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NOAA Data Report ERL MESA-39



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MESA NEW YORK BIGHT PROJECT  
EXPANDED WATER COLUMN CHARACTERIZATION CRUISE (XWCC 16)  
NOAA SHIP GEORGE B. KELEZ, OCTOBER 1977

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

Marine Ecosystems Analysis Program  
Boulder, Colorado  
February 1978

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Atlantic Oceanic and Meteorological Laboratories  
Miami, Florida

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UNITED STATES  
DEPARTMENT OF COMMERCE  
Juanita M. Kreps, Secretary

NATIONAL OCEANIC AND  
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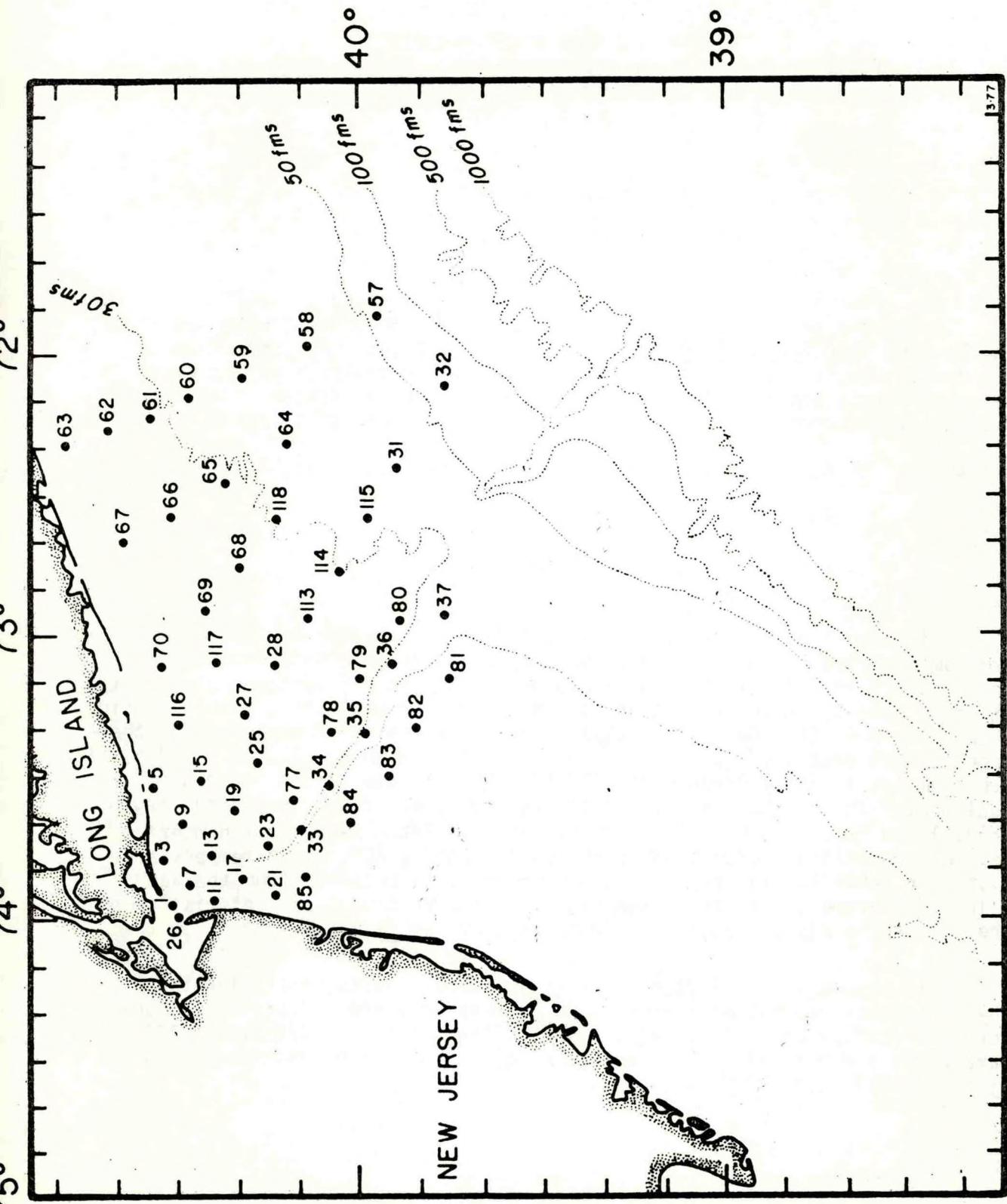
During the period 11-19 October 1977, an oceanographic cruise was made on the NOAA Ship George B. Kelez in the New York Bight. The objective of the cruise was to supply data to provide a base for analysis of the water characteristics and movements in the highly impacted ecosystem. This report presents 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 October of 1976, a cruise of 53 stations was conducted by the Atlantic Oceanographic and Meteorological Laboratories (AOML), Miami, Florida, aboard the NOAA Ship George B. Kelez. The instrumentation employed was the same as that described in previous reports (Hazelworth *et al.*, 1974, 1975, a,b) namely, an Inter Ocean Model 513-10 CSTD with associated sensors and equipment. The area of investigation was the expanded New York Bight region (Fig. 1 and Tab. 1). Only 52 stations were completed because of hampering weather conditions. 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 fifteenth 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,d).



**Figure 1.** Locations of stations occupied during XMCC-16.

TABLE 1.  
NEW YORK BIGHT STATION POSITIONS

STATION	LATITUDE	LONGITUDE	STATION	LATITUDE	LONGITUDE
1	40° 30.2'	73° 57.3'	60	40° 27.0'	72° 9.0'
3	40° 31.5'	73° 48.4'	61	40° 33.0'	72° 13.0'
5	40° 33.3'	73° 32.5'	62	40° 40.0'	72° 16.0'
7	40° 26.9'	73° 53.0'	63	40° 47.0'	72° 20.0'
9	40° 28.3'	73° 39.6'	64	40° 12.0'	72° 20.0'
11	40° 22.2'	73° 56.7'	65	40° 21.0'	72° 28.0'
13	40° 23.3'	73° 47.0'	66	40° 30.0'	72° 34.0'
15	40° 25.2'	73° 30.4'	67	40° 38.0'	72° 40.0'
17	40° 18.5'	73° 51.8'	68	40° 19.0'	72° 46.0'
19	40° 20.2'	73° 37.9'	69	40° 25.0'	72° 55.0'
21	40° 13.5'	73° 56.1'	70	40° 32.0'	73° 7.0'
23	40° 14.8'	73° 45.6'	77	40° 10.5'	73° 34.0'
25	40° 16.9'	73° 28.3'	78	40° 5.0'	73° 21.5'
26	40° 29.0'	73° 59.5'	79	40° .0'	73° 9.5'
27	40° 18.0'	73° 17.5'	80	39° 54.5'	72° 57.0'
28	40° 13.5'	73° 7.0'	81	39° 44.5'	73° 10.0'
31	39° 54.0'	72° 25.0'	82	39° 50.5'	73° 20.5'
32	39° 46.0'	72° 7.0'	83	39° 56.5'	73° 30.5'
33	40° 10.0'	73° 41.5'	84	40° 2.0'	73° 41.0'
34	40° 5.5'	73° 31.5'	85*	40° 8.0'	73° 51.5'
35	39° 59.0'	73° 21.5'	113	40° 08.8'	72° 55.5'
36	39° 55.0'	73° 6.5'	114	40° 04.0'	72° 45.2'
37	39° 46.0'	72° 57.0'	115	39° 58.7'	72° 34.1'
57	39° 57.0'	71° 52.0'	116	40° 30.0'	73° 18.7'
58	40° 8.0'	71° 58.0'	117	40° 23.1'	73° 05.0'
59	40° 18.0'	72° 4.0'	118	40° 14.4'	72° 34.1'

\*Station occupied twice.

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

Cruise	Date	AOML Personnel
XWCC-16	October 11-19, 1977	John B. Hazelworth, Chief Scientist Adriana Cantillo Derek Richerson Philip Hanson Terren Niedrauer

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. The statistical parameters in Table 3 were computed using the following formulas:

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

Calibration recheck

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

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

Where N = total number of water samples for entire cruise;

W = water sample value;

$\bar{E}$  = mean electronic sensor value at the depth corresponding to water sample at the same depth;

I = corrected interpolated one meter electronic sensor value at the nearest depth corresponding to the water sample value.

T = date (Julian day, Table 3)

Table 3. Correction Factors and Data Accuracy for Cruise XWCC-16

	Temp.	Salinity	$\sigma_2$	Depth (Meters)
Calib. Offset	.0013T-.3986	-.0019T+.3953	-.0043T+1.4794	0.0
Calib. Recheck				
$\bar{X}$	+.00	-.00	.00	
$S_x$	.02	.03	.07	
Precision (Repeatability)				<u>±0.5</u>

## 2. DATA PRESENTATION

Tables of the interpolated data and the corresponding depth profiles of temperature, salinity, sigma-t, and transmissivity are given in Section 6, Station Data. The codes used in the headings are from the National Oceanographic Data Center Manual Series (1964). The tabulated data are given at 1-m intervals from the surface to 50 m and at 10-m intervals thereafter; in addition, data are presented at the depths at which water samples were obtained and at the bottom of 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

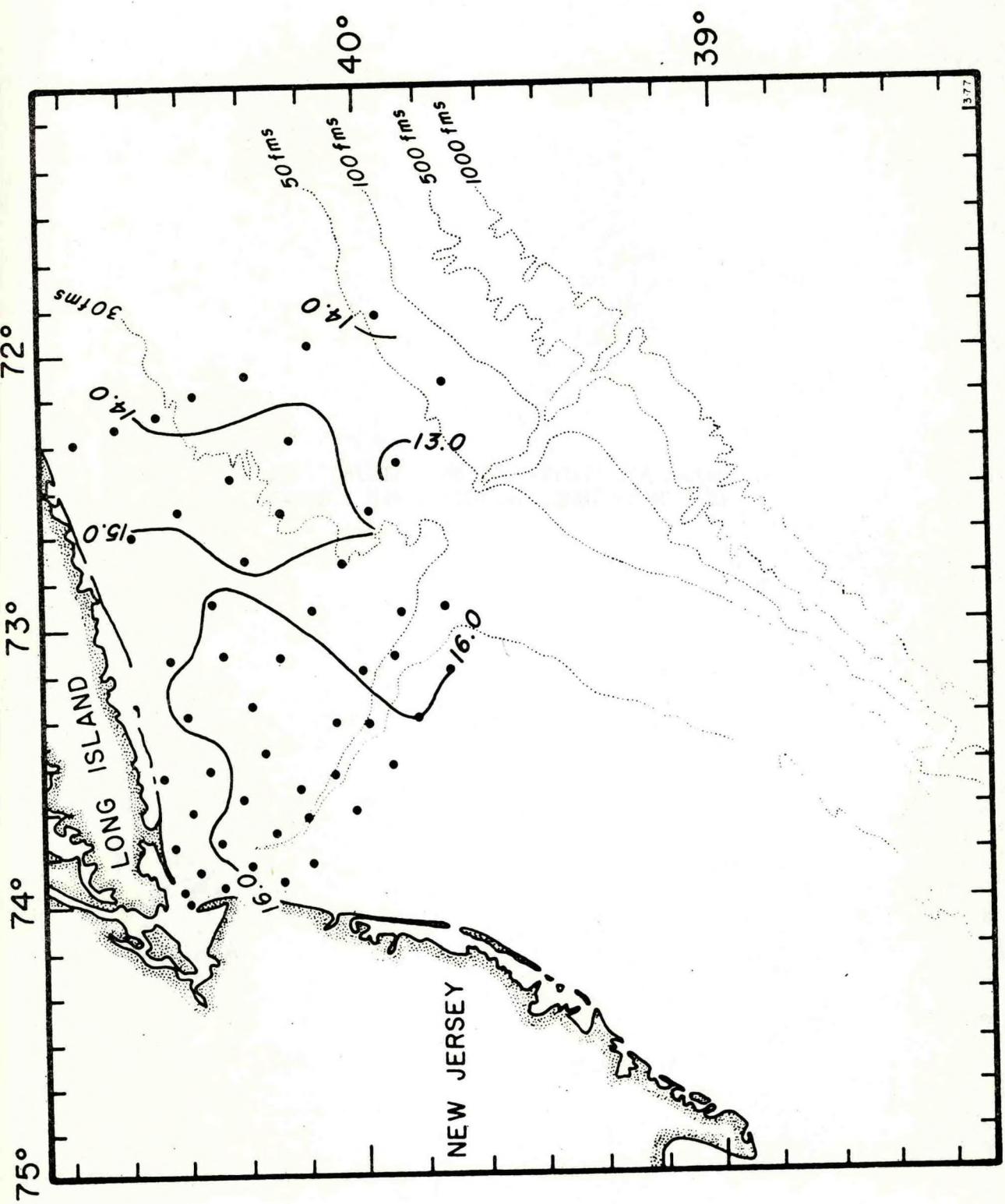
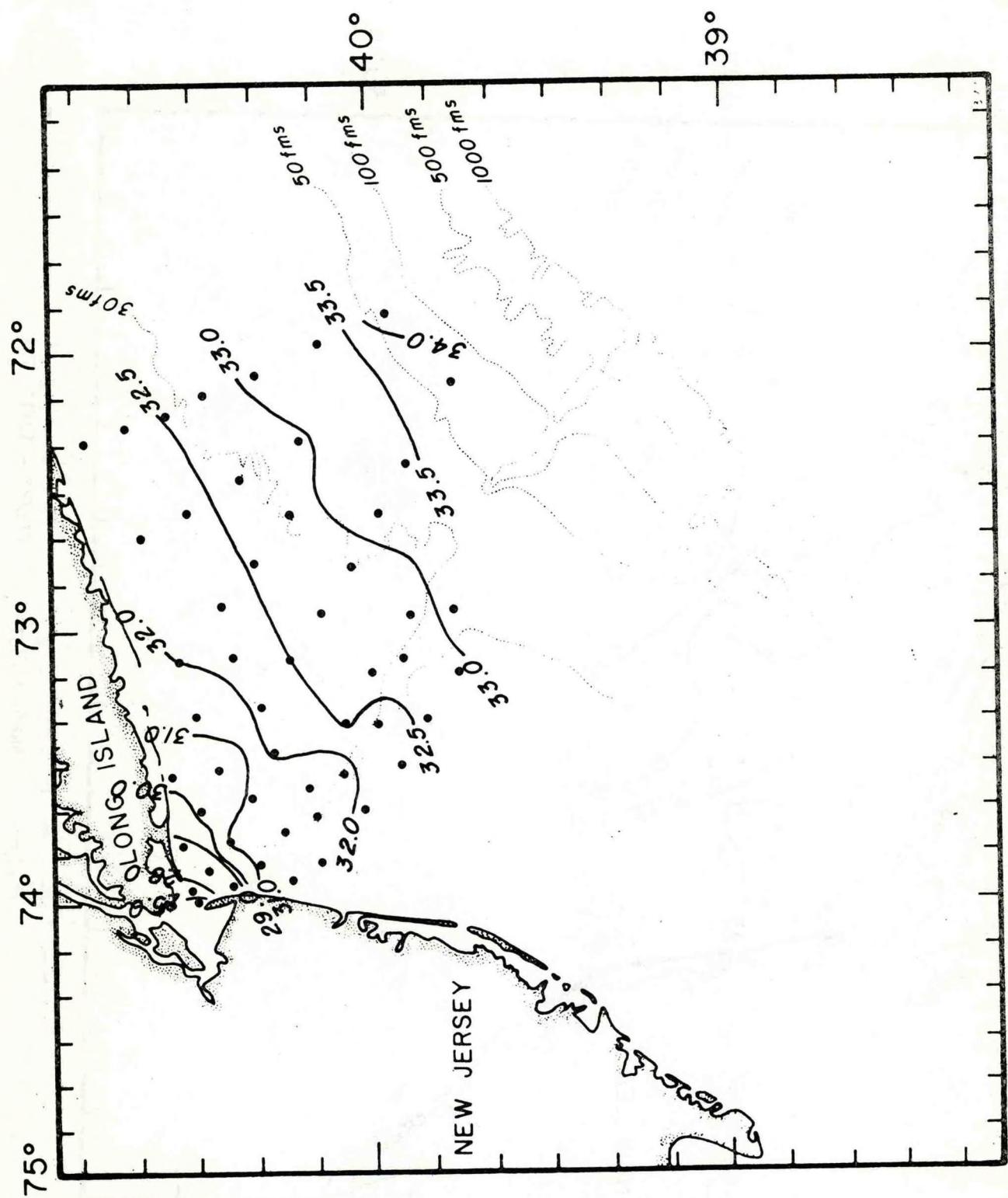


Figure 2. Surface Water Temperatures 10/11/77 - 10/19/77.

Figure 3. Surface Salinities 10/11/77 - 10/19/77.



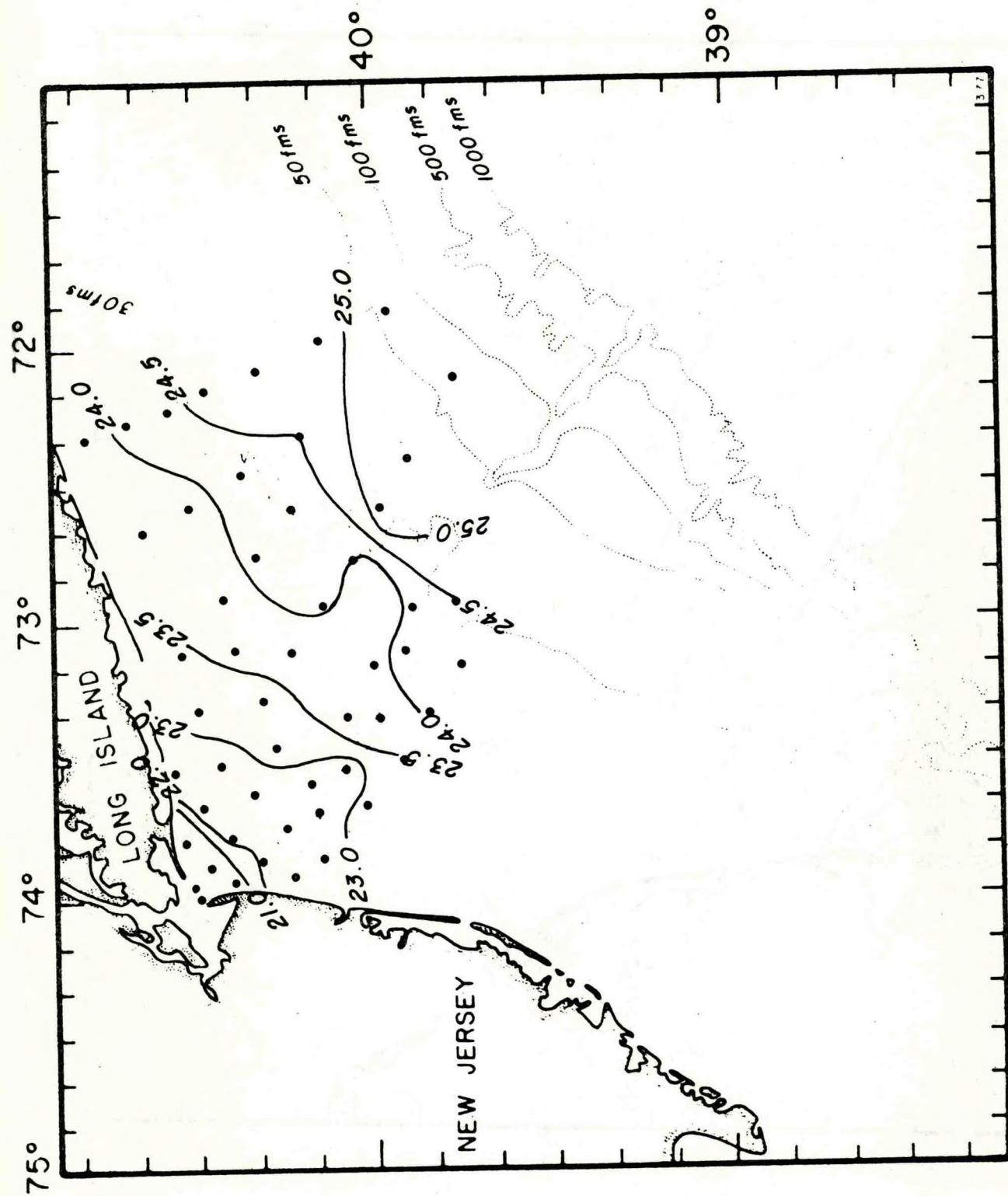


Figure 4. Surface Sigma-t 10/11/77 - 10/19/77.

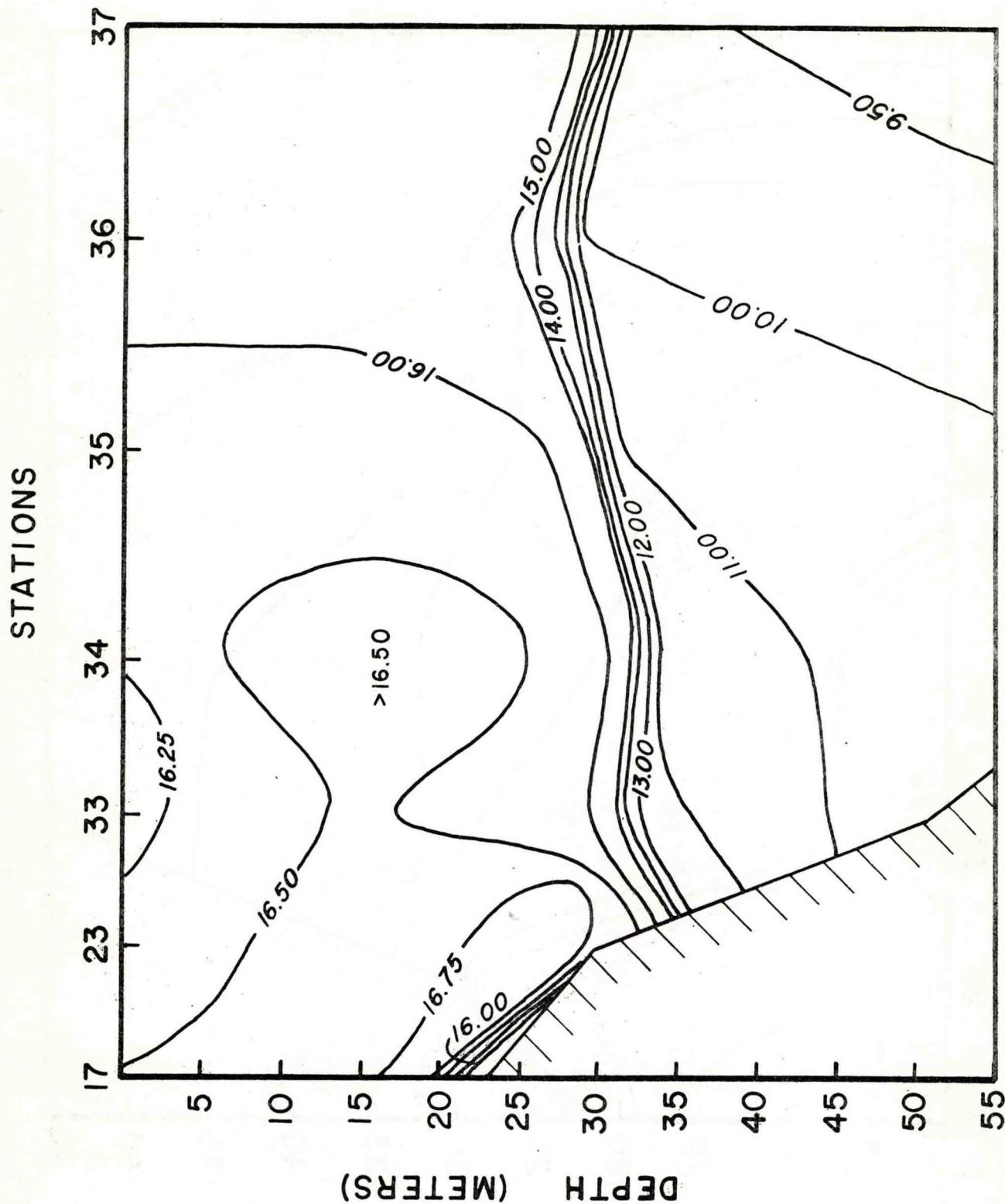


Figure 5. Vertical temperature contours along the Hudson Shelf Valley, 10/11/77 - 10/19/77. Reference Figure 1 for track line.

## STATIONS

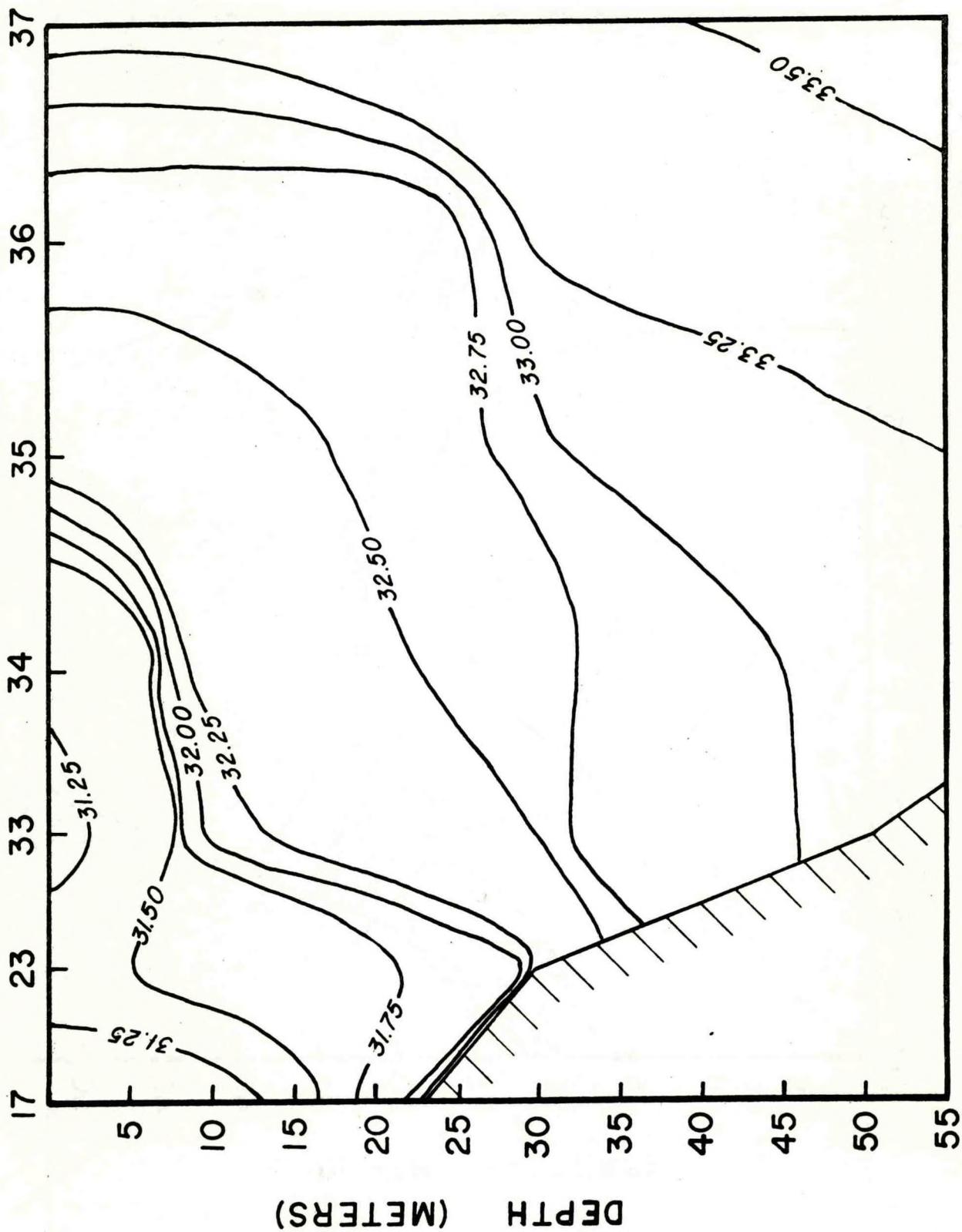


Figure 6. Vertical salinity contours along the Hudson Shelf Valley, 10/11/77 - 10/19/77. Reference Figure 1 for track line.

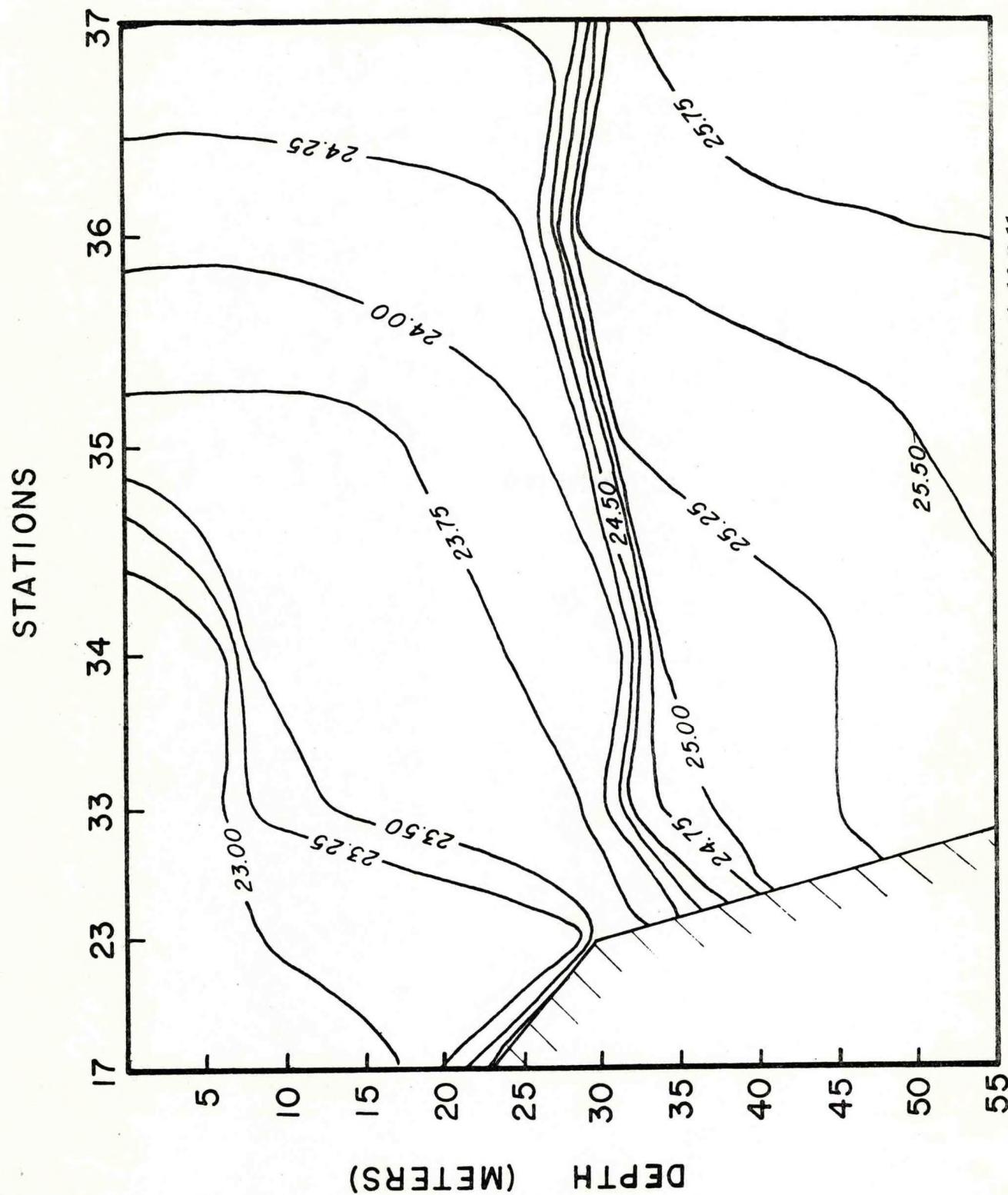


Figure 7. Vertical sigma-t contours along the Hudson Shelf Valley, 10/11/77 - 10/19/77. Reference Figure 1 for track line.

**6. STATION DATA**

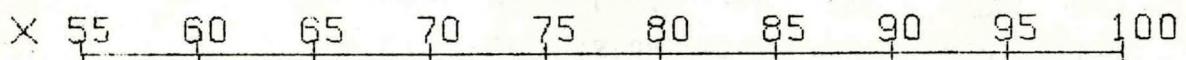
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 WETHR 0 WIND DIR/SPD 11/13 SEA DIR/HT 09/0 SWELL DIR/HT 09/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.04	27.43	20.17	80.9	8.25	5.00				
2	15.04	27.43	20.17	80.9	8.25	5.00	2.27	15.16	11.71	1.70
3	15.10	27.50	20.21	81.3	8.23	5.12				
4	15.11	27.74	20.40	81.3	8.23	5.11				
5	15.16	28.14	20.69	81.1	8.23	5.09				
6	15.23	28.50	20.95	82.1	8.24	5.06				
7	15.28	28.77	21.15	83.0	8.25	5.04				
8	15.43	29.95	22.02	79.9	8.25	5.02				
9	15.49	30.68	22.56	79.9	8.25	4.97				
10	15.51	30.79	22.64	79.9	8.26	4.92	1.06	5.30	6.52	1.36

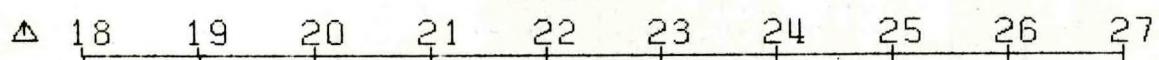
KELEZ CRUISE XWCC-16 STATION 1

10/11/77

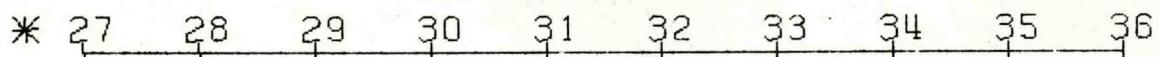
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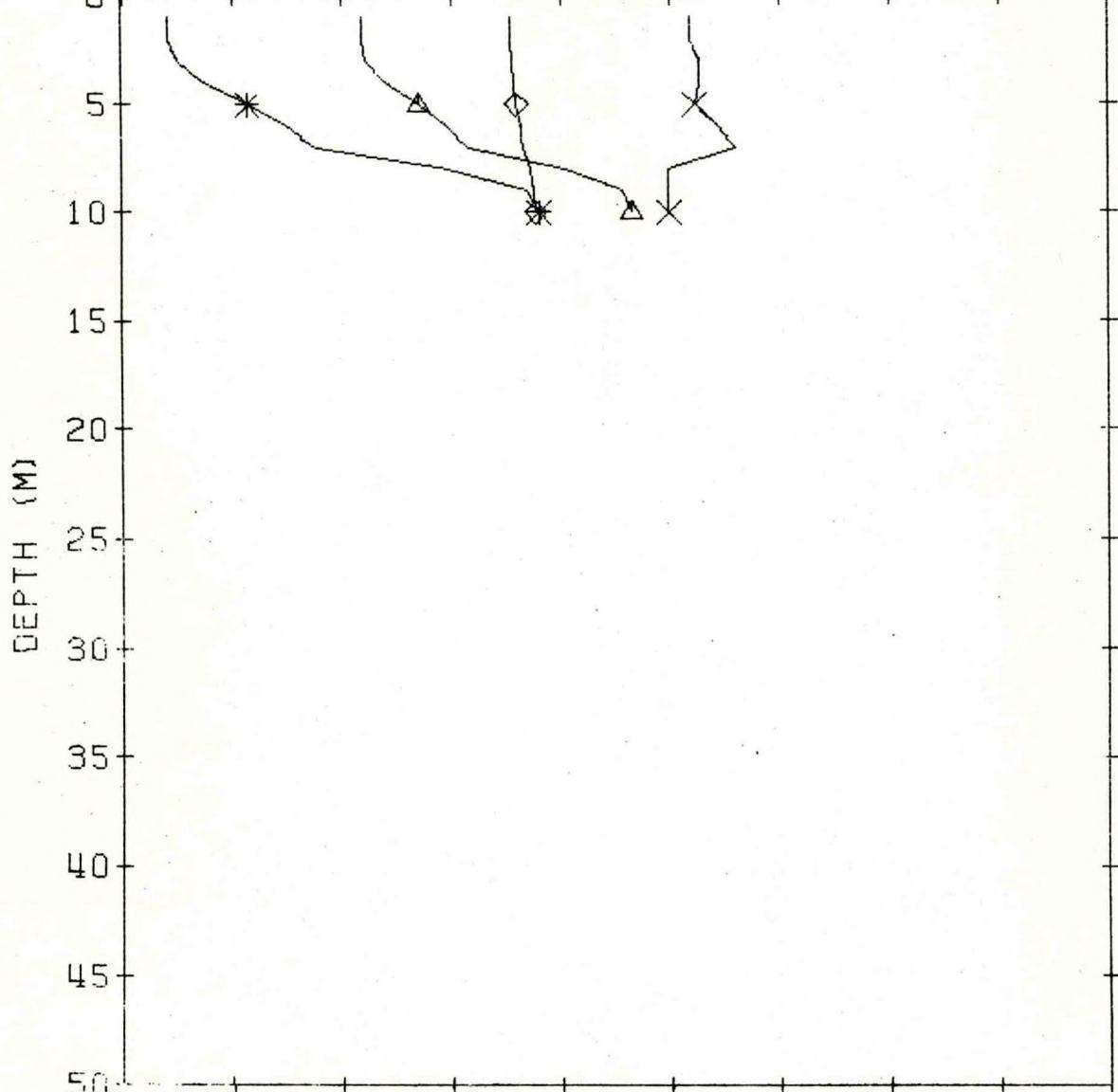
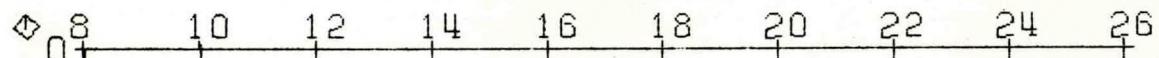
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)



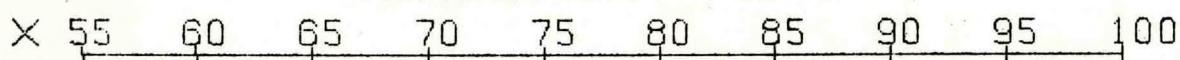
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 WETHR 0 WIND DIR/SPD 16/10 SEA DIR/HT 10/0 SWELL DIR/HT 10/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.58	28.14	20.60	84.4	8.21	5.21				
2	15.58	28.14	20.60	84.4	8.21	5.21				
3	15.56	28.15	20.62	84.5	8.21	5.20				
4	15.52	28.18	20.65	84.4	8.21	5.21				
5	15.40	28.54	20.94	84.5	8.20	5.21				
6	15.40	29.66	21.80	85.2	8.21	5.21				
7	15.69	30.41	22.32	86.0	8.25	5.17				
8	15.88	30.58	22.40	87.2	8.29	5.09				
9	15.88	30.77	22.55	88.2	8.29	5.07				
10	15.91	31.17	22.85	88.0	8.28	5.09				
11	15.81	31.65	23.24	86.5	8.24	5.10				
12	15.76	31.78	23.35	83.7	8.23	5.10				
13	15.76	31.80	23.36	83.0	8.22	5.08				
14	15.80	31.79	23.35	84.1	8.23	5.05				
15	15.51	31.96	23.54	82.4	8.22	5.04				
16	15.29	32.11	23.71	82.4	8.22	5.04				

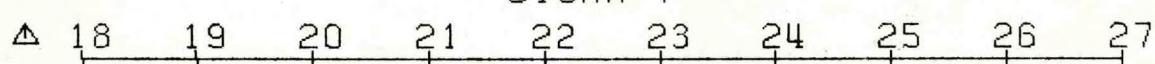
KELEZ CRUISE XWCC-16 STATION 3

10/11/77

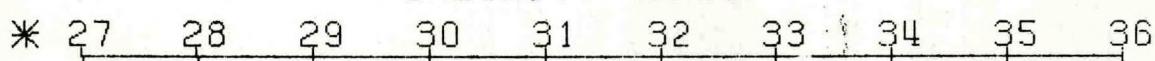
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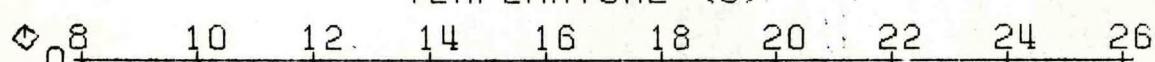
## SIGMA-T



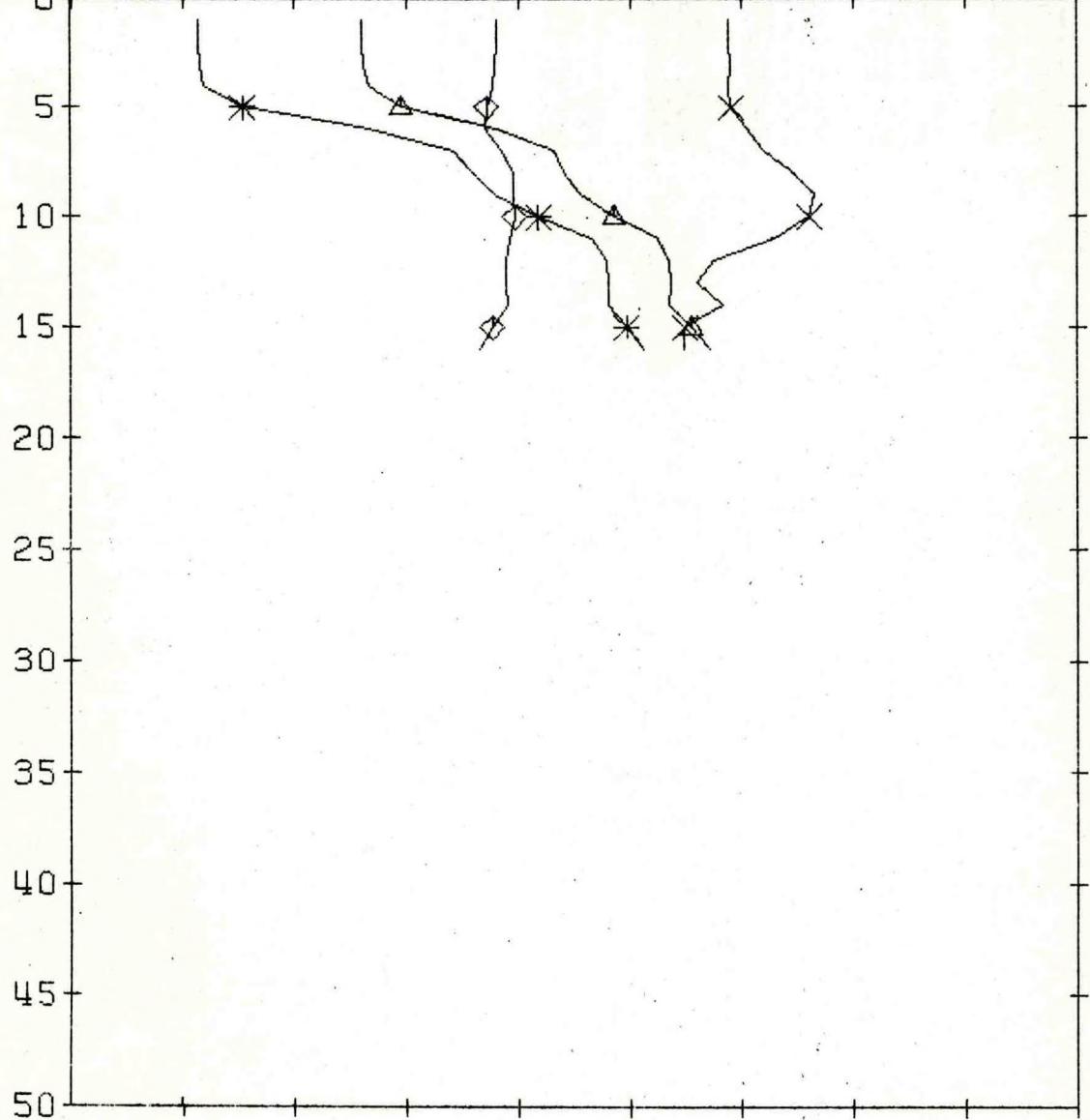
## SALINITY (0/00)



## TEMPERATURE (C)



DEPTH (M)

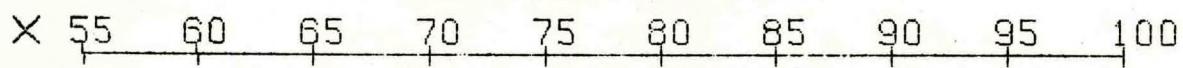


XWCC-16 STA.005 LAT 40 33.4N; LONG 73 32.4W GMT 19.3 10/11/77  
 DEPTH 11 AIR D/W 66.7/27.8 BARO 20.0 VIS 7 CLD TYP/CVR 6/4  
 WETHR 1 WIND DIR/SPD 18/09 SEA DIR/HT 18/0 SWELL DIR/HT 16/1

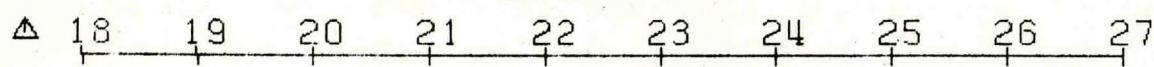
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.71	30.88	22.67	83.1	8.44	6.03				
2	15.71	30.88	22.67	83.1	8.44	6.03				
3	15.70	30.85	22.65	85.1	8.41	6.27				
4	15.70	30.86	22.66	84.1	8.41	6.27				
5	15.70	30.87	22.67	84.9	8.41	6.26				
6	15.72	30.89	22.68	85.0	8.40	6.26				
7	15.74	30.91	22.69	84.7	8.40	6.25				
8	15.79	31.03	22.77	85.2	8.38	6.23				
9	15.82	31.13	22.84	85.3	8.36	6.18				
10	16.00	31.35	22.97	85.3	8.34	6.11				
11	16.22	31.62	23.13	85.3	8.24	5.93				
12	16.26	31.66	23.15	85.3	8.23	5.92				

KELEZ CRUISE XWCC-16 STATION 5 10/11/77

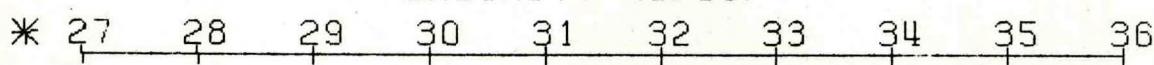
TRANSMISSIVITY (0/0)



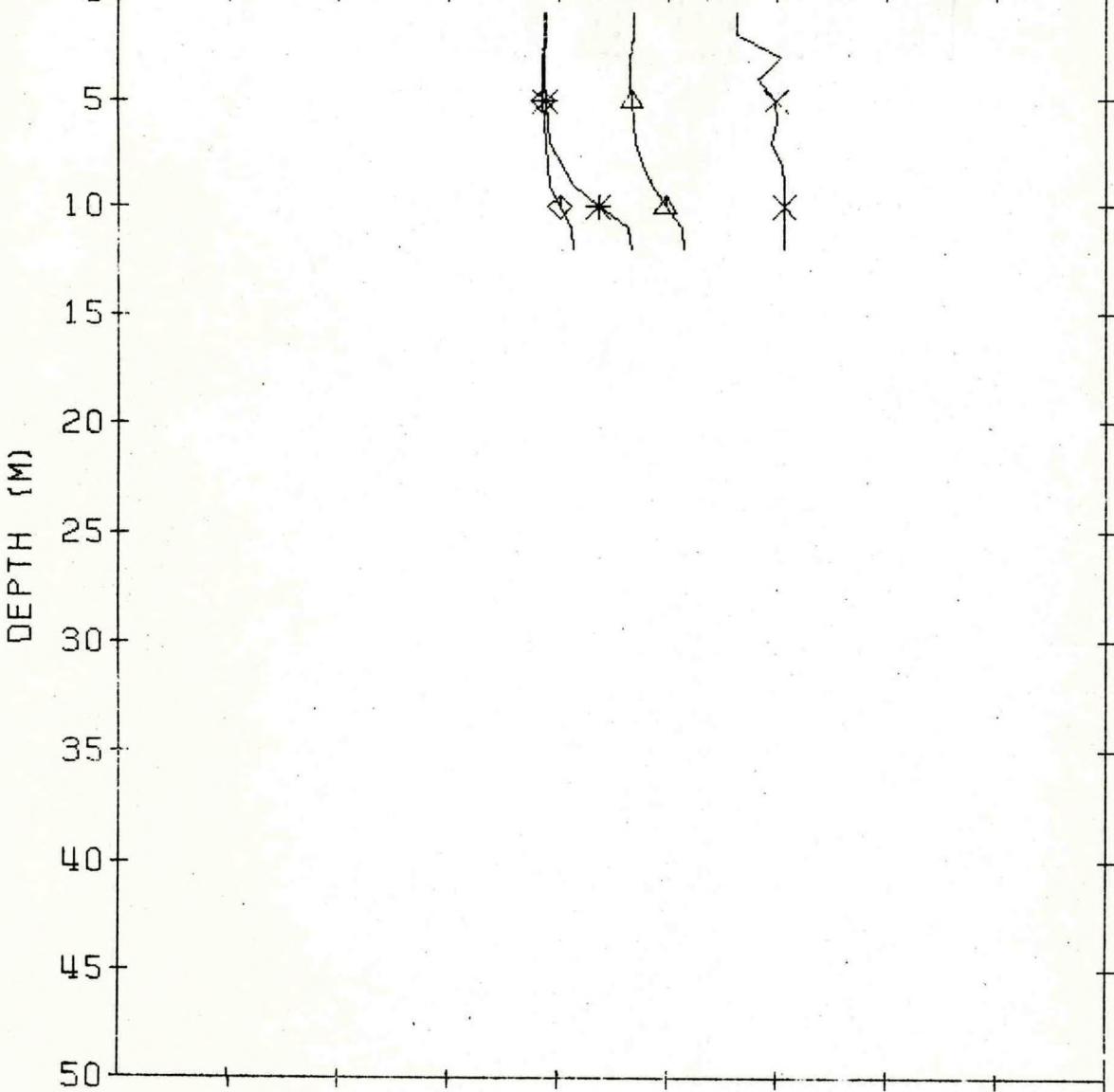
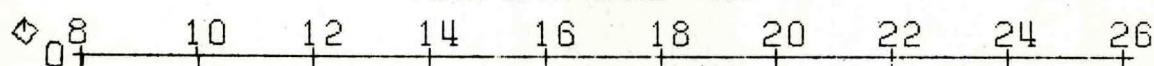
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)



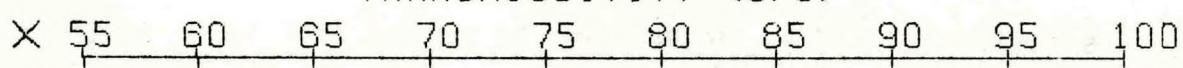
XWCC-16 STA.007 LAT 40 26.9N; LONG 73 53.0W GMT 16.1 10/11/77  
 DEPTH 20 AIR D/W 55.6/33.3 BARO 22.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 16/10 SEA DIR/HT 16/ SWELL DIR/HT 10/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.41	28.04	20.56	85.6	8.26	5.45				
2	15.41	28.04	20.56	85.6	8.26	5.45	1.88	10.93	8.61	1.42
3	15.39	28.04	20.56	85.9	8.26	5.45				
4	15.39	28.04	20.57	85.7	8.26	5.46				
5	15.36	28.04	20.57	85.2	8.26	5.47				
6	15.31	28.04	20.58	85.5	8.25	5.47				
7	15.30	28.04	20.58	85.0	8.25	5.46				
8	15.29	28.04	20.58	85.0	8.25	5.45				
9	15.27	28.05	20.60	85.2	8.24	5.43				
10	15.27	28.10	20.63	85.3	8.24	5.42	1.95	11.33	9.04	1.49
11	15.48	29.24	21.46	85.5	8.25	5.39				
12	15.79	30.64	22.47	86.3	8.27	5.32				
13	15.74	31.19	22.91	84.6	8.25	5.26				
14	15.60	31.51	23.18	82.3	8.23	5.19				
15	15.55	31.63	23.28	81.4	8.22	5.07				
16	15.53	31.67	23.31	81.3	8.22	4.92				
17	15.43	31.75	23.40	80.6	8.20	4.80				
18	15.25	31.92	23.57	80.6	8.17	4.68				
19	14.98	31.92	23.63	80.6	8.18	4.54	.93	3.80	9.24	1.24

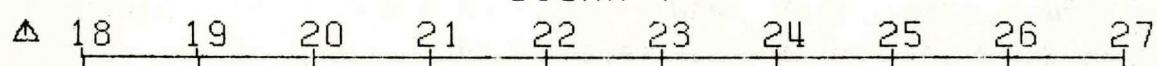
KELEZ CRUISE XWCC-16 STATION 7

10/11/77

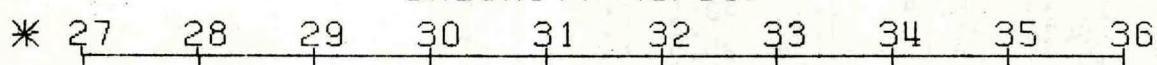
## TRANSMISSIVITY (0/0)



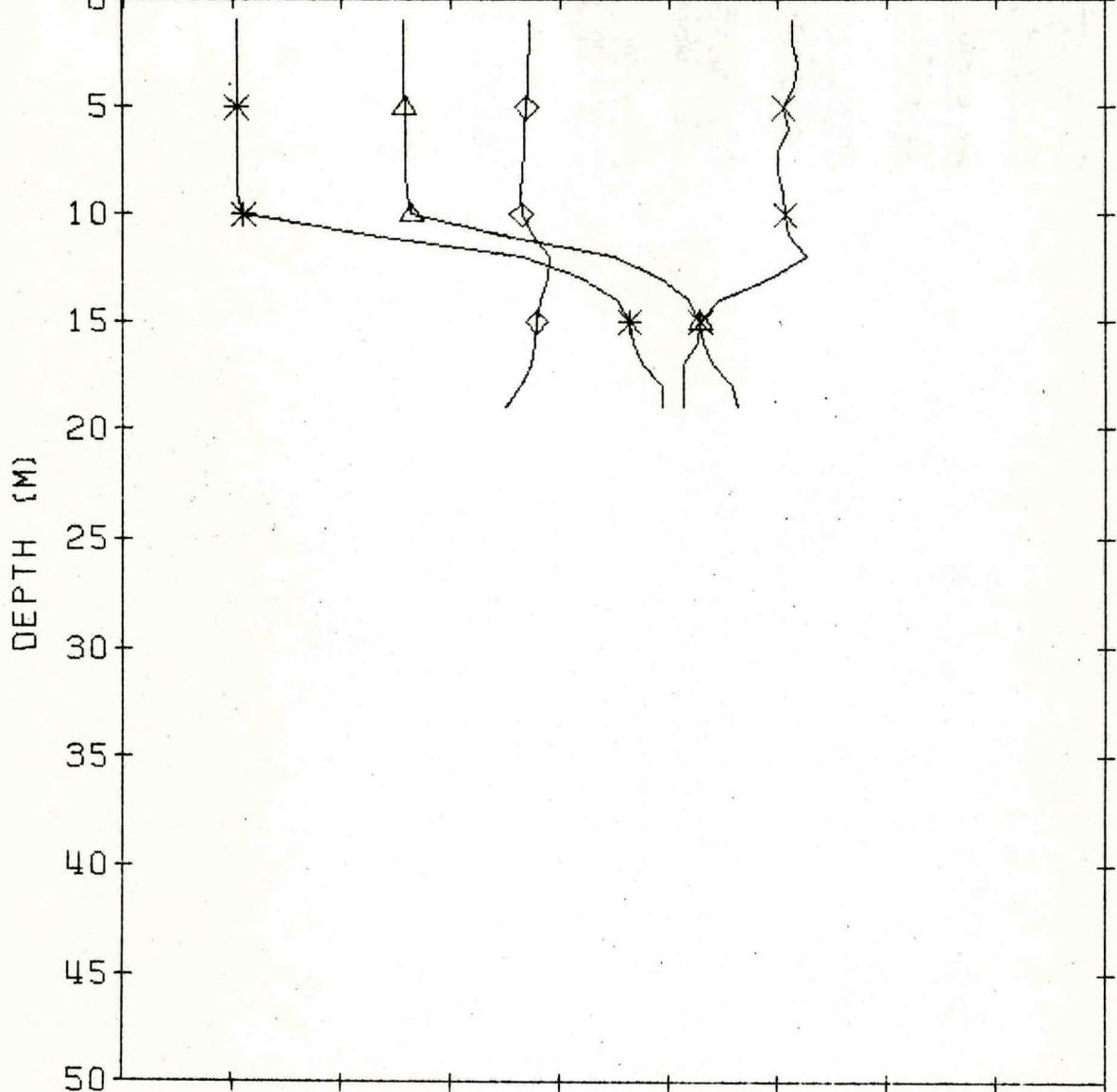
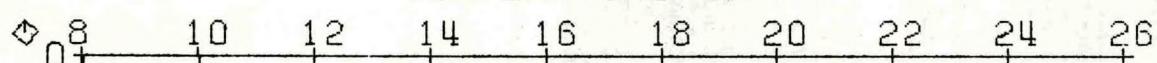
## SIGMA-T



## SALINITY (0/00)



## TEMPERATURE (C)



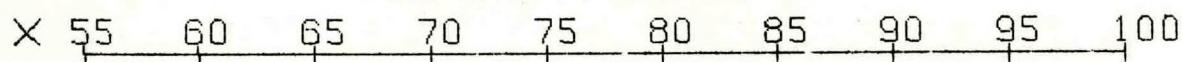
XWCC-16 STA.009 LAT 40 28.3N; LONG 73 39.6W GMT 20.5 10/11/77  
 DEPTH 22 AIR D/W 72.2/33.3 BARO 18.5 VIS 7 CLD TYP/CVR 6/4  
 WETHR 1 WIND DIR/SPD 18/14 SEA DIR/HT 17/0 SWELL DIR/HT 17/1

DEP	TEMP	SAL	SIGT	TRAN	PH	O2	N02	N03	SI03	P04
1	15.81	30.21	22.14	89.7	8.40	6.11				
2	15.81	30.21	22.14	89.7	8.40	6.11	1.02	6.08	.00	.62
3	15.81	30.20	22.13	89.8	8.40	6.10				
4	15.81	30.21	22.13	89.9	8.40	6.10				
5	15.81	30.21	22.13	89.6	8.39	6.10				
6	15.81	30.21	22.14	89.7	8.39	6.09				
7	15.82	30.21	22.13	89.7	8.40	6.09				
8	15.83	30.22	22.14	89.8	8.39	6.08				
9	15.82	30.22	22.14	89.8	8.40	6.09				
10	15.84	30.24	22.16	89.8	8.39	6.09	1.02	5.34	.27	.64
11	16.07	30.49	22.30	90.2	8.36	6.07				
12	16.22	30.83	22.52	90.1	8.34	5.90				
13	16.33	31.06	22.68	89.5	8.34	5.70				
14	16.38	31.26	22.82	89.1	8.34	5.56				
15	16.46	31.46	22.95	89.1	8.35	5.49				
16	16.49	31.66	23.10	89.0	8.34	5.44				
17	16.35	31.85	23.27	89.1	8.35	5.40				
18	15.49	32.15	23.69	87.6	8.18	5.37				
19	15.04	32.25	23.87	87.1	8.14	5.08				
20	14.66	32.40	24.07	86.7	8.11	4.67	.93	5.43	8.65	1.25
21	14.56	32.39	24.07	86.7	8.09	4.41				

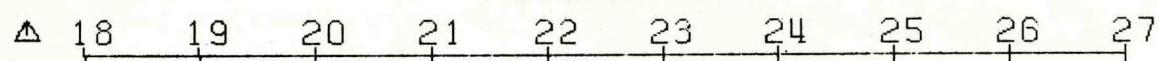
KELEZ CRUISE XWCC-16 STATION 9

10/11/77

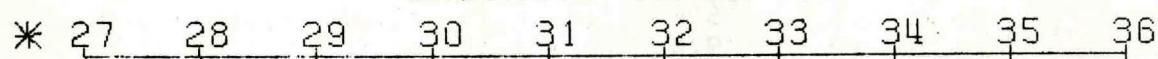
## TRANSMISSIVITY (0/0)



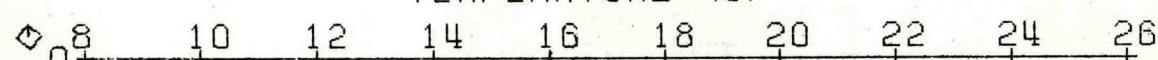
## SIGMA-T



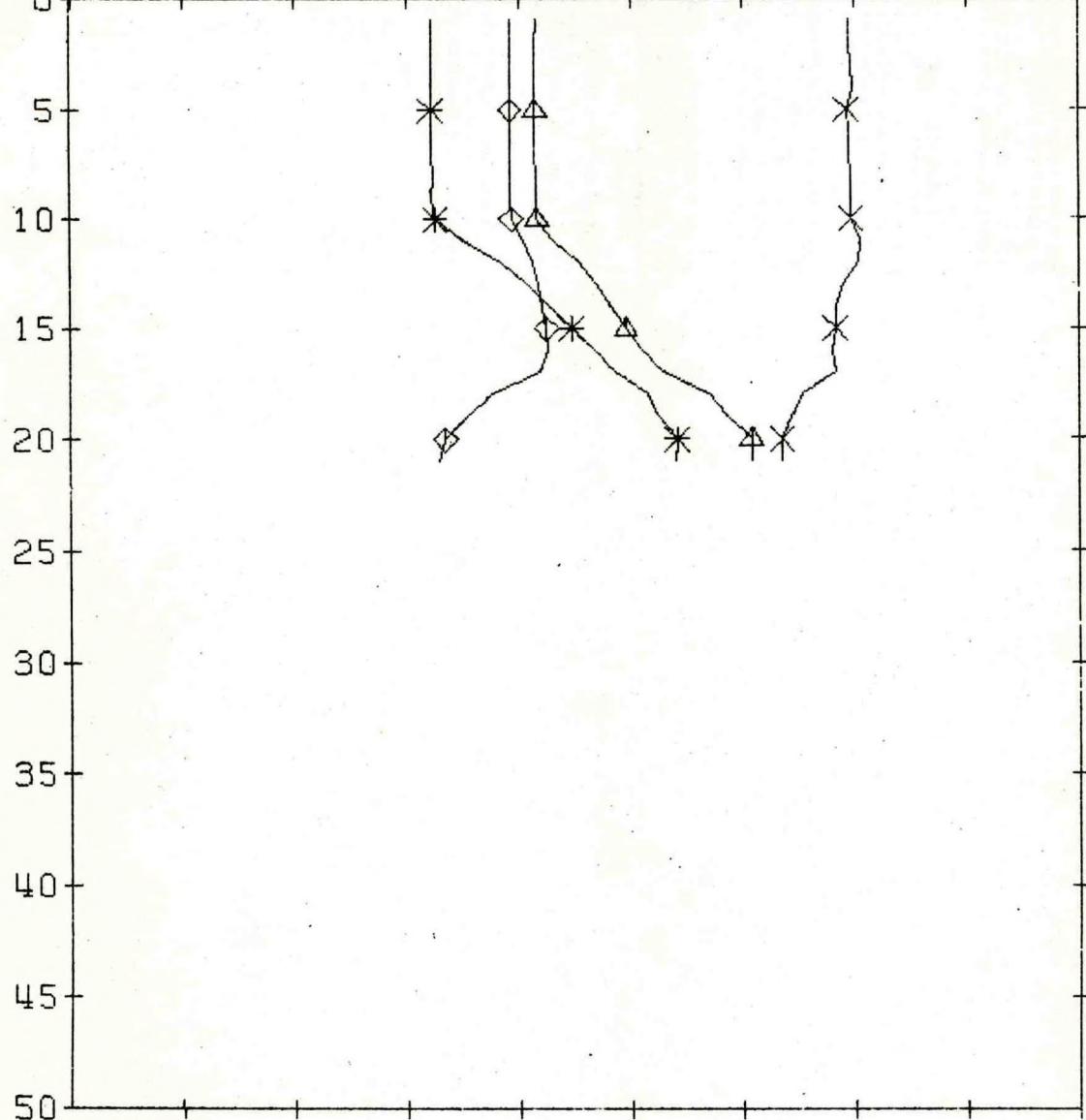
## SALINITY (0/00)



## TEMPERATURE (C)



DEPTH (M)



XWCC-16 STA.011 LAT 40 22.3N; LONG 73 56.6W GMT 00.4 10/12/77  
 DEPTH 14 AIR D/W 55.6/27.8 BARO 18.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 17/15 SEA DIR/HT 17/0 SWELL DIR/HT 18/1

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.25	28.28	20.78	82.2	8.32	5.89	1.76	10.27	5.96	1.12
2	15.25	28.28	20.78	82.2	8.32	5.89				
3	15.34	28.49	20.92	86.4	8.31	5.85				
4	15.33	28.45	20.89	86.3	8.31	5.85				
5	15.40	28.65	21.03	85.9	8.31	5.85				
6	15.59	28.74	21.06	87.6	8.32	5.81				
7	15.38	28.82	21.16	86.6	8.31	5.81				
8	15.75	29.12	21.32	88.6	8.32	5.83				
9	16.02	31.04	22.73	85.4	8.27	5.71				
10	16.01	31.14	22.80	81.4	8.24	5.44				
11	16.02	31.20	22.85	81.4	8.24	5.17	.80	3.30	4.53	1.12
12	16.05	31.20	22.84	81.4	8.22	5.01				

KELEZ CRUISE XWCC-16 STATION 11 10/12/77

TRANSMISSIVITY (0/0)

X 55 60 65 70 75 80 85 90 95 100

SIGMA-T

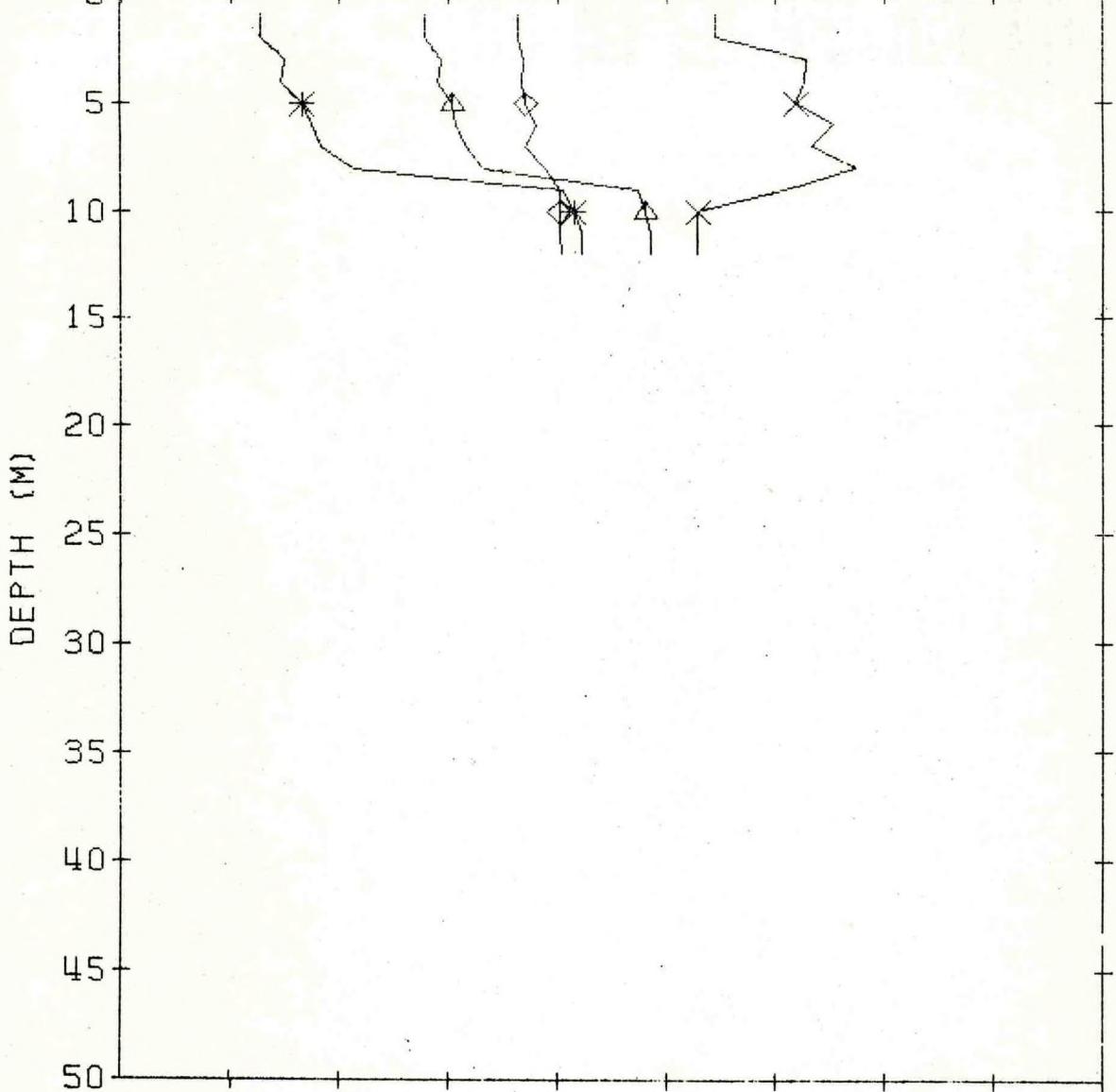
△ 18 19 20 21 22 23 24 25 26 27

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

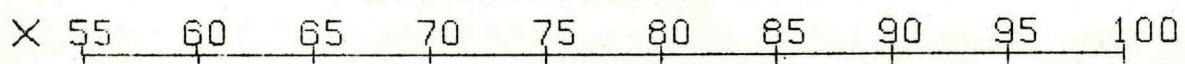


XWCC-16 STA.013 LAT 40 23.3N; LONG 73 47.0W GMT 23.0 10/11/77  
 DEPTH 38 AIR D/W 55.6/44.4 BARO 18.0 VIS 7 CLD TYP/CVR X/  
 WETHR 1 WIND DIR/SPD 17/14 SEA DIR/HT 17/0 SWELL DIR/HT 16/1

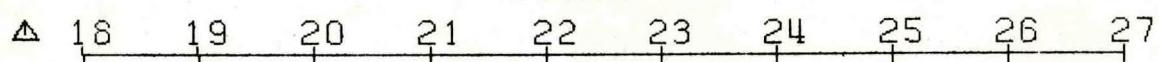
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.48	31.36	22.87	90.3	8.44	5.85	.34	5.07	.00	.40
2	16.48	31.36	22.87	90.3	8.44	5.85				
3	16.48	31.36	22.87	90.5	8.43	5.85				
4	16.48	31.37	22.87	90.5	8.43	5.85				
5	16.48	31.37	22.87	90.4	8.43	5.86				
6	16.48	31.37	22.87	90.5	8.43	5.86				
7	16.48	31.37	22.87	90.4	8.42	5.86				
8	16.48	31.37	22.88	90.4	8.42	5.86				
9	16.47	31.37	22.88	90.3	8.43	5.86				
10	16.47	31.37	22.88	90.4	8.43	5.85	.37	.96	.00	.40
11	16.46	31.37	22.88	90.3	8.43	5.86				
12	16.45	31.38	22.89	90.4	8.43	5.86				
13	16.44	31.38	22.89	90.1	8.43	5.86				
14	16.43	31.38	22.89	90.1	8.43	5.87				
15	16.34	31.39	22.92	90.2	8.43	5.88				
16	16.31	31.41	22.94	90.1	8.43	5.89				
17	16.34	31.42	22.95	90.2	8.43	5.89				
18	16.42	31.45	22.95	90.6	8.42	5.89				
19	16.63	31.67	23.07	90.8	8.41	5.86				
20	16.66	31.76	23.14	90.7	8.41	5.81	.27	.57	.00	.44
21	16.66	31.87	23.22	90.8	8.40	5.77				
22	16.32	32.10	23.47	90.6	8.36	5.72				
23	15.52	32.37	23.86	90.2	8.31	5.67				
24	15.36	32.44	23.94	90.0	8.25	5.53				
25	15.24	32.44	23.97	89.4	8.23	5.25				
26	15.19	32.51	24.04	89.2	8.24	5.05				
27	15.07	32.50	24.05	89.4	8.23	4.85				
28	14.85	32.55	24.14	89.2	8.22	4.69				
29	14.36	32.61	24.29	88.7	8.19	4.59				
30	14.27	32.62	24.31	89.3	8.18	4.47	.50	4.20	7.36	.90
31	13.89	32.64	24.41	88.4	8.15	4.33				
32	13.14	32.62	24.54	87.0	8.10	4.24				
33	12.36	32.74	24.79	86.6	8.05	4.10				
34	11.75	32.83	24.97	86.2	8.05	3.91				
35	11.60	32.85	25.01	86.1	8.08	3.75				
36	11.45	32.86	25.05	86.1	8.06	3.70	.29	8.10	13.82	1.21
37	11.41	32.86	25.06	86.1	8.04	3.57				

KELEZ CRUISE XWCC-16 STATION 13 10/11/77

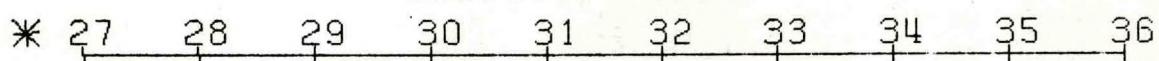
TRANSMISSIVITY (0/0)



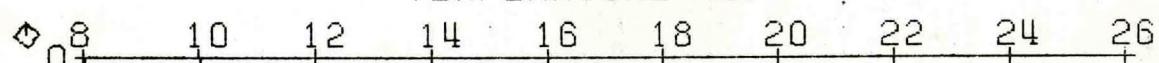
SIGMA-T



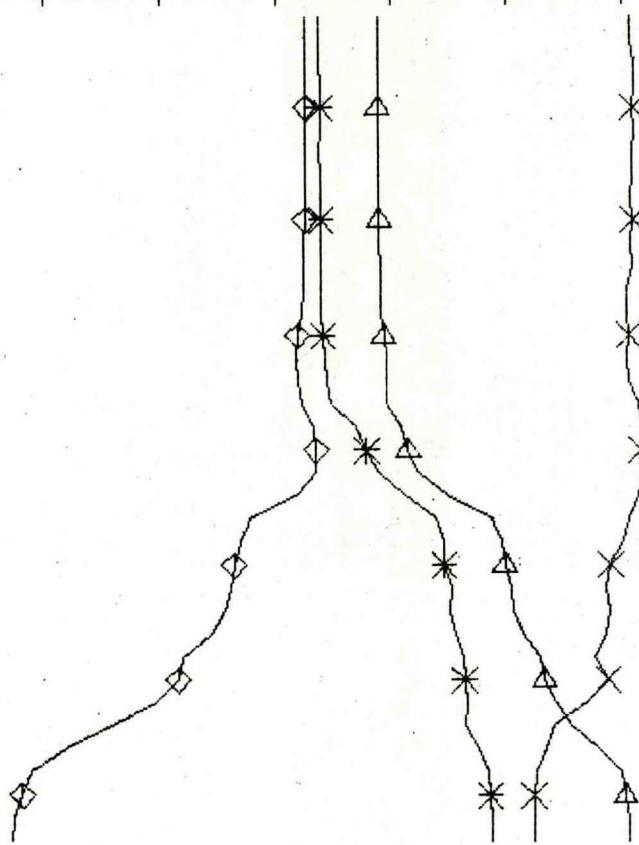
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

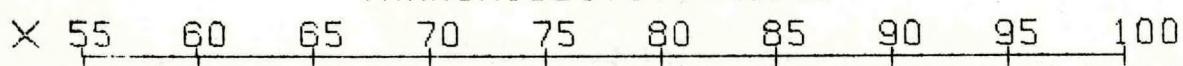


XWCC-16 STA.015 LAT 40 25.2N; LONG 73 30.4W GMT 11.2 10/12/77  
 DEPTH 25 AIR D/W 61.1/47.2 BARO 15.0 VIS 7 CLD TYP/CVR 7/8  
 WETHR 2 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 00/0

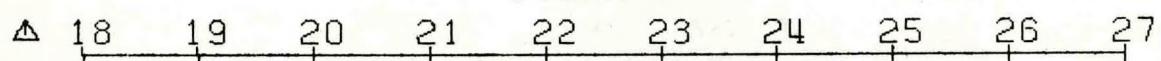
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.41	30.10	22.14	87.2	8.39	6.07	1.19	5.27	.00	.32
2	15.41	30.10	22.14	87.2	8.39	6.07				
3	15.42	30.09	22.13	87.0	8.38	6.06				
4	15.44	30.10	22.14	87.1	8.38	6.06				
5	15.45	30.11	22.14	86.9	8.38	6.06				
6	15.59	30.12	22.12	87.0	8.38	6.07				
7	15.77	30.32	22.23	88.0	8.38	6.05				
8	15.69	30.32	22.25	87.6	8.38	6.04				
9	15.85	30.52	22.37	88.7	8.37	6.04				
10	15.90	30.56	22.39	89.0	8.37	6.01	.94	3.74	.00	.56
11	15.93	30.60	22.41	89.5	8.37	5.98				
12	15.92	30.58	22.40	89.7	8.37	5.95				
13	16.25	30.99	22.64	89.5	8.35	5.92				
14	16.60	31.26	22.76	90.3	8.33	5.84				
15	16.57	31.68	23.09	90.3	8.29	5.72				
16	16.61	31.99	23.32	89.8	8.26	5.61				
17	16.60	32.06	23.38	89.3	8.25	5.39				
18	16.59	32.12	23.42	88.8	8.26	5.18				
19	16.60	32.14	23.44	88.6	8.27	5.04				
20	16.59	32.15	23.45	88.0	8.27	4.93				
21	16.59	32.15	23.44	88.2	8.27	4.82				
22	16.59	32.15	23.45	87.6	8.27	4.73				
23	16.59	32.15	23.44	87.6	8.27	4.67				
24	16.59	32.14	23.44	87.7	8.27	4.62	.40	1.65	3.13	1.27
25	16.58	32.14	23.44	87.7	8.28	4.59				

KELEZ CRUISE XWCC-16 STATION 15 10/12/77

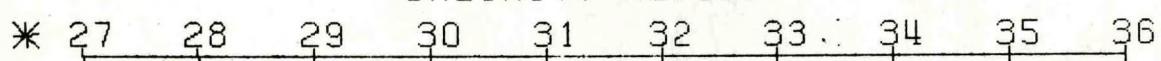
TRANSMISSIVITY (0/0)



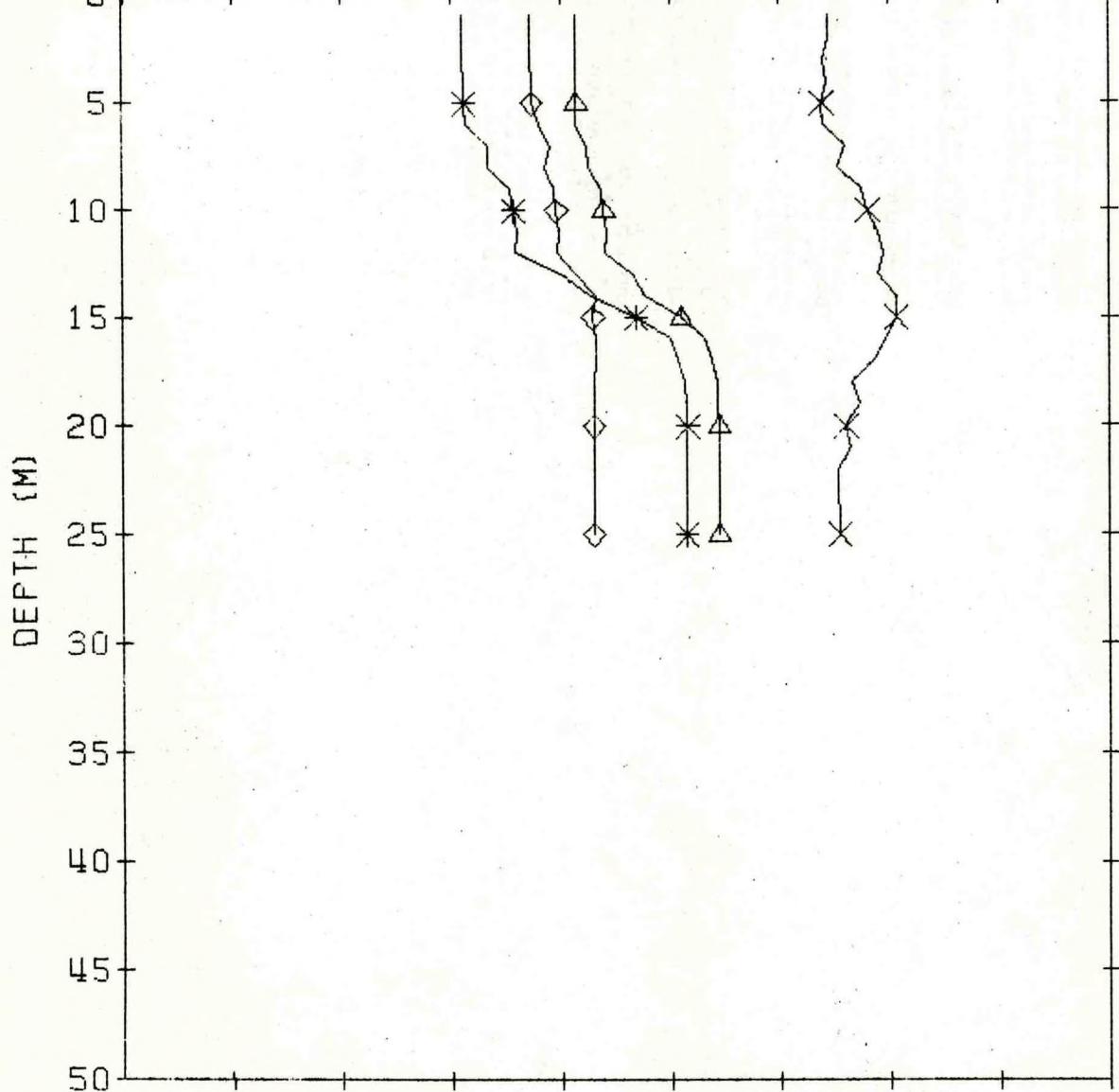
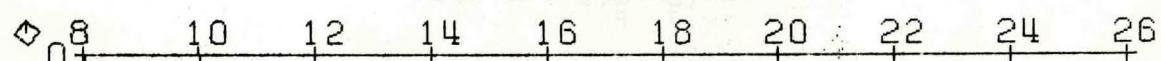
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

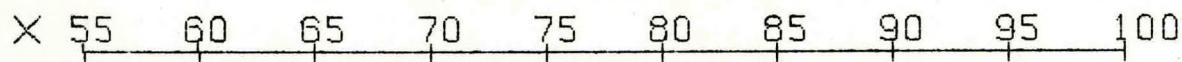


XWCC-16 STA.017 LAT 40 18.0N; LONG 73 50.6W GMT 02.0 10/12/77  
 DEPTH 25 AIR D/W 61.1/38.9 BARO 18.0 VIS 7 CLD TYP/CVR 4/2  
 WETHR 1 WIND DIR/SPD 18/12 SEA DIR/HT 18/ SWELL DIR/HT 15/1

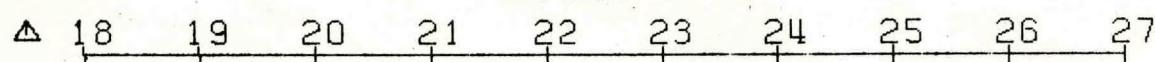
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	S103	P04
1	16.53	31.23	22.76	90.6	8.35	5.50				
2	16.53	31.23	22.75	90.6	8.35	5.50	.56	1.34	.00	.94
3	16.50	31.23	22.76	90.5	8.35	5.49				
4	16.51	31.23	22.76	90.8	8.35	5.49				
5	16.50	31.22	22.76	90.2	8.35	5.49				
6	16.50	31.22	22.76	90.9	8.34	5.50				
7	16.50	31.22	22.76	91.1	8.35	5.51				
8	16.50	31.22	22.76	89.6	8.34	5.51	.56	1.39	.00	.59
9	16.49	31.22	22.76	90.0	8.34	5.50				
10	16.49	31.22	22.76	90.9	8.35	5.50				
11	16.49	31.22	22.76	90.7	8.34	5.50				
12	16.50	31.23	22.76	90.8	8.34	5.50				
13	16.52	31.25	22.77	90.7	8.35	5.50				
14	16.50	31.27	22.80	90.7	8.36	5.50				
15	16.48	31.28	22.80	90.9	8.36	5.51				
16	16.48	31.30	22.82	91.1	8.37	5.52				
17	16.75	31.61	23.00	90.3	8.33	5.53				
18	16.75	31.69	23.06	90.7	8.34	5.41				
19	16.78	31.91	23.22	89.9	8.33	5.33				
20	16.72	31.96	23.27	88.8	8.32	5.25				
21	16.47	31.99	23.36	89.5	8.31	5.17				
22	15.94	32.14	23.58	88.8	8.36	5.11				
23	15.24	32.29	23.85	88.4	8.31	5.03	.36	2.10	.00	.94

KELEZ CRUISE XWCC-16 STATION 17 10/12/77

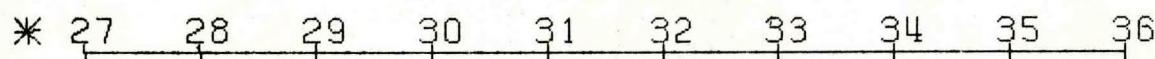
TRANSMISSIVITY (0/0)



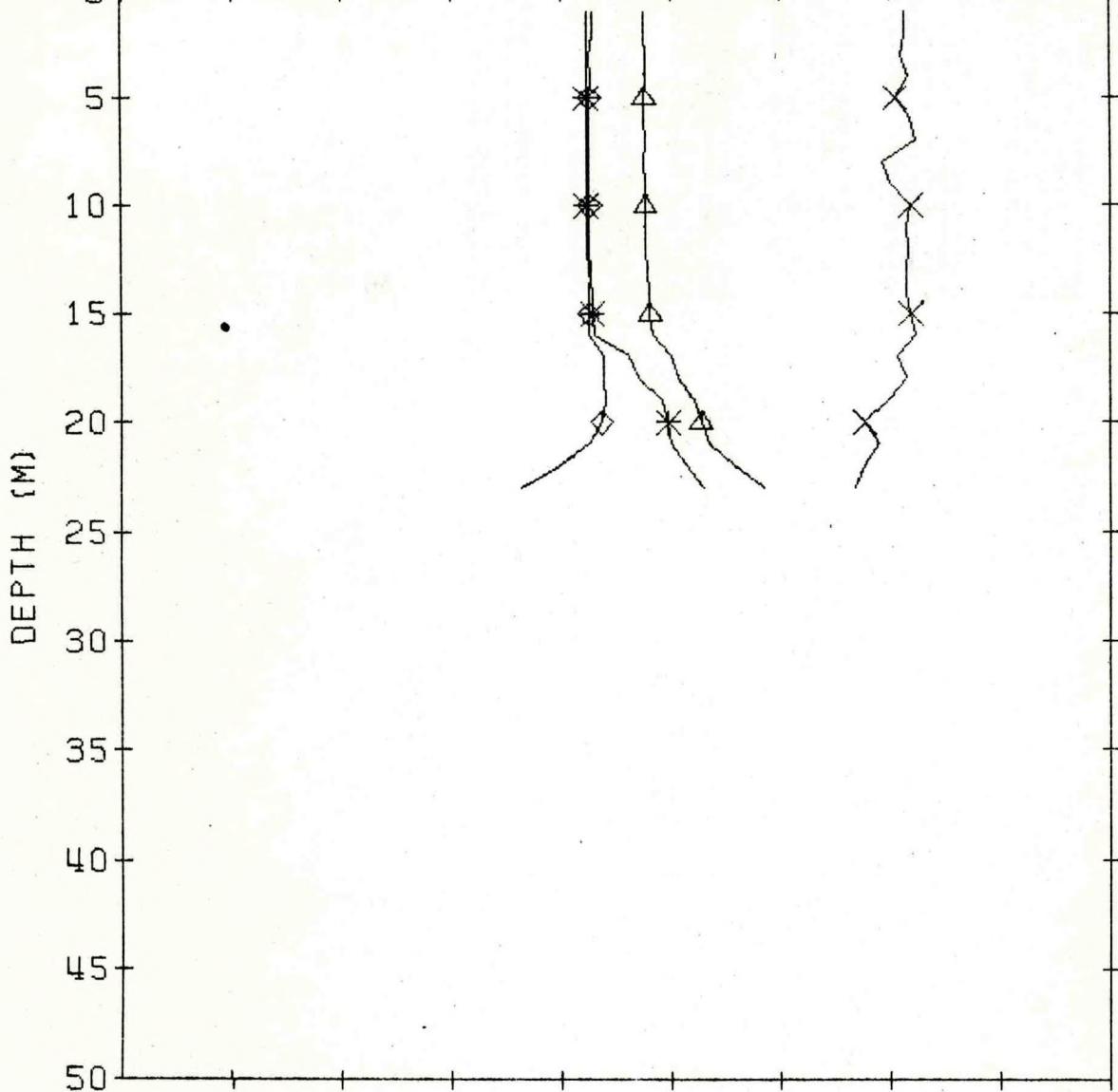
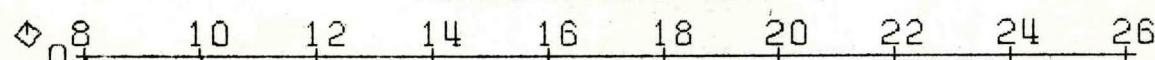
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

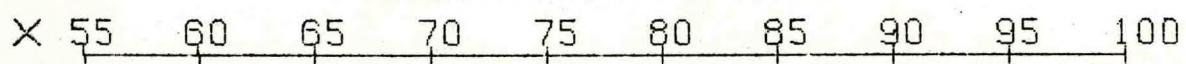


XWCC-16 STA.019 LAT 40 20.3N; LONG 73 38.3W GMT 09.5 10/12/77  
 DEPTH 27 AIR D/W 66.7/50.0 BARO 15.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 00/00 SEA DIR/HT 00/0 SWELL DIR/HT 18/0

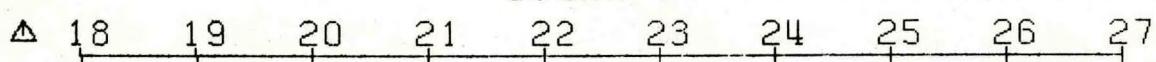
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.31	31.06	22.68	89.6	8.43	6.06				
2	16.31	31.06	22.68	89.6	8.43	6.06				
3	16.31	31.06	22.68	89.4	8.41	6.07				
4	16.31	31.07	22.68	89.5	8.41	6.07				
5	16.31	31.07	22.68	89.7	8.41	6.06				
6	16.32	31.07	22.68	89.6	8.41	6.06				
7	16.33	31.07	22.68	89.1	8.41	6.05				
8	16.35	31.07	22.68	89.9	8.41	6.05				
9	16.37	31.10	22.69	88.8	8.40	6.05				
10	16.39	31.10	22.69	89.5	8.40	6.02				
11	16.36	31.11	22.70	89.8	8.41	6.00				
12	16.38	31.12	22.70	89.6	8.40	5.99				
13	16.46	31.21	22.76	89.7	8.39	6.00				
14	16.63	31.34	22.82	89.4	8.34	5.93				
15	16.70	31.45	22.89	89.7	8.31	5.86				
16	16.77	31.53	22.93	89.1	8.29	5.74				
17	16.80	31.57	22.95	89.3	8.27	5.54				
18	16.82	31.60	22.97	89.1	8.26	5.35				
19	16.84	31.63	22.99	88.9	8.25	5.20				
20	16.87	31.71	23.05	88.7	8.24	5.07				
21	16.83	31.78	23.11	88.8	8.24	4.95				
22	16.74	31.88	23.21	88.9	8.27	4.84				
23	16.65	31.98	23.30	88.6	8.26	4.78				
24	16.59	32.05	23.37	87.2	8.26	4.74				
25	16.56	32.07	23.40	86.3	8.26	4.68				
							.68	2.00	.00	.41
							.67	2.09	1.41	.99
							.38	2.59	1.09	.88

KELEZ CRUISE XWCC-16 STATION 19 10/12/77

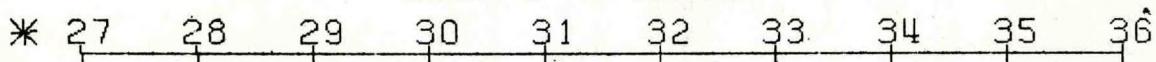
TRANSMISSIVITY (0/0)



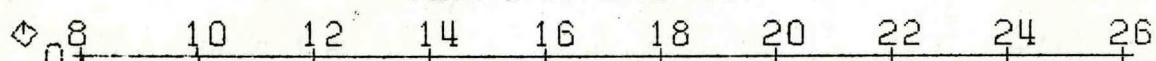
SIGMA-T



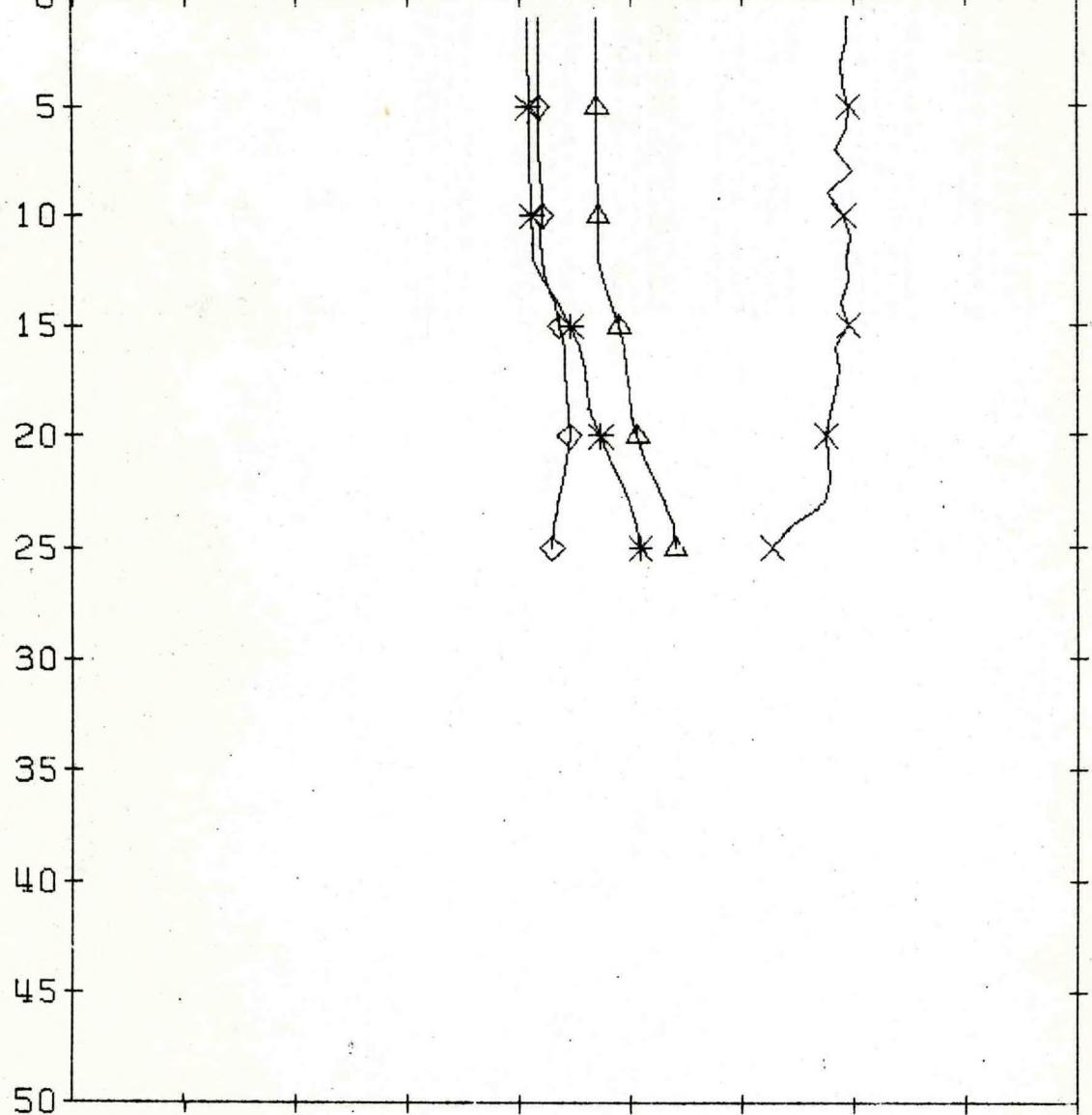
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

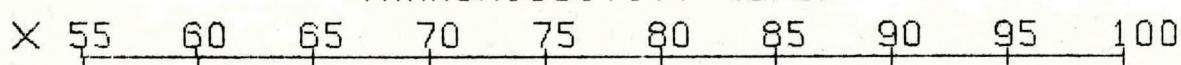


XWCC-16 STA.021 LAT 40 13.5N; LONG 73 56.0W GMT 03.2 10/12/77  
 DEPTH 19 AIR D/W 66.7/44.4 BARO 18.0 VIS 7 CLD TYP/CVR 4/6  
 WETHR 1 WIND DIR/SPD 20/06 SEA DIR/HT 20/0 SWELL DIR/HT 19/1

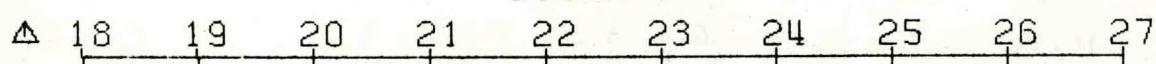
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.62	31.36	22.84	86.9	8.29	5.00				
2	16.62	31.36	22.83	86.9	8.29	5.00	.67	1.48	2.28	.99
3	16.58	31.37	22.85	87.0	8.26	4.98				
4	16.62	31.39	22.86	86.9	8.27	4.98				
5	16.65	31.43	22.88	87.0	8.26	4.97				
6	16.72	31.51	22.93	87.5	8.27	4.97				
7	16.75	31.55	22.95	88.8	8.28	4.97				
8	16.71	31.55	22.96	89.0	8.28	4.98				
9	16.71	31.55	22.96	89.0	8.29	4.99				
10	16.71	31.56	22.97	89.1	8.28	5.00	.52	.89	1.21	.82
11	16.71	31.57	22.97	88.9	8.28	5.00				
12	16.71	31.58	22.98	88.9	8.27	5.00				
13	16.70	31.63	23.02	88.4	8.26	4.98				
14	16.69	31.65	23.04	88.2	8.26	4.93				
15	16.68	31.65	23.05	88.0	8.25	4.86				
16	16.63	31.67	23.07	87.7	8.25	4.81				
17	16.57	31.75	23.14	86.3	8.33	4.77				
18	16.60	31.87	23.23	82.8	8.34	4.65	.75	2.22	6.30	1.54

KELEZ CRUISE XWCC-16 STATION 21 10/12/77

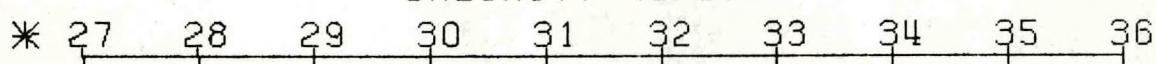
TRANSMISSIVITY (0/0)



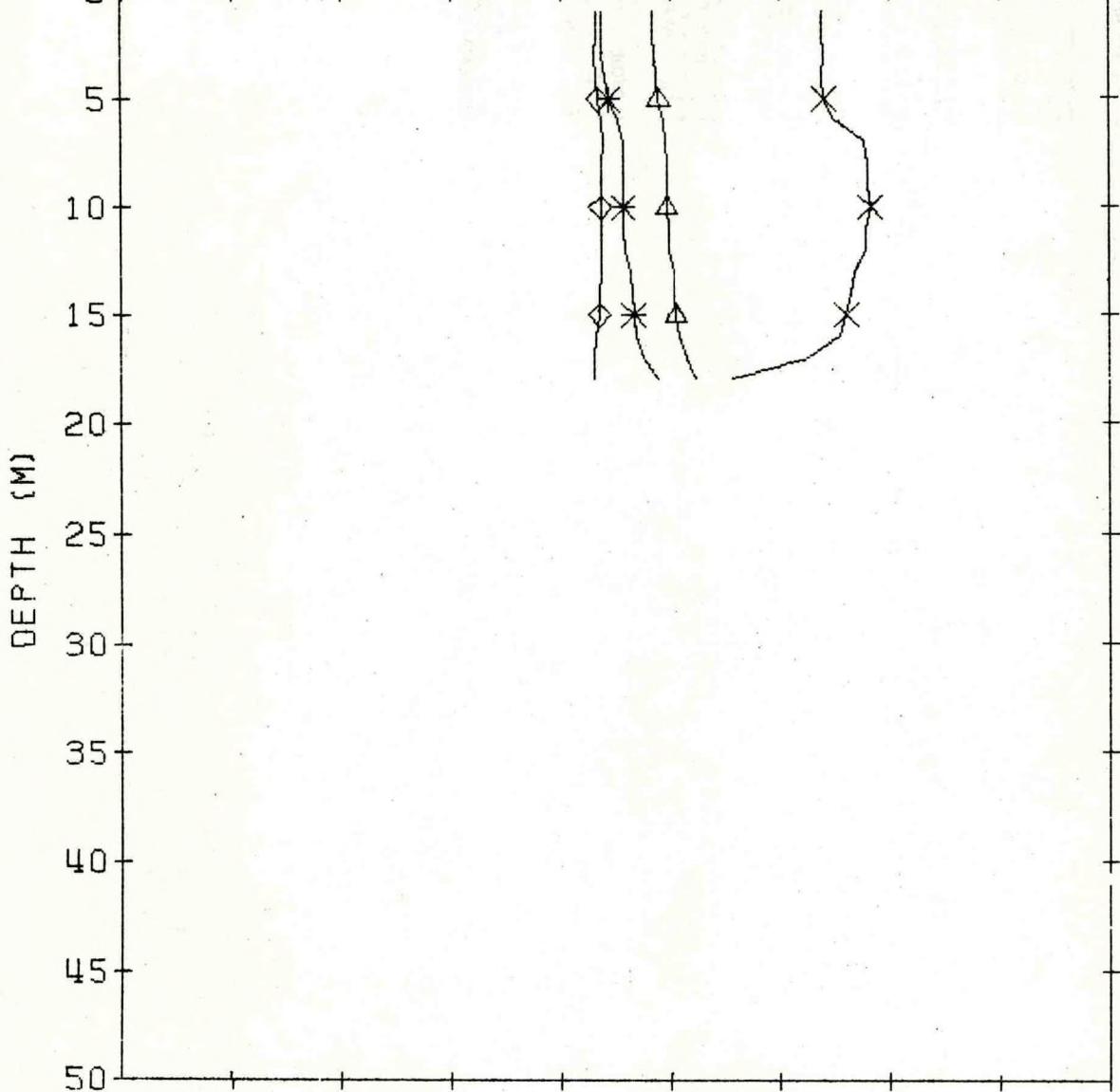
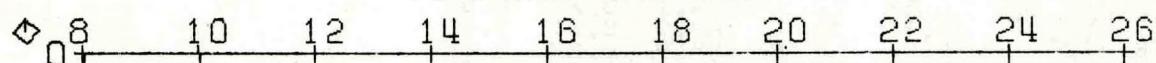
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

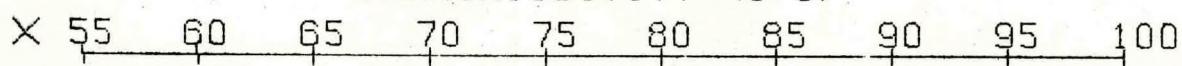


XWCC-16 STA.023 LAT 40 14.8N; LONG 73 43.5W GMT 08.3 10/12/77  
 DEPTH 30 AIR D/W 66.7/44.4 BARO 15.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 31/02 SEA DIR/HT 00/0 SWELL DIR/HT 17/0

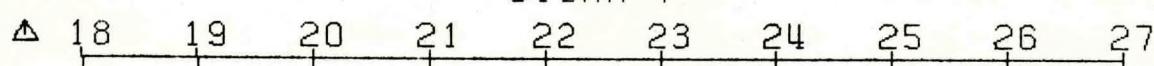
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.43	31.44	22.94	89.1	8.42	5.84				
2	16.43	31.44	22.94	89.1	8.42	5.84	.49	1.50	.00	.39
3	16.44	31.45	22.95	89.4	8.40	5.97				
4	16.45	31.46	22.95	89.5	8.39	5.98				
5	16.48	31.50	22.97	89.6	8.40	5.98				
6	16.48	31.51	22.99	89.6	8.39	5.98				
7	16.47	31.52	22.99	89.7	8.39	5.96				
8	16.50	31.54	23.00	89.7	8.39	5.96				
9	16.51	31.56	23.01	89.9	8.39	5.95				
10	16.51	31.56	23.02	89.9	8.40	5.94				
11	16.51	31.56	23.02	89.8	8.39	5.92	.43	1.41	.00	.41
12	16.52	31.57	23.02	89.9	8.39	5.91				
13	16.52	31.57	23.02	89.9	8.39	5.91				
14	16.52	31.57	23.02	89.8	8.39	5.90				
15	16.52	31.58	23.02	90.1	8.39	5.90				
16	16.51	31.58	23.03	89.8	8.39	5.89				
17	16.50	31.58	23.03	90.2	8.39	5.88				
18	16.51	31.60	23.04	90.2	8.39	5.86				
19	16.53	31.62	23.05	90.3	8.39	5.84				
20	16.52	31.62	23.05	90.6	8.39	5.81	.41	1.28	.00	.49
21	16.59	31.69	23.10	90.5	8.39	5.80				
22	16.76	31.84	23.17	91.1	8.40	5.77				
23	16.78	31.85	23.18	91.1	8.40	5.75				
24	16.80	31.87	23.19	91.2	8.40	5.76				
25	16.81	31.87	23.19	91.2	8.40	5.76				
26	16.80	31.88	23.19	91.3	8.40	5.76				
27	16.81	31.88	23.19	91.3	8.40	5.76				
28	16.80	31.89	23.20	91.2	8.39	5.76				
29	16.77	31.92	23.23	91.2	8.39	5.65	.14	.48	.00	.39
30	16.54	32.32	23.59	90.7	8.35	5.65				

KELEZ CRUISE XWCC-16 STATION 23 10/12/77

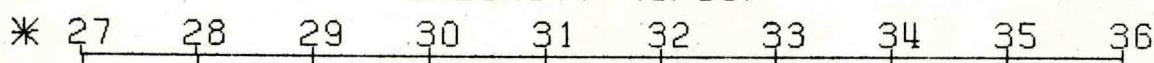
TRANSMISSIVITY (0/0)



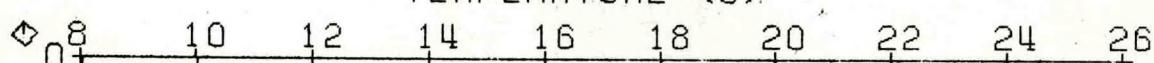
SIGMA-T



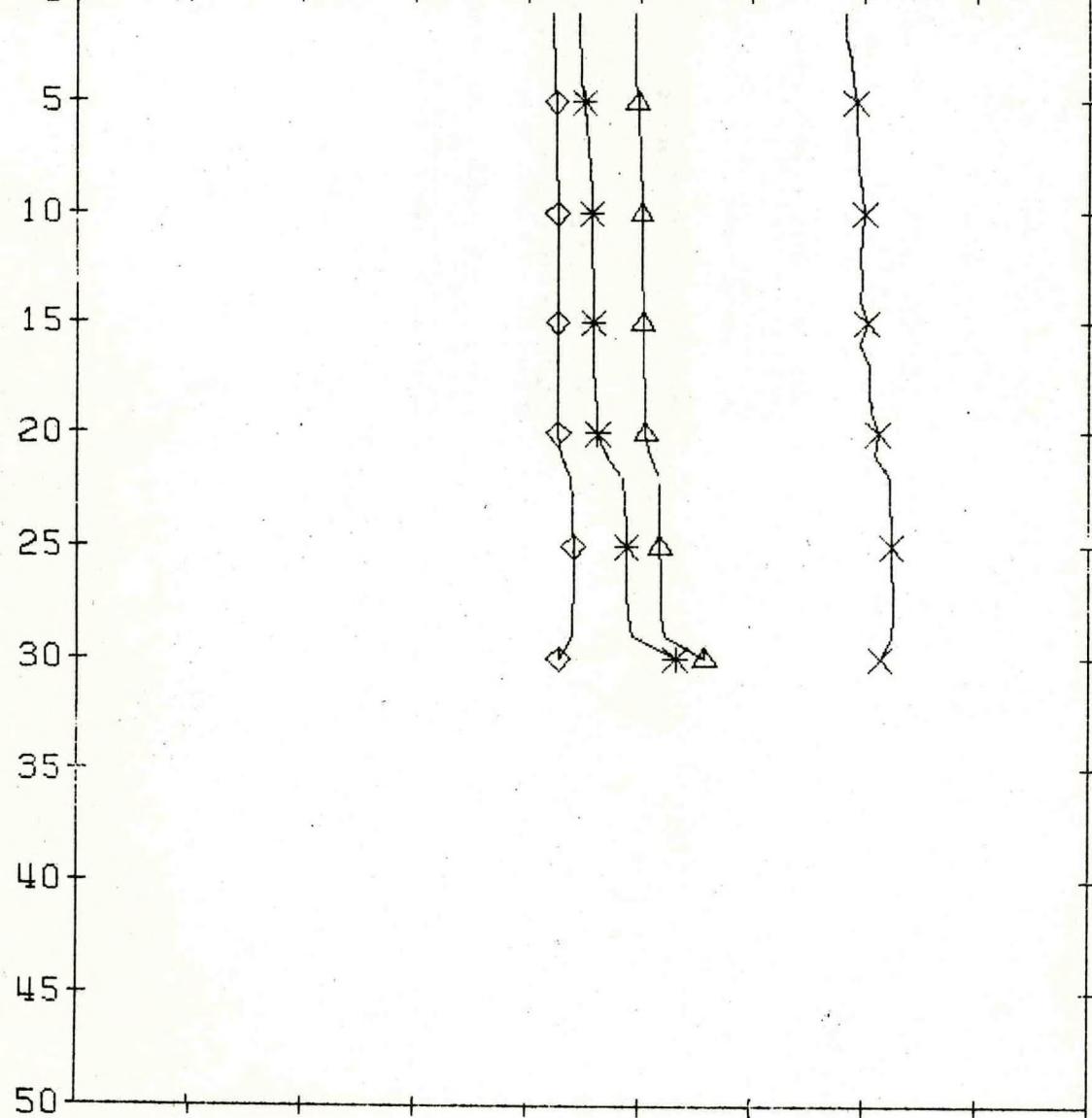
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

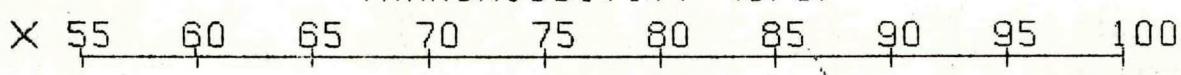


XWCC-16 STA.025 LAT 40 16.2N; LONG 73 28.4W GMT 16.4 10/12/77  
 DEPTH 34 AIR D/W 38.9/11.1 BARO 15.0 VIS 7 CLD TYP/CVR 8/6  
 WETHR 1 WIND DIR/SPD 29/20 SEA DIR/HT 29/2 SWELL DIR/HT 30/2

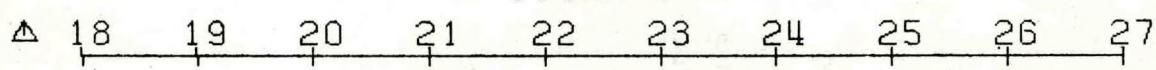
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.43	32.03	23.39	88.9	8.45	5.90				
2	16.42	32.03	23.39	88.9	8.45	5.90	.10	.31	.00	.23
3	16.44	32.05	23.40	89.6	8.45	5.95				
4	16.43	32.05	23.41	89.9	8.43	5.95				
5	16.45	32.05	23.41	89.8	8.43	5.95				
6	16.43	32.05	23.40	89.9	8.42	5.95				
7	16.43	32.05	23.41	89.8	8.43	5.95				
8	16.43	32.05	23.41	89.9	8.43	5.95				
9	16.44	32.05	23.41	89.8	8.43	5.95				
10	16.46	32.07	23.42	89.9	8.42	5.94	.10	.33	.00	.24
11	16.45	32.07	23.42	90.0	8.43	5.93				
12	16.46	32.09	23.43	90.2	8.43	5.93				
13	16.52	32.14	23.45	90.0	8.42	5.89				
14	16.58	32.27	23.54	90.7	8.42	5.86				
15	16.56	32.29	23.56	90.7	8.41	5.82				
16	16.51	32.29	23.57	90.8	8.42	5.80				
17	16.51	32.31	23.58	90.7	8.42	5.79				
18	16.55	32.33	23.60	90.9	8.41	5.76				
19	16.72	32.44	23.64	90.6	8.42	5.70	.07	.61	.00	.22
20	16.77	32.46	23.64	91.3	8.42	5.67				
21	16.63	32.50	23.71	91.2	8.40	5.66				
22	16.56	32.67	23.85	91.4	8.39	5.61				
23	16.54	32.81	23.96	91.3	8.40	5.59				
24	16.52	32.89	24.03	91.1	8.40	5.56				
25	16.51	32.90	24.04	91.2	8.40	5.54				
26	16.42	32.91	24.07	91.4	8.40	5.52				
27	15.84	32.88	24.18	91.1	8.36	5.42				
28	15.68	32.82	24.17	90.9	8.32	5.42				
29	15.51	32.81	24.20	90.7	8.41	5.21				
30	14.87	32.77	24.31	90.4	8.35	5.05				
31	13.65	32.73	24.53	87.8	8.20	4.89				
32	13.37	32.69	24.55	87.2	8.15	4.89				

KELEZ CRUISE XWCC-16 STATION 25 10/12/77

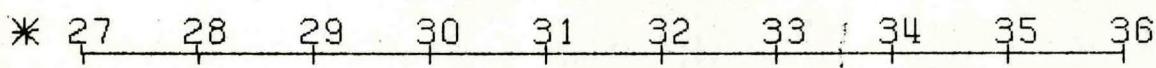
TRANSMISSIVITY (0/0)



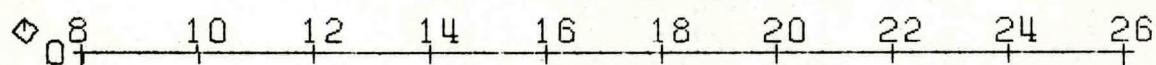
SIGMA-T



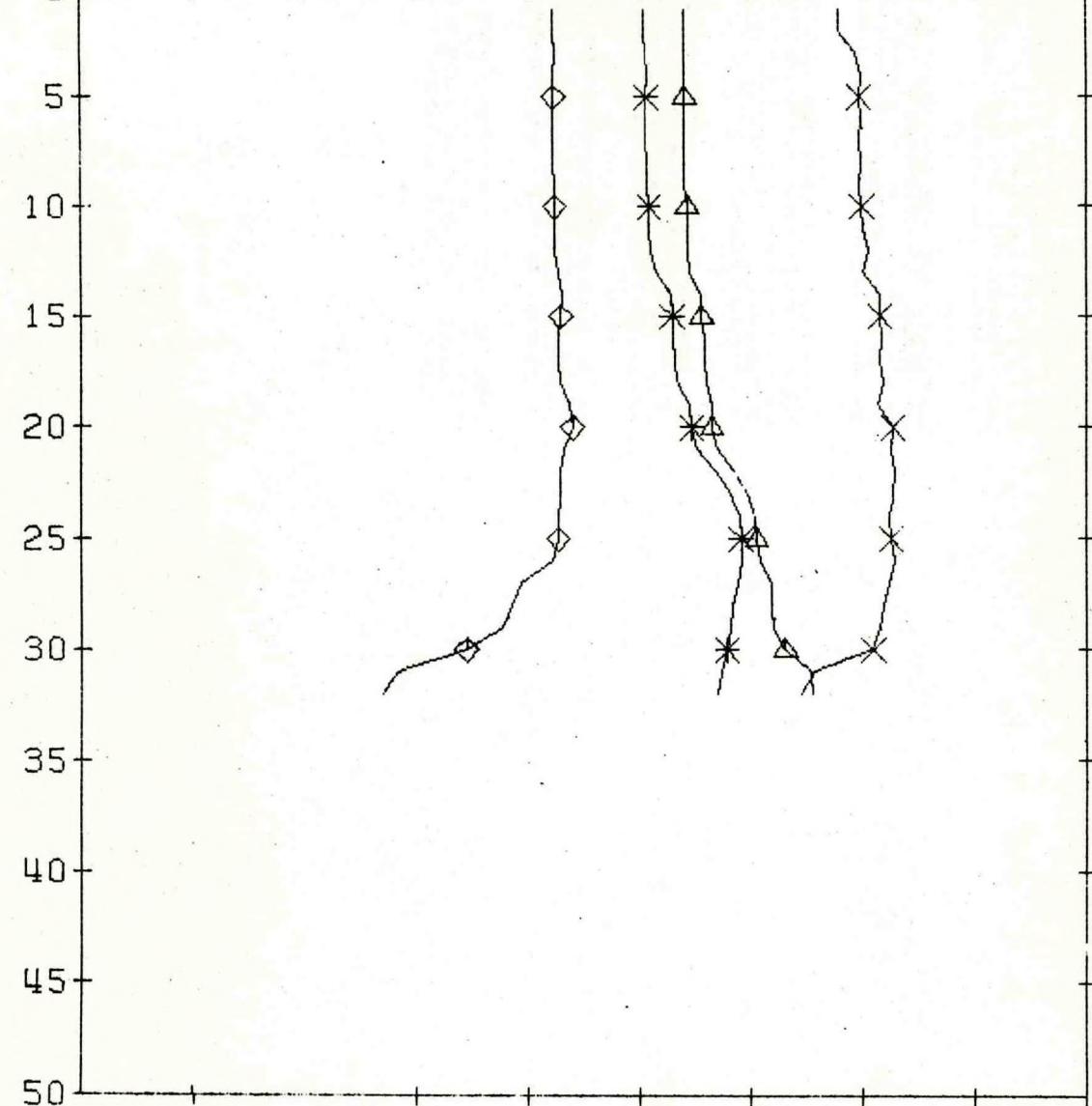
SALINITY (0/00)



TEMPERATURE (C)



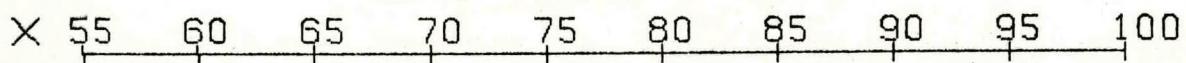
DEPTH (M)



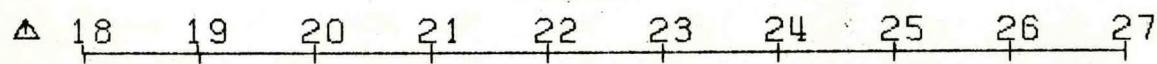
XWCC-16 STA.026 LAT 40 29.0N; LONG 73 59.5W GMT 14.2 10/11/77  
 DEPTH 11 AIR D/W 55.6/27.8 BARO 22.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 16/10 SEA DIR/HT 06/1 SWELL DIR/HT 07/1  
 DEP TEMP SAL SIGT TRAN PH 02 N02 N03 SI03 P04  
 1 15.06 24.73 18.10 76.9 8.09 4.82 3.14 20.13 16.36 2.14  
 2 15.06 24.73 18.10 76.9 8.09 4.82  
 3 15.08 24.72 18.09 76.8 8.06 4.80  
 4 15.08 24.77 18.13 76.7 8.05 4.80  
 5 15.08 24.85 18.19 76.5 8.06 4.80  
 6 15.05 25.25 18.50 75.7 8.08 4.81  
 7 15.04 25.26 18.51 75.6 8.08 4.82  
 8 15.04 25.45 18.65 74.9 8.09 4.84  
 9 15.03 25.52 18.71 75.4 8.25 4.85 3.10 19.19 16.42 2.04  
 10 15.03 25.52 18.71 75.4 8.26 4.86

KELEZ CRUISE XWCC-16 STATION 26 10/11/77

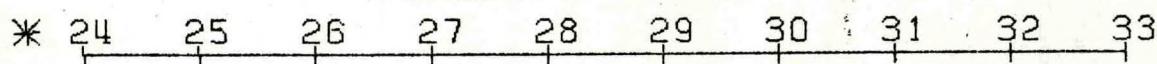
TRANSMISSIVITY (0/0)



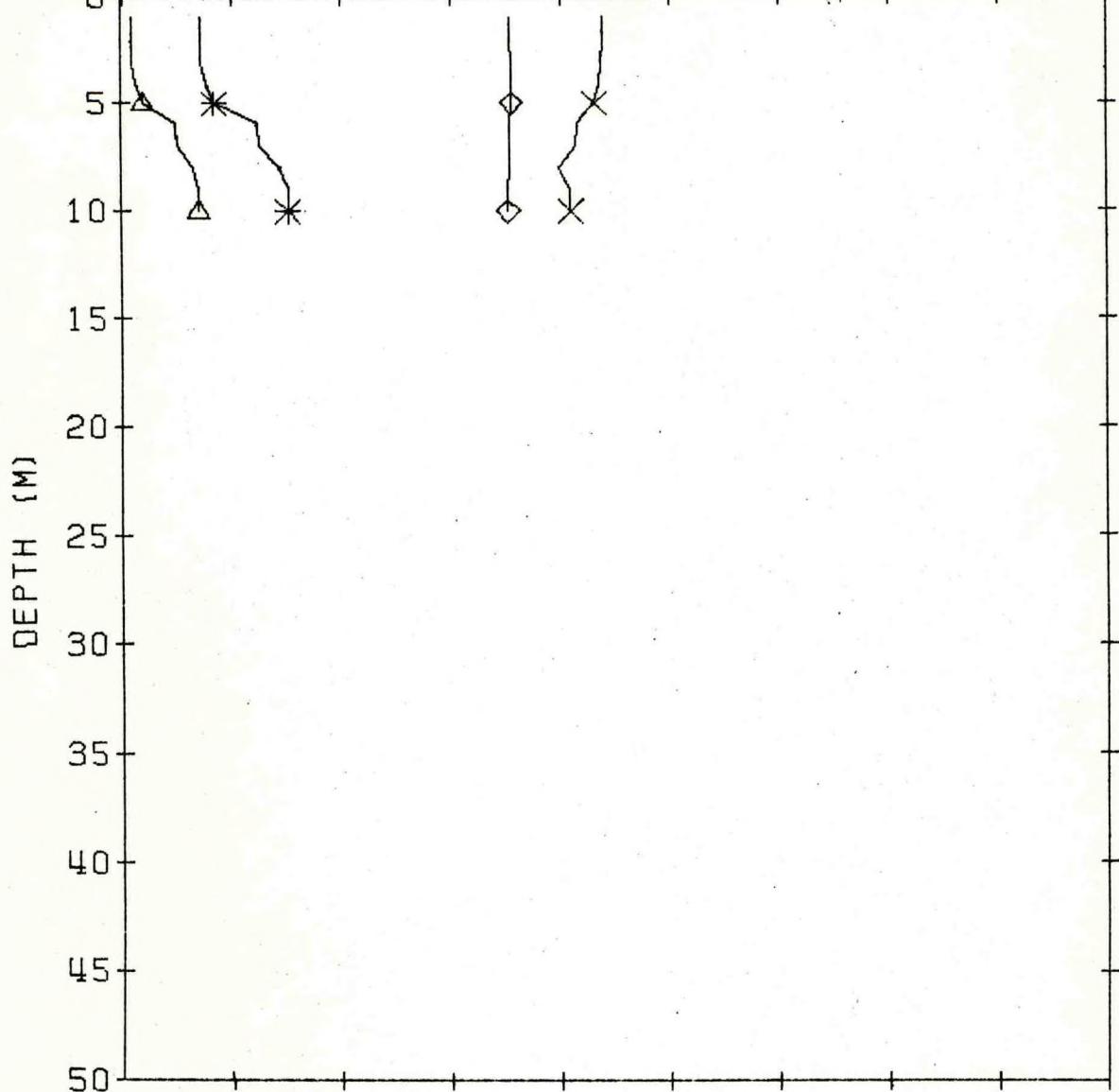
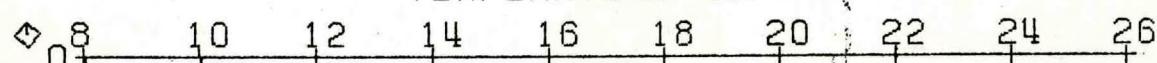
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

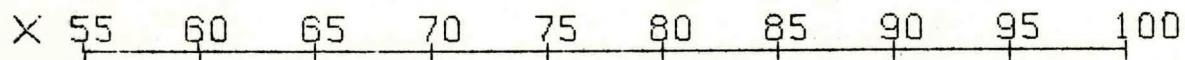


XWCC-16 STA.027 LAT 40 18.0N; LONG 73 17.5W GMT 15.1 10/12/77  
 DEPTH 34 AIR D/W 50.0/38.9 BARO 15.0 VIS 6 CLD TYP/CVR 6/8  
 WETHR 2 WIND DIR/SPD 29/10 SEA DIR/HT 28/0 SWELL DIR/HT 11/1

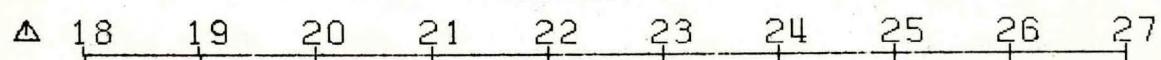
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.54	32.08	23.40	90.4	8.42	5.90				
2	16.54	32.08	23.40	90.4	8.42	5.90				
3	16.54	32.08	23.40	89.0	8.43	5.91				
4	16.54	32.08	23.40	87.8	8.43	5.90				
5	16.54	32.08	23.40	88.1	8.43	5.90				
6	16.54	32.08	23.41	88.5	8.43	5.90				
7	16.55	32.08	23.40	90.7	8.43	5.90				
8	16.54	32.08	23.40	88.1	8.42	5.90				
9	16.54	32.07	23.40	86.5	8.43	5.90				
10	16.54	32.08	23.40	87.2	8.43	5.90	.07	.34	.00	.26
11	16.54	32.08	23.40	87.1	8.43	5.90				
12	16.54	32.08	23.40	86.1	8.43	5.89				
13	16.55	32.08	23.40	86.1	8.43	5.89				
14	16.55	32.09	23.41	86.0	8.43	5.89				
15	16.56	32.09	23.41	85.4	8.43	5.88				
16	16.57	32.10	23.42	85.5	8.43	5.88				
17	16.58	32.11	23.42	85.3	8.42	5.87				
18	16.67	32.21	23.47	85.3	8.42	5.87				
19	16.73	32.25	23.49	88.0	8.41	5.82				
20	16.72	32.26	23.50	90.4	8.41	5.77	.10	.33	.00	.25
21	16.72	32.27	23.51	90.2	8.41	5.73				
22	16.72	32.29	23.53	90.3	8.41	5.70				
23	16.72	32.31	23.54	90.2	8.41	5.68				
24	16.72	32.32	23.54	90.2	8.41	5.67				
25	16.71	32.32	23.54	89.4	8.41	5.66				
26	16.71	32.33	23.55	89.3	8.41	5.64				
27	16.71	32.33	23.56	89.7	8.41	5.64				
28	16.71	32.33	23.56	90.2	8.41	5.63				
29	16.68	32.37	23.59	90.5	8.41	5.63				
30	16.17	32.43	23.75	90.7	8.35	5.64				
31	15.94	32.48	23.85	90.4	8.20	5.55				
32	15.39	32.52	24.00	89.5	8.17	5.36	.26	.47	1.77	.68
33	14.74	32.65	24.24	89.5	8.15	5.36				

KELEZ CRUISE XWCC-16 STATION 27 10/12/77

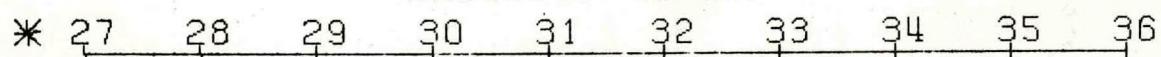
TRANSMISSIVITY (0/0)



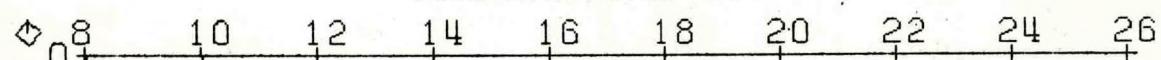
SIGMA-T



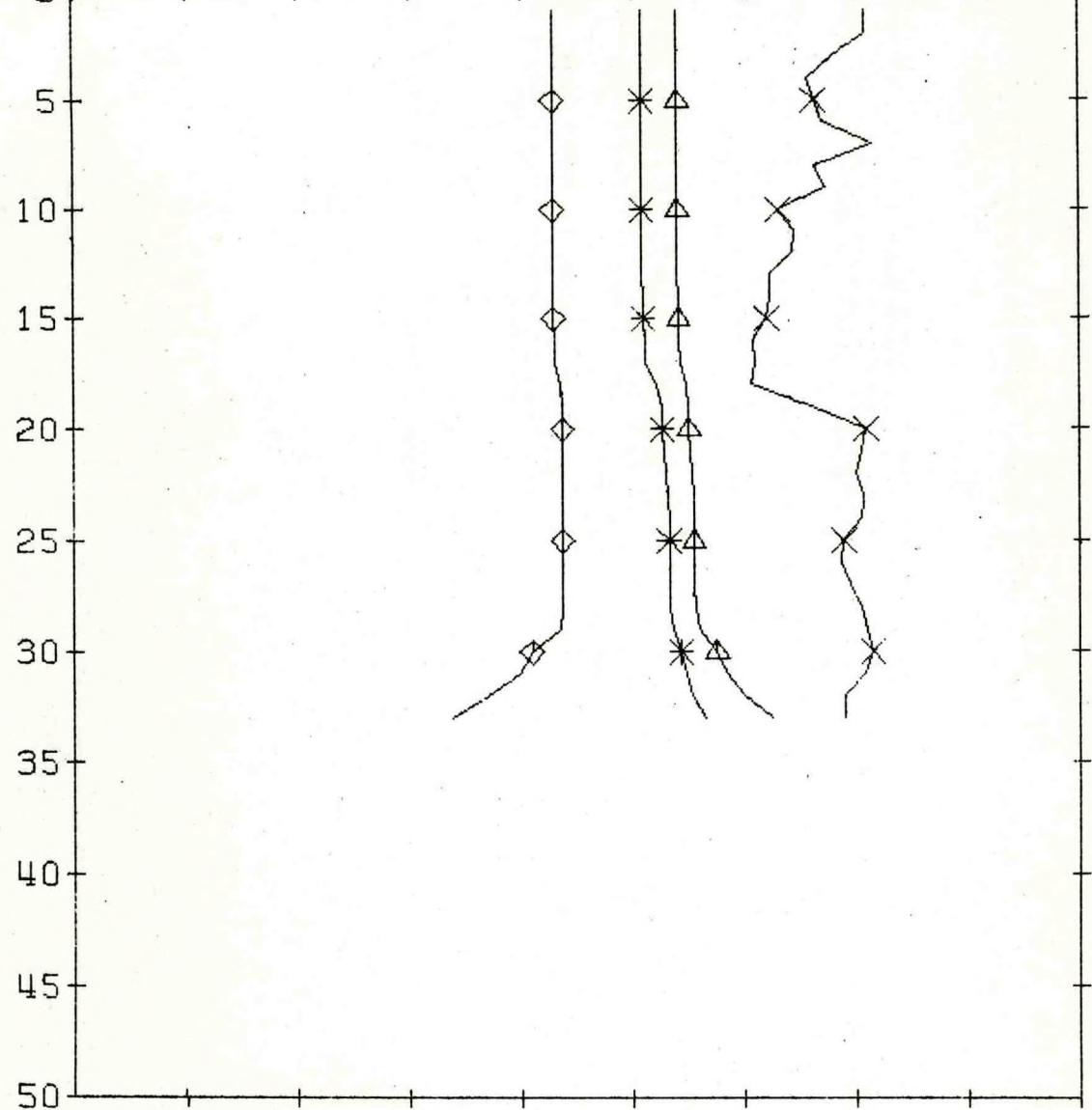
SALINITY (0/0)



TEMPERATURE (C)



DEPTH (M)

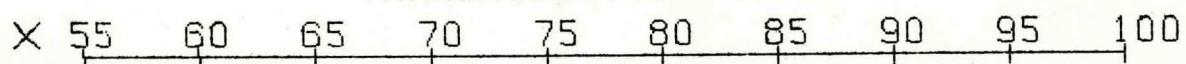


XWCC-16 STA.028 LAT 40 13.5N; LONG 73 7.0W GMT 23.2 10/13/77  
 DEPTH 43 AIR D/W 33.3/02.8 BARO 20.0 VIS 7 CLD TYP/CVR X/9  
 WETHR WIND DIR/SPD 05/20 SEA DIR/HT 05/1 SWELL DIR/HT 06/2

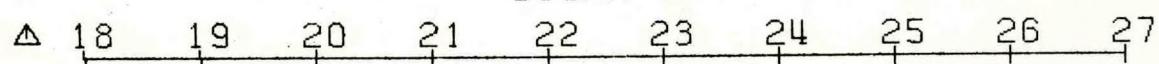
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.17	32.50	23.81	90.3	8.43	5.77				
2	16.17	32.50	23.81	90.3	8.43	5.77	.00	.11	.00	.25
3	16.17	32.50	23.81	90.3	8.42	5.77				
4	16.16	32.50	23.81	90.3	8.42	5.76				
5	16.16	32.50	23.81	90.2	8.42	5.76				
6	16.16	32.49	23.81	90.2	8.43	5.75				
7	16.17	32.50	23.81	90.2	8.42	5.74				
8	16.16	32.50	23.81	90.2	8.42	5.74				
9	16.16	32.50	23.81	90.2	8.43	5.75				
10	16.16	32.49	23.81	90.1	8.42	5.75	.00	.00	.00	.20
11	16.17	32.49	23.81	90.1	8.43	5.75				
12	16.17	32.49	23.81	90.1	8.42	5.75				
13	16.17	32.50	23.81	90.0	8.42	5.74				
14	16.17	32.49	23.81	90.1	8.42	5.73				
15	16.17	32.49	23.80	90.1	8.42	5.73				
16	16.17	32.50	23.81	90.1	8.42	5.73				
17	16.18	32.49	23.80	90.0	8.42	5.73				
18	16.18	32.50	23.80	90.1	8.43	5.72				
19	16.19	32.50	23.80	90.1	8.43	5.72				
20	16.18	32.50	23.81	90.1	8.42	5.72	.00	.03	.00	.20
21	16.18	32.49	23.80	90.1	8.42	5.72				
22	16.20	32.50	23.81	90.1	8.42	5.72				
23	16.20	32.51	23.81	90.2	8.42	5.72				
24	16.21	32.51	23.81	90.2	8.42	5.71				
25	16.22	32.51	23.81	90.2	8.42	5.70				
26	16.23	32.52	23.81	90.3	8.41	5.69				
27	16.26	32.58	23.86	90.6	8.39	5.66				
28	16.29	32.71	23.94	90.6	8.37	5.64				
29	15.60	32.76	24.14	91.0	8.32	5.62				
30	15.07	32.82	24.30	91.0	8.27	5.55				
31	13.38	32.86	24.68	90.9	8.19	5.51				
32	11.74	33.01	25.12	90.4	8.14	5.24				
33	11.56	33.03	25.16	89.9	8.10	4.86				
34	11.54	33.02	25.16	89.8	8.11	4.57				
35	11.53	33.02	25.16	89.7	8.11	4.39				
36	11.53	33.02	25.16	89.8	8.11	4.24				
37	11.53	33.02	25.16	89.9	8.11	4.13				
38	11.52	33.02	25.16	89.8	8.11	4.06				
39	11.52	33.02	25.16	89.8	8.11	4.00				
40	11.53	33.02	25.16	89.8	8.11	3.93				
41	11.53	33.02	25.16	90.0	8.11	3.88	.14	4.09	10.73	1.02
42	11.52	33.02	25.16							

KELEZ CRUISE XWCC-16 STATION 28 10/13/77

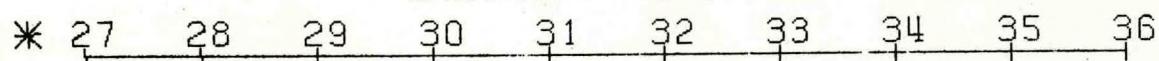
TRANSMISSIVITY (0/0)



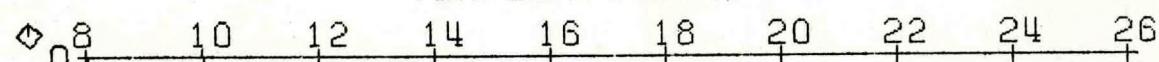
SIGMA-T



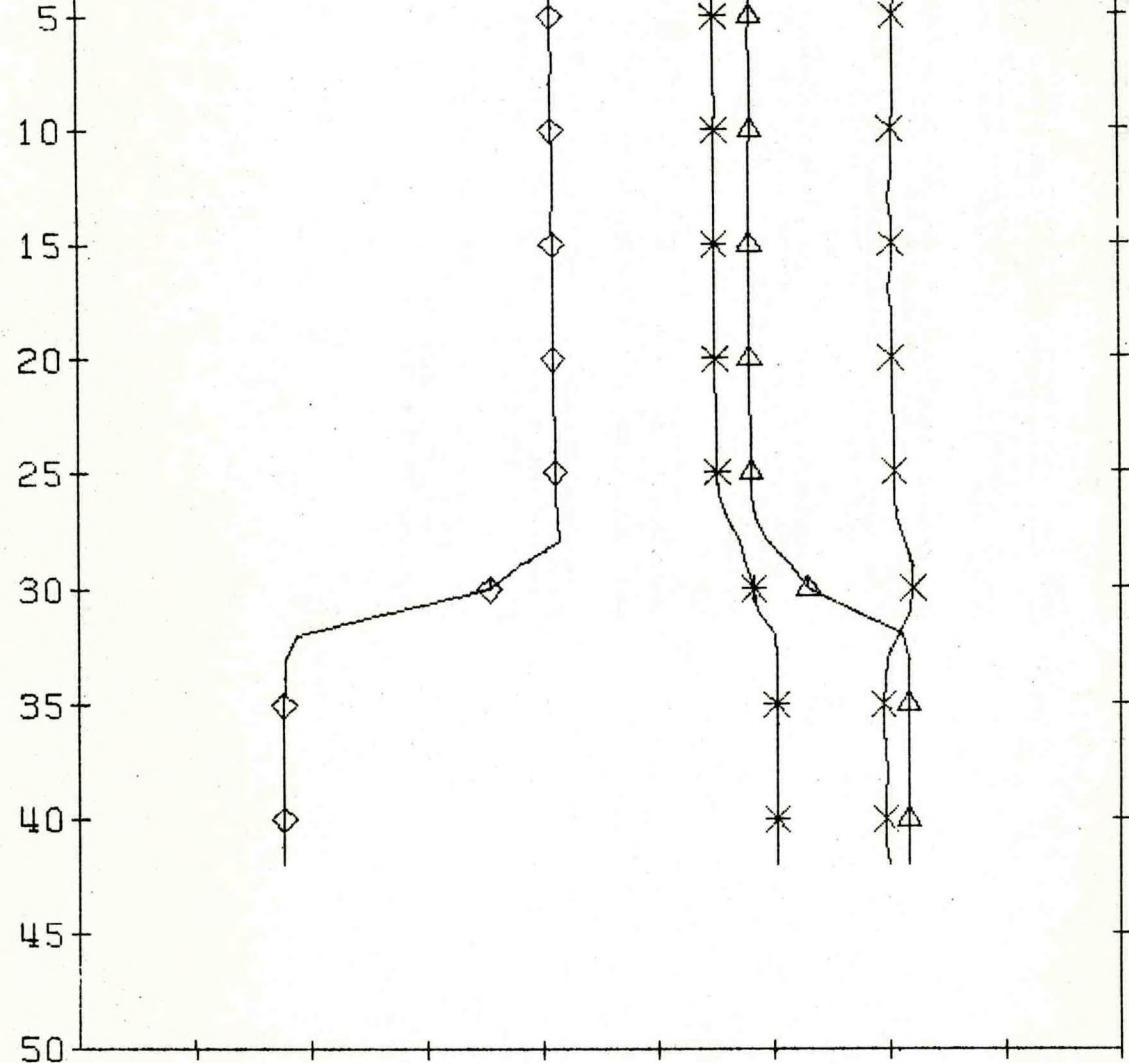
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

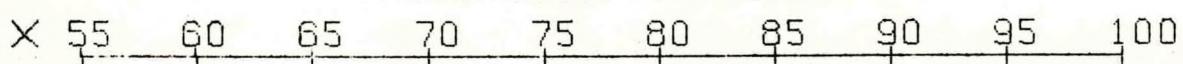


XWCC-16 STA.031 LAT 39 53.7N; LONG 72 24.5W GMT 05.1 10/19/77  
 DEPTH 73 AIR D/W 38.9/11.1 BARO 14.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 17/08 SEA DIR/HT 17/0 SWELL DIR/HT 24/1

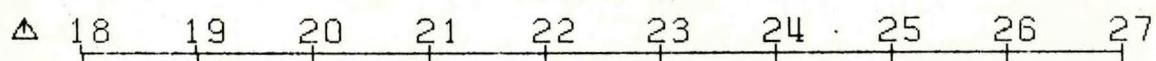
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	12.71	33.45	25.27	87.4	8.40	5.93				
2	12.71	33.45	25.27	87.4	8.40	5.93	.04	1.03	.96	.75
3	12.70	33.45	25.27	88.2	8.40	5.86				
4	12.70	33.45	25.28	88.2	8.40	5.86				
5	12.71	33.45	25.27	88.2	8.40	5.87				
6	12.71	33.45	25.27	88.1	8.40	5.86				
7	12.71	33.45	25.27	88.2	8.40	5.87				
8	12.71	33.45	25.27	88.1	8.39	5.86				
9	12.71	33.45	25.27	88.0	8.40	5.86	.07	1.01	.91	.19
10	12.71	33.45	25.28	88.1	8.40	5.86				
11	12.71	33.46	25.28	88.1	8.40	5.86				
12	12.71	33.46	25.28	88.2	8.40	5.85				
13	12.71	33.46	25.28	88.2	8.40	5.84				
14	12.71	33.46	25.28	88.1	8.40	5.84				
15	12.71	33.46	25.28	88.1	8.40	5.84				
16	12.71	33.46	25.28	88.1	8.39	5.84				
17	12.71	33.46	25.28	88.1	8.39	5.85				
18	12.71	33.45	25.27	88.1	8.39	5.85				
19	12.71	33.45	25.27	88.0	8.40	5.85				
20	12.71	33.46	25.28	88.0	8.39	5.84	.08	1.34	1.51	.26
21	12.68	33.48	25.30	87.9	8.38	5.84				
22	12.67	33.48	25.30	88.1	8.38	5.81				
23	12.67	33.48	25.30	88.2	8.38	5.77				
24	12.66	33.48	25.31	88.3	8.38	5.74				
25	12.66	33.48	25.30	88.4	8.38	5.71				
26	12.66	33.47	25.30	88.4	8.38	5.69				
27	12.66	33.47	25.30	88.3	8.38	5.67				
28	12.66	33.48	25.30	88.2	8.38	5.66				
29	12.66	33.48	25.30	88.0	8.38	5.65				
30	12.65	33.48	25.30	88.4	8.38	5.64	.04	2.45	1.47	.29
31	12.65	33.48	25.30	88.2	8.37	5.63				
32	12.65	33.48	25.30	88.4	8.38	5.62				
33	12.65	33.47	25.30	88.6	8.38	5.62				
34	12.65	33.47	25.30	88.3	8.37	5.62				
35	12.65	33.47	25.30	88.3	8.37	5.62				
36	12.65	33.47	25.30	88.4	8.38	5.62				
37	12.65	33.48	25.30	88.3	8.38	5.62				
38	12.65	33.47	25.30	88.4	8.37	5.61				
39	12.65	33.48	25.30	88.5	8.37	5.61				
40	12.65	33.51	25.33	88.6	8.37	5.60				
41	12.71	33.54	25.34	88.4	8.37	5.58				
42	12.74	33.62	25.39	88.5	8.37	5.57				
43	12.76	33.67	25.43	88.6	8.37	5.55				
44	12.70	33.73	25.49	88.6	8.36	5.53				
45	12.69	33.76	25.51	88.7	8.36	5.48				
46	12.62	33.83	25.58	88.6	8.35	5.45				
47	12.46	33.97	25.72	88.6	8.34	5.40				
48	12.23	34.11	25.87	88.6	8.32	5.34				
49	12.10	34.21	25.98	88.4	8.32	5.27	.07	2.47	4.06	.29
50	12.06	34.25	26.02	88.4	8.32	5.27				
60	11.56	34.72	26.48	88.0	8.28	4.74				
70	11.41	34.77	26.54	87.8	8.27	4.34	.06	7.60	12.51	.42
71	11.39	34.75	26.53	87.8	8.26	4.27				

KELEZ CRUISE XWCC-16 STATION 31 10/19/77

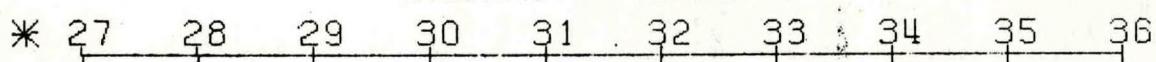
TRANSMISSIVITY (0/0)



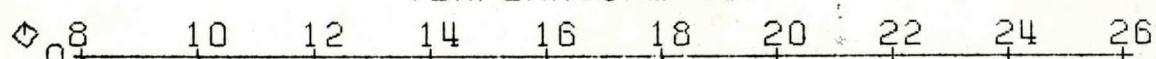
SIGMA-T



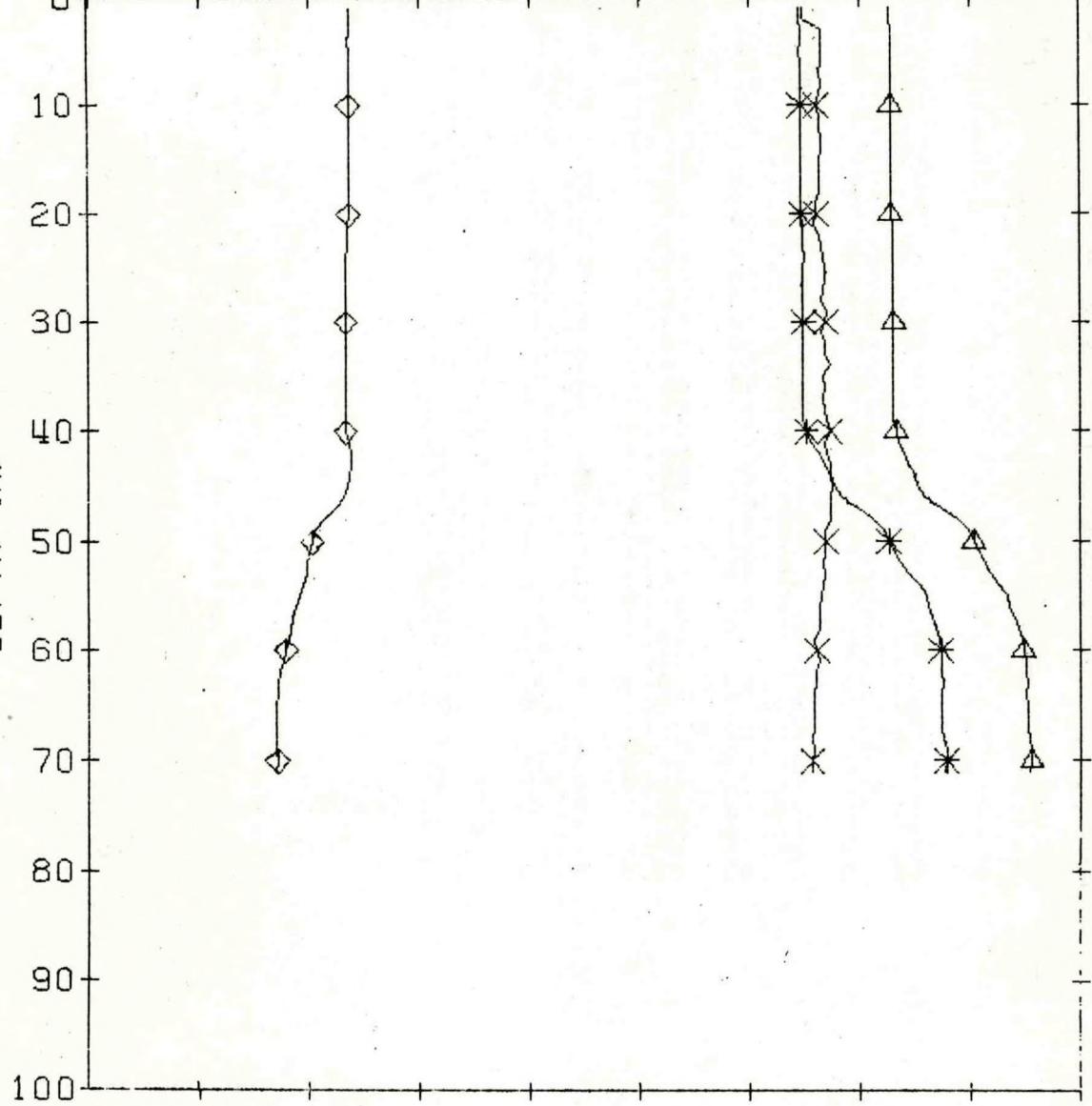
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

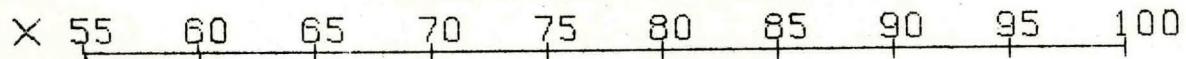


XWCC-16 STA.032 LAT 39 44.3N; LONG 72 7.6W 10/19/77  
 DEPTH 124 AIR D/W 44.4/16.7 BARO 14.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 21/15 SEA DIR/HT 21/2 SWELL DIR/HT 22/2

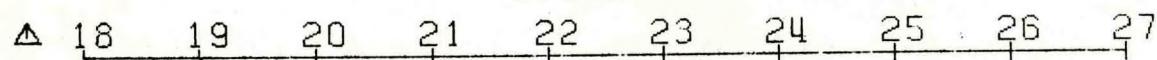
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	13.52	33.71	25.31	88.2	8.38	5.71				
2	13.52	33.70	25.31	88.2	8.38	5.71				
3	13.52	33.70	25.30	88.2	8.39	5.70				
4	13.52	33.70	25.30	88.2	8.39	5.71				
5	13.52	33.70	25.30	88.2	8.39	5.70				
6	13.52	33.70	25.30	88.2	8.39	5.70				
7	13.52	33.71	25.31	88.4	8.39	5.70				
8	13.53	33.70	25.30	88.4	8.39	5.70				
9	13.52	33.70	25.30	88.3	8.39	5.70				
10	13.52	33.70	25.30	88.2	8.39	5.70				
11	13.52	33.71	25.30	88.3	8.39	5.70				
12	13.52	33.71	25.30	88.3	8.39	5.70				
13	13.52	33.70	25.30	88.3	8.39	5.70				
14	13.52	33.70	25.30	88.3	8.39	5.70				
15	13.52	33.70	25.31	88.4	8.39	5.71				
16	13.52	33.71	25.31	88.4	8.39	5.71				
17	13.52	33.70	25.31	88.4	8.39	5.71				
18	13.51	33.70	25.30	88.4	8.39	5.71				
19	13.52	33.70	25.30	88.4	8.39	5.71				
20	13.52	33.70	25.30	88.4	8.39	5.71				
21	13.52	33.70	25.30	88.4	8.39	5.71				
22	13.51	33.70	25.30	88.4	8.39	5.70				
23	13.51	33.70	25.31	88.4	8.39	5.70				
24	13.51	33.71	25.31	88.4	8.39	5.70				
25	13.51	33.71	25.31	88.4	8.39	5.70				
26	13.51	33.71	25.31	88.4	8.39	5.70				
27	13.51	33.71	25.31	88.4	8.39	5.70				
28	13.55	33.78	25.36	88.6	8.6	6.69				
29	13.67	33.91	25.42	88.9	8.9	6.65				
30	13.71	33.93	25.44	88.9	8.9	6.63				
31	13.73	33.97	25.46	88.9	8.9	6.60				
32	13.77	33.97	25.48	88.9	8.9	6.57				
33	13.81	34.01	25.58	88.9	8.9	6.54				
34	13.93	34.17	25.66	88.9	8.9	6.50				
35	14.13	34.33	25.82	88.9	8.9	6.47				
36	14.12	34.53	25.89	88.9	8.9	6.43				
37	14.01	34.65	25.95	88.9	8.9	6.37				
38	13.94	34.69	25.99	88.9	8.9	6.36				
39	13.90	34.71	26.00	88.9	8.9	6.36				
40	13.88	34.72	26.01	88.9	8.9	6.36				
41	13.88	34.72	26.02	88.9	8.9	6.36				
42	13.86	34.73	26.03	88.9	8.9	6.36				
43	13.85	34.74	26.04	88.9	8.9	6.36				
44	13.83	34.79	26.10	88.9	8.9	6.36				
45	13.75	34.82	26.13	88.9	8.9	6.34				
46	13.71	34.83	26.14	88.9	8.9	6.34				
47	13.71	34.85	26.16	88.9	8.9	6.34				
48	13.73	34.85	26.18	88.9	8.9	6.34				
49	13.68	34.85	26.56	88.9	8.9	6.34				
50	13.58	34.85	26.67	88.9	8.9	6.29				
60	11.85	34.90	26.92	88.9	8.9	6.20				
70	11.49	34.96	27.02	88.9	8.9	6.04				
80	11.53	34.99	27.15	87.7	8.7	5.90				
90	11.57	34.99	27.15	87.7	8.7	5.84				
100	10.88	34.99	27.17	87.7	8.7	5.75				
110	10.74	34.99	27.17	87.7	8.7	5.71				
120	10.69	34.91	27.17	87.7	8.7	5.71				
121	10.67	35.41	27.17	87.7	8.7	5.71				

KELEZ CRUISE XWCC-16 STATION 32 10/19/77

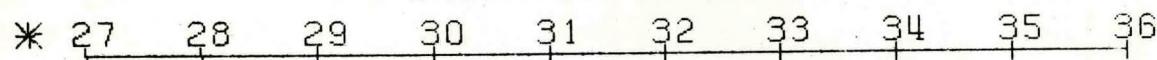
TRANSMISSIVITY (0/0)



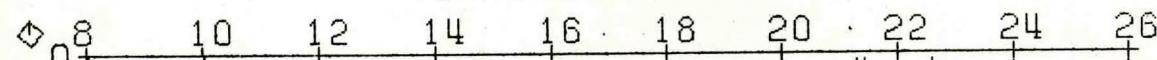
SIGMA-T



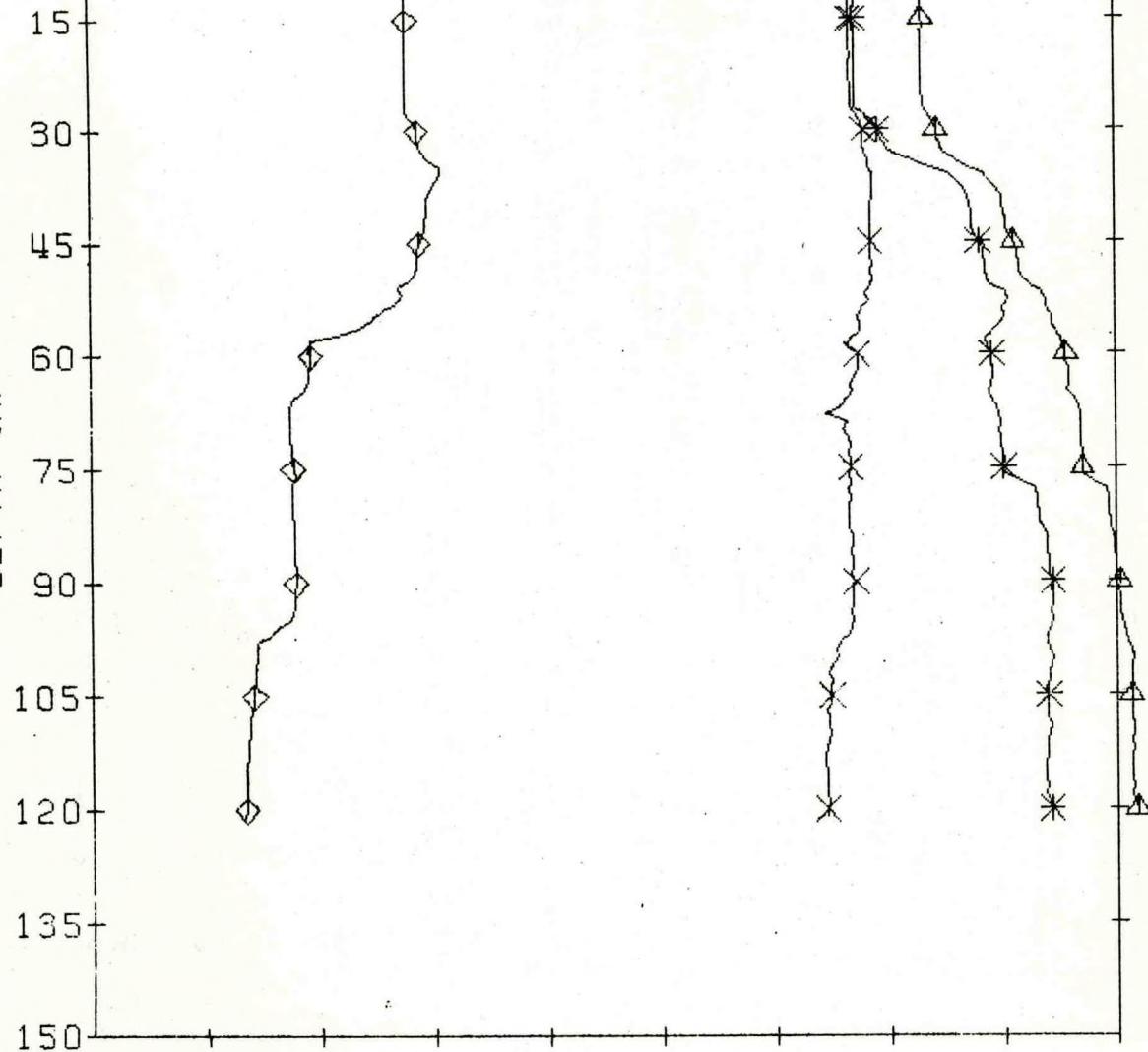
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

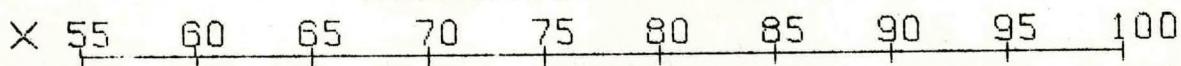


XWCC-16 STA.033 LAT 40 9.8N; LONG 73 41.5W GMT 06.2 10/12/77  
 DEPTH 62 AIR D/W 66 7/50.0 BARO 16.0 VIS 7 CLD TYP/CVR X/9  
 WETHR 2 WIND DIR/SPD 21/02 SEA DIR/HT 21/0 SWELL DIR/HT 00/0

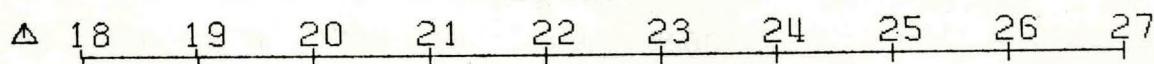
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.21	31.19	22.80	88.7	8.43	5.69				
2	16.21	31.19	22.80	88.7	8.43	5.69	.48	1.62	.00	.40
3	16.26	31.38	22.93	89.8	8.42	5.93				
4	16.27	31.44	22.97	89.8	8.42	5.94				
5	16.28	31.46	22.99	89.7	8.42	5.93				
6	16.28	31.48	23.00	89.7	8.42	5.94				
7	16.28	31.46	23.00	89.7	8.42	5.94				
8	16.42	31.95	23.33	89.6	8.44	5.93				
9	16.42	31.97	23.34	89.6	8.44	5.92				
10	16.46	32.11	23.45	89.7	8.44	5.95				
11	16.49	32.13	23.45	89.8	8.44	5.98	.04	.08	.00	.20
12	16.49	32.17	23.48	90.1	8.44	5.98				
13	16.50	32.24	23.53	90.3	8.43	5.99				
14	16.50	32.30	23.58	90.4	8.43	5.95				
15	16.50	32.33	23.60	90.5	8.42	5.92				
16	16.49	32.39	23.65	90.5	8.42	5.89				
17	16.50	32.44	23.69	90.6	8.42	5.87				
18	16.47	32.43	23.69	90.5	8.42	5.84				
19	16.46	32.45	23.71	90.5	8.42	5.82				
20	16.45	32.46	23.72	90.7	8.42	5.79				
21	16.45	32.46	23.72	90.8	8.42	5.76	.03	.64	.00	.24
22	16.44	32.47	23.73	90.7	8.42	5.74				
23	16.43	32.47	23.73	90.7	8.41	5.71				
24	16.42	32.48	23.74	90.8	8.42	5.70				
25	16.41	32.47	23.73	90.7	8.42	5.69				
26	16.42	32.47	23.73	90.6	8.42	5.68				
27	16.41	32.47	23.73	90.7	8.43	5.68				
28	16.40	32.48	23.74	90.6	8.43	5.68				
29	16.28	32.48	23.77	90.6	8.42	5.67				
30	15.67	32.56	23.97	90.6	8.36	5.70	.14	.80	.42	.47
31	15.58	32.67	24.08	90.6	8.36	5.64				
32	13.98	32.80	24.51	90.2	8.25	5.53				
33	12.93	32.81	24.73	89.6	8.04	5.42				
34	12.38	32.82	24.85	89.1	8.21	5.22				
35	12.18	32.82	24.89	88.8	8.24	5.68				
36	11.98	32.82	24.94	88.8	8.12	5.28				
37	11.66	32.85	25.01	88.9	8.06	5.02				
38	11.42	32.86	25.07	89.2	8.06	5.88				
39	11.36	32.87	25.07	89.1	8.06	5.76				
40	11.28	32.88	25.10	88.9	8.05	6.99				
41	11.30	32.89	25.10	88.9	8.06	6.65				
42	11.23	32.91	25.12	88.9	8.05	6.15				
43	11.12	32.92	25.14	88.5	8.05	5.58				
44	10.84	32.92	25.16	89.1	8.06	5.88	.22	8.27	15.14	1.10
45	10.75	32.92	25.26	88.8	8.07	5.60				
46	10.70	32.92	25.29	88.5	8.06	6.20				
47	10.65	32.93	25.33	88.5	8.06	6.00				
48	10.54	32.93	25.37	87.5	8.06	6.20				
49	10.37	32.93	25.40	87.5	8.06	6.30				
50	10.25	32.93	25.49	87.5	8.05	6.64				
60			25.53	85.9	8.03	5.58				

KELEZ CRUISE XWCC-16 STATION 33 10/12/77

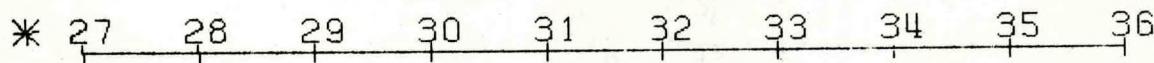
TRANSMISSIVITY (0/0)



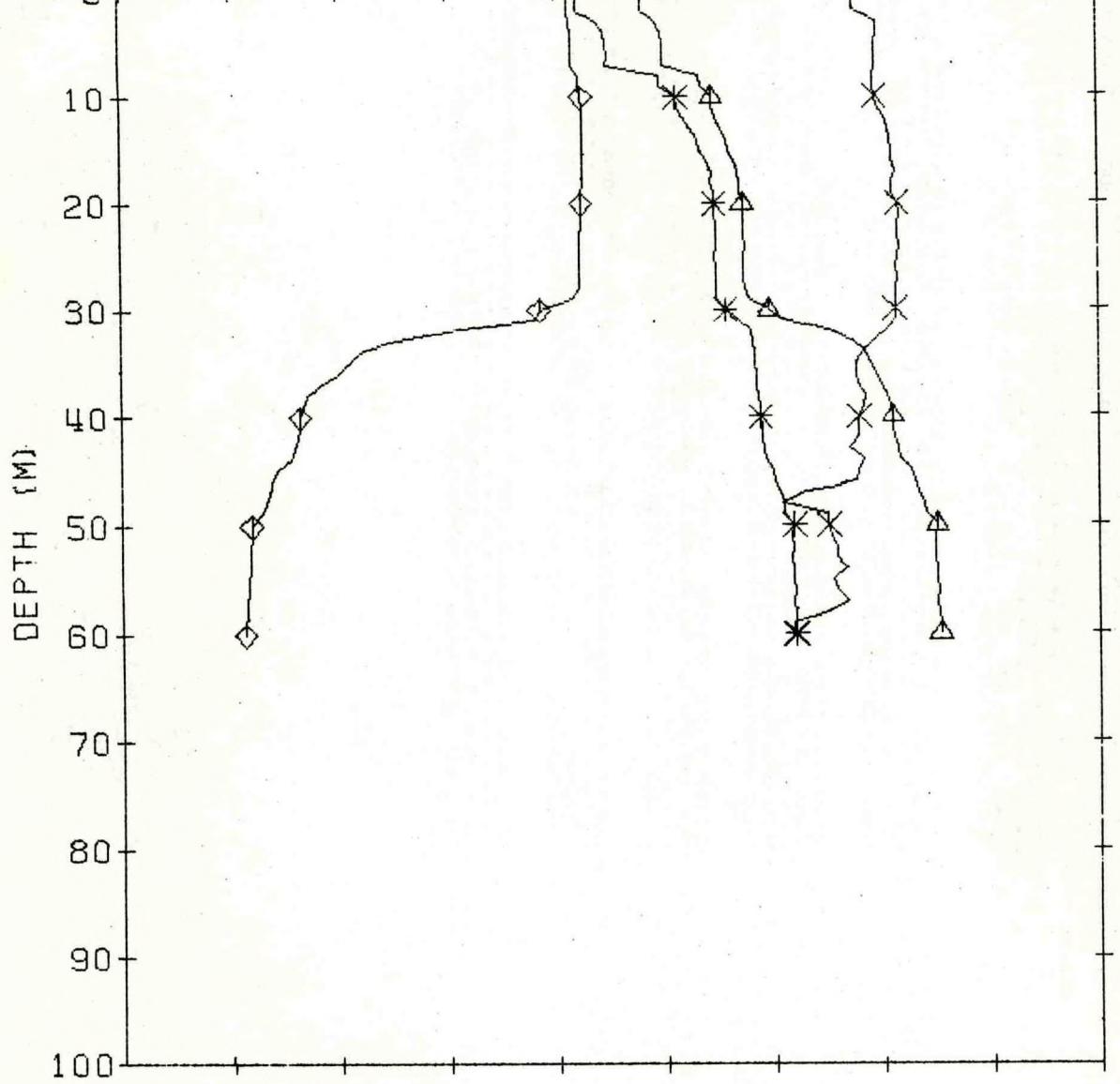
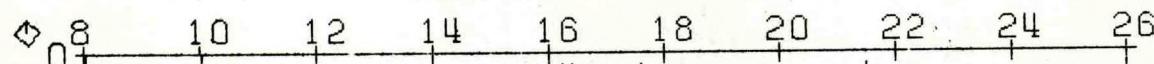
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

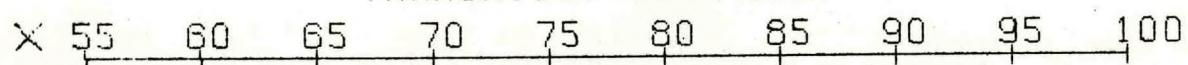


XWCC-16 STA.034 LAT 40 5.5N; LONG 73 32.0W GMT 20.3 10/12/77  
 DEPTH 69 AIR D/W 44.4/00.0 BARO 15.5 VIS 7 CLD TYP/CVR 4/2  
 WETHR 1 WIND DIR/SPD 29/12 SEA DIR/HT 29/1 SWELL DIR/HT 30/2

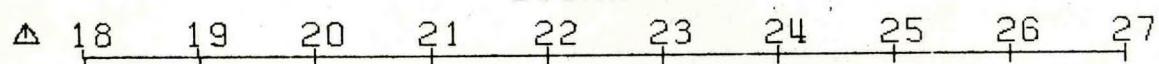
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.27	31.34	22.90	90.2	8.42	5.91				
2	16.27	31.34	22.90	90.2	8.42	5.91				
3	16.27	31.34	22.90	90.1	8.40	5.90				
4	16.26	31.34	22.90	90.0	8.41	5.91				
5	16.27	31.34	22.90	90.0	8.41	5.92				
6	16.26	31.36	22.92	89.9	8.41	5.92				
7	16.56	31.91	22.27	90.1	8.41	5.91				
8	16.68	32.27	22.52	90.1	8.41	5.85				
9	16.66	32.30	22.54	90.0	8.41	5.81				
10	16.62	32.32	22.58	90.0	8.41	5.78	.52	1.56	.00	.41
11	16.63	32.32	22.57	90.0	8.41	5.75				
12	16.62	32.35	22.60	90.4	8.42	5.72				
13	16.57	32.36	22.62	90.5	8.41	5.71				
14	16.53	32.37	22.63	90.4	8.42	5.72				
15	16.53	32.37	22.63	90.4	8.43	5.73				
16	16.54	32.39	22.64	90.4	8.43	5.74				
17	16.54	32.43	22.66	90.3	8.43	5.76				
18	16.58	32.46	22.68	90.3	8.44	5.78				
19	16.59	32.48	22.69	90.3	8.44	5.79	.01	.01	.00	.20
20	16.61	32.48	22.69	90.3	8.44	5.79				
21	16.61	32.49	22.71	90.4	8.43	5.79				
22	16.60	32.52	22.74	90.3	8.44	5.80				
23	16.58	32.54	22.75	90.3	8.44	5.80				
24	16.58	32.57	22.77	90.4	8.43	5.79				
25	16.56	32.59	22.80	90.3	8.43	5.79				
26	16.55	32.59	22.82	90.5	8.42	5.79				
27	16.45	32.61	22.84	90.7	8.42	5.77				
28	16.42	32.62	22.85	90.5	8.42	5.74				
29	16.41	32.60	22.84	90.7	8.42	5.70	.09	.27	.00	.28
30	16.39	32.60	22.84	91.0	8.40	5.70				
31	15.76	32.71	24.18	90.4	8.18	5.69				
32	15.21	32.82	24.67	90.4	8.23	5.63				
33	13.28	32.93	25.10	90.0	8.34	5.58				
34	11.50	32.94	25.12	90.0	8.13	5.40				
35	11.37	32.93	25.13	89.8	8.10	5.95				
36	11.35	32.94	25.14	89.6	8.10	4.63				
37	11.23	32.96	25.17	89.8	8.11	4.42				
38	11.23	32.96	25.18	90.0	8.10	4.29				
39	11.19	32.96	25.17	89.7	8.10	4.20				
40	11.19	32.96	25.18	89.8	8.10	4.12				
41	11.19	32.96	25.18	89.8	8.09	4.06				
42	11.15	32.97	25.21	89.5	8.09	4.99				
43	11.06	32.99	25.24	89.9	8.10	4.92				
44	10.98	33.00	25.25	90.0	8.10	4.87				
45	10.94	33.00	25.25	89.0	8.10	4.86				
46	10.90	33.08	25.37	89.8	8.10	4.85				
47	10.62	33.13	25.43	89.4	8.10	4.88				
48	10.51	33.14	25.44	89.1	8.09	4.89				
49	10.48	33.16	25.46	89.1	8.09	4.89				
50	10.44	33.21	25.54	88.7	8.08	4.86	.12	8.50	15.96	1.05
60	10.24	33.21	25.54	88.2	8.08	4.84	.26	8.73	19.63	1.12

KELEZ CRUISE XWCC-16 STATION 34 10/12/77

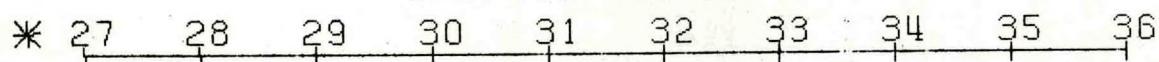
TRANSMISSIVITY (0/0)



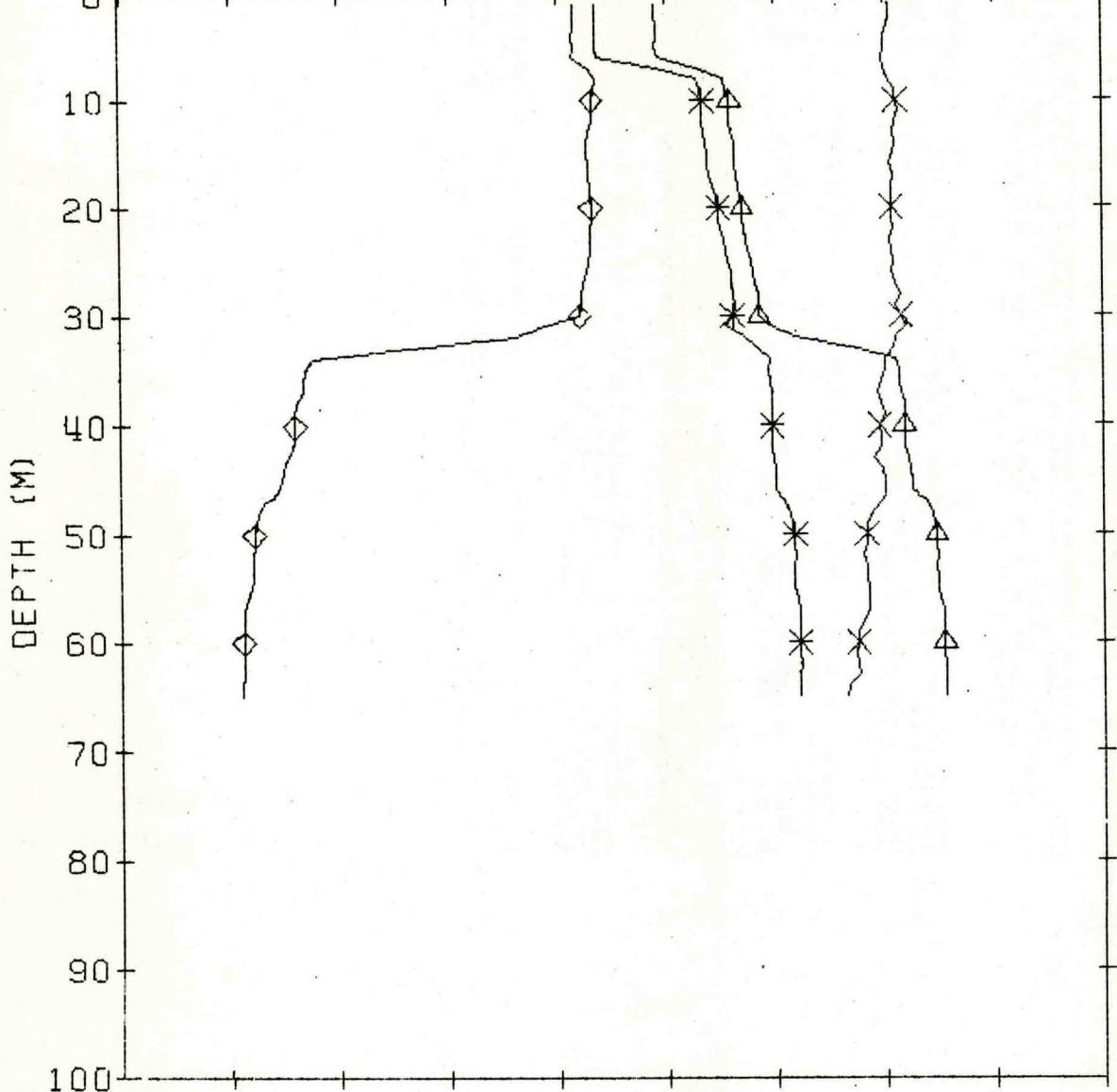
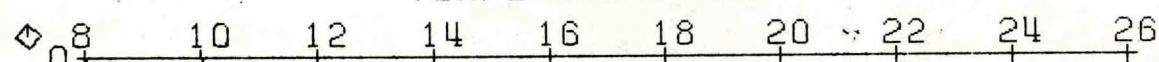
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

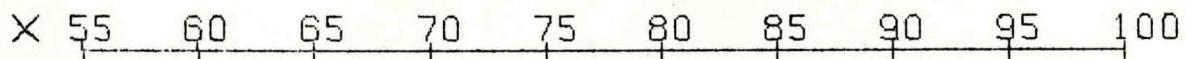


XWCC-16 STA.035 LAT 39 58.7N; LONG 73 21.5W GMT 01.3 10/13/77  
 DEPTH 70 AIR D/W 50.0/05.6 BARO 19.0 VIS 7 CLD TYP/CVR X/6  
 WETHR 1 WIND DIR/SPD 31/22 SEA DIR/HT 31/1 SWELL DIR/HT 32/2

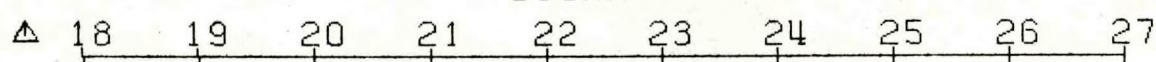
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.32	32.35	23.66	89.3	8.43	5.90				
2	16.32	32.35	23.66	89.3	8.43	5.90				
3	16.32	32.35	23.66	89.3	8.43	5.91				
4	16.32	32.35	23.66	89.3	8.43	5.92				
5	16.32	32.35	23.66	89.3	8.43	5.93				
6	16.32	32.35	23.66	89.3	8.43	5.93				
7	16.32	32.35	23.66	89.3	8.43	5.92				
8	16.32	32.35	23.66	89.3	8.43	5.91				
9	16.32	32.35	23.66	89.3	8.43	5.91				
10	16.32	32.35	23.67	89.5	8.43	5.91	.02	.12	.00	.13
11	16.32	32.36	23.67	89.6	8.44	5.91				
12	16.32	32.36	23.67	89.6	8.43	5.91				
13	16.32	32.37	23.67	89.6	8.43	5.90				
14	16.34	32.39	23.68	89.6	8.43	5.89				
15	16.34	32.40	23.69	89.6	8.43	5.88				
16	16.37	32.53	23.73	89.6	8.43	5.88				
17	16.38	32.59	23.79	90.0	8.43	5.87				
18	16.38	32.67	23.83	90.3	8.43	5.87				
19	16.37	32.68	23.89	90.7	8.42	5.86				
20	16.34	32.70	23.91	90.3	8.42	5.85	.04	.00	.00	.13
21	16.29	32.71	23.94	90.1	8.42	5.84				
22	16.28	32.70	23.95	90.1	8.42	5.80				
23	16.28	32.70	23.94	89.1	8.42	5.79				
24	16.24	32.72	23.96	89.9	8.40	5.77				
25	16.13	32.72	23.99	90.7	8.39	5.75				
26	15.94	32.75	24.05	90.9	8.38	5.71				
27	15.85	32.76	24.08	91.0	8.37	5.67				
28	15.89	32.80	24.22	90.8	8.35	5.60	.05	1.04	.75	.66
29	15.61	32.86	24.64	90.4	8.32	5.60				
30	11.41	32.92	25.10	90.7	8.25	5.68				
31	10.94	33.07	25.31	90.2	8.19	5.66				
32	10.86	33.09	25.34	89.7	8.15	5.40				
33	10.86	33.10	25.34	89.0	8.13	5.10				
34	10.85	33.10	25.34	89.9	8.13	4.90				
35	10.85	33.10	25.34	89.3	8.13	4.75				
36	10.85	33.11	25.35	89.8	8.14	4.63				
37	10.84	33.10	25.35	90.1	8.13	4.54				
38	10.84	33.10	25.35	88.7	8.14	4.47				
39	10.84	33.10	25.35	89.8	8.14	4.41				
40	10.84	33.10	25.35	89.8	8.13	4.36				
41	10.80	33.10	25.35	90.0	8.12	4.33				
42	10.76	33.09	25.35	90.1	8.12	4.27				
43	10.66	33.11	25.35	90.1	8.12	4.22				
44	10.64	33.13	25.35	90.1	8.13	4.21				
45	10.65	33.14	25.41	90.2	8.13	4.21				
46	10.63	33.13	25.41	90.2	8.13	4.21				
47	10.61	33.14	25.42	90.2	8.13	4.21				
48	10.62	33.15	25.42	90.2	8.12	4.21				
49	10.62	33.14	25.42	90.1	8.12	4.21				
50	10.58	33.14	25.42	89.0	8.12	4.20				
60	9.99	33.29	25.64	89.0	8.11	4.20				
68	9.83	33.35	25.72	86.3	8.11	4.20	.18	7.14	12.00	.93

KELEZ CRUISE XWCC-16 : STATION 35 10/13/77

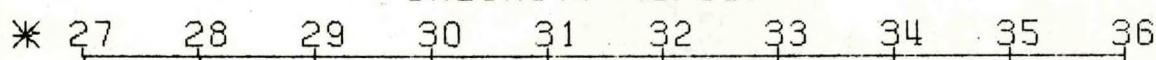
TRANSMISSIVITY (0/0)



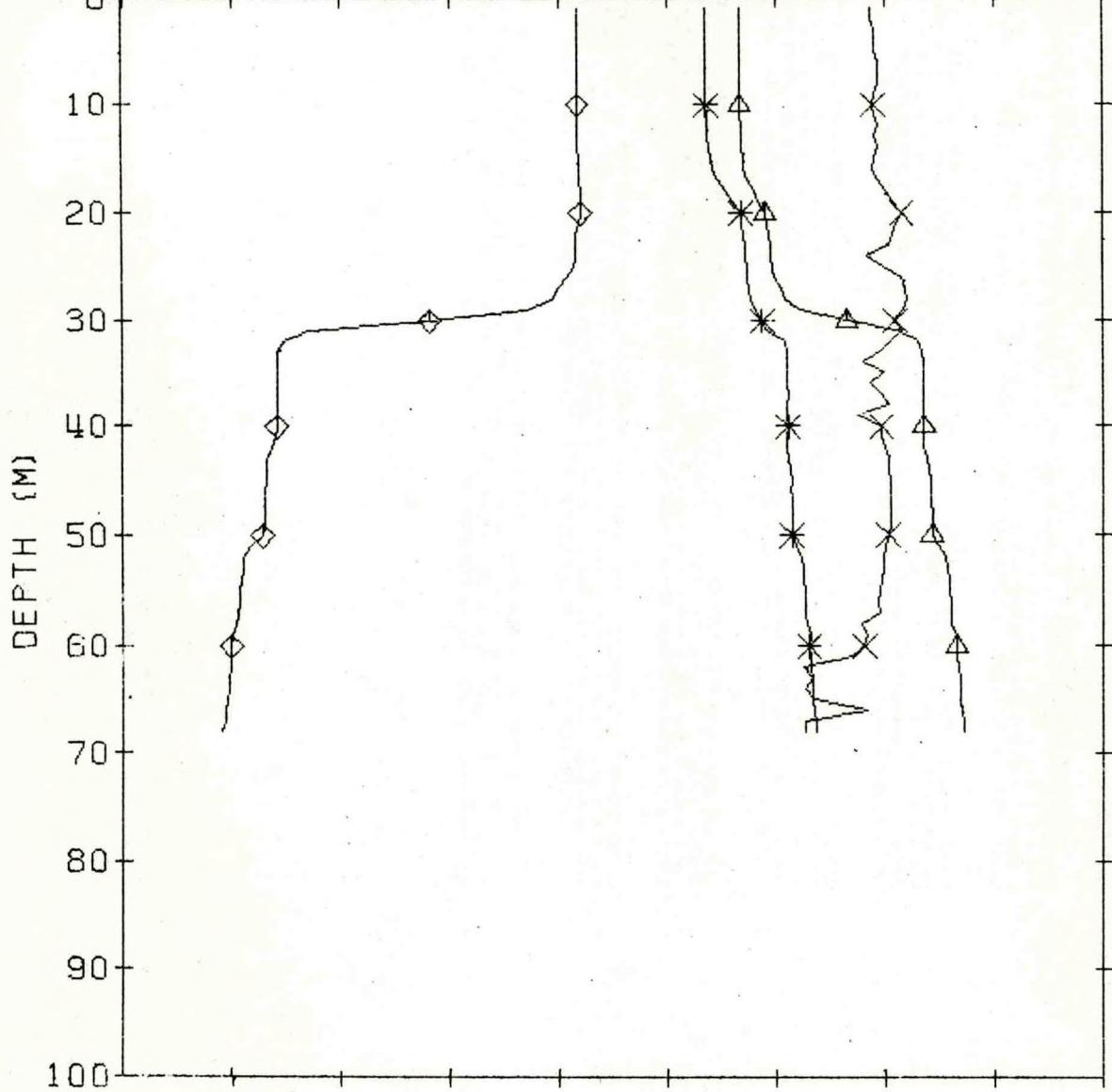
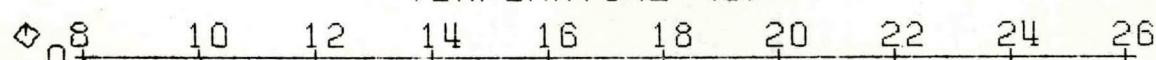
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

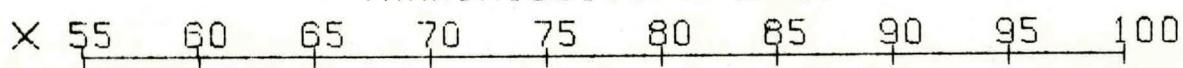


XWCC-16 STA.036 LAT 39 55.0N; LONG 73 6.7W GMT 06.4 '10/13/77  
 DEPTH 67 AIR D/W 33.3/94.4 BARO 20.5 VIS 7 CLD TYP/CVR X/9  
 WETHR WIND DIR/SPD 01/20 SEA DIR/HT 01/1 SWELL DIR/HT 36/1

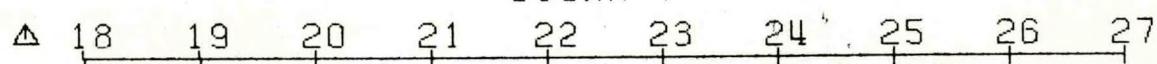
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	S103	P04
1	15.53	32.73	24.13	81.2	8.42	5.71				
2	15.53	32.73	24.13	81.2	8.42	5.71				
3	15.53	32.74	24.13	87.5	8.40	5.73				
4	15.53	32.76	24.15	90.4	8.40	5.74				
5	15.53	32.78	24.16	90.4	8.40	5.74				
6	15.53	32.73	24.12	90.4	8.40	5.74				
7	15.53	32.73	24.13	90.4	8.40	5.73				
8	15.53	32.73	24.13	90.4	8.40	5.73				
9	15.53	32.73	24.13	90.4	8.40	5.73				
10	15.53	32.73	24.13	90.4	8.40	5.73	.01	.04	.00	.12
11	15.53	32.74	24.13	90.4	8.40	5.73				
12	15.53	32.74	24.13	90.4	8.40	5.72				
13	15.53	32.74	24.13	90.4	8.40	5.72				
14	15.53	32.74	24.13	90.4	8.40	5.72				
15	15.53	32.74	24.13	90.4	8.40	5.72				
16	15.53	32.74	24.13	90.4	8.40	5.72				
17	15.53	32.74	24.13	90.4	8.40	5.72				
18	15.53	32.74	24.13	90.4	8.40	5.72				
19	15.53	32.74	24.13	90.3	8.40	5.72				
20	15.53	32.74	24.13	90.4	8.40	5.71				
21	15.53	32.74	24.13	90.4	8.40	5.71				
22	15.54	32.74	24.13	90.4	8.40	5.71				
23	15.54	32.73	24.13	90.4	8.40	5.71				
24	15.46	32.73	24.15	90.4	8.40	5.71				
25	14.90	32.74	24.27	90.6	8.38	5.72				
26	14.29	32.74	24.41	90.8	8.35	5.78				
27	13.29	32.74	24.72	90.8	8.33	5.83				
28	11.34	32.74	25.21	90.6	8.27	5.89				
29	10.00	32.73	25.53	90.6	8.22	5.06				
30	9.77	32.73	25.73	90.3	8.17	5.99				
31	9.75	32.73	25.73	90.2	8.18	5.68				
32	9.73	32.73	25.74	90.2	8.19	5.46				
33	9.73	32.73	25.73	90.1	8.19	5.27				
34	9.73	32.73	25.74	90.1	8.18	5.14				
35	9.72	32.73	25.74	90.1	8.18	5.02				
36	9.72	32.73	25.74	90.2	8.18	4.97				
37	9.72	32.73	25.74	90.4	8.18	4.90				
38	9.72	32.73	25.74	90.3	8.17	4.84				
39	9.72	32.73	25.73	90.4	8.18	4.81				
40	9.72	32.73	25.73	90.4	8.17	4.78				
41	9.72	32.74	25.74	90.4	8.18	4.76				
42	9.71	32.74	25.74	90.3	8.17	4.74				
43	9.71	32.74	25.73	90.3	8.17	4.73				
44	9.71	32.74	25.73	90.3	8.17	4.72				
45	9.70	32.74	25.74	90.4	8.16	4.71				
46	9.69	32.74	25.74	90.4	8.17	4.71				
47	9.69	32.74	25.73	90.4	8.16	4.71				
48	9.69	32.74	25.73	90.4	8.16	4.71				
49	9.69	32.75	25.74	90.3	8.16	4.69				
50	9.69	32.75	25.74	90.3	8.16	4.70				
60	9.57	32.74	25.81	89.4	8.16	4.72				
63	9.53	32.74	25.83	89.1	8.11	4.69				

KELEZ CRUISE XWCC-16 STATION 36 10/13/77

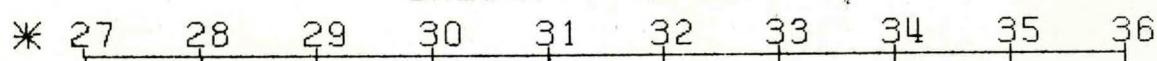
TRANSMISSIVITY (0/0)



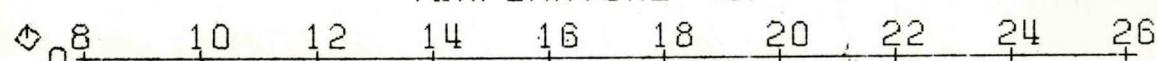
SIGMA-T



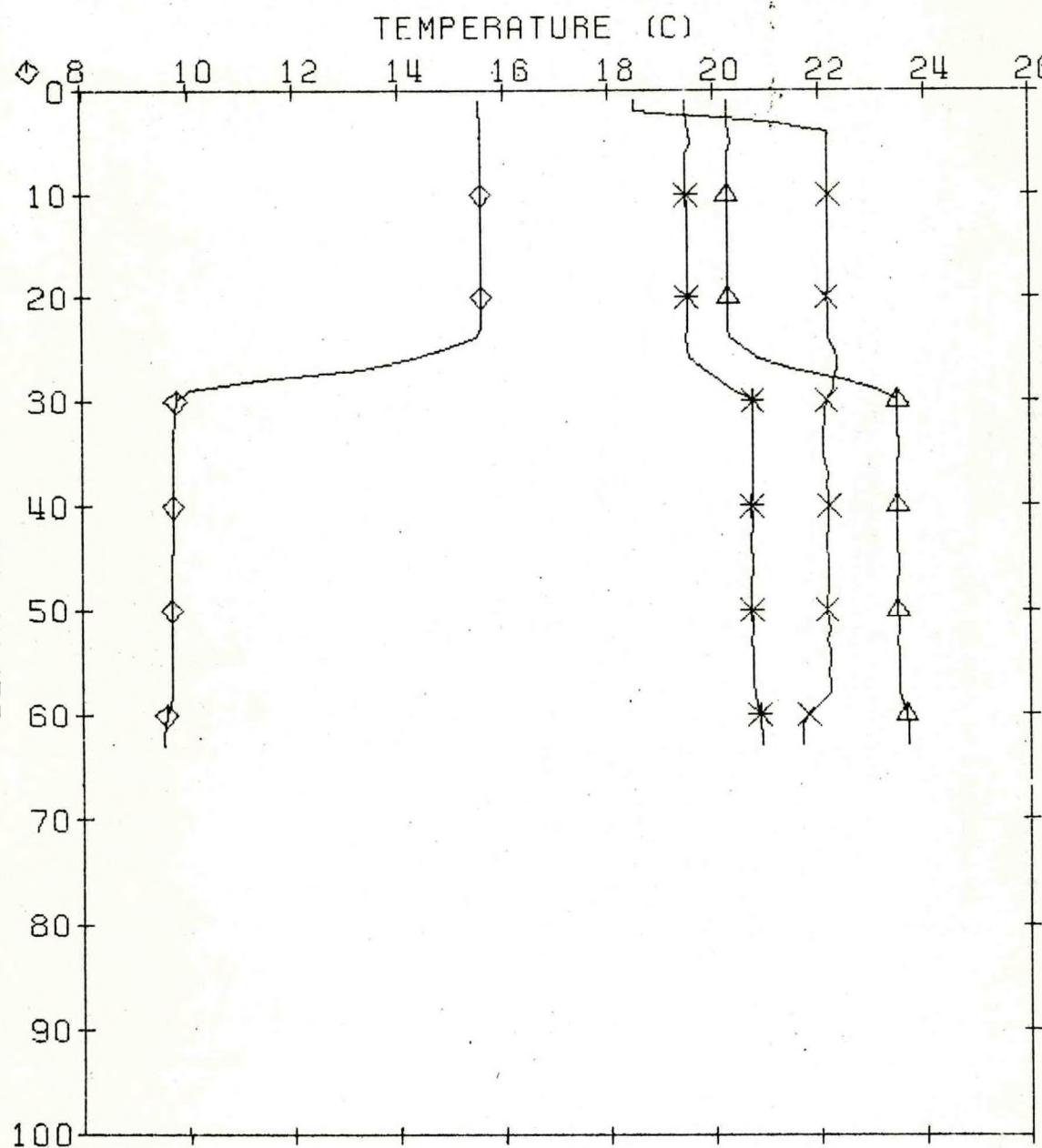
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

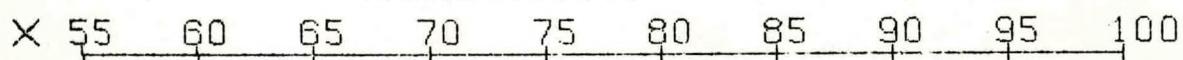


XWCC-16 STA.037 LAT 39 45.5N; LONG 72 57.2W GMT 12.5 10/13/77  
 DEPTH 75 AIR D/W 41.7/05.6 BARO 21.0 VIS 7 CLD TYP/CVR 7/8  
 WETHR 2 WIND DIR/SPD 03/25 SEA DIR/HT 03/1 SWELL DIR/HT 05/3

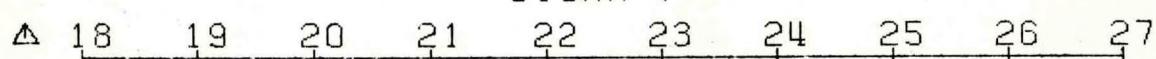
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.87	33.31	24.50	88.2	8.40	5.71				
2	15.87	33.31	24.50	88.2	8.40	5.71	.00	.10	.00	.15
3	15.87	33.31	24.50	90.0	8.41	5.72				
4	15.88	33.31	24.50	90.7	8.41	5.73				
5	15.88	33.31	24.49	90.7	8.41	5.74				
6	15.87	33.31	24.50	90.6	8.41	5.76				
7	15.87	33.32	24.50	90.6	8.41	5.77				
8	15.87	33.32	24.50	90.6	8.41	5.78				
9	15.87	33.32	24.50	90.8	8.41	5.78				
10	15.88	33.31	24.49	90.7	8.41	5.76	.00	.00	.00	.13
11	15.88	33.31	24.50	90.8	8.41	5.76				
12	15.88	33.31	24.50	90.8	8.41	5.75				
13	15.89	33.31	24.50	90.9	8.41	5.76				
14	15.89	33.32	24.50	91.0	8.41	5.77				
15	15.89	33.31	24.50	90.8	8.41	5.77				
16	15.89	33.32	24.50	90.9	8.41	5.77				
17	15.89	33.31	24.50	90.9	8.41	5.78				
18	15.89	33.31	24.50	90.9	8.41	5.79				
19	15.89	33.31	24.50	90.8	8.41	5.79				
20	15.89	33.31	24.50	90.9	8.41	5.78	.01	.02	.00	.14
21	15.89	33.31	24.50	90.9	8.41	5.77				
22	15.89	33.32	24.50	90.8	8.41	5.75				
23	15.89	33.31	24.50	90.9	8.41	5.74				
24	15.88	33.31	24.50	90.9	8.41	5.72				
25	15.82	33.30	24.50	90.9	8.41	5.71				
26	15.80	33.30	24.51	90.9	8.41	5.70				
27	15.72	32.82	24.51	90.9	8.40	5.69				
28	15.35	32.92	24.60	90.9	8.39	5.69				
29	14.88	32.92	24.72	90.7	8.37	5.72				
30	13.04	32.66	25.14	90.8	8.34	5.76				
31	10.94	40	25.56	90.6	8.25	5.89				
32	10.09	43	25.73	90.5	8.23	5.07				
33	9.89	46	25.79	90.2	8.25	5.06				
34	9.69	47	25.83	90.2	8.26	5.94				
35	9.60	48	25.85	90.0	8.26	5.84				
36	9.56	49	25.87	90.0	8.26	5.73				
37	9.53	49	25.88	89.9	8.26	5.65				
38	9.43	50	25.90	89.9	8.26	5.58				
39	9.43	50	25.91	90.0	8.25	5.53				
40	9.26	50	25.93	90.0	8.24	4.49				
41	9.23	50	25.93	89.7	8.23	4.46				
42	9.21	51	25.94	89.9	8.23	4.38				
43	9.21	51	25.94	90.1	8.23	3.99				
44	9.21	51	25.95	90.1	8.23	2.95				
45	9.20	51	25.95	90.0	8.22	2.25				
46	9.20	51	25.94	90.1	8.22	1.96				
47	9.20	51	25.94	90.1	8.22	1.66				
48	9.20	51	25.95	90.1	8.21	1.36				
49	9.21	53	25.95	90.0	8.21	1.13				
50	9.20	51	25.94	90.1	8.19	4.96	.06	6.57	12.95	.93
60	9.20	54	25.96	90.3	8.19	4.95				
70	9.20	54	25.94	90.1	8.18	4.95	.04	6.93	13.31	.91
73	9.20	51	25.94	90.1						

KELEZ CRUISE XWCC-16 STATION 37 10/13/77

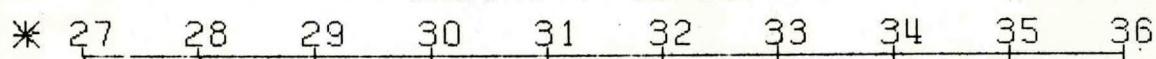
TRANSMISSIVITY (0/0)



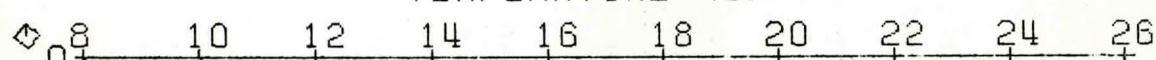
SIGMA-T



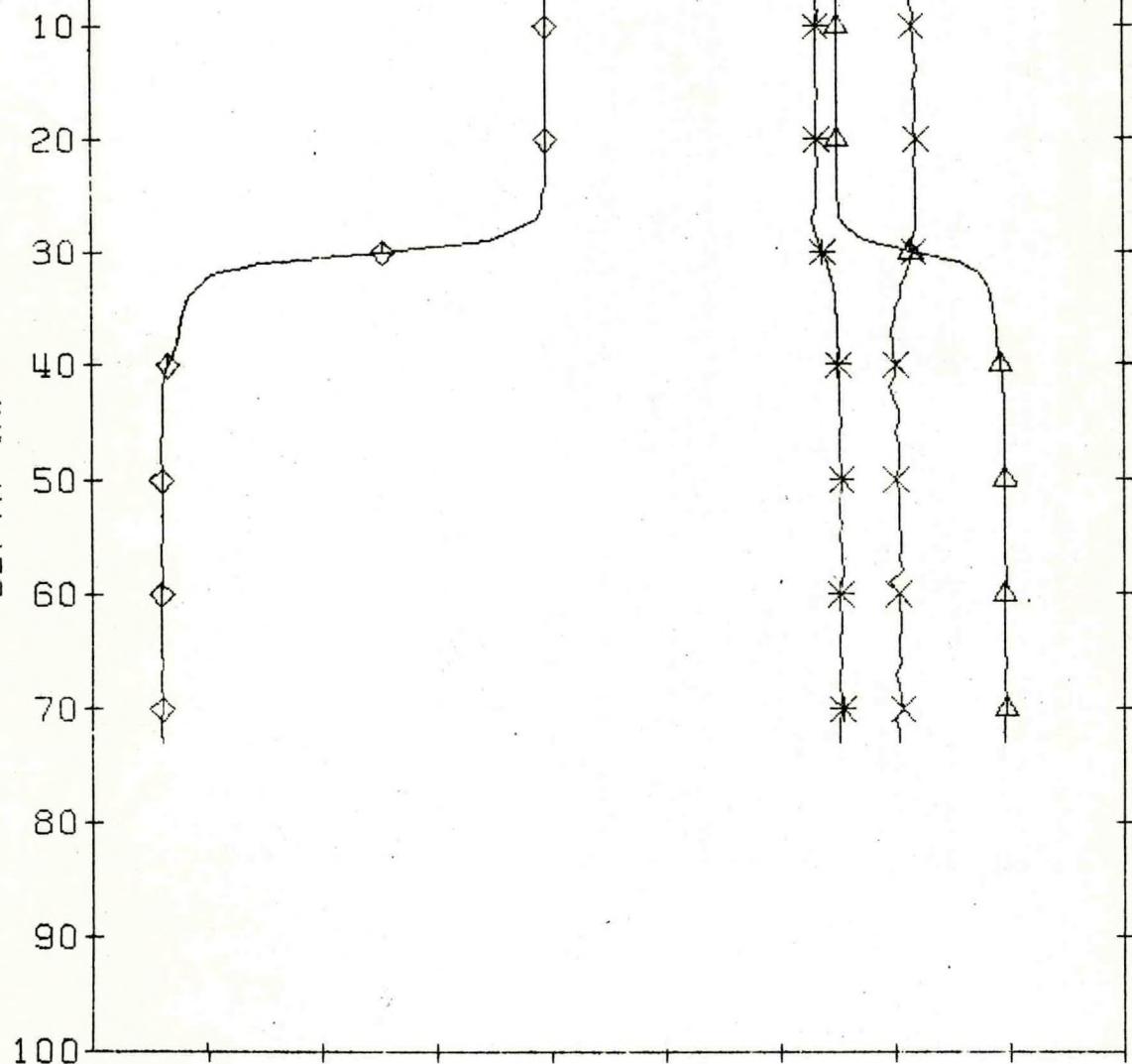
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

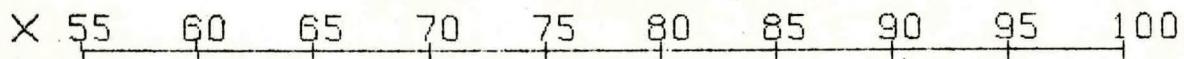


XWCC-16 STA. 057 LAT 39 57.0N; LONG 71 54.5W GMT 23.4 10/18/77  
 DEPTH 97 AIR D/W 30.6/05.6 BARO 14.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 22/15 SEA DIR/HT 22/0 SWELL DIR/HT 23/1

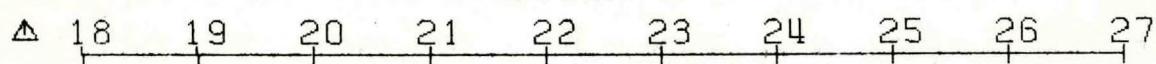
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	14.50	34.21	25.49	87.7	8.39	5.94				
2	14.50	34.20	25.49	87.7	8.39	5.94	.05	1.87	1.57	.30
3	14.50	34.20	25.48	87.9	8.39	5.91				
4	14.50	34.20	25.48	88.1	8.39	5.83				
5	14.50	34.20	25.48	88.1	8.39	5.76				
6	14.50	34.20	25.48	88.2	8.39	5.72				
7	14.51	34.20	25.48	88.3	8.39	5.69				
8	14.51	34.20	25.48	88.3	8.39	5.66				
9	14.51	34.20	25.48	88.3	8.39	5.64				
10	14.50	34.21	25.49	88.3	8.39	5.62	.05	1.51	1.38	.32
11	14.50	34.21	25.49	88.3	8.40	5.61				
12	14.50	34.20	25.48	88.3	8.40	5.60				
13	14.50	34.20	25.48	88.3	8.40	5.59				
14	14.50	34.20	25.48	88.3	8.40	5.58				
15	14.51	34.20	25.48	88.3	8.40	5.57				
16	14.51	34.20	25.48	88.3	8.40	5.57				
17	14.51	34.21	25.49	88.3	8.40	5.57				
18	14.50	34.20	25.48	88.6	8.40	5.57				
19	14.51	34.20	25.48	88.7	8.40	5.57				
20	14.50	34.20	25.48	88.5	8.40	5.57				
21	14.51	34.21	25.48	88.6	8.40	5.55				
22	14.51	34.21	25.48	88.6	8.40	5.55				
23	14.50	34.21	25.49	88.6	8.40	5.56				
24	14.51	34.21	25.48	88.7	8.40	5.56				
25	14.51	34.20	25.48	88.5	8.40	5.56				
26	14.52	34.21	25.48	88.6	8.40	5.56				
27	14.52	34.21	25.48	88.5	8.40	5.54				
28	14.52	34.21	25.48	88.5	8.40	5.54				
29	14.52	34.21	25.49	88.6	8.40	5.54				
30	14.52	34.21	25.48	88.6	8.40	5.54	.03	1.66	1.42	.30
31	14.52	34.21	25.49	88.7	8.40	5.53				
32	14.52	34.21	25.49	88.6	8.40	5.53				
33	14.54	34.22	25.49	88.8	8.40	5.53				
34	14.53	34.21	25.48	88.4	8.40	5.53				
35	14.53	34.21	25.48	88.4	8.40	5.53				
36	14.53	34.21	25.48	88.4	8.40	5.53				
37	14.53	34.22	25.49	88.7	8.40	5.53				
38	14.53	34.22	25.49	88.7	8.40	5.53				
39	14.54	34.22	25.49	88.7	8.40	5.53				
40	14.55	34.23	25.49	88.4	8.40	5.54				
41	14.55	34.23	25.50	88.6	8.40	5.53				
42	14.55	34.23	25.49	88.6	8.40	5.52				
43	14.54	34.23	25.52	88.9	8.40	5.50				
44	14.49	34.27	25.53	88.9	8.39	5.49				
45	14.44	34.28	25.56	88.9	8.39	5.47				
46	14.44	34.35	25.64	88.9	8.39	5.45				
47	14.30	34.42	25.64	89.1	8.36	5.43				
48	12.25	34.45	25.62	89.3	8.33	5.47				
49	11.84	34.53	26.19	89.2	8.32	5.50	.01	5.65	7.36	.61
50	11.84	34.54	26.28	89.1	8.31	5.40				
51	11.75	34.54	26.69	88.9	8.29	4.69				
52	13.44	34.69	26.85	88.6	8.28	4.03				
53	13.07	34.65	26.90	87.9	8.27	3.79				
54	12.81	34.61	26.92	87.3	8.27	3.73	.03	11.79	10.62	.84
55	12.82	35.63	26.93	87.2	8.28	3.70				

KELEZ CRUISE XWCC-16 STATION 57 10/18/77

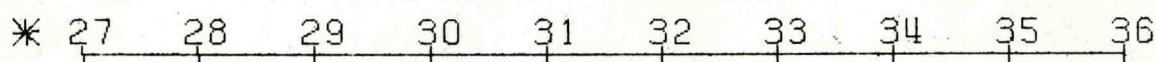
TRANSMISSIVITY (0/0)



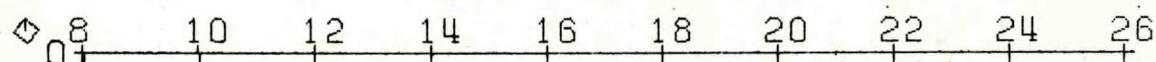
SIGMA-T



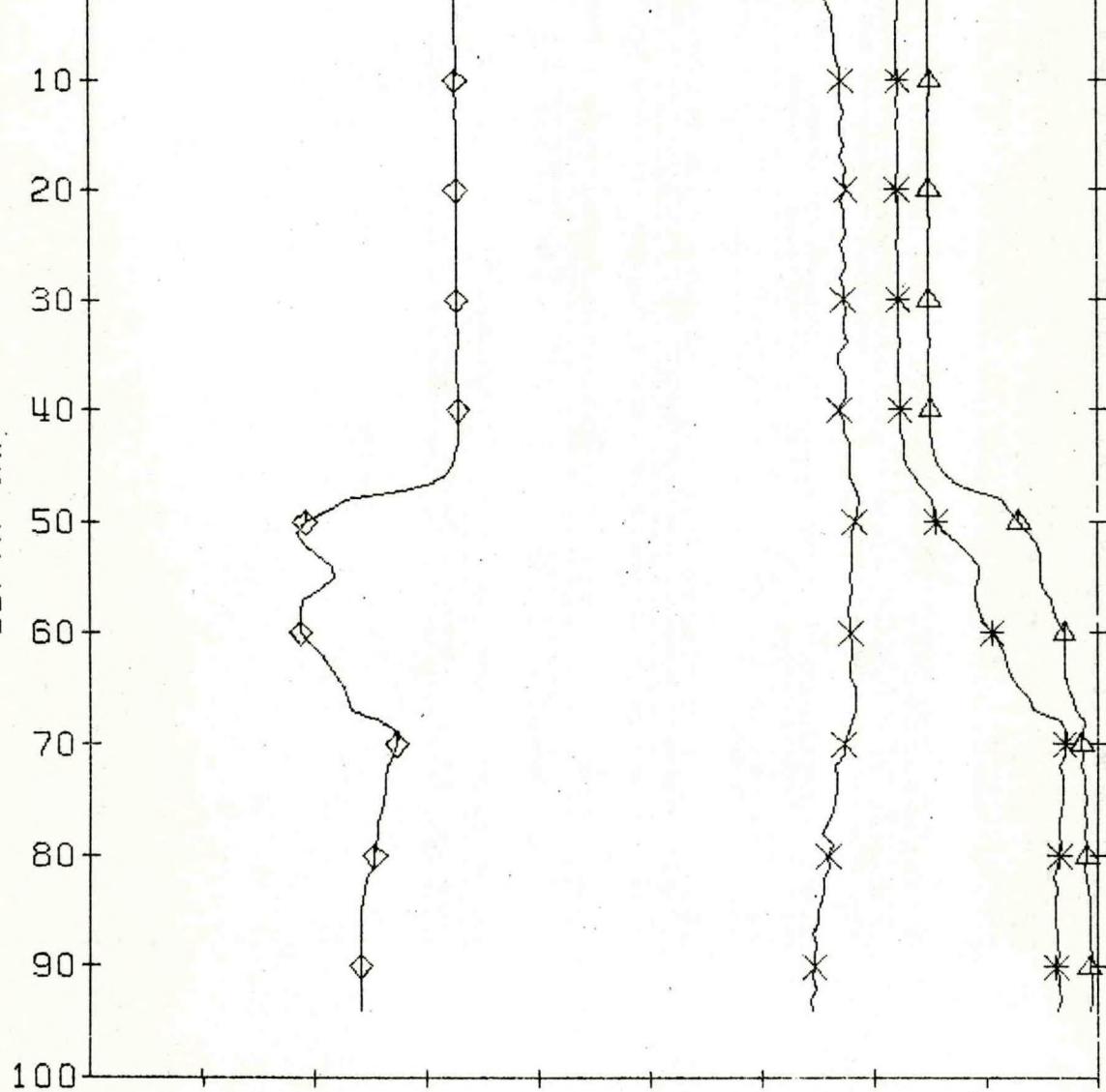
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

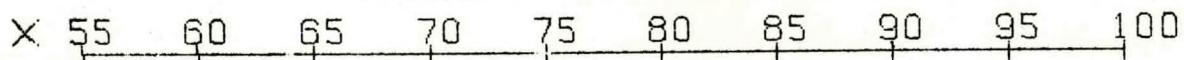


XWCC-16 STA.058 LAT 40 8.0N; LONG 71 58.0W GMT 21.5 10/18/77  
 DEPTH 72 AIR D/W 33.3/05.6 BARO 13.0 VIS 7 CLD TYP/CVR 4/4  
 WETHR 1 WIND DIR/SPD 23/17 SEA DIR/HT 23/0 SWELL DIR/HT 23/1

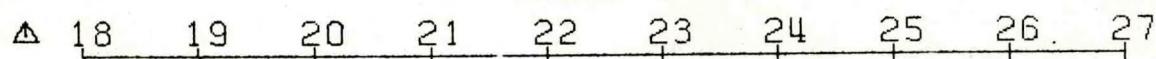
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	13.78	33.12	24.80	87.3	8.40	5.80				
2	13.78	33.12	24.80	87.3	8.40	5.80	.08	.48	.29	.30
3	13.78	33.12	24.80	87.4	8.39	5.79				
4	13.78	33.12	24.80	87.4	8.40	5.79				
5	13.78	33.12	24.80	87.5	8.39	5.80				
6	13.78	33.12	24.80	87.4	8.40	5.81				
7	13.78	33.12	24.80	87.4	8.40	5.81				
8	13.78	33.12	24.80	87.5	8.39	5.81				
9	13.78	33.12	24.80	87.5	8.40	5.80				
10	13.78	33.12	24.80	87.5	8.40	5.79	.10	.40	.65	.30
11	13.78	33.12	24.80	87.4	8.39	5.79				
12	13.78	33.12	24.80	87.4	8.40	5.79				
13	13.78	33.12	24.80	87.5	8.39	5.78				
14	13.78	33.12	24.80	87.5	8.40	5.78				
15	13.78	33.12	24.81	87.5	8.39	5.78				
16	13.78	33.12	24.80	87.5	8.39	5.77				
17	13.78	33.12	24.81	87.5	8.39	5.77				
18	13.79	33.12	24.81	87.6	8.40	5.77				
19	13.81	33.12	24.81	87.6	8.40	5.77				
20	13.82	33.12	24.82	87.6	8.40	5.76	.11	.42	.35	.26
21	13.84	33.12	24.82	87.7	8.39	5.75				
22	13.86	33.12	24.82	87.7	8.40	5.74				
23	13.88	33.12	24.83	87.8	8.40	5.73				
24	13.94	33.12	24.85	87.8	8.40	5.72				
25	13.99	33.12	24.86	88.0	8.40	5.70				
26	14.03	33.12	24.88	88.3	8.40	5.68				
27	14.06	33.12	24.90	87.9	8.40	5.67				
28	14.12	33.12	24.92	88.3	8.40	5.66				
29	14.15	33.12	24.94	88.2	8.40	5.65				
30	14.17	33.12	24.94	88.4	8.40	5.64	.11	.42	.70	.28
31	14.19	33.12	24.95	88.4	8.40	5.63				
32	14.19	33.12	24.96	88.4	8.40	5.62				
33	14.19	33.12	24.97	88.5	8.40	5.61				
34	14.17	33.12	25.01	88.5	8.40	5.61				
35	14.14	33.12	25.04	88.6	8.39	5.60				
36	14.06	33.12	25.11	88.6	8.39	5.59				
37	13.81	33.12	25.21	88.7	8.37	5.59				
38	13.37	33.12	25.35	88.6	8.36	5.60				
39	12.80	33.12	25.51	88.6	8.33	5.62				
40	12.38	33.12	25.66	88.5	8.31	5.59				
41	11.99	33.12	25.80	88.3	8.30	5.54				
42	11.41	33.12	25.94	88.1	8.28	5.48				
43	11.05	33.12	26.07	87.9	8.26	5.39				
44	10.68	34.11	26.16	87.7	8.25	5.31				
45	10.64	34.12	26.17	87.7	8.26	5.21				
46	10.78	34.23	26.24	87.6	8.25	5.09				
47	10.92	34.29	26.25	87.6	8.26	5.09				
48	11.03	34.36	26.29	87.5	8.26	5.09				
49	11.21	34.53	26.33	87.4	8.27	4.99				
50	11.53	34.61	26.36	87.3	8.27	4.90				
60	11.85	34.83	26.40	87.2	8.27	4.50				
70	11.87	34.84	26.50	86.4	8.26	4.37	.08	6.03	16.23	.91
72	11.87	34.84	26.51	86.6	8.27	4.37	.12	6.77	16.07	.88

KELEZ CRUISE XWCC-16 STATION 58 10/18/77

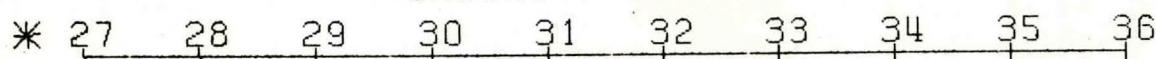
TRANSMISSIVITY (0/0)



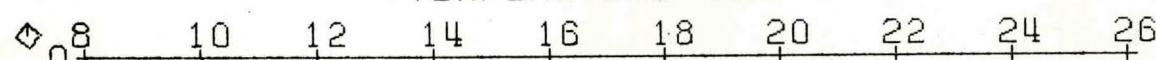
SIGMA-T



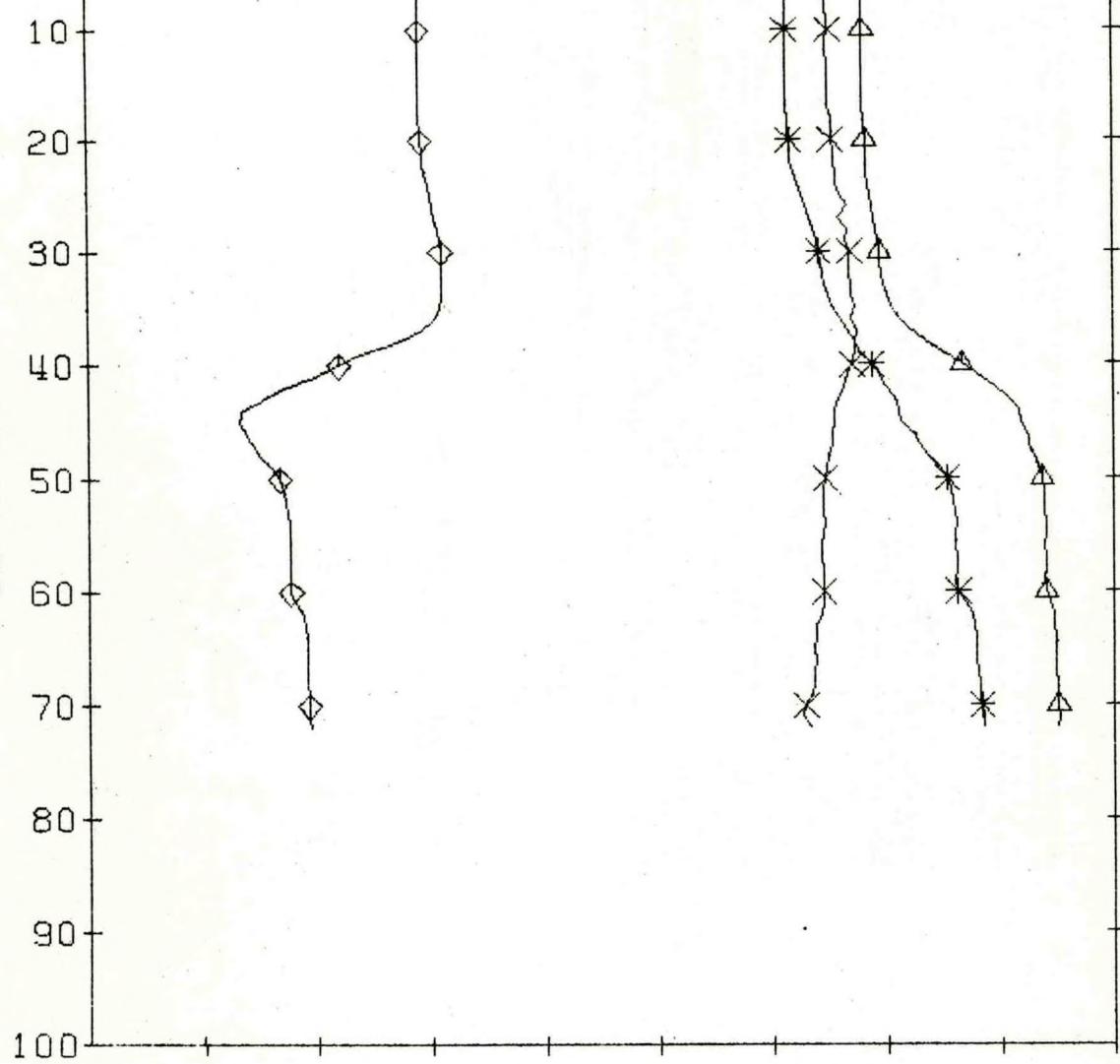
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

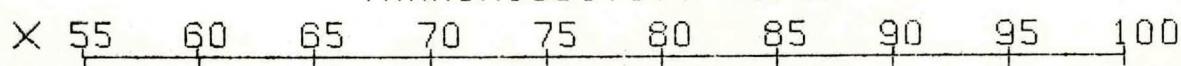


XWCC-16 STA.059 LAT 40 18.0N; LONG 72 4.0W GMT 20.0 10/18/77  
 DEPTH 60 AIR D/W 33.3/05.6 BARO 13.5 VIS 7 CLD TYP/CVR 4/4  
 WETHR 1 WIND DIR/SPD 25/17 SEA DIR/HT 25/1 SWELL DIR/HT 24/1

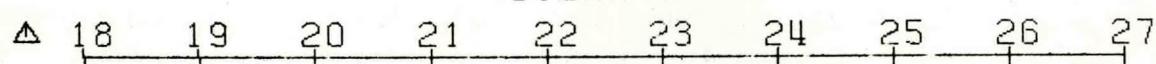
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	13.59	33.11	24.83	87.1	8.39	5.91				
2	13.59	33.11	24.83	87.1	8.39	5.91	.03	.96	2.99	.40
3	13.60	33.12	24.83	87.5	8.38	5.74				
4	13.60	33.11	24.83	87.4	8.38	5.73				
5	13.60	33.11	24.83	87.6	8.37	5.73				
6	13.60	33.12	24.83	87.7	8.38	5.74				
7	13.60	33.12	24.84	87.3	8.38	5.75				
8	13.60	33.11	24.83	87.5	8.38	5.74				
9	13.61	33.11	24.83	87.6	8.38	5.73				
10	13.61	33.11	24.83	87.5	8.38	5.73				
11	13.61	33.11	24.83	87.5	8.38	5.73				
12	13.60	33.11	24.83	87.6	8.38	5.72				
13	13.60	33.11	24.83	87.6	8.38	5.72				
14	13.60	33.11	24.83	87.6	8.38	5.72				
15	13.60	33.11	24.83	87.7	8.38	5.71				
16	13.60	33.10	24.83	87.5	8.38	5.71				
17	13.60	33.11	24.83	87.6	8.38	5.70				
18	13.60	33.11	24.83	87.6	8.38	5.70				
19	13.60	33.10	24.83	87.6	8.38	5.71				
20	13.61	33.10	24.82	87.6	8.38	5.71	.05	.56	1.30	.33
21	13.60	33.11	24.83	87.4	8.38	5.70				
22	13.60	33.11	24.83	87.7	8.38	5.71				
23	13.60	33.11	24.83	87.6	8.38	5.71				
24	13.60	33.12	24.84	87.6	8.38	5.70				
25	13.59	33.12	24.84	87.7	8.38	5.70				
26	13.59	33.12	24.84	87.8	8.38	5.69				
27	13.58	33.12	24.85	87.9	8.38	5.68				
28	13.58	33.13	24.85	88.0	8.38	5.67				
29	13.58	33.13	24.85	87.9	8.38	5.66	.04	.67	1.42	.35
30	13.57	33.13	24.85	88.0	8.38	5.66				
31	13.57	33.13	24.85	87.9	8.38	5.65				
32	13.56	33.13	24.85	88.0	8.38	5.64				
33	13.55	33.13	24.86	88.0	8.38	5.63				
34	13.55	33.13	24.85	88.0	8.38	5.64				
35	13.55	33.12	24.85	88.3	8.37	5.63				
36	13.55	33.12	24.85	88.6	8.37	5.61				
37	13.51	33.12	25.03	88.3	8.37	5.61				
38	13.51	33.12	25.03	88.6	8.37	5.61				
39	13.51	33.12	25.03	88.6	8.37	5.61				
40	10.14	33.65	25.79	87.7	8.21	5.82				
41	10.09	33.68	25.89	87.0	8.22	5.62				
42	10.08	33.68	25.93	87.0	8.22	5.34				
43	10.08	33.69	25.94	86.9	8.22	5.20				
44	10.08	33.69	25.93	86.9	8.22	5.08				
45	10.09	33.70	25.95	86.9	8.22	4.90				
46	10.11	33.72	25.95	86.8	8.22	4.87				
47	10.15	33.73	25.96	86.8	8.22	4.82				
48	10.21	33.77	25.97	86.8	8.22	4.77				
49	10.29	33.84	26.02	86.8	8.23	4.72	.04	6.01	17.49	.96
50	10.34	33.88	26.04	86.9	8.23	4.50				
50	10.34	34.17	26.16	86.5	8.23	4.50				

KELEZ CRUISE XWCC-16 STATION 59 10/18/77

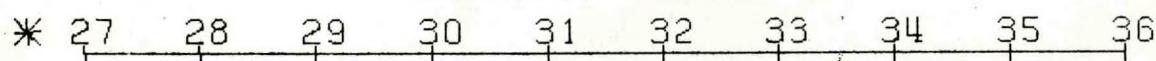
TRANSMISSIVITY (0/0)



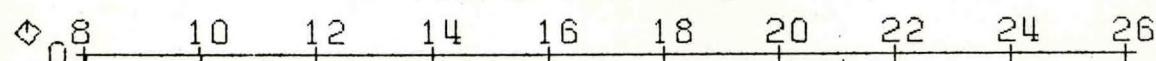
SIGMA-1



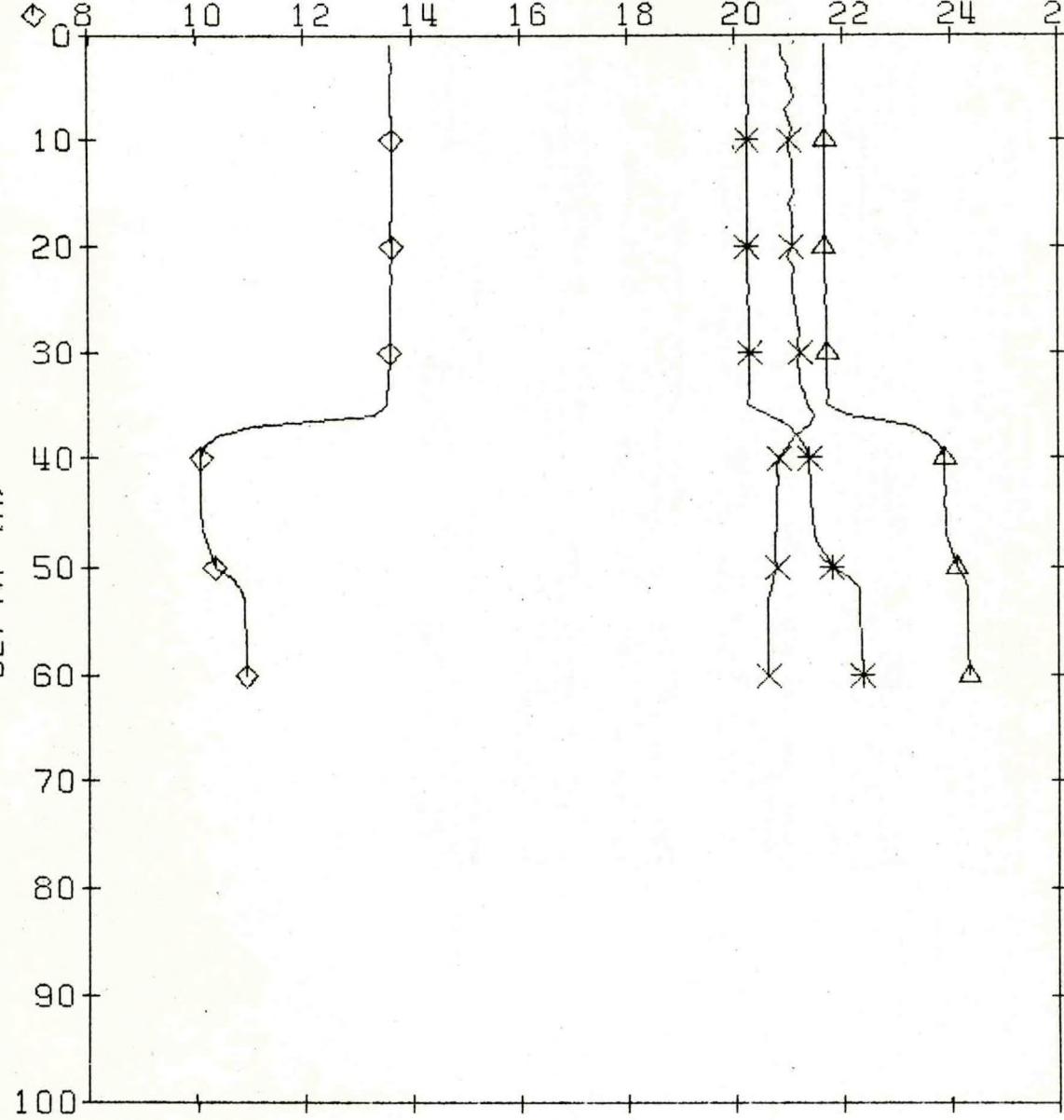
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)



XWCC-16 STA.060 LAT 40 26.8N; LONG 72 8.8W GMT 18.2 10/18/77  
 DEPTH 60 AIR D/W 16.7/94.4 BARO 13.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 25/16 SEA DIR/HT 25/0 SWELL DIR/HT 25/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	13.37	32.84	24.67	83.6	8.41	6.00				
2	13.37	32.84	24.67	83.6	8.41	6.00				
3	13.37	32.84	24.67	86.9	8.41	5.72				
4	13.37	32.84	24.67	87.3	8.39	5.66				
5	13.37	32.84	24.67	87.3	8.39	5.66				
6	13.37	32.84	24.67	87.4	8.39	5.67				
7	13.37	32.84	24.67	87.4	8.39	5.68				
8	13.37	32.84	24.67	87.4	8.39	5.68				
9	13.37	32.84	24.67	87.4	8.38	5.67	.04	.51	1.41	.34
10	13.37	32.84	24.67	87.3	8.38	5.68				
11	13.36	32.85	24.68	87.5	8.38	5.67				
12	13.36	32.85	24.68	87.2	8.38	5.68				
13	13.36	32.85	24.68	87.0	8.38	5.68				
14	13.36	32.85	24.68	87.5	8.38	5.68				
15	13.36	32.85	24.68	87.2	8.38	5.68				
16	13.36	32.84	24.67	87.4	8.37	5.68				
17	13.36	32.84	24.67	87.4	8.37	5.67				
18	13.36	32.84	24.67	87.4	8.37	5.67				
19	13.36	32.84	24.67	87.4	8.37	5.66				
20	13.36	32.84	24.67	87.4	8.37	5.66	.06	.57	1.41	.39
21	13.36	32.85	24.68	87.4	8.38	5.65				
22	13.36	32.85	24.68	87.4	8.37	5.64				
23	13.36	32.85	24.68	87.5	8.37	5.63				
24	13.36	32.85	24.68	87.4	8.38	5.63				
25	13.36	32.85	24.68	87.4	8.37	5.63				
26	13.36	32.86	24.68	87.4	8.38	5.62				
27	13.36	32.86	24.68	87.5	8.37	5.61				
28	13.36	32.85	24.68	87.5	8.37	5.60				
29	13.36	32.85	24.68	87.5	8.37	5.61	.07	.56	1.41	.38
30	13.36	32.86	24.68	87.4	8.37	5.61				
31	13.36	32.86	24.68	87.5	8.37	5.61				
32	13.36	32.85	24.68	87.5	8.37	5.60				
33	13.36	32.86	24.68	87.5	8.37	5.60				
34	13.36	32.85	24.68	87.6	8.37	5.59				
35	13.35	32.86	24.69	87.6	8.37	5.59				
36	13.36	32.86	24.68	87.6	8.37	5.59				
37	13.16	32.87	24.73	87.8	8.35	5.59				
38	12.66	32.88	24.84	88.0	8.33	5.60				
39	11.67	32.06	25.16	87.6	8.29	5.61				
40	10.00	32.10	25.59	87.3	8.23	5.69				
41	9.60	32.15	25.60	86.9	8.18	5.65				
42	9.60	32.15	25.60	86.9	8.18	5.64				
43	9.59	32.15	25.60	86.7	8.19	5.55				
44	9.59	32.16	25.60	86.8	8.19	5.55				
45	9.58	32.15	25.60	86.8	8.18	5.55				
46	9.58	32.15	25.60	86.8	8.18	5.56				
47	9.58	32.15	25.61	86.9	8.18	4.96				
48	9.57	32.16	25.61	86.9	8.18	4.89				
49	9.57	32.16	25.61	87.0	8.18	4.83				
50	9.57	32.16	25.61	87.0	8.18	4.78	.16	6.55	13.42	1.01
57	9.57	33.16	25.61	86.9	8.18	4.61				

KELEZ CRUISE XWCC-16 STATION 60 10/18/77

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

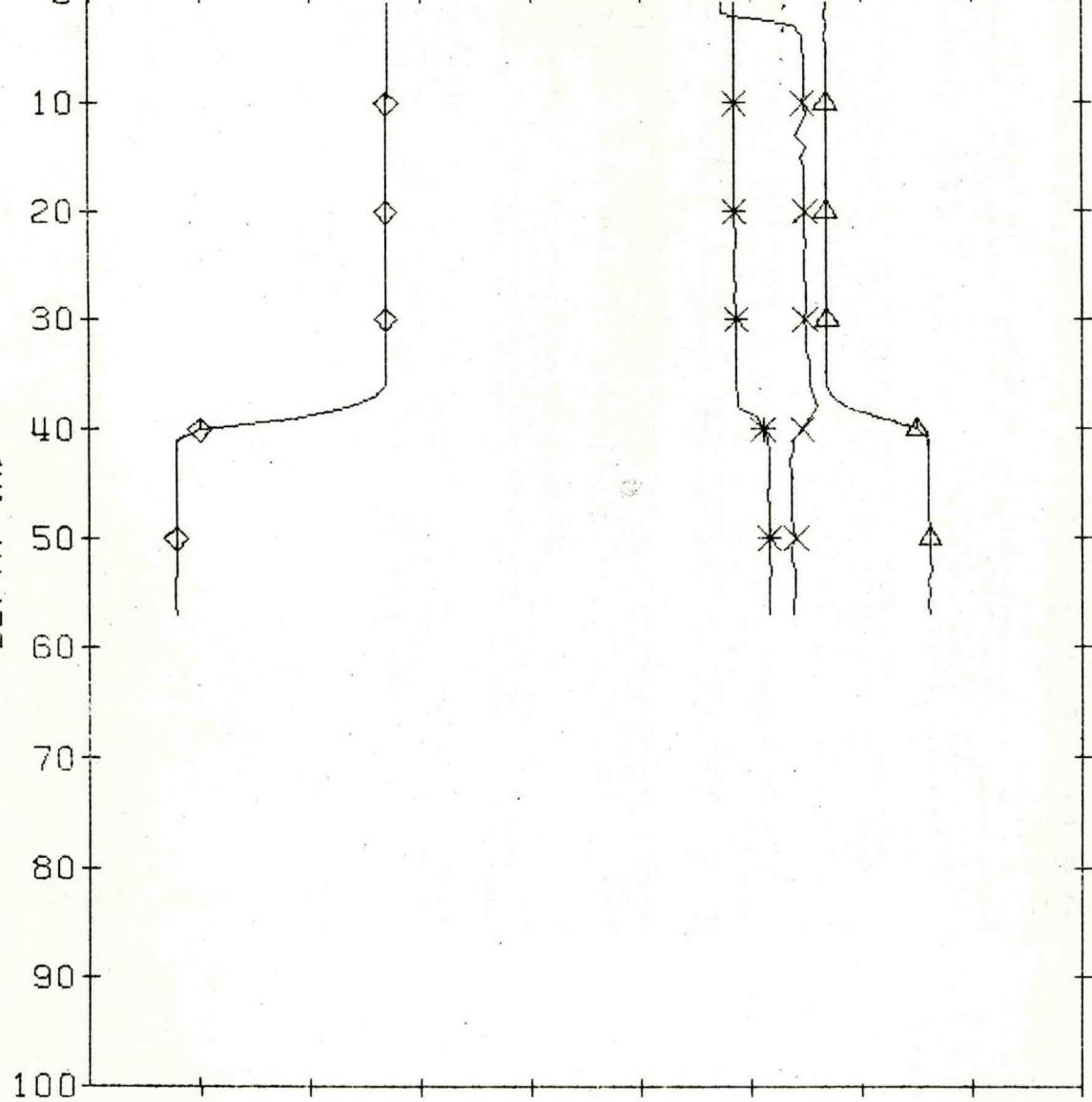
SALINITY (0/00)

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

TEMPERATURE (C)

◊ 8 10 12 14 16 18 20 22 24 26

DEPTH (M)

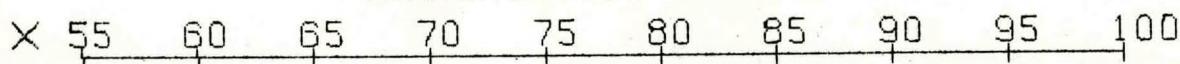


XWCC-16 STA.061 LAT 40 34.0N; LONG 72 13.0W GMT 16.4 10/18/77  
 DEPTH 53 AIR D/W 22.2/94.4 BARO 13.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 26/25 SEA DIR/HT 26/0 SWELL DIR/HT 24/2

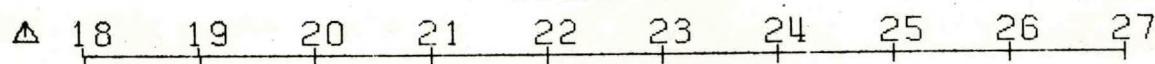
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	13.59	32.53	24.39	86.8	8.34	5.99				
2	13.59	32.53	24.39	86.8	8.34	5.99	.04	.36	.47	.40
3	13.59	32.54	24.40	88.3	8.34	5.50				
4	13.59	32.54	24.39	88.2	8.34	5.53				
5	13.60	32.53	24.39	88.0	8.34	5.54				
6	13.60	32.53	24.39	88.3	8.34	5.55				
7	13.59	32.54	24.39	88.0	8.34	5.55				
8	13.58	32.54	24.39	87.9	8.33	5.55				
9	13.58	32.54	24.39	88.1	8.33	5.55				
10	13.59	32.54	24.39	88.1	8.34	5.55	.08	.29	.88	.39
11	13.59	32.54	24.39	88.0	8.34	5.54				
12	13.59	32.54	24.39	88.1	8.34	5.54				
13	13.59	32.54	24.39	88.0	8.34	5.54				
14	13.58	32.54	24.39	88.1	8.34	5.54				
15	13.56	32.54	24.40	88.1	8.34	5.44				
16	13.57	32.54	24.40	88.0	8.34	5.44				
17	13.56	32.54	24.40	88.1	8.34	5.33				
18	13.56	32.54	24.40	88.1	8.34	5.33				
19	13.57	32.54	24.40	88.0	8.34	5.33				
20	13.55	32.54	24.40	88.0	8.34	5.33	.08	.29	.76	.43
21	13.55	32.54	24.40	88.1	8.34	5.21				
22	13.55	32.54	24.40	88.0	8.33	5.50				
23	13.55	32.54	24.40	88.1	8.34	5.50				
24	13.55	32.54	24.40	88.1	8.34	4.49				
25	13.55	32.54	24.40	88.2	8.34	4.49				
26	13.55	32.55	24.41	88.1	8.34	4.49				
27	13.54	32.55	24.41	88.0	8.34	4.49				
28	13.54	32.54	24.41	88.0	8.34	4.49				
29	13.54	32.54	24.41	88.0	8.34	4.49	.08	.32	.82	.42
30	13.53	32.55	24.41	88.0	8.34	4.48				
31	13.53	32.55	24.42	88.0	8.34	4.47				
32	13.53	32.55	24.42	88.0	8.34	4.46				
33	13.50	32.57	24.44	88.4	8.33	4.44				
34	13.47	32.57	24.44	88.3	8.32	4.44				
35	13.32	32.62	24.51	88.3	8.32	4.42				
36	13.17	32.62	24.55	88.4	8.30	4.42				
37	12.62	32.79	24.78	88.4	8.28	4.40				
38	11.97	32.88	24.97	88.4	8.27	3.38				
39	11.29	32.96	25.16	88.2	8.24	3.36	.16	2.88	8.62	.92
40	10.37	33.08	25.41	87.2	8.17	4.41				
41	10.30	33.08	25.43	86.7	8.15	3.34				
42	10.27	33.08	25.43	86.7	8.16	3.16				
43	10.19	33.08	25.45	86.3	8.16	4.98				
44	10.13	33.09	25.46	86.5	8.16	4.87				
45	10.11	33.09	25.46	86.6	8.16	4.78				
46	10.11	33.09	25.47	86.7	8.16	4.71				
47	10.11	33.10	25.47	86.7	8.15	4.65				
48	10.11	33.09	25.47	86.8	8.15	4.58				
49	10.11	33.10	25.47	86.8	8.15	4.54	.17	3.97	11.05	.97
50	10.11	33.10	25.47	86.8	8.15	4.53				
51	10.11	33.10	25.47	86.8	8.15					

KELEZ CRUISE XWCC-16 STATION 61 10/18/77

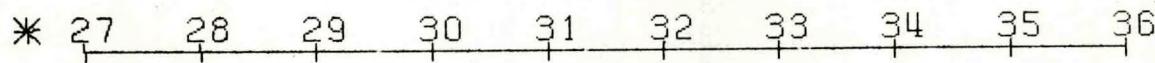
TRANSMISSIVITY (0/0)



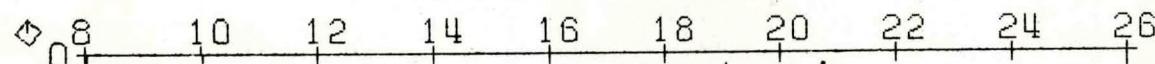
SIGMA-T



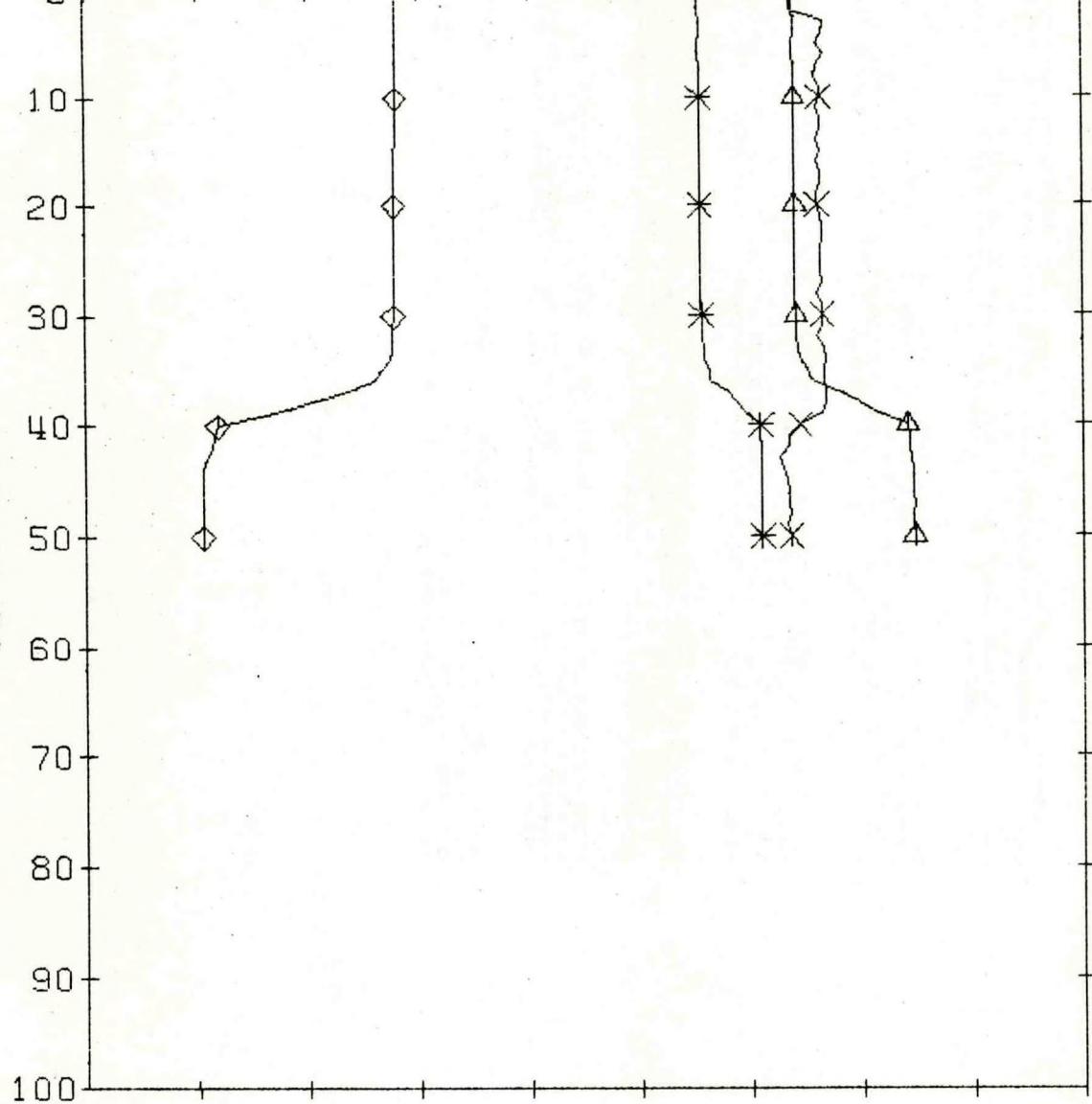
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)



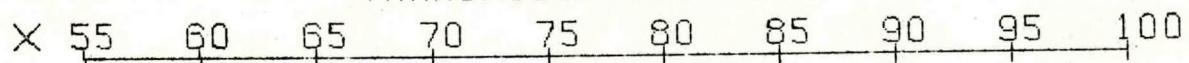
XWCC-16 STA.062 LAT 40 40.0N; LONG 72 15.9W GMT 15.3 10/18/77  
 DEPTH 48 AIR D/W 27.8/97.2 BARO 13.0 VIS 7 CLD TYP/CVR 2/1  
 WETHR 1 WIND DIR/SPD 28/16 SEA DIR/HT 28/0 SWELL DIR/HT 25/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	14.16	32.30	24.09	87.8	8.37	5.67				
2	14.16	32.30	24.09	87.8	8.37	5.67				
3	14.16	32.30	24.09	87.3	8.36	5.95				
4	14.16	32.30	24.09	87.8	8.37	5.69				
5	14.16	32.30	24.09	87.9	8.37	5.62				
6	14.16	32.30	24.09	87.6	8.36	5.69				
7	14.15	32.31	24.10	87.8	8.37	5.69				
8	14.15	32.31	24.10	87.5	8.37	5.69				
9	14.14	32.31	24.11	87.5	8.36	5.69				
10	14.14	32.31	24.11	87.8	8.36	5.69	.05	.75	.12	.39
11	14.14	32.32	24.11	87.9	8.37	5.68				
12	14.14	32.33	24.12	87.8	8.36	5.68				
13	14.13	32.34	24.13	87.8	8.36	5.68				
14	14.11	32.36	24.15	87.8	8.36	5.67				
15	14.10	32.37	24.16	87.6	8.36	5.67				
16	14.09	32.39	24.18	87.4	8.36	5.67				
17	14.09	32.40	24.18	87.7	8.37	5.67				
18	14.08	32.40	24.19	87.8	8.37	5.66				
19	14.08	32.41	24.19	87.7	8.36	5.65				
20	14.08	32.41	24.20	87.7	8.36	5.65	.05	.27	.00	.39
21	14.07	32.42	24.20	87.7	8.36	5.64				
22	14.06	32.43	24.21	87.7	8.37	5.64				
23	14.06	32.43	24.22	87.5	8.36	5.63				
24	14.05	32.44	24.22	87.1	8.36	5.62				
25	14.05	32.44	24.22	87.2	8.36	5.61				
26	14.04	32.44	24.23	87.6	8.36	5.60				
27	14.04	32.45	24.23	87.7	8.36	5.60				
28	14.03	32.46	24.24	87.8	8.36	5.59				
29	14.02	32.46	24.25	87.8	8.36	5.59				
30	14.01	32.47	24.25	87.8	8.36	5.58	.05	.67	.23	.43
31	14.00	32.47	24.26	87.7	8.35	5.57				
32	13.99	32.48	24.26	87.8	8.35	5.56				
33	13.98	32.48	24.27	87.8	8.35	5.55				
34	13.96	32.49	24.28	87.8	8.35	5.54				
35	13.94	32.51	24.30	87.8	8.35	5.54				
36	13.91	32.52	24.31	87.8	8.34	5.54				
37	13.90	32.51	24.31	87.7	8.34	5.54				
38	13.87	32.50	24.37	88.0	8.32	5.53				
39	12.76	32.67	24.66	87.9	8.29	5.50				
40	11.97	32.87	24.97	87.5	8.23	5.54				
41	11.61	32.97	25.11	87.3	8.17	5.57				
42	11.48	32.96	25.12	87.3	8.15	5.58				
43	11.45	32.96	25.13	87.1	8.14	5.56				
44	11.44	32.97	25.14	87.1	8.13	5.48				
45	11.42	32.98	25.15	86.9	8.14	5.37	.07	3.18	9.54	.93
46	11.42	32.98	25.15	86.9	8.14	5.23				
47	11.41	32.97	25.14	86.8	8.14	5.09				

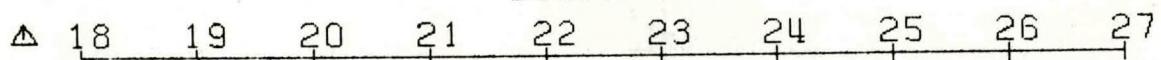
KELEZ CRUISE XWCC-16 STATION 62

10/18/77

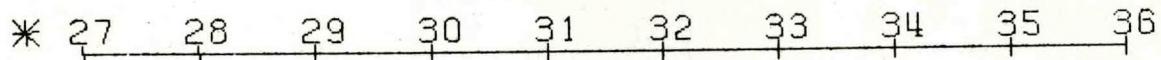
## TRANSMISSIVITY (0/0)



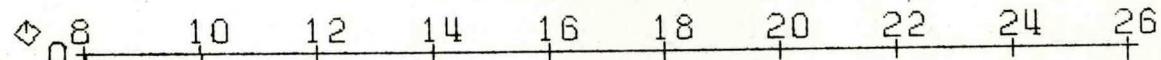
## SIGMA-T



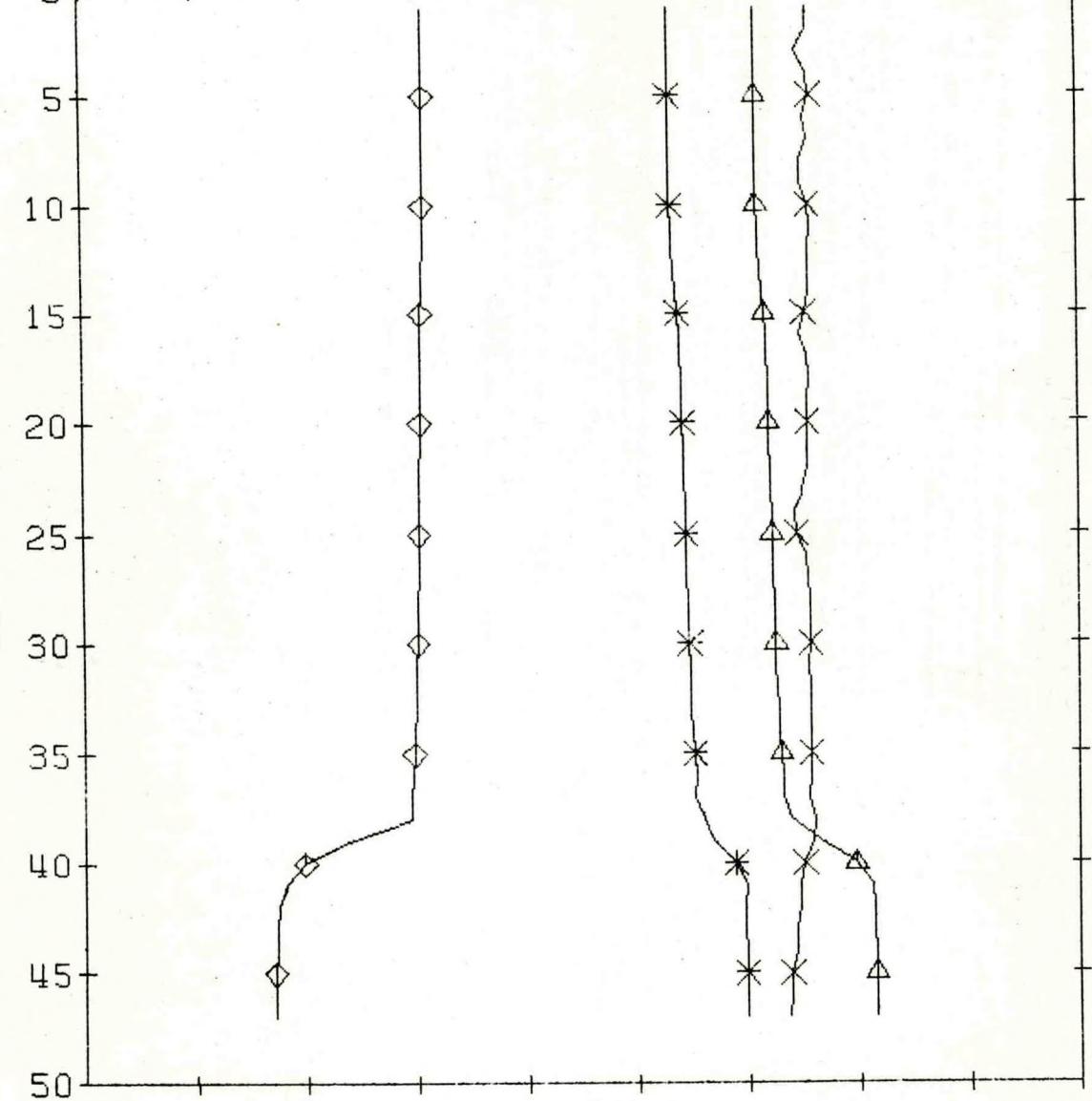
## SALINITY (0/00)



## TEMPERATURE (C)



DEPTH (M)

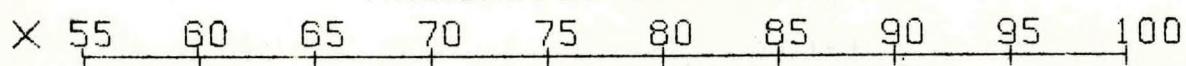


XWCC-16 STA.063 LAT 40 46.1N; LONG 72 22.3W GMT 14.2 10/18/77  
 DEPTH 34 AIR D/W 38.9/05.6 BARO 13.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 27/18 SEA DIR/HT 27/0 SWELL DIR/HT 27/1

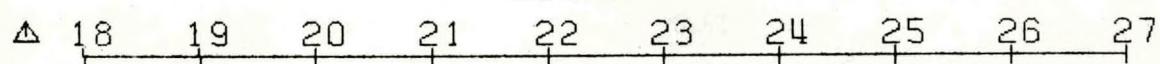
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	14.34	32.05	23.86	86.7	8.36	6.15				
2	14.34	32.05	23.86	86.7	8.36	6.15				
3	14.34	32.05	23.86	86.6	8.36	6.67				
4	14.34	32.05	23.86	86.7	8.37	6.61				
5	14.34	32.05	23.86	86.6	8.36	6.61				
6	14.34	32.05	23.86	86.6	8.36	6.61				
7	14.34	32.05	23.86	86.7	8.36	6.62				
8	14.34	32.04	23.86	86.7	8.36	6.62				
9	14.34	32.05	23.87	86.6	8.36	6.63				
10	14.33	32.06	23.87	86.4	8.36	6.63	.18	.42	1.06	.57
11	14.33	32.06	23.87	86.4	8.36	6.63				
12	14.33	32.06	23.87	86.3	8.36	6.63				
13	14.32	32.07	23.88	86.2	8.35	6.62				
14	14.33	32.07	23.88	86.3	8.35	6.62				
15	14.33	32.07	23.88	86.1	8.35	6.62				
16	14.34	32.06	23.87	85.6	8.34	6.61				
17	14.33	32.07	23.88	86.3	8.34	6.60				
18	14.33	32.07	23.88	86.4	8.34	6.60				
19	14.33	32.07	23.88	86.1	8.34	6.59	.22	.41	1.36	.55
20	14.33	32.08	23.89	85.8	8.34	6.59				
21	14.33	32.09	23.89	85.6	8.34	6.58				
22	14.33	32.09	23.89	85.6	8.34	6.57				
23	14.33	32.09	23.89	85.8	8.34	6.56				
24	14.34	32.09	23.89	85.8	8.34	6.55				
25	14.34	32.09	23.89	85.8	8.34	6.55				
26	14.33	32.09	23.89	85.6	8.34	6.55				
27	14.33	32.09	23.89	85.4	8.34	6.55				
28	14.34	32.09	23.89	85.8	8.34	6.54				
29	14.34	32.09	23.89	85.6	8.34	6.54				
30	14.34	32.08	23.89	85.6	8.34	6.53				
31	14.34	32.08	23.89	85.7	8.34	6.52				
32	14.34	32.09	23.89	85.7	8.34	6.51				
33	14.34	32.08	23.89	85.6	8.35	5.51	.22	.41	1.41	.55
34	14.34	32.08	23.89	85.7	8.35	5.51				

KELEZ CRUISE XWCC-16 STATION 63 10/18/77

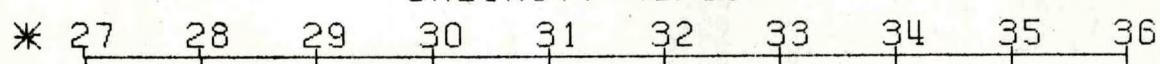
TRANSMISSIVITY (0/0)



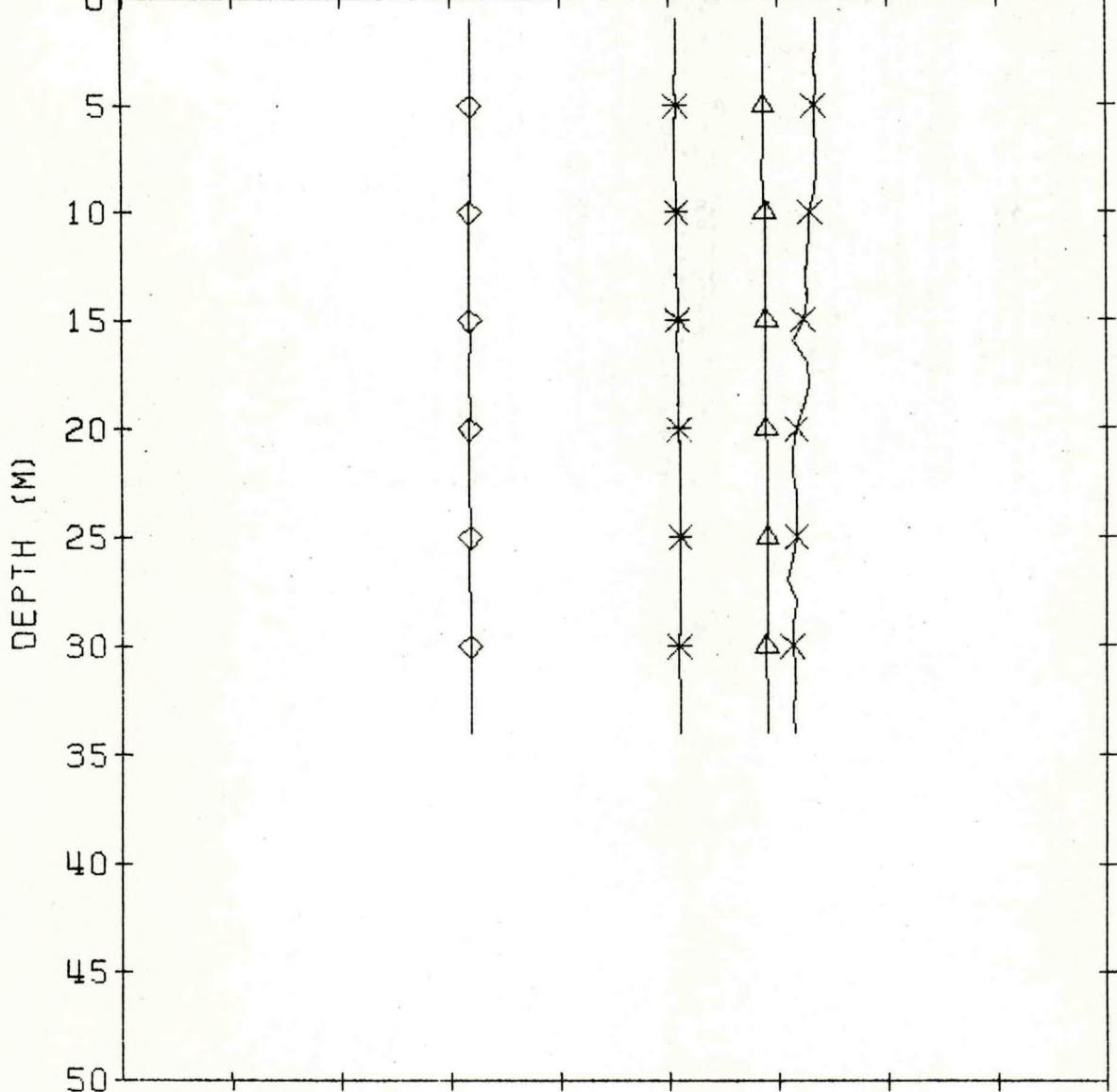
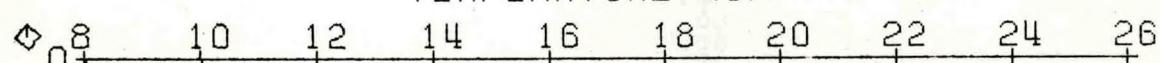
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

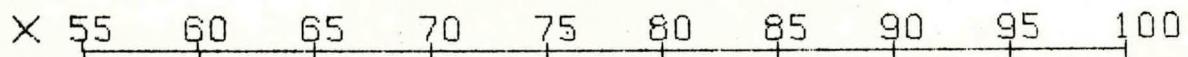


XWCC-16 STA. 064 LAT 40 11.8N; LONG 72 19.6W GMT 02.1 10/17/77  
 DEPTH 66 AIR D/W 61.1/54.4 BARO 94.5 VIS 6 CLD TYP/CVR 7/8  
 WETHR 6 WIND DIR/SPD 13/18 SEA DIR/HT 13/0 SWELL DIR/HT 14/2

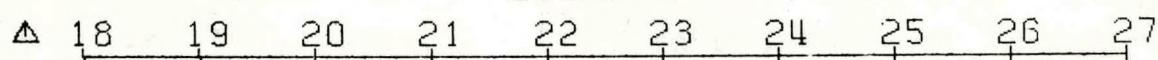
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	14.61	32.95	24.50	88.5	8.43	5.83				
2	14.61	32.95	24.50	88.5	8.43	5.83				
3	14.61	32.95	24.50	88.3	8.43	5.81				
4	14.61	32.95	24.50	88.5	8.42	5.81				
5	14.61	32.95	24.50	88.5	8.42	5.81				
6	14.61	32.95	24.50	88.4	8.42	5.81				
7	14.61	32.95	24.50	88.4	8.42	5.81				
8	14.61	32.95	24.50	88.5	8.42	5.80				
9	14.60	32.95	24.50	88.5	8.42	5.81				
10	14.60	32.95	24.50	88.5	8.42	5.80	.07	.20	.00	.25
11	14.60	32.95	24.50	88.4	8.43	5.80				
12	14.60	32.95	24.50	88.4	8.42	5.79				
13	14.60	32.95	24.50	88.5	8.42	5.79				
14	14.61	32.95	24.50	88.5	8.42	5.78				
15	14.61	32.95	24.50	88.5	8.42	5.78				
16	14.61	32.95	24.50	88.5	8.42	5.78				
17	14.61	32.95	24.50	88.5	8.42	5.78				
18	14.61	32.95	24.50	88.5	8.42	5.78				
19	14.61	32.95	24.50	88.6	8.42	5.78				
20	14.61	32.95	24.50	88.6	8.43	5.78				
21	14.61	32.95	24.50	88.6	8.42	5.77				
22	14.61	32.95	24.50	88.6	8.41	5.77				
23	14.61	32.95	24.50	88.7	8.42	5.77				
24	14.66	32.95	24.52	88.7	8.42	5.77				
25	14.74	32.95	24.54	89.0	8.42	5.76				
26	14.91	32.95	24.62	89.4	8.42	5.75				
27	15.05	32.95	24.67	89.5	8.42	5.73				
28	15.11	32.95	24.75	89.8	8.42	5.70				
29	15.14	32.95	24.81	89.8	8.42	5.67				
30	15.13	32.95	24.83	89.8	8.42	5.66	.09	.53	.00	.28
31	15.12	32.95	24.85	89.9	8.42	5.64				
32	15.13	32.95	24.86	90.1	8.42	5.63				
33	15.13	32.95	24.87	90.0	8.42	5.62				
34	15.14	32.95	24.91	90.1	8.42	5.60				
35	14.69	32.95	24.97	90.1	8.41	5.59				
36	13.63	32.95	25.16	90.0	8.41	5.63				
37	13.63	32.95	25.22	89.9	8.34	5.73				
38	12.84	32.95	25.25	89.9	8.34	5.73				
39	11.37	32.95	25.50	89.9	8.30	5.74				
40	10.52	32.95	25.62	89.9	8.27	5.79				
41	9.99	32.95	25.68	89.9	8.25	5.85				
42	9.62	32.95	25.71	89.9	8.21	5.83				
43	9.49	32.95	25.71	88.6	8.21	5.78				
44	9.43	32.95	25.70	88.3	8.21	5.64				
45	9.37	32.95	25.71	88.0	8.21	5.48				
46	9.36	32.95	25.70	88.0	8.21	5.46				
47	9.34	32.95	25.70	88.0	8.21	5.37				
48	9.34	32.95	25.71	88.0	8.21	5.24				
49	9.33	32.95	25.71	88.3	8.20	5.16				
50	9.33	32.95	25.71	88.3	8.20	4.78				
60	9.33	32.95	25.73	88.3	8.18	4.70				
64	9.32	33.26	25.73				0.01	7.59	16.13	1.05

KELEZ CRUISE XWCC-16 STATION 64 10/17/77

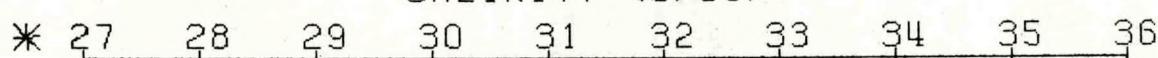
TRANSMISSIVITY (0/0)



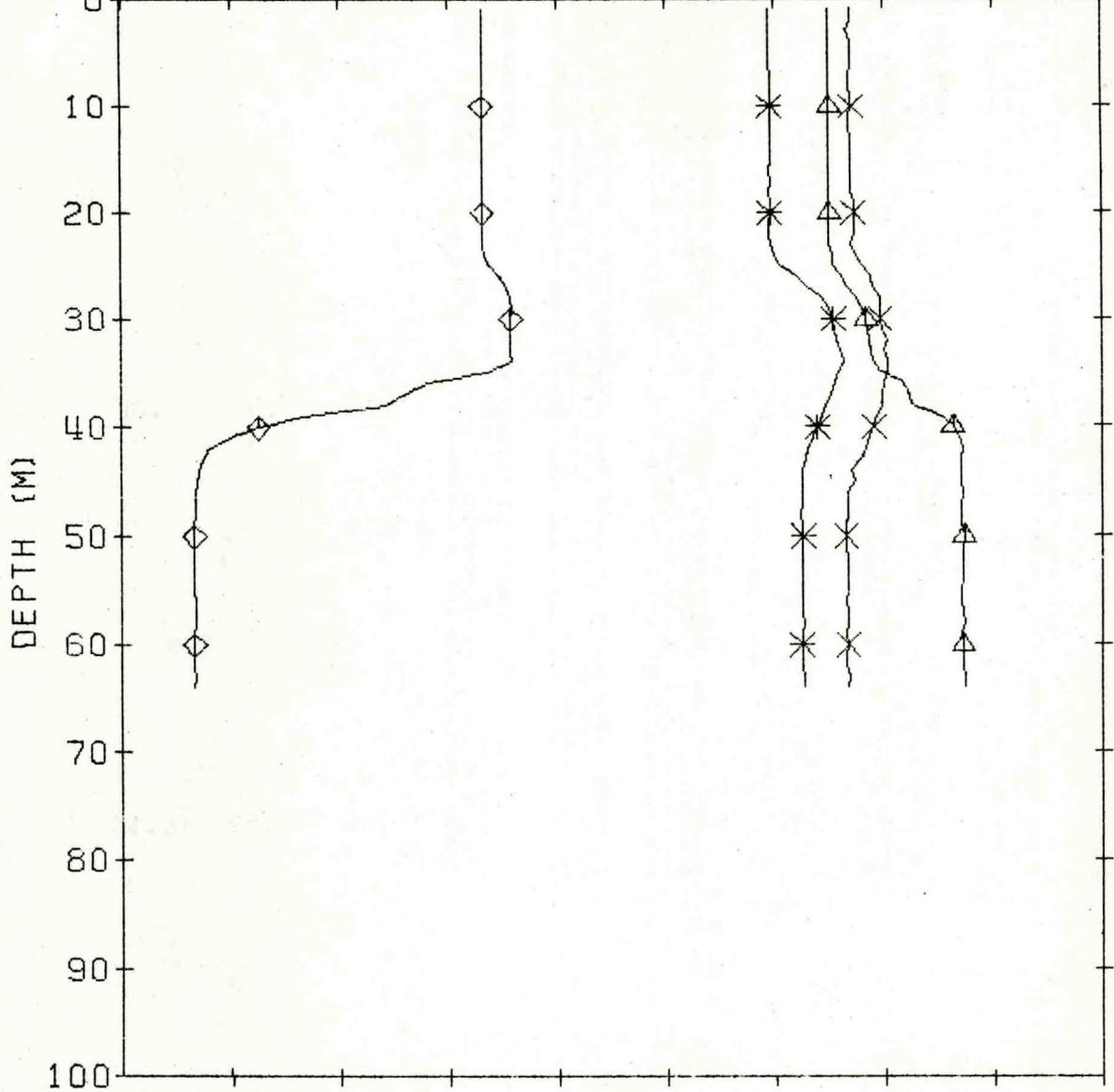
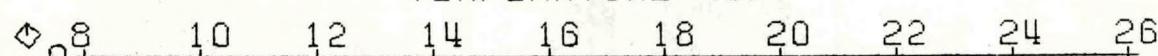
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)

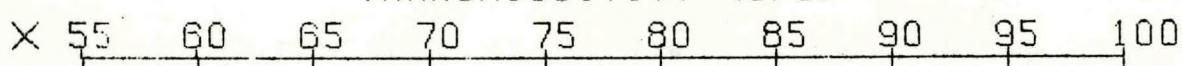


XWCC-16 STA.065 LAT 40°19.4N; LONG 72°25.3W GMT 03.5 10/17/77  
 DEPTH 52 AIR D/W 48.9/38.9 BARO 94.0 VIS 6 CLD TYP/CVR 7/8  
 WETHR 2 WIND DIR/SPD 23/16 SEA DIR/HT 23/1 SWELL DIR/HT 15/2

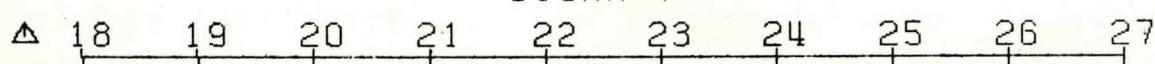
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	14.49	32.66	24.30	88.6	8.42	5.75				
2	14.49	32.66	24.30	88.6	8.42	5.75				
3	14.49	32.66	24.30	88.6	8.42	5.75				
4	14.48	32.66	24.30	88.6	8.41	5.74				
5	14.48	32.66	24.30	88.8	8.41	5.74				
6	14.48	32.67	24.31	88.9	8.41	5.75				
7	14.48	32.67	24.31	88.8	8.41	5.75				
8	14.49	32.67	24.31	88.6	8.41	5.74				
9	14.48	32.67	24.31	88.7	8.41	5.74	.04	.23	.00	.33
10	14.48	32.68	24.31	88.8	8.41	5.74				
11	14.48	32.69	24.32	88.8	8.41	5.74				
12	14.48	32.69	24.32	88.7	8.41	5.74				
13	14.48	32.71	24.34	88.7	8.41	5.74				
14	14.48	32.74	24.37	88.7	8.41	5.75				
15	14.49	32.77	24.39	88.8	8.40	5.73				
16	14.49	32.82	24.42	88.8	8.41	5.73				
17	14.50	32.89	24.47	88.9	8.41	5.72				
18	14.52	32.94	24.51	89.1	8.41	5.72				
19	14.54	32.97	24.53	89.3	8.41	5.72				
20	14.55	32.99	24.55	89.4	8.42	5.72	.03	.34	.00	.28
21	14.56	33.03	24.56	89.6	8.42	5.71				
22	14.58	33.04	24.57	89.4	8.41	5.71				
23	14.59	33.05	24.58	89.7	8.41	5.70				
24	14.60	33.04	24.57	89.9	8.41	5.69				
25	14.60	33.06	24.58	90.0	8.41	5.67				
26	14.61	33.06	24.58	90.0	8.41	5.67				
27	14.61	33.06	24.58	90.1	8.42	5.66				
28	14.62	33.06	24.58	90.0	8.42	5.65				
29	14.62	33.07	24.59	90.1	8.41	5.65	.03	.42	.06	.30
30	14.63	33.09	24.60	90.0	8.41	5.64				
31	14.63	33.10	24.61	90.1	8.41	5.64				
32	14.65	33.11	24.62	90.2	8.42	5.63				
33	14.65	33.14	24.64	90.3	8.41	5.62				
34	14.67	33.17	24.66	90.3	8.41	5.62				
35	14.67	33.18	24.67	90.4	8.41	5.62				
36	14.68	33.12	24.74	90.4	8.38	5.60				
37	12.71	33.09	24.99	90.3	8.35	5.61	.07	3.35	8.38	.86
38	11.65	33.07	25.18	89.6	8.27	5.71				
39	11.35	33.05	25.22	89.1	8.23	5.81				
40	11.30	33.03	25.21	88.9	8.21	5.84				
41	11.29	33.02	25.21	88.7	8.21	5.77				
42	11.25	33.02	25.21	88.7	8.21	5.63				
43	11.14	33.02	25.23	88.6	8.21	5.50				
44	11.06	33.03	25.26	88.4	8.21	5.40				
45	10.99	33.05	25.28	88.4	8.21	5.27				
46	10.94	33.05	25.29	88.4	8.20	5.17				
47	10.91	33.05	25.29	88.3	8.20	5.15				
48	10.89	33.06	25.30	88.1	8.21	5.07				
49	10.89	33.06	25.30	88.2	8.21	5.00	.04	3.70	9.38	.91
50	10.88	33.06	25.31	88.3	8.20	4.84				

KELEZ CRUISE XWCC-16 STATION 65 10/17/77

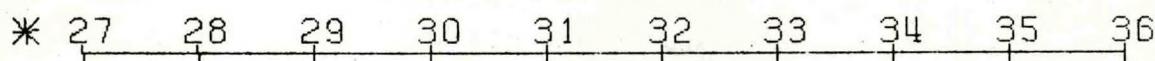
TRANSMISSIVITY (0/0)



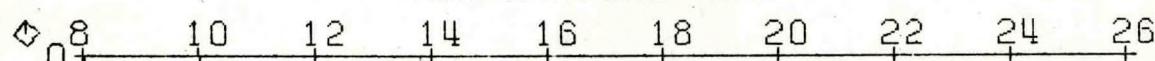
SIGMA-T



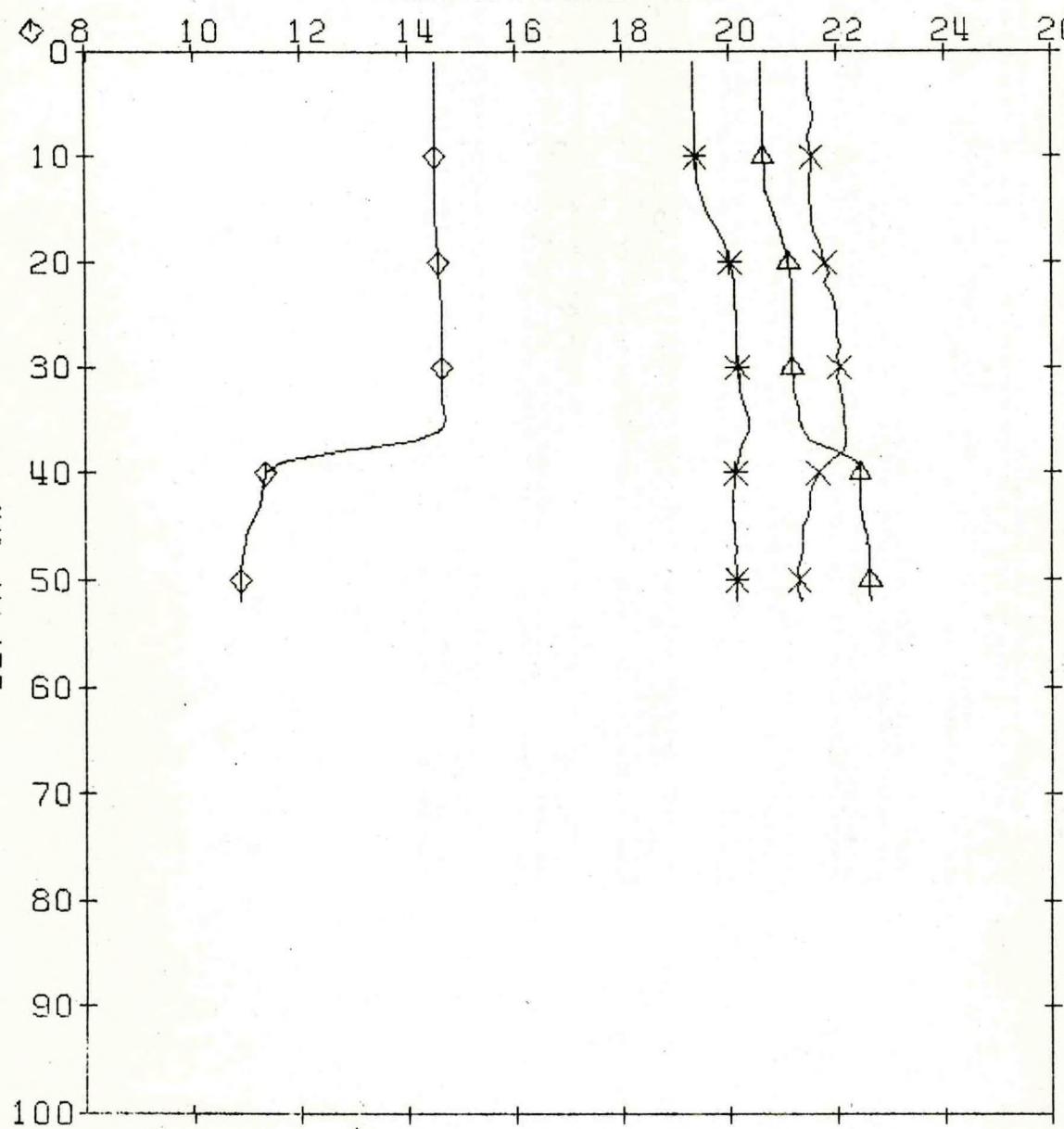
SALINITY (0/00)



TEMPERATURE (C)



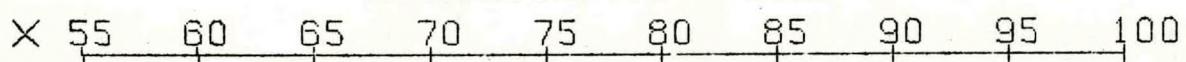
DEPTH (M)



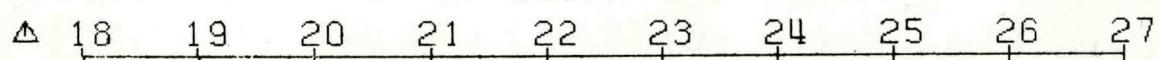
XWCC\_16 STA.066 LAT 40 33.5N; LONG 72 33.2W GMT 06.1 10/17/77  
DEPTH 39 AIR D/W 33.3/22.2 BARO 93.0 VIS 7 CLD TYP/CVR 9/6  
WEATHER 9 WIND DIR/SPD 21/30 SEA DIR/HT 14/3 SWELL DIR/HT 15/2

KELEZ CRUISE XWCC-16 STATION 66 10/17/77

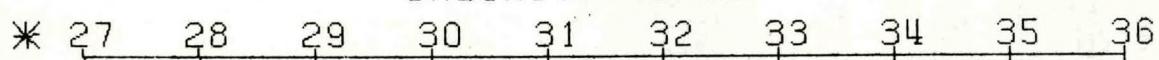
TRANSMISSIVITY (0/0)



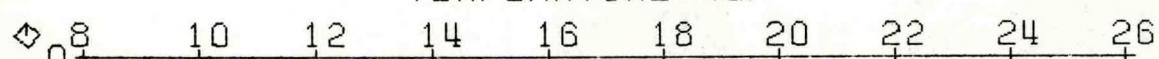
SIGMA-T



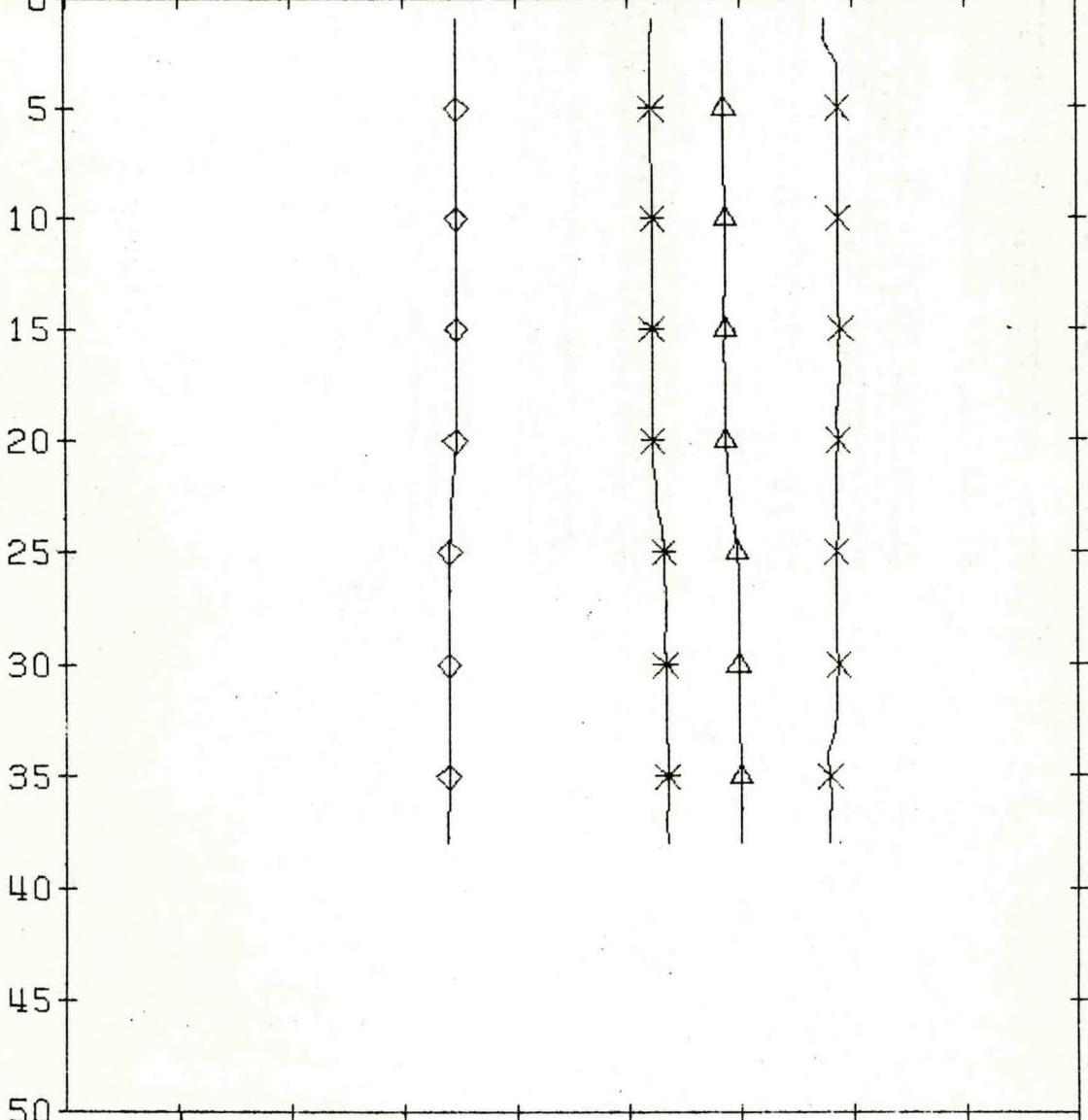
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

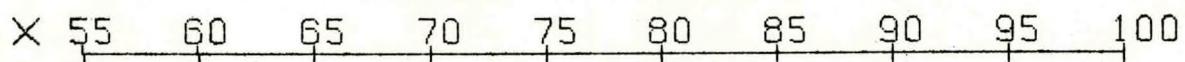


XWCC-16 STA.067 LAT 40 38.1N; LONG 72 40.0W GMT 12.3 10/18/77  
 DEPTH 34 AIR D/W 27.8/02.8 BARO 12.5 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 28/18 SEA DIR/HT 28/0 SWELL DIR/HT 27/2

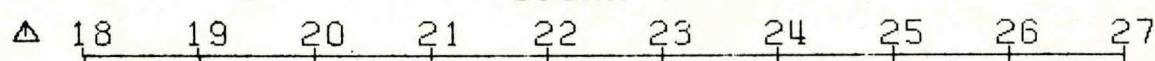
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.08	32.35	23.93	86.2	8.38	5.45				
2	15.08	32.34	23.93	86.2	8.38	5.45	.18	.29	1.65	.53
3	15.08	32.34	23.93	86.2	8.38	5.45				
4	15.08	32.35	23.93	86.2	8.37	5.46				
5	15.07	32.35	23.94	86.4	8.37	5.46				
6	15.08	32.35	23.94	86.2	8.38	5.46				
7	15.08	32.35	23.93	86.2	8.38	5.46				
8	15.08	32.35	23.94	86.2	8.37	5.47				
9	15.08	32.35	23.94	86.2	8.37	5.46				
10	15.08	32.35	23.94	86.2	8.37	5.46	.18	.32	1.65	.50
11	15.08	32.35	23.94	86.4	8.37	5.46				
12	15.08	32.35	23.93	86.2	8.37	5.46				
13	15.08	32.34	23.93	86.3	8.37	5.46				
14	15.08	32.35	23.94	86.3	8.38	5.45				
15	15.08	32.35	23.94	86.2	8.37	5.45				
16	15.08	32.35	23.94	86.2	8.38	5.45				
17	15.07	32.34	23.93	86.4	8.37	5.45				
18	15.07	32.34	23.94	86.3	8.37	5.46				
19	15.07	32.34	23.94	86.3	8.37	5.45	.21	.39	1.59	.46
20	15.07	32.34	23.93	86.3	8.37	5.45				
21	15.08	32.35	23.93	86.3	8.37	5.45				
22	15.08	32.34	23.93	86.3	8.37	5.45				
23	15.08	32.34	23.93	86.3	8.37	5.45				
24	15.08	32.34	23.93	86.4	8.37	5.44				
25	15.08	32.34	23.93	86.1	8.38	5.44				
26	15.08	32.34	23.93	86.2	8.38	5.44				
27	15.08	32.34	23.93	86.2	8.38	5.44				
28	15.08	32.34	23.93	86.4	8.38	5.43				
29	15.08	32.34	23.93	86.1	8.38	5.44				
30	15.08	32.34	23.93	85.9	8.38	5.43	.18	.32	1.65	.45
31	15.08	32.35	23.93	86.2	8.38	5.44				
32	15.08	32.35	23.94	86.1	8.38	5.43				

KELEZ CRUISE XWCC-16 STATION 67 10/18/77

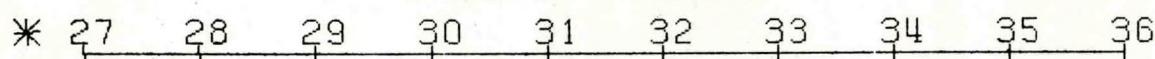
TRANSMISSIVITY (0/0)



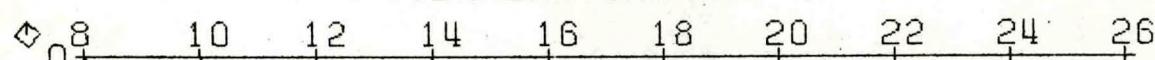
SIGMA-T



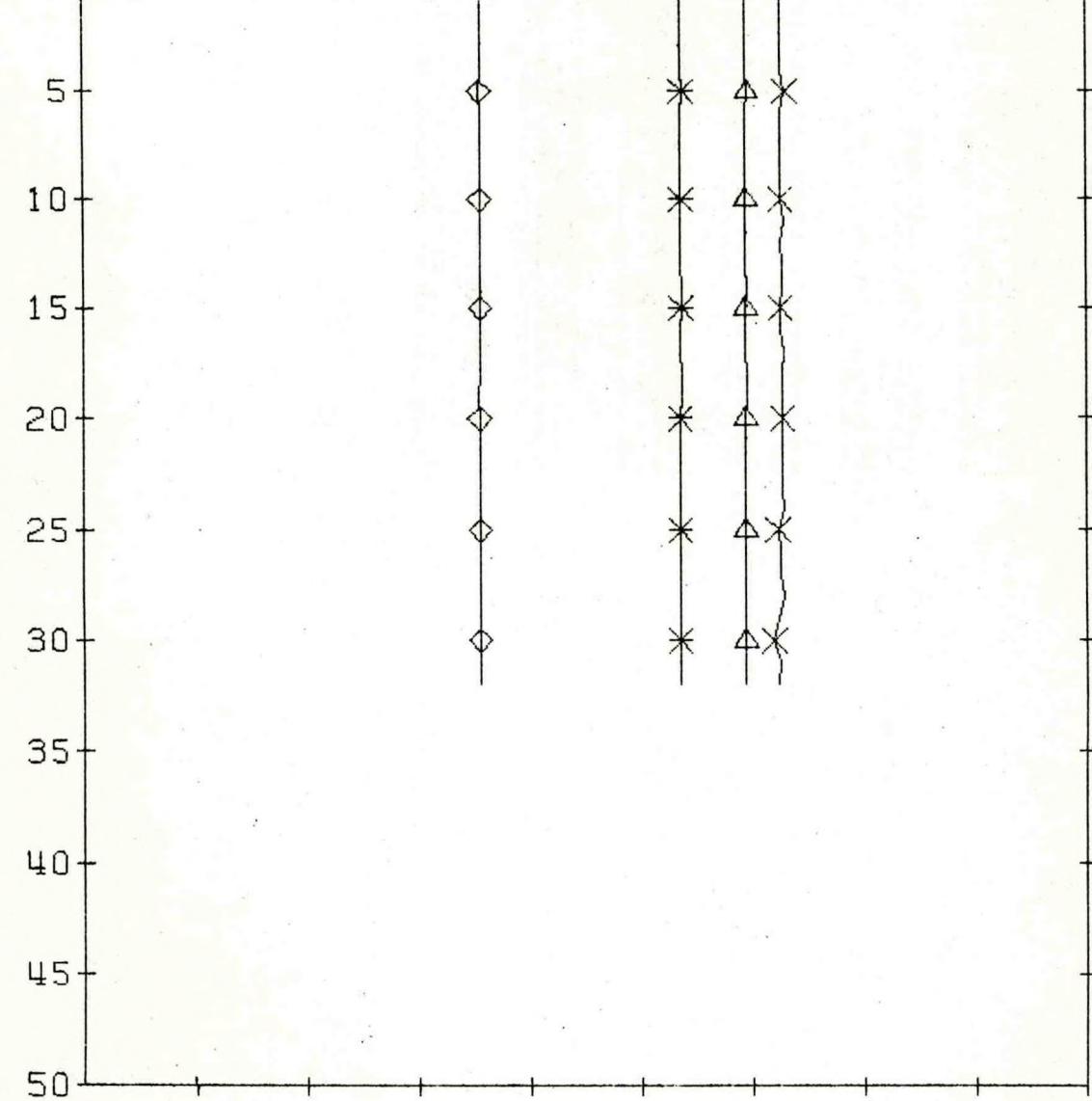
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

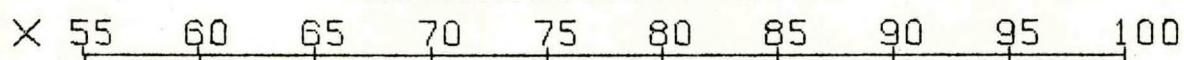


XWCC-16 STA.068 LAT 40 19.0N; LONG 72 46.0W GMT 21.5 10/16/77  
 DEPTH 48 AIR D/W 80 6/66.7 BARO 00.5 VIS 6 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 14/13 SEA DIR/HT 14/0 SWELL DIR/HT 14/2

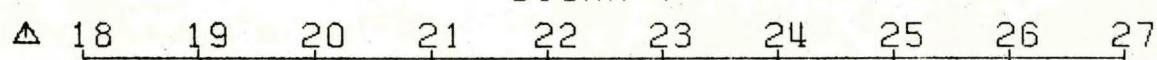
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	14.58	32.59	24.23	88.5	8.43	5.84				
2	14.58	32.59	24.23	88.5	8.43	5.84				
3	14.56	32.59	24.23	88.5	8.42	5.82				
4	14.57	32.59	24.23	88.7	8.42	5.81				
5	14.57	32.59	24.23	88.8	8.42	5.81				
6	14.57	32.59	24.23	88.8	8.42	5.80				
7	14.57	32.59	24.23	88.9	8.42	5.81				
8	14.56	32.59	24.23	88.9	8.42	5.81				
9	14.56	32.59	24.23	88.8	8.42	5.81				
10	14.55	32.60	24.24	89.0	8.41	5.81				
11	14.55	32.60	24.24	88.9	8.42	5.80				
12	14.55	32.60	24.24	89.0	8.42	5.80				
13	14.55	32.60	24.24	89.0	8.42	5.80				
14	14.54	32.60	24.24	89.0	8.42	5.80				
15	14.54	32.60	24.24	89.1	8.42	5.79				
16	14.54	32.60	24.24	89.1	8.42	5.79				
17	14.54	32.60	24.24	89.1	8.42	5.78				
18	14.54	32.60	24.24	89.1	8.42	5.78				
19	14.53	32.61	24.25	89.2	8.42	5.77				
20	14.53	32.61	24.25	89.1	8.42	5.77	.05	.19	.00	.28
21	14.53	32.61	24.26	89.1	8.42	5.77				
22	14.53	32.61	24.26	89.2	8.42	5.76				
23	14.53	32.61	24.26	89.2	8.42	5.76				
24	14.53	32.62	24.26	89.2	8.41	5.75				
25	14.54	32.64	24.27	89.4	8.41	5.75				
26	14.56	32.70	24.32	89.6	8.41	5.74				
27	14.62	32.77	24.36	89.7	8.41	5.72				
28	14.66	32.83	24.39	89.7	8.41	5.70				
29	14.71	32.89	24.43	89.6	8.41	5.67				
30	14.74	32.92	24.45	89.7	8.41	5.65	.07	.33	.00	.32
31	14.77	32.96	24.47	89.5	8.41	5.64				
32	14.82	33.01	24.50	89.2	8.41	5.62				
33	14.84	33.05	24.52	89.8	8.40	5.61				
34	14.85	33.05	24.52	89.8	8.40	5.60				
35	14.85	33.07	24.54	89.8	8.41	5.59				
36	14.84	33.07	24.54	90.0	8.40	5.58				
37	14.82	33.07	24.55	90.1	8.40	5.58				
38	14.78	33.07	24.55	90.0	8.40	5.57				
39	14.76	33.05	24.54	90.0	8.39	5.55				
40	14.70	33.04	24.54	90.0	8.39	5.55	.04	.34	.00	.34
41	14.62	33.02	24.55	89.9	8.38	5.54				
42	14.57	33.02	24.57	89.9	8.37	5.53				
43	14.52	33.02	24.58	89.9	8.37	5.51				
44	14.46	33.04	24.60	89.8	8.37	5.48				
45	14.38	33.02	24.60	89.8	8.36	5.48				
46	14.08	33.02	24.67	89.7	8.33	5.28	.11	1.23	1.95	.60
47	13.47	33.02	24.79	89.5	8.34	5.38				

KELEZ CRUISE XWCC-16 STATION 68 10/16/77

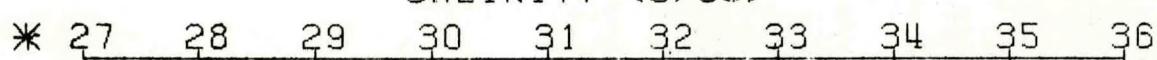
TRANSMISSIVITY (0/0)



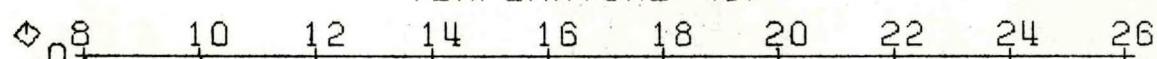
SIGMA-T



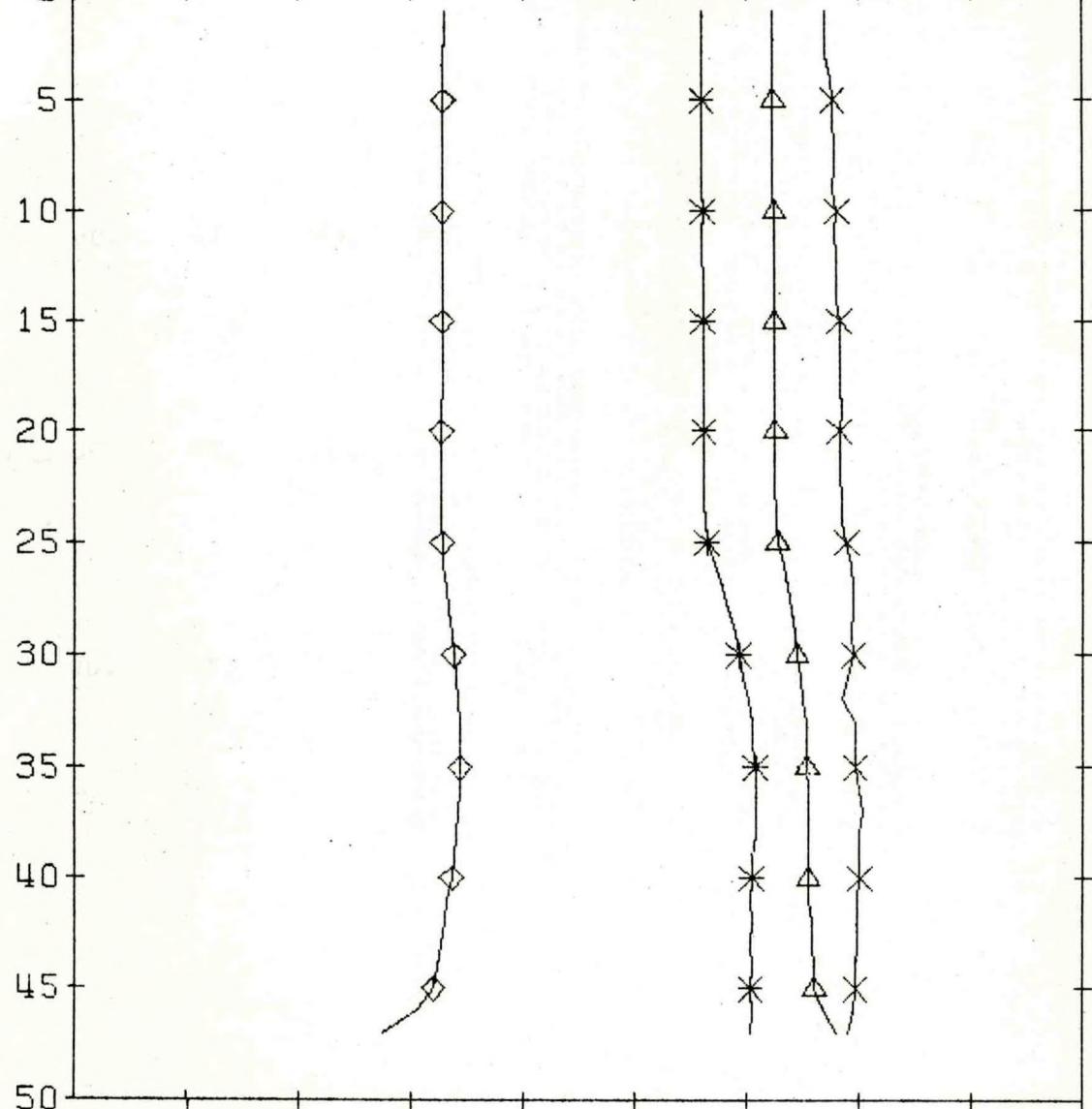
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

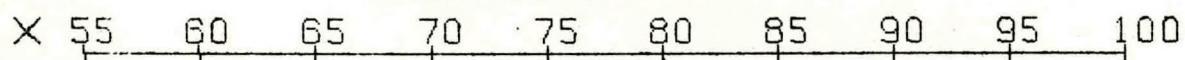


XWCC-16 STA.069 LAT 40 24.7N; LONG 72 55.5W GMT 05.2 10/14/77  
 DEPTH 41 AIR D/W 27.8/05.6 BARO 20.0 VIS 7 CLD TYP/CVR 7/8  
 WETHR 2 WIND DIR/SPD 04/30 SEA DIR/HT 04/1 SWELL DIR/HT 06/2

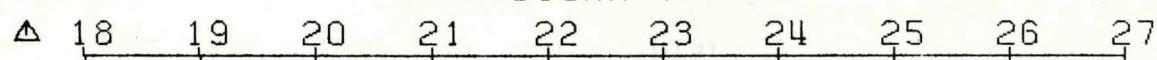
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.06	32.43	23.78	88.5	8.47	5.86				
2	16.06	32.43	23.78	88.5	8.47	5.86				
3	16.05	32.43	23.79	87.4	8.47	5.84				
4	16.05	32.44	23.79	89.4	8.45	5.78				
5	16.05	32.44	23.79	89.2	8.44	5.79				
6	16.05	32.44	23.79	89.3	8.44	5.78				
7	16.05	32.44	23.79	89.2	8.44	5.78				
8	16.05	32.44	23.79	89.3	8.43	5.77				
9	16.05	32.44	23.79	89.2	8.43	5.77				
10	16.05	32.44	23.79	89.2	8.44	5.77	.01	.02	.00	.23
11	16.05	32.44	23.79	89.1	8.43	5.77				
12	16.05	32.45	23.80	89.1	8.43	5.77				
13	16.06	32.44	23.79	89.1	8.43	5.77				
14	16.05	32.44	23.79	89.1	8.43	5.77				
15	16.05	32.44	23.79	89.2	8.43	5.77				
16	16.05	32.44	23.79	89.3	8.43	5.77				
17	16.05	32.44	23.79	89.2	8.44	5.77				
18	16.05	32.44	23.79	89.2	8.43	5.77				
19	16.05	32.44	23.79	89.2	8.43	5.76				
20	16.05	32.44	23.79	89.1	8.43	5.75	.01	.08	.00	.25
21	16.05	32.44	23.79	89.2	8.43	5.75				
22	16.03	32.45	23.80	89.1	8.43	5.76				
23	16.04	32.44	23.80	89.1	8.43	5.76				
24	16.05	32.44	23.79	89.2	8.43	5.75				
25	16.06	32.44	23.79	89.1	8.43	5.75				
26	15.98	32.47	23.83	89.1	8.43	5.75				
27	16.02	32.45	23.81	89.1	8.43	5.75				
28	16.03	32.45	23.80	89.1	8.43	5.74				
29	16.02	32.46	23.81	89.2	8.43	5.74				
30	15.94	32.47	23.84	89.3	8.42	5.75				
31	15.69	32.52	24.93	88.0	8.40	5.74				
32	12.23	32.73	24.97	88.0	8.37	5.76				
33	12.16	32.73	24.95	88.0	8.34	5.84				
34	12.12	32.93	24.98	88.0	8.27	5.29				
35	12.08	32.94	24.99	88.0	8.11	4.79				
36	12.00	32.94	25.01	87.6	8.07	4.43				
37	11.91	32.96	25.04	87.5	8.07	4.12				
38	11.89	32.95	25.04	87.5	8.07	3.98				
39	11.88	32.95	25.05	87.5	8.07	3.83	.03	5.23	4.12	1.53
40						3.65				

KELEZ CRUISE XWCC-16 STATION 69 10/14/77

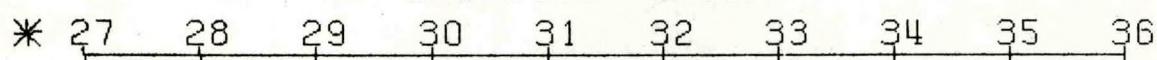
TRANSMISSIVITY (0/0)



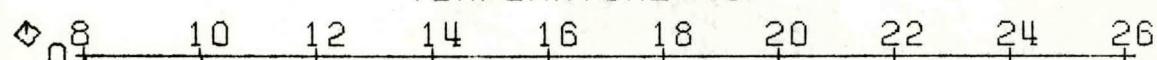
SIGMA-T



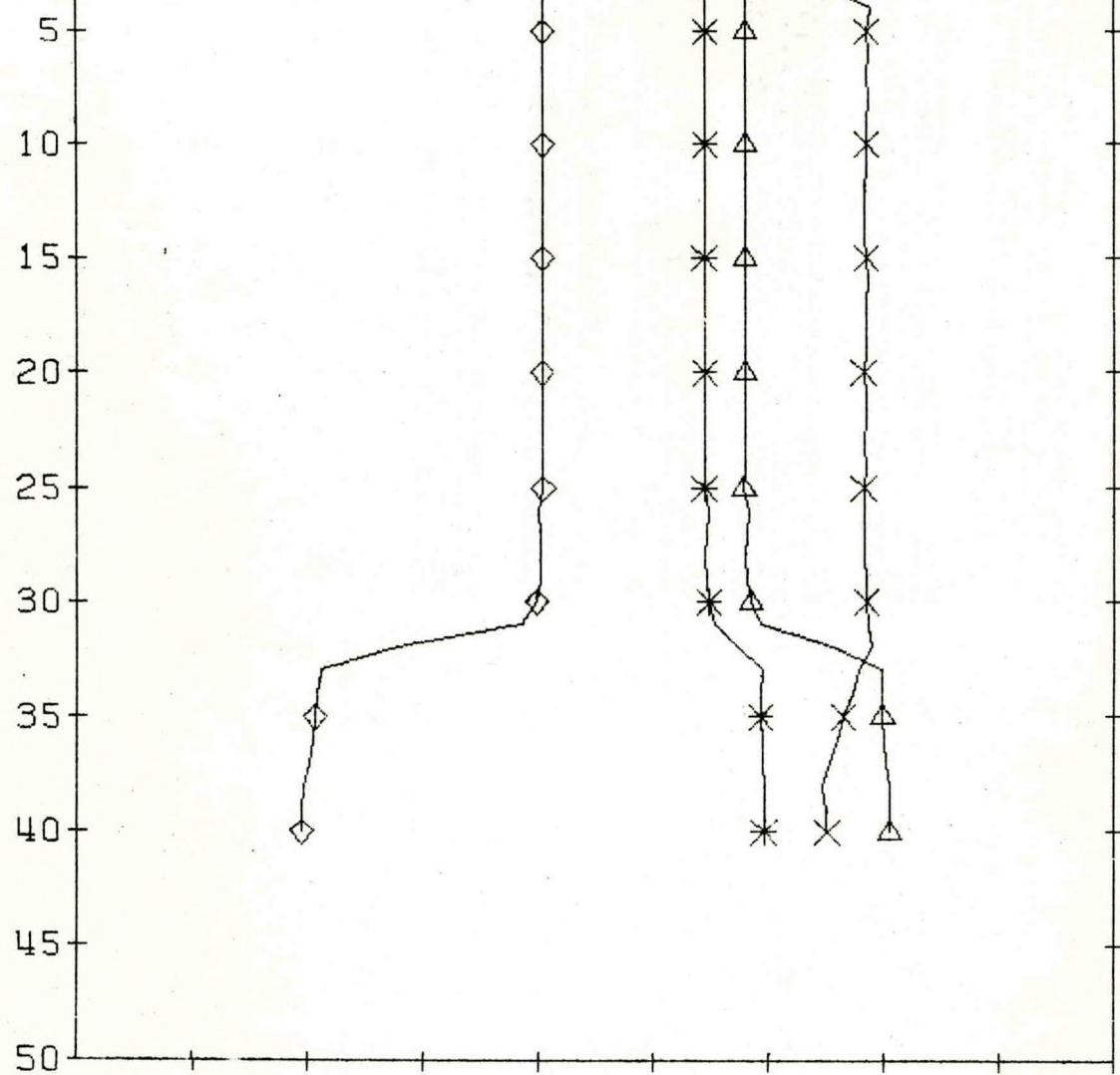
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

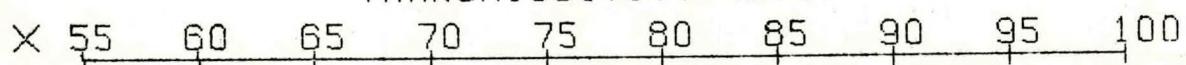


XWCC-16 STA.070 LAT 40 32.2N; LONG 73 7.5W GMT 03.0 10/14/77  
 DEPTH 28 AIR D/W 33.3/05.6 BARO 21.0 VIS 7 CLD TYP/CVR 4/4  
 WETHR 1 WIND DIR/SPD 03/20 SEA DIR/HT 03/0 SWELL DIR/HT 06/2

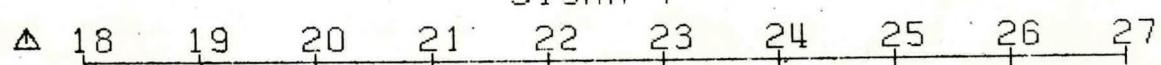
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.94	31.99	23.47	89.3	8.32	5.46				
2	15.94	31.98	23.47	89.3	8.32	5.46				
3	15.92	32.00	23.48	89.3	8.31	5.45				
4	15.92	32.00	23.48	89.2	8.32	5.45				
5	15.93	32.00	23.48	89.4	8.31	5.46				
6	15.93	32.00	23.48	89.3	8.31	5.47				
7	15.93	32.00	23.48	89.2	8.31	5.47				
8	15.93	31.99	23.48	89.3	8.32	5.47				
9	15.93	31.99	23.48	89.3	8.32	5.47				
10	15.93	31.99	23.48	89.3	8.31	5.46	.49	1.28	.06	.87
11	15.93	31.99	23.48	89.3	8.31	5.46				
12	15.93	31.99	23.47	89.3	8.31	5.46				
13	15.92	32.00	23.48	89.4	8.31	5.46				
14	15.92	32.00	23.48	89.2	8.31	5.47				
15	15.92	32.00	23.48	89.2	8.31	5.46				
16	15.92	32.00	23.48	89.1	8.31	5.46				
17	15.92	32.00	23.48	89.1	8.31	5.46				
18	15.92	32.00	23.48	89.2	8.31	5.46				
19	15.92	32.00	23.48	89.2	8.31	5.46				
20	15.92	32.00	23.49	89.1	8.31	5.46	.47	1.44	.06	.75
21	15.92	32.01	23.49	89.0	8.30	5.45				
22	15.92	32.00	23.49	89.1	8.31	5.44				
23	15.88	32.09	23.56	88.6	8.27	5.43				
24	15.74	32.32	23.77	86.7	8.14	5.47				
25	15.63	32.49	23.92	85.6	8.04	4.10				
26	15.64	32.47	23.91	85.5	8.03	4.10	.46	3.52	6.06	1.86

KELEZ CRUISE XWCC-16 STATION 70 10/14/77

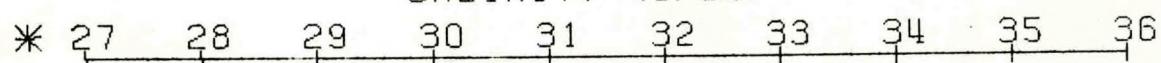
TRANSMISSIVITY (0/0)



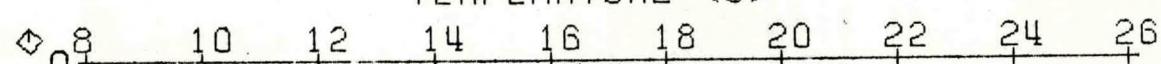
SIGMA-T



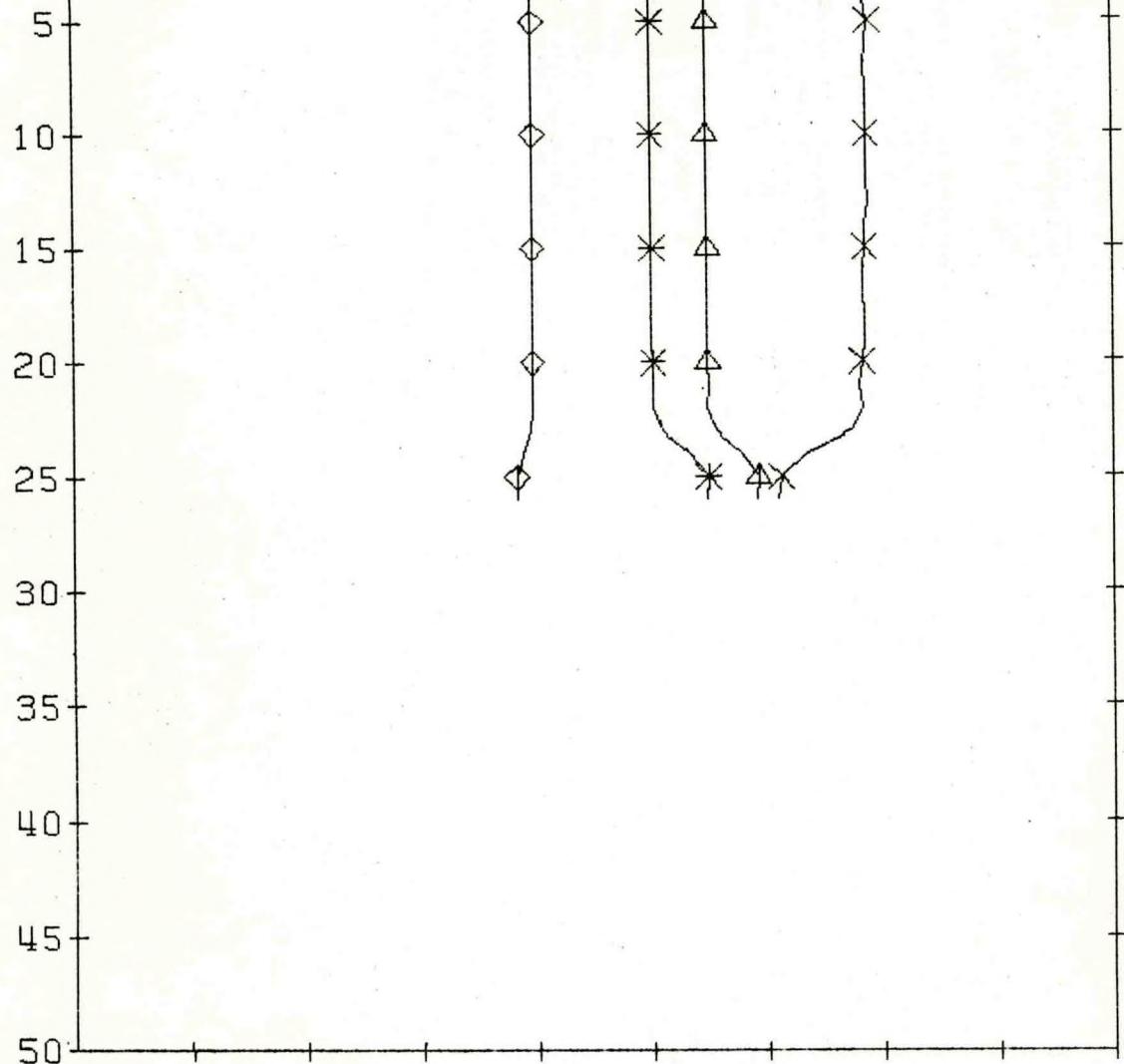
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

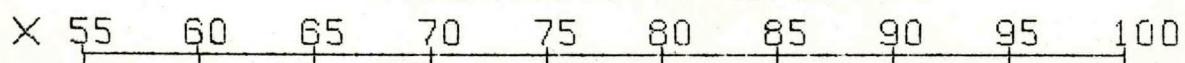


XWCC-16 STA.077 LAT 40 10.5N; LONG 73 33.9W GMT 19.1 10/12/77  
DEPTH 36 AIR D/W 44.4/05.6 BARO 15.0 VIS 7 CLD TYP/CVR 8/4  
WEATHER 1 WIND DIR/SPD 30/15 SEA DIR/HT 29/2 SWELL DIR/HT 30/2

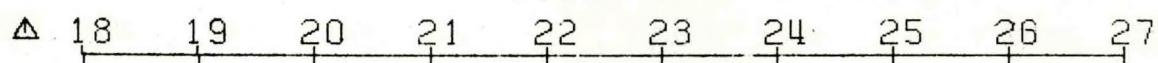
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.19	31.05	22.69	90.0	8.45	5.89				
2	16.19	31.05	22.69	90.0	8.45	5.89				
3	16.20	31.05	22.70	90.0	8.43	5.84				
4	16.20	31.05	22.70	90.1	8.40	5.83				
5	16.21	31.05	22.69	90.0	8.39	5.84				
6	16.20	31.05	22.69	90.2	8.39	5.84				
7	16.20	31.05	22.69	90.2	8.39	5.84				
8	16.20	31.05	22.70	90.1	8.39	5.85				
9	16.20	31.05	22.69	90.1	8.39	5.84				
10	16.20	31.05	22.70	90.1	8.39	5.85				
11	16.25	31.15	22.76	90.0	8.39	5.85				
12	16.37	31.45	22.97	89.9	8.40	5.84				
13	16.45	31.71	23.14	89.9	8.41	5.85				
14	16.47	31.84	23.24	90.0	8.42	5.86				
15	16.48	31.88	23.27	90.2	8.42	5.88				
16	16.48	31.95	23.32	90.2	8.42	5.90				
17	16.48	32.01	23.37	90.3	8.42	5.91				
18	16.48	32.08	23.42	90.4	8.42	5.91				
19	16.45	32.11	23.45	90.5	8.43	5.92				
20	16.46	32.16	23.48	90.6	8.43	5.92				
21	16.47	32.19	23.51	90.8	8.43	5.92				
22	16.60	32.34	23.59	90.9	8.42	5.91				
23	16.61	32.42	23.65	91.1	8.41	5.86				
24	16.60	32.45	23.67	91.1	8.42	5.82				
25	16.57	32.50	23.68	91.2	8.42	5.76				
26	16.47	32.51	23.74	91.0	8.42	5.74				
27	16.45	32.51	23.75	91.1	8.42	5.74				
28	16.43	32.51	23.76	91.1	8.42	5.70				
29	16.42	32.52	23.77	91.2	8.41	5.68				
30	16.34	32.55	23.81	90.8	8.40	5.65				
31	15.77	32.48	23.89	90.8	8.31	5.52				
32	13.43	32.74	24.58	90.0	8.18	5.37				
33	12.43	32.81	24.83	89.4	8.05	5.22				
34	12.43	32.86	24.90	88.9	8.03					
							.25	5.13	12.41	1.21

KELEZ CRUISE XWCC-16 STATION 77 10/12/77

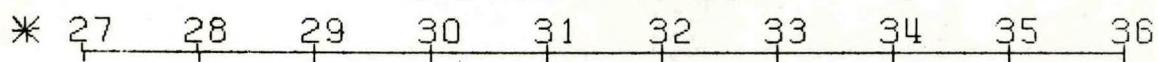
TRANSMISSIVITY (0/0)



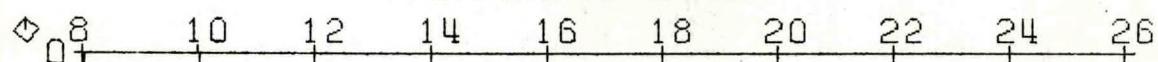
SIGMA-T



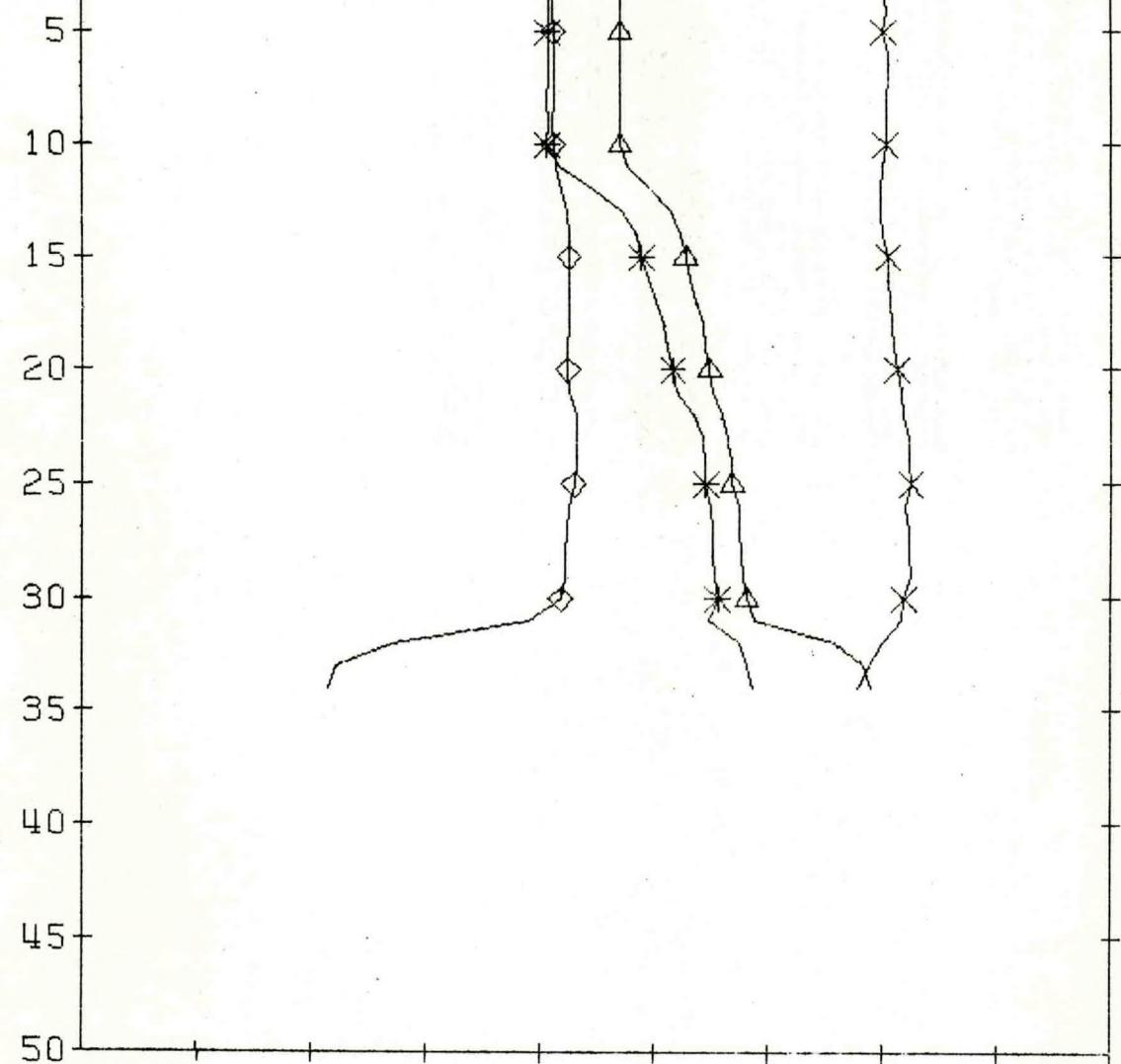
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

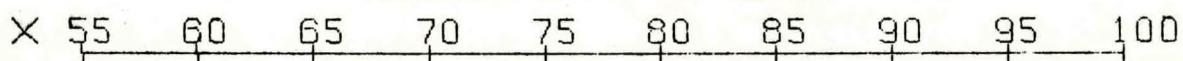


XWCC-16 STA.078 LAT 40 5.0N; LONG 73 21.5W GMT 03.1 10/13/77  
DEPTH 42 AIR D/W 47.2/11.1 BARO 19.5 VIS 7 CLD TYP/CVR X/6  
WETHR 1 WIND DIR/SPD 32/20 SEA DIR/HT 32/1 SWELL DIR/HT 33/2

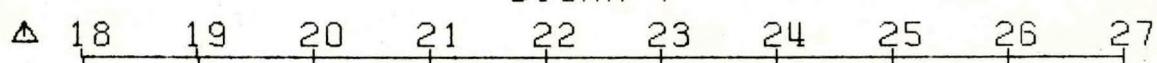
WEATHER	1	WIND DIRECTION	DEGREES	SEAS	SWELL	PERIOD	02	N02	N03	S103	P04
DEP	TEMP	SAL	SIGT	TRAN	PH						
1	16.31	32.52	23.79	89.3	8.41	5.96					
2	16.31	32.51	23.79	89.3	8.41	5.96	.00	.00	.00	.00	.21
3	16.32	32.52	23.79	90.1	8.42	5.81					
4	16.32	32.52	23.79	90.0	8.42	5.82					
5	16.32	32.52	23.79	90.1	8.42	5.82					
6	16.31	32.52	23.79	90.2	8.42	5.81					
7	16.31	32.52	23.79	90.1	8.42	5.81					
8	16.32	32.52	23.79	90.2	8.42	5.80					
9	16.32	32.52	23.81	90.0	8.42	5.81	.00	.00	.00	.00	.12
10	16.31	32.54	23.81	90.0	8.42	5.80					
11	16.31	32.54	23.81	90.2	8.42	5.79					
12	16.31	32.55	23.82	90.2	8.43	5.78					
13	16.28	32.57	23.84	90.1	8.42	5.78					
14	16.28	32.58	23.85	90.2	8.42	5.77					
15	16.26	32.60	23.87	90.2	8.42	5.76					
16	16.25	32.60	23.87	90.2	8.42	5.76					
17	16.25	32.61	23.88	90.2	8.42	5.76					
18	16.21	32.64	23.91	90.2	8.41	5.76					
19	16.14	32.68	23.95	90.4	8.41	5.76	.00	.00	.00	.00	.18
20	16.07	32.71	23.99	90.4	8.41	5.75					
21	16.07	32.71	23.99	90.4	8.41	5.75					
22	16.07	32.70	23.99	90.4	8.41	5.73					
23	16.07	32.71	23.99	90.4	8.41	5.72					
24	16.06	32.71	23.99	90.4	8.41	5.71					
25	16.06	32.71	24.00	90.4	8.41	5.70					
26	16.06	32.71	24.00	90.4	8.41	5.70					
27	16.06	32.72	24.00	90.4	8.41	5.69					
28	16.00	32.76	24.04	90.7	8.40	5.67					
29	15.73	32.79	24.13	90.9	8.38	5.67					
30	15.07	32.77	24.26	91.1	8.34	5.67					
31	13.79	32.83	24.58	91.0	8.30	5.66					
32	12.05	32.98	24.97	90.7	8.25	5.70					
33	11.56	32.95	25.10	90.1	8.18	5.60					
34	11.48	32.97	25.13	89.7	8.12	5.27					
35	11.44	32.97	25.14	89.8	8.13	4.99					
36	11.43	32.98	25.15	89.8	8.12	4.76					
37	11.42	32.97	25.14	89.8	8.12	4.59					
38	11.41	32.98	25.14	89.7	8.11	4.45					
39	11.40	32.98	25.15	89.9	8.14	4.31					
40	11.40	32.98	25.15	89.9	8.18	4.18	.15	5.93	8.34	.93	
41	11.41	32.98	25.15	89.9	8.13	4.07					

KELEZ CRUISE XWCC-16 STATION 78 10/13/77

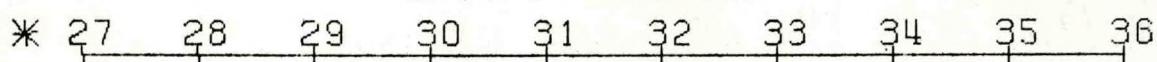
TRANSMISSIVITY (0/0)



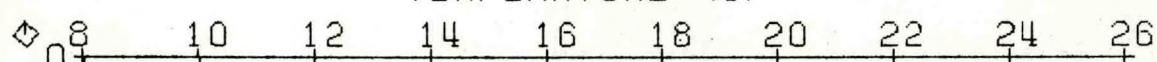
SIGMA-T



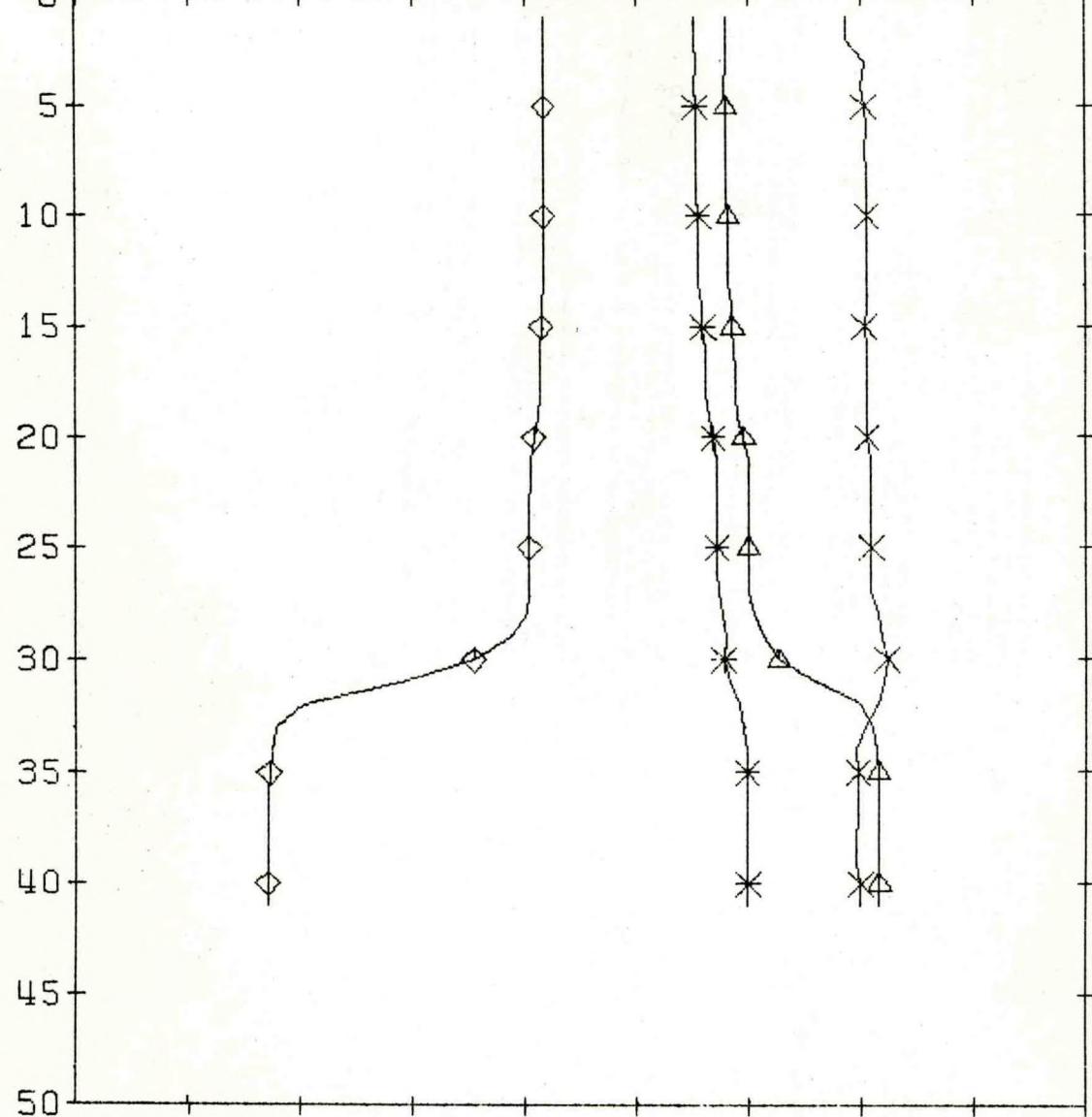
SALINITY (0/00)



TEMPERATURE (C)



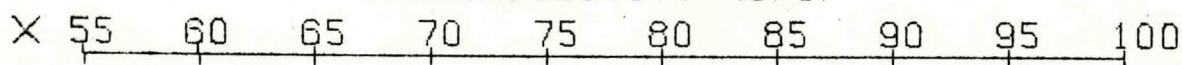
DEPTH (M)



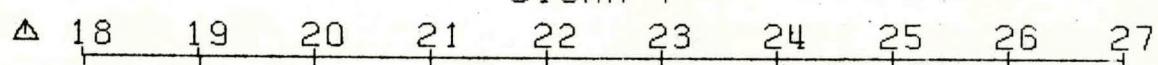
XWCC-16 STA.079 LAT 40°3N; LONG 73°9.5W GMT 05.1 10/13/77  
 DEPTH 46 AIR D/W 44.4/05.6 BARO 20.0 VIS 7 CLD TYP/CVR X/9  
 WETHR WIND DIR/SPD 34/19 SEA DIR/HT 34/1 SWELL DIR/HT 34/1  
 DEP TEMP SAL SIGT TRAN PH 02 N02 N03 SI03 P04  
 1 15.78 32.56 23.94 88.6 8.47 5.89 .00 .00 .00 .18  
 2 15.78 32.56 23.94 88.6 8.47 5.89 .00 .00 .00 .18  
 3 15.77 32.56 23.95 89.6 8.46 5.85 .00 .00 .00 .18  
 4 15.76 32.58 23.96 89.9 8.43 5.82 .00 .00 .00 .18  
 5 15.76 32.57 23.96 89.9 8.42 5.81 .00 .00 .00 .18  
 6 15.76 32.57 23.96 89.9 8.42 5.81 .00 .00 .00 .18  
 7 15.77 32.57 23.95 89.8 8.42 5.81 .00 .00 .00 .18  
 8 15.77 32.57 23.95 89.9 8.42 5.80 .00 .00 .00 .18  
 9 15.76 32.57 23.96 89.9 8.43 5.80 .00 .00 .00 .18  
 10 15.77 32.57 23.96 89.9 8.43 5.79 .00 .00 .00 .18  
 11 15.77 32.58 23.96 89.9 8.42 5.79 .00 .00 .00 .18  
 12 15.77 32.58 23.95 89.8 8.42 5.78 .00 .00 .00 .18  
 13 15.77 32.57 23.95 89.9 8.43 5.78 .00 .00 .00 .18  
 14 15.78 32.58 23.96 89.9 8.43 5.79 .00 .00 .00 .18  
 15 15.76 32.57 23.95 89.9 8.43 5.79 .00 .00 .00 .18  
 16 15.76 32.57 23.96 89.9 8.43 5.79 .00 .00 .00 .18  
 17 15.77 32.57 23.97 89.9 8.43 5.78 .00 .00 .00 .18  
 18 15.79 32.59 23.98 90.0 8.42 5.78 .00 .00 .00 .14  
 19 15.80 32.62 23.99 89.9 8.42 5.77 .00 .00 .00 .14  
 20 15.80 32.62 23.99 90.1 8.42 5.77 .00 .00 .00 .14  
 21 15.80 32.62 24.00 90.1 8.42 5.77 .00 .00 .00 .14  
 22 15.80 32.64 24.00 90.1 8.42 5.76 .00 .00 .00 .14  
 23 15.80 32.64 24.01 90.1 8.42 5.76 .00 .00 .00 .14  
 24 15.80 32.65 24.01 90.2 8.42 5.75 .00 .00 .00 .14  
 25 15.79 32.66 24.02 90.2 8.42 5.75 .00 .00 .00 .14  
 26 15.81 32.66 24.02 90.5 8.39 5.74 .00 .00 .00 .14  
 27 15.14 32.77 24.04 90.8 8.35 5.84 .00 .00 .00 .14  
 28 14.17 32.84 24.05 90.6 8.29 5.96 .00 .00 .00 .14  
 29 12.03 32.98 25.04 90.3 8.23 5.01 .00 .00 .00 .14  
 30 11.28 32.11 25.27 90.3 8.17 5.84 .00 .00 .00 .14  
 31 10.64 33.17 25.43 90.0 8.16 5.60 .00 .00 .00 .14  
 32 10.31 33.23 25.54 90.0 8.15 5.38 .00 .00 .00 .14  
 33 10.28 33.24 25.55 89.9 8.16 5.15 .00 .00 .00 .14  
 34 10.28 33.24 25.55 90.0 8.15 4.96 .00 .00 .00 .14  
 35 10.28 33.25 25.56 90.0 8.15 4.81 .00 .00 .00 .14  
 36 10.28 33.24 25.56 89.8 8.15 4.71 .00 .00 .00 .14  
 37 10.28 33.24 25.56 90.1 8.15 4.63 .00 .00 .00 .14  
 38 10.28 33.23 25.55 90.2 8.15 4.58 .00 .00 .00 .14  
 39 10.28 33.24 25.56 90.1 8.14 4.53 .00 .00 .00 .14  
 40 10.28 33.24 25.56 90.2 8.14 4.48 .00 .00 .00 .14  
 41 10.27 33.25 25.56 90.3 8.13 4.46 .00 .00 .00 .14  
 42 10.27 33.24 25.56 90.3 8.12 4.41 .00 .00 .00 .14  
 43 10.27 33.24 25.56 90.3 8.12 4.40 .00 .00 .00 .14  
 44 10.27 33.24 25.56 90.3 8.12 4.40 .05 5.43 10.12 .85

KELEZ CRUISE XWCC-16 STATION 79 10/13/77

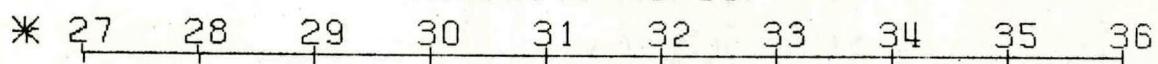
TRANSMISSIVITY (0/0)



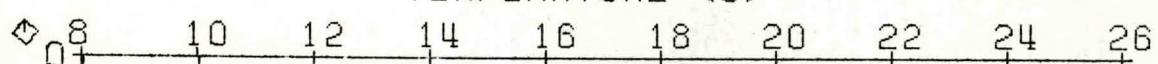
SIGMA-T



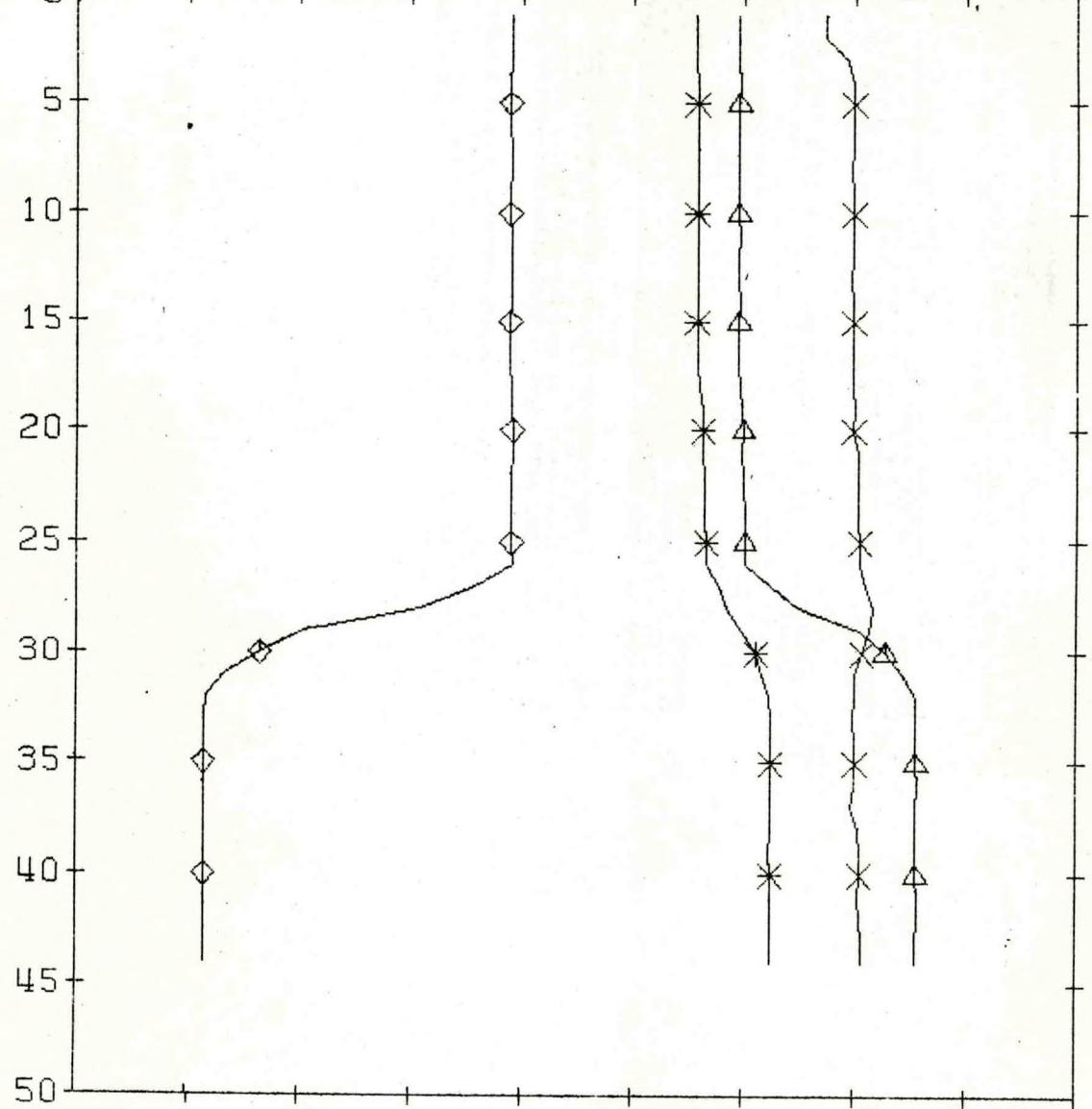
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

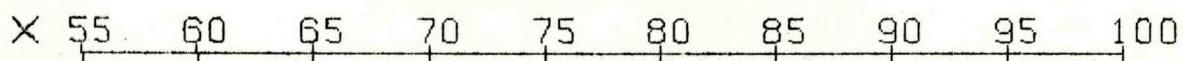


XWCC-16 STA.080 LAT 39 54.6N; LONG 72 57.3W GMT 17.2 10/13/77  
 DEPTH 54 AIR D/W 38.9/05.6 BARO 21.5 VIS 7 CLD TYP/CVR 7/8  
 WETHR 2 WIND DIR/SPD 02/17 SEA DIR/HT 03/2 SWELL DIR/HT 02/3

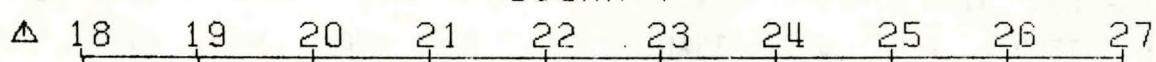
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.70	32.73	24.09	90.4	8.52	6.07				
2	15.70	32.73	24.09	90.4	8.52	6.07				
3	15.70	32.72	24.08	89.8	8.47	6.05				
4	15.69	32.73	24.09	90.6	8.46	6.87				
5	15.70	32.73	24.09	90.6	8.46	6.88				
6	15.70	32.72	24.09	90.6	8.45	6.88				
7	15.70	32.72	24.09	90.6	8.46	6.89				
8	15.70	32.73	24.09	90.6	8.45	6.88				
9	15.70	32.72	24.09	90.6	8.46	6.89				
10	15.70	32.73	24.09	90.6	8.45	6.89	.00	.00	.00	.14
11	15.70	32.72	24.09	90.6	8.45	6.88				
12	15.70	32.73	24.09	90.6	8.45	6.88				
13	15.71	32.74	24.10	90.7	8.45	6.88				
14	15.71	32.74	24.10	90.6	8.46	6.89				
15	15.71	32.74	24.10	90.6	8.45	6.89				
16	15.71	32.74	24.10	90.6	8.45	6.89				
17	15.71	32.73	24.09	90.7	8.46	6.88				
18	15.71	32.74	24.10	90.6	8.46	6.88				
19	15.71	32.75	24.11	90.6	8.45	6.86				
20	15.73	32.77	24.12	90.6	8.45	6.86	.08	.00	.00	.16
21	15.75	32.80	24.14	90.7	8.45	6.85				
22	15.76	32.84	24.17	90.9	8.44	6.84				
23	15.76	32.88	24.19	91.0	8.43	6.83				
24	15.71	32.90	24.22	91.0	8.42	6.82				
25	15.54	32.93	24.28	91.0	8.41	6.82				
26	15.25	32.94	24.36	91.1	8.40	6.82				
27	15.01	32.96	24.42	91.2	8.39	6.82				
28	13.75	32.03	24.74	91.1	8.36	6.81				
29	10.71	32.18	25.43	90.9	8.27	6.03				
30	9.73	32.33	25.72	90.6	8.21	6.28	.15	2.23	3.74	.62
31	9.70	32.34	25.73	90.4	8.18	6.12				
32	9.69	32.35	25.74	90.2	8.19	6.86				
33	9.68	32.35	25.74	90.2	8.19	6.58				
34	9.68	32.35	25.75	90.1	8.19	6.36				
35	9.67	32.35	25.74	90.1	8.18	6.22				
36	9.67	32.34	25.74	90.2	8.18	6.12				
37	9.67	32.34	25.74	90.1	8.18	6.00				
38	9.67	32.35	25.74	90.2	8.18	4.91				
39	9.67	32.35	25.74	90.3	8.18	4.86				
40	9.66	32.34	25.74	90.4	8.18	4.81	.08	5.20	11.26	.91
41	9.66	32.34	25.73	90.3	8.17	4.78				
42	9.66	32.34	25.73	90.4	8.17	4.75				
43	9.66	32.34	25.73	90.5	8.17	4.72				
44	9.66	32.34	25.73	90.4	8.17	4.70				
45	9.66	32.34	25.73	90.4	8.17	4.68				
46	9.65	32.33	25.73	90.4	8.16	4.67				
47	9.65	32.33	25.73	90.4	8.17	4.65				
48	9.66	32.33	25.73	90.3	8.16	4.65				
49	9.66	32.34	25.74	90.4	8.21	4.64				
50	9.67	32.34	25.74	90.4	8.21	4.63	.08	5.57	11.61	.91
51	9.66	32.34	25.73	90.4	8.21	4.63				

KELEZ CRUISE XWCC-16 STATION 80 10/13/77

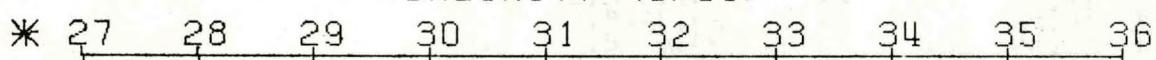
TRANSMISSIVITY (0/0)



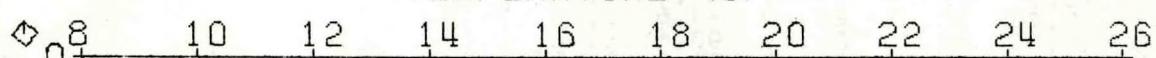
SIGMA-T



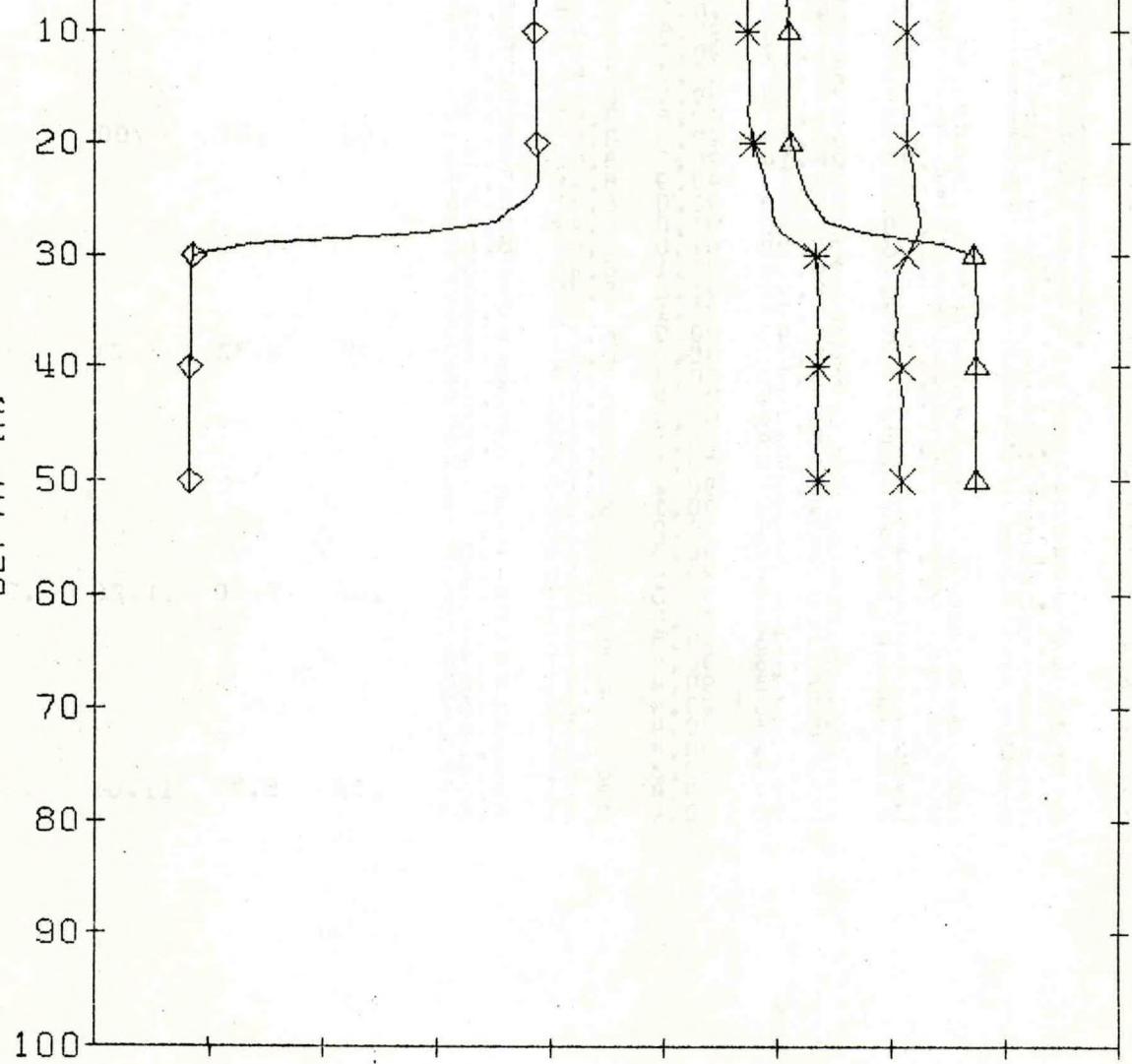
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

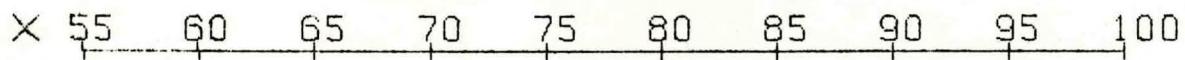


XWCC-16 STA.081 LAT 39 44.8N; LONG 73 10.0W GMT 10.4 10/13/77  
 DEPTH 43 AIR D/W 38.9/05.6 BARO 21.0 VIS 7 CLD TYP/CVR X/9  
 WETHR WIND DIR/SPD 04/20 SEA DIR/HT 04/1 SWELL DIR/HT 36/2

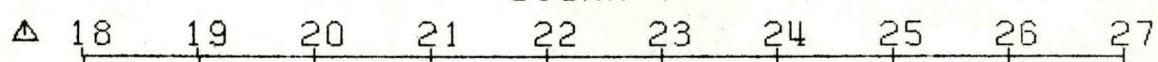
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.00	32.88	24.14	90.6	8.40	5.68				
2	16.00	32.88	24.14	90.6	8.40	5.68				
3	16.00	32.89	24.15	90.5	8.41	5.67				
4	15.99	32.89	24.15	90.5	8.41	5.68				
5	16.00	32.89	24.15	90.5	8.41	5.68				
6	16.00	32.89	24.15	90.6	8.41	5.68				
7	16.00	32.89	24.15	90.5	8.41	5.68				
8	16.00	32.88	24.14	90.4	8.40	5.68				
9	16.00	32.88	24.14	90.5	8.40	5.67				
10	16.00	32.88	24.14	90.6	8.40	5.66	.00	.10	.00	.08
11	16.00	32.88	24.14	90.5	8.40	5.67				
12	16.00	32.88	24.15	90.5	8.40	5.66				
13	16.00	32.89	24.15	90.5	8.40	5.65				
14	16.00	32.88	24.14	90.5	8.40	5.65				
15	16.01	32.89	24.14	90.5	8.40	5.65				
16	16.01	32.89	24.14	90.6	8.40	5.65				
17	16.00	32.89	24.15	90.6	8.40	5.65				
18	16.00	32.90	24.15	90.6	8.40	5.65				
19	16.00	32.90	24.15	90.6	8.40	5.65				
20	16.00	32.89	24.15	90.6	8.40	5.64	.00	.10	.00	.18
21	15.99	32.89	24.15	90.6	8.40	5.64				
22	15.89	32.91	24.19	90.6	8.39	5.65				
23	15.35	32.92	24.31	90.7	8.37	5.65				
24	13.96	32.93	24.62	90.6	8.34	5.71				
25	12.29	32.94	24.95	90.8	8.25	5.75				
26	11.42	32.95	25.12	90.1	8.18	5.66				
27	11.11	32.96	25.19	89.9	8.16	5.49				
28	10.85	32.99	25.26	89.9	8.14	5.29				
29	10.73	33.02	25.30	89.7	8.14	5.09				
30	10.66	33.06	25.35	89.8	8.13	4.90	.09	5.58	11.89	.88
31	10.60	33.08	25.37	89.9	8.13	4.74				
32	10.52	33.11	25.41	89.8	8.12	4.62				
33	10.43	33.14	25.45	89.8	8.11	4.52				
34	10.41	33.15	25.46	89.9	8.11	4.43				
35	10.41	33.15	25.46	89.8	8.11	4.36				
36	10.41	33.15	25.46	89.9	8.11	4.27				
37	10.41	33.15	25.46	89.9	8.11	4.22				
38	10.41	33.16	25.47	90.0	8.13	4.19				
39	10.41	33.15	25.46	90.0	8.12	4.16	.19	5.99	13.39	1.01
40	10.41	33.15	25.46	90.0	8.17	4.13				
41	10.41	33.15	25.46	90.0	8.18	4.12				

KELEZ CRUISE XWCC-16 STATION 81 10/13/77

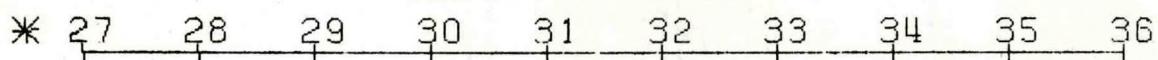
TRANSMISSIVITY (0/0)



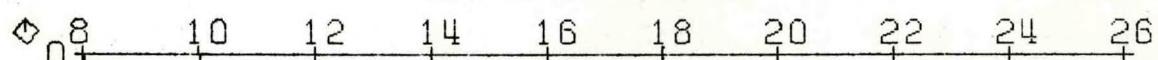
SIGMA-T



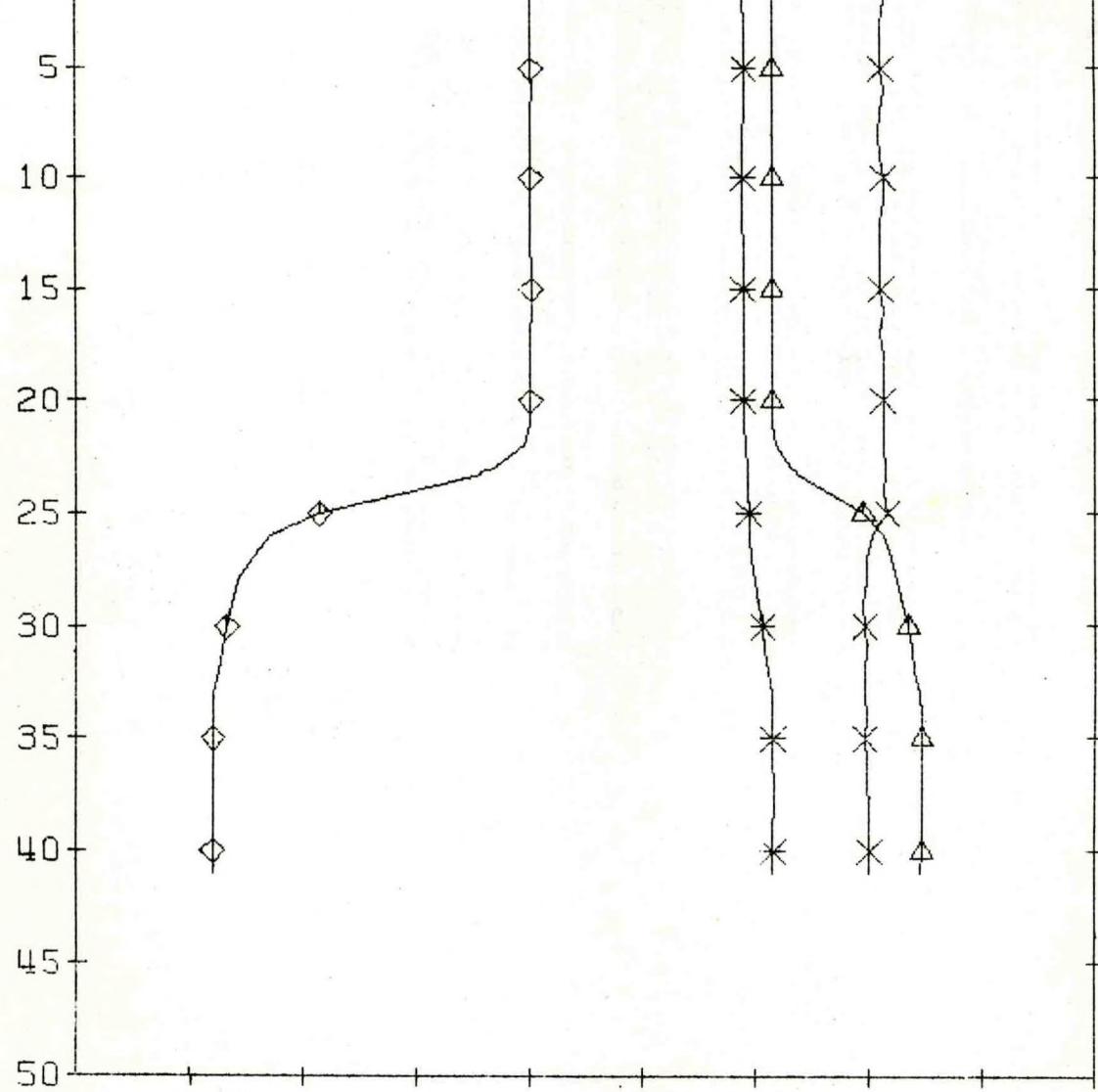
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

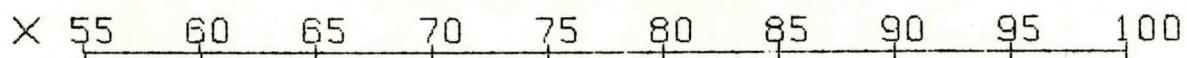


XWCC-16 STA.082 LAT 39 50.5N; LONG 73 20.5W GMT 09.0 10/13/77  
 DEPTH 43 AIR D/W 30.6/91.7 BARO 20.0 VIS 7 CLD TYP/CVR X/9  
 WETHR WIND DIR/SPD 01/20 SEA DIR/HT 01/1 SWELL DIR/HT 36/2

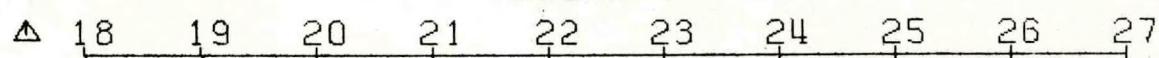
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.99	32.73	24.03	90.2	8.41	5.78				
2	15.99	32.73	24.03	90.2	8.41	5.78	.00	.03	.00	.16
3	15.99	32.73	24.03	90.3	8.41	5.76				
4	16.00	32.73	24.03	90.3	8.41	5.78				
5	16.00	32.74	24.03	90.2	8.40	5.80				
6	15.99	32.74	24.03	90.4	8.40	5.80				
7	16.00	32.74	24.03	90.3	8.41	5.79				
8	16.01	32.74	24.03	90.3	8.40	5.78				
9	16.01	32.74	24.03	90.3	8.41	5.76				
10	16.01	32.74	24.03	90.4	8.40	5.74	.00	.13	.00	.17
11	16.01	32.74	24.03	90.2	8.40	5.74				
12	16.01	32.74	24.03	90.2	8.40	5.71				
13	16.00	32.74	24.03	90.3	8.41	5.71				
14	16.01	32.75	24.04	90.2	8.41	5.71				
15	16.01	32.74	24.03	90.3	8.41	5.71				
16	16.02	32.74	24.03	90.3	8.41	5.70				
17	16.02	32.74	24.03	90.2	8.41	5.69				
18	16.02	32.74	24.03	90.4	8.41	5.69				
19	16.02	32.74	24.03	90.3	8.41	5.68				
20	16.02	32.75	24.03	90.3	8.41	5.68	.00	.13	.00	.25
21	16.02	32.75	24.03	90.4	8.41	5.67				
22	16.04	32.76	24.04	90.4	8.39	5.68				
23	15.94	32.78	24.08	90.4	8.37	5.68				
24	15.66	32.80	24.14	90.6	8.34	5.70				
25	14.52	32.80	24.40	90.8	8.34	5.70				
26	12.95	32.81	24.73	90.8	8.30	5.73				
27	12.25	32.82	24.87	90.3	8.22	5.66				
28	11.95	32.85	24.95	90.4	8.20	5.39				
29	11.35	32.87	25.08	90.0	8.14	5.10				
30	10.81	32.04	25.30	89.4	8.13	4.93				
31	10.71	32.08	25.35	89.5	8.14	4.76				
32	10.71	32.08	25.35	89.7	8.14	4.58				
33	10.70	32.07	25.35	89.5	8.13	4.51				
34	10.70	32.08	25.36	89.5	8.13	4.44				
35	10.70	32.08	25.36	89.6	8.13	4.38				
36	10.70	32.09	25.36	89.7	8.13	4.33				
37	10.70	32.08	25.36	89.6	8.13	4.29				
38	10.70	32.08	25.35	90.0	8.13	4.26				
39	10.70	32.08	25.36	89.8	8.12	4.24				
40	10.70	32.08	25.35	89.8	8.17	4.22				
41	10.70	32.08	25.35	89.9	8.18	4.17				
42	10.70	33.08	25.36	89.9	8.17	4.18	.12	4.81	13.31	.91

KELEZ CRUISE XWCC-16 STATION 82 10/13/77

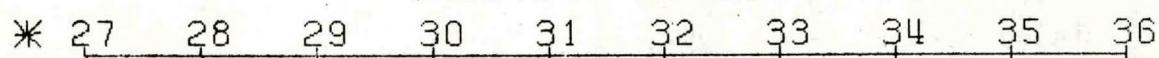
TRANSMISSIVITY (0/0)



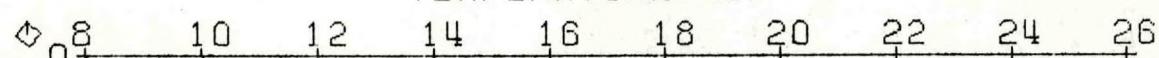
SIGMA-T



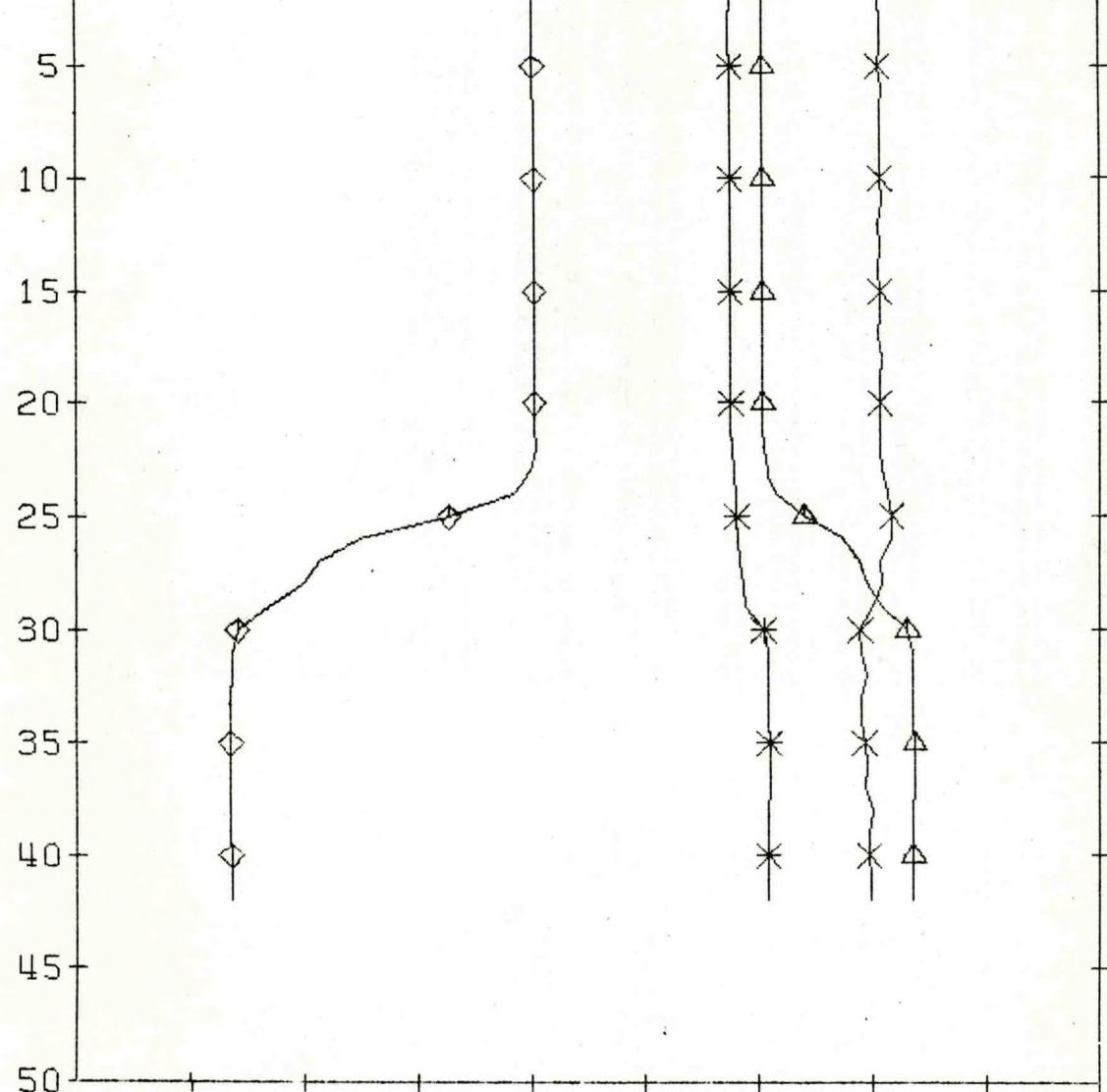
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

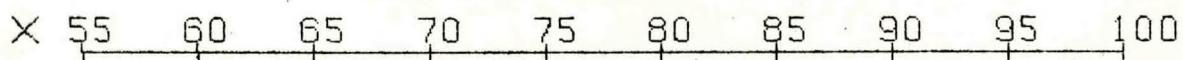


XWCC-16 STA.083 LAT 39 56.2N; LONG 73 30.0W GMT 00.0 10/13/77  
 DEPTH 40 AIR D/W 50.0/05.6 BARO 13.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 31/20 SEA DIR/HT 31/0 SWELL DIR/HT 30/2

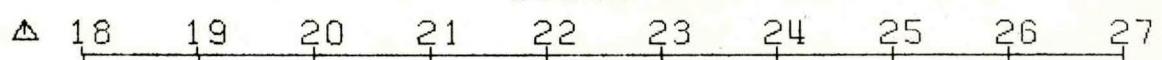
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.38	32.16	23.50	88.5	8.47	6.05				
2	16.38	32.16	23.50	88.5	8.47	6.05				
3	16.37	32.13	23.48	89.0	8.46	6.04	.04	.08	.00	.19
4	16.37	32.14	23.49	88.9	8.45	6.06				
5	16.38	32.14	23.49	89.0	8.45	6.06				
6	16.37	32.13	23.48	89.0	8.45	6.06				
7	16.38	32.15	23.50	89.0	8.46	6.06				
8	16.39	32.16	23.50	88.9	8.45	6.06				
9	16.38	32.14	23.49	89.0	8.45	6.06				
10	16.37	32.13	23.48	89.0	8.45	6.05	.02	.00	.00	.20
11	16.39	32.17	23.51	89.1	8.46	6.03				
12	16.41	32.23	23.55	89.2	8.46	6.04				
13	16.42	32.30	23.60	89.4	8.45	6.04				
14	16.44	32.39	23.66	89.5	8.45	6.04				
15	16.47	32.47	23.72	90.0	8.45	6.03				
16	16.48	32.54	23.77	90.5	8.44	6.00				
17	16.47	32.55	23.78	90.5	8.44	6.96				
18	16.48	32.55	23.78	90.6	8.44	6.92				
19	16.48	32.55	23.78	90.6	8.44	6.89				
20	16.48	32.55	23.78	90.5	8.44	6.87	.00	.02	.00	.14
21	16.47	32.55	23.78	90.6	8.44	6.86				
22	16.46	32.55	23.79	90.6	8.44	6.84				
23	16.49	32.57	23.79	90.6	8.44	6.82				
24	16.49	32.58	23.80	90.6	8.44	6.81				
25	16.45	32.59	23.82	90.6	8.44	6.81				
26	16.42	32.60	23.83	90.6	8.44	6.81				
27	16.42	32.62	23.84	90.7	8.43	6.80				
28	16.45	32.65	23.86	90.9	8.43	6.78				
29	16.39	32.72	23.93	90.9	8.41	6.75				
30	16.20	32.76	24.01	91.0	8.41	6.72	.04	.97	.00	.19
31	15.67	32.77	24.13	91.0	8.38	6.70				
32	15.53	32.78	24.17	90.9	8.37	6.65				
33	15.25	32.79	24.24	90.8	8.35	6.57				
34	13.66	32.82	24.59	91.0	8.25	6.52				
35	12.93	32.84	24.76	90.5	8.13	6.54				
36	11.76	32.87	25.01	90.0	8.10	6.36				
37	11.23	32.96	25.17	89.8	8.10	6.81				
38	11.20	32.99	25.20	89.6	8.11	6.82	.18	6.19	13.19	.91

KELEZ CRUISE XWCC-16 STATION 83 10/13/77

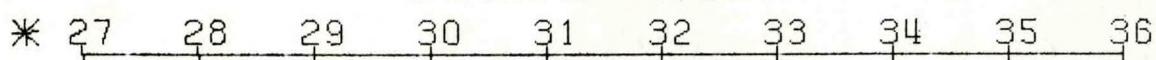
TRANSMISSIVITY (0/0)



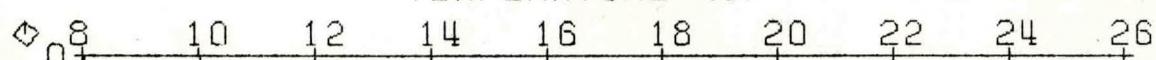
SIGMA-T



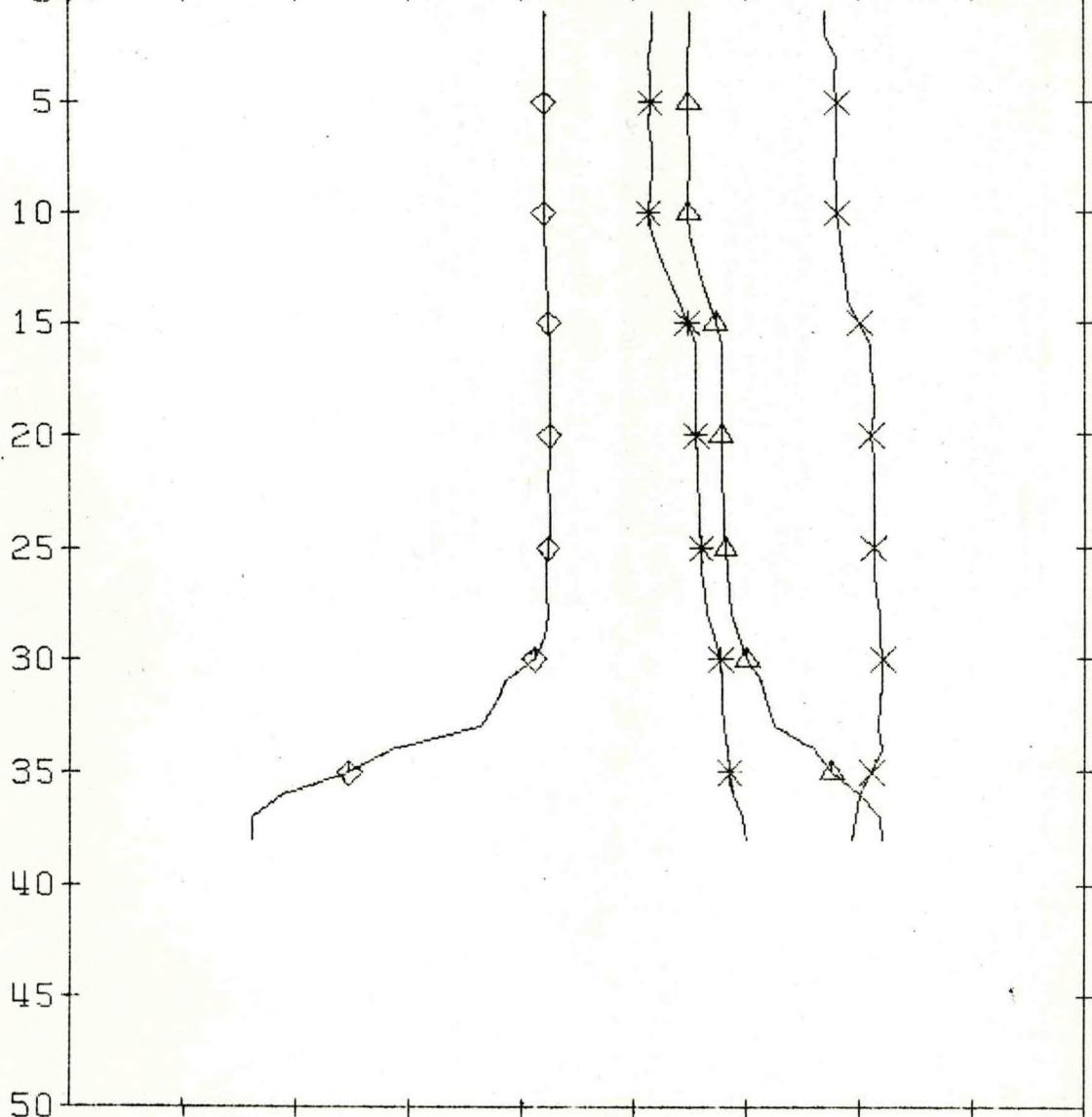
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

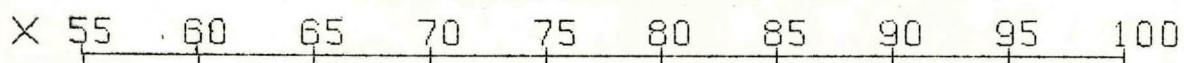


XWCC-16 STA.084 LAT 40 2.0N; LONG 73 41.5W GMT 22.2 10/12/77  
 DEPTH 30 AIR D/W 50.0/00.0 BARO 17.0 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 31/19 SEA DIR/HT 31/0 SWELL DIR/HT 30/2

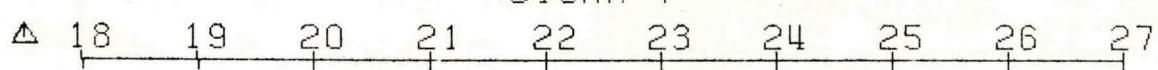
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	S103	P04
1	16.36	32.29	23.61	89.6	8.46	5.91				
2	16.36	32.29	23.61	89.6	8.46	5.91	.04	.05	.00	.23
3	16.34	32.29	23.61	89.4	8.44	5.91				
4	16.35	32.30	23.61	89.5	8.44	5.92				
5	16.33	32.30	23.62	89.5	8.44	5.94				
6	16.34	32.30	23.62	89.5	8.44	5.96				
7	16.36	32.30	23.62	89.5	8.44	5.97				
8	16.36	32.31	23.62	89.6	8.44	5.98				
9	16.37	32.31	23.61	89.6	8.44	5.97				
10	16.37	32.31	23.62	89.6	8.44	5.95				
11	16.37	32.31	23.62	89.5	8.44	5.94				
12	16.38	32.32	23.63	89.6	8.44	5.92				
13	16.38	32.33	23.63	89.6	8.44	5.90				
14	16.40	32.34	23.64	89.8	8.44	5.89				
15	16.39	32.33	23.63	89.7	8.44	5.88				
16	16.39	32.33	23.63	89.7	8.44	5.87				
17	16.43	32.36	23.65	90.0	8.43	5.86				
18	16.43	32.37	23.66	90.1	8.44	5.85				
19	16.43	32.38	23.66	90.1	8.44	5.84				
20	16.43	32.38	23.66	90.2	8.43	5.82				
21	16.44	32.40	23.67	90.2	8.44	5.81				
22	16.44	32.42	23.69	90.6	8.43	5.79				
23	16.44	32.44	23.70	91.0	8.43	5.77				
24	16.41	32.43	23.70	91.1	8.42	5.75				
25	16.06	32.47	23.82	91.0	8.43	5.68				
26	15.04	32.64	24.16	90.7	8.43	5.65				
27	12.18	32.86	24.91	89.2	8.42	5.34				
28	12.09	32.91	24.97	88.7	8.42	5.34				
29	11.99	32.90	24.99	88.6	8.42	5.34	.41	6.04	9.14	.23

KELEZ CRUISE XWCC-16 STATION 84 10/12/77

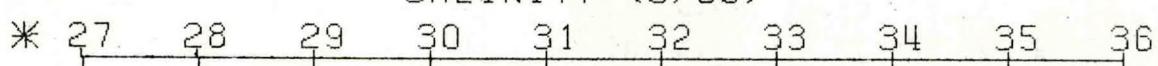
TRANSMISSIVITY (0/0)



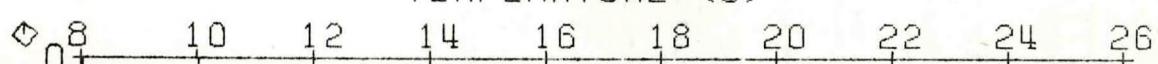
SIGMA-T



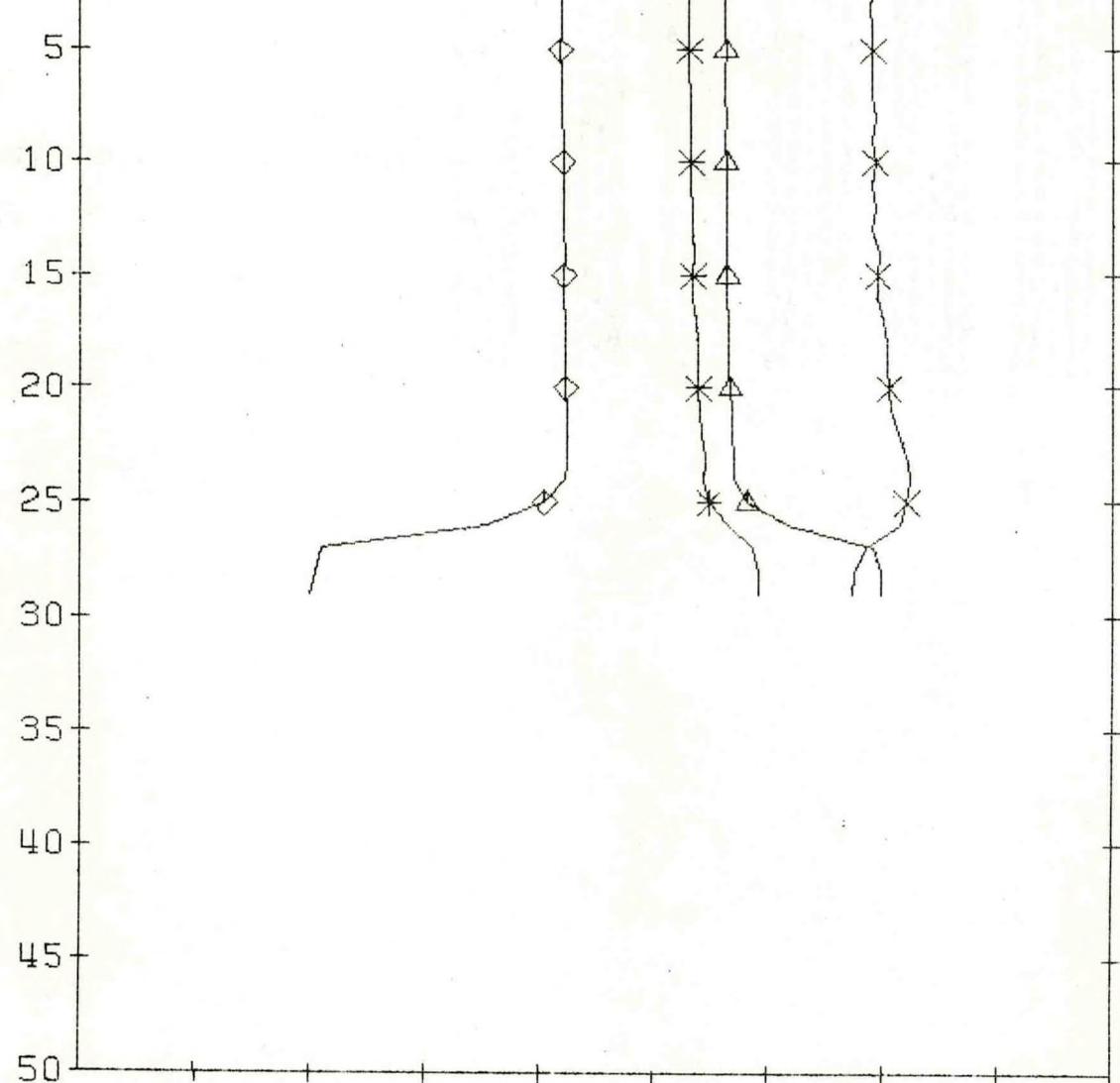
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

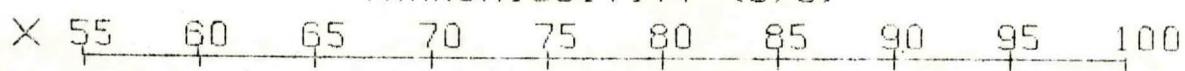


XWCC-16 STA.085 LAT 40 8.4N; LONG 73 52.7W GMT 04.4 10/12/77  
 DEPTH 25 AIR D/W 72.2/50.0 BARO 17.0 VIS 7 CLD TYP/CVR X/8  
 WETHR 2 WIND DIR/SPD 21/02 SEA DIR/HT 21/0 SWELL DIR/HT 00/0

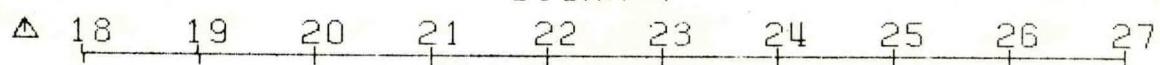
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.55	31.46	22.93	90.0	8.43	5.54				
2	16.55	31.46	22.92	90.0	8.43	5.54	.33	.76	.00	.44
3	16.55	31.46	22.93	90.7	8.39	5.63				
4	16.55	31.46	22.93	89.1	8.39	5.62				
5	16.55	31.46	22.93	90.9	8.39	5.62				
6	16.55	31.46	22.93	91.0	8.39	5.62				
7	16.55	31.46	22.93	91.0	8.39	5.62				
8	16.55	31.47	22.93	90.9	8.39	5.61				
9	16.55	31.46	22.93	90.7	8.39	5.62				
10	16.55	31.47	22.93	90.2	8.39	5.62	.34	.82	.00	.44
11	16.55	31.46	22.93	91.0	8.39	5.62				
12	16.55	31.47	22.94	90.9	8.39	5.61				
13	16.55	31.51	22.97	90.8	8.40	5.62				
14	16.54	31.55	22.30	90.8	8.41	5.64				
15	16.54	31.57	22.30	90.7	8.41	5.68				
16	16.55	31.58	22.30	90.7	8.41	5.71				
17	16.57	31.58	22.30	90.8	8.41	5.72				
18	16.59	31.64	22.30	90.7	8.41	5.73				
19	16.60	31.71	22.30	90.6	8.40	5.73				
20	16.57	31.82	22.30	90.7	8.38	5.73				
21	16.58	31.96	22.30	90.2	8.36	5.70				
22	16.53	32.07	22.30	90.0	8.36	5.63				
23	16.17	32.24	22.30	89.3	8.31	5.52				
24	15.84	32.34	23.76	89.3	8.24	5.28				

KELEZ CRUISE XWCC-16 STATION 85 10/12/77

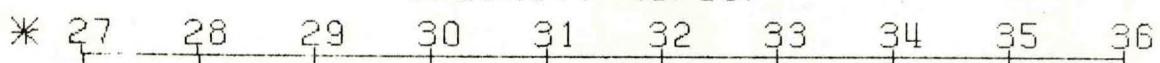
TRANSMISSIVITY (0/0)



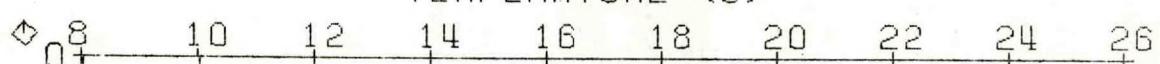
SIGMA-T



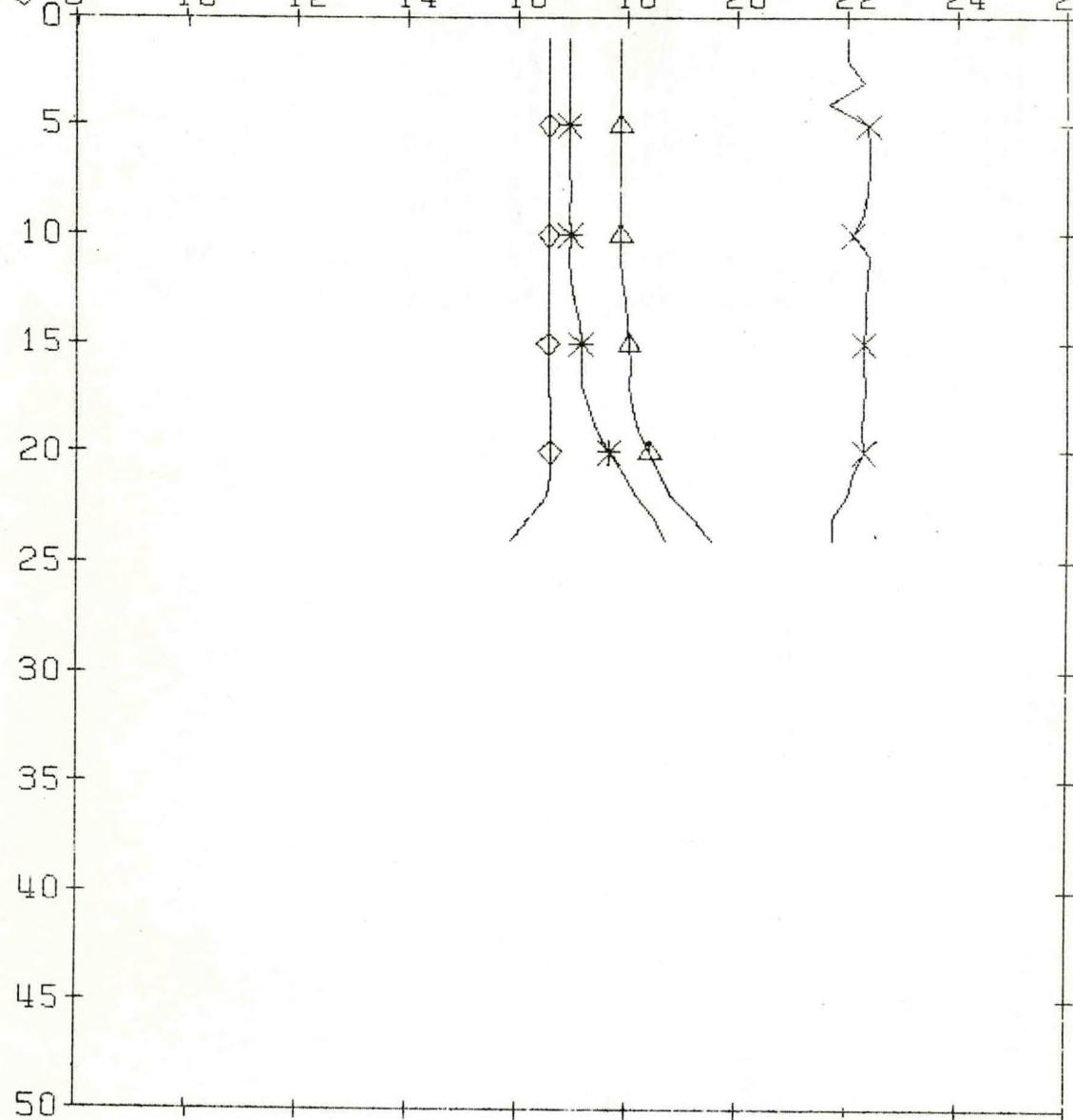
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

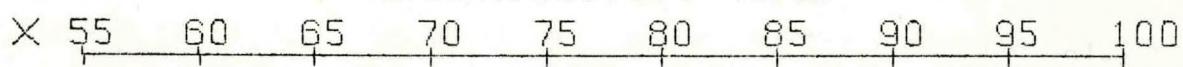


XWCC-16 STA.085 LAT 40 8.7N; LONG 73 53.6W GMT 19.5 10/15/77  
 DEPTH 22 AIR D/W 66.7/19.4 BARO 09.5 VIS 7 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 30/14 SEA DIR/HT 30/1 SWELL DIR/HT 29/2

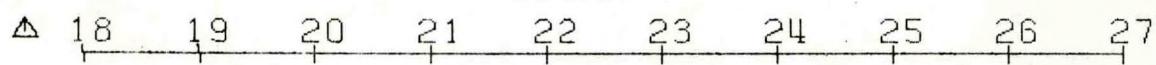
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.49	31.21	22.97	76.9	8.49	5.78				
2	15.49	31.21	22.97	76.9	8.49	5.78	.60	1.60	.00	.66
3	15.48	31.21	22.97	80.2	8.44	5.56				
4	15.48	31.20	22.97	80.1	8.44	5.58				
5	15.48	31.20	22.97	80.0	8.44	5.59				
6	15.48	31.20	22.97	78.9	8.44	5.59				
7	15.48	31.20	22.97	80.0	8.44	5.59				
8	15.48	31.20	22.97	80.1	8.44	5.59				
9	15.48	31.20	22.97	79.8	8.44	5.58				
10	15.48	31.20	22.97	80.6	8.43	5.58	.59	1.58	.00	.62
11	15.48	31.20	22.97	80.2	8.43	5.58				
12	15.48	31.20	22.97	79.9	8.43	5.58				
13	15.48	31.20	22.97	80.1	8.43	5.56				
14	15.48	31.20	22.97	79.3	8.43	5.56				
15	15.48	31.20	22.97	79.9	8.43	5.55				
16	15.48	31.20	22.97	79.7	8.43	5.55				
17	15.48	31.20	22.97	79.8	8.43	5.54				
18	15.48	31.20	22.96	79.8	8.43	5.54				
19	15.48	31.20	22.97	79.2	8.43	5.53				
20	15.48	31.20	22.97	79.2	8.43	5.53	.60	1.57	.00	.66

KELEZ CRUISE XWCC-16 STATION 85 10/15/77

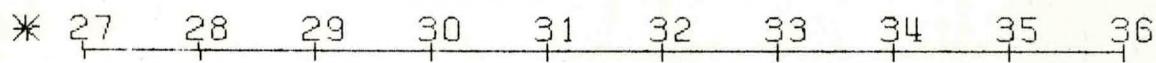
TRANSMISSIVITY (0/0)



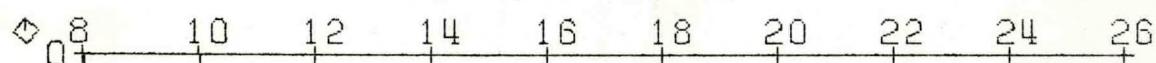
SIGMA-T



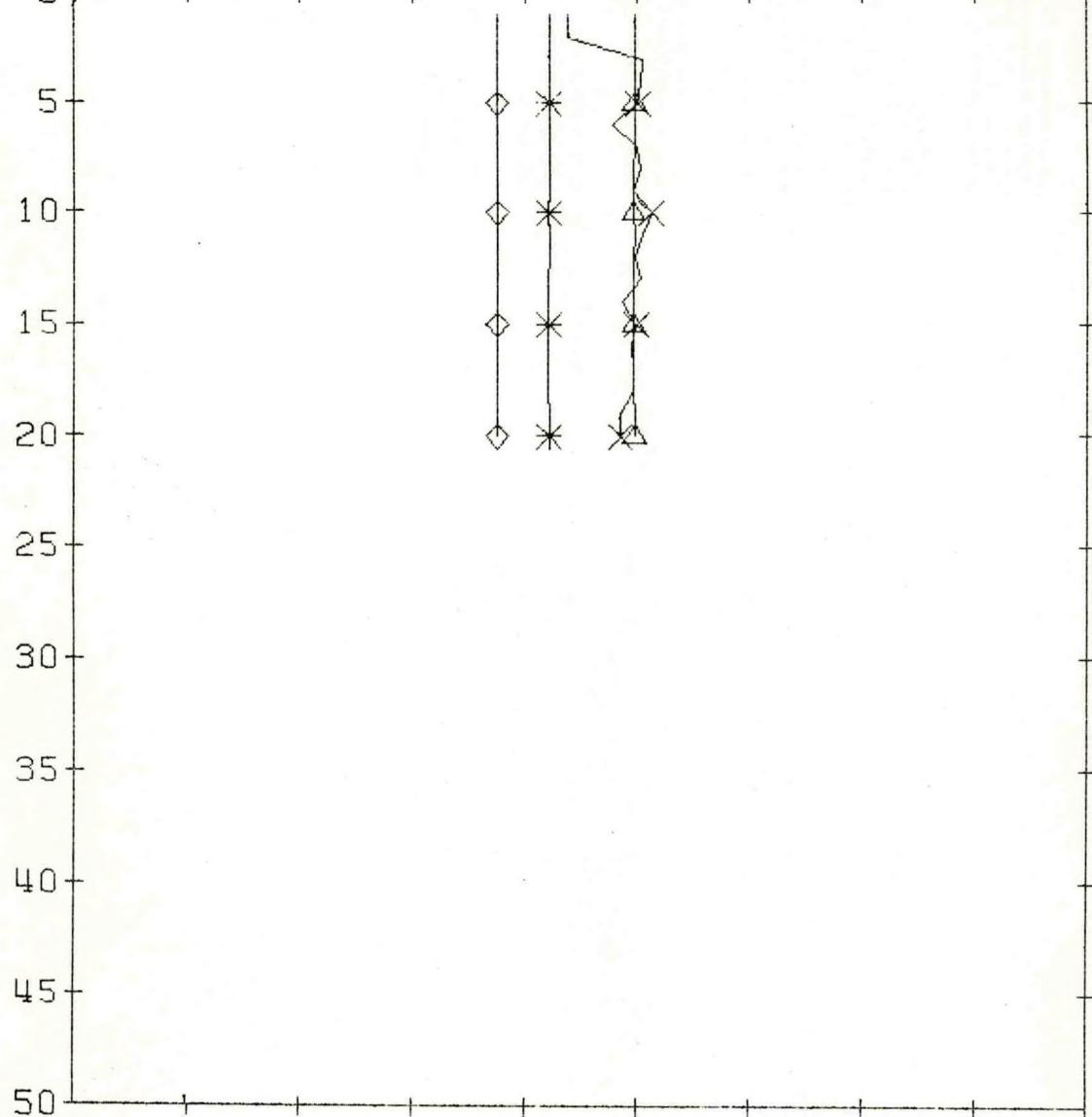
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

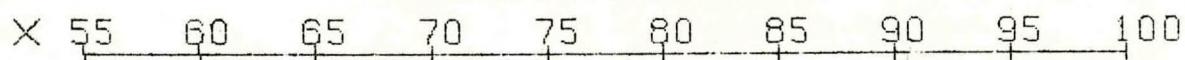


XWCC-16 STA.113 LAT 40 8.8N; LONG 72 55.6W GMT 21.3 10/13/77  
 DEPTH 48 AIR D/W 38.9/11.1 BARO 19.0 VIS 7 CLD TYP/CVR X/9  
 WETHR WIND DIR/SPD 04/20 SEA DIR/HT 04/1 SWELL DIR/HT 03/2

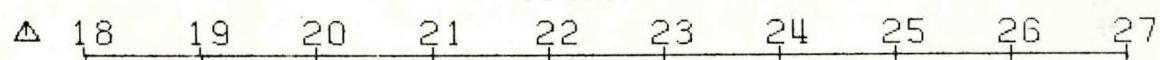
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	15.80	32.70	24.05	89.7	8.45	5.92				
2	15.80	32.70	24.05	89.7	8.45	5.92	.00	.00	.00	.13
3	15.79	32.70	24.05	90.1	8.45	5.93				
4	15.79	32.70	24.05	90.2	8.45	5.92				
5	15.79	32.70	24.05	90.0	8.45	5.92				
6	15.79	32.70	24.05	90.2	8.44	5.92				
7	15.79	32.70	24.05	90.1	8.44	5.93				
8	15.79	32.70	24.05	90.2	8.45	5.93				
9	15.79	32.70	24.05	89.8	8.44	5.94				
10	15.79	32.70	24.05	90.0	8.44	5.94	.00	.10	.00	.15
11	15.79	32.70	24.05	90.1	8.45	5.93				
12	15.79	32.70	24.05	90.1	8.44	5.93				
13	15.79	32.70	24.05	90.1	8.44	5.92				
14	15.79	32.70	24.05	90.1	8.44	5.92				
15	15.79	32.70	24.05	90.1	8.44	5.92				
16	15.79	32.70	24.05	90.2	8.44	5.91				
17	15.79	32.70	24.05	90.2	8.44	5.91				
18	15.79	32.69	24.05	90.0	8.44	5.91				
19	15.79	32.69	24.05	89.9	8.44	5.91	.00	.10	.00	.17
20	15.79	32.69	24.05	90.0	8.44	5.91				
21	15.79	32.69	24.04	90.2	8.44	5.91				
22	15.79	32.70	24.05	89.9	8.44	5.91				
23	15.80	32.69	24.04	90.0	8.44	5.91				
24	15.69	32.70	24.07	90.2	8.43	5.90				
25	15.42	32.76	24.18	88.7	8.41	5.92				
26	14.66	32.91	24.46	90.0	8.36	5.93				
27	13.19	32.00	24.83	89.7	8.33	5.00				
28	11.78	32.03	25.13	90.6	8.25	5.98				
29	11.24	32.06	25.24	90.3	8.20	5.83	.00	5.12	2.90	.78
30	11.07	32.05	25.26	90.2	8.21	5.65				
31	10.93	32.10	25.33	90.0	8.20	5.50				
32	10.85	32.07	25.35	89.7	8.20	5.38				
33	10.72	32.04	25.44	89.3	8.20	5.22				
34	10.60	32.04	25.52	89.5	8.18	5.16				
35	10.23	32.19	25.62	89.5	8.15	5.08				
36	10.02	32.27	25.61	89.0	8.15	4.94				
37	10.00	32.25	25.61	88.6	8.15	4.84	.09	4.52	9.28	1.01
38	10.01	32.25	25.61	90.0	8.15	4.74				
39	9.98	32.25	25.61	89.9	8.14	4.67				
40	9.98	32.25	25.61	89.7	8.14	4.62				
41	9.97	32.25	25.62	89.9	8.14	4.56				
42	9.97	32.26	25.62	90.0	8.14	4.53				
43	9.97	32.25	25.61	90.1	8.16	4.50				
44	9.96	32.26	25.62	89.9	8.16	4.48	.05	4.84	9.55	.92
45	9.96	32.25	25.61	90.1	8.16					
46	9.96	32.25	25.61							

KELEZ CRUISE XWCC-16 STATION 113 10/13/77

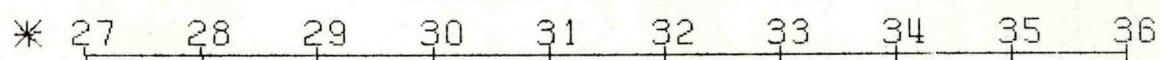
TRANSMISSIVITY (0/0)



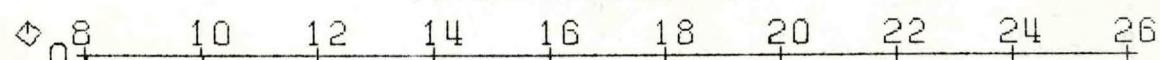
SIGMA-T



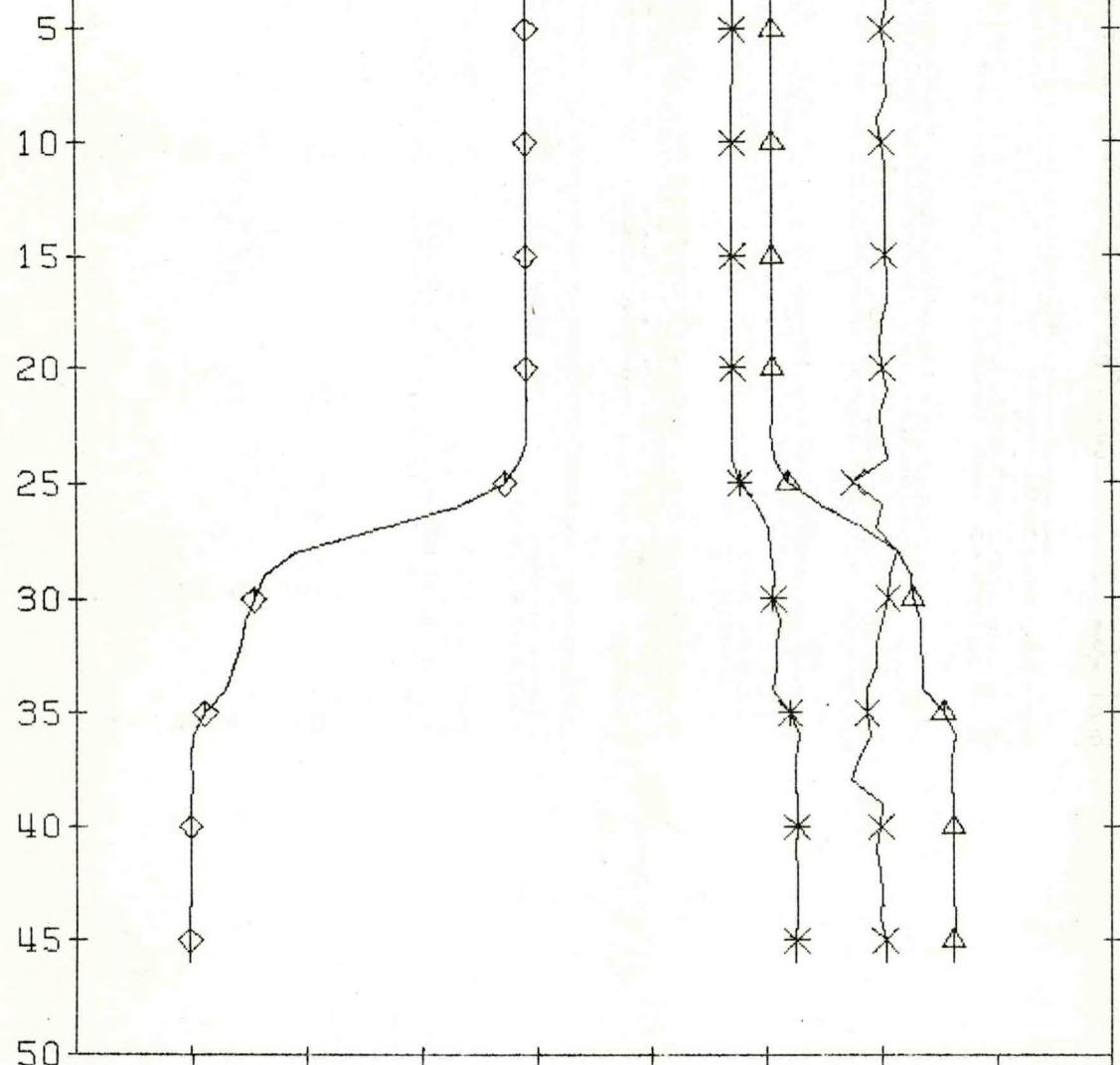
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)



XWCC-16 STA. 114 LAT 40 4.0N; LONG 72 45.2W GMT 19.5 10/13/77  
 DEPTH 55 AIR D/W 55.6 6/22.2 BARO 21.0 VIS 7 CLD TYP/CVR 7/8  
 WETHR 2 WIND DIR/SPD 04/20 SEA DIR/HT 03/2 SWELL DIR/HT 03/2

DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	S103	P04
1	15.54	32.56	24.00	89.5	8.43	6.13				
2	15.54	32.56	24.00	89.5	8.43	6.13				
3	15.54	32.57	24.00	89.6	8.44	6.12				
4	15.54	32.58	24.01	90.2	8.47	6.05				
5	15.54	32.58	24.01	90.1	8.49	6.06				
6	15.54	32.58	24.01	90.3	8.48	6.06				
7	15.54	32.58	24.01	90.2	8.48	6.07				
8	15.54	32.58	24.01	90.3	8.49	6.06				
9	15.55	32.58	24.02	90.4	8.48	6.06				
10	15.55	32.59	24.02	90.4	8.48	6.05				
11	15.55	32.59	24.01	90.3	8.48	6.05				
12	15.55	32.59	24.01	90.1	8.48	6.06				
13	15.55	32.59	24.02	90.3	8.48	6.05				
14	15.56	32.59	24.02	90.3	8.48	6.05				
15	15.56	32.60	24.03	90.2	8.48	6.05				
16	15.58	32.61	24.03	90.3	8.48	6.05				
17	15.60	32.72	24.05	90.4	8.48	6.05				
18	15.65	32.86	24.10	90.6	8.47	6.04				
19	15.73	32.04	24.31	90.8	8.44	6.99				
20	15.78	32.33	24.33	90.9	8.42	6.95				
21	15.76	32.34	24.34	91.1	8.42	6.91				
22	15.79	32.08	24.36	91.1	8.42	6.87				
23	15.76	32.10	24.39	91.1	8.42	6.83				
24	15.68	32.11	24.45	91.1	8.41	6.80				
25	15.38	32.10	24.74	91.2	8.37	6.85				
26	14.06	32.11	24.45	91.1	8.32	6.00				
27	11.70	32.16	25.23	91.1	8.31	6.21				
28	10.46	32.17	25.46	90.4	8.31	6.23				
29	10.28	32.19	25.50	90.2	8.27	6.23				
30	10.08	32.20	25.57	90.0	8.23	6.17				
31	9.99	32.21	25.59	89.9	8.23	6.06				
32	9.94	32.21	25.59	89.1	8.22	6.86				
33	9.91	32.23	25.61	89.7	8.21	6.68				
34	9.84	32.23	25.63	89.7	8.20	6.53				
35	9.80	32.25	25.64	89.5	8.19	6.40				
36	9.70	32.25	25.67	89.6	8.18	6.27				
37	9.60	32.25	25.69	89.2	8.17	6.16				
38	9.58	32.27	25.71	89.8	8.17	6.06				
39	9.53	32.28	25.73	90.0	8.17	4.99				
40	9.47	32.28	25.73	90.0	8.17	4.90				
41	9.44	32.28	25.74	90.1	8.17	4.87				
42	9.42	32.29	25.74	90.1	8.17	4.81				
43	9.40	32.29	25.74	90.3	8.16	4.77				
44	9.40	32.29	25.74	90.3	8.16	4.74				
45	9.40	32.29	25.74	90.3	8.16	4.70				
46	9.40	32.29	25.74	90.2	8.16	4.69				
47	9.38	32.29	25.74	90.0	8.16	4.67				
48	9.27	32.29	25.76	90.0	8.16	4.66				
49	9.14	32.30	25.80	90.0	8.15	4.65				
50	9.12	32.30	25.83	90.0	8.15	4.64				
54	9.04	32.52	25.97	89.9	8.15	4.56				
							.09	6.98	17.74	1.07

KELEZ CRUISE XWCC-16 STATION 114 10/13/77

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

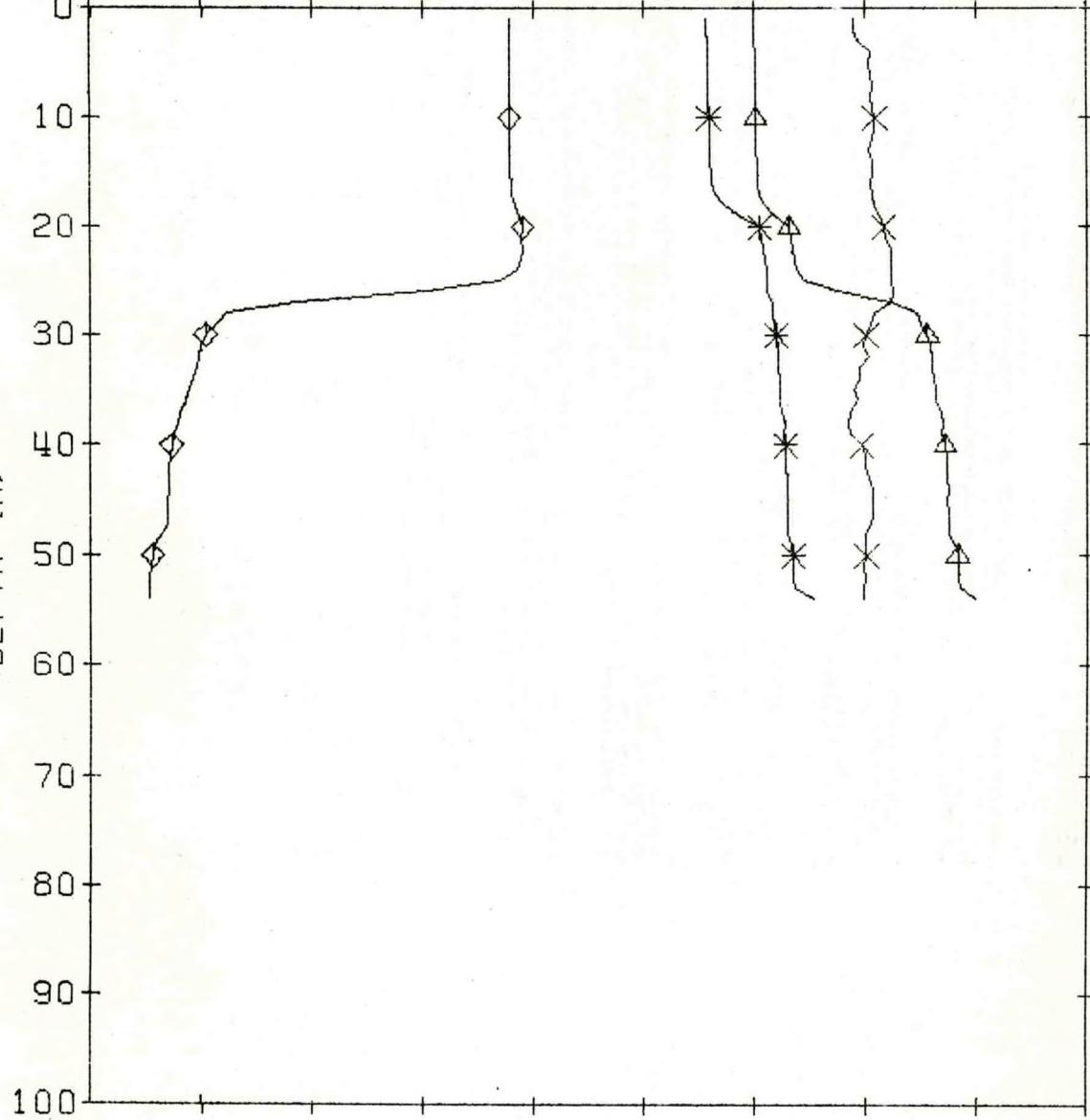
SALINITY (0/00)

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

TEMPERATURE (C)

◊ 8 10 12 14 16 18 20 22 24 26

DEPTH (M)

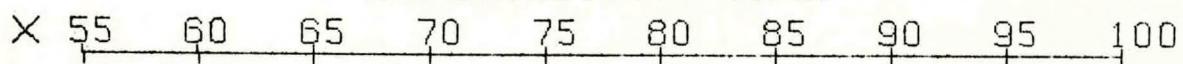


XWCC-16 STA. 115 LAT 39 58.5N; LONG 72 34.7W GMT 06.5 10/19/77  
 DEPTH 65 AIR D/W 33.3/05.6 BARO 13.0 VIS 7 CLD TYP/CVR X/9  
 WETHR 1 WIND DIR/SPD 18/09 SEA DIR/HT 18/ SWELL DIR/HT 24/1

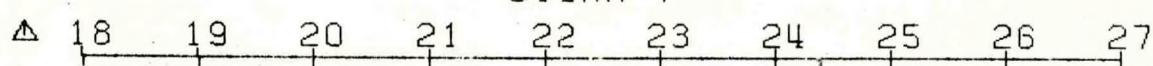
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	13.17	33.39	25.13	88.0	8.39	6.00				
2	13.17	33.39	25.13	88.0	8.39	6.00	.05	.55	.00	.70
3	13.17	33.40	25.14	88.6	8.38	5.80				
4	13.17	33.40	25.14	88.6	8.38	5.82				
5	13.17	33.40	25.14	88.7	8.38	5.82				
6	13.17	33.40	25.14	88.6	8.38	5.81				
7	13.17	33.40	25.14	88.6	8.38	5.82				
8	13.17	33.40	25.14	88.6	8.38	5.81				
9	13.17	33.40	25.14	88.6	8.38	5.81				
10	13.17	33.40	25.14	88.6	8.38	5.82	.03	.47	.00	.15
11	13.17	33.40	25.14	88.6	8.38	5.81				
12	13.17	33.40	25.14	88.5	8.38	5.82				
13	13.17	33.40	25.14	88.6	8.38	5.81				
14	13.17	33.40	25.14	88.6	8.38	5.81				
15	13.17	33.40	25.14	88.6	8.38	5.81				
16	13.17	33.40	25.14	88.5	8.38	5.81				
17	13.16	33.40	25.14	88.6	8.38	5.81				
18	13.17	33.40	25.14	88.6	8.38	5.81				
19	13.18	33.40	25.13	88.7	8.38	5.81				
20	13.18	33.40	25.13	88.5	8.38	5.81	.04	.56	.00	.21
21	13.17	33.40	25.13	88.6	8.38	5.80				
22	13.17	33.40	25.13	88.4	8.38	5.81				
23	13.17	33.40	25.13	88.5	8.38	5.81				
24	13.17	33.40	25.14	88.8	8.38	5.81				
25	13.18	33.40	25.14	88.8	8.38	5.81				
26	13.17	33.40	25.14	88.8	8.38	5.81				
27	13.17	33.40	25.14	88.8	8.38	5.80				
28	13.17	33.40	25.14	88.8	8.38	5.80				
29	13.16	33.40	25.14	88.6	8.38	5.79				
30	13.16	33.40	25.14	88.4	8.38	5.79	.03	.56	.00	.26
31	13.16	33.40	25.14	88.5	8.38	5.79				
32	13.16	33.40	25.14	88.4	8.38	5.78				
33	13.16	33.40	25.14	88.3	8.38	5.78				
34	13.15	33.40	25.15	88.4	8.38	5.78				
35	13.15	33.40	25.15	88.6	8.38	5.78				
36	13.14	33.40	25.14	88.4	8.38	5.77				
37	13.14	33.40	25.14	88.6	8.38	5.77				
38	13.12	33.40	25.15	88.4	8.38	5.77				
39	13.08	33.40	25.16	88.6	8.38	5.76				
40	12.94	33.40	25.19	88.5	8.38	5.76				
41	12.87	33.40	25.20	88.7	8.38	5.74				
42	12.79	33.40	25.22	88.6	8.38	5.72				
43	12.72	33.40	25.23	88.4	8.38	5.68				
44	12.65	33.40	25.25	88.6	8.38	5.65				
45	12.52	33.40	25.27	88.4	8.38	5.65				
46	12.03	33.44	25.29	88.1	8.26	5.58				
47	11.56	33.54	25.55	88.1	8.26	5.50				
48	11.31	33.61	25.61	88.1	8.25	5.58				
49	11.10	33.61	25.69	88.1	8.27	5.50				
50	10.89	33.65	25.77	87.9	8.26	5.58	:07	4.12	7.75	:23
60	11.07	34.03	26.03	88.0	8.25	4.78	:09	4.99	9.67	:61
61	11.08	34.03	26.02	88.1	8.26	4.76				

KELEZ CRUISE XWCC-16 STATION 115 10/19/77

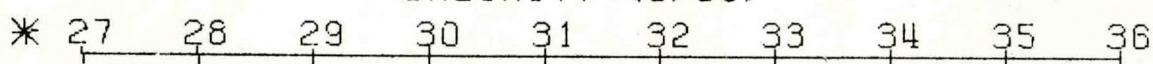
TRANSMISSIVITY (0/0)



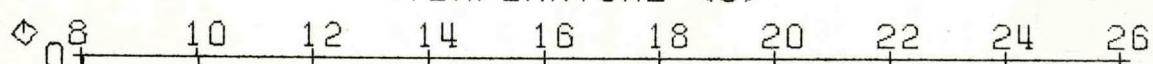
SIGMA-T



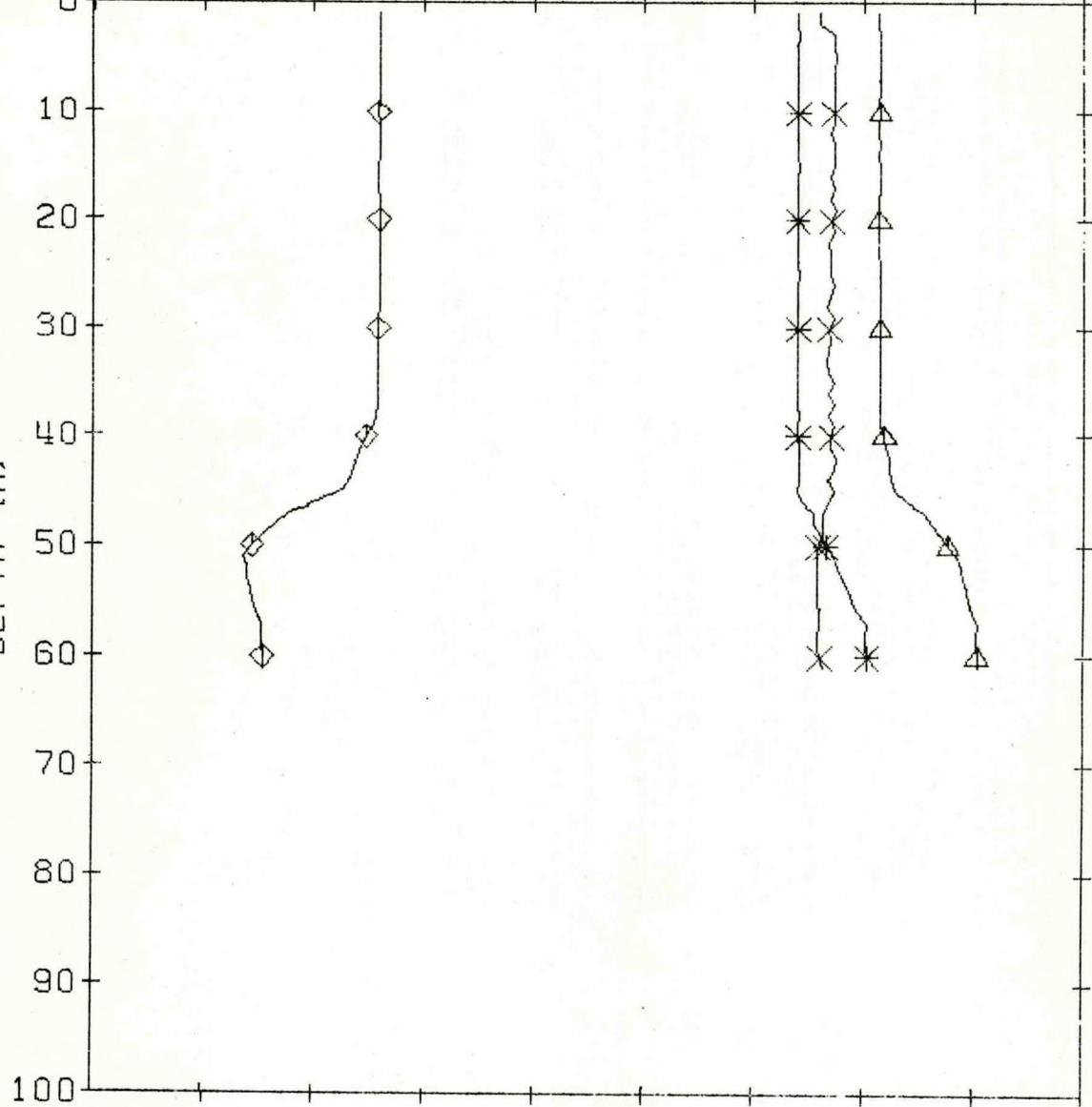
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

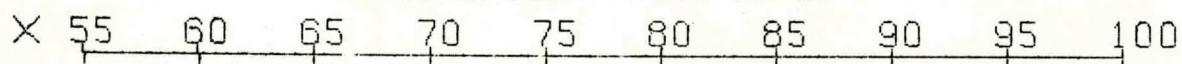


XWCC-16 STA.116 LAT 40 30.1N; LONG 73 18.8W GMT 13.2 10/12/77  
 DEPTH 26 AIR D/W 69.4/50.0 BARO 15.0 VIS 7 CLD TYP/CVR 6/8  
 WETHR 2 WIND DIR/SPD 24/06 SEA DIR/HT 24/0 SWELL DIR/HT 15/1

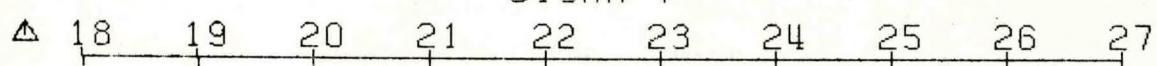
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.21	31.63	23.13	90.8	8.35	5.67				
2	16.21	31.63	23.13	90.8	8.35	5.67				
3	16.20	31.62	23.13	91.2	8.35	5.64				
4	16.20	31.62	23.13	91.1	8.34	5.64				
5	16.19	31.63	23.14	91.0	8.34	5.64				
6	16.19	31.62	23.13	91.1	8.34	5.64				
7	16.19	31.62	23.13	91.0	8.34	5.64				
8	16.19	31.63	23.14	91.2	8.34	5.64				
9	16.19	31.63	23.14	91.0	8.34	5.64	.56	1.76	.00	.45
10	16.19	31.63	23.14	90.9	8.34	5.64				
11	16.20	31.64	23.14	91.2	8.35	5.64				
12	16.24	31.66	23.15	91.1	8.35	5.64				
13	16.27	31.70	23.17	91.3	8.36	5.64				
14	16.29	31.74	23.20	91.3	8.37	5.64				
15	16.31	31.76	23.21	91.1	8.38	5.66				
16	16.34	31.80	23.23	91.3	8.40	5.68				
17	16.35	31.77	23.21	90.6	8.39	5.70				
18	16.24	32.04	23.44	90.2	8.36	5.72				
19	16.17	32.23	23.61	87.9	8.33	5.59				
20	16.17	32.25	23.62	87.6	8.22	5.13	.52	1.53	1.62	.89
21	16.16	32.26	23.62	86.8	8.17	4.74				
22	16.15	32.26	23.63	86.0	8.17	4.45				
23	16.15	32.26	23.63	86.5	8.17	4.23				
24	16.14	32.27	23.64	85.5	8.17	4.08	.56	1.39	1.62	.51
25	16.14	32.27	23.64	85.0	8.17	3.94				

KELEZ CRUISE XWCC-16 STATION 116 10/12/77

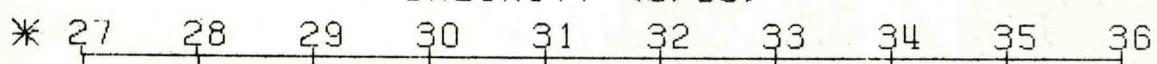
TRANSMISSIVITY (0/0)



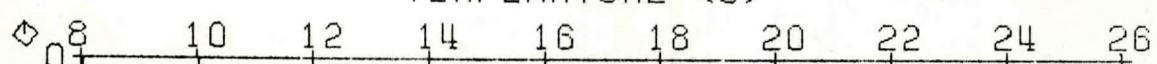
SIGMA-T



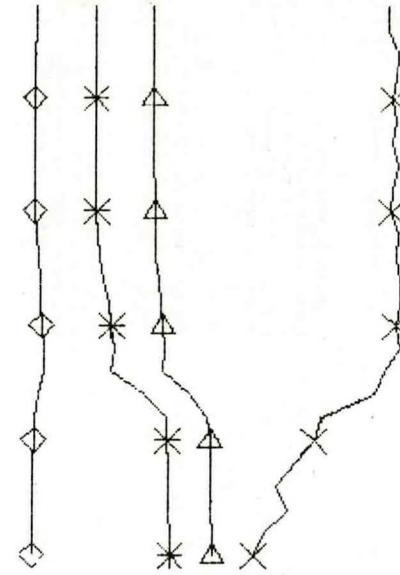
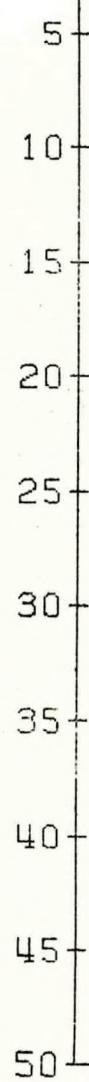
SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

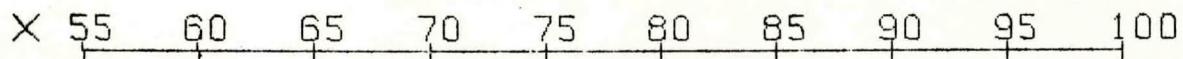


XWCC-16 STA.117 LAT 40 23.3N; LONG 73 5.5W GMT 01.2 10/14/77  
 DEPTH 37 AIR D/W 27.8/05.6 BARO 21.5 VIS 7 CLD TYP/CVR 4/4  
 WETHR 1 WIND DIR/SPD 04/20 SEA DIR/HT 04/0 SWELL DIR/HT 06/2

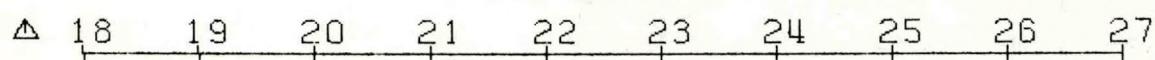
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	16.19	32.32	23.66	90.2	8.43	5.79				
2	16.19	32.32	23.66	90.2	8.43	5.79				
3	16.19	32.32	23.67	90.2	8.43	5.80				
4	16.19	32.32	23.67	90.3	8.43	5.80				
5	16.19	32.32	23.67	90.2	8.43	5.80				
6	16.19	32.32	23.67	90.1	8.43	5.80				
7	16.19	32.32	23.68	90.2	8.43	5.80				
8	16.20	32.32	23.67	90.2	8.43	5.80				
9	16.20	32.32	23.67	90.2	8.43	5.80				
10	16.20	32.32	23.67	90.2	8.43	5.79	.00	.00	.00	.37
11	16.20	32.32	23.67	90.1	8.43	5.78				
12	16.20	32.32	23.67	90.2	8.43	5.78				
13	16.20	32.32	23.67	90.2	8.43	5.78				
14	16.20	32.32	23.67	90.2	8.43	5.78				
15	16.20	32.32	23.67	90.2	8.43	5.77				
16	16.20	32.32	23.67	90.2	8.43	5.77				
17	16.20	32.32	23.67	90.2	8.43	5.76				
18	16.20	32.32	23.67	90.2	8.43	5.76				
19	16.20	32.32	23.67	90.0	8.43	5.76				
20	16.20	32.32	23.67	90.0	8.43	5.77	.00	.07	.00	.30
21	16.20	32.32	23.67	89.9	8.43	5.76				
22	16.21	32.32	23.67	90.0	8.43	5.76				
23	16.21	32.32	23.67	90.0	8.43	5.76				
24	16.22	32.34	23.68	90.3	8.43	5.75				
25	16.23	32.36	23.69	90.4	8.42	5.75				
26	16.23	32.36	23.69	90.3	8.42	5.74				
27	16.24	32.36	23.69	90.5	8.42	5.74				
28	16.30	32.44	23.73	90.6	8.41	5.73				
29	16.30	32.46	23.75	90.9	8.41	5.71				
30	16.26	32.47	23.77	90.9	8.40	5.69	.04	.26	.00	.48
31	15.77	32.58	23.96	90.9	8.27	5.68				
32	15.22	32.61	24.11	90.8	8.19	5.62				
33	13.87	32.72	24.47	90.4	8.11	5.49				
34	13.52	32.84	24.64	89.9	8.09	5.22				
35	13.30	32.86	24.70	89.4	8.05	4.73	.08	4.12	6.14	.77
36	13.09	32.86	24.74	87.8	8.05	4.73				

KELEZ CRUISE XWCC-16 STATION 117 10/14/77

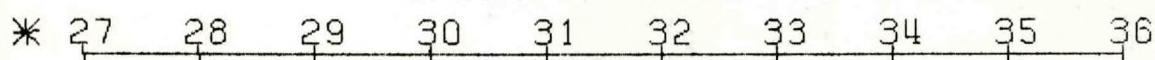
TRANSMISSIVITY (0/0)



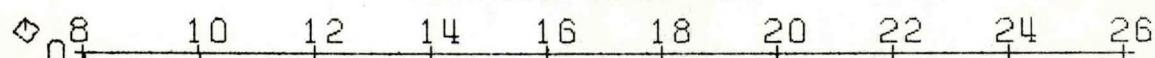
SIGMA-T



SALINITY (0/00)

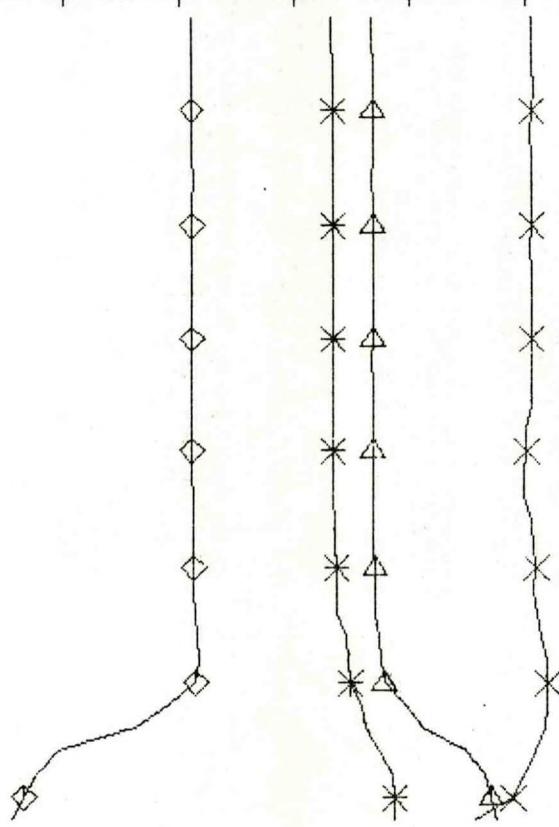


TEMPERATURE (C)



DEPTH (M)

5 10 15 20 25 30 35 40 45 50

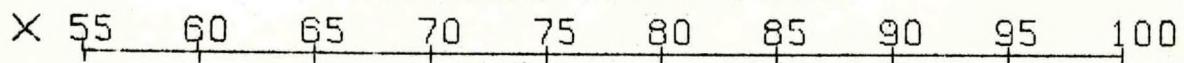


XWCC-16 STA.118 LAT 40 14.0N; LONG 72 34.0W GMT 00.0 10/17/77  
 DEPTH 55 AIR D/W 61.1/52.8 BARO 98.5 VIS 6 CLD TYP/CVR /0  
 WETHR 0 WIND DIR/SPD 15/17 SEA DIR/HT 15/1 SWELL DIR/HT 14/2

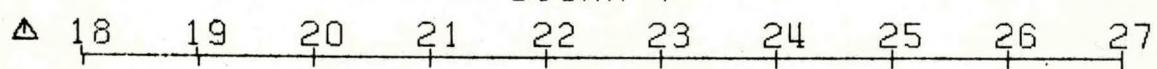
DEP	TEMP	SAL	SIGT	TRAN	PH	02	N02	N03	SI03	P04
1	14.69	32.88	24.43	88.4	8.37	5.75				
2	14.69	32.88	24.43	88.4	8.37	5.75				
3	14.69	32.86	24.41	87.9	8.39	5.77				
4	14.69	32.87	24.42	87.9	8.39	5.79				
5	14.69	32.87	24.42	88.0	8.39	5.79				
6	14.69	32.86	24.41	88.1	8.39	5.78				
7	14.69	32.86	24.41	88.2	8.39	5.78				
8	14.69	32.87	24.42	88.2	8.39	5.78				
9	14.68	32.87	24.42	88.2	8.39	5.78				
10	14.69	32.87	24.42	88.3	8.39	5.78				
11	14.69	32.87	24.42	88.4	8.40	5.78	.05	.29	.00	.23
12	14.69	32.86	24.41	88.4	8.40	5.78				
13	14.69	32.87	24.42	88.4	8.40	5.78				
14	14.69	32.87	24.42	88.4	8.40	5.76				
15	14.68	32.86	24.41	88.3	8.40	5.77				
16	14.69	32.87	24.42	88.4	8.41	5.77				
17	14.69	32.87	24.42	88.5	8.40	5.76				
18	14.71	32.89	24.43	88.5	8.40	5.76				
19	14.74	32.93	24.46	88.7	8.40	5.76				
20	14.72	32.90	24.44	88.5	8.41	5.74	.06	.82	.00	.28
21	14.72	32.91	24.44	88.6	8.41	5.74				
22	14.74	32.91	24.44	88.6	8.41	5.74				
23	14.77	32.98	24.49	88.8	8.41	5.73				
24	14.81	33.00	24.49	88.9	8.41	5.72				
25	14.82	33.00	24.49	88.8	8.41	5.71				
26	14.82	33.01	24.50	88.8	8.41	5.70				
27	14.83	33.02	24.50	88.9	8.41	5.70				
28	14.84	33.02	24.51	88.9	8.41	5.69				
29	14.84	33.03	24.51	88.9	8.41	5.68	.04	.16	.00	.24
30	14.85	33.03	24.51	88.8	8.41	5.68				
31	14.86	33.03	24.51	88.8	8.41	5.68				
32	14.86	33.04	24.51	88.9	8.41	5.68				
33	14.86	33.04	24.51	88.9	8.41	5.68				
34	14.87	33.04	24.51	89.0	8.41	5.67				
35	14.89	33.05	24.52	89.1	8.41	5.67				
36	14.81	33.06	24.54	89.1	8.41	5.67				
37	14.61	33.07	24.59	89.2	8.40	5.68				
38	14.54	33.08	24.61	89.3	8.39	5.69				
39	13.98	33.09	24.74	89.3	8.37	5.70				
40	11.86	33.11	25.17	89.0	8.33	5.71				
41	10.71	33.12	25.38	89.0	8.27	5.86				
42	10.30	33.12	25.46	88.7	8.23	5.96				
43	10.24	33.13	25.47	88.6	8.21	5.96				
44	10.15	33.13	25.49	88.5	8.22	5.91				
45	10.12	33.13	25.50	88.4	8.21	5.80				
46	10.06	33.15	25.52	88.4	8.21	5.63				
47	9.96	33.15	25.54	88.3	8.21	5.57				
48	9.90	33.17	25.56	88.2	8.21	5.42				
49	9.86	33.19	25.59	88.2	8.21	5.31				
50	9.85	33.18	25.58	88.2	8.21	5.21	.04	5.98	10.92	.87
55	9.82	33.20	25.60	88.3	8.21	4.97				

KELEZ CRUISE XWCC-16 STATION 11B 10/17/77

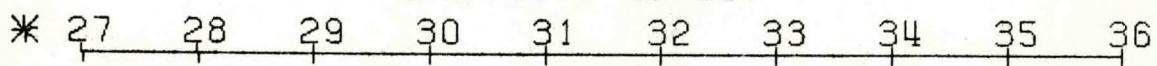
TRANSMISSIVITY (0/0)



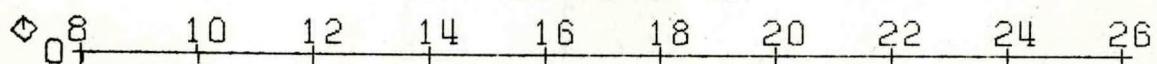
SIGMA-T



SALINITY (0/00)



TEMPERATURE (C)



DEPTH (M)

