | 7.52 | 31.94 | 24.97 | 92.7 | 5.76 | 5.41 | 2.2 | .20 | 0.9 | 2.0 | .60 |


KELEZ CRUISE XWCC-22 STATION 141 6/06/79
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-22 STA.142 LAT 39 3.0N; LONG 74 6.0W GMT 11.0 6/06/79
DEPTH 33 AIR D/W 18.3/17.2 BARO 13.0 VIS 6 CLD TYP/CVR /0
WETHR 1 WIND DIR/SPD 18/10 SEA DIR/HT 25/0 SWELL DIR/HT 25/2

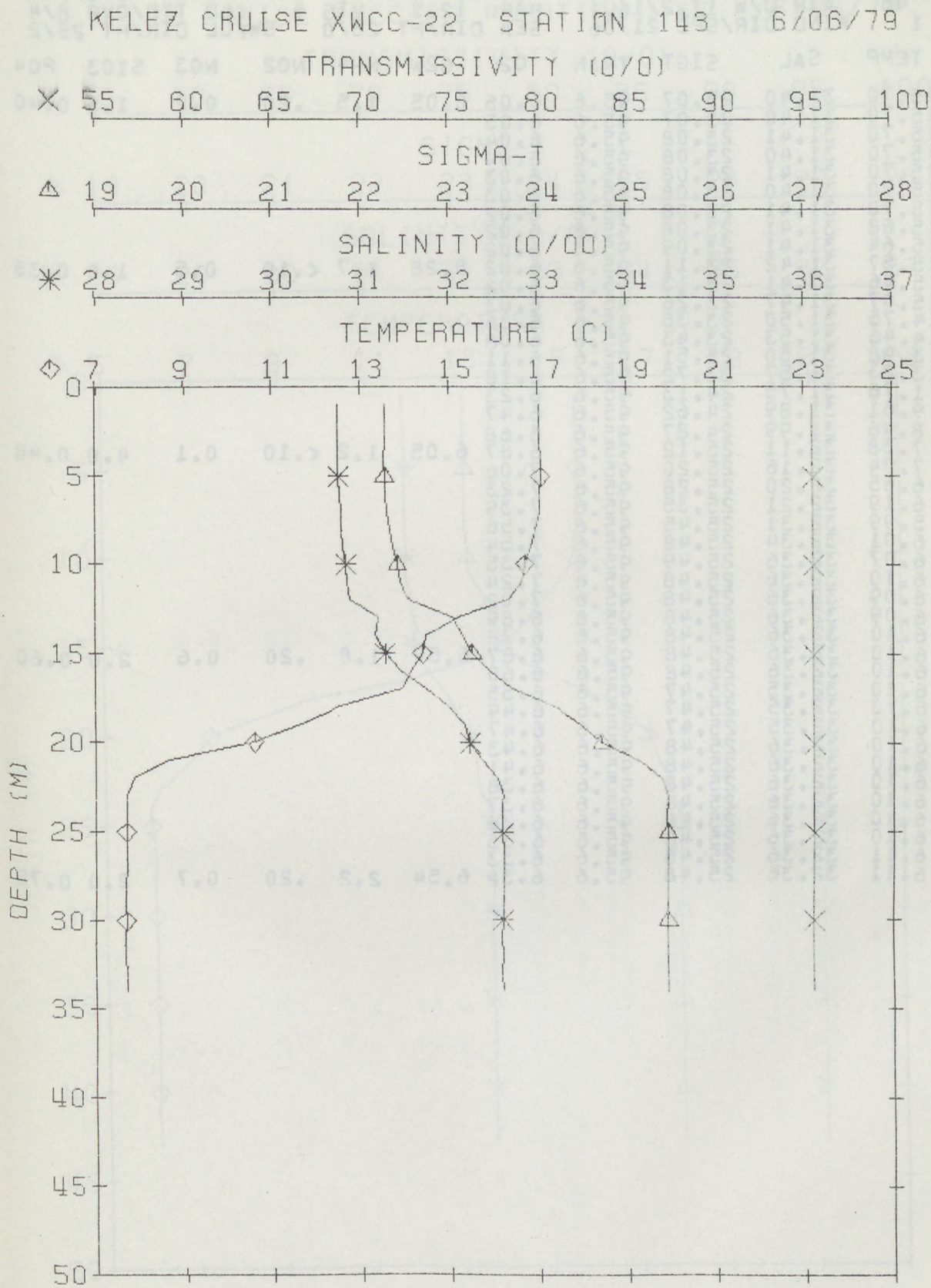
| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.89 | 30.70 | 22.27 | 93.4 | 6.05 | 6.11 | 1.1 | <.10 | 0.2 | 1.0 | .20 |
| 2 | 16.89 | 30.70 | 22.27 | 93.4 | 6.04 | | | | | | |
| 3 | 16.91 | 30.73 | 22.29 | 93.4 | 6.04 | | | | | | |
| 4 | 16.93 | 30.76 | 22.31 | 93.4 | 6.04 | | | | | | |
| 5 | 16.91 | 30.80 | 22.34 | 93.4 | 6.03 | | | | | | |
| 6 | 16.85 | 30.80 | 22.36 | 93.4 | 6.02 | | | | | | |
| 7 | 16.74 | 30.81 | 22.39 | 93.4 | 6.03 | | | | | | |
| 8 | 16.61 | 30.83 | 22.43 | 93.4 | 6.03 | | | | | | |
| 9 | 16.22 | 30.79 | 22.49 | 93.4 | 6.04 | | | | | | |
| 10 | 15.43 | 30.95 | 22.79 | 93.4 | 6.10 | 6.25 | 1.2 | <.10 | 0.1 | 1.0 | .20 |
| 11 | 14.64 | 31.08 | 23.06 | 93.4 | 6.19 | | | | | | |
| 12 | 14.45 | 31.25 | 23.22 | 93.4 | 6.28 | | | | | | |
| 13 | 14.23 | 31.42 | 23.40 | 93.4 | 6.31 | | | | | | |
| 14 | 14.16 | 31.46 | 23.44 | 93.4 | 6.32 | | | | | | |
| 15 | 13.42 | 31.65 | 23.74 | 93.4 | 6.33 | | | | | | |
| 16 | 12.16 | 31.88 | 24.16 | 93.4 | 6.43 | | | | | | |
| 17 | 10.17 | 32.11 | 24.69 | 93.4 | 6.59 | | | | | | |
| 18 | 7.23 | 32.17 | 25.18 | 93.4 | 6.82 | | | | | | |
| 19 | 6.82 | 32.18 | 25.25 | 93.4 | 7.00 | | | | | | |
| 20 | 6.75 | 32.18 | 25.26 | 93.4 | 6.87 | 6.14 | 1.4 | .20 | 0.5 | 1.5 | .60 |
| 21 | 6.73 | 32.18 | 25.26 | 93.4 | 6.69 | | | | | | |
| 22 | 6.72 | 32.17 | 25.26 | 93.4 | 6.54 | | | | | | |
| 23 | 6.72 | 32.17 | 25.25 | 93.4 | 6.42 | | | | | | |
| 24 | 6.72 | 32.17 | 25.25 | 93.4 | 6.34 | | | | | | |
| 25 | 6.72 | 32.16 | 25.25 | 93.4 | 6.27 | | | | | | |
| 26 | 6.72 | 32.16 | 25.25 | 93.4 | 6.23 | | | | | | |
| 27 | 6.72 | 32.17 | 25.25 | 93.4 | 6.19 | | | | | | |
| 28 | 6.72 | 32.17 | 25.25 | 93.4 | 6.17 | | | | | | |
| 29 | 6.73 | 32.16 | 25.25 | 93.4 | 6.14 | | | | | | |
| 30 | 6.72 | 32.17 | 25.25 | 93.4 | 6.11 | 6.11 | 1.6 | .20 | 0.3 | 2.5 | .50 |

KELEZ CRUISE XWCC-22 STATION 142 6/06/79



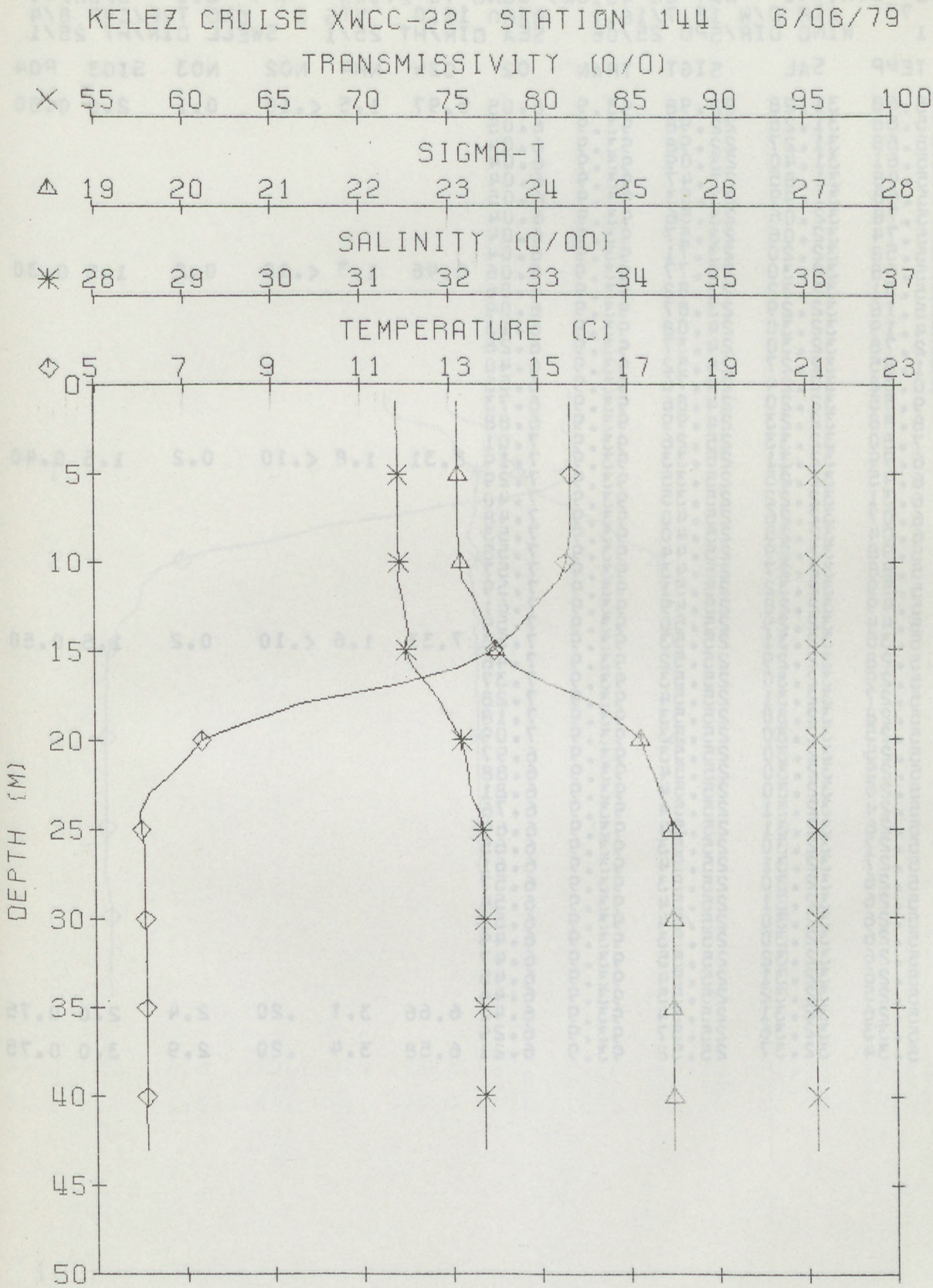
XWCC-22 STA.143 LAT 38 57.9N; LONG 73 55.8W GMT 9.8 6/06/79
DEPTH 37 AIR D/W 17.8/17.2 BARO 13.0 VIS 6 CLD TYP/CVR 8/7
WETHR 2 WIND DIR/SPD 21/04 SEA DIR/HT 25/0 SWELL DIR/HT 25/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.03 | 30.74 | 22.27 | 95.6 | 5.98 | 5.98 | 1.0 | <.10 | 0.2 | | 0.20 |
| 2 | 17.03 | 30.74 | 22.27 | 95.6 | 5.98 | | | | | | |
| 3 | 17.03 | 30.74 | 22.27 | 95.6 | 5.97 | | | | | | |
| 4 | 17.04 | 30.74 | 22.27 | 95.6 | 5.97 | | | | | | |
| 5 | 17.04 | 30.75 | 22.27 | 95.6 | 5.96 | | | | | | |
| 6 | 17.03 | 30.76 | 22.29 | 95.6 | 5.96 | | | | | | |
| 7 | 17.01 | 30.77 | 22.29 | 95.6 | 5.96 | | | | | | |
| 8 | 16.93 | 30.78 | 22.32 | 95.6 | 5.95 | | | | | | |
| 9 | 16.82 | 30.80 | 22.36 | 95.6 | 5.96 | | | | | | |
| 10 | 16.68 | 30.83 | 22.42 | 95.6 | 5.97 | 6.11 | 1.5 | <.10 | 0.3 | 1.0 | .40 |
| 11 | 16.60 | 30.85 | 22.45 | 95.6 | 5.97 | | | | | | |
| 12 | 16.31 | 30.87 | 22.53 | 95.6 | 5.99 | | | | | | |
| 13 | 15.18 | 31.19 | 23.02 | 95.6 | 6.03 | | | | | | |
| 14 | 14.44 | 31.15 | 23.15 | 95.6 | 6.16 | | | | | | |
| 15 | 14.37 | 31.27 | 23.26 | 95.6 | 6.21 | | | | | | |
| 16 | 14.12 | 31.45 | 23.45 | 95.6 | 6.24 | | | | | | |
| 17 | 13.92 | 31.73 | 23.70 | 95.6 | 6.24 | | | | | | |
| 18 | 12.52 | 31.98 | 24.17 | 95.6 | 6.28 | | | | | | |
| 19 | 11.65 | 32.15 | 24.47 | 95.6 | 6.41 | | | | | | |
| 20 | 10.58 | 32.21 | 24.70 | 95.6 | 6.55 | 7.58 | 1.4 | <.10 | 0.3 | 1.5 | .40 |
| 21 | 8.64 | 32.36 | 25.13 | 95.6 | 6.74 | | | | | | |
| 22 | 7.85 | 32.52 | 25.37 | 95.6 | 6.98 | | | | | | |
| 23 | 7.70 | 32.58 | 25.44 | 95.6 | 7.17 | | | | | | |
| 24 | 7.68 | 32.57 | 25.43 | 95.6 | 7.14 | | | | | | |
| 25 | 7.67 | 32.58 | 25.45 | 95.6 | 6.98 | | | | | | |
| 26 | 7.67 | 32.59 | 25.45 | 95.6 | 6.83 | | | | | | |
| 27 | 7.67 | 32.59 | 25.45 | 95.6 | 6.68 | | | | | | |
| 28 | 7.67 | 32.59 | 25.45 | 95.6 | 6.59 | | | | | | |
| 29 | 7.66 | 32.59 | 25.45 | 95.6 | 6.49 | | | | | | |
| 30 | 7.67 | 32.59 | 25.45 | 95.6 | 6.43 | | | | | | |
| 31 | 7.67 | 32.58 | 25.45 | 95.6 | 6.39 | | | | | | |
| 32 | 7.67 | 32.58 | 25.45 | 95.6 | 6.35 | | | | | | |
| 33 | 7.67 | 32.58 | 25.45 | 95.6 | 6.31 | | | | | | |
| 34 | 7.67 | 32.59 | 25.45 | 95.6 | 6.27 | 6.38 | 1.8 | <.10 | 0.5 | 2.5 | .65 |


KELEZ CRUISE XWCC-22 STATION 143 6/06/79
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

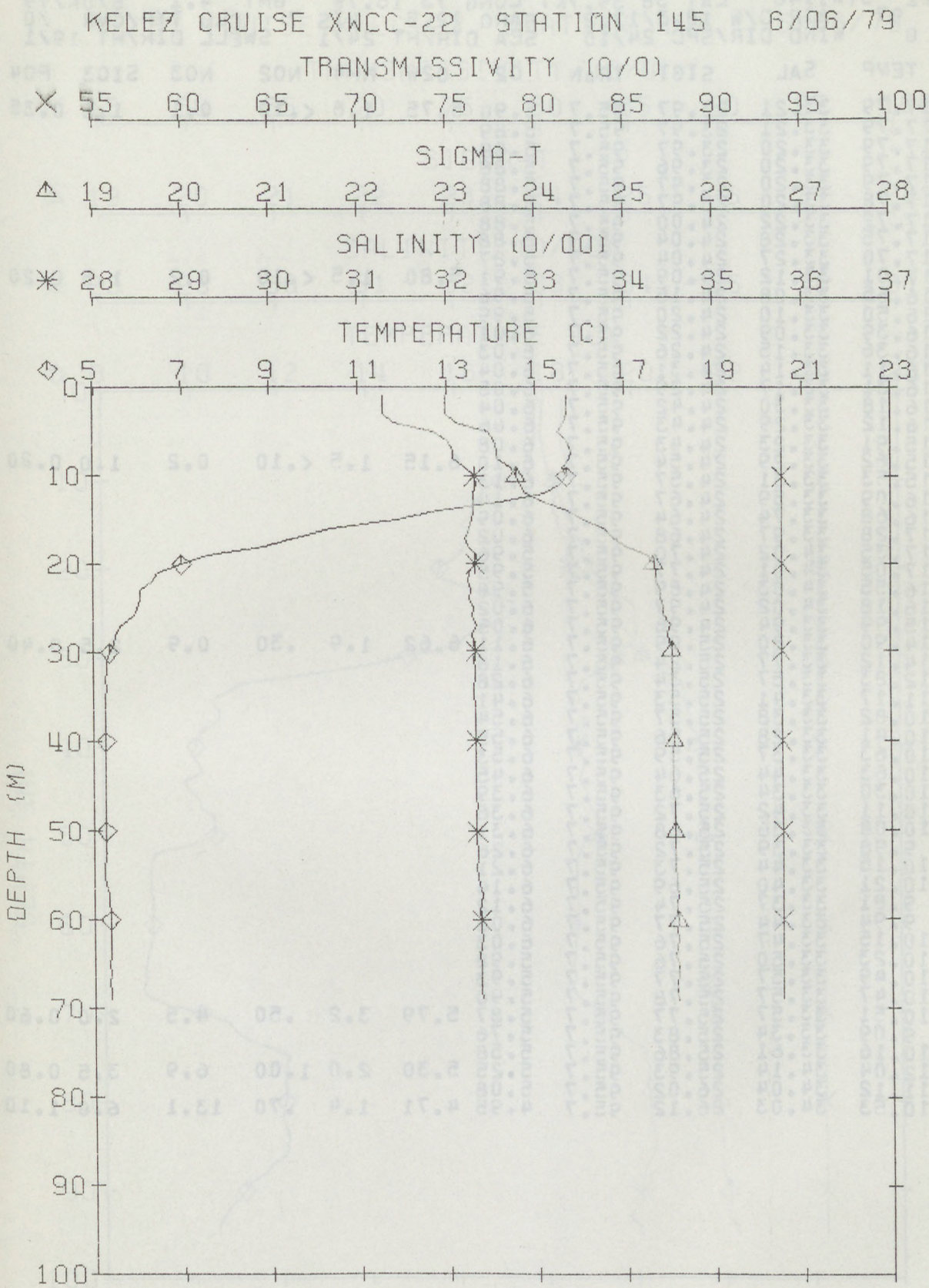
XWCC-22 STA.144 LAT 38 51.8N; LONG 73 42.0W GMT 8.1 6/06/79
DEPTH 46 AIR D/W 17.2/16.1 BARO 12.5 VIS 6 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 21/06 SEA DIR/HT 25/0 SWELL DIR/HT 25/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.70 | 31.40 | 23.07 | 95.6 | 6.05 | 6.05 | 1.5 | .20 | 0.2 | 1.5 | 0.40 |
| 2 | 15.70 | 31.40 | 23.07 | 95.6 | 6.05 | | | | | | |
| 3 | 15.70 | 31.41 | 23.08 | 95.6 | 6.04 | | | | | | |
| 4 | 15.70 | 31.40 | 23.08 | 95.6 | 6.04 | | | | | | |
| 5 | 15.70 | 31.41 | 23.08 | 95.6 | 6.03 | | | | | | |
| 6 | 15.70 | 31.40 | 23.08 | 95.6 | 6.03 | | | | | | |
| 7 | 15.70 | 31.41 | 23.08 | 95.6 | 6.02 | | | | | | |
| 8 | 15.68 | 31.41 | 23.08 | 95.6 | 6.02 | | | | | | |
| 9 | 15.64 | 31.41 | 23.09 | 95.6 | 6.02 | | | | | | |
| 10 | 15.57 | 31.42 | 23.11 | 95.6 | 6.02 | 8.28 | 1.7 | <.10 | 0.5 | 1.0 | 0.35 |
| 11 | 15.46 | 31.41 | 23.13 | 95.6 | 6.02 | | | | | | |
| 12 | 15.07 | 31.47 | 23.26 | 95.6 | 6.03 | | | | | | |
| 13 | 14.75 | 31.50 | 23.35 | 95.6 | 6.06 | | | | | | |
| 14 | 14.46 | 31.53 | 23.43 | 95.6 | 6.08 | | | | | | |
| 15 | 13.98 | 31.50 | 23.51 | 95.6 | 6.11 | | | | | | |
| 16 | 13.23 | 31.57 | 23.72 | 95.6 | 6.18 | | | | | | |
| 17 | 11.76 | 31.75 | 24.13 | 95.6 | 6.23 | | | | | | |
| 18 | 9.61 | 31.89 | 24.62 | 95.6 | 6.47 | | | | | | |
| 19 | 8.46 | 31.99 | 24.87 | 95.6 | 6.68 | | | | | | |
| 20 | 7.38 | 32.11 | 25.12 | 95.6 | 6.87 | 6.05 | 1.2 | <.10 | 0.1 | 4.0 | 0.40 |
| 21 | 7.04 | 32.16 | 25.20 | 95.6 | 7.06 | | | | | | |
| 22 | 6.65 | 32.20 | 25.28 | 95.6 | 7.23 | | | | | | |
| 23 | 6.19 | 32.21 | 25.35 | 95.6 | 7.39 | | | | | | |
| 24 | 5.99 | 32.31 | 25.45 | 95.6 | 7.56 | | | | | | |
| 25 | 6.01 | 32.34 | 25.48 | 95.6 | 7.54 | | | | | | |
| 26 | 6.07 | 32.36 | 25.49 | 95.6 | 7.35 | | | | | | |
| 27 | 6.10 | 32.36 | 25.48 | 95.6 | 7.24 | | | | | | |
| 28 | 6.09 | 32.36 | 25.48 | 95.6 | 7.02 | | | | | | |
| 29 | 6.09 | 32.36 | 25.48 | 95.6 | 6.89 | | | | | | |
| 30 | 6.10 | 32.36 | 25.48 | 95.6 | 6.78 | | | | | | |
| 31 | 6.10 | 32.36 | 25.48 | 95.6 | 6.67 | 6.54 | 1.8 | .20 | 0.6 | 2.0 | 0.60 |
| 32 | 6.10 | 32.36 | 25.48 | 95.6 | 6.60 | | | | | | |
| 33 | 6.10 | 32.35 | 25.47 | 95.6 | 6.55 | | | | | | |
| 34 | 6.10 | 32.35 | 25.47 | 95.6 | 6.49 | | | | | | |
| 35 | 6.10 | 32.35 | 25.47 | 95.6 | 6.47 | | | | | | |
| 36 | 6.10 | 32.36 | 25.48 | 95.6 | 6.43 | | | | | | |
| 37 | 6.10 | 32.36 | 25.48 | 95.6 | 6.41 | | | | | | |
| 38 | 6.10 | 32.36 | 25.48 | 95.6 | 6.38 | | | | | | |
| 39 | 6.10 | 32.36 | 25.48 | 95.6 | 6.37 | | | | | | |
| 40 | 6.10 | 32.36 | 25.48 | 95.6 | 6.36 | | | | | | |
| 41 | 6.10 | 32.36 | 25.48 | 95.6 | 6.35 | | | | | | |
| 42 | 6.11 | 32.36 | 25.48 | 95.6 | 6.33 | | | | | | |
| 43 | 6.11 | 32.36 | 25.48 | 95.6 | 6.32 | 6.54 | 2.2 | .20 | 0.7 | 2.0 | 0.75 |


KELEZ CRUISE XWCC-22 STATION 144 6/06/79
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

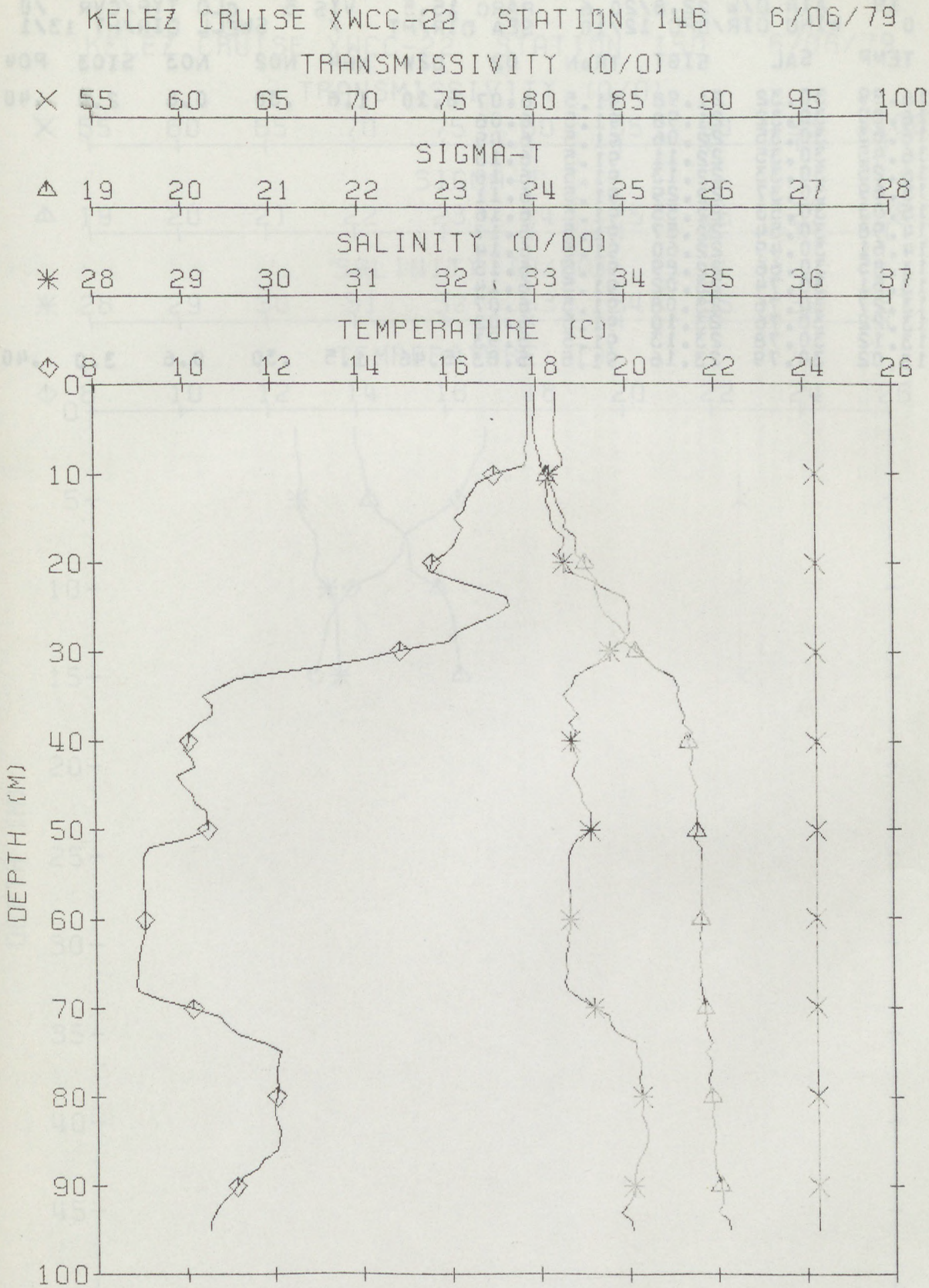
XWCC-22 STA.145 LAT 38 45.0N; LONG 73 27.0W GMT 6.1 6/06/79
DEPTH 73 AIR D/W 16.7/16.1 BARO 13.0 VIS 6 CLD TYP/CVR 8/4
WETHR 1 WIND DIR/SPD 25/06 SEA DIR/HT 25/1 SWELL DIR/HT 25/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.68 | 31.28 | 22.98 | 93.9 | 6.05 | 5.97 | 1.5 | <.10 | 0.1 | 2.0 | 0.30 |
| 2 | 15.68 | 31.28 | 22.98 | 93.9 | 6.05 | | | | | | |
| 3 | 15.68 | 31.27 | 22.98 | 93.9 | 6.04 | | | | | | |
| 4 | 15.61 | 31.40 | 23.09 | 93.9 | 6.04 | | | | | | |
| 5 | 15.48 | 31.85 | 23.47 | 93.9 | 6.04 | | | | | | |
| 6 | 15.68 | 31.99 | 23.53 | 93.9 | 6.05 | | | | | | |
| 7 | 15.78 | 32.06 | 23.56 | 93.9 | 6.04 | | | | | | |
| 8 | 15.74 | 32.06 | 23.57 | 93.9 | 6.04 | | | | | | |
| 9 | 15.58 | 32.20 | 23.71 | 93.9 | 6.04 | | | | | | |
| 10 | 15.68 | 32.30 | 23.77 | 93.9 | 6.06 | 6.46 | 1.3 | <.10 | 0.2 | 1.5 | 0.30 |
| 11 | 15.51 | 32.32 | 23.82 | 93.9 | 6.06 | | | | | | |
| 12 | 15.18 | 32.29 | 23.87 | 93.9 | 6.09 | | | | | | |
| 13 | 14.19 | 32.30 | 24.08 | 93.9 | 6.13 | | | | | | |
| 14 | 12.78 | 32.30 | 24.37 | 93.9 | 6.26 | | | | | | |
| 15 | 11.85 | 32.27 | 24.52 | 93.9 | 6.40 | | | | | | |
| 16 | 10.38 | 32.24 | 24.76 | 93.9 | 6.55 | | | | | | |
| 17 | 9.55 | 32.20 | 24.86 | 93.9 | 6.73 | | | | | | |
| 18 | 8.88 | 32.23 | 24.99 | 93.9 | 6.88 | | | | | | |
| 19 | 7.60 | 32.33 | 25.26 | 93.9 | 7.01 | | | | | | |
| 20 | 6.99 | 32.31 | 25.33 | 93.9 | 7.19 | 8.31 | 1.8 | <.10 | 0.2 | 1.5 | 0.40 |
| 21 | 6.45 | 32.25 | 25.35 | 93.9 | 7.29 | | | | | | |
| 22 | 6.31 | 32.22 | 25.35 | 93.9 | 7.40 | | | | | | |
| 23 | 6.07 | 32.26 | 25.40 | 93.9 | 7.48 | | | | | | |
| 24 | 6.04 | 32.25 | 25.40 | 93.9 | 7.53 | | | | | | |
| 25 | 5.98 | 32.29 | 25.44 | 93.9 | 7.55 | | | | | | |
| 26 | 5.88 | 32.27 | 25.43 | 93.9 | 7.57 | | | | | | |
| 27 | 5.59 | 32.32 | 25.51 | 93.9 | 7.59 | | | | | | |
| 28 | 5.49 | 32.28 | 25.49 | 93.9 | 7.61 | | | | | | |
| 29 | 5.44 | 32.29 | 25.50 | 93.9 | 7.59 | | | | | | |
| 30 | 5.35 | 32.31 | 25.53 | 93.9 | 7.53 | 7.33 | 1.6 | <.10 | 0.2 | 1.5 | 0.50 |
| 31 | 5.28 | 32.29 | 25.52 | 93.9 | 7.46 | | | | | | |
| 32 | 5.29 | 32.30 | 25.53 | 93.9 | 7.37 | | | | | | |
| 33 | 5.27 | 32.31 | 25.54 | 93.9 | 7.28 | | | | | | |
| 34 | 5.28 | 32.30 | 25.53 | 93.9 | 7.18 | | | | | | |
| 35 | 5.25 | 32.30 | 25.53 | 93.9 | 7.09 | | | | | | |
| 36 | 5.25 | 32.30 | 25.53 | 93.9 | 6.97 | | | | | | |
| 37 | 5.25 | 32.30 | 25.54 | 93.9 | 6.88 | | | | | | |
| 38 | 5.25 | 32.30 | 25.54 | 93.9 | 6.81 | | | | | | |
| 39 | 5.24 | 32.31 | 25.54 | 93.9 | 6.76 | | | | | | |
| 40 | 5.26 | 32.31 | 25.54 | 93.9 | 6.69 | | | | | | |
| 41 | 5.27 | 32.30 | 25.53 | 93.9 | 6.65 | | | | | | |
| 42 | 5.27 | 32.31 | 25.54 | 93.9 | 6.61 | | | | | | |
| 43 | 5.26 | 32.30 | 25.53 | 93.9 | 6.57 | | | | | | |
| 44 | 5.26 | 32.31 | 25.54 | 93.9 | 6.54 | | | | | | |
| 45 | 5.26 | 32.30 | 25.54 | 93.9 | 6.51 | | | | | | |
| 46 | 5.26 | 32.30 | 25.53 | 93.9 | 6.49 | | | | | | |
| 47 | 5.26 | 32.32 | 25.55 | 93.9 | 6.47 | | | | | | |
| 48 | 5.26 | 32.31 | 25.54 | 93.9 | 6.45 | | | | | | |
| 49 | 5.25 | 32.32 | 25.55 | 93.9 | 6.44 | | | | | | |
| 50 | 5.26 | 32.31 | 25.54 | 93.9 | 6.42 | 6.66 | 3.1 | .20 | 2.4 | 2.0 | 0.75 |
| 60 | 5.33 | 32.36 | 25.57 | 93.9 | 6.29 | | | | | | |
| 69 | 5.34 | 32.37 | 25.58 | 93.9 | 6.21 | 6.58 | 3.4 | .20 | 2.9 | 3.0 | 0.75 |


KELEZ CRUISE XWCC-22 STATION 145 6/06/79
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

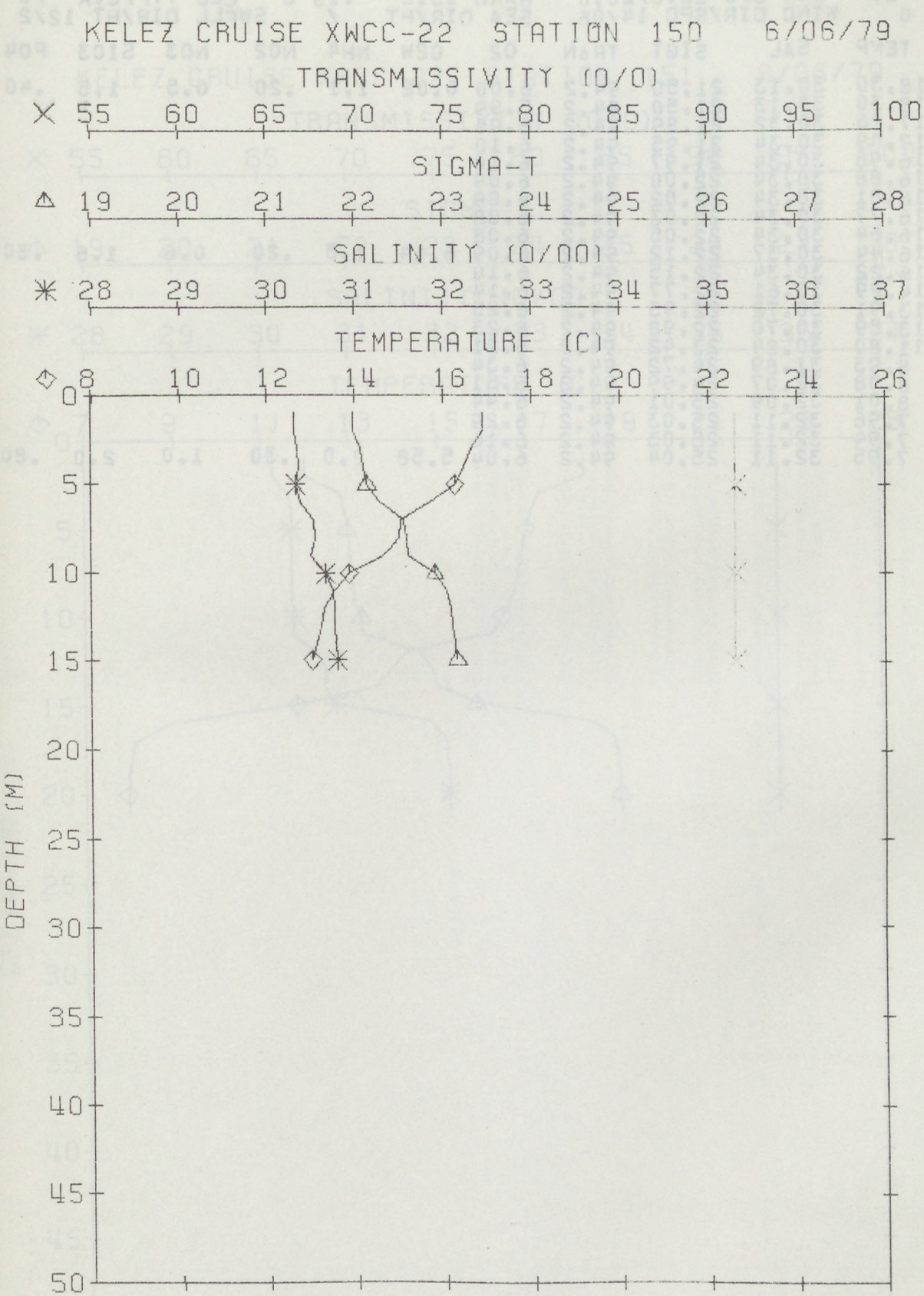
XWCC-22 STA.146 LAT 38 39.7N; LONG 73 15.7W GMT 4.1 6/06/79
DEPTH 97 AIR D/W 18.3/17.2 BARO 12.5 VIS 7 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 24/10 SEA DIR/HT 24/1 SWELL DIR/HT 19/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.79 | 33.21 | 23.97 | 95.7 | 5.90 | 5.75 | 1.6 | <.10 | 0.1 | 1.5 | 0.35 |
| 2 | 17.79 | 33.21 | 23.97 | 95.7 | 5.89 | | | | | | |
| 3 | 17.79 | 33.20 | 23.97 | 95.7 | 5.89 | | | | | | |
| 4 | 17.79 | 33.20 | 23.96 | 95.7 | 5.88 | | | | | | |
| 5 | 17.79 | 33.20 | 23.97 | 95.7 | 5.88 | | | | | | |
| 6 | 17.78 | 33.20 | 23.97 | 95.7 | 5.88 | | | | | | |
| 7 | 17.72 | 33.22 | 24.00 | 95.7 | 5.88 | | | | | | |
| 8 | 17.75 | 33.28 | 24.04 | 95.7 | 5.88 | | | | | | |
| 9 | 17.70 | 33.27 | 24.04 | 95.7 | 5.87 | | | | | | |
| 10 | 17.01 | 33.12 | 24.09 | 95.7 | 5.91 | 5.80 | 1.5 | <.10 | 0.2 | 1.5 | 0.20 |
| 11 | 16.65 | 33.08 | 24.15 | 95.7 | 5.96 | | | | | | |
| 12 | 16.50 | 33.10 | 24.20 | 95.7 | 5.99 | | | | | | |
| 13 | 16.39 | 33.09 | 24.22 | 95.7 | 6.01 | | | | | | |
| 14 | 16.36 | 33.15 | 24.26 | 95.7 | 6.03 | | | | | | |
| 15 | 16.11 | 33.14 | 24.31 | 95.7 | 6.04 | | | | | | |
| 16 | 16.31 | 33.17 | 24.29 | 95.7 | 6.05 | | | | | | |
| 17 | 16.18 | 33.30 | 24.42 | 95.7 | 6.04 | | | | | | |
| 18 | 16.12 | 33.29 | 24.43 | 95.7 | 6.06 | | | | | | |
| 19 | 15.91 | 33.23 | 24.43 | 95.7 | 6.08 | | | | | | |
| 20 | 15.62 | 33.29 | 24.54 | 95.7 | 6.10 | 6.15 | 1.5 | <.10 | 0.2 | 1.0 | 0.20 |
| 21 | 15.53 | 33.31 | 24.57 | 95.7 | 6.13 | | | | | | |
| 22 | 16.09 | 33.59 | 24.67 | 95.7 | 6.14 | | | | | | |
| 23 | 16.68 | 33.74 | 24.64 | 95.7 | 6.09 | | | | | | |
| 24 | 17.28 | 33.97 | 24.68 | 95.7 | 6.02 | | | | | | |
| 25 | 17.35 | 34.02 | 24.70 | 95.7 | 5.96 | | | | | | |
| 26 | 17.05 | 34.01 | 24.77 | 95.7 | 5.95 | | | | | | |
| 27 | 16.55 | 34.03 | 24.89 | 95.7 | 5.98 | | | | | | |
| 28 | 16.18 | 34.02 | 24.97 | 95.7 | 6.02 | | | | | | |
| 29 | 15.99 | 33.94 | 24.96 | 95.7 | 6.05 | | | | | | |
| 30 | 14.90 | 33.80 | 25.09 | 95.7 | 6.11 | 6.62 | 1.9 | .30 | 0.9 | 2.5 | 0.40 |
| 31 | 14.12 | 33.77 | 25.24 | 95.7 | 6.18 | | | | | | |
| 32 | 12.83 | 33.57 | 25.34 | 95.7 | 6.28 | | | | | | |
| 33 | 11.17 | 33.41 | 25.53 | 95.7 | 6.41 | | | | | | |
| 34 | 10.82 | 33.38 | 25.57 | 95.7 | 6.54 | | | | | | |
| 35 | 10.41 | 33.28 | 25.56 | 95.7 | 6.55 | | | | | | |
| 36 | 10.63 | 33.37 | 25.59 | 95.7 | 6.53 | | | | | | |
| 37 | 10.63 | 33.44 | 25.64 | 95.7 | 6.45 | | | | | | |
| 38 | 10.30 | 33.34 | 25.63 | 95.7 | 6.39 | | | | | | |
| 39 | 10.11 | 33.42 | 25.72 | 95.7 | 6.36 | | | | | | |
| 40 | 10.08 | 33.36 | 25.68 | 95.7 | 6.31 | | | | | | |
| 41 | 9.98 | 33.39 | 25.72 | 95.7 | 6.26 | | | | | | |
| 42 | 10.15 | 33.44 | 25.73 | 95.7 | 6.21 | | | | | | |
| 43 | 10.21 | 33.40 | 25.69 | 95.7 | 6.14 | | | | | | |
| 44 | 9.81 | 33.37 | 25.74 | 95.7 | 6.12 | | | | | | |
| 45 | 9.94 | 33.44 | 25.77 | 95.7 | 6.08 | | | | | | |
| 46 | 10.15 | 33.47 | 25.76 | 95.7 | 6.03 | | | | | | |
| 47 | 10.23 | 33.50 | 25.76 | 95.7 | 5.98 | | | | | | |
| 48 | 10.49 | 33.57 | 25.77 | 95.7 | 5.93 | | | | | | |
| 49 | 10.47 | 33.57 | 25.78 | 95.7 | 5.90 | | | | | | |
| 50 | 10.51 | 33.57 | 25.77 | 95.7 | 5.87 | 5.79 | 3.2 | .50 | 4.5 | 2.0 | 0.60 |
| 60 | 9.09 | 33.34 | 25.83 | 95.7 | 5.76 | | | | | | |
| 70 | 10.16 | 33.61 | 25.86 | 95.7 | 5.58 | | | | | | |
| 80 | 12.04 | 34.14 | 25.93 | 95.7 | 5.25 | 5.30 | 2.0 | 1.00 | 6.9 | 3.5 | 0.80 |
| 90 | 11.12 | 34.04 | 26.02 | 95.7 | 5.08 | | | | | | |
| 95 | 10.53 | 34.03 | 26.12 | 95.7 | 4.95 | 4.71 | 1.4 | .70 | 13.1 | 6.0 | 1.10 |


KELEZ CRUISE XWCC-22 STATION 146 6/06/79
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

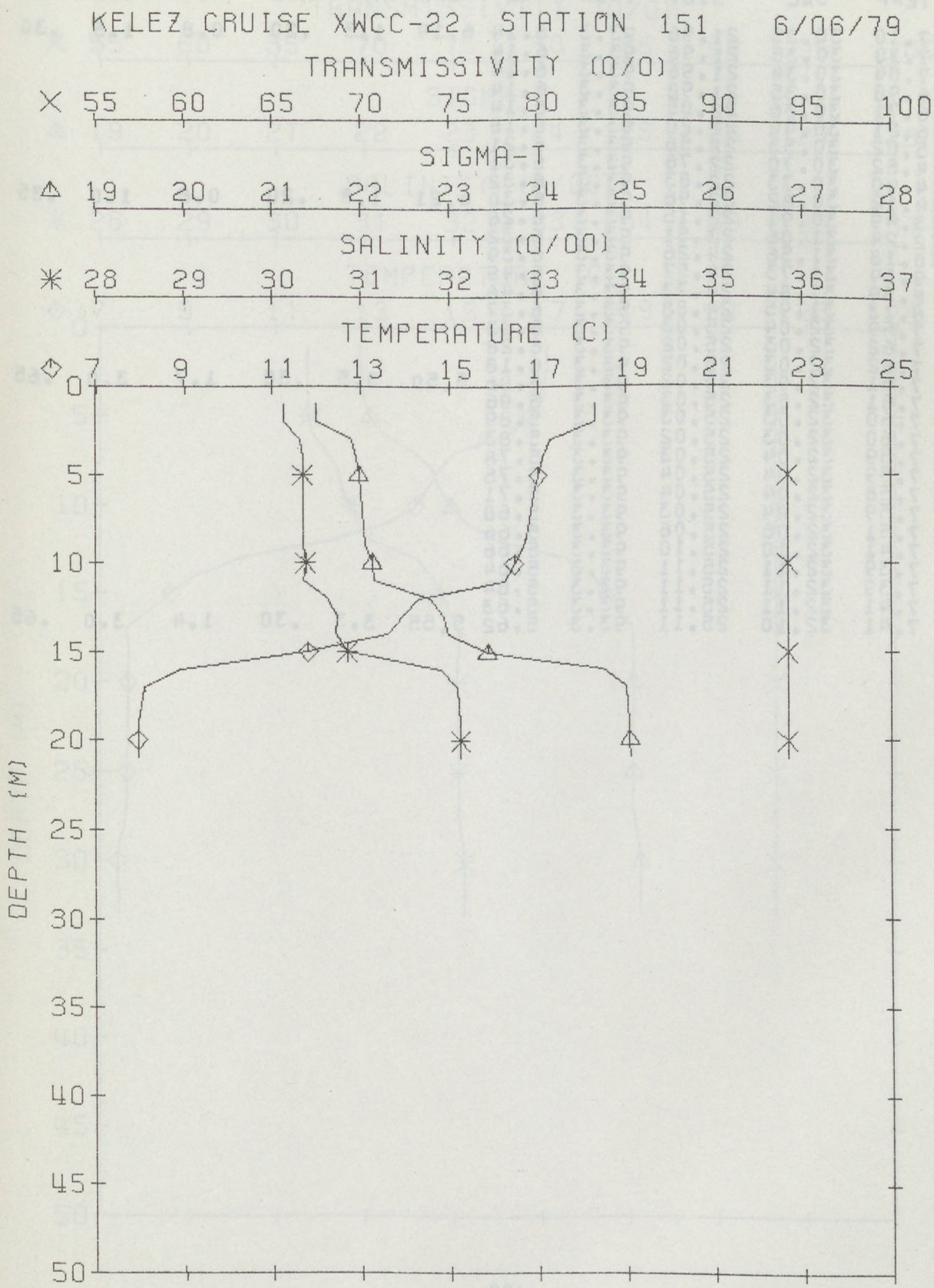
XWCC-22 STA.150 LAT 38 53.8N; LONG 74 42.0W GMT 17.5 6/06/79
DEPTH 19 AIR D/W 22.8/20.6 BARO 15.5 VIS 5 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 12/10 SEA DIR/HT / SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.89 | 30.32 | 21.98 | 91.5 | 6.07 | 6.10 | 1.6 | .30 | 0.6 | 2.0 | .40 |
| 2 | 16.89 | 30.32 | 21.98 | 91.5 | 6.06 | | | | | | |
| 3 | 16.63 | 30.35 | 22.06 | 91.5 | 6.09 | | | | | | |
| 4 | 16.45 | 30.35 | 22.11 | 91.5 | 6.10 | | | | | | |
| 5 | 16.25 | 30.33 | 22.13 | 91.5 | 6.10 | | | | | | |
| 6 | 15.69 | 30.37 | 22.29 | 91.5 | 6.11 | | | | | | |
| 7 | 15.03 | 30.53 | 22.55 | 91.5 | 6.16 | | | | | | |
| 8 | 14.98 | 30.54 | 22.57 | 91.5 | 6.17 | | | | | | |
| 9 | 14.61 | 30.49 | 22.60 | 91.5 | 6.14 | | | | | | |
| 10 | 13.85 | 30.66 | 22.89 | 91.5 | 6.15 | | | | | | |
| 11 | 13.51 | 30.74 | 23.02 | 91.5 | 6.14 | | | | | | |
| 12 | 13.27 | 30.76 | 23.08 | 91.5 | 6.07 | | | | | | |
| 13 | 13.22 | 30.76 | 23.10 | 91.5 | 6.02 | | | | | | |
| 14 | 13.12 | 30.78 | 23.13 | 91.5 | 5.93 | | | | | | |
| 15 | 13.02 | 30.79 | 23.16 | 91.5 | 5.83 | 5.46 | 1.5 | .30 | 0.6 | 3.0 | .40 |


KELEZ CRUISE XWCC-22 STATION 150 6/06/79
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

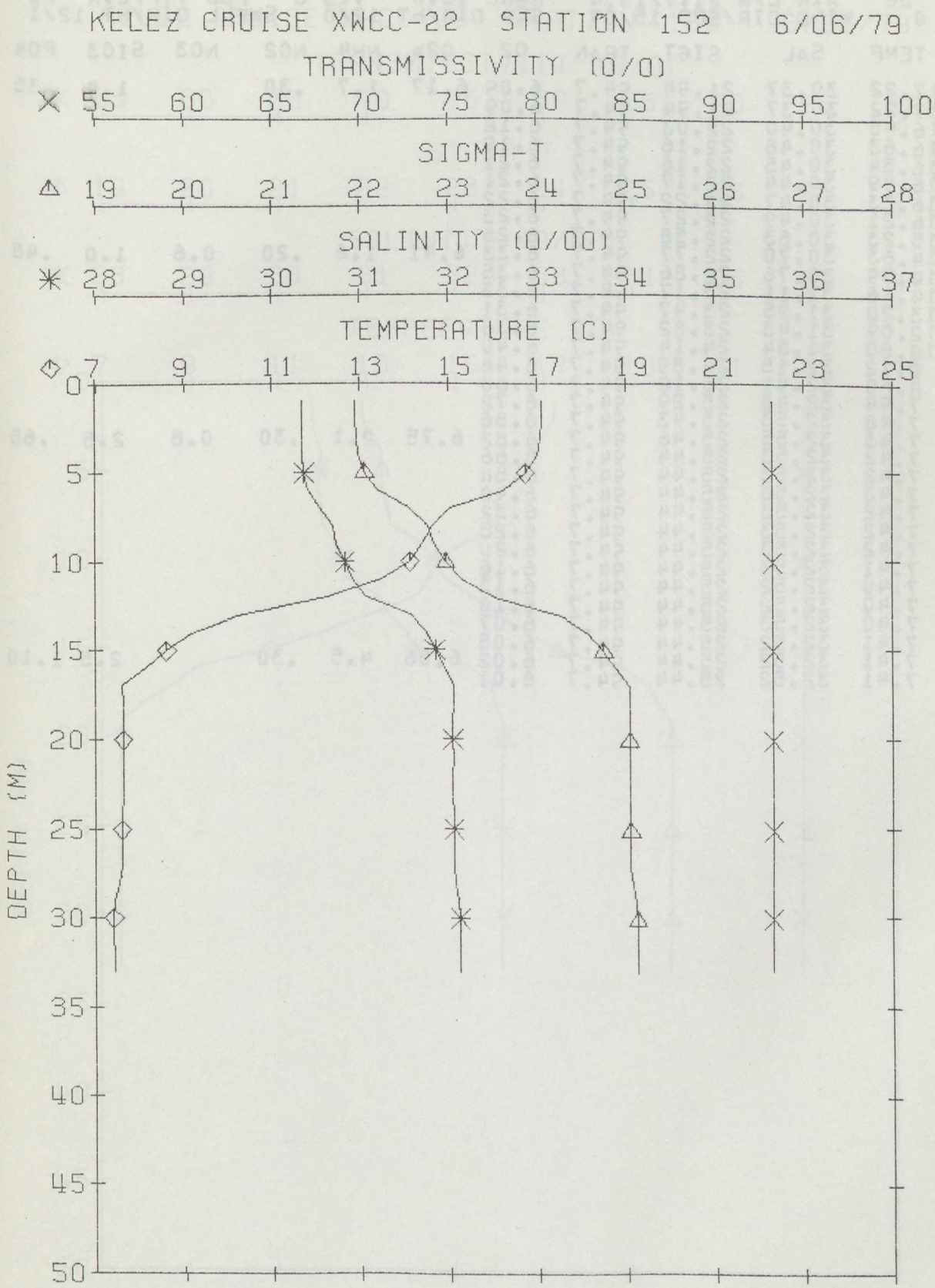
XWCC-22 STA.151 LAT 38 49.7N; LONG 74 34.0W GMT 18.8 6/06/79
DEPTH 23 AIR D/W 22.8/20.0 BARO 15.5 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 14/06 SEA DIR/HT / SWELL DIR/HT 12/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.30 | 30.13 | 21.50 | 94.2 | 6.00 | 6.02 | 1.1 | .20 | 0.5 | 1.5 | .40 |
| 2 | 18.30 | 30.13 | 21.50 | 94.2 | 5.99 | | | | | | |
| 3 | 17.26 | 30.32 | 21.89 | 94.2 | 6.05 | | | | | | |
| 4 | 17.09 | 30.34 | 21.95 | 94.2 | 6.10 | | | | | | |
| 5 | 16.98 | 30.34 | 21.97 | 94.2 | 6.10 | | | | | | |
| 6 | 16.88 | 30.34 | 22.00 | 94.2 | 6.09 | | | | | | |
| 7 | 16.81 | 30.34 | 22.02 | 94.2 | 6.09 | | | | | | |
| 8 | 16.77 | 30.34 | 22.03 | 94.2 | 6.08 | | | | | | |
| 9 | 16.64 | 30.34 | 22.05 | 94.2 | 6.08 | | | | | | |
| 10 | 16.44 | 30.37 | 22.12 | 94.2 | 6.09 | 6.14 | 1.3 | .20 | 0.6 | 1.5 | .30 |
| 11 | 16.22 | 30.34 | 22.15 | 94.2 | 6.10 | | | | | | |
| 12 | 14.29 | 30.61 | 22.77 | 94.2 | 6.14 | | | | | | |
| 13 | 13.91 | 30.72 | 22.93 | 94.2 | 6.25 | | | | | | |
| 14 | 13.59 | 30.70 | 22.98 | 94.2 | 6.23 | | | | | | |
| 15 | 11.80 | 30.84 | 23.42 | 94.2 | 6.21 | | | | | | |
| 16 | 8.93 | 31.89 | 24.72 | 94.2 | 6.34 | | | | | | |
| 17 | 8.08 | 32.07 | 24.99 | 94.2 | 6.51 | | | | | | |
| 18 | 8.01 | 32.09 | 25.01 | 94.2 | 6.44 | | | | | | |
| 19 | 7.96 | 32.11 | 25.03 | 94.2 | 6.29 | | | | | | |
| 20 | 7.94 | 32.11 | 25.03 | 94.2 | 6.16 | | | | | | |
| 21 | 7.95 | 32.11 | 25.04 | 94.2 | 6.04 | 5.58 | 2.0 | .30 | 1.0 | 2.0 | .80 |


KELEZ CRUISE XWCC-22 STATION 151 6/06/79
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

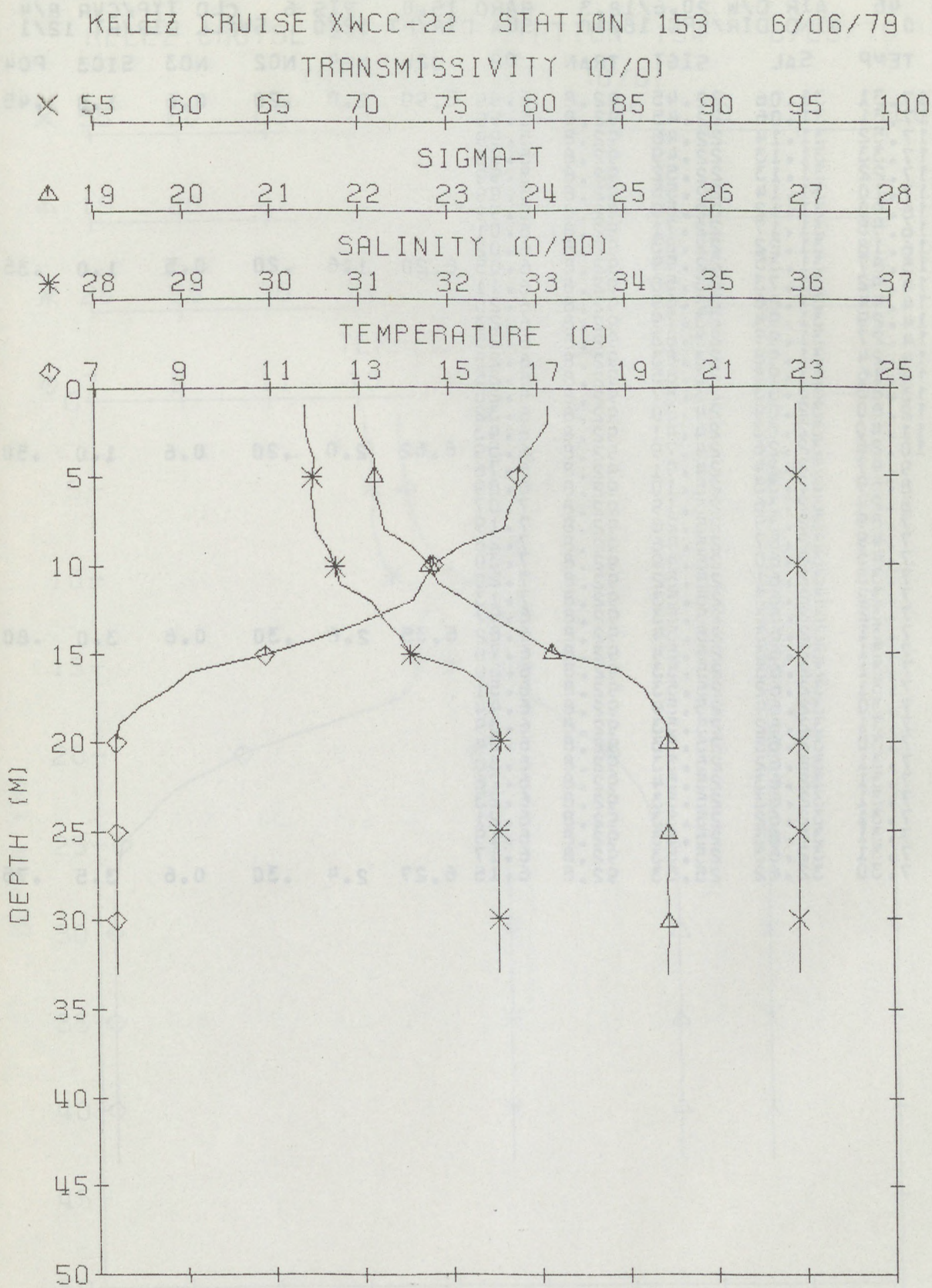
XWCC-22 STA.152 LAT 38 45.3N; LONG 74 27.3W GMT 19.9 6/06/79
DEPTH 36 AIR D/W 22.8/20.0 BARO 15.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 13/05 SEA DIR/HT 12/0 SWELL DIR/HT 12/2

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.10 | 30.35 | 21.96 | 93.3 | 6.14 | 6.19 | 1.3 | .20 | 0.8 | 1.5 | .30 |
| 2 | 17.10 | 30.35 | 21.96 | 93.3 | 6.14 | | | | | | |
| 3 | 17.04 | 30.34 | 21.96 | 93.3 | 6.14 | | | | | | |
| 4 | 16.98 | 30.35 | 21.98 | 93.3 | 6.14 | | | | | | |
| 5 | 16.71 | 30.36 | 22.05 | 93.3 | 6.14 | | | | | | |
| 6 | 16.21 | 30.40 | 22.20 | 93.3 | 6.16 | | | | | | |
| 7 | 15.02 | 30.53 | 22.56 | 93.3 | 6.21 | | | | | | |
| 8 | 14.62 | 30.70 | 22.76 | 93.3 | 6.31 | | | | | | |
| 9 | 14.40 | 30.73 | 22.83 | 93.3 | 6.32 | | | | | | |
| 10 | 14.12 | 30.82 | 22.96 | 93.3 | 6.30 | 6.21 | 1.8 | .20 | 0.8 | 1.0 | .35 |
| 11 | 13.49 | 30.91 | 23.15 | 93.3 | 6.28 | | | | | | |
| 12 | 12.24 | 31.06 | 23.51 | 93.3 | 6.32 | | | | | | |
| 13 | 10.18 | 31.56 | 24.26 | 93.3 | 6.39 | | | | | | |
| 14 | 9.14 | 31.73 | 24.57 | 93.3 | 6.49 | | | | | | |
| 15 | 8.59 | 31.84 | 24.73 | 93.3 | 6.46 | | | | | | |
| 16 | 8.13 | 31.95 | 24.88 | 93.3 | 6.37 | | | | | | |
| 17 | 7.59 | 32.04 | 25.03 | 93.3 | 6.33 | | | | | | |
| 18 | 7.62 | 32.03 | 25.02 | 93.3 | 6.28 | | | | | | |
| 19 | 7.62 | 32.03 | 25.02 | 93.3 | 6.18 | | | | | | |
| 20 | 7.61 | 32.03 | 25.02 | 93.3 | 6.06 | 5.50 | 3.5 | .30 | 1.7 | 3.0 | .65 |
| 21 | 7.61 | 32.03 | 25.03 | 93.3 | 5.96 | | | | | | |
| 22 | 7.60 | 32.03 | 25.03 | 93.3 | 5.89 | | | | | | |
| 23 | 7.60 | 32.03 | 25.02 | 93.3 | 5.83 | | | | | | |
| 24 | 7.59 | 32.04 | 25.03 | 93.3 | 5.78 | | | | | | |
| 25 | 7.59 | 32.04 | 25.04 | 93.3 | 5.75 | | | | | | |
| 26 | 7.58 | 32.04 | 25.04 | 93.3 | 5.71 | | | | | | |
| 27 | 7.59 | 32.04 | 25.03 | 93.3 | 5.68 | | | | | | |
| 28 | 7.51 | 32.06 | 25.06 | 93.3 | 5.66 | | | | | | |
| 29 | 7.41 | 32.10 | 25.10 | 93.3 | 5.66 | | | | | | |
| 30 | 7.39 | 32.11 | 25.11 | 93.3 | 5.64 | | | | | | |
| 31 | 7.39 | 32.11 | 25.11 | 93.3 | 5.64 | | | | | | |
| 32 | 7.41 | 32.11 | 25.11 | 93.3 | 5.63 | | | | | | |
| 33 | 7.41 | 32.10 | 25.11 | 93.3 | 5.62 | 5.55 | 3.3 | .30 | 1.4 | 3.0 | .65 |


KELEZ CRUISE XWCC-22 STATION 152 6/06/79
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

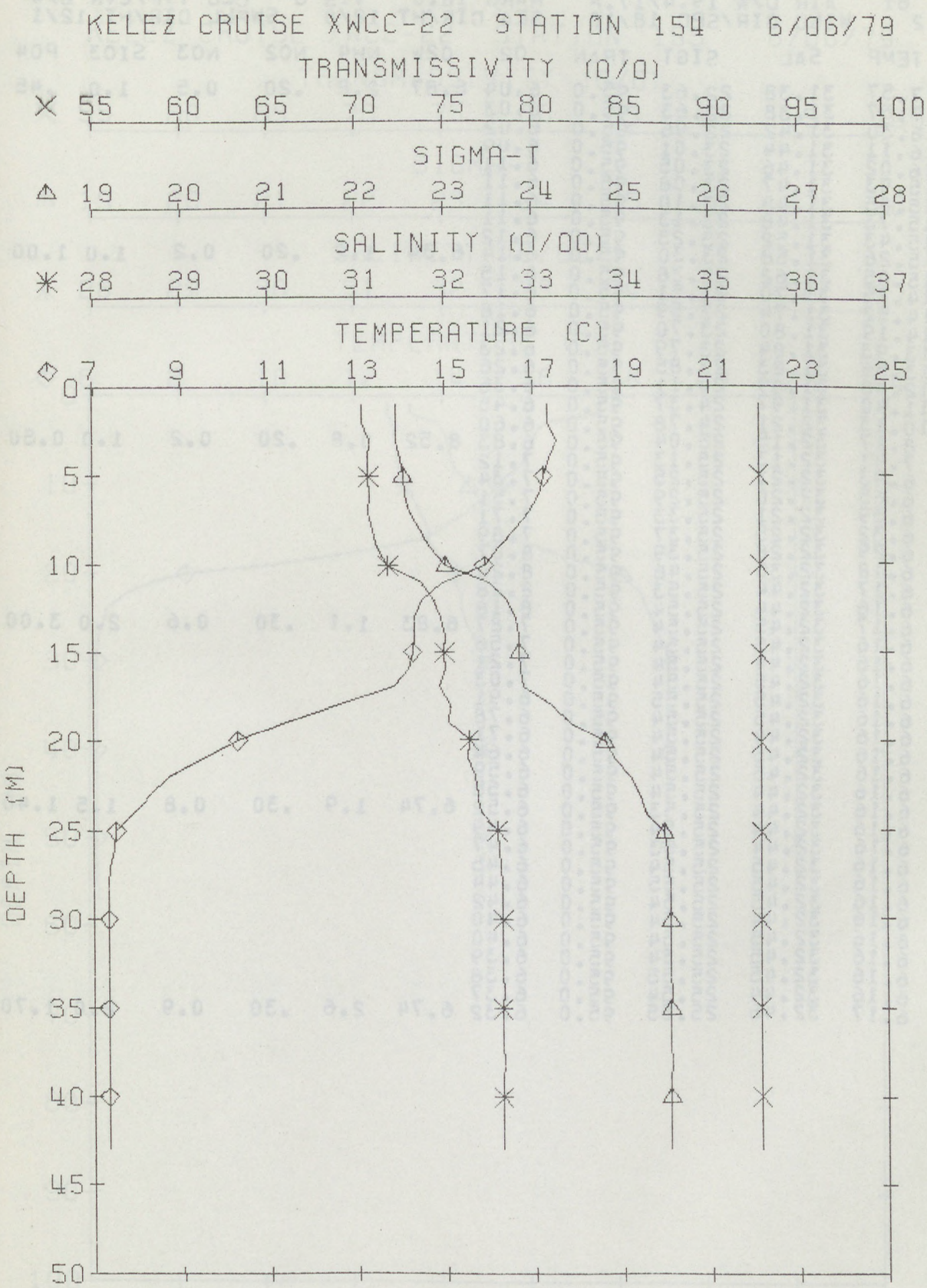
XWCC-22 STA.153 LAT 38 41.7N; LONG 74 20.0W GMT 21.0 6/06/79
DEPTH 36 AIR D/W 21.7/19.4 BARO 15.0 VIS 6 CLD TYP/CVR /0
WETHR 0 WIND DIR/SPD 15/07 SEA DIR/HT 12/0 SWELL DIR/HT 12/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.22 | 30.37 | 21.94 | 94.7 | 6.09 | 6.17 | 1.7 | .30 | | 1.0 | .35 |
| 2 | 17.22 | 30.37 | 21.94 | 94.7 | 6.09 | | | | | | |
| 3 | 16.95 | 30.40 | 22.03 | 94.7 | 6.18 | | | | | | |
| 4 | 16.63 | 30.48 | 22.16 | 94.7 | 6.19 | | | | | | |
| 5 | 16.54 | 30.45 | 22.16 | 94.7 | 6.21 | | | | | | |
| 6 | 16.49 | 30.44 | 22.17 | 94.7 | 6.21 | | | | | | |
| 7 | 16.33 | 30.47 | 22.22 | 94.7 | 6.22 | | | | | | |
| 8 | 16.21 | 30.49 | 22.27 | 94.7 | 6.23 | | | | | | |
| 9 | 15.23 | 30.63 | 22.58 | 94.7 | 6.25 | | | | | | |
| 10 | 14.63 | 30.70 | 22.77 | 94.7 | 6.33 | 6.41 | 1.6 | .20 | 0.6 | 1.0 | .45 |
| 11 | 14.39 | 30.76 | 22.86 | 94.7 | 6.35 | | | | | | |
| 12 | 14.16 | 31.11 | 23.17 | 94.7 | 6.33 | | | | | | |
| 13 | 13.20 | 31.25 | 23.47 | 94.7 | 6.31 | | | | | | |
| 14 | 12.09 | 31.43 | 23.82 | 94.7 | 6.36 | | | | | | |
| 15 | 10.80 | 31.54 | 24.14 | 94.7 | 6.40 | | | | | | |
| 16 | 9.12 | 32.15 | 24.89 | 94.7 | 6.46 | | | | | | |
| 17 | 8.60 | 32.41 | 25.18 | 94.7 | 6.60 | | | | | | |
| 18 | 7.94 | 32.43 | 25.29 | 94.7 | 6.72 | | | | | | |
| 19 | 7.48 | 32.53 | 25.43 | 94.7 | 6.86 | | | | | | |
| 20 | 7.43 | 32.55 | 25.46 | 94.7 | 6.82 | 6.75 | 2.1 | .30 | 0.8 | 2.5 | .65 |
| 21 | 7.42 | 32.53 | 25.44 | 94.7 | 6.66 | | | | | | |
| 22 | 7.42 | 32.53 | 25.44 | 94.7 | 6.50 | | | | | | |
| 23 | 7.43 | 32.53 | 25.44 | 94.7 | 6.40 | | | | | | |
| 24 | 7.42 | 32.53 | 25.44 | 94.7 | 6.32 | | | | | | |
| 25 | 7.42 | 32.53 | 25.44 | 94.7 | 6.25 | | | | | | |
| 26 | 7.42 | 32.53 | 25.44 | 94.7 | 6.20 | | | | | | |
| 27 | 7.41 | 32.53 | 25.44 | 94.7 | 6.16 | | | | | | |
| 28 | 7.40 | 32.52 | 25.44 | 94.7 | 6.13 | | | | | | |
| 29 | 7.40 | 32.52 | 25.44 | 94.7 | 6.10 | | | | | | |
| 30 | 7.40 | 32.53 | 25.44 | 94.7 | 6.07 | | | | | | |
| 31 | 7.41 | 32.52 | 25.44 | 94.7 | 6.05 | | | | | | |
| 32 | 7.41 | 32.52 | 25.44 | 94.7 | 6.02 | 6.06 | 4.5 | .30 | | 2.5 | 1.10 |
| 33 | 7.41 | 32.52 | 25.44 | 94.7 | 6.01 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 153 6/06/79
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

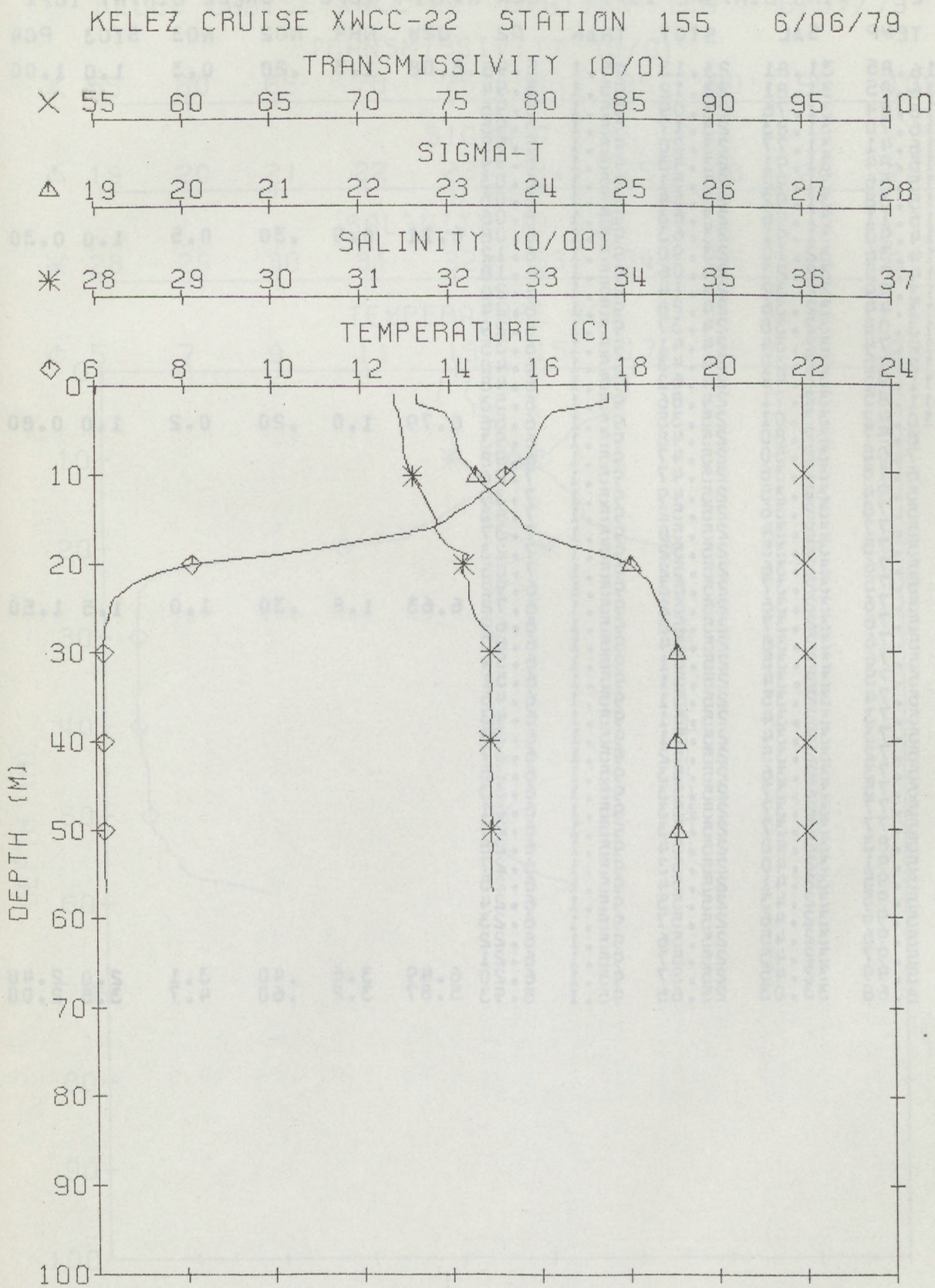
XWCC-22 STA.154 LAT 38 37.5N; LONG 74 12.0W GMT 22.2 6/06/79
DEPTH 46 AIR D/W 20.6/18.3 BARO 15.0 VIS 6 CLD TYP/CVR 8/4
WETHR 0 WIND DIR/SPD 18/10 SEA DIR/HT 12/0 SWELL DIR/HT 12/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.31 | 31.06 | 22.45 | 92.8 | 5.99 | 5.99 | 2.0 | .20 | 0.6 | 1.0 | .45 |
| 2 | 17.31 | 31.06 | 22.45 | 92.8 | 5.99 | | | | | | |
| 3 | 17.52 | 31.14 | 22.46 | 92.8 | 5.99 | | | | | | |
| 4 | 17.33 | 31.13 | 22.49 | 92.8 | 5.98 | | | | | | |
| 5 | 17.22 | 31.13 | 22.52 | 92.8 | 5.99 | | | | | | |
| 6 | 17.10 | 31.14 | 22.55 | 92.8 | 5.99 | | | | | | |
| 7 | 16.90 | 31.12 | 22.59 | 92.8 | 5.99 | | | | | | |
| 8 | 16.55 | 31.17 | 22.71 | 92.8 | 6.01 | | | | | | |
| 9 | 16.18 | 31.22 | 22.83 | 92.8 | 6.02 | | | | | | |
| 10 | 15.87 | 31.35 | 22.99 | 92.8 | 6.05 | 6.20 | 1.6 | .20 | 0.5 | 1.0 | .35 |
| 11 | 14.92 | 31.73 | 23.50 | 92.8 | 6.11 | | | | | | |
| 12 | 14.44 | 31.86 | 23.69 | 92.8 | 6.20 | | | | | | |
| 13 | 14.29 | 31.94 | 23.79 | 92.8 | 6.23 | | | | | | |
| 14 | 14.27 | 31.99 | 23.83 | 92.8 | 6.25 | | | | | | |
| 15 | 14.24 | 31.98 | 23.83 | 92.8 | 6.25 | | | | | | |
| 16 | 14.16 | 31.98 | 23.85 | 92.8 | 6.25 | | | | | | |
| 17 | 13.83 | 31.93 | 23.87 | 92.8 | 6.25 | | | | | | |
| 18 | 12.60 | 32.04 | 24.20 | 92.8 | 6.32 | | | | | | |
| 19 | 11.40 | 32.03 | 24.41 | 92.8 | 6.43 | | | | | | |
| 20 | 10.26 | 32.26 | 24.79 | 92.8 | 6.59 | 6.62 | 2.0 | .20 | 0.6 | 1.0 | .50 |
| 21 | 9.47 | 32.24 | 24.91 | 92.8 | 6.76 | | | | | | |
| 22 | 8.69 | 32.33 | 25.10 | 92.8 | 6.89 | | | | | | |
| 23 | 8.24 | 32.36 | 25.19 | 92.8 | 7.07 | | | | | | |
| 24 | 7.89 | 32.39 | 25.26 | 92.8 | 7.19 | | | | | | |
| 25 | 7.49 | 32.57 | 25.46 | 92.8 | 7.28 | | | | | | |
| 26 | 7.45 | 32.60 | 25.49 | 92.8 | 7.30 | | | | | | |
| 27 | 7.35 | 32.61 | 25.52 | 92.8 | 7.20 | | | | | | |
| 28 | 7.32 | 32.63 | 25.53 | 92.8 | 7.13 | | | | | | |
| 29 | 7.32 | 32.63 | 25.53 | 92.8 | 6.97 | | | | | | |
| 30 | 7.31 | 32.63 | 25.54 | 92.8 | 6.82 | 6.35 | 2.6 | .30 | 0.8 | 3.0 | .80 |
| 31 | 7.31 | 32.63 | 25.54 | 92.8 | 6.70 | | | | | | |
| 32 | 7.31 | 32.63 | 25.53 | 92.8 | 6.60 | | | | | | |
| 33 | 7.31 | 32.62 | 25.53 | 92.8 | 6.51 | | | | | | |
| 34 | 7.30 | 32.64 | 25.54 | 92.8 | 6.44 | | | | | | |
| 35 | 7.31 | 32.62 | 25.53 | 92.8 | 6.39 | | | | | | |
| 36 | 7.30 | 32.63 | 25.53 | 92.8 | 6.34 | | | | | | |
| 37 | 7.31 | 32.62 | 25.53 | 92.8 | 6.30 | | | | | | |
| 38 | 7.31 | 32.63 | 25.54 | 92.8 | 6.26 | | | | | | |
| 39 | 7.31 | 32.63 | 25.53 | 92.8 | 6.23 | | | | | | |
| 40 | 7.31 | 32.62 | 25.53 | 92.8 | 6.21 | | | | | | |
| 41 | 7.31 | 32.63 | 25.53 | 92.8 | 6.19 | | | | | | |
| 42 | 7.31 | 32.63 | 25.53 | 92.8 | 6.17 | | | | | | |
| 43 | 7.30 | 32.62 | 25.53 | 92.8 | 6.15 | 6.27 | 2.4 | .30 | 0.6 | 3.5 | .75 |


KELEZ CRUISE XWCC-22 STATION 154 6/06/79
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)
◇ 7 9 11 13 15 17 19 21 23 25
DEPTH (M)
0 5 10 15 20 25 30 35 40 45 50

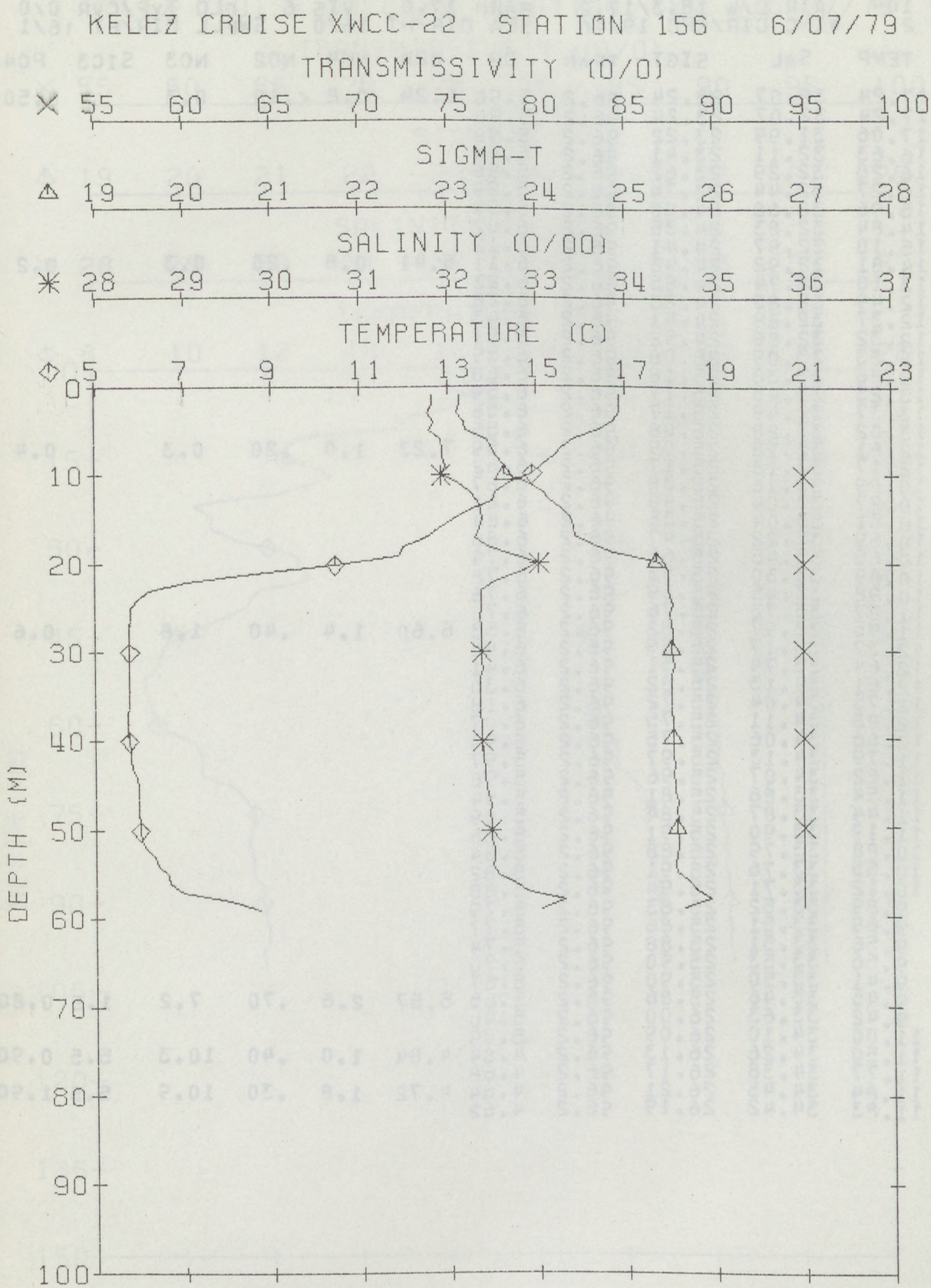
XWCC-22 STA.155 LAT 38 31.4N; LONG 74 4.6W GMT 23.5 6/06/79
DEPTH 61 AIR D/W 19.4/17.8 BARO 16.0 VIS 6 CLD TYP/CVR 8/4
WETHR 2 WIND DIR/SPD 18/10 SEA DIR/HT 12/0 SWELL DIR/HT 12/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.57 | 31.38 | 22.63 | 95.0 | 6.04 | 6.87 | 2.8 | .20 | 0.5 | 1.0 | .45 |
| 2 | 17.57 | 31.38 | 22.63 | 95.0 | 6.03 | | | | | | |
| 3 | 16.30 | 31.42 | 22.96 | 95.0 | 6.02 | | | | | | |
| 4 | 16.11 | 31.44 | 23.01 | 95.0 | 6.09 | | | | | | |
| 5 | 16.02 | 31.46 | 23.05 | 95.0 | 6.11 | | | | | | |
| 6 | 15.93 | 31.47 | 23.08 | 95.0 | 6.11 | | | | | | |
| 7 | 15.85 | 31.48 | 23.10 | 95.0 | 6.11 | | | | | | |
| 8 | 15.73 | 31.48 | 23.13 | 95.0 | 6.11 | | | | | | |
| 9 | 15.43 | 31.52 | 23.23 | 95.0 | 6.12 | | | | | | |
| 10 | 15.26 | 31.58 | 23.30 | 95.0 | 6.14 | 6.34 | 1.2 | .20 | 0.2 | 1.0 | 1.00 |
| 11 | 15.05 | 31.62 | 23.38 | 95.0 | 6.15 | | | | | | |
| 12 | 14.75 | 31.70 | 23.51 | 95.0 | 6.17 | | | | | | |
| 13 | 14.52 | 31.74 | 23.59 | 95.0 | 6.18 | | | | | | |
| 14 | 14.19 | 31.80 | 23.70 | 95.0 | 6.21 | | | | | | |
| 15 | 13.93 | 31.84 | 23.79 | 95.0 | 6.23 | | | | | | |
| 16 | 13.56 | 31.83 | 23.85 | 95.0 | 6.26 | | | | | | |
| 17 | 12.48 | 31.89 | 24.11 | 95.0 | 6.35 | | | | | | |
| 18 | 11.40 | 31.97 | 24.37 | 95.0 | 6.45 | | | | | | |
| 19 | 10.13 | 32.21 | 24.78 | 95.0 | 6.60 | | | | | | |
| 20 | 8.17 | 32.15 | 25.04 | 95.0 | 6.83 | 8.52 | 0.8 | .20 | 0.2 | 1.0 | 0.50 |
| 21 | 7.41 | 32.13 | 25.13 | 95.0 | 7.12 | | | | | | |
| 22 | 6.93 | 32.21 | 25.25 | 95.0 | 7.34 | | | | | | |
| 23 | 6.65 | 32.20 | 25.29 | 95.0 | 7.51 | | | | | | |
| 24 | 6.39 | 32.21 | 25.33 | 95.0 | 7.71 | | | | | | |
| 25 | 6.32 | 32.25 | 25.37 | 95.0 | 7.89 | | | | | | |
| 26 | 6.29 | 32.28 | 25.39 | 95.0 | 8.07 | | | | | | |
| 27 | 6.18 | 32.35 | 25.46 | 95.0 | 8.20 | | | | | | |
| 28 | 6.17 | 32.44 | 25.53 | 95.0 | 8.28 | | | | | | |
| 29 | 6.16 | 32.44 | 25.54 | 95.0 | 8.18 | | | | | | |
| 30 | 6.17 | 32.45 | 25.54 | 95.0 | 7.87 | 6.83 | 1.1 | .30 | 0.6 | 2.0 | 3.00 |
| 31 | 6.16 | 32.45 | 25.54 | 95.0 | 7.56 | | | | | | |
| 32 | 6.16 | 32.44 | 25.54 | 95.0 | 7.21 | | | | | | |
| 33 | 6.16 | 32.45 | 25.54 | 95.0 | 7.03 | | | | | | |
| 34 | 6.16 | 32.45 | 25.55 | 95.0 | 6.91 | | | | | | |
| 35 | 6.16 | 32.45 | 25.54 | 95.0 | 6.78 | | | | | | |
| 36 | 6.16 | 32.44 | 25.54 | 95.0 | 6.71 | | | | | | |
| 37 | 6.16 | 32.45 | 25.54 | 95.0 | 6.64 | | | | | | |
| 38 | 6.16 | 32.45 | 25.54 | 95.0 | 6.59 | | | | | | |
| 39 | 6.16 | 32.44 | 25.54 | 95.0 | 6.55 | | | | | | |
| 40 | 6.16 | 32.44 | 25.53 | 95.0 | 6.52 | 6.74 | 1.9 | .30 | 0.8 | 1.5 | 1.40 |
| 41 | 6.16 | 32.44 | 25.54 | 95.0 | 6.49 | | | | | | |
| 42 | 6.16 | 32.44 | 25.53 | 95.0 | 6.47 | | | | | | |
| 43 | 6.16 | 32.45 | 25.54 | 95.0 | 6.45 | | | | | | |
| 44 | 6.16 | 32.45 | 25.55 | 95.0 | 6.44 | | | | | | |
| 45 | 6.16 | 32.45 | 25.54 | 95.0 | 6.42 | | | | | | |
| 46 | 6.16 | 32.44 | 25.54 | 95.0 | 6.40 | | | | | | |
| 47 | 6.16 | 32.45 | 25.54 | 95.0 | 6.40 | | | | | | |
| 48 | 6.16 | 32.45 | 25.54 | 95.0 | 6.39 | | | | | | |
| 49 | 6.16 | 32.45 | 25.55 | 95.0 | 6.38 | | | | | | |
| 50 | 6.16 | 32.44 | 25.54 | 95.0 | 6.37 | | | | | | |
| 57 | 6.17 | 32.46 | 25.55 | 95.0 | 6.32 | 6.74 | 2.6 | .30 | 0.9 | 2.0 | 1.70 |


KELEZ CRUISE XWCC-22 STATION 155 6/06/79
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

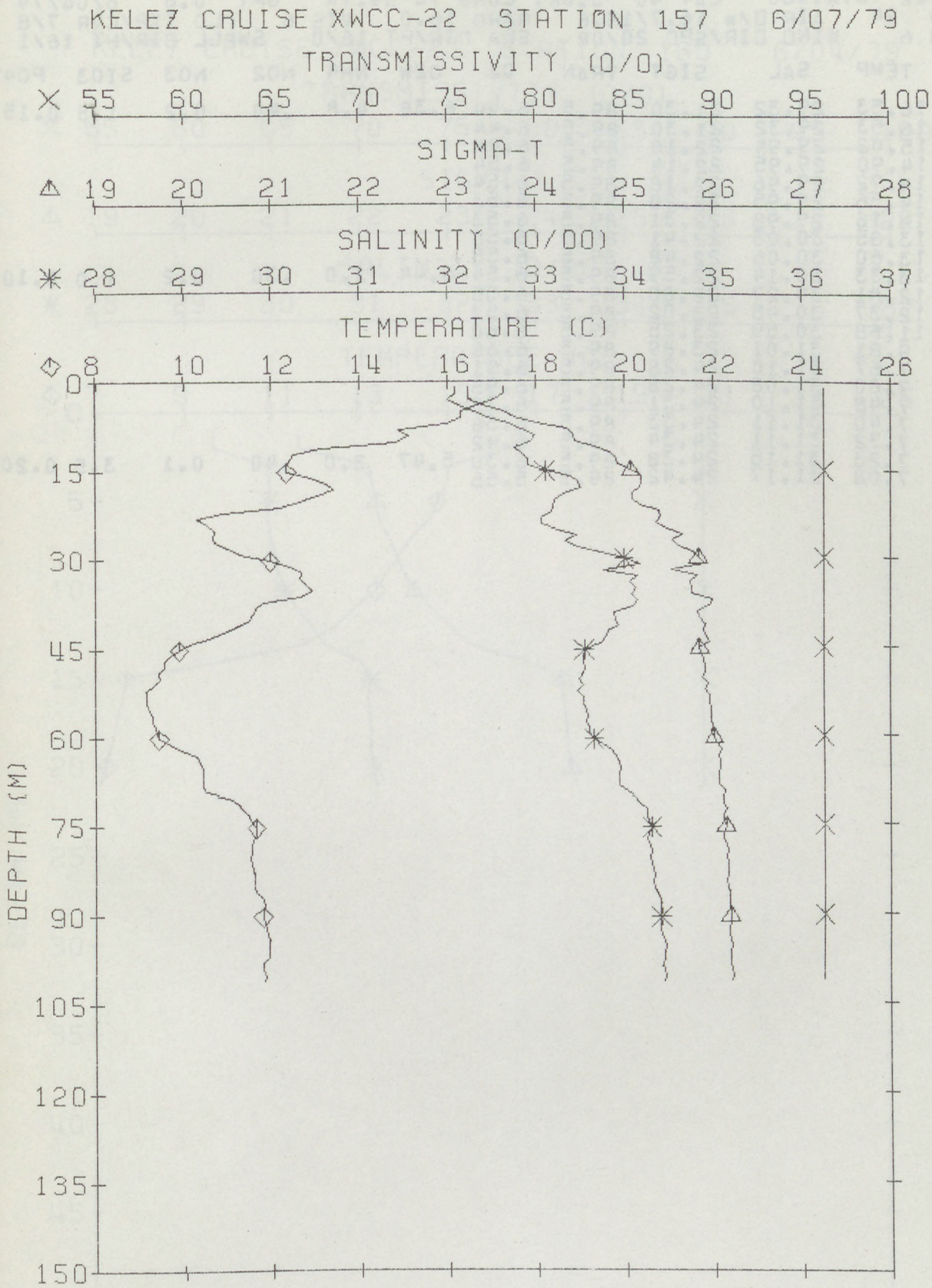
XWCC-22 STA.156 LAT 38 25.0N; LONG 73 54.0W GMT 1.0 6/07/79
DEPTH 62 AIR D/W 18.9/17.8 BARO 16.5 VIS 6 CLD TYP/CVR 2/4
WETHR 2 WIND DIR/SPD 19/10 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.85 | 31.81 | 23.13 | 95.1 | 5.95 | 6.08 | 1.3 | .20 | 0.3 | 1.0 | 1.00 |
| 2 | 16.85 | 31.81 | 23.12 | 95.1 | 5.94 | | | | | | |
| 3 | 16.84 | 31.76 | 23.09 | 95.1 | 5.95 | | | | | | |
| 4 | 16.70 | 31.83 | 23.17 | 95.1 | 5.95 | | | | | | |
| 5 | 16.41 | 31.77 | 23.20 | 95.1 | 5.95 | | | | | | |
| 6 | 15.84 | 31.91 | 23.43 | 95.1 | 5.99 | | | | | | |
| 7 | 15.56 | 31.92 | 23.51 | 95.1 | 6.03 | | | | | | |
| 8 | 15.38 | 31.92 | 23.54 | 95.1 | 6.05 | | | | | | |
| 9 | 15.11 | 31.96 | 23.63 | 95.1 | 6.06 | | | | | | |
| 10 | 14.90 | 31.91 | 23.63 | 95.1 | 6.08 | 6.11 | 0.9 | .30 | 0.5 | 1.0 | 0.30 |
| 11 | 14.36 | 32.10 | 23.90 | 95.1 | 6.12 | | | | | | |
| 12 | 14.05 | 32.23 | 24.06 | 95.1 | 6.18 | | | | | | |
| 13 | 13.99 | 32.32 | 24.14 | 95.1 | 6.20 | | | | | | |
| 14 | 13.44 | 32.36 | 24.28 | 95.1 | 6.24 | | | | | | |
| 15 | 13.08 | 32.38 | 24.37 | 95.1 | 6.29 | | | | | | |
| 16 | 12.74 | 32.34 | 24.41 | 95.1 | 6.35 | | | | | | |
| 17 | 12.45 | 32.30 | 24.43 | 95.1 | 6.40 | | | | | | |
| 18 | 11.95 | 32.42 | 24.62 | 95.1 | 6.48 | | | | | | |
| 19 | 11.85 | 32.71 | 24.86 | 95.1 | 6.53 | | | | | | |
| 20 | 10.42 | 33.01 | 25.35 | 95.1 | 6.56 | 6.79 | 1.0 | .20 | 0.2 | 1.0 | 0.80 |
| 21 | 8.57 | 32.80 | 25.48 | 95.1 | 6.93 | | | | | | |
| 22 | 7.05 | 32.50 | 25.47 | 95.1 | 6.98 | | | | | | |
| 23 | 6.18 | 32.36 | 25.47 | 95.1 | 7.26 | | | | | | |
| 24 | 5.94 | 32.35 | 25.49 | 95.1 | 7.39 | | | | | | |
| 25 | 5.78 | 32.36 | 25.52 | 95.1 | 7.43 | | | | | | |
| 26 | 5.77 | 32.34 | 25.50 | 95.1 | 7.37 | | | | | | |
| 27 | 5.75 | 32.35 | 25.52 | 95.1 | 7.23 | | | | | | |
| 28 | 5.76 | 32.36 | 25.52 | 95.1 | 7.05 | | | | | | |
| 29 | 5.75 | 32.37 | 25.53 | 95.1 | 6.92 | | | | | | |
| 30 | 5.76 | 32.36 | 25.52 | 95.1 | 6.78 | 6.63 | 1.8 | .30 | 1.0 | 1.5 | 1.50 |
| 31 | 5.76 | 32.37 | 25.52 | 95.1 | 6.69 | | | | | | |
| 32 | 5.76 | 32.38 | 25.54 | 95.1 | 6.60 | | | | | | |
| 33 | 5.76 | 32.35 | 25.51 | 95.1 | 6.54 | | | | | | |
| 34 | 5.75 | 32.34 | 25.51 | 95.1 | 6.51 | | | | | | |
| 35 | 5.74 | 32.35 | 25.51 | 95.1 | 6.45 | | | | | | |
| 36 | 5.73 | 32.34 | 25.51 | 95.1 | 6.43 | | | | | | |
| 37 | 5.73 | 32.34 | 25.51 | 95.1 | 6.39 | | | | | | |
| 38 | 5.72 | 32.35 | 25.52 | 95.1 | 6.37 | | | | | | |
| 39 | 5.73 | 32.36 | 25.53 | 95.1 | 6.35 | | | | | | |
| 40 | 5.75 | 32.37 | 25.53 | 95.1 | 6.33 | | | | | | |
| 41 | 5.77 | 32.37 | 25.53 | 95.1 | 6.31 | | | | | | |
| 42 | 5.77 | 32.37 | 25.53 | 95.1 | 6.29 | | | | | | |
| 43 | 5.83 | 32.40 | 25.54 | 95.1 | 6.28 | | | | | | |
| 44 | 5.91 | 32.40 | 25.53 | 95.1 | 6.27 | | | | | | |
| 45 | 5.95 | 32.41 | 25.54 | 95.1 | 6.25 | | | | | | |
| 46 | 5.95 | 32.43 | 25.55 | 95.1 | 6.24 | | | | | | |
| 47 | 5.96 | 32.46 | 25.57 | 95.1 | 6.23 | | | | | | |
| 48 | 5.96 | 32.45 | 25.56 | 95.1 | 6.22 | | | | | | |
| 49 | 5.97 | 32.45 | 25.57 | 95.1 | 6.21 | | | | | | |
| 50 | 5.99 | 32.45 | 25.57 | 95.1 | 6.20 | 6.49 | 3.6 | .40 | 3.1 | 2.0 | 2.40 |
| 59 | 8.68 | 33.03 | 25.65 | 95.1 | 5.93 | 5.87 | 3.2 | .60 | 4.7 | 3.5 | 2.00 |


KELEZ CRUISE XWCC-22 STATION 156 6/07/79
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

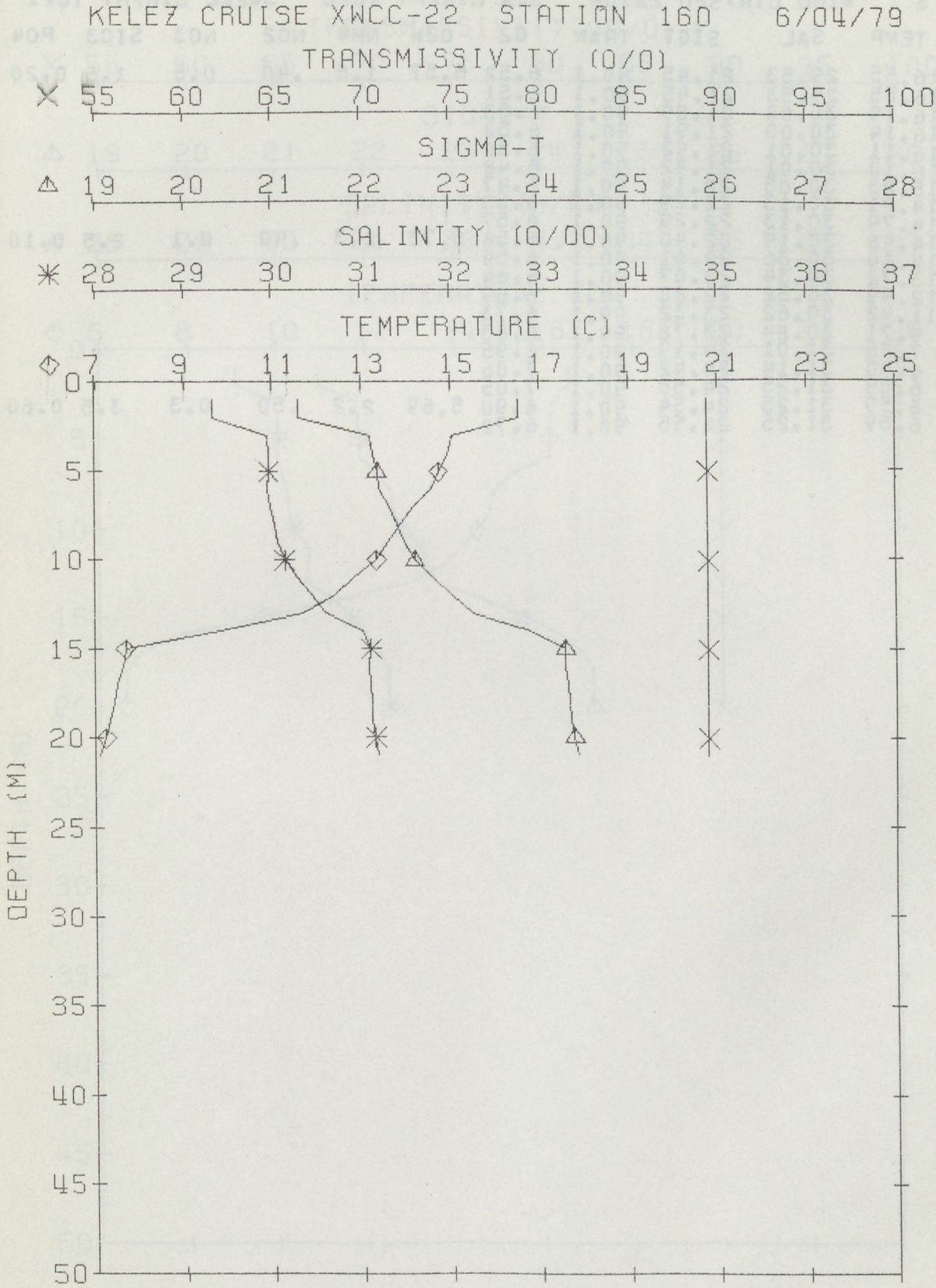
XWCC-22 STA.157 LAT 38 19.3N; LONG 73 44.0W GMT 2.5 6/07/79
DEPTH 109 AIR D/W 18.3/17.2 BARO 17.0 VIS 6 CLD TYP/CVR 0/0
WETHR 2 WIND DIR/SPD 19/10 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.24 | 32.07 | 23.24 | 96.2 | 5.90 | 6.24 | 0.8 | <.10 | 0.3 | | 0.50 |
| 2 | 17.24 | 32.07 | 23.24 | 96.2 | 5.90 | | | | | | |
| 3 | 17.06 | 31.99 | 23.22 | 96.2 | 5.90 | | | | | | |
| 4 | 16.63 | 32.11 | 23.41 | 96.2 | 5.94 | | | | | | |
| 5 | 16.28 | 32.29 | 23.62 | 96.2 | 5.96 | | | | | | |
| 6 | 16.27 | 32.44 | 23.74 | 96.2 | 5.99 | | | | | | |
| 7 | 15.96 | 32.68 | 24.00 | 96.2 | 5.99 | | | | | | |
| 8 | 14.84 | 32.83 | 24.35 | 96.2 | 6.02 | | | | | | |
| 9 | 15.10 | 32.97 | 24.41 | 96.2 | 6.12 | | | | | | |
| 10 | 14.81 | 32.92 | 24.43 | 96.2 | 6.11 | 6.41 | 0.8 | .20 | 0.3 | | 0.2 |
| 11 | 13.10 | 32.74 | 24.65 | 96.2 | 6.23 | | | | | | |
| 12 | 12.49 | 32.83 | 24.83 | 96.2 | 6.28 | | | | | | |
| 13 | 12.37 | 32.89 | 24.91 | 96.2 | 6.43 | | | | | | |
| 14 | 12.32 | 32.89 | 24.92 | 96.2 | 6.51 | | | | | | |
| 15 | 12.33 | 33.09 | 25.06 | 96.2 | 6.59 | | | | | | |
| 16 | 12.86 | 33.38 | 25.18 | 96.2 | 6.60 | | | | | | |
| 17 | 13.23 | 33.45 | 25.17 | 96.2 | 6.59 | | | | | | |
| 18 | 13.37 | 33.49 | 25.17 | 96.2 | 6.56 | | | | | | |
| 19 | 13.02 | 33.28 | 25.08 | 96.2 | 6.55 | | | | | | |
| 20 | 12.61 | 33.18 | 25.09 | 96.2 | 6.59 | 7.23 | 1.0 | .20 | 0.3 | | 0.4 |
| 21 | 12.17 | 33.18 | 25.17 | 96.2 | 6.62 | | | | | | |
| 22 | 10.89 | 33.16 | 25.38 | 96.2 | 6.67 | | | | | | |
| 23 | 10.27 | 33.04 | 25.40 | 96.2 | 6.81 | | | | | | |
| 24 | 10.51 | 33.04 | 25.35 | 96.2 | 6.84 | | | | | | |
| 25 | 10.69 | 33.22 | 25.47 | 96.2 | 6.80 | | | | | | |
| 26 | 10.65 | 33.45 | 25.65 | 96.2 | 6.79 | | | | | | |
| 27 | 10.69 | 33.30 | 25.53 | 96.2 | 6.78 | | | | | | |
| 28 | 10.98 | 33.45 | 25.59 | 96.2 | 6.75 | | | | | | |
| 29 | 11.27 | 33.73 | 25.76 | 96.2 | 6.70 | | | | | | |
| 30 | 11.95 | 33.97 | 25.82 | 96.2 | 6.53 | 6.60 | 1.4 | .40 | 1.8 | | 0.6 |
| 31 | 12.37 | 34.17 | 25.89 | 96.2 | 6.45 | | | | | | |
| 32 | 12.64 | 33.74 | 25.51 | 96.2 | 6.41 | | | | | | |
| 33 | 12.61 | 34.13 | 25.82 | 96.2 | 6.30 | | | | | | |
| 34 | 12.75 | 34.04 | 25.72 | 96.2 | 6.18 | | | | | | |
| 35 | 12.88 | 34.11 | 25.75 | 96.2 | 6.07 | | | | | | |
| 36 | 12.66 | 34.06 | 25.75 | 96.2 | 5.99 | | | | | | |
| 37 | 11.79 | 34.13 | 25.97 | 96.2 | 5.97 | | | | | | |
| 38 | 11.62 | 34.07 | 25.96 | 96.2 | 5.98 | | | | | | |
| 39 | 11.54 | 33.86 | 25.81 | 96.2 | 5.94 | | | | | | |
| 40 | 11.44 | 33.87 | 25.84 | 96.2 | 5.89 | | | | | | |
| 41 | 11.19 | 33.90 | 25.91 | 96.2 | 5.86 | | | | | | |
| 42 | 10.88 | 33.79 | 25.88 | 96.2 | 5.84 | | | | | | |
| 43 | 10.55 | 33.76 | 25.91 | 96.2 | 5.82 | | | | | | |
| 44 | 10.12 | 33.71 | 25.94 | 96.2 | 5.80 | | | | | | |
| 45 | 9.89 | 33.52 | 25.83 | 96.2 | 5.79 | | | | | | |
| 46 | 9.69 | 33.51 | 25.86 | 96.2 | 5.77 | | | | | | |
| 47 | 9.56 | 33.51 | 25.88 | 96.2 | 5.74 | | | | | | |
| 48 | 9.56 | 33.53 | 25.90 | 96.2 | 5.70 | | | | | | |
| 49 | 9.41 | 33.50 | 25.90 | 96.2 | 5.67 | | | | | | |
| 50 | 9.45 | 33.46 | 25.86 | 96.2 | 5.65 | 5.57 | 2.6 | .70 | 7.2 | 1.5 | 0.80 |
| 60 | 9.42 | 33.63 | 26.00 | 96.2 | 5.40 | | | | | | |
| 70 | 11.00 | 34.10 | 26.09 | 96.2 | 5.09 | | | | | | |
| 80 | 11.50 | 34.26 | 26.13 | 96.2 | 4.84 | 4.84 | 1.0 | .40 | 10.3 | 5.5 | 0.90 |
| 90 | 11.77 | 34.38 | 26.17 | 96.2 | 4.68 | | | | | | |
| 100 | 11.84 | 34.45 | 26.21 | 96.2 | 4.64 | 4.72 | 1.8 | .30 | 10.9 | 5.5 | 1.90 |
| 101 | 11.83 | 34.42 | 26.19 | 96.2 | 4.62 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 157 6/07/79
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

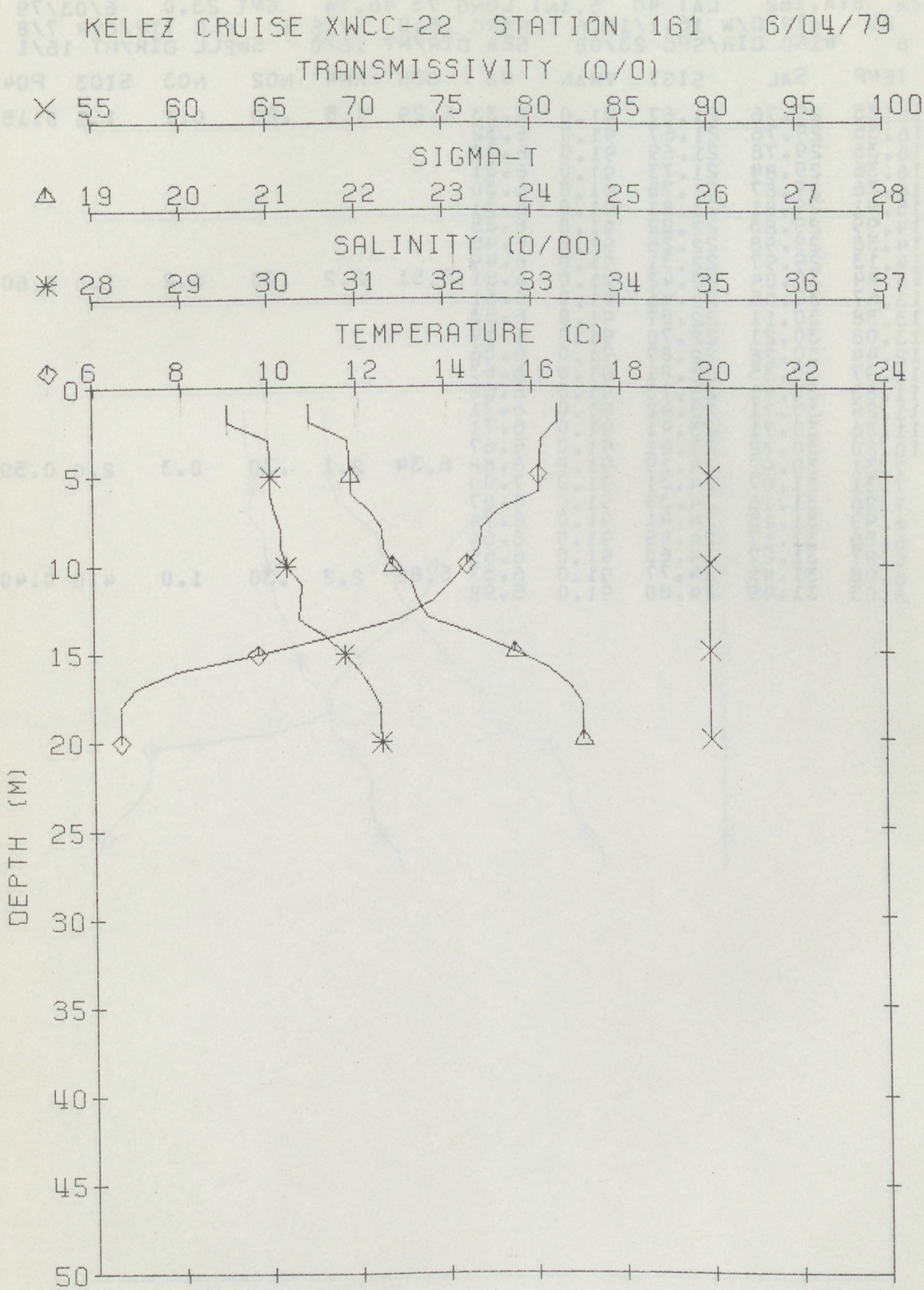
XWCC-22 STA.160 LAT 40 5.0N; LONG 73 59.7W GMT 0.8 6/04/79
DEPTH 24 AIR D/W 16.7/15.6 BARO 16.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 20/08 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.53 | 29.32 | 21.30 | 89.5 | 6.44 | 6.38 | 4.8 | .40 | 0.2 | 1.5 | 0.15 |
| 2 | 16.53 | 29.32 | 21.30 | 89.5 | 6.44 | | | | | | |
| 3 | 15.02 | 29.94 | 22.10 | 89.5 | 6.48 | | | | | | |
| 4 | 14.90 | 29.95 | 22.14 | 89.5 | 6.54 | | | | | | |
| 5 | 14.72 | 29.96 | 22.18 | 89.5 | 6.54 | | | | | | |
| 6 | 14.56 | 29.95 | 22.20 | 89.5 | 6.53 | | | | | | |
| 7 | 14.16 | 29.98 | 22.31 | 89.5 | 6.53 | | | | | | |
| 8 | 13.85 | 30.03 | 22.41 | 89.5 | 6.55 | | | | | | |
| 9 | 13.60 | 30.06 | 22.48 | 89.5 | 6.55 | | | | | | |
| 10 | 13.33 | 30.14 | 22.59 | 89.5 | 6.54 | 6.44 | 2.0 | .30 | 0.2 | 1.0 | 0.10 |
| 11 | 12.81 | 30.27 | 22.80 | 89.5 | 6.55 | | | | | | |
| 12 | 12.37 | 30.45 | 23.02 | 89.5 | 6.57 | | | | | | |
| 13 | 11.68 | 30.59 | 23.25 | 89.5 | 6.60 | | | | | | |
| 14 | 9.81 | 31.01 | 23.89 | 89.5 | 6.66 | | | | | | |
| 15 | 7.67 | 31.10 | 24.28 | 89.5 | 6.91 | | | | | | |
| 16 | 7.60 | 31.08 | 24.28 | 89.5 | 6.95 | | | | | | |
| 17 | 7.48 | 31.10 | 24.31 | 89.5 | 6.75 | | | | | | |
| 18 | 7.40 | 31.11 | 24.33 | 89.5 | 6.56 | | | | | | |
| 19 | 7.32 | 31.11 | 24.34 | 89.5 | 6.42 | | | | | | |
| 20 | 7.23 | 31.15 | 24.38 | 89.5 | 6.30 | 5.47 | 3.0 | .40 | 0.1 | 3.5 | 0.20 |
| 21 | 7.08 | 31.17 | 24.42 | 89.5 | 5.55 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 160 6/04/79
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

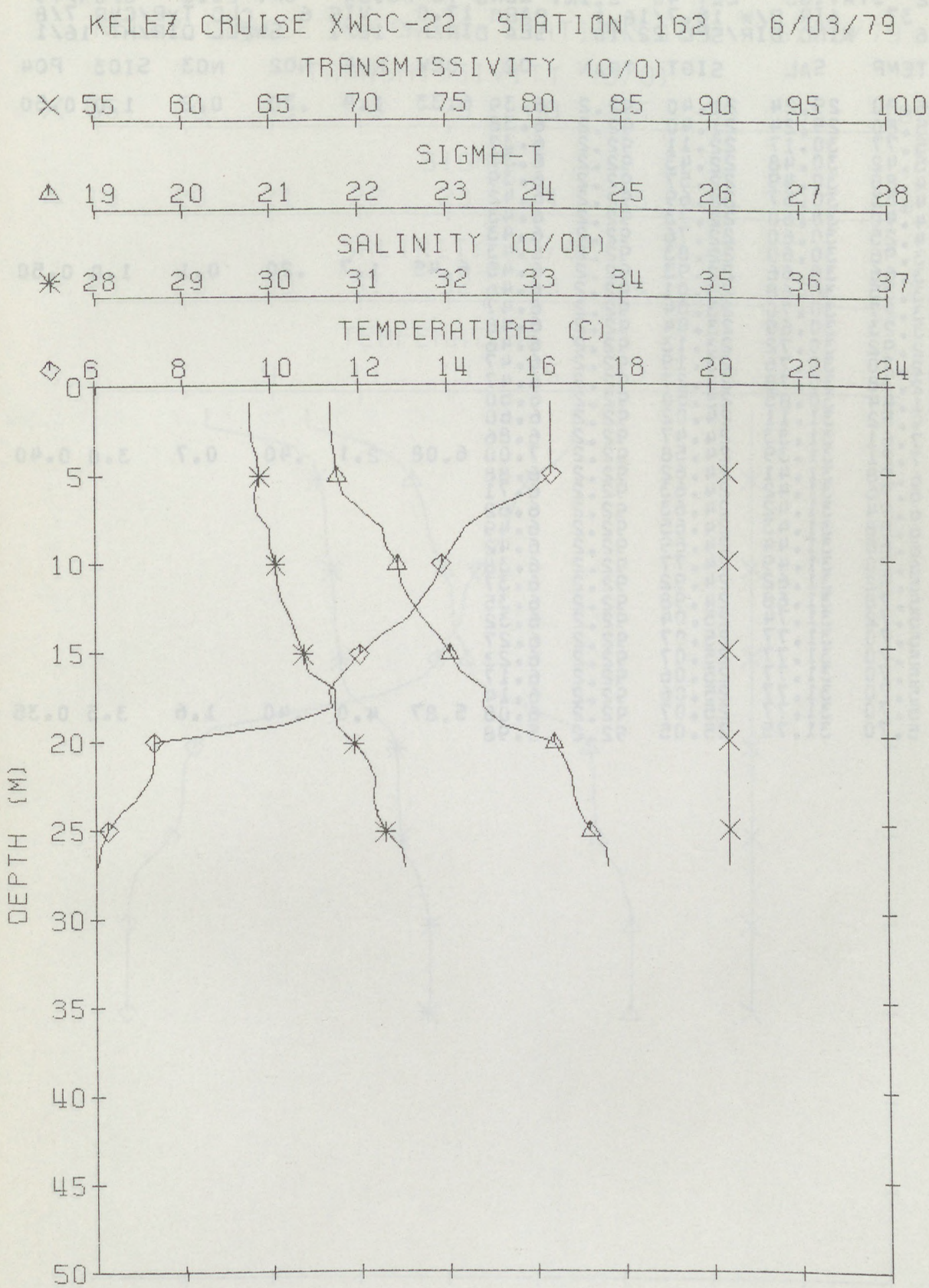
XWCC-22 STA.161 LAT 40 5.0N; LONG 73 54.7W GMT 0.0 6/04/79
DEPTH 21 AIR D/W 16.7/15.6 BARO 16.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 22/08 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.55 | 29.53 | 21.45 | 90.1 | 6.52 | 6.57 | 1.6 | .40 | 0.5 | 1.5 | 0.20 |
| 2 | 16.55 | 29.53 | 21.45 | 90.1 | 6.51 | | | | | | |
| 3 | 16.19 | 30.00 | 21.89 | 90.1 | 6.53 | | | | | | |
| 4 | 16.14 | 30.00 | 21.91 | 90.1 | 6.52 | | | | | | |
| 5 | 16.11 | 30.01 | 21.92 | 90.1 | 6.50 | | | | | | |
| 6 | 16.10 | 30.01 | 21.92 | 90.1 | 6.48 | | | | | | |
| 7 | 15.23 | 30.05 | 22.14 | 90.1 | 6.47 | | | | | | |
| 8 | 14.81 | 30.13 | 22.29 | 90.1 | 6.55 | | | | | | |
| 9 | 14.79 | 30.13 | 22.29 | 90.1 | 6.57 | | | | | | |
| 10 | 14.48 | 30.19 | 22.40 | 90.1 | 6.56 | 6.73 | 2.3 | .40 | 0.1 | 2.5 | 0.10 |
| 11 | 14.10 | 30.36 | 22.61 | 90.1 | 6.59 | | | | | | |
| 12 | 13.72 | 30.34 | 22.67 | 90.1 | 6.64 | | | | | | |
| 13 | 12.99 | 30.32 | 22.80 | 90.1 | 6.69 | | | | | | |
| 14 | 11.42 | 30.62 | 23.32 | 90.1 | 6.73 | | | | | | |
| 15 | 9.71 | 30.84 | 23.78 | 90.1 | 6.83 | | | | | | |
| 16 | 7.86 | 31.01 | 24.19 | 90.1 | 6.95 | | | | | | |
| 17 | 6.90 | 31.14 | 24.42 | 90.1 | 7.06 | | | | | | |
| 18 | 6.59 | 31.25 | 24.55 | 90.1 | 7.05 | | | | | | |
| 19 | 6.59 | 31.25 | 24.54 | 90.1 | 6.90 | 5.69 | 2.2 | .50 | 0.3 | 3.5 | 0.60 |
| 20 | 6.59 | 31.25 | 24.55 | 90.1 | 6.72 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 161 6/04/79
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

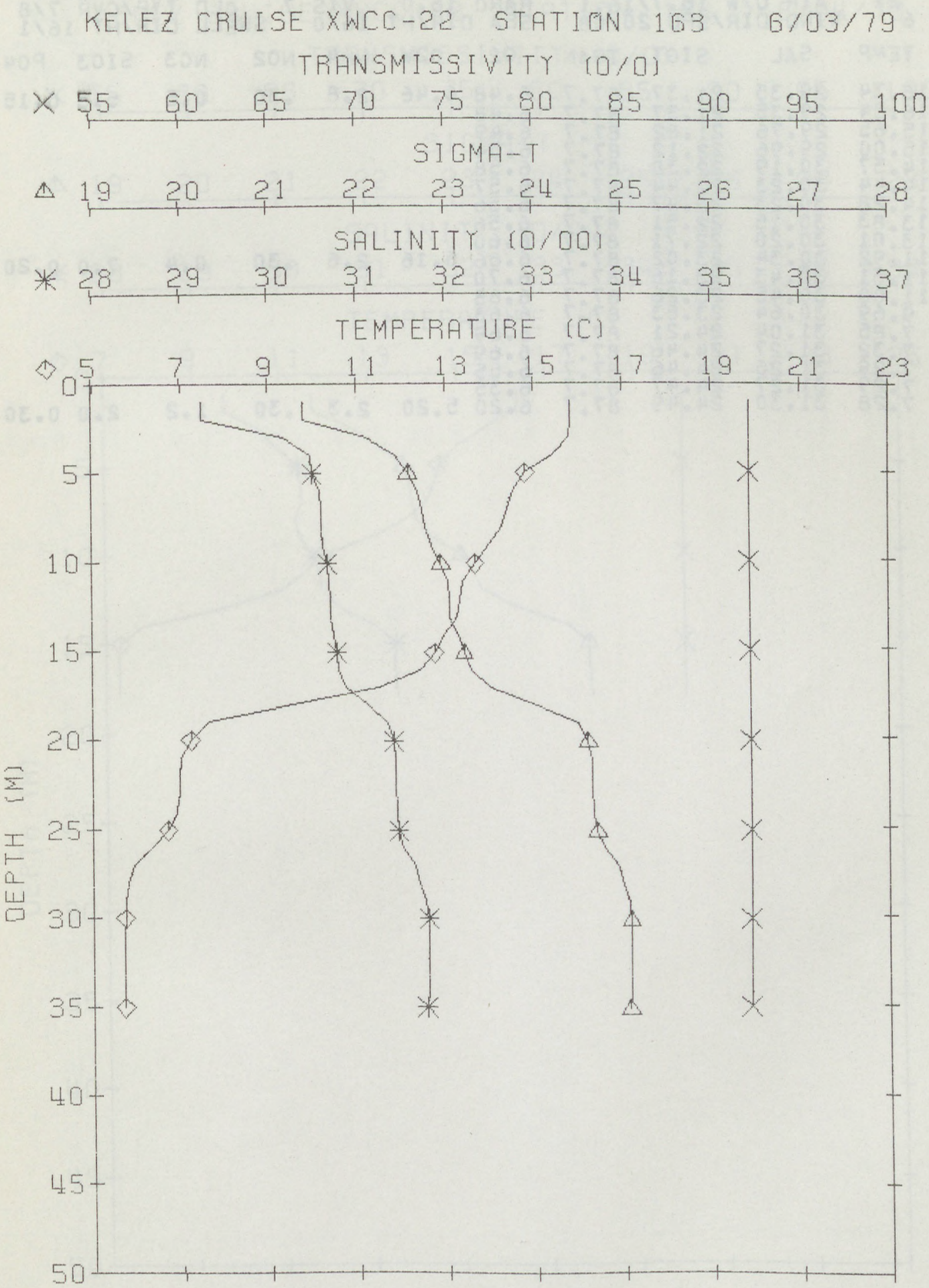
XWCC-22 STA.162 LAT 40 5.1N; LONG 73 46.7W GMT 23.0 6/03/79
DEPTH 29 AIR D/W 16.1/15.6 BARO 16.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 23/08 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.35 | 29.76 | 21.67 | 91.0 | 6.33 | 6.29 | 1.5 | .20 | 0.1 | 1.5 | 0.15 |
| 2 | 16.35 | 29.76 | 21.67 | 91.0 | 6.32 | | | | | | |
| 3 | 16.36 | 29.78 | 21.69 | 91.0 | 6.32 | | | | | | |
| 4 | 16.36 | 29.84 | 21.73 | 91.0 | 6.31 | | | | | | |
| 5 | 16.36 | 29.87 | 21.75 | 91.0 | 6.30 | | | | | | |
| 6 | 15.91 | 29.81 | 21.81 | 91.0 | 6.31 | | | | | | |
| 7 | 14.99 | 29.83 | 22.02 | 91.0 | 6.35 | | | | | | |
| 8 | 14.38 | 29.98 | 22.26 | 91.0 | 6.45 | | | | | | |
| 9 | 14.13 | 29.97 | 22.31 | 91.0 | 6.49 | | | | | | |
| 10 | 13.84 | 30.04 | 22.42 | 91.0 | 6.51 | 6.51 | 2.2 | .20 | 0.2 | 1.0 | 0.60 |
| 11 | 13.67 | 30.05 | 22.46 | 91.0 | 6.51 | | | | | | |
| 12 | 13.38 | 30.11 | 22.57 | 91.0 | 6.53 | | | | | | |
| 13 | 13.08 | 30.21 | 22.70 | 91.0 | 6.54 | | | | | | |
| 14 | 12.44 | 30.28 | 22.87 | 91.0 | 6.56 | | | | | | |
| 15 | 11.97 | 30.35 | 23.01 | 91.0 | 6.63 | | | | | | |
| 16 | 11.63 | 30.41 | 23.13 | 91.0 | 6.68 | | | | | | |
| 17 | 11.29 | 30.71 | 23.42 | 91.0 | 6.71 | | | | | | |
| 18 | 11.36 | 30.71 | 23.41 | 91.0 | 6.71 | | | | | | |
| 19 | 10.20 | 30.72 | 23.61 | 91.0 | 6.67 | | | | | | |
| 20 | 7.31 | 30.92 | 24.19 | 91.0 | 6.88 | 6.34 | 2.1 | .30 | 0.3 | 2.0 | 0.50 |
| 21 | 7.31 | 31.07 | 24.31 | 91.0 | 7.00 | | | | | | |
| 22 | 7.26 | 31.16 | 24.39 | 91.0 | 6.87 | | | | | | |
| 23 | 6.99 | 31.15 | 24.41 | 91.0 | 6.74 | | | | | | |
| 24 | 6.56 | 31.17 | 24.49 | 91.0 | 6.69 | | | | | | |
| 25 | 6.27 | 31.27 | 24.60 | 91.0 | 6.65 | | | | | | |
| 26 | 6.08 | 31.45 | 24.77 | 91.0 | 6.57 | 5.86 | 2.2 | .30 | 1.0 | 4.0 | 0.40 |
| 27 | 6.03 | 31.49 | 24.80 | 91.0 | 5.98 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 162 6/03/79
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

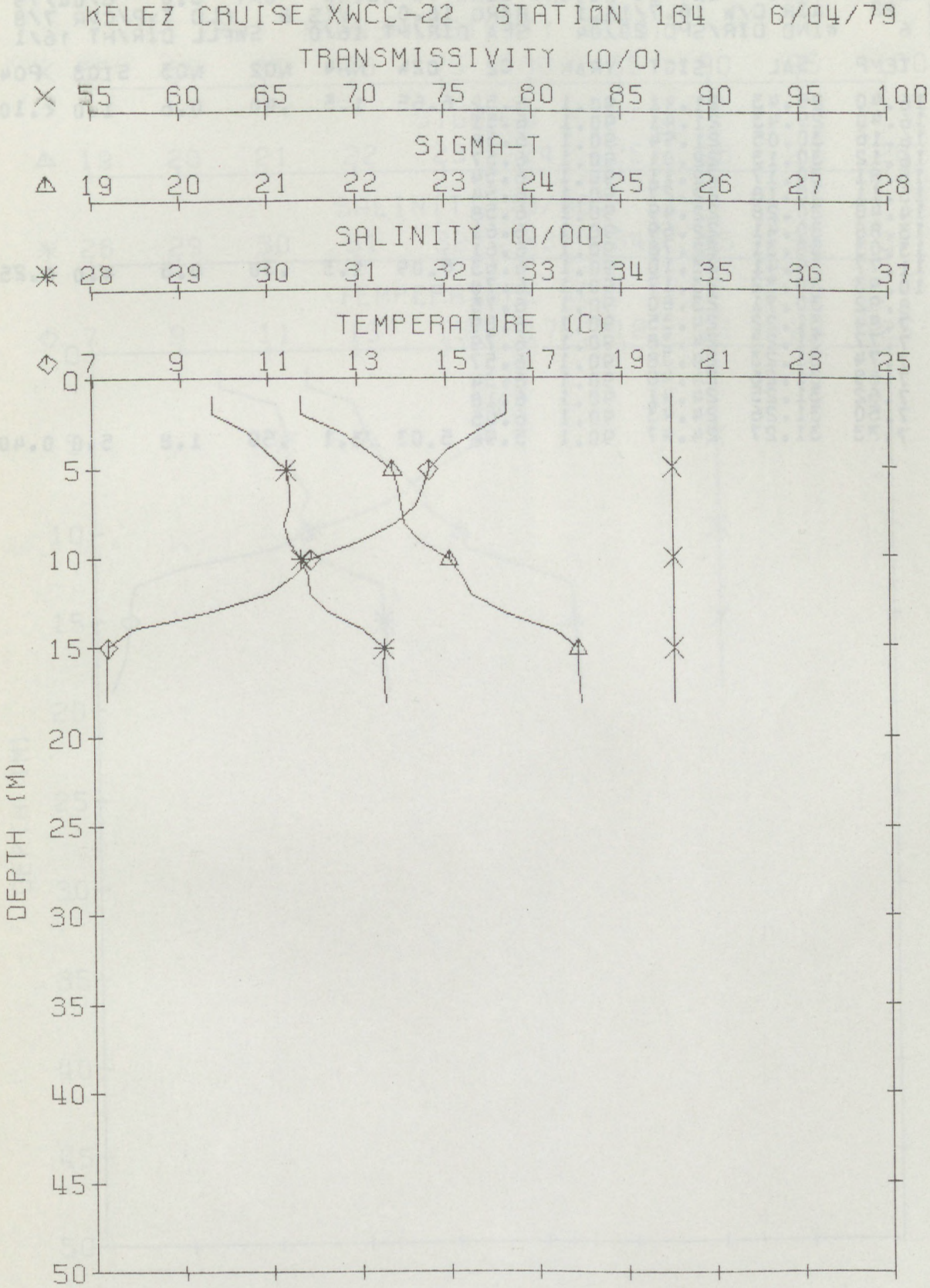
XWCC-22 STA.163 LAT 40 5.1N; LONG 73 38.3W GMT 21.8 6/03/79
DEPTH 37 AIR D/W 16.7/16.1 BARO 17.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 22/10 SEA DIR/HT 16/1 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.80 | 29.24 | 21.40 | 92.2 | 6.39 | 6.33 | 1.4 | .30 | 0.2 | 1.0 | 0.50 |
| 2 | 15.80 | 29.24 | 21.40 | 92.2 | 6.38 | | | | | | |
| 3 | 15.77 | 30.17 | 22.11 | 92.2 | 6.37 | | | | | | |
| 4 | 15.42 | 30.48 | 22.43 | 92.2 | 6.37 | | | | | | |
| 5 | 14.80 | 30.49 | 22.57 | 92.2 | 6.39 | | | | | | |
| 6 | 14.53 | 30.57 | 22.69 | 92.2 | 6.42 | | | | | | |
| 7 | 14.40 | 30.60 | 22.73 | 92.2 | 6.43 | | | | | | |
| 8 | 14.25 | 30.60 | 22.76 | 92.2 | 6.43 | | | | | | |
| 9 | 13.96 | 30.60 | 22.83 | 92.2 | 6.43 | | | | | | |
| 10 | 13.66 | 30.66 | 22.93 | 92.2 | 6.45 | 6.45 | 1.7 | .20 | 0.1 | 1.0 | 0.50 |
| 11 | 13.35 | 30.68 | 23.01 | 92.2 | 6.46 | | | | | | |
| 12 | 13.27 | 30.70 | 23.04 | 92.2 | 6.47 | | | | | | |
| 13 | 13.23 | 30.69 | 23.04 | 92.2 | 6.46 | | | | | | |
| 14 | 12.92 | 30.72 | 23.13 | 92.2 | 6.46 | | | | | | |
| 15 | 12.70 | 30.76 | 23.19 | 92.2 | 6.47 | | | | | | |
| 16 | 12.38 | 30.78 | 23.27 | 92.2 | 6.47 | | | | | | |
| 17 | 11.44 | 30.85 | 23.50 | 92.2 | 6.50 | | | | | | |
| 18 | 9.52 | 31.11 | 24.02 | 92.2 | 6.60 | | | | | | |
| 19 | 7.61 | 31.33 | 24.47 | 92.2 | 6.86 | | | | | | |
| 20 | 7.21 | 31.39 | 24.58 | 92.2 | 7.00 | 6.08 | 2.1 | .40 | 0.7 | 3.0 | 0.40 |
| 21 | 6.98 | 31.41 | 24.62 | 92.2 | 6.88 | | | | | | |
| 22 | 6.96 | 31.42 | 24.63 | 92.2 | 6.71 | | | | | | |
| 23 | 6.94 | 31.42 | 24.63 | 92.2 | 6.62 | | | | | | |
| 24 | 6.88 | 31.43 | 24.65 | 92.2 | 6.49 | | | | | | |
| 25 | 6.68 | 31.44 | 24.69 | 92.2 | 6.42 | | | | | | |
| 26 | 6.30 | 31.49 | 24.77 | 92.2 | 6.38 | | | | | | |
| 27 | 5.92 | 31.62 | 24.92 | 92.2 | 6.37 | | | | | | |
| 28 | 5.78 | 31.68 | 24.98 | 92.2 | 6.35 | | | | | | |
| 29 | 5.72 | 31.74 | 25.04 | 92.2 | 6.32 | | | | | | |
| 30 | 5.70 | 31.77 | 25.07 | 92.2 | 6.27 | | | | | | |
| 31 | 5.70 | 31.77 | 25.07 | 92.2 | 6.23 | | | | | | |
| 32 | 5.70 | 31.77 | 25.06 | 92.2 | 6.17 | | | | | | |
| 33 | 5.70 | 31.77 | 25.06 | 92.2 | 6.14 | | | | | | |
| 34 | 5.70 | 31.77 | 25.07 | 92.2 | 6.08 | 5.87 | 4.0 | .40 | 1.6 | 3.5 | 0.35 |
| 35 | 5.70 | 31.75 | 25.05 | 92.2 | 5.98 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 163 6/03/79
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

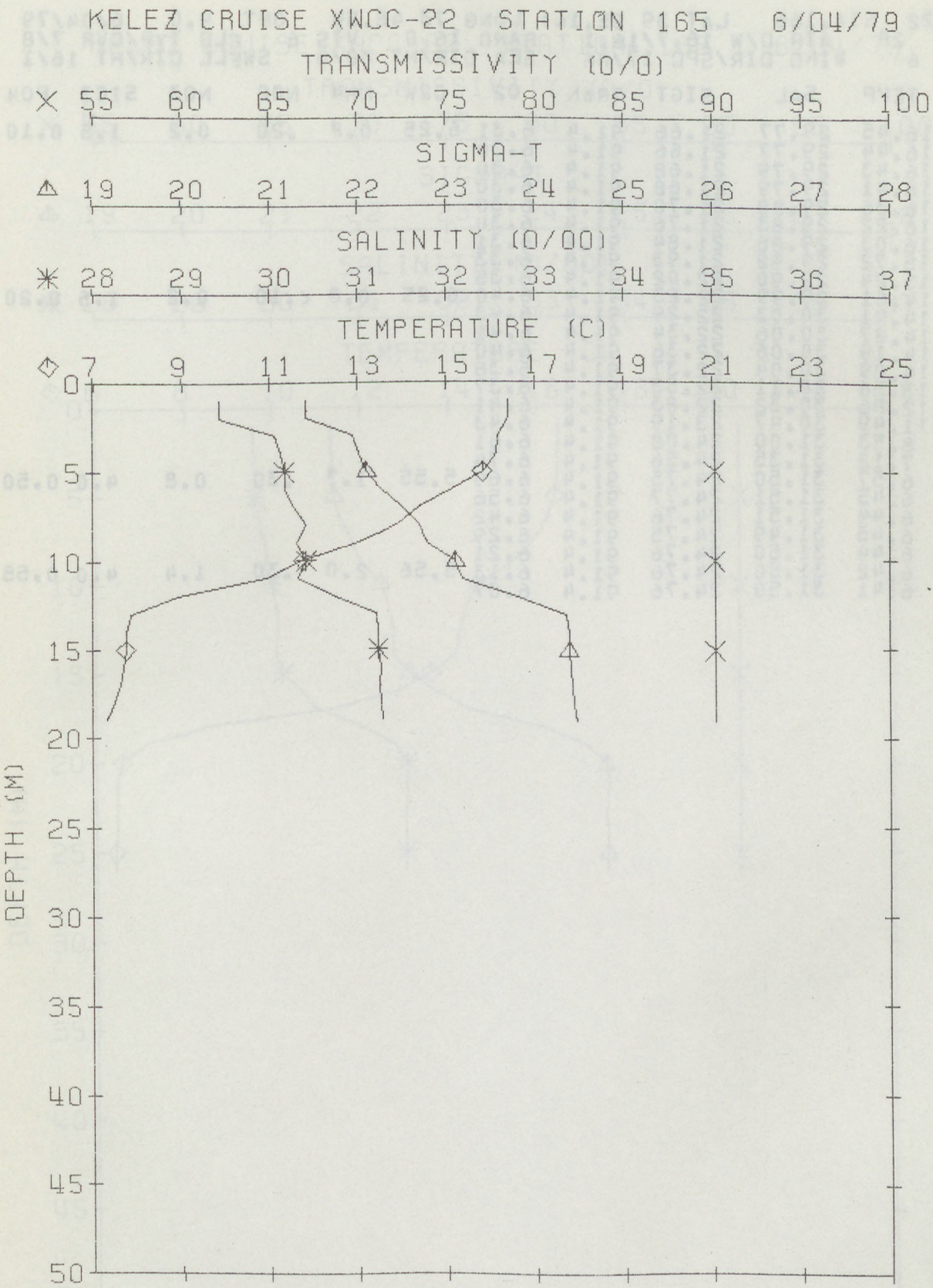
XWCC-22 STA.164 LAT 39 58.0N; LONG 74 1.3W GMT 2.2 6/04/79
DEPTH 21 AIR D/W 16.7/16.1 BARO 16.0 VIS 7 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 20/08 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.34 | 29.35 | 21.37 | 87.7 | 6.48 | 6.46 | 2.8 | .30 | 0.5 | 5.5 | 0.15 |
| 2 | 16.34 | 29.35 | 21.37 | 87.7 | 6.48 | | | | | | |
| 3 | 15.65 | 29.76 | 21.82 | 87.7 | 6.49 | | | | | | |
| 4 | 15.00 | 29.96 | 22.12 | 87.7 | 6.54 | | | | | | |
| 5 | 14.57 | 30.19 | 22.38 | 87.7 | 6.58 | | | | | | |
| 6 | 14.44 | 30.23 | 22.44 | 87.7 | 6.57 | | | | | | |
| 7 | 14.28 | 30.23 | 22.47 | 87.7 | 6.56 | | | | | | |
| 8 | 13.83 | 30.15 | 22.51 | 87.7 | 6.56 | | | | | | |
| 9 | 13.01 | 30.20 | 22.71 | 87.7 | 6.60 | | | | | | |
| 10 | 11.92 | 30.34 | 23.02 | 87.7 | 6.66 | 6.16 | 2.6 | .30 | 0.4 | 7.0 | 0.20 |
| 11 | 11.51 | 30.43 | 23.16 | 87.7 | 6.70 | | | | | | |
| 12 | 11.00 | 30.45 | 23.26 | 87.7 | 6.65 | | | | | | |
| 13 | 9.69 | 30.64 | 23.63 | 87.7 | 6.63 | | | | | | |
| 14 | 7.85 | 31.04 | 24.21 | 87.7 | 6.69 | | | | | | |
| 15 | 7.32 | 31.27 | 24.46 | 87.7 | 6.69 | | | | | | |
| 16 | 7.29 | 31.26 | 24.46 | 87.7 | 6.55 | | | | | | |
| 17 | 7.29 | 31.27 | 24.47 | 87.7 | 6.35 | | | | | | |
| 18 | 7.28 | 31.30 | 24.49 | 87.7 | 6.20 | 5.20 | 2.3 | .30 | 1.2 | 2.0 | 0.30 |


KELEZ CRUISE XWCC-22 STATION 164 6/04/79
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

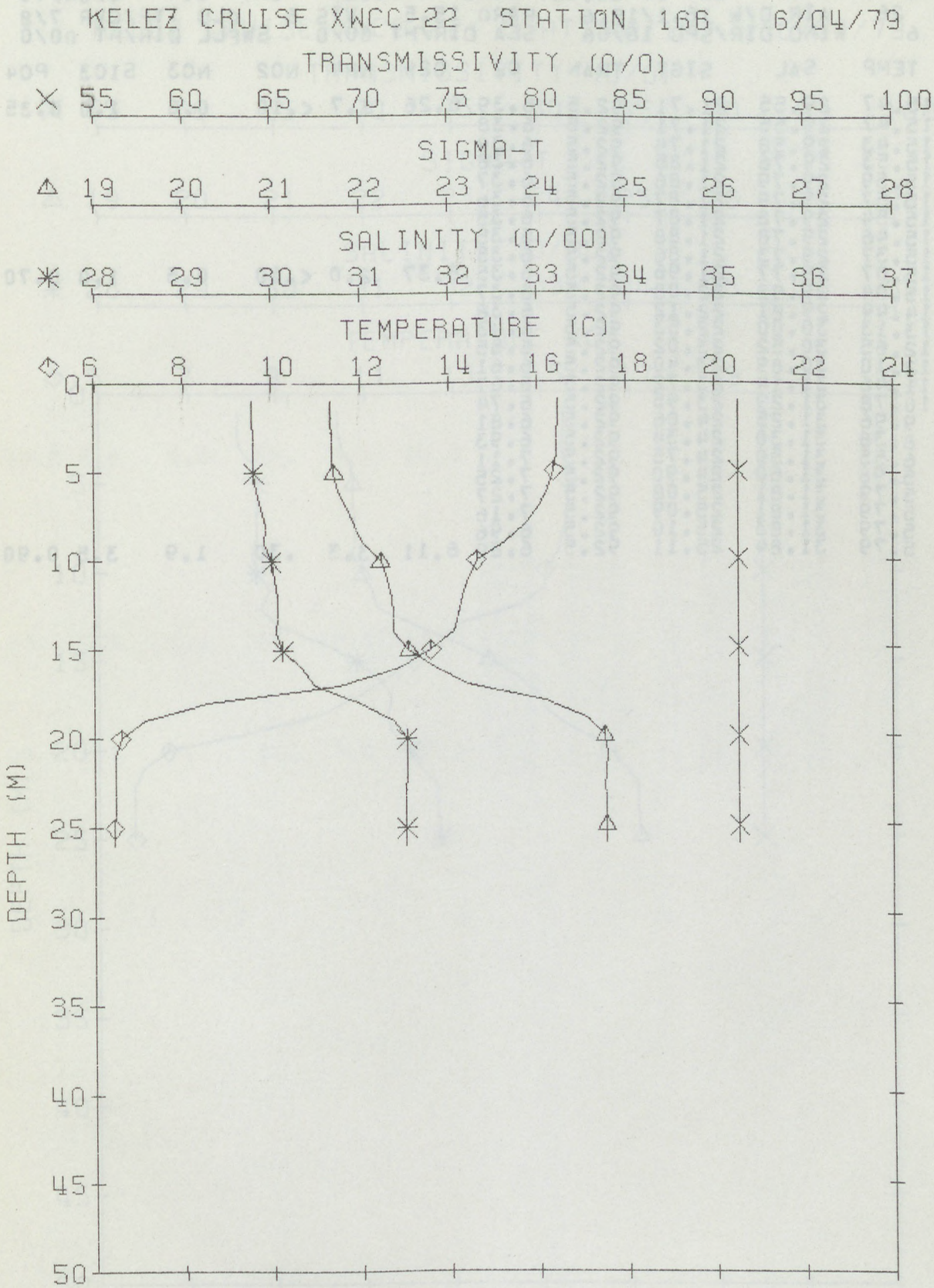
XWCC-22 STA.165 LAT 39 56.5N; LONG 73 56.3W GMT 3.0 6/04/79
DEPTH 22 AIR D/W 16.7/16.1 BARO 16.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 20/04 SEA DIR/HT 16/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.40 | 29.43 | 21.41 | 90.1 | 6.52 | 6.65 | 1.5 | .40 | 0.6 | 1.0 | <.10 |
| 2 | 16.40 | 29.43 | 21.41 | 90.1 | 6.51 | | | | | | |
| 3 | 16.16 | 30.05 | 21.94 | 90.1 | 6.58 | | | | | | |
| 4 | 16.12 | 30.13 | 22.01 | 90.1 | 6.57 | | | | | | |
| 5 | 15.81 | 30.17 | 22.11 | 90.1 | 6.54 | | | | | | |
| 6 | 15.11 | 30.18 | 22.27 | 90.1 | 6.54 | | | | | | |
| 7 | 14.40 | 30.28 | 22.49 | 90.1 | 6.58 | | | | | | |
| 8 | 13.88 | 30.41 | 22.69 | 90.1 | 6.61 | | | | | | |
| 9 | 13.03 | 30.31 | 22.78 | 90.1 | 6.61 | | | | | | |
| 10 | 11.77 | 30.41 | 23.10 | 90.1 | 6.63 | 6.09 | 1.3 | .30 | 0.5 | 4.0 | 0.25 |
| 11 | 10.93 | 30.32 | 23.17 | 90.1 | 6.70 | | | | | | |
| 12 | 8.92 | 30.71 | 23.80 | 90.1 | 6.75 | | | | | | |
| 13 | 7.84 | 31.22 | 24.35 | 90.1 | 6.89 | | | | | | |
| 14 | 7.77 | 31.23 | 24.38 | 90.1 | 6.79 | | | | | | |
| 15 | 7.74 | 31.23 | 24.38 | 90.1 | 6.57 | | | | | | |
| 16 | 7.69 | 31.26 | 24.40 | 90.1 | 6.34 | | | | | | |
| 17 | 7.62 | 31.25 | 24.41 | 90.1 | 6.18 | | | | | | |
| 18 | 7.50 | 31.26 | 24.43 | 90.1 | 6.05 | | | | | | |
| 19 | 7.33 | 31.27 | 24.47 | 90.1 | 5.96 | 5.03 | 3.1 | .50 | 1.8 | 5.0 | 0.40 |


KELEZ CRUISE XWCC-22 STATION 165 6/04/79
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

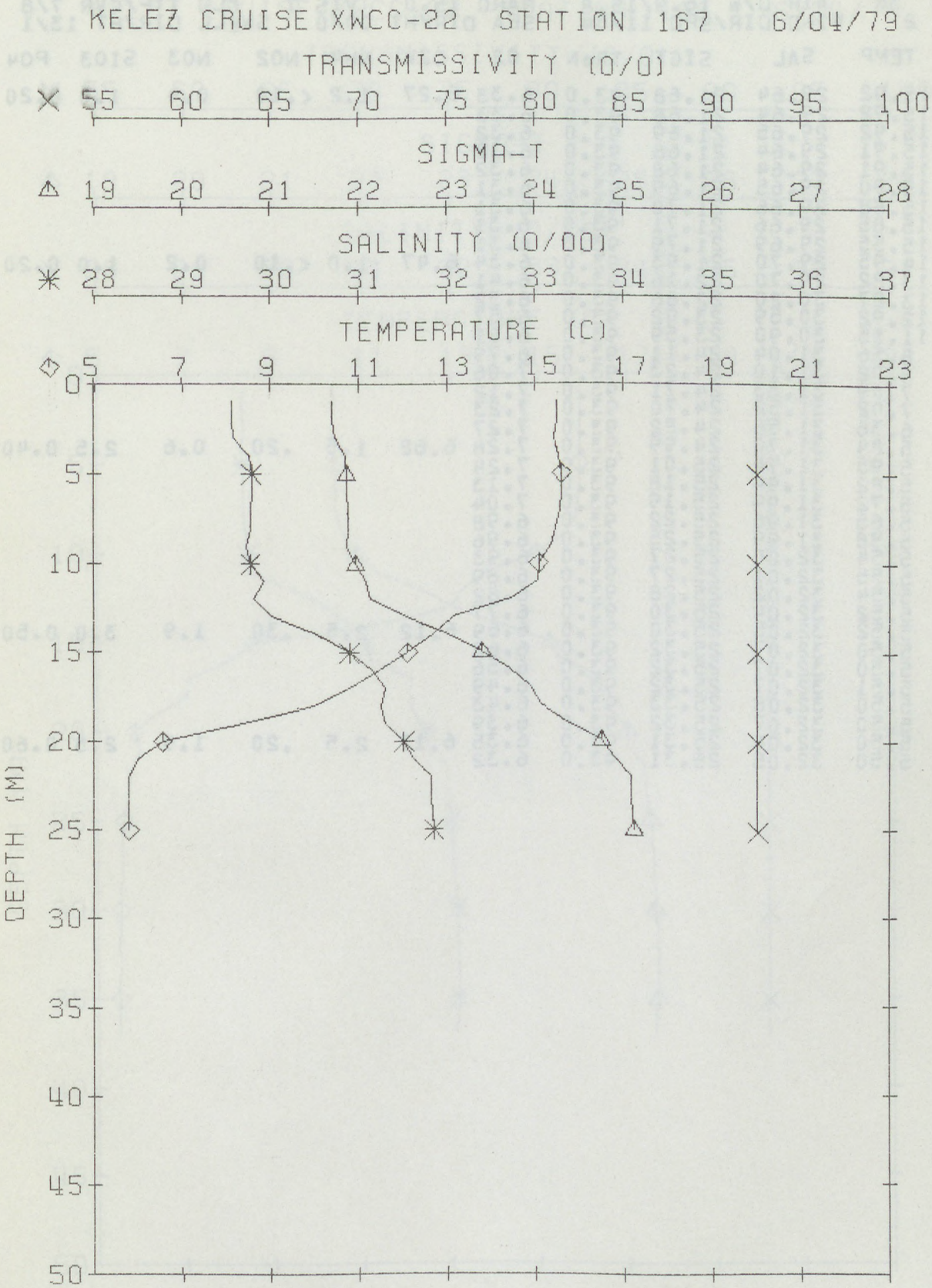
XWCC-22 STA.166 LAT 39 55.1N; LONG 73 48.5W GMT 4.0 6/04/79
DEPTH 28 AIR D/W 16.7/16.1 BARO 16.0 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 17/06 SEA DIR/HT 00/0 SWELL DIR/HT 16/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.45 | 29.77 | 21.66 | 91.4 | 6.31 | 6.25 | 0.8 | .20 | 0.2 | 1.5 | 0.10 |
| 2 | 16.44 | 29.77 | 21.66 | 91.4 | 6.30 | | | | | | |
| 3 | 16.43 | 29.79 | 21.68 | 91.4 | 6.30 | | | | | | |
| 4 | 16.41 | 29.79 | 21.68 | 91.4 | 6.30 | | | | | | |
| 5 | 16.36 | 29.80 | 21.70 | 91.4 | 6.30 | | | | | | |
| 6 | 16.22 | 29.83 | 21.76 | 91.4 | 6.30 | | | | | | |
| 7 | 16.03 | 29.88 | 21.84 | 91.4 | 6.31 | | | | | | |
| 8 | 15.72 | 29.92 | 21.93 | 91.4 | 6.33 | | | | | | |
| 9 | 15.24 | 29.90 | 22.02 | 91.4 | 6.35 | | | | | | |
| 10 | 14.61 | 29.99 | 22.23 | 91.4 | 6.40 | 6.25 | 0.8 | <.10 | 0.2 | 1.5 | 0.20 |
| 11 | 14.41 | 30.03 | 22.29 | 91.4 | 6.43 | | | | | | |
| 12 | 14.27 | 30.06 | 22.34 | 91.4 | 6.41 | | | | | | |
| 13 | 14.19 | 30.06 | 22.36 | 91.4 | 6.40 | | | | | | |
| 14 | 14.09 | 30.04 | 22.37 | 91.4 | 6.38 | | | | | | |
| 15 | 13.56 | 30.11 | 22.53 | 91.4 | 6.37 | | | | | | |
| 16 | 12.86 | 30.32 | 22.83 | 91.4 | 6.41 | | | | | | |
| 17 | 11.49 | 30.47 | 23.19 | 91.4 | 6.43 | | | | | | |
| 18 | 8.53 | 31.00 | 24.08 | 91.4 | 6.61 | | | | | | |
| 19 | 7.12 | 31.35 | 24.56 | 91.4 | 6.74 | | | | | | |
| 20 | 6.57 | 31.50 | 24.75 | 91.4 | 6.69 | 5.55 | 1.3 | .30 | 0.8 | 4.0 | 0.50 |
| 21 | 6.45 | 31.51 | 24.77 | 91.4 | 6.56 | | | | | | |
| 22 | 6.44 | 31.51 | 24.76 | 91.4 | 6.42 | | | | | | |
| 23 | 6.45 | 31.49 | 24.75 | 91.4 | 6.29 | | | | | | |
| 24 | 6.44 | 31.50 | 24.76 | 91.4 | 6.21 | | | | | | |
| 25 | 6.42 | 31.50 | 24.76 | 91.4 | 6.13 | 5.56 | 2.0 | .30 | 1.4 | 4.0 | 0.55 |
| 26 | 6.41 | 31.50 | 24.76 | 91.4 | 6.07 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 166 6/04/79
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

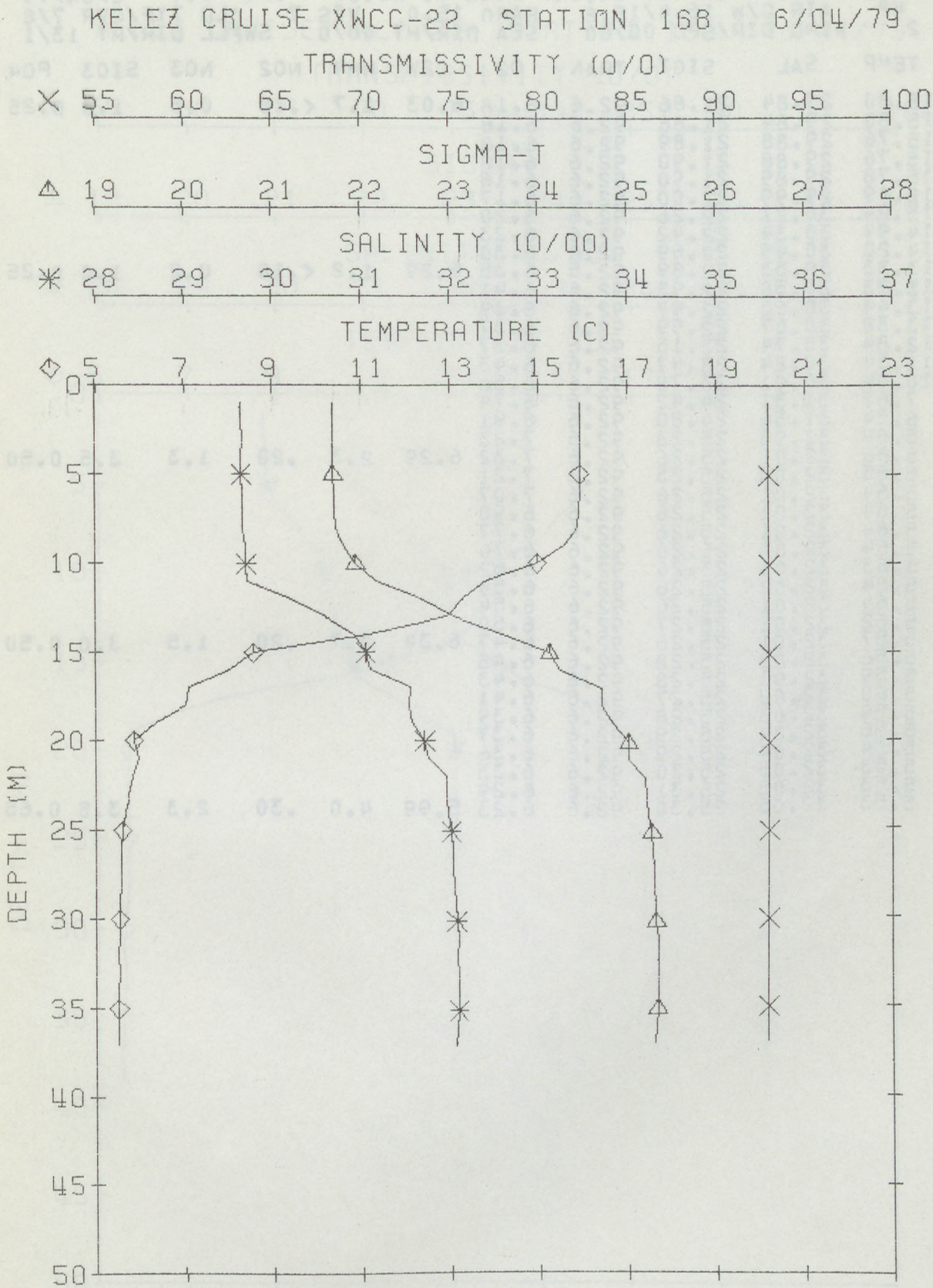
XWCC-22 STA.167 LAT 39 53.0N; LONG 73 38.2W GMT 5.4 6/04/79
DEPTH 26 AIR D/W 16.1/15.6 BARO 15.5 VIS 6 CLD TYP/CVR 7/8
WETHR 6 WIND DIR/SPD 18/06 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.47 | 29.55 | 21.71 | 92.5 | 6.39 | 6.26 | 1.7 | <.10 | 0.6 | 1.0 | 0.35 |
| 2 | 15.47 | 29.55 | 21.71 | 92.5 | 6.38 | | | | | | |
| 3 | 15.43 | 29.58 | 21.74 | 92.5 | 6.38 | | | | | | |
| 4 | 15.53 | 29.76 | 21.85 | 92.5 | 6.38 | | | | | | |
| 5 | 15.59 | 29.79 | 21.86 | 92.5 | 6.37 | | | | | | |
| 6 | 15.57 | 29.79 | 21.87 | 92.5 | 6.36 | | | | | | |
| 7 | 15.54 | 29.78 | 21.87 | 92.5 | 6.35 | | | | | | |
| 8 | 15.46 | 29.78 | 21.88 | 92.5 | 6.35 | | | | | | |
| 9 | 15.37 | 29.73 | 21.86 | 92.5 | 6.35 | | | | | | |
| 10 | 15.07 | 29.77 | 21.96 | 92.5 | 6.35 | 6.37 | 2.0 | <.10 | 0.5 | 1.0 | 0.70 |
| 11 | 15.04 | 29.92 | 22.08 | 92.5 | 6.37 | | | | | | |
| 12 | 14.44 | 29.81 | 22.12 | 92.5 | 6.38 | | | | | | |
| 13 | 13.13 | 30.00 | 22.53 | 92.5 | 6.43 | | | | | | |
| 14 | 12.65 | 30.52 | 23.02 | 92.5 | 6.55 | | | | | | |
| 15 | 12.10 | 30.89 | 23.40 | 92.5 | 6.61 | | | | | | |
| 16 | 11.46 | 31.14 | 23.72 | 92.5 | 6.67 | | | | | | |
| 17 | 10.78 | 31.29 | 23.95 | 92.5 | 6.74 | | | | | | |
| 18 | 9.96 | 31.25 | 24.06 | 92.5 | 6.81 | | | | | | |
| 19 | 8.38 | 31.30 | 24.34 | 92.5 | 6.93 | | | | | | |
| 20 | 6.55 | 31.50 | 24.75 | 92.5 | 7.11 | | | | | | |
| 21 | 5.98 | 31.60 | 24.90 | 92.5 | 7.25 | | | | | | |
| 22 | 5.79 | 31.81 | 25.08 | 92.5 | 7.27 | | | | | | |
| 23 | 5.79 | 31.81 | 25.09 | 92.5 | 7.16 | | | | | | |
| 24 | 5.79 | 31.83 | 25.10 | 92.5 | 6.96 | | | | | | |
| 25 | 5.79 | 31.84 | 25.11 | 92.5 | 6.80 | 6.11 | 3.3 | .30 | 1.9 | 3.5 | 0.90 |


KELEZ CRUISE XWCC-22 STATION 167 6/04/79
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

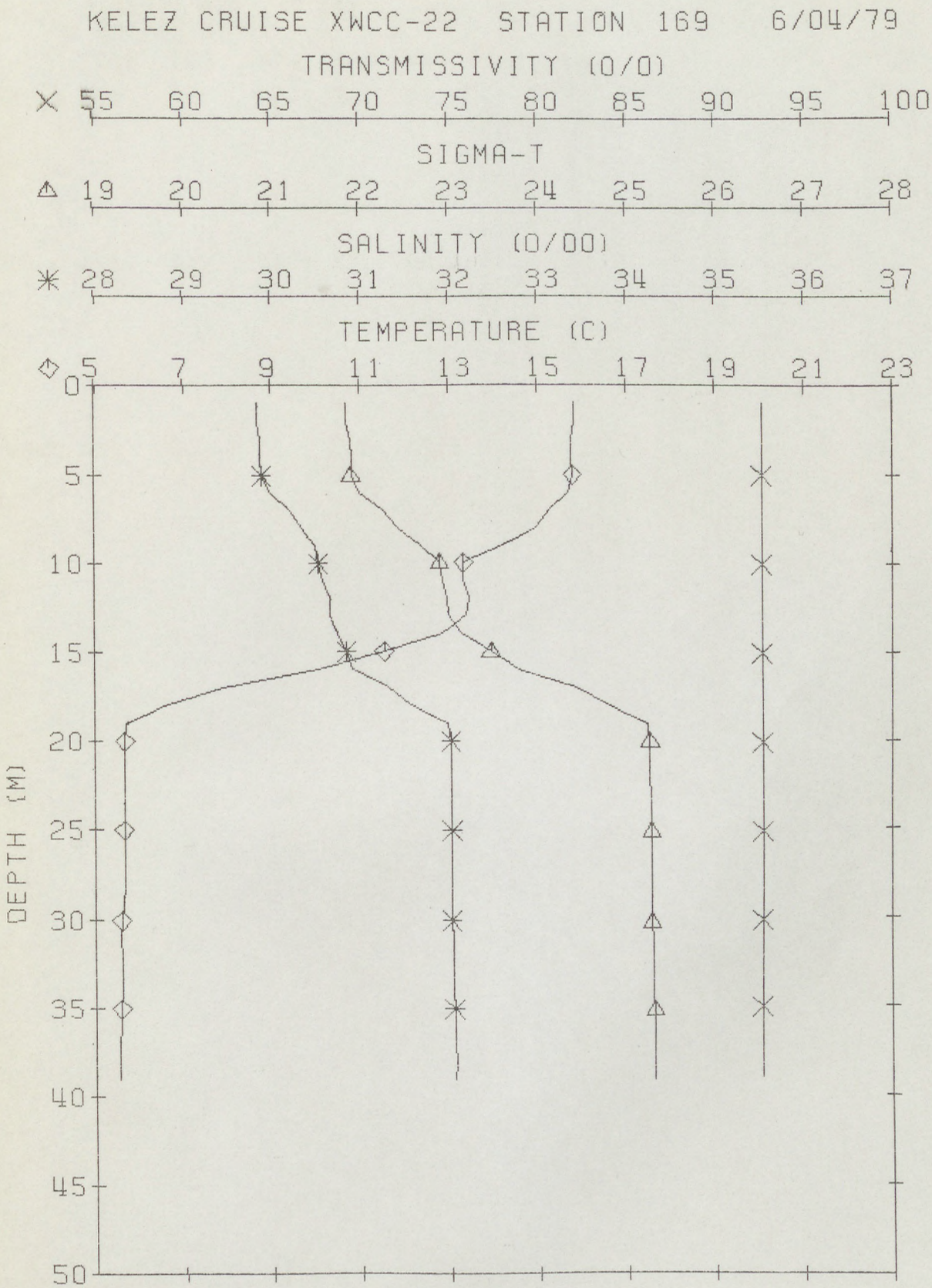
XWCC-22 STA.168 LAT 39 52.0N; LONG 73 30.0W GMT 6.5 6/04/79
DEPTH 38 AIR D/W 16.9/15.8 BARO 15.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 11/04 SEA DIR/HT 00/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.92 | 29.64 | 21.68 | 93.0 | 6.33 | 6.27 | 1.2 | <.10 | 0.4 | 1.0 | 0.20 |
| 2 | 15.92 | 29.64 | 21.68 | 93.0 | 6.33 | | | | | | |
| 3 | 15.92 | 29.65 | 21.69 | 93.0 | 6.32 | | | | | | |
| 4 | 15.91 | 29.64 | 21.68 | 93.0 | 6.32 | | | | | | |
| 5 | 15.91 | 29.64 | 21.68 | 93.0 | 6.32 | | | | | | |
| 6 | 15.90 | 29.65 | 21.69 | 93.0 | 6.31 | | | | | | |
| 7 | 15.88 | 29.66 | 21.70 | 93.0 | 6.31 | | | | | | |
| 8 | 15.85 | 29.66 | 21.71 | 93.0 | 6.31 | | | | | | |
| 9 | 15.55 | 29.69 | 21.79 | 93.0 | 6.31 | | | | | | |
| 10 | 14.95 | 29.70 | 21.93 | 93.0 | 6.34 | 6.47 | 1.0 | <.10 | 0.2 | 1.0 | 0.20 |
| 11 | 13.82 | 29.70 | 22.16 | 93.0 | 6.41 | | | | | | |
| 12 | 13.27 | 30.20 | 22.66 | 93.0 | 6.52 | | | | | | |
| 13 | 12.92 | 30.59 | 23.02 | 93.0 | 6.57 | | | | | | |
| 14 | 11.15 | 30.90 | 23.59 | 93.0 | 6.61 | | | | | | |
| 15 | 8.56 | 31.04 | 24.11 | 93.0 | 6.79 | | | | | | |
| 16 | 8.02 | 31.10 | 24.23 | 93.0 | 7.06 | | | | | | |
| 17 | 7.09 | 31.53 | 24.71 | 93.0 | 7.12 | | | | | | |
| 18 | 7.02 | 31.52 | 24.70 | 93.0 | 7.23 | | | | | | |
| 19 | 6.36 | 31.56 | 24.82 | 93.0 | 7.27 | | | | | | |
| 20 | 5.84 | 31.70 | 24.99 | 93.0 | 7.28 | 6.68 | 1.5 | .20 | 0.6 | 2.5 | 0.40 |
| 21 | 5.95 | 31.74 | 25.01 | 93.0 | 7.24 | | | | | | |
| 22 | 5.82 | 31.94 | 25.18 | 93.0 | 7.13 | | | | | | |
| 23 | 5.72 | 31.94 | 25.19 | 93.0 | 7.04 | | | | | | |
| 24 | 5.65 | 31.96 | 25.22 | 93.0 | 6.98 | | | | | | |
| 25 | 5.58 | 31.99 | 25.25 | 93.0 | 6.96 | | | | | | |
| 26 | 5.54 | 32.00 | 25.27 | 93.0 | 6.93 | | | | | | |
| 27 | 5.55 | 32.01 | 25.27 | 93.0 | 6.89 | | | | | | |
| 28 | 5.54 | 32.02 | 25.28 | 93.0 | 6.82 | | | | | | |
| 29 | 5.52 | 32.04 | 25.30 | 93.0 | 6.77 | | | | | | |
| 30 | 5.52 | 32.05 | 25.30 | 93.0 | 6.69 | 6.12 | 2.5 | .30 | 1.9 | 3.0 | 0.50 |
| 31 | 5.50 | 32.07 | 25.32 | 93.0 | 6.62 | | | | | | |
| 32 | 5.50 | 32.07 | 25.32 | 93.0 | 6.56 | | | | | | |
| 33 | 5.51 | 32.07 | 25.32 | 93.0 | 6.49 | | | | | | |
| 34 | 5.50 | 32.08 | 25.33 | 93.0 | 6.43 | | | | | | |
| 35 | 5.50 | 32.07 | 25.32 | 93.0 | 6.39 | | | | | | |
| 36 | 5.50 | 32.06 | 25.31 | 93.0 | 6.35 | 6.12 | 2.5 | .20 | 1.9 | 2.5 | 0.60 |
| 37 | 5.50 | 32.05 | 25.31 | 93.0 | 6.32 | | | | | | |


KELEZ CRUISE XWCC-22 STATION 168 6/04/79
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

XWCC-22 STA.169 LAT 39 58.3N; LONG 73 28.5W GMT 7.7 6/04/79
DEPTH 42 AIR D/W 16.4/15.8 BARO 15.0 VIS 7 CLD TYP/CVR 7/8
WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 13/1

| DEP | TEMP | SAL | SIGT | TRAN | O2 | O2W | NH4 | NO2 | NO3 | SIO3 | PO4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.80 | 29.84 | 21.86 | 92.6 | 6.18 | 6.03 | 1.7 | <.10 | 0.5 | 1.0 | 0.25 |
| 2 | 15.80 | 29.84 | 21.86 | 92.6 | 6.18 | | | | | | |
| 3 | 15.76 | 29.88 | 21.89 | 92.6 | 6.18 | | | | | | |
| 4 | 15.76 | 29.88 | 21.90 | 92.6 | 6.18 | | | | | | |
| 5 | 15.78 | 29.89 | 21.90 | 92.6 | 6.18 | | | | | | |
| 6 | 15.69 | 29.99 | 22.00 | 92.6 | 6.17 | | | | | | |
| 7 | 15.24 | 30.21 | 22.26 | 92.6 | 6.20 | | | | | | |
| 8 | 14.94 | 30.34 | 22.42 | 92.6 | 6.23 | | | | | | |
| 9 | 14.20 | 30.49 | 22.69 | 92.6 | 6.30 | | | | | | |
| 10 | 13.33 | 30.53 | 22.89 | 92.6 | 6.35 | 6.29 | 1.2 | <.10 | 0.2 | 1.0 | 0.25 |
| 11 | 13.33 | 30.58 | 22.93 | 92.6 | 6.41 | | | | | | |
| 12 | 13.44 | 30.66 | 22.97 | 92.6 | 6.39 | | | | | | |
| 13 | 13.38 | 30.67 | 22.99 | 92.6 | 6.37 | | | | | | |
| 14 | 12.84 | 30.74 | 23.15 | 92.6 | 6.37 | | | | | | |
| 15 | 11.54 | 30.84 | 23.47 | 92.6 | 6.43 | | | | | | |
| 16 | 10.04 | 30.91 | 23.78 | 92.6 | 6.56 | | | | | | |
| 17 | 7.87 | 31.31 | 24.42 | 92.6 | 6.74 | | | | | | |
| 18 | 6.54 | 31.56 | 24.80 | 92.6 | 6.91 | | | | | | |
| 19 | 5.69 | 31.98 | 25.23 | 92.6 | 7.23 | | | | | | |
| 20 | 5.66 | 32.01 | 25.26 | 92.6 | 7.32 | 6.29 | 2.3 | .20 | 1.3 | 3.5 | 0.50 |
| 21 | 5.65 | 32.00 | 25.25 | 92.6 | 7.21 | | | | | | |
| 22 | 5.64 | 32.01 | 25.26 | 92.6 | 7.07 | | | | | | |
| 23 | 5.64 | 32.01 | 25.26 | 92.6 | 6.90 | | | | | | |
| 24 | 5.64 | 32.01 | 25.26 | 92.6 | 6.77 | | | | | | |
| 25 | 5.64 | 32.01 | 25.26 | 92.6 | 6.70 | | | | | | |
| 26 | 5.63 | 32.01 | 25.26 | 92.6 | 6.62 | | | | | | |
| 27 | 5.64 | 32.02 | 25.26 | 92.6 | 6.59 | | | | | | |
| 28 | 5.64 | 32.01 | 25.26 | 92.6 | 6.54 | | | | | | |
| 29 | 5.62 | 32.01 | 25.27 | 92.6 | 6.50 | | | | | | |
| 30 | 5.57 | 32.01 | 25.26 | 92.6 | 6.47 | 6.34 | 2.7 | .20 | 1.5 | 3.0 | 0.50 |
| 31 | 5.56 | 32.02 | 25.28 | 92.6 | 6.45 | | | | | | |
| 32 | 5.59 | 32.03 | 25.28 | 92.6 | 6.43 | | | | | | |
| 33 | 5.60 | 32.02 | 25.27 | 92.6 | 6.41 | | | | | | |
| 34 | 5.59 | 32.03 | 25.28 | 92.6 | 6.39 | | | | | | |
| 35 | 5.56 | 32.04 | 25.29 | 92.6 | 6.37 | | | | | | |
| 36 | 5.54 | 32.04 | 25.29 | 92.6 | 6.36 | | | | | | |
| 37 | 5.53 | 32.05 | 25.30 | 92.6 | 6.33 | | | | | | |
| 38 | 5.53 | 32.05 | 25.31 | 92.6 | 6.29 | | | | | | |
| 39 | 5.53 | 32.05 | 25.30 | 92.6 | 6.23 | 5.99 | 4.0 | .30 | 2.3 | 3.5 | 0.65 |



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