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NOAA Data Report ERL MESA-38



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MESA NEW YORK BIGHT PROJECT  
EXPANDED WATER COLUMN CHARACTERIZATION CRUISE (XWCC 15)  
NOAA SHIP GEORGE B. KELEZ, AUGUST 1977

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

Marine Ecosystems Analysis Program  
Boulder, Colorado  
February 1978

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Miami, Florida

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UNITED STATES  
DEPARTMENT OF COMMERCE  
Juanita M. Kreps, Secretary

NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION  
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During the period 1-9 August 1977, an oceanographic cruise was made on the NOAA Ship George B. Kelez in the New York Bight. The objective of the cruise was to supply data to provide a base for analysis of the water characteristics and movements in the highly impacted ecosystem. This report presents the corrected physical and chemical (nutrient) data from this cruise.

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

## 1. INTRODUCTION

This report is a continuation in the Marine Ecosystem Analysis (MESA) Program's series of publication presenting oceanographic data from the New York Bight. In August 1977, a cruise of 88 stations was conducted by the Atlantic Oceanographic and Meteorological Laboratories (AOML), Miami, Florida, aboard the NOAA Ship George B. Kelez. The instrumentation employed was the same as that described in previous reports (Hazelworth et al., 1974, 1975 a,b) namely, an Inter Ocean Model 513-10 CSTD with associated sensors and equipment. The area of investigation was the expanded New York Bight region (Fig. 1 and Tab. 1). Cruise dates and participating AOML staff members are listed in Table 2. The physical and nutrient data obtained from the water column measurements are presented herein; the operational characteristics of the nutrient-analyses system are found in Starr et al., (1977).

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

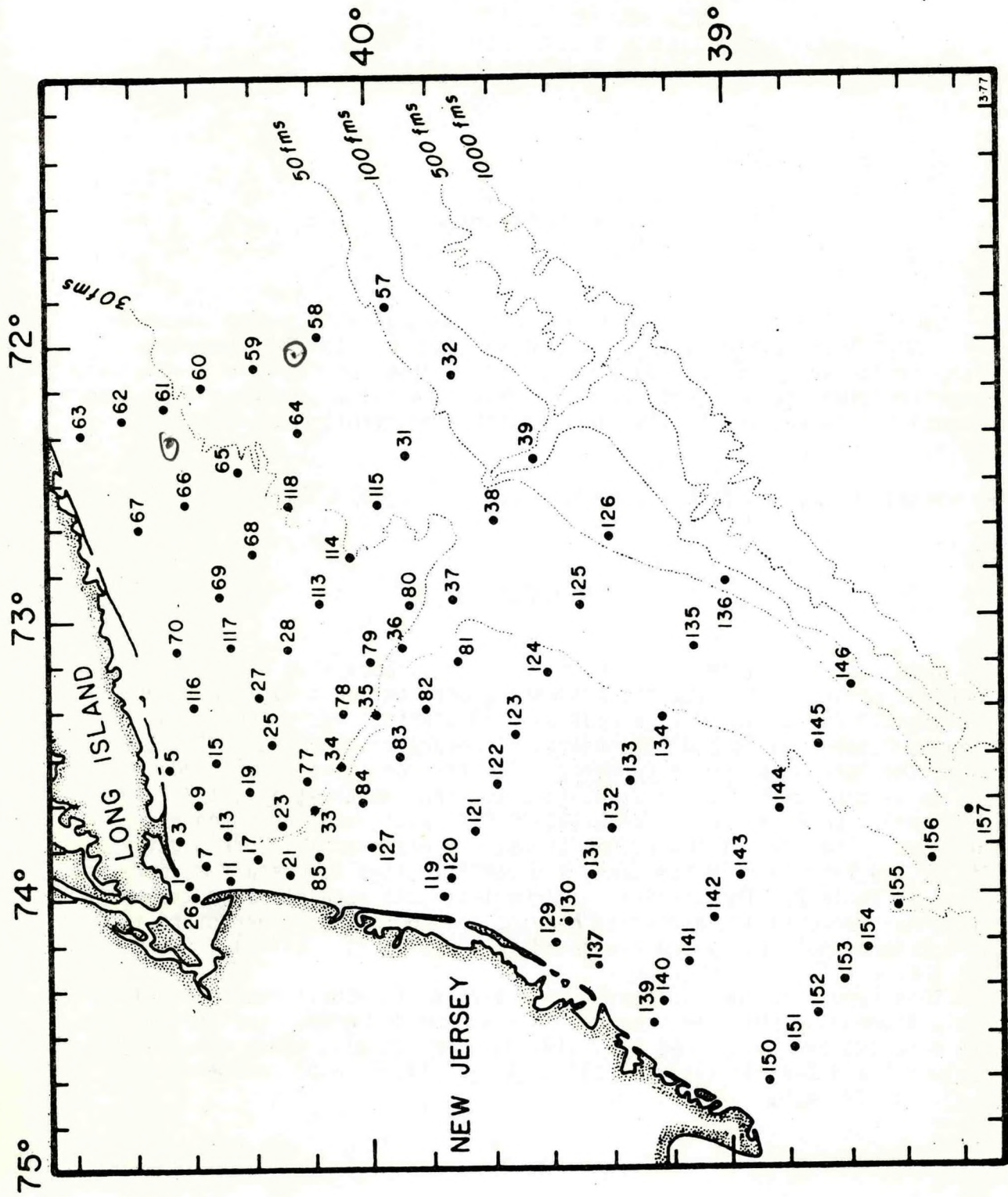


Figure 1. Locations of stations occupied during XWCC-15.



TABLE 1.

## NEW YORK BIGHT STATION POSITIONS

STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE
1	40° 30.2'	73° 57.3'	82	39° 50.5'	73° 20.5'
3	40° 31.5'	73° 48.4'	83	39° 56.5'	73° 30.5'
5	40° 33.3'	73° 32.5'	84	40° 2.0'	73° 41.0'
7	40° 26.9'	73° 53.0'	85	40° 8.0'	73° 51.5'
9	40° 28.3'	73° 39.6'	113	40° 08.8'	72° 55.5'
11	40° 22.2'	73° 56.7'	114	40° 04.0'	72° 45.2'
13	40° 23.3'	73° 47.0'	115	39° 58.7'	72° 34.1'
15	40° 25.2'	73° 30.4'	116	40° 30.0'	73° 18.7'
17	40° 18.5'	73° 51.8'	117	40° 23.1'	73° 05.0'
19	40° 20.2'	73° 37.9'	118	40° 14.4'	72° 34.1'
21	40° 13.5'	73° 56.1'	119	39° 48.4'	74° 00.0'
23	40° 14.8'	73° 45.6'	120	39° 46.5'	73° 55.5'
25	40° 16.9'	73° 28.3'	121	39° 42.9'	73° 46.5'
26	40° 29.0'	73° 59.5'	122	39° 39.5'	73° 36.0'
27	40° 18.0'	73° 17.5'	123	39° 35.0'	73° 26.0'
28	40° 13.5'	73° 7.0'	124	39° 30.0'	73° 12.2'
31	39° 54.0'	72° 25.0'	125	39° 23.8'	72° 57.2'
32	39° 46.0'	72° 7.0'	126	39° 18.9'	72° 42.5'
33	40° 10.0'	73° 41.5'	127	39° 57.2'	73° 53.4'
34	40° 5.5'	73° 31.5'	129	39° 30.0'	74° 11.0'
35	39° 59.0'	73° 21.5'	130	39° 27.7'	74° 06.1'
36	39° 55.0'	73° 6.5'	131	39° 23.2'	73° 55.5'
37	39° 46.0'	72° 57.0'	132	39° 20.0'	73° 46.5'
38	39° 39.0'	72° 39.5'	133	39° 16.9'	73° 35.8'
39	39° 32.0'	72° 26.0'	134	39° 11.1'	73° 21.9'
57	39° 57.0'	71° 52.0'	135	39° 05.2'	73° 06.5'
58	40° 8.0'	71° 58.0'	136	39° 00.0'	72° 52.0'
59	40° 18.0'	72° 4.0'	137	39° 18.8'	74° 00.6'
60	40° 27.0'	72° 9.0'	139	39° 13.5'	74° 30.0'
61	40° 33.0'	72° 13.0'	140	39° 11.0'	74° 24.5'
62	40° 40.0'	72° 16.0'	141	39° 06.8'	74° 15.2'
63	40° 47.0'	72° 20.0'	142	39° 02.9'	74° 05.9'
64	40° 12.0'	72° 20.0'	143	38° 58.1'	73° 56.0'
65	40° 21.0'	72° 28.0'	144	38° 51.6'	73° 42.0'
66	40° 30.0'	72° 34.0'	145	38° 45.0'	73° 27.9'
67	40° 38.0'	72° 40.0'	146	38° 39.4'	73° 16.1'
68	40° 19.0'	72° 46.0'	150	38° 53.8'	74° 41.9'
69	40° 25.0'	72° 55.0'	151	38° 49.7'	74° 34.0'
70	40° 32.0'	73° 7.0'	152	38° 45.4'	74° 27.2'
77	40° 10.5'	73° 34.0'	153	38° 41.5'	74° 20.0'
78	40° 5.0'	73° 21.5'	154	38° 37.1'	74° 12.8'
79	40° .0'	73° 9.5'	155	38° 31.4'	74° 04.5'
80	39° 54.5'	72° 57.0'	156	38° 25.3'	73° 53.0'
81	39° 44.5'	73° 10.0'	157	38° 19.5'	73° 43.2'



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

Cruise	Date	AOML Personnel
XWCC-15	August 1-9, 1977	Donald K. Atwood, Chief Scientist George A. Berberian Terren M. Niedrauer Dale Finch Philip Hanson Joan Parker

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 or ph calibration correction factors were calculated. However, these sensors were calibrated before the cruise. No ph data are reported for several casts. When a ph value falls below 7.2, it is rejected as being below acceptable minimum. The statistical parameters in Table 3 were computed using the following formulae:

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

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)



Table 3. Correction Factors and Data Accuracy for Cruise XWCC-15

	Temp.	Salinity	O <sub>2</sub>	Depth (Meters)
Calib. Offset	.0004T-.1305	.0003T-.0689	-.0312T+7.0108	0.0
Calib. Recheck				
$\bar{X}$	+0.00	+0.00	+0.00	
S <sub>x</sub>	.02	.02	.10	
Precision (Repeatability)				±0.5

## 2. DATA PRESENTATION

Tables of the interpolated data and the corresponding depth profiles of temperature, salinity, sigma-t, and transmissivity are given in Section 6, Station Data. The codes used in the headings are from the National Oceanographic Data Center Manual Series (1964). The tabulated data are given at 1-m intervals from the surface to 50-m and at 10-m intervals thereafter; in addition, data are presented at the depths at which water samples were obtained and at the bottom of the cast. Profiles were produced from the corrected 1-m interval data. The symbols, explained to the left of each horizontal axis and located on the curves at 5-m intervals, identify the parameters.

The distributions of temperature, salinity, and sigma-t are presented in Section 5: 1) horizontally at the 1-m depth (Figures 2-4), and 2) vertically along the axis of the Hudson Shelf Valley (Figures 5-7).

## 3. ACKNOWLEDGMENTS

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



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



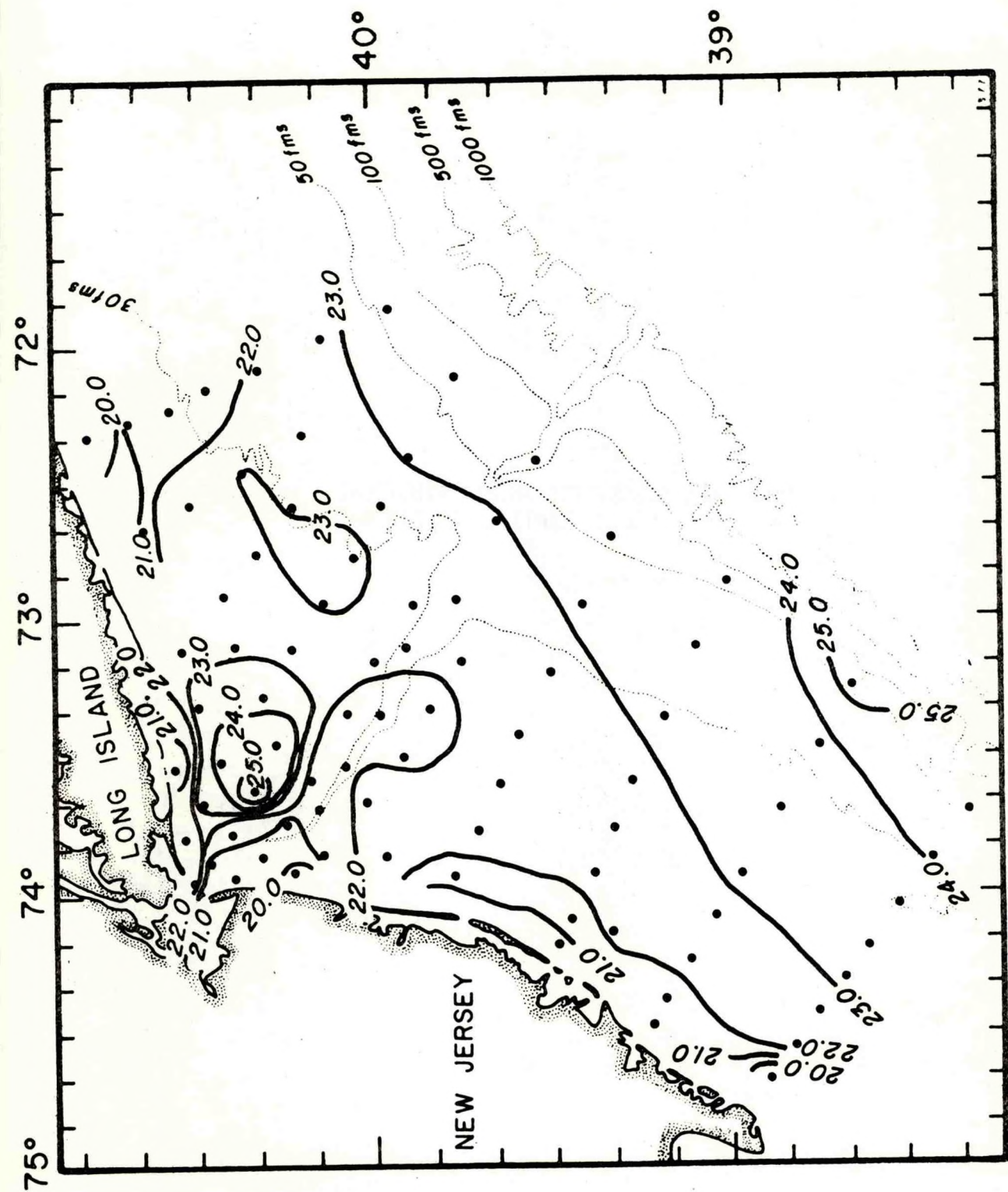


Figure 2. Surface Water Temperatures 8/1/77 - 8/9/77.

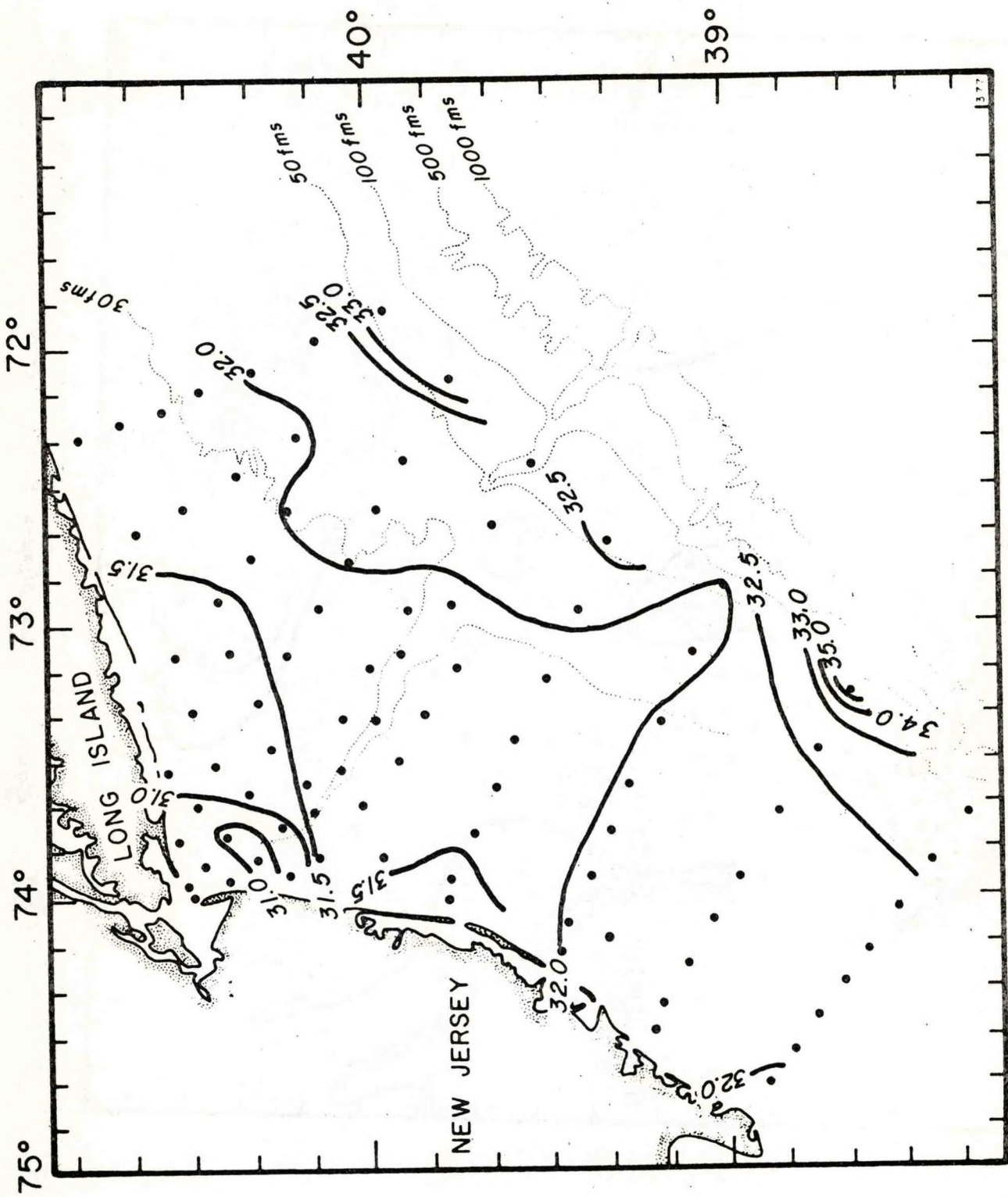


Figure 3. Surface Salinities 8/1/77 - 8/19/77.



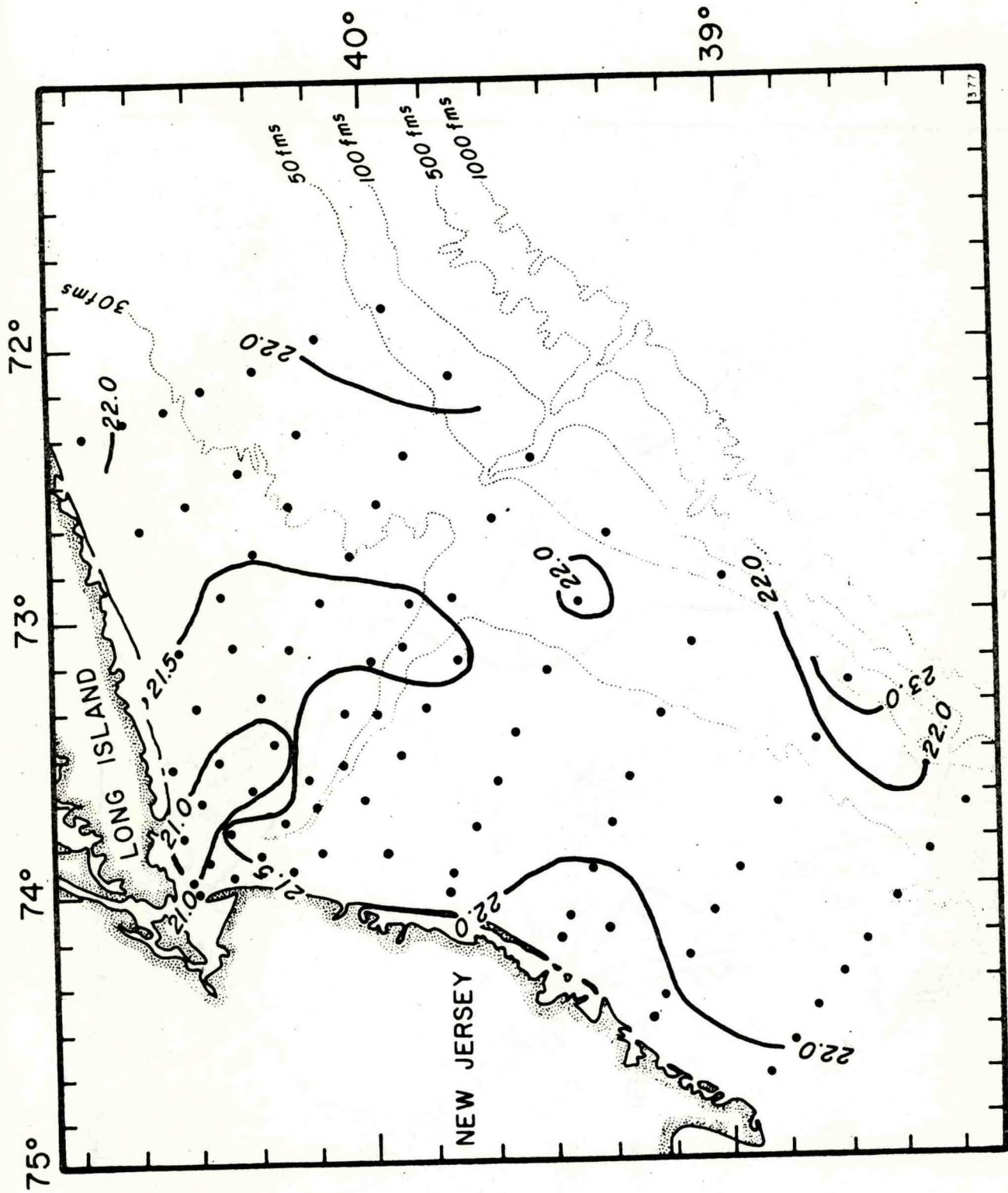


Figure 4. Surface Sigma-t 8/1/77 - 8/9/77.

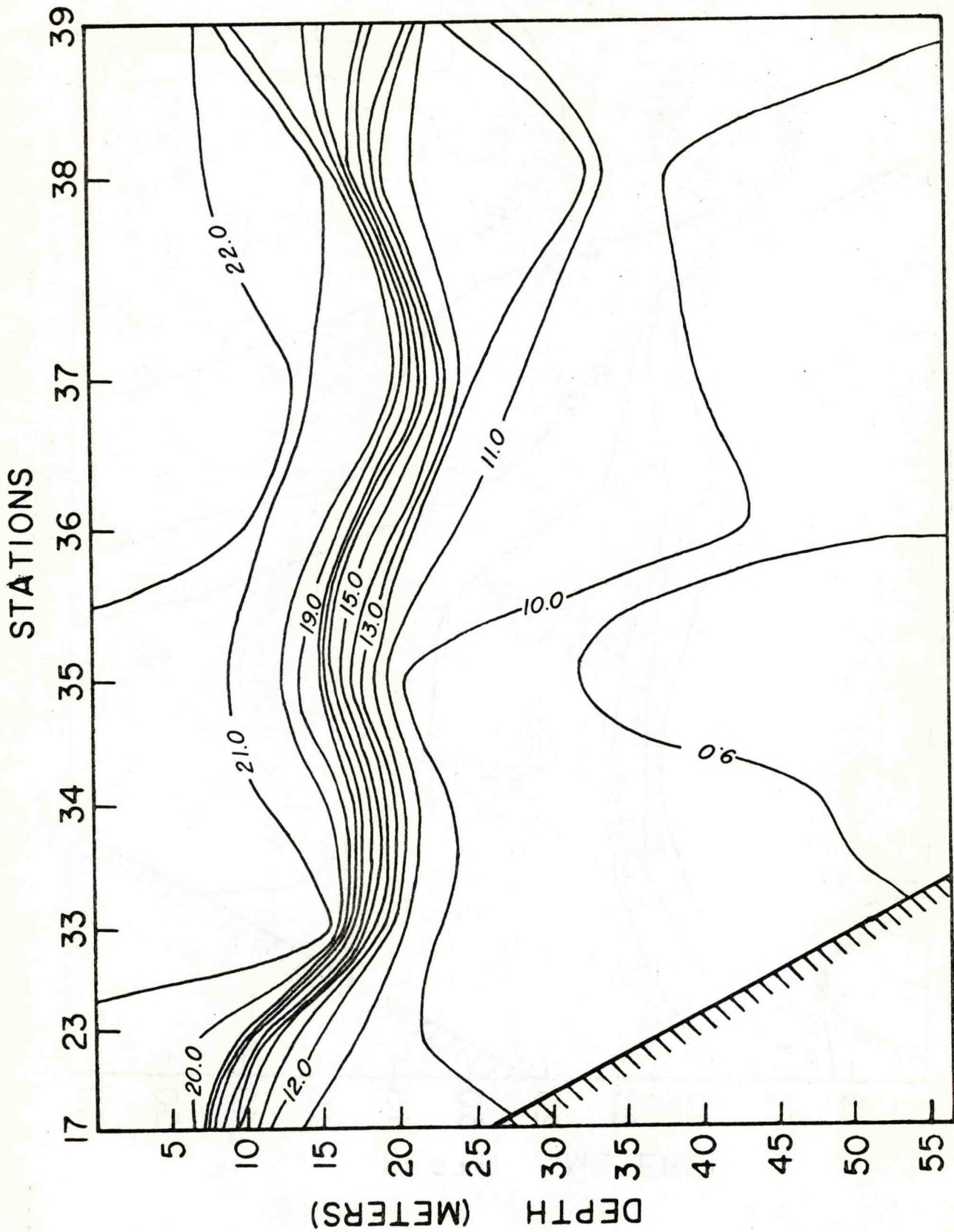


Figure 5. Vertical temperature contours along the Hudson Shelf Valley, 8/1/77 - 8/9/77. Reference Figure 1 for track line.



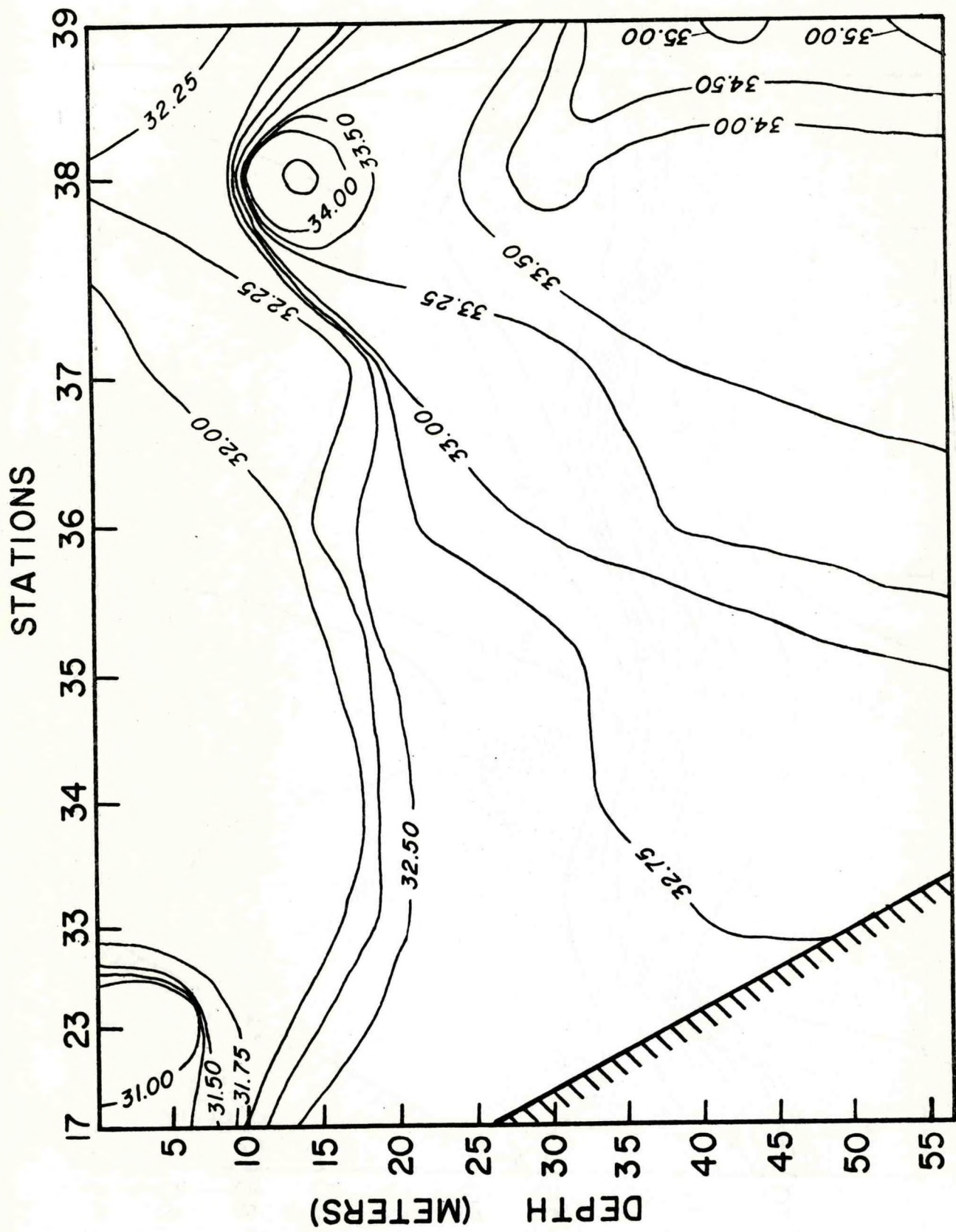


Figure 6. Vertical salinity contours along the Hudson Shelf Valley, 8/1/77 - 8/9/77. Reference Figure 1 for track line.

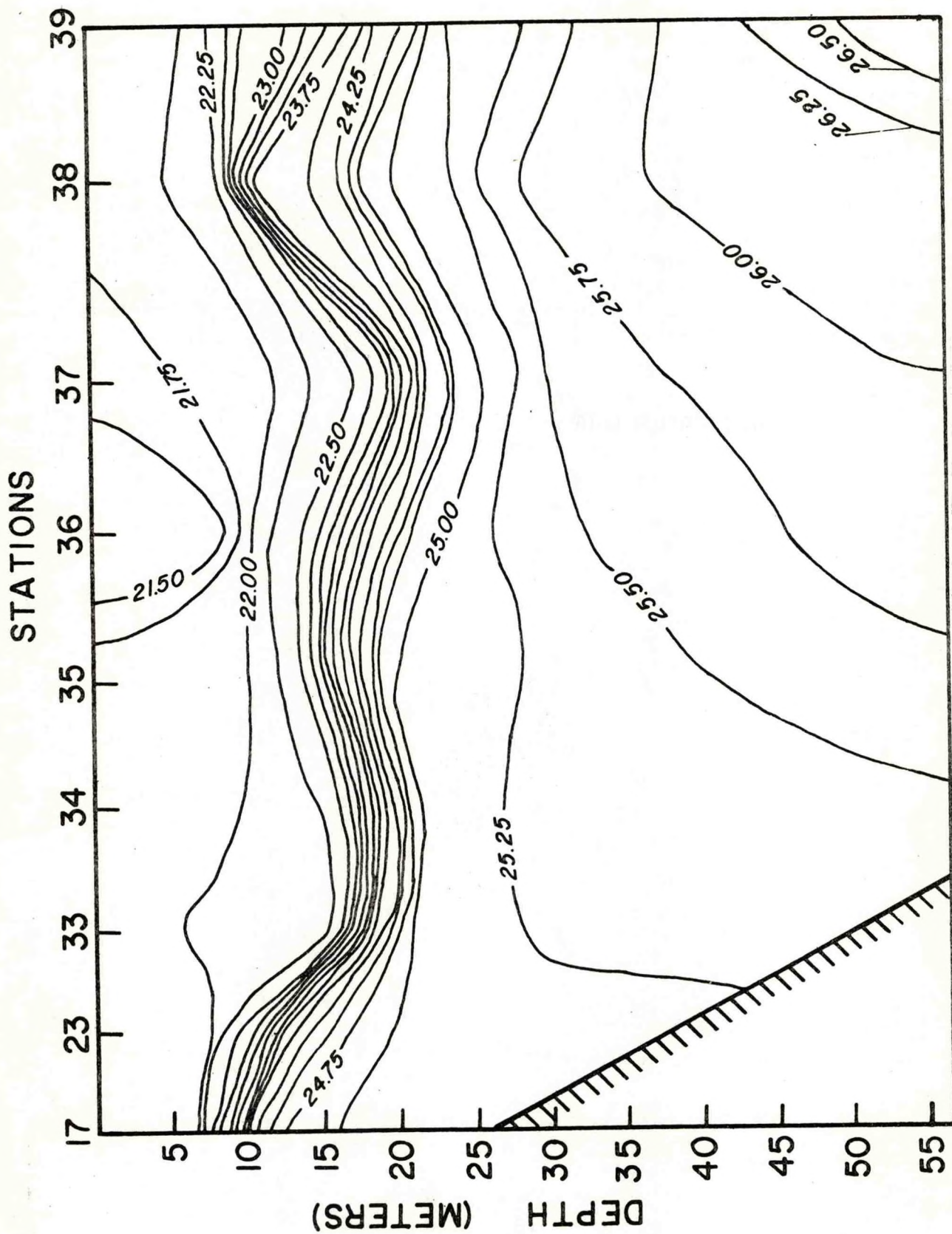


Figure 7. Vertical sigma-t contours along the Hudson Shelf Valley, 8/1/77 - 8/9/77. Reference Figure 1 for track line.



6. STATION DATA

XWCC-15 STA.001 LAT 40 29.9N; LONG 73 57.1W GMT 14.2 08/01/77  
 DEPTH 10 AIR D/W 75.5/73.5 BARO 13.5 VIS 5 CLD TYP/CVR 8/8  
 WETHR 2 WIND DIR/SPD 20/08 SEA DIR/HT 20/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.20	30.11	20.48	76.0	7.83	5.57				
2	22.20	30.11	20.48	76.0	7.83	5.57				
3	19.51	30.76	21.69	78.5	7.76	4.92				
4	19.45	30.85	21.77	78.7	7.74	5.19	.45	1.53	7.94	1.81
5	18.72	31.01	22.07	79.7	7.72	5.12				
6	17.56	31.25	22.53	81.4	7.65	5.02				
7	17.36	31.20	22.54	80.8	7.64	4.70				
8	17.02	31.29	22.69	81.2	7.64	4.54				
9	16.87	31.32	22.75	81.2	7.64	4.38	.36	1.41	10.15	2.32



KELEZ CRUISE XWCC-15 STATION 1 08/01/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

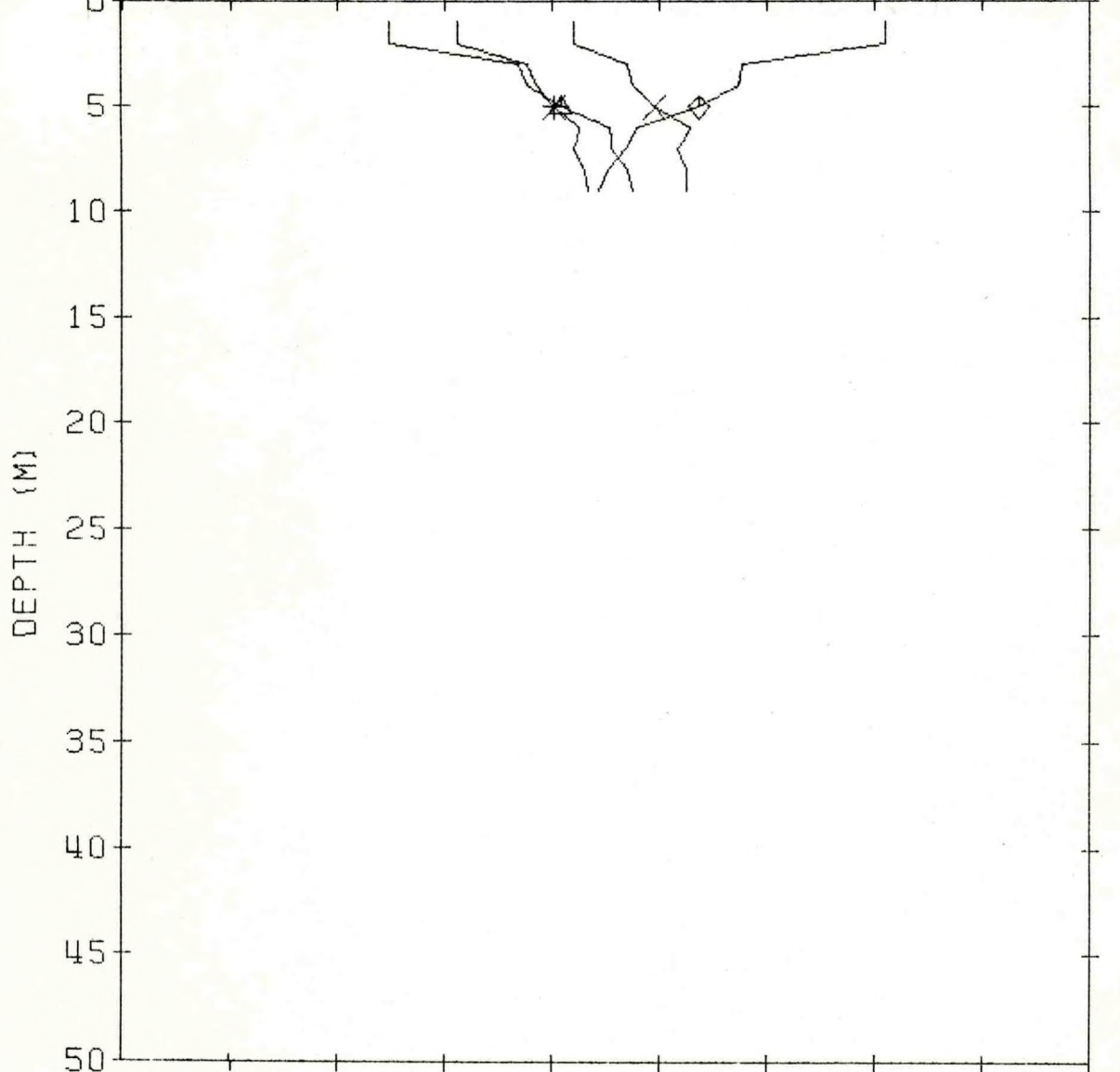
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.003 LAT 40 31.5N; LONG 73 48.4W GMT 08.1 08/09/77  
 DEPTH 17 AIR D/W 75.0/73.0 BARO 11.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 27/12 SEA DIR/HT 00/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.20	30.04	20.43	78.1		5.19				
2	22.20	30.04	20.43	78.1		5.19	1.11	2.29	5.28	1.50
3	22.24	30.05	20.43	78.9		5.12				
4	22.23	30.08	20.45	79.3		5.11				
5	22.15	30.43	20.74	79.2		5.10				
6	21.84	31.29	21.47	81.5		5.11				
7	21.64	31.60	21.76	83.0		5.08				
8	21.46	31.73	21.91	84.8		5.03				
9	21.30	31.78	21.99	85.8		4.96				
10	19.93	31.87	22.42	85.4		4.90	.20	.23	3.01	.85
11	17.71	32.05	23.11	85.7		4.91				
12	14.49	32.05	23.83	85.1		4.94				
13	13.65	32.06	24.01	84.4		4.66				
14	13.62	32.05	24.01	84.0		4.71				
15	13.60	32.05	24.01	84.0		4.71				
16	13.60	32.05	24.01	84.2		3.70	.39	1.07	13.80	3.02



KELEZ CRUISE XWCC-15 STATION 3 08/09/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

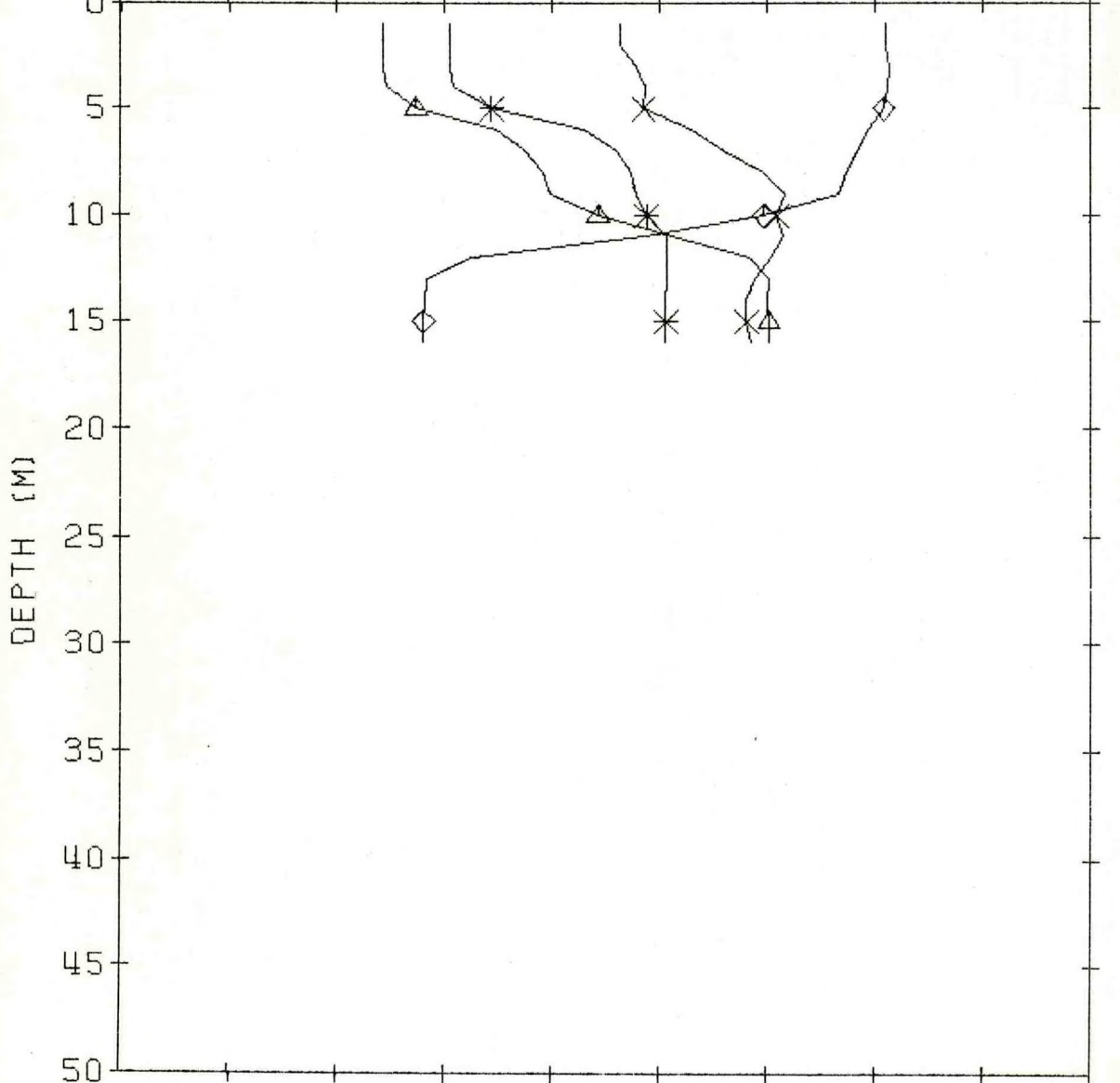
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26

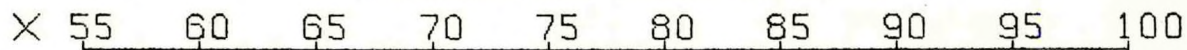


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 WETHR 2 WIND DIR/SPD 25/15 SEA DIR/HT 25/0 SWELL DIR/HT 17/1

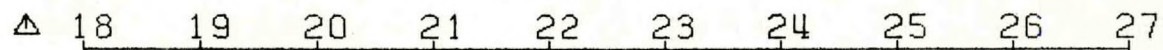
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.44	31.39	21.92	74.1		5.25				
2	20.44	31.39	21.92	74.1		5.25	.11	.03	6.17	1.42
3	20.44	31.41	21.94	73.5		5.25				
4	20.44	31.38	21.92	73.6		5.29				
5	19.76	31.49	22.17	74.2		5.26				
6	18.96	31.54	22.42	74.5		5.21				
7	17.84	31.69	22.80	77.8		5.11				
8	17.06	31.71	23.00	80.5		4.95				
9	16.44	31.72	23.15	82.8		4.67				
10	16.17	31.75	23.24	83.5		4.58				
11	16.04	31.78	23.28	83.9		4.48				
12	15.85	31.79	23.34	83.9		4.39				
13	15.67	31.79	23.38	83.9		4.24	.21	.39	7.83	1.83



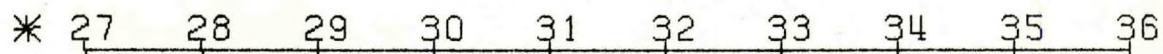
TRANSMISSIVITY (0/0)



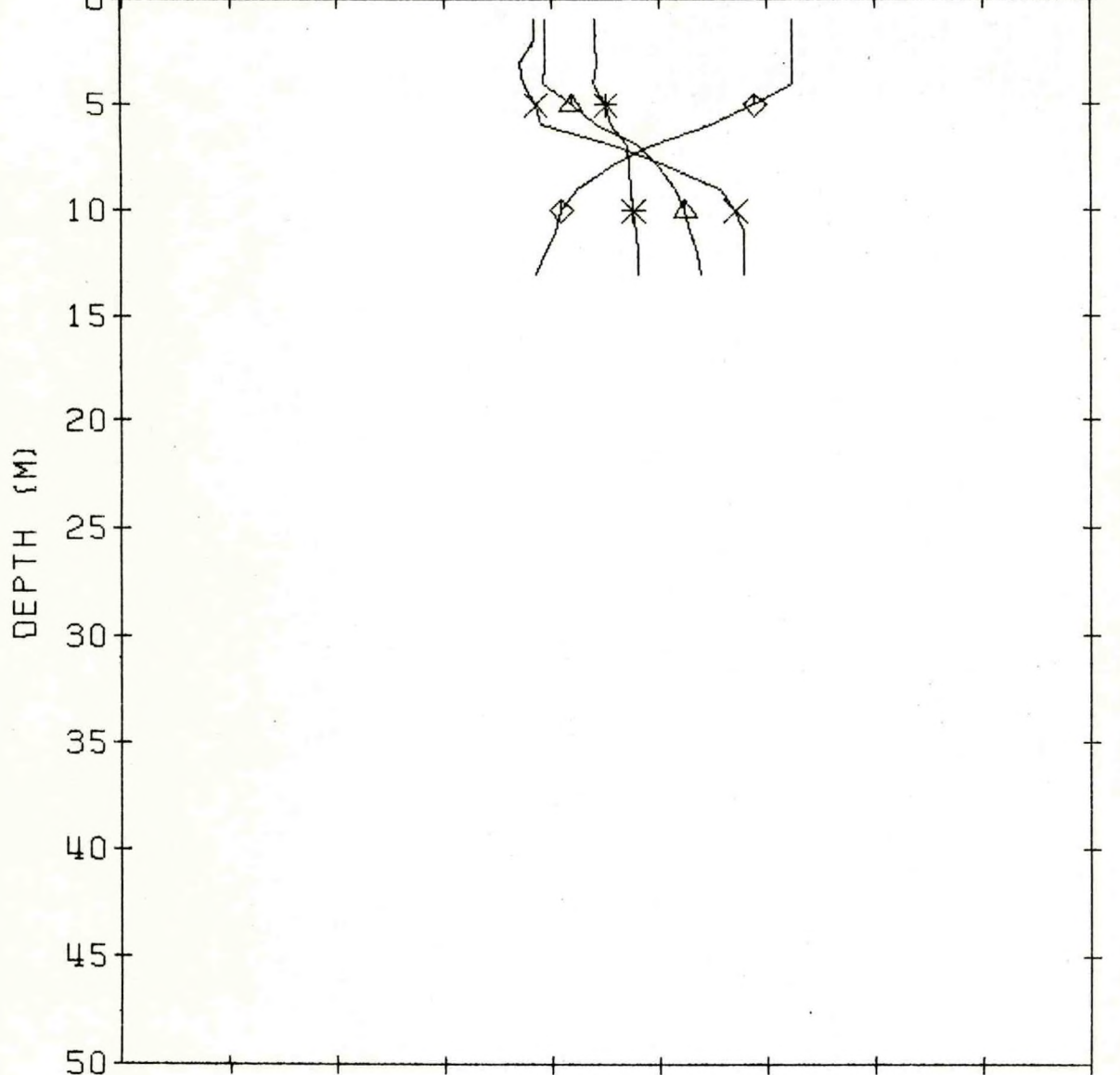
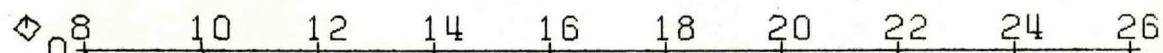
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)



XWCC-15 STA.007 LAT 40 27.0N; LONG 73 52.8W GMT 16.5 08/01/77  
 DEPTH 21 AIR D/W 73.0/72.0 BARO 13.0 VIS 5 CLD TYP/CVR 9/8  
 WETHR 9 WIND DIR/SPD 19/16 SEA DIR/HT 19/0 SWELL DIR/HT 15/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.65	30.36	21.09	72.1	7.64	5.62				
2	20.65	30.36	21.09	72.1	7.64	5.61				
3	20.71	30.37	21.08	71.2	7.66	5.70	.74	2.59	8.42	2.10
4	20.43	30.52	21.26	71.5	7.72	5.76				
5	20.07	30.76	21.50	73.2	7.71	5.75				
6	19.82	30.74	21.59	74.8	7.70	5.70				
7	19.42	30.84	21.77	75.1	7.72	5.51				
8	19.02	31.59	22.44	79.9	7.68	5.45				
9	15.37	31.81	23.46	83.8	7.57	5.54				
10	13.41	31.95	23.98	84.0	7.51	5.42	.10	.12	8.03	1.70
11	13.09	32.14	24.18	83.5	7.47	5.14				
12	12.85	32.18	24.26	83.8	7.46	4.71				
13	12.81	32.18	24.27	83.9	7.46	4.44				
14	12.81	32.18	24.27	84.1	7.46	4.24				
15	12.79	32.18	24.27	83.0	7.47	4.11				
16	12.72	32.19	24.30	84.0	7.48	4.03				
17	12.51	32.24	24.37	83.7	7.48	3.98				
18	12.39	32.26	24.41	83.9	7.49	3.97				
19	12.28	32.28	24.45	83.6	7.49	3.96				
20	12.21	32.32	24.49	83.6	7.49	3.96				
21	12.21	32.32	24.49	83.6	7.49	3.95	.18	1.36	13.29	2.83



TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

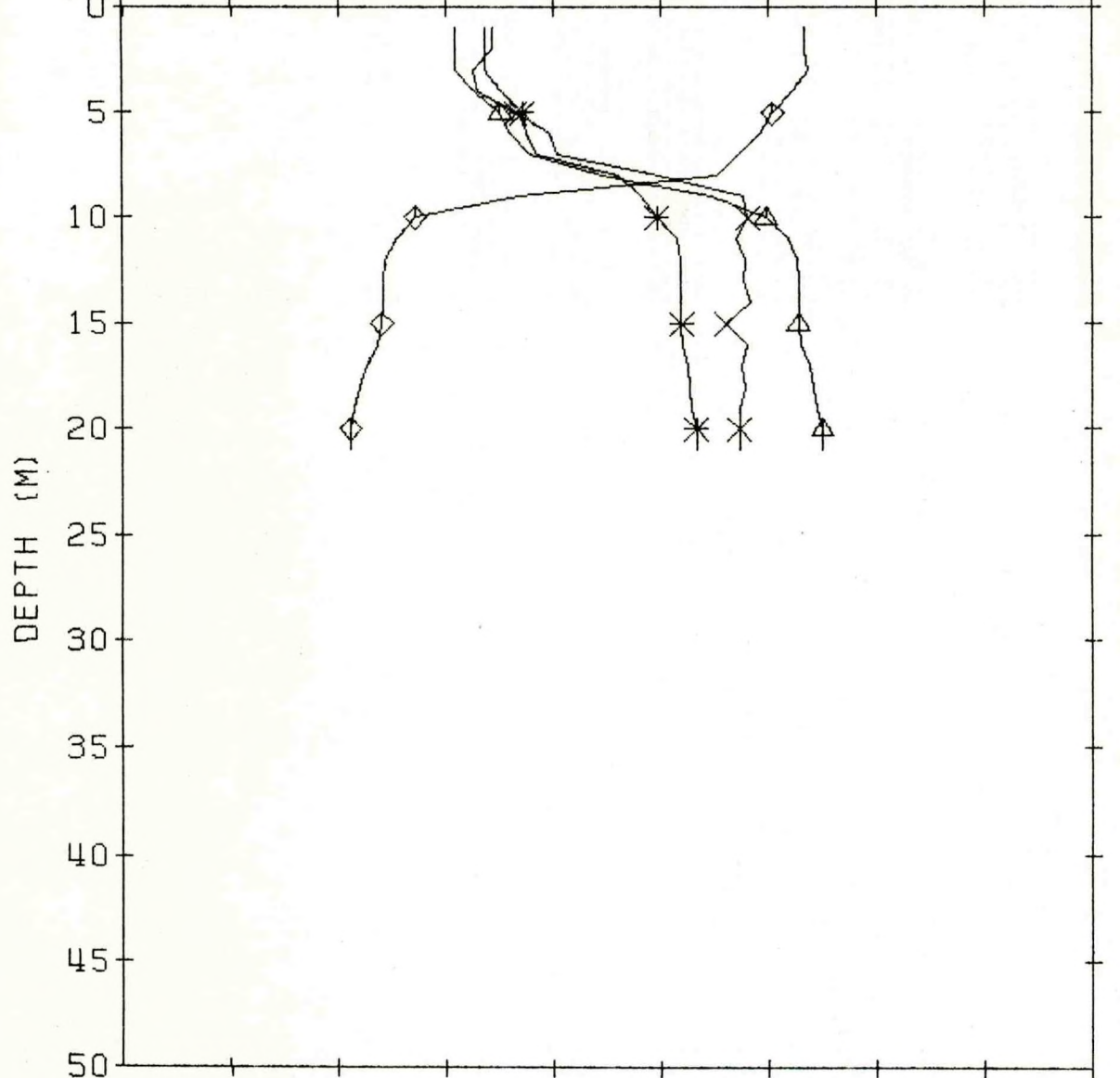
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.009 LAT 40 28.3N; LONG 73 39.6W GMT 06.5 08/09/77  
 DEPTH 22 AIR D/W 77.0/74.0 BARO 11.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 27/17 SEA DIR/HT 27/0 SWELL DIR/HT 25/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	23.95	30.89	20.58	71.0		6.84				
2	23.95	30.89	20.58	71.0		6.84				
3	23.94	30.90	20.59	72.3		6.84	.15	.14	.83	.32
4	23.92	30.92	20.61	72.5		6.84				
5	23.92	30.93	20.62	72.5		6.84				
6	23.84	31.03	20.71	72.9		6.84				
7	23.44	31.32	21.05	74.8		6.81				
8	23.86	31.60	21.43	77.1		6.71				
9	23.82	31.62	21.45	80.9		6.40				
10	23.88	31.66	21.55	82.8		6.12				
11	23.20	31.71	21.69	83.4		5.97	.08	.00	2.71	.29
12	21.88	31.75	21.81	83.9		5.83				
13	21.46	31.76	21.93	85.0		5.70				
14	21.09	31.79	22.05	85.6		5.58				
15	20.64	31.81	22.19	86.2		5.46				
16	19.92	31.81	22.37	86.6		5.38				
17	19.23	31.85	22.58	86.6		5.27				
18	16.13	32.01	23.45	86.0		5.29				
19	12.94	32.19	24.25	85.8		5.36				
20	12.92	32.21	24.28	85.3		5.01				
21	12.90	32.21	24.28	85.0		5.00				
22	12.90	32.21	24.28	85.0		5.00	.35	1.53	12.72	2.74



TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

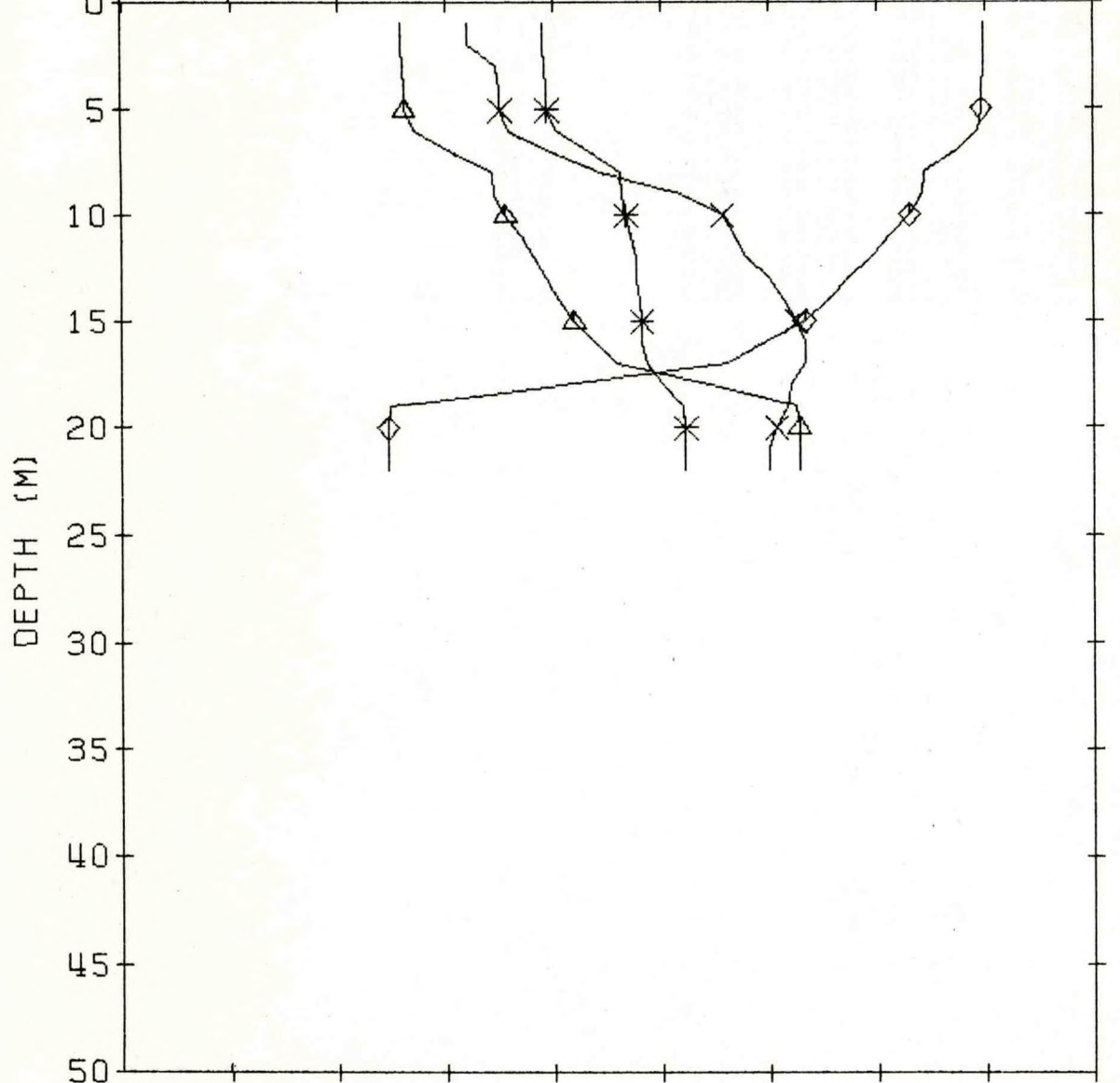
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.011 LAT 40 22.2N; LONG 73 56.8W GMT 20.3 08/01/77  
 DEPTH 14 AIR D/W 70.0/69.0 BARO 12.0 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 14/09 SEA DIR/HT 14/0 SWELL DIR/HT 15/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.66	30.72	21.36	76.2		5.83				
2	20.66	30.72	21.36	76.2		5.83				
3	20.61	30.74	21.39	72.1		5.69	.42	1.00	5.89	1.40
4	20.45	30.96	21.59	78.0		5.67				
5	20.41	30.93	21.59	78.0		5.66				
6	20.17	31.06	21.74	78.5		5.63				
7	19.72	31.10	21.89	82.0		5.58				
8	17.92	31.19	22.40	83.2		5.53				
9	15.29	31.80	23.47	83.6		5.60				
10	15.24	31.82	23.50	83.1		5.23				
11	15.15	31.82	23.51	82.9		4.84				
12	15.07	31.84	23.55	82.6		4.50				
13	14.92	31.84	23.58	82.4		4.26	.40	1.22	12.96	2.84
14	14.92	31.84	23.58	82.4		4.27				



KELEZ CRUISE XWCC-15 STATION 11 08/01/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

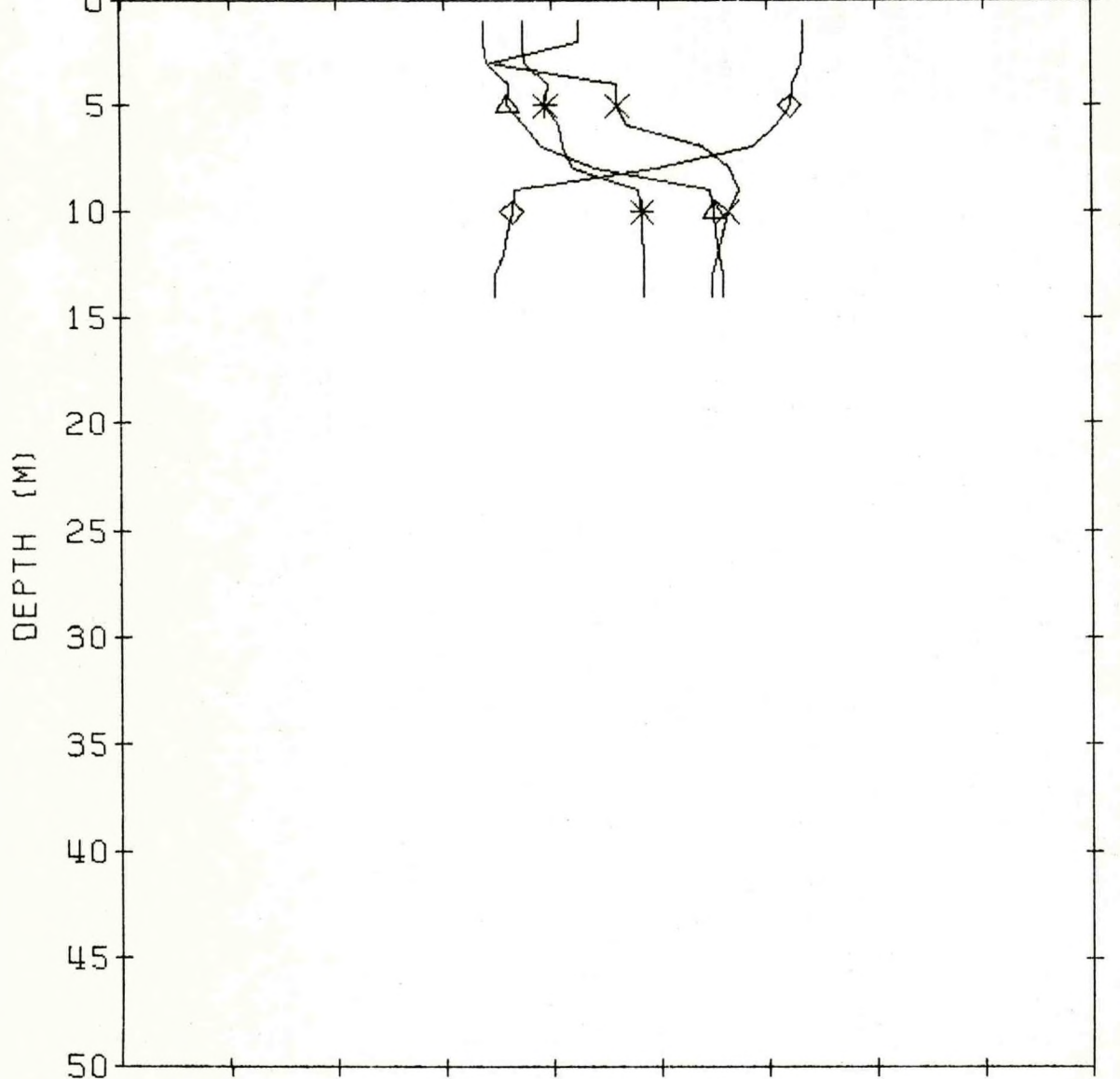
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.013 LAT 40 23.6N; LONG 73 47.1W GMT 18.3 08/01/77  
 DEPTH 37 AIR D/W 73.0/72.0 BARO 13.0 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 21/23 SEA DIR/HT 21/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.36	31.39	21.68	79.6		6.16				
2	21.36	31.39	21.68	79.6		6.16	.08	.09	4.89	1.09
3	21.34	31.39	21.68	79.5		6.15				
4	21.36	31.38	21.67	79.9		6.21				
5	21.33	31.39	21.69	80.1		6.21				
6	21.32	31.39	21.69	80.1		6.21				
7	21.33	31.38	21.68	79.9		6.20				
8	21.32	31.38	21.68	79.8		6.19				
9	21.32	31.36	21.67	79.7		6.19				
10	21.28	31.63	21.88	83.0		6.19	.00	.00	1.90	.43
11	20.99	31.91	22.17	83.3		6.04				
12	20.97	31.94	22.42	83.9		5.88				
13	18.97	32.00	22.76	84.0		5.72				
14	16.46	32.11	23.45	84.4		5.68				
15	12.03	32.22	24.45	84.8		5.60				
16	11.44	32.38	24.68	85.6		5.54				
17	11.28	32.48	24.79	86.0		5.20				
18	11.26	32.48	24.79	86.0		4.89				
19	11.18	32.50	24.82	86.3		4.66				
20	11.13	32.51	24.84	86.4		4.48	.20	2.07	11.59	2.56
21	11.10	32.52	24.85	86.5		4.36				
22	11.06	32.54	24.87	86.6		4.27				
23	11.02	32.54	24.87	86.7		4.23				
24	10.94	32.54	24.90	86.8		4.20				
25	10.85	32.56	24.93	86.9		4.17				
26	10.79	32.57	24.94	86.9		4.13				
27	10.66	32.58	24.98	86.8		4.10				
28	10.58	32.60	25.01	86.9		4.03				
29	10.47	32.62	25.03	87.0		3.97				
30	10.35	32.64	25.07	86.7		3.94	.34	2.02	12.98	2.78
31	10.33	32.64	25.08	86.4		3.92				
32	10.25	32.65	25.10	86.6		3.89				
33	10.21	32.66	25.12	86.6		3.87				
34	10.16	32.66	25.12	86.6		3.86				
35	10.16	32.67	25.13	86.4		3.86				
36	10.14	32.67	25.13	86.2		3.86				
37	10.14	32.67	25.13	86.2		3.93	.33	2.18	13.18	2.83



KELEZ CRUISE XWCC-15 STATION 13 08/01/77

TRANSMISSIVITY (0/0)

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SIGMA-T

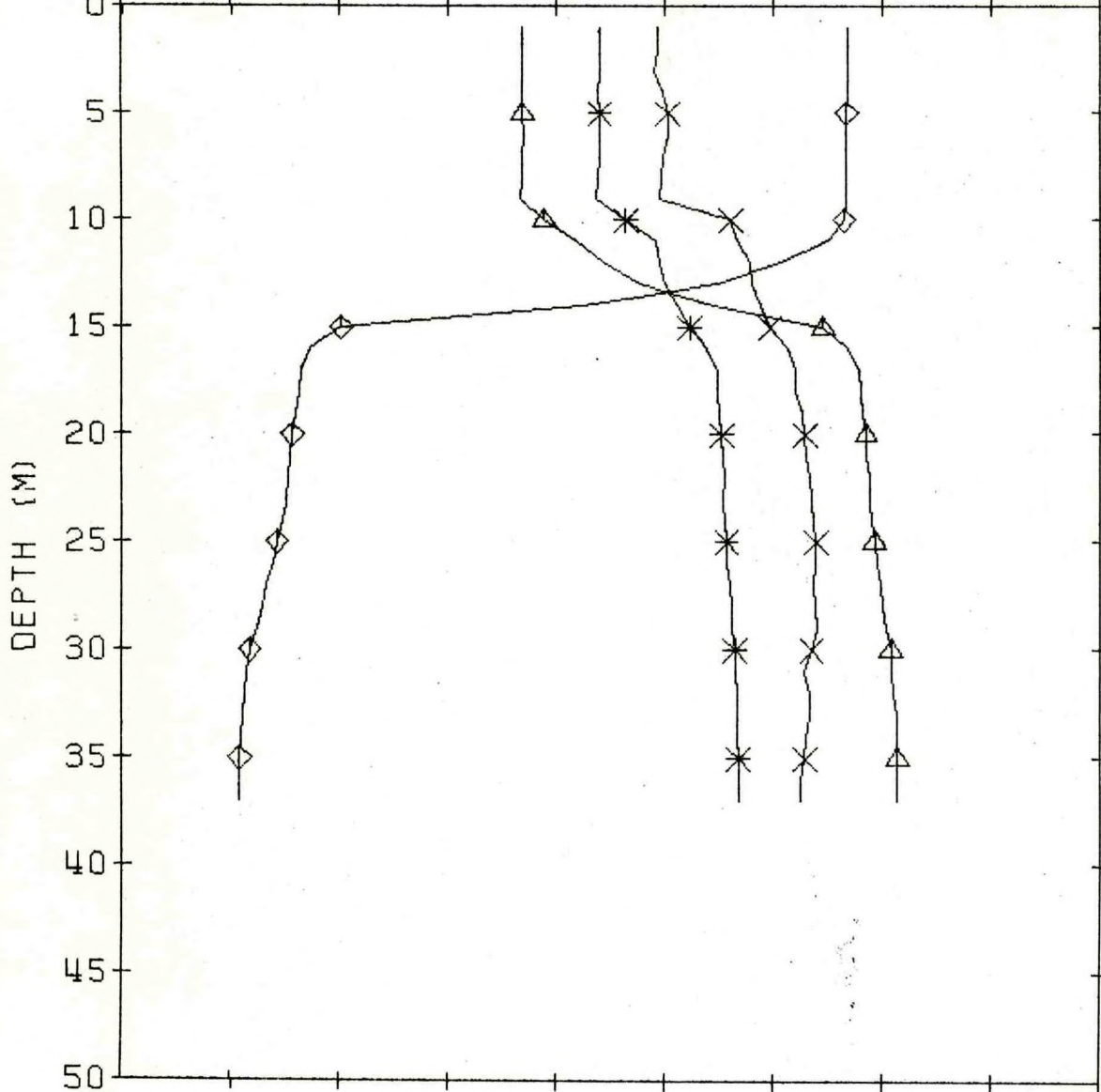
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC\_15 STA.015 LAT 40 25.2N; LONG 73 30.4W GMT 03.2 08/09/77  
 DEPTH 25 AIR D/W 79.0/76.0 BARO 11.0 VIS 7 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 23/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	24.41	31.34	20.78	73.7		6.12				
2	24.41	31.34	20.78	73.7		6.12				
3	24.35	31.34	20.80	74.5		6.21	.12	.00	1.50	.24
4	24.32	31.35	20.81	74.6		6.23				
5	24.33	31.37	20.83	74.9		6.23				
6	23.92	31.30	20.90	77.2		6.23				
7	23.28	31.32	21.10	79.1		6.24				
8	22.29	31.43	21.45	81.6		6.18				
9	21.56	31.49	21.70	83.5		6.11				
10	20.28	31.65	22.16	86.7		6.06				
11	19.82	31.73	22.35	87.7		5.95	.05	.24	.25	.14
12	18.97	31.72	22.55	87.6		5.86				
13	18.43	31.71	22.67	87.6		5.83				
14	17.70	31.69	22.84	87.5		5.76				
15	16.91	31.69	23.03	87.0		5.58				
16	16.46	31.72	23.15	86.6		5.55				
17	16.14	31.74	23.24	86.3		4.98				
18	15.55	31.81	23.42	86.1		4.71				
19	15.09	31.86	23.56	86.1		4.59				
20	14.54	31.90	23.71	85.8		4.41	.17	.52	6.89	1.54
21	14.10	31.95	23.83	85.5		4.11				
22	14.10	31.94	23.82	85.5		3.59				
23	13.89	31.98	23.90	85.4		3.60	.28	1.35	11.51	2.36



KELEZ CRUISE XWCC-15 STATION 15 08/09/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

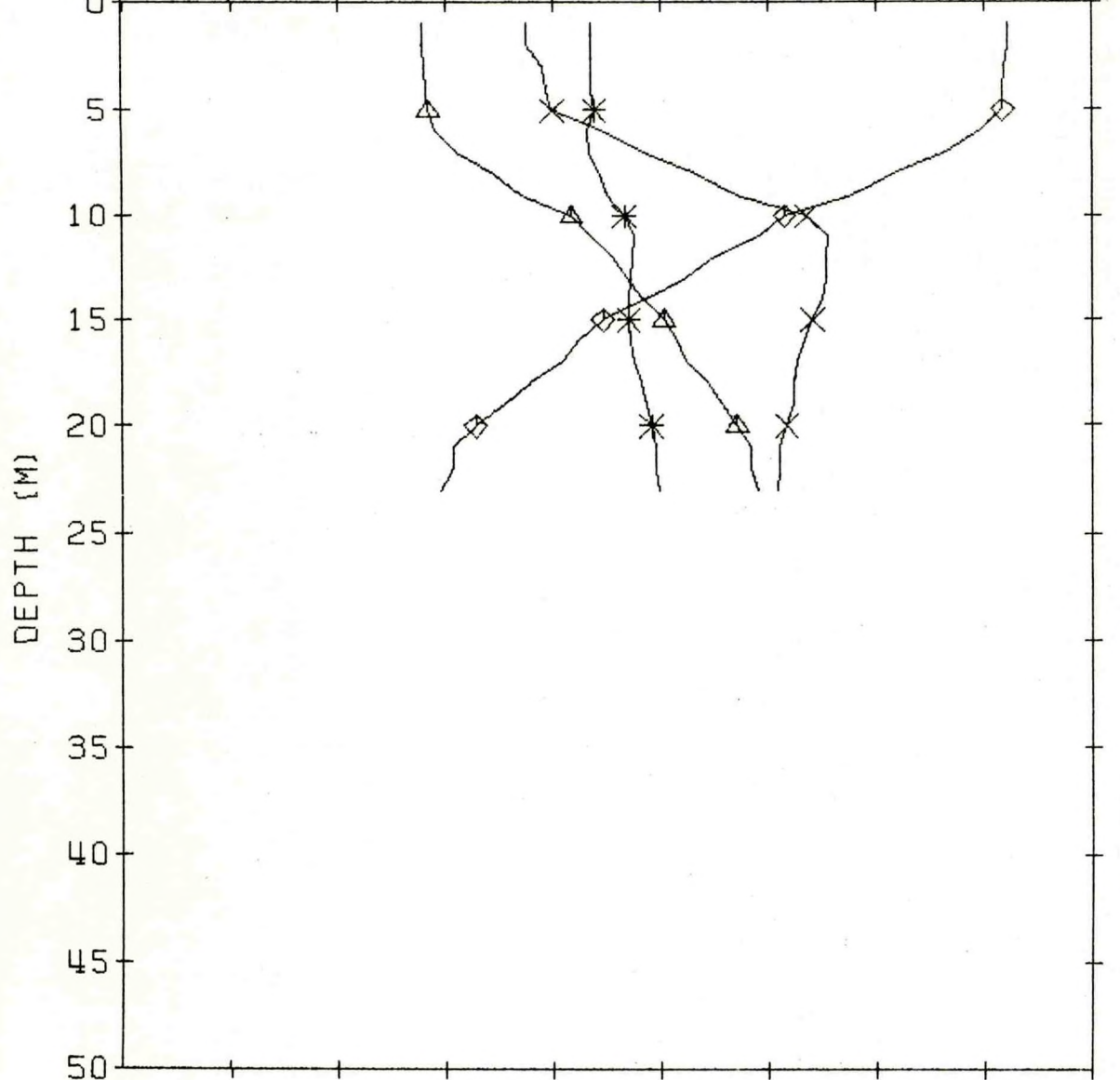
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.017 LAT 40 18.4N; LONG 73 50.6W GMT 21.4 08/01/77  
 DEPTH 27 AIR D/W 70.5/69.0 BARO 12.5 VIS 6 CLD TYP/CVR 7/8  
 WETHR 6 WIND DIR/SPD 14/08 SEA DIR/HT 14/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.89	31.20	21.66	75.1		5.61				
2	20.89	31.20	21.66	75.1		5.61				
3	20.89	31.20	21.66	75.5		5.95	.12	.00	5.45	1.20
4	20.89	31.20	21.66	76.5		6.16				
5	20.78	31.21	21.70	76.5		6.14				
6	20.62	31.25	21.77	76.7		6.15				
7	19.16	31.32	22.20	79.4		6.12				
8	16.75	31.53	22.94	82.8		6.23				
9	15.30	31.73	23.41	83.4		6.01				
10	13.45	32.19	24.15	84.7		5.64	.17	.39	9.39	2.03
11	12.39	32.39	24.51	85.6		5.22				
12	11.34	32.46	24.76	86.0		5.07				
13	11.12	32.50	24.84	86.1		5.04				
14	10.88	32.53	24.89	86.5		5.01				
15	10.74	32.57	24.95	86.8		4.99				
16	10.53	32.60	25.01	87.0		4.98				
17	10.47	32.62	25.04	86.9		4.97				
18	10.47	32.62	25.04	86.8		4.90				
19	10.45	32.62	25.04	86.8		4.77				
20	10.33	32.65	25.08	86.5		4.64				
21	10.25	32.67	25.11	86.4		4.52				
22	10.20	32.68	25.13	86.3		4.44				
23	10.18	32.69	25.14	86.3		4.38				
24	10.17	32.68	25.14	86.3		4.34				
25	10.16	32.70	25.15	86.2		4.30				
26	10.16	32.70	25.15	86.2		4.27	.42	2.70	12.91	2.77



KELEZ CRUISE XWCC-15 STATION 17 08/01/77

TRANSMISSIVITY (0/0)

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SIGMA-T

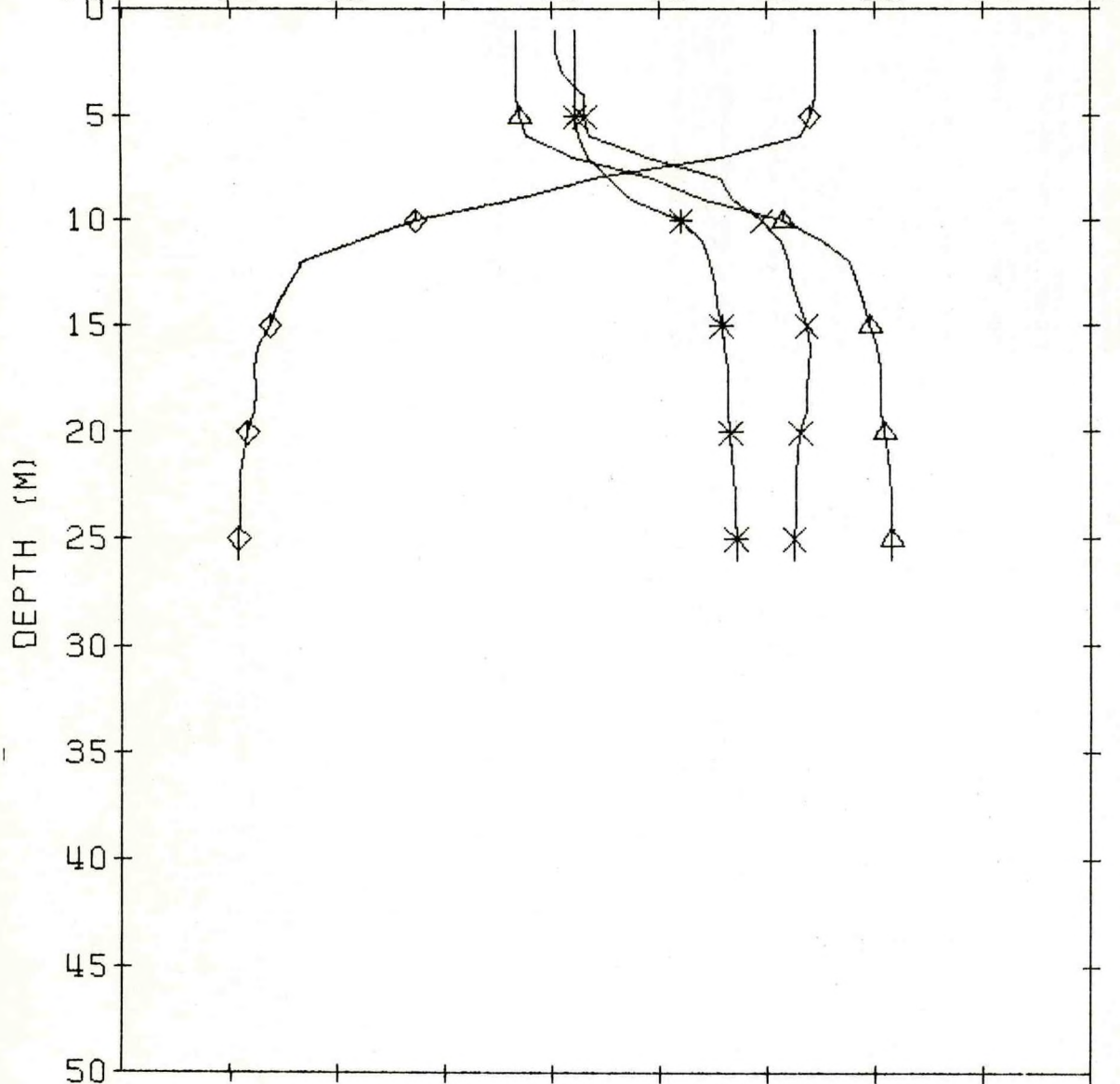
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC\_15 STA.019 LAT 40 20.2N; LONG 73 37.9W GMT 01.5 08/09/77  
 DEPTH 26 AIR D/W 80.0/76.0 BARO 11.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 24/10 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	25.10	31.48	20.68	73.7		6.61				
2	25.10	31.48	20.68	73.7		6.61				
3	24.96	31.50	20.74	74.1		6.61	.12	.33	2.00	.37
4	24.60	31.46	20.82	74.2		6.61				
5	24.19	31.47	20.94	74.5		6.69				
6	24.06	31.48	20.99	74.7		6.78				
7	24.17	31.49	20.96	74.2		6.77				
8	24.22	31.51	20.96	74.1		6.70				
9	24.20	31.51	20.97	74.7		6.61				
10	24.08	31.54	21.03	74.5		6.47	.09	.93	.93	.22
11	23.37	31.56	21.25	75.9		6.50				
12	20.96	31.66	21.99	80.7		6.31				
13	18.09	31.77	22.80	84.5		5.96				
14	16.33	31.91	23.32	84.8		5.40				
15	15.27	31.93	23.57	84.3		5.04				
16	14.90	31.96	23.68	84.2		4.78				
17	14.64	31.99	23.75	84.1		4.54				
18	14.19	31.99	23.85	84.2		4.42				
19	13.76	32.02	23.96	84.3		4.25				
20	13.54	32.02	24.00	84.4		4.04	.22	.83	8.89	1.72
21	13.29	32.06	24.08	84.7		3.83				
22	12.91	32.07	24.16	84.6		3.72				
23	12.37	32.07	24.27	85.1		3.63				
24	12.19	32.07	24.30	85.1		3.63				
25	12.19	32.07	24.30	85.1		3.63	.38	2.21	13.38	2.46



TRANSMISSIVITY (0/0)

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SIGMA-T

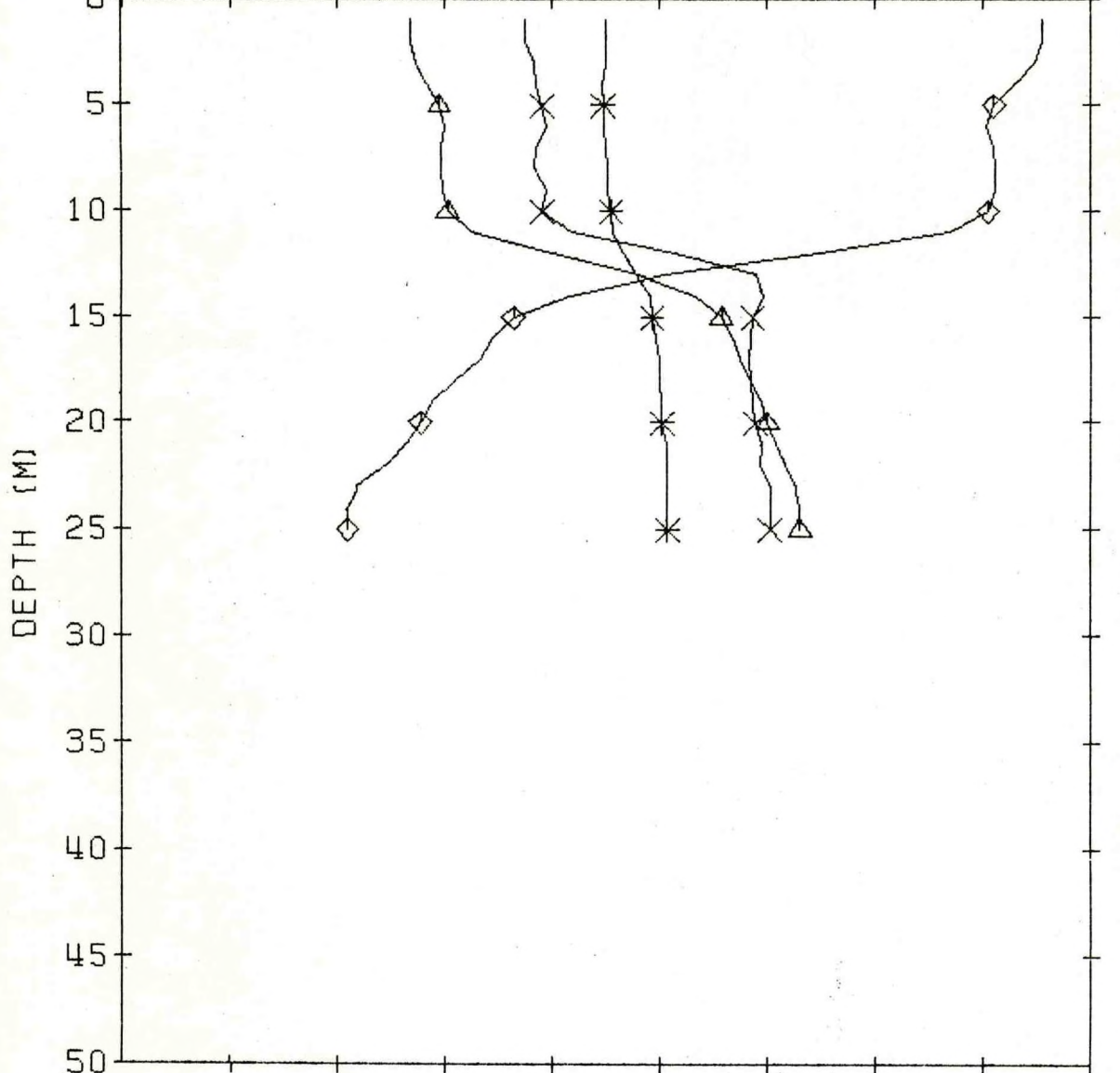
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.021 LAT 40 13.3N; LONG 73 56.0W GMT 22.5 08/01/77  
 DEPTH 21 AIR D/W 68.0/67.5 BARO 14.5 VIS 5 CLD TYP/CVR 7/8  
 WETHR 6 WIND DIR/SPD 27/14 SEA DIR/HT 27/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.36	30.88	21.82	74.8	7.32	5.69				
2	19.36	30.88	21.82	74.8	7.32	5.69				
3	19.36	30.88	21.82	74.8	7.32	5.69				
4	19.35	30.90	21.83	75.6	7.33	5.75	.36	1.39	7.78	1.80
5	19.31	30.92	21.85	75.9	7.30	5.80				
6	19.32	30.92	21.85	75.1	7.22	5.80				
7	19.33	30.92	21.85	75.0	7.54	5.83				
8	19.35	30.94	21.86	75.3	7.59	5.87				
9	18.83	31.03	22.06	76.5	7.60	5.86				
10	16.23	31.83	23.29	80.3	7.60	5.90				
11	13.71	32.08	24.01	84.2	7.61	5.96	.09	.71	11.13	2.38
12	12.68	32.25	24.35	84.9	7.62	5.76				
13	12.20	32.33	24.50	84.9	7.62	5.35				
14	12.18	32.34	24.51	84.8	7.62	4.90				
15	12.15	32.34	24.52	84.8	7.62	4.41				
16	12.13	32.35	24.53	84.7	7.62	4.08				
17	12.10	32.35	24.53	84.7	7.62	3.83				
18	12.08	32.35	24.54	84.8	7.62	3.63				
19	12.07	32.36	24.55	84.8	7.62	3.49				
20	12.06	32.36	24.55	84.7	7.62	3.39				
21	12.06	32.36	24.55	84.7	7.62	3.28	.64	3.10	20.87	4.38



TRANSMISSIVITY (0/0)

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SIGMA-T

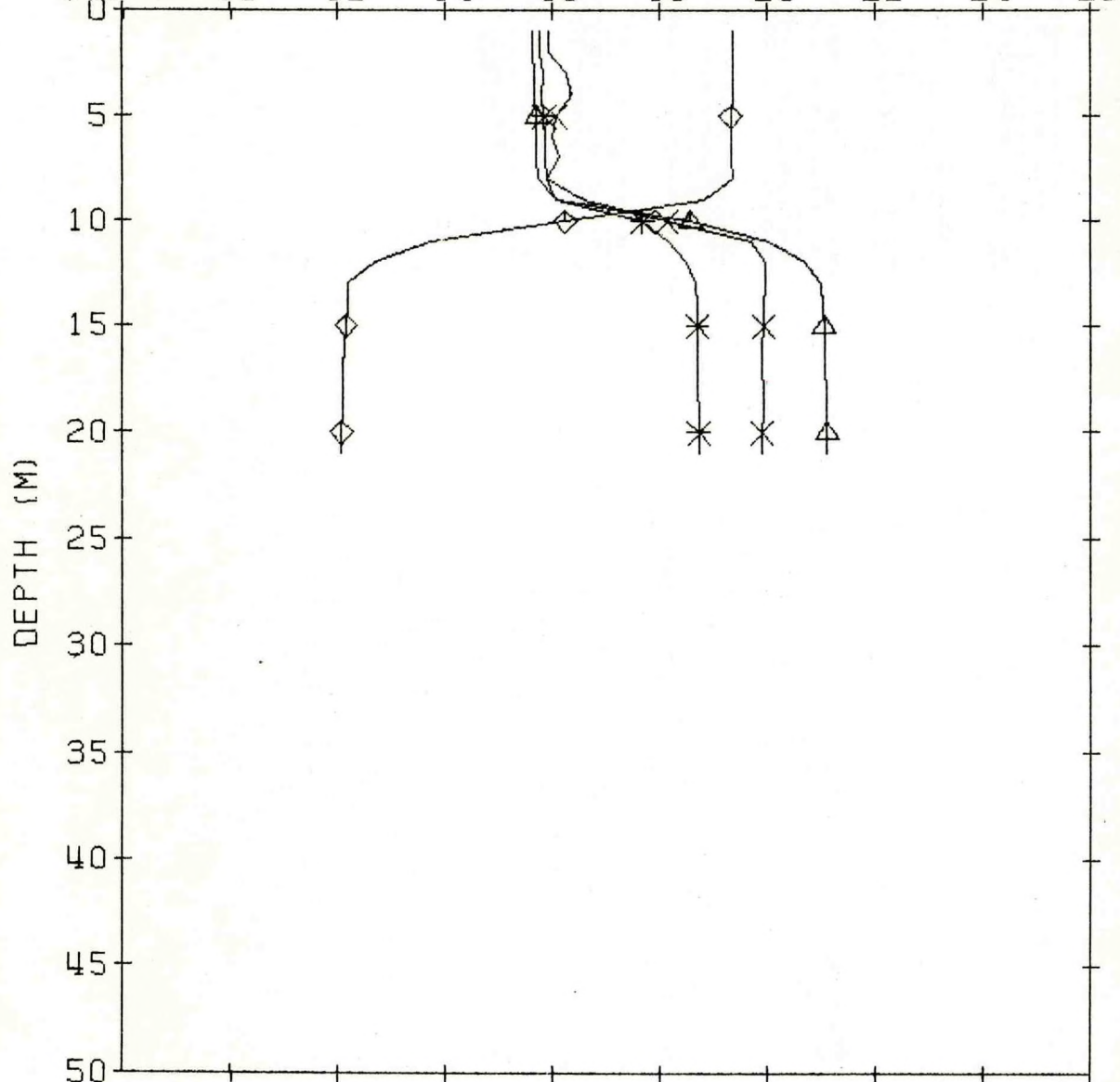
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26

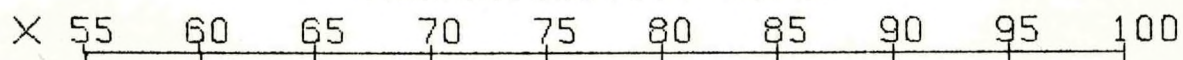


XWCC-15 STA.023 LAT 40 15.0N; LONG 73 45.6W GMT 02.1 08/02/77  
 DEPTH 38 AIR D/W 69.0/68.0 BARO 12.5 VIS 7 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 18/10 SEA DIR/HT 18/0 SWELL DIR/HT 18/1

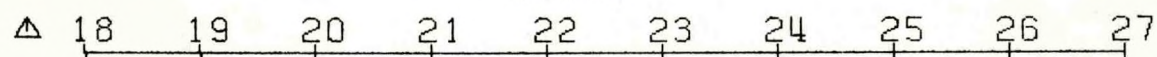
DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.37	30.87	21.55	72.1		6.16				
2	20.37	30.87	21.55	72.1		6.16				
3	20.29	30.86	21.56	73.0		6.26	.14	.15	8.39	1.72
4	20.28	30.86	21.56	73.1		6.26				
5	20.28	30.86	21.56	73.1		6.25				
6	20.24	30.86	21.57	73.1		6.24				
7	20.11	31.01	21.72	73.8		6.23				
8	19.87	31.73	22.33	77.1		6.11				
9	19.38	31.74	22.46	81.8		6.79				
10	18.99	31.77	22.58	82.4		6.66	.06	.09	5.58	1.11
11	18.33	31.81	23.24	83.0		6.55				
12	14.60	32.05	23.74	83.6		6.33				
13	13.64	32.04	24.00	83.7		6.44				
14	12.97	32.17	24.23	84.0		6.44				
15	12.74	32.31	24.50	84.4		6.08				
16	11.75	32.42	24.66	84.8		6.04				
17	11.40	32.48	24.77	85.0		6.81				
18	10.99	32.56	24.90	85.6		6.81				
19	10.73	32.57	24.96	86.0		6.99				
20	10.36	32.61	25.05	86.6		6.62	.00	.24	6.60	1.38
21	10.06	32.64	25.12	87.0		6.99				
22	9.97	32.64	25.14	87.0		6.24				
23	9.95	32.64	25.14	87.0		6.42				
24	9.99	32.65	25.15	87.1		6.51				
25	9.99	32.64	25.15	87.1		6.56				
26	9.99	32.65	25.17	87.0		6.64				
27	9.99	32.65	25.17	87.1		6.68				
28	9.99	32.65	25.17	87.1		6.68				
29	9.99	32.65	25.17	86.9		6.66				
30	9.99	32.65	25.17	87.0		6.65	.08	.69	8.20	1.51
31	9.99	32.65	25.17	87.0		6.64				
32	9.99	32.65	25.17	86.9		6.63				
33	9.99	32.66	25.18	86.9		6.62				
34	9.99	32.66	25.19	86.8		6.60				
35	9.99	32.67	25.20	86.9		6.58				
36	9.99	32.67	25.21	86.9		6.55				
37	9.99	32.67	25.21	86.9		6.54				
38	9.67	32.67	25.21	86.9		6.54	.21	2.38	9.78	2.03



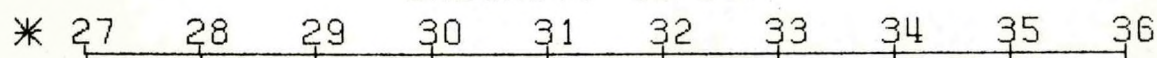
TRANSMISSIVITY (0/0)



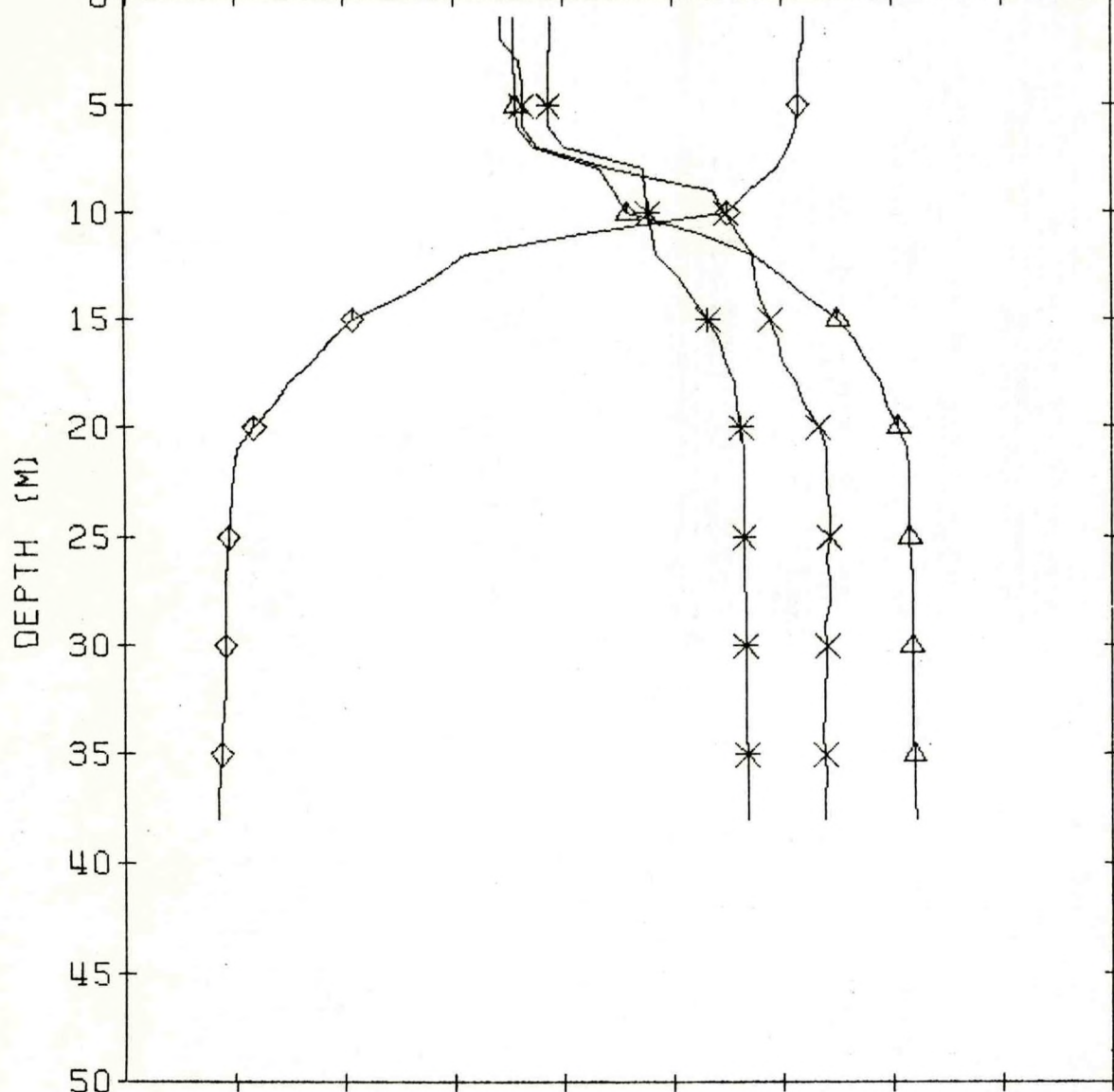
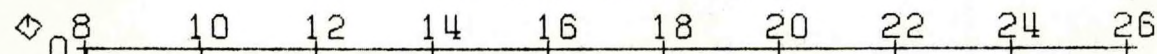
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)



XWCC-15 STA.025 LAT 40 16.9N; LONG 73 28.3W GMT 00.2 08/09/77  
 DEPTH 33 AIR D/W 79.0/76.0 BARO 10.5 VIS 6 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 23/13 SEA DIR/HT 23/0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	24.31	31.32	20.79	80.7		5.21				
2	24.31	31.32	20.79	80.7		5.21				
3	24.31	31.35	20.81	80.9		5.65	.06	.00	.76	.12
4	24.16	31.37	20.87	80.9		5.72				
5	23.73	31.38	21.01	83.9		5.75				
6	23.36	31.36	21.10	84.9		5.77				
7	23.35	31.35	21.10	85.0		5.71				
8	23.35	31.36	21.11	85.1		5.74				
9	22.24	31.60	21.94	88.1		5.83				
10	21.46	31.77	21.94	88.3		5.85	.10	.00	.20	.06
11	21.09	31.77	22.04	88.2		5.87				
12	19.62	31.72	22.39	87.8		5.99				
13	18.98	31.82	22.62	87.4		6.13				
14	18.71	31.83	22.70	87.1		6.16				
15	17.56	32.06	23.00	87.0		6.23				
16	14.76	32.06	23.78	86.1		6.57				
17	13.27	32.12	24.13	83.4		6.67				
18	12.56	32.15	24.29	83.3		6.25				
19	12.30	32.17	24.36	84.7		5.68				
20	12.02	32.22	24.45	85.2		4.69	.27	1.05	8.89	1.67
21	11.89	32.23	24.49	85.7		4.13				
22	11.68	32.27	24.55	86.1		3.93				
23	11.47	32.29	24.60	86.0		3.83				
24	11.32	32.33	24.67	86.0		3.84				
25	11.17	32.35	24.70	86.1		3.97				
26	11.08	32.38	24.74	86.2		4.10				
27	11.07	32.39	24.75	86.4		4.25				
28	10.99	32.40	24.78	86.6		4.22				
29	10.78	32.47	24.87	86.9		4.09				
30	10.67	32.47	24.88	86.9		4.09				
31	10.67	32.47	24.88	86.9		4.09	.36	2.01	10.37	1.96

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

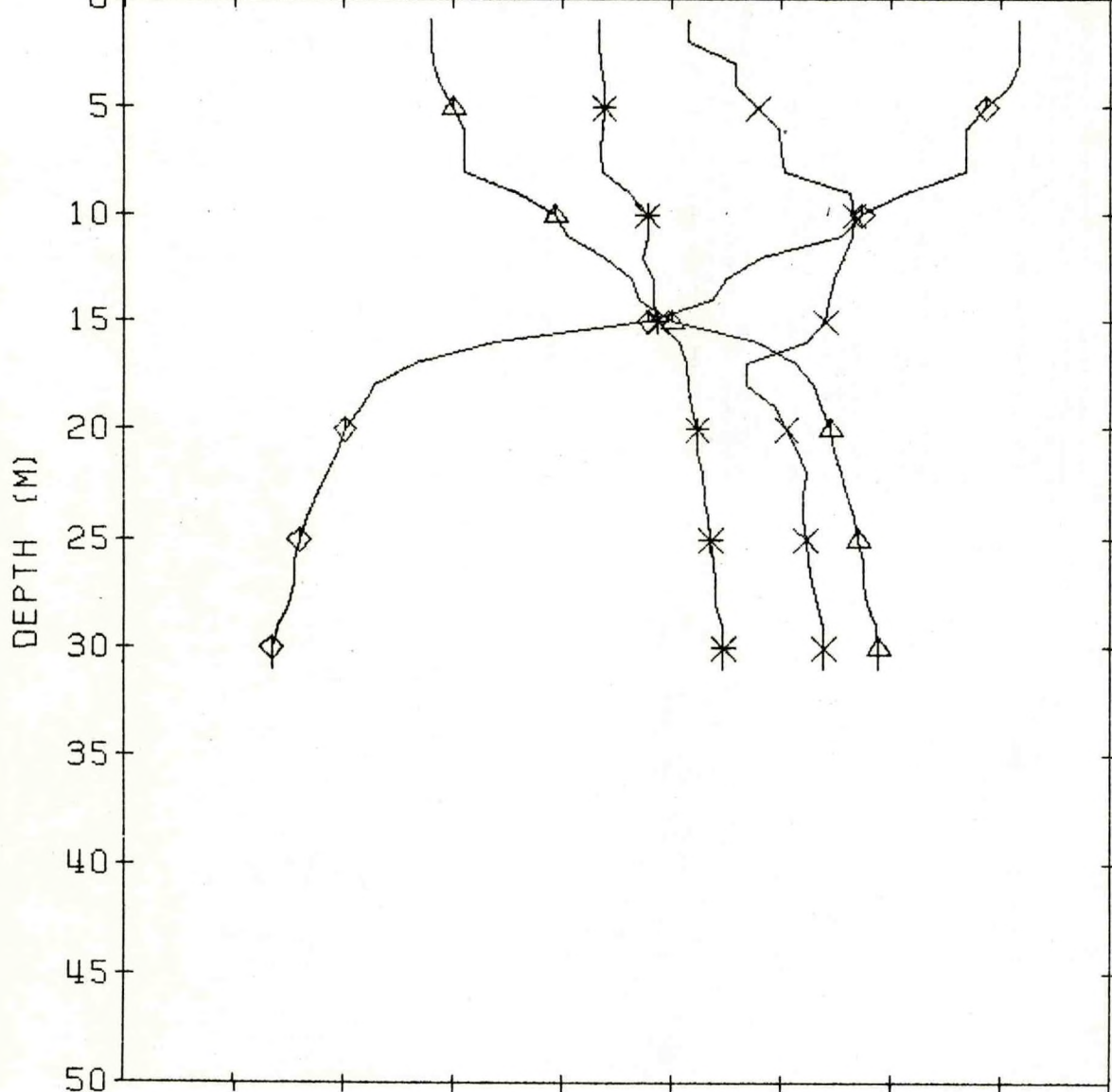
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26

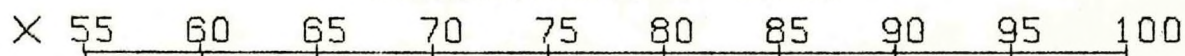




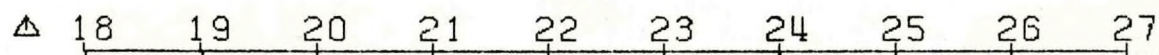
XWCC-15 STA.026 LAT 40 29.0N; LONG 73 59.0W GMT 15.3 08/01/77  
 DEPTH 09 AIR D/W 74.0/73.0 BARO 13.5 VIS 5 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 19/12 SEA DIR/HT 19/0 SWELL DIR/HT 15/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.11	30.14	21.31	71.8	7.51	6.03				
2	19.11	30.14	21.31	71.8	7.51	6.03				
3	18.67	30.43	21.64	76.4	7.50	4.92				
4	18.61	30.46	21.68	78.2	7.53	4.48	.84	3.43	10.14	2.49
5	18.46	30.48	21.73	79.5	7.59	4.48	.93	3.66	10.80	2.64
6	18.30	30.53	21.80	79.9	7.57	4.43				
7	18.20	30.56	21.85	79.9	7.57	4.33				
8	17.98	30.64	21.97	79.6	7.57	4.26				
9	17.73	30.76	22.12	78.7	7.57	4.19	.75	2.80	11.72	2.77

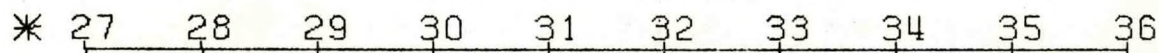
TRANSMISSIVITY (0/0)



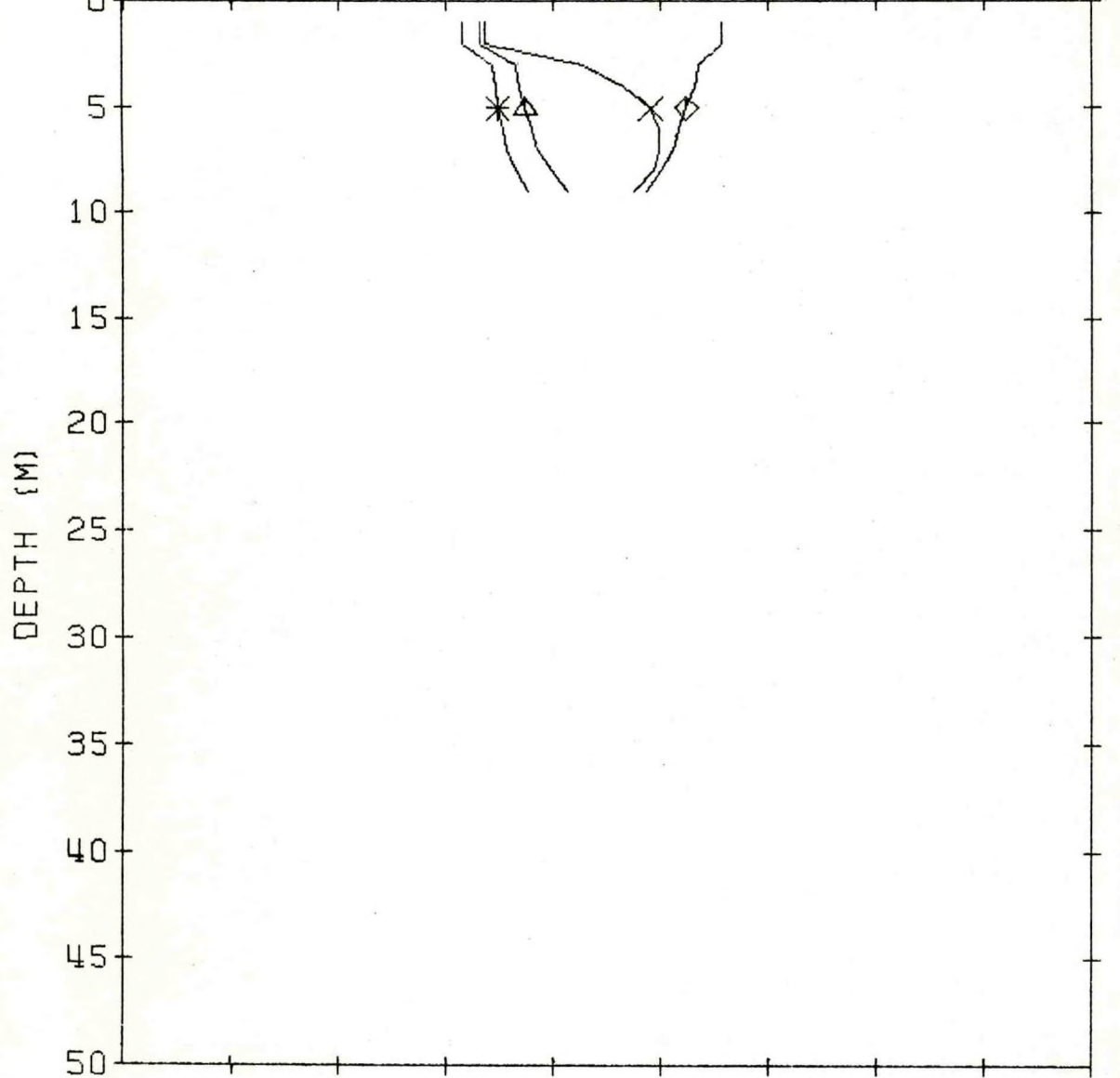
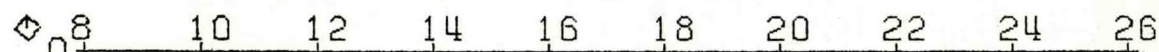
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)



XWCC\_15 STA.027 LAT 40 18.0N; LONG 73 17.5W GMT 22.5 08/08/77  
 DEPTH 35 AIR D/W 78.0/75.0 BARO 10.5 VIS 6 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 23/12 SEA DIR/HT 23/0 SWELL DIR/HT 19/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	23.72	31.47	21.08	81.4	5.41					
2	23.72	31.47	21.08	81.4	5.91					
3	23.47	31.45	21.14	84.6	5.91		.06	.09	.00	.00
4	23.30	31.46	21.20	85.7	5.76					
5	23.27	31.50	21.23	86.1	5.77					
6	22.78	31.51	21.38	87.1	5.80					
7	22.33	31.62	21.59	87.7	5.83					
8	21.31	31.63	21.87	88.2	5.89					
9	20.54	31.70	22.13	88.8	5.98					
10	19.72	31.61	22.28	88.0	6.02	.03	.00	.16	.04	
11	19.24	31.73	22.49	87.9	6.11					
12	19.97	31.97	22.67	87.2	6.13					
13	18.22	31.98	22.94	86.3	6.18					
14	17.33	32.11	23.24	85.7	6.37					
15	15.90	32.13	23.59	85.0	6.61					
16	12.96	32.20	24.26	84.9	6.88					
17	11.82	32.29	24.54	84.1	7.20					
18	11.34	32.29	24.62	84.5	7.00					
19	10.91	32.34	24.74	85.8	6.76					
20	10.40	32.46	24.93	85.7	6.69	.08	.70	2.47	.56	
21	10.26	32.52	25.00	84.6	6.72					
22	10.20	32.55	25.03	85.9	6.51					
23	10.18	32.55	25.03	86.4	6.54					
24	10.17	32.55	25.03	86.7	6.57					
25	10.17	32.55	25.04	86.9	6.59					
26	10.12	32.55	25.04	87.0	6.59					
27	10.11	32.55	25.04	87.1	6.59					
28	10.10	32.55	25.05	87.1	6.55					
29	10.07	32.55	25.06	87.1	6.57					
30	9.81	32.55	25.09	87.0	6.53					
31	9.79	32.55	25.11	86.9	6.53					
32	9.77	32.55	25.12	86.9	6.56					
33	9.77	32.55	25.12	86.9	6.59					
34	9.77	32.55	25.13	86.9	6.62	.36	2.60	9.91	1.89	



KELEZ CRUISE XWCC-15 STATION 27 08/08/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

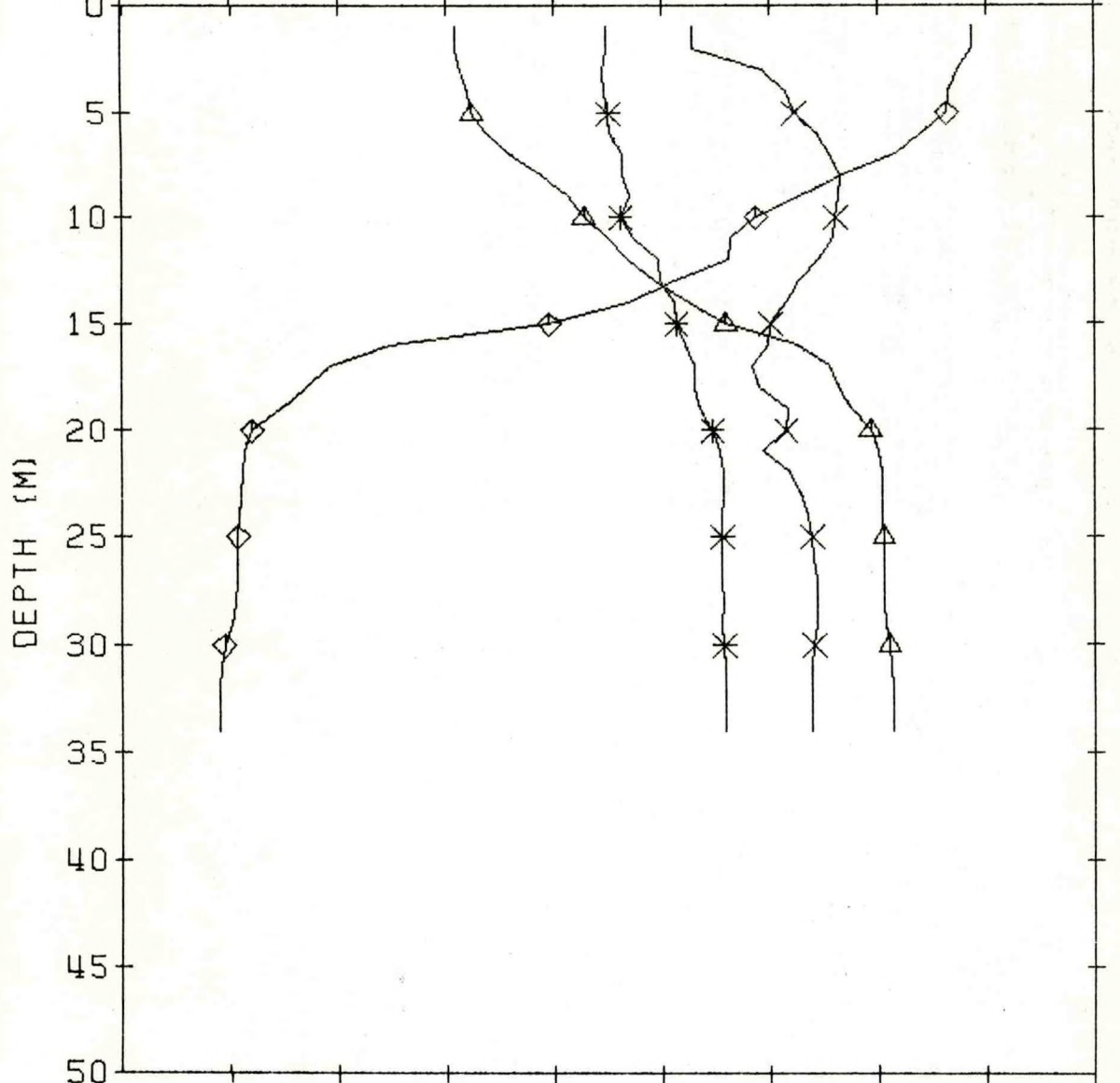
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.028 LAT 40 13.5N; LONG 73 7.0W GMT 14.1 08/08/77  
 DEPTH 40 AIR D/W 83.0/76.0 BARO 13.0 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 28/10 SEA DIR/HT 28/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.90	31.68	21.47	87.9		5.43				
2	22.90	31.68	21.47	87.9		5.43				
3	22.83	31.68	21.49	87.7		5.42	.29	.01	.00	.10
4	22.96	31.64	21.42	88.8		5.51				
5	22.97	31.65	21.43	89.0		5.50				
6	22.81	31.66	21.48	89.1		5.50				
7	22.31	31.66	21.64	88.9		5.54				
8	21.69	31.75	21.86	88.5		5.68				
9	21.57	31.88	21.95	88.8		5.72				
10	21.41	31.86	22.02	88.8		5.73	.30	.00	.04	.11
11	20.74	31.90	22.22	88.6		5.79				
12	19.62	31.91	22.53	87.7		5.87				
13	17.00	31.99	23.18	86.2		6.13				
14	14.33	31.99	23.82	84.2		6.04				
15	12.66	32.23	24.35	84.4		6.76				
16	11.89	32.23	24.48	84.4		6.45				
17	11.46	32.36	24.66	85.5		6.43				
18	10.89	32.41	24.80	85.5		6.99				
19	10.62	32.46	24.89	85.0		6.27				
20	10.45	32.50	24.95	85.8		6.19	.33	.08	2.89	.69
21	10.30	32.52	24.99	86.6		6.10				
22	10.16	32.51	25.01	86.3		6.00				
23	9.11	32.61	25.09	86.6		6.81				
24	9.71	32.61	25.16	86.7		6.79				
25	9.34	32.68	25.27	86.6		6.58				
26	9.93	32.69	25.30	86.7		6.22				
27	9.92	32.70	25.31	86.7		6.44				
28	9.92	32.69	25.30	86.7		6.57				
29	9.91	32.70	25.31	86.7		6.45	.82	3.75	12.41	2.43
30	9.91	32.70	25.31	86.8		6.36				
31	9.91	32.70	25.32	86.8		6.31				
32	9.91	32.70	25.32	86.8		6.26				
33	9.91	32.71	25.33	86.8		6.44				
34	9.91	32.70	25.33	86.8		6.19				
35	9.91	32.70	25.33	86.8		6.16				
36	9.91	32.70	25.33	86.8		6.15				
37	9.91	32.70	25.33	86.8		6.14				
38	9.91	32.70	25.33	86.8		6.14				
39	9.91	32.70	25.33	86.8		6.13				
40	9.91	32.70	25.33	86.8		6.13				
41	9.91	32.70	25.33	87.9		6.12	.82	4.07	12.15	2.43

KELEZ CRUISE, XWCC-15 STATION 28 08/08/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

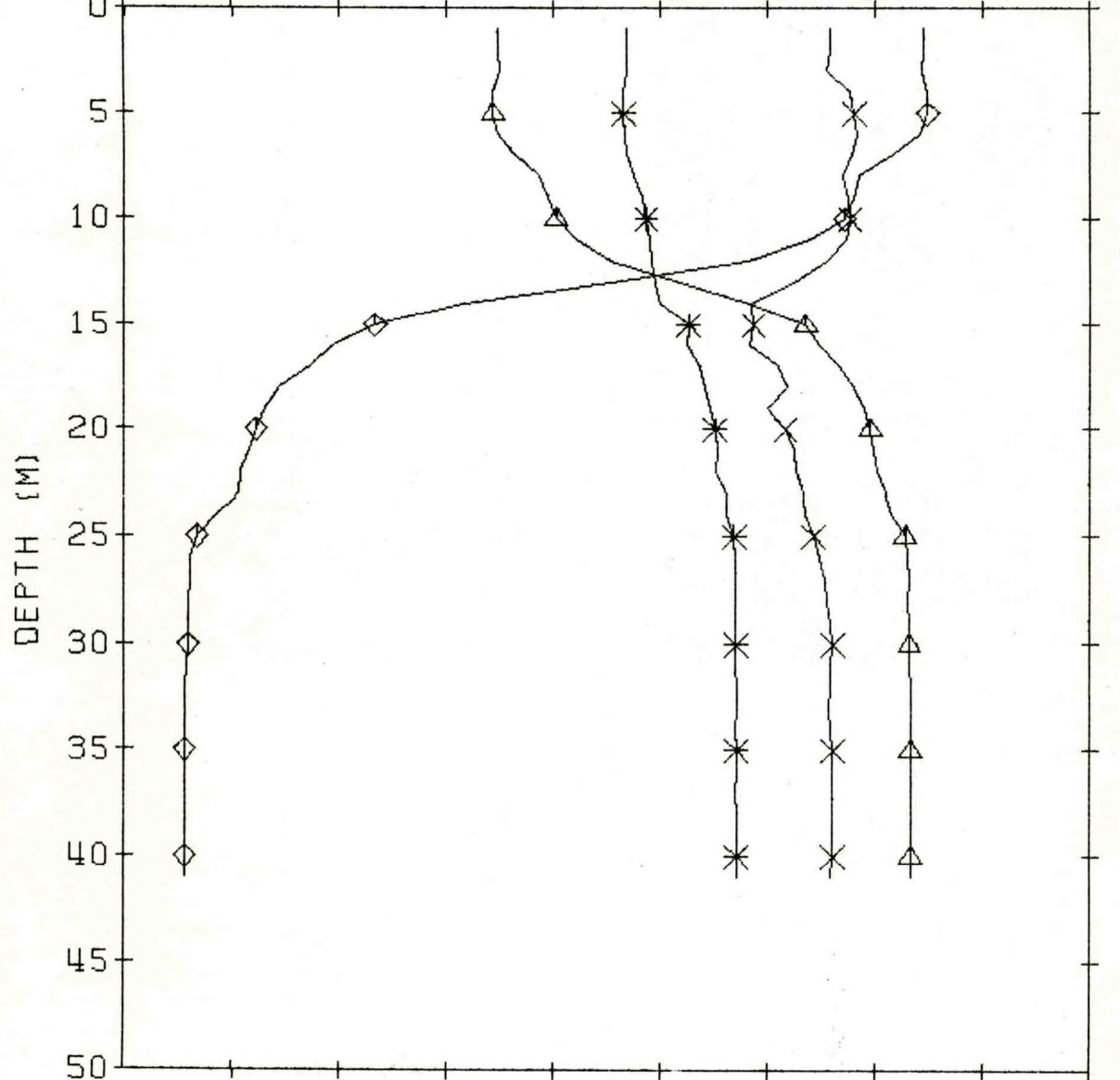
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.031 LAT 39 54.0N; LONG 72 25.0W GMT 00.5 08/08/77  
 DEPTH 69 AIR D/W 76.0/74.0 BARO 14.0 VIS 6 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 25/12 SEA DIR/HT 25/0 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	23.06	32.05	21.71	89.2		5.50				
2	23.06	32.05	21.71	89.2		5.50				
3	23.06	32.10	21.77	89.5		5.48	.06	.07	2.81	.51
4	23.04	32.08	21.73	90.3		5.50				
5	23.02	32.09	21.75	90.2		5.49				
6	23.01	32.13	21.78	90.1		5.49				
7	23.00	32.27	21.86	89.7		5.59				
8	23.00	32.22	22.23	89.3		5.75				
9	23.00	32.22	22.31	89.4		5.97				
10	23.00	32.22	22.59	89.9		5.83				
11	23.00	32.22	23.98	90.2		5.63				
12	23.00	32.03	24.00	90.4		5.50				
13	23.00	32.06	24.08	90.4		5.50				
14	23.00	32.06	24.12	90.5		5.51				
15	23.00	32.11	24.18	90.5		5.51				
16	23.00	32.10	24.23	90.4		5.52				
17	23.00	32.07	24.28	90.4		5.56				
18	23.00	32.05	24.39	90.2		5.63				
19	23.00	32.10	24.56	89.9		5.82	.04	.00	.04	.00
20	21.17	32.12	24.66	89.9		5.88				
21	20.79	32.12	24.66	89.9		5.88				
22	19.66	32.12	24.91	89.9		5.98				
23	18.00	32.06	24.26	89.9		5.55				
24	17.54	32.99	25.33	89.9		5.45				
25	16.76	32.72	25.99	89.7		5.57				
26	16.21	32.72	25.90	89.5		5.67				
27	16.00	32.77	25.59	89.5		5.71				
28	15.99	32.82	25.63	89.3		5.71				
29	15.84	32.82	25.61	89.2		5.70				
30	15.66	32.84	25.72	89.1		5.70				
31	15.66	32.76	25.76	89.1		5.70	.30	.00	.40	.06
32	14.99	32.72	25.79	89.0		5.72				
33	13.95	32.61	25.91	88.8		5.80				
34	13.58	32.60	25.96	88.7		5.82				
35	13.58	32.58	25.98	88.7		5.80				
36	13.58	32.54	26.01	88.7		5.74				
37	13.58	32.53	26.04	88.7		5.69				
38	12.72	32.47	26.05	88.7		5.61				
39	12.24	32.35	26.06	88.7		5.47				
40	11.73	32.30	26.12	88.3		5.44				
41	11.54	32.30	26.16	88.4		5.45				
42	11.44	32.27	26.14	88.4		5.44				
43	10.99	32.19	26.18	88.4		5.42				
44	10.71	32.13	26.17	88.2		5.40				
45	10.19	32.08	26.22	88.1		5.40				
46	10.00	32.07	26.24	88.2		5.38				
47	10.00	32.07	26.25	88.2		5.34				
48	10.00	32.07	26.24	88.3		5.31				
49	10.00	32.11	26.27	88.3		5.27				
50	9.55	32.19	26.33	88.4		5.21	.10	9.31	9.90	1.87
60	9.28	32.13	26.41	88.3		5.42	.14	5.67	11.49	2.22
68	9.30	32.17	26.44	88.0		5.32	.13	6.20	11.90	2.26

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

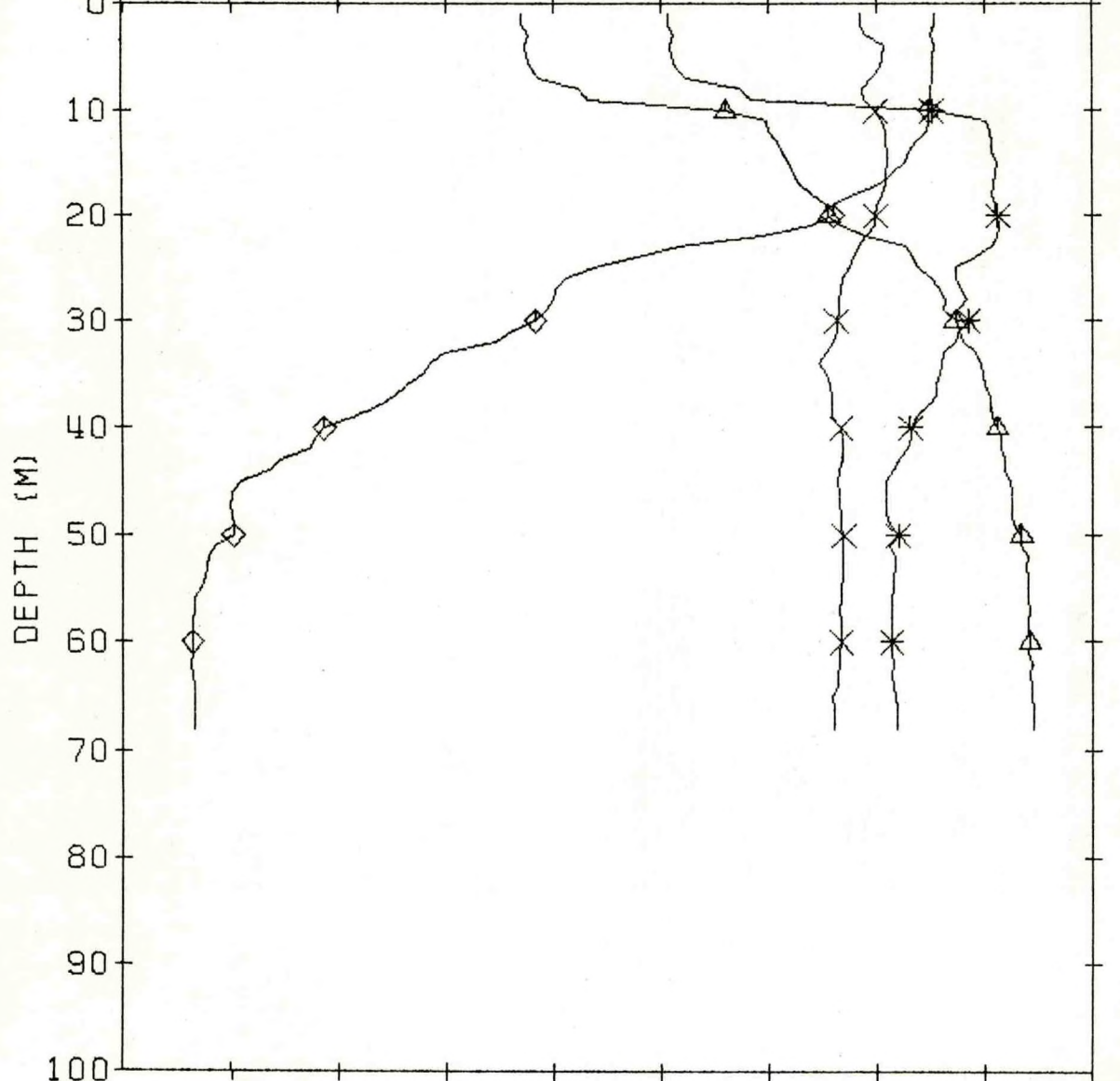
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC\_15 STA.032 LAT 39 42.1N; LONG 72 6.8W GMT 23.2 08/06/77  
 DEPTH 127 AIR D/W 79.0/76.0 BARO 16.0 VIS 5 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 23/13 SEA DIR/HT 23/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	24.46	33.37	22.30	90.4						
2	24.46	33.37	22.30	90.4						
3	24.27	33.47	22.43	90.1			.11	.00	.30	.09
4	23.96	33.71	22.70	90.1						
5	23.75	33.19	22.13	90.0						
6	23.64	33.41	22.32	90.0						
7	23.66	33.56	22.46	90.0						
8	23.66	33.60	22.51	90.0						
9	23.66	33.61	22.51	90.0						
10	23.66	33.63	22.53	90.0						
11	23.66	33.63	22.53	90.0						
12	23.66	33.63	22.53	90.0						
13	23.66	33.63	22.53	90.0						
14	23.66	33.63	22.53	90.0						
15	23.66	33.63	22.53	90.0						
16	23.66	33.63	22.53	90.0						
17	23.66	33.63	22.53	90.0						
18	23.66	33.63	22.53	90.0						
19	23.66	33.63	22.53	90.0						
20	23.66	33.63	22.53	90.0						
21	23.66	33.63	22.53	90.0						
22	23.66	33.63	22.53	90.0			.02	.00	.00	.06
23	23.66	33.63	22.53	90.0						
24	23.66	33.63	22.53	90.0						
25	23.66	33.63	22.53	90.0						
26	23.66	33.63	22.53	90.0						
27	23.66	33.63	22.53	90.0						
28	23.66	33.63	22.53	90.0						
29	23.66	33.63	22.53	90.0						
30	23.66	33.63	22.53	90.0						
31	23.66	33.63	22.53	90.0						
32	23.66	33.63	22.53	90.0						
33	23.66	33.63	22.53	90.0						
34	23.66	33.63	22.53	90.0						
35	23.66	33.63	22.53	90.0						
36	23.66	33.63	22.53	90.0						
37	23.66	33.63	22.53	90.0						
38	23.66	33.63	22.53	90.0						
39	23.66	33.63	22.53	90.0						
40	23.66	33.63	22.53	90.0						
41	23.66	33.63	22.53	90.0						
42	23.66	33.63	22.53	90.0						
43	23.66	33.63	22.53	90.0						
44	23.66	33.63	22.53	90.0						
45	23.66	33.63	22.53	90.0						
46	23.66	33.63	22.53	90.0						
47	23.66	33.63	22.53	90.0						
48	23.66	33.63	22.53	90.0						
49	23.66	33.63	22.53	90.0						
50	23.66	33.63	22.53	90.0						
51	23.66	33.63	22.53	90.0						
52	23.66	33.63	22.53	90.0						
53	23.66	33.63	22.53	90.0						
54	23.66	33.63	22.53	90.0						
55	23.66	33.63	22.53	90.0						
56	23.66	33.63	22.53	90.0						
57	23.66	33.63	22.53	90.0						
58	23.66	33.63	22.53	90.0						
59	23.66	33.63	22.53	90.0						
60	23.66	33.63	22.53	90.0						
61	23.66	33.63	22.53	90.0						
62	23.66	33.63	22.53	90.0						
63	23.66	33.63	22.53	90.0						
64	23.66	33.63	22.53	90.0						
65	23.66	33.63	22.53	90.0						
66	23.66	33.63	22.53	90.0						
67	23.66	33.63	22.53	90.0						
68	23.66	33.63	22.53	90.0						
69	23.66	33.63	22.53	90.0						
70	23.66	33.63	22.53	90.0						
71	23.66	33.63	22.53	90.0						
72	23.66	33.63	22.53	90.0						
73	23.66	33.63	22.53	90.0						
74	23.66	33.63	22.53	90.0						
75	23.66	33.63	22.53	90.0						
76	23.66	33.63	22.53	90.0						
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78	23.66	33.63	22.53	90.0						
79	23.66	33.63	22.53	90.0						
80	23.66	33.63	22.53	90.0						
81	23.66	33.63	22.53	90.0						
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85	23.66	33.63	22.53	90.0						
86	23.66	33.63	22.53	90.0						
87	23.66	33.63	22.53	90.0						
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89	23.66	33.63	22.53	90.0						
90	23.66	33.63	22.53	90.0						
91	23.66	33.63	22.53	90.0						
92	23.66	33.63	22.53	90.0						
93	23.66	33.63	22.53	90.0						
94	23.66	33.63	22.53	90.0						
95	23.66	33.63	22.53	90.0						
96	23.66	33.63	22.53	90.0						
97	23.66	33.63	22.53	90.0						
98	23.66	33.63	22.53	90.0						
99	23.66	33.63	22.53	90.0						
100	23.66	33.63	22.53	90.0			.08	4.06	6.93	1.47
101	23.66	33.63	22.53	90.0			.11	7.22	6.57	1.52
102	23.66	33.63	22.53	90.0			.09	10.72	8.38	1.81



TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

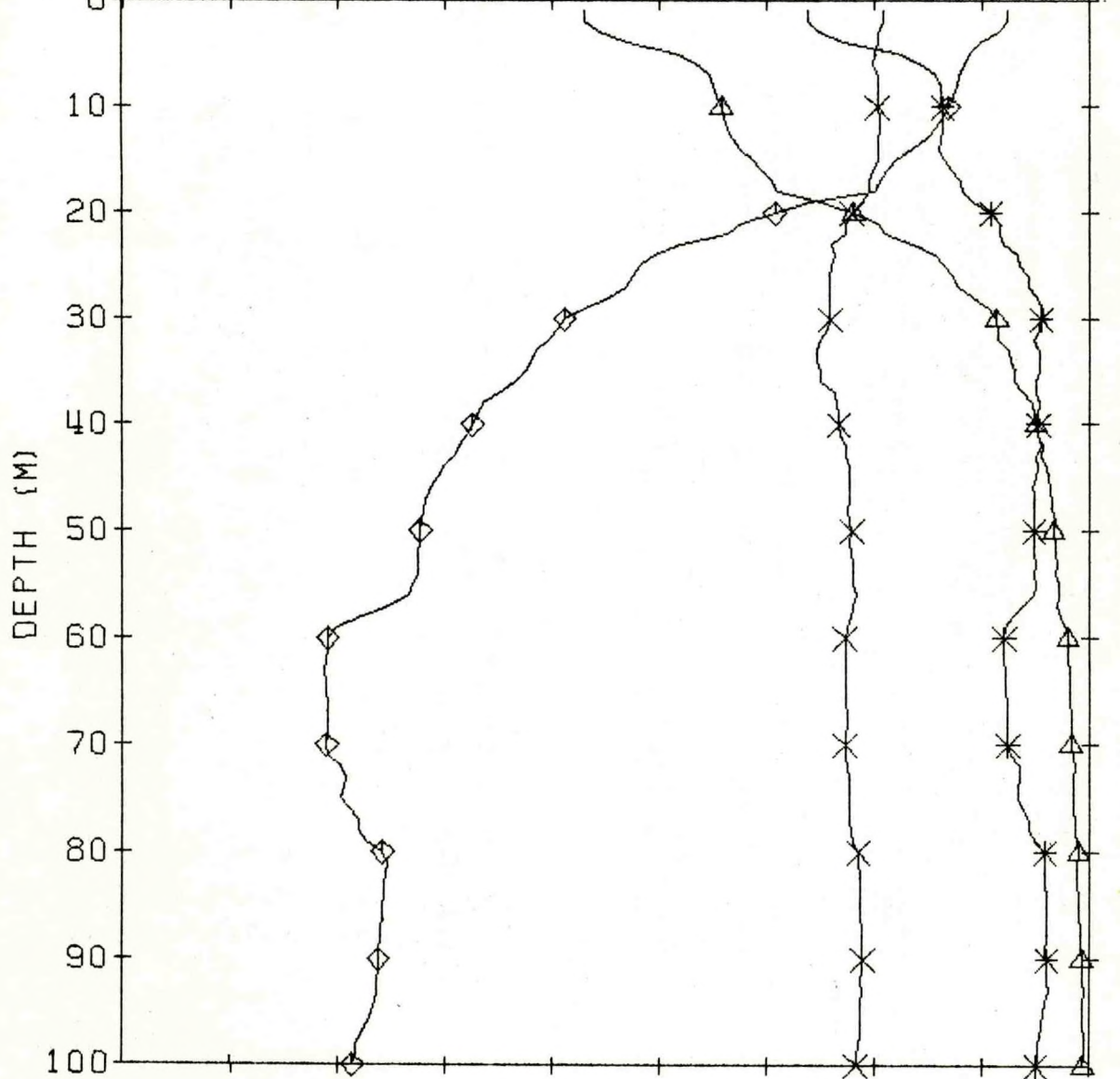
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.033 LAT 40 10.6N; LONG 73 41.7W GMT 03.5 08/02/77  
 DEPTH 56 AIR D/W 73.0/70.0 BARO 12.5 VIS 7 CLD TYP/CVR 8/4  
 WETHR 1 WIND DIR/SPD 22/10 SEA DIR/HT 22/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.60	31.90	22.00	86.2		5.61				
2	21.60	31.90	22.00	86.2		5.61				
3	21.61	31.90	22.00	86.4		5.60	.02	.16	2.26	.47
4	21.60	31.91	22.00	86.4		5.59				
5	21.61	31.91	22.00	86.4		5.59				
6	21.61	31.91	22.00	86.6		5.59				
7	21.61	31.92	22.01	86.5		5.59				
8	21.61	31.93	22.02	87.3		5.59				
9	21.61	31.93	22.02	88.1		5.58				
10	21.59	31.94	22.03	88.4		5.58				
11	21.59	31.94	22.03	88.4		5.58				
12	21.57	31.94	22.04	88.5		5.57				
13	21.53	31.94	22.05	88.7		5.54				
14	21.45	31.94	22.06	88.9		5.53				
15	21.31	31.95	22.08	89.2		5.52				
16	20.33	31.95	22.38	89.4		5.52				
17	17.33	31.95	22.14	89.3		5.52				
18	15.62	31.95	23.73	89.9		5.76				
19	11.47	31.95	24.22	88.8		6.01				
20	10.44	31.95	24.72	87.4		6.39	.10	.37	4.85	1.00
21	10.35	31.95	25.00	86.9		6.38				
22	10.14	31.95	25.08	87.1		6.37				
23	9.01	31.95	25.11	87.7		6.22				
24	8.94	31.95	25.13	87.7		6.09				
25	8.83	31.95	25.15	88.7		5.96				
26	8.76	31.95	25.18	88.8		5.89				
27	8.72	31.95	25.19	88.8		5.85				
28	8.70	31.95	25.21	88.8		5.81				
29	8.55	31.95	25.24	88.8		5.77	.35	1.58	7.69	1.55
30	8.52	31.95	25.27	88.8		5.74				
31	8.48	31.95	25.29	88.8		5.70				
32	8.45	31.95	25.29	88.8		5.66				
33	8.43	31.95	25.30	88.8		5.61				
34	8.43	31.95	25.30	88.8		5.58				
35	8.42	31.95	25.30	88.8		5.50				
36	8.42	31.95	25.30	88.8		5.45				
37	8.40	31.95	25.31	88.8		5.40				
38	8.38	31.95	25.31	88.8		5.35				
39	8.33	31.95	25.32	88.8		5.32	.29	3.11	9.39	1.95
40	8.25	31.95	25.33	88.8		5.29				
41	8.22	31.95	25.33	88.8		5.27				
42	8.21	31.95	25.34	88.8		5.22				
43	8.20	31.95	25.34	88.8		5.19				
44	8.20	31.95	25.35	88.8		5.16				
45	8.20	31.95	25.35	88.8		5.14				
46	8.20	31.95	25.35	88.8		5.13				
47	8.20	31.95	25.36	88.8		5.11				
48	8.20	31.95	25.37	88.8		5.10				
49	8.20	31.95	25.37	88.8		5.07				
50	8.20	31.95	25.37	88.8		5.00	.24	3.83	11.64	2.25



KELEZ CRUISE XWCC-15 STATION 33 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

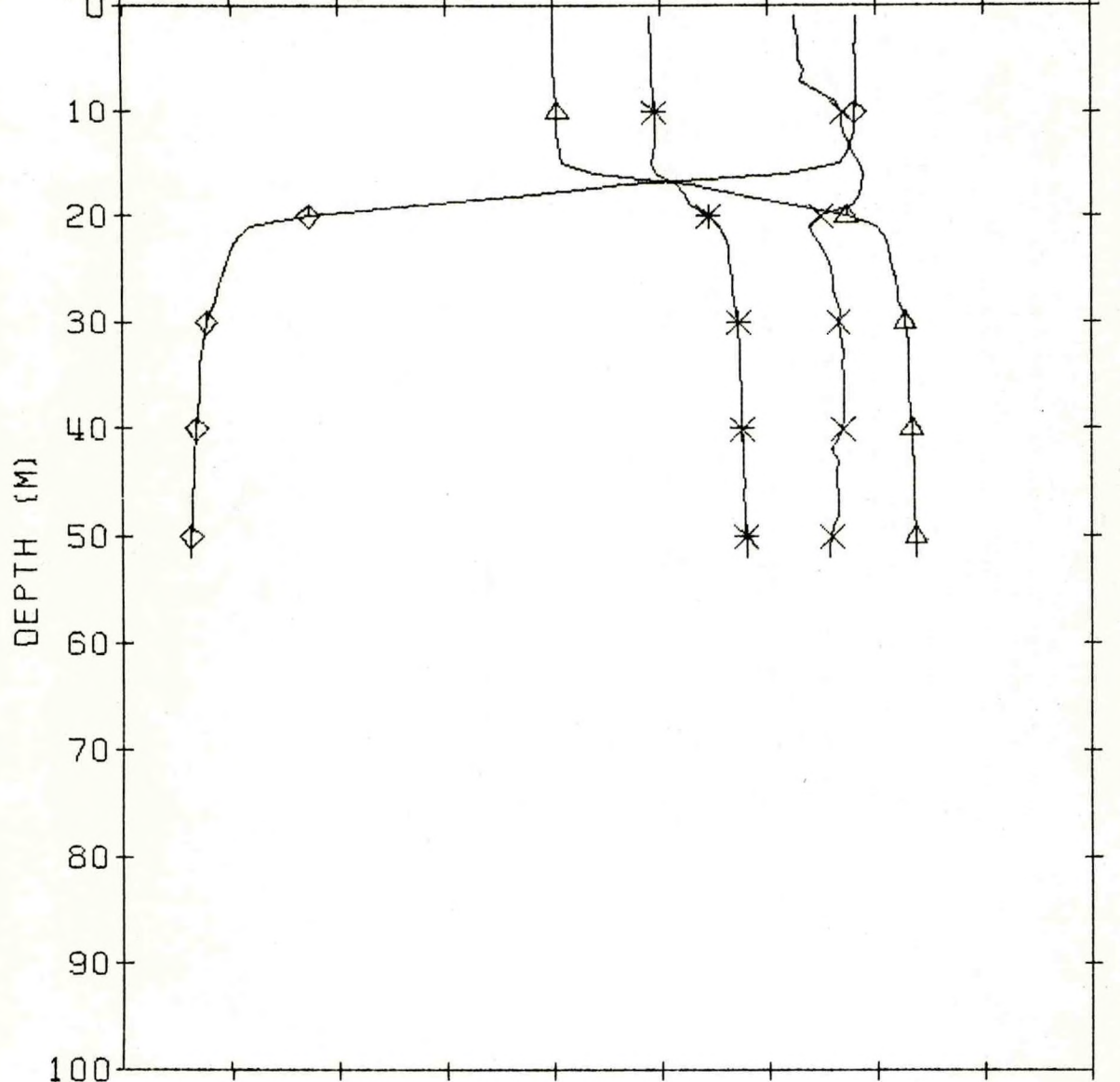
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC\_15 STA.034 LAT 40 6.0N; LONG 73 33.5W GMT 07.1 08/02/77  
 DEPTH 68 AIR D/W 71.0/69.0 BARO 13.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 30/07 SEA DIR/HT 30/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.60	31.74	21.88	89.8	7.51					
2	21.60	31.74	21.88	89.8	7.51		.02	.00	1.51	.34
3	21.60	31.74	21.88	89.8	7.51					
4	21.60	31.74	21.88	89.8	7.51					
5	21.61	31.75	21.88	89.9	7.51					
6	21.61	31.75	21.88	89.9	7.51					
7	21.61	31.75	21.88	89.9	7.51					
8	21.61	31.75	21.88	89.9	7.51					
9	21.61	31.75	21.88	89.9	7.51					
10	21.61	31.75	21.88	89.9	7.51					
11	21.61	31.75	21.88	89.9	7.51		.03	.00	4.75	.84
12	21.61	31.75	21.88	89.9	7.51					
13	21.61	31.75	21.88	89.9	7.51					
14	21.61	31.75	21.88	89.9	7.51					
15	21.61	31.75	21.88	89.9	7.51					
16	21.61	31.75	21.88	89.9	7.51					
17	21.61	31.75	21.88	89.9	7.51					
18	21.61	31.75	21.88	89.9	7.51					
19	21.61	31.75	21.88	89.9	7.51					
20	21.61	31.75	21.88	89.9	7.51					
21	21.61	31.75	21.88	89.9	7.51					
22	21.61	31.75	21.88	89.9	7.51		.02	.00	4.96	.97
23	21.61	31.75	21.88	89.9	7.51					
24	21.61	31.75	21.88	89.9	7.51					
25	21.61	31.75	21.88	89.9	7.51					
26	21.61	31.75	21.88	89.9	7.51					
27	21.61	31.75	21.88	89.9	7.51					
28	21.61	31.75	21.88	89.9	7.51					
29	21.61	31.75	21.88	89.9	7.51		.18	.42	5.17	1.05
30	21.61	31.75	21.88	89.9	7.51					
31	21.61	31.75	21.88	89.9	7.51					
32	21.61	31.75	21.88	89.9	7.51					
33	21.61	31.75	21.88	89.9	7.51					
34	21.61	31.75	21.88	89.9	7.51					
35	21.61	31.75	21.88	89.9	7.51					
36	21.61	31.75	21.88	89.9	7.51					
37	21.61	31.75	21.88	89.9	7.51					
38	21.61	31.75	21.88	89.9	7.51					
39	21.61	31.75	21.88	89.9	7.51					
40	21.61	31.75	21.88	89.9	7.51					
41	21.61	31.75	21.88	89.9	7.51					
42	21.61	31.75	21.88	89.9	7.51					
43	21.61	31.75	21.88	89.9	7.51					
44	21.61	31.75	21.88	89.9	7.51					
45	21.61	31.75	21.88	89.9	7.51					
46	21.61	31.75	21.88	89.9	7.51					
47	21.61	31.75	21.88	89.9	7.51					
48	21.61	31.75	21.88	89.9	7.51					
49	21.61	31.75	21.88	89.9	7.51					
50	21.61	31.75	21.88	89.9	7.51		.38	4.08	8.78	1.87
51	21.61	31.75	21.88	89.9	7.51		.70	.80	14.16	2.84

KELEZ CRUISE XWCC-15 STATION 34 08/02/77

TRANSMISSIVITY (0/0)

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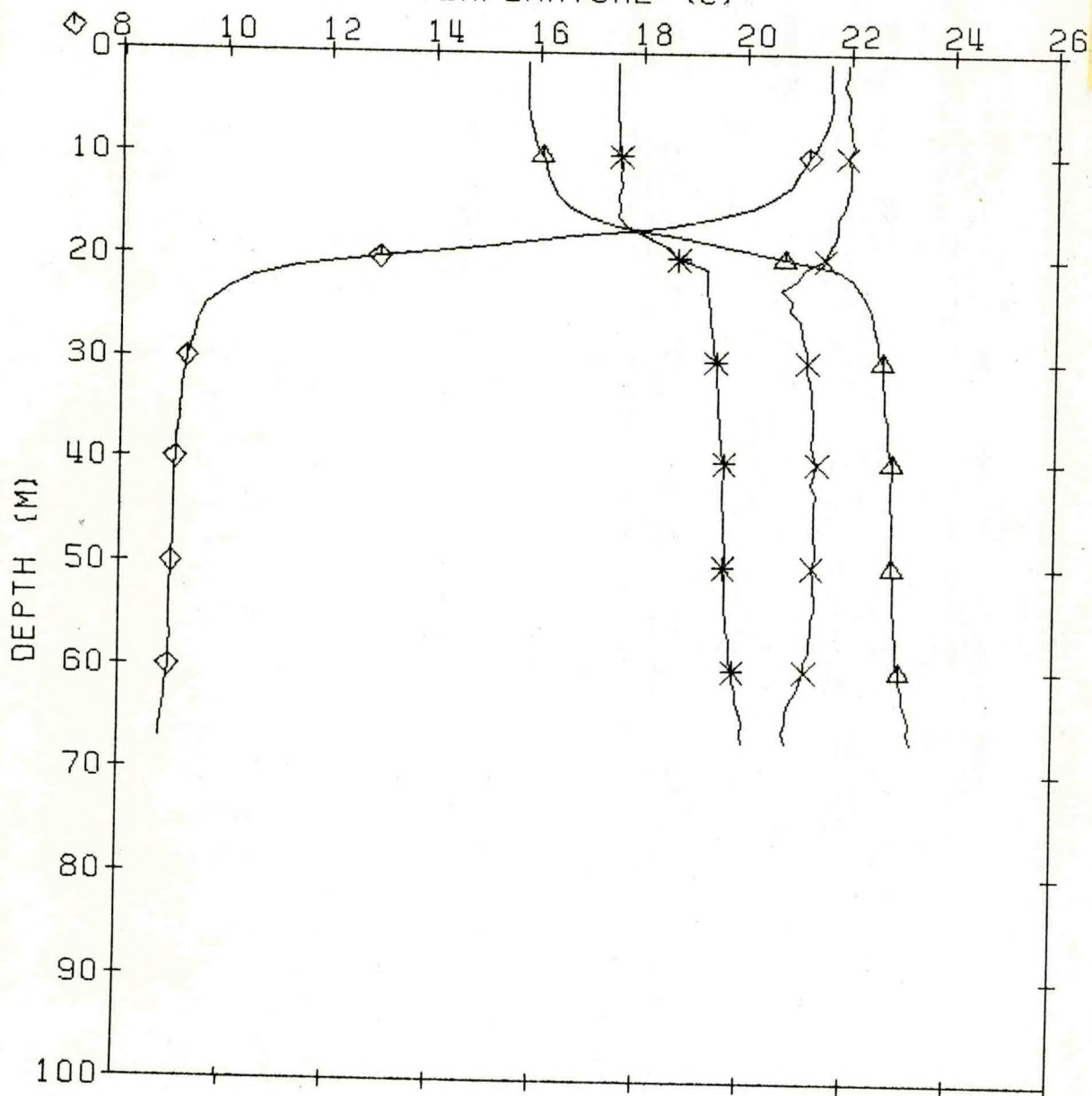
SIGMA-T

△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)





XWCC-15 STA.035 LAT 39 59.0N; LONG 73 21.6W GMT 10.5 08/02/77  
 DEPTH 68 AIR D/W 70.5/69.0 BARO 14.0 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 30/05 SEA DIR/HT 30/0 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.03	31.63	21.95	88.0		57				
2	21.03	31.63	21.95	88.0		57				
3	21.03	31.63	21.95	88.0		57				
4	21.03	31.63	21.95	88.0		57	.00	.29	1.47	.35
5	21.03	31.63	21.95	88.0		57				
6	21.03	31.63	21.95	88.0		57				
7	21.03	31.63	21.95	88.0		57				
8	21.03	31.63	21.95	88.0		57				
9	21.03	31.63	21.95	88.0		57				
10	21.03	31.63	21.95	88.0		57				
11	21.03	31.63	21.95	88.0		57	.04	.00	1.13	.27
12	21.03	31.63	21.95	88.0		57				
13	21.03	31.63	21.95	88.0		57				
14	21.03	31.63	21.95	88.0		57				
15	21.03	31.63	21.95	88.0		57				
16	21.03	31.63	21.95	88.0		57				
17	21.03	31.63	21.95	88.0		57				
18	21.03	31.63	21.95	88.0		57				
19	21.03	31.63	21.95	88.0		57				
20	21.03	31.63	21.95	88.0		57				
21	21.03	31.63	21.95	88.0		57	.07	.60	3.70	.77
22	21.03	31.63	21.95	88.0		57				
23	21.03	31.63	21.95	88.0		57				
24	21.03	31.63	21.95	88.0		57				
25	21.03	31.63	21.95	88.0		57				
26	21.03	31.63	21.95	88.0		57				
27	21.03	31.63	21.95	88.0		57				
28	21.03	31.63	21.95	88.0		57				
29	21.03	31.63	21.95	88.0		57	.29	2.25	5.82	1.16
30	21.03	31.63	21.95	88.0		57				
31	21.03	31.63	21.95	88.0		57				
32	21.03	31.63	21.95	88.0		57				
33	21.03	31.63	21.95	88.0		57				
34	21.03	31.63	21.95	88.0		57				
35	21.03	31.63	21.95	88.0		57				
36	21.03	31.63	21.95	88.0		57				
37	21.03	31.63	21.95	88.0		57				
38	21.03	31.63	21.95	88.0		57				
39	21.03	31.63	21.95	88.0		57				
40	21.03	31.63	21.95	88.0		57				
41	21.03	31.63	21.95	88.0		57				
42	21.03	31.63	21.95	88.0		57				
43	21.03	31.63	21.95	88.0		57				
44	21.03	31.63	21.95	88.0		57				
45	21.03	31.63	21.95	88.0		57				
46	21.03	31.63	21.95	88.0		57				
47	21.03	31.63	21.95	88.0		57				
48	21.03	31.63	21.95	88.0		57				
49	21.03	31.63	21.95	88.0		57				
50	21.03	31.63	21.95	88.0		57				
51	21.03	31.63	21.95	88.0		57				
52	21.03	31.63	21.95	88.0		57				
53	21.03	31.63	21.95	88.0		57				
54	21.03	31.63	21.95	88.0		57				
55	21.03	31.63	21.95	88.0		57				
56	21.03	31.63	21.95	88.0		57				
57	21.03	31.63	21.95	88.0		57				



KELEZ CRUISE XWCC-15 STATION 35 08/02/77

TRANSMISSIVITY (0/0)

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SIGMA-T

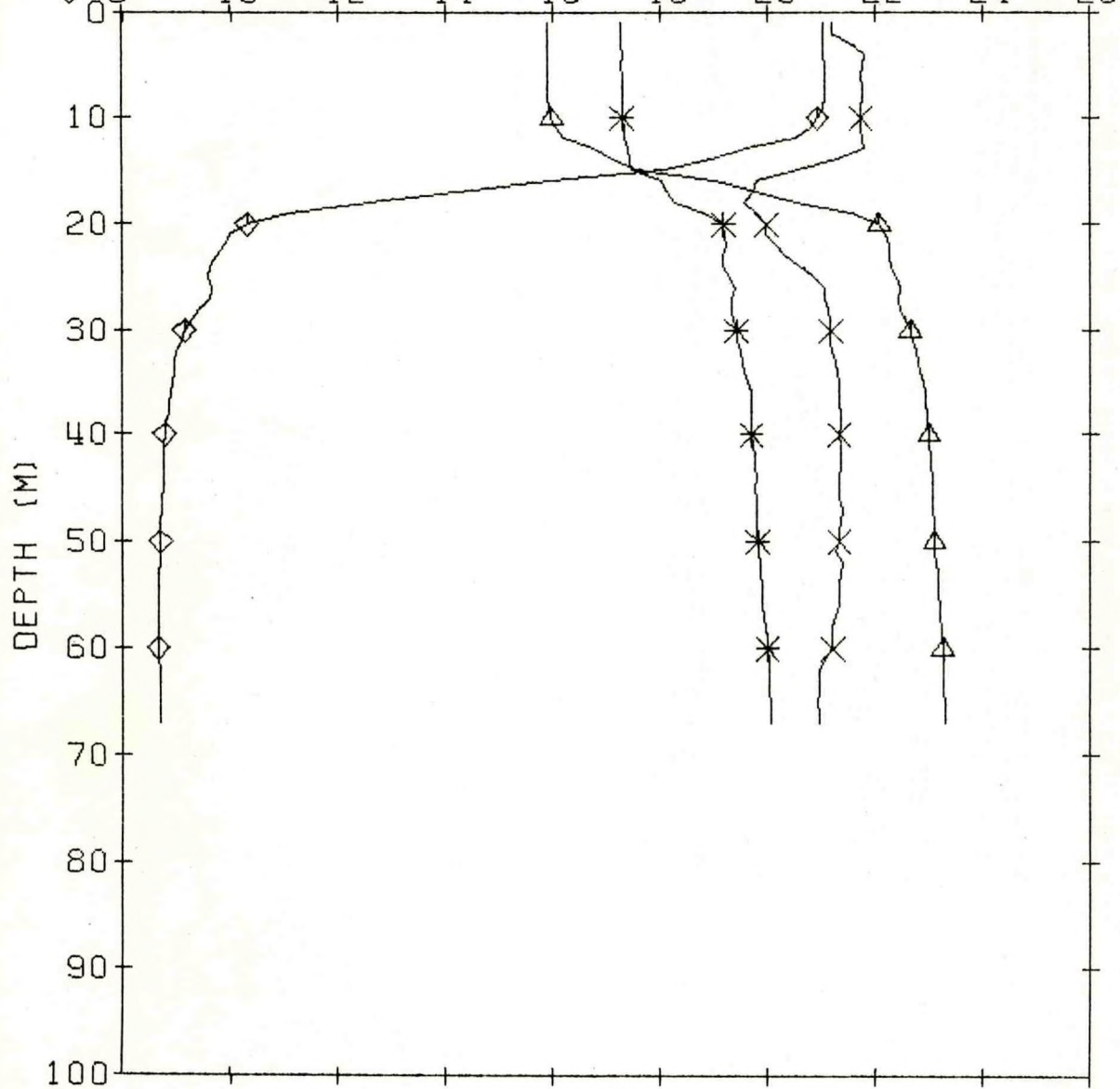
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26



XWCC-15 STA.036 LAT 39 55.0N; LONG 73 6.9W GMT 11.2 08/06/77  
 DEPTH 65 AIR D/W 76.0/74.0 BARO 18.0 VIS 7 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 26/05 SEA DIR/HT 00/0 SWELL DIR/HT 21/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.77	31.54	21.40	86.2	5.59					
2	22.77	31.54	21.40	86.2	5.59					
3	22.77	31.54	21.40	86.2	5.59		.07	.03	.81	.23
4	22.77	31.54	21.40	86.2	5.59					
5	22.77	31.54	21.40	86.2	5.59					
6	22.78	31.54	21.40	86.2	5.59					
7	22.79	31.54	21.41	86.2	5.59					
8	22.79	31.57	21.42	86.2	5.59					
9	22.53	31.64	21.55	86.2	5.59					
10	22.02	31.81	21.82	86.2	5.59					
11	21.16	31.86	22.09	86.2	5.59					
12	20.63	31.89	22.32	86.2	5.59					
13	20.63	32.04	22.32	86.2	5.59					
14	20.33	32.13	22.51	86.2	5.59					
15	20.33	32.40	22.78	86.2	5.59					
16	19.33	32.44	23.01	86.2	5.59					
17	18.00	32.48	23.36	86.2	5.59					
18	15.90	32.58	23.89	86.2	5.59					
19	15.06	32.58	24.11	86.2	5.59					
20	14.55	32.64	24.32	86.2	5.59		.02	.90	.77	.25
21	12.57	32.72	24.73	86.2	5.59					
22	11.47	32.78	24.99	86.2	5.59					
23	11.44	32.79	25.00	86.2	5.59					
24	11.39	32.79	25.00	86.2	5.59					
25	10.91	32.83	25.13	86.2	5.59					
26	10.47	32.87	25.23	86.2	5.59					
27	10.33	32.90	25.27	86.2	5.59					
28	10.43	32.93	25.28	86.2	5.59					
29	10.44	33.07	25.45	86.2	5.59					
30	10.44	33.11	25.42	86.2	5.59		.04	.93	1.22	.39
31	10.44	33.15	25.45	86.2	5.59					
32	10.47	33.15	25.45	86.2	5.59					
33	10.40	33.22	25.52	86.2	5.59					
34	10.33	33.24	25.54	86.2	5.59					
35	10.33	33.22	25.53	86.2	5.59					
36	10.33	33.22	25.53	86.2	5.59					
37	10.33	33.23	25.54	86.2	5.59					
38	10.33	33.23	25.54	86.2	5.59					
39	10.33	33.23	25.54	86.2	5.59					
40	10.33	33.23	25.54	86.2	5.59		.08	.07	1.22	.31
41	10.33	33.23	25.54	86.2	5.59					
42	10.19	33.23	25.66	86.2	5.59					
43	10.04	33.23	25.67	86.2	5.59					
44	9.99	33.23	25.68	86.2	5.59					
45	9.99	33.23	25.67	86.2	5.59					
46	9.99	33.23	25.75	86.2	5.59					
47	9.99	33.23	25.88	86.2	5.59					
48	9.99	33.23	25.88	86.2	5.59					
49	9.99	33.23	25.88	86.2	5.59					
50	9.99	33.23	25.88	86.2	5.59		.29	2.31	7.25	1.44
65	9.99	33.23	25.88	86.2	5.59					



TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

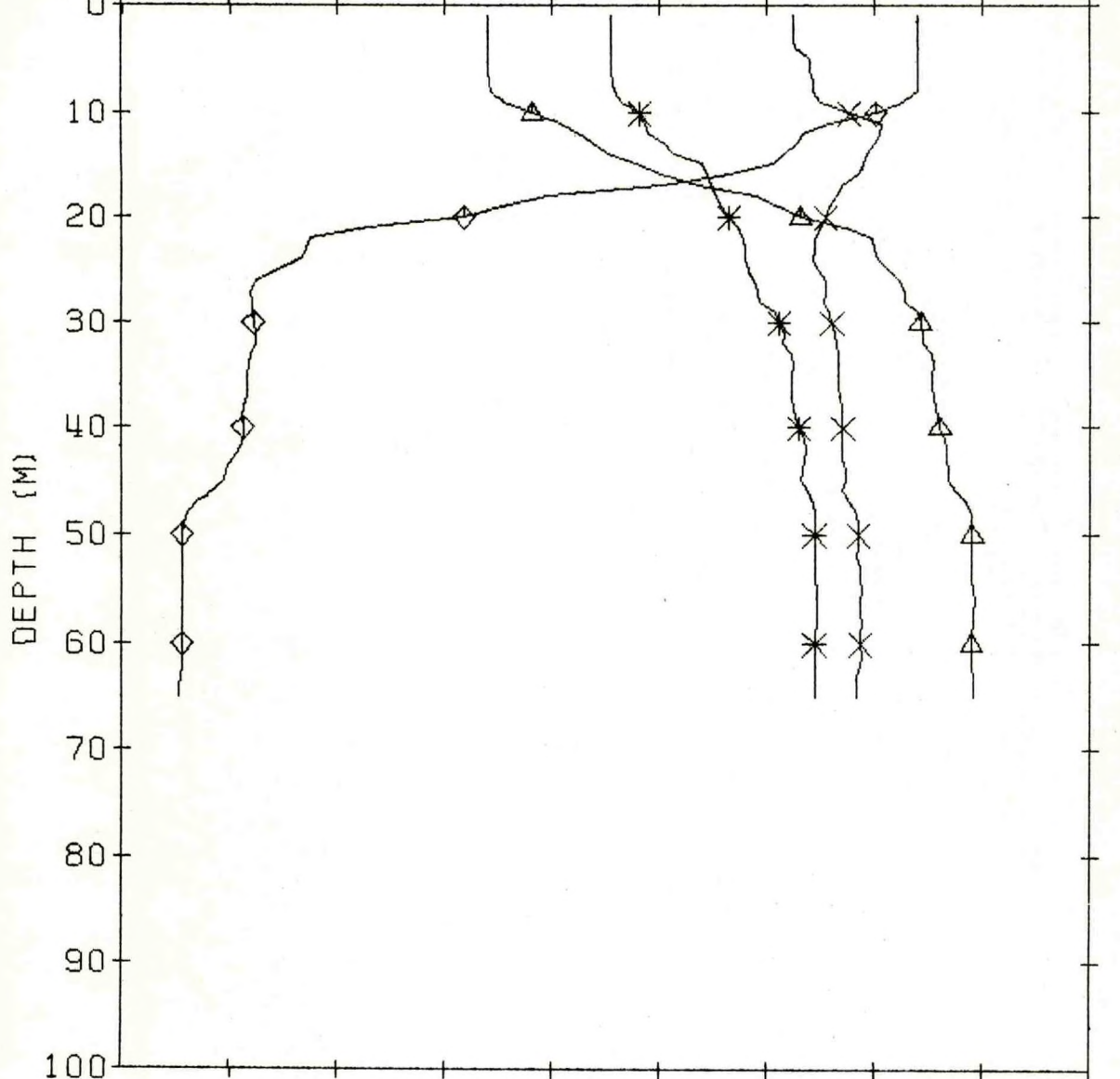
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.037 LAT 39 46.1N; LONG 72 57.7W GMT 15.1 08/06/77  
 DEPTH 75 AIR D/W 75.0/73.0 BARO 18.0 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 23/10 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.94	31.96	21.67	90.6		5.75				
2	22.94	31.96	21.67	90.6		5.75				
3	22.86	31.97	21.70	90.6		5.49	.03	.60	.00	.09
4	22.86	31.00	21.72	90.6		5.48				
5	22.86	31.01	21.73	90.6		5.48				
6	22.79	31.01	21.75	90.6		5.48				
7	22.79	31.01	21.76	90.6		5.49				
8	22.79	31.01	21.75	90.6		5.49				
9	22.56	31.00	21.80	90.6		5.48				
10	22.52	31.05	21.86	90.6		5.33				
11	22.35	31.06	21.92	90.6		5.55				
12	22.13	31.10	21.96	90.6		5.57				
13	22.13	31.10	22.01	90.6		5.58				
14	22.71	31.11	22.13	90.6		5.63				
15	22.70	31.10	22.33	89.9		5.75				
16	22.73	31.13	22.42	89.9		5.87				
17	22.43	31.17	22.44	89.9		5.88				
18	22.43	31.17	22.60	89.9		5.92				
19	22.33	31.11	22.80	89.9		5.87				
20	22.00	31.07	23.02	88.6		5.94	.34	.29	.00	.09
21	18.00	31.00	23.73	88.6		5.15				
22	16.90	31.02	24.03	88.6		5.55				
23	15.66	31.11	24.39	88.6		5.78				
24	13.68	31.08	24.85	88.6		5.10				
25	11.40	31.08	25.01	88.6		5.30				
26	11.25	31.07	25.17	88.6		5.34				
27	11.00	31.00	25.38	88.6		5.30				
28	10.76	31.06	25.48	88.6		5.09				
29	10.00	31.00	25.66	88.6		5.95	.52	1.14	4.01	.79
30	9.90	31.00	25.59	88.6		5.75				
31	9.90	31.00	25.63	88.6		5.63				
32	9.90	31.00	25.64	88.6		5.37				
33	9.90	31.00	25.65	88.6		5.36				
34	9.90	31.00	25.66	88.6		5.41				
35	9.90	31.00	25.67	88.6		5.47				
36	9.90	31.00	25.67	88.6		5.69				
37	9.90	31.00	25.78	88.6		5.77				
38	9.90	31.00	25.80	88.6		5.79				
39	9.90	31.00	25.83	88.6		5.78				
40	9.90	31.00	25.86	88.6		5.76				
41	9.90	31.00	25.89	88.6		5.70				
42	9.90	31.00	25.91	88.6		5.50				
43	9.90	31.00	25.93	88.6		5.21				
44	9.90	31.00	25.94	88.6		5.84				
45	9.90	31.00	25.96	88.6		5.99				
46	9.90	31.00	25.96	88.6		5.63	.20	3.14	7.64	1.46
47	9.90	31.00	25.94	88.6		5.46	.23	3.45	7.49	1.44
48	9.90	31.00	25.98	88.6		5.39				
49	9.90	31.00	25.99	88.6		5.35				

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

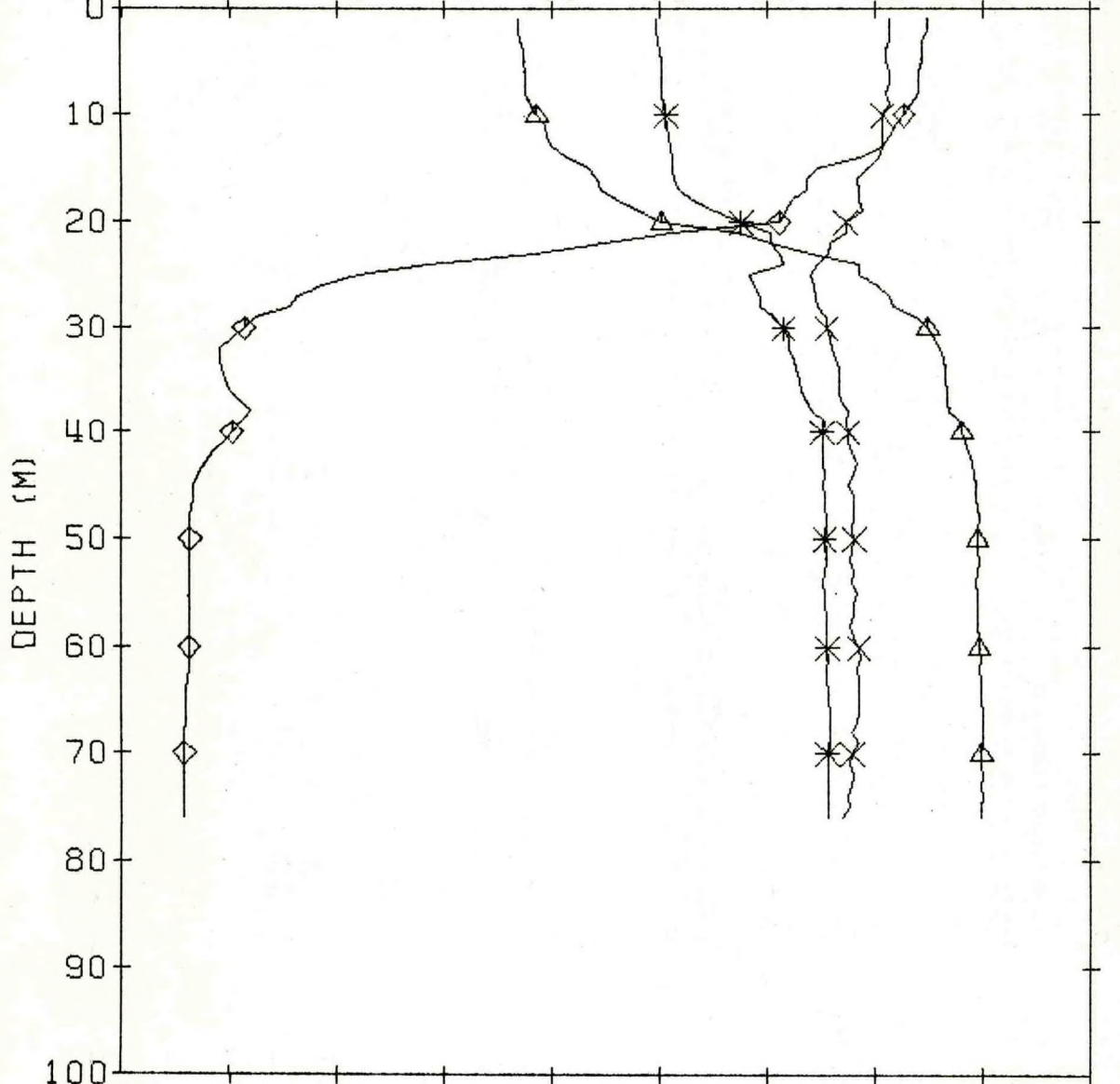
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.038 LAT 39 38.8N; LONG 72 39.8W GMT 18.1 08/06/77  
 DEPTH 75 AIR D/W 80.0/76.0 BARO 17.5 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 25/09 SEA DIR/HT 25/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.86	32.28	21.94	90.3	7.80	5.62				
2	22.86	32.28	21.94	90.3	7.80	5.62				
3	22.86	32.28	21.94	89.3	7.80	5.62	.03	.17	.00	.03
4	22.86	32.28	21.95	90.3	7.83	5.61				
5	22.70	32.30	22.00	90.7	7.83	5.62				
6	22.38	32.31	22.09	90.4	7.85	5.63				
7	22.33	32.28	22.12	90.3	7.85	5.66				
8	21.97	32.28	22.19	90.3	7.85	5.69				
9	21.88	32.44	22.33	90.4	7.84	5.76				
10	21.86	32.77	23.34	90.9	7.85	5.77				
11	21.84	32.44	23.78	90.8	7.85	5.75				
12	21.80	32.47	23.89	90.9	7.84	5.69				
13	21.80	32.53	23.93	91.3	7.85	5.68				
14	21.74	32.55	23.97	90.0	7.85	5.67				
15	21.40	32.51	24.03	90.6	7.84	5.70				
16	20.50	32.18	24.03	90.3	7.83	5.79				
17	18.95	32.06	24.34	90.3	7.81	5.98				
18	16.95	32.95	24.84	89.2	7.79	6.35				
19	14.95	32.51	24.86	88.7	7.77	6.64				
20	13.64	32.34	25.00	88.3	7.76	6.78	.04	.18	.57	.16
21	13.14	32.30	25.07	88.3	7.75	6.92				
22	12.97	32.31	25.11	88.7	7.77	6.97				
23	12.83	32.34	25.16	88.1	7.78	6.94				
24	12.83	32.40	25.25	88.1	7.78	6.97				
25	12.80	32.57	25.39	88.7	7.77	7.06				
26	12.80	32.76	25.55	88.8	7.75	7.17				
27	12.80	32.90	25.65	88.8	7.75	7.04				
28	12.80	32.02	25.73	88.8	7.75	7.09				
29	12.80	32.06	25.76	88.8	7.72	7.57				
30	12.80	32.06	25.77	88.8	7.71	7.60				
31	12.80	32.10	25.79	88.9	7.70	7.64				
32	12.80	32.10	25.81	88.9	7.71	7.64				
33	12.80	32.99	25.80	88.9	7.71	7.65				
34	12.80	32.88	25.90	88.9	7.70	7.68				
35	12.80	32.88	25.99	88.9	7.70	7.68				
36	12.80	32.88	25.99	88.9	7.69	7.55				
37	12.80	32.88	26.00	88.9	7.67	7.40				
38	12.80	32.88	26.00	88.9	7.65	7.44				
40	12.80	32.79	26.07	88.9	7.62	7.21				
41	12.80	32.79	26.10	88.9	7.52	7.09				
42	12.80	32.77	26.13	88.9	7.49	7.00				
43	12.80	32.77	26.14	88.9	7.43	6.87				
44	12.80	32.77	26.14	88.9	7.40	6.73				
45	12.80	32.79	26.16	88.9	7.33	6.60				
46	12.80	32.79	26.15	88.9	7.37	6.49				
47	12.80	32.79	26.16	88.9	7.33	6.46				
48	12.80	32.79	26.16	88.9	7.33	6.43				
49	12.80	32.81	26.17	89.4	7.36	6.40				
50	12.80	32.81	26.22	89.4	7.36	6.38	.32	7.42	11.89	2.17
60	12.80	32.90	26.24	89.4	7.45	6.37				
70	12.80	32.90	26.24	89.4	7.51	6.41				
75	12.80	32.90	26.24	89.4	7.51	6.42	.11	6.48	10.53	1.91

KELEZ CRUISE XWCC-15 STATION 38 08/06/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

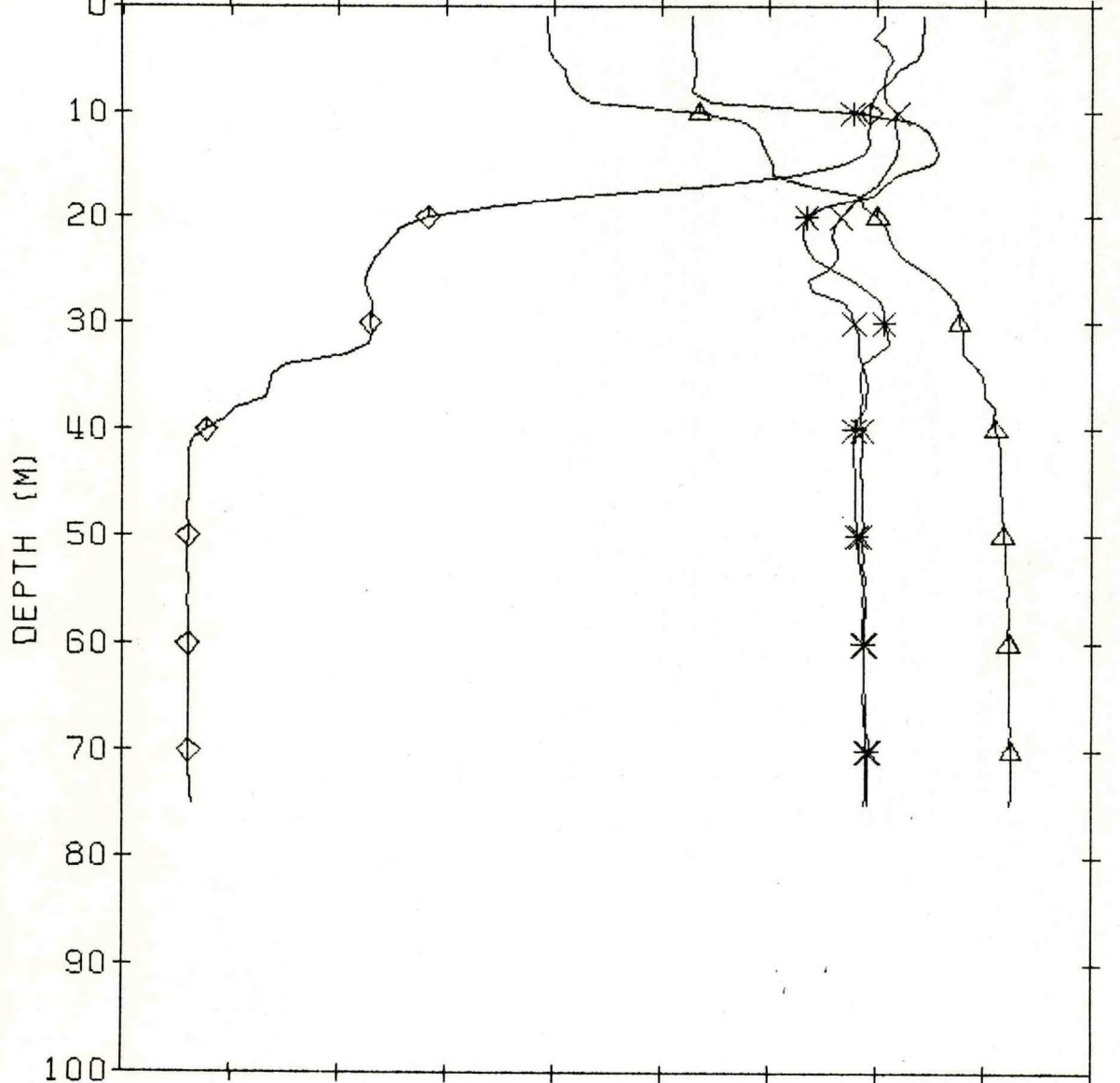
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.039 LAT 39 32.5N; LONG 72 26.5W GMT 20.2 08/06/77  
 DEPTH 128 AIR D/W 78.0/76.0 BARO 17.0 VIS 6 CLD TYP/CVR X/4  
 WETR 1 WIND DIR/SPD 23/10 SEA DIR/HT 23/0 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.33	32.09	21.66	89.6	5.69					
2	23.33	32.09	21.66	89.6	5.69					
3	22.88	32.12	21.83	89.9	5.67		.06	.70	.40	.12
4	22.88	32.12	21.83	89.9	5.64					
5	22.44	32.10	21.93	89.9	5.64					
6	22.44	32.10	21.93	89.9	5.71					
7	21.48	32.14	22.00	89.9	5.77					
8	21.48	32.14	22.00	89.9	5.84					
9	20.74	32.15	22.24	88.8	5.94					
10	19.99	32.30	22.73	88.8	6.10					
11	19.99	32.30	22.73	88.8	6.30					
12	19.99	32.30	22.73	88.8	6.47					
13	19.99	32.30	22.73	88.8	6.51					
14	19.99	32.30	22.73	88.8	6.57					
15	17.99	32.44	23.11	88.8	6.62					
16	17.99	32.44	23.11	88.8	6.71					
17	17.99	32.44	23.11	88.8	6.77					
18	17.99	32.44	23.11	88.8	6.85					
19	15.99	32.08	22.44	87.7	6.85		.06	.80	.00	.06
20	15.99	32.08	22.44	87.7	6.88					
21	15.99	32.08	22.44	87.7	6.88					
22	15.99	32.08	22.44	87.7	6.88					
23	15.99	32.08	22.44	87.7	6.88					
24	15.99	32.08	22.44	87.7	6.88					
25	15.99	32.08	22.44	87.7	6.88					
26	15.99	32.08	22.44	87.7	6.88					
27	15.99	32.08	22.44	87.7	6.88					
28	15.99	32.08	22.44	87.7	6.88					
29	15.99	32.08	22.44	87.7	6.88					
30	15.99	32.08	22.44	87.7	6.88					
31	15.99	32.08	22.44	87.7	6.88					
32	15.99	32.08	22.44	87.7	6.88					
33	15.99	32.08	22.44	87.7	6.88					
34	15.99	32.08	22.44	87.7	6.88					
35	15.99	32.08	22.44	87.7	6.88					
36	15.99	32.08	22.44	87.7	6.88					
37	15.99	32.08	22.44	87.7	6.88					
38	15.99	32.08	22.44	87.7	6.88					
39	15.99	32.08	22.44	87.7	6.88					
40	15.99	32.08	22.44	87.7	6.88					
41	15.99	32.08	22.44	87.7	6.88					
42	15.99	32.08	22.44	87.7	6.88					
43	15.99	32.08	22.44	87.7	6.88					
44	15.99	32.08	22.44	87.7	6.88					
45	15.99	32.08	22.44	87.7	6.88					
46	15.99	32.08	22.44	87.7	6.88					
47	15.99	32.08	22.44	87.7	6.88					
48	15.99	32.08	22.44	87.7	6.88					
49	15.99	32.08	22.44	87.7	6.88					
50	15.99	32.08	22.44	87.7	6.88					
51	15.99	32.08	22.44	87.7	6.88					
52	15.99	32.08	22.44	87.7	6.88					
53	15.99	32.08	22.44	87.7	6.88					
54	15.99	32.08	22.44	87.7	6.88					
55	15.99	32.08	22.44	87.7	6.88					
56	15.99	32.08	22.44	87.7	6.88					
57	15.99	32.08	22.44	87.7	6.88					
58	15.99	32.08	22.44	87.7	6.88					
59	15.99	32.08	22.44	87.7	6.88					
60	15.99	32.08	22.44	87.7	6.88					
61	15.99	32.08	22.44	87.7	6.88					
62	15.99	32.08	22.44	87.7	6.88					
63	15.99	32.08	22.44	87.7	6.88					
64	15.99	32.08	22.44	87.7	6.88					
65	15.99	32.08	22.44	87.7	6.88					
66	15.99	32.08	22.44	87.7	6.88					
67	15.99	32.08	22.44	87.7	6.88					
68	15.99	32.08	22.44	87.7	6.88					
69	15.99	32.08	22.44	87.7	6.88					
70	15.99	32.08	22.44	87.7	6.88					
71	15.99	32.08	22.44	87.7	6.88					
72	15.99	32.08	22.44	87.7	6.88					
73	15.99	32.08	22.44	87.7	6.88					
74	15.99	32.08	22.44	87.7	6.88					
75	15.99	32.08	22.44	87.7	6.88					
76	15.99	32.08	22.44	87.7	6.88					
77	15.99	32.08	22.44	87.7	6.88					
78	15.99	32.08	22.44	87.7	6.88					
79	15.99	32.08	22.44	87.7	6.88					
80	15.99	32.08	22.44	87.7	6.88					
81	15.99	32.08	22.44	87.7	6.88					
82	15.99	32.08	22.44	87.7	6.88					
83	15.99	32.08	22.44	87.7	6.88					
84	15.99	32.08	22.44	87.7	6.88					
85	15.99	32.08	22.44	87.7	6.88					
86	15.99	32.08	22.44	87.7	6.88					
87	15.99	32.08	22.44	87.7	6.88					
88	15.99	32.08	22.44	87.7	6.88					
89	15.99	32.08	22.44	87.7	6.88					
90	15.99	32.08	22.44	87.7	6.88					
91	15.99	32.08	22.44	87.7	6.88					
92	15.99	32.08	22.44	87.7	6.88					
93	15.99	32.08	22.44	87.7	6.88					
94	15.99	32.08	22.44	87.7	6.88					
95	15.99	32.08	22.44	87.7	6.88					
96	15.99	32.08	22.44	87.7	6.88					
97	15.99	32.08	22.44	87.7	6.88					
98	15.99	32.08	22.44	87.7	6.88					
99	15.99	32.08	22.44	87.7	6.88					
100	15.99	32.08	22.44	87.7	6.88		.08	11.09	10.12	1.87
101	15.99	32.08	22.44	87.7	6.88		.14	13.37	11.34	2.14

KELEZ CRUISE XWCC-15 STATION 39 08/06/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

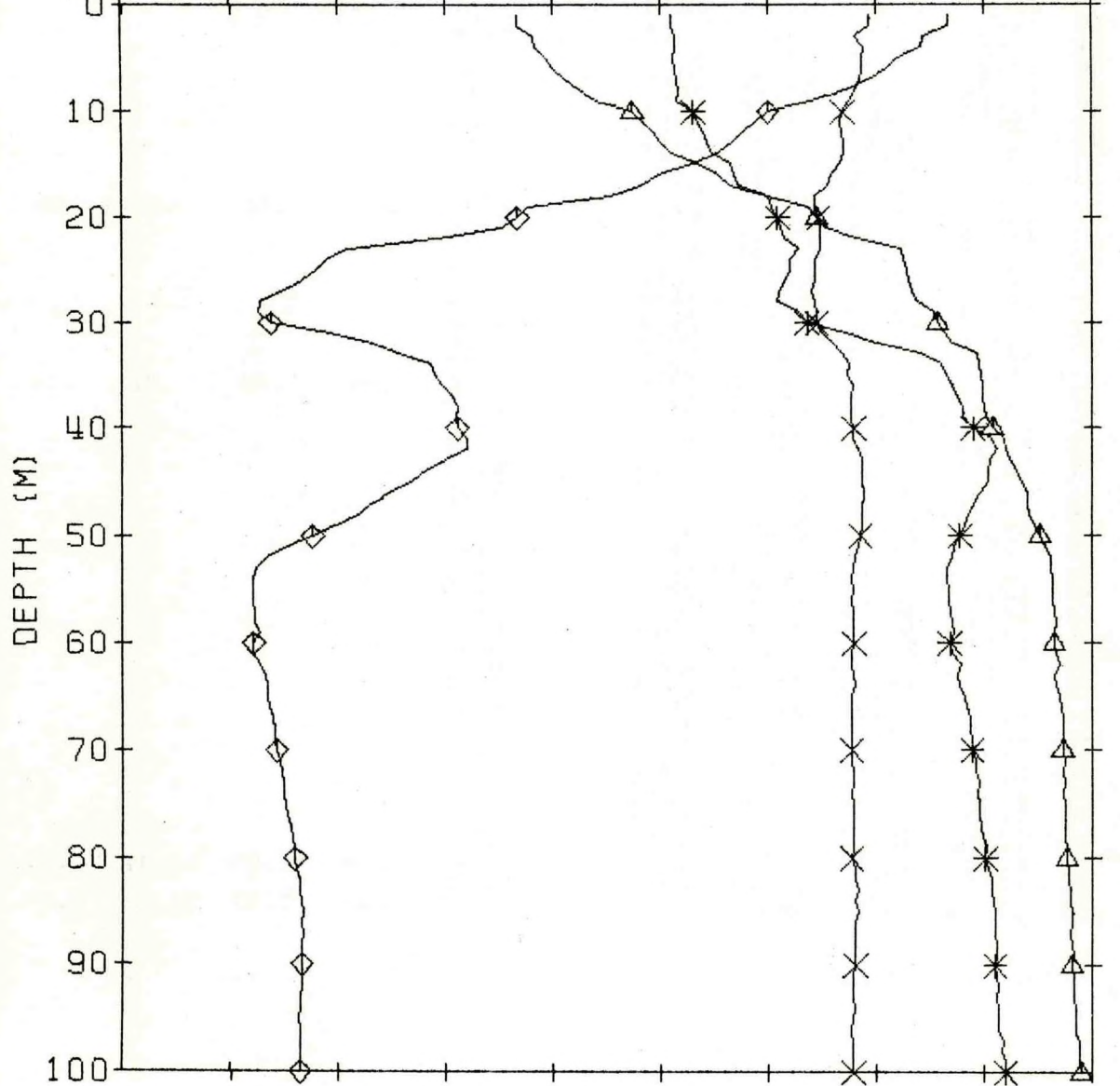
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.057 LAT 39 58.0N; LONG 71 52.0W GMT 02.1 08/07/77  
 DEPTH 109 AIR D/W 75.0/73.0 BARO 16.0 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 29/10 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.10	33.40	22.71	90.0		5.45				
2	23.10	33.40	22.71	90.0		5.45				
3	23.14	33.51	22.79	90.0		5.46	.03	.59	.00	.04
4	23.14	33.69	22.92	90.0		5.45				
5	23.18	34.03	23.17	90.0		5.45				
6	23.20	34.44	23.27	90.0		5.43				
7	23.16	34.72	23.70	90.0		5.42				
8	23.09	34.91	23.86	90.0		5.41				
9	23.00	34.99	23.92	90.0		5.40				
10	23.00	35.04	23.97	90.0		5.38				
11	23.00	35.09	24.05	90.0		5.39				
12	23.00	35.11	24.07	90.0		5.39				
13	23.00	35.12	24.09	90.0		5.40				
14	23.00	35.13	24.09	90.0		5.39				
15	23.00	35.14	24.10	90.0		5.39				
16	23.00	35.15	24.11	90.0		5.39				
17	23.00	35.17	24.14	90.0		5.39				
18	23.00	35.16	24.19	90.0		5.41				
19	23.00	35.16	24.26	90.0		5.46				
20	23.00	35.15	24.99	90.0		5.49	.01	.63	.00	.00
21	23.00	35.10	24.54	90.0		5.63				
22	23.00	35.17	24.88	90.0		5.84				
23	23.00	35.21	24.99	90.0		6.00				
24	23.00	35.16	25.00	90.0		6.10				
25	23.00	35.11	25.00	90.0		6.15				
26	23.00	35.09	25.10	90.0		6.17				
27	23.00	35.00	25.16	90.0		6.28				
28	23.00	35.00	25.24	90.0		6.40				
29	23.00	35.00	25.33	90.0		6.41				
30	23.00	35.00	25.48	90.0		6.55				
31	23.00	35.00	25.79	90.0		6.77				
32	23.00	35.00	25.73	90.0		6.86				
33	23.00	35.00	25.72	90.0		6.86				
34	23.00	35.00	25.66	90.0		6.86				
35	23.00	35.00	25.60	90.0		6.86				
36	23.00	35.00	25.65	90.0		6.86				
37	23.00	35.00	25.66	90.0		6.86				
38	23.00	35.00	25.66	90.0		6.86				
39	23.00	35.00	25.66	90.0		6.86				
40	23.00	35.00	25.66	90.0		6.86				
41	23.00	35.00	25.66	90.0		6.86				
42	23.00	35.00	25.66	90.0		6.86				
43	23.00	35.00	25.66	90.0		6.86				
44	23.00	35.00	25.66	90.0		6.86				
45	23.00	35.00	25.66	90.0		6.86				
46	23.00	35.00	25.66	90.0		6.86				
47	23.00	35.00	25.66	90.0		6.86				
48	23.00	35.00	25.66	90.0		6.86				
49	23.00	35.00	25.66	90.0		6.86				
50	23.00	35.00	25.66	90.0		6.86				
51	23.00	35.00	25.66	90.0		6.86				
52	23.00	35.00	25.66	90.0		6.86				
53	23.00	35.00	25.66	90.0		6.86				
54	23.00	35.00	25.66	90.0		6.86				
55	23.00	35.00	25.66	90.0		6.86				
56	23.00	35.00	25.66	90.0		6.86				
57	23.00	35.00	25.66	90.0		6.86				
58	23.00	35.00	25.66	90.0		6.86				
59	23.00	35.00	25.66	90.0		6.86				
60	23.00	35.00	25.66	90.0		6.86				
61	23.00	35.00	25.66	90.0		6.86				
62	23.00	35.00	25.66	90.0		6.86				
63	23.00	35.00	25.66	90.0		6.86				
64	23.00	35.00	25.66	90.0		6.86				
65	23.00	35.00	25.66	90.0		6.86				
66	23.00	35.00	25.66	90.0		6.86				
67	23.00	35.00	25.66	90.0		6.86				
68	23.00	35.00	25.66	90.0		6.86				
69	23.00	35.00	25.66	90.0		6.86				
70	23.00	35.00	25.66	90.0		6.86				
71	23.00	35.00	25.66	90.0		6.86				
72	23.00	35.00	25.66	90.0		6.86				
73	23.00	35.00	25.66	90.0		6.86				
74	23.00	35.00	25.66	90.0		6.86				
75	23.00	35.00	25.66	90.0		6.86				
76	23.00	35.00	25.66	90.0		6.86				
77	23.00	35.00	25.66	90.0		6.86				
78	23.00	35.00	25.66	90.0		6.86				
79	23.00	35.00	25.66	90.0		6.86				
80	23.00	35.00	25.66	90.0		6.86				
81	23.00	35.00	25.66	90.0		6.86				
82	23.00	35.00	25.66	90.0		6.86				
83	23.00	35.00	25.66	90.0		6.86				
84	23.00	35.00	25.66	90.0		6.86				
85	23.00	35.00	25.66	90.0		6.86				
86	23.00	35.00	25.66	90.0		6.86				
87	23.00	35.00	25.66	90.0		6.86				
88	23.00	35.00	25.66	90.0		6.86				
89	23.00	35.00	25.66	90.0		6.86				
90	23.00	35.00	25.66	90.0		6.86				
91	23.00	35.00	25.66	90.0		6.86				
92	23.00	35.00	25.66	90.0		6.86				
93	23.00	35.00	25.66	90.0		6.86				
94	23.00	35.00	25.66	90.0		6.86				
95	23.00	35.00	25.66	90.0		6.86				
96	23.00	35.00	25.66	90.0		6.86				
97	23.00	35.00	25.66	90.0		6.86				
98	23.00	35.00	25.66	90.0		6.86				
99	23.00	35.00	25.66	90.0		6.86				
100	23.00	35.00	25.66	90.0		6.86				

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

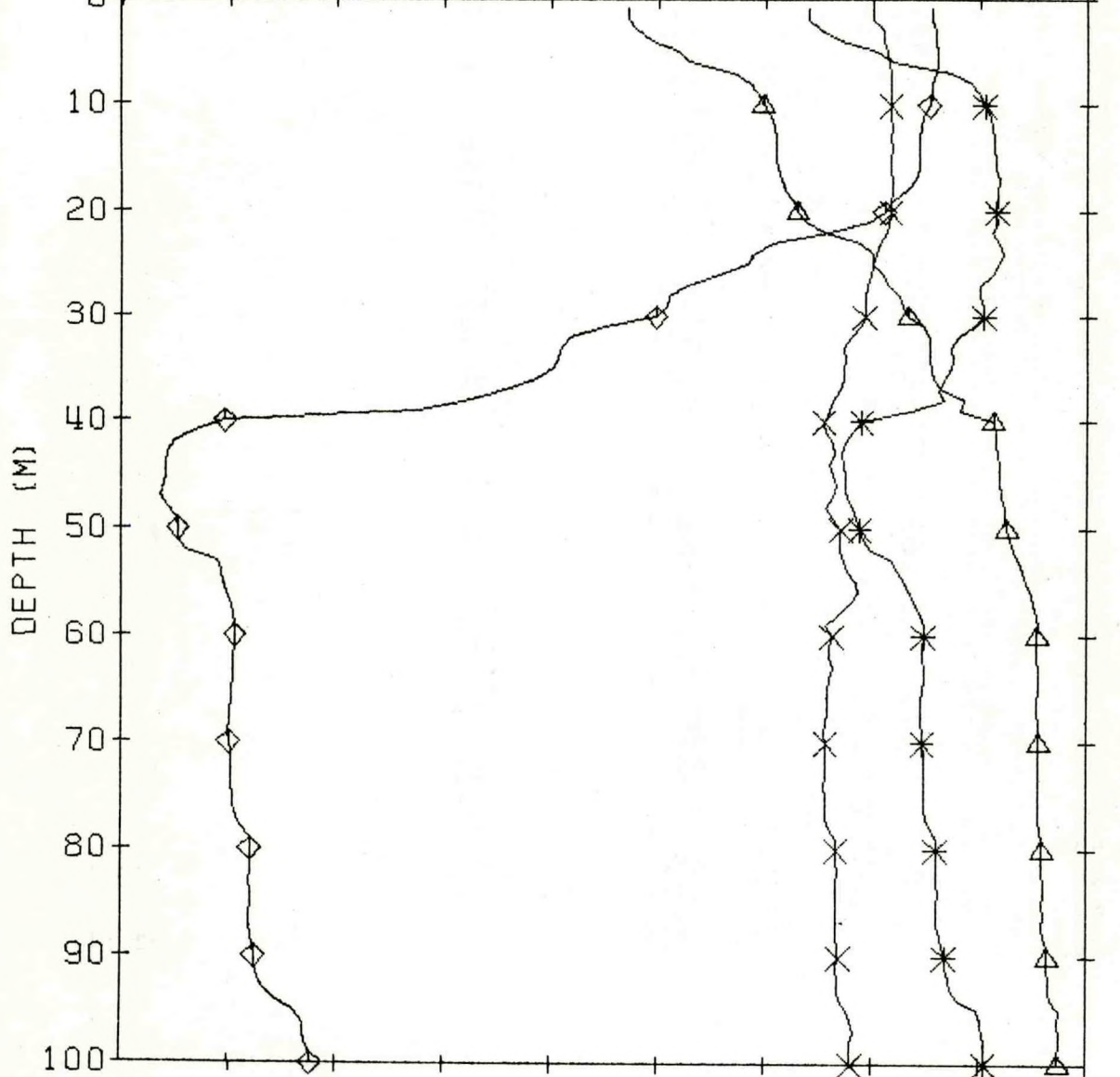
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.058 LAT 40 7.9N; LONG 71 58.0W GMT 04.5 08/07/77  
 DEPTH 73 AIR D/W 75.0/72.0 BARO 16.0 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 25/14 SEA DIR/HT 25/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.20	32.17	22.04	88.4	7.79	5.50				
2	22.20	32.17	22.04	88.4	7.79	5.50				
3	22.20	32.17	22.04	88.4	7.79	5.50	.02	.49	.69	.18
4	22.20	32.17	22.04	88.4	7.79	5.50				
5	22.20	32.17	22.04	88.4	7.79	5.50				
6	22.20	32.17	22.04	88.4	7.79	5.50				
7	22.20	32.17	22.04	88.4	7.79	5.50				
8	22.20	32.17	22.04	88.4	7.79	5.50				
9	22.20	32.17	22.04	88.4	7.79	5.50				
10	22.20	32.17	22.04	88.4	7.79	5.50				
11	22.20	32.17	22.04	88.4	7.79	5.50				
12	22.20	32.17	22.04	88.4	7.79	5.50				
13	22.20	32.17	22.04	88.4	7.79	5.50				
14	22.20	32.17	22.04	88.4	7.79	5.50				
15	22.20	32.17	22.04	88.4	7.79	5.50				
16	22.20	32.17	22.04	88.4	7.79	5.50				
17	22.20	32.17	22.04	88.4	7.79	5.50				
18	22.20	32.17	22.04	88.4	7.79	5.50				
19	22.20	32.17	22.04	88.4	7.79	5.50				
20	22.20	32.17	22.04	88.4	7.79	5.50	.01	.82	.68	.42
21	22.20	32.17	22.04	88.4	7.79	5.50				
22	22.20	32.17	22.04	88.4	7.79	5.50				
23	22.20	32.17	22.04	88.4	7.79	5.50				
24	22.20	32.17	22.04	88.4	7.79	5.50				
25	22.20	32.17	22.04	88.4	7.79	5.50				
26	22.20	32.17	22.04	88.4	7.79	5.50				
27	22.20	32.17	22.04	88.4	7.79	5.50				
28	22.20	32.17	22.04	88.4	7.79	5.50				
29	22.20	32.17	22.04	88.4	7.79	5.50				
30	22.20	32.17	22.04	88.4	7.79	5.50	.18	2.47	1.11	.53
31	22.20	32.17	22.04	88.4	7.79	5.50				
32	22.20	32.17	22.04	88.4	7.79	5.50				
33	22.20	32.17	22.04	88.4	7.79	5.50				
34	22.20	32.17	22.04	88.4	7.79	5.50				
35	22.20	32.17	22.04	88.4	7.79	5.50				
36	22.20	32.17	22.04	88.4	7.79	5.50				
37	22.20	32.17	22.04	88.4	7.79	5.50				
38	22.20	32.17	22.04	88.4	7.79	5.50				
39	22.20	32.17	22.04	88.4	7.79	5.50				
40	22.20	32.17	22.04	88.4	7.79	5.50				
41	22.20	32.17	22.04	88.4	7.79	5.50				
42	22.20	32.17	22.04	88.4	7.79	5.50				
43	22.20	32.17	22.04	88.4	7.79	5.50				
44	22.20	32.17	22.04	88.4	7.79	5.50				
45	22.20	32.17	22.04	88.4	7.79	5.50				
46	22.20	32.17	22.04	88.4	7.79	5.50				
47	22.20	32.17	22.04	88.4	7.79	5.50				
48	22.20	32.17	22.04	88.4	7.79	5.50				
49	22.20	32.17	22.04	88.4	7.79	5.50				
50	22.20	32.17	22.04	88.4	7.79	5.50	.15	2.36	9.76	2.03
51	22.20	32.17	22.04	88.4	7.79	5.50	.08	4.34	10.47	2.19
52	22.20	32.17	22.04	88.4	7.79	5.50				
53	22.20	32.17	22.04	88.4	7.79	5.50	.08	1.57	12.35	2.40
54	22.20	32.17	22.04	88.4	7.79	5.50				
55	22.20	32.17	22.04	88.4	7.79	5.50				
56	22.20	32.17	22.04	88.4	7.79	5.50				
57	22.20	32.17	22.04	88.4	7.79	5.50				
58	22.20	32.17	22.04	88.4	7.79	5.50				
59	22.20	32.17	22.04	88.4	7.79	5.50				
60	22.20	32.17	22.04	88.4	7.79	5.50				
61	22.20	32.17	22.04	88.4	7.79	5.50				
62	22.20	32.17	22.04	88.4	7.79	5.50				
63	22.20	32.17	22.04	88.4	7.79	5.50				
64	22.20	32.17	22.04	88.4	7.79	5.50				
65	22.20	32.17	22.04	88.4	7.79	5.50				
66	22.20	32.17	22.04	88.4	7.79	5.50				
67	22.20	32.17	22.04	88.4	7.79	5.50				
68	22.20	32.17	22.04	88.4	7.79	5.50				
69	22.20	32.17	22.04	88.4	7.79	5.50				
70	22.20	32.17	22.04	88.4	7.79	5.50				
71	22.20	32.17	22.04	88.4	7.79	5.50				
72	22.20	32.17	22.04	88.4	7.79	5.50				
73	22.20	32.17	22.04	88.4	7.79	5.50				
74	22.20	32.17	22.04	88.4	7.79	5.50				

KELEZ CRUISE XWCC-15 STATION 58 08/07/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

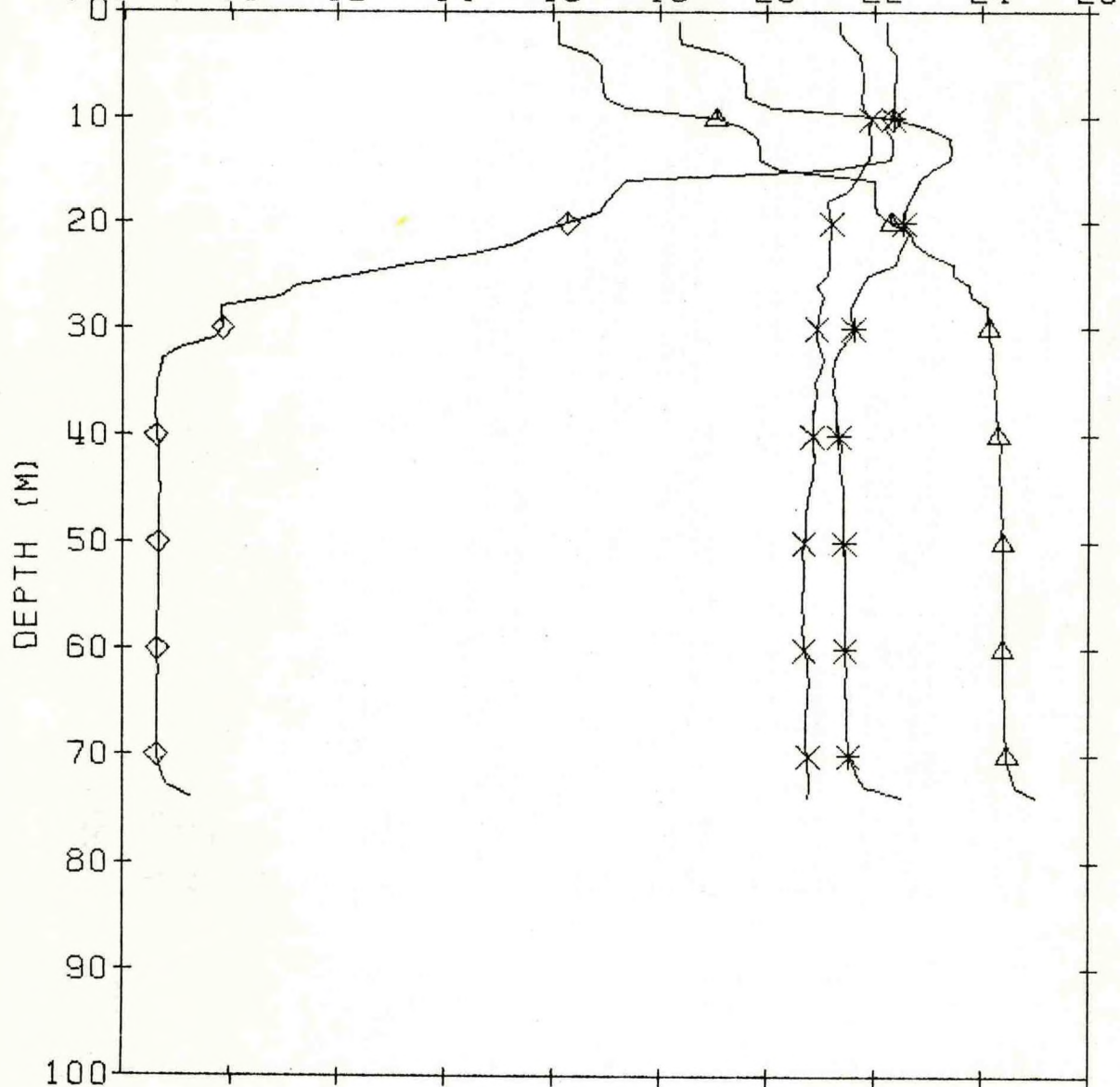
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.059 LAT 40 17.8N; LONG 72 4.0W GMT 07.0 08/07/77  
 DEPTH 60 AIR D/W 74.0/73.0 BARO 15.5 VIS 6 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 25/11 SEA DIR/HT 25/1 SWELL DIR/HT 25/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.26	32.08	21.95	89.7	7.53					
2	22.26	32.08	21.95	89.7	7.53					
3	22.26	32.07	21.96	89.7	7.53		.03	.48	.38	.16
4	22.26	32.08	21.97	89.7	7.53					
5	22.26	32.08	21.97	89.7	7.53					
6	22.26	32.08	21.97	89.7	7.53					
7	22.26	32.07	21.96	89.7	7.53					
8	22.26	32.12	22.02	89.7	7.53					
9	22.26	32.11	22.08	89.7	7.53					
10	22.26	32.12	22.11	89.7	7.53					
11	22.26	32.10	22.12	89.7	7.53					
12	22.26	32.11	22.22	89.7	7.53					
13	22.26	32.11	22.22	89.7	7.53					
14	22.26	32.11	22.22	89.7	7.53					
15	22.26	32.11	22.22	89.7	7.53					
16	22.26	32.11	22.22	89.7	7.53					
17	22.26	32.11	22.22	89.7	7.53					
18	22.26	32.11	22.22	89.7	7.53					
19	22.26	32.11	22.22	89.7	7.53					
20	22.26	32.11	22.22	89.7	7.53		.03	.75	.00	.02
21	22.26	32.11	22.22	89.7	7.53					
22	22.26	32.11	22.22	89.7	7.53					
23	22.26	32.11	22.22	89.7	7.53					
24	22.26	32.11	22.22	89.7	7.53					
25	22.26	32.11	22.22	89.7	7.53					
26	22.26	32.11	22.22	89.7	7.53					
27	22.26	32.11	22.22	89.7	7.53					
28	22.26	32.11	22.22	89.7	7.53					
29	22.26	32.11	22.22	89.7	7.53					
30	22.26	32.11	22.22	89.7	7.53		.03	.62	.11	.12
31	22.26	32.11	22.22	89.7	7.53					
32	22.26	32.11	22.22	89.7	7.53					
33	22.26	32.11	22.22	89.7	7.53					
34	22.26	32.11	22.22	89.7	7.53					
35	22.26	32.11	22.22	89.7	7.53					
36	22.26	32.11	22.22	89.7	7.53					
37	22.26	32.11	22.22	89.7	7.53					
38	22.26	32.11	22.22	89.7	7.53					
39	22.26	32.11	22.22	89.7	7.53					
40	22.26	32.11	22.22	89.7	7.53		.03	.75	3.21	.71
41	22.26	32.11	22.22	89.7	7.53					
42	22.26	32.11	22.22	89.7	7.53					
43	22.26	32.11	22.22	89.7	7.53					
44	22.26	32.11	22.22	89.7	7.53					
45	22.26	32.11	22.22	89.7	7.53					
46	22.26	32.11	22.22	89.7	7.53					
47	22.26	32.11	22.22	89.7	7.53					
48	22.26	32.11	22.22	89.7	7.53					
49	22.26	32.11	22.22	89.7	7.53					
50	22.26	32.11	22.22	89.7	7.53		.08	.56	9.51	1.80
60	22.26	32.11	22.22	89.7	7.53		.30	3.42	12.63	.02

KELEZ CRUISE XWCC-15 STATION 59 08/07/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

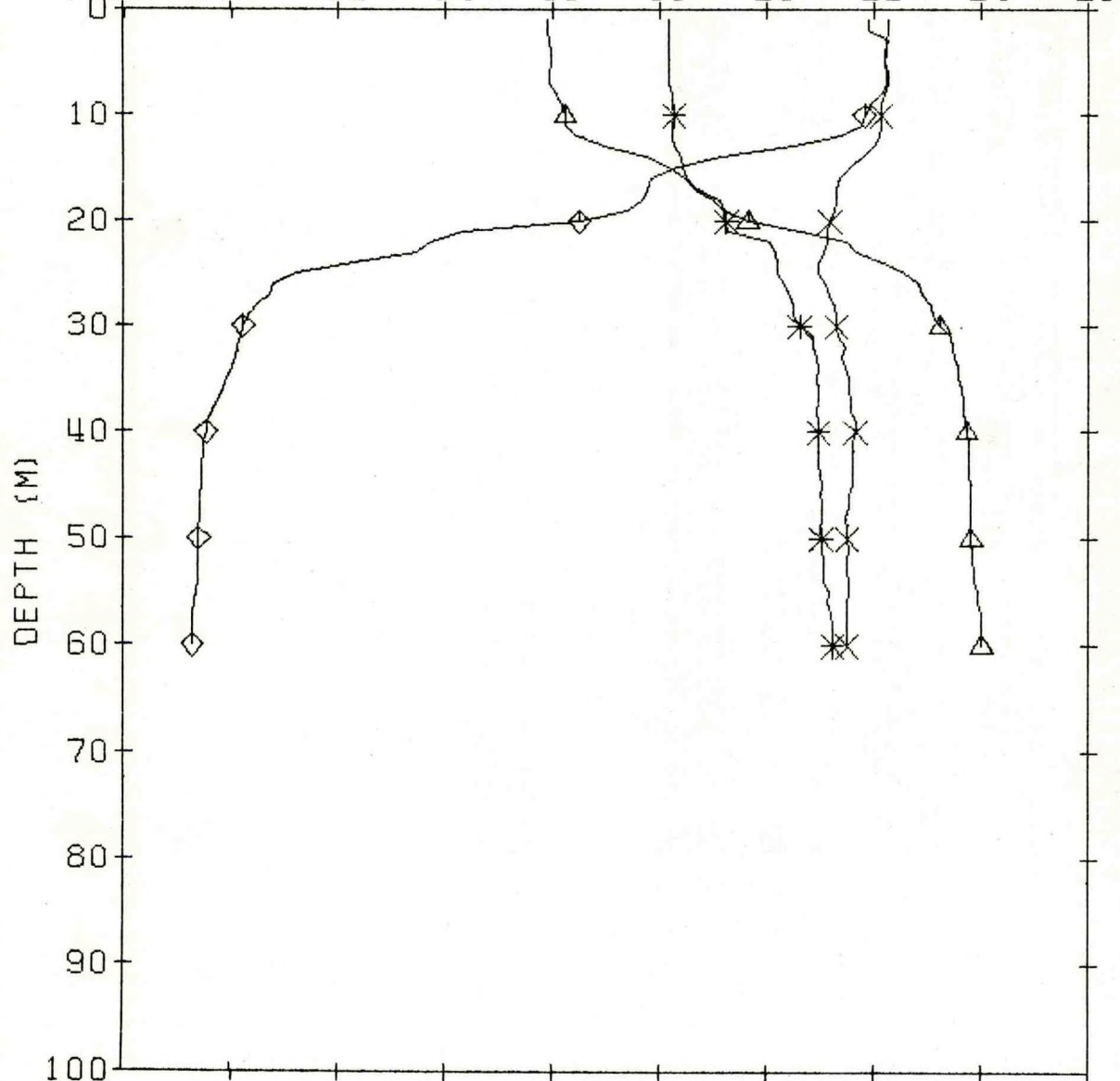
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.060 LAT 40 26.6N; LONG 72 9.1W GMT 09.1 08/07/77  
 DEPTH 57 AIR D/W 73.5/72.0 BARO 15.5 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 25/08 SEA DIR/HT 25/0 SWELL DIR/HT 21/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.50	31.80	21.95	89.4		5.72				
2	21.50	31.80	21.95	89.4		5.72				
3	21.50	31.81	21.96	89.4		5.75	.05	.72	.00	.05
4	21.50	31.81	21.96	89.4		5.79				
5	21.50	31.81	21.96	89.4		5.84				
6	21.50	31.81	21.96	89.4		5.93				
7	21.50	31.81	21.96	89.4		6.04				
8	21.50	31.81	21.96	89.4		6.24				
9	21.50	31.81	21.96	89.4		6.36				
10	21.50	31.81	21.96	89.4		6.43				
11	21.50	31.81	21.96	89.4		6.50				
12	21.50	31.81	21.96	89.4		6.68				
13	21.50	31.81	21.96	89.4		6.92				
14	21.50	31.81	21.96	89.4		7.20				
15	21.50	31.81	21.96	89.4		7.40				
16	21.50	31.81	21.96	89.4		7.37				
17	21.50	31.81	21.96	89.4		7.37				
18	21.50	31.81	21.96	89.4		7.38				
19	21.50	31.81	21.96	89.4		7.39				
20	21.50	31.81	21.96	89.4		7.22	.05	.67	.00	.02
21	21.50	31.81	21.96	89.4		6.99				
22	21.50	31.81	21.96	89.4		6.69				
23	21.50	31.81	21.96	89.4		6.69				
24	21.50	31.81	21.96	89.4		6.71				
25	21.50	31.81	21.96	89.4		6.88				
26	21.50	31.81	21.96	89.4		6.99				
27	21.50	31.81	21.96	89.4		6.99				
28	21.50	31.81	21.96	89.4		6.77				
29	21.50	31.81	21.96	89.4		6.52				
30	21.50	31.81	21.96	89.4		6.47				
31	21.50	31.81	21.96	89.4		6.48	.05	.70	.79	.49
32	21.50	31.81	21.96	89.4		6.32				
33	21.50	31.81	21.96	89.4		6.26				
34	21.50	31.81	21.96	89.4		6.22				
35	21.50	31.81	21.96	89.4		6.20				
36	21.50	31.81	21.96	89.4		6.17				
37	21.50	31.81	21.96	89.4		6.14				
38	21.50	31.81	21.96	89.4		6.12				
39	21.50	31.81	21.96	89.4		6.12				
40	21.50	31.81	21.96	89.4		6.12	.23	.68	1.29	.37
41	21.50	31.81	21.96	89.4		6.26				
42	21.50	31.81	21.96	89.4		6.21				
43	21.50	31.81	21.96	89.4		6.21				
44	21.50	31.81	21.96	89.4		6.21				
45	21.50	31.81	21.96	89.4		6.21				
46	21.50	31.81	21.96	89.4		6.21				
47	21.50	31.81	21.96	89.4		6.21				
48	21.50	31.81	21.96	89.4		6.21				
49	21.50	31.81	21.96	89.4		6.21				
50	21.50	31.81	21.96	89.4		6.21	.41	2.24	9.97	1.95
51	21.50	31.81	21.96	89.4		6.21				

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

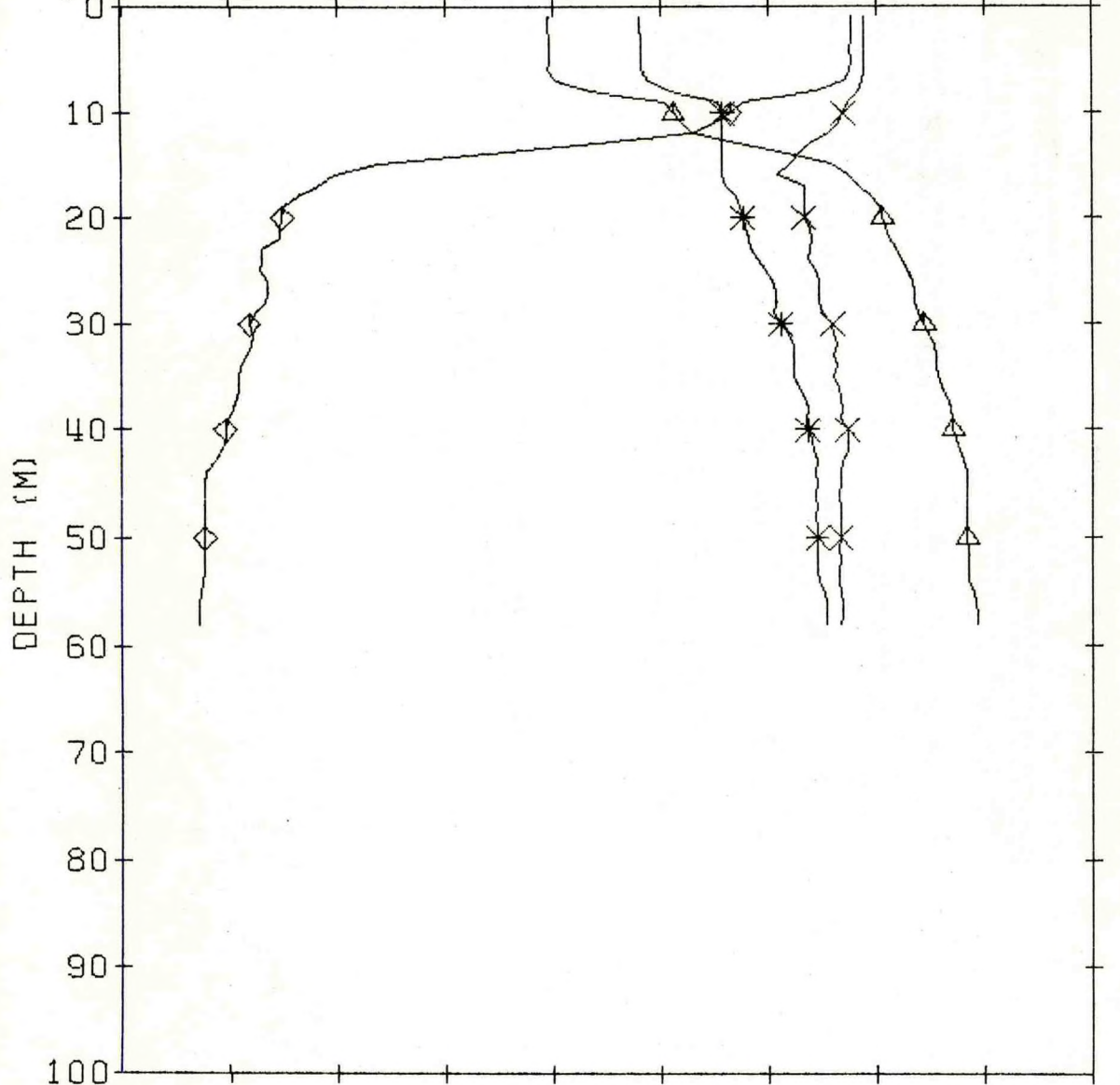
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA. 061 LAT 40 33.3N; LONG 72 13.3W GMT 10.5 08/07/77  
 DEPTH 54 AIR D/W 75.0/73.0 BARO 15.5 VIS 6 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 27/08 SEA DIR/HT 27/0 SWELL DIR/HT 22/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.67	31.65	21.79			5.53				
2	21.67	31.65	21.79			5.53				
3	21.66	31.65	21.80			5.64	.05	.00	.00	.00
4	21.66	31.65	21.80			5.64				
5	21.66	31.65	21.80			5.64				
6	21.66	31.65	21.80			5.64				
7	21.66	31.65	21.81			5.65				
8	21.63	31.67	21.82			5.65				
9	21.63	31.67	21.82			5.65				
10	20.99	31.80	22.02			5.79				
11	20.99	31.80	22.02			5.76	.07	.71	.15	.15
12	18.91	31.49	23.15			6.04				
13	18.91	31.51	23.17			6.20				
14	18.91	31.53	23.27			6.27				
15	18.91	31.53	23.27			6.27				
16	17.99	31.77	23.55			6.33				
17	17.99	31.77	23.55			6.33				
18	15.00	31.00	24.11			6.56				
19	13.44	31.63	24.49			6.96				
20	12.22	31.66	24.99			7.17	.07	.19	.52	.22
21	11.00	31.68	24.99			7.33				
22	11.00	31.68	24.99			7.33				
23	10.89	31.71	24.99			7.24				
24	10.89	31.71	24.99			7.15				
25	10.78	31.81	24.99			7.10				
26	10.88	31.92	24.99			6.98				
27	10.88	31.92	24.99			6.92				
28	10.88	31.92	24.99			6.93				
29	10.64	31.88	24.99			6.92	.09	.66	.67	.29
30	10.64	31.88	24.99			6.86				
31	10.22	31.99	24.99			6.76				
32	10.22	31.99	24.99			6.57				
33	10.22	31.99	24.99			6.57				
34	10.22	31.99	24.99			6.51				
35	10.47	31.44	24.44			6.50				
36	10.47	31.44	24.44			6.50				
37	10.33	31.17	24.49			6.49				
38	10.10	31.10	24.47			6.47				
39	10.09	31.10	24.47			6.43	.37	.25	1.83	.52
40	9.99	31.10	24.47			6.38				
41	9.99	31.10	24.47			6.24				
42	9.99	31.10	24.47			6.07				
43	9.99	31.10	24.47			5.94				
44	9.99	31.10	24.47			5.80				
45	9.99	31.10	24.47			5.75				
46	9.99	31.10	24.47			5.75				
47	9.99	31.10	24.47			5.69				
48	9.99	31.10	24.47			5.69				
49	9.99	31.10	24.47			5.69				
50	9.99	31.10	24.47			5.69				
51	9.99	31.10	24.47			5.69	.63	2.36	8.12	1.63

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

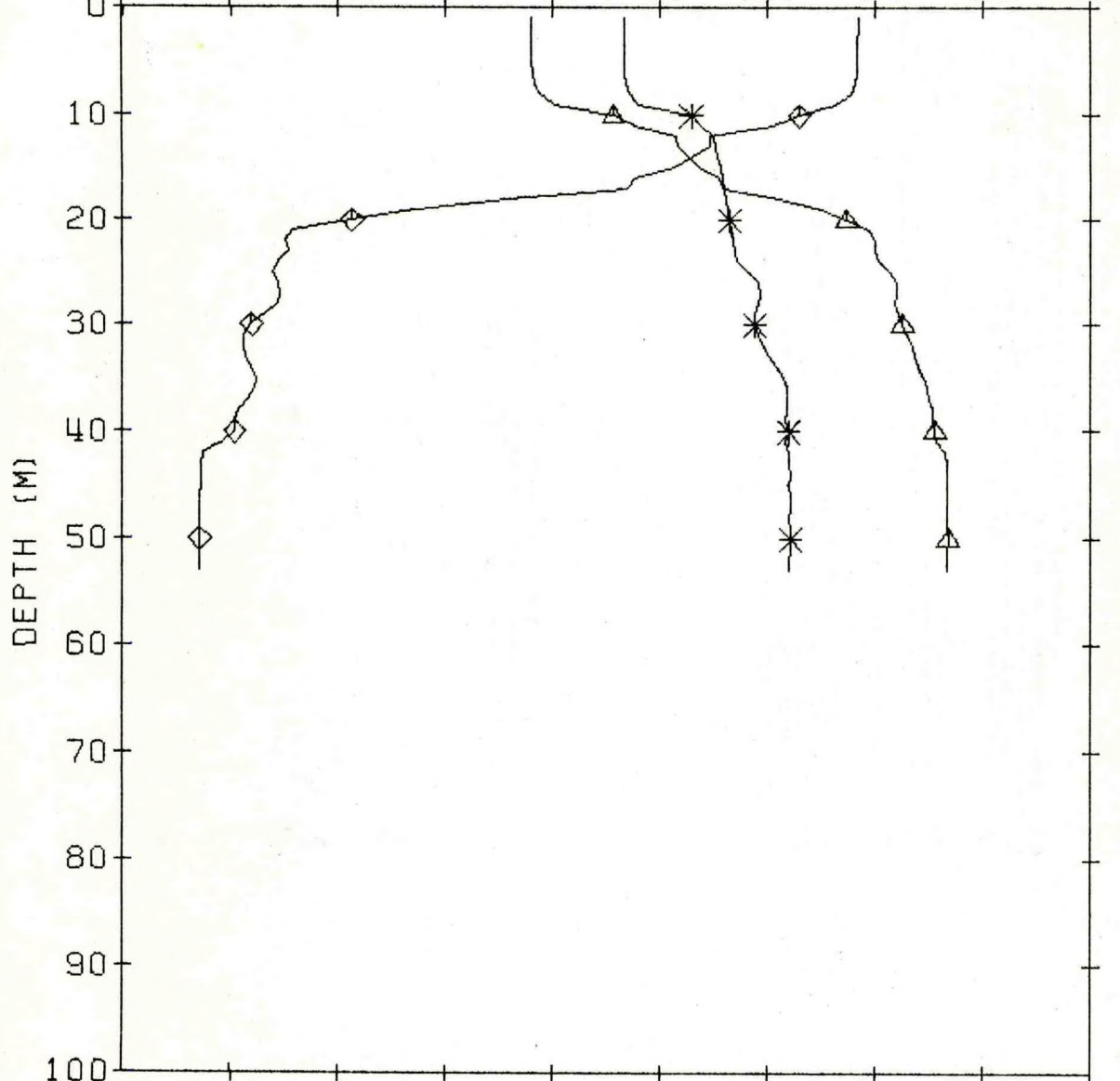
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.062 LAT 40 40.0N; LONG 72 16.0W GMT 12.3 08/07/77  
 DEPTH 47 AIR D/W 77.0/73.5 BARO 15.5 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 26/09 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.47	31.72	21.90	89.6		5.72				
2	21.47	31.72	21.90	89.6		5.72				
3	21.47	31.73	21.91	89.4		5.73	.08	.79	.00	.00
4	21.22	31.68	21.94	89.7		5.80				
5	20.82	31.64	22.01	89.7		5.84				
6	20.84	31.64	22.01	89.7		5.89				
7	20.22	31.64	22.16	89.7		5.87				
8	19.49	31.65	22.36	89.8		5.87				
9	18.00	31.66	22.73	89.9		6.26				
10	17.40	31.66	22.93	89.9		6.43	.00	.08	.00	.00
11	17.50	31.88	23.03	88.8		6.50				
12	16.55	31.88	23.24	88.8		6.57				
13	16.55	31.10	23.49	88.6		6.61				
14	15.92	31.66	23.60	88.7		6.63				
15	15.48	33.00	23.81	88.7		6.70				
16	15.14	33.99	23.91	88.7		6.77				
17	14.54	33.99	24.09	88.7		6.90				
18	13.77	33.77	24.51	88.7		7.03				
19	11.67	33.77	24.51	88.7		7.18				
20	10.76	33.40	24.82	88.7		7.17				
21	10.53	33.38	24.84	88.6		6.92	.00	.44	.52	.04
22	10.15	33.43	24.94	88.6		6.71				
23	9.92	33.43	24.98	88.6		6.50				
24	9.77	33.55	25.06	88.4		6.39				
25	9.75	33.58	25.13	88.5		6.20				
26	9.75	33.61	25.15	88.6		6.04				
27	9.71	33.62	25.17	88.7		5.95				
28	9.66	33.64	25.19	88.8		5.84				
29	9.60	33.65	25.21	88.8		5.70	.49	1.33	7.20	1.36
30	9.60	33.67	25.22	88.8		5.57				
31	9.60	33.71	25.24	88.8		5.49				
32	9.60	33.70	25.24	88.8		5.40				
33	9.60	33.72	25.25	88.8		5.30				
34	9.60	33.75	25.27	88.8		5.20				
35	9.60	33.76	25.30	88.8		5.11				
36	9.60	33.76	25.30	88.8		5.00				
37	9.60	33.77	25.31	88.8		4.88				
38	9.60	33.79	25.32	88.8		4.77				
39	9.60	33.87	25.39	88.8		4.64				
40	9.60	33.91	25.42	88.8		4.55	.03	.22	9.58	1.69
41	9.60	33.92	25.42	88.8		4.46				
42	9.60	33.92	25.44	88.8		4.33				
43	9.60	33.92	25.44	88.8		4.24				
44	9.60	33.92	25.44	88.8		4.14				
45	9.60	33.91	25.44	88.8		4.00	.46	2.30	10.87	1.96
46	9.60	33.91	25.44	88.8		3.88				
47	9.60	33.91	25.44	88.8		3.78				

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

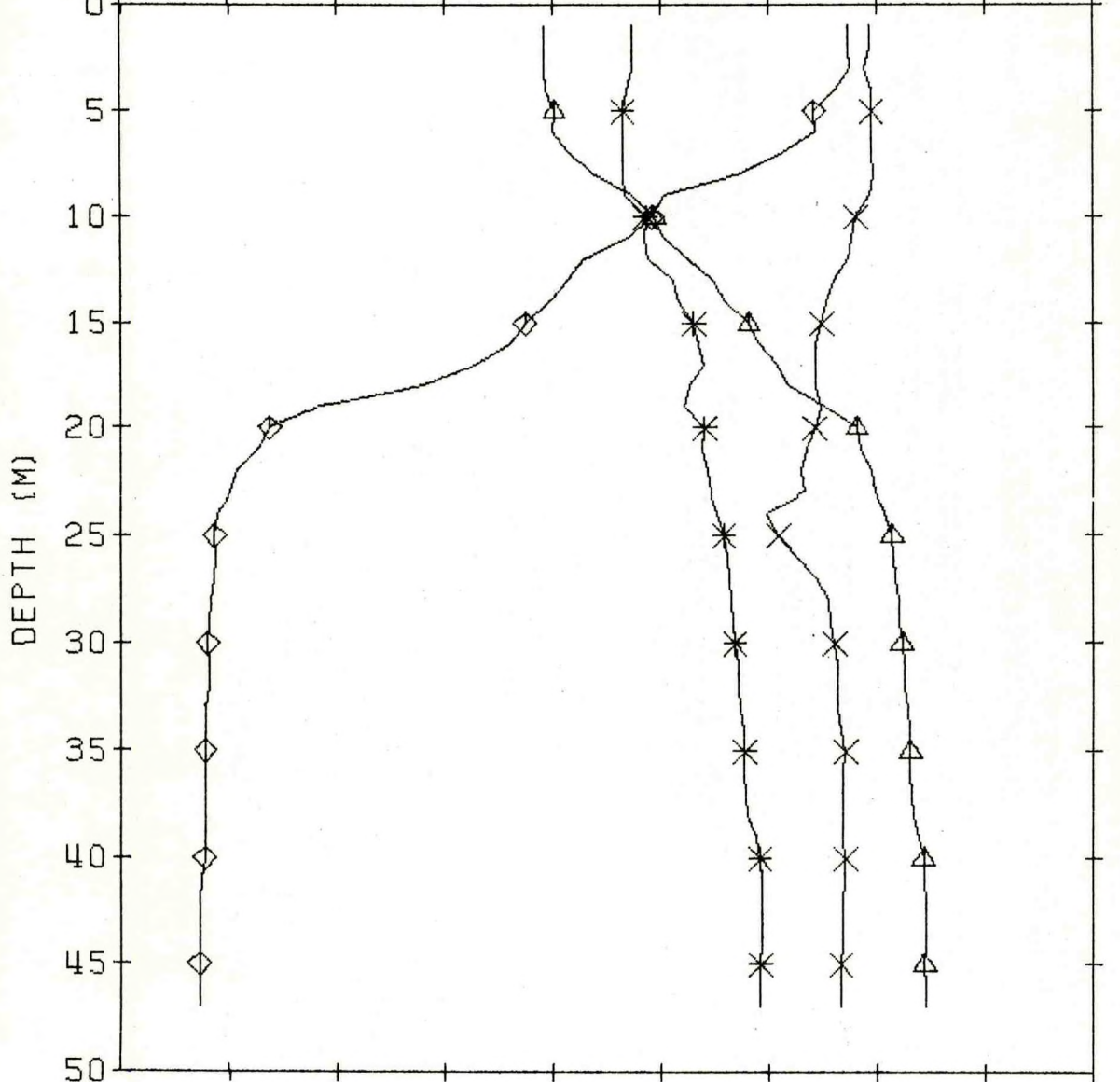
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.063 LAT 40 47.0N; LONG 72 20.0W GMT 14.2 08/07/77  
 DEPTH 32 AIR D/W 80.5/75.0 BARO 14.5 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 24/06 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	19.78	31.56	22.22	87.5		6.10				
2	19.78	31.56	22.22	87.5		6.10				
3	19.78	31.57	22.23	87.4		6.07	.00	.57	.04	.00
4	19.73	31.56	22.23	87.7		6.12				
5	19.68	31.55	22.24	87.7		6.14				
6	19.63	31.56	22.26	87.7		6.14				
7	19.56	31.56	22.28	87.6		6.15				
8	19.51	31.56	22.29	87.4		6.15				
9	19.56	31.56	22.28	87.5		6.15				
10	18.61	31.60	22.60	87.9		6.19	.04	.16	.00	.00
11	17.68	31.85	22.96	88.1		6.34				
12	17.03	31.81	23.09	87.5		6.35				
13	16.78	31.87	23.15	87.1		6.22				
14	16.75	31.87	23.20	86.6		6.09				
15	16.35	31.83	23.25	86.6		6.02				
16	15.51	31.90	23.50	86.0		5.99				
17	15.20	32.00	23.64	86.4		5.81				
18	14.50	32.08	23.85	86.6		5.76				
19	13.67	32.23	24.14	86.6		5.77				
20	13.00	32.24	24.28	86.7		5.78	.06	.33	4.36	.78
21	12.74	32.26	24.34	86.7		5.56				
22	12.66	32.27	24.37	86.8		5.39				
23	12.57	32.27	24.38	86.9		5.26				
24	12.17	32.32	24.50	86.5		5.19				
25	12.00	32.36	24.56	86.6		5.33				
26	11.86	32.37	24.60	86.6		5.43				
27	11.57	32.40	24.67	86.6		5.57				
28	11.33	32.43	24.74	86.6		5.69				
29	11.00	32.47	24.83	86.6		5.77				
30	10.77	32.53	24.91	86.6		5.74				
31	10.29	32.59	25.04	86.9		5.74				
32	10.16	32.66	25.12	87.1		5.53	.41	1.75	11.49	2.13

KELEZ CRUISE XWCC-15 STATION 63 08/07/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

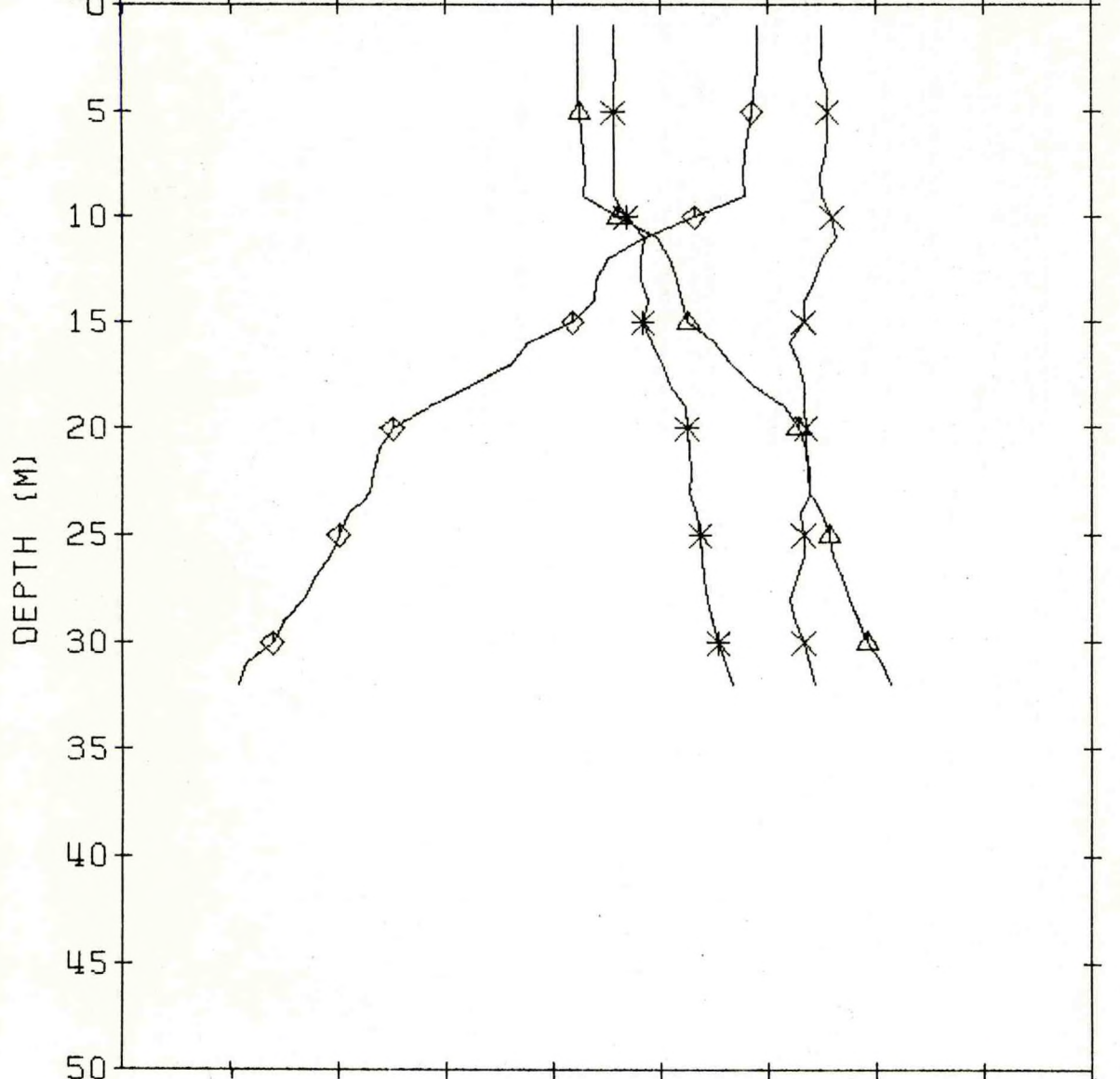
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.064 LAT 40 12.0N; LONG 72 20.0W GMT 22.1 08/07/77  
 DEPTH 66 AIR D/W 78.5/74.5 BARO 11.0 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 22/20 SEA DIR/HT 22/1 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.96	31.94	21.65	88.1		5.55				
2	22.96	31.94	21.65	88.1		5.55				
3	22.91	31.94	21.66	88.7		5.56	.03	.10	.19	.08
4	22.87	31.94	21.68	88.7		5.55				
5	22.73	31.91	21.69	88.8		5.55				
6	22.39	31.93	21.88	88.7		5.59				
7	22.06	32.01	21.95	88.4		5.63				
8	21.61	32.14	22.18	88.2		5.71				
9	21.11	32.31	22.45	88.1		5.81				
10	20.71	32.50	22.69	88.0		5.90				
11	20.47	32.77	23.12	88.0		6.01				
12	20.54	32.99	23.32	88.9		6.06				
13	20.41	33.05	23.42	88.9		6.06				
14	20.09	33.36	23.51	88.8		6.14				
15	19.96	33.38	23.56	88.5		6.26				
16	19.23	33.91	23.60	88.0		6.32				
17	17.88	34.94	23.75	88.4		6.66				
18	16.10	35.79	24.05	88.7		7.00				
19	15.00	35.94	24.41	88.6		7.33				
20	14.22	36.04	24.64	88.6		7.60	.07	.00	.60	.19
21	14.19	36.24	24.81	88.9		7.99				
22	14.17	36.28	24.85	88.7		7.53				
23	14.11	36.31	24.88	88.7		7.33				
24	13.44	36.47	25.00	88.7		7.44				
25	12.16	36.38	25.33	88.7		7.40				
26	11.33	36.33	25.44	88.7		7.47				
27	11.33	36.33	25.44	88.7		7.45				
28	11.33	36.33	25.44	88.7		7.33				
29	11.07	36.36	25.51	88.7		7.26				
30	10.59	36.29	25.60	88.7		7.11	.06	.00	4.03	.09
31	9.98	36.22	25.64	88.8		6.89				
32	9.98	36.22	25.64	88.8		6.67				
33	9.98	36.22	25.64	88.8		6.48				
34	9.98	36.22	25.64	88.8		6.36				
35	9.98	36.22	25.64	88.8		6.29				
36	9.98	36.22	25.64	88.8		6.25				
37	9.98	36.22	25.64	88.8		6.21				
38	9.98	36.22	25.64	88.8		6.17				
39	9.98	36.22	25.64	88.8		6.09				
40	9.98	36.22	25.64	88.8		6.09	.49	.78	3.62	.85
41	9.98	36.22	25.64	88.8		6.09				
42	9.98	36.22	25.64	88.8		6.04				
43	9.98	36.22	25.64	88.8		6.01				
44	9.98	36.22	25.64	88.8		6.01				
45	9.98	36.22	25.64	88.8		6.01				
46	9.98	36.22	25.64	88.8		6.01				
47	9.98	36.22	25.64	88.8		6.01				
48	9.98	36.22	25.64	88.8		6.01				
49	9.98	36.22	25.64	88.8		6.01				
50	9.98	36.22	25.64	88.8		6.01	.35	2.29	13.26	2.40
60	9.98	36.22	25.64	88.8		6.01	.30	3.40	14.34	2.61
66	9.19	36.22	25.64	88.8		4.97				

KELEZ CRUISE XWCC-15 STATION 64 08/07/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

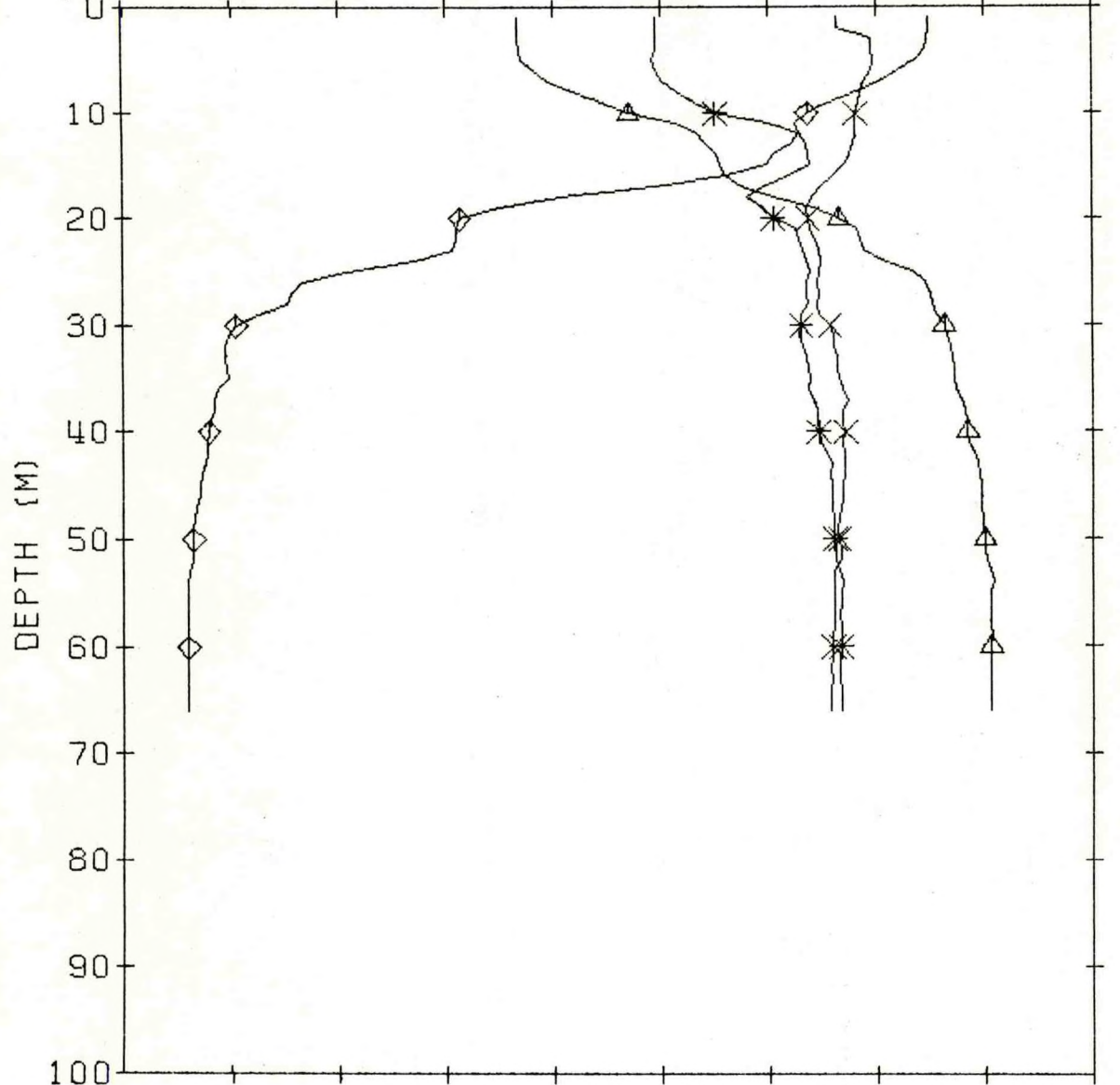
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.065 LAT 40 21.1N; LONG 72 28.1W GMT 20.0 08/07/77  
 DEPTH 51 AIR D/W 76.0/75.0 BARO 12.0 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 21/10 SEA DIR/HT 21/0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.04	31.78	21.50	88.9	7.47					
2	23.04	31.78	21.50	88.9	7.47					
3	23.04	31.78	21.50	88.9	7.47					
4	23.04	31.78	21.50	88.9	7.47		.03	.48	.00	.34
5	23.04	31.78	21.50	88.9	7.47					
6	23.04	31.78	21.50	88.9	7.47					
7	23.04	31.78	21.50	88.9	7.47					
8	23.04	31.78	21.50	88.9	7.47					
9	23.04	31.78	21.50	88.9	7.47					
10	23.04	31.78	21.50	88.9	7.47		.06	.33	.33	.11
11	23.04	31.78	21.50	88.9	7.47					
12	23.04	31.78	21.50	88.9	7.47					
13	23.04	31.78	21.50	88.9	7.47					
14	23.04	31.78	21.50	88.9	7.47					
15	23.04	31.78	21.50	88.9	7.47					
16	23.04	31.78	21.50	88.9	7.47					
17	23.04	31.78	21.50	88.9	7.47					
18	23.04	31.78	21.50	88.9	7.47					
19	23.04	31.78	21.50	88.9	7.47		.06	.00	.19	.12
20	23.04	31.78	21.50	88.9	7.47					
21	23.04	31.78	21.50	88.9	7.47					
22	23.04	31.78	21.50	88.9	7.47					
23	23.04	31.78	21.50	88.9	7.47					
24	23.04	31.78	21.50	88.9	7.47					
25	23.04	31.78	21.50	88.9	7.47					
26	23.04	31.78	21.50	88.9	7.47					
27	23.04	31.78	21.50	88.9	7.47					
28	23.04	31.78	21.50	88.9	7.47					
29	23.04	31.78	21.50	88.9	7.47					
30	23.04	31.78	21.50	88.9	7.47		.78	1.75	7.59	1.56
31	23.04	31.78	21.50	88.9	7.47					
32	23.04	31.78	21.50	88.9	7.47					
33	23.04	31.78	21.50	88.9	7.47					
34	23.04	31.78	21.50	88.9	7.47					
35	23.04	31.78	21.50	88.9	7.47					
36	23.04	31.78	21.50	88.9	7.47					
37	23.04	31.78	21.50	88.9	7.47					
38	23.04	31.78	21.50	88.9	7.47					
39	23.04	31.78	21.50	88.9	7.47					
40	23.04	31.78	21.50	88.9	7.47		.59	1.82	7.77	1.59
41	23.04	31.78	21.50	88.9	7.47					
42	23.04	31.78	21.50	88.9	7.47					
43	23.04	31.78	21.50	88.9	7.47					
44	23.04	31.78	21.50	88.9	7.47					
45	23.04	31.78	21.50	88.9	7.47					
46	23.04	31.78	21.50	88.9	7.47					
47	23.04	31.78	21.50	88.9	7.47					
48	23.04	31.78	21.50	88.9	7.47					
49	23.04	31.78	21.50	88.9	7.47					
50	23.04	31.78	21.50	88.9	7.47		.68	2.24	9.95	2.15

KELEZ CRUISE XWCC-15 STATION 65 08/07/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

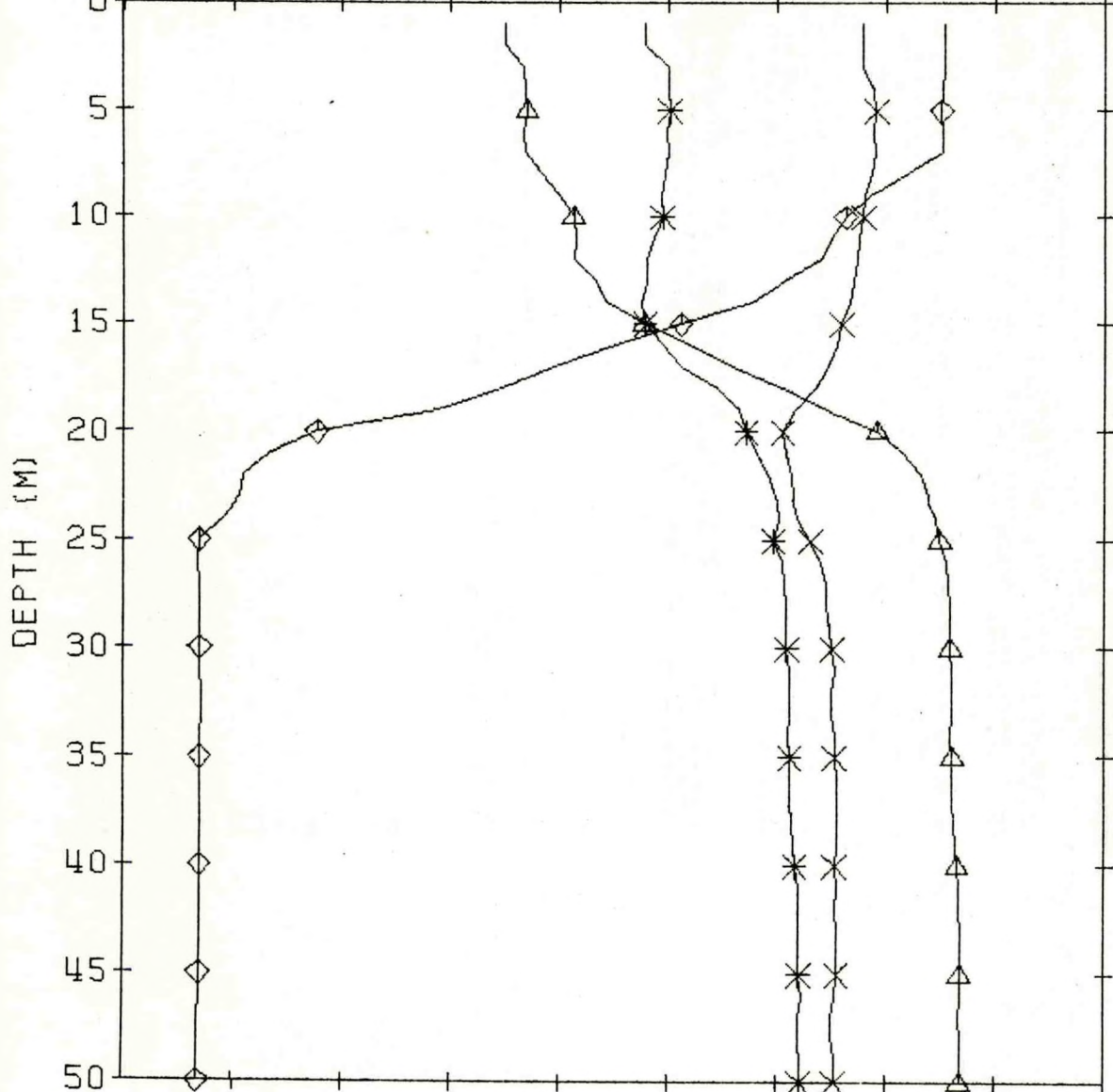
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

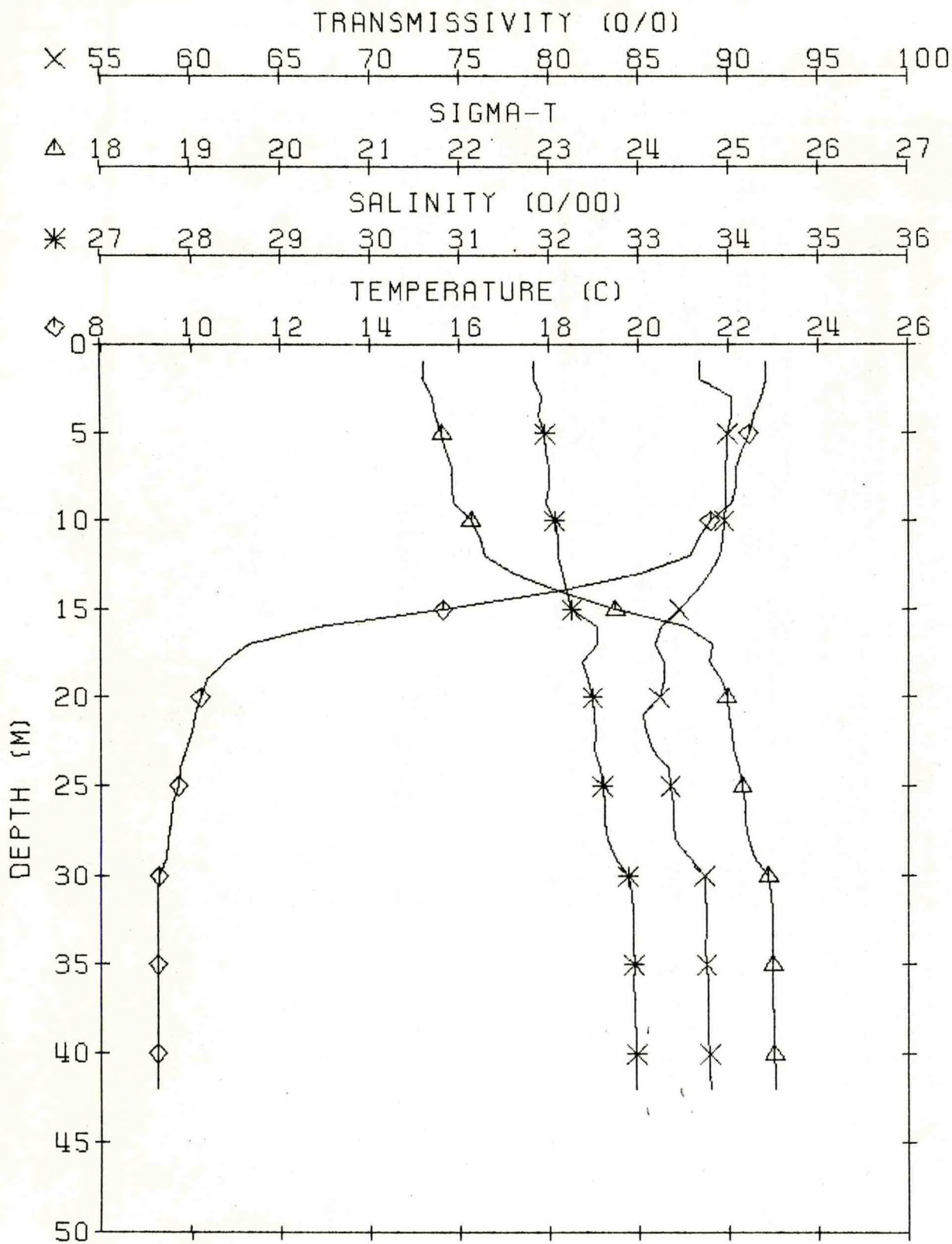
◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.066 LAT 40 30.4N; LONG 72 33.5W GMT 18.2 08/07/77  
 DEPTH 43 AIR D/W 77.0/74.0 BARO 13.5 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 22/09 SEA DIR/HT 20/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.8	31.8	21.6	88.4	5.5					
2	22.8	31.8	21.6	88.4	5.5					
3	22.8	31.8	21.6	88.4	5.5					
4	22.8	31.8	21.6	88.4	5.5					
5	22.8	31.8	21.6	88.4	5.5					
6	22.8	31.8	21.6	88.4	5.5					
7	22.8	31.8	21.6	88.4	5.5					
8	22.8	31.8	21.6	88.4	5.5					
9	22.8	31.8	21.6	88.4	5.5					
10	22.8	31.8	21.6	88.4	5.5					
11	22.8	31.8	21.6	88.4	5.5					
12	22.8	31.8	21.6	88.4	5.5					
13	22.8	31.8	21.6	88.4	5.5					
14	22.8	31.8	21.6	88.4	5.5					
15	22.8	31.8	21.6	88.4	5.5					
16	22.8	31.8	21.6	88.4	5.5					
17	22.8	31.8	21.6	88.4	5.5					
18	22.8	31.8	21.6	88.4	5.5					
19	22.8	31.8	21.6	88.4	5.5					
20	22.8	31.8	21.6	88.4	5.5					
21	22.8	31.8	21.6	88.4	5.5					
22	22.8	31.8	21.6	88.4	5.5					
23	22.8	31.8	21.6	88.4	5.5					
24	22.8	31.8	21.6	88.4	5.5					
25	22.8	31.8	21.6	88.4	5.5					
26	22.8	31.8	21.6	88.4	5.5					
27	22.8	31.8	21.6	88.4	5.5					
28	22.8	31.8	21.6	88.4	5.5					
29	22.8	31.8	21.6	88.4	5.5					
30	22.8	31.8	21.6	88.4	5.5					
31	22.8	31.8	21.6	88.4	5.5					
32	22.8	31.8	21.6	88.4	5.5					
33	22.8	31.8	21.6	88.4	5.5					
34	22.8	31.8	21.6	88.4	5.5					
35	22.8	31.8	21.6	88.4	5.5					
36	22.8	31.8	21.6	88.4	5.5					
37	22.8	31.8	21.6	88.4	5.5					
38	22.8	31.8	21.6	88.4	5.5					
39	22.8	31.8	21.6	88.4	5.5					
40	22.8	31.8	21.6	88.4	5.5					
41	22.8	31.8	21.6	88.4	5.5					
42	22.8	31.8	21.6	88.4	5.5					
43	22.8	31.8	21.6	88.4	5.5					
44	22.8	31.8	21.6	88.4	5.5					
45	22.8	31.8	21.6	88.4	5.5					
46	22.8	31.8	21.6	88.4	5.5					
47	22.8	31.8	21.6	88.4	5.5					
48	22.8	31.8	21.6	88.4	5.5					
49	22.8	31.8	21.6	88.4	5.5					
50	22.8	31.8	21.6	88.4	5.5					
51	22.8	31.8	21.6	88.4	5.5					
52	22.8	31.8	21.6	88.4	5.5					
53	22.8	31.8	21.6	88.4	5.5					
54	22.8	31.8	21.6	88.4	5.5					
55	22.8	31.8	21.6	88.4	5.5					
56	22.8	31.8	21.6	88.4	5.5					
57	22.8	31.8	21.6	88.4	5.5					
58	22.8	31.8	21.6	88.4	5.5					
59	22.8	31.8	21.6	88.4	5.5					
60	22.8	31.8	21.6	88.4	5.5					
61	22.8	31.8	21.6	88.4	5.5					
62	22.8	31.8	21.6	88.4	5.5					
63	22.8	31.8	21.6	88.4	5.5					
64	22.8	31.8	21.6	88.4	5.5					
65	22.8	31.8	21.6	88.4	5.5					
66	22.8	31.8	21.6	88.4	5.5					
67	22.8	31.8	21.6	88.4	5.5					
68	22.8	31.8	21.6	88.4	5.5					
69	22.8	31.8	21.6	88.4	5.5					
70	22.8	31.8	21.6	88.4	5.5					
71	22.8	31.8	21.6	88.4	5.5					
72	22.8	31.8	21.6	88.4	5.5					
73	22.8	31.8	21.6	88.4	5.5					
74	22.8	31.8	21.6	88.4	5.5					
75	22.8	31.8	21.6	88.4	5.5					
76	22.8	31.8	21.6	88.4	5.5					
77	22.8	31.8	21.6	88.4	5.5					
78	22.8	31.8	21.6	88.4	5.5					
79	22.8	31.8	21.6	88.4	5.5					
80	22.8	31.8	21.6	88.4	5.5					
81	22.8	31.8	21.6	88.4	5.5					
82	22.8	31.8	21.6	88.4	5.5					
83	22.8	31.8	21.6	88.4	5.5					
84	22.8	31.8	21.6	88.4	5.5					
85	22.8	31.8	21.6	88.4	5.5					
86	22.8	31.8	21.6	88.4	5.5					
87	22.8	31.8	21.6	88.4	5.5					
88	22.8	31.8	21.6	88.4	5.5					
89	22.8	31.8	21.6	88.4	5.5					
90	22.8	31.8	21.6	88.4	5.5					
91	22.8	31.8	21.6	88.4	5.5					
92	22.8	31.8	21.6	88.4	5.5					
93	22.8	31.8	21.6	88.4	5.5					
94	22.8	31.8	21.6	88.4	5.5					
95	22.8	31.8	21.6	88.4	5.5					
96	22.8	31.8	21.6	88.4	5.5					
97	22.8	31.8	21.6	88.4	5.5					
98	22.8	31.8	21.6	88.4	5.5					
99	22.8	31.8	21.6	88.4	5.5					
100	22.8	31.8	21.6	88.4	5.5					
101	22.8	31.8	21.6	88.4	5.5					
102	22.8	31.8	21.6	88.4	5.5					
103	22.8	31.8	21.6	88.4	5.5					
104	22.8	31.8	21.6	88.4	5.5					
105	22.8	31.8	21.6	88.4	5.5					
106	22.8	31.8	21.6	88.4	5.5					
107	22.8	31.8	21.6	88.4	5.5					
108	22.8	31.8	21.6	88.4	5.5					
109	22.8	31.8	21.6	88.4	5.5					
110	22.8	31.8	21.6	88.4	5.5					
111	22.8	31.8	21.6	88.4	5.5					
112	22.8	31.8	21.6	88.4	5.5					
113	22.8	31.8	21.6	88.4	5.5					
114	22.8	31.8	21.6	88.4	5.5					
115	22.8	31.8	21.6	88.4	5.5					
116	22.8	31.8	21.6	88.4	5.5					
117	22.8	31.8	21.6	88.4	5.5					
118	22.8	31.8	21.6	88.4	5.5					
119	22.8	31.8	21.6	88.4	5.5					
120	22.8	31.8	21.6	88.4	5.5					
121	22.8	31.8	21.6	88.4	5.5					
122	22.8	31.8	21.6	88.4	5.5					
123	22.8	31.8	21.6	88.4	5.5					
124	22.8	31.8	21.6	88.4	5.5					
125	22.8	31.8	21.6	88.4	5.5					
126	22.8	31.8	21.6	88.4	5.5					
127	22.8	31.8	21.6	88.4	5.5					
128	22.8	31.8	21.6	88.4	5.5					
129	22.8	31.8	21.6	88.4	5.5					
130	22.8	31.8	21.6	88.4	5.5					
131	22.8	31.8	21.6	88.4	5.5					
132	22.8	31.8	21.6	88.4	5.5					
133	22.8	31.8	21.6	88.4	5.5					
134	22.8	31.8	21.6	88.4	5.5					
135	22.8	31.8	21.6	88.4	5.5					
136	22.8	31.8	21.6	88.4	5.5					
137	22.8	31.8	21.6	88.4	5.5					
138	22.8	31.8	21.6	88.4	5.5					
139	22.8	31.8	21.6	88.4	5.5					
140	22.8	31.8	21.6	88.4	5.5					
141	22.8	31.8	21.6	88.4	5.5					
142	22.8	31.8	21.6	88.4	5.5					
143	22.8	31.8	21.6	88.4	5.5					
144	22.8	31.8	21.6	88.4	5.5					
145	22.8	31.8	21.6	88.4	5.5					
146	22.8	31.8	21.6	88.4	5.5					
147	22.8	31.8	21.6	88.4	5.5					
148	22.8	31.8	21.6	88.4	5.5					
149	22.8	31.8	21.6	88.4	5.5					
150	22.8	31.8	21.6	88.4	5.5					
151	22.8	31.8	21.6	88.4	5.5					
152	22.8	31.8	21.6	88.4	5.5					
153	22.8	31.8	21.6	88.4	5.5					
154	22.8	31.8	21.6	88.4	5.5					
155	22.8	31.8	21.6	88.4	5.5					
156	22.8	31.8	21.6	88.4	5.5					
157	22.8	31.8	21.6	88.4	5.5					
158	22.8	31.8	21.6	88.4	5.5					
159	22.8	3								





XWCC-15 STA.067 LAT 40 38.2N; LONG 72 40.0W GMT 16.4 08/07/77  
 DEPTH 35 AIR D/W 75.0/73.0 BARO 14.0 VIS 6 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 24/11 SEA DIR/HT 24/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.04	31.56	21.89	87.3		5.80				
2	21.04	31.56	21.89	87.3		5.80				
3	21.04	31.56	21.90	87.9		5.87	.05	.08	.00	.00
4	20.90	31.57	21.94	88.4		5.96				
5	20.97	31.55	21.91	88.4		5.99				
6	20.83	31.58	21.97	88.3		5.98				
7	20.80	31.58	21.97	88.2		5.99				
8	20.77	31.59	21.99	88.2		5.99				
9	20.86	31.59	21.97	88.1		5.99				
10	19.86	31.62	22.30	88.5		6.01				
11	19.86	31.76	22.52	88.3		6.15	.06	.00	.63	.05
12	18.66	31.75	22.65	88.3		6.24				
13	18.21	31.96	22.92	88.9		6.33				
14	18.11	31.97	22.95	88.7		6.33				
15	17.77	31.92	23.00	88.7		6.36				
16	16.99	31.95	23.20	88.7		6.41				
17	16.57	31.90	23.33	88.7		6.48				
18	16.17	31.93	23.38	88.7		6.48				
19	15.42	32.00	23.59	88.7		6.46				
20	14.68	32.29	23.90	88.6		6.77	.09	.42	5.96	1.21
21	13.68	32.32	24.21	88.5		6.54				
22	12.54	32.24	24.37	88.5		6.62				
23	12.25	32.29	24.46	88.6		6.60				
24	12.12	32.30	24.49	88.6		6.62				
25	12.07	32.38	24.50	88.6		6.60				
26	11.78	32.30	24.56	88.7		6.66				
27	11.54	32.36	24.65	88.7		6.70				
28	11.35	32.39	24.70	87.1		6.71				
29	11.11	32.42	24.76	87.1		6.74				
30	10.99	32.44	24.81	87.0		6.78				
31	10.82	32.46	24.85	87.0		6.73				
32	10.54	32.44	24.88	87.1		6.75				
33	10.24	32.49	24.98	87.2		6.79				
34	10.18	32.54	25.00	87.3		6.40	.26	.76	8.98	1.75

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

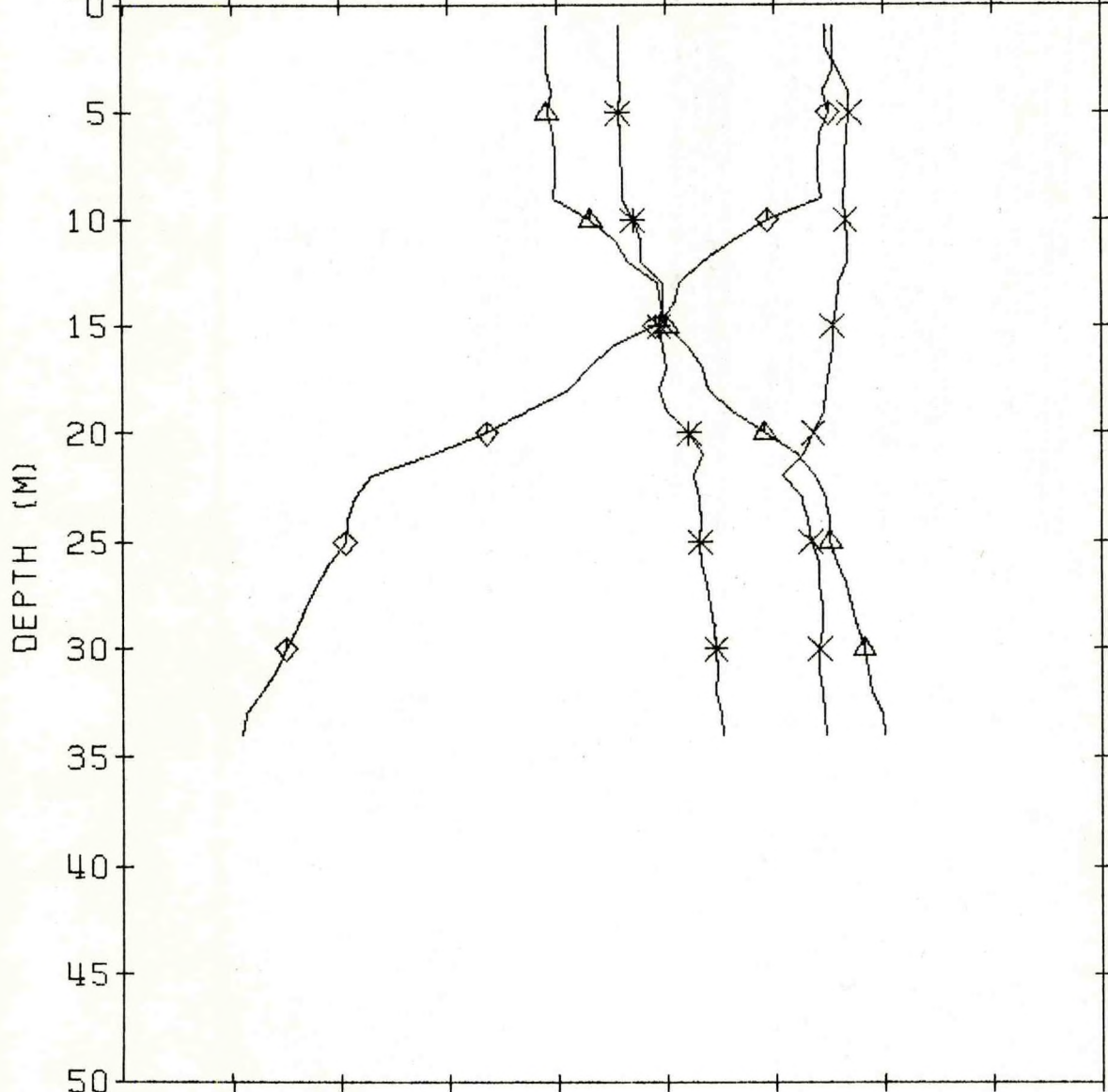
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.068 LAT 40 19.0N; LONG 72 46.0W GMT 09.4 08/08/77  
 DEPTH 48 AIR D/W 76.0/73.0 BARO 12.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 25/14 SEA DIR/HT 25/0 SWELL DIR/HT 22/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.81	31.75	21.55	86.5	5.54					
2	22.81	31.75	21.55	86.5	5.54					
3	22.81	31.75	21.55	88.1	5.54		.04	.43	.16	.13
4	22.80	31.75	21.55	88.6	5.54					
5	22.80	31.75	21.55	88.4	5.57					
6	22.81	31.74	21.54	88.6	5.61					
7	22.61	31.81	21.65	88.6	5.63					
8	22.03	31.99	21.95	88.8	5.66					
9	22.03	31.99	21.95	88.8	5.68					
10	21.60	32.24	22.26	89.3	5.74	.31	.49	.24	.19	
11	22.00	32.66	22.77	89.4	5.84					
12	22.00	32.69	22.86	89.4	5.91					
13	22.00	32.87	23.03	89.3	5.96					
14	22.00	33.09	23.20	89.4	6.00					
15	22.00	33.22	23.33	89.4	6.01					
16	22.00	33.44	23.53	89.4	6.08					
17	22.00	33.66	23.73	89.4	6.15					
18	22.00	33.88	23.90	89.4	6.23					
19	22.00	34.11	24.15	89.3	6.33	.30	.00	.00	.17	
20	22.00	34.33	24.40	89.4	6.44					
21	22.00	34.55	24.69	89.4	6.55					
22	22.00	34.77	24.99	89.4	6.66					
23	22.00	35.00	25.24	89.4	6.77					
24	22.00	35.22	25.50	89.4	6.88					
25	22.00	35.44	25.77	89.4	6.99					
26	22.00	35.66	26.02	89.4	7.10					
27	22.00	35.88	26.24	89.4	7.21					
28	22.00	36.11	26.47	89.4	7.32					
29	22.00	36.33	26.70	89.4	7.43					
30	22.00	36.55	26.90	89.4	7.54					
31	22.00	36.77	27.14	89.4	7.65					
32	22.00	37.00	27.37	89.4	7.76					
33	22.00	37.22	27.57	89.4	7.87					
34	22.00	37.44	27.77	89.4	7.98					
35	22.00	37.66	27.99	89.4	8.09					
36	22.00	37.88	28.22	89.4	8.20	1.16	1.27	2.86	.76	
37	22.00	38.11	28.44	89.4	8.31					
38	22.00	38.33	28.66	89.4	8.42					
39	22.00	38.55	28.88	89.4	8.53					
40	22.00	38.77	29.10	89.4	8.64					
41	22.00	39.00	29.33	89.4	8.75	.57	2.15	7.77	1.64	
42	22.00	39.22	29.55	89.4	8.86					
43	22.00	39.44	29.77	89.4	8.97					
44	22.00	39.66	29.99	89.4	9.08					
45	22.00	39.88	30.22	89.4	9.19					
46	22.00	40.11	30.44	89.4	9.30					
47	22.00	40.33	30.66	89.4	9.41					
48	22.00	40.55	30.88	89.4	9.52	.60	2.45	8.79	1.80	

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

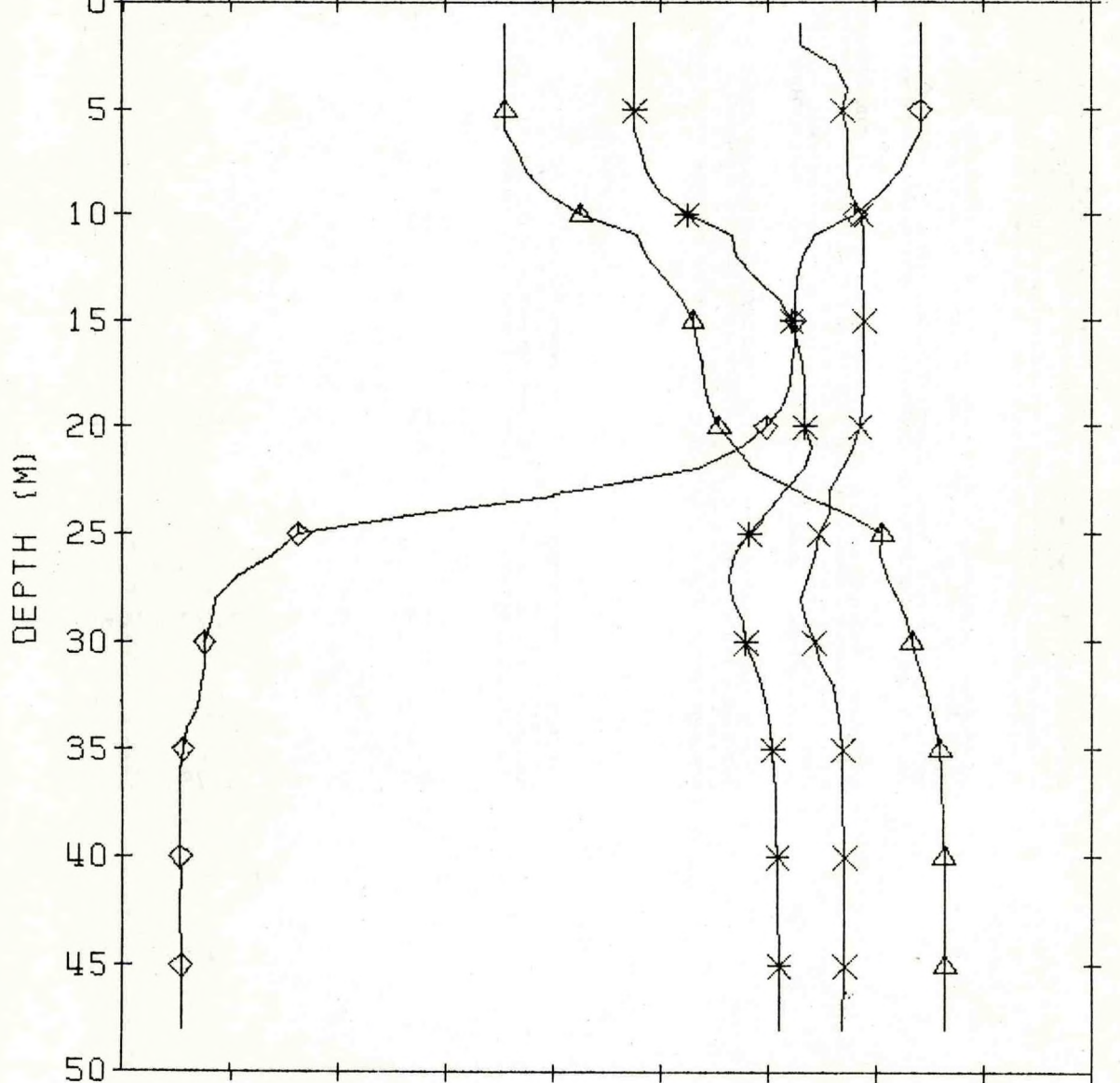
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.069 LAT 40 24.8N; LONG 72 55.1W GMT 17.5 08/08/77  
 DEPTH 40 AIR D/W 77.0/74.0 BARO 12.0 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 24/11 SEA DIR/HT 24/0 SWELL DIR/HT 49/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.64	31.48	21.39	87.0	6.00					
2	22.64	31.48	21.39	87.0	6.00					
3	22.64	31.49	21.40	87.7	6.74		.07	.32	.00	.00
4	22.63	31.51	21.42	88.2	6.75					
5	22.63	31.51	21.40	88.1	6.74					
6	22.60	31.55	21.45	88.1	6.73					
7	22.67	31.91	21.99	88.3	6.75					
8	22.01	31.90	22.16	88.4	6.94					
9	20.35	31.93	22.36	88.2	6.02					
10	20.17	31.92	22.35	88.1	6.98	.05	.37	.93	.20	
11	19.89	31.93	22.47	88.1	6.98					
12	18.80	31.92	22.92	88.7	6.03					
13	18.80	31.92	22.92	88.7	6.03					
14	18.53	31.42	23.67	88.2	6.23					
15	18.53	31.42	23.67	88.2	6.23					
16	18.01	31.50	24.07	88.5	6.04					
17	18.61	31.42	24.30	88.5	6.05					
18	18.88	31.55	24.67	88.6	6.05					
19	18.88	31.55	24.67	88.6	6.05					
20	18.48	31.52	24.96	88.6	6.73	.07	.95	1.22	.33	
21	18.00	31.60	25.10	88.6	6.99					
22	18.88	31.70	25.20	88.6	6.44					
23	18.88	31.70	25.20	88.6	6.44					
24	18.88	31.73	25.21	88.6	6.11					
25	18.88	31.77	25.24	88.6	6.24					
26	18.88	31.76	25.24	88.6	6.34					
27	18.88	31.76	25.24	88.6	6.55					
28	18.88	31.76	25.24	88.6	6.07					
29	18.88	31.77	25.26	88.6	6.05					
30	18.88	31.77	25.26	88.6	6.98	.78	2.99	8.69	1.67	
31	18.88	31.77	25.26	88.7	6.01					
32	18.88	31.85	25.44	88.9	6.99					
33	18.88	31.85	25.44	88.9	6.99					
34	18.88	31.85	25.44	88.9	6.99					
35	18.88	31.87	25.48	88.8	6.77					
36	18.88	31.87	25.48	88.8	6.77					
37	18.88	31.86	25.47	88.7	6.37					
38	18.88	31.89	25.49	88.7	6.21					
39	18.88	31.89	25.49	88.7	6.21					
40	18.88	31.89	25.49	88.7	6.00	.74	3.75	10.74	2.01	

TRANSMISSIVITY (0/0)

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SIGMA-T

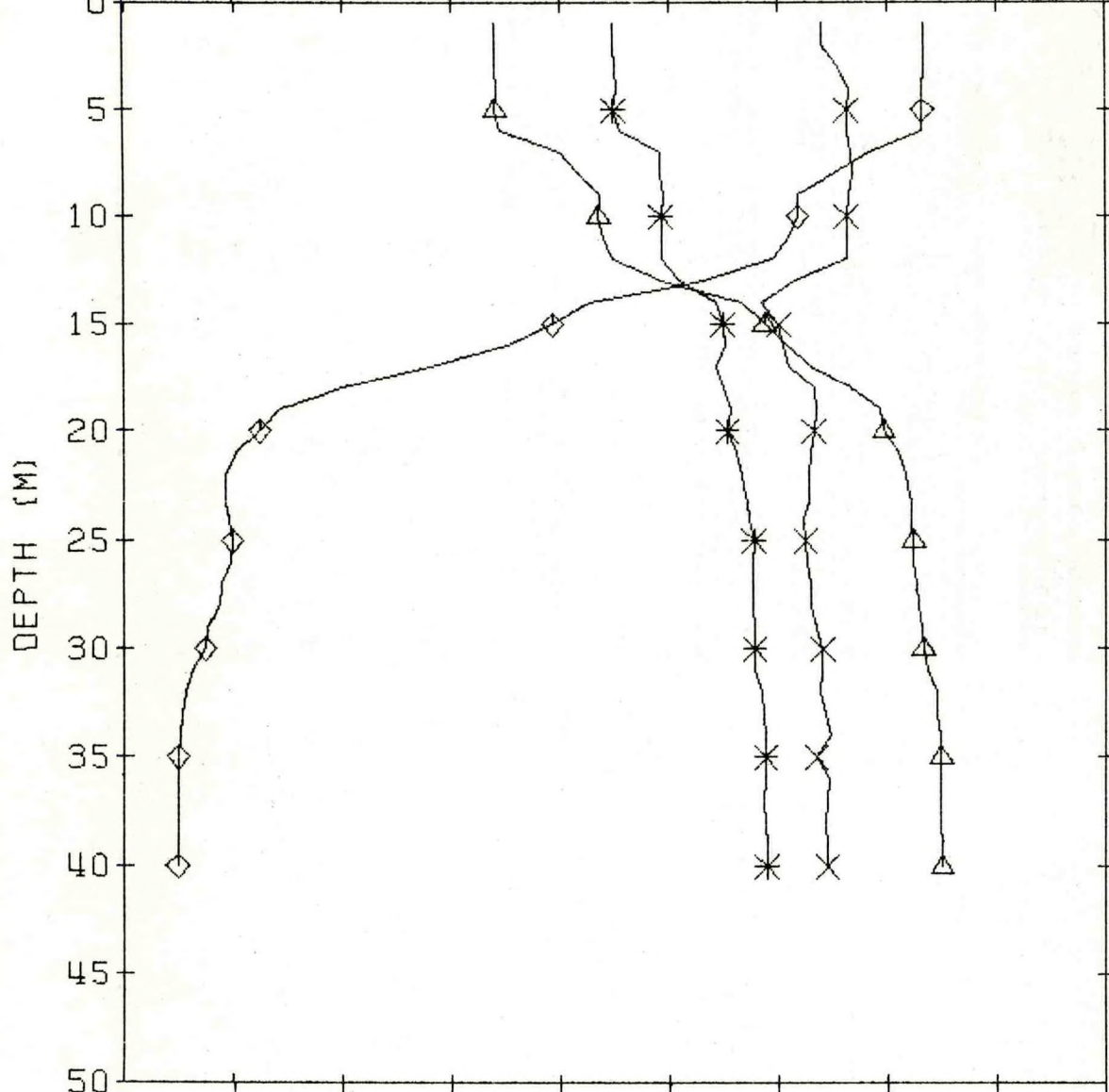
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.070 LAT 40 31.9N; LONG 73 7.2W GMT 19.3 08/08/77  
 DEPTH 28 AIR D/W 80.0/75.0 BARO 10.5 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 23/12 SEA DIR/HT 23/0 SWELL DIR/HT 22/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.19	31.43	21.49	76.7		5.79				
2	22.19	31.43	21.49	76.7		5.79	.11	.85	1.80	.34
3	22.05	31.41	21.50	78.1		6.09				
4	21.74	31.42	21.60	78.6		6.16				
5	21.45	31.43	21.68	81.7		6.20				
6	21.34	31.44	21.72	82.9		6.26				
7	20.98	31.42	21.80	84.7		6.28				
8	19.69	31.59	22.27	87.3		6.33				
9	19.44	31.67	22.40	87.3		6.33				
10	18.44	31.72	22.58	87.3		6.43	.06	.75	.00	.00
11	17.76	31.90	22.98	87.4		6.50				
12	16.88	32.00	23.34	86.2		6.59				
13	15.83	32.00	23.68	86.2		6.59				
14	14.80	32.06	23.93	85.2		6.67				
15	13.90	32.04	23.95	85.4		6.64				
16	13.88	32.03	23.95	85.6		6.60				
17	13.68	32.06	24.02	85.9		6.78				
18	13.48	32.09	24.07	86.0		6.55				
19	13.36	32.10	24.10	86.0		6.36				
20	13.26	32.13	24.15	86.0		6.23	.12	.53	4.39	1.01
21	13.22	32.12	24.15	86.0		6.10				
22	13.08	32.13	24.18	86.0		6.03				
23	13.00	32.14	24.20	86.2		4.95				
24	12.99	32.15	24.22	86.2		4.88				
25	12.94	32.16	24.23	86.2		4.83				
26	12.88	32.14	24.23	86.2		4.76				
27	12.50	32.19	24.34	86.2		4.71	.16	1.52	6.93	1.33

TRANSMISSIVITY (0/0)

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SIGMA-T

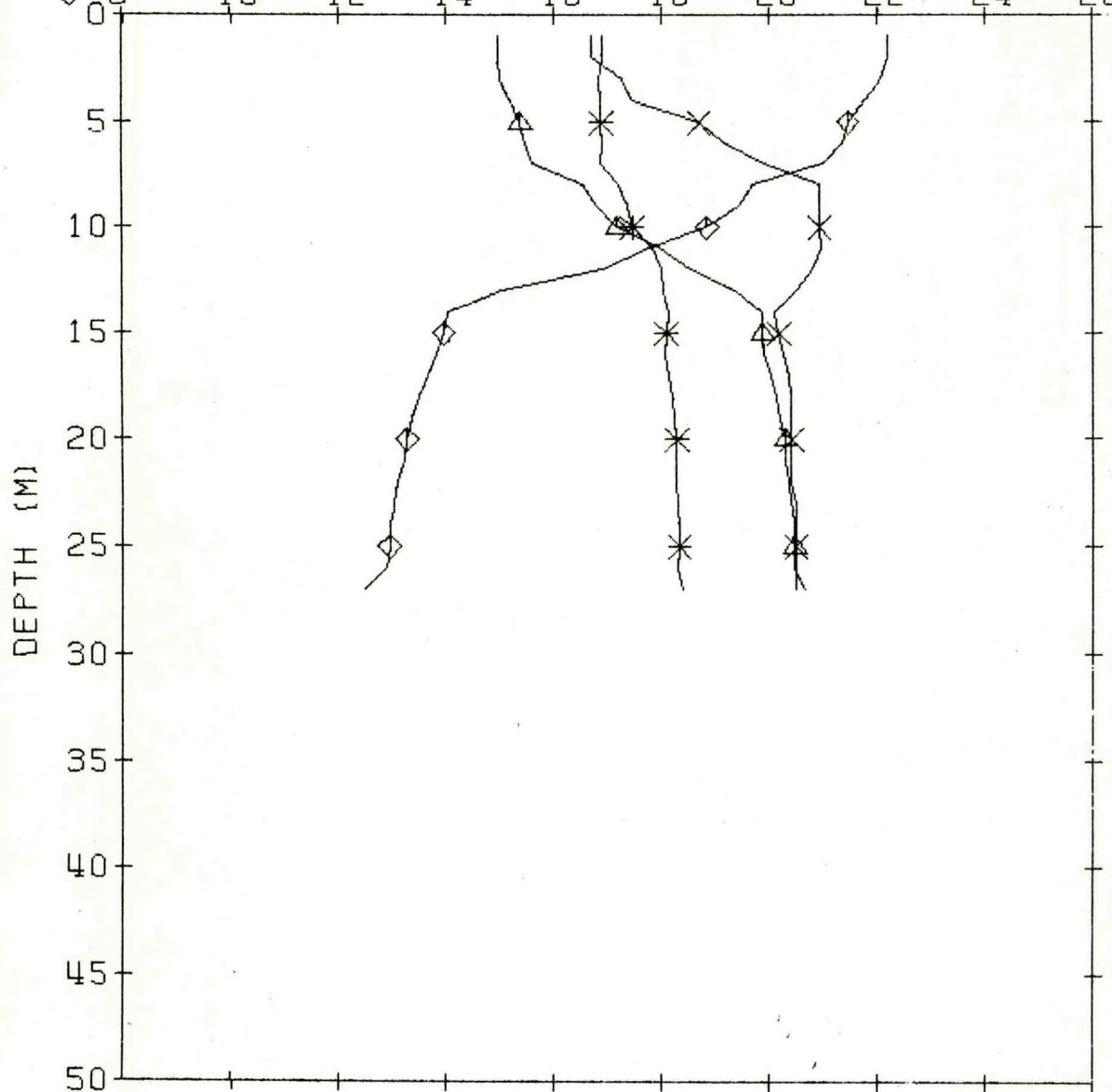
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.077 LAT 40 10.4N; LONG 73 34.3W GMT 05.4 08/02/77  
 DEPTH 35 AIR D/W 71.0/69.0 BARO 13.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 29/02 SEA DIR/HT 29/0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.50	31.66	21.85	87.0	7.95	5.5				
2	21.50	31.67	21.85	87.0	7.95	5.5				
3	21.48	31.67	21.86	87.0	7.95	5.5	.05	.00	2.78	.53
4	21.48	31.68	21.86	87.0	7.95	5.5				
5	21.47	31.68	21.87	87.0	7.95	5.5				
6	21.48	31.68	21.87	87.0	7.95	5.5				
7	21.90	31.67	21.86	87.0	7.95	5.5				
8	21.90	31.67	21.86	87.0	7.95	5.5				
9	21.90	31.67	21.86	87.0	7.95	5.5	.03	.00	1.90	.38
10	21.90	31.67	21.86	87.0	7.95	5.5				
11	21.90	31.67	21.86	87.0	7.95	5.5				
12	21.90	31.67	21.86	87.0	7.95	5.5				
13	21.90	31.67	21.86	87.0	7.95	5.5				
14	21.90	31.67	21.86	87.0	7.95	5.5				
15	21.90	31.67	21.86	87.0	7.95	5.5				
16	21.90	31.67	21.86	87.0	7.95	5.5				
17	21.90	31.67	21.86	87.0	7.95	5.5				
18	21.90	31.67	21.86	87.0	7.95	5.5				
19	21.90	31.67	21.86	87.0	7.95	5.5				
20	21.90	31.67	21.86	87.0	7.95	5.5				
21	21.90	31.67	21.86	87.0	7.95	5.5				
22	21.90	31.67	21.86	87.0	7.95	5.5				
23	21.90	31.67	21.86	87.0	7.95	5.5				
24	21.90	31.67	21.86	87.0	7.95	5.5				
25	21.90	31.67	21.86	87.0	7.95	5.5				
26	21.90	31.67	21.86	87.0	7.95	5.5				
27	21.90	31.67	21.86	87.0	7.95	5.5				
28	21.90	31.67	21.86	87.0	7.95	5.5				
29	21.90	31.67	21.86	87.0	7.95	5.5				
30	21.90	31.67	21.86	87.0	7.95	5.5	.30	2.78	9.26	1.89

KELEZ CRUISE XWCC-15 STATION 77 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

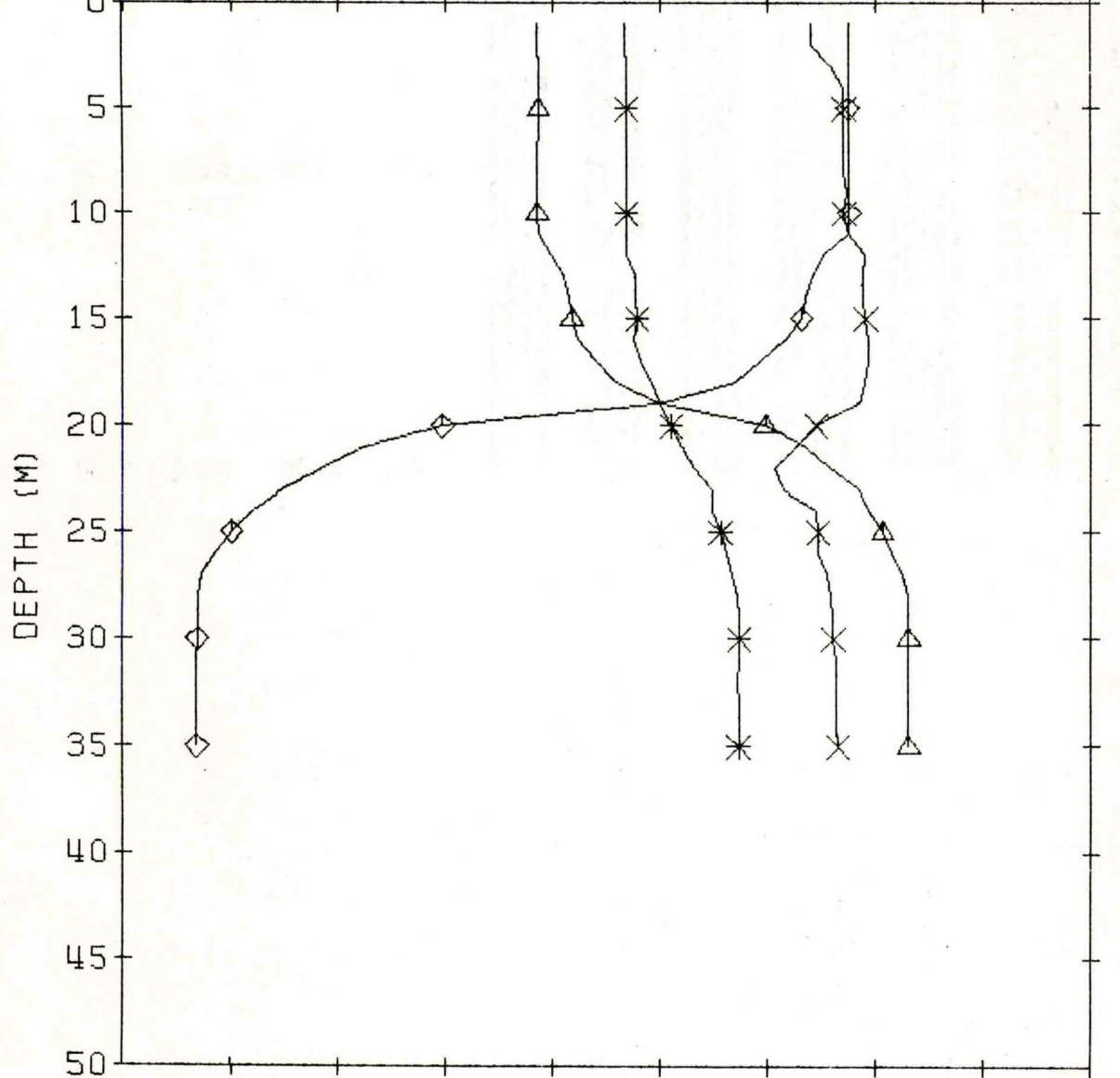
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.078 LAT 40 5.5N; LONG 73 21.5W GMT 09.1 08/02/77  
 DEPTH 41 AIR D/W 71.0/69.0 BARO 13.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 29/12 SEA DIR/HT 29/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.01	31.63	21.95	87.2		5.48				
2	21.01	31.63	21.95	87.2		5.48				
3	21.01	31.63	21.95	87.2		5.48				
4	21.01	31.63	21.96	87.6		5.58	.02	.00	1.51	.32
5	21.01	31.63	21.96	87.9		5.59				
6	21.01	31.63	21.95	87.9		5.59				
7	21.01	31.63	21.96	87.9		5.59				
8	21.00	31.63	21.95	88.0		5.60				
9	20.95	31.63	21.96	88.0		5.60				
10	20.85	31.61	21.96	88.2		5.61				
11	20.74	31.59	22.00	88.4		5.65	.01	.43	.79	.20
12	20.69	31.60	22.02	88.5		5.70				
13	20.62	31.59	22.03	88.5		5.73				
14	20.44	31.59	22.07	88.7		5.75				
15	20.24	31.62	22.10	87.9		5.78				
16	19.44	31.70	22.36	87.7		5.77				
17	17.71	31.85	22.86	84.8		5.72				
18	16.41	31.85	23.26	82.3		5.52				
19	14.40	31.11	23.90	82.3		5.33				
20	11.88	31.34	24.57	84.8		5.41				
21	10.89	31.44	24.83	86.0		5.81	.04	.39	5.09	1.09
22	10.59	31.54	24.91	86.6		5.97				
23	10.22	31.56	25.03	87.4		5.93				
24	10.09	31.61	25.09	87.7		5.79				
25	9.98	31.62	25.12	88.0		5.60				
26	9.98	31.63	25.12	88.1		5.47				
27	9.98	31.63	25.14	88.1		5.37				
28	9.98	31.64	25.17	88.1		5.30				
29	9.98	31.65	25.18	88.1		5.28				
30	9.98	31.66	25.23	88.1		5.19				
31	9.98	31.71	25.31	88.1		5.11				
32	9.98	31.72	25.32	88.1		5.33	.36	2.67	8.36	1.69
33	9.98	31.72	25.33	88.1		5.33				
34	9.98	31.71	25.33	88.1		5.31				
35	9.98	31.72	25.33	88.1		5.26				
36	9.98	31.72	25.33	88.1		5.23				
37	9.98	31.73	25.34	88.1		5.22				
38	9.98	31.73	25.34	88.1		5.21				
39	9.98	31.72	25.33	88.1		5.19				
40	9.98	31.72	25.33	88.1		5.19	.33	2.97	8.36	1.68

KELEZ CRUISE XWCC-15 STATION 78 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

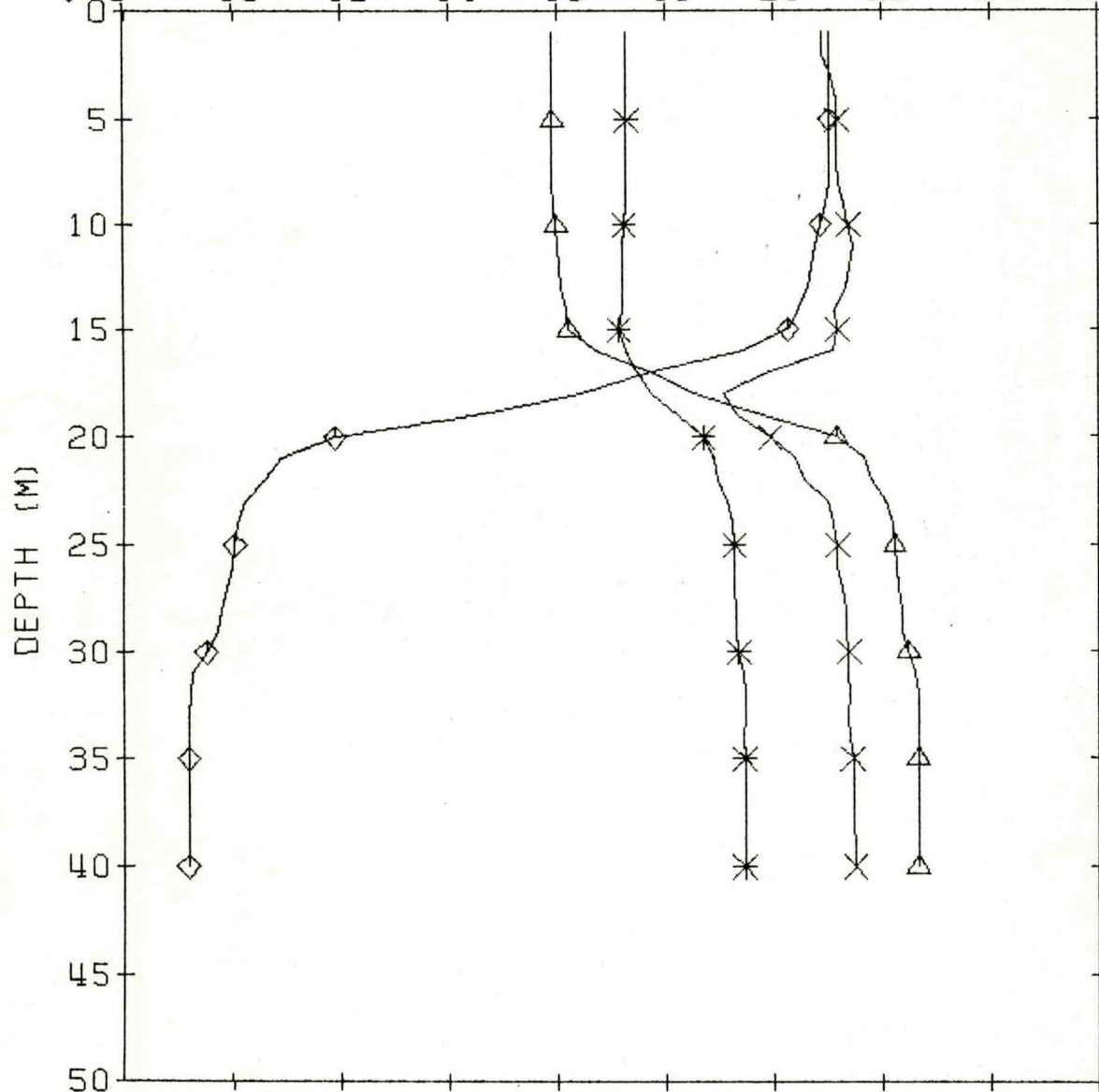
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.079 LAT 40 .0N; LONG 73 9.5W GMT 09.4 08/06/77  
 DEPTH 47 AIR D/W 75.5/73.5 BARO 18.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 24/08 SEA DIR/HT 24/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.68	31.62	21.49	87.3		5.63				
2	22.68	31.62	21.49	87.3		5.63				
3	22.70	31.61	21.48	87.3		5.61	.05	.00	1.17	.26
4	22.70	31.61	21.47	87.3		5.60				
5	22.69	31.61	21.48	87.3		5.60				
6	22.69	31.61	21.48	87.3		5.62				
7	22.69	31.61	21.48	87.3		5.60				
8	22.67	31.65	21.50	87.6		5.60				
9	22.66	31.64	21.51	87.7		5.60				
10	22.66	31.70	21.51	87.8		5.60	.07	.00	.40	.22
11	22.66	31.70	21.75	87.8		5.60				
12	22.63	31.84	22.24	87.9		5.60				
13	22.63	31.89	22.44	87.9		5.60				
14	22.63	31.91	22.55	87.9		5.60				
15	22.63	31.90	22.55	87.9		5.60				
16	22.63	31.90	22.55	87.9		5.60				
17	22.63	31.90	22.55	87.9		5.60				
18	22.63	31.90	22.55	87.9		5.60				
19	22.63	31.90	22.55	87.9		5.60				
20	22.64	31.60	22.40	87.7		5.60	.04	.08	2.91	.65
21	22.64	31.64	22.05	87.4		5.60				
22	22.64	31.66	22.16	87.4		5.61				
23	22.64	31.67	22.20	87.4		5.61				
24	22.64	31.68	22.23	87.4		5.61				
25	22.64	31.68	22.23	87.4		5.61				
26	22.64	31.69	22.23	87.4		5.61				
27	22.64	31.72	22.23	87.4		5.61				
28	22.64	31.74	22.23	87.4		5.61				
29	22.64	31.81	22.41	87.7		5.61	1.10	2.14	9.49	1.79
30	22.64	31.80	22.43	87.7		5.61				
31	22.64	31.79	22.43	87.7		5.61				
32	22.64	31.78	22.43	87.7		5.61				
33	22.64	31.78	22.43	87.7		5.61				
34	22.64	31.78	22.43	87.7		5.61				
35	22.64	31.78	22.43	87.7		5.61				
36	22.64	31.78	22.43	87.7		5.61				
37	22.64	31.78	22.43	87.7		5.61				
38	22.64	31.78	22.43	87.7		5.61				
39	22.64	31.78	22.43	87.7		5.61				
40	22.64	31.78	22.43	87.7		5.61	.92	1.80	11.33	2.08
41	22.64	31.78	22.43	87.7		5.61				
42	22.64	31.78	22.43	87.7		5.61				
43	22.64	31.78	22.43	87.7		5.61				
44	22.64	31.78	22.43	87.7		5.61				
45	22.64	31.78	22.43	87.7		5.61				
46	22.64	31.78	22.43	87.7		5.61				
47	22.64	31.78	22.43	87.7		5.61	.37	3.29	11.96	2.12

KELEZ CRUISE XWCC-15 STATION 79 08/06/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

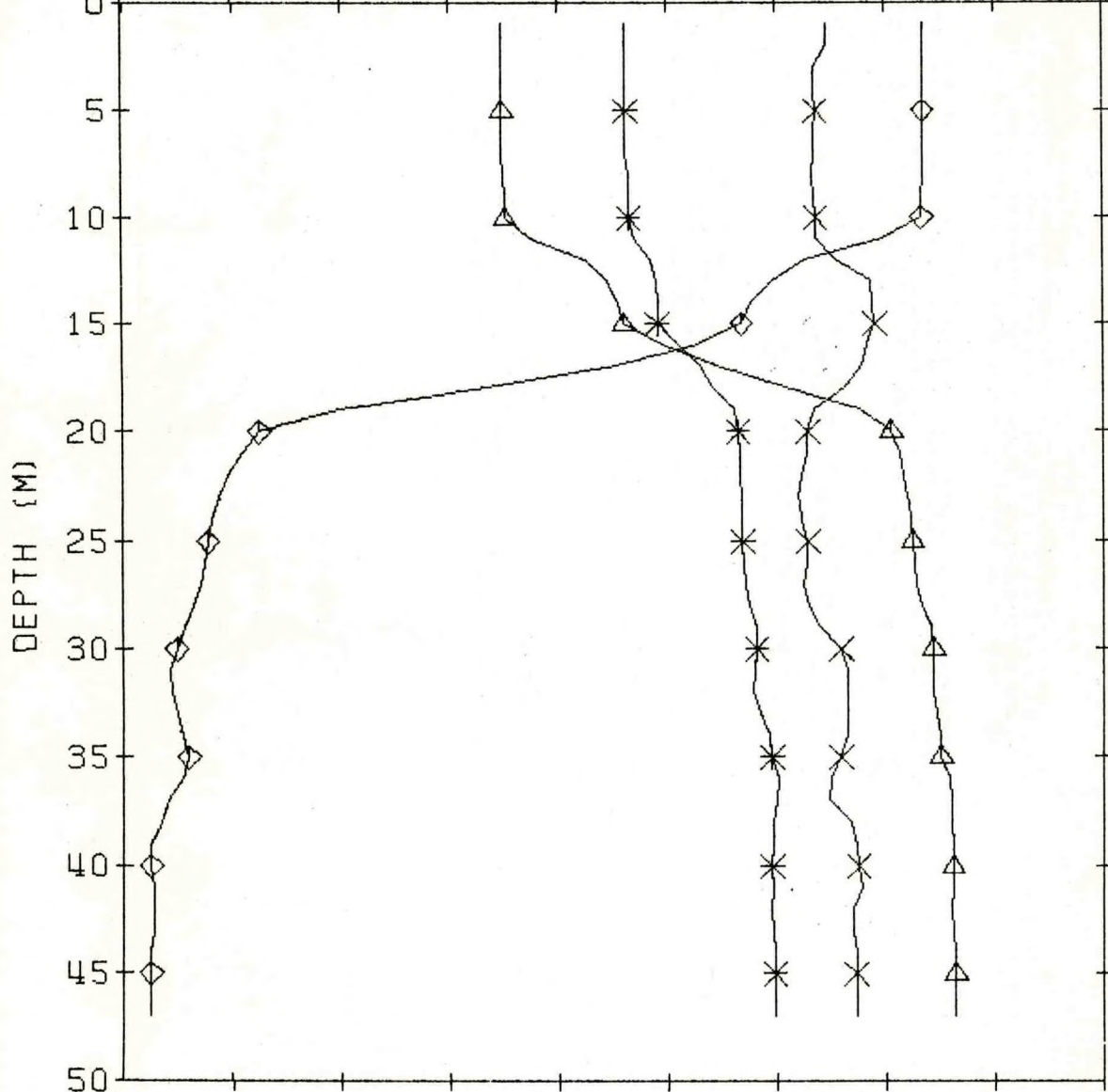
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.080 LAT 39 54.8N; LONG 72 57.0W GMT 13.0 08/06/77  
 DEPTH 53 AIR D/W 76.0/74.0 BARO 18.0 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 23/07 SEA DIR/HT 00/0 SWELL DIR/HT 20/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.50	31.55	21.49	90.4		5.63				
2	22.50	31.55	21.49	90.4		5.63				
3	22.41	31.55	21.50	90.4		5.57	.06	.14	.20	.13
4	22.35	31.55	21.54	90.5		5.57				
5	21.98	31.55	21.65	90.8		5.62				
6	21.54	31.55	21.76	90.8		5.71				
7	21.02	31.55	21.91	90.7		5.75				
8	20.72	31.55	22.02	90.6		5.77				
9	20.21	31.55	22.19	90.6		5.88				
10	19.73	31.55	22.36	90.3		5.95	.05	.00	.00	.08
11	19.33	31.55	22.54	90.4		5.99				
12	19.25	31.55	22.67	90.4		6.00				
13	18.17	31.55	23.02	88.9		6.4				
14	17.33	31.55	23.34	88.8		6.31				
15	16.99	31.55	23.47	88.8		6.52				
16	14.99	31.55	24.08	88.8		6.77				
17	12.79	31.55	24.54	88.8		7.1				
18	11.08	31.55	24.77	88.8		7.36				
19	9.99	31.55	25.06	88.8		7.7	.09	.70	3.52	.72
20	9.99	31.55	25.15	88.8		7.7				
21	9.99	31.55	25.26	88.8		7.7				
22	9.99	31.55	25.36	88.8		7.7				
23	9.99	31.55	25.46	88.8		7.7				
24	9.99	31.55	25.56	88.8		7.7				
25	9.99	31.55	25.66	88.8		7.7				
26	9.99	31.55	25.77	88.8		7.7				
27	9.99	31.55	25.87	88.8		7.7				
28	9.99	31.55	25.97	88.8		7.7				
29	9.99	31.55	26.07	88.8		7.7	.61	2.34	7.74	1.49
30	9.99	31.55	26.17	88.8		7.7				
31	9.99	31.55	26.27	88.8		7.7				
32	9.99	31.55	26.37	88.8		7.7				
33	9.99	31.55	26.47	88.8		7.7				
34	9.99	31.55	26.57	88.8		7.7				
35	9.99	31.55	26.67	88.8		7.7				
36	9.99	31.55	26.77	88.8		7.7				
37	9.99	31.55	26.87	88.8		7.7				
38	9.99	31.55	26.97	88.8		7.7				
39	9.99	31.55	27.07	88.8		7.7	.48	2.52	6.53	1.30
40	9.99	31.55	27.17	88.8		7.7				
41	9.99	31.55	27.27	88.8		7.7				
42	9.99	31.55	27.37	88.8		7.7				
43	9.99	31.55	27.47	88.8		7.7				
44	9.99	31.55	27.57	88.8		7.7				
45	9.99	31.55	27.67	88.8		7.7				
46	9.99	31.55	27.77	88.8		7.7				
47	9.99	31.55	27.87	88.8		7.7				
48	9.99	31.55	27.97	88.8		7.7				
49	9.99	31.55	28.07	88.8		7.7				
50	9.99	31.55	28.17	88.8		7.7				
51	9.99	31.55	28.27	88.8		7.7				
52	9.99	31.55	28.37	88.8		7.7	.53	2.94	6.77	1.34

KELEZ CRUISE XWCC-15 STATION 80 08/06/77

TRANSMISSIVITY (0/0)

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SIGMA-T

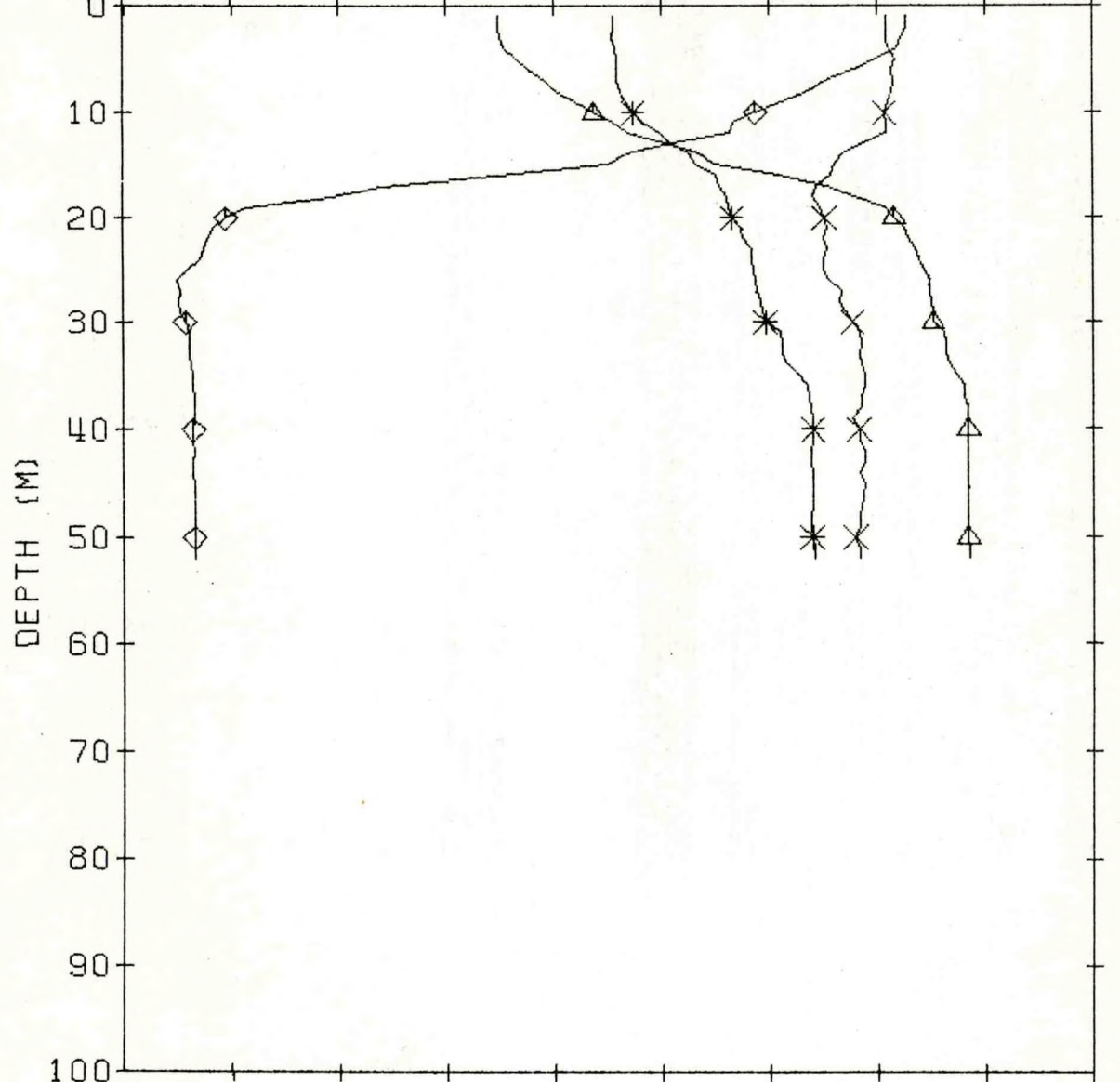
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.081 LAT 39 44.5N; LONG 73 10.2W GMT 07.2 08/06/77  
 DEPTH 43 AIR D/W 74.0/73.0 BARO 17.5 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 23/10 SEA DIR/HT 23/1 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.2	31.4	21.4	90.9	5.5					
2	22.2	31.4	21.4	90.9	5.5					
3	22.2	31.4	21.4	90.9	5.5					
4	22.2	31.4	21.4	90.9	5.5		.03	.00	.00	.06
5	22.2	31.4	21.4	90.9	5.5					
6	22.2	31.4	21.4	90.9	5.5					
7	22.2	31.4	21.4	90.9	5.5					
8	22.2	31.4	21.4	90.9	5.5					
9	22.2	31.4	21.4	90.9	5.5					
10	22.2	31.4	21.4	90.9	5.5					
11	22.2	31.4	21.4	90.9	5.5		.04	.00	.00	.09
12	22.2	31.4	21.4	90.9	5.5					
13	22.2	31.4	21.4	90.9	5.5					
14	22.2	31.4	21.4	90.9	5.5					
15	22.2	31.4	21.4	90.9	5.5					
16	22.2	31.4	21.4	90.9	5.5					
17	22.2	31.4	21.4	90.9	5.5					
18	22.2	31.4	21.4	90.9	5.5					
19	22.2	31.4	21.4	90.9	5.5					
20	22.2	31.4	21.4	90.9	5.5		.06	.00	.28	.20
21	22.2	31.4	21.4	90.9	5.5					
22	22.2	31.4	21.4	90.9	5.5					
23	22.2	31.4	21.4	90.9	5.5					
24	22.2	31.4	21.4	90.9	5.5					
25	22.2	31.4	21.4	90.9	5.5					
26	22.2	31.4	21.4	90.9	5.5					
27	22.2	31.4	21.4	90.9	5.5					
28	22.2	31.4	21.4	90.9	5.5					
29	22.2	31.4	21.4	90.9	5.5					
30	22.2	31.4	21.4	90.9	5.5					
31	22.2	31.4	21.4	90.9	5.5					
32	22.2	31.4	21.4	90.9	5.5					
33	22.2	31.4	21.4	90.9	5.5					
34	22.2	31.4	21.4	90.9	5.5					
35	22.2	31.4	21.4	90.9	5.5					
36	22.2	31.4	21.4	90.9	5.5					
37	22.2	31.4	21.4	90.9	5.5					
38	22.2	31.4	21.4	90.9	5.5					
39	22.2	31.4	21.4	90.9	5.5					
40	22.2	31.4	21.4	90.9	5.5					
41	22.2	31.4	21.4	90.9	5.5					
42	22.2	31.4	21.4	90.9	5.5					
43	22.2	31.4	21.4	90.9	5.5					
44	22.2	31.4	21.4	90.9	5.5					
45	22.2	31.4	21.4	90.9	5.5					
46	22.2	31.4	21.4	90.9	5.5					
47	22.2	31.4	21.4	90.9	5.5					
48	22.2	31.4	21.4	90.9	5.5					
49	22.2	31.4	21.4	90.9	5.5					
50	22.2	31.4	21.4	90.9	5.5					
51	22.2	31.4	21.4	90.9	5.5					
52	22.2	31.4	21.4	90.9	5.5					
53	22.2	31.4	21.4	90.9	5.5					
54	22.2	31.4	21.4	90.9	5.5					
55	22.2	31.4	21.4	90.9	5.5					
56	22.2	31.4	21.4	90.9	5.5					
57	22.2	31.4	21.4	90.9	5.5					
58	22.2	31.4	21.4	90.9	5.5					
59	22.2	31.4	21.4	90.9	5.5					
60	22.2	31.4	21.4	90.9	5.5					
61	22.2	31.4	21.4	90.9	5.5		.82	2.73	8.98	1.77

KELEZ CRUISE XWCC-15 STATION 81 08/06/77

TRANSMISSIVITY (0/0)

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SIGMA-T

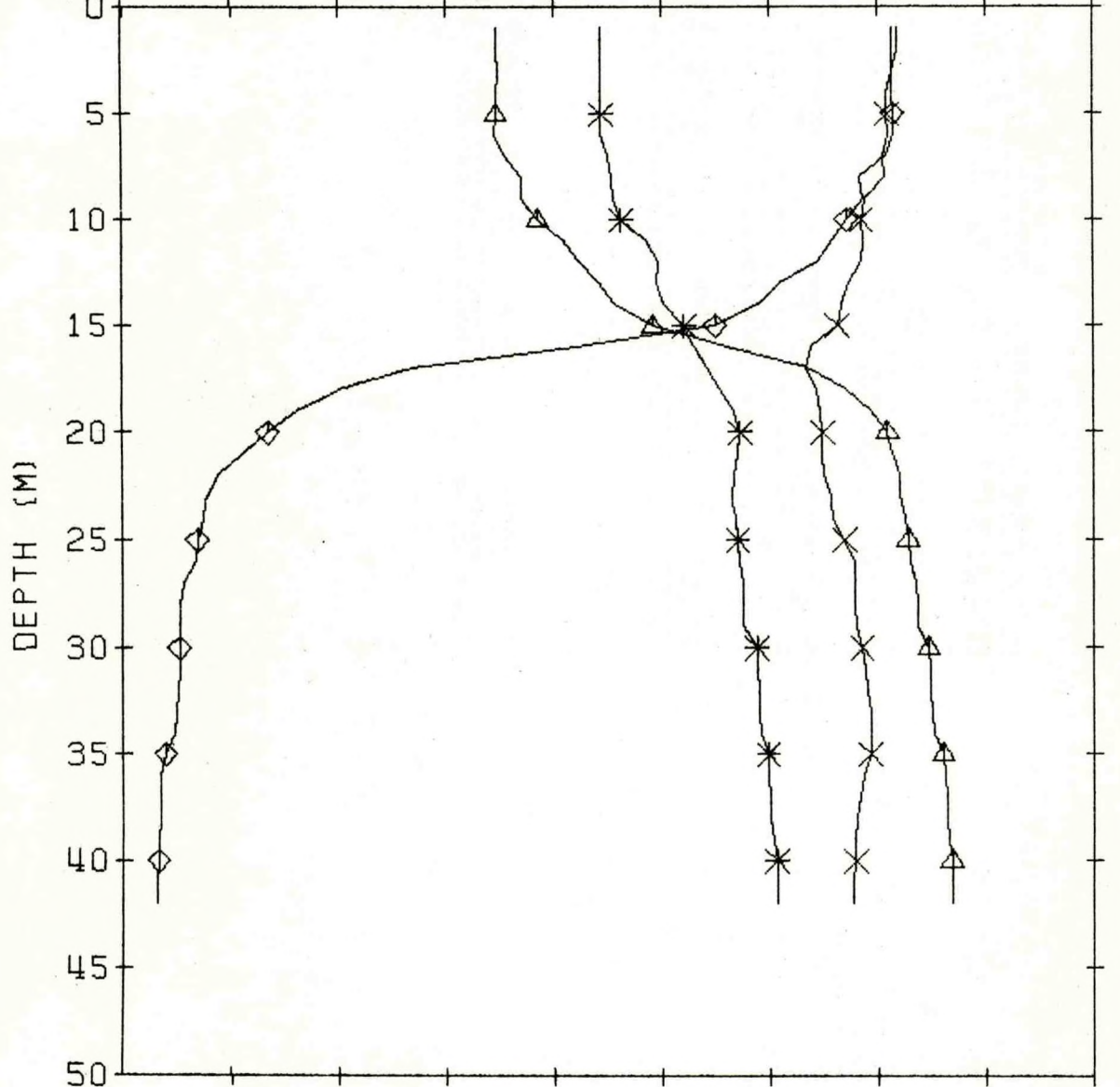
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.082 LAT 39 50.8N; LONG 73 20.2W GMT 12.5 08/02/77  
 DEPTH 44 AIR D/W 70.5/68.0 BARO 15.5 VIS 4 CLD TYP/CVR X/8  
 WETHR 4 WIND DIR/SPD 33/09 SEA DIR/HT 33/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.68	31.72	21.84	89.4		5.57				
2	21.68	31.72	21.84	89.4		5.57				
3	21.68	31.72	21.84	89.4		5.57	.03	.00	2.10	.45
4	21.68	31.72	21.84	89.4		5.57				
5	21.69	31.73	21.84	89.7		5.57				
6	21.68	31.72	21.84	89.7		5.57				
7	21.68	31.72	21.84	89.7		5.57				
8	21.67	31.73	21.85	89.7		5.57				
9	21.67	31.72	21.85	89.7		5.56				
10	21.67	31.74	21.88	89.9		5.56	.00	.03	1.52	.37
11	21.65	31.76	21.97	90.1		5.58				
12	20.00	31.85	22.33	90.3		5.70				
13	20.00	31.86	22.33	90.1		5.70				
14	19.90	31.84	22.40	89.8		5.71				
15	19.90	31.87	22.60	89.7		5.72				
16	19.90	31.87	22.60	89.7		5.72				
17	19.90	31.87	22.60	89.7		5.72				
18	19.90	31.87	22.60	89.7		5.72				
19	19.90	31.87	22.60	89.7		5.72				
20	19.90	31.87	22.60	89.7		5.72	.01	.00	2.29	.53
21	19.90	31.87	22.60	89.7		5.72				
22	19.90	31.87	22.60	89.7		5.72				
23	19.90	31.87	22.60	89.7		5.72				
24	19.90	31.87	22.60	89.7		5.72				
25	19.90	31.87	22.60	89.7		5.72				
26	19.90	31.87	22.60	89.7		5.72				
27	19.90	31.87	22.60	89.7		5.72				
28	19.90	31.87	22.60	89.7		5.72	.40	1.28	4.75	1.01
29	19.90	31.87	22.60	89.7		5.72				
30	19.90	31.87	22.60	89.7		5.72				
31	19.90	31.87	22.60	89.7		5.72				
32	19.90	31.87	22.60	89.7		5.72				
33	19.90	31.87	22.60	89.7		5.72				
34	19.90	31.87	22.60	89.7		5.72				
35	19.90	31.87	22.60	89.7		5.72	.62	3.49	9.99	2.01

KELEZ CRUISE XWCC-15 STATION 82 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

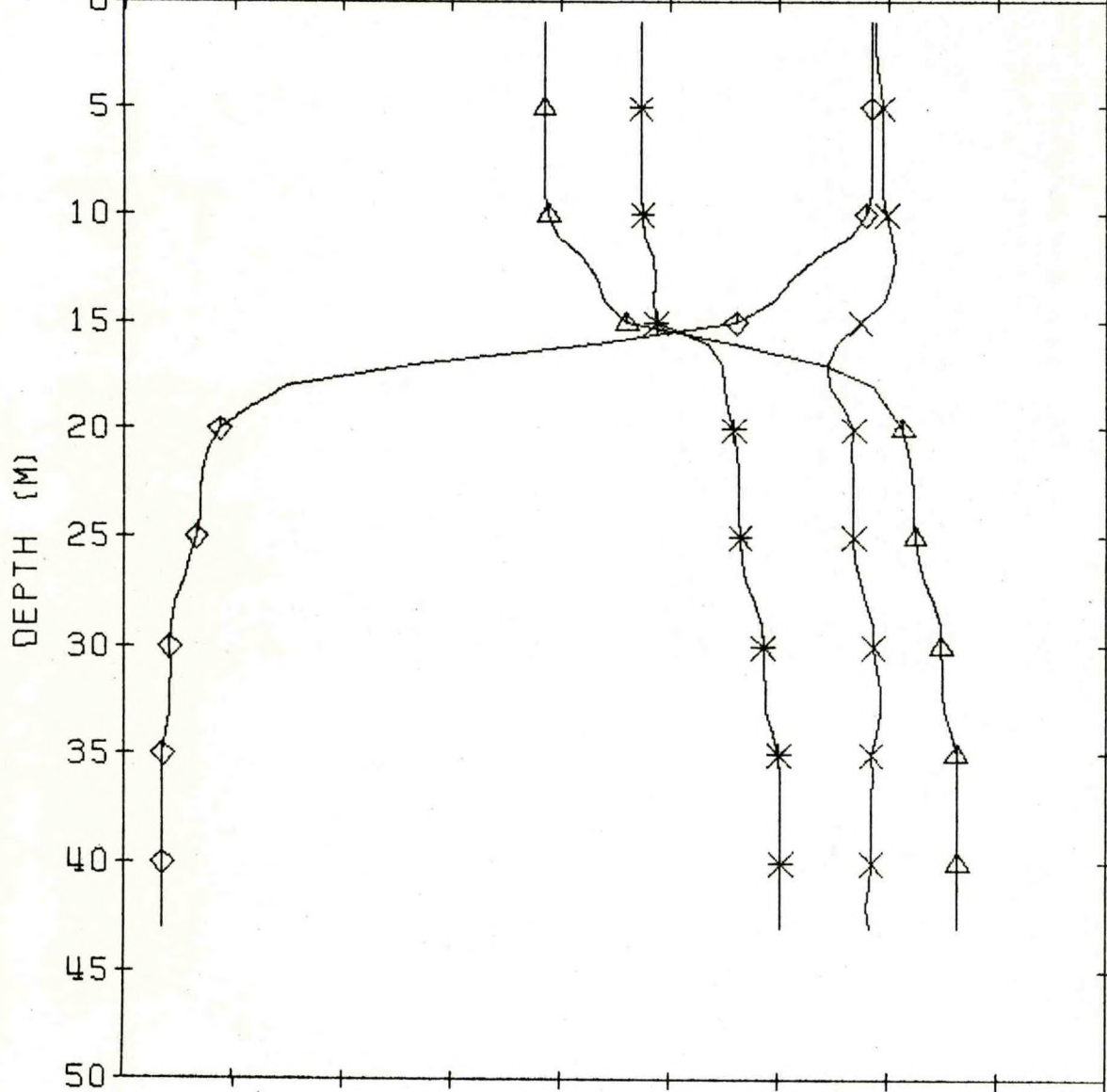
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.083 LAT 39 56.5N; LONG 73 30.5W GMT 14.3 08/02/77  
 DEPTH 40 AIR D/W 73.0/70.0 BARO 16.5 VIS 4 CLD TYP/CVR X/8  
 WETHR 4 WIND DIR/SPD 29/04 SEA DIR/HT 29/0 SWELL DIR/HT 19/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.56	31.77	21.91	89.6		5.51				
2	21.56	31.77	21.91	89.6		5.51				
3	21.56	31.77	21.91	89.6		5.51	.03	.00	.91	.27
4	21.56	31.77	21.91	89.6		5.51				
5	21.56	31.77	21.91	89.6		5.51				
6	21.56	31.77	21.91	89.6		5.51				
7	21.56	31.77	21.91	89.6		5.51				
8	21.56	31.77	21.91	89.6		5.51				
9	21.56	31.77	21.91	89.6		5.51				
10	21.47	31.77	21.93	89.6		5.51	.00	.28	.57	.22
11	20.99	31.88	22.15	90.0		5.62				
12	20.78	31.88	22.22	90.0		5.62				
13	20.66	31.93	22.27	90.0		5.66				
14	20.66	31.93	22.27	90.0		5.66				
15	20.66	31.93	22.27	90.0		5.66				
16	19.76	32.05	22.60	89.9		5.74				
17	19.19	32.11	23.77	86.6		5.16				
18	13.41	32.29	24.24	86.6		5.49				
19	11.66	32.39	24.65	86.6		5.71				
20	11.22	32.48	24.80	86.6		5.76	.00	.00	2.16	.55
21	10.97	32.51	24.86	86.6		5.76				
22	10.74	32.51	24.91	86.6		5.78				
23	10.53	32.55	24.97	86.6		5.75				
24	10.24	32.58	25.04	86.6		5.72				
25	9.84	32.62	25.14	86.6		5.80				
26	9.73	32.65	25.18	86.6		5.74				
27	9.66	32.66	25.21	86.6		5.73				
28	9.66	32.68	25.24	86.6		5.73				
29	9.66	32.70	25.38	86.6		5.92	.12	1.97	6.63	1.50
30	9.66	32.80	25.40	86.6		5.73				
31	9.66	32.84	25.42	86.6		5.73				
32	9.66	32.85	25.44	86.6		5.73				
33	9.66	32.85	25.44	86.6		5.73				
34	9.66	32.87	25.44	86.6		5.73				
35	9.66	32.87	25.44	86.6		5.73				
36	9.66	32.87	25.44	86.6		5.73				
37	9.66	32.87	25.44	86.6		5.73				
38	9.66	32.87	25.44	86.6		5.73	.34	2.06	8.76	1.78

KELEZ CRUISE XWCC-15 STATION 83 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

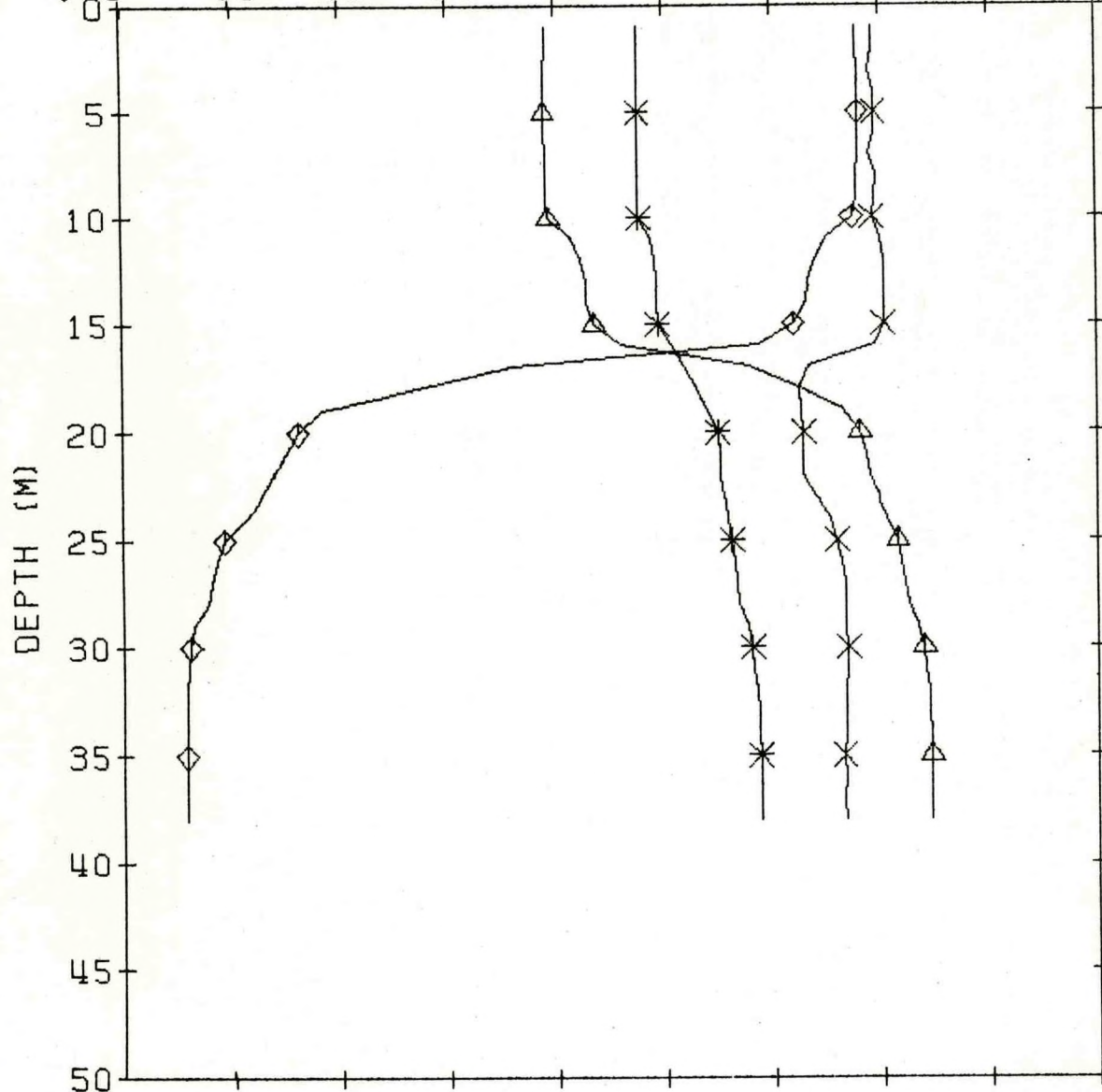
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.084 LAT 40 2.1N; LONG 73 41.7W GMT 16.3 08/02/77  
 DEPTH 29 AIR D/W 76.0/70.0 BARO 17.0 VIS 5 CLD TYP/CVR X/4  
 WETHR 4 WIND DIR/SPD 03/02 SEA DIR/HT 03/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.03	31.89	21.87	86.7	5.63					
2	22.03	31.89	21.87	86.7	5.63					
3	21.89	31.88	21.91	87.1	5.93		.00	.00	1.69	.38
4	21.87	31.87	21.90	87.0	6.00					
5	21.87	31.87	21.90	86.8	6.00					
6	21.85	31.87	21.92	86.7	6.00					
7	21.75	31.88	21.94	86.6	6.00					
8	21.72	31.89	21.96	86.6	6.00					
9	21.71	31.88	21.96	86.3	6.33					
10	21.69	31.88	21.96	86.3	6.33	.00	.00		2.57	.55
11	21.67	31.88	21.97	86.5	6.22					
12	21.64	31.89	21.98	86.5	6.22					
13	21.61	31.89	21.99	86.6	6.22					
14	21.54	31.90	22.00	86.8	6.22					
15	21.48	31.90	22.03	87.0	6.22					
16	20.70	32.09	22.39	86.7	5.57					
17	17.91	32.21	23.18	86.4	6.05					
18	14.49	32.34	24.05	86.0	6.27					
19	11.21	32.45	24.78	85.8	6.27	.17	1.63	11.74	2.42	
20	10.80	32.59	24.90	85.5	6.22					
21	10.61	32.66	25.05	85.2	6.79					
22	10.45	32.71	25.11	85.4	6.41					
23	10.37	32.72	25.14	85.6	6.18					
24	10.31	32.75	25.17	85.7	6.97					
25	10.29	32.76	25.18	85.8	6.82					
26	10.26	32.76	25.18	85.8	6.71					
27	10.11	32.76	25.21	86.0	6.62					
28	10.11	32.76	25.21	86.1	6.53	.30	2.98	13.17	2.79	

KELEZ CRUISE XWCC-15 STATION 84 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

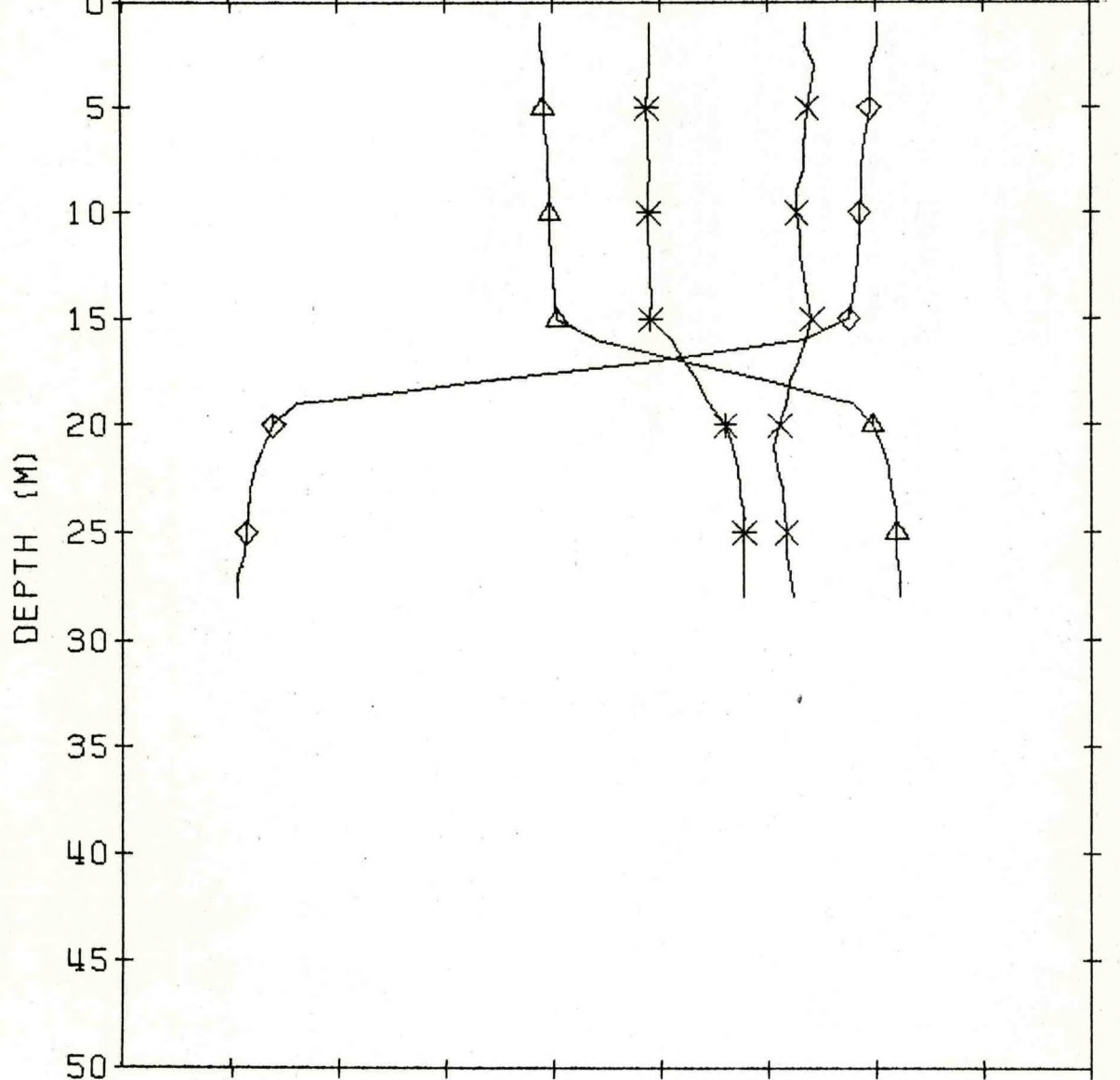
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.085 LAT 40 8.0N; LONG 73 51.3W GMT 01.5 08/02/77  
 DEPTH 28 AIR D/W 67.0/67.0 BARO 13.0 VIS 6 CLD TYP/CVR 7/8  
 WETHR 6 WIND DIR/SPD 29/06 SEA DIR/HT 29/0 SWELL DIR/HT 31/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.24	31.64	21.90	76.6		5.53				
2	21.24	31.64	21.90	76.6		5.53				
3	21.25	31.67	21.92	78.2		5.96	.01	.14	6.15	1.18
4	21.27	31.69	21.93	78.4		6.00				
5	21.27	31.71	21.95	78.5		6.01				
6	21.28	31.73	21.96	78.7		6.01				
7	21.28	31.76	21.98	78.9		6.01				
8	21.28	31.81	22.02	79.2		6.00				
9	21.22	31.87	22.08	79.6		5.99				
10	21.08	31.90	22.14	80.1		5.97	.10	.00	6.42	1.30
11	20.84	31.93	22.22	81.2		5.93				
12	20.09	31.93	22.42	82.2		5.87				
13	18.17	32.18	23.00	83.3		5.74				
14	14.50	32.27	24.00	83.3		5.58				
15	12.73	32.38	24.44	83.3		5.7				
16	11.93	32.43	24.63	84.1		5.9				
17	11.71	32.44	24.68	84.1		6.01				
18	11.60	32.49	24.73	84.1		6.75				
19	11.47	32.49	24.76	84.1		6.45				
20	11.38	32.50	24.79	85.5		6.30	.42	2.91	16.16	3.32
21	11.32	32.51	24.80	88.0		6.38				
22	11.27	32.52	24.82	88.0		6.45				
23	11.25	32.53	24.83	88.0		6.52				
24	11.17	32.53	24.85	88.0		6.56				
25	11.09	32.55	24.88	88.0		6.58				
26	10.72	32.55	24.94	88.0		6.58				
27	10.40	32.55	25.00	88.0		6.60	.50	3.90	17.05	3.53

KELEZ CRUISE XWCC-15 STATION 85 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

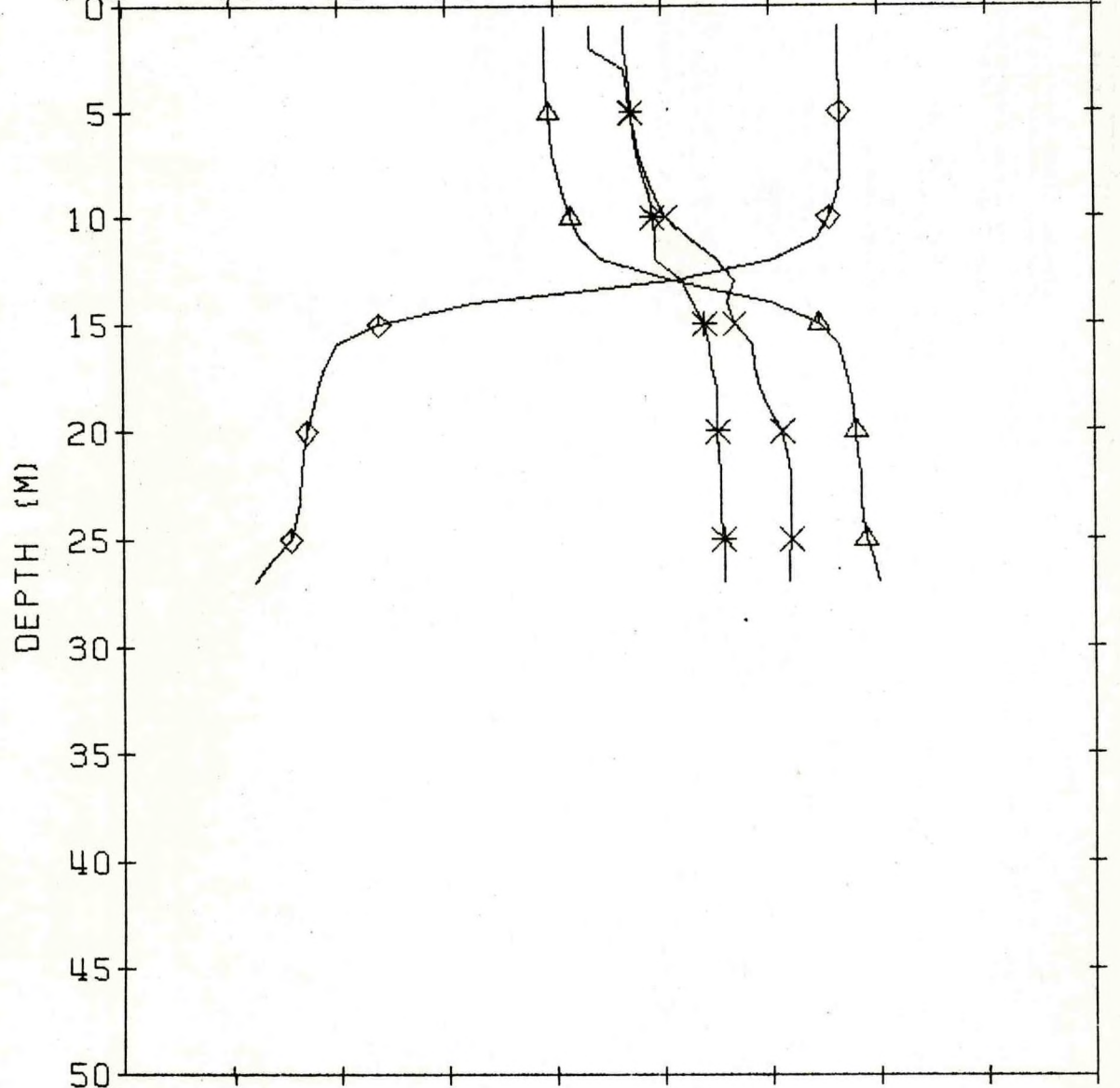
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.113 LAT 40 8.8N; LONG 72 55.5W GMT 12.0 08/08/77  
 DEPTH 48 AIR D/W 79.0/76.0 BARO 13.0 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 26/10 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	23.21	31.58	21.31	84.2		5.56				
2	23.21	31.58	21.31	84.2		5.56				
3	23.15	31.58	21.33	84.5		5.57	.29	.00	.94	.25
4	23.14	31.58	21.33	86.1		5.61				
5	23.14	31.59	21.34	86.2		5.61				
6	23.04	31.59	21.38	86.2		5.62				
7	22.77	31.59	21.44	86.2		5.62				
8	22.48	31.72	21.62	86.4		5.66				
9	21.86	31.67	21.75	86.4		5.60				
10	20.69	31.64	21.04	86.4		5.64	.32	.54	.00	.11
11	20.28	31.78	22.26	86.3		5.54				
12	20.11	31.77	22.29	86.2		5.41				
13	19.36	31.77	22.49	86.2		5.36				
14	18.96	31.85	22.65	86.2		5.29				
15	17.76	31.29	23.01	86.2		5.29				
16	16.14	31.25	23.63	86.3		5.15				
17	15.18	31.45	23.99	86.7		5.07				
18	14.17	31.55	24.28	86.7		5.08				
19	13.21	31.80	24.66	86.8		5.08				
20	12.31	31.76	24.99	86.9		5.06	.31	.85	.00	.17
21	11.36	31.77	24.99	86.9		5.06				
22	11.00	31.78	25.17	86.8		5.16				
23	10.36	31.80	25.26	86.8		5.19				
24	9.99	31.80	25.26	86.7		5.13				
25	9.99	31.81	25.35	86.7		5.09				
26	9.99	31.81	25.37	86.7		5.08				
27	9.99	31.86	25.41	86.7		5.08				
28	9.99	31.91	25.44	86.7		5.08				
29	9.99	31.96	25.46	86.7		5.08	1.17	.29	3.17	.79
30	9.99	31.92	25.46	86.7		5.08				
31	9.99	31.92	25.46	86.8		5.08				
32	9.99	31.92	25.46	86.8		5.08				
33	9.99	31.92	25.46	86.8		5.08				
34	9.99	31.92	25.46	86.8		5.08				
35	9.99	31.92	25.46	86.8		5.08				
36	9.99	31.92	25.46	86.8		5.08				
37	9.99	31.92	25.46	86.8		5.08				
38	9.99	31.92	25.46	86.8		5.08				
39	9.99	31.92	25.46	86.8		5.08				
40	9.99	31.92	25.46	86.8		5.08	.57	3.66	11.48	2.24
41	9.99	31.92	25.46	86.8		5.08				
42	9.99	31.92	25.46	86.8		5.08				
43	9.99	31.92	25.46	86.8		5.08				
44	9.99	31.92	25.46	86.8		5.08				
45	9.99	31.92	25.46	86.8		5.08				
46	9.99	31.92	25.46	86.8		5.08				
47	9.99	31.92	25.46	86.8		5.08	.65	3.59	11.48	2.27

KELEZ CRUISE XWCC-15 STATION 113 08/08/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

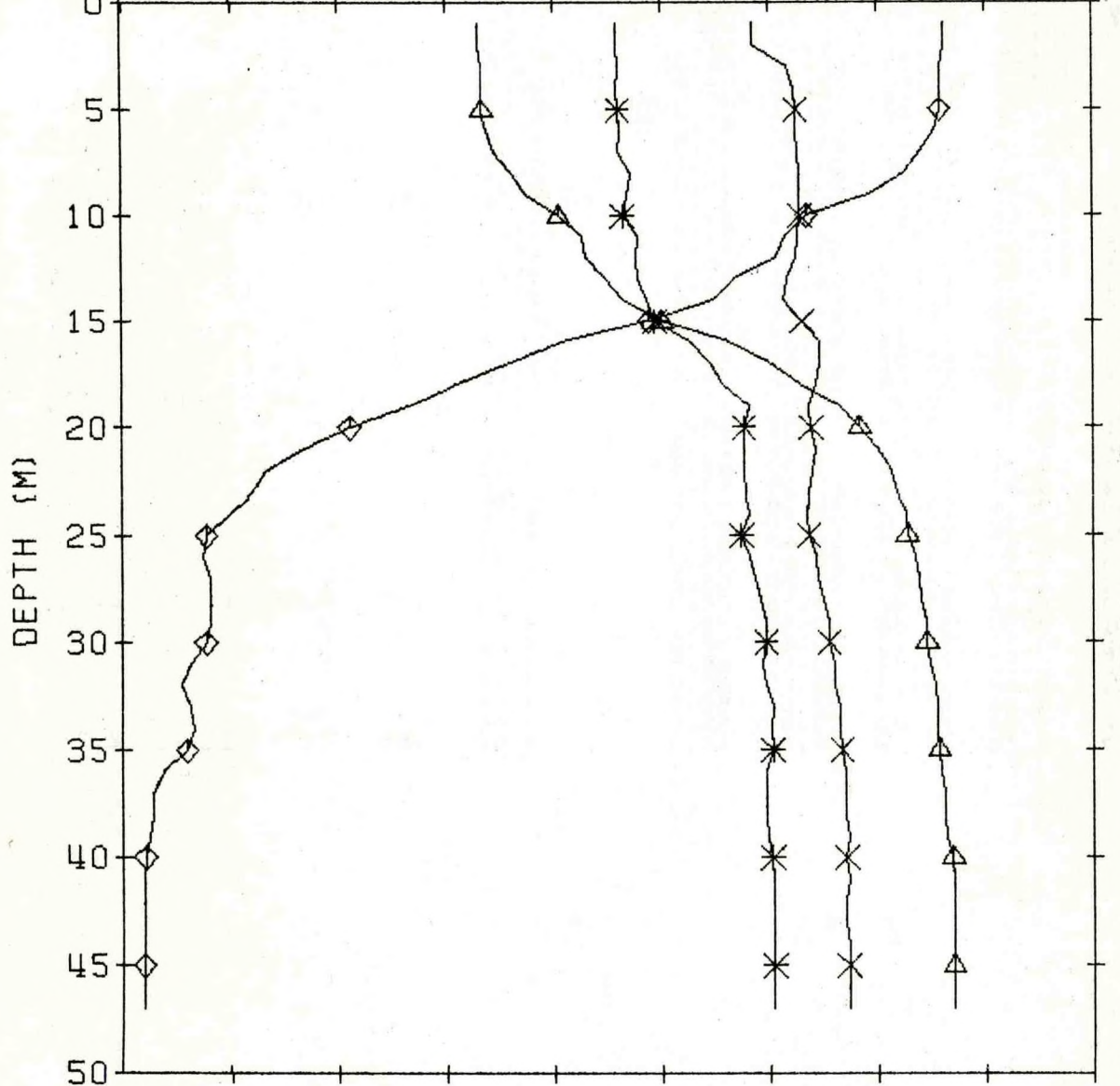
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.114 LAT 40 4.1N; LONG 72 46.5W GMT 05.3 08/08/77  
 DEPTH 56 AIR D/W 76.0/74.0 BARO 13.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 23/10 SEA DIR/HT 23/0 SWELL DIR/HT 24/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	23.28	32.08	21.67	89.8		.47				
2	23.28	32.08	21.67	89.8		.47				
3	23.28	32.08	21.67	89.8		.47				
4	23.28	32.08	21.67	89.8		.47	.08	.00	.00	.04
5	23.28	32.08	21.67	89.8		.47				
6	23.28	32.08	21.67	89.8		.47				
7	23.28	32.08	21.67	89.8		.47				
8	23.28	32.08	21.67	89.8		.47				
9	23.28	32.08	21.67	89.8		.47				
10	23.28	32.08	21.67	89.8		.47				
11	23.28	32.08	21.67	89.8		.47				
12	23.28	32.08	21.67	89.8		.47				
13	23.28	32.08	21.67	89.8		.47				
14	23.28	32.08	21.67	89.8		.47				
15	23.28	32.08	21.67	89.8		.47				
16	23.28	32.08	21.67	89.8		.47				
17	23.28	32.08	21.67	89.8		.47				
18	23.28	32.08	21.67	89.8		.47				
19	23.28	32.08	21.67	89.8		.47				
20	23.28	32.08	21.67	89.8		.47	.04	.00	.16	.06
21	23.28	32.08	21.67	89.8		.47				
22	23.28	32.08	21.67	89.8		.47				
23	23.28	32.08	21.67	89.8		.47				
24	23.28	32.08	21.67	89.8		.47				
25	23.28	32.08	21.67	89.8		.47				
26	23.28	32.08	21.67	89.8		.47				
27	23.28	32.08	21.67	89.8		.47				
28	23.28	32.08	21.67	89.8		.47				
29	23.28	32.08	21.67	89.8		.47				
30	23.28	32.08	21.67	89.8		.47				
31	23.28	32.08	21.67	89.8		.47	.31	1.04	3.63	.85
32	23.28	32.08	21.67	89.8		.47				
33	23.28	32.08	21.67	89.8		.47				
34	23.28	32.08	21.67	89.8		.47				
35	23.28	32.08	21.67	89.8		.47				
36	23.28	32.08	21.67	89.8		.47				
37	23.28	32.08	21.67	89.8		.47				
38	23.28	32.08	21.67	89.8		.47				
39	23.28	32.08	21.67	89.8		.47				
40	23.28	32.08	21.67	89.8		.47	.40	2.16	8.13	1.64
41	23.28	32.08	21.67	89.8		.47				
42	23.28	32.08	21.67	89.8		.47				
43	23.28	32.08	21.67	89.8		.47				
44	23.28	32.08	21.67	89.8		.47				
45	23.28	32.08	21.67	89.8		.47				
46	23.28	32.08	21.67	89.8		.47				
47	23.28	32.08	21.67	89.8		.47				
48	23.28	32.08	21.67	89.8		.47				
49	23.28	32.08	21.67	89.8		.47				
50	23.28	32.08	21.67	89.8		.47	.29	2.27	8.63	1.77
51	23.28	32.08	21.67	89.8		.47	.30	2.62	9.04	1.79

KELEZ CRUISE XWCC-15 STATION 114 08/08/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

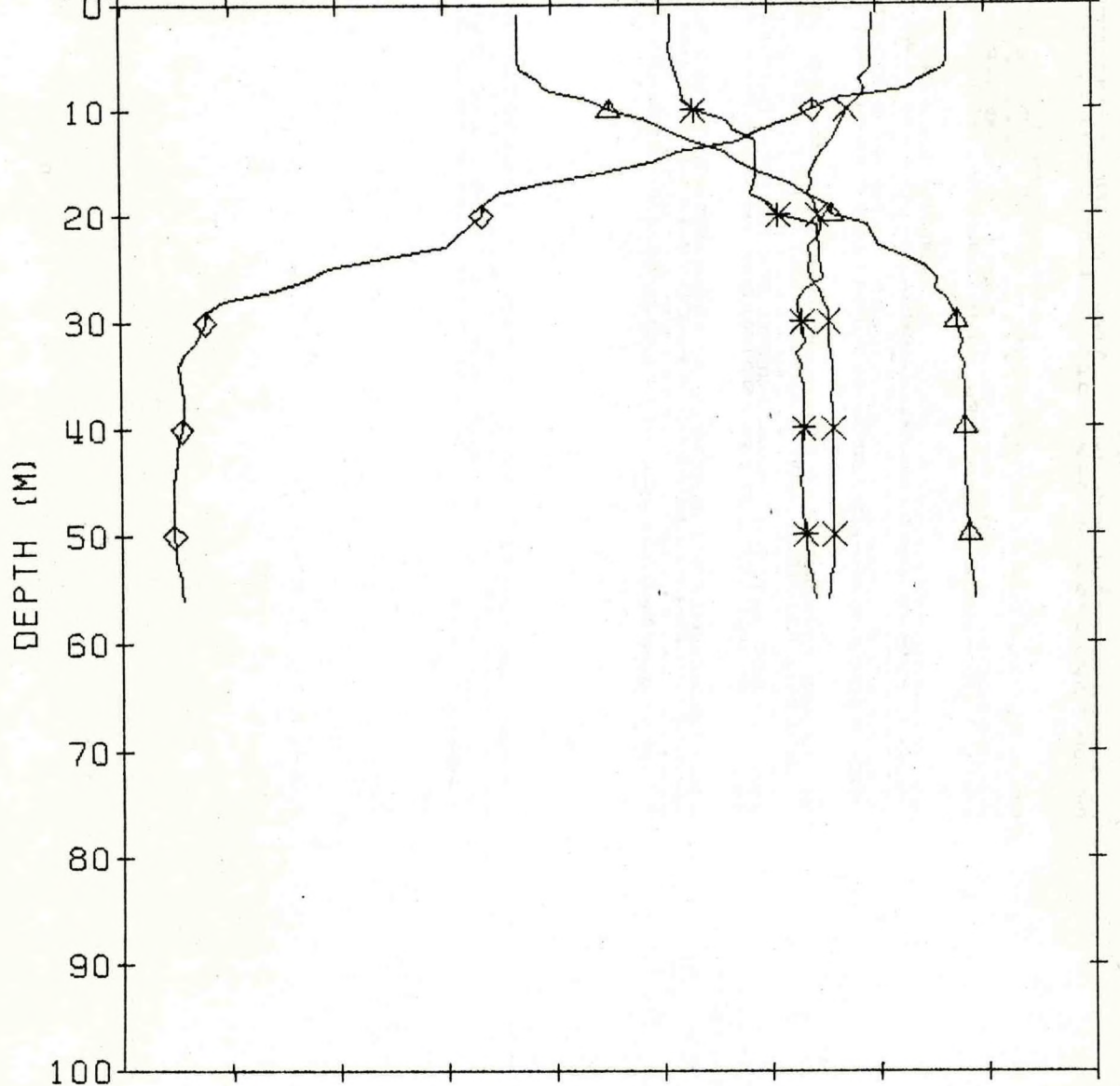
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.115 LAT 39 58.7N; LONG 72 34.1W GMT 03.0 08/08/77  
 DEPTH 61 AIR D/W 75.5/74.0 BARO 13.0 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 25/10 SEA DIR/HT 00/0 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.73	33.10	21.84	89.0	5.62					
2	22.73	33.10	21.84	89.0	5.62					
3	22.73	33.10	21.84	89.0	5.62					
4	22.73	33.10	21.84	89.0	5.62					
5	22.73	33.10	21.84	89.0	5.62					
6	22.73	33.10	21.84	89.0	5.62					
7	22.73	33.10	21.84	89.0	5.62					
8	22.73	33.10	21.84	89.0	5.62					
9	22.73	33.10	21.84	89.0	5.62					
10	22.73	33.10	21.84	89.0	5.62					
11	22.73	33.10	21.84	89.0	5.62					
12	22.73	33.10	21.84	89.0	5.62					
13	22.73	33.10	21.84	89.0	5.62					
14	22.73	33.10	21.84	89.0	5.62					
15	22.73	33.10	21.84	89.0	5.62					
16	22.73	33.10	21.84	89.0	5.62					
17	22.73	33.10	21.84	89.0	5.62					
18	22.73	33.10	21.84	89.0	5.62					
19	22.73	33.10	21.84	89.0	5.62					
20	22.73	33.10	21.84	89.0	5.62					
21	22.73	33.10	21.84	89.0	5.62					
22	22.73	33.10	21.84	89.0	5.62					
23	22.73	33.10	21.84	89.0	5.62					
24	22.73	33.10	21.84	89.0	5.62					
25	22.73	33.10	21.84	89.0	5.62					
26	22.73	33.10	21.84	89.0	5.62					
27	22.73	33.10	21.84	89.0	5.62					
28	22.73	33.10	21.84	89.0	5.62					
29	22.73	33.10	21.84	89.0	5.62					
30	22.73	33.10	21.84	89.0	5.62					
31	22.73	33.10	21.84	89.0	5.62					
32	22.73	33.10	21.84	89.0	5.62					
33	22.73	33.10	21.84	89.0	5.62					
34	22.73	33.10	21.84	89.0	5.62					
35	22.73	33.10	21.84	89.0	5.62					
36	22.73	33.10	21.84	89.0	5.62					
37	22.73	33.10	21.84	89.0	5.62					
38	22.73	33.10	21.84	89.0	5.62					
39	22.73	33.10	21.84	89.0	5.62					
40	22.73	33.10	21.84	89.0	5.62					
41	22.73	33.10	21.84	89.0	5.62					
42	22.73	33.10	21.84	89.0	5.62					
43	22.73	33.10	21.84	89.0	5.62					
44	22.73	33.10	21.84	89.0	5.62					
45	22.73	33.10	21.84	89.0	5.62					
46	22.73	33.10	21.84	89.0	5.62					
47	22.73	33.10	21.84	89.0	5.62					
48	22.73	33.10	21.84	89.0	5.62					
49	22.73	33.10	21.84	89.0	5.62					
50	22.73	33.10	21.84	89.0	5.62					
51	22.73	33.10	21.84	89.0	5.62					
52	22.73	33.10	21.84	89.0	5.62					
53	22.73	33.10	21.84	89.0	5.62					
54	22.73	33.10	21.84	89.0	5.62					
55	22.73	33.10	21.84	89.0	5.62					
56	22.73	33.10	21.84	89.0	5.62					
57	22.73	33.10	21.84	89.0	5.62					
58	22.73	33.10	21.84	89.0	5.62					
59	22.73	33.10	21.84	89.0	5.62					
60	22.73	33.10	21.84	89.0	5.62					
61	22.73	33.10	21.84	89.0	5.62					
62	22.73	33.10	21.84	89.0	5.62					
63	22.73	33.10	21.84	89.0	5.62					
64	22.73	33.10	21.84	89.0	5.62					
65	22.73	33.10	21.84	89.0	5.62					
66	22.73	33.10	21.84	89.0	5.62					
67	22.73	33.10	21.84	89.0	5.62					
68	22.73	33.10	21.84	89.0	5.62					
69	22.73	33.10	21.84	89.0	5.62					
70	22.73	33.10	21.84	89.0	5.62					
71	22.73	33.10	21.84	89.0	5.62					
72	22.73	33.10	21.84	89.0	5.62					
73	22.73	33.10	21.84	89.0	5.62					
74	22.73	33.10	21.84	89.0	5.62					
75	22.73	33.10	21.84	89.0	5.62					
76	22.73	33.10	21.84	89.0	5.62					
77	22.73	33.10	21.84	89.0	5.62					
78	22.73	33.10	21.84	89.0	5.62					
79	22.73	33.10	21.84	89.0	5.62					
80	22.73	33.10	21.84	89.0	5.62					
81	22.73	33.10	21.84	89.0	5.62					
82	22.73	33.10	21.84	89.0	5.62					
83	22.73	33.10	21.84	89.0	5.62					
84	22.73	33.10	21.84	89.0	5.62					
85	22.73	33.10	21.84	89.0	5.62					
86	22.73	33.10	21.84	89.0	5.62					
87	22.73	33.10	21.84	89.0	5.62					
88	22.73	33.10	21.84	89.0	5.62					
89	22.73	33.10	21.84	89.0	5.62					
90	22.73	33.10	21.84	89.0	5.62					
91	22.73	33.10	21.84	89.0	5.62					
92	22.73	33.10	21.84	89.0	5.62					
93	22.73	33.10	21.84	89.0	5.62					
94	22.73	33.10	21.84	89.0	5.62					
95	22.73	33.10	21.84	89.0	5.62					
96	22.73	33.10	21.84	89.0	5.62					
97	22.73	33.10	21.84	89.0	5.62					
98	22.73	33.10	21.84	89.0	5.62					
99	22.73	33.10	21.84	89.0	5.62					
100	22.73	33.10	21.84	89.0	5.62					

KELEZ CRUISE XWCC-15 STATION 115 08/08/77

TRANSMISSIVITY (0/0)

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SIGMA-T

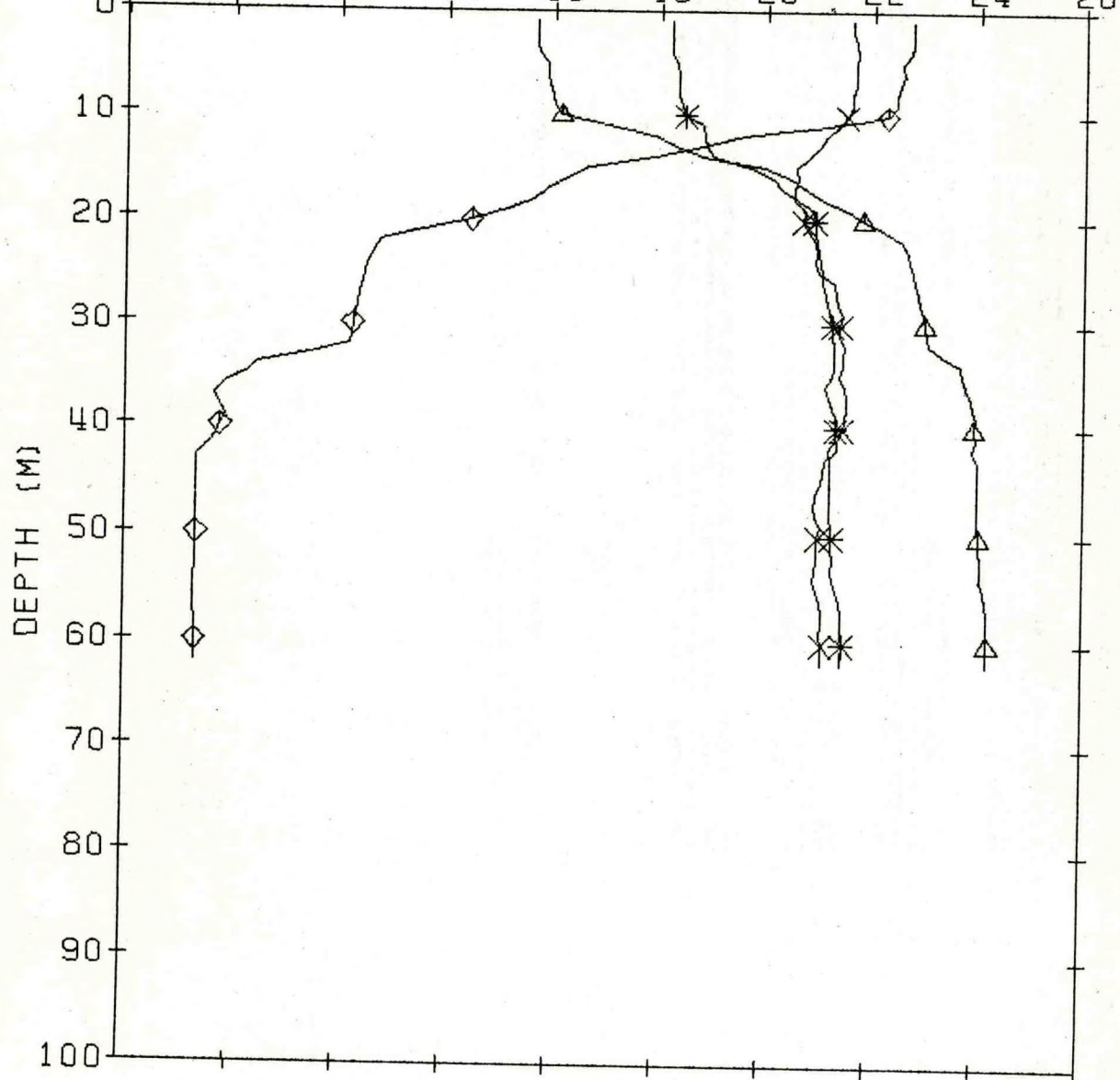
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.116 LAT 40 30.0N; LONG 73 18.7W GMT 21.0 08/08/77  
 DEPTH 25 AIR D/W 78.0/75.5 BARO 10.5 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 21/13 SEA DIR/HT 21/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.25	31.21	21.02	75.6	6.02					
2	23.25	31.21	21.02	75.6	6.02					
3	23.00	31.28	21.09	75.0	6.02		.19	.00	2.09	.41
4	23.01	31.30	21.15	75.3	6.02					
5	22.83	31.31	21.21	76.4	6.06					
6	22.60	31.33	21.28	77.6	6.09					
7	22.28	31.32	21.37	79.0	6.04					
8	21.20	31.48	21.79	83.3	6.05					
9	19.96	31.75	22.49	86.3	6.08					
10	17.96	31.74	22.81	86.7	6.34	.06	.54	.00	.00	
11	17.79	31.75	22.98	86.4	6.39					
12	17.43	31.72	22.93	86.2	6.35					
13	16.65	31.69	23.09	86.1	6.34					
14	15.73	31.77	23.35	85.6	6.31					
15	15.58	31.79	23.40	85.4	6.12					
16	15.35	31.78	23.44	85.3	6.02					
17	15.14	31.82	23.51	85.5	5.72					
18	14.97	31.84	23.57	85.8	5.52					
19	14.83	31.87	23.62	85.9	5.37					
20	14.73	31.88	23.65	86.1	5.24	.06	.24	1.59	.50	
21	14.51	31.92	23.73	86.0	5.15					
22	14.27	31.96	23.81	86.0	5.09					
23	13.98	31.93	23.85	85.9	5.04					
24	13.21	32.07	24.11	85.6	5.00	.16	.62	5.34	1.11	

KELEZ CRUISE XWCC-15 STATION 116 08/08/77

TRANSMISSIVITY (0/0)

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SIGMA-T

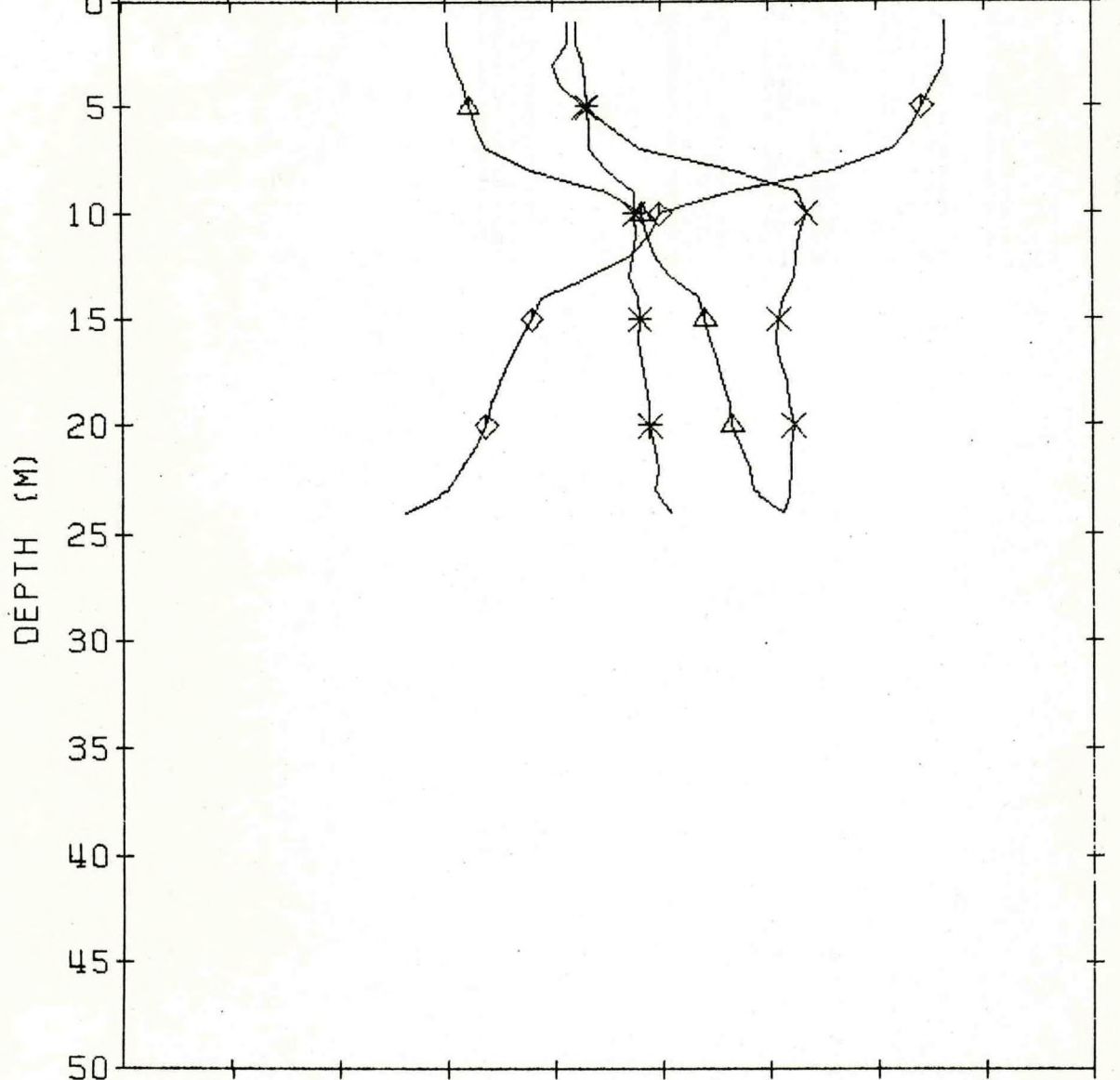
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.117 LAT 40 23.2N; LONG 73 5.0W GMT 16.2 08/08/77  
 DEPTH 36 AIR D/W 85.0/77.0 BARO 12.5 VIS 6 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 25/12 SEA DIR/HT 25/0 SWELL DIR/HT 24/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.58	31.43	21.37	85.9	5.56					
2	22.58	31.43	21.37	85.9	5.56					
3	22.44	31.44	21.42	86.7	5.81		.32	.00	.00	.00
4	22.41	31.44	21.43	87.2	5.84					
5	22.40	31.44	21.43	87.0	5.83					
6	22.40	31.44	21.43	87.0	5.83					
7	22.17	31.58	21.60	87.4	5.88					
8	21.96	31.80	21.91	87.8	5.88					
9	20.92	31.90	22.18	88.4	5.91					
10	20.55	31.91	22.77	88.6	5.97	.04	.00	.00	.16	.00
11	19.82	32.02	22.55	88.4	6.01					
12	19.14	32.04	22.75	87.9	6.06					
13	17.11	32.09	23.23	86.5	6.19					
14	15.12	32.13	23.76	85.4	6.61					
15	12.36	32.24	24.36	85.2	6.92					
16	11.36	32.36	24.69	85.7	7.11					
17	10.88	32.39	24.77	86.0	7.18					
18	10.46	32.39	24.82	86.1	7.10					
19	10.32	32.40	24.88	86.1	7.00					
20	10.32	32.40	24.89	86.1	7.00	.04	.00	.00	3.20	.61
21	10.00	32.41	24.92	85.6	6.94					
22	10.00	32.43	24.96	86.1	6.92					
23	10.00	32.45	24.98	86.3	6.88					
24	9.99	32.49	25.04	86.2	6.83					
25	9.99	32.52	25.08	85.9	6.76					
26	9.99	32.56	25.11	85.7	6.70					
27	9.99	32.60	25.15	85.6	6.63					
28	9.99	32.65	25.22	86.2	6.57					
29	9.99	32.67	25.21	86.6	6.43					
30	9.99	32.66	25.22	86.6	6.22	.63	1.68	6.59	1.40	
31	9.99	32.66	25.22	86.6	6.08					
32	9.99	32.66	25.22	86.6	5.89					
33	9.99	32.66	25.22	86.6	5.77					
34	9.99	32.68	25.22	86.7	5.68					
35	9.99	32.68	25.22	86.7	5.59					
36	9.44	32.68	25.26	86.8	5.51	.71	2.17	9.16	1.62	

KELEZ CRUISE XWCC-15 STATION 117 08/08/77

TRANSMISSIVITY (0/0)

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SIGMA-T

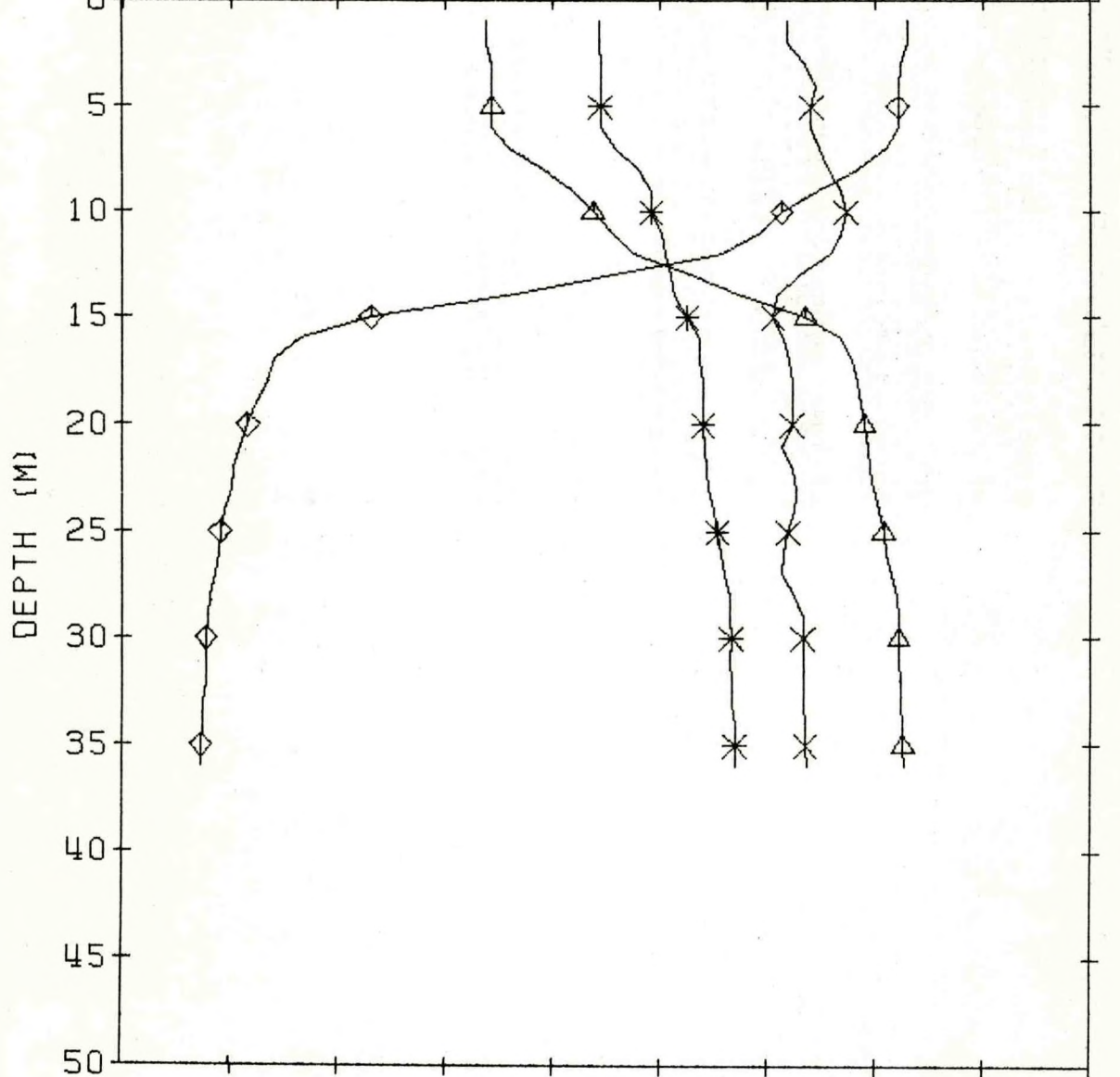
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC 15 STA. 118 LAT 40 14.3N; LONG 72 34.0W GMT 07.4 08/08/77  
 DEPTH 55 AIR D/W 77.5/75.0 BARO 12.0 VIS 6 CLD TYP/CVR 7/2  
 WETHR 6 WIND DIR/SPD 25/16 SEA DIR/HT 25/0 SWELL DIR/HT 29/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.93	35.03	21.73	90.3		.42				
2	22.93	35.03	21.73	90.3		.42				
3	22.93	35.03	21.73	90.3		.42	.04	.35	.00	.07
4	22.93	35.03	21.73	90.3		.42				
5	22.93	35.03	21.73	90.3		.42				
6	22.93	35.03	21.73	90.3		.42				
7	22.93	35.03	21.73	90.3		.42				
8	22.93	35.03	21.73	90.3		.42				
9	22.93	35.03	21.73	90.3		.42				
10	22.93	35.03	21.73	90.3		.42	.03	.00	.00	.07
11	22.93	35.03	21.73	90.3		.42				
12	22.93	35.03	21.73	90.3		.42				
13	22.93	35.03	21.73	90.3		.42				
14	22.93	35.03	21.73	90.3		.42				
15	22.93	35.03	21.73	90.3		.42				
16	22.93	35.03	21.73	90.3		.42				
17	22.93	35.03	21.73	90.3		.42				
18	22.93	35.03	21.73	90.3		.42				
19	22.93	35.03	21.73	90.3		.42				
20	22.93	35.03	21.73	90.3		.42	.05	.63	.00	.11
21	22.93	35.03	21.73	90.3		.42				
22	22.93	35.03	21.73	90.3		.42				
23	22.93	35.03	21.73	90.3		.42				
24	22.93	35.03	21.73	90.3		.42				
25	22.93	35.03	21.73	90.3		.42				
26	22.93	35.03	21.73	90.3		.42				
27	22.93	35.03	21.73	90.3		.42				
28	22.93	35.03	21.73	90.3		.42				
29	22.93	35.03	21.73	90.3		.42				
30	22.93	35.03	21.73	90.3		.42	.49	.16	1.85	.55
31	22.93	35.03	21.73	90.3		.42				
32	22.93	35.03	21.73	90.3		.42				
33	22.93	35.03	21.73	90.3		.42				
34	22.93	35.03	21.73	90.3		.42				
35	22.93	35.03	21.73	90.3		.42				
36	22.93	35.03	21.73	90.3		.42				
37	22.93	35.03	21.73	90.3		.42				
38	22.93	35.03	21.73	90.3		.42				
39	22.93	35.03	21.73	90.3		.42				
40	22.93	35.03	21.73	90.3		.42	.44	1.65	4.77	1.05
41	22.93	35.03	21.73	90.3		.42				
42	22.93	35.03	21.73	90.3		.42				
43	22.93	35.03	21.73	90.3		.42				
44	22.93	35.03	21.73	90.3		.42				
45	22.93	35.03	21.73	90.3		.42				
46	22.93	35.03	21.73	90.3		.42				
47	22.93	35.03	21.73	90.3		.42				
48	22.93	35.03	21.73	90.3		.42				
49	22.93	35.03	21.73	90.3		.42				
50	22.93	35.03	21.73	90.3		.42	.35	2.73	8.25	1.67

KELEZ CRUISE WCC-15 STATION 118 08/08/77

TRANSMISSIVITY (0/0)

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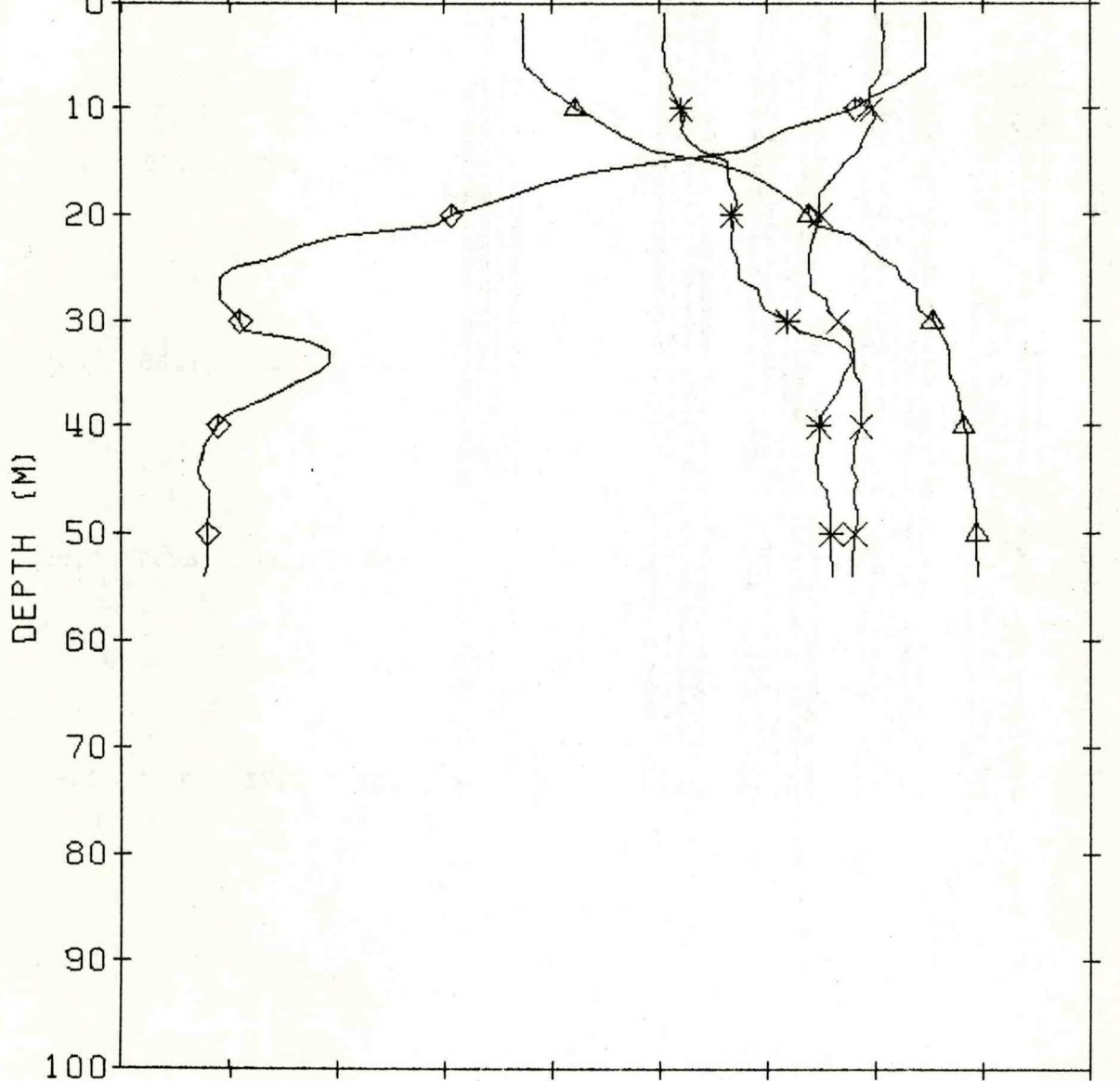
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.119 LAT 39 47.2N; LONG 74 .3W GMT 19.3 08/02/77  
 DEPTH 19 AIR D/W 75.5/72.0 BARO 15.5 VIS 6 CLD TYP/CVR X/4  
 WETHR 4 WIND DIR/SPD 13/10 SEA DIR/HT 00/0 SWELL DIR/HT 16/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	20.92	31.46	21.85	69.9		6.38				
2	20.92	31.46	21.85	69.9		6.38				
3	20.92	31.47	21.86	71.4		6.70	.02	.00	7.54	1.42
4	20.56	31.47	21.91	71.1		6.69				
5	20.43	31.47	21.99	71.0		6.72				
6	20.14	31.50	22.09	71.4		6.75				
7	19.71	31.53	22.22	73.2		6.71				
8	16.46	31.80	23.21	75.5		6.72				
9	13.82	32.08	23.99	79.6		6.74				
10	13.09	32.36	24.36	81.2		6.28	.08	1.04	10.70	2.20
11	12.21	32.56	24.63	83.6		5.63				
12	12.08	32.53	24.68	84.6		4.96				
13	12.04	32.53	24.69	84.8		4.20				
14	12.03	32.54	24.70	84.9		3.61				
15	12.02	32.54	24.69	85.0		3.24				
16	12.00	32.54	24.70	85.0		2.97				
17	12.00	32.54	24.70	85.1		2.75				
18	11.99	32.54	24.70	85.1		2.61				
19	11.99	32.54	24.70	85.2		2.62	.54	2.23	15.74	3.20

KELEZ CRUISE XWCC-15 STATION 119 08/02/77

TRANSMISSIVITY (0/0)

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SIGMA-T

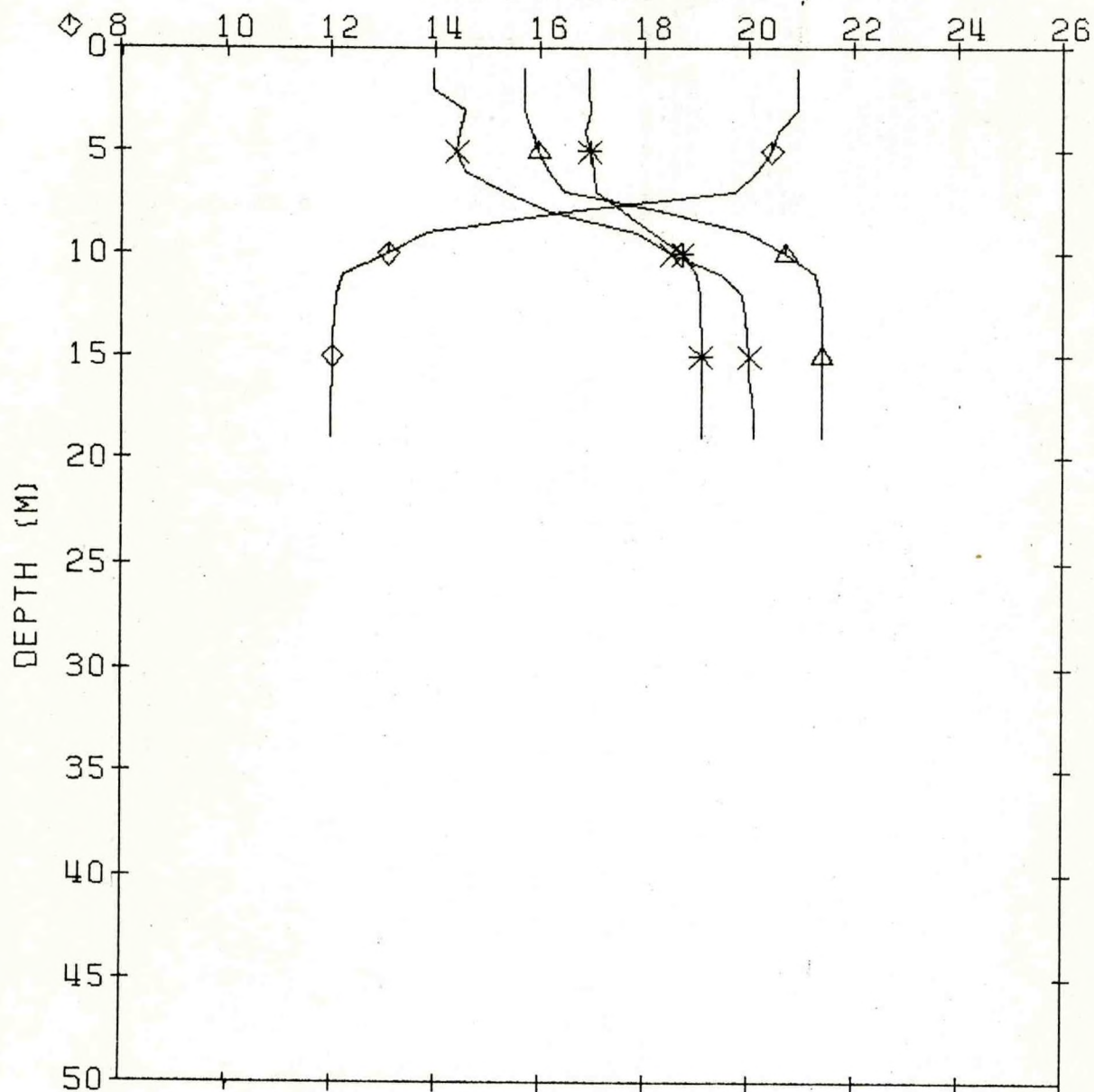
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA. 120 LAT 39 46.5N; LONG 73 55.5W GMT 20.4 08/02/77  
 DEPTH 22 AIR D/W 75.0/71.5 BARO 17.0 VIS 5 CLD TYP/CVR X/4  
 WETHR 4 WIND DIR/SPD 14/09 SEA DIR/HT 00/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.92	31.28	21.44	68.1		6.84				
2	21.92	31.28	21.44	68.1		6.84				
3	21.92	31.28	21.44	68.2		6.84	.14	.00	7.84	1.45
4	21.56	31.27	21.54	68.7		6.91				
5	21.48	31.50	21.58	69.3		6.91				
6	21.34	31.68	21.90	73.5		6.81				
7	20.35	31.84	22.29	77.4		6.52				
8	17.26	32.00	23.18	78.0		6.44				
9	14.34	32.16	23.95	79.6		6.20				
10	13.67	32.31	24.20	80.7		5.64	.10	.69	13.92	2.99
11	12.83	32.41	24.45	82.0		4.84				
12	11.93	32.52	24.70	83.7		4.39				
13	11.64	32.59	24.81	84.7		3.86				
14	11.61	32.59	24.81	84.9		3.50				
15	11.59	32.59	24.82	85.0		3.23				
16	11.59	32.59	24.82	85.1		3.05				
17	11.58	32.59	24.82	85.1		2.98				
18	11.57	32.59	24.83	85.2		2.91				
19	11.56	32.60	24.83	85.3		2.83				
20	11.55	32.60	24.83	85.3		2.80				
21	11.55	32.60	24.83	85.3		2.78				
22	11.55	32.60	24.83	85.3		2.78	.35	3.84	14.03	2.85

KELEZ CRUISE XWCC-15 STATION 120 08/02/77

TRANSMISSIVITY (0/0)

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SIGMA-T

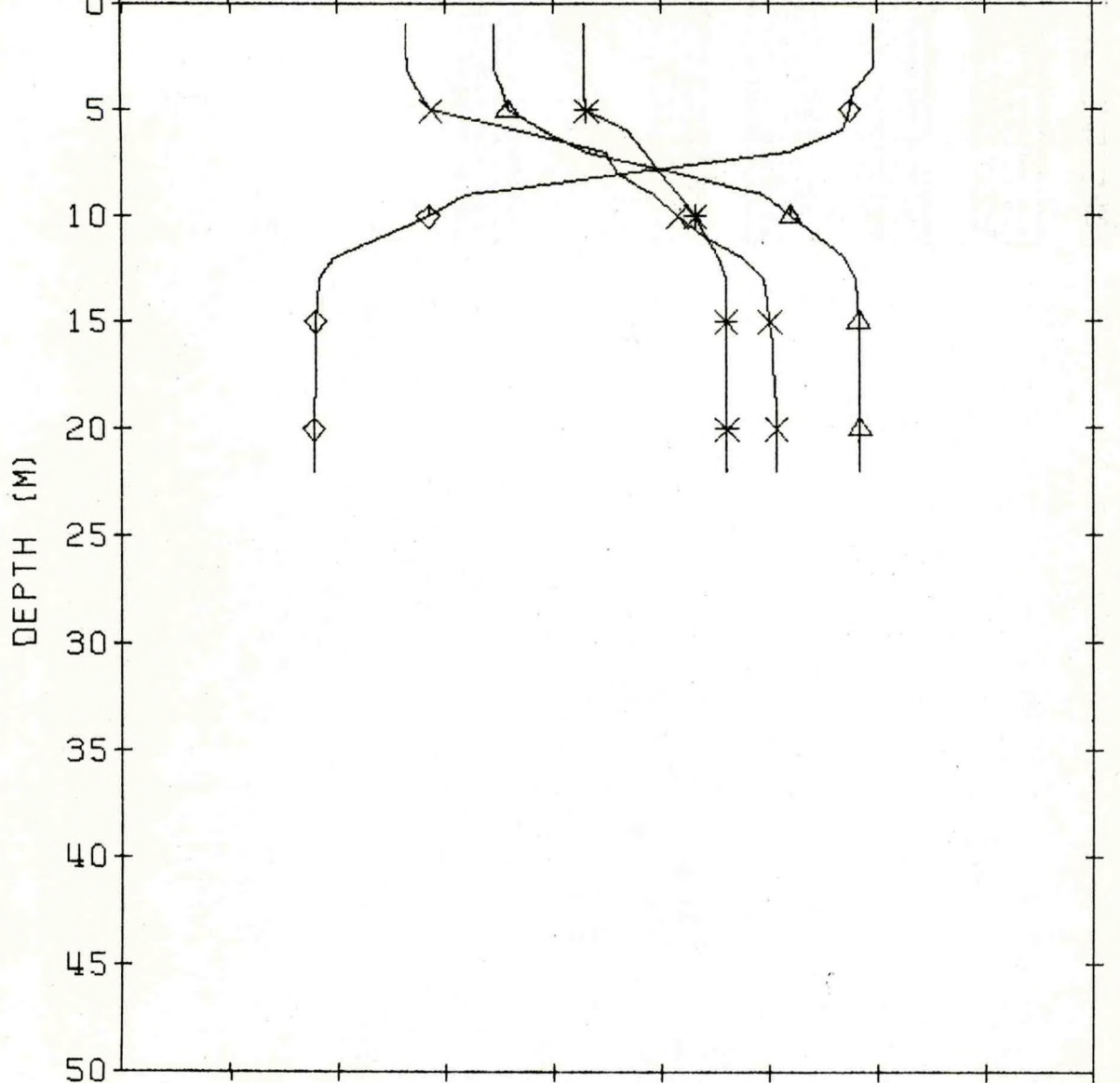
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.121 LAT 39 43.0N; LONG 73 46.7W GMT 22.1 08/02/77  
 DEPTH 18 AIR D/W 74.0/72.0 BARO 17.0 VIS 5 CLD TYP/CVR X/4  
 WETHR 4 WIND DIR/SPD 18/10 SEA DIR/HT 18/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.88	31.79	21.56	85.8	7.23	5.96				
2	22.88	31.79	21.56	85.8	7.23	5.96				
3	22.88	31.79	21.57	85.9	7.29	5.84	.07	.00	1.60	.38
4	22.84	31.99	21.72	85.9	7.32	5.82				
5	22.64	32.03	21.89	85.8	7.34	5.89				
6	22.27	32.06	21.93	85.1	7.35	5.90				
7	22.27	32.09	21.96	85.2	7.36	5.91				
8	22.25	32.10	21.97	85.9	7.35	5.91				
9	22.23	32.10	21.98	86.0	7.34	5.89				
10	22.19	32.11	22.00	85.9	7.35	5.87	.03	.00	2.51	.57
11	22.04	32.11	22.04	86.1	7.34	5.86				
12	21.90	32.13	22.09	86.3	7.33	5.86				
13	21.70	32.17	22.18	86.1	7.33	5.84				
14	21.28	32.18	22.30	86.6	7.34	5.71				
15	19.69	32.40	22.88	85.5	7.34	5.70				
16	17.37	32.40	23.46	85.1	7.34	5.70				
17	13.02	32.40	24.40	85.9	7.34	4.80				
18	13.02	32.40	24.40	86.5	7.34	4.80	.27	1.19	7.23	1.63

KELEZ CRUISE XWCC-15 STATION 121 08/02/77

TRANSMISSIVITY (0/0)

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SIGMA-T

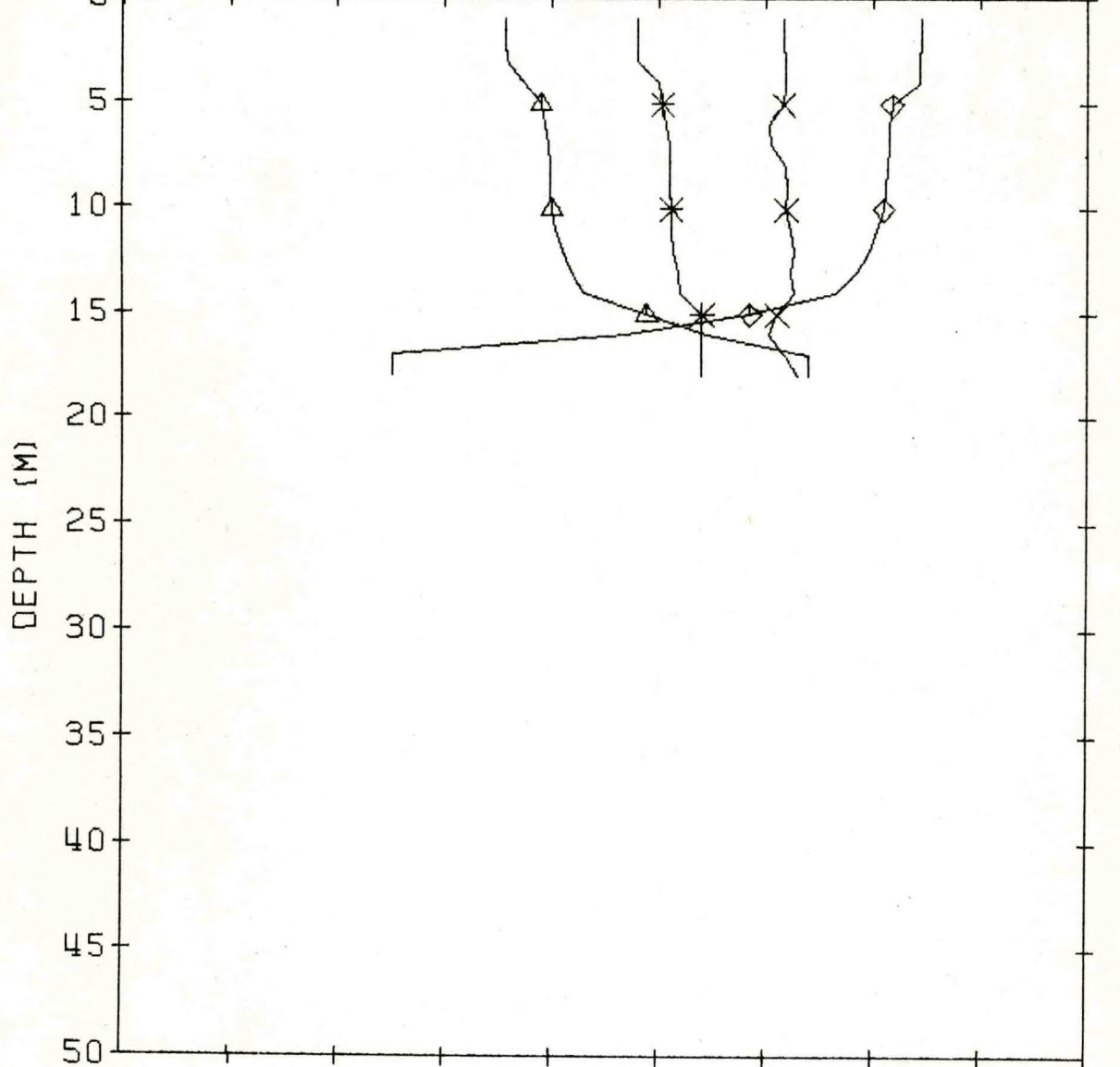
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.122 LAT 39 39.6N; LONG 73 36.0W GMT 23.5 08/02/77  
 DEPTH 34 AIR D/W 73.0/71.0 BARO 17.0 VIS 6 CLD TYP/CVR X/4  
 WETHR 4 WIND DIR/SPD 18/11 SEA DIR/HT 00/0 SWELL DIR/HT 17/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.52	31.91	21.75	88.7		5.65				
2	22.52	31.91	21.75	88.7		5.65				
3	22.44	31.90	21.77	89.8		5.66	.01	.00	1.60	.38
4	22.42	31.92	21.79	89.6		5.68				
5	22.08	31.93	21.89	89.2		5.69				
6	21.94	31.90	21.91	88.9		5.70				
7	21.92	31.90	21.91	88.9		5.69				
8	21.92	31.90	21.91	88.9		5.69				
9	21.90	31.90	21.92	88.5		5.70				
10	21.87	31.89	21.92	88.3		5.68				
11	21.73	31.91	21.97	88.0		5.71				
12	21.68	31.89	21.97	88.3		5.64	.02	.00	1.60	.38
13	21.61	31.89	21.99	88.7		5.46				
14	21.52	31.89	22.02	88.6		5.44				
15	21.27	31.91	22.10	88.3		5.49				
16	20.35	31.97	22.39	87.4		5.76				
17	15.34	32.17	23.5	85.6		5.85				
18	11.46	32.34	24.65	83.7		5.85				
19	10.59	32.54	24.95	82.6		5.91				
20	9.11	32.70	25.16	81.1		5.81	.05	.00	3.06	.71
21	9.79	32.75	25.25	86.0		5.08				
22	9.66	32.77	25.29	87.1		5.10				
23	9.63	32.78	25.30	87.4		5.09				
24	9.63	32.78	25.30	87.4		5.10				
25	9.64	32.78	25.30	87.4		5.09				
26	9.63	32.78	25.30	87.4		5.10				
27	9.63	32.78	25.31	87.4		5.10				
28	9.62	32.79	25.31	87.4		5.10				
29	9.62	32.79	25.31	87.4		5.09				
30	9.62	32.79	25.31	87.4		5.09				
31	9.62	32.79	25.31	87.4		5.09				
32	9.62	32.79	25.31	87.4		5.09				
33	9.62	32.79	25.31	87.4		5.09				
34	9.62	32.79	25.31	87.4		5.09	.42	.81	7.87	1.69

KELEZ CRUISE XWCC-15 STATION 122 08/02/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

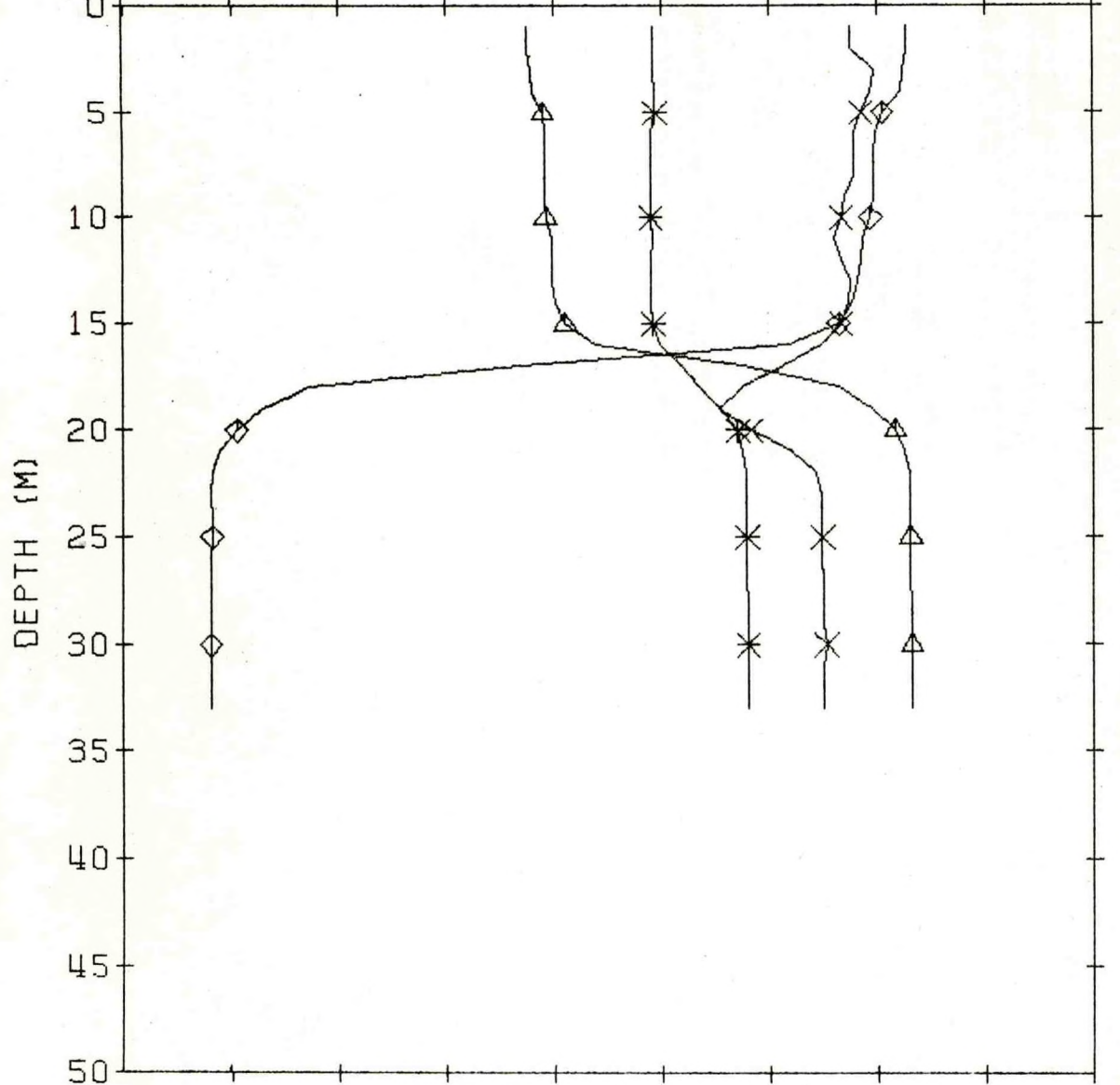
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.123 LAT 39 35.0N; LONG 73 26.0W GMT 01.3 08/03/77  
 DEPTH 37 AIR D/W 74.0/71.0 BARO 18.0 VIS 6 CLD TYP/CVR X/4  
 WETHR 4 WIND DIR/SPD 18/10 SEA DIR/HT 00/0 SWELL DIR/HT 17/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.73	31.90	21.69	88.3	5.70					
2	22.73	31.90	21.69	88.3	5.70		.02	.00	.55	.12
3	22.67	31.92	21.72	88.2	5.60					
4	22.73	31.92	21.70	88.4	5.64					
5	22.74	31.93	21.71	88.2	5.64					
6	22.71	31.91	21.70	88.4	5.65					
7	22.44	31.90	21.77	88.2	5.67					
8	22.37	31.91	21.79	88.2	5.67					
9	22.21	31.97	21.88	88.3	5.67					
10	21.80	31.98	22.01	88.5	5.68					
11	20.81	31.99	22.28	88.9	5.68					
12	20.69	32.01	22.33	88.9	5.68					
13	20.50	32.03	22.39	88.8	5.67					
14	20.42	32.05	22.43	88.8	5.68					
15	20.11	32.08	22.53	88.9	5.68					
16	19.44	32.09	22.71	88.9	5.68					
17	17.28	32.10	23.25	88.8	5.68					
18	16.67	32.17	23.44	88.5	5.68					
19	13.86	32.54	24.34	88.5	5.68					
20	12.18	32.77	24.76	88.4	5.68	.00	.00	2.18	.50	
21	10.99	32.88	25.08	88.6	5.68	.00	.00			
22	9.99	32.85	25.37	88.6	5.68	.00	.00			
23	9.99	32.85	25.37	88.6	5.68	.00	.00			
24	9.99	32.84	25.66	88.6	5.68	.00	.00			
25	9.99	32.84	25.66	88.6	5.68	.00	.00			
26	9.99	32.84	25.66	88.6	5.68	.00	.00			
27	9.99	32.84	25.66	88.6	5.68	.00	.00			
28	9.99	32.84	25.66	88.6	5.68	.00	.00			
29	9.99	32.84	25.66	88.6	5.68	.00	.00			
30	9.99	32.84	25.66	88.6	5.68	.00	.00			
31	9.99	32.84	25.66	88.6	5.68	.00	.00			
32	9.99	32.84	25.66	88.6	5.68	.00	.00			
33	9.99	32.84	25.66	88.6	5.68	.00	.00			
34	9.99	32.84	25.66	88.6	5.68	.00	.00			
35	9.99	32.84	25.66	88.6	5.68	.00	.00			
36	9.99	32.84	25.66	88.6	5.68	.00	.00			
37	9.99	32.84	25.66	88.6	5.68	.00	.00			
38	9.99	32.84	25.66	88.6	5.68	.00	.00			
39	9.99	32.84	25.66	88.6	5.68	.00	.00			
40	9.99	32.84	25.66	88.6	5.68	.00	.00			
41	9.99	32.84	25.66	88.6	5.68	.00	.00			
42	9.99	32.84	25.66	88.6	5.68	.00	.00			
43	9.99	32.84	25.66	88.6	5.68	.00	.00			
44	9.99	32.84	25.66	88.6	5.68	.00	.00			
45	9.99	32.84	25.66	88.6	5.68	.00	.00			
46	9.99	32.84	25.66	88.6	5.68	.00	.00			
47	9.99	32.84	25.66	88.6	5.68	.00	.00			
48	9.99	32.84	25.66	88.6	5.68	.00	.00			
49	9.99	32.84	25.66	88.6	5.68	.00	.00			
50	9.99	32.84	25.66	88.6	5.68	.00	.00			
51	9.99	32.84	25.66	88.6	5.68	.00	.00			
52	9.99	32.84	25.66	88.6	5.68	.00	.00			
53	9.99	32.84	25.66	88.6	5.68	.00	.00			
54	9.99	32.84	25.66	88.6	5.68	.00	.00			
55	9.99	32.84	25.66	88.6	5.68	.00	.00			
56	9.99	32.84	25.66	88.6	5.68	.00	.00			
57	9.99	32.84	25.66	88.6	5.68	.00	.00			
58	9.99	32.84	25.66	88.6	5.68	.00	.00			
59	9.99	32.84	25.66	88.6	5.68	.00	.00			
60	9.99	32.84	25.66	88.6	5.68	.00	.00			
61	9.99	32.84	25.66	88.6	5.68	.00	.00			
62	9.99	32.84	25.66	88.6	5.68	.00	.00			
63	9.99	32.84	25.66	88.6	5.68	.00	.00			
64	9.99	32.84	25.66	88.6	5.68	.00	.00			
65	9.99	32.84	25.66	88.6	5.68	.00	.00			
66	9.99	32.84	25.66	88.6	5.68	.00	.00			
67	9.99	32.84	25.66	88.6	5.68	.00	.00			
68	9.99	32.84	25.66	88.6	5.68	.00	.00			
69	9.99	32.84	25.66	88.6	5.68	.00	.00			
70	9.99	32.84	25.66	88.6	5.68	.00	.00			
71	9.99	32.84	25.66	88.6	5.68	.00	.00			
72	9.99	32.84	25.66	88.6	5.68	.00	.00			
73	9.99	32.84	25.66	88.6	5.68	.00	.00			
74	9.99	32.84	25.66	88.6	5.68	.00	.00			
75	9.99	32.84	25.66	88.6	5.68	.00	.00			
76	9.99	32.84	25.66	88.6	5.68	.00	.00			
77	9.99	32.84	25.66	88.6	5.68	.00	.00			
78	9.99	32.84	25.66	88.6	5.68	.00	.00			
79	9.99	32.84	25.66	88.6	5.68	.00	.00			
80	9.99	32.84	25.66	88.6	5.68	.00	.00			
81	9.99	32.84	25.66	88.6	5.68	.00	.00			
82	9.99	32.84	25.66	88.6	5.68	.00	.00			
83	9.99	32.84	25.66	88.6	5.68	.00	.00			
84	9.99	32.84	25.66	88.6	5.68	.00	.00			
85	9.99	32.84	25.66	88.6	5.68	.00	.00			
86	9.99	32.84	25.66	88.6	5.68	.00	.00			
87	9.99	32.84	25.66	88.6	5.68	.00	.00			
88	9.99	32.84	25.66	88.6	5.68	.00	.00			
89	9.99	32.84	25.66	88.6	5.68	.00	.00			
90	9.99	32.84	25.66	88.6	5.68	.00	.00			
91	9.99	32.84	25.66	88.6	5.68	.00	.00			
92	9.99	32.84	25.66	88.6	5.68	.00	.00			
93	9.99	32.84	25.66	88.6	5.68	.00	.00			
94	9.99	32.84	25.66	88.6	5.68	.00	.00			
95	9.99	32.84	25.66	88.6	5.68	.00	.00			
96	9.99	32.84	25.66	88.6	5.68	.00	.00			
97	9.99	32.84	25.66	88.6	5.68	.00	.00			
98	9.99	32.84	25.66	88.6	5.68	.00	.00			
99	9.99	32.84	25.66	88.6	5.68	.00	.00			
100	9.99	32.84	25.66	88.6	5.68	.00	.00			

KELEZ CRUISE XWCC-15 STATION 123 08/03/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

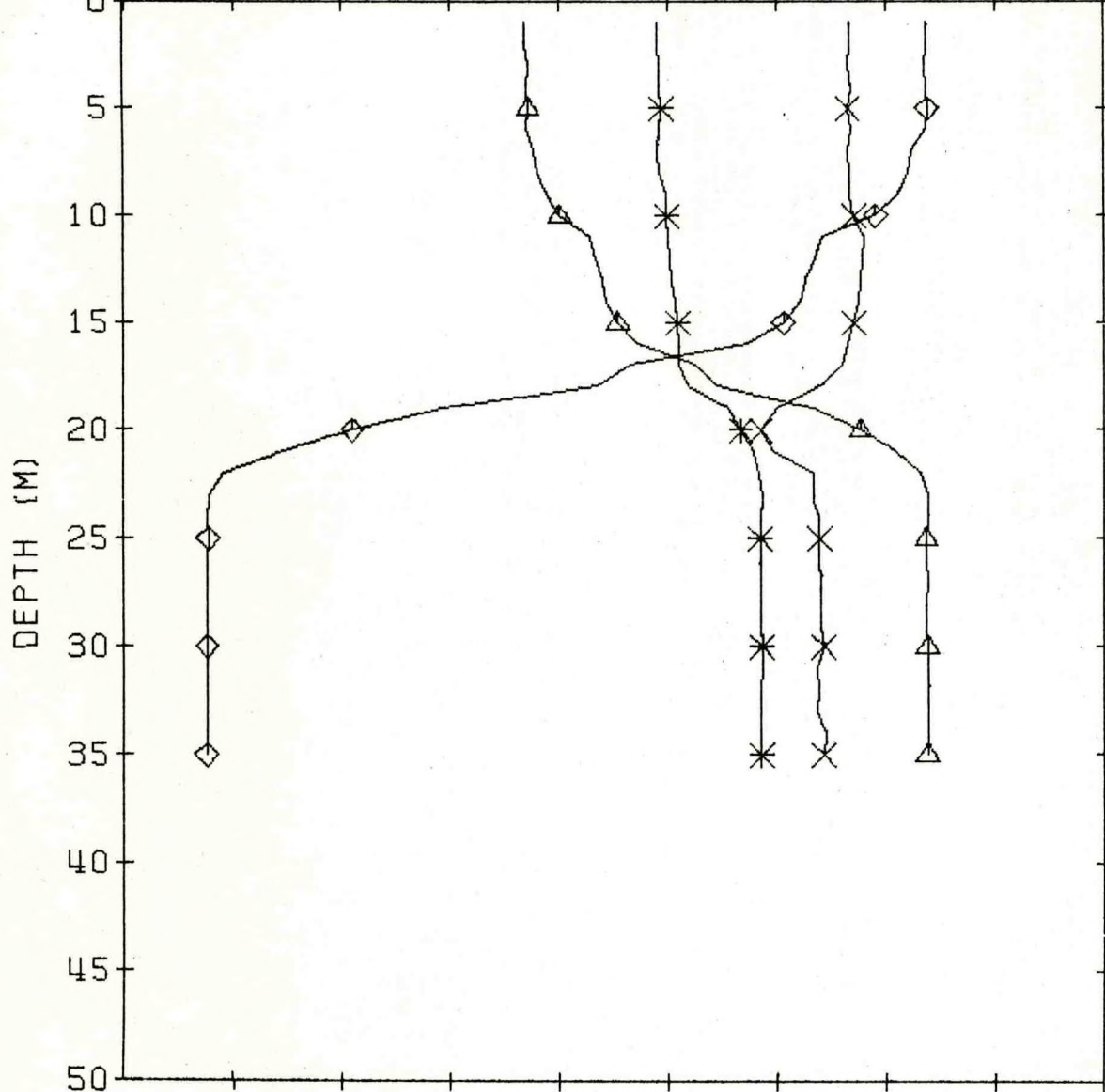
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.124 LAT 39 26.1N; LONG 73 12.1W GMT 04.5 -08/06/77  
 DEPTH 39 AIR D/W 76.0/74.0 BARO 18.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 24/10 SEA DIR/HT 24/1 SWELL DIR/HT 22/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.87	31.82	21.59	90.0	7.61	5.63				
2	22.87	31.82	21.59	90.0	7.61	5.63				
3	22.87	31.82	21.59	90.0	7.61	5.63				
4	22.87	31.84	21.60	90.0	7.58	5.63	.03	.17	.12	.12
5	22.89	31.85	21.60	89.9	7.59	5.63				
6	22.90	31.86	21.61	89.9	7.64	5.63				
7	22.92	31.86	21.60	89.6	7.66	5.54				
8	22.92	31.86	21.60	89.7	7.66	5.54				
9	22.92	31.89	21.63	89.9	7.66	5.54				
10	21.61	32.04	22.10	89.7	7.66	5.62	.03	.00	.20	.12
11	21.07	32.03	22.24	89.6	7.66	5.77				
12	20.47	32.07	22.43	89.4	7.63	5.81				
13	18.79	32.11	22.89	88.9	7.61	5.94				
14	16.99	32.15	23.43	88.9	7.59	6.11				
15	15.46	32.19	23.73	88.6	7.57	6.51				
16	13.76	32.23	24.08	88.3	7.56	6.88				
17	12.04	32.49	24.50	88.5	7.56	6.88				
18	10.55	32.78	24.88	88.6	7.55	6.88				
19	9.06	32.91	25.38	88.9	7.49	6.88				
20	7.44	32.97	25.88	88.7	7.50	7.40	.02	.08	.69	.32
21	5.81	33.07	26.47	88.7	7.49	7.34				
22	4.18	33.07	27.05	88.7	7.46	7.17				
23	2.55	33.04	27.63	88.5	7.45	6.82				
24	0.92	33.05	28.21	88.1	7.43	6.41				
25	0.29	33.06	28.79	88.6	7.43	6.08				
26	0.00	33.01	29.37	88.0	7.43	5.76				
27	0.00	33.00	29.95	88.0	7.43	5.44				
28	0.00	33.04	30.53	88.0	7.43	5.12	.00	.15	.28	.12
29	0.00	33.04	31.11	88.0	7.43	4.80				
30	0.00	33.06	31.69	88.0	7.43	4.48				
31	0.00	33.05	32.27	88.0	7.43	4.16				
32	0.00	33.05	32.85	88.0	7.43	3.84				
33	0.00	33.05	33.43	88.0	7.43	3.52				
34	0.00	33.05	34.01	88.0	7.43	3.20				
35	0.00	33.05	34.59	88.0	7.43	2.88				
36	0.00	33.05	35.17	88.0	7.43	2.56				
37	0.00	33.05	35.75	88.0	7.43	2.24				
38	0.00	33.05	36.33	88.0	7.43	1.92	.52	1.96	6.53	1.39

KELEZ CRUISE XWCC-15 STATION 124 08/06/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

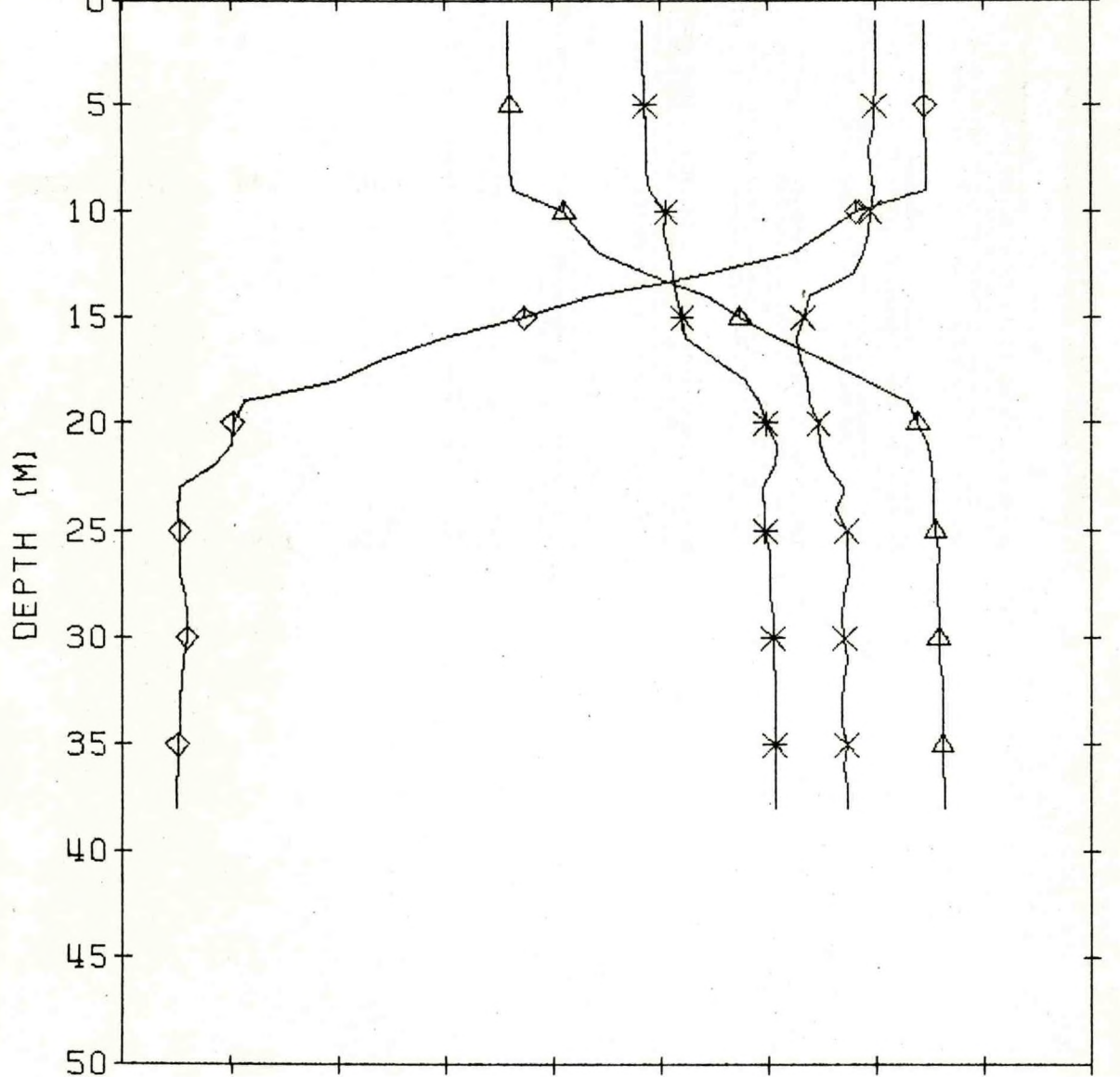
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC\_15 STA.125 LAT 39 24.5N; LONG 72 56.5W GMT 00.1 08/06/77  
 DEPTH 62 AIR D/W 76.0/74.5 BARO 19.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 23/19 SEA DIR/HT 23/0 SWELL DIR/HT 22/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.46	32.71	22.09	90.0	5.37					
2	23.46	32.71	22.09	90.0	5.37					
3	23.47	32.70	22.08	90.4	5.42		.03	.05	.40	.12
4	23.46	32.70	22.08	90.6	5.42					
5	23.44	32.69	22.09	90.7	5.41					
6	23.44	32.68	22.13	90.6	5.44					
7	23.00	32.67	22.13	90.5	5.47					
8	23.00	32.64	22.13	90.0	5.50					
9	23.00	32.64	22.13	90.0	5.57					
10	23.00	32.60	22.13	90.7	5.62					
11	23.00	32.60	22.13	90.9	5.74					
12	23.00	32.60	22.13	90.9	5.83					
13	23.00	32.60	22.13	90.9	5.88					
14	23.00	32.60	22.13	90.9	5.92					
15	23.00	32.60	22.13	90.9	5.96					
16	23.00	32.60	22.13	90.9	6.04					
17	23.00	32.60	22.13	90.9	6.11					
18	23.00	32.60	22.13	90.9	6.14					
19	23.00	32.60	22.13	90.9	6.27		.05	.00	.20	.14
20	23.00	32.60	22.13	90.9	6.43					
21	23.00	32.60	22.13	90.9	6.61					
22	23.00	32.60	22.13	90.9	6.78					
23	23.00	32.60	22.13	90.9	6.87					
24	23.00	32.60	22.13	90.9	7.06					
25	23.00	32.60	22.13	90.9	7.24					
26	23.00	32.60	22.13	90.9	7.31					
27	23.00	32.60	22.13	90.9	7.35					
28	23.00	32.60	22.13	90.9	7.32					
29	23.00	32.60	22.13	90.9	7.24		.06	.04	.40	.19
30	23.00	32.60	22.13	90.9	7.16					
31	23.00	32.60	22.13	90.9	7.06					
32	23.00	32.60	22.13	90.9	6.93					
33	23.00	32.60	22.13	90.9	6.84					
34	23.00	32.60	22.13	90.9	6.59					
35	23.00	32.60	22.13	90.9	6.44					
36	23.00	32.60	22.13	90.9	6.44					
37	23.00	32.60	22.13	90.9	6.43					
38	23.00	32.60	22.13	90.9	6.41					
39	23.00	32.60	22.13	90.9	6.38		.46	.41	.00	.15
40	23.00	32.60	22.13	90.9	6.36					
41	23.00	32.60	22.13	90.9	6.33					
42	23.00	32.60	22.13	90.9	6.33					
43	23.00	32.60	22.13	90.9	6.33					
44	23.00	32.60	22.13	90.9	6.24					
45	23.00	32.60	22.13	90.9	6.17					
46	23.00	32.60	22.13	90.9	6.02					
47	23.00	32.60	22.13	90.9	5.90					
48	23.00	32.60	22.13	90.9	5.78					
49	23.00	32.60	22.13	90.9	5.70					
50	23.00	32.60	22.13	90.9	5.60					
51	23.00	32.60	22.13	90.9	5.50					
52	23.00	32.60	22.13	90.9	5.40					
53	23.00	32.60	22.13	90.9	5.30					
54	23.00	32.60	22.13	90.9	5.20					
55	23.00	32.60	22.13	90.9	5.10					
56	23.00	32.60	22.13	90.9	5.00					
57	23.00	32.60	22.13	90.9	4.90					
58	23.00	32.60	22.13	90.9	4.80					
59	23.00	32.60	22.13	90.9	4.70					
60	23.00	32.60	22.13	90.9	4.60					
61	23.00	32.60	22.13	90.9	4.50					
62	23.00	32.60	22.13	90.9	4.40					
63	23.00	32.60	22.13	90.9	4.30					

KELEZ CRUISE XWCC-15 STATION 125 08/06/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

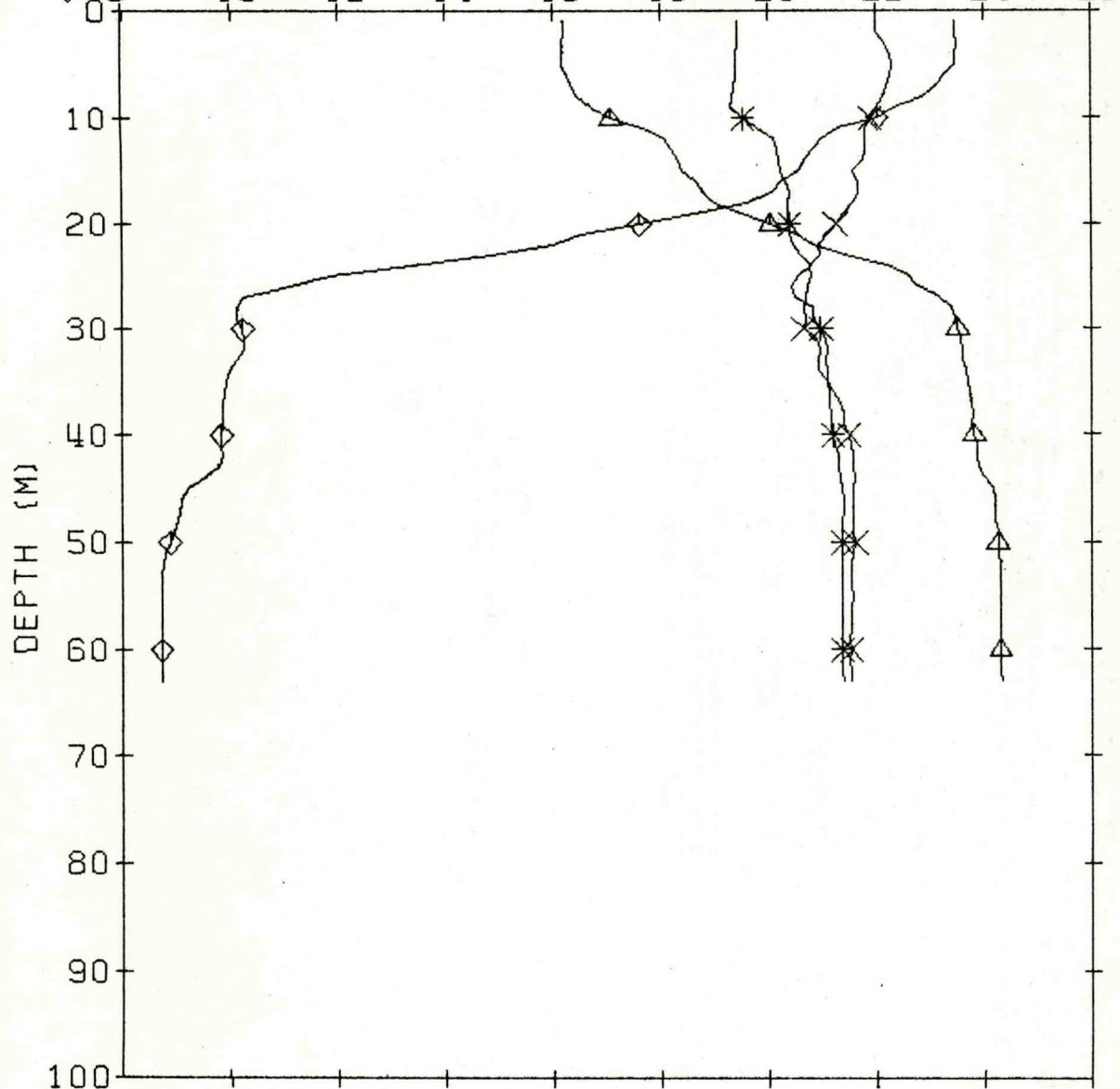
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC\_15 STA.126 LAT 39 19.0N; LONG 72 42.5W GMT 22.0 08/05/77  
 DEPTH 102 AIR D/W 76.5/75.0 BARO 19.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 21/16 SEA DIR/HT 21/0 SWELL DIR/HT 19/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	23.71	32.62	21.95	88.5	5.51					
2	23.71	32.62	21.95	88.5	5.51					
3	23.71	32.62	21.95	88.5	5.51		.00	.12	.00	.03
4	23.58	32.62	21.95	88.5	5.51					
5	23.58	32.62	21.95	88.5	5.51					
6	23.58	32.62	21.95	88.5	5.51					
7	23.58	32.62	21.95	88.5	5.51					
8	23.58	32.62	21.95	88.5	5.51					
9	23.58	32.62	21.95	88.5	5.51					
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11	23.58	32.62	21.95	88.5	5.51					
12	23.58	32.62	21.95	88.5	5.51					
13	23.58	32.62	21.95	88.5	5.51					
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59	23.58	32.62	21.95	88.5	5.51					
60	23.58	32.62	21.95	88.5	5.51					
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91	23.58	32.62	21.95	88.5	5.51					
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93	23.58	32.62	21.95	88.5	5.51					
94	23.58	32.62	21.95	88.5	5.51					
95	23.58	32.62	21.95	88.5	5.51					
96	23.58	32.62	21.95	88.5	5.51					
97	23.58	32.62	21.95	88.5	5.51					
98	23.58	32.62	21.95	88.5	5.51					
99	23.58	32.62	21.95	88.5	5.51					
100	23.58	32.62	21.95	88.5	5.51		.06	7.44	11.87	2.15

KELEZ CRUISE XWCC-15 STATION 126 08/05/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

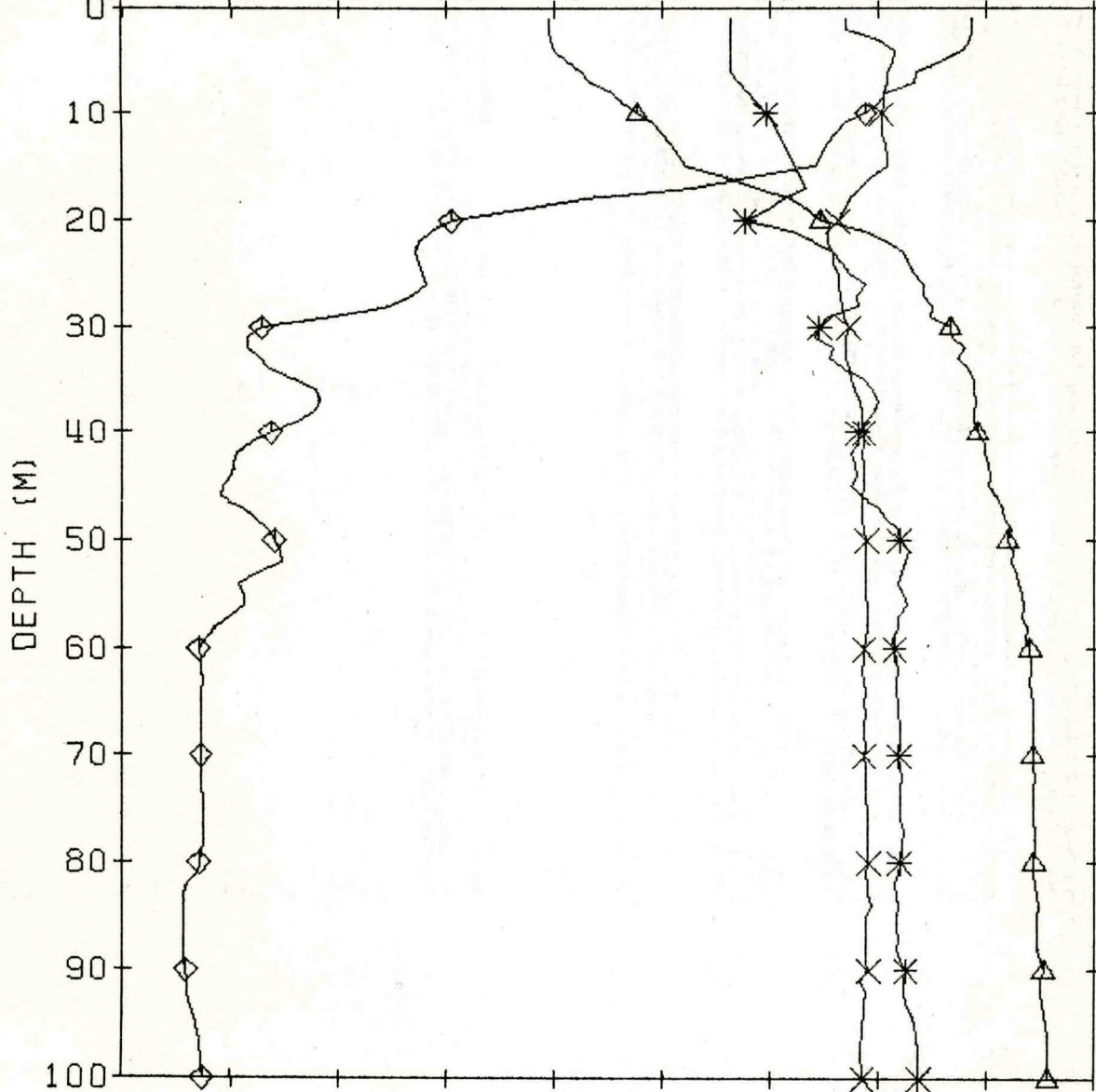
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.127 LAT 39 57.2N; LONG 73 53.3W GMT 18.0 08/02/77  
 DEPTH 24 AIR D/W 77.0/72.0 BARO 17.0 VIS 6 CLD TYP/CVR X/4  
 WETHR 4 WIND DIR/SPD 10/04 SEA DIR/HT 10/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.05	31.87	21.85	78.2	5.78					
2	22.05	31.87	21.85	78.2	5.78					
3	22.05	31.88	21.86	79.7	6.00	.00	.71	4.61	.90	
4	21.76	31.81	21.89	79.1	6.02					
5	21.57	31.87	21.98	78.8	6.07					
6	21.50	31.86	21.99	78.6	6.09					
7	21.47	31.88	22.00	79.2	6.09					
8	21.47	31.88	22.02	80.5	6.05					
9	21.25	31.83	22.04	82.5	5.99					
10	19.86	31.92	22.48	83.6	5.00	.00	.42	3.69	.66	
11	19.49	32.04	22.67	83.3	5.00					
12	18.56	32.00	23.02	82.6	5.80					
13	16.25	32.47	23.77	82.5	5.73					
14	12.32	32.56	24.66	84.5	5.75					
15	11.21	32.56	24.93	85.5	5.49					
16	11.15	32.66	24.95	84.7	5.05					
17	11.13	32.65	24.97	84.8	4.66					
18	11.12	32.65	24.95	84.8	4.42					
19	11.12	32.66	24.96	85.5	4.24					
20	11.12	32.66	24.94	85.5	4.09					
21	11.12	32.64	24.94	85.5	3.99					
22	11.12	32.64	24.94	85.5	3.92					
23	11.12	32.64	24.94	85.5	3.83	.25	3.14	13.07	2.76	

KELEZ CRUISE XWCC-15 STATION 127 08/02/77

TRANSMISSIVITY (0/0)

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SIGMA-T

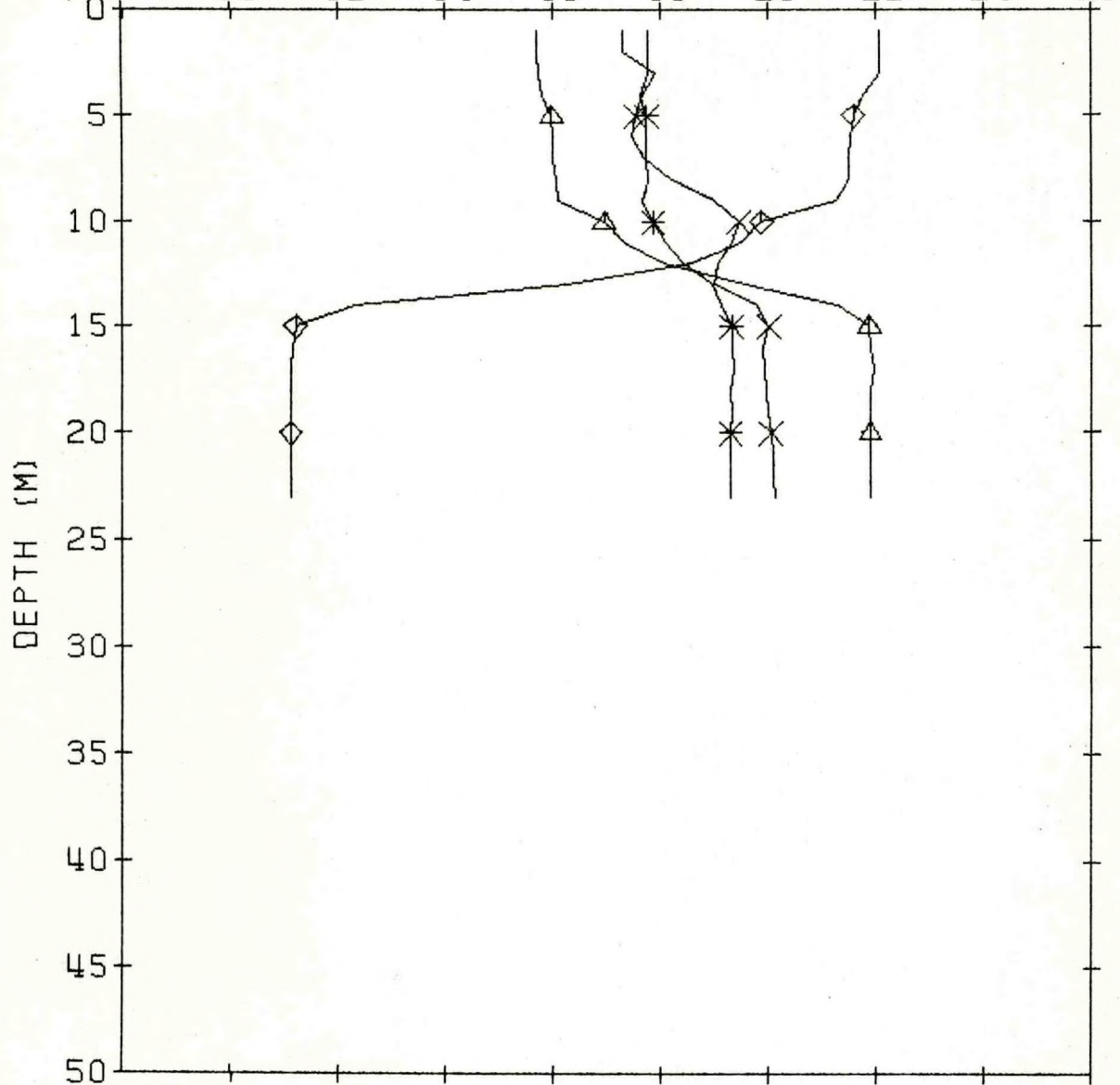
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.129 LAT 39 30.0N; LONG 74 11.0W GMT 11.1 08/03/77  
 DEPTH 16 AIR D/W 72.5/71.5 BARO 18.0 VIS 3 CLD TYP/CVR X/1  
 WETHR 4 WIND DIR/SPD 17/08 SEA DIR/HT 00/0 SWELL DIR/HT 15/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	20.99	32.00	22.24	78.3	7.65	6.20				
2	20.99	32.00	22.24	78.3	7.65	6.20	.59	.00	7.93	1.61
3	20.96	32.00	22.25	77.0	7.71	6.18				
4	20.90	32.01	22.25	76.2	7.74	6.23				
5	20.92	32.07	22.31	78.0	7.74	6.22				
6	20.16	32.00	22.46	80.3	7.73	6.23				
7	18.87	32.11	23.04	78.6	7.70	6.21				
8	16.87	32.03	23.50	79.2	7.68	6.33				
9	13.74	32.55	24.35	79.8	7.62	6.34	.43	.59	13.82	2.93
10	12.69	32.55	24.59	83.4	7.61	6.16				
11	12.66	32.55	24.59	83.3	7.63	5.42				
12	12.66	32.54	24.58	83.1	7.63	4.76				
13	12.66	32.54	24.58	83.0	7.63	4.16				
14	12.67	32.54	24.58	83.1	7.63	3.76				
15	12.66	32.55	24.58	82.9	7.63	3.46				
16	12.66	32.55	24.58	82.2	7.63	3.23	.51	1.26	14.71	3.08

KELEZ CRUISE XWCC-15 STATION 129 08/03/77

TRANSMISSIVITY (0/0)

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SIGMA-T

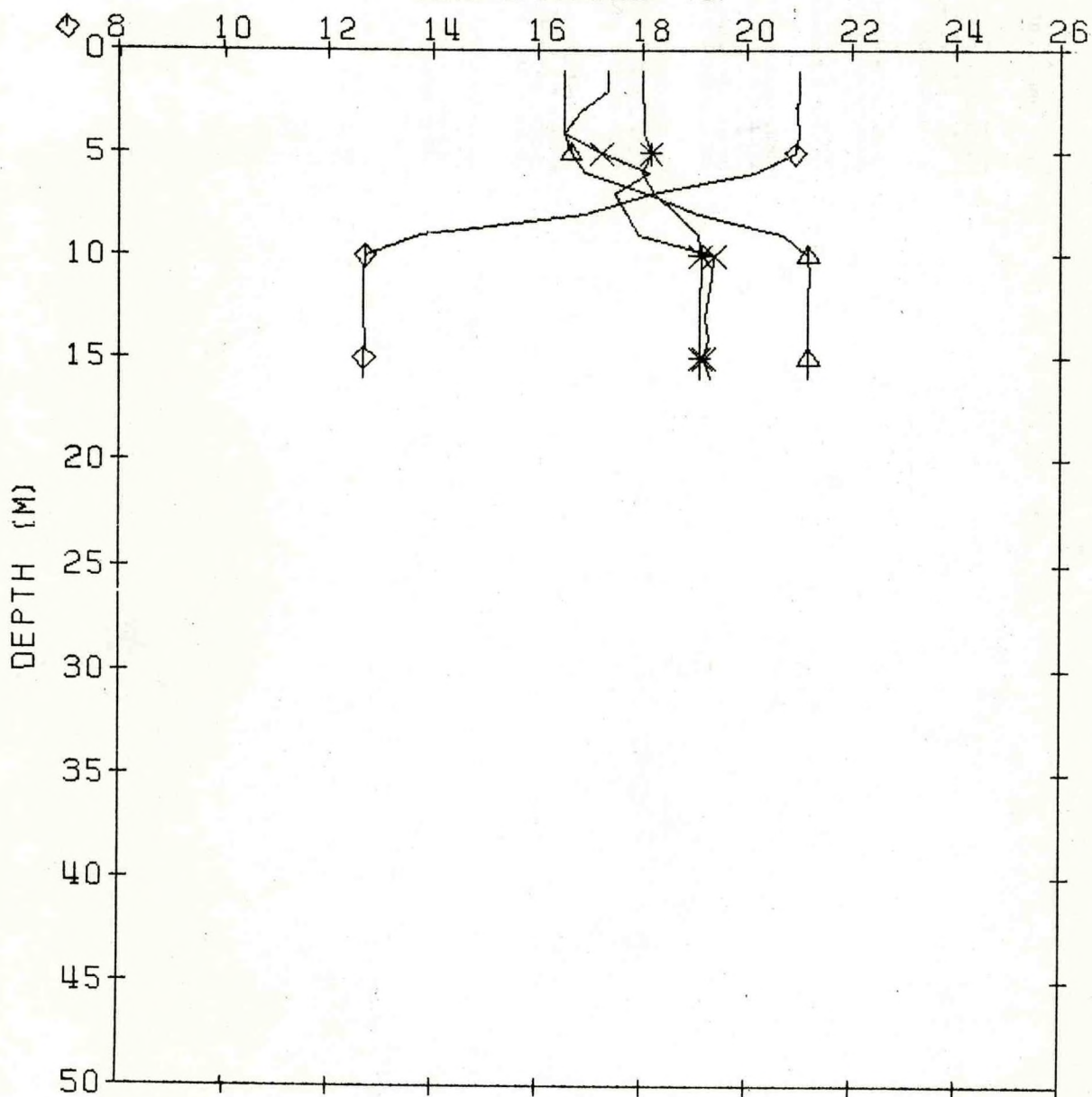
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.130 LAT 39 27.6N; LONG 74 5.3W GMT 10.0 08/03/77  
 DEPTH 20 AIR D/W 71.5/70.5 BARO 18.0 VIS 3 CLD TYP/CVR X/1  
 WETHR 4 WIND DIR/SPD 17/07 SEA DIR/HT 00/0 SWELL DIR/HT 14/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.02	32.07	22.29	81.5	7.66	6.01				
2	21.02	32.07	22.29	81.5	7.66	6.01				
3	21.05	32.07	22.28	81.6	7.66	6.02	.05	.06	6.60	1.34
4	20.93	32.06	22.30	82.1	7.65	6.02				
5	20.77	32.12	22.39	82.2	7.79	6.06				
6	20.62	32.18	22.48	82.1	7.85	6.04				
7	19.08	32.17	22.86	84.6	7.81	6.05				
8	17.71	32.14	23.18	85.9	7.80	6.14				
9	16.49	32.08	23.42	83.5	7.79	6.06				
10	15.86	32.14	23.61	80.3	7.78	5.96	.61	.00	8.32	1.80
11	13.77	32.34	24.20	80.6	7.78	5.69				
12	11.68	32.61	24.82	84.8	7.74	5.57				
13	11.58	32.60	24.83	85.6	7.74	5.27				
14	11.58	32.60	24.83	85.5	7.75	4.64				
15	11.57	32.60	24.83	85.5	7.75	4.07				
16	11.57	32.60	24.83	85.5	7.75	3.74				
17	11.57	32.60	24.84	85.5	7.75	3.43				
18	11.55	32.57	24.81	85.7	7.75	3.25				
19	11.41	32.57	24.83	85.7	7.75	3.12	.61	1.68	14.27	3.01
20	11.41	32.57	24.83	85.7	7.75	3.12				

KELEZ CRUISE XWCC-15 STATION 130 08/03/77

TRANSMISSIVITY (0/0)

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SIGMA-T

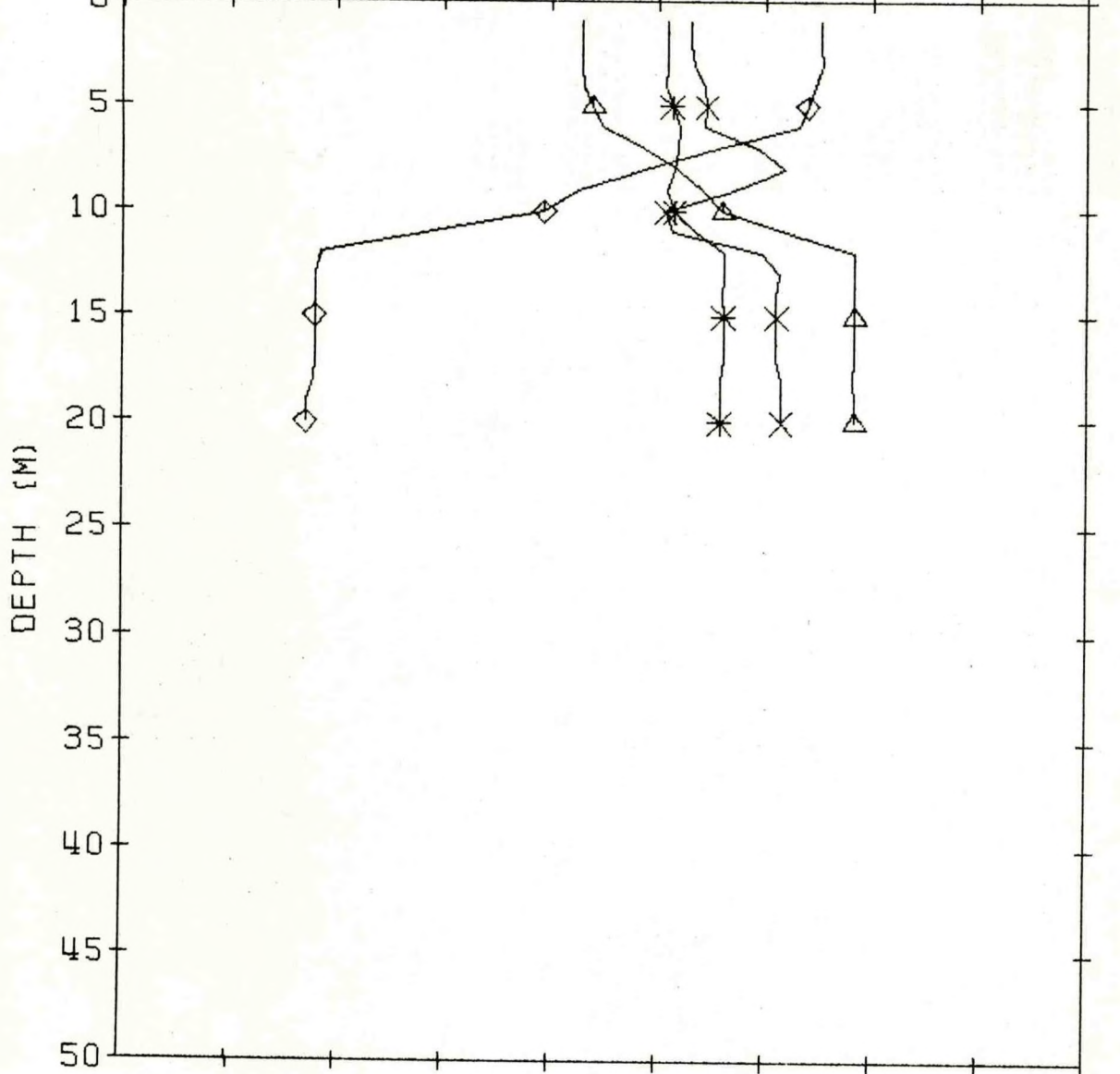
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.131 LAT 39 23.2N; LONG 73 55.5W GMT 07.5 08/03/77  
 DEPTH 27 AIR D/W 73.0/72.0 BARO 18.0 VIS 5 CLD TYP/CVR X/8  
 WETHR 4 WIND DIR/SPD 19/05 SEA DIR/HT 00/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.10	32.15	22.05	84.1	7.68	5.57				
2	22.10	32.15	22.05	84.1	7.68	5.57				
3	22.03	32.14	22.07	86.0	7.68	5.56	.02	.00	2.99	.59
4	22.06	32.15	22.06	85.9	7.69	5.56				
5	22.06	32.14	22.06	85.9	7.70	5.56				
6	21.98	32.13	22.07	86.0	7.70	5.56				
7	21.85	32.13	22.11	86.1	7.70	5.56				
8	21.72	32.15	22.16	86.0	7.70	5.56				
9	21.96	32.14	22.16	86.0	7.70	5.56				
10	20.66	32.18	22.38	86.4	7.68	5.57	.00	.11	3.11	.71
11	19.90	32.22	22.87	86.9	7.66	5.57				
12	18.22	32.22	22.33	86.10	7.65	5.75				
13	17.42	32.22	22.33	85.5	7.65	5.80				
14	16.78	32.29	22.33	84.2	7.64	5.75				
15	15.70	32.40	22.83	81.8	7.64	5.76				
16	13.33	32.76	44.68	82.5	7.61	5.66				
17	10.94	32.76	25.07	83.6	7.61	5.82				
18	10.89	32.77	5.08	84.6	7.61	5.87				
19	10.86	32.79	5.10	84.6	7.60	5.65				
20	10.85	32.78	5.10	84.6	7.59	5.51	.20	.02	6.22	1.34
21	10.84	32.79	5.11	84.6	7.59	5.38				
22	10.84	32.82	5.13	84.6	7.59	5.27				
23	10.84	32.80	5.12	84.7	7.59	5.22				
24	10.84	32.81	5.12	84.8	7.57	5.18				
25	10.83	32.79	5.11	84.8	7.57	5.15				
26	10.83	32.79	5.11	84.9	7.57	5.12				
27	10.83	32.79	5.11	84.9	7.57	5.12	.15	.69	6.17	1.37

KELEZ CRUISE XWCC-15 STATION 131 08/03/77

TRANSMISSIVITY (0/0)

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SIGMA-T

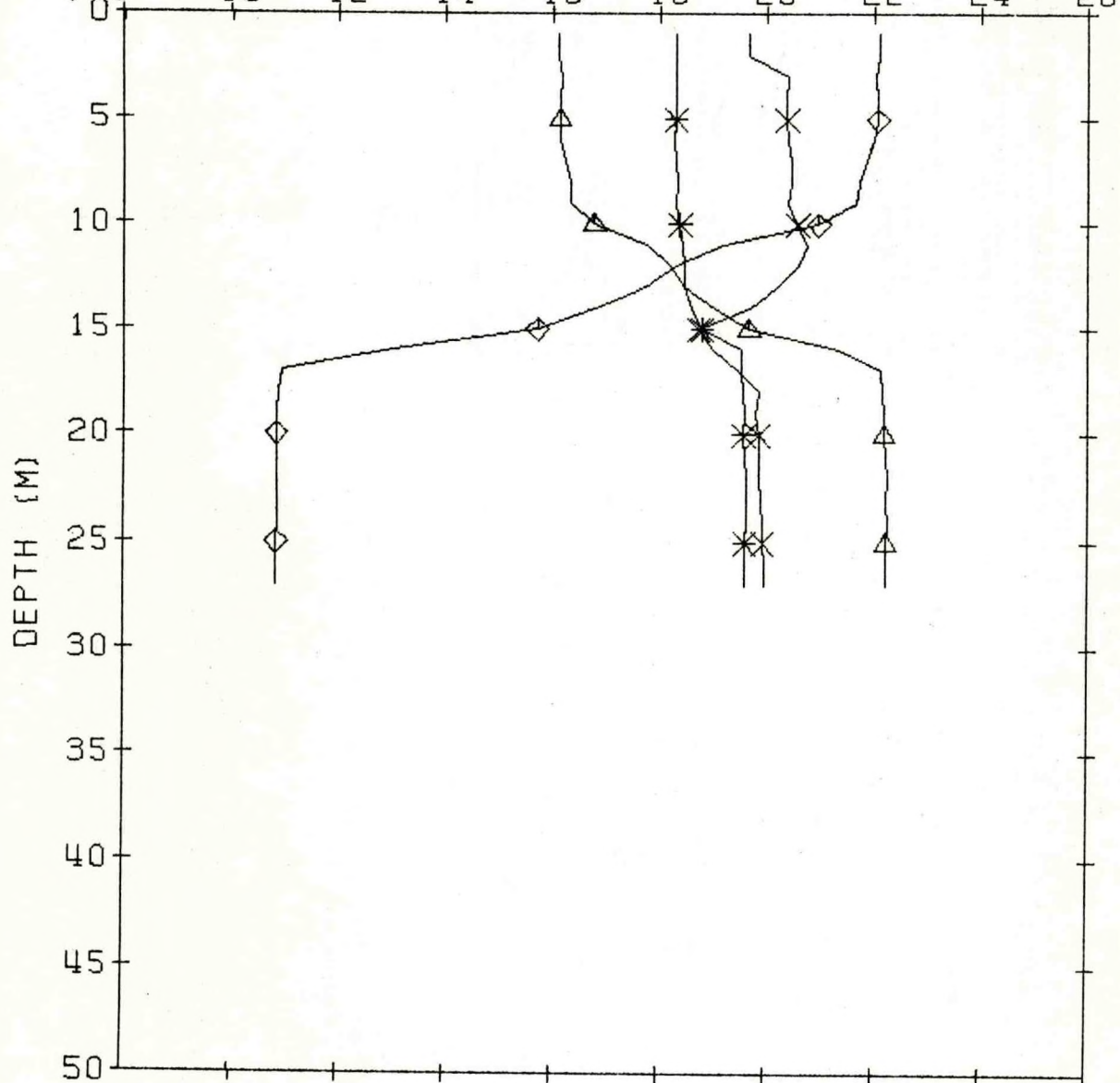
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.132 LAT 39 20.6N; LONG 73 47.8W GMT 06.2 08/03/77  
 DEPTH 34 AIR D/W 74.0/72.0 BARO 18.0 VIS 5 CLD TYP/CVR X/8  
 WETHR 4 WIND DIR/SPD 19/04 SEA DIR/HT 00/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.48	32.17	21.96	88.2	7.58	5.52				
2	22.48	32.17	21.96	88.2	7.58	5.52				
3	22.48	32.16	21.95	86.8	7.54	5.50				
4	22.47	32.17	21.96	87.7	7.63	5.52	.00	.00	4.01	.73
5	22.45	32.17	21.97	87.6	7.63	5.52				
6	22.44	32.17	21.97	87.8	7.64	5.52				
7	22.44	32.17	21.97	87.7	7.65	5.52				
8	22.43	32.16	21.97	87.8	7.65	5.52				
9	22.42	32.16	21.97	87.8	7.65	5.52				
10	22.38	32.15	21.98	87.9	7.65	5.51	.03	.07	3.79	.75
11	22.31	32.14	21.99	88.0	7.66	5.51				
12	22.08	32.08	22.03	88.1	7.66	5.52				
13	22.08	32.08	22.03	88.1	7.66	5.52				
14	22.23	32.14	22.28	88.0	7.65	5.56				
15	19.64	32.25	22.78	87.0	7.63	5.59				
16	16.67	32.35	23.57	85.9	7.59	5.73				
17	13.34	32.40	24.33	82.7	7.57	5.63				
18	13.00	32.55	24.50	81.3	7.56	5.63				
19	12.25	32.65	24.74	81.1	7.55	5.69				
20	10.09	32.86	25.29	82.9	7.52	5.73	.33	1.13	6.95	1.48
21	9.70	32.99	25.46	86.3	7.52	5.76				
22	9.71	32.99	25.46	86.4	7.51	5.46				
23	9.71	32.99	25.46	86.3	7.50	5.16				
24	9.71	32.99	25.45	86.4	7.49	5.93				
25	9.71	32.99	25.45	86.6	7.45	5.76				
26	9.71	32.99	25.45	86.6	7.46	5.66				
27	9.71	32.99	25.46	86.7	7.46	5.57				
28	9.70	32.99	25.45	86.6	7.46	5.51				
29	9.70	32.99	25.46	86.6	7.46	5.47				
30	9.70	32.99	25.46	86.8	7.46	5.43				
31	9.70	32.99	25.46	86.6	7.47	5.40				
32	9.69	32.99	25.46	86.6	7.47	5.39				
33	9.67	32.99	25.46	86.8	7.47	5.37				
34	9.67	32.99	25.46	86.8	7.47	5.35	.30	1.14	7.23	1.54

KELEZ CRUISE XWCC-15 STATION 132 08/03/77

TRANSMISSIVITY (0/0)

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SIGMA-T

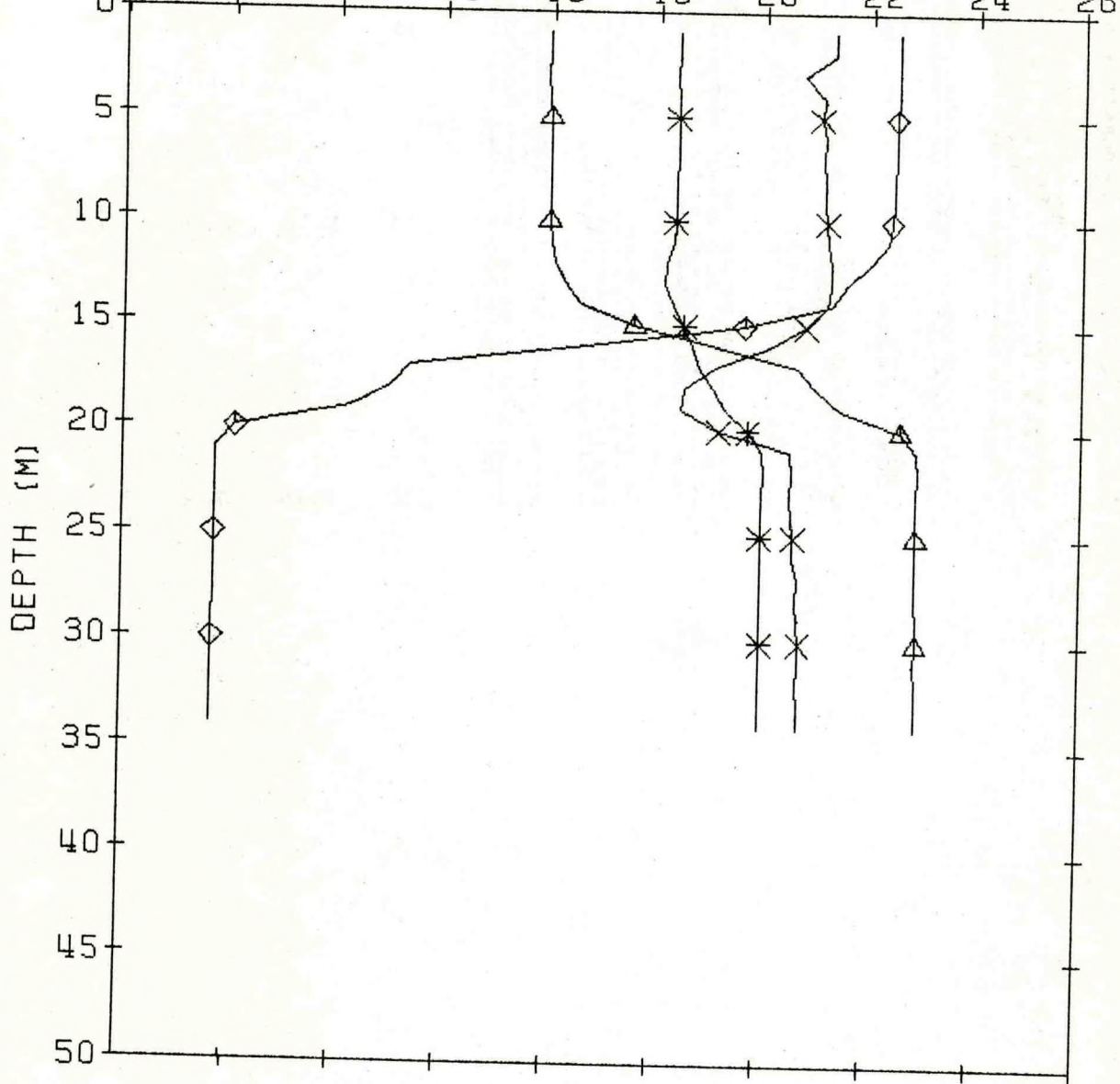
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.133 LAT 39 17.2N; LONG 73 36.0W GMT 04.3 08/03/77  
 DEPTH 2 44 AIR D/W 74.0/72.0 BARO 18.5 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 21/06 SEA DIR/HT 00/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.88	32.09	21.79	88.9	7.50	5.46				
2	22.88	32.09	21.79	88.9	7.50	5.46				
3	22.88	32.09	21.79	88.9	7.50	5.46	.00	.00	1.60	.33
4	22.88	32.09	21.79	88.9	7.56	5.46				
5	22.88	32.09	21.79	88.9	7.56	5.46				
6	22.88	32.09	21.79	88.9	7.56	5.46				
7	22.88	32.09	21.79	88.9	7.56	5.46				
8	22.88	32.09	21.83	88.9	7.56	5.47				
9	22.88	32.09	21.94	88.9	7.57	5.48				
10	22.88	32.30	21.98	88.9	7.57	5.48	.00	.00	.90	.21
11	22.88	32.31	21.99	88.9	7.57	5.48				
12	22.88	32.31	22.00	88.8	7.58	5.48				
13	22.88	32.33	22.00	88.8	7.58	5.48				
14	22.88	32.33	22.00	88.8	7.58	5.48				
15	22.88	32.34	22.00	88.8	7.57	5.48				
16	22.88	32.41	22.00	88.8	7.57	5.48				
17	22.88	32.42	22.00	88.8	7.56	5.48				
18	22.88	32.48	22.00	88.8	7.55	5.48				
19	22.88	32.69	22.00	88.8	7.50	5.48	.00	.00	.55	.15
20	22.88	32.77	22.44	88.5	7.48	5.48				
21	22.88	32.83	22.92	88.5	7.45	5.48				
22	22.88	32.91	22.44	88.5	7.43	5.48				
23	22.88	32.99	22.44	88.5	7.41	5.48				
24	22.88	33.10	22.63	88.6	7.39	5.48				
25	22.88	33.10	22.63	88.7	7.37	5.48				
26	22.88	33.12	22.68	88.7	7.36	5.48				
27	22.88	33.12	22.68	88.7	7.36	5.48				
28	22.88	33.11	22.67	88.7	7.36	5.48				
29	22.88	33.11	22.67	88.7	7.36	5.48	.48	.29	5.58	1.26
30	22.88	33.11	22.66	88.8	7.36	5.48				
31	22.88	33.11	22.67	88.8	7.36	5.48				
32	22.88	33.11	22.67	88.7	7.36	5.48				
33	22.88	33.11	22.67	88.7	7.36	5.48				
34	22.88	33.11	22.67	88.7	7.36	5.48				
35	22.88	33.12	22.67	88.7	7.36	5.48				
36	22.88	33.12	22.67	88.7	7.36	5.48				
37	22.88	33.12	22.67	88.7	7.36	5.48				
38	22.88	33.11	22.67	88.7	7.36	5.48				
39	22.88	33.11	22.66	88.7	7.36	5.48				
40	22.88	33.11	22.67	88.7	7.36	5.48				
41	22.88	33.11	22.67	88.7	7.36	5.48				
42	22.88	33.11	22.67	88.7	7.36	5.48				
43	22.88	33.11	22.67	88.7	7.36	5.48	.45	.82	5.82	1.25
44	22.88	33.11	22.67	88.7	7.36	5.48				

KELEZ CRUISE XWCC-15 STATION 133 08/03/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

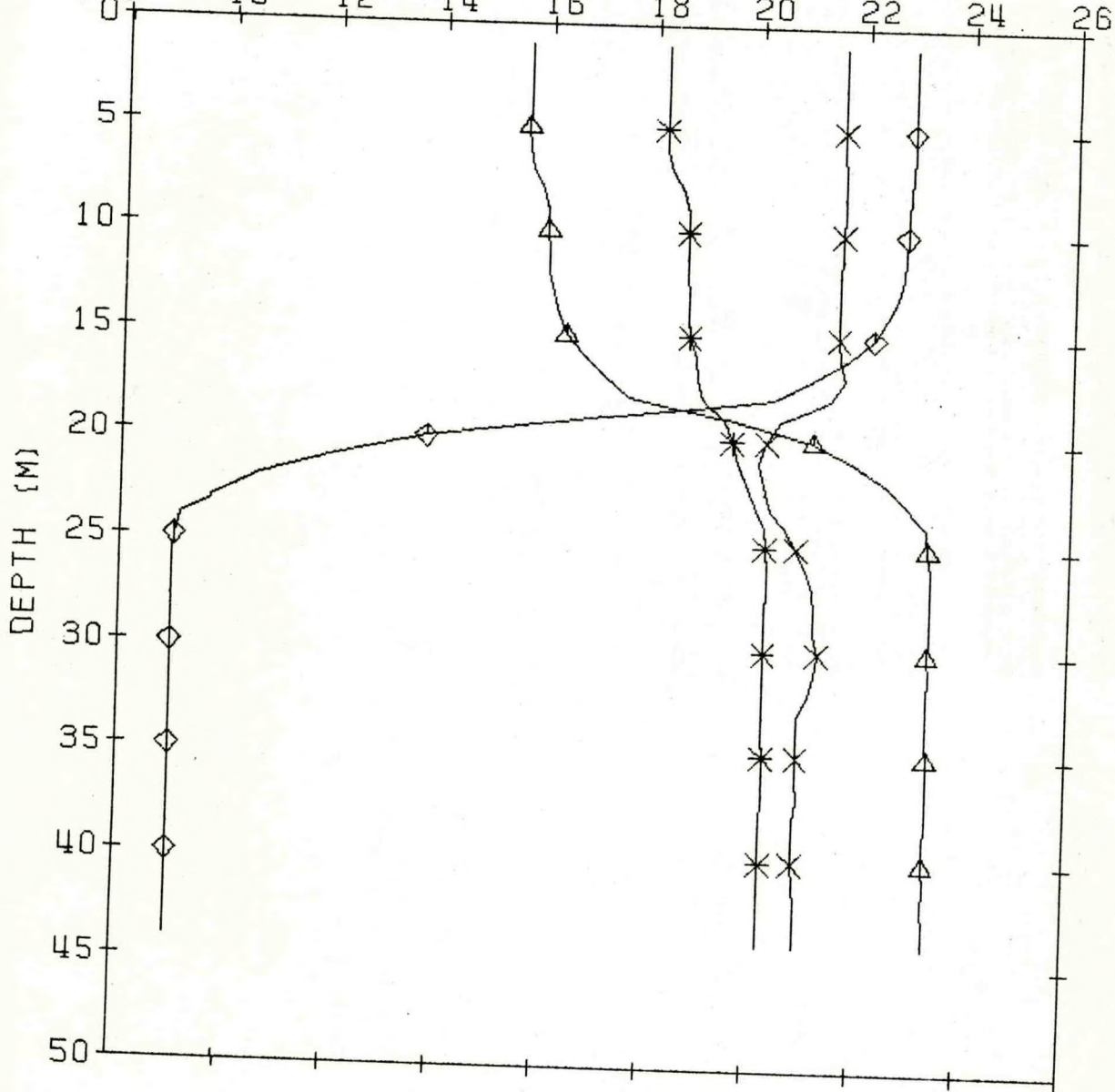
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC\_15 STA.134 LAT 39 10.9N; LONG 73 22.0W GMT 08.4 08/05/77  
 DEPTH 52 AIR D/W 74.5/73.5 BARO 22.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 23/08 SEA DIR/HT 00/0 SWELL DIR/HT 20/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.18	33.04	21.66	88.9	8.06	5.48				
2	23.18	33.04	21.66	88.9	8.06	5.48				
3	23.18	33.04	21.67	88.9	8.08	5.47	.02	.00	1.31	.17
4	23.21	33.04	21.67	89.9	8.11	5.43				
5	23.20	33.04	21.67	89.9	8.13	5.43				
6	23.20	33.04	21.67	89.9	8.13	5.42				
7	23.20	33.04	21.67	90.0	8.13	5.42				
8	23.20	33.04	21.67	90.1	8.13	5.42				
9	23.20	33.06	21.68	90.0	8.13	5.42				
10	23.20	33.06	21.68	90.0	8.13	5.42	.02	.00	.07	.08
11	23.21	33.15	21.94	90.9	8.13	5.49				
12	23.33	33.13	21.96	90.9	8.13	5.53				
13	23.47	33.16	21.92	90.9	8.13	5.57				
14	23.54	33.17	21.95	90.9	8.14	5.65				
15	24.09	33.22	21.95	90.9	8.14	5.72				
16	24.18	33.24	21.98	90.9	8.13	5.94				
17	24.65	33.23	21.98	90.9	8.13	6.16				
18	25.17	33.33	21.90	90.9	8.13	6.41				
19	25.88	33.44	21.98	90.9	8.13	6.71				
20	26.14	33.54	21.98	90.9	8.13	6.95	.03	.00	1.99	.33
21	26.47	33.57	21.98	90.9	8.12	7.01				
22	26.88	33.60	21.98	90.9	8.12	7.05				
23	27.06	33.62	21.98	90.9	8.10	6.99				
24	27.48	33.75	21.98	90.9	8.10	6.88				
25	27.81	33.99	21.98	90.9	8.06	6.77				
26	28.08	33.99	21.98	90.9	8.06	6.73				
27	28.78	33.99	21.98	90.9	8.06	6.60				
28	29.78	33.99	21.98	90.9	8.06	6.32	.70	2.19	5.60	1.04
29	30.78	33.99	21.98	90.9	8.06	6.11				
30	31.76	33.99	21.98	90.9	8.05	5.95				
31	32.76	33.99	21.98	90.9	8.04	5.75				
32	33.76	33.99	21.98	90.9	8.03	5.53				
33	34.73	33.99	21.98	90.9	8.02	5.28				
34	35.71	33.99	21.98	90.9	8.02	5.02				
35	36.69	33.99	21.98	90.9	8.00	4.76				
36	37.67	33.99	21.98	90.9	8.00	4.50				
37	38.67	33.99	21.98	90.9	7.95	4.24				
38	39.67	33.99	21.98	90.9	7.91	3.98				
39	40.67	33.99	21.98	90.9	7.88	3.72	.51	.79	6.41	1.10
40	41.67	33.99	21.98	90.9	7.81	3.46				
41	42.67	33.99	21.98	90.9	7.79	3.20				
42	43.67	33.99	21.98	90.9	7.76	2.94				
43	44.67	33.99	21.98	90.9	7.74	2.68				
44	45.67	33.99	21.98	90.9	7.71	2.42				
45	46.67	33.99	21.98	90.9	7.69	2.16				
46	47.67	33.99	21.98	90.9	7.67	1.90				
47	48.67	33.99	21.98	90.9	7.65	1.64				
48	49.67	33.99	21.98	90.9	7.64	1.38				
49	50.67	33.99	21.98	90.9	7.64	1.12	.58	3.22	7.89	1.44
50	51.67	33.99	21.98	90.9	7.64	0.86				

KELEZ CRUISE XWCC-15 STATION 134 08/05/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

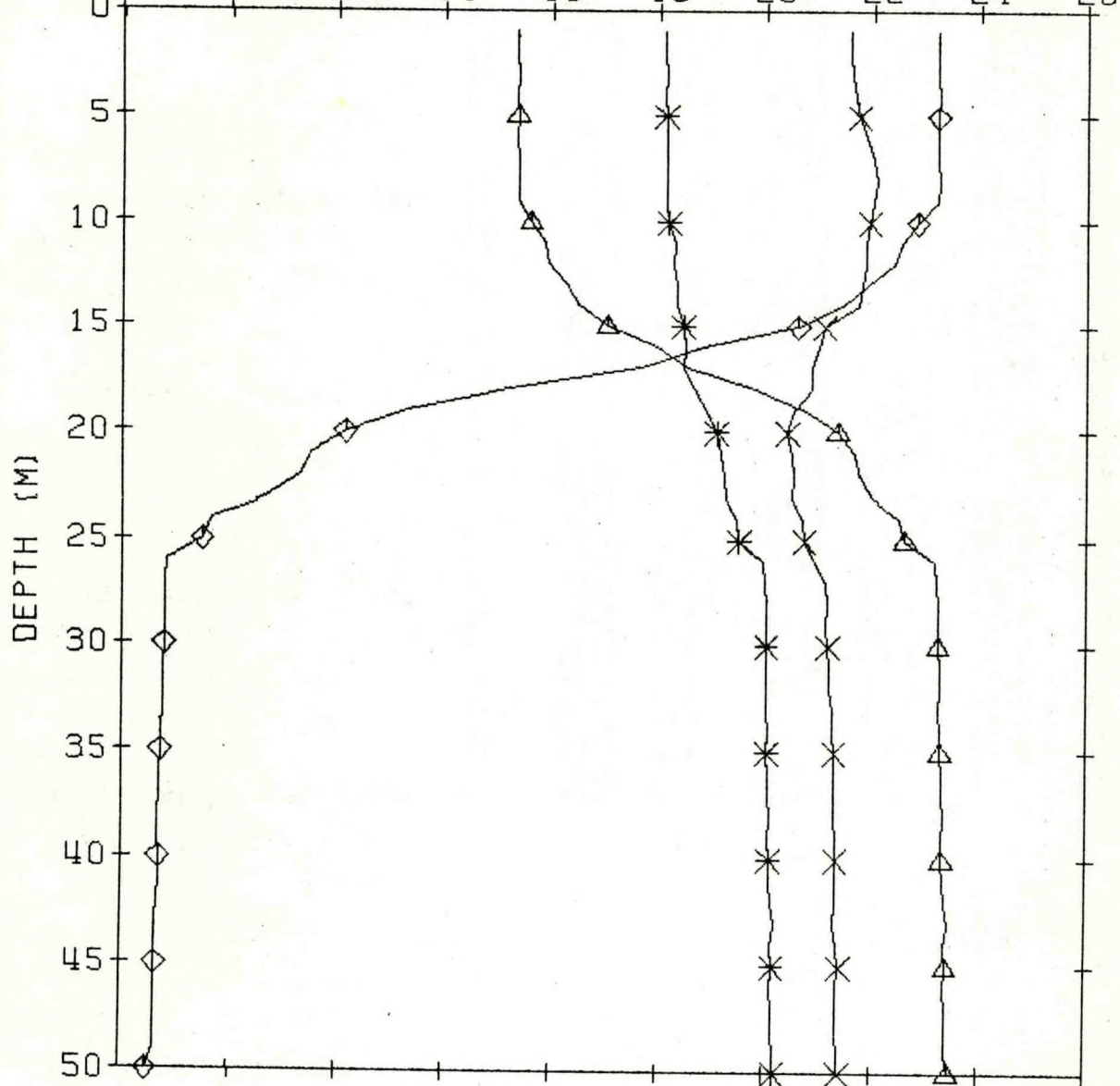
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.135 LAT 39 5.2N; LONG 73 6.5W GMT 11.0 08/05/77  
 DEPTH 68 AIR D/W BARO 22.2 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 20/08 SEA DIR/HT 00/0 SWELL DIR/HT 20/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.87	31.96	21.69	88.2	7.97	5.59				
2	22.87	31.96	21.69	88.2	7.97	5.59				
3	22.88	31.96	21.69	88.2	7.97	5.59	.18	10.36	.07	.11
4	22.88	31.97	21.70	90.5	7.97	5.57				
5	22.88	31.97	21.69	90.4	7.98	5.54				
6	22.88	31.97	21.70	90.4	7.98	5.54				
7	22.87	31.97	21.71	90.3	7.98	5.54				
8	22.84	31.97	21.77	90.2	7.98	5.54				
9	22.59	31.96	21.90	90.0	7.98	5.58				
10	22.19	31.96	21.90	90.0	7.98	5.58				
11	21.90	31.96	21.99	90.0	7.98	5.64				
12	21.68	31.96	22.06	89.0	7.98	5.69				
13	21.33	31.96	22.08	89.0	7.98	5.72				
14	20.96	31.99	22.25	89.0	7.98	5.78				
15	19.96	31.99	22.59	88.9	7.97	5.88				
16	17.77	31.99	23.52	88.8	7.96	6.00				
17	15.77	31.99	24.58	88.8	7.96	6.39				
18	14.11	31.99	25.55	88.8	7.95	6.82				
19	13.36	31.99	26.66	88.8	7.95	7.28	.25	3.59	1.99	.26
20	13.36	31.99	27.99	88.8	7.95	7.78				
21	12.78	31.99	29.23	88.8	7.94	8.21				
22	12.55	31.99	30.00	88.8	7.94	8.60				
23	12.47	31.99	30.77	88.8	7.93	8.94				
24	12.47	31.99	31.50	88.8	7.93	9.33				
25	12.47	31.99	32.23	88.8	7.92	9.74				
26	12.47	31.99	33.00	88.8	7.92	10.11				
27	12.47	31.99	33.77	88.8	7.92	10.44				
28	12.47	31.99	34.50	88.8	7.92	10.78				
29	12.47	31.99	35.23	88.8	7.92	11.11	.25	3.57	1.95	.26
30	12.47	31.99	36.00	88.8	7.92	11.45				
31	12.47	31.99	36.73	88.8	7.92	11.78				
32	12.47	31.99	37.50	88.8	7.92	12.11				
33	12.47	31.99	38.23	88.8	7.92	12.44				
34	12.47	31.99	39.00	88.8	7.92	12.77				
35	12.47	31.99	39.73	88.8	7.92	13.11				
36	12.47	31.99	40.50	88.8	7.92	13.44				
37	12.47	31.99	41.23	88.8	7.92	13.77				
38	12.47	31.99	42.00	88.8	7.92	14.11				
39	12.47	31.99	42.73	88.8	7.92	14.44				
40	12.47	31.99	43.50	88.8	7.92	14.77				
41	12.47	31.99	44.23	88.8	7.92	15.11				
42	12.47	31.99	45.00	88.8	7.92	15.44				
43	12.47	31.99	45.73	88.8	7.92	15.77				
44	12.47	31.99	46.50	88.8	7.92	16.11				
45	12.47	31.99	47.23	88.8	7.92	16.44				
46	12.47	31.99	48.00	88.8	7.92	16.77				
47	12.47	31.99	48.73	88.8	7.92	17.11				
48	12.47	31.99	49.50	88.8	7.92	17.44				
49	12.47	31.99	50.23	88.8	7.92	17.77	.87	6.88	2.35	.44
50	12.47	31.99	51.00	88.8	7.92	18.11	.46	10.43	7.50	1.37
51	12.47	31.99	51.73	88.8	7.92	18.44	.53	39.11	8.11	1.55
52	12.47	31.99	52.50	88.8	7.92	18.77				
53	12.47	31.99	53.23	88.8	7.92	19.11				
54	12.47	31.99	54.00	88.8	7.92	19.44				
55	12.47	31.99	54.73	88.8	7.92	19.77				
56	12.47	31.99	55.50	88.8	7.92	20.11				
57	12.47	31.99	56.23	88.8	7.92	20.44				
58	12.47	31.99	57.00	88.8	7.92	20.77				
59	12.47	31.99	57.73	88.8	7.92	21.11				
60	12.47	31.99	58.50	88.8	7.92	21.44				

KELEZ CRUISE XWCC-15 STATION 135 08/05/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

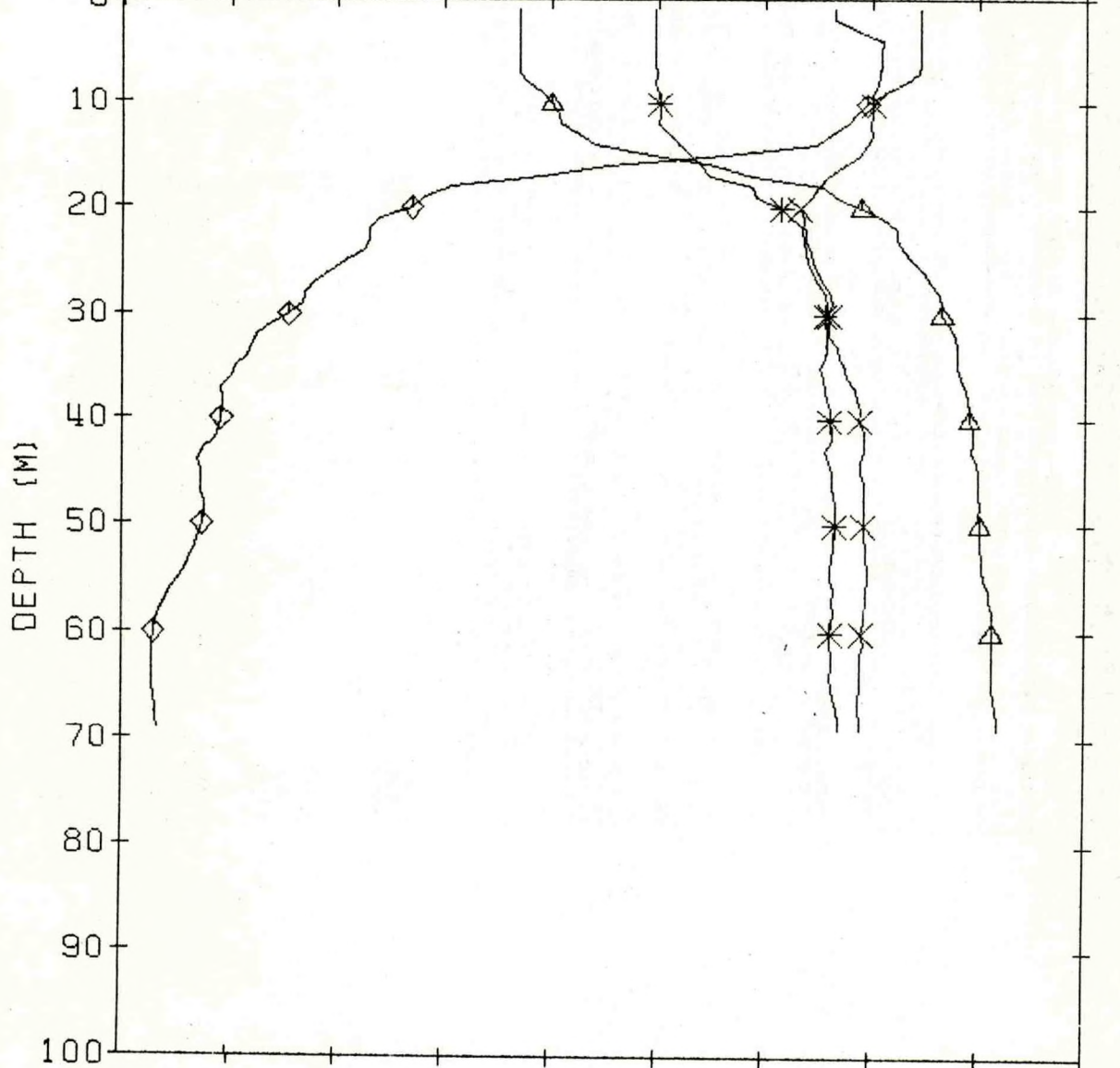
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.136 LAT 39.0N; LONG 72 52.1W GMT 19.0 08/05/77  
 DEPTH 116 AIR D/W 79.0/76.0 BARO 20.5 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 20/12 SEA DIR/HT 20/1 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.64	35.00	21.50	90.6	7.44					
2	22.64	35.00	21.50	90.6	7.44					
3	22.64	35.00	21.50	90.6	7.44					
4	22.64	35.00	21.50	90.6	7.44					
5	22.64	35.00	21.50	90.6	7.44					
6	22.64	35.00	21.50	90.6	7.44					
7	22.64	35.00	21.50	90.6	7.44					
8	22.64	35.00	21.50	90.6	7.44					
9	22.64	35.00	21.50	90.6	7.44					
10	22.64	35.00	21.50	90.6	7.44					
11	22.64	35.00	21.50	90.6	7.44					
12	22.64	35.00	21.50	90.6	7.44					
13	22.64	35.00	21.50	90.6	7.44					
14	22.64	35.00	21.50	90.6	7.44					
15	22.64	35.00	21.50	90.6	7.44					
16	22.64	35.00	21.50	90.6	7.44					
17	22.64	35.00	21.50	90.6	7.44					
18	22.64	35.00	21.50	90.6	7.44					
19	22.64	35.00	21.50	90.6	7.44					
20	22.64	35.00	21.50	90.6	7.44					
21	22.64	35.00	21.50	90.6	7.44					
22	22.64	35.00	21.50	90.6	7.44					
23	22.64	35.00	21.50	90.6	7.44					
24	22.64	35.00	21.50	90.6	7.44					
25	22.64	35.00	21.50	90.6	7.44					
26	22.64	35.00	21.50	90.6	7.44					
27	22.64	35.00	21.50	90.6	7.44					
28	22.64	35.00	21.50	90.6	7.44					
29	22.64	35.00	21.50	90.6	7.44					
30	22.64	35.00	21.50	90.6	7.44					
31	22.64	35.00	21.50	90.6	7.44					
32	22.64	35.00	21.50	90.6	7.44					
33	22.64	35.00	21.50	90.6	7.44					
34	22.64	35.00	21.50	90.6	7.44					
35	22.64	35.00	21.50	90.6	7.44					
36	22.64	35.00	21.50	90.6	7.44					
37	22.64	35.00	21.50	90.6	7.44					
38	22.64	35.00	21.50	90.6	7.44					
39	22.64	35.00	21.50	90.6	7.44					
40	22.64	35.00	21.50	90.6	7.44					
41	22.64	35.00	21.50	90.6	7.44					
42	22.64	35.00	21.50	90.6	7.44					
43	22.64	35.00	21.50	90.6	7.44					
44	22.64	35.00	21.50	90.6	7.44					
45	22.64	35.00	21.50	90.6	7.44					
46	22.64	35.00	21.50	90.6	7.44					
47	22.64	35.00	21.50	90.6	7.44					
48	22.64	35.00	21.50	90.6	7.44					
49	22.64	35.00	21.50	90.6	7.44					
50	22.64	35.00	21.50	90.6	7.44					
51	22.64	35.00	21.50	90.6	7.44					
52	22.64	35.00	21.50	90.6	7.44					
53	22.64	35.00	21.50	90.6	7.44					
54	22.64	35.00	21.50	90.6	7.44					
55	22.64	35.00	21.50	90.6	7.44					
56	22.64	35.00	21.50	90.6	7.44					
57	22.64	35.00	21.50	90.6	7.44					
58	22.64	35.00	21.50	90.6	7.44					
59	22.64	35.00	21.50	90.6	7.44					
60	22.64	35.00	21.50	90.6	7.44					
61	22.64	35.00	21.50	90.6	7.44					
62	22.64	35.00	21.50	90.6	7.44					
63	22.64	35.00	21.50	90.6	7.44					
64	22.64	35.00	21.50	90.6	7.44					
65	22.64	35.00	21.50	90.6	7.44					
66	22.64	35.00	21.50	90.6	7.44					
67	22.64	35.00	21.50	90.6	7.44					
68	22.64	35.00	21.50	90.6	7.44					
69	22.64	35.00	21.50	90.6	7.44					
70	22.64	35.00	21.50	90.6	7.44					
71	22.64	35.00	21.50	90.6	7.44					
72	22.64	35.00	21.50	90.6	7.44					
73	22.64	35.00	21.50	90.6	7.44					
74	22.64	35.00	21.50	90.6	7.44					
75	22.64	35.00	21.50	90.6	7.44					
76	22.64	35.00	21.50	90.6	7.44					
77	22.64	35.00	21.50	90.6	7.44					
78	22.64	35.00	21.50	90.6	7.44					
79	22.64	35.00	21.50	90.6	7.44					
80	22.64	35.00	21.50	90.6	7.44					
81	22.64	35.00	21.50	90.6	7.44					
82	22.64	35.00	21.50	90.6	7.44					
83	22.64	35.00	21.50	90.6	7.44					
84	22.64	35.00	21.50	90.6	7.44					
85	22.64	35.00	21.50	90.6	7.44					
86	22.64	35.00	21.50	90.6	7.44					
87	22.64	35.00	21.50	90.6	7.44					
88	22.64	35.00	21.50	90.6	7.44					
89	22.64	35.00	21.50	90.6	7.44					
90	22.64	35.00	21.50	90.6	7.44					
91	22.64	35.00	21.50	90.6	7.44					
92	22.64	35.00	21.50	90.6	7.44					
93	22.64	35.00	21.50	90.6	7.44					
94	22.64	35.00	21.50	90.6	7.44					
95	22.64	35.00	21.50	90.6	7.44					
96	22.64	35.00	21.50	90.6	7.44					
97	22.64	35.00	21.50	90.6	7.44					
98	22.64	35.00	21.50	90.6	7.44					
99	22.64	35.00	21.50	90.6	7.44					
100	22.64	35.00	21.50	90.6	7.44					

KELEZ CRUISE XWCC-15 STATION 136 08/05/77

TRANSMISSIVITY (0/0)

× 55 60 65 70 75 80 85 90 95 100

SIGMA-T

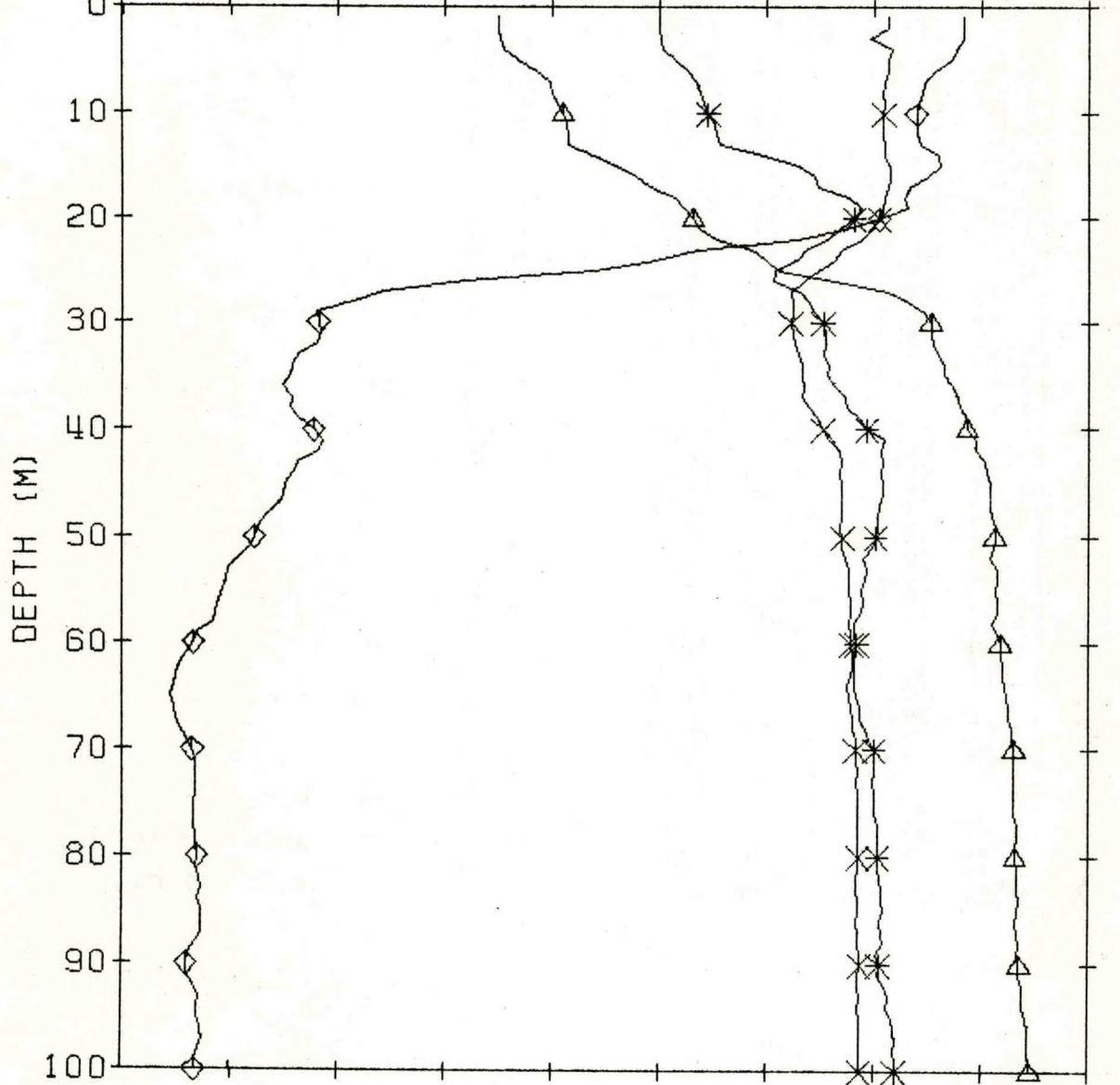
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.137 LAT 39 18.5N; LONG 74 .6W GMT 14.5 08/03/77  
 DEPTH 26 AIR D/W 70.0/70.0 BARO 18.5 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 12/08 SEA DIR/HT 20/0 SWELL DIR/HT 16/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.06	32.08	22.01	84.4	7.52	5.87				
2	22.06	32.08	22.01	84.4	7.52	5.87				
3	22.06	32.08	22.01	84.4	7.52	5.87				
4	22.04	32.07	22.01	84.4	7.51	5.85	.07	.00	2.42	.60
5	22.04	32.08	22.02	84.4	7.51	5.86				
6	22.01	32.09	22.03	84.3	7.51	5.66				
7	22.01	32.11	22.06	84.3	7.51	5.67				
8	22.01	32.12	22.08	84.3	7.51	5.67				
9	22.01	32.12	22.08	84.4	7.51	5.66				
10	22.01	32.13	22.09	84.4	7.51	5.66	.00	.00	2.38	.55
11	22.00	32.17	22.36	85.4	7.51	5.69				
12	22.02	32.25	22.79	86.4	7.51	5.73				
13	22.04	32.33	23.07	87.6	7.51	5.70				
14	22.03	32.33	23.64	88.6	7.48	5.69				
15	22.03	32.44	23.56	88.4	7.45	5.62				
16	22.00	32.54	24.80	88.4	7.44	5.45				
17	22.00	32.66	24.92	88.4	7.44	5.21				
18	22.00	32.79	25.09	88.4	7.44	5.12				
19	22.00	32.83	25.14	88.4	7.44	5.04				
20	22.01	32.80	25.12	88.5	7.44	5.01	.02	.09	6.62	1.35
21	22.01	32.80	25.12	88.5	7.44	4.99				
22	22.01	32.79	25.12	88.5	7.43	4.98				
23	22.01	32.79	25.11	88.5	7.41	4.98				
24	22.01	32.79	25.11	88.5	7.36	4.98				
25	22.01	32.79	25.11	88.5	7.42	4.98				
26	22.01	32.79	25.11	88.5	7.42	4.97	.24	.20	6.33	1.45

KELEZ CRUISE XWCC-15 STATION 137 08/03/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

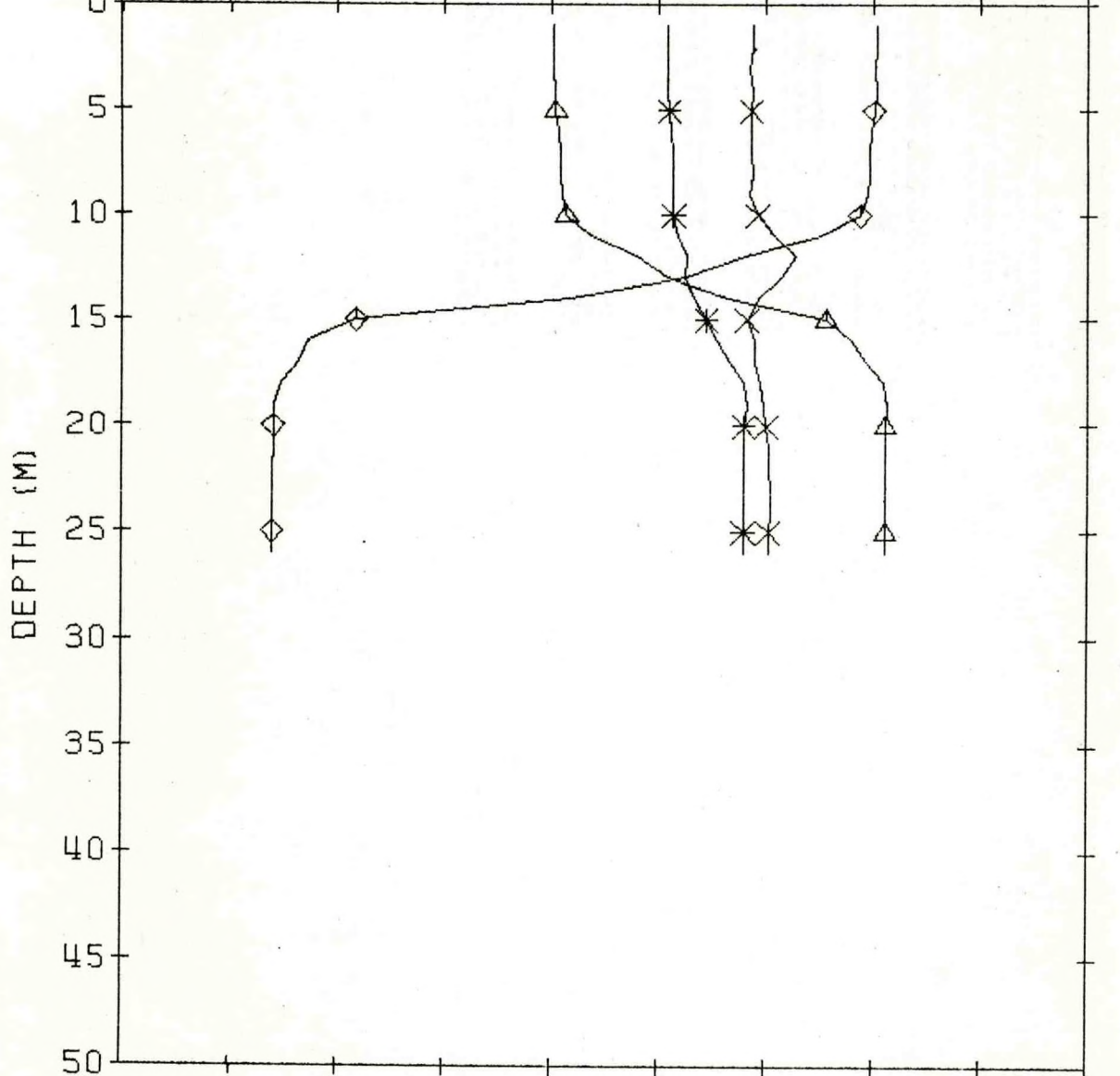
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.139 LAT 39 13.7N; LONG 74 30.1W GMT 05.3 08/04/77  
 DEPTH 17 AIR D/W 73.0/72.0 BARO 18.5 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 22/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	21.13	32.07	22.25	83.7	7.62	5.84				
2	21.13	32.07	22.25	83.7	7.62	5.84	.04	.00	6.57	1.28
3	21.13	32.08	22.26	83.9	7.69	5.86				
4	21.02	32.08	22.29	83.9	7.74	5.85				
5	20.56	32.13	22.45	84.0	7.77	5.86				
6	20.34	32.12	22.51	84.0	7.77	5.82				
7	20.12	32.12	22.56	84.1	7.76	5.73				
8	18.41	32.17	23.03	84.1	7.74	5.68				
9	16.56	32.22	23.50	83.0	7.71	5.55				
10	14.47	32.33	24.05	83.7	7.67	5.11	.07	.00	5.99	1.22
11	13.74	32.43	24.28	86.9	7.67	4.37				
12	13.73	32.43	24.28	86.9	7.68	4.48				
13	13.73	32.43	24.28	86.9	7.68	4.91				
14	13.70	32.42	24.28	86.5	7.68	4.54				
15	13.68	32.42	24.28	86.8	7.68	4.33				
16	13.67	32.42	24.29	86.6	7.68	4.05	.26	.63	17.29	3.51
17	13.67	32.42	24.29	86.6	7.68	2.04				

KELEZ CRUISE XWCC-15 STATION 139 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

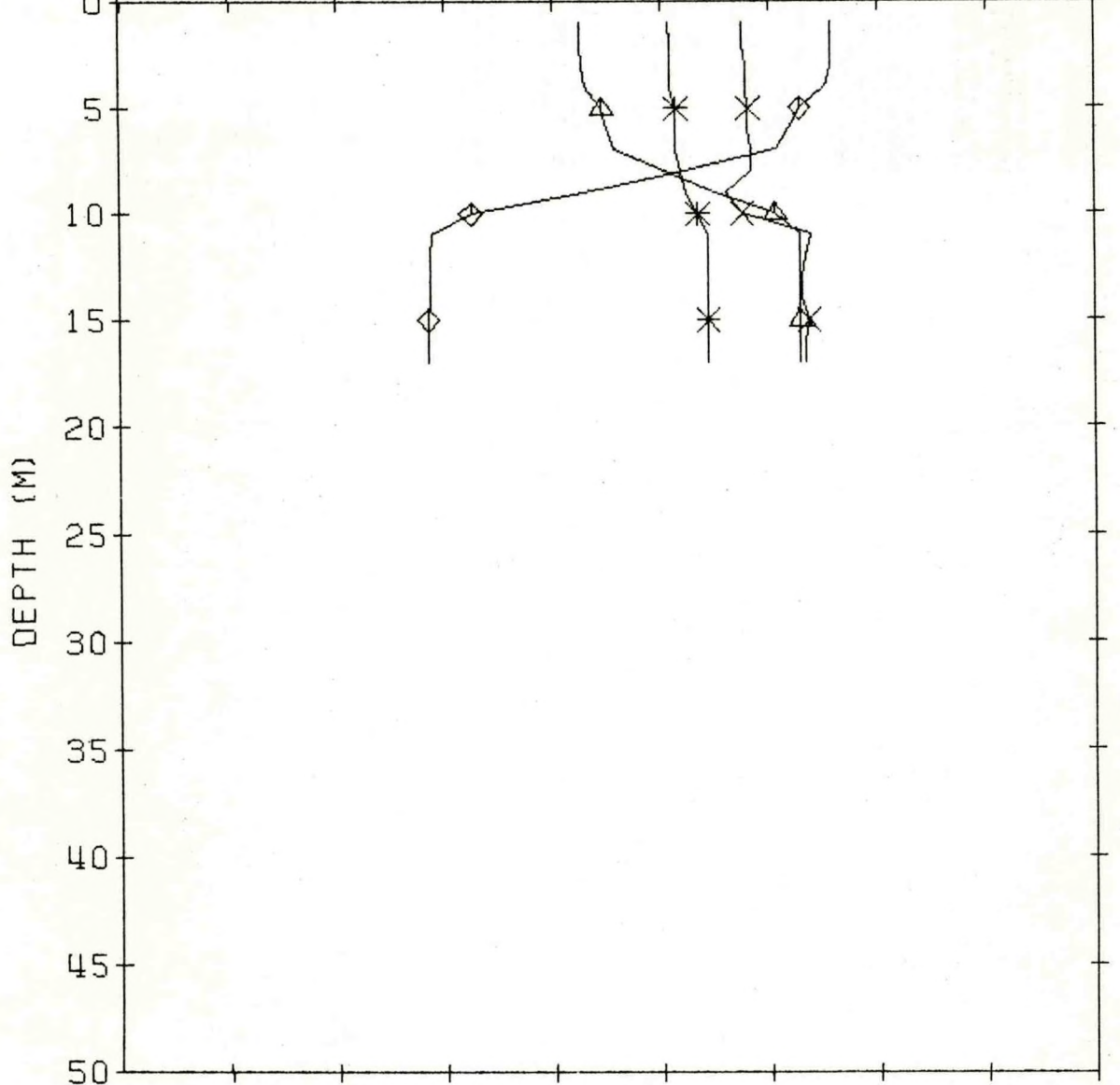
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.140 LAT 39 7.0N; LONG 74 24.6W GMT 04.3 08/04/77  
 DEPTH 19 AIR D/W 74.0/72.0 BARO 19.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 20/07 SEA DIR/HT 20/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	21.91	32.08	22.05	79.8	7.70	5.49				
2	21.91	32.08	22.05	79.8	7.70	5.48				
3	21.88	32.09	22.06	81.9	7.72	6.01	.05	.00	6.27	1.19
4	21.88	32.09	22.06	82.2	7.76	6.02				
5	21.88	32.08	22.06	82.1	7.78	6.02				
6	21.63	32.09	22.13	82.3	7.79	6.03				
7	21.42	32.14	22.06	82.5	7.79	6.06				
8	20.42	32.22	22.56	83.9	7.75	6.09				
10	18.44	32.33	23.37	85.2	7.74	6.12	.04	.00	2.28	.53
11	17.49	32.33	23.49	84.9	7.74	6.09				
12	17.00	32.33	23.49	84.5	7.73	5.96				
13	15.50	32.49	24.02	83.3	7.69	5.81				
14	13.50	32.55	24.50	86.1	7.66	5.74				
14	12.96	32.52	24.50	86.6	7.67	5.30				
15	12.95	32.52	24.51	86.6	7.67	4.66				
16	12.95	32.52	24.50	86.7	7.67	4.11				
17	12.94	32.52	24.51	86.7	7.67	3.91				
18	12.94	32.52	24.51	87.1	7.67	3.68				
19	12.94	32.52	24.51	87.1	7.67	3.68	.28	.50	8.78	1.89

KELEZ CRUISE XWCC-15 STATION 140 08/04/77

TRANSMISSIVITY (0/0)

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SIGMA-T

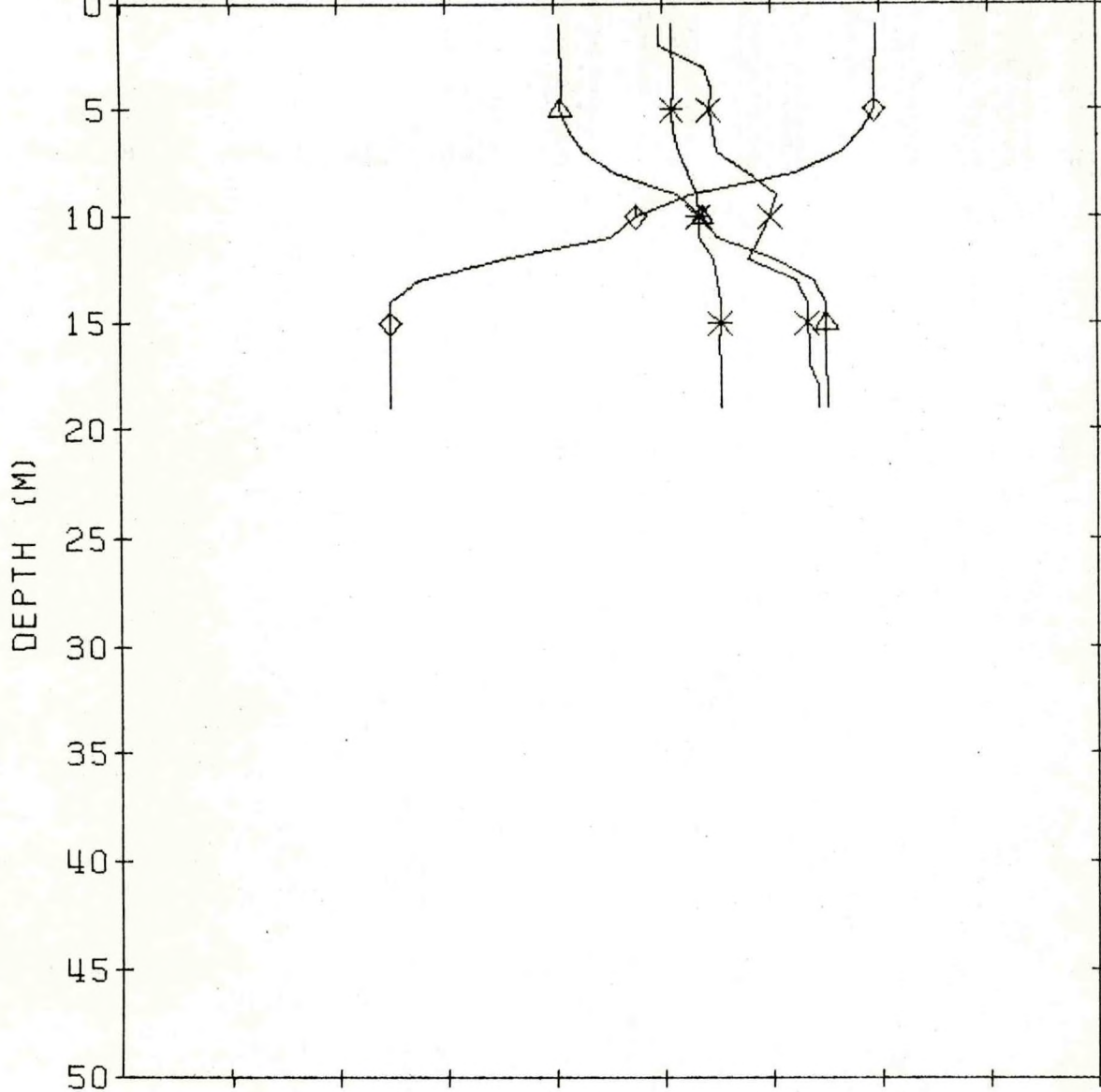
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.141 LAT 39 6.9N; LONG 74 15.6W GMT 03.0 08/04/77  
 DEPTH 24 AIR D/W 74.0/73.0 BARO 19.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 16/10 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.66	31.96	21.75	81.4	7.85	6.12				
2	22.66	31.96	21.75	81.4	7.85	6.12				
3	22.63	31.97	21.77	81.2	7.88	6.09	.04	.00	3.59	.66
4	22.65	31.96	21.76	81.2	7.89	6.12				
5	22.61	31.97	21.77	81.3	7.90	6.12				
6	22.54	31.98	21.80	81.4	7.90	6.13				
7	22.48	32.00	21.83	81.6	7.91	6.14				
8	22.55	32.04	21.90	82.3	7.90	6.12				
9	21.68	32.07	22.11	84.0	7.90	6.13				
10	21.22	32.08	22.24	84.5	7.88	6.08	.07	.02	3.98	.76
11	20.62	32.12	22.43	85.9	7.87	6.03				
12	19.58	32.23	22.78	85.9	7.86	5.94				
13	16.20	32.34	23.68	86.8	7.82	5.92				
14	12.10	32.45	24.61	86.4	7.82	5.88				
15	11.99	32.56	24.72	86.1	7.82	5.20				
16	11.87	32.68	24.83	86.2	7.82	4.69				
17	11.75	32.70	24.87	86.3	7.82	4.42				
18	11.71	32.69	24.87	86.3	7.82	4.22				
19	11.70	32.70	24.88	86.4	7.82	4.09				
20	11.69	32.70	24.88	86.4	7.79	4.02	.31	1.13	8.55	1.77
21	11.66	32.71	24.89	86.5	7.75	3.99				
22	11.64	32.71	24.90	86.5	7.72	3.99				
23	11.63	32.71	24.90	86.5	7.73	4.00				
24	11.63	32.71	24.90	86.5	7.73	4.00	.27	1.14	8.63	1.83

KELEZ CRUISE XWCC-15 STATION 141 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

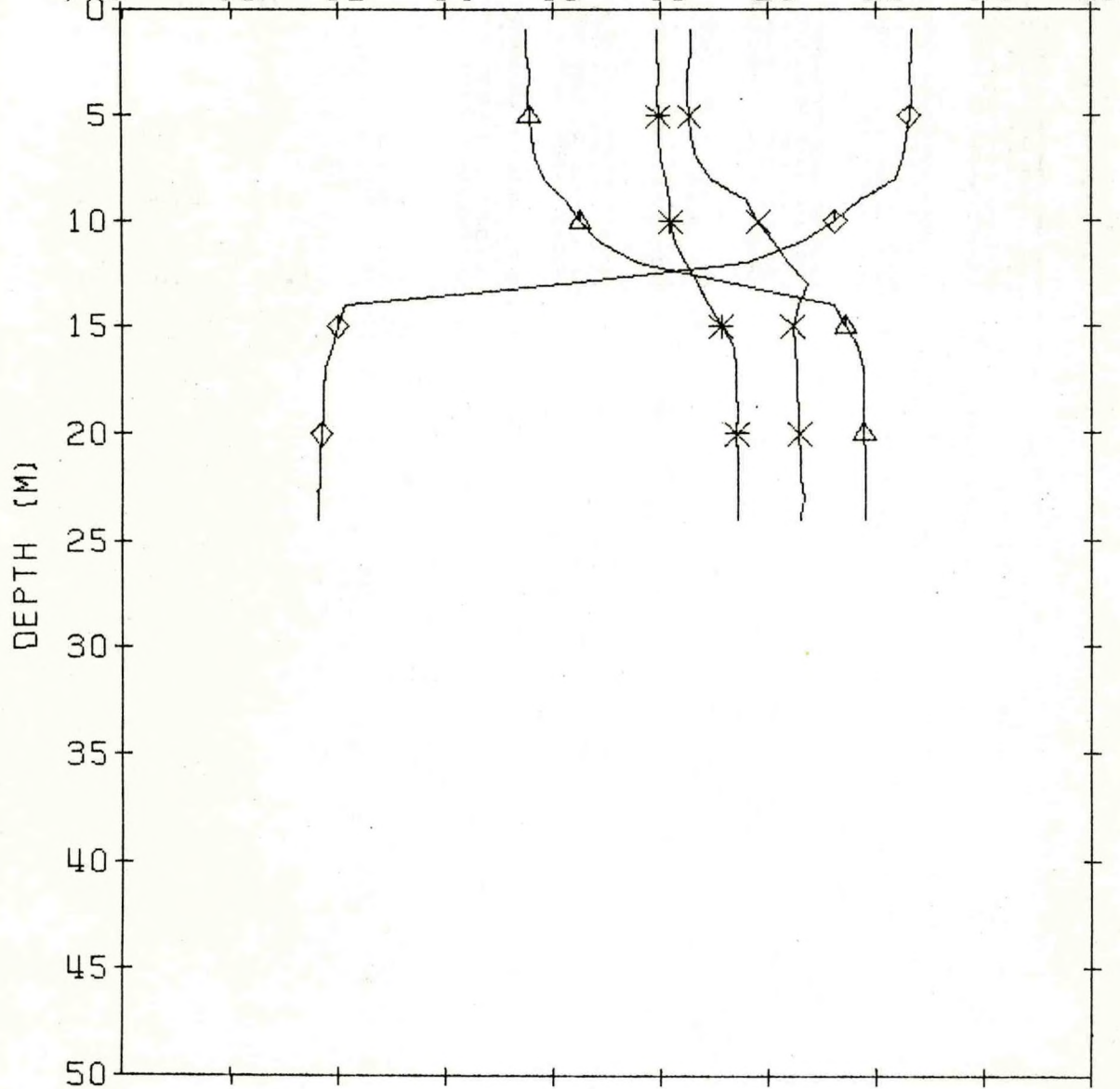
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.142 LAT 39 3.0N; LONG 74 6.2W GMT 00.4 08/04/77  
 DEPTH 33 AIR D/W 72.0/71.0 BARO 19.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 09/02 SEA DIR/HT 00/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.96	32.05	21.74	80.3		6.18				
2	22.96	32.05	21.74	80.3		6.18				
3	22.96	32.05	21.73	80.3		6.07	.05	.00	2.68	.55
4	22.96	32.05	21.74	80.4		6.13				
5	22.88	32.05	21.76	80.6		6.13				
6	22.73	32.05	21.77	80.6		6.13				
7	22.65	32.04	21.80	80.7		6.12				
8	22.55	32.05	21.82	80.8		6.11				
9	22.41	32.05	21.90	81.0		6.10				
10	22.30	32.06	21.96	81.5		6.09	.05	1.51	4.21	.78
11	22.20	32.08	21.94	81.7		6.07				
12	22.00	32.08	21.94	82.0		6.04				
13	21.90	32.09	22.03	82.7		6.01				
14	21.19	32.13	22.29	84.3		6.02				
15	19.20	32.21	22.86	85.9		5.99				
16	17.81	32.37	23.33	86.1		5.85				
17	16.01	32.39	23.76	85.4		5.66				
18	13.80	32.61	24.41	84.7		5.58				
19	12.87	32.69	24.65	84.4		5.42				
20	11.28	32.82	25.05	84.4		5.36	.05	.15	5.20	1.29
21	10.08	32.90	25.31	86.4		5.43				
22	9.84	32.90	25.37	86.5		5.36				
23	9.71	32.90	25.41	86.8		5.26				
24	9.58	32.94	25.44	86.7		5.15				
25	9.50	32.94	25.45	86.8		5.07				
26	9.50	32.94	25.45	86.8		4.97				
27	9.50	32.94	25.45	86.8		4.94				
28	9.49	32.94	25.45	86.9		4.93				
29	9.48	32.94	25.45	86.9		4.92				
30	9.48	32.94	25.45	86.9		4.91				
31	9.48	32.94	25.46	86.9		4.90	.50	.90	7.71	1.68
32	9.48	32.94	25.46	86.9		4.90				

KELEZ CRUISE XWCC-15 STATION 142 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

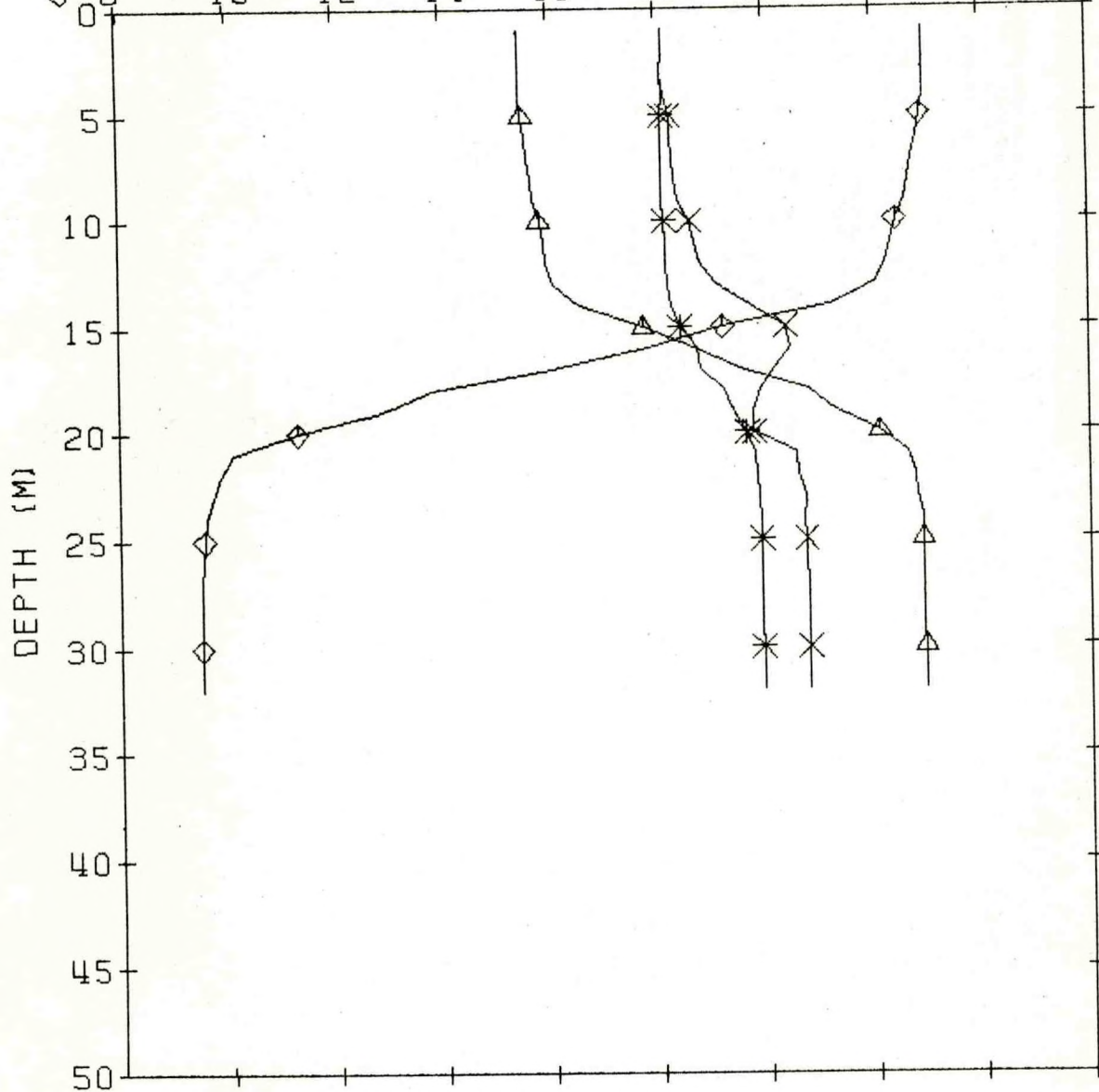
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.143 LAT 38 58.0N; LONG 73 56.0W GMT 22.1 08/03/77  
 DEPTH 39 AIR D/W 76.0/74.0 BARO 18.0 VIS 7 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 35/04 SEA DIR/HT 35/0 SWELL DIR/HT 19/2

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	NO2	NO3	SI03	P04
1	22.20	32.13	21.73	85.4		5.62				
2	22.20	32.13	21.73	85.4		5.62				
3	22.20	32.14	21.77	86.6		5.59	.00	.00	6.50	1.23
4	22.04	32.15	21.79	86.9		5.62				
5	22.09	32.15	21.77	86.9		5.63				
6	22.10	32.14	21.77	86.7		5.62				
7	22.06	32.14	21.77	86.7		5.62				
8	22.81	32.16	21.86	86.5		5.63				
9	22.23	32.17	22.03	87.0		5.64				
10	21.64	32.00	22.09	87.7		5.72	.03	.00	3.28	.66
11	21.58	32.00	22.30	87.5		5.71				
12	21.51	32.00	22.30	87.6		5.66				
13	21.47	32.00	22.33	87.7		5.63				
14	21.43	32.00	22.35	87.5		5.60				
15	20.41	32.00	22.59	87.7		5.59				
16	19.56	32.01	22.85	87.7		5.61				
17	18.01	32.42	23.32	87.7		5.68				
18	17.44	32.41	23.33	86.8		5.72				
19	16.99	32.47	23.67	86.8		5.66				
20	13.00	32.69	24.61	85.9		5.74	.32	.79	7.06	1.48
21	10.75	32.94	25.66	85.1		5.88				
22	8.58	32.02	25.63	86.4		5.88				
23	8.58	32.02	25.66	86.6		5.95				
24	8.58	32.00	25.66	86.6		5.94				
25	8.58	32.00	25.66	86.6		5.99				
26	8.58	32.00	25.64	86.6		5.99				
27	8.58	32.00	25.65	86.6		5.77				
28	8.49	32.01	25.66	86.6		5.93				
29	8.49	32.00	25.66	86.6		5.88				
30	8.49	32.00	25.66	86.6		5.78				
31	8.49	32.01	25.66	86.6		5.74				
32	8.48	32.00	25.66	86.6		5.70				
33	8.48	32.00	25.66	86.6		5.68				
34	8.48	32.01	25.66	86.6		5.71				
35	8.47	32.01	25.66	86.6		5.88				
36	8.47	32.01	25.66	86.6		5.88				
37	8.47	32.01	25.66	86.6		5.82	.45	1.27	8.88	1.86

KELEZ CRUISE XWCC-15 STATION 143 08/03/77

TRANSMISSIVITY (0/0)

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SIGMA-T

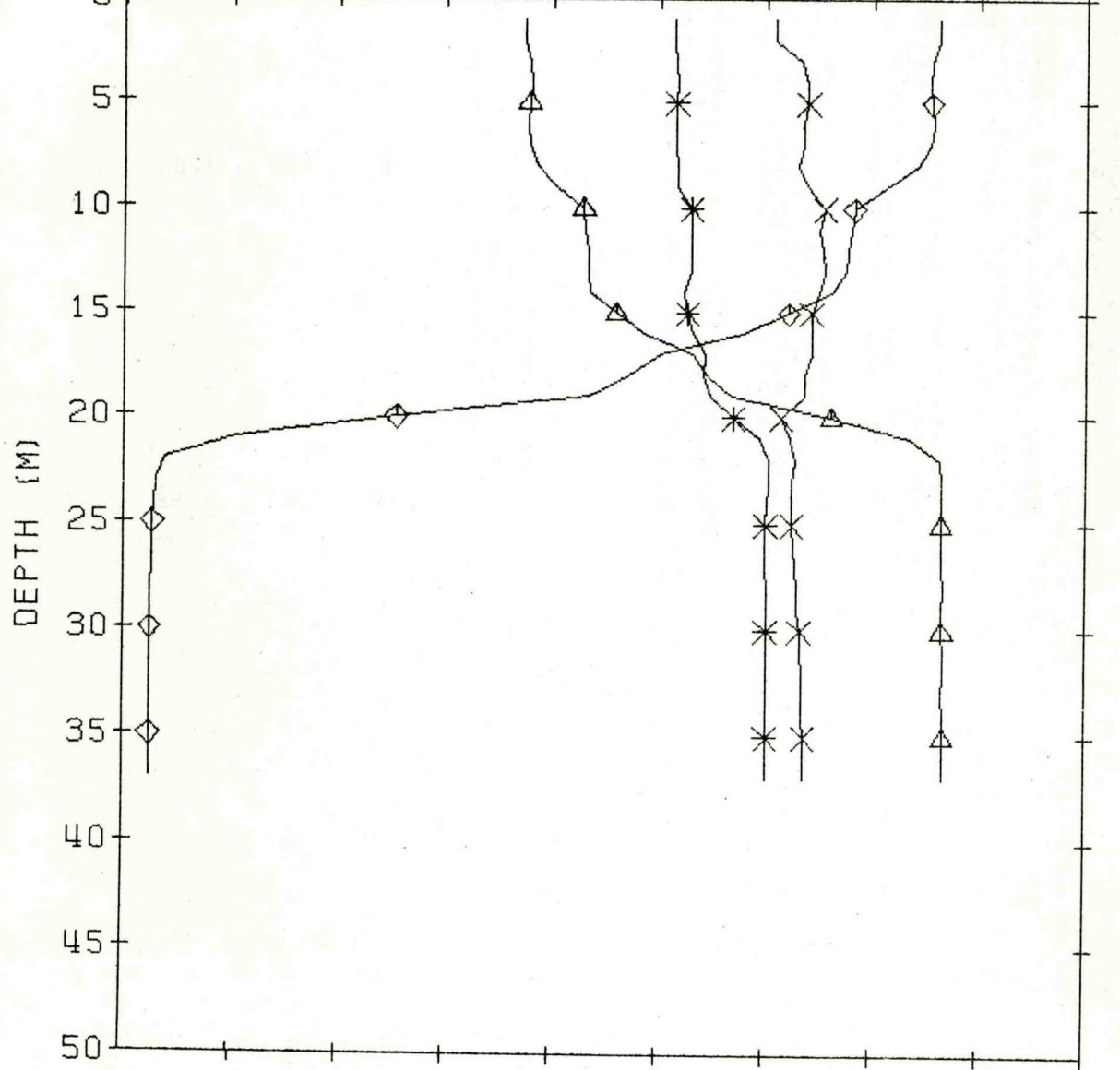
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SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26

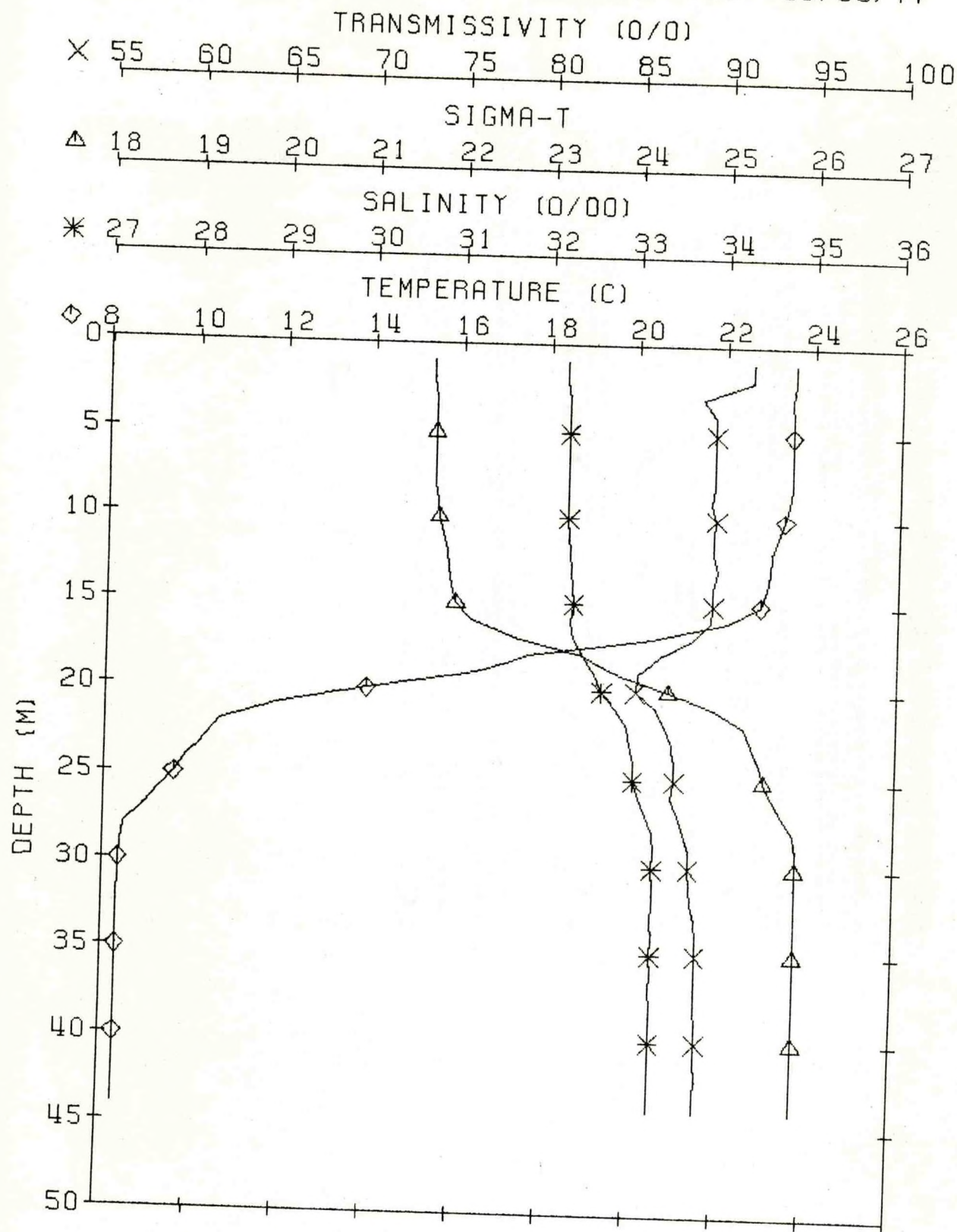




XWCC\_15 STA.144 LAT 38 51.5N; LONG 73 41.8W GMT 05.0 08/05/77  
 DEPTH 44 AIR D/W 75.0/74.0 BARO 22.0 VIS 7 CLD TYP/CVR 0/0  
 WTHR 0 WIND DIR/SPD 23/10 SEA DIR/HT 23/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.18	35.18	21.66	91.5	7.89	5.59				
2	22.18	35.18	21.66	91.5	7.89	5.59				
3	22.18	35.18	21.66	91.5	7.89	5.59				
4	22.18	35.18	21.66	91.5	7.89	5.59	.04	.00	3.34	.52
5	22.18	35.18	21.66	91.5	7.89	5.59				
6	22.18	35.18	21.66	91.5	7.89	5.59				
7	22.18	35.18	21.66	91.5	7.89	5.59				
8	22.18	35.18	21.66	91.5	7.89	5.59				
9	22.18	35.18	21.66	91.5	7.89	5.59				
10	22.18	35.18	21.66	91.5	7.89	5.59	.00	.00	3.12	.47
11	22.18	35.18	21.66	91.5	7.89	5.59				
12	22.18	35.18	21.66	91.5	7.89	5.59				
13	22.18	35.18	21.66	91.5	7.89	5.59				
14	22.18	35.18	21.66	91.5	7.89	5.59				
15	22.18	35.18	21.66	91.5	7.89	5.59				
16	22.18	35.18	21.66	91.5	7.89	5.59				
17	22.18	35.18	21.66	91.5	7.89	5.59				
18	22.18	35.18	21.66	91.5	7.89	5.59				
19	22.18	35.18	21.66	91.5	7.89	5.59				
20	22.18	35.18	21.66	91.5	7.89	5.59	.49	.00	1.84	.32
21	22.18	35.18	21.66	91.5	7.89	5.59				
22	22.18	35.18	21.66	91.5	7.89	5.59				
23	22.18	35.18	21.66	91.5	7.89	5.59				
24	22.18	35.18	21.66	91.5	7.89	5.59				
25	22.18	35.18	21.66	91.5	7.89	5.59				
26	22.18	35.18	21.66	91.5	7.89	5.59				
27	22.18	35.18	21.66	91.5	7.89	5.59				
28	22.18	35.18	21.66	91.5	7.89	5.59				
29	22.18	35.18	21.66	91.5	7.89	5.59	.46	2.27	6.86	1.32
30	22.18	35.18	21.66	91.5	7.89	5.59				
31	22.18	35.18	21.66	91.5	7.89	5.59				
32	22.18	35.18	21.66	91.5	7.89	5.59				
33	22.18	35.18	21.66	91.5	7.89	5.59				
34	22.18	35.18	21.66	91.5	7.89	5.59				
35	22.18	35.18	21.66	91.5	7.89	5.59				
36	22.18	35.18	21.66	91.5	7.89	5.59				
37	22.18	35.18	21.66	91.5	7.89	5.59				
38	22.18	35.18	21.66	91.5	7.89	5.59				
39	22.18	35.18	21.66	91.5	7.89	5.59				
40	22.18	35.18	21.66	91.5	7.89	5.59				
41	22.18	35.18	21.66	91.5	7.89	5.59				
42	22.18	35.18	21.66	91.5	7.89	5.59				
43	22.18	35.18	21.66	91.5	7.89	5.59				
44	22.18	35.18	21.66	91.5	7.89	5.59	.56	2.15	7.07	1.27

KELEZ CRUISE XWCC-15 STATION 144 08/05/77





XWCC-15 STA.145 LAT 38 45.0N; LONG 73 28.5W GMT 02.3 08/05/77  
 DEPTH 70 AIR D/W 76.0/74.0 BARO 22.5 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 22/12 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.73	35.73	21.97	91.1	7.93	5.32	.02	.00	.10	.05
2	22.73	35.73	21.97	91.1	7.93	5.32				
3	22.73	35.73	21.97	91.1	7.93	5.32				
4	22.73	35.73	21.97	91.1	7.93	5.32				
5	22.73	35.73	21.97	91.1	7.93	5.32				
6	22.73	35.73	21.97	91.1	7.93	5.32				
7	22.73	35.73	21.97	91.1	7.93	5.32				
8	22.73	35.73	21.97	91.1	7.93	5.32				
9	22.73	35.73	21.97	91.1	7.93	5.32				
10	22.73	35.73	21.97	91.1	7.93	5.32				
11	22.73	35.73	21.97	91.1	7.93	5.32				
12	22.73	35.73	21.97	91.1	7.93	5.32				
13	22.73	35.73	21.97	91.1	7.93	5.32				
14	22.73	35.73	21.97	91.1	7.93	5.32				
15	22.73	35.73	21.97	91.1	7.93	5.32				
16	22.73	35.73	21.97	91.1	7.93	5.32				
17	22.73	35.73	21.97	91.1	7.93	5.32				
18	22.73	35.73	21.97	91.1	7.93	5.32				
19	22.73	35.73	21.97	91.1	7.93	5.32				
20	22.73	35.73	21.97	91.1	7.93	5.32				
21	22.73	35.73	21.97	91.1	7.93	5.32				
22	22.73	35.73	21.97	91.1	7.93	5.32				
23	22.73	35.73	21.97	91.1	7.93	5.32				
24	22.73	35.73	21.97	91.1	7.93	5.32				
25	22.73	35.73	21.97	91.1	7.93	5.32				
26	22.73	35.73	21.97	91.1	7.93	5.32				
27	22.73	35.73	21.97	91.1	7.93	5.32				
28	22.73	35.73	21.97	91.1	7.93	5.32				
29	22.73	35.73	21.97	91.1	7.93	5.32				
30	22.73	35.73	21.97	91.1	7.93	5.32				
31	22.73	35.73	21.97	91.1	7.93	5.32				
32	22.73	35.73	21.97	91.1	7.93	5.32				
33	22.73	35.73	21.97	91.1	7.93	5.32				
34	22.73	35.73	21.97	91.1	7.93	5.32				
35	22.73	35.73	21.97	91.1	7.93	5.32				
36	22.73	35.73	21.97	91.1	7.93	5.32				
37	22.73	35.73	21.97	91.1	7.93	5.32				
38	22.73	35.73	21.97	91.1	7.93	5.32				
39	22.73	35.73	21.97	91.1	7.93	5.32				
40	22.73	35.73	21.97	91.1	7.93	5.32				
41	22.73	35.73	21.97	91.1	7.93	5.32				
42	22.73	35.73	21.97	91.1	7.93	5.32				
43	22.73	35.73	21.97	91.1	7.93	5.32				
44	22.73	35.73	21.97	91.1	7.93	5.32				
45	22.73	35.73	21.97	91.1	7.93	5.32				
46	22.73	35.73	21.97	91.1	7.93	5.32				
47	22.73	35.73	21.97	91.1	7.93	5.32				
48	22.73	35.73	21.97	91.1	7.93	5.32				
49	22.73	35.73	21.97	91.1	7.93	5.32				
50	22.73	35.73	21.97	91.1	7.93	5.32				
51	22.73	35.73	21.97	91.1	7.93	5.32				
52	22.73	35.73	21.97	91.1	7.93	5.32				
53	22.73	35.73	21.97	91.1	7.93	5.32				
54	22.73	35.73	21.97	91.1	7.93	5.32				
55	22.73	35.73	21.97	91.1	7.93	5.32				
56	22.73	35.73	21.97	91.1	7.93	5.32				
57	22.73	35.73	21.97	91.1	7.93	5.32				
58	22.73	35.73	21.97	91.1	7.93	5.32				
59	22.73	35.73	21.97	91.1	7.93	5.32				
60	22.73	35.73	21.97	91.1	7.93	5.32				
61	22.73	35.73	21.97	91.1	7.93	5.32				
62	22.73	35.73	21.97	91.1	7.93	5.32				
63	22.73	35.73	21.97	91.1	7.93	5.32				
64	22.73	35.73	21.97	91.1	7.93	5.32				
65	22.73	35.73	21.97	91.1	7.93	5.32				
66	22.73	35.73	21.97	91.1	7.93	5.32				
67	22.73	35.73	21.97	91.1	7.93	5.32				
68	22.73	35.73	21.97	91.1	7.93	5.32				
69	22.73	35.73	21.97	91.1	7.93	5.32				
70	22.73	35.73	21.97	91.1	7.93	5.32				
71	22.73	35.73	21.97	91.1	7.93	5.32				
72	22.73	35.73	21.97	91.1	7.93	5.32				
73	22.73	35.73	21.97	91.1	7.93	5.32				
74	22.73	35.73	21.97	91.1	7.93	5.32				
75	22.73	35.73	21.97	91.1	7.93	5.32				
76	22.73	35.73	21.97	91.1	7.93	5.32				
77	22.73	35.73	21.97	91.1	7.93	5.32				
78	22.73	35.73	21.97	91.1	7.93	5.32				
79	22.73	35.73	21.97	91.1	7.93	5.32				
80	22.73	35.73	21.97	91.1	7.93	5.32				
81	22.73	35.73	21.97	91.1	7.93	5.32				
82	22.73	35.73	21.97	91.1	7.93	5.32				
83	22.73	35.73	21.97	91.1	7.93	5.32				
84	22.73	35.73	21.97	91.1	7.93	5.32				
85	22.73	35.73	21.97	91.1	7.93	5.32				
86	22.73	35.73	21.97	91.1	7.93	5.32				
87	22.73	35.73	21.97	91.1	7.93	5.32				
88	22.73	35.73	21.97	91.1	7.93	5.32				
89	22.73	35.73	21.97	91.1	7.93	5.32				
90	22.73	35.73	21.97	91.1	7.93	5.32				
91	22.73	35.73	21.97	91.1	7.93	5.32				
92	22.73	35.73	21.97	91.1	7.93	5.32				
93	22.73	35.73	21.97	91.1	7.93	5.32				
94	22.73	35.73	21.97	91.1	7.93	5.32				
95	22.73	35.73	21.97	91.1	7.93	5.32				
96	22.73	35.73	21.97	91.1	7.93	5.32				
97	22.73	35.73	21.97	91.1	7.93	5.32				
98	22.73	35.73	21.97	91.1	7.93	5.32				
99	22.73	35.73	21.97	91.1	7.93	5.32				
100	22.73	35.73	21.97	91.1	7.93	5.32				

KELEZ CRUISE XWCC-15 STATION 145 08/05/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

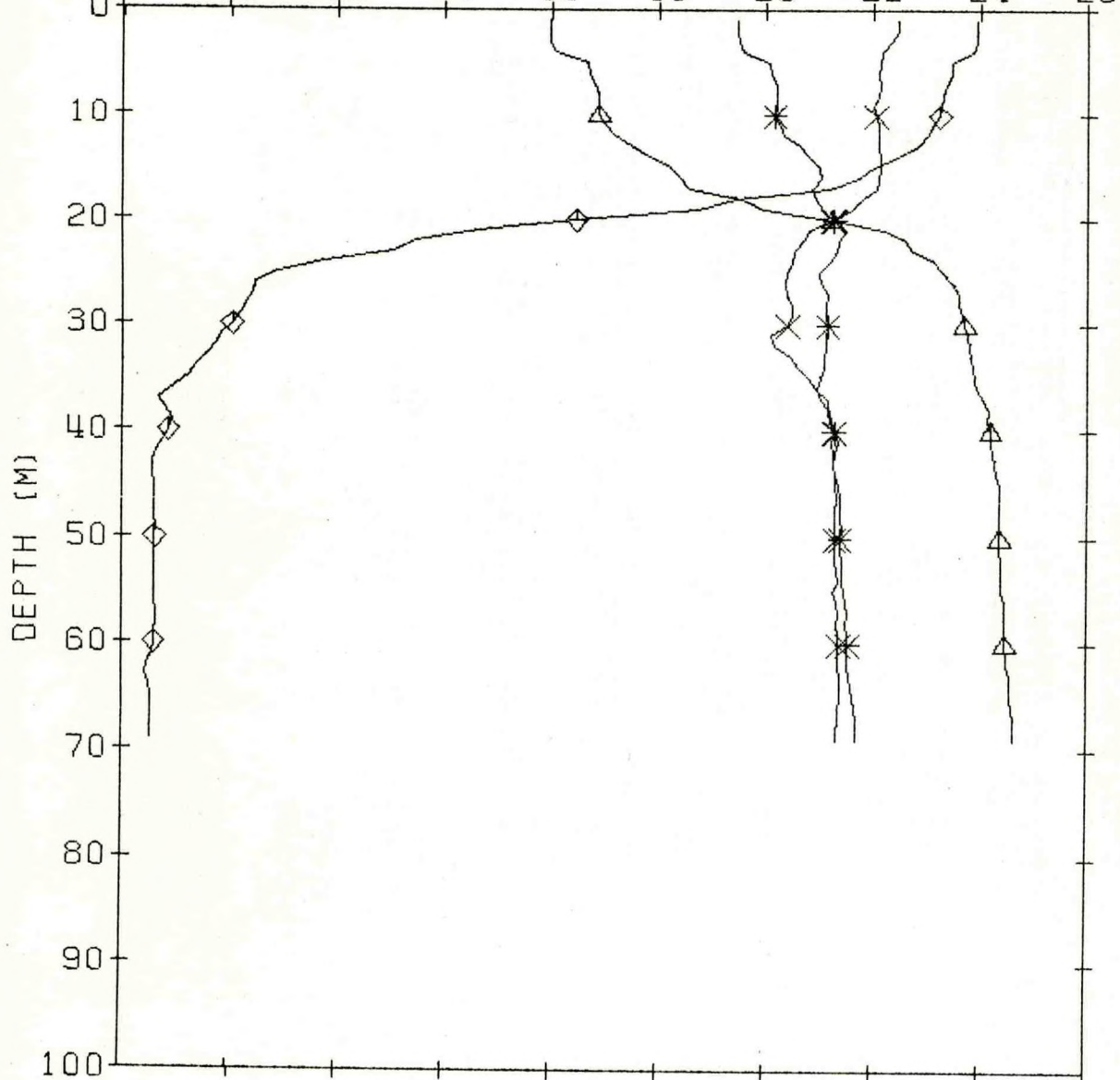
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.146 LAT 38 39.6N; LONG 73 14.5W GMT 00.4 08/05/77  
 DEPTH 104 AIR D/W 77.0/75.0 BARO 22.0 VIS 7 CLD TYP/CVR 0/0  
 WETHR 0 WIND DIR/SPD 21/15 SEA DIR/HT 21/0 SWELL DIR/HT 18/0

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	25.79	35.18	23.26	90.3	7.64	5.07				
2	25.79	35.18	23.26	90.3	7.64	5.07				
3	25.80	35.18	23.26	90.3	7.64	5.06	.00	.00	.00	.00
4	25.80	35.18	23.26	90.3	7.64	5.06				
5	25.97	35.22	23.34	90.3	7.51	5.05				
6	26.00	35.22	23.34	90.3	7.51	5.03				
7	26.00	35.22	23.34	90.3	7.51	5.02				
8	26.00	35.22	23.34	90.3	7.51	5.02				
9	26.00	35.22	23.34	90.3	7.51	5.02				
10	26.00	35.22	23.34	90.3	7.51	5.01				
11	26.00	35.22	23.34	90.3	7.51	5.00				
12	26.00	35.22	23.34	90.3	7.51	5.00				
13	26.00	35.22	23.34	90.3	7.51	5.00				
14	26.00	35.22	23.34	90.3	7.51	5.00				
15	26.00	35.22	23.34	90.3	7.51	5.00				
16	26.00	35.22	23.34	90.3	7.51	5.00				
17	26.00	35.22	23.34	90.3	7.51	5.00				
18	26.00	35.22	23.34	90.3	7.51	5.00				
19	26.00	35.22	23.34	90.3	7.51	5.00				
20	26.00	35.22	23.34	90.3	7.51	5.00	.00	.00	.10	.00
21	26.00	35.22	23.34	90.3	7.51	5.00				
22	26.00	35.22	23.34	90.3	7.51	5.00				
23	26.00	35.22	23.34	90.3	7.51	5.00				
24	26.00	35.22	23.34	90.3	7.51	5.00				
25	26.00	35.22	23.34	90.3	7.51	5.00				
26	26.00	35.22	23.34	90.3	7.51	5.00				
27	26.00	35.22	23.34	90.3	7.51	5.00				
28	26.00	35.22	23.34	90.3	7.51	5.00				
29	26.00	35.22	23.34	90.3	7.51	5.00				
30	26.00	35.22	23.34	90.3	7.51	5.00				
31	26.00	35.22	23.34	90.3	7.51	5.00				
32	26.00	35.22	23.34	90.3	7.51	5.00				
33	26.00	35.22	23.34	90.3	7.51	5.00				
34	26.00	35.22	23.34	90.3	7.51	5.00				
35	26.00	35.22	23.34	90.3	7.51	5.00				
36	26.00	35.22	23.34	90.3	7.51	5.00				
37	26.00	35.22	23.34	90.3	7.51	5.00				
38	26.00	35.22	23.34	90.3	7.51	5.00				
39	26.00	35.22	23.34	90.3	7.51	5.00				
40	26.00	35.22	23.34	90.3	7.51	5.00				
41	26.00	35.22	23.34	90.3	7.51	5.00				
42	26.00	35.22	23.34	90.3	7.51	5.00				
43	26.00	35.22	23.34	90.3	7.51	5.00				
44	26.00	35.22	23.34	90.3	7.51	5.00				
45	26.00	35.22	23.34	90.3	7.51	5.00				
46	26.00	35.22	23.34	90.3	7.51	5.00				
47	26.00	35.22	23.34	90.3	7.51	5.00				
48	26.00	35.22	23.34	90.3	7.51	5.00				
49	26.00	35.22	23.34	90.3	7.51	5.00				
50	26.00	35.22	23.34	90.3	7.51	5.00				
51	26.00	35.22	23.34	90.3	7.51	5.00				
52	26.00	35.22	23.34	90.3	7.51	5.00				
53	26.00	35.22	23.34	90.3	7.51	5.00				
54	26.00	35.22	23.34	90.3	7.51	5.00				
55	26.00	35.22	23.34	90.3	7.51	5.00				
56	26.00	35.22	23.34	90.3	7.51	5.00				
57	26.00	35.22	23.34	90.3	7.51	5.00				
58	26.00	35.22	23.34	90.3	7.51	5.00				
59	26.00	35.22	23.34	90.3	7.51	5.00				
60	26.00	35.22	23.34	90.3	7.51	5.00				
61	26.00	35.22	23.34	90.3	7.51	5.00				
62	26.00	35.22	23.34	90.3	7.51	5.00				
63	26.00	35.22	23.34	90.3	7.51	5.00				
64	26.00	35.22	23.34	90.3	7.51	5.00				
65	26.00	35.22	23.34	90.3	7.51	5.00				
66	26.00	35.22	23.34	90.3	7.51	5.00				
67	26.00	35.22	23.34	90.3	7.51	5.00				
68	26.00	35.22	23.34	90.3	7.51	5.00				
69	26.00	35.22	23.34	90.3	7.51	5.00				
70	26.00	35.22	23.34	90.3	7.51	5.00				
71	26.00	35.22	23.34	90.3	7.51	5.00				
72	26.00	35.22	23.34	90.3	7.51	5.00				
73	26.00	35.22	23.34	90.3	7.51	5.00				
74	26.00	35.22	23.34	90.3	7.51	5.00				
75	26.00	35.22	23.34	90.3	7.51	5.00				
76	26.00	35.22	23.34	90.3	7.51	5.00				
77	26.00	35.22	23.34	90.3	7.51	5.00				
78	26.00	35.22	23.34	90.3	7.51	5.00				
79	26.00	35.22	23.34	90.3	7.51	5.00				
80	26.00	35.22	23.34	90.3	7.51	5.00				
81	26.00	35.22	23.34	90.3	7.51	5.00				
82	26.00	35.22	23.34	90.3	7.51	5.00				
83	26.00	35.22	23.34	90.3	7.51	5.00				
84	26.00	35.22	23.34	90.3	7.51	5.00				
85	26.00	35.22	23.34	90.3	7.51	5.00				
86	26.00	35.22	23.34	90.3	7.51	5.00				
87	26.00	35.22	23.34	90.3	7.51	5.00				
88	26.00	35.22	23.34	90.3	7.51	5.00				
89	26.00	35.22	23.34	90.3	7.51	5.00				
90	26.00	35.22	23.34	90.3	7.51	5.00				
91	26.00	35.22	23.34	90.3	7.51	5.00				
92	26.00	35.22	23.34	90.3	7.51	5.00				
93	26.00	35.22	23.34	90.3	7.51	5.00				
94	26.00	35.22	23.34	90.3	7.51	5.00				
95	26.00	35.22	23.34	90.3	7.51	5.00				
96	26.00	35.22	23.34	90.3	7.51	5.00				
97	26.00	35.22	23.34	90.3	7.51	5.00				
98	26.00	35.22	23.34	90.3	7.51	5.00				
99	26.00	35.22	23.34	90.3	7.51	5.00				
100	26.00	35.22	23.34	90.3	7.51	5.00	.08	17.42	8.84	1.74

KELEZ CRUISE XWCC-15 STATION 146 08/05/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

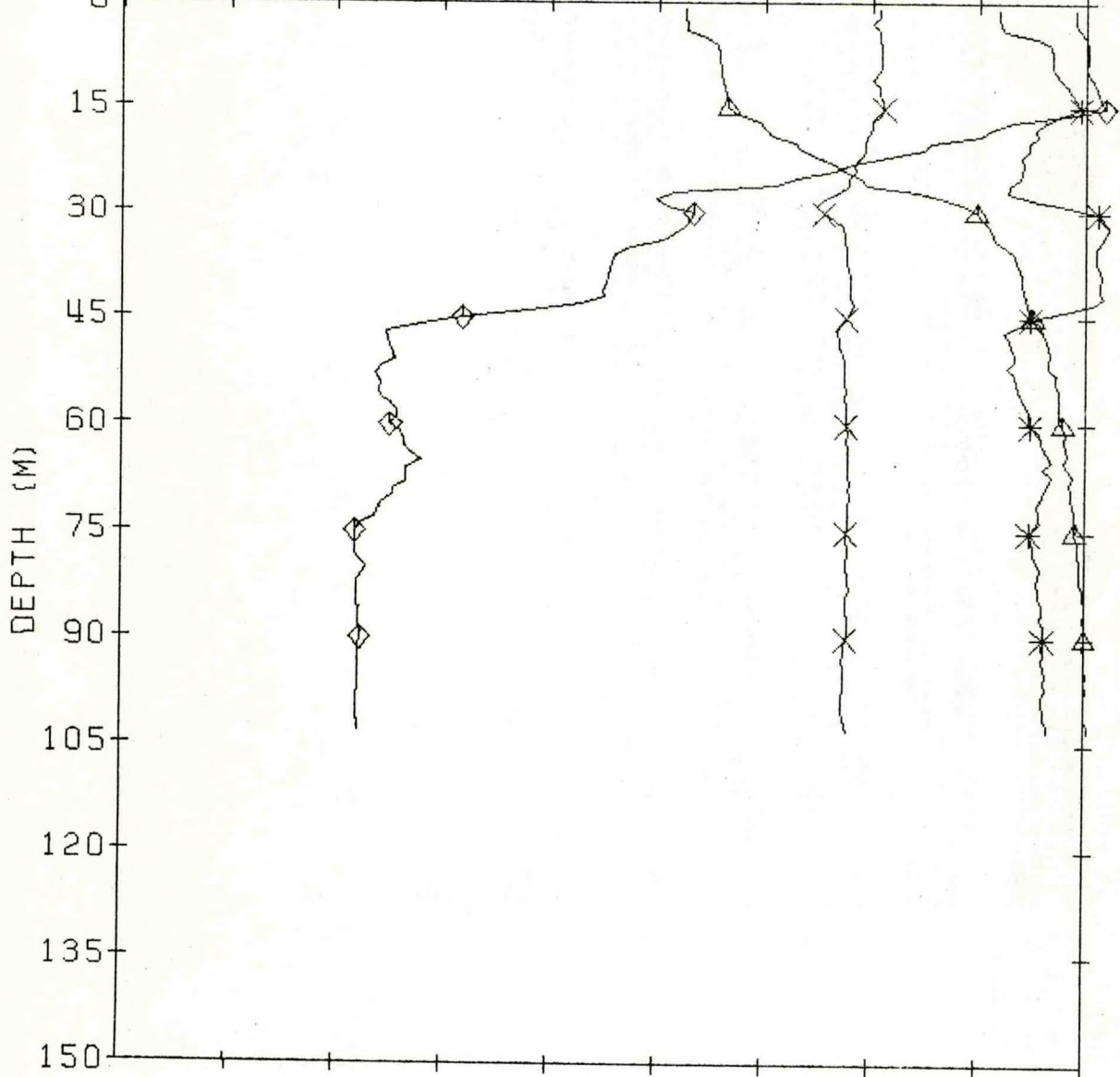
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.150 LAT 38 53.8N; LONG 74 41.9W GMT 08.2 08/04/77  
 DEPTH 17 AIR D/W 72.0/71.0 BARO 18.5 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 22/07 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	19.46	31.98	22.62	80.8	7.61	5.69				
2	19.46	31.98	22.62	80.8	7.61	5.69	.05	.00	4.34	.92
3	18.94	32.19	22.91	81.6	7.60	5.54				
4	18.77	32.19	22.96	81.7	7.64	5.32				
5	18.39	32.15	23.02	81.6	7.63	5.32				
6	17.99	32.21	23.16	81.8	7.62	5.31				
7	17.56	32.24	23.29	82.0	7.62	5.26				
8	17.38	32.27	23.35	82.4	7.62	5.21				
9	17.28	32.28	23.38	82.5	7.62	5.12				
10	17.18	32.28	23.41	82.6	7.62	5.03	.04	.37	5.34	1.24
11	16.97	32.29	23.47	82.7	7.61	4.94				
12	16.35	32.33	23.65	82.5	7.60	4.91				
13	16.22	32.33	23.67	82.5	7.60	4.83				
14	15.93	32.35	23.75	82.6	7.59	4.72				
15	15.55	32.38	23.79	82.0	7.59	4.62				
16	15.84	32.38	23.80	81.8	7.59	4.55				
17	15.71	32.37	23.82	82.5	7.59	4.36	.10	.12	6.12	1.34

KELEZ CRUISE XWCC-15 STATION 150 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

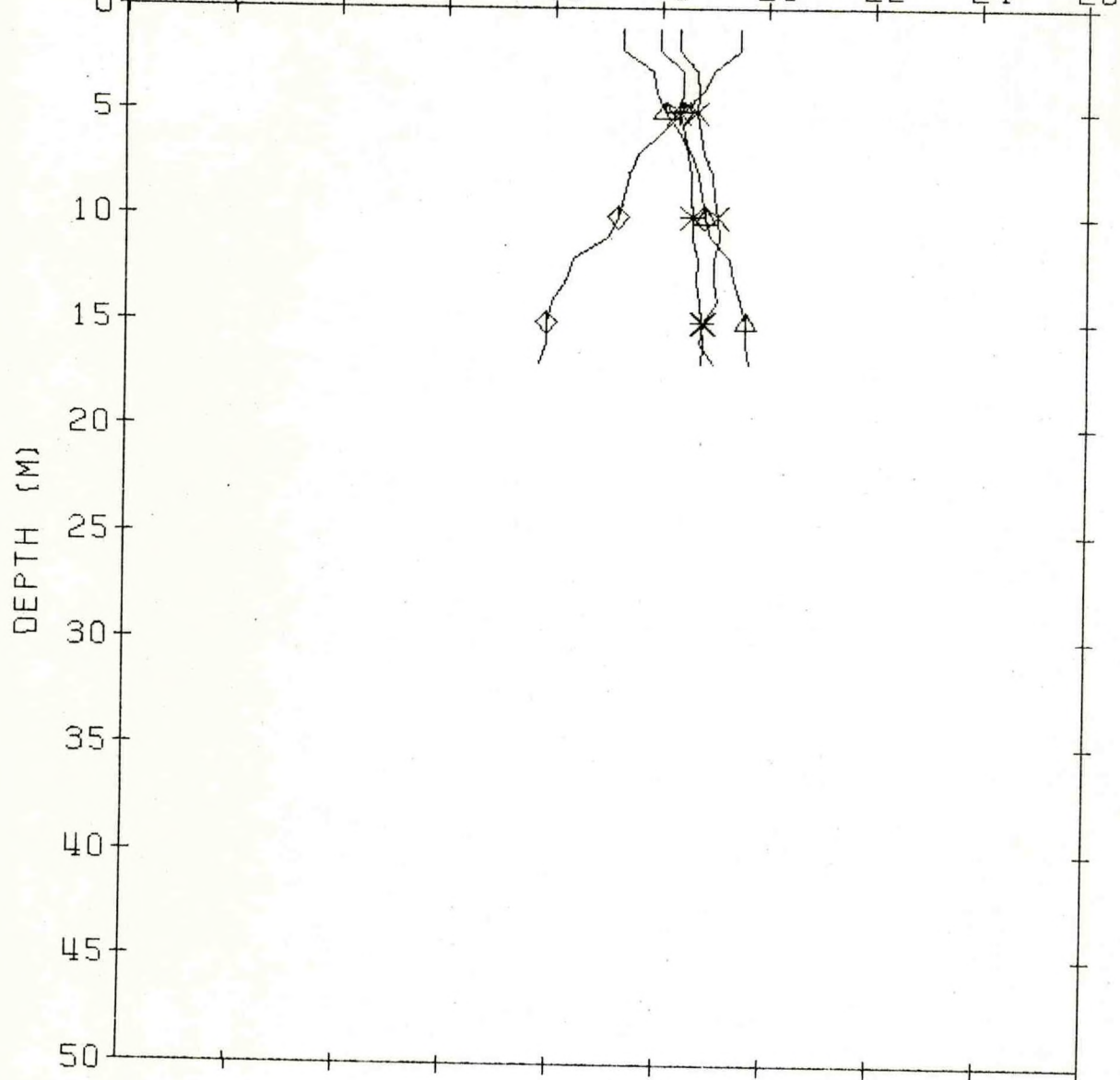
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.151 LAT 38 49.7N; LONG 74 34.0W GMT 10.1 08/04/77  
 DEPTH 24 AIR D/W 73.0/72.5 BARO 19.5 VIS 6 CLD TYP/CVR X/8  
 WETHR 4 WIND DIR/SPD 26/08 SEA DIR/HT 00/0 SWELL DIR/HT 15/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	22.31	32.13	21.98	81.3	7.64	5.61				
2	22.31	32.13	21.98	81.3	7.64	5.61				
3	22.21	32.12	22.00	82.8	7.70	5.61	.06	.14	4.30	.89
4	22.00	32.12	22.00	82.9	7.71	5.60				
5	21.88	32.10	22.07	82.9	7.70	5.61				
6	21.46	32.03	22.14	82.9	7.70	5.64				
7	20.40	32.03	22.42	83.9	7.69	5.70				
8	19.44	32.14	22.75	84.6	7.68	5.81				
9	18.03	32.20	23.14	84.7	7.65	5.83				
10	17.31	32.20	23.35	83.7	7.64	5.75	.07	.33	3.88	.73
11	16.87	32.20	23.49	83.3	7.63	5.37				
12	16.35	32.20	23.61	82.8	7.62	5.37				
13	14.85	32.20	23.98	82.8	7.61	4.95				
14	13.63	32.20	24.35	84.4	7.62	4.30				
15	13.40	32.20	24.42	84.3	7.63	4.93				
16	13.22	32.20	24.47	84.7	7.62	4.72				
17	13.04	32.20	24.50	84.9	7.63	4.63				
18	12.55	32.20	24.63	84.7	7.63	4.58				
19	12.46	32.20	24.65	85.1	7.63	4.54				
20	12.39	32.20	24.67	85.0	7.63	4.50				
21	12.37	32.20	24.67	85.1	7.63	4.47				
22	12.36	32.20	24.68	85.1	7.62	4.45				
23	12.35	32.20	24.68	85.0	7.65	4.43	.29	1.12	10.32	2.07

KELEZ CRUISE XWCC-15 STATION 151 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

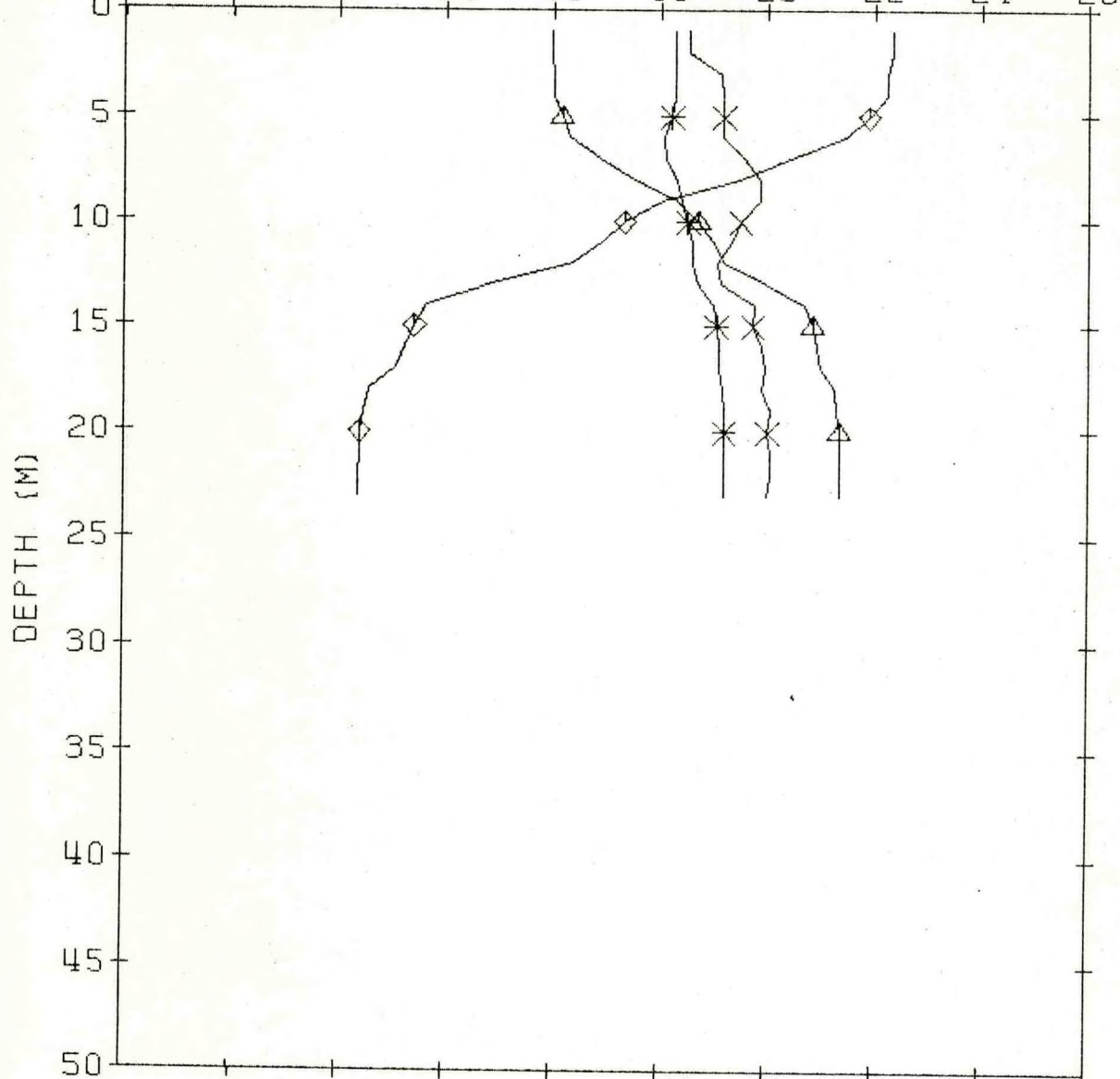
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA. 152 LAT 38 45.4N; LONG 74 27.6W GMT 11.4 08/04/77  
 DEPTH 29 AIR D/W 75.5/73.5 BARO 20.0 VIS 6 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 22/10 SEA DIR/HT 00/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	22.78	32.16	21.87	81.0	7.61	5.78				
2	22.78	32.16	21.87	81.0	7.61	5.78				
3	22.77	32.16	21.87	81.0	7.61	5.77	.07	.00	6.50	1.16
4	22.71	32.15	21.88	81.7	7.61	5.76				
5	22.53	32.16	21.94	82.2	7.72	5.77				
6	22.33	32.17	22.00	82.9	7.78	5.79				
7	22.02	32.17	22.09	83.9	7.78	5.78				
8	21.78	32.17	22.16	84.1	7.77	5.76				
9	21.48	32.17	22.24	84.6	7.76	5.73				
10	20.80	32.18	22.43	85.4	7.76	5.72	.05	.00	4.04	.73
11	20.01	32.20	22.65	85.4	7.75	5.71				
12	18.73	32.22	22.99	86.0	7.73	5.71				
13	17.36	32.22	23.32	86.2	7.71	5.72				
14	16.04	32.30	23.68	86.4	7.70	5.70				
15	14.45	32.43	24.13	86.3	7.69	5.59				
16	13.80	32.47	24.30	85.8	7.69	5.40				
17	13.46	32.52	24.41	86.0	7.68	5.13				
18	12.30	32.62	24.71	86.8	7.67	4.89				
19	11.94	32.67	24.82	87.0	7.68	4.74				
20	11.79	32.64	24.82	87.0	7.67	4.58	.26	.61	7.79	1.55
21	11.21	32.70	24.97	87.1	7.67	4.44				
22	10.33	32.83	25.23	87.6	7.67	4.40				
23	10.19	32.83	25.25	87.6	7.67	4.41				
24	10.15	32.83	25.25	87.6	7.67	4.40				
25	9.01	32.80	25.26	87.5	7.67	4.38				
26	9.92	32.81	25.28	87.4	7.67	4.36				
27	9.88	32.81	25.29	87.7	7.67	4.33				
28	9.83	32.82	25.30	87.5	7.67	4.27				
29	9.83	32.82	25.30	87.5	7.67	4.27	.49	1.59	9.35	1.84

KELEZ CRUISE XWCC-15 STATION 152 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

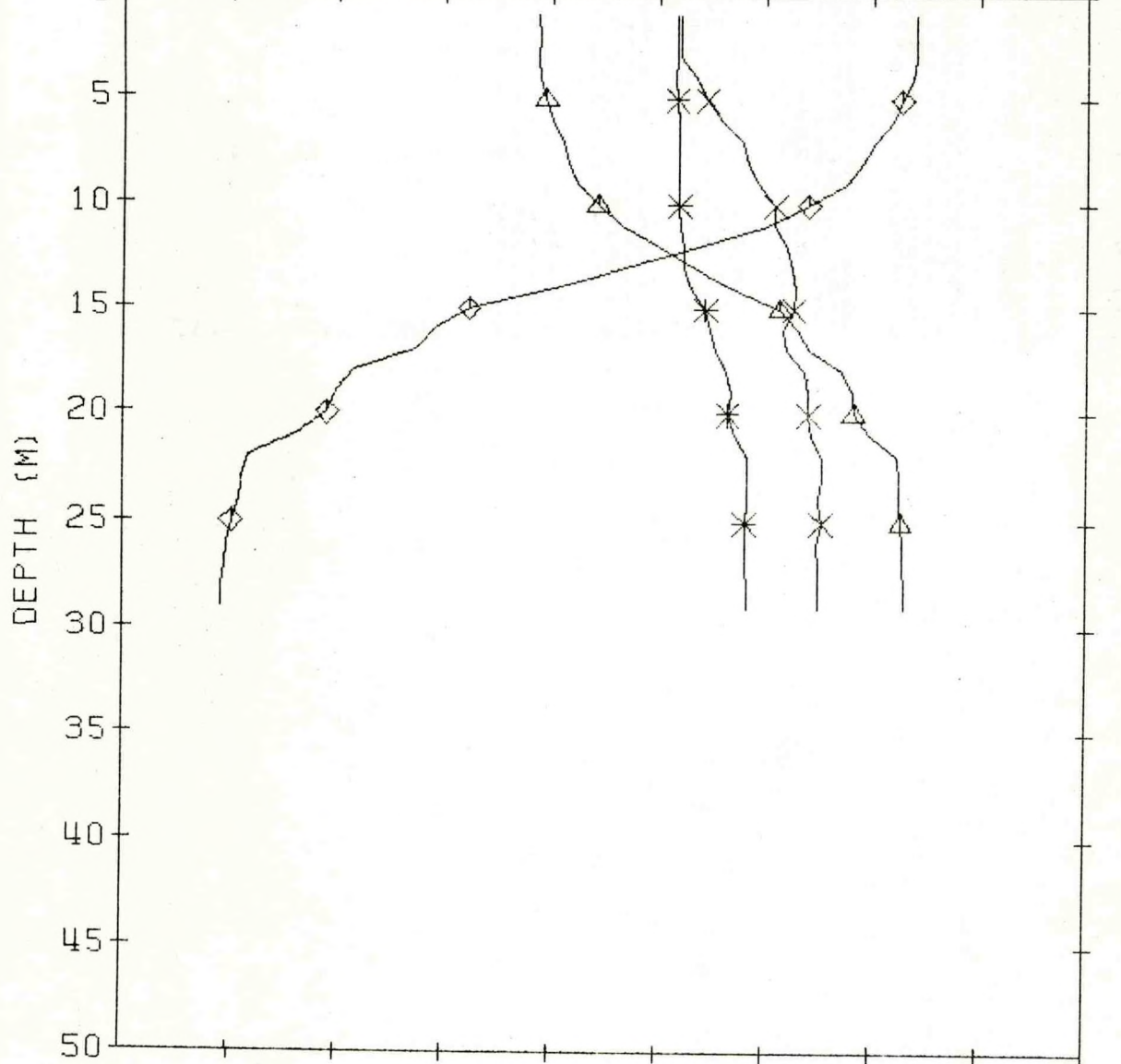
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA. 153 LAT 38 41.6N; LONG 74 20.0W GMT 13.0 08/04/77  
 DEPTH 32 AIR D/W 77.0/75.0 BARO 21.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 26/13 SEA DIR/HT 26/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.43	32.09	21.63	85.6	7.58	5.69				
2	23.43	32.09	21.63	85.6	7.58	5.69				
3	23.43	32.09	21.63	85.6	7.58	5.71	.03	.39	2.29	.38
4	23.43	32.09	21.63	85.6	7.58	5.74				
5	23.43	32.09	21.63	85.6	7.59	5.74				
6	23.43	32.09	21.63	85.7	7.62	5.73				
7	23.42	32.10	21.64	85.7	7.74	5.71				
8	23.41	32.10	21.64	85.8	7.86	5.71				
9	23.30	32.13	21.70	86.6	7.86	5.71				
10	23.20	32.17	21.76	86.9	7.86	5.72	.05	.06	1.92	.32
11	23.01	32.19	21.79	87.1	7.85	5.75				
12	22.90	32.22	21.83	87.0	7.86	5.75				
13	22.80	32.22	21.88	87.4	7.87	5.74				
14	22.60	32.22	21.96	88.2	7.87	5.73				
15	22.50	32.22	22.06	88.2	7.87	5.70				
16	22.50	32.22	22.17	87.5	7.87	5.72				
17	22.50	32.22	22.24	87.1	7.87	5.72				
18	22.50	32.22	22.37	87.4	7.86	5.63				
19	22.89	32.38	22.82	87.4	7.84	5.54				
20	22.10	32.45	23.57	87.8	7.80	5.67	.02	.42	5.03	.91
21	22.11	32.61	24.74	87.0	7.79	5.63				
22	22.09	32.87	25.46	87.9	7.77	5.31				
23	22.08	33.03	25.63	87.9	7.76	5.18				
24	22.08	33.04	25.63	88.1	7.75	4.97				
25	22.08	33.04	25.64	88.2	7.71	4.88				
26	22.08	33.04	25.64	88.3	7.71	4.83				
27	22.08	33.04	25.64	88.3	7.66	4.82				
28	22.08	33.04	25.64	88.3	7.64	4.80				
29	22.08	33.04	25.64	88.3	7.61	4.79				
30	22.08	33.03	25.64	88.3	7.62	4.79				
31	22.08	33.03	25.64	88.3	7.62	4.78				
32	22.08	33.03	25.64	88.4	7.62	4.77				
33	22.08	33.03	25.64	88.4	7.62	4.77	.29	1.17	8.42	1.57
34	22.08	33.03	25.64	88.4	7.62	4.76				

KELEZ CRUISE XWCC-15 STATION 153 08/04/77

TRANSMISSIVITY (0/0)

× 55 60 65 70 75 80 85 90 95 100

SIGMA-T

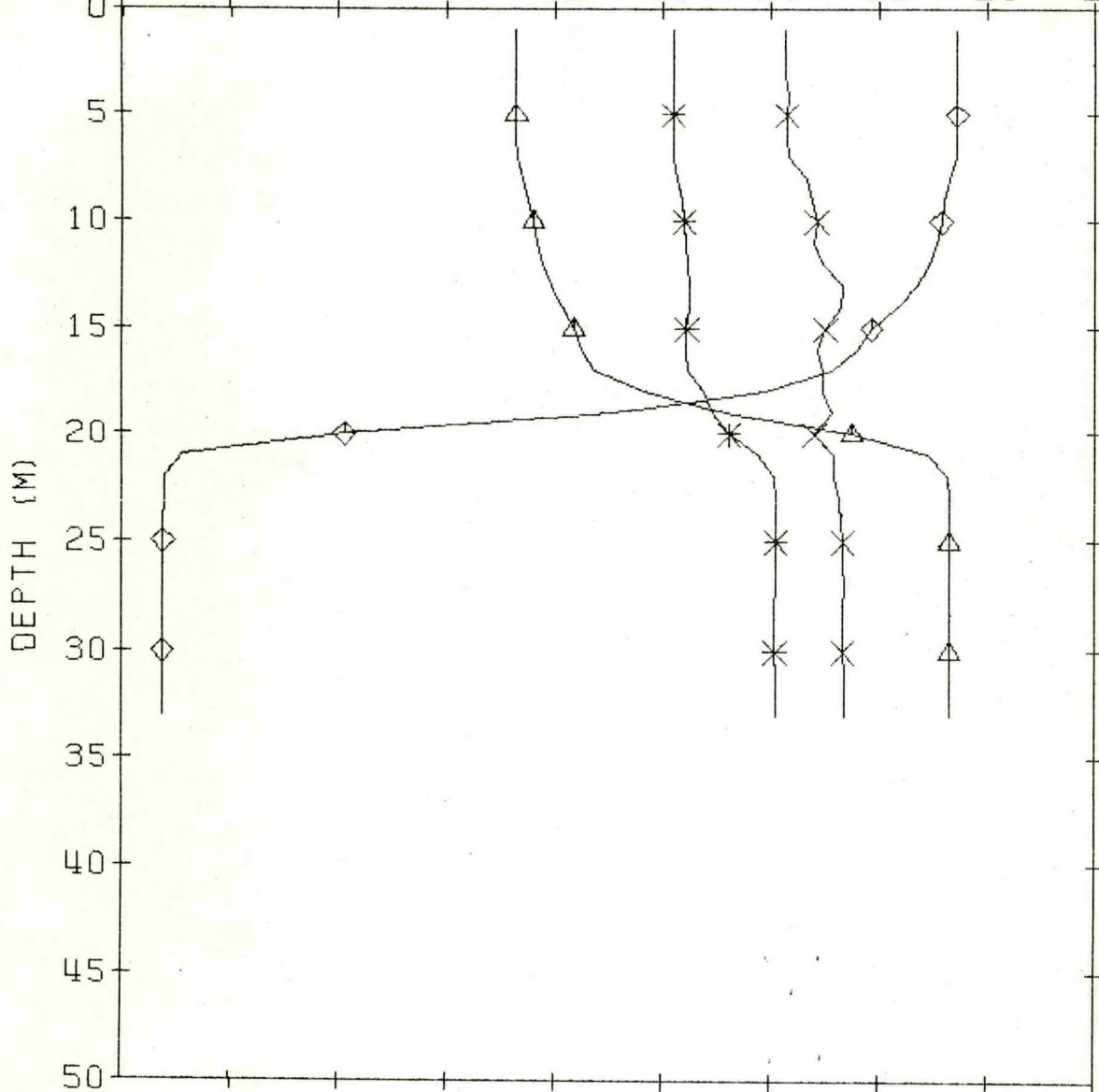
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA. 154 LAT 38 37.1N; LONG 74 12.8W GMT 14.3 08/04/77  
 DEPTH 46 AIR D/W 83.0/78.0 BARO 21.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 25/10 SEA DIR/HT 00/0 SWELL DIR/HT 21/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.66	32.07	21.55	85.9						
2	23.66	32.07	21.55	85.9			.05	.39	2.85	.47
3	23.66	32.07	21.55	85.9						
4	23.66	32.07	21.55	85.9						
5	23.66	32.07	21.55	85.9						
6	23.66	32.07	21.55	85.9						
7	23.66	32.07	21.55	85.9						
8	23.66	32.07	21.55	85.9						
9	23.66	32.07	21.55	85.9						
10	23.66	32.07	21.55	85.9			.01	.43	9.48	1.73
11	23.66	32.07	21.55	85.9						
12	23.66	32.07	21.55	85.9						
13	23.66	32.07	21.55	85.9						
14	23.66	32.07	21.55	85.9						
15	23.66	32.07	21.55	85.9						
16	23.66	32.07	21.55	85.9						
17	23.66	32.07	21.55	85.9						
18	23.66	32.07	21.55	85.9						
19	23.66	32.07	21.55	85.9						
20	23.66	32.07	21.55	85.9			.05	.00	1.34	.27
21	23.66	32.07	21.55	85.9						
22	23.66	32.07	21.55	85.9						
23	23.66	32.07	21.55	85.9						
24	23.66	32.07	21.55	85.9						
25	23.66	32.07	21.55	85.9						
26	23.66	32.07	21.55	85.9						
27	23.66	32.07	21.55	85.9						
28	23.66	32.07	21.55	85.9						
29	23.66	32.07	21.55	85.9						
30	23.66	32.07	21.55	85.9			.43	1.51	6.82	1.42
31	23.66	32.07	21.55	85.9						
32	23.66	32.07	21.55	85.9						
33	23.66	32.07	21.55	85.9						
34	23.66	32.07	21.55	85.9						
35	23.66	32.07	21.55	85.9						
36	23.66	32.07	21.55	85.9			.39	1.07	7.72	1.49
37	23.66	32.07	21.55	85.9						
38	23.66	32.07	21.55	85.9						
39	23.66	32.07	21.55	85.9						
40	23.66	32.07	21.55	85.9						
41	23.66	32.07	21.55	85.9						
42	23.66	32.07	21.55	85.9						
43	23.66	32.07	21.55	85.9						
44	23.66	32.07	21.55	85.9						
45	23.66	32.07	21.55	85.9			.36	1.41	7.72	1.47
46	23.66	32.07	21.55	85.9						

KELEZ CRUISE XWCC-15 STATION 154 08/04/77

TRANSMISSIVITY (0/0)

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SIGMA-T

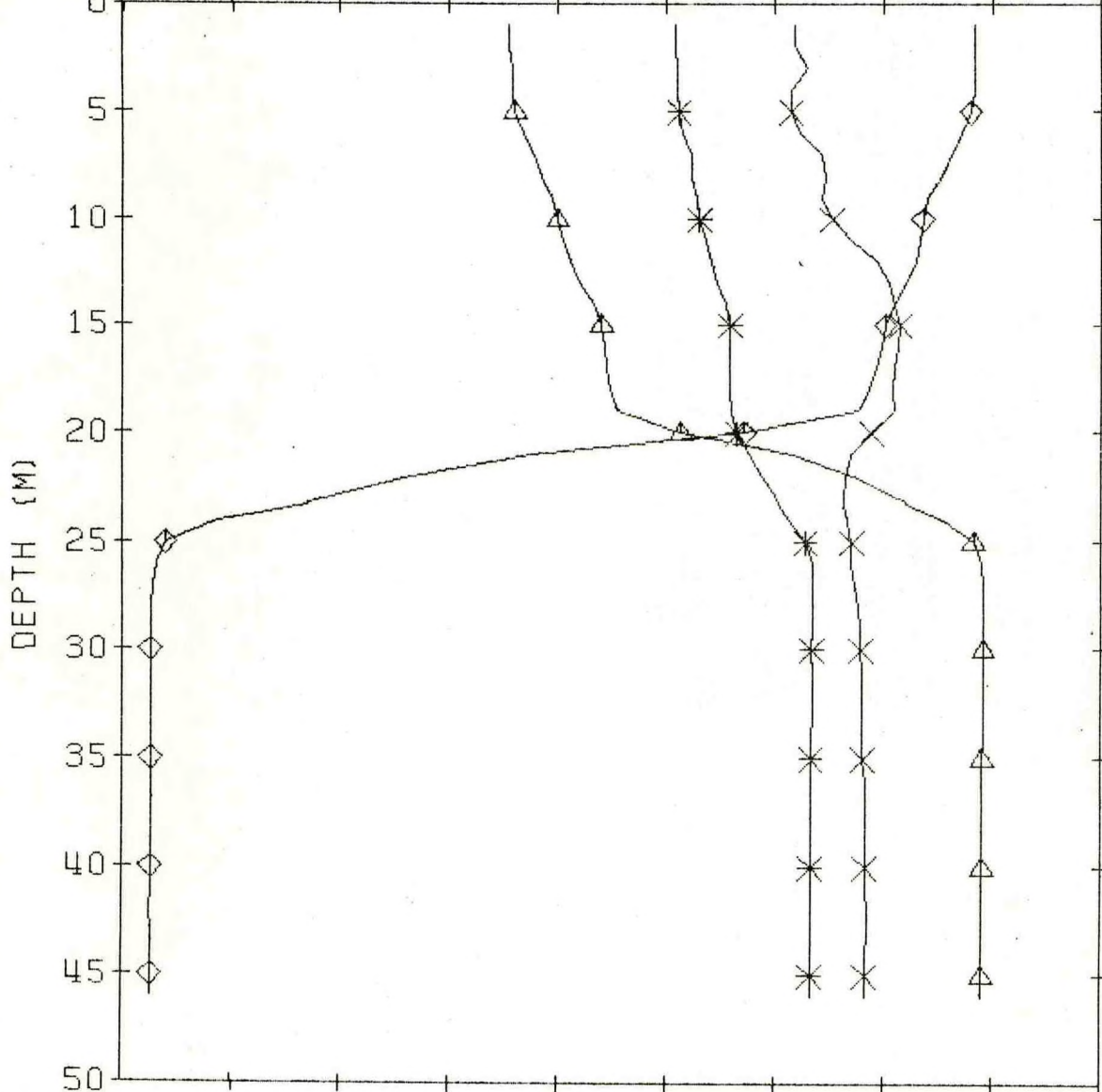
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.155 LAT 38 31.3N; LONG 74 4.5W GMT 16.2 08/04/77  
 DEPTH 60 AIR D/W 83.0/78.0 BARO 21.5 VIS 6 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 23/06 SEA DIR/HT 23/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	23.3	34.2	21.1	88.5	7.72	5.44				
2	23.3	34.2	21.1	88.5	7.72	5.44				
3	23.3	34.2	21.1	88.5	7.72	5.44				
4	23.3	34.2	21.1	88.5	7.72	5.44				
5	23.3	34.2	21.1	88.5	7.72	5.44				
6	23.3	34.2	21.1	88.5	7.72	5.44				
7	23.3	34.2	21.1	88.5	7.72	5.44				
8	23.3	34.2	21.1	88.5	7.72	5.44				
9	23.3	34.2	21.1	88.5	7.72	5.44				
10	23.3	34.2	21.1	88.5	7.72	5.44				
11	23.3	34.2	21.1	88.5	7.72	5.44				
12	23.3	34.2	21.1	88.5	7.72	5.44				
13	23.3	34.2	21.1	88.5	7.72	5.44				
14	23.3	34.2	21.1	88.5	7.72	5.44				
15	23.3	34.2	21.1	88.5	7.72	5.44				
16	23.3	34.2	21.1	88.5	7.72	5.44				
17	23.3	34.2	21.1	88.5	7.72	5.44				
18	23.3	34.2	21.1	88.5	7.72	5.44				
19	23.3	34.2	21.1	88.5	7.72	5.44				
20	23.3	34.2	21.1	88.5	7.72	5.44				
21	23.3	34.2	21.1	88.5	7.72	5.44				
22	23.3	34.2	21.1	88.5	7.72	5.44				
23	23.3	34.2	21.1	88.5	7.72	5.44				
24	23.3	34.2	21.1	88.5	7.72	5.44				
25	23.3	34.2	21.1	88.5	7.72	5.44				
26	23.3	34.2	21.1	88.5	7.72	5.44				
27	23.3	34.2	21.1	88.5	7.72	5.44				
28	23.3	34.2	21.1	88.5	7.72	5.44				
29	23.3	34.2	21.1	88.5	7.72	5.44				
30	23.3	34.2	21.1	88.5	7.72	5.44				
31	23.3	34.2	21.1	88.5	7.72	5.44				
32	23.3	34.2	21.1	88.5	7.72	5.44				
33	23.3	34.2	21.1	88.5	7.72	5.44				
34	23.3	34.2	21.1	88.5	7.72	5.44				
35	23.3	34.2	21.1	88.5	7.72	5.44				
36	23.3	34.2	21.1	88.5	7.72	5.44				
37	23.3	34.2	21.1	88.5	7.72	5.44				
38	23.3	34.2	21.1	88.5	7.72	5.44				
39	23.3	34.2	21.1	88.5	7.72	5.44				
40	23.3	34.2	21.1	88.5	7.72	5.44				
41	23.3	34.2	21.1	88.5	7.72	5.44				
42	23.3	34.2	21.1	88.5	7.72	5.44				
43	23.3	34.2	21.1	88.5	7.72	5.44				
44	23.3	34.2	21.1	88.5	7.72	5.44				
45	23.3	34.2	21.1	88.5	7.72	5.44				
46	23.3	34.2	21.1	88.5	7.72	5.44				
47	23.3	34.2	21.1	88.5	7.72	5.44				
48	23.3	34.2	21.1	88.5	7.72	5.44				
49	23.3	34.2	21.1	88.5	7.72	5.44				
50	23.3	34.2	21.1	88.5	7.72	5.44				
51	23.3	34.2	21.1	88.5	7.72	5.44				
52	23.3	34.2	21.1	88.5	7.72	5.44				
53	23.3	34.2	21.1	88.5	7.72	5.44				
54	23.3	34.2	21.1	88.5	7.72	5.44				
55	23.3	34.2	21.1	88.5	7.72	5.44				
56	23.3	34.2	21.1	88.5	7.72	5.44				
57	23.3	34.2	21.1	88.5	7.72	5.44				
58	23.3	34.2	21.1	88.5	7.72	5.44				
59	23.3	34.2	21.1	88.5	7.72	5.44				
60	23.3	34.2	21.1	88.5	7.72	5.44				
61	23.3	34.2	21.1	88.5	7.72	5.44				
62	23.3	34.2	21.1	88.5	7.72	5.44				
63	23.3	34.2	21.1	88.5	7.72	5.44				
64	23.3	34.2	21.1	88.5	7.72	5.44				
65	23.3	34.2	21.1	88.5	7.72	5.44				
66	23.3	34.2	21.1	88.5	7.72	5.44				
67	23.3	34.2	21.1	88.5	7.72	5.44				
68	23.3	34.2	21.1	88.5	7.72	5.44				
69	23.3	34.2	21.1	88.5	7.72	5.44				
70	23.3	34.2	21.1	88.5	7.72	5.44				
71	23.3	34.2	21.1	88.5	7.72	5.44				
72	23.3	34.2	21.1	88.5	7.72	5.44				
73	23.3	34.2	21.1	88.5	7.72	5.44				
74	23.3	34.2	21.1	88.5	7.72	5.44				
75	23.3	34.2	21.1	88.5	7.72	5.44				
76	23.3	34.2	21.1	88.5	7.72	5.44				
77	23.3	34.2	21.1	88.5	7.72	5.44				
78	23.3	34.2	21.1	88.5	7.72	5.44				
79	23.3	34.2	21.1	88.5	7.72	5.44				
80	23.3	34.2	21.1	88.5	7.72	5.44				
81	23.3	34.2	21.1	88.5	7.72	5.44				
82	23.3	34.2	21.1	88.5	7.72	5.44				
83	23.3	34.2	21.1	88.5	7.72	5.44				
84	23.3	34.2	21.1	88.5	7.72	5.44				
85	23.3	34.2	21.1	88.5	7.72	5.44				
86	23.3	34.2	21.1	88.5	7.72	5.44				
87	23.3	34.2	21.1	88.5	7.72	5.44				
88	23.3	34.2	21.1	88.5	7.72	5.44				
89	23.3	34.2	21.1	88.5	7.72	5.44				
90	23.3	34.2	21.1	88.5	7.72	5.44				
91	23.3	34.2	21.1	88.5	7.72	5.44				
92	23.3	34.2	21.1	88.5	7.72	5.44				
93	23.3	34.2	21.1	88.5	7.72	5.44				
94	23.3	34.2	21.1	88.5	7.72	5.44				
95	23.3	34.2	21.1	88.5	7.72	5.44				
96	23.3	34.2	21.1	88.5	7.72	5.44				
97	23.3	34.2	21.1	88.5	7.72	5.44				
98	23.3	34.2	21.1	88.5	7.72	5.44				
99	23.3	34.2	21.1	88.5	7.72	5.44				
100	23.3	34.2	21.1	88.5	7.72	5.44				

KELEZ CRUISE XWCC-15 STATION 155 08/04/77

TRANSMISSIVITY (0/0)

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SIGMA-T

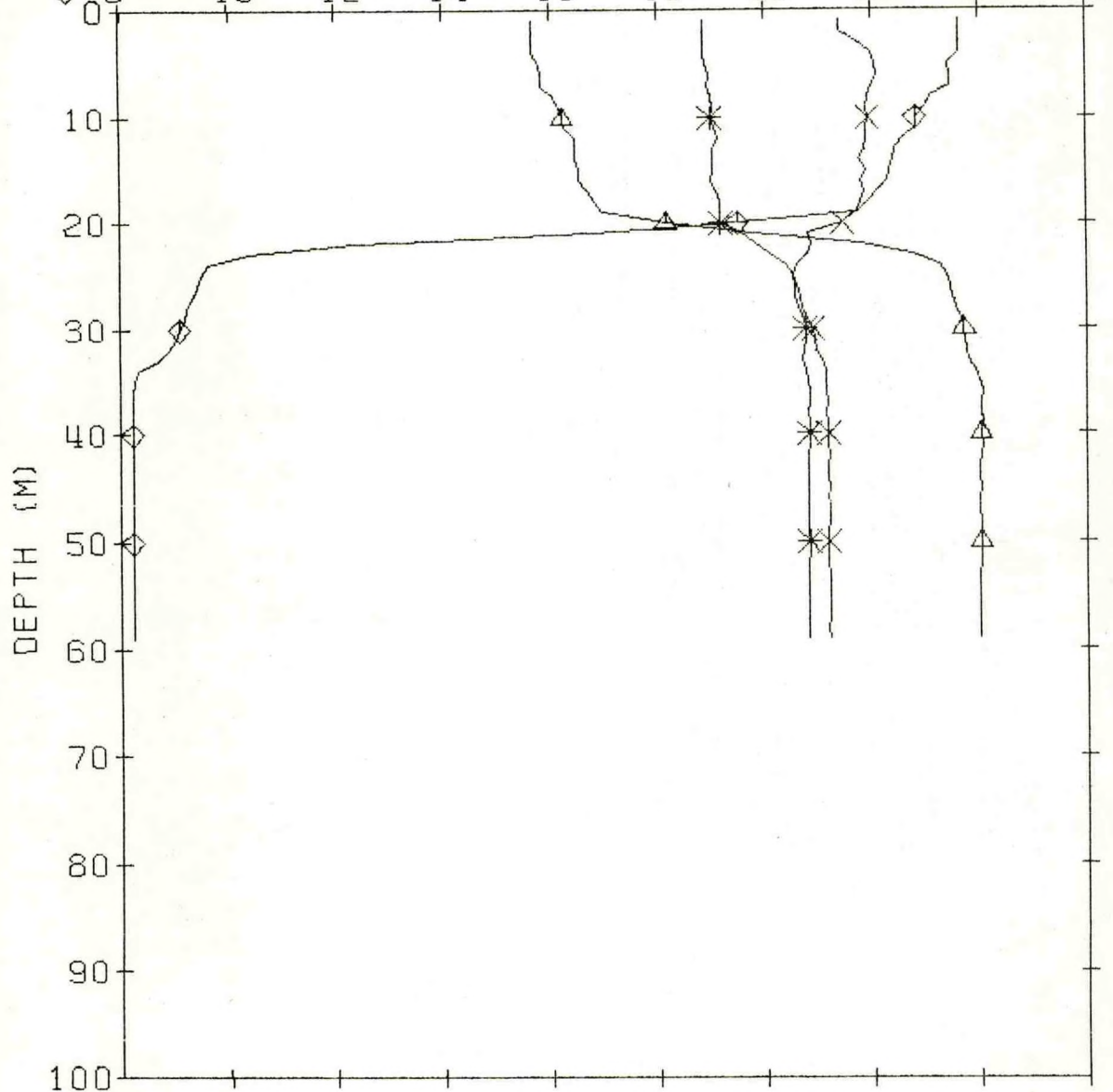
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26





XWCC-15 STA.156 LAT 38 25.2N; LONG 73 52.6W GMT 18.3 08/04/77  
 DEPTH 61 AIR D/W 77.0/75.0 BARO 22.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 23/10 SEA DIR/HT 23/0 SWELL DIR/HT 16/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	NO2	NO3	SI03	P04
1	24.04	33.71	21.92	89.7	7.81	5.35				
2	24.04	33.71	21.92	89.7	7.81	5.35				
3	24.04	33.71	21.92	89.7	7.81	5.35				
4	24.04	33.71	21.92	89.7	7.81	5.35				
5	24.04	33.71	21.92	89.7	7.81	5.35				
6	24.04	33.71	21.92	89.7	7.81	5.35				
7	24.04	33.71	21.92	89.7	7.81	5.35				
8	24.04	33.71	21.92	89.7	7.81	5.35				
9	24.04	33.71	21.92	89.7	7.81	5.35				
10	24.04	33.71	21.92	89.7	7.81	5.35				
11	24.04	33.71	21.92	89.7	7.81	5.35				
12	24.04	33.71	21.92	89.7	7.81	5.35				
13	24.04	33.71	21.92	89.7	7.81	5.35				
14	24.04	33.71	21.92	89.7	7.81	5.35				
15	24.04	33.71	21.92	89.7	7.81	5.35				
16	24.04	33.71	21.92	89.7	7.81	5.35				
17	24.04	33.71	21.92	89.7	7.81	5.35				
18	24.04	33.71	21.92	89.7	7.81	5.35				
19	24.04	33.71	21.92	89.7	7.81	5.35				
20	24.04	33.71	21.92	89.7	7.81	5.35				
21	24.04	33.71	21.92	89.7	7.81	5.35				
22	24.04	33.71	21.92	89.7	7.81	5.35				
23	24.04	33.71	21.92	89.7	7.81	5.35				
24	24.04	33.71	21.92	89.7	7.81	5.35				
25	24.04	33.71	21.92	89.7	7.81	5.35				
26	24.04	33.71	21.92	89.7	7.81	5.35				
27	24.04	33.71	21.92	89.7	7.81	5.35				
28	24.04	33.71	21.92	89.7	7.81	5.35				
29	24.04	33.71	21.92	89.7	7.81	5.35				
30	24.04	33.71	21.92	89.7	7.81	5.35				
31	24.04	33.71	21.92	89.7	7.81	5.35				
32	24.04	33.71	21.92	89.7	7.81	5.35				
33	24.04	33.71	21.92	89.7	7.81	5.35				
34	24.04	33.71	21.92	89.7	7.81	5.35				
35	24.04	33.71	21.92	89.7	7.81	5.35				
36	24.04	33.71	21.92	89.7	7.81	5.35				
37	24.04	33.71	21.92	89.7	7.81	5.35				
38	24.04	33.71	21.92	89.7	7.81	5.35				
39	24.04	33.71	21.92	89.7	7.81	5.35				
40	24.04	33.71	21.92	89.7	7.81	5.35				
41	24.04	33.71	21.92	89.7	7.81	5.35				
42	24.04	33.71	21.92	89.7	7.81	5.35				
43	24.04	33.71	21.92	89.7	7.81	5.35				
44	24.04	33.71	21.92	89.7	7.81	5.35				
45	24.04	33.71	21.92	89.7	7.81	5.35				
46	24.04	33.71	21.92	89.7	7.81	5.35				
47	24.04	33.71	21.92	89.7	7.81	5.35				
48	24.04	33.71	21.92	89.7	7.81	5.35				
49	24.04	33.71	21.92	89.7	7.81	5.35				
50	24.04	33.71	21.92	89.7	7.81	5.35				
51	24.04	33.71	21.92	89.7	7.81	5.35				
52	24.04	33.71	21.92	89.7	7.81	5.35				
53	24.04	33.71	21.92	89.7	7.81	5.35				
54	24.04	33.71	21.92	89.7	7.81	5.35				
55	24.04	33.71	21.92	89.7	7.81	5.35				
56	24.04	33.71	21.92	89.7	7.81	5.35				
57	24.04	33.71	21.92	89.7	7.81	5.35				
58	24.04	33.71	21.92	89.7	7.81	5.35				
59	24.04	33.71	21.92	89.7	7.81	5.35				
60	24.04	33.71	21.92	89.7	7.81	5.35				
61	24.04	33.71	21.92	89.7	7.81	5.35				

KELEZ CRUISE XWCC-15 STATION 156 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

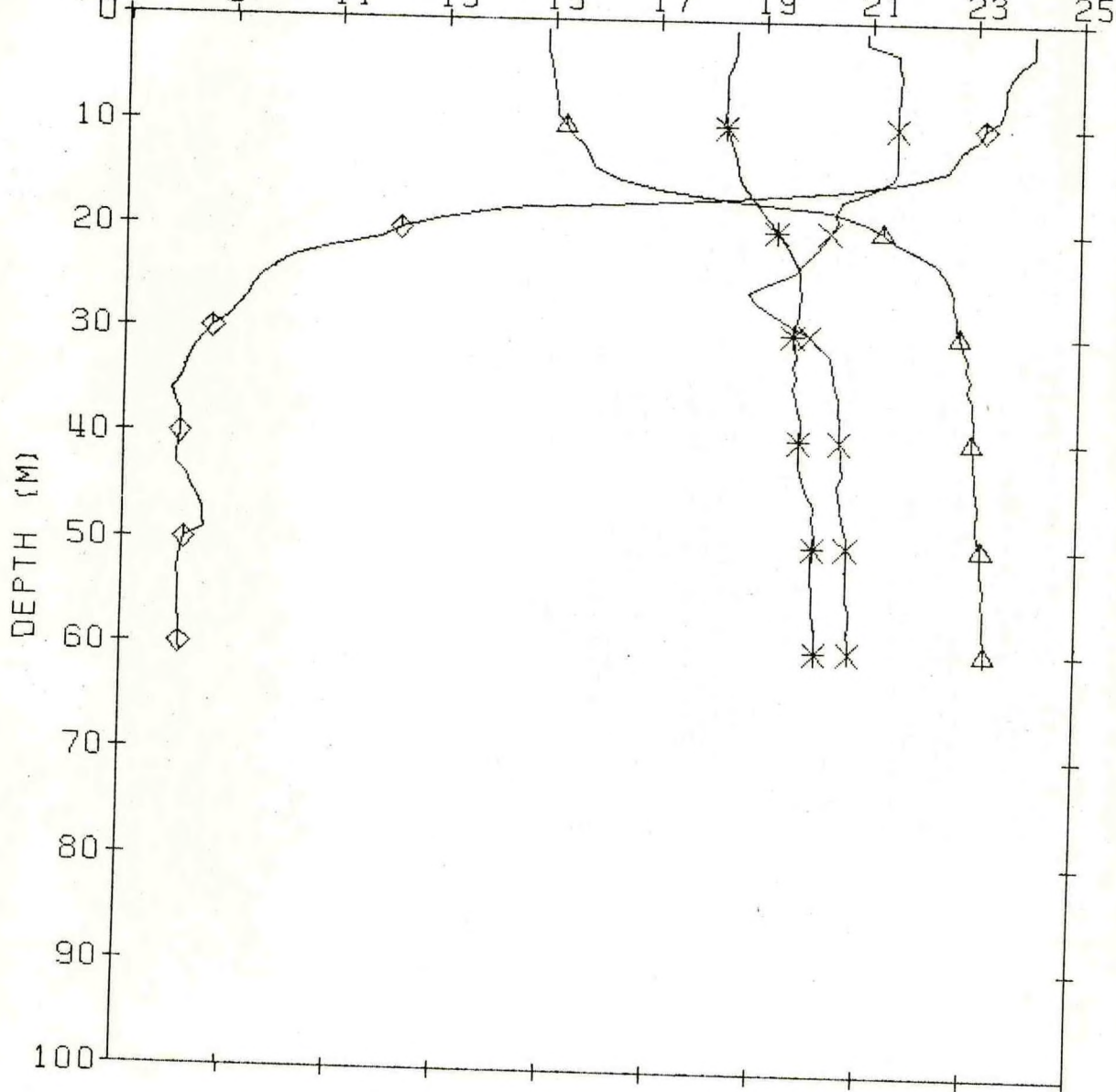
△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 7 9 11 13 15 17 19 21 23 25





XWCC-15 STA. 157 LAT 38 18.6N; LONG 73 44.0W GMT 20.2 08/04/77  
 DEPTH 110 AIR D/W 77.0/74.0 BARO 22.0 VIS 7 CLD TYP/CVR X/4  
 WETHR 1 WIND DIR/SPD 21/10 SEA DIR/HT 21/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	24.39	33.56	21.70	89.2			.03	.00	.00	.00
2	24.39	33.56	21.70	89.2						
3	24.39	33.56	21.70	89.2						
4	24.39	33.56	21.70	89.2						
5	24.39	33.56	21.70	89.2						
6	24.39	33.56	21.70	89.2						
7	24.39	33.56	21.70	89.2						
8	24.39	33.56	21.70	89.2						
9	24.39	33.56	21.70	89.2						
10	24.39	33.56	21.70	89.2						
11	24.39	33.56	21.70	89.2						
12	24.39	33.56	21.70	89.2						
13	24.39	33.56	21.70	89.2						
14	24.39	33.56	21.70	89.2						
15	24.39	33.56	21.70	89.2						
16	24.39	33.56	21.70	89.2						
17	24.39	33.56	21.70	89.2						
18	24.39	33.56	21.70	89.2						
19	24.39	33.56	21.70	89.2						
20	24.39	33.56	21.70	89.2						
21	24.39	33.56	21.70	89.2						
22	24.39	33.56	21.70	89.2						
23	24.39	33.56	21.70	89.2						
24	24.39	33.56	21.70	89.2						
25	24.39	33.56	21.70	89.2						
26	24.39	33.56	21.70	89.2						
27	24.39	33.56	21.70	89.2						
28	24.39	33.56	21.70	89.2						
29	24.39	33.56	21.70	89.2						
30	24.39	33.56	21.70	89.2						
31	24.39	33.56	21.70	89.2						
32	24.39	33.56	21.70	89.2						
33	24.39	33.56	21.70	89.2						
34	24.39	33.56	21.70	89.2						
35	24.39	33.56	21.70	89.2						
36	24.39	33.56	21.70	89.2						
37	24.39	33.56	21.70	89.2						
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39	24.39	33.56	21.70	89.2						
40	24.39	33.56	21.70	89.2						
41	24.39	33.56	21.70	89.2						
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43	24.39	33.56	21.70	89.2						
44	24.39	33.56	21.70	89.2						
45	24.39	33.56	21.70	89.2						
46	24.39	33.56	21.70	89.2						
47	24.39	33.56	21.70	89.2						
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49	24.39	33.56	21.70	89.2						
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52	24.39	33.56	21.70	89.2						
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69	24.39	33.56	21.70	89.2						
70	24.39	33.56	21.70	89.2						
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80	24.39	33.56	21.70	89.2						
81	24.39	33.56	21.70	89.2						
82	24.39	33.56	21.70	89.2						
83	24.39	33.56	21.70	89.2						
84	24.39	33.56	21.70	89.2						
85	24.39	33.56	21.70	89.2						
86	24.39	33.56	21.70	89.2						
87	24.39	33.56	21.70	89.2						
88	24.39	33.56	21.70	89.2						
89	24.39	33.56	21.70	89.2						
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95	24.39	33.56	21.70	89.2						
96	24.39	33.56	21.70	89.2						
97	24.39	33.56	21.70	89.2						
98	24.39	33.56	21.70	89.2						
99	24.39	33.56	21.70	89.2						
100	24.39	33.56	21.70	89.2						
101	24.39	33.56	21.70	89.2						
102	24.39	33.56	21.70	89.2						
103	24.39	33.56	21.70	89.2						
104	24.39	33.56	21.70	89.2						
105	24.39	33.56	21.70	89.2						
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107	24.39	33.56	21.70	89.2						
108	24.39	33.56	21.70	89.2						
109	24.39	33.56	21.70	89.2						
110	24.39	33.56	21.70	89.2						
111	24.39	33.56	21.70	89.2						
112	24.39	33.56	21.70	89.2						
113	24.39	33.56	21.70	89.2						
114	24.39	33.56	21.70	89.2						
115	24.39	33.56	21.70	89.2						
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118	24.39	33.56	21.70	89.2						
119	24.39	33.56	21.70	89.2						
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124	24.39	33.56	21.70	89.2						
125	24.39	33.56	21.70	89.2						
126	24.39	33.56	21.70	89.2						
127	24.39	33.56	21.70	89.2						
128	24.39	33.56	21.70	89.2						
129	24.39	33.56	21.70	89.2						
130	24.39	33.56	21.70	89.2						
131	24.39	33.56	21.70	89.2						
132	24.39	33.56	21.70	89.2						
133	24.39	33.56	21.70	89.2						
134	24.39	33.56	21.70	89.2						
135	24.39	33.56	21.70	89.2						
136	24.39	33.56	21.70	89.2						
137	24.39	33.56	21.70	89.2						

KELEZ CRUISE XWCC-15 STATION 157 08/04/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

△ 18 19 20 21 22 23 24 25 26 27

SALINITY (0/00)

\* 27 28 29 30 31 32 33 34 35 36

TEMPERATURE (C)

◇ 8 10 12 14 16 18 20 22 24 26

